



MODEL S
MODEL X
MODEL 3
MODEL Y

MODEL

2015–2020

2012–2020

2021 +

2024

OWNER'S MANUAL













NORTH AMERICA

MODEL S
MODEL X
MODEL 3
MODEL Y

2015–2020

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OWNER'S MANUAL











NORTH AMERICA

USING THIS OWNER'S MANUAL

YOUR OWNER'S MANUAL

For the latest and greatest information that is customized to your vehicle, view the Owner's Manual on your vehicle's touchscreen by touching the app launcher and then selecting the Manual app. The information is specific to your vehicle depending on the features you purchased, vehicle configuration, market region, and software version. In contrast, owner information that is provided by Tesla elsewhere is updated as necessary and may not contain information unique to your vehicle.

RELEASE NOTES

Information about new features is displayed on the touchscreen after a software update, and can be viewed at any time by choosing the **Release Notes** tab in the Manual app, or by touching **Controls > Software > Release Notes**. If the content in the Owner's Manual on how to use your vehicle conflicts with information in the Release Notes, the Release Notes take precedence.

ILLUSTRATIONS AND PRODUCT SPECIFICATIONS

The illustrations provided in this document are for demonstration purposes only. Depending on vehicle options, software version and market region, the information displayed on the touchscreen in your vehicle may appear slightly different.

All specifications and descriptions contained in this document are verified to be accurate at the time of printing. However, because continuous improvement is a goal at Tesla, we reserve the right to make product modifications at any time. To communicate any inaccuracies or omissions in this document, please send an email to: ownersmanualfeedback@tesla.com.

SAFETY INFORMATION

You can find safety information in your CybertruckModel SModel XModel 3Model Y Owner's Manual on the touchscreen.

For detailed information about your CybertruckModel SModel XModel 3Model Y, go to the Tesla website for your region, log on to your Tesla account, or sign up to get an account.

If you have any questions or concerns about your CybertruckModel SModel XModel 3Model Y, call 1-877-79TESLA (1-877-798-3752).

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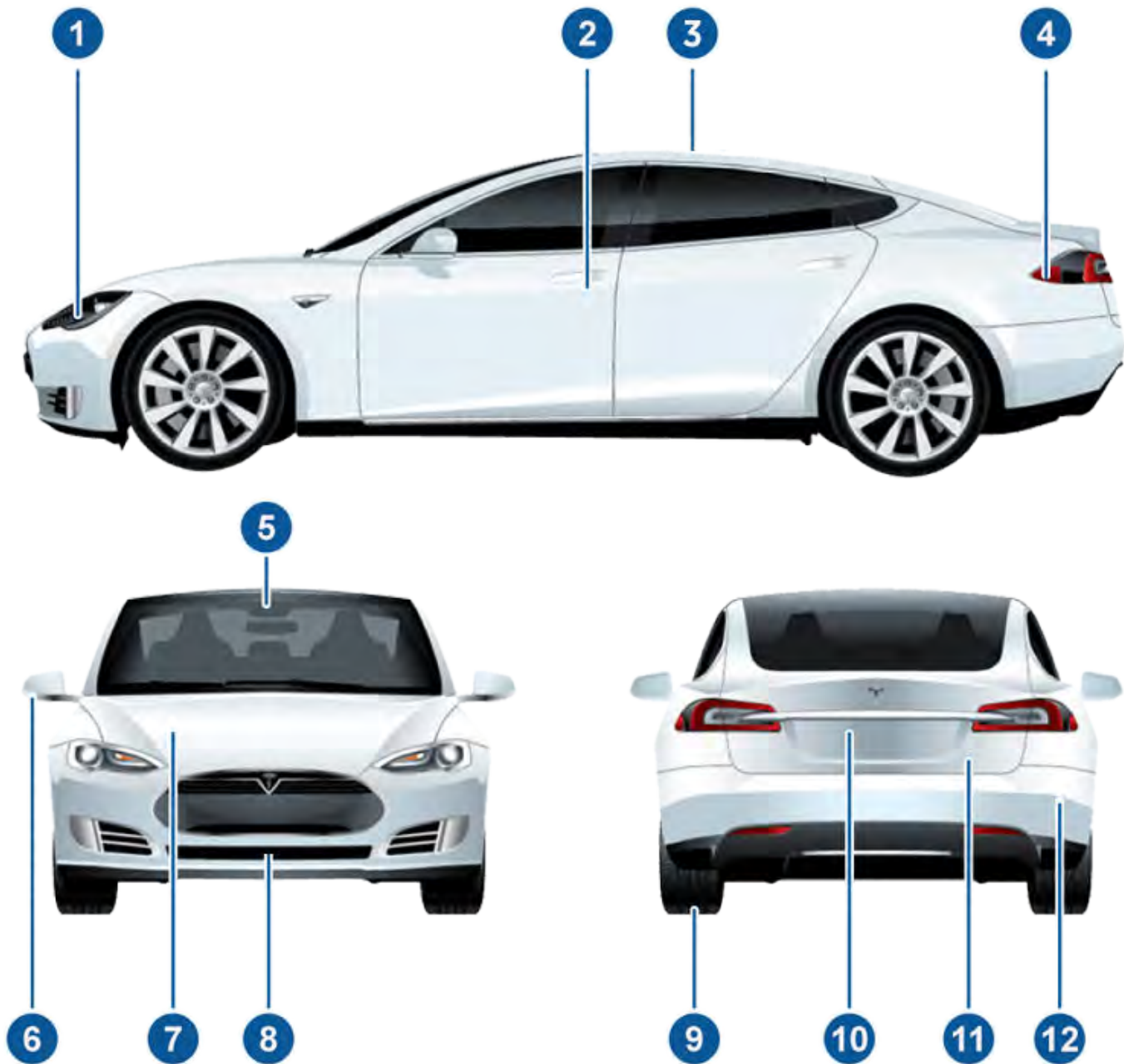
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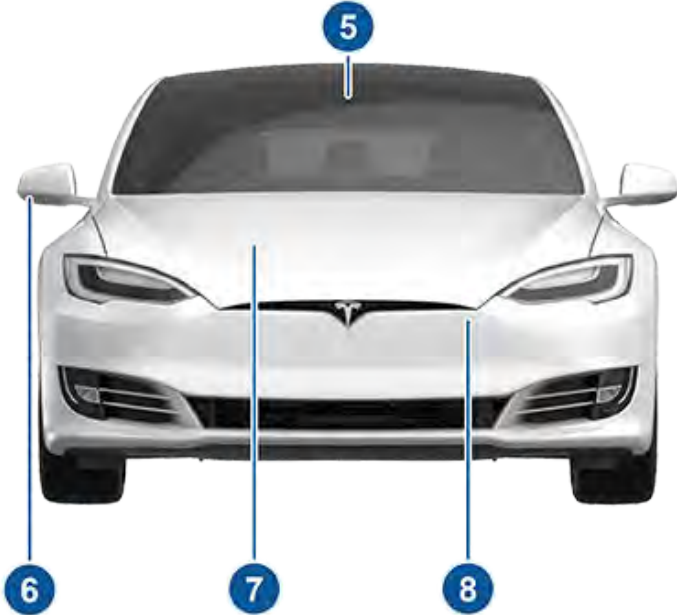
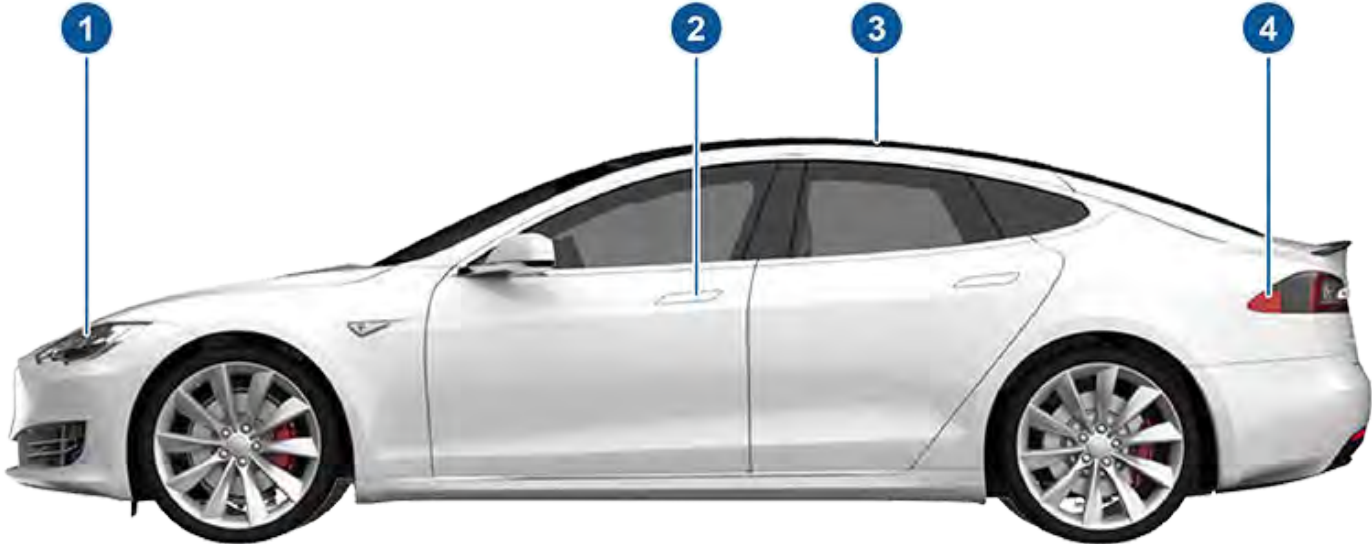
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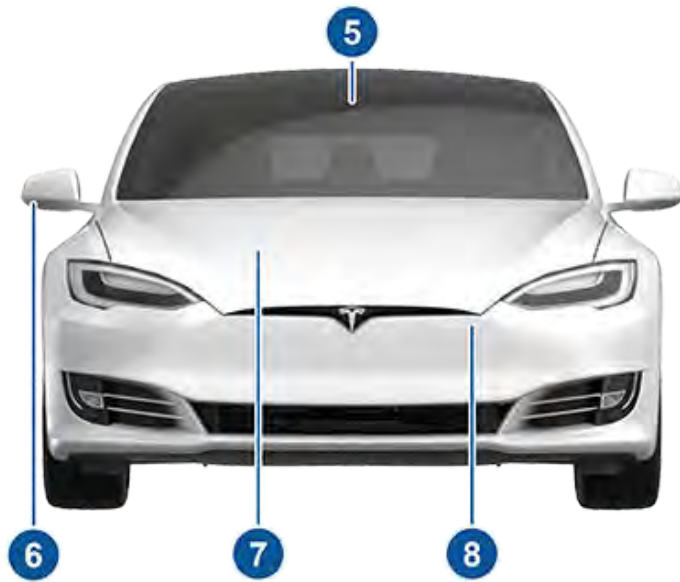
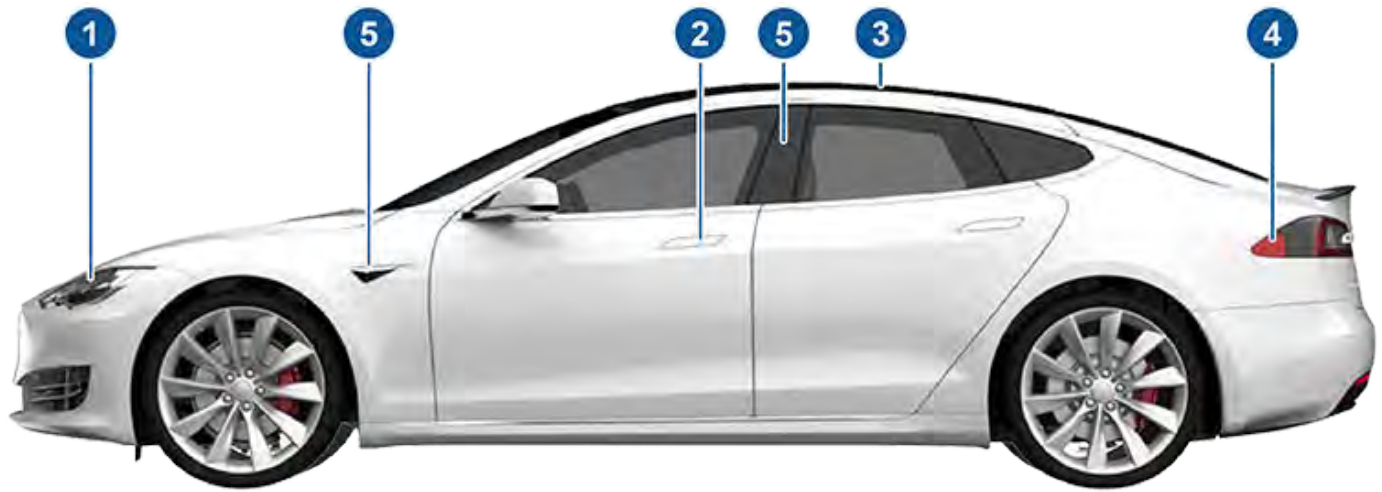


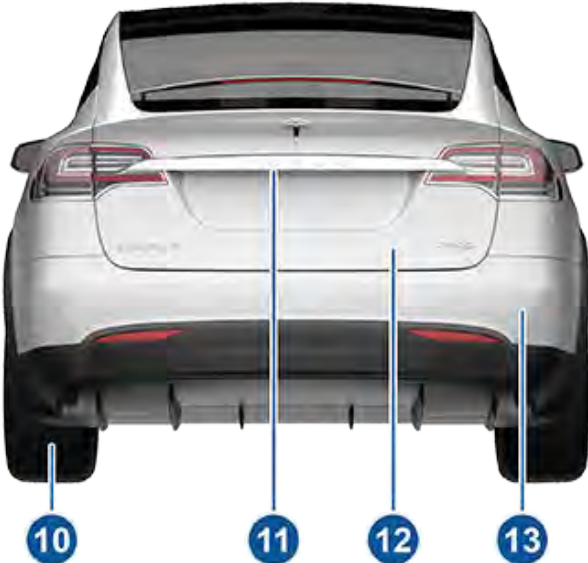
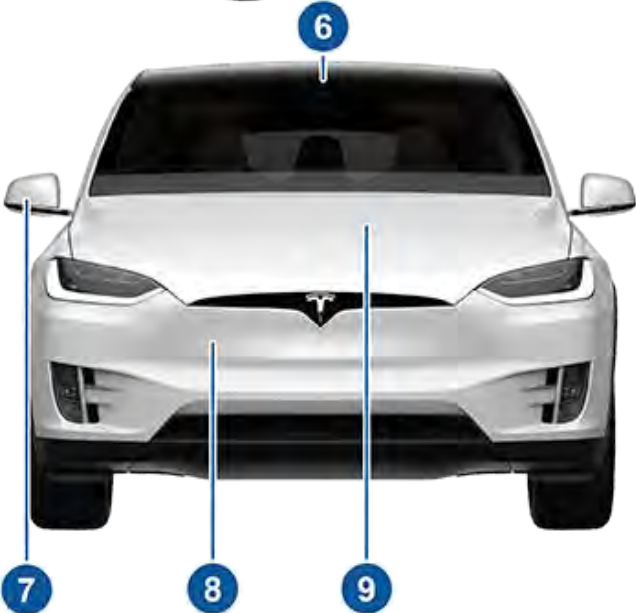
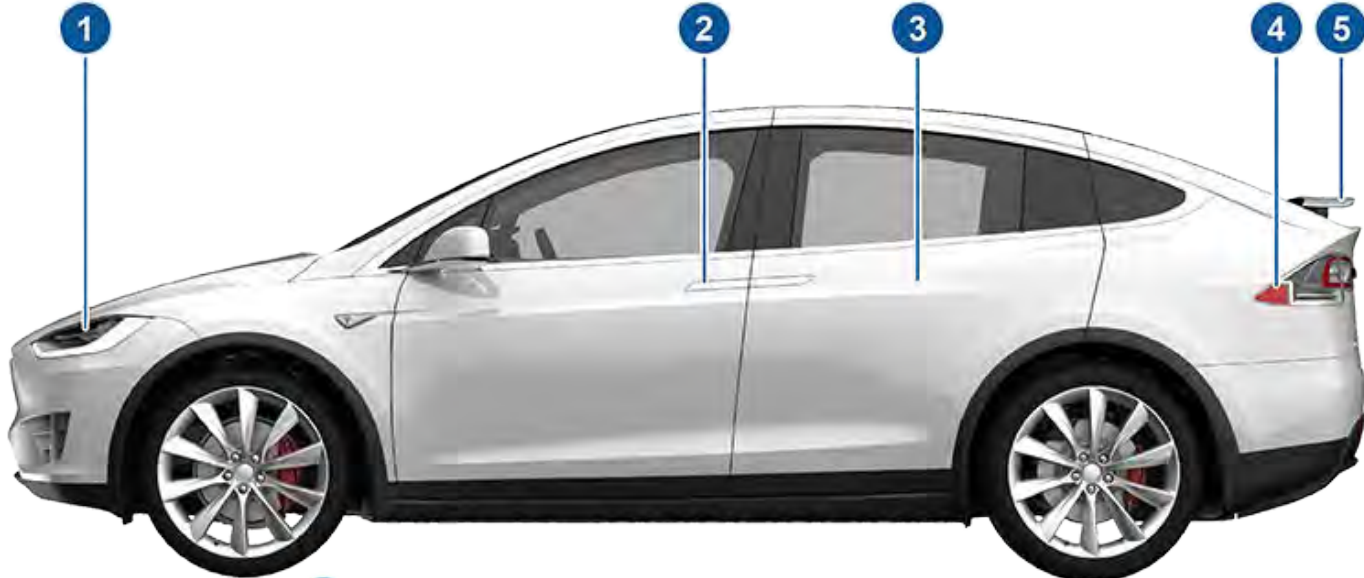
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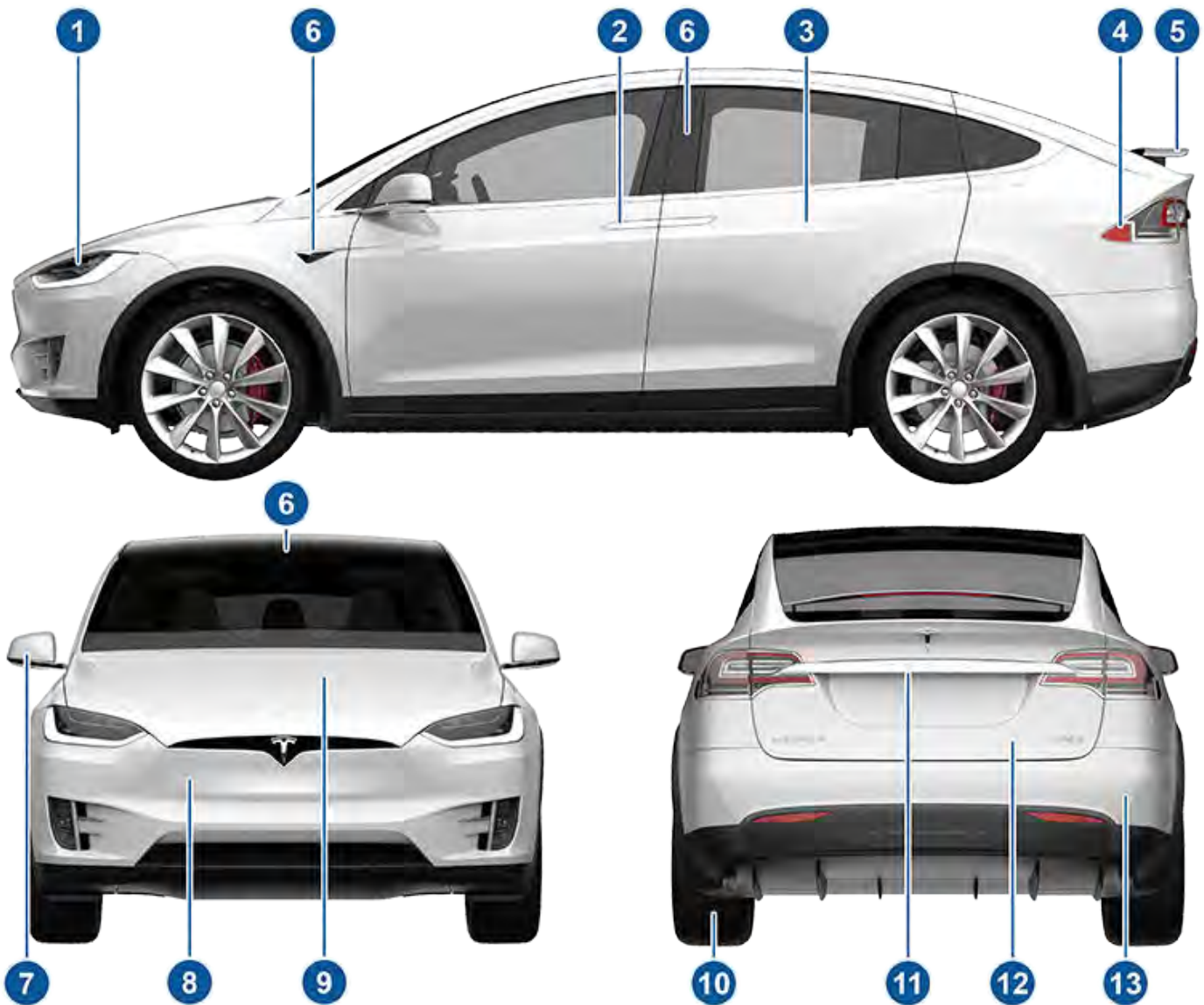
Exterior









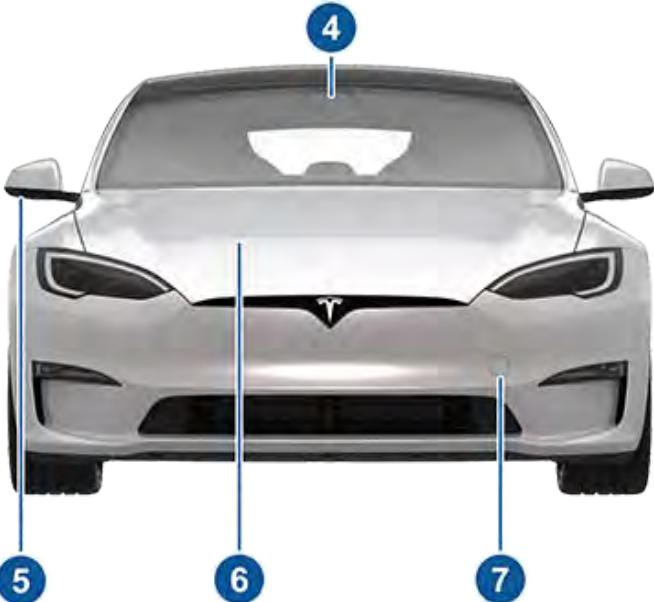
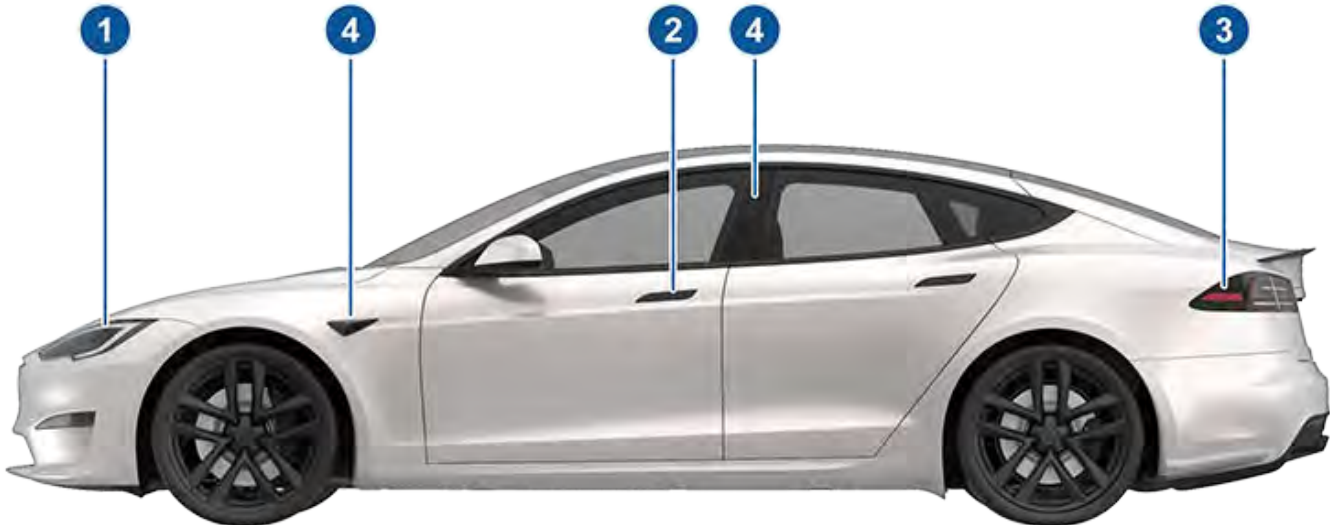


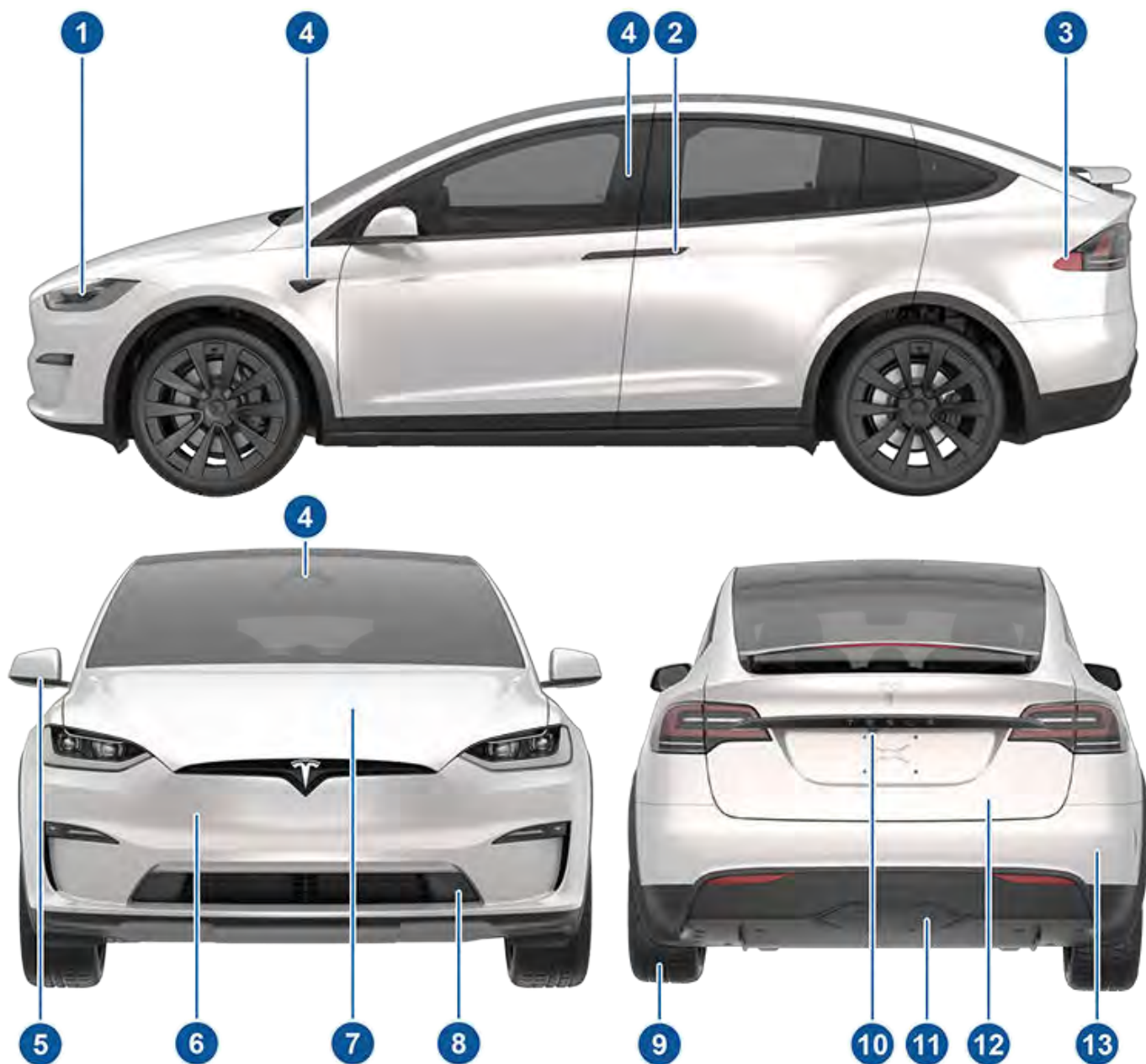
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10. Radar sensor (hidden from view in the above image) ([About Autopilot on page 550](#))
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14. Rear trunk/liftgate ([Rear Trunk on page 165](#))



15. Ultrasonic sensors (Park Assist on page 485 and About Autopilot on page 550)

NOTE: Depending on market region, vehicle configuration, and options purchased, your vehicle may look slightly different than described.

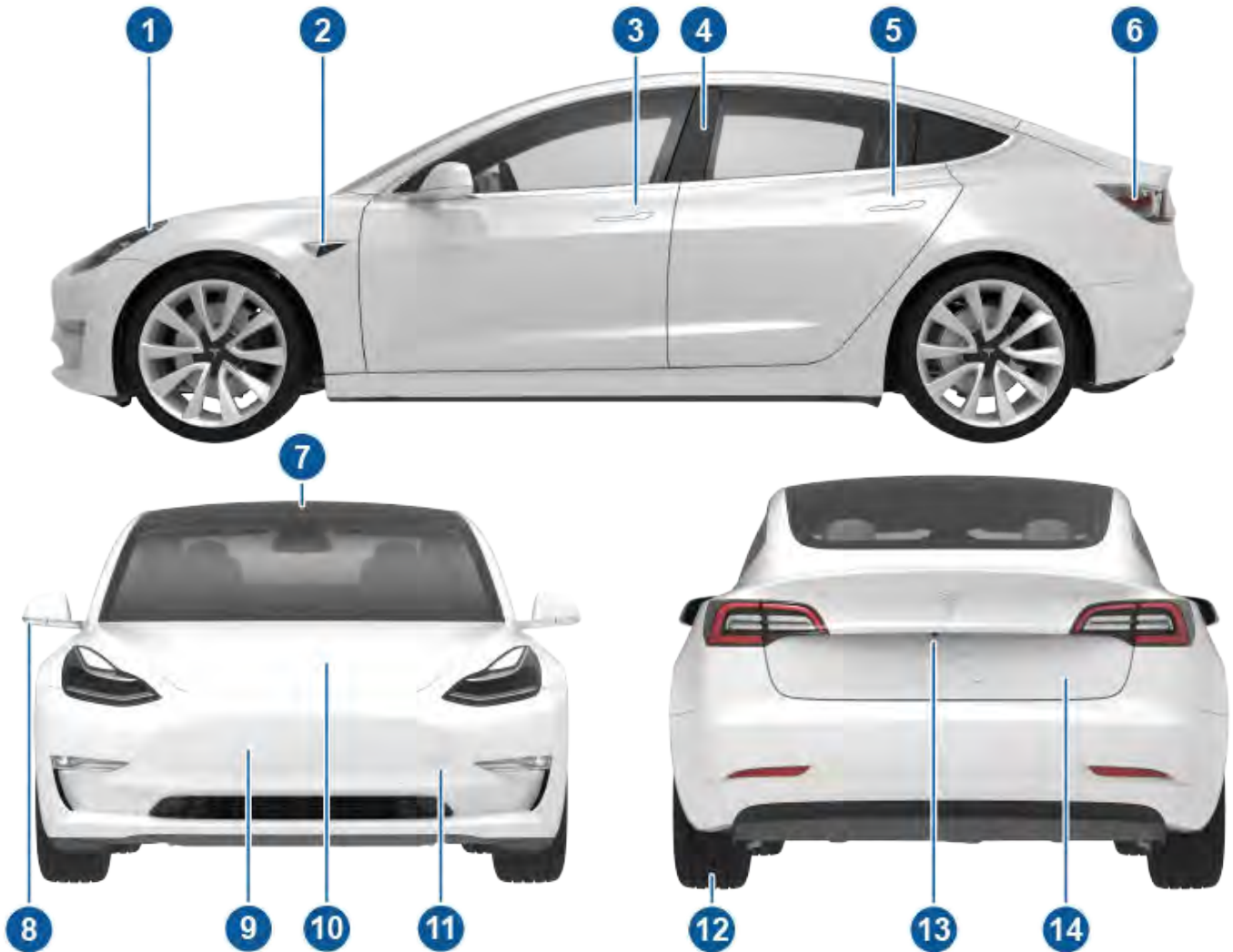




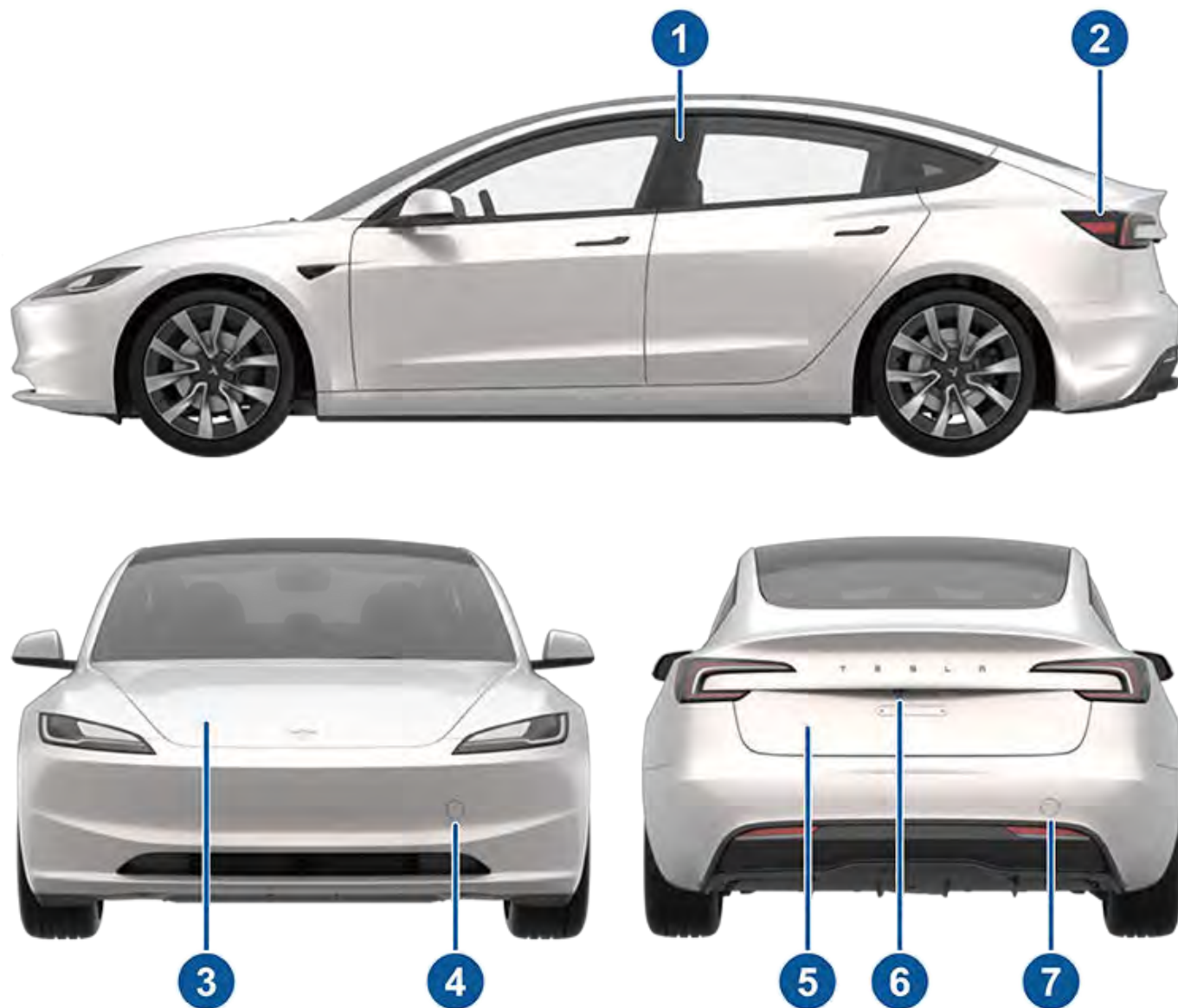
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13. Ultrasonic sensors, if equipped (Park Assist on page 485 and Cameras on page 101)

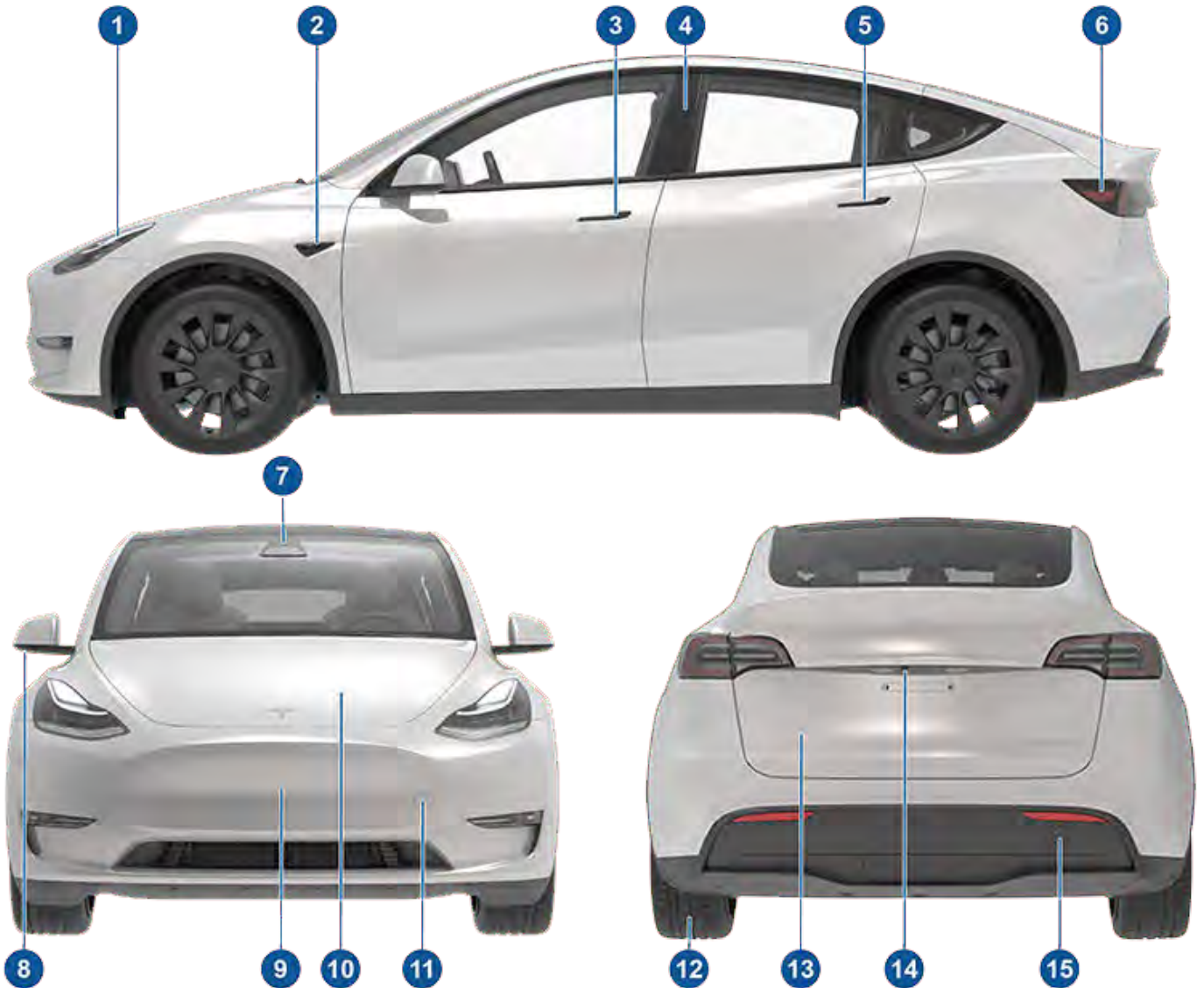


1. Exterior lights (Lights on page 421)
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4. Key card sensor (Keys on page 109), Autopilot camera (Cameras on page 101)
5. Rear door handle (Using Exterior Door Handles on page 131)
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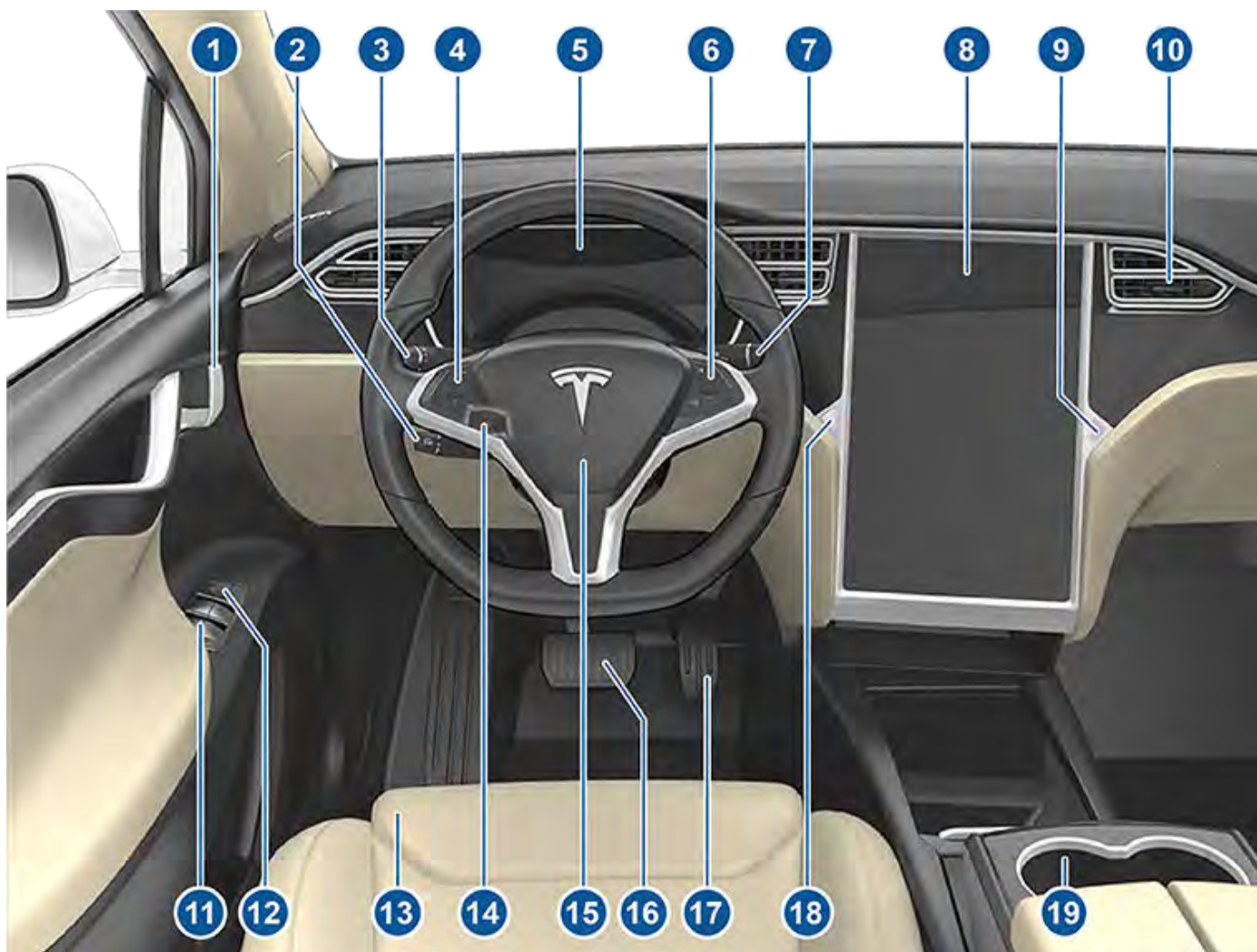
For Autopilot camera locations, see [Cameras on page 101](#).



1. Exterior lights ([Lights on page 421](#))
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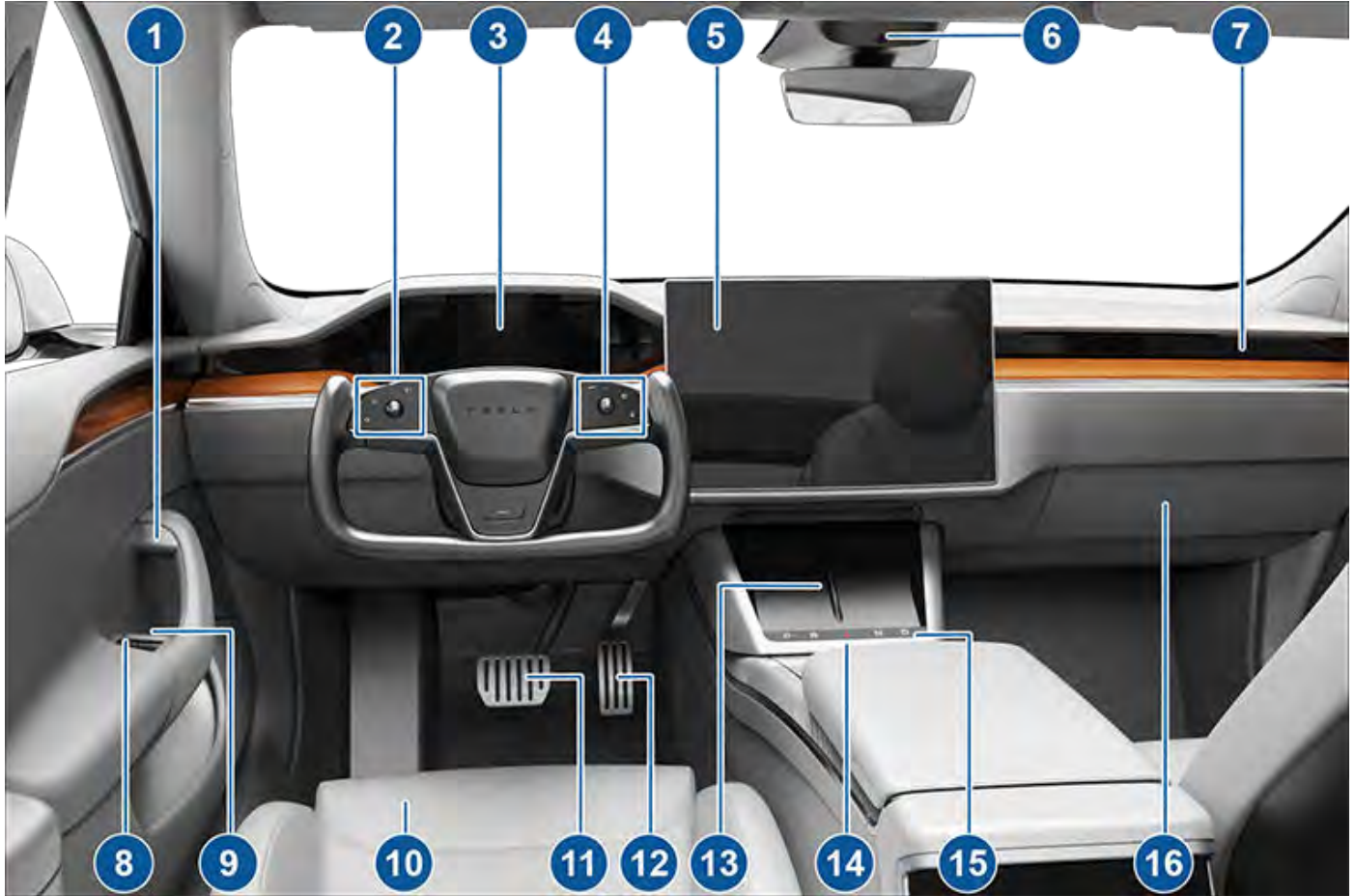
Interior

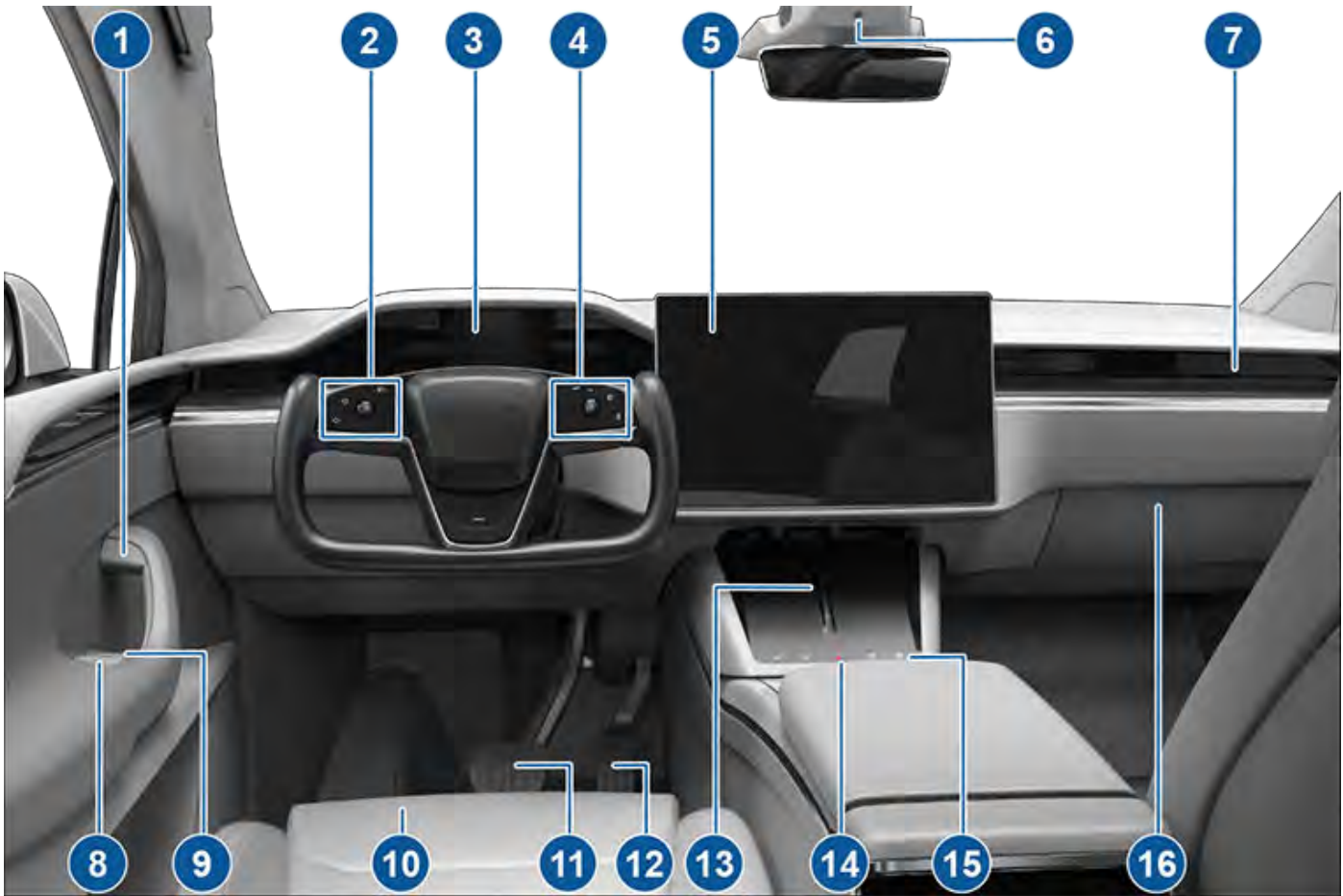


1. Interior door handles ([Opening Doors from the Interior on page 148](#))
2. CruiseAutopilot stalk ([Cruise Control on page 478](#)) ([Traffic-Aware Cruise Control on page 576](#) and [Autosteer on page 587](#))
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4. Steering wheel buttons - left ([Using Left Steering Wheel Buttons on page 384](#))
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6. Steering wheel buttons - right ([Using Right Steering Wheel Buttons on page 385](#))
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10. Cabin climate control vents ([Operating Climate Controls on page 669](#))
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- 18. Hazard warning lights (Hazard Warning Flashers on page 441)
- 19. Cup holders (Cup Holders on page 207)

NOTE: Illustrations are provided to improve conceptual understanding only. Depending on vehicle options purchased and market region, the design may differ but the function is the same.

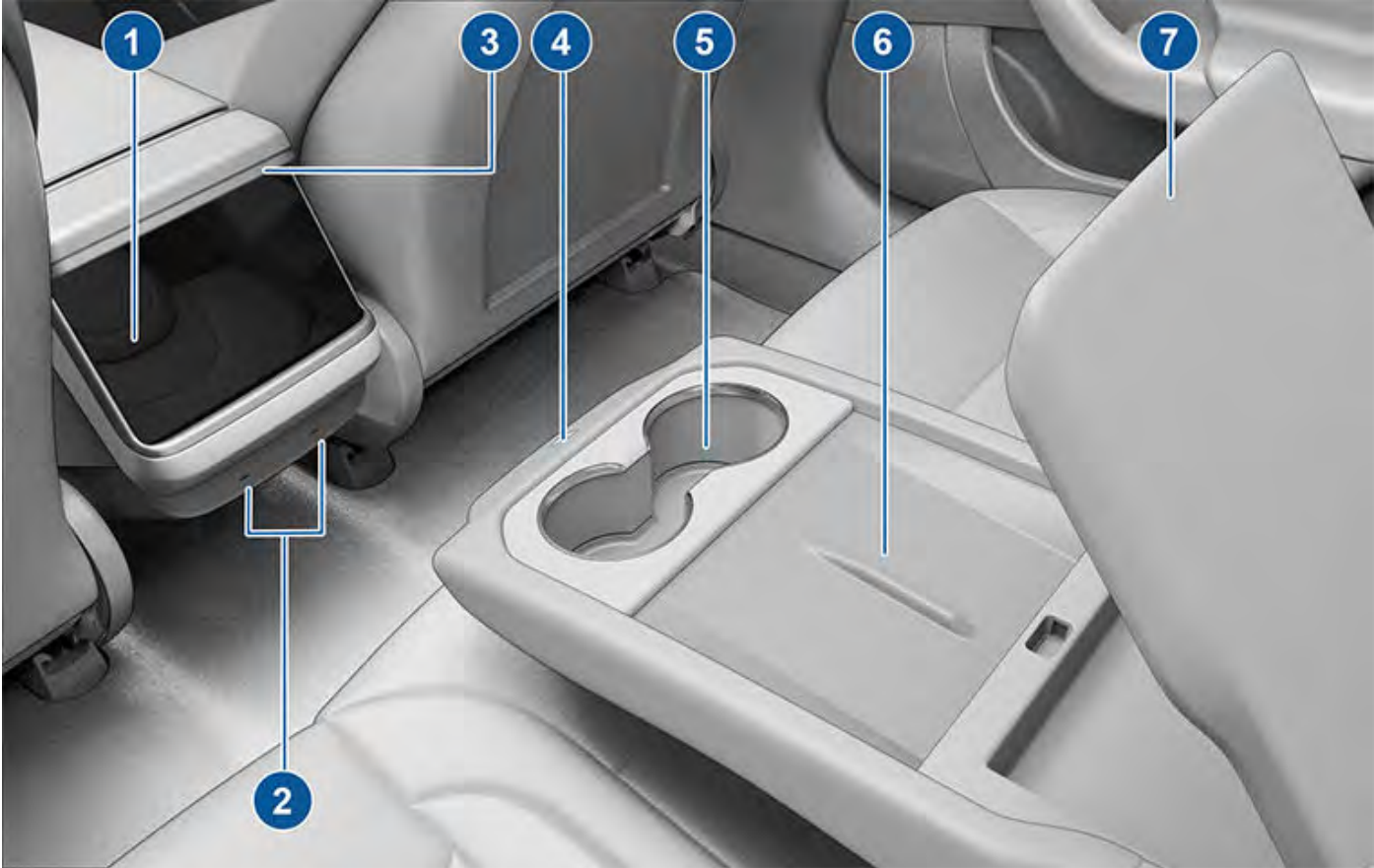


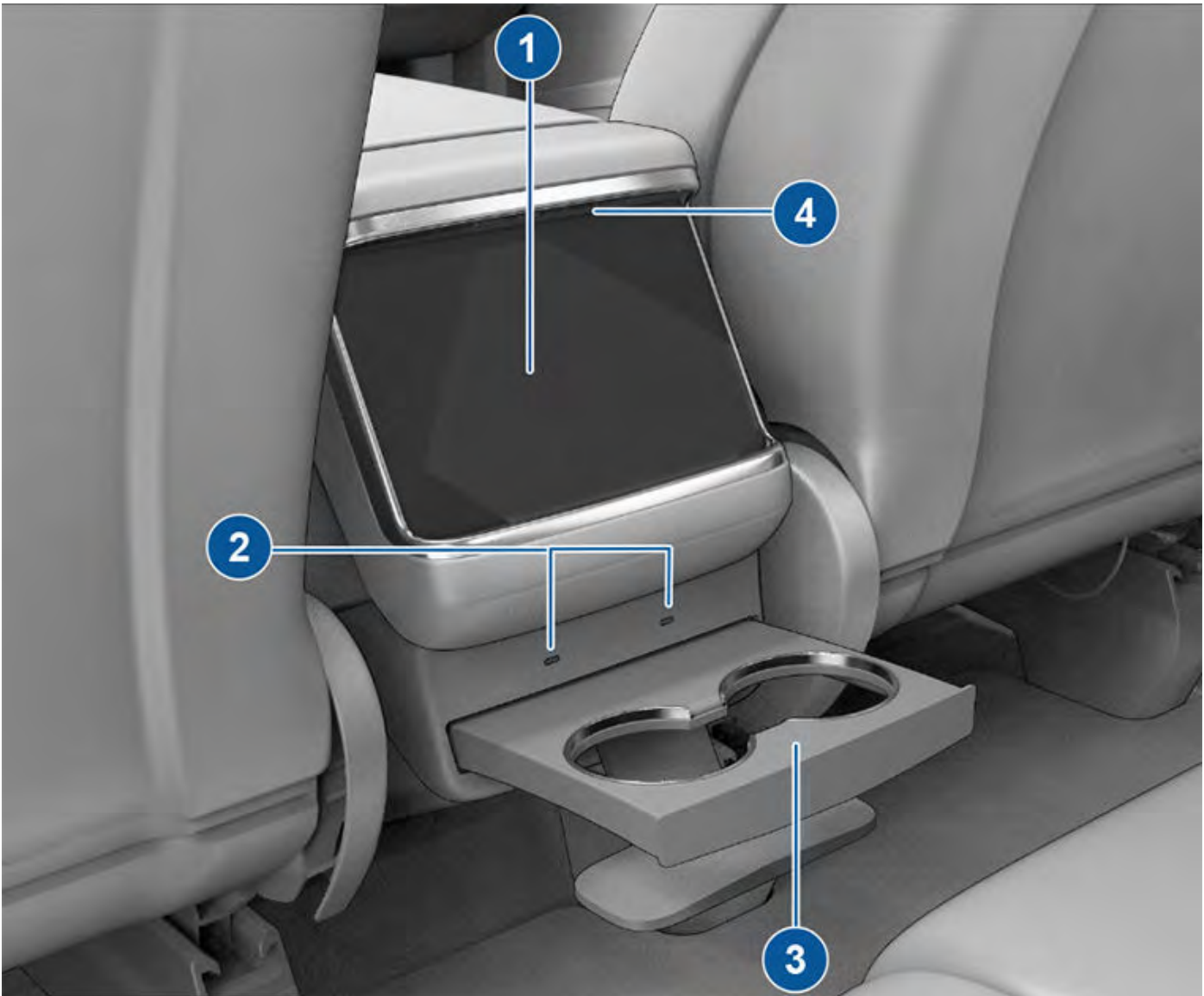


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11. Brake pedal ([Braking and Stopping on page 461](#))
12. Accelerator pedal ([Acceleration Modes on page 501](#))
13. Wireless phone chargers ([Wireless Phone Chargers on page 60](#))
14. Hazard warning lights ([Hazard Warning Flashers on page 441](#))

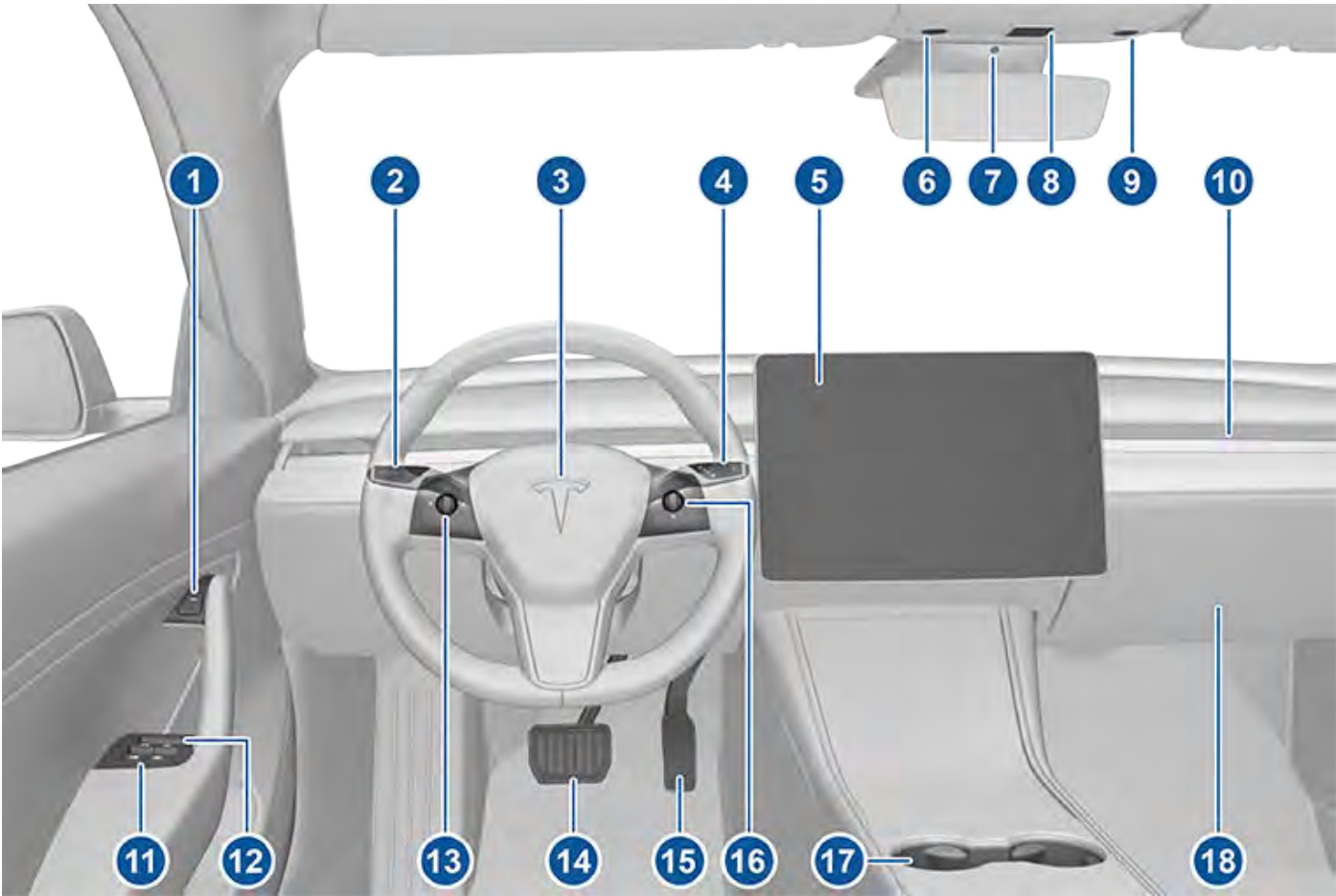


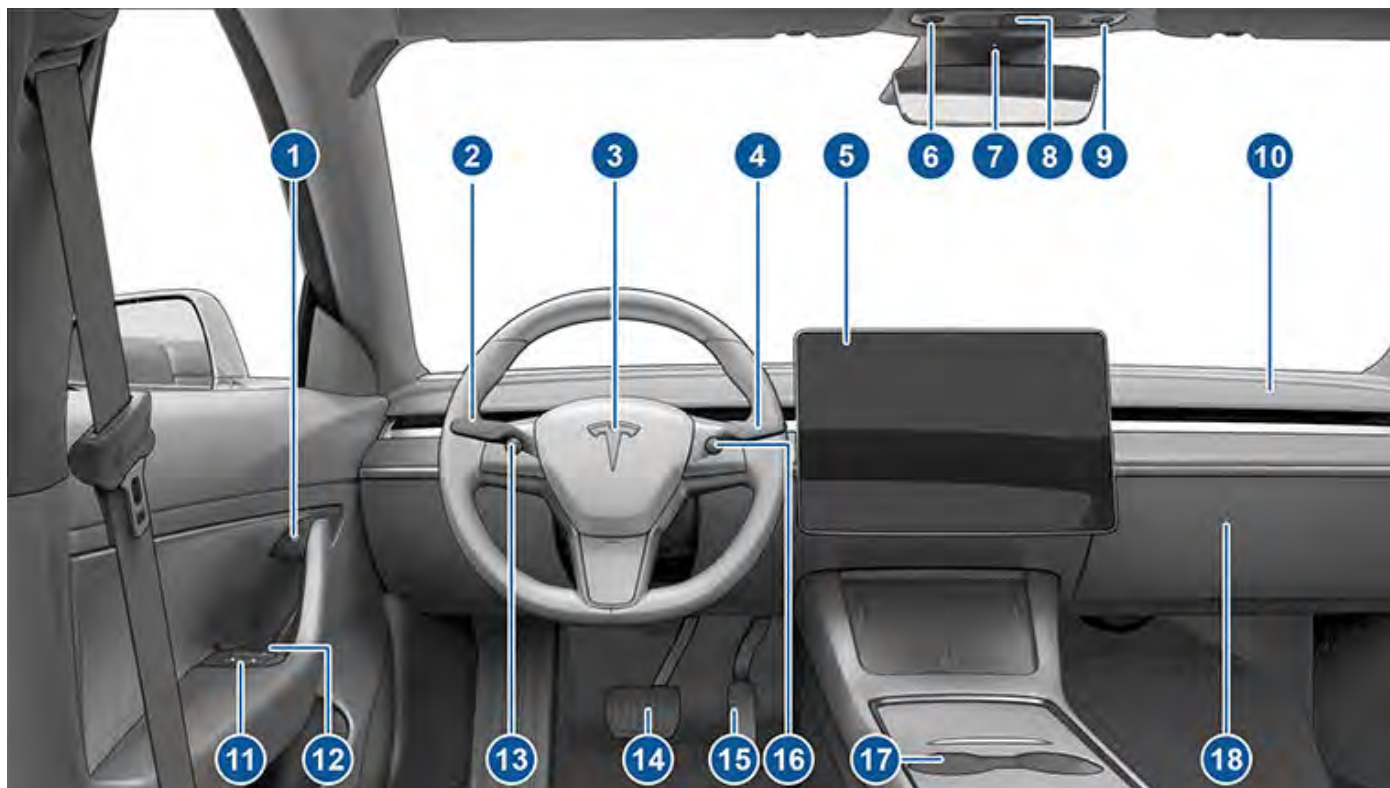
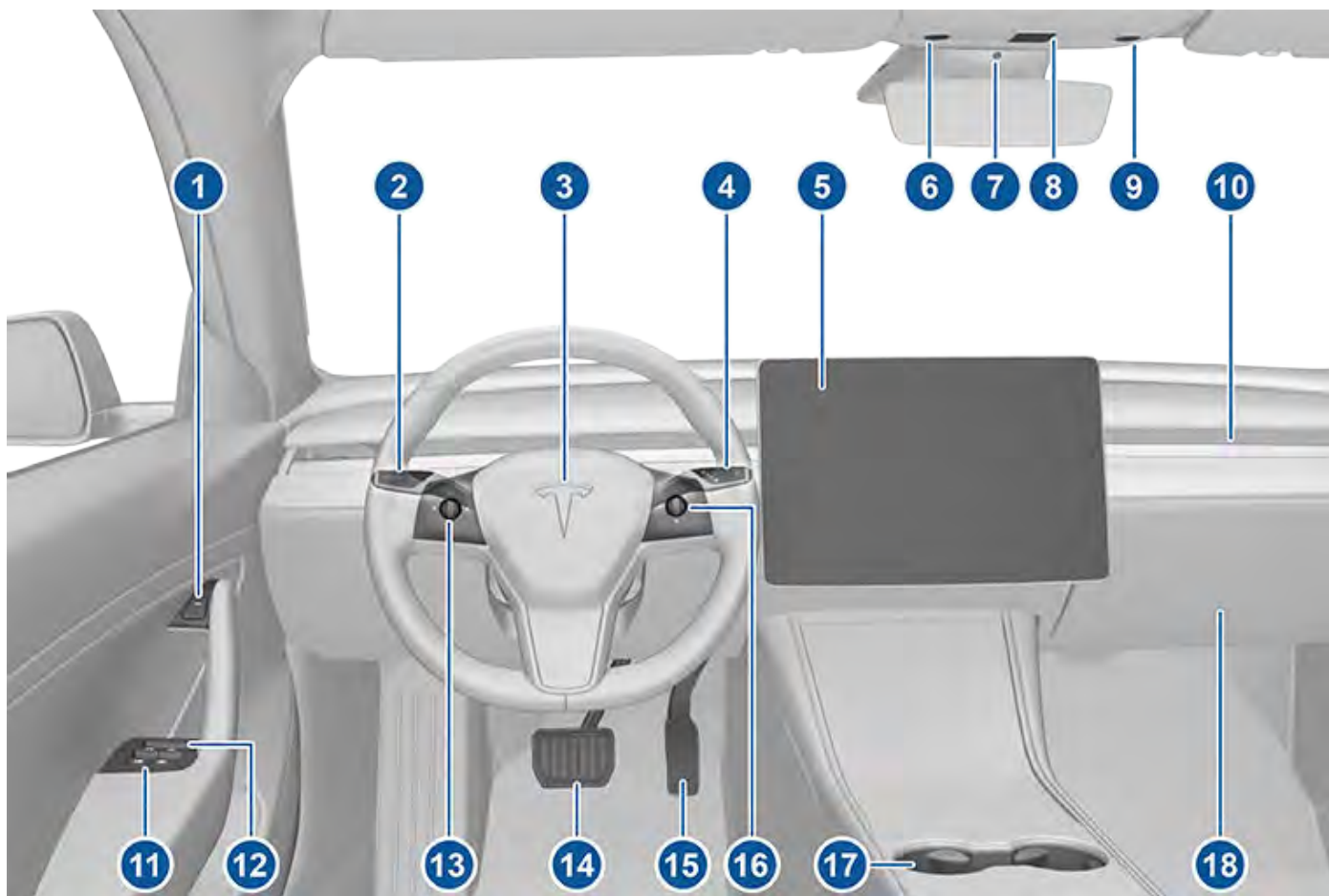
- 15. Secondary drive mode selector (Shifting on page 405)
- 16. Glovebox (Glovebox on page 193)

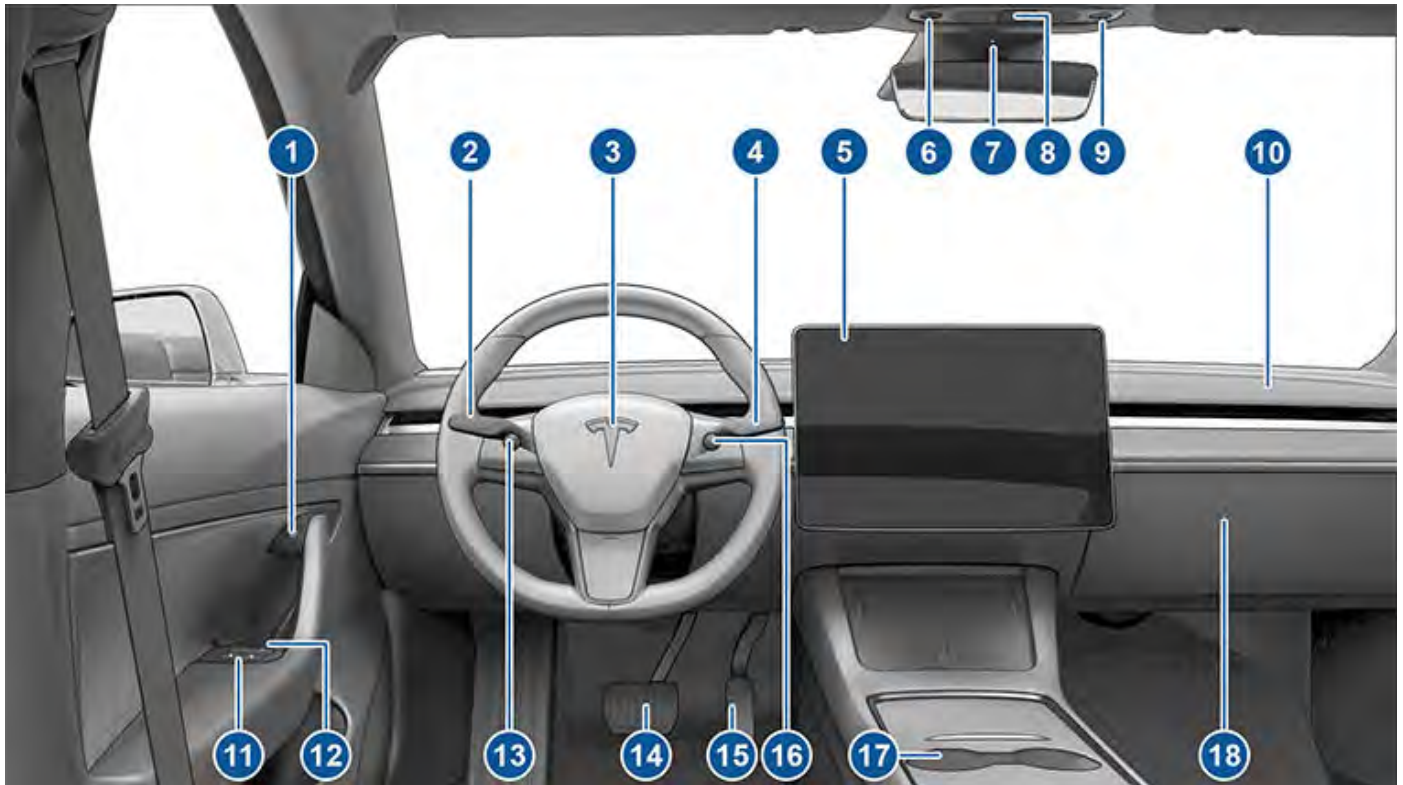




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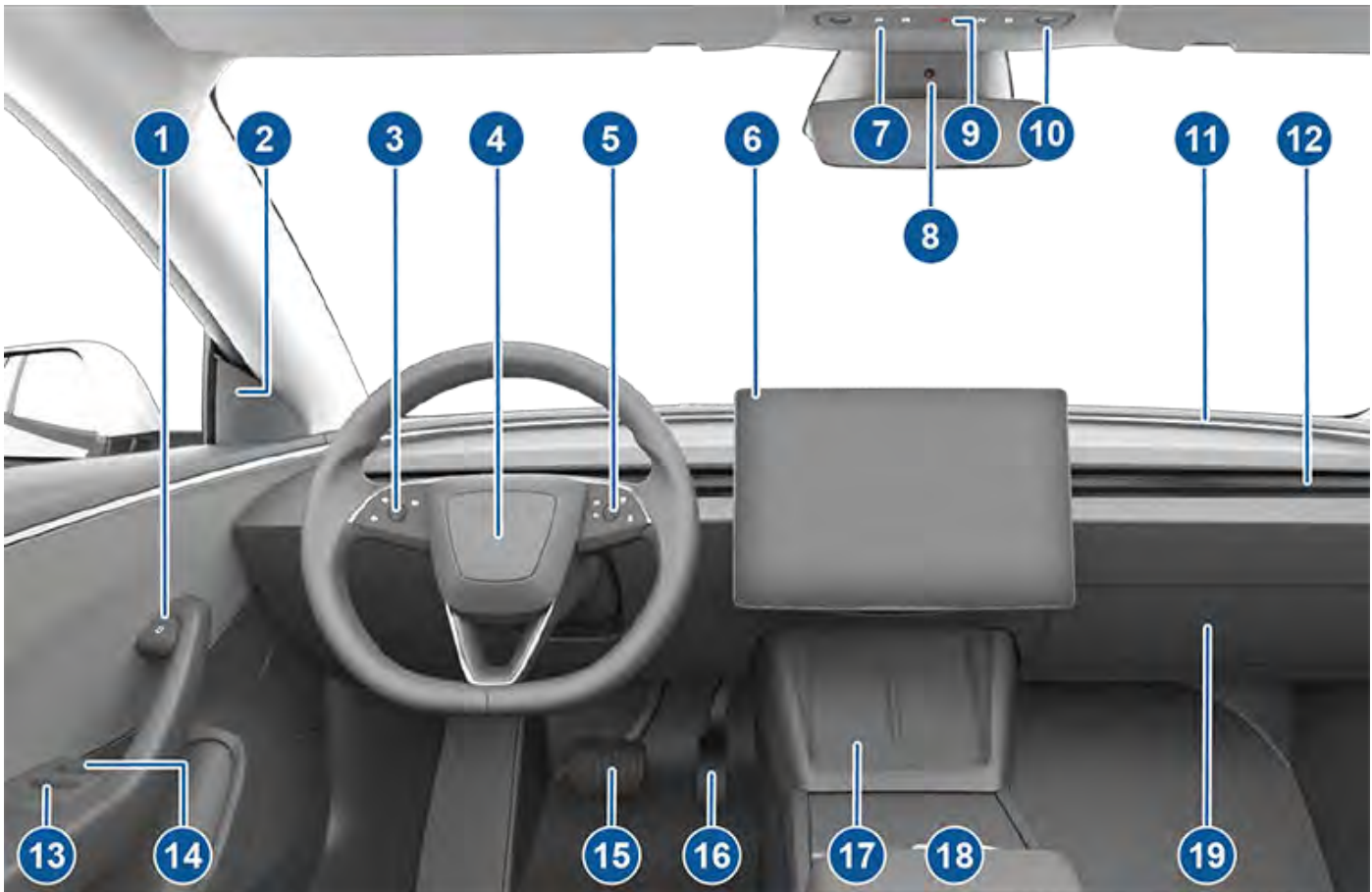


1. Door open button ([Opening Doors from the Interior on page 133](#))
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10. Climate control vent (see [Operating Climate Controls on page 669](#))
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18. Glovebox ([Glovebox on page 203](#))



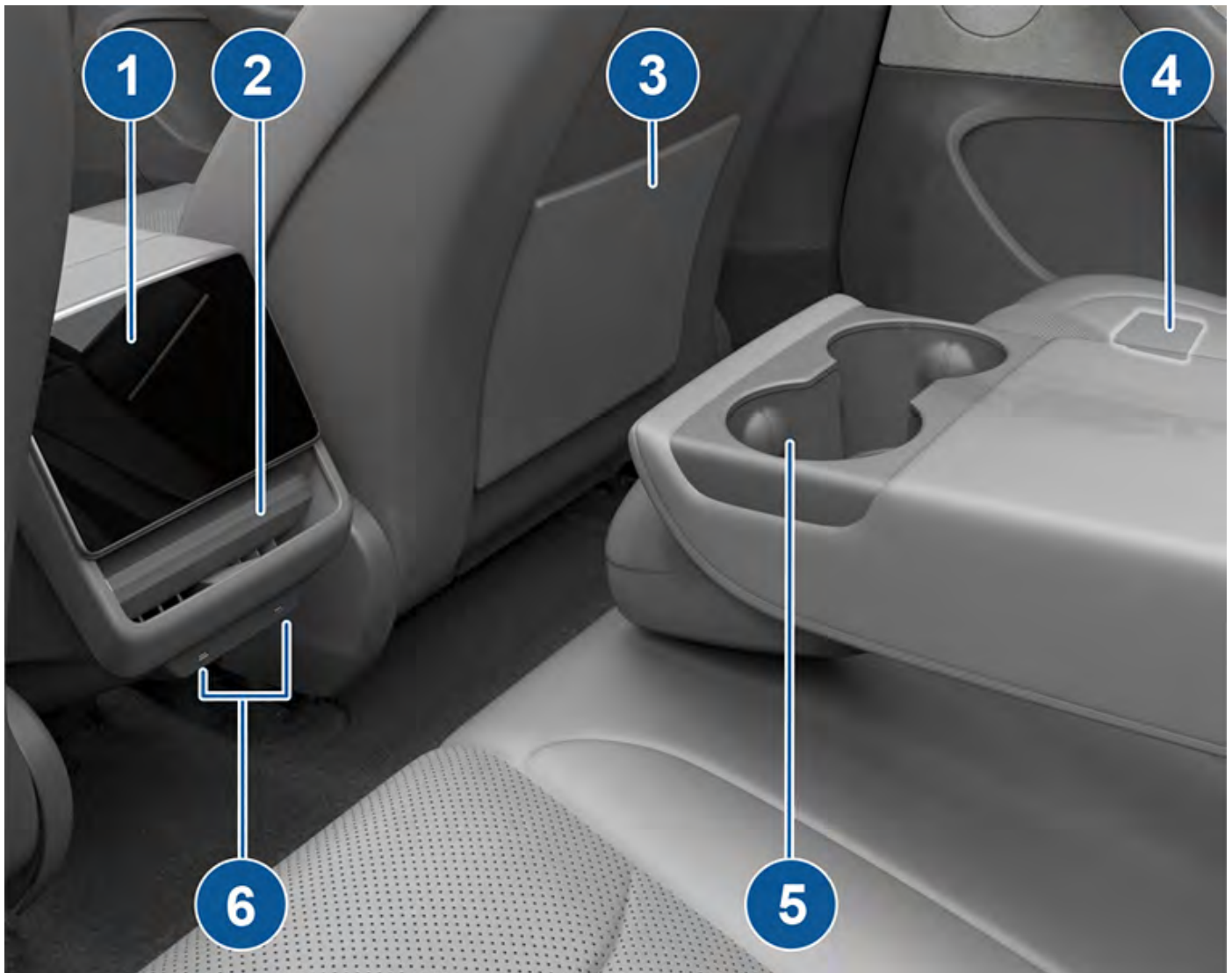
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- 8. Cabin camera ([Cabin Camera on page 654](#))
- 9. Hazard warning flashers ([Hazard Warning Flashers on page 441](#))
- 10. Dome lights ([Lights on page 433](#))

⚠ CAUTION: CybertruckModel SModel XModel 3Model Y is equipped with an in-cabin sensor located near the front passenger dome light to ensure certain vehicle and safety components are working properly. Do not block or obstruct the sensor. Doing so may cause inaccurate readings, such as for occupant detection, parking brake engagement, vehicle display settings, etc.

- 11. Accent lights ([Lights on page 433](#))
- 12. Climate control vent (see [Operating Climate Controls on page 669](#))
- 13. Power window switches ([Windows on page 158](#))
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- 18. Center console ([Center Console on page 191](#))
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3. Seat pocket
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5. Cup holders ([Rear Console on page 193](#))
6. USB ports ([USB Ports on page 58](#))

Touchscreen

In addition to the instrument panel, CybertruckModel SModel XModel 3Model Y is equipped with a front and rear touchscreen.


NOTE: Throughout this Owner's Manual, the front touchscreen is referred to as the "touchscreen" whereas the rear touchscreen is referred to as the "rear touchscreen".

NOTE: Throughout this Owner's Manual, the front touchscreen is referred to as the "touchscreen" whereas the rear touchscreen is referred to as the "rear touchscreen".

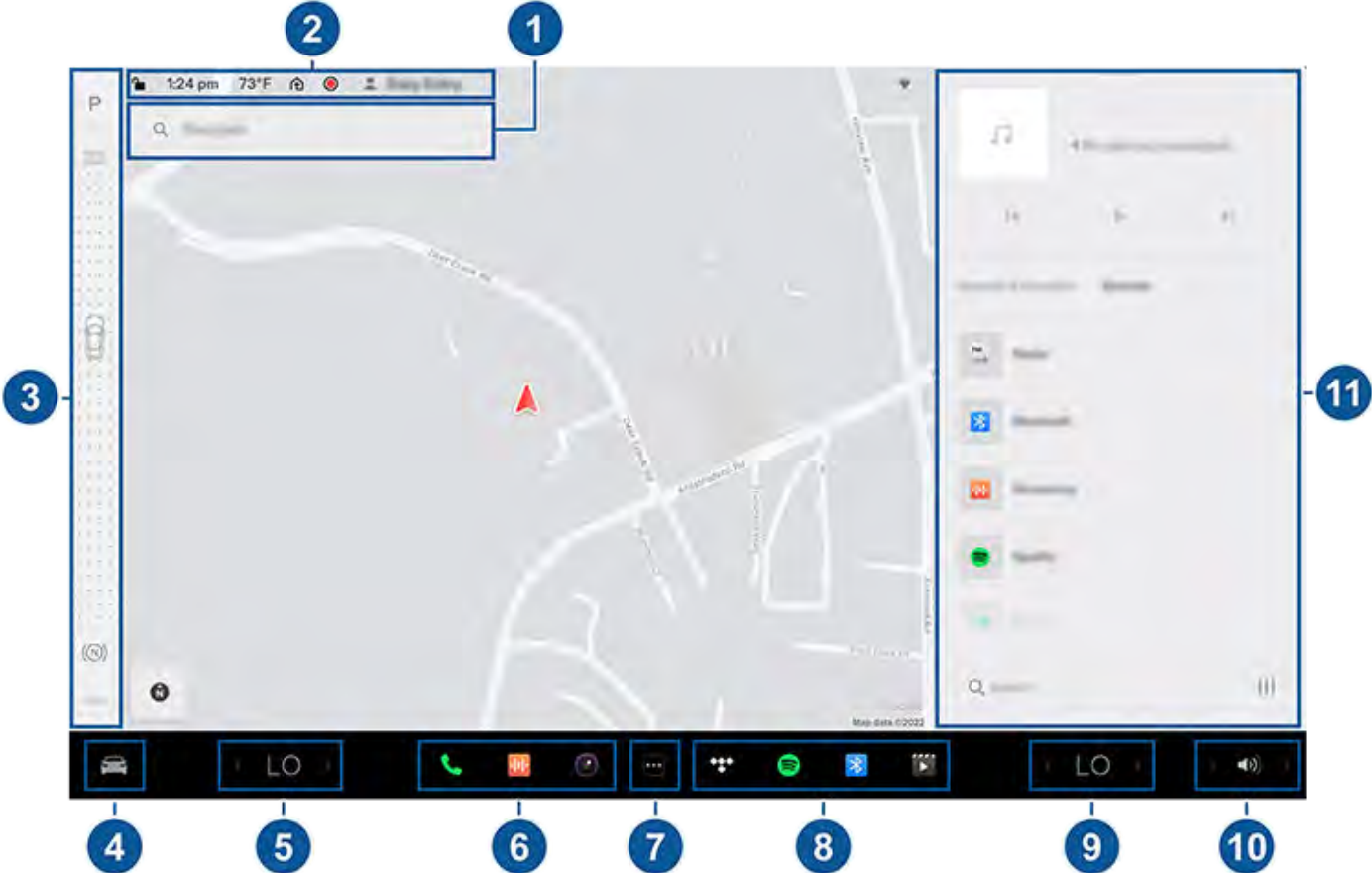
 **WARNING:** Always pay attention to road and traffic conditions when driving. To minimize driver distraction and ensure the safety of vehicle occupants as well as other road users, avoid using the touchscreen to adjust settings while the vehicle is in motion.

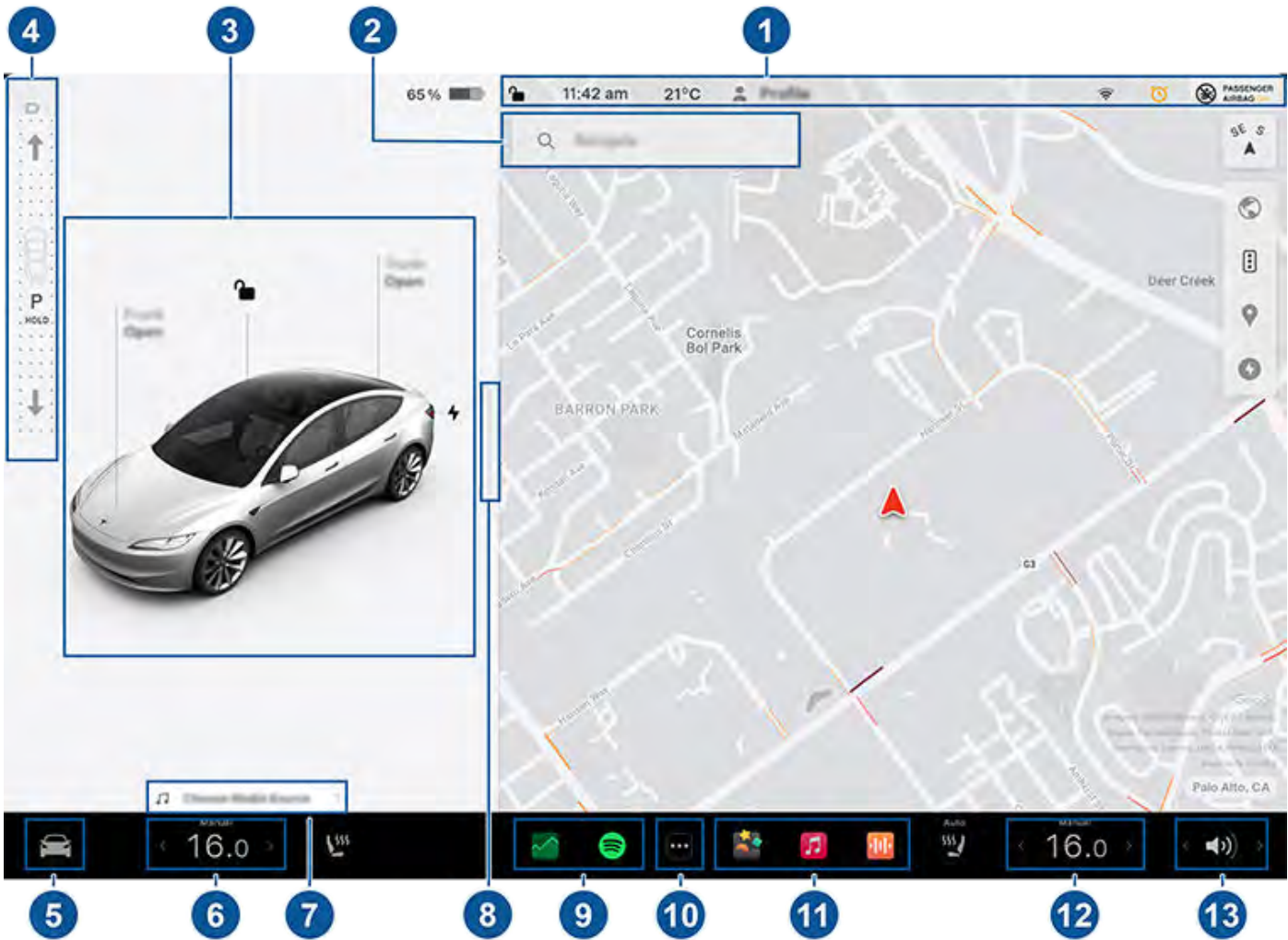
Use the touchscreen to control many features that, in traditional cars, are controlled using physical buttons (for example, adjusting the cabin heating and air conditioning, headlights, etc.). You also use the touchscreen to control media, navigate, use entertainment features, and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. For hands-free access to common touchscreen controls, use voice commands (see [Voice Commands on page 97](#)).

If the touchscreen is unresponsive or demonstrates unusual behavior, you can restart it (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

 **CAUTION:** Do not apply a screen protector on the touchscreen. Doing so can result in unintended inputs to the touchscreen (phantom inputs), delayed response or unresponsiveness to touches, electrostatic discharge which can damage the touchscreen, etc. Any damage caused by installing a screen protector is not covered by the warranty.

NOTE: *Illustrations are provided to improve conceptual understanding only. Depending on vehicle options, software version, market region and regional and language settings, the details displayed on the screen will differ.*





1. **Navigation:** Change the orientation of the map, find or navigate to a destination, and change navigation settings (see [Maps and Navigation](#) on page 699).
2. **Status bar:** Find car controls and status in the top bar (see [Top Status Bar Icons](#) on page 32).
3. **Drive mode strip:** Use to shift into Park, Reverse, Neutral, or Drive. The drive mode strip always displays on the touchscreen when you touch **Controls**. (See [Shifting](#) on page 405.)
4. **Controls:** Control various features and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. The Controls screen appears over the map. Touch an option on the Controls screen to display the various settings and preferences associated with the chosen option.

To search for a specific setting, touch **Search** at the top of the Controls screen. Make changes directly from the result or touch the link to jump to that option in Controls.



When an information icon displays beside a specific setting, touch it to display a popup that provides helpful details about the associated setting.

NOTE: You can also access Controls by touching anywhere on the side of the touchscreen closest to the driver and swiping open.

NOTE: Many vehicle controls, settings, and preferences (such as climate, media, and navigation) can be adjusted hands-free using voice commands (see [Voice Commands](#) on page 97).

NOTE: You can send touchscreen feedback to Tesla by long-pressing this icon.



5. **Climate controls (driver):** Use the left and right arrows to decrease/increase cabin temperature. Touch **Split** on the popup to display separate controls for the driver and passenger. Touch the temperature icon to customize climate control settings (see [Operating Climate Controls on page 669](#)). The passenger climate controls display when temperature controls have been **Split** to provide separate controls for the driver and passenger.
6. **My Apps:** For one-touch access to frequently used apps and controls, you can choose what displays here. See [Customizing My Apps on page 32](#).
7. **App Launcher:** Touch the app launcher to open the app tray. Then touch any app to open it. The app you choose displays on top of the map. To close an app, drag it downward.
NOTE: You cannot completely close Media Player. When you drag Media Player down, it displays Mini-Player which allows you see what's playing, pause/play, and skip reverse/forward.
8. **Recent App(s):** Displays the most recently used app(s). The number of recent apps displayed here depends on how many apps have been added to **My Apps**. If you add the maximum number of apps to **My Apps**, only the most recent app displays.
9. **Climate controls (passenger):** Displays when temperature controls have been **Split** to provide separate controls for the driver and passenger.
10. **Volume Control:** Controls the volume of media player and phone calls (see [Volume Controls on page 708](#)). The volume of navigation instructions is controlled separately (see [Maps and Navigation on page 699](#)).
11. **Media Player:** See [Media on page 707](#).

1. **Status bar:** Find car controls and status in the top bar (see [Top Status Bar Icons on page 32](#)).
2. **Navigation:** Change the orientation of the map, find or navigate to a destination, and change navigation settings (see [Maps and Navigation on page 699](#)).
3. **Car status:** This area dynamically displays the current status of CybertruckModel SModel XModel 3Model Y as you drive, park, open doors, turn lights on, etc. Monitor this area when driving as it displays important information such as driving speed and warning messages (see [Car Status on page 68](#)). When the vehicle is in Park, you can open the trunks or charge port door. This area also houses shortcut "cards" for Media, tire pressures, and Trip Information.

When full self-driving is enabled (if equipped), the car status area displays visualizations of the road and your vehicle's surroundings. You can expand/condense the visualization by dragging the car status area from side to side. Expanding the visualization displays more details about the roadway and its surroundings, including road markings, stop lights, and objects (such as trash cans and poles).

4. **Drive mode strip:** Use to shift into Park, Reverse, Neutral, or Drive. Swipe from the edge of the touchscreen towards the passenger, to bring up the drive mode strip. (See [Shifting on page 405](#).)
5. **Controls:** Control various features and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. The Controls screen appears over the map. Touch an option on the Controls screen to display the various settings and preferences associated with the chosen option.

To search for a specific setting, touch **Search** at the top of the Controls screen. Make changes directly from the result or touch the link to jump to that option in Controls.



When an information icon displays beside a specific setting, touch it to display a popup that provides helpful details about the associated setting.

NOTE: Many vehicle controls, settings, and preferences (such as climate, media, and navigation) can be adjusted hands-free using voice commands (see [Voice Commands on page 97](#)).

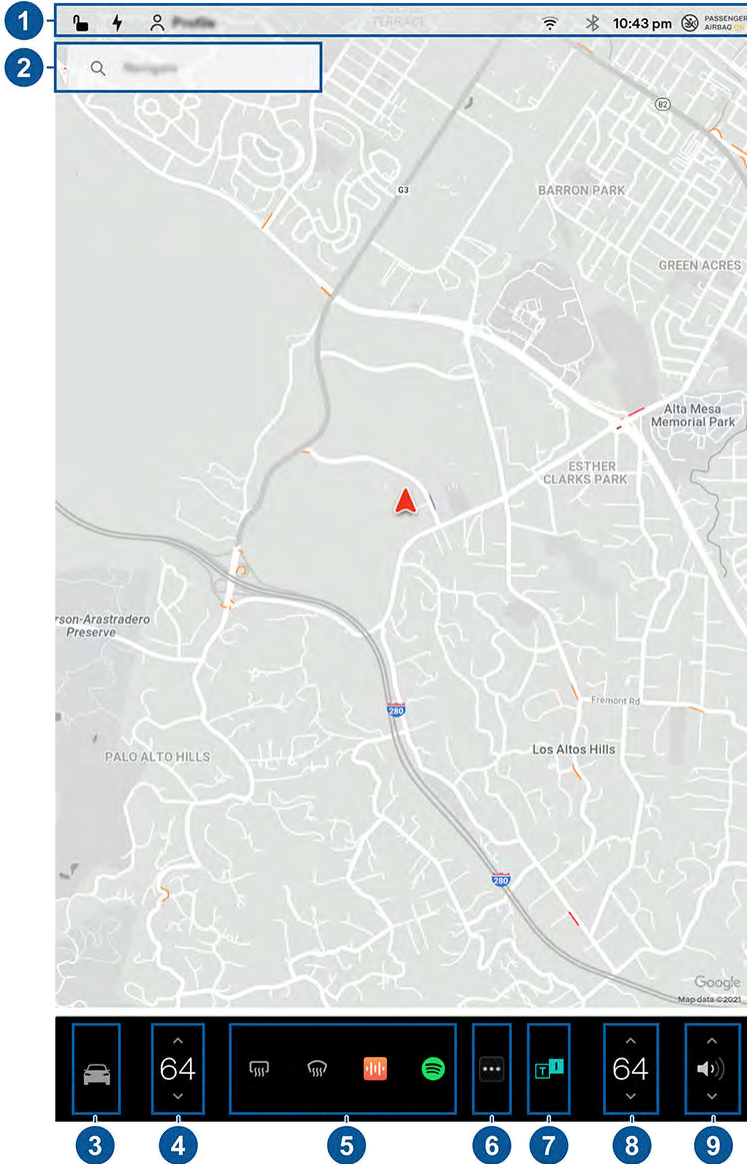
NOTE: You can send touchscreen feedback to Tesla by long-pressing this icon.

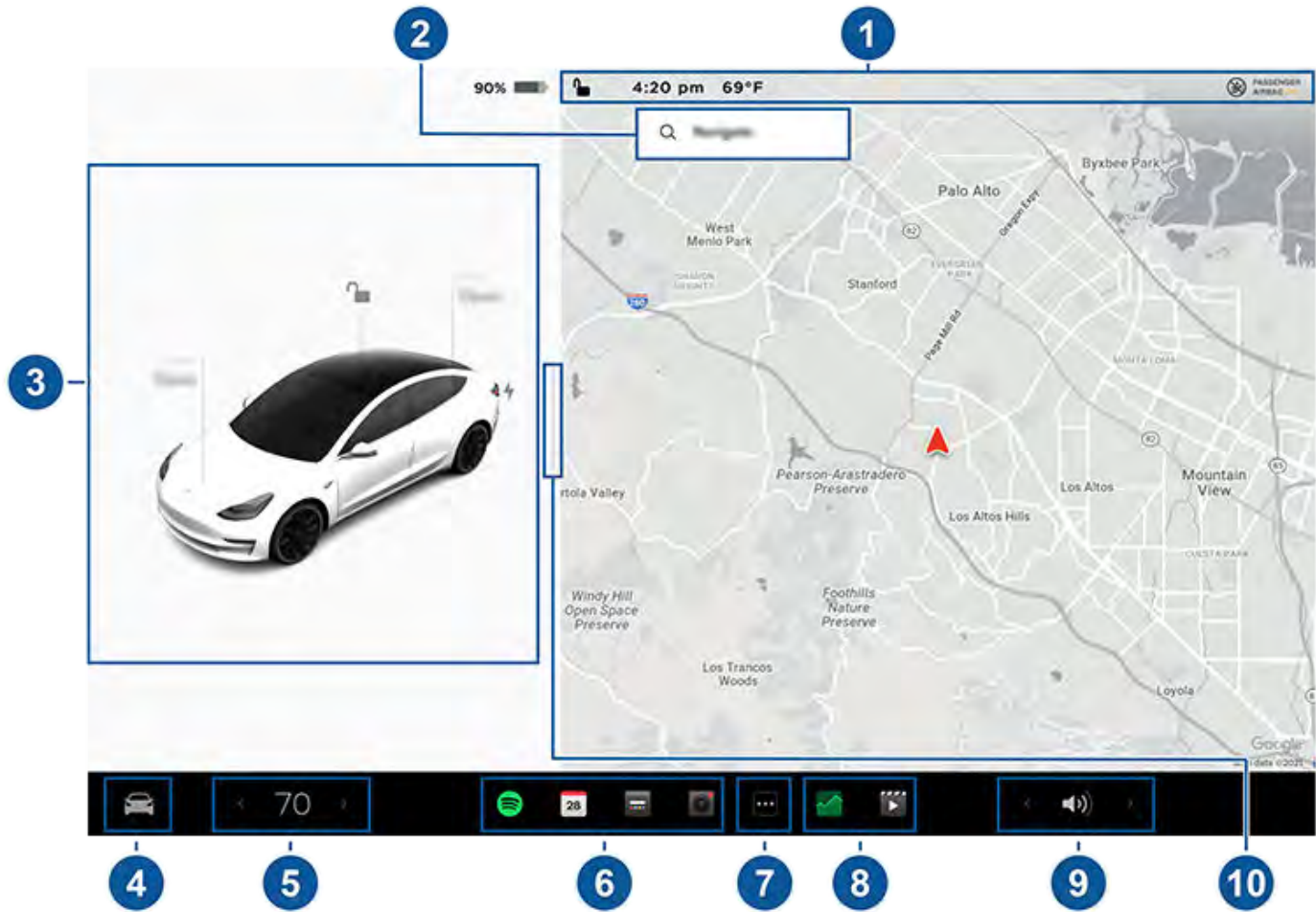
6. **Climate controls (driver):** Use the left and right arrows to decrease/increase cabin temperature. Touch **Split** on the popup to display separate controls for the driver and passenger. Touch the temperature icon to customize climate control settings (see [Operating Climate Controls on page 669](#)). The passenger climate controls display when temperature controls have been **Split** to provide separate controls for the driver and passenger.
7. **Media player shortcut:** When using the media player app, swipe to minimize/maximize.
8. **Full-screen Park view:** Swipe towards the passenger for a full-screen Park view with media and navigation controls.

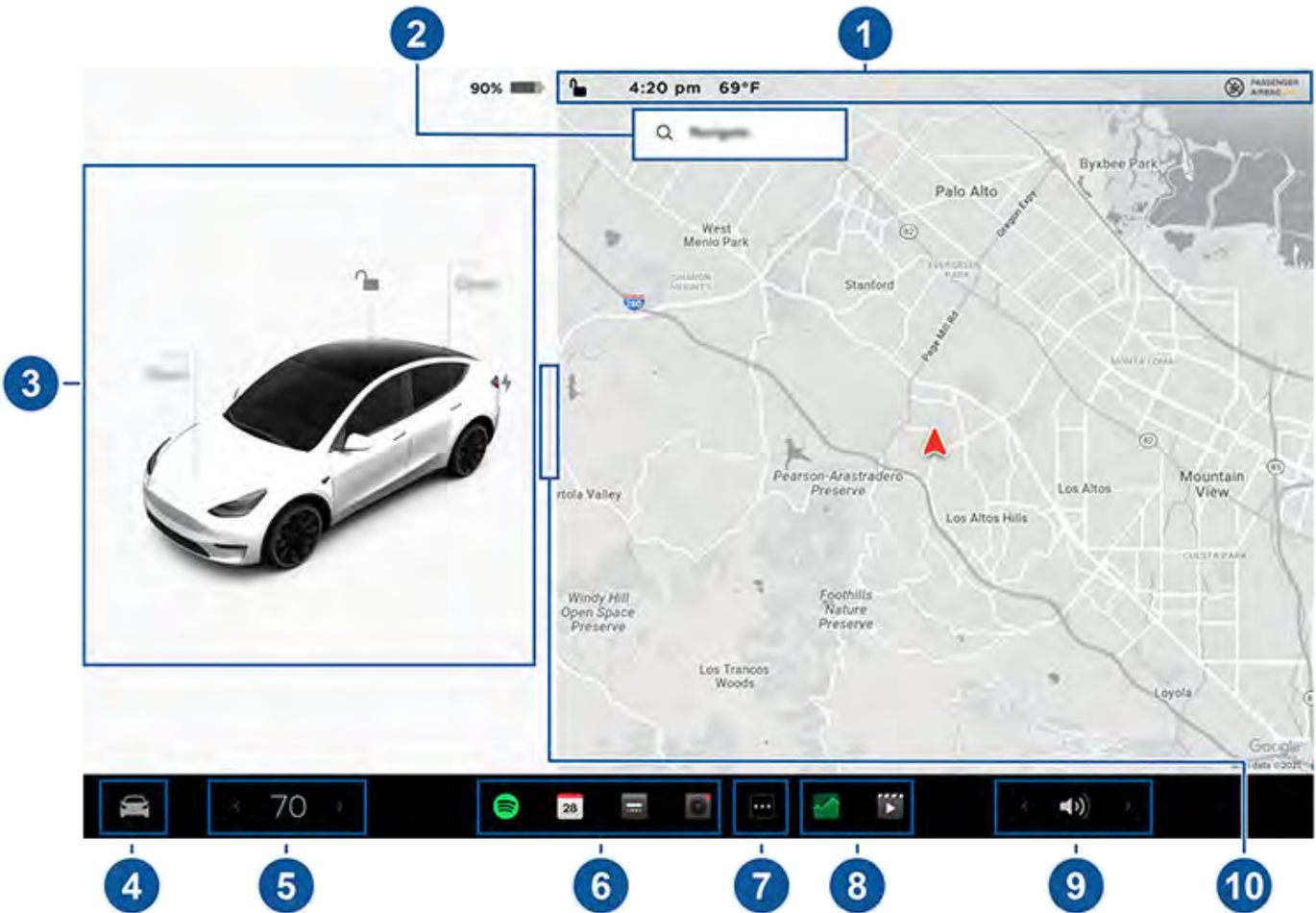


Owners Manual

9. **My Apps:** For one-touch access to frequently used apps and controls, you can choose what displays here. See [Customizing My Apps on page 32](#).
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12. **Climate controls (passenger):** Displays when temperature controls have been **Split** to provide separate controls for the driver and passenger.
13. **Volume Control:** Controls the volume of media player and phone calls (see [Volume Controls on page 708](#)). The volume of navigation instructions is controlled separately (see [Maps and Navigation on page 699](#)).







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- Car status:** This area dynamically displays the current status of CybertruckModel SModel XModel 3Model Y as you drive, park, open doors, turn lights on, etc. Monitor this area when driving as it displays important information such as driving speed and warning messages (see [Car Status](#) on page 68). When the car is in Park, you can open the trunks or charge port door. This area also houses shortcut "cards" for Media, tire pressures, and Trip Information.

When full self-driving is enabled (if equipped), the car status area displays visualizations of the road and your vehicle's surroundings. You can expand/condense the visualization by dragging the car status area from side to side. Expanding the visualization displays more details about the roadway and its surroundings, including road markings, stop lights, and objects (such as trash cans and poles).

- Controls:** Control various features and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. The Controls screen appears over the map. Touch an option on the Controls screen to display the various settings and preferences associated with the chosen option.

To search for a specific setting, touch **Search** at the top of the Controls screen. Make changes directly from the result or touch the link to jump to that option in Controls.



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NOTE: Many vehicle controls, settings, and preferences (such as climate, media, and navigation) can be adjusted hands-free using voice commands (see [Voice Commands](#) on page 97).



NOTE: You can send touchscreen feedback to Tesla by long-pressing this icon.

5. **Climate controls (driver):** Use the left and right arrows to decrease/increase cabin temperature. Touch **Split** on the popup to display separate controls for the driver and passenger. Touch the temperature icon to customize climate control settings (see [Operating Climate Controls on page 669](#)). The passenger climate controls display when temperature controls have been **Split** to provide separate controls for the driver and passenger.
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11. **Full-screen Park view:** (If equipped) Swipe towards the passenger for a full-screen Park view with media and navigation controls.

1. **Status bar:** Find car controls and status in the top bar (see [Top Status Bar Icons on page 32](#)).
2. **Navigation:** Change the orientation of the map, find or navigate to a destination, and change navigation settings (see [Maps and Navigation on page 699](#)).
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To search for a specific setting, touch **Search** at the top of the Controls screen. Make changes directly from the result or touch the link to jump to that option in Controls.



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- Recent App(s):** Displays the most recently used app(s). The number of recent apps displayed here depends on how many apps have been added to **My Apps**. If you add the maximum number of apps to **My Apps**, only the most recent app displays.
- Volume Control:** Controls the volume of media player and phone calls (see [Volume Controls on page 708](#)). The volume of navigation instructions is controlled separately (see [Maps and Navigation on page 699](#)).
- Full-screen Park view:** (If equipped) Swipe towards the passenger for a full-screen Park view with media and navigation controls.

Customizing My Apps

For one-touch access to commonly used apps and controls, you can customize what displays in the **My Apps** area on the touchscreen's bottom bar:

- Enter customization mode by touching and holding any app or control in the **My Apps** area. If this area is empty, touch the App Launcher.
- Drag any app or control from the app tray onto the **My Apps** area in the bottom bar.

NOTE: Seat heaters selected from the app tray appear next to the temperature, instead of in the My Apps area.

NOTE: When you've added the maximum number of apps or controls to **My Apps**, adding an additional app removes the rightmost app.

NOTE: Remove an app or control from the **My Apps** area by touching and holding, then touching its associated "X".

Top Status Bar Icons



Touch to lock/unlock all doors and trunks.

4:20 pm

Your vehicle automatically updates the time. If the time is incorrect, confirm your vehicle has internet and GPS connectivity with the latest software.



Displays on the touchscreen status bar only when CybertruckModel SModel XModel 3Model Y detects a programmed HomeLink within range, and the touchscreen is not already displaying the HomeLink screen or popup. See [Smart Garage on page 365](#).



Displays on the touchscreen status bar only when CybertruckModel SModel XModel 3Model Y is parked. Add, configure (including **Valet Mode** and **Use Easy Entry**), or quickly switch driver profiles. Driver profiles can also be accessed from the top of any Controls screen. See [Driver Profiles on page 514](#).



Available when CybertruckModel SModel XModel 3Model Y is parked, touch to manually enable or disable Sentry Mode for the current drive cycle. To automatically turn Sentry Mode on (or off) every time you leave your vehicle, enable the setting from **Controls > Safety > Sentry Mode**. See [Sentry Mode on page 664](#) for more information.

NOTE: If you turn Sentry Mode on or off from **Controls > Sentry Mode**, the shortcuts on the vehicle's touchscreen and mobile app will only work for the current drive cycle.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.



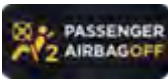
Displays when CybertruckModel SModel XModel 3Model Y is connected to a Wi-Fi network.



Displays when CybertruckModel SModel XModel 3Model Y is connected to a cellular network. Touch this icon for quick access to Wi-Fi settings.



Displays when CybertruckModel SModel XModel 3Model Y cellular connectivity is unavailable. Touch this icon for quick access to Wi-Fi settings.



Status of the front passenger airbag (see [Airbags on page 331](#)[Airbags on page 342](#)[Airbags on page 320](#)).



Appears when your vehicle's GPS location is actively being accessed in the Tesla mobile app by the owner, an added driver, or a third party app you're using. Tap the icon for details. To disable, navigate to **Safety > Allow Mobile Access** on the touchscreen.



Touch to lock/unlock all doors and trunks.

4:20 pm

Your vehicle automatically updates the time. If the time is incorrect, confirm your vehicle has internet and GPS connectivity with the latest software.



Displays when a software update is fully downloaded and ready to install. (See [Software Updates on page 749](#)).



Add, configure, or quickly switch driver profiles (including Valet Mode and Easy Entry). See [Driver Profiles on page 514](#).



Control or program HomeLink devices (if equipped) (see [Smart Garage on page 365](#)).



Displays when a notification is in effect. Touch to display information about the notification. To display a list of the most recent notifications, with the most recent listed first, you can also touch **Service > Notifications**.



Connected to a Wi-Fi network.



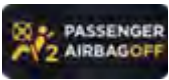
Connected to cellular network. Touch to connect to Wi-Fi (see [Wi-Fi on page 359](#)).



Displays when CybertruckModel SModel XModel 3Model Y cellular connectivity is unavailable. Touch this icon for quick access to Wi-Fi settings.



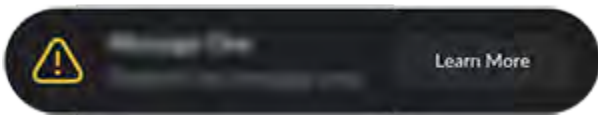
Connect to a Bluetooth device (see [Bluetooth on page 360](#)).



Status of the front passenger airbag (see [Airbags on page 342](#)[Airbags on page 320](#)).

Popup Messages and Vehicle Alerts

Popup messages appear at the bottom of the touchscreen. For example, a seat belt reminder appears if a seat belt is unfastened in an occupied seat, an alert appears to notify you of an incoming phone call, a text message appears (when applicable), and voice commands appear when in use. If applicable, touch options from these popup messages (for example, accept/decline a phone call, choose an option from the headlight menu, etc.). To dismiss a popup message, swipe it downward.



If an alert appears on your vehicle's touchscreen, touch **Learn More** for more details regarding the alert and how it can be resolved. You can view a list of vehicle alerts and notifications by touching the bell icon at the top of **Controls**.

NOTE: Not all alerts provide additional information at this time.

Restarting the Touchscreen or Instrument Panel

You can restart your touchscreen if it is unresponsive or demonstrates unusual behavior.

NOTE: To ensure the safety of occupants as well as other road users, restart the touchscreen only when the vehicle is in Park.

WARNING: Only restart the touchscreen while the vehicle is stopped and in Park. The car status display, safety warnings, backup camera, etc. will not be visible during the restart.

1. Shift into Park.
2. Hold down both scroll buttons on the steering wheelsteering yoke (or steering wheel) until the touchscreen turns black. Pressing the brake pedal while holding down the scroll buttons does not have any impact and is not required.





3. After a few seconds, the Tesla logo appears. Wait approximately 30 seconds for the touchscreen to restart. If the touchscreen is still unresponsive or demonstrating unusual behavior after a few minutes, try power cycling the vehicle (if possible). See [Power Cycling the Vehicle on page 370](#)[Power Cycling the Vehicle on page 370](#)[Power Cycling the Vehicle on page 375](#)[Power Cycling the Vehicle on page 375](#).

To reset the instrument panel, shift into Park and press the top two buttons on the steering wheel (**Voice Commands** and **Next**) for 15–30 seconds, or until the screen turns black. A few seconds later, a Tesla logo appears. Wait approximately 30 seconds for the instrument panel to restart.

NOTE: Restarting the touchscreen also activates the drive mode selector on the center console.

NOTE: Pressing the scroll buttons only restarts the touchscreen. It does not restart any other vehicle component and does not power CybertruckModel SModel XModel 3Model Y off and on.

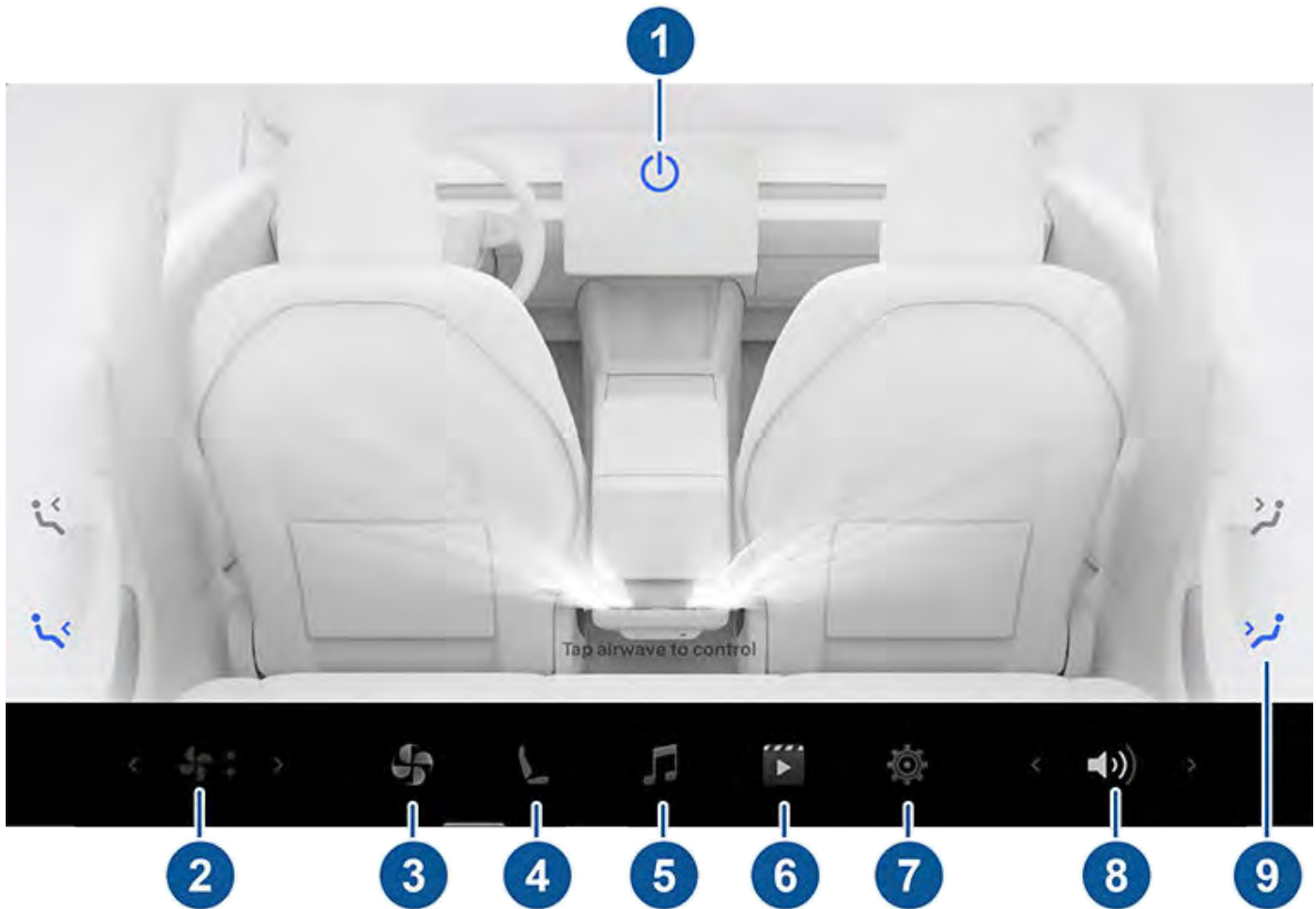
Tilt the Touchscreen (if equipped)

To tilt the touchscreen, navigate to **Controls**, then touch the display icon to choose the desired position.

⚠ WARNING: When the center display is tilting, ensure that there are no objects (such as your fingers or jewelry) between the screen and instrument panel to reduce the risk of injury or damage.

Rear Touchscreen

The rear touchscreen provides rear passengers with access to:



1. **Power:** Touch to turn the rear climate control system on or off.
2. **Rear fan speed:** Touch to adjust fan speed.
3. **Rear fan:** Touch to turn the rear fan on or off, to adjust fan speed and control the direction of air flow from the rear vents (see [Adjusting the Front and Rear Vents on page 685](#)).
4. **Seats:** Control rear seat heaters and move the front passenger seat forward/rearward using the arrows.
5. **Media:** Play, pause, skip or rewind through the currently playing song (see [Media on page 707](#)).
6. **Video:** Access video streaming services.
7. **Settings:** Touch to pair up to two sets of Bluetooth headphones, change the brightness or clean the display.
NOTE: You can also use the front touchscreen to pair Bluetooth headphones to the rear display by launching the Rear Screen app.
8. **Volume:** Touch to adjust the volume.
9. **Air wave preset:** Touch to direct the air flow to the passenger head or torso quickly. Direct the air flow exactly where you want by touching and moving the air wave on the touchscreen.

NOTE: You can also use the front touchscreen to adjust climate settings in the rear cabin (see [Adjusting Climate Control Settings on page 669](#)).

NOTE: Adjusting the media and volume controls also adjusts the front cabin settings.



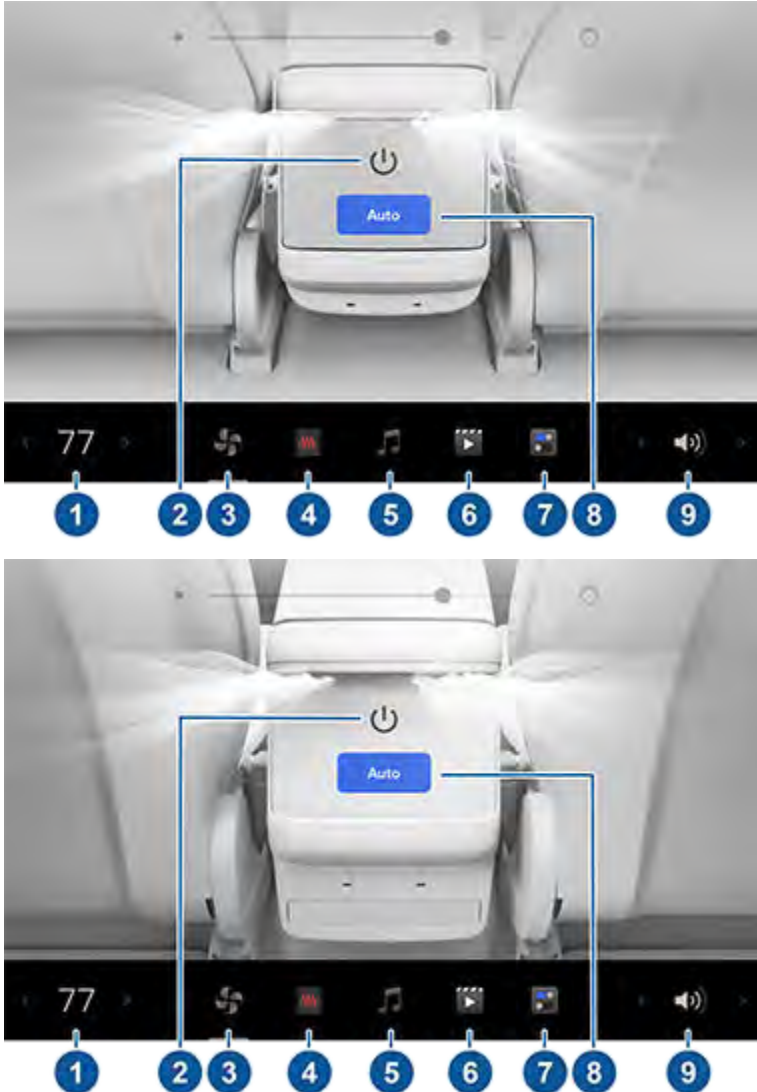
Control the rear screen from the front



To control the rear touchscreen from the front, open the rear screen remote control app in the bottom bar on the front touchscreen. Besides audio, video and climate controls, you can lock the rear display in the app or by touching **Controls > Display > Lock Rear Display**.

Rear Touchscreen

The rear touchscreen provides rear passengers with access to:



1. **Temperature:** Touch the arrows to decrease/increase cabin temperature.
2. **Power:** Touch to turn the rear climate control system on or off.
3. **Rear fan:** Touch to turn the rear fan on or off, to adjust fan speed and control the direction of air flow from the rear vents (see [Adjusting the Front and Rear Vents](#) on page 685).
4. **Seats:** Control rear seat heaters and move the front passenger seat forward/rearward using the arrows.
5. **Media:** Play, pause, skip or rewind through the currently playing song (see [Media](#) on page 707).
6. **Video:** Access video streaming services.
7. **Settings:** Touch to pair up to two sets of Bluetooth headphones, change the brightness or clean the display.



NOTE: Connect headphones to listen to audio from the rear touchscreen. The vehicle supports up to two Bluetooth devices at a time (such as one phone and one headset).

NOTE: Some vehicles manufactured before approximately September 2021 may require additional hardware to be compatible with wireless headphones. If the touchscreen displays this message, use the mobile app to schedule a service appointment.

8. **Auto:** If **Auto** is enabled and a passenger is detected, the set temperature is maintained for the rear cabin.

NOTE: Enable **Sync** on the rear tab of the front touchscreen's climate controls to set both the front and back cabin temperatures.

9. **Volume:** Touch to adjust the volume.

NOTE: You can also use the front touchscreen to adjust climate settings in the rear cabin (see [Adjusting Climate Control Settings on page 669](#)).

NOTE: Adjusting the media and volume controls also adjusts the front cabin settings.

Control the rear screen from the front



To control the rear touchscreen from the front, open the rear screen remote control app in the bottom bar on the front touchscreen. Besides audio, video and climate controls, you can lock the rear display in the app or by touching **Controls > Display > Lock Rear Display**.

Customizing Display and Sound Settings

Touch **Controls > Display** to adjust display settings to suit your preferences:

- **Appearance:** Customize the display to be **Dark** or **Light**. When set to **Auto**, the brightness changes automatically based on ambient lighting conditions.
- **Reduce Blue Light:** When enabled, the display automatically adjusts to use warmer colors at night.
- **Brightness:** Drag the slider to manually control the brightness level. If **Display Mode** is set to **Auto**, the touchscreen further adjusts based on both the ambient lighting conditions and your brightness preference. CybertruckModel SModel XModel 3Model Y remembers your chosen brightness preference and adjusts the touchscreen accordingly.
- **Energy Saving:** When toggled on, CybertruckModel SModel XModel 3Model Y reduces the amount of energy being consumed when not in use (for newer vehicles, this is automated). See [Getting Maximum Range on page 745](#).
- **Screen Clean Mode:** When enabled, your touchscreen darkens and temporarily disables to facilitate cleaning. Follow the onscreen instructions to exit Screen Clean Mode.
- **Touchscreen Language:** Select the language that the touchscreen displays.

NOTE: CybertruckModel SModel XModel 3Model Y must be in Park to change the language. When you change the language, you experience a brief delay as CybertruckModel SModel XModel 3Model Y shuts down and restarts the touchscreen.

- **Voice Recognition Language:** Choose the language to be used for voice commands.
- **Voice Navigation Language:** Choose the language that the navigation system uses for spoken instructions.

NOTE: For languages that require a download, select the language in the dropdown list to initiate the download (Wi-Fi connection required).

- **Text size:** Select between **Standard** and **Large** to customize the text size on your vehicle's touchscreen.
- **Lock Rear Display:** Lock access to the rear touchscreen.
- **Time:** Choose to display time in either 12 or 24 hour format.
- **Energy Display:** Choose to display remaining energy and charging units as either a percentage of battery energy remaining, or as an estimate of the distance you can drive. When you choose Distance, you can display mileage based on either:
 - **Rated** - based on EPA testing in the United States.



- **Ideal** - assumes ideal driving conditions based on driving at a steady speed of 55 mph (89 km/h) on a flat road, and using no additional energy (seat heaters, air conditioning, etc).

NOTE: When anticipating when you need to charge, use energy estimate as a general guideline only. Many factors have an impact on energy consumption. See [Factors Affecting Energy Consumption on page 745](#).

- **Distance:** Choose to display measurements in metric (kilometers, centimeters, etc.) or imperial (miles, inches, etc.) units.
- **Temperature:** Choose to display temperature using Fahrenheit or Celsius.
- **Tire Pressure:** Choose to display tire pressures using BAR or PSI.

In addition to customizing the display, you can enable Joe Mode to reduce the volume of all chimes that are not related to critical safety issues. Touch **Controls > Safety > Joe Mode** to enable.

Naming your Vehicle

To further personalize your vehicle, you can name it. Touch **Controls > Software > Name Your Vehicle** located on the right side of the touchscreen below the image of CybertruckModel SModel XModel 3Model Y. If your vehicle already has a name, touch the existing name to change it. Enter the new name in the popup and touch **Save**. The name of your CybertruckModel SModel XModel 3Model Y also appears in the Tesla mobile app.

Erasing Personal Data with a Factory Reset

When transferring ownership of CybertruckModel SModel XModel 3Model Y, perform a factory reset for security purposes *before removing your vehicle from your account* by touching **Controls > Service > Factory Reset**. Before erasing data, CybertruckModel SModel XModel 3Model Y verifies your credentials by prompting you to enter the user name and password associated with your Tesla account.

NOTE: Performing a factory reset is only possible when the vehicle is in your account. After the vehicle is removed from your account, you no longer have access to perform a reset of customized settings to the factory defaults and to erase all personal data.



Interior Electronics

In addition to storage compartments and cup holders (see [Interior Storage on page 201](#)), the Cybertruck Model S Model X Model 3 Model Y interior supports various electronics such as an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), USB ports, a phone dock for two phones (or other devices) or a wireless phone charger (depending on date of manufacture) a wireless phone charger, and a 12V power socket.

USB Ports

Cybertruck Model S Model X Model 3 Model Y has two USB ports located in the front compartment of the center console. These ports can be used to:

- Connect and charge USB devices.
- Play audio files stored on a phone or USB device (see [Playing Media from Devices on page 709](#)).
- Save videos when using features such as Sentry Mode or Dashcam (see [Dashcam on page 661](#) and [Sentry Mode on page 664](#)).

NOTE: If your Model Y is equipped with a USB port located in the glove box (described below), it is recommended that you use the glovebox USB to save Sentry Mode or Dashcam videos because power consumption is minimized and the location is more secure.

- Save videos when using features such as Sentry Mode or Dashcam (see [Sentry Mode on page 664](#) and [Dashcam on page 661](#)).
- For saving Sentry Mode and Dashcam video footage, use the USB port located in the glove box. Doing so increases security and minimizes power consumption.

The USB ports can output power up to approximately 15W (which may vary depending on vehicle manufacture date).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

The left port is USB-C compatible whereas the right port is USB-A (on vehicles manufactured before approximately June, 2020, both ports are USB-A).

The left port is USB-C compatible whereas the right port is USB-A.

Both ports are USB-C compatible.

Open the center console door below the touchscreen and lift the phone dock upward to access the front USB ports.

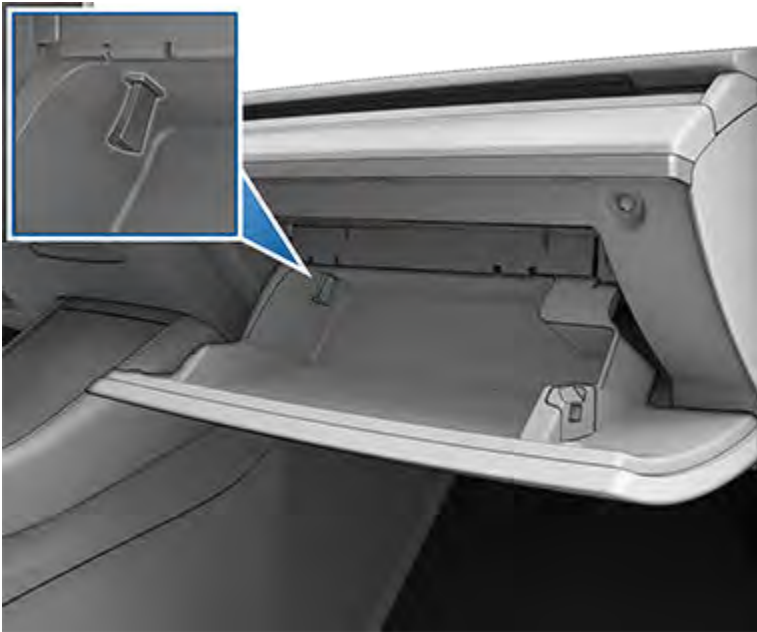
See [USB Drive Requirements for Recording Videos on page 666](#) for information about formatting USB flash drives.

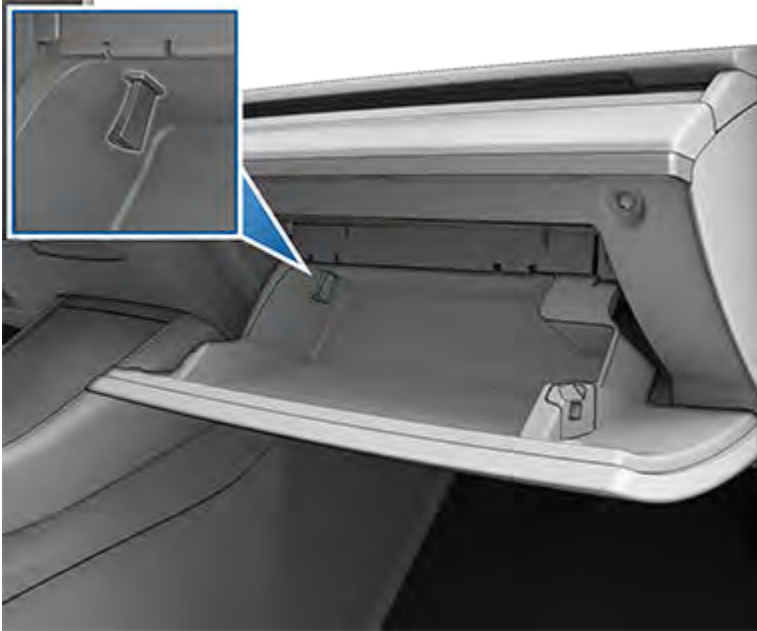


Open the front compartment of the center console. The front USB ports are located on the rear wall of the compartment.



Depending on date of manufacture, some vehicles include a USB port located inside the glovebox. This USB-A port is equipped with a pre-formatted flash drive, ready to save videos when using features such as Sentry Mode and Dashcam. Although not its primary purpose, this port can also communicate with the vehicle and can be used to charge a USB-connected device.





Two additional USB ports are located in the rear of the center console (on vehicles manufactured since approximately June 2020, these ports are USB-C). These ports charge USB-connected devices but do not communicate with the vehicle.





If CybertruckModel SModel XModel 3Model Y is equipped with seven seats, two USB-C ports are located at the front of the console located between the third row seats. These ports charge USB-connected devices but do not communicate with the vehicle.



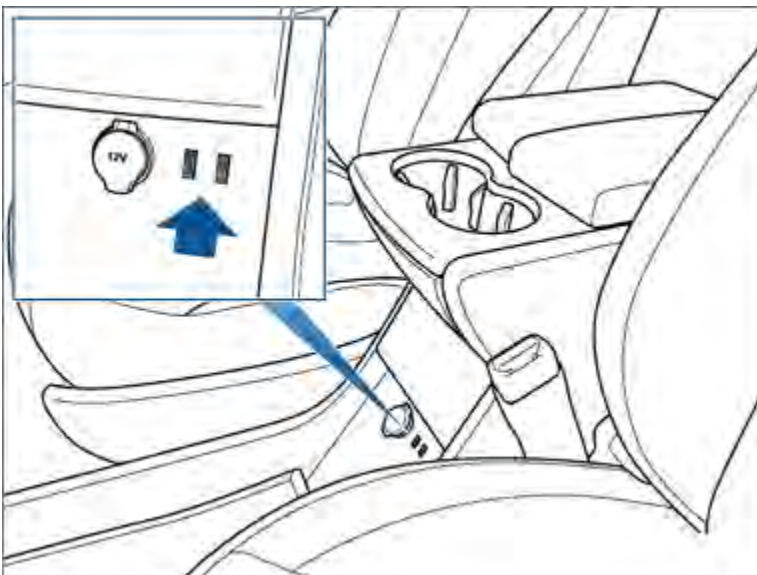
NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

USB Ports

Your CybertruckModel SModel XModel 3Model Y has two USB ports located on the front of the center console that you can use to connect USB devices. To play audio files stored on a USB drive connected to these ports, see [Playing Media from Devices on page 709](#). You can also use these ports to charge USB devices.





In addition, Model X has two charge-only USB ports located at the rear of the center console, and another charge-only connection located between the third row seats (if equipped).

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by the Media Player.

NOTE: You can charge four devices simultaneously using the two ports at the front of the center console and the two at the rear of the console.

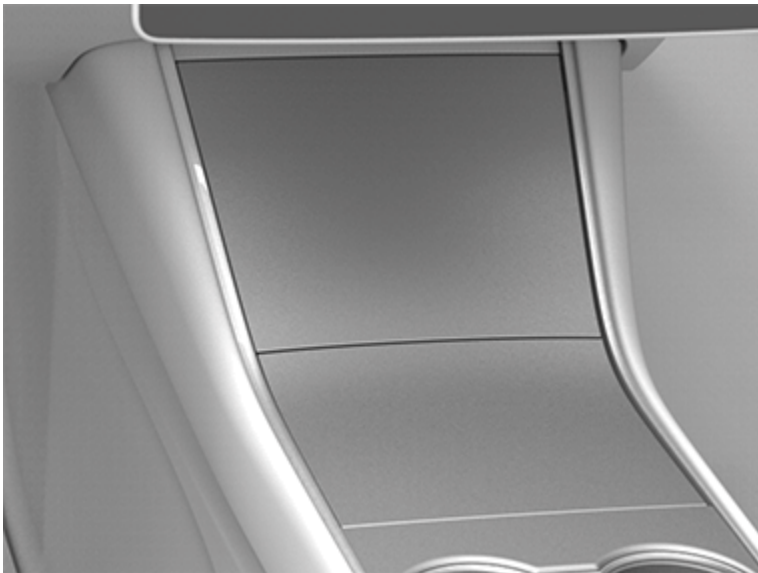
NOTE: Power is available whenever the vehicle is considered "awake" The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

Installing Phone Charging Cable

To make it easy to connect your phone while keeping the console free of clutter, you can install a phone charging cable in Cybertruck Model S Model X Model 3 Model Y.

NOTE: The phone dock supports two phones side-by-side.

To install a phone charging cable:



1. Open both center console doors in front of the cup holders.
2. Remove the rubber mat from the phone dock.
3. Lift the phone dock to access the USB ports.
4. Release the cover from the base of the phone dock by sliding it to the left.
5. Plug the USB connector on the phone charging cable into a USB port.
6. Insert the phone end of the charging cable through the bottom of the phone dock and route the cable through the securing tabs towards the bottom of the phone dock.
7. Reinstall the cover to the base of the phone dock by sliding it to the right.
8. Lower the phone dock and reinstall the rubber mat.

Wireless Phone Charger

A wireless phone charger (if equipped), is integrated into the front console to provide up to 15W of power to charge a Qi-enabled phone. Simply place your phone on the charger. Your device may feel warm while charging, but this is a normal effect of inductive charging.



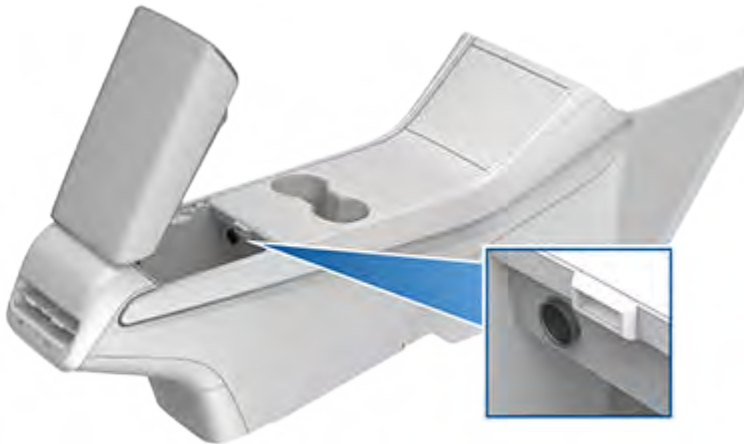
When placed on the wireless charger, your phone charges whenever the vehicle is powered on (the touchscreen is on and you are inside the vehicle). Your phone will not charge after exiting the vehicle unless a feature (such as Sentry mode) is enabled and providing power to the USB ports. CybertruckModel SModel XModel 3Model Y will also not charge a phone if the vehicle's Battery is discharged.

NOTE: The wireless phone charger may not work if your phone case is too large or is made of metal. Try removing the phone from its case before placing in the charger.

CAUTION: The phone must be in direct contact with the wireless charger. Do not place objects between the phone and the charger (for example, credit cards, key cards, coins, keys, metal objects, etc.).

Low Voltage Power Socket

Your CybertruckModel SModel XModel 3Model Y has a power socket located in the center console's rear compartment.






The power socket is suitable for accessories requiring up to 12A continuous draw (16A peak).

NOTE: For vehicles manufactured after approximately November 2021, power inverters plugged into the low voltage power socket must support 16V DC input to function.

An additional low voltage power socket is located on the left side of the rear trunk.

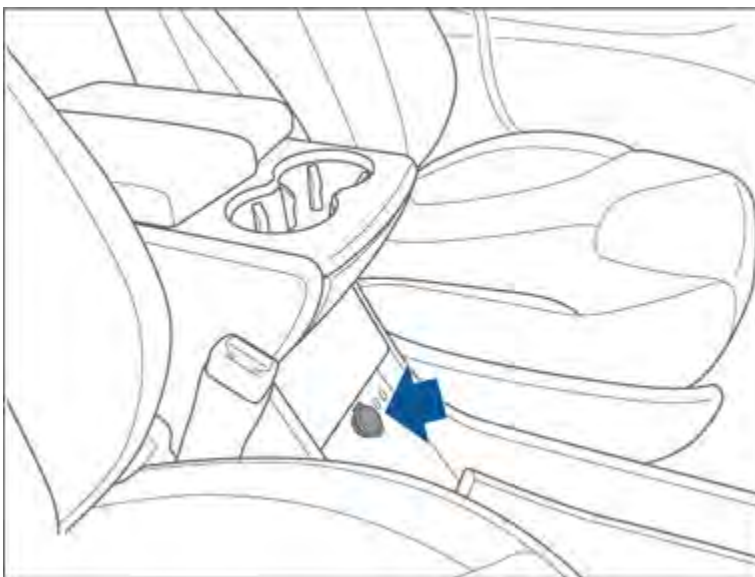


NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

-  **WARNING:** The power socket and an accessory's connector can become hot.
-  **WARNING:** To prevent excessive interference with the vehicle's electronics, Tesla recommends that you do not plug any non-Tesla accessories, including power inverters, into the low voltage power socket. However, if you do use a non-Tesla accessory and notice any malfunctions or unexpected behavior, such as indicator lights, alert messages, or excessive heat from the accessory, unplug the accessory from the low voltage power socket immediately.
-  **CAUTION:** Do not attempt to jump start Cybertruck Model S Model X Model 3 Model Y using the low voltage power socket. Doing so can result in damage.

Low Voltage Power Socket

Your Cybertruck Model S Model X Model 3 Model Y has a power socket located on the front of the center console. An additional low voltage power socket is located in the rear trunk. Power is available whenever the instrument panel and touchscreen are on.




The low voltage power socket is suitable for accessories requiring up to 11A continuous draw (15A peak) or a maximum of 150 continuous watts (180 watts peak).



NOTE: Power is available whenever the vehicle is considered "awake" The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: In situations where CybertruckModel SModel XModel 3Model Y is unable to detect the key fob (low battery, interference, etc.), place it immediately below the low voltage power socket in the center console where CybertruckModel SModel XModel 3Model Y can best detect it.

 **WARNING:** The power socket and an accessory's connector can become hot.



Interior Electronics

In addition to storage compartments and cup holders (see [Interior Storage on page 201](#)), the Cybertruck Model S Model X Model 3 Model Y interior supports various electronics such as an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), USB ports, a phone dock for two phones (or other devices) or a wireless phone charger (depending on date of manufacture) a wireless phone charger, and a 12V power socket.

USB Ports

Cybertruck Model S Model X Model 3 Model Y has two USB ports located in the front compartment of the center console. These ports can be used to:

- Connect and charge USB devices.
- Play audio files stored on a phone or USB device (see [Playing Media from Devices on page 709](#)).
- Save videos when using features such as Sentry Mode or Dashcam (see [Dashcam on page 661](#) and [Sentry Mode on page 664](#)).

NOTE: If your Model Y is equipped with a USB port located in the glove box (described below), it is recommended that you use the glovebox USB to save Sentry Mode or Dashcam videos because power consumption is minimized and the location is more secure.

- Save videos when using features such as Sentry Mode or Dashcam (see [Sentry Mode on page 664](#) and [Dashcam on page 661](#)).
- For saving Sentry Mode and Dashcam video footage, use the USB port located in the glove box. Doing so increases security and minimizes power consumption.

The USB ports can output power up to approximately 15W (which may vary depending on vehicle manufacture date).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

The left port is USB-C compatible whereas the right port is USB-A (on vehicles manufactured before approximately June, 2020, both ports are USB-A).

The left port is USB-C compatible whereas the right port is USB-A.

Both ports are USB-C compatible.

Open the center console door below the touchscreen and lift the phone dock upward to access the front USB ports.

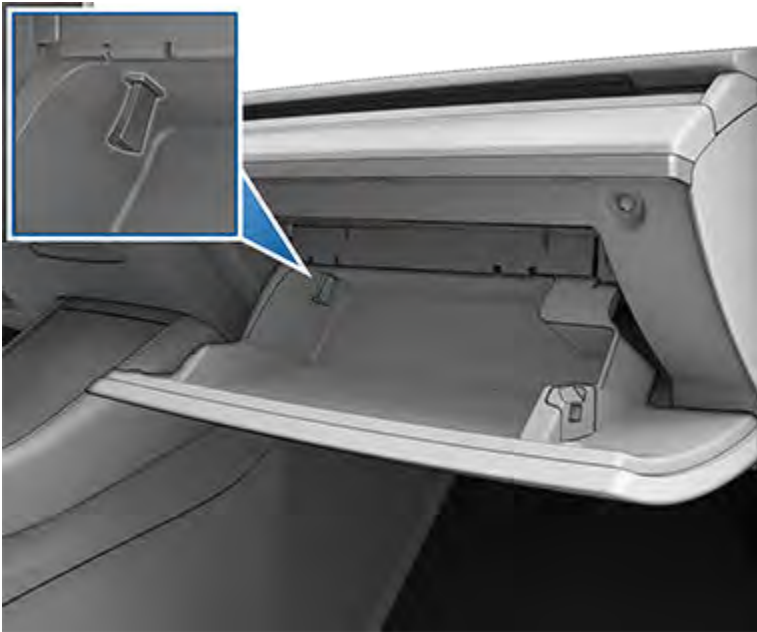
See [USB Drive Requirements for Recording Videos on page 666](#) for information about formatting USB flash drives.

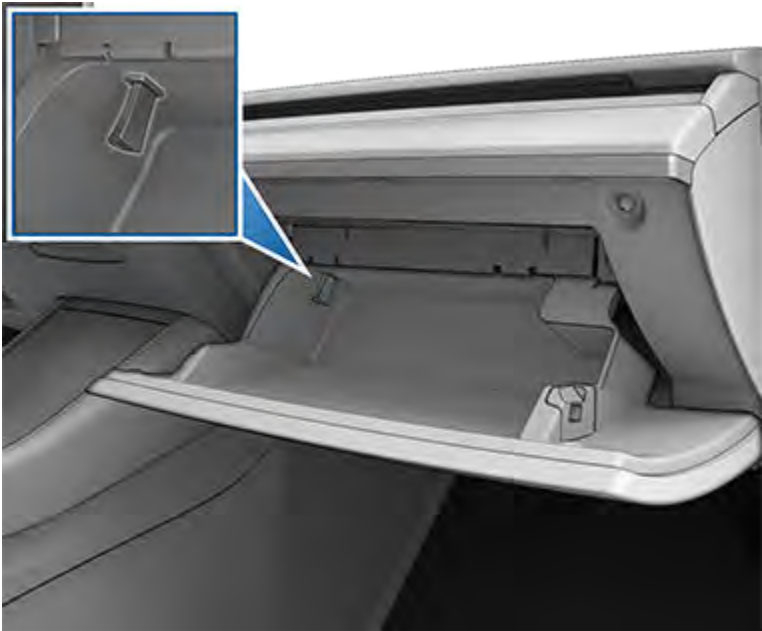


Open the front compartment of the center console. The front USB ports are located on the rear wall of the compartment.

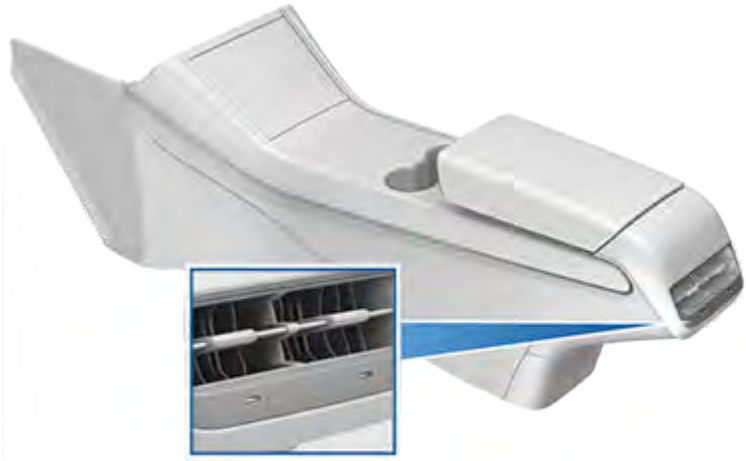


Depending on date of manufacture, some vehicles include a USB port located inside the glovebox. This USB-A port is equipped with a pre-formatted flash drive, ready to save videos when using features such as Sentry Mode and Dashcam. Although not its primary purpose, this port can also communicate with the vehicle and can be used to charge a USB-connected device.





Two additional USB ports are located in the rear of the center console (on vehicles manufactured since approximately June 2020, these ports are USB-C). These ports charge USB-connected devices but do not communicate with the vehicle.





If CybertruckModel SModel XModel 3Model Y is equipped with seven seats, two USB-C ports are located at the front of the console located between the third row seats. These ports charge USB-connected devices but do not communicate with the vehicle.



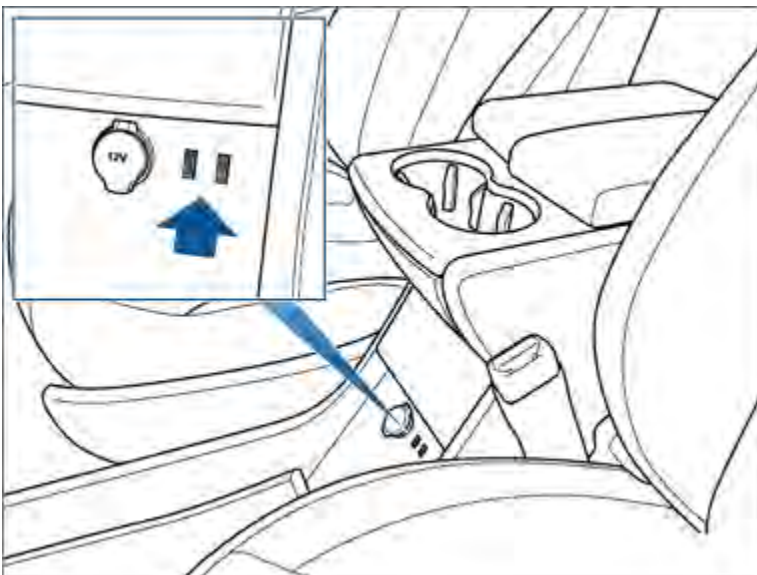
NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

USB Ports

Your CybertruckModel SModel XModel 3Model Y has two USB ports located on the front of the center console that you can use to connect USB devices. To play audio files stored on a USB drive connected to these ports, see [Playing Media from Devices on page 709](#). You can also use these ports to charge USB devices.





In addition, Model X has two charge-only USB ports located at the rear of the center console, and another charge-only connection located between the third row seats (if equipped).

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by the Media Player.

NOTE: You can charge four devices simultaneously using the two ports at the front of the center console and the two at the rear of the console.

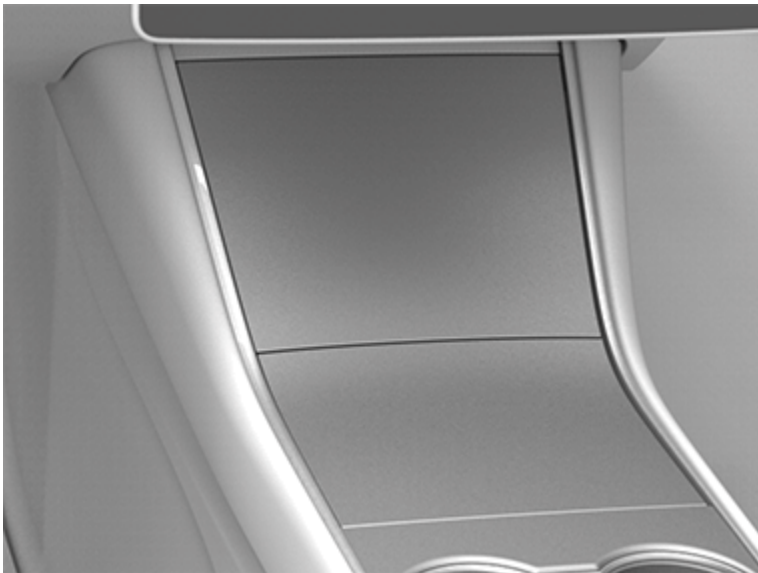
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Installing Phone Charging Cable

To make it easy to connect your phone while keeping the console free of clutter, you can install a phone charging cable in Cybertruck Model S Model X Model 3 Model Y.

NOTE: The phone dock supports two phones side-by-side.

To install a phone charging cable:



1. Open both center console doors in front of the cup holders.
2. Remove the rubber mat from the phone dock.
3. Lift the phone dock to access the USB ports.
4. Release the cover from the base of the phone dock by sliding it to the left.
5. Plug the USB connector on the phone charging cable into a USB port.
6. Insert the phone end of the charging cable through the bottom of the phone dock and route the cable through the securing tabs towards the bottom of the phone dock.
7. Reinstall the cover to the base of the phone dock by sliding it to the right.
8. Lower the phone dock and reinstall the rubber mat.

Wireless Phone Charger

A wireless phone charger (if equipped), is integrated into the front console to provide up to 15W of power to charge a Qi-enabled phone. Simply place your phone on the charger. Your device may feel warm while charging, but this is a normal effect of inductive charging.



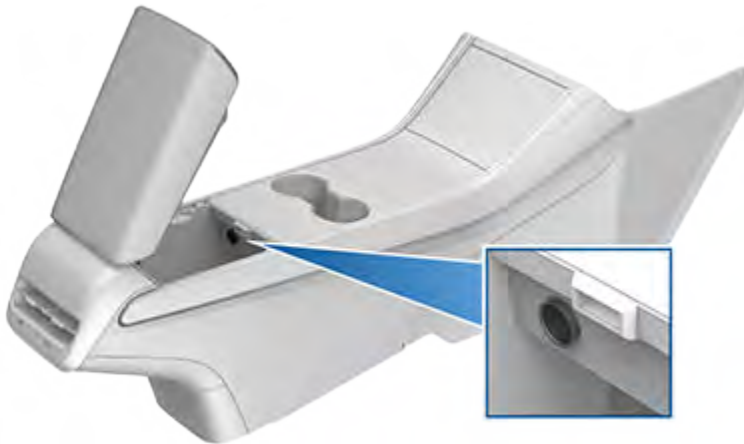
When placed on the wireless charger, your phone charges whenever the vehicle is powered on (the touchscreen is on and you are inside the vehicle). Your phone will not charge after exiting the vehicle unless a feature (such as Sentry mode) is enabled and providing power to the USB ports. CybertruckModel SModel XModel 3Model Y will also not charge a phone if the vehicle's Battery is discharged.

NOTE: The wireless phone charger may not work if your phone case is too large or is made of metal. Try removing the phone from its case before placing in the charger.

CAUTION: The phone must be in direct contact with the wireless charger. Do not place objects between the phone and the charger (for example, credit cards, key cards, coins, keys, metal objects, etc.).

Low Voltage Power Socket

Your CybertruckModel SModel XModel 3Model Y has a power socket located in the center console's rear compartment.






The power socket is suitable for accessories requiring up to 12A continuous draw (16A peak).

NOTE: For vehicles manufactured after approximately November 2021, power inverters plugged into the low voltage power socket must support 16V DC input to function.

An additional low voltage power socket is located on the left side of the rear trunk.

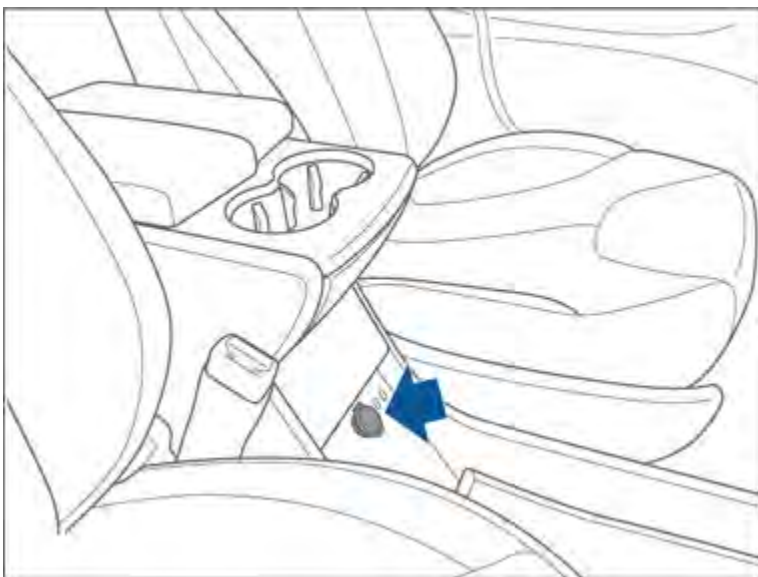


NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

-  **WARNING:** The power socket and an accessory's connector can become hot.
-  **WARNING:** To prevent excessive interference with the vehicle's electronics, Tesla recommends that you do not plug any non-Tesla accessories, including power inverters, into the low voltage power socket. However, if you do use a non-Tesla accessory and notice any malfunctions or unexpected behavior, such as indicator lights, alert messages, or excessive heat from the accessory, unplug the accessory from the low voltage power socket immediately.
-  **CAUTION:** Do not attempt to jump start CybertruckModel SModel XModel 3Model Y using the low voltage power socket. Doing so can result in damage.

Low Voltage Power Socket

Your CybertruckModel SModel XModel 3Model Y has a power socket located on the front of the center console. An additional low voltage power socket is located in the rear trunk. Power is available whenever the instrument panel and touchscreen are on.




The low voltage power socket is suitable for accessories requiring up to 11A continuous draw (15A peak) or a maximum of 150 continuous watts (180 watts peak).



NOTE: Power is available whenever the vehicle is considered "awake" The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Preconditioning, Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during HV charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: In situations where CybertruckModel SModel XModel 3Model Y is unable to detect the key fob (low battery, interference, etc.), place it immediately below the low voltage power socket in the center console where CybertruckModel SModel XModel 3Model Y can best detect it.

 **WARNING:** The power socket and an accessory's connector can become hot.



Interior Electronics

In addition to storage compartments and cup holders (see [Interior Storage on page 191](#)), the CybertruckModel SModel XModel 3Model Y interior supports various electronics such as USB ports, wireless phone chargers, and a 12V power socket.

USB Ports

CybertruckModel SModel XModel 3Model Y has five USB ports:

- Two USB ports are located in the front compartment of the center console. These can be used to charge USB devices and to play audio files from a phone or USB device (see [Playing Media from Devices on page 709](#)).
- Two USB ports are located below the rear touchscreen that can be used to charge USB devices.
- One USB port is located inside the glovebox. This port is equipped with a USB flash drive. The secure location of this USB port makes it ideal for saving Sentry Mode and Dashcam video footage.

The USB ports can output power up to approximately 27W (which may vary depending on vehicle manufacture date).

See [USB Drive Requirements for Recording Videos on page 666](#) for information about formatting USB flash drives.

To access the front USB ports, open the front compartment of the center console. The front USB ports are located on the rear wall of the compartment:

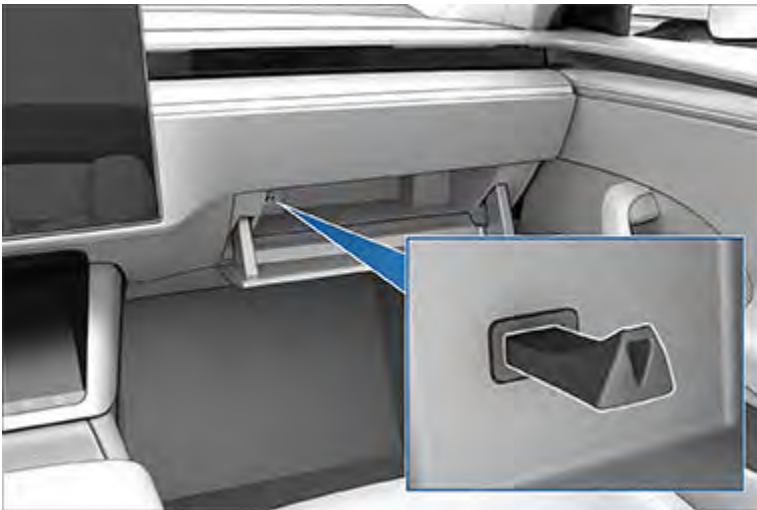


Rear USB ports are located below the rear touchscreen:





Glovebox USB port:



NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

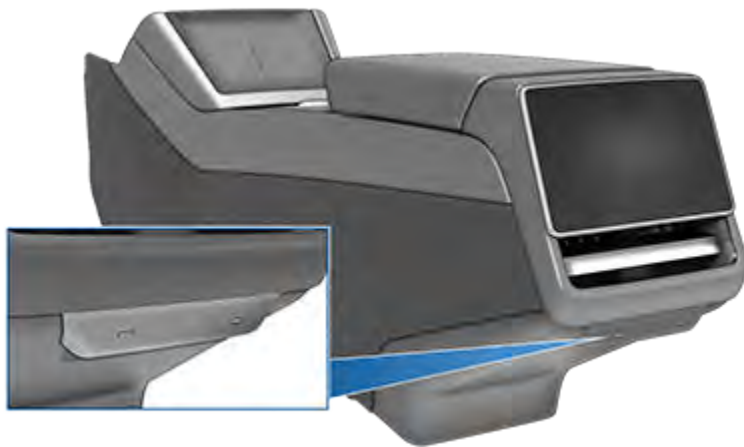
USB Ports

CybertruckModel SModel XModel 3Model Y has four USB ports. The three USB-C ports output up to approximately 42W or two ports up to approximately 65W.

- One USB-C port is located in the rear compartment of the center console used to charge USB devices.



- Two USB-C ports are located below the rear touchscreen that can be used to charge USB devices.



- One USB-A port is located inside the glovebox. This port is equipped with a USB flash drive. The secure location of this USB port makes it ideal for saving Sentry Mode and Dashcam video footage. It also supports audio files from a phone or USB device (see [Playing Media from Devices](#) on page 709).



See [USB Drive Requirements for Recording Videos](#) on page 666 for information about formatting USB flash drives.



NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

Wireless Phone Chargers

Wireless phone chargers are integrated into the front console, providing up to 15W of power to charge Qi-enabled phones. To charge your phone, place it on one of the two charge pads. The phone must be in direct contact with the wireless charger. Do not place objects between the phone and the charger (for example, credit cards, key cards, coins, keys, metal objects, etc.). Your device may feel warm while charging, but this is a normal effect of inductive charging.

⚠ CAUTION: Remove NFC cards (for example, the vehicle key card, credit cards, or hotel key) from integrated phone cases before charging your phone to avoid damage to the card.



When placed on the wireless charger, your phone charges whenever the vehicle is powered on (the touchscreen is on and you are in the vehicle). Your phone does not charge when you leave the vehicle unless a feature, such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode is enabled.

NOTE: The wireless phone charger may not work if your phone case is too thick or is made of metal. Try removing the phone from its case before placing it on the charger.

NOTE: The wireless phone charger does not charge if the vehicle's high voltage Battery is discharged.



Low Voltage Power Socket

Your CybertruckModel SModel XModel 3Model Y has a power socket located in the center console's compartment. To access the low voltage socket, open the front compartment of the center console.



The power socket is suitable for accessories requiring up to 12A continuous draw (16A peak).

NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

⚠ WARNING: The power socket and an accessory's connector can become hot.

⚠ WARNING: To prevent excessive interference with the vehicle's electronics, Tesla recommends that you do not plug any non-Tesla accessories, including power inverters, into the low voltage power socket. However, if you do use a non-Tesla accessory and notice any malfunctions or unexpected behavior, such as indicator lights, alert messages, or excessive heat from the accessory, unplug the accessory from the low voltage power socket immediately.

NOTE: A power inverter plugged into the low voltage power socket must support 16V DC input to function.

⚠ CAUTION: Do not attempt to jump start CybertruckModel SModel XModel 3Model Y using the low voltage power socket. Doing so can result in damage.



Active Road Noise Reduction

Cybertruck Model S Model X Model 3 Model Y is equipped with Active Road Noise Reduction which reduces low-frequency road noise while driving on rough surfaces. To accomplish this, the vehicle uses the seat microphones to measure noise in the cabin, then generates anti-noise through the speakers to intelligently create quiet zones around each occupant the front occupants depending on vehicle and environmental factors.



To turn Active Road Noise Reduction on or off, open the Media Player and touch **Audio Settings icon > Options > Active Road Noise Reduction** (the audio settings icon shows an equalizer with three vertical lines). This may require several minutes of driving time to calibrate before enabling.

NOTE: To ensure active noise reduction operates effectively, avoid covering the microphones (with seat covers, etc.). Active Road Noise Reduction may disable if a window is rolled down, door is open, or the fan is turned up. Active Road Noise Reduction also disables if there is a rear passenger in the vehicle.

⚠ CAUTION: To prevent damage to these microphones when cleaning, do not over-saturate the area of the seats where the microphones are located.



Interior Electronics

In addition to storage compartments and cup holders (see [Interior Storage on page 191](#)), the CybertruckModel SModel XModel 3Model Y interior supports various electronics such as USB ports, wireless phone chargers, and a 12V power socket.

USB Ports

CybertruckModel SModel XModel 3Model Y has five USB ports:

- Two USB ports are located in the front compartment of the center console. These can be used to charge USB devices and to play audio files from a phone or USB device (see [Playing Media from Devices on page 709](#)).
- Two USB ports are located below the rear touchscreen that can be used to charge USB devices.
- One USB port is located inside the glovebox. This port is equipped with a USB flash drive. The secure location of this USB port makes it ideal for saving Sentry Mode and Dashcam video footage.

The USB ports can output power up to approximately 27W (which may vary depending on vehicle manufacture date).

See [USB Drive Requirements for Recording Videos on page 666](#) for information about formatting USB flash drives.

To access the front USB ports, open the front compartment of the center console. The front USB ports are located on the rear wall of the compartment:

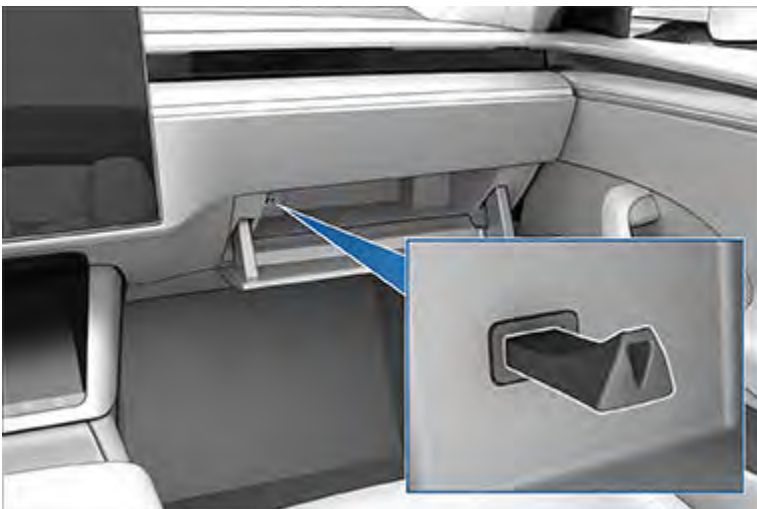


Rear USB ports are located below the rear touchscreen:





Glovebox USB port:



NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

USB Ports

Cybertruck Model S Model X Model 3 Model Y has four USB ports. The three USB-C ports output up to approximately 42W or two ports up to approximately 65W.

- One USB-C port is located in the rear compartment of the center console used to charge USB devices.



- Two USB-C ports are located below the rear touchscreen that can be used to charge USB devices.



- One USB-A port is located inside the glovebox. This port is equipped with a USB flash drive. The secure location of this USB port makes it ideal for saving Sentry Mode and Dashcam video footage. It also supports audio files from a phone or USB device (see [Playing Media from Devices on page 709](#)).



See [USB Drive Requirements for Recording Videos on page 666](#) for information about formatting USB flash drives.



NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

NOTE: Use USB 3.0 compliant cables to connect a device to a USB port. Using non-compliant cables can result in slower charging, potential connection problems or degraded performance.

NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

Wireless Phone Chargers

Wireless phone chargers are integrated into the front console, providing up to 15W of power to charge Qi-enabled phones. To charge your phone, place it on one of the two charge pads. The phone must be in direct contact with the wireless charger. Do not place objects between the phone and the charger (for example, credit cards, key cards, coins, keys, metal objects, etc.). Your device may feel warm while charging, but this is a normal effect of inductive charging.

⚠ CAUTION: Remove NFC cards (for example, the vehicle key card, credit cards, or hotel key) from integrated phone cases before charging your phone to avoid damage to the card.



When placed on the wireless charger, your phone charges whenever the vehicle is powered on (the touchscreen is on and you are in the vehicle). Your phone does not charge when you leave the vehicle unless a feature, such as Keep Climate On, Dog Mode, Camp Mode, or Sentry Mode is enabled.

NOTE: The wireless phone charger may not work if your phone case is too thick or is made of metal. Try removing the phone from its case before placing it on the charger.

NOTE: The wireless phone charger does not charge if the vehicle's high voltage Battery is discharged.



Low Voltage Power Socket

Your CybertruckModel SModel XModel 3Model Y has a power socket located in the center console's compartment. To access the low voltage socket, open the front compartment of the center console.



The power socket is suitable for accessories requiring up to 12A continuous draw (16A peak).

NOTE: Power is available whenever the vehicle is considered "awake". The vehicle may be awake for many reasons. For example, when using features such as Summon, or when features such as Cabin Overheat Protection, Keep Climate On, Dog Mode, Camp Mode, Sentry Mode, etc. are enabled. The vehicle is also awake whenever the low voltage battery is being charged or is in use, during high voltage charging, when the vehicle is communicating with the mobile app, etc. Leaving an accessory plugged in does not deplete the low voltage battery.

⚠ WARNING: The power socket and an accessory's connector can become hot.

⚠ WARNING: To prevent excessive interference with the vehicle's electronics, Tesla recommends that you do not plug any non-Tesla accessories, including power inverters, into the low voltage power socket. However, if you do use a non-Tesla accessory and notice any malfunctions or unexpected behavior, such as indicator lights, alert messages, or excessive heat from the accessory, unplug the accessory from the low voltage power socket immediately.

NOTE: A power inverter plugged into the low voltage power socket must support 16V DC input to function.

⚠ CAUTION: Do not attempt to jump start CybertruckModel SModel XModel 3Model Y using the low voltage power socket. Doing so can result in damage.



Active Road Noise Reduction

CybertruckModel SModel XModel 3Model Y is equipped with Active Road Noise Reduction which reduces low-frequency road noise while driving on rough surfaces. To accomplish this, the vehicle uses the seat microphones to measure noise in the cabin, then generates anti-noise through the speakers to intelligently create quiet zones around each occupantthe front occupants depending on vehicle and environmental factors.



To turn Active Road Noise Reduction on or off, open the Media Player and touch **Audio Settings icon > Options > Active Road Noise Reduction** (the audio settings icon shows an equalizer with three vertical lines). This may require several minutes of driving time to calibrate before enabling.

NOTE: To ensure active noise reduction operates effectively, avoid covering the microphones (with seat covers, etc.). Active Road Noise Reduction may disable if a window is rolled down, door is open, or the fan is turned up. Active Road Noise Reduction also disables if there is a rear passenger in the vehicle.

⚠ CAUTION: To prevent damage to these microphones when cleaning, do not over-saturate the area of the seats where the microphones are located.

Car Status

Overview

The touchscreen displays the status of CybertruckModel SModel XModel 3Model Y at all times. What you see depends on whether the vehicle is:

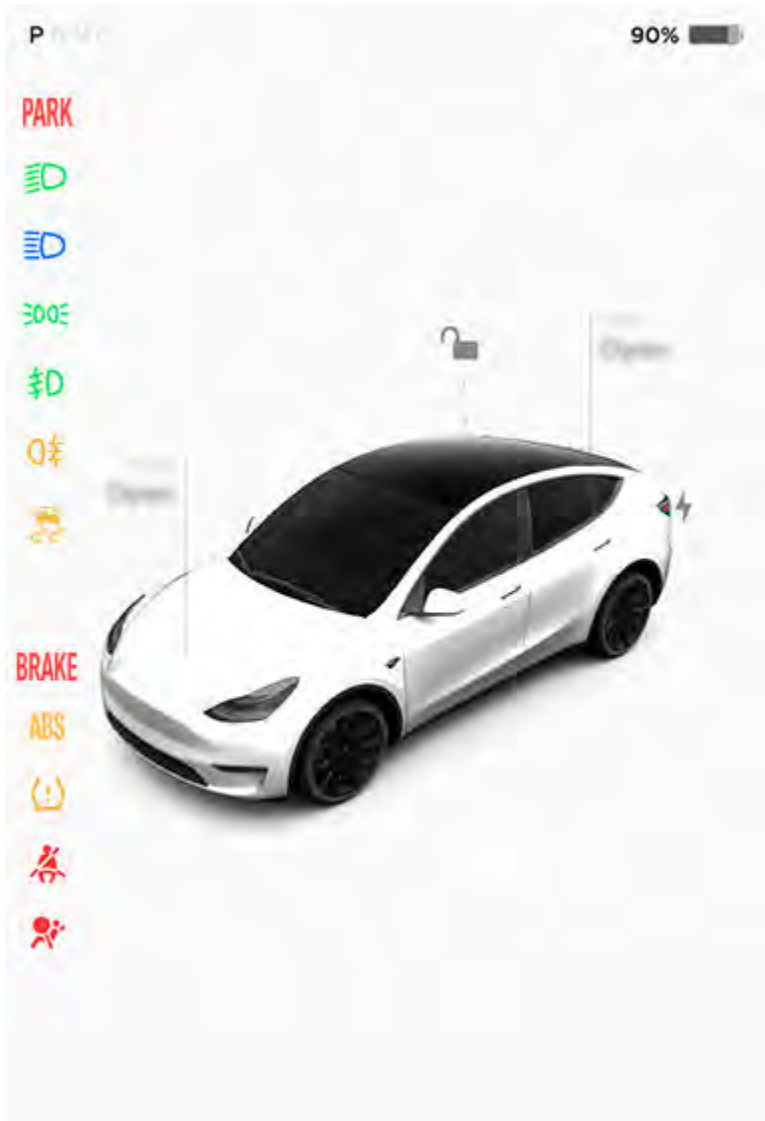
- Parked (shown below).
- Driving (see [Driving Status on page 74](#)).
- Charging (see [Charging Status on page 733](#)).

When CybertruckModel SModel XModel 3Model Y is parked, the status area shows the drive mode, estimated range, and an overhead view of the car with buttons you can touch to open the trunks and charge port door. When you press the brake, CybertruckModel SModel XModel 3Model Y powers up and indicator lights flash briefly. Unless an indicator light applies to the current situation (for example, a seat belt is not fastened), it should turn off. If an indicator light fails to turn on or off, contact Tesla.

NOTE: The following image is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.







Cards

The bottom of the car status display also shows shortcut "cards" for quick access to Media, tire pressure data, trip information, and more. Swipe the cards to the left or right to customize your cards shortcuts.

Indicator Lights

The following indicator lights illuminate to advise you or alert you of a specific status or condition.

BRAKE

If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

USA:

Canada:



If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.



BRAKE

The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Braking and Stopping on page 461](#)).

USA:



The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Braking and Stopping on page 461](#)).

Canada:

ABS

The ABS indicator briefly flashes amber on the touchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

USA:

Canada:



The ABS indicator briefly flashes amber on the touchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

PARK

When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

USA:



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

Canada:

PARK

If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

USA:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

Canada:



Tire pressure warning. The pressure of a tire is out of range. If a fault with the Tire Pressure Monitoring System (TPMS) is detected, the indicator flashes. For a TPMS fault, contact Tesla. See [Tire Care and Maintenance on page 754](#).



A seat belt for an occupied seat is not fastened. See [Seat Belts on page 254](#).



Airbag safety. If this indicator does not flash on briefly when CybertruckModel SModel XModel 3Model Y prepares to drive, or if it remains on, contact Tesla immediately. See [Airbag Warnings on page 341](#).



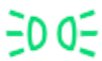
Front fog lights are on, if equipped. See [Lights on page 421](#).



Front fog lights are on, if equipped. See [Lights on page 421](#).



The rear fog indicator displays on the touchscreen whenever rear fog lights are on.



Parking lights are on (side marker lights, tail lights, and license plate lights) . See [Lights on page 421](#)[Lights on page 433](#).



Low beam headlights are on.



High beam headlights are on and **Auto High BeamAdaptive HeadlightsAuto High Beam** is disabled or currently unavailable.



Auto High BeamAdaptive HeadlightsAuto High Beam is enabled and high beams are on. CybertruckModel SModel XModel 3Model Y is ready to turn off the high beams if light is detected. See [High Beam Headlights on page 422](#)[High Beam Headlights on page 435](#).



Auto High BeamAdaptive HeadlightsAuto High Beam is enabled but high beams are not on because light is detected in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, high beams automatically turn back on. See [High Beam Headlights on page 422](#)[High Beam Headlights on page 435](#).



This indicator flashes amber when the electronic stability control systems are actively minimizing wheel spin by controlling brake pressure and motor power. See [Traction Control on page 496](#). If this indicator remains on, a fault is detected and you should immediately contact Tesla.



Electronic stability control systems are no longer minimizing wheel spin. On a Rear Wheel Drive vehicle, the traction control system has been turned off, or on an All-Wheel Drive vehicle, Slip Start has been enabled. See [Traction Control on page 496](#).



Trailer mode (if equipped) is active (see [Towing and Accessories](#) on page 528).



Vehicle Hold is actively applying the brakes. See [Vehicle Hold](#) on page 493.



A door or trunk is open. See [Doors](#) on page 131, [Rear Trunk](#) on page 165, or [Front Trunk](#) on page 181.



A blue snowflake appears when some of the energy stored in the Battery may not be available due to cold weather conditions. During these cold weather conditions, charging rates may also be limited. If CybertruckModel SModel XModel 3Model Y is plugged in, you can heat your Battery by turning on climate control with the mobile app. The snowflake disappears when the Battery is sufficiently warm.



Appears when regenerative braking is limited. See [Regenerative Braking](#) on page 463 for more information.



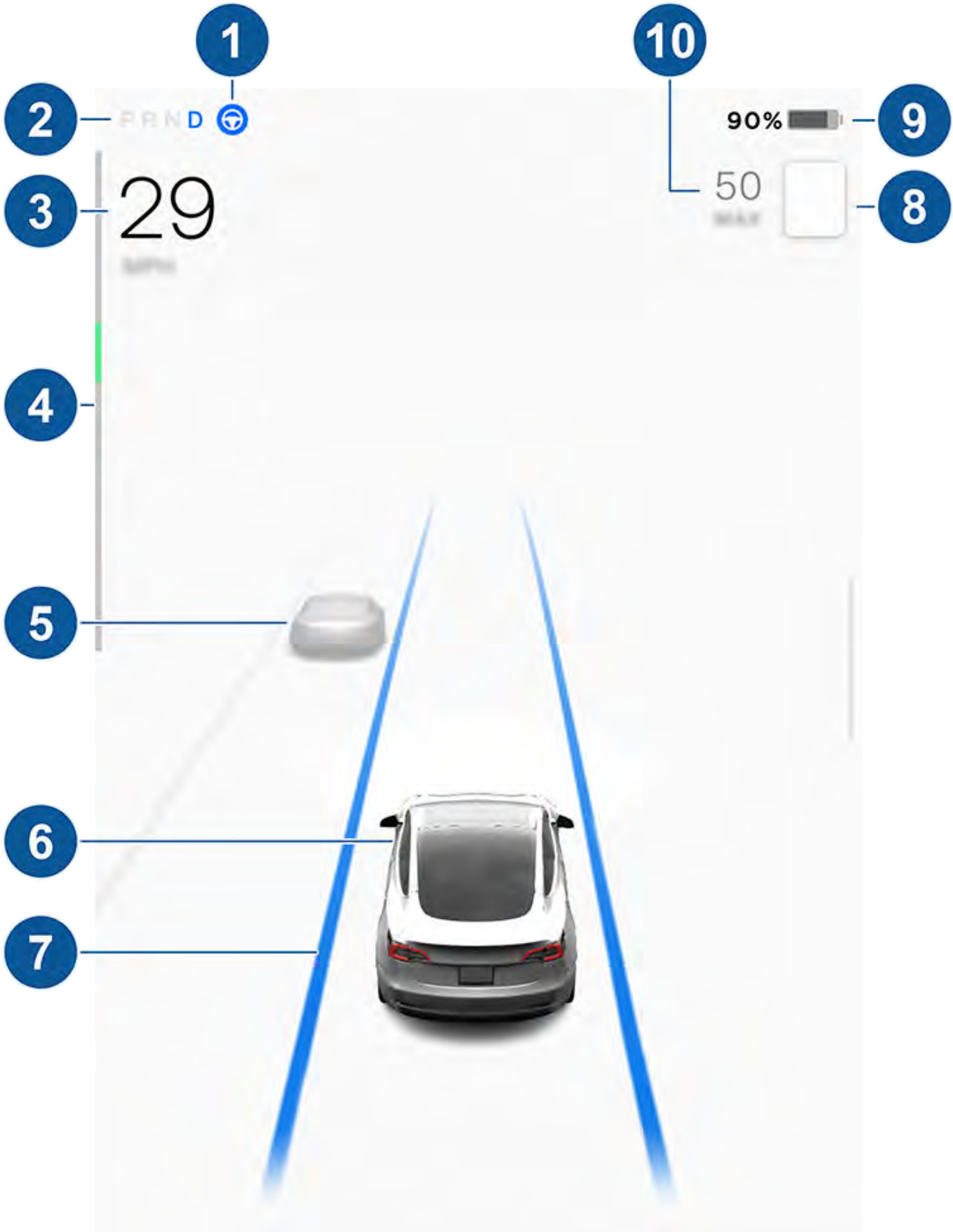
Vehicle power is currently being limited because the energy remaining in the Battery is low, the vehicle's systems are being heated or cooled, or an error is detected by the drive inverter.

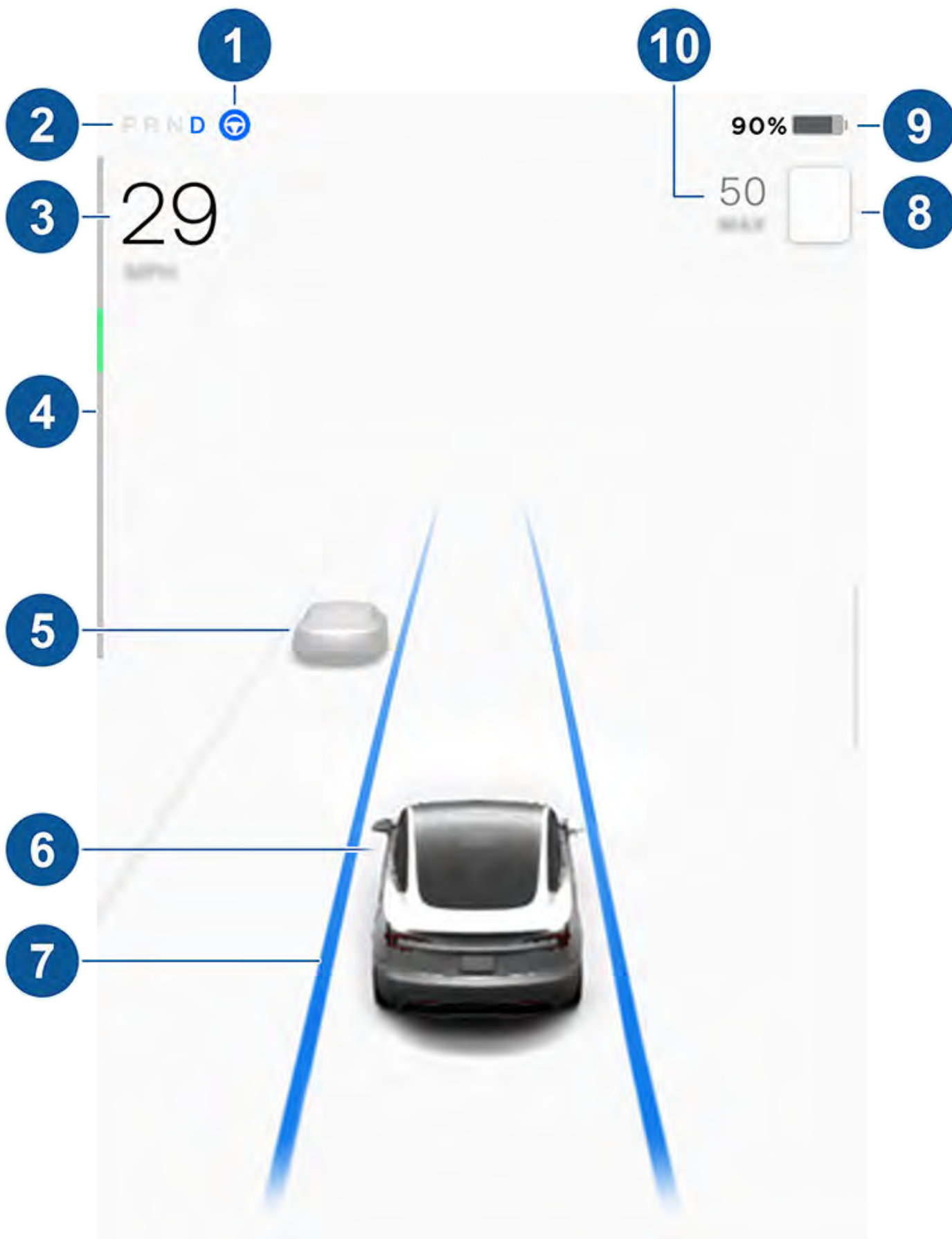
See [Popup Messages and Vehicle Alerts](#) on page 34 for more information about alert popups on your vehicle's touchscreen.

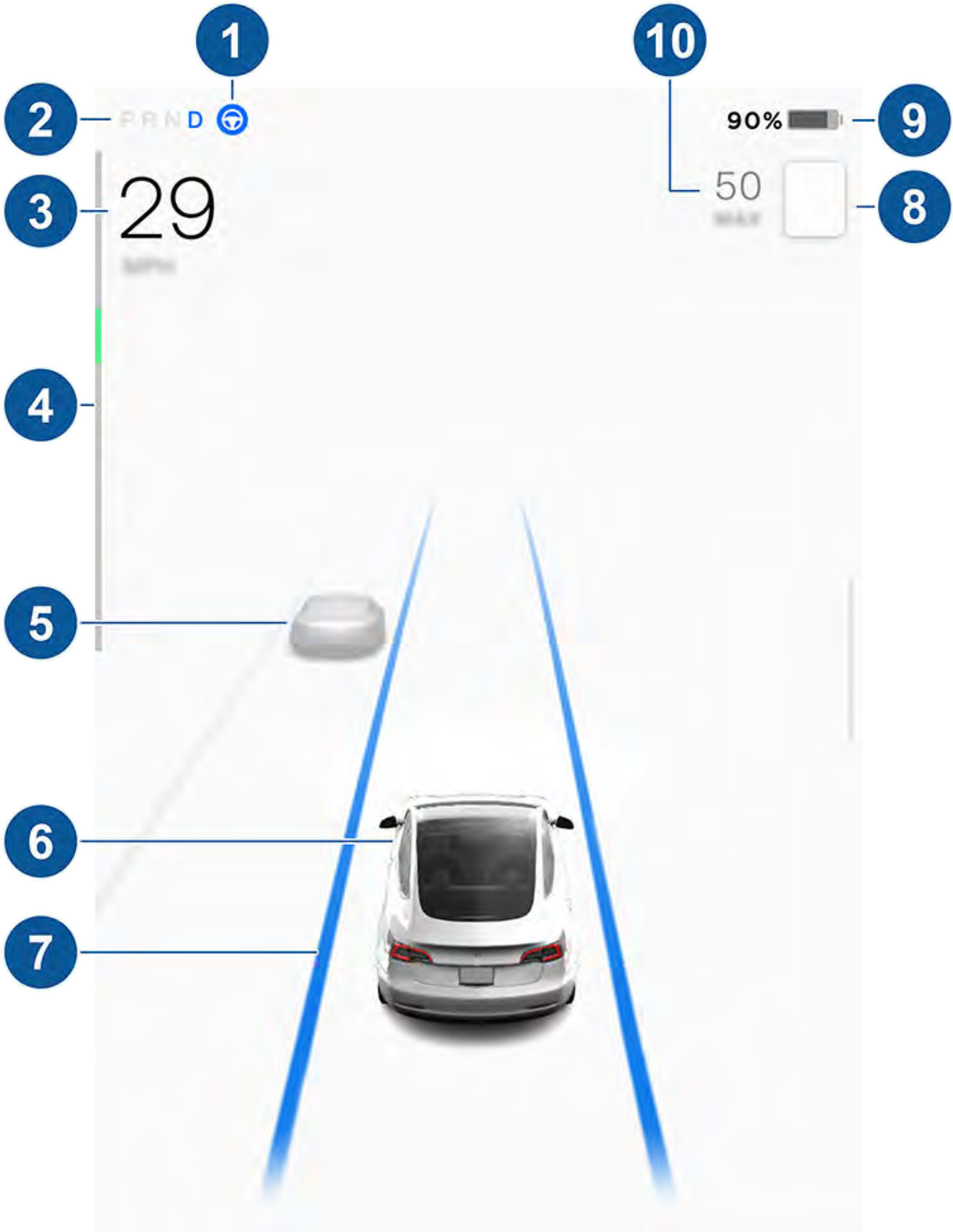
Driving Status

When CybertruckModel SModel XModel 3Model Y is driving (or ready to drive), the touchscreen shows your current driving status and a real-time visualization of the road as detected by the Autopilot components (see [Cameras](#) on page 101). The visualization automatically zooms in and out to better utilize touchscreen space and inform you when a vehicle is detected in your blind spot.

NOTE: *The following illustration is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.*











NOTE: To display more details about the roadway and its surroundings, such as road markings, stop lights, objects (such as trash cans and poles), etc., touch **Controls > Autopilot > Full Self-Driving Visualization Preview** (if equipped).

1. When Autosteer is available but you haven't activated it, the icon is gray. When Autosteer is actively steering CybertruckModel SModel XModel 3Model Y, the icon is blue (see [Autosteer on page 556](#)).
2. Currently selected drive mode: Park, Reverse, Neutral, or Drive.
3. Driving speed.
4. The power meter displays real-time power usage (see [Regenerative Braking on page 463](#) for more information). The power meter may display vertically at the top of the driving status screen but the function is the same.
5. Other cars detected on the road (as applicable).
6. Your CybertruckModel SModel XModel 3Model Y. Colored lines radiate from the image of your CybertruckModel SModel XModel 3Model Y as objects are detected (other motorists, guard rails, etc.). The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represents the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being very close and requiring your immediate attention. See [Lane Assist on page 638](#).
7. When Autosteer is active and detecting the driving lane, the lane is highlighted in blue (see [Autosteer on page 556](#)).
NOTE: If Navigate on Autopilot is active, the driving lane displays as a single blue line in front of CybertruckModel SModel XModel 3Model Y (see [Navigate on Autopilot on page 561](#)).
8. The speed limit that is currently being detected by Speed Assist (see [Speed Assist on page 651](#)).
NOTE: A blue outline may appear around the speed limit icon to notify that you are above the speed limit.
NOTE: The icon associated with the detected speed limit reflects the style of speed limit signs used in your market region.
9. Total estimated driving distance (or energy) available. Touch the displayed value to change how available energy is displayed. You can toggle between driving distance and percentage of battery energy remaining. You can also change how energy is displayed by touching **Controls > Display > Energy Display**.
NOTE: When anticipating when you need to charge, use range estimates as a general guideline only.
10. The set cruising speed. When Traffic-Aware Cruise Control is available but you haven't set a cruising speed, the number is gray (see [Traffic-Aware Cruise Control on page 554](#)).

 **WARNING:** Pay attention to important alert messages that display at the bottom of the car status area of the touchscreen. Ignoring these messages can result in serious injury or death.

 **WARNING:** Although the touchscreen shows surrounding traffic, some vehicles may not be displayed. Never rely on the touchscreen to determine if a vehicle is present (for example, in your blind spot). Always use your mirrors and perform shoulder checks.



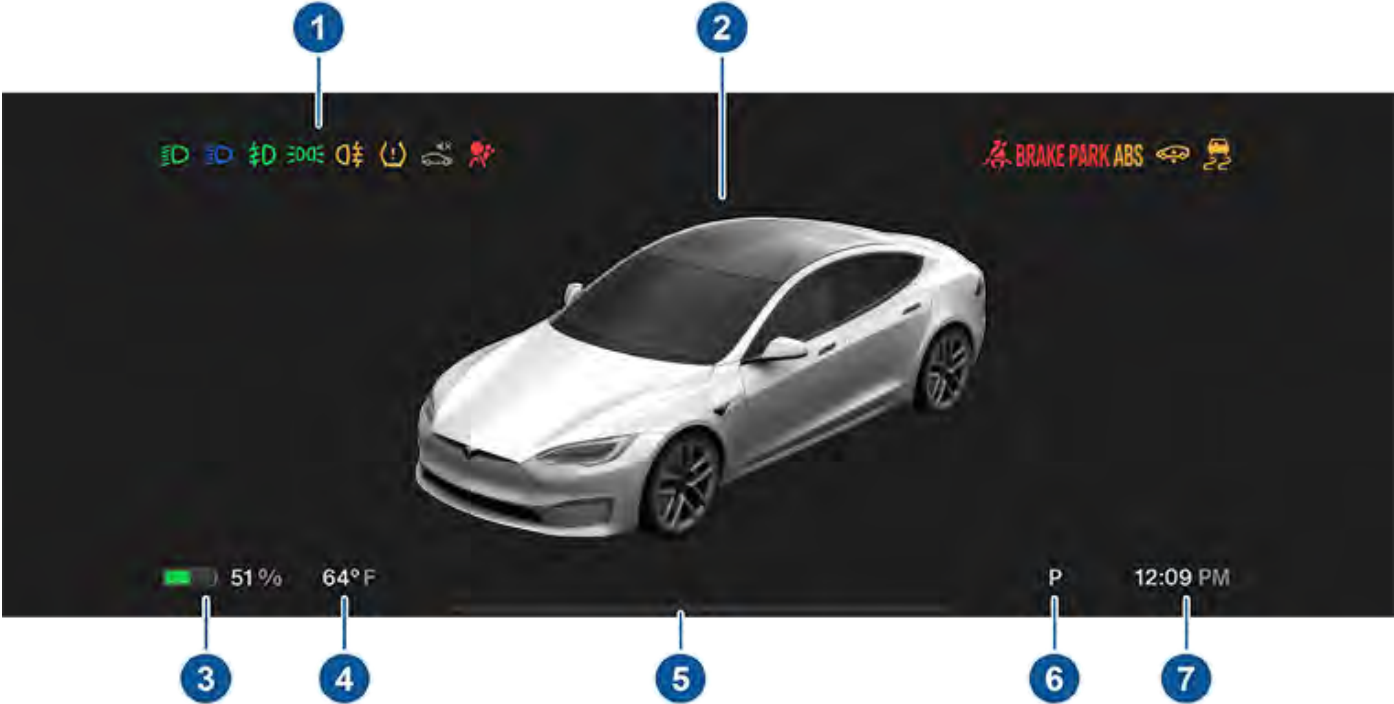
Instrument Panel

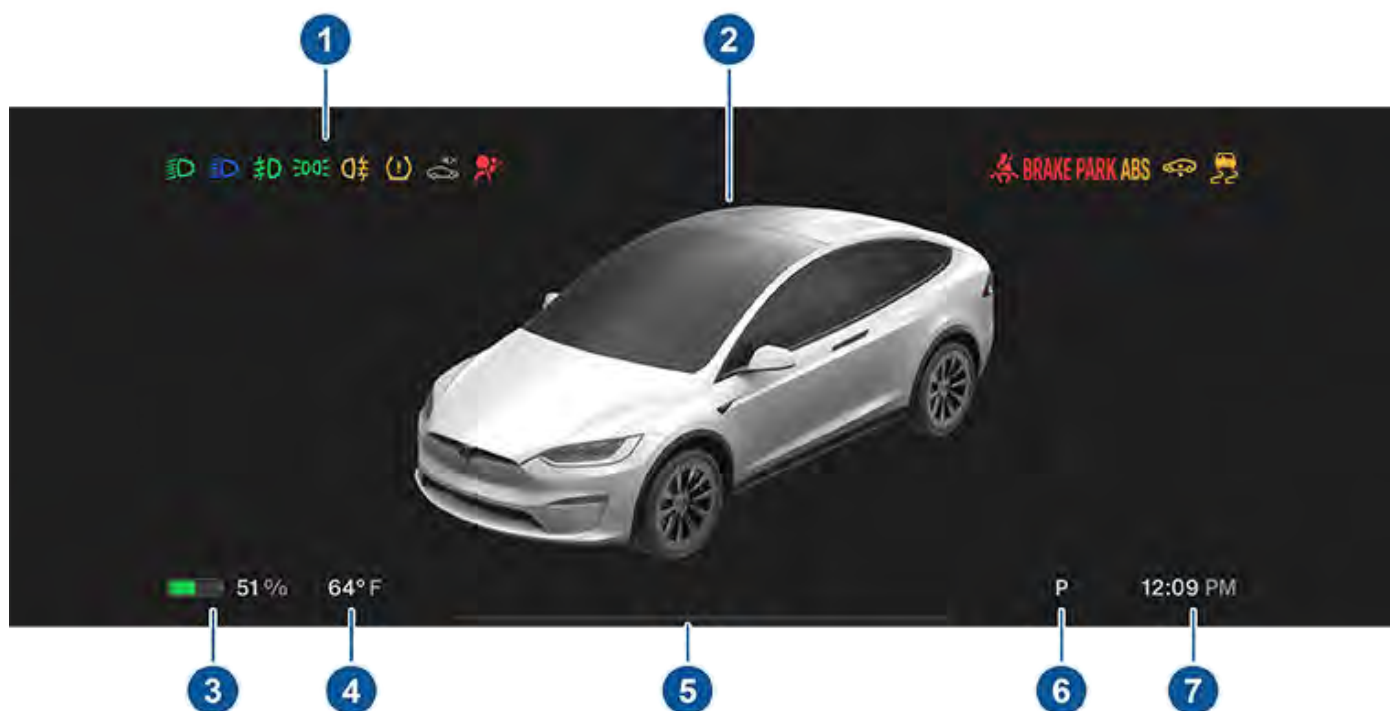
Instrument Panel Overview

The instrument panel changes depending on whether CybertruckModel SModel XModel 3Model Y is:

- Off or Parked (shown below).
- Driving (see [Instrument Panel - Driving on page 81](#)).
- Charging (see [Charging Instructions on page 726](#)).

When CybertruckModel SModel XModel 3Model Y is off or Parked, the instrument panel shows remaining estimated range, vehicle status, and outside temperature.





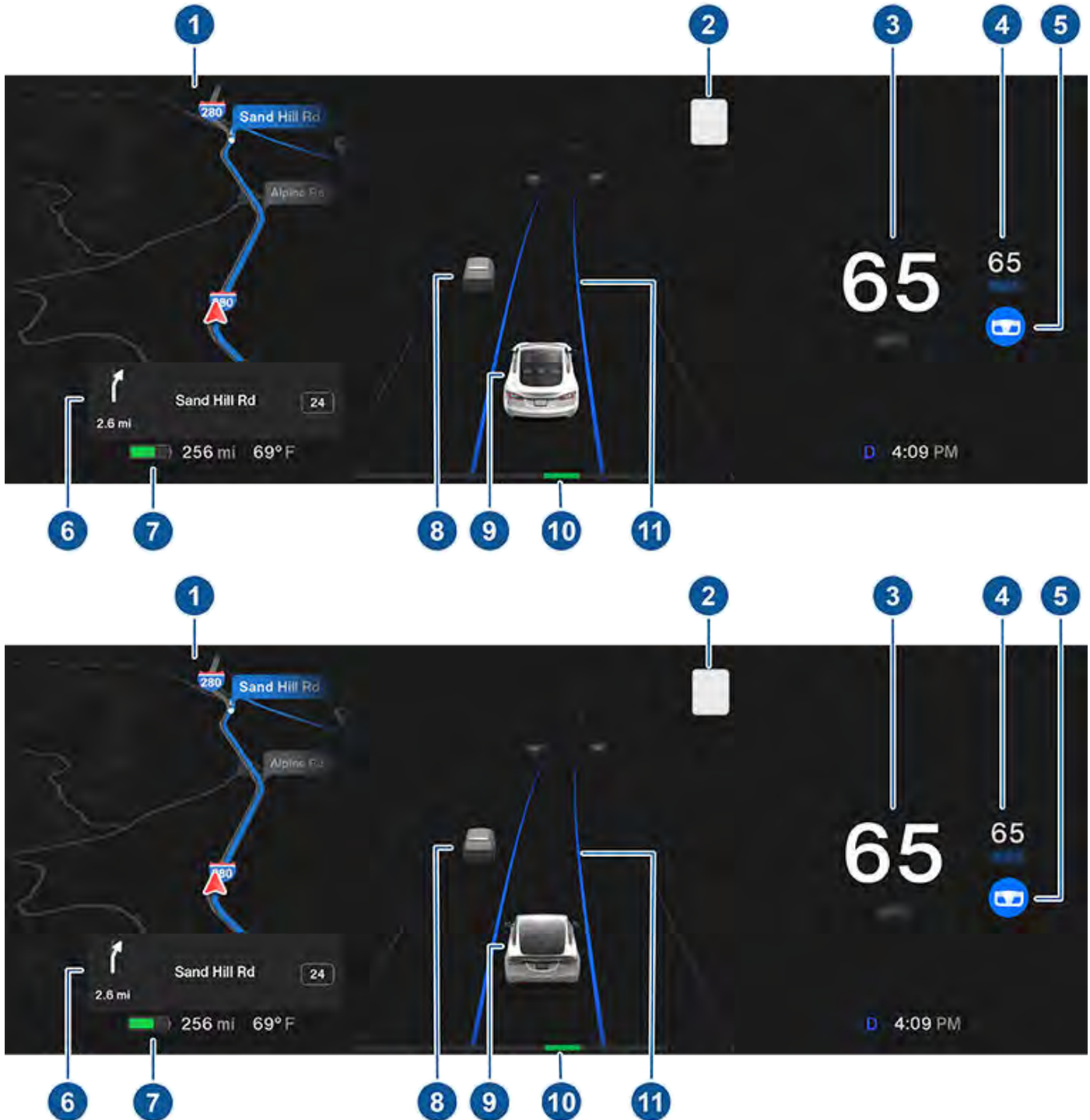
1. When the car is off and you initially press the brake, indicator lights flash briefly along the top of the instrument panel. Unless an indicator light applies to a current situation, it should turn off. If an indicator light fails to turn on or off, refer to [Indicator Lights on page 82](#).
2. An image of your car and its accompanying status (such as lights on, door open, etc.).
3. Total estimated driving distance (or energy) available. Instead of driving distance, you can display the percentage of battery energy remaining. To do so, touch **Controls > Display > Energy Display**.
NOTE: When anticipating when you need to charge, use estimates as a general guideline only.
4. Estimated outside temperature.
5. Pay attention to instructions or important alert messages that display here. If any alerts are in effect, you can view information about them by touching **Controls** and then touching the bell icon located at the top of the screen.
6. Currently selected drive mode: Park, Reverse, Neutral, or Drive. If **Auto Shift out of Park** is enabled, Drive or Reverse is automatically selected (based on sensor input) and displayed on the instrument panel when the driver's door is closed and seatbelt is buckled (see [Seat Belts on page 254](#)).
7. Current time of day.

See [Popup Messages and Vehicle Alerts on page 34](#) for more information about alert popups on your vehicle's touchscreen.



Instrument Panel - Driving

When CybertruckModel SModel XModel 3Model Y is driving (or ready to drive), the instrument panel shows your current driving status and a real-time visualization of the road as detected by the Autopilot components. The visualization automatically zooms in and out based on the detected road type.



NOTE: Touch **Controls > Autopilot > Full Self-Driving Visualization Preview** (if equipped) to display more details about the roadway and its surroundings, such as road markings, stop lights, objects (such as trash cans and poles), etc.

1. The instrument panel displays your location on a map, a wiper menu, Auto Shift out of Park instructions, etc. When a navigation route is active, the upcoming portion of the route displays.



2. The speed limit (if available) that is currently being detected by Speed Assist (see [Speed Assist on page 651](#)).

NOTE: A blue outline may appear around the speed limit icon to notify that you are above the speed limit.

3. Current driving speed.

4. The currently set cruising speed. When Traffic-Aware Cruise Control is available but you haven't set a cruising speed by engaging Traffic-Aware Cruise Control or Autosteer, the icon is gray (see [Autopilot Features on page 553](#)).

5. Autosteer is actively steering CybertruckModel SModel XModel 3Model Y. When Autosteer is available but you haven't activated it, the icon is gray (see [Autosteer on page 556](#)).

6. When navigating, upcoming instructions in the navigation route appear here.

7. Total estimated driving distance (or energy) available. Instead of driving distance, you can display the percentage of battery energy remaining (touch **Controls** > **Display** > **Energy Display**).

NOTE: When anticipating when you need to charge, use estimates as a general guideline only.

8. Surrounding road users are shown in their corresponding locations.



WARNING: Although the instrument panel shows surrounding traffic, some vehicles may not be displayed. Never rely on the instrument panel to determine if a vehicle is present (for example, in your blind spot). Always use your mirrors and perform shoulder checks.

9. Your CybertruckModel SModel XModel 3Model Y.

10. The power meter displays real-time power usage. During acceleration, the bar fills to the right to represent power being used. During deceleration (when CybertruckModel SModel XModel 3Model Y is moving and you release your foot from the accelerator pedal), the bar fills to the left with a green color to represent power being fed back to the Battery by regenerative braking (see [Regenerative Braking on page 463](#)).

11. When Autosteer is active and detects the driving lane, it is highlighted in blue (see [Autopilot Features on page 553](#)). Depending on the current driving scenario, you may see neighboring lanes.

NOTE: In situations where Autosteer is unable to detect lane markings, the driving lane is determined based on the vehicle you are following.











NOTE: If Navigate on Autopilot is active, the driving lane displays as a single blue line in front of CybertruckModel SModel XModel 3Model Y (see [Navigate on Autopilot on page 561](#)).

Indicator Lights











Indicator lights display along the top of the instrument panel to show status and alert you of specific vehicle conditions.

Indicator	Description
	(USA) A brake system fault is detected or the brake fluid level is low. See Braking and Stopping on page 461 . Contact Tesla immediately.
	(Canada) A brake system fault is detected or the brake fluid level is low. See Braking and Stopping on page 461 . Contact Tesla immediately.
	(USA) A brake booster fault has been detected. See Braking and Stopping on page 461 .











Indicator	Description
	<p>(Canada) A brake booster fault has been detected. See Braking and Stopping on page 461.</p>
	<p>(USA) An ABS (Anti-lock Braking System) fault is detected. See Braking and Stopping on page 461. Contact Tesla immediately.</p>
	<p>(Canada) An ABS (Anti-lock Braking System) fault is detected. See Braking and Stopping on page 461. Contact Tesla immediately.</p>
	<p>(USA) A parking brake fault is detected. Contact Tesla. See Parking Brake on page 468.</p>
	<p>(Canada) A parking brake fault is detected. Contact Tesla. See Parking Brake on page 468.</p>
	<p>(USA) The parking brake is manually applied. See Parking Brake on page 468.</p>
	<p>(Canada) The parking brake is manually applied. See Parking Brake on page 468.</p>
	<p>Tire pressure warning. The pressure of a tire is out of range. If a fault with the Tire Pressure Monitoring System (TPMS) is detected, the indicator flashes. For a TPMS fault, contact Tesla. See Tire Care and Maintenance on page 754.</p>
	<p>A seat belt for an occupied seat is not fastened. See Seat Belts on page 254.</p>
	<p>Airbag safety. If this red indicator does not flash on briefly when CybertruckModel SModel XModel 3Model Y prepares to drive, or if it remains on, contact Tesla immediately. See Airbags on page 342Airbags on page 320.</p>



Indicator	Description
	Front fog lights are on, if equipped. See Lights on page 433 .
	Parking lights (side marker lights, tail lights, and license plate lights) are on. See Lights on page 433 .
	Low beam headlights are on.
	High beam headlights are on. Illuminates when high beams are on but the Auto High Beam setting (if equipped) is turned off or if the Auto High Beam setting is turned on but is temporarily unavailable. See Lights on page 433 .
	High beam headlights are currently turned on, and Auto High Beam (if equipped) is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y. See Lights on page 433 .
	High beam headlights are temporarily turned off because Auto High Beam (if equipped) is on and is detecting light in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, the high beams automatically turn back on. See Lights on page 433 .
	If a fault is detected with the Adaptive Front Lighting this indicator displays, if equipped. See #unique_146 on page .
	If a fault is detected with the Adaptive Front Lighting this indicator displays, if equipped. See Adaptive Front Lighting System (AFS) on page 438 .
	This indicator flashes amber when the electronic stability control systems are actively minimizing wheel spin by controlling brake pressure and motor power. See Traction Control on page 496 . If this indicator remains on, a fault is detected and you should immediately contact Tesla.
	If a fault is detected that reduces the performance of the air suspension system, this amber indicator light displays (see Air Suspension on page 471). If the problem persists, contact Tesla.



Indicator	Description
	<p>If a fault is detected that disables the air suspension system, this red indicator light displays (see Air Suspension on page 471). Contact Tesla.</p>
	<p>Vehicle Hold is actively applying the brakes. See Vehicle Hold on page 493.</p>
	<p>Electronic stability control systems are no longer minimizing wheel spin. See Traction Control on page 496.</p>
	<p>CybertruckModel SModel XModel 3Model Y is in Transport mode and can roll freely. It does not automatically shift into Park when you exit. See Activate Transport Mode on page 913.</p>
	<p>Trailer mode (if equipped) is active. See Towing and Accessories on page 537.</p>
	<p>A blue snowflake appears when some of the energy stored in the Battery may not be available due to cold weather conditions. During these cold weather conditions, charging rates may also be limited. If CybertruckModel SModel XModel 3Model Y is plugged in, you can heat your Battery by turning on climate control with the mobile app. The snowflake disappears when the Battery is sufficiently warm.</p>
	<p>A green icon appears when regenerative braking is limited. See Regenerative Braking on page 463 for more information.</p>
	<p>Vehicle power is currently being limited because the energy remaining in the Battery is low, the vehicle's systems are being heated or cooled, or an error is detected by the drive inverter.</p>



Instrument Panel

Instrument Panel Overview

The instrument panel changes depending on whether CybertruckModel SModel XModel 3Model Y is:

- Off (shown below).
- Driving (see [Instrument Panel - Driving on page 91](#)[Instrument Panel - Driving on page 93](#)[Instrument Panel - Driving on page 95](#)).
- Charging (see [Charging Status on page 730](#)).

When CybertruckModel SModel XModel 3Model Y is off, the instrument panel shows remaining estimated range, status of doors, and outside temperature. When you press the brake, indicator lights flash on briefly along the top. Unless an indicator light applies to a current situation, it should turn off. If an indicator light fails to turn on or off, contact Tesla.

NOTE: The following illustration is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.





The following indicators illuminate on the instrument panel to advise you or alert you of a specific condition.

BRAKE

If the touchscreen displays this red brake indicator at any time other than briefly when you first start Cybertruck Model S Model X Model 3 Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

USA:

Canada:



If the touchscreen displays this red brake indicator at any time other than briefly when you first start Cybertruck Model S Model X Model 3 Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

BRAKE

The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 1236](#)).

USA:



The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 1236](#)).

Canada:

ABS

The ABS indicator briefly flashes amber on the touchscreen when you first start Cybertruck Model S Model X Model 3 Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

USA:

Canada:



The ABS indicator briefly flashes amber on the touchscreen when you first start Cybertruck Model S Model X Model 3 Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

USA:



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

Canada:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

USA:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

Canada:

Low beam headlights are on.



High beam headlights are on. Illuminates when high beams are on but the Auto High Beam setting is turned off or if the Auto High Beam setting is turned on but is temporarily unavailable. See [High Beam Headlights on page 437](#).



High beam headlights are currently turned on, and Auto High Beam is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y. See [High Beam Headlights on page 437](#).



High beam headlights are temporarily turned off because Auto High Beam is on and is detecting light in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, the high beams automatically turn back on. See [High Beam Headlights on page 437](#).



Parking lights (side marker lights, tail lights, and license plate lights) are on. See [Lights on page 433](#).



Front fog lights, if equipped. See [Lights on page 433](#).



Adaptive Front Lighting, if equipped. See [#unique_146 on page .](#)





Adaptive Front Lighting, if equipped. See [Adaptive Front Lighting System \(AFS\) on page 438](#).



Electronic stability control systems are actively minimizing wheel spin by controlling brake pressure and motor power (indicator flashes amber). See [Traction Control on page 496](#). If this indicator remains on, a fault is detected and you should immediately contact Tesla.



If a fault is detected that reduces the performance of the air suspension system, this amber indicator light displays (see [Air Suspension on page 471](#)[Air Suspension on page 474](#)[Air Suspension on page 476](#)). If the problem persists, contact Tesla.



If a fault is detected that disables the air suspension system, a red indicator lights up on the instrument panel (see [Air Suspension on page 471](#)[Air Suspension on page 474](#)[Air Suspension on page 476](#)). Contact Tesla.



Airbag safety. If this red indicator does not flash on briefly when CybertruckModel SModel XModel 3Model Y prepares to drive, or if it remains on, contact Tesla immediately. See [Airbags on page 342](#)[Airbags on page 320](#).



Vehicle Hold is actively applying the brakes. See [Vehicle Hold on page 493](#).



Tire pressure warning. The pressure of a tire is out of range. If a fault with the Tire Pressure Monitoring System (TPMS) is detected, the indicator flashes. For a TPMS fault, contact Tesla. See [Tire Care and Maintenance on page 754](#).



A door or trunk is open. See [Keys and Doors on page 143](#), [Rear Trunk on page 165](#), or [Front Trunk on page 181](#).



A seat belt for an occupied seat is not fastened. See [Seat Belts on page 254](#).

NOTE: Depending on the date of manufacture, rear seating positions may not be equipped with a seat belt reminder.



Electronic stability control systems are no longer minimizing wheel spin. On a Rear Wheel Drive vehicle, the traction control system has been turned off, or on an All-Wheel Drive vehicle, Slip Start has been enabled. See [Traction Control on page 496](#).



CybertruckModel SModel XModel 3Model Y is in Transport mode and can roll freely. It does not automatically shift into Park when you exit. See [Instructions for Transporters on page 894](#)[Instructions for Transporters on page 902](#)[Instructions for Transporters on page 921](#).



Trailer mode (if equipped) is active. See [Towing and Accessories](#) on page 537.



Appears when some of the energy stored in the Battery may not be available due to cold weather conditions. During these cold weather conditions, charging rates may also be limited. If Cybertruck/Model S/Model X/Model 3/Model Y is plugged in, you can heat your Battery by turning on climate control with the mobile app. The snowflake icon disappears when the Battery is sufficiently warm.



Vehicle power is currently being limited because the energy remaining in the Battery is low or the vehicle's systems are being heated or cooled.



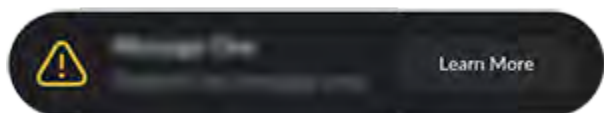
Flashes green when the left turn signal is operating. Both turn signal indicators flash green when the hazard warning flashers are operating.



Flashes green when the right turn signal is operating. Both turn signal indicators flash green when the hazard warning flashers are operating.

Popup Messages and Vehicle Alerts

Popup messages appear on the instrument panel. For example, a seat belt reminder appears if a seat belt is unfastened in an occupied seat, an alert appears to notify you of an incoming phone call, a text message appears (when applicable), and voice commands appear when in use.



You can view a list of vehicle alerts and notifications by touching the notifications icon on the touchscreen.

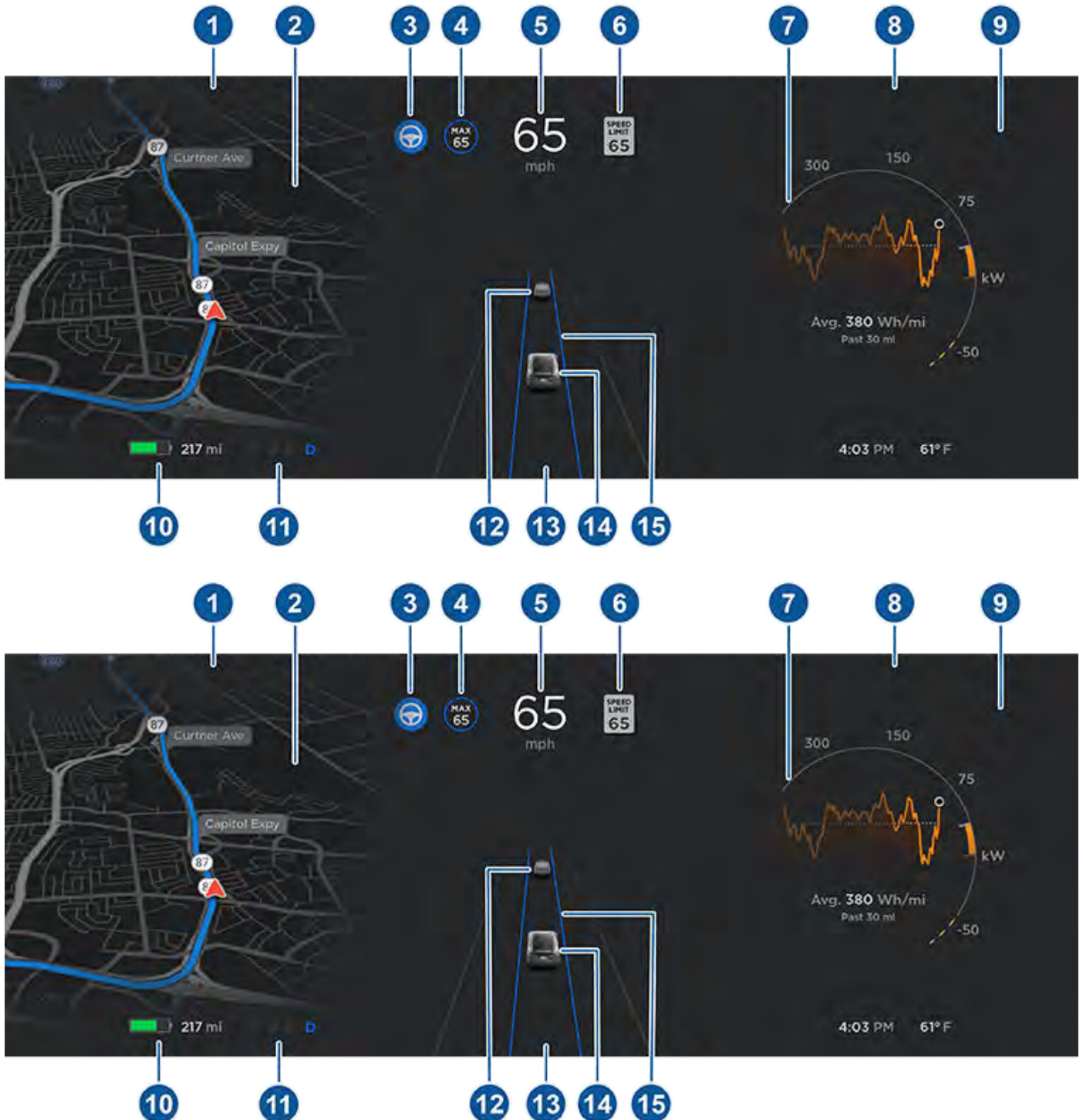
NOTE: Not all alerts provide additional information at this time.



Instrument Panel - Driving

When Cybertruck Model S Model X Model 3 Model Y is driving (or ready to drive), the instrument panel shows your current driving status and a real-time visualization of the road as detected by the Autopilot components (see [About Autopilot on page 550](#)). The visualization automatically zooms in and out as needed to inform you when a vehicle is detected in your blind spot.


NOTE: The following illustration is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.



NOTE: Touch **Controls > Autopilot > Full Self-Driving Visualization Preview** (if equipped) to display more details about the roadway and its surroundings, such as road markings, stop lights, objects (such as trash cans and poles), etc.



1. Indicator lights display along the top to provide status (see [Instrument Panel Overview on page 86](#)).
2. When you are actively navigating to a destination, navigation instructions display here. Use the left steering wheel buttons to change what displays on the left side of the instrument panel whenever navigation instructions are not displayed (see [Using Left Steering Wheel Buttons on page 384](#)).
3. Autosteer is actively steering CybertruckModel SModel XModel 3Model Y. When Autosteer is available but you haven't activated it, the icon is gray (see [Autosteer on page 587](#)).
4. Traffic-Aware Cruise Control is cruising at a set speed. When Traffic-Aware Cruise Control is available but you haven't set a cruising speed, the icon is gray and the speed is not shown (see [Traffic-Aware Cruise Control on page 576](#)).
5. Driving speed.
6. The speed limit (if available) that is currently being detected by Speed Assist (see [Speed Assist on page 651](#)).
NOTE: A blue outline may appear around the speed limit icon to notify that you are above the speed limit.
7. On the Energy graph, dashed lines appear on the power meter if CybertruckModel SModel XModel 3Model Y is limiting power. The dashed lines appear on the top portion (energy being used) when power available for acceleration is being limited, and on the bottom portion (energy being gained) when power that can be gained by regenerative braking is limited. CybertruckModel SModel XModel 3Model Y limits power for many reasons. Here are just a few examples:
 - Acceleration may be limited when the Battery is reaching a low state of charge or if the powertrain is hot.
 - Both acceleration and regenerative braking may be limited when the ambient temperature is either very high or very low.
 - Regenerative braking may be limited when the Battery is fully charged.**NOTE:** Use the right steering wheel buttons to control what displays on the right side of the instrument panel (see [Using Right Steering Wheel Buttons on page 385](#)).
8. Pay attention to important alert messages that display here. If any alerts are in effect, you can view information about them by touching the alert icon (exclamation mark) on the touchscreen's status bar (the topmost area of the touchscreen).
9. Use the right steering wheel buttons to change what displays on the right side of the instrument panel whenever a phone call is not active (see [Using Right Steering Wheel Buttons on page 385](#)).
10. Total estimated driving distance (or energy) available. Instead of driving distance, you can display the percentage of battery energy remaining. To do so, touch **Controls > Display > Energy Display**.
NOTE: When anticipating when you need to charge, use range estimates as a general guideline only.
11. Currently selected drive mode: Park, Reverse, Neutral, or Drive.
12. The car in front of you (if applicable).
NOTE: In situations where Autosteer is unable to detect lane markings, the driving lane is determined based on the vehicle you are following. In these situations, the car in front of you is highlighted in blue.
13. Pay attention to important driving-related messages that appear at the bottom center of the instrument panel.
14. Your CybertruckModel SModel XModel 3Model Y.
15. When Autosteer is active and detects the driving lane, it is highlighted in blue (see [Autosteer on page 587](#)). Depending on the current driving scenario, you may see neighboring lanes.
NOTE: If Navigate on Autopilot is active, the driving lane displays as a single blue line in front of CybertruckModel SModel XModel 3Model Y (see [Navigate on Autopilot on page 592](#)).

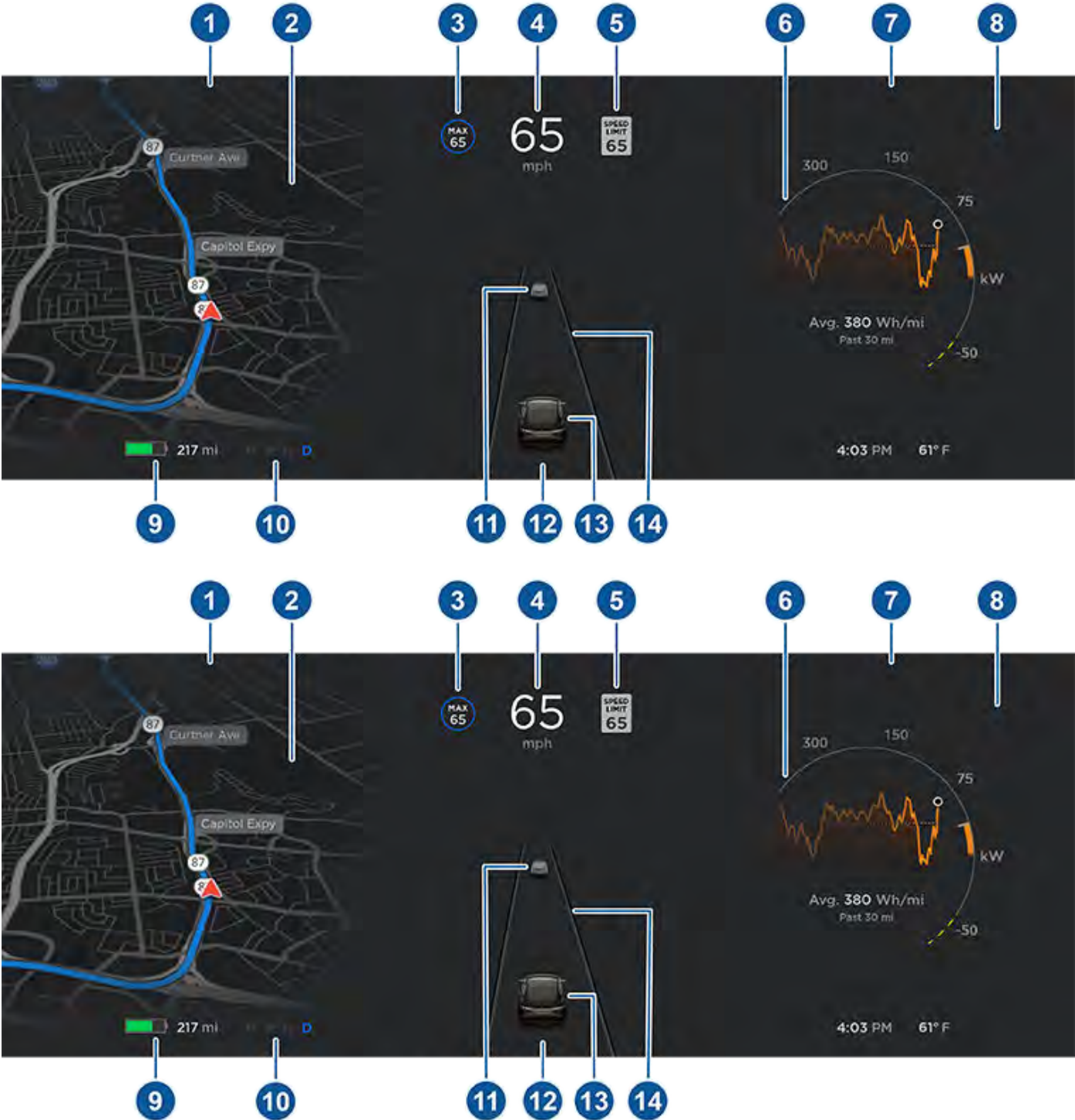
 **WARNING:** Although the instrument panel shows surrounding traffic, some vehicles may not be displayed. Never rely on the instrument panel to determine if a vehicle is present (for example, in your blind spot). Always use your mirrors and perform shoulder checks.



Instrument Panel - Driving

When Cybertruck Model S Model X Model 3 Model Y is driving (or ready to drive), the instrument panel shows your current driving status. The visualization automatically zooms in and out to as needed to inform you when a vehicle is detected in your blind spot.

NOTE: The following illustration is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.



1. Indicator lights display along the top to provide status (see Instrument Panel Overview on page 86).




2. When you are actively navigating to a destination, navigation instructions display here. Use the left steering wheel buttons to change what displays on the left side of the instrument panel whenever navigation instructions are not displayed (see [Using Left Steering Wheel Buttons on page 384](#)).
3. When you set a cruising speed using cruise control, the set speed displays on the cruise control icon (see [Cruise Control on page 478](#)).
4. Driving speed.
5. The speed limit (if available) that is currently being detected by Speed Assist (see [Speed Assist on page 651](#)).
6. On the Energy graph, dashed lines appear on the power meter if CybertruckModel SModel XModel 3Model Y is limiting power. The dashed lines appear on the top portion (energy being used) when power available for acceleration is being limited, and on the bottom portion (energy being gained) when power that can be gained by regenerative braking is limited. CybertruckModel SModel XModel 3Model Y limits power for many reasons. Here are just a few examples:
 - Acceleration may be limited when the Battery is reaching a low state of charge or if the powertrain is hot.
 - Both acceleration and regenerative braking may be limited when the ambient temperature is either very high or very low.
 - Regenerative braking may be limited when the Battery is fully charged.
7. Pay attention to important alert messages that display here. If any alerts are in effect, you can view information about them by touching the alert icon (exclamation mark) on the touchscreen's status bar (the topmost area of the touchscreen).
8. Use the right steering wheel buttons to change what displays on the right side of the instrument panel whenever a phone call is not active (see [Using Right Steering Wheel Buttons on page 385](#)).
9. Total estimated driving distance (or energy) available. Instead of driving distance, you can display the percentage of battery energy remaining. To do so, touch **Controls > Display > Energy Display**.

NOTE: When anticipating when you need to charge, use range estimates as a general guideline only.

NOTE: In cold weather, some of the stored energy in the Battery may not be available on your drive because the Battery is too cold. When this happens, a portion of the Battery meter is blue and the driving distance value has a snowflake image next to it. If CybertruckModel SModel XModel 3Model Y is plugged in, you can heat your Battery using wall power by turning on climate control using the mobile app. When the Battery warms up, the blue portion on the meter and the snowflake image are no longer displayed.

10. Currently selected drive mode: Park, Reverse, Neutral, or Drive.
11. The car in front of you (if applicable).
12. Pay attention to important driving-related messages that appear at the bottom center of the instrument panel.
13. Your CybertruckModel SModel XModel 3Model Y.
14. Driving lane (if detected). Depending on the current driving scenario, you may see neighboring lanes.

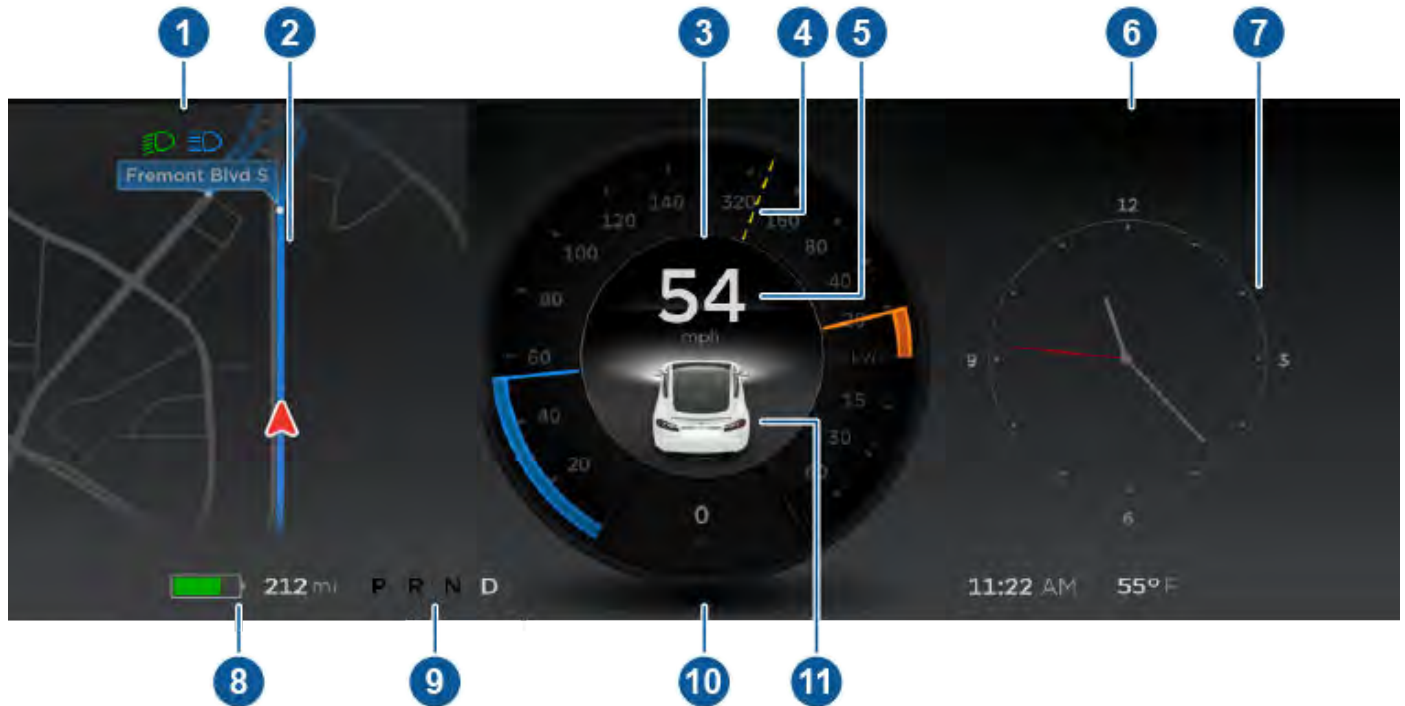
 **WARNING:** Although the instrument panel shows surrounding traffic, some vehicles may not be displayed. Never rely on the instrument panel to determine if a vehicle is present (for example, in your blind spot). Always use your mirrors and perform shoulder checks.



Instrument Panel - Driving

When CybertruckModel SModel XModel 3Model Y is driving (or ready to drive), the instrument panel shows your current driving status.

NOTE: The following illustration is provided for demonstration purposes only. Depending on vehicle options, software version, and market region, the information displayed may be slightly different.



1. Indicator lights display along the top to provide status (see [Instrument Panel Overview on page 86](#)).
2. When you are actively navigating to a destination, navigation instructions display here. Use the left steering wheel buttons to change what displays on the left side of the instrument panel whenever navigation instructions are not displayed (see [Using Left Steering Wheel Buttons on page 384](#)).
3. Cruise control status displays here, if engaged (see [Cruise Control on page 478](#)).
4. Dashed lines appear on the power meter if Model S is limiting power. The dashed lines appear on the top portion (energy being used) when power available for acceleration is being limited, and on the bottom portion (energy being gained) when power that can be gained by regenerative braking is limited. CybertruckModel SModel XModel 3Model Y limits power for many reasons. Here are just a few examples:
 - Acceleration may be limited when the Battery is reaching a low state of charge or if the powertrain is hot.
 - Both acceleration and regenerative braking may be limited when the ambient temperature is either very high or very low.
 - Regenerative braking may be limited when the Battery is fully charged.
5. Driving speed.
6. Pay attention to important alert messages that display here. If any alerts are in effect, you can view information about them by touching the alert icon (exclamation mark) on the touchscreen's status bar (the topmost area of the touchscreen).
7. Use the right steering wheel buttons to change what displays on the right side of the instrument panel whenever a phone call is not active (see [Using Right Steering Wheel Buttons on page 385](#)).
8. Total estimated driving distance (or energy) available. Instead of driving distance, you can display the percentage of battery energy remaining. To do so, touch **Controls > Display > Energy Display**.

NOTE: When anticipating when you need to charge, use range estimates as a general guideline only.



NOTE: In cold weather, some of the stored energy in the Battery may not be available on your drive because the Battery is too cold. When this happens, a portion of the Battery meter is blue and the driving distance value has a snowflake image next to it. If CybertruckModel SModel XModel 3Model Y is plugged in, you can heat your Battery using wall power by turning on climate control using the mobile app. When the Battery warms up, the blue portion on the meter and the snowflake image are no longer displayed.

9. Currently selected drive mode: Park, Reverse, Neutral, or Drive.
10. Pay attention to important driving-related messages that appear at the bottom center of the instrument panel.
11. Your CybertruckModel SModel XModel 3Model Y.



Voice Commands

NOTE: For your convenience, Tesla allows you to choose from a variety of languages to use for voice commands. To choose a different language, touch **Controls > Display > Voice Recognition Language**.

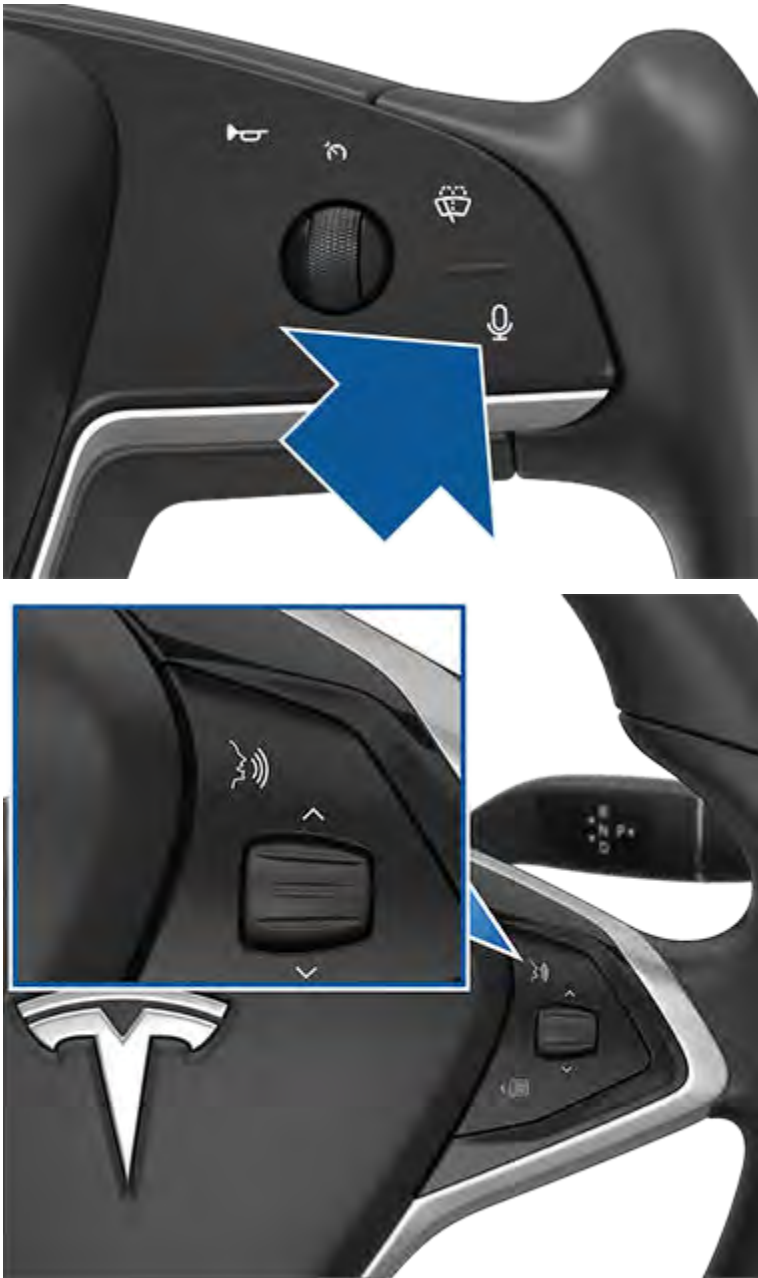
Use voice commands to easily control settings and preferences without using the touchscreen. Voice commands are designed to understand natural requests. The following is a non-exhaustive list of actions that you can perform with voice commands:

- Adjust climate preferences
- Tweak the windshield wiper speed and frequency
- Control various aspects of your vehicle
- Navigate to a location
- Call a contact
- Interact with apps and settings

To initiate a voice command, press and release the right scroll wheel button on the steering wheelsteering yoke (or steering wheel)press and release the right scroll wheel button on the steering wheelsteering yoke (or steering wheel)fully press the microphone button on the right side of the steering wheelsteering yoke (or steering wheel)fully press the microphone button on the right side of the steering wheelsteering yoke (or steering wheel)touch the voice button on the right side of the steering wheelsteering yoke (or steering wheel). When a chime sounds, make your request.







Examples of Voice Commands

Here is a list of example voice commands. This is not an exhaustive list. Tesla is constantly working to improve voice commands.

NOTE: Your vehicle must be in Park to enable some voice commands (such as Sentry Mode, Dog Mode, etc.).

Climate Controls

Adjust your climate preferences:

- "Make it cooler"
- "Make it warmer"
- "Turn on/off the driver's seat heater"
- "Cool down the passenger"
- "Direct airflow to my face"



- "Sync climate"
- "Increase/decrease the fan speed"
- "Turn on/off rear defroster"
- "Set the temperature/fan..."
- "Turn on recirculate"

Windshield Wipers

Update the windshield wiper speed and frequency based on changing road and weather conditions:

- "Speed up the wipers"
- "Speed up the wiper"
- "Turn on/off the wiper"
- "Increase/decrease windshield wiper speed by..."
- "Turn on/off the wipers"

Vehicle Controls

Modify various controls in your vehicle:

- "Sentry Mode on/off"
- "Keep my car safe"
- "Keep my truck safe"
- "Lock/unlock the doors"
- "Turn on Dog Mode"
- "Fold/unfold the mirrors"
- "Open/close charge port"
- "Start/stop charging"
- "Open service settings"
- "Open the glovebox"

Navigation

Search for or navigate to a location:

- "Where is [location]?"
- "Drive to [location]"
- "Navigate to [location]"
- "Show nearby Superchargers"
- "I'm feeling hungry/lucky" (see [Maps and Navigation on page 699](#)).
- "Stop navigation"
- "Mute voice guidance"

If you have defined a navigation address for your home or work locations, you can use a voice command to navigate there by saying "Navigate home" or "Take me to work".

Contacts

To call or text a contact on your Bluetooth-connected phone (see [Phone, Calendar, and Web Conferencing on page 363](#)), say:

- "Call [contact name/phone number]"



- "Text [contact name/phone number]"

Media

Listen to media and adjust your playback preferences:

- "Listen to [song name]"
- "Lower/raise the volume"
- "Skip to next"
- "Pause/play song"
- "Change the source to [media source]"

To improve voice command recognition accuracy, provide multiple cues in your command, such as artist and song.

Apps and Settings

Easily navigate through your apps and settings:

- "Open [Toybox/browser/theater/phone]"
- "Search for..."
- "The screen is too bright"
- "Show me the Owner's Manual"

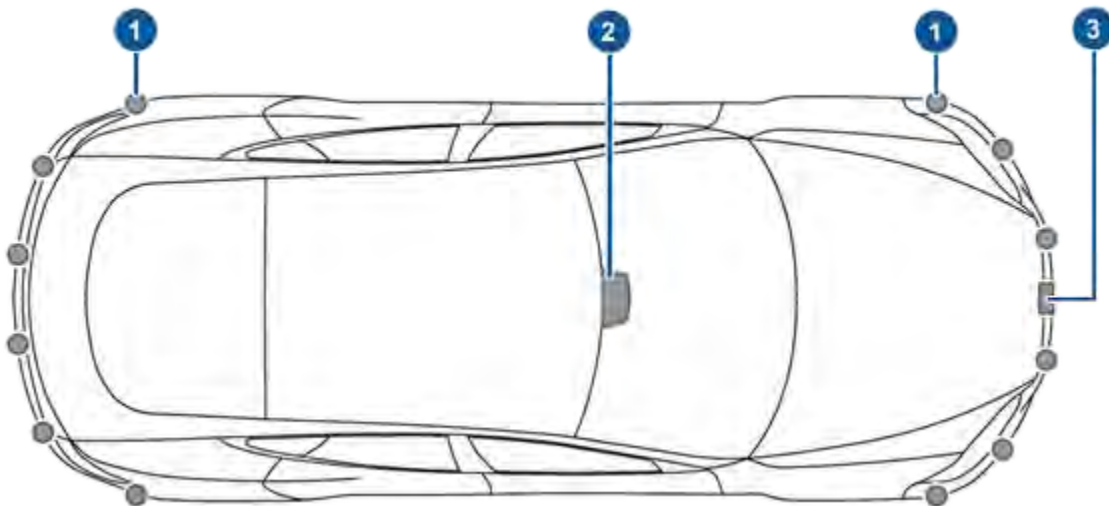
You can also file a bug report by saying "Report", "Feedback", or "Bug report".

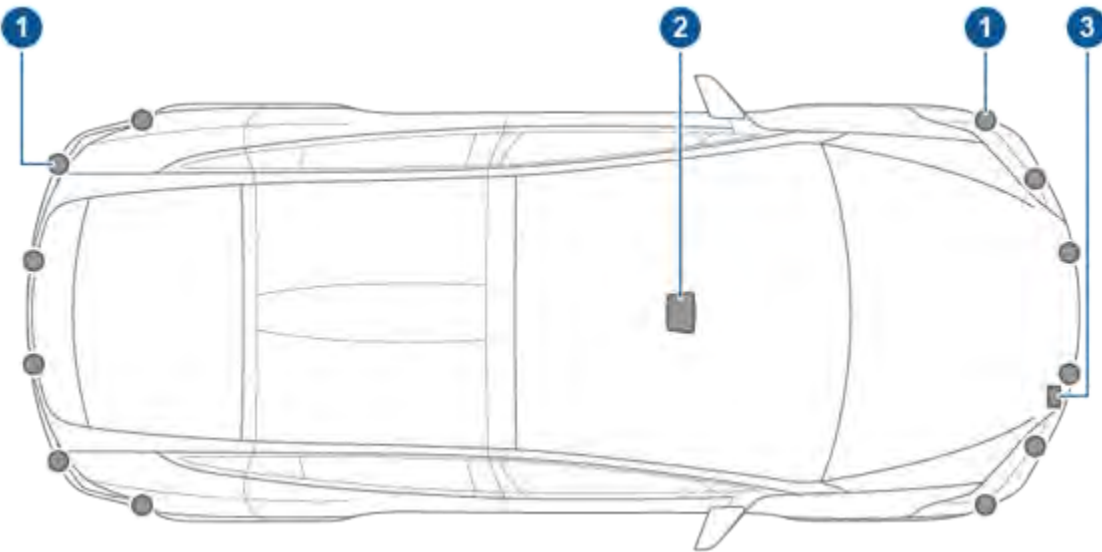
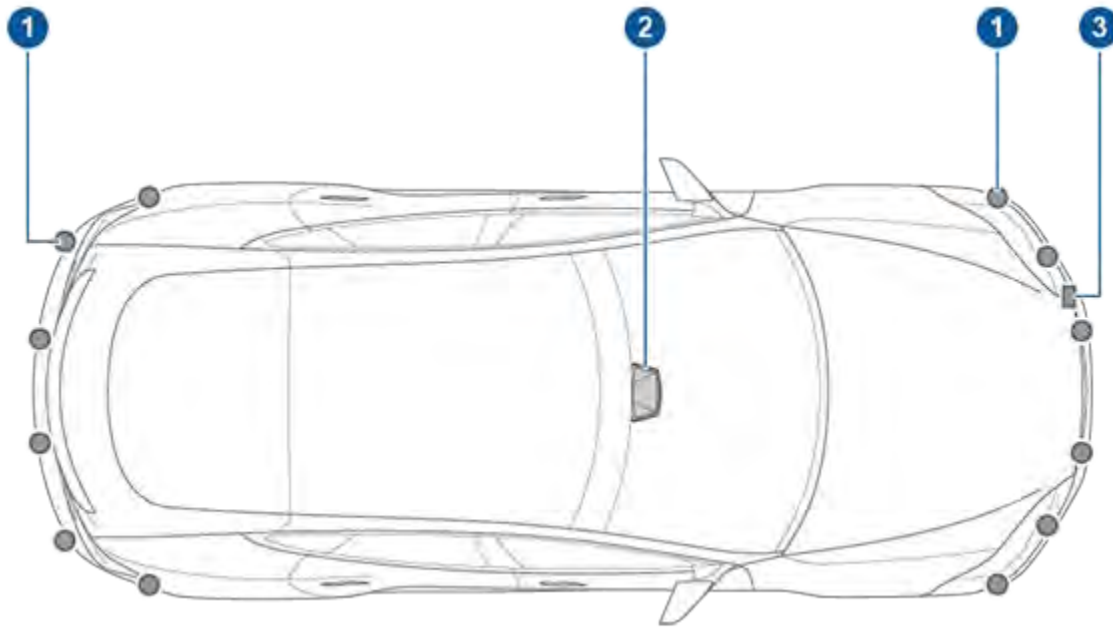
For more information on voice commands, go to <https://www.tesla.com/support/voice-commands>.

NOTE: To support ongoing quality improvements, Tesla captures and processes voice command transcriptions (such as "set the temperature..."). Audio voice recordings are not collected, and transcriptions are not associated with your Tesla account or with your vehicle's identification number. To further protect your privacy, voice commands containing personal data are not captured (such as "Navigate to..." or "Make a call to...").

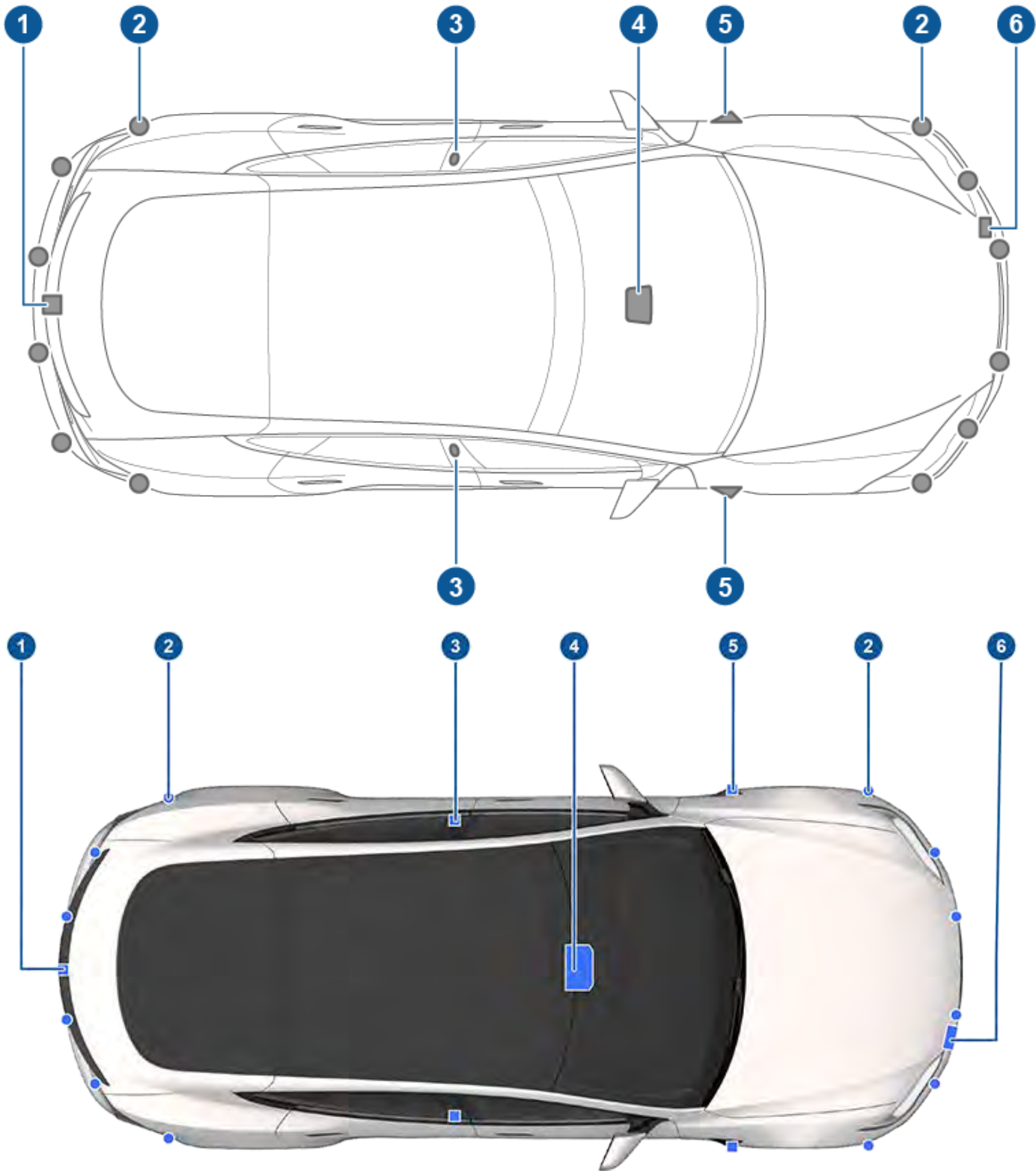
Cameras

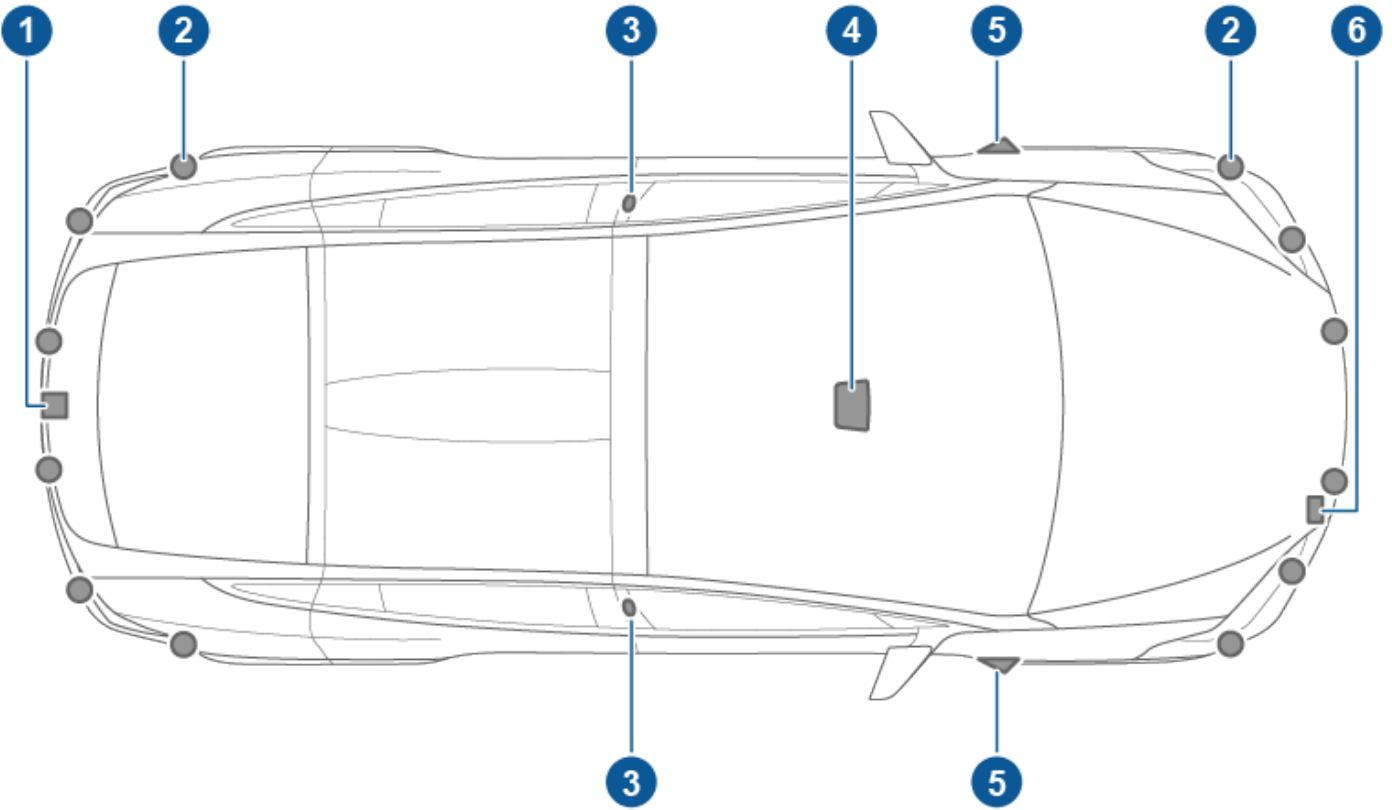
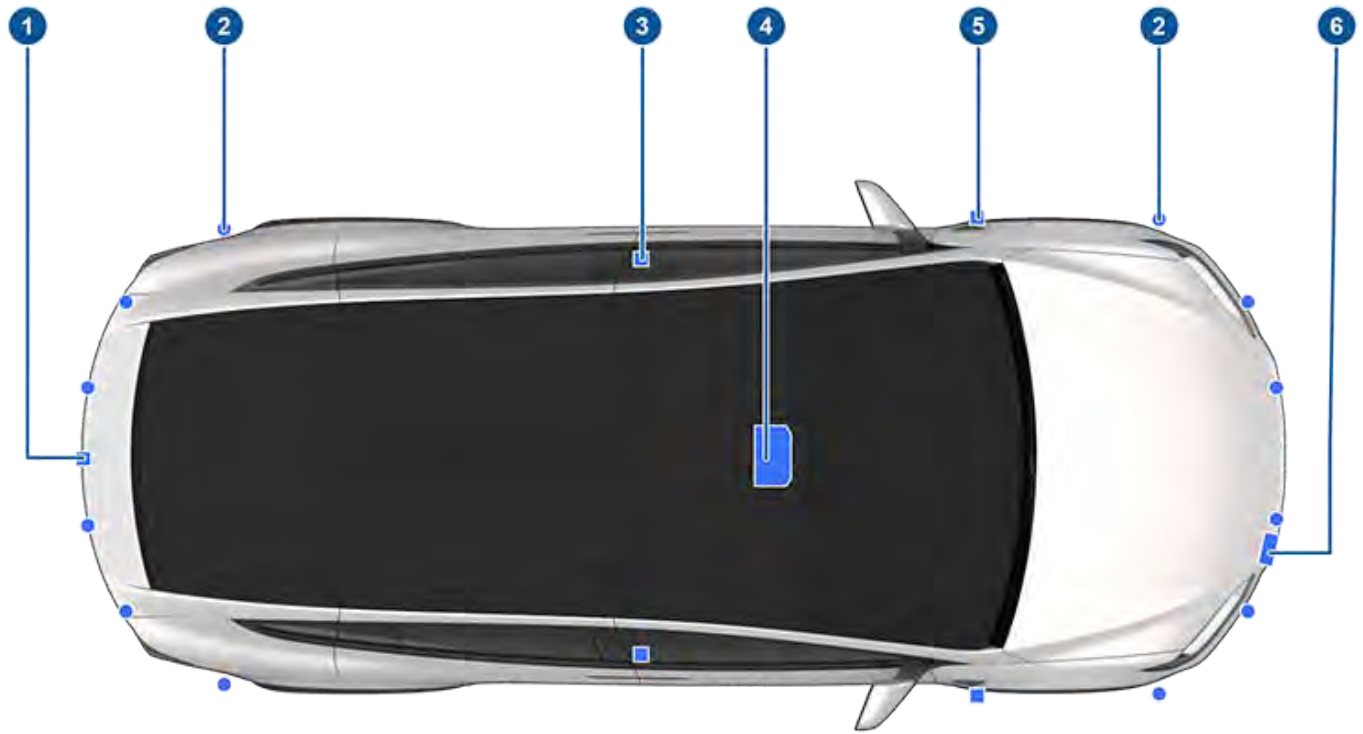
Your CybertruckModel SModel XModel 3Model Y includes the following components that actively monitor the surrounding area:

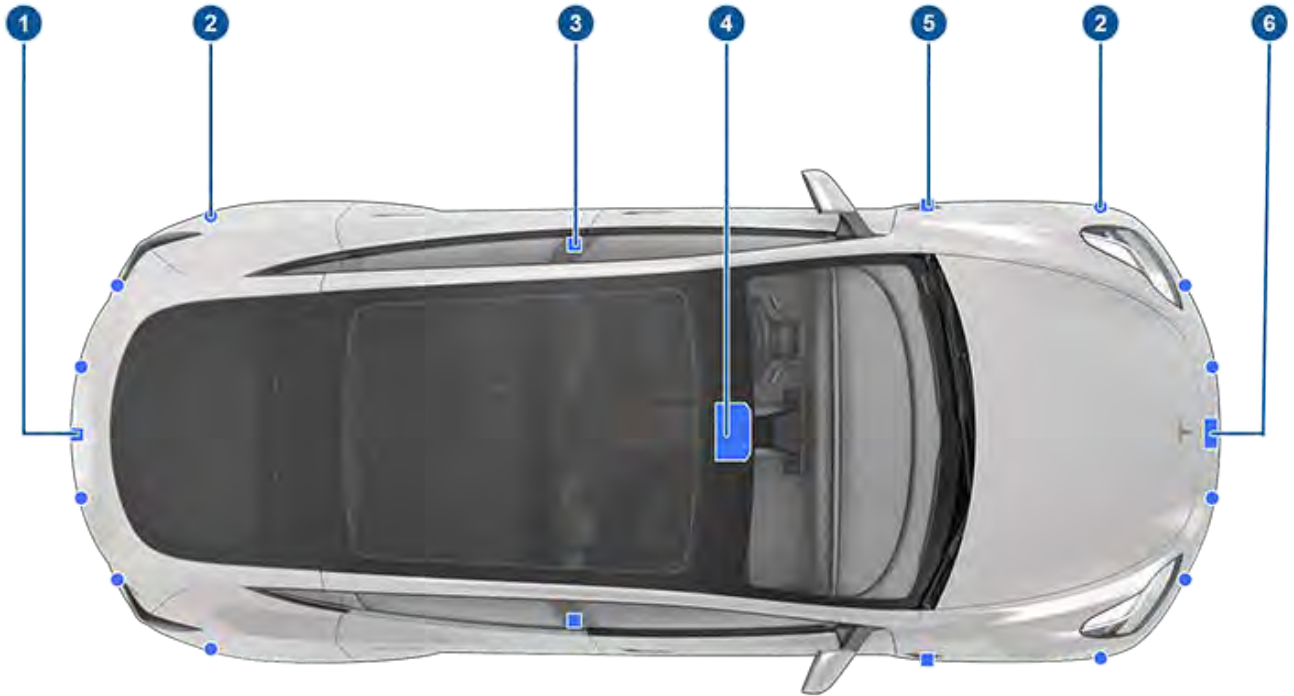




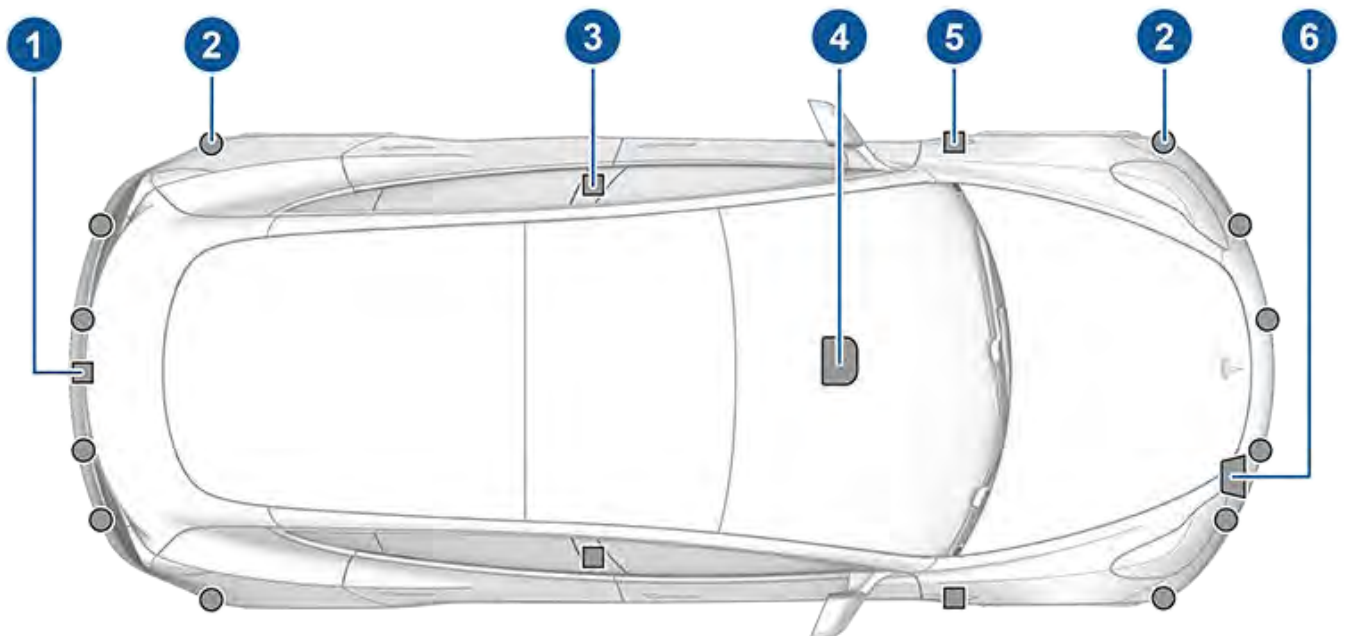
1. Ultrasonic sensors are located in the front and rear bumpers.
2. A forward looking camera is mounted on the windshield above the rear view mirror.
3. Radar is mounted in the front grille. Radar is mounted behind the front bumper on the left side of the vehicle. Radar is mounted behind the front bumper on the right side of the vehicle.







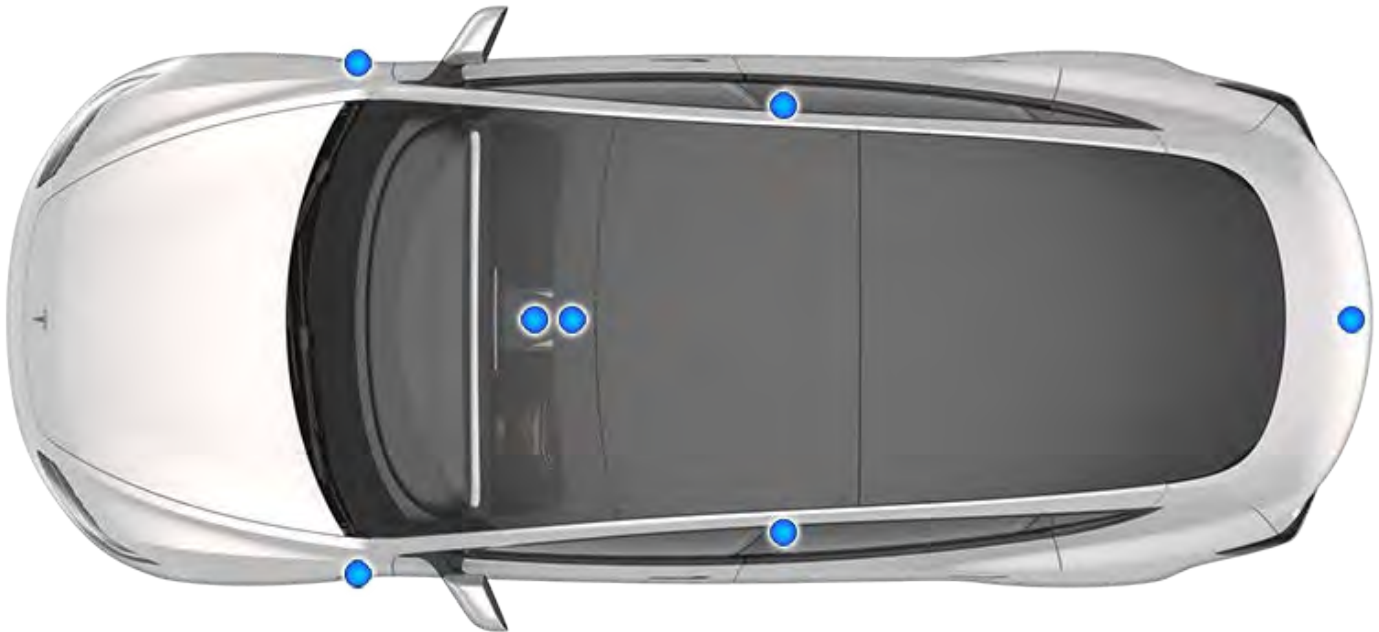
1. A camera is mounted above the rear license plate.
2. Ultrasonic sensors (if equipped) are located in the front and rear bumpers.
3. A camera is mounted in each door pillar.
4. Three cameras are mounted to the windshield above the rear view mirror.
5. Two cameras are mounted to the windshield above the rear view mirror.
6. A camera is mounted to each front fender.
7. Radar (if equipped) is mounted behind the front bumper.



1. A camera is mounted above the rear license plate.



2. Ultrasonic sensors (if equipped) are located in the front and rear bumpers.
3. A camera is mounted in each door pillar.
4. Three cameras are mounted to the windshield above the rear view mirror.
5. A camera is mounted to each front fender.
6. Radar (if equipped) is mounted behind the front bumper.



- A camera is mounted above the rear license plate.
- A camera is mounted in each door pillar.
- Two cameras are mounted to the windshield above the rear view mirror.
- A camera is mounted to each front fender.

CybertruckModel SModel XModel 3Model Y is also equipped with high precision electronically-assisted braking and steering systems.

Cabin Camera

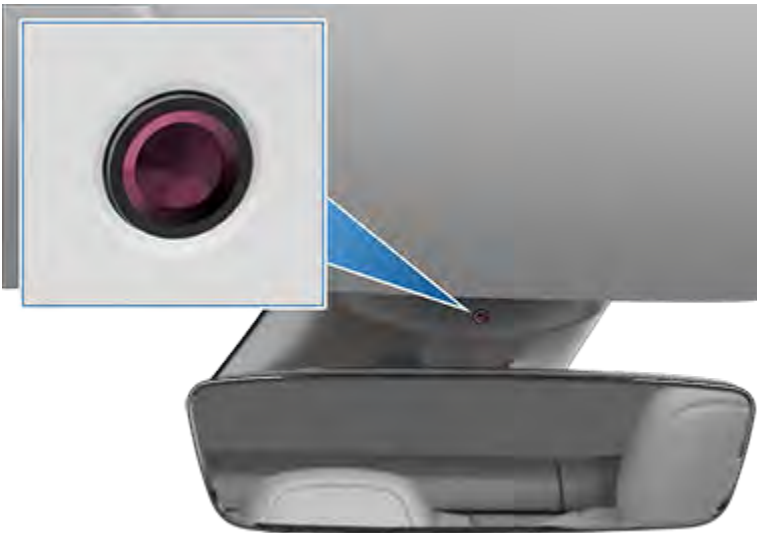
Your CybertruckModel SModel XModel 3Model Y may be equipped with a cabin camera located above the rear view mirror. For more information, see [Cabin Camera on page 654](#).

Your CybertruckModel SModel XModel 3Model Y may be equipped with a cabin camera located above the rear view mirror. For more information, see [Cabin Camera on page 654](#).

Your CybertruckModel SModel XModel 3Model Y is equipped with a cabin camera located above the rear view mirror. For more information, see [Cabin Camera on page 654](#).

Your CybertruckModel SModel XModel 3Model Y is equipped with a cabin camera located above the rear view mirror. For more information, see [Cabin Camera on page 654](#).





Drive to Calibrate Cameras

CybertruckModel SModel XModel 3Model Y must maneuver with precision when Autopilot features are being used. Therefore, before some features such as Lane Departure Avoidance and Automatic Emergency Braking can be used for the first time or after some types of service repairs, cameras must complete a self-calibration process. For your convenience, the instrument paneltouchscreen displays a progress indicator.

When calibration is complete, Autopilot features, as well as Active Safety features, are available for use. Calibration typically completes after driving 20-25 miles (32-40 km), but the distance varies depending on road and environmental conditions. For example, calibration completes quicker when driving on a straight road with multiple lanes (such as a controlled-access highway), with highly-visible lane markings (in the driving lane as well as the adjacent lanes). Contact Tesla only if your CybertruckModel SModel XModel 3Model Y has not completed the calibration process after driving 100 miles (160 km) in the described conditions.

If a camera has shifted from its calibrated position (for example, the camera or windshield was replaced), you must clear the calibration. To do so, touch **Controls > Service > Camera Calibration > Clear Calibration**. When the calibration is cleared, CybertruckModel SModel XModel 3Model Y repeats the calibration process. While this helps re-calibrate the cameras in many cases, **Clear Calibration** may not resolve all camera and sensor concerns.

NOTE: The self-calibration drive process is only applicable to CybertruckModel SModel XModel 3Model Y vehicles built after approximately October 12, 2016.

NOTE: To calibrate, cameras require highly-visible lane markings in both the driving lane and adjacent lanes (at least two lanes over on each side of the vehicle). For best results, drive in the middle lane of a multi-lane highway (ideally with at least five lanes) that has clear lane markings and minimal traffic.

NOTE: If you attempt to use a feature that is not available until the calibration process is complete, the feature is disabled and the instrument paneltouchscreen displays a message.

NOTE: CybertruckModel SModel XModel 3Model Y must repeat the calibration process if the cameras are serviced by Tesla, and in some cases, after a software update.

Keeping Cameras Free of Obstructions

Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).



Condensation can form inside the camera enclosures, especially if you park your vehicle outside in cold or wet conditions. The instrument clustertouchscreen may display an alert stating that a camera is blocked and that some or all Autopilot features may be temporarily restricted until the camera vision is clear. To proactively dry the condensation, precondition the cabin by setting it to a warm temperature, turning the windshield defroster on, and directing the front air vents toward the door pillars (see [Mobile App on page 355](#)).

Opening and Closing

Keys

Types of Keys

CybertruckModel SModel XModel 3Model Y supports the following types of keys:

- **Phone key** – You can set up your personal phone as a "phone key" that communicates with CybertruckModel SModel XModel 3Model Y using Bluetooth. A phone key supports automatic locking and unlocking.
- **Key card** – Tesla provides two key cards that communicate with CybertruckModel SModel XModel 3Model Y using short range radio-frequency identification (RFID) signals. The key card is used to "authenticate" phone keys to work with CybertruckModel SModel XModel 3Model Y and to add or remove other keys. Unlike the phone key and key fobs, the key card does not support automatic locking and unlocking. In situations where your phone key has a dead battery, or is lost or stolen, use your key card to unlock, drive, and lock CybertruckModel SModel XModel 3Model Y.
- **Key fob** – The key fob (if equipped) allows you to press buttons to open the front and rear trunks, and unlock, lock, and drive CybertruckModel SModel XModel 3Model Y. The key fob also supports automatic locking and unlocking, if available in your region (see [Walk-Away Door Lock on page 141](#)) and can be used as a backup to your phone key.

CybertruckModel SModel XModel 3Model Y supports a total of 19 keys, which can include phone keys, key cards, and up to four key fobs.



CAUTION: Remember to bring a key with you when you drive. Although you can drive CybertruckModel SModel XModel 3Model Y away from its key, you will be unable to power it back on after it powers off.

Phone Key



CAUTION: Do not leave your paired phone in your vehicle (for example, if you are hiking or at the beach). If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off.

Using your phone as a key is a convenient way to access your CybertruckModel SModel XModel 3Model Y. As you approach, your phone's Bluetooth signal is detected and the doors unlock when you press a door handle when you pull a door handle. Likewise, when you exit and walk away with the phone key, doors automatically lock (provided the **Walk-Away Door Lock** feature is turned on; see [Walk-Away Door Lock on page 141](#)).

Before you can use a phone to access CybertruckModel SModel XModel 3Model Y, follow these steps to authenticate it:

1. Download the Tesla mobile app to your phone.
2. Log into the Tesla mobile app using your Tesla account username and password.

NOTE: You must remain logged in to your Tesla account to use your phone to access CybertruckModel SModel XModel 3Model Y.

NOTE: If multiple vehicles are linked to your Tesla account, you must ensure that the vehicle you want the mobile app to access is currently selected on the mobile app.

3. Ensure:
 - Your phone's general Bluetooth settings are enabled.
 - Bluetooth is enabled within your phone's settings for the Tesla mobile app. For example, on your phone, navigate to Settings, choose the Tesla mobile app, and ensure the Bluetooth setting is turned on.
 - Access to your location is enabled. Open the Tesla mobile app in your phone's settings and select **Location > Always**. For the best experience, keep the mobile app running in the background.
 - Allow Mobile Access is enabled on the vehicle touchscreen (**Controls > Safety > Allow Mobile Access**).



NOTE: CybertruckModel SModel XModel 3Model Y communicates with your phone using Bluetooth. Keep in mind that your phone must have enough battery power to run Bluetooth and that many phones disable Bluetooth when the battery is low.

4. While inside or near the vehicle, open the Tesla mobile app and touch **Set Up Phone Key** on the main screen, or navigate to **Security > Set Up Phone Key**. Follow the prompts on the mobile app and vehicle touchscreen to set up your phone key.

To view a list of keys that can currently access CybertruckModel SModel XModel 3Model Y, or to remove a phone key, touch **Controls > Locks** (see [Managing Keys on page 126](#)).

CybertruckModel SModel XModel 3Model Y can connect to three phone keys simultaneously. Therefore, if more than three phone keys are detected and you want to authenticate or pair a different phone, move the other connected phone key(s) out of range or turn off its Bluetooth setting.

Once a phone has been authenticated, it no longer requires an internet connection to be used as a phone key for CybertruckModel SModel XModel 3Model Y. However, to use the phone hands-free, access your phone's contacts, play media from it, etc., you must also pair it and connect it as a Bluetooth device (see [Bluetooth on page 360](#)).

Some smartphones with NFC capability can be used to lock/unlock your vehicle, just like using a key card. Ensure the Tesla mobile app is correctly paired to your vehicle and enable the NFC function on your phone. Once enabled, simply hold the phone to the driver's side door pillar to lock or unlock the door. Refer to your smartphone's instructions for specific information on how to do this.

Key Card

Tesla provides you with two CybertruckModel SModel XModel 3Model Y key cards, designed to fit in your wallet.

To use a key card to unlock or lock CybertruckModel SModel XModel 3Model Y, position the card as shown and tap it against the card reader located just below the Autopilot camera on the driver's side door pillar. When CybertruckModel SModel XModel 3Model Y detects the key card, the exterior lights flash, the mirrors unfold or fold (if Fold Mirrors is on), the horn sounds (if Lock Confirmation Sound is on), and the doors unlock or lock.

NOTE: You may need to physically touch the center console or driver's side door pillar with the key card, and you may need to hold it against the transmitter for one or two seconds.





Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of scanning the key card (see [Starting and Powering Off on page 373](#)[Starting and Powering Off on page 369](#)[Starting and Powering Off on page 369](#)[Starting and Powering Off on page 369](#)). If you wait longer than two minutes, you must re-authenticate by placing the key card near the card reader located behind the cup holders on the center console. When your key card is detected, your two minute authentication period restarts.



NOTE: If enabled, Walk-Away Door Lock (see [Walk-Away Door Lock on page 141](#)) operates only when you walk away using a phone key or key fob. When you walk away carrying your key card, CybertruckModel SModel XModel 3Model Y does not automatically unlock/lock.



CAUTION: Always carry your key card with you in your purse or wallet to use as a backup in case your authenticated phone has a dead battery, or is lost or stolen.

Key Card

Tesla provides you with two CybertruckModel SModel XModel 3Model Y key cards, designed to fit in your wallet.

To use a key card to unlock or lock CybertruckModel SModel XModel 3Model Y, position the card as shown and tap it against the card reader located just below the Autopilot camera on the driver's side door pillar. When CybertruckModel SModel XModel 3Model Y detects the key card, the exterior lights flash, the mirrors unfold or fold (if Fold Mirrors is on), the horn sounds (if Lock Confirmation Sound is on), and the doors unlock or lock.

NOTE: You may need to physically touch the center console or driver's side door pillar with the key card, and you may need to hold it against the transmitter for one or two seconds.



Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of scanning the key card (see [Starting and Powering Off on page 369](#)). If you wait longer than two minutes, you must re-authenticate by placing the key card near the card reader located behind the cup holders on the center console. When your key card is detected, your two minute authentication period restarts.



NOTE: If enabled, Walk-Away Door Lock (see [Walk-Away Door Lock on page 141](#)) operates only when you walk away using a phone key or key fob. When you walk away carrying your key card, CybertruckModel SModel XModel 3Model Y does not automatically unlock/lock.

⚠ CAUTION: Always carry your key card with you in your purse or wallet to use as a backup in case your authenticated phone has a dead battery, or is lost or stolen.

Key Card

Tesla provides you with two CybertruckModel SModel XModel 3Model Y key cards, designed to fit in your wallet.

To use a key card to unlock or lock CybertruckModel SModel XModel 3Model Y, position the card as shown and tap it against the card reader located approximately one third the way up of the driver's side door pillar. When CybertruckModel SModel XModel 3Model Y detects the key card, the exterior lights flash, the mirrors unfold or fold (if Fold Mirrors is on), the horn sounds (if Lock Confirmation Sound is on), and the doors unlock or lock.

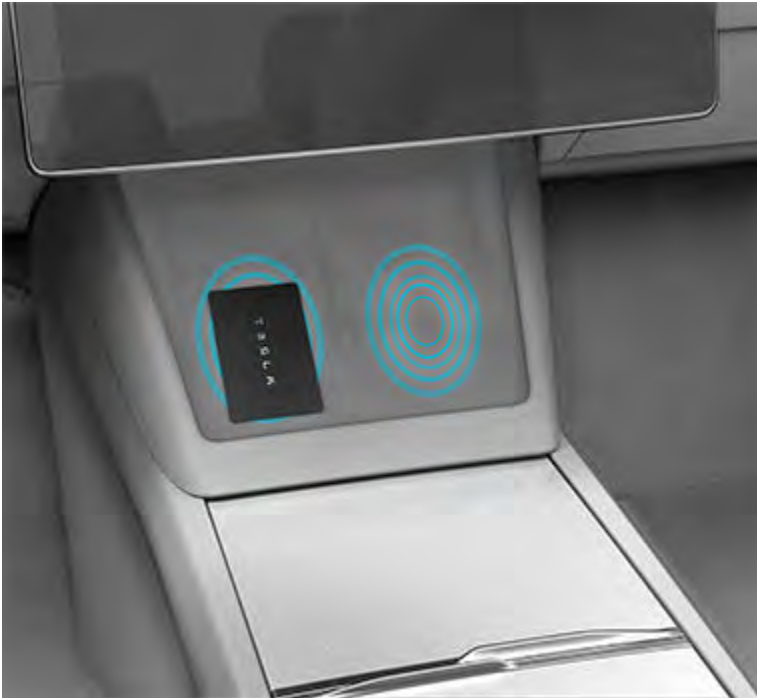
NOTE: You may need to physically touch the wireless phone charger or driver's side door pillar with the key card, and you may need to hold it against the transmitter for one or two seconds.





Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of scanning the key card (see [Starting and Powering Off on page 373](#)). If you wait longer than two minutes, you must re-authenticate by placing the key card near the card reader located in the wireless phone charger on the center console. When your key card is detected, your two minute authentication period restarts.





NOTE: If enabled, Walk-Away Door Lock (see [Walk-Away Door Lock on page 141](#)) operates only when you walk away using a phone key or passive key fob. When you walk away carrying your key card, CybertruckModel SModel XModel 3Model Y does not automatically unlock/lock.

Key Card

Tesla provides you with two CybertruckModel SModel XModel 3Model Y key cards, designed to fit in your wallet.

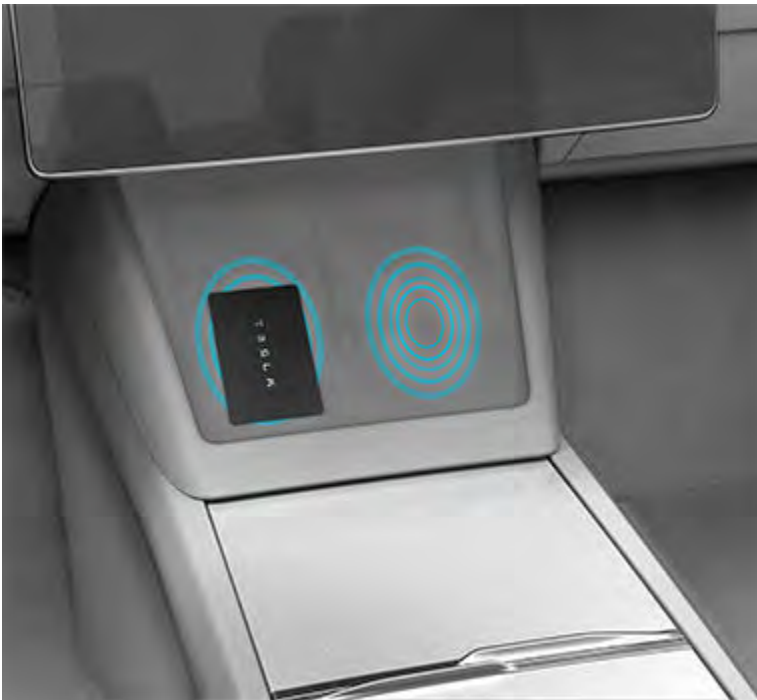
To use a key card to unlock or lock CybertruckModel SModel XModel 3Model Y, position the card as shown and tap it against the card reader located approximately one third the way up of the driver's side door pillar. When CybertruckModel SModel XModel 3Model Y detects the key card, the exterior lights flash, the mirrors unfold or fold (if Fold Mirrors is on), the horn sounds (if Lock Confirmation Sound is on), and the doors unlock or lock.

NOTE: You may need to physically touch the wireless phone charger or driver's side door pillar with the key card, and you may need to hold it against the transmitter for one or two seconds.





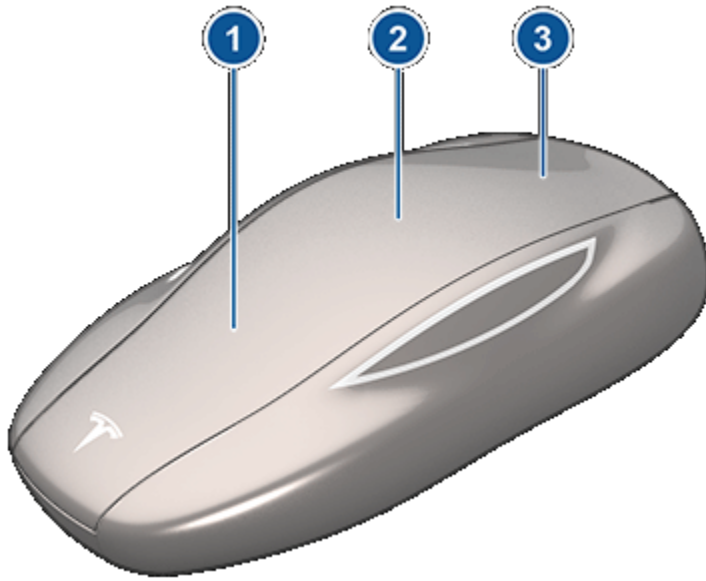
Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of scanning the key card (see [Starting and Powering Off on page 373](#)). If you wait longer than two minutes, you must re-authenticate by placing the key card near the card reader located in the wireless phone charger on the center console. When your key card is detected, your two minute authentication period restarts.



NOTE: If enabled, Walk-Away Door Lock (see [Walk-Away Door Lock on page 141](#)) operates only when you walk away using a phone key or key fob. When you walk away carrying your key card, CybertruckModel SModel XModel 3Model Y does not automatically unlock/lock.

Key Fob

If you have purchased the key fob accessory, you can quickly familiarize yourself with this key by thinking of it as a miniature version of CybertruckModel SModel XModel 3Model Y, with the Tesla badge representing the front. The key has three buttons that feel like softer areas on the surface.



1. Front trunk - Double-click to unlatch the front trunk.
2. Lock/Unlock All - Single-click to lock doors and trunks (all doors and trunks must be closed). Double-click to unlock doors and trunks.
3. Rear trunk - Double-click to unlatch the rear trunk. Hold down for one to two seconds to open the charge port door.

Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of pressing the unlock button on the key fob (see [Starting and Powering Off on page 373](#)). If you wait longer than two minutes, you must press the unlock button again, or place the key fob near the card reader located behind the cup holders on the center console. When your key fob is detected, the two minute authentication period restarts.

When approaching or leaving CybertruckModel SModel XModel 3Model Y carrying the key fob, you do not need to point the key fob at CybertruckModel SModel XModel 3Model Y as you press a button, but you must be within operating range.

Radio equipment on a similar frequency can affect the key. If this happens, move the key at least one foot (30 cm) away from other electronic devices (phones, laptops, etc.).

In the event that the key fob's battery is dead, you can still use it to drive the vehicle by scanning the key fob on the card reader located on the driver's side door pillar (like the key card).

Instructions for changing the battery are provided in [Replacing the Key Fob Battery on page 119](#).

NOTE: You can use the same key fob with multiple CybertruckModel SModel XModel 3Model Y vehicles provided you authenticate it (see [Managing Keys on page 126](#)). However, key fob works with only one CybertruckModel SModel XModel 3Model Y at a time. Therefore, to use a key fob for a different CybertruckModel SModel XModel 3Model Y, touch its flat side against the card reader on the driver's side door pillar.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to four different key fobs.

CAUTION: Protect the key from impact, high temperatures, and damage from liquids. Avoid contact with solvents, waxes, and abrasive cleaners.

Passive Locking and Unlocking

Locking and unlocking CybertruckModel SModel XModel 3Model Y with your key fob is conveniently hands-free. Although you must be carrying a paired key fob, there is no need to use it. CybertruckModel SModel XModel 3Model Y has sensors around the vehicle that can recognize the presence of a key fob within a range of approximately six feet (two meters). Therefore, you can keep your key fob in your pocket or purse and simply pull on the door handle to unlock. When carrying your key fob with you, you can also open the trunk without having to use the key by pressing the liftgate rear trunk's exterior door handle. If **Walk-Away Door Lock** is enabled, CybertruckModel SModel XModel 3Model Y automatically locks when you exit and the key fob is no longer in range (see [Walk-Away Door Lock on page 141](#)). Passive locking and unlocking is automatically enabled when you pair your key fob to CybertruckModel SModel XModel 3Model Y.



Although you can use the same key fob with multiple vehicles, it can only be paired to one vehicle at a time. To activate a paired key fob to a different vehicle, touch the flat side onto the driver's side door pillar and click any button on the key fob to confirm.

NOTE: For increased security, passive locking and unlocking disables after being stationary for five minutes while within vehicle range when the vehicle is not in use (for example, you are standing outside your vehicle). In this situation, you must shake or press a button on the key fob to re-enable passive locking and unlocking.

Replacing the Key Fob Battery

Under normal use, the accessory key fob has a battery that lasts for up to one year, depending on key fob version and selected vehicle settings. When the battery is low, a message displays on the touchscreen.

To replace the key fob battery:



1. With the key fob placed button side down on a soft surface, release the bottom cover, using a small flat-bladed tool.
2. Remove the battery by lifting it away from the retaining clips.
3. While avoiding touching the battery's flat surfaces, insert the new battery (type CR2032) with the '+' side facing up.

NOTE: Wipe the battery clean before fitting and avoid touching the battery's flat surfaces. Finger marks on the flat surfaces of the battery can reduce battery life.

NOTE: CR2032 batteries can be purchased from any retailer that sells batteries.

4. Holding the bottom cover at an angle, align the tabs on the cover with the corresponding slots on the key fob, then press the cover firmly onto the key fob until it snaps into place.
5. Test that the key fob works by unlocking and locking CybertruckModel SModel XModel 3Model Y.

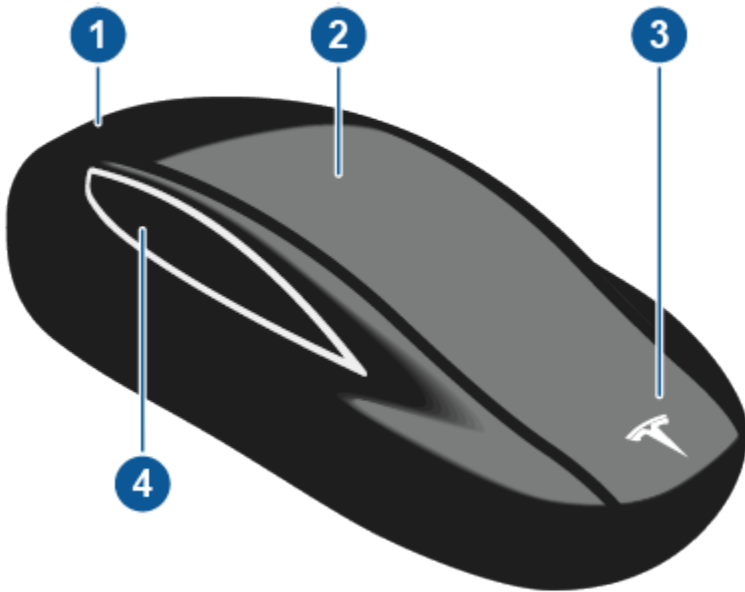


WARNING: Key fob batteries contain a chemical burn hazard and should not be ingested. The key fob contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns within two hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Key Fob

NOTE: Depending on market region, vehicle configuration, or date of manufacture, your vehicle may not come with a key fob. Go to <http://shop.tesla.com> for more information.

You can quickly familiarize yourself with the key fob by thinking of it as a miniature version of CybertruckModel SModel XModel 3Model Y, with the Tesla badge representing the front. The key has buttons that feel like softer areas on the surface.



1. Rear trunk - Double-click to open or close the rear trunk. Hold down for one to two seconds to open the charge port door.
2. Lock/Unlock All - Single-click to lock doors and trunks (all doors and trunks must be closed). Double-click to unlock doors and trunks.
3. Front trunk - Double-click to unlatch the front trunk.

1. Trunk

- Double-click to open or close the rear trunk.
- If equipped with a powered liftgate, double-click to unlatch the rear trunk. You can also single-click to stop the liftgate when it is moving.
- Hold the button down for one to two seconds to open the charge port door.

2. Lock/Unlock All

- Single-click to lock all doors and rear trunk. Hazard warning lights flash once.

NOTE: If a door or the rear trunk is open, hazard warning lights flash three times and doors do not lock. But you can enable a single-click to both close all doors (and rear trunk) and lock them, by turning on the **Close All with Key Fob** setting (touch **Controls** > **Locks** > **Close All with Key Fob**). By default, this setting is turned off and you must triple-click the button to close and lock all doors.



- Double-click to unlock. Hazard warning lights flash twice.

NOTE: If Automatic Doors is enabled (touch **Controls** > **Locks** > **Automatic Doors**), doors unlock and the driver's door opens as you approach Model X. A subsequent double-click opens the passenger front door.

3. Front trunk

- Double-click to unlatch the front trunk.

4. Falcon wing doors

- Double-click to open/close the associated falcon wing door.
- Single-click to stop movement of the associated falcon wing door. Subsequently double-clicking reverses movement of the falcon wing door. For example if the door was opening, it closes, and vice versa.

NOTE: Falcon wing doors are designed to proactively detect obstacles that prevent the doors from moving when an obstacle is detected.

⚠ WARNING: Model X falcon wing doors have several sensors to detect the presence of an object in the door's path. In most cases, when an object is detected, the door stops moving. However, the sensors are unable to detect all areas under all circumstances, particularly when closing. Therefore, you must monitor the movement of falcon wing doors to ensure the door's path of movement is free of obstacles, staying prepared at all times to proactively intervene to stop the door from contacting an object (including a person). Failure to do so can cause serious damage or bodily injury.

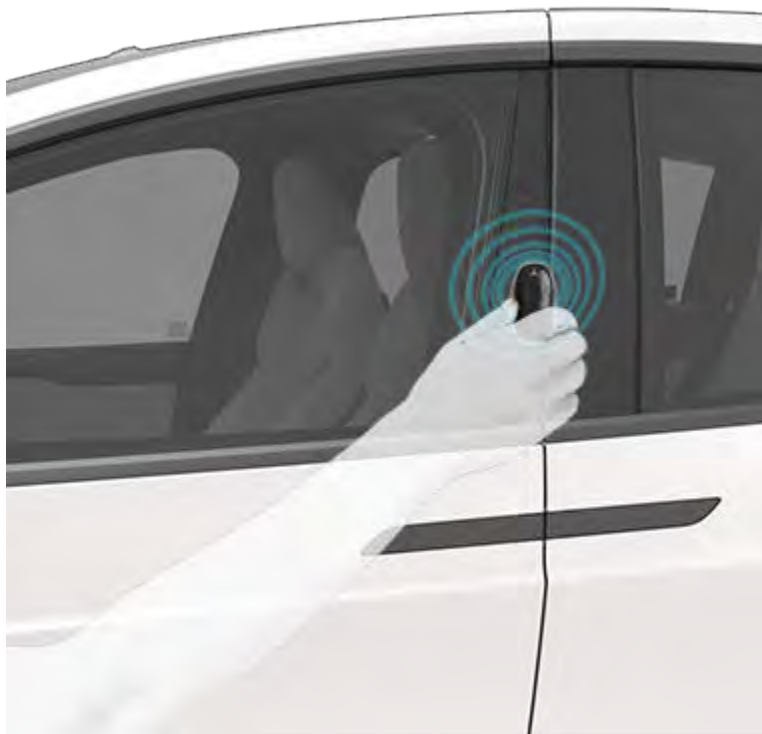
Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of pressing the unlock button on the key fob (see [Starting and Powering Off on page 369](#)). If you wait longer than two minutes, you must press the unlock button again, or place the key fob near the card reader located in the lower half of the left wireless phone charger, facing downward, on the center console. When your key fob is detected, the two minute authentication period restarts.

When approaching or leaving CybertruckModel SModel XModel 3Model Y carrying the key fob, you do not need to point the key fob at CybertruckModel SModel XModel 3Model Y as you press a button, but you must be within operating range.

Radio equipment on a similar frequency can affect the key. If this happens, move the key at least one foot (30 cm) away from other electronic devices (phones, laptops, etc.).

In the event that the key fob's battery is dead, you can still use it. To unlock the vehicle, scan the key fob on the card reader located on the driver's side door pillar (like the key card).





To drive the vehicle, scan the key fob on the phone charger.

1. Place it at the top of the left phone charger, **against the center divider**.
2. Point the front of the key fob down.
3. Swipe downwards.



1. Place it at the top of the left phone charger, **against the center divider**.
2. Point the front of the key fob to the left.
3. Swipe downwards.



Instructions for changing the battery are provided in [Replacing the Key Fob Battery on page 123](#).

NOTE: You can use the same key fob with multiple CybertruckModel SModel XModel 3Model Y vehicles provided you authenticate it (see [Managing Keys on page 126](#)). However, key fob works with only one CybertruckModel SModel XModel 3Model Y at a time. Therefore, to use a key fob for a different CybertruckModel SModel XModel 3Model Y, touch its flat side against the card reader on the driver's side door pillar.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to four different key fobs.



CAUTION: Protect the key from impact, high temperatures, and damage from liquids. Avoid contact with solvents, waxes, and abrasive cleaners.

Passive Locking and Unlocking

Locking and unlocking CybertruckModel SModel XModel 3Model Y with your key fob is conveniently hands-free. Although you must be carrying a paired key fob, there is no need to use it. CybertruckModel SModel XModel 3Model Y has sensors around the vehicle that can recognize the presence of a key fob within a range of approximately six feet (two meters). Therefore, you can keep your key fob in your pocket or purse and press the door handle to unlock and extend the handle. When carrying your key fob with you, you can also open the trunk without having to use the key by pressing the liftgate rear trunk's exterior switch. If **Walk-Away Door Lock** is enabled, CybertruckModel SModel XModel 3Model Y automatically locks when you exit and the key fob is no longer in range (see [Walk-Away Door Lock on page 141](#)). Passive locking and unlocking is automatically enabled when you pair your key fob to CybertruckModel SModel XModel 3Model Y.

Although you can use the same key fob with multiple vehicles, it can only be paired to one vehicle at a time. To activate a paired key fob to a different vehicle, touch the flat side onto the driver's side door pillar and click any button on the key fob to confirm.

NOTE: For increased security, passive locking and unlocking disables after being stationary for five minutes while within vehicle range when the vehicle is not in use (for example, you are standing outside your vehicle). In this situation, you must shake or press a button on the key fob to re-enable passive locking and unlocking.

Replacing the Key Fob Battery

Under normal use, the key fob has a battery that lasts for up to one year, depending on key fob version and selected vehicle settings. When the battery is low, a message displays on the touchscreen.

To replace the key fob battery:

1. With the key fob placed button side down on a soft surface, release the bottom cover, using a small flat-bladed tool.



NOTE: If a lanyard is attached to the key, you can release the bottom cover by placing your thumb against the "X" on the bottom cover, then firmly pulling the lanyard toward you (hence pushing the key off of its cover). You can also pry the cover off by placing a small flat-bladed tool, a fingernail, or the Tesla-provided tool against the lanyard cord.

2. Remove the battery by lifting it away from the retaining clips.

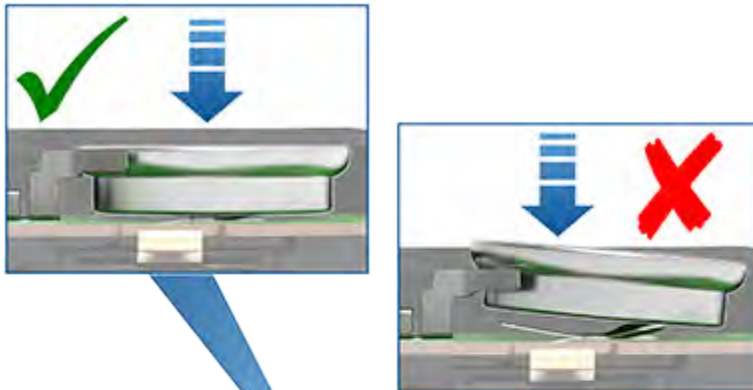




3. While avoiding touching the battery's flat surfaces, insert the new battery (type CR2330CR2354) with the '+' side facing up.

NOTE: Wipe the battery clean before fitting and avoid touching the battery's flat surfaces. Finger marks on the flat surfaces of the battery can reduce battery life.

CAUTION: The battery should press against the spring on the positive contact. Do not place the battery on top of the contact and force it down vertically. Doing so may damage the contact.



NOTE: CR2330CR2354 batteries can be purchased from any retailer that sells batteries.

4. Holding the bottom cover at an angle, align the tabs on the cover with the corresponding slots on the key fob, then press the cover firmly onto the key fob until it snaps into place.
5. Test that the key fob works by unlocking and locking CybertruckModel SModel XModel 3Model Y.



WARNING: Key fob batteries contain a chemical burn hazard and should not be ingested. The key fob contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns within two hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

Attaching a Lanyard

To attach a lanyard, release the bottom cover as described above. Place the lanyard over the pin located between the slots on the widest side of the key fob. Re-align the cover and snap into place.

Managing Keys

To display a list of all keys that can access your CybertruckModel SModel XModel 3Model Y, touch **Controls > Locks**. An icon displays next to each key to indicate whether the key is a phone key, key card, or key fob. Use this list to manage keys that have access to your CybertruckModel SModel XModel 3Model Y.

CybertruckModel SModel XModel 3Model Y supports up to 19 keys. When you reach this limit, you must delete a key before adding a new one.

NOTE: You can use the same key for more than one CybertruckModel SModel XModel 3Model Y. This prevents you from having to deal with multiple keys when you switch vehicles. If you customize the name of an authenticated key card or key fob on one CybertruckModel SModel XModel 3Model Y (by touching the pencil icon), any other CybertruckModel SModel XModel 3Model Y to which the key card or key fob is authenticated also displays the changed name.

NOTE: If you are leasing your vehicle, contact your leasing company to add or remove keys.

Adding Keys from the Touchscreen

If you have a key card or key fob that is already paired with your vehicle, you can pair a new key using the touchscreen.

1. On the touchscreen, touch **Controls > Locks > Keys > Add Key**.
2. Scan your new key card or key fob on the card reader located behind the cup holders on the top of the center console. After the new key card or key fob is recognized, remove it from the card reader.



NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

3. Scan your new key card or key fob on the card reader located behind the cup holders on the top of the center console. After the new key card or key fob is recognized, remove it from the card reader.



NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

4. Scan your new key card or key fob on the card reader located on either wireless phone charger. When you hear a chime, the new key card is recognized.

NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

5. Scan your new key card or key fob on the card reader located on the wireless phone charger. To scan the key fob:
 - Place it at the top of the left phone charger, **against the center divider**.
 - Point the front of the key fob down.
 - Swipe downwards (as shown in the image).

When you hear a chime and the new key is recognized, remove it from the card reader.



6. Scan your new key card or key fob on the card reader located on the wireless phone charger. To scan the key fob:
 - Place it at the top of the left phone charger, **against the center divider**.
 - Point the front of the key fob to the left.
 - Swipe downwards (as shown in the image).

When you hear a chime and the new key is recognized, remove it from the card reader.



7. Scan a key card or key fob that has already been paired to the vehicle to confirm new key pairing.
8. When complete, the key list includes the new key. Touch the associated pencil icon to customize the name of the key.

Adding Keys from the Mobile App

In the event that you don't have a working key card or key fob, you can add a new key using the Tesla mobile app.

NOTE: Only the owner of the vehicle is able to pair a new key using the mobile app.

NOTE: Pairing a key with the mobile app is supported with version 4.29.0 of the Tesla mobile app on vehicles with software versions 2022.40 or higher.

1. While inside or near the vehicle, open the Tesla mobile app on your smartphone.
2. In the mobile app, touch **Security & Drivers**, then touch **Add Key Card**.
3. Scan your new key card or key fob on the card reader located behind the cup holders on the top of the center console.



NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

4. Scan your new key card or key fob on the card reader located behind the cup holders on the top of the center console.



NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

5. Scan your new key card or key fob on the card reader located on either wireless phone charger.

NOTE: When adding a key fob, ensure it is at room temperature. Pairing a key fob that is very cold can be unsuccessful.

6. Scan your new key card or key fob on the card reader located on the wireless phone charger. To scan the key fob:
 - Place it at the top of the left phone charger, **against the center divider**.
 - Point the front of the key fob down.
 - Swipe downwards (as shown in the image).



7. Scan your new key card or key fob on the card reader located on the wireless phone charger. To scan the key fob:
 - Place it at the top of the left phone charger, **against the center divider**.
 - Point the front of the key fob to the left.
 - Swipe downwards (as shown in the image).



8. When the key is paired successfully, the mobile app shows a confirmation message. Touch **Done** in the mobile app and remove the key card or key fob from the card reader.
9. When complete, the key list on the touchscreen includes the new key. Touch the associated pencil icon to customize the name of the key.

Removing Keys

When you no longer want a key to access CybertruckModel SModel XModel 3Model Y (for example, you lost your phone or key card, etc.), follow these steps to remove it.

1. On the touchscreen, touch **Controls > Locks**.
2. In the key list, find the key that you would like to delete and touch its associated trash icon.
3. When prompted, scan an authenticated key on the card reader to confirm the deletion. When complete, the key list no longer includes the deleted key.

NOTE: CybertruckModel SModel XModel 3Model Y requires at least one authenticated key card or key fob at all times. If only one key card remains on the key list, you cannot delete it.

Replacing Key cards

If you lose a key card, you can purchase replacement ones on the Tesla Shop. When ready to pair, simply follow the steps in [Managing Keys on page 126](#). Remember to remove your old key cards from **Controls > Locks > Keys** for security purposes.



Doors

Using Exterior Door Handles

Use your thumb to push the wide part of the door handle. The handle pivots toward you, and you can open the door by pulling the handle or pulling the edge of the door.



The handle retracts automatically.



When a door or trunk is open, the touchscreen displays the Door Open indicator light.

NOTE: See [Cold Weather Best Practices on page 693](#) to ensure door handles function properly in cold weather.



WARNING: While using the door handle, take care to avoid allowing fingers, jewelry, acrylic nails, etc. from being pinched by the door or door handle mechanism. Failure to do so may result in damage or injury.

Using Exterior Door Handles

A light press on a door handle extends it provided CybertruckModel SModel XModel 3Model Y is unlocked and detects a phone key or key fob nearby. You can set door handles to extend automatically when you approach the driver's side carrying a phone key or key fob by touching **Controls > Locks > Auto-Present Handles**. Select **Exclude Home** to disable door handle presentation at home (set your home address by touching **Navigate > Set Home**).



Insert your hand into the handle and pull to open the door.

Door handles retract if you do not use them within ten seconds after they extend. Just press a handle to extend it again. Door handles also retract ten seconds after the last door closes, when CybertruckModel SModel XModel 3Model Y begins moving, and when you lock CybertruckModel SModel XModel 3Model Y.

NOTE: To preserve battery life, CybertruckModel SModel XModel 3Model Y is designed to temporarily disable the **Auto-Present Handles** feature if the vehicle is unable to detect a phone key nearby.

In these cases, extend a door handle by pressing it, or by pressing the unlock button on the key fob. There is no need to reset the setting. The next time you approach CybertruckModel SModel XModel 3Model Y, provided the above conditions do not apply, handles automatically extend.

Opening and Closing Front Doors from Outside

Model X doors are electrically powered. When you approach Model X carrying a key, the doors automatically unlock. The front doors open when you press the door handle.

You can also set the driver's door to open automatically upon your approach and close automatically upon your departure (if equipped). The door partially opens between 20° and 45° (halfway open) depending on obstacles detected.

Touch **Controls > Vehicle > Locks > Automatic Doors**. If this setting is on, you can also open the driver's door by double-clicking the key fob's lock/unlock button. A subsequent double-click opens the front passenger door. Selecting **Exclude Automatic Doors Opening at Home** still allows for automatic closing doors at home but disables automatic door opening (set your home address by touching **Navigate > Set Home**).

NOTE: Depending on date of manufacture and options chosen at time of purchase, your Model X may not be equipped with automatic doors.

You can also specify that you want to unlock only the driver's door by touching **Controls > Vehicle > Locks > Driver Door Unlock Mode**. See [Driver Door Unlock Mode on page 142](#)[Driver Door Unlock Mode on page 155](#).

NOTE: See [Cold Weather Best Practices on page 693](#) for information on opening the doors in cold weather.

⚠ CAUTION: The front doors may not fully open or close automatically when parked on a very steep hill. Never rely on Model X to fully open or close the doors for you when parked on a steep hill.

NOTE: Depending on date of manufacture and options chosen at time of purchase, your Model X may not be equipped with automatic doors.



Whenever a door is open, the Door Open indicator displays on the instrument panel. Also, the image of the CybertruckModel SModel XModel 3Model Y on the touchscreen's **Controls** window also provides a visual representation of an open door or trunk.



To close doors from the outside, you can:

- Manually push them shut.
- Single-click or triple-click the key fob's lock/unlock button (if the **Close All with Key Fob** setting is on, only a single click is needed to close all doors and trunks—a triple-click is needed if the setting is off).
- Use the Mobile App (see [Mobile App on page 355](#)).

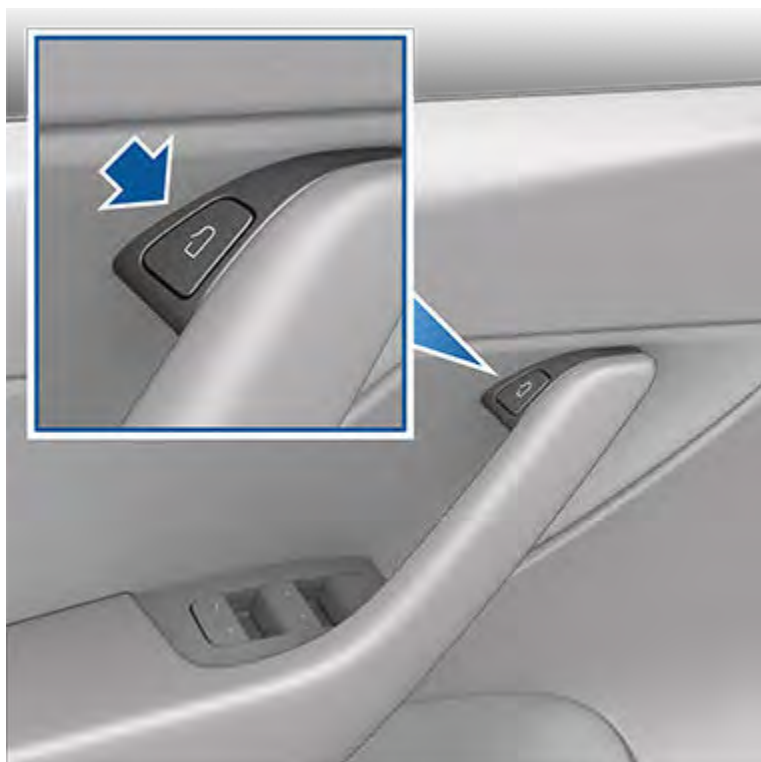
NOTE: Powered doors stop moving if an obstacle is detected.

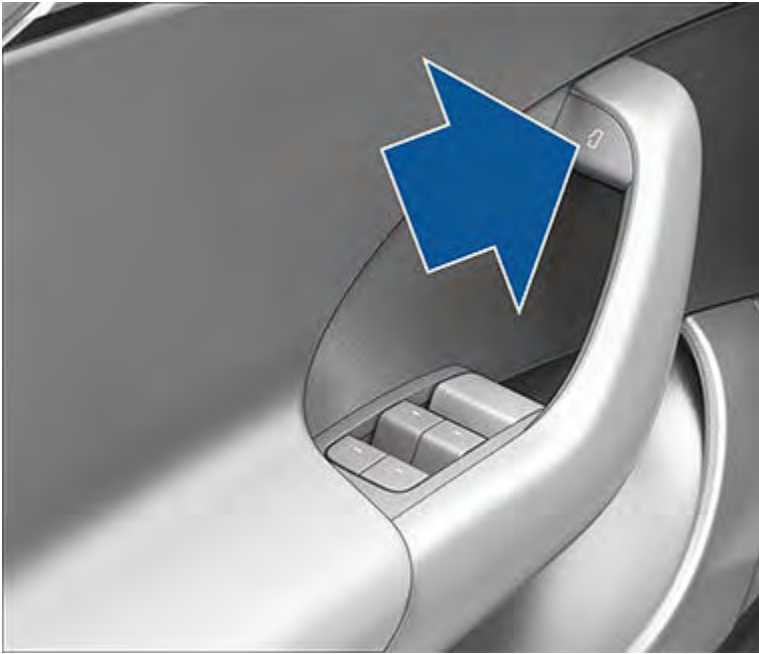
WARNING: Before allowing an automated feature to open or close a front door (rather than doing so manually), it is important to check that the area around the door is free of obstacles (such as people and objects). You must proactively monitor the door's movement to ensure that it does not contact a person or object. Failure to do so can result in damage or serious injury.

Opening Doors from the Interior

CybertruckModel SModel XModel 3Model Y doors are electrically powered. To open a door while sitting inside, press the button located at the top of the interior door handle and pushwhile pushing the door open.







NOTE: To prevent children from opening the rear doors, turn on child locks (see [Child Locks on page 142](#)).

You can also use the touchscreen popup to open and close doors when inside CybertruckModel SModel XModel 3Model Y while the vehicle is in Park.

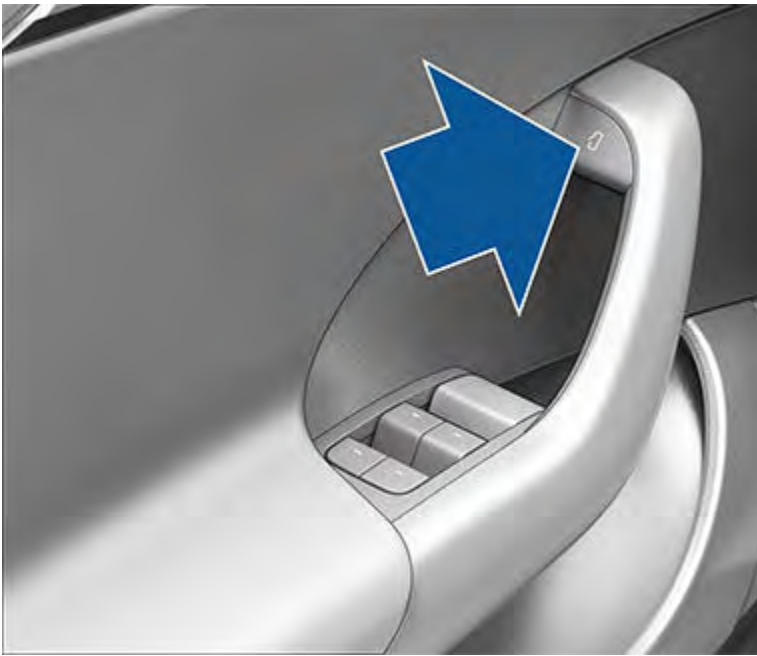
NOTE: In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the doors with the button on the top of the door handle. See [Opening Doors with No Power on page 947](#)[Opening Doors with No Power on page 948](#)[Opening Doors with No Power on page 949](#) for more information.

Opening and Closing Front Doors from Interior

To open a front door, pull the interior door handle toward you.

To open a front door while sitting inside, press the button located at the top of the interior door handle and push the door open.





You can also use the touchscreen popup to open and close doors when inside Cybertruck Model S Model X Model 3 Model Y while the vehicle is in Park or by touching **Controls > Locks**.

You can also use the touchscreen to open and close doors when inside Model X. Touch **Controls**, then choose the door you want to open or close.

The driver's door automatically closes when you sit in the driver's seat and press the brake pedal. You can also close doors by simply pulling the handle toward you.

⚠ WARNING: Before pressing the brake pedal and causing the driver's door to automatically close, ensure that there are no body parts (hands, legs, etc.) obstructing the path of the closing door.

Opening and Closing Falcon Wing Doors

Model X has falcon wing doors that easily open and close by pressing a button, using a key fob, using the mobile app, or touching the associated icon on the touchscreen. The falcon wing doors are equipped with several sensors that detect the presence of people and objects and, if an object is detected, the door stops moving. Based on detected objects, the doors may adjust their outward and upward movement in an attempt to avoid contacting the object. For example, if an object is detected above Model X, the door's movement may extend further outward but lower, whereas if an object (or person) is detected beside the door, the door may extend outward much less.

⚠ WARNING: It is important to keep your hands clear of the falcon wing door frames at all times. Proactively check the door frame area prior to closing, and monitor the movement of the door during closing to ensure that it does not come into contact with a person or object. Failure to do so can result in damage or serious injury.

⚠ WARNING: Before opening or closing a falcon wing door, it is important to check that the area around the door is free of obstacles (people and objects). Although the doors have many sensors, it can not detect all objects at all times, particularly when moving. At any given moment, there may be areas near the door that are not in the detection zone. Therefore, when opening or closing a falcon wing door, you and your passengers must stand away from the door as it is moving, while proactively monitoring the door's movement and being prepared to take corrective action at any time. To stop a door from moving, single-click the falcon wing door button on the key fob, press the switch on the door or door pillar, or touch the button on the touchscreen.

To open a falcon wing door from outside Model X, press the door handle or double-press the falcon wing door button on the key fob (see [Keys on page 109](#) [Using the Key Fob on page 143](#)).

To open a falcon wing door from inside Model X, press the switch located on the driver's side door pillar, or, on the touchscreen, touch the associated door icon (**Controls**) (**Controls > Locks**):

NOTE: Falcon wing doors open only when Model X is stationary.



NOTE: If Model X is locked, using the switch (illustrated above) the first time unlocks the associated door. Using it a second time opens it.

⚠ CAUTION: Remove accumulation of snow or ice before opening a falcon wing door. Snow can get inside Model X and ice can prevent the door from opening. In situations where water or snow has accumulated on the glass on top of the falcon wing door, Tesla recommends using the touchscreen or switch on the door pillar (instead of the external door handle or key fob) to slowly open the falcon wing door for the first few inches (cm). Opening the falcon wing door slowly for the first few inches (cm) mitigates the scenario of water, snow, etc. from entering the vehicle.

To close a falcon wing door, press the button located on the inside of the door. You can also use the key fob (see [Using the Key Fob on page 143](#) [Key Fob on page 119](#)), use the switch on the door pillar (illustrated above), or touch the associated door icon on the touchscreen (**Controls**) (**Controls** > **Close**).



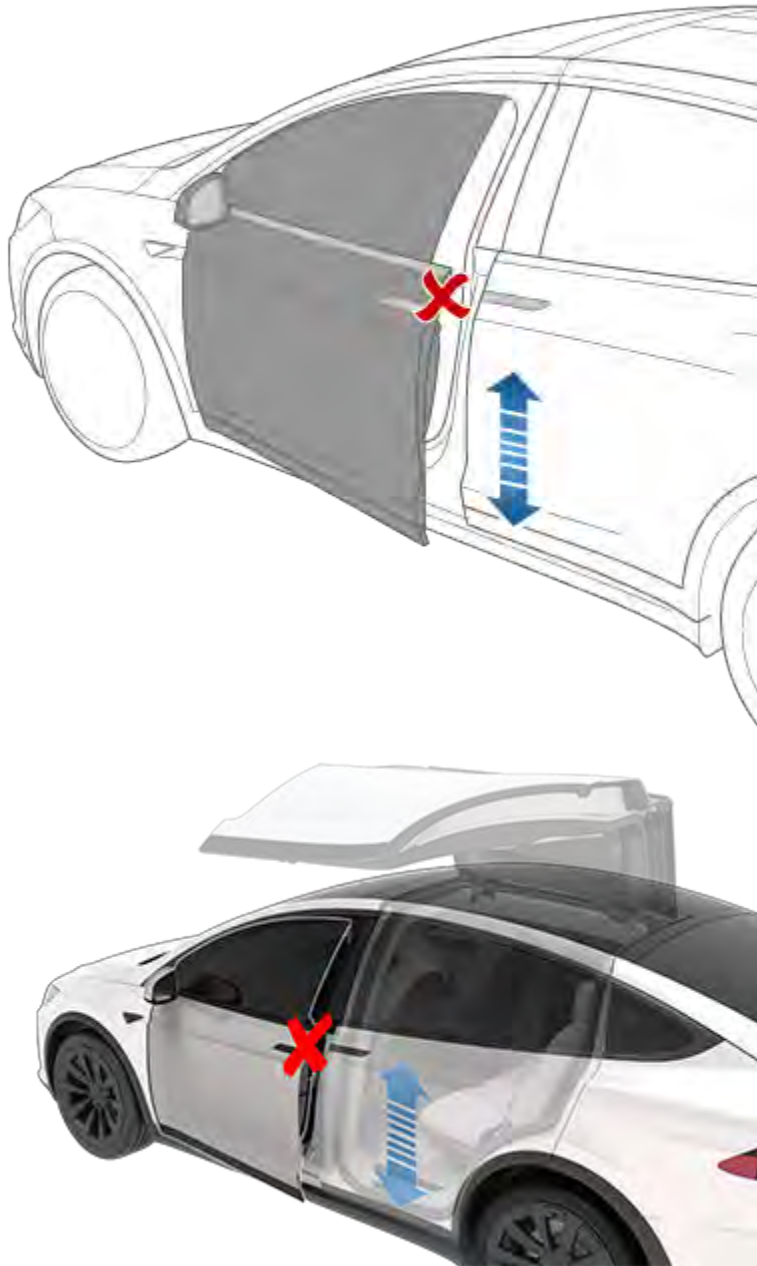
If a falcon wing door or the front trunk is left open when you attempt to shift out of Park, the touchscreen displays a notification requiring you to confirm your intent to drive. The falcon wing door automatically closes when your driving speed reaches 10 mph (16 km/h). In addition, your vehicle speed is limited if you choose to keep the front trunk open while driving. It is your responsibility to ensure doors and trunks are properly closed before driving.

NOTE: To prevent children from opening falcon wing doors using the interior switch, turn on child-protection locks using the touchscreen (**Controls > Vehicle > Child-Protection Lock**)(**Controls > Locks > Child Locks**). See [Child Locks on page 142](#)[Child-Protection Lock on page 155](#).

NOTE: You can configure Model X to open the falcon wing doors to a lower height setting by using the touchscreen (**Controls > Vehicle > Locks > Falcon Door Height**).

NOTE: If a falcon wing door detects an obstacle while closing, it reverses a few inches before it stops moving.

⚠ WARNING: Whenever a front door is partially open (approximately 20°) as you are opening or closing the associated falcon wing door, you **MUST** keep your hands (or any object) away from the opening edge of the front door. When a falcon wing door passes by a partially opened front door, the distance between the two doors is very narrow. Objects, such as hands or fingers, placed in this area, are not detected by sensors and can therefore become pinched between the doors. To avoid bodily injury, it is a good practice to keep your hands away from the front door whenever you are opening or closing a falcon wing door.



CAUTION: In rainy weather, leaving a falcon wing open while opening the liftgate can result in rain water falling from the liftgate into the rear seating area.

WARNING: When opening or closing a falcon wing door, it is important to proactively monitor the movement of the door to ensure that it does not come into contact with a person or object. Failure to do so can cause serious damage or injury.

NOTE: In the unlikely event that Cybertruck Model S Model X Model 3 Model Y has no low voltage power, you will be unable to open the falcon wing doors with the touchscreen or by pressing the switch located on the driver's side door pillar. See [Opening Doors with No Power on page 947](#) [Opening Doors with No Power on page 948](#) [Opening Doors with No Power on page 949](#) for more information.

Obstacle Detection

A falcon wing door stops moving when one of its many sensors detects an obstacle, or when the door senses resistance because it has made contact with an object. The touchscreen displays a warning. In these cases, provided it is appropriate to continue opening or closing the falcon wing door, you can override obstacle detection by pressing and holding the switch located on the door pillar, or touching and holding the associated door icon on the touchscreen.



When Model X detects a low ceiling (for example, in a garage), it opens the falcon wing doors (and trunk) to a lower height, even if no obstacle is detected. You can override this height and open the doors higher by touching the associated door icon on the touchscreen (**Controls**). The touchscreen displays a message asking you if you always want to open the doors to the higher height at this location, and saves your choice. The next time you open the falcon wing doors at this location, Model X opens them to the height you saved.

⚠ WARNING: Before overriding a falcon wing door's default opening height, visually inspect the area to ensure adequate clearance between the door and the detected object.

⚠ WARNING: Applying adhesive products such as wraps, stickers, rubber coating, etc. on the outside of the falcon wing doors can affect the sensors' ability to detect obstacles properly.

Calibration

If the falcon wing doors lose calibration, a message displays on the touchscreen. To calibrate the doors, first ensure that both doors have plenty of space to open and close and are clear of passengers, objects, etc. Then press and hold the **Calibrate** button until calibration is complete. During calibration, the lower door opens all the way out (requiring extra space on the side of Model X), the upper door moves all the way down, and then the lower door closes.

Calibration

If the falcon wing doors lose calibration, the main Controls window on the touchscreen displays a **Calibration Required** message. To calibrate the doors, first ensure that both doors have plenty of space to open and close and are clear of passengers, objects, etc. Touch **Controls > Service > Calibrate Doors**, and follow the instructions on the touchscreen. During calibration, the lower door opens all the way out (requiring extra space on the side of Model X), the upper door moves all the way down, and then the lower door closes.

Front Door Reset

Since your CybertruckModel SModel XModel 3Model Y does not have traditional door handles that you can pull from the outside, it is equipped with pop actuators (sometimes referred to as "ice breakers") that are used to assist in opening the front doors in cases where resistance is detected, such as ice buildup in cold weather. The pop actuator is located just above the front door latch and extends as necessary to open the front door. Once the front door opens slightly, the pop actuator gently retracts back into the door.



If the pop actuator is unable to retract because it is stuck to or caught on something, the pop actuator can be extended manually to extract the object by performing the following:

1. Carefully close the door latch using a pen, screwdriver, or comparable tool (never use a finger or body part and avoid damaging the paint); CybertruckModel SModel XModel 3Model Y will detect this as though the door is closed.



2. Make sure Cybertruck Model S Model X Model 3 Model Y is unlocked, then press the exterior door handle or pull the interior door handle to reset the latch and extend the pop actuator.
3. As the pop actuator extends out from the door, quickly extract the object.

⚠ WARNING: The pop actuator will attempt to retract back into the door almost immediately after the door handle is pressed or pulled. The pop actuator retracts gently, but will not release automatically if something gets caught.

⚠ WARNING: As with all mechanical and moving parts on the vehicle, never put body parts in, or near, moving components. Make sure children are monitored when opening and closing doors. Interacting with moving components, including the pop actuator, can cause serious damage or bodily injury.

Interior Locking and Unlocking

While sitting inside Cybertruck Model S Model X Model 3 Model Y, you can lock and unlock all doors and trunks by touching the lock icon on the touchscreen in **Controls**.



The icon changes to indicate whether doors are locked or unlocked.

You can also unlock the doors by pressing the Park button on the end of the drive stalk a second time. Pressing this button once engages Park and pressing it again unlocks the doors.

You can also unlock the doors by pressing the Park button on the end of the drive stalk a second time. Pressing this button once engages Park and pressing it again unlocks the doors.

Walk-Away Door Lock

Doors and trunks can automatically lock when you walk away carrying your phone key or paired key fob (if ordered after approximately October 1, 2019). To turn this feature on or off, touch **Controls > Locks > Walk-Away Door Lock**.

When the doors lock, the exterior lights flash once and the mirrors fold (if **Fold Mirrors** is on). To also hear a confirmation sound when Cybertruck Model S Model X Model 3 Model Y locks, touch **Controls > Locks > Lock Confirmation Sound**.

NOTE: Touch **Toybox > Boombox > Lock Sound** to customize the lock sound when the vehicle is locked from the outside (Pedestrian Warning System required).

Cybertruck Model S Model X Model 3 Model Y does not automatically lock if:

- You check the **Exclude Home** checkbox and Cybertruck Model S Model X Model 3 Model Y is parked at the location you have designated as Home. For details on how to designate a location as Home, see [Home, Work, and Favorite Destinations on page 703](#).
- A phone key or paired key fob is detected inside Cybertruck Model S Model X Model 3 Model Y.
- A door or trunk is not fully closed.



- The phone key's Bluetooth setting is turned off.
- If CybertruckModel SModel XModel 3Model Y detects an authenticated key for several minutes after you exit the vehicle and close all doors, Walk-Away Lock disables and doors do not lock when you walk away. In this case, you must manually lock your vehicle until after your next drive.
- The driver does not use the driver door to get out of the vehicle.

The tonneau cover locks into place (whether opened or closed) when **Walk-Away Door Lock** is enabled. Take care to ensure the tonneau cover is closed, or intentionally left open, before walking away from your vehicle.

NOTE: It is ultimately your responsibility to ensure your vehicle is locked, even when Walk-Away Door Lock is enabled.

Drive Away Locking

CybertruckModel SModel XModel 3Model Y automatically locks all doors (including the trunks) when your driving speed exceeds 5 mph (8 km/h).

Driver Door Unlock Mode

Enabling **Controls > Locks > Driver Door Unlock Mode** only unlocks the driver door when you first unlock CybertruckModel SModel XModel 3Model Y. The driver door unlocks only if a key is present on the driver side of the vehicle and not the passenger side. To unlock the remaining doors, long press the button located at the top of the interior driver door handle, use the touchscreen, mobile app, or press the key fob a second time.

Car Left Open Notifications

To receive a mobile notification if a door, trunk and/or window is left open or if CybertruckModel SModel XModel 3Model Y is left unlocked unexpectedly, touch **Controls > Locks > Car Left Open Notifications**.

Child Locks

CybertruckModel SModel XModel 3Model Y has child locks on the rear doors to prevent them from being opened using the interior release buttons. On the touchscreen, touch **Controls > Locks > Child Lock > Child Lock**. You can choose **Both** to engage the child lock on both rear doors, or you can choose **Left** or **Right** to engage it on just a specific door.



WARNING: It is recommended that you turn on child locks when children are seated in the rear seats.

Unlock on Park

When you stop CybertruckModel SModel XModel 3Model Y and engage Park, you can choose to unlock all doors. To turn this feature on or off, touch **Controls > Locks > Unlock on Park**.

NOTE: If set to **OFF**, you can unlock all doors by pressing the Park button a second time after engaging Park.

NOTE: If set to **OFF**, you can unlock all doors by pressing the Park button a second time after engaging Park.



Keys and Doors

Keyless Locking and Unlocking



CAUTION: Do not leave your paired phone in your vehicle (for example, if you are hiking or at the beach). If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off.

Locking and unlocking CybertruckModel SModel XModel 3Model Y is convenient. Although you must be carrying a valid key fob, there is no need to use it. CybertruckModel SModel XModel 3Model Y has sensors around the driver's door that can recognize the presence of a key fob within a range of approximately three feet (one meter). So, you can keep your key fob in your pocket or purse and CybertruckModel SModel XModel 3Model Y detects it as you approach.

When you walk up to CybertruckModel SModel XModel 3Model Y carrying your key fob, the doors automatically unlock if Passive Entry is on (**Controls > Safety > Passive Entry**). If a door handle is retracted, press it and it extends. If the **Auto-Present Handles** setting is turned on (see [Using Exterior Door Handles on page 147](#)), you do not need to touch the door handle. Instead, door handles extend automatically as you approach CybertruckModel SModel XModel 3Model Y. Select **Exclude Home** to disable door handle presentation at home (set your home address by touching **Navigate > Set Home**). To open the rear trunk, press the switch located under the powered liftgate's exterior handle.

NOTE: CybertruckModel SModel XModel 3Model Y must detect your key fob near the driver's door before the doors or powered liftgate unlock.

NOTE: If Passive Entry is off, you must use the key fob to unlock CybertruckModel SModel XModel 3Model Y. See [Using the Key Fob on page 143](#).

If equipped with the premium upgrade package, and the **Automatic Doors** setting is turned on, when you walk up to Model X carrying your key fob, doors automatically unlock and the driver's door partially opens. If not equipped, or if this setting is turned off, doors automatically unlock and a door opens when you press its handle. Selecting **Exclude Automatic Doors Opening at Home** still allows for automatic closing doors at home but disables automatic door opening (set your home address by touching **Navigate > Set Home**).

NOTE: You can choose whether you want all doors, or just the driver's door, to unlock when you approach CybertruckModel SModel XModel 3Model Y carrying your key fob (see [Driver Door Unlock Mode on page 155](#)).

When carrying your key fob with you, you can also open the rear trunk without having to use the key fob. Simply press the switch located under the powered liftgate's exterior handle. Driver Door Unlock Mode (see [Driver Door Unlock Mode on page 155](#)) must be off and the vehicle must detect the key fob near the driver's door before opening the rear trunk.

CybertruckModel SModel XModel 3Model Y also locks automatically. If you enable **Walk Away Door Lock**, CybertruckModel SModel XModel 3Model Y locks when you walk away carrying your key fob with you (see [Walk-Away Door Lock on page 155](#)).

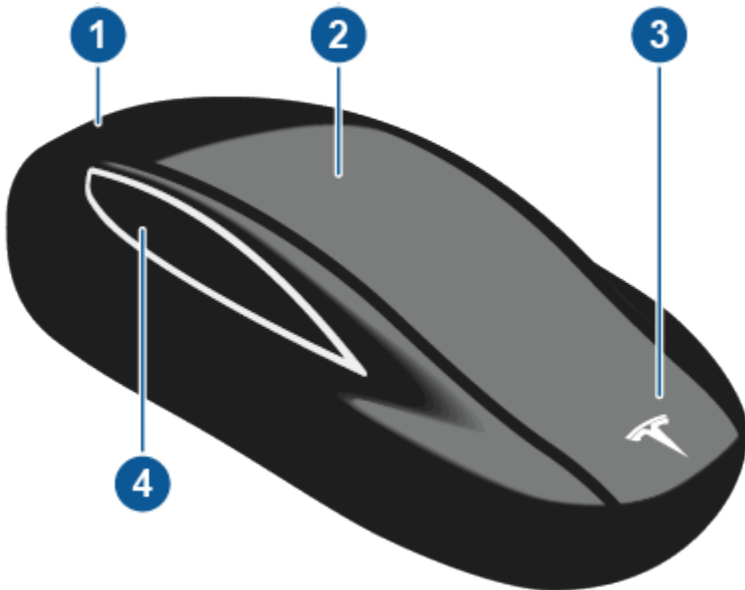
In addition, you can set CybertruckModel SModel XModel 3Model Y to sound a soft horn whenever you car locks or unlocks (if equipped). To set up, touch **Controls > Vehicle > Lock Confirmation Sound**.

While sitting inside CybertruckModel SModel XModel 3Model Y, you can also lock and unlock the vehicle by touching the icon on the touchscreen's status bar.

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with the automatic locking and unlocking feature.

Using the Key Fob

To quickly familiarize yourself with the key fob, think of the key fob as a miniature version of CybertruckModel SModel XModel 3Model Y, with the Tesla badge representing the front. The key fob has three buttons that feel like softer areas on the surface. The key fob has three buttons on the top that feel like softer areas on the surface, and a metal button on each side representing the falcon wing doors.



1. Trunk

- Double-click to open the rear trunk.
- If equipped with a powered liftgate, double-click to close the rear trunk. You can also single-click to stop the liftgate when it is moving.
- Hold the button down for one to two seconds to open the charge port door.

2. Lock/Unlock All

- Single-click to lock doors and trunks (all doors and trunks must be closed). Hazard warning lights flash once and door handles retract. If a door or the powered liftgate is open, hazard warning lights flash three times and doors do not lock.
- Double-click to unlock. Hazard warning lights flash twice and door handles extend. If a door or the rear trunk is open, hazard warning lights flash three times and doors do not lock.

3. Lock/Unlock All

- Single-click to lock all doors and rear trunk. Hazard warning lights flash once.



NOTE: If a door or the rear trunk is open, hazard warning lights flash three times and doors do not lock. But you can enable a single-click to both close all doors (and rear trunk) and lock them, by turning on the **Close All with Key Fob** setting (touch **Controls > Vehicle > Close All with Key Fob**). By default, this setting is turned off and you must triple-click the button to close and lock all doors.

- Double-click to unlock. Hazard warning lights flash twice.

NOTE: If Model X is equipped with the premium upgrades package and Automatic Doors is enabled (touch **Controls > Vehicle > Automatic Doors**), doors unlock and the driver's door opens as you approach Model X. A subsequent double-click opens the passenger front door.

4. Front trunk

- Double-click to open the front trunk.

5. Falcon wing doors

- Double-click to open/close the associated falcon wing door.
- Single-click to stop movement of the associated falcon wing door. Subsequently double-clicking reverses movement of the falcon wing door. For example if the door was opening, it closes, and vice versa.

NOTE: Falcon wing doors are designed to proactively detect obstacles that prevent the doors from moving when an obstacle is detected.



WARNING: Model X falcon wing doors have several sensors to detect the presence of an object in the door's path. In most cases, when an object is detected, the door stops moving. However, the sensors are unable to detect all areas under all circumstances, particularly when closing. Therefore, you must monitor the movement of falcon wing doors to ensure the door's path of movement is free of obstacles, staying prepared at all times to proactively intervene to stop the door from contacting an object (including a person). Failure to do so can cause serious damage or bodily injury.

You do not need to point the key fob at CybertruckModel SModel XModel 3Model Y, but you must be within operating range (which varies depending on the strength of the key fob's battery).

If CybertruckModel SModel XModel 3Model Y is unable to detect the key fob, the touchscreen displays a message indicating that a key fob is not inside. Place the key fob where CybertruckModel SModel XModel 3Model Y can best detect it, which is below the low voltage power socket (see [Key Fob Not Inside on page 369](#)).

Radio equipment on a similar frequency can affect the key fob. If this happens, move the key fob at least one foot (30 cm) away from other electronic devices (phone, laptop, etc). If the key fob does not work, you may need to change its battery. If the key fob's battery is discharged, you can open CybertruckModel SModel XModel 3Model Y by following the unlocking procedure (see [Unlocking When the Key Fob Doesn't Work on page 156](#)).

For increased security, your key fob may require periodical updates. To update your key fob, go to **Controls > Service > Update Key Fob** and follow the onscreen instructions. Your vehicle must be in Park to update the key fob.



CAUTION: Remember to bring the key fob with you when you drive. Although you can drive CybertruckModel SModel XModel 3Model Y away from its key fob, you will be unable to power it back on after it powers off.



CAUTION: Protect the key fob from impact, high temperatures, and damage from liquids. Avoid contact with solvents, waxes and abrasive cleaners.

Replacing the Key Fob Battery

The key fob's battery lasts for approximately a year with normal use. When the battery is low, a message displays on the instrument panel. Follow these steps to replace it:

NOTE: Tesla recommends replacing the battery in all key fobs at the same time.



1. With the key fob placed button-side down on a soft surface, use a small flat-bladed tool or fingernail to release the bottom cover.

NOTE: If a lanyard is attached to the key fob, you can release the bottom cover by placing your thumb against the "X" on the bottom cover, then firmly pulling the lanyard toward you (hence pushing the key fob off of its cover). You can also pry the cover off by placing a small flat-bladed tool, a fingernail, or the Tesla-provided tool against the lanyard cord.

2. Remove the battery by carefully lifting it away from the front retaining clips. Remove the battery by carefully releasing it from the retaining clips at an angle.
3. Insert the new battery (type CR2032CR2354) with the '+' side facing up. The battery fits snugly so you must slide it into position at an angle toward the Positive contact (the contact located near the center of the key fob), then press down firmly on the other side, ensuring it is held firmly in its intended position.

NOTE: Tesla recommends using Panasonic CR2032CR2354 batteries. These can be purchased through online retailers, local supermarkets, and drug stores.



CAUTION: The battery should press against the spring on the positive contact. Do not place the battery on top of the contact and force it down vertically. Doing so may damage the contact.

NOTE: Wipe the battery clean before fitting and avoid touching the battery's flat surfaces. Finger marks on the flat surfaces of the battery can reduce battery life.

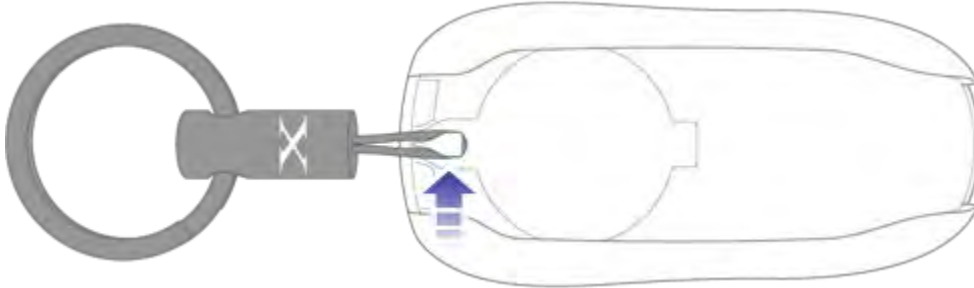
4. Holding the cover at an angle, align the tabs on the widest side of the cover with the corresponding slots on the key fob, then press the cover firmly onto the key fob until it snaps into place.



5. Test that the key fob works by unlocking and locking your vehicle.

Attaching a Lanyard

The Model X key fob supports the use of a small lanyard. To attach a lanyard, release the bottom cover as described above. Place the lanyard over the pin on the back side of the key fob. Re-align the cover and snap into place.



Getting More Key Fobs

If you lose a key fob or require an additional one, contact Tesla. CybertruckModel SModel XModel 3Model Y can recognize up to threeeight key fobs.

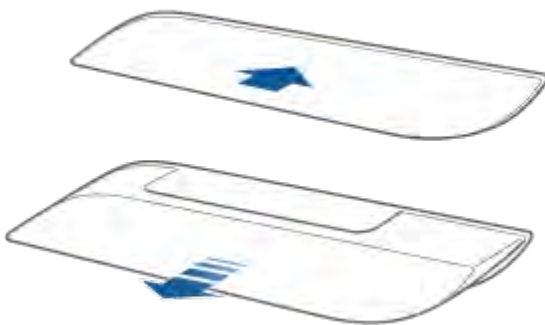
When ordering a new key fob for CybertruckModel SModel XModel 3Model Y, take all available key fobs with you for reprogramming.

Using Exterior Door Handles

A light press on a door handle extends it, provided Model S detects a valid key fob nearby and Passive Entry is on (**Controls > Safety > Passive Entry**).

You can set the door handles to extend automatically whenever you approach the driver's side carrying the key fob. On the touchscreen, touch **Controls > Vehicle > Auto-Present Handles**.

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with **Auto-Present Handles**.



Insert your hand into the handle and pull to open the door.

Door handles retract if you do not use them within one minute after they extend. Just press a handle to extend it again. Door handles also retract a minute after the last door closes, when CybertruckModel SModel XModel 3Model Y begins moving, and when you lock CybertruckModel SModel XModel 3Model Y.

NOTE: To preserve battery life, CybertruckModel SModel XModel 3Model Y is designed to temporarily disable the **Auto-Present Handles** feature when:



- The key fob has been out of range for more than 48 hours.
- The key fob remains within range for five minutes after all doors have been closed.

In these cases, extend door handles by touching one of them, or by pressing the unlock button on the key fob. There is no need to reset the setting. The next time you approach CybertruckModel SModel XModel 3Model Y, provided the above conditions do not apply, handles automatically extend.



Whenever a door is open, the Door Open indicator displays on the instrument panel. Also, the image of the CybertruckModel SModel XModel 3Model Y on the touchscreen's **Controls** window also provides a visual representation of an open door or trunk.

Opening Doors from the Interior

To open a door, pull the interior door handle toward you.

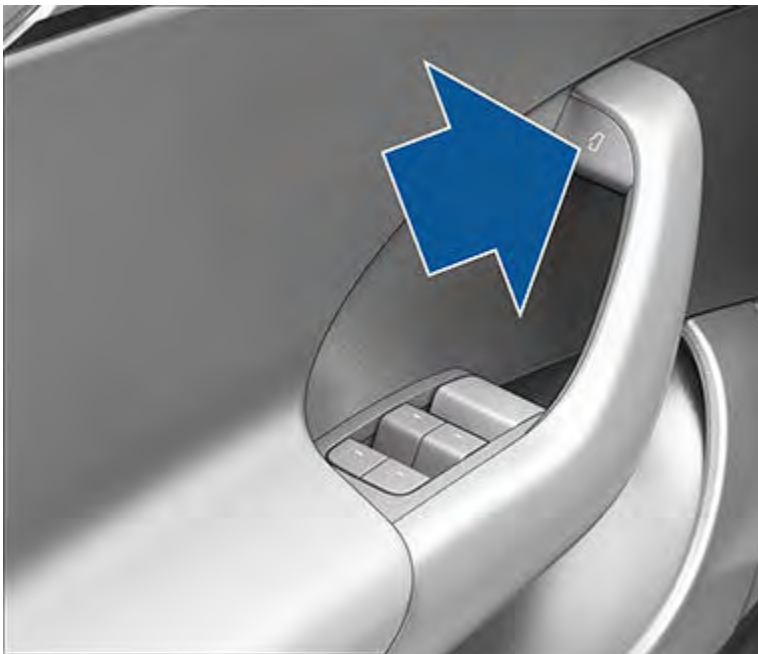


NOTE: To prevent children from opening rear doors using the interior handles, use the touchscreen, **Controls > Vehicle > Child-Protection Lock**, to turn on the child-protection locks (see [Child-Protection Lock on page 155](#)).

Opening and Closing Front Doors from Interior

To open a front door, pull the interior door handle toward you.

To open a front door while sitting inside, press the button located at the top of the interior door handle and push the door open.



You can also use the touchscreen popup to open and close doors when inside CybertruckModel SModel XModel 3Model Y while the vehicle is in Park or by touching **Controls** > **Locks**.

You can also use the touchscreen to open and close doors when inside Model X. Touch **Controls**), then choose the door you want to open or close.

The driver's door automatically closes when you sit in the driver's seat and press the brake pedal. You can also close doors by simply pulling the handle toward you.

⚠ WARNING: Before pressing the brake pedal and causing the driver's door to automatically close, ensure that there are no body parts (hands, legs, etc.) obstructing the path of the closing door.

Opening and Closing Front Doors from Outside

Model X doors are electrically powered. When you approach Model X carrying a key, the doors automatically unlock. The front doors open when you press the door handle.

You can also set the driver's door to open automatically upon your approach and close automatically upon your departure (if equipped). The door partially opens between 20° and 45° (halfway open) depending on obstacles detected.




Touch **Controls > Vehicle > Locks > Automatic Doors**. If this setting is on, you can also open the driver's door by double-clicking the key fob's lock/unlock button. A subsequent double-click opens the front passenger door. Selecting **Exclude Automatic Doors Opening at Home** still allows for automatic closing doors at home but disables automatic door opening (set your home address by touching **Navigate > Set Home**).

NOTE: Depending on date of manufacture and options chosen at time of purchase, your Model X may not be equipped with automatic doors.

You can also specify that you want to unlock only the driver's door by touching **Controls > Vehicle > Locks > Driver Door Unlock Mode**. See [Driver Door Unlock Mode on page 142](#)[Driver Door Unlock Mode on page 155](#).

NOTE: See [Cold Weather Best Practices on page 693](#) for information on opening the doors in cold weather.

 **CAUTION:** The front doors may not fully open or close automatically when parked on a very steep hill. Never rely on Model X to fully open or close the doors for you when parked on a steep hill.

NOTE: Depending on date of manufacture and options chosen at time of purchase, your Model X may not be equipped with automatic doors.




Whenever a door is open, the Door Open indicator displays on the instrument panel. Also, the image of the CybertruckModel SModel XModel 3Model Y on the touchscreen's **Controls** window also provides a visual representation of an open door or trunk.

To close doors from the outside, you can:

- Manually push them shut.
- Single-click or triple-click the key fob's lock/unlock button (if the **Close All with Key Fob** setting is on, only a single click is needed to close all doors and trunks—a triple-click is needed if the setting is off).
- Use the Mobile App (see [Mobile App on page 355](#)).

NOTE: Powered doors stop moving if an obstacle is detected.

 **WARNING:** Before allowing an automated feature to open or close a front door (rather than doing so manually), it is important to check that the area around the door is free of obstacles (such as people and objects). You must proactively monitor the door's movement to ensure that it does not contact a person or object. Failure to do so can result in damage or serious injury.

Front Door Reset

Since your CybertruckModel SModel XModel 3Model Y does not have traditional door handles that you can pull from the outside, it is equipped with pop actuators (sometimes referred to as "ice breakers") that are used to assist in opening the front doors in cases where resistance is detected, such as ice buildup in cold weather. The pop actuator is located just above the front door latch and extends as necessary to open the front door. Once the front door opens slightly, the pop actuator gently retracts back into the door.



If the pop actuator is unable to retract because it is stuck to or caught on something, the pop actuator can be extended manually to extract the object by performing the following:

1. Carefully close the door latch using a pen, screwdriver, or comparable tool (never use a finger or body part and avoid damaging the paint); Cybertruck Model S Model X Model 3 Model Y will detect this as though the door is closed.



2. Make sure Cybertruck Model S Model X Model 3 Model Y is unlocked, then press the exterior door handle or pull the interior door handle to reset the latch and extend the pop actuator.
3. As the pop actuator extends out from the door, quickly extract the object.

⚠ WARNING: The pop actuator will attempt to retract back into the door almost immediately after the door handle is pressed or pulled. The pop actuator retracts gently, but will not release automatically if something gets caught.

⚠ WARNING: As with all mechanical and moving parts on the vehicle, never put body parts in, or near, moving components. Make sure children are monitored when opening and closing doors. Interacting with moving components, including the pop actuator, can cause serious damage or bodily injury.

Opening and Closing Falcon Wing Doors

Model X has falcon wing doors that easily open and close by pressing a button, using a key fob, using the mobile app, or touching the associated icon on the touchscreen. The falcon wing doors are equipped with several sensors that detect the presence of people and objects and, if an object is detected, the door stops moving. Based on detected objects, the doors may adjust their outward and upward movement in an attempt to avoid contacting the object. For example, if an object is detected above Model X, the door's movement may extend further outward but lower, whereas if an object (or person) is detected beside the door, the door may extend outward much less.



Owners Manual

WARNING: It is important to keep your hands clear of the falcon wing door frames at all times. Proactively check the door frame area prior to closing, and monitor the movement of the door during closing to ensure that it does not come into contact with a person or object. Failure to do so can result in damage or serious injury.

WARNING: Before opening or closing a falcon wing door, it is important to check that the area around the door is free of obstacles (people and objects). Although the doors have many sensors, it can not detect all objects at all times, particularly when moving. At any given moment, there may be areas near the door that are not in the detection zone. Therefore, when opening or closing a falcon wing door, you and your passengers must stand away from the door as it is moving, while proactively monitoring the door's movement and being prepared to take corrective action at any time. To stop a door from moving, single-click the falcon wing door button on the key fob, press the switch on the door or door pillar, or touch the button on the touchscreen.

To open a falcon wing door from outside Model X, press the door handle or double-press the falcon wing door button on the key fob (see [Keys on page 109](#) [Using the Key Fob on page 143](#)).

To open a falcon wing door from inside Model X, press the switch located on the driver's side door pillar, or, on the touchscreen, touch the associated door icon (**Controls**) (**Controls > Locks**):

NOTE: Falcon wing doors open only when Model X is stationary.



NOTE: If Model X is locked, using the switch (illustrated above) the first time unlocks the associated door. Using it a second time opens it.



⚠ CAUTION: Remove accumulation of snow or ice before opening a falcon wing door. Snow can get inside Model X and ice can prevent the door from opening. In situations where water or snow has accumulated on the glass on top of the falcon wing door, Tesla recommends using the touchscreen or switch on the door pillar (instead of the external door handle or key fob) to slowly open the falcon wing door for the first few inches (cm). Opening the falcon wing door slowly for the first few inches (cm) mitigates the scenario of water, snow, etc. from entering the vehicle.

To close a falcon wing door, press the button located on the inside of the door. You can also use the key fob (see [Using the Key Fob on page 143](#) [Key Fob on page 119](#)), use the switch on the door pillar (illustrated above), or touch the associated door icon on the touchscreen (**Controls**) (**Controls** > **Close**).



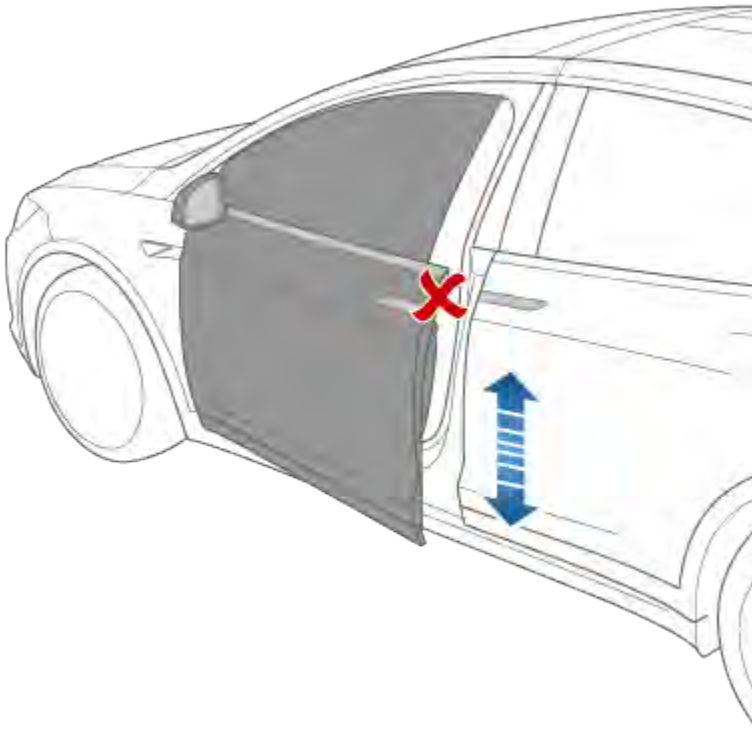
If a falcon wing door or the front trunk is left open when you attempt to shift out of Park, the touchscreen displays a notification requiring you to confirm your intent to drive. The falcon wing door automatically closes when your driving speed reaches 10 mph (16 km/h). In addition, your vehicle speed is limited if you choose to keep the front trunk open while driving. It is your responsibility to ensure doors and trunks are properly closed before driving.

NOTE: To prevent children from opening falcon wing doors using the interior switch, turn on child-protection locks using the touchscreen (**Controls** > **Vehicle** > **Child-Protection Lock**) (**Controls** > **Locks** > **Child Locks**). See [Child Locks on page 142](#) [Child-Protection Lock on page 155](#).

NOTE: You can configure Model X to open the falcon wing doors to a lower height setting by using the touchscreen (**Controls** > **Vehicle** > **Locks** > **Falcon Door Height**).

NOTE: If a falcon wing door detects an obstacle while closing, it reverses a few inches before it stops moving.

⚠ WARNING: Whenever a front door is partially open (approximately 20°) as you are opening or closing the associated falcon wing door, you **MUST** keep your hands (or any object) away from the opening edge of the front door. When a falcon wing door passes by a partially opened front door, the distance between the two doors is very narrow. Objects, such as hands or fingers, placed in this area, are not detected by sensors and can therefore become pinched between the doors. To avoid bodily injury, it is a good practice to keep your hands away from the front door whenever you are opening or closing a falcon wing door.



CAUTION: In rainy weather, leaving a falcon wing open while opening the liftgate can result in rain water falling from the liftgate into the rear seating area.

WARNING: When opening or closing a falcon wing door, it is important to proactively monitor the movement of the door to ensure that it does not come into contact with a person or object. Failure to do so can cause serious damage or injury.


NOTE: In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the falcon wing doors with the touchscreen or by pressing the switch located on the driver's side door pillar. See [Opening Doors with No Power on page 947](#)[Opening Doors with No Power on page 948](#)[Opening Doors with No Power on page 949](#) for more information.


Obstacle Detection

A falcon wing door stops moving when one of its many sensors detects an obstacle, or when the door senses resistance because it has made contact with an object. The touchscreen displays a warning. In these cases, provided it is appropriate to continue opening or closing the falcon wing door, you can override obstacle detection by pressing and holding the switch located on the door pillar, or touching and holding the associated door icon on the touchscreen.



When Model X detects a low ceiling (for example, in a garage), it opens the falcon wing doors (and trunk) to a lower height, even if no obstacle is detected. You can override this height and open the doors higher by touching the associated door icon on the touchscreen (**Controls**). The touchscreen displays a message asking you if you always want to open the doors to the higher height at this location, and saves your choice. The next time you open the falcon wing doors at this location, Model X opens them to the height you saved.

 **WARNING:** Before overriding a falcon wing door's default opening height, visually inspect the area to ensure adequate clearance between the door and the detected object.

 **WARNING:** Applying adhesive products such as wraps, stickers, rubber coating, etc. on the outside of the falcon wing doors can affect the sensors' ability to detect obstacles properly.

Calibration

If the falcon wing doors lose calibration, a message displays on the touchscreen. To calibrate the doors, first ensure that both doors have plenty of space to open and close and are clear of passengers, objects, etc. Then press and hold the **Calibrate** button until calibration is complete. During calibration, the lower door opens all the way out (requiring extra space on the side of Model X), the upper door moves all the way down, and then the lower door closes.

Calibration

If the falcon wing doors lose calibration, the main Controls window on the touchscreen displays a **Calibration Required** message. To calibrate the doors, first ensure that both doors have plenty of space to open and close and are clear of passengers, objects, etc. Touch **Controls > Service > Calibrate Doors**, and follow the instructions on the touchscreen. During calibration, the lower door opens all the way out (requiring extra space on the side of Model X), the upper door moves all the way down, and then the lower door closes.

Interior Locking and Unlocking

From inside CybertruckModel SModel XModel 3Model Y, you can use the touchscreen to lock or unlock doors and trunks, provided a valid key is inside the vehicle. Touch the lock icon on the touchscreen's status bar.

When you stop CybertruckModel SModel XModel 3Model Y and engage Park, you can choose whether you want doors to unlock or remain locked. To do so, touch **Controls > Vehicle > Unlock on Park**. When enabled, doors automatically unlock when you engage Park.

You can also unlock doors and present handles by pressing the Park button on the end of the drive stalk a second time (for example, after pressing it one time to engage Park).

NOTE: If a door or trunk is still open when you lock CybertruckModel SModel XModel 3Model Y, it locks when you close it.

Driver Door Unlock Mode

You can choose to unlock only the driver's door when you approach your vehicle carrying your key fob. To do so, touch **Controls > Vehicle > Driver Door Unlock Mode**. To unlock the remaining doors, use the touchscreen or press the key fob a second time.

Child-Protection Lock

CybertruckModel SModel XModel 3Model Y has child-protection locks on the rear falcon wing doors and liftgate to prevent them from being opened using interior handles. Use the touchscreen to turn child-protection locks on or off. Touch **Controls > Vehicle > Child-Protection Lock**.

NOTE: It is recommended that you turn child-protection locks on whenever children are seated in the rear seats.

Drive Away Locking

CybertruckModel SModel XModel 3Model Y automatically locks all doors (including the trunks) whenever your driving speed exceeds 5 mph (8 km/h).

Walk-Away Door Lock

Doors and trunks automatically lock whenever you walk away carrying the key fob or if the key fob is otherwise not detected by your vehicle (not present, dead battery, etc.).

To turn this feature on or off, touch **Controls > Vehicle > Walk-Away Door Lock**.



NOTE: Touch **Toybox > Boombox > Lock Sound** to customize the lock sound when the vehicle is locked from the outside (Pedestrian Warning System required).

Check the **Exclude Home** checkbox to prevent doors from locking when you walk away carrying the key fob when CybertruckModel SModel XModel 3Model Y is parked at the location you have designated as Home. For details on how to designate a location as Home, see [Home, Work, and Favorite Destinations on page 703](#).

If you unlock CybertruckModel SModel XModel 3Model Y using the mobile app, it automatically locks after a short period of time if all doors remain closed. If parked in an area without cellular service (such as an indoor parking garage), ensure that you have a functional key fob available to unlock CybertruckModel SModel XModel 3Model Y.

If CybertruckModel SModel XModel 3Model Y detects an authenticated key fob for five minutes after you exit the vehicle and close all doors, Walk-Away Door Lock disables and doors do not lock when you leave with the key fob. You will need to manually lock CybertruckModel SModel XModel 3Model Y until after your next drive.

In addition, if all doors are closed and you use the key fob to unlock CybertruckModel SModel XModel 3Model Y, walk away locking is temporarily suspended for one minute. If you open a door within this minute, it does not re-lock until after all the doors are closed and you have walked away with the key fob.

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with walk-away locking.

NOTE: It is ultimately your responsibility to ensure your vehicle is locked, even when Walk-Away Door Lock is enabled.

Unlocking When the Key Fob Doesn't Work

If CybertruckModel SModel XModel 3Model Y does not unlock when you walk up to it, or when you double-click the unlock button on the top of your key fob, the key fob's battery may be dead. Even if this is the case, you can still use the key fob to unlock and drive CybertruckModel SModel XModel 3Model Y.

NOTE: Although you can still use your key fob, you should consider using the mobile app to remotely unlock and start the vehicle. Then, replace your key fob's battery when convenient.

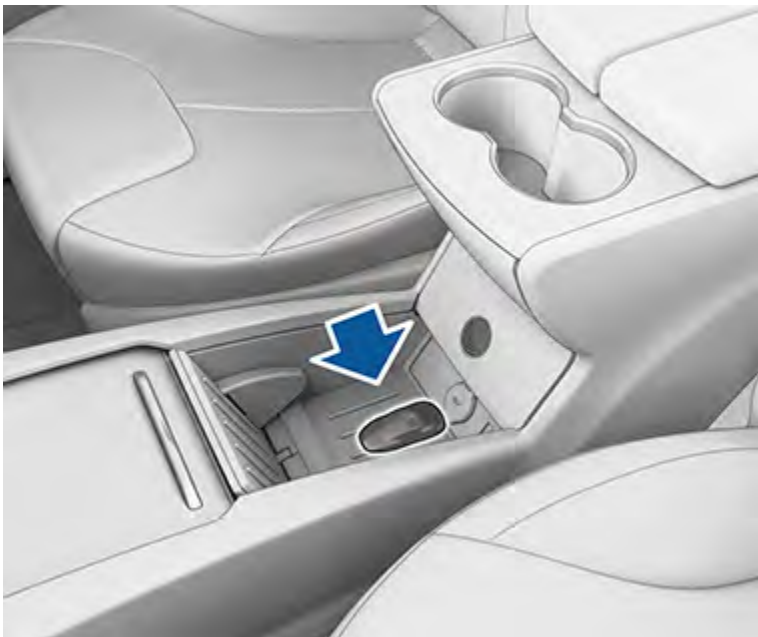
To unlock CybertruckModel SModel XModel 3Model Y (and disable the security alarm) using the key fob, first position the key fob near the base of the passenger side windshield wiper at the base of the door pillar between the front door and the falcon wing door, on the driver's side of the vehicle. Then press the front door handle on the right side of the vehicle. Then press the driver's door handle. If CybertruckModel SModel XModel 3Model Y doesn't unlock, try adjusting the position of the key fob and try again. The key fob must be in the correct position for the vehicle to unlock. If Model X still doesn't unlock, remove the key fob's battery and try again. See [Replacing the Key Fob Battery on page 145](#).

NOTE: The following illustration assumes a left hand drive (LHD) vehicle. On a right hand drive (RHD) vehicle, the locations are mirrored.





To drive Cybertruck Model S Model X Model 3 Model Y after gaining access to the cabin, place the bottom of the key fob against the center console, immediately below the low voltage power outlet, then press and hold the brake pedal to start Cybertruck Model S Model X Model 3 Model Y.



NOTE: Unlocking Cybertruck Model S Model X Model 3 Model Y using this method disables walk away locking. You must manually re-enable walk away locking after replacing the key fob's battery.



Windows

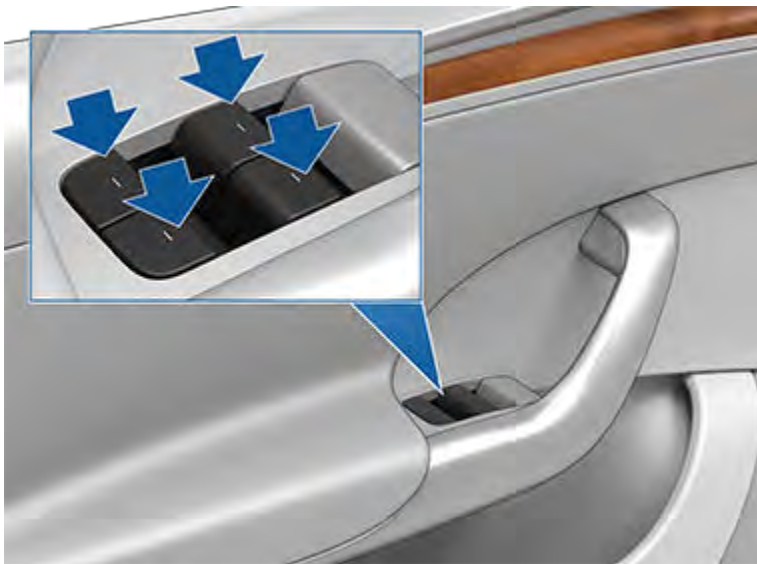
Opening and Closing

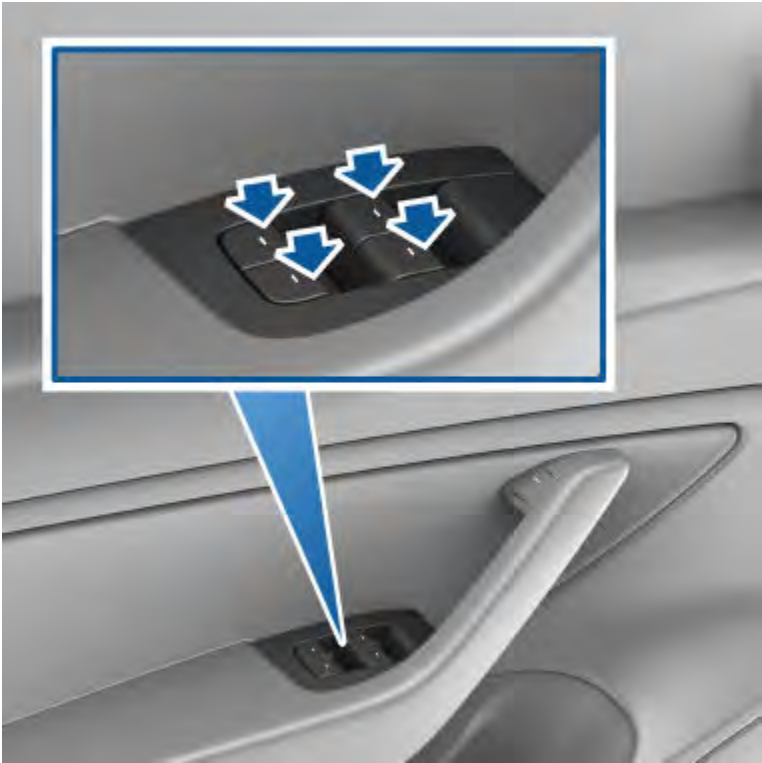
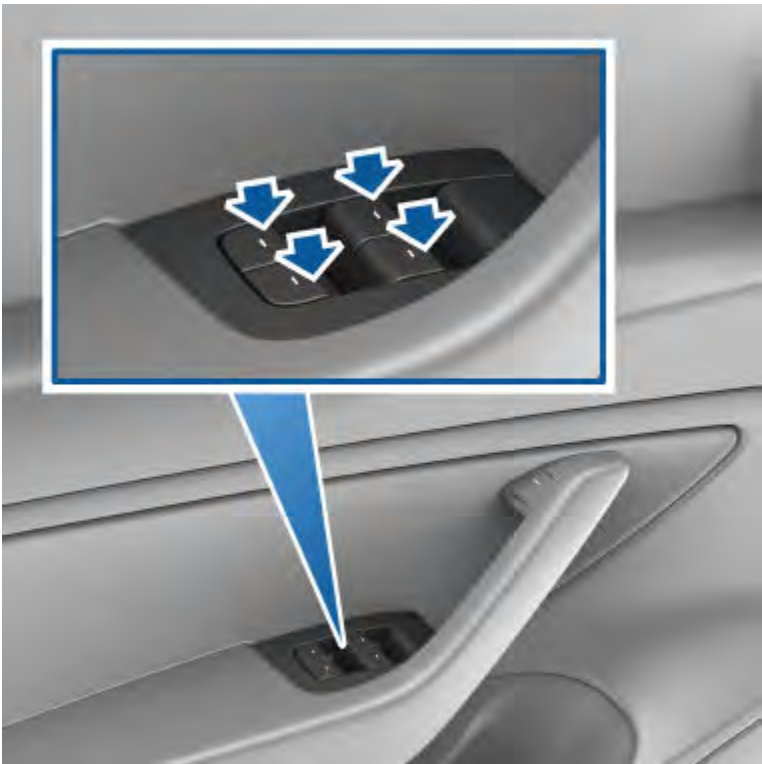
NOTE: It is your responsibility to ensure windows are closed after locking the vehicle.

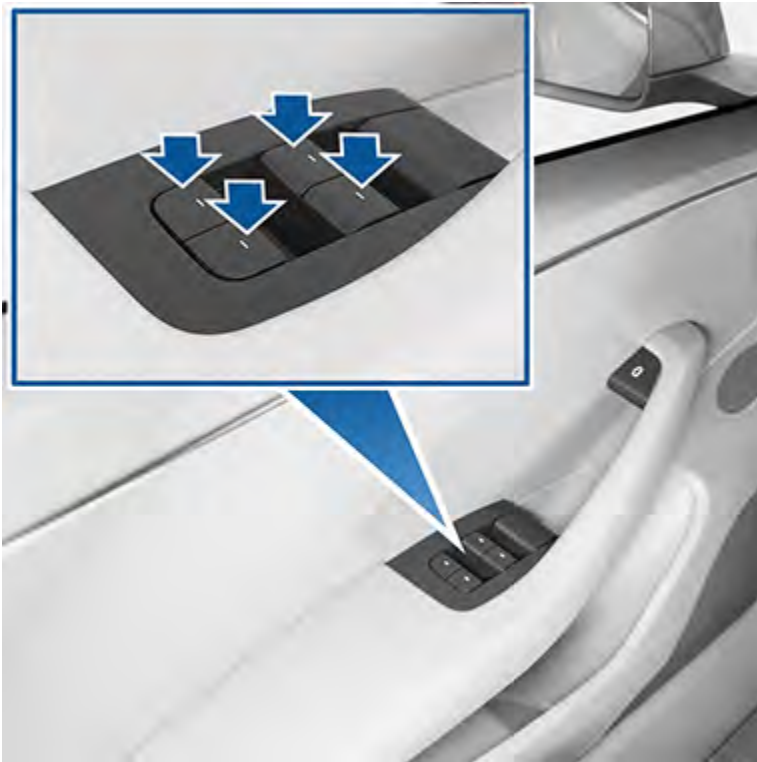
Press down on a switch to lower the associated window. Window switches operate at two levels:

- To lower a window fully, press the switch all the way down and immediately release.
- To lower a window partially, press the switch gently and release when the window is where you want it.

NOTE: If a window is fully lowered and you open the associated door, the window rises slightly. Likewise, if you fully lower a window while the door is already open, it stops slightly above the edge of the door. To fully lower a window while the door is open, press the switch again.







Similarly, pull a switch to raise the associated window:

- To raise a window fully, pull the switch all the way up and immediately release.
- To raise a window partially, pull the switch gently and release when the window is where you want it.

If a window is left open unintentionally, CybertruckModel SModel XModel 3Model Y can send a notification to the mobile app (touch **Controls** > **Locks** > **Car Left Open Notification**Controls > **Vehicle** > **Car Left Open Notification**, then choose **Doors & Windows**).

You can also enable **Close Windows on Lock** by touching **Controls** > **Locks** > **Close Windows on Lock**. When enabled, your vehicle automatically closes the windows when CybertruckModel SModel XModel 3Model Y locks.

NOTE: See [Cold Weather Best Practices on page 693](#) for information on preparing windows for cold weather.

⚠ CAUTION: To avoid damage, windows automatically lower slightly when you open or close a door. If you manually raise a window when the door is open, ensure it is slightly lowered before closing the door.

⚠ WARNING: Before closing a window, it is the driver's responsibility to ensure that all occupants, especially children, do not have any body parts extended through the window's opening. Failure to do so can cause serious injury.

Locking Rear Windows

To prevent passengers from using the rear window switches, touch **Controls** > **Locks** > **Window Lock**. To unlock the rear windows, touch **Window Lock** again.

To prevent passengers from using the rear window switches, press the rear window lock switch. The switch light turns on. To unlock rear windows, press the switch again.



⚠ WARNING: To ensure safety, it is recommended that you lock the rear window switches whenever children are seated in the rear seats.

⚠ WARNING: Never leave children unattended in CybertruckModel SModel XModel 3Model Y.

Calibrating Windows

In the unlikely event that a window behaves unexpectedly (touches the bright molding, fails to open or close properly, goes down more than normal when the door opens, etc.), you can calibrate it to potentially fix the issue.

To calibrate a window:

1. Close the door with the affected window.
2. Sit in the driver's seat and close the driver door.
3. Using the window's switch on the driver's door, **raise** the affected window until it stalls.
4. Using the window's switch on the driver's door, **lower** the affected window until it stalls.
5. Repeat step 3 and **raise** the affected window until it stalls.

The window should now be calibrated. If the issue continues after attempting the calibration procedure a couple times, contact Tesla.

UV Index Rating

The roof, windshields, and windows in CybertruckModel SModel XModel 3Model Y are excellent at protecting you from UV (ultraviolet) rays. The glass components score less than 2 on the UV Index scale. Review your region's UV Index specifications for more information. You are still responsible for taking the necessary precautions for sun protection.

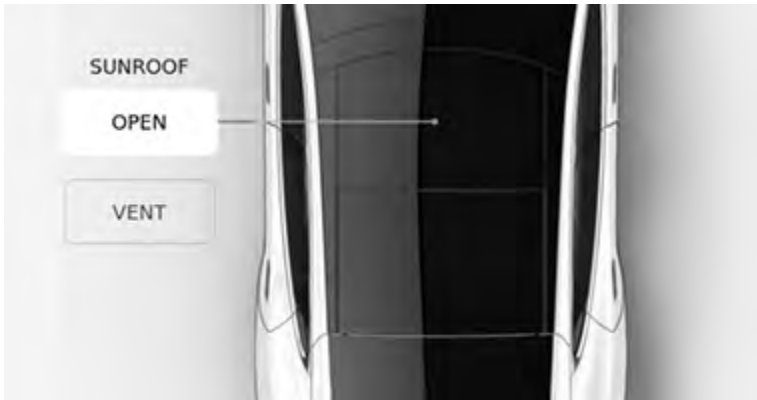


Sunroof

Opening and Closing

If your Cybertruck Model S Model X Model 3 Model Y is equipped with a sunroof, you can vent and close the sunroof remotely using the mobile app or you can adjust the position of the sunroof by controlling it from the menu on your right scroll wheel.





For full control of the sunroof, touch **Controls** on the touchscreen. Drag, or tap on, the image of the sunroof or touch the buttons next to the image of your vehicle. The sunroof moves to the selected position. To stop the sunroof from moving at any time, touch the image of the sunroof.



- **OPEN:** touch once to open the sunroof to its comfort position (75% open). Touch twice to open the sunroof fully.
- **VENT:** touch to open the sunroof slightly.
- **CLOSE:** touch to fully close the sunroof.

NOTE: If the sunroof detects any obstruction, it does not close. If, after removing the obstruction, it still does not close, touch and hold **CLOSE** to override the sunroof's anti-trap mechanism.

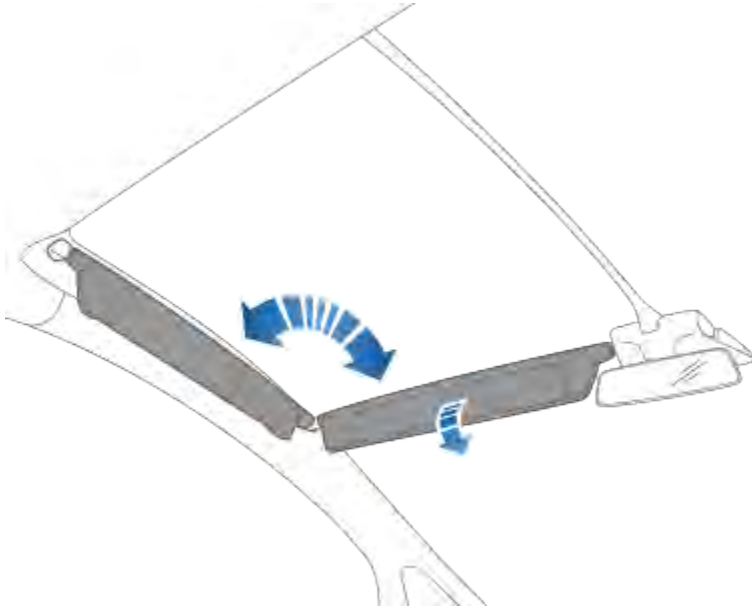
NOTE: If you find wind noise (which varies depending on driving speed) excessive, even with the sunroof in the comfort position, open a window slightly.

-  **CAUTION:** Remove snow and ice before opening the sunroof. Opening a sunroof covered in snow and ice can cause damage.
-  **WARNING:** Do not allow occupants to extend any part of their body through the sunroof. Doing so can cause serious injury from flying debris, tree branches, or other obstructions.
-  **WARNING:** Before closing the sunroof, ensure that occupants, especially children, do not have any body part extended through the sunroof opening. Failure to do so can cause serious injury.
-  **WARNING:** Do not carry an object that protrudes through the sunroof. Doing so can damage the sunroof's seals and anti-trap mechanism, and can cause injury to occupants.

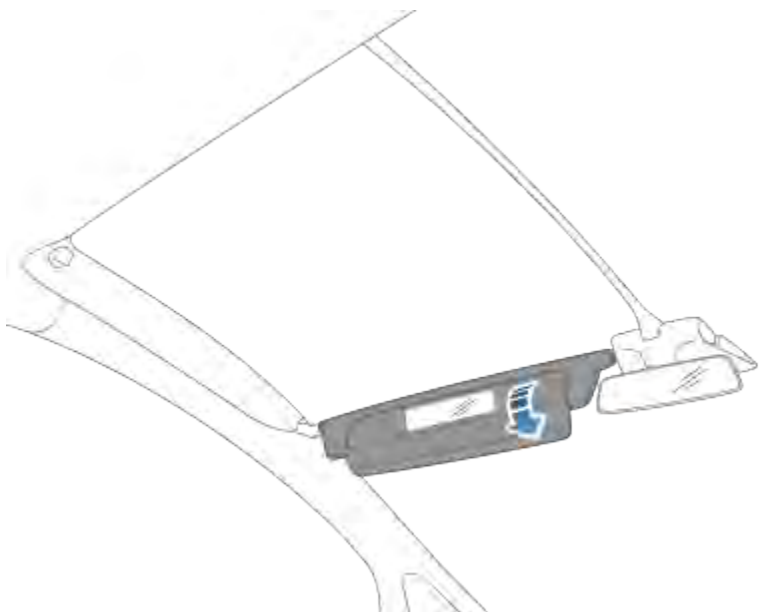


Sun Visors

The sun visors in Model X are held in place by magnets. To protect occupants from sunlight coming through the windshield, release the sun visor from the pillar and pivot it toward the rear view mirror until the magnet snaps into place. While held in place by the magnet, you can adjust the sun visor and lower the extender to provide maximum shade.



To expose the vanity mirror, lower the visor extender then lower the mirror cover. While the cover is lowered, the mirror is exposed and lights are illuminated.



To protect front seat occupants from sunlight coming through the side window, lower the sun visor from the pillar then lower the visor extender.

Storage Areas



Rear Trunk

Opening

To open the rear trunk, ensure CybertruckModel SModel XModel 3Model Y is in Park, then do one of the following:

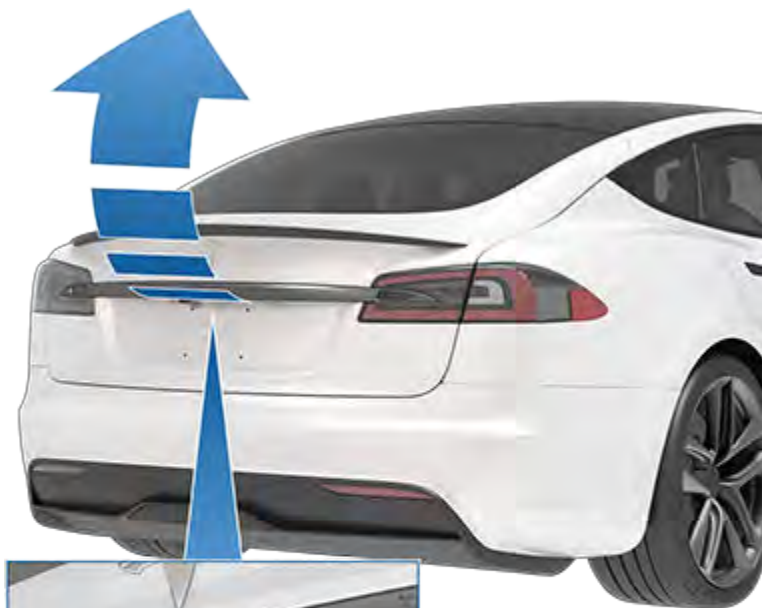
- Approach the trunk with your phone key in your front pocket (see [Hands-Free Trunk on page 169](#)).
- Approach the trunk with your phone key in your front pocket (see [Hands-Free Trunk on page 170](#)).
- Touch the associated **Open** button on the touchscreen.
- Touch **Controls** > **Trunk** on the touchscreen.
- Double-click the rear trunk button on the key fob.
- Double-click the rear trunk button on the key fob.
- Touch the rear trunk button on the mobile app.
- Press the switch located under the liftgaterear trunk's exterior handle (a valid key must be detected).

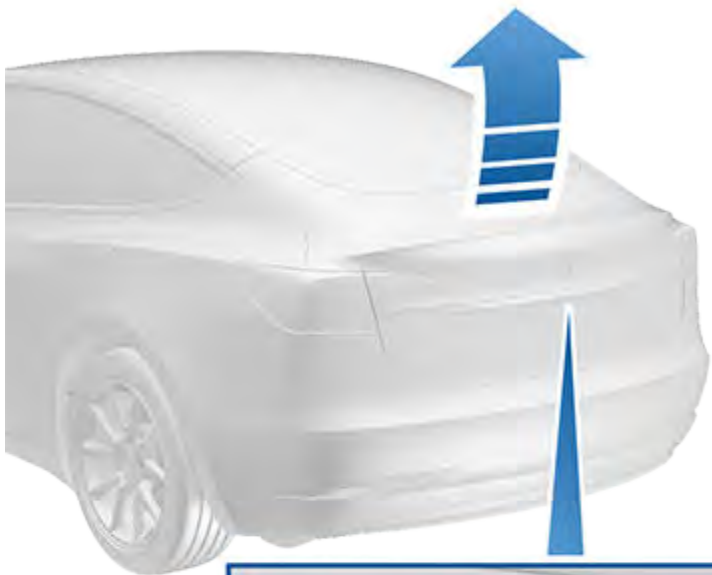
NOTE: If **Passive Entry** is off, you must use a key fob to unlock CybertruckModel SModel XModel 3Model Y before you can use the switch to open the liftgate. See [Using the Key Fob on page 143](#).

CAUTION: Before opening the liftgaterear trunk in an enclosed area (such as a garage), ensure the opening height of the liftgaterear trunk is properly adjusted to avoid low-hanging ceilings or objects (see [Adjusting Liftgate Opening Height on page 171](#)[Adjusting Opening Height of Powered Trunk on page 173](#)[Adjusting Opening Height of Powered Trunk on page 173](#)).

CybertruckModel SModel XModel 3Model Y must be unlocked or detect a key before you can use the switch to open the liftgaterear trunk.









The instrument panel informs you when a door or trunk is open.



When a door, trunk or liftgate/rear trunk is open, the instrument panel displays the Door Open indicator light. The image of your Cybertruck/Model S/Model X/Model 3/Model Y on the touchscreen also displays the open trunk.

When a door or trunk is open, the touchscreen displays the Door Open indicator light. The image of your Cybertruck/Model S/Model X/Model 3/Model Y on the touchscreen also displays the open trunk.

To stop a liftgate/rear trunk while it is moving, single-click the rear trunk button on the key fob. Then, when you double-click the rear trunk button, it moves again, but in the opposite direction (provided it was not almost entirely open or closed when you stopped it). For example, if you single-click to stop the liftgate/rear trunk while opening, when you double-click, it closes.



You can stop a powered trunk while it is moving by single-clicking the rear trunk button on the key fob accessory. Then, when you double-click the liftgate rear trunk button, it moves again, but in the opposite direction (provided it was not almost entirely open or closed when you stopped it). For example, if you single-click to stop the powered trunk while it is opening, when you double-click, it closes.

NOTE: In emergency situations, you can override an open or close command by grasping the liftgate rear trunk to stop it in place.

NOTE: In emergency situations, you can override the open or close command for the powered trunk by pressing the trunk switch again or by grasping to stop it in place.

⚠ WARNING: Before opening or closing the powered trunk, it is important to check that the surrounding area is free of obstacles (people and objects). You must proactively monitor the trunk to ensure that it does not come into contact with a person or object. Failure to do so may result in damage or serious injury.

⚠ WARNING: Before opening or closing the rear trunk, it is important to check that the area around the trunk is free of obstacles (people and objects).

To open the liftgate rear trunk from inside the vehicle in the unlikely situation that Cybertruck Model S Model X Model 3 Model Y has no power, see [Interior Emergency Trunk Release on page 178](#).

If Model X detects a low ceiling (for example, in a garage), it opens the liftgate rear trunk (and falcon wing doors) to a lower height, even if no obstacle is detected. You can override this height by manually lifting it higher. When doing so, the touchscreen prompts you to choose if you always want the trunk to open to this higher position at this location, and saves your choice. If you choose to do so, the next time you open the liftgate rear trunk at this location, Model X opens it to the saved height.

⚠ WARNING: Before opening or closing the liftgate rear trunk, check the surrounding area (for people and objects). Although the liftgate rear trunk can detect obstacles, it cannot detect all objects at all times. Do not rely on the liftgate to sense an obstruction when opening or closing. You must proactively monitor the liftgate to ensure that it does not come into contact with a person or object. Failure to do so may result in damage or injury.

A low voltage power socket is located on the left side of the rear trunk.



Hands-Free Trunk

You can open the trunk without pressing a button.

NOTE: Requires an iPhone 11 or newer and Tesla mobile app 4.29.5 or higher. Ensure your phone settings allow "Nearby Interactions" for the Tesla mobile app. If your phone key is already paired, open the Tesla mobile app and go to **Phone Key > Upgrade**.

1. To enable, touch **Controls > Locks > Hands-Free Trunk**.
2. With your phone key in your front pocket, approach the trunk and **stand still**. When your phone key has been detected, Cybertruck Model S Model X Model 3 Model Y chimes and the trunk opens. To cancel the request, step away from the vehicle.



⚠ CAUTION: Do not leave your phone inside the trunk as it may open by itself. If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off, and ensure you have alternate methods to lock/unlock your vehicle, see [Keys on page 109](#).

⚠ WARNING: Before allowing an automated feature to open the trunk (rather than doing so manually), it is important to check that the area around the trunk is free of obstacles (such as people and objects). Proactively monitor the trunk's movement to ensure that it does not contact a person or object. Failure to do so can result in damage or serious injury.

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2. With your phone key in your front pocket, approach the trunk and **stand still**. When your phone key has been detected, CybertruckModel SModel XModel 3Model Y chimes and the trunk opens. To cancel the request, step away from the vehicle.



CAUTION: Do not leave your phone inside the trunk as it may open by itself. If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off, and ensure you have alternate methods to lock/unlock your vehicle, see [Keys on page 109](#).

WARNING: Before allowing an automated feature to open the trunk (rather than doing so manually), it is important to check that the area around the trunk is free of obstacles (such as people and objects). Proactively monitor the trunk's movement to ensure that it does not contact a person or object. Failure to do so can result in damage or serious injury.

Adjusting Liftgate Opening Height

If CybertruckModel SModel XModel 3Model Y is equipped with a liftgaterear trunk, you can adjust its opening height to make it easier to reach or to avoid low-hanging ceilings or objects (for example, a garage door or light):

You can adjust the opening height of the liftgaterear trunk to make it easier to reach or to avoid low-hanging ceilings or objects (for example, a garage door or light):

1. Open the trunk, then manually lower or raise the liftgaterear trunk to the desired opening height.
2. Press and hold the button on the underside of the liftgaterear trunk for three seconds until you hear a confirmation chime.







3. Confirm that you have set it to the desired height by closing the liftgate/rear trunk, then reopening it.

⚠ CAUTION: Depending on configuration (such as suspension height or wheel selection), your vehicle's liftgate can open up to approximately 7.5 feet (2.3 meters) 8 feet (2.5 meters) 7.5 feet (2.3 meters) high. Adjust the liftgate height to prevent it from coming into contact with low ceilings or other objects.

Adjusting Opening Height of Powered Trunk

You can adjust the opening height of the powered trunk to make it easier to reach or to avoid low-hanging ceilings or objects (for example, a garage door or light):

1. Open the trunk, then manually lower or raise it to the desired opening height.
2. Press and hold the button on the underside of the trunk for three seconds until you hear a confirmation chime.



3. Confirm that you have set it to the desired height by closing the powered trunk, then reopening it.

⚠ CAUTION: Depending on configuration (such as wheel selection), your vehicle's rear trunk can open up to approximately 6.5 feet (2 meters). Adjust the rear trunk height to prevent it from coming into contact with low ceilings or other objects.

Closing

If Model S is not equipped with a liftgate/rear trunk, close the rear trunk by pulling down on the liftgate and pushing firmly until it is fully closed.

To close the liftgate/rear trunk, do one of the following:

- Touch **Controls > Trunk**.
- Touch the associated **Close** button on the touchscreen.
- Touch the associated **Close** button on the touchscreen.
- Double-click the rear trunk button on the key fob.
- Double-click the rear trunk button on the key fob.
- Press the switch located on the underside of the liftgate/rear trunk

If the liftgate/rear trunk senses an obstruction when closing, it stops moving and chimes two times. Remove the obstruction and try closing it again.

If the liftgate/rear trunk loses its calibration when opened, the liftgate chimes three times and does not move. To restore calibration, manually pull the liftgate down to close it.

To close the trunk, push it downward until you hear the latch click into place. Model 3 is equipped with pull cups to assist with lowering the rear trunk.



To close the powered trunk, do one of the following:

- Touch the associated **Close** button on the touchscreen.
- Press the switch located by the rear trunk's exterior handle.
- Double-click the rear trunk button on the key fob.

If the powered trunk senses an obstruction when closing, it stops moving and sounds two chimes. Remove the obstruction and try closing it again.

⚠ WARNING: Before driving, ensure that the trunk is securely latched in the fully-closed position by lifting up on the bottom edge and confirming there is no movement.

Interior Release

To open the rear trunk from inside a Model S equipped with the Tesla Built-In Rear Facing Child Seats, press the interior release switch located inside the rear trunk and push the liftgate up. If Model S is locked and is equipped with a liftgate, the first press unlocks the rear trunk and the second press opens it.

NOTE: If Model S is not equipped with the Tesla Rear Facing Child Seats, the switch may appear to exist, but it is inactive and pressing it does not release the liftgate.



If Model S is equipped with the power liftgate, you do not need to push it up. When you press the release switch, it opens, and when you pull the switch, it closes.


NOTE: The interior release switch is disabled if child-protection locks are turned on (see [Child-Protection Lock on page 155](#)), or if Cybertruck Model S Model X Model 3 Model Y is moving.



Parcel Shelf (if equipped)

The parcel shelf covers the rear cargo and is useful when you want to conceal valuables, keep the sun away from groceries, or minimize noise from rustling objects. To fold the shelf in, hold the circular panel and slide the shelf back toward the rear seat. Fold the circular panel on top of the folded parcel shelf. To unfold, flip over the circular panel and slide the shelf toward you until it straightens out.

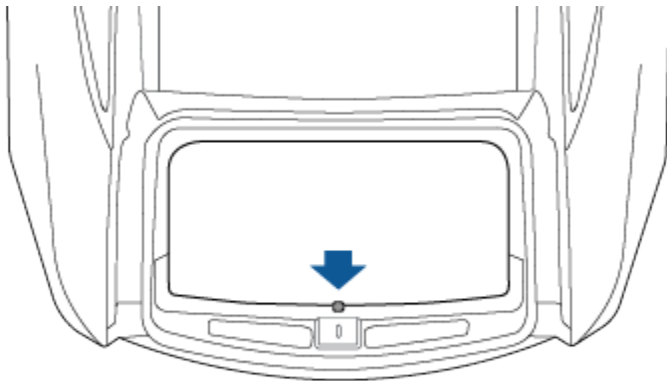
To remove, fold the back panel and lift the parcel shelf upward with your hand underneath the bottom of the shelf to disengage the tabs and magnets in the front corners. Then slide the parcel shelf out.

 **CAUTION:** Do not place heavy objects on top of the parcel shelf.

Accessing the Cargo Area

To access the cargo area inside the rear trunk, pull up the strap at the rear of the cargo cover. You can then fold the cargo cover forward or remove it from CybertruckModel SModel XModel 3Model Y.

Secure all cargo before moving CybertruckModel SModel XModel 3Model Y, and place heavy cargo in the lowerupper trunk compartment.









To access the cargo area inside the rear trunk, push down on the ridged portion of the handle of the cargo cover and then pull up. You can then adjust the position of the cargo cover or completely remove it.



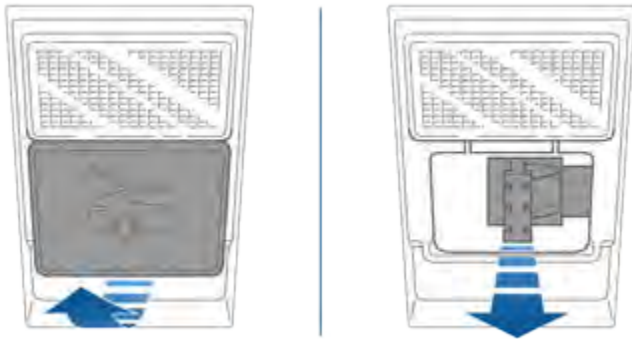
Rear Trunk Load Limits

Distribute the weight of cargo as evenly as possible between the front and rear trunks.

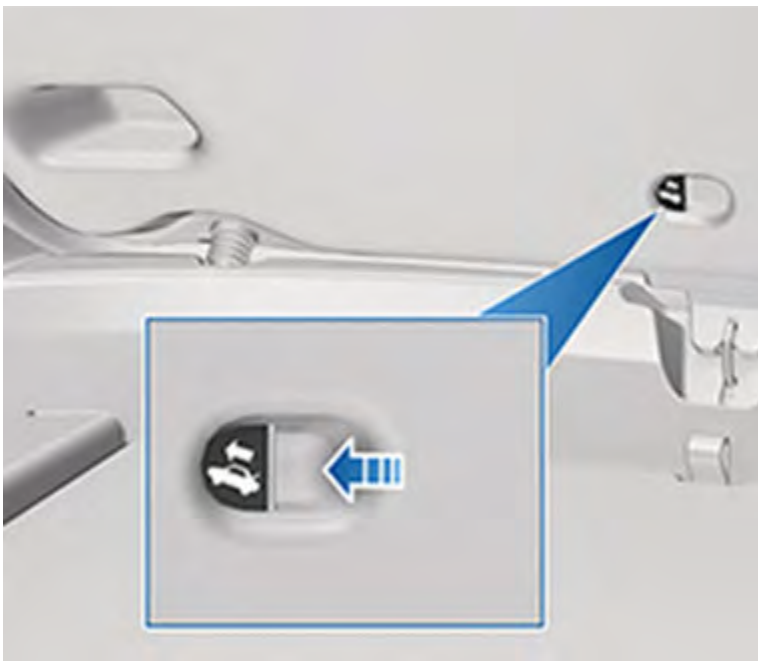
-  **CAUTION:** Never load more than 176 lbs (80 kg) in the upper compartment of the rear trunk or more than 285 lbs (130 kg) in the lower compartment. Doing so can cause damage.
-  **CAUTION:** Never load more than 88 lbs (40 kg) in the lower compartment of the rear trunk or more than 285 lbs (130 kg) on the upper compartment (above the lower compartment cover). Doing so can cause damage.
-  **CAUTION:** Never load more than 88 lbs (40 kg) in the lower compartment of the rear trunk or more than 198 lbs (90 kg) on the upper compartment (above the lower compartment cover). Doing so can cause damage.
-  **WARNING:** When loading cargo, always consider the vehicle's Gross Vehicle Weight Rating (GVWR) (see [Specifications on page 838](#)). The GVWR is the maximum allowable total mass of the vehicle including all passengers, fluids, and cargo.

Interior Emergency Trunk Release

An illuminated mechanical release located inside the rear trunk allows you to open the rear trunk from the inside if Cybertruck Model S Model X Model 3 Model Y has no electrical power. This mechanical release also allows a person locked inside to get out.



1. Remove the cover by pulling its lower edge very firmly toward you.
2. Pull the cable to release the latch.
3. Push the rear trunk open.



1. Firmly press and hold the illuminated button in the direction of the arrow to release the latch.
2. While pressing the button, push the rear trunk open.



NOTE: The button glows for several hours after a brief exposure to ambient light.

⚠ WARNING: Do not allow children to play inside the trunk or become locked inside. An unrestrained child could suffer serious injury or death in a crash. A child could suffer heat exhaustion or death if trapped in the vehicle, especially without climate control on. If your CybertruckModel SModel XModel 3Model Y is equipped with Tesla built-in rear facing child seats, see [Tesla Built-In Rear Facing Child Seats on page 314](#) and ensure all restrictions, instructions, and warnings are followed.



Front Trunk

Opening

To open the front trunk, ensure CybertruckModel SModel XModel 3Model Y is in Park, and then do one of the following before pulling the hood open:

- Touch **Controls** > **Front Trunk** on the touchscreen.
- Touch **Controls** > **Frunk** on the touchscreen.
- Touch the associated **Open** icon on the touchscreen.
- Double-click the front trunk button on the key fob.
- Touch the front trunk button in the mobile app.







The instrument panel displays when a door, trunk, or liftgate is open.



When a door or trunk/liftgate is open, the instrument panel displays the Door Open indicator light. The image of your CybertruckModel SModel XModel 3Model Y on the touchscreen also displays the open front trunk.

When a door or trunk is open, the touchscreen displays the Door Open indicator light. The image of your CybertruckModel SModel XModel 3Model Y on the touchscreen also displays the open front trunk.

When a door or trunk/liftgate is open, the touchscreen displays the Door Open indicator light. The image of your CybertruckModel SModel XModel 3Model Y on the touchscreen also displays the open front trunk.

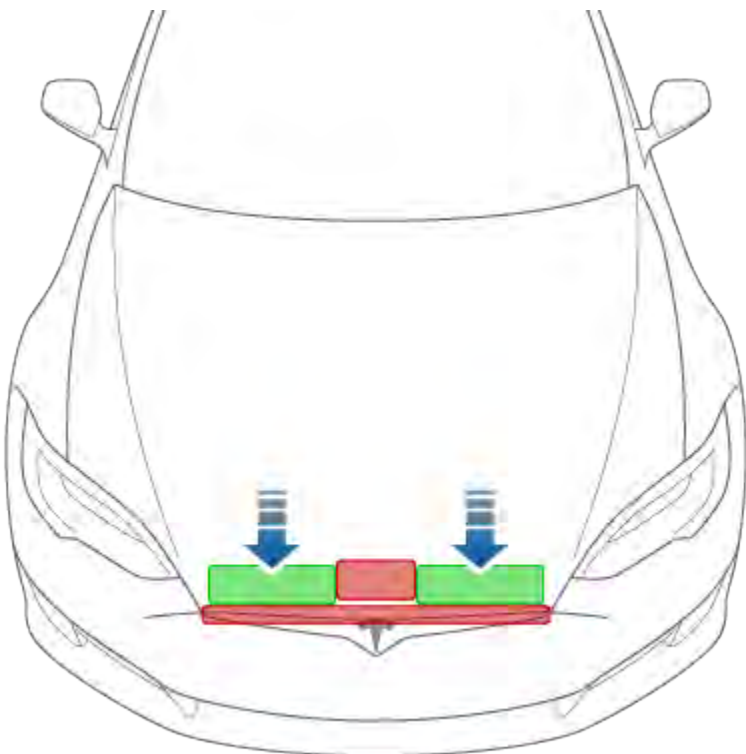
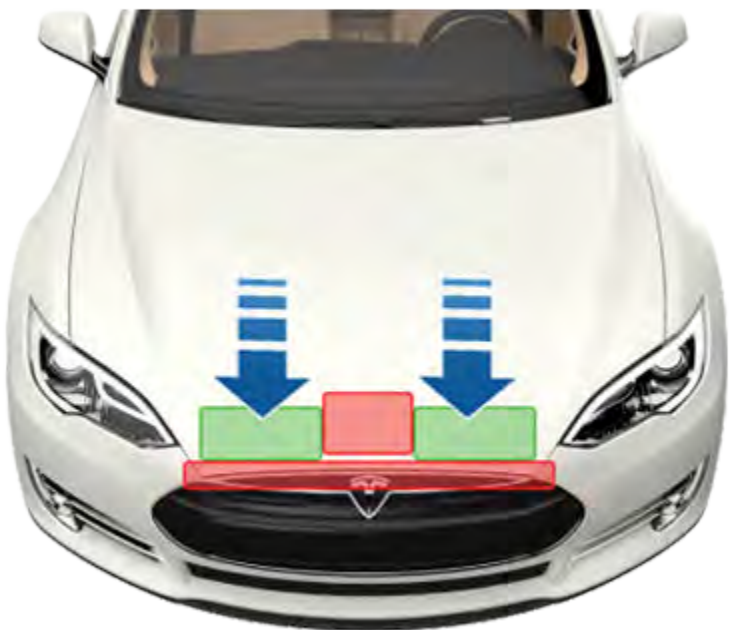
⚠ WARNING: Before opening or closing the hood, it is important to check that the area around the hood is free of obstacles (people and objects). Failure to do so may result in damage or serious injury.

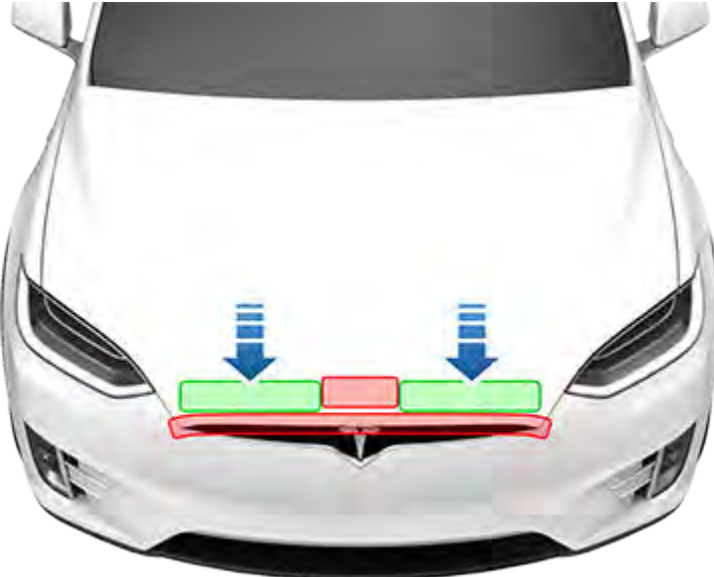
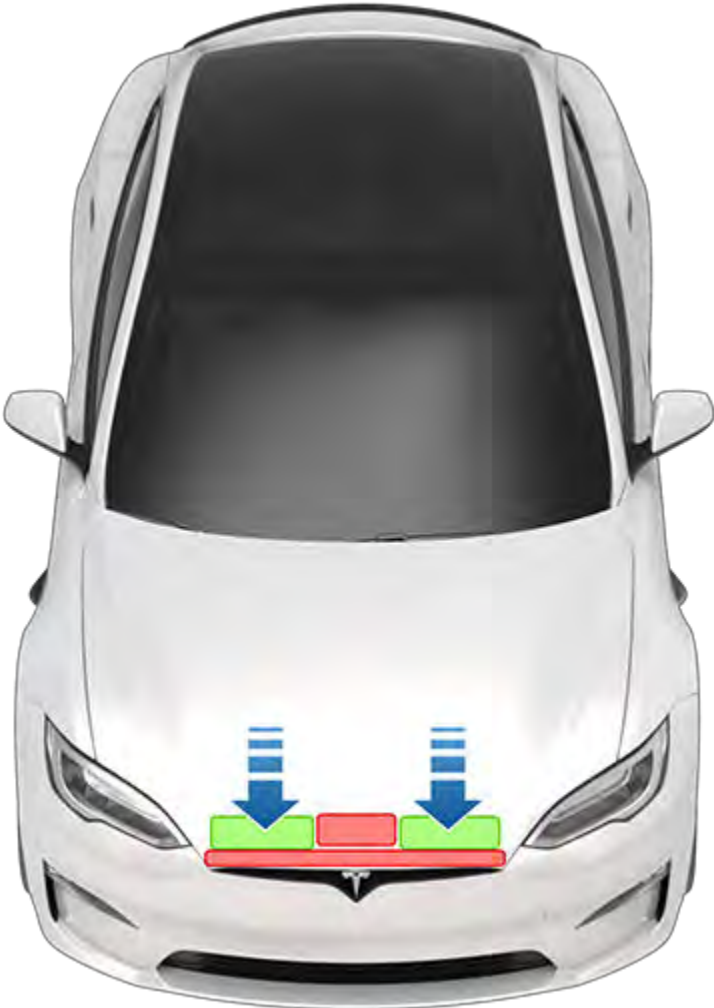
Closing

The CybertruckModel SModel XModel 3Model Y hood is not heavy enough to latch under its own weight and applying pressure on the front edge or center of the hood can cause damage.

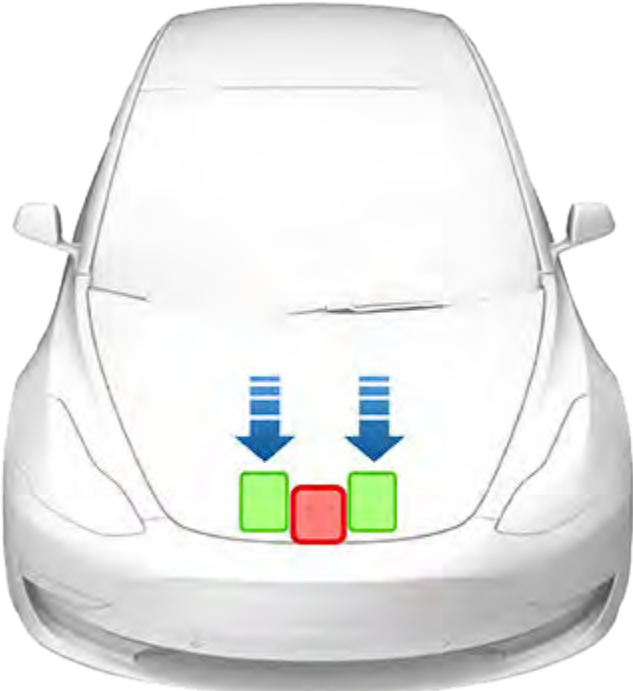
To properly close the hood:

1. Lower the hood until the striker touches the latches.
2. Place both hands on the front of the hood in the areas shown (in green), then press down firmly to engage the latches.
3. Carefully try to lift the front edge of the hood to ensure that it is fully closed.











CAUTION: To prevent damage:

- Apply pressure only to the green areas shown. Applying pressure to the red areas can cause damage.
- Do not close the hood with one hand. Doing so applies concentrated force in one area and can result in a dent or crease.
- Do not apply pressure to the front edge of the hood. Doing so can crease the edge.
- Do not slam or drop the hood.
- To avoid scratches, don't have anything in your hands (keys). Jewelry can also cause scratches.



WARNING: Before driving, you must ensure that the hood is securely latched in the fully closed position by carefully trying to lift the front edge of the hood upward and confirming there is no movement. It is the driver's responsibility to ensure that the front trunk is properly closed before driving.

If a falcon wing door or the front trunk is left open when you attempt to shift out of Park, a notification requiring you to confirm your intent to drive appears on the touchscreen. The falcon wing doors may automatically close once you begin to accelerate. In addition, your vehicle speed is limited if you choose to keep the front trunk open while driving.

If the front trunk is left open when you attempt to shift out of Park, a notification requiring you to confirm your intent to drive appears on the touchscreen. If you choose to keep the front trunk open while driving, your vehicle speed is limited.

The front trunk locks when:

- You lock CybertruckModel SModel XModel 3Model Y using the touchscreen, key or mobile app.
- You leave CybertruckModel SModel XModel 3Model Y carrying your key (if [Walk-Away Door Lock on page 155](#)[Walk-Away Door Lock on page 141](#) is turned on).
- Valet mode is active (see [Valet Mode on page 516](#)).

Front Trunk Load Limit

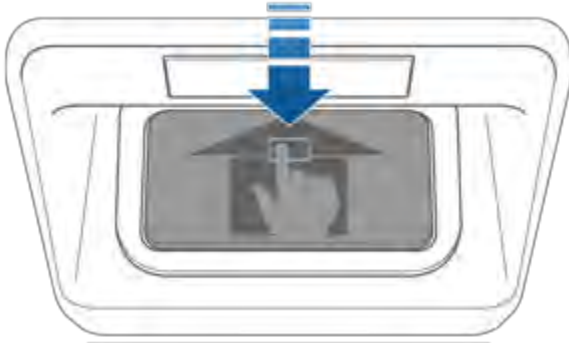
Distribute the weight of cargo as evenly as possible between the front and rear trunks.



- ⚠ CAUTION:** Never load more than 110 lbs (50 kg) in the front trunk. Doing so can cause damage.
- ⚠ CAUTION:** Never load more than 300 lbs (136 kg) in the front trunk. Doing so can cause damage.
- ⚠ WARNING:** When loading cargo, always consider the vehicle's Gross Vehicle Weight Rating (GVWR) (see [Specifications on page 838](#)). The GVWR is the maximum allowable total mass of the vehicle including all passengers, fluids, and cargo.

Interior Emergency Release



An illuminated interior release button inside the front trunk allows a person locked inside to get out.





Press the interior release button to unlatch the front trunk, then push up on the hood.

NOTE: The interior release button glows following a brief exposure to ambient light.

-  **WARNING:** People should never climb inside the front trunk. Never shut the front trunk when a person is inside.
-  **WARNING:** Care should be taken to ensure that objects inside the front trunk do not bump against the release button, causing the hood to accidentally open.



Interior Storage

Center Console

In addition to housing an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), the center console includes cup holders, two storage compartments, various chargers (see [Interior Electronics on page 57](#)), and a rear touchscreen.

To open the main storage compartment, squeeze the latch under the front lip. Open the front storage compartment by sliding its cover forward.



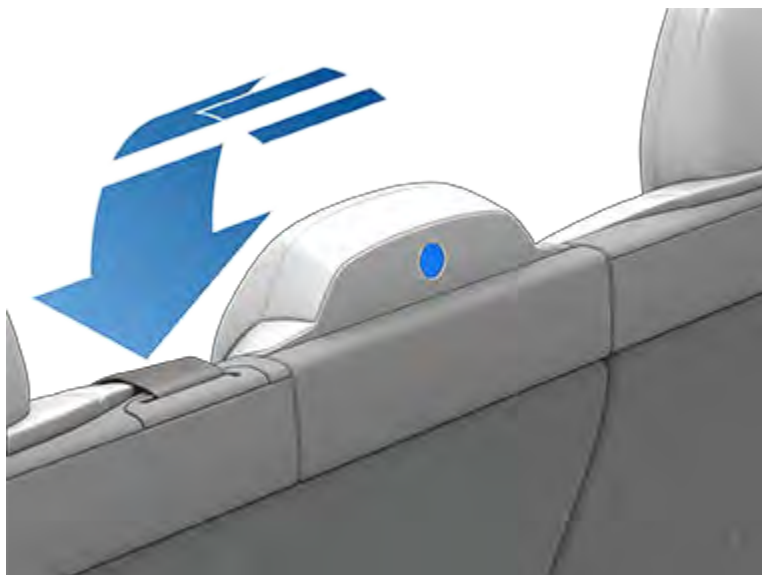


CybertruckModel SModel XModel 3Model Y has two cupholders that slide out under the rear touchscreen.

Rear Console

Your CybertruckModel SModel XModel 3Model Y has a rear console integrated in the center of the second row. This console can serve as an arm rest for rear passengers.

To lower the console, press the button on the top back of the center seat. To raise the console, push it all the way upwards.



To access the storage tray and wireless phone charger (see [Interior Electronics on page 57](#)), raise the cover by pressing the latch on the underside of it and pulling it up.



Rear Console

Your Cybertruck Model S Model X Model 3 Model Y has a rear console integrated in the center of the second row seat back. Pull the console down to access the rear cup holders or use it as an armrest.



NOTE: The rear console is self-locking in certain situations and cannot be lowered. For example, while driving on a steep slope or during hard accelerations.

Glovebox

To open the glovebox, touch **Controls** > **Glovebox**. The glovebox automatically opens and the light turns on.



To close the glovebox, push it upward until it latches into the closed position.

For additional glovebox security, touch **Controls > Safety > Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).

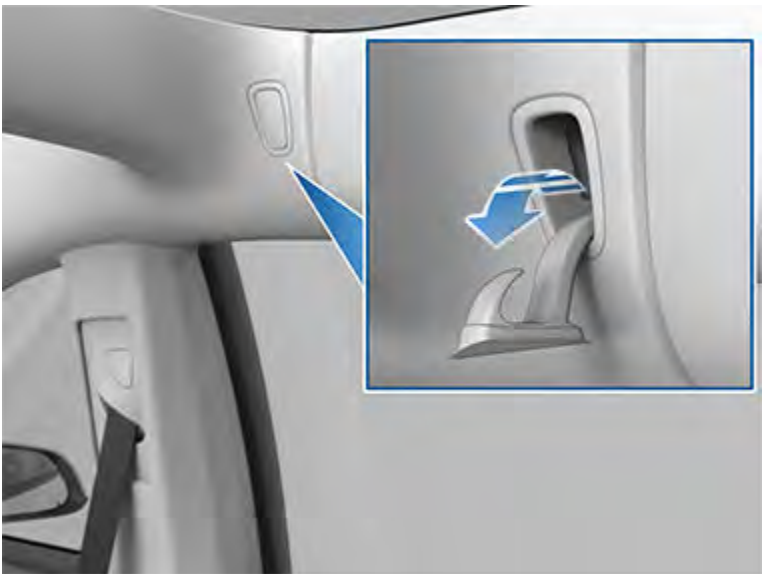
NOTE: If you leave the glovebox open, its light eventually turns off.

NOTE: The glovebox locks whenever closed and you lock CybertruckModel SModel XModel 3Model Y using the mobile app, key card, you leave CybertruckModel SModel XModel 3Model Y carrying your phone key (if Walk-Away Door Lock is turned on), or if Valet mode is active (see [Valet Mode on page 516](#)). It does not lock when CybertruckModel SModel XModel 3Model Y is locked by touching the lock icon on the touchscreen.

⚠ WARNING: When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.

Coat Hangers

Your CybertruckModel SModel XModel 3Model Y has a coat hanger on each side of the vehicle above the rear window in the second row, next to the reading light. Push the coat hanger to release it. Push it again to retract it.



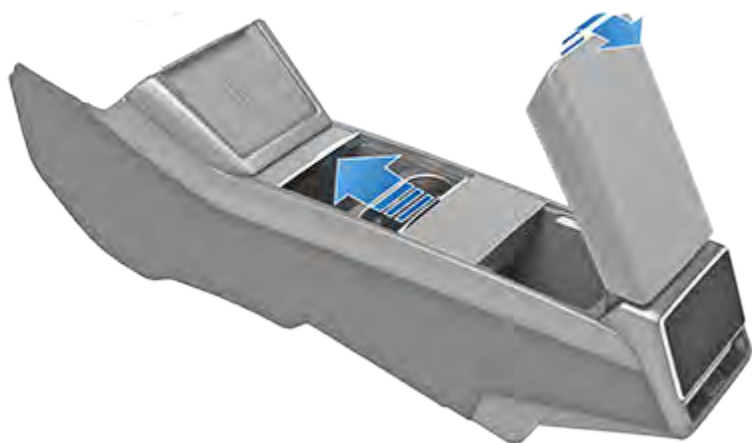


Interior Storage

Center Console

In addition to housing an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), the center console includes cup holders, two storage compartments, various chargers (see [Interior Electronics on page 57](#)), and a rear touchscreen.

To open the main storage compartment, squeeze the latch under the front lip. Open the front storage compartment by sliding its cover forward.



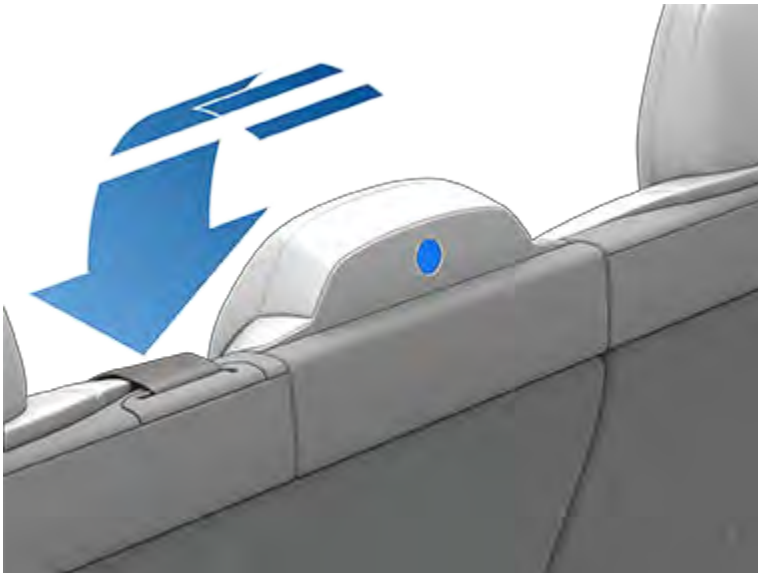


CybertruckModel SModel XModel 3Model Y has two cupholders that slide out under the rear touchscreen.

Rear Console

Your CybertruckModel SModel XModel 3Model Y has a rear console integrated in the center of the second row. This console can serve as an arm rest for rear passengers.

To lower the console, press the button on the top back of the center seat. To raise the console, push it all the way upwards.



To access the storage tray and wireless phone charger (see [Interior Electronics on page 57](#)), raise the cover by pressing the latch on the underside of it and pulling it up.



Rear Console

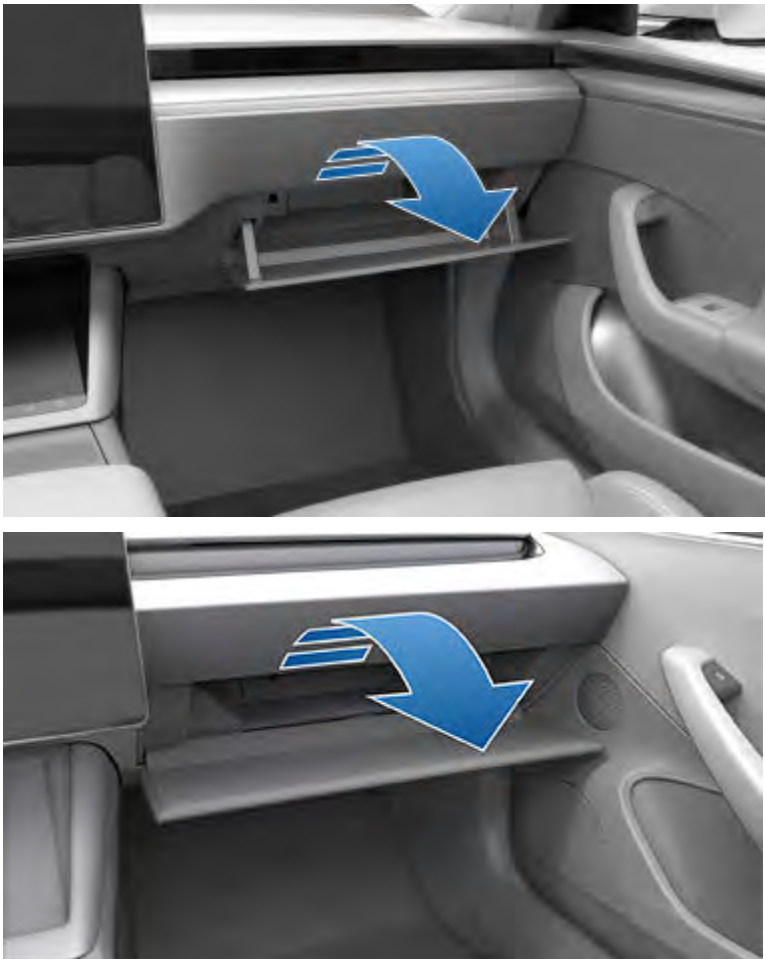
Your CybertruckModel SModel XModel 3Model Y has a rear console integrated in the center of the second row seat back. Pull the console down to access the rear cup holders or use it as an armrest.



NOTE: The rear console is self-locking in certain situations and cannot be lowered. For example, while driving on a steep slope or during hard accelerations.

Glovebox

To open the glovebox, touch **Controls** > **Glovebox**. The glovebox automatically opens and the light turns on.



To close the glovebox, push it upward until it latches into the closed position.

For additional glovebox security, touch **Controls** > **Safety** > **Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).

NOTE: If you leave the glovebox open, its light eventually turns off.

NOTE: The glovebox locks whenever closed and you lock CybertruckModel SModel XModel 3Model Y using the mobile app, key card, you leave CybertruckModel SModel XModel 3Model Y carrying your phone key (if Walk-Away Door Lock is turned on), or if Valet mode is active (see [Valet Mode on page 516](#)). It does not lock when CybertruckModel SModel XModel 3Model Y is locked by touching the lock icon on the touchscreen.

⚠ WARNING: When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.

Coat Hangers

Your CybertruckModel SModel XModel 3Model Y has a coat hanger on each side of the vehicle above the rear window in the second row, next to the reading light. Push the coat hanger to release it. Push it again to retract it.





Interior Storage

Center Console

In addition to housing an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), the center console includes cup holders, two storage compartments, and a phone dock for two phones (or other devices) or a wireless phone charger (depending on date of manufacture) a wireless phone charger (see [Interior Electronics on page 41](#)).

To open the main storage compartment, pull its cover upward. Open the other storage compartment or access the phone dock by pressing firmly near the cover's opening edge. To close a storage compartment, push its cover down gently.



To open the main storage compartment, pull its cover upward. Open the front storage compartment by sliding its cover forward.



Rear Console

Your Cybertruck Model S Model X Model 3 Model Y has a rear console integrated in the center of the second row seat back. Pull the console down to access the rear cup holders, or use it as an armrest.



Third Row Cup Holders (7-seat models only)

If Cybertruck Model S Model X Model 3 Model Y is equipped with seven seats, two cup holders are located between the third row seats.

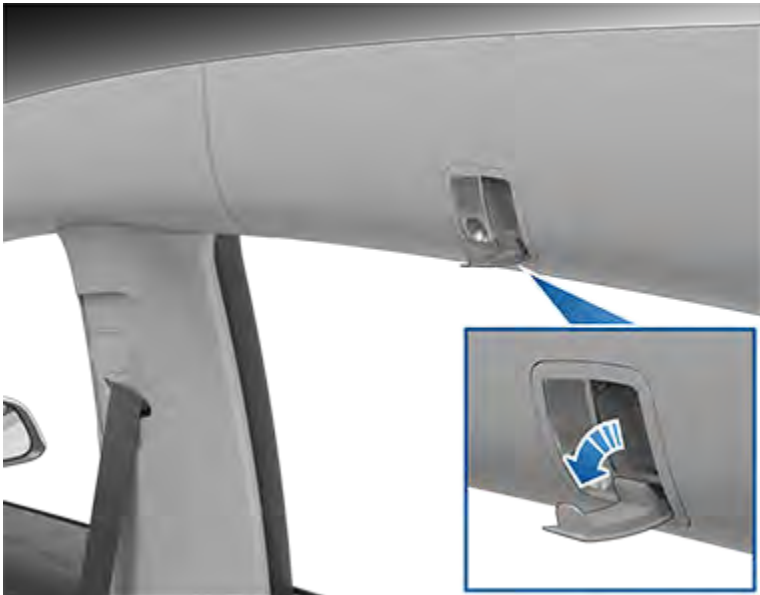


Coat Hangers

Your Cybertruck Model S Model X Model 3 Model Y has a coat hanger on each side of the vehicle in the second row. Push the coat hanger to release it. Push it again to retract it.



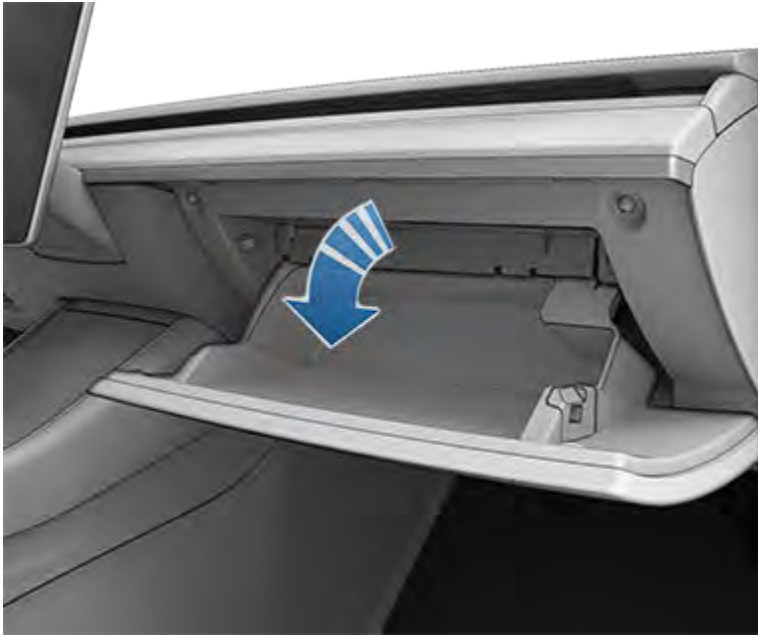
Your Cybertruck Model S Model X Model 3 Model Y has a coat hanger on each side of the vehicle in the second row next to the reading light. Push the coat hanger to release it. Push it again to retract it.



Glovebox

To open the glovebox, touch **Controls** > **Glovebox**. The glovebox automatically opens and its light turns on.





To close the glovebox, push it upward until it clicks into its closed position.

For additional glovebox security, touch **Controls > Safety > Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).

NOTE: If you leave the glovebox open, its light eventually turns off.

NOTE: The glovebox locks whenever closed and you lock CybertruckModel SModel XModel 3Model Y using the mobile app, key card, you leave CybertruckModel SModel XModel 3Model Y carrying your phone key (if Walk-Away Door Lock is turned on), or if Valet mode is active (see [Valet Mode on page 516](#)). It does not lock when CybertruckModel SModel XModel 3Model Y is locked by touching the lock icon on the touchscreen.

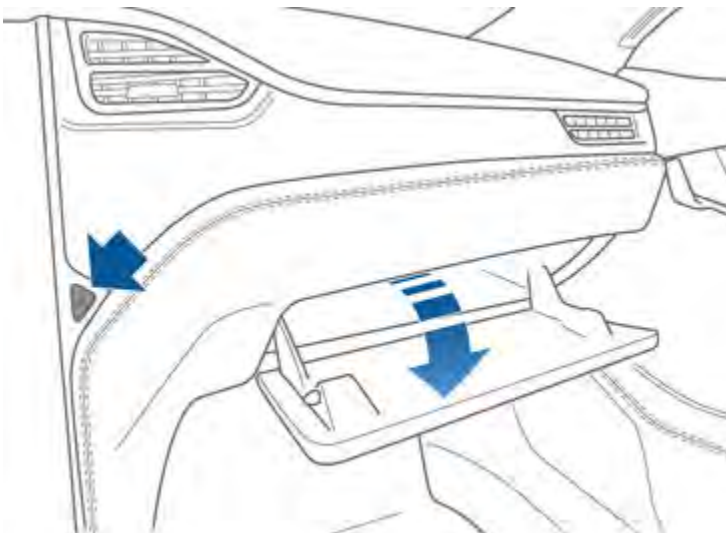


WARNING: When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.

Glovebox


To open the glovebox, press the switch located on the side of the touchscreen. The glovebox locks whenever CybertruckModel SModel XModel 3Model Y is locked externally, using the key or walk-away locking. It also locks when CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)). It does not lock when you lock CybertruckModel SModel XModel 3Model Y using the lock icon on the touchscreen's status bar.

For additional glovebox security, touch **Controls > Safety > Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).





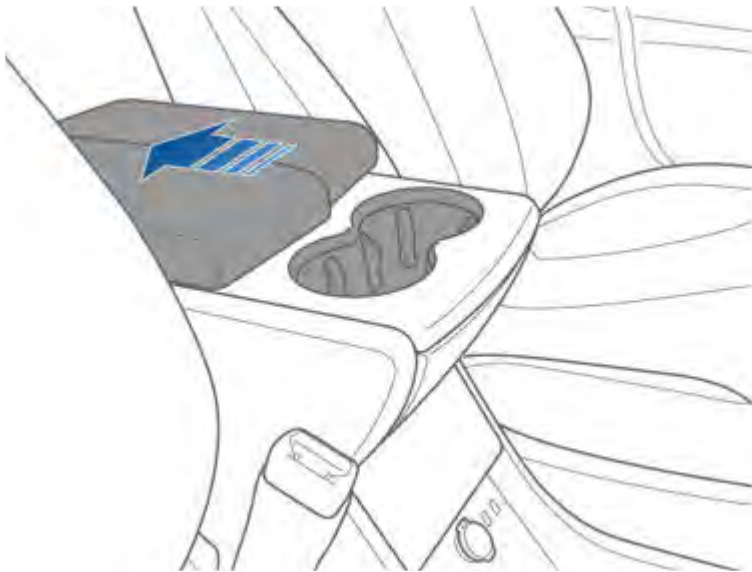
NOTE: If you leave the glovebox open, its light eventually turns off.

 **WARNING:** When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.



Cup Holders

To expose a front cup holder, slide back the armrest.



To expose rear cup holders (if equipped), press and release the cup holder face plate located at the back of the center console.





Interior Storage

Center Console

In addition to housing an RFID transmitter that reads key fobs and key cards (see [Keys on page 109](#)), the center console includes cup holders, two storage compartments, and a phone dock for two phones (or other devices) or a wireless phone charger (depending on date of manufacture) a wireless phone charger (see [Interior Electronics on page 41](#)).

To open the main storage compartment, pull its cover upward. Open the other storage compartment or access the phone dock by pressing firmly near the cover's opening edge. To close a storage compartment, push its cover down gently.

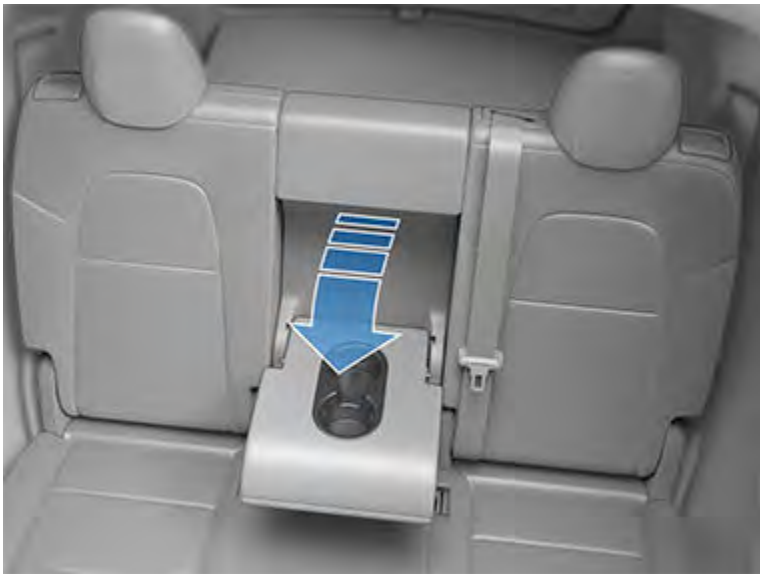


To open the main storage compartment, pull its cover upward. Open the front storage compartment by sliding its cover forward.



Rear Console

Your Cybertruck Model S Model X Model 3 Model Y has a rear console integrated in the center of the second row seat back. Pull the console down to access the rear cup holders, or use it as an armrest.



Third Row Cup Holders (7-seat models only)

If Cybertruck Model S Model X Model 3 Model Y is equipped with seven seats, two cup holders are located between the third row seats.



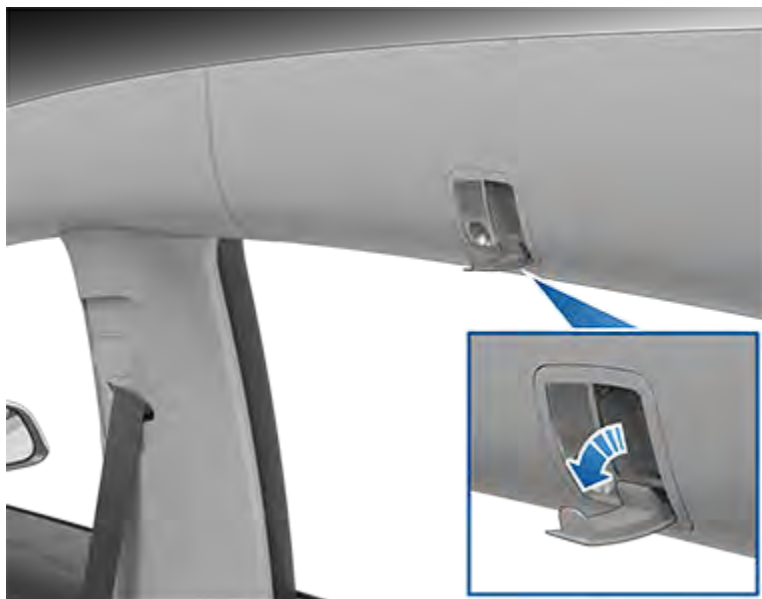


Coat Hangers

Your Cybertruck Model S Model X Model 3 Model Y has a coat hanger on each side of the vehicle in the second row. Push the coat hanger to release it. Push it again to retract it.



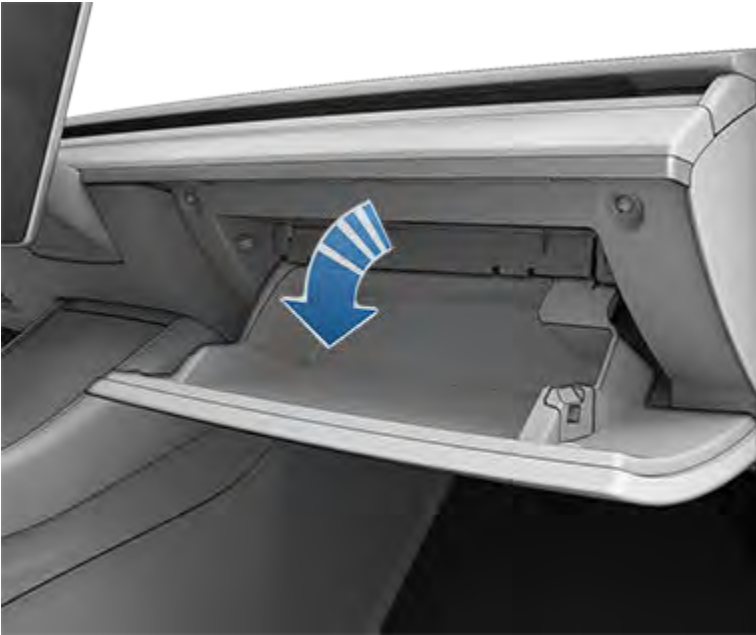
Your Cybertruck Model S Model X Model 3 Model Y has a coat hanger on each side of the vehicle in the second row next to the reading light. Push the coat hanger to release it. Push it again to retract it.



Glovebox

To open the glovebox, touch **Controls** > **Glovebox**. The glovebox automatically opens and its light turns on.





To close the glovebox, push it upward until it clicks into its closed position.

For additional glovebox security, touch **Controls > Safety > Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).

NOTE: If you leave the glovebox open, its light eventually turns off.

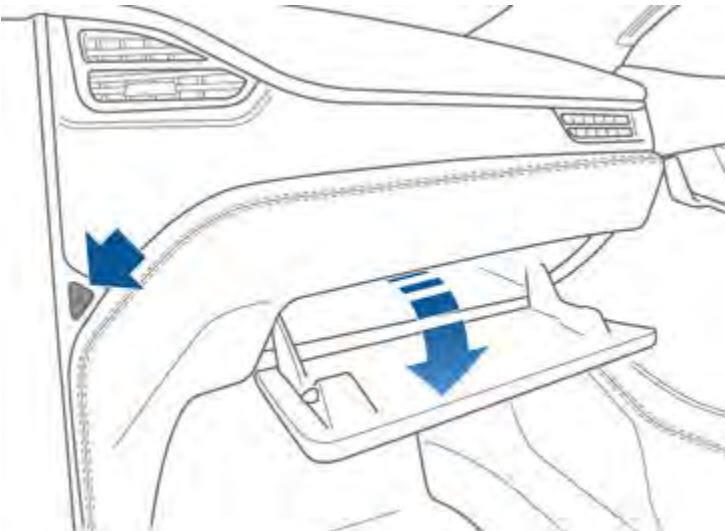
NOTE: The glovebox locks whenever closed and you lock CybertruckModel SModel XModel 3Model Y using the mobile app, key card, you leave CybertruckModel SModel XModel 3Model Y carrying your phone key (if Walk-Away Door Lock is turned on), or if Valet mode is active (see [Valet Mode on page 516](#)). It does not lock when CybertruckModel SModel XModel 3Model Y is locked by touching the lock icon on the touchscreen.

⚠ WARNING: When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.


Glovebox

To open the glovebox, press the switch located on the side of the touchscreen. The glovebox locks whenever CybertruckModel SModel XModel 3Model Y is locked externally, using the key or walk-away locking. It also locks when CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)). It does not lock when you lock CybertruckModel SModel XModel 3Model Y using the lock icon on the touchscreen's status bar.

For additional glovebox security, touch **Controls > Safety > Glovebox PIN** to set a 4-digit PIN (see [Glovebox PIN on page 660](#)).



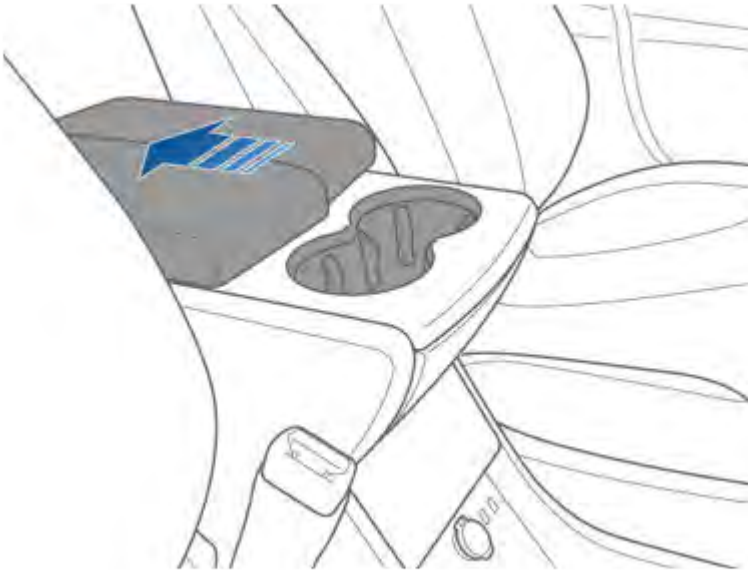
NOTE: If you leave the glovebox open, its light eventually turns off.

 **WARNING:** When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.



Cup Holders

To expose a front cup holder, slide back the armrest.



To expose rear cup holders (if equipped), press and release the cup holder face plate located at the back of the center console.



Seating and Safety Restraints

Front and Rear Seats

Correct Driving Position

The seat, head support, seat belt and airbags work together to maximize your safety. Using these correctly ensures greater protection.





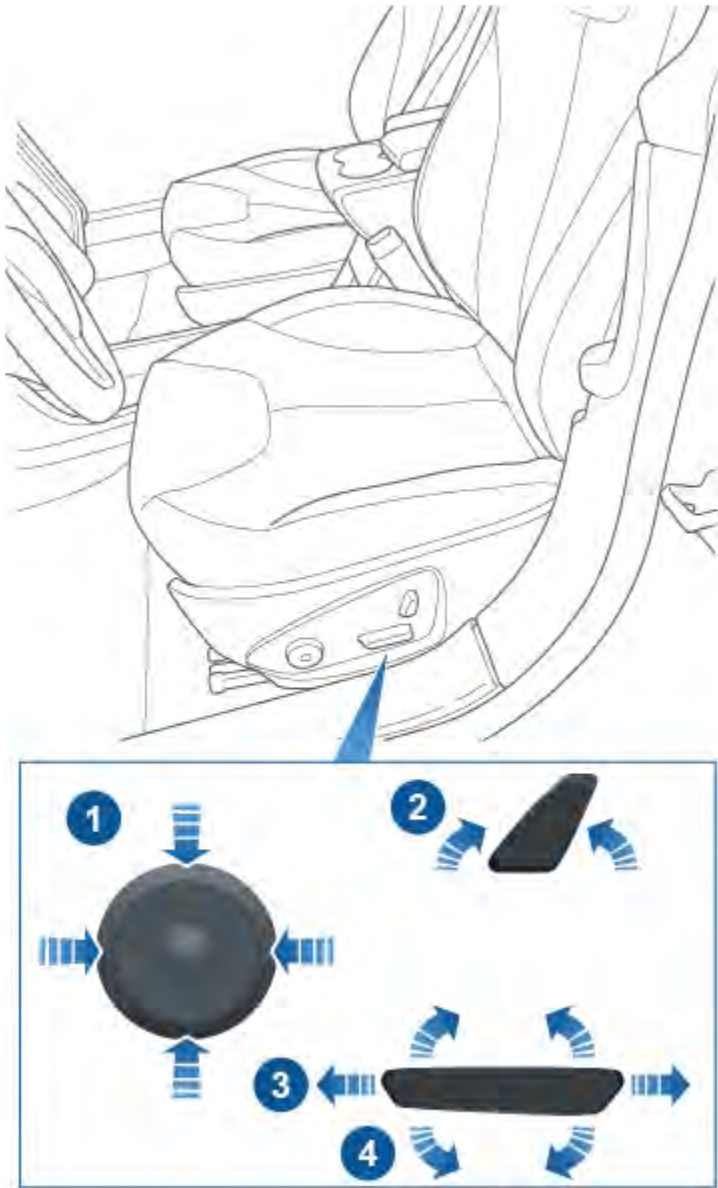
Position the seat so you can wear the seat belt correctly, while being as far away from the front airbag as possible:

1. Sit upright with both feet on the floor and the seat back in an upright position.
2. Make sure you can easily reach the pedals and that your arms are slightly bent when holding the steering wheel. Your chest should be at least 10 inches (25 cm) from the center of the airbag cover.
3. Place the shoulder section of the seat belt mid-way between your neck and your shoulder. Fit the lap section of the belt tightly across your hips, not across your stomach.

CybertruckModel SModel XModel 3Model Y seats include integrated head supports in the front that cannot be adjusted or removed.

CybertruckModel SModel XModel 3Model Y seats include integrated head supports that cannot be adjusted or removed.

Adjusting the Driver's Seat




1. Adjust lumbar support.

NOTE: If your Model S is equipped with adjustable head supports, this button is also used to move the head support up or down. This button is also used to move the head support up or down (see [Head Supports/Restraints on page 237](#)). When you touch this button, the touchscreen displays a popup with an image of the seat. If the lumbar area on the image is not highlighted in blue, touch the lumbar area on the image to specify that you want to adjust lumbar support. The selection you choose is retained until you manually change it.

2. Adjust backrest.

3. Move seat forward/backward.

4. Adjust the seat's height and tilt angle.

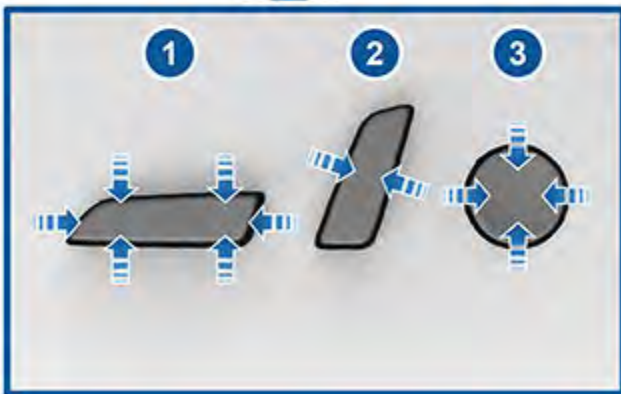
 **WARNING:** Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).

 **WARNING:** Do not adjust seats while driving. Doing so increases the risk of a collision.



WARNING: Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure your seat back is reclined no more than 30 degrees when the vehicle is moving.

Adjusting the Front Seats

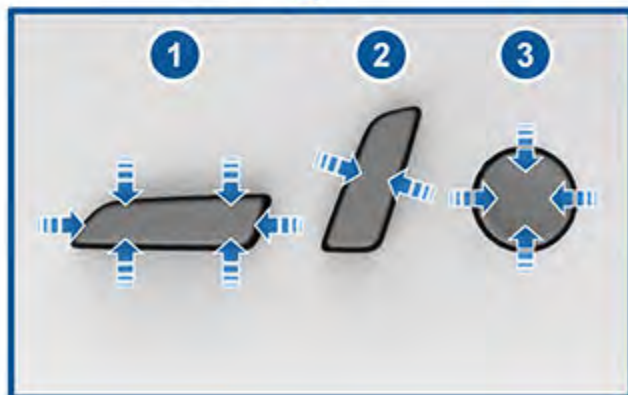


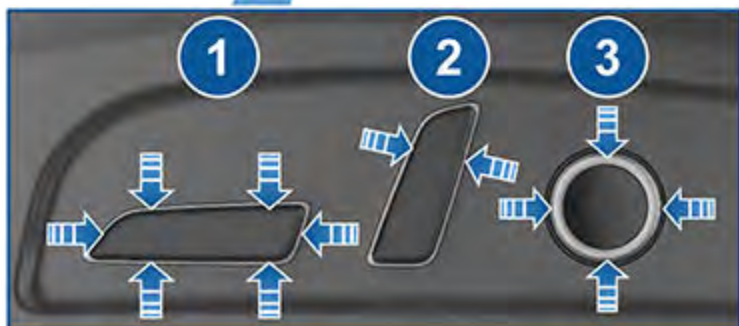
1. Move seat forward/backward and adjust the seat's height and tilt angle up/down.
2. Adjust backrest.
3. Adjust lumbar support.

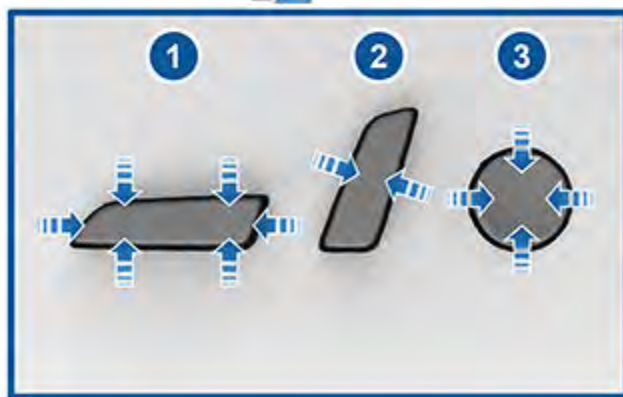


- ⚠ CAUTION:** Do not move a front seat's backrest fully forward when the seat is also in the fully forward position. Doing so can cause the top of the seat to hit, and potentially damage, the sun visor.
- ⚠ WARNING:** Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).
- ⚠ WARNING:** Do not adjust seats while driving. Doing so increases the risk of a collision.
- ⚠ WARNING:** Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure your seat back is reclined no more than 30 degrees when the vehicle is moving.




Adjusting the Front Seats







1. Move seat forward/backward and adjust the seat's height and tilt angle up/down.
2. Adjust backrest.
3. Adjust lumbar support (if equipped).

-  **CAUTION:** Do not move a front seat's backrest fully forward when the seat is also in the fully forward position. Doing so can cause the top of the seat to hit, and potentially damage, the sun visor.
-  **WARNING:** Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).
-  **WARNING:** Do not adjust seats while driving. Doing so increases the risk of a collision.



WARNING: Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure your seat back is reclined no more than 30 degrees when the vehicle is moving.

Calibrating Seats

You can calibrate the driver seat. This is useful if you find your seat range limited or your driver profile does not automatically adjust the seat for you. Navigate to **Controls > Service > Driver Seat, Steering & Mirrors Calibration** and follow the instructions on the touchscreen.

WARNING: Ensure nothing is behind or underneath the driver seat during calibration. Failure to do so may cause serious injury.

Folding Rear Seats

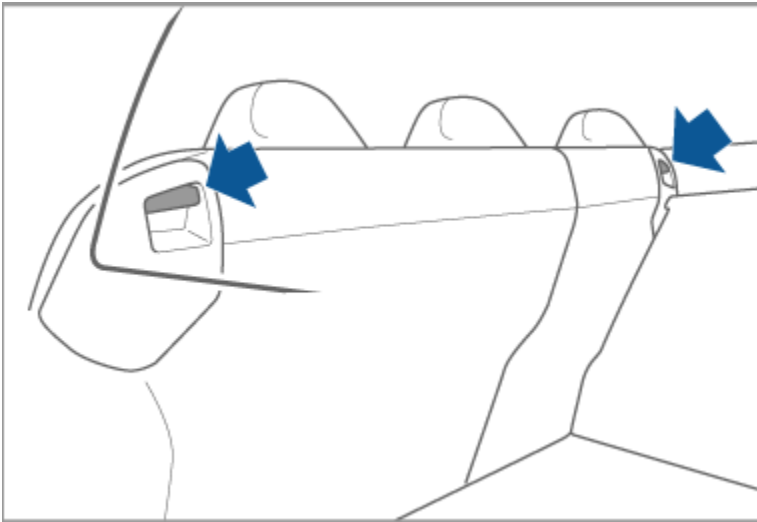
Cybertruck Model S Model X Model 3 Model Y has a split rear seat that can fold forward.

NOTE: If Model S is equipped with the optional executive rear seats, these seats do not fold forward.

NOTE: Driving with the rear seats folded forward can increase the amount of perceived noise and/or vibration coming from the rear of the vehicle (trunk, suspension, etc.).

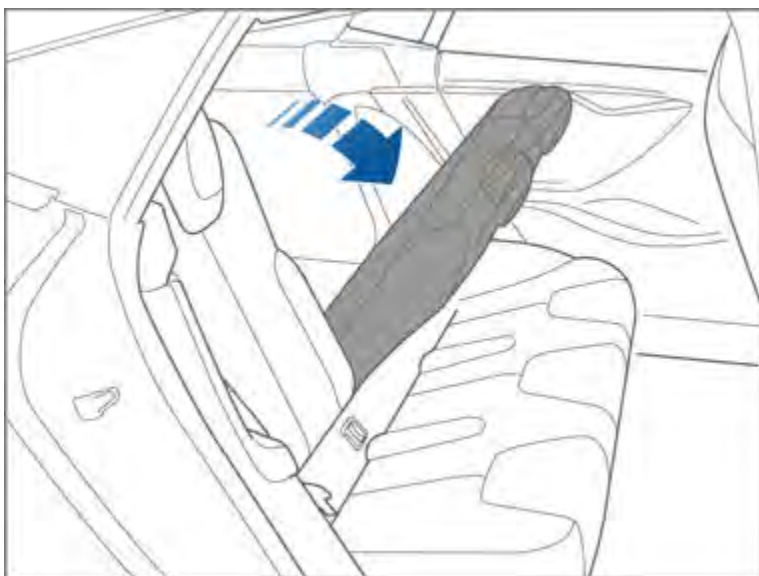
CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

Before folding, remove items from the seats and the rear footwell. To allow the rear seat backs to fold completely flat, you may need to move the front seats forward.





To fold a rear seat, pull the corresponding lever and fold the seat forward.





Adjusting Second Row Seat Backs

Cybertruck Model S Model X Model 3 Model Y provides seating for up to three passengers in the second row. The seat back is split 60/40 so adjusting the left seat back moves the seat backs for both the left and center seating positions, whereas adjusting the right seat back moves only the rightmost seat back.

For vehicles with 5 seats:

Use the adjustment handles on the outside corner of each second row outboard seat back to adjust the corresponding seat back. While pulling and holding the handle, move the seat back to the desired position, and then release the handle. Ensure the seat back is securely latched into position by pushing it forward and rearward.



For vehicles with 7 seats:

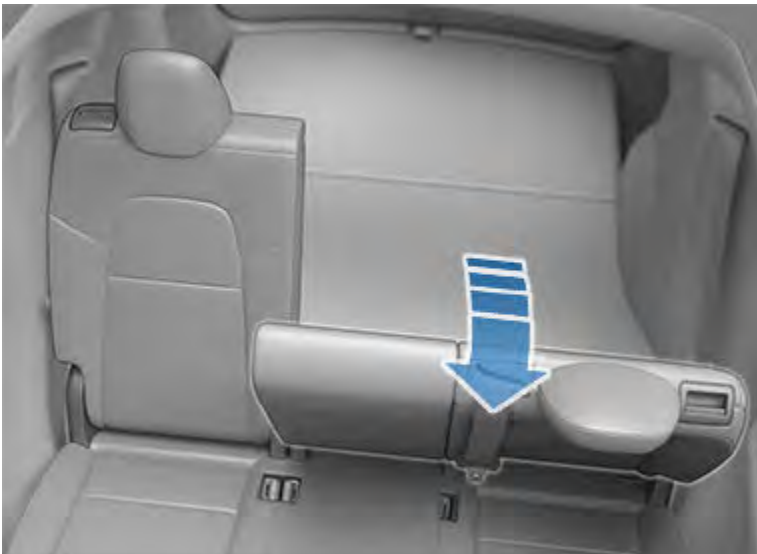


Use the adjustment handles on the side shield of each outboard seating position to adjust the corresponding second row seat backs. While pulling and holding the handle, move the seat back to the desired position, and then release the handle. Ensure the seat back is securely latched into position by pushing it forward and rearward.



Folding Second Row Seat Backs

To maximize cargo space, each second row seat back can be folded fully forward to lay flat. While pulling and holding the handle, push the corresponding seat back fully forward.



NOTE: Before folding seats fully forward, remove any items from the seats and the rear footwell. To allow the seat backs to fold completely flat, you may need to move the front seats forward.

NOTE: Driving with second row seats folded forward may increase perceivable noise and/or vibration coming from the rear of the vehicle (trunk, suspension, etc.).

To allow you to carry long items (such as skis) in the rear of Cybertruck Model S Model X Model 3 Model Y, the center seat back can also be independently folded forward. Pull the handle on the rear of the seat back to unlatch it, then pull it forward.



You can also fold the second row seat backs fully forward by pressing the corresponding switch located on the left side of the rear trunk. Pressing the switch causes the seat back to swing forward. You can then push it downward so it lays fully flat.





WARNING: Before pressing the switch to fold the seat back, you **MUST** keep body parts (hands, fingers, etc.) and objects away from the edges of rear seats. The seat can swing forward with considerable force and cause injury or damage.



To return the seat backs to their upright position, pull it upwards until it locks into place. To confirm that the seat back is locked in the upright position, try pulling it forward.

NOTE: Before raising a second row seat back, make sure that the seat belts are not trapped behind the backrest.

CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

WARNING: Always ensure the seat backs are locked in their upright position by pushing it forward or rearward. Failure to do so increases the risk of injury.

Moving Second Row Seats (7-seater only)

Lift the bar located beneath each outboard seating position to unlock and move the second row seats forward or rearward. The bench seats have a 60/40 split. Therefore, the bar on the left side moves the seat for the left and center seats, whereas the bar on the right side moves only the rightmost seat. Pull up and hold the bar while moving the seat forward or rearward. Release the lever when the seat is at the desired location. Push the seat rearward and forward to ensure the seat(s) are locked into position.



Raising Rear Seats

Before raising a rear seat, make sure that the seat belts are not trapped behind the backrest.

Pull the seat back upward until it locks into place.

To confirm that the seat back is locked in the upright position, try pulling it forward.

⚠ WARNING: Always ensure the seat backs are locked in their upright position by pushing it forward or rearward. Failure to do so increases the risk of injury.

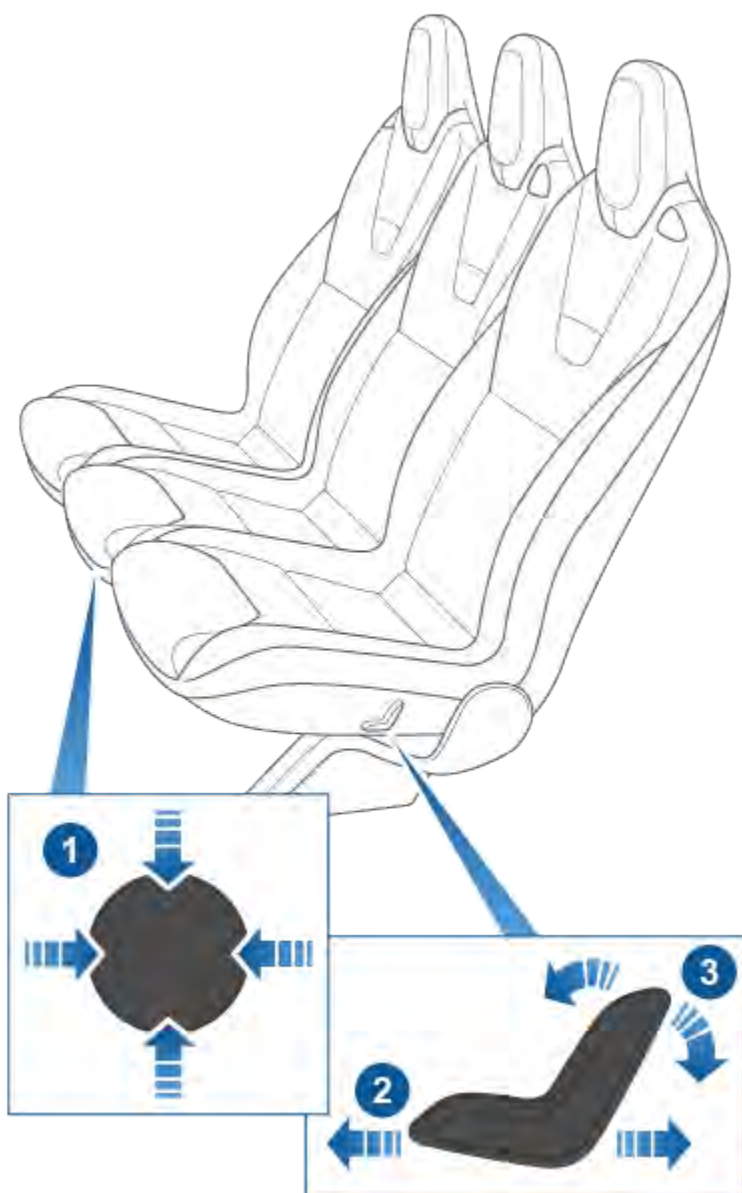
Adjusting Second Row Monopost Seats

A Model X equipped with monopost seats can accommodate two or three passengers in the second row, depending on the option chosen at time of purchase. There are two ways to adjust the position of these seats:

- Touch **Controls > Seats** on the touchscreen. Press and hold the icon associated with the seat you want to adjust. White icons indicate that the seat can be moved in that direction; gray icons indicate that the seat cannot be moved any farther in that direction.

NOTE: The front seats may move forward slightly to accommodate the forward movement of the second row seats.

- Use the manual adjustments illustrated below. In addition to moving a seat forward/rearward, the manual seat adjustments allow you to adjust the backrest. Although the control on the outboard seats is L-shaped, and the control on the middle seat is circular, they both provide the same functions.



1. Move seat forward/backward (up/down on the control) and adjust the backrest (left/right on the control).
2. Move seat forward/backward.
3. Adjust backrest.

NOTE: The backrest locks into position when you release the lever. If a backrest is not locked into position when a driving gear is engaged, the instrument panel displays an alert for the unlocked backrest. Adjust the backrest again, ensuring it locks into position.

⚠ WARNING: Before driving, ensure the seat is locked in position. You may need to pull the seat forward or backward until it clicks into place.

Adjusting Second Row Seat Backs (Bench Seats)

If your Model X is equipped with two seating rows, the second row bench seats can accommodate up to three passengers. Use the mechanical adjustment lever located at the side of each outboard seating position to adjust the seat backs. A bench seat is split 60/40 so the adjustment lever on the left side moves the seat backs for both the left and center seats, whereas the lever on the right side moves the rightmost seat back only. While pulling and holding the lever, move the seat back to the desired position, and then release the lever. When returning a seat back to its upright position, try moving it forward or back to ensure it is securely latched into position.



WARNING: Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure the backs of occupied seats are reclined no more than 30 degrees when the vehicle is moving.

Folding Second Row Seat Backs (Bench Seats)

The second row seat backs on bench seats can be folded fully forward so they lay flat and maximize cargo space. Pull up the mechanical lever located on the side of each outboard seat (the same lever you use to recline the seats, as described above), then push the seat back fully forward. The bench seats have a 60/40 split—therefore, the adjustment lever on the left side folds the seat backs for both the left and center seats, whereas the lever on the right folds the rightmost seat back only.

NOTE: Before folding seats fully forward, remove any items from the seats and the rear footwell. To allow the seat backs to fold completely flat, you may need to move the front seats forward.

CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

Moving Second Row Bench Seats

NOTE: Only bench seats in seven-seat vehicles can be moved forward and rearward. The bench seats in five-seat vehicles are stationary.

Use the mechanical lever located beneath each outboard seating position to move the second row seats forward or rearward. The bench seats have a 60/40 split—therefore, the lever on the left side moves the seat for the left and center seats, whereas the lever on the right side moves only the rightmost seat. Pull and hold the lever while moving the seat forward or rearward. Release the lever when the seat is at the desired location.



NOTE: You can adjust the position of bench seats using the mechanical levers only. You cannot use the touchscreen to adjust bench seats.

Accessing Third Row Seats (if equipped) - Monopost Seating

A button is located on the backrest of each outboard monopost seat in the second row. This button makes it easy for passengers to enter and exit the third row seating positions. Touch **Controls > Seats > Easy Entry** and choose how you want this button to work:

- **ON** - Allows you to tilt and move the associated outboard seat fully forward, and the center seat partially forward, with a **single-press** of the button.
- **OFF** - When off, which is recommended if a child seat is installed in the second row, you must **hold** the button to move the second row seats forward.

After using the third row ingress button to access third row seats, simply press the button again to return the seats to their normal position.



⚠ WARNING: For vehicles with third row seats, do not use the third row ingress button located on the backrest of a second row outboard seat when a child is seated in the second row. Using the button tilts and moves the seats forward and can squeeze the occupant. Do not rely on Model X to recognize or accommodate occupants seated in the vehicle while using this button. Use this button only when the second row seats are unoccupied.

Guidelines for using the third row ingress button:

- If a front row seat is positioned such that the second row seat will collide with it during an easy entry operation, it automatically moves forward just enough to accommodate the forward position of the second row monopost seat.
- Forward movement of second row monopost seats cancels if an occupant adjusts a second row seat while it is moving.
- When an outboard seat tilts forward after pressing the button, its backrest resets to the forward position and may need to be re-adjusted for comfort.

⚠ WARNING: Use the third row ingress button to access the third row **ONLY** when the second row seats are unoccupied. Do not rely on Model X to recognize or accommodate occupants seated in the vehicle while using the button.

⚠ WARNING: Always ensure that the seat is locked in position before traveling. Failure to do so increases the risk of injury.

Accessing Third Row Seats (if equipped) - Bench Seating

A button is located on the backrest of each outboard bench seat in the second row. This button makes it easy for passengers to enter and exit the third row seating positions. Press and release the button on the left outboard seat to tilt and move the combined left and center seats forward. Press and release the button on the right outboard seat to tilt and move the right seat forward.



⚠ WARNING: For vehicles with third row seats, do not use the third row ingress button located on the backrest of a second row outboard bench seat when a child is seated in the second row. Using the button allows the combined left and center seats to be moved forward and can squeeze the occupant. Use this button only when the second row seats are unoccupied. Before driving, ensure the seat and the seat back are securely latched into position.

In some situations, such as when you are parked on an incline or when the seat's trim affects the movement of the bench seats after you press the button, the bench seats might not move forward completely, and you may need to push the seats forward gently until they reach the end of the track.

⚠ WARNING: After you use the third row ingress button to access the third row seats, push the bench seats back to their seating position, ensuring the seats are securely latched into position by trying to move them forward and rearward. Failure to do so increases the risk of injury.

⚠ WARNING: The seat must be fully latched into position before driving. Push or pull the seat until you hear the seat "click" into place.

Folding and Raising Third Row Seat Backs (if equipped)

To fold a third row seat, press the button located in the top outside corner of the seat. The button has two detents.





1. Fold head restraint forward.
2. Fold seat back forward.

To raise the seats, hold the button on the top outside corner of the seat then pull the seat back upward until it latches into place. Try pulling the seat back forward to confirm that it is locked in the upright position.

NOTE: Before folding third row seat backs, remove any items from the seats and the footwell. To allow the seat backs to fold completely flat, you may need to move the second row seats forward.

NOTE: Driving with the third row seats backs folded forward might result in increased perceivable noise and/or vibration coming from the rear of the vehicle (trunk, suspension, etc.).

⚠ CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

⚠ WARNING: Always ensure the seats and seat backs are locked in their upright position before travel. Failure to do so increases the risk of injury.

Accessing Third Row Seats (7-seater only)

A third row ingress button is located on the backrest of each second row outside seat. This button makes it easy for passengers to access the third row seating positions. To access a third row seat:

1. Press the button on the associated second row backrest.
NOTE: If you press the button and do not move the seats, the seats relock.
2. Push the second row backrest forward. The seat then releases and pitches upward.
3. Push the seat fully forward.



To relock the seats, first push the seat rearward. You will hear the seat tracks lock. Then push the seat downward to engage the rear latches onto the floor strikes. You will hear the latches lock. If the seat does not latch onto the floor, the touchscreen displays a warning indicating that the seat is not properly locked into position.



- ⚠ WARNING:** Do not use the button when a child is seated in a seat that will move. Using the button moves the combined left and center seats forward and can squeeze the occupant. Use this button only when the second row seat is unoccupied. Before driving, ensure the seat and the seat back are securely latched into position.
- ⚠ WARNING:** Do not use a second row seating position when the seat is not securely latched into position,
- ⚠ WARNING:** After using the button to access the third row, push the second row seat backs into their upright position, ensuring that the seat backs are securely latched and "clicked" into position by trying to move them forward and rearward. Failure to do so increases the risk of injury.
- ⚠ WARNING:** Keep the area on the underside of the second row seats free of debris to ensure reliable locking of the floor latches.
- ⚠ WARNING:** If an occupant is seated in the the third row when pushing down on the second row seat to engage the floor latches, ensure that the occupant's feet are not located under the second row seat.

Folding Third Row Seat Backs (7-seater only)

To fold a third row seat, first ensure that the head support is fully down as shown (see [Head Supports on page 240](#)). Then press the button located in the top corner of the seat back and fold the backrest downward.



NOTE: To return the seat backs to the upright position, pull the seat back upward until it latches into place. Try pulling the backrest forward to confirm that it is securely latched in the upright position.

NOTE: Before folding the seat backs, remove any items from the seats and the footwell. To allow the backrests to fold completely flat, you may need to move the second row seats forward.

NOTE: Driving with the third row backrests folded forward may result in increased perceivable noise and/or vibration coming from the rear of the vehicle (trunk, suspension, etc.).



CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

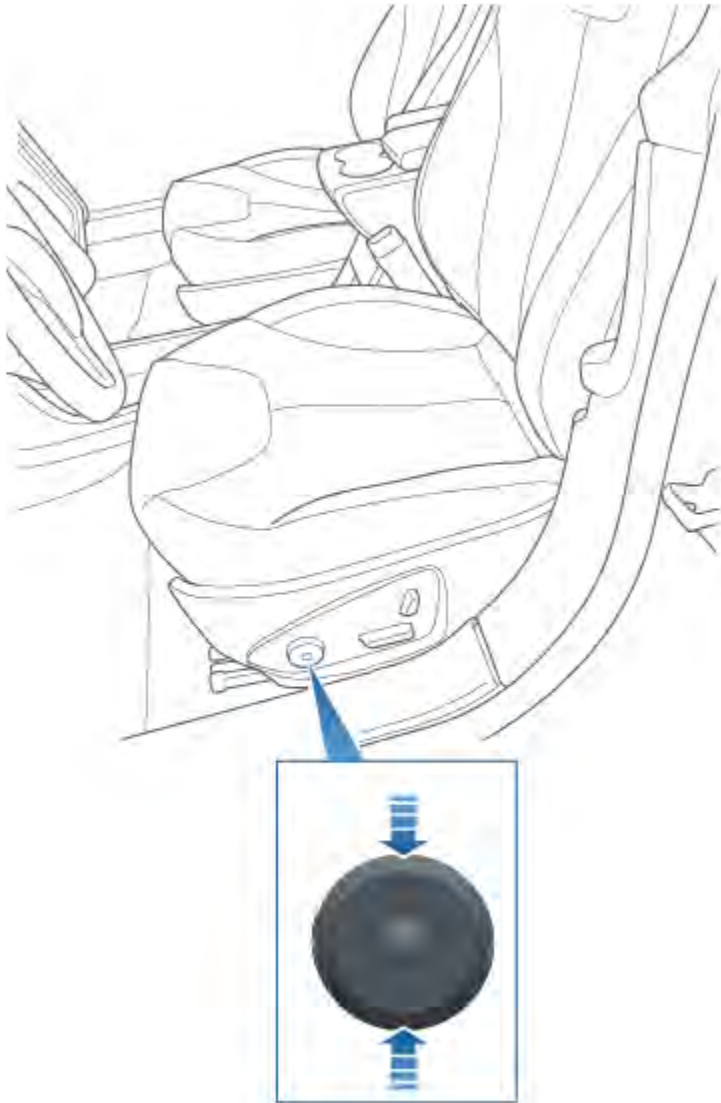


WARNING: Always ensure the seat backrests are locked in their upright position before travel. Failure to do so increases the risk of injury.

Head Supports/Restraints

If your Model S is equipped with adjustable head supports, use the round button on the seat to move the head support up/down. Use the round button on the seat to move the head support up/down. The same button is used to adjust the seat's lumbar support (see [Adjusting the Driver's Seat on page 217](#)). Therefore, when you touch this button, the touchscreen displays a popup with an image of the seat. If the head support shown on the image is not highlighted in blue, touch this area on the image to specify that you want to adjust the head support. The selection you choose is saved until you manually change it. You can save the head support setting to your driver profile (see [Driver Profiles on page 514](#)).

NOTE: Head supports are not adjustable on early versions of Model S.



The second and third row seats have integrated non-removable head supports that cannot be adjusted. However, the head supports in the third row seats can be folded down (see [Folding and Raising Third Row Seat Backs \(if equipped\) on page 234](#)).

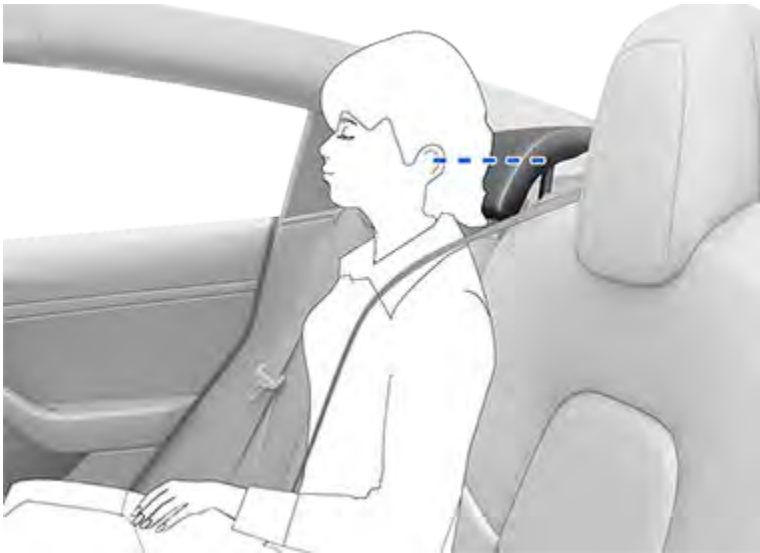
Head Supports

The front and second row seats include integrated head supports that are not adjustable.

Head Supports

The front seats and the second row outboard seats include integrated head supports that are not adjustable.

The rear center seat includes an adjustable head support that can be raised, lowered, or removed. When occupied by a passenger that is not seated in a child safety seat, the head support should always be lifted and locked into position (so that the center is aligned with the center of the occupant's head).



- ⚠ WARNING:** To minimize the risk of severe injury or death in the event of a collision, ensure that head support is positioned correctly before sitting in, or operating, Cybertruck Model S Model X Model 3 Model Y. Always lift and lock the head support in position before sitting in the rear center seat.
- ⚠ WARNING:** When installing a seat belt retained child safety seat in the center seating position in the second row, you must lower the associated head support (described next).

Raising/Lowering the Rear Center Head Support

To raise the head support, lift it until you hear it click into place. Push down on the head support to ensure that it is secure.

To lower the head support, press and hold the button on the outer base of the right post and press the head support down.



Removing/Installing a Head Support

To remove the head support:

1. Raise the head support as described above.
2. Press and hold the button on the outer base of the right post.



3. Insert a short, flat object (such as a small flat-head screwdriver) into the opening on the inside base of the left post and pull the head support upward.



To re-install the head support:

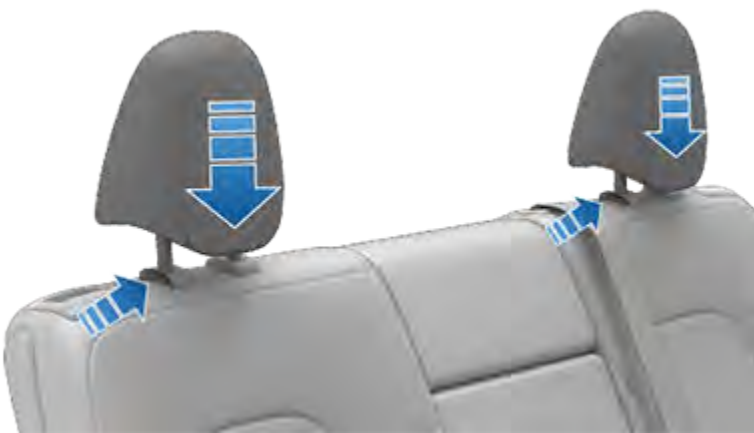
1. With the front of the head support facing forward, insert both posts into the corresponding holes on the seat back.
2. Press down on the head support until it clicks into place.
3. Pull up on the head support to ensure that it is secure.

⚠ WARNING: Ensure that the head support is correctly installed before seating an occupant. Failure to do so increases the risk of injury or death if a collision occurs.

Head Supports

The front seats include integrated head supports that you can not adjust.

The second row outboard seats include an adjustable head support that you can raise, lower, or remove. When either of these seats is occupied by a passenger that is not in a child safety seat, the corresponding head support should be adjusted (align the center of the head support with the center of the occupant's head) and locked into position. To raise a head support on a second row outboard seat, pull it upward to the desired position. To lower it, press and hold the button on the base of the outer post while pushing it downward.



The second row center seat, and both third row seats (if equipped), are equipped with the option to raise a head support. Initially stowed into the seat's back rest, you can access the head support by pulling it upward.

⚠ WARNING: When installing a child safety seat in a second row seating position, or in the third row (if equipped), you must lower the head support. The headrest must be raised and locked in place when sitting in the rear middle seat.

To stow the head support in the second row center seat, press and hold the button on the base of the post while pushing the head support fully downward.



To lower a head support in the third row, press and hold the button on the base of the post while pushing the head support fully downward.



⚠ WARNING: To minimize the risk of severe injury or death in the event of a collision, ensure that head supports are positioned correctly before driving.

Removing/Installing a Head Support

All head supports in the second and third row (if equipped) seating positions can be removed. To remove a head support:

1. Fully raise the head support by pulling it upward.
2. Press and hold the button located at the base of one of the posts.
3. Insert a short, flat object (such as a small flat-head screwdriver) into the opening in the base of the opposite post and pull the head support upward.



To re-install the head support:

1. With the front of the head support facing forward, insert both posts into the corresponding holes on the seat back.
2. Press downward on the head support until it clicks into place.
3. Pull upward on the head support to ensure that it is secure.

⚠ WARNING: Ensure that the head support is correctly installed before seating an occupant. Failure to do so increases the risk of injury or death if a collision occurs.

Seat Heaters

The front and rear and second row seats operate at three levels from 3 (highest) to 1 (lowest). To operate the seat heaters, see [Operating Climate Controls on page 669](#).

If Cybertruck Model S Model X Model 3 Model Y is equipped with the cold weather package, you can also control seat heaters in all rear seating positions, as well as wiper defrosters and washer nozzles by touching the climate controls on the touchscreen.

⚠ WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.

Seat Covers

⚠ WARNING: Do not use seat covers on a front seat or a seat equipped with a seat-mounted airbag (see [Location of Airbags on page 320](#)). Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. Also, if the vehicle is equipped with an occupant detection system that is used to determine the status of the passenger front airbag, seat covers may interfere with this system.

Front and Rear Seats

Correct Driving Position

The seat, head support, seat belt and airbags work together to maximize your safety. Using these correctly ensures greater protection.



Position the seat so you can wear the seat belt correctly, while being as far away from the front airbag as possible:

1. Sit upright with both feet on the floor and the seat back in an upright position.
2. Make sure you can easily reach the pedals and that your arms are slightly bent when holding the steering wheel/steering yoke (or steering wheel). Your chest should be at least 10 inches (25 cm) from the center of the airbag cover.
3. Place the shoulder section of the seat belt mid-way between your neck and your shoulder. Fit the lap section of the belt tightly across your hips, not across your stomach.

Cybertruck Model S Model X Model 3 Model Y front seats include integrated head supports that cannot be adjusted or removed.



Adjusting the Front Seats



1. Move seat forward/backward and adjust the seat's height and tilt angle up/down.
2. Adjust backrest.
3. Adjust lumbar support.

- WARNING:** Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).
- WARNING:** Do not adjust seats while driving. Doing so increases the risk of a collision.
- WARNING:** Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure your seat back is reclined no more than 30 degrees when the vehicle is moving.

Calibrating Seats

(If equipped) You can calibrate the driver seat. This is useful if you find your seat range limited or your driver profile does not automatically adjust the seat for you. Navigate to **Controls > Service > Driver Seat, Steering & Mirrors Calibration** and follow the instructions on the touchscreen.

- WARNING:** Ensure nothing is behind or underneath the driver seat during calibration. Failure to do so may cause serious injury.

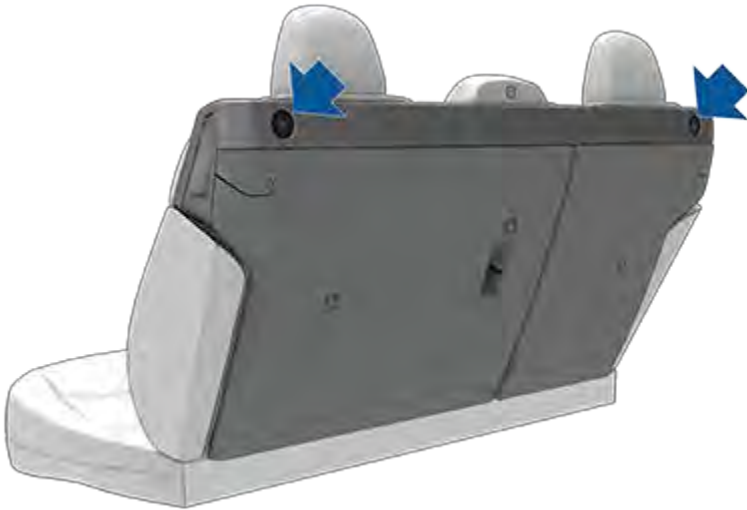


Folding Rear Seats

Cybertruck Model S Model X Model 3 Model Y has a split rear seat that can fold forward.

NOTE: If Model S is equipped with the optional executive rear seats, these seats do not fold forward.

Before folding, remove items from the seats and the rear footwell. To allow the rear seats to fold completely flat, you may need to move the front seats forward. To fold a rear seat, push the corresponding button on the back of the seat.






You can also fold the rear seats fully forward by pressing the corresponding switch located on the left side of the rear trunk. Pressing the switch causes the seat to unlatch. You can then push it downward to lay it fully flat.



To return the seats to their upright position, pull upwards until it locks into place. To confirm that the seat is locked in the upright position, try pulling it forward.

NOTE: Driving with the rear seats folded may increase noise in the cabin area (for example, you may hear vibration sounds coming from the rear of the vehicle such as the trunk, suspension, etc.).

-  **CAUTION:** Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.
-  **CAUTION:** While raising a rear seat back, hold the seat belt out of the way to ensure that the seat belt is not trapped behind the backrest or caught in the seat latch.
-  **WARNING:** Always ensure that the seats are locked in their upright position by attempting to push it forward or rearward, ensuring the latch is fully engaged. Failure to do so can increase the risk of injury.

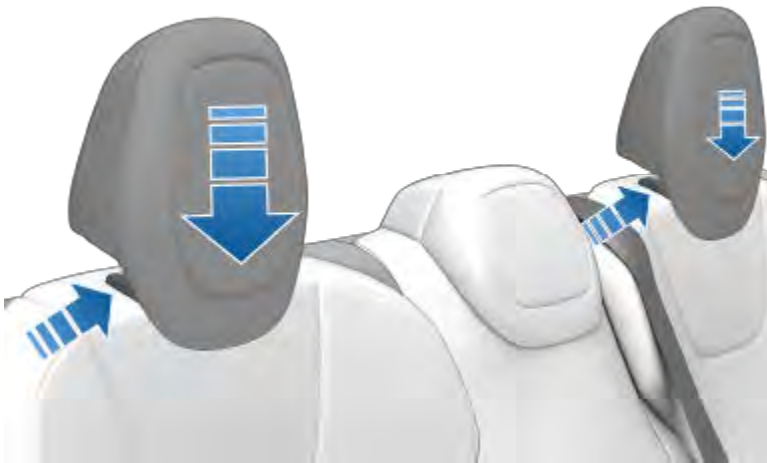


Head Supports

The front seats include integrated head supports that you cannot adjust.

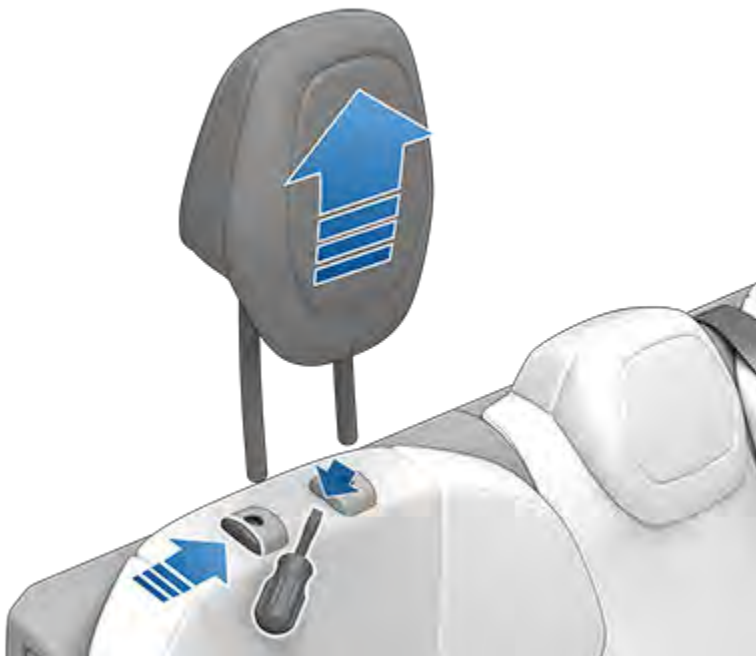
The rear outboard seating positions include an adjustable head support that can be raised/lowered or removed. The head support should always be raised and locked into position (so that the center is aligned with the center of the occupant's head) when occupied by a passenger that is not in a child safety seat.

Lift the head support to the desired position. To lower the head support, press and hold the button on the base of the outer post while pushing down on the head support.



To remove a head support:

1. Lift the headrest to raise it.
2. Press and hold the button located at the base of the right post.
3. Insert a short, flat object (such as a small flat-head screwdriver) into the opening on the inside base of the opposite post and pull the head support upward.





Seat Heaters

All seats contain heating pads. In addition, both front seats are ventilated. You can control seat heaters in all seating positions using the touchscreen.

WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.

Seat Covers

WARNING: Do not use seat covers on front seats. Doing so could restrict deployment of the seat-mounted side air bags if a collision occurs. Seat covers can also interfere with the occupant detection system that is used to determine the status of the passenger front airbag.

Front and Rear Seats

Correct Driving Position

The seat, head support, seat belt and airbags work together to maximize your safety. Using these correctly ensures greater protection.



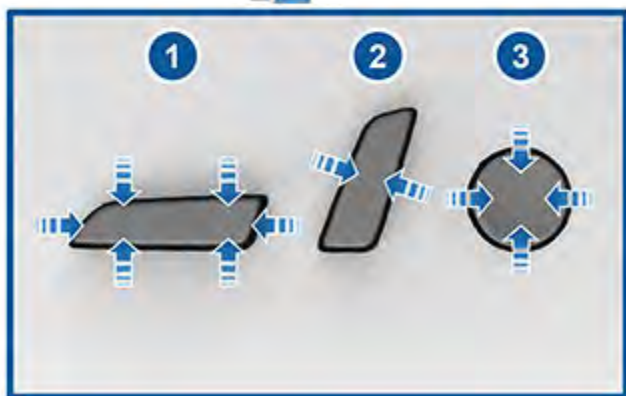
Position the seat so you can wear the seat belt correctly, while being as far away from the front airbag as possible:

1. Sit upright with both feet on the floor and the seat back in an upright position.
2. Make sure you can easily reach the pedals and that your arms are slightly bent when holding the steering wheel/steering yoke (or steering wheel). Your chest should be at least 10 inches (25 cm) from the center of the airbag cover.
3. Place the shoulder section of the seat belt mid-way between your neck and your shoulder. Fit the lap section of the belt tightly across your hips, not across your stomach.

Cybertruck Model S Model X Model 3 Model Y seats include integrated head supports that cannot be adjusted or removed.



Adjusting Front Seats



1. Move seat forward/backward and adjust the seat's height and tilt angle up/down.
2. Adjust backrest.
3. Adjust lumbar support.

⚠ WARNING: Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).

⚠ WARNING: Do not adjust seats while driving. Doing so increases the risk of a collision.



WARNING: Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure your seat back is reclined no more than 30 degrees when the vehicle is moving.

Calibrating Seats

(If equipped) You can calibrate the driver seat. This is useful if you find your seat range limited or your driver profile does not automatically adjust the seat for you. Navigate to **Controls > Service > Driver Seat, Steering & Mirrors Calibration** and follow the instructions on the touchscreen.

WARNING: Ensure nothing is behind or underneath the driver seat during calibration. Failure to do so may cause serious injury.

Adjusting Second Row Seats (Bench)

Second row bench seats can accommodate up to three passengers. Use the mechanical adjustment lever located at the side of each outboard seating position to adjust the seat backs. A bench seat is split 60/40 so the adjustment lever on the left side moves the seat backs for both the left and center seats, whereas the lever on the right side moves the rightmost seat back only. While pulling and holding the lever, move the seat back to the desired position, and then release the lever. When returning a seat back to its upright position, try moving it forward or back to ensure it is securely latched into position.



WARNING: Riding in a moving vehicle with the seat back reclined can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure the backs of occupied seats are reclined no more than 30 degrees when the vehicle is moving.

Folding Second Row Seats (Bench)

The second row seat backs on bench seats can be folded fully forward so they lay flat and maximize cargo space. Pull up the mechanical lever located on the side of each outboard seat (the same lever you use to recline the seats, as described previously), then push the seat back fully forward. The bench seats have a 60/40 split—therefore, the adjustment lever on the left side folds the seat backs for both the left and center seats, whereas the lever on the right folds the rightmost seat back only.



NOTE: Before folding seats fully forward, remove any items from the seats and the rear footwell. To allow the seat backs to fold completely flat, you may need to move the front seats forward.

⚠ CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

Moving Second Row Seats (Bench)

NOTE: Only bench seats in seven-seat vehicles can be moved forward and rearward. The bench seats in five-seat vehicles are stationary.

Use the mechanical lever located beneath each outboard seating position to move the second row seats forward or rearward. The bench seats have a 60/40 split—therefore, the lever on the left side moves the seat for the left and center seats, whereas the lever on the right side moves only the rightmost seat. Pull and hold the lever while moving the seat forward or rearward. Release the lever when the seat is at the desired location. Ensure the lever is locked in place before driving.



NOTE: You can adjust the position of bench seats using the mechanical levers only. You cannot use the touchscreen to adjust bench seats.

Adjusting Second Row Seats (Monopost)

A Model X equipped with monopost seats can accommodate two passengers in the second row. To adjust the position of these seats, use the manual adjustments.



Use the button near the top of the seat to move the seat back forward/backward.

Use the L-shaped button at the bottom of the seat to move the seat forward/backward (up/down on the control) and adjust the backrest by tilting the top of the L-shaped button forward/backward.

NOTE: The backrest locks into position when you release the lever. If a backrest is not locked into position when a drive mode is engaged, the instrument panel displays an alert for the unlocked backrest. Adjust the backrest again, ensuring it locks into position.

⚠ WARNING: Before driving, ensure the seat is locked in position. You may need to pull the seat forward or backward until it clicks into place.

Accessing Third Row Seats (if equipped)

Bench Seats

If your vehicle is equipped with bench seats, a button is located on the backrest of each second row outboard bench seat. This third row ingress button makes it easy for passengers to enter and exit the third row seating positions. Press and release the button on the left outboard seat to tilt and move the combined left and center seats forward. Press and release the button on the right outboard seat to tilt and move the right seat forward.



⚠ WARNING: For vehicles with third row seats, do not use the third row ingress button located on the backrest of a second row outboard bench seat when a child is seated in the second row. Using the button allows the combined left and center seats to be moved forward and can squeeze the occupant. Use this button only when the second row seats are unoccupied. Before driving, ensure the seat and the seat back are securely latched into position.



In some situations, such as when you are parked on an incline or when the seat's trim affects the movement of the bench seats after you press the button, the bench seats might not move forward completely, and you may need to push the seats forward gently until they reach the end of the track.

WARNING: After you use the third row ingress button to access the third row seats, push the bench seats back to their seating position, ensuring the seats are securely latched into position by trying to move them forward and rearward. The seat must be fully latched into position before driving. Push or pull the seat until you hear the seat "click" into place. Failure to do so increases the risk of injury.

Monopost Seats

If your vehicle is equipped with monopost seats, a third row ingress button is located on the backrest of each outboard monopost seat in the second row. This button makes it easy for passengers to enter and exit the third row seating positions. Touch **Controls > Safety > Third Row Easy Entry** and choose how you want this button to work:

- **ON** - Allows you to tilt and move the associated outboard seat fully forward, and the center seat partially forward, with a **single-press** of the button.
- **OFF** - When off, which is recommended if a child seat is installed in the second row, you must **hold** the button to move the second row seats.



After using the button to access third row seats, simply press the button again to return the second row seats to their normal position.

WARNING: Do not use the third row ingress button located on the backrest of a second row outboard seat when a child or occupant is seated in the second row. Use this button **ONLY** when second row seats are unoccupied. Using the button tilts and moves the seats forward and can squeeze an occupant. Do not rely on Model X to recognize or accommodate seated occupants while using this button.

Guidelines for using the third row ingress button:

- If a front seat is positioned such that the second row seat will collide with it during an easy entry operation, it automatically moves forward enough to accommodate the forward position of the second row monopost seat.
- When an outboard seat tilts forward after pressing the button, its backrest resets to the forward position and may need to be re-adjusted for comfort.
- Forward movement of the second row monopost seats cancels if an occupant adjusts a second row seat while it is moving.

WARNING: Always ensure that the seat is locked in position before traveling. Failure to do so increases the risk of injury.



Folding Third Row Seats (if equipped)

To fold a third row seat, press the button located in the top outside corner of the seat. The button has two detents.



1. Fold head restraint forward.
2. Fold seat back forward.

NOTE: Before folding third row seat backs, remove any items from the seats and the footwell. To allow the seat backs to fold completely flat, you may need to move the second row seats forward.

NOTE: Driving with the third row seat backs folded forward may result in increased perceivable noise and/or vibration coming from the rear of the vehicle (trunk, suspension, etc.).

NOTE: To raise the seats, hold the button on the top outside corner of the seat, then pull the seat back upward until it latches into the upright position. Try pulling the seat back forward to confirm that it is locked in position.

CAUTION: Before folding seats all the way down, ensure the seat belt is unbuckled and there are no objects remaining on the seat.

WARNING: Always ensure the seats and seat backs are locked in their upright position before travel. Failure to do so increases the risk of injury.

Seat Heaters

All seats contain heating pads. In addition, both front seats are ventilated. You can control seat heaters in all seating positions using the climate controls on the touchscreen.

WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.

Seat Covers

WARNING: Do not use seat covers on a seat equipped with a seat-mounted air bag (see [Location of Airbags on page 320](#)). Doing so could restrict deployment of the seat-mounted side air bags if a collision occurs. Also, if the vehicle is equipped with an occupant detection system that is used to determine the status of the passenger front airbag, seat covers may interfere with this system.



Seat Belts

Wearing Seat Belts

Using seat belts and child safety seats is the most effective way to protect occupants if a collision occurs. Therefore, wearing a seat belt is required by law in most jurisdictions.

All seats are equipped with three-point inertia reel seat belts. Inertia reel belts are automatically tensioned to allow occupants to move comfortably during normal driving conditions. To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) feature that, by fully extracting the seat belt (beyond the length needed for a typical adult occupant), locks the belt into place until the seat belt is unbuckled (see [Installing Seat Belt Retained Child Seats on page 262](#)[Installing Seat Belt Retained Child Seats on page 273](#)). To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) feature that, by fully extracting the seat belt (beyond the length needed for a typical adult occupant), locks the belt into place until the seat belt is unbuckled (see [Installing Seat Belt Retained Child Seats on page 307](#)[Installing Seat Belt Retained Child Seats on page 299](#)[Installing Seat Belt Retained Child Seats on page 283](#)).

The seat belt reel automatically tightens or locks to prevent movement of occupants if Cybertruck Model S Model X Model 3 Model Y experiences a force associated with hard acceleration, braking, cornering, or an impact in a collision.

Seat Belt Reminders



The seat belt reminder on the instrument panel on the touchscreen alerts you if a seat belt for an occupied driver or passenger seat is unbuckled. If all occupants are buckled up and the reminder stays on, re-buckle seat belts to ensure they are correctly latched. Also remove any heavy objects (such as a briefcase) from an unoccupied seat. If the reminder light continues to stay on, contact Tesla.

You can temporarily disable a seat belt reminder associated with a rear seating position. This is useful when you are carrying an object in a rear seat that triggers the seat belt reminder alert. To disable the reminder, touch the associated seat on the seat belt reminder popup message that displays on the touchscreen when a seat belt reminder is active. When a reminder is disabled, the seat belt reminder icon is replaced by a seat icon, for the current drive only. Touch the seat again to re-enable the reminder.



WARNING: Do not disable a seat belt reminder when the seating position is occupied by a passenger.



WARNING: Seat belts must be worn by passengers in all seating positions.

NOTE: In regions where regulations require seat belt reminders in rear seating positions, these reminders cannot be disabled. To cancel the reminder in an unoccupied seat when an object is detected, you must either fasten the seat belt or remove the object.

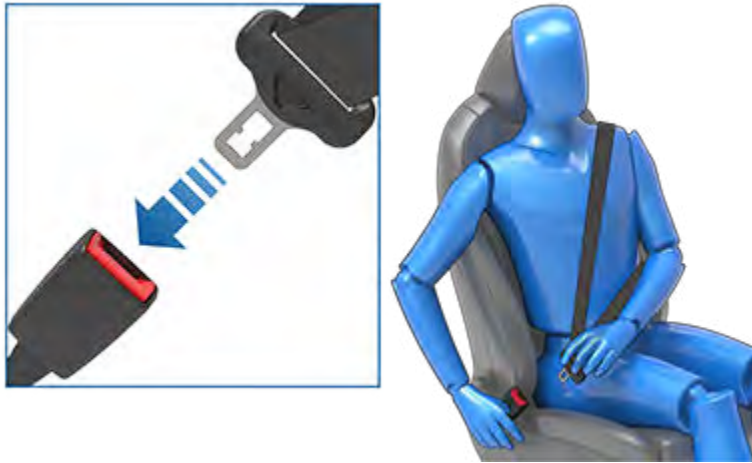
To Fasten a Belt

1. Ensure correct positioning of the seat. See (see [Correct Driving Position on page 214](#)) (see [Correct Driving Position on page 242](#)) (see [Correct Driving Position on page 247](#)) for details on the correct position of the driver's seat.
2. Draw the belt out smoothly, ensuring the belt lays flat across the pelvis, chest and mid-point of your collar bone, between the neck and shoulder. Ensure the belt is routed correctly and is not twisted. Never sit on the seat belt or any seat belt component.



WARNING: A twisted or incorrectly routed seat belt can cause damage and interfere with the functionality of the seat belt system.

3. Insert the latch plate into the buckle and press together until you hear a click indicating it is locked in place.



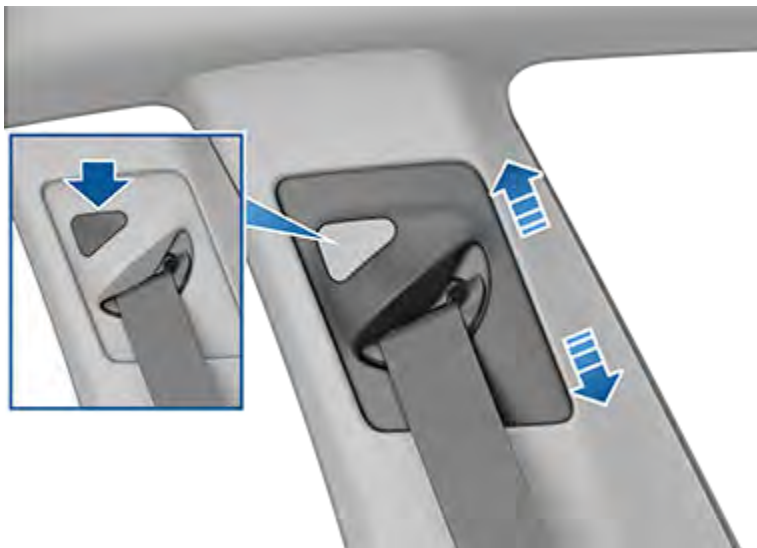
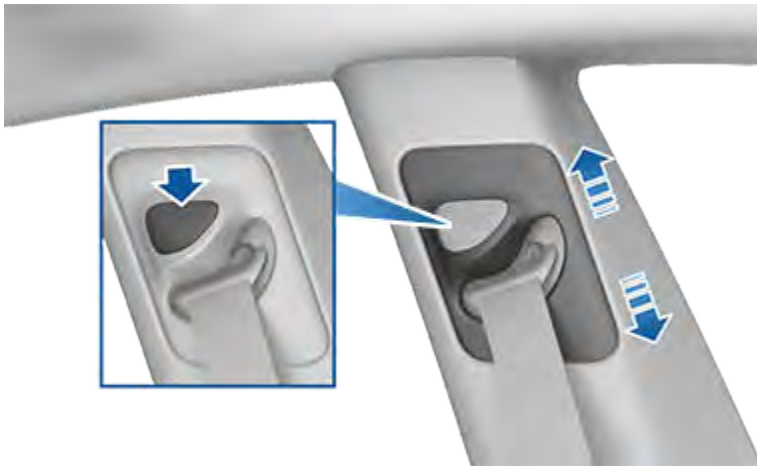
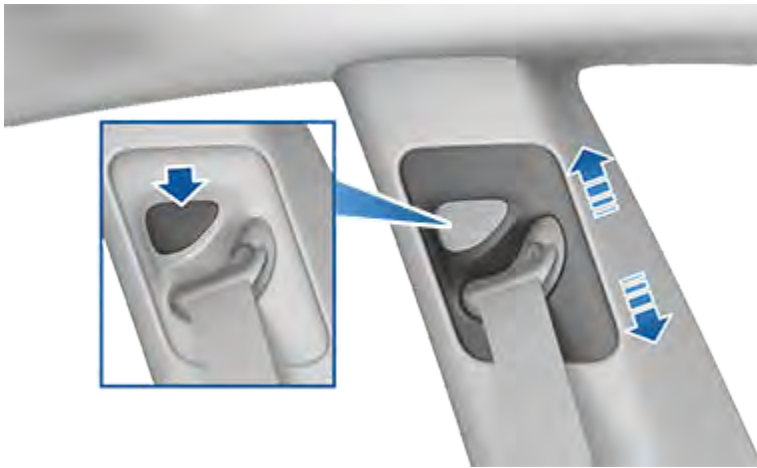
4. Pull the belt to check that it is securely fastened.
5. Pull the diagonal part of the belt toward the reel to remove excess slack.

To Adjust the Shoulder Anchor Height

Cybertruck Model S Model X Model 3 Model Y is equipped with an adjustable shoulder anchor for each front seat to ensure that the seat belt is positioned correctly. The seat belt should lay flat across the mid-point of your collar bone while in the correct driving position (see [Correct Driving Position on page 214](#)) (see [Correct Driving Position on page 242](#)) (see [Correct Driving Position on page 247](#)). Adjust the height of the shoulder anchor if the seat belt is not positioned correctly:

1. Press and hold the button on the shoulder anchor to release the locking mechanism.
2. While holding the button, move the shoulder anchor up or down, as necessary, to correctly position the seat belt.





3. Release the button on the shoulder anchor so that it locks into position.
4. Without pressing the button, pull on the seat belt webbing and attempt to move the shoulder anchor downward to check that it is locked into position.

⚠ WARNING: Ensure that the seat belt is positioned correctly and that the shoulder anchor is locked into position before driving. Riding in a moving vehicle with the seat belt positioned incorrectly or with the shoulder anchor not locked into position can reduce the effectiveness of the seat belt in a collision.



To Release a Belt

Hold the belt near the buckle to prevent the belt from retracting too quickly, then press the button on the buckle. The belt retracts automatically. Ensure there is no obstruction that prevents the belt from fully retracting. The belt should not hang loose. If a seat belt does not fully retract, contact Tesla.

Wearing Seat Belts When Pregnant

Do not put the lap or shoulder sections of the seat belt over the abdominal area. Wear the lap section of the belt as low as possible across the hips, not the waist. Position the shoulder portion of the belt between the breasts and to the side of the abdomen. Consult your doctor for specific guidance.



- WARNING:** If the seat belt is uncomfortable, adjust the seating position instead of wearing the seat belt incorrectly.
- WARNING:** Never place anything between you and the seat belt to cushion the impact in the event of a collision.

Seat Belt Pre-tensioners

The front seat belts are equipped with pre-tensioners that work in conjunction with the airbags in a collision. The pre-tensioners automatically retract both the seat belt lower anchor and the upper shoulder webbing, reducing slack in both the lap and diagonal portions of the belts, resulting in reduced forward movement of the occupant.



If the pre-tensioners and airbags did not activate in an impact, this does not mean they malfunctioned. It usually means that the strength or type of force needed to activate them was not present.

The rearsecond row outboard seats are equipped with shoulder pre-tensioners to retract the seat belt webbing to reduce forward movement of the occupant.

- ⚠ WARNING:** Do not bend, sit on, or interfere with the pre-tensioner assembly. Doing so can cause damage that interferes with the proper functionality of the seat belt system.
- ⚠ WARNING:** Once the seat belt pre-tensioners have been activated, they must be replaced. After any collision, have the airbags, seat belt pre-tensioners and any associated components checked and, if necessary, replaced.

Testing Seat Belts

To confirm that seat belts are operating correctly, perform these checks on each seat belt.

1. With the seat belt fastened, give the webbing nearest the buckle a quick and forceful pull. The buckle should remain securely locked.
2. With the seat belt fastened, give the webbing closest to the door a quick and forceful pull. The permanent seat belt attachment should remain securely locked. Never attempt to remove this attachment.
3. With the belt unfastened, unreel the webbing to its limit. Check that unreeling is free from snags, and visually check the webbing for wear. Allow the webbing to retract, checking that retraction is smooth and complete.
4. With the webbing half unreeled, hold the tongue plate and pull forward quickly. The mechanism should lock automatically and prevent further unreeling.














If a seat belt fails any of these tests, repair immediately. Do not allow occupants to sit in a seat with a failed seat belt.

For information about cleaning seat belts, see [Seat Belts on page 781](#).

Seat Belt Warnings

- ⚠ WARNING:** Seat belts should be worn by all occupants at all times, even if driving for a very short distance. Failure to do so increases the risk of injury or death if a collision occurs.
- ⚠ WARNING:** Secure small children in a suitable child safety seat as described in the Owner's Manual. Always follow the child safety seat manufacturer's instructions when installing.





-  **WARNING:** Ensure that all seat belts are worn correctly. An improperly worn seat belt increases the risk of injury or death if a collision occurs.
-  **WARNING:** Never sit on top of any seat belt component. Doing so can cause damage or improper deployment of safety equipment.
-  **WARNING:** Do not wear seat belts over hard, fragile or sharp items in clothing, such as pens, keys, eyeglasses, etc. The pressure from the seat belt on such items can cause injury.
-  **WARNING:** Seat belts should not be worn with any part of the strap twisted.
-  **WARNING:** Each seat belt assembly must be used by one occupant only. It is dangerous to put a seat belt around a child being carried on an occupant's lap.
-  **WARNING:** Seat belts that have been worn in a collision must be inspected or replaced by Tesla, even if damage to the assembly is not obvious.
-  **WARNING:** Seat belts that show signs of wear, or have been cut or damaged in any way must be replaced immediately.
-  **WARNING:** Avoid contaminating a seat belt's components with any chemicals, liquids, grit, dirt or cleaning products. If a seat belt fails to retract or latch into the buckle, it must be replaced immediately. Use the mobile app to schedule a service appointment.
-  **WARNING:** Do not make modifications or additions that can prevent a seat belt mechanism from taking up slack, or that can prevent a seat belt from being adjusted to remove slack. A seat belt with slack greatly reduces occupant protection.
-  **WARNING:** Do not make modifications that can interfere with the operation of a seat belt, or that can cause a seat belt to become inoperable.
-  **WARNING:** Do not use after market comfort and convenience products that attach to the seat belts.
-  **WARNING:** When seat belts are not in use, they should be fully retracted and not hanging loose. If a seat belt does not fully retract, schedule a service appointment.
-  **WARNING:** The seat belt system has no user serviceable parts and may contain pyrotechnics. Do not disassemble, remove, or replace components.

Child Safety Seats

Guidelines for Seating Children

Your CybertruckModel SModel XModel 3Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in the second row seats only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

-  **WARNING:** Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur. See [Airbags on page 331](#).
-  **WARNING:** Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in the second row. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on CybertruckModel SModel XModel 3Model Y to recognize or accommodate a child seated in the second row while using this setting (see [Driver Profiles on page 514](#)).

Refer to the label located on the sun visors.

NOTE: The image shown below is representative only and may not be identical to the label(s) in your vehicle.



CybertruckModel SModel XModel 3Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag (see [Airbags on page 331](#)).



When driving with a child seat on the front passenger seat, always double-check the status of the passenger front airbag to confirm that it is OFF.



To protect an adult subsequently occupying the front passenger seat, check to verify that the passenger front airbag is ON.

WARNING: It is the driver's responsibility to confirm that the passenger front airbag is OFF when a child is seated in the front passenger seat. If the passenger front airbag fails to disable with a child seat in position, place the child and child restraint system in the rear seat and use the mobile app to schedule service immediately.

WARNING: Always ensure that all CybertruckModel SModel XModel 3Model Y seats are locked in position before traveling. Failure to do so increases the risk of injury. Pay attention to all warnings displayed on the touchscreen.

Choosing a Child Safety Seat

All children age 12 and under should ride in the second and third row seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by the National Highway Traffic Safety Administration (NHTSA) in the United States (for more information, go to www.nhtsa.gov/ChildSafety/Guidance).

Category	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)**	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear facing (or convertible)	Forward facing (or convertible)*	Seat belt retained booster seat
Seat position	Rear facing only*	Forward facing*	Forward facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29.5 kg), secure the booster seat with the child using the seat belt only.****



Category	Infants	Toddlers	Young children
<p>* Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS. Keep your child in a rear facing seat for as long as possible. CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS.</p> <p>** ISOFIX is the international standard for attachment points for child safety seats in passenger cars. The system has other regional names including LATCH ("Lower Anchors and Tethers for Children") in the United States and LUAS ("Lower Universal Anchorage System") or Canfix in Canada. It has also been called the "Universal Child Safety Seat System" or UCSSS.</p> <p>*** Subject to instructions provided by the child safety seat manufacturer.</p> <p>**** In the center seating position, the vehicle's head support can be adjusted if the booster seat is not equipped with an integrated head support.</p>			

NOTE: When installing a child restraint system, you must also buckle the seat belt to silence the seat belt warning chime.

⚠ WARNING: Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where Cybertruck Model S Model X Model 3 Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.

⚠ WARNING: Do not use LATCH/Isfix/i-Size anchors with child restraint system or booster seats that have an integral safety belt where the combined weight of the child plus the child restraint system exceeds 65 lbs (29.5 kg).

Seating Larger Children

If a child is too large to fit into a child safety seat, but too small to safely use the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.



⚠ WARNING: Larger children in booster seats should wear the seat belt like an adult. Do not extend the seat belt webbing fully to engage the automatic locking retractor (ALR).

Installing Child Safety Seats

There are two general methods used to install child safety seats:

- Seat belt retained - these seats are secured using the vehicle's seat belts.
- LATCH retained - these seats attach to anchor bars built into the vehicle's rear seats.



Check the child safety seat manufacturer's instructions and the table provided in this document to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.

To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) that, by pulling the seat belt beyond the length needed for a typical adult occupant, locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.

The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.

NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.

Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y, and fully extend the seat belt. Route and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.
2. Allow the seat belt to retract, and remove all slack in the seat belt while firmly pushing the child safety seat into the CybertruckModel SModel XModel 3Model Y seat.
3. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor (ALR) is engaged.

NOTE: The ALR disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.





4. If the seat belt retained child safety seat has an upper tether, attach it to the back of the seat (see [Attaching Upper Tether Straps](#) on page 267).

Installing LATCH (ISOFIX) Child Seats

Lower LATCH anchors are provided in the second row outboard seats. The anchors are located between the seat's back rest and rear cushion. The exact location of each anchor is identified by a child safety seat identification button, illustrated below. The button is located on the seat back, directly above its associated anchor.





In the second row, install LATCH child safety seats in the outboard seating positions only. Use only a seat belt retained seat in the center position.





To install a LATCH child safety seat, slide the safety seat latches onto the anchor bars until they click into place. Carefully read and follow the instructions provided by the child safety seat manufacturer.





Once installed, test the security of the installation before seating a child. Attempt to twist the child safety seat from side to side and try to pull it away from the seat, then check to ensure the anchors remain securely in place.

NOTE: Lower LATCH anchors should not be used with child seats or booster seats that have an integrated safety belt in situations where the combined weight of the child plus the child restraint is more than 65 lbs (29.5 kg). In these situations, use the safety belt instead.

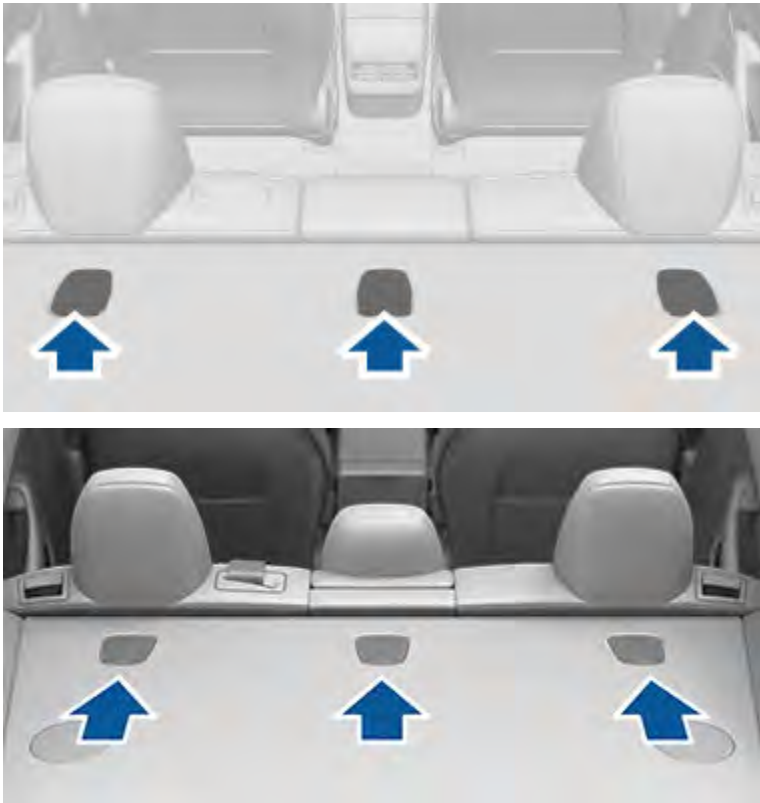


Attaching Upper Tether Straps

If an upper tether strap is provided, attach its hook to the anchor point located on the shelf behind the rear seats.

⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

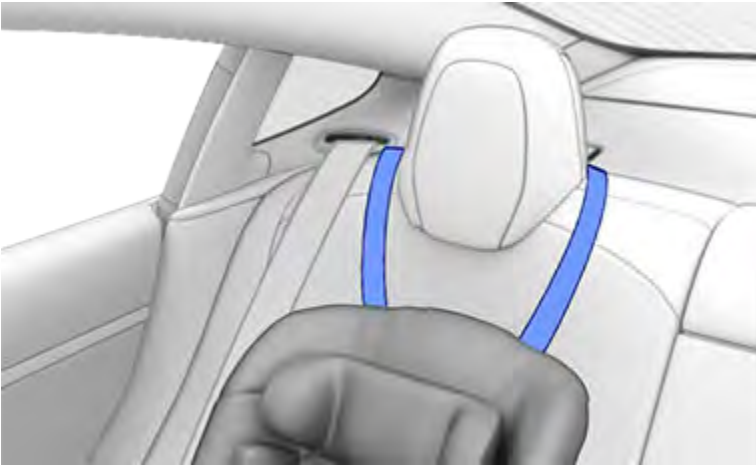
⚠ WARNING: USE ONLY SEAT BELT RETAINED CHILD SAFETY SEATS IN THE CENTER SEATING POSITION.



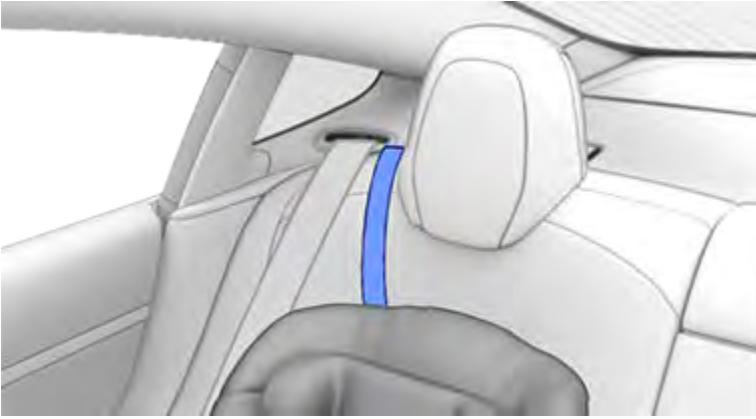
To access an anchor point, press down on the back of its cover.



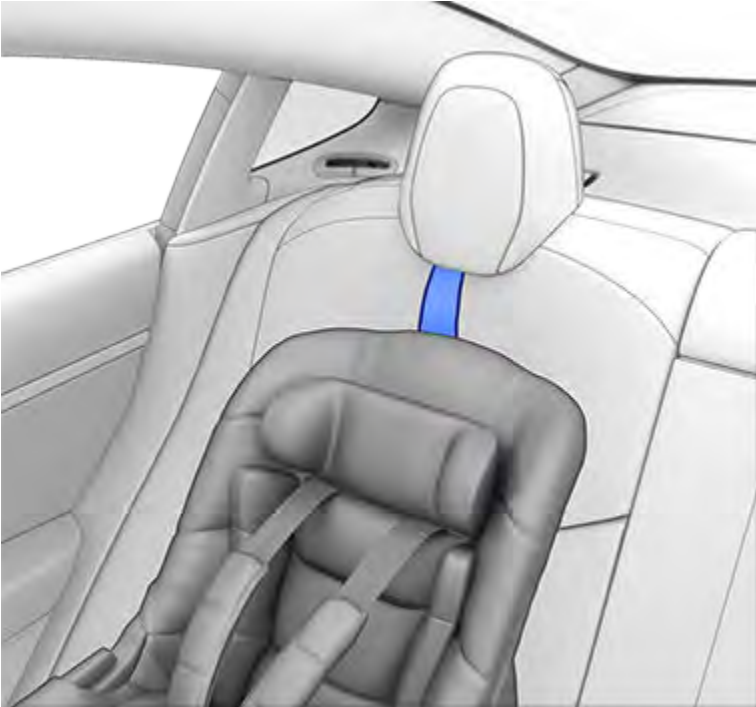
For dual-strap tethers, position a strap on each side of the head support.



For single-strap tethers at the outboard seating positions, route the strap over the outside-facing side of the head support (same side of the head support as the seat belt retraction mechanism).



If routing the strap over the outside-facing side of the head support is not possible (such as there is not enough slack in the strap), route the strap under the head support.





For a single-strap tether in the rear center seating position, fully lower the head support (see [Head Supports on page 238](#)) and route the strap over the top center of the head support.



For a single strap tether in the rear center seating position, route the strap over the top center of the head support.



For dual strap tether in the rear center seating position, route the straps around each side of the head support.

















Testing a Child Safety Seat

Before seating a child, always make sure the child safety seat is not loose:

1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.
2. If the seat moves more than 1 inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.



Child Safety Seat Warnings

-  **WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
-  **WARNING:** Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. Children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
-  **WARNING:** According to collision statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.
-  **WARNING:** Do not use a forward facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.
-  **WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children should be restrained in an appropriate child safety seat at all times.
-  **WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
-  **WARNING:** Children should ride in a rear facing child safety seat using the seat's integrated 5-point harness for as long as possible.
-  **WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
-  **WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
-  **WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
-  **WARNING:** Child restraint anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.



Child Safety Seats

Guidelines for Seating Children

Your Cybertruck Model S Model X Model 3 Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in a rear seating position only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

- ⚠ WARNING:** Never seat a child on a rear-facing child seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur. See [Airbag Status Indicator on page 335](#).
- ⚠ WARNING:** Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur.
- ⚠ WARNING:** Always ensure that all Cybertruck Model S Model X Model 3 Model Y seats are locked in position before traveling. Failure to do so increases the risk of injury. Pay attention to all warnings displayed on the touchscreen.
- ⚠ WARNING:** Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in the second row. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on Cybertruck Model S Model X Model 3 Model Y to recognize or accommodate a child seated in the second row while using this setting (see [Driver Profiles on page 514](#)).

Refer to the following label located on the sun visors.

NOTE: The image shown below is representative only and may not be identical to the label(s) in your vehicle.



Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag (see [Airbags on page 331](#)).



When driving with a child seat on the front passenger seat, always double-check the status of the passenger front airbag to confirm that it is OFF.



To protect an adult subsequently occupying the front passenger seat, check to verify that the passenger front airbag is ON.



Choosing a Child Safety Seat

All children age 12 and under should ride in the second and third row seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by the National Highway Traffic Safety Administration (NHTSA) in the United States (for more information, go to www.nhtsa.gov/ChildSafety/Guidance).

	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)**	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear-facing (or convertible)	Forward-facing (or convertible)*	Seat belt retained booster seat
Seat position	Rear-facing only*	Forward-facing*	Forward-facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29 kg), secure the booster seat with the child using the seat belt only.****

* Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time **BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS**. Keep your child in a rear-facing seat for as long as possible. **CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS**

** **ISOFIX** is the international standard for attachment points for [child safety seats](#) in passenger cars. The system has other regional names including **LATCH** ("Lower Anchors and Tethers for Children") in the United States and **LUAS** ("Lower Universal Anchorage System") or **Canfix** in Canada. It has also been called the "Universal Child Safety Seat System" or **UCSSS**.

*** **Subject to instructions provided by the child safety seat manufacturer.**

******In the center seating position, the vehicle's head support can be adjusted if the booster seat is not equipped with an integrated head support.**

NOTE: When installing a child restraint system, you must also buckle the seat belt to silence the seat belt warning chime.

⚠ WARNING: Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where Cybertruck Model S Model X Model 3 Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.

⚠ WARNING: Do not use LATCH/Isfix/i-Size anchors with child safety seats or booster seats that have an integral safety belt where the combined weight of the child plus the child safety seat exceeds 65 lbs (29.5 kg).

⚠ WARNING: Do not use **Easy Entry** (as described in [Driver Profiles on page 514](#)) to automatically move the driver's seat to the full rearward position if a child safety seat is installed in the second row located behind the driver's seat. With reduced clearance, the movement of the seat may impact a child's legs, cause injury, or dislodge the seat.



Seating Larger Children



If a child is too large to fit into a child safety seat, but too small to safely fit into the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.

The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.

Installing Child Safety Seats

There are two general methods used to install child safety seats:

- Seat belt retained - these seats are secured using the vehicle's seat belts.
- LATCH retained - these seats attach to anchor bars built into the second row seats.

Check the child safety seat manufacturer's instructions and the table provided in this document to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.

To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) that, by pulling the seat belt beyond the length needed for a typical adult occupant, locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.

The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.

NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.



Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y, and fully extend the seat belt. Route and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.



2. Allow the seat belt to retract, and remove all slack in the seat belt while firmly pushing the child safety seat into the CybertruckModel SModel XModel 3Model Y seat.
3. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor (ALR) is engaged.

NOTE: The ALR disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.

4. If the seat belt retained child safety seat has an upper tether, attach it to the back of the seat (see [Attaching Upper Tether Straps on page 276](#)).

Installing LATCH (ISOFIX) Child Seats

Lower LATCH anchors are provided in the second row outboard seats. The anchors are located between the seat's back rest and rear cushion. The exact location of each anchor is identified by a child safety seat identification button, illustrated below. The button is located on the seat, near the associated anchor.



For the second row, install LATCH child safety seats in the outboard seating positions only. Use only a seat belt retained seat in the center position.



To install a LATCH child safety seat, slide the safety seat latches onto the anchor bars until they click into place. Carefully read and follow the instructions provided by the child safety seat manufacturer.

NOTE: Lower LATCH anchors should not be used with child seats or booster seats that have an integrated safety belt in situations where the combined weight of the child plus the child restraint is more than 65 lbs (29.5 kg). In these situations, use the safety belt instead.



NOTE: If Cybertruck Model S Model X Model 3 Model Y is equipped with seven seats, the third row seating positions are not equipped with LATCH anchors. Use only seat belt retained child safety seats in a third row seating position.



Once installed, test the security of the installation before seating a child. Attempt to twist the child safety seat from side to side and try to pull it away from the seat, then check to ensure the anchors remain securely in place.

Attaching Upper Tether Straps

If an upper tether strap is provided, attach its hook to the anchor point located behind the seat.

NOTE: The location of anchor points may not be readily visible but can be found by identifying a slice in the seat's material.

⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

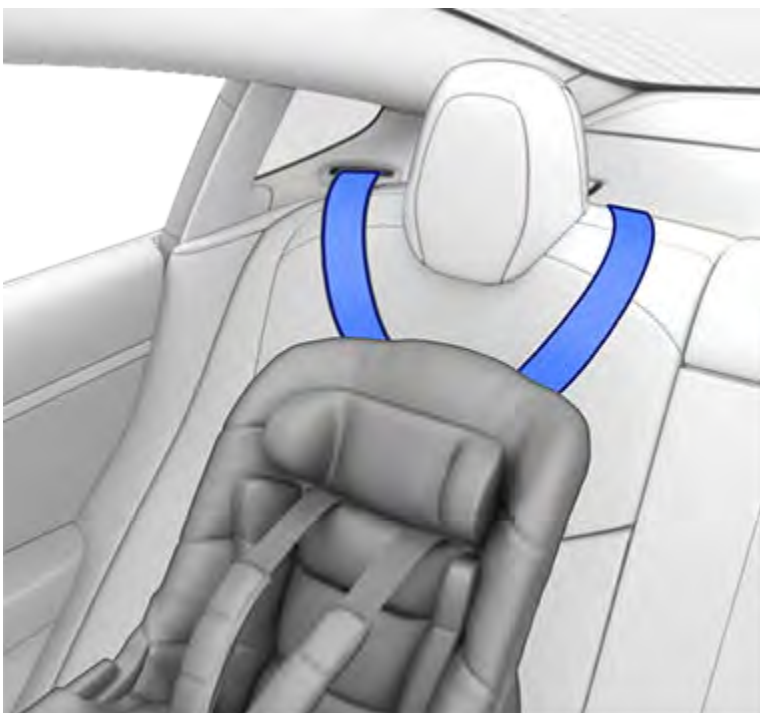
⚠ WARNING: USE ONLY SEAT BELT RETAINED CHILD SAFETY SEATS IN THE CENTER SEATING POSITION.



Make sure the hook is fully seated on the anchor point.



For dual-strap tethers, position a strap on each side of the head support.

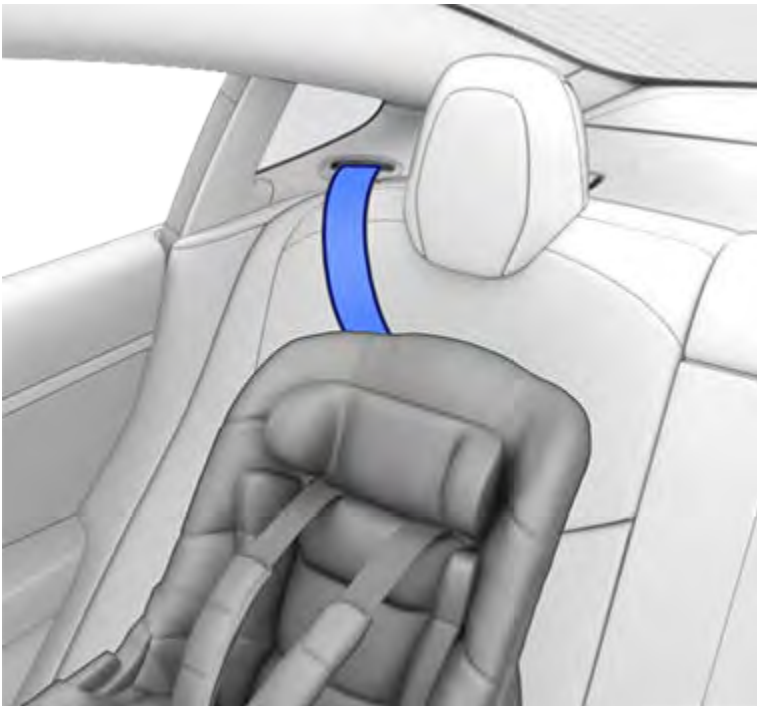


For dual-strap tethers in the third row (if equipped), position both straps over the head support.

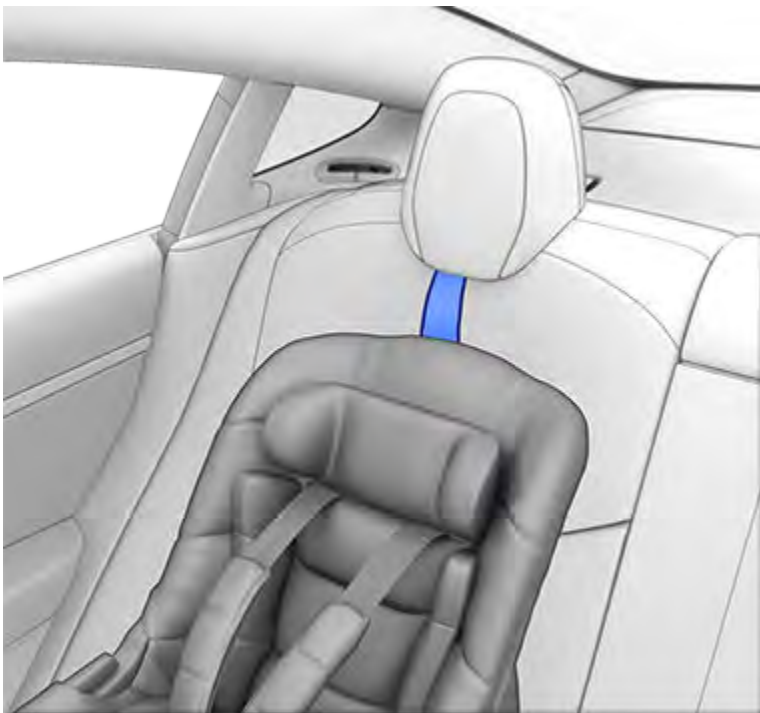


⚠ WARNING: Before running a tether strap OVER a head support, you MUST LOWER the head support (see [Head Supports](#) on page 240).

For single-strap tethers at the outboard seating positions, run the strap over the outside-facing side of the head support (same side of the head support as the seat belt retraction mechanism).



If routing the strap over the outside-facing side of the head support is not possible (such as there is not enough slack in the strap), raise the head support (see [Head Supports](#) on page 240) and route the strap under the head support.



For a single-strap tether in the third row (if equipped), position the strap over the head support.



Testing a Child Safety Seat















Before seating a child, always make sure the child safety seat is not loose:

1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.



2. If the seat moves more than one inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.

Child Safety Seat Warnings

-  **WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
-  **WARNING:** Seat belt retained child safety seats are designed to be secured in the vehicle using lap seat belts or the lap belt portion of a lap-shoulder seat belt. Children could be endangered in a crash if their child safety seat is not properly secured.
-  **WARNING:** According to collision statistics, children are safer when properly restrained in the second row seating positions than in the front passenger seat.
-  **WARNING:** Do not use a forward-facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.
-  **WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children should be restrained in an appropriate child safety seat at all times.
-  **WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
-  **WARNING:** Children should ride in a rear-facing child safety seat using the seat's integrated 5-point harness for as long as possible.
-  **WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
-  **WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
-  **WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
-  **WARNING:** Child restraint anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.






Child Safety Seats

Guidelines for Seating Children

Your Cybertruck Model S Model X Model 3 Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in rear seats only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

Never use child safety seats in the front passenger seat.

-  **WARNING:** Never seat a child in the front passenger seat, even if using a child safety seat.
-  **WARNING:** Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur.
-  **WARNING:** For vehicles with third row seats, when a child is seated in a second row monopost seat, the setting for the button that moves a second row outboard seat forward for easy access into the third row should be **OFF** (touch **Controls > Seats > Easy Entry**). This ensures that you need to manually hold the button to move the seat, preventing a child seated in the second row from being pushed against the corresponding front seat.

Refer to the following label located on the sun visors.

NOTE: The image(s) shown below are representative only and may not be identical to the labels in your vehicle.



Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the passenger front airbag (see [Airbags on page 320](#)).





The Passenger Airbag Off indicator displays on the touchscreen when the passenger front airbag is OFF. When the passenger front airbag is OFF, it does not inflate when a collision occurs. This indicator also displays when the seat is unoccupied. Before driving with a child seated on the front passenger seat, always double-check the status of the passenger front airbag to confirm that it is OFF.

NOTE: In cars manufactured prior to approximately December 2019, the Passenger Airbag Off indicator does not display when the seat is unoccupied.



To protect an adult occupying the front passenger seat, always double-check the passenger front airbag to confirm that it is ON.

-  **WARNING:** Always ensure that all Cybertruck Model S Model X Model 3 Model Y seats are locked in position before traveling. Failure to do so increases the risk of injury. Pay attention to all warnings displayed on the touchscreen.
-  **WARNING:** Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in a second row seat. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on Cybertruck Model S Model X Model 3 Model Y to recognize or accommodate a child seated in the second row seats while using this setting (see [Driver Profiles on page 514](#)).

Choosing a Child Safety Seat

All children age 12 and under should ride in the second and third row seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by the National Highway Traffic Safety Administration (NHTSA) in the United States (for more information, go to www.nhtsa.gov/equipment/car-seats-and-booster-seats).



Owners Manual


	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)**	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear-facing (or convertible)	Forward-facing (or convertible)*	Seat belt retained booster seat
Seat position	Rear-facing only*	Forward-facing*	Forward-facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29.5 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29.5 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29 kg), secure the booster seat with the child using the seat belt only.


* Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time **BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS. Keep your child in a rear-facing seat for as long as possible. CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS.**

** **LATCH** ("Lower Anchors and Tethers for Children") and **ISOFIX** are international standards for attachment points for **child safety seats** in passenger cars that enable compliant child safety seats to be quickly and safely secured. The system has other regional names including **LUAS** ("Lower Universal Anchorage System") or **Canfix** in Canada. It has also been called the "Universal Child Safety Seat System" or **UCSSS**.

*** **Subject to instructions provided by the child safety seat manufacturer.**

NOTE: When installing a child restraint system, you must also buckle the seat belt to silence the seat belt warning chime.

 **WARNING:** Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where Cybertruck Model S Model X Model 3 Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.

 **WARNING:** Do not use LATCH anchors with child safety seats or booster seats that have an integral safety belt where the combined weight of the child plus the child safety seat exceeds 65 lbs (29.5 kg).



Seating Larger Children



If a child is too large to fit into a child safety seat, but too small to safely fit into the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.

Installing Child Safety Seats

Second Row Seats

- Seat belt retained - these seats are secured using the vehicle's seat belts (see [Installing Seat Belt Retained Child Seats on page 283](#)).
- LATCH retained - these seats attach to anchor bars built into the vehicle's second row outboard seats (see [Installing LATCH Child Seats \(Second Row\) on page 284](#)).

Third Row Seats

- Seat belt retained - these seats are secured using the vehicle's seat belts (see [Installing Seat Belt Retained Child Seats on page 283](#)).
- LATCH retained - these seats attach to anchor bars built into the vehicle's third row seats, if equipped (see [Installing LATCH Child Seats \(Third Row\) on page 289](#)).

Check the child safety seat manufacturer's instructions and the table in this owner's manual to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.



To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) feature that, by fully extracting the seat belt (beyond the length needed for a typical adult occupant), locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat with integrated restraints, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.

The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.

NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.

Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y, and fully extend the seat belt. Route and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.



2. Allow the seat belt to retract, and remove all slack in the seat belt while firmly pushing the child safety seat into the CybertruckModel SModel XModel 3Model Y seat.
3. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor (ALR) is engaged.

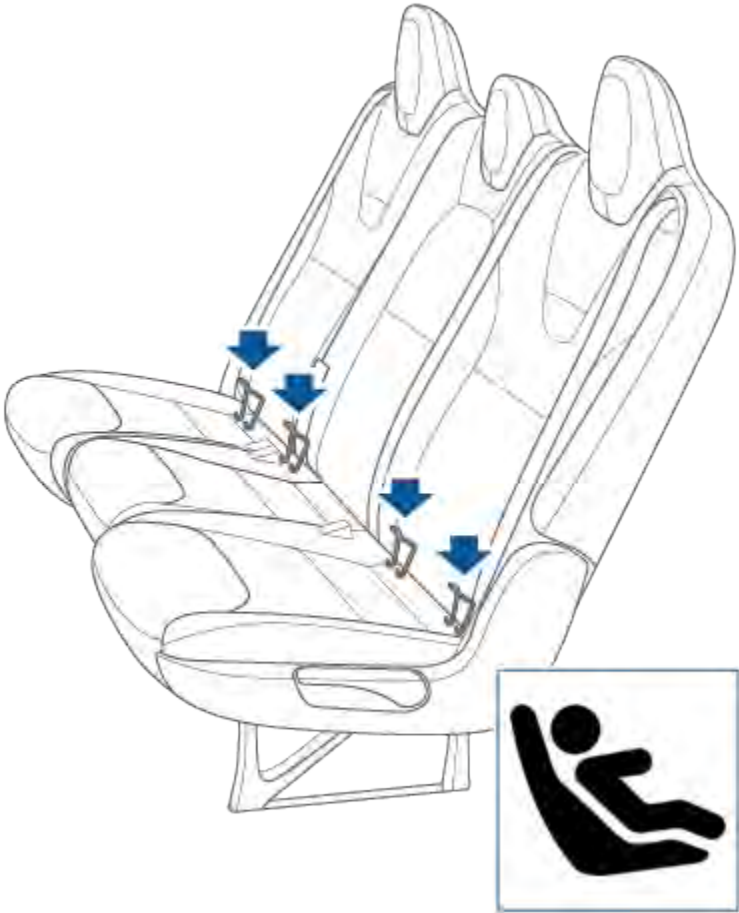
NOTE: The ALR disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.

4. If the seat belt retained child safety seat has an upper tether, attach it to the back of the seat (see [Attaching Upper Tether Straps on page 291](#)).

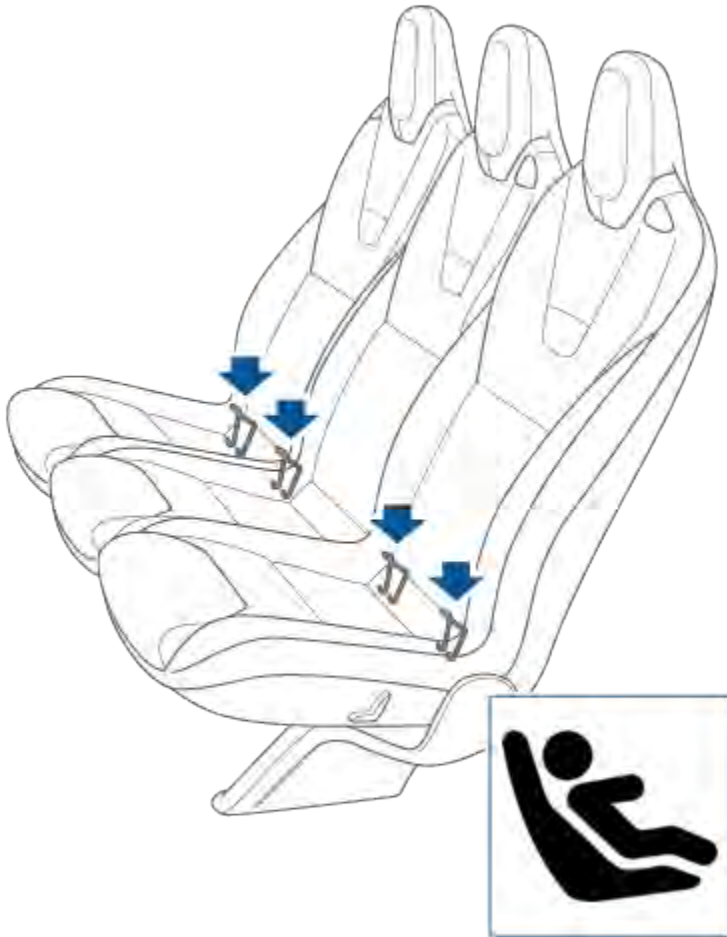
Installing LATCH Child Seats (Second Row)

Lower LATCH anchors are provided in the second row seats (and third row seats, if equipped). The anchors are located between the seat's rear back rest and lower cushion. The exact location of each anchor is identified by a child safety seat identification button, illustrated below. The button is located on the seat back, directly above its associated anchor.

Bench Seats



Monopost Seats



In the second row, install LATCH child safety seats in the outboard seating positions only. Use only a seat belt retained seat in the center position.

NOTE: If Model X is equipped with two seats in the second row, both seats support the use of LATCH child safety seats.

NOTE: Second row outboard seats support the use of upper tether straps (see [Attaching Upper Tether Straps on page 291](#)).

⚠ WARNING: Before driving after installing a child seat in the second row, ensure that a "seat unlocked" warning does NOT display on the touchscreen or instrument panel. This warning indicates that the seat is unsafe for an occupant because it was not returned to its safe, locked position. If the touchscreen or instrument panel displays the warning message, move the seat or backrest slightly forward or backward until it locks firmly into position and the message no longer displays.

Bench Seats





NOTE: To accommodate large rear-facing LATCH child safety seats, you may need to move the seat in the full rearward position, and move the corresponding front seat forward to the mid-track position (up to 13 cm forward of the rearmost position), raise the seat upward (3 cm from its lowest position), and angle the seat back to 15 degrees (or 10 degrees rearward from its forward-most position).

⚠ WARNING: Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in the second row. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on CybertruckModel SModel XModel 3Model Y to recognize or accommodate a child seated in the second row while using this setting (see [Driver Profiles on page 514](#)).

Monopost Seats



NOTE: To accommodate large rear-facing LATCH child safety seats, you may need to move the seat in the full rearward position, and move the corresponding front seat forward to the mid-track position (up to 13 cm forward of the rearmost position), raise the seat upward (3 cm from its lowest position), and angle the seat back to 15 degrees (or 10 degrees rearward from its forward-most position).

⚠ WARNING: For vehicles with third row seats, when a child is seated in a second row monopost seat, the setting for the button that moves a second row outboard seat forward for easy access into the third row should be **OFF** (touch **Controls** > **Seats** > **Easy Entry**). This ensures that you need to manually hold the button to move the seat, preventing a child seated in the second row from being pushed against the corresponding front seat.

To install a LATCH child safety seat, slide the safety seat latches onto the anchor bars until they click into place. Carefully read and follow the instructions provided by the child safety seat manufacturer.

Bench Seats



Monopost Seats



Once installed, test the security of the installation before seating a child. Attempt to twist the child safety seat from side to side and try to pull it away from the seat, then check to ensure the anchors remain securely in place.

NOTE: Lower LATCH anchors should not be used with child seats or booster seats that have an integrated safety belt in situations where the combined weight of the child plus the child safety seat is more than 65 lbs (29.5 kg). In these situations, use the seat belt instead.

Installing LATCH Child Seats (Third Row)

Seats equipped with the child safety seat identification button are LATCH compatible.





Owners Manual

Lower LATCH anchors are provided in the third row seats. The anchors are located between the seat's rear back rest and lower cushion. The exact location of each anchor is identified by a child safety seat identification button. The button is located on the seat back, directly above its associated anchor.



To install, carefully read and follow the instructions provided by the manufacturer of the child restraint system. The instructions describe how to slide the child restraint system onto the seat's anchor bars until you hear and feel it "click" into place. You may need to push the child restraint system firmly against the seat back and adjust accordingly to ensure it fits snugly.



Once installed, test the security of the installation before seating a child. Attempt to twist the child safety seat from side to side and try to pull it away from the seat, then check to ensure the anchors remain securely in place. If the child restraint system moves away from the seat, both latches are not fully engaged onto the seat's anchor bars. Reinstall and try again. It is critical that both latches on the child restraint system are fully engaged.



NOTE: Lower LATCH anchors should not be used with child seats or booster seats that have an integrated safety belt in situations where the combined weight of the child plus the child safety seat is more than 65 lbs (29.5 kg). In these situations, use the seat belt instead.

Attaching Upper Tether Straps

If an upper tether strap is provided, attach its hook to the anchor point located on the back of the second and third row (if equipped) seats.

NOTE: The location of anchor points may not be readily visible but can be found by identifying a slice in the seat's material.

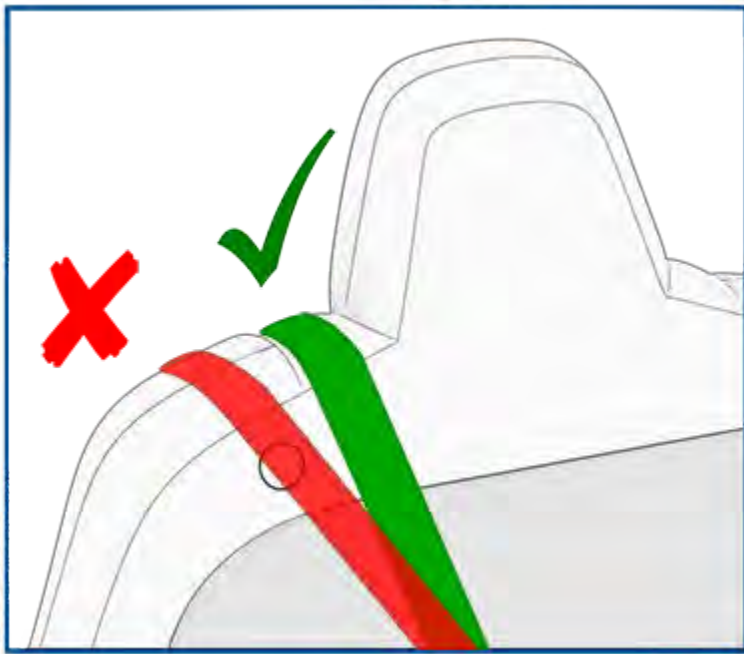
⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

⚠ WARNING: USE ONLY SEAT BELT RETAINED CHILD SAFETY SEATS IN THE CENTER SEATING POSITION.

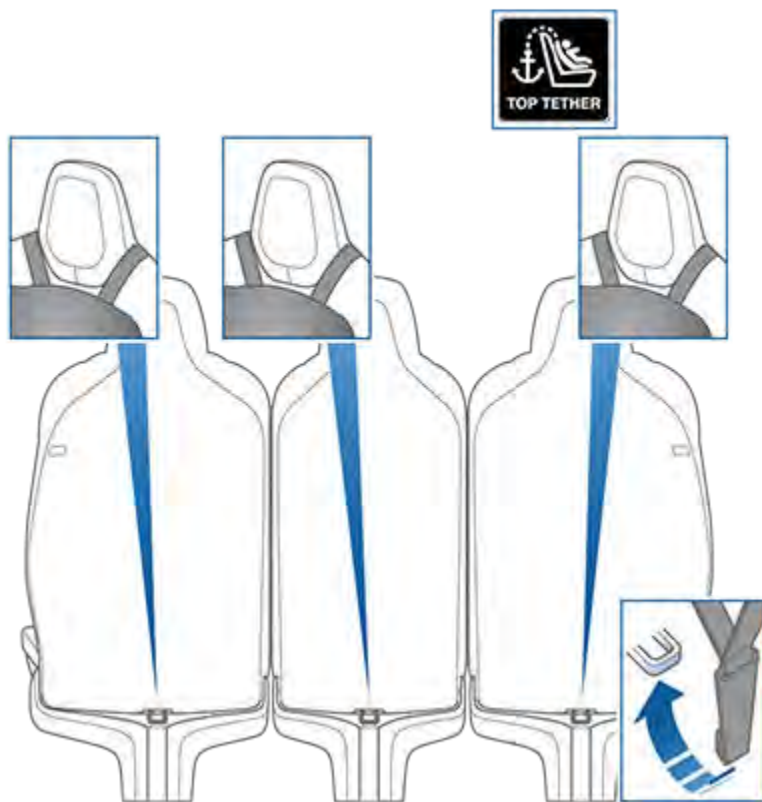
For dual-strap tethers, position a strap on each side of the head restraint.

NOTE: If Model X is equipped with the optional six seat interior, a center seating position is not available in the second row.

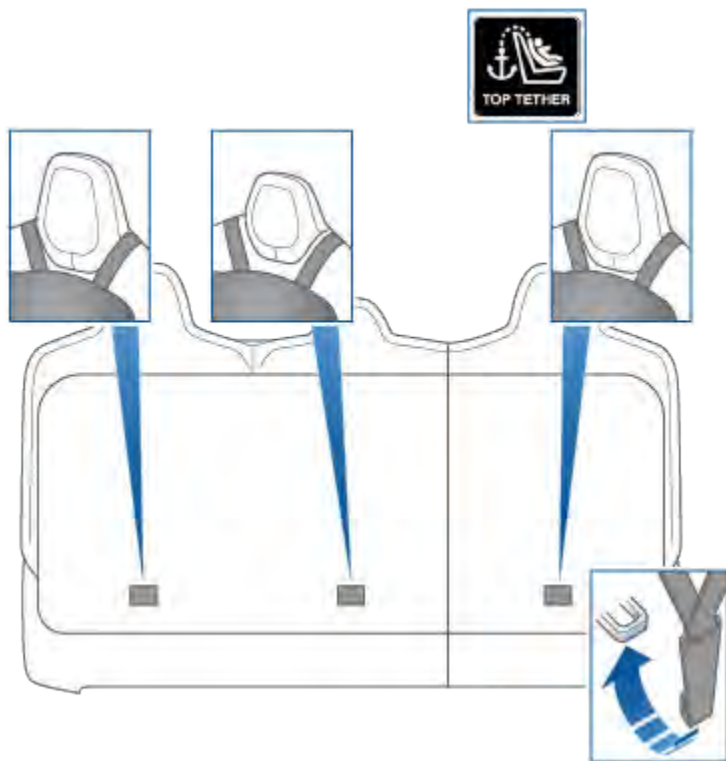
⚠ WARNING: When routing tether straps, keep the strap close to the headrest as illustrated below. On a Model X equipped with third row seats, do not allow a tether strap to cover the third row access button on the rear shoulder of the seat.



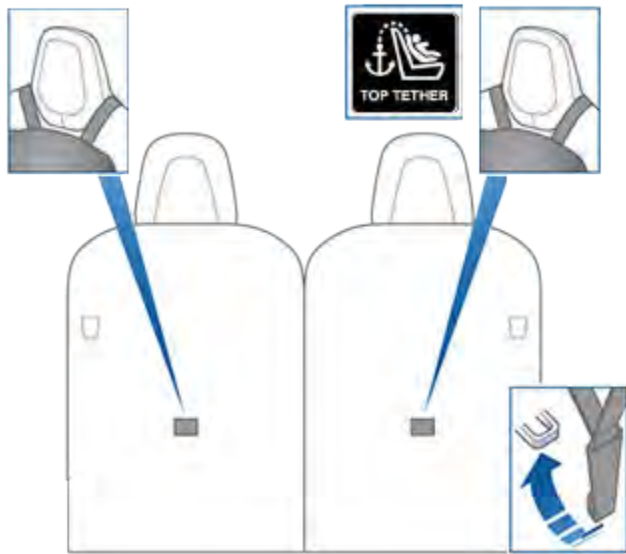
Dual Straps - Second Row Monopost Seats



Dual Straps - Second Row Bench Seats

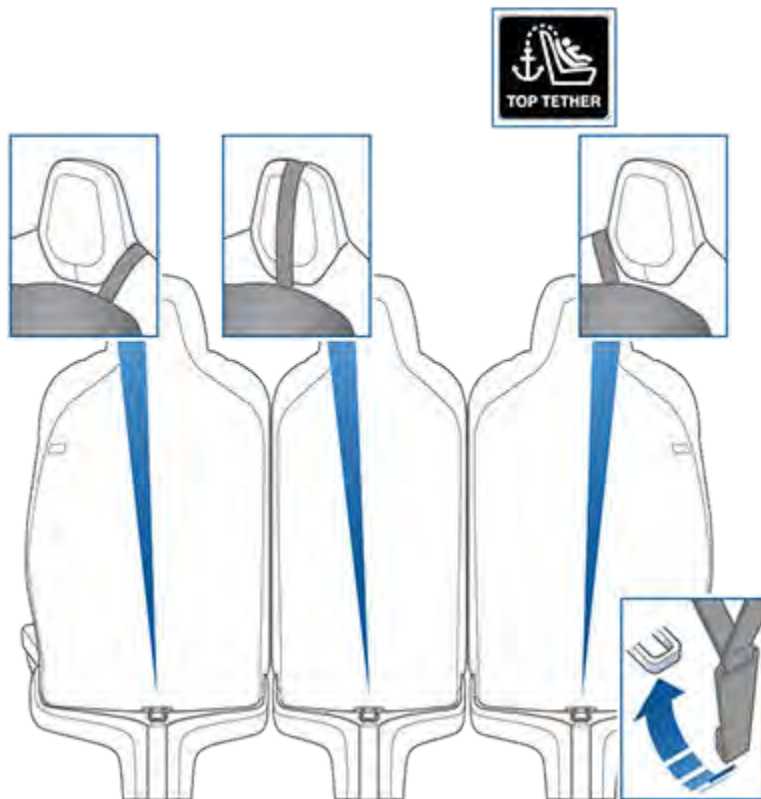


Dual Straps - Third Row Seats:

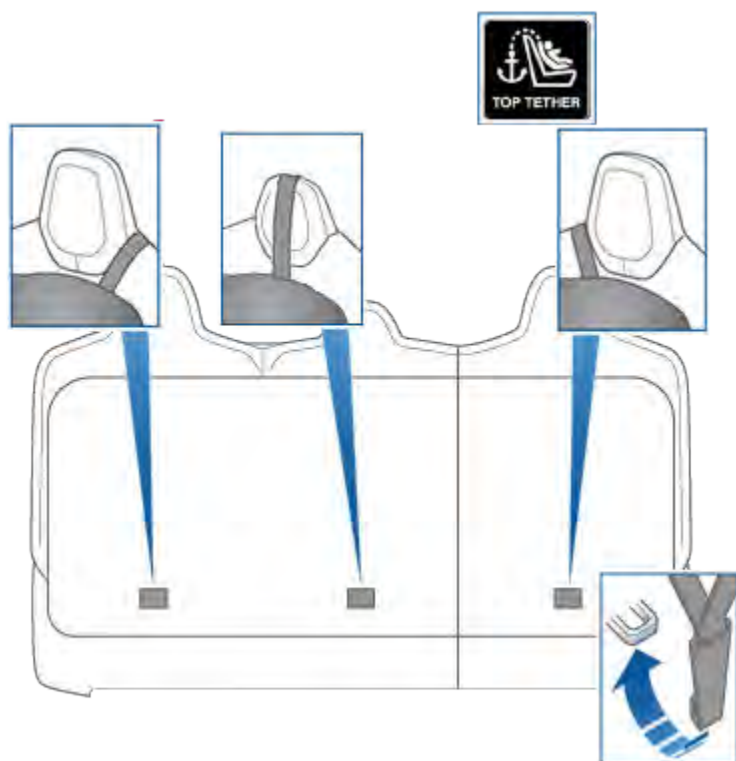


For single-strap tethers, position the strap in the outboard seating positions over the outside-facing side of the head restraint (the same side of the head restraint as the seat belt retraction mechanism). In the center seating position (if equipped), center and position the strap over the top of the head restraint.

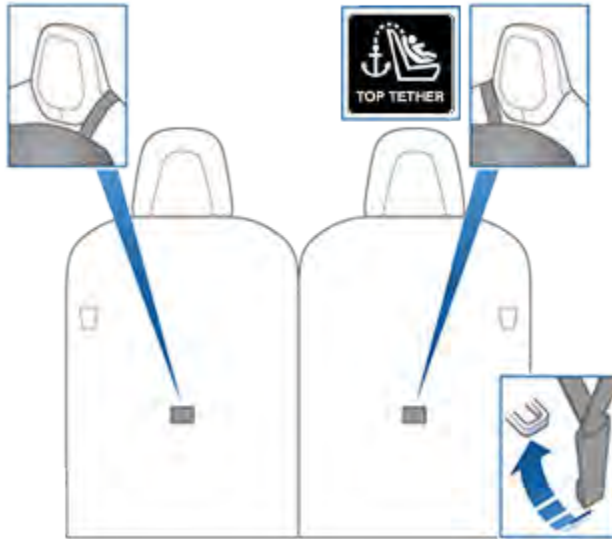
Single Strap - Second Row Monopost Seats



Single Strap - Second Row Bench Seats



Single Strap - Third Row Seats






Testing a Child Safety Seat

Before seating a child, always make sure the child safety seat is not loose:












1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.
2. If the seat moves more than one inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.

Child Safety Seat Warnings

-  **WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
-  **WARNING:** Child safety seats are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. A child could be endangered in a crash if a child safety seat is not properly secured in the vehicle.
-  **WARNING:** According to collision statistics, children are safer when properly restrained in a rear seating position than in the front passenger seat.



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-  **WARNING:** Do not use a forward-facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.
-  **WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children should be restrained in an appropriate child safety seat at all times.
-  **WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
-  **WARNING:** Children should ride in a rear-facing child safety seat using the seat's integrated 5-point harness for as long as possible.
-  **WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
-  **WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
-  **WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
-  **WARNING:** Child safety seat anchors are designed to withstand only those loads imposed by a correctly fitted child safety seat. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.



Child Safety Seats

Guidelines for Seating Children

Your Cybertruck Model S Model X Model 3 Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in the rear seats only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

Never use child safety seats in the front row passenger seat.

WARNING: Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur.

Refer to the following label located on the sun visors.

NOTE: The image shown below is representative only and may not be identical to the label in your vehicle.



Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag (see [Airbags on page 342](#)).



The Passenger Airbag Off indicator displays on the touchscreen when the passenger front airbag is OFF. When the passenger front airbag is OFF, it does not inflate when a collision occurs. This indicator also displays when the seat is unoccupied. Before driving with a child seated on the front passenger seat, always double-check the status of the passenger front airbag to confirm that it is OFF.

NOTE: In cars manufactured prior to approximately December 2019, the Passenger Airbag Off indicator does not display when the seat is unoccupied.



To protect an adult subsequently occupying the front passenger seat, always double-check the passenger front airbag to confirm that it is ON.

If your Model S is equipped with the optional Tesla built-in rear facing child seats, these seats are child safety seats and are designed only for children within a specific height and weight range (see [Tesla Built-In Rear Facing Child Seats on page 314](#)).



Choosing a Child Safety Seat

All children age 12 and under should ride in the second row seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by National Highway Traffic Safety Administration (NHTSA). For more information, go to www.nhtsa.gov/ChildSafety/Guidance.

Category	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)*	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear facing (or convertible)	Forward facing (or convertible)*	Forward facing or seat belt retained booster seat****
Seat position	Rear facing only*	Rear facing as long as possible, then forward facing*	Forward facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29 kg), secure the booster seat with the child using the seat belt only.

* Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time **BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS**. Keep your child in a rear facing seat for as long as possible. **CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS.**

** **LATCH** ("Lower Anchors and Tethers for Children") and **ISOFIX** are international standards for attachment points for [child safety seats](#) in passenger cars that enable compliant child safety seats to be quickly and safely secured. The system has other regional names including **LUAS** ("Lower Universal Anchorage System") or **Canfix** in Canada. It has also been called the "Universal Child Safety Seat System" or **UCSSS**.

*** Subject to instructions provided by the child safety seat manufacturer.

****Keep your child in a forward facing child safety seat with a harness and tether until the child reaches the child safety seat's maximum allowable height or weight as specified by the manufacturer of the child safety seat.

NOTE: When installing a child restraint system, you must also buckle the seat belt to silence the seat belt warning chime.

WARNING: Do not use **Easy Entry** (as described in [Driver Profiles on page 514](#)) to automatically move the driver's seat to the full rearward position if a child safety seat is installed on a rear seat behind the driver's seat. With reduced clearance, the movement of the seat may impact a child's legs, cause injury, or dislodge the seat.

WARNING: Do not use LATCH anchors with child safety seats or booster seats that have an integral safety belt where the combined weight of the child plus the child safety seat exceeds 65 lbs (29.5 kg).

WARNING: Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where CybertruckModel SModel XModel 3Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.



Seating Larger Children

If a child is too large to fit into a child safety seat, but too small to safely fit into the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.

Installing Child Safety Seats

There are two general methods used to install child safety seats:

- Seat belt retained - these seats are secured using the vehicle's seat belts.
- LATCH retained - these seats attach to anchor bars built into the vehicle's rear seats.

Check the child safety seat manufacturer's instructions and the table in this manual to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.

To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) that, by pulling the seat belt beyond the length needed for a typical adult occupant, locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.

NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.

Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y, and fully extend the seat belt. Route and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.





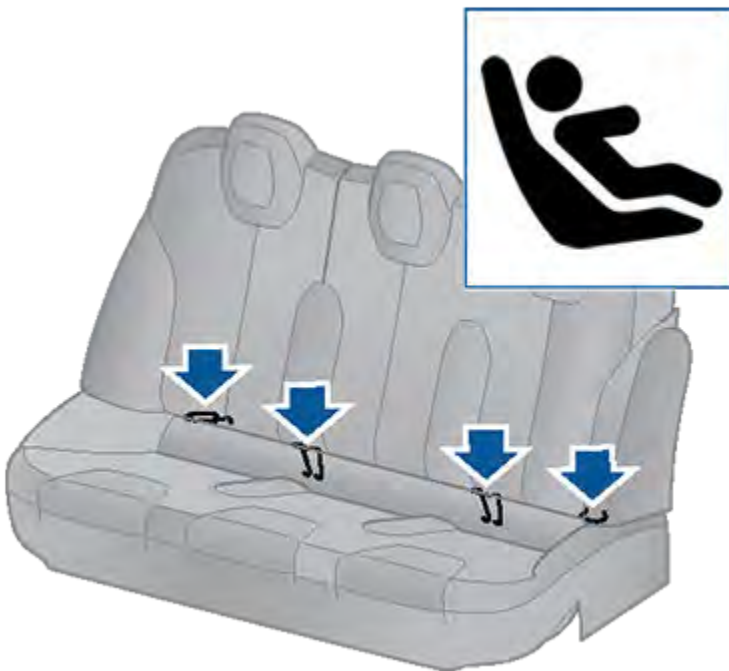
2. Allow the seat belt to retract, and remove all slack in the seat belt while firmly pushing the child safety seat into the Cybertruck Model S Model X Model 3 Model Y seat.
3. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor (ALR) is engaged.

NOTE: The ALR disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.

4. Attach the upper tether strap(s), as required by the manufacturer of the child restraint system (see [Attaching Upper Tether Straps on page 302](#)).

Installing ISOFIX (LATCH) Child Seats

Lower LATCH anchors are provided in the second row outboard seats. The anchors are located between the seat's back rest and rear cushion. The exact location of each anchor is identified by a child safety seat identification button, illustrated below. The button is located on the seat back, directly above its associated anchor.

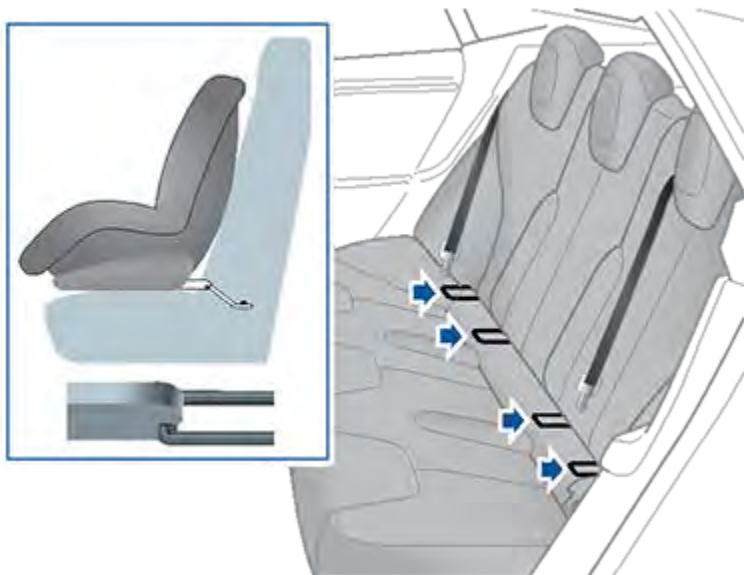


In the rear seats, install LATCH child safety seats in the outboard seating positions only. Use only a seat belt retained seat in the center position.





To install a LATCH child safety seat, carefully read and follow the instructions provided by the manufacturer of the child restraint system. These instructions describe how to slide the child restraint system onto the seat's anchor bars until you hear it "click" into place. You may need to push the child restraint system firmly against the seat back to ensure it fits snugly.



Adjust until the child restraint system is fitted firmly against the seat back. Ensure the child restraint system fits snugly.



Before seating a child, ensure that the child restraint system is securely installed. Grasp the front of the child restraint system with one hand on each side, and attempt to:

- Twist the child restraint system from side to side.
- Pull the child restraint system away from the seat.

If the child restraint system moves away from the seat, both latches are not fully engaged onto the seat's anchor bars. You must reinstall it and try again. It is critical that both latches on the child restraint system are fully engaged.

NOTE: Do not use LATCH anchors with child seats or booster seats that have an integrated safety belt where the combined weight of the child plus the child restraint system exceeds 65 lbs (29.5 kg).

Attaching Upper Tether Straps

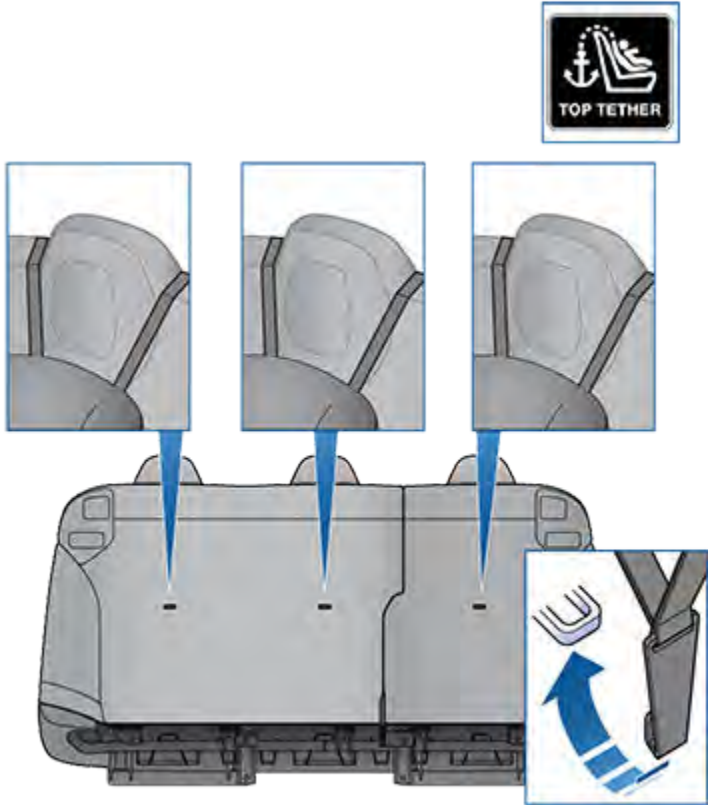
If an upper tether strap is provided, attach its hook to the anchor point located on the back of the rear seats.

NOTE: The location of anchor points may not be readily visible but can be found by identifying a slice in the seat's material.

⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

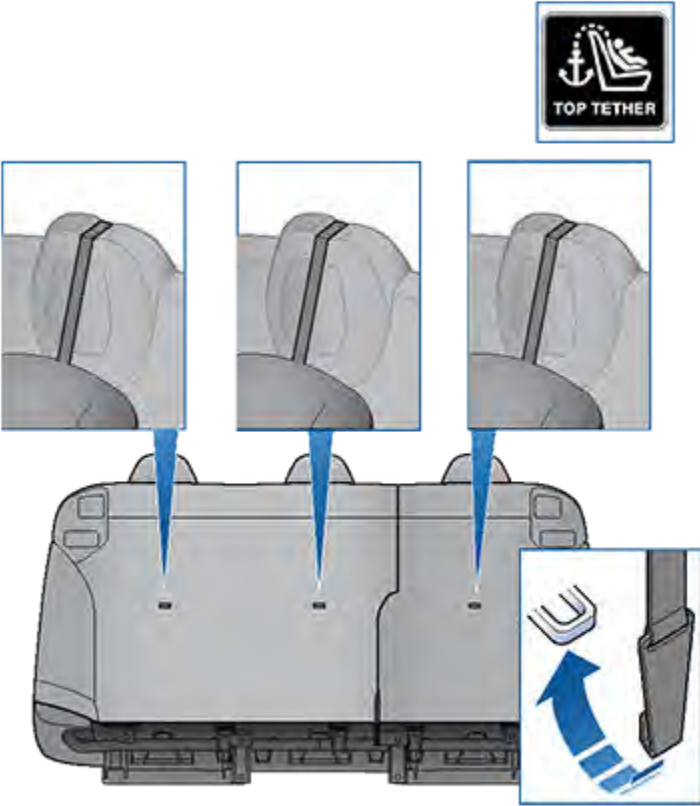
⚠ WARNING: USE ONLY SEAT BELT RETAINED CHILD SAFETY SEATS IN THE CENTER SEATING POSITION.

For dual-strap tethers, position a strap on each side of the head support.



Always position single-strap tethers to route over the top of the head support.

NOTE: To prevent the single-strap tether from moving side to side, the top of the head support deforms.



















Testing a Child Safety Seat

Before seating a child, always make sure the child safety seat is not loose:

1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.
2. If the seat moves more than one inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.

Child Safety Seat Warnings

-  **WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
-  **WARNING:** Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. Children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
-  **WARNING:** According to collision statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.
-  **WARNING:** Do not use a forward facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.
-  **WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children should be restrained in an appropriate child safety seat at all times.
-  **WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
-  **WARNING:** Children should ride in a rear facing child safety seat using the seat's integrated 5-point harness for as long as possible.
-  **WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
-  **WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
-  **WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
-  **WARNING:** Child restraint anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.



Child Safety Seats

Passenger Front Airbag Must Be OFF

Your Cybertruck Model S Model X Model 3 Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in the rear seats only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

WARNING: Never seat a child in the front passenger seat, even if using a child restraint system.

WARNING: Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur.

Refer to the following label located on the sun visors.

NOTE: The image shown below is representative only and may not be identical to the label in your vehicle.



Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag (see [Airbags on page 342](#)).



When driving with a child seated on the front passenger seat (if permitted), always double-check the status of the passenger front airbag to confirm that it is OFF.



To protect an adult subsequently occupying the front passenger seat, always double-check the passenger front airbag to confirm that it is ON.

WARNING: It is the driver's responsibility to confirm that the passenger front airbag is OFF when a child is seated in the front passenger seat. If the passenger front airbag fails to disable with a child seat in position, place the child and child restraint system in the rear seat and use the mobile app to schedule a service appointment immediately.

WARNING: Always ensure that all Cybertruck Model S Model X Model 3 Model Y seats are locked in position before traveling. Failure to do so increases the risk of injury. Pay attention to all warnings displayed on the touchscreen.

WARNING: Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in a rear seat. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on Cybertruck Model S Model X Model 3 Model Y to recognize or accommodate a child seated in the rear seats while using this setting (see [Driver Profiles on page 514](#)).



Choosing a Child Safety Seat

All children age 12 and under should ride in the rear seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by National Highway Traffic Safety Administration (NHTSA). For more information, go to www.nhtsa.gov/ChildSafety/Guidance.

Category	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)*	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear facing (or convertible)	Forward facing (or convertible)*	Forward facing or seat belt retained booster seat****
Seat position	Rear facing only*	Rear facing as long as possible, then forward facing*	Forward facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29 kg), secure the booster seat with the child using the seat belt only.

*** Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS. Keep your child in a rear facing seat for as long as possible. CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS.**

**** LATCH** ("Lower Anchors and Tethers for Children") and **ISOFIX** are international standards for attachment points for [child safety seats](#) in passenger cars that enable compliant child safety seats to be quickly and safely secured. The system has other regional names including **LUAS** ("Lower Universal Anchorage System") or **Canfix** in Canada. It has also been called the "Universal Child Safety Seat System" or **UCSSS**.

***** Subject to instructions provided by the child safety seat manufacturer.**

******Keep your child in a forward facing child safety seat with a harness and tether until the child reaches the child safety seat's maximum allowable height or weight as specified by the manufacturer of the child safety seat.**

NOTE: When installing a child restraint system, you must also buckle the seat belt to silence the seat belt warning chime.

⚠ WARNING: Do not use LATCH anchors with child safety seats or booster seats that have an integral safety belt where the combined weight of the child plus the child safety seat exceeds 65 lbs (29.5 kg).

⚠ WARNING: Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where CybertruckModel SModel XModel 3Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.



Seating Larger Children



If a child is too large to fit into a child safety seat, but too small to safely fit into the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.

Installing Child Safety Seats

There are two general methods used to install child safety seats:

- Seat belt retained - these seats are secured using the vehicle's seat belts. All passenger seating positions in Cybertruck Model S Model X Model 3 Model Y support the use of seat belt retained child safety seats.
- LATCH retained - these seats attach to anchor bars built into the vehicle's rear seats. The rear outboard seating positions in Cybertruck Model S Model X Model 3 Model Y support the use of LATCH retained child safety seats.

Check the child safety seat manufacturer's instructions and the table in this manual to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.

To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) feature that, by fully extracting the seat belt (beyond the length needed for a typical adult occupant), locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat with integrated restraints, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.

The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.



NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.

Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y, and fully extend the seat belt. Route and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.



2. Allow the seat belt to retract, and remove all slack in the seat belt while firmly pushing the child safety seat into the CybertruckModel SModel XModel 3Model Y seat.
3. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor (ALR) is engaged.

NOTE: The ALR disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.

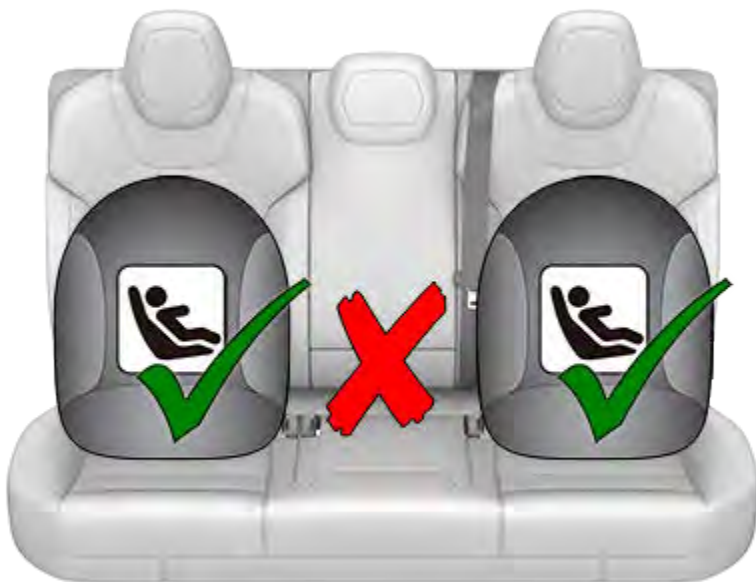
4. Attach the upper tether strap(s), as required by the manufacturer of the child restraint system (see [Attaching Upper Tether Straps on page 311](#)).

Installing ISOFIX (LATCH) Child Seats

Lower LATCH anchors are provided in the rear outboard seats. The anchors are located between the seat's rear back rest and lower cushion. The exact location of each anchor is identified by a child safety seat identification button, illustrated below. The button is located on the seat back, directly above its associated anchor.



In the rear seats, install LATCH child safety seats in the outboard seating positions only. Use only a seat belt retained seat in the center position.



To install a LATCH child safety seat, lift the flap (if equipped) to allow access to the anchors.



Carefully read and follow the instructions provided by the manufacturer of the child restraint system. The instructions describe how to slide the child restraint system onto the seat's anchor bars until you hear it "click" into place. You may need to push the child restraint system firmly against the seat back to ensure it fits snugly. The flap (if equipped) remains open when the child seat is installed.



Adjust until the child restraint system is fitted firmly against the seat back. Ensure the child restraint system fits snugly.



Before seating a child, ensure that the child restraint system is securely installed. Grasp the front of the child restraint system with one hand on each side, and attempt to:

- Twist the child restraint system from side to side.
- Pull the child restraint system away from the seat.

If the child restraint system moves away from the seat, both latches are not fully engaged onto the seat's anchor bars. You must reinstall it and try again. It is critical that both latches on the child restraint system are fully engaged.

⚠ WARNING: Do not use LATCH anchors with child seats or booster seats that have an integrated safety belt where the combined weight of the child plus the child restraint system exceeds 65 lbs (29.5 kg).

Attaching Upper Tether Straps

If an upper tether strap is provided, attach its hook to the anchor point located on the back of the rear seats.

NOTE: The location of anchor points may not be readily visible but can be found by identifying a slice in the seat's material.

⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

⚠ WARNING: USE ONLY SEAT BELT RETAINED CHILD SAFETY SEATS IN THE CENTER SEATING POSITION.

For dual-strap tethers, position the straps as shown.



Position single-strap tethers for the outboard seating positions to route on the outside of the head support. Position a single strap in the center seating position to route over the top of the seat as illustrated.

NOTE: To prevent the single-strap tether in the center seating position from moving side to side, the top of the seat deforms.



Testing a Child Safety Seat











Before seating a child, always make sure the child safety seat is not loose:

1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.
2. If the seat moves more than one inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.

Child Safety Seat Warnings

- WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
- WARNING:** Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. Children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
- WARNING:** According to collision statistics, children are safer when properly restrained in the rear seating positions than in the front seating positions.
- WARNING:** Do not use a forward facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.



-  **WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children should be restrained in an appropriate child safety seat at all times.
-  **WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
-  **WARNING:** Children should ride in a rear facing child safety seat using the seat's integrated 5-point harness for as long as possible.
-  **WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
-  **WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
-  **WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
-  **WARNING:** Child restraint anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.
-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.



Tesla Built-In Rear Facing Child Seats

Usage Restrictions

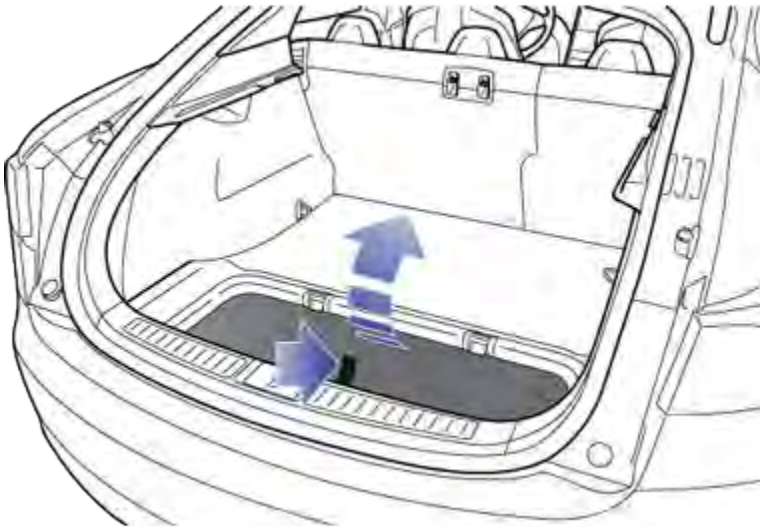
The optional Tesla built-in rear facing child seats are child restraint systems and must only be used for children over 37" (94 cm) tall and weighing between 35 and 77 lbs (16.2 to 35.2 kg).

Always ensure the top of the child's head cannot contact the vehicle and that the child is seated comfortably with the seat belts positioned and latched correctly. The child's pelvis must be held securely in place by the lap belt. Follow all instructions provided and **do not use supplemental child safety seats in these seats.**

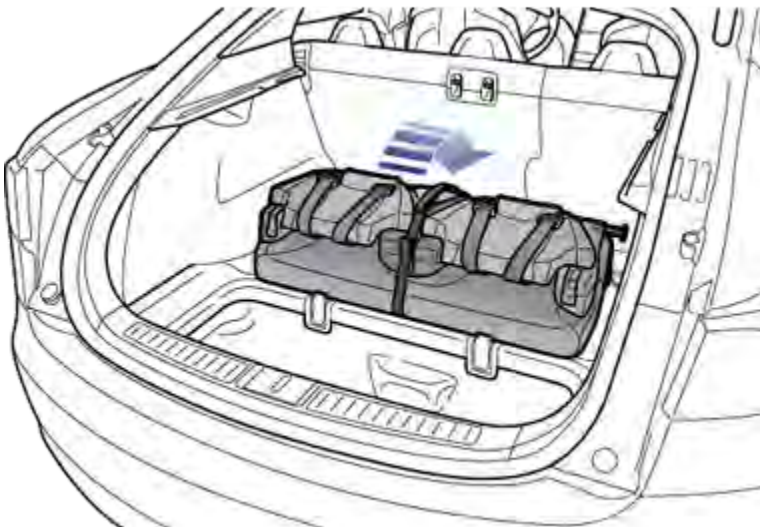
NOTE: Whenever a child is seated in the Tesla built-in rear facing child seats, it is recommended that you set the climate control system to draw outside air into Cybertruck Model S Model X Model 3 Model Y instead of recirculating the air. This draws more air into the rear seating areas. See [#unique_386 on page](#) .

Opening

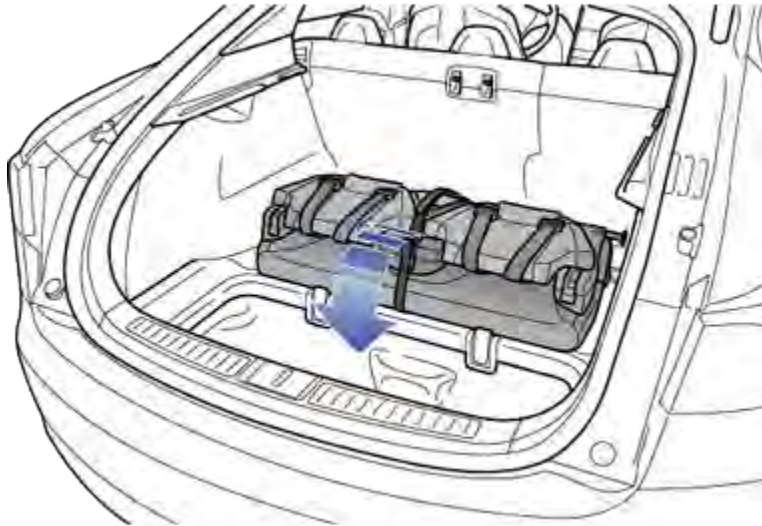
1. Remove the cover from the trunk floor and pull the strap to lift the seat assembly upward.



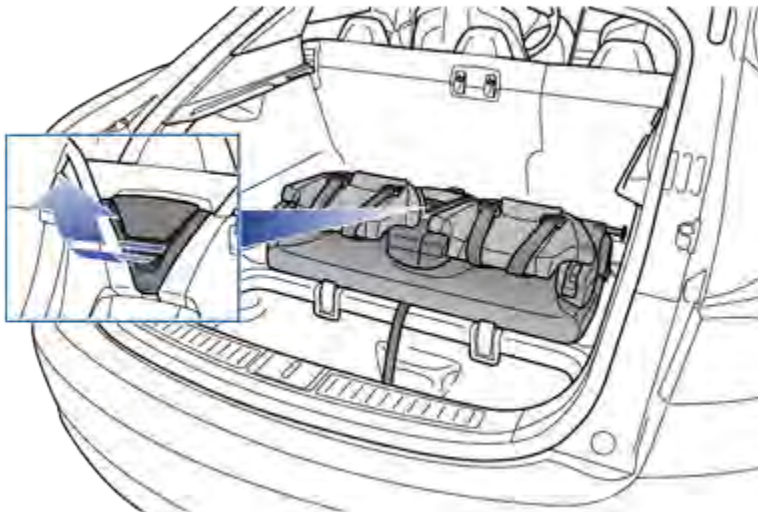
2. Push the seat assembly into position.



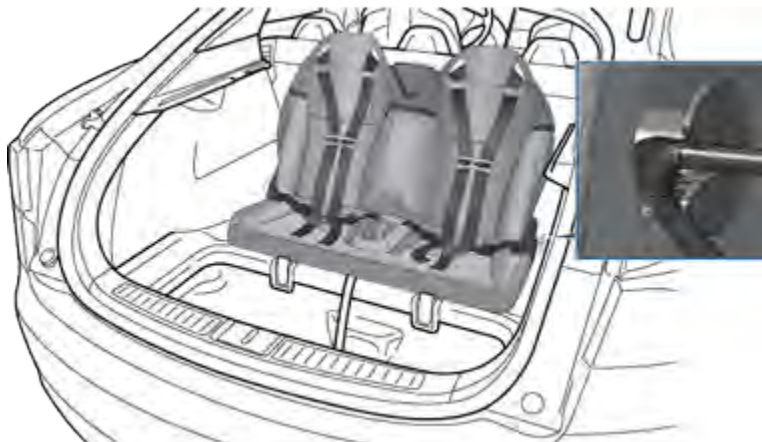
3. Undo the Velcro strap.



4. Pull the handle to release the head supports from the seat back, then pull the head supports toward you to unfold them.



5. Raise the seat back to the upright position and push until it locks into position. Visually check to ensure that the retaining catches are engaged.



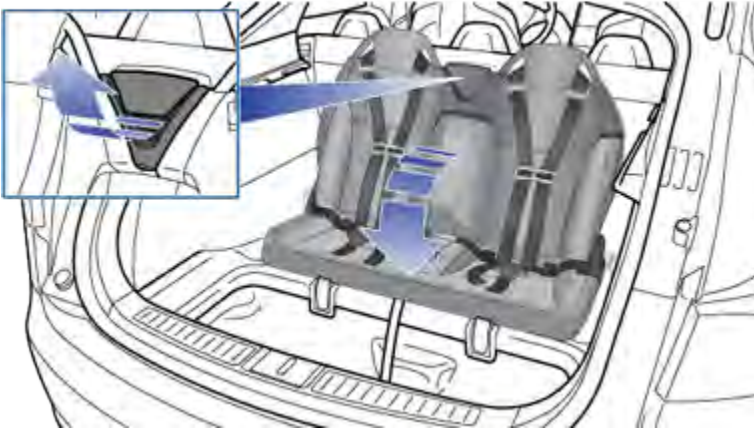
6. Check that the seat back and seat base are securely retained in the upright position by trying to pull the seat back toward you.



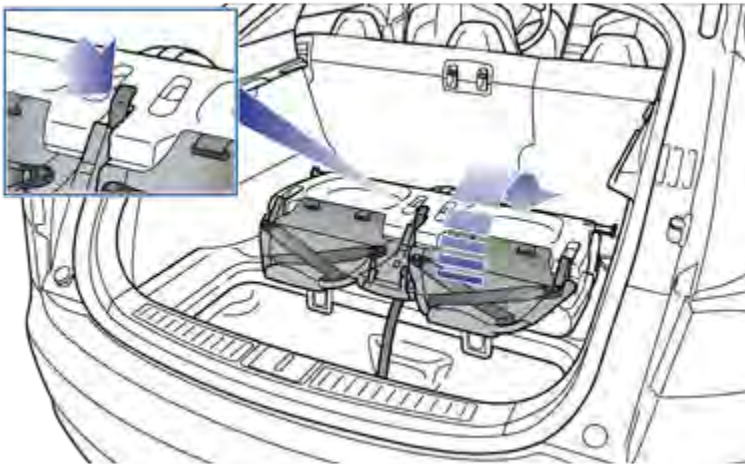
Folding

CAUTION: Before folding the seats, fasten the seat belts to prevent them from getting trapped in the seat mechanism and being damaged.

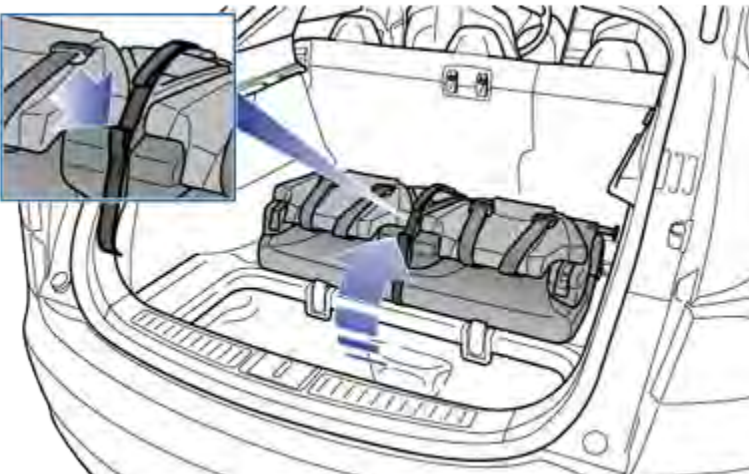
1. Pull the handle to release the seat back and pull the seat back fully forward.



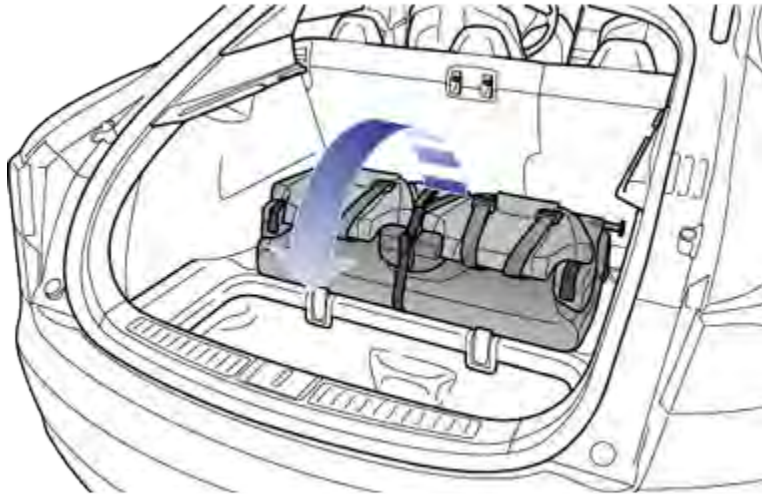
2. Push the lever to release the head supports from the seat back, then fold back onto the seat.



3. Secure the Velcro strap.



4. Pull the strap at the rear of the seat to fold the seat assembly into the trunk floor.



5. Replace the cover on the trunk floor.



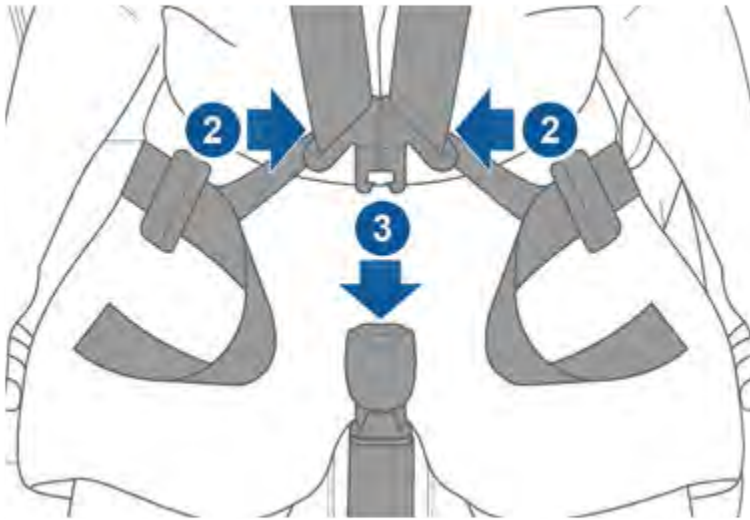
Seating a Child

The Tesla built-in rear facing child seats are child restraint systems and must only be used for children over 37" (94 cm) tall and weighing between 35 and 77 lbs (16.2 to 35.2 kg).

Always ensure the top of the child's head cannot contact the vehicle and that the child is seated comfortably with the seat belts positioned and latched correctly. The child's pelvis must be held securely in place by the lap belt. Follow all instructions provided and **do not use supplemental child safety seats in these seats.**

NOTE: Whenever a child is seated in the Tesla built-in rear facing child seats, it is recommended that you set the climate control system to draw outside air into CybertruckModel SModel XModel 3Model Y instead of recirculating the air. This draws more air into the rear seating areas. See [#unique_386](#) on page .

1. Position the child in the seat with arms through the loops of the seat belts.
2. Connect the two halves of the seat belt tongue.
3. Insert the seat belt tongue into the buckle and ensure it is securely fastened.



4. Adjust the shoulder belts so they run over the top of the child's shoulders and away from the face.
5. Connect the chest clip and adjust it to be as high as possible without causing the shoulder belts to touch the child's neck.
6. Pull the lower straps until the child is securely held in the seat.



7. Slide the shoulder clips into place to ensure the upper portion of the belts remain positioned over the child's shoulders.



To release, press the button on the buckle, release the chest clip, and separate the two halves of the seat restraint.

Warnings - Tesla Child Seats

- ⚠ WARNING:** The Tesla built-in rear facing seats are child restraint systems and must only be used for children over 37" (94 cm) tall and weighing between 35 and 77 lbs (16.2 to 35.2 kg).
- ⚠ WARNING:** Do not use supplemental child restraint systems, including booster seats, in the Tesla built-in rear facing child seats.
- ⚠ WARNING:** Always ensure that the top of the child's head cannot touch the vehicle and that the child is seated comfortably with the seat belts correctly fastened.
- ⚠ WARNING:** Follow all instructions and heed all warnings related to the Tesla built-in rear facing child seats. Failure to do so can compromise occupant safety.
- ⚠ WARNING:** Read all safety warnings and labels attached to the seats.
- ⚠ WARNING:** Do not leave children unattended in Cybertruck Model S Model X Model 3 Model Y, even if the child is secured in a child safety seat or a Tesla built-in rear facing child seat. In hot weather, the interior temperature can reach dangerous levels that can result in dehydration, serious injury or death.
- ⚠ WARNING:** Do not remove or replace the fabric on a Tesla built-in rear facing child seat. The covers are an integral part of the restraint's performance and should not be removed or replaced with any other type than those supplied by Tesla.
- ⚠ WARNING:** If the Tesla built-in rear facing child seats have been worn in an accident, they must be inspected or replaced by Tesla, even if damage is not obvious.
- ⚠ WARNING:** Before allowing a child to ride in the Tesla built-in rear facing child seats, check that the seat is securely held in the upright position by trying to pull the seat back toward you.
- ⚠ WARNING:** Do not remove the built-in rear facing child seats for any reason, including cleaning. To ensure safety of occupants, removal and installation must be performed by qualified Tesla service technicians.
- ⚠ WARNING:** Do not make modifications or additions that can interfere with the operation of the Tesla built-in rear facing child seats.
- ⚠ WARNING:** To prevent injury, ensure all loose items (bags, luggage, etc.) are secured. In an accident, or during hard braking and sharp turns, loose items could cause injury.

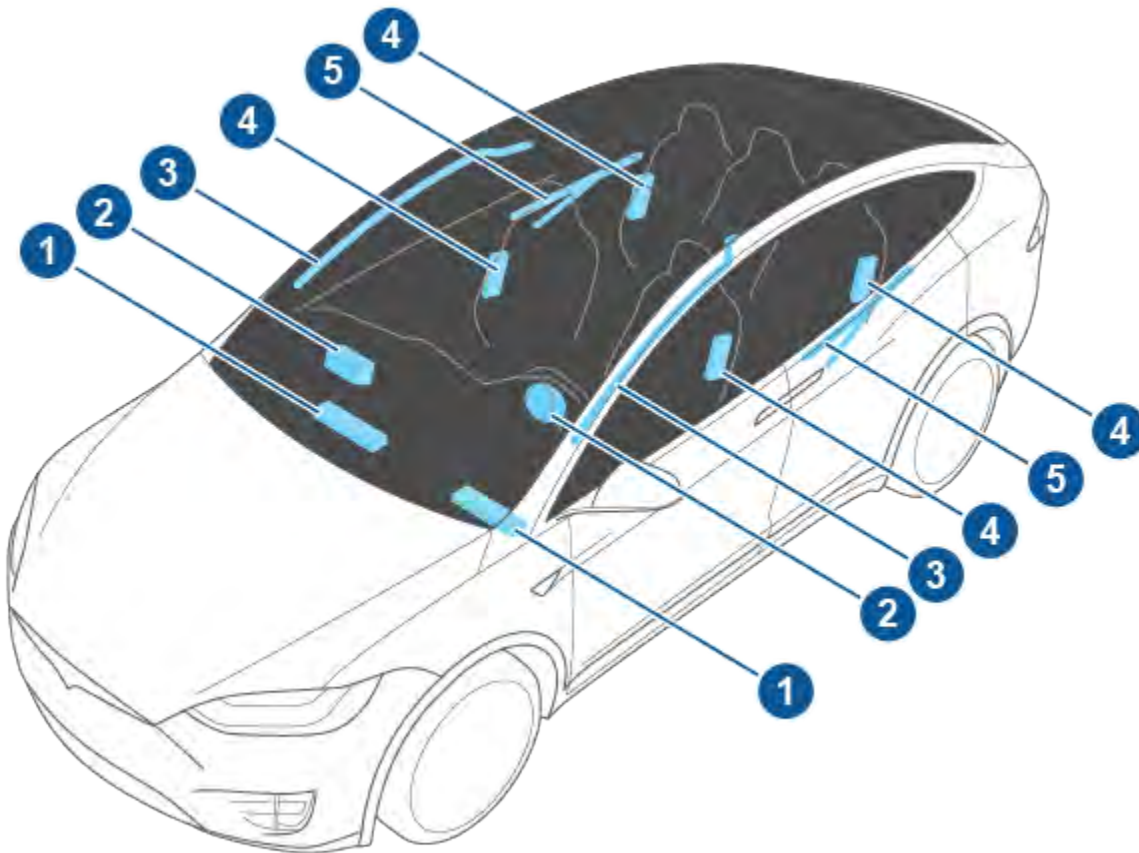


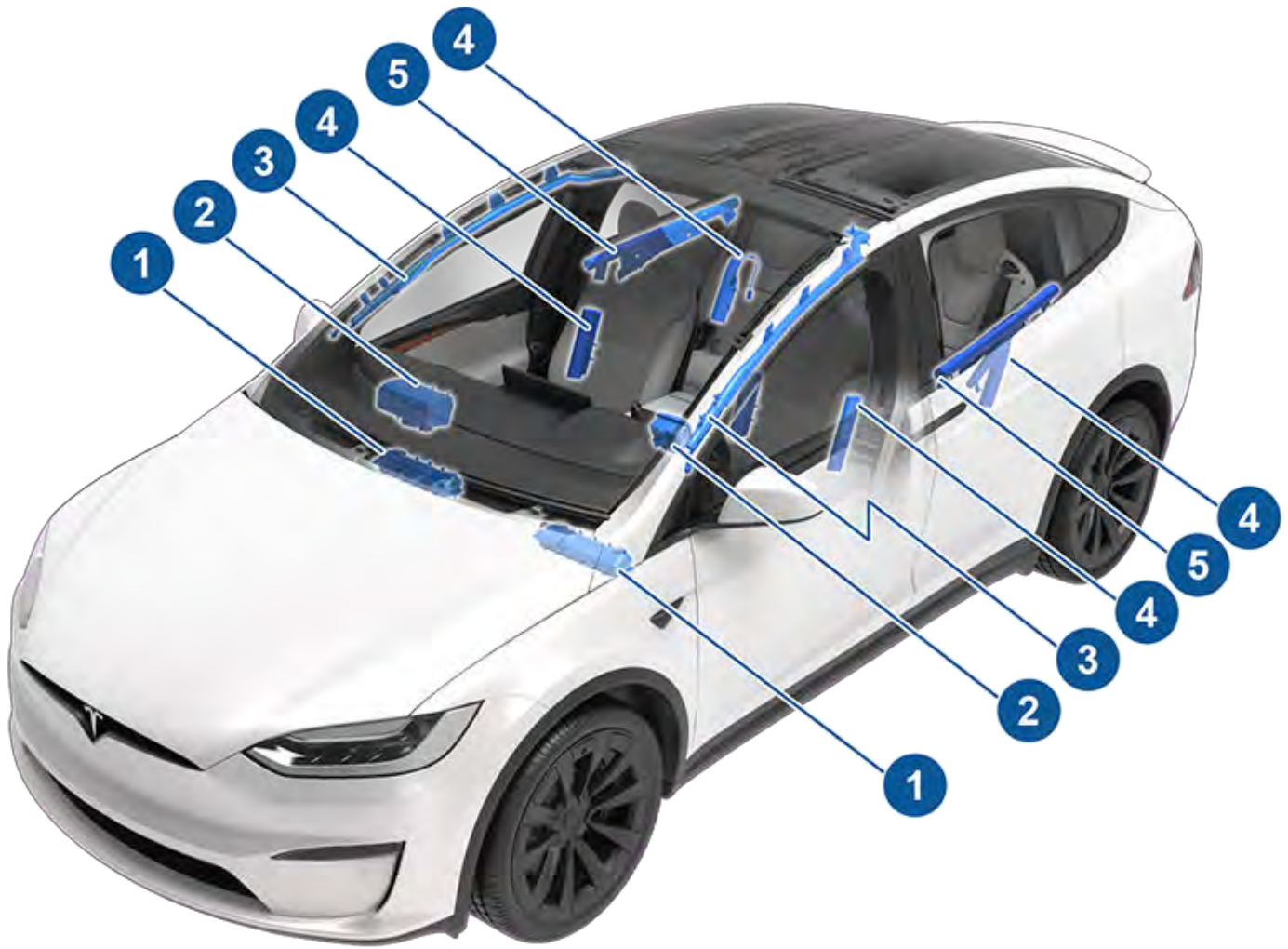
Airbags

Location of Airbags

Airbags are located in the approximate areas shown below. Airbag warning information is printed on the sun visors.

CybertruckModel SModel XModel 3Model Y is equipped with an airbag and lap/shoulder belt at both front seating positions. The airbag is a supplemental restraint at those seating positions. All occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.





1. Knee airbags
2. Front airbags
3. Curtain airbags
4. Seat-mounted side airbags

NOTE: Vehicles manufactured prior to approximately mid-September 2022 are *not* equipped with a seat-mounted airbag on the inside portion of the driver's seat.

5. Door-mounted airbags

How Airbags Work

Airbags inflate when sensors detect an impact that exceeds deployment thresholds. These thresholds are designed to predict the severity of a crash in time for the airbags to help protect the vehicle's occupants. Airbags inflate instantly with considerable force accompanied by a loud noise. The inflated bag, together with the seat belts, limits movement of occupants to reduce the risk of injury.

Front airbags are not ordinarily designed to inflate in rear collisions, rollovers, side collisions and when braking heavily or driving over bumps and potholes. Likewise, front airbags may not inflate in all frontal collisions, such as minor front collisions, underride collisions, or minor impacts with narrow objects (such as posts or poles). Significant superficial damage can occur to the vehicle without the airbags inflating and, conversely, a relatively small amount of structural damage can cause airbags to inflate. Therefore, the external appearance of the vehicle after a collision does not represent whether or not the front airbags should have inflated.



WARNING: Before modifying CybertruckModel SModel XModel 3Model Y to accommodate a person with disabilities in a way that may affect the airbag system, use the mobile app to schedule service.

Types of Airbags

CybertruckModel SModel XModel 3Model Y has the following types of airbags:

- **Front airbags:** The front airbags are designed to reduce injuries if larger children or adults are riding in the front seats. Follow all warnings and instructions related to seating a child on the front passenger seat (if permitted in your market region).
- **Knee airbags:** Knee airbags and the front airbags work together. The knee airbags limit the forward motion of the front seat occupants by restricting leg movement, thereby positioning the occupants so that the front airbags work more effectively. Whether or not knee airbags deploy in a collision is partially dependent on the track position of the associated seat.
- **Seat-mounted airbags:** A seat-mounted side airbag in the front seats helps protect the pelvis and the thorax region of the torso. The seat-mounted airbag on the inside portion of the driver's seat helps protect the head and torso. Seat-mounted airbags on both the impacted and non-impacted side of the vehicle inflate in the event of a severe side impact or a severe offset frontal impact.
- **Curtain airbags:** A curtain airbag on each side of CybertruckModel SModel XModel 3Model Y in the front roof-rail help protect the head. Curtain airbags on both the impacted and non-impacted side of the vehicle will inflate if a severe side impact occurs, a severe offset frontal impact occurs, or if the vehicle rolls over.
- **Door-mounted airbags:** There is an airbag on each side of CybertruckModel SModel XModel 3Model Y mounted in the trim on the falcon wing doors. These are the same as the curtain airbags in that they help protect the head and typically inflate in the event of a severe side impact, a severe offset frontal impact, or if the vehicle rolls over. The door-mounted airbags on both the impacted and non-impacted side of the vehicle will inflate.

Airbag Status Indicator

The status of the passenger front airbag displays on the touchscreen:



The Passenger Airbag Off indicator displays on the touchscreen when the passenger front airbag is OFF. When the passenger front airbag is OFF, it does not inflate when a collision occurs. This indicator also displays when the seat is unoccupied. When driving with a child seat on the front passenger seat (if permitted in your market region), always double-check the status of the passenger front airbag to confirm that it is OFF.

NOTE: In cars manufactured prior to approximately October 2019, the Passenger Airbag Off indicator *does not* display when the seat is unoccupied.



To protect an adult occupying the front passenger seat, ensure the passenger front airbag is ON. When the passenger airbag is ON, it may inflate when a collision occurs.



The airbag indicator displays on the touchscreen for a few seconds at the start of every drive while checking the following functionality, as applicable:

- Airbags
- Seat belts with pre-tensioners and load limiters
- Impact sensors
- Occupant sensors
- Seat belt sensors
- Passive safety component wiring harnesses
- Onboard restraint controlled components (ex: accelerometer and other passive safety components)

After this check, the airbag indicator turns off. If the airbag system detects a fault in any of the previously mentioned components, the airbag warning indicator stays on. In this case contact Tesla service immediately. Do not drive the vehicle until the airbag system is inspected by Tesla.



The airbag indicator on the instrument cluster remains lit if the airbag system is malfunctioning. The only time this indicator should illuminate is briefly when CybertruckModel SModel XModel 3Model Y first powers up, in which case it turns off within a few seconds. If it remains illuminated, use the mobile app to schedule a service appointment immediately and do not drive.

Front Passenger Occupant Detection

CybertruckModel SModel XModel 3Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag.

NOTE: The occupancy sensor system meets the regulatory requirement of FMVSS 208 and automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.

Weight in front passenger seat	Passenger airbag status	Indicator status
Empty	OFF	PASSENGER AIRBAG OFF**
Up to 20 lbs (9 kg)	OFF	PASSENGER AIRBAG OFF
20-100 lbs (9-45 kg)*	OFF or ON	OFF - PASSENGER AIRBAG OFF ON - PASSENGER AIRBAG ON
Over 100 lbs (45 kg)	ON	PASSENGER AIRBAG ON

*Values are approximate. A weight detected near the threshold can cause the airbag status to occasionally turn on and off depending on seating position and physique.

**In cars manufactured after approximately October 2019, the Passenger Airbag Off indicator displays when the seat is unoccupied.


NOTE: It takes approximately six seconds after you power on CybertruckModel SModel XModel 3Model Y for the occupancy sensor to report accurate status of the front passenger airbag. As a result, when you first power on CybertruckModel SModel XModel 3Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, it will take the touchscreen approximately six seconds to display the status, PASS AIRBAG OFF. If it fails to do so, use the mobile app to schedule a service appointment immediately and do not seat a child in the front passenger seating position.


To make sure the sensing system can correctly detect occupancy status, eliminate the following:

- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse).
- Objects wedged between the seat back and seat cushion.
- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

 **WARNING:** If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, use the mobile app to schedule a service appointment immediately.

 **WARNING:** If seating a child in the front passenger seat is legally permissible in your market region, it is the driver's responsibility to ensure that the passenger front airbag is OFF. Never seat a child in a rear facing safety seat in the front passenger seat with an active airbag. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.



WARNING: Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system, if equipped.

Front Passenger Occupant Detection

CybertruckModel SModel XModel 3Model Y has an occupancy classification system (OCS) that controls the status of the passenger front airbag.

NOTE: The occupancy classification system (OCS) automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.

WARNING: Seating an infant in a rear-facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents
Rear facing child restraint system designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	20 lbs (9 kg) or less
Forward facing child restraint system	OFF	PASSENGER AIRBAG OFF	35 lbs (16 kg) or less
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	20-100 lbs (9-45 kg)*
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 100 lbs (45 kg)

*If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.

NOTE: It takes approximately six seconds after you power on CybertruckModel SModel XModel 3Model Y for the occupant classification system (OCS) to report accurate status of the front passenger airbag. As a result, when you first power on CybertruckModel SModel XModel 3Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, it will take the touchscreen approximately six seconds to display the status, PASS AIRBAG OFF. If it fails to do so, use the mobile app to schedule a service appointment and do not seat a child in the front passenger seating position.

To make sure the sensing system can correctly detect occupancy status, eliminate the following:




- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse).
- Objects wedged between the seat back and seat cushion.
- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

WARNING: If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, use the mobile app to schedule a service appointment immediately.



-  **WARNING:** Never seat a child in the front passenger seat. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.
-  **WARNING:** To ensure accuracy of the occupant detection system, do not make any modifications to the front passenger seat.
-  **WARNING:** Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system and the noise-canceling microphones, if equipped.

Ensuring Accurate Occupant Detection

To help ensure an occupant in the front passenger seat can be accurately classified, the passenger must:

- Wear a seat belt.
- Sit upright on the center of the seat cushion, with shoulders resting against the seat back and legs extended comfortably in front with feet on the floor. See [Examples of Correct and Incorrect Seating Positions on page 327](#). See [Examples of Correct and Incorrect Seating Positions on page 326](#).
- Remain positioned on the seat cushion and not lift their weight off the seat (for example, by pushing their feet against the floor or pressing on the center console or armrest to lift up).
- Never wear thick, wet, or bulky clothing (such as ski wear or padded clothing).





In addition to the items listed above, the following situations can interfere with the accuracy of the occupant classification system:

- Placing a radio transmitter (for example, a hunting radio or walkie-talkie) on the front passenger seat.
- Placing an AC/DC inverter, or a device that is being powered by the inverter (for example, a cell phone, tablet, or computer) on the front passenger seat cushion.
- Placing liquid (such as a bottled drink) or food containers on a car seat when a child restraint system is present.
- Incorrectly placing a child restraint system so that the entire lower section is not positioned against the seat cushion.
- Objects lodged under the seat or wedged between the seat back and cushion.
- Heavy objects sitting on the seat (briefcase, large purse).
- Cargo interfering with the seat.
- Aftermarket items attached to or placed between the seat and the occupant, such as covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, instruct passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: Tesla follows NHTSA (National Highway Traffic Safety Administration) recommendations that all occupants age 12 and under must ride in the rear seating positions.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

-  **WARNING:** Failure to follow the above instructions can adversely affect the Occupant Classification System (OCS) which can cause serious injury or death.
-  **WARNING:** If the front passenger airbag is not turning on or off as expected, do not seat a passenger in the front passenger seat. Use the mobile app to schedule a service appointment.
-  **WARNING:** To ensure accuracy of the occupant detection system, do not make any modifications to the front passenger seat.
-  **WARNING:** Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant classification system.



Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:



Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:





Inflation Effects

⚠ WARNING: When airbags inflate, a fine powder is released. This powder can irritate the skin and should be thoroughly flushed from the eyes and from any cuts or abrasions.

After inflation, the airbags deflate to provide a gradual cushioning effect for the occupants and to ensure the driver's forward vision is not obscured.

If airbags have inflated, or if your vehicle has been in a collision, always have the airbags, seat belt pre-tensioners and any associated components checked and, if necessary, replaced by Tesla.

In a collision, in addition to the airbags inflating:

- United States only: Your vehicle automatically dials 911 if **Controls > Safety > Automatic 911 calls** is enabled. Cancellation instructions as well as a countdown timer display on the touchscreen.
- Doors and liftgate unlock.
- Hazard warning lights turn on.
- Interior lights turn on.
- High voltage is disabled (you must use the mobile app to schedule a service appointment to restore high voltage power).
- Windows go to the vent position.
- Vehicle applies the brakes to come to a stop.

NOTE: Depending on the nature of the impact and the forces involved, doors may not unlock in a collision and/or damage may prevent them from opening. In such cases, the door may need to be opened using the interior manual release, or other means of extrication (for example, exiting through another door, breaking the window, etc.).

Airbag Warnings

⚠ WARNING: All occupants, including the driver, should always wear their seat belts, whether or not an airbag is also provided at their seating position, to minimize the risk of severe injury or death in the event of a collision.

⚠ WARNING: Front seat occupants should not place their arms over the airbag module, as an inflating airbag can cause fractures or other injuries.

⚠ WARNING: Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system, if equipped.

⚠ WARNING: Airbags inflate with considerable speed and force, which can cause injury. To limit injuries, ensure that occupants are wearing seat belts and are correctly seated, with the seat positioned as far back as possible. The National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of 10 inches (25 cm) between an occupant's chest and an airbag.

⚠ WARNING: Children should not be seated on the front passenger seat. Follow all regulations in your region for the appropriate way to seat a child based on the child's weight, size, and age. The safest place to seat infants and young children is in a rear seating position. Seating an infant or child on a seat equipped with an operational front airbag can cause serious injury or death.

⚠ WARNING: Do not use a rear-facing child restraint system on a seat with an operational airbag in front of it. Doing so can cause injury or death if the airbag inflates.

⚠ WARNING: To ensure correct inflation of the side airbags, maintain an unobstructed gap between an occupant's torso and the side of CybertruckModel SModel XModel 3Model Y.

⚠ WARNING: Passengers shouldn't lean their heads against doors. Doing so can cause injury if a curtain airbag inflates.

⚠ WARNING: Do not allow passengers to obstruct the operation of an airbag by placing feet, knees or any other part of the body on or near an airbag.

⚠ WARNING: Do not attach or place objects on or near the front airbags, the side of the front seats, the headliner at the side of the vehicle, or any other airbag cover that could interfere with inflation of an airbag. These include but are not limited to: steering wheel covers, decals, seat cushions, pillows, etc. Objects can cause serious injury if the vehicle is in a collision severe enough to cause the airbag to inflate.

⚠ WARNING: Following inflation, some airbag components are hot. Do not touch until they have cooled.

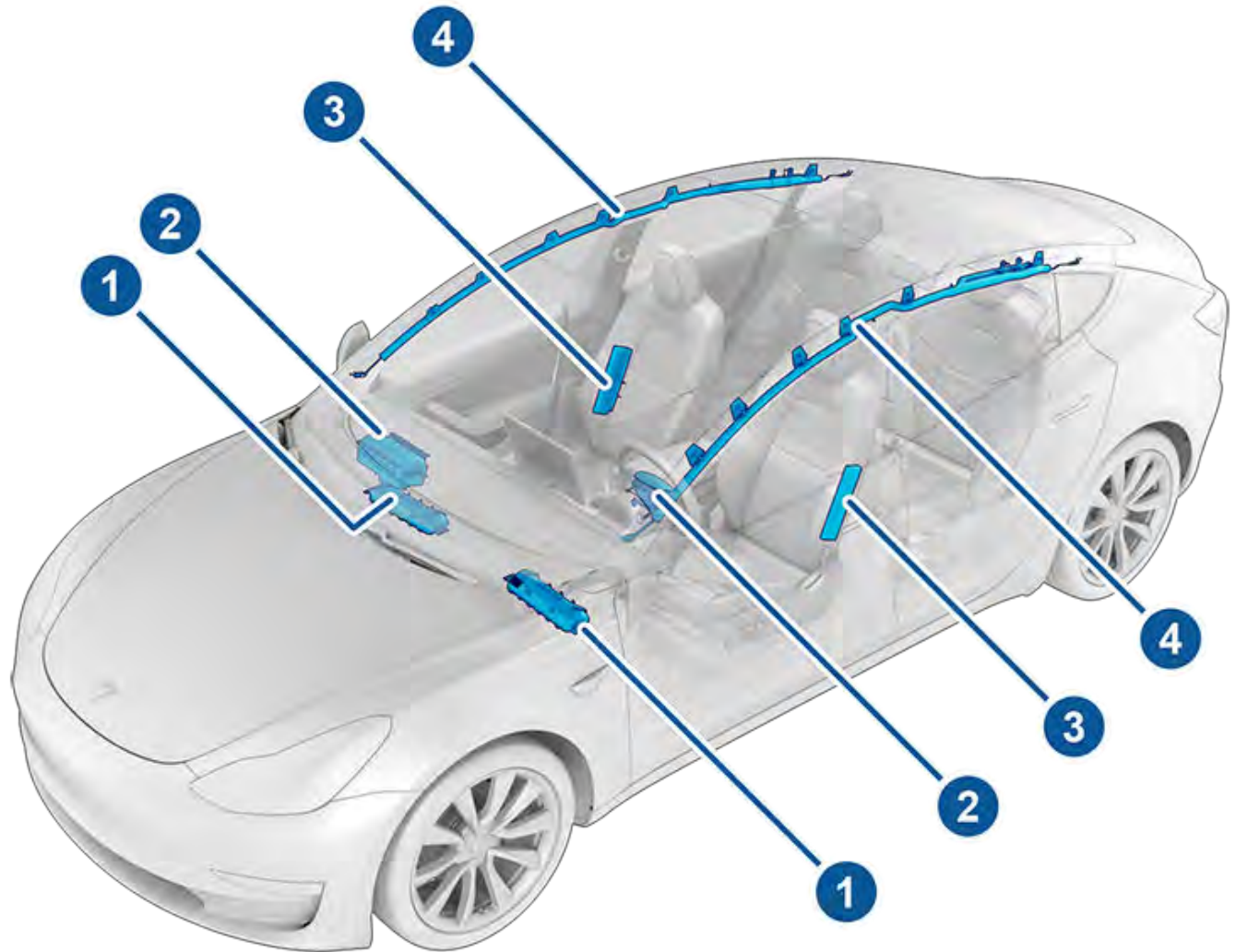
Airbags

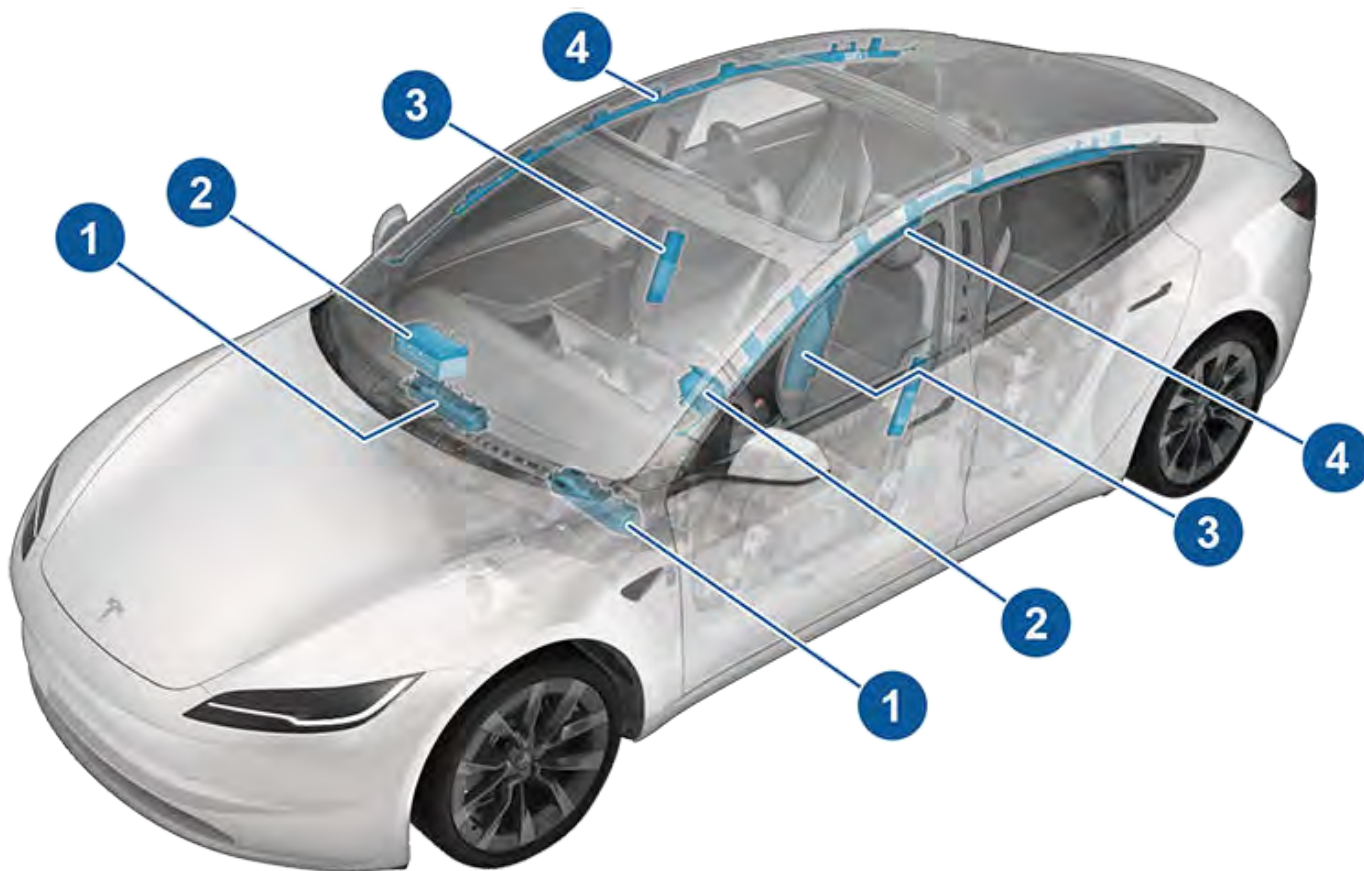
Location of Airbags

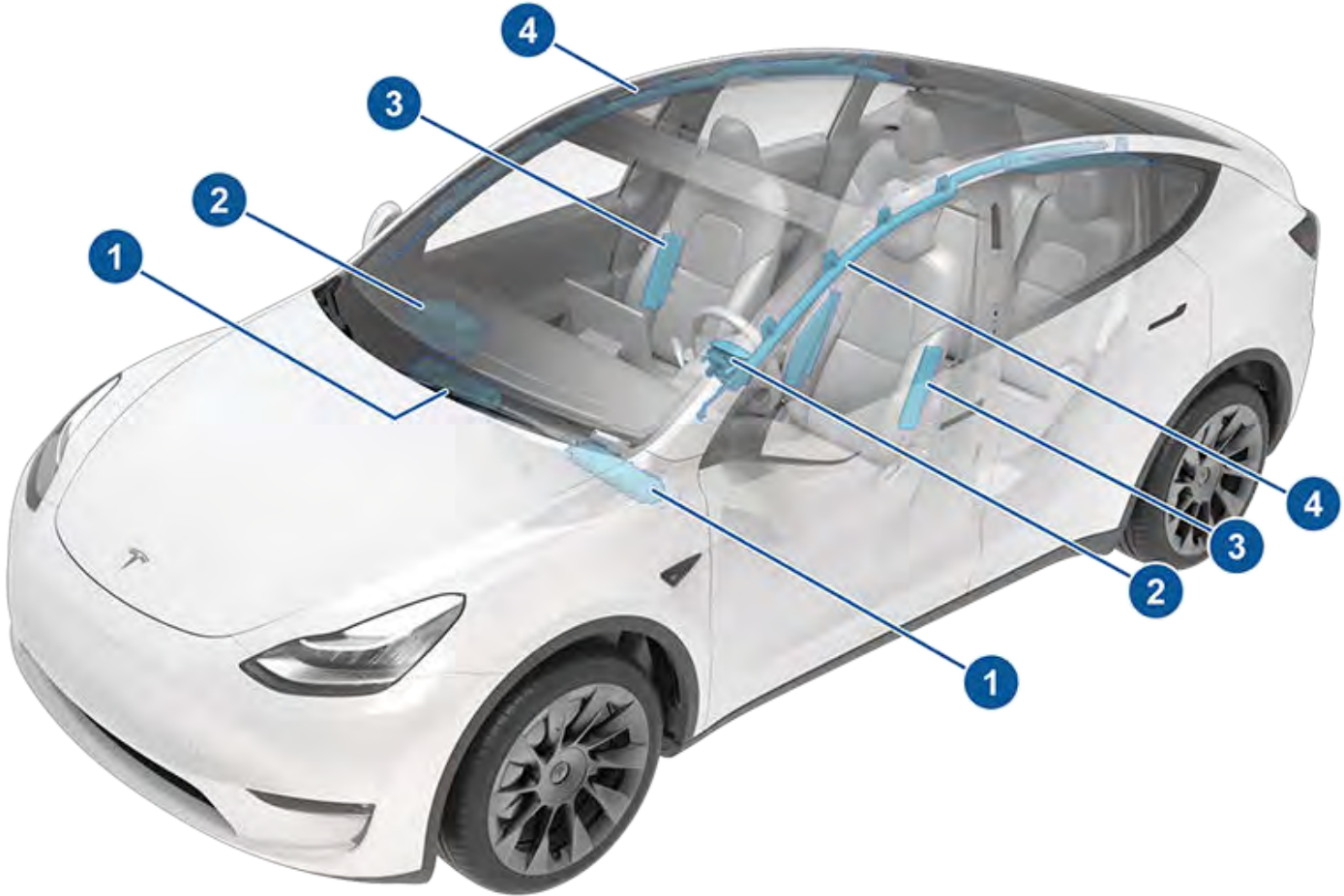
Airbags are located in the approximate areas shown below. Airbag warning information is printed on the sun visors.

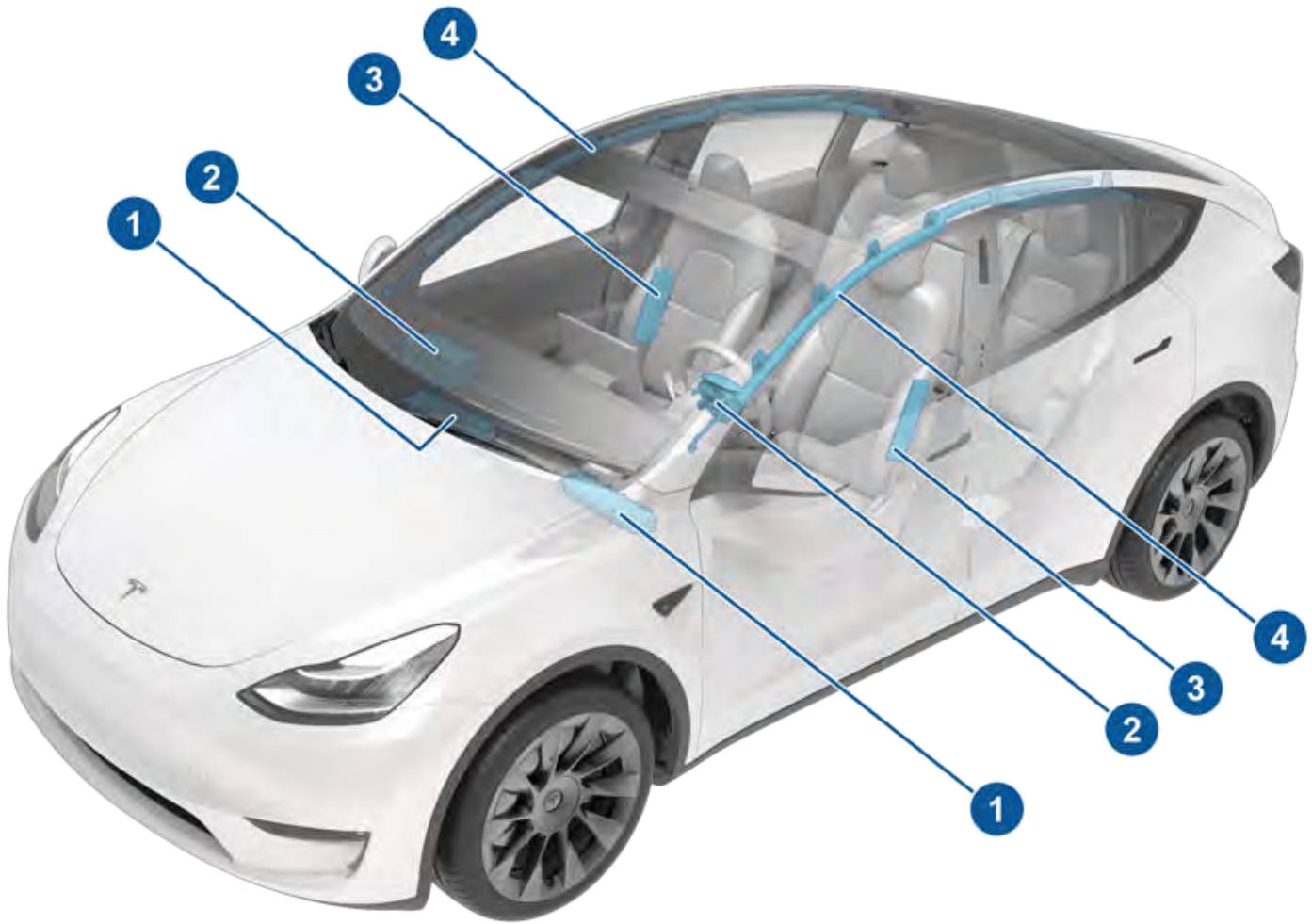
CybertruckModel SModel XModel 3Model Y is equipped with an airbag and lap/shoulder belt at both front seating positions. The airbag is a supplemental restraint at those seating positions. All occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.

NOTE: On RHD (Right Hand Drive) vehicles, the locations of the passenger and driver airbags are reversed.









1. *United States only:* Knee airbag
2. Front airbags
3. Seat-mounted side airbags

NOTE: Your vehicle also has a seat-mounted airbag on the inside portion of the driver's seat.

NOTE: Your vehicle is also equipped with a seat-mounted airbag on the inside portion of the driver's seat.

4. Curtain airbags



How Airbags Work

Airbags inflate when sensors detect an impact that exceeds deployment thresholds. These thresholds are designed to predict the severity of a crash in time for the airbags to help protect the vehicle's occupants. Airbags inflate instantly with considerable force accompanied by a loud noise. The inflated bag, together with the seat belts, limits movement of occupants to reduce the risk of injury.

Front airbags are not ordinarily designed to inflate in rear collisions, rollovers, side collisions and when braking heavily or driving over bumps and potholes. Likewise, front airbags may not inflate in all frontal collisions, such as minor front collisions, underride collisions, or minor impacts with narrow objects (such as posts or poles). Significant superficial damage can occur to the vehicle without the airbags inflating and, conversely, a relatively small amount of structural damage can cause airbags to inflate. Therefore, the external appearance of the vehicle after a collision does not represent whether or not the front airbags should have inflated.



WARNING: Before modifying your vehicle to accommodate a person with disabilities in a way that may affect the airbag system, use the mobile app to schedule a service appointment.

Types of Airbags

Cybertruck Model S Model X Model 3 Model Y has the following types of airbags:

- **Front airbags:** The front airbags are designed to reduce injuries if larger children or adults are riding in the front seats. Follow all warnings and instructions related to seating a child on the front passenger seat (if permitted in your market region). See [Child Safety Seats on page 259](#).
- **Knee airbags:** Knee airbags and the front airbags work together. The knee airbags limit the forward motion of the front seat occupants by restricting leg movement, thereby positioning the occupants so that the front airbags work more effectively.
- **Seat-mounted side airbags:** A seat-mounted side airbag in the front seats helps protect the pelvis and the thorax region of the torso; the seat-mounted far side airbag in the inside portion of the driver's seat helps protect the head and torso; the seat-mounted far side airbag in the inside portion of the driver's seat helps protect the head and torso. The seat-mounted side airbags on both the impacted and non-impacted side of the vehicle will inflate in the event of severe side impact or severe offset frontal impact.
- **Curtain airbags:** Curtain airbags help protect the head. Curtain airbags on both the impacted and non-impacted side of the vehicle will inflate only if a severe side impact occurs, or if the vehicle rolls over.

Airbag Status Indicator

The status of the passenger front airbag displays in the top corner of the touchscreen:



Before driving with a child seated on the front passenger seat (if legally permitted in your market region), always double-check the status of the passenger front airbag to confirm that it is OFF. When the passenger front airbag is OFF, it will not inflate when a collision occurs. This indicator also displays when the seat is unoccupied.



To protect an adult occupying the front passenger seat, ensure the passenger front airbag is ON. When the passenger front airbag is ON, it may inflate when a collision occurs.



The airbag indicator displays on the touchscreen for a few seconds at the start of every drive while checking the following functionality, as applicable:

- Airbags
- Seat belts with pre-tensioners and load limiters
- Impact sensors
- Occupant sensors
- Seat belt sensors
- Passive safety component wiring harnesses



- Onboard restraint controlled components (ex: accelerometer and other passive safety components)

After this check, the airbag indicator turns off. If the airbag system detects a fault in any of the previously mentioned components, the airbag warning indicator stays on. In this case contact Tesla service immediately. Do not drive the vehicle until the airbag system is inspected by Tesla.

Front Passenger Occupant Detection

Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the status of the front airbag.

NOTE: The Occupant Classification System (OCS) meets the regulatory requirement of FMVSS 208 and automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.

WARNING: Seating an infant in a rear facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents
Rear-facing child restraint system designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	20 lbs (9 kg) or less
Forward facing child restraint system	OFF	PASSENGER AIRBAG OFF	35 lbs (16 kg) or less
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	20-100 lbs (9-45 kg)*
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 100 lbs (45 kg)

*If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.

Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents.
Rear-facing child restraint system designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	20 lbs (9 kg) or less
Forward facing child restraint system	OFF	PASSENGER AIRBAG OFF	35 lbs (16 kg) or less
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	20-100 lbs (9-45 kg)*
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 100 lbs (45 kg)

* If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.



Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents.
Rear-facing child restraint system designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	22 lbs (10 kg) or less
Forward facing child restraint system	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	22-35 lbs (10-16 kg)
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Less than 51 lbs (23 kg)
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	51-103 lbs (23-47 kg)
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 103 lbs (47 kg)

* If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.




NOTE: It takes approximately six seconds after you power on CybertruckModel SModel XModel 3Model Y for the Occupant Classification System (OCS) to report accurate status of the front passenger airbag. As a result, when you first power on CybertruckModel SModel XModel 3Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, it will take the touchscreen approximately six seconds to display the status, PASS AIRBAG OFF. If it fails to do so, use the mobile app to schedule a service appointment and do not seat a child in the front passenger seating position.

To make sure the sensing system can correctly detect occupancy status, eliminate the following:

- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse, etc.).
- Objects wedged between the seat back and seat cushion.
- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

-  **WARNING:** If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, use the mobile app to schedule a service appointment immediately.
-  **WARNING:** If seating a child in the front passenger seat is legally permissible in your market region, it is the driver's responsibility to ensure that the passenger front airbag is OFF. Never seat a child in a rear facing safety seat in the front passenger seat with an active airbag. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.
-  **WARNING:** Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the Occupant Classification System, if equipped.

Ensuring Accurate Occupant Detection

To help ensure an occupant in the front passenger seat can be accurately classified, the passenger must:

- Wear a seat belt.



- Sit upright on the center of the seat cushion, with shoulders resting against the seat back and legs extended comfortably in front with feet on the floor.
- Remain positioned on the seat cushion and not lift their weight off the seat (for example, by pushing their feet against the floor or pressing on the center console or armrest to lift up).
- Never wear thick, wet, or bulky clothing (such as ski wear or padded clothing).





In addition to the items listed above, the following situations can interfere with the accuracy of the occupant classification system:

- Placing a radio transmitter (for example, a hunting radio or walkie-talkie) on the front passenger seat.
- Placing an AC/DC inverter, or a device that is being powered by the inverter (for example, a cell phone, tablet, or computer) on the front passenger seat cushion.
- Placing liquid (such as a bottled drink) or food containers on a car seat when a child restraint system is present.
- Incorrectly placing a child restraint system so that the entire lower section is not positioned against the seat cushion.
- Objects lodged under the seat or wedged between the seat back and cushion.
- Heavy objects sitting on the seat (briefcase, large purse).
- Cargo interfering with the seat.
- Aftermarket items attached to or placed between the seat and the occupant, such as covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, instruct passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: Tesla follows NHTSA (National Highway Traffic Safety Administration) recommendations that all occupants age 12 and under must ride in a rear seating position.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

-  **WARNING:** Failure to follow the instructions can adversely affect the Occupant Classification System (OCS) which can cause serious injury or death.
-  **WARNING:** If the front passenger airbag is not turning on or off as expected, do not seat a passenger in the front passenger seat. Use the mobile app to schedule a service appointment.
-  **WARNING:** To ensure accuracy of the Occupant Classification System (OCS), do not make any modifications to the front passenger seat.
-  **WARNING:** Do not use seat covers on Cybertruck Model S Model X Model 3 Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system.

Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:



Inflation Effects

⚠ WARNING: When airbags inflate, a fine powder is released. This powder can irritate the skin and should be thoroughly flushed from the eyes and from any cuts or abrasions.

After inflation, the airbags deflate to provide a gradual cushioning effect for the occupants and to ensure the driver's forward vision is not obscured.

If airbags have inflated, or if your vehicle has been in a collision, your vehicle requires servicing before it will power up. In addition, your airbags, seat belt pre-tensioners and any associated components must be checked, and if necessary, replaced. Use the mobile app to schedule a service appointment immediately.

In a collision, in addition to the airbags inflating:

- United States only: Your vehicle automatically dials 911 if **Controls > Safety > Automatic 911 calls** is enabled. Cancellation instructions as well as a countdown timer display on the touchscreen.
- Doors unlock.
- Hazard warning lights turn on.
- Interior lights turn on.














- High voltage is disabled.
- Windows go to the vent position.
- Vehicle applies the brakes to come to a stop.

NOTE: Depending on the nature of the impact and the forces involved, doors may not unlock in a collision and/or damage may prevent them from opening. In such cases, the door may need to be opened using the interior manual release, or other means of extrication (for example, exiting through another door, breaking the window, etc.).

NOTE: In some collisions, even if airbags did not inflate, high voltage may be disabled and you will be unable to power up and drive. Use the mobile app to schedule a service appointment immediately.

Airbag Warnings

-  **WARNING:** All occupants, including the driver, should always wear their seat belts, whether or not an airbag is also provided at their seating position, to minimize the risk of severe injury or death in the event of a collision.
-  **WARNING:** Front seat occupants should not place their arms over the airbag module, as an inflating airbag can cause fractures or other injuries.
-  **WARNING:** Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the Occupant Classification System (OCS), if equipped.
-  **WARNING:** Airbags inflate with considerable speed and force, which can cause injury. To limit injuries, ensure that occupants are wearing seat belts and are correctly seated, with the seat positioned as far back as possible. The National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of 10 inches (25 cm) between an occupant's chest and an airbag.
-  **WARNING:** Children should not be seated on the front passenger seat unless permitted by regulations in your market region. Follow all regulations in your region for the appropriate way to seat a child based on the child's weight, size, and age. The safest place to seat infants and young children is in a rear seating position. Seating an infant or child in a rear-facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.
-  **WARNING:** Do not use a rear-facing child restraint system on a seat with an operational airbag in front of it. Doing so can cause injury or death if the airbag inflates.
-  **WARNING:** To ensure correct inflation of the side airbags, maintain an unobstructed gap between an occupant's torso and the side of CybertruckModel SModel XModel 3Model Y.
-  **WARNING:** Passengers shouldn't lean their heads against doors or windows. Doing so can cause injury if a curtain airbag inflates.
-  **WARNING:** Do not allow passengers to obstruct the operation of an airbag by placing feet, knees or any other part of the body on or near an airbag.
-  **WARNING:** Do not attach or place objects on or near the front airbags, the side of the front seats, the headliner at the side of the vehicle, or any other airbag cover that could interfere with inflation of an airbag. These include but are not limited to: steering wheel covers, decals, seat cushions, pillows, etc. Objects can cause serious injury if the vehicle is in a collision severe enough to cause the airbag to inflate.
-  **WARNING:** Following inflation, some airbag components are hot. Do not touch until they have cooled.

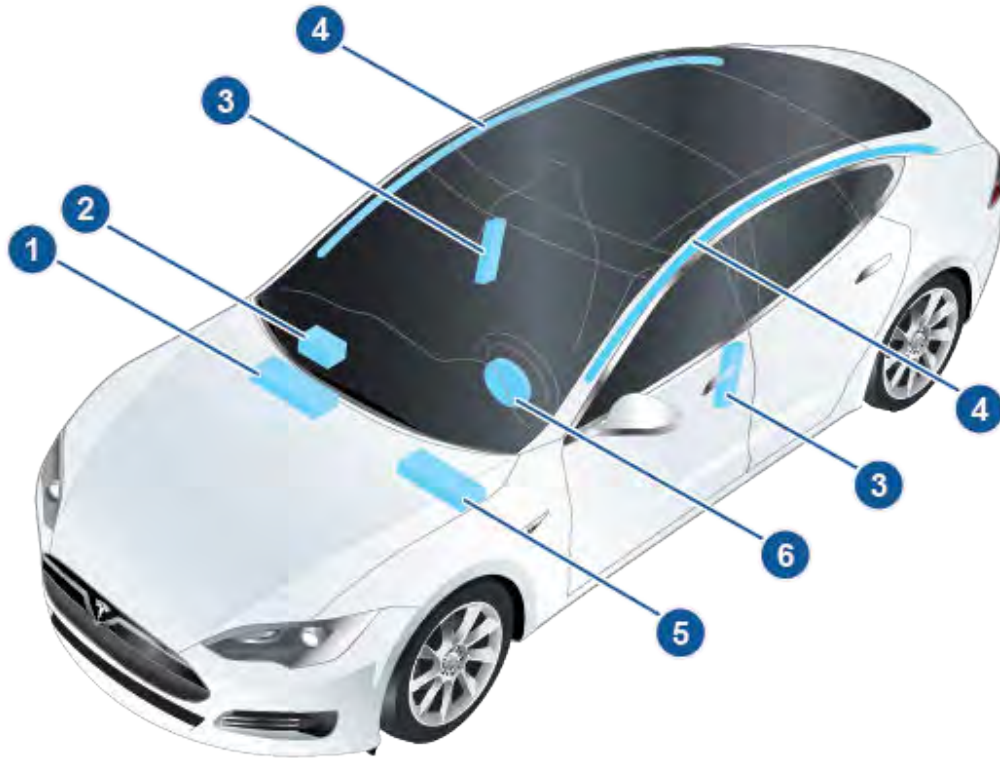


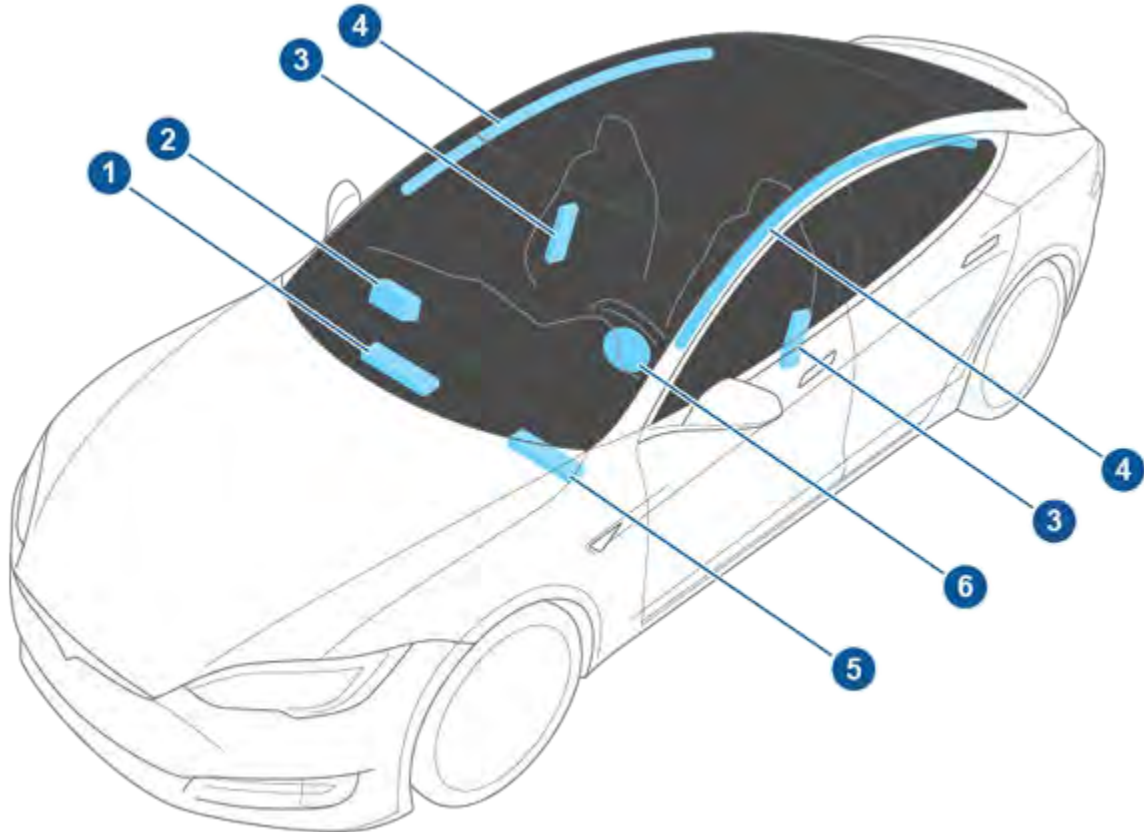
Airbags

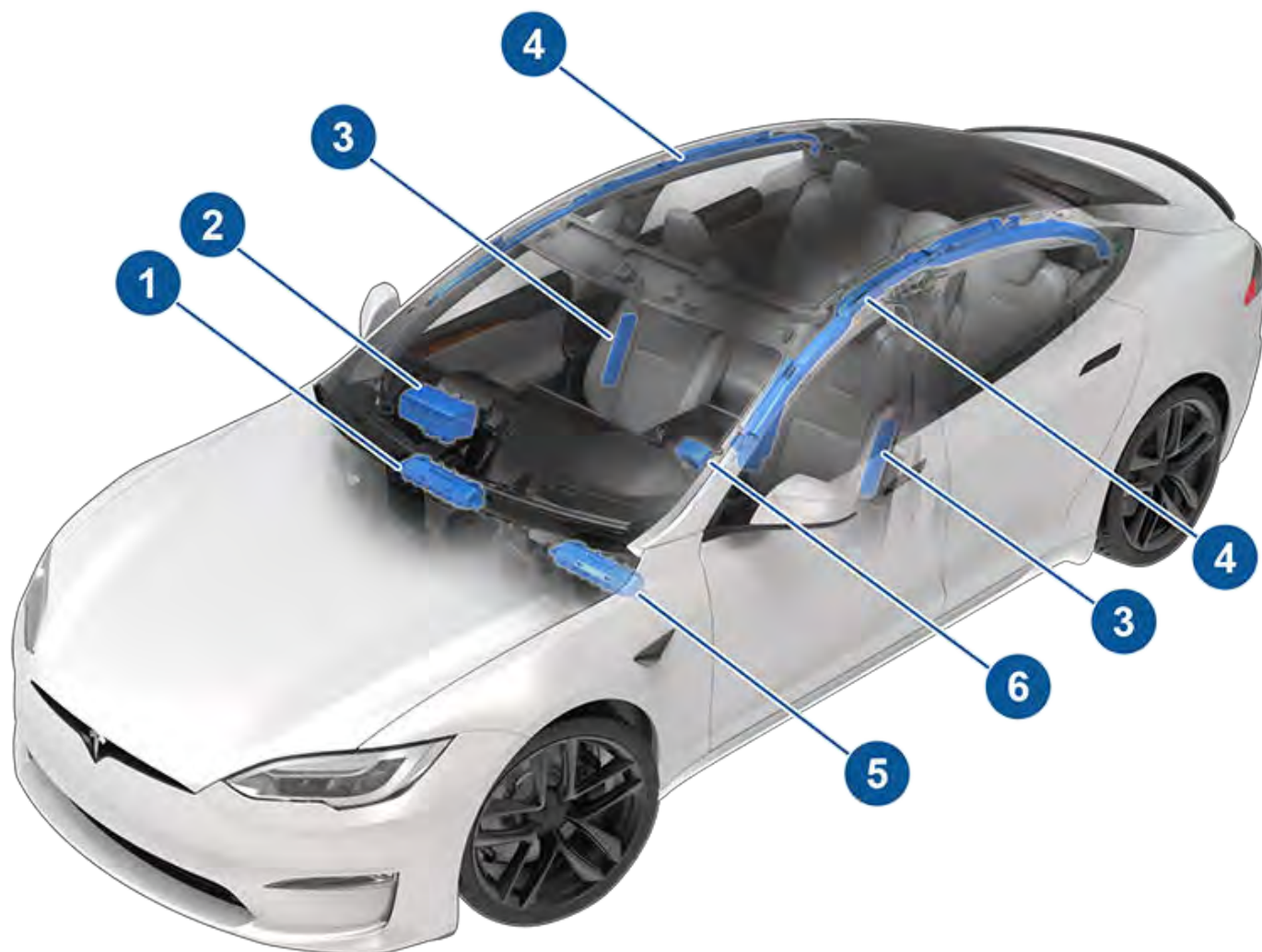
Location of Airbags

Airbags are located in the approximate areas shown below. Airbag warning information is printed on the sun visors.

Cybertruck Model S Model X Model 3 Model Y is equipped with an airbag and lap/shoulder belt at both front seating positions. The airbag is a supplemental restraint at those seating positions. All occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.







1. Passenger knee airbag
2. Passenger front airbag
3. Seat-mounted side airbags

NOTE: Vehicles manufactured prior to approximately mid-September 2022 are *not* equipped with a seat-mounted airbag on the inside portion of the driver's seat.

4. Curtain airbags
5. Driver knee airbag
6. Driver front airbag



How Airbags Work

Airbags inflate when sensors detect an impact that exceeds deployment thresholds. These thresholds are designed to predict the severity of a crash in time for the airbags to help protect the vehicle's occupants. Airbags inflate instantly with considerable force accompanied by a loud noise. The inflated bag, together with the seat belts, limits movement of occupants to reduce the risk of injury.

Front airbags are not ordinarily designed to inflate in rear collisions, rollovers, side collisions and when braking heavily or driving over bumps and potholes. Likewise, front airbags may not inflate in all frontal collisions, such as minor front collisions, underride collisions, or minor impacts with narrow objects (such as posts or poles). Significant superficial damage can occur to the vehicle without the airbags inflating and, conversely, a relatively small amount of structural damage can cause airbags to inflate. Therefore, the external appearance of the vehicle after a collision does not represent whether or not the front airbags should have inflated.



WARNING: Before modifying your vehicle to accommodate a person with disabilities in a way that may affect the airbag system, use the mobile app to schedule a service appointment.

Types of Airbags

Cybertruck Model S Model X Model 3 Model Y has the following types of airbags:

- **Front airbags:** The front airbags are designed to reduce injuries if larger children or adults are riding in the front seats. Follow all warnings and instructions related to seating a child on the front passenger seat (if permitted in your market region).
- **Knee airbags:** Knee airbags and the front airbags work together. The knee airbags limit the forward motion of the front seat occupants by restricting leg movement, thereby positioning the occupants so that the front airbags work more effectively.
- **Seat-mounted airbags:** A seat-mounted side airbag in the front seats helps protect the pelvis and the thorax region of the torso. The seat-mounted airbag on the inside portion of the driver's seat helps protect the head and torso. Seat-mounted airbags on both the impacted and non-impacted side of the vehicle inflate in the event of a severe side impact or a severe offset frontal impact.
- **Curtain airbags:** Curtain airbags help protect the head. Curtain airbags on both the impacted and non-impacted side of the vehicle inflate only if a severe side impact occurs, or if the vehicle rolls over.

Airbag Status Indicator

The status of the passenger front airbag displays on the touchscreen:



The Passenger Airbag Off indicator displays on the touchscreen when the passenger front airbag is OFF. When the passenger front airbag is OFF, it does not inflate when a collision occurs. This indicator also displays when the seat is unoccupied. When driving with a child seat on the front passenger seat (if permitted in your market region), always double-check the status of the passenger front airbag to confirm that it is OFF.

NOTE: In cars manufactured prior to approximately December 2019, the Passenger Airbag Off indicator does not display when the seat is unoccupied.



To protect an adult occupying the front passenger seat, ensure the passenger front airbag is ON. When the passenger airbag is ON, it may inflate when a collision occurs.



The airbag indicator displays on the touchscreen for a few seconds at the start of every drive while checking the following functionality, as applicable:

- Airbags
- Seat belts with pre-tensioners and load limiters
- Impact sensors
- Occupant sensors
- Seat belt sensors
- Passive safety component wiring harnesses



- Onboard restraint controlled components (ex: accelerometer and other passive safety components)

After this check, the airbag indicator turns off. If the airbag system detects a fault in any of the previously mentioned components, the airbag warning indicator stays on. In this case contact Tesla service immediately. Do not drive the vehicle until the airbag system is inspected by Tesla.

The airbag indicator on the instrument cluster remains lit if the airbag system is malfunctioning. The only time this indicator should illuminate is briefly when CybertruckModel SModel XModel 3Model Y first powers up, in which case it turns off within a few seconds. If it remains illuminated, use the mobile app to schedule a service appointment immediately and do not drive.

Front Passenger Occupant Detection

CybertruckModel SModel XModel 3Model Y has an occupancy sensor in the front passenger seat that controls the status of the front airbag.

NOTE: The occupancy classification system (OCS) meets the regulatory requirement of FMVSS 208 and automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.

⚠ WARNING: Seating an infant in a rear facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

Object Classification	Status of Airbag Indicator*	Indicator	Notes
Empty	OFF	PASSENGER AIRBAG OFF	In cars manufactured prior to approximately December 2019, the Passenger Airbag Off indicator <i>does not</i> display when the seat is unoccupied.
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents.
Rear facing child seat designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	20 lbs (9 kg) or less
Forward facing child seat	OFF	PASSENGER AIRBAG OFF	35 lbs (16 kg) or less
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	20-100 lbs (9-45 kg)*
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 100 lbs (45 kg)

*If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.

NOTE: It takes approximately six seconds after you power on CybertruckModel SModel XModel 3Model Y for the occupant classification system (OCS) to report accurate status of the front passenger airbag. As a result, when you first power on CybertruckModel SModel XModel 3Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, a delay of approximately six seconds can occur before the touchscreen displays the PASS AIRBAG OFF status. If it fails to do so, use the mobile app to schedule a service appointment and do not seat a child in the front passenger seating position.

To make sure the sensing system can correctly detect occupancy status, eliminate the following:





- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse).
- Objects wedged between the seat back and seat cushion.



- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

-  **WARNING:** If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, use the mobile app to schedule a service appointment immediately.
-  **WARNING:** It is the driver's responsibility to confirm that the passenger front airbag is OFF when a child is seated in the front passenger seat. If the passenger front airbag fails to disable with a child seat in position, place the child and child restraint system in the rear seat and use the mobile app to schedule a service appointment immediately.
-  **WARNING:** Never seat a child in the front passenger seat. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.
-  **WARNING:** Do not use seat covers on CybertruckModel SModel XModel 3Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system and the noise-canceling microphones, if equipped.



Front Passenger Occupant Detection

CybertruckModel SModel XModel 3Model Y has an occupancy sensor in the front passenger seat that controls the status of the front airbag.

NOTE: The occupancy classification system (OCS) automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.

⚠ WARNING: Seating an infant in a rear facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents.
Rear facing child seat designed for children up to a year old	OFF	PASSENGER AIRBAG OFF	20 lbs (9 kg) or less
Forward facing child seat	OFF	PASSENGER AIRBAG OFF	35 lbs (16 kg) or less
Child in a booster seat	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	20-100 lbs (9-45 kg)*
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 100 lbs (45 kg)

*If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Use the mobile app to schedule a service appointment.

NOTE: It takes approximately six seconds after you power on CybertruckModel SModel XModel 3Model Y for the occupant classification system (OCS) to report accurate status of the front passenger airbag. As a result, when you first power on CybertruckModel SModel XModel 3Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, a delay of approximately six seconds can occur before the touchscreen displays the PASS AIRBAG OFF status. If it fails to do so, use the mobile app to schedule a service appointment and do not seat a child in the front passenger seating position.

To make sure the sensing system can correctly detect occupancy status, eliminate the following:

- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse).
- Objects wedged between the seat back and seat cushion.
- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.



These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.

⚠ WARNING: If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, use the mobile app to schedule a service appointment immediately.

⚠ WARNING: It is the driver's responsibility to confirm that the passenger front airbag is OFF when a child is seated in the front passenger seat (if permitted). If the passenger front airbag fails to disable with a child seat in position, place the child and child restraint system in the rear seat and use the mobile app to schedule a service appointment immediately.



-  **WARNING:** Never seat a child in the front passenger seat. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.
-  **WARNING:** Do not use seat covers on Cybertruck Model S Model X Model 3 Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system and the noise-canceling microphones, if equipped.

Ensuring Accurate Occupant Detection

To help ensure an occupant in the front passenger seat can be accurately detected, the passenger must:





- Wear a seat belt.
- Sit upright on the center of the seat cushion, with shoulders resting against the seat back and legs extended comfortably in front with feet on the floor. See [Examples of Correct and Incorrect Seating Positions on page 349](#) [Examples of Correct and Incorrect Seating Positions on page 351](#).
- Remain positioned on the seat cushion and not lift their weight off the seat (for example, by pushing their feet against the floor or pressing on the center console or armrest to lift up).
- Never wear thick, wet, or bulky clothing (such as ski wear or padded clothing).

In addition to the items listed above, the following situations can interfere with the accuracy of the occupant classification system:

- Placing a radio transmitter (for example, a hunting radio or walkie-talkie) on the front passenger seat.
- Placing an AC/DC inverter, or a device that is being powered by the inverter (for example, a cell phone, tablet, or computer) on the front passenger seat cushion.
- Placing liquid (such as a bottled drink) or food containers on a car seat when a child seat is present.
- Objects lodged under the seat or wedged between the seat back and cushion.
- Heavy objects sitting on the seat (briefcase, large purse).
- Cargo interfering with the seat.
- Aftermarket items attached to or placed between the seat and the occupant, such as covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, instruct passengers to ride in the rear seats and use the mobile app to schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front and side airbags.

-  **WARNING:** Tesla follows NHTSA (National Highway Traffic Safety Administration) recommendations that all occupants age 12 and under be seated in a rear seat.
-  **WARNING:** Failure to follow the above instructions can adversely affect the Occupant Classification System (OCS) which can cause serious injury or death.
-  **WARNING:** If the front passenger airbag is not turning on or off as expected, do not seat a passenger in the front passenger seat. Use the mobile app to schedule a service appointment.
-  **WARNING:** To ensure accuracy of the occupant detection system, do not make any modifications to the front passenger seat and do not use seat covers. Modifying the seat, or using seat covers, can restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant classification system.

Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:



Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:



Inflation Effects

⚠ WARNING: When airbags inflate, a fine powder is released. This powder can irritate the skin and should be thoroughly flushed from the eyes and from any cuts or abrasions.

After inflation, the airbags deflate to provide a gradual cushioning effect for the occupants and to ensure the driver's forward vision is not obscured.

If airbags have inflated, or if your vehicle has been in a collision, always have the airbags, seat belt pre-tensioners and any associated components checked and, if necessary, replaced by Tesla.

In a collision, in addition to the airbags inflating:

- United States only: Your vehicle automatically dials 911 if **Controls > Safety > Automatic 911 calls** is enabled. Cancellation instructions as well as a countdown timer display on the touchscreen.
- Doors unlock, and the door handles extend.
- Hazard warning lights turn on.
- Interior lights turn on.
- High voltage is disabled (you must use the mobile app to schedule a service appointment to restore high voltage power).
- Windows go to the vent position.
- Vehicle applies the brakes to come to a stop.

NOTE: Depending on the nature of the impact and the forces involved, doors may not unlock in a collision and/or damage may prevent them from opening. In such cases, the door may need to be opened using the interior manual release, or other means of extrication (for example, exiting through another door, breaking the window, etc.).

Airbag Warnings








⚠ WARNING: Do not place objects over or near airbags because any such objects could cause harm if the vehicle is in a crash severe enough to cause the airbag to inflate.

⚠ WARNING: All occupants, including the driver, should always wear their seat belts, whether or not an airbag is also provided at their seating position, to minimize the risk of severe injury or death in the event of a collision.

⚠ WARNING: Front seat occupants should not place their arms over the airbag module, as an inflating airbag can cause fractures or other injuries.

⚠ WARNING: Do not use seat covers on Cybertruck Model S Model X Model 3 Model Y. Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. It can also reduce the accuracy of the occupant detection system and the noise-canceling microphones, if equipped.



-  **WARNING:** Airbags inflate with considerable speed and force, which can cause injury. To limit injuries, ensure that occupants are wearing seat belts and are correctly seated, with the seat positioned as far back as possible. The National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of 10 inches (25 cm) between an occupant's chest and an airbag.
-  **WARNING:** Children should not be seated on the front passenger seat unless permitted by regulations in your market region. Follow all regulations in your region for the appropriate way to seat a child based on the child's weight, size, and age. The safest place to seat infants and young children is in a rear seating position. Seating an infant or child in a rear-facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.
-  **WARNING:** To ensure correct inflation of the side airbags, maintain an unobstructed gap between an occupant's torso and the side of CybertruckModel SModel XModel 3Model Y.
-  **WARNING:** Passengers shouldn't lean their heads against doors. Doing so can cause injury if a curtain airbag inflates.
-  **WARNING:** Do not allow passengers to obstruct the operation of an airbag by placing feet, knees or any other part of the body on or near an airbag.
-  **WARNING:** Do not attach or place objects on or near the front airbags, the side of the front seats, the headliner at the side of the vehicle, or any other airbag cover that could interfere with inflation of an airbag. These include but are not limited to: steering wheel covers, decals, seat cushions, pillows, etc. Objects can cause serious injury if the vehicle is in a collision severe enough to cause the airbag to inflate.
-  **WARNING:** Following inflation, some airbag components are hot. Do not touch until they have cooled.

Connectivity



Mobile App

The Tesla mobile app allows you to communicate with CybertruckModel SModel XModel 3Model Y remotely using your iPhone® or Android™ phone.

NOTE: The information below may not represent an exhaustive list of the functions available on the Tesla mobile app. To ensure access to new and improved features, download updated versions of the mobile app as they become available.

To Use the Mobile App

To set up the Tesla mobile app to communicate with your CybertruckModel SModel XModel 3Model Y:

1. Download the Tesla mobile app to your phone.
2. Log in to the Tesla mobile app by entering your Tesla account credentials.
3. Enable mobile access to your CybertruckModel SModel XModel 3Model Y by touching **Controls > Safety > Allow Mobile Access**.
4. Turn your phone's Bluetooth setting **ON** and ensure that Bluetooth is turned on within your phone's global settings for the Tesla mobile app. For example, on your phone, navigate to Settings, choose the Tesla mobile app, and ensure the Bluetooth setting is enabled.

Your phone and vehicle must both be actively connected to cellular service or Wi-Fi for the mobile app to communicate with your vehicle. Tesla recommends that you always have a functional physical key readily available if parking in an area with limited or absent cellular service, such as an indoor parking garage.

NOTE: In the event that you require lockout assistance from Tesla due to a non-warranty issue, such as having limited cellular connectivity and having no secondary key available, your expenses are not covered under the Roadside Assistance policy.

NOTE: Tesla does not support the use of third party applications to contact CybertruckModel SModel XModel 3Model Y.

Overview

When both your phone and the vehicle have internet service, the Tesla mobile app's home screen allows you to:

- Lock or unlock your vehicle.
- Enable or disable the heating or air conditioning and monitor the cabin climate.
- Check your vehicle's charging information. Charging details also appear when a charging cable is plugged in.
- Open or close the charge port.

NOTE: Twisting red lines next to the Battery icon indicate that the Battery is actively heating up (including while charging or preparing to charge).

- Open the tailgate.
- See where your vehicle is located.
- View your vehicle's estimated range.
- Open the front trunk.
- View your vehicle's odometer, VIN, and current software version.

You can configure the shortcut options on the home screen to include opening and closing the powered frunk and tonneau cover.

Media settings appear on the mobile app to pause, play, rewind, fast forward, and adjust the volume of the media currently playing in the vehicle. You may need to enable Media settings by touching **Audio Settings > Options > Allow Mobile Control**.

For supported video sources, send videos to Tesla Theater by sharing the link through the mobile app. Navigate to the movie, show, or video you want to play on your phone and touch the share button. Share the video with the Tesla app and it appears on the touchscreen if CybertruckModel SModel XModel 3Model Y is in Park.



Profile

In the Profile tab located at the top corner, you can:

- Switch to a different vehicle associated with your Tesla account, if you have access to more than one.
- Navigate the Tesla Shop.
- Manage your account information and view your order history.
- View and customize notifications you receive under the Settings tab, such as Calendar sync, when your security alarm has been triggered, charging updates, and new software updates. You can start updates from afar and check its progress.

Controls

The Controls tab allows you to do the following:

- Open the front or rear trunk.
- Open or close the tonneau cover.
- Open the tailgate.
- Open or close the powered frunk.
- Turn on and check the status of the A/C power outlets.
- Control the bed lights.
- Lock or unlock CybertruckModel SModel XModel 3Model Y from afar.

NOTE: Your vehicle does not automatically re-lock if you unlock from the mobile app.

- Open or close the charge port.
- Flash the lights or honk the horn to find where CybertruckModel SModel XModel 3Model Y is parked.
- Enable Keyless Driving.

NOTE: Keyless Driving can be used when you do not have your key or to bypass PIN to Drive in cases where you forgot your PIN or your touchscreen is unresponsive (see [PIN to Drive on page 660](#)).

- Open and close your garage door if your vehicle has a programmed HomeLink connection, if available (see [Smart Garage on page 365](#)).
- Vent the windows.

Climate

You can check the interior temperature and heat or cool the cabin before driving (even if it's in a garage), control the seat heaters, and defrost the windshield:

- Enable or disable **Defrost Car**defrost, which helps melt snow, ice, and frost on the windshield, windows, and mirrors, by swiping up from the bottom of the screen.
- Enable or disable **Dog Mode** or **Camp Mode**.
- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C or just the fan to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available). See [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#) for more information.
- Vent or close the windows.Vent or close the sunroof.Vent the windows.
- Precondition the cabin to your desired temperature and turn on or off the steering wheelsteering yoke (or steering wheel) and seat heaters (if equipped).
- Enable or disable **Defrost Truck**, which helps melt snow, ice, and frost on the windshield, windows, and mirrors, by swiping up from the bottom of the screen.
- Enable or disable **Dog Mode** or **Camp Mode**.



- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available). See [Operating Climate Controls on page 1338](#).
- Vent or close the windows.
- Precondition the cabin to your desired temperature and turn on or off the steering wheel and seat heaters.

Using the mobile app to precondition CybertruckModel SModel XModel 3Model Y also warms the Battery as needed. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

NOTE: In some vehicles, depending on vehicle specifications and date of manufacture, using the mobile app to defrost CybertruckModel SModel XModel 3Model Y also thaws ice on the charge port latch. This is useful in extremely cold weather or icy conditions in which the charge port latch can freeze in place, preventing you from removing or inserting the charge cable.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to precondition your vehicle on **HI** for approximately 30–45 minutes (you must use your mobile app to precondition the vehicle; setting your climate to **HI** using the touchscreen is not effective). This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to enable **Defrost Car** for approximately 30–45 minutes. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to enable **Defrost Truck** for approximately 30–45 minutes. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

Location

Locate CybertruckModel SModel XModel 3Model Y with directions, or track its movement across a map.

Summon

You can park or retrieve CybertruckModel SModel XModel 3Model Y using Summon (see [Summon on page 624](#)[Summon on page 617](#)) or Smart Summon (see [Smart Summon on page 628](#)[Smart Summon on page 621](#)).

Schedule

Enable scheduled charging or departure, and precondition the vehicle. See [Scheduled Charging and Scheduled Departure on page 743](#)[unique_435 on page](#) for more information. Scheduled charging or departure can also be saved based on a preferred location.

Security

The Security tab allows you to do the following:

- Pair your phone to the vehicle (see [Phone Key on page 109](#)).
- Enable or disable Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\) on page 664](#)).
- Enable or disable Valet Mode (see [Valet Mode on page 516](#)).
- Enable or disable Speed Limit Mode and receive notifications when the vehicle's driving speed is within approximately 3 mph (5 km/h) of your selected maximum speed (see [Speed Limit Mode on page 660](#)).
- Disable Phone Key, if needed (such as when you do not want the vehicle to automatically unlock whenever your phone is nearby).

Upgrades

View and purchase the latest upgrades available for your vehicle, such as full self-driving.



Service

See [Schedule Service on page 751](#) for information on how to schedule service through the mobile app.

Roadside

View roadside resources and request roadside assistance (where applicable). For more information on Roadside Assistance, see [Contacting Tesla Roadside Assistance on page 930](#).

Granting Access to a Second Driver

Add and remove access permission for an additional driver from the Tesla mobile app.

NOTE: Tesla mobile app version 4.3.1 or higher is required. Additional drivers can either use a previously registered Tesla Account or use the app to create a new Tesla Account.

To add an additional driver, in the Tesla mobile app from the vehicle home screen, go to **Security > Add Driver** and follow the onscreen instructions.

NOTE: The additional driver has access to all app features except purchasing upgrades.

To remove access, use the mobile app and go to **Security > Manage Drivers** and follow the onscreen instructions.



Wi-Fi

Wi-Fi is available as a data connection method and is often faster than cellular data networks. Connecting to Wi-Fi is especially useful in areas with limited or no cellular connectivity. To ensure fast, reliable delivery of software and map updates, Tesla recommends leaving CybertruckModel SModel XModel 3Model Y connected to a Wi-Fi network whenever possible (for example, when parked at home).

To connect to a Wi-Fi network:

1. Touch **Controls** > **Wi-Fi**. CybertruckModel SModel XModel 3Model Y begins to scan and display detected Wi-Fi networks that are within range.

NOTE: If a known Wi-Fi network does not appear in the list, move CybertruckModel SModel XModel 3Model Y closer to the access point or consider using a range extender.

NOTE: When connecting to a 5GHz network (if available), check which channels are supported in your region.

5GHz Network Channels Supported

36-48	52-64	100-140	149-165
✓	✓	✓	✓

2. Find and tap the the Wi-Fi network you want to use in **Searching for Wi-Fi Networks** or add it manually in **Add Wi-Fi Networks**, enter the password (if necessary), then touch **Confirm**. When successfully connected, the Wi-Fi network shows in **Known Wi-Fi Networks** along with a green check. Whenever the network is within range, CybertruckModel SModel XModel 3Model Y connects to it automatically.

NOTE: CybertruckModel SModel XModel 3Model Y does not currently support connections to captive Wi-Fi networks (a captive Wi-Fi, commonly used by public hotspots, requires you to access a custom web portal and agree to terms of service prior to allowing you to log in).

NOTE: If more than one previously connected network is within range, CybertruckModel SModel XModel 3Model Y connects to the one most recently used.

NOTE: At Tesla Service Centers, CybertruckModel SModel XModel 3Model Y automatically connects to the Tesla Service Wi-Fi network.

Hotspots

Instead of a Wi-Fi network, you can also use a mobile hotspot (subject to fees and restrictions of your carrier). After connecting to your hotspot, select **Remain Connected in Drive**, if you want to keep the connection active while you are driving.

Troubleshooting Tips

If your vehicle's Wi-Fi connection is slow or it fails to connect, try these tips.

- On the touchscreen, check the number of Wi-Fi icon bars (signal strength). If the bars are low, consider adding a Wi-Fi access point closer to the vehicle to improve the signal.
- Restart the touchscreen (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).
- Remove the Wi-Fi connection and reconnect. Touch **Controls** > **Wi-Fi**, select your network and **Forget Network** then reconnect by touching your network in **Known Networks**.
- Try a different Wi-Fi network.



Bluetooth

Bluetooth® Compatibility



You can use various Bluetooth devices in CybertruckModel SModel XModel 3Model Y provided it is paired and within operating range. For example, you can pair your Bluetooth-capable phone so you can use it hands-free. In addition to phones, you can pair other Bluetooth-enabled devices with CybertruckModel SModel XModel 3Model Y. For example, you can pair an iPod Touch, iPad, Android tablet, etc. from which you can play music.

Before using your phone or other Bluetooth device with CybertruckModel SModel XModel 3Model Y, you must pair it. Pairing sets up CybertruckModel SModel XModel 3Model Y to communicate with supported Bluetooth-capable devices. You can pair up to ten Bluetooth phones. Unless you've specified a specific phone as a **Priority Device**, or if the phone specified as **Priority Device** is not within range, CybertruckModel SModel XModel 3Model Y always connects to the last phone that was used (provided it is within range). To connect to a different phone, see [Switching Between Paired Devices on page 361](#).

NOTE: Authenticating your phone to use as a key (see [Keys on page 109](#)[Keys on page 1142](#)) does not allow you to use the phone hands-free, play media from it, etc. You must also pair it as described below.

NOTE: On many phones, Bluetooth turns off if the phone's battery is low.

NOTE: Although Bluetooth typically supports wireless communication over distances of up to approximately 30 feet (nine meters), performance can vary based on the phone, or other device, you are using.

NOTE: CybertruckModel SModel XModel 3Model Y can pair up to twenty Bluetooth devices at a time but only allows two devices to connect simultaneously (such as one phone and one controller or two controllers) to each front and rear touchscreen (if equipped).

CAUTION: Do not leave your paired phone in your vehicle (for example, if you are hiking or at the beach). If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off.

Pairing a Phone or Bluetooth Device

Pairing allows you to use your Bluetooth-capable phone hands-free to make and receive phone calls, access your contact list, recent calls, etc. It also allows you to play media files from your phone. Once a phone is paired, CybertruckModel SModel XModel 3Model Y can connect to it whenever the phone is within range.

1. To pair a phone or a Bluetooth device, sit inside CybertruckModel SModel XModel 3Model Y and ensure the touchscreen is on.
2. Unlock your phone and enable Bluetooth (typically in Settings on your phone).

NOTE: On some phones, this may require you to go to Bluetooth Settings for the remainder of the procedure.

3. On the touchscreen, touch **Controls > Bluetooth** to automatically start Bluetooth scanning for new devices.
4. Wait for your phone to be listed and touch **Connect**.
5. Check that the number displayed on your phone matches the number on the touchscreen. Then, on your phone, confirm that you want to pair.
6. If prompted on your phone, specify whether you want to allow CybertruckModel SModel XModel 3Model Y to access your personal information, such as calendar, contacts and media files (see [Importing Contacts and Recent Calls on page 361](#)). When paired, CybertruckModel SModel XModel 3Model Y lists your phone under **Controls > Bluetooth > Paired Devices**.

To change the settings of a paired device, go to **Controls > Bluetooth > Paired Devices** and expand the dropdown next to the device's name.

If you are experiencing issues importing or connecting to Bluetooth, see [Troubleshooting Bluetooth on page 361](#) for more information.

For vehicles manufactured prior to approximately April 2018: If Bluetooth takes an exceptionally long time to pair, reset Bluetooth functionality by touching **Controls > Service > Reset Bluetooth**. You may need to wait a few minutes. Once reset, try pairing to CybertruckModel SModel XModel 3Model Y again. After you reset Bluetooth, CybertruckModel SModel XModel 3Model Y may forget previously paired devices.



Importing Contacts and Recent Calls

Once a phone is paired, go to **Controls > Bluetooth > Paired Devices** and expand the dropdown next to the device's name to specify whether you want to allow access to your phone's contacts, recent calls and text messages. If you allow access, you can use the phone app to make calls and send messages to people in your list of contacts and on your recent calls list (see [Phone, Calendar, and Web Conferencing on page 363](#)). Before contacts can be imported, you may need to either set your phone to allow syncing, or respond to a popup on your phone to confirm that you want to sync contacts. This varies depending on the type of phone you are using. For details, refer to the documentation provided with your phone.

If you are having trouble importing contacts or pairing with Bluetooth, see [Troubleshooting Bluetooth on page 361](#) for more information.

Disconnecting or Unpairing a Bluetooth Device

If you want to disconnect your phone or Bluetooth device, but keep it paired, touch **Disconnect** in your phone's Bluetooth settings dropdown on the touchscreen (**Controls > Bluetooth > Paired Devices > Your phone**). If you no longer want to use your device with CybertruckModel SModel XModel 3Model Y, touch **Forget Device** and follow the instructions. Once you forget a device, you must pair it again if you want to use it with CybertruckModel SModel XModel 3Model Y (see [Pairing a Phone or Bluetooth Device on page 360](#)).

NOTE: Your phone automatically disconnects when you leave CybertruckModel SModel XModel 3Model Y.

NOTE: Unpairing the phone has no effect on using the phone as a key. To forget an authenticated phone, see [Managing Keys on page 126](#) [Managing Keys on page 1144](#).

Switching Between Paired Devices

CybertruckModel SModel XModel 3Model Y automatically connects to a phone that you designated as **Priority Device**. If you have not set a phone as a priority, CybertruckModel SModel XModel 3Model Y connects to the last phone to which it was connected, provided it is within operating range and has Bluetooth turned on. If the last phone is not within range, it attempts to connect with the next phone that it has been paired with.

To connect to a different phone, touch **Controls > Bluetooth > Paired Devices**. Select the phone you want to connect to, then touch **Connect**. If the phone you want to connect to is not listed, you must pair the phone. See [Pairing a Phone or Bluetooth Device on page 360](#).

When connected, the Bluetooth settings screen displays the Bluetooth symbol next to the phone's name to show that CybertruckModel SModel XModel 3Model Y is connected to the phone.

Troubleshooting Bluetooth

Your vehicle uses Bluetooth and BLE (Bluetooth Low Energy) to seamlessly connect your smartphone to CybertruckModel SModel XModel 3Model Y. Due to several potential factors, Bluetooth or BLE may sometimes disconnect or experience issues in the pairing process. Connecting to Bluetooth allows your vehicle to use phone functions such as audio, phone calls, calendars, text messages, etc.

BLE is used for passive functions like phone key.

NOTE: Do not unpair your vehicle to your phone or remove it as phone key without a working key card nearby.

Try the following to troubleshoot Bluetooth, starting with your smartphone.

Smartphone Troubleshooting

Bluetooth may not connect due to settings and updates on your smartphone:

- Enable Bluetooth on your phone. If already enabled, disable and re-enable Bluetooth again.
- Ensure Airplane Mode is turned off.
- Charge your phone; if your phone battery is too low, it may not support Bluetooth functions.
- Pair your device properly. If already paired, try unpairing and re-pairing again.
- Update your phone to the latest software provided by the manufacturer.
- Check that your vehicle's sound system is selected as the audio output source.



- Ensure your phone's settings allow for Bluetooth (ex: data is turned on or you are connected to Wi-Fi).
- Turn your phone off and on again.
- Ensure location permissions set to "Always On" for the mobile app.

Tesla Mobile App Troubleshooting

Check the Tesla mobile app:

- Confirm the Tesla mobile app is up to date on software.
- Verify you're logged into the Tesla mobile app while using your phone key.
- Ensure the Tesla app is running in the background.
- Double check that you have completely set up your profile in the mobile app and properly configured your settings.

Vehicle Troubleshooting

Your vehicle's settings may affect its ability to pair with your smartphone:

- Charge CybertruckModel SModel XModel 3Model Y: If the vehicle Battery is too low, you may lose Bluetooth function.
- Update vehicle software and make sure it is always up to date. Check for new software updates by navigating to **Controls > Software**.
- Restart the touchscreen. See [Touchscreen on page 24](#).
- Reboot your vehicle.

If Bluetooth still does not work, unpair from your vehicle AND smartphone. Then try re-pairing both again.

For BLE phone key issues, when in the vehicle, navigate to **Controls > Locks** and remove your phone as "Phone as Key". Then set it back up again. But only do this while you are in the vehicle and have a reliable back up key available (such as a key card).



Phone, Calendar, and Web Conferencing

Using the Phone App



When your phone is connected to CybertruckModel SModel XModel 3Model Y using Bluetooth (see [Bluetooth on page 360](#)), and you have allowed access to information on your phone (see [Importing Contacts and Recent Calls on page 361](#)), you can use the phone app to display and make a hands-free call to anyone listed on your phone.

- **Calls:** Displays recent calls in chronological order with the most recent call listed first.
- **Messages:** Displays message in chronological order with the most recent message listed first. You can view, send, and receive text messages. Instead of typing a text message, touch the microphone button on the right side of the steering wheelsteering yoke (or steering wheel) to enter text using your voice.
 - ⚠ **WARNING:** To minimize distraction and ensure the safety of occupants as well as other road users, do not view or send text messages when the vehicle is in motion. Pay attention to road and traffic conditions at all times when driving.
- **Contacts:** Contacts are listed in alphabetical order and can be sorted by first name or last name. You can also choose a letter on the right side of the list to quickly scroll to the names that begin with the selected character. When you touch a name on your contacts list, the contact's available number(s) displays on the right pane, along with other available information (such as address). Touch the contact's number to make a call.
- **Favorites:** Displays the contacts from your phone that you have identified as Favorites.
- **Calendar:** Displays calendar entries from your phone (see [Calendar on page 364](#)). If an entry includes a phone number or an address, you can make a phone call, or navigate to a destination, by touching the corresponding information in the calendar entry.

Making a Phone Call

You can make a phone call by:

- Speaking a voice command (see [Voice Commands on page 97](#)). Voice commands are a convenient, hands-free way to call or text your contacts.
- Selecting a contact or recent call from the menu on your right scroll button (see [Using Right Steering Wheel Buttons on page 385](#)).
- Touching a phone number shown in a list in the phone app - Contacts, Calls, or Calendar.
- Using the CybertruckModel SModel XModel 3Model Y on-screen dialer in the Phone app.

NOTE: If it is safe and legal to do so, you can also initiate a call by dialing the number or selecting the contact directly from your phone.

NOTE: You can also make a phone call by touching a pin on the map and choosing the phone number (if available) on the popup screen.

Receiving a Phone Call

When your phone receives an incoming call, the instrument panel and touchscreen displaytouchscreen displays the caller's number or name (if the caller is in your phone's contact list and CybertruckModel SModel XModel 3Model Y has access to your contacts).

Touch one of the options on the touchscreen to **Answer** or **Ignore** the call. Depending on the phone you are using and what speakers you used for your most recent call, your phone may prompt you to choose which speakers you want to use for the incoming call.



WARNING: Stay focused on the road at all times while driving. Using or programming a phone while driving, even with Bluetooth enabled, can result in serious injury or death.



WARNING: Follow all applicable laws regarding the use of phones while driving, including, but not limited to, laws that prohibit texting and require hands-free operation at all times.



In Call Options

When a call is in progress, you can display the call menu on the instrument panel by pressing the top button on the right side of the steering wheel. Then roll the right scroll button and choose an option (see [Using Right Steering Wheel Buttons on page 385](#)). To adjust the call volume, roll the steering wheel's left scroll button during a call.

In Call Options

When a call is in progress, the call displays on the touchscreen. To adjust the call volume, roll the left scroll button during a call. Tilt the left scroll button left to mute/unmute and tilt right to end the call.

Calendar



The calendar displays scheduled events from your phone's (iPhone® or Android™) calendar for the current and next day. The calendar is conveniently integrated with the phone app so you can dial into your meeting from a Calendar entry. It is also integrated with the navigation system so you can navigate to the event's location.

1. Ensure your phone is paired to CybertruckModel SModel XModel 3Model Y.
2. Ensure you are logged into the Tesla mobile app.
3. In your Tesla mobile app, touch **Profile > Settings > Calendar Sync**.

NOTE: To ensure you have access to all of the calendar's features, it is recommended that you use the most recent version of the mobile app.

4. On your phone, go to **Settings** and allow access/give permission to share your calendar with the Tesla mobile app. The mobile app can then periodically (and automatically) send calendar data from your phone to CybertruckModel SModel XModel 3Model Y.

If a calendar event includes an address, a navigation arrow displays to indicate that you can touch the address to navigate to the event's location.

If an event has a uniquely specified address and takes place within two hours of you entering your vehicle and preparing to drive, CybertruckModel SModel XModel 3Model Y automatically routes you to the event's address (see [Automatic Navigation on page 702](#)).

Touch an event's information icon to display all notes associated with the event. If the notes include one or more phone numbers, the information icon shows a phone icon and the calendar displays the first phone number found. Touch to initiate a phone call. You can also initiate a phone call by touching any number in an event's notes popup screen (this is especially useful for conference calls). If notes include a web link, you can touch the link to open it in the Web browser.

Zoom



Seamlessly take meetings and calls through your vehicle's touchscreen. To set up, touch the Zoom app and sign in or enter the meeting ID. You can even access meetings shown on your calendar or in text messages by touching the Zoom link. Your vehicle's cabin camera can be used in calls over Zoom only when CybertruckModel SModel XModel 3Model Y is Parked. When the vehicle is shifted out of Park in the middle of a Zoom call, the cabin camera turns off and you switch to audio only. Use the touchscreen to turn on/off the video, mute/unmute yourself, and customize various preferences for your meeting.

⚠ WARNING: Do not to use the video function when the vehicle is "temporarily parked" on a public road (such as when the vehicle is parked along the curb or in a spot that is not a designated parking spot)..

⚠ WARNING: Stay focused on your surroundings and follow all applicable laws while driving, including, but not limited to, laws that require hands-free operation at all times.



Smart Garage

myQ



If equipped, CybertruckModel SModel XModel 3Model Y can intelligently connect to your myQ® smart garage.

myQ is a smart garage control system that works seamlessly with CybertruckModel SModel XModel 3Model Y, and allows you to remotely monitor and control your garage door from the vehicle's touchscreen or a paired phone. This is convenient if you forget to close your garage door, want to allow friends and family inside, or need to open and close it remotely (such as when receiving a package). By linking myQ with CybertruckModel SModel XModel 3Model Y, the garage door can detect your vehicle nearby and automatically open or close to accommodate.

Follow these steps to set up myQ on your vehicle:

1. Your garage door must be myQ compatible. Navigate to **Controls > Garage icon**. Use the myQ Compatibility tool (<https://www.myq.com/app/myq-compatibility>) to determine this.
2. Ensure your garage is Wi-Fi compatible. myQ uses Wi-Fi to communicate with your smart phone and vehicle. Some garages will have a Wi-Fi or myQ symbol on the hub. Your garage must have a strong Wi-Fi signal to control and monitor your garage through your vehicle.
NOTE: If your garage is not compatible, you may be able to purchase an external myQ hub to use this feature.
3. Download the myQ app from your smart phone's app store. Use the app to set up your account information and pair the garage to your phone. myQ requires a paid subscription, which you can purchase in the app.
4. Check that your vehicle is running the latest available software version and has Wi-Fi or LTE connectivity.
5. Touch the garage icon at the top of the touchscreen or navigateNavigate to **Controls > Locks > myQ Connected Garage > Link Account** and follow the instructions to pair the garage with CybertruckModel SModel XModel 3Model Y. Once paired, monitoring and controlling the garage becomes available on the touchscreen, where you can further customize myQ.

For more information, questions, or troubleshooting assistance, visit www.myQ.com/Tesla.

HomeLink Universal Transceiver



If your vehicle is equipped with the HomeLink® Universal Transceiver, you can operate up to three Radio Frequency (RF) devices, including garage doors, gates, lights, and security systems.

NOTE: Depending on date of manufacture, market region, and options selected at time of purchase, some vehicles are not equipped with a HomeLink Universal Transceiver.

WARNING: Do not use the HomeLink Universal Transceiver with a device that does not have safety stop and reverse features. Using a device without these safety features increases the risk of injury or death.

Supported Modes

HomeLink supports three different transmit modes, which is how your vehicle and the RF device communicate. Selecting a transmit mode is determined by your RF device's compatibility:

- **Standard Mode:** Use Standard Mode if your RF device is equipped with a remote control that must be used to operate the device (for example, a remote-controlled garage door). This mode is the most commonly used transmit mode for HomeLink devices.
- **D-Mode or UR-Mode:** Use D-Mode or UR-Mode if the RF device does not have a remote control, and the receiver has a "Learn" button (may also be called "Program" or "Smart"). D-Mode and UR-Mode function similarly in that CybertruckModel SModel XModel 3Model Y communicates directly with the device's receiver as opposed to the remote control.



NOTE: D-Mode is used primarily in North America whereas UR-Mode is popular in Europe, the Middle East, and Asia. To determine the mode your device is compatible with, contact HomeLink by going to www.homelink.com or calling 1-800-355-3515.

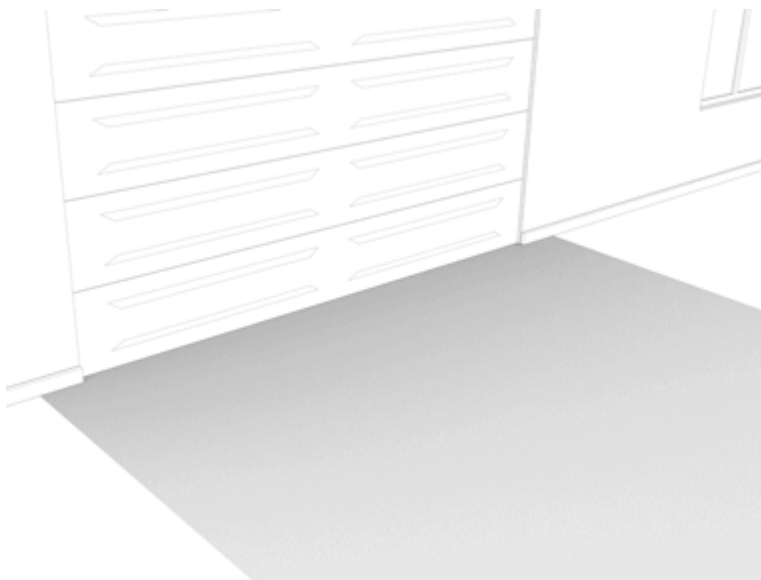
Each of your devices can be set to a different mode. For example, your garage door can be set to Standard Mode, your front gate can be set to D-Mode, etc. To change a transmit mode, touch the HomeLink icon at the top of the touchscreen **Controls** screen and select the device you want to change. Then, select **Program** and choose the desired mode for your device. Confirm by touching **Set Mode** and follow the onscreen instructions.

For older vehicles, changing the mode for one device changes the mode for all devices, so be careful when changing transmit modes. Devices not compatible with your selected mode may not work. Touch the HomeLink icon at the top of the touchscreen, then touch **Change Transmit Mode**.

NOTE: Check the product information for your HomeLink device to determine which mode is compatible with your device.

Programming HomeLink

To program HomeLink®:



1. Park CybertruckModel SModel XModel 3Model Y so that the front bumper is in front of the device you want to program.



CAUTION: Your device might open or close during programming. Therefore, before programming, make sure that the device is clear of any people or objects.

2. Check that the device's remote control has a healthy battery. Tesla recommends replacing the battery in the device's remote control before Programming HomeLink.
3. Touch the HomeLink icon at the top of the touchscreen **Controls** screen.
4. Touch **Create HomeLink**.
5. On the HomeLink screen, enter a name for the device, then touch **Enter** or **Add New HomeLink**.
6. Choose the mode you wish to use (Standard, D-Mode, or UR-Mode), then touch **Set Mode**.
7. Touch **Start** and follow the onscreen instructions.

NOTE: If you see a screen called "Train the receiver" while programming the device, remember that this is a time-sensitive step. After pressing the Learn/Program/Smart button on the device's remote control, you have only approximately 30 seconds to return to your vehicle and press **Continue**, and then press the trained HomeLink device name twice. Consider having an assistant to ensure you can complete this step within 30 seconds.

8. Once your device is programmed, touch **Save** to complete the programming.
9. Ensure HomeLink works as expected. In some cases, you may need to repeat the programming process multiple times before succeeding.



Once programmed, you can operate the device by touching its corresponding HomeLink icon on the touchscreen. HomeLink remembers the location of your programmed devices. When you approach a known location, the HomeLink control on the touchscreen automatically appears. When you drive away, it disappears.

NOTE: The HomeLink icon displays at the top of the touchscreen when CybertruckModel SModel XModel 3Model Y detects a programmed HomeLink device within range, and the touchscreen is not already displaying the HomeLink screen or popup,

NOTE: For additional assistance or compatibility questions, contact HomeLink (www.homelink.com or call 1-800-355-3515).

Auto Opening and Closing

To operate a HomeLink device without using the touchscreen, you can automate the device to open as you approach, and close as you drive away:

1. Touch the HomeLink icon at the top of the touchscreen **Controls** screen, touch **HomeLink Settings**, then choose the device you want to automate.
2. Adjust the device's HomeLink settings as needed:
 - Select the **Auto-open when arriving** checkbox if you want the device to open as you approach.
 - Touch the arrows to specify the distance you want CybertruckModel SModel XModel 3Model Y to be from the device before it opens.
 - Select the **Auto-close when leaving** checkbox if you want the device to close as you drive away.
 - Select the **Auto-fold mirrors** checkbox if you want mirrors to fold when you arrive at the HomeLink location. This is useful for narrow garages.
 - Select the **Chime for Auto-open and Auto-close** checkbox if you want CybertruckModel SModel XModel 3Model Y to sound a chime when a signal has been sent to open or close the device.

HomeLink remembers the vehicle's GPS location at the time of pairing and uses this to determine the vehicle's whereabouts in relation to the HomeLink device. HomeLink does not detect and differentiate between opening and closing (ex: if Auto-open is triggered and the door is already open, the door will close) but typically determines whether to auto-open or -close based on the following:

Auto-Open: Detects when CybertruckModel SModel XModel 3Model Y approaches the garage door (or other HomeLink device) within a specified distance. Auto-open initiates so long as the approaching vehicle is in Drive and HomeLink is enabled. HomeLink does not trigger when the vehicle is already in the area.

Auto-Close: HomeLink triggers when the CybertruckModel SModel XModel 3Model Y shifts from Park into Reverse, and moves at least 23 feet (seven meters) in Reverse.

NOTE: Changing gears multiple times while in the specified distance may interfere with Auto-close.

In situations where you don't want the device to automatically open or close, touch **Skip Auto-Open** or **Skip Auto-Close** at any time during the count-down message.

NOTE: Do not rely on HomeLink to ensure the device fully closes.

Resetting the Location of the HomeLink Device

If you experience situations in which you sometimes drive up to your HomeLink device and it doesn't open, or the touchscreen does not display a notification as you approach a programmed device, you may need to reset the device's location. To do so, park as close as possible to the HomeLink device (garage door, gate, etc.) and display the HomeLink settings page by touching the HomeLink icon at the top of the touchscreen **Controls** screen. Touch the name of the device you want to reset, then touch **Reset Location**.

Deleting a Device

To delete a HomeLink device, touch the HomeLink icon at the top of the touchscreen **Controls** screen, then touch **HomeLink Settings**. Touch the name of the device you want to delete, then touch **Delete**.

NOTE: You can also perform a factory reset to erase your HomeLink settings, along with all other personal data (saved addresses, music favorites, imported contacts, etc.). See [Erasing Personal Data with a Factory Reset on page 40](#).

NOTE: For security reasons, delete your HomeLink devices if you sell your CybertruckModel SModel XModel 3Model Y.



Troubleshooting HomeLink

Standard Mode

In Standard Mode, CybertruckModel SModel XModel 3Model Y records the RF signal from your HomeLink device's remote control. The touchscreen instructs you to stand in front of the vehicle, point the device's remote control at the front bumper, and press and hold the button until the headlights flash. When the headlights flash, CybertruckModel SModel XModel 3Model Y has learned the remote control and you can touch **Continue** on the touchscreen. If the headlights do not flash:

- Check the batteries in the remote control. It is a good idea to replace the batteries before you start programming.
- Ensure you are standing in front of CybertruckModel SModel XModel 3Model Y with the device's remote control positioned within two inches (five cm) of the Tesla emblem.
- Press and hold the button on your device's remote control until the headlights flash. In some cases you must hold the button on the remote control for up to three minutes.

NOTE: Some HomeLink remote controls require multiple short presses (approximately one second each press) instead of one long duration press. If you are unsuccessful after multiple attempts of using long presses, try repeated presses of one second each.

D-Mode and UR-Mode

In D-Mode and UR-Mode, the device's receiver learns CybertruckModel SModel XModel 3Model Y. The touchscreen instructs you to press the "Learn" button (may also be called "Program" or "Smart") on the device's receiver. If this does not work, refer to the following guidelines:

- Park CybertruckModel SModel XModel 3Model Y with its bumper as close as possible to the garage door, gate, etc. that you are trying to program.
- Make sure you are pressing the receiver's Learn/Program/Smart button. For instructions on how to put the receiver into learning mode, refer to the product details provided with your RF device that you are trying to program.
- If you see a screen called "Train the receiver" while programming the device, remember that this is a time-sensitive step. After pressing the Learn/Program/Smart button on the device's remote control or receiver, you only have approximately 30 seconds to return to your vehicle, press **Continue**, then press the trained HomeLink device name twice. Consider having someone assist you with this step.
- Most devices stay in learning mode for only three to five minutes. Immediately after pressing the device's Learn/Program/Smart button, follow the instructions displayed on the vehicle's touchscreen.

For additional assistance or compatibility questions, contact HomeLink (www.homelink.com or call 1-800-355-3515).

Driving



Starting and Powering Off

Starting

When you open a door to enter CybertruckModel SModel XModel 3Model Y, the instrument panel and touchscreen power on. The touchscreen powers on and you can operate all controls. To drive CybertruckModel SModel XModel 3Model Y:

1. **Press the brake pedal** - CybertruckModel SModel XModel 3Model Y powers on and is ready to drive.
2. **Select a drive mode** - move the drive stalk down for Drive or up for Reverse (see [Shifting on page 399](#)).

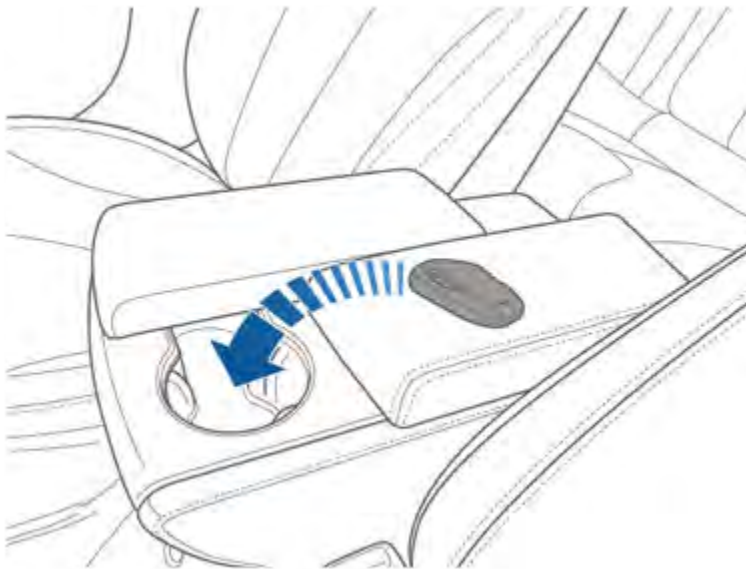
NOTE: If the **PIN to Drive** feature is enabled (see [PIN to Drive on page 660](#)), you must also enter a valid PIN on the touchscreen before you can drive CybertruckModel SModel XModel 3Model Y.

Everything you need to know when driving CybertruckModel SModel XModel 3Model Y displays on the instrument panel touchscreen.

Key Fob Not Inside

If CybertruckModel SModel XModel 3Model Y does not detect a key fob when you press the brake, the instrument panel displays a message telling you that a key fob is not inside.

If you receive this message, press the brake and place the key fob in the center console cup holder where CybertruckModel SModel XModel 3Model Y can best detect it.



If CybertruckModel SModel XModel 3Model Y still does not detect the key fob, try holding it against the center console, immediately below the low voltage power socket (see [Low Voltage Power Socket on page 47](#)). If the key fob is still not detected, remove the key fob's battery and try again. See [Replacing the Key Fob Battery on page 145](#). Or try using another key fob. If another key fob does not work, contact Tesla.

A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect the key fob. These include a low battery in the key fob, interference from other devices using radio signals, and objects between the key fob and receiver.

Always keep the key fob with you. After driving, the key fob is needed to restart CybertruckModel SModel XModel 3Model Y after it powers off. And when you leave CybertruckModel SModel XModel 3Model Y, you must bring the key fob with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Drive Disabled - Requires Authentication

If CybertruckModel SModel XModel 3Model Y does not detect a key when you press the brake (a key fob or phone key is not detected or two minutes have passed since you used the key card), the touchscreen displays a message telling you that driving requires authentication.



If you see this message, place the key card behind the cup holders where the RFID transmitter can read it. The two-minute authentication period restarts and you can start CybertruckModel SModel XModel 3Model Y by pressing the brake pedal.



A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect a phone key or key fob (for example, the device's battery is low or dead and is no longer able to communicate using Bluetooth).

Always keep your phone key, key fob, or a key card with you. After driving, your key is needed to restart CybertruckModel SModel XModel 3Model Y after it powers off. And when you leave CybertruckModel SModel XModel 3Model Y, you must bring your key with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Powering Off

When you finish driving, shift into Park by pressing the button on the end of the drive stalk. When you leave CybertruckModel SModel XModel 3Model Y with the key fobyour phone key and key fob, it powers off automatically, turning off the instrument panel and touchscreentouchscreen.

CybertruckModel SModel XModel 3Model Y also powers off automatically after being in Park for 30 minutes, even if you are sitting in the driver's seat.

Although usually not needed, you can power off CybertruckModel SModel XModel 3Model Y while sitting in the driver's seat, provided the vehicle is not moving. Touch **Controls > Safety > Power Off**. CybertruckModel SModel XModel 3Model Y automatically powers back on again if you press the brake pedal or touch the touchscreen.

NOTE: CybertruckModel SModel XModel 3Model Y automatically shifts into Park whenever it determines that you are exiting the vehicle (for example, the driver's seat belt is unbuckled and the vehicle is almost at a standstill). If you shift into Neutral, CybertruckModel SModel XModel 3Model Y shifts into Park when you open the door to exit. To keep CybertruckModel SModel XModel 3Model Y in Neutral, see [Instructions for Transporters on page 902](#). To keep CybertruckModel SModel XModel 3Model Y in Neutral, you will need to activate Transport Mode (see [Instructions for Transporters on page 921](#)).

Power Cycling the Vehicle

You can power cycle CybertruckModel SModel XModel 3Model Y if it demonstrates unusual behavior or displays a nondescript alert.

NOTE: If the touchscreen is unresponsive or demonstrates unusual behavior, reboot it before you power cycle the vehicle (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

1. Shift into Park.
2. On the touchscreen, touch **Controls > Safety > Power Off**.
3. Wait for at least two minutes without interacting with the vehicle. Do not open the doors, touch the brake pedal, touch the touchscreen, etc.
4. After two minutes, press the brake pedal or open the door to wake the vehicle.



Starting and Powering Off

Starting

When you open a door to enter CybertruckModel SModel XModel 3Model Y, the instrument panel and touchscreen power on. The touchscreen powers on and you can operate all controls. To drive CybertruckModel SModel XModel 3Model Y:

1. **Press the brake pedal** - CybertruckModel SModel XModel 3Model Y powers on and is ready to drive.
2. **Select a drive mode** - move the drive stalk down for Drive or up for Reverse (see [Shifting on page 399](#)).

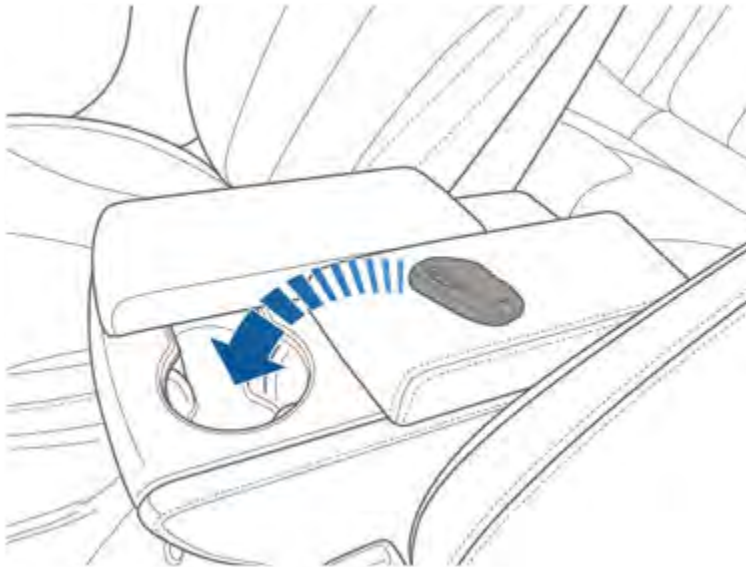
NOTE: If the **PIN to Drive** feature is enabled (see [PIN to Drive on page 660](#)), you must also enter a valid PIN on the touchscreen before you can drive CybertruckModel SModel XModel 3Model Y.

Everything you need to know when driving CybertruckModel SModel XModel 3Model Y displays on the instrument panel touchscreen.

Key Fob Not Inside

If CybertruckModel SModel XModel 3Model Y does not detect a key fob when you press the brake, the instrument panel displays a message telling you that a key fob is not inside.

If you receive this message, press the brake and place the key fob in the center console cup holder where CybertruckModel SModel XModel 3Model Y can best detect it.



If CybertruckModel SModel XModel 3Model Y still does not detect the key fob, try holding it against the center console, immediately below the low voltage power socket (see [Low Voltage Power Socket on page 47](#)). If the key fob is still not detected, remove the key fob's battery and try again. See [Replacing the Key Fob Battery on page 145](#). Or try using another key fob. If another key fob does not work, contact Tesla.

A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect the key fob. These include a low battery in the key fob, interference from other devices using radio signals, and objects between the key fob and receiver.

Always keep the key fob with you. After driving, the key fob is needed to restart CybertruckModel SModel XModel 3Model Y after it powers off. And when you leave CybertruckModel SModel XModel 3Model Y, you must bring the key fob with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Drive Disabled - Requires Authentication

If CybertruckModel SModel XModel 3Model Y does not detect a key when you press the brake (a key fob or phone key is not detected or two minutes have passed since you used the key card), the touchscreen displays a message telling you that driving requires authentication.



If you see this message, place the key card behind the cup holders where the RFID transmitter can read it. The two-minute authentication period restarts and you can start CybertruckModel SModel XModel 3Model Y by pressing the brake pedal.



A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect a phone key or key fob (for example, the device's battery is low or dead and is no longer able to communicate using Bluetooth).

Always keep your phone key, key fob, or a key card with you. After driving, your key is needed to restart CybertruckModel SModel XModel 3Model Y after it powers off. And when you leave CybertruckModel SModel XModel 3Model Y, you must bring your key with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Powering Off

When you finish driving, shift into Park by pressing the button on the end of the drive stalk. When you leave CybertruckModel SModel XModel 3Model Y with the key fobyour phone key and key fob, it powers off automatically, turning off the instrument panel and touchscreentouchscreen.

CybertruckModel SModel XModel 3Model Y also powers off automatically after being in Park for 30 minutes, even if you are sitting in the driver's seat.

Although usually not needed, you can power off CybertruckModel SModel XModel 3Model Y while sitting in the driver's seat, provided the vehicle is not moving. Touch **Controls > Safety > Power Off**. CybertruckModel SModel XModel 3Model Y automatically powers back on again if you press the brake pedal or touch the touchscreen.

NOTE: CybertruckModel SModel XModel 3Model Y automatically shifts into Park whenever it determines that you are exiting the vehicle (for example, the driver's seat belt is unbuckled and the vehicle is almost at a standstill). If you shift into Neutral, CybertruckModel SModel XModel 3Model Y shifts into Park when you open the door to exit. To keep CybertruckModel SModel XModel 3Model Y in Neutral, see [Instructions for Transporters on page 902](#). To keep CybertruckModel SModel XModel 3Model Y in Neutral, you will need to activate Transport Mode (see [Instructions for Transporters on page 921](#)).

Power Cycling the Vehicle

You can power cycle CybertruckModel SModel XModel 3Model Y if it demonstrates unusual behavior or displays a nondescript alert.

NOTE: If the touchscreen is unresponsive or demonstrates unusual behavior, reboot it before you power cycle the vehicle (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

1. Shift into Park.
2. On the touchscreen, touch **Controls > Safety > Power Off**.
3. Wait for at least two minutes without interacting with the vehicle. Do not open the doors, touch the brake pedal, touch the touchscreen, etc.
4. After two minutes, press the brake pedal or open the door to wake the vehicle.



Starting and Powering Off

Starting

When you open a door to enter CybertruckModel SModel XModel 3Model Y, the touchscreen powers on and you can operate all controls. To shift CybertruckModel SModel XModel 3Model Y, press the brake pedal and swipe up for Drive or down for Reverse on the touchscreen's drive mode strip (see [Shifting on page 405](#)).

If **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y automatically selects Drive or Reverse based on the detected surroundings. Pressing the brake pedal shifts the vehicle into the selected drive mode displayed on the instrument paneltouchscreen's drive mode strip (provided the driver's door is closed and the driver's seat belt is buckled), and pressing the accelerator moves the vehicle in that direction.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Pedals & Steering > Dynamics > Auto Shift out of Park**.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Dynamics > Auto Shift out of Park**.

Before accelerating when **Auto Shift out of Park** is enabled, check the instrument paneltouchscreen to make sure that CybertruckModel SModel XModel 3Model Y has shifted into the drive mode you want (Drive or Reverse). If the selection is not correct, or if **Auto Shift out of Park** is not enabled, swipe up for Drive or down for Reverse on the touchscreen's drive mode strip to choose a new drive mode. See [Shifting on page 405](#).

NOTE: If **PIN to Drive** is enabled (see [PIN to Drive on page 660](#)), you must enter a valid PIN on the touchscreen before you can drive CybertruckModel SModel XModel 3Model Y.

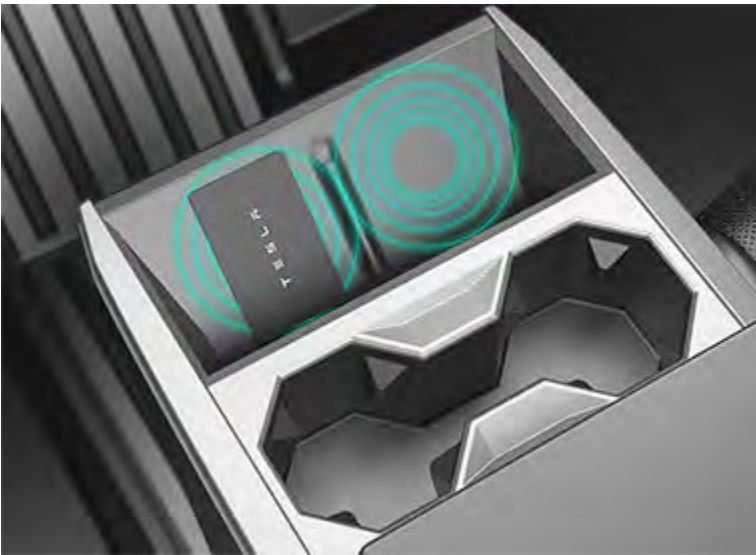
Everything you need to know when driving CybertruckModel SModel XModel 3Model Y displays on the instrument paneltouchscreen.

Drive Disabled - Requires Authentication

If CybertruckModel SModel XModel 3Model Y does not detect a key when you press the brake (a phone key is not detected or two minutes have passed since you used the key card), the touchscreen displays a message telling you that driving requires authentication.

If you see this message, place the key card in either phone dock where the RFID transmitter can read it. The two-minute authentication period restarts and you can start CybertruckModel SModel XModel 3Model Y by pressing the brake pedal.





A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect a phone key (for example, the device's battery is low or dead and is no longer able to communicate using Bluetooth).

Always keep your phone key or a key card with you. After driving, your key is needed to restart CybertruckModel SModel XModel 3Model Y. And when you leave the vehicle, you must bring your key with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Powering Off

When you finish driving and shift into Park, simply exit the vehicle. When you leave CybertruckModel SModel XModel 3Model Y with your phone key and key fob with your phone key with your phone key, it powers off automatically, turning off the instrument panel and touchscreentouchscreen.

CybertruckModel SModel XModel 3Model Y also powers off automatically after being in Park for 30 minutes, even if you are sitting in the driver's seat.

Although usually not needed, you can power off CybertruckModel SModel XModel 3Model Y while sitting in the driver's seat, provided the vehicle is not moving. Touch **Controls > Safety > Power Off**. CybertruckModel SModel XModel 3Model Y automatically powers back on after a short period if you press the brake pedal or touch the touchscreen.



NOTE: CybertruckModel SModel XModel 3Model Y automatically shifts into Park whenever it determines that you are exiting the vehicle (for example, the driver's seat belt is unbuckled and the vehicle is almost at a standstill). If you shift into Neutral, your vehicle shifts into Park when you open the door to exit. To keep your vehicle in Neutral, see [Instructions for Transporters on page 911](#). To keep your vehicle in Neutral, you will need to activate Transport Mode (see [Instructions for Transporters on page 921](#)[Instructions for Transporters on page 1445](#)).

Power Cycling the Vehicle

You can power cycle CybertruckModel SModel XModel 3Model Y if it demonstrates unusual behavior or displays a nondescript alert.

NOTE: If the touchscreen is unresponsive or demonstrates unusual behavior, reboot it before you power cycle the vehicle (see [Restarting the Touchscreen or Instrument Panel on page 34](#)[Restarting the Touchscreen on page 1115](#)).

1. Shift into Park.
2. On the touchscreen, touch **Controls** > **Safety** > **Power Off**.
3. Wait for at least two minutes without interacting with the vehicle. Do not open the doors, touch the brake pedal, touch the touchscreen, etc.
4. After two minutes, press the brake pedal or open the door to wake the vehicle.



Starting and Powering Off

Starting

When you open a door to enter CybertruckModel SModel XModel 3Model Y, the touchscreen powers on and you can operate all controls. To shift CybertruckModel SModel XModel 3Model Y, press the brake pedal and swipe up for Drive or down for Reverse on the touchscreen's drive mode strip (see [Shifting on page 405](#)).

If **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y automatically selects Drive or Reverse based on the detected surroundings. Pressing the brake pedal shifts the vehicle into the selected drive mode displayed on the instrument paneltouchscreen's drive mode strip (provided the driver's door is closed and the driver's seat belt is buckled), and pressing the accelerator moves the vehicle in that direction.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Pedals & Steering > Dynamics > Auto Shift out of Park**.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Dynamics > Auto Shift out of Park**.

Before accelerating when **Auto Shift out of Park** is enabled, check the instrument paneltouchscreen to make sure that CybertruckModel SModel XModel 3Model Y has shifted into the drive mode you want (Drive or Reverse). If the selection is not correct, or if **Auto Shift out of Park** is not enabled, swipe up for Drive or down for Reverse on the touchscreen's drive mode strip to choose a new drive mode. See [Shifting on page 405](#).

NOTE: If **PIN to Drive** is enabled (see [PIN to Drive on page 660](#)), you must enter a valid PIN on the touchscreen before you can drive CybertruckModel SModel XModel 3Model Y.

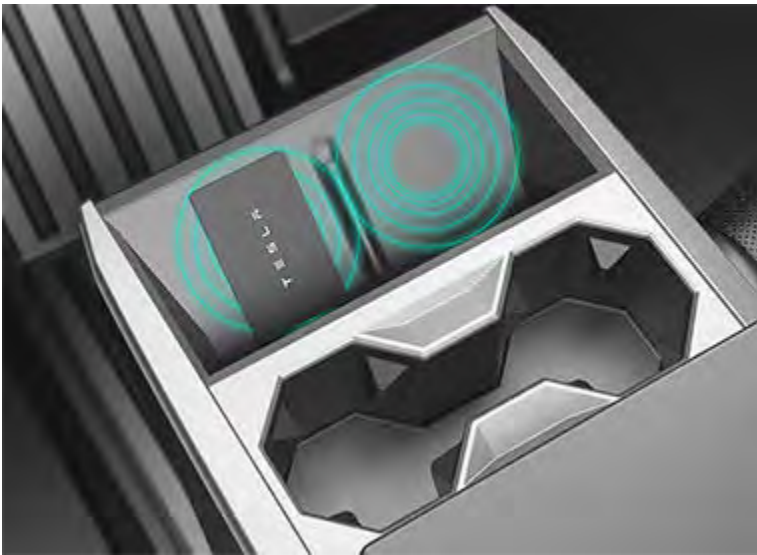
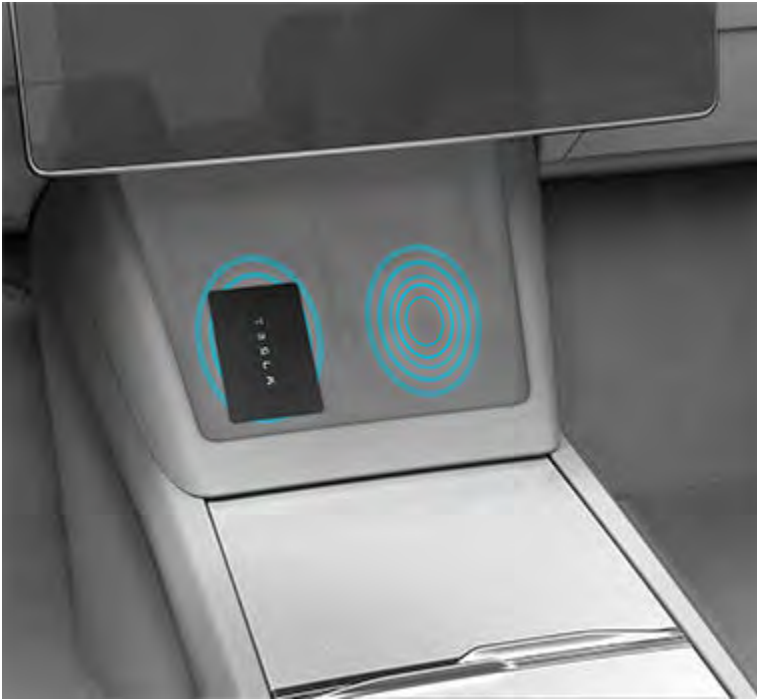
Everything you need to know when driving CybertruckModel SModel XModel 3Model Y displays on the instrument paneltouchscreen.

Drive Disabled - Requires Authentication

If CybertruckModel SModel XModel 3Model Y does not detect a key when you press the brake (a phone key is not detected or two minutes have passed since you used the key card), the touchscreen displays a message telling you that driving requires authentication.

If you see this message, place the key card in either phone dock where the RFID transmitter can read it. The two-minute authentication period restarts and you can start CybertruckModel SModel XModel 3Model Y by pressing the brake pedal.





A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect a phone key (for example, the device's battery is low or dead and is no longer able to communicate using Bluetooth).

Always keep your phone key or a key card with you. After driving, your key is needed to restart CybertruckModel SModel XModel 3Model Y. And when you leave the vehicle, you must bring your key with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Powering Off

When you finish driving and shift into Park, simply exit the vehicle. When you leave CybertruckModel SModel XModel 3Model Y with your phone key and key fob with your phone key with your phone key, it powers off automatically, turning off the instrument panel and touchscreen.

CybertruckModel SModel XModel 3Model Y also powers off automatically after being in Park for 30 minutes, even if you are sitting in the driver's seat.

Although usually not needed, you can power off CybertruckModel SModel XModel 3Model Y while sitting in the driver's seat, provided the vehicle is not moving. Touch **Controls** > **Safety** > **Power Off**. CybertruckModel SModel XModel 3Model Y automatically powers back on after a short period if you press the brake pedal or touch the touchscreen.



NOTE: CybertruckModel SModel XModel 3Model Y automatically shifts into Park whenever it determines that you are exiting the vehicle (for example, the driver's seat belt is unbuckled and the vehicle is almost at a standstill). If you shift into Neutral, your vehicle shifts into Park when you open the door to exit. To keep your vehicle in Neutral, see [Instructions for Transporters on page 911](#). To keep your vehicle in Neutral, you will need to activate Transport Mode (see [Instructions for Transporters on page 921](#)[Instructions for Transporters on page 1445](#)).

Power Cycling the Vehicle

You can power cycle CybertruckModel SModel XModel 3Model Y if it demonstrates unusual behavior or displays a nondescript alert.

NOTE: If the touchscreen is unresponsive or demonstrates unusual behavior, reboot it before you power cycle the vehicle (see [Restarting the Touchscreen or Instrument Panel on page 34](#)[Restarting the Touchscreen on page 1115](#)).

1. Shift into Park.
2. On the touchscreen, touch **Controls > Safety > Power Off**.
3. Wait for at least two minutes without interacting with the vehicle. Do not open the doors, touch the brake pedal, touch the touchscreen, etc.
4. After two minutes, press the brake pedal or open the door to wake the vehicle.



Steering Wheel/Steering Yoke (or Steering Wheel)

Adjusting the Steering Wheel/Steering Yoke (or Steering Wheel) Position

Depending on options purchased, you may have either a steering yoke or a steering wheel: the design may differ but the function is the same.

To adjust the steering wheel/steering yoke (or steering wheel), touch **Controls** and touch the **Steering** icon.

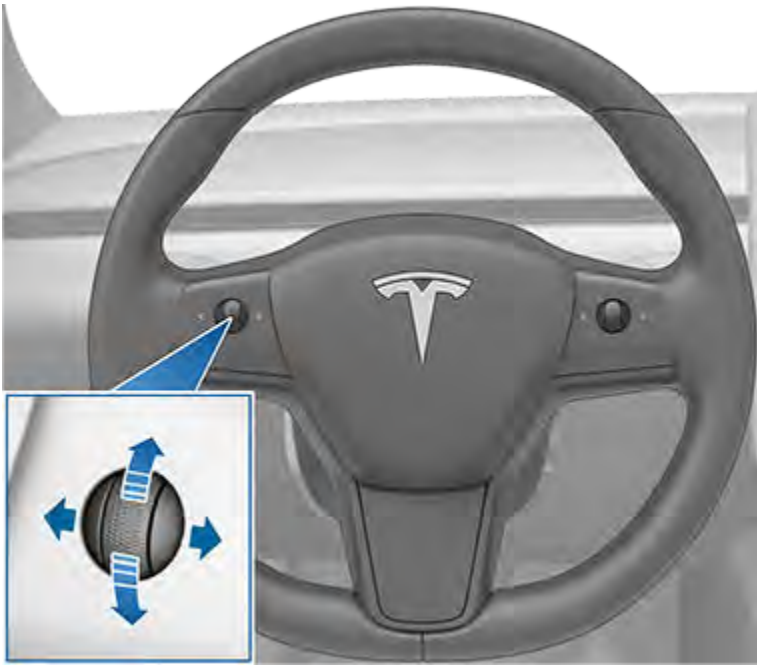
Use the left scroll button on the steering wheel/steering yoke (or steering wheel) to move the steering wheel/steering yoke (or steering wheel) to the desired position:

- To adjust the height/tilt angle of the steering wheel/steering yoke (or steering wheel), roll the left scroll button up or down.
- To move the steering wheel/steering yoke (or steering wheel) closer to you, or further away from you, press the left scroll button to the left or right.

You can also customize what you want the left scroll button to control, such as Climate or Dashcam status. To customize, hold down the left scroll button and navigate the menu on the instrument cluster touchscreen.

You can also customize what you want the left scroll button to control, such as Climate or Dashcam status. To customize, hold down the left scroll button and navigate the menu on the instrument cluster touchscreen.



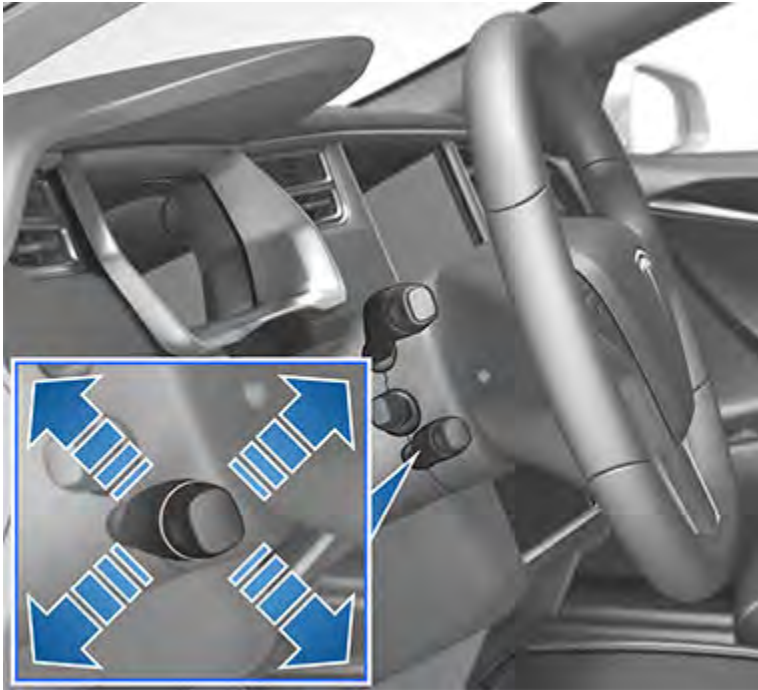


⚠ WARNING: Do not make steering wheelsteering yoke (or steering wheel) adjustments while driving.



Adjusting Steering Wheel Position

Adjust the steering wheel to the desired driving position by moving the control on the left side of the steering column. Using this control, you can move the steering wheel forward and backward and up and down.



⚠ WARNING: Do not make adjustments while driving.

Adjusting Steering Weight

You can adjust the feel and sensitivity of the steering system to suit your personal preference:

1. On the touchscreen, touch **Controls > Pedals & Steering > Dynamics > Steering Weight**.
2. Choose a steering option:
 - **Light** - Reduces the effort required to turn the steering wheelsteering yoke (or steering wheel). In town, CybertruckModel SModel XModel 3Model Y feels easier to drive and park.
 - **Medium** - Tesla believes that this setting offers the best handling and response in most conditions.
 - **Heavy** - Increases the effort required to turn the steering wheelsteering yoke (or steering wheel). When driving at higher speeds, CybertruckModel SModel XModel 3Model Y feels more responsive.



Overview of Buttons

Your CybertruckModel SModel XModel 3Model Y features stalkless driving in which all controls you need when driving are accessible on the steering yoke (or steering wheel).



1. Right turn signal (see [Turn Signals on page 440](#)).
2. High beam headlights* (see [High Beam Headlights on page 436](#)).
3. Left turn signal (see [Turn Signals on page 440](#)).
4. Left scroll button (see [Left Scroll Button on page 382](#)).
5. Horn (see [Horn on page 390](#)).
6. Identifier that is always illuminated to indicate that the right scroll wheel can be used with cruise control.
7. Wipers* (see [Wipers and Washers on page 453](#)).
8. Right scroll button (see [Right Scroll Button on page 383](#)).
9. Voice commands (see [Voice Commands on page 97](#)).

*The behaviors associated with the buttons for headlight high beams and wipers vary depending on whether you press or press and hold the button. Refer to the corresponding sections in this Owner's Manual for details.

NOTE: Simultaneously holding down both the left and right scroll buttons while CybertruckModel SModel XModel 3Model Y is parked causes the touchscreen to restart (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

Left Scroll Button

Use the scroll button on the left side of the steering yoke (or steering wheel) to adjust the position of the mirrors and steering yoke (or steering wheel). It also controls the wipers and media player.



- When using media player, push the button to the left to go back to the previous song or station or push it to the right to skip to the next song or station.
- To increase/decrease the volume of the sound system, roll the button up/down respectively.

NOTE: The scroll button adjusts the volume for media and phone calls based on what is currently in use. As you adjust the volume, the touchscreen displays the volume level and whether you are adjusting volume for media or phone.

- To mute the media volume, or to pause/play an audio file, push the scroll button.
- When adjusting mirrors, push the button to the left/right to move the associated mirror inward/outward and up/down to position the mirror upward or downward (see [Mirrors on page 394](#)).
- When adjusting the position of the steering wheelsteering yoke (or steering wheel), roll the button up/down to adjust the tilt/angle and press the button to the left or right to move the steering wheelsteering yoke (or steering wheel) closer or further (see [Adjusting the Steering WheelSteering Yoke \(or Steering Wheel\) Position on page 379](#)).
- When a menu displays on the instrument panel from which you can choose options (for example, wipers), use the scroll button to choose an option (up, down, left, or right).
- For incoming calls, press the scroll button to answer. During the call, press the scroll button again to hang up.

Right Scroll Button

Use the scroll button on the right side of the steering yoke (or steering wheel) to control Autopilot features such as Autosteer and Traffic-Aware Cruise Control:



- When driving, push and release the button to engage Autosteer or Traffic-Aware Cruise Control (see [Autosteer on page 556](#)). If **Autopilot Activation** is set to **Double Click** (touch **Controls** > **Autopilot** > **Autopilot Activation**), a single push engages Traffic-Aware Cruise Control (see [Traffic-Aware Cruise Control on page 554](#)) only and you must push and release twice to engage Autosteer. Once engaged, pushing the button cancels Autosteer and/or Traffic-Aware Cruise Control.
- Scroll up and down when using [Autopark on page 614](#) to select your desired parking space. Press the scroll button to confirm and begin the Autopark maneuver.

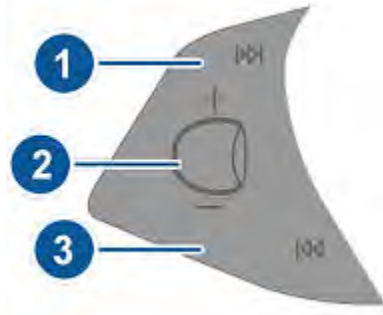


- When CybertruckModel SModel XModel 3Model Y is in Park, push the button twice to automatically engage Summon before exiting the vehicle (see [Summon on page 617](#)).
- When Traffic-Aware Cruise Control is engaged, rolling the scroll button up/down increase/decreases the set cruising speed respectively.

NOTE: There is currently no action associated with pushing the right scroll button to the left and right.

Using Left Steering Wheel Buttons

Use the buttons on the left side of the steering wheel to change radio stations, control media player volume, and to choose what displays on the left side of the instrument paneltouchscreen (whenever the Navigation app is not displaying instructions).



1. Next

If you are listening to local or satellite radio and you have defined more than one radio preset, press to play the next preset in the radio band that is currently playing. If you have not defined more than one preset, press to go to the next available frequency.

If you are listening to Internet radio, or to an audio file on a connected Bluetooth or USB device, press to skip to the next song or station.

If you have more than one favorite defined, press and hold to cycle through favorites.

2. Scroll Button

- To adjust the media volume, roll up or down.

NOTE: The scroll button adjusts the volume for media, navigation instructions and phone calls based on what is currently in use. As you adjust volume, the instrument paneltouchscreen displays the volume level and whether you are adjusting volume for media, navigation or phone.

- To mute the media volume, or to pause/play an audio file, tap the scroll button.
- To choose what displays on the left side of the instrument paneltouchscreen, hold the scroll button briefly until the available options are displayed. Roll the scroll button to choose **Empty**, **Car Status**, **Clock**, **Media**, **Energy**, **Trips**, **Suspension**, etc. When the option you want is highlighted, tap the scroll button.

NOTE: The option you choose to display using the left scroll button is retained until you manually change it.

NOTE: Car status displays information such as status of doors and trunks, and on newer model vehicles, the tire pressure measurements.

3. Previous

Same as described above for Next, except it skips to the previous song or station. If you have more than one favorite defined, press and hold to cycle through favorites.

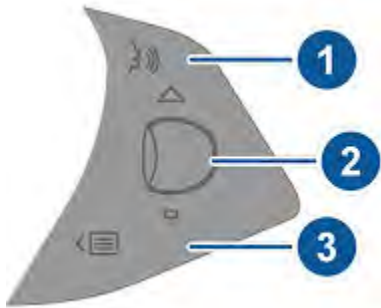
NOTE: Regardless of how you customize the left side of the instrument paneltouchscreen, it automatically changes to display navigation instructions (if applicable), or to let you know if a door or trunk is open when CybertruckModel SModel XModel 3Model Y is in Drive or Reverse.



Using Right Steering Wheel Buttons

Use the buttons on the right side of the steering wheel to access call options while on a phone call, to choose what displays on the right side of the instrument panel touchscreen, to adjust Cybertruck Model S Model X Model 3 Model Y features, and to use voice commands.

NOTE: Whenever you receive or make a phone call, the right side of the instrument panel touchscreen automatically displays call options to help you easily handle phone calls on your Bluetooth-connected phone.



1. Press to use a voice command to call a contact, navigate, or listen to Internet music. When you hear the tone, speak your command. For details, see [Voice Commands on page 97](#).
2. Scroll Button
 - During a phone call, touch the scroll button to display call options that allow you to perform an action on the call.
 - Roll the scroll button to adjust the most recently used feature from the feature list (see Menu button).
 - To choose what displays on the right side of the instrument panel touchscreen, hold the scroll button briefly until the available options are displayed. Roll the scroll button to choose **Empty, Car Status, Clock, Media, Energy, Trips, Suspension**, etc. When the option you want is highlighted, tap the scroll button.

NOTE: Car status displays information such as status of doors and trunks, and on newer model vehicles, the tire pressure measurements.

NOTE: The option you choose to display using the right scroll button is retained until you manually change it.
 - To restart the touchscreen, hold down both scroll buttons for approximately five seconds. See [Restarting the Touchscreen or Instrument Panel on page 34](#).
 - **Suspension.** Display a real-time visualization of how the suspension system is dynamically adjusting each wheel's damping to account for changing road conditions. Roll the scroll button to choose Suspension and then press the scroll button. See [Air Suspension on page 471](#).
3. Menu button

Press to display a menu that allows you to control the following Cybertruck Model S Model X Model 3 Model Y:

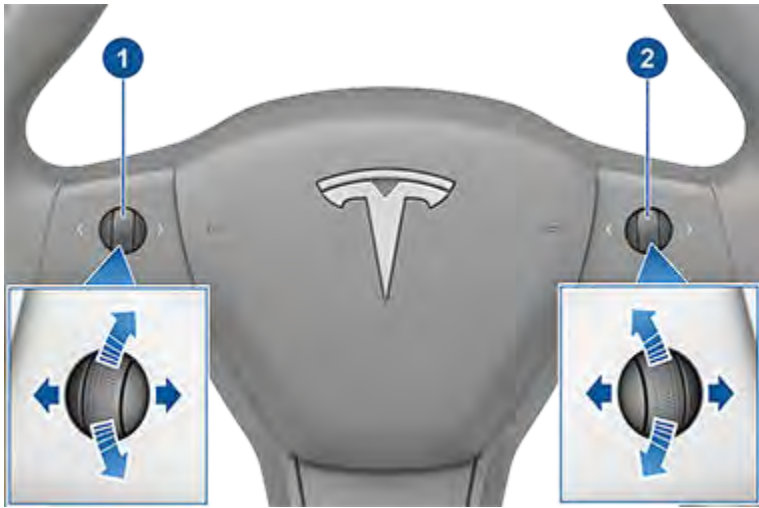
- **Temperature.** Roll the scroll button to change the driver side temperature, or press the wheel to turn the climate control system on and off.
- **Fan Speed.** Roll the scroll button to adjust the speed of the fan used to cool or heat the cabin.
- **Display Brightness.** Roll the scroll button to change the brightness level of the displays, or press the wheel to restore default settings.
- **Sunroof** (if equipped). Roll the scroll button to adjust the position of the sunroof.
- **Recent Calls.** If your phone is paired to Cybertruck Model S Model X Model 3 Model Y, roll the scroll button to view your recent calls. Press the scroll button to call the contact that's displayed. To pair your phone, see [Pairing a Phone or Bluetooth Device on page 360](#).
- **Contacts.** If your phone is paired to Cybertruck Model S Model X Model 3 Model Y, roll the scroll button to navigate to contacts in your phone. Your contacts are listed alphabetically by their last name. To ensure Cybertruck Model S Model X Model 3 Model Y can access your contacts, see [Importing Contacts and Recent Calls on page 361](#).

Press the menu button again to close the feature list.



Scroll Buttons

A scroll button is located on each side of the steering wheelsteering yoke (or steering wheel). Use your thumb to press this button to the right or left. You can also press the button or roll it up or down.



1. Use the left scroll button to:

- Control the volume. Press the scroll button to mute/unmute the volume, roll the scroll button up to increase the volume or down to decrease the volume.

NOTE: The scroll button adjusts the volume for media, navigation instructions or phone calls based on what is currently in use. As you adjust volume, the touchscreen displays the volume level and whether you are adjusting volume for media, navigation or phone calls.

- Push the scroll button to the right to go to the next song, station, or Favorite (depending on what's playing). Push the scroll button to the left to return to the previous selection.
- Adjust the position of the exterior mirrors (see [Adjusting Exterior Mirrors on page 395](#)).
- Adjust the position of the steering wheelsteering yoke (or steering wheel) (see [Adjusting the Steering Wheelsteering Yoke \(or Steering Wheel\) Position on page 379](#)).
- Adjust the angle of the headlights (see [Headlight Adjustments on page 423](#)).

2. Use the right scroll button to:

- Speak a voice command. Press the button to initiate a voice command (see [Voice Commands on page 97](#)).
- When using Traffic-Aware Cruise Control, adjust your set speed and the distance you want to maintain from a vehicle traveling ahead of you (see [Traffic-Aware Cruise Control on page 554](#)). Or, if Full Self-Driving (Supervised) is active, change the Full Self-Driving (Supervised) profile between **Chill**, **Average**, and **Assertive** (see [Full Self-Driving \(Supervised\) on page 603](#)).
- Adjust your cruising speed (see [Cruise Control on page 478](#)).

NOTE: The arrows associated with the scroll buttons are backlit in low ambient lighting conditions. To turn this backlighting on or off, touch **Controls > Lights > Steering Wheel Lights**.

To restart the touchscreen, press and hold both scroll buttons until after the touchscreen turns black. See [Restarting the Touchscreen or Instrument Panel on page 34](#).

Scroll Buttons

A scroll button is located on each side of the steering wheelsteering yoke (or steering wheel). Use your thumb to press this button to the right or left. You can also press the button or roll it up or down.



1. Use the left scroll button to:

- Control the volume. Press the scroll button to mute/unmute the volume, roll the scroll button up to increase the volume or down to decrease the volume.

NOTE: The scroll button adjusts the volume for media, navigation instructions or phone calls based on what is currently in use. As you adjust volume, the touchscreen displays the volume level and whether you are adjusting volume for media, navigation or phone calls.

- Push the scroll button to the right to go to the next song, station, or Favorite (depending on what's playing). Push the scroll button to the left to return to the previous selection.
- Adjust the position of the exterior mirrors (see [Adjusting Exterior Mirrors on page 395](#)).
- Adjust the position of the steering wheel/steering yoke (or steering wheel) (see [Adjusting the Steering Wheel/Steering Yoke \(or Steering Wheel\) Position on page 379](#)).
- Adjust the angle of the headlights (see [Headlight Adjustments on page 423](#)).

2. Use the right scroll button to:

- Speak a voice command. Press the button to initiate a voice command (see [Voice Commands on page 97](#)).
- When using Traffic-Aware Cruise Control, adjust your set speed and the distance you want to maintain from a vehicle traveling ahead of you (see [Traffic-Aware Cruise Control on page 554](#)). Or, if Full Self-Driving (Supervised) is active, change the Full Self-Driving (Supervised) profile between **Chill**, **Average**, and **Assertive** (see [Full Self-Driving \(Supervised\) on page 603](#)).
- Adjust your cruising speed (see [Cruise Control on page 478](#)).

NOTE: The arrows associated with the scroll buttons are backlit in low ambient lighting conditions. To turn this backlighting on or off, touch **Controls > Lights > Steering Wheel Lights**.

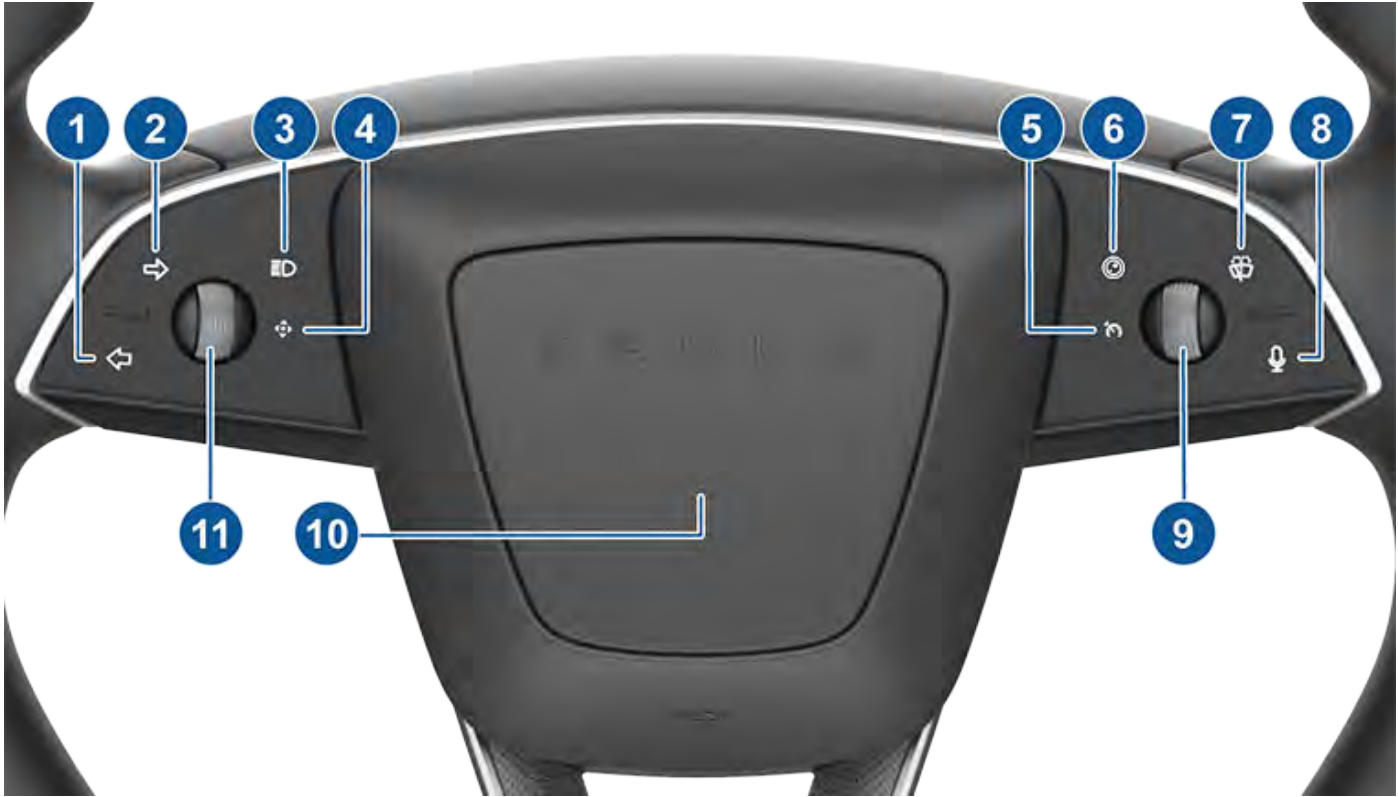
To restart the touchscreen, press and hold both scroll buttons until after the touchscreen turns black. See [Restarting the Touchscreen or Instrument Panel on page 34](#).



Steering Wheel Overview

Your Cybertruck Model S Model X Model 3 Model Y features stalkless driving in which all controls you need when driving are accessible on the steering wheel.

The steering wheel design may vary but the function is the same.



1. Left turn signal (see [Turn Signals](#) on page 439)
2. Right turn signal (see [Turn Signals](#) on page 439)
3. High beam headlights (see [High Beam Headlights](#) on page 435)
4. Multifunction light (non-functional)
5. Cruise control light (non-functional)
6. Rear-facing camera button
7. Wipers (see [Wipers and Washers](#) on page 453)
8. Voice commands (see [Voice Commands](#) on page 97)
9. Right scroll wheel (see [Right Scroll Wheel \(Autopilot\)](#) on page 389)
10. Horn (see [Horn](#) on page 390)
11. Left scroll wheel (see [Left Scroll Wheel \(Multifunction\)](#) on page 389)



Scroll Wheels

The scroll wheel on the left side of the steering wheel controls functions such as mirror adjustment, volume control, and wiper speed. The right scroll wheel controls Autopilot features, such as Autosteer initiation and max speed limit.

Left Scroll Wheel (Multifunction)

Mode	Action	Function	More Information
Normal	Press	Play/pause media	Media on page 707
	Tilt left/right	Next/previous track	
	Scroll up/down	Adjust volume	
Wipers*	Press	Confirm speed	Wipers and Washers on page 453
	Tilt left/right	Select wiper speed	
Multifunction	Long press	Activate/set function	Left Scroll Wheel Customization on page 389
	Tilt left/right	Navigate list	
	Scroll	Select function	
Phone call	Tilt left/right	Answer/decline a phone call	Using the Phone App on page 363
	In a call, tilt left	Mute/unmute	
	In a call, tilt right	End a call	

* First press the wiper button on steering wheel to activate.

Left Scroll Wheel Customization

Choose from a list to create quick access to a function by touching **Controls > Display > Scroll Wheel Function**. Selecting a function sets the default action when you long press the left scroll button, unless you select **Ask each time**.

Right Scroll Wheel (Autopilot)

Mode	Action	Function	More Information
Single Click*	Press	Activate Autosteer	Autopilot Settings on page 553
	Tilt left/right	Adjust follow distance	
	Scroll up/down	Adjust max speed	
Double Click*	Press	Activate Traffic-Aware Cruise Control	
	Double press	Activate Autosteer	
	Tilt left/right	Adjust follow distance	
	Scroll	Adjust max speed	
Full Self-Driving (Supervised) **	Press*	Activate Full Self-Driving (Supervised)	Full Self-Driving (Supervised) on page 603

* Choose how you want Autopilot features to be enabled by touching **Controls > Autopilot > Autopilot Activation**.

** First enable Full Self-Driving (Supervised) by touching **Controls > Autopilot > Autopilot Features > Full Self-Driving (Supervised)**.

Both Scroll Wheels

Mode	Action	Function	More Information
Normal	Press both briefly	Activate secondary drive mode selector (P, R, N, D)	Shift Using the Overhead Console on page 408



Mode	Action	Function	More Information
	Press both and hold	Restart the touchscreen	Restarting the Touchscreen or Instrument Panel on page 34

Heated Steering Wheel/Steering Yoke (or Steering Wheel)

If Cybertruck/Model S/Model X/Model 3/Model Y is equipped with the cold weather package, you can warm up the steering wheel by touching climate controls on the touchscreen (see [Operating Climate Controls on page 669](#)). When turned on, radiant heat keeps the steering wheel at a comfortable temperature.

To warm up the steering wheel/steering yoke (or steering wheel), touch the temperature icon on the touchscreen to display climate controls (see [Overview of Climate Controls on page 669](#)), then touch the steering wheel/steering yoke (or steering wheel) icon. When turned on, radiant heat keeps the steering wheel/steering yoke (or steering wheel) at a comfortable temperature.

NOTE: Depending on date of manufacture, your Model S may not include a heated steering wheel, even when equipped with the optional cold weather package.

Heated Steering Wheel

To warm up the steering wheel, touch the fan icon on the touchscreen to display climate controls (see [Adjusting Climate Control Settings on page 669](#)), then touch the steering wheel icon. When on, radiant heat keeps the steering wheel at a comfortable temperature.

NOTE: Depending on date of manufacture, your Cybertruck/Model S/Model X/Model 3/Model Y may not be equipped with a heated steering wheel.

NOTE: Depending on date of manufacture, your Cybertruck/Model S/Model X/Model 3/Model Y may not be equipped with a heated steering wheel.

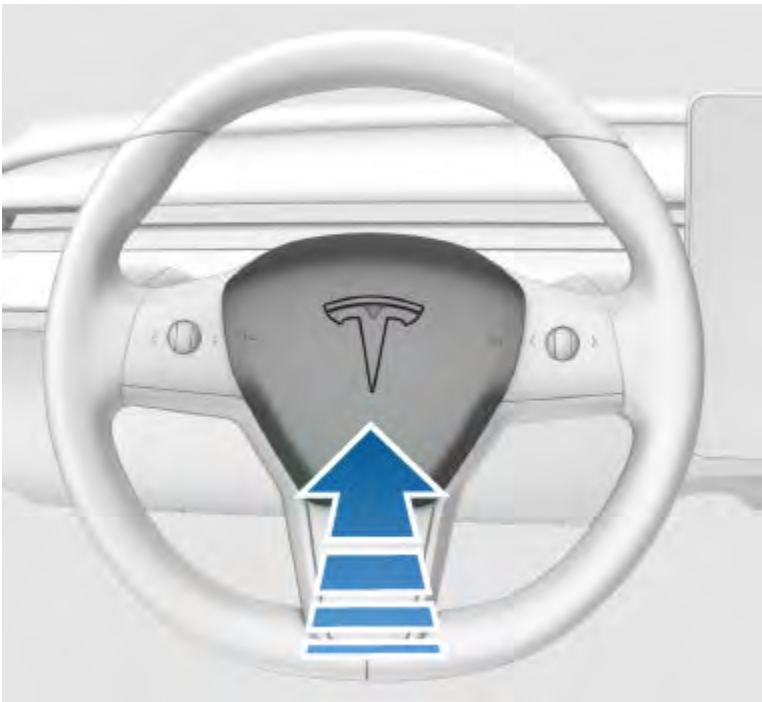
Horn

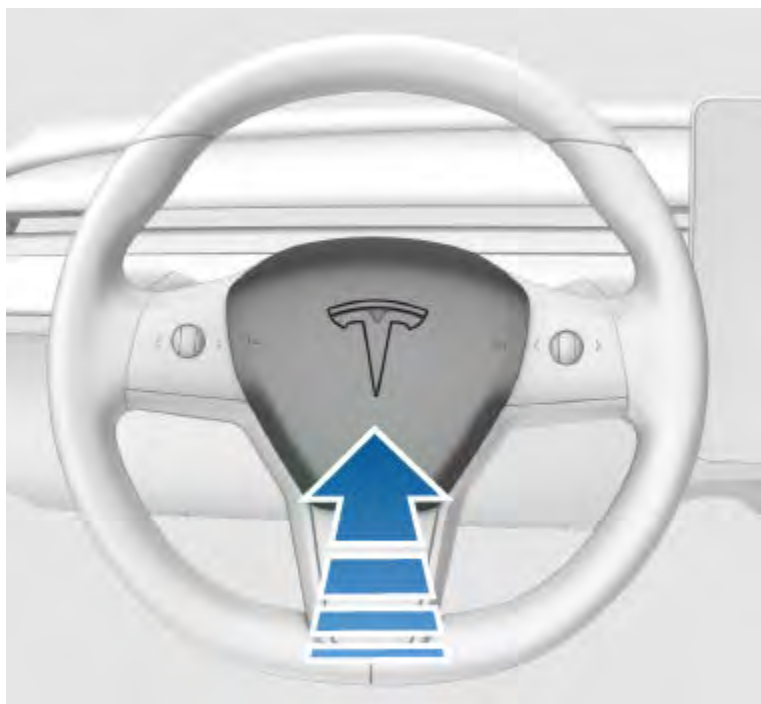
To sound the horn, press and hold the center pad on the steering wheel.

For vehicles manufactured as of approximately January 2024: To sound the horn, press the middle of the steering wheel/steering yoke (or steering wheel).



For vehicles manufactured prior to approximately January 2024: To sound the horn, press and hold the horn button on the right side of the steering wheel/steering yoke (or steering wheel).









Mirrors

Adjusting Exterior Mirrors

Press the button associated with the mirror you want to adjust (left or right). The button's light turns on and you can then press the dial to move the mirror to the desired position. Repeat for the other side mirror. If prompted, touch **Save** on the touchscreen to save the mirror adjustment in your driver profile.



Auto-Tilt automatically tilts mirrors downward when backing up. To turn Auto-Tilt on or off, touch **Controls > Vehicle > Mirror Auto-Tilt**. To adjust the auto-tilt position, make mirror adjustments with Cybertruck Model S Model X Model 3 Model Y shifted into Reverse. When you shift out of Reverse, mirrors tilt back to their normal (upward) position. But now that you have adjusted them for backing up, they automatically tilt to the selected downward position whenever you shift into Reverse.

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with Mirror Auto-Tilt.

The driver's side mirror automatically dims at night, in proportion to the level of glare from the headlights of a vehicle behind you (except when in Reverse). Also, both exterior side mirrors have heaters that turn on and off with the rear window defroster.

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with a side mirror that automatically dims at night and may not include heated side mirrors. In addition, mirror adjustments may not be saved to your driver profile.

NOTE: See [Cold Weather Best Practices on page 693](#) for information to ensure your mirrors function properly in cold weather.

Folding Mirrors

To manually fold and unfold exterior mirrors (for example, parking in a narrow garage, tight space, etc.), press the center button. You can also manually fold and unfold mirrors by touching **Controls > Fold/Unfold**.



When you manually fold the mirrors, they remain folded until your driving speed reaches 31 mph (50 km/h) (or until you manually unfold them).

NOTE: You cannot fold a mirror when driving over 31 mph (50 km/h).

To set the mirrors to fold automatically whenever you exit and lock CybertruckModel SModel XModel 3Model Y touch **Controls > Vehicle > Mirror Auto-Fold**. The mirrors unfold automatically when you unlock CybertruckModel SModel XModel 3Model Y.

You can also set the mirrors to fold automatically whenever you arrive at a specific location, which saves you from having to manually fold them each time you arrive at a frequented place. To set this up, CybertruckModel SModel XModel 3Model Y must be driving at a low speed (less than 3 mph/5 km/h) or stopped at the location you want your vehicle to remember. Then touch **Controls > Always Fold Mirrors at this Location**. Next time you approach the saved location, your mirrors fold and unfold within 25 feet (7.5 meters) of the location. To stop the mirrors from folding at a saved location, drive to the saved location and touch the **X** next to **Auto-Fold Set at This Location**.

NOTE: When you leave the saved location, mirrors can unfold when your driving speed is over 3 mph (5 km/h), or until you touch **Controls > Unfold Mirrors**.

NOTE: Mirrors can automatically fold if you return to a saved location and are driving below 31 mph (50 km/h).

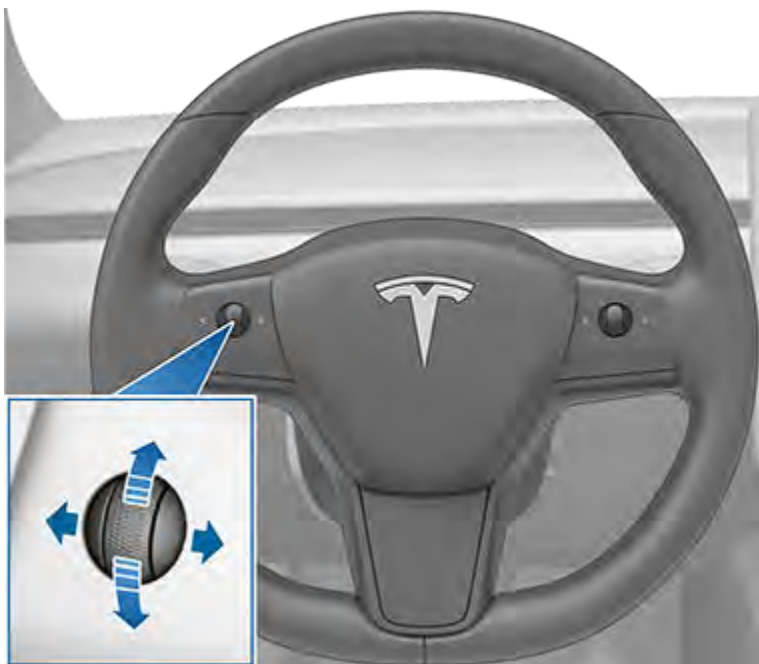
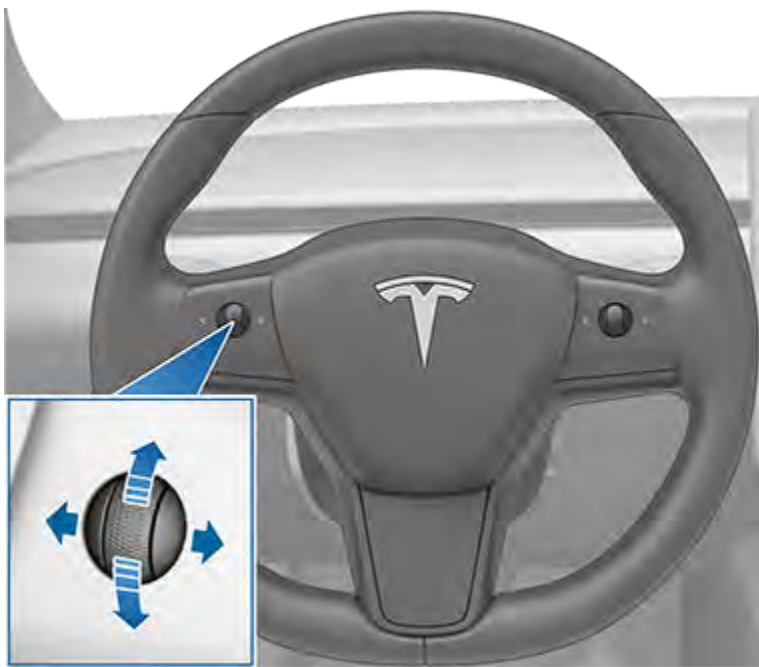
NOTE: You can override the automatic folding/unfolding of mirrors at any time (for example, CybertruckModel SModel XModel 3Model Y has no power) by pushing the mirror assembly away from you to unfold, or pulling it toward you to fold.

You can integrate auto-folding mirrors with HomeLink (see [Smart Garage on page 365](#)). To enable, go to **HomeLink > Auto-Fold Mirrors when Nearby**.

Adjusting Exterior Mirrors

Adjust the exterior mirrors by touching **Controls > Mirrors**. Press the left scroll button on the steering wheelsteering yoke (or steering wheel) to choose whether you are adjusting the **Left** or **Right** mirror. Then use the left scroll button as follows to adjust the selected mirror to its desired position:

- To move the mirror up or down, roll the left scroll button up or down.
- To move the mirror inward or outward, press the left scroll button to the left or right.





Mirror Auto Tilt automatically tilts mirrors downward when backing up. To turn this feature on or off, touch **Controls > Mirrors > Mirror Auto Tilt**. To adjust the auto-tilt position, make mirror adjustments with CybertruckModel SModel XModel 3Model Y shifted into Reverse. When you shift out of Reverse, mirrors tilt back to their normal (upward) position. But now that you have adjusted them for backing up, they automatically tilt to the selected downward position whenever you shift into Reverse.

Both exterior mirrors can tilt downward when the vehicle is shifted into Reverse. When you shift back into another drive mode, the mirrors return to their normal upward position. To turn this feature on or off, touch **Controls > Mirrors > Mirror Auto Tilt**.

NOTE: With a future software update, the **Save** button will retain the mirror adjustments but it does not function currently.

To reduce glare when driving at night, the rear view mirror and exterior side mirrors dim automatically. To enable or disable this feature, touch **Controls > Mirrors > Mirror Auto Dim**.

Availability of this **Mirror Auto Dim** depends on market region and date of manufacture.

NOTE: Both exterior mirrors have heaters that turn on and off with the rear window defroster.

Folding Mirrors

To manually fold and unfold exterior mirrors (for example, parking in a narrow garage, tight space, etc.), touch **Controls > Fold/Unfold Mirrors**.

When you manually fold the mirrors, they remain folded until your driving speed reaches 31 mph (50 km/h) (or until you manually unfold them by touching **Controls > Unfold Mirrors**).

NOTE: You cannot fold a mirror when driving over 31 mph (50 km/h).



To set the mirrors to fold automatically whenever you exit and lock CybertruckModel SModel XModel 3Model Y touch **Controls > Mirrors > Mirror Auto Fold**. The mirrors unfold automatically when you unlock CybertruckModel SModel XModel 3Model Y.

You can also set mirrors to fold automatically whenever you arrive at a specific location, which saves you from having to manually fold them each time you arrive at a frequented place. To set up, stop at the location you want to save (or drive at less than 3 mph (6 km/h)), and fold the mirrors. Touch **Save Location** when it appears briefly on the **Fold Mirrors** control.

If you no longer want mirrors to automatically fold, touch **Controls > Unfold Mirrors** when they fold at the saved location and then touch **Remove Location**.

When you leave the saved location, mirrors unfold when your driving speed reaches 3 mph (6 km/h), or when you touch **Controls > Unfold Mirrors**.

NOTE: Mirrors can automatically fold if you return to a saved location and are driving below 31 mph (50 km/h).

NOTE: You can override the automatic folding/unfolding of mirrors at any time (for example, CybertruckModel SModel XModel 3Model Y has no power) by pushing the mirror assembly away from you to unfold, or pulling it toward you to fold.

NOTE: If you expect ice to accumulate when CybertruckModel SModel XModel 3Model Y is parked, turn off **Mirror Auto Fold**. Accumulation of ice can prevent exterior side mirrors from folding or unfolding. See [Cold Weather Best Practices on page 693](#) for information on how to ensure your mirrors function properly in cold weather.

You can integrate auto-folding mirrors with HomeLink (see [Smart Garage on page 365](#)). To enable, go to **HomeLink > Auto-Fold Mirrors when Nearby**.

Rear View Mirror

Adjust the rear view mirror manually. When in Drive or Neutral, the rear view mirror automatically dims in low lighting conditions based on the time of day (for example, when driving at night).

Vanity Mirrors

To expose and illuminate the vanity mirror, fold the sun visor downwards, then use the tab to lower the mirror cover. After closing the mirror cover, the light turns off.



Vanity Mirrors

See [Sun Visors on page 163](#) for details on how to expose and illuminate the vanity mirrors.

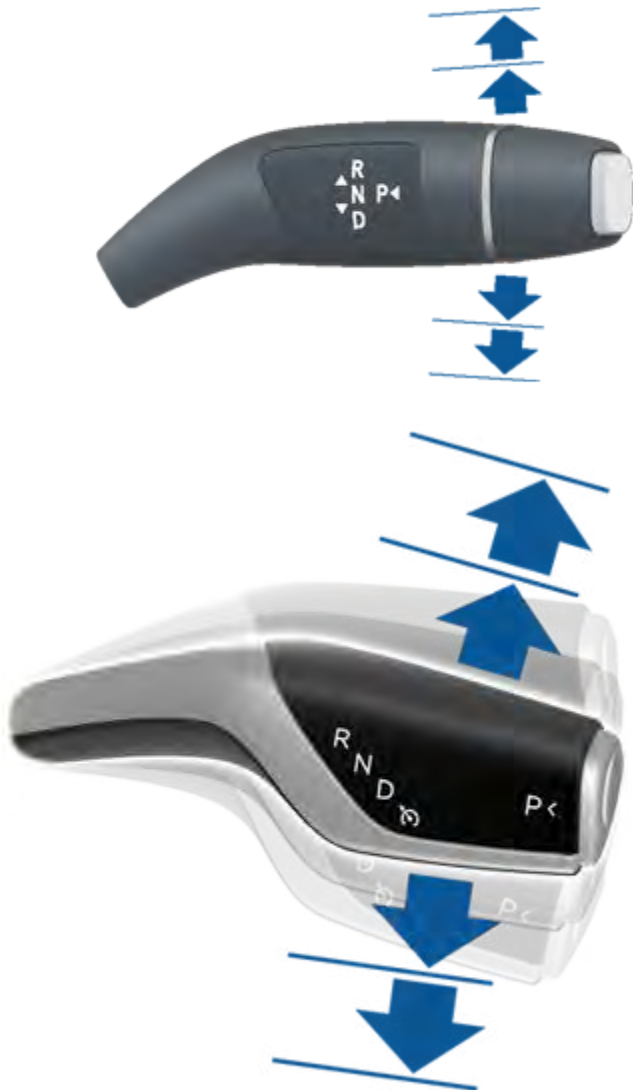


Shifting

How to Shift

When CybertruckModel SModel XModel 3Model Y is in Park, you must press the brake pedal to shift.

Move the drive stalk up or down to shift into different drive modes.



If you try to shift when it is prohibited by the current driving speed, a chime sounds and the drive mode does not change.

Reverse

Push the drive stalk all the way up and release. You can only shift into Reverse when CybertruckModel SModel XModel 3Model Y is stopped or moving less than 5 mph (8 km/h).

Neutral

Neutral allows CybertruckModel SModel XModel 3Model Y to roll freely when you are not pressing the brake pedal:

- When in Park, shift into Neutral by briefly pushing the drive stalk either up or down to the first position.



- When in Drive, shift into Neutral by briefly pushing the drive stalk up to the first position. If Autosteer or Traffic-Aware Cruise Control is active, you must push the drive stalk up to the first position and hold it there for more than 1 second. In doing so, Autosteer or Traffic-Aware Cruise Control is disabled.
- When in Reverse, shift into Neutral by briefly pushing the drive stalk down to the first position.

NOTE: You must press the brake pedal to shift out of Neutral if driving slower than approximately 5 mph (8 km/h).

CybertruckModel SModel XModel 3Model Y automatically shifts into Park when you leave the driver's seat. To stay in Neutral, use the touchscreen to engage Transport Mode (see [Instructions for Transporters on page 921](#)).

If CybertruckModel SModel XModel 3Model Y is in Park and you use the touchscreen to release the parking brake (**Controls > Safety > Parking Brake**), CybertruckModel SModel XModel 3Model Y shifts into Neutral (see [Parking Brake on page 468](#)).

Drive

Push the drive stalk all the way down and release. You can shift into Drive when CybertruckModel SModel XModel 3Model Y is stopped or moving less than 5 mph (8 km/h) in Reverse.

NOTE: When in Drive, push the drive stalk all the way down and release to enable cruise control (see [Cruise Control on page 478](#)).

NOTE: When in Drive, push the drive stalk all the way down once to engage Traffic-Aware Cruise Control, or twice in quick succession to engage Autosteer. If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once. For more information, see [Autopilot Settings on page 553](#).

Park

Press the end of the drive stalk while CybertruckModel SModel XModel 3Model Y is stopped.



CybertruckModel SModel XModel 3Model Y automatically shifts into Park to prevent roll-away while driving in low speeds. This happens whenever you connect a charge cable, unbuckle your seat belt, or open the door while in Drive or Neutral. Ensure the charge cable is removed, buckle your seat belt, and close the door before shifting out of Park.




Attempting to engage the parking brake above 5 mph (8 km/h) will result in emergency braking (see [Emergency Braking on page 462](#)).

To make it convenient to pick up passengers, you can also unlock all doors and/or extend the door handles at any time by shifting into Park then pressing the Park button a second time.

NOTE: You must press the brake pedal to shift out of Park.

NOTE: The above conditions do not reflect a comprehensive list of reasons why CybertruckModel SModel XModel 3Model Y may or may not automatically shift into Park and, in certain scenarios, it is possible for your vehicle to shift into Park when only one of the above conditions is true.



-  **CAUTION:** CybertruckModel SModel XModel 3Model Y will not shift out of Park if the front trunk is not securely shut or if the charge port is unable to determine whether a charging cable is plugged in. Ensure the front trunk is closed and any charging cables are unplugged, and follow the directions on the touchscreen to proceed.
-  **CAUTION:** In emergency situations, if the brakes are not functioning properly, press and hold the Park button on the center console or touchscreen on the drive stalk to bring CybertruckModel SModel XModel 3Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.
-  **WARNING:** It is the driver's responsibility to always ensure the vehicle is in Park before exiting. Never rely on CybertruckModel SModel XModel 3Model Y to automatically shift into Park for you; it might not work in all circumstances (for example, if Creep or a slope causes the vehicle to travel greater than approximately 1.5 mph (2 km/h)).

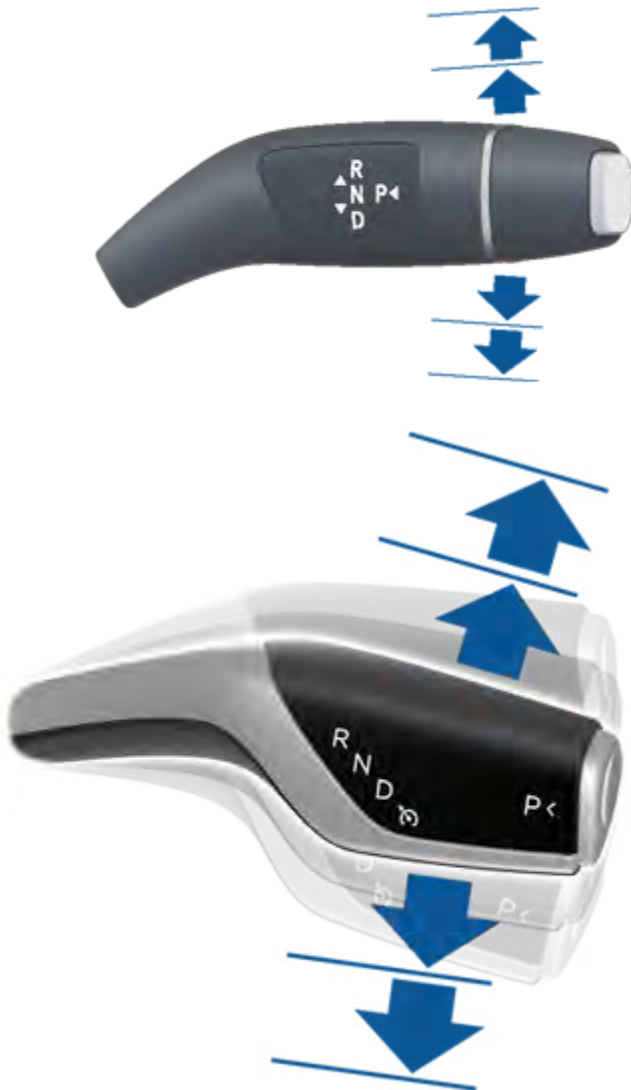


Shifting

How to Shift

When Cybertruck Model S Model X Model 3 Model Y is in Park, you must press the brake pedal to shift.

Move the drive stalk up or down to shift into different drive modes.



If you try to shift when it is prohibited by the current driving speed, a chime sounds and the drive mode does not change.

Reverse

Push the drive stalk all the way up and release. You can only shift into Reverse when Cybertruck Model S Model X Model 3 Model Y is stopped or moving less than 5 mph (8 km/h).

Neutral

Neutral allows Cybertruck Model S Model X Model 3 Model Y to roll freely when you are not pressing the brake pedal:

- When in Park, shift into Neutral by briefly pushing the drive stalk either up or down to the first position.



- When in Drive, shift into Neutral by briefly pushing the drive stalk up to the first position. If Autosteer or Traffic-Aware Cruise Control is active, you must push the drive stalk up to the first position and hold it there for more than 1 second. In doing so, Autosteer or Traffic-Aware Cruise Control is disabled.
- When in Reverse, shift into Neutral by briefly pushing the drive stalk down to the first position.

NOTE: You must press the brake pedal to shift out of Neutral if driving slower than approximately 5 mph (8 km/h).

CybertruckModel SModel XModel 3Model Y automatically shifts into Park when you leave the driver's seat. To stay in Neutral, use the touchscreen to engage Transport Mode (see [Instructions for Transporters on page 921](#)).

If CybertruckModel SModel XModel 3Model Y is in Park and you use the touchscreen to release the parking brake (**Controls > Safety > Parking Brake**), CybertruckModel SModel XModel 3Model Y shifts into Neutral (see [Parking Brake on page 468](#)).

Drive

Push the drive stalk all the way down and release. You can shift into Drive when CybertruckModel SModel XModel 3Model Y is stopped or moving less than 5 mph (8 km/h) in Reverse.

NOTE: When in Drive, push the drive stalk all the way down and release to enable cruise control (see [Cruise Control on page 478](#)).

NOTE: When in Drive, push the drive stalk all the way down once to engage Traffic-Aware Cruise Control, or twice in quick succession to engage Autosteer. If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once. For more information, see [Autopilot Settings on page 553](#).

Park

Press the end of the drive stalk while CybertruckModel SModel XModel 3Model Y is stopped.



CybertruckModel SModel XModel 3Model Y automatically shifts into Park to prevent roll-away while driving in low speeds. This happens whenever you connect a charge cable, unbuckle your seat belt, or open the door while in Drive or Neutral. Ensure the charge cable is removed, buckle your seat belt, and close the door before shifting out of Park.

Attempting to engage the parking brake above 5 mph (8 km/h) will result in emergency braking (see [Emergency Braking on page 462](#)).




To make it convenient to pick up passengers, you can also unlock all doors and/or extend the door handles at any time by shifting into Park then pressing the Park button a second time.

NOTE: You must press the brake pedal to shift out of Park.

NOTE: The above conditions do not reflect a comprehensive list of reasons why CybertruckModel SModel XModel 3Model Y may or may not automatically shift into Park and, in certain scenarios, it is possible for your vehicle to shift into Park when only one of the above conditions is true.



Owners Manual

-  **CAUTION:** CybertruckModel SModel XModel 3Model Y will not shift out of Park if the front trunk is not securely shut or if the charge port is unable to determine whether a charging cable is plugged in. Ensure the front trunk is closed and any charging cables are unplugged, and follow the directions on the touchscreen to proceed.
-  **CAUTION:** In emergency situations, if the brakes are not functioning properly, press and hold the Park button on the center console or touchscreenon the drive stalk to bring CybertruckModel SModel XModel 3Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.
-  **WARNING:** It is the driver's responsibility to always ensure the vehicle is in Park before exiting. Never rely on CybertruckModel SModel XModel 3Model Y to automatically shift into Park for you; it might not work in all circumstances (for example, if Creep or a slope causes the vehicle to travel greater than approximately 1.5 mph (2 km/h)).



Shifting

Shift Using the Touchscreen

When you press the brake pedal when parked, the drive mode strip displays on one side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: swipe up for Drive, swipe down for Reverse or touch the P for Park or N for Neutral. The drive mode strip is always available on the touchscreen when you touch **Controls**. Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip.



NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen's drive mode strip displays **Park** and **Neutral** at all times. To shift into **Park** when driving below 5 mph (8 km/h), touch the button on the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the **Park** button to slowly bring the vehicle to a stop.

To shift into Neutral, open **Controls** to bring up the drive mode strip, then press and hold **Neutral** until Neutral engages.

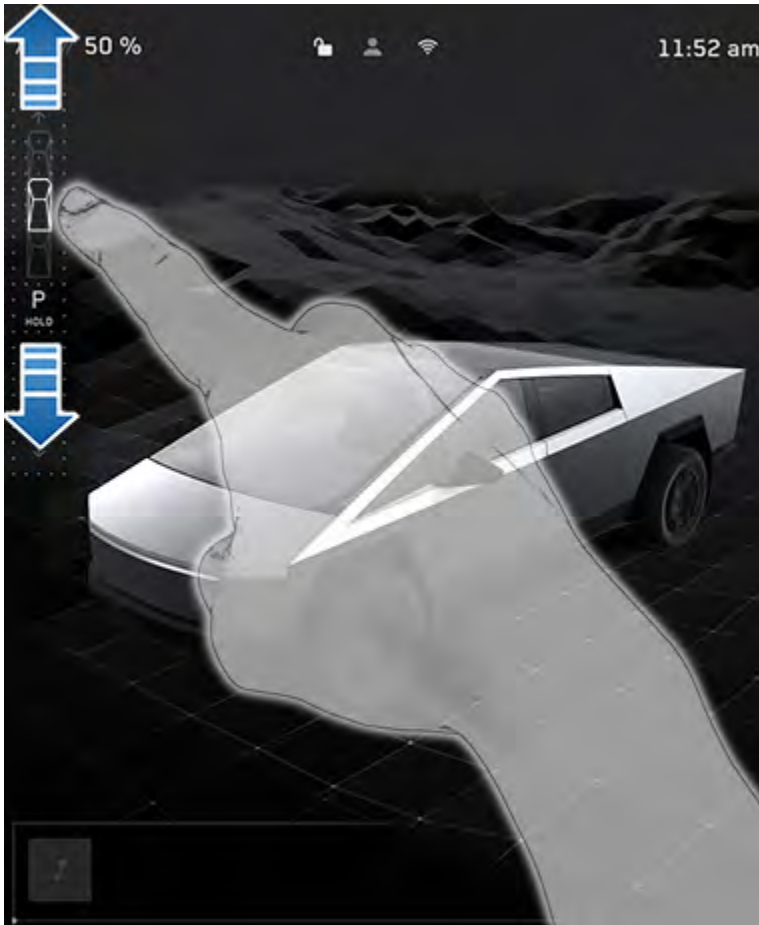
The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the center console/overhead console automatically activates and must be used to shift (see [Shift Using the Center Console on page 410](#)[Shift Using the Overhead Console on page 408](#)).

If you try to shift when it is prohibited by the current driving speed, the instrument panel/touchscreen displays an alert, a chime sounds, and the drive mode does not change.



Shift Using the Touchscreen

When you press the brake pedal when CybertruckModel SModel XModel 3Model Y is parked, the drive mode strip displays on the driver's side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: Swipe up for Drive, swipe down for Reverse, or press the drive mode strip for Park.



The touchscreen always shows which gear CybertruckModel SModel XModel 3Model Y is in, but the drive mode strip is hidden when driving at highway speeds. To show the drive mode strip at any time, swipe right from the left edge of the touchscreen.

To shift into **Park** when driving below 5 mph (8 km/h), touch the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the gear strip to slowly bring the vehicle to a stop.

NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the overhead console automatically activates and must be used to shift (see [Shift Using the Overhead Console on page 407](#)).

If you try to shift when it is prohibited by the current driving speed, the touchscreen displays an alert, a chime sounds, and the drive mode does not change.

Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.



To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 406](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.

WARNING: As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 407](#)).
- The cameras are free of obstructions (see [Cameras on page 1136](#)) and CybertruckModel SModel XModel 3Model Y has enough input to make a selection.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 405](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.

WARNING: As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 408](#)).

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates.



In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console illuminates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen on page 1115](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift after a short amount of time.

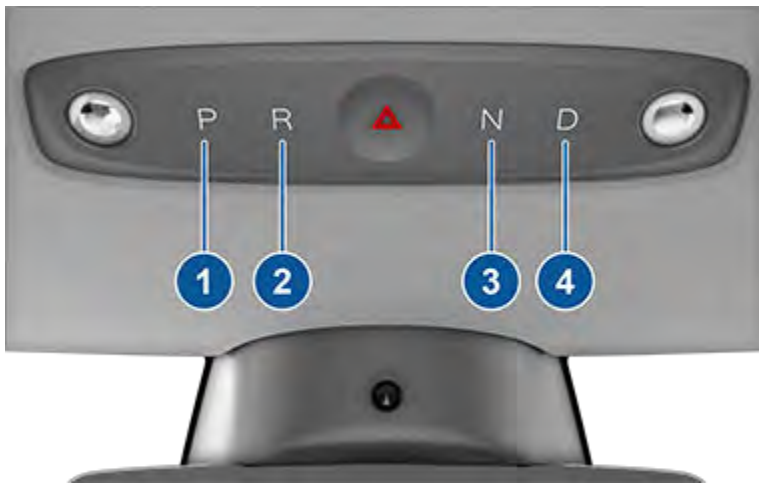
Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press the brake and touch one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console activates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift within 10 seconds.

Auto Shift (Beta)

NOTE: **Auto Shift** is a Beta feature and is disabled by default.

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with **Auto Shift** (Beta) or the features may not operate exactly as described.

Auto Shift (Beta) can shift between Drive and Reverse, or out of Park, to assist with actions such as turns, parking, or reversing out of a parking spot. To enable, touch **Controls > Pedals & Steering > Auto Shift (Beta)**, where you can select between **On** or **Out of Park**.

When **On**, **Auto Shift** (Beta) lets you shift without using the touchscreen based on your surroundings. This assists with multi-point turns, reversing out of a parking spot, parallel parking, and similar driving maneuvers. When the vehicle assists with shifting, a readiness indicator appears on the instrument clustertouchscreen.

With **Out of Park**, CybertruckModel SModel XModel 3Model Y is designed to select Drive or Reverse when shifting out of Park (such as pulling out of a parking spot). CybertruckModel SModel XModel 3Model Y selects a drive mode when:

selects a drive mode when:


- **Auto Shift** (Beta) is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park (for **Out of Park**) or in Drive or Reverse (for **On**).
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

Auto Shift (Beta) is designed to enhance your driving experience and may only appear in certain circumstances, such as requiring a vehicle or object in the front and/or rear to begin the maneuver. Confirm the drive mode selection and follow the instructions on the instrument clustertouchscreen before you press the accelerator.

To override the selection, press the brake pedal and use the drive mode strip on the touchscreen to manually shift into your desired Drive Mode. Once you override, you'll need to shift gears again for **Auto Shift** (Beta) to reappear. If **Auto Shift** (Beta) is unavailable, the instrument clustertouchscreen displays a message.



NOTE: CybertruckModel SModel XModel 3Model Y does not allow Auto Shift (Beta) in certain modes and driving situations, including but not limited to: Valet Mode, Track Mode, Creep, Trailer Mode, etc.

 **WARNING:** Never rely on **Auto Shift** (Beta) without confirming the selection before proceeding. Always remain attentive, monitor your surroundings, and maneuver safely.


Auto Shift out of Park

NOTE: **Auto Shift out of Park** is a BETA feature and is disabled by default.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The instrument panel displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, or Park).

Confirm the drive mode selection and follow the instructions on the instrument panel before you press the accelerator.

 **WARNING:** As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the instrument panel displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled (touch **Controls** > **Pedals & Steering** > **Auto Shift out of Park**).
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Auto Shift out of Park is disabled by default. When disabled, use the touchscreen or the center console to manually shift. To enable **Auto Shift out of Park**, touch **Controls** > **Pedals & Steering** > **Auto Shift out of Park**.

Shift Using the Center Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the center console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the center console activates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the center console by simultaneously and *briefly* pressing both scroll buttons on the steering yoke (or steering wheel). However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk, rear trunk, and doors must be closed to shift using the center console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the center console, the center console automatically deactivates if you don't shift within 10 seconds.

Park

To manually shift into Park, press the brake pedal and touch the **Park** button on the touchscreen's drive mode strip. If the touchscreen is unavailable, press Park on the drive mode selector located on the center console/overhead console/overhead console.

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into Park to prevent roll-away while driving in low speeds. This happens whenever you connect a charge cable, unbuckle your seat belt, or open the door while in Drive or Neutral. Ensure the charge cable is removed, buckle your seat belt, and close the door before shifting out of Park.

Attempting to engage the parking brake above 5 mph (8 km/h) will result in emergency braking (see [Braking and Stopping on page 461](#)/[Braking and Stopping on page 1235](#)).

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to bring Cybertruck/Model S/Model X/Model 3/Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: You must always press the brake pedal to shift out of Park.



CAUTION: Cybertruck/Model S/Model X/Model 3/Model Y will not shift out of Park if a charge cable is plugged in, or if the charge port is unable to determine whether a charging cable is plugged in. In situations when Cybertruck/Model S/Model X/Model 3/Model Y does not shift out of Park, check the instrument panel or touchscreen for instructions on how to proceed.



WARNING: It is the driver's responsibility to always ensure the vehicle is in Park before exiting. Never rely on Cybertruck/Model S/Model X/Model 3/Model Y to automatically shift into Park for you.



Drive

To manually shift into Drive, swipe up on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press D on the drive mode selector located on the center console/overhead console. You can shift into Drive when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Reverse.

Reverse

To manually shift into Reverse, swipe down on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press R on the drive mode selector located on the center console/overhead console. You can shift into Reverse when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Drive. You can manually close the park assist view on the touchscreen by touching the **X** in the upper corner.

Neutral

Neutral allows Cybertruck/Model S/Model X/Model 3/Model Y to roll freely when you are not pressing the brake pedal. To shift into Neutral, do any of the following:

- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip and press **Neutral**.
- Choose **Neutral** from the drive mode selector on the overhead console/overhead console.

NOTE: When Cybertruck/Model S/Model X/Model 3/Model Y is traveling over 5 mph (8 km/h) and you swipe up or down on the touchscreen's drive mode strip, a **Neutral** icon displays at the bottom of the drive mode strip from which you can also choose to engage Neutral.

NOTE: You must press the brake pedal to shift out of Neutral if Cybertruck/Model S/Model X/Model 3/Model Y is moving slower than approximately 5 mph (8 km/h).

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into **Park** when you open the driver's door to exit the vehicle unless the vehicle is in certain modes such as Transport or Car Wash Mode which allows the vehicle to stay in **Neutral** even when you leave.

Keeping Your Vehicle in Neutral (Transport Mode)

To keep Cybertruck/Model S/Model X/Model 3/Model Y in Neutral when you exit, allowing it to roll freely (for example, pulling onto a flatbed truck), you must activate Transport mode:

1. Shift into Park.
2. Press the brake pedal.
3. Touch **Controls** > **Service** > **Towing**. The touchscreen displays a message reminding you how to properly transport Cybertruck/Model S/Model X/Model 3/Model Y.
4. Press the **Transport Mode**. It turns blue to show that Cybertruck/Model S/Model X/Model 3/Model Y is now in Transport Mode. Cybertruck/Model S/Model X/Model 3/Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) for short distances or winched (for example, onto a flatbed truck).

For more information on Transport Mode, see [Activate Transport Mode on page 913](#)/[Activate Transport Mode on page 922](#)/[Activate Transport Mode on page 1447](#).

NOTE: In Transport mode, Cybertruck/Model S/Model X/Model 3/Model Y does not shift into a drive mode. You must first cancel Transport mode by touching **Transport Mode** again. Transport mode also cancels if you use the touchscreen or drive mode selector on the center console/overhead console to shift into Park or if you manually apply the parking brake by touching **Controls** > **Safety** > **Parking Brake**.



Shifting

Shift Using the Touchscreen

When you press the brake pedal when parked, the drive mode strip displays on one side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: swipe up for Drive, swipe down for Reverse or touch the P for Park or N for Neutral. The drive mode strip is always available on the touchscreen when you touch **Controls**. Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip.



NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen's drive mode strip displays **Park** and **Neutral** at all times. To shift into **Park** when driving below 5 mph (8 km/h), touch the button on the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the **Park** button to slowly bring the vehicle to a stop.

To shift into Neutral, open **Controls** to bring up the drive mode strip, then press and hold **Neutral** until Neutral engages.

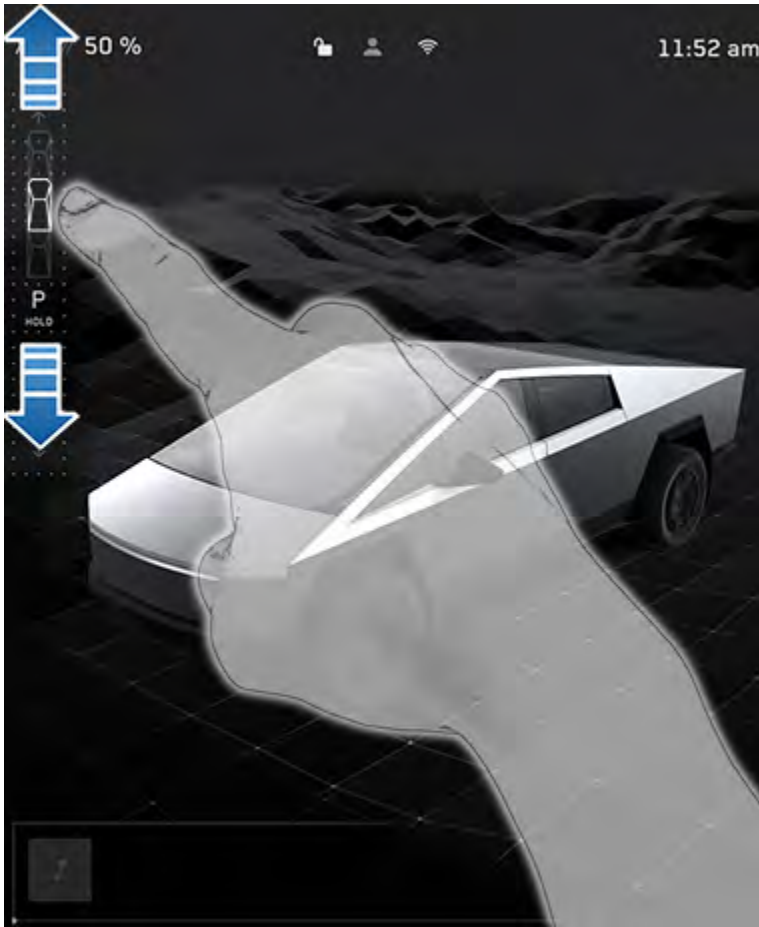
The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the center console/overhead console automatically activates and must be used to shift (see [Shift Using the Center Console on page 410](#) [Shift Using the Overhead Console on page 408](#)).

If you try to shift when it is prohibited by the current driving speed, the instrument panel/touchscreen displays an alert, a chime sounds, and the drive mode does not change.



Shift Using the Touchscreen

When you press the brake pedal when CybertruckModel SModel XModel 3Model Y is parked, the drive mode strip displays on the driver's side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: Swipe up for Drive, swipe down for Reverse, or press the drive mode strip for Park.



The touchscreen always shows which gear CybertruckModel SModel XModel 3Model Y is in, but the drive mode strip is hidden when driving at highway speeds. To show the drive mode strip at any time, swipe right from the left edge of the touchscreen.

To shift into **Park** when driving below 5 mph (8 km/h), touch the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the gear strip to slowly bring the vehicle to a stop.

NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the overhead console automatically activates and must be used to shift (see [Shift Using the Overhead Console on page 407](#)).

If you try to shift when it is prohibited by the current driving speed, the touchscreen displays an alert, a chime sounds, and the drive mode does not change.

Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.



To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 406](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.



WARNING: As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 407](#)).
- The cameras are free of obstructions (see [Cameras on page 1136](#)) and CybertruckModel SModel XModel 3Model Y has enough input to make a selection.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 405](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.



WARNING: As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 408](#)).

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates.



In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console illuminates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen on page 1115](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift after a short amount of time.

Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press the brake and touch one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console activates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift within 10 seconds.

Auto Shift (Beta)

NOTE: **Auto Shift** is a Beta feature and is disabled by default.

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with **Auto Shift** (Beta) or the features may not operate exactly as described.

Auto Shift (Beta) can shift between Drive and Reverse, or out of Park, to assist with actions such as turns, parking, or reversing out of a parking spot. To enable, touch **Controls > Pedals & Steering > Auto Shift (Beta)**, where you can select between **On** or **Out of Park**.

When **On**, **Auto Shift** (Beta) lets you shift without using the touchscreen based on your surroundings. This assists with multi-point turns, reversing out of a parking spot, parallel parking, and similar driving maneuvers. When the vehicle assists with shifting, a readiness indicator appears on the instrument clustertouchscreen.

With **Out of Park**, CybertruckModel SModel XModel 3Model Y is designed to select Drive or Reverse when shifting out of Park (such as pulling out of a parking spot). CybertruckModel SModel XModel 3Model Y selects a drive mode when:

selects a drive mode when:


- **Auto Shift** (Beta) is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park (for **Out of Park**) or in Drive or Reverse (for **On**).
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

Auto Shift (Beta) is designed to enhance your driving experience and may only appear in certain circumstances, such as requiring a vehicle or object in the front and/or rear to begin the maneuver. Confirm the drive mode selection and follow the instructions on the instrument clustertouchscreen before you press the accelerator.

To override the selection, press the brake pedal and use the drive mode strip on the touchscreen to manually shift into your desired Drive Mode. Once you override, you'll need to shift gears again for **Auto Shift** (Beta) to reappear. If **Auto Shift** (Beta) is unavailable, the instrument clustertouchscreen displays a message.



NOTE: CybertruckModel SModel XModel 3Model Y does not allow Auto Shift (Beta) in certain modes and driving situations, including but not limited to: Valet Mode, Track Mode, Creep, Trailer Mode, etc.

 **WARNING:** Never rely on **Auto Shift** (Beta) without confirming the selection before proceeding. Always remain attentive, monitor your surroundings, and maneuver safely.


Auto Shift out of Park

NOTE: **Auto Shift out of Park** is a BETA feature and is disabled by default.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The instrument panel displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, or Park).

Confirm the drive mode selection and follow the instructions on the instrument panel before you press the accelerator.

 **WARNING:** As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the instrument panel displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled (touch **Controls > Pedals & Steering > Auto Shift out of Park**).
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Auto Shift out of Park is disabled by default. When disabled, use the touchscreen or the center console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Pedals & Steering > Auto Shift out of Park**.

Shift Using the Center Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the center console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the center console activates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the center console by simultaneously and *briefly* pressing both scroll buttons on the steering yoke (or steering wheel). However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk, rear trunk, and doors must be closed to shift using the center console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the center console, the center console automatically deactivates if you don't shift within 10 seconds.

Park

To manually shift into Park, press the brake pedal and touch the **Park** button on the touchscreen's drive mode strip. If the touchscreen is unavailable, press Park on the drive mode selector located on the center console/overhead console/overhead console.

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into Park to prevent roll-away while driving in low speeds. This happens whenever you connect a charge cable, unbuckle your seat belt, or open the door while in Drive or Neutral. Ensure the charge cable is removed, buckle your seat belt, and close the door before shifting out of Park.

Attempting to engage the parking brake above 5 mph (8 km/h) will result in emergency braking (see [Braking and Stopping on page 461](#)/[Braking and Stopping on page 1235](#)).

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to bring Cybertruck/Model S/Model X/Model 3/Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: You must always press the brake pedal to shift out of Park.



CAUTION: Cybertruck/Model S/Model X/Model 3/Model Y will not shift out of Park if a charge cable is plugged in, or if the charge port is unable to determine whether a charging cable is plugged in. In situations when Cybertruck/Model S/Model X/Model 3/Model Y does not shift out of Park, check the instrument panel or touchscreen for instructions on how to proceed.



WARNING: It is the driver's responsibility to always ensure the vehicle is in Park before exiting. Never rely on Cybertruck/Model S/Model X/Model 3/Model Y to automatically shift into Park for you.



Drive

To manually shift into Drive, swipe up on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press D on the drive mode selector located on the center console/overhead console. You can shift into Drive when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Reverse.

Reverse

To manually shift into Reverse, swipe down on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press R on the drive mode selector located on the center console/overhead console. You can shift into Reverse when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Drive. You can manually close the park assist view on the touchscreen by touching the **X** in the upper corner.

Neutral

Neutral allows Cybertruck/Model S/Model X/Model 3/Model Y to roll freely when you are not pressing the brake pedal. To shift into Neutral, do any of the following:

- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip and press **Neutral**.
- Choose **Neutral** from the drive mode selector on the overhead console/overhead console.

NOTE: When Cybertruck/Model S/Model X/Model 3/Model Y is traveling over 5 mph (8 km/h) and you swipe up or down on the touchscreen's drive mode strip, a **Neutral** icon displays at the bottom of the drive mode strip from which you can also choose to engage Neutral.

NOTE: You must press the brake pedal to shift out of Neutral if Cybertruck/Model S/Model X/Model 3/Model Y is moving slower than approximately 5 mph (8 km/h).

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into **Park** when you open the driver's door to exit the vehicle unless the vehicle is in certain modes such as Transport or Car Wash Mode which allows the vehicle to stay in **Neutral** even when you leave.

Keeping Your Vehicle in Neutral (Transport Mode)

To keep Cybertruck/Model S/Model X/Model 3/Model Y in Neutral when you exit, allowing it to roll freely (for example, pulling onto a flatbed truck), you must activate Transport mode:

1. Shift into Park.
2. Press the brake pedal.
3. Touch **Controls** > **Service** > **Towing**. The touchscreen displays a message reminding you how to properly transport Cybertruck/Model S/Model X/Model 3/Model Y.
4. Press the **Transport Mode**. It turns blue to show that Cybertruck/Model S/Model X/Model 3/Model Y is now in Transport Mode. Cybertruck/Model S/Model X/Model 3/Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) for short distances or winched (for example, onto a flatbed truck).

For more information on Transport Mode, see [Activate Transport Mode on page 913](#)/[Activate Transport Mode on page 922](#)/[Activate Transport Mode on page 1447](#).

NOTE: In Transport mode, Cybertruck/Model S/Model X/Model 3/Model Y does not shift into a drive mode. You must first cancel Transport mode by touching **Transport Mode** again. Transport mode also cancels if you use the touchscreen or drive mode selector on the center console/overhead console to shift into Park or if you manually apply the parking brake by touching **Controls** > **Safety** > **Parking Brake**.



Lights

Controlling Lights

Touch **Controls** > **Lights** on the touchscreen to access all light controls, both interior and exterior.

You can also pull the turn signal stalk toward you to display a popup that provides quick access to exterior lights. For example, you can turn the headlights on or off continuously (overriding the default Auto High Beam setting). The lights popup allows you to adjust all exterior light settings, including parking lights, fog lights (if equipped), etc. The setting you choose is retained for the current drive only.

NOTE: If the touchscreen is already displaying the full Controls screen for lights, pulling the turn signal stalk does not display the quick access popup.

In addition to the lights you can control from the touchscreen, CybertruckModel SModel XModel 3Model Y has convenience lights that operate automatically based on what you are doing. For example, in low ambient lighting conditions, the interior lights, marker lights, tail lights, and puddle lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, when you open a door, and when you shift into Park. They turn off after a minute or two, when you shift or lock CybertruckModel SModel XModel 3Model Y. Use these settings to control your vehicle's interior and exterior lights:

Headlights

Exterior lights (headlights, tail lights, side marker lights, parking lights, and license plate lights) are set to **Auto** each time you start CybertruckModel SModel XModel 3Model Y. When set to **Auto**, exterior lights automatically turn on when driving in low lighting conditions, or whenever the wipers are active. If you change to a different setting, lights always revert to **Auto** on your next drive.

Touch one of these options to change and retain the exterior light setting until adjusted again or the next time you drive:

- **Off:** Exterior lights turn off. When driving, daytime running lights may remain on based on regulations in various market regions.
- **Parking:** Parking lights, side marker lights, tail lights and license plate lights turn on.
- **On:** Low beam headlights, side marker lights, parking lights, tail lights, and license plate lights turn on.

NOTE: CybertruckModel SModel XModel 3Model Y has a series of LED lights along the rim of the headlights, also referred to as "signature" lights. These lights automatically turn on whenever CybertruckModel SModel XModel 3Model Y is powered on and a drive mode (Drive or Reverse) is engaged.



CAUTION: The rear tail lights are off when daytime running lights are on. Be sure the rear lights are on during low rear visibility conditions (for example, when it is dark, foggy, snowy, or the road is wet, etc.). Failure to do so can cause damage or serious injury.



WARNING: Always ensure that headlights are on during low visibility conditions. Failure to do so may result in a collision.

Fog Lights

A separate control is available to turn on fog lights (if equipped). When on, fog lights operate whenever low beam headlights are on. When headlights are turned off, fog lights also turn off.

Dome Lights

Turn the interior dome (map) lights on or off. If set to **AUTO**, the interior dome lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, open a door upon exiting, or shift into Park.



You can also manually turn an individual dome light on or off by pressing its lens. If you manually turn a dome light on, it turns off when CybertruckModel SModel XModel 3Model Y powers off. If CybertruckModel SModel XModel 3Model Y was already powered off when you manually turned the light on, it eventually turns off.

NOTE: To control the backlighting on the steering wheel buttons, touch **Controls > Lights > Steering Wheel Lights**. If on, they turn on whenever headlights are on.

Ambient Lights

When enabled, interior ambient lights (if equipped) turn on whenever the headlights are on.

Steering Wheel Lights

If you turn on **Steering Wheel Lights**, the arrows associated with the scroll buttons are backlit in low ambient lighting conditions.

Reading Lights

There are two reading lights in the second row seating area, both above the door and next to the coat hangers (see [Coat Hangers on page 203](#)). Turn an individual reading light on or off by pressing its lens. The reading light will automatically turn off when CybertruckModel SModel XModel 3Model Y powers off.

High Beam Headlights

You can temporarily turn on high beams by pulling the turn signal stalk toward you. When you release, high beam headlights turn off.

To briefly flash the high beam headlights, pull the turn signal stalk towards you and immediately release.

By default, **Auto High BeamAdaptive Headlights** is enabled to allow high beam headlights to automatically switch to low beam when there is light detected in front of CybertruckModel SModel XModel 3Model Y (for example, from an oncoming vehicle).





NOTE: Your chosen setting is retained until you manually change it.

The following indicator lights are visible on the touchscreen to show the status of the headlights:

Low beam headlights are on.



High beam headlights are on and **Auto High Beam Adaptive Headlights** is disabled or currently unavailable.



Auto High Beam Adaptive Headlights is enabled and high beams are on. Cybertruck Model S Model X Model 3 Model Y is ready to turn off the high beams if light is detected.



Auto High Beam Adaptive Headlights is enabled but high beams are not on because light is detected in front of Cybertruck Model S Model X Model 3 Model Y. When light is no longer detected, high beams automatically turn back on.



Auto High Beam Adaptive Headlights

When **Auto High Beam Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Auto High Beam > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you pull the turn signal stalk toward you.

NOTE: **Auto High Beam Adaptive Headlights** is automatically enabled when Autosteer is engaged. To switch to low beam headlights, push the turn signal stalk forward and release. **Auto High Beam Adaptive Headlights** is re-enabled every time Autosteer is activated.



WARNING: **Auto High Beam Adaptive Headlights** is a convenience feature only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

Headlights After Exit

When **Headlights after Exit** is on, the exterior headlights remain on when you stop driving and park Cybertruck Model S Model X Model 3 Model Y in low lighting conditions. They automatically turn off after one minute or when Cybertruck Model S Model X Model 3 Model Y locks. When off, headlights turn off when you engage Park and open a door.

NOTE: If you lock Cybertruck Model S Model X Model 3 Model Y using the Tesla mobile app or key card, the headlights immediately turn off. However, if the vehicle locks because Walk-Away Door Lock is enabled (see [Walk-Away Door Lock on page 141](#)), the headlights automatically turn off after one minute.

To turn this feature on or off, touch **Controls > Lights > Headlights after Exit**.

Headlight Adjustments

To adjust the angle of the headlights, touch **Controls > Service > Adjust Headlights**, then follow the onscreen instructions. You can choose which headlight you would like to adjust by selecting it on the touchscreen.



NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

WARNING: Proceed with caution when adjusting headlights. Tesla has carefully calibrated the position of the headlights to be in an optimum position for most driving scenarios. Tesla recommends that you do not adjust headlights unless you are familiar with how headlights should be adjusted. Once adjusted, you will be unable to automatically restore them to their originally calibrated position. Contact Tesla for assistance when adjusting headlights.

Turn Signals

The turn signals flash three times or continuously, depending on how far up or down you move the stalk. Lightly push the turn signal stalk up or down for a three-flash sequence. For a continuous signal, push the stalk fully up or down.



The turn signals stop operating when canceled by the steering wheel, by moving the stalk in the opposite direction, or lightly pushing the stalk in the same direction once more.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by using the turn stalk.



The corresponding turn signal indicator lights up on the touchscreen when a turn signal is operating. CybertruckModel SModel XModel 3Model Y also emits a clicking sound.



- WARNING:** When actively using Traffic-Aware Cruise Control, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to accelerate in specific situations (see [Overtake Acceleration on page 573](#)).
- WARNING:** When actively using Autosteer, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to change lanes (see [Autosteer on page 556](#)).

Hazard Warning Flashers

To turn on the hazard warning flashers, press the button located above the rear view mirror. All turn signals flash. Press the button again to turn off the hazard warning flashers.



If a severe crash is detected by your vehicle, the hazard warning flashers will automatically turn on and flash quickly to increase visibility. Pressing the hazard warning flashers once will return the lights to their normal cadence. Pressing a second time turns all hazard warning flashers off.

NOTE: Hazard warning flashers operate even when CybertruckModel SModel XModel 3Model Y cannot detect a key.

NOTE: The hazard warning light button is illuminated whenever CybertruckModel SModel XModel 3Model Y is powered on.



Condensation in Head or Tail Lights

Due to weather changes, humidity levels, or recent exposure to water (such as a car wash), condensation may occasionally accumulate in your vehicle's head or tail lights. This is normal— as the weather gets warmer and humidity decreases, condensation often disappears on its own. If you notice water buildup within the exterior lenses, or if the condensation affects the visibility of the exterior lights, contact Tesla Service.



Lights

Controlling Lights

Touch **Controls** > **Lights** on the touchscreen to access all light controls, both interior and exterior.

You can also pull the turn signal stalk toward you to display a popup that provides quick access to exterior lights. For example, you can turn the headlights on or off continuously (overriding the default Auto High Beam setting). The lights popup allows you to adjust all exterior light settings, including parking lights, fog lights (if equipped), etc. The setting you choose is retained for the current drive only.

NOTE: If the touchscreen is already displaying the full Controls screen for lights, pulling the turn signal stalk does not display the quick access popup.

In addition to the lights you can control from the touchscreen, CybertruckModel SModel XModel 3Model Y has convenience lights that operate automatically based on what you are doing. For example, in low ambient lighting conditions, the interior lights, marker lights, tail lights, and puddle lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, when you open a door, and when you shift into Park. They turn off after a minute or two, when you shift or lock CybertruckModel SModel XModel 3Model Y. Use these settings to control your vehicle's interior and exterior lights:

Headlights

Exterior lights (headlights, tail lights, side marker lights, parking lights, and license plate lights) are set to **Auto** each time you start CybertruckModel SModel XModel 3Model Y. When set to **Auto**, exterior lights automatically turn on when driving in low lighting conditions, or whenever the wipers are active. If you change to a different setting, lights always revert to **Auto** on your next drive.

Touch one of these options to change and retain the exterior light setting until adjusted again or the next time you drive:

- **Off:** Exterior lights turn off. When driving, daytime running lights may remain on based on regulations in various market regions.
- **Parking:** Parking lights, side marker lights, tail lights and license plate lights turn on.
- **On:** Low beam headlights, side marker lights, parking lights, tail lights, and license plate lights turn on.

NOTE: CybertruckModel SModel XModel 3Model Y has a series of LED lights along the rim of the headlights, also referred to as "signature" lights. These lights automatically turn on whenever CybertruckModel SModel XModel 3Model Y is powered on and a drive mode (Drive or Reverse) is engaged.



CAUTION: The rear tail lights are off when daytime running lights are on. Be sure the rear lights are on during low rear visibility conditions (for example, when it is dark, foggy, snowy, or the road is wet, etc.). Failure to do so can cause damage or serious injury.



WARNING: Always ensure that headlights are on during low visibility conditions. Failure to do so may result in a collision.

Fog Lights

A separate control is available to turn on fog lights (if equipped). When on, fog lights operate whenever low beam headlights are on. When headlights are turned off, fog lights also turn off.

Dome Lights

Turn the interior dome (map) lights on or off. If set to **AUTO**, the interior dome lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, open a door upon exiting, or shift into Park.



You can also manually turn an individual dome light on or off by pressing its lens. If you manually turn a dome light on, it turns off when CybertruckModel SModel XModel 3Model Y powers off. If CybertruckModel SModel XModel 3Model Y was already powered off when you manually turned the light on, it eventually turns off.

NOTE: To control the backlighting on the steering wheel buttons, touch **Controls > Lights > Steering Wheel Lights**. If on, they turn on whenever headlights are on.

Ambient Lights

When enabled, interior ambient lights (if equipped) turn on whenever the headlights are on.

Steering Wheel Lights

If you turn on **Steering Wheel Lights**, the arrows associated with the scroll buttons are backlit in low ambient lighting conditions.

Reading Lights

There are two reading lights in the second row seating area, both above the door and next to the coat hangers (see [Coat Hangers on page 203](#)). Turn an individual reading light on or off by pressing its lens. The reading light will automatically turn off when CybertruckModel SModel XModel 3Model Y powers off.

High Beam Headlights

You can temporarily turn on high beams by pulling the turn signal stalk toward you. When you release, high beam headlights turn off.

To briefly flash the high beam headlights, pull the turn signal stalk towards you and immediately release.

By default, **Auto High BeamAdaptive Headlights** is enabled to allow high beam headlights to automatically switch to low beam when there is light detected in front of CybertruckModel SModel XModel 3Model Y (for example, from an oncoming vehicle).





NOTE: Your chosen setting is retained until you manually change it.

The following indicator lights are visible on the touchscreen to show the status of the headlights:

Low beam headlights are on.



High beam headlights are on and **Auto High Beam Adaptive Headlights** is disabled or currently unavailable.



Auto High Beam Adaptive Headlights is enabled and high beams are on. Cybertruck Model S Model X Model 3 Model Y is ready to turn off the high beams if light is detected.



Auto High Beam Adaptive Headlights is enabled but high beams are not on because light is detected in front of Cybertruck Model S Model X Model 3 Model Y. When light is no longer detected, high beams automatically turn back on.



Auto High Beam Adaptive Headlights

When **Auto High Beam Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Auto High Beam > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you pull the turn signal stalk toward you.

NOTE: **Auto High Beam Adaptive Headlights** is automatically enabled when Autosteer is engaged. To switch to low beam headlights, push the turn signal stalk forward and release. **Auto High Beam Adaptive Headlights** is re-enabled every time Autosteer is activated.



WARNING: **Auto High Beam Adaptive Headlights** is a convenience feature only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

Headlights After Exit

When **Headlights after Exit** is on, the exterior headlights remain on when you stop driving and park Cybertruck Model S Model X Model 3 Model Y in low lighting conditions. They automatically turn off after one minute or when Cybertruck Model S Model X Model 3 Model Y locks. When off, headlights turn off when you engage Park and open a door.

NOTE: If you lock Cybertruck Model S Model X Model 3 Model Y using the Tesla mobile app or key card, the headlights immediately turn off. However, if the vehicle locks because Walk-Away Door Lock is enabled (see [Walk-Away Door Lock on page 141](#)), the headlights automatically turn off after one minute.

To turn this feature on or off, touch **Controls > Lights > Headlights after Exit**.

Headlight Adjustments

To adjust the angle of the headlights, touch **Controls > Service > Adjust Headlights**, then follow the onscreen instructions. You can choose which headlight you would like to adjust by selecting it on the touchscreen.



NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

WARNING: Proceed with caution when adjusting headlights. Tesla has carefully calibrated the position of the headlights to be in an optimum position for most driving scenarios. Tesla recommends that you do not adjust headlights unless you are familiar with how headlights should be adjusted. Once adjusted, you will be unable to automatically restore them to their originally calibrated position. Contact Tesla for assistance when adjusting headlights.

Turn Signals

The turn signals flash three times or continuously, depending on how far up or down you move the stalk. Lightly push the turn signal stalk up or down for a three-flash sequence. For a continuous signal, push the stalk fully up or down.



The turn signals stop operating when canceled by the steering wheel, by moving the stalk in the opposite direction, or lightly pushing the stalk in the same direction once more.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by using the turn stalk.



The corresponding turn signal indicator lights up on the touchscreen when a turn signal is operating. CybertruckModel SModel XModel 3Model Y also emits a clicking sound.



- ⚠ WARNING:** When actively using Traffic-Aware Cruise Control, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to accelerate in specific situations (see [Overtake Acceleration on page 573](#)).
- ⚠ WARNING:** When actively using Autosteer, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to change lanes (see [Autosteer on page 556](#)).

Hazard Warning Flashers

To turn on the hazard warning flashers, press the button located above the rear view mirror. All turn signals flash. Press the button again to turn off the hazard warning flashers.



If a severe crash is detected by your vehicle, the hazard warning flashers will automatically turn on and flash quickly to increase visibility. Pressing the hazard warning flashers once will return the lights to their normal cadence. Pressing a second time turns all hazard warning flashers off.

NOTE: Hazard warning flashers operate even when CybertruckModel SModel XModel 3Model Y cannot detect a key.

NOTE: The hazard warning light button is illuminated whenever CybertruckModel SModel XModel 3Model Y is powered on.



Condensation in Head or Tail Lights

Due to weather changes, humidity levels, or recent exposure to water (such as a car wash), condensation may occasionally accumulate in your vehicle's head or tail lights. This is normal— as the weather gets warmer and humidity decreases, condensation often disappears on its own. If you notice water buildup within the exterior lenses, or if the condensation affects the visibility of the exterior lights, contact Tesla Service.



Lights

Controlling Lights

Touch **Controls** > **Lights** to control the lights.

NOTE: You can also access an abbreviated lights menu while driving by touching the High Beam button on the steering wheelsteering yoke (or steering wheel). A lights menu displays on the touchscreen, providing quick access to headlight controls.

NOTE: You can also access an abbreviated lights menu while driving by touching the High Beam button on the steering wheelsteering yoke (or steering wheel). A lights menu displays on the touchscreen, providing quick access to headlight controls.

In addition to the lights that you can control from the touchscreen, CybertruckModel SModel XModel 3Model Y has convenience lights that turn on and off automatically based on what you are doing. For example, interior lights, marker lights, tail lights, door handle lights, and puddle lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, when you open a door, and when you shift into Park. They turn off automatically after a minute or two or when you shift or lock CybertruckModel SModel XModel 3Model Y.

Exterior Lights

Exterior lights (headlights, tail lights, side marker lights, parking lights, and license plate lights) are set to **Auto** each time you start CybertruckModel SModel XModel 3Model Y. When set to **Auto**, exterior lights automatically turn on when driving in low lighting conditions, or whenever the wipers are active. If you change to a different setting, lights always revert to **Auto** on your next drive.

Touch one of these options to change and retain the exterior light setting until adjusted again or the next time you drive:

- **Off:** Exterior lights turn off. When driving, daytime running lights may remain on based on regulations in various market regions.
- **Parking:** Parking lights, side marker lights, tail lights and license plate lights turn on.
- **On:** Low beam headlights, side marker lights, parking lights, tail lights, and license plate lights turn on.

If equipped, the headlights automatically adjust to improve your view based on your driving speed and steering angle. When driving at lower speeds with low beam headlights on, the headlights increase lateral illumination to make pedestrians and curbs more visible and to improve visibility when turning at a dark intersection, into a driveway, or when making a u-turn.



CAUTION: Ensure the headlights and rear lights are on during low visibility conditions (for example, when it is dark, foggy, snowy, or the road is wet, etc.). The rear tail lights are off while daytime running lights are on. Failure to do so can cause damage or serious injury.

NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

NOTE: To comply with local traffic regulations when crossing from a left-hand traffic region to a right-hand traffic region, and vice versa, headlights should be adjusted. If you plan to drive to a region that requires headlights to be adjusted, schedule a service appointment using the mobile app.

NOTE: For vehicles manufactured prior to approximately June 2023: To comply with local traffic regulations when crossing from a left-hand traffic region to a right-hand traffic region, and vice versa, headlights should be adjusted. If you plan to drive to a region that requires headlights to be adjusted, schedule a service appointment using the mobile app.

NOTE: For vehicles manufactured as of approximately June 2023: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

Fog Lights

If equipped, touch to turn the fog lights on or off. Fog lights operate only when low beam headlights are on. When headlights are turned off, fog lights also turn off.



The rear fog indicator displays on the instrument panel whenever rear fog lights (if equipped) are on.



The front fog indicator displays on the instrument panel whenever the optional front fog lights are on.

NOTE: Depending on the market region and vehicle options, your vehicle may not be equipped with front and/or rear fog lights.

NOTE: In some regions, there is no control for the front fog lights. They operate in conjunction with the headlights and turn on only in situations where low beam headlights are on.

Dome Lights

Turn the interior dome (map) lights on or off. If set to **Auto**, all interior dome lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, open a door upon exiting, or shift into Park.

You can also manually turn an individual dome light on or off by touching its lens. If you turn a dome light on, it turns off when CybertruckModel SModel XModel 3Model Y powers off. If CybertruckModel SModel XModel 3Model Y was already powered off when you manually turned the light on, it turns off after 60 minutes.



Ambient Lights

When enabled, interior ambient lights turn on whenever the headlights are on.

Accent Lights

Enable or disable the accent lights that line the cabin of your vehicle and customize the accent light color to your preferences. When enabled and CybertruckModel SModel XModel 3Model Y shifts out of Park, the accent lights dim depending on the setting selected (for example, during the day **Auto** dims the accents lights all the way down while **On** dims according to the display setting). You can also turn the footwell lights on or off.

Headlights after Exit

When you stop driving and park CybertruckModel SModel XModel 3Model Y in low lighting conditions, exterior lights temporarily remain illuminated. They automatically turn off after one minute or when you lock CybertruckModel SModel XModel 3Model Y whichever comes first.

NOTE: If you lock CybertruckModel SModel XModel 3Model Y using the Tesla mobile app or key card or key fob, the headlights immediately turn off. However, if the vehicle locks because Walk-Away Door Lock is enabled (see [Walk-Away Door Lock on page 141](#)[Walk-Away Door Lock on page 155](#)), the headlights automatically turn off after one minute.



To turn this feature on and off, touch **Controls > Lights > Headlights After Exit**. When **Headlights After Exit** is off, the headlights turn off immediately when you engage Park and open a door.

NOTE: Model S has lights along the rim of the headlights, also referred to as "signature" lights. These lights automatically turn on whenever Model S is powered on and a drive mode is engaged.

High Beam Headlights

Use the high beam headlight button on the left side of the steering wheelsteering yoke (or steering wheel) to control the headlights:

- Press and quickly release to flash high beam headlights.
- Press and hold to turn on high beam headlights - touchscreen displays a brief timer and you must hold for the duration of the timer to latch the high beam headlights to the on position. When headlights are on, press the button a second time to turn them off.



The following indicator lights are visible on the touchscreen to show the status of the headlights:

Low beam headlights are on.



Illuminates when high beams are on but the **Auto High BeamAdaptive Headlights** setting is turned off or if the **Auto High BeamAdaptive Headlights** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High BeamAdaptive Headlights** is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y.





High beams are temporarily turned off because **Auto High Beam Adaptive Headlights** is operating and light is detected in front of Cybertruck Model S Model X Model 3 Model Y. When light is no longer detected, high beam headlights automatically turn back on.

Adaptive Headlights

When **Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you press the high beam headlight button on the left side of the steering wheel/steering yoke (or steering wheel).

NOTE: Adaptive Headlights is automatically enabled when Autosteer is engaged. To switch to low beam headlights, press the high beam headlight button on the steering wheel/steering yoke (or steering wheel). **Adaptive Headlights** is re-enabled every time Autosteer is activated.

WARNING: Adaptive Headlights is a convenience feature only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

High Beam Headlights

Use the high beam headlight button on the left side of the steering wheel/steering yoke (or steering wheel) to control the headlights:

- Press and quickly release to flash high beam headlights.
- Press and hold to turn on high beam headlights - the instrument panel displays a brief timer and you must hold for the duration of the timer to latch the high beam headlights to the on position. When headlights are on, press the button a second time to turn them off.



The following indicator lights are visible on the instrument panel to show the status of the headlights:

Low beam headlights are on.





High beam headlights are on. Illuminates when high beams are on but the **Auto High Beam Adaptive Headlights** setting is turned off or if the **Auto High Beam Adaptive Headlights** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High Beam Adaptive Headlights** is ready to turn off the high beams if light is detected in front of the vehicle.



High beams are temporarily turned off because **Auto High Beam Adaptive Headlights** is operating and light is detected in front of your vehicle. When light is no longer detected, high beam headlights automatically turn back on.

Auto High Beam Adaptive Headlights

When **Auto High Beam Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Auto High Beam > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you press the high beam headlight button on the left side of the steering wheel/steering yoke (or steering wheel).

NOTE: Auto High Beam Adaptive Headlights is automatically enabled when Autosteer is engaged. To switch to low beam headlights, press the high beam headlight button on the steering wheel/steering yoke (or steering wheel). **Auto High Beam Adaptive Headlights** is re-enabled every time Autosteer is activated.



WARNING: Auto High Beam Adaptive Headlights is a convenience only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

High Beam Headlights

Push the turn signal stalk away from you to turn the high beam headlights on continuously. To cancel, pull the stalk towards you.

To briefly flash the high beam headlights, pull the stalk towards you.



The high beam headlights can automatically switch to low beam when there is light detected in front of Cybertruck Model S Model X Model 3 Model Y (for example, from an oncoming vehicle). To turn this feature on or off, touch **Controls > Auto High Beam** or **Controls > Lights > Auto High Beam**.



NOTE: Your chosen setting is retained until you manually change it.

NOTE: Auto High Beam is automatically enabled when Autosteer is engaged.

In situations where high beams are turned off because **Auto High Beam** is turned on and light is detected in front of CybertruckModel SModel XModel 3Model Y, you can temporarily turn on high beams by pulling the stalk all the way toward you.

The following indicator lights are visible on the instrument panel to show the status of the headlights:

Low beam headlights are on.



High beam headlights are on. Illuminates when high beams are on but the **Auto High Beam** setting is turned off or if the **Auto High Beam** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High Beam** is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y.



High beams are temporarily turned off because **Auto High Beam** is operating and light is detected in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, high beam headlights automatically turn back on.



WARNING: **Auto High Beam** is a convenience only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

Rear Reading Lights

CybertruckModel SModel XModel 3Model Y is equipped with a reading light on each side of the rear seats, located above the door and next to the coat hangers (see [Coat Hangers on page 194](#)). To turn a reading light on or off, press its lens. If you leave a reading light turned on, it automatically turns off when CybertruckModel SModel XModel 3Model Y powers off.

Adaptive Front Lighting System (AFS)

If equipped, the Adaptive Front Lighting System (AFS) automatically adjusts the beam of the headlights to improve your driving view. Electric sensors measure driving speed, steering angle and yaw (the rotation of the car around the vertical axis) to determine the optimum position of the headlights based on current driving conditions. For example, to improve visibility while driving on winding roads at night, the AFS casts the beam in the direction of the curve. When low beam headlights are turned on and when driving at lower speeds, AFS improves lateral illumination to increase the visibility of pedestrians and curbs, and to improve visibility when turning at a dark intersection, into a driveway, or when making a u-turn.

The Adaptive Front Lighting System (AFS) operates whenever headlights are on. If CybertruckModel SModel XModel 3Model Y isn't moving, or is moving in reverse, the adaptive headlights do not activate. This prevents the headlights from inadvertently blinding other drivers.

If the AFS fails, the instrument panel displays an alert. Contact Tesla Service.





Headlight Adjustments

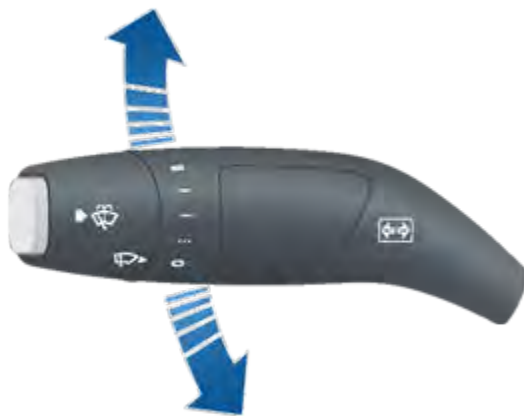
To adjust the angle of the headlights, touch **Controls > Service > Adjust Headlights**, then follow the onscreen instructions. You can choose which headlight you would like to adjust by selecting it on the touchscreen.

NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

⚠ WARNING: Proceed with caution when adjusting headlights. Tesla has carefully calibrated the position of the headlights to be in an optimum position for most driving scenarios. Tesla recommends that you do not adjust headlights unless you are familiar with how headlights should be adjusted. Once adjusted, you will be unable to automatically restore them to their originally calibrated position. Contact Tesla for assistance when adjusting headlights.

Turn Signals

Move the turn signal stalk up (before turning right) or down (before turning left). The turn signals flash three times or continuously, depending on how far up or down you move the stalk. Lightly push the stalk up or down for a three-flash sequence. For a continuous signal, push the stalk fully up or down.



The turn signals stop operating when canceled by the steering wheelsteering yoke (or steering wheel), or when you return the stalk to the central position.



When a turn signal is operating, the corresponding turn signal indicator lights up on the instrument panel and a clicking sound can be heard.

⚠ WARNING: When actively using Traffic-Aware Cruise Control, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to accelerate in specific situations (see [Overtake Acceleration on page 573](#)[Overtake Acceleration on page 582](#)).

⚠ WARNING: When actively using Autosteer, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to change lanes (see [Auto Lane Change on page 590](#)).

Turn Signals

To engage a turn signal, press the corresponding arrow button on the left side of the steering wheelsteering yoke (or steering wheel). A turn signal cancels based on the angle of the steering wheelsteering yoke (or steering wheel) (for example, you finish making a turn). You can also cancel a turn signal by pressing the turn signal button a second time.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. You can override automatic cancellation at any time (for example, you want the turn signal to remain on because you are making more than one lane change). To override, engage the turn signal by pressing and momentarily holding the turn signal button (instead of just pressing). Then, when the first maneuver is complete, the turn signal remains on. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by pressing the turn signal button after maneuvers such as a merge, lane change, or fork in the roadway.



When a turn signal is operating, the corresponding indicator lights up on the touchscreen and you can hear a clicking sound.

Turn Signals

To engage a turn signal, press the corresponding arrow button on the left side of the steering wheelsteering yoke (or steering wheel). A turn signal cancels based on the angle of the steering wheelsteering yoke (or steering wheel) (for example, you finish making a turn). You can also cancel a turn signal by pressing the turn signal button a second time.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. You can override automatic cancellation at any time (for example, you want the turn signal to remain on because you are making more than one lane change). To override, engage the turn signal by pressing and momentarily holding the turn signal button (instead of just pressing). Then, when the first maneuver is complete, the turn signal remains on. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by pressing the turn signal button after maneuvers such as a merge, lane change, or fork in the roadway.



When a turn signal is operating, the corresponding indicator lights up on the instrument panel and you can hear a clicking sound.



Hazard Warning Flashers

To turn on the hazard warning flashers, press the button located on the side of the touchscreen closest to the steering wheelsteering yoke (or steering wheel). All turn signals flash. Press again to turn off.

To turn on the hazard warning flashers, press the button on the drive mode selector located at the front of the center console. All turn signals flash. Press again to turn off.



To turn on the hazard warning flashers, press the button on the drive mode selector located on the overhead center. All turn signals flash. Press again to turn off.



If a severe crash is detected by your vehicle, the hazard warning flashers will automatically turn on and flash quickly to increase visibility. Pressing the hazard warning flashers once will return the lights to their normal cadence. Pressing a second time turns all hazard warning flashers off.

NOTE: Hazard warning flashers operate even without a key nearby.

Condensation in Head or Tail Lights

Due to weather changes, humidity levels, or recent exposure to water (such as a car wash), condensation may occasionally accumulate in your vehicle's head or tail lights. This is normal— as the weather gets warmer and humidity decreases, condensation often disappears on its own. If you notice water buildup within the exterior lenses, or if the condensation affects the visibility of the exterior lights, contact Tesla Service.



Lights

Controlling Lights

Touch **Controls** > **Lights** to control the lights.

NOTE: You can also access an abbreviated lights menu while driving by touching the High Beam button on the steering wheelsteering yoke (or steering wheel). A lights menu displays on the touchscreen, providing quick access to headlight controls.

NOTE: You can also access an abbreviated lights menu while driving by touching the High Beam button on the steering wheelsteering yoke (or steering wheel). A lights menu displays on the touchscreen, providing quick access to headlight controls.

In addition to the lights that you can control from the touchscreen, CybertruckModel SModel XModel 3Model Y has convenience lights that turn on and off automatically based on what you are doing. For example, interior lights, marker lights, tail lights, door handle lights, and puddle lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, when you open a door, and when you shift into Park. They turn off automatically after a minute or two or when you shift or lock CybertruckModel SModel XModel 3Model Y.

Exterior Lights

Exterior lights (headlights, tail lights, side marker lights, parking lights, and license plate lights) are set to **Auto** each time you start CybertruckModel SModel XModel 3Model Y. When set to **Auto**, exterior lights automatically turn on when driving in low lighting conditions, or whenever the wipers are active. If you change to a different setting, lights always revert to **Auto** on your next drive.

Touch one of these options to change and retain the exterior light setting until adjusted again or the next time you drive:

- **Off:** Exterior lights turn off. When driving, daytime running lights may remain on based on regulations in various market regions.
- **Parking:** Parking lights, side marker lights, tail lights and license plate lights turn on.
- **On:** Low beam headlights, side marker lights, parking lights, tail lights, and license plate lights turn on.

If equipped, the headlights automatically adjust to improve your view based on your driving speed and steering angle. When driving at lower speeds with low beam headlights on, the headlights increase lateral illumination to make pedestrians and curbs more visible and to improve visibility when turning at a dark intersection, into a driveway, or when making a u-turn.



CAUTION: Ensure the headlights and rear lights are on during low visibility conditions (for example, when it is dark, foggy, snowy, or the road is wet, etc.). The rear tail lights are off while daytime running lights are on. Failure to do so can cause damage or serious injury.

NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

NOTE: To comply with local traffic regulations when crossing from a left-hand traffic region to a right-hand traffic region, and vice versa, headlights should be adjusted. If you plan to drive to a region that requires headlights to be adjusted, schedule a service appointment using the mobile app.

NOTE: For vehicles manufactured prior to approximately June 2023: To comply with local traffic regulations when crossing from a left-hand traffic region to a right-hand traffic region, and vice versa, headlights should be adjusted. If you plan to drive to a region that requires headlights to be adjusted, schedule a service appointment using the mobile app.

NOTE: For vehicles manufactured as of approximately June 2023: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

Fog Lights

If equipped, touch to turn the fog lights on or off. Fog lights operate only when low beam headlights are on. When headlights are turned off, fog lights also turn off.



The rear fog indicator displays on the instrument panel whenever rear fog lights (if equipped) are on.



The front fog indicator displays on the instrument panel whenever the optional front fog lights are on.

NOTE: Depending on the market region and vehicle options, your vehicle may not be equipped with front and/or rear fog lights.

NOTE: In some regions, there is no control for the front fog lights. They operate in conjunction with the headlights and turn on only in situations where low beam headlights are on.

Dome Lights

Turn the interior dome (map) lights on or off. If set to **Auto**, all interior dome lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, open a door upon exiting, or shift into Park.

You can also manually turn an individual dome light on or off by touching its lens. If you turn a dome light on, it turns off when CybertruckModel SModel XModel 3Model Y powers off. If CybertruckModel SModel XModel 3Model Y was already powered off when you manually turned the light on, it turns off after 60 minutes.



Ambient Lights

When enabled, interior ambient lights turn on whenever the headlights are on.

Accent Lights

Enable or disable the accent lights that line the cabin of your vehicle and customize the accent light color to your preferences. When enabled and CybertruckModel SModel XModel 3Model Y shifts out of Park, the accent lights dim depending on the setting selected (for example, during the day **Auto** dims the accents lights all the way down while **On** dims according to the display setting). You can also turn the footwell lights on or off.

Headlights after Exit

When you stop driving and park CybertruckModel SModel XModel 3Model Y in low lighting conditions, exterior lights temporarily remain illuminated. They automatically turn off after one minute or when you lock CybertruckModel SModel XModel 3Model Y whichever comes first.

NOTE: If you lock CybertruckModel SModel XModel 3Model Y using the Tesla mobile app or key card or key fob, the headlights immediately turn off. However, if the vehicle locks because Walk-Away Door Lock is enabled (see [Walk-Away Door Lock on page 141](#)[Walk-Away Door Lock on page 155](#)), the headlights automatically turn off after one minute.

To turn this feature on and off, touch **Controls > Lights > Headlights After Exit**. When **Headlights After Exit** is off, the headlights turn off immediately when you engage Park and open a door.

NOTE: Model S has lights along the rim of the headlights, also referred to as "signature" lights. These lights automatically turn on whenever Model S is powered on and a drive mode is engaged.

High Beam Headlights

Use the high beam headlight button on the left side of the steering wheelsteering yoke (or steering wheel) to control the headlights:

- Press and quickly release to flash high beam headlights.
- Press and hold to turn on high beam headlights - touchscreen displays a brief timer and you must hold for the duration of the timer to latch the high beam headlights to the on position. When headlights are on, press the button a second time to turn them off.



The following indicator lights are visible on the touchscreen to show the status of the headlights:

Low beam headlights are on.



Illuminates when high beams are on but the **Auto High BeamAdaptive Headlights** setting is turned off or if the **Auto High BeamAdaptive Headlights** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High BeamAdaptive Headlights** is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y.





High beams are temporarily turned off because **Auto High Beam Adaptive Headlights** is operating and light is detected in front of Cybertruck Model S Model X Model 3 Model Y. When light is no longer detected, high beam headlights automatically turn back on.

Adaptive Headlights

When **Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you press the high beam headlight button on the left side of the steering wheel steering yoke (or steering wheel).

NOTE: Adaptive Headlights is automatically enabled when Autosteer is engaged. To switch to low beam headlights, press the high beam headlight button on the steering wheel steering yoke (or steering wheel). **Adaptive Headlights** is re-enabled every time Autosteer is activated.

WARNING: Adaptive Headlights is a convenience feature only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

High Beam Headlights

Use the high beam headlight button on the left side of the steering wheel steering yoke (or steering wheel) to control the headlights:

- Press and quickly release to flash high beam headlights.
- Press and hold to turn on high beam headlights - the instrument panel displays a brief timer and you must hold for the duration of the timer to latch the high beam headlights to the on position. When headlights are on, press the button a second time to turn them off.



The following indicator lights are visible on the instrument panel to show the status of the headlights:

Low beam headlights are on.





High beam headlights are on. Illuminates when high beams are on but the **Auto High Beam Adaptive Headlights** setting is turned off or if the **Auto High Beam Adaptive Headlights** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High Beam Adaptive Headlights** is ready to turn off the high beams if light is detected in front of the vehicle.



High beams are temporarily turned off because **Auto High Beam Adaptive Headlights** is operating and light is detected in front of your vehicle. When light is no longer detected, high beam headlights automatically turn back on.

Auto High Beam Adaptive Headlights

When **Auto High Beam Adaptive Headlights** is enabled, Cybertruck Model S Model X Model 3 Model Y automatically switches between the high beam and low beam headlights based on whether or not there is light detected in front of Cybertruck Model S Model X Model 3 Model Y.

The headlights also adjust to curves on the road ahead to provide greater visibility at night.

To control this feature, touch **Controls > Lights > Auto High Beam > Adaptive Headlights**, or by using the lights popup that displays on the touchscreen when you press the high beam headlight button on the left side of the steering wheel/steering yoke (or steering wheel).

NOTE: Auto High Beam Adaptive Headlights is automatically enabled when Autosteer is engaged. To switch to low beam headlights, press the high beam headlight button on the steering wheel/steering yoke (or steering wheel). **Auto High Beam Adaptive Headlights** is re-enabled every time Autosteer is activated.



WARNING: Auto High Beam Adaptive Headlights is a convenience only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

High Beam Headlights

Push the turn signal stalk away from you to turn the high beam headlights on continuously. To cancel, pull the stalk towards you.

To briefly flash the high beam headlights, pull the stalk towards you.



The high beam headlights can automatically switch to low beam when there is light detected in front of Cybertruck Model S Model X Model 3 Model Y (for example, from an oncoming vehicle). To turn this feature on or off, touch **Controls > Auto High Beam** or **Controls > Lights > Auto High Beam**.



NOTE: Your chosen setting is retained until you manually change it.

NOTE: Auto High Beam is automatically enabled when Autosteer is engaged.

In situations where high beams are turned off because **Auto High Beam** is turned on and light is detected in front of CybertruckModel SModel XModel 3Model Y, you can temporarily turn on high beams by pulling the stalk all the way toward you.

The following indicator lights are visible on the instrument panel to show the status of the headlights:

Low beam headlights are on.



High beam headlights are on. Illuminates when high beams are on but the **Auto High Beam** setting is turned off or if the **Auto High Beam** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High Beam** is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y.



High beams are temporarily turned off because **Auto High Beam** is operating and light is detected in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, high beam headlights automatically turn back on.



WARNING: **Auto High Beam** is a convenience only and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

Rear Reading Lights

CybertruckModel SModel XModel 3Model Y is equipped with a reading light on each side of the rear seats, located above the door and next to the coat hangers (see [Coat Hangers on page 194](#)). To turn a reading light on or off, press its lens. If you leave a reading light turned on, it automatically turns off when CybertruckModel SModel XModel 3Model Y powers off.

Adaptive Front Lighting System (AFS)

If equipped, the Adaptive Front Lighting System (AFS) automatically adjusts the beam of the headlights to improve your driving view. Electric sensors measure driving speed, steering angle and yaw (the rotation of the car around the vertical axis) to determine the optimum position of the headlights based on current driving conditions. For example, to improve visibility while driving on winding roads at night, the AFS casts the beam in the direction of the curve. When low beam headlights are turned on and when driving at lower speeds, AFS improves lateral illumination to increase the visibility of pedestrians and curbs, and to improve visibility when turning at a dark intersection, into a driveway, or when making a u-turn.

The Adaptive Front Lighting System (AFS) operates whenever headlights are on. If CybertruckModel SModel XModel 3Model Y isn't moving, or is moving in reverse, the adaptive headlights do not activate. This prevents the headlights from inadvertently blinding other drivers.

If the AFS fails, the instrument panel displays an alert. Contact Tesla Service.





Headlight Adjustments

To adjust the angle of the headlights, touch **Controls > Service > Adjust Headlights**, then follow the onscreen instructions. You can choose which headlight you would like to adjust by selecting it on the touchscreen.

NOTE: Headlights do not require adjustments when temporarily driving into a region where the traffic direction is different (for example, driving in right-hand traffic region, and then driving into a region with left-hand traffic).

⚠ WARNING: Proceed with caution when adjusting headlights. Tesla has carefully calibrated the position of the headlights to be in an optimum position for most driving scenarios. Tesla recommends that you do not adjust headlights unless you are familiar with how headlights should be adjusted. Once adjusted, you will be unable to automatically restore them to their originally calibrated position. Contact Tesla for assistance when adjusting headlights.

Turn Signals

Move the turn signal stalk up (before turning right) or down (before turning left). The turn signals flash three times or continuously, depending on how far up or down you move the stalk. Lightly push the stalk up or down for a three-flash sequence. For a continuous signal, push the stalk fully up or down.



The turn signals stop operating when canceled by the steering wheelsteering yoke (or steering wheel), or when you return the stalk to the central position.



When a turn signal is operating, the corresponding turn signal indicator lights up on the instrument panel and a clicking sound can be heard.

⚠ WARNING: When actively using Traffic-Aware Cruise Control, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to accelerate in specific situations (see [Overtake Acceleration on page 573](#)[Overtake Acceleration on page 582](#)).

⚠ WARNING: When actively using Autosteer, engaging a turn signal can cause CybertruckModel SModel XModel 3Model Y to change lanes (see [Auto Lane Change on page 590](#)).

Turn Signals

To engage a turn signal, press the corresponding arrow button on the left side of the steering wheelsteering yoke (or steering wheel). A turn signal cancels based on the angle of the steering wheelsteering yoke (or steering wheel) (for example, you finish making a turn). You can also cancel a turn signal by pressing the turn signal button a second time.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. You can override automatic cancellation at any time (for example, you want the turn signal to remain on because you are making more than one lane change). To override, engage the turn signal by pressing and momentarily holding the turn signal button (instead of just pressing). Then, when the first maneuver is complete, the turn signal remains on. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by pressing the turn signal button after maneuvers such as a merge, lane change, or fork in the roadway.



When a turn signal is operating, the corresponding indicator lights up on the touchscreen and you can hear a clicking sound.



Turn Signals

To engage a turn signal, press the corresponding arrow button on the left side of the steering wheelsteering yoke (or steering wheel). A turn signal cancels based on the angle of the steering wheelsteering yoke (or steering wheel) (for example, you finish making a turn). You can also cancel a turn signal by pressing the turn signal button a second time.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. You can override automatic cancellation at any time (for example, you want the turn signal to remain on because you are making more than one lane change). To override, engage the turn signal by pressing and momentarily holding the turn signal button (instead of just pressing). Then, when the first maneuver is complete, the turn signal remains on. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by pressing the turn signal button after maneuvers such as a merge, lane change, or fork in the roadway.



When a turn signal is operating, the corresponding indicator lights up on the instrument panel and you can hear a clicking sound.

Hazard Warning Flashers

To turn on the hazard warning flashers, press the button located on the side of the touchscreen closest to the steering wheel/steering yoke (or steering wheel). All turn signals flash. Press again to turn off.

To turn on the hazard warning flashers, press the button on the drive mode selector located at the front of the center console. All turn signals flash. Press again to turn off.



To turn on the hazard warning flashers, press the button on the drive mode selector located on the overhead center. All turn signals flash. Press again to turn off.



If a severe crash is detected by your vehicle, the hazard warning flashers will automatically turn on and flash quickly to increase visibility. Pressing the hazard warning flashers once will return the lights to their normal cadence. Pressing a second time turns all hazard warning flashers off.

NOTE: Hazard warning flashers operate even without a key nearby.

Condensation in Head or Tail Lights

Due to weather changes, humidity levels, or recent exposure to water (such as a car wash), condensation may occasionally accumulate in your vehicle's head or tail lights. This is normal— as the weather gets warmer and humidity decreases, condensation often disappears on its own. If you notice water buildup within the exterior lenses, or if the condensation affects the visibility of the exterior lights, contact Tesla Service.



Wipers and Washers

Wipers and Washers

You can access wiper settings by touching the wiper button on the steering wheelsteering yoke (or steering wheel).

- Press the wiper button to wipe the windshield. If the wiper is already operating at a wiper setting and is not set to **Auto**, pressing the wiper button cycles through speeds. Wiper speeds cycle as follows: I > II > III > IIII > III > II > I.
- Press and hold the wiper button to spray washer fluid onto the windshield. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later. You can also press and hold the wiper button for a continuous spray of washer fluid—the wipers perform the wipes after you release.

You can also access wiper settings by touching **Controls > Wipers**.

Whenever you press the wiper button, the instrument panel displays the wiper menu, allowing you to adjust wiper settings. Roll the left scroll button on the steering wheelsteering yoke (or steering wheel) up or down to choose your desired setting.



1. Turn the wipers off.
2. Choose how you want the wipers to operate:
 - IIII - Continuous, fast.
 - III - Continuous, slow.
 - II - Intermittent, fast.
 - I - Intermittent, slow.



- **Auto** - Cybertruck Model S Model X Model 3 Model Y detects precipitation and adjusts the wiping speed and intensity. Pressing the wiper button while the wipers are set to **Auto** temporarily increases the sensitivity of the wipers.

NOTE: When you engage Autosteer the wipers are set to **Auto**. Although you can change the wiper setting from **Auto** while using Autosteer, the wipers once again default to **Auto** the next time you engage Autosteer.

NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.

NOTE: You can also adjust the windshield wiper speed and frequency using voice commands (see [Voice Commands](#) on page 97).

Periodically check and clean the edge of the wiper blades. If a blade is damaged, replace it immediately. For details on checking and replacing wiper blades, see [Windshield Wiper Blades, Jets and Fluid](#) on page 784.

CAUTION: To avoid damaging the hood, ensure that the hood is fully closed before activating the windshield wipers.

CAUTION: Remove ice from the windshield before turning the wipers on. Ice has sharp edges that can damage the rubber on the wiper blades.

CAUTION: In harsh climates, ensure that the wiper blades are not frozen or adhered to the windshield.

Wipers and Washers

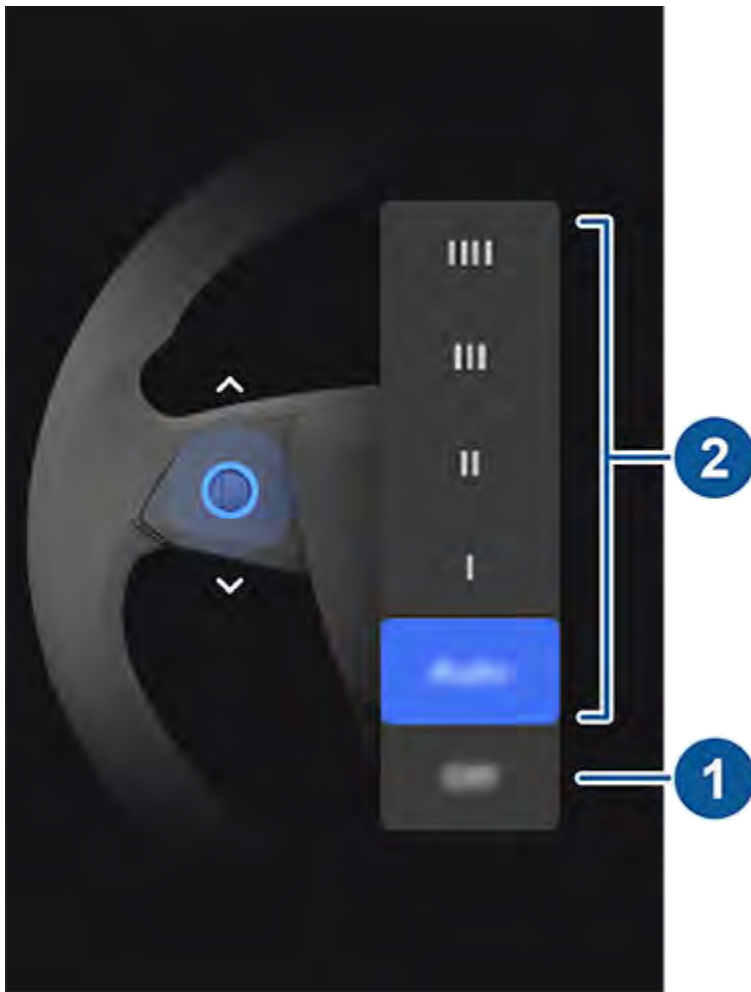
You can access wiper settings by touching the wiper button on the steering wheelsteering yoke (or steering wheel).



- Press the wiper button to wipe the windshield. If the wiper is already operating at a wiper setting and is not set to **Auto**, pressing the wiper button cycles through speeds. Wiper speeds cycle as follows: I > II > III > IIII > III > II > I.
- Press and hold the wiper button to spray washer fluid onto the windshield. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later. You can also press and hold the wiper button for a continuous spray of washer fluid—the wipers perform the wipes after you release.

You can also access wiper settings by touching **Controls > Wipers**.

Whenever you press the wiper button on the steering wheel, the touchscreen displays the wiper menu, allowing you to adjust wiper settings. Roll the left scroll button on the steering wheelsteering yoke (or steering wheel) up or down to choose your desired setting.



1. Turn the wipers off.
2. Choose how you want the wipers to operate:
 - **||||** - Continuous, fast.
 - **|||** - Continuous, slow.
 - **||** - Intermittent, fast.
 - **I** - Intermittent, slow.
 - **Auto** - Cybertruck Model S Model X Model 3 Model Y detects precipitation and adjusts the wiping speed and intensity. Pressing the wiper button while the wipers are set to **Auto** temporarily increases the sensitivity of the wipers.

NOTE: When you engage Autosteer the wipers are set to **Auto**. Although you can change the wiper setting from **Auto** while using Autosteer, the wipers once again default to **Auto** the next time you engage Autosteer.

NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.

NOTE: You can also adjust the windshield wiper speed and frequency using voice commands (see [Voice Commands on page 97](#)).

Periodically check and clean the edge of the wiper blades. If a blade is damaged, replace it immediately. For details on checking and replacing wiper blades, see [Windshield Wiper Blades, Jets and Fluid on page 784](#).

- ⚠ CAUTION:** To avoid damaging the hood, ensure that the hood is fully closed before activating the windshield wipers.
- ⚠ CAUTION:** Remove ice from the windshield before turning the wipers on. Ice has sharp edges that can damage the rubber on the wiper blades.



CAUTION: In harsh climates, ensure that the wiper blades are not frozen or adhered to the windshield.

Wipers

To wipe the windshield, rotate the end of the turn signal stalk away from you. You can rotate to five positions:

- 1st: Off.
- 2nd: Auto with low rain sensitivity.*
- 3rd: Auto with high rain sensitivity.*
- 4th: Continuous, slow.
- 5th: Continuous, fast.



For a single wipe, press and release the end of the stalk.

If the wipers are set to Auto and CybertruckModel SModel XModel 3Model Y detects no liquid on the windshield, the wipers do not wipe.

*To enable the **Auto** settings, touch **Controls > Vehicle > Autowipers (Beta)**. When wipers are set to Auto, CybertruckModel SModel XModel 3Model Y detects whether or not it is raining. The frequency at which they wipe depends on how much rain is detected on the windshield. When wipers are set to high rain sensitivity, the wipers turn on when CybertruckModel SModel XModel 3Model Y detects a light mist.

NOTE: When you engage Autosteer the wipers are set to **Auto**. Although you can change the wiper setting from **Auto** while using Autosteer, the wipers once again default to **Auto** the next time you engage Autosteer.

NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.

NOTE: When you operate the wipers, headlights automatically turn on for approximately one minute (if they are not on already).

NOTE: You can also adjust the windshield wiper speed and frequency using voice commands (see [Voice Commands on page 97](#)).

CAUTION: Ensure the wipers are in the Off position before washing CybertruckModel SModel XModel 3Model Y to avoid the risk of damaging the wipers.

To extend the life of wiper blades, remove ice from the windshield before turning wipers on. Ice has sharp edges that can damage the rubber on the wiper blades.

Periodically check and clean the edge of the wiper blade. If damaged, replace the wiper blade immediately. For details on checking and replacing wiper blades, see [Windshield Wiper Blades, Jets and Fluid on page 784](#).

CAUTION: In harsh climates, ensure that the wiper blades are not frozen or adhered to the windshield.



Defrosting Wipers

To make wiper blades easy to access so you can remove any ice and snow, shift CybertruckModel SModel XModel 3Model Y into Park, turn the wipers off, then use the touchscreen to move them to the service position. Touch **Controls > Service > Wiper Service Mode**. When parking in cold outdoor climates, it is helpful to leave CybertruckModel SModel XModel 3Model Y with the wipers in the service position. In this position, they are closer to the defrost vent, allowing you to thaw them by directing air from the climate control system towards the windshield.

If CybertruckModel SModel XModel 3Model Y is equipped with the optional cold weather package, you can defrost wipers by touching the climate control on the touchscreen (see [Operating Climate Controls on page 669](#)). Wiper defrosters automatically turn off after 15 minutes.

NOTE: Wipers automatically return to their normal position when you shift CybertruckModel SModel XModel 3Model Y out of Park.

Washers

Press the button on the end of the turn signal stalk to spray washer fluid onto the windshield. You can press this button at two levels. Press partially for a single wipe, without any washer fluid. Press fully for both wipe and wash. When washing the windshield, the wipers turn on. After releasing the button, the wipers perform two additional wipes then a third wipe a few seconds later. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later.



s

Periodically top up washer fluid (see [Windshield Wiper Blades, Jets and Fluid on page 784](#)).

Defrosting Washer Nozzles

If CybertruckModel SModel XModel 3Model Y is equipped with the optional cold weather package, washer nozzles have defrosters that turn on whenever the ambient temperature nears freezing, or when you turn on the wiper defrosters (see [Operating Climate Controls on page 669](#)). The washer defrosters turn off when the wiper defrosters turn off (after 15 minutes), provided the temperature is warm enough to prevent freezing.

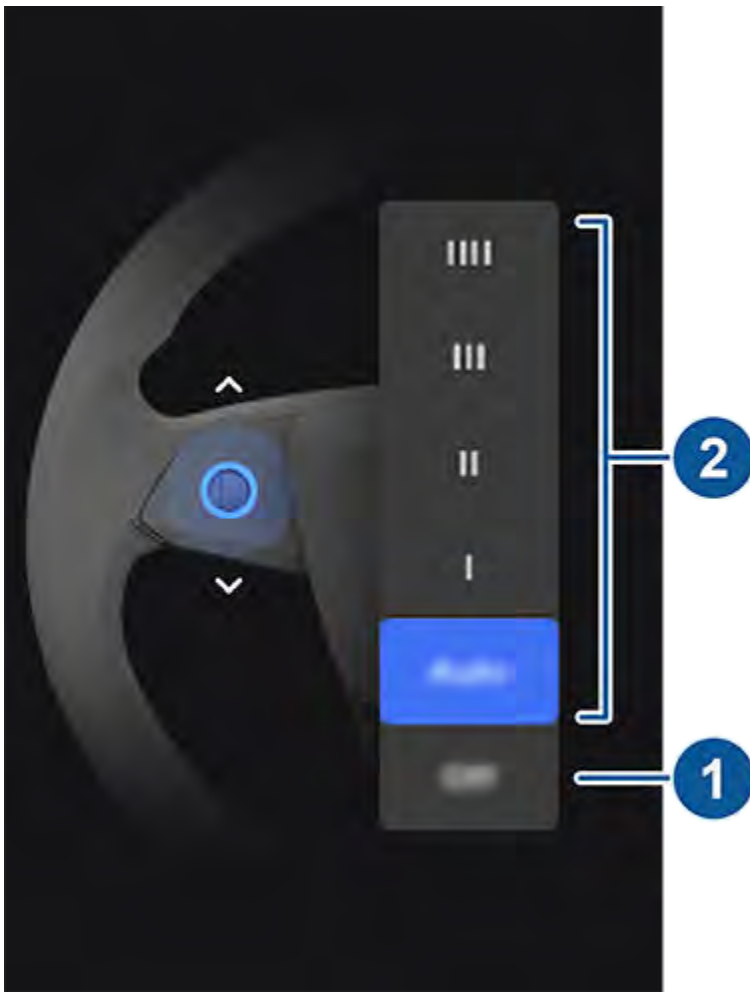
Wipers

You can access wiper settings by pressing the button on the end of the turn signal stalk or touching **Controls > Wipers**. You can also add wipers to the bottom bar (see [Customizing My Apps on page 32](#)).

The button at the end of turn signal stalk has two levels.

- *Press partially* to wipe the windshield. If the wiper is already operating at a wiper setting and is not set to **Auto**, pressing the button cycles through speeds. Wiper speeds cycle as follows: I > II > III > IIII > III > II > I.
- *Press fully* to spray washer fluid onto the windshield. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later. You can also press and hold the wiper button for a continuous spray of washer fluid—the wipers perform the wipes after you release.

Whenever you press the wiper button, the touchscreen displays the wiper menu, allowing you to adjust wiper settings. Roll the left scroll button on the steering wheelsteering yoke (or steering wheel) up or down to choose your desired setting. You can also use the touchscreen or use voice commands (see [Voice Commands on page 97](#)).



1. Turn the wiper off.
2. Choose how you want the wipers to operate:
 - **||||** - Continuous, fast.
 - **|||** - Continuous, slow.
 - **||** - Intermittent, fast.
 - **I** - Intermittent, slow.
 - **Auto** - CybertruckModel SModel XModel 3Model Y detects precipitation and adjusts the wiping speed and intensity. Pressing the wiper button while the wipers are set to **Auto** temporarily increases the sensitivity of the wipers.
NOTE: When you engage Autosteer the wipers are set to **Auto**. Although you can change the wiper setting from **Auto** while using Autosteer, the wipers once again default to **Auto** the next time you engage Autosteer.
NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.

Periodically check and clean the edge of the wiper blades. If a blade is damaged, replace it immediately. For details on checking and replacing wiper blades, see [Windshield Wiper Blades, Jets and Fluid on page 784](#).

- CAUTION:** Ensure the wipers are off before washing CybertruckModel SModel XModel 3Model Y to avoid the risk of damaging the wipers.
- CAUTION:** To avoid damaging the hood, ensure that the hood is fully closed before using the windshield wipers.
- CAUTION:** In harsh climates, ensure that the wiper blades are not frozen or adhered to the windshield. Remove ice from the windshield before using the wipers. Ice has sharp edges that can damage the rubber on the blades.



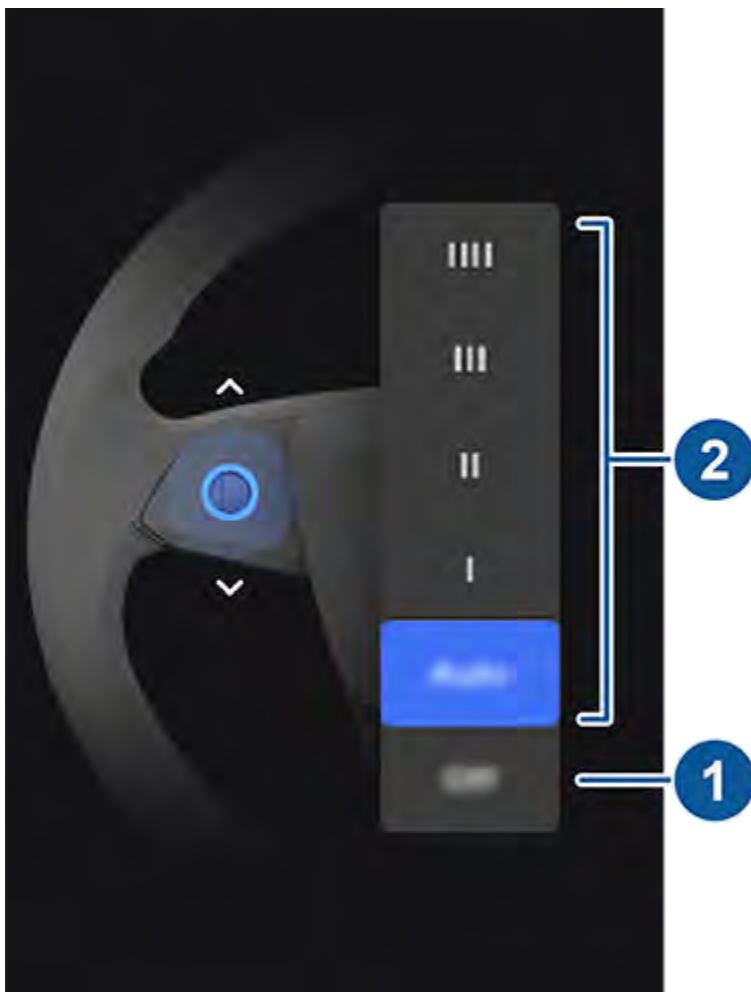
Wipers

You can access wiper settings by pressing the button on the end of the turn signal stalk or touching **Controls > Wipers**. You can also add wipers to the bottom bar (see [Customizing My Apps on page 32](#)).

The button at the end of turn signal stalk has two levels.

- *Press partially* to wipe the windshield. If the wiper is already operating at a wiper setting and is not set to **Auto**, pressing the button cycles through speeds. Wiper speeds cycle as follows: I > II > III > IIII > III > II > I.
- *Press fully* to spray washer fluid onto the windshield. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later. You can also press and hold the wiper button for a continuous spray of washer fluid—the wipers perform the wipes after you release.

Whenever you press the wiper button, the touchscreen displays the wiper menu, allowing you to adjust wiper settings. Roll the left scroll button on the steering wheel/steering yoke (or steering wheel) up or down to choose your desired setting. You can also use the touchscreen or use voice commands (see [Voice Commands on page 97](#)).



- Turn the wiper off.
- Choose how you want the wipers to operate:
 - IIII - Continuous, fast.
 - III - Continuous, slow.
 - II - Intermittent, fast.
 - I - Intermittent, slow.
 - **Auto** - CybertruckModel SModel XModel 3Model Y detects precipitation and adjusts the wiping speed and intensity. Pressing the wiper button while the wipers are set to **Auto** temporarily increases the sensitivity of the wipers.



Owners Manual

NOTE: When you engage Autosteer the wipers are set to **Auto**. Although you can change the wiper setting from **Auto** while using Autosteer, the wipers once again default to **Auto** the next time you engage Autosteer.

NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.

CAUTION: Ensure the wipers are off before washing Cybertruck Model S Model X Model 3 Model Y to avoid the risk of damaging the wipers.

Periodically check and clean the edge of the wiper blades. If a blade is damaged, replace it immediately. For details on checking and replacing wiper blades, see [Windshield Wiper Blades, Jets and Fluid on page 784](#).

CAUTION: To avoid damaging the hood, ensure that the hood is fully closed before using the windshield wipers.

CAUTION: In harsh climates, ensure that the wiper blades are not frozen or adhered to the windshield. Remove ice from the windshield before using the wipers. Ice has sharp edges that can damage the rubber on the blades.

Windshield Washers

Press the button on the end of the turn signal stalk to spray washer fluid onto the windshield. This button has two levels. Press partially for a single wipe without any washer fluid. Press fully for both wipe and wash. When washing the windshield, the wipers turn on. While spraying the windshield, the wipers turn on. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later.



Periodically top up washer fluid (see [Topping Up Windshield Washer Fluid on page 784](#)).

Windshield Washers

Press the button on the end of the turn signal stalk to spray washer fluid onto the windshield. This button has two levels. Press partially for a single wipe without any washer fluid. Press fully for both wipe and wash. When washing the windshield, the wipers turn on. While spraying the windshield, the wipers turn on. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later.



Periodically top up washer fluid (see [Topping Up Windshield Washer Fluid on page 784](#)).



Braking and Stopping

Braking Systems

⚠ WARNING: Properly functioning braking systems are critical to ensure safety. If you experience a problem with the brake pedal, brake calipers, or any component of a CybertruckModel SModel XModel 3Model Y braking system, contact Tesla immediately.

CybertruckModel SModel XModel 3Model Y has an anti-lock braking system (ABS) that prevents the wheels from locking when you apply maximum brake pressure. This improves steering control during heavy braking in most road conditions.

During emergency braking conditions, the ABS constantly monitors the speed of each wheel and varies the brake pressure according to the grip available.

The alteration of brake pressure can be felt as a pulsing sensation through the brake pedal. This demonstrates that the ABS is operating and is not a cause for concern. Keep firm and steady pressure on the brake pedal while experiencing the pulsing.

ABS

USA:

The ABS indicator briefly flashes amber on the instrument paneltouchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

Canada:



The ABS indicator briefly flashes amber on the instrument paneltouchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

BRAKE

USA:

If the instrument paneltouchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brakes firm to bring the vehicle to a stop when safe to do so.

Canada:



If the instrument paneltouchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brakes firm to bring the vehicle to a stop when safe to do so.

BRAKE

USA:

The instrument paneltouchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brakes firm to stop the vehicle when safety permits. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 463](#)).

Canada:



The instrument paneltouchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brakes firm to stop the vehicle when safety permits. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 463](#)).

⚠ WARNING: When driving a Model S Plaid equipped with the optional Carbon Ceramic Brake Kit in temperatures below 14 degrees Fahrenheit (-10 degrees Celsius), the instrument panel displays an alert indicating that stability and braking performance may be degraded in cold weather. You may need to increase the amount of pressure you apply to the brake pedal when driving in cold weather. Be aware of this reduced performance and drive cautiously in cold weather conditions.

⚠ WARNING: The **Apply Brakes When Regenerative Braking is Limited** feature is not available on Model S that have the "Carbon Ceramic Brake Kit" installed.



Emergency Braking


In an emergency, fully press the brake pedal and maintain firm pressure, even on low traction surfaces. The ABS varies the braking pressure to each wheel according to the amount of traction available. This prevents wheels from locking and ensures that you stop as safely as possible.


If an alternative method is needed to bring the vehicle to a stop, press and hold the Park button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Touch **Controls** to display the drive mode strip.


If an alternative method is needed to bring the vehicle to a stop, press and hold the Park button on the drive stalk to apply the brakes and remove drive torque while the button is held.


If an alternative method is needed to bring the vehicle to a stop, press and hold the Park button on the drive stalk to apply the brakes and remove drive torque while the button is held.

If an alternative method is needed to bring the vehicle to a stop, press and hold the Park button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Swipe from the edge of the touchscreen towards the passenger, to bring up the drive mode strip.

 **WARNING:** Do not pump the brake pedal. Doing so interrupts operation of the ABS and can increase braking distance.

 **WARNING:** Always maintain a safe distance from the vehicle in front of you and be aware of hazardous driving conditions. While the ABS can improve stopping distance, it cannot overcome the laws of physics. It also does not prevent the danger of hydroplaning (where a layer of water prevents direct contact between the tires and the road).

 **CAUTION:** Automatic Emergency Braking (see [Collision Avoidance Assist on page 645](#)) may intervene to automatically brake in situations where a collision is considered imminent. Automatic Emergency Braking is not designed to prevent a collision. At best, it can minimize the impact of a frontal collision by attempting to reduce your driving speed. Depending on Automatic Emergency Braking to avoid a collision can result in serious injury or death.

 **CAUTION:** In emergency situations, if the brakes are not functioning properly, press and hold the Park button on the center console or touchscreen on the overhead console or touchscreen on the drive stalk to bring Cybertruck Model S Model X Model 3 Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.


Dynamic Brake Lights (if equipped)

If you are driving over 30 mph (50 km/h) and brake forcefully (or if Automatic Emergency Braking engages), the brake lights flash quickly to warn other drivers that Cybertruck Model S Model X Model 3 Model Y is rapidly slowing down. If Cybertruck Model S Model X Model 3 Model Y stops completely, the hazard warning lights flash. Flashing continues until you press the accelerator or manually press the hazard lights button to turn them off (see [Hazard Warning Flashers on page 425](#) [Hazard Warning Flashers on page 425](#) [Hazard Warning Flashers on page 441](#) [Hazard Warning Flashers on page 441](#)).

NOTE: Dynamic brake lights will not flash while Track Mode is enabled (see [Track Mode on page 502](#)).

NOTE: Dynamic brake lights will not flash while Track Mode is enabled (see [Track Mode on page 502](#)).

NOTE: When towing a trailer (if applicable), the brake lights on the trailer also operate as described above, even when the trailer is not equipped with a separate braking system.

 **WARNING:** When towing a trailer (if applicable), always increase your following distance. Sudden braking may result in skidding, jack-knifing, and loss of control.

Brake Disc Wiping

To ensure brakes remain responsive in cold and wet weather, Cybertruck Model S Model X Model 3 Model Y is equipped with brake disc wiping. When cold and wet weather is detected, this feature repeatedly applies an imperceptible amount of brake force to remove water from the surface of the brake discs.

Hydraulic Fade Compensation

Cybertruck Model S Model X Model 3 Model Y is equipped with hydraulic fade compensation. This assists in monitoring brake system pressure and ABS activity for instances of reduced brake performance. If reduced brake performance is detected (for example, as a result of brake fade, or cold or wet conditions), you may hear a sound, feel the brake pedal pull away from your foot, and notice a strong increase in braking. Brake as you normally would and continue to press the brake pedal without releasing or pumping the brakes.



CAUTION: In emergency situations, if the brakes are not functioning properly, press and hold the Park button on the center console or touchscreen on the overhead console or touchscreen on the drive stalk on the drive stalk to bring Cybertruck Model S Model X Model 3 Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.

WARNING: Always maintain a safe driving distance from the vehicle in front of you and exercise caution when driving conditions are hazardous. Brake disc wiping and hydraulic fade compensation is not a substitute for adequately applying the brakes.

Hydraulic Boost Compensation

Cybertruck Model S Model X Model 3 Model Y is equipped with a brake booster that activates the brakes when the brake pedal is pressed. Hydraulic boost compensation provides mechanical assistance if the brake booster fails. If a brake booster failure is detected, the brake pedal feels stiffer to press and you may hear a sound when you press the brake pedal. To stop Cybertruck Model S Model X Model 3 Model Y, apply steady force to the brake pedal without releasing or pumping. Drive cautiously and maintain a safe distance from other road users—brake pedal responsiveness and braking performance may be degraded.

Regenerative Braking

Whenever Cybertruck Model S Model X Model 3 Model Y is moving and your foot is off the accelerator, regenerative braking slows down the vehicle and feeds any surplus power back to the Battery. By anticipating your stops and reducing or removing pressure from the accelerator pedal to slow down, you can take advantage of regenerative braking to increase driving range.

The power meter on the Energy app displays real-time feedback on the amount of power being used. You can also display the power meter on either side of the instrument panel by choosing **Energy** using the scroll button on the steering wheel steering yoke (or steering wheel) (see [Steering Wheel Steering Yoke \(or Steering Wheel\) on page 379](#)). When energy is being gained by regenerative braking, the power meter displays a green area that represents the amount of power that is being fed back to the Battery.

The amount of power fed back to the Battery using regenerative braking can depend on the current state of the Battery. For example, regenerative braking may be limited if the Battery is cold or is already fully charged. When regenerative braking is limited, the power meter displays a dashed line to indicate the amount of deceleration power that is not being fed back to the Battery.



Vehicle deceleration due to regenerative braking may vary depending on the current state of the Battery. For example, regenerative braking may be limited if the Battery is cold or is already fully charged.



To experience the same amount of deceleration whenever you release the accelerator pedal, regardless of the state of the Battery, you can choose to have the regular braking system automatically engage whenever regenerative braking is limited. Touch **Controls > Pedals & Steering > Dynamics > Apply Brakes When Regenerative Braking is Limited**.

⚠ WARNING: Apply Brakes When Regenerative Braking is Limited may not operate if the brakes are extremely hot.

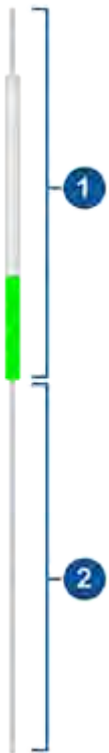
NOTE: If **Apply Brakes When Regenerative Braking is Limited** is enabled and applying the brakes, the brake pedal may move and it may feel stiffer when pressed. This is expected and does not change your ability to slow down
CybertruckModel SModel XModel 3Model Y.

The power meter (a thin horizontal line centered at the bottom of the instrument panel) displays real-time power usage:



1. The left side of the power meter represents power generated from regenerative braking, or power that is used to slow down the vehicle. Power being fed back to the Battery displays in green whereas power used by the regular braking system displays in gray.
2. The right side of the power meter shows power being output by the Battery, such as that used to accelerate the vehicle. When you press the accelerator pedal, the power meter fills to the right with black (or white if the display is dark).

The power meter (a thin line in the touchscreen's car status area) displays real-time power usage:








1. Represents power generated from regenerative braking, or power that is captured from slowing down the vehicle. Power being fed back to the Battery displays in green whereas power used by the regular braking system displays in gray.
2. Represents power being output by the Battery, such as that used to accelerate the vehicle. When you press the accelerator pedal, the top half of the power meter fills with black (or white if the display is dark).



NOTE: Installing winter tires with aggressive compound and tread design may result in temporarily-reduced regenerative braking power. However, your vehicle is designed to continuously recalibrate itself, and after changing tires it will increasingly restore regenerative braking power after some straight-line accelerations. For most drivers this occurs after a short period of normal driving, but drivers who normally accelerate lightly may need to use slightly harder accelerations while the recalibration is in progress. Touch **Service > Wheel & Tire > Tires** to select winter tires and quicken this process.

NOTE: If regenerative braking is aggressively slowing CybertruckModel SModel XModel 3Model Y (such as when your foot is completely off the accelerator pedal at highway speeds), the brake lights turn on to alert others that you are slowing down.

NOTE: Because CybertruckModel SModel XModel 3Model Y uses regenerative braking, the brake pads are typically used less frequently than those in traditional braking systems. To avoid the accumulation of rust and corrosion, Tesla recommends frequently pressing the brake pedal to apply the mechanical brakes and dry the brake pads and rotors.

-  **WARNING:** In snowy or icy conditions, CybertruckModel SModel XModel 3Model Y may experience loss of traction during regenerative braking, particularly when in the **Standard** setting and/or not using winter tires. Tesla recommends using the **Low** setting in snowy or icy conditions to help maintain vehicle stability, particularly when in the **Standard** setting and/or not using winter tires. Tesla recommends using the **Low** setting in snowy or icy conditions to help maintain vehicle stability, particularly when in the **Standard** setting and/or not using winter tires. Tesla recommends using the **Low** setting in snowy or icy conditions to help maintain vehicle stability.
-  **WARNING:** Never rely on your vehicle to adequately decelerate or fully stop your vehicle. Many factors can contribute to a longer stopping distance, including downward slopes and reduced or limited regenerative braking. Always be prepared to use the brake pedal to adequately decelerate or stop.
-  **WARNING:** Press the brake pedal if CybertruckModel SModel XModel 3Model Y moves when unsafe to do so. It is your responsibility to stay alert and be in control of the vehicle at all times. Failure to do so can result in serious damage, injury, or death.
-  **WARNING:** Do not rely on regenerative braking to keep you and your vehicle safe. Various factors such as driving with a heavy vehicle load, on a steep hill, or on wet or icy roads affect deceleration rate and the distance at which CybertruckModel SModel XModel 3Model Y will come to a stop. Drive attentively and always stay prepared to use the brake pedal to stop as appropriate based on traffic and road conditions.
-  **WARNING:** Forward Collision Warning and Automatic Emergency Braking do not operate when driving at very low speeds (see [Collision Avoidance Assist on page 645](#)). Do not rely on these features to warn you, or to prevent or reduce the impact of a collision.

To Set the Regenerative Braking Level

NOTE: The regenerative braking setting is not available on all vehicles.

You can use the touchscreen to change the level of regenerative braking:

1. Touch **Controls > Pedals & Steering > Regenerative Braking**.
2. Choose from two levels:
 - **Standard:** Provides the maximum amount of regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y slows down.
 - **Low:** Limits regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y takes longer to slow down and coasts farther than if set to "Standard".

To Set the Regenerative Braking Level

You can use the touchscreen to change the level of regenerative braking:

1. Touch **Controls > Dynamics > Regenerative Braking**.
2. Choose from two levels:
 - **Low:** Limits regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y takes longer to slow down and coasts farther than if set to "Standard".
 - **Standard:** Provides the maximum amount of regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y slows down, reducing the need to use the brakes.

To Set the Regenerative Braking Level

NOTE: The regenerative braking setting is not available on all vehicles.



You can use the touchscreen to change the level of regenerative braking:

1. Touch **Controls > Dynamics > Regenerative Braking**.
2. Choose from two levels:
 - **Low:** Limits regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y takes longer to slow down and coasts farther than if set to "Standard".
 - **Standard:** Provides the maximum amount of regenerative braking. When you release the accelerator, CybertruckModel SModel XModel 3Model Y slows down, reducing the need to use the brakes.

Stopping Mode

Regenerative braking decelerates CybertruckModel SModel XModel 3Model Y whenever you release the accelerator pedal when driving. You can choose what you want CybertruckModel SModel XModel 3Model Y to do once the driving speed has been reduced to a very low speed (almost at a stop) and both the accelerator pedal and brake pedal are released. While in Park, touch **Controls > Driving > Stopping Mode** and choose from these options:

- **CREEP:** When close to, or at, a complete stop, the motor continues to apply torque, moving CybertruckModel SModel XModel 3Model Y slowly forward (in Drive) or backwards (in Reverse), similar to a conventional vehicle with an automatic transmission. In some situations, such as on a steep hill or driveway, you may need to press the accelerator pedal to continue moving or to prevent CybertruckModel SModel XModel 3Model Y from moving in the opposite direction.
 - ⚠ **WARNING:** Never rely on CREEP to apply enough torque to prevent your vehicle from rolling down a hill. Always press the brake pedal to remain stopped or the accelerator pedal to proceed up the hill. Failure to do so can result in property damage and/or a collision.
- **HOLD:** Maximizes range and reduces brake wear by continuing to provide regenerative braking at speeds lower than with the Creep and Roll settings. When CybertruckModel SModel XModel 3Model Y stops, the brakes are automatically applied without you having to put your foot on the brake pedal. Whether stopped on a flat surface or a hill, Vehicle Hold keeps the brake applied, provided your foot remains off the accelerator and brake pedals. See [Vehicle Hold on page 493](#).
 - ⚠ **WARNING:** Never rely on HOLD to adequately decelerate or fully stop your vehicle. Many factors can contribute to a longer stopping distance, including downward slopes, the low regenerative braking setting, and reduced or limited regenerative braking (see [Regenerative Braking on page 463](#)). Always be prepared to use the brake pedal to adequately decelerate or stop.
- **ROLL:** When close to, or at, a complete stop, CybertruckModel SModel XModel 3Model Y becomes free rolling like a vehicle in Neutral. Therefore, if stopped on a slope, CybertruckModel SModel XModel 3Model Y will roll downward. The brake does not engage, and the motor does not apply torque (until the accelerator pedal is pressed).
 - NOTE: If you choose CREEP or ROLL, you can still use Vehicle Hold to apply the brakes. However, you will need to briefly press the brake pedal when the vehicle is stopped. See [Vehicle Hold on page 493](#).

NOTE: Your preferred Stopping Mode setting does not sync to your driver profile.

- ⚠ **WARNING:** Press the brake pedal if CybertruckModel SModel XModel 3Model Y moves when unsafe to do so. It is your responsibility to stay alert and be in control of the vehicle at all times. Failure to do so can result in serious damage, injury, or death.
- ⚠ **WARNING:** Do not rely on regenerative braking and your chosen Stopping Mode to keep you and your vehicle safe. Various factors such as driving with a heavy vehicle load, on a steep hill, or on wet or icy roads affect deceleration rate and the distance at which CybertruckModel SModel XModel 3Model Y will come to a stop. Drive attentively and always stay prepared to use the brake pedal to stop as appropriate based on traffic and road conditions.
- ⚠ **WARNING:** Forward Collision Warning and Automatic Emergency Braking do not operate when driving at very low speeds (see [Collision Avoidance Assist on page 645](#)). Do not rely on these features to warn you, or to prevent or reduce the impact of a collision.

Stopping Mode

NOTE: Stopping Modes are unavailable for vehicles manufactured as of approximately January 2024.



Regenerative braking decelerates CybertruckModel SModel XModel 3Model Y whenever you release the accelerator pedal when driving. You can choose what you want CybertruckModel SModel XModel 3Model Y to do once the driving speed has been reduced to a very low speed (almost at a stop) and both the accelerator pedal and brake pedal are released. While in Park, touch **Controls > Dynamics > Stopping Mode** and choose from these options:

- **Creep:** When close to, or at, a complete stop, the motor continues to apply torque, moving CybertruckModel SModel XModel 3Model Y slowly forward (in Drive) or backwards (in Reverse), similar to a conventional vehicle with an automatic transmission. In some situations, such as on a steep hill or driveway, you may need to press the accelerator pedal to continue moving or to prevent CybertruckModel SModel XModel 3Model Y from moving in the opposite direction.
 - ⚠ **WARNING:** Never rely on **Creep** to apply enough torque to prevent your vehicle from rolling down a hill. Always press the brake pedal to remain stopped or the accelerator pedal to proceed up the hill. Failure to do so can result in property damage and/or a collision.
- **Hold:** Maximizes range and reduces brake wear by continuing to provide regenerative braking at speeds lower than with the Creep and Roll settings. When CybertruckModel SModel XModel 3Model Y stops, the brakes are automatically applied without you having to put your foot on the brake pedal. Whether stopped on a flat surface or a hill, Vehicle Hold keeps the brake applied, provided your foot remains off the accelerator and brake pedals. See [Vehicle Hold on page 493](#).
 - ⚠ **WARNING:** Never rely on **Hold** to adequately decelerate or fully stop your vehicle. Many factors can contribute to a longer stopping distance, including downward slopes, the low regenerative braking setting, and reduced or limited regenerative braking (see [Regenerative Braking on page 463](#)). Always be prepared to use the brake pedal to adequately decelerate or stop.
- **Roll:** When close to, or at, a complete stop, CybertruckModel SModel XModel 3Model Y becomes free rolling like a vehicle in Neutral. Therefore, if stopped on a slope, CybertruckModel SModel XModel 3Model Y will roll downward. The brake does not engage, and the motor does not apply torque (until the accelerator pedal is pressed).
 - NOTE:** If you choose **Creep** or **Roll**, you can still use Vehicle Hold to apply the brakes. However, you will need to briefly press the brake pedal when the vehicle is stopped. See [Vehicle Hold on page 493](#).
 - NOTE:** When CybertruckModel SModel XModel 3Model Y is in Track Mode (see [Track Mode on page 502](#)), **Roll** is automatically enabled, regardless of your chosen setting. When no longer in Track Mode, CybertruckModel SModel XModel 3Model Y reverts to your chosen setting.

NOTE: Your preferred Stopping Mode setting does not sync to your driver profile.

- ⚠ **WARNING:** Press the brake pedal if CybertruckModel SModel XModel 3Model Y moves when unsafe to do so. It is your responsibility to stay alert and be in control of the vehicle at all times. Failure to do so can result in serious damage, injury, or death.
- ⚠ **WARNING:** Do not rely on regenerative braking and your chosen Stopping Mode to keep you and your vehicle safe. Various factors such as driving with a heavy vehicle load, on a steep hill, or on wet or icy roads affect deceleration rate and the distance at which CybertruckModel SModel XModel 3Model Y will come to a stop. Drive attentively and always stay prepared to use the brake pedal to stop as appropriate based on traffic and road conditions.
- ⚠ **WARNING:** Forward Collision Warning and Automatic Emergency Braking do not operate when driving at very low speeds (see [Collision Avoidance Assist on page 645](#)). Do not rely on these features to warn you, or to prevent or reduce the impact of a collision.

Stopping Mode

Regenerative braking decelerates CybertruckModel SModel XModel 3Model Y whenever you release the accelerator pedal when driving. You can choose what you want CybertruckModel SModel XModel 3Model Y to do once the driving speed has been reduced to a very low speed (almost at a stop) and both the accelerator pedal and brake pedal are released. While in Park, touch **Controls > Dynamics > Stopping Mode** and choose from these options:

- **Creep:** When close to, or at, a complete stop, the motor continues to apply torque, moving CybertruckModel SModel XModel 3Model Y slowly forward (in Drive) or backwards (in Reverse), similar to a conventional vehicle with an automatic transmission. In some situations, such as on a steep hill or driveway, you may need to press the accelerator pedal to continue moving or to prevent CybertruckModel SModel XModel 3Model Y from moving in the opposite direction.
 - ⚠ **WARNING:** Never rely on **Creep** to apply enough torque to prevent your vehicle from rolling down a hill. Always press the brake pedal to remain stopped or the accelerator pedal to proceed up the hill. Failure to do so can result in property damage and/or a collision.



- **Hold:** Maximizes range and reduces brake wear by continuing to provide regenerative braking at speeds lower than with the Creep and Roll settings. When CybertruckModel SModel XModel 3Model Y stops, the brakes are automatically applied without you having to put your foot on the brake pedal. Whether stopped on a flat surface or a hill, Vehicle Hold keeps the brake applied, provided your foot remains off the accelerator and brake pedals. See [Vehicle Hold on page 493](#).



WARNING: Never rely on **Hold** to adequately decelerate or fully stop your vehicle. Many factors can contribute to a longer stopping distance, including downward slopes, the low regenerative braking setting, and reduced or limited regenerative braking (see [Regenerative Braking on page 463](#)). Always be prepared to use the brake pedal to adequately decelerate or stop.

- **Roll:** When close to, or at, a complete stop, CybertruckModel SModel XModel 3Model Y becomes free rolling like a vehicle in Neutral. Therefore, if stopped on a slope, CybertruckModel SModel XModel 3Model Y will roll downward. The brake does not engage, and the motor does not apply torque (until the accelerator pedal is pressed).

NOTE: If you choose **Creep** or **Roll**, you can still use Vehicle Hold to apply the brakes. However, you will need to briefly press the brake pedal when the vehicle is stopped. See [Vehicle Hold on page 493](#).

NOTE: When CybertruckModel SModel XModel 3Model Y is in Track Mode (see [Track Mode on page 502](#)), **Roll** is automatically enabled, regardless of your chosen setting. When no longer in Track Mode, CybertruckModel SModel XModel 3Model Y reverts to your chosen setting.

NOTE: Your preferred Stopping Mode setting does not sync to your driver profile.



WARNING: Press the brake pedal if CybertruckModel SModel XModel 3Model Y moves when unsafe to do so. It is your responsibility to stay alert and be in control of the vehicle at all times. Failure to do so can result in serious damage, injury, or death.



WARNING: Do not rely on regenerative braking and your chosen Stopping Mode to keep you and your vehicle safe. Various factors such as driving with a heavy vehicle load, on a steep hill, or on wet or icy roads affect deceleration rate and the distance at which CybertruckModel SModel XModel 3Model Y will come to a stop. Drive attentively and always stay prepared to use the brake pedal to stop as appropriate based on traffic and road conditions.



WARNING: Forward Collision Warning and Automatic Emergency Braking do not operate when driving at very low speeds (see [Collision Avoidance Assist on page 645](#)). Do not rely on these features to warn you, or to prevent or reduce the impact of a collision.

Parking Brake

To engage the parking brake, touch **Controls > Safety > Parking Brake**. Follow the onscreen instructions. You can also engage the parking brake by pressing and holding the button on the end of the drive stalk while in Park. You can also engage the parking brake by pressing and holding the button on the end of the drive stalk while in Park.





Use the touchscreen to manually release the parking brake (which also shifts CybertruckModel SModel XModel 3Model Y into Neutral):

1. Touch **Controls > Safety**.
2. Press the brake pedal, then touch **Parking Brake**. If CybertruckModel SModel XModel 3Model Y was previously in Park, it shifts into Neutral.



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

USA:



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

Canada:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

USA:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

Canada:

NOTE: The parking brake operates on the rear wheels only, and is independent of the pedal-operated brake system.

CAUTION: In the unlikely event that CybertruckModel SModel XModel 3Model Y loses electrical power, you cannot access the touchscreen and are therefore unable to release the parking brake without first jump starting (see [Jump Starting on page 938](#)).

WARNING: In snowy or icy conditions the rear wheels may not have sufficient traction to prevent CybertruckModel SModel XModel 3Model Y from sliding down a slope, particularly if not using winter tires. Avoid parking on hills in snowy or icy conditions. You are always responsible for parking safely.


WARNING: Your CybertruckModel SModel XModel 3Model Y may display an alert if the road is too steep to safely park on, or if the parking brakes are not properly engaged. These alerts are for guidance purposes only and are not a substitute for the driver's judgment of safe parking conditions, including specific road or weather conditions. Do not depend on these alerts to determine whether or not it is safe to park at any location. You are always responsible for parking safely.

Brake Wear

CybertruckModel SModel XModel 3Model Y brake pads are equipped with wear indicators. A wear indicator is a thin metal strip attached to the brake pad that squeals as it rubs against the rotor when the pad wears down. This squealing sound indicates that the brake pads have reached the end of their service life and require replacement. To replace the brake pads, contact Tesla Service.



Brakes must be periodically inspected visually by removing the tire and wheel. For detailed specifications and service limits for rotors and brake pads, see [Subsystems on page 869](#). Additionally, Tesla recommends cleaning and lubricating the brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter months.

 **WARNING:** Neglecting to replace worn brake pads damages the braking system and can result in a braking hazard.



Air Suspension

NOTE: When Cybertruck Model S Model X Model 3 Model Y starts, you may hear the sound of the compressor as the air suspension system's reservoir fills with air.

Your Cybertruck Model S Model X Model 3 Model Y is equipped with Adaptive Air Suspension that offers superior ride quality and allows you to choose a softer or firmer ride based on your preference. When carrying loads, the system also maintains a level height between the front and rear. You can manually adjust the ride height to suit your circumstances (for example, you can raise Cybertruck Model S Model X Model 3 Model Y when you need extra ground clearance, such as when driving on a steep driveway or ramp, in deep snow, over large speed bumps, parking curbs, etc.).

If a fault is detected that reduces the performance of the adaptive air suspension system, a yellow indicator lights up on the instrument panel. If the problem persists, contact Tesla.



If a fault is detected that disables the adaptive air suspension system, a red indicator lights up on the instrument panel. Contact Tesla.



Adjusting Ride Height



CAUTION: Before adjusting the suspension height, ensure Cybertruck Model S Model X Model 3 Model Y is clear of all obstacles, above and below.

You can manually adjust the ride height by pressing the brake pedal and touching **Controls > Suspension** on the touchscreen. The ride height settings that are available depend on your driving speed and other conditions (for example, the suspension does not lower if a door is open). The touchscreen also displays the approximate ground clearance for each setting. Drag the slider to choose from these options:

- **Very High** - When set to **Very High**, the suspension automatically lowers to the default ride height*, which is **Standard or Medium or Low**, after driving approximately 100 feet (30 meters) or when driving speed reaches 15 mph (24 km/h). To maintain the Very High setting for an unlimited distance until your driving speed reaches the speed threshold, touch **Persist until 15 mph** in the setting for Very High.
- **High** - When set to **High**, the suspension automatically lowers to the default ride height*, which is **Standard or Medium or Low**, after driving approximately 100 feet (30 meters) or when driving speed reaches 35 mph (56 km/h). To maintain the **High** setting for an unlimited distance until your driving speed reaches the speed threshold, touch **Persist until 35 mph**.

NOTE: You can also raise the suspension to **High** by touching the **Raise Suspension** shortcut on the main Controls window.

- **Standard** - The **Standard** setting ensures optimum comfort and handling under all loading conditions.
- **Medium** - The **Medium** setting ensures optimum comfort and handling under all loading conditions. The suspension automatically lowers to **Low** when driving speed exceeds 55 mph (89 km/h).
- **Low** - Lowering the height can improve aerodynamics, make it easier to load or unload cargo and passengers, and improve handling.
- **Very Low** - This setting takes effect when you manually choose it or automatically at very high speeds. The suspension will revert to **Low** the default setting on your next drive, or when appropriate based on vehicle speed.

*If the **Default Ride Height to Low** setting is turned off, the ride height is adjusted between **Standard Medium** and **Low** to balance ride comfort with handling and range. To optimize handling and range, turn on the **Default Ride Height to Low** setting.



CAUTION: Avoid driving aggressively (hard accelerations, sharp turns, etc.) when the suspension is set to **High** or **Very High**. Doing so can cause vibration and increase the possibility of damage.



CAUTION: Acceleration may be reduced when the suspension is set to **High** or **Very High**.



Adaptive Suspension Damping

The settings associated with **Adaptive Suspension Damping** provide real-time adjustments to the suspension system to optimize both ride and handling. Choose from:

- **Comfort** - Provides a gentler ride for a relaxed driving experience.
- **Auto** - Adjusts to a wide range of roads and driving styles, providing a fluid yet well controlled ride.
- **Sport** - Provides a firmer, more controlled ride that increases driver engagement and connection to the road.
- **Advanced** - Can be used to fine tune the suspension by dragging individual sliders that adjust **Ride Comfort** and **Handling**.

Touch **Show Suspension Data** to display detailed information about the dampers for each wheel, including ride height, compression and rebound values, and body accelerations.

NOTE: When Adaptive Suspension Damping is set to **Comfort** or **Auto**, the suspension may raise to improve ride comfort on rough roads. (U.S. only) This feature depends on the availability of up-to-date map data that includes data indicating rough road sections.

Use Comfort Damping in Autopilot - By default, damping automatically sets to the Comfort setting when using Autopilot, and reverts back to your chosen setting when Autopilot is no longer in use. Turn this setting off to disable this feature.

NOTE: Settings for Adaptive Suspension Damping are disabled when Track Mode is engaged. Track Mode automatically optimizes adaptive damping settings to support aggressive driving on a closed circuit driving course (see [Track Mode on page 511](#)).

Real-time Visualization

The image of your CybertruckModel SModel XModel 3Model Y on the Suspension screen provides a real-time visualization of the status of the air suspension system. In addition to visually showing changes to the ride height, it displays Compression and Rebound lines that reflect how the suspension system is controlling the dampers for each wheel based on your chosen settings and changing road conditions. Both are controlled simultaneously. Touch **Show Suspension Data** to display detailed information about the dampers for each wheel, including ride height, compression and rebound values, and body accelerations.

NOTE: The instrument panel can also display a real-time visualization of how the suspension system is dynamically adjusting each wheel's damping to account for changing road conditions. To view, hold the respective steering wheelsteering yoke (or steering wheel) scroll button briefly until the available options are displayed. Roll the scroll button to highlight **Suspension**, then tap the scroll button.

Auto-Raising Locations

Whenever you raise the suspension to **High** or **Very High**, the location is automatically saved. By saving the location, you do not need to manually raise the suspension every time you arrive at a frequently-used location where you have previously raised the suspension. When you return to the saved location, CybertruckModel SModel XModel 3Model Y raises the suspension and the instrument panel displays a message indicating that the suspension is being raised.

When saving locations, CybertruckModel SModel XModel 3Model Y also saves the **Persist until XX mph** setting (if specified).

NOTE: When returning to a saved location and driving faster than the **High** and **Very High** suspension settings allow, the suspension does not raise until CybertruckModel SModel XModel 3Model Y slows down.

NOTE: After leaving a saved location, the suspension automatically lowers. However, it may not lower until CybertruckModel SModel XModel 3Model Y meets the speed and distance threshold at which the suspension lowers.

NOTE: If CybertruckModel SModel XModel 3Model Y reaches a saved location and the existing suspension setting is already higher than the level that has been saved for that location, the ride height is not adjusted.

To remove an auto-raising location

If you do not want the suspension to automatically raise at a location, touch to deselect **Always raise at this location** in the popup that appears when you arrive at a saved location. Or, when using the **Raise Suspension** shortcut on the main Controls window, touch to deselect **Location Saved**.



Self-Leveling

Cybertruck Model S Model X Model 3 Model Y equipped with air suspension automatically self-levels, even when power is off. To prevent damage when jacking or lifting the vehicle, you must activate **Jack Mode** to disable self-leveling (press the brake pedal and touch **Controls > Service > Jack Mode**). For more details, see [Jack Mode on page 800#unique_583 on page](#) .



Air Suspension

NOTE: When CybertruckModel SModel XModel 3Model Y starts, you may hear the sound of the compressor as the air suspension system's reservoir fills with air.

Air suspension offers a superior ride quality and when carrying loads, the system maintains a level height between the front and rear. You can manually adjust the ride height to suit your circumstances (for example, you can raise CybertruckModel SModel XModel 3Model Y when driving at low speeds when you need extra ground clearance, such as when driving on a steep driveway or ramp, in deep snow, over large speed bumps, parking curbs, etc.).



If a fault is detected that reduces the performance of the air suspension system, a yellow indicator lights up on the instrument panel. If the problem persists, contact Tesla.



If a fault is detected that disables the air suspension system, a red indicator lights up on the instrument panel. Contact Tesla.

Adjusting Ride Height

CAUTION: Before adjusting the suspension height, ensure CybertruckModel SModel XModel 3Model Y is clear of all obstacles, above and below.

You can manually adjust the ride height by pressing the brake pedal touching **Controls > Suspension** on the touchscreen. The ride height settings that are available depend on your driving speed and other conditions (for example, the suspension does not lower if a door is open). The touchscreen also displays the approximate ground clearance for each setting. Drag the slider to choose from these options:

- **Very High.** When set to **Very High**, the suspension automatically lowers to **High** after driving approximately 100 feet (30 meters) or when driving speed reaches 15 mph (24 km/h). To maintain the **Very High** setting for an unlimited distance until your driving speed reaches the speed threshold, touch **Keep until 15 mph**.
- **High.** When set to **High**, the suspension automatically lowers to **Standard** after driving approximately 100 feet (30 meters) or when driving speed reaches 35 mph (56 km/h). To maintain the **High** setting for an unlimited distance until your driving speed reaches the speed threshold, touch **Keep until 35 mph**.
- **Standard.** The **Standard** setting ensures optimum comfort and handling under all loading conditions.
- **Low.** Lowering the height can improve aerodynamics and make it easier to load or unload cargo and passengers.
- **Very Low.** This setting takes effect only when you manually choose it. The suspension reverts to the default setting on your next drive.

CAUTION: Avoid driving aggressively (hard accelerations, sharp turns, etc.) when the suspension is set to **High** or **Very High**. Doing so can cause vibration and increase the possibility of damage.

CAUTION: Acceleration may be reduced when the suspension is set to **High** or **Very High**.

Automatic Lowering

When driving CybertruckModel SModel XModel 3Model Y above typical driveway or parking lot speeds, the suspension automatically lowers ride height to improve aerodynamics and handling. For most average speed driving, the suspension is automatically set to **Standard**. As described above, when you make manual height adjustments, the suspension automatically lowers at increased driving speeds.

You can adjust the speed at which the suspension automatically transitions to the **Low** ride height by touching **Controls > Suspension > Adjust Speed** on the touchscreen, then moving the slider to the desired speed. You can also choose **Always** to maintain the lowered suspension at all speeds or **Never** to disable the suspension from automatically transitioning to **Low**.

NOTE: You can temporarily override the ride height by touching **Controls > Suspension**, and then manually choosing a ride height. Your suspension's automatic lowering setting is restored the next time you drive.



Auto-Raising Locations

Whenever you raise the suspension to **High** or **Very High**, the location is automatically saved. By saving the location, you do not need to manually raise the suspension every time you arrive at a frequently-used location where you have previously raised the suspension. When you return to the saved location, CybertruckModel SModel XModel 3Model Y raises the suspension and the instrument panel displays a message indicating that the suspension is being raised.

When saving locations, CybertruckModel SModel XModel 3Model Y also saves the **Keep until XX mph** setting (if specified).

NOTE: When returning to a saved location and driving faster than the **High** and **Very High** suspension settings allow, the suspension does not raise until CybertruckModel SModel XModel 3Model Y slows down.

NOTE: After leaving a saved location, the suspension automatically lowers. However, it may not lower until CybertruckModel SModel XModel 3Model Y meets the speed and distance threshold at which the suspension lowers.

NOTE: If CybertruckModel SModel XModel 3Model Y reaches a saved location and the existing suspension setting is already higher than the level that has been saved for that location, the ride height is not adjusted.

To remove an auto-raising location

If you do not want the suspension to automatically raise at a location, touch to deselect **Always Auto-Raise** at This Location in the popup that appears when you arrive at a saved location.

Self-Leveling

CybertruckModel SModel XModel 3Model Y equipped with air suspension automatically self-levels, even when power is off. To prevent damage when jacking or lifting the vehicle, you must activate **Jack Mode** to disable self-leveling (press the brake pedal and touch **Controls > Service > Jack Mode**). For more details, see [Jack Mode on page 800](#).



Air Suspension

NOTE: When CybertruckModel SModel XModel 3Model Y starts, you may hear the sound of the compressor as the air suspension system's reservoir fills with air.

Air suspension offers a superior ride quality and when carrying loads, the system maintains a level height between the front and rear. You can manually adjust the ride height to suit your circumstances (for example, you can raise CybertruckModel SModel XModel 3Model Y when driving at low speeds when you need extra ground clearance, such as when driving on a steep driveway or ramp, in deep snow, over large speed bumps, parking curbs, etc.).



If a fault is detected that reduces the performance of the air suspension system, a yellow indicator lights up on the instrument panel. If the problem persists, contact Tesla.



If a fault is detected that disables the air suspension system, a red indicator lights up on the instrument panel. Contact Tesla.

Adjusting Ride Height

CAUTION: Before adjusting the suspension height, ensure CybertruckModel SModel XModel 3Model Y is clear of all obstacles, above and below.

You can manually adjust the ride height by pressing the brake pedal touching **Controls > Suspension** on the touchscreen. The ride height settings that are available depend on your driving speed and other conditions (for example, the suspension does not lower if a door is open). The touchscreen also displays the approximate ground clearance for each setting. Drag the slider to choose from these options:

- **Very High.** When set to **Very High**, the suspension automatically lowers to **High** when driving speed reaches 22 mph (35 km/h).
- **High.** When set to **High**, the suspension automatically lowers to **Standard** when driving speed reaches 34 mph (55 km/h).
- **Standard.** The **Standard** setting ensures optimum comfort and handling under all loading conditions.
- **Low.** Lowering the height can improve aerodynamics and make it easier to load or unload cargo and passengers.

CAUTION: Avoid driving aggressively (hard accelerations, sharp turns, etc.) when the suspension is set to **High** or **Very High**. Doing so can cause vibration and increase the possibility of damage.

CAUTION: Acceleration may be reduced when the suspension is set to **High** or **Very High**.

Auto-Raising Suspension

Auto-raising suspension saves you from manually having to raise the suspension every time you arrive at a frequently-used location where you have previously raised the suspension. The location is automatically saved whenever you raise the suspension to **High** or **Very High**. When you return to the saved location, CybertruckModel SModel XModel 3Model Y raises the suspension and the instrument panel displays a message indicating that the suspension is being raised.

After leaving a saved location, the suspension automatically lowers. However, it may not lower until CybertruckModel SModel XModel 3Model Y meets the speed threshold at which the suspension lowers.

NOTE: When returning to a saved location and driving faster than the **High** and **Very High** suspension settings allow, the suspension does not raise until CybertruckModel SModel XModel 3Model Y slows down.

NOTE: If CybertruckModel SModel XModel 3Model Y reaches a saved location and the existing suspension setting is already higher than the level that has been saved for that location, the ride height is not adjusted.



To remove an auto-raising location

If you do not want the suspension to automatically raise at a location, touch the **X** in the auto-raising status message that displays at a saved location. By doing so, the suspension does not automatically raise at the location.

Self-Leveling

Cybertruck Model S Model X Model 3 Model Y equipped with air suspension automatically self-levels, even when power is off. To prevent damage when jacking or lifting the vehicle, you must activate **Jack Mode** to disable self-leveling (press the brake pedal and touch **Controls > Service > Jack Mode**). For more details, see [Jack Mode on page 800](#).



Cruise Control

Cruise control makes it easy to maintain a consistent driving speed. Cruise control is primarily intended for driving on dry, straight roads, such as highways. It should not be used on city streets and in heavy traffic.

Operating Cruise Control

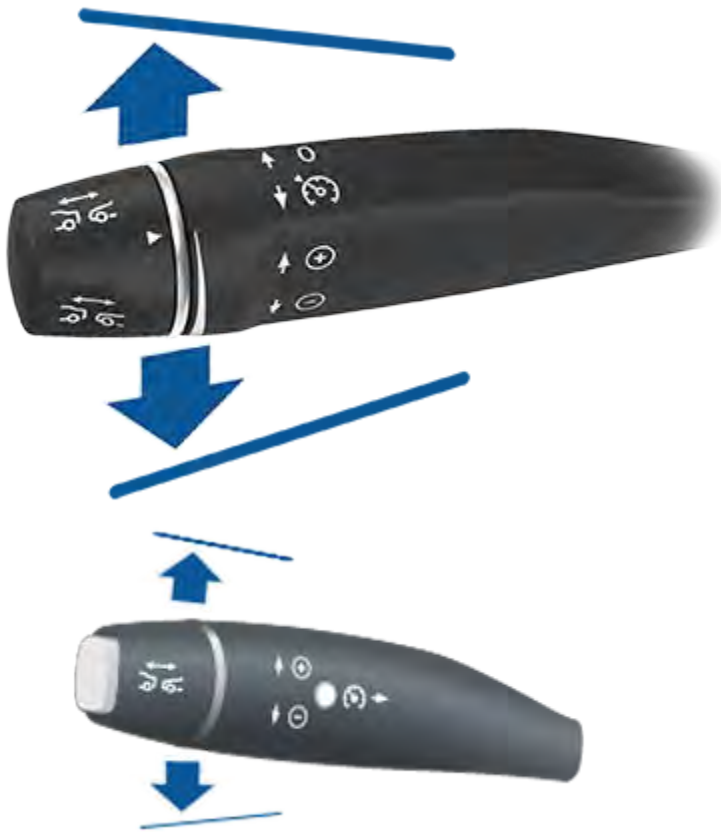
WARNING: Do not use cruise control on winding or slippery road surfaces, or when traffic conditions make it unsafe to drive at a consistent speed.

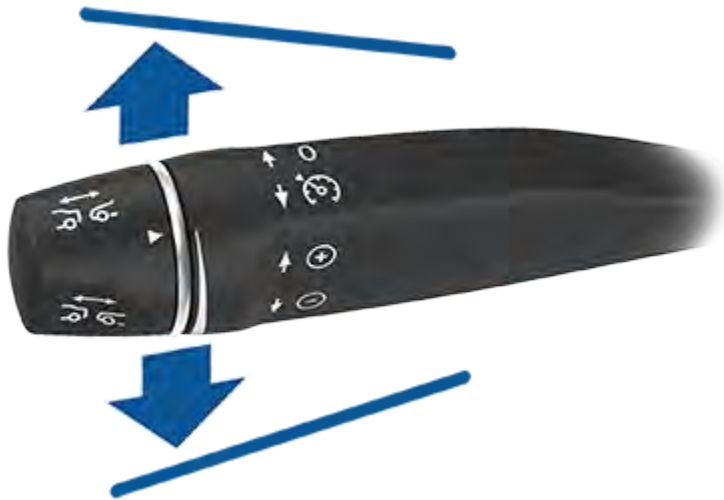
1. If there is a button on the end of your cruise stalk, press the button to turn the cruise control system on or off. An orange light is illuminated if the system is on.

2. Accelerate manually until you reach your desired cruising speed.

NOTE: Cruise control will not activate below 18 mph (29 km/h).

3. Move the cruise stalk up or down, then release.





1. Accelerate manually until you reach your desired cruising speed.
NOTE: Cruise control will not activate below 18 mph (29 km/h).
2. Move the drive stalk fully down then release.



Cruise control is now active.



The instrument cluster touchscreen displays a gray speedometer icon to show your set speed.



The instrument panel displays the **CRUISE** message above the speedometer and an arrow displays on the speedometer to show your set speed.

You can manually accelerate past the set speed at any time when cruise control is active. However, when you release the accelerator, Cybertruck Model S Model X Model 3 Model Y slows down to the set speed.

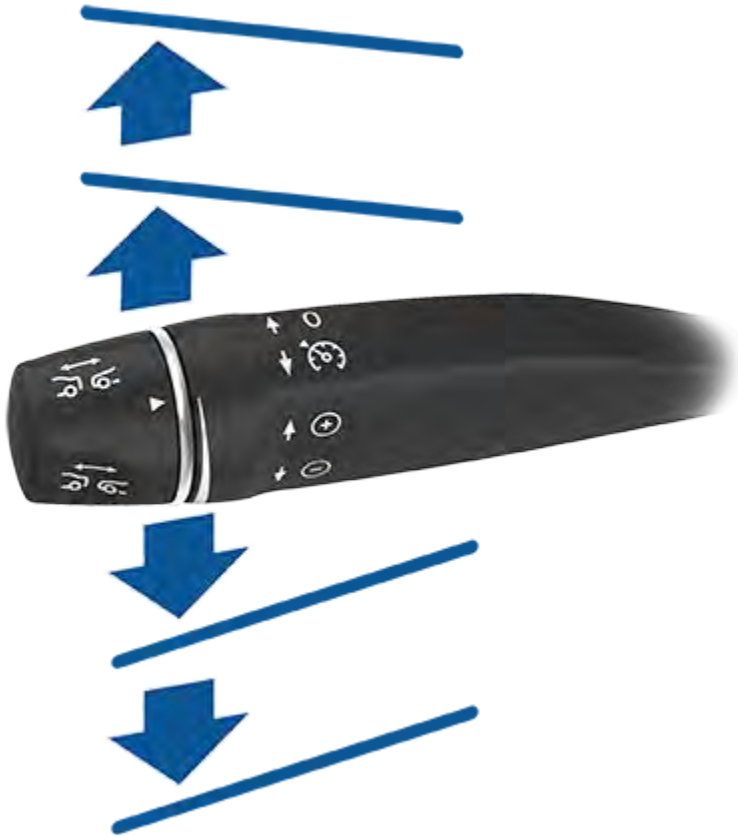


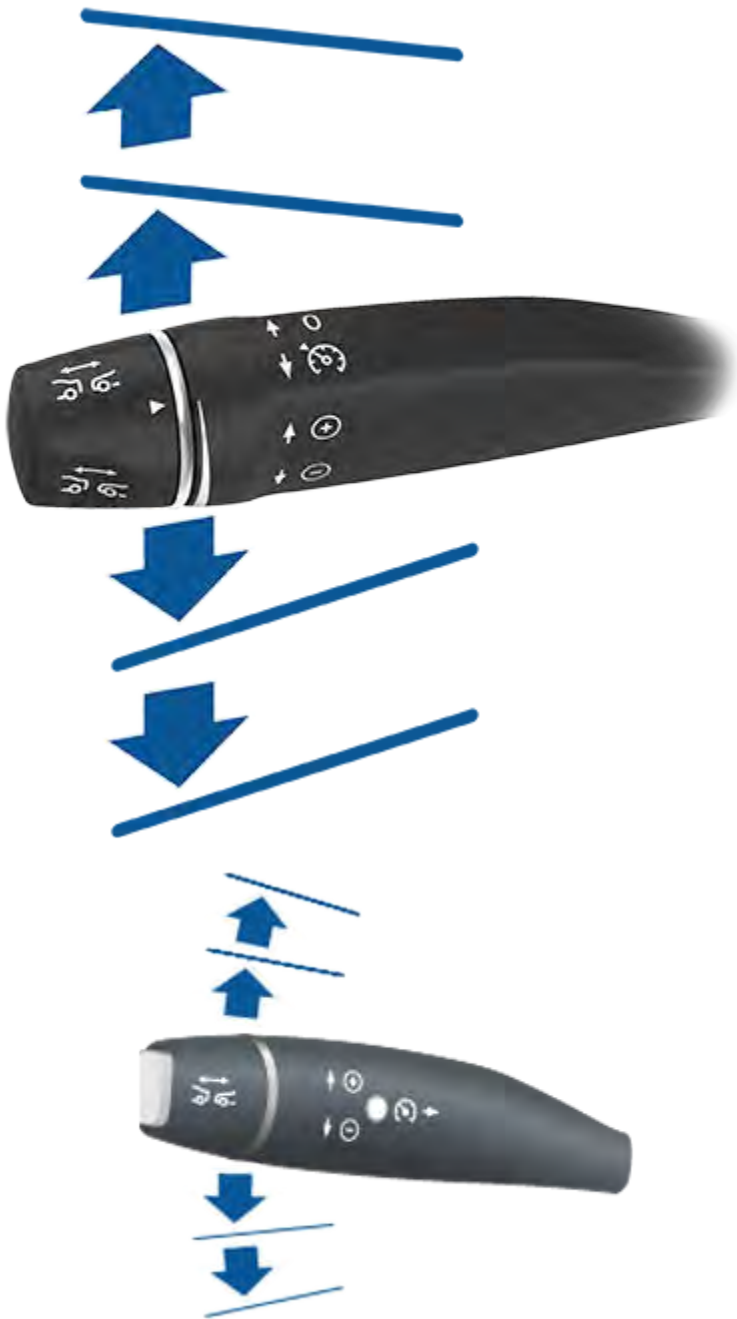
WARNING: Driving downhill can increase driving speed, causing Cybertruck Model S Model X Model 3 Model Y to exceed your cruising speed.

Changing the Cruising Speed

Move the cruise stalk up (increase) or down (decrease) until your desired cruising speed is reached.

- Move the cruise stalk up or down to the first position and release to increase/decrease the set speed by 1 mph.
- Move the cruise stalk up/down to the second position and release to increase/decrease the set speed by 5 mph.
- Hold the cruise stalk up or down to increase/decrease the cruising speed and set speed simultaneously.





NOTE: It may take a few seconds for Cybertruck Model S Model X Model 3 Model Y to reach the new set speed.

Changing the Cruising Speed

To change the set speed, roll the right scroll wheel up (to increase) or down (to decrease) until your desired set speed is displayed. Slowly rolling the scroll wheel changes the set speed in 1 mph (1 km/h) increments and quickly rolling the scroll wheel changes the set speed to the closest 5 mph (5 km/h) increment.



You can also use the touchscreen to change the set speed by touching the plus (+) or minus (-) next to the displayed set speed. A quick tap changes the set speed by 1 mph (1 km/h) and a press and hold changes the set speed to the closest 5 mph (5 km/h) increment. To increase/decrease to the next increment, you must release the plus (+) or minus (-) then press it again.

NOTE: It may take a few seconds for CybertruckModel SModel XModel 3Model Y to reach the new set speed.

Canceling Cruise Control

To cancel cruise control:

- Press the brake pedal.
- Shift the drive stalk up.

NOTE: When cruise control cancels, CybertruckModel SModel XModel 3Model Y does not coast. Instead, regenerative braking slows down CybertruckModel SModel XModel 3Model Y in the same way as when you move your foot off the accelerator when driving without cruise control (see [Regenerative Braking on page 463](#)).

Canceling and Resuming

If equipped, press the button on the end of the cruise stalk to turn the cruise control system off (which will cancel cruise control and clear the set speed).

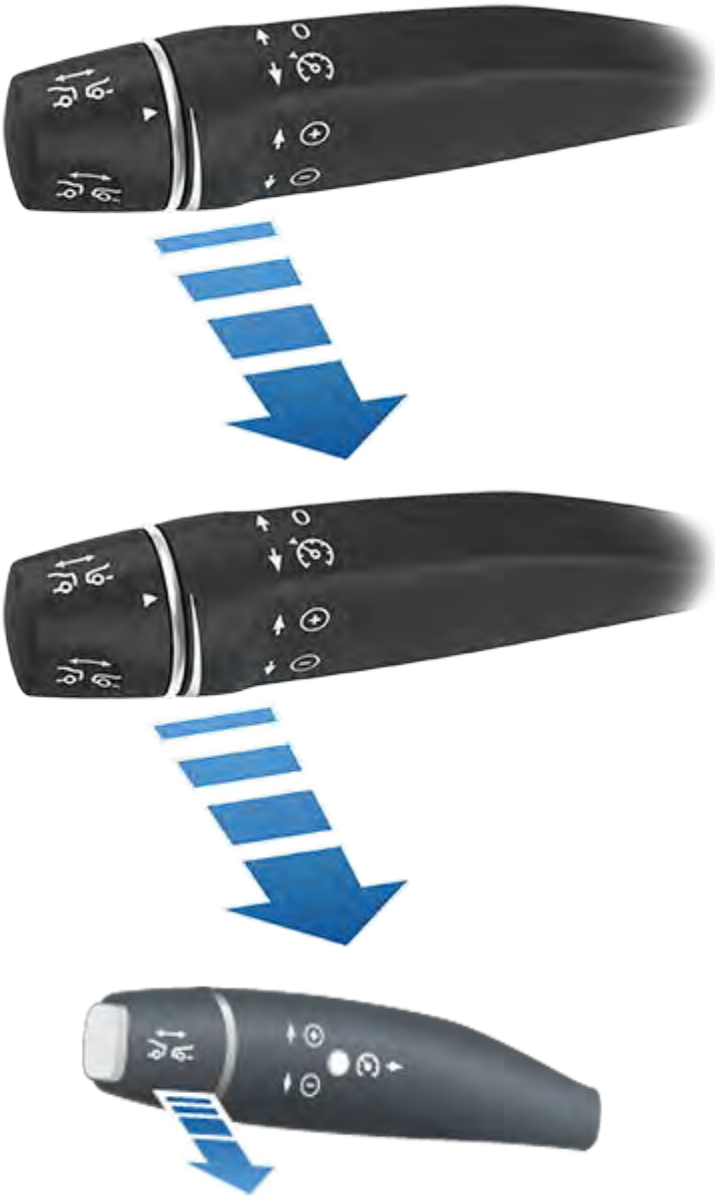
You can cancel cruise control if you do any of the following:

- Press the brake pedal.
- Push the cruise stalk away from you.

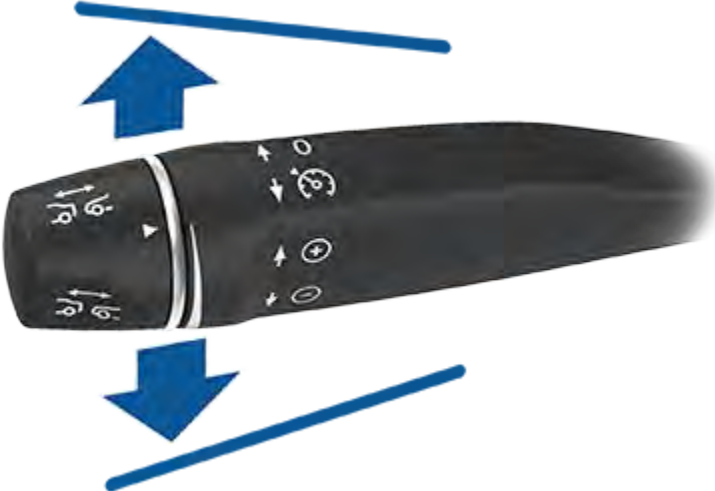
NOTE: Canceling cruise control does not clear the set speed until CybertruckModel SModel XModel 3Model Y powers off.

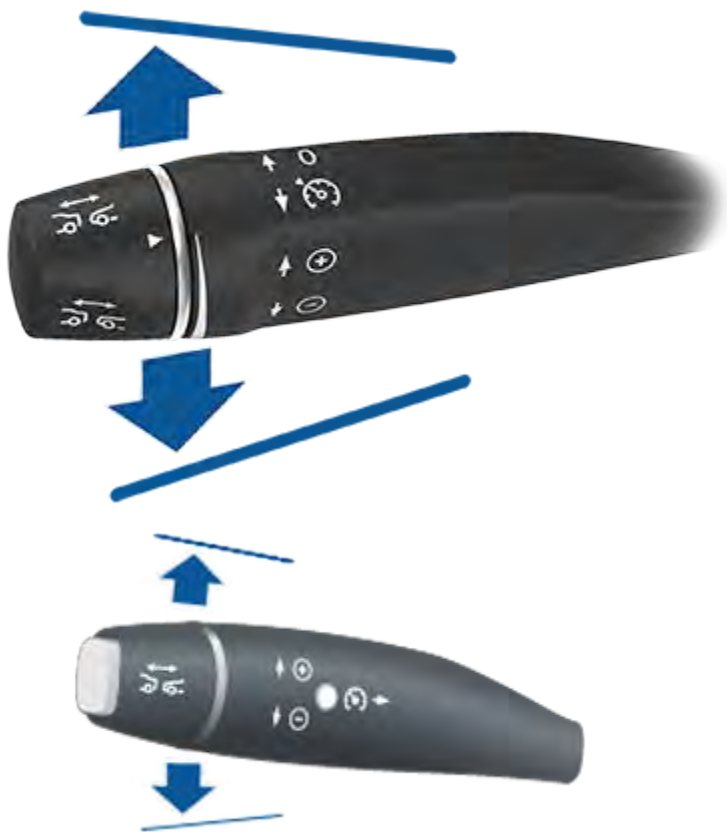
NOTE: When cruise control cancels, CybertruckModel SModel XModel 3Model Y does not coast. Instead, regenerative braking slows down CybertruckModel SModel XModel 3Model Y in the same way as when you move your foot off the accelerator when driving without cruise control (see [Regenerative Braking on page 463](#)).

To resume cruising at the previous set speed, briefly pull the cruise stalk toward you. Cruise control resumes, provided your driving speed is over 18 mph (29 km/h).



To resume cruising at the current driving speed, move the cruise stalk up or down, then release.







Park Assist

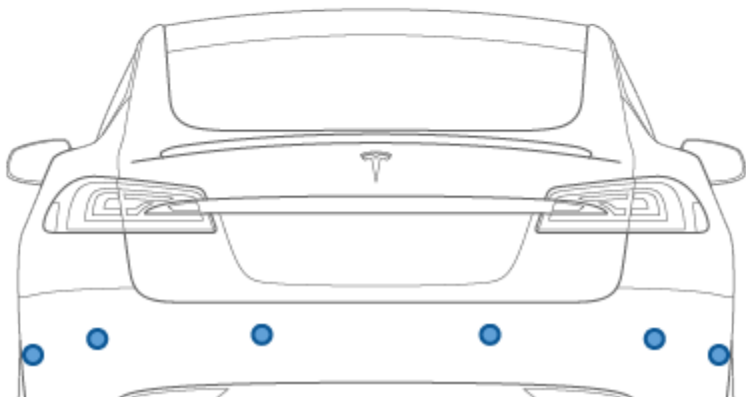
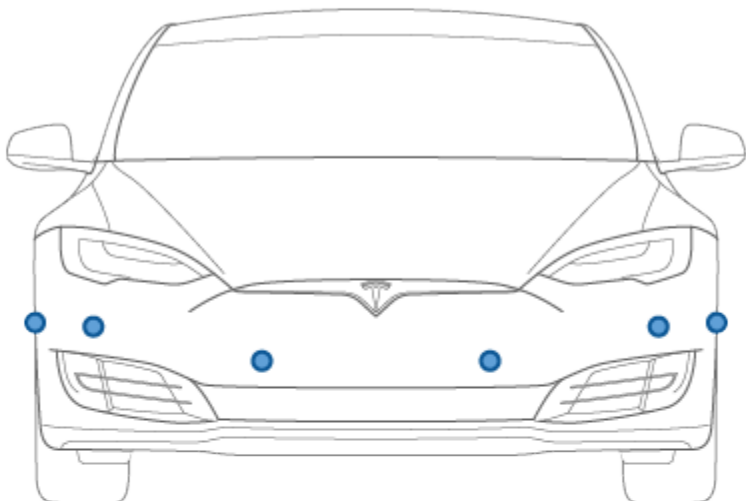
CybertruckModel SModel XModel 3Model Y is designed to detect the presence of objects. When driving slowly (for example, when parking), the vehicle alerts you if an object is detected in close proximity of your CybertruckModel SModel XModel 3Model Y. The vehicle alerts you when objects are detected in front of CybertruckModel SModel XModel 3Model Y when you are in Drive, and behind CybertruckModel SModel XModel 3Model Y when you are in Reverse.

⚠ WARNING: You may not be alerted if CybertruckModel SModel XModel 3Model Y rolls freely in the opposite direction (for example, Park Assist does not display an alert if CybertruckModel SModel XModel 3Model Y rolls backwards down a hill while in Drive).

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with the parking sensors.

⚠ WARNING: The Park Assist images provided below are representative only. The exact number and location of sensors may vary depending on the date your CybertruckModel SModel XModel 3Model Y was manufactured.

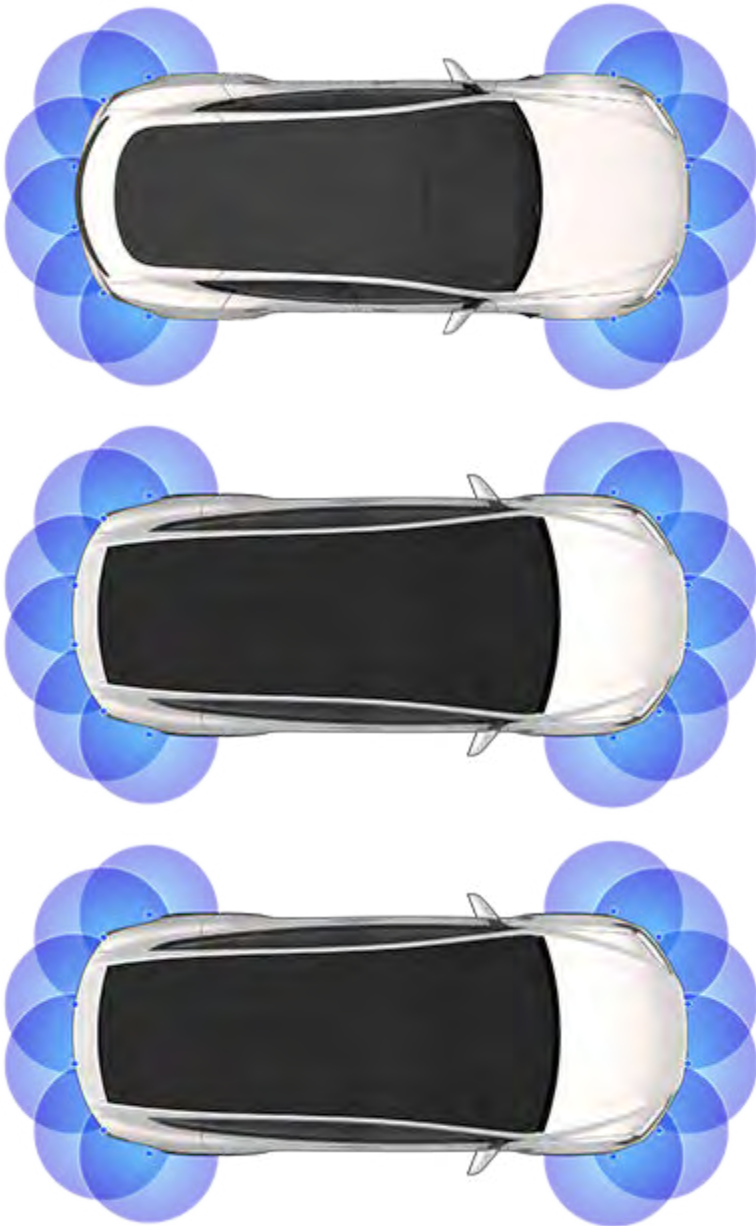












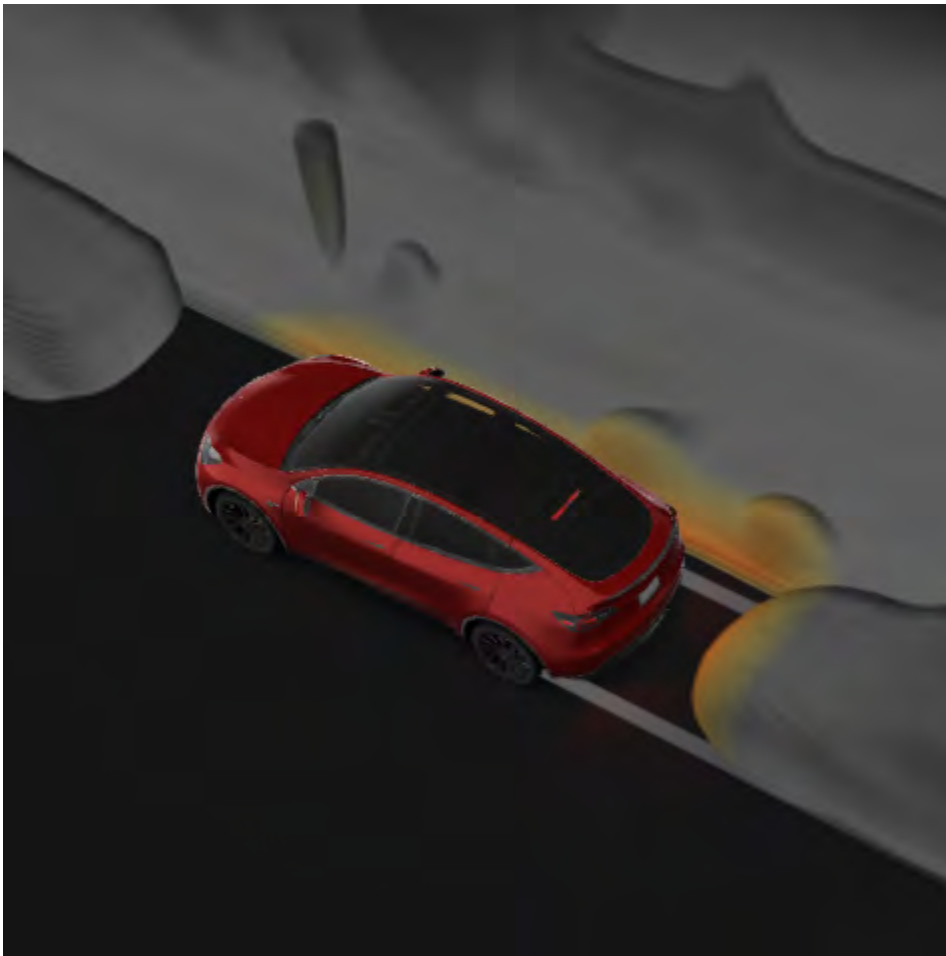
NOTE: Park Assist may be disabled when a bicycle is detected or CybertruckModel SModel XModel 3Model Y is in trailer mode.

⚠ WARNING: Never depend on Park Assist to inform you if an area you are approaching is free of objects and/or people. Several external factors can reduce the performance of Park Assist, causing either no readings or false readings (see [Limitations and False Warnings on page 492](#)). Therefore, depending on Park Assist to determine if CybertruckModel SModel XModel 3Model Y is approaching an obstruction can result in damage to the vehicle and/or objects, and can potentially cause serious injury. Always inspect the area with your own eyes. When reversing, perform shoulder checks and use all mirrors. Park assist does not detect children, pedestrians, bicyclists, animals, or objects that are moving, protruding, located too far above or below the sensors or cameras, or too close or too far from the sensors or cameras. Park Assist is for guidance purposes only and is not intended to replace your own direct visual checks. It is not a substitute for careful driving.

Tesla Vision Park Assist

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Tesla Vision Park Assist.

Your vehicle uses the cameras mounted on the front, rear, and sides of CybertruckModel SModel XModel 3Model Y to create a high-fidelity reproduction of surrounding objects on the instrument clustertouchscreen.



The colors on the visualization correspond to the distance between CybertruckModel SModel XModel 3Model Y and the object shown. Red is closer to CybertruckModel SModel XModel 3Model Y, and yellow is farther from CybertruckModel SModel XModel 3Model Y.

You can enable or disable Tesla Vision Park Assist by touching **Controls** > **Autopilot**, scrolling to **Park Assist**, and toggling between **Standard** and **Tesla Vision**.

Visual and Audio Feedback

When you shift to Reverse, the Park Assist view displays on the left side of the instrument panel touchscreen, showing objects that are in close proximity to the front and rear of CybertruckModel SModel XModel 3Model Y. This view closes when you shift into Drive unless an object is detected close to the front of CybertruckModel SModel XModel 3Model Y, in which case the Park Assist view closes automatically when you start driving faster than the speed at which Park Assist operates. When reversing, visual feedback also displays on the touchscreen (see [Rear Facing Camera\(s\) on page 523](#)). You can manually close the park assist view on the touchscreen by touching the **X**.

When driving at low speeds with the Camera app displayed on the touchscreen, you can switch to the Park Assist view by touching the button located in the upper left corner of the Camera app screen. This is useful if you need assistance with parallel parking.

If chimes are turned on (see [Controlling Audible Feedback on page 492](#)), an audible beep sounds as you approach an object. You can temporarily mute the chime by touching the speaker icon on the bottom corner of the Park Assist view.

NOTE: If Park Assist is unable to provide feedback, the instrument panel touchscreen displays an alert message.

! **CAUTION:** Keep sensors and cameras clean from dirt, debris, snow, and ice. Avoid using a high pressure power washer on the sensors and cameras, and do not clean a sensor or camera with a sharp or abrasive object that can scratch or damage its surface.

! **CAUTION:** Do not install accessories or stickers on or near the sensors or cameras.



Controlling Audible Feedback

You can use Park Assist with or without audible feedback. To turn chimes on or off, touch **Controls > Safety > Park Assist Chimes**.

To mute the chimes temporarily, touch the speaker icon in the bottom corner of the Park Assist view. The chimes are muted until you shift or drive over the speed at which Park Assist operates.

Limitations and False Warnings

Park Assist may not function correctly in these situations:

- One or more of the sensors or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- The object is located below approximately 8 inches (20 cm) (such as a curb or low barrier).



CAUTION: Shorter objects that are detected (such as curbs or low barriers) can move into a blind spot. CybertruckModel SModel XModel 3Model Y cannot alert you about an object while it is in a blind spot.

- Weather conditions (heavy rain, snow, or fog).
- The object is thin (such as a sign post).
- Park Assist's operating range has been exceeded.
- The object is sound-absorbing or soft (such as powder snow).
- The object is sloped (such as a sloped embankment).
- CybertruckModel SModel XModel 3Model Y has been parked in, or being driven in, extremely hot or cold temperatures.
- The sensors are affected by other electrical equipment or devices that generate ultrasonic waves.
- You are driving in a location where the sensors' waves are deflected away from the vehicle (such as driving next to a wall or pillar).
- The object is located too close to the bumper.
- A bumper is misaligned or damaged.
- An object that is mounted to CybertruckModel SModel XModel 3Model Y is interfering with and/or obstructing Park Assist (such as a bike rack or bumper sticker).
- CybertruckModel SModel XModel 3Model Y rolls freely in the opposite direction you selected (for example, Park Assist does not display an alert if CybertruckModel SModel XModel 3Model Y rolls backwards down a hill while in Drive).

Other Parking Aids

In addition to Park Assist, when shifted into Reverse, the backup camera displays a view of the area behind CybertruckModel SModel XModel 3Model Y (see [Rear Facing Camera\(s\) on page 523](#)).



Vehicle Hold

When CybertruckModel SModel XModel 3Model Y is stopped, Vehicle Hold can continue to apply the brakes even after you remove your foot from the brake pedal.

Vehicle Hold will activate:

Vehicle Hold will activate:

- **Hold:** Vehicle Hold is automatically enabled any time the vehicle comes to a complete stop.
- **Hold:** Vehicle Hold is automatically enabled any time the vehicle comes to a complete stop.
- **Creep** or **Roll:** Vehicle Hold is enabled automatically anytime the vehicle is at a standstill and the brake is pressed to the floor (**Roll** is the default setting on your vehicle).

- **Hold:** Vehicle Hold is automatically enabled any time the vehicle comes to a complete stop.
- **Creep** or **Roll:** Vehicle Hold is enabled automatically anytime the vehicle is at a standstill and the brake is pressed to the floor.

When the vehicle's stopping mode is set to **Hold**, Vehicle Hold is automatically enabled any time the vehicle comes to a complete stop.



This indicator displays on the instrument panel touchscreen whenever Vehicle Hold is actively braking CybertruckModel SModel XModel 3Model Y.

To disengage Vehicle Hold, press the accelerator pedal or press and release the brake pedal.

NOTE: Shifting into Neutral also disengages Vehicle Hold.

NOTE: After actively braking CybertruckModel SModel XModel 3Model Y for approximately ten minutes, CybertruckModel SModel XModel 3Model Y shifts into Park and Vehicle Hold cancels. CybertruckModel SModel XModel 3Model Y also shifts into Park if it detects that the driver has left the vehicle.



Vehicle Hold

When CybertruckModel SModel XModel 3Model Y is stopped, Vehicle Hold can continue to apply the brakes even after you remove your foot from the brake pedal.

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When the vehicle's stopping mode is set to **Hold**, Vehicle Hold is automatically enabled any time the vehicle comes to a complete stop.



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To disengage Vehicle Hold, press the accelerator pedal or press and release the brake pedal.

NOTE: Shifting into Neutral also disengages Vehicle Hold.

NOTE: After actively braking CybertruckModel SModel XModel 3Model Y for approximately ten minutes, CybertruckModel SModel XModel 3Model Y shifts into Park and Vehicle Hold cancels. CybertruckModel SModel XModel 3Model Y also shifts into Park if it detects that the driver has left the vehicle.



Hill Start Assist

Hill Start Assist automatically engages the brakes for approximately one second when on a hill. This prevents CybertruckModel SModel XModel 3Model Y from rolling during the time it takes for you to move your foot from the brake pedal to the accelerator pedal. Hill Start Assist engages the brakes only if CybertruckModel SModel XModel 3Model Y is in Drive and facing uphill, or in Reverse and facing downhill.



WARNING: After approximately one second, Hill Start Assist no longer brakes your vehicle and it could roll. Therefore, quickly move your foot from the brake pedal to the accelerator pedal. Never rely on Hill Start Assist to prevent CybertruckModel SModel XModel 3Model Y from rolling for more than one second. Failure to do so can result in a collision.



Traction Control

How It Works

The traction control system constantly monitors the speed of the front and rear wheels. If CybertruckModel SModel XModel 3Model Y experiences a loss of traction, the system minimizes wheel spin by controlling brake pressure and motor power. By default, the traction control system is on. Under normal conditions, it should remain on to ensure maximum safety.



This yellow indicator flashes on the instrument panel touchscreen whenever the traction control system is actively controlling brake pressure and motor power to minimize wheel spin. If the indicator stays on, a fault is detected with the traction control system. Contact Tesla Service.

⚠ WARNING: If the above indicator remains illuminated in situations in which you have not disabled the traction control system (described next), the traction control system may not be operating correctly. Contact Tesla Service immediately.

⚠ WARNING: Traction control cannot prevent collisions caused by driving dangerously or turning too sharply at high speeds.

Disabling Traction Control

Under normal conditions, the traction control system should remain enabled. Disable it only in circumstances where you deliberately want the wheels to spin, such as:

- Starting on a loose surface, such as gravel or snow.
- Driving in deep snow, sand or mud.
- Rocking out of a hole or deep rut.

To allow the wheels to spin, touch **Controls > Pedals & Steering > Dynamics > Slip Start**.



The instrument panel touchscreen displays an alert message when traction control is turned off.

Although the traction control system automatically reactivates the next time you start CybertruckModel SModel XModel 3Model Y, it is strongly recommended that you enable it immediately after the circumstances that required you to disable it have passed.

NOTE: Traction Control can not be disabled when you are actively using cruise control.

Allowing Wheel Slip

To allow the wheels to spin at a limited speed, you can enable Slip Start. Slip Start can be enabled only when CybertruckModel SModel XModel 3Model Y is moving 30 mph (48 km/h) or slower. Slip Start automatically disables when the speed exceeds 50 mph (80 km/h). Slip Start can be enabled at any speed, however it is less effective at higher speeds.

Under normal conditions, Slip Start should not be enabled. Enable it only in circumstances where you deliberately want the wheels to spin, such as:

- Starting on a loose surface, such as gravel or snow.
- Driving in deep snow, sand or mud.
- Rocking out of a hole or deep rut.

To allow the wheels to spin, touch **Controls > Pedals & Steering > Dynamics > Slip Start**.



The instrument panel touchscreen displays an alert message when Slip Start is enabled.

Although Slip Start is automatically disabled the next time you start Cybertruck Model S Model X Model 3 Model Y, it is strongly recommended that you disable it immediately after the circumstances that required you to enable it have passed.

NOTE: Slip Start can not be enabled when you are actively using cruise control.

Disabling Traction Control

Under normal conditions, the traction control system should remain on. Turn it off only in circumstances where you deliberately want the wheels to spin, such as:

- Starting on a loose surface, such as gravel or snow.
- Driving in deep snow, sand or mud.
- Rocking out of a hole or deep rut.
- Driving off-road.

On Rear-Wheel Drive vehicles, turn off traction control and allow the wheels to spin by touching **Controls > Dynamics > Slip Start**.

On All-Wheel Drive vehicles, you can choose one of these options, depending on the circumstances:

- **Slip Start** is designed to make it easier to dislodge Model Y when stuck in mud, snow, ice, etc. Turning on Slip Start allows the wheels to spin, making it possible to rock Model Y out of a situation in which the wheels are stuck.
- **Off-Road Assist** is designed to provide overall improvements when driving off-road. In addition to allowing the wheels to spin, Off-Road Assist balances the torque between the front and rear motors to optimize traction. Off-Road Assist improves traction on rough and soft surfaces where one side of the vehicle may lose traction while the other side still has traction. When Off-Road Assist is on, the accelerator pedal provides more gradual torque, which is useful for crawling at low speeds (for example, over rocky surfaces). When enabled, **OFF-ROAD** displays on the touchscreen above the driving speed.

After the circumstances that required you to turn on Slip Start or Off-Road Assist have passed, it is strongly recommended that you turn the setting off to re-enable traction control. If you leave these settings on, Traction Control automatically re-enables on your next drive.



When you turn on Slip Start or Off-Road Assist, the touchscreen displays an indicator light to indicate that the traction control system is no longer preventing wheel slip.

NOTE: Although you can use Slip Start and Off-Road Assist at any speed, it is less effective at higher speeds.

NOTE: Slip Start and Off-Road Assist are not available when you are actively using Autopilot.

NOTE: Engaging cruise control when Slip Start or Off-Road Assist is on causes the feature to turn off and traction control to be re-enabled.

NOTE: Automatic Emergency Braking and Lane Departure Avoidance do not operate when Off-Road Assist is turned on.

Acceleration Modes

Touch **Controls > Dynamics > Acceleration** to adjust the amount of acceleration you experience when driving Cybertruck Model S Model X Model 3 Model Y:

- **Chill:** Limits acceleration for a smooth and gentle ride.

NOTE: When **Chill** is selected, **Chill** displays on the touchscreen above the driving speed.



- **Standard:** (*Non-Performance vehicles*)(*Non-Performance vehicles*) Provides the normal level of acceleration.
NOTE: If equipped with the Acceleration Upgrade package, the modes of acceleration are **Chill** and **Sport**.
NOTE: If equipped with the Acceleration Upgrade package, the modes of acceleration are **Chill** and **Sport**.
- **Sport:** (*Performance vehicles/Acceleration Upgrade package*) Provides the normal level of acceleration.
- **Sport:** (*Performance vehicles/Acceleration Upgrade package*) Provides the normal level of acceleration.
- **Insane:** (*Performance vehicles*) Provides the maximum level of acceleration immediately available.
NOTE: Using the increased torque and power available in **Insane** can reduce range and efficiency.
NOTE: **Insane** strives to keep the Battery within an optimal temperature range. In addition to heating the Battery, these settings also cool the Battery when necessary (for example, while driving at high speeds, during rapid acceleration, driving for long periods, etc.).

You can improve the efficiency of the cabin heating by reducing your selected acceleration mode. This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.

You can improve the efficiency of the cabin heating by reducing your selected acceleration mode. This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.

If your vehicle is equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**), you can improve the efficiency of the cabin heating by reducing your selected acceleration mode. This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.



Acceleration Modes

The acceleration settings available on your Cybertruck Model S Model X Model 3 Model Y vary depending on date of manufacture and options chosen at time of purchase:

- **Chill:** limits acceleration for a smooth and gentle ride (available on all vehicles equipped with Autopilot hardware).
- **Standard:** provides the normal level of acceleration (available on non-Performance All-Wheel Drive vehicles and Rear Wheel Drive Model S vehicles equipped with Autopilot hardware).
- **Sport:** provides the normal level of acceleration (available on Performance All-Wheel Drive vehicles).
- **Insane:** increases peak torque by approximately 30 percent (available on Performance All-Wheel Drive vehicles not equipped with the Ludicrous upgrade).
- **Ludicrous:** increases peak torque by approximately 60 percent (available on Performance All-Wheel Drive vehicles equipped with the Ludicrous upgrade).
- **Insane+:** increases peak torque by approximately 30 percent (available on Performance All-Wheel Drive vehicles not equipped with the Ludicrous upgrade) while also heating up the Battery to its ideal operating temperature to ensure access to 100% of available power. Before choosing this setting, read about [Using Insane+ or Ludicrous+ on page 499](#).
- **Ludicrous+:** increases peak torque by approximately 60 percent (available on Performance All-Wheel Drive vehicles equipped with the Ludicrous upgrade) while also immediately heating up the Battery to its ideal operating temperature to ensure access to 100% of available power. Before choosing this setting, read about [Using Insane+ or Ludicrous+ on page 499](#).

NOTE: Although Chill does not directly improve driving range, using the increased torque and power available in Insane or Ludicrous mode can reduce range and efficiency.

NOTE: When Chill is selected, Chill displays on the instrument panel touchscreen above the driving speed.

In addition, a Performance All-Wheel Drive Cybertruck Model S Model X Model 3 Model Y also features Launch Mode to provide optimum acceleration on surfaces with good traction. For the specific driving instructions required to use Launch Mode, see [Launch Mode on page 500](#).

To choose an acceleration mode, touch **Controls > Pedals & Steering > Acceleration**.

Using Insane+ or Ludicrous+

If you choose Insane or Ludicrous, additional power is available immediately. However, to achieve the absolute maximum power (designed for short term use), you can choose **Insane+** or **Ludicrous+** to heat the Battery to its ideal operating temperature. This ensure access to 100% of available power.

While the battery is being heated, the touchscreen displays a status message providing you with an approximate wait time, and letting you know when the additional power is available. In addition to heating the Battery, **Insane+** and **Ludicrous+** modes strive to keep the Battery within an optimal temperature range. Therefore, under aggressive driving scenarios, you may also see the "Cooling" status for several minutes until temperatures fall. Cybertruck Model S Model X Model 3 Model Y stays in the chosen mode for three hours, even if you leave the vehicle. After three hours, the feature times out.

NOTE: Insane+ and Ludicrous+ are designed to achieve maximum performance for short term acceleration. These settings are not intended for daily driving. The tradeoff for the additional power boost is extra energy consumption and earlier power fade on long drives. The Insane or Ludicrous acceleration settings provide a significant increase in performance even without choosing the Insane+ or Ludicrous+ setting to achieve maximum Battery power. In fact, in normal driving situations, the additional power that can be achieved using Insane+ and Ludicrous+ may be unnoticeable.

NOTE: To support Insane+ or Ludicrous+, the charge level must be 20% or higher. You cannot initiate these settings if the charge level is less than 20%. In addition, these settings immediately cancel if at any time during use, the charge level drops below 20%.

When using Insane+ or Ludicrous+, Cybertruck Model S Model X Model 3 Model Y consumes more energy to keep the Battery within an optimal temperature range.

To cancel Insane+ or Ludicrous+ at any time, change the acceleration level to another setting. To prevent excess and potentially unnecessary energy consumption (for example, you leave the vehicle and forget to cancel Insane+ or Ludicrous+), these settings cancel automatically in three hours, regardless of whether you are still driving or have left the vehicle.



NOTE: Insane+ or Ludicrous+ strives to keep the Battery within an optimal temperature range. In addition to heating the Battery, these settings also cool the battery when necessary (for example, while driving at high speeds, during rapid acceleration, driving for long periods, etc.).

Launch Mode

Launch Mode, available on Performance All-Wheel Drive vehicles only, provides optimum acceleration on surfaces with good traction.

NOTE: Hard acceleration including, but not limited to, using launch mode, increases stress on the vehicle's powertrain, and can cause premature wear and aging of various components. CybertruckModel SModel XModel 3Model Y constantly monitors powertrain fatigue and damage, and notifies you if vehicle components need to be serviced.

⚠ WARNING: Use Launch Mode only in appropriate locations where there is no cross traffic or pedestrians present. Launch Mode is designed for use on closed circuit driving courses. It is the driver's responsibility to ensure that driving style and acceleration do not endanger or inconvenience other road users.

To Activate Launch Mode

1. Ensure the brakes are slightly warm by driving for a few minutes and using the brakes a few times.
2. Set the air suspension to Low (see [Air Suspension on page 471](#)[Air Suspension on page 474](#)[Air Suspension on page 476](#)).
3. Set the air suspension to Low or Very Low (see [Air Suspension on page 471](#)[Air Suspension on page 474](#)[Air Suspension on page 476](#)).
4. Set the acceleration level to **Insane+** or **Ludicrous+** (if equipped).

NOTE: If equipped with the **Ludicrous+** setting, you can achieve optimum performance by pressing and holding this setting for three seconds.

5. With CybertruckModel SModel XModel 3Model Y shifted into Drive and at a complete stop with the steering wheel straight, firmly hold the brake pedal with your left foot, then fully press the accelerator pedal. Within one second, the instrument panel displays a message indicating that Launch Mode is enabled.

NOTE: Launch mode further lowers the front suspension, significantly reducing ground clearance.

6. Within twelve seconds of Launch Mode being enabled, release the brake pedal to launch the vehicle.

When you release the brake, CybertruckModel SModel XModel 3Model Y launches forward.

NOTE: Launch Mode is not available if Traction Control has been disabledSlip Start has been enabled (which allows the wheels to spin). See [Traction Control on page 496](#).

NOTE: Launch Mode is available only if the ambient temperature is 37° F (3° C) or warmer.



Acceleration Modes

Touch **Controls** > **Pedals & Steering** > **Acceleration** to choose a preferred acceleration mode:

- **Chill** limits acceleration for a slightly smoother and gentler ride.

NOTE: When Chill is selected, **Chill** displays on the instrument panel, above the driving speed.

- **Sport** provides the normal level of acceleration.
- **Insane** (called **Plaid** on performance vehicles, if equipped) provides the maximum level of acceleration immediately available.

NOTE: Using the increased torque and power available in Insane or Plaid mode can reduce range and efficiency.

NOTE: Insane or Plaid strives to keep the Battery within an optimal temperature range. In addition to heating the Battery, these settings also cool the Battery when necessary (for example, while driving at high speeds, during rapid acceleration, driving for long periods, etc.).

NOTE: You can improve the efficiency of the cabin heating by reducing your selected acceleration mode. This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.

In addition, CybertruckModel SModel XModel 3Model Y features Drag Strip Mode. Using Drag Strip Mode to precondition your CybertruckModel SModel XModel 3Model Y is useful before a short distance race.

Drag Strip Mode

Drag Strip Mode preconditions the Battery and drive unit to ideal operating temperatures for timed acceleration. CybertruckModel SModel XModel 3Model Y stays in Drag Strip Mode for three hours, even if you leave the vehicle. After three hours, the feature times out to prevent unnecessary energy consumption (for example, you leave the vehicle and forget to cancel Drag Strip Mode).

When using Drag Strip Mode, CybertruckModel SModel XModel 3Model Y consumes more energy to keep the Battery within an optimal temperature range.

Cancel Drag Strip Mode at any time by toggling **Drag Strip Mode** off.

NOTE: Drag Strip Mode automatically disables Slip Start when enabled.



WARNING: Drag Strip Mode is designed for use on closed circuit driving courses only. It is the driver's responsibility to ensure that driving style and acceleration do not endanger or inconvenience other road users.

How to Launch the Vehicle

The touchscreen provides visual instructions on how to launch:

1. Touch **Controls** > **Pedals & Steering** > **Drag Strip Mode**.
2. Wait for the instrument panel to indicate that the vehicle is Peak Performance Ready.
3. With CybertruckModel SModel XModel 3Model Y shifted into Drive and at a complete stop, firmly hold the brake pedal with your left foot, then fully press the accelerator pedal.
4. Once step 3 is complete, the front suspension begins lowering into a "cheetah stance".
NOTE: Suspension lowering for "cheetah stance" significantly reduces ground clearance.
5. Wait for the instrument panel to indicate that Drag Strip Mode is Ready to Launch.
6. Once you see "Cheetah Stance Enabled" and "Ready to launch" on the instrument panel, release the brake pedal to launch the vehicle.



Suspension

Available on Performance vehicles only, touch **Controls > Dynamics > Ride & Handling** for settings that provide real-time adjustments to the suspension system to optimize both ride and handling. Choose from:


- **Standard**- Adjusts to a wide range of roads and driving styles, providing a fluid yet well controlled ride.
- **Sport** - Provides a firmer, more controlled ride that increases driver engagement and connection to the road.


NOTE: Settings for **Ride & Handling** are disabled when **Track Mode** (if equipped) is engaged. **Track Mode** automatically optimizes adaptive damping settings to support aggressive driving on a closed circuit driving course (see [Track Mode on page 502](#)).

Track Mode

Track Mode, available only on Performance CybertruckModel SModel XModel 3Model Y vehicles, is designed to modify the stability control, traction control, regenerative braking, and cooling systems to increase performance and handling while driving on closed circuit courses. Track Mode improves cornering ability by intelligently using the motors, and regenerative and traditional braking systems. When enabled, the cooling system runs at an increased level before, during, and after aggressive driving sessions to allow your vehicle's systems to withstand the surplus heat.

NOTE: Track Mode is designed and calibrated for a Performance CybertruckModel SModel XModel 3Model Y equipped with performance brakes and tires. Vehicles without performance brakes and tires may experience comparatively lower performance and endurance.

 **WARNING:** Track Mode is designed for use on closed circuit driving courses only. It is the driver's responsibility to drive safely and ensure others are not endangered.

 **WARNING:** Track Mode is designed for use by experienced track drivers familiar with the course. Do not use on public roads. It is the driver's responsibility to be in control of the vehicle at all times, including on the track. Because vehicle behavior (including traction and stability control) differs when using Track Mode, always use caution.

Using Track Mode

Track Mode is always disabled when you start CybertruckModel SModel XModel 3Model Y. To enable Track Mode for your current drive, shift into Park and follow these steps:

1. Touch **Controls > Dynamics > Track Mode**.

When enabled, **TRACK** displays on the touchscreen above the driving speed, and a Track Mode pop up window appears on the map. The car status area of the touchscreen displays a color-coded image of your CybertruckModel SModel XModel 3Model Y that provides you with important at-a-glance status information about the Battery, the motors, the tires and the brakes. See [Monitoring Vehicle Health on page 504](#).

2. If desired, customize the Track Mode settings by touching **Track Mode Settings** on the Track Mode pop up window (see [Customizing Track Mode on page 503](#)). You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting.

NOTE: For optimum performance, wait for the battery and motor temperatures to reduce if highlighted in yellow or red.

3. If you want to use the Lap Timer, follow the onscreen instructions to drop a pin on the map to define the lap's start/finish location. You will then need to press **START** on the Lap Timer to begin your driving session. Once started, the Lap Timer starts counting when you drive CybertruckModel SModel XModel 3Model Y past the lap's start/finish location where you dropped the pin. See [Using the Lap Timer on page 504](#).

4. Shift and **GO!**

If you started the Lap Timer, each time you pass the start/finish location, the timer resets for the next lap. See [Using the Lap Timer on page 504](#).

You can also view a real-time accelerometer (G-meter) by swiping the Cards area of the touchscreen. See [G-Meter on page 505](#).

When Track Mode is on:



- Autopilot features are unavailable.
- The Slip Start setting is overridden.
- The Regenerative Braking setting is overridden.
- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 466](#).
- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 467](#).
- Energy usage increases.
- Entertainment features are unavailable.


Use the touchscreen setting to turn Track Mode off at any time. Powering off CybertruckModel SModel XModel 3Model Y also turns off Track Mode (although it may still appear on the touchscreen if Post-Drive cooling is in progress). When Track Mode is off, all settings return to their previous state and all features return to their normal operating state.



CAUTION: Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times. Driver assistance features automatically re-enable when Track Mode is turned Off.

Customizing Track Mode

To customize Track Mode, touch **Track Mode Settings** on the Track Mode popup window that appears on the map when you enable Track Mode. You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting. Choose an existing Track Mode setting from the list of pre-defined profiles provided by Tesla. Or create a new settings profile by touching **Add New Settings**, entering a name for the settings profile, then adjusting these settings to suit your preferences or driving scenario, or customize for a specific track:

- **Handling Balance** - Drag the slider to customize the balance of CybertruckModel SModel XModel 3Model Y in a turn. If CybertruckModel SModel XModel 3Model Y is too loose, you can choose a front-biased under-steering setup. Difficult to get the vehicle through a turn? Try a rear-biased setup to increase rotation. You can select any value, in 5% increments, between 100/0 (for 100% front biased used for under-steering) and 0/100 (for 100% rear biased used for over-steering).
 - **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
 - **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
 - **Stability Assist** - Choose the level at which the stability control systems assist in controlling the vehicle. Stability Assist modifies motor torque and selectively applies the brakes to each wheel to make the vehicle more stable and help the driver maintain control.
-  **WARNING:** Drive with caution when customizing **Stability Assist**. If you lose control of CybertruckModel SModel XModel 3Model Y, less stability control intervention will be applied and the vehicle may not stabilize itself. Use only if you have advance experience driving beyond grip limits.
- **Reduced:** Provides the maximum amount of stability control intervention while in track mode. Stability control is reduced compared to on-road mode.
 - **Minimal:** Provides minimal amount of stability control intervention.
 - **Off:** Oversteer support is completely disabled and traction control is limited to allow wheel spin.
- **Regenerative Braking** - Drag the slider to choose how much regenerative braking is available. You can choose any value, in 5% increments, between 0 and 100%. Tesla recommends the 100% setting to prevent overheating the brakes.



- **Post-Drive Cooling** - Enable if you want the cooling systems to continue cooling the vehicle's components even after you leave the vehicle. Cooling stops automatically when the components are sufficiently cool, or when you power CybertruckModel SModel XModel 3Model Y off and back on again. Post-Drive Cooling is useful if you want to quickly cool the components between driving sessions. If Post-Drive Cooling is set to OFF, the components eventually cool, but it takes longer.
- **Compressor Overclock** - Enable if you want to run the cooling compressor beyond its normal operating rate. Doing so speeds up the cooling process and is useful when performing multiple aggressive driving sessions with very little time in between



CAUTION: Extensive use of Compressor Overclock can damage or shorten the life of the compressor. Damage caused by using this feature is not covered by the warranty.

- **Save Dashcam for Laps** - Enable if you want to save a video and data on a USB flash drive when using the Lap Timer. A USB flash drive must be set up and inserted as described (see [USB Drive Requirements for Recording Videos on page 666](#)). The USB flash drive must contain a folder named **TeslaTrackMode**. When enabled, Track Mode stores a video and associated data for each lap. Track Mode also stores the car status and telemetry data with details about the vehicle's position, speed, acceleration, use of accelerator, etc. You can then view the video recordings and analyze this data, which is saved as a .CSV file on the USB flash drive, to determine where time is being lost or gained.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Track Mode allows you to save up to 20 settings profiles. To delete a chosen profile, touch **Delete** at the bottom of the settings screen.

NOTE: You can not change or delete a pre-defined profile provided by Tesla.

Using the Lap Timer

When you enable Track Mode, the map displays a Lap Timer. Follow the onscreen instructions to place a start/finish pin on the map. Once the pins are placed, press **START** to initiate the driving (lapping) session. When you drive CybertruckModel SModel XModel 3Model Y through the start/finish location, the Lap Timer automatically starts timing the duration of the lap, resetting the timer whenever you pass the start/finish location, and displaying the real-time delta between the current lap and the fastest lap so far in the driving session. The map highlights the track in blue.

At the completion of each lap, the Lap Timer displays the duration of the lap. It also displays the times associated with the previous and best laps in the driving session.

If **Save Dashcam for Laps** is on (see [Customizing Track Mode on page 503](#)), and a properly formatted USB flash drive is inserted in a front USB port, Track Mode saves a video of the driving session (as recorded by the front cameras), along with a .CSV file that provides detailed information about the lap.

NOTE: To stop the timer at the end of your driving session, touch **STOP** on the Lap Timer popup window.

Monitoring Vehicle Health

You can easily monitor the health of CybertruckModel SModel XModel 3Model Y when using Track Mode by glancing at the car status area of the touchscreen. The colors indicate the status of the various components, allowing you to determine the current operating state and make decisions accordingly. The components are displayed in green when operating within their ideal temperature range. Colors change as follows:

- The Battery displays blue when cold and red when hot.
- A brake displays blue when cold and red when hot (an early warning for overheating brakes).
- A motor displays blue when it's cold or red when it's hot.
- Dynamic readings of the tire pressures displays on the touchscreen. A tire displays blue when under-used or red when the peak grip is exceeded.

NOTE: A component displayed in red may indicate a need to stop driving and allow the component to cool.



CAUTION: Any vehicle damage or injuries caused by using Track Mode is the driver's responsibility. The vehicle warranty does not cover damage caused by excessive overuse of vehicle components. It also does not cover racing, autocross, or driving in competition.



G-Meter

In Track Mode, a real-time G-Meter displays on the touchscreen. The G-Meter graphically displays peak lateral, acceleration, and deceleration values in the form of a circular meter. The history of your drive is represented in the shaded area. The G-Meter resets at the start of each driving session.

NOTE: You can swipe the G-Meter card to display a different card. However, the G-Meter displays as the default card whenever you engage Track Mode.

Track Mode

Track Mode, available only on Performance CybertruckModel SModel XModel 3Model Y vehicles, is designed to modify the stability control, traction control, regenerative braking, and cooling systems to increase performance and handling while driving on closed circuit courses. Track Mode improves cornering ability by intelligently using the motors, and regenerative and traditional braking systems. When enabled, the cooling system runs at an increased level before, during, and after aggressive driving sessions to allow your vehicle's systems to withstand the surplus heat.

NOTE: Track Mode is designed and calibrated for a Performance CybertruckModel SModel XModel 3Model Y equipped with performance brakes and tires. Vehicles without performance brakes and tires may experience comparatively lower performance and endurance.



WARNING: Track Mode is designed for use on closed circuit driving courses only. It is the driver's responsibility to drive safely and ensure others are not endangered.



WARNING: Track Mode is designed for use by experienced track drivers familiar with the course. Do not use on public roads. It is the driver's responsibility to be in control of the vehicle at all times, including on the track. Because vehicle behavior (including traction and stability control) differs when using Track Mode, always use caution.

Using Track Mode

Track Mode is always disabled when you start CybertruckModel SModel XModel 3Model Y. To enable Track Mode for your current drive, shift into Park and follow these steps:

1. Touch **Controls > Dynamics > Track Mode**.

When enabled, **TRACK** displays on the touchscreen above the driving speed, and a Track Mode pop up window appears on the map. The car status area of the touchscreen displays a color-coded image of your CybertruckModel SModel XModel 3Model Y that provides you with important at-a-glance status information about the Battery, the motors, the tires and the brakes. See [Monitoring Vehicle Health on page 504](#).

2. If desired, customize the Track Mode settings by touching **Track Mode Settings** on the Track Mode pop up window (see [Customizing Track Mode on page 503](#)). You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting.

NOTE: For optimum performance, wait for the battery and motor temperatures to reduce if highlighted in yellow or red.

3. If you want to use the Lap Timer, follow the onscreen instructions to drop a pin on the map to define the lap's start/finish location. You will then need to press **START** on the Lap Timer to begin your driving session. Once started, the Lap Timer starts counting when you drive CybertruckModel SModel XModel 3Model Y past the lap's start/finish location where you dropped the pin. See [Using the Lap Timer on page 504](#).

4. Shift and **GO!**

If you started the Lap Timer, each time you pass the start/finish location, the timer resets for the next lap. See [Using the Lap Timer on page 504](#).

You can also view a real-time accelerometer (G-meter) by swiping the Cards area of the touchscreen. See [G-Meter on page 505](#).

When Track Mode is on:

- Autopilot features are unavailable.
- The Slip Start setting is overridden.
- The Regenerative Braking setting is overridden.



- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 466](#).
- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 467](#).
- Energy usage increases.
- Entertainment features are unavailable.

Use the touchscreen setting to turn Track Mode off at any time. Powering off CybertruckModel SModel XModel 3Model Y also turns off Track Mode (although it may still appear on the touchscreen if Post-Drive cooling is in progress). When Track Mode is off, all settings return to their previous state and all features return to their normal operating state.



CAUTION: Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times. Driver assistance features automatically re-enable when Track Mode is turned Off.

Customizing Track Mode

To customize Track Mode, touch **Track Mode Settings** on the Track Mode popup window that appears on the map when you enable Track Mode. You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting. Choose an existing Track Mode setting from the list of pre-defined profiles provided by Tesla. Or create a new settings profile by touching **Add New Settings**, entering a name for the settings profile, then adjusting these settings to suit your preferences or driving scenario, or customize for a specific track:

- **Handling Balance** - Drag the slider to customize the balance of CybertruckModel SModel XModel 3Model Y in a turn. If CybertruckModel SModel XModel 3Model Y is too loose, you can choose a front-biased under-steering setup. Difficult to get the vehicle through a turn? Try a rear-biased setup to increase rotation. You can select any value, in 5% increments, between 100/0 (for 100% front biased used for under-steering) and 0/100 (for 100% rear biased used for over-steering).
- **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
- **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
- **Stability Assist** - Choose the level at which the stability control systems assist in controlling the vehicle. Stability Assist modifies motor torque and selectively applies the brakes to each wheel to make the vehicle more stable and help the driver maintain control.



WARNING: Drive with caution when customizing **Stability Assist**. If you lose control of CybertruckModel SModel XModel 3Model Y, less stability control intervention will be applied and the vehicle may not stabilize itself. Use only if you have advance experience driving beyond grip limits.

- **Reduced:** Provides the maximum amount of stability control intervention while in track mode. Stability control is reduced compared to on-road mode.
- **Minimal:** Provides minimal amount of stability control intervention.
- **Off:** Oversteer support is completely disabled and traction control is limited to allow wheel spin.
- **Regenerative Braking** - Drag the slider to choose how much regenerative braking is available. You can choose any value, in 5% increments, between 0 and 100%. Tesla recommends the 100% setting to prevent overheating the brakes.
- **Post-Drive Cooling** - Enable if you want the cooling systems to continue cooling the vehicle's components even after you leave the vehicle. Cooling stops automatically when the components are sufficiently cool, or when you power CybertruckModel SModel XModel 3Model Y off and back on again. Post-Drive Cooling is useful if you want to quickly cool the components between driving sessions. If Post-Drive Cooling is set to OFF, the components eventually cool, but it takes longer.



- **Compressor Overclock** - Enable if you want to run the cooling compressor beyond its normal operating rate. Doing so speeds up the cooling process and is useful when performing multiple aggressive driving sessions with very little time in between



CAUTION: Extensive use of Compressor Overclock can damage or shorten the life of the compressor. Damage caused by using this feature is not covered by the warranty.

- **Save Dashcam for Laps** - Enable if you want to save a video and data on a USB flash drive when using the Lap Timer. A USB flash drive must be set up and inserted as described (see [USB Drive Requirements for Recording Videos on page 666](#)). The USB flash drive must contain a folder named **TeslaTrackMode**. When enabled, Track Mode stores a video and associated data for each lap. Track Mode also stores the car status and telemetry data with details about the vehicle's position, speed, acceleration, use of accelerator, etc. You can then view the video recordings and analyze this data, which is saved as a .CSV file on the USB flash drive, to determine where time is being lost or gained.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Track Mode allows you to save up to 20 settings profiles. To delete a chosen profile, touch **Delete** at the bottom of the settings screen.

NOTE: You can not change or delete a pre-defined profile provided by Tesla.

Using the Lap Timer

When you enable Track Mode, the map displays a Lap Timer. Follow the onscreen instructions to place a start/finish pin on the map. Once the pins are placed, press **START** to initiate the driving (lapping) session. When you drive CybertruckModel SModel XModel 3Model Y through the start/finish location, the Lap Timer automatically starts timing the duration of the lap, resetting the timer whenever you pass the start/finish location, and displaying the real-time delta between the current lap and the fastest lap so far in the driving session. The map highlights the track in blue.

At the completion of each lap, the Lap Timer displays the duration of the lap. It also displays the times associated with the previous and best laps in the driving session.

If **Save Dashcam for Laps** is on (see [Customizing Track Mode on page 503](#)), and a properly formatted USB flash drive is inserted in a front USB port, Track Mode saves a video of the driving session (as recorded by the front cameras), along with a .CSV file that provides detailed information about the lap.

NOTE: To stop the timer at the end of your driving session, touch **STOP** on the Lap Timer popup window.

Monitoring Vehicle Health

You can easily monitor the health of CybertruckModel SModel XModel 3Model Y when using Track Mode by glancing at the car status area of the touchscreen. The colors indicate the status of the various components, allowing you to determine the current operating state and make decisions accordingly. The components are displayed in green when operating within their ideal temperature range. Colors change as follows:

- The Battery displays blue when cold and red when hot.
- A brake displays blue when cold and red when hot (an early warning for overheating brakes).
- A motor displays blue when it's cold or red when it's hot.
- Dynamic readings of the tire pressures displays on the touchscreen. A tire displays blue when under-used or red when the peak grip is exceeded.

NOTE: A component displayed in red may indicate a need to stop driving and allow the component to cool.



CAUTION: Any vehicle damage or injuries caused by using Track Mode is the driver's responsibility. The vehicle warranty does not cover damage caused by excessive overuse of vehicle components. It also does not cover racing, autocross, or driving in competition.

G-Meter

In Track Mode, a real-time G-Meter displays on the touchscreen. The G-Meter graphically displays peak lateral, acceleration, and deceleration values in the form of a circular meter. The history of your drive is represented in the shaded area. The G-Meter resets at the start of each driving session.





NOTE: You can swipe the G-Meter card to display a different card. However, the G-Meter displays as the default card whenever you engage Track Mode.

Track Mode

Track Mode, available only on Performance CybertruckModel SModel XModel 3Model Y vehicles, is designed to modify the stability control, traction control, regenerative braking, and cooling systems to increase performance and handling while driving on closed circuit courses. Track Mode improves cornering ability by intelligently using the motors, and regenerative and traditional braking systems. When enabled, the cooling system runs at an increased level before, during, and after aggressive driving sessions to allow your vehicle's systems to withstand the surplus heat.

NOTE: Track Mode is designed and calibrated for a Performance CybertruckModel SModel XModel 3Model Y equipped with performance brakes and tires. Vehicles without performance brakes and tires may experience comparatively lower performance and endurance.

 **WARNING:** Track Mode is designed for use on closed circuit driving courses only. It is the driver's responsibility to drive safely and ensure others are not endangered.

 **WARNING:** Track Mode is designed for use by experienced track drivers familiar with the course. Do not use on public roads. It is the driver's responsibility to be in control of the vehicle at all times, including on the track. Because vehicle behavior (including traction and stability control) differs when using Track Mode, always use caution.

Using Track Mode

Track Mode is always disabled when you start CybertruckModel SModel XModel 3Model Y. To enable Track Mode for your current drive, shift into Park and follow these steps:

1. Touch **Controls > Dynamics > Track Mode**.

When enabled, **TRACK** displays on the touchscreen above the driving speed, and a Track Mode pop up window appears on the map. The car status area of the touchscreen displays a color-coded image of your CybertruckModel SModel XModel 3Model Y that provides you with important at-a-glance status information about the Battery, the motors, the tires and the brakes. See [Monitoring Vehicle Health on page 504](#).

2. If desired, customize the Track Mode settings by touching **Track Mode Settings** on the Track Mode pop up window (see [Customizing Track Mode on page 503](#)). You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting.

NOTE: For optimum performance, wait for the battery and motor temperatures to reduce if highlighted in yellow or red.

3. If you want to use the Lap Timer, follow the onscreen instructions to drop a pin on the map to define the lap's start/finish location. You will then need to press **START** on the Lap Timer to begin your driving session. Once started, the Lap Timer starts counting when you drive CybertruckModel SModel XModel 3Model Y past the lap's start/finish location where you dropped the pin. See [Using the Lap Timer on page 504](#).

4. Shift and **GO!**

If you started the Lap Timer, each time you pass the start/finish location, the timer resets for the next lap. See [Using the Lap Timer on page 504](#).

You can also view a real-time accelerometer (G-meter) by swiping the Cards area of the touchscreen. See [G-Meter on page 505](#).

When Track Mode is on:

- Autopilot features are unavailable.
- The Slip Start setting is overridden.
- The Regenerative Braking setting is overridden.
- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 466](#).



- Stopping Mode is set to the Roll setting in which CybertruckModel SModel XModel 3Model Y is free-rolling at very low speeds whenever Drive or Reverse is engaged and both the accelerator and brake pedal are released. For details, see [Stopping Mode on page 467](#).
- Energy usage increases.
- Entertainment features are unavailable.

Use the touchscreen setting to turn Track Mode off at any time. Powering off CybertruckModel SModel XModel 3Model Y also turns off Track Mode (although it may still appear on the touchscreen if Post-Drive cooling is in progress). When Track Mode is off, all settings return to their previous state and all features return to their normal operating state.



CAUTION: Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times. Driver assistance features automatically re-enable when Track Mode is turned Off.

Customizing Track Mode

To customize Track Mode, touch **Track Mode Settings** on the Track Mode popup window that appears on the map when you enable Track Mode. You can also access the Track Mode settings by touching **Controls > Dynamics**, then touching **Customize** next to the Track Mode setting. Choose an existing Track Mode setting from the list of pre-defined profiles provided by Tesla. Or create a new settings profile by touching **Add New Settings**, entering a name for the settings profile, then adjusting these settings to suit your preferences or driving scenario, or customize for a specific track:

- **Handling Balance** - Drag the slider to customize the balance of CybertruckModel SModel XModel 3Model Y in a turn. If CybertruckModel SModel XModel 3Model Y is too loose, you can choose a front-biased under-steering setup. Difficult to get the vehicle through a turn? Try a rear-biased setup to increase rotation. You can select any value, in 5% increments, between 100/0 (for 100% front biased used for under-steering) and 0/100 (for 100% rear biased used for over-steering).
- **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
- **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems for controllable driving in which stability systems remain engaged, whereas -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
- **Stability Assist** - Choose the level at which the stability control systems assist in controlling the vehicle. Stability Assist modifies motor torque and selectively applies the brakes to each wheel to make the vehicle more stable and help the driver maintain control.



WARNING: Drive with caution when customizing **Stability Assist**. If you lose control of CybertruckModel SModel XModel 3Model Y, less stability control intervention will be applied and the vehicle may not stabilize itself. Use only if you have advance experience driving beyond grip limits.

- **Reduced:** Provides the maximum amount of stability control intervention while in track mode. Stability control is reduced compared to on-road mode.
- **Minimal:** Provides minimal amount of stability control intervention.
- **Off:** Oversteer support is completely disabled and traction control is limited to allow wheel spin.
- **Regenerative Braking** - Drag the slider to choose how much regenerative braking is available. You can choose any value, in 5% increments, between 0 and 100%. Tesla recommends the 100% setting to prevent overheating the brakes.
- **Post-Drive Cooling** - Enable if you want the cooling systems to continue cooling the vehicle's components even after you leave the vehicle. Cooling stops automatically when the components are sufficiently cool, or when you power CybertruckModel SModel XModel 3Model Y off and back on again. Post-Drive Cooling is useful if you want to quickly cool the components between driving sessions. If Post-Drive Cooling is set to OFF, the components eventually cool, but it takes longer.
- **Compressor Overclock** - Enable if you want to run the cooling compressor beyond its normal operating rate. Doing so speeds up the cooling process and is useful when performing multiple aggressive driving sessions with very little time in between



CAUTION: Extensive use of Compressor Overclock can damage or shorten the life of the compressor. Damage caused by using this feature is not covered by the warranty.

- **Save Dashcam for Laps** - Enable if you want to save a video and data on a USB flash drive when using the Lap Timer. A USB flash drive must be set up and inserted as described (see [USB Drive Requirements for Recording Videos on page 666](#)). The USB flash drive must contain a folder named **TeslaTrackMode**. When enabled, Track Mode stores a video and associated data for each lap. Track Mode also stores the car status and telemetry data with details about the vehicle's position, speed, acceleration, use of accelerator, etc. You can then view the video recordings and analyze this data, which is saved as a .CSV file on the USB flash drive, to determine where time is being lost or gained.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Track Mode allows you to save up to 20 settings profiles. To delete a chosen profile, touch **Delete** at the bottom of the settings screen.

NOTE: You can not change or delete a pre-defined profile provided by Tesla.

Using the Lap Timer

When you enable Track Mode, the map displays a Lap Timer. Follow the onscreen instructions to place a start/finish pin on the map. Once the pins are placed, press **START** to initiate the driving (lapping) session. When you drive CybertruckModel SModel XModel 3Model Y through the start/finish location, the Lap Timer automatically starts timing the duration of the lap, resetting the timer whenever you pass the start/finish location, and displaying the real-time delta between the current lap and the fastest lap so far in the driving session. The map highlights the track in blue.

At the completion of each lap, the Lap Timer displays the duration of the lap. It also displays the times associated with the previous and best laps in the driving session.

If **Save Dashcam for Laps** is on (see [Customizing Track Mode on page 503](#)), and a properly formatted USB flash drive is inserted in a front USB port, Track Mode saves a video of the driving session (as recorded by the front cameras), along with a .CSV file that provides detailed information about the lap.

NOTE: To stop the timer at the end of your driving session, touch **STOP** on the Lap Timer popup window.

Monitoring Vehicle Health

You can easily monitor the health of CybertruckModel SModel XModel 3Model Y when using Track Mode by glancing at the car status area of the touchscreen. The colors indicate the status of the various components, allowing you to determine the current operating state and make decisions accordingly. The components are displayed in green when operating within their ideal temperature range. Colors change as follows:

- The Battery displays blue when cold and red when hot.
- A brake displays blue when cold and red when hot (an early warning for overheating brakes).
- A motor displays blue when it's cold or red when it's hot.
- Dynamic readings of the tire pressures displays on the touchscreen. A tire displays blue when under-used or red when the peak grip is exceeded.

NOTE: A component displayed in red may indicate a need to stop driving and allow the component to cool.



CAUTION: Any vehicle damage or injuries caused by using Track Mode is the driver's responsibility. The vehicle warranty does not cover damage caused by excessive overuse of vehicle components. It also does not cover racing, autocross, or driving in competition.

G-Meter

In Track Mode, a real-time G-Meter displays on the touchscreen. The G-Meter graphically displays peak lateral, acceleration, and deceleration values in the form of a circular meter. The history of your drive is represented in the shaded area. The G-Meter resets at the start of each driving session.


NOTE: You can swipe the G-Meter card to display a different card. However, the G-Meter displays as the default card whenever you engage Track Mode.




Track Mode

Track Mode, available only on Plaid CybertruckModel SModel XModel 3Model Y vehicles, is designed to modify the stability control, traction control, regenerative braking, and cooling systems to increase performance and handling while driving on closed circuit courses. Track Mode improves cornering ability by intelligently using the motors, and regenerative and traditional braking systems. When enabled, the cooling system runs at an increased level before, during, and after aggressive driving sessions to allow your vehicle's systems to withstand the surplus heat.

In Track Mode, adaptive suspension damping is optimized for handling and vehicle body control to promote driver confidence in dynamic maneuvers. Ride height is automatically set to **Low** and the suspension no longer automatically raises for comfort over rough surfaces.

 **WARNING:** Track Mode is designed for use only by experienced drivers familiar with closed circuit driving courses. Do not use on public roads. It is the driver's responsibility to drive safely and be in control of the vehicle and all times to ensure safety to self and others. Vehicle behavior (including traction and stability control) differs when using Track Mode and driver must exercise caution at all times.

 **WARNING:** For speeds above 158 mph (255 km/h), GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Ratings) must not exceed the maximums stated on the Vehicle Certification label (see [Vehicle Loading on page 846](#)).

Using Track Mode

Track Mode is always disabled when you start CybertruckModel SModel XModel 3Model Y. To enable Track Mode for your current drive, shift into Park and follow these steps:

1. Touch **Controls > Pedals & Steering > Track Mode**.

When enabled, **TRACK** displays on the instrument panel above the driving speed, and a Track Mode pane appears on the map. The Track Mode pane displays important at-a-glance status information about the Battery and the motors (see [Monitoring Vehicle Health on page 513](#)) and a real-time accelerometer (see [G-Meter on page 513](#)).

2. If desired, customize the Track Mode settings by touching **Customize** on the Track Mode pane of the touchscreen (see [Customizing Track Mode on page 512](#)). You can also customize the Track Mode settings by touching **Pedals & Steering > Driving**, then touching **Customize** next to the Track Mode setting.

NOTE: For optimum performance, wait for the battery and motor temperatures to reduce if highlighted in yellow or red.

3. If desired, start the Lap Timer (see [Using the Lap Timer on page 513](#)).
4. Shift into gear and **GO!**

If you started the Lap Timer, each time you pass the start/finish location, the timer resets for the next lap. See [Using the Lap Timer on page 513](#).

When Track Mode is on:

- Autopilot features are unavailable.
- The Slip Start setting is overridden.
- Energy usage increases.
- Entertainment features are unavailable.
- Auto Shift (Beta) is disabled (see [Auto Shift \(Beta\) on page 409](#) for more information).
- Settings for Adaptive Suspension Damping are disabled (Track Mode automatically optimizes adaptive damping to support aggressive driving).

Use the touchscreen setting to turn Track Mode off at any time. Powering off CybertruckModel SModel XModel 3Model Y also turns off Track Mode (although it may still appear on the touchscreen if Post-Drive cooling is in progress). When Track Mode is off, all settings return to their previous state and all features return to their normal operating state.

NOTE: If CybertruckModel SModel XModel 3Model Y powers off while Track Mode is still enabled for Post-Drive cooling, the touchscreen displays a popup that provides quick access to re-enabling it when you power CybertruckModel SModel XModel 3Model Y back on.



CAUTION: Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times. Driver Assistance features automatically re-enable when Track Mode is turned Off.

Top Speed, Tires, and Tire Pressures

A CybertruckModel SModel XModel 3Model Y equipped with Tesla Carbon Ceramic brakes is capable of achieving a top speed of 200 mph (322 km/h).

To support this top speed, Model S must be equipped with the following tires at the recommended pressures:

Goodyear Supercar 3R	Cold - 32 psi* Hot - 36 psi* Hot on high load/banked tracks - 40 psi*
Michelin PS4S	Cold - 32 psi* Hot - 40 psi*
* For both axles at curb loading conditions.	

WARNING: Never attempt to drive at 200 mph (322 km/h) unless CybertruckModel SModel XModel 3Model Y is equipped with the Tesla Carbon Ceramic brake kit and the appropriate tires described above.

Customizing Track Mode

To customize Track Mode, touch **Customize** on the Track Mode pane that appears on the map when you enable Track Mode. You can also access the Track Mode settings by touching **Controls > Pedals & Steering**, then touching **Customize** next to the Track Mode setting. Choose an existing Track Mode setting from the list of pre-defined profiles provided by Tesla. Or create a new settings profile by touching **Add New Settings**, entering a name for the settings profile, then adjusting these settings to suit your preferences or driving scenario, or customize for a specific track:

- **Handling Balance** - Drag the slider to customize the balance of CybertruckModel SModel XModel 3Model Y in a turn. If CybertruckModel SModel XModel 3Model Y is too loose, you can choose a front-biased under-steering setup. Difficult to get the vehicle through a turn? Try a rear-biased setup to increase rotation. You can select any value, in 5% increments, between 100/0 (for 100% front biased used for under-steering) and 0/100 (for 100% rear biased used for over-steering).
- **Stability Assist** - Drag the slider to choose the level at which the stability control systems assist in controlling the vehicle. You can choose any level from -10 to +10. Choosing +10 engages all stability assist systems and is similar to driving without track mode engaged. Choosing -10 disables all stability systems and the stability of the drive rests solely on the driver. The default setting of 0 represents a balance which provides some stability being automatically controlled and leaving some control up to the driver.
- **Regenerative Braking** - Drag the slider to choose how much regenerative braking is available. You can choose any value, in 5% increments, between 0 and 100%. When using base brakes, Tesla recommends the 100% setting to prevent overheating. Overheating is not a concern on a CybertruckModel SModel XModel 3Model Y equipped with Carbon Ceramic brakes.
- **Post-Drive Cooling** - Enable if you want the cooling systems to continue cooling the vehicle's components even after you leave the vehicle. Cooling stops automatically when the components are sufficiently cool, or when you power CybertruckModel SModel XModel 3Model Y off and back on again. Post-Drive Cooling is useful if you want to quickly cool the components between driving sessions. If Post-Drive Cooling is set to OFF, the components eventually cool, but it takes longer.
- **Brake Temperatures** (displays only if CybertruckModel SModel XModel 3Model Y is **not equipped** with Tesla's Carbon Ceramic brake kit) - Enable to display brake temperatures as well as warnings associated with the braking system. You may want to disable in situations in which you have installed an aftermarket high performance braking system.

NOTE: Warnings are automatically disabled on a CybertruckModel SModel XModel 3Model Y equipped with the optional Tesla Carbon Ceramic brake kit.



- **Save Dashcam for Laps** - Enable if you want to save a video and data on a USB flash drive when using the Lap Timer. A USB flash drive must be set up and inserted as described (see [USB Drive Requirements for Recording Videos on page 666](#)). The USB flash drive must contain a folder named **TeslaTrackMode**. When enabled, Track Mode stores a video and associated data for each lap. Track Mode also stores the car status and telemetry data with details about the vehicle's position, speed, acceleration, use of accelerator, etc. You can then view the video recordings and analyze this data, which is saved as a .CSV file on the USB flash drive, to determine where time is being lost or gained.

The currently chosen setting displays on the touchscreen in the top left corner of the Track Mode pane.

Track Mode allows you to save up to 20 settings profiles. To delete a chosen profile, touch **Delete** at the bottom of the settings screen.

NOTE: You can not change or delete a pre-defined profile provided by Tesla.

Using the Lap Timer

When you enable Track Mode, the map displays a Lap Timer. Drop a pin on the map to define the lap's start/finish location. Then press **START** to begin the driving (lapping) session. Once started, the Lap Timer starts counting when you drive CybertruckModel SModel XModel 3Model Y past the lap's start/finish location where you dropped the pin. The Lap Timer automatically starts timing the duration of the lap, resetting the timer whenever you pass the start/finish location, and displaying the real-time delta between the current lap and the fastest lap so far in the driving session. The map highlights the track in blue.

At the completion of each lap, the Lap Timer displays the duration of the lap. It also displays the times associated with the previous and best laps in the driving session.

If **Save Dashcam for Laps** is enabled (see [Customizing Track Mode on page 512](#)), and a properly formatted USB flash drive is inserted, Track Mode saves a video of the driving session (as recorded by the front cameras), along with a .CSV file that provides detailed information about the lap.

NOTE: To stop the timer at the end of your driving session, touch **STOP** on the Lap Timer.

Monitoring Vehicle Health

You can easily monitor the health of CybertruckModel SModel XModel 3Model Y when using Track Mode by glancing at the touchscreen and the instrument panel.

The touchscreen displays bars that graphically represent the temperatures of the Battery and motors. These bars display with no color when operating within their ideal temperature range. However, as the Battery or a motor begins to suffer from reduced performance due to temperature, the associated bar is highlighted in yellow. Then, as the performance becomes more limited, the color of the bar progresses toward red.

The instrument panel displays dynamic readings of tire pressures and colors a tire's pressure reading red if the tire pressure becomes low.

If CybertruckModel SModel XModel 3Model Y is not equipped with Tesla's Carbon Ceramic brake kit, the instrument panel also displays temperature warnings from the front and rear brakes, using yellow as the brakes reach thermal limits and red when thermal limits are further exceeded.

NOTE: A component displayed in red may indicate the need for the component to cool significantly before it can perform adequately.



CAUTION: Any vehicle damage or injuries caused by using Track Mode is the driver's responsibility. The vehicle warranty does not cover damage caused by excessive overuse of vehicle components. It also does not cover racing, autocross, or driving in competition.

G-Meter

In Track Mode, a real-time G-Meter displays on the Track Mode pane on the touchscreen. The G-Meter graphically displays peak lateral and longitudinal acceleration values in the form of a circular meter. The history of your drive is represented in the shaded area. The G-Meter resets at the start of each driving session.



Driver Profiles

When you first adjust the driver's seat, steering wheelsteering yoke (or steering wheel) position, or exterior side mirrors, the touchscreen prompts you to create a driver profile to save these adjustments. Your profile also saves various preferences you make while customizing CybertruckModel SModel XModel 3Model Y.

To save your profile settings to the cloud and access them across multiple Tesla vehicles, set up a Tesla Profile (see [Using Tesla Profiles on page 514](#)).

To save your profile settings to the cloud and access them across multiple Tesla vehicles, set up a Tesla Profile (see [Using Tesla Profiles on page 515](#)).



To add a new driver profile, touch the driver profile icon at the top of the touchscreen in **Controls**. Then touch **Driver Profile Settings > Add New Driver**, type the driver's name and touch **Create Profile**. Follow the onscreen instructions to save mirror and steering wheel position to the driver profile to save mirror and steering wheel position to the driver profile.

Check the **Use Easy Entry** checkbox if you want to save (or use existing) **Easy Entry** settings in which the driver's seat and the steering wheelsteering yoke (or steering wheel) are automatically adjusted to make it easy to enter and exit CybertruckModel SModel XModel 3Model Y.

If you change the position of the driver's seat, steering wheelsteering yoke (or steering wheel), or exterior side mirrors after you have saved or chosen a driver profile, the touchscreen prompts you to **Save** the new position or **Restore** the previously saved position (other settings are automatically saved). To change a setting without saving or restoring, just ignore the prompt.

To delete a driver profile, touch the driver profile icon at the top of the touchscreen in **Controls**, touch **Driver Profile Settings** and select the driver profile you want to remove. Once selected, **Delete** the driver profile.

NOTE: Valet mode is a built-in driver profile that limits speed and restricts access to some CybertruckModel SModel XModel 3Model Y features (see [Valet Mode on page 516](#)).

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with the driver profile feature. Also, in cases where the vehicle is equipped with driver profiles, some features may not be automatically saved and adjusted based on the driver profile (for example, mirror position).

NOTE: To stop automatic adjustments that are in process based on a driver's profile, touch **Stop** on the Driver Profile dropdown menu. Automatic adjustments also stop if you manually adjust a seat, mirror, or the steering wheelsteering yoke (or steering wheel).

Selecting Between Driver Profiles



To adjust CybertruckModel SModel XModel 3Model Y based on a driver's profile, touch the driver profile icon at the top of the touchscreen **Controls** screen **Controls** screen. Then choose the driver, and CybertruckModel SModel XModel 3Model Y is adjusted based on the settings that have been saved to the chosen driver profile. See [Using Tesla Profiles on page 514](#) to learn more about saving profile settings to the cloud for easy access across multiple Tesla vehicles. See [Using Tesla Profiles on page 515](#) to learn more about saving profile settings to the cloud for easy access across multiple Tesla vehicles.

NOTE: Your preferred Stopping Mode setting does not sync to your driver profile. For more information, see [Braking and Stopping on page 461](#).

Using Tesla Profiles

(If equipped) Driver profile settings, such as seat adjustments, temperature preferences, navigation Recents and Favorites, media settings, and data sharing preferences can be saved into a Tesla Profile that is synced to every supported vehicle under your Tesla Account. This provides convenient access to your profile settings and preferences across all your Tesla supported vehicles.

To set up your Tesla Profile, navigate to **Driver Profile Settings** and select your Tesla Account name. You can choose to set it up as a New Profile or copy the settings from an existing driver profile that you were previously using.



To set up a Tesla Profile for additional drivers, share your vehicle with them from the mobile app and navigate to **Security & Drivers > Manage Drivers > Add Driver**. Their Tesla Profile will appear in the Driver Profile settings after accepting the invitation from their Tesla Account. If you remove their access to the vehicle, it also removes their Tesla Profile. For more information on granting mobile app access, see [Granting Access to a Second Driver on page 358](#). In addition, you can change your profile picture from your Tesla Mobile App.

NOTE: Some vehicle settings are synced only between similar vehicle models. If the seat, steering, and mirror positions do not restore as expected, touch **Controls > Service > Driver Seat, Steering, & Mirrors Calibration** on the affected vehicles. If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)).

NOTE: Tesla Profiles are supported on vehicles with software versions 2022.24 or higher.

To remove your Tesla Profile from a vehicle, remove that vehicle from your Tesla account:

1. In the Tesla mobile app, touch the profile icon in the top-right corner.
2. Touch **Add/Remove Products**.
3. Touch **Remove**.
4. Select the vehicle you'd like to remove.

Using Tesla Profiles

Driver profile settings, such as seat adjustments, temperature preferences, navigation Recents and Favorites, media settings, and data sharing preferences can be saved into a Tesla Profile that is synced to every supported vehicle under your Tesla Account. This provides convenient access to your profile settings and preferences across all your Tesla supported vehicles.

To set up your Tesla Profile, navigate to **Driver Profile Settings** and select your Tesla Account name. You can choose to set it up as a New Profile or copy the settings from an existing driver profile that you were previously using.

To set up a Tesla Profile for additional drivers, share your vehicle with them from the mobile app and navigate to **Security & Drivers > Manage Drivers > Add Driver**. Their Tesla Profile will appear in the Driver Profile settings after accepting the invitation from their Tesla Account. If you remove their access to the vehicle, it also removes their Tesla Profile. For more information on granting mobile app access, see [Granting Access to a Second Driver on page 358](#). In addition, you can change your profile picture from your Tesla Mobile App.

NOTE: Some vehicle settings, such as seat, mirror, steering wheel, and air vent positions are only synced between the same vehicle models. If the seat or steering positions do not restore as expected, touch **Controls > Service > Seat & Steering Calibration** on the affected vehicles.

To remove your Tesla Profile from a vehicle, remove that vehicle from your Tesla account:

1. In the Tesla mobile app, touch the profile icon in the top-right corner.
2. Touch **Add/Remove Products**.
3. Touch **Remove**.
4. Select the vehicle you'd like to remove.

Saved Settings

A subset of the settings that you choose to customize your Cybertruck Model S Model X Model 3 Model Y are automatically saved to your driver's profile. Once saved, a green check mark appears next to the driver profile icon on the touchscreen. Examples of automatically saved driver profile settings are:

- Navigation, temperature, lights and display settings.
- Autopilot and driving preferences.

NOTE: The settings that are associated with driver profiles vary depending on the vehicle's date of manufacture and version of software installed.



Linking a Driver Profile to a Key Fob

You can link a driver profile to a specific key fob to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key fob is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key fob, enter CybertruckModel SModel XModel 3Model Y with the key fob and touch the driver profile icon at the top of the touchscreen. Select the driver profile you would like to link to the key fob, then touch **Link to Key Fob**.

NOTE: CybertruckModel SModel XModel 3Model Y detects only one key fob at a time. The driver profile is linked to the key fob that is detected by the vehicle at that time. Therefore, if you want to link driver profiles to multiple key fobs, ensure that only the key fob that you would like to link the driver profile to is within detection range while performing the linking procedure. Move all other key fobs outside of the detection range (at least three feet (one meter) away from CybertruckModel SModel XModel 3Model Y).

NOTE: CybertruckModel SModel XModel 3Model Y can support up to threeseight linked key fobs. However, a driver profile can only be linked to one key fob.

To remove the link between a driver profile and key fob, touch the driver profile icon at the top of the touchscreen. Select the driver profile, then touch the **X** next to **Linked to Key Fob**.

Linking a Driver Profile to a Key

You can link a driver profile to a key (or keys) to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key, first ensure you are using your desired driver profile, then touch **Controls > Locks > Keys**. You can toggle the driver icon to link or delete a key to the desired driver profile. The name of the driver profile appears under the key to show that it is linked.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to 10 driver profiles. You can link multiple keys to a driver profile, but you cannot link multiple driver profiles to a single key.

Linking a Driver Profile to a Key


You can link a driver profile to a key (or keys) to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key, first ensure you are using your desired driver profile, then touch **Controls > Locks > Keys**. You can toggle the driver icon to link or delete a key to the desired driver profile. The name of the driver profile appears under the key to show that it is linked.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to 10 driver profiles. You can link multiple keys to a driver profile, but you cannot link multiple driver profiles to a single key.

Easy Entry

You can define an Easy Entry setting that moves the steering wheelsteering yoke (or steering wheel) and driver's seat to make it easy to enter and exit CybertruckModel SModel XModel 3Model Y. Any driver can use the Easy Entry setting by associating it with their driver profile. When the Easy Entry setting is associated with a driver profile, the steering wheelsteering yoke (or steering wheel) and driver's seat automatically adjust when in Park and the driver's seat belt is unbuckled, allowing an easy exit from (and next entrance into) CybertruckModel SModel XModel 3Model Y. When returning to the vehicle and stepping on the brake pedal, settings automatically adjust back to the settings used by the most recent driver profile (or based on the key if it's linked to a driver profile).

To use **Easy Entry** with a driver profile, ensure the **Use Easy Entry** box is checked.

 **WARNING:** Never use Easy Entry to move the driver's seat to the full rearward position when a child safety seat is installed on a rear seat located behind the driver's seat. With reduced clearance, the movement of the seat may impact a child's legs, cause injury, or dislodge the seat.

NOTE: You can also make it easier to enter or exit CybertruckModel SModel XModel 3Model Y by enabling Auto Lower. For more information, see [Auto Lower on page 1241](#).

Valet Mode

When CybertruckModel SModel XModel 3Model Y is in Valet mode, the following restrictions apply:

- Key card must be used to access and drive CybertruckModel SModel XModel 3Model Y.



- Key card must be used to access and drive CybertruckModel SModel XModel 3Model Y.
- Speed is limited to 70 mph (113 km/h).
- Maximum acceleration and power are limited.
- Front trunk and glovebox are locked.
- Home and Work locations are not available in the navigation system.
- Voice commands are disabled.
- Cruise control is disabled.
- Autopilot convenience features are disabled.
- The Allow Mobile Access setting cannot be changed.
- HomeLink (if available in your market region) is not accessible.
- Driver Profiles are not accessible.
- Some apps, such as Toybox and Theater, are not accessible.
- The touchscreen does not display the list of keys that can access CybertruckModel SModel XModel 3Model Y (see [Managing Keys on page 126](#)).
- The touchscreen does not display the list of keys that can access CybertruckModel SModel XModel 3Model Y (see [Managing Keys on page 1144](#)).
- Wi-Fi and Bluetooth are disabled. When CybertruckModel SModel XModel 3Model Y is in Valet mode, you cannot pair new Bluetooth devices or view or delete existing paired devices. However, if a Bluetooth-paired device or a known Wi-Fi network is within range, CybertruckModel SModel XModel 3Model Y connects to it.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically shift when in Valet Mode.

Starting Valet Mode

With CybertruckModel SModel XModel 3Model Y in Park, touch the driver profile icon at the top of the touchscreen**Controls** screen**Controls** screen, then touch **Valet Mode**.

The first time you enter Valet mode, the touchscreen prompts you to create a 4-digit PIN you will use to cancel Valet mode.


When Valet mode is active, the instrument paneltouchscreentouchscreen displays the word **Valet** while the driver profile changes to **Valet Mode** on the touchscreen.


You can also use the mobile app to start and cancel Valet mode (if CybertruckModel SModel XModel 3Model Y is in Park). When using the mobile app, you do not need to enter a PIN because you are already required to log into the app using your Tesla Account credentials.


NOTE: If **PIN to Drive** is enabled (see [PIN to Drive on page 660](#)), you must enter the driving PIN before you can define or enter a Valet PIN. Once in Valet mode, CybertruckModel SModel XModel 3Model Y can be driven without the valet needing to enter the driving PIN.

NOTE: The **PIN to Drive** setting is not available when Valet mode is active.

If you forget your valet PIN, reset it from inside CybertruckModel SModel XModel 3Model Y by entering your Tesla Account credentials (which also cancels Valet mode). You can also reset your PIN using the mobile app.

 **WARNING:** Do not use Valet mode when towing a trailer. The torque limitations of Valet mode can make it difficult for CybertruckModel SModel XModel 3Model Y to pull a trailer up a hill.

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 **WARNING:** Do not use Valet mode when towing a trailer. The torque limitations of Valet mode can make it difficult for CybertruckModel SModel XModel 3Model Y to pull a trailer up a hill.

Canceling Valet Mode

With CybertruckModel SModel XModel 3Model Y in Park, touch the **Valet Mode** driver profile icon at the top of the touchscreen**Controls** screen**Controls** screen, and enter your 4-digit PIN.



Owners Manual

When you cancel Valet mode, all settings associated with the most recently used driver profile and climate control settings are restored, and all features are available.

NOTE: You do not need to enter a PIN to cancel Valet mode from the mobile app.

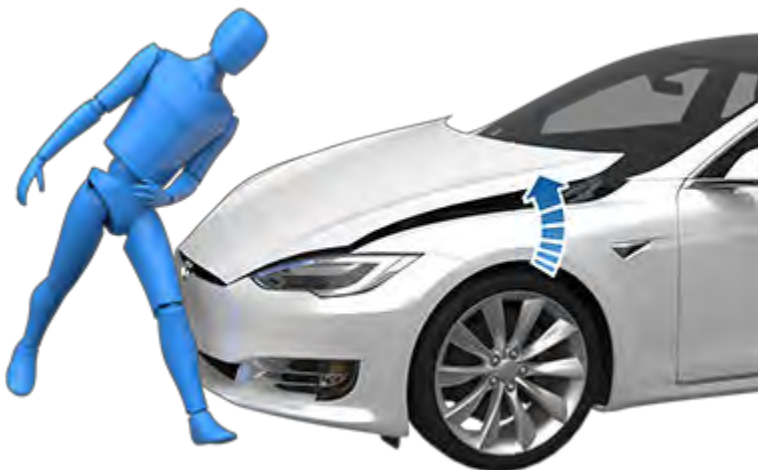
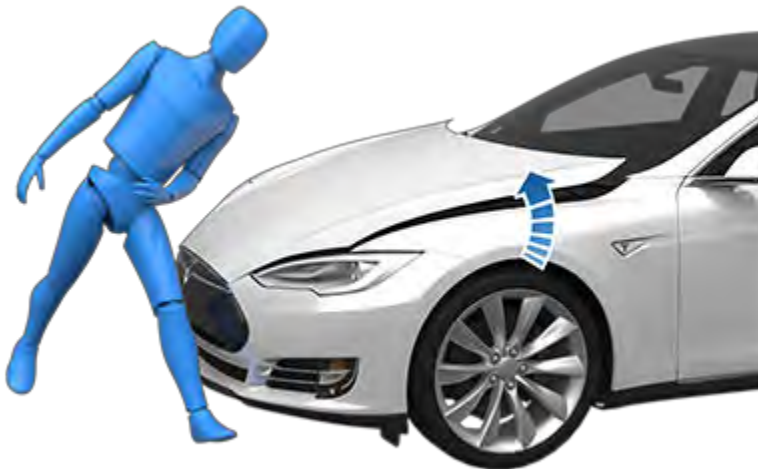


Active Hood

How Active Hood Works

(If equipped) CybertruckModel SModel XModel 3Model Y (depending on market region and date of manufacture) (depending on market region and date of manufacture) features a pedestrian protection system with an Active Hood that is designed to reduce head injuries to pedestrians and cyclists in a frontal collision. Multiple sensors at the front of the vehicle are designed to detect an impact with a pedestrian when CybertruckModel SModel XModel 3Model Y is moving between approximately 19 and 52 km/h28 and 52 km/h25 and 50 km/h23 and 52 km/h30 and 52 km/h, and raise the rear portion of the hood automatically approximately 80 mm. This increases the space between the hood and the components beneath it, reducing the likelihood of injuries.

NOTE: The pedestrian protection system relies on a series of sensors and algorithms designed and calibrated to determine when Active Hood should deploy. Therefore, not all pedestrian collisions result in deployment. Similarly, the Active Hood may deploy if CybertruckModel SModel XModel 3Model Y collides with an animal, vehicle, or other object.







If Active Hood has been deployed, the instrument panel touchscreen displays an alert and a chime sounds. Immediately take Cybertruck Model S Model X Model 3 Model Y to the nearest Tesla Service Center or Tesla-approved body shop. Active Hood's associated sensors and actuators must be serviced whenever Active Hood has been deployed.

⚠ WARNING: Deployment of Active Hood may cause the raised hood to partially obstruct driver vision, increasing the risk of a collision. If safe to do so, Cybertruck Model S Model X Model 3 Model Y can be driven to the nearest Tesla Service Center or Tesla-approved body shop. If unsafe to drive (you cannot clearly see over the raised hood, the hood latch has been damaged, etc.), you must have your vehicle transported.

⚠ WARNING: If the instrument panel touchscreen displays an alert indicating that Active Hood has been deployed in situations where it has not, immediately drive Cybertruck Model S Model X Model 3 Model Y to the nearest Tesla Service Center.

NOTE: If damage occurs to the front bumper, contact a local Tesla-approved body shop to inspect the sensors for damage.



Trip Information

Displaying Trip Information

Trip information displays on the touchscreen in the cards area on the car status display, or in the "Cards" area on the vehicle status display, or when you touch **Controls > Trips**. For the current trip, you can display distance, duration and average energy usage. You can also show distance and total and average energy used since your last charge and for additional trips.

To name or rename a trip, touch the trip's name, enter a new name for the trip, then press **Save**. To reset a particular trip meter, touch its associated **Reset** button.

You can display information for up to three trips on the instrument panel. Use the checkboxes to specify the trip(s) you want to display. Then use the scroll wheel on the right side of the steering wheel to display the chosen trip(s) (see [Using Right Steering Wheel Buttons on page 385](#)).

Odometer

To display the odometer and view vehicle mileage, do either of the following:

- Touch **Controls > Software**.
- Touch **Controls > Trips**.
- Open the mobile app and scroll down to the bottom of the main screen.

The odometer also displays on the instrument panel.



Rear Facing Camera(s)

Camera Location

Cybertruck Model S Model X Model 3 Model Y is equipped with a rear view camera located above the rear license plate.







Whenever you shift into Reverse, the touchscreen displays the view from the camera. Lines show your driving path based on the position of the steering wheel/steering yoke (or steering wheel). These lines adjust as you move the steering wheel/steering yoke (or steering wheel).

Cybertruck/Model S/Model X/Model 3/Model Y also displays images from the side cameras. Simply swipe up or down to hide or show the side camera views.

NOTE: You may need to expand the camera window to see the images from the side cameras .

NOTE: Visual feedback from Park Assist also appears on the instrument panel/touchscreen (see [Park Assist on page 485](#)).

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with parking sensors.



To display the view from the rear view cameras at any time, open the app launcher and touch the Camera app.



If a black screen appears on the touchscreen instead of the rear view camera feed when in Reverse, use the rear view mirrors and ensure your surroundings are safe before continuing to Reverse. If inoperability of the rear view camera persists, use the mobile app to schedule a service appointment.

⚠ WARNING: Never depend on the camera cameras to inform you if the area behind you is free of objects and/or people. The camera cameras may not detect objects or barriers that can potentially cause damage or injury. In addition, several external factors can reduce the performance of the camera cameras, including a dirty or obstructed lens. Therefore, depending on the camera cameras to determine if Cybertruck Model S Model X Model 3 Model Y is approaching an obstruction can result in damage to the vehicle and/or objects and can potentially cause serious injury. Always inspect the area with your own eyes. When reversing, perform shoulder checks and use all mirrors. Use the camera cameras for guidance purposes only. It is not intended to replace your own direct visual checks and is not a substitute for careful driving.

To ensure a clear picture, the camera lens must be clean and free of obstructions. See [Cleaning on page 777](#).



Pedestrian Warning System

The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 25 mph (40 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.


The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 25 mph (40 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 32 km/h (19 mph), or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 19 mph (32 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 19 mph (32 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

For vehicles manufactured prior to approximately November 2021: In situations where you need to turn the sound off (such as in stop and go highway traffic), touch **Controls > Safety > Pedestrian Warning > Pause**. The sound is paused for the current drive only. On your next drive, the sound automatically turns back on. The switch may not be available for vehicles manufactured after this date.

 **WARNING:** Use the Pause switch to silence the alarm only when absolutely necessary and when there are no other road users in the surrounding area. You must turn the Pedestrian Warning System back on immediately after the circumstances that required you to turn it off have passed.




The instrument panel touchscreen displays this indicator when the Pedestrian Warning System has been paused and is therefore not active.

NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2020.

NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2019.

NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2020.

 **WARNING:** If sound cannot be heard, pedestrians may not be aware of your oncoming vehicle, which may increase the likelihood of a collision resulting in serious injury or death. Never rely on the Pedestrian Warning System to make sure that pedestrians are aware of your vehicle. If the Pedestrian Warning System is not operating, schedule a service appointment.



Towing and Accessories

The towing package includes a 2" x 2" (5 cm x 5 cm) hitch receiver that can support an accessory carrier (for bicycles, skis, snowboards, etc.) or tow a trailer.

Installing and Using a Carrier

When using the tow package to carry accessories, the 2" x 2" (5 cm x 5 cm) square hitch receiver is designed to support vertical loads of up to 160 lbs (72 kg). Ball mounts that are compatible with the square receiver must be purchased separately.

To install and use an accessory carrier, you must first attach the ball mount to the hitch receiver (see [Attaching and Removing the Ball Mount on page 533](#)). Then, follow the instructions provided by your accessory carrier. Observe all regulations and legal requirements in your state or region that apply to carrying accessories.

The CybertruckModel SModel XModel 3Model Y towing package includes the wiring necessary for using an accessory carrier equipped with lights (see [Electrical Connections on page 534](#)). The package also includes Trailer Mode software compatibility (see [Trailer Mode on page 530](#)).

NOTE: Go to <http://www.tesla.com> to purchase accessories for your vehicle. Although third-party products are available, Tesla recommends and supports only Tesla-approved products (see [Parts and Accessories on page 802](#)). The accessory products available for your vehicle may vary based on market region. Before attempting to install a non Tesla-approved carrier, review the product information to ensure compatibility.


NOTE: When not in use, the ball mount should be removed and stored in a dry location to prevent dust and corrosion. Keep the dust cover over the hitch housing to prevent dirt and debris from entering (see [Attaching and Removing the Ball Mount on page 533](#)).


NOTE: Tesla assumes no responsibility for damage or injuries resulting from installing and using an accessory carrier, for any omissions in the instructions accompanying an accessory carrier, or for your failure to follow the instructions. Damage caused by using an accessory carrier is not covered by the warranty.

Carrying Accessories

The hitch receiver is designed to support vertical loads up to 160 lbs (72 kg). When carrying bicycles, skis, or other items on the CybertruckModel SModel XModel 3Model Y hitch, always check to ensure that the maximum weight is not exceeded. When calculating weight, remember to include the weight of the accessory carrier. For example, assuming the carrier weighs 40 lbs (18 kg), the weight threshold is sufficient for carrying two bicycles weighing approximately 60 lbs (27 kg) each, or four items weighing approximately 30 lbs (14 kg) each.

NOTE: Consult the product details of your accessory carrier for more information, such as additional weight or load limits. Damage caused by non Tesla-approved accessories is not covered by the warranty.

 **CAUTION:** Exceeding the maximum weight the CybertruckModel SModel XModel 3Model Y hitch is designed to support (as previously described) can cause significant damage.

 **CAUTION:** Do not attempt to install an accessory carrier on CybertruckModel SModel XModel 3Model Y that is not equipped with the tow package. Doing so can cause significant damage.

Trailer Towing

The maximum trailer weight (including all cargo and additional equipment), and the trailer tongue weight depend on the number of occupants in your vehicle and the tires being used. The maximum towing capacity and trailer tongue weight must never exceed the following:

Wheel/Rim Size	# of Passengers	Maximum Towing Capacity	Maximum Tongue Weight
19", 20" and 21"	up to 3	3,500 lbs (1,588 kg)	350 lbs (159 kg)
19" and 21"	4 - 5	3,500 lbs (1,588 kg)	350 lbs (159 kg)
20"	4 - 5	2,300 lbs (1,043 kg)**	230 lbs (104 kg)**
19"	6 - 7*	2000 lbs (907 kg)**	200 lbs (91 kg)**
20"	6 - 7*	Towing not permitted	-
21"	6 - 7*	1200 lbs (544 kg)**	120 lbs (54 kg)**



*Applicable only to vehicles with seven seating positions.




** You must operate within the speed limitations of your trailer and tires, and only drive at speeds appropriate for the load you are towing, the weather, road and traffic conditions, and your level of towing experience. Always obey posted speed limits and local regulations regarding speed.

NOTE: In Canada, towing is limited to 55 mph (89 km/h).

For trailers with a combined loading of more than 1650 lbs (750 kg), Tesla recommends using a separate braking system with an independent controller (see [Trailer Brakes on page 531](#)). Carefully follow the instructions provided by the trailer brake manufacturer to ensure that trailer brakes are properly installed, adjusted, and maintained.

The tongue weight is the downward force that the weight of the trailer exerts on the hitch. This must not exceed 10% of the maximum trailer weight. Carrying a significant amount of equipment, passengers, or cargo in the tow vehicle can reduce the towing capacity it can handle, which also reduces the tongue weight. Maximum towing capacity is calculated assuming the GVWR (Gross Vehicle Weight Rating) is not exceeded (see [Specifications on page 838](#)).




NOTE: If the information on the hitch label conflicts with the information provided in this Owner's Manual, this Owner's Manual takes precedence.

-  **CAUTION:** You should only use CybertruckModel SModel XModel 3Model Y to tow if you have experience and knowledge of how towing affects the vehicle and are able to safely load, secure, and maneuver the vehicle and cargo. Tesla's instructions are not all-inclusive of the knowledge and skills necessary for safe towing. Damage caused by towing a trailer is not covered by the warranty.
-  **WARNING:** Do not overload the vehicle or trailer. Doing so can cause poor performance, vehicle damage, and loss of vehicle control, resulting in serious injury.
-  **WARNING:** Do not use the trailer hitch to transport CybertruckModel SModel XModel 3Model Y (see [Instructions for Transporters on page 921](#)).

Tire Pressures when Towing

When towing a trailer, tire pressures must be adjusted to accommodate the additional load. 19", 20", and 21" tires are acceptable to use for towing. Keep tires inflated to the pressures shown below (if different, these pressures override the pressures that are provided on the Tire and Loading Information Label (see [Vehicle Loading on page 846](#))).

Front Tires	Rear Tires	Cold Tire Inflation Pressure
255/45R19	255/45R19	42 psi (290 kPa)
255/40R20	255/40R20	42 psi (290 kPa)
255/35R21	275/35R21	42 psi (290 kPa)

-  **CAUTION:** Do not use CybertruckModel SModel XModel 3Model Y for towing if equipped with tires that are not listed previously.
-  **WARNING:** Check tire pressures using an accurate pressure gauge when tires are cold. Driving one mile/1.6 km warms the tires sufficiently to affect tire pressures. Parking the vehicle in direct sunlight or in hot weather can also affect tire pressures. If you must check warm tires, expect increased pressures. Do not let air out of warm tires in an attempt to match recommended cold tire pressures. A hot tire at or below the recommended cold tire inflation pressure may be dangerously under-inflated.
-  **WARNING:** Never attempt to tow a trailer when a CybertruckModel SModel XModel 3Model Y tire is faulty or has been temporarily repaired (for example, using a tire repair kit). A temporarily repaired tire is not designed to sustain the towing load. Towing using a faulty or temporarily repaired tire can result in tire failure and loss of vehicle stability.

Before Towing a Trailer

Before towing a trailer, you must do the following:

- Inflate tires to the cold tire inflation pressure specified in [Tire Pressures when Towing on page 529](#).
- Observe all regulations and legal requirements that apply to trailer towing. Failure to comply with regulations can compromise your safety.
- Adjust side mirrors to provide a clear rear view without a significant blind spot.



- Engage **Trailer Mode** (see [Trailer Mode on page 530](#)).

Confirm the following:

- CybertruckModel SModel XModel 3Model Y rests horizontally with the trailer attached. If the vehicle is tipped up at the front and down at the rear, check that you are not exceeding the maximum towing capacity and tongue loads provided in [Trailer Towing on page 528](#).
- Trailer lights (brake lights, turn signal lights, and marker lights) are working properly.
- The trailer tongue is securely connected to the hitch ball.
- Safety chains are properly connected between the trailer and the tow vehicle. Cross the safety chains under the tongue of the trailer to help prevent the tongue from contacting the road if it separates from the hitch. Leave enough slack in the safety chains to allow for turns and ensure that the chains do not drag on the ground.
- All trailer hitch parts and attachments, safety chains, and electrical connectors are in good condition and are properly connected. If any problems are apparent, do not tow the trailer.
- All cargo is secured.
- Wheel chocks are available.
- The trailer load is evenly distributed such that the trailer tongue weight is approximately 4-10% of the total trailer weight, without exceeding the maximum tongue weights provided in [Trailer Towing on page 528](#).



CAUTION: Loads that are balanced over the trailer wheels or heavier in the rear can cause trailer sway, resulting in loss of vehicle control.



WARNING: Always ensure that cargo is secured in the trailer and will not shift. Dynamic load shifts can cause loss of vehicle control, resulting in serious injury.

Towing Guidelines

CybertruckModel SModel XModel 3Model Y is designed primarily as a passenger-carrying vehicle. Towing a trailer puts additional load on the motor(s), drive train, brakes, tires, and suspension and significantly decreases range. If you decide to tow a trailer, proceed with caution and follow these general guidelines:

- Reduce your driving speed and avoid sudden maneuvers. When towing a trailer, steering, stability, turning radius, stopping distance and braking performance are different when compared to driving without a trailer.
- Increase your following distance by maintaining at least twice the distance from the vehicle ahead. This helps to avoid situations that require heavy braking. Sudden braking may result in skidding or jack-knifing, and loss of control.
- Avoid sharp turns. Sharp turns can cause the trailer to contact the vehicle and cause damage. Keep in mind that the trailer wheels are closer to the inside of the turn than the vehicle's wheels. Therefore, make wider turns to prevent the trailer from hitting curbs, road signs, trees or other objects.
- Periodically check the trailer lights and turn signals to confirm that the bulbs are still working. When towing a trailer, the turn signal arrows on the touchscreen flash as normal, even if the bulbs on the trailer are burned out.
- Periodically confirm the cargo is secure.
- Regularly confirm that all towing components are securely tightened.



WARNING: Towing requires you to increase your stopping distance. When towing, increase your following distance and avoid situations that could potentially cause heavy braking. Failure to do so can result in a collision.



WARNING: Observe all regulations and legal requirements in your jurisdiction that apply specifically to trailer towing. Failure to comply with regulations can compromise your safety.

Trailer Mode

Trailer Mode must always be active when towing a trailer. When you connect a trailer's electrical connection while the vehicle is in Park, CybertruckModel SModel XModel 3Model Y automatically engages Trailer Mode. When you disconnect the trailer's electrical connection, Trailer Mode does not automatically disengage. To manually engage or disengage Trailer Mode, touch **Controls > Dynamics > Trailer Mode** on the touchscreen. One of the following indicators displays:



Trailer Mode is active.



CybertruckModel SModel XModel 3Model Y detects a connection for trailer lights but Trailer Mode is disabled. It is likely that a carrying accessory has been connected.



CybertruckModel SModel XModel 3Model Y detects a faulty electrical connection for the trailer lights. Some, or all, trailer lights may not be functioning. Pull over as soon as safety permits and inspect the trailer lights for faulty cabling or connections. If the issues are resolved and the red icon still persists, disable and re-enable Trailer Mode once more.



Some Autopilot features, as well as rear parking sensor functionality, may not be available when Trailer Mode is enabled. In addition, these features operate differently:

- Traffic-Aware Cruise Control increases the following distance from the vehicle in front of you.
- Side collision warnings are active but automatic steering interventions are disabled.
- The braking force provided by Automatic Emergency Braking (see [Collision Avoidance Assist on page 645](#)) may be limited. Therefore, stopping distance may increase.

⚠ WARNING: Do not rely on CybertruckModel SModel XModel 3Model Y to detect the trailer and automatically engage Trailer Mode. Always check to ensure Trailer Mode is engaged before towing a trailer.

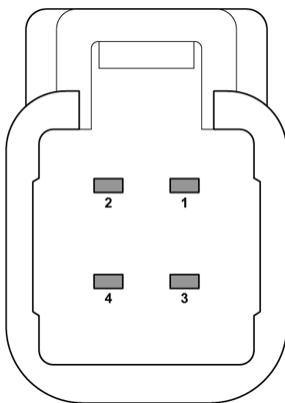
⚠ WARNING: Under no circumstances should you exit Trailer Mode when towing a trailer. Doing so can cause serious injury.

Trailer Brakes

When towing a loaded trailer that weighs more than 1650 lbs (750 kg), Tesla recommends that the trailer be equipped with its own brake system adequate for the weight of the trailer. Ensure compliance with local regulations. A brake controller must be purchased separately, and the required 4-pin pigtail connector can be ordered from Tesla Service.

Follow these steps to connect a brake controller:

1. Connect the wiring on the brake controller to the appropriate locations on the 4-pin pigtail connector.






2. Remove the cover located under the dashboard in the driver's side footwell.



3. Peel back the carpet to expose the vehicle's 4-pin connector on the wiring harness.



4. Connect the pigtail connector to the vehicle wiring connector.

-  **WARNING:** Towing increases your stopping distance, even when the trailer is equipped with its own braking system. When towing, increase your following distance and avoid situations that could potentially cause heavy braking. Failure to do so can cause a collision.
-  **WARNING:** Observe all regulations and legal requirements in your regional and national jurisdictions that apply specifically to trailer towing and brake requirements. Many regions require a breakaway switch, located on the tongue of the trailer, to activate the trailer brakes in the event that the trailer separates from the vehicle. Failure to comply with regulations can compromise your safety.
-  **WARNING:** Follow the instructions provided by the trailer brake manufacturer to ensure that trailer brakes are properly installed, adjusted, and maintained. Tesla is not responsible for damages caused by incorrect installation of trailer braking systems.



Parking with a Trailer

Whenever possible, avoid parking on a grade. However, if parking on a grade is absolutely necessary, place wheel chocks under the trailer wheels. Consider having someone help you with these steps:

1. One person presses and holds the brake pedal.
2. A second person places the wheel chocks under the wheels on the downgrade side of the vehicle's tires.
3. When the chocks are in place, release the brake pedal and ensure the chocks hold the weight of the vehicle and trailer.

NOTE: When testing chocks, ensure that Vehicle Hold (see [Vehicle Hold on page 493](#)) is not engaged. If Vehicle Hold is braking CybertruckModel SModel XModel 3Model Y, the Vehicle Hold indicator light displays on the touchscreen. To disengage Vehicle Hold, press and release the brake pedal.

4. Place the vehicle in Park.

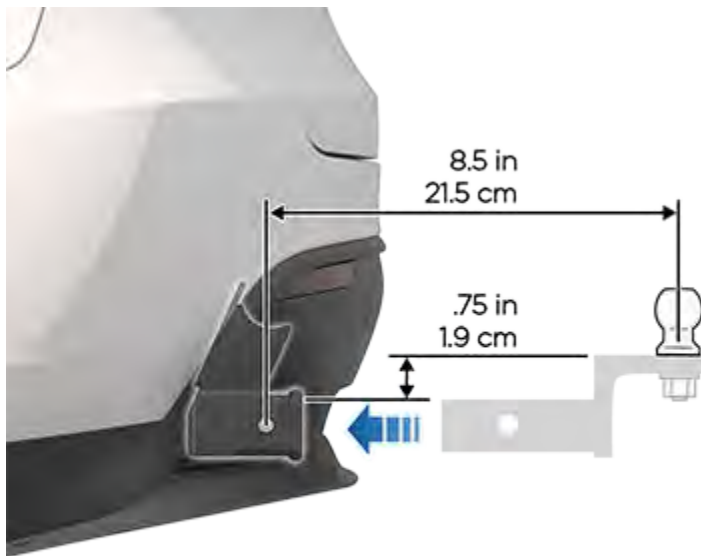
⚠ WARNING: If parking on a grade is necessary, always ensure that all trailer wheels have been securely chocked. Failure to do so can result in serious damage or injury.

Trailer Sway Mitigation

When trailer sway is detected, the electronic stability control system attempts to apply the appropriate amount of braking to minimize trailer sway. The touchscreen briefly displays the traction control system indicator. Pressing the brake pedal when the system is actively braking to mitigate trailer sway does not cancel this automatic braking.

Attaching and Removing the Ball Mount

The CybertruckModel SModel XModel 3Model Y towing package does not include a ball mount. You must purchase a ball mount suitable for the type of trailer you are towing. The CybertruckModel SModel XModel 3Model Y hitch receiver supports a ball mount with a length of up to 8.5" (22 cm) and a rise of up to 0.75" (2 cm). Do not use any type of drop ball mount that does not meet these requirements.



To attach a ball mount:

1. Use a thin object, such as a butter knife or flat blade screwdriver, to pry around the edges of tow hitch cover and release the 15 clips that secure the cover to the rear fascia. Store the dust cover in a secure location.



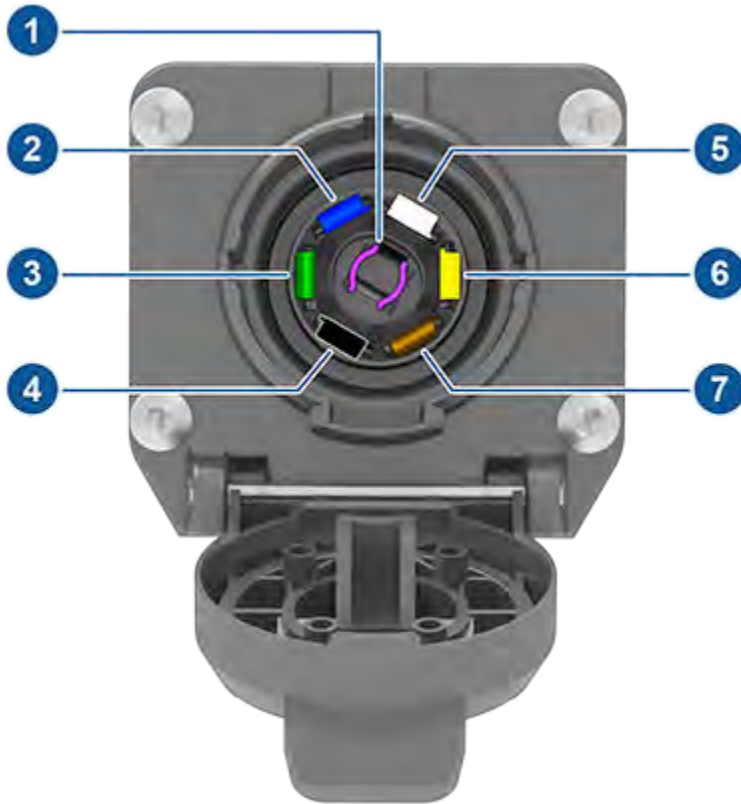
2. If necessary, remove the cotter pin from the locking bolt and slide the locking bolt out of the hitch assembly.
3. Slide the ball holder into the hitch assembly.
4. Align the hole in the ball holder with the one in the hitch assembly.
5. Slide the locking bolt through the hitch assembly/ball holder.
6. Insert the cotter pin in the hole at the end of the locking bolt.

To remove a ball mount:

1. Remove the cotter pin from the locking bolt and slide the locking bolt out of the ball holder/hitch assembly.
2. Pull the ball holder out of the hitch assembly.
3. Re-install the dust cover for the hitch housing and store the ball mount in a secure location.

Electrical Connections



Regulations require all trailers to be equipped with tail lights, brake lights, side marker lights, and turn signals. To provide power for trailer lighting, a built-in 7-pin wiring connector is provided near the hitch support's wiring plugs for most types of trailers. Plugging in trailer wiring into the Cybertruck Model S Model X Model 3 Model Y electrical connector automatically engages Trailer Mode (see [Trailer Mode on page 530](#)). It is the driver's responsibility to ensure that all electrical connections are working and all trailer lights are operating before and during towing. You must perform manual checks.



1. Reverse Lights
2. Brake Controller Output
3. Right Turn Signal and Brake Light
4. Low Voltage Power (if equipped)
5. Ground
6. Left Turn Signal and Brake Light
7. Tail Lamps

Loss of trailer lights when towing may be the result of a fault in the trailer wiring or excessive power consumption by the lights connected to the trailer output(s). When this occurs, a red Trailer Mode icon appears on the touchscreen. Fix any issues with the wiring and/or reduce the number of lights connected to the trailer output(s), then toggle Trailer Mode off and on again.

NOTE: Vehicles with a lead-acid low voltage battery have auxiliary power. Vehicles with low voltage lithium-ion batteries do not have auxiliary power at this time. You can determine which battery your vehicle is equipped with by touching **Controls > Software > Additional Vehicle Information**.

-  **CAUTION:** Always ensure that the trailer electrical cable does not contact or drag on the ground and there is enough slack in the cable to allow for turns.
-  **WARNING:** Use only the electrical connections designed by Tesla. Do not attempt to directly splice or attempt to connect a trailer's electrical wiring using any other method. Doing so can damage the vehicle's electrical system and cause malfunctions.

Impact on Range

Towing a trailer increases vehicle weight and drag. As a result, driving range can decrease significantly. Although Trip Planner (if available in your market region) attempts to adjust estimates based on Trailer Mode, actual energy consumption may vary. Plan trip length and charging destinations accordingly.



Active Spoiler

NOTE: Depending on date of manufacture and vehicle configuration, Model X may not be equipped with the active spoiler.

Model X has a rear spoiler designed to improve aerodynamics. If Model X is equipped with the active spoiler, the position of the spoiler can vary depending on the status and speed of Model X:

- When Model X is in Reverse or when driving speed is below 10 mph (16 km/h), the spoiler provides maximum visibility behind Model X.
- When driving speed exceeds 45 mph (72 km/h), the spoiler lowers to the position that provides the most effective aerodynamics.
- When Model X is powered off and locked, the spoiler retracts.

To allow the spoiler to automatically move as described above, touch **Controls > Service > Spoiler Mode > Automatic**. To disable automatic movement of the spoiler and keep it in its extended position, choose the **Extended** setting.

NOTE: If the spoiler can not automatically lower or raise, the instrument panel displays an alert. Contact Tesla Service.



Towing and Accessories


The towing package allows you to tow a trailer with your Model X. It also allows you to carry skis, snowboards, bicycles, etc. by attaching an accessory carrier to the hitch.


Carrying Accessories

The Model X towing package has a 2 inch hitch receiver that can support an accessory carrier.

The hitch receiver is designed to support vertical loads of up to 120 lbs (54 kg) when the load is cantilevered rearward within 24 inches (63 cm) of the hitch receiver, such as when carrying bikes on an accessory rack.

When carrying bicycles or other items on the Model X hitch, always check to ensure that the maximum weight is not exceeded. When calculating weight, remember to include the weight of the accessory carrier. For example, assuming the carrier weighs 40 lbs, the weight threshold is sufficient for carrying two bicycles weighing approximately 40 lbs each, or four bicycles weighing approximately 20 lbs each.

 **CAUTION:** The Model X hitch is designed to support up to 120 lbs (54 kg). Exceeding this maximum weight can cause significant damage.

 **CAUTION:** Do not attempt to install a carrier on a Model X that is not equipped with the towing package. Doing so can cause significant damage.

To install and use an accessory carrier, the tow hitch must be connected (see [Connecting the Tow Hitch on page 544](#)). Then follow the instructions provided with your accessory carrier. Observe all regulations and legal requirements in your state/region that apply to carrying accessories.

The Model X towing package includes the wiring necessary for using an accessory carrier equipped with lights (see [Electrical Connections on page 548](#)). The package also includes Trailer Mode software (see [Trailer Mode on page 540](#)).





When you connect an accessory carrier's wiring harness, Model X detects a connection for trailer lights and this indicator illuminates on the instrument panel. Trailer Mode is disabled.

When carrying accessories, periodically confirm that the accessory carrier and its cargo remain secure at all times, and if applicable, that the lights on the accessory carrier are working.

NOTE: Go to www.tesla.com to purchase accessories for your Model X. Although third-party products are available, Tesla recommends and supports only Tesla-approved products (see [Parts and Accessories on page 802](#)). The accessory products available for your Model X vary based on market region. Before attempting to install a non-Tesla carrier, review the product information to ensure compatibility.

NOTE: When not in use, the hitch receiver should be removed and stored in a dry location to prevent rust and corrosion. Keep the dust cover over the hitch housing to prevent dirt and debris from entering (see [Disconnecting the Tow Hitch on page 548](#)).

 **CAUTION:** A carrier may obscure your view from the rear view mirror or the rear camera(s). In addition, some Autopilot features may not function as expected.

 **WARNING:** Tesla assumes no responsibility for damage or injuries resulting from installing and using an accessory carrier, for any omissions in the instructions accompanying an accessory carrier, or for your failure to follow the instructions. Damage caused by using an accessory carrier is not covered by the warranty.



Towing Capacity


The total trailer weight (including all cargo and additional equipment), and the trailer tongue weight, must never exceed the following:


Wheel/Rim Size	Maximum Towing Capacity*	Maximum Tongue Weight**
245/45R19 110 V / Y	SAE Class III – 4960 lb (2250 kg)	SAE Class III – 500 lb (225 kg)
275/45R20 110 V / Y	SAE Class III – 5000 lb (2300 kg)	SAE Class III – 500 lb (230 kg)
285/35R22 106 W	SAE Class II – 3500 lb (1588 kg)	SAE Class II – 350 lb (158 kg)


*Tesla recommends a separate braking system on trailers with a loaded weight of over 1000 lbs (450 kg). The braking system must be appropriate for the weight of the trailer. Follow the instructions provided by the trailer brake manufacturer to ensure that trailer brakes are properly installed, adjusted, and maintained.

**The tongue weight is the downward force that the weight of the trailer exerts on the hitch. It must not be less than 10% of the trailer load. Carrying a significant amount of equipment, passengers, or cargo in the tow vehicle can reduce the tongue weight it can handle, which also reduces the maximum towing capacity. Maximum towing capacity is calculated assuming the GVWR (Gross Vehicle Weight Rating) is not exceeded. The GVWR is printed on the Vehicle Certification Label (see [Vehicle Certification Label on page 850](#)).

NOTE: If the towing capacity on the hitch label conflicts with the information provided in this owner's manual, this owner's manual takes precedence.

 **WARNING:** Do not overload the vehicle or trailer. Doing so can cause poor performance, vehicle damage and loss of vehicle control, resulting in serious injury.

 **WARNING:** Do not use the trailer hitch to tow/transport Model X.



 **CAUTION:** Tesla assumes no responsibility for damage or injuries resulting from towing a trailer, for any errors or omissions in the instructions accompanying towing equipment, or for your failure to follow the proper instructions. Damage caused by towing a trailer is not covered by the warranty.



Tire Pressures when Towing

When towing a trailer, tire pressures must be adjusted to accommodate the additional load. Keep tires inflated to the pressures shown below (these pressures override the pressures that are provided on the Tire and Loading information label):

Front Tires	Rear Tires	Cold Tire Inflation Pressure
245/45R19	245/45R19	45 psi (310 kPa)
255/45R20 265/45R20	275/45R20	46 psi (320 kPa)
265/35ZR22	285/35ZR22	50 psi (345 kPa)

-  **WARNING:** Check tire pressures using an accurate pressure gauge when tires are cold. Driving one mile (1.6 km) warms the tires sufficiently to affect tire pressures. Parking the vehicle in direct sunlight or in hot weather can also affect tire pressures. If you must check warm tires, expect increased pressures. Do not let air out of warm tires in an attempt to match recommended cold tire pressures. A hot tire at or below the recommended cold tire inflation pressure is dangerously under-inflated.
-  **WARNING:** Never attempt to tow a trailer when a Model X tire is faulty or has been inflated using a tire repair kit. A temporarily repaired tire is not designed to sustain the towing load. Towing using a faulty or temporarily repaired tire can result in tire failure and loss of vehicle stability.

Before Towing a Trailer

Before towing a trailer, you must do the following:

- Inflate tires to the cold tire inflation pressure specified in Tire Pressures when Towing.
- Set the Suspension height to **Low** (touch **Controls > Suspension > Low**).
- Observe all regulations and legal requirements in your state/region that apply to trailer towing. Failure to comply with regulations can compromise your safety.
- Adjust side mirrors to provide a clear rearward view without a significant blind spot.
- Engage **Trailer Mode** (see [Trailer Mode on page 540](#)).

Confirm the following:

- Model X rests horizontally with the trailer attached. If the vehicle is tipped up at the front, and down at the rear, check that you are not exceeding the maximum towing capacity and tongue loads provided in Carrying Capacity.
- All trailer hitch parts and attachments , safety chains, and electrical connectors are in good condition and are properly connected. If any problems are apparent, do not tow the trailer.
- Trailer lights (brake lights, turn signal lights, and marker lights) are working properly.
- The trailer tongue is securely connected to the hitch ball.
- Safety chains are properly connected between the trailer and the tow vehicle. Cross the safety chains under the tongue of the trailer to help prevent the tongue from contacting the road if it separates from the hitch. Leave enough slack in the safety chains to allow for turns and ensure that the chains can never drag on the ground.
- All cargo is secured.
- Wheel chocks are available.
- The trailer load is evenly distributed such that the trailer tongue weight is approximately 10% of the total trailer weight, without exceeding the maximum tongue weights provided in Carrying Capacity.
- If the trailer is equipped with a separate braking system, check that the brakes work and are properly adjusted. To provide safe stopping ability, you must balance the trailer brakes with the vehicle brakes.



NOTE: For general information about trailer safety provided by the National Highway Traffic Safety Administration, go to: <http://www.nhtsa.gov/cars/problems/Equipment/towing/Towing.pdf>.

WARNING: The trailer tongue weight must be approximately 10% of the total trailer weight without exceeding the maximum tongue weights provided in Carrying Capacity. Loads that are balanced over the wheels or heavier in the rear can cause trailer sway, resulting in loss of vehicle control.

WARNING: Always ensure that cargo is secured in the trailer and will not shift. Dynamic load shifts can cause loss of vehicle control, resulting in serious injury or death.

Trailer Mode

Trailer Mode must always be active when towing a trailer. When you connect a trailer's electrical connection, Model X automatically engages Trailer Mode. When you disconnect the trailer's electrical connection, Trailer Mode disengages. To engage or exit Trailer Mode manually, touch **Controls > Pedals & Steering > Trailer Mode** on the touchscreen. One of the following indicators display on the instrument panel:

Trailer Mode is active.



Model X detects a connection for trailer lights but Trailer Mode is disabled. It is likely that a carrying accessory has been connected.



Model X detects a faulty electrical connection for the trailer lights. Some, or all, trailer lights may not be functioning. Pull over as soon as safety permits and inspect the trailer lights for faulty cabling or connections. If the issues are resolved and the red icon still persists, turn Trailer Mode off and on again.



NOTE: In situations where Model X detects a heavy load, it assumes that a trailer is connected and automatically engages Trailer Mode. A message displays on the instrument panel informing you that Trailer Mode has been engaged. When Trailer Mode is entered automatically due to detection of a heavy load, you can change the Trailer Mode setting only by stopping Model X, engaging Park or Neutral, then manually applying the parking brake using the touchscreen (**Controls > Safety > Parking Brake**).

Some Autopilot features, as well as rear parking sensor functionality, may not be available when Trailer Mode is enabled. In addition, some features may operate differently. For example:

- Autosteer is unavailable.
- For Traffic-Aware Cruise Control availability, first set **Controls > Autopilot > Autopilot Activation > Double Click**. Then, engage Traffic-Aware Cruise Control with a single press of the right steering yoke scroll button.
- Traffic-Aware Cruise Control increases the following distance from the car in front of you.
- The air suspension system will not make speed-based adjustments from **StandardMedium** to **Low**.
- The air suspension system does not automatically raise ride height based on saved locations.
- Side collision warnings are active but automatic steering interventions are disabled.
- The braking force provided by Automatic Emergency Braking (see [Collision Avoidance Assist on page 645](#)) is significantly limited.

WARNING: Do not rely on Model X to detect the trailer and automatically engage Trailer Mode. Always check that Trailer Mode is engaged before towing a trailer.

WARNING: Under no circumstances should you exit Trailer Mode when towing a trailer. Doing so can cause serious injury and/or death.

WARNING: Do not use the suspension setting to appropriately match the height of the hitch with the height of the trailer. You must choose a trailer hitch and trailer that have the appropriate height for suitable axle loading and trailer balance.

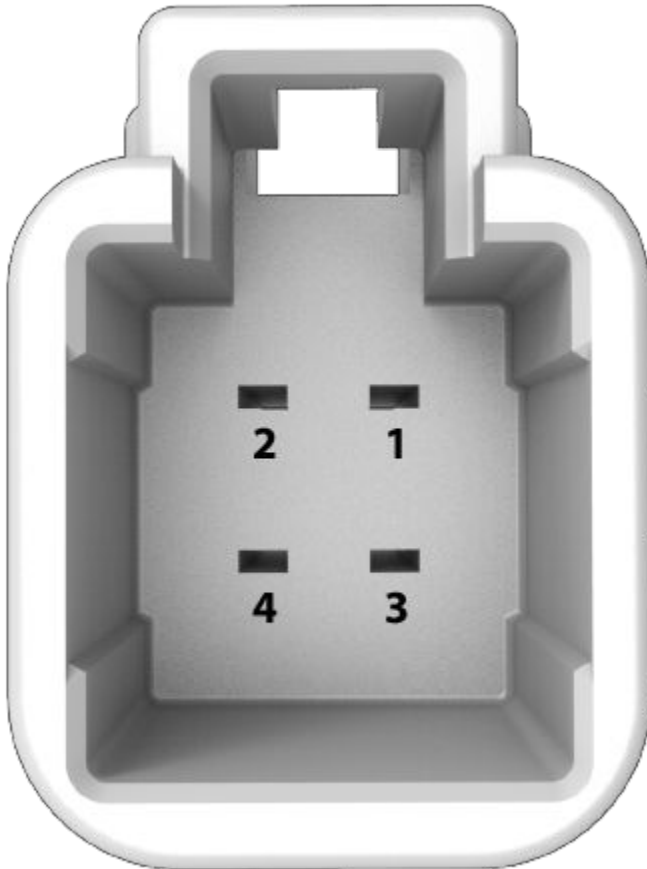


Trailer Brakes

When towing a loaded trailer that weighs more than 1000 lbs (450 kg), Tesla recommends that the trailer be equipped with its own brake system adequate for the weight of the trailer. Ensure compliance with local regulations. A brake controller must be purchased separately, and the required 4-pin pigtail connector can be ordered from Tesla Service.

Follow these steps to connect a brake controller:

1. Connect the wiring on the brake controller to the appropriate locations on the 4-pin pigtail connector.



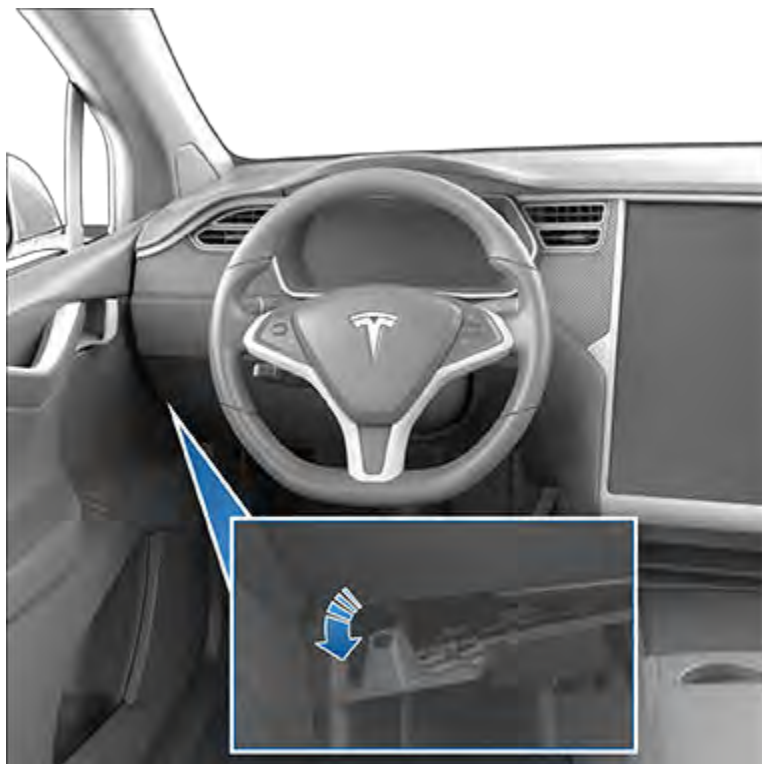
1 - Brake control output to trailer

2 - Ground

3 - Brake On Signal

4 - Low Voltage Power (20A)




2. Remove the cover located under the dashboard in the driver's side foot well.



3. Peel back the carpet to expose Model X's 4-pin connector on the wiring harness.



4. Connect the pigtail connector to the vehicle wiring connector.

-  **WARNING:** Towing increases your stopping distance, even when the trailer is equipped with its own braking system. When towing, increase your following distance and avoid situations that could potentially cause heavy braking. Failure to do so can result in a collision.
-  **WARNING:** Observe all regulations and legal requirements in your regional and national jurisdictions that apply specifically to trailer towing and brake requirements. Many regions require a breakaway switch, located on the tongue of the trailer, to activate the trailer brakes in the event that the trailer separates from the vehicle. Failure to comply with regulations can compromise your safety.
-  **WARNING:** Follow the instructions provided by the trailer brake manufacturer to ensure that trailer brakes are properly installed, adjusted, and maintained. Tesla is not responsible for damages caused by incorrect installation of trailer braking systems.



⚠ WARNING: Never attempt to connect trailer brakes directly to the vehicle braking system. Doing so can cause damage to the vehicle and the trailer, and can cause the braking system to malfunction, resulting in serious injury or death.

Towing Guidelines

Model X is designed primarily as a passenger-carrying vehicle. Towing a trailer puts additional load on the motor(s), drive train, brakes, tires, and suspension and significantly decreases range. If you decide to tow a trailer, proceed with caution and follow these general guidelines:

- Reduce your driving speed and avoid sudden maneuvers. Keep in mind that when towing a trailer, steering, stability, turning radius, stopping distance and braking performance are different when compared to driving without a trailer.
- Increase your following distance by maintaining at least twice the distance from a vehicle ahead. This helps to avoid situations that require heavy braking. Sudden braking may result in skidding or jack-knifing, and loss of control.
- Avoid sharp turns. Sharp turns can cause the trailer to contact the vehicle and cause damage. Keep in mind that the trailer wheels are closer to the inside of the turn than the vehicle's wheels. Therefore, make wider turns to prevent the trailer from hitting curbs, road signs, trees or other objects.
- Periodically check the trailer lights and turn signals to confirm that bulbs are still working. When towing a trailer, the turn signal arrows on the vehicle instrument cluster flash as normal, even if the bulbs on the trailer are burned out.
- Periodically confirm the cargo is secure.
- Periodically confirm the trailer brakes are working.
- Avoid parking on a grade (see [Parking with a Trailer on page 544](#)).
- Regularly confirm that all towing components are securely tightened.

Parking with a Trailer

Whenever possible, avoid parking on a grade. However, if parking on a grade is absolutely necessary, place wheel chocks under the trailer wheels:

- One person presses and holds the brake pedal.
- A second person places the wheel chocks under the wheels on the downgrade side of the vehicle's tires.
- When the chocks are in place, release the brake pedal and ensure the chocks hold the weight of the vehicle and trailer.

NOTE: When testing chocks, ensure that Vehicle Hold (see [Vehicle Hold on page 493](#)) is not engaged. If Vehicle Hold is braking Model X, the Vehicle Hold indicator light displays on the instrument panel. To disengage Vehicle Hold, press and release the brake pedal.

- Place the vehicle in Park.

⚠ WARNING: If parking on a grade is necessary, always ensure that all trailer wheels have been securely chocked. Failure to do so can result in serious damage, injury, or death.

Trailer Sway Mitigation

When trailer sway is detected, the Model X electronic stability control system attempts to apply the appropriate amount of braking to minimize trailer sway. The instrument panel briefly displays the traction control system indicator. Pressing the brake pedal when the system is actively braking to mitigate trailer sway does not cancel this automatic braking.

Connecting the Tow Hitch

The Model X towing package includes a weight-carrying hitch with a 2" x 2" removable hitch receiver. When not in use, the hitch receiver should be removed and stored in a dry location to prevent rust and corrosion. Keep the dust cover over the hitch housing to prevent dirt and debris from entering.



The trailer hitch assembly is attached to the body of the vehicle with 8 nuts.



NOTE: The maximum permissible rear overhang for the coupling point is 47 inches (1186 mm).

NOTE: Always attach safety chains when towing. Cross the chains under the trailer tongue and attach to the trailer eyelets to ensure the security of the trailer load.

⚠ CAUTION: Always remove the ball mount before installing or removing the hitch receiver from the vehicle (see [Attaching and Removing the Ball Mount](#) on page 548).

⚠ WARNING: You must use the Model X trailer hitch when towing a trailer. Never attempt to attach a different type of trailer hitch.

To install the trailer hitch receiver:

1. Remove the dust cover from the hitch housing.



NOTE: Model X may have two push clips that secure the dust cover to the vehicle. To open, use a sharp object, such as a flat screwdriver, to carefully pry the clips open. Remove the dust cover.



2. Insert the key into the locking cylinder on the hitch, and turn the cylinder so the top of the key is aligned with the "unlocked" position.



- Pull the locking cylinder out of the adapter approximately 1/8" (0.5 cm), and turn clockwise until the red marking on the cylinder aligns with the white dot.



⚠ WARNING: Be careful when turning the locking cylinder. If it does not lock into the "Open Position", it automatically retracts into its original "Closed Position" and can pinch your fingers.

- Firmly grasp the hitch from the bottom and align the triangular-shaped guides at the sides of the hitch with the corresponding cutouts in the hitch housing.

NOTE: Do not grasp the locking cylinder because it needs to rotate freely.

- Push the hitch into the hitch housing until the locking cylinder rotates approximately 120° counter-clockwise and automatically locks into the "Closed Position". The green area on the locking cylinder (above the white arrow) aligns with the white dot on the housing.
- Visually check to confirm that the hitch is fully inserted into the housing. Try pulling down on the hitch. The hitch should not drop when you pull down.

NOTE: If the hitch does not lock into the housing, it falls out when you pull down on it.

- Turn the key so the arrows align with the "locked" marking on the locking cylinder.
- Remove the key and store it in a safe place (preferably inside the vehicle).

NOTE: The key can be removed only if the hitch is locked. This indicates a proper connection. Do not use the hitch if the key is not removed.

NOTE: Tesla recommends making a note of the key code. You need this code if you lose the keys and need to order a replacement.



- Close the dust cover to prevent dirt and debris from entering the lock. For newer version with push clips, reattach the dust cover, snap it in place and open the push clips before pushing them in.



NOTE: To maintain the hitch, regularly grease its surfaces with non-resinous grease.

Disconnecting the Tow Hitch

After towing, remove the hitch:

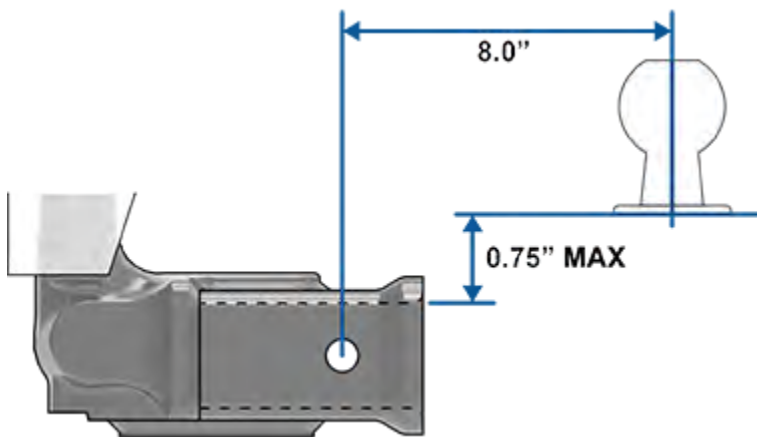
1. Insert the key and turn to align the top of the key with the "unlocked" position.
2. While firmly holding the bottom of the hitch (to prevent it from dropping to the ground), pull the locking cylinder out approximately 1/8" (0.5 cm), and turn it clockwise until the red marking on the locking cylinder aligns with the white dot. At this point, the locking cylinder is locked in the "open" and the hitch drops out of the housing.

⚠ WARNING: Be careful when turning the locking cylinder. If it does not lock into the "Open Position", it automatically retracts into its original "closed" position and can pinch your fingers.

3. Reinstall the dust cover on the hitch housing to prevent dirt from accumulating inside the housing.
4. Close the dust cover on the hitch's locking cylinder and store the hitch in a secure location.

Attaching and Removing the Ball Mount

The Model X towing package does not include a ball mount. You must purchase a ball mount suitable for the type of trailer you are towing. The Model X hitch receiver supports a ball mount up to 8" with a rise of up to 0.75". Do not use any type of drop ball mount.



To attach a ball mount:

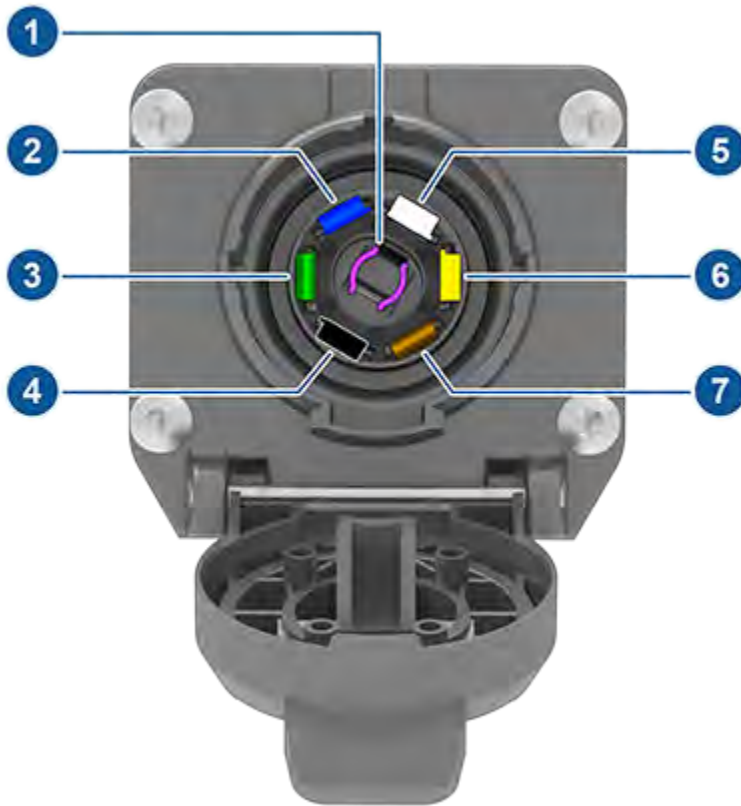
1. If necessary, remove the cotter pin from the locking bolt and slide the locking bolt out of the hitch assembly.
2. Slide the ball holder into the hitch assembly.
3. Align the hole in the ball holder with the one in the hitch assembly.
4. Slide the locking bolt through the hitch assembly/ball holder.
5. Insert the cotter pin in the hole at the end of the locking bolt.

To remove a ball mount:

1. Remove the cotter pin from the locking bolt and slide the locking bolt out of the ball holder/hitch assembly.
2. Pull the ball holder out of the hitch assembly.

Electrical Connections

Regulations require all trailers to be equipped with tail lights, brake lights, side marker lights, and turn signals. To provide power for trailer lighting, a built-in seven-way wiring connector (SAE J560) is attached near the tow hitch. Most trailer wiring plugs can be attached to this connector.



1. Reverse Lights (Purple)
2. Brake Controller Output (Blue)
3. Right Turn Signal and Brake Light (Green)
4. Low Voltage Power (Red or Black)
5. Ground (White)
6. Left Turn Signal and Brake Light (Yellow)
7. Tail Lights and Running Lights (Brown)

NOTE: It is the driver's responsibility to ensure that all electrical connections are working, and all trailer lights are operating before and during towing. Model X does not detect faulty trailer lights. You must perform manual checks.

NOTE: Loss of trailer lights when towing may be the result of a fault in the trailer wiring or excessive power consumption by the lights connected to the trailer output(s). When this occurs, a red Trailer Mode icon appears on the touchscreen. Fix any issues with the wiring and/or reduce the number of lights connected to the trailer output(s), then toggle Trailer Mode off and on again.

Plugging trailer wiring into the Model X electrical connector automatically engages Trailer Mode (see [Trailer Mode](#) on page 540).



WARNING: The brake controller output operates only when a brake controller is installed (see [Trailer Brakes](#) on page 541).



WARNING: Use only the electrical connection designed by Tesla. Do not attempt to directly splice or attempt to connect trailer electrical wiring using any other method. Doing so can damage the vehicle electrical system and cause malfunctions.



CAUTION: Always ensure that the trailer electrical cable does not contact or drag on the ground and there is enough slack in the cable to allow for turns.



Impact on Range

Towing a trailer and carrying accessories increases vehicle weight and drag. As a result, driving range can decrease significantly. Although Trip Planner attempts to adjust estimates based on Trailer Mode, actual energy consumption may vary. Plan trip length and charging destinations accordingly.

Autopilot

About Autopilot

Autopilot is a suite of advanced driver assistance features that are intended to make driving safer and less stressful. None of these features make CybertruckModel SModel XModel 3Model Y fully autonomous or replace you as the driver. Autopilot features come standard with all new Tesla vehicles.

Basic Autopilot includes Traffic-Aware Cruise Control and Autosteer.

- **Traffic-Aware Cruise Control:** Maintains your speed and an adjustable following distance from the vehicle in front of you, if there is one (see [Traffic-Aware Cruise Control on page 554](#)[Traffic-Aware Cruise Control on page 576](#)).
- **Autosteer:** Maintains your speed and distance from a leading vehicle while also intelligently keeping CybertruckModel SModel XModel 3Model Y in its lane (see [Autosteer on page 556](#)[Autosteer on page 587](#)).

WARNING: Basic Autopilot is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury, or death.

Enhanced Autopilot includes additional features. Enhanced Autopilot Features are designed to further reduce driver workload and make common actions, such as changing lanes or parking, easier.

- **Auto Lane Change:** Moves CybertruckModel SModel XModel 3Model Y into an adjacent lane when you engage the turn signal and Autosteer is active (see [Auto Lane Change on page 559](#)[Auto Lane Change on page 590](#)).
- **Navigate on Autopilot:** Actively guides CybertruckModel SModel XModel 3Model Y from a highway's on-ramp to off-ramp, including performing lane changes, navigating interchanges, automatically engaging the turn signal, and taking the correct exit (see [Navigate on Autopilot on page 561](#)[Navigate on Autopilot on page 592](#)).
- **Autopark:** Parks CybertruckModel SModel XModel 3Model Y, either parallel or perpendicularly (see [Autopark on page 614](#)[Autopark on page 609](#)).
- **Summon:** Moves CybertruckModel SModel XModel 3Model Y forward or backward, even while you're outside the vehicle. This is useful for parking in tight parking spots (see [Summon on page 617](#)[Summon on page 624](#)).
- **Smart Summon:** Moves CybertruckModel SModel XModel 3Model Y out of a parking space and through more complex environments, maneuvering around obstacles and other vehicles, to meet you or go to a predetermined target (see [Smart Summon on page 621](#)[Smart Summon on page 628](#)).

WARNING: Enhanced Autopilot is a hands-on feature. Keep your hands on the steering wheel at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

Full Self-Driving Capability includes:

- **Traffic Light & Stop Sign Control:** Maintains your speed, keeps a following distance, and keeps CybertruckModel SModel XModel 3Model Y in its lane while also slowing down and stopping for traffic lights and stop signs (see [Traffic Light and Stop Sign Control on page 597](#)).
- **Autosteer on City Streets (Full Self-Driving (Supervised)):** Attempts to drive to your destination by following curves in the road; stopping at and negotiating intersections, stop signs, and roundabouts; making left and right turns; and entering/exiting highways (see [Full Self-Driving \(Supervised\) on page 603#unique_679 on page](#)).


WARNING: Full Self-Driving Capability is a hands-on feature. Keep your hands on the steering wheel at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Pay attention to the road at all times and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.



Autopilot uses the cameras on CybertruckModel SModel XModel 3Model Y, which monitor the surrounding area and detect other vehicles, pedestrians, road markings, and obstacles such as barriers and curbs. There are cameras mounted on the front, rear, left, and right sides of CybertruckModel SModel XModel 3Model Y (see [Cameras on page 101](#)[Cameras on page 1136](#)).

CybertruckModel SModel XModel 3Model Y may also be equipped with a cabin camera, mounted in the rear-view mirror, that monitors driver attentiveness. It is your responsibility to keep your hands on the wheel, pay attention to the road, and be ready to take immediate action at any time.

When Autopilot is engaged, CybertruckModel SModel XModel 3Model Y shows a series of escalating warnings reminding you to keep your hands on the wheel and pay attention to the road. If there is no response, Autopilot disengages and is unavailable for the remainder of the drive.

 **WARNING:** Autopilot is designed for your driving comfort and convenience and is not a collision warning or avoidance system. It is your responsibility to stay alert, drive safely, and be in control of the vehicle at all times. Never depend on Autopilot to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.

It is your responsibility to familiarize yourself with the limitations of Autopilot and be ready to take control at all times. For more limitations, cautions, and warnings, see [Limitations and Warnings on page 631](#).



Autopilot Conditions

Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

Before you can use Autopilot features, and after some Service visits, you must drive a short distance to calibrate cameras. For more information, see [Drive to Calibrate Cameras on page 108](#)[Drive to Calibrate Cameras on page 1140](#).

In addition, these features may not work as intended when:

- The road has sharp curves or significant changes in elevation.
- Road signs and signals are unclear, ambiguous, or poorly maintained.
- Visibility is poor (due to heavy rain, snow, hail, etc. or poorly lit roadways at night)
- You are driving in a tunnel or next to a highway divider that interferes with the view of the camera(s)
- Bright light (such as from oncoming headlights or direct sunlight) interferes with the view of the camera(s).

The list above does not represent an exhaustive list of situations that may interfere with proper operation of Autopilot features. For more information, see [Limitations and Warnings on page 631](#).

Autopilot Feature	Available When
Traffic-Aware Cruise Control	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h) <p>NOTE: You can activate Traffic-Aware Cruise Control at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p>
Autosteer	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h) <p>NOTE: You can activate Autosteer at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p> <p>NOTE: On a residential road, a road without a center divider, or a road that is not controlled access, the maximum allowed cruising speed is limited and the instrument paneltouchscreen displays a message. The restricted speed will be the speed limit of the road plus 5 mph (10 km/h).</p> <ul style="list-style-type: none"> • Headlights are set to On or Auto. Although Autopilot is available both during the day and in low light conditions (dusk or dark), Autosteer aborts or is unavailable if headlights are set to Off. When Autosteer is engaged, Auto High BeamAdaptive Headlights Auto High Beam is automatically enabled (see High Beam Headlights on page 436High Beam Headlights on page 435High Beam Headlights on page 437High Beam Headlights on page 422High Beam Headlights on page 422Headlights on page 1229) and the wiper iswipers are set to Auto.
Navigate on Autopilot	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h). <p>NOTE: You can activate Navigate on Autopilot at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p> <ul style="list-style-type: none"> • You are driving on a controlled-access highway. When you leave a controlled-access highway, Navigate on Autopilot reverts to Autosteer.



Autopilot Feature	Available When
Full Self-Driving (Supervised)	<ul style="list-style-type: none"> You are driving less than 85 mph (150 km/h). <p>NOTE: You can activate Full Self-Driving (Supervised) at lower speeds, including when CybertruckModel SModel XModel 3Model Y is at a standstill, whether or not there is a vehicle detected in front of CybertruckModel SModel XModel 3Model Y.</p> <ul style="list-style-type: none"> Headlights are set to On or Auto. Although Full Self-Driving (Supervised) is available both during the day and in low light conditions (dusk or dark), it aborts or is unavailable if headlights are set to Off. When Full Self-Driving (Supervised) is engaged, Auto High Beam is automatically enabled (see High Beam Headlights on page 436High Beam Headlights on page 435 High Beam Headlights on page 422High Beam Headlights on page 1229) and the wiper is/wipers are set to Auto.

Autopilot Features


This topic describes how to enable and use the following driver assistance features.


- Traffic-Aware Cruise Control:** Like traditional cruise control, Traffic-Aware Cruise Control maintains a set driving speed. However, Traffic-Aware Cruise Control also slows down or accelerates CybertruckModel SModel XModel 3Model Y as needed to maintain the following distance from the vehicle in front of you. While Traffic-Aware Cruise Control is engaged, you are still responsible for steering CybertruckModel SModel XModel 3Model Y (see [Traffic-Aware Cruise Control on page 554](#)).
- Autosteer:** Like Traffic-Aware Cruise Control, Autosteer maintains a set speed (if there is not a vehicle in front of you) or a set following distance (if there is a vehicle in front of you). In addition, Autosteer detects lane markings, road edges, and the presence of vehicles and objects to intelligently keep CybertruckModel SModel XModel 3Model Y in its driving lane (see [Autosteer on page 556](#)).

NOTE: Autosteer is a BETA feature.
- Auto Lane Change:** When you engage a turn signal while Autosteer is active, Auto Lane Change moves CybertruckModel SModel XModel 3Model Y into the adjacent lane in the direction indicated by the turn signal (see [Auto Lane Change on page 559](#)).
- Navigate on Autopilot:** Navigate on Autopilot builds on the features of Traffic-Aware Cruise Control and Autosteer. While Autosteer is active, Navigate on Autopilot allows CybertruckModel SModel XModel 3Model Y to suggest and, if configured, automatically change lanes to pass other vehicles and follow the navigation route (see [Navigate on Autopilot on page 561](#)).

NOTE: Navigate on Autopilot is a BETA feature.

Traffic-Aware Cruise Control and Autosteer use information from the cameras on CybertruckModel SModel XModel 3Model Y to detect lane markings, road edges, and other vehicles and road users around CybertruckModel SModel XModel 3Model Y.

 **CAUTION:** Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

 **CAUTION:** It is your responsibility to familiarize yourself with the limitations of Autopilot and the situations in which driver intervention may be needed. For more information, see [Limitations and Warnings on page 631](#).

Autopilot Settings

Before you use Autopilot features, customize how they work by touching **Controls > Autopilot**.

- Set Speed:** Choose whether Autopilot engages at the currently detected speed limit or your current driving speed. Touch **Controls > Autopilot > Set Speed** and choose either **Speed Limit** or **Current Speed**.



- **Offset:** If you choose **Speed Limit**, you can specify an offset by touching **Set Speed Offset**. You can choose **Fixed** (the cruising speed adjusts by a specific amount on all roads) or **Percentage** (the cruising speed is adjusted as a percentage of the road's detected speed limit).
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Click**, both Traffic-Aware Cruise Control and Autosteer engage when you single-press the right scroll wheel. If set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer.

NOTE: Autopilot Activation must be set to **Double Click** if you want to use Traffic-Aware Cruise Control independently of Autosteer.

- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Click**, both Traffic-Aware Cruise Control and Autosteer engage when you single-press the right scroll wheel. If set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer.
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Pull**, both Traffic-Aware Cruise Control and Autosteer engage when you pull the drive stalk down once. If set to **Double Pull**, you must pull the drive stalk down twice in quick succession to engage Autosteer.

NOTE: Autopilot Activation must be set to **Double Pull** if you want to use Traffic-Aware Cruise Control independently of Autosteer.

- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Pull**, both Traffic-Aware Cruise Control and Autosteer engage when you pull the drive stalk down once. If set to **Double Pull**, you must pull the drive stalk down twice in quick succession to engage Autosteer.
- **Green Traffic Light Chime:** In Canada and U.S.: If on, a chime will sound when you are waiting at a red traffic light and the light turns green. If you are not actively using Traffic-Aware Cruise Control and are waiting at a red light with a car in front of you, the chime sounds when the car ahead of you advances.

NOTE: Autopilot Activation must be set to **Double Pull** if you want to use Traffic-Aware Cruise Control independently of Autosteer.

Traffic-Aware Cruise Control

Traffic-Aware Cruise Control is always enabled.

When Traffic-Aware Cruise Control is available but not engaged, the instrument cluster touchscreen displays the cruising speed in gray. The number shown represents the speed that will be set when you engage Traffic-Aware Cruise Control.

When Traffic-Aware Cruise Control is actively cruising at a set speed, the speed is highlighted with blue text.

To engage Traffic-Aware Cruise Control, press the right scroll wheel, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.

NOTE: If **Autopilot Activation** is set to **Single Click**, pressing the right scroll wheel once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Click** to use Traffic-Aware Cruise Control independently of Autosteer when you single-press the right scroll wheel.

To engage Traffic-Aware Cruise Control, press the right scroll wheel, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.

NOTE: If **Autopilot Activation** is set to **Single Click**, pressing the right scroll wheel once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Click** to use Traffic-Aware Cruise Control independently of Autosteer when you single-press the right scroll wheel.



To engage Traffic-Aware Cruise Control when it is available (the car status area of the touchscreen displays the gray cruising speed icon), pull the drive stalk down once, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once.

To engage Traffic-Aware Cruise Control when it is available (the car status area of the touchscreen displays the gray cruising speed icon), pull the drive stalk down once, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once.

If you want a chime to sound when you engage or cancel Traffic-Aware Cruise Control, touch **Controls > Autopilot > Traffic-Aware Cruise Control Chime**.

WARNING: Traffic-Aware Cruise Control is designed for your driving comfort and convenience and is not a collision warning or avoidance system. It is your responsibility to stay alert, drive safely, and be in control of the vehicle at all times. Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death. For more information, see [Limitations and Warnings on page 631](#).



Autosteer

To enable Autosteer:

1. Touch **Controls > Autopilot > Autopilot Features > Autosteer (Beta)**.
2. After carefully reading and understanding the popup window, touch **Yes**.



To indicate that Autosteer is available (but not actively steering CybertruckModel SModel XModel 3Model Y), the instrument paneltop corner of the touchscreen displays a gray Autosteer icon next to the driving gear. In situations where Autosteer is temporarily unavailable, the Autosteer icon disappears. (For example, if your driving speed is not within the speed required for Autosteer to operate.)



To initiate Autosteer, press the right scroll wheelpress the right scroll wheelmove the drive stalk fully down twice in quick successionmove the drive stalk fully down twice in quick succession.

NOTE: If the setting for **Autopilot Activation** is set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once engages Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once engages Autosteer (see [Autopilot Settings on page 553](#)).





Autosteer confirms activation with an audible chime and briefly displays a message on the instrument clustertouchscreen reminding you to pay attention to the road and be ready to take over at any time.



To indicate that Autosteer is now active, the instrument clustertouchscreen displays the Autosteer icon in blue.

When Autosteer is able to detect lane markings, it displays the edges of the driving lane in blue on the instrument clustertouchscreen.







Whenever Autosteer is active, Traffic-Aware Cruise Control is active as well.

In situations where the speed limit cannot be detected when Autosteer is engaged, Autosteer reduces your driving speed and limits the set cruising speed to 45 mph (70 km/h). Although you can manually accelerate to exceed the limited speed, CybertruckModel SModel XModel 3Model Y will not brake for detected obstacles as long as you are applying the accelerator pedal. Autosteer slows down to the limited speed when you release the accelerator pedal. When you leave the road or disengage Autosteer by using the steering wheelsteering yoke (or steering wheel), you can increase your set speed again, if desired.

- ⚠ WARNING:** Steering is limited when Autosteer is enabled. Therefore, CybertruckModel SModel XModel 3Model Y may not be able to handle tight turns. Be prepared to take control of the vehicle at all times.
- ⚠ WARNING:** Autosteer is a hands-on assistance feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Autosteer and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).

Auto Lane Change

If you engage a turn signal while Autosteer is active, CybertruckModel SModel XModel 3Model Y moves into the adjacent lane in the direction indicated by the turn signal, provided the following conditions are met:

- The turn signal is engaged.
- Lane markings indicate that a lane change is permitted.
- Midway through the lane change, CybertruckModel SModel XModel 3Model Y must detect the target lane's outside lane marking. If this lane marking is not detected, the lane change is aborted and CybertruckModel SModel XModel 3Model Y returns to its original driving lane.
- The view of the camera(s) is not obstructed.
- CybertruckModel SModel XModel 3Model Y does not detect a vehicle in its blind spot, or a vehicle or obstacle up to the center of the target lane. If a vehicle or other obstacle is detected in the target lane, it is shown in red in the visualization on the instrument clustertouchscreen and CybertruckModel SModel XModel 3Model Y does not complete the lane change until it is safe to do so.



NOTE: Auto Lane Change cancels if the lane change cannot be completed in 5 seconds.

⚠ WARNING: Although Autopilot is designed to detect vehicles and obstacles in adjacent lanes, it is your responsibility to always perform visual checks to make sure it is safe and appropriate to move into the target lane. If Autopilot cannot change lanes due to inadequate data, the instrument clustertouchscreen displays a series of warnings. Therefore, when using Auto Lane Change, always pay attention to the instrument clustertouchscreen and be prepared to manually steer CybertruckModel SModel XModel 3Model Y.

The minimum speed at which Autopilot changes lanes may vary depending on region, adjacent lane speeds, and other factors. Always be ready to manually steer and change lanes as necessary. When an automatic lane change is in progress, Overtake Acceleration is activated, allowing CybertruckModel SModel XModel 3Model Y to accelerate closer to a vehicle in front (see [Overtake Acceleration on page 573](#)).

When you engage a turn signal, Autopilot moves CybertruckModel SModel XModel 3Model Y one lane at a time. Moving into an additional lane requires you to engage the turn signal a second time after the first lane change is complete.

As CybertruckModel SModel XModel 3Model Y changes lanes, it is important to monitor its performance by watching the driving path in front of you and the surrounding area. Stay prepared to take over steering at any time. As you are crossing over into the adjacent lane, the instrument clustertouchscreen displays the location in the lane that CybertruckModel SModel XModel 3Model Y is moving into.



Navigate on Autopilot

To enable Navigate on Autopilot, touch **Controls** > **Autopilot** > **Navigate on Autopilot (Beta)**. Then, to customize how you want Navigate on Autopilot to operate, touch **Customize Navigate on Autopilot**:

- **Enable at Start of Every Trip:** Choose whether to automatically enable Navigate on Autopilot for every navigation route. When enabled, the Navigate on Autopilot button on the turn-by-turn direction list is already enabled at the start of every trip.
- **Speed Based Lane Changes:** Navigate on Autopilot is designed to perform both route-based and speed-based lane changes. Speed-based lane changes are optional. You can use this setting to disable speed-based lane changes or to specify how assertively you want Navigate on Autopilot to change lanes to achieve the set cruising speed (**Mild**, **Average**, or **Mad Max**).
- **Exit Passing Lane:** Choose whether you want Navigate on Autopilot to maneuver out of a passing lane when navigating to a destination. In addition to route-based and speed-based lane changes, Navigate on Autopilot requests a lane change out of a passing lane as a reminder to stay in a slower lane when you are not passing other vehicles. Choose **No** to disable this and keep Cybertruck Model S Model X Model 3 Model Y in a passing lane except when needed to stay on the navigation route.
- **Require Lane Change Confirmation:** By default, Navigate on Autopilot requires your confirmation before proceeding with a lane change by pressing the appropriate turn signal engaging the appropriate turn signal. If you do not confirm the lane change within 3 seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes.
- **Lane Change Notification:** You can specify if or how you want to be notified of lane changes (**Off**, **Chime**, **Vibrate**, or **Both**).

If **Enable at Start of Every Trip** is turned on, Navigate on Autopilot engages automatically when:

- Autosteer is active.
- You are navigating to a destination.



- You are on a controlled-access highway.

Once enabled, the Navigate on Autopilot button appears on the map's turn-by-turn direction list whenever a navigation route is active and the route includes at least one controlled-access highway.

If **Enable at Start of Every Trip** is turned off, touch the **Navigate on Autopilot** button above the turn-by-turn directions to enable it. Once the Navigate on Autopilot is selected, it will engage whenever you engage Autosteer.



The Navigate on Autopilot icon shows in the turn-by-turn direction list when you are navigating to a destination and Navigate on Autopilot is available but not active.



If Navigate on Autopilot is active, the icon is blue. If **Enable at Start of Every Trip** is turned on, the Navigate on Autopilot icon is selected whenever you start navigation. Touch the icon to cancel Navigate on Autopilot and revert to Autosteer.

Whenever Navigate on Autopilot is active, the Navigate on Autopilot button is blue and the instrument cluster touchscreen displays the driving lane as a single blue line in front of CybertruckModel SModel XModel 3Model Y:





The turn-by-turn directions display the Autosteer icon next to the maneuvers (such as off-ramps) that Navigate on Autopilot will handle.

When Navigate on Autopilot is engaged CybertruckModel SModel XModel 3Model Y automatically makes both speed-based and route-based lane changes after driver confirmation.

- **Speed Based Lane Changes:** Navigate on Autopilot changes lanes to reduce driving time to your destination. For example, if CybertruckModel SModel XModel 3Model Y is behind a vehicle going below the set cruising speed, Navigate on Autopilot will move into the passing lane to pass it. Speed-based lanes changes are optional.
- **Route Based Lane Changes:** Navigate on Autopilot changes lanes to route you to your destination. For example, Navigate on Autopilot will move into the exit lane as CybertruckModel SModel XModel 3Model Y approaches the off-ramp specified by the navigation route.

When the instrument clustertouchscreen displays a message asking you to confirm the lane change, engage the appropriate turn signal. If you do not confirm the lane change within 3 seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes. Auto Lane Change cancels if the lane change cannot be completed in 5 seconds.

If you ignore a route-based lane change suggestion (for example, you are driving in the left lane while approaching an off-ramp on the right side of the highway), Navigate on Autopilot is unable to maneuver onto the off-ramp and as a result, you are re-routed to your destination.



NOTE: When determining navigation routes, and maneuvers at interchanges, Navigate on Autopilot considers whether or not you want to use High Occupancy Vehicle (HOV) lanes. Therefore, ensure the **Use HOV Lanes** setting is appropriate for your circumstances (see [Maps and Navigation on page 699](#)). If the setting is off, Navigate on Autopilot never uses a HOV lane, regardless of time of day. If the setting is on, Navigate on Autopilot uses HOV lanes, whenever applicable.

CAUTION: Navigate on Autopilot may not always attempt to exit at an off-ramp or change lanes, even when an exit or lane change is determined by the navigation route. Always remain alert and be prepared to manually steer onto an off-ramp, or make a lane change to prepare for, or to exit at, an off-ramp or interchange.

Navigate on Autopilot activates and deactivates based on the type of road you are driving on. When Navigate on Autopilot is active and you approach an off-ramp or interchange along your navigation route, the appropriate turn signal engages and Autosteer maneuvers CybertruckModel SModel XModel 3Model Y onto the off-ramp or interchange.

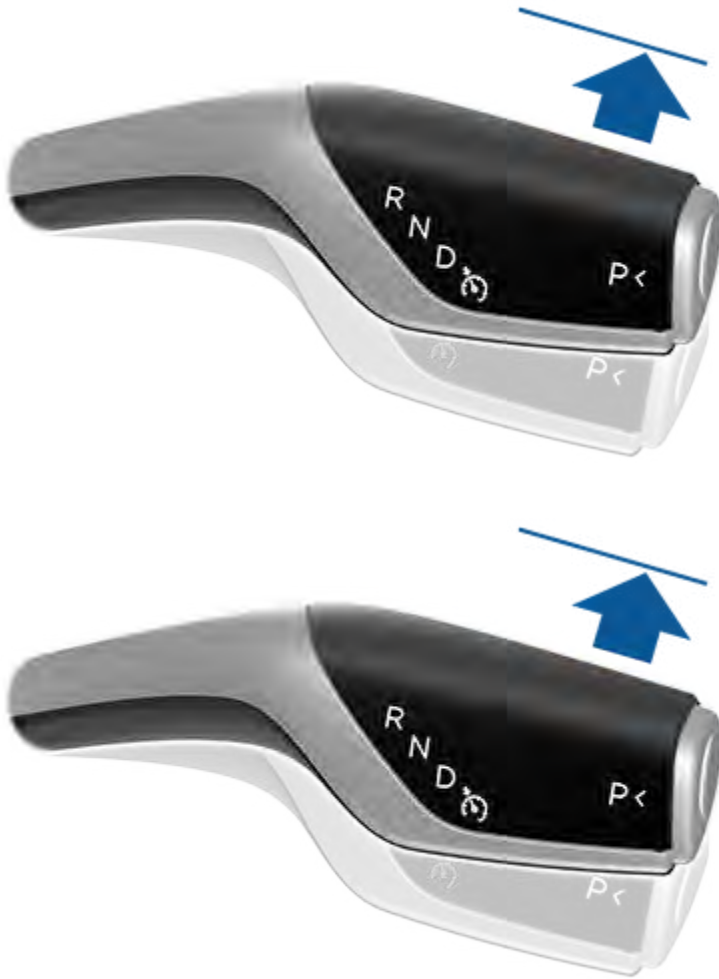
When you leave a controlled-access highway Navigate on Autopilot reverts to Autosteer—a chime sounds and the instrument clustertouchscreen displays the driving lane lines in blue (instead of the single blue in front of CybertruckModel SModel XModel 3Model Y). When Navigate on Autopilot deactivates, Autosteer remains active. Always be prepared to take appropriate action.

WARNING: Navigate on Autopilot is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Navigate on Autopilot and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).

Canceling Autopilot

Traffic-Aware Cruise Control cancels when:

- You move the drive stalk upward.
 - **CAUTION:** If you move the drive stalk upward and hold it up for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- You move the drive stalk downward.
 - **CAUTION:** If you move the drive stalk downward and hold it down for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- You press the right scroll wheel on the steering wheelsteering yoke (or steering wheel).
- You press the left scroll wheel on the steering wheelsteering yoke (or steering wheel).
- You press the brake pedal.
- You exceed 90 mph (150 km/h).
- You shift into Reverse, Park, or Neutral.
- A door is opened.
- An Automatic Emergency Braking event occurs (see [Collision Avoidance Assist on page 645](#)).
- The driver's seatbelt is released, and/or the driver gets out of their seat.



When Traffic-Aware Cruise Control cancels, the cruising speed icon on the instrument cluster touchscreen turns gray to indicate that Traffic-Aware Cruise Control is no longer active.

Autosteer cancels when any of the above actions are taken. In addition, Autosteer cancels when:

- You exceed 85 mph (140 km/h).
- You take over steering manually. You apply rotational force to the steering wheelsteering yoke (or steering wheel) (even a slight amount).

⚠ WARNING: If **Autopilot Activation** is set to **Double Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheelsteering yoke (or steering wheel), Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheelsteering yoke (or steering wheel), Traffic-Aware Cruise Control also cancels.

⚠ WARNING: If **Autopilot Activation** is set to **Double Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.

⚠ WARNING: If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.



WARNING: If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you started steering manually applied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manually applied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.

- You do not respond to repeated reminders to keep your hands on the wheel and subsequent messages on the instrument clustertouchscreen (see [Driver Attentiveness on page 574](#)).

When Autosteer cancels, a chime sounds and the Autosteer icon either turns gray to indicate that Autosteer is no longer active, or disappears to indicate that it is not currently available.

Navigate on Autopilot cancels when Autosteer cancels, as described above. In addition, Navigate on Autopilot cancels when:

- You touch the Navigate on Autopilot button on the map's turn-by-turn direction list. In this case, Autosteer is still active.
- You leave a controlled-access highway. When this happens, Autosteer is still active.

When Navigate on Autopilot cancels but Autosteer remains active, a chime sounds and the visualization goes from a single blue line in the driving lane to two blue lines on either side of the lane.

When Traffic-Aware Cruise Control or Autosteer cancels, CybertruckModel SModel XModel 3Model Y does not coast. Instead, regenerative braking slows down CybertruckModel SModel XModel 3Model Y in the same way as when you move your foot off the accelerator when driving without Traffic-Aware Cruise Control (see [Regenerative Braking on page 463](#)).

While Using Autopilot

When Traffic-Aware Cruise Control is active and Autopilot is maintaining a set speed, the speed is highlighted with blue text on the instrument clustertouchscreen.

When Autosteer is active, the steering wheelsteering yoke (or steering wheel) icon is blue and the lane markings are highlighted in blue on the visualization. If Navigate on Autopilot is also active, the Navigate on Autopilot button is blue and the instrument clustertouchscreen displays the driving lane as a single blue line in front of CybertruckModel SModel XModel 3Model Y.

To display more details about the roadway and its surroundings, such as road markings, stop lights, and objects (such as trash cans and poles), touch **Controls > Autopilot > Full Self-Driving Visualization Preview**.

If unable to detect lane markings, Autosteer may determine the driving lane based on a vehicle you are following. In most cases, Autosteer attempts to center CybertruckModel SModel XModel 3Model Y in the driving lane. However, there may be situations in which Autosteer follows a driving path that is offset from the center of the lane (for example, if guard rails are detected).

Maintaining the Set Speed

When Autopilot is active, CybertruckModel SModel XModel 3Model Y maintains your set cruising speed whenever a vehicle is not detected in front of it. When cruising behind a vehicle, CybertruckModel SModel XModel 3Model Y accelerates and decelerates as needed to maintain a chosen following distance (see [Adjusting the Following Distance on page 569](#)), up to the set speed.

You can manually accelerate at any time by pressing the accelerator pedal, but when you release the pedal CybertruckModel SModel XModel 3Model Y resumes cruising at the set speed.

CybertruckModel SModel XModel 3Model Y also adjusts the cruising speed when entering and exiting curves.

When CybertruckModel SModel XModel 3Model Y is actively slowing down to maintain the selected distance from the vehicle ahead, brake lights turn on. You may notice slight movement of the brake pedal. However, when CybertruckModel SModel XModel 3Model Y is accelerating, the accelerator pedal does not move.

Changing the Set Speed

Roll the right scroll wheel up to increase, or down to decrease, the set speed.

You can also change the cruising speed to the current speed limit (including any offset you've specified), by either:



You can also change the cruising speed to the current speed limit (including any offset you've specified), by either:

- Pushing the drive stalk downward and briefly holding.
- Touching and briefly holding the speed limit sign on the touchscreen until you see the cruising speed change.
- Pushing the drive stalk downward and briefly holding.
- Touching and briefly holding the speed limit sign on the touchscreen until you see the cruising speed change.







It may take a few seconds for CybertruckModel SModel XModel 3Model Y to reach the new cruising speed.

Adjusting the Following Distance

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, press the steering wheel's right scroll button to the left or right.

NOTE: If Full Self-Driving (Supervised) is active, pressing the steering wheel's right scroll button to the left or right changes the Full Self-Driving (Supervised) profile (see [Full Self-Driving \(Supervised\)](#) on page 603).

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, touch **Controls > Autopilot > Cruise Follow Distance**.

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, touch **Controls > Autopilot > Cruise Follow Distance** or press the right scroll button on the steering wheel to the left or right.



The closest following distance is 2. The closest following distance is 1.





Each setting corresponds to a time-based distance that represents how long it takes for CybertruckModel SModel XModel 3Model Y, from its current location, to reach the location of the rear bumper of the vehicle ahead of you. Autopilot retains your setting until you change it again.

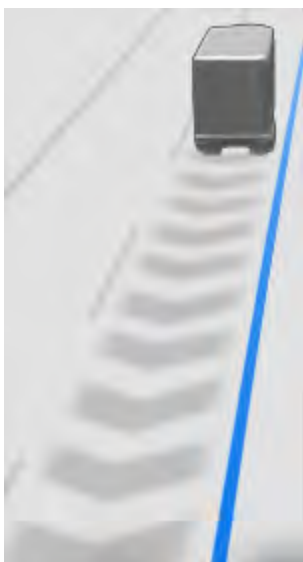
As you adjust the following distance, the touchscreen displays the current setting.

As you adjust the following distance, the touchscreen displays the current setting.



Stopping and Slowdowns

When moving significantly faster than vehicles in adjacent lanes, CybertruckModel SModel XModel 3Model Y automatically reduces the driving speed. This is especially helpful in heavy traffic situations or when vehicles are constantly merging into different lanes. When CybertruckModel SModel XModel 3Model Y detects other vehicles driving significantly slower, the instrument clustertouchscreen highlights the adjacent lanes with arrows and detected vehicles in gray, and CybertruckModel SModel XModel 3Model Y reduces the driving speed as appropriate. To temporarily override this feature, press the accelerator pedal.



When following a vehicle, Autopilot remains active at low speeds, even when CybertruckModel SModel XModel 3Model Y comes to a full stop. For example, Autopilot remains active even if CybertruckModel SModel XModel 3Model Y slows down to a complete or near-complete stop in heavy, stop-and-go traffic on a highway. When traffic starts moving more rapidly, Autopilot again accelerates up to the set speed.

Sometimes when CybertruckModel SModel XModel 3Model Y is at a full stop, Autopilot goes into a HOLD state. If this happens, briefly press the accelerator pedal to resume cruising.



When the HOLD status is active, the instrument clustertouchscreen displays the HOLD icon and a message that indicates that you need to resume cruise control.

CybertruckModel SModel XModel 3Model Y goes into HOLD state while Autopilot is active in the following circumstances:

- CybertruckModel SModel XModel 3Model Y has been at a standstill for 5 minutes.
- CybertruckModel SModel XModel 3Model Y detects a pedestrian (the HOLD state may clear when the pedestrian is no longer detected).
- CybertruckModel SModel XModel 3Model Y suddenly loses visibility of the vehicle in front of you.
- An obstacle is detected in front of CybertruckModel SModel XModel 3Model Y.

Cruising Near or On Exits

When you are cruising near an exit on a controlled-access highway and engage the turn signal toward the off-ramp, Autopilot assumes you are exiting and begins to slow down CybertruckModel SModel XModel 3Model Y. If you do not drive onto the off-ramp, Autopilot resumes cruising at the set speed.

In a region with right hand traffic, this occurs only when you engage the right turn signal when driving in the right-most lane within 164 ft. (50 meters) of an exit. Likewise in regions with left hand traffic, this occurs when engaging the left turn signal when driving in the left-most lane within 164 ft. (50 meters) of an exit.

NOTE: If Navigate on Autopilot is active, CybertruckModel SModel XModel 3Model Y will perform a route-based lane change to enter the exit lane and take the off-ramp as necessary to follow the navigation route.



When enabled while on a highway interchange or off-ramp, Traffic-Aware Cruise Control may reduce your set speed in 5 mph (5 km/h) increments – to as slow as 25 mph (40 km/h) – to better match the reported speeds of other Tesla vehicles that have driven at that specific location. To override this and continue cruising at your set speed, tap the accelerator pedal. The new set speed is maintained for the duration of the interchange or off-ramp (unless you override it or cancel Autopilot). After the interchange or off-ramp, the set speed may revert or change as necessary based on the new location. For example, if you merged onto a different highway, the set cruising speed reverts to what it was before driving on the interchange.

⚠ WARNING: In some cases (such as having insufficient data), Traffic-Aware Cruise Control may not automatically reduce the set speed on the highway interchange or off-ramp. Do not rely on Traffic-Aware Cruise Control to determine an appropriate driving speed. Tesla recommends driving at a speed that is safe for road conditions and within posted speed limits.

When cruising onto an on-ramp to a controlled-access highway, Autopilot automatically adjusts the set cruising speed to the speed limit of the highway, plus any offset you have specified. If Navigate on Autopilot is engaged, it disengages as you leave the controlled-access highway (see [Canceling Autopilot on page 564](#)). In this case, Autosteer remains active.

Overtake Acceleration

Engage the turn signal momentarily to accelerate CybertruckModel SModel XModel 3Model Y towards the vehicle ahead of it. By momentarily holding the turn signal stalk up or down stalk up or down, you can quickly accelerate up to your set speed without having to press the accelerator pedal as long as:

- Traffic-Aware Cruise Control is operating and detects a vehicle in front of you.
- No obstacles or vehicles are detected in the target lane.
- CybertruckModel SModel XModel 3Model Y is traveling below the set speed, but over 45 mph (72 km/h).

NOTE: If Autosteer is active and you fully engage the turn signal, CybertruckModel SModel XModel 3Model Y will change lanes automatically (see [Auto Lane Change on page 559](#)).

CybertruckModel SModel XModel 3Model Y stops accelerating when you reach your set cruising speed, if changing lanes takes too long, or if CybertruckModel SModel XModel 3Model Y gets too close the vehicle ahead. CybertruckModel SModel XModel 3Model Y also stops accelerating if you disengage the turn signal.

Stop Light and Stop Sign Warning

While Autopilot is in use, CybertruckModel SModel XModel 3Model Y displays a warning on the instrument clustertouchscreen and sounds a chime if it detects that you are likely to run through a red stop light or stop sign. If this happens, **TAKE IMMEDIATE CORRECTIVE ACTION!**

The visual and audible warnings cancel after a few seconds or when you press the brake pedal, whichever comes first.

Stop Light and Stop Sign Warning provides warnings only. It does not slow down or stop CybertruckModel SModel XModel 3Model Y at red traffic lights, stop signs, road markings, etc. If equipped with Traffic Light and Stop Sign Control, you can enable this feature to automatically stop CybertruckModel SModel XModel 3Model Y at traffic lights and stop signs (see [Traffic Light and Stop Sign Control on page 597](#)).

Emergency Vehicles

CybertruckModel SModel XModel 3Model Y automatically reduces driving speed when lights from an emergency vehicle are detected when using Autosteer at night on a high speed road. When this happens, the instrument clustertouchscreen displays a message informing you of the slowdown. You will also hear a chime, and see a reminder to keep your hands on the steering wheelsteering yoke (or steering wheel). When the light detections pass by or cease to appear, Autopilot resumes your cruising speed. Alternatively, you may tap the accelerator to resume your cruising speed.

Never depend on Autopilot features to determine the presence of emergency vehicles. CybertruckModel SModel XModel 3Model Y may not detect lights from emergency vehicles. Keep your eyes on your driving path and always be prepared to take immediate action.



Driver Attentiveness

Autosteer determines how best to steer CybertruckModel SModel XModel 3Model Y. When active, Autosteer requires you to hold the steering wheel. If it does not detect your hands on the steering wheel for a period of time, a flashing blue light appears at the top of the vehicle status section of the instrument clustertouchscreen and the following message displays:

Steering yoke alert:



Apply slight turning force to steering yoke

Steering wheel alert:



Apply slight turning force to steering wheel

When your hands are detected, the message disappears and Autosteer resumes normal operation. Autosteer detects your hands by recognizing slight resistance as the steering wheel turns, or from you manually turning the steering wheel very lightly (without enough force to take over steering). Autosteer also qualifies your hands as being detected if you engage a turn signal or use a button or scroll wheel on the steering wheel.

Autosteer requires that you pay attention to your surroundings and remain prepared to take control at any time. If Autosteer still does not detect your hands on the steering wheel, the flashing light on the vehicle status section of the instrument clustertouchscreen increases in frequency and a chime sounds.

If you repeatedly ignore Autosteer's prompts to apply slight force to the steering wheel, Autosteer disables for the rest of the drive and displays the following message requesting you to drive manually.



Autosteer unavailable for the rest of this drive. Hold steering wheelsteering yoke (or steering wheel) to drive manually.

For the rest of the drive, you must steer manually. Autosteer is available again on your next drive (after you stop and shift CybertruckModel SModel XModel 3Model Y into Park).

If you don't resume manual steering, Autosteer sounds a continuous chime, turns on the warning flashers, and slows the vehicle to a complete stop.

Autosteer Suspension

Use of Autosteer will be suspended if improper usage is detected.

When you or another driver of your vehicle receives five forced Autopilot disengagements, use of Autosteer is suspended for a week. A forced disengagement is when the Autopilot system disengages for the remainder of a trip after the driver receives several audio and visual warnings for inattentiveness. Driver-initiated disengagements do not count as improper usage.

You can see how many disengagements are remaining before Autosteer access is suspended by touching **Controls > Autopilot**.

A disengagement is forgiven after 7 days, as long as you don't receive another forced disengagement in that time.

NOTE: If your access to Autosteer is suspended, you are still able to use Traffic-Aware Cruise Control and all active safety features are still enabled.



Take Over Steering Immediately

In situations where Autosteer is unable to steer CybertruckModel SModel XModel 3Model Y, Autosteer sounds a warning chime and displays the following message on the touchscreeninstrument panel.



Take over immediately

When you see this message, **TAKE OVER STEERING IMMEDIATELY.**







Traffic-Aware Cruise Control

NOTE: Traffic-Aware Cruise Control is a BETA feature.

Traffic-Aware Cruise Control determines when there is a vehicle in front of you in the same lane. If the area in front of CybertruckModel SModel XModel 3Model Y is clear, Traffic-Aware Cruise Control maintains a set driving speed. When a vehicle is detected, Traffic-Aware Cruise Control is designed to slow down CybertruckModel SModel XModel 3Model Y as needed to maintain a selected time-based distance from the vehicle in front, up to the set speed. Traffic-Aware Cruise Control does not eliminate the need to watch the road in front of you and to manually apply the brakes when needed.

Traffic-Aware Cruise Control is primarily intended for driving on dry, straight roads, such as highways.

-  **CAUTION:** Ensure all cameras and sensors (if equipped) are clean before each drive. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance.
-  **WARNING:** Traffic-Aware Cruise Control is designed for your driving comfort and convenience and is not a collision warning or avoidance system. It is your responsibility to stay alert, drive safely, and be in control of the vehicle at all times. Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.
-  **WARNING:** Although Traffic-Aware Cruise Control is capable of detecting pedestrians and cyclists, never depend on Traffic-Aware Cruise Control to adequately slow CybertruckModel SModel XModel 3Model Y down for them. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.
-  **WARNING:** Do not use Traffic-Aware Cruise Control on winding roads with sharp curves, on icy or slippery road surfaces, or when weather conditions (such as heavy rain, snow, fog, etc.) make it inappropriate to drive at a consistent speed. Traffic-Aware Cruise Control does not adapt driving speed based on road and driving conditions.

To Use Traffic-Aware Cruise Control

To initiate Traffic-Aware Cruise Control when no vehicle is detected ahead of you, you must be driving at least 18 mph (30 km/h), unless certain vehicle and environmental conditions are met, in which case, you may be able to initiate it at lower speeds. If a vehicle is detected ahead of you, you can initiate Traffic-Aware Cruise Control at any speed, even when stationary, provided CybertruckModel SModel XModel 3Model Y is at least 5 feet (1.5 m) behind the detected vehicle and certain vehicle and environmental conditions are met.

NOTE: The maximum cruising speed is 90 mph (150 km/h). It is the driver's responsibility to cruise at a safe speed based on road conditions and speed limits.

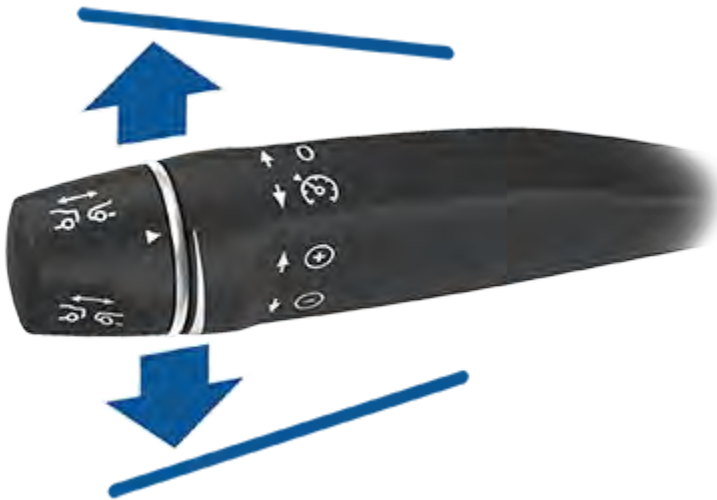


When Traffic-Aware Cruise Control is available but not engaged, the instrument panel displays a gray cruising speed icon. The number shown in gray represents the cruising speed that will be set when you engage Traffic-Aware Cruise Control.

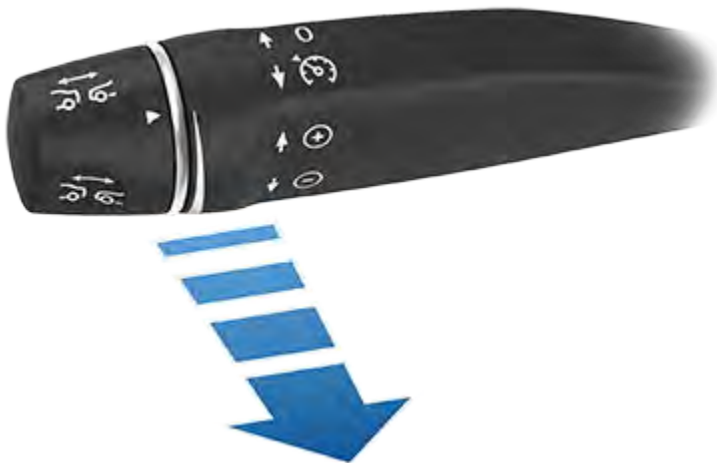


When Traffic-Aware Cruise Control is actively cruising at a set cruising speed, the icon turns blue and displays the set cruising speed.

1. When available, you can engage Traffic-Aware Cruise Control to match the speed limit or your current speed. Choose:
 - To engage Traffic-Aware Cruise Control *at your current driving speed*, move the Autopilot stalk up or down once and release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed.





- To engage Traffic-Aware Cruise Control at the currently detected speed limit, pull the Autopilot stalk toward you once and release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Pull**, moving the Autopilot stalk toward you once activates Autosteer (see [Autosteer on page 587](#)). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you move the Autosteer stalk toward you.

NOTE: If you choose to engage Traffic-Aware Cruise Control at the currently detected speed limit, you can specify an offset. Touch **Controls > Autopilot > Set Speed Offset**. You can choose a **Fixed** offset, in which the cruising speed adjusts by a specific number of mph (km/h) on all roads, or a **Percentage** offset, in which the cruising speed is adjusted as a percentage of the road's detected speed limit. If you pull the Autopilot stalk toward you when you are already driving faster than the speed limit, the set speed adjusts to your current driving speed instead of the speed limit. If you move the Autopilot stalk up or down when cruising at the speed limit, your set speed changes to your current driving speed.

-  **WARNING:** When you adjust the cruising speed based on the speed limit, the set cruising speed may not change when the speed limit changes.
-  **WARNING:** Do not rely on Traffic-Aware Cruise Control or Speed Assist to determine an accurate or appropriate cruising speed. It is the driver's responsibility to cruise at a safe speed based on road conditions and applicable speed limits.

- To change your speed while using Traffic-Aware Cruise Control, you can use the right scroll wheel or the Autopilot stalk. For details, see [Changing the Cruising Speed on page 578](#).
- To cancel Traffic-Aware Cruise Control, push the stalk away from you once or press the brake pedal. See [Canceling and Resuming on page 582](#) for more information.



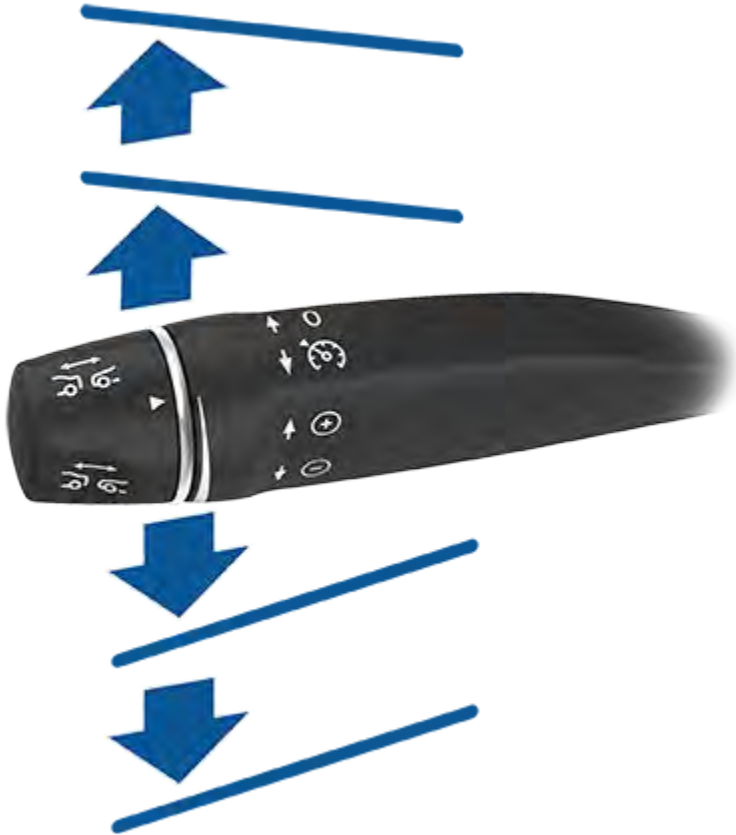
Set Traffic-Aware Cruise Control Chime

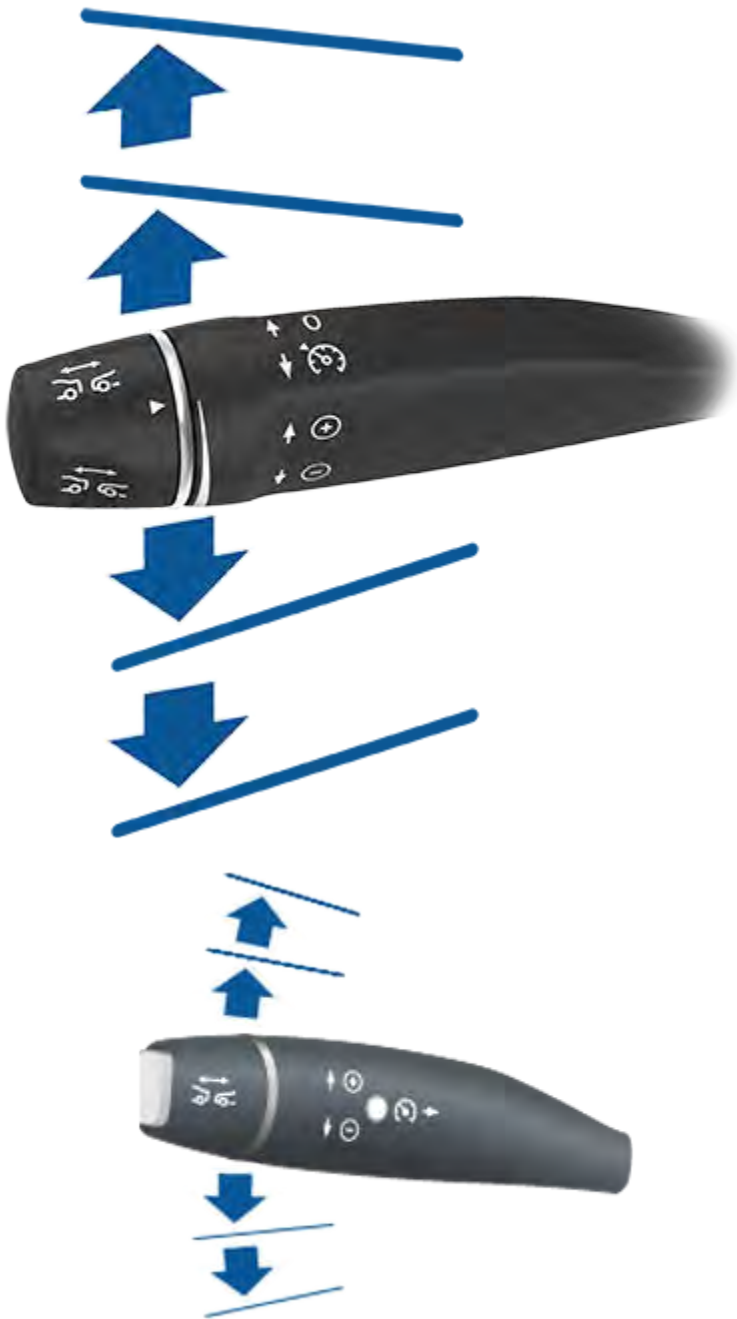
If you want a chime to sound when you engage or cancel Traffic-Aware Cruise Control, touch **Controls** > **Autopilot** > **Traffic-Aware Cruise Control Chime**.

NOTE: Cybertruck Model S Model X Model 3 Model Y must be in Park.

Changing the Cruising Speed

To change the set cruising speed while using Traffic-Aware Cruise Control, move the Autopilot stalk up (increase) or down (decrease) until the instrument panel icon displays your desired cruising speed.





To increase/decrease speed by 1 mph (1 km/h), move the stalk up or down to the first position and release. To increase/decrease speed to the closest 5 mph (5 km/h) increment, move the stalk up/down to the second position and release. For example, if you are traveling at 57 mph and you move the stalk up to the second position and release, the speed increases to 60 mph. You can also increase/decrease speed by holding the stalk in the full up/down position and releasing when the icon on the instrument panel displays your desired cruising speed.

You can also pull and hold the Autopilot stalk towards you for approximately half a second to cruise at the detected speed limit.

NOTE: It may take a few seconds for Cybertruck Model S Model X Model 3 Model Y to reach the new cruising speed, assuming Cybertruck Model S Model X Model 3 Model Y is not cruising behind a vehicle that is driving slower than your set speed.







Cruising at the Set Speed

Traffic-Aware Cruise Control maintains your set cruising speed whenever a vehicle is not detected in front of CybertruckModel SModel XModel 3Model Y. When cruising behind a detected vehicle, Traffic-Aware Cruise Control accelerates and decelerates CybertruckModel SModel XModel 3Model Y as needed to maintain a chosen following distance (see [Adjust the Following Distance on page 581](#)), up to the set speed.

Traffic-Aware Cruise Control also adjusts the cruising speed when entering and exiting curves.

You can manually accelerate at any time when cruising at a set speed, but when you release the accelerator, Traffic-Aware Cruise Control resumes cruising at the set speed.

NOTE: When Traffic-Aware Cruise Control is actively slowing down CybertruckModel SModel XModel 3Model Y to maintain the selected distance from the vehicle ahead, brake lights turn on to alert other road users that you are slowing down. You may notice slight movement of the brake pedal. However, when Traffic-Aware Cruise Control is accelerating CybertruckModel SModel XModel 3Model Y, the accelerator pedal does not move.

-  **WARNING:** Traffic-Aware Cruise Control may occasionally cause CybertruckModel SModel XModel 3Model Y to brake when not required or when you are not expecting it. This can be caused by closely following a vehicle ahead, detecting vehicles or objects in adjacent lanes (especially on curves), etc.
-  **WARNING:** Due to limitations inherent in the onboard GPS (Global Positioning System), you may experience situations in which CybertruckModel SModel XModel 3Model Y slows down, especially near exits or off-ramps where a curve is detected and/or you are navigating to a destination and not following the route.
-  **WARNING:** Traffic-Aware Cruise Control may not detect all objects and, especially when cruising over 50 mph (80 km/h), may not brake/decelerate when a vehicle or object is only partially in the driving lane or when a vehicle you are following moves out of your driving path and a stationary or slow-moving vehicle or object is in front of you. Always pay attention to the road ahead and stay prepared to take immediate corrective action. Depending on Traffic-Aware Cruise Control to avoid a collision can result in serious injury or death. In addition, Traffic-Aware Cruise Control may react to vehicles or objects that either do not exist, or are not in your lane of travel, causing CybertruckModel SModel XModel 3Model Y to slow down unnecessarily or inappropriately.
-  **WARNING:** Traffic-Aware Cruise Control may be unable to provide adequate speed control because of limited braking capability and hills. It can also misjudge the distance from a vehicle ahead. Driving downhill can increase driving speed, causing CybertruckModel SModel XModel 3Model Y to exceed your set speed (and potentially the road's speed limit). Never depend on Traffic-Aware Cruise Control to slow down CybertruckModel SModel XModel 3Model Y enough to prevent a collision. Always keep your eyes on the road when driving and be prepared to take corrective action as needed. Depending on Traffic-Aware Cruise Control to reduce your driving speed enough to prevent a collision can result in serious injury or death.

HOLD State

When following a vehicle, Traffic-Aware Cruise Control remains active at low speeds, even when CybertruckModel SModel XModel 3Model Y comes to a full stop. When the vehicle is moving again, Traffic-Aware Cruise Control resumes operating at the set speed. However, under the following circumstances, Traffic-Aware Cruise Control goes into a **HOLD** state, in which case, you need to briefly press the accelerator pedal or pull the Autopilot stalk toward you (see [Canceling and Resuming on page 582](#)) to resume cruising. When the **HOLD** status is active, the instrument panel displays the **HOLD** icon and a message that indicates that you need to resume cruise control. The following circumstances can cause Traffic-Aware Cruise Control to go into the **HOLD** state:

- CybertruckModel SModel XModel 3Model Y has been at a standstill for 5 minutes.
- CybertruckModel SModel XModel 3Model Y detects a pedestrian (the **HOLD** state may clear when the pedestrian is no longer detected).
- CybertruckModel SModel XModel 3Model Y suddenly loses visibility of the vehicle in front of you.
- An obstacle is detected in front of CybertruckModel SModel XModel 3Model Y.

Cruising Near or On Exits

When cruising near an exit on a controlled-access highway and engaging the turn signal toward the off-ramp, Traffic-Aware Cruise Control assumes you are exiting and begins to slow down CybertruckModel SModel XModel 3Model Y. If you do not drive onto the off-ramp, Traffic-Aware Cruise Control resumes cruising at the set speed. In a region with right hand traffic, this occurs only when you engage the right turn signal when driving in the right-most lane within 164 feet (50 meters) of an exit. Likewise in regions with left hand traffic; when engaging the left turn signal when driving in the left-most lane within 164 feet (50 meters) of an exit.



When cruising onto an on-ramp to a controlled-access highway, Traffic-Aware Cruise Control automatically adjusts the set cruising speed to the speed limit of the highway, plus any offset you have specified.

NOTE: The on-board Global Positioning System (GPS) determines if you are driving in a region with right or left hand traffic. In situations where GPS data is unavailable (for example, if there is inadequate signal), engaging the turn signal near an exit does not cause Traffic-Aware Cruise Control to slow down CybertruckModel SModel XModel 3Model Y.

When enabled while on a highway interchange or off-ramp, Traffic-Aware Cruise Control may reduce your set speed in 5 mph (5 km/h) increments – to as slow as 25 mph (40 km/h) – to better match the reported speeds of other Tesla vehicles that have driven at that specific location. To override this and continue cruising at your set speed, tap the accelerator pedal or move the Autopilot stalk. The new set speed is maintained for the duration of the interchange or off-ramp (unless you override it or cancel Traffic-Aware Cruise Control). After the interchange or off-ramp, the set speed may revert or change as necessary based on the new location. For example, if you merged onto a different highway, the set cruising speed reverts to what it was before driving on the interchange.

WARNING: In some cases (such as having insufficient data), Traffic-Aware Cruise Control may not automatically reduce the set speed on the highway interchange or off-ramp. Do not rely on Traffic-Aware Cruise Control to determine an appropriate driving speed. Tesla recommends driving at a speed that is safe for road conditions and within posted speed limits.

Adjust the Following Distance

o adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, rotate the Autopilot stalk. Each setting corresponds to a time-based distance that represents how long it takes for CybertruckModel SModel XModel 3Model Y, from its current location, to reach the location of the rear bumper of the vehicle ahead of you. Your setting is retained until you manually change it.

The closest following distance is 2.The closest following distance is 1.



As you rotate the Autopilot stalk, the instrument panel displays the current setting. Release the stalk when the desired setting is displayed.



- WARNING:** It is the driver's responsibility to determine and maintain a safe following distance at all times. Do not rely on Traffic-Aware Cruise Control to maintain an accurate or appropriate following distance.
- WARNING:** Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y to avoid a collision. Always watch the road in front of you and stay prepared to take immediate corrective action.

Overtake Acceleration

When following a vehicle with Traffic-Aware Cruise Control active, engaging the turn signal (to indicate a move into the passing lane) accelerates CybertruckModel SModel XModel 3Model Y towards the vehicle ahead. By momentarily holding the turn signal stalk up or down, you can quickly accelerate up to your set speed without having to press the accelerator pedal. The turn signal causes acceleration only when all of the following conditions are met:

- Traffic-Aware Cruise Control is operating and detects a vehicle in front of you.
- No obstacles or vehicles are detected in the target lane.
- CybertruckModel SModel XModel 3Model Y is traveling below the set speed, but over 45 mph (72 km/h).

Overtake Acceleration is intended as an aid when passing a vehicle ahead of you. When the turn signal is engaged, Traffic-Aware Cruise Control continues to maintain distance from the vehicle ahead, but allows you to drive slightly closer than your selected distance.

Acceleration cancels when one of the conditions happen:

- You reach your set cruising speed.
- Changing lanes takes too long.
- CybertruckModel SModel XModel 3Model Y gets too close to the vehicle ahead.

OR

- You disengage the turn signal.

NOTE: Overtake Acceleration occurs when you fully engage the turn signal, or you . When you release the turn signal, CybertruckModel SModel XModel 3Model Y stops accelerating (in the same way as when you release the accelerator pedal) and resumes the set speed.

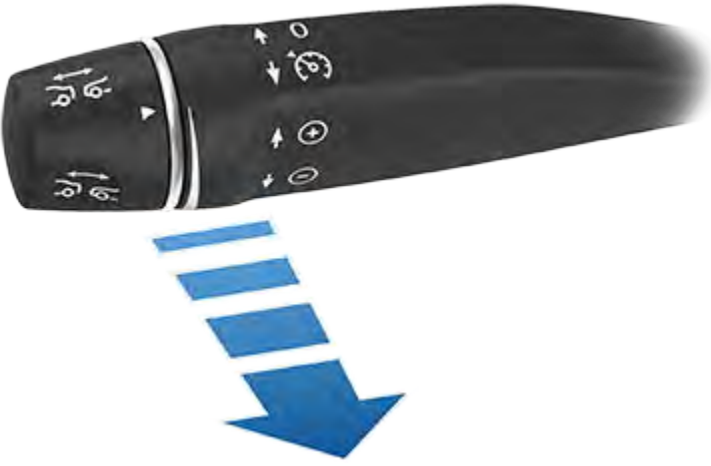
- WARNING:** Overtake Acceleration can cancel for many unforeseen reasons in addition to those listed above (for example, lack of GPS data). Stay alert and never depend on Overtake Acceleration to increase your driving speed.
- WARNING:** Overtake Acceleration increases your driving speed whenever the appropriate turn signal is engaged, and accelerates CybertruckModel SModel XModel 3Model Y closer to the vehicle ahead. Although Traffic-Aware Cruise Control continues to maintain distance from the vehicle ahead, it is important to be aware that your selected following distance is reduced when Overtake Acceleration is active, particularly in cases where it may not be your intention to overtake the vehicle you are following.

Canceling and Resuming

To manually cancel Traffic-Aware Cruise Control, press the brake pedal or briefly push the Autopilot stalk away from you. The cruising speed icon on the instrument panel turns gray to indicate that Traffic-Aware Cruise Control is no longer active.

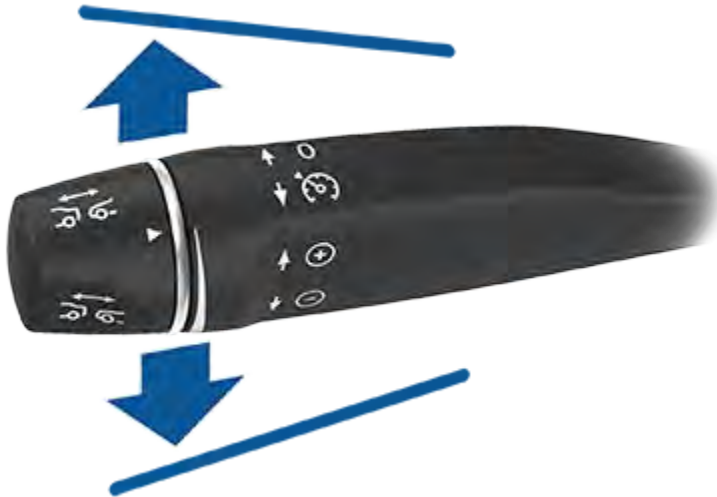


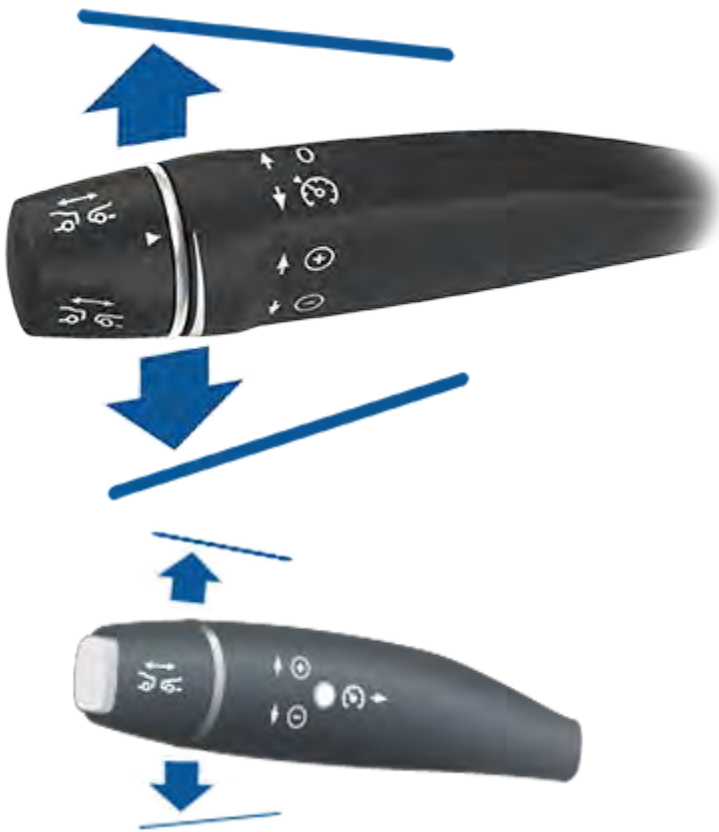
To resume cruising at the previously set speed, briefly pull the Autopilot stalk toward you.





To resume cruising at the current driving speed, move the Autopilot stalk up or down, then release.





NOTE: Depending on date of manufacture, some CybertruckModel SModel XModel 3Model Y vehicles have a button on the end of the Autopilot stalk. Pressing this button when Traffic-Aware Cruise Control is active cancels Traffic-Aware Cruise Control.

NOTE: When Traffic-Aware Cruise Control cancels, CybertruckModel SModel XModel 3Model Y does not coast. Instead, regenerative braking slows down CybertruckModel SModel XModel 3Model Y in the same way as when you move your foot off the accelerator when driving without Traffic-Aware Cruise Control (see [Regenerative Braking on page 463](#)).

⚠ WARNING: Traffic-Aware Cruise Control cancels, or may not be available, in the following situations:

- You press the brake pedal.
- Your driving speed exceeds the maximum cruising speed of 90 mph (150 km/h).
- You shift CybertruckModel SModel XModel 3Model Y.
- A door is opened.
- A camera or sensor (if equipped) is obstructed. This could be caused by dirt, mud, ice, snow, fog, etc.
- The traction control setting is manually disabled or is repeatedly engaging to prevent wheels from slipping.
- The wheels are spinning while at a standstill.
- The Traffic-Aware Cruise Control system is failing or requires service.

When Traffic-Aware Cruise Control is unavailable or cancels, CybertruckModel SModel XModel 3Model Y no longer drives consistently at a set speed and no longer maintains a specified distance from the vehicle ahead.

⚠ WARNING: Traffic-Aware Cruise Control can cancel unexpectedly at any time for unforeseen reasons. Always watch the road in front of you and stay prepared to take appropriate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.



Summary of Cruise Indicators



Traffic-Aware Cruise Control is available but is not actively controlling your speed until you activate it. The number shown in gray is the cruising speed that will be set when you engage Traffic-Aware Cruise Control.



Traffic-Aware Cruise Control is actively cruising and is either maintaining the set speed (no vehicle in front) or is maintaining a chosen following distance from a vehicle ahead (up to the set speed).




Cybertruck Model S Model X Model 3 Model Y has fully stopped but is in a **HOLD** state. If safe, press the accelerator pedal to resume cruising at the set speed.

Limitations

Traffic-Aware Cruise Control is particularly unlikely to operate as intended in the following types of situations:

- The road has sharp curves.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- A camera or sensor (if equipped) is obstructed (fogged over, dirty, covered by a sticker, etc.).




 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Traffic-Aware Cruise Control.



Autosteer

NOTE: Autosteer is a BETA feature.

Autosteer builds upon Traffic-Aware Cruise Control (see [Traffic-Aware Cruise Control on page 576](#)), intelligently keeping CybertruckModel SModel XModel 3Model Y in its driving lane when cruising at a set speed. Autosteer also allows you to use the turn signals to move CybertruckModel SModel XModel 3Model Y into an adjacent lane (see [Auto Lane Change on page 590](#)). Autosteer detects lane markings and the presence of vehicles and objects to steer CybertruckModel SModel XModel 3Model Y.

-  **CAUTION:** Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, affect performance.
-  **WARNING:** Autosteer is a hands-on feature. You must keep your hands on the steering wheelsteering yoke (or steering wheel) at all times.
-  **WARNING:** Autosteer is intended for use on controlled-access highways with a fully attentive driver. When using Autosteer, hold the steering wheelsteering yoke (or steering wheel) and be mindful of road conditions and surrounding traffic. Do not use Autosteer in construction zones, or in areas where bicyclists or pedestrians may be present. Never depend on Autosteer to determine an appropriate driving path. Always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

Operating Autosteer

Before you can operate Autosteer, you must enable it by touching **Controls > Autopilot > Autopilot Features > Autosteer (Beta)**.



To indicate that Autosteer is available (but not actively steering CybertruckModel SModel XModel 3Model Y), the instrument panel displays a gray Autosteer icon.

To initiate Autosteer, pull the Autopilot stalk toward you twice in quick succession.



NOTE: If the setting for **Autopilot Activation** is set to **Single Pull** (touch **Controls > Autopilot > Autopilot Activation**), Autosteer engages when you pull the Autopilot stalk toward you once. If set to **Double Pull**, you must pull the Autopilot stalk toward you twice in quick succession to engage Autosteer.



To indicate that Autosteer is now actively steering CybertruckModel SModel XModel 3Model Y, the instrument panel displays the Autosteer icon in blue. When Autosteer is able to detect lane markings, it also displays the driving lane in blue.

Autosteer briefly displays a message on the instrument panel reminding you to pay attention to the road and be ready to take over at any time.

The speed at which you can initiate Autosteer can vary depending on various conditions and whether or not a vehicle is detected ahead of you. When no vehicle is detected ahead of you, you must be driving at least 18 mph (30 km/h), unless certain vehicle and environmental conditions are met, in which case, you may be able to initiate it at lower speeds. When a vehicle is detected ahead of you, you can initiate Autosteer at any speed, even when stationary, provided CybertruckModel SModel XModel 3Model Y is at least 5 feet (150 cm) behind the detected vehicle.

NOTE: The maximum cruising speed is 90 mph (150 km/h). It is the driver's responsibility to cruise at a safe speed based on road conditions and speed limits.

NOTE: When Autosteer is engaged, **Auto High Beam** is automatically enabled and the maximum cruising speed is 85 mph (140 km/h).

⚠ WARNING: Never depend on Autopilot features to determine the presence of emergency vehicles. CybertruckModel SModel XModel 3Model Y may not detect lights from emergency vehicles. Keep your eyes on your driving path and always be prepared to take immediate action.

In situations where Autosteer is temporarily unavailable, the Autosteer icon disappears. For example, your driving speed is not within the speed required for Autosteer to operate. Autosteer may also be unavailable if it is not receiving adequate data from the camera(s).

NOTE: In low light conditions (dusk or dark), Autosteer aborts or is unavailable if headlights are set to **Off**. For best results, set headlights to **Auto**.

If unable to detect lane markings, Autosteer may determine the driving lane based on a vehicle you are following. In these situations, the vehicle in front of you is highlighted in blue.

In most cases, Autosteer attempts to center CybertruckModel SModel XModel 3Model Y in the driving lane. However, there may be situations in which Autosteer may steer CybertruckModel SModel XModel 3Model Y in a driving path that is offset from the center of the lane (for example, detection of guard rails).

⚠ WARNING: Autosteer is not designed to, and will not, steer CybertruckModel SModel XModel 3Model Y around objects partially in a driving lane and in some cases, may not stop for objects that are completely blocking the driving lane. Always watch the road in front of you and stay prepared to take immediate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.

Restricted Speed

On a controlled-access highway, the cruising speed reflects the speed limit, taking into consideration any offset you've specified using Speed Assist. However, if you choose to use Autosteer on residential roads, a road without a center divider, or a road where access is not limited, Autosteer may limit the maximum allowed cruising speed and the instrument panel displays a message indicating that speed is restricted. The restricted speed will be the speed limit of the road plus 5 mph (10 km/h).

In situations where the speed limit cannot be detected when Autosteer is engaged, Autosteer reduces your driving speed and limits the set cruising speed to 45 mph (70 km/h). Although you can manually accelerate to exceed the limited speed, CybertruckModel SModel XModel 3Model Y may not brake for detected obstacles. Autosteer slows down to the limited speed when you release the accelerator pedal. When you leave the road, or disengage Autosteer by using the steering wheelsteering yoke (or steering wheel), you can increase your set speed again, if desired.

Hold Steering WheelSteering Yoke (or Steering Wheel)

Autosteer determines how best to steer CybertruckModel SModel XModel 3Model Y. When active, Autosteer requires you to hold the steering wheelsteering yoke (or steering wheel). If it does not detect your hands on the steering wheelsteering yoke (or steering wheel) for a period of time, a flashing light appears along the top of the instrument panel and the following message displays:



Apply slight turning force to steering wheel

Autosteer detects your hands by recognizing slight resistance as the steering wheelsteering yoke (or steering wheel) turns, or from you manually turning the steering wheelsteering yoke (or steering wheel) very lightly (without enough force to take over steering). Autosteer also qualifies your hands as being detected if you engage a turn signal use the Autopilot stalk, or use a button or scroll wheel on the steering wheelsteering yoke (or steering wheel).

NOTE: When your hands are detected, the message disappears and Autosteer resumes normal operation.

Autosteer requires that you pay attention to your surroundings and remain prepared to take control at any time. If Autosteer still does not detect your hands on the steering wheelsteering yoke (or steering wheel), the flashing light on the instrument panel increases in frequency and a chime sounds.

If you repeatedly ignore Autosteer's prompts to apply slight force to the steering wheelsteering yoke (or steering wheel), Autosteer disables for the rest of the drive and displays the following message requesting you to drive manually. If you don't resume manual steering, Autosteer sounds a continuous chime, turns on the warning flashers, and slows the vehicle to a complete stop.



Autosteer unavailable for the rest of this drive. Hold steering wheelsteering yoke (or steering wheel) to drive manually.

For the rest of the drive, you must steer manually. Autosteer is available again on your next drive (after you stop and shift CybertruckModel SModel XModel 3Model Y into Park).

Autosteer Suspension

Use of Autosteer will be suspended if improper usage is detected.

When you or another driver of your vehicle receives three forced Autopilot disengagements, use of Autosteer is suspended for a week. A forced disengagement is when the Autopilot system disengages for the remainder of a trip after the driver receives several audio and visual warnings for inattentiveness. Driver-initiated disengagements do not count as improper usage.

You can see how many disengagements are remaining before Autosteer access is suspended by touching **Controls > Autopilot**.

A disengagement is forgiven after 7 days, as long as you don't receive another forced disengagement in that time.

NOTE: If your access to Autosteer is suspended, you are still able to use Traffic-Aware Cruise Control and all active safety features are still enabled.

Take Over Immediately

In situations where Autosteer is unable to steer CybertruckModel SModel XModel 3Model Y, Autosteer sounds a warning chime and displays the following message on the instrument panel:



Take over immediately

When you see this message, **TAKE OVER STEERING IMMEDIATELY**.

Canceling Autosteer

Autosteer cancels when:



- You press the brake pedal.
- You start steering manually.

NOTE: If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you started steering manually, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manually, Traffic-Aware Cruise Control also cancels.

- You apply rotational force to the steering wheelsteering yoke (or steering wheel) (even a slight amount).

NOTE: If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you applied rotational force to the steering wheelsteering yoke (or steering wheel), Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manually, Traffic-Aware Cruise Control also cancels.

- You push the Autopilot stalk away from you.
- You exceed the maximum speed at which Autosteer operates – 90 mph (150 km/h).
- You shift.
- A door is opened.
- An Automatic Emergency Braking event occurs (see [Collision Avoidance Assist on page 645](#)).







When Autosteer cancels, it sounds a chime and the Autosteer icon either turns gray to indicate that Autosteer is no longer active, or disappears to indicate that it is not currently available.

NOTE: If Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. Disengage Traffic-Aware Cruise Control as you normally would, by pressing the brake pedal or briefly pushing the Autopilot stalk away from you or.

To disable Autosteer so it is no longer available, touch **Controls > Autopilot > Autopilot Features > Autosteer (Beta)**.

Auto Lane Change

When Autosteer is active, engage a turn signal to move CybertruckModel SModel XModel 3Model Y into an adjacent lane (moving the steering wheelsteering yoke (or steering wheel) would cancel Autosteer).

-  **WARNING:** It is the driver's responsibility to determine whether a lane change is safe and appropriate. Auto Lane Change cannot detect oncoming traffic in the target lane, especially fast moving vehicles from the rear. Therefore, before initiating a lane change, always check blind spots, lane markings, and the surrounding roadway to confirm it is safe and appropriate to move into the target lane.
-  **WARNING:** Never depend on Auto Lane Change to determine an appropriate driving path. Drive attentively by watching the road and traffic ahead of you, checking the surrounding area, and monitoring the instrument panel for warnings. Always be prepared to take immediate action.
-  **WARNING:** Do not use Auto Lane Change on roads where traffic conditions are constantly changing and where bicycles and pedestrians are present.
-  **WARNING:** The performance of Auto Lane Change depends on the ability of the camera(s) to recognize lane markings.
-  **WARNING:** Do not use Auto Lane Change on winding roads with sharp curves, on icy or slippery roads, or when weather conditions (such as heavy rain, snow, fog, etc.) may be obstructing the view from the camera(s) or sensors (if equipped).
-  **WARNING:** Failure to follow all warnings and instructions can result in property damage, serious injury or death.

Operating Auto Lane Change

Auto Lane Change is available whenever Autosteer is active. To change lanes using Auto Lane Change:

1. Perform visual checks to make sure it is safe and appropriate to move into the target lane.
2. Engage the appropriate turn signal, keeping your hands on the steering wheelsteering yoke (or steering wheel).
3. If needed, cancel the turn signal once you are in the target lane.

NOTE: Auto Lane Change cancels if the lane change cannot be completed in five seconds.

NOTE: The minimum speed at which Auto Lane Change operates may vary depending on region, adjacent lane speeds, and other factors. Always be ready to manually steer and change lanes as necessary.



Auto Lane Change moves CybertruckModel SModel XModel 3Model Y into the adjacent lane in the direction indicated by the turn signal, provided the following conditions are met:

- The turn signal is engaged.
- CybertruckModel SModel XModel 3Model Y does not detect a vehicle in its blind spot, or a vehicle or obstacle up to the center of the target lane.
- Lane markings indicate that a lane change is permitted.
- Midway through the lane change, CybertruckModel SModel XModel 3Model Y must detect the target lane's outside lane marking. If this lane marking is not detected, the lane change is aborted and CybertruckModel SModel XModel 3Model Y returns to its original driving lane.
- The view of the camera(s) is not obstructed.

When an automatic lane change is in progress, Overtake Acceleration is activated, allowing CybertruckModel SModel XModel 3Model Y to accelerate closer to a vehicle in front (see [Overtake Acceleration on page 582](#)).

NOTE: Auto Lane Change moves CybertruckModel SModel XModel 3Model Y one lane at a time. Moving into an additional lane requires you to engage the turn signal a second time after the first lane change is complete.

When using Auto Lane Change, it is important to monitor its performance by watching the driving path in front of you and the surrounding area. Stay prepared to take over steering at any time. As you are crossing over into the adjacent lane, the instrument panel displays the location in the lane that CybertruckModel SModel XModel 3Model Y is moving into.

In situations where Auto Lane Change is unable to operate at optimal performance, or cannot operate due to inadequate data, the instrument panel displays a series of warnings. Therefore, when using Auto Lane Change, always pay attention to the instrument panel and be prepared to manually steer CybertruckModel SModel XModel 3Model Y.

Adjacent Lane Speed



When moving significantly faster than vehicles in adjacent lanes, CybertruckModel SModel XModel 3Model Y automatically reduces the driving speed. This is especially helpful in heavy traffic situations or when vehicles are constantly merging into different lanes. When CybertruckModel SModel XModel 3Model Y detects other vehicles driving significantly slower, the instrument panel highlights the adjacent lanes with arrows and detected vehicles in gray, and CybertruckModel SModel XModel 3Model Y reduces the driving speed as appropriate. To temporarily override this feature, press the accelerator pedal.



WARNING: Never depend on Autopilot to determine a safe driving speed; you are responsible for driving safely and according to traffic laws in your market region.





Stop Light and Stop Sign Warning


While Autosteer is in use, CybertruckModel SModel XModel 3Model Y displays a warning on the instrument panel and sounds a chime if it detects that you are likely to run through a red stop light or stop sign. If this happens, **TAKE IMMEDIATE CORRECTIVE ACTION!**

The visual and audible warnings cancel after a few seconds, or when you press the brake pedal, whichever comes first.

Stop Light and Stop Sign Warning provides warnings only. It does not slow down or stop CybertruckModel SModel XModel 3Model Y at red traffic lights, stop signs, road markings, etc. If equipped with Traffic Light and Stop Sign Control, you can enable this feature to automatically stop CybertruckModel SModel XModel 3Model Y at traffic lights and stop signs (see [Traffic Light and Stop Sign Control on page 597](#)).

 **CAUTION:** Stop Light and Stop Sign Warning requires on-board maps to know that a particular stop light or stop sign exists at a location. In some cases, map data is inaccurate or outdated and may not include all stop lights or stop signs. Therefore, Stop Light and Stop Sign Warning may not detect all stop lights and stop signs.


 **WARNING:** The Stop Light and Stop Sign Warning feature does not apply the brakes or decelerate CybertruckModel SModel XModel 3Model Y and may not detect all stop lights and stop signs. Stop Light and Stop Sign Warning is designed for guidance purposes only and is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Stop Light and Stop Sign Warning to warn you of a stop light or stop sign.

 **WARNING:** Stop Light and Stop Sign Warning is designed to warn you only when approaching a visible red stop sign, solid red or later portion of a yellow traffic light. It may not warn you of intersections with flashing lights and it does not warn you of yield signs or temporary stop and yield signs (such as those used in construction areas). Additionally, Stop Light and Stop Sign Warning does not warn you of approaching stop lights or stop signs when you are pressing the accelerator pedal or brake pedal (which disables Autosteer).

Limitations

Autosteer and its associated functions are particularly unlikely to operate as intended when:

- Autosteer is unable to accurately determine lane markings. For example, lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction, are changing quickly (lanes branching off, crossing over, or merging), objects or landscape features are casting strong shadows on the lane markings, or the road surface contains pavement seams or other high-contrast lines.
- Visibility is poor (heavy rain, snow, fog, etc.) or weather conditions are interfering with sensor operation.
- A camera(s) or sensor(s) is obstructed, covered, or damaged.
- Driving on hills.
- Approaching a toll booth.
- Driving on a road that has sharp curves or is excessively rough.
- Bright light (such as direct sunlight) is interfering with the view of the camera(s).
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- A vehicle is detected in your blind spot when you engage the turn signal.
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it, which is blocking the view of the camera(s).

 **WARNING:** Many unforeseen circumstances can impair the operation of Autosteer. Always keep this in mind and remember that as a result, Autosteer may not steer CybertruckModel SModel XModel 3Model Y appropriately. Always drive attentively and be prepared to take immediate action.

Navigate on Autopilot

NOTE: Navigate on Autopilot is a BETA feature.

When using Autosteer on a controlled-access highway (a main highway on which road users enter and exit using on-ramps and off-ramps). Navigate on Autopilot guides CybertruckModel SModel XModel 3Model Y to off-ramps and interchanges based on your navigation route. Along the highway portion of a navigation route, Navigate on Autopilot also changes lanes to prepare for exits (route-based lane changes) and to minimize the driving time to your destination (speed-based lane changes).



- ⚠ WARNING:** Navigate on Autopilot does not make driving autonomous. You must pay attention to the road, keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, and remain aware of your navigation route.
- ⚠ WARNING:** As is the case with normal driving, be extra careful around blind corners, interchanges, and on-ramps and off-ramps - obstacles can appear quickly and at any time.
- ⚠ WARNING:** Navigate on Autopilot may not recognize or detect oncoming vehicles, stationary objects, and special-use lanes such as those used exclusively for bikes, carpools, emergency vehicles, etc. Remain alert at all times and be prepared to take immediate action. Failure to do so can cause damage, injury or death.

Enabling and Customizing Navigate on Autopilot

To enable Navigate on Autopilot, touch **Controls > Autopilot > Autopilot Features > Autosteer > Navigate on Autopilot (Beta)**. Then, to customize how you want Navigate on Autopilot to operate, touch **Customize Navigate on Autopilot**:

- **Enable At Start Of Every Trip:** Choose whether or not you want to automatically enable Navigate on Autopilot for every navigation route. When enabled, the Navigate on Autopilot button on the turn-by-turn direction list is already enabled at the start of every trip.
- **Speed Based Lane Changes:** Navigate on Autopilot is designed to perform both route-based and speed-based lane changes. Route-based lane changes are designed to keep you on your navigation route (for example, moving you into an adjacent lane to prepare for an upcoming off-ramp) whereas speed-based lane changes are designed to maintain a driving speed (not to exceed your cruising speed) that allows you to minimize the time it takes to reach your destination (for example, moving into an adjacent lane to pass a vehicle in front of you). Speed-based lanes changes are optional. You can use this setting to disable speed-based lane changes or to specify how aggressively you want Navigate on Autopilot to change lanes to achieve the set cruising speed. The **Mild** setting is more conservative about lane changes and may result in a slightly longer driving time whereas **Mad Max** is designed to allow you to reach your destination in the shortest driving time possible, but changes lanes only when safe to do so.
- **Exit Passing Lane:** Choose whether you want Navigate on Autopilot to maneuver out of a passing lane when navigating to a destination.

NOTE: In addition to route-based and speed-based lane changes, Navigate on Autopilot requests a lane change out of a passing lane as a reminder to stay in a slower lane when you are not passing other vehicles. Choose **NO** to disable this and keep CybertruckModel SModel XModel 3Model Y in a passing lane except when needed to stay on the navigation route.

- **Require Lane Change Confirmation:** By default, Navigate on Autopilot requires your confirmation before proceeding with a lane change by pulling the Autopilot stalk toward you or engaging the appropriate turn signal. However, if you want Navigate on Autopilot to change lanes without requiring this confirmation, turn this setting off. When you turn the setting off, you can specify if or how you want to be notified of lane changes (**Off, Chime, Vibrate, or Both**).

- ⚠ WARNING:** If you turn off **Require Lane Change Confirmation**, Navigate on Autopilot notifies you of upcoming lane changes and off-ramps, but it remains your responsibility to monitor the environment and maintain control of CybertruckModel SModel XModel 3Model Y at all times. Lane changes can occur quickly and suddenly. Always keep your hands on the wheel and your eyes on the driving path in front of you.

NOTE: The touchscreen displays route-based lane changes at the top of the map's turn-by-turn direction list to notify you that an upcoming lane change is needed to stay on the navigation route.

Operating Navigate on Autopilot

Once enabled, the Navigate on Autopilot button appears on the map's turn-by-turn direction list whenever a navigation route is active and the route includes at least one controlled-access highway. When enabled, the Navigate on Autopilot button is blue and the turn-by-turn direction displays the Autosteer icon next to the maneuvers (such as off-ramps) that Navigate on Autopilot will handle.



The Navigate on Autopilot icon shows in the turn-by-turn direction list when you are navigating to a destination and Navigate on Autopilot is available but not active.



If Navigate on Autopilot is active, the icon is blue. If **Enable at Start of Every Trip** is turned on, the Navigate on Autopilot icon is selected whenever you start navigation. Touch the icon to cancel Navigate on Autopilot and revert to Autosteer. If **Enable At Start Of Every Trip** is turned off, you must touch the **Navigate on Autopilot** button to enable it for each navigation route.

Navigate on Autopilot activates and deactivates as appropriate, based on the type of road you are driving on. For example, if Autosteer is active and Navigate on Autopilot is enabled, Navigate on Autopilot automatically becomes active when you reach a controlled-access highway on your navigation route.

Whenever Navigate on Autopilot is active, the instrument panel displays the driving lane as a single blue line in front of CybertruckModel SModel XModel 3Model Y:



When Navigate on Autopilot is active and you approach an off-ramp or interchange along your navigation route, the appropriate turn signal engages and Autosteer maneuvers CybertruckModel SModel XModel 3Model Y onto the off-ramp or interchange.

⚠ WARNING: Never depend on Navigate on Autopilot to determine an appropriate lane at an off-ramp. Stay alert and perform visual checks to ensure that the driving lane is safe and appropriate.



When you leave a controlled-access highway (for example, you take an exit or you enter a section of the navigation route that is no longer supported), Navigate on Autopilot reverts to Autosteer— a chime sounds and the instrument panel displays the driving lane lines in blue (instead of the single blue in front of CybertruckModel SModel XModel 3Model Y).

NOTE: When determining navigation routes, and maneuvers at interchanges, Navigate on Autopilot considers whether or not you want to use High Occupancy Vehicle (HOV) lanes. Therefore, ensure the **Use HOV Lanes** setting is appropriate for your circumstances (see [Maps and Navigation on page 699](#)). If the setting is off, Navigate on Autopilot never uses a HOV lane, regardless of time of day. If the setting is on, Navigate on Autopilot uses HOV lanes, whenever applicable.

WARNING: When Navigate on Autopilot deactivates, Autosteer remains active. Always be prepared to take appropriate action.

WARNING: Navigate on Autopilot may not always attempt to exit at an off-ramp or change lanes, even when an exit or lane change is determined by the navigation route. Always remain alert and be prepared to manually steer onto an off-ramp, or make a lane change to prepare for, or to exit at, an off-ramp or interchange.

You can cancel Navigate on Autopilot at any time by touching **Navigate on Autopilot** on the map's turn-by-turn direction list (CybertruckModel SModel XModel 3Model Y reverts to Autosteer), or by canceling Autosteer entirely (see [Canceling Autosteer on page 589](#)).

Lane Changes

Navigate on Autopilot changes lanes to either prepare CybertruckModel SModel XModel 3Model Y for an upcoming off-ramp, to increase your driving speed (not to exceed your set cruising speed), or to move CybertruckModel SModel XModel 3Model Y out of a passing lane when you are not actively passing other road users. A message displays at the top of the map's turn-by-turn direction list to notify you when an upcoming lane change is required to stay on your navigation route. The instrument panel displays the upcoming driving path:




When the instrument panel displays a message asking you to confirm the lane change, engage the appropriate turn signal or pull the Autopilot stalk toward you. If you do not confirm the lane change within three seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes.



If **Require Lane Change Confirmation** is turned **off**, Navigate on Autopilot engages the appropriate turn signal, checks for vehicles and objects, and when appropriate, maneuvers CybertruckModel SModel XModel 3Model Y into the adjacent lane.

If **Require Lane Change Confirmation** is turned **on**, you must engage the appropriate turn signal or pull the Autopilot stalk toward you to confirm that you want Navigate on Autopilot to proceed with the lane change. If you do not confirm the lane change within three seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes.

NOTE: If you ignore a route-based lane change suggestion (for example, you are driving in the left lane while approaching an off-ramp on the right side of the highway), Navigate on Autopilot is unable to maneuver onto the off-ramp and as a result, you are re-routed to your destination.

 **WARNING:** Navigate on Autopilot may not always attempt to exit at an off-ramp or change lanes, even when an exit or lane change is determined by the navigation route. Always remain alert and be prepared to manually steer onto an off-ramp, or make a lane change to prepare for, or to exit at, an off-ramp or interchange.

Be Ready to Assist


When attempting to change lanes or maneuver CybertruckModel SModel XModel 3Model Y, or when approaching construction zones, Navigate on Autopilot may be unable to determine the appropriate driving lane (for example, complex clover leaves and multi-lane off-ramps) and the instrument panel displays an alert indicating that Navigate on Autopilot is trying to maneuver and may require assistance. When you see the message, be prepared to take immediate action to ensure that it is safe and appropriate to complete the lane change or maneuver.



Traffic Light and Stop Sign Control

NOTE: *Traffic Light and Stop Sign Control is a BETA feature and works best on roads that are frequently driven by Tesla vehicles. Traffic Light and Stop Sign Control attempts to stop at all traffic lights and may also stop at green lights.*

Traffic Light and Stop Sign Control is designed to recognize and respond to traffic lights and stop signs, slowing CybertruckModel SModel XModel 3Model Y to a stop when using Traffic-Aware cruise control or Autosteer. This feature uses the vehicle's forward-facing cameras, in addition to GPS data, and slows the car for all detected traffic lights, including green, blinking yellow, and off lights in addition to stop signs and some road markings. As CybertruckModel SModel XModel 3Model Y approaches an intersection, the instrument clustertouchscreen displays a notification indicating the intention to slow down. You must confirm that you want to continue or CybertruckModel SModel XModel 3Model Y stops at the red line displayed on the instrument clustertouchscreen's driving visualization.

 **WARNING: NEVER** make assumptions and predict when and where Traffic Light and Stop Sign Control will stop or continue through an intersection or road marking. From a driver's perspective, the behavior of Traffic Light and Stop Sign Control may appear inconsistent. Always pay attention to the roadway and be prepared to take immediate action. It is the driver's responsibility to determine whether to stop or continue through an intersection. Never depend on Traffic Light and Stop Sign Control to determine when it is safe and/or appropriate to stop or continue through an intersection.

Before Using

Before using Traffic Light and Stop Sign Control, you must:

- Ensure that forward-facing cameras are unobstructed (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)) and calibrated (see [Drive to Calibrate Cameras on page 108](#)[Drive to Calibrate Cameras on page 1140](#)). Traffic Light and Stop Sign Control depends on the ability of the cameras to detect traffic lights, stop signs, and road markings.
- Ensure that the latest version of maps has been downloaded to CybertruckModel SModel XModel 3Model Y. Although Traffic Light and Stop Sign Control primarily uses visual data received from the vehicle's cameras, greater accuracy is achieved when using the most recent map data. To check which version of maps is currently downloaded, touch **Controls** > **Software**. You must connect to a Wi-Fi network to receive updated maps (see [Map Updates on page 706](#)).
- Enable the feature. With the vehicle in Park, touch **Controls** > **Autopilot** > **Traffic Light and Stop Sign Control**. Once enabled, Traffic Light and Stop Sign Control operates whenever Traffic-Aware Cruise Control or Autosteer is active.

How it Works

When Traffic Light and Stop Sign Control is enabled and you are using Autosteer, Traffic-Aware Cruise Control, or Full Self-Driving (Supervised), the instrument clustertouchscreen displays a popup message to inform you that an upcoming traffic light, stop sign, or road marking has been detected. As it approaches the stop location, **even at an intersection where the traffic light is green**, CybertruckModel SModel XModel 3Model Y slows down and displays a red line to indicate where CybertruckModel SModel XModel 3Model Y will stop. To continue through the intersection—even if the traffic light is green — you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to give the vehicle permission to proceed. When you've confirmed that you want to proceed, the red stop line turns gray and CybertruckModel SModel XModel 3Model Y continues through the intersection and resumes your set cruising speed.

NOTE: If CybertruckModel SModel XModel 3Model Y is approaching a green light and detects that a vehicle in front of you is continuing through the intersection, CybertruckModel SModel XModel 3Model Y continues through the intersection without requiring your confirmation, provided you are not in a turning lane and the vehicle can detect that your hands are on the steering wheelsteering yoke (or steering wheel).

NOTE: If, after you pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to continue through the intersection, the traffic signal changes before you enter the intersection (for example, the light changes from green to yellow or from yellow to red), CybertruckModel SModel XModel 3Model Y may determine that it is not appropriate to proceed. Therefore, CybertruckModel SModel XModel 3Model Y stops and you must press the accelerator to proceed. At all times, it is your responsibility to ensure the vehicle stops or accelerates appropriately and safely.



WARNING: Traffic Light and Stop Sign Control DOES NOT turn CybertruckModel SModel XModel 3Model Y through an intersection unless Full Self-Driving (Supervised) is engaged. When in a turning lane, CybertruckModel SModel XModel 3Model Y stops at the red stop line. To proceed, pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal—CybertruckModel SModel XModel 3Model Y continues *straight* through the intersection (even when in a turning lane), so you MUST manually steer CybertruckModel SModel XModel 3Model Y through the intersection (which cancels Autosteer).

Traffic Light and Stop Sign Control is designed to operate as described only when the following conditions are met:

- Autosteer, Full Self-Driving (Supervised), or Traffic-Aware Cruise Control is engaged.
- The cameras can detect an upcoming traffic light, stop sign or road marking (for example, cameras are unobstructed and have a clear line-of-sight to the traffic light, stop sign, or road marking).
- The instrument clustertouchscreen on CybertruckModel SModel XModel 3Model Y is displaying an upcoming traffic light in "bold" format. CybertruckModel SModel XModel 3Model Y does not acknowledge traffic lights that the instrument clustertouchscreen shows as faded. If a traffic light is not directly ahead of the camera (for example, it is located at an angle of the camera's view, or located in an adjacent lane) the instrument clustertouchscreen displays it as faded and CybertruckModel SModel XModel 3Model Y does not slow down and stop for it.

WARNING: If the instrument clustertouchscreen is not displaying a red stop line at an upcoming intersection, CybertruckModel SModel XModel 3Model Y does not slow down or stop. It is the driver's responsibility to pay attention to upcoming intersections and monitor traffic conditions to determine when and if the vehicle should stop and then to take appropriate action as needed.

WARNING: Never depend on Traffic Light and Stop Sign Control to determine whether to stop at, or proceed through, an intersection. Drive attentively by watching the road and paying attention to the roadway, upcoming intersections, traffic conditions, crosswalks, and other road users. It is always the driver's responsibility to determine whether to stop or proceed. Be prepared to take immediate action. Failure to do so can result in injury or death.

WARNING: In some situations, Traffic Light and Stop Sign Control may inaccurately detect a traffic light or stop sign, causing CybertruckModel SModel XModel 3Model Y to slow down unexpectedly. Be prepared to take immediate action at all times.

WARNING: You must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to proceed through an intersection, regardless of the status of the traffic light. If you do not confirm, CybertruckModel SModel XModel 3Model Y stops at the red stop line displayed on the instrument clustertouchscreen, even if stopping may be inappropriate. Stopping at a green light may confuse other drivers and may result in a collision, injury or death. Therefore, always pay attention to upcoming intersections and be prepared to manually brake or accelerate in response to surroundings.

WARNING: Never assume that your ability to see a traffic light, stop sign, or road marking (especially at a complex intersection, or an intersection in which a traffic light or sign is partially obstructed, etc.) means that CybertruckModel SModel XModel 3Model Y can also see it and respond appropriately.





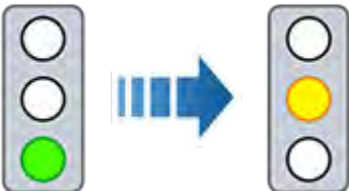
WARNING: Even the most recent map data does not include all traffic lights and stop signs. Therefore, Traffic Light and Stop Sign Control relies heavily on the ability of the cameras to detect traffic lights, stop signs, road markings, etc. As a result, CybertruckModel SModel XModel 3Model Y may ignore an intersection that is blocked from the camera's view (for example, obstructed by a tree or a large vehicle or object, or located near a steep hill or sharp curve).

WARNING: Traffic Light and Stop Sign Control is not a substitute for attentive driving and sound judgment.

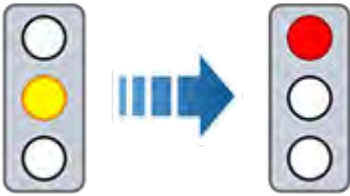
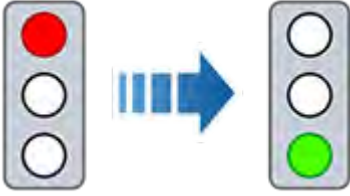





Traffic Lights

When driving with Autosteer or Traffic-Aware Cruise Control engaged, and Traffic Light and Stop Sign Control enabled, CybertruckModel SModel XModel 3Model Y is designed to respond as follows when approaching intersections controlled by a traffic light:

Type of Traffic Light	Vehicle Intended Response
 	<p>At a solid green traffic light, or at a traffic light that is currently off (not illuminated), CybertruckModel SModel XModel 3Model Y slows down.</p> <p>If you are following a car in front of you that continues through the intersection, the instrument clustertouchscreen displays a green stop line and provided your hands are detected on the steering wheelsteering yoke (or steering wheel), CybertruckModel SModel XModel 3Model Y also continues. If a car is not in front of you, the instrument clustertouchscreen displays a red stop line and you must confirm that you want to continue through the intersection by pulling the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly pressing the accelerator pedal. If you don't confirm, CybertruckModel SModel XModel 3Model Y stops at the red stop line.</p> <p>NOTE: CybertruckModel SModel XModel 3Model Y resumes the set cruising speed when it continues through the intersection, taking into consideration the speed of a vehicle in front of you.</p>
 	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to continue through the intersection (for example, the light turns green again, or once CybertruckModel SModel XModel 3Model Y has come to a complete stop), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p>
	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection (for example, the light turns green again), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p> <p>NOTE: If the traffic light changes <i>after</i> you've confirmed that you want to proceed (for example, a green traffic light turns yellow), CybertruckModel SModel XModel 3Model Y may stop instead of continuing, especially if CybertruckModel SModel XModel 3Model Y determines that it can safely stop before entering the intersection.</p> <p>NOTE: CybertruckModel SModel XModel 3Model Y is not designed to proceed through an intersection when the traffic light is red or if the light turns yellow in situations when there is adequate distance to safely stop before entering the intersection.</p> <p>NOTE: You can take over driving at any time by manually braking to cancel Autosteer or Traffic-Aware Cruise Control.</p>



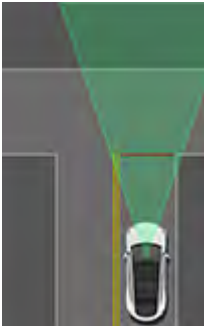



Type of Traffic Light	Vehicle Intended Response
 	
 	<p>CybertruckModel SModel XModel 3Model Y slows down. To proceed, you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal. If you don't, CybertruckModel SModel XModel 3Model Y stops at the red stop line displayed on the instrument clustertouchscreen.</p> <p>NOTE: To prevent CybertruckModel SModel XModel 3Model Y from stopping, and to minimize how much it slows down as it approaches, you can confirm that you want to proceed by pulling the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly pressing the accelerator pedal at any time after the instrument clustertouchscreen displays the red stop line. CybertruckModel SModel XModel 3Model Y resumes your set cruising speed immediately after you confirm (taking into consideration the speed of a vehicle in front of you).</p> <p>⚠ WARNING: Approach attentively and be prepared to press the brake pedal to slow down or stop.</p>
	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection (for example, traffic laws and conditions indicate it is safe and legal to proceed), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p>





Stop Signs and Road Markings

When driving with Autosteer or Traffic-Aware Cruise Control engaged, and Traffic Light and Stop Sign Control enabled, CybertruckModel SModel XModel 3Model Y is designed to respond as follows when approaching intersections controlled by stop signs, stop lines, or road markings:

Type of Intersection	Vehicle Intended Response
 <p>No Traffic Control</p>  <p>Arm of T-junction</p>	<p>CybertruckModel SModel XModel 3Model Y assumes the right of way and continues straight without slowing down or stopping.</p>
 <p>End of T-junction</p>	<p>If CybertruckModel SModel XModel 3Model Y detects a T-junction based on the map data, CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed, you must take over steering and acceleration.</p> <p>⚠ WARNING: CybertruckModel SModel XModel 3Model Y may not stop at a T-junction that does not have a stop sign or stop line, or if the T-junction is not included in the map data. Drive attentively and be prepared to stop (when necessary and/or appropriate).</p>
 <p>Stop Sign</p>	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection, you must pull the Autopilot stalk toward you or press down on the drive stalk or briefly press the accelerator pedal.</p> <p>NOTE: If you confirm that you want to proceed through an intersection controlled by a stop sign by pulling the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly pressing the accelerator pedal before CybertruckModel SModel XModel 3Model Y has stopped, your confirmation is ignored. CybertruckModel SModel XModel 3Model Y is not designed to proceed through a stop sign without stopping.</p> <p>NOTE: Even when using Autosteer, and even if you have engaged a turn signal, you must turn the steering wheelsteering yoke (or steering wheel) yourself (which cancels Autosteer) to complete a turn at an intersection.</p>



Type of Intersection	Vehicle Intended Response
 <p>Stop Sign and Road Marking</p>	
 <p>Road Marking</p>	

-  **WARNING:** CybertruckModel SModel XModel 3Model Y also slows down and stops at a roundabout. You must take over steering (which cancels Autosteer) and pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to continue through the roundabout.
-  **WARNING:** At crosswalks, CybertruckModel SModel XModel 3Model Y may slow down and may stop, depending on whether the crosswalk is controlled by a traffic light and whether the cameras detect pedestrians, bicyclists, etc. in the crosswalk. Pay particular attention at crosswalks and be prepared to take over at any time. Failure to do so can result in injury or death.

Limitations

Depending on many different circumstances and environmental conditions, Traffic Light and Stop Sign Control *may or may not* stop at:

- Railroad crossings.
- Keep-out zones.
- Toll booths.
- Crosswalk systems.
- Yield signs or temporary traffic lights and stop signs (such as at construction areas).
- Miscellaneous traffic U-turn lights, bicycle and pedestrian crossing lights, lane availability lights, etc.

In addition, Traffic Light and Stop Sign Control is particularly unlikely to operate as intended, can disengage, or may not operate, when one or more of the following conditions are present:

- Driving through consecutive light-controlled intersections that are very close to each other.
- Visibility is poor (heavy rain, snow, fog, etc.) or weather conditions are interfering with camera or sensor operation.
- Bright light (such as direct sunlight) is interfering with the view of the camera(s).



- A camera is obstructed, covered, damaged, or not properly calibrated.
- Driving on a hill or on a road that has sharp curves on which the cameras are unable to see upcoming traffic lights or stop signs.
- A traffic light, stop sign, or road marking is obstructed (for example, a tree, a large vehicle, etc.).
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it, which is blocking the view of a camera.

⚠ WARNING: The limitations listed above are not an exhaustive list of reasons why CybertruckModel SModel XModel 3Model Y may not operate as expected. Many unforeseen circumstances can adversely impact the accurate operation of Traffic Light and Stop Sign Control. Using this feature does not reduce or eliminate the need to drive attentively and responsibly. You must be prepared to take appropriate and immediate action at all times.

Full Self-Driving (Supervised)

When Full Self-Driving (Supervised) (also referred to as Autosteer on City Streets) is engaged, CybertruckModel SModel XModel 3Model Y attempts to drive to your destination by following curves in the road, stopping at and negotiating intersections, making left and right turns, navigating roundabouts, and entering/exiting highways.

Unlike Traffic-Aware Cruise Control, Autosteer, and Navigate on Autopilot, which are intended for use on multi-lane roadways with clear lane markings, Full Self-Driving (Supervised) is meant to work in a variety of driving scenarios. You can use Full Self-Driving (Supervised) on any type of roadway, including residential and city streets.

⚠ WARNING: Driver intervention may be required in certain situations, such as on narrow roads with oncoming cars, in construction zones, or while going through complex intersections. For more examples of scenarios in which driver intervention might be required, see [Limitations and Warnings on page 631](#).

Full Self-Driving (Supervised) uses inputs from cameras mounted at the front, rear, left, and right of CybertruckModel SModel XModel 3Model Y to build a model of the area surrounding CybertruckModel SModel XModel 3Model Y (see [Cameras on page 101](#)). The Full Self-Driving computer installed in CybertruckModel SModel XModel 3Model Y is designed to use this input, rapidly process neural networks, and make decisions to safely guide you to your destination.

NOTE: As Tesla's Full Self-Driving (Supervised) capabilities evolve, CybertruckModel SModel XModel 3Model Y is upgraded through over-the-air software updates. Download updates as soon as they become available.

NOTE: Full Self-Driving (Supervised) uses Tesla's vision-based system and therefore radar (if equipped) is disabled.

Like other Autopilot features, Full Self-Driving (Supervised) requires a fully attentive driver and will display a series of escalating warnings requiring driver response. **You must keep your hands on the steering wheelsteering yoke (or steering wheel) while Full Self-Driving (Supervised) is engaged.** While Full Self-Driving (Supervised) is engaged, the cabin camera monitors driver attentiveness (see [Driver Attentiveness on page 608](#)).

⚠ WARNING: Full Self-Driving (Supervised) is a hands-on feature that requires you to pay attention to the road at all times. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, pay attention to pedestrians and cyclists, and always be prepared to take immediate action (especially around blind corners, crossing intersections, and in narrow driving situations). Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Full Self-Driving (Supervised) and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).

⚠ CAUTION: Use of Full Self-Driving (Supervised) will be suspended if improper usage is detected. For more information, see [Autopilot Suspension on page 608](#).

⚠ CAUTION: As Full Self-Driving (Supervised) deployment expands, Tesla will gradually make it available to eligible customers in select countries outside of the United States and Canada. Because every country contains unique infrastructure, driving behaviors, and traffic patterns that Full Self-Driving (Supervised) must adapt to over time, it is essential for drivers using Full Self-Driving (Supervised) in newly eligible countries to be extra attentive and overly cautious. You must be ready to take over safely at any time.

Before Using Full Self-Driving (Supervised)

Before using Full Self-Driving (Supervised), you must:



- Ensure that the cameras on CybertruckModel SModel XModel 3Model Y are unobstructed and calibrated (see [Cameras on page 101](#)). Full Self-Driving (Supervised) depends on the ability of the cameras to detect traffic lights, stop signs, and road markings.
- Ensure that the latest version of maps has been downloaded to CybertruckModel SModel XModel 3Model Y. Although Full Self-Driving (Supervised) primarily uses visual data received from the vehicle's cameras, greater accuracy is achieved when using the most recent map data. To check which version of maps is currently downloaded, touch **Controls > Software**. You must connect to a Wi-Fi network to receive updated maps (see [Map Updates on page 706](#)).

In addition, you must enable Full Self-Driving (Supervised) before you can use it. To enable Full Self-Driving (Supervised), touch **Controls > Autopilot > Full Self-Driving (Supervised)** and then, after carefully reading and understanding the popup window, touch **Yes**.

NOTE: When Full Self-Driving (Supervised) is enabled, the setting for **Autopilot Activation** is set to **Single Click** and Traffic-Aware Cruise Control and Autosteer are unavailable.

NOTE: When Full Self-Driving (Supervised) is enabled, the setting for **Autopilot Activation** is set to **Single Click** and Traffic-Aware Cruise Control and Autosteer are unavailable.

NOTE: When Full Self-Driving (Supervised) is enabled, the setting for **Autopilot Activation** is set to **Single Pull** and Traffic-Aware Cruise Control and Autosteer are unavailable.

NOTE: When Full Self-Driving (Supervised) is enabled, the setting for **Autopilot Activation** is set to **Single Pull** and Traffic-Aware Cruise Control and Autosteer are unavailable.

Customize Full Self-Driving (Supervised) settings by touching **Controls > Autopilot**.

- **Full Self-Driving (Supervised):** If desired, change the default setting of **Average** to **Chill** or **Assertive**. **Chill** provides a more relaxed driving style and **Assertive** drives with more urgency.
- **Minimal Lane Changes for the Current Drive:** When selected, Full Self-Driving (Supervised) makes fewer lane changes on the current drive. CybertruckModel SModel XModel 3Model Y will still make lane changes as necessary to follow the navigation route.
NOTE: While Full Self-Driving (Supervised) is selected, tilting the right steering wheelsteering yoke (or steering wheel) button to the right or left also allows you to change the Full Self-Driving (Supervised) profile and enable or disable **Minimal Lane Changes**.
- **Automatic Set Speed Offset:** When enabled, CybertruckModel SModel XModel 3Model Y drives at the speed that Autopilot determines to be the most natural. This considers factors like road type, traffic flow, environmental conditions, the detected speed limit, and the selected Full Self-Driving (Supervised) profile setting.



WARNING: You are responsible for the speed of the vehicle at all times, whether Autopilot is engaged or not.

To Use Full Self-Driving (Supervised)

Once Full Self-Driving (Supervised) is enabled, activate it the same way you would Autosteer (see [Autosteer on page 556](#)[Autosteer on page 587](#)).

1. Enter a destination. If you do not choose a destination, CybertruckModel SModel XModel 3Model Y chooses the most probable driving path or suggests a destination based on your driving.
2. When the instrument clustertouchscreen displays the gray steering wheelsteering yoke (or steering wheel) icon, press the right scroll wheelpress the right scroll wheelpull the drive stalk down once fullypull the drive stalk once fullypull the Autopilot stalk toward you.



You can engage Full Self-Driving (Supervised) at any speed less than 85 mph (150 km/h), including when Cybertruck Model S Model X Model Y is at a standstill.

The instrument cluster touchscreen displays the maximum speed in blue. When you engage Full Self-Driving (Supervised), the set cruising speed defaults to the speed limit, plus any offset you've specified. If Autopilot is unable to determine the speed limit, the cruising speed is your current speed, in addition to any specified offset.



To indicate that Full Self-Driving (Supervised) is available but not engaged, the top corner of the touchscreen displays a gray steering wheelsteering yoke (or steering wheel) icon next to the driving gear.



When Full Self-Driving (Supervised) is engaged, the steering wheelsteering yoke (or steering wheel) icon is blue and a blue line represents your driving path.

When Full Self-Driving (Supervised) is engaged, the instrument clustertouchscreen displays a visualization of the environment surrounding CybertruckModel SModel XModel 3Model Y, including the roadway and detected objects such as vehicles, pedestrians, curbs, bicyclists, and more. Objects that are highlighted on the visualization represent priorities that Full Self-Driving (Supervised) is actively controlling for at a given time.

NOTE: The Full Self-Driving (Supervised) visualization may not be a holistic representation of the objects, road markings, road signals, and other variables that Full Self-Driving (Supervised) takes into account as it attempts to drive to your destination. While Full Self-Driving (Supervised) is engaged, it uses data from the cameras on CybertruckModel SModel XModel 3Model Y that may not be represented in the visualization (see [Cameras on page 101](#)).

NOTE: Full Self-Driving (Supervised) uses Tesla's vision-based system and therefore radar (if equipped) is disabled.



The visualization will also inform you of the system's intended action by displaying a message on the instrument clustertouchscreen, such as when the vehicle is slowly creeping for visibility to take a turn at an intersection.

You can widen the visualization area to fullscreen. Enable the setting by touching **Controls > Autopilot > Full Self-Driving (Supervised) > Expanded Full Self-Driving Visualization**. Then on the touchscreen, swipe the visualization window handle to fill the entire screen.

NOTE: You can override Full Self-Driving (Supervised) at any time if you are uncomfortable or uncertain about the system's intended course of action. You are driving CybertruckModel SModel XModel 3Model Y at all times.

Canceling Full Self-Driving (Supervised)

To disengage Full Self-Driving (Supervised), do any of the following:

- Press the brake pedal.
- Move the drive stalk upward.
 - **CAUTION:** If you move the drive stalk upward and hold it up for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- Move the drive stalk upward.
 - **CAUTION:** If you move the drive stalk upward and hold it up for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- Press the right scroll wheel on the steering yoke (or steering wheel).



- Press the right scroll wheel on the steering wheelsteering yoke (or steering wheel)
- Push the Autopilot stalk away from you once.
- Take over and steer manually.

When you disengage Full Self-Driving (Supervised) by steering manually, Traffic-Aware Cruise Control remains active.


In addition, Full Self-Driving (Supervised) will disengage if any of the following occurs:

- You shift out of Drive.
- A door or trunk is opened.
- There is an Automatic Emergency Braking event (see [Collision Avoidance Assist on page 645](#)).
- The driver's seatbelt is released, and/or the driver gets out of their seat.
- You do not respond to repeated reminders to keep your hands on the wheel and subsequent messages on the instrument clustertouchscreen.
- Full Self-Driving (Supervised) becomes unavailable. This can happen for a number of reasons (for example, if a camera becomes obscured). If Full Self-Driving (Supervised) disengages, an alert will appear on the instrument clustertouchscreen to notify you and a chime will sound. If this happens, **take control of steering immediately**.

When driver intervention is required, it is best to safely disengage as soon as possible. It is recommended to practice disengaging from Full Self-Driving (Supervised) in safe environment without other road users so you may become familiar with the process.

While Using Full Self-Driving (Supervised)


Full Self-Driving (Supervised) changes lanes, makes left and right turns, follows on- and off-ramps, and takes forks in the road as necessary to reach the destination.

 **WARNING:** NEVER make assumptions and predict when and where Full Self-Driving (Supervised) will stop or continue through an intersection or road marking. From a driver's perspective, the behavior of Full Self-Driving (Supervised) may appear inconsistent. Always pay attention to the roadway and be prepared to take immediate action. It is the driver's responsibility to determine whether to stop or continue through an intersection. Never depend on Full Self-Driving (Supervised) to determine when it is safe and/or appropriate to stop or continue through an intersection.

Like Autosteer and Traffic-Aware Cruise Control, Full Self-Driving (Supervised) maintains your speed and following distance from the vehicle ahead of CybertruckModel SModel XModel 3Model Y, if there is one. Full Self-Driving (Supervised) also slows down and stops at traffic lights and stop signs as necessary, and reacts to pedestrians, cyclists, and other vehicles on the road.

For example, if you are driving on a residential street and another vehicle backs out of a driveway ahead of CybertruckModel SModel XModel 3Model Y, Full Self-Driving (Supervised) slows down or stops as appropriate. If the other vehicle stops backing out while partially blocking the driving lane, Full Self-Driving (Supervised) slows down and maneuvers around the other vehicle if the width of the lane allows it.

When the traffic in front of you is slowing down, Full Self-Driving (Supervised) shows blue arrows in the driving lane and slows down to maintain an appropriate following distance from the vehicle ahead of you. When you are driving on the highway, Full Self-Driving (Supervised) displays a message on the instrument clustertouchscreen to inform you when an action (such as a lane change) is being taken.

 **WARNING:** In rare cases, Full Self-Driving (Supervised) may not appropriately slow down, come to a stop, or resume control for a stop sign or traffic light. You may assist the system by lightly applying the accelerator, or can override Full Self-Driving (Supervised) at any time.

Changing Lanes

To tell Full Self-Driving (Supervised) to change lanes while on a multi-lane roadway, engage the right or left turn signal. On city or residential streets, engaging the right or left turn signal tells Full Self-Driving (Supervised) to make a right or left turn, respectively.



Unlike Navigate on Autopilot, Full Self-Driving (Supervised) does not require confirmation before a lane change. To cancel a lane change or turn, cancel the turn signal or intervene with the steering wheelsteering yoke (or steering wheel) or other vehicle controls.

To be notified by a **Chime**, **Vibration**, or **Both** of upcoming lane changes (in addition to the notification on the instrument clustertouchscreen), touch **Controls > Autopilot > Full Self-Driving (Supervised)** and then select a **Lane Change Notification**.

Changing the Set Speed

While Full Self-Driving (Supervised) is active, move the Autopilot stalk up to increase, or down to decrease, the set speed until the instrument panel displays your desired cruising speed.

While Full Self-Driving (Supervised) is active, roll the right scroll wheel up to increase, or down to decrease, the set speed.

NOTE: In some cases, your speed is limited by the speed limit, the type of roadway, or the flow of traffic. If this is the case, Full Self-Driving (Supervised) displays a message at the top of the visualization.

Arriving at Your Destination

Once you reach your destination, Full Self-Driving (Supervised) stops CybertruckModel SModel XModel 3Model Y and displays a message indicating that navigation is complete.

Driver Attentiveness

Like other Autopilot features, Full Self-Driving (Supervised) requires driver attentiveness. **Your hands must be on the steering wheel at all times while Full Self-Driving (Supervised) is engaged, and you must monitor your surroundings, the road, and other road users.**

⚠ WARNING: The use of devices designed to circumvent driver attentiveness is a violation of the terms of use for Full Self-Driving (Supervised) and may result in the feature being permanently disabled on your vehicle and a ban on future use of the feature.

Full Self-Driving (Supervised) periodically displays a message reminding the driver to apply slight force to the steering wheel:



Apply slight turning force to steering wheel

If CybertruckModel SModel XModel 3Model Y does not detect slight turning force on the steering wheel, the instrument clustertouchscreen flashes and eventually chimes repeatedly. Do not use handheld devices while using Full Self-Driving (Supervised). If the cabin camera detects a handheld device while Full Self-Driving (Supervised) is engaged, the instrument clustertouchscreen displays a message reminding you to keep your hands on the wheel.

Similarly, the cabin camera monitors your continued attentiveness when using Full Self-Driving (Supervised). This system cannot be disabled. The instrument clustertouchscreen displays a message reminding you to pay attention if you repeatedly look away from the road, obstruct the camera, or prevent the system from identifying your gaze.

If you repeatedly ignore prompts to apply slight force to the steering wheel or to pay attention, Full Self-Driving (Supervised) disables for the rest of the drive and displays the following message requesting you to drive manually. If you don't resume manual steering, Full Self-Driving (Supervised) sounds a continuous chime, turns on the warning flashers, and slows the vehicle to a complete stop.



Autopilot unavailable for current drive. Autopilot Strikeout - Attention warnings ignored.

Autopilot Suspension

Use of Autosteer and Full Self-Driving (Supervised) will be suspended if improper usage is detected.



Use of Autosteer and Full Self-Driving (Supervised) is suspended for a week when you or another driver of your vehicle receives five Autopilot "strikeouts." A strikeout is when the Autopilot system disengages for the remainder of a trip after the driver receives several audio and visual warnings for inattentiveness.

You can see how many strikeouts are remaining before Autopilot access is suspended by touching **Controls > Autopilot**.

A strikeout is forgiven after 7 days, as long as you don't receive another strikeout in that time.




NOTE: If your access to Autosteer and Full Self-Driving (Supervised) is suspended, you can still use Traffic-Aware Cruise Control and all active safety features are still enabled.

There may be occasions where driver intervention is required and you must take over immediately to maintain safe driving. Driver-initiated disengagements do not count as improper usage and are expected from the driver.

Autopark

This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately September 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately January 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately late May 2023.

Autopark uses data to simplify parking on public roads by maneuvering Cybertruck Model S Model X Model 3 Model Y into parallel and perpendicular parking spaces.

-  **CAUTION:** Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance.
-  **WARNING:** Autopark's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to curbs, objects, and other vehicles.
-  **WARNING:** Do not use Autopark if anything, such as a ball hitch, bike rack, or trailer, is attached to the tow hitch. Autopark may not stop for hitches when parking between or in front of other vehicles.

Parameters

Autopark detects potential parking spaces based on the following parameters:

Perpendicular Parking

- Your driving speed must be below 8 mph (13 km/h). If driving too fast, Autopark may not be able to accurately detect your desired parking space.
- The parking space must be at least 7.2 feet (2.2 meters) wide.
- The parking space must have at least three visible lines for the vehicle to park into, such as parking lines, road markings, or distinct curbs. Autopark may not work in a garage, for example, without three visible parking lines.
- Autopark may not work with textured road surfaces such as cobblestone or brick.

Parallel Parking

- Your driving speed must be below 13 mph (21 km/h). If driving too fast, Autopark may not be able to accurately detect your desired parking space.
- There must be a vehicle in front of the space you want to park in.
- A distinct curb or edge must be visible. Autopark may not correctly identify the parking space if the curb is not distinct, such as grass or dirt.

NOTE: Autopark does not operate on angled parking spaces.



Parameters

Autopark detects potential perpendicular parking spaces that are at least 9.5 feet (2.9 meters) wide with a vehicle parked on each side.

Autopark detects parallel parking spaces that are at least 20 feet (6 meters), but no more than 49 feet (15 meters) long.

Your vehicle speed must be below 13 mph (21 km/h) for parallel parking spaces, and 8 mph (13 km/h) for perpendicular parking spaces. If driving too fast, Autopark may not be able to accurately detect your desired parking space.

NOTE: Autopark does not operate on angled parking spaces.

To Use Autopark

When driving, follow these steps to allow Autopark to maneuver CybertruckModel SModel XModel 3Model Y into a parking space:

1. While driving slowly, monitor the instrument clustertouchscreen to see potential parking spaces detected by Autopilot. When CybertruckModel SModel XModel 3Model Y is positioned such that it can reverse into one of the detected locations, the instrument clustertouchscreen displays a parking icon.



NOTE: The parking icon appears only if the vehicle's position and/or the circumstances of the surrounding area are such that Autopark can determine an appropriate driving path. If Autopark cannot determine an appropriate path (for example, when driving on a narrow street where moving into the parking space causes the front of the vehicle to extend into the adjacent lane), you can either reposition the vehicle, find a different parking space, or park manually.

NOTE: If the Autopark icon does not appear for potential parking spaces when driving at the indicated speed, it is possible that Autopark is calibrating. Autopark requires a calibration process when CybertruckModel SModel XModel 3Model Y is new, or when tires have recently been changed.

2. Choose a spot, check to determine if it is appropriate and safe, then pull forward and stop approximately one car length ahead of the parking space (as you normally would when parallel parking or when backing into a perpendicular parking space).



3. Release the steering wheelsteering yoke (or steering wheel), shift CybertruckModel SModel XModel 3Model Y into Reverse, then touch **Start** on the touchscreen.
4. Release the steering wheelsteering yoke (or steering wheel), shift CybertruckModel SModel XModel 3Model Y into Reverse, then touch **Start** on the touchscreen.
5. Release the steering wheelsteering yoke (or steering wheel), then touch and hold **Autopark** in the drive mode strip on the touchscreen. You can release the button once Autopark engages.
6. Release the steering wheelsteering yoke (or steering wheel), then touch and hold **Autopark** in the drive mode strip on the touchscreen. You can release the button once Autopark engages.
7. Autopark displays a message when parking is complete.

If you press the brake pedal when Autopark is actively parking CybertruckModel SModel XModel 3Model Y, the parking process pauses until you touch **Resume** on the touchscreen.

⚠ WARNING: Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.

⚠ WARNING: When Autopark is actively steering CybertruckModel SModel XModel 3Model Y:

- Do not interfere with the movement of the steering wheelsteering yoke (or steering wheel). Doing so cancels Autopark.
- Continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- Monitor the touchscreen and instrument paneltouchscreen to ensure that you are aware of the instructions that Autopark is providing.

To Use Autopark

When driving, follow these steps to allow Autopark to maneuver CybertruckModel SModel XModel 3Model Y into a parking space:

1. While driving slowly on a public road, monitor the instrument panel to determine when Autopark has detected a parking space. The instrument panel will display a parking icon if the vehicle detects a potential parking spot.





NOTE: The parking icon appears only if the vehicle's position and/or the circumstances of the surrounding area are such that Autopark can determine an appropriate driving path. If Autopark cannot determine an appropriate path (for example, when driving on a narrow street where moving into the parking space causes the front of the vehicle to extend into the adjacent lane), you can either reposition the vehicle, find a different parking space, or park manually.

NOTE: If the Autopark icon does not appear for potential parking spaces when driving at the indicated speed, it is possible that Autopark is calibrating. Autopark requires a calibration process when CybertruckModel SModel XModel 3Model Y is new, or when tires have recently been changed (see [Calibration on page 612](#)).

2. Choose a spot, check to determine if it is appropriate and safe, then pull forward and stop approximately one car length ahead of the parking space (as you normally would when parallel parking or when backing into a perpendicular parking space).
3. Release the steering wheel, shift CybertruckModel SModel XModel 3Model Y into Reverse, then touch **Start Autopark** on the touchscreen.
4. Autopark displays a message when parking is complete.

NOTE: If you press the brake pedal when Autopark is actively parking CybertruckModel SModel XModel 3Model Y, the parking process pauses until you touch **Resume** on the touchscreen.

WARNING: Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.

WARNING: When Autopark is actively steering CybertruckModel SModel XModel 3Model Y:

- Do not interfere with the movement of the steering wheelsteering yoke (or steering wheel). Doing so cancels Autopark.
- Continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- Monitor the touchscreen and instrument panel to ensure that you are aware of the instructions that Autopark is providing.

Calibration

During a parking sequence, Autopark must maneuver CybertruckModel SModel XModel 3Model Y with a great deal of precision. Therefore, before it can be used, Autopark must complete a calibration process. Calibration can take anywhere from 30 minutes to several days, depending on driving behavior. When Autopark is calibrating, a note displays on the Autopilot settings screen indicating that calibration is in progress. When calibration is complete, this note no longer displays and Autopark is available for use.

NOTE: Autopark repeats the calibration process whenever tires are changed.

To Pause Parking

To pause Autopark, press the brake pedal once. CybertruckModel SModel XModel 3Model Y stops and remains stopped until you touch **Resume** on the touchscreen.



To Cancel Parking

Autopark cancels the parking sequence when you manually move the steering wheelsteering yoke (or steering wheel), shift, or touch **Cancel** on the touchscreen. Autopark also cancels parking when:

- The parking sequence exceeds seven moves.
- CybertruckModel SModel XModel 3Model Y detects that the driver is exiting the vehicle.
- A door is opened.
- You press the accelerator pedal.
- You press the brake pedal while Autopark is paused.
- An Automatic Emergency Braking event occurs (see [Collision Avoidance Assist on page 645](#)).

Limitations

Autopark is particularly unlikely to operate as intended in these situations:

- The road is sloped. Autopark is designed to operate on flat roads only.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- The curb is constructed of material other than stone, or the curb cannot be detected.
- The target parking space is directly adjacent to a wall or pillar (for example, the last parking space of a row in an underground parking structure).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.






WARNING: Many unforeseen circumstances can impair Autopark's ability to park CybertruckModel SModel XModel 3Model Y. Keep this in mind and remember that as a result, Autopark may not steer CybertruckModel SModel XModel 3Model Y appropriately. Pay attention when parking CybertruckModel SModel XModel 3Model Y and stay prepared to immediately take control.



Autopark

Autopark uses data to simplify parking on public roads by maneuvering CybertruckModel SModel XModel 3Model Y into parallel and perpendicular parking spaces.

-  **WARNING:** It is your responsibility to familiarize yourself with the limitations of Autopark and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).
-  **WARNING:** Do not use Autopark if anything, such as a ball hitch, bike rack, or trailer, is attached to the tow hitch. Autopark may not stop for hitches when parking between or in front of other vehicles.
-  **CAUTION:** Autopark's performance depends on the ability of the cameras to determine the vehicle's proximity to curbs, objects, and other vehicles. Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

Parameters

Autopark detects potential parking spaces based on the following parameters:

Perpendicular Parking

- Your driving speed must be below 8 mph (13 km/h). If driving too fast, Autopark may not be able to accurately detect your desired parking space.
- The parking space must be at least as wide as your vehicle.
- The parking space must have at least three visible lines for the vehicle to park into, such as parking lines, road markings, or distinct curbs. Autopark may not work in a garage, for example, without three visible parking lines.
- Autopark may not work with textured road surfaces such as cobblestone or brick.

Parallel Parking

- Your driving speed must be below 8 mph (13 km/h). If driving too fast, Autopark may not be able to accurately detect your desired parking space.
- There must be a vehicle in front of or behind the space you want to park in.

NOTE: Autopark does not operate on angled parking spaces.

To Use Autopark

When driving, follow these steps to allow Autopark to maneuver CybertruckModel SModel XModel 3Model Y into a parking space:

1. While driving slowly, monitor the instrument clustertouchscreen to see potential parking spaces detected by Autopilot. When CybertruckModel SModel XModel 3Model Y is positioned such that it can reverse into one of the detected locations, the instrument clustertouchscreen displays potential open parking spaces.



NOTE: The detected parking spaces appear only if the vehicle's position and/or the circumstances of the surrounding area are such that Autopark can determine an appropriate driving path. If Autopark cannot determine an appropriate path (for example, when driving on a narrow street where moving into the parking space causes the front of the vehicle to extend into the adjacent lane), you can either reposition the vehicle, find a different parking space, or park manually.

2. Choose a spot. Check to determine if it is appropriate and safe, then pull forward and stop approximately one car length ahead of the parking space (as you normally would when parallel parking or when backing into a perpendicular parking space).
3. Release the steering wheelsteering yoke (or steering wheel), then touch **Start** on the touchscreen.
4. Release the steering wheelsteering yoke (or steering wheel), then touch **Start** on the touchscreen.
5. Release the steering wheelsteering yoke (or steering wheel), then touch and hold **Autopark** in the drive mode strip on the touchscreen. You can release the button once Autopark engages.
6. Autopark displays a message when parking is complete.

If you press the brake pedal when Autopark is actively parking CybertruckModel SModel XModel 3Model Y, the parking process pauses until you touch **Resume** on the touchscreen.



WARNING: Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.



WARNING: When Autopark is actively steering CybertruckModel SModel XModel 3Model Y:

- Do not interfere with the movement of the steering wheelsteering yoke (or steering wheel). Doing so cancels Autopark.
- Continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- Monitor the touchscreen to ensure that you are aware of the instructions that Autopark is providing.

To Use Autopark

When driving, follow these steps to allow Autopark to maneuver CybertruckModel SModel XModel 3Model Y into a parking space:

1. While driving slowly, monitor the instrument clustertouchscreen to see potential parking spaces detected by Autopilot. When CybertruckModel SModel XModel 3Model Y is positioned such that it can reverse into one of the detected locations, the instrument clustertouchscreen displays potential open parking spaces.



NOTE: The detected parking spaces appear only if the vehicle's position and/or the circumstances of the surrounding area are such that Autopark can determine an appropriate driving path. If Autopark cannot determine an appropriate path (for example, when driving on a narrow street where moving into the parking space causes the front of the vehicle to extend into the adjacent lane), you can either reposition the vehicle, find a different parking space, or park manually.

2. Move the right scroll wheel up or down to select a parking space. Check to determine if it is appropriate and safe, then pull forward and stop approximately one car length ahead of the parking space (as you normally would when parallel parking or when backing into a perpendicular parking space).
3. When ready to park, press the right scroll wheel button and release the steering wheelsteering yoke (or steering wheel).
4. Autopark displays a message when parking is complete.

If you press the brake pedal when Autopark is actively parking CybertruckModel SModel XModel 3Model Y, the parking process pauses until you touch **Resume** on the touchscreen.

WARNING: Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.



WARNING: When Autopark is actively steering CybertruckModel SModel XModel 3Model Y:

- Do not interfere with the movement of the steering wheelsteering yoke (or steering wheel). Doing so cancels Autopark.
- Continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- Monitor the touchscreen and instrument panel to ensure that you are aware of the instructions that Autopark is providing.

To Pause Parking

To pause Autopark, press the brake pedal once. CybertruckModel SModel XModel 3Model Y stops and remains stopped until you touch **Resume** on the touchscreen.

To Cancel Parking

Autopark cancels the parking sequence when you manually move the steering wheelsteering yoke (or steering wheel), shift, or touch **Cancel** on the touchscreen. Autopark also cancels parking when:

- The parking sequence exceeds seven moves.
- CybertruckModel SModel XModel 3Model Y detects that the driver is exiting the vehicle.
- A door is opened.
- You press the accelerator pedal.
- You press the brake pedal while Autopark is paused.
- An Automatic Emergency Braking event occurs (see [Collision Avoidance Assist on page 645](#)).

Summon

This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately September 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately January 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately late May 2023.

Summon allows you to automatically park and retrieve CybertruckModel SModel XModel 3Model Y while you are standing outside the vehicle. Summon moves CybertruckModel SModel XModel 3Model Y forward and reverse up to 39 ft. (12 meters) in, or out of, a parking space.

To move CybertruckModel SModel XModel 3Model Y a longer distance while steering around objects, you can use Smart Summon and your mobile phone. Smart Summon allows your vehicle to find you (or you can send your vehicle to a chosen location). See [Smart Summon on page 621](#).

To move CybertruckModel SModel XModel 3Model Y, your phone must be paired via Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)).

Summon requires that CybertruckModel SModel XModel 3Model Y can detect a valid key nearby.

WARNING: Summon is designed and intended for use only on parking lots and driveways on private property where the surrounding area is familiar and predictable.

WARNING: Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Summon safely, responsibly, and as intended. For more information about the limitations of Summon and conditions that may interfere with its use, see [Warnings and Limitations on page 631](#).

Before Using Summon

Before operating Summon, use the touchscreen to enable it and customize how you want it to work. Touch **Controls > Autopilot > Customize Summon** and adjust the following settings to suit your preferences:



- **Bumper Clearance:** Set the distance that you want Summon to stop from a detected object (for example, you may want Summon to stop within just a few inches of a garage wall). Note that this distance applies only to objects that Summon detects directly in front of CybertruckModel SModel XModel 3Model Y when moving forward, or directly behind CybertruckModel SModel XModel 3Model Y when reversing.
- **Summon Distance:** Set a maximum distance that CybertruckModel SModel XModel 3Model Y can travel when entering or exiting a parking space.
- **Side Clearance:** Choose an option to specify how much side clearance you want to allow. **Tight** allows CybertruckModel SModel XModel 3Model Y to enter and exit very narrow parking spaces.



WARNING: Parking in a narrow space limits the ability of the cameras and sensors (if equipped) to accurately detect the location of obstacles, increasing the risk of damage to CybertruckModel SModel XModel 3Model Y and/or surrounding objects.

- **Require Continuous Press:** By default, Summon requires that you press and hold a button on the mobile app to move CybertruckModel SModel XModel 3Model Y during the parking process. When **Require Continuous Press** is set to **No**, you can press and release the button—you don't need to hold it down to keep the vehicle moving. Also, when **Require Continuous Press** is set to **No**, you can operate Summon using the key fob accessory instead of the mobile app (see [Operating Summon with the Key Fob on page 619](#)) and you can start a parking sequence from inside the vehicle (see [Starting Summon Before Exiting the Vehicle on page 620](#)). Also, when **Require Continuous Press** is set to **No**, you can operate Summon using the key fob accessory instead of the mobile app (see [Operating Summon with the Key Fob on page 619](#)) and you can start a parking sequence from inside the vehicle (see [Starting Summon Before Exiting the Vehicle on page 620](#)).
- **Use Auto HomeLink** (if equipped): Set to **ON** if you want to activate HomeLink to open/close a programmed HomeLink device (such as a gate or a garage door) during the parking process when using Summon. If enabled, the device automatically opens and closes when CybertruckModel SModel XModel 3Model Y enters or exits during a Summon session. In a Smart Summon session, the device automatically opens when, at the beginning of a session, Smart Summon detects that CybertruckModel SModel XModel 3Model Y is parked in a garage.



WARNING: Always ensure that CybertruckModel SModel XModel 3Model Y is fully in or out of a garage before HomeLink lowers the garage door. Summon and Smart Summon cannot detect where an overhead door will lower.

NOTE: When enabled, the HomeLink device automatically opens and closes when using Summon, and automatically opens as needed when using Smart Summon. To automate HomeLink in other situations (such as normal driving), you must adjust the HomeLink device's main settings by touching the HomeLink icon at the top of the **Controls** screen (see [Smart Garage on page 365](#)).

The above settings, with the exception of HomeLink, apply only to Summon—not Smart Summon (see [Before Using Smart Summon on page 621](#)). You cannot customize Smart Summon's bumper clearance, distance, and side clearance. And when using Smart Summon, you must always hold down the button on the mobile app to keep CybertruckModel SModel XModel 3Model Y moving. Also, Smart Summon operates with the mobile app only—not the key fob—not the key fob. All settings are retained until you manually change them.

Using Summon to Park and Retrieve your Vehicle

Follow these steps to use Summon to park your CybertruckModel SModel XModel 3Model Y:

- Align CybertruckModel SModel XModel 3Model Y within 39 ft. (12 meters) of the parking space so CybertruckModel SModel XModel 3Model Y can follow a straight path into or out of the space in either Drive or Reverse.
- Ensure CybertruckModel SModel XModel 3Model Y key fob is in close range.
- Pair your phone with CybertruckModel SModel XModel 3Model Y via Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)). After you pair once, your phone automatically connects to CybertruckModel SModel XModel 3Model Y every time. Your phone must be within approximately 6 meters of the vehicle for Summon to work.
- From outside the vehicle, initiate the parking maneuver by touching **Summon** on the mobile app, then holding down the **Forward** or **Reverse** button.

NOTE: If the **Require Continuous Press** setting is **No**, you do not need to hold down the button, just press and release.

NOTE: You can also initiate the parking maneuver from inside the vehicle (see [Starting Summon Before Exiting the Vehicle on page 620](#)).



Summon shifts CybertruckModel SModel XModel 3Model Y into Drive or Reverse (based on the direction you specified) and drives into or out of the parking space. When parking is complete, or if an obstacle is detected, Summon shifts CybertruckModel SModel XModel 3Model Y into Park. Summon shifts CybertruckModel SModel XModel 3Model Y into Park when:

- CybertruckModel SModel XModel 3Model Y detects an obstacle in its driving path (within the **Bumper Clearance** setting that you specified).
- Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance of 39 ft. (12 meters).
- You release the **Forward** or **Reverse** button (when Require Continuous Press is turned on).
- You press any button to manually stop Summon.

If you used Summon to park CybertruckModel SModel XModel 3Model Y, you can then use Summon to return CybertruckModel SModel XModel 3Model Y back to its original position (provided CybertruckModel SModel XModel 3Model Y has remained in Park), or to the maximum **Summon Distance** that you have specified (whichever comes first). Simply specify the opposite direction on the mobile app and Summon moves CybertruckModel SModel XModel 3Model Y along the original path, provided no obstructions have been introduced. If an obstacle is detected, CybertruckModel SModel XModel 3Model Y attempts to avoid the obstacle while staying very close to its original path (Summon does not steer around obstacles).

NOTE: To use Summon to move CybertruckModel SModel XModel 3Model Y multiple times in the same direction (not to exceed the maximum of 39 ft. (12 meters), cancel Summon and then restart the parking process using the same direction.

NOTE: Although Summon can move CybertruckModel SModel XModel 3Model Y a short distance laterally to avoid an obstacle, it does not attempt to steer around an obstacle to return CybertruckModel SModel XModel 3Model Y to its original driving path. Only Smart Summon can steer CybertruckModel SModel XModel 3Model Y around objects.

NOTE: Summon requires that CybertruckModel SModel XModel 3Model Y can detect a valid key nearby.

NOTE: Summon requires that CybertruckModel SModel XModel 3Model Y can detect an authenticated phone nearby (Canada only).



WARNING: CybertruckModel SModel XModel 3Model Y cannot detect obstacles that are located lower than the bumper, are very narrow, or are hanging from a ceiling (for example, bicycles). In addition, many unforeseen circumstances can impair Summon's ability to move in or out of a parking space and, as a result, Summon may not move CybertruckModel SModel XModel 3Model Y appropriately. Therefore, you must continually monitor the vehicle's movement and its surroundings and remain prepared to stop CybertruckModel SModel XModel 3Model Y at any time.

Operating Summon with the Key Fob

NOTE: Summon may not operate if the battery is low on the key fob accessory.

Follow these steps to park CybertruckModel SModel XModel 3Model Y from outside the vehicle using the key fob accessory:

1. On the touchscreen, ensure that **Require Continuous Press** is disabled (touch **Controls** > **Autopilot** > **Customize Summon** > **Require Continuous Press**).
2. With CybertruckModel SModel XModel 3Model Y in Park, stand within 10 ft. (three meters) and press and hold the top center button on the key fob accessory (Lock/Unlock All button) until the hazard lights blink continuously.

NOTE: The hazard lights flash once as CybertruckModel SModel XModel 3Model Y locks, then within five seconds, CybertruckModel SModel XModel 3Model Y powers on and the hazard lights flash continuously. Do not proceed to the next step until the hazard lights are flashing. If, after five seconds, the hazard lights are not flashing, release the button on the key fob accessory, move closer to CybertruckModel SModel XModel 3Model Y, and try again. If Summon receives no further input within ten seconds, Summon cancels.

3. Press the Front Trunk button on the key fob accessory to move CybertruckModel SModel XModel 3Model Y forward into the parking space, or press the Rear Trunk button to reverse CybertruckModel SModel XModel 3Model Y into the parking space.

Operating Summon with the Key Fob

NOTE: Summon may not operate if the battery is low on the key fob accessory.

Follow these steps to park CybertruckModel SModel XModel 3Model Y from outside the vehicle using the key fob accessory:



1. On the touchscreen, ensure that **Require Continuous Press** is disabled (touch **Controls > Autopilot > Customize Summon > Require Continuous Press**).
2. With CybertruckModel SModel XModel 3Model Y in Park, stand within 10 ft. (three meters) and press and hold the top center button on the key fob accessory (Lock/Unlock All button) until the hazard lights blink continuously.
NOTE: The hazard lights flash once as CybertruckModel SModel XModel 3Model Y locks, then within five seconds, CybertruckModel SModel XModel 3Model Y powers on and the hazard lights flash continuously. Do not proceed to the next step until the hazard lights are flashing. If, after five seconds, the hazard lights are not flashing, release the button on the key fob accessory, move closer to CybertruckModel SModel XModel 3Model Y, and try again. If Summon receives no further input within ten seconds, Summon cancels.
3. Press the Front Trunk button on the key fob accessory to move CybertruckModel SModel XModel 3Model Y forward into the parking space, or press the Rear Trunk button to reverse CybertruckModel SModel XModel 3Model Y into the parking space.

Starting Summon Before Exiting the Vehicle

To start a Summon parking sequence before exiting CybertruckModel SModel XModel 3Model Y:

1. On the touchscreen, ensure that **Require Continuous Press** is disabled (touch **Controls > Autopilot > Customize Summon > Require Continuous Press**).
2. Close all doors and trunks.
3. With CybertruckModel SModel XModel 3Model Y powered on and Park engaged, double press the Park button on the drive stalk.double press the Park button on the drive stalk.double press the scroll button on the right side of the steering wheelsteering yoke (or steering wheel).double press the scroll button on the right side of the steering wheelsteering yoke (or steering wheel). The touchscreen displays a popup screen.
4. On the touchscreen, choose the direction of travel.
5. Exit CybertruckModel SModel XModel 3Model Y and close the driver's door.

Summon now moves CybertruckModel SModel XModel 3Model Y according to the direction you specified on the touchscreen.

NOTE: To cancel the parking maneuver before exiting the vehicle, touch **Cancel** on the popup screen.

NOTE: If you do not choose a direction of travel on the touchscreen, Summon does not start a parking maneuver when you exit.

Stopping or Canceling Summon

Stop CybertruckModel SModel XModel 3Model Y at any time while Summon is active by using the mobile app or by pressing any button on the key fob or by pressing any button on the key fob. Summon also cancels when:

- A door handle is engaged or a door is opened.
- You interact with the steering wheelsteering yoke (or steering wheel), brake pedal, accelerator pedal, or shift.
- CybertruckModel SModel XModel 3Model Y detects an obstacle.
- Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance of approximately 39 ft. (12 meters).
- Your phone enters sleep mode or loses connectivity to CybertruckModel SModel XModel 3Model Y.



Smart Summon

This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately September 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately January 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately late May 2023.

Smart Summon is designed to allow you to move CybertruckModel SModel XModel 3Model Y to your location (using your phone's GPS as a target destination) or to a location of your choice, maneuvering around and stopping for objects as necessary. Smart Summon works with the Tesla mobile app when your phone is located within approximately 213 ft. (65 meters) of CybertruckModel SModel XModel 3Model Y. Smart Summon works with the Tesla mobile app when your phone is located within approximately 20 ft. (6 meters) of CybertruckModel SModel XModel 3Model Y.

Smart Summon maneuvers CybertruckModel SModel XModel 3Model Y out of parking spaces and around corners. This is useful for moving CybertruckModel SModel XModel 3Model Y out of a tight parking spot, through puddles, or helping you retrieve your car while carrying packages. You must maintain a clear line of sight between you and CybertruckModel SModel XModel 3Model Y and closely monitor the vehicle and its surroundings at all times.



CAUTION: Smart Summon is designed and intended for use only on parking lots and driveways located on private property where the surrounding area is familiar and predictable. Do not use Smart Summon on public roads.



WARNING: Smart Summon must only be used on paved surfaces.



WARNING: Smart Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Smart Summon safely, responsibly, and as intended. It is your responsibility to familiarize yourself with the limitations of Smart Summon (see [Limitations and Warnings on page 631](#)).

Before Using Smart Summon

- Download the latest version of the Tesla mobile app to your phone, and ensure your phone has cellular service and GPS enabled.
- Your phone must be connected to CybertruckModel SModel XModel 3Model Y and located within approximately 213 ft. (65 meters).
- Your phone must be connected to CybertruckModel SModel XModel 3Model Y and located within approximately 20 ft. (6 meters).
- Your phone must be paired to CybertruckModel SModel XModel 3Model Y over Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)) and located within approximately 20 ft. (6 meters).
- The vehicle's cameras must be fully calibrated (see [Drive to Calibrate Cameras on page 108](#)).
- You must have a clear line of sight to CybertruckModel SModel XModel 3Model Y.
- CybertruckModel SModel XModel 3Model Y must be in Park, not charging, and all doors and trunks must be closed.



CAUTION: Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance.

Using Smart Summon

1. Open the Tesla mobile app, and press **Summon**.
2. Press the **Smart Summon** icon located in the center of the image of your CybertruckModel SModel XModel 3Model Y. It may take several seconds for Smart Summon to start up.

NOTE: You can use Standby Mode to eliminate the delay that occurs when Smart Summon is starting up (see [Standby Mode on page 623](#)).

The mobile app displays a map with a blue circle, which represents the maximum proximity of 213 ft. (65 meters) that you must maintain between your phone and CybertruckModel SModel XModel 3Model Y. The blue dot on the map represents your location, and the red arrow represents the vehicle.



The mobile app displays a map with a blue circle, which represents the maximum proximity of 20 ft. (6 meters) that you must maintain between your phone and CybertruckModel SModel XModel 3Model Y. The blue dot on the map represents your location, and the red arrow represents the vehicle.

3. Position yourself anywhere within the blue circle where you have a clear line of sight to CybertruckModel SModel XModel 3Model Y.
4. You can now operate Smart Summon using either of these modes:
 - **Come to Me** mode: Press and hold the **Come to Me** button. CybertruckModel SModel XModel 3Model Y moves to your GPS location. As you move, CybertruckModel SModel XModel 3Model Y follows you. When CybertruckModel SModel XModel 3Model Y reaches you, it stops and shifts into park.
 - **Go to Target** mode: Touch the crosshair icon then drag the map to position the pin on a chosen destination. Press and hold the **Go to Target** button. CybertruckModel SModel XModel 3Model Y moves to the destination. When reaching the location, CybertruckModel SModel XModel 3Model Y stops and shifts into Park and the mobile app displays a message indicating that Summon has completed.

NOTE: To subsequently change the location, lift your finger, reposition the map, then press and hold **Go to Target** again.

To stop CybertruckModel SModel XModel 3Model Y at any time, simply release the **Come to Me** or **Go to Target** button.



The map's crosshair icon toggles between **Go to Target** and **Come to Me** modes. When **Come to Me** mode is selected, the icon is blue.

NOTE: The map also has an icon that allows you to display/hide satellite imagery.

Immediately after initiating Smart Summon in either mode, hazard lights briefly flash, mirrors fold, and CybertruckModel SModel XModel 3Model Y shifts into Drive or Reverse. CybertruckModel SModel XModel 3Model Y then slowly moves to within 3 ft. (1 meter) of you (**Come to Me**) or your chosen destination (**Go to Target**), navigating obstacles as needed. As CybertruckModel SModel XModel 3Model Y moves, the corresponding red arrow on the map also moves to show the vehicle's location. As you move, the corresponding blue dot also moves to show your location.

In either mode, CybertruckModel SModel XModel 3Model Y stops moving and shifts into park when:

- You release the button on the mobile app.
- The maximum proximity between your phone and CybertruckModel SModel XModel 3Model Y is exceeded (if moving the vehicle to a destination away from you, you may need to follow the car to maintain this distance).
- The driving path is blocked.
- CybertruckModel SModel XModel 3Model Y has moved the maximum distance of 475 ft. (145 meters) since the start of the Smart Summon session, or has moved 492 ft. (150 meters) away from the location from which the vehicle was last driven manually.

NOTE: If Smart Summon moves CybertruckModel SModel XModel 3Model Y forward 3 ft. and then backwards 2 ft., this is considered 5 ft. of travel.

- CybertruckModel SModel XModel 3Model Y has moved the maximum distance of 65 ft. since the start of the Smart Summon session.

NOTE: If Smart Summon moves CybertruckModel SModel XModel 3Model Y forward 3 meters and then backwards 2 meters, this is considered 5 meters of travel.

NOTE: There is no need to look at the mobile app—just hold down the button while keeping your eye on CybertruckModel SModel XModel 3Model Y and its driving path at all times, remaining ready to release the button to stop the vehicle if needed.

If equipped and Auto HomeLink is enabled for Summon (touch **Controls > Autopilot > Customize Summon > Use Auto HomeLink**), Smart Summon automatically opens a HomeLink device if you start the Smart Summon maneuver when CybertruckModel SModel XModel 3Model Y is located inside a garage. The mobile app informs you that the door has opened.

WARNING: When you release the button to stop CybertruckModel SModel XModel 3Model Y, a slight delay occurs before the vehicle stops. Therefore, it is critical that you pay close attention to the vehicle's driving path at all times and proactively anticipate obstacles that the vehicle may be unable to detect.



WARNING: Use extreme caution when using Smart Summon in environments where movement of obstacles can be unpredictable. For example, where people, children or animals are present.

WARNING: Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all oncoming or side traffic. Pay attention and be ready to stop CybertruckModel SModel XModel 3Model Y at all times by releasing the button on the mobile app.

Standby Mode

To keep CybertruckModel SModel XModel 3Model Y ready to Summon and reduce the time it takes to warm up, turn on Standby Mode. Touch **Controls** > **Autopilot** > **Standby Mode**. When Standby Mode is turned on, you can conserve Battery energy by disabling Standby Mode at these locations:

- **Exclude Home** - Disables Standby Mode at the location you set as Home in your Favorites list.
- **Exclude Work** - Disables Standby Mode at the location you set as Work in your Favorites list.
- **Exclude Favorites** - Disables Standby Mode at any location in your Favorites list.

NOTE: To conserve energy, Smart Summon automatically exits Standby mode from midnight to 6:00 am. During these hours, a delay occurs as Smart Summon starts up.

NOTE: Additional battery power may be consumed while Standby Mode is active.

NOTE: For details on how to designate a location as Home, Work, or Favorites, see [Home, Work, and Favorite Destinations on page 703](#).

Stopping or Canceling Smart Summon

Smart Summon stops CybertruckModel SModel XModel 3Model Y whenever you release the button on the mobile app. To resume the Smart Summon session, simply press the **Come to Me** or **Go to Target** button again.

WARNING: Always anticipate when you need to stop CybertruckModel SModel XModel 3Model Y. Depending on the quality of the connectivity between the phone and CybertruckModel SModel XModel 3Model Y, there may be a slight delay between when you release the button and when the car stops.

Smart Summon cancels, and requires you to restart it, when:

- You press any button on the key fob.
- A door handle is engaged or a door is opened.
- You interact with the steering wheelsteering yoke (or steering wheel), brake pedal, accelerator pedal, or shift.
- CybertruckModel SModel XModel 3Model Y is blocked by an obstacle.
- Smart Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance. To move further than this distance, you must shift CybertruckModel SModel XModel 3Model Y into Drive or Reverse and then re-initiate a Smart Summon session.
- Your phone enters sleep mode or loses connectivity to CybertruckModel SModel XModel 3Model Y.



Summon





This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately September 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately January 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately late May 2023.

Summon allows you to automatically park and retrieve CybertruckModel SModel XModel 3Model Y while you are standing outside the vehicle. Summon moves CybertruckModel SModel XModel 3Model Y forward and reverse up to 39 ft. (12 meters) in, or out of, a parking space.

To move CybertruckModel SModel XModel 3Model Y a longer distance while steering around objects, you can use Smart Summon and your mobile phone. Smart Summon allows your vehicle to find you (or you can send your vehicle to a chosen location). See [Smart Summon on page 628](#).


To move CybertruckModel SModel XModel 3Model Y, your phone must be paired via Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)).

Summon requires that CybertruckModel SModel XModel 3Model Y can detect a valid key nearby.

-  **CAUTION:** Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance.
-  **WARNING:** Summon is designed and intended for use only on parking lots and driveways on private property where the surrounding area is familiar and predictable.
-  **WARNING:** Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Summon safely, responsibly, and as intended.
-  **WARNING:** Summon's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to objects, people, animals, and other vehicles.

Before Using Summon

Before operating Summon, use the touchscreen to enable it and customize how you want it to work. Touch **Controls** > **Autopilot** > **Customize Summon** and adjust the following settings to suit your preferences:

- **Bumper Clearance:** Set the distance that you want Summon to stop from a detected object (for example, you may want Summon to stop within just a few inches of a garage wall). Note that this distance applies only to objects that Summon detects directly in front of CybertruckModel SModel XModel 3Model Y when moving forward, or directly behind CybertruckModel SModel XModel 3Model Y when reversing.
- **Summon Distance:** Set a maximum distance that CybertruckModel SModel XModel 3Model Y can travel when entering or exiting a parking space.
- **Side Clearance:** Choose an option to specify how much side clearance you want to allow. **Tight** allows CybertruckModel SModel XModel 3Model Y to enter and exit very narrow parking spaces.
 -  **WARNING:** Parking in a narrow space limits the ability of the cameras and sensors (if equipped) to accurately detect the location of obstacles, increasing the risk of damage to CybertruckModel SModel XModel 3Model Y and/or surrounding objects.
- **Require Continuous Press:** By default, Summon requires that you press and hold a button on the mobile app to move CybertruckModel SModel XModel 3Model Y during the parking process. When **Require Continuous Press** is set to **No**, you can press and release the button—you don't need to hold it down to keep the vehicle moving. Also, when **Require Continuous Press** is set to **No**, you can operate Summon using the key fob instead of the mobile app (see [Operating Summon with the Key Fob on page 626](#)) and you can start a parking sequence from inside the vehicle (see [Starting Summon Before Exiting the Vehicle on page 626](#)).
- **Use Auto HomeLink** (if equipped): Set to **ON** if you want to activate HomeLink to open/close a programmed HomeLink device (such as a gate or a garage door) during the parking process when using Summon. If enabled, the device automatically opens and closes when CybertruckModel SModel XModel 3Model Y enters or exits during a Summon session. In a Smart Summon session, the device automatically opens when, at the beginning of a session, Smart Summon detects that CybertruckModel SModel XModel 3Model Y is parked in a garage.



WARNING: Always ensure that CybertruckModel SModel XModel 3Model Y is fully in or out of a garage before HomeLink lowers the garage door. Summon and Smart Summon cannot detect where an overhead door will lower.

NOTE: When enabled, the HomeLink device automatically opens and closes when using Summon, and automatically opens as needed when using Smart Summon. To automate HomeLink in other situations (such as normal driving), you must adjust the HomeLink device's main settings by touching the HomeLink icon at the top of the touchscreen (see [Smart Garage on page 365](#)).

NOTE: The above settings, with the exception of HomeLink, apply only to Summon—not Smart Summon (see [Before Using Smart Summon on page 628](#)). You cannot customize Smart Summon's bumper clearance, distance, and side clearance. And when using Smart Summon, you must always hold down the button on the mobile app to keep CybertruckModel SModel XModel 3Model Y moving. Also, Smart Summon operates with the mobile app only—not the key fob.

NOTE: All settings are retained until you manually change them.

Using Summon to Park and Retrieve your Vehicle

Follow these steps to use Summon to park your CybertruckModel SModel XModel 3Model Y:

- Align CybertruckModel SModel XModel 3Model Y within 39 ft. (12 meters) of the parking space so CybertruckModel SModel XModel 3Model Y can follow a straight path into or out of the space in either Drive or Reverse.
- Ensure CybertruckModel SModel XModel 3Model Y key fob is in close range.
- Pair your phone with CybertruckModel SModel XModel 3Model Y via Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)). After you pair once, your phone automatically connects to CybertruckModel SModel XModel 3Model Y every time. Your phone must be within approximately six meters of the vehicle for Summon to work.
- From outside the vehicle, initiate the parking maneuver by touching **Summon** on the mobile app, then holding down the **Forward** or **Reverse** button.

NOTE: If the **Require Continuous Press** setting is **No**, you do not need to hold down the button, just press and release.

NOTE: You can also initiate the parking maneuver from inside the vehicle (see [#unique_756 on page](#)).

Summon shifts CybertruckModel SModel XModel 3Model Y into Drive or Reverse (based on the direction you specified) and drives into or out of the parking space. When parking is complete, or if an obstacle is detected, Summon shifts CybertruckModel SModel XModel 3Model Y into Park. Summon shifts CybertruckModel SModel XModel 3Model Y into Park when:

- CybertruckModel SModel XModel 3Model Y detects an obstacle in its driving path (within the **Bumper Clearance** setting that you specified).
- Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance of 39 ft. (12 meters).
- You release the **Forward** or **Reverse** button (when Require Continuous Press is turned on).
- You press any button to manually stop Summon.

If you used Summon to park CybertruckModel SModel XModel 3Model Y, you can then use Summon to return CybertruckModel SModel XModel 3Model Y back to its original position (provided CybertruckModel SModel XModel 3Model Y has remained in Park), or to the maximum **Summon Distance** that you have specified (whichever comes first). Simply specify the opposite direction on the mobile app and Summon moves CybertruckModel SModel XModel 3Model Y along the original path, provided no obstructions have been introduced. If an obstacle is detected, CybertruckModel SModel XModel 3Model Y attempts to avoid the obstacle while staying very close to its original path (Summon does not steer around obstacles).

NOTE: To use Summon to move CybertruckModel SModel XModel 3Model Y multiple times in the same direction (not to exceed the maximum of 39 ft. (12 meters), cancel Summon and then restart the parking process using the same direction.

NOTE: Although Summon can move CybertruckModel SModel XModel 3Model Y a short distance laterally to avoid an obstacle, it does not attempt to steer around an obstacle to return CybertruckModel SModel XModel 3Model Y to its original driving path. Only Smart Summon can steer CybertruckModel SModel XModel 3Model Y around objects.

NOTE: Summon requires that CybertruckModel SModel XModel 3Model Y can detect a valid key nearby.



WARNING: CybertruckModel SModel XModel 3Model Y cannot detect obstacles that are located lower than the bumper, are very narrow, or are hanging from a ceiling (for example, bicycles). In addition, many unforeseen circumstances can impair Summon's ability to move in or out of a parking space and, as a result, Summon may not move CybertruckModel SModel XModel 3Model Y appropriately. Therefore, you must continually monitor the vehicle's movement and its surroundings and remain prepared to stop CybertruckModel SModel XModel 3Model Y at any time.

Operating Summon with the Key Fob

NOTE: Summon may not operate if the battery is low on the key fob.

Follow these steps to park CybertruckModel SModel XModel 3Model Y from outside the vehicle using the key fob:

1. On the touchscreen, ensure that **Require Continuous Press** is disabled (touch **Controls > Autopilot > Customize Summon > Require Continuous Press**).
2. With CybertruckModel SModel XModel 3Model Y in Park, stand within 10 ft. (three meters) and press and hold the top center button on the key fob (Lock/Unlock All button) until the hazard lights blink continuously.
NOTE: The hazard lights flash once as CybertruckModel SModel XModel 3Model Y locks, then within five seconds, CybertruckModel SModel XModel 3Model Y powers on and the hazard lights flash continuously. Do not proceed to the next step until the hazard lights are flashing. If, after five seconds, the hazard lights are not flashing, release the button on the key fob, move closer to CybertruckModel SModel XModel 3Model Y, and try again. If Summon receives no further input within ten seconds, Summon cancels.
3. Press the Front Trunk button on the key fob to move CybertruckModel SModel XModel 3Model Y forward into the parking space, or press the Rear Trunk button to reverse CybertruckModel SModel XModel 3Model Y into the parking space.

Starting Summon Before Exiting the Vehicle

To start a Summon parking sequence before exiting CybertruckModel SModel XModel 3Model Y:

1. On the touchscreen, ensure that **Require Continuous Press** is disabled (touch **Controls > Autopilot > Customize Summon > Require Continuous Press**).
2. Close all doors and trunks.
3. With CybertruckModel SModel XModel 3Model Y powered on and Park engaged, double press the Park button on the drive stalk. The touchscreen displays a popup screen.
4. On the touchscreen, choose the direction of travel.
5. Exit CybertruckModel SModel XModel 3Model Y and close the driver's door.

Summon now moves CybertruckModel SModel XModel 3Model Y according to the direction you specified on the touchscreen.

NOTE: To cancel the parking maneuver before exiting the vehicle, touch **Cancel** on the popup screen.

NOTE: If you do not choose a direction of travel on the touchscreen, Summon does not start a parking maneuver when you exit.

Stopping or Canceling Summon

Stop CybertruckModel SModel XModel 3Model Y at any time while Summon is active by using the mobile app or by pressing any button on the key fob. Summon also cancels when:

- A door handle is engaged or a door is opened.
- You interact with the steering wheelsteering yoke (or steering wheel), brake pedal, accelerator pedal, or shift.
- CybertruckModel SModel XModel 3Model Y detects an obstacle.
- Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance of approximately 39 ft. (12 meters).
- Your phone enters sleep mode or loses connectivity to CybertruckModel SModel XModel 3Model Y.



Limitations

Summon is unlikely to operate as intended in the following types of situations:

- The driving path is sloped. Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Summon does not move CybertruckModel SModel XModel 3Model Y over an edge that is higher than approximately 1 in (2.5 cm).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached.

NOTE: Summon is disabled if CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)).



WARNING: The list above does not represent an exhaustive list of situations that may interfere with proper operation of Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.





Smart Summon


This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately October 2022. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately September 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately January 2023. This feature may be temporarily limited or inactive until it is enabled with a future software update for vehicles manufactured as of approximately late May 2023.


Smart Summon is designed to allow you to move CybertruckModel SModel XModel 3Model Y to your location (using your phone's GPS as a target destination) or to a location of your choice, maneuvering around and stopping for objects as necessary. Smart Summon works with the Tesla mobile app when your phone is located within approximately 213 ft. (65 meters) of CybertruckModel SModel XModel 3Model Y. Smart Summon works with the Tesla mobile app when your phone is located within approximately 20 ft. (6 meters) of CybertruckModel SModel XModel 3Model Y.


Smart Summon maneuvers CybertruckModel SModel XModel 3Model Y out of parking spaces and around corners. This is useful for moving CybertruckModel SModel XModel 3Model Y out of a tight parking spot, through puddles, or helping you retrieve your car while carrying packages. You must maintain a clear line of sight between you and CybertruckModel SModel XModel 3Model Y and closely monitor the vehicle and its surroundings at all times.


 **CAUTION:** Ensure all cameras and sensors (if equipped) are clean. Dirty cameras and sensors, as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance.


 **WARNING:** Smart Summon is designed and intended for use only on parking lots and driveways located on private property where the surrounding area is familiar and predictable. Do not use Smart Summon on public roads.

 **WARNING:** Smart Summon must only be used on paved surfaces.

 **WARNING:** Smart Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Smart Summon safely, responsibly, and as intended.

 **WARNING:** Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all traffic. Smart Summon does not recognize the direction of traffic, does not navigate around empty parking spaces, and may not anticipate crossing traffic.

 **WARNING:** Smart Summon's performance depends on the sensors (if equipped), the visibility of the cameras, and the availability of an adequate cellular signal and GPS data.

 **WARNING:** When using Smart Summon, you must maintain a clear line of sight between you and CybertruckModel SModel XModel 3Model Y and stay prepared to stop the vehicle at any time by releasing the button on the mobile app.

Before Using Smart Summon

- Download the latest version of the Tesla mobile app to your phone, and ensure your phone has cellular service and GPS enabled.
- Your phone must be connected to CybertruckModel SModel XModel 3Model Y and located within approximately 213 ft. (65 meters).
- Your phone must be paired to CybertruckModel SModel XModel 3Model Y over Bluetooth (see [Pairing a Phone or Bluetooth Device on page 360](#)) and located within approximately 20 ft. (6 meters).
- The vehicle's cameras must be fully calibrated (see [Drive to Calibrate Cameras on page 108](#)).
- You must have a clear line of sight to CybertruckModel SModel XModel 3Model Y.
- CybertruckModel SModel XModel 3Model Y must be in Park, not charging, and all doors and trunks must be closed.

Using Smart Summon

1. Open the Tesla mobile app, and press **Summon**.
2. Press the **Smart Summon** icon located in the center of the image of your CybertruckModel SModel XModel 3Model Y. It may take several seconds for Smart Summon to start up.



NOTE: You can use Standby Mode to eliminate the delay that occurs when Smart Summon is starting up (see [Standby Mode on page 630](#)).

The mobile app displays a map with a blue circle, which represents the maximum proximity of 213 ft. (65 meters) that you must maintain between your phone and CybertruckModel SModel XModel 3Model Y. The blue dot on the map represents your location, and the red arrow represents the vehicle.

The mobile app displays a map with a blue circle, which represents the maximum proximity of 20 ft. (6 meters) that you must maintain between your phone and CybertruckModel SModel XModel 3Model Y. The blue dot on the map represents your location, and the red arrow represents the vehicle.

3. Position yourself anywhere within the blue circle where you have a clear line of sight to CybertruckModel SModel XModel 3Model Y.
4. You can now operate Smart Summon using either of these modes:
 - **Come to Me** mode: Press and hold the **Come to Me** button. CybertruckModel SModel XModel 3Model Y moves to your GPS location. As you move, CybertruckModel SModel XModel 3Model Y follows you. When CybertruckModel SModel XModel 3Model Y reaches you, it stops and shifts into park.
 - **Go to Target** mode: Touch the crosshair icon then drag the map to position the pin on a chosen destination. Press and hold the **Go to Target** button. CybertruckModel SModel XModel 3Model Y moves to the destination. When reaching the location, CybertruckModel SModel XModel 3Model Y stops and shifts into Park and the mobile app displays a message indicating that Summon has completed.

NOTE: To subsequently change the location, lift your finger, reposition the map, then press and hold **Go to Target** again.

To stop CybertruckModel SModel XModel 3Model Y at any time, simply release the **Come to Me** or **Go to Target** button.



The map's crosshair icon toggles between **Go to Target** and **Come to Me** modes. When **Come to Me** mode is selected, the icon is blue.

NOTE: The map also has an icon that allows you to display/hide satellite imagery.

Immediately after initiating Smart Summon in either mode, hazard lights briefly flash, mirrors fold, and CybertruckModel SModel XModel 3Model Y shifts into Drive or Reverse. CybertruckModel SModel XModel 3Model Y then slowly moves to within 3 ft. (1 meter) of you (**Come to Me**) or your chosen destination (**Go to Target**), navigating obstacles as needed. As CybertruckModel SModel XModel 3Model Y moves, the corresponding red arrow on the map also moves to show the vehicle's location. As you move, the corresponding blue dot also moves to show your location.

In either mode, CybertruckModel SModel XModel 3Model Y stops moving and shifts into park when:

- You release the button on the mobile app.
- The maximum proximity between your phone and CybertruckModel SModel XModel 3Model Y is exceeded (if moving the vehicle to a destination away from you, you may need to follow the car to maintain this distance).
- The driving path is blocked.
- CybertruckModel SModel XModel 3Model Y has moved the maximum distance of 475 ft. (145 meters) since the start of the Smart Summon session, or has moved 492 ft. (150 meters) away from the location from which the vehicle was last driven manually.

NOTE: If Smart Summon moves CybertruckModel SModel XModel 3Model Y forward 3 ft. and then backwards 2 ft., this is considered 5 ft. of travel.

- CybertruckModel SModel XModel 3Model Y has moved the maximum distance of 65 ft. since the start of the Smart Summon session.

NOTE: If Smart Summon moves CybertruckModel SModel XModel 3Model Y forward 3 meters and then backwards 2 meters, this is considered 5 meters of travel.

NOTE: There is no need to look at the mobile app—just hold down the button while keeping your eye on CybertruckModel SModel XModel 3Model Y and its driving path at all times, remaining ready to release the button to stop the vehicle if needed.



If equipped and Auto HomeLink is enabled for Summon (touch **Controls** > **Autopilot** > **Customize Summon** > **Use Auto HomeLink**), Smart Summon automatically opens a HomeLink device if you start the Smart Summon maneuver when CybertruckModel SModel XModel 3Model Y is located inside a garage. The mobile app informs you that the door has opened.

- ⚠ WARNING:** When you release the button to stop CybertruckModel SModel XModel 3Model Y, a slight delay occurs before the vehicle stops. Therefore, it is critical that you pay close attention to the vehicle's driving path at all times and proactively anticipate obstacles that the vehicle may be unable to detect.
- ⚠ WARNING:** Use extreme caution when using Smart Summon in environments where movement of obstacles can be unpredictable. For example, where people, children or animals are present.
- ⚠ WARNING:** Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all oncoming or side traffic. Pay attention and be ready to stop CybertruckModel SModel XModel 3Model Y at all times by releasing the button on the mobile app.

Standby Mode

To keep CybertruckModel SModel XModel 3Model Y ready to Summon and reduce the time it takes to warm up, turn on Standby Mode. Touch **Controls** > **Autopilot** > **Standby Mode**. When Standby Mode is turned on, you can conserve Battery energy by disabling Standby Mode at these locations:

- **Exclude Home** - Disables Standby Mode at the location you set as Home in your Favorites list.
- **Exclude Work** - Disables Standby Mode at the location you set as Work in your Favorites list.
- **Exclude Favorites** - Disables Standby Mode at any location in your Favorites list.

NOTE: To conserve energy, Smart Summon automatically exits Standby mode from midnight to 6:00 am. During these hours, a delay occurs as Smart Summon starts up.

NOTE: Additional battery power may be consumed while Standby Mode is active.

NOTE: For details on how to designate a location as Home, Work, or Favorites, see [Home, Work, and Favorite Destinations on page 703](#).

Stopping or Canceling Smart Summon

Smart Summon stops CybertruckModel SModel XModel 3Model Y whenever you release the button on the mobile app. To resume the Smart Summon session, simply press the **Come to Me** or **Go to Target** button again.

- ⚠ WARNING:** Always anticipate when you need to stop CybertruckModel SModel XModel 3Model Y. Depending on the quality of the connectivity between the phone and CybertruckModel SModel XModel 3Model Y, there may be a slight delay between when you release the button and when the car stops.

Smart Summon cancels, and requires you to restart it, when:

- You press any button on the key fob.
- A door handle is engaged or a door is opened.
- You interact with the steering wheelsteering yoke (or steering wheel), brake pedal, accelerator pedal, or shift.
- CybertruckModel SModel XModel 3Model Y is blocked by an obstacle.
- Smart Summon has moved CybertruckModel SModel XModel 3Model Y the maximum distance. To move further than this distance, you must shift CybertruckModel SModel XModel 3Model Y into Drive or Reverse and then re-initiate a Smart Summon session.
- Your phone enters sleep mode or loses connectivity to CybertruckModel SModel XModel 3Model Y.

Limitations

Smart Summon is unlikely to operate as intended in the following types of situations:

- GPS data is unavailable due to poor cellular coverage.
- The driving path is sloped. Smart Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Depending on the height of the concrete edge, Smart Summon may not move CybertruckModel SModel XModel 3Model Y over it.



- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) or camera operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached.

NOTE: Smart Summon is disabled if CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)).

⚠ WARNING: The list above does not represent an exhaustive list of situations that may interfere with proper operation of Smart Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Smart Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.

Limitations and Warnings

This topic includes warnings, cautions, and limitations pertaining to the following Autopilot features.

- [Traffic-Aware Cruise Control on page 554](#)[Traffic-Aware Cruise Control on page 576](#)
- [Autosteer on page 556](#)[Autosteer on page 587](#)
- [Navigate on Autopilot on page 634](#)[Navigate on Autopilot on page 592](#)
- [Autosteer on City Streets \(Full Self-Driving \(Supervised\)\) on page 634](#)
- [Autopark on page 635](#)[Autopark on page 609](#)
- [Summon on page 636](#)[Summon on page 624](#)
- [Smart Summon on page 636](#)[Smart Summon on page 628](#)

⚠ WARNING: Read the following warnings and limitations carefully before using Autopilot. Failure to follow all warnings and instructions can result in property damage, serious injury, or death.

NOTE: Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

Traffic-Aware Cruise Control


While using Traffic-Aware Cruise Control, **it is the driver's responsibility to stay alert, drive safely, and be in control of the vehicle at all times.** Always keep your eyes on the road when driving and be prepared to take corrective action as needed.

In addition, it is the driver's responsibility to cruise at a safe speed and maintain a safe following distance based on road conditions and applicable speed limits. Be aware of the following limitations while Traffic-Aware Cruise Control is active.


- There may be situations where the cruising speed may not change when the speed limit changes.
- Traffic-Aware Cruise Control does not adapt driving speed based on road and driving conditions. Do not use Traffic-Aware Cruise Control on winding roads with sharp curves, on icy or slippery road surfaces, or when weather conditions (such as heavy rain, snow, fog, etc.) make it inappropriate to drive at a consistent speed.
- Do not rely on Traffic-Aware Cruise Control to maintain an accurate or appropriate following distance.
- Traffic-Aware Cruise Control may be unable to provide adequate speed control because of limited braking capability and hills. It can also misjudge the distance from a vehicle ahead. Driving downhill can increase driving speed, causing CybertruckModel SModel XModel 3Model Y to exceed your set speed (and potentially the road's speed limit).
- Traffic-Aware Cruise Control may occasionally cause CybertruckModel SModel XModel 3Model Y to brake when not required or when you are not expecting it. This can be caused by closely following a vehicle ahead, detecting vehicles or objects in adjacent lanes (especially on curves), etc.





- Due to limitations inherent in the onboard GPS (Global Positioning System), you may experience situations in which CybertruckModel SModel XModel 3Model Y slows down, especially near exits or off-ramps where a curve is detected and/or you are navigating to a destination and not following the route.
- In some cases (such as having insufficient data), Traffic-Aware Cruise Control may not automatically reduce the set speed on the highway interchange or off-ramp.
- Traffic-Aware Cruise Control may not detect all objects and, especially when cruising over 50 mph (80 km/h), may not brake/decelerate when a vehicle or object is only partially in the driving lane or when a vehicle you are following moves out of your driving path and a stationary or slow-moving vehicle or object is in front of you.
- Traffic-Aware Cruise Control may react to vehicles or objects that either do not exist, or are not in your lane of travel, causing CybertruckModel SModel XModel 3Model Y to slow down unnecessarily or inappropriately.

 **WARNING:** Traffic-Aware Cruise Control is particularly unlikely to operate as intended in the following types of situations:


- The road has sharp curves or significant changes in elevation.
- Road signs and signals are unclear, ambiguous, or poorly maintained.
- Visibility is poor (due to heavy rain, snow, hail, etc. or poorly lit roadways at night)
- You are driving in a tunnel or next to a highway divider that interferes with the view of the camera(s)
- Bright light (such as from oncoming headlights or direct sunlight) interferes with the view of the camera(s).


 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Traffic-Aware Cruise Control. Traffic-Aware Cruise Control can cancel unexpectedly at any time for unforeseen reasons. Always watch the road in front of you and stay prepared to take appropriate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.

 **WARNING:** Traffic-Aware Cruise Control is designed for your driving comfort and convenience and is not a collision warning or avoidance system. Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.

 **WARNING:** Although Traffic-Aware Cruise Control is capable of detecting pedestrians and cyclists, never depend on Traffic-Aware Cruise Control to adequately slow CybertruckModel SModel XModel 3Model Y down for them. Failure to do so can result in serious injury or death.

Autosteer

 **WARNING:** Autosteer is a hands-on feature. Keep your hands on the steering wheel at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

 **WARNING:** Autosteer is intended for use on controlled-access highways with a fully attentive driver. Do not use Autosteer in construction zones, or in areas where bicyclists or pedestrians may be present.

 **WARNING:** Never depend on Autosteer to determine an appropriate driving path.



CAUTION: Autosteer and its associated functions are particularly unlikely to operate as intended when:

- Autosteer is unable to accurately determine lane markings. For example, lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction, are changing quickly (lanes branching off, crossing over, or merging), objects or landscape features are casting strong shadows on the lane markings, or the road surface contains pavement seams or other high-contrast lines.
- Visibility is poor (heavy rain, snow, fog, etc.) or weather conditions are interfering with sensor operation.
- A camera(s) or sensor(s) is obstructed, covered, or damaged.
- Driving on hills.
- Approaching a toll booth.
- Driving on a road that has sharp curves or is excessively rough.
- Bright light (such as direct sunlight) is interfering with the view of the camera(s).
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- A vehicle is detected in your blind spot when you engage the turn signal.
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it, which is blocking the view of the camera(s).



WARNING: Many unforeseen circumstances can impair the operation of Autosteer. Always keep this in mind and remember that as a result, Autosteer may not steer CybertruckModel SModel XModel 3Model Y appropriately. Always drive attentively and be prepared to take immediate action.



WARNING: Autosteer is not designed to, and will not, steer CybertruckModel SModel XModel 3Model Y around objects partially in a driving lane and in some cases, may not stop for objects that are completely blocking the driving lane. Always watch the road in front of you and stay prepared to take immediate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.

Auto Lane Change



CAUTION: When changing lanes using Auto Lane Change, It is the driver's responsibility to determine whether a lane change is safe and appropriate. Therefore, before initiating a lane change, always check blind spots, lane markings, and the surrounding roadway to confirm it is safe and appropriate to move into the target lane.






CAUTION: Be aware of the following limitations while using Auto Lane Change.






- Never depend on Auto Lane Change to determine an appropriate driving path. Drive attentively by watching the road and traffic ahead of you, checking the surrounding area, and monitoring the touchscreen for warnings. Always be prepared to take immediate action.
- Do not use Auto Lane Change on roads where traffic conditions are constantly changing and where bicycles and pedestrians are present.
- The performance of Auto Lane Change depends on the ability of the camera(s) to recognize lane markings.
- Do not use Auto Lane Change on winding roads with sharp curves, on icy or slippery roads, or when weather conditions (such as heavy rain, snow, fog, etc.) may be obstructing the view from the camera(s) or sensors (if equipped).
- Overtake Acceleration can cancel for many unforeseen reasons in addition to those listed above (for example, lack of GPS data). Stay alert and never depend on Overtake Acceleration to increase your driving speed.
- Overtake Acceleration increases your driving speed whenever the appropriate turn signal is engaged, and accelerates CybertruckModel SModel XModel 3Model Y closer to the vehicle ahead. Although Traffic-Aware Cruise Control continues to maintain distance from the vehicle ahead, it is important to be aware that your selected following distance is reduced when Overtake Acceleration is active, particularly in cases where it may not be your intention to overtake the vehicle you are following.






Stop Light and Stop Sign Warning

-  **WARNING:** Stop Light and Stop Sign Warning requires on-board maps to know that a particular stop light or stop sign exists at a location. In some cases, map data is inaccurate or outdated and may not include all stop lights or stop signs. Therefore, Stop Light and Stop Sign Warning may not detect all stop lights and stop signs.
-  **WARNING:** The Stop Light and Stop Sign Warning feature does not apply the brakes or decelerate CybertruckModel SModel XModel 3Model Y and may not detect all stop lights and stop signs. Stop Light and Stop Sign Warning is designed for guidance purposes only and is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Stop Light and Stop Sign Warning to warn you of a stop light or stop sign.
-  **WARNING:** Stop Light and Stop Sign Warning is designed to warn you only when approaching a visible red stop sign, solid red or later portion of a yellow traffic light. It may not warn you of intersections with flashing lights and it does not warn you of yield signs or temporary stop and yield signs (such as those used in construction areas). Additionally, Stop Light and Stop Sign Warning does not warn you of approaching stop lights or stop signs when you are pressing the accelerator pedal or brake pedal (which disables Autosteer).

Navigate on Autopilot

-  **WARNING:** Never depend on Navigate on Autopilot to determine an appropriate lane at an off-ramp. Stay alert and perform visual checks to ensure that the driving lane is safe and appropriate.
-  **WARNING:** If you turn off **Require Lane Change Confirmation**, Navigate on Autopilot notifies you of upcoming lane changes and off-ramps, but it remains your responsibility to monitor the environment and maintain control of CybertruckModel SModel XModel 3Model Y at all times. Lane changes can occur quickly and suddenly. Always keep your hands on the wheel and your eyes on the driving path in front of you.
-  **WARNING:** Navigate on Autopilot does not make driving autonomous. You must pay attention to the road, keep your hands on the steering wheel at all times, and remain aware of your navigation route.
-  **WARNING:** As is the case with normal driving, be extra careful around blind corners, interchanges, and on-ramps and off-ramps - obstacles can appear quickly and at any time.
-  **WARNING:** Navigate on Autopilot may not recognize or detect oncoming vehicles, stationary objects, and special-use lanes such as those used exclusively for bikes, carpools, emergency vehicles, etc. Remain alert at all times and be prepared to take immediate action. Failure to do so can cause damage, injury or death.

Autosteer on City Streets (Full Self-Driving (Supervised))

-  **WARNING:** Always remember that **Full Self-Driving (Supervised)** (also known as **Autosteer on City Streets**) does not make CybertruckModel SModel XModel 3Model Y autonomous and requires a fully attentive driver who is ready to take immediate action at all times.
-  **WARNING:** Full Self-Driving (Supervised) is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Full Self-Driving (Supervised) and the situations in which it may not work as expected.
-  **WARNING:** Failure to follow all warnings and instructions can result in property damage, serious injury or death.



CAUTION: Full Self-Driving (Supervised) and its associated functions may not operate as intended and there are numerous situations in which driver intervention may be needed. Examples include (but are not limited to):

- Interactions with pedestrians, bicyclists, and other road users.
- Unprotected turns with high-speed cross traffic.
- Multi-lane turns.
- Simultaneous lane changes.
- Narrow roads with oncoming cars or double-parked vehicles.
- Rare objects such as trailers, ramps, cargo, open doors, etc. protruding from vehicles.
- Merges onto high-traffic, high-speed roads.
- Debris in the road.
- Construction zones.
- High curvature roads, particularly at fast driving speeds.

Visibility is critical for Full Self-Driving (Supervised) to operate. Low visibility, such as low light or poor weather conditions (rain, snow, direct sun, fog, etc.) can significantly degrade performance.

WARNING: CybertruckModel SModel XModel 3Model Y may quickly and suddenly make unexpected maneuvers or mistakes that require immediate driver intervention.

The list above represents only a fraction of the possible scenarios that can cause Full Self-Driving (Supervised) to make sudden maneuvers and behave unexpectedly. In fact, CybertruckModel SModel XModel 3Model Y can suddenly swerve even when driving conditions appear normal and straight-forward. Stay alert and always pay attention to the roadway so you can anticipate the need to take corrective action as early as possible. Remember that this is an early access feature that must be used with extra caution.

CAUTION: As Full Self-Driving (Supervised) deployment expands, Tesla will gradually make it available to eligible customers in select countries outside the United States. Because every country contains unique infrastructure, driving behaviors, and traffic patterns that Full Self-Driving (Supervised) must adapt to over time, it is essential for drivers using Full Self-Driving (Supervised) in newly eligible countries to be extra attentive and overly cautious. You must be ready to take over safely at any time.

Autopark

CAUTION: Autopark's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to curbs, objects, and other vehicles. Be aware of the following warnings before and while using Autopark:


- Do not use Autopark if anything, such as a ball hitch, bike rack, or trailer, is attached to the tow hitch. Autopark may not stop for hitches when parking between or in front of other vehicles.
- Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.
- When Autopark is actively steering CybertruckModel SModel XModel 3Model Y, the steering wheel moves in accordance with Autopark's adjustments. Do not interfere with the movement of the steering wheel. Doing so cancels Autopark.
- During the parking sequence, continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- When Autopark is active, monitor the touchscreen to ensure that you are aware of the instructions that Autopark is providing.




CAUTION:

Autopark is particularly unlikely to operate as intended in these situations:


- The road is sloped. Autopark is designed to operate on flat roads only.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- The curb is constructed of material other than stone, or the curb cannot be detected.
- The target parking space is directly adjacent to a wall or pillar (for example, the last parking space of a row in an underground parking structure).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) operation.
- The sensors (if equipped) are affected by other electrical equipment or electrical interference.


 **WARNING:** Many unforeseen circumstances can impair Autopark's ability to park CybertruckModel SModel XModel 3Model Y. Keep this in mind and remember that as a result, Autopark may not steer CybertruckModel SModel XModel 3Model Y appropriately. Pay attention when parking CybertruckModel SModel XModel 3Model Y and stay prepared to immediately take control.

Summon


 **CAUTION:** Summon's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to objects, people, animals, and other vehicles. Summon is unlikely to operate as intended in the following types of situations:


- The driving path is sloped. Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Summon does not move CybertruckModel SModel XModel 3Model Y over an edge that is higher than approximately 1 in (2.5 cm).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached.

 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.

 **WARNING:** CybertruckModel SModel XModel 3Model Y cannot detect obstacles that are located lower than the bumper, are very narrow, or are hanging from a ceiling (for example, bicycles). In addition, many unforeseen circumstances can impair Summon's ability to move in or out of a parking space and, as a result, Summon may not move CybertruckModel SModel XModel 3Model Y appropriately. Therefore, you must continually monitor the vehicle's movement and its surroundings and remain prepared to stop CybertruckModel SModel XModel 3Model Y at any time.

Smart Summon

 **CAUTION:** Smart Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Smart Summon safely, responsibly, and as intended.

 **CAUTION:** Smart Summon is designed and intended for use only on parking lots and driveways located on private property where the surrounding area is familiar and predictable. Do not use Smart Summon on public roads.

NOTE: Smart Summon is disabled if CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)).

**CAUTION:**

Smart Summon is unlikely to operate as intended in the following types of situations:

- GPS data is unavailable due to poor cellular coverage.
- The driving path is sloped. Smart Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Depending on the height of the concrete edge, Smart Summon may not move CybertruckModel SModel XModel 3Model Y over it.
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) or camera operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached



WARNING: The list above does not represent an exhaustive list of situations that may interfere with proper operation of Smart Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Smart Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.



WARNING: Smart Summon must only be used on paved surfaces.



WARNING: Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all traffic. Smart Summon does not recognize the direction of traffic, does not navigate around empty parking spaces, and may not anticipate crossing traffic.



WARNING: When using Smart Summon, you must maintain a clear line of sight between you and CybertruckModel SModel XModel 3Model Y and stay prepared to stop the vehicle at any time by releasing the button on the mobile app.



WARNING: When you release the button to stop CybertruckModel SModel XModel 3Model Y, a slight delay occurs before the vehicle stops. Therefore, it is critical that you pay close attention to the vehicle's driving path at all times and proactively anticipate obstacles that the vehicle may be unable to detect.



WARNING: Use extreme caution when using Smart Summon in environments where movement of obstacles can be unpredictable. For example, where people, children or animals are present.



WARNING: Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all oncoming or side traffic. Pay attention and be ready to stop CybertruckModel SModel XModel 3Model Y at all times by releasing the button on the mobile app.

Active Safety Features



Lane Assist

CybertruckModel SModel XModel 3Model Y monitors the markers on the lane you are driving in as well as the surrounding areas for the presence of vehicles or other objects.

NOTE: For vehicles manufactured as of approximately October 2022, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

NOTE: For vehicles manufactured as of approximately October 2022, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

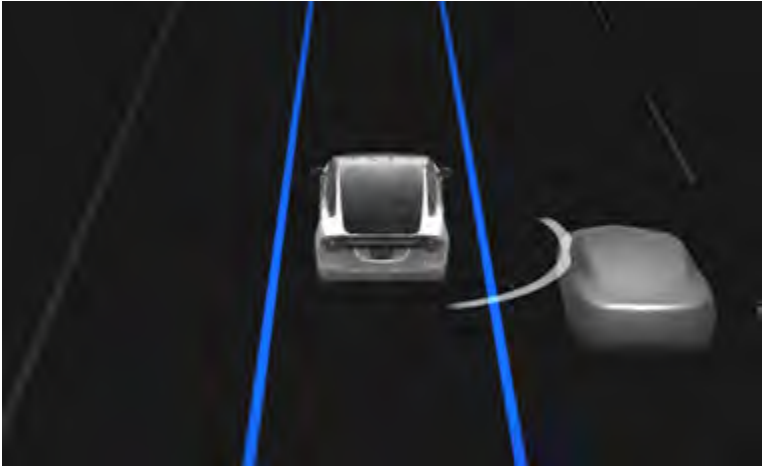
NOTE: For vehicles manufactured as of approximately January 2023, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

NOTE: For vehicles manufactured as of approximately late May 2023, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

When an object is detected in your blind spot or near the side of CybertruckModel SModel XModel 3Model Y (such as a vehicle, guard rail, etc.), the instrument clustertouchscreen displays colored lines radiating from the image of your vehicle. The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represent the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being the closest and requiring your immediate attention. These colored lines only display when driving between approximately 7 and 85 mph (12 and 140 km/h). When Autosteer is active, these colored lines also display if driving slower than 7 mph (12 km/h). However, the colored lines do not display if CybertruckModel SModel XModel 3Model Y is at a standstill (for example, in heavy traffic).

When an object is detected in your blind spot or near the side of CybertruckModel SModel XModel 3Model Y (such as a vehicle, guard rail, etc.), the instrument clustertouchscreen displays colored lines radiating from the image of your vehicle. The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represent the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being the closest and requiring your immediate attention. These colored lines only display when driving between approximately 7 and 85 mph (12 and 140 km/h). When Autosteer is active, these colored lines also display if driving slower than 7 mph (12 km/h). However, the colored lines do not display if CybertruckModel SModel XModel 3Model Y is at a standstill (for example, in heavy traffic).







- ⚠ WARNING:** Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).
- ⚠ WARNING:** Lane Assist features are for guidance purposes only and are not intended to replace your own direct visual checks. Before changing lanes, always use side mirrors and perform the appropriate shoulder checks to visually determine if it is safe and appropriate to change lanes.
- ⚠ WARNING:** Never depend on Lane Assist to inform you if you unintentionally drive outside of the driving lane, or to inform you that there is a vehicle beside you or in your blind spot. Several external factors can reduce the performance of Lane Assist (see [Limitations and Inaccuracies on page 644](#)). It is the driver's responsibility to stay alert and pay attention to the driving lane and other road users. Failure to do so can result in serious injury or death.



Steering Interventions

Lane Assist provides steering interventions if CybertruckModel SModel XModel 3Model Y drifts into (or close to) an adjacent lane in which an object, such as a vehicle, is detected. In these situations, CybertruckModel SModel XModel 3Model Y automatically steers to a safer position in the driving lane. This steering is applied only when CybertruckModel SModel XModel 3Model Y is traveling between 30 and 85 mph (48 and 140 km/h) on major roads with clearly visible lane markings. When a steering intervention is applied, the instrument panel touchscreen briefly displays a warning message.

Lane Departure Warning

Lane Departure Warning alerts you of undesired lane departures by slightly vibrating the steering wheelsteering yoke (or steering wheel) if a front wheel passes over a lane marking when the associated turn signal is off. To turn this warning on or off, touch **Controls > Autopilot > Lane Departure Warning**. Lane Departure Warning is active only when driving between approximately 40 and 90 mph (64 and 145 km/h).

Lane Departure Avoidance

NOTE: Depending on date of manufacture, software version, and vehicle configuration, your vehicle may not be equipped with Lane Departure Avoidance, or the feature may not operate exactly as described.

Lane Departure Avoidance is designed to warn you if CybertruckModel SModel XModel 3Model Y is drifting out of, or nears the edge of, your driving lane.

Lane Departure Avoidance operates when driving between 40 and 90 mph (64 and 145 km/h) on roads with clearly visible lane markings. You can choose if and how you want Lane Departure Warning to operate by touching **Controls > Autopilot > Lane Departure Avoidance** and selecting between these options:

- **Off:** You are not warned of lane departures or potential collisions with a vehicle in an adjacent lane.
- **Warning:** If a front wheel passes over a lane marking, a blue indicator line appears on the instrument cluster touchscreen and the steering wheelsteering yoke (or steering wheel) vibrates. the touchscreen displays a warning. (For vehicles equipped with Full Self-Driving (Supervised): if a front wheel passes over a lane marking, the steering wheelsteering yoke (or steering wheel) vibrates.)
- **Assist:** A blue indicator line, corresponding to the line being crossed by the vehicle, appears on the touchscreen. Corrective steering is applied to keep CybertruckModel SModel XModel 3Model Y in a safe position if CybertruckModel SModel XModel 3Model Y drifts into an adjacent lane or near the edge of the road.

When Lane Departure Avoidance is enabled and Traffic-Aware Cruise Control is active, if CybertruckModel SModel XModel 3Model Y drifts out of the driving lane when the associated turn signal is off, Lane Assist also checks to see whether your hands are on the steering wheelsteering yoke (or steering wheel). If hands are not detected, the instrument panel touchscreen displays a series of alerts, similar to those that are used when driving with Autosteer. If hands are repeatedly not detected CybertruckModel SModel XModel 3Model Y gradually slows down to 15 mph (25 km/h) below the detected speed limit, or below the set cruising speed, and the hazard lights start flashing.

NOTE: Lane Departure Avoidance does not warn you of lane departures, or provide steering interventions, if the associated turn signal is on, which indicates an intentional lane change.



WARNING: Lane Departure Avoidance is intended to help keep you safe, but it does not work in every situation and does not replace the need to remain attentive and in control.



WARNING: Keep your hands on the steering wheelsteering yoke (or steering wheel) and drive attentively at all times.



WARNING: Steering interventions are minimal and are not designed to move CybertruckModel SModel XModel 3Model Y out of its driving lane. Do not rely on steering interventions to avoid side collisions.

Emergency Lane Departure Avoidance

NOTE: Depending on date of manufacture, software version, and vehicle configuration, your vehicle may not be equipped with Emergency Lane Departure Avoidance, or the feature may not operate exactly as described.

Emergency Lane Departure Avoidance automatically applies steering to avoid a potential collision in situations where:

- CybertruckModel SModel XModel 3Model Y is departing a lane and may collide with a vehicle traveling in the same direction in the adjacent lane (regardless of the status of the turn signal).




- CybertruckModel SModel XModel 3Model Y is departing a lane into an oncoming lane, the turn signal is off, and an oncoming vehicle is detected.
- CybertruckModel SModel XModel 3Model Y is departing the road and the turn signal is off (for example, very close to the edge of the road and a collision may occur).

To turn this feature on or off, touch **Controls > Autopilot > Emergency Lane Departure Avoidance**.

When Emergency Lane Departure Avoidance applies steering, a chime sounds and the instrument paneltouchscreen displays a warning and highlights the lane marking in red.

Emergency Lane Departure Avoidance operates when CybertruckModel SModel XModel 3Model Y is traveling between 40 and 90 mph (64 and 145 km/h) on a road with clearly visible lane markings, curbs, etc.


 **WARNING:** Emergency Lane Departure Avoidance is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Emergency Lane Departure Avoidance to prevent a collision. Several factors can reduce or impair performance. Depending on Emergency Lane Departure Avoidance to prevent a potential collision can result in serious injury or death.

Blind Spot Assist

Automatic Blind Spot Camera


You can turn it on/off by touching **Controls > Safety > Automatic Blind Spot CameraControls > Autopilot > Automatic Blind Spot Camera** on the touchscreen.


Once enabled, when the turn signal is engaged, the touchscreen displays the image from the corresponding side repeater camera. When a vehicle is detected in your blind spot in an adjacent lane, a vertical red bar appears on the image to warn you. For example, when the left turn signal is engaged and a vehicle is detected, a vertical red bar appears on the left side of the image. You can move the image to a different location on the touchscreen. To do so, touch and drag the image to the new location (valid locations are indicated by shaded areas that display when you touch and hold the image).

 **WARNING:** Automatic Blind Spot Camera does not eliminate the need to drive attentively and manually perform shoulder checks when changing lanes.

Blind Spot Collision Warning Chime

If you want a chime to sound when a vehicle is in your blind spot and a possible collision is detected, touch **Controls > Safety > Blind Spot Collision Warning Chime Controls > Autopilot > Blind Spot Collision Warning Chime**.

 **WARNING:** Blind Spot Camera does not eliminate the need to drive attentively and manually perform shoulder checks when changing lanes.

 **WARNING:** Blind Spot Collision Warning Chime cannot detect every collision. It is the driver's responsibility to remain alert and perform the appropriate shoulder checks when changing lanes.

Blind Spot Warning Light

Both front door pillars are equipped with a blind spot indicator in the upper speaker grille. You can enable or disable the indicators by touching **Controls > Safety > Blind Spot Warning Light**. When a vehicle is detected in your blind spot in an adjacent lane a red light appears in the upper speaker grille.

- A solid red light indicates a vehicle has been detected in your blind spot.
- A blinking red light indicates that a vehicle is in your blind spot while the turn signal is indicating your intent to turn that direction.
- A rapid blinking red light indicates that a vehicle is detected and immediate corrective action is required to avoid a collision.



⚠ WARNING: Do not rely on Blind Spot Warning Light to detect a vehicle in your blind spot. Always visually confirm that a lane is free from obstacles and vehicles before exiting your lane.

Blind Spot Warning Light

Both front door pillars are equipped with a blind spot warning light in the upper speaker grille. You can enable or disable the warning lights by touching **Controls > Safety > Blind Spot Warning Light**. When a vehicle is detected in your blind spot in an adjacent lane a red light appears in the upper speaker grille.

- A solid red light indicates a vehicle has been detected in your blind spot.
- A blinking red light indicates that a vehicle is in your blind spot while the turn signal is indicating your intent to turn that direction.
- A rapid blinking red light indicates that a vehicle is detected and immediate corrective action is required to avoid a collision.



⚠ WARNING: Do not rely on Blind Spot Warning Light to detect a vehicle in your blind spot. Always visually confirm that a lane is free from obstacles and vehicles before exiting your lane.



Limitations and Inaccuracies

Lane Assist features cannot always detect lane markings and you may experience unnecessary or invalid warnings when:


- Visibility is poor and lane markings are not clearly visible (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- A vehicle in front of CybertruckModel SModel XModel 3Model Y is blocking the view of the camera(s).
- The windshield is obstructing the view of the camera(s) (fogged over, dirty, covered by a sticker, etc.).
- Lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction, or are changing quickly (for example, lanes branching off, crossing over, or merging).
- The road is narrow or winding.
- Objects or landscape features are casting strong shadows on lane markers.


Lane Assist may not provide warnings, or may apply inappropriate warnings, when:

- One or more of the sensors (if equipped), or cameras is damaged, dirty, or obstructed (by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coatings, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- An object that is mounted to CybertruckModel SModel XModel 3Model Y is interfering with and/or obstructing a sensor (such as a bike rack or a bumper sticker).

In addition, Lane Assist may not steer CybertruckModel SModel XModel 3Model Y away from an adjacent vehicle, or may apply unnecessary or inappropriate steering, in these situations:

- You are driving CybertruckModel SModel XModel 3Model Y on sharp corners or on a curve at a relatively high speed.
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- You are drifting into another lane but an object (such as a vehicle) is not present.
- A vehicle in another lane cuts in front of you or drifts into your driving lane.
- CybertruckModel SModel XModel 3Model Y is not traveling within the speeds at which the Lane Assist feature is designed to operate.
- One or more of the sensors (if equipped) is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- An object mounted to CybertruckModel SModel XModel 3Model Y (such as a bike rack or a bumper sticker) is interfering with or obstructing a sensor.
- Visibility is poor and lane markings are not clearly visible (due to heavy rain, snow, fog, etc.).
- Lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction or are changing quickly (for example, lanes branching off, crossing over, or merging).

 **CAUTION:** Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times, including on track. Driver Assistance features automatically re-enable when Track Mode is turned Off.

 **WARNING:** The lists above do not represent every possible situation that may interfere with Lane Assist features. There are many reasons why Lane Assist may not operate as intended. To avoid a collision, stay alert and always pay attention to the road so you can anticipate the need to take corrective action as early as possible.





Collision Avoidance Assist


If your CybertruckModel SModel XModel 3Model Y is equipped with Autopilot components (see [Cameras on page 101](#)), the following collision avoidance features are designed to increase the safety of you and your passengers:


The following collision avoidance features are designed to increase the safety of you and your passengers:

- **Forward Collision Warning** - provides visual and audible warnings in situations when CybertruckModel SModel XModel 3Model Y detects that there is a high risk of a frontal collision (see [Forward Collision Warning on page 645](#)).
- **Automatic Emergency Braking** - automatically applies braking to reduce the impact of a collision (see [Automatic Emergency Braking on page 648](#)[Automatic Emergency Braking on page 649](#)).
- **Obstacle-Aware Acceleration** - reduces acceleration if CybertruckModel SModel XModel 3Model Y detects an object in its immediate driving path (see [Obstacle-Aware Acceleration on page 650](#)).

 **CAUTION:** Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

 **WARNING:** Forward Collision Warning is for guidance purposes only and is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Forward Collision Warning to warn you of a potential collision. Several factors can reduce or impair performance, causing either unnecessary, invalid, inaccurate, or missed warnings. Depending on Forward Collision Warning to warn you of a potential collision can result in serious injury or death.

 **WARNING:** Automatic Emergency Braking is not designed to prevent all collisions. In certain situations, it can minimize the impact of a collision by attempting to reduce your driving speed. Depending on Automatic Emergency Braking to avoid a collision can result in serious injury or death.

 **WARNING:** Obstacle-Aware Acceleration is not designed to prevent a collision. In certain situations, it can minimize the impact of a collision. Depending on Obstacle-Aware Acceleration to avoid a collision can result in serious injury or death.

Forward Collision Warning

CybertruckModel SModel XModel 3Model Y monitors the area in front of it for the presence of an object such as a vehicle, motorcycle, bicycle, or pedestrian. If a collision is considered likely unless you take immediate corrective action, Forward Collision Warning is designed to sound a chime and highlight the vehicle in front of you in red on the instrument paneltouchscreentouchscreen. If this happens, **TAKE IMMEDIATE CORRECTIVE ACTION!**












Visual and audible warnings cancel automatically when the risk of a collision has been reduced (for example, you have decelerated or stopped CybertruckModel SModel XModel 3Model Y, or the object in front of your vehicle has moved out of your driving path).

If immediate action is not taken when CybertruckModel SModel XModel 3Model Y issues a Forward Collision Warning, Automatic Emergency Braking (if enabled) may automatically apply the brakes if a collision is considered imminent (see [Automatic Emergency Braking on page 648](#)[Automatic Emergency Braking on page 649](#)).

By default, Forward Collision Warning is turned on. To turn off or adjust sensitivity, touch **Controls > Autopilot > Forward Collision Warning**. Instead of the default warning level of **Medium**, you can turn the warning **Off**, or you can choose to be warned **Late** or **Early**.

NOTE: Your chosen setting is retained until you manually change it.


-  **WARNING:** The camera(s) and sensors (if equipped) associated with Forward Collision Warning are designed to monitor an approximate area of up to 525 feet (160 meters) in your driving path. The area being monitored by Forward Collision Warning can be adversely affected by road and weather conditions. Use appropriate caution when driving.
-  **WARNING:** Forward Collision Warning is designed only to provide visual and audible alerts. It does not attempt to apply the brakes or decelerate CybertruckModel SModel XModel 3Model Y. When seeing and/or hearing a warning, it is the driver's responsibility to take immediate corrective action.
-  **WARNING:** Forward Collision Warning may provide a warning in situations where the likelihood of collision may not exist. Stay alert and always pay attention to the area in front of CybertruckModel SModel XModel 3Model Y so you can anticipate whether any action is required.

Forward Collision Warning operates only when driving between approximately 7 mph (10 km/h) and 90 mph (150 km/h).

Forward Collision Warning operates only when driving between approximately 7 mph (10 km/h) and 90 mph (150 km/h).

Forward Collision Warning operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Forward Collision Warning operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

-  **WARNING:** Forward Collision Warning does not provide a warning when the driver is already applying the brake.

Automatic Emergency Braking

CybertruckModel SModel XModel 3Model Y is designed to determine the distance from detected objects. When a collision is considered unavoidable, Automatic Emergency Braking is designed to apply the brakes to reduce the vehicle's speed and therefore, the severity of the impact. The amount of speed that is reduced depends on many factors, including driving speed and environment.

When Automatic Emergency Braking applies the brakes, the instrument paneltouchscreentouchscreen displays a visual warning and sounds a chime. You may also notice abrupt downward movement of the brake pedal. The brake lights turn on to alert other road users that you are slowing down.



Emergency braking in progress

Automatic Emergency Braking operates only when driving between approximately 6 mph (10 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 5 mph (8 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking does not apply the brakes, or stops applying the brakes, when:

- You turn the steering wheelsteering yoke (or steering wheel) sharply.
- You press and release the brake pedal while Automatic Emergency Braking is applying the brakes.



- You accelerate hard while Automatic Emergency Braking is applying the brakes.
- The vehicle, motorcycle, bicycle, or pedestrian is no longer detected in the front or rear of the vehicle.

Automatic Emergency Braking is always enabled when you start CybertruckModel SModel XModel 3Model Y. To disable for your current drive, shift into Park and touch **Controls > Autopilot > Automatic Emergency Braking**. Even if you disable Automatic Emergency Braking, your vehicle may still apply the brakes after detecting an initial collision to reduce further impact (see [Multi-Collision Braking on page 650](#)). When disabled, the touchscreen displays a visual message.



Automatic Emergency Braking is disabled



WARNING: It is strongly recommended that you do not disable Automatic Emergency Braking. If you disable it, CybertruckModel SModel XModel 3Model Y does not automatically apply the brakes in situations where a collision is considered likely.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal collisions only.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal and reverse collisions with limited functionality while in Reverse.

In the event Automatic Emergency Braking is unavailable, the touchscreen displays a visual warning.



Automatic Emergency Braking is not available



WARNING: Automatic Emergency Braking is designed to reduce the severity of an impact. It is not designed to avoid a collision.



WARNING: Several factors can affect the performance of Automatic Emergency Braking, causing either no braking or inappropriate or untimely braking, such as when a vehicle is partially in the path of travel or there is road debris. It is the driver's responsibility to drive safely and remain in control of the vehicle at all times. Never depend on Automatic Emergency Braking to avoid or reduce the impact of a collision.



WARNING: Automatic Emergency Braking is not a substitute for maintaining a safe traveling distance between you and the vehicle in front of you.



WARNING: The brake pedal moves downward abruptly during automatic braking events. Always ensure that the brake pedal can move freely. Do not place material under or on top of the driver's floor mat (including an additional mat) and always ensure that the driver's floor mat is properly secured. Failure to do so can impede the ability of the brake pedal to move freely.

Automatic Emergency Braking

CybertruckModel SModel XModel 3Model Y is designed to determine the distance from detected objects. When a collision is considered unavoidable, Automatic Emergency Braking is designed to apply the brakes to reduce the vehicle's speed and therefore, the severity of the impact. The amount of speed that is reduced depends on many factors, including driving speed and environment.

When Automatic Emergency Braking applies the brakes, the instrument paneltouchscreentouchscreen displays a visual warning and sounds a chime. You may also notice abrupt downward movement of the brake pedal. The brake lights turn on to alert other road users that you are slowing down.



Emergency braking in progress

Automatic Emergency Braking operates only when driving between approximately 6 mph (10 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 5 mph (8 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).








Automatic Emergency Braking does not apply the brakes, or stops applying the brakes, when:

- You turn the steering wheel/steering yoke (or steering wheel) sharply.
- You press and release the brake pedal while Automatic Emergency Braking is applying the brakes.
- You accelerate hard while Automatic Emergency Braking is applying the brakes.
- The vehicle, motorcycle, bicycle, or pedestrian is no longer detected in the front or rear of the vehicle.

Automatic Emergency Braking is always enabled when you start CybertruckModel SModel XModel 3Model Y. To disable it for your current drive, touch **Controls > Autopilot > Automatic Emergency Braking**. Even if you disable Automatic Emergency Braking, your vehicle may still apply the brakes after detecting an initial collision to reduce further impact (see [Multi-Collision Braking on page 650](#)).

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal collisions only.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal and reverse collisions with limited functionality while in Reverse.

-  **WARNING:** It is strongly recommended that you do not disable Automatic Emergency Braking. If you disable it, CybertruckModel SModel XModel 3Model Y does not automatically apply the brakes in situations where a collision is considered likely.
-  **WARNING:** Automatic Emergency Braking is designed to reduce the severity of an impact. It is not designed to avoid a collision.
-  **WARNING:** Several factors can affect the performance of Automatic Emergency Braking, causing either no braking or inappropriate or untimely braking, such as when a vehicle is partially in the path of travel or there is road debris. It is the driver's responsibility to drive safely and remain in control of the vehicle at all times. Never depend on Automatic Emergency Braking to avoid or reduce the impact of a collision.
-  **WARNING:** Automatic Emergency Braking is not a substitute for maintaining a safe traveling distance between you and the vehicle in front of you.
-  **WARNING:** The brake pedal moves downward abruptly during automatic braking events. Always ensure that the brake pedal can move freely. Do not place material under or on top of the driver's floor mat (including an additional mat) and always ensure that the driver's floor mat is properly secured. Failure to do so can impede the ability of the brake pedal to move freely.

Multi-Collision Braking

In addition to Automatic Emergency Braking, CybertruckModel SModel XModel 3Model Y may apply the brakes to prevent or mitigate a subsequent impact after an initial collision if airbag deployment is detected. The brakes may be applied regardless of driving speed.


Obstacle-Aware Acceleration

Obstacle-Aware Acceleration is designed to reduce the impact of a collision by reducing motor torque and in some cases applying the brakes, if CybertruckModel SModel XModel 3Model Y detects an object in its driving path. The instrument panel touchscreen displays a visual warning and sounds a chime when the brakes are automatically applied. For example, CybertruckModel SModel XModel 3Model Y, while parked in front of a closed garage door with Drive engaged, detects that you have pressed hard on the accelerator pedal. Although CybertruckModel SModel XModel 3Model Y still accelerates and hits the garage door, the reduced torque may result in less damage.




Obstacle-Aware Acceleration is designed to operate only when all of these conditions are simultaneously met:

- Drive or Reverse is engaged.
- CybertruckModel SModel XModel 3Model Y is stopped or traveling less than 10 mph (16 km/h).
- CybertruckModel SModel XModel 3Model Y detects an object in its immediate driving path.

To disable Obstacle-Aware Acceleration, touch **Controls > Autopilot > Obstacle-Aware Acceleration**.

-  **WARNING:** Obstacle-Aware Acceleration is designed to reduce the severity of an impact. It is not designed to avoid a collision.






-  **WARNING:** Obstacle-Aware Acceleration may not limit torque in all situations, such as performing a sharp turn into a parking space. Several factors, including environmental conditions, distance from an obstacle, and a driver's actions, can limit, delay, or inhibit Obstacle-Aware Acceleration.
-  **WARNING:** Do not rely on Obstacle-Aware Acceleration to control acceleration or to avoid, or limit, the severity of a collision, and do not attempt to test Obstacle-Aware Acceleration. Doing so can result in serious property damage, injury, or death.
-  **WARNING:** Several factors can affect the performance of Obstacle-Aware Acceleration, causing an inappropriate or untimely reduction in motor torque and/or undesired braking. It is the driver's responsibility to drive safely and remain in control of CybertruckModel SModel XModel 3Model Y at all times.

Limitations and Inaccuracies

Collision Avoidance features cannot always detect all objects, vehicles, bikes, or pedestrians, and you may experience unnecessary, inaccurate, invalid, or missed warnings for many reasons, particularly if:

- The road has sharp curves.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- A camera or sensor is obstructed (dirty, covered, fogged over, covered by a sticker, etc.).
- One or more of the sensors (if equipped) is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.

-  **CAUTION:** If a fault occurs with a Collision Avoidance Assist feature, CybertruckModel SModel XModel 3Model Y displays an alert. Contact Tesla Service.
-  **CAUTION:** Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times, including on track. Driver Assistance features automatically re-enable when Track Mode is turned Off.
-  **WARNING:** The limitations previously described do not represent an exhaustive list of situations that may interfere with proper operation of Collision Avoidance Assist features. These features may fail to provide their intended function for many other reasons. It is the driver's responsibility to avoid collisions by staying alert, paying attention, and taking corrective action as early as possible.

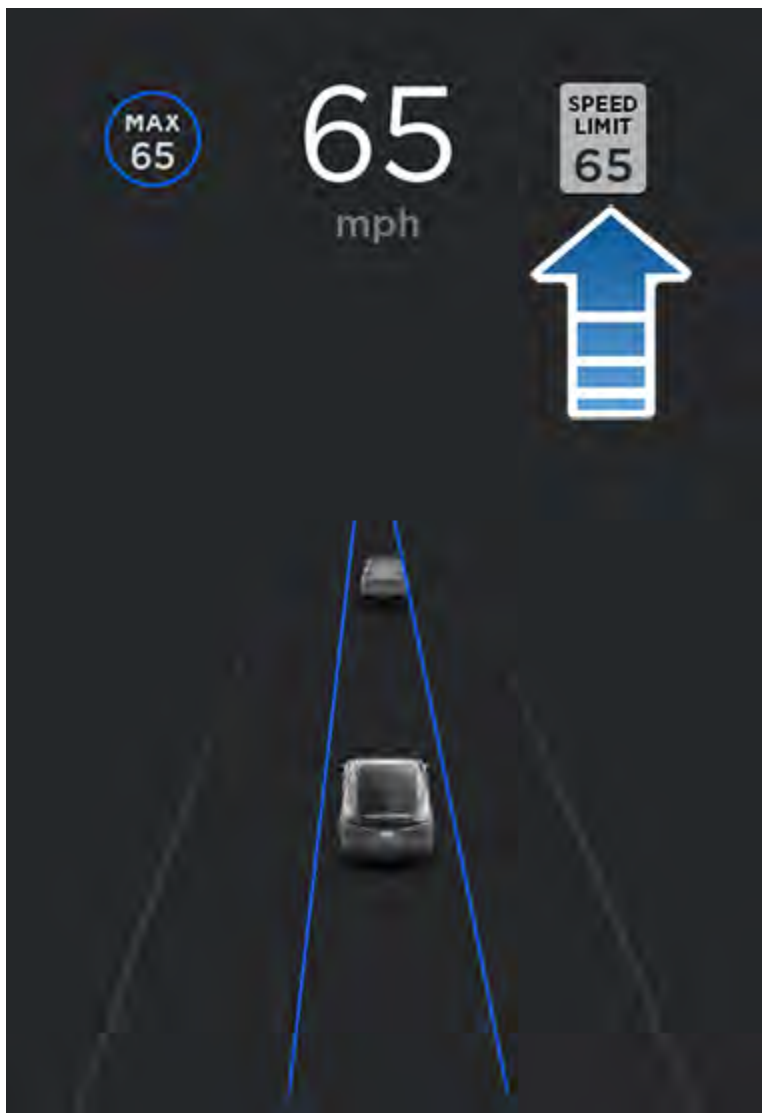
Speed Assist

How Speed Assist Works

CybertruckModel SModel XModel 3Model Y displays a speed limit on the instrument paneltouchscreentouchscreen and you can choose if and how you are warned when you exceed the speed limit. In addition, a blue outline may appear around the speed limit icon to notify that you are above the speed limit.

Instead of using the detected speed limit, you can base warnings on an arbitrary speed limit that you enter manually.

NOTE: When using Traffic-Aware Cruise Control, you can touch this speed limit sign to change your set cruising speed to the detected speed limit (including any offsets that you have set).





In situations where CybertruckModel SModel XModel 3Model Y is unable to determine a speed limit, or if Speed Assist is uncertain that an acquired speed limit is accurate, the instrument paneltouchscreentouchscreen may not display a speed limit sign and warnings do not take effect.

NOTE: Speed limit warnings go away after ten seconds, or when CybertruckModel SModel XModel 3Model Y slows down below the specified limit.

⚠ WARNING: Do not rely on Speed Assist to determine the appropriate speed limit or driving speed. Always drive at a safe speed based on traffic and road conditions.

Controlling Speed Assist

To adjust the Speed Limit Warning setting, touch **Controls > Autopilot > Speed Limit Warning**, then choose one of these options:



- **Off** - Speed limit warnings do not display and chimes are not sounded.
- **Display** - Speed limit signs display on the instrument panel touchscreen and the sign increases in size when you exceed the determined limit.
- **Chime** - In addition to the visual display, a chime is sounded when you exceed the determined speed limit.

You can also specify how the speed limit is determined:

- **Relative** - You can set a speed limit offset (+ or -) if you want to be alerted only when you exceed the offset speed limit by a specified amount. For example, you can increase the offset to +10 mph (10 km/h) if you only want to be warned when you exceed the speed limit by 10 mph (10 km/h).

NOTE: The offset from speed limit also affects the number shown in the gray speed icon on the instrument panel touchscreen.

- **Absolute** - Manually specify any speed limit between 20 and 140 mph (30 and 240 km/h).


NOTE: Speed Assist is not always accurate. In some situations, the location of a road can be miscalculated and Speed Assist can display a speed for a directly adjacent road that may have a different speed limit. For example, Speed Assist can assume Cybertruck Model S Model X Model 3 Model Y is on a controlled-access highway when it is actually on a nearby surface street, and vice versa.

NOTE: Your chosen setting is retained until you manually change it.

Limitations and Inaccuracies

Speed Assist may not be fully functional or may provide inaccurate information in these situations:

- Visibility is poor and speed limit signs are not clearly visible (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- Cybertruck Model S Model X Model 3 Model Y is being driven very close to a vehicle in front of it which is blocking the view of the camera(s).
- The windshield is obstructing the view of the camera(s) (fogged over, dirty, covered by a sticker, etc.).
- Speed limit signs are concealed by objects.
- The speed limits stored in the map database are incorrect or outdated.
- Cybertruck Model S Model X Model 3 Model Y is being driven in an area where GPS or map data is not available or where speed limit signs can not be detected.
- Traffic signs that do not conform to standard recognizable formats, such as digital or temporary speed signs.
- A road or a speed limit has recently changed.

 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Speed Assist. Speed Assist may fail to provide warnings for many other reasons.

Cabin Camera

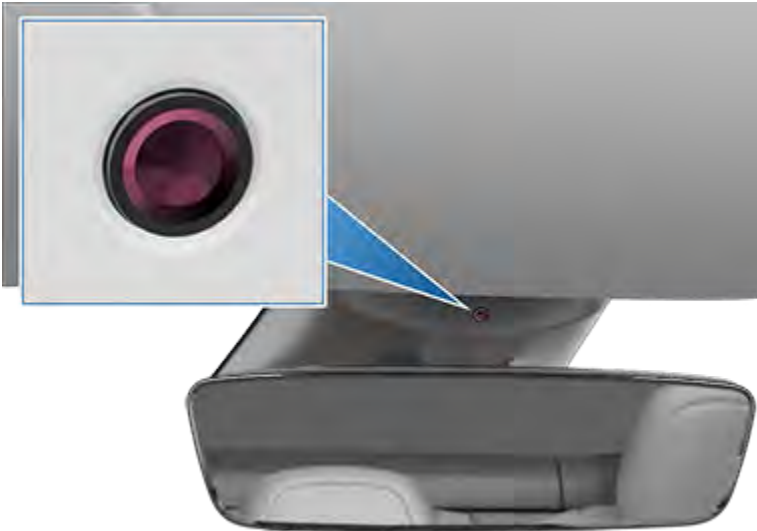
Your Cybertruck Model S Model X Model 3 Model Y may be equipped with a cabin camera located above the rear view mirror.

Your Cybertruck Model S Model X Model 3 Model Y may be equipped with a cabin camera located above the rear view mirror.

Your Cybertruck Model S Model X Model 3 Model Y is equipped with a cabin camera located above the rear view mirror.

Your Cybertruck Model S Model X Model 3 Model Y is equipped with a cabin camera located above the rear view mirror.





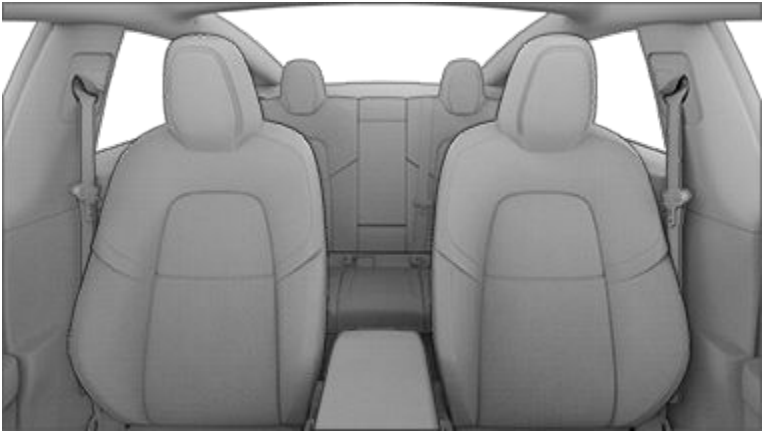
The cabin camera (if equipped) is not currently active. If used in a future safety feature, Tesla will notify you of its availability through a software update.

The cabin camera can determine driver inattentiveness and provide you with audible alerts, to remind you to keep your eyes on the road when Autopilot is engaged.

By default, images and video from the camera do not leave the vehicle itself and are not transmitted to anyone, including Tesla, unless you enable data sharing. If you enable data sharing and a safety critical event occurs (such as a collision), CybertruckModel SModel XModel 3Model Y shares short cabin camera video clips with Tesla to help us develop future safety enhancements and continuously improve the intelligence of features that rely on the cabin camera. Data may also be shared if diagnostics are required on cabin camera functionality. Cabin camera does not perform facial recognition or any other method of identity verification. To protect your privacy, cabin camera data is not associated with your vehicle identification number.

To adjust your data sharing preferences touch **Controls > Software > Data Sharing > Allow Cabin Camera Analytics**. You can change your data sharing settings at any time. To view features currently enabled that use cabin camera, touch **Controls > Software > Cabin Camera**.







NOTE: Keep the camera lens clean and free of obstructions. Remove any buildup of dirt or dust by occasionally wiping the camera lens with a clean cloth.

⚠ CAUTION: Do not use chemical-based or abrasive cleaners. Doing so can damage the surface of the camera lens.

Dashcam, Sentry, and Security



Safety & Security Settings

About the Security System

If CybertruckModel SModel XModel 3Model Y does not detect a key nearby and a locked door or trunk is opened, an alarm sounds. The headlights and turn signals also flash. To deactivate the alarm, press any button on the key fob.

If CybertruckModel SModel XModel 3Model Y does not detect an authenticated phone or key and a locked door or trunk is opened, an alarm sounds. The headlights and turn signals also flash. To deactivate the alarm, press any button on the mobile app or tap your key card or key fob or key fob against the card reader located just below the Autopilot camera on the driver's side door pillarapproximately one third the way up of the driver's side door pillar on the driver's side door pillar.

To manually enable or disable the alarm system, touch **Controls > Safety > Security Alarm**. When enabled, CybertruckModel SModel XModel 3Model Y activates its alarm one minute after you exit, the doors lock, and a recognized key is no longer detected.

A battery-backed siren (if equipped) sounds in situations where a locked door or trunk is opened and CybertruckModel SModel XModel 3Model Y does not detect a key nearby. If you also want this siren to sound in situations where the vehicle detects motion inside the cabin, enable **Tilt/Intrusion** (see [Tilt/Intrusion \(if equipped\) on page 659](#)).

NOTE: If CybertruckModel SModel XModel 3Model Y is in Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\) on page 664](#)), the **Security Alarm** setting is not available.

About the Security System

The vehicle security system activates when CybertruckModel SModel XModel 3Model Y does not detect an authenticated phone or key and:

- A locked door is opened
- The locked tailgate is opened
- The powered front trunk is opened

When your vehicle detects this, the siren sounds, headlights and turn signals flash, and you receive a notification on your mobile app that the security alarm is triggered. To deactivate the alarm, press any button on the mobile app or tap your key card against the card reader located on the driver's side door pillar.

To enable the alarm system, touch **Controls > Safety > Security Alarm**. When enabled, CybertruckModel SModel XModel 3Model Y.

Sentry Mode and the vehicle alarm system are two separate things: the alarm system works similar to other vehicles (a siren sounds when a locked door is opened), whereas Sentry Mode uses cameras and audio to detect suspicious activity nearby (see [Sentry Mode on page 664](#) for more information). If CybertruckModel SModel XModel 3Model Y is in Sentry Mode, the **Security Alarm** setting is not available.

Tilt/Intrusion (if equipped)

Depending on configuration, market region, and date of manufacture, your vehicle may not be equipped with this feature.

The **Security Alarm** must be on to enable **Tilt/Intrusion**.

Tilt/Intrusion sounds the alarm in your vehicle if CybertruckModel SModel XModel 3Model Y detects motion inside the cabin, or is moved or tilted (for example, with a tow truck or jack). To enable, touch **Controls > Safety > Tilt/Intrusion**.

The intrusion sensor automatically disables in situations where the climate control system is operating when you leave your vehicle. To override, you can manually turn the Tilt/Intrusion Sensor on again after choosing Keep Climate On, Dog, or Camp Mode.

The tilt/intrusion sensor automatically re-enables at the start of every drive cycle.

NOTE: The **Tilt/Intrusion** alarm must be turned off to use **Cabin Overheat Protection** (see [Cabin Overheat Protection on page 678](#)).



NOTE: If you plan to leave something that moves inside your locked vehicle, remember to turn off **Tilt/Intrusion**. If this setting is on, any motion detected inside CybertruckModel SModel XModel 3Model Y activates the intrusion alarm.

NOTE: If CybertruckModel SModel XModel 3Model Y is in Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\)](#) on page 664), the **Tilt/Intrusion** setting is not available.

Enhanced Anti-Theft Upgrade (if equipped)

If your vehicle is equipped with the Enhanced Anti-Theft upgrade, the horn sounds in situations where a locked door or trunk is opened and CybertruckModel SModel XModel 3Model Y does not detect a key nearby. If **Tilt/Intrusion** is on, the horn also sounds if CybertruckModel SModel XModel 3Model Y detects motion inside the cabin or if the vehicle is moved or tilted (for example, with a tow truck or jack). To turn the Tilt/Intrusion detection system on or off, touch **Controls > Safety > Tilt/Intrusion**.

PIN to Drive

For an added layer of security, prevent CybertruckModel SModel XModel 3Model Y from being driven until a 4-digit PIN (Personal Identification Number) is entered. To enable this setting, touch **Controls > Safety > PIN to Drive** and follow the on-screen prompts to create a driving PIN.

When enabled, in addition to entering the 4-digit driving PIN to drive, you must also use it to enter Valet mode for the first time and create the 4-digit valet PIN to enter and exit Valet mode. In Valet mode, CybertruckModel SModel XModel 3Model Y can be driven without the need for the valet to enter a driving PIN. The **PIN to Drive** setting is disabled whenever Valet mode is active.

If you forget your driving PIN, touch the link to enter your Tesla login credentials on the PIN to Drive popup, then follow the instructions on the touchscreen.

NOTE: In the unlikely event that your touchscreen is unresponsive, you may be unable to enter the PIN. In this case, first try to restart the touchscreen (see [Restarting the Touchscreen or Instrument Panel on page 34](#) [Restarting the Touchscreen on page 1115](#)). If the touchscreen is still unresponsive, you can still bypass PIN to Drive by turning on Keyless Driving in the Tesla mobile app.

Glovebox PIN

Protect the contents in your glovebox with a 4-digit PIN (not related to PIN to Drive). To enable, touch **Controls > Safety > Glovebox PIN** and follow the directions on the touchscreen. When enabled, you are prompted to enter the PIN to open the glovebox. Select the toggle to disable and then enter the PIN to remove this added security protection.

If you forget your glovebox PIN, reset it by entering your Tesla login credentials, then follow the directions on the touchscreen.

NOTE: Using a **Glovebox PIN** allows the glovebox to be opened even when CybertruckModel SModel XModel 3Model Y is in Valet mode.


Speed Limit Mode

Speed Limit Mode allows you to limit acceleration and maximum driving speed to a chosen value between 50 and 120 mph (80 and 193 km/h). The first time you use this feature, you must create a 4-digit PIN that you must use to enable and disable Speed Limit Mode. When enabled and the driving speed approaches within approximately 3 mph (5 km/h) of the maximum speed, a chime sounds, the instrument clustertouchscreen displays a message, and CybertruckModel SModel XModel 3Model Y sends a notification to the mobile app. You can also touch **Security > Speed Limit Mode** to enable from the Tesla mobile app. To enable Speed Limit Mode:

1. Ensure CybertruckModel SModel XModel 3Model Y is in Park.
2. Touch **Controls > Safety > Speed Limit Mode** on the touchscreen.
3. Select the maximum driving speed.
4. Drag the slider to the **On** position.
5. Enter the 4-digit PIN that you want to use to enable and disable Speed Limit Mode.

NOTE: If you forget the PIN, you can disable Speed Limit Mode by entering login credentials for your Tesla account.

NOTE: While Speed Limit Mode is enabled, the acceleration setting automatically sets to **Chill**.

 **WARNING:** Driving downhill can increase driving speed and cause CybertruckModel SModel XModel 3Model Y to exceed your chosen maximum speed.



WARNING: Speed Limit Mode is not a replacement for good judgment, driver training, and the need to closely monitor speed limits and driving conditions. Accidents occur at any speed and it is your responsibility to drive safely.

Trailer Alarm



When enabled, Cybertruck sounds an alarm if the vehicle detects the trailer is being unplugged while **Trailer Mode** is active and the vehicle is locked.

Clear Browser Data

You can clear your vehicle's browser data (like you would on a computer or smartphone) by navigating to **Controls > Service > Clear Browser Data**. This is useful for many situations, such erasing settings or searches from another driver.

Check the boxes on the touchscreen popup to exclude bookmarks and/or history for your convenience.

Dashcam

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Dashcam or the features may not operate exactly as described. **It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.**

Dashcam records video footage of your vehicle's surroundings while driving. Use Dashcam to record driving incidents or other notable events, like you would for an external dashcam on other vehicles.

The Dashcam icon is located in the app launcher. You can add the Dashcam app to the bottom bar for easy access (see [Customizing My Apps on page 32](#)[Customizing My Apps on page 118](#)). When CybertruckModel SModel XModel 3Model Y is in Park, touching the Dashcam icon displays the Viewer (see [Viewing Video Recordings on page 667](#)).



To protect your privacy, video recordings are saved locally to a formatted USB flash drive's onboard memory. Recordings are not sent to Tesla. CybertruckModel SModel XModel 3Model Y does not record videos when Dashcam is **Off**.

How to Use Dashcam

1. Format a USB flash drive. Dashcam requires a properly formatted USB drive inserted in your vehicle's USB port to store and retrieve footage. Vehicles manufactured beginning approximately 2020 are equipped with a pre-formatted USB flash drive in the glove box. There are two ways to format the flash drive if needed:
 - Format the flash drive with CybertruckModel SModel XModel 3Model Y. Insert the flash drive into the USB port and navigate to **Controls > Safety > Format USB Drive**.
 - Format the flash drive on a computer. See [USB Drive Requirements for Recording Videos on page 666](#) for more information.
2. Insert the USB flash drive into your vehicle's USB port, preferably the one in the glovebox (if equipped).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.



3. Enable Dashcam by touching **Controls > Safety > Dashcam**. Dashcam allows you to choose how and when footage is saved. You can choose between:

- **Auto:** Dashcam automatically saves a recording to the USB drive when CybertruckModel SModel XModel 3Model Y detects a safety-critical event, such as a collision or airbag deployment. When **Auto** is selected, detection can vary and is subject to your vehicle's power, sleep, and Autopilot state.

NOTE: Several factors determine whether Dashcam automatically saves a recording of a safety-critical event (for example, amount of force, whether or not airbags deploy, etc.). Do not rely on Dashcam to automatically record all safety-critical events.

- **Manual:** You must manually touch the Dashcam icon to save a recording of the most recent ten minutes of footage.
- **On Honk:** When you press the horn, Dashcam saves a recording of the most recent ten minutes of footage. You can enable this along with **Auto** or **Manual** simultaneously.

4. Once enabled, the Dashcam icon indicates when footage is saved. You can also view the status of the Dashcam icon in **Controls**:



The icon changes to show the status of Dashcam:



RECORDING: Dashcam is recording. To save video footage, touch the icon. To pause recording, press and hold the icon.



AVAILABLE: Dashcam is available but not actively recording. Touch the dashcam icon to start recording footage.



PAUSED: Dashcam is paused. To resume recording, touch the icon. To avoid losing video footage, pause Dashcam before removing the flash drive.



BUSY: Dashcam is in the process of loading, saving, or overwriting footage. While dashcam is busy, footage is not being captured and recorded.



SAVED: Footage is saved. You can also save Dashcam clips by touching the Dashcam icon in the app launcher while Driving.



RECORDING: Dashcam is recording. To save video footage, touch the icon. To pause recording, press and hold the icon.



AVAILABLE: Dashcam is available but not actively recording. Touch the dashcam icon to start recording footage.



PAUSED: Dashcam is on, but not currently recording or saving anything. This may happen while the viewer is launched, for example.



BUSY: Dashcam is in the process of loading, saving, or overwriting footage. While dashcam is busy, footage is not being captured and recorded.



SAVED: Footage is saved. You can also save Dashcam clips by touching the Dashcam icon in the app launcher while Driving.

5. When your desired footage is saved, view the clips on the touchscreen or a computer:
 - Touchscreen: Ensure CybertruckModel SModel XModel 3Model Y is in Park and touch the Dashcam icon in the app launcher. Videos are organized by timestamp. See [Viewing Video Recordings on page 667](#) for more information.
 - Computer: Insert the USB flash drive into a computer and navigate to the TeslaCam folder. Videos are organized by timestamp. See [Viewing Video Recordings on page 667](#) for more information.
6. To turn Dashcam off, navigate to **Controls > Safety > Dash cam > Off**. If set to **Auto**, **Manual**, or **On Honk**, Dashcam automatically enables (but may not be actively saving footage, depending on your preferences) every time you drive.



Sentry Mode

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Sentry Mode or the features may not operate exactly as described. **It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.**

When enabled, your vehicle's cameras and sensors (if equipped) remain powered on and ready to record suspicious activity around your vehicle when Cybertruck Model S Model X Model 3 Model Y is locked and in Park. Think of Sentry Mode as an intelligent vehicle security system that alerts you when it detects possible threats nearby.


If a threat is detected or the vehicle sensors determine there is a lot of jerky movement like when getting towed or shaken, Sentry Mode pulses the headlights, sounds the alarm, and displays a message on the touchscreen indicating that the cameras may be recording to inform individuals outside of the vehicle. The mobile app alerts you of the alarm and saves footage of the event to a USB drive (if installed).

Sentry Mode is disabled by default. You can use voice commands or the Tesla mobile app to easily enable or disable Sentry Mode. To enable Sentry Mode using voice commands, say "Keep Tesla safe," "Keep my car safe," "Sentry on," or "Enable Sentry" (see [Voice Commands on page 97](#)).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Sentry Mode requires your Battery to be at least 20% charged. If the Battery falls below 20%, Sentry Mode turns off and the mobile app sends you a notification. Power consumption may increase when Sentry Mode is active.

NOTE: When Sentry Mode is enabled, the Security Alarm settings (**Controls > Safety > Security Alarm**) are not available.

 **CAUTION:** Do not rely on Sentry Mode to protect Cybertruck Model S Model X Model 3 Model Y from all possible security threats. Sentry Mode uses many factors to determine whether to activate the security alarm. All impacts may not be detected and the alarm may not activate in all situations. While it may help deter some threats, no security system can prevent all attacks.

NOTE: Sentry Mode only sends notifications to the mobile app when the alarm is triggered or sudden jerky motions are detected by the vehicle.

How to Use Sentry Mode (With a USB Flash Drive)

1. Sentry Mode requires a properly formatted USB drive inserted in your vehicle's USB port. Vehicles manufactured beginning approximately 2020 are equipped with a pre-formatted USB flash drive in the glove box. There are two ways to format the USB drive:
 - Insert the USB drive into the USB port and navigate to **Controls > Safety > Format USB Drive**. Your vehicle automatically formats the USB drive for you.
 - Format the USB drive on a computer. See [USB Drive Requirements for Recording Videos on page 666](#) for more information.
2. Insert the USB drive into the vehicle's USB port, preferable the one in the glove box (if equipped).
3. With your vehicle in Park, enable Dashcam by navigating to **Controls > Safety > Dashcam** (Dashcam must be enabled for Sentry Mode to work).
4. Touch **Controls > Safety > Sentry Mode > On**. Once enabled, the Sentry Mode icon in **Controlson** the status bar turns red.



NOTE: Rear camera recordings are available only on vehicles manufactured after approximately February 2018.

When enabled, Sentry Mode is idle, ready to sound the alarm and save a recording of the security event if triggered. See [Viewing Video Recordings on page 667](#) for information on viewing footage.



5. To silence the security alarm and audio system when the alarm is triggered, navigate to **Controls > Safety > Disable Sentry Sounds**. When enabled, Sentry Mode still sends a notification through the mobile app and saves the last 10 minutes footage.
6. To silence the security alarm and audio system when the alarm is triggered, navigate to **Controls > Safety > Disable Sentry Sounds**. When enabled, Sentry Mode still sends a notification through the mobile app and saves the last 10 minutes footage.
7. To manually enable/disable Sentry Mode until the next drive, touch the Sentry Mode icon. Sentry Mode is Off when the icon is no longer red.



Turn Sentry Mode **Off** in **Controls > Safety > Sentry Mode** to disable for more than one drive cycle.

How to Use Sentry Mode (Without a USB Flash Drive)

When Sentry mode is enabled and a security event is detected but without a USB drive plugged into a USB port, your vehicle alerts you through the mobile app, without any camera recordings.

Sentry Mode Settings

- **Exclude specific locations**

In **Controls > Safety > Sentry Mode**, you can determine if you want Sentry Mode to *not* enable in certain locations (see [Home, Work, and Favorite Destinations on page 703](#) for more information):

- **Exclude Home:** Sentry Mode does not automatically enable at the location set as Home in your Favorites list.
- **Exclude Work:** Sentry Mode does not automatically enable at the location set as Work in your Favorites list.
- **Exclude Favorites:** Sentry Mode does not automatically enable at any location in your Favorites list.

NOTE: To recognize a location listed as Home, Work, or a Favorite, CybertruckModel SModel XModel 3Model Y must be parked within approximately 1,640 feet (500 meters) of the saved location.

To set up your Home or Work location, touch **Navigate > Set Home/Set Work**. To set up a **Favorite**, touch the star when viewing an address on the map. Manually turning Sentry Mode on or off using the touchscreen or the mobile app overrides your Home, Work, or Favorite exclusion preferences until your next drive.

- **Set Camera-Based Detection**

When **Camera-Based Detection** is enabled, Sentry Mode uses the vehicle's external cameras in addition to vehicle sensors to detect a security event while parked. If disabled, your vehicle only saves clips to the USB drive if a physical threat is detected. To adjust, touch **Controls > Safety > Sentry Mode > Camera-Based Detection**.

- **View Live Camera**

NOTE: **View Live Camera** requires premium connectivity and version 4.2.1 (or newer) of the Tesla mobile app installed on a phone that has been paired as a key to CybertruckModel SModel XModel 3Model Y.

When Sentry Mode is enabled, use the mobile app to remotely view the area surrounding CybertruckModel SModel XModel 3Model Y as seen through the exterior cameras. To enable, touch **Controls > Safety > Sentry Mode > View Live Camera via Mobile App** on the touchscreen to see what Sentry Mode records in real-time. Ensure there are no occupants in the vehicle and all doors are locked. Then, on the mobile app, navigate to **Safety > Sentry Mode > View Live Camera**.

When **View Live Camera** is actively in use, CybertruckModel SModel XModel 3Model Y periodically flashes its exterior lights and displays a message on the touchscreen to notify others that the area surrounding the vehicle is being viewed through the cameras.

View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.



If CybertruckModel SModel XModel 3Model Y is equipped with a pedestrian warning speaker (see [Pedestrian Warning System on page 527](#)), you can press and hold the microphone button on the mobile app to transmit your voice through this speaker.

You can also enable Dog Mode at the same time and switch the live camera view to see through the interior camera on the mobile app. See [Keep Climate On, Dog, and Camp on page 677](#) for more information. This feature is not supported in vehicles with Autopilot computer 2.0 or 2.5. Touch **Controls > Software > Autopilot computer** to find out which computer your vehicle has.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet.

NOTE: Video quality can vary depending on network connectivity. No audio is captured.

NOTE: The live camera feed is fully encrypted and cannot be accessed by Tesla.

• View Live Camera

NOTE: **View Live Camera** requires the Tesla mobile app installed on a phone that has been paired as a key to CybertruckModel SModel XModel 3Model Y.

When Sentry Mode is enabled, use the mobile app to remotely view the area surrounding CybertruckModel SModel XModel 3Model Y as seen through the exterior cameras. To enable, touch **Controls > Safety > Sentry Mode > View Live Camera via Mobile App** on the touchscreen to see what Sentry Mode records in real-time. Ensure there are no occupants in the vehicle and all doors are locked. Then, on the mobile app, navigate to **Safety > Sentry Mode > View Live Camera**.

When **View Live Camera** is actively in use, CybertruckModel SModel XModel 3Model Y periodically flashes its exterior lights and displays a message on the touchscreen to notify others that the area surrounding the vehicle is being viewed through the cameras.

View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.

If CybertruckModel SModel XModel 3Model Y is equipped with a pedestrian warning speaker (see [Pedestrian Warning System on page 527](#)), you can press and hold the microphone button on the mobile app to transmit your voice through this speaker.

You can also enable Dog Mode at the same time and switch the live camera view to see through the interior camera on the mobile app. See [Keep Climate On, Dog, and Camp on page 1340](#) for more information.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet if the alarm sounds while they are in your vehicle.

NOTE: Video quality can vary depending on network connectivity. No audio is captured.

NOTE: The live camera feed is fully encrypted and cannot be accessed by Tesla.

See [Viewing Video Recordings on page 667](#) for more information on viewing Sentry Mode footage.

NOTE: When the internal storage reaches full capacity, new recordings overwrite the older recordings.

USB Drive Requirements for Recording Videos

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. To play media files or to format and view video footage, use the USB-A port in the glovebox (see [Interior Electronics on page 41](#)).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. To play media files or to format and view video footage, use the USB-A port in the glovebox (see [Interior Electronics on page 41](#)).

Some features require you to use a USB drive (for example, Dashcam, Sentry Mode and Track Mode, if equipped, and Track Mode, if equipped,) that meet these requirements:

- Minimum storage capacity of 64 GB. Use a USB drive with as much available storage as possible. Video footage can occupy a large amount of space.
- A sustained write speed of at least 4 MB/s. Note that sustained write speed differs from peak write speed.



- USB 2.0 compatible. If using a USB 3.0 drive, it must also support USB 2.0.
- Properly formatted (either automatically or [manually on page 667](#)).

NOTE: The USB-C ports in the center console and below the rear touchscreen do not support the ability to format, save, and view video footage. For any of these functions, use the USB-A port in the glovebox (see [Interior Electronics on page 57](#)).

NOTE: In some market regions you can purchase recommended USB drives on <http://www.tesla.com>.

Automatically Formatting a USB Drive

Insert the USB drive into a front USB port that supports the ability to format, save, and view video footage (see [Interior Electronics on page 41](#)[Interior Electronics on page 41](#)[Interior Electronics on page 57](#)[Interior Electronics on page 57](#)[Interior Electronics on page 1125](#)). and touch **Controls** > **Safety** > **Format USB Drive**. This automatically formats the USB drive as exFAT and creates folders for TeslaCam and TeslaTrackMode (if equipped) and TeslaTrackMode (if equipped). The USB drive is now ready to record and save video footage.

Format USB Drive is available only when a USB drive (with one or fewer partitions) is inserted into a front USB port. Choosing **Format USB Drive** erases any existing content on the USB drive. Before using this feature, move any content you want to keep to a different device.

Manually Formatting a USB Drive

If CybertruckModel SModel XModel 3Model Y is unable to format the USB drive, format it using a computer:

1. Format the USB drive as exFAT, MS-DOS FAT (for Mac), ext3, or ext4 (NTFS is currently not supported).
2. Create a base-level folder titled **TeslaCam**. For Track Mode (if equipped), create another base-level folder called **TeslaTrackMode**. For Track Mode (if equipped), create another base-level folder called **TeslaTrackMode**. You can use one USB drive for Dashcam, Sentry Mode, Track Mode (if equipped), Track Mode (if equipped), and audio files, but you must create separate partitions or folders on the exFAT USB drive.
3. Once formatted, insert the USB drive into the glovebox USB port (if equipped), otherwise use a front USB port in the center console. Do not use a rear USB port because they can only charge devices. It may take a few seconds for CybertruckModel SModel XModel 3Model Y to recognize the USB drive.
4. Once recognized, ensure icons for Dashcam and Sentry Mode appear at the top of your touchscreen. Icons for Dashcam and Sentry Mode are available when you touch **Controls**. CybertruckModel SModel XModel 3Model Y is now ready to record videos.

NOTE: You may need to first enable Sentry Mode by touching **Controls** > **SentryControls** > **Safety** > **Sentry Mode**.

Viewing Video Recordings

If footage is saved, you can view the clips on the touchscreen or a computer.

When the USB drive runs out of storage space, video footage can no longer be saved. To prevent the USB drive from getting full, regularly move saved videos to another device and delete them from the USB drive.

Viewing on the Touchscreen

You can view recorded footage on the touchscreen when CybertruckModel SModel XModel 3Model Y is in Park. Touch the Dashcam icon located in the app launcher. The tabs display a list of all video clips, organized by location and timestamp. Pause, rewind, fast forward, and delete clips as needed. Swipe to the right or press and hold to quickly delete certain clips.

Navigate to **Controls** > **Safety** > **Delete Dashcam Clips** to delete all Dashcam and Sentry Mode footage.

NOTE: Dashcam recording pauses when you launch the Viewer.

Viewing on a Computer

Insert the USB drive into a computer and navigate to the TeslaCam or TeslaTrackMode (if equipped) or TeslaTrackMode (if equipped) folder.

The TeslaCam folder contains these sub-folders:



- **RecentClips:** Contains the last 60 minutes of recorded content.
- **SavedClips:** Contains all recordings that are saved and renamed from the RecentClips folder.
- **SentryClips:** Contains recordings from all Sentry Mode security events. If storage space on the USB drive becomes limited, the oldest Sentry Clips are deleted to provide space for new ones. Once deleted, you cannot retrieve them.

Climate

Operating Climate Controls

Overview of Climate Controls

Climate controls are available at the bottom of the touchscreen. By default, climate control is set to **Auto**, which maintains optimum comfort in all but the most severe weather conditions. When you adjust the cabin temperature while in the **Auto** setting, the system automatically adjusts the heating, air conditioning, air distribution, and fan speed to maintain the cabin at your selected temperature.

Touch the displayed temperature at the bottom of the touchscreen to access the main climate controls screen, where you can adjust your climate preferences. You can return to Auto at any time by touching **Auto**. Touch the power button on the main climate controls screen to toggle on or off. For quick access to common controls, touch **<** or **>** to display the climate popup.

While the cabin is warming up or cooling down, the fan speed may be reduced. The touchscreen displays **Warming Up** or **Cooling Down** while getting to your preferred temperature.

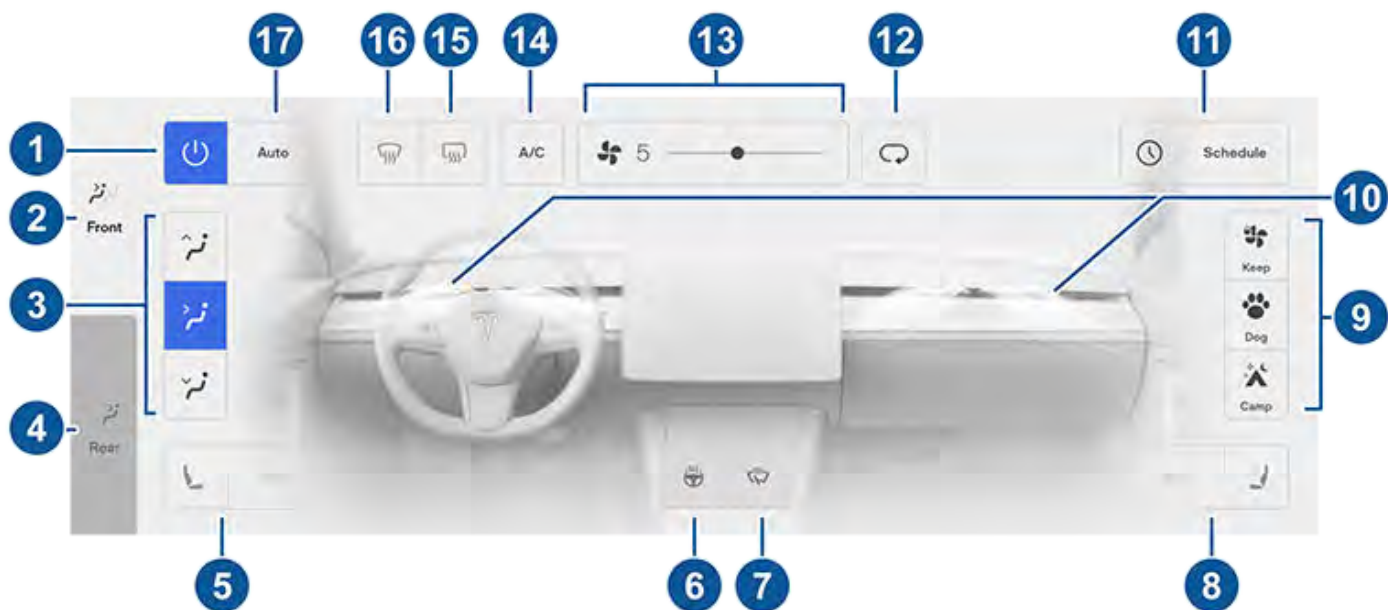
NOTE: The climate control system is powered by the high voltage Battery. Therefore, prolonged use decreases driving range.

⚠ WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.

Adjusting Climate Control Settings

NOTE: Easily adjust your climate preferences, such as turning on the seat heater or changing the cabin temperature, hands-free by using voice commands (see [Voice Commands](#) on page 97).







NOTE: For one-touch access to seat heaters and defrosters, you can add these controls to My Apps. See [Customizing My Apps on page 32](#).

1. Touch to turn the climate control system on or off.
2. Touch to adjust the climate settings for the front cabin.
3. Choose where air flows into the front cabin (windshield, face-level, or foot-level vents). You can choose one or more vents.
4. Touch to adjust the climate settings for the rear cabin. If set to **Auto**, the rear vents turn on automatically when the front climate system is on and a passenger is detected (see [Ventilation on page 681](#)). If set to **Auto**, the rear vents turn on automatically when the front climate system is on and a passenger is detected (see [Ventilation on page 681](#)). If **Auto** is enabled and a passenger is detected, the set temperature is maintained for the rear cabin (see [Adjusting the Front and Rear Vents on page 685](#)). If **Auto** is enabled and a passenger is detected, the set temperature is maintained for the rear cabin (see [Adjusting the Front and Rear Vents on page 685](#)).

NOTE: Enable **Sync** to set the same temperature for the front and back cabins.

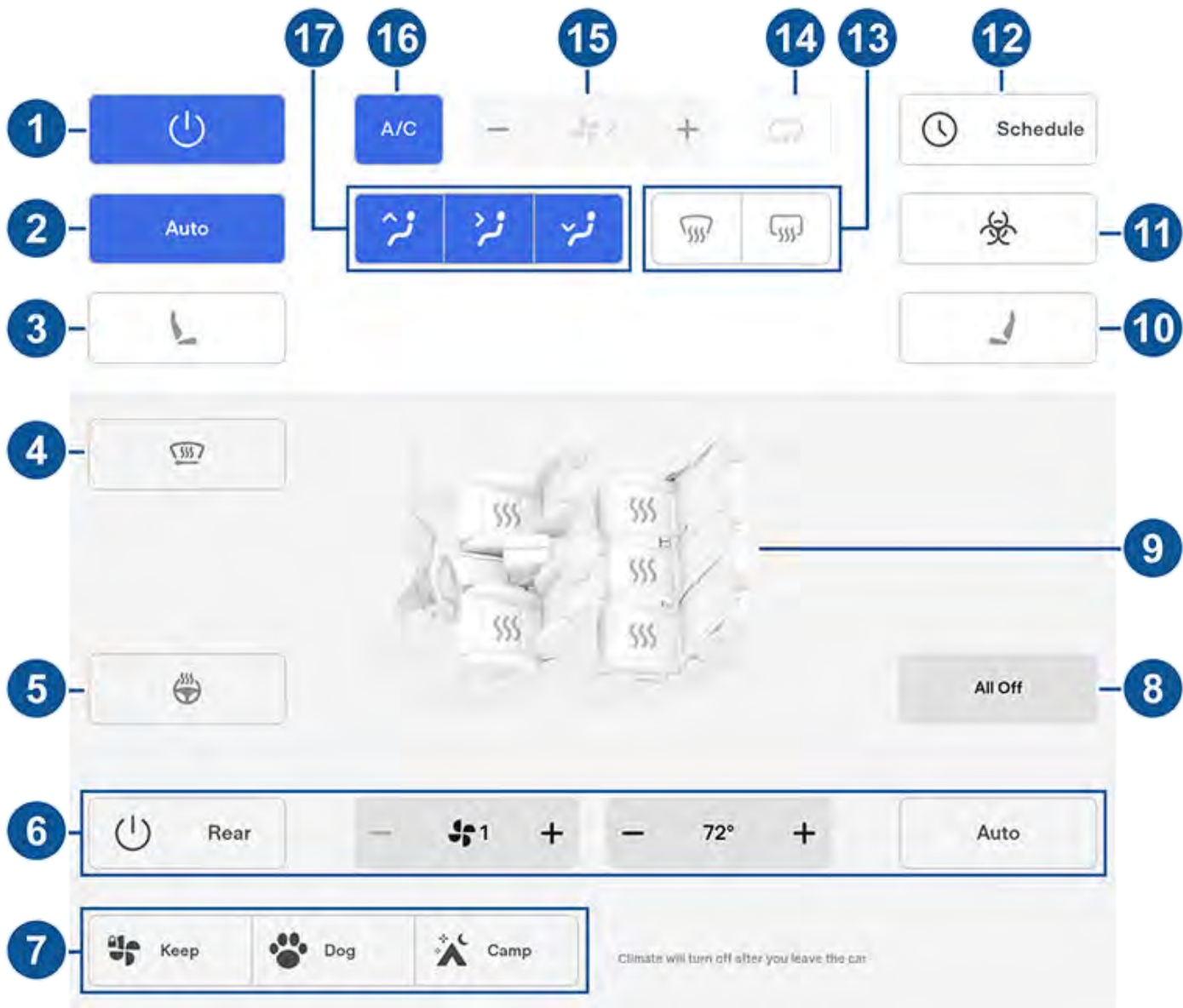
5. Touch the driver's side seat icon to adjust seat heaters for the driver. The seat operates at three levels from 3 (highest) to 1 (lowest). The seat icon displays twisting lines that turn red (heating) or blue (cooling) or blue (cooling) corresponding with the set level. **Auto**, which displays when the climate control system is set to **Auto**, warms or cools or cools the front seats based on cabin temperature. For one-touch access to seat heaters, you can add them to the touchscreen's bottom bar (see [Customizing My Apps on page 32](#)).
6. Touch to control the heated steering wheel/steering yoke (or steering wheel), if equipped. The icon displays red twisting lines that correspond to the set level. If set to **Auto**, the steering wheel is heated as needed, based on cabin temperature, whenever the climate control system is set to **Auto**. For one-touch access, you can add this control to the touchscreen's bottom bar (see [Customizing My Apps on page 32](#)).
7. Touch to turn on the wiper defrosters (if equipped). Wipers defrost for 3015 minutes then turn off automatically.
8. Touch the passenger's side seat icon to adjust seat heaters for the front passenger. The seat operates at three levels from 3 (highest) to 1 (lowest). The seat icon displays twisting lines that turn red (heating) or blue (cooling) or blue (cooling) corresponding with the set level. **Auto**, which displays when the climate control system is set to **Auto**, warms or cools or cools the front seats based on cabin temperature. For one-touch access to seat heaters, you can add them to the touchscreen's bottom bar (see [Customizing My Apps on page 32](#)).
9. When in Park, these settings display to allow you to keep the climate control system operating, even when you leave CybertruckModel SModel XModel 3Model Y (see [Keep Climate On, Dog, and Camp on page 677](#)).
10. Touch to adjust how air flows from the front vents. When the climate control system is operating, the passenger front vent can be turned off independently of driver's vent. See [Adjusting the Front and Rear Vents on page 685](#)[Adjusting the Front and Rear Vents on page 685](#)[Ventilation on page 681](#)[Ventilation on page 681](#).
11. When CybertruckModel SModel XModel 3Model Y is in Park, touch **Schedule** to set a recurring daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive by preconditioning the Battery and cabin climate and/or charging during off-peak hours (see [Scheduled Charging and Scheduled Departure on page 743](#)).

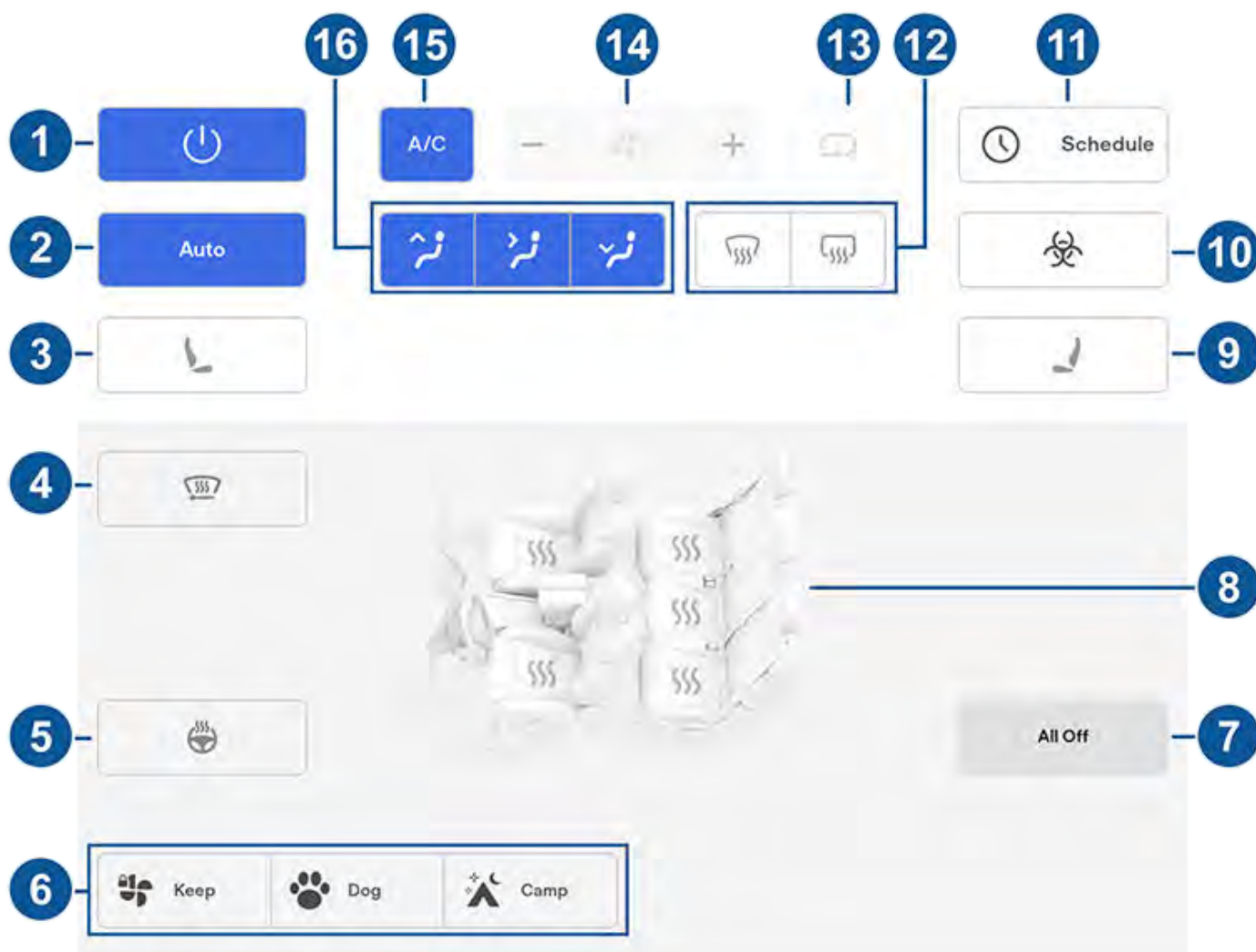


12. If your CybertruckModel SModel XModel 3Model Y is equipped with the medical-grade HEPA (High Efficiency Particulate Air) filter, this filter ensures the best quality air inside the cabin whenever the climate control system is on and outside air is entering the cabin (recirculate is off). The HEPA filter is extremely effective at removing particles, including pollution, allergens, bacteria, pollen, mold spores, and viruses. Both the HEPA filter and the secondary filtration system also contain activated carbon to remove a broad spectrum of odors and gases. When you engage Bioweapon Defense Mode, the positive pressure inside the cabin minimizes the amount of outside air that can enter the vehicle.
NOTE: Some gases, such as carbon monoxide, are not effectively removed by activated carbon.
13. Touch to control the flow of air inside the cabin. Air can be drawn into CybertruckModel SModel XModel 3Model Y from outside or air can be recirculated inside the cabin.
14. Use the slider to adjust the fan speed. When in **Auto**, the fan speed levels change to **Low/ Medium/ High**.
NOTE: Adjusting the fan speed may change the selected setting for how air is drawn into CybertruckModel SModel XModel 3Model Y in order to increase or reduce air flow.
15. Touch to turn the air conditioning system on or off. Turning it off reduces cooling, but saves energy.
NOTE: Because CybertruckModel SModel XModel 3Model Y runs much quieter than a gasoline-powered vehicle, you may notice the sound of the air conditioning compressor as it is operating. To minimize noise, reduce the fan speed.
16. Touch to warm up the rear windshield. After 15 minutes, the rear window defroster automatically turns off. The exterior side mirrors and charge port and charge port (on some vehicles) are also heated whenever the rear window defroster is operating. See [Cold Weather Best Practices on page 693](#) for more information on preparing for cold weather.
17. The windshield defroster distributes air flow to the windshield. Touch once to *defog* the windshield (the icon turns blue). Touch a second time to *defrost* the windshield. Touch a third time to turn off and restore the air distribution, heating, and fan to their previous settings.
18. Touch **Auto** to turn the Auto setting on or off.

Adjusting Climate Control Settings

NOTE: Easily adjust your climate preferences, such as turning on the seat heater or changing the cabin temperature, hands-free by using voice commands (see [Voice Commands on page 97](#)).





NOTE: For one-touch access to seat heaters and defrosters, you can add these controls to My Apps. See [Customizing My Apps on page 32](#).

1. Touch to turn the climate control system on or off.
2. Touch **Auto** to turn the Auto setting on or off.
3. Touch the driver's side seat icon to adjust seat heaters for the driver. The seat operates at three levels from 3 (highest) to 1 (lowest). For one-touch access to seat heaters, you can add them to the touchscreen's bottom bar (see [Customizing My Apps on page 32](#)).
4. Touch to turn on the wiper defrosters (if equipped). Wipers defrost for 15 minutes then turn off automatically.
5. Touch to turn the heater on or off for the steering wheel (if equipped).
6. Touch to adjust the climate settings for the rear cabin. If set to **Auto**, the rear vents turn on automatically when the front climate system is on and a passenger is detected.
7. When in Park, these settings display to allow you to keep the climate control system operating, even when you leave CybertruckModel SModel XModel 3Model Y (see [Keep Climate On, Dog, and Camp on page 677](#)).
8. Touch to turn all seat heaters off.
9. Touch to adjust seat heaters for front and rear seats.
10. Touch the passenger's side seat icon to adjust seat heaters for the front passenger. The seat operates at three levels from 3 (highest) to 1 (lowest). For one-touch access to seat heaters, you can add them to the touchscreen's bottom bar (see [Customizing My Apps on page 32](#)).

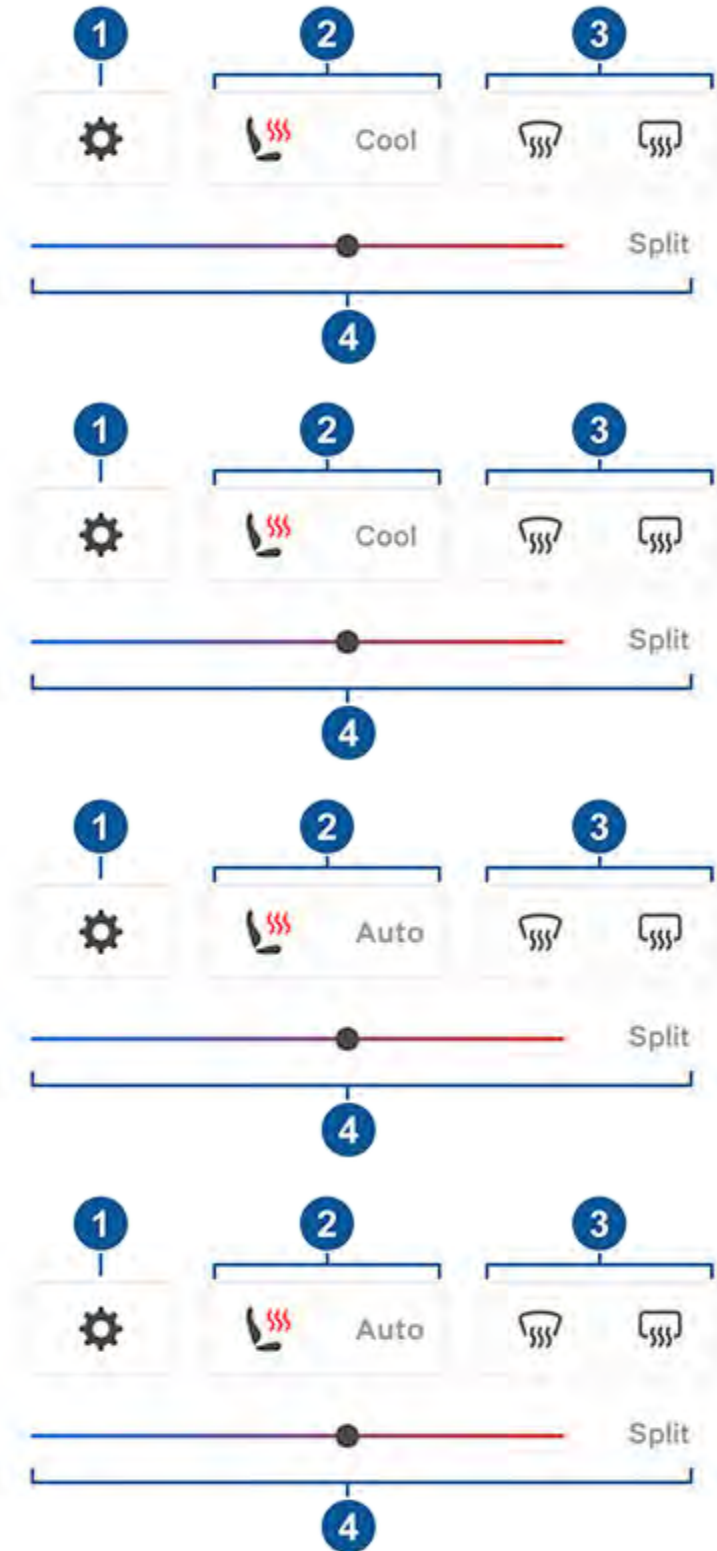


11. If your CybertruckModel SModel XModel 3Model Y is equipped with the medical-grade HEPA (High Efficiency Particulate Air) filter, this filter ensures the best quality air inside the cabin whenever the climate control system is on and outside air is entering the cabin (recirculate is off). The HEPA filter is extremely effective at removing particles, including pollution, allergens, bacteria, pollen, mold spores, and viruses. Both the HEPA filter and the secondary filtration system also contain activated carbon to remove a broad spectrum of odors and gases. When you engage Bioweapon Defense Mode, the positive pressure inside the cabin minimizes the amount of outside air that can enter the vehicle.
NOTE: Some gases, such as carbon monoxide, are not effectively removed by activated carbon.
12. When CybertruckModel SModel XModel 3Model Y is in Park, touch **Schedule** to set a recurring daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive by preconditioning the Battery and cabin climate and/or charging during off-peak hours (see [Scheduled Charging and Scheduled Departure on page 743](#)).
13. The windshield defroster distributes air flow to the windshield. Touch once to *defog* the windshield (the icon turns blue). Touch a second time to *defrost* the windshield. Touch a third time to turn off and restore the air distribution, heating, and fan to their previous settings.
14. Touch to control the flow of air inside the cabin. Air can be drawn into CybertruckModel SModel XModel 3Model Y from outside or air can be recirculated inside the cabin.
15. Use the slider to adjust the fan speed.
NOTE: Adjusting the fan speed may change the selected setting for how air is drawn into CybertruckModel SModel XModel 3Model Y in order to increase or reduce air flow.
16. Touch to turn the air conditioning system on or off. Turning it off reduces cooling, but saves energy.
NOTE: Because CybertruckModel SModel XModel 3Model Y runs much quieter than a gasoline-powered vehicle, you may notice the sound of the air conditioning compressor as it is operating. To minimize noise, reduce the fan speed.
17. Choose where air flows into the front cabin (windshield, face-level, or foot-level vents). You can choose one or more vents.



Climate Popup

Touch the temperature arrows on the bottom of the touchscreen to display a popup for easy access to some of the most common climate controls:



NOTE: For one-touch access to seat heaters and defrosters, you can add these controls to My Apps. See [Customizing My Apps](#) on page 32.



1. Touch to access the main climate controls screen.
2. Enable or disable heated or cooled seats (if equipped).
3. Enable or disable heated or cooled seats (if equipped).
4. Enable or disable heated seats.
5. Enable or disable heated seats.
6. Enable or disable the front or rear windshield defrosters.
7. Modify the cabin temperature by dragging the slider. You can also enable temperature splitting which allows the driver and front passenger to customize their own climate preferences. The front passenger can touch the temperature icon on the bottom of the touchscreen or the main climate controls screen to adjust. Touch **Split** again to disable climate splitting.

Keep Climate On, Dog, and Camp

The **Keep Climate On**, **Dog**, and **Camp** settings allow you to keep the climate control system running when in Park, even after you've left CybertruckModel SModel XModel 3Model Y or choose to stay inside the vehicle. These settings are useful when it is important to maintain the cabin temperature in hot or cold weather conditions. For example, when leaving groceries in CybertruckModel SModel XModel 3Model Y on hot days, you may want to use Keep Climate On to prevent spoilage.

Dog is designed to maintain a comfortable cabin temperature for your pet while you actively and frequently monitor this temperature using the mobile app (which requires both your phone and the vehicle to have cellular connectivity). When in Dog, the touchscreen displays the current cabin temperature to inform people passing by that your pet is safe. This setting is not intended for people, and should only be used for short periods of time while you stay in close proximity should you need to return to the vehicle in situations where the temperature can no longer be maintained.

NOTE: To avoid accidentally pressing the window switch (such as your dog stepping on it), the windows cannot be rolled down while Dog is enabled.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet. See [Sentry Mode on page 664](#) for more information.

Live Camera view is now available if Sentry Mode or Dog Mode, or both, are enabled. When Sentry Mode is on, the cameras show a live view of the vehicle's surroundings. When Dog Mode is on, the interior cabin camera shows the inside of the vehicle so you can check on your pet at any time. If both are enabled, switch the camera views by touching the gray circles or the interior icon that correspond to different cameras on the mobile app. See [Sentry Mode on page 664](#) for more information.

NOTE: Enabling the interior cabin camera for Dog or Sentry Mode requires the mobile app version 4.15.0 or higher. This feature is not supported in vehicles with Autopilot computer 2.0 or 2.5. Touch **Controls > Software > Autopilot computer** to find out which computer your vehicle has.

NOTE: View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.

Camp allows you to power electronics through the USB ports and low voltage outlet in addition to maintaining the cabin temperature. The touchscreen remains on so you can play music, browse the internet, play games in the arcade, or watch shows in Tesla Theater. You can also control media and climate settings from a paired phone. Camp is ideal for remaining inside your vehicle, such as camping or staying with a child. While active, Sentry Mode and the vehicle alarm system are disabled. Walk-Away Door Lock is inactive.

To operate Keep Climate On, Dog, or Camp:

1. Make sure the Battery's charge level is at least 20%.
2. Engage Park. The **Keep Climate On**, **Dog**, and **Camp** settings are available only when CybertruckModel SModel XModel 3Model Y is in Park.
3. If necessary, adjust the climate settings.
4. On the climate controls screen, touch **Keep Climate On**, **Dog**, or **Camp**.






NOTE: You can also control **Dog** and **Camp** from the mobile app, by swiping up from the gray bar on the Climate screen.

The climate control system attempts to maintain your climate settings until you shift out of Park or manually turn it off. Avoid using Keep Climate On, Dog, or Camp when the Battery's charge level is low. If the Battery's charge level drops below 20%, the Tesla mobile app attempts to repeatedly send notifications reminding you to check on anything that you have left in CybertruckModel SModel XModel 3Model Y.



NOTE: Software updates cannot be performed when Keep Climate On, Dog, or Camp is active.

NOTE: The intrusion sensor (if equipped) automatically disables when Keep Climate On, Dog, or Camp is active. However, you can override this behavior and keep the intrusion sensor enabled. To do so, touch **Controls > Safety > Tilt/Intrusion** after enabling Keep Climate On, Dog, or Camp. However, note that keeping the intrusion sensor enabled while Keep Climate On, Dog, or Camp is active can trigger an alarm event as a result of air movement inside the cabin.

-  **WARNING:** Never leave a child unattended in your vehicle.
-  **WARNING:** Check local laws for any restrictions on leaving pets unattended in your vehicle.
-  **WARNING:** You are responsible for the safety of your dog or pet. Never leave them in CybertruckModel SModel XModel 3Model Y for long periods of time. Constantly monitor the vehicle temperature and their well-being. Make sure you have sufficient cellular coverage on your phone and time to return to the vehicle, if necessary.
-  **WARNING:** In the unlikely event that your climate control system needs service or is not working as expected, avoid using Keep Climate On, Dog, and Camp. Never rely on your vehicle to protect something irreplaceable.
-  **WARNING:** You can adjust and monitor the climate control system remotely using the mobile app. However, if you use the mobile app to turn off the climate control system, Keep Climate On, Dog, and Camp stop operating.

Cabin Overheat Protection

Cabin Overheat Protection prevents the cabin from getting too hot in scorching ambient conditions. While not necessary to activate whenever you leave CybertruckModel SModel XModel 3Model Y, the climate control system can reduce and maintain the temperature of your vehicle's cabin. This can prevent the cabin from getting too hot after leaving it parked in the sun, making the vehicle more comfortable when you return. Cabin Overheat Protection may take up to 15 minutes to enable once you exit the vehicle. This feature is intended for passenger comfort and has no impact on the reliability of your vehicle's components.

To turn on, touch **Controls > Safety > Cabin Overheat Protection** and choose:



- **On:** The air conditioning operates when the cabin temperature exceeds 105° F (40° C), or the selected temperature if available, on the touchscreen or mobile app. Customizing temperatures may require the most recent version of the mobile app.
- **No A/C:** Only the fan operates to prevent touch surfaces from getting too hot.
- **Off:** Disables Cabin Overheat Protection.

You can also enable Cabin Overheat Protection remotely through the mobile app by touching **Climate**. Swipe up on the bottom menu and select a setting under **Cabin Overheat Protection** (see [Mobile App on page 355](#)).

Cabin Overheat Protection operates until 12 hours has elapsed once you exit CybertruckModel SModel XModel 3Model Y, or until the Battery energy drops below 20%, whichever comes first. Using Cabin Overheat Protection requires energy from the Battery, which may decrease range.

NOTE: To enable **Cabin Overheat Protection**, **Tilt/Intrusion** must be turned off.

NOTE: To enable **Cabin Overheat Protection**, **Tilt/Intrusion** must be turned off.

-  **WARNING:** Due to automatic shut-off, extreme outside conditions, or other potential inability to maintain the selected temperature, the inside of the vehicle can become dangerously hot, even when Cabin Overheat Protection is enabled. If you experience temperatures exceeding the selected temperature repeatedly, contact Tesla service.
-  **WARNING:** Never leave children or pets in the vehicle unattended. Due to automatic shut-off or extreme outside conditions, the inside of the vehicle can become dangerously hot, even when Cabin Overheat Protection is enabled.

Climate Control Operating Tips

You can improve the efficiency of the cabin heater by limiting acceleration. This allows the heat pump system to use more residual heat from the Battery to efficiently heat the cabin while maintaining the chosen acceleration level. This is useful in cold weather.

- When you use the mobile app to turn on the climate control system, it automatically turns off when the charge level drops to 20%, or if two hours has passed. To cool or heat the cabin for a longer period of time, charge the vehicle and re-enable your climate control preference through the mobile app.



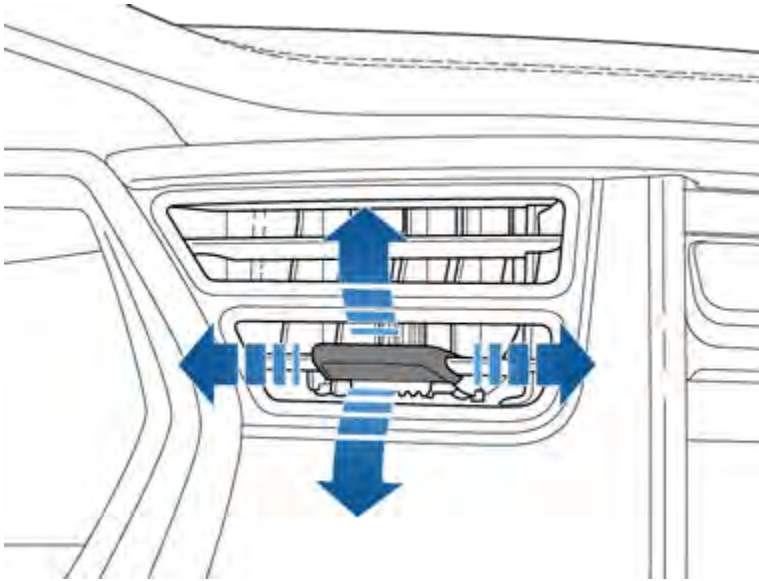
- You may hear the sound of the climate system inside the cabin of CybertruckModel SModel XModel 3Model Y when Parked. It makes a low fan noise. The climate system attempts to dry itself out to minimize additional moisture or musty odors. This is a normal operation and not a cause for concern.
- If your vehicle is equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**), you can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.
- You can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)[Acceleration Modes on page 501](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.
- Your charge port latch may freeze in extremely cold weather or icy conditions. In cases where you cannot remove or insert the charge cable, or your vehicle is not Supercharging due to the latch being frozen in place, enable **Defrost Car** in the mobile app. This helps thaw ice on the charge port latch so the charge cable can be removed or inserted. See [Cold Weather Best Practices on page 693](#) for more information.
- To conserve energy, turn on Range Mode to limit the power of the climate control system (touch **Controls > Pedals & Steering > Range Mode**). Cabin heating and cooling may be less effective, but you can use seat heaters to provide warmth in colder climates.
- If the climate control system is louder than you prefer, manually reduce the fan speed.
- In addition to cooling the interior, the air conditioning compressor also cools the Battery. Therefore, in hot weather, the air conditioning compressor can turn on even if you turned it off. This is normal because the system's priority is to cool the Battery to ensure it stays within an optimum temperature range to support longevity and optimum performance.
- Even when not in use, you may hear CybertruckModel SModel XModel 3Model Y emit a whining noise or the sound of water circulating. These sounds are normal and occur when the internal cooling systems turn on to support various vehicle functions, such as maintaining the low voltage battery and balancing the temperature of the high voltage Battery.
- To ensure the climate control system operates efficiently, close all windows and ensure that the exterior grille in front of the windshield is free of ice, snow, leaves, and other debris.
- In very humid conditions, it is normal for the windshield to fog slightly when you first turn on the air conditioning.
- It is normal for a small pool of water to form under CybertruckModel SModel XModel 3Model Y when parked. Extra water produced by the dehumidifying process is drained underneath.
- CybertruckModel SModel XModel 3Model Y is designed to automatically maximize efficiency; therefore, your air conditioning compressor and external fan may run and make noise even when the outside temperature is cold and your vehicle is heating or supercharging.
- CybertruckModel SModel XModel 3Model Y is designed to automatically maximize efficiency; therefore, your air conditioning compressor and external fan may run and make noise even when the outside temperature is cold and your vehicle is heating or supercharging.
- To reduce the temperature in the cabin in hot weather conditions, the fan may turn on to vent the cabin when the vehicle is parked. This occurs only if the battery's charge level is above 20%.



Vents

Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions such as leaves and snow.

To direct the flow of air inside CybertruckModel SModel XModel 3Model Y, move the interior vents up, down, or from side to side.



NOTE: You can direct the outer face level vents toward the side windows to help defrost or defog them.

Cabin Air Filter(s)

CybertruckModel SModel XModel 3Model Y has one or more air filters to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

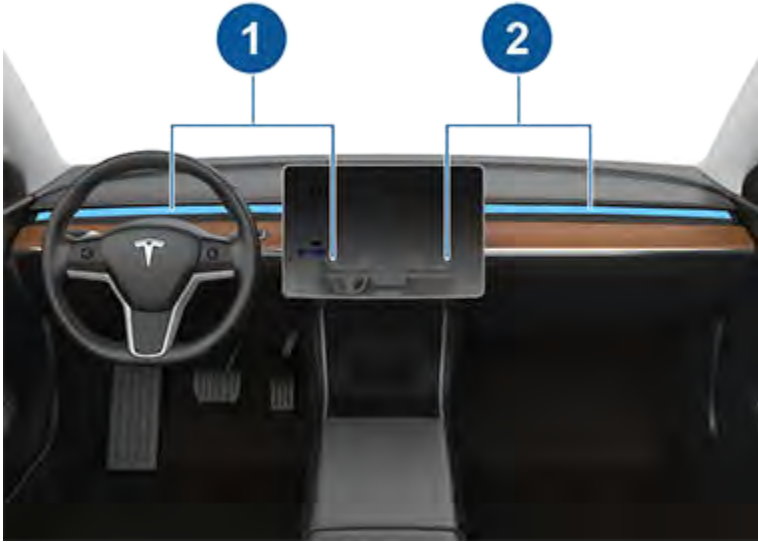
NOTE: Cabin air filter(s) require periodic replacement. See [Service Intervals on page 750](#).



Ventilation

Adjusting the Front Vents

CybertruckModel SModel XModel 3Model Y has a unique horizontal face-level vent that spans the width of the dashboard. Using the touchscreen, you can pinpoint exactly where you want to direct the air flowing from this vent when heating or cooling the front cabin area.



1. Driver vent and controls
2. Passenger vent and controls

When the face-level vent is on you can adjust the direction of the air flow from each vent. To adjust the direction of the air flow, simply touch the radiating air waves from the corresponding vent on the touchscreen. The air flows in a single stream when centered or splits into mirrored air streams when air is directed outward or inward from the center of the vent.

When CybertruckModel SModel XModel 3Model Y detects that there are no passengers sitting in the passenger seat, the passenger vent and controls automatically turn off. Adjust the climate settings to enable passenger air flow.

NOTE: You can direct the face-level vents toward the windows to help defrost or defog them.

NOTE: When you split a vent into two separate air flows, the air flow in each direction is not as strong as when all air is flowing in a single direction.

NOTE: Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions, such as leaves and snow.

Adjusting the Rear Vents

CybertruckModel SModel XModel 3Model Y has vents located at the back of the center console where air flows from when the setting is turned on from the touchscreen. To direct the flow of air in the rear cabin area, adjust the vents at the rear of the center console up, down, or from side to side as necessary.



Cabin Air Filter(s)

Cybertruck Model S Model X Model 3 Model Y has one or more air filters to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

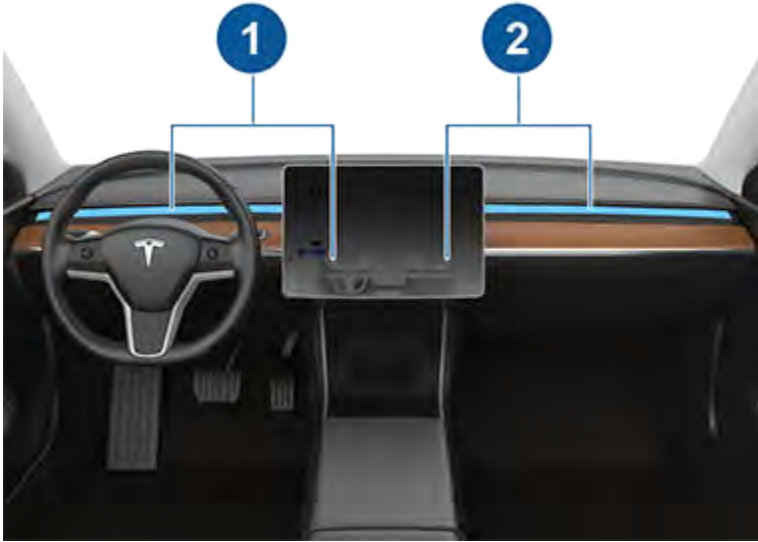
NOTE: Cabin air filter(s) require periodic replacement. See [Service Intervals on page 750](#).



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1. Driver vent and controls
2. Passenger vent and controls

When the face-level vent is on you can adjust the direction of the air flow from each vent. To adjust the direction of the air flow, simply touch the radiating air waves from the corresponding vent on the touchscreen. The air flows in a single stream when centered or splits into mirrored air streams when air is directed outward or inward from the center of the vent.

When CybertruckModel SModel XModel 3Model Y detects that there are no passengers sitting in the passenger seat, the passenger vent and controls automatically turn off. Adjust the climate settings to enable passenger air flow.

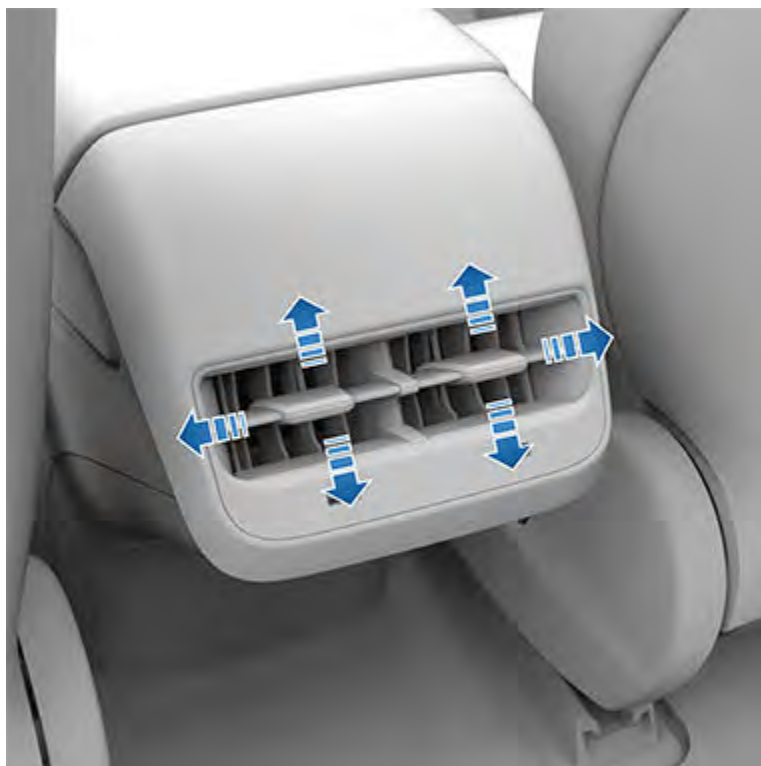
NOTE: You can direct the face-level vents toward the windows to help defrost or defog them.

NOTE: When you split a vent into two separate air flows, the air flow in each direction is not as strong as when all air is flowing in a single direction.

NOTE: Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions, such as leaves and snow.

Adjusting the Rear Vents

CybertruckModel SModel XModel 3Model Y has vents located at the back of the center console where air flows from when the setting is turned on from the touchscreen. To direct the flow of air in the rear cabin area, adjust the vents at the rear of the center console up, down, or from side to side as necessary.



Cabin Air Filter(s)

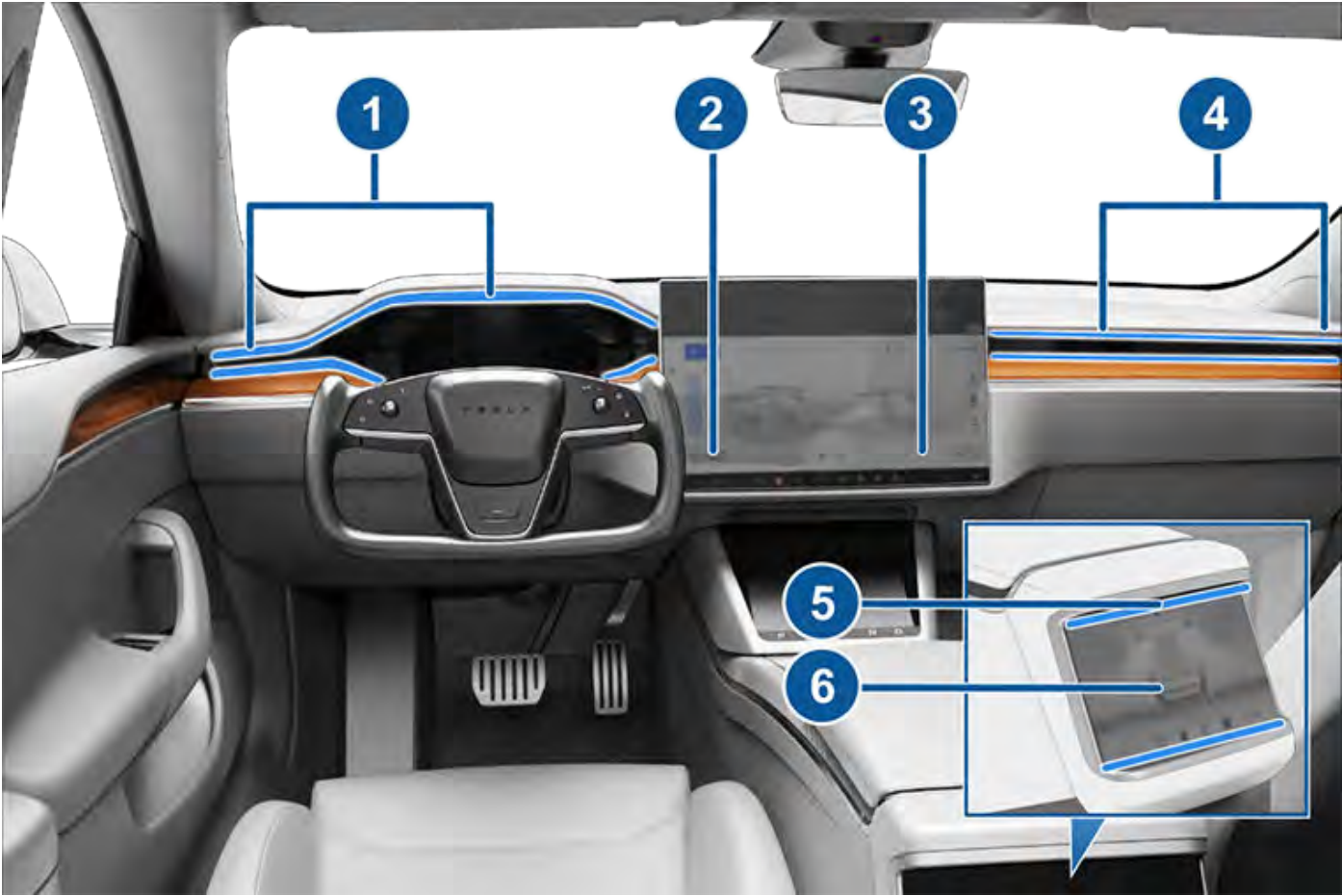
Cybertruck Model S Model X Model 3 Model Y has one or more air filters to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

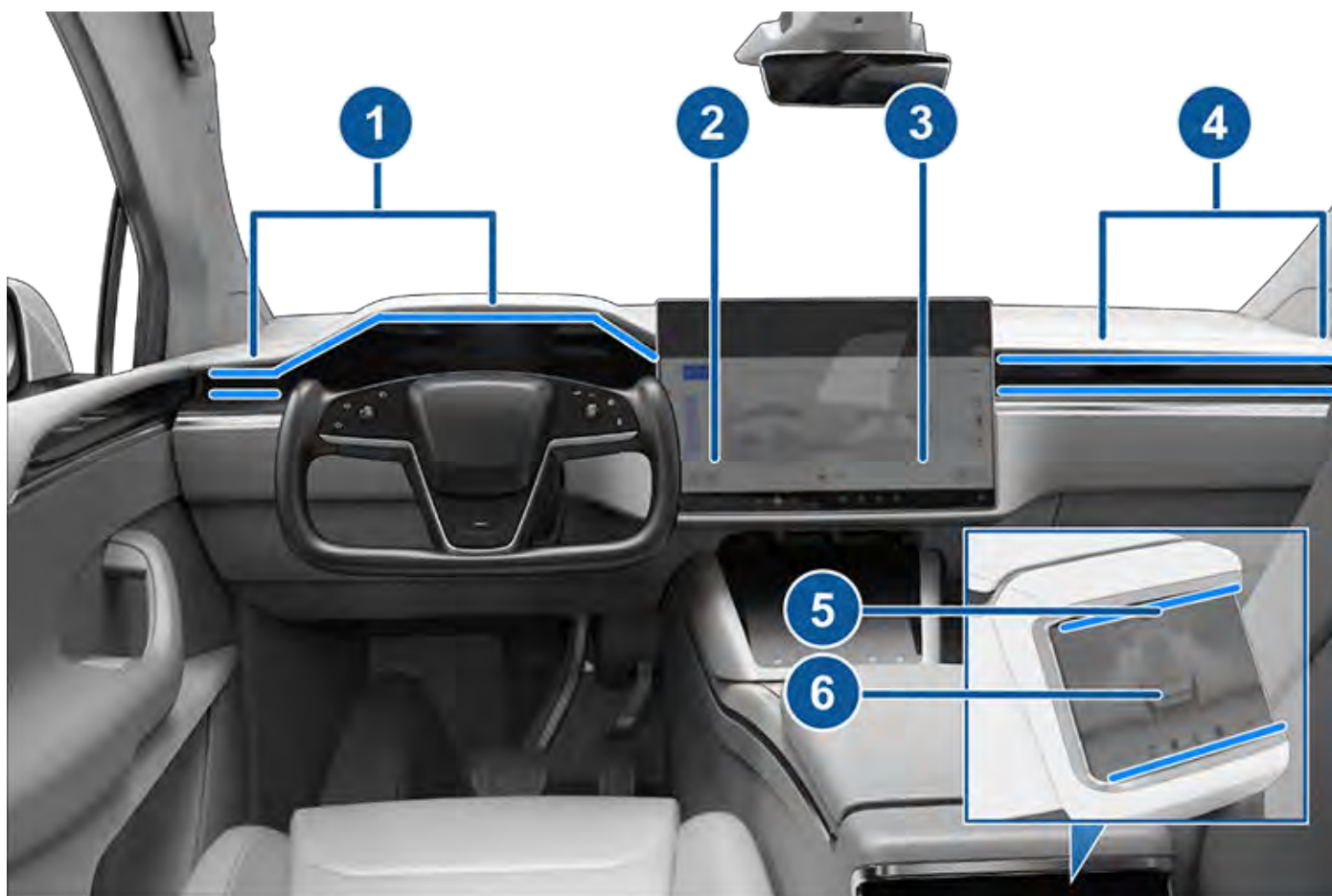
NOTE: Cabin air filter(s) require periodic replacement. See [Service Intervals on page 750](#).

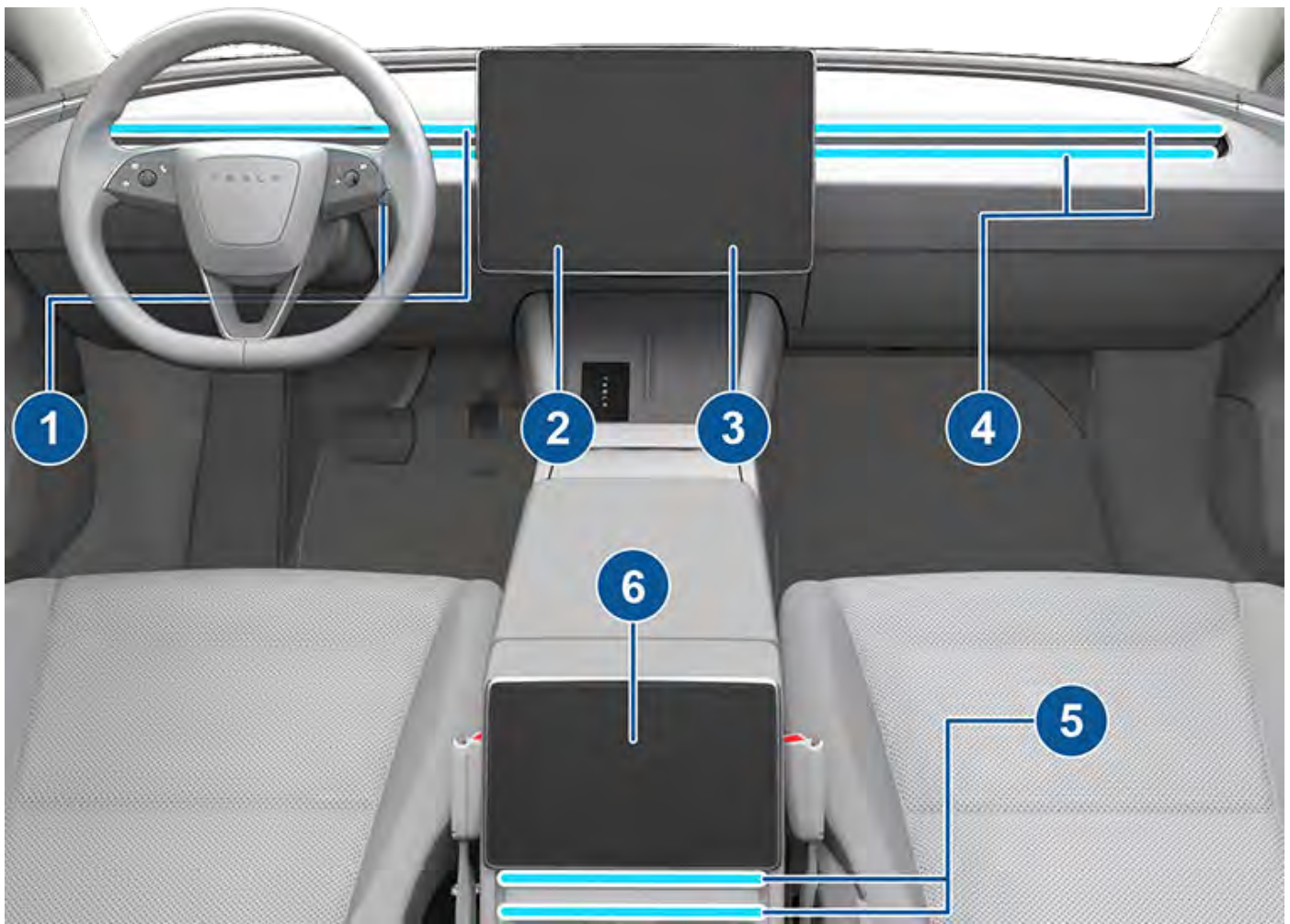


Adjusting the Front and Rear Vents

Cybertruck Model S Model X Model 3 Model Y has a unique horizontal face-level vent that spans the width of the dashboard. It also has vents at the top and bottom of the rear console. It also has vents at the bottom of the rear console.



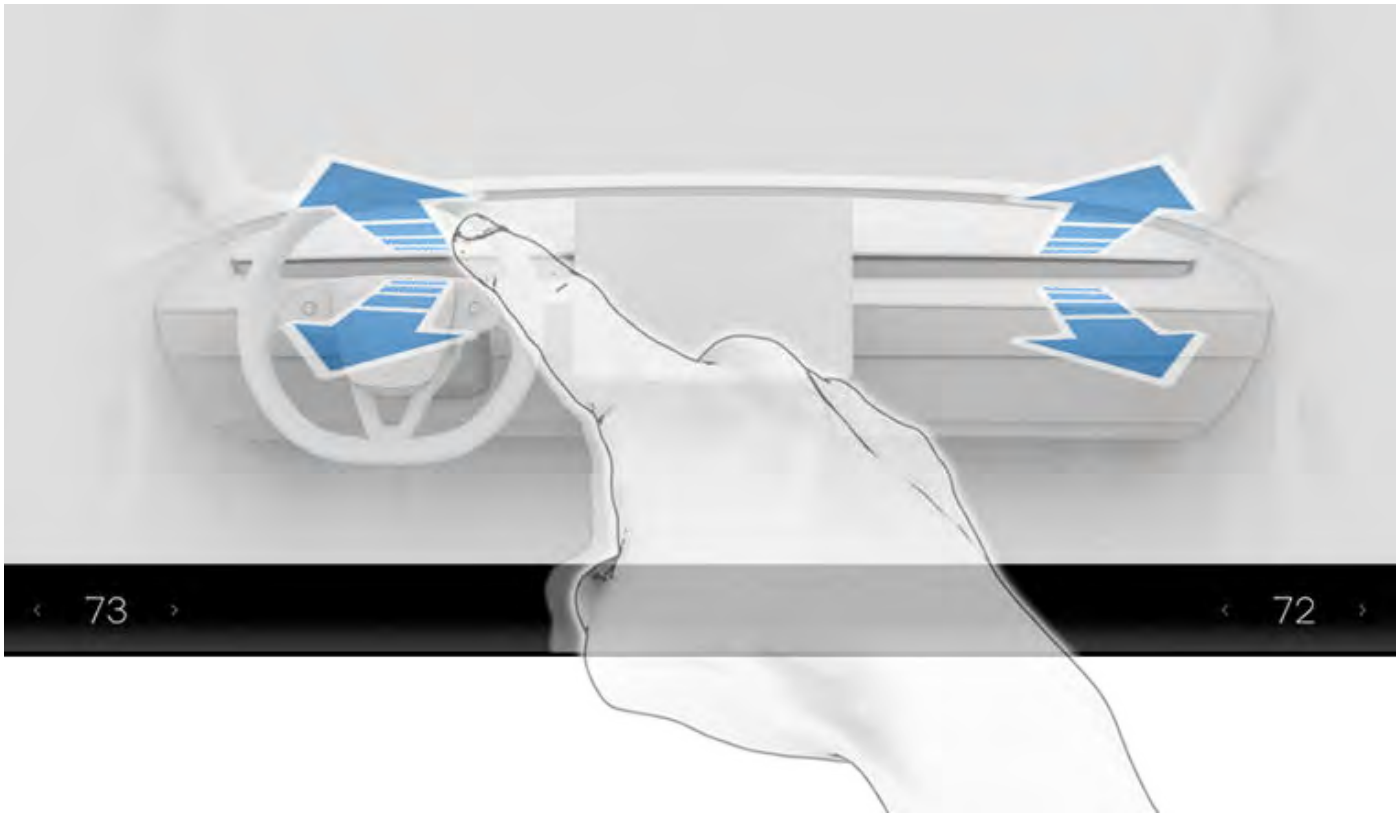




- 1. Driver vents
- 2. Driver controls
- 3. Passenger controls
- 4. Passenger vents
- 5. Rear vents
- 6. Rear controls



Using the touchscreens, you can pinpoint exactly where you want to direct the air flowing from this vent when heating or cooling the cabin. When the face-level vent is on you can adjust the direction of the air flow from each vent. To adjust the direction of the air flow, touch the radiating air waves from the corresponding vent on the touchscreen. The air flows in a single stream when centered or splits into mirrored air streams when air is directed outward or inward from the center of the vent.



To turn the front passenger vent off while the climate control system is on, touch the front passenger air wave on the touchscreen and follow the instructions.

NOTE: When you split a vent into two separate air flows, the air flow in each direction is not as strong as when all air is flowing in a single direction.

NOTE: Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions, such as leaves and snow.

Cabin Air Filter(s)

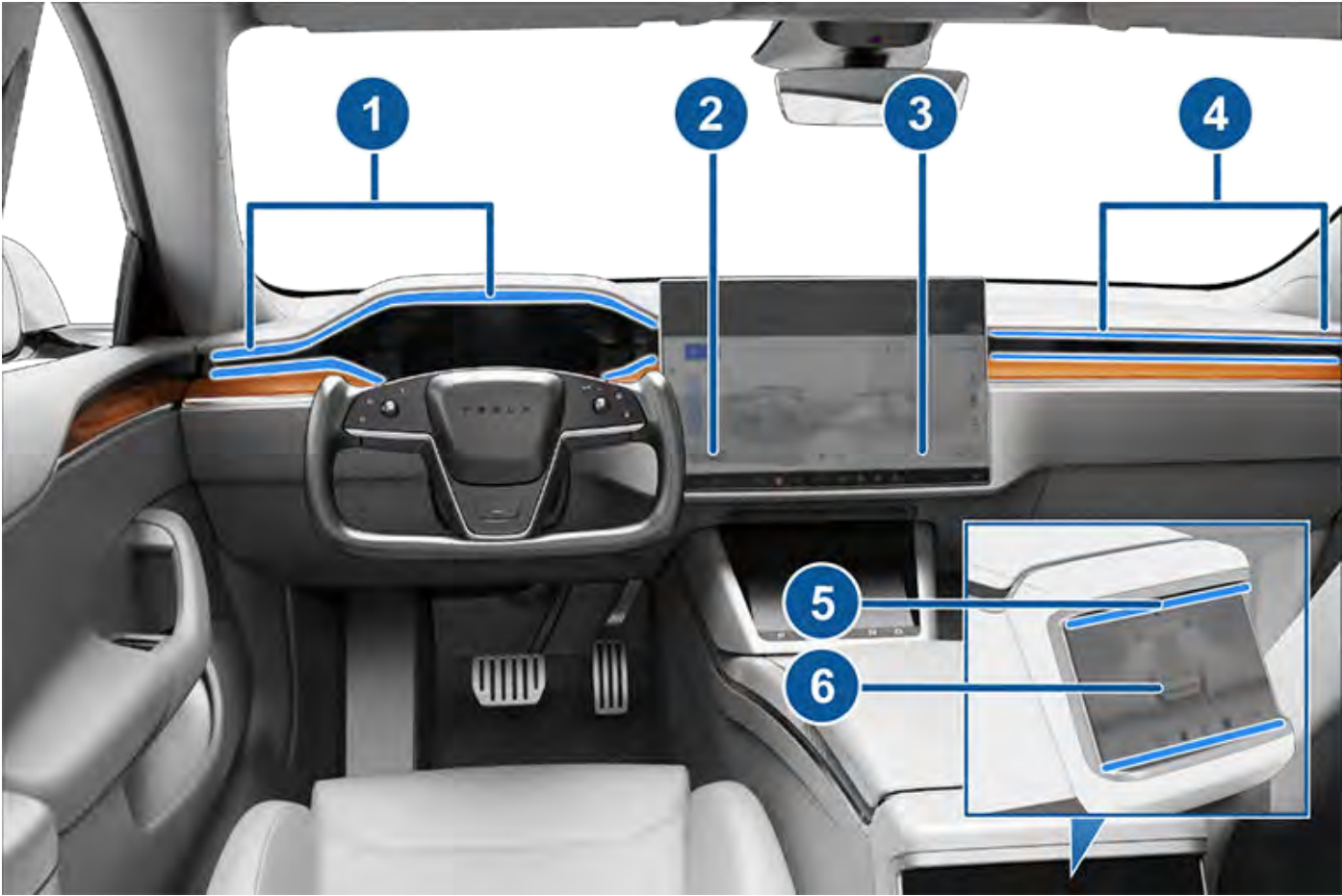
CybertruckModel SModel XModel 3Model Y has one or more air filters to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

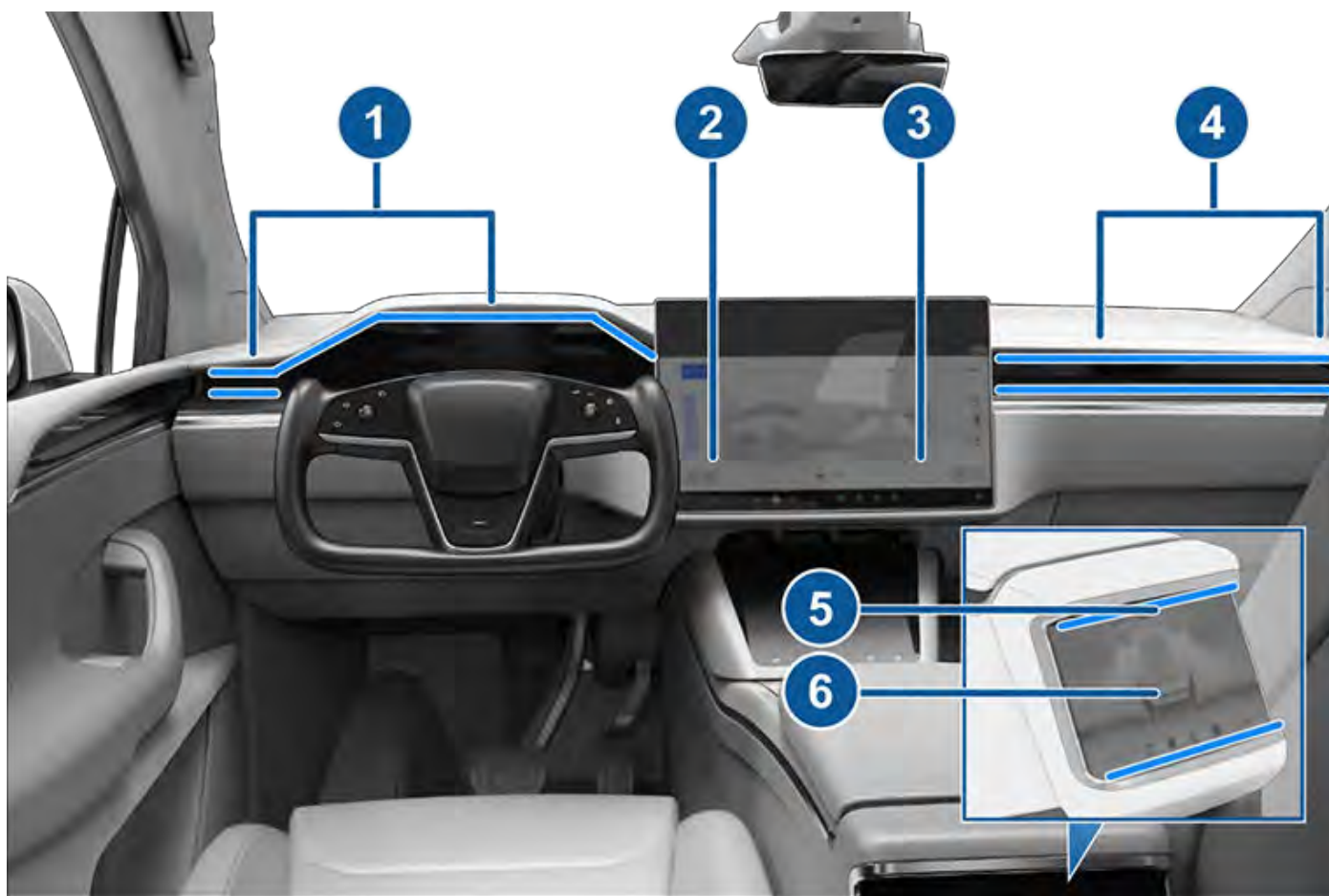
NOTE: Cabin air filter(s) require periodic replacement. See [Service Intervals on page 750](#).

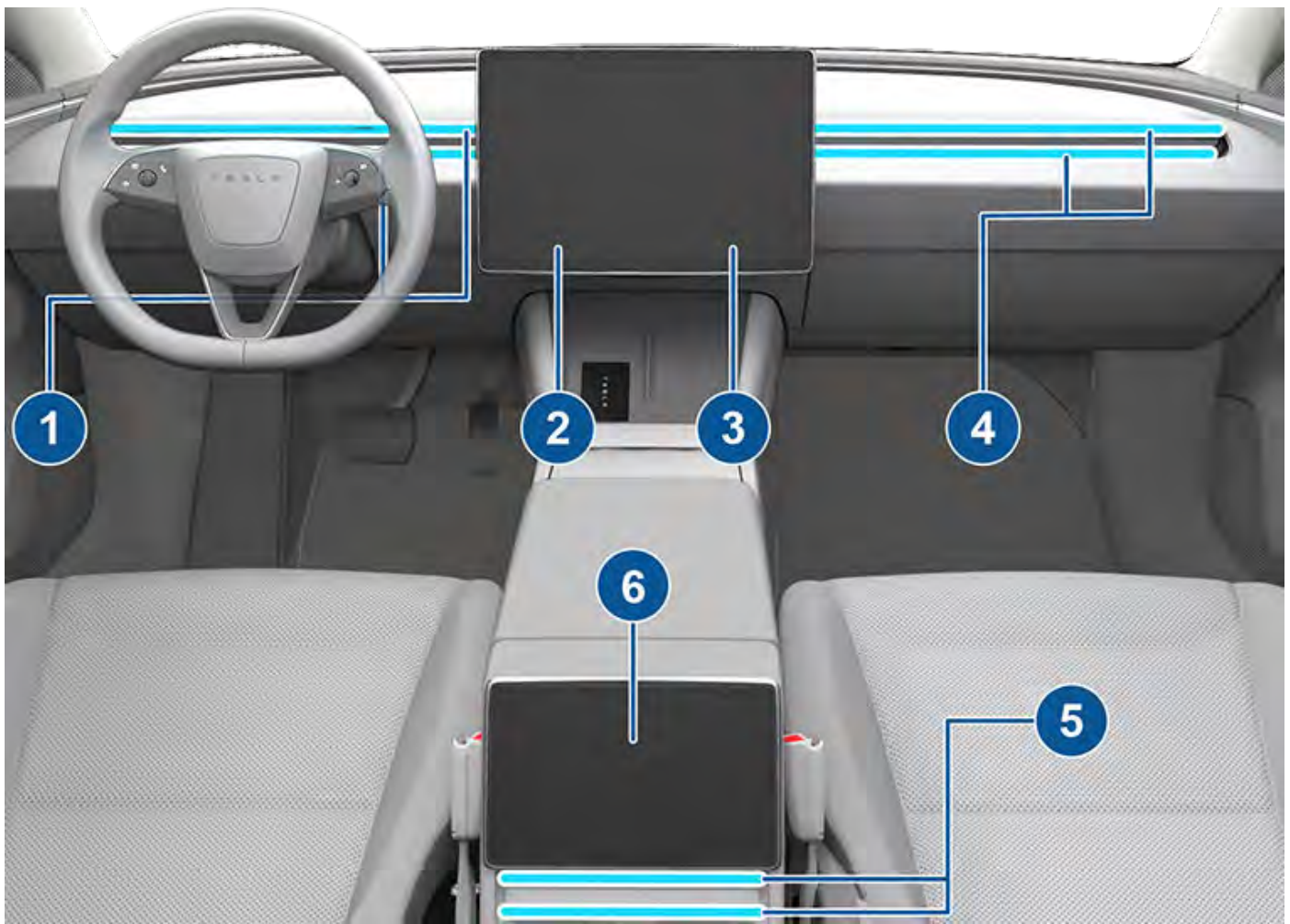


Adjusting the Front and Rear Vents

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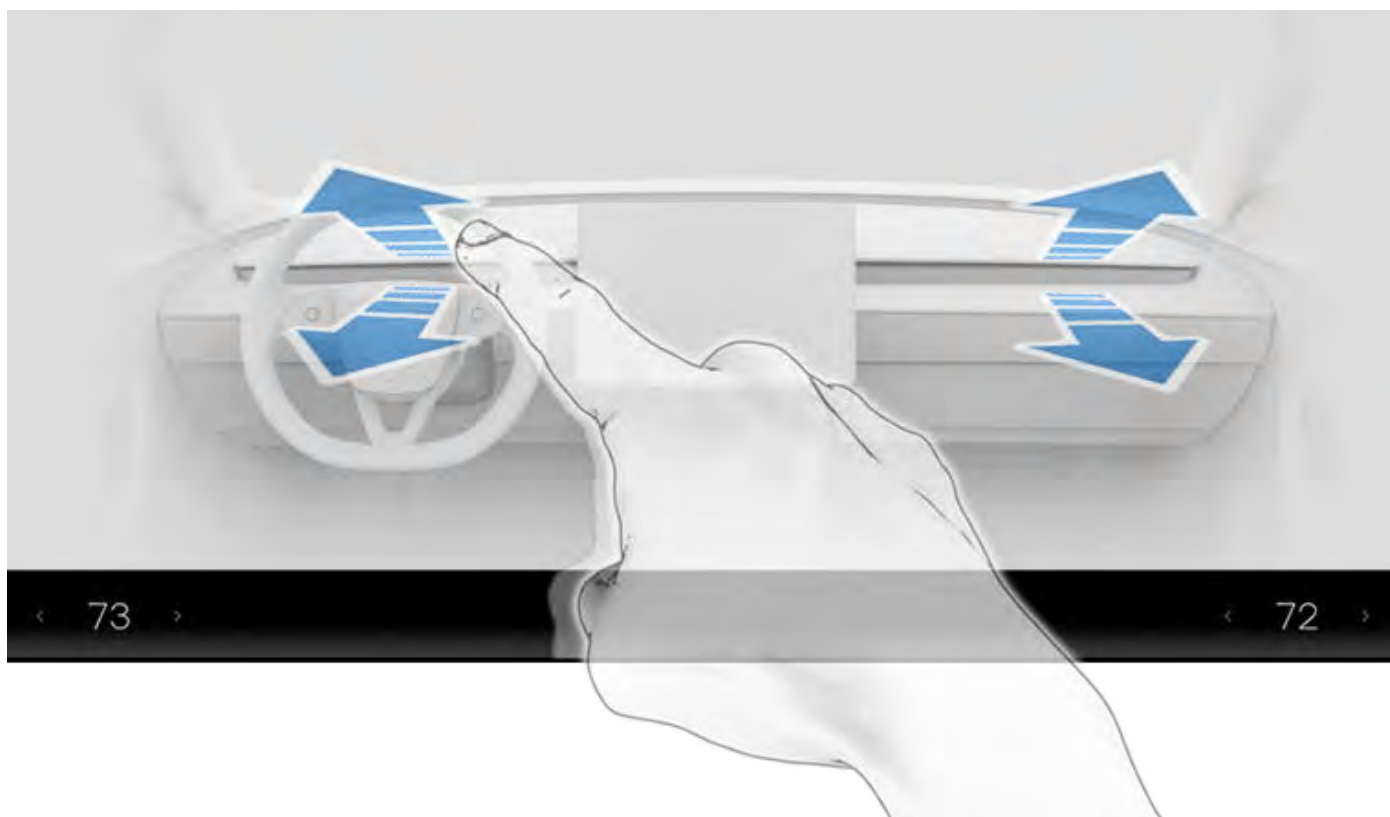




- 1. Driver vents
- 2. Driver controls
- 3. Passenger controls
- 4. Passenger vents
- 5. Rear vents
- 6. Rear controls



Using the touchscreens, you can pinpoint exactly where you want to direct the air flowing from this vent when heating or cooling the cabin. When the face-level vent is on you can adjust the direction of the air flow from each vent. To adjust the direction of the air flow, touch the radiating air waves from the corresponding vent on the touchscreen. The air flows in a single stream when centered or splits into mirrored air streams when air is directed outward or inward from the center of the vent.



To turn the front passenger vent off while the climate control system is on, touch the front passenger air wave on the touchscreen and follow the instructions.

NOTE: When you split a vent into two separate air flows, the air flow in each direction is not as strong as when all air is flowing in a single direction.

NOTE: Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions, such as leaves and snow.

Cabin Air Filter(s)

CybertruckModel SModel XModel 3Model Y has one or more air filters to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

NOTE: Cabin air filter(s) require periodic replacement. See [Service Intervals on page 750](#).



Cold Weather Best Practices

To ensure that CybertruckModel SModel XModel 3Model Y provides you with the best ownership experience possible in harsh cold weather conditions, follow these best practices.

Before Driving

When snow and ice accumulate on your vehicle, moving parts, such as the door handlesdoors, windows, mirrors, and wipers the wiper can freeze in place. To achieve maximum range and performance, it is helpful to warm the cabin and Battery before driving. There are several ways to do so:

- Touch **Schedule**, available on both the charging and climate control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).
- In the mobile app, navigate to **Climate** to customize the temperature at which you want to heat the cabin. This also warms the high voltage Battery as needed.
- In the mobile app, navigate to **Climate > Defrost Car > Defrost** to melt snow, ice, and frost on the windshield, charge port, charge port (if equipped), windows, and mirrors. This also warms the high voltage Battery as needed.

NOTE: Tesla recommends activating climate settings at least 30–45 minutes before departure (see [Operating Climate Controls on page 669Operating Climate Controls on page 1338](#)). Preconditioning times depend on outside temperature and other factors. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

Charge Port

If your charge port latch freezes in place and a charging cable becomes stuck in the charge port, try manually releasing the charge cable. See [Manually Releasing Charge Cable on page 737Manually Releasing Charge Cable on page 740Manually Releasing Charge Cable on page 737Manually Releasing Charge Cable on page 1375](#).

In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In these weather conditions, on some vehicles, you can thaw ice on the charge port latch so the charge cable can be removed and inserted. To do so, enable **Defrost Car** using the mobile app.

In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use the **Defrost Car** setting in the mobile app. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

You can also prevent the occurrence of a charge port latch freezing in place by using the **Schedule** settings (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).

NOTE: If your charge port latch is frozen in place, it may not lock the charging cable in place when inserted, but it can still charge at a slow AC rate even if the latch is not engaged.

Charging

By using Trip Planner (if available) to navigate to a Tesla charging location, CybertruckModel SModel XModel 3Model Y preheats the high voltage Battery to ensure when you arrive at the charger, the temperature of the Battery is optimal and ready to charge. This reduces the amount of time it takes to charge. See (see [Trip Planner on page 705](#)).

NOTE: Tesla recommends using Trip Planner to navigate to a charging location for at least 30–45 minutes before arrival to ensure optimal Battery temperature and charging conditions. If the drive to the charging location is less than 30–45 minutes, consider preconditioning the Battery before driving (see [Before Driving on page 693](#)).

NOTE: The thermal system may produce steam under certain conditions for vehicles equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**). For example, odorless steam can come from the front of your vehicle while charging at a Supercharger in cold temperature. This is normal and not a cause for concern.

Windows

In the mobile app, go to **Climate** and select **Defrost CarDefrost Truck**, which helps melt snow, ice, and frost on the windshield, windows, and mirrors.



In cold temperatures, CybertruckModel SModel XModel 3Model Y automatically makes a slight adjustment to the position of the windows to make it easier to open doors.

NOTE: Always connect to an external, low voltage power supply before opening a door when the vehicle has no power to avoid breaking a window.

Use the mobile app to schedule a service appointment for Tesla to provide hydrophobic coating to the side and rear windows (not the front windshield) for a nominal fee.

Doors

In severe winter conditions, ice buildup can make it more difficult to open door handles. You can use the mobile app to pop open the driver door in this situation.

1. In the mobile app, touch and hold any of the four quick control buttons and follow the instructions to customize quick controls with **Unlatch Door**.
2. When you are next to your car, touch **Unlatch Door** to pop open the driver door.

Removing Ice From Door Handle

In severe winter conditions, ice buildup within the door handle can prevent the door handle from opening. The process for freeing a CybertruckModel SModel XModel 3Model Y door handle is slightly different than others to remove ice buildup.

NOTE: Preemptively applying WD-40 to the door handle pivot pins can help prevent ice buildup inside your door handle.

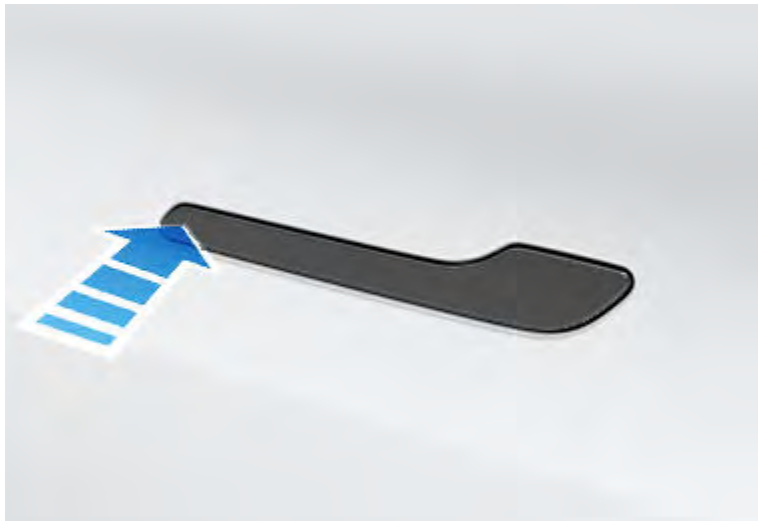


CAUTION: Do not attempt to use tools or excessive force to release the door handle from ice buildup.

If your vehicle's door handles are black: Perform the following to remove ice from the door handle:



1. Forcefully press the frontmost part of the door handle. It will rock slightly inward to help break the ice.



2. Press the rearmost part of the door handle to try to open as you normally would.
3. Once the door handle is able to move, open and close it a few more times to release any remaining ice buildup. Make sure the door handle is fully pressed in (retracted) prior to entering the vehicle, and check that the door is fully closed before driving away.

If your vehicle's door handles are silver: You can usually remove the ice with a few forceful bumps to the door handle using the bottom of your fist. Perform the following to remove ice from the door handle:

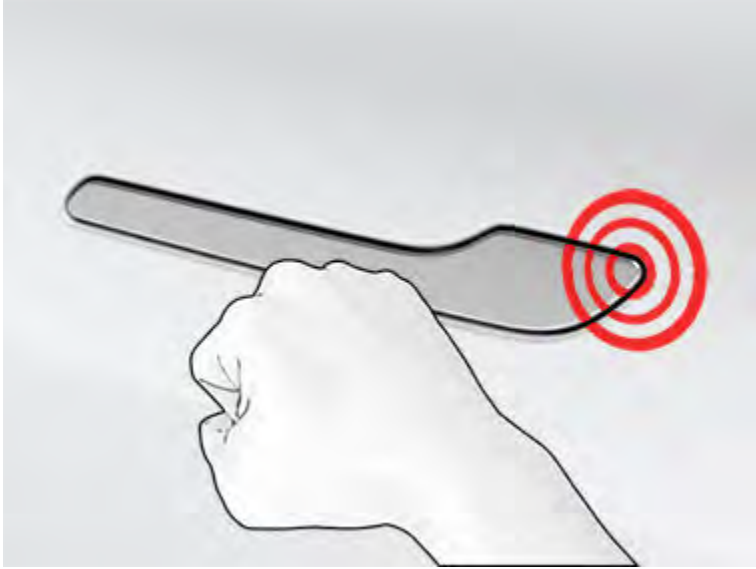
⚠ CAUTION: Remove any jewelry or objects that can damage the paint prior to performing the procedure, and do not attempt to use tools or excessive force.



1. Forcefully press the rearmost part of the door handle to try to open the door handle.
2. Working in a circular pattern around the perimeter of the door handle, use the bottom of your fist to forcefully bump the door handle to break and release the ice buildup.



3. Aiming for the rearmost end of the wide part of the door handle, use the bottom of your fist to forcefully bump the door handle. Increase the intensity of the bumps as necessary, repeating steps 1 through 3 until the ice is removed and the door handle can be opened.



⚠ CAUTION: Never bump the vehicle so hard as to cause a dent; the force used should be similar to knocking on your neighbor's front door.

4. Once the door handle is able to move, open and close it a few more times to release any remaining ice buildup. Make sure the door handle is fully pressed in (retracted) prior to entering the vehicle, and check that the door is fully closed before driving away.

Mirrors

If ice buildup is expected when parking, turn off **Auto-Fold Mirrors**. Touch **Controls > Vehicle > Auto-Fold**. Ice can prevent exterior side mirrors from folding or unfolding.

NOTE: Side mirrors automatically heat as needed during preconditioning, or when the rear defroster is turned on.

Wipers

If you expect snow or ice to build up when parked, touch **Controls > Service > Wiper Service Mode**. This raises the wipers against the windshield so they can defrost when the windshield defrosts (see [Wipers and Washers on page 453](#)). You can also turn on wiper defrosters (if equipped). See [Operating Climate Controls on page 669](#).

Tires and Tire Chains

Use winter tires to increase traction in snowy or icy conditions. You can purchase winter tires on the Tesla Shop (see [Seasonal Tire Types on page 769](#)) (see [Seasonal Tire Types on page 1405](#)).

Tire chains provide additional traction when driving in snowy or icy conditions. Check local regulations to determine if tire chains are recommended or required during winter months. See [Using Tire Chains on page 770](#) [Tire Chains on page 1406](#) for more information.

Your vehicle's tire pressures will drop in cold ambient temperatures. If the TPMS indicator light appears, inflate the tires before driving. The tires will lose one PSI for every 10° F (6° C) drop in outside temperature (see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#)). Proper tire pressures help protect tires from potholes and improve range when properly inflated.

While Driving

Cold weather can increase energy consumption because more power is required for driving, cabin and Battery heating. Follow these suggestions to reduce energy consumption:



- Use seat heaters to keep warm. Seat heaters use less energy than the cabin heater. Lowering the cabin temperature and using seat heaters reduces energy consumption (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)).
- Slow down your driving and avoid frequent and rapid acceleration.
- Turn on Range Mode to automatically limit the power that the climate control system uses to maintain the temperature of the Battery and the cabin area. Range Mode also turns off signature lights (if equipped) and adjusts the front and rear motor torque split to maximize range (see [Getting Maximum Range on page 745](#)).
- If your vehicle is equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls** > **Software** > **Additional Vehicle Information**), you can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.
- You can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)[Acceleration Modes on page 501](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.

Regenerative Braking

Regenerative braking can be limited if the Battery is too cold. As you continue to drive, the Battery warms up and regenerative power increases (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)).

NOTE: Limited regenerative braking can be avoided if you allow enough time to precondition your vehicle or if you use **Schedule** to precondition CybertruckModel SModel XModel 3Model Y before your departure time (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).

NOTE: Installing winter tires can result in temporarily reduced regenerative braking power but after a short period of driving, CybertruckModel SModel XModel 3Model Y recalibrates to correct this. Touch **Service** > **Wheel & Tire** > **Tires** to select winter tires and quicken this process.

Cold Battery



A blue snowflake icon appears on your instrument panel touchscreen when some of the stored energy in the Battery is unavailable because the Battery is cold. This portion of unavailable energy displays in blue on the Battery meter. Regenerative braking, acceleration, and charging rates may be limited. The snowflake icon no longer displays when the Battery is sufficiently warm.

After Driving

Leave CybertruckModel SModel XModel 3Model Y plugged in when not in use. This uses the charging system, rather than the Battery itself, to keep the Battery warm (see [High Voltage Battery Information on page 724](#)).

Scheduled Departure

When parked, plug in CybertruckModel SModel XModel 3Model Y and use the **Schedule** settings, available on both the charging and climate control screens, to set a time when you want to precondition CybertruckModel SModel XModel 3Model Y (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)). You can also use **Schedule** to prevent the charge port latch freezing in place. Your vehicle determines the appropriate time to begin charging so it is complete during off-peak hours and the cabin and Battery are warm by your set departure time.

Storage

If you leave CybertruckModel SModel XModel 3Model Y parked for an extended period of time, plug the vehicle into a charger to prevent normal range loss and to keep the Battery at an optimal temperature. Your vehicle is safe to stay plugged in for any length of time.

When not in use, CybertruckModel SModel XModel 3Model Y enters a sleep mode to conserve energy. Reduce the number of times you check your vehicle's status on the mobile app, as this automatically wakes up your vehicle and starts normal energy consumption.



Hot Weather Best Practices

To ensure that CybertruckModel SModel XModel 3Model Y provides you with the best ownership experience possible in hot ambient conditions, follow these best practices.

Before Driving

There are several ways to prepare your vehicle for a drive, without having to get into an already hot vehicle:

- Precondition the cabin by moving the direction of air flow from the vents, and turn the seat heaters on or off. In the mobile app, navigate to **Climate** to customize the temperature at which you want to cool the cabin.
- Touch **Schedule**, available on both the Charging and Climate Control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).
- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C or just the fan to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available).
- In the mobile app, navigate to **Controls** to vent the windows.

NOTE: Tesla recommends activating climate settings at least 30–45 minutes before departure (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)). Preconditioning times depend on outside temperature and other factors. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

After Driving

Leave CybertruckModel SModel XModel 3Model Y plugged in when not in use, especially if using Preconditioning or Cabin Overheat Protection. This uses the charging system, rather than the battery itself, to maintain a comfortable temperature (see [High Voltage Battery Information on page 724](#)). In addition, there are several ways to minimize a hot cabin:

- Before leaving your vehicle (to run errands, for example), use Dog Mode to keep the cabin cool for pets or perishable goods. See [Keep Climate On, Dog, and Camp on page 677](#)[Keep Climate On, Dog, and Camp on page 1340](#) for more information.
- Tesla recommends turning the air conditioning off approximately 30 seconds before pressing Park to reduce puddling below the vehicle.
- Park in the shade to help reduce power consumption and maintain cooler cabin temperatures.
- Use a sun shade (available on the Tesla Shop) if you have to park outside in the sun.
- When parked, plug in CybertruckModel SModel XModel 3Model Y and **Schedule** your charging. Your vehicle determines the appropriate time to begin charging so it is complete during off-peak hours. The cabin and Battery are also prepared by your set departure time. For more information, see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#) .

Charging

When using Trip Planner or navigating to a Supercharger station, your vehicle automatically prepares the Battery for most efficient charging. In extreme heat, you may not see the message that the vehicle is preconditioning the Battery while navigating to a Supercharger, but it is still preparing the Battery for charging.

NOTE: Tesla recommends using Trip Planner to navigate to a charging location for at least 30–45 minutes before arrival to ensure optimal Battery temperature and charging conditions. If the drive to the charging location is less than 30–45 minutes, consider preconditioning the Battery before driving (see [Before Driving on page 693](#)).

If possible, leave your vehicle plugged into a charger whenever not in use, even in warm weather, especially if using Preconditioning or Cabin Overheat Protection.

Storage

If you leave CybertruckModel SModel XModel 3Model Y parked for an extended period of time, plug the vehicle into a charger to prevent normal range loss and to keep the Battery at an optimal temperature. Your vehicle is safe to stay plugged in for any length of time.



When not in use, CybertruckModel SModel XModel 3Model Y enters a sleep mode to conserve energy. Reduce the number of times you check your vehicle's status on the mobile app, as this automatically wakes up your vehicle and starts normal energy consumption.

Navigation and Entertainment

Maps and Navigation

Map Overview

The touchscreen displays a map at all times (except when CybertruckModel SModel XModel 3Model Y is shifted into Reverse).

Use your finger(s) to interact with the map:

- To move the map in any direction, hold and drag a finger.
- To rotate the map in any direction, hold and turn two fingers.
- To zoom the map in or out, expand or pinch two fingers, respectively.

NOTE: When you rotate or move the map, your current location is no longer tracked. The message "Tracking Disabled" displays briefly next to the map orientation icon and the icon turns gray. To re-enable tracking, touch the map's orientation icon and choose North Up or Heading Up.

NOTE: The map zooms in and out automatically when a navigation route is active.

To change the orientation of the map, toggle between these options:



North Up: North is always at the top of the screen.



Heading Up: The direction you are driving is always at the top of the screen. The map rotates as you change direction. This icon has an integrated compass that indicates the direction you are driving.

NOTE: Touching this icon while navigating to a destination displays the route overview.



Route overview is available when you are navigating to a destination and displays when you expand the turn-by-turn direction list (by swiping it downward). When you collapse the turn-by-turn direction list by swiping it upward, the map displays your previously chosen orientation.

Map Display

When CybertruckModel SModel XModel 3Model Y is in Park, the following icons display on the map to allow you to customize the type of information the map displays. To access these icons when driving, touch anywhere on the map (they disappear after a few seconds).



Satellite imagery (if equipped with premium connectivity).



Traffic conditions (if equipped with premium connectivity).



Map details (such as points of interest).

Drop a pin anywhere on the map by pressing and holding your finger on a desired location. When you drop a pin, or touch an existing pin, the chosen location is centered on the map and a popup screen provides information about the location. From this popup, you can navigate to the location add or remove the location from your list of favorite destinations (see [Home, Work, and Favorite Destinations on page 703](#)).



Charging locations. Shows a popup list that includes the city and proximity of the corresponding stations on the map. Charging locations include Tesla Superchargers, destination charging sites, third-party fast chargers, and public chargers that you have used previously. See [Charging Locations on page 703](#). Touch the lightning bolt icons in the popup list to filter by the types of chargers based on max power.

NOTE: In some market regions, third-party fast chargers are also included on the map as dark gray pins when you display chargers.

Navigation Settings

NOTE: The navigation settings available can vary depending on region and vehicle configuration.



The navigation settings icon displays when you touch ... once you start navigating to a destination.

NOTE: You can also access navigation settings by touching **Controls > Navigation**.

Touch the navigation settings icon to customize the navigation system to suit your preferences (the available settings vary depending on your market region and vehicle configuration):

- **Navigation Guidance:** Touch **Voice** to enable an audible reading for navigation instructions.
- Touch **-** or **+** to increase or decrease the volume of spoken navigation instructions. Decreasing all the way to the left or touching the speaker icon mutes the instructions. You can also mute/unmute navigation instructions by touching the speaker icon. This volume setting applies only to the navigation system's spoken instructions. Volume for Media Player and Phone does not change.
NOTE: Volume may automatically be adjusted based on driving speed and climate settings.
NOTE: Navigation instructions are muted when the paired phone has an ongoing phone call.
- Enable **Automatic Navigation** if you want CybertruckModel SModel XModel 3Model Y to automatically initiate a navigation destination when you get in your vehicle. Destinations are predicted based on commonly driven routes, time of day, and calendar entries (see [Automatic Navigation on page 702](#)).
- Enable **Trip Planner** (if available in your market region) to add Supercharger stops as needed. Supercharging stops are added to navigation routes with the goal of minimizing the amount of time you spend driving and charging (see [Trip Planner on page 705](#)).
- Enable **Online Routing** to automatically route to avoid heavy traffic and to get real-time traffic conditions along navigation routes, if available in your region (see [Online Routing on page 705](#)).
- Touch **Avoid Ferries** to be automatically routed to avoid ferries.
- Touch **Avoid Tolls** to be automatically routed to avoid tolls, if possible.
- Touch **Use HOV Lanes** to include High Occupancy Vehicle (HOV) lanes on navigation routes. This is particularly useful when using Navigate on Autopilot (see [Navigate on Autopilot on page 592](#)[Navigate on Autopilot on page 561](#)).



Navigating to a Destination

To navigate to a location, touch the search bar in the corner of the map and enter a destination, send the destination from your phone, or use voice commands (see [Voice Commands on page 97](#)) for an address, landmark, business, etc. When you touch the search bar, you can also choose from the following types of locations:

- A saved **Home** or **Work** location (see [Home, Work, and Favorite Destinations on page 703](#)).
- A **Charging** destination (see [Charging Locations on page 703](#)).
- A **Recent** destination (the most recent destination is listed at the top).
- A destination you have marked as a **Favorite** (see [Home, Work, and Favorite Destinations on page 703](#)).
- A popular restaurant when you're feeling **Hungry** or a popular destination (such as museums and amusement parks) when you're feeling **Lucky** (see [Lucky and Hungry on page 702](#)).

NOTE: You can start navigation remotely from your iOS® or Android™ device using the "share" functionality on your device after allowing access to the Tesla mobile app.

When you specify a location, the touchscreen zooms out to provide an overview of the route you need to travel and displays a turn-by-turn direction list. Estimated arrival time, driving time, and mileage displays at the bottom of the direction list. Note the following about the turn-by-turn direction list:

- The Battery icon on the turn list provides a visual representation showing an estimate of how much energy will remain when you reach your destination, and how much will remain if you make a round trip back to your current location. See [Predicting Energy Usage on page 704](#).
- If charging is needed to reach your destination and Trip Planner is enabled (and available in your market region), the navigation route automatically includes Supercharger stops (see [Trip Planner on page 705](#)).
- If you won't have enough energy to reach your destination and there is no Supercharger on the route, an alert tells you that charging is needed to reach your destination.
- Each turn is preceded by the distance to the maneuver.
- To see the bottom of the list, you may need to drag the list upward.
- Touch the top of the list to minimize it.

While navigating, the map tracks your location and displays the current leg of your trip. You can display the entire route at any time by swiping down to expand the turn-by-turn direction list or touching the route overview icon.

Below the turn-by-turn list, a progress bar shows how close you are to your destination or next stop. If online routing is enabled, the progress bar also shows live traffic conditions on your route (see [Online Routing on page 705](#)).

To stop navigating, touch **Cancel**, located in the bottom corner of the turn-by-turn direction list. Swipe right on the suggested location or press and hold the location to quickly delete certain recent navigation searches.

NOTE: If a data connection is not available, onboard maps allow you to navigate to any destination, but you must enter the exact and complete address.



If **Navigate on Autopilot** is enabled, you can turn it on for the navigation route by touching **Navigate on Autopilot** in the turn-by-turn direction list (when the feature is active, the icon is blue). **Navigate on Autopilot** automatically changes lanes and steers CybertruckModel SModel XModel 3Model Y on controlled-access roads (like highways and freeways), along a navigation route. For details, see [Navigate on Autopilot on page 592](#)[Navigate on Autopilot on page 561](#).





Selecting an Alternate Route

Depending on market region and vehicle configuration, this feature may not be available on your vehicle. Your vehicle must be equipped with Premium Connectivity.

After you have entered a destination with one stop, the map displays up to three alternate routes. This allows you to easily compare total travel time and traffic information for each route. If you do not select a preferred route within the timeout period, the fastest route is automatically selected.

Adding Stops to a Route

After entering a destination, edit your route by adding, deleting or reordering stops. Touch the three dots at the bottom of the turn-by-turn direction list to view options to edit your route.



Add Stop allows you to add a stop by searching for a location or adding a Home, Recent or Favorite destination. You can also add a stop by touching any pin on the map and selecting **Add** from the popup.



Edit Stop allows you to set up a complex trip by adding or deleting stops on your route. Drag and drop stops by touching the equal sign to reorder your trip.

You can also use the Tesla mobile app to edit your route (if available in your region). In the Tesla mobile app, go to **Locations > Navigate** and enter a destination, touch **Edit Trip > Add Stop** to edit your route, then touch **Send to Car** to share the trip with your vehicle.

NOTE: Requires Tesla mobile app version 4.27.5 or newer.

Automatic Navigation

NOTE: Automatic Navigation may not be available in all market regions and on all vehicle configurations.

Automatic Navigation can predict a destination when you get in your vehicle. When your phone's calendar is synced to CybertruckModel SModel XModel 3Model Y, and the calendar includes an event that takes place within two hours of when you get in your vehicle to drive, Automatic Navigation suggests the location of the event (assuming a valid address is associated with the event).

In addition, if you are Home and drive on weekdays (Monday to Friday) from 5:00 AM to 11:00 AM, Automatic Navigation can automatically route you to your specified Work location (see [Home, Work, and Favorite Destinations on page 703](#)). Likewise, if you are at work on weekdays from 3:00 PM to 11:00 PM, Automatic Navigation can automatically route you to your specified Home location.

To enable Automatic Navigation, touch **Controls > Navigation > Automatic Navigation**. You must have your phone's calendar synced to CybertruckModel SModel XModel 3Model Y and the event must include a uniquely specified and valid address (see [Phone, Calendar, and Web Conferencing on page 363](#)).

NOTE: Navigation instructions that you enter manually, or send to CybertruckModel SModel XModel 3Model Y, override routes suggested by Automatic Navigation.

Lucky and Hungry

NOTE: Features may not be available in all market regions and on all vehicle configurations.

In addition to navigating to a destination of your choice, CybertruckModel SModel XModel 3Model Y can also suggest nearby locations based on whether you are feeling **Hungry** or **Lucky**. In the navigation search bar, touch **Hungry** or **Lucky**. **Hungry** suggests a list of popular restaurants, whereas **Lucky** suggests a list of popular destinations (such as museums and amusement parks). Once you discover an interesting destination, touch **Navigate** to proceed to the destination.

This feature requires the latest version of Navigation maps. To download, connect CybertruckModel SModel XModel 3Model Y to Wi-Fi and touch **Controls > Software** to check if an update is available (see [Map Updates on page 706](#)).



Home, Work, and Favorite Destinations

If you frequently drive to a destination, add it as a favorite to avoid entering the location's name or address each time. When you add a destination as a Favorite, you can easily navigate to it by touching the navigation search bar and then touching **Favorites** and choosing it from your list of favorite destinations.



To add a destination to your Favorites list, touch its pin on the map, then touch the star icon on the popup screen that appears. Enter a name (or leave as-is to accept the default name), then touch **Add to Favorites**. The star becomes solid and the destination is included on your Favorites list.

To delete a Recent or Favorite destination, touch it on the destination list and hold it down briefly until the **X** appears. Then touch the **X** to delete it from the list.

Home and **Work** locations also display under the navigation search bar. Touch to set an address to the corresponding location. After entering the address, touch **Save as Home** or **Save as Work**. Then simply touch these shortcuts whenever you want to navigate home or to work.

To change or delete the corresponding address, press and hold the **Home** or **Work** icon. A popup allows you to enter a new address and **Save as Home** or **Save as Work**. Once a Home or Work location is saved, CybertruckModel SModel XModel 3Model Y may prompt you to navigate to your Work location in the mornings and to your Home location in the evenings and provide an estimated driving time based on current traffic conditions. See [Automatic Navigation on page 702](#). Touch **Clear Home** or **Clear Work** to remove associated addresses entirely. Based on your usage patterns, CybertruckModel SModel XModel 3Model Y may prompt you to save a location as Home or Work.

For security reasons, if you sell, transfer ownership, or allow others to drive CybertruckModel SModel XModel 3Model Y, it is recommended that you delete your Home and Work locations. You can delete these individually or you can perform a factory reset to erase all personal data (touch **Controls** > **Service** > **Factory Reset**).

Charging Locations

To display charging locations on the map, touch the map's search bar, then touch **Charging**. Charging locations are shown in a list (with the closest charging location at the top of the list) and represented by corresponding pins on the map. Touch a pin to display more information, navigate to, or mark it as a favorite.

Touch the lightning bolt icons to specify the types of charging locations you want the map to include (by default, the map displays only Superchargers):



Touch to include low power stations up to 25 kW, such as destination charging locations.

Touch to include low power stations up to 70 kW, such as destination charging locations.

Touch to include low power stations up to 70 kW, such as destination charging locations.



Touch to include medium power chargers 25 kW to 75 kW.



Touch to include high power chargers 75 kW and above.

Touch to include high power chargers above 70 kW.

Touch to include high power chargers above 70 kW.

NOTE: In some market regions, third-party fast chargers are also included as dark gray pins when you choose to display all charging stations.

The appearance of a charging location's pin reveals the predicted status about the location. Touch the pin to display details.



Owners Manual



The Supercharger location is operational and the number displayed on the pin represents the predicted number of available Supercharger stalls upon arrival.

NOTE: A Supercharger located on your current navigation route is colored black (or white, if the touchscreen is in night mode).



The Supercharger location is predicting a high volume of users. You may need to wait before charging.



The Supercharger location may be operating at a reduced capacity.



The Supercharger location may be closed.



The Supercharger location has no data available but should be operational.



The location is either a destination charging location, a third-party fast charger, or a public charging station that you have previously used. Touch to display more information such as usage restrictions and available charge current.

NOTE: When the map is zoomed out and more than one destination charging location is available in an area, the pin is round and displays the number of stations. Touch the pin to zoom in. Then you can touch an individual pin for details about a specific location.

Touch a charging location's pin to display a popup from which you can:

- Determine its exact location and approximate distance from your current location.
- View amenities that are available at the charging location, including restrooms, restaurants, lodging, shopping, and Wi-Fi. On a Supercharger popup, touch an amenity icon to search the surrounding area for the associated amenity.
- Touch the arrow icon to navigate to the charging location.

NOTE: When navigating to a Supercharger (or third-party fast charger in some regions), CybertruckModel SModel XModel 3Model Y preconditions the Battery to prepare for charging. This ensures you arrive with an optimal Battery temperature, reducing the amount of time it takes to charge. In some circumstances (such as cold weather), it is normal for the motor(s) and components to make noise as it generates heat to warm the Battery (see [Charging on page 693](#)).

- View how busy a Supercharger location typically is during different times of the day, along with corresponding charging fees and idle fees (see [Supercharger Fees on page 736](#)[Supercharger Fees on page 1375](#)).

Predicting Energy Usage

When navigating to a destination, CybertruckModel SModel XModel 3Model Y helps you anticipate your charging needs by calculating the amount of energy that remains when you reach your destination. When navigating, the map displays this calculation next to the Battery icon on the turn-by-turn direction list (see [Navigating to a Destination on page 701](#)). When the turn-by-turn direction list is compressed, touch the top of the list to expand it.



The calculation that predicts how much energy you will use is an estimate based on driving style (predicted speed, etc.) and environmental factors (wind speed and direction, ambient and forecasted temperatures, air density and humidity, etc.). As you drive, CybertruckModel SModel XModel 3Model Y continuously learns how much energy it uses, improving accuracy over time. CybertruckModel SModel XModel 3Model Y predicts energy usage based on the driving style of the individual vehicle. For example, if you drive aggressively for a period of time, future range predictions will assume higher consumption. Some factors that contribute to predicted energy (such as forecasted temperatures and wind speed) are available only when CybertruckModel SModel XModel 3Model Y has internet connectivity.

NOTE: If you purchase a used Tesla vehicle, it is recommended that you perform a factory reset (**Controls > Service > Factory Reset**) to ensure the predicted energy is as accurate as possible.

Throughout your route, CybertruckModel SModel XModel 3Model Y monitors energy usage and updates the estimate of energy remaining at the end of your trip. A popup warning displays on the turn-by-turn direction list in these situations:

- A yellow warning displays when you have very little energy remaining to reach your destination, requiring you to drive slowly to conserve energy. For tips on conserving energy, see [Getting Maximum Range on page 745](#).
- A red warning displays when you must charge to reach your destination.

To determine if you have enough energy for a round trip, touch the Battery icon on the turn-by-turn direction list to display an estimated calculation of your round trip energy usage.

Online Routing

CybertruckModel SModel XModel 3Model Y detects real-time traffic conditions and automatically adjusts the estimated driving and arrival times. In situations where traffic conditions may delay your estimated time of arrival and an alternate route is available, the navigation system can reroute you to your destination. To decline the alternate route, tap the reroute notification on your touchscreen. You can also specify the minimum number of minutes that must be saved before you are rerouted. Turn this feature on or off by touching **Controls > Navigation > Online Routing**.

When **Online Routing** is enabled, real-time traffic condition icons display along navigation routes when detected, if available in your region (Premium Connectivity required).



Appears when a speed camera is detected. As you are approaching the speed camera, CybertruckModel SModel XModel 3Model Y can also sound a chime. To enable this feature, touch **Controls > Navigation > Speed Camera Chime**.



Displays stop signs and traffic lights.

Trip Planner

Trip Planner (if available in your region) helps you take longer road trips with confidence. If reaching your destination requires charging, Trip Planner routes you through the appropriate Supercharger locations. Trip Planner selects a route and provides charging times to minimize the amount of time you spend driving and charging. To enable Trip Planner, touch the map's settings icon (see [Navigation Settings on page 700](#)), then touch **Trip Planner**.

When Trip Planner is enabled and charging is required to reach your destination, the turn-by-turn direction list includes Supercharger stops, recommended charging times at each Supercharger, and an estimate of how much energy will be available when you arrive at the Supercharger location.

To remove Supercharger stops and display directions only, touch **Remove all charging stops** at the bottom of the turn-by-turn direction list. If you remove charging stops, the turn-by-turn direction list may display an alert indicating that charging is needed to reach your destination. To add Supercharger stops back to the turn-by-turn direction list, touch **Add charging stops**.

While charging at a Supercharger, the charging screen displays the remaining charging time needed to drive to your next Supercharger stop or destination (if no further charging is needed). If you charge for a shorter or longer length of time, charging time at subsequent Supercharger stops is adjusted accordingly. You can also use the mobile app to monitor remaining charging time needed.



NOTE: When navigating to a Supercharger or, in some regions, a third-party fast charger using Trip Planner, CybertruckModel SModel XModel 3Model Y may allocate some energy to pre-heat the Battery to arrive at the Supercharger or third-party fast charger with an optimal Battery temperature. This reduces charging time (see [Charging on page 693](#)).

If Trip Planner estimates that you won't have enough energy for your round trip, and there are no Superchargers available on your route, Trip Planner displays an alert at the top of the turn-by-turn direction list notifying you that charging is needed to reach your destination.

NOTE: If a Supercharger on your navigation route experiences an outage, Trip Planner displays a notification and attempts to reroute you to a different Supercharger location.

Map Updates

As updated maps become available, they are automatically sent to CybertruckModel SModel XModel 3Model Y over Wi-Fi. To ensure you receive them, periodically connect CybertruckModel SModel XModel 3Model Y to a Wi-Fi network (see [Wi-Fi on page 359](#)). The touchscreen displays a message informing you when new maps are installed.



Media

Overview

NOTE: Media apps vary depending on market region, vehicle configuration, options purchased, and software version. Some apps described may not be available in your market region, or may be replaced by different ones.

The Media Player displays on the touchscreen and is used to play various types of media. You can drag Media Player upward to expand it (allowing you to browse), and downward to minimize it so that just the Miniplayer displays. The convenient Miniplayer, which occupies the least amount of space on the touchscreen, displays what's currently playing and provides only the basic functions associated with what's playing. You can also drag Media Player to display on the left or right side of the touchscreen.

Streaming services are available only when a data connection is available (for example, Wi-Fi or Premium Connectivity). For some media services, you can use a default Tesla account. For others, you may need to enter account credentials the first time you use it.

NOTE: Instead of launching a different media app, you can change the source from within the Media Player screen by choosing a source from the dropdown list.



Radio: Choose from a list of available radio stations or touch the numeric keypad to directly tune the radio to a specific frequency. Touch the next or previous arrows to move from one frequency to the next (or previous).



Bluetooth: Play audio from a bluetooth-connected phone or USB device (see [Playing Media from Devices on page 709](#)).



Streaming: Play the audio streaming service available in your market region (for example, Slacker Radio), if equipped.



Spotify: Play audio available on Spotify.

NOTE: A Spotify Premium account is required for use.



Apple Music: Play audio available on Apple Music.



Caraoke (if equipped): Sing along with various songs (see [Caraoke on page 709](#)).



Tuneln: Play audio available on Tuneln.



Tidal: Play audio available on Tidal.



Tidal: Play audio available on Tidal.



NOTE: You can show or hide any media app/source. See [Media Settings on page 708](#).

When listening to internet radio or a music streaming service, the options available on the Media Player screen vary depending on what you are listening to. Touch the next (or previous) arrows to play the next (and in some cases previous) available station, episode, or track. You can also play next/previous using the left scroll button on the steering wheelsteering yoke (or steering wheel).

NOTE: You can use voice commands to adjust media settings and preferences, such as volume control, playing certain songs, or switching the media source (see [Voice Commands on page 97](#)).

Volume Controls

Volume can be controlled by:

- Roll the scroll button on the left side of the steering wheelsteering yoke (or steering wheel) up or down to increase or decrease volume respectively. This adjusts the volume for media, voice commands, and phone calls.
- Volume may be adjusted based on your driving speed and climate settings.
- Touch the <> arrows associated with the speaker icon on the bottom corner of the touchscreen.
- To mute the volume, press the left scroll button. Press again to unmute.
- Pressing the left scroll button during a phone call mutes both the sound and your microphone.

Media Settings

NOTE: The settings available vary depending on market region. Also, a setting may not be applicable to all audio sources.

Press the settings icon located in the Media Player's search bar to access audio settings.



You can adjust these settings:

- **Tone:** Drag the sliders to adjust the subwoofer and any of the five frequency bands (Bass, Bass/Mid, Mid, Mid/Treble, and Treble). If equipped with premium audio, you can adjust the level of sound immersion to make your music experience more engaging by dragging the immersive sound slider according to your preferences.
- **Balance:** Drag the center circle to the location in CybertruckModel SModel XModel 3Model Y where you want to focus the sound.
- **Options:** Set preferences for optional features. For example, you can turn **DJ Commentary**, **Explicit Content** and **Allow Mobile Control** on or off.
- **Sources:** Displays all available media sources and allows you to choose whether you want to show or hide each source. You may want to hide media sources that you never use. Once hidden, the media source does not appear on the drop down list in Media Player, nor will it appear in the app tray when you touch the App Launcher. You can re-display a hidden media source at any time by returning to this settings screen.

Searching Audio Content



Touch Media Player's magnifying glass icon to search for a particular song, album, artist, podcast, or station. You can also use voice commands to search hands-free (see [Voice Commands on page 97](#)). If available, touch **HD®** to play high definition versions of the selected frequency.



SiriusXM Satellite Radio (if equipped)

If equipped, you can listen to SiriusXM, a subscription-based satellite radio service. To receive satellite radio channels, you must provide the radio service provider with the radio ID for your touchscreen.

To display the radio ID:


1. Touch the radio source icon, then select SiriusXM from the list.
2. Move the channel selector to channel 0.
3. The Radio ID displays in the station information area.

To select a SiriusXM channel, you can either manually scroll through channel numbers, or you can browse channels by category.

Caraoke

NOTE: Depending on vehicle configuration and market region, Caraoke may not be available on your vehicle. Caraoke requires premium connectivity.

Navigate to Media Player and select the drop down menu to change the media source to Caraoke. Or add Caraoke as an app in the app launcher. You can browse through various songs and select the song you want to sing. Touch the microphone icon to enable or disable the song's main vocals. Disabling the microphone leaves only the song's instrumentals and background vocals. Touch the Lyrics icon (located next to the microphone icon) to enable or disable the song's lyrics.

 **WARNING:** Never read Caraoke lyrics while driving. You must always pay attention to the road and traffic conditions. When driving, the Caraoke lyrics are intended only for use by a passenger.

Recents and Favorites

For most source content, recents and favorites display at the top for easy access.



To add a currently playing station, podcast, or audio file to your Favorites list, touch the **Favorites** icon on Media Player.



To remove an item as a favorite, touch the highlighted **Favorites** icon. You can also remove multiple favorites by expanding Media Player to show all favorites for the applicable type of source content. Then press and hold any favorite. An **X** appears on all favorites and you can then touch the **X** to remove them from your Favorites list.



Your recently played selections are updated continuously so you don't need to remove them.

NOTE: Selections you play on FM (if equipped) radio are not included in the Recents list.

Playing Media from Devices

USB Flash Drives

Insert a flash drive into a front USB port (see [USB Ports on page 57](#)[USB Ports on page 58](#)[USB Ports on page 44](#)[USB Ports on page 41](#)[USB-C Ports on page 1125](#)). Touch **Media Player > USB**, then touch the name of the desired folder. To play media from a USB connection, CybertruckModel SModel XModel 3Model Y recognizes flash drives only. To play media from other types of devices (such as an iPod), you must connect the device using Bluetooth (see [Bluetooth Connected Devices on page 710](#)).

NOTE: Media Player supports USB flash drives with exFAT formatting (NTFS is not currently supported).

NOTE: Use a USB port located at the front of the center console. The USB connections at the rear of the console are for charging only.



NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Bluetooth Connected Devices

Pair your Bluetooth-capable device to CybertruckModel SModel XModel 3Model Y (see [Bluetooth on page 360](#)) to play stored audio files. Choose Media Player's **Phone** source, touch the name of your Bluetooth-connected device, then touch **CONNECT**.



Theater, Arcade, and Toybox

Overview

NOTE: Entertainment options may vary depending on market region, date of manufacture, and vehicle configuration.



Theater: Play various video streaming services (such as Netflix, YouTube, Hulu, etc.) while parked. Available only if CybertruckModel SModel XModel 3Model Y is connected to WiFi, or is equipped with premium connectivity and a cellular signal is available.



Arcade: Want to game? You may need to use the steering wheelsteering yoke (or steering wheel) buttons or a Bluetooth or USB controller to play. See [Gaming Controllers and Headphones and Headphones on page 713](#).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports can only be used to charge devices. On these vehicles, you must use the USB port inside the glove box.



Toybox: Play in the Toybox while parked.



WARNING: Use these features only when CybertruckModel SModel XModel 3Model Y is parked. Always pay attention to road and traffic conditions when driving. Using these features while driving is illegal and very dangerous.

NOTE: You can also use voice commands to access these features (see [Voice Commands on page 97](#)).

Toybox

Your vehicle's toybox includes features that can be fun to use. Here's an example of the types of features you can find in Toybox:

Select This...	To Do This...
007 (air suspension vehicles only)	You are no longer a "Driver", you're a "Diver"! Touch Controls > Suspension to change your depth.
Boombox	If CybertruckModel SModel XModel 3Model Y is equipped with a Pedestrian Warning System, delight pedestrians with a variety of sounds from your vehicle's external speaker while in Park. See Boombox on page 712 for more details. NOTE: Check local laws before using Boombox in public areas.
Emissions	Fun can come in surprising ways. Select your preferred fart style and target seat. Use your turn signal or press the left scroll wheel when you're ready to "release" your prank. For those lucky vehicles equipped with a Pedestrian Warning System, you can choose to broadcast externally when your vehicle is parked. But wait-- the fun doesn't stop there! Use the mobile app to conduct remote emissions testing by touching and holding any of the four quick control buttons and selecting the fart button.
Light Show	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones. NOTE: Light show should not be used when parked on or near public roads. Doing so can be distracting to other road users. Before activating, it is the driver's responsibility to ensure the use of light show complies with local laws and regulations. NOTE: Light show supports multiple custom shows from one USB drive to enjoy and share with others (follow the instructions onscreen).
Light Show	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones. Light show should not be used when parked on or near public roads. Doing so can be distracting to other road users. Before activating, it is the driver's responsibility to ensure the use of light show complies with local laws and regulations.



	NOTE: Light Show enthusiasts can also play multiple custom Light Shows from the same USB flash drive. Save the files to a directory named "LightShow" on your flash drive, connect, and pick your favorite.
Model Xmas	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones.
Ludicrous Speed (P100D vehicles only)	Press and hold the Ludicrous setting (open the Controls drawer and touch Controls > Pedals & Steering > Acceleration > Ludicrous) for approximately five seconds. Touch Yes, bring it on! if you want to go fast. To display power and acceleration readings on the instrument panel, press either scroll button briefly until the available options are displayed. Then, roll the scroll button to highlight Readout then press the scroll button again.
Mars	The map shows your CybertruckModel SModel XModel 3Model Y as a rover on the Martian landscape, and the About Your Tesla box displays SpaceX's interplanetary spaceship.
Rainbow Charge Port	When CybertruckModel SModel XModel 3Model Y is locked and charging, press the button on the mobile connector ten times in quick succession. Neat, huh?
Rainbow Road	Need more cowbell? Visit Rainbow Road by pulling the Autopilot stalk toward youmoving the drive stalk fully downmoving the drive stalk fully down four times in quick succession while Autosteer is enabled.
Romance	You can't roast chestnuts by an open fire in your car, but you can still cozy up with your loved ones by this virtual fireplace. Cue the music and get your romance on!
Sketchpad	Channel your inner Picasso. Show us what you got! Touch Publish to submit your artistic compositions to Tesla for critiquing.
TRAX	It's never too late to follow your dream of becoming a world-famous DJ. With TRAX, you can turn your vehicle into your own personal music studio. While in Park, choose from an array of instruments and unique sounds to create the next hit song. Microphone and headset are not included.
The Answer to the Ultimate Question of Life, The Universe, and Everything	Rename your vehicle to 42 (touch Controls > Software and touch the vehicle's name). Notice the new name.
Car Colorizer (if equipped)	Change the color of your CybertruckModel SModel XModel 3Model Y on the touchscreen. Touch the color swatch next to the vehicle name and customize the exterior color, tone, and more.

Boombox

NOTE: Check local laws before using Boombox in public places.

Using Boombox, you can play sound externally through the Pedestrian Warning System (PWS) speaker when CybertruckModel SModel XModel 3Model Y is in Park. For example:

- **Play current media.**
- Use **Megaphone** to project a modulated version of your voice.
- Press the horn to play the first five seconds of any sound from a compatible USB device.

NOTE: If Camp mode is enabled in Climate Controls, you can exit the vehicle and use the Tesla app to control the volume.

Prepare a USB drive for Boombox

Follow these steps to add up to five custom Boombox sounds:

1. On a computer, format a USB drive to exFAT, MS-DOS FAT (for Mac), ext3, or ext4 (NTFS is currently not supported).
2. Create a folder on the USB drive called **Boombox**.

NOTE: The USB drive can only contain one folder. For example, it cannot be shared with Dashcam.



3. Add .wav and .mp3 audio files to the folder. Although you can add as many files as the USB drive's capacity allows, you can only select from the first five, as listed alphabetically. File names, of any length, can contain upper or lower case alpha characters (a-z/A-Z), numbers from 0-9, periods (.), a dashes (-), and underscores (_).
4. Plug the USB drive into a front USB port.
NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports can only be used to charge devices. On these vehicles, you must use the USB port inside the glove box.
5. Choose a sound from the USB drive by selecting from the **Boombox** dropdown menu.

Uninstall Games

Uninstalling games is useful if you want to free up your vehicle's onboard storage. To uninstall a game, navigate to **Arcade**, select the game you wish to uninstall, then touching **Uninstall**. Once you uninstall a game, you must download it before you can play the game again.

Gaming Controllers and Headphones and Headphones

You can pair Bluetooth Classic gaming controllers to CybertruckModel SModel XModel 3Model Y by following the same steps as pairing your phone (see [Phone, Calendar, and Web Conferencing on page 363](#)). After pairing, the controller automatically connects to the vehicle. Once connected, you can use the controller to play select games. CybertruckModel SModel XModel 3Model Y supports up to two Bluetooth devices at a time (such as two controllers, or one phone and one controller).

For vehicles manufactured prior to approximately November 1, 2021, you can connect USB-compatible game controllers to the front USB ports in the vehicle's center console. For vehicles manufactured after approximately November 1, 2021, you must use the glovebox USB port.

You can pair Bluetooth Classic headphones by navigating to **Bluetooth Devices** and adding new headphones on the rear touchscreen. Once connected, you can use the headphones to listen to audio from the rear touchscreen.

NOTE: Some vehicles manufacture before approximately September 2021 may require additional hardware to be compatible with wireless headphones. If the touchscreen displays this message, use the mobile app to schedule a service appointment.

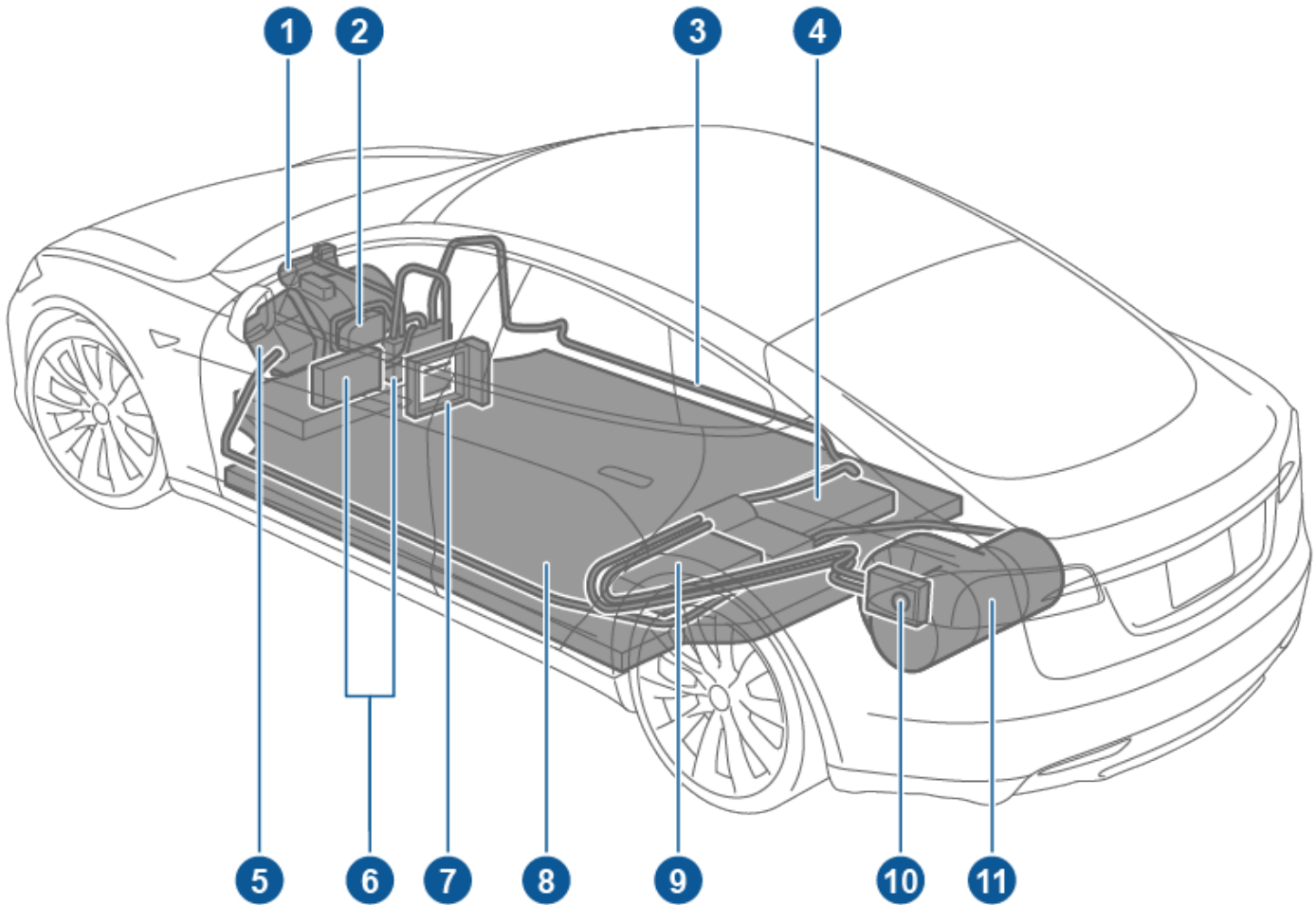
You can pair Bluetooth Classic headphones by navigating to **Settings > Bluetooth Devices** and adding new headphones on the rear touchscreen. Once connected, you can use the headphones to listen to audio from the rear touchscreen.



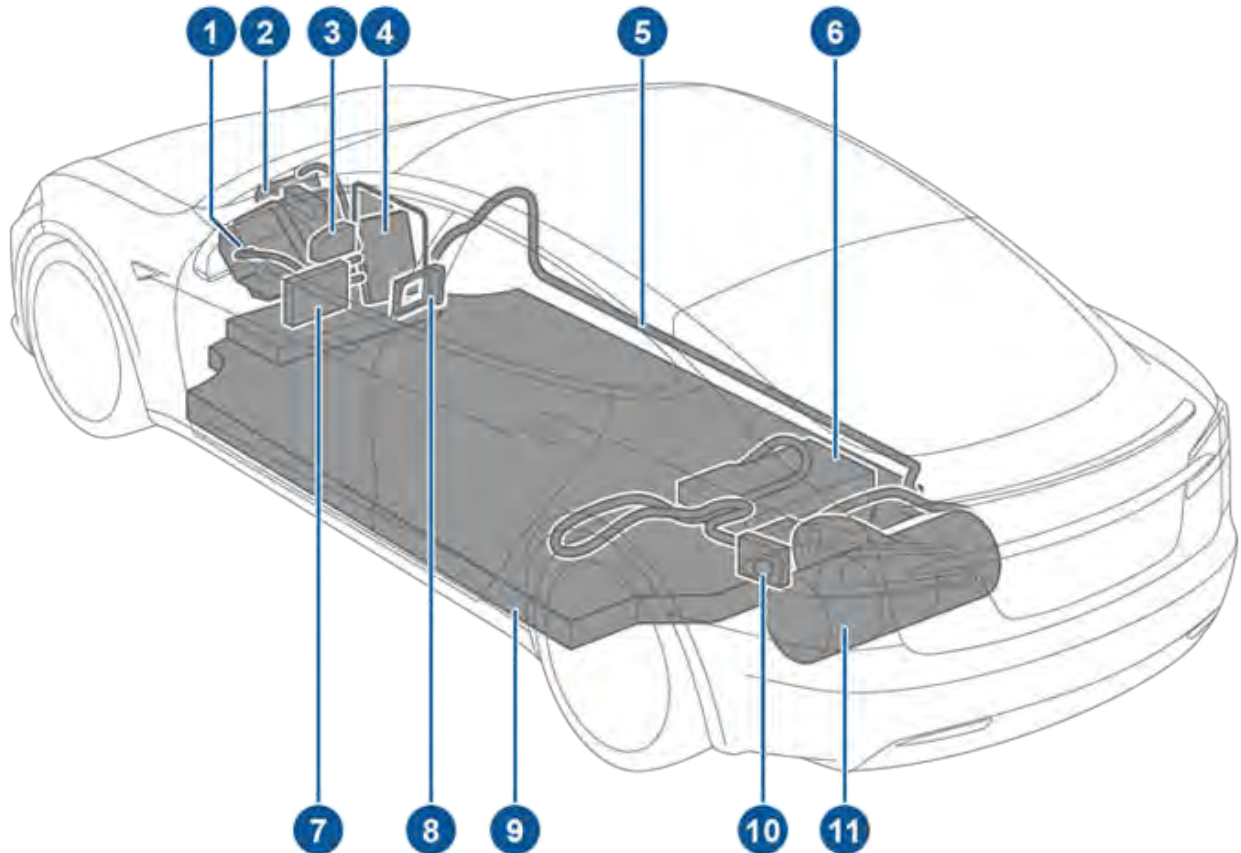
Charging and Energy Consumption

Electric Vehicle Components

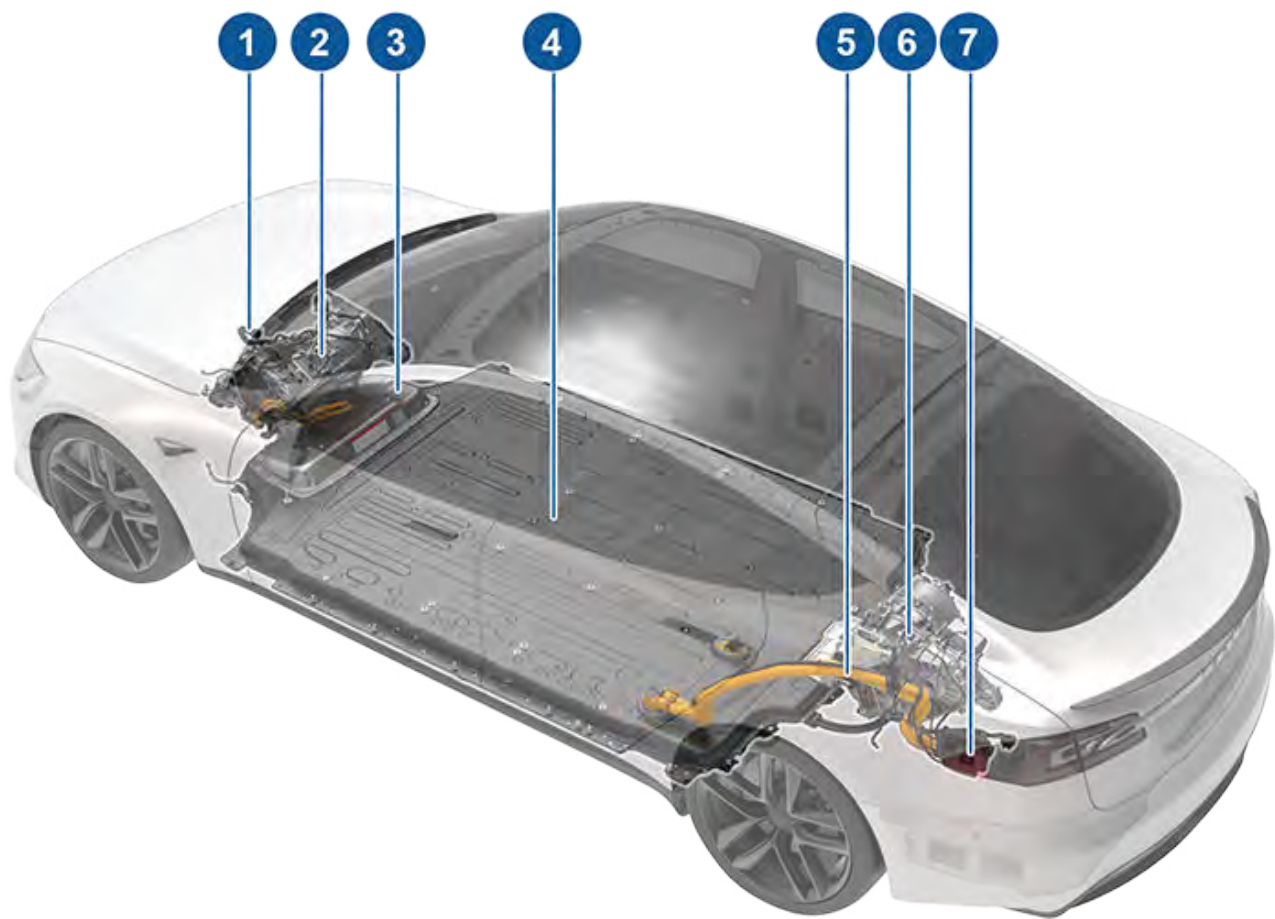
High Voltage Components



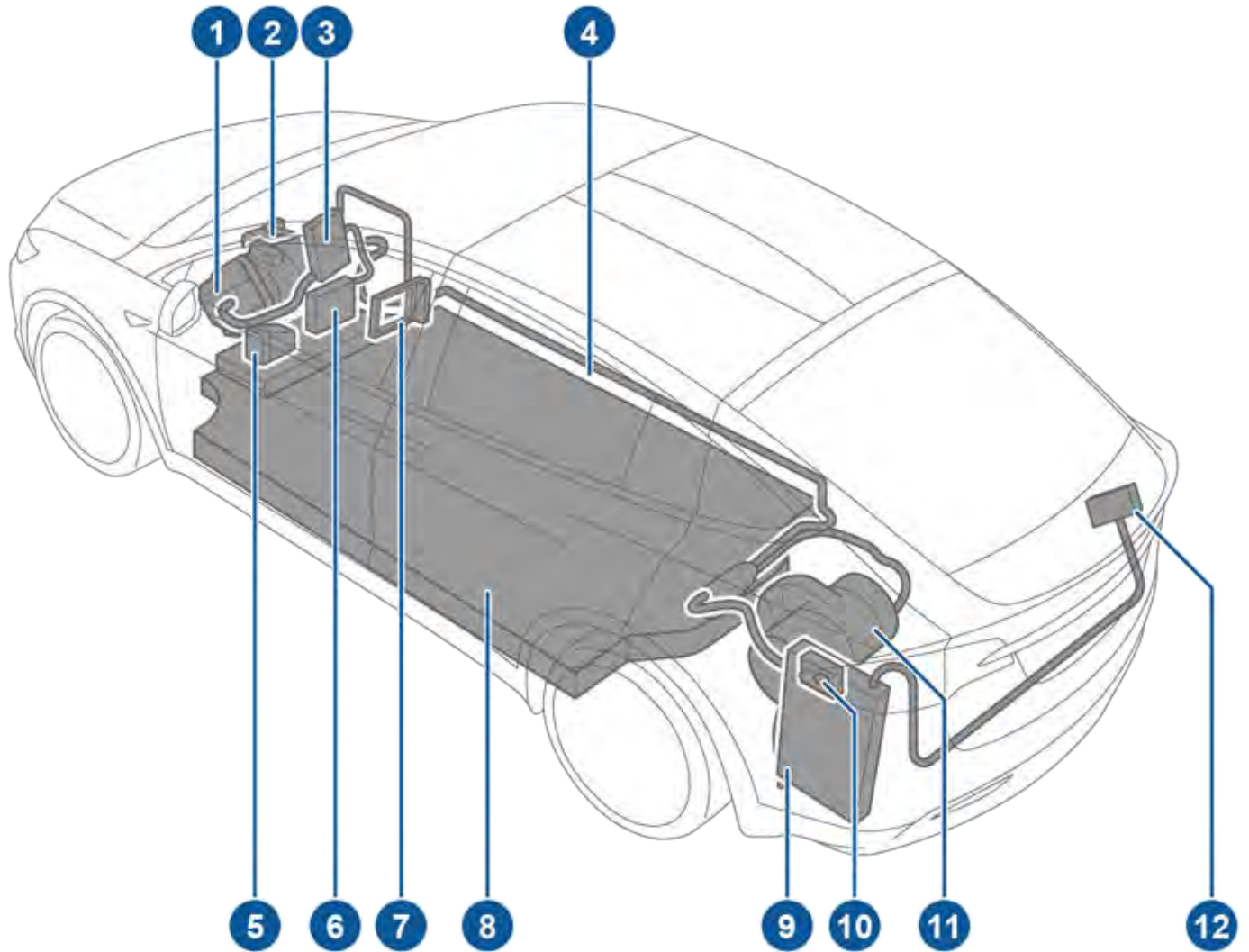
1. Air Conditioning Compressor
2. Battery Coolant Heater
3. High Voltage Cabling (colored orange)
4. On-board Master Charger
5. Front Motor (All-Wheel Drive vehicles only)
6. DC-DC Converter and Junction Box
7. Cabin Heater
8. High Voltage Battery
9. OPTIONAL: On-board Slave Charger
10. Charge Port
11. Rear Motor



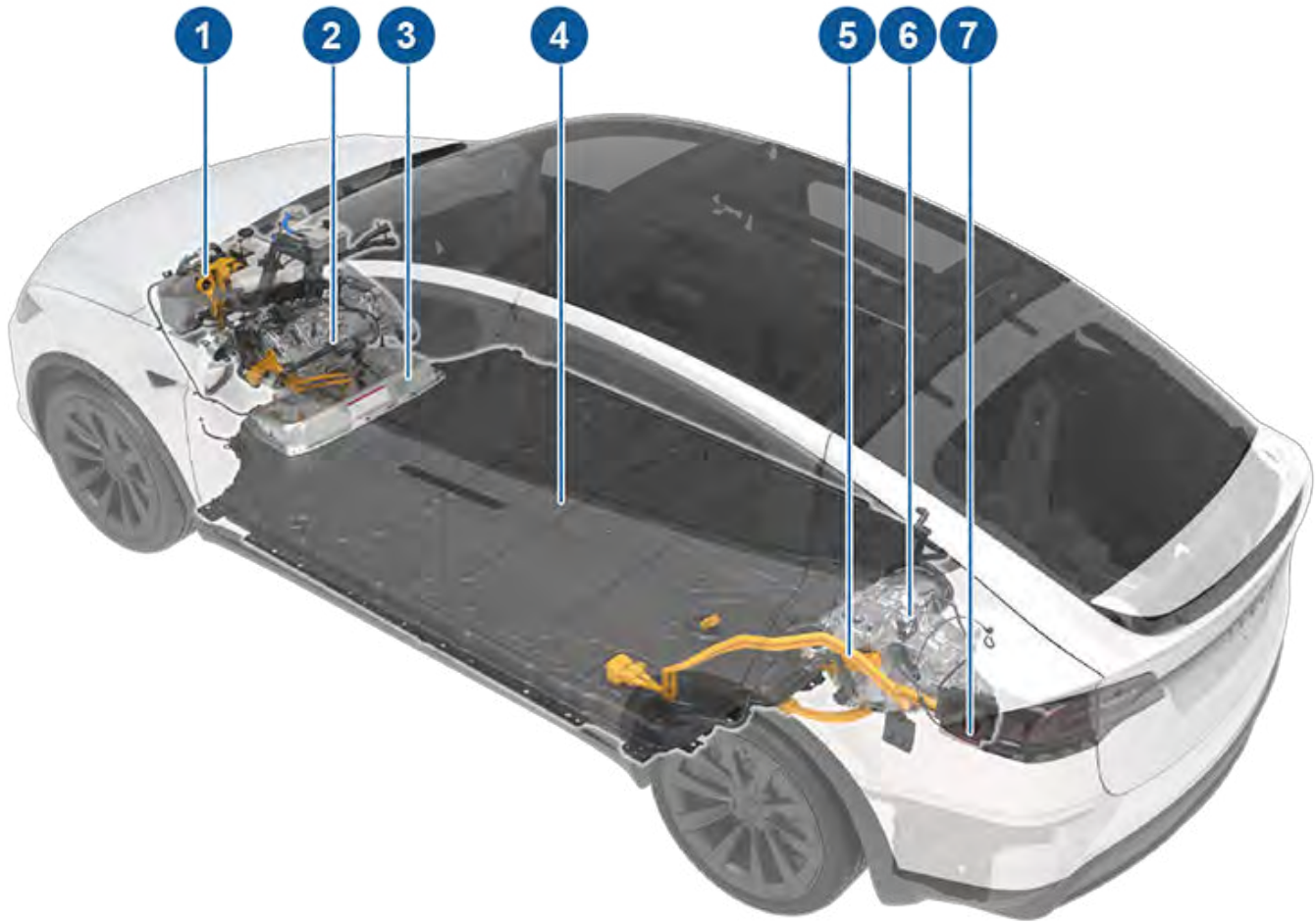
1. Front Motor (All-Wheel Drive vehicles only)
2. Air Conditioning Compressor
3. Battery Coolant Heater
4. Forward Junction Box
5. High Voltage Busbars
6. On-board Charger
7. DC-DC Converter
8. Cabin Heater
9. High Voltage Battery
10. Charge Port
11. Rear Motor



1. Heat Pump Assembly
2. Front Drive Unit
3. Service Access Panel for High Voltage Components (Penthouse)
4. High Voltage Battery
5. High Voltage Busbars
6. Rear Drive Unit
7. Charge Port

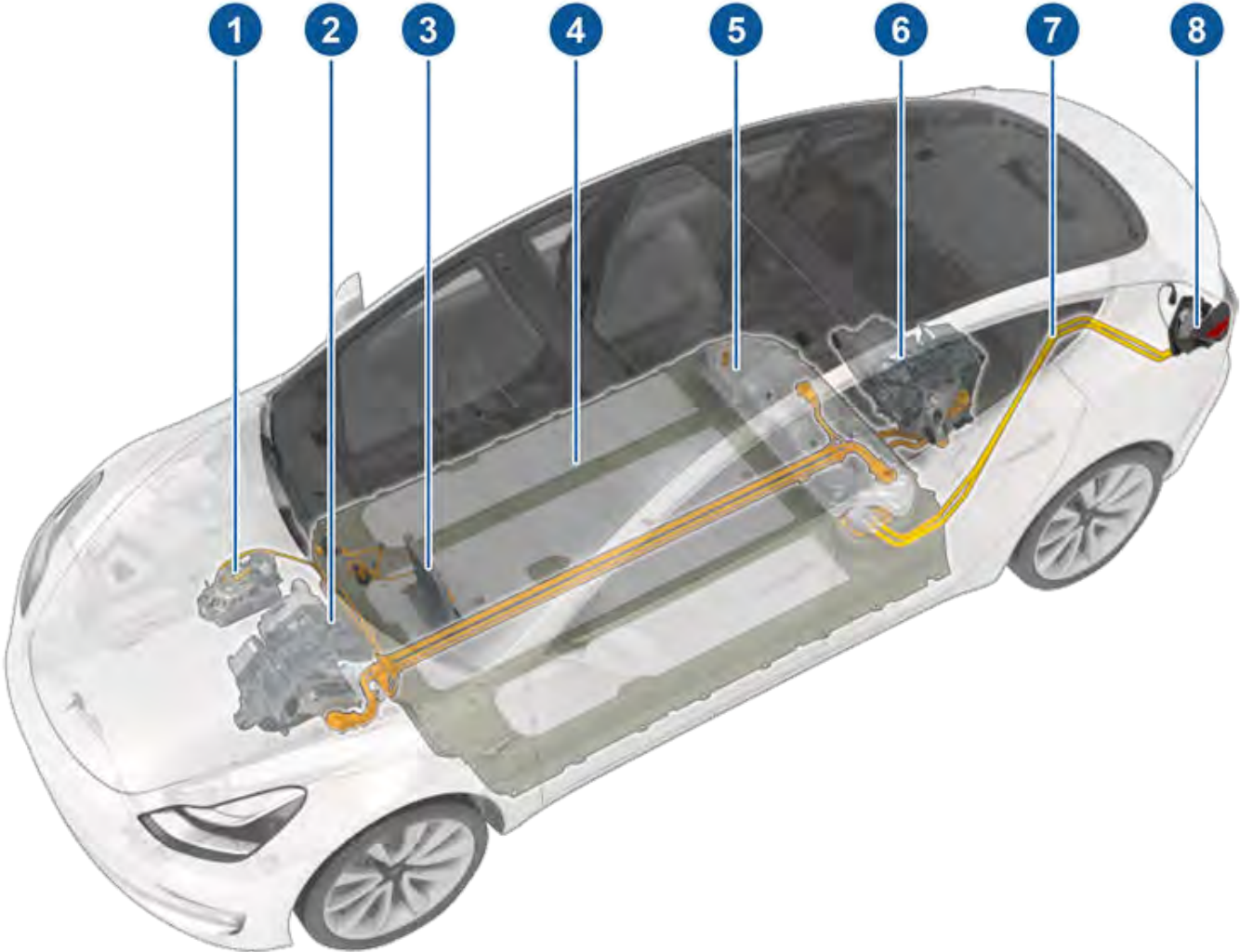


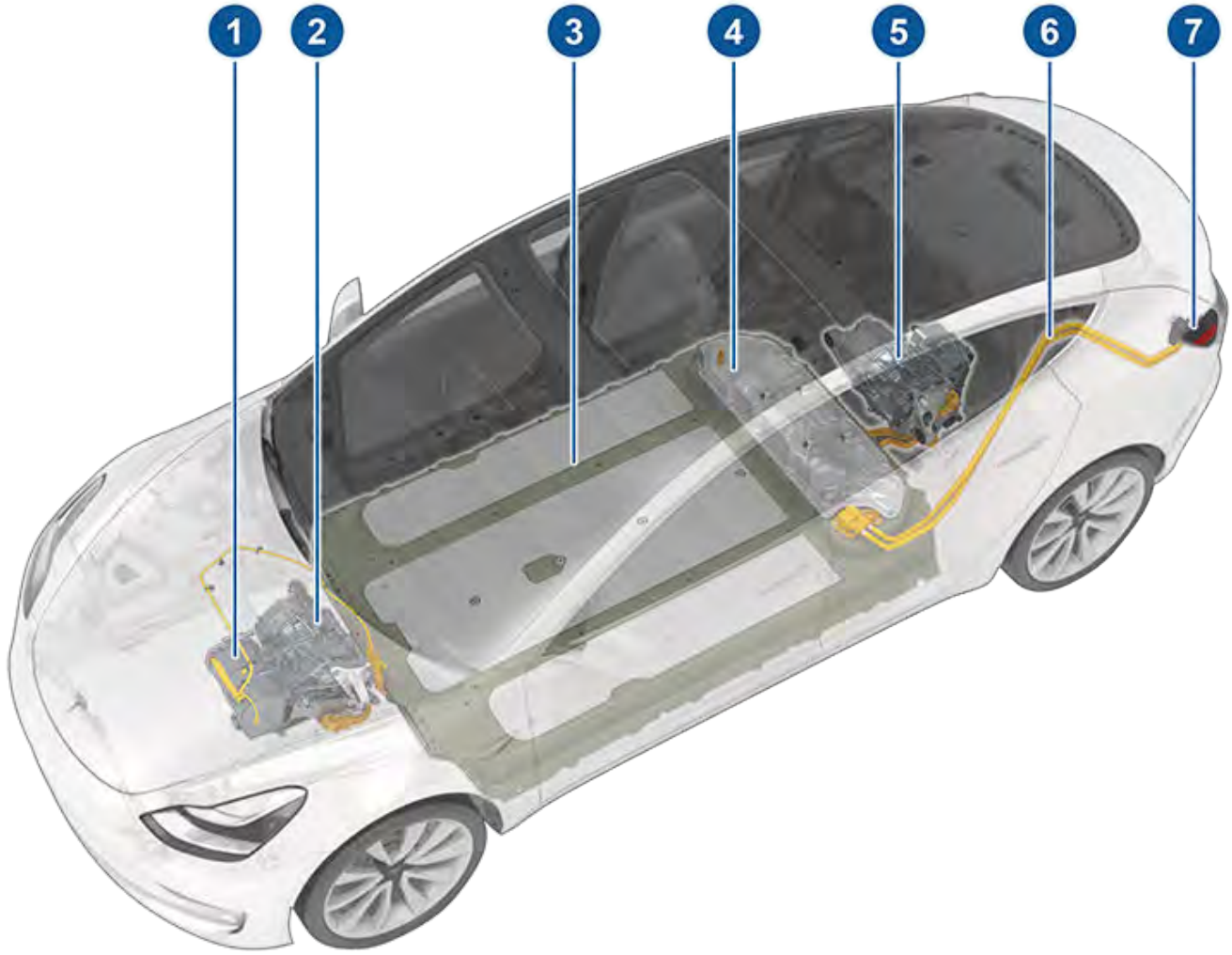
- 1. Front Motor
- 2. Air Conditioning Compressor
- 3. Forward Junction Box
- 4. High Voltage Cabling
- 5. Battery Coolant Heater
- 6. DC-DC Converter
- 7. Cabin Heater
- 8. High Voltage Battery
- 9. On-board Charger
- 10. Charge Port
- 11. Rear Motor
- 12. HV Cable to Rear HVAC Assembly

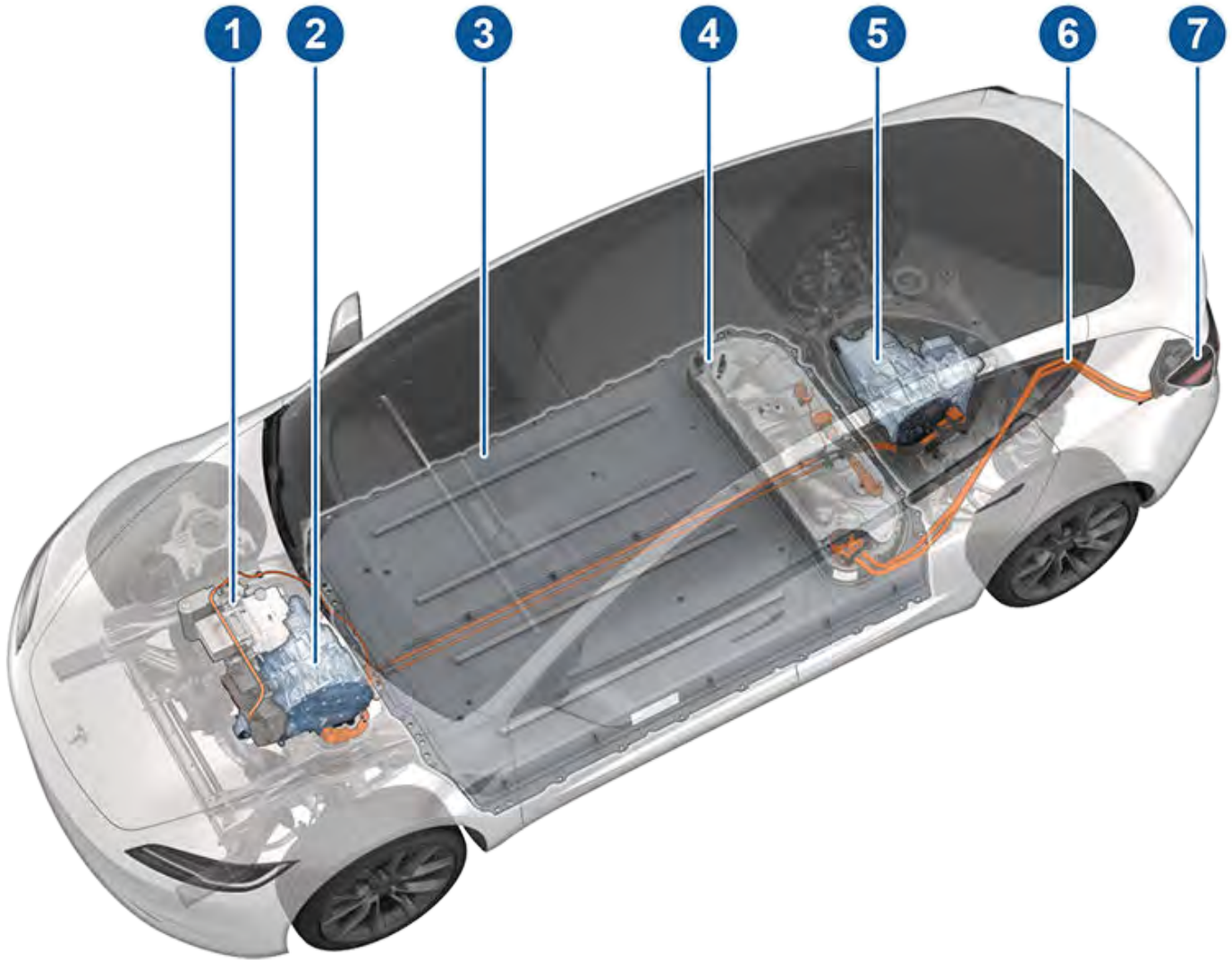


1. Heat Pump Assembly
2. Front Drive Unit
3. Service Access Panel for High Voltage Components (Penthouse)
4. High Voltage Battery
5. High Voltage Busbars
6. Rear Drive Unit
7. Charge Port

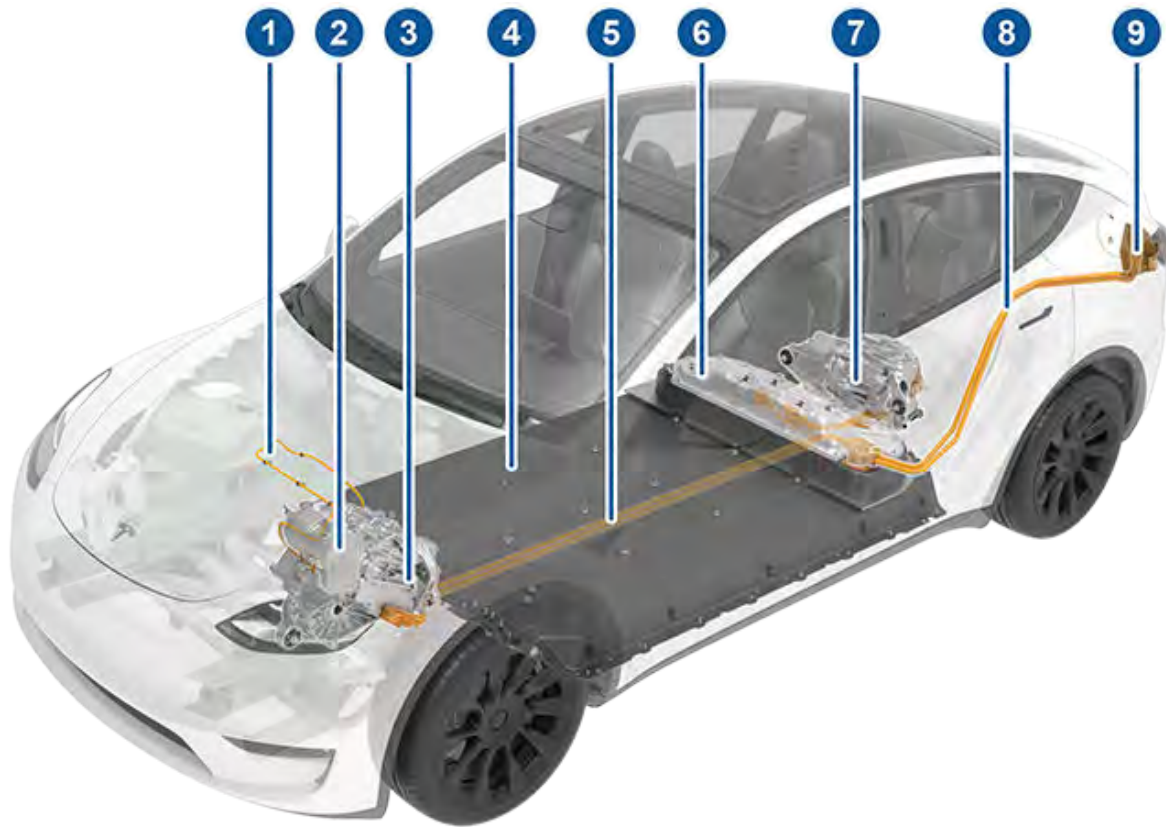
NOTE: Plaid version not shown.







1. Air Conditioning Compressor
2. Heat Pump Assembly
3. Front Motor (Dual Motor vehicles only)
4. Cabin Heater
5. High Voltage Battery
6. Service Access Panel for High Voltage Components (Penthouse)
7. Rear Motor
8. High Voltage Lines
9. Charge Port



1. High Voltage Cabling
2. Heat Pump Assembly
3. Front Motor (Dual Motor vehicles only)
4. High Voltage Battery
5. High Voltage Cabling
6. Service Access Panel for High Voltage Components (Penthouse)
7. Rear Motor
8. High Voltage Busbars
9. Charge Port

⚠ WARNING: The high voltage system has no user serviceable parts. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are typically colored orange for easy identification.

⚠ WARNING: Read and follow all instructions provided on the labels that are attached to CybertruckModel SModel XModel 3Model Y. These labels are there for your safety.

⚠ WARNING: In the unlikely event that a fire occurs, immediately contact your local fire emergency responders.

Charging Equipment

Charging equipment designed specifically to charge your CybertruckModel SModel XModel 3Model Y is available from Tesla.

For information on the charging equipment **available for your region**, go to <http://shop.tesla.com>.

- A Wall Connector, which installs in your parking space, is the fastest way to charge your vehicle for daily use.
- A Mobile Connector allows you to plug into most commonly used power outlets. When using the Mobile Connector, attach the smart adapter (if required) to the Mobile Connector before plugging it in to the power outlet, and then plug in your vehicle.



- Tesla also offers adapters that allow you to plug into the most commonly used public charging stations in your region. At a public charge station, first attach the adapter to the station's charging connector and then plug in your vehicle.



High Voltage Battery Information

CybertruckModel SModel XModel 3Model Y has one of the most sophisticated battery systems in the world. The most important way to preserve the high voltage Battery is to **LEAVE YOUR VEHICLE PLUGGED IN** when you are not using it. This is particularly important if you are not planning to drive CybertruckModel SModel XModel 3Model Y for several weeks.

NOTE: When left idle and unplugged, your vehicle periodically uses energy from the Battery for system tests and recharging the low voltage battery when necessary.

There is no advantage to waiting until the Battery's level is low before charging. In fact, the Battery performs best when charged regularly.

NOTE: If you allow the Battery to discharge to 0%, other components may become damaged or require replacement (for example, the low voltage battery). In these cases, you are responsible for repair and/or transporting expenses. Discharge-related expenses are not covered by the warranty or under the Roadside Assistance policy.

The peak charging rate of the Battery may decrease slightly after a large number of DC Fast Charging sessions, such as those at Superchargers. To ensure maximum driving range and Battery safety, the Battery charge rate is decreased when the Battery is too cold, the Battery's charge is nearly full, and when the Battery conditions change with usage and age. These changes in the condition of the Battery are driven by battery physics and may increase the total Supercharging duration by a few minutes over time. You can minimize the amount of charge time by using Trip Planner (if available in your market region) to warm the Battery while driving to a Supercharger. See [Trip Planner on page 705](#) for more information.

Battery Care

Never allow the Battery to fully discharge.

Even when CybertruckModel SModel XModel 3Model Y is not being driven, its Battery discharges very slowly to power the onboard electronics. The Battery can discharge at a rate of approximately 1% per day, though the discharge rate may vary depending on environmental factors (such as cold weather), vehicle configuration, and your selected settings on the touchscreen. Situations can arise in which you must leave CybertruckModel SModel XModel 3Model Y unplugged for an extended period of time (for example, at an airport when traveling). In these situations, keep the 1% in mind to ensure that you leave the Battery with a sufficient charge level. For example, over a two week period (14 days), the Battery may discharge by approximately 14%.

Discharging the Battery to 0% may result in damage to vehicle components. To protect against a complete discharge, CybertruckModel SModel XModel 3Model Y enters a low-power consumption mode when the displayed charge level drops to approximately 0%. In this mode, the Battery stops supporting the onboard electronics and auxiliary low voltage battery. Once this low-power consumption mode is active, immediately plug in CybertruckModel SModel XModel 3Model Y to prevent a jump start and low voltage battery replacement.

NOTE: If CybertruckModel SModel XModel 3Model Y is unresponsive and does not unlock, open, or charge, the low voltage battery may be discharged. In this situation, try jump starting the low voltage battery (see [Jump Starting on page 938](#)[Jump Starting on page 1455](#)). If the vehicle is still unresponsive, use the mobile app to schedule a service appointment.

Temperature Limits

For better long-term performance, avoid exposing CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.

Energy Saving Feature

CybertruckModel SModel XModel 3Model Y has an energy-saving feature that reduces the amount of energy being consumed by the displays when CybertruckModel SModel XModel 3Model Y is not in use. On newer vehicles, this feature is automated to provide an optimal level of energy saving. However, on older vehicles, you can control the amount of energy being consumed by the displays by touching **Controls > Display > Energy Saving**. For more information on maximizing range and saving energy, see [Getting Maximum Range on page 745](#).

Submerged Vehicle





As with any vehicle, if your Tesla has been exposed to flooding, extreme weather events or has otherwise been submerged in water (especially in salt water), treat it as if it's been in an accident and contact your insurance company for support. Do not attempt to operate the vehicle before Tesla Service has inspected it, but you should tow or move it away from any structures.



An unintentionally submerged vehicle is different than a vehicle that intentionally enters water while off-roading. In these situations, use **Wade Mode**. See [#unique_892 on page](#) for more information.

NOTE: Damage caused by water is not covered under warranty.

Battery Warnings and Cautions

-  **WARNING:** The high voltage system must be serviced **only** by a trained technician. Under no circumstances should you open or tamper with the Battery. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are typically colored orange for easy identification.
-  **CAUTION:** If the Battery's charge level falls to 0%, you must plug it in. If you leave it unplugged for an extended period, it may not be possible to charge or use CybertruckModel SModel XModel 3Model Y without jump starting or replacing the low voltage battery. Leaving CybertruckModel SModel XModel 3Model Y unplugged for an extended period can also result in permanent Battery damage. If you are unable to charge CybertruckModel SModel XModel 3Model Y after attempting to jump start the low voltage battery, schedule a service appointment.
-  **CAUTION:** The Battery requires no owner maintenance. Do not remove the coolant filler cap and do not add fluid. If the instrument paneltouchscreentouchscreen warns you that the fluid level is low, use the mobile app to schedule a service appointment.
-  **CAUTION:** Do not use the Battery as a stationary power source. Doing so voids the warranty.



Charging Instructions

Opening the Charge Port

The charge port is located on the left side of CybertruckModel SModel XModel 3Model Y, behind a door that is part of the rear tail light assembly. Park CybertruckModel SModel XModel 3Model Y to ensure that the charge cable easily reaches the charge port.

With CybertruckModel SModel XModel 3Model Y in Park, press and release the button on the Tesla charge cable to open the charge port door.

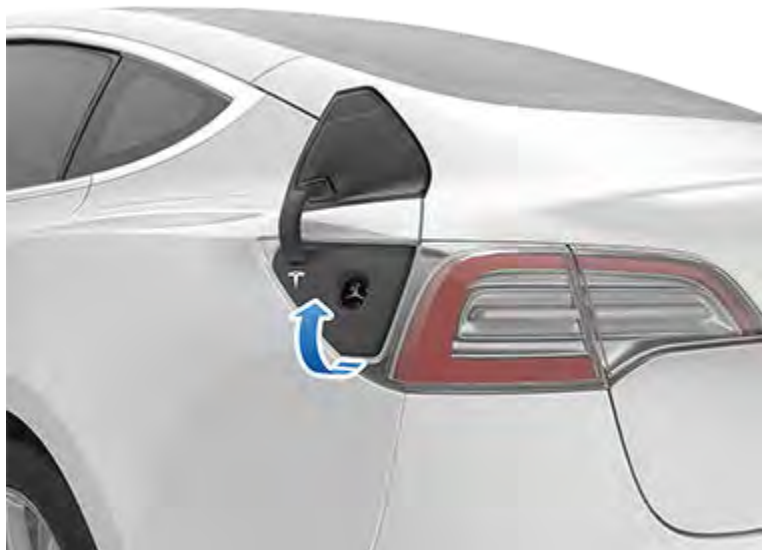
NOTE: If the charge cable is close to the charge port door, you can press the button on the charge cable to open the charge port door even when Model S is locked or a recognized key is not within range.



You can also open the charge port door using any of these methods:

- On the touchscreen, touch **Controls** and touch the Charge Port icon (lightning bolt).
- On the touchscreen, navigate to **Controls > Charging > Open Charge Port**.
- Press the bottom of the charge port door when CybertruckModel SModel XModel 3Model Y is unlocked.
- On the key fob accessory (sold separately), hold down the rear trunk button for 1-2 seconds.
- On the key fob accessory (sold separately), hold down the rear trunk button for 1-2 seconds.
- When the vehicle is locked with an authenticated key in range, you can also press the button on the charge cable to open the charge port door (see [Keys on page 109](#)).
- Use voice commands to open the charge port door (see [Voice Commands on page 97](#)). You can also use voice commands to close the charge port door, and begin or stop charging.

NOTE: The following image is provided for demonstration purposes only. Depending on market region and date of manufacture, your charge port may be slightly different.








NOTE: The charge port lights up white when you open the charge port door. If you do not insert a charge cable into the charge port within a few minutes after opening the charge port door, the charge port door closes. If this happens, use the touchscreen to open the charge port door again.

NOTE: The Tesla "T" lights up when you open the charge port door. If you do not insert a charge cable into the charge port within a few minutes after opening the charge port door, the charge port door closes. If this happens, use the touchscreen to open the charge port door again.



NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In these weather conditions, you can thaw ice on the charge port latch so the charge cable can be removed and inserted. To do so, turn on the rear defrost, or enable preconditioning using the mobile app. To prevent this from occurring, use the **Schedule** settings, available on both the charging and climate control screens, to set a departure time and enable preconditioning (see [Scheduled Charging and Scheduled Departure on page 743](#)). To thaw ice on the charge port latch so the charge cable can be removed and inserted, enable preconditioning using the mobile app. To prevent this from occurring, use the **Schedule** settings, available on both the charging and climate control screens, to set a departure time and enable preconditioning (see [Scheduled Charging and Scheduled Departure on page 743](#)).

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to precondition your vehicle on **HI** for approximately 30–45 minutes (you must use your mobile app to precondition the vehicle; setting your climate to **HI** using the touchscreen is not effective). This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

 **CAUTION:** Do not try to force the charge port door open.

Plugging In

If desired, use the touchscreen to change the charge limit and the charging current (see [Charge Settings on page 734](#)).

To charge at a public charging station, plug the appropriate adapter into the vehicle's charging port, and then connect the station's charging connector to the adapter. The most commonly used adapter(s) for each market region are provided. Depending on the charging equipment you are using, you may need to start and stop charging using a control on the charging equipment.

If you are using the Mobile Connector, plug into the power outlet before plugging in CybertruckModel SModel XModel 3Model Y.


Align the connector to the charge port and insert fully. When the connector is properly inserted, charging begins automatically after CybertruckModel SModel XModel 3Model Y:

- Engages a latch that holds the connector in place;
- Shifts into Park (if it was in any other drive mode);
- Heats or cools the Battery, if needed. If the Battery requires heating or cooling, you may notice a delay before charging begins.

NOTE: Whenever CybertruckModel SModel XModel 3Model Y is plugged in but not actively charging, it draws energy from the charging equipment instead of using energy stored in the Battery. For example, if you are sitting in CybertruckModel SModel XModel 3Model Y and using the touchscreen while parked and plugged in, CybertruckModel SModel XModel 3Model Y draws energy from the charging equipment instead of the Battery.

In some cases when CybertruckModel SModel XModel 3Model Y is plugged in but using very little energy, however, it may draw it directly from the Battery. For example, if you leave CybertruckModel SModel XModel 3Model Y plugged in for several days without using it, it may gradually draw a small amount of energy directly from the Battery to support vehicle systems.

Once the Battery discharges enough, it starts charging to reach the limit again. Depending on when you check, the Battery may not have discharged enough yet to trigger a charge cycle. As a result, it may be slightly under the charge limit even after being plugged in for a long period. This is normal, and CybertruckModel SModel XModel 3Model Y will start charging again once it has discharged enough. Alternatively, to start a new charge cycle manually, unplug and then plug in CybertruckModel SModel XModel 3Model Y.

 **CAUTION:** The connector end of the charge cable can damage the paint if you drop it onto CybertruckModel SModel XModel 3Model Y.

Charge Port Light

After you insert a charge cable into CybertruckModel SModel XModel 3Model Y, wait a few seconds and confirm that the charge port light begins blinking green and that your vehicle is charging. If the light is amber or red, troubleshoot the issue before you leave to ensure a successful charging session.

- **WHITE (OR LIGHT BLUE):** The charge port door is open. CybertruckModel SModel XModel 3Model Y is ready to charge and the connector is not inserted, or the charge port latch is unlocked and the connector is ready to be removed.



NOTE: If equipped with an early generation charge port, the charge port remains unlocked whenever the vehicle is not charging and in a cold ambient temperature below 41° F (5° C). In this situation, the charge port light is white.

- **BLUE:** The charger is connected, but CybertruckModel SModel XModel 3Model Y is not charging (such as when scheduled charging is active).
- **BLINKING BLUE:** CybertruckModel SModel XModel 3Model Y is communicating with the charger, but has not started charging yet (such as when your vehicle is preparing to charge).
- **BLINKING GREEN:** Charging is in progress. As CybertruckModel SModel XModel 3Model Y approaches a full charge, the frequency of the blinking slows.
- **SOLID GREEN:** Charging is complete.
- **SOLID AMBER:** The connector is not fully plugged in. Realign the connector to the charge port and insert fully.
- **BLINKING AMBER:** CybertruckModel SModel XModel 3Model Y is charging at a reduced current (AC charging only).
- **RED:** A fault is detected and charging has stopped. Check the instrument panel or touchscreen for an alert.

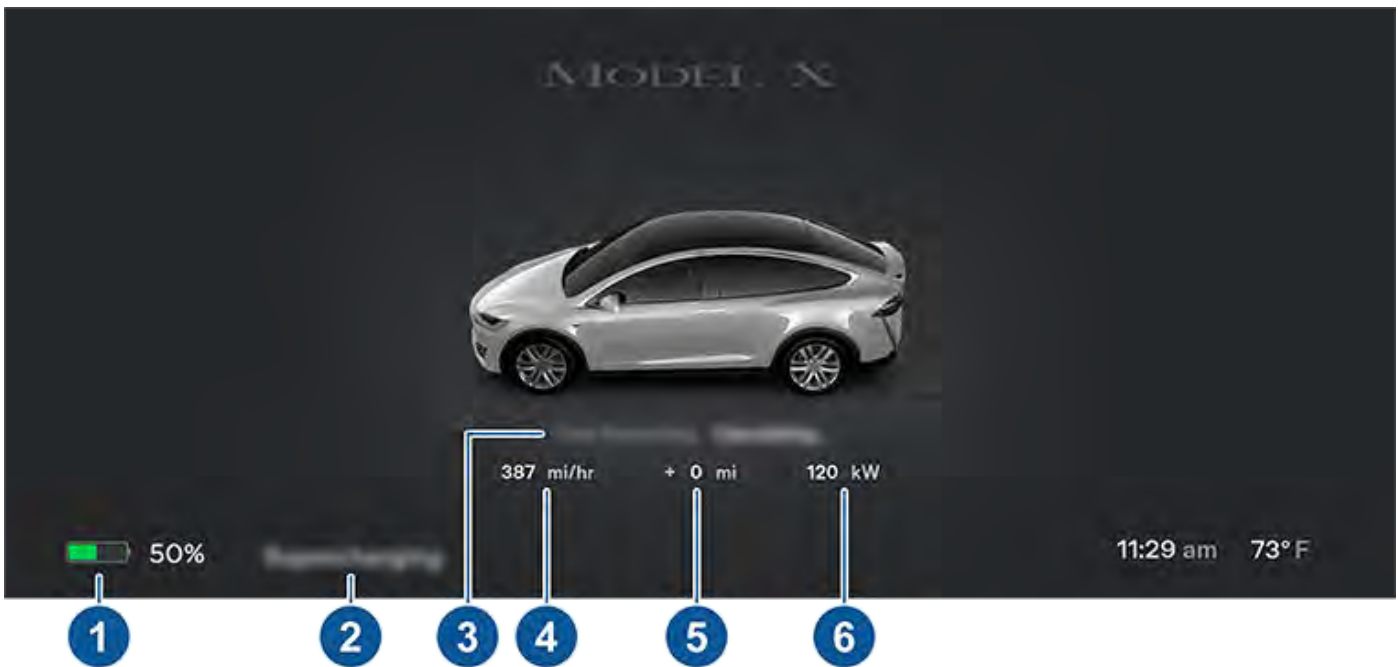
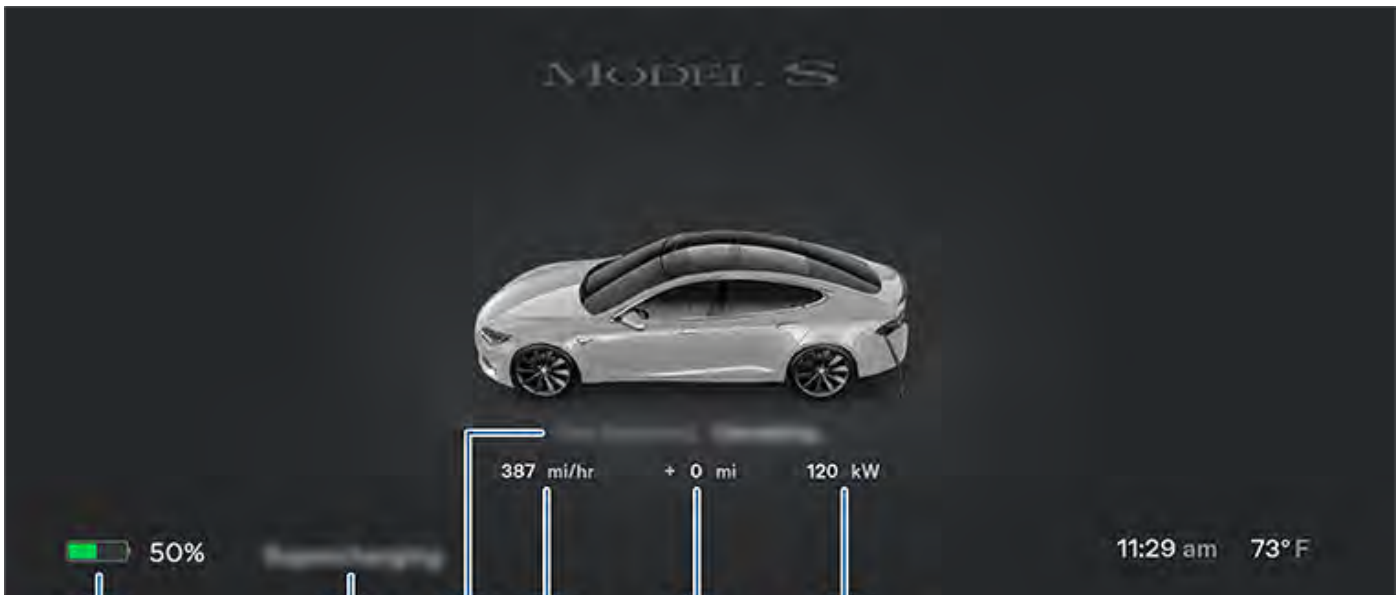
Charging Status

Charging status displays on the instrument panel when the charge port door is open.





1. **Time remaining:** The estimated time remaining to charge to your set limit (see [Charge Settings](#) on page 734).
NOTE: When charging to 100%, the vehicle may continue to charge with low power when charging is displayed as complete. This is expected operation. Because the added energy beyond this point is low, it is usually not beneficial to continue charging.
2. **Charging:** The current power of the charger.
3. **Charging rate:** The current charging speed that the vehicle is charging.
4. **Range gained:** Estimated increase in driving distance achieved in the charging session.
5. **Driving distance:** Displays the total estimated driving distance or energy percentage (depending on your display setting) available.
NOTE: To change how energy units are displayed, touch **Controls > Display > Energy Display**.
6. **Charge status:** Charge status messages (such as Supercharging, Scheduled Charging) display here (see [Scheduled Charging and Scheduled Departure](#) on page 743).



1. **Driving distance:** Displays the total estimated driving distance or energy percentage (depending on your display setting) available.

NOTE: To change how energy units are displayed, touch **Controls > Display > Energy Display**.

2. **Charge status:** Charge status messages (such as Supercharging, Scheduled Charging) display here (see [Scheduled Charging and Scheduled Departure on page 743](#)).

3. **Time remaining:** The estimated time remaining to charge to your set limit (see [Charge Settings on page 734](#)).

NOTE: When charging to 100%, the vehicle may continue to charge with low power when charging is displayed as complete. This is expected operation. Because the added energy beyond this point is low, it is usually not beneficial to continue charging.

4. **Charging rate:** The current charging speed that the vehicle is charging.

5. **Range gained:** Estimated increase in driving distance achieved in the charging session.



6. **Charging:** The current power of the charger.

Charging Status

Charging status displays at the top of the car status screen when the charge port door is open.

1. **Time remaining:** The estimated time remaining to charge to your set limit (see [Charge Settings on page 734](#)).

NOTE: When charging to 100%, the vehicle may continue to charge with low power when charging is displayed as complete. This is expected operation. Because the added energy beyond this point is low, it is usually not beneficial to continue charging.

2. **Charging:** The current power of the charger.

3. **Charging rate:** The maximum current available from the attached charge cable.

4. **Range gained:** Estimated increase in driving distance achieved in the charging session.

5. **Driving distance:** Displays the total estimated driving distance or energy percentage (depending on your display setting) available.

NOTE: To change how energy units are displayed, touch **Controls > Display > Energy Display**.

6. **Charge status:** Charge status messages (such as Supercharging, Scheduled Charging) display here (see [Scheduled Charging and Scheduled Departure on page 743](#)).

During Charging

During charging, the charge port light (the Tesla "T" logo) pulses green, and the instrument panel touchscreen displays real-time charging status. The frequency at which the green charge port light pulses slows down as the charge level approaches full. When charging is complete, the light stops pulsing and is solid green.

NOTE: If CybertruckModel SModel XModel 3Model Y is locked, the charge port light does not light up.

If the charge port light turns red while charging, a fault is detected. Check the instrument panel or touchscreen for an alert describing the fault. A fault can occur due to something as common as a power outage. If a power outage occurs, charging resumes automatically when power is restored.

NOTE: The thermal system may produce steam under certain conditions for vehicles with heat pumps (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**). For example, odorless steam can come from the front of your vehicle while charging at a Supercharger in cold temperature. This is normal and not a cause for concern.

NOTE: It is normal to hear sounds during charging. Particularly at high currents, the refrigerant compressor and fan operate as needed to keep the Battery cool.

NOTE: Air conditioning performance is generally not affected by charging. However, in some circumstances (for example, charging at high currents during a particularly warm day), the air coming from the vents may not be as cool as expected and a message displays on the instrument panel touchscreen. This is normal and ensures that the Battery stays within an optimum temperature range while charging to support longevity and optimum performance.



WARNING: Never spray liquid at a high velocity (for example, a pressure washer) towards the charge port while charging. Doing so can result in serious injury or damage to the vehicle, charging equipment, or property.

Stopping Charging

Stop charging at any time by disconnecting the charge cable or touching **Stop Charging** on the touchscreen.

NOTE: To prevent unauthorized unplugging of the charge cable, the charge cable latch remains locked and CybertruckModel SModel XModel 3Model Y must be unlocked or able to recognize your key authenticated phone before you can disconnect the charge cable.

NOTE: If equipped with an early generation charge port, the charge port remains unlocked whenever the vehicle is not charging and in a cold ambient temperature below 41° F (5° C), even when CybertruckModel SModel XModel 3Model Y is locked.

To disconnect the charge cable:



1. Press and hold the button on the connector handle to release the latch.

NOTE: You can also release the latch using the lightning icon on the car status overview on the touchscreen or mobile app, or by pressing and holding the rear trunk button on the key fob accessory. If your vehicle is equipped with a motorized charge port, you can also press the button to the left of the charge port to release the latch.

NOTE: You can also release the latch using the lightning icon on the car status overview on the touchscreen or mobile app, or by pressing and holding the rear trunk button on the key fob accessory. If your vehicle is equipped with a motorized charge port, you can also press the button to the left of the charge port to release the latch.

2. Pull the connector from the charge port. The charge port door automatically closes.
3. Push the charge port door closed.

NOTE: You can also close the charge port door using any of these methods:

- On the touchscreen, touch the Charge Port icon (lightning bolt) on the car status overview.
- On the touchscreen, navigate to **Controls > Charging > Close Charge Port**.
- Use voice commands to close the charge port door (see [Voice Commands on page 97](#)).



CAUTION: Never close the charge port door manually. Doing so can cause damage.

To disconnect the charge cable when using an adapter at a public charge station:

1. Unlock CybertruckModel SModel XModel 3Model Y.
2. While holding the public charging handle in one hand and the adapter in the other hand, press and hold the button on the public charging handle and pull both outwards, removing the handle and adapter at the same time.

NOTE: If the charging station handle separates from the adapter, leaving the adapter in CybertruckModel SModel XModel 3Model Y, use the touchscreen to unlock the charge port.
3. Press and hold the button on the charging handle again to release the adapter from the public charging handle.

NOTE: If CybertruckModel SModel XModel 3Model Y is equipped with a motorized charge port door, it automatically closes shortly after you remove the charge cable.

NOTE: The charge port door automatically closes within approximately 10 seconds of removing the connector from the charge port.

NOTE: You can also close the charge port door using any of these methods:

- On the touchscreen, touch the Charge Port icon (lightning bolt) on the car status overview.
- On the touchscreen, navigate to **Controls > Charging > Close Charge Port**.
- Use voice commands to close the charge port door (see [Voice Commands on page 97](#)).



CAUTION: Never close the charge port door manually. Doing so can cause damage.



CAUTION: Tesla strongly recommends leaving CybertruckModel SModel XModel 3Model Y plugged in when not in use. This maintains the Battery at the optimum level of charge.



CAUTION: CybertruckModel SModel XModel 3Model Y does not shift out of Park if the charge port is unable to determine whether a charging cable is plugged in. Ensure the charging cable is unplugged and follow the instructions on the touchscreen to proceed (see [Park on page 400](#)).

Charge Settings

Access charge settings by touching **Controls > Charging** when CybertruckModel SModel XModel 3Model Y is in Park. You can also touch the battery icon on the touchscreen to access charge settings. You can also touch the charge icon on the touchscreen to access charge settings.



When charging, you can also touch the charge icon on the touchscreen to access charge settings.



1. **Driving distance:** Displays the total estimated driving distance available.
2. **Set limit:** Adjust the charge slider to the level of charging you want. The setting you choose applies to immediate and scheduled charging sessions.

NOTE: Refer to the information on the vehicle touchscreen (navigate to **Controls > Charging**) or the mobile App (touch the **Charging** icon) for recommended daily and trip charging limits.

NOTE: Tesla recommends limiting the Battery's full charge level to below 90% for **Daily** use and charging to 100% only if needed for a long **Trip**.

NOTE: A portion of the battery image may appear blue. This indicates that a small portion of the energy stored in the battery is not available because the battery is cold. This is normal and no reason for concern. When the battery warms up, the blue portion no longer displays.

Slide the charge limit past the daily recommended charge limit for a pop-up option to temporarily charge above the daily recommended limit for one-time only. This is helpful for long trips and, if selected, resets back to the previous charge limit.

You can further adjust charge settings:

- **Charge current at this location:** The current automatically sets to the maximum current available from the attached charge cable, unless it was previously reduced to a lower level. If needed, touch - or + to change the current (for example, you may want to reduce the current if you are concerned about overloading a domestic wiring circuit shared by other equipment). It is not possible to set the charging current to a level that exceeds the maximum available from the attached charge cable. When you change the current, CybertruckModel SModel XModel 3Model Y remembers the location. If you charge at the same location, you do not need to change it again.

When charging using the Mobile Connector with domestic outlets, your vehicle may automatically select a default charge current. Override this default current to a higher setting by customizing **Charge Current at this location** or through the mobile app.

NOTE: If CybertruckModel SModel XModel 3Model Y is charging and detects unexpected fluctuations in input power, the charging current is automatically reduced by 25%. For example, a 40 amp current is reduced to 30 amps. This automatic current reduction increases robustness and safety in situations when an external problem exists (for example, a home wiring system, receptacle, adapter or cord is unable to meet its rated current capacity). As a precaution, when CybertruckModel SModel XModel 3Model Y automatically reduces current, it saves the reduced current at the charging location. Although you can manually increase it, Tesla recommends charging at the lower current until the underlying problem is resolved and the charging location can provide consistent power.

- **Open Charge Port, Unlock Charge Port and Stop Charging:** When not charging, touch **Open Charge Port** or **Unlock Charge Port** to open the charge port door or to unlock the charge cable from the charge port. You can also touch the lightning icon near the charge port on the car status overview. Use **Stop Charging** when you are finished charging.

NOTE: In cold ambient temperatures below 41° F (5° C), the charge port (if equipped with early generation charge port hardware) remains unlocked whenever the vehicle is not charging.



- **Schedule:** Depending on the setting you select by touching **Switch to Scheduled Departure/Scheduled Charging**, this displays either a departure time for when the vehicle should be preconditioned and/or charged by or a time to start charging (see [Scheduled Charging and Scheduled Departure on page 743](#)).
- **Charge on Solar at this location:** *If available in your region, setup your vehicle with your Tesla Powerwall to charge from excess solar production, using the Tesla mobile app. When your vehicle is plugged in at home and **Charge on Solar** is enabled, your vehicle charges up to the minimum charge limit from any source and then continues charging on only excess solar power up to the maximum charge limit. If Scheduled Charging or Scheduled Departure is configured, your vehicle uses any excess solar and waits until the designated time to charge from any source to the minimum charge limit. System requirements: Vehicle software 2023.26 or higher, Powerwall software 23.12.10 or higher and Tesla mobile app 4.22.5 or higher. System requirements **outside of North America:** Vehicle software 2023.32 or higher, Powerwall software 23.12.10 or higher and Tesla mobile app 4.30.5 or higher.*
- **Supercharging:** Displays Supercharger usage fees, the location, the time that charging started, and a cost estimate for the session (see [Supercharger Fees on page 736](#)).

NOTE: To reduce congestion at high-usage Supercharger sites, you may be limited to a maximum charge of 80% when not using Trip Planner (if available in your market region). See [Trip Planner on page 705](#)).

Supercharger Fees

When charging at a Tesla Supercharger, information about the charging session displays at the bottom of the charging screen. This includes the location, the time that charging started, and a cost estimate for the session. When you stop Supercharging, the estimated cost of the session displays until a new Supercharging session begins. If free charging is applicable, the estimated cost displays as zero.

NOTE: Estimated cost may not reflect the final cost of the Supercharging session. Final pricing for Supercharging sessions can be found in your Tesla account.

You are subject to additional fees after charging is complete or, at a busy Supercharger location, after your vehicle has reached the congestion limit. Superchargers are designed for fast charging, and these fees encourage drivers to move their vehicles when charging is complete. The rate structure for each site, including whether idle or congestion fees apply, can be found on the site's popup on the touchscreen (see [Charging Locations on page 703](#)) or in the Tesla mobile app.

- **Idle fees** apply when half or more of the Superchargers at a site are occupied, and begin accruing when the vehicle reaches its charge limit. The Tesla mobile app notifies you when charging is almost complete, and again when charging is complete. Additional notifications are sent if idle fees are incurred. Idle fees are waived if you move your vehicle within five minutes of when charging completed.
- United States only: **Congestion fees** apply at select Supercharger locations that are often busy. Congestion fees accrue when the station is at capacity and the vehicle's battery charge level is above the congestion limit. Fees are waived for the first five minutes, and then billed until the vehicle is moved.

Log into your Tesla account to view fees and details about Supercharger sessions, track the remaining balance of free credits, set up a payment method, and make payments. Once a payment method is saved, fees are automatically paid from your account.

Third Party Chargers

Depending on market region, vehicle configuration, etc., all Tesla vehicles have a **North American Charging Standard (NACS)** charge port, which is a charging system developed by Tesla that is quickly becoming more popular at third party charging stations. These stations feature an NACS connector and don't require a separate adapter.

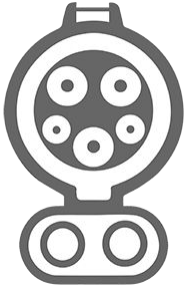
While all Tesla vehicles can charge on Tesla stations (such as a Supercharger, Wall Connector, or Mobile Connector), your vehicle may not have the hardware needed to use some NACS third-party DC fast charging stations. In other words, the connector may look compatible, but when you plug it into CybertruckModel SModel XModel 3Model Y, your vehicle does not charge. This is because CybertruckModel SModel XModel 3Model Y needs to also support a CCS communication protocol (a commonly used charging system for some third party chargers) in order to charge at third-party DC fast chargers with NACS connector.

NOTE: An adapter is required to charge at third-party stations with a CCS connector and your vehicle's hardware may need a retrofit to support CCS communication protocol.

To see if your vehicle can already communicate with CCS, navigate to **Controls > Software > Additional Vehicle Information > CCS and 3rd-party NACS DC Fast Charging Support:**



CCS charger:



NACS charger:



- **Enabled:** CybertruckModel SModel XModel 3Model Y supports the CCS communication protocol and can charge at any CCS station (adapter required) and third party NACS station.
- **Not enabled:** Your vehicle currently does not support the CCS communication protocol for NACS and CCS charging stations. Use the mobile app to see if you are eligible to schedule a service appointment to enable this through a hardware retrofit. Availability of this retrofit may vary.
- **Not compatible:** CybertruckModel SModel XModel 3Model Y cannot support the CCS communication protocol and cannot charge at third party NACS or CCS charging stations.

Manually Releasing Charge Cable

If the usual methods for releasing a charge cable from the charge port (using the charge handle release button, touchscreen, or mobile app) do not work, carefully follow these steps:

If the usual methods for releasing a charge cable from the charge port (using the charge handle release button, touchscreen, or mobile app) do not work, try pressing and holding down the rear trunk button on the key fob accessory (if equipped) for 1-2 seconds. If it still doesn't release, carefully follow these steps:

If the usual methods for releasing a charge cable from the charge port (using the charge handle release button, touchscreen, or mobile app) do not work, try pressing and holding down the rear trunk button on the key fob accessory (if equipped) for 1-2 seconds. If it still doesn't release, carefully follow these steps:

1. Ensure that CybertruckModel SModel XModel 3Model Y is not actively charging by displaying the charging screen on the touchscreen. If necessary, touch **Stop Charging**.
2. Open the rear trunk.
3. Pull the charge port's release cable downwards to unlatch the charge cable.



WARNING: Do not pull the release cable while simultaneously attempting to remove the charge cable from the charge port. Always pull the release cable *before* attempting to remove the charge cable. Failure to follow these instructions can result in electric shock and serious injury.







NOTE: The release cable may be recessed within the opening of the trim.

4. Pull the charge cable from the charge port.

CAUTION: Use the release cable **only** in situations where you can not release the charge cable using the usual methods. Continuous use can damage the release cable or charging equipment.

WARNING: Do not perform this procedure when your vehicle is charging, or if any orange high voltage conductors are exposed. Failure to follow these instructions can result in electric shock and serious injury or damage to the vehicle. If you are uncertain as to how to safely perform this procedure, contact your nearest Service Center.

Manually Releasing Charge Cable

If the usual methods for releasing a charge cable from the charge port (using the charge handle release button, touchscreen, or mobile app) do not work, try pressing and holding down the rear trunk button on the key fob for 1-2 seconds. If it still doesn't release, carefully follow these steps:

1. Ensure that CybertruckModel SModel XModel 3Model Y is not actively charging by displaying the charging screen on the touchscreen. If necessary, touch **Stop Charging**.
2. Open the rear trunk.
3. Open the flap on the left side of the trunk side trim.



- Press and hold the charge port's manual release lever towards the front of the vehicle to unlatch the charge cable.

⚠ WARNING: Do not touch or attempt to remove the orange high voltage cover. Failure to follow these instructions can result in electric shock and serious injury.

NOTE: If your vehicle does not have a charge port manual release lever, discontinue this procedure and contact your nearest Service Center.


NOTE: The orientation of the manual release lever may vary depending on market region.





- Pull the charge cable from the charge port.



6. Close the flap on the left side of the trunk side trim.

 **CAUTION:** The release lever is designed for use only in situations where the charge cable cannot be released from the charge port using the usual methods. Continuous use may result in damage to the release lever or charging equipment.

 **WARNING:** Do not perform this procedure while your vehicle is charging or if any orange high voltage conductors are exposed. Failure to follow these instructions can result in electric shock and serious injury or damage to the vehicle. If you are uncertain as to how to safely perform this procedure, contact your nearest Service Center.

 **WARNING:** Do not attempt to remove the charge cable at the same exact time as you begin to press the release lever towards the front of the vehicle. Always press the release lever towards the front of the vehicle and hold it before you begin to remove the charge cable from the charge port. Failure to follow these instructions can result in electric shock and serious injury.

Charging Best Practices

- Avoid allowing the Battery to get too low (the Battery icon turns yellow when the capacity remaining in the Battery drops to 20% or below).
- Refer to the information on the vehicle touchscreen (navigate to **Controls > Charging**) or the mobile App (touch the **Charging** icon) for recommended daily and trip charging limits.
- After you plug in your vehicle, confirm that the charge port light begins blinking green (indicating that CybertruckModel SModel XModel 3Model Y is charging) before you walk away. If CybertruckModel SModel XModel 3Model Y does not begin charging after a few seconds, the connector may not be fully inserted into the charge port, or there may be an issue preventing charging. Check the touchscreen for an alert with more information.

NOTE: If the charge port light begins blinking amber, CybertruckModel SModel XModel 3Model Y is charging at a reduced current. If the charge port light is solid blue, the charger is connected but the vehicle is not charging (such as when scheduled charging or scheduled departure is enabled). For more information, see [Charge Port Light on page 729](#).

Fast charging tips:

- Find fast chargers by filtering for three lightning bolts in the navigation search bar.
- Navigate to fast chargers to allow for preconditioning of the high voltage Battery. An optimal Battery temperature can help speed up charging.
- Typically, a lower state of charge results in faster charging.

NOTE: It is your responsibility to monitor your vehicle's charge at all times. Do not wait until the vehicle is discharged to plug it in. Always ensure you have more than enough charge to safely get to a charger.

- At Superchargers, leave some space between other vehicles, as neighboring stalls may share power.



Scheduled Charging and Scheduled Departure

Toggle between Scheduled Departure and Scheduled Charging by touching **Controls > Charging > Switch to Scheduled Charging/Scheduled Departure** when CybertruckModel SModel XModel 3Model Y is in Park.

NOTE: Scheduled Charging/Scheduled Departure settings are also available on the Climate Controls screen and in the Tesla mobile app.

Think of **Scheduled Charging** as "When do I want charging to start?" and think of **Scheduled Departure Off-Peak Charging** which is "When do I want charging to be complete?"

Scheduled Charging can be used together with **Scheduled Departure Preconditioning** but not with **Scheduled Departure Off-Peak Charging**.

Scheduled Charging/Scheduled Departure settings are automatically saved for each location.

NOTE: If you plug in CybertruckModel SModel XModel 3Model Y with both **Off-Peak Charging** and **Scheduled Charging** deselected, your vehicle charges immediately.

Using Scheduled Charging

Use **Scheduled Charging** to specify a daily time in which you want CybertruckModel SModel XModel 3Model Y to **start** charging.

With **Scheduled Charging** selected, enable the feature then set a daily time to start charging.

NOTE: Scheduled Charging starts charging immediately if CybertruckModel SModel XModel 3Model Y is plugged in up to six hours after the scheduled start time. However, if CybertruckModel SModel XModel 3Model Y is plugged in after six hours of the scheduled charging time, charging may not start until the scheduled time on the next day.

Using Scheduled Departure

Use **Scheduled Departure** to set a daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive. CybertruckModel SModel XModel 3Model Y automatically calculates when it needs to start preconditioning and/or charging. This ensures that charging is complete and/or the cabin climate and Battery are preconditioned by your departure time.

When **Scheduled Departure** is displayed, touch **Schedule** to set a daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive. Specify a time, then touch **Settings** to enable one or both of the following departure features. When plugging in with **Off-Peak Charging** enabled, the vehicle briefly draws power (you may hear clicking) to calculate the necessary charging start time.

After you've specified your desired settings, touch **Set**. The touchscreen displays your scheduled departure time.

- **Preconditioning** warms the Battery for improved performance and ensures a comfortable cabin climate at your set departure time.

NOTE: When CybertruckModel SModel XModel 3Model Y is not plugged in, preconditioning operates but only when the Battery's charge level is above 20%.

- **Off-Peak Charging** delays charging and automatically starts charging in order to finish before your scheduled departure time while also ensuring to charge the Battery during off-peak hours to reduce energy costs. Touch **Change Off-Peak Hours** to customize the time when off-peak utility rates end.

NOTE: Choosing **Off-Peak Charging** can reduce energy costs even in market regions where off-peak utility rates are not applicable. For example, if charging starts as soon as you plug in, charging may complete much sooner. This causes the Battery to cool down to ambient temperatures and requires energy to warm it back up by your departure time. Therefore, even if off-peak utility rates are not applicable to you, it is recommended that you set Off-Peak Hours to the same time as your departure time in order to reduce energy consumption.

NOTE: If there is not enough time to reach the charge limit, charging starts immediately in order to charge as much as possible.

NOTE: Once charging has started and there is not enough time to complete charging during off-peak hours, charging continues until the charge limit is reached.



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You can limit **Preconditioning** and **Off-Peak Charging** to weekdays only.



Getting Maximum Range

Factors Affecting Energy Consumption

While driving:

- Elevated driving speed.
- Environmental conditions such as cold or hot weather and wind.
- Using climate controls to heat or cool the cabin.
- Uphill travel: Driving uphill requires more energy and depletes range at a faster rate. However, driving downhill allows your vehicle to regain a portion of its expended energy through regenerative braking (see [Regenerative Braking on page 463](#)).
- Short trips or stop-and-go traffic: It takes energy to bring the cabin and Battery to a specified temperature when starting the vehicle. You may see a higher average consumption when the vehicle is used for very short trips or in heavy traffic.
- Heavy cargo load.
- Windows rolled down.
- The tonneau cover staying open.
- Towing a trailer.
- Driving on soft or sandy terrain (see [Off-Road Driving on page 1249](#)).
- Wheels and tires not maintained.
- Customized settings or third-party accessories (roof or trunk racks, third party wheels).

While parked and not plugged in to a charger:

- Preconditioning the cabin or using climate controls.
- Summon.
- Vehicle infotainment and climate controls system.
- Sentry mode.
- Tesla or third-party mobile app requests.
- The outlets in the cabin or the cargo bed are in use. For more information, see [Interior Electronics on page 1125](#) and [Cargo Bed Outlets on page 1129](#).

Tips to Maximize Range

You can maximize your driving range using the same driving habits you use to conserve fuel in a gasoline-powered vehicle. To achieve maximum range:

- Slow down your driving and avoid frequent and rapid acceleration. Consider using Chill Mode (touch **Controls > Pedals & Steering > Dynamics > Acceleration**) and Speed Assist (see [Speed Assist on page 651](#)) to assist in controlling your acceleration and speed.
- If safe to do so, modulate the accelerator pedal instead of using the brake pedal when gradually slowing down. Whenever Cybertruck Model S Model X Model 3 Model Y is moving and you are not pressing the accelerator pedal, regenerative braking slows down the vehicle and feeds surplus energy back to the Battery (see [Regenerative Braking on page 463](#)).
- Limit the use of resources such as heating and air conditioning. Using seat and steering wheel/steering yoke (or steering wheel) heaters (if equipped) to keep warm is more efficient than heating the cabin using climate controls.
- With your vehicle plugged in, use the mobile app to precondition your vehicle to ensure the cabin is at a comfortable temperature and windows are defrosted (if needed) before your drive by touching **Climate > On** and customizing your preferences (see [Mobile App on page 355](#)).
- Touch **Schedule**, available on both the charging and climate control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).
- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds.



- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds (see [Stopping Mode on page 466](#)).
- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds (see [Stopping Mode on page 467](#)).
- Ensure the wheels are aligned to specification, the tires are kept at the recommended inflation pressures (see [Tire Care and Maintenance on page 754](#) [Tire Pressures on page 1400](#)), and are rotated when needed (see [Maintenance Service Intervals on page 750](#)).
- Install aero covers (if equipped) to reduce wind resistance (see [Removing and Installing Aero Covers on page 760](#)).
- Install wheel covers (if equipped) to reduce wind resistance.
- Lighten your load by removing any unnecessary cargo.
- Fully raise all windows and close the tonneau cover.
- Turn on Range Mode (see [Range Mode on page 748](#)).
- Features such as Sentry Mode and Cabin Overheat Protection can impact range. Disable features when not needed.
- To prevent an excessive amount of energy consumption while the vehicle is idle, keep the vehicle plugged in when not in use.

It is normal for estimated range to decrease slightly over the first few months before leveling off. Over time, you may see a gradual, but natural, decrease in range at full charge – this depends on factors such as the mileage and age of the Battery. Your CybertruckModel SModel XModel 3Model Y will inform you in the unlikely event a hardware issue is causing excessive Battery or range degradation.

The power meter on the instrument panel touchscreen provides feedback on energy usage.

Range Assurance

The driving range displayed in CybertruckModel SModel XModel 3Model Y is an estimate of the remaining battery energy and, when set to Rated (**Controls > Display > Energy Display**), is based on EPA-rated consumption or ECE R101 (depending on market region). It may not account for your personal driving patterns or external conditions. The displayed range on the instrument panel touchscreen may decrease faster than the actual distance driven. To view estimated range based on your recent energy consumption, open the Energy app to display the graph.

NOTE: Rated driving range is based on EPA-rated consumption in the United States, which deviates from tests advertised and performed in other jurisdictions.

Your vehicle continuously monitors its energy level and proximity to known charging locations.



Touch **Chargers** in the Navigation search bar to toggle between types of chargers, including Superchargers and destination charging sites.

When you are at risk of driving beyond the range of known charging locations, the touchscreen displays a message giving you the opportunity to display a list of charging locations that are within range. When you select a charging location from the list, CybertruckModel SModel XModel 3Model Y provides navigation instructions and the turn-by-turn direction list displays the predicted amount of energy that will remain when you arrive at the charging destination.

Trip Planner (if available in your market region) routes you through Supercharger locations to minimize the amount of time you spend charging and driving. To enable, touch **Controls > Navigation > Trip Planner**.

Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage.





Touch to open the Energy app and choose from the different tabs. The energy chart's colored line represents your actual driving energy consumption whereas the gray line represents predicted usage. You can customize the chart units by touching **Controls** → **Display** → **Energy Display**.

Drive: Monitor the amount of energy being used while driving. You can track the real-time energy consumption broken down by categories, compare against different baseline projections, and view range tips tailored to your drive to understand how to improve energy efficiency.

- Choose **Trip** while navigating to a destination to compare the actual usage against the estimated projection.
- Choose **Rated** to compare the actual energy or range usage against the estimated driving distance (or energy) available.
- Choose between **Current Drive** to view data from your current drive or **Since Last Charged** to include data since the vehicle was last charged.
- View **Range Tips** to understand impacts on battery consumption and suggestions to maximize range and efficiency.

Park: Monitors the amount of energy lost while CybertruckModel SModel XModel 3Model Y is parked.

- Choose between **Since Last Drive** or **Since Last Charge**.
- View how much idle energy has been consumed while your vehicle is parked and suggestions to decrease energy loss.

Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage.



1. Locate the Energy app in the bottom bar by touching the app launcher (the three dots).
2. Touch to open the Energy app and choose from the different tabs. The energy chart's colored line represents your actual driving energy consumption whereas the gray line represents predicted usage.

NOTE: You can customize the chart values by touching **Controls** > **Display** > **Energy Display**.

- **Drive:** Monitor the amount of energy being used while driving. You can track the real-time energy consumption broken down by categories, compare against different baseline projections, and view range tips tailored to your drive to understand how to improve energy efficiency.
 1. Choose **Trip** while navigating to a destination to compare the actual usage against the estimated projection.
 2. Choose **Rated** to compare the actual energy or range usage against the estimated driving distance (or energy) available.
 3. Choose between **Current Drive** to view data from your current drive or **Since Last Charged** to include data since the vehicle was last charged.
 4. View **Range Tips** to understand impacts on battery consumption and suggestions to maximize range and efficiency.
- **Park:** Monitors the amount of energy lost while CybertruckModel SModel XModel 3Model Y is parked.
 1. Choose between **Since Last Drive** or **Since Last Charge**.
 2. View how much idle energy has been consumed while your vehicle is parked and suggestions to decrease energy loss.
- **Consumption:** Display how much energy CybertruckModel SModel XModel 3Model Y has consumed over the past 5, 15 or 30 miles (10, 25 or 50 km).
 1. Touch **Instant Range** to adjust the projected range estimation. Instant Range uses only the latest few data points to estimate the projected range.
 2. Touch **Average Range** to use the past 5, 15 or 30 miles (10, 25 or 50 km) of energy consumption to provide a more accurate projected range.

Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage. To use the Energy app, navigate to **Application Launcher** > **Energy** on the touchscreen. Choose from two types of charts:



- **Consumption:** Display how much energy CybertruckModel SModel XModel 3Model Y has consumed over the past 5, 15 or 30 miles (10, 25 or 50 km).

Touch **Instant Range** or **Average Range** to adjust the projected range estimation. Instant Range uses only the latest few data points to estimate the projected range, whereas Average Range uses the past 5, 15 or 30 miles (10, 25 or 50 km) of energy consumption to provide a more accurate projected range.

- **Trip:** You can monitor the amount of energy being used while navigating to a destination. You can track actual usage against the initial prediction. The green line represents the actual usage whereas the gray line represents predicted usage. To change the zoom level, touch the zoom icon located in the top right corner of the chart.

NOTE: The Trip chart displays energy usage only if you are currently navigating to a destination.

Range Mode

Range Mode conserves energy by limiting the power of the climate control system and turns off the signature lights. Turn Range Mode on by touching **Controls > Driving > Range Mode**. When turned on in an All-Wheel Drive vehicle, Range Mode also optimizes torque distribution between the motors to maximize range.

Saving Energy

CybertruckModel SModel XModel 3Model Y has an energy-saving feature that reduces the amount of energy being consumed when CybertruckModel SModel XModel 3Model Y is not in use. On newer vehicles, this feature is automated to provide an optimal level of energy saving. However, on older vehicles, you can touch **Controls > Display > Energy Saving** and choose from the following options:

- **OFF** - CybertruckModel SModel XModel 3Model Y automatically shifts to the energy-saving mode only at night (10 pm to 5 am). Idle energy consumption may increase.
- **ON** - Significantly less energy is consumed whenever CybertruckModel SModel XModel 3Model Y is not in use. The start-up time of the instrument panel touchscreen and Bluetooth could be slower.
- **Always Connected** - Preserves cellular connectivity when energy saving is active. This allows the mobile app to connect to CybertruckModel SModel XModel 3Model Y quicker, and provides immediate internet access when entering the car. Slightly more energy is consumed.

Maintenance



Software Updates

Loading New Software

Tesla updates your vehicle's software wirelessly, constantly providing new features. Tesla recommends you install software updates at the earliest opportunity on your vehicle. To ensure the fastest and most reliable delivery of software updates, leave Wi-Fi turned on and connected whenever possible. In most cases, your vehicle must be connected to Wi-Fi to download the software update (see [Wi-Fi on page 359](#)).

Downloading vs. Installing New Software

There are two steps to receiving a new update: downloading the software (which requires Wi-Fi), and installing it. For your convenience, you can start downloads and installations using the Tesla mobile app.

Download

When a software update is available for download, the download occurs automatically, showing a green arrow at the top of the touchscreen. If the vehicle is not connected to Wi-Fi, a yellow download icon appears. Although you can drive while the software update is being downloaded, doing so can interrupt the download if your vehicle loses the Wi-Fi connection. When the software update is fully downloaded and ready to install, a clock icon displays at the top of the touchscreen.

NOTE: To ensure the fastest and most reliable download of software updates, leave the Wi-Fi turned on and connected whenever possible (see [Wi-Fi on page 359](#)).

Install

You CANNOT drive while software is being installed. If plugged in, your vehicle will stop charging until the installation is complete. To start the installation, touch the yellow clock icon at the top of the touchscreen. Touch **Install Now** to begin the installation immediately or touch **Set For This Time** to choose a different start time. At any time before the update installs, you can touch this clock icon to reschedule. If you are driving CybertruckModel SModel XModel 3Model Y at the scheduled update time, the update is canceled and must be rescheduled. You can also view, download, and install software updates by navigating to **Controls > Software**. If available, connect to Wi-Fi to download the update.

Software updates are not performed when certain features are active, such as Keep Climate On, Dog Mode, or Camp Mode and Smart Preconditioning.

NOTE: Software updates will not install if Keep, Dog, or Camp mode are enabled (see [Keep Climate On, Dog, and Camp on page 677](#)[Keep Climate On, Dog, and Camp on page 1340](#)).

NOTE: On an as-needed basis, Tesla also sends software updates using a cellular connection.

NOTE: Some software updates take approximately 30 minutes to complete (some may take longer). CybertruckModel SModel XModel 3Model Y must be in Park while the software is being updated.



WARNING: Do not attempt to use the vehicle while the software is being installed. Vehicle functions, including some safety systems and opening or closing the doors or windows, may be limited or disabled when installation is in progress and you could damage the vehicle.

Software Update Preferences

Tesla determines how, when, and where to send updates to vehicles based on various factors unique to each release. In **Controls > Software**, you can choose how quickly you want to receive updates that are ready for your vehicle. Be an early adopter by selecting **Advanced** (which will have additional releases), or wait until others have installed (which will result in fewer releases) by selecting **Standard**. Choosing **Advanced** does not enroll your vehicle in Tesla's early access program.

Tesla does not update your software upon request for those wanting to receive the latest features and improvements. Selecting **Advanced** and consistently connecting to Wi-Fi (see [Wi-Fi on page 359](#)) is the best way to quickly receive the latest software updates.

If the touchscreen displays a message indicating that a software update was not successfully completed, wait for the next software update to deploy to your vehicle.

NOTE: The software update screen persists until you install the update. Install a software update as soon as possible. Any harm resulting from failure to install a software update is not covered by the vehicle's warranty. Failure or refusal to install updates can cause some vehicle features to become inaccessible or digital media devices may become incompatible.



NOTE: Tesla may update or reinstall your vehicle's software as part of the normal diagnostic, repair, and maintenance process within Tesla Service.

NOTE: Reverting to a previous software version is not possible.

Charging

If CybertruckModel SModel XModel 3Model Y is charging when the software update begins, charging stops. Charging resumes automatically when the software update is complete.

Viewing Release Notes

When a software update is complete, read the release notes displayed on the touchscreen to learn about changes or new features. To display release notes about the current version of your vehicle's software at any time, touch **Controls > Software > Release Notes**.

Tesla strongly recommends reading all release notes. They may contain important safety information or operating instructions for your CybertruckModel SModel XModel 3Model Y.

Maintenance Service Intervals

Service Intervals

Tesla recommends the following maintenance items and intervals, as applicable to your vehicle, to ensure continued reliability and efficiency of your CybertruckModel SModel XModel 3Model Y.

For additional information on vehicle alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 24 years.
- Cabin air filter replacement every 2 years.
- HEPA filters and replacement every 3 years.
- HEPA filters and carbon filters replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 3 years.
- Cabin air filter replacement every 3 years.
- HEPA filters replacement every 3 years.
- HEPA filters and carbon filters replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 4** years.
- Cabin air filter replacement every 2 years.
- HEPA filter (x2) and carbon filter (x2) replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.



- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

**A/C desiccant bag replacement can be extended to 6 years on vehicles manufactured between approximately 2017-2021.

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 8 years.
- HEPA filter replacement every 2 years, or every year in cases of off-road/dirt road driving.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

*Heavy brake usage due to towing, mountain descents, or performance driving -- especially for vehicles in hot and humid environments -- may necessitate more frequent brake fluid checks and replacements.

NOTE: Any damage caused by opening the Battery coolant reservoir is excluded from the warranty.

NOTE: The above intervals are based on typical driving behaviors and scenarios. Depending on various circumstances such as driving behavior, usage, environmental conditions, etc., the above maintenance items may need to be performed more or less frequently than specified. Additionally, the above list should not be considered comprehensive and does not include consumable parts such as windshield wiperthe windshield wiper, brake pads, low voltage battery (if applicable), etc.

NOTE: Damages or failures caused by maintenance or repairs performed by non-Tesla certified technicians are not covered by the warranty.

For more do-it-yourself maintenance procedures and information, see <https://www.tesla.com/support/do-it-yourself-guides>.

Schedule Service

Scheduling a service visit through the mobile app is easy. After touching **Service**, select the type of service needed and follow the directions in the mobile app. Provide as much detail as possible to better help the Service team identify the cause of concern, such as:

- Photos, sound recordings, or videos.
- Date(s), time(s), and time zone when the issue occurred.
- Country of use and location.
- Approximate speed the vehicle was traveling (if applicable).
- Environmental conditions (rain, snow, cold, etc.).
- Road name and type of road (if applicable).
- Quality of lane markings (if applicable).
- Applicable vehicle settings.
- Identifiable symptoms.

Visit <https://www.tesla.com/support/service-visits> for more information on scheduling service.

Daily Checks

- Check the Battery's charge level, displayed on the instrument paneltouchscreen or mobile app.
- Check the condition and pressure of each tire (see [Tire Care and Maintenance on page 754](#)[Tire Pressures on page 1400](#)).
- Check that all exterior lights, horn, turn signals, and wiperthe wiper and washers are working.
- Check for any unexpected indicator lights or vehicle alerts on the touchscreen or instrument panel.
- Check the operation of the brakes, including the parking brake.



NOTE: Because CybertruckModel SModel XModel 3Model Y uses regenerative braking (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)), the brake pads are typically used less frequently than those in traditional braking systems. To avoid the accumulation of rust and corrosion, Tesla recommends frequently pressing the brake pedal to apply the mechanical brakes, which dries the brake pads and rotors.

- Check the operation of the seat belts (see [Seat Belts on page 254](#)[Seat Belts on page 1157](#)).
- Look for abnormal fluid deposits underneath CybertruckModel SModel XModel 3Model Y that might indicate a leak. It is normal for a small pool of water to form (caused by the air conditioning system's dehumidifying process).
- Look around the exterior of CybertruckModel SModel XModel 3Model Y and immediately remove any corrosive substances (such as bird droppings, tree resin, tar spots, dead insects, industrial fallout, etc.) to prevent damage to the exterior (see [Cleaning on page 777](#)).

Weekly Checks

- During wet weather, clean Autopilot cameras weekly (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Otherwise, clean them monthly during dry weather.

Monthly Checks

- Check windshield washer fluid level and top up if necessary (see [Topping Up Windshield Washer Fluid on page 784](#)[Topping Up Windshield Washer Fluid on page 1416](#)).
- Check that the air conditioning system is operating correctly (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)).

NOTE: In addition to cooling the interior, the air conditioning compressor also cools the Battery. Therefore, in hot weather, the air conditioning compressor can turn on even if you turned it off. This is normal because the system's priority is to cool the Battery to ensure it stays within an optimum temperature range to support longevity and optimum performance. Also, even when not in use, you may hear CybertruckModel SModel XModel 3Model Y emit a whining noise or the sound of water circulating. These sounds are normal and occur when the internal cooling systems turn on to support various vehicle functions, such as maintaining the low voltage battery and balancing the temperature of the high voltage Battery.

Fluid Replacement Intervals

Battery coolant and brake fluid levels should only be checked by Tesla or a professional automotive repair shop. Specific service information is available in the Service Manual.

- **Battery coolant:** Your Battery coolant does not need to be replaced for the life of your vehicle under most circumstances.

NOTE: Any damage caused by opening the Battery coolant reservoir is excluded from the warranty.

- **Brake fluid:** Do not top up your brake fluid.

Software

Updating software is important to ensure proper operation and longevity of your vehicle's components. You must install a software update at the earliest opportunity. See [Software Updates on page 749](#).

Tesla may update or reinstall your vehicle's software as part of the normal diagnostic, repair, and maintenance process within Service.

High Voltage Safety

Your CybertruckModel SModel XModel 3Model Y has been designed and built with safety as a priority. However, be aware of these precautions to protect yourself from the risk of injury inherent in all high-voltage systems:

- Read and follow all instructions provided on the labels that are attached to CybertruckModel SModel XModel 3Model Y. These labels are there for your safety.
- The high voltage system has no user-serviceable parts. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are colored orange for easy identification.
- If a collision occurs, do not touch any high voltage wiring, connectors, or components connected to the wiring.



- In the unlikely event that a fire occurs, immediately contact your local fire emergency responders.

⚠ WARNING: Assume that the low voltage components of CybertruckModel SModel XModel 3Model Y, including all cables and connectors, are always energized. 48V low voltage connectors are colored blue for easy identification, and wires that operate at 48V are marked with blue tape.

Do not handle low voltage cables or connect/disconnect connectors when the low voltage system is powered. Because the 48V low voltage system operates at a higher voltage than a typical low voltage system, there is an increased risk of personal injury, arcing, or component damage if the low voltage components of CybertruckModel SModel XModel 3Model Y are handled improperly.

⚠ WARNING: Always disconnect the charge cable before working underneath CybertruckModel SModel XModel 3Model Y, even if charging is not in progress.

⚠ WARNING: Keep your hands and clothing away from cooling fans. Some fans operate even when CybertruckModel SModel XModel 3Model Y is powered off.

⚠ WARNING: Some fluids (Battery acid, Battery coolant, brake fluid, windshield washer additives, etc.) used in vehicles are poisonous and should not be inhaled, swallowed, or brought into contact with open wounds. For your safety, always read and follow instructions printed on fluid containers.

Replacing the Low Voltage Battery

You can replace the low voltage battery yourself on some vehicles. See [Replacing the Low Voltage Lead-Acid Battery on page](#) [Replacing the Low Voltage Lead-Acid Battery on page](#) for more information and procedure instructions.

Replacing the Low Voltage Battery

You can replace the low voltage battery yourself on some vehicles. See [Replacing the Low Voltage Lead-Acid Battery on page](#) [Replacing the Low Voltage Lead-Acid Battery on page](#) for more information and procedure instructions.



Tire Care and Maintenance

Displaying Tire Pressures

Tire pressures display on the touchscreen in the cards area on the car status display, or by touching **Controls > Service**. The pressure of each tire displays in the visualization of your CybertruckModel SModel XModel 3Model Y, in addition to what time your tire pressures were last measured. The touchscreen also displays your vehicle's recommended cold tire pressures so you can easily determine how much to inflate your tires. You can choose whether you want to display tire pressures using Bar or PSI by touching **Controls > Display > Tire Pressure**.

You can display tire pressures on the instrument panel by using the right or left steering wheelsteering yoke (or steering wheel) buttons to display **Car Status** (see [Using Left Steering Wheel Buttons on page 384](#) or [Using Right Steering Wheel Buttons on page 385](#)). The pressure of each tire displays in the visualization of your vehicle, in addition to what time the tire pressures were last measured. To choose whether you want to display tire pressures using Bar or PSI, touch **Controls > Display > Tire Pressure**.

You can also view tire pressures in the Tesla mobile app.

NOTE: You may need to drive briefly before the visualization displays the tire pressure values.

Maintaining Tire Pressures

Keep tires inflated to the pressures shown on the Tire and Loading Information label, even if it differs from the pressure printed on the tire itself. The Tire and Loading Information label is located on the center door pillar and is visible when the driver door is open.

If you are towing a trailer, do not use the tire pressures printed on the Tire and Loading Information Label. Instead, refer to the tire pressures published in the towing section (see [Towing and Accessories on page 537](#)).

If you are towing a trailer, do not use the tire pressures printed on the Tire and Loading Information Label. Instead, refer to the tire pressures published in the towing section (see [Towing and Accessories on page 528](#)).

NOTE: If your CybertruckModel SModel XModel 3Model Y is fitted with Tesla accessory wheels or tires, some information may be different from the labels on the vehicle. See [Accessory Wheels and Tires on page 802](#).







The Tire Pressure indicator light on the instrument panel touchscreen alerts you if one or more tires is under- or over-inflated.

The Tire Pressure indicator light does not immediately turn off when you adjust tire pressure. After inflating the tire to the recommended pressure, you must drive over 15 mph (25 km/h) for a short amount of time to activate the Tire Pressure Monitoring System (TPMS), which turns off the Tire Pressure indicator light.

If the indicator light flashes for one minute whenever you power on Cybertruck Model S Model X Model 3 Model Y, a fault with the TPMS is detected (see [TPMS Malfunction](#) on page 769).

NOTE: Your vehicle's tire pressures will drop in cold ambient temperatures. If the TPMS indicator light appears, inflate the tires before driving. The tires will lose one PSI for every 10° F (6° C) drop in outside temperature. Proper tire pressures help protect tires from potholes and improve range when properly inflated.

⚠ WARNING: Under-inflation is the most common cause of tire failures and can cause a tire to overheat, resulting in severe tire cracking, tread separation, or blowout, resulting in unexpected loss of vehicle control and increased risk of injury. Under-inflation also reduces the vehicle's range and tire tread life.



- ⚠ WARNING:** The Low Tire Pressure indicator light alerts you only in situations when a tire is below the recommended threshold (as indicated on the Tire and Loading Information label) under normal driving conditions. It does not alert you when a tire is under-inflated based on the load you are carrying.
- ⚠ WARNING:** Check tire pressures using an accurate pressure gauge when tires are cold. It takes only about one mile (1.6 km) of driving to warm up the tires sufficiently to affect tire pressures. Parking the vehicle in direct sunlight or in hot weather can also affect tire pressures. If you must check warm tires, expect increased pressures. Do not let air out of warm tires in an attempt to match recommended cold tire pressures. A hot tire at or below the recommended cold tire inflation pressure is dangerously under-inflated.

Checking and Adjusting Tire Pressures

Follow these steps when tires are cold and CybertruckModel SModel XModel 3Model Y has been stationary for over three hours:



1. Refer to the Tire and Loading Information label located on the driver's center door pillar for the target tire pressure.
2. Remove the valve cap.
3. Firmly press an accurate tire pressure gauge onto the valve to measure pressure.
4. If required, add or remove air to reach the recommended pressure.
NOTE: You can release air by pressing the metal stem in the center of the valve.
5. Re-check pressure using the accurate tire gauge.
6. Repeat steps 3 and 4 as necessary until the tire pressure is correct.
7. Reinstall the valve cap to prevent dirt from entering. Periodically check the valve for damage and leaks.

Inspecting and Maintaining Tires

Regularly inspect the tread and side walls for any sign of distortion (bulges), foreign objects, cuts or wear.

- ⚠ WARNING:** Do not drive CybertruckModel SModel XModel 3Model Y if a tire is damaged, excessively worn, or inflated to an incorrect pressure. Check tires regularly for wear, and ensure there are no cuts, bulges or exposure of the ply/cord structure.

Tire Wear

Adequate tread depth is important for proper tire performance. Tires with a tread depth less than 4/32" (3 mm) are more likely to hydroplane in wet conditions and should not be used. Tires with a tread depth less than 5/32" (4 mm) do not perform well in snow and slush and should not be used when driving in winter conditions.



CybertruckModel SModel XModel 3Model Y is originally fitted with tires that have wear indicators molded into the tread pattern. When the tread has been worn down to $4/32''$ (3 mm) $3/32''$ (2 mm), the indicators start to appear at the surface of the tread pattern, producing the effect of a continuous band of rubber across the width of the tire. For optimal performance and safety, Tesla recommends replacing tires before the wear indicators are visible.

To improve vehicle handling characteristics and minimize hydroplaning in wet conditions, put tires with the most tread on the rear of the car.

Tire Rotation, Balance, and Wheel Alignment

Tesla recommends rotating the tires every 6,250 miles (10,000 km) or if tread depth difference is $2/32''$ (1.5 mm) or greater, whichever comes first.

Tire rotation is an essential part of tire maintenance. It helps maintain an even treadwear pattern which enhances the tire's overall wear quality, decreases road noise and maximizes tire life.

Vehicles with staggered wheels and non-directional tires can be rotated side-to-side (left-to-right) but not front-to-back as the front and rear tire size is different. Left-to-right rotation can increase tread life by changing the direction of rotation for each tire and balancing shoulder wear.

Unbalanced wheels (sometimes noticeable as vibration through the steering wheelsteering yoke (or steering wheel)) affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.


If tire wear is uneven (on one side of the tire only) or becomes abnormally excessive, check the wheel alignment. If the tires need to be serviced, such as rotated or replaced, reset the tire configuration (see [Tire Configuration on page 767](#)) to improve your driving experience.

Punctured Tires

A puncture eventually causes the tire to lose pressure, which is why it is important to check tire pressures frequently. Permanently repair or replace punctured or damaged tires as soon as possible.

Your tubeless tires may not leak when penetrated, provided the object remains in the tire. If, however, you feel a sudden vibration or ride disturbance while driving, or you suspect a tire is damaged, immediately reduce your speed. Drive slowly, while avoiding heavy braking or sharp steering and, when safe to do so, stop the vehicle. Arrange to have CybertruckModel SModel XModel 3Model Y transported to a Tesla Service Center, or to a nearby tire repair center.

NOTE: In some cases, you can temporarily repair small tire punctures (under $1/4''$ (6 mm)) using an optional tire repair kit available from Tesla. This allows you to slowly drive CybertruckModel SModel XModel 3Model Y to Tesla or to a nearby tire repair facility.

 **WARNING:** Do not drive with a punctured tire that has not been repaired, even if the puncture has not caused the tire to deflate. A punctured tire can deflate suddenly at any time.

Flat Spots

If CybertruckModel SModel XModel 3Model Y is stationary for a long period, tires can form flat spots. When CybertruckModel SModel XModel 3Model Y is driven, these flat spots cause a vibration which gradually disappears as the tires warm up and regain their original shape.

To minimize flat spots during storage, inflate tires to the maximum pressure indicated on the tire wall. Then, before driving, release air to adjust tire pressure to the recommended levels.

Improving Tire Mileage

To improve the mileage you get from your tires, maintain tires at the recommended tire pressures, observe speed limits and advisory speeds, and avoid:

- Pulling away quickly, or hard acceleration.
- Fast turns and heavy braking.
- Potholes and objects in the road.
- Hitting curbs when parking.



- Contaminating tires with fluids that can cause damage.

Replacing Tires and Wheels

Tires degrade over time due to the effects of ultraviolet light, extreme temperatures, high loads, and environmental conditions. It is recommended that tires are replaced every six years, or sooner if required, even if tread depth is above the minimum.

When a tire set becomes worn, replace all four tires at the same time. Choose a Tesla-approved tire which is designed specifically for your vehicle. Most Tesla-approved tires can be identified with a "T-mark" specification on the tire's sidewall (for example, T0, T1, T2). Tesla-approved tires are designed to work with electric drivetrains and optimize performance, safety, reliability, and durability. For more information about Tesla-approved replacement tires, refer to the [Service ManualService ManualService ManualService ManualService ManualService Manual](#).

NOTE: The T-mark identifies a specific tire's progression according to Tesla specifications. For example, a T1 Michelin Primacy is newer than a T0 Michelin Primacy, but is not necessarily newer than other models of T0 tires.

If tires need to be replaced early, for example due to a flat tire, we recommend replacing the tires in pairs unless the other tires are within 2/32 in (1.5 mm) of tread depth of the new tire. When replacing tires, it is important to match the brand and model of the older tires. Always place a pair of new tires on the rear if all four tires are the same size. Always balance the wheel and tire after replacing a tire. Consult with a professional tire retailer and installer for further guidance. If you replace your tires or install different ones, reset the tire configuration (see [Tire Configuration on page 767](#)). This resets the learned tire settings and improves the driving experience on your new tires. It may take up to 24 hours after a tire replacement or repair before the tire lubricant is completely dry and tires achieve maximum adherence to the rims. Avoid hard accelerations during this period to avoid tire slip on the rim.

NOTE: Regardless of the number of tires replaced, a complete set of matching tires is recommended for optimum performance.

If tires other than those specified are used, ensure that the load and speed ratings marked on the tire (see [Understanding Tire Markings on page 882](#)) equal or exceed those of the original specification.

For the specification of the original wheels and tires installed on CybertruckModel SModel XModel 3Model Y, see [Wheels and Tires on page 877](#).

If you replace a wheel, the TPMS (Tire Pressure Monitoring System) sensors need to be reset to ensure they provide accurate warnings when tires are under- or over-inflated (see [Resetting the TPMS Sensors on page 767](#)) (see [Automatic Reset of TPMS Sensors on page 768](#)) (see [Automatic Reset of TPMS Sensors on page 768](#) and [Manually Resetting TPMS Sensors on page 768](#)) (see [Automatic Reset of TPMS Sensors on page 768](#)) (see [Automatic Reset of TPMS Sensors on page 769](#)) (see [Automatic Reset of TPMS Sensors on page 769](#)).

NOTE: Installing winter tires with aggressive compound and tread design may result in temporarily-reduced regenerative braking power. However, your vehicle is designed to continuously recalibrate itself, and after changing tires it will increasingly restore regenerative braking power after some moderate-torque straight-line accelerations. For most drivers this occurs after a short period of normal driving, but drivers who normally accelerate lightly may need to use slightly harder accelerations while the recalibration is in progress. Go to **Service > Wheel & Tire > Tires** to select winter tires and quicken this process.



WARNING: For your safety, use only tires and wheels that match the original specification. Tires that do not match the original specification can affect the operation of the TPMS.




WARNING: Never exceed the speed rating of your vehicle's tires. The speed rating is shown on the sidewall of your tires (see [Understanding Tire Markings on page 882](#)).

Asymmetric Tires

Some CybertruckModel SModel XModel 3Model Y tires are asymmetric and must be mounted on the wheel with the correct sidewall facing outward. The sidewall of the tire is marked with the word **OUTSIDE**. When new tires are installed, make sure that the tires are correctly mounted on the wheels.



TI-6279

 **WARNING:** Road holding is seriously impaired if the tires are incorrectly installed on the wheels.

Removing and Installing Aero Covers

If your Cybertruck Model S Model X Model 3 Model Y is equipped with aero covers, you must remove them to access the lug nuts.

To remove an aero cover:

1. Grasp the aero cover firmly with both hands.
2. Pull the aero cover toward you to release the retaining clips.





To install an aero cover:

1. Align the aero cover with the valve stem.
2. Firmly press the center of the cover to secure it in place, then work your way out to firmly pressing the outer perimeter of each spoke. You may need to hold onto the opposite side of the cover until all spokes are secured.
3. Firmly press the center of the cap with your hands (do not hit the cover with your hands) to ensure it is secured.
4. As a final check, quickly pull each spoke to confirm they are secured in place.





For Gemini wheels, press on the perimeter of the cover until it aligns with the wheel surface. Press on the Tesla "T" in the center until the cap snaps into place. See [Parts and Accessories](#) on page 802 for more information.

⚠ CAUTION: To prevent the aero cover from falling off, ensure that it is fully secured before driving.

Removing and Installing Lug Nut Covers

If your Cybertruck Model S Model X Model 3 Model Y is equipped with lug nut covers, you must remove them to access the lug nuts.

To remove a lug nut cover:

1. Insert the curved part of the lug nut cover tool, if equipped (located in the glovebox in some vehicles, or you can use a small allen wrench) into the hole at the base of the Tesla "T".

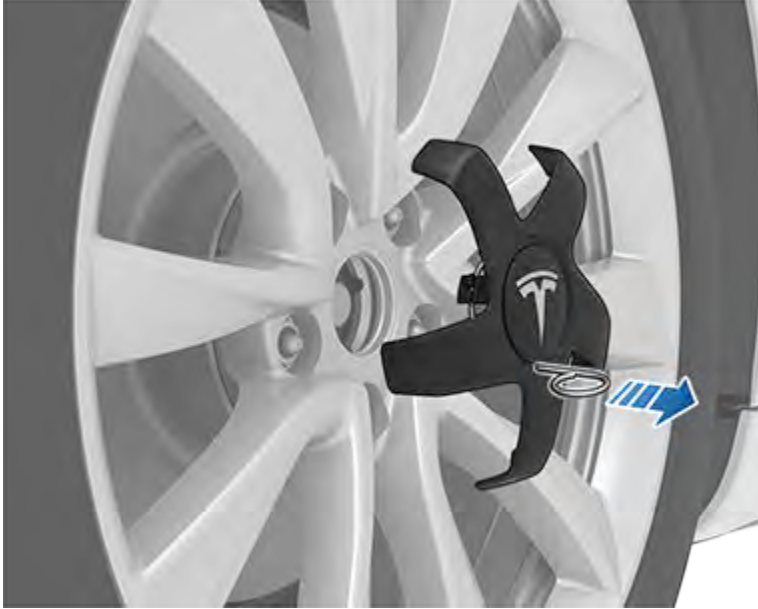
NOTE: The lug nut cover tool can also be purchased at an auto parts store or through online retailers.



2. Maneuver the lug nut cover tool so that it is fully inserted into the hole in the lug nut cover.
3. Twist the lug nut cover tool so that the curved part is touching the middle of the lug nut cover.



4. Firmly pull the lug nut tool away from the wheel until the lug nut cover is released.





1. Place the curved part of the lug nut cover tool (located in the glovebox for some vehicles, or you can use a small allen wrench) into the lowered perimeter around the middle of the lug nut cover.

NOTE: The lug nut cover tool can also be purchased at an auto parts store or through online retailers.



2. Twist the lug nut cover tool so that the end of the curved part is facing away from the Tesla "T".
3. Firmly pull the lug nut tool away from the wheel until the lug nut cover is released.



To install the lug nut cover:

1. Align the lug nut cover into position.
2. Push firmly on the lug nut cover until it fully snaps into place.

⚠ CAUTION: Make sure the lug nut cover is fully secure before driving to prevent it from falling off.



Wheel Configuration

If you are installing new wheels or swapping them for different ones, update your vehicle's wheel configuration by touching **Controls > Service > Wheel & Tire > Wheels**. This allows CybertruckModel SModel XModel 3Model Y to learn the new wheels and provide more accurate status updates on your vehicle. Select a wheel from the drop down menu that matches the new wheels you plan to install on CybertruckModel SModel XModel 3Model Y. Selecting new wheels in the wheel configuration also changes the wheels that appear on your vehicle's avatar on the touchscreen.

Ensure you are aware if your vehicle is equipped with staggered wheels, meaning the wheels are different sizes in the front and rear. Check the front and rear tire sizes marked on the tire sidewall to see if they match or are different sizes. If the wheels are staggered, take extra precaution to ensure the new wheels you install are staggered in the same way as the previous wheels.

NOTE: Changing your vehicle's wheel configuration can impact range estimates, tire pressure warning levels, and vehicle visualization.



WARNING: Only use Tesla-approved wheels when installing or swapping wheels. Using non Tesla-approved wheels can cause serious damage. Tesla is not liable for damage caused by using wheels not approved by Tesla.

Tire Configuration

To see the miles driven since your last tire rotation or replacement, touch **Controls > Service** and look under Last Tire Service. After the tires on CybertruckModel SModel XModel 3Model Y are rotated, replaced, or swapped, update your vehicle's tire configuration by touching **Reset**, or by touching **Wheel & Tire > Tires** from the same screen. This allows your vehicle to reset the learned tire settings and improve your driving experience. This also clears and resets the tread wear alert for the vehicle until you travel 6,250 miles (10,000 km) and low tread depth is detected again.

Ensure you are aware if your vehicle is equipped with winter tires. Winter tires can be identified by a mountain and snowflake icon on the tires' sidewall. See [Winter Tires on page 770](#) for more information.

NOTE: Changing your vehicle's tire configuration can temporarily impact acceleration and regenerative braking levels and should only be done after tires have been rotated or replaced.

Tire Pressure Monitoring

Each tire should be checked monthly when cold and inflated to the recommended pressures that are printed on the Tire and Loading Information label located on the driver's door pillar (see [Maintaining Tire Pressures on page 754](#)). If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, determine the proper tire inflation pressure for those tires.

As an added safety feature, your vehicle has been equipped with a TPMS that displays a tire pressure telltale (Tire Pressure Warning) on the instrument paneltouchscreen when one or more of your tires is significantly under- or over-inflated. Accordingly, when the Tire Pressure indicator light displays on the instrument paneltouchscreen to alert you about tire pressure, stop and check your tires as soon as possible, and inflate them to the proper pressure (see [Maintaining Tire Pressures on page 754](#)). Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces range efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.



If CybertruckModel SModel XModel 3Model Y detects a fault with the TPMS, this indicator flashes for one minute whenever you power on CybertruckModel SModel XModel 3Model Y.

NOTE: Installing accessories that are not approved by Tesla can interfere with the TPMS.



CAUTION: Avoid placing powered USB devices near the card reader on the center console (see [Key Card on page 111](#)) as powered USB devices may interfere with the tire pressure monitoring system.



WARNING: The TPMS is not a substitute for proper tire maintenance, including manually checking tire pressures and regularly inspecting the condition of tires. It is the driver's responsibility to maintain correct tire pressure, even if under- or over-inflation has not reached the level for the TPMS to trigger the Tire Pressure Warning on the instrument paneltouchscreen.

Resetting the TPMS Sensors

After replacing one or more wheels (but not after replacing a tire or rotating wheels), the TPMS sensors need to be reset to ensure tire pressure warnings are accurate.



On newer versions of Model S, the TPMS sensors are reset automatically after driving over 15 mph (25 km/h) for longer than 10 minutes. But for older versions, follow these steps:

1. Inflate all tires to their recommended pressures, as indicated on the Tire and Loading Information label located on the door pillar.
2. Get ready to drive for ten minutes, then touching **Controls > Service > Reset TPMS Sensors**.
3. Follow the onscreen instructions.



CAUTION: Selecting the incorrect wheel size may result in false tire pressure warnings. If a tire pressure warning displays, exit the vehicle, close the rear trunk and all doors, wait for the touchscreen to go black, then re-enter the vehicle and ensure that the correct wheel size is selected before touching **Reset TPMS Sensors**.

NOTE: On some older versions of Model S, when changing to 21" wheels, the TPMS may generate false tire pressure warnings. Bring Model S to a Tesla Service Center for further adjustment.



WARNING: Do not reset the TPMS sensors in an attempt to clear tire pressure warnings.

Automatic Reset of TPMS Sensors

After replacing one or more wheels (but not after replacing a tire or rotating wheels), the TPMS sensors are reset to ensure tire pressure warnings are accurate. TPMS sensors reset automatically after driving over 15 mph (25 km/h) for longer than 10 minutes.

NOTE: After replacing a wheel, false tire pressure warnings may display before you've driven 15 mph (25 km/h) for longer than 10 minutes.

Automatic Reset of TPMS Sensors

After replacing one or more wheels (but not after replacing a tire or rotating wheels), the TPMS sensors are reset to ensure tire pressure warnings are accurate. TPMS sensors reset automatically after driving over 15 mph (25 km/h) for longer than 10 minutes.

NOTE: After replacing a wheel, false tire pressure warnings may display before you've driven 15 mph (25 km/h) for longer than 10 minutes.

Manually Resetting TPMS Sensors

To accommodate aftermarket tires and specific off-highway driving situations (such as track events), you can reset the TPMS sensors to trigger an alert based on the currently set tire pressure instead of the default factory tire pressure. To do so, touch **Service > Reset TPMS Sensors** and follow the onscreen instructions.

NOTE: Resetting TPMS sensors may be especially helpful when using Track Mode, but remember to restore the factory TPMS setting when returning to normal driving.



WARNING: If your Cybertruck Model S Model X Model 3 Model Y is equipped with aftermarket tires that differ in size from those printed on the Tire and Loading Information Label (see [Vehicle Loading on page 846](#)), it is the driver's responsibility to determine the correct tire pressure. Do not drive on public roads when tires are not inflated to the correct pressure.



WARNING: Do not depend on TPMS sensors to accurately determine pressures and trigger alerts. It is the driver's responsibility to maintain correct tire pressures (see [Maintaining Tire Pressures on page 754](#)). Over or under-inflated tires can result in loss of control or tire damage, which can lead to serious injury.

Automatic Reset of TPMS Sensors

After replacing one or more wheels (but not after replacing a tire), the TPMS sensors are relearned to ensure tire pressure warnings are accurate. TPMS sensors reset automatically within 10 minutes of driving over 15 mph (25 km/h).



WARNING: If your Cybertruck Model S Model X Model 3 Model Y is equipped with aftermarket tires that differ in size from those printed on the Tire and Loading Information Label (see [Vehicle Loading on page 846](#)), it is the driver's responsibility to determine the correct tire pressure. Do not drive on public roads when tires are not inflated to the correct pressure.



WARNING: Do not depend on TPMS sensors to accurately determine pressures and trigger alerts. It is the driver's responsibility to maintain correct tire pressures (see [Maintaining Tire Pressures on page 754](#)). Over or under-inflated tires can result in loss of control or tire damage, which can lead to serious injury.

Automatic Reset of TPMS Sensors

After replacing one or more wheels (but not after replacing a tire), the TPMS sensors are relearned to ensure tire pressure warnings are accurate. TPMS sensors reset automatically within two minutes of driving over 15 mph (25 km/h).

WARNING: If your CybertruckModel SModel XModel 3Model Y is equipped with aftermarket tires that differ in size from those printed on the Tire and Loading Information Label, it is the driver's responsibility to determine the correct tire pressure. Do not drive on public roads when tires are not inflated to the correct pressure.

WARNING: Do not depend on TPMS sensors to accurately determine pressures and trigger alerts. It is the driver's responsibility to maintain correct tire pressures (see [Maintaining Tire Pressures on page 754](#)). Over or under-inflated tires can result in loss of control or tire damage, which can lead to serious injury.

Automatic Reset of TPMS Sensors

After replacing one or more wheels (but not after replacing a tire), the TPMS sensors are relearned to ensure tire pressure warnings are accurate. TPMS sensors reset automatically within 10 minutes of driving over 15 mph (25 km/h).

WARNING: If your CybertruckModel SModel XModel 3Model Y is equipped with aftermarket tires that differ in size from those printed on the Tire and Loading Information Label (see [Vehicle Loading on page 846](#)), it is the driver's responsibility to determine the correct tire pressure. Do not drive on public roads when tires are not inflated to the correct pressure.

WARNING: Do not depend on TPMS sensors to accurately determine pressures and trigger alerts. It is the driver's responsibility to maintain correct tire pressures (see [Maintaining Tire Pressures on page 754](#)). Over or under-inflated tires can result in loss of control or tire damage, which can lead to serious injury.

Replacing a Tire Sensor

If the Tire Pressure warning indicator displays frequently, use the mobile app to schedule a service appointment to determine if a tire sensor needs to be replaced. If a non-Tesla Service Center repairs or replaces a tire, the tire sensor may not work until Tesla performs the setup procedure.

TPMS Malfunction

CybertruckModel SModel XModel 3Model Y has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly.



The TPMS malfunction indicator is combined with the tire pressure indicator light. When the system detects a malfunction, the indicator flashes for approximately one minute, then remains continuously lit. This sequence continues upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator is on, the system might not be able to detect or signal under- or over-inflated tires as intended.

TPMS malfunctions can occur for a variety of reasons, including installing replacement or alternate tires or wheels that prevent the TPMS from functioning properly. Always check the TPMS malfunction indicator light after replacing one or more tires or wheels on your vehicle to ensure that the replacement tires or wheels allow the TPMS to continue to function properly.

NOTE: If a tire has been replaced or repaired using a different tire sealant than the one available from Tesla, and a low tire pressure is detected, it is possible that the tire sensor has been damaged.

Seasonal Tire Types

Understand Your Tire Type

The type of tires that your vehicle is originally equipped with depends on vehicle model and market region. It is important to understand the capabilities of your vehicle's tires and whether they are suited for summer, all-season, or winter driving. Check the information on the sidewall of a tire for information about a tire's performance characteristics (see [Understanding Tire Markings on page 882](#)).



Summer and All-Season Tires

Summer tires and all season tires are designed for maximum dry and wet road performance but are not designed to perform well in winter conditions. All-season tires are designed to provide adequate traction in most conditions year-round, but may not provide the same level of traction as winter tires in snowy or icy conditions. All-season tires can be identified by "ALL SEASON" and/or "M+S" (mud and snow) on the tire sidewall.

If driving in cold temperatures or on roads where snow or ice may be present, Tesla recommends using winter tires.

⚠ WARNING: In cold temperatures or on snow or ice, summer and all-season tires do not provide adequate traction. Selecting and installing the appropriate tires for winter conditions is important to ensure the safety and optimum performance of your Cybertruck Model S Model X Model 3 Model Y.

Winter Tires

Use winter tires to increase traction in snowy or icy conditions. When installing winter tires, always install a complete set of four tires at the same time. Winter tires must be the same diameter, brand, construction and tread pattern on all four wheels.



Winter tires can be identified by a mountain/snowflake symbol on the tire's sidewall.

When driving with winter tires, you may experience more road noise, shorter tread life, and less traction on dry roads.

NOTE: Installing winter tires with aggressive compound and tread design may result in temporarily-reduced regenerative braking power. However, your vehicle is designed to recalibrate itself to restore regenerative braking power after a short period of normal driving.

NOTE: If you install winter tires or replace your tires, reset the tire configuration by navigating to **Controls > Service > Wheel & Tire Configuration > Tires** (see [Tire Configuration on page 767](#)). This resets the learned tire settings and improves the driving experience on your new tires.

Driving in Low Temperatures

Tire performance is reduced in low ambient temperatures, resulting in reduced grip and an increased susceptibility to damage from impacts. Performance tires (summer applications) have reduced traction in ambient temperatures below 40° F (5° C), and are not recommended in snow/ice conditions. Performance tires can temporarily harden when cold, causing you to hear rotational noise for the first few miles (kilometers) until the tires warm up.

Using Tire Chains

Tesla has tested and approved the following tire chains (also called snow chains) to increase traction in snowy conditions. Tire chains should only be installed on the rear tires. The approved tire chains can be purchased from Tesla.

Tire Size	Recommended Chain
18"/19"	König CG-9 103
20"	König K-SUMMIT K34
Tire Size	Recommended Chain
18"	König CG-9 102
19"	König CG-9 103
Tire Size	Recommended Chain
20"/22"	KONIG K-SUMMIT K67
Tire Size	Recommended Chain
20"	KONIG K-SUMMIT K67




Do not use tire chains on 22" tires.

Tire Size	Recommended Chain
19"	KONIG K-SUMMIT K45

Do not use tire chains on 21" tires.

Tire Size	Recommended Chain
19"/20"	KONIG XG-12 PRO SIZE 252
21"	KONIG K-SUMMIT XXL K66

 **CAUTION:** If your CybertruckModel SModel XModel 3Model Y is equipped with aero covers, you must remove them before installing tire chains (see [Removing and Installing Aero Covers on page 760](#)). Failure to do so can cause damage not covered by the warranty.

 **CAUTION:** Do not put tire chains on summer tires, doing so can cause damage.


When installing tire chains, follow the instructions and warnings provided by the tire chain manufacturer. Mount them evenly and as tight as possible.


When using tire chains:


- Inspect the tire chains for loose fittings and damaged links before each use.
- Set air suspension (if equipped) to StandardMedium and turn off the **Default Ride Height to Low** setting (see [Air Suspension on page 471](#)[Air Suspension on page 474](#)[Air Suspension on page 476](#)).
- Set air suspension to **Medium** and turn off the **Default Ride Height to Low** setting.
- Avoid heavily loading CybertruckModel SModel XModel 3Model Y (heavy loads can reduce the clearance between the tires and the body).
- Do not drive the vehicle without the chains properly installed.
- Drive slowly. Do not exceed 30 mph (48 km/h).
- Remove the tire chains as soon as conditions allow.


NOTE: Tire chains are prohibited in some jurisdictions. Check local laws before installing tire chains.

 **CAUTION:** Air suspension (if equipped) should remain in the **Medium** ride height setting to avoid damage.

 **CAUTION:** Using non-recommended tire chains, or using tire chains on other sized tires can damage the suspension, body, wheels, and/or brake lines. Damage caused by using non-recommended tire chains, or incorrectly installing tire chains, is not covered by the warranty.

 **CAUTION:** Do not use snow chains on the front tires.

 **CAUTION:** Never deflate your tires to put on tire chains. When re-inflated, the chains might fit too tightly and cause tire damage.

 **CAUTION:** Ensure that the tire chains cannot touch suspension components or brake lines. If you hear the chains making unusual noises that would indicate contact with CybertruckModel SModel XModel 3Model Y, stop and investigate immediately.



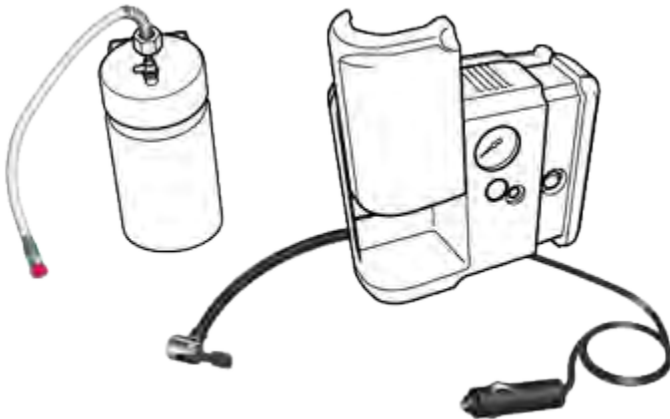
Temporary Tire Repair

Tire Repair Kit

Your CybertruckModel SModel XModel 3Model Y has no spare tire. Depending on the legislations that apply to the region in which you purchased CybertruckModel SModel XModel 3Model Y, a tire repair kit may or may not be included. If a tire repair kit was not provided in CybertruckModel SModel XModel 3Model Y upon delivery, you can purchase one from Tesla.

NOTE: Although CybertruckModel SModel XModel 3Model Y does not have a spare tire, in the event of a flat tire, Roadside Assistance provides towing coverage for up to 50 miles.

The tire repair kit consists of a compressor and a canister of tire sealant (enough to repair one tire). When injected into a tire, the sealant can penetrate a small puncture up to 1/4" (6 mm) to form a temporary repair.



NOTE: For punctures larger than 1/4" (6 mm), severe tread damage, a damaged sidewall, ripped tires or tires that have come off the rim, contact Roadside Assistance.

- ⚠ WARNING:** The tire repair kit is a temporary repair only. You must repair or replace a damaged tire as soon as possible.
- ⚠ WARNING:** Do not exceed 30 mph (48 km/h) when driving with a tire that has been temporarily repaired with sealant.
- ⚠ WARNING:** Follow all directions and warnings on the tire repair kit before starting a repair.
- ⚠ CAUTION:** Do not drive on a deflated tire as this can cause serious damage.

Tire Sealant Canister

The tire sealant provided in the Tesla tire repair kit is approved for use with CybertruckModel SModel XModel 3Model Y and is designed not to damage the TPMS (Tire Pressure Monitoring System) sensors. Therefore, you must replace it only with one of the same type and capacity (see [Replacing the Sealant Canister on page 775](#)). Tire sealant canisters can be purchased from Tesla.

The tire sealant has an expiration date printed on the outside of the canister. If the expiration date has passed, the sealant might not work as expected. Always replace an expired tire sealant canister.

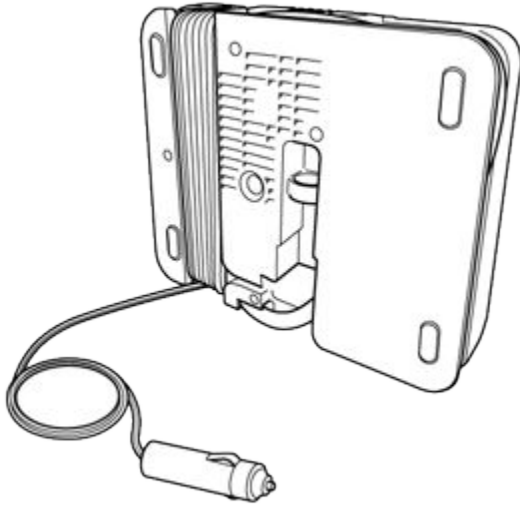
- ⚠ WARNING:** Do not use any tire sealant other than the one available from Tesla. Doing so could cause tire pressure sensors to malfunction.
- ⚠ WARNING:** Always read and follow the safety and handling instructions printed on the sealant canister.
- ⚠ WARNING:** Keep tire sealant out of the reach of children.
- ⚠ WARNING:** Tire sealant can be harmful if it contacts the eyes or if swallowed or inhaled. If the sealant comes into contact with your eyes, immediately flush with water and seek medical attention if irritation persists. If swallowed, do not induce vomiting and seek medical assistance immediately. If inhaled, breathe fresh air. Inhalation can cause drowsiness and dizziness. If breathing is affected, seek medical assistance immediately.



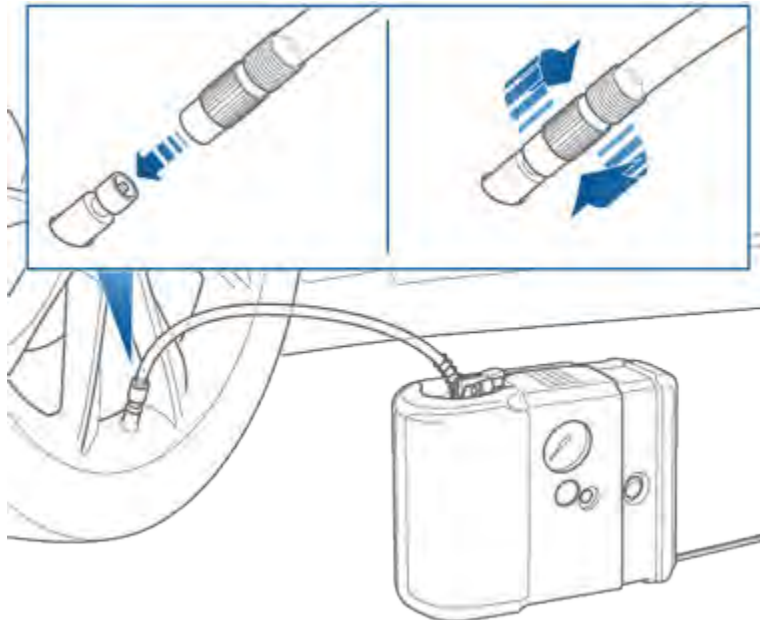
Inflating with Sealant and Air

If you have a Tesla tire repair kit, follow these steps to temporarily repair a small tire puncture (less than 1/4" (6 mm)).

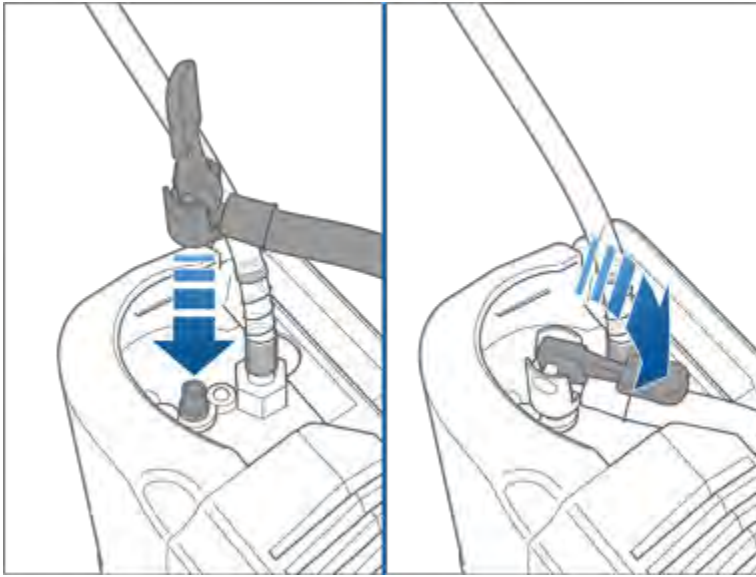
1. Stop Cybertruck Model S Model X Model 3 Model Y in a safe place away from traffic and ask passengers to wait in a safe area.
2. Turn on the hazard warning flashers to alert other road users.
3. If possible, position the wheel with the puncture at the bottom.
4. Detach the power supply connector from the back of the compressor and plug it into the low voltage power socket located on the front of center console.



5. Release the clear plastic hose from the tire compressor.
6. Remove the red cap and screw the end of the hose onto the tire's valve.



7. Attach the sealant kit's black air hose to the sealant valve and press the lever down to secure it in place.

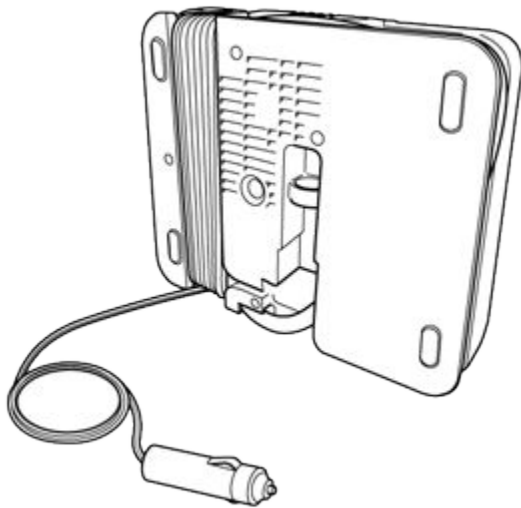


8. Ensure the compressor is lying on a level surface with the pressure gauge facing to the side as shown in Step 5.
9. Turn on the compressor.
10. Inflate the tire to the recommended pressure.
11. Turn off the compressor and disconnect the hose from the tire's valve. Wipe any excess sealant from the tire valve and wheel rim.
12. Immediately drive for 5 miles (8 km) to distribute the sealant around the tire. Do not exceed 30 mph (48 km/h).
13. Stop and check the tire's pressure. If necessary, inflate using the black air hose.
14. Have the tire repaired or replaced as soon as possible.
15. Replace the tire repair sealant canister (see [Replacing the Sealant Canister on page 775](#)).

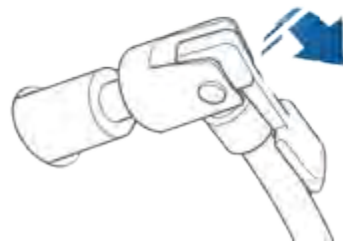
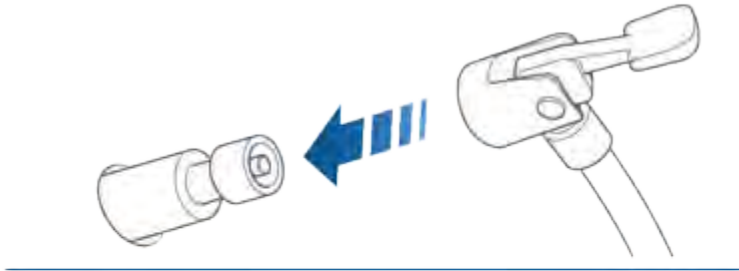
Inflating with Air Only

If you have a Tesla tire repair kit, follow these steps to inflate a tire with air:

1. Detach the power supply connector from the rear of the compressor and plug it into the low voltage power socket located in CybertruckModel SModel XModel 3Model Y on the front of center console.

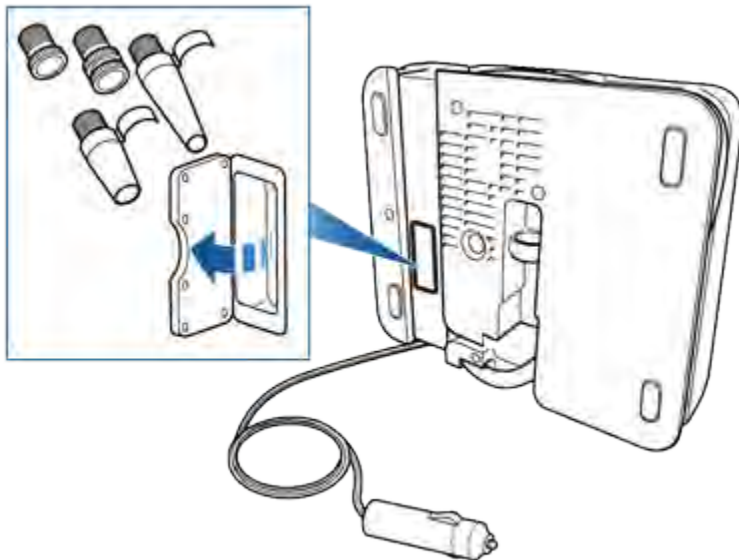


2. Release the black air hose from the compressor.
3. Attach the air hose to the valve and press the lever down to secure it in place.



4. Ensure the compressor is lying on a level surface with the pressure gauge facing to the side where you can read it.
5. To add air, turn on the compressor and inflate until the desired pressure is reached.
6. To release air, turn off the compressor, then press and hold the red button until the desired pressure is reached.

NOTE: For your convenience, the tire repair kit includes a selection of adapters that allow you to inflate other items. These adapters are located in a compartment on the back of the compressor.



⚠ CAUTION: To avoid overheating, do not use the compressor continuously for more than eight minutes. Allow the compressor to cool for 15 minutes between uses.

⚠ CAUTION: The compressor runs slowly when overheated from excessive use. Turn it off and allow it to cool.

Replacing the Sealant Canister

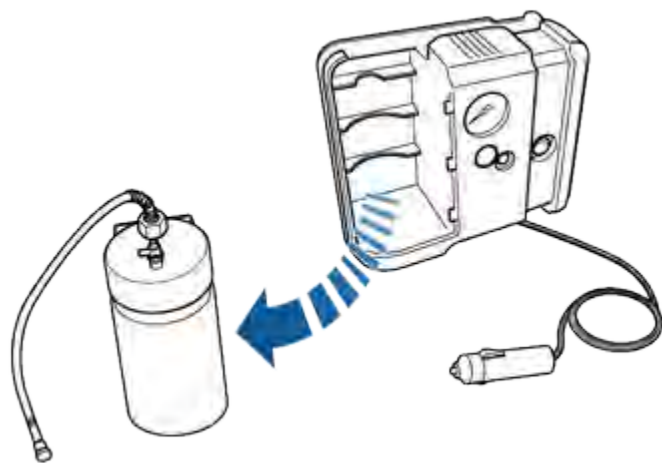
If you have a Tesla tire repair kit, you can purchase additional or replacement canisters of tire sealant from Tesla.

Follow these steps to replace the canister in your Tesla tire repair kit:

1. Unwrap the clear hose from the compressor. This hose is included with the tire repair sealant canister.
2. Remove the canister cover by sliding it upward to release it from the compressor.



3. Remove the canister.



4. Insert the new canister and replace the cover.



Cleaning

Cleaning the Exterior

To prevent damage to the exterior, immediately remove corrosive substances (such as grease, oil, bird droppings, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.). Do not wait until CybertruckModel SModel XModel 3Model Y is due for a complete wash. If necessary, use denatured alcohol to remove tar spots and stubborn grease stains, then immediately wash the area with water and a mild, non-detergent soap to remove the alcohol.

NOTE: It is normal for the stainless steel exterior to mature over time, resulting in minor changes to the reflective properties and color of the metal.

Dents and Scratches

The stainless steel exterior of CybertruckModel SModel XModel 3Model Y is more resistant to dents and dings than most other vehicles. However, CybertruckModel SModel XModel 3Model Y does not have a clear coat on the surface of the exterior body panels, meaning any scratches that appear are in the stainless steel panels themselves. Anyone performing scratch repair should refer to the applicable "Exterior Stainless Steel Panel Refinishing" procedure within the Collision Repair Manual on service.tesla.com. In addition, do not use, and/or immediately remove, chemical, corrosive, or non-pH neutral substances (including but not limited to: acidic liquids or materials, grease, oil, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.) as they can cause corrosion on the vehicle's exterior.



CAUTION: Tesla is not liable for any damage caused by failing to refer to official guidance.

To prevent damage to the paint, immediately remove corrosive substances (grease, oil, bird droppings, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.). Do not wait until CybertruckModel SModel XModel 3Model Y is due for a complete wash. If necessary, use denatured alcohol to remove tar spots and stubborn grease stains, then immediately wash the area with water and a mild, non-detergent soap to remove the alcohol.

Surface Contamination

Over time, you may notice contamination on the surface of the stainless steel body panels. These spots may appear as orange or brown rust. However, it is important to note that your Cybertruck is not rusting. Refer to the [DIY Guide](#) for more information.

Keep the exterior cameras free of dirt, condensation, or obstructions. These substances can cause unclear pictures or Autopilot and safety features to stop working (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)).

Follow these steps when washing the exterior of CybertruckModel SModel XModel 3Model Y:

1. Before washing, flush grime and grit from the vehicle using a hose. Flush away accumulations of mud in areas where debris easily collects (such as wheel wells and panel seams). If salt has been used on the highways (such as during winter months), thoroughly rinse all traces of road salt from the underside of the vehicle, wheel wells, and brakes.
2. Mix a mild, pH-neutral soap (such as car shampoo) with water until it gets soapy.
3. Soak a soft cleaning sponge in the soap mixture and hand wash CybertruckModel SModel XModel 3Model Y.



CAUTION: Some cleaners and car shampoos contain chemicals that can cause damage or discoloration, especially for plastic trim pieces, exterior lights, or camera lenses. For example, some car cleaning formulas contain hydroxide or other highly alkaline or caustic ingredients that can damage exterior components. Do not use acidic products either. Damage or discoloration resulting from cleaning products is not covered by the warranty.

4. Hand wash CybertruckModel SModel XModel 3Model Y using a clean soft cloth and cold or lukewarm water and a dish soap with mild degreasing properties. Mix the dish soap and water until it resembles water you would wash your dishes in. mild, high-quality car shampoo.



CAUTION: Some cleaners and car shampoos contain chemicals that can cause damage or discoloration, especially for plastic trim pieces, exterior lights, or camera lenses. For example, some car cleaning formulas contain hydroxide or other highly alkaline or caustic ingredients that can damage exterior components. Do not use acidic products either. Damage or discoloration resulting from cleaning products is not covered by the warranty.

5. After washing, rinse with clean water to prevent soap from drying on the surfaces.



6. Dry thoroughly with microfiber cloths (ensure the cloths are clean of sand, dirt, rocks, etc.), one in each hand, rotating in circular motions until the surface is dry.
7. Dry thoroughly with a chamois. If necessary, dry the brakes by going on a short drive and applying the brakes multiple times.

For a waterless wash:

1. Hand wash using a non-ionic pH-neutral waterless wash with a high quality microfiber towel.
2. Dry any streaks thoroughly with a chamois.
3. Remove oil and grease with an organic solvent, such as alcohol or ethyl alcohol.

NOTE: Do not use alcohol or ethyl alcohol on the head or tail lights.

For spot cleaning: Use a glass cleaner and microfiber cloth. Spray glass cleaner and wipe in a zig-zag motion when cleaning large areas, such as entire panels.

Use isopropyl alcohol wipes (such as those used to clean glasses or screens) to clean away small stains.

NOTE: Tesla does not recommend taking Cybertruck through an automatic car wash.

Cleaning Mud

If your vehicle is covered in mud, such as after off-roading, rinse the entire exterior of the vehicle with water. It is important to regularly clean the exterior of Cybertruck after off-roading because mud and debris can quickly build up and limit some vehicle functions.

For certain components, such as the underside, wheel wells, panel seams, and radiator, use a power washer to remove stuck-on mud or debris. Then follow the rest of the [regular cleaning on page 777](#) steps, as explained above. Wipe away mud from the headlights, tail lights, and cameras, as it may affect your vehicle's ability to drive safely.



CAUTION: Damage to the vehicle as a result of debris or mud buildup is not covered by the warranty.

Window Cleaning and Treatments

Clean windows and mirrors using an automotive glass cleaner. Do not scrape or use any abrasive cleaning fluid on glass or mirrored surfaces. Follow the directions in [Cleaning the Exterior on page 777](#) for best practices in cleaning the exterior glass.

To add a hydrophobic coating to your vehicle's windows, apply the coating only to the side and rear windows, not the front windshield—doing so may affect the visibility of the autopilot cameras. Follow the hydrophobic coating manufacturer's instructions for application details.

NOTE: Tesla is not responsible for any damage associated with applying window treatments on your vehicle.

Car Wash Mode

When taking CybertruckModel SModel XModel 3Model Y to a car wash, Car Wash Mode closes all windows, locks the charge port, and disables windshield wipers, Sentry Mode, walk-away door locking, and parking sensor chimes. To enable, touch **Controls > Service > Car Wash Mode**. Your vehicle must be stationary and not actively charging.

If using an automatic car wash, **Enable Free Roll** keeps your vehicle in Neutral and activates free roll for the duration of the wash, while preventing CybertruckModel SModel XModel 3Model Y from applying the Parking brake if you leave the driver's seat. To enable, press on the brake pedal and touch **Enable Free Roll**; or shift into Neutral.

Car Wash Mode disables if the vehicle's speed exceeds 9 mph (15 km/h) or by touching **Exit** on the touchscreen.



CAUTION: Failure to put CybertruckModel SModel XModel 3Model Y in Car Wash Mode may result in damage (for example, to the charge port or windshield wipers). Damage caused by car washes is not covered by the warranty.



Car Wash

If taking CybertruckModel SModel XModel 3Model Y to an automatic car wash is necessary, Car Wash Mode closes all windows, locks the charge port, and disables windshield wipers, Sentry Mode, and walk-away door locking. To enable, touch **Controls > Car Wash**. Your vehicle must be stationary and not actively charging.

If using an automatic car wash, **Enable Free Roll** keeps your vehicle in Neutral and activates free roll for the duration of the wash, while preventing CybertruckModel SModel XModel 3Model Y from applying the Parking brake if you leave the driver's seat. To enable, press on the brake pedal and touch **Enable Free Roll**; or shift into Neutral.

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Cleaning a Camera

To ensure a clear picture, the camera lens must be clean and free of obstructions. There are two different methods to clean a camera, depending on when your vehicle was built.

For vehicles built prior to approximately January 12, 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens with a spray bottle. Do not attempt to remove dirt or debris by wiping an exposed lens with your hands or a cloth. This debris can damage the surface of the lens when rubbed against it during wiping.

For vehicles built as of approximately January 12, 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens and drying it with a microfiber cloth. Clean the camera lens every week during wet weather (snow, rain, sleet) and every month during dry weather.



CAUTION: Do not use chemical-based or abrasive cleaners. Doing so can damage the surface of the lens.



CAUTION: Do not clean an ultrasonic sensor (if equipped) or camera lens with a sharp or abrasive object that can scratch or damage its surface.

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Cleaning a Camera


To ensure a clear picture, the camera lens must be clean and free of obstructions. There are different methods to clean a camera, depending on when your vehicle was built.


For vehicles built from Fremont and Gigafactory Austin prior to approximately late May 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens with a spray bottle. Do not attempt to remove dirt or debris by wiping an exposed lens with your hands or a cloth. This debris can damage the surface of the lens when rubbed against it during wiping.

For vehicles built from Fremont and Gigafactory Austin as of approximately late May 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens and drying it with a microfiber cloth. Clean the camera lens every week during wet weather (snow, rain, sleet) and every month during dry weather.



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 **CAUTION:** Do not clean an ultrasonic sensor (if equipped) or camera lens with a sharp or abrasive object that can scratch or damage its surface.

Cautions for Exterior Cleaning


 **CAUTION:** Do not wash in direct sunlight.


 **CAUTION:** Do not use windshield treatment fluids. Doing so can interfere with wiper friction and cause a chattering sound.


 **CAUTION:** Do not use hot water, detergents, highly alkaline or caustic cleaning ingredients or solvents, specifically those containing hydroxide.


 **CAUTION:** If using a pressure washer, maintain a distance of at least 12" (30 cm) between the nozzle and the surface of CybertruckModel SModel XModel 3Model Y. Avoid aiming the water jet directly at parking sensors. Keep the nozzle moving and do not concentrate the water jet on any one area.


 **CAUTION:** Do not aim water hoses directly at windows, door, or hood seals or at electronic modules or exposed cabling.


 **CAUTION:** To avoid corrosive damage that may not be covered by the warranty, rinse away any road salt from the underside of the vehicle, wheel wells, and brakes. After cleaning the vehicle, dry the brakes by going on a short drive and applying the brakes multiple times.


 **CAUTION:** Avoid using tight-napped or rough cloths, such as washing mitts. A high-quality microfiber cleaning cloth is recommended.

 **CAUTION:** If washing in an automatic car wash, use touchless car washes only. These car washes have no parts (brushes, etc.) that touch the surfaces of CybertruckModel SModel XModel 3Model Y. Some touchless car washes use caustic solutions that, over time, can cause discoloration of decorative exterior trim. Avoid exposure to soaps and chemicals above pH 13. If unsure, check the product label or ask the staff at the car wash. Damage caused by improper washing is not covered by the warranty.

 **CAUTION:** If washing in an automatic car wash, make sure the vehicle is locked. In addition, avoid using controls on the touchscreen that can result in accidentally opening doors or trunks while the vehicle is being washed. Any damage caused is not covered by the warranty.

 **CAUTION:** Ensure the wipers are off before washing CybertruckModel SModel XModel 3Model Y to avoid the risk of damaging the wipers.

 **CAUTION:** Do not use chemical based wheel cleaners or pre-wash products. These can damage the finish on the wheels.

 **WARNING:** Never spray liquid at a high velocity (for example, if using a pressure washer) towards the charge port while CybertruckModel SModel XModel 3Model Y is charging. Failure to follow these instructions can result in serious injury or damage to the vehicle, charging equipment, or property.

Cleaning the Interior

Frequently inspect and clean the interior to maintain its appearance and to prevent premature wear. If possible, immediately wipe up spills and remove marks. For general cleaning, wipe interior surfaces using a soft cloth (such as microfiber) dampened with a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use). To avoid streaks, dry immediately with a soft lint-free cloth.



Interior Glass

Do not scrape, or use any abrasive cleaning fluid on glass or mirrored surfaces. This can damage the reflective surface of the mirror and the heating elements in the rear window.

Airbags

Do not allow any substance to enter an airbag cover. This could affect correct operation.

Dashboard and Plastic Surfaces

Do not polish the upper surfaces of the dashboard. Polished surfaces are reflective and could interfere with your driving view.

Seats

Wipe spills and chemical residues from interior surfaces as soon as possible using a soft cloth moistened with warm water and non-detergent soap. Wipe gently in a circular motion. Then wipe dry using a soft, lint-free cloth.

Although seating surfaces are designed to repel stains, Tesla recommends regular cleaning to maintain performance and an as-new appearance. Promptly treat dye transfer from clothing, such as indigo-dyed denim. Avoid contact with harsh chemicals, including certain cosmetics. Never use cleaners containing alcohol or bleach. Spot-test cleaners on an inconspicuous area before applying to visible surfaces.

If equipped with leather seats, note that leather is prone to dye-transfer which can cause discoloration, particularly on light colored leather. White and tan leather is coated with an anti-soiling treatment. Using detergents or commercially available leather cleaners and conditioners is not recommended because they can discolor or dry out the leather.

Vacuum seats as needed to remove any loose dirt.



CAUTION: Aftermarket, non-Tesla seat covers may inhibit the sensitivity of a seat's occupancy sensors and may cause staining or damage.



CAUTION: The front seats are equipped with microphones (see [Active Road Noise Reduction on page 62](#)) that must not be exposed to liquids. To prevent damage to these microphones when cleaning, do not over-saturate the area of the seats where these microphones are located.

Carpets

Avoid over-wetting carpets. For heavily soiled areas, use a diluted upholstery cleaner.

Seat Belts

Extend the belts to wipe. Do not use any type of detergent or chemical cleaning agent. Allow the belts to dry naturally while extended, preferably away from direct sunlight.

Door Seals

Wipe door seals with a damp cloth to remove any debris. Excessive debris on the door seals can cause damage when contacting surrounding surfaces. Avoid using alcohol wipes or any chemical products that can potentially deteriorate the coating on the door seals.

Tesla Built-In Rear Facing Child Seats

Vacuum the seats to remove any loose dirt. Wipe the seats with a soft cloth dampened with warm water. You can also use an upholstery cleaner designed for automotive use. Extend the belts to wipe. Allow the belts to dry naturally, preferably away from direct sunlight.

TouchscreenFront and Rear TouchscreensFront and Rear TouchscreensTouchscreen, Rear Touchscreen, and Instrument PanelTouchscreen and Instrument Panel






Clean the touchscreen(s) and instrument panel using a soft lint-free cloth specifically designed to clean monitors and displays. Do not use cleaners (such as a glass cleaner) or alcohol-based gel products (such as hand sanitizer) and do not use a wet wipe or a dry statically-charged cloth (such as a recently washed microfiber). To wipe the front touchscreen without activating buttons and changing settings, you can enable Screen Clean Mode. Touch **Controls** > **Display** > **Screen Clean Mode**. The display darkens to make it easy to see dust and smudges. To exit Screen Clean Mode, press and hold **HOLD TO EXIT**.



Chrome and Metal Surfaces

Polish, abrasive cleaners, alcohol-based gel products (such as hand sanitizer), and hard cloths can damage the finish on chrome and metal surfaces.

Cautions for Interior Cleaning

-  **CAUTION:** Using solvents (including alcohol), alcohol-based gel products (such as hand sanitizer), bleach, citrus, naphtha, or silicone-based products or additives on interior components can cause damage.
-  **CAUTION:** Statically-charged materials can cause damage to the touchscreen or instrument panel.
-  **WARNING:** If you notice any damage on an airbag or seat belt, contact Tesla immediately.
-  **WARNING:** Do not allow any water, cleaners, or fabric to enter a seat belt mechanism.
-  **WARNING:** Exposure to chemical cleaners can be hazardous and can irritate eyes and skin. Read and observe the instructions provided by the manufacturer of the chemical cleaner.



Polishing, Touch Up, and Body Repair

To preserve the cosmetic appearance of the body, you can occasionally treat the paint surfaces with an approved polish containing:

- Very mild abrasive to remove surface contamination without removing or damaging the paint.
- Filling compounds that fill scratches and reduce their visibility.
- Wax to provide a protective coating between the paint and environmental elements.

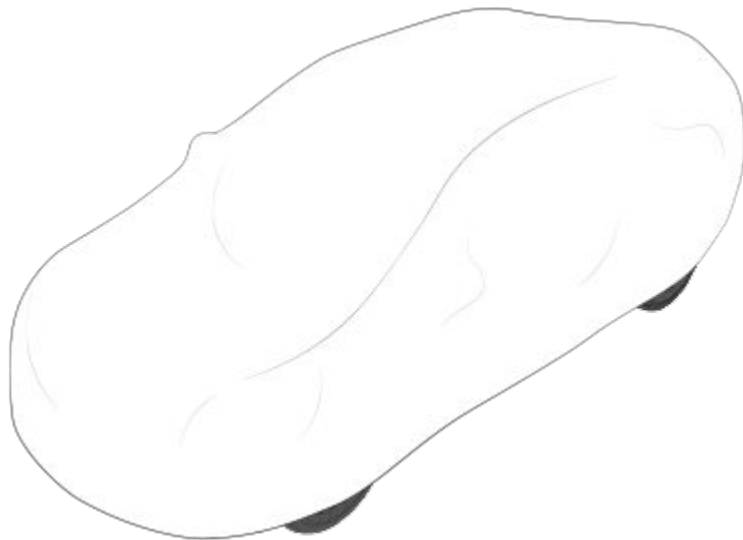
Regularly inspect the exterior paint for damage. Treat minor chips and scratches using a paint touch-up pen (available for purchase from Tesla, depending on market region). Use the touch-up pen after washing but before polishing or waxing.

Repair rock chips, fractures or scratches. Refer to <https://www.tesla.com/support/body-shop-support> for more information on repair locations and available services.

-  **CAUTION:** Do not use cutting pastes, color restoration compounds, or polishes containing harsh abrasives. These can scour the surface and permanently damage the paint.
-  **CAUTION:** Do not use chrome polish or other abrasive cleaners.

Using a Car Cover

To preserve the cosmetic appearance of the body when CybertruckModel SModel XModel 3Model Y is not being used, use a genuine Tesla car cover. Car covers can be purchased online from the Tesla Shop.





CAUTION: Use only a Tesla-approved car cover when Cybertruck Model S Model X Model 3 Model Y is plugged in. Using a non-Tesla car cover can prevent the Battery from being adequately cooled during charging.

Floor Mats

To extend the life of your carpet and make them easier to clean, use genuine Tesla floor mats available online at <http://www.tesla.com>. Maintain floor mats by regularly cleaning them and checking that they are properly attached. Replace floor mats if they become excessively worn.

WARNING: To avoid potential interference with a foot pedal, ensure that the driver's floor mat is securely fastened, and never place an additional floor mat on top of it. Floor mats should always rest on top of the vehicle carpeting surface and not on another floor mat or other covering.



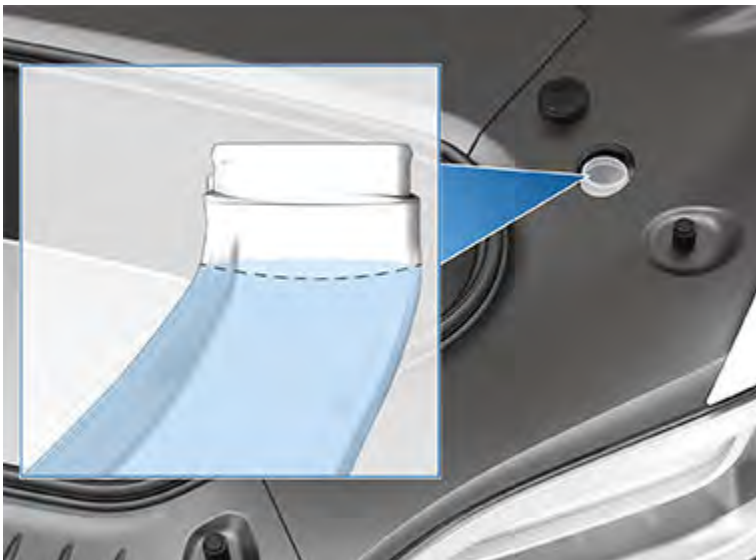
Windshield Wiper Blades, Jets and Fluid

Topping Up Windshield Washer Fluid

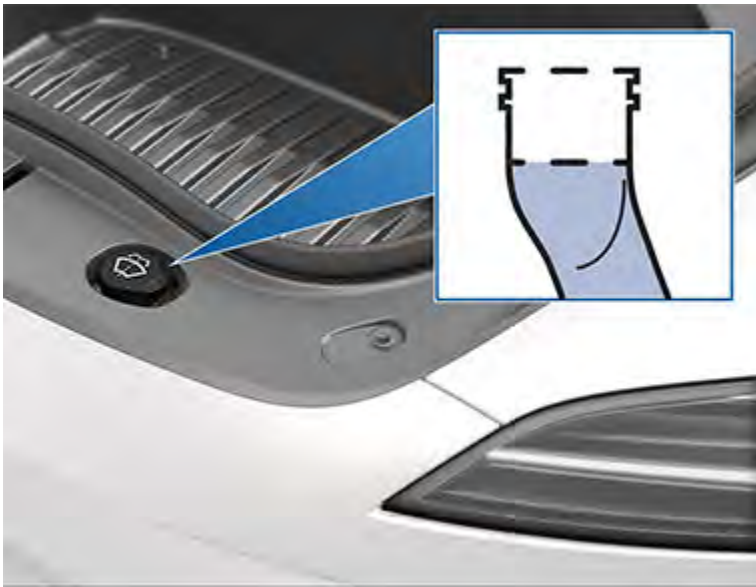
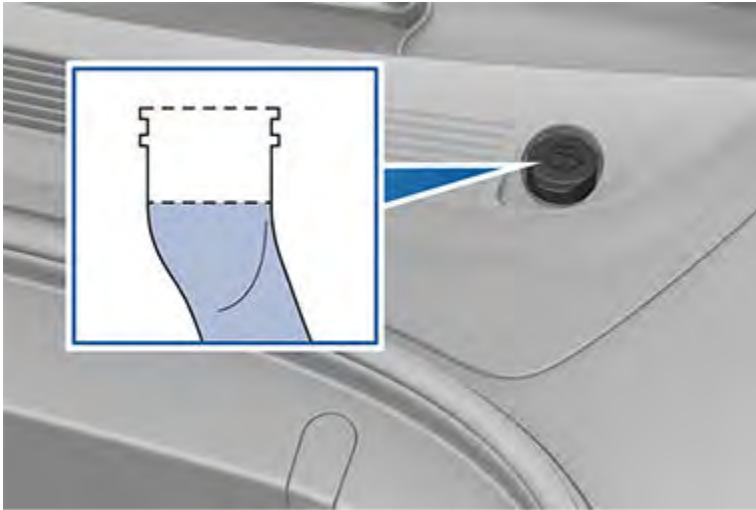
The only reservoir into which you can add fluid is the windshield washer fluid reservoir, which is located behind the front trunk. When the level is low, a message displays on the instrument panel touchscreen.

To top up the washer fluid:

1. Open the hood.
2. Clean around the filler cap before opening it to prevent dirt from entering the reservoir.
3. Open the filler cap.
4. While avoiding spilling, fill the reservoir until the fluid level is visible just below the filler neck. The reservoir has a capacity of 3.24.5 liters.










5. Wipe up any spills immediately and wash the affected area with water.
6. Reinstall the filler cap.

⚠ CAUTION: Use only ethanol-based windshield washer fluid meant for automotive vehicles. Using other substances, such as untreated water, can result in bacterial growth within the climate control system resulting in odor or potential damage that is not covered by warranty.



NOTE: Some national or local regulations restrict the use of Volatile Organic Compounds (VOCs). VOCs are commonly used as antifreeze in washer fluid. Use a washer fluid with limited VOC content only if it provides adequate freeze resistance for all climates in which you drive CybertruckModel SModel XModel 3Model Y.

-  **CAUTION:** Do not add formulated washer fluids that contain water repellent or bug wash. These fluids can cause streaking, smearing, and squeaking or other noises.
-  **WARNING:** In temperatures below 40° F (4° C), use a washer fluid with antifreeze. In cold weather, using a washer fluid without antifreeze can impair visibility through the windshield.
-  **WARNING:** Windshield washer fluid can irritate eyes and skin. Read and observe the instructions provided by the washer fluid manufacturer.

Checking and Cleaning Wiper Blades

Periodically clean the edge of the wiper blades and check the rubber for cracks, splits, and roughness. If damaged, replace the blade immediately to prevent damage to the glass and improve visibility.

Contaminants on the windshield, or on the wiper blades, can reduce the effectiveness of the wipers. Contaminants include ice, wax spray from car washes, washer fluid with bug and/or water repellent, bird droppings, tree sap, and other organic substances.

Follow these guidelines for cleaning:

- Clean the windshield and wiper blades using washer fluid, isopropyl (rubbing) alcohol, or non-abrasive glass cleaner approved for use on automotive glass and rubber. Inappropriate products can cause damage or smears, and create glare on the windshield.
- Lift the wiper arm a short distance away from the windshield, just far enough to access the wiper blade. Do not lift a wiper arm beyond its intended position.

If the wipers remain ineffective after cleaning, replace the wiper blades.

Replacing Wiper Blades

For optimum performance, replace the wiper blades at least once a year. Replacement blades must meet the following criteria:

- The blade on the driver's side must be 26 inches (650 mm) long and 20 inches (500 mm)19 inches (475 mm)21 inches (530 mm) long for the blade on the passenger's side.
- Ensure the connector on the replacement blade is the same as the original blade. Different connectors may prevent the replacement blade from connecting to the wiper arm on the vehicle.



You can purchase replacement wiper blades on the [Tesla Shop](#).

NOTE: Only install replacement blades that are identical to the original blades. Using inappropriate blades can damage the wiper system and windshield.

NOTE: The wiper washing system is an integrated part of the wiper blades on CybertruckModel SModel XModel 3Model Y.

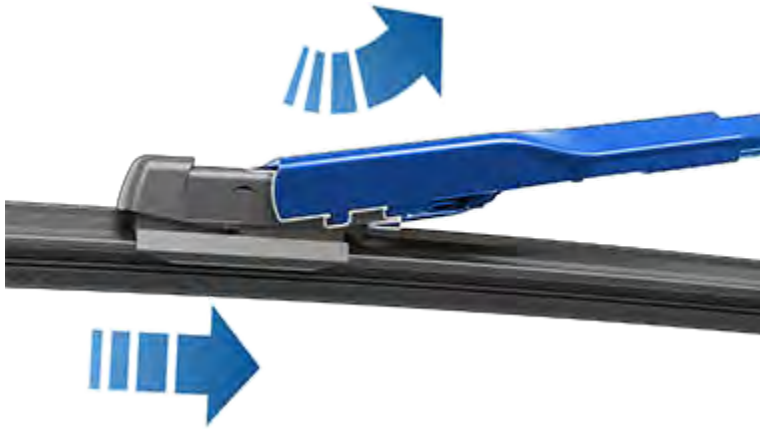
To replace the wiper blades:



1. Shift into Park and turn off the wipers.
2. Touch **Controls** > **Service** > **Wiper Service Mode** to move the wipers to the service position.
3. Lift the wiper arm a short distance away from the windshield, just far enough to access the wiper blade.
 **CAUTION:** Wiper blades do not lock into a lifted position. Do not lift a wiper arm beyond its intended position.
4. Squeeze the two tabs to release the wiper blade from the wiper arm.
 **CAUTION:** The wiper blade is still connected to the washer hose and cannot be removed yet.



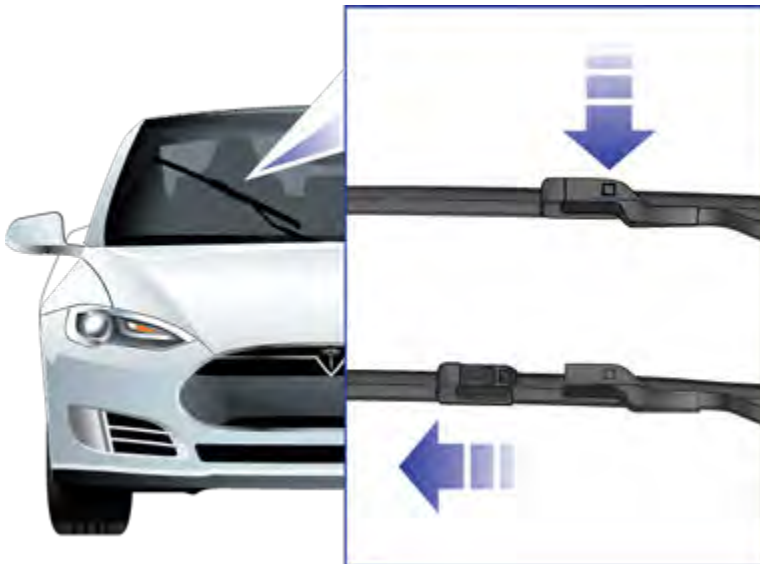
5. Gently slide the wiper blade out and up to release it from the wiper arm.

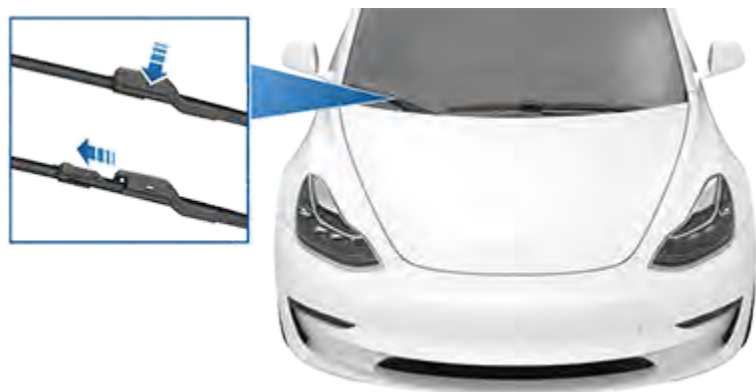
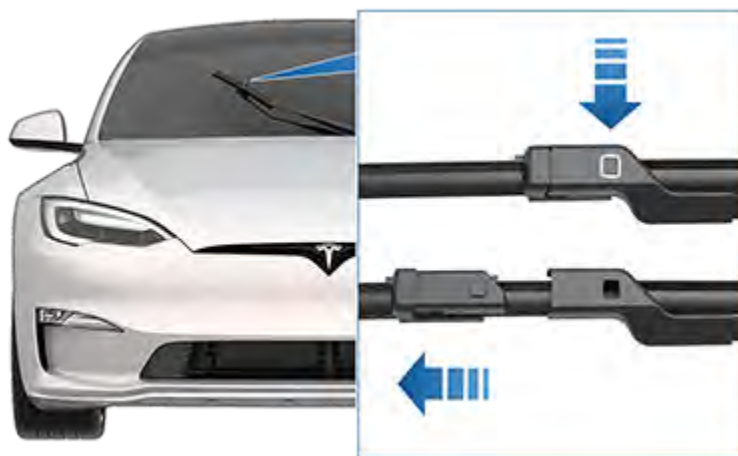
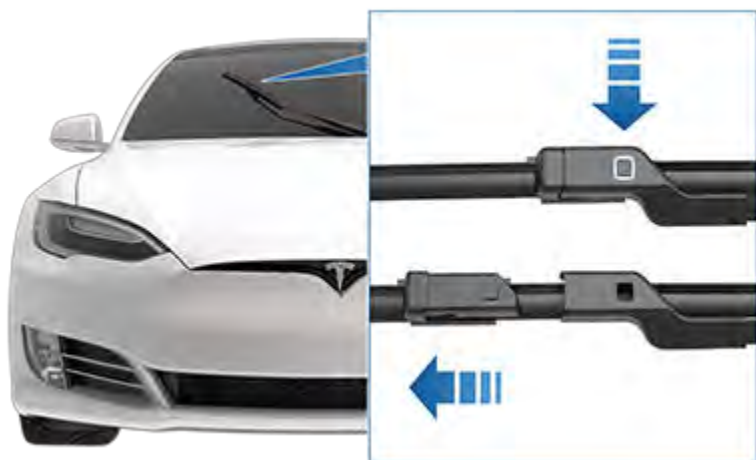


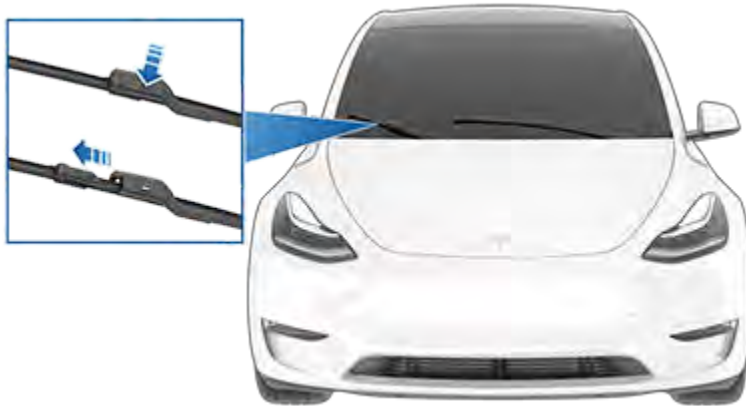
6. Place a towel between the wiper arm and windshield to avoid scratching or cracking the windshield.
7. Disconnect the washer hose from the wiper blade, taking care to avoid spilling any washer fluid.



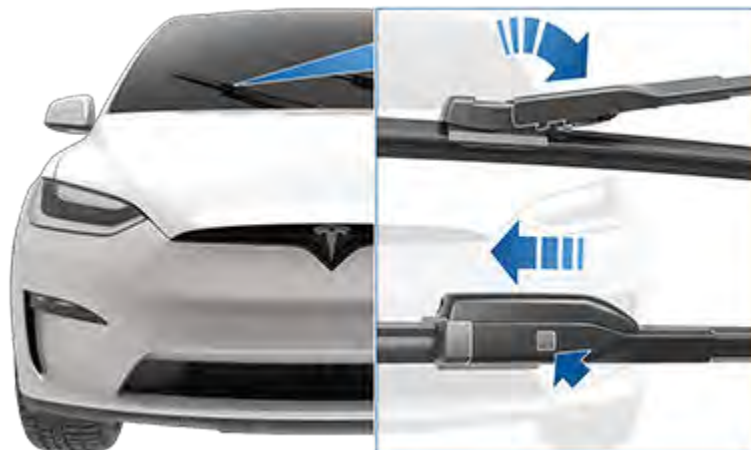
8. Hold the wiper arm and press the locking tab while sliding the blade down the arm.







9. Slide the wiper blade down and into the wiper arm to secure it in place.



10. Fully insert the washer hose onto the nipple of the new wiper blade.

11. Align the new wiper blade on the wiper arm and slide it toward the end of the wiper arm until it locks into place.

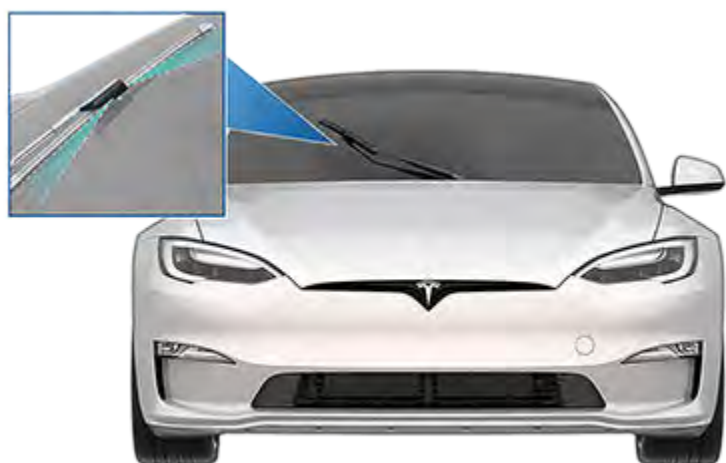
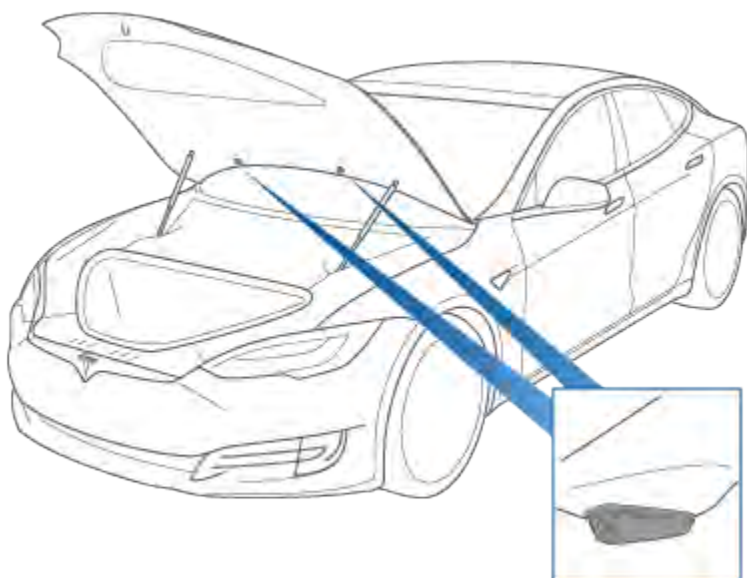
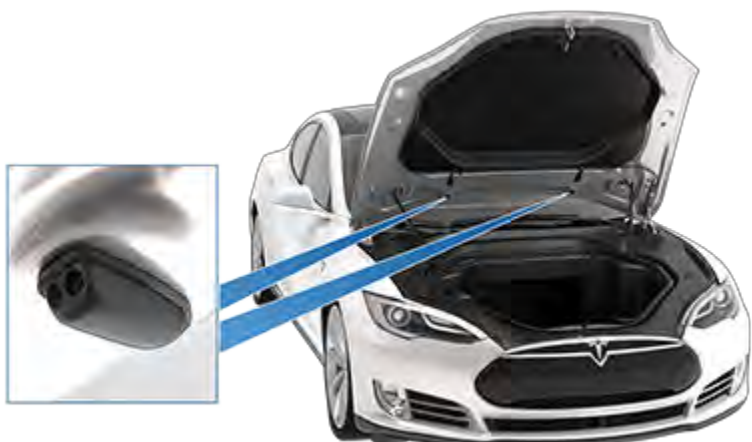
12. Turn Wiper Service Mode off to return the wipers to their normal position.

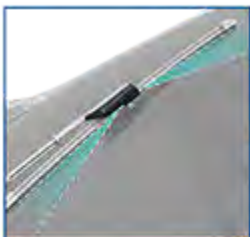
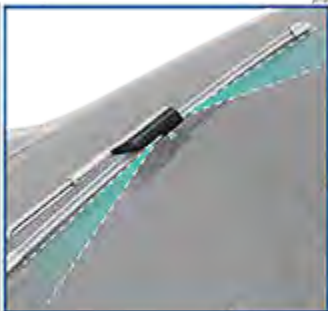
Cleaning Washer Jets

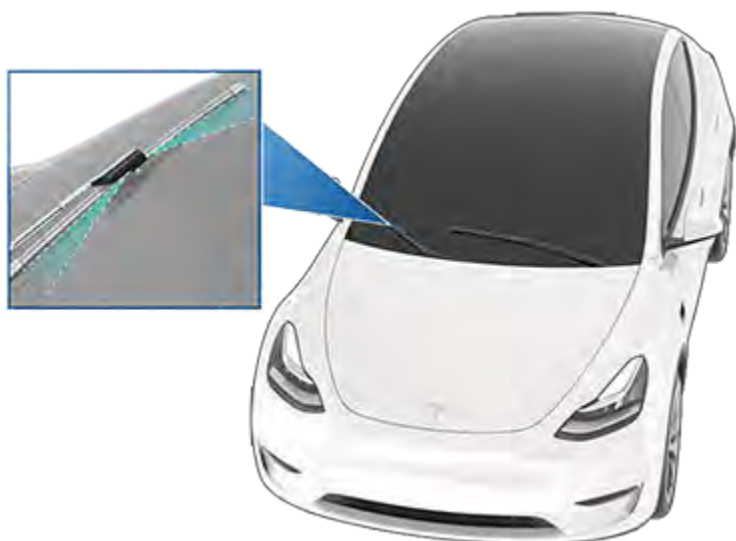
The position of the windshield washers is set at the factory and should never need adjusting.



If a windshield washer jet becomes blocked, use a thin strand of wire to clear any blockages from the nozzles.







⚠ WARNING: Do not operate the washers while cleaning CybertruckModel SModel XModel 3Model Y. Windshield washer fluid can irritate eyes and skin. Read and observe the washer fluid manufacturer's instructions.



Jacking and Lifting

WARNING: Ensure the equipment you are using is rated for the weight of CybertruckModel SModel XModel 3Model Y, including any cargo, installed accessories, or upgrades before attempting to lift.

Follow the steps below to lift CybertruckModel SModel XModel 3Model Y. Ensure that any non-Tesla repair facility is aware of these instructions, including lift points and warnings.

1. Position CybertruckModel SModel XModel 3Model Y centrally between the lift posts.
2. If your CybertruckModel SModel XModel 3Model Y is equipped with air suspension, it automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off (see [Jack Mode on page 800](#)). Use the touchscreen to set the suspension as follows:
 - Touch **Controls > Suspension**.
 - Press the brake pedal, then touch **Very High** to maximize the height of the suspension.
 - Touch **Controls > Service > Jack Mode** to disable self-leveling.

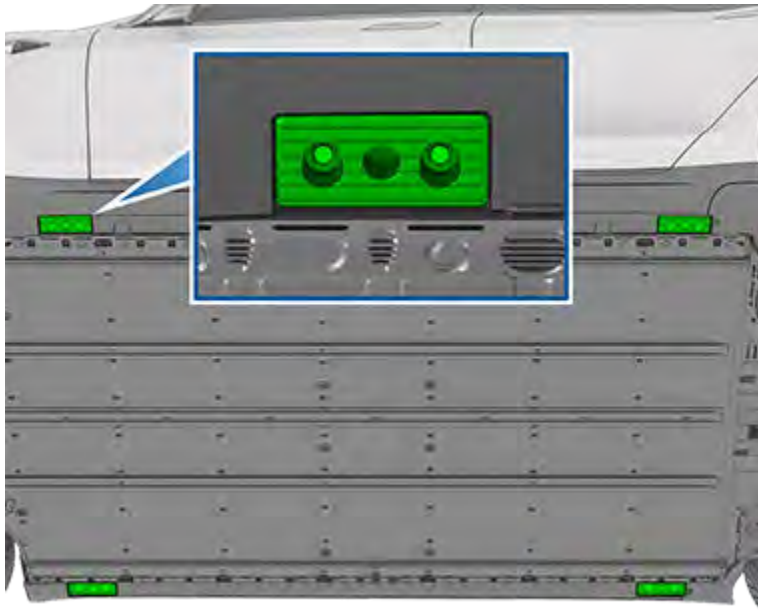


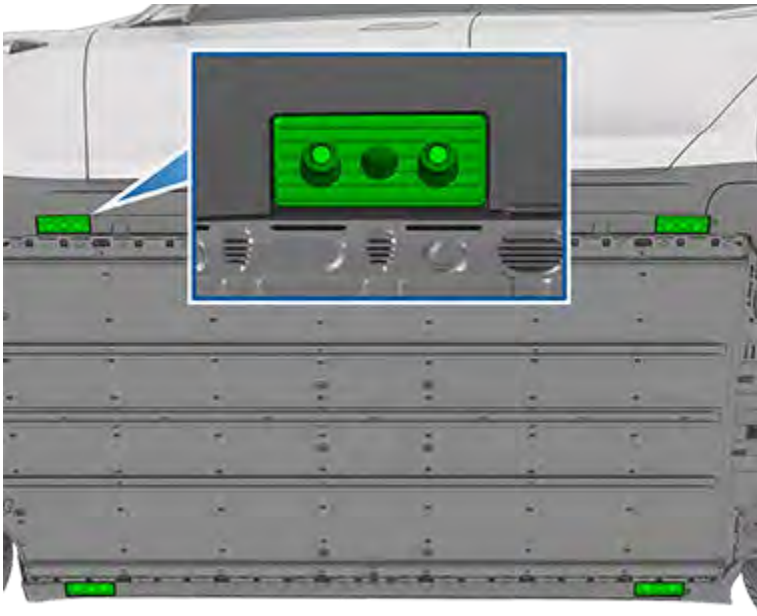
When Jack mode is active, CybertruckModel SModel XModel 3Model Y displays this indicator light on the instrument paneltouchscreen, along with a message telling you that active suspension is disabled.

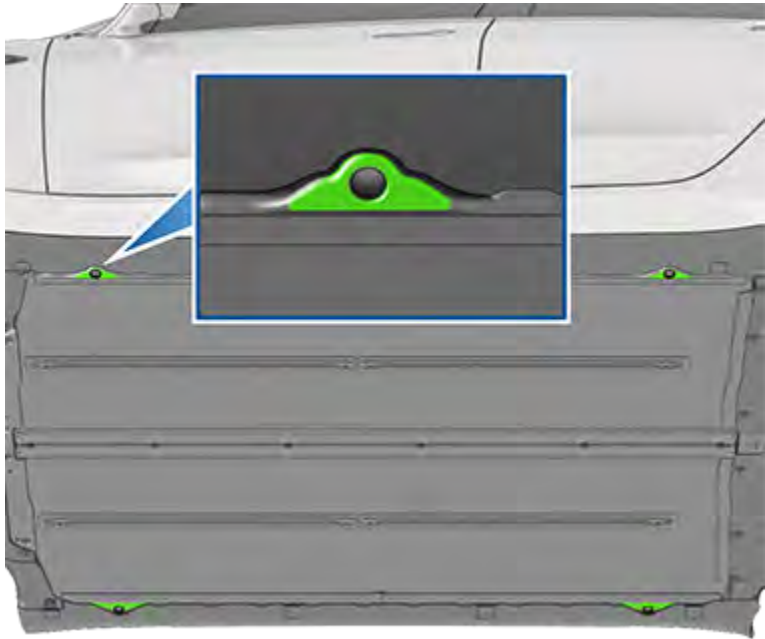
3. Close the falcon wing doors.
4. Position the lift arm pads under the designated body lift points at the locations shown.

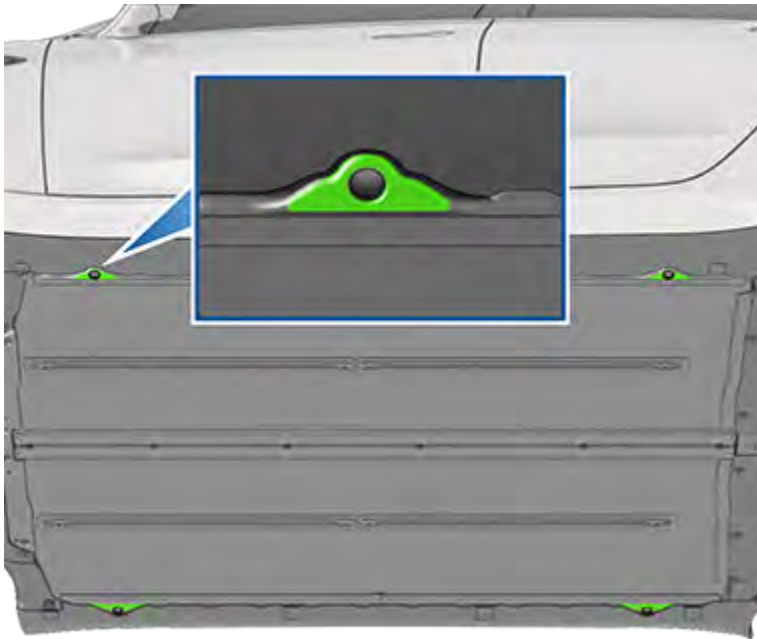
WARNING: DO NOT position the lift arm pads under the Battery or side rails.

NOTE: The following illustration is provided to improve conceptual understanding. The exact location of the lift points may differ slightly. Check the vehicle itself for exact location of lift points.









5. Adjust the height and position of the lift arm pads to ensure that they are correctly located.
6. With assistance, raise the lift to the desired height, ensuring the lift arm pads remain in their correct positions.
7. Engage any lift safety locks. Follow the lift manufacturer's instructions.
8. After lowering the vehicle, disengage Jack Mode by touching **Controls > Service**.

Using a Jack and Jack Stand

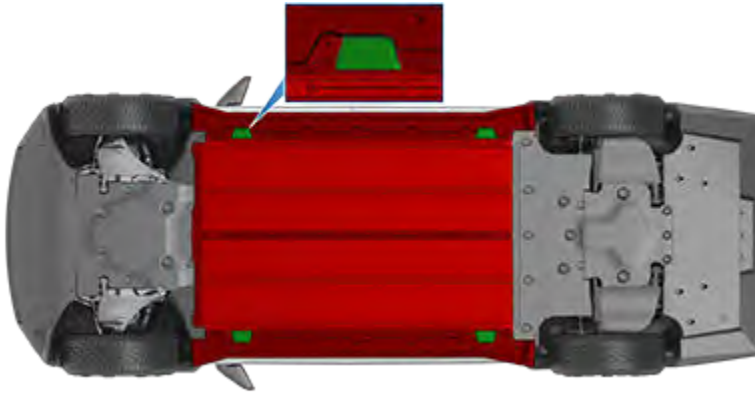
1. Ensure Cybertruck Model S Model X Model 3 Model Y is located in a flat, stable, and secure area with enough space surrounding the vehicle to jack it.
2. Ensure the vehicle ride height is set to **Medium** and enable Jack Mode (**Controls > Service > Jack Mode** see [Jack Mode on page 800](#)) to disable self-leveling.

⚠ WARNING: You **MUST** enable Jack Mode, otherwise the vehicle may try to self-level while on the jack. Failing to engage Jack Mode may cause serious injury or death.

3. If available, chock the wheel diagonal to the corner you're working on (for example, if you are replacing the rear driver's side tire, chock the front passenger's side tire).
4. Remove the wheel cover from the wheel with the flat tire (see [Removing and Installing Wheel Covers on page 1407](#)).
5. Use the lug nut wrench to break loose the lug nuts on the wheel.
6. Place the jack under the vehicle's lift point (shown in green) corresponding to the location you are working on.

⚠ WARNING: DO NOT position the jack under the Battery or side rails (shown in red).

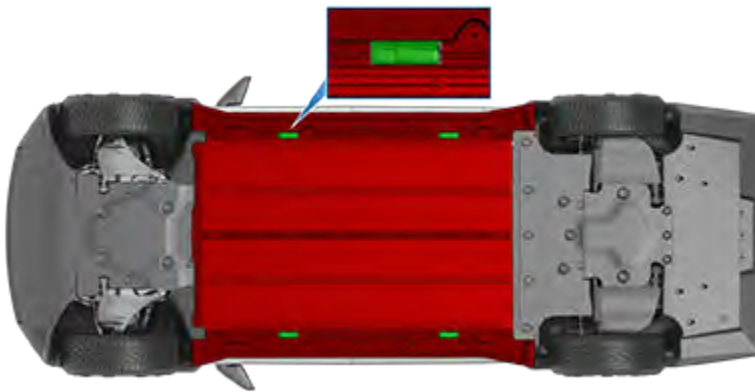
Lift points:



7. Following the jack manufacturer's instructions, begin to lift the vehicle, making sure to constantly monitor the contact with the lift point.
8. Place the jack stand under the appropriate jack stand location in the image corresponding to the area you're working on. Ensure the jack stand is appropriately oriented and does not touch any of the red areas in the image. Adjust to meet the jack's height. The vehicle should be able to be solely propped up with the jack stand.

⚠ WARNING: Do not get under the vehicle when it is propped up on the jack or jack stands. Doing so may cause serious injury or death.

Jack stand points:



9. Slowly lower the jack following manufacturer instructions, constantly monitoring the contact between the vehicle and the jack stand. Then release the jack from the vehicle's lift point and check that it is secure.
10. To lower the vehicle off of the jack stand, use the jack to raise the vehicle until the jack stand is no longer supporting the vehicle, remove the jack stand, and slowly lower the vehicle down.
11. Disengage Jack Mode by touching **Controls > Service > Jack Mode**.

Using a 2-Post Lift:

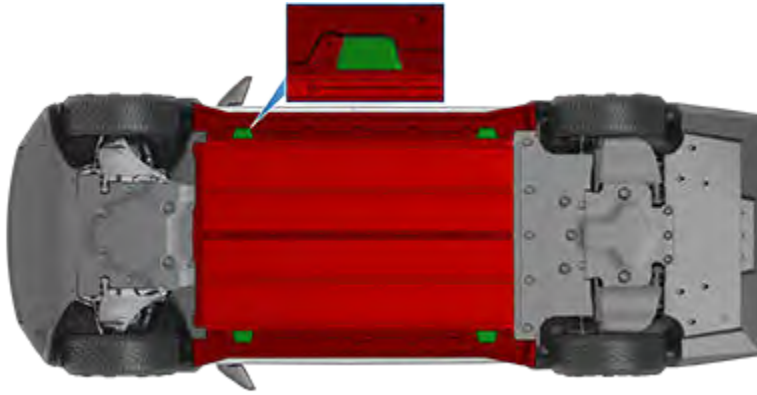
1. Ensure the vehicle ride height is set to **Medium** and enable Jack Mode (**Controls > Service > Jack Mode** see [Jack Mode on page 800](#)) to disable self-leveling.

⚠ WARNING: You **MUST** enable Jack Mode, otherwise the vehicle may try to self-level while on the jack. Failing to engage Jack Mode may cause serious injury or death.

2. Position the lift arm pads under the lift points at the locations shown.

⚠ WARNING: DO NOT position the lift arm pads under the Battery or side rails.

Lift points:



3. Lift the vehicle to working height.
4. Engage any lift safety locks. Follow the lift manufacturer's instructions for details.

⚠ WARNING: Failure to correctly engage the safety locks can result in serious injury or death.

5. When done, lower the vehicle down slowly and safely.
6. Disengage Jack Mode by touching **Controls > Service > Jack Mode**.

⚠ WARNING: The air suspension system automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. You **MUST** disable this system by engaging Jack mode before lifting or jacking. If you do not disable the air suspension, CybertruckModel SModel XModel 3Model Y can attempt to self-level, causing serious damage, bodily injury, or death.

⚠ WARNING: Never raise CybertruckModel SModel XModel 3Model Y when the charge cable is connected, even if charging is not in progress.

⚠ WARNING: Do not work on an incorrectly supported vehicle. Doing so can cause serious damage, bodily injury, or death.

⚠ CAUTION: It is your responsibility to be observant of the vehicle and it's surroundings. Ensure the area is clear when lifting and lowering CybertruckModel SModel XModel 3Model Y and that the doors, front trunk, and liftgate/rear trunk/tailgate are closed as necessary to avoid damage.

⚠ CAUTION: **DO NOT** lift from under the Battery or side rails. Place the lift arm pads under the designated body lift points only. The locations shown are the only approved lifting points for CybertruckModel SModel XModel 3Model Y. Lifting at any other points can cause damage. Damage caused by incorrectly lifting CybertruckModel SModel XModel 3Model Y is not covered by the warranty.

Jack Mode

⚠ WARNING: Failure to enable Jack Mode can result in the vehicle self-leveling, resulting in damage, injury, or death.

If CybertruckModel SModel XModel 3Model Y is equipped with air suspension, it automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. To prevent damage when jacking or lifting the vehicle, you must activate Jack mode to disable self-leveling. Jack mode prevents the self-leveling that occurs automatically.

CybertruckModel SModel XModel 3Model Y automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. Before enabling **Jack Mode**:

1. Set the Suspension to **Very High** to allow for enough ground clearance for the jack.
2. Set the ride height to **Medium** to allow for enough ground clearance for the jack.

NOTE: Due to the large wheels and height of CybertruckModel SModel XModel 3Model Y, setting the ride height to **High** or **Very High** may not provide sufficient clearance for you to safely change the tire.

3. Enable **Jack Mode (Controls > Service > Jack Mode)**.
4. To deactivate **Jack Mode**, press the brake pedal and touch **Controls > Service > Jack Mode** again. **Jack Mode** automatically cancels when you start to drive.



When CybertruckModel SModel XModel 3Model Y is in **Jack Mode** mode, a red air suspension indicator lights up on the instrument panel.

NOTE: Jack mode may be unexpectedly enabled in situations where an object is supporting the vehicle's weight (for example the bumper of the vehicle is resting on a curb).



Parts and Accessories

Parts, Accessories, and Modifications

Use only genuine Tesla parts and accessories. Tesla performs rigorous testing on parts to ensure their suitability, safety, and reliability. Purchase these parts from Tesla, where they are professionally installed and where you can receive expert advice about modifications to CybertruckModel SModel XModel 3Model Y. Accessories are available for purchase from Tesla stores or online at www.tesla.com.

NOTE: Some accessories may not be available in your market region.

Tesla is unable to assess parts manufactured by other distributors and therefore accepts no responsibility if you use non-Tesla parts on CybertruckModel SModel XModel 3Model Y.

⚠ WARNING: Installing non-approved parts and accessories, or performing non-approved modifications, can affect the performance of CybertruckModel SModel XModel 3Model Y and the safety of its occupants. Any damage caused by using or installing non-approved parts, or by performing non-approved modifications, is not covered by the warranty.

⚠ WARNING: Tesla does not accept liability for death, personal injury or damage that occurs if you use or install non-approved accessories or make non-approved modifications.

Accessory Wheels and Tires

If your CybertruckModel SModel XModel 3Model Y is fitted with Tesla accessory wheels or tires, the Gross Axle Weight Rating (GAWR), wheel, tire, and loading information may be different from the labels shown on the vehicle. Refer to the relevant following section for updated information.

NOTE: If your vehicle is not fitted with Tesla accessory wheels or tires (it is fitted with the factory original wheels and tires, including Tesla genuine replacement parts), refer to the labels attached to the center door pillar for the most accurate information for your CybertruckModel SModel XModel 3Model Y.

20" Sport Wheels



Wheels	Location	Width (in)	Offset (mm)
20"	Front/Rear	8.5	40



Tires (front/rear)	Size	Tire Pressure
Michelin, Pilot Sport 4S (PS4S)	235/35ZR20	42 PSI (290 kPa)*

*Increase the tire pressure to 44 PSI (300 kPa) prior to driving 136 mph (220 kph) or faster.

GAWR		
Front	2407 lbs	1,092 kg
Rear	2,767 lbs	1,255 kg

19" Sport Wheels



Wheels	Location	Width (in)	Offset (mm)
19"	Front/Rear	8.5	40

Tires (front/rear)	Size	Tire Pressure
Continental, ProContact RX	235/40R19	42 PSI (290 kPa)*
Hankook Ventus S1 Evo3	235/40R19	42 PSI (290 kPa)*
Pirelli Winter Sottozero 3	235/40R19	42 PSI (290 kPa)

*Increase the tire pressure to 44 PSI (300 kPa) prior to driving 134 mph (215 kph) or faster.

GAWR		
Front	2,447 lbs	1,110 kg
Rear	2,767 lbs	1,255 kg



Owners Manual

20" Zero-G Wheels (Performance)



Wheels	Location	Width (in)	Offset (mm)
20"	Front/Rear	9	34

Tires (front/rear)	Size	Tire Pressure
Michelin, Pilot Sport 4S (PS4S)	235/35ZR20	42 PSI (290 kPa)
Michelin PS Cup 2	245/35ZR20	42 PSI (290 kPa)

GAWR		
Front	2,650 lbs	1,202 kg
Rear	2,784 lbs	1,263 kg

20" Zero-G Wheels (Non-Performance)

Wheels	Location	Width (in)	Offset (mm)
20"	Front/Rear	9	40

Tires (front/rear)	Size	Tire Pressure
Michelin, Pilot Sport 4S (PS4S)	235/35ZR20	42 PSI (290 kPa)

GAWR		
Front	2,650 lbs	1,202 kg
Rear	2,784 lbs	1,263 kg

19" Gemini Wheels (Performance)

See [Removing and Installing Aero Covers on page 760](#) for information on how to remove and install Gemini wheel covers.



Wheels	Location	Width (in)	Offset (mm)
19"	Front/Rear	8.5	35

Tires (front/rear)	Size	Tire Pressure
Hankook Ventus S1 Evo3	235/40R19	42 PSI (290 kPa)*
Pirelli Winter, Sottozero 3	235/40R19	42 PSI (290 kPa)*

*Increase the tire pressure to 44 PSI (300 kPa) prior to driving 136 mph (220 kph) or faster.

GAWR		
Front	2510 lbs	1,141 kg
Rear	3,023 lbs	1,374 kg



18" Aero Wheels



Wheels	Location	Width (in)	Offset (mm)
18"	Front/Rear	8.5	40

Tires (front/rear)	Size	Tire Pressure
Michelin, Primacy MXM4	235/45R18	42 PSI (290 kPa)
Michelin, Pilot Sport 4 (PS4)	235/45R18	42 PSI (290 kPa)
Pirelli Winter Sottozero Serie II	235/45R18	42 PSI (290 kPa)

GAWR		
Front	2,447 lbs	1,110 kg
Rear	2,840 lbs	1,288 kg

Body Repairs

If your Cybertruck Model S Model X Model 3 Model Y is in a collision, contact Tesla or a Tesla-approved Body Shop to ensure that it is repaired with genuine Tesla parts. Tesla has selected and approved body shops that meet strict requirements for training, equipment, quality, and customer satisfaction.

Some repair shops and insurance companies might suggest using non-original equipment or salvaged parts to save money. However, these parts do not meet Tesla's high standards for quality, fit and corrosion resistance. In addition, non-original equipment and salvaged parts (and any damage or failures they might cause) are not covered by the warranty.

Replacing Cabin Filters

NOTE: Depending on your vehicle's date of manufacture, screw may be in a slightly different location on the cabin filter cover.

Model 3 has air filters that prevent pollen, industrial fallout, road dust, and other particles from entering the cabin through the vents. Tesla recommends replacing these filters every 2 years (every year in China). Cabin filters can be purchased at the [Tesla Shop](#).

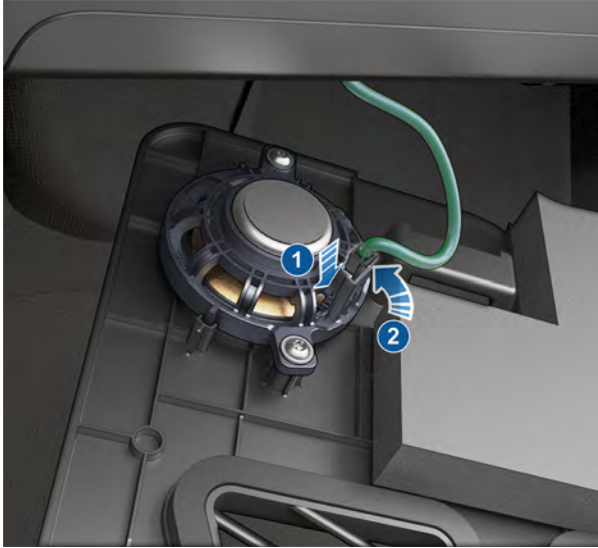
To replace the cabin filters:



1. Turn off the climate control system.
2. Move the front seat on the right-hand side fully rearwards and remove the floor mat.
3. Use a clip pry tool to carefully release the push clips that secure the right-hand side front footwell cover to the instrument panel. Then, while supporting the footwell cover, disconnect the two electrical connectors and move the footwell cover aside.
 - For the light, carefully press down on the tab while releasing the connector.
 - For the speaker, carefully angle the vehicle-side connector so that the small tab releases from the hole in the footwell cover-side connector while releasing the connector.



CAUTION: To avoid damage, do not pull on the wires when disconnecting the connectors. When disconnecting the connectors, make sure to pull from the plastic on the connectors themselves.



4. Working from top-to-bottom, use a trim tool to carefully release the right side panel from the center console.
5. Remove the T20 screw that secures the cabin filter cover to the heating, ventilation, and air conditioning (HVAC) module, then release the cabin filter cover and move it aside. On some vehicles, the screw is a T20/6mm hybrid fastener. Locking tabs may also replace the screw: use your index finger and thumb to squeeze the two tabs at the bottom of the cabin filter cover. Tilt the cover outward to remove.

NOTE: If the HVAC module does not have a cabin filter cover, reinstall the trim panels and contact Tesla.



WARNING: Do not stretch, bend, or otherwise damage the orange High Voltage (HV) cables that are attached to the cabin filter cover. If the HV cables are damaged, immediately discontinue this procedure. HV shock can result in serious injury or death.



6. Fold the upper cabin filter's tab upward and the lower filter's tab downward.
7. Holding the tab on the upper cabin filter, pull the upper filter out from the HVAC module.
8. Holding the tab on the lower cabin filter, pull the lower filter upwards and then out from the HVAC module.
9. Ensuring that the arrows on both new filters face towards the **rear** of the vehicle, insert the lower cabin filter into the HVAC module and lower it into place. Then, insert the upper cabin filter above it.
10. Fold the tabs inward so that the cabin filter cover can be installed.
11. Install the cabin filter cover by engaging the lower cover tab then securing the T20 screw or T20/6mm hybrid fastener. Tighten the screw to 1.2 Nm/0.89 ft-lbs. On vehicles with tabs instead of a T20 screw: maneuver the top notch of the cabin filter cover into place, then secure the tabs at the bottom of the HVAC module.
12. Reconnect the two electrical connectors to the components in the front right-hand side footwell cover, then resecure the cover with the push clips.
13. Align the right side panel with the front and rear locator slots on the center console, then apply pressure until all of the clips are fully secure.
14. Reinstall the front right-hand side floor mat then move the front right-hand side seat back into place.

Replacing Cabin Filters

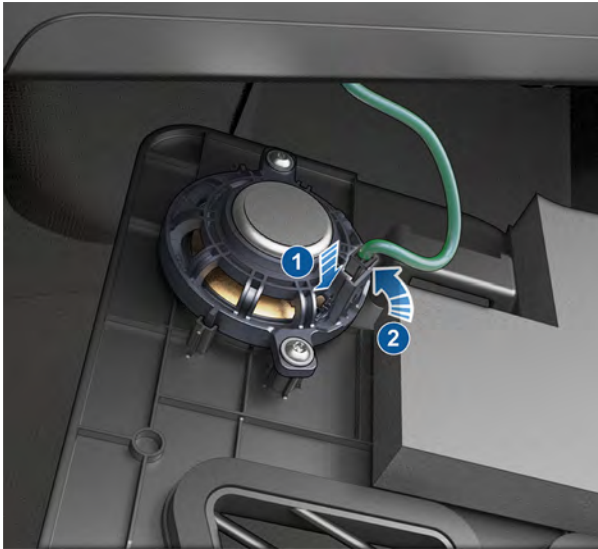
Model Y has air filters that prevent pollen, industrial fallout, road dust, and other particles from entering the cabin through the vents. Tesla recommends replacing these filters every 2 years (every year in China). Cabin filters can be purchased at the [Tesla Shop](#).

To replace the cabin filters:

1. Turn off the climate control system.
2. Move the front right-hand side seat fully rearwards and remove the floor mat.
3. Use a clip pry tool to carefully release the push clips that secure the front right-hand side footwell cover to the instrument panel. Then, while supporting the footwell cover, disconnect the two electrical connectors and move the footwell cover aside.
 - For the light, carefully press down on the tab while releasing the connector.
 - For the speaker, carefully angle the vehicle-side connector so that the small tab releases from the hole in the footwell cover-side connector while releasing the connector.



CAUTION: To avoid damage, do not pull on the wires when disconnecting the connectors. When disconnecting the connectors, make sure to pull from the plastic on the connectors themselves.



4. Working from top-to-bottom, use a trim tool to carefully release the right side panel from the center console.
5. Remove the 6 mm screw that secures the cabin filter cover to the heating, ventilation, and air conditioning (HVAC) module, then release the cabin filter cover and move it aside. On some vehicles, tabs replace the 6 mm screw: use your index finger and thumb to squeeze the two tabs at the bottom of the cabin filter cover. Tilt the cover outward to remove.



6. Fold the upper cabin filter's pull tabs outward.
7. Holding the tabs on the upper cabin filter, pull the upper filter out from the HVAC module.
8. Holding the upper tab on the lower cabin filter, pull the lower filter upwards and then out from the HVAC module.
9. Ensuring that the arrows on both new filters face towards the **rear** of the vehicle, insert the lower cabin filter into the HVAC module and lower it into place. Then, insert the upper cabin filter above it.
10. Fold the tabs inward so that the cabin filter cover can be installed.
11. Install the cabin filter cover by engaging the lower cover tab then securing the 6 mm screw. Tighten the screw to 1.2 Nm/ 0.89 ft-lbs. On vehicles with tabs instead of a 6 mm screw: maneuver the top notch of the cabin filter cover into place, then secure the tabs at the bottom of the HVAC module.
12. Reconnect the two electrical connectors to the components in the front right-hand side footwell cover, then resecure the cover with the push clips.



- Align the right side panel with the front and rear locator slots on the center console, then apply pressure until all of the clips are fully secure.
- Reinstall the front right-hand side floor mat then move the front right-hand side seat back into place.

Replacing Cabin Air Filters


Cybertruck Model S Model X Model 3 Model Y has an air filter that prevents pollen, industrial fallout, road dust, and other particles from entering the cabin through the vents. Tesla recommends replacing these filters every 2 years (every year in China). Cabin filters can be purchased at the [Tesla Shop](#).


To replace the cabin filter:

- Turn off the climate control system.
- Move the front right-hand side seat fully rearwards.
- Slowly and gently pull down the footwell cover to release the magnets, then disconnect the electrical harness on the right side of the cover. Set the footwell cover aside.
- Squeeze the cabin filter door lock to release it, and then remove and set the door aside.
- Note the direction of air flow printed on the cabin filter. The arrows on the filter should face toward the rear of the vehicle.
- Slide the filter out of the HVAC module.
- Ensuring that the arrows on the new filter face toward the rear of the vehicle, insert the new cabin filter into the HVAC module.
- Slide the cabin filter door onto the HVAC module, and then push the door to lock it.
NOTE: Ensure the lock is fully engaged and the door is sealed shut.
- Position the front right-hand side footwell cover on the vehicle and connect the electrical harness to the cover.
- Install the front right-hand side footwell cover, making sure the magnets (x3) are locked into position.
- Move the front right-hand side seat back to its original position.

Replacing the Low Voltage Lead-Acid Battery

This procedure is intended for vehicles in North America only.

 **CAUTION:** It is your responsibility to monitor the low voltage battery health. Damage to the low voltage battery due to running out of range is not covered by the warranty.

 **CAUTION:** To avoid damage that is not covered by the warranty, replace your low voltage lead-acid battery with the same type of battery. The low voltage lead-acid battery for North American vehicles is **AtlasBX / Hankook 85B24LS 12V 45Ah**. You can purchase a new lead-acid low voltage battery that is compatible with your vehicle from your local service center

NOTE: Vehicles manufactured between approximately July 2017 and October 2020 do not have a heat pump and should use [Vehicles Manufactured Before Approximately October 2020 on page](#) . Vehicles manufactured afterward have a heat pump and should use [Vehicles Manufactured After Approximately October 2020 on page](#) .

NOTE: Vehicles manufactured in Gigafactory Shanghai before approximately October 2021, and in the Fremont Factory before approximately December 2021, are equipped with a Lead-Acid low voltage battery. Vehicles manufactured after these dates are equipped with a Lithium-Ion low voltage battery. Before performing this procedure, it is your responsibility to double check and confirm whether your vehicle is equipped with a Lead-Acid or Lithium-Ion low voltage battery.

Vehicles Manufactured Before Approximately October 2020

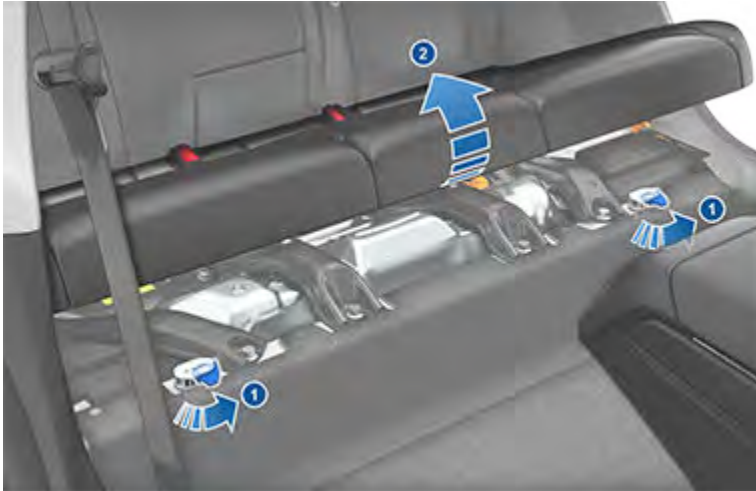
Perform the following procedure to replace the lead-acid low voltage battery. Wear appropriate personal protection equipment (such as safety glasses, leather gloves when handling the lead-acid battery etc.).

Removal:

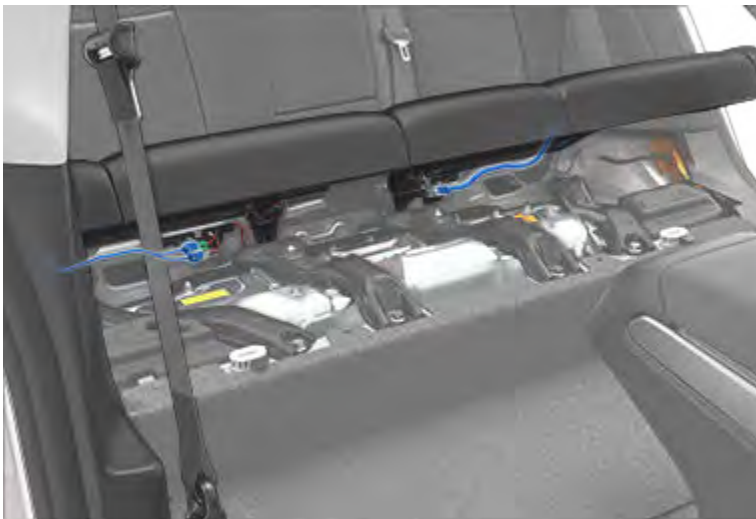
- Prepare the vehicle to remove the low voltage lead-acid battery:
 - Ensure the vehicle is in Park.
 - Lower all windows.



- c. Open the front trunk.
 - d. Leave a door propped open so you can get back into the vehicle if needed.
 - e. Disconnect the charge cable from the charge port.
2. Move the driver and front passenger seat fully forward.
 3. Under the rear seat, press the left and right tabs to the side and lift the seat cushion up. The seat separates from the base but is still restrained by one wire harness on each side.



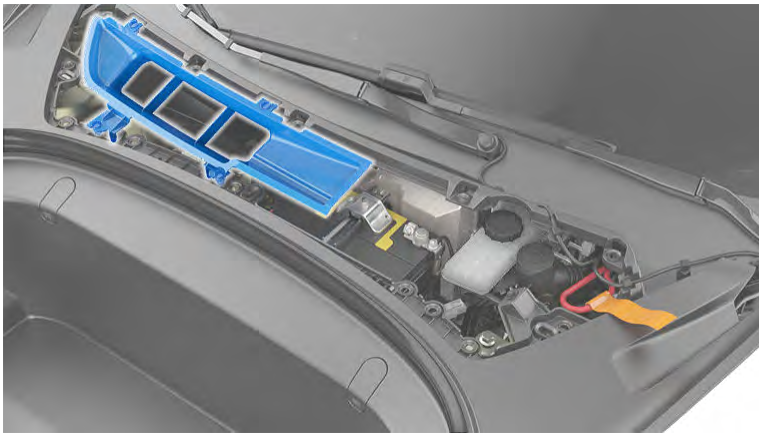
4. Disconnect the wire harnesses and remove the seat cushion. Set the cushion aside.



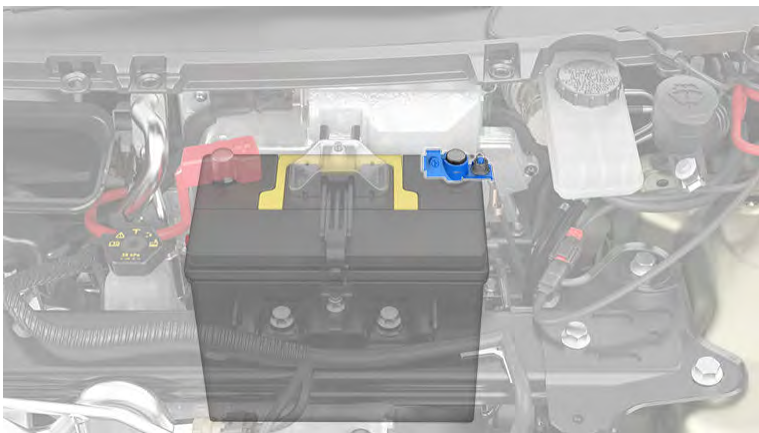
5. In the front trunk, remove the vehicle's underhood apron by inserting a small, non-marring flat tool or your fingers underneath the panel. Pull up to loosen the clips and set the underhood apron aside.



6. Remove the cabin intake duct and set it aside.



7. Power off the vehicle by navigating to **Controls > Safety > Power Off** on the touchscreen.
8. With a 10mm socket, loosen the nut that secures the negative (-) terminal clamp to the negative (-) post on the low voltage lead-acid battery. Release the terminal clamp from the negative (-) post.



9. Disconnect the low voltage cable from penthouse:
 - a. In the rear passenger seat, remove the foam cover and set it aside. The foam covers the low voltage cable.



b. Release and pull down the gray lever-arm on the side of the low voltage connector.



c. Pull the connector upward to disconnect it from the penthouse.

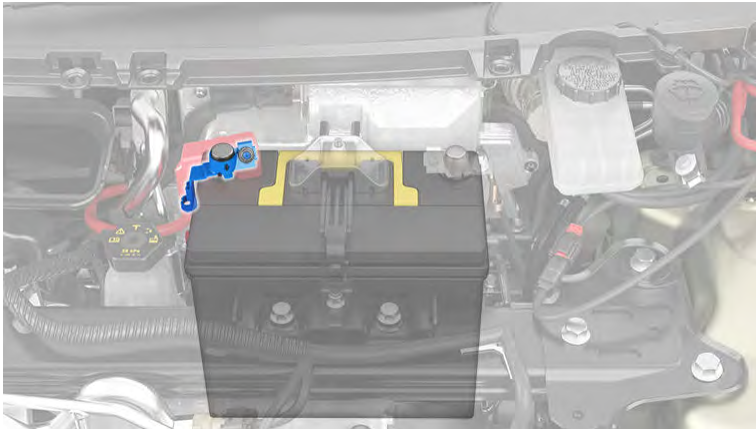


⚠ WARNING: The area under the seat cushion houses the high voltage Battery. **DO NOT TOUCH OR PLACE ITEMS ON THE METAL HOUSING!** Doing so can cause serious damage or injury.

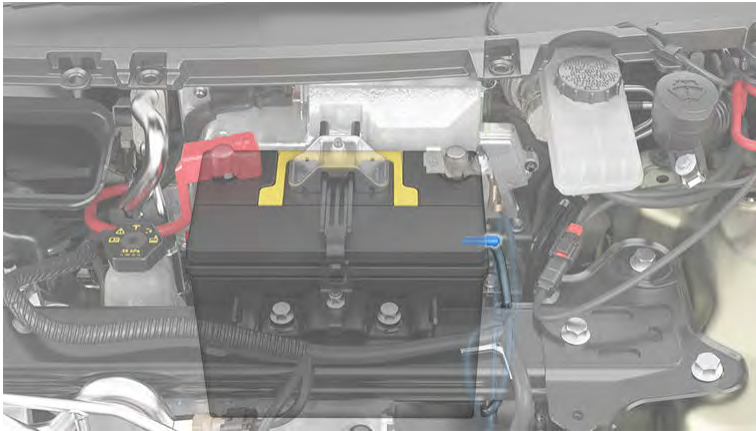
10. With a 10mm socket, release the terminal cover and loosen the nut that secures the positive (+) terminal clamp to the positive (+) post on the low voltage lead-acid battery. Release the terminal clamp from the positive (+) post and cover the terminal clamp with a dry rag.



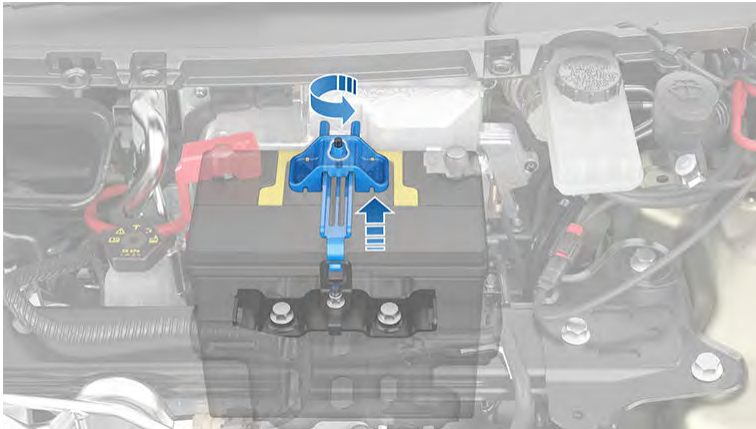
CAUTION: Do not allow the positive (+) terminal clamp to contact nearby components like the low voltage battery hold down bracket or A/C cooling lines.



11. Unplug the vent tube hose from the negative (-) terminal side of the low voltage lead-acid battery.



12. With a 10mm socket, loosen the nut and release the battery hold down from the top of the low voltage lead-acid battery by unhooking and sliding it back, taking care to ensure it does not slip into the vehicle.



13. Using the battery handle, carefully remove the low voltage lead-acid battery, taking care not to touch or damage the surrounding components.



WARNING: When lifting the low voltage lead-acid battery, stand in front of the vehicle and use proper lifting technique. The low voltage battery weighs approximately 25 lb (12 kg). Failure to do so may cause serious injury.



14. Inspect the new low voltage lead-acid battery to ensure it is equipped a red plug on the positive (+) terminal side. If the new low voltage battery does not have a red plug, use a small trim tool transfer the red plug from the old battery to the new one.

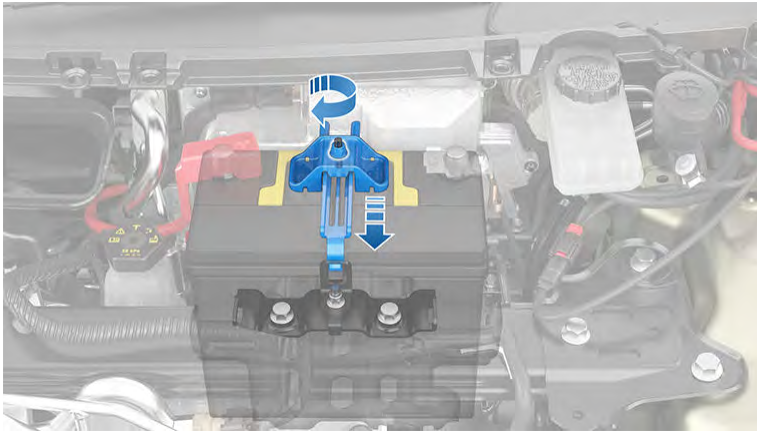


CAUTION: Dispose of the old low voltage lead-acid battery according to local laws, such as dropping it off at a battery recycling facility. Keep the low voltage battery upright and place it on a towel or piece of cardboard when transporting it.



Installation:

1. Carefully maneuver the new low voltage battery into place, taking care not to touch or damage nearby components.
2. Install the low voltage battery hold down and use a 10mm socket to tighten the bolt that secures it to the low voltage lead-acid battery. Torque the bolt to 6 Nm (4.4 ft-lb).



3. In the rear passenger seat, connect the penthouse cable to the connector:
 - a. Ensure the gray lever-arm is down, then install the connector.



- b. Secure the connector by gently tugging the gray lever-arm upward until it clicks into place.

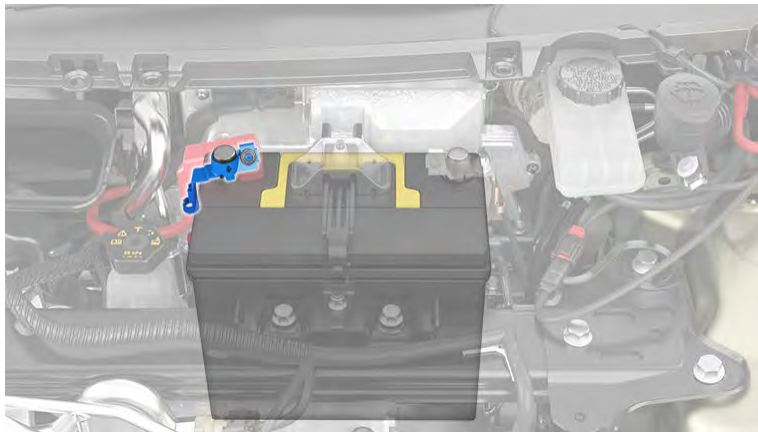


- c. Replace the foam cover on top of the penthouse cable.

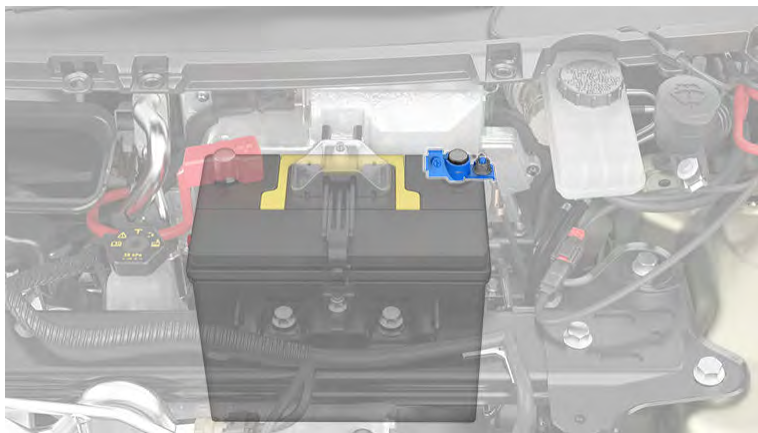


⚠ WARNING: The area under the seat cushion houses the high voltage Battery. **DO NOT TOUCH OR PLACE ITEMS ON THE METAL HOUSING!** Doing so can cause serious damage or injury.

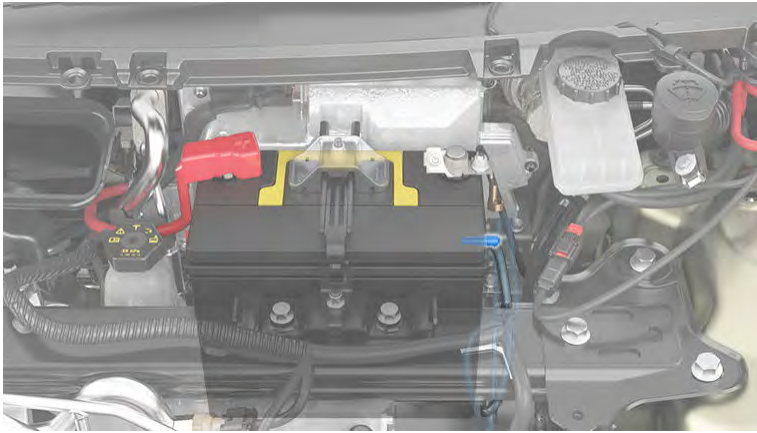
4. Remove the protective caps from the positive (+) and negative (-) posts on new low voltage lead-acid battery.
5. Connect the positive (+) terminal by positioning the terminal clamp over the terminal post. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb). Install the positive (+) terminal cover.



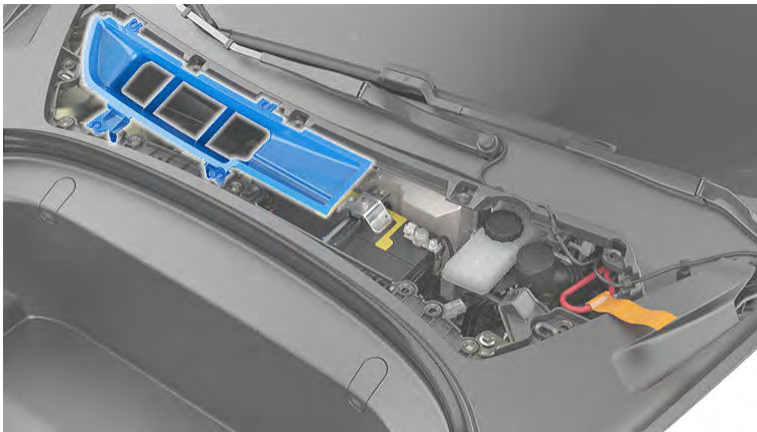
6. Connect the negative (-) terminal by positioning the terminal clamp over the connector. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb).



7. Connect the vent tube hose into the negative (-) terminal side of the low voltage lead-acid battery.

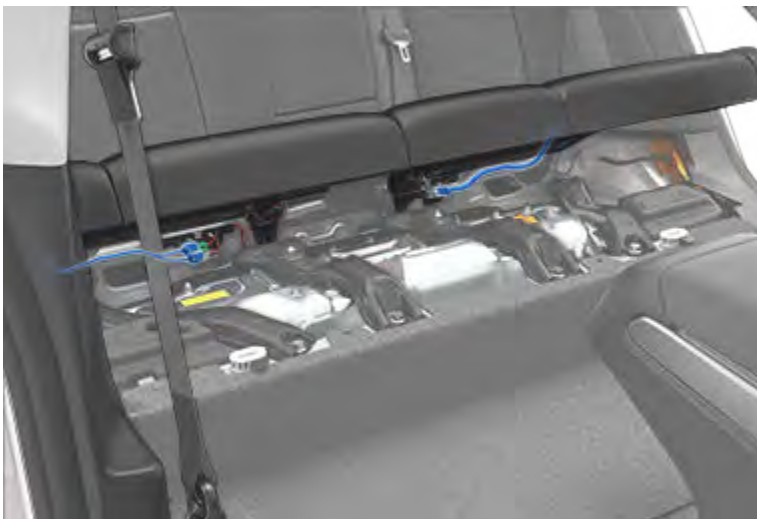


8. Replace the cabin intake duct.

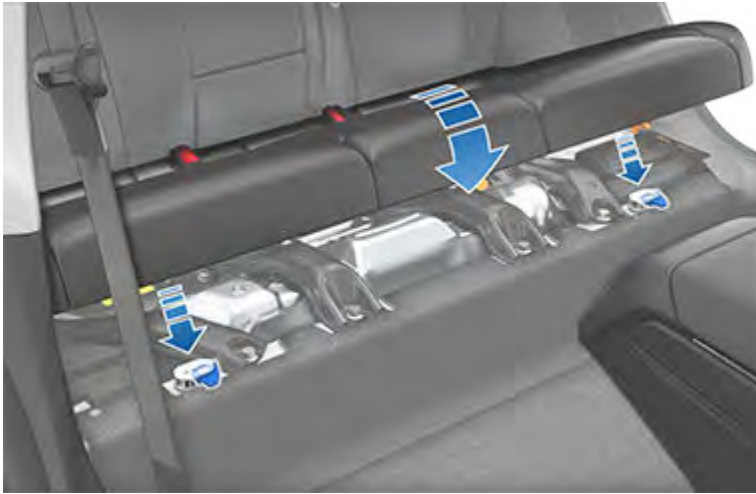


9. Open one of the vehicle's doors to make sure power has been correctly restored and the touchscreen turns on (this may take several minutes).

10. In the rear seat, connect the seat wire harnesses (one on each side) and replace the seat cushion.



11. Press the seat cushion back into the base until it clicks into place.



12. Replace the underhood apron by aligning the clips into their openings in the front trunk. Press down to lock them in place. The clips make an audible clicking sound when secured.



13. Close the front trunk. If an alert to replace to low voltage lead-acid battery was previously shown on the touchscreen, ensure the alert no longer appears.

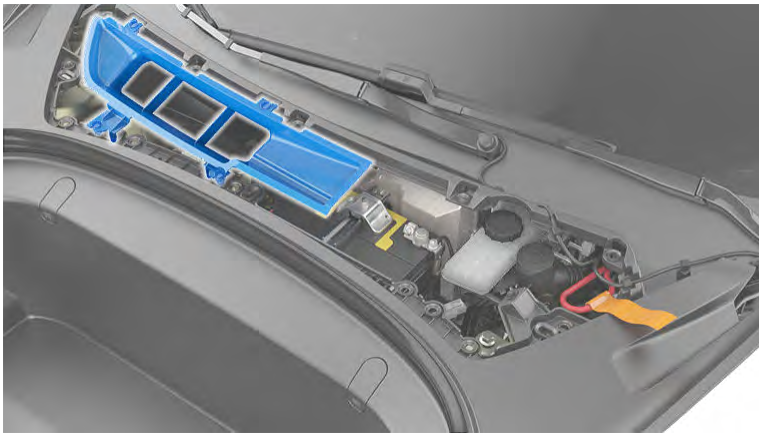
Vehicles Manufactured After Approximately October 2020

Removal:

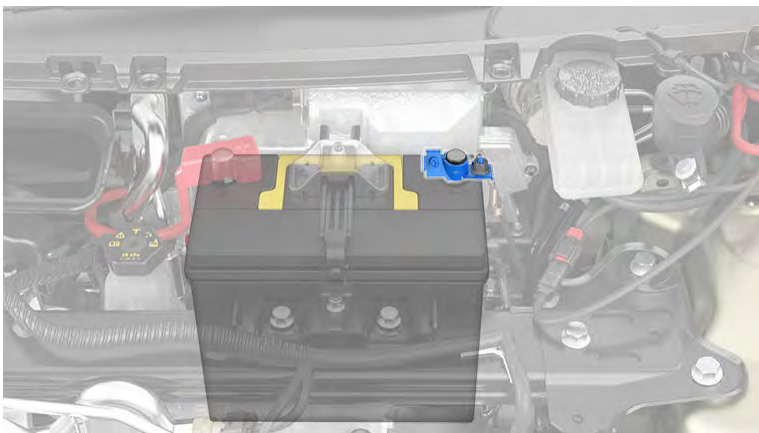
1. Prepare the vehicle to remove the low voltage lead-acid battery:
 - a. Ensure the vehicle is in Park.
 - b. Lower all windows.
 - c. Open the front trunk.
 - d. Leave a door propped open so you can get back into the vehicle if needed.
 - e. Disconnect the charge cable from the charge port.
2. Remove the vehicle's underhood apron by inserting a small, non-marring flat tool or your fingers underneath the panel. Pull up to loosen the clips and set the underhood apron aside.



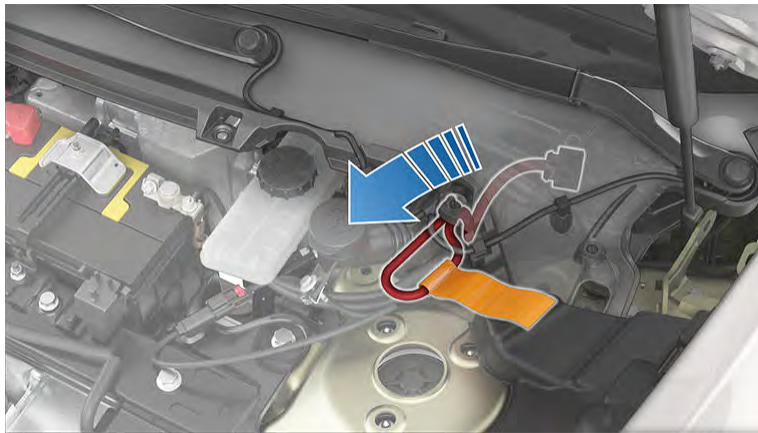
3. In the front trunk, remove the cabin intake duct and set it aside.



4. Power off the vehicle by navigating to **Controls > Safety > Power Off** on the touchscreen.
5. With a 10mm socket, loosen the nut that secures the negative (-) terminal clamp to the negative (-) post on the low voltage lead-acid battery. Release the terminal clamp from the negative (-) post.

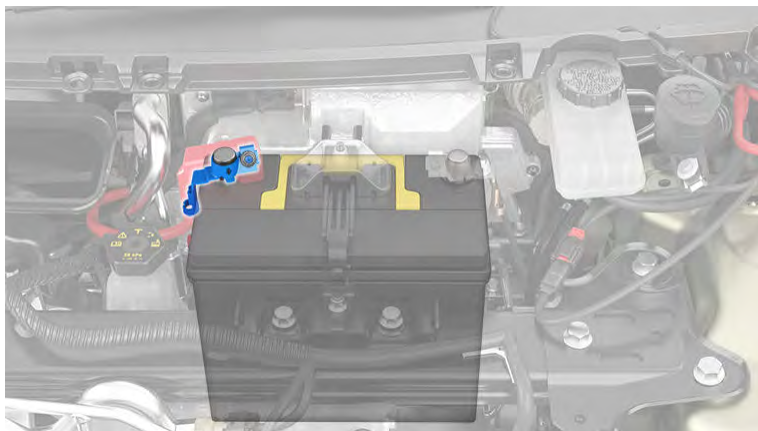


6. In the front trunk, disconnect the first responder loop by sliding the red locking tab toward you, pressing the black tab, and releasing it. Set the first responder loop aside.

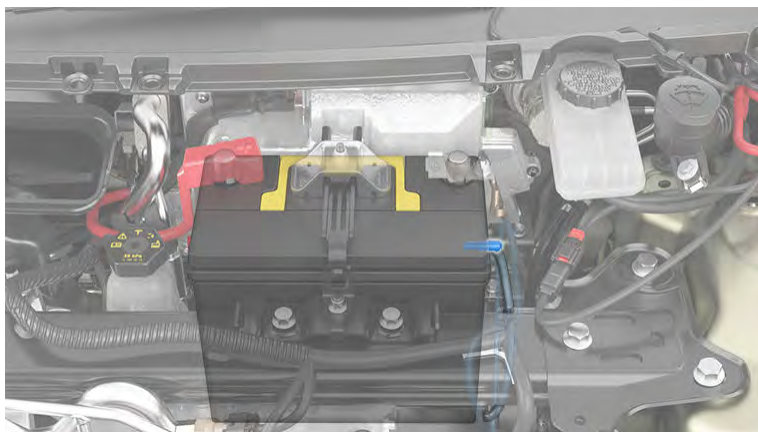


7. With a 10mm socket, release the terminal cover and loosen the nut that secures the positive (+) terminal clamp to the positive (+) post on the low voltage lead-acid battery. Release the terminal clamp from the positive (+) post and cover the terminal clamp with a dry rag.

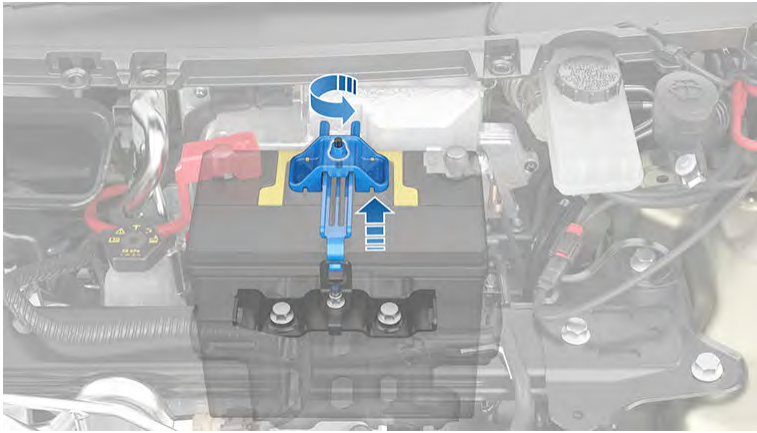
⚠ CAUTION: Do not allow the positive (+) terminal clamp to contact nearby components like the low voltage lead-acid battery hold down bracket or A/C cooling lines.



8. Unplug the vent tube hose from the negative (-) terminal side of the low voltage battery.



9. With a 10mm socket, loosen the nut and release the battery hold down from the top of the low voltage lead-acid battery by unhooking and slipping it back. If needed, tilt the battery hold down backward so it does not slip into the vehicle.



10. Carefully remove the low voltage lead-acid battery, taking care not to damage the surrounding components.



WARNING: When lifting the lead-acid battery, stand in front of the vehicle and use proper lifting technique. The lead-acid battery weighs approximately 25 lb (12 kg). Failure to do so may cause serious injury.



11. Inspect the new low voltage lead-acid battery to make sure it is equipped with a red plug on the positive (+) terminal side. If the new lead-acid battery does not have a red plug, transfer the red plug from the old battery to the new one.



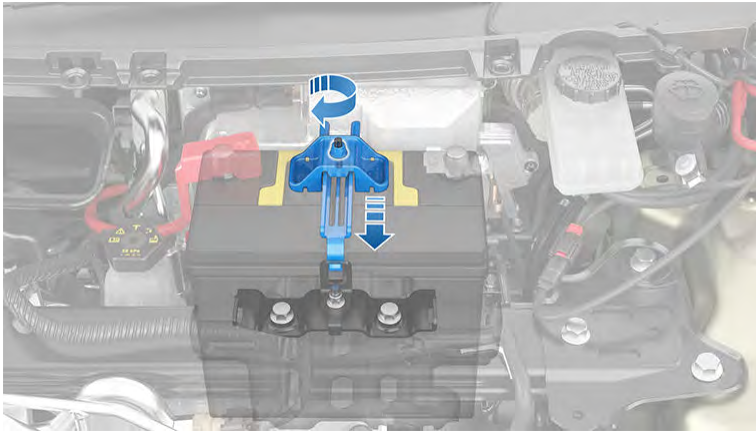
CAUTION: Dispose of the old low voltage lead-acid battery according to local laws, such as dropping it off at a battery recycling facility. Keep the battery upright and place it on a towel or piece of cardboard when transporting it.



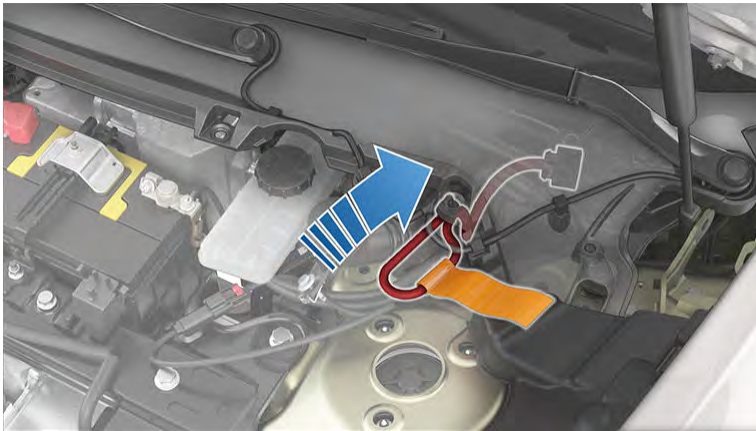
Installation:



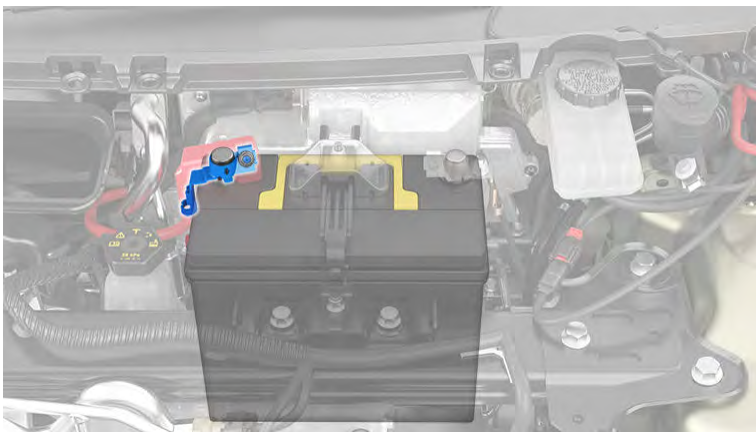
1. Carefully place the new lead-acid battery in the vehicle, taking care not to damage nearby components.
2. Install the low voltage lead-acid battery hold down and use a 10mm socket to tighten the nut that secures it to the battery. Torque the nut to 6 Nm (4.4 ft-lb).



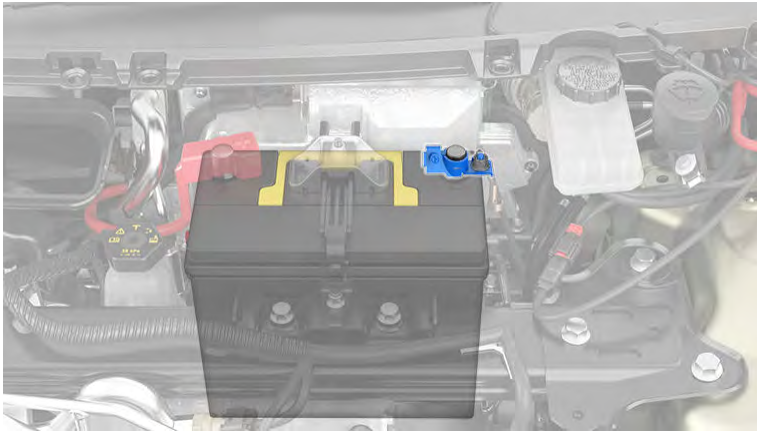
3. Reconnect the first responder loop.



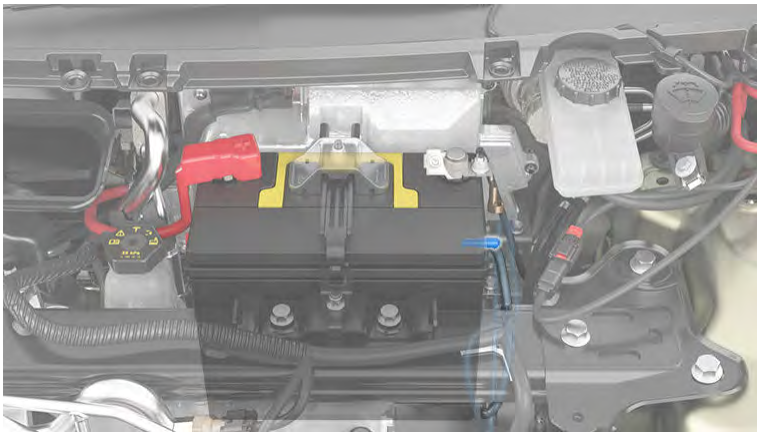
4. Remove the protective caps from the positive (+) and negative (-) posts on the new low voltage lead-acid battery.
5. Reconnect the positive (+) terminal by positioning the terminal clamp over the terminal post. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb). Reinstall the positive (+) terminal cover.



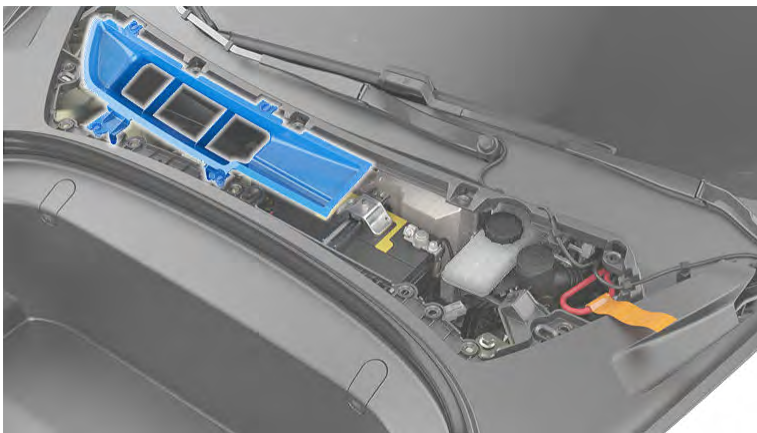
6. Reconnect the negative (-) terminal by positioning the terminal clamp over the connector. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb).



7. Connect the vent tube hose into the negative (-) terminal side of the low voltage lead-acid battery.



8. Open one of the vehicle's doors to make sure power has been correctly restored and the touchscreen turns on (this may take several minutes).
9. Reinstall the cabin intake duct.



10. Replace the underhood apron by aligning the clips into their openings in the front trunk. Press down to lock them in place. The clips make an audible clicking sound when secured.



11. Close the front trunk. If an alert to replace to low voltage lead-acid battery was previously shown on the touchscreen, ensure the alert no longer appears.

Replacing the Low Voltage Lead-Acid Battery

- CAUTION:** It is your responsibility to monitor the low voltage battery health. Damage to the low voltage battery due to running out of range is not covered by the warranty.
- CAUTION:** To avoid damage that is not covered by the warranty, replace your low voltage lead-acid battery with the same type of battery. The low voltage lead-acid battery for North American vehicles is **AtlasBX / Hankook 85B24LS 12V 45Ah**. You can purchase a new lead-acid low voltage battery that is compatible with your vehicle from your local service center.

Perform the following procedure to replace the lead-acid low voltage battery. Wear appropriate personal protection equipment (such as safety glasses, leather gloves when handling the lead-acid battery, etc.).

Removal:

1. Prepare the vehicle to remove the low voltage lead-acid battery:
 - a. Ensure the vehicle is in Park.
 - b. Lower all windows.
 - c. Open the front trunk.
 - d. Leave a door propped open so you can get back into the vehicle if needed.
 - e. Disconnect the charge cable from the charge port.
2. In the front trunk, remove the vehicle's underhood apron by inserting a small, non-marring flat tool or your fingers underneath the panel. Pull up to loosen the clips and set the underhood apron aside.



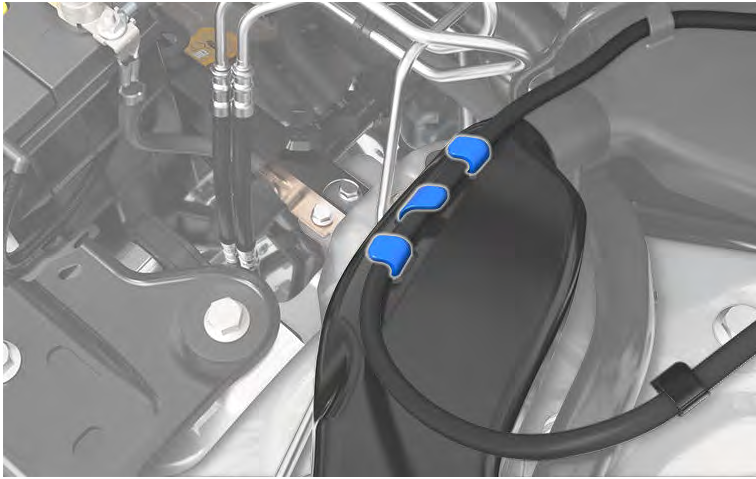
3. If equipped, remove the HEPA filter:

- a. Using a 10mm socket, remove the bolt that attaches the washer fluid reservoir neck to the underhood storage unit.

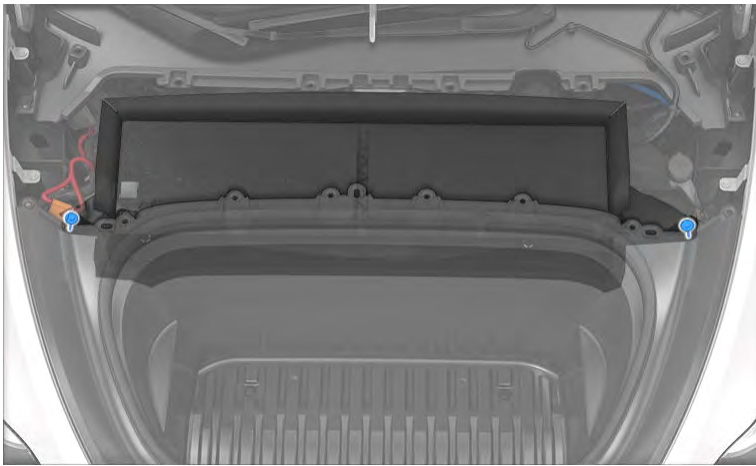


- b. Remove the washer tank neck from the vehicle. If the windshield washer reservoir is full, some washer fluid may leak out.

NOTE: You do not need to remove the hose from the neck.



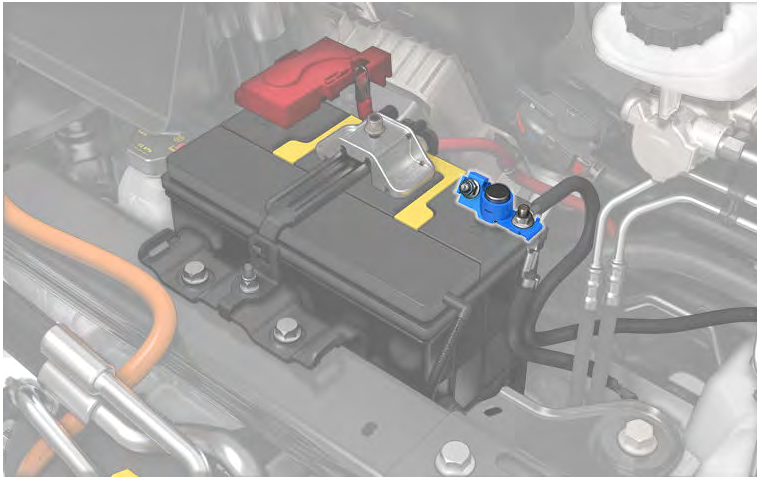
- c. With a 10mm socket, remove the bolts (x2) that attach the HEPA filter assembly to the vehicle.



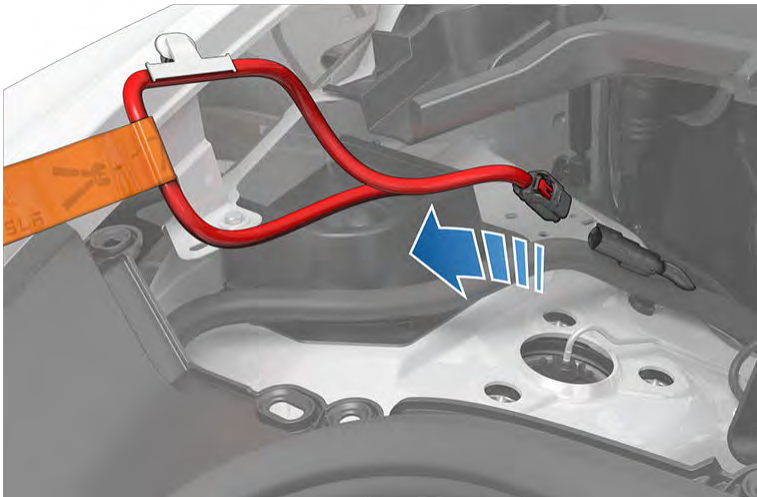
- d. Remove the HEPA filter assembly from the vehicle by tilting the rear edge of the filter assembly up past the brake fluid reservoir. Lift the filter assembly out of the vehicle, taking care not to bump into or damage other components.



4. Power off the vehicle by navigating to **Controls > Safety > Power Off** on the touchscreen.
5. With a 10mm socket, loosen the nut that secures the negative (-) terminal clamp to the negative (-) post on the lead-acid battery. Release the terminal clamp from the negative (-) post.



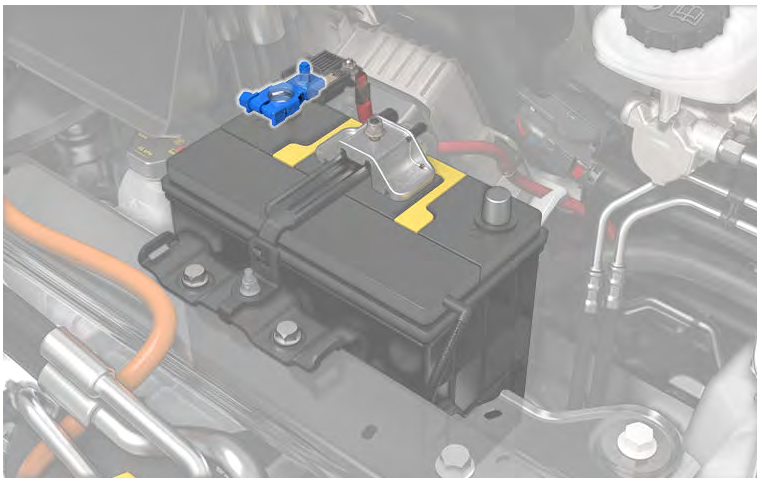
6. Disconnect the first responder loop by sliding the red locking tab toward you and pressing the black tab.



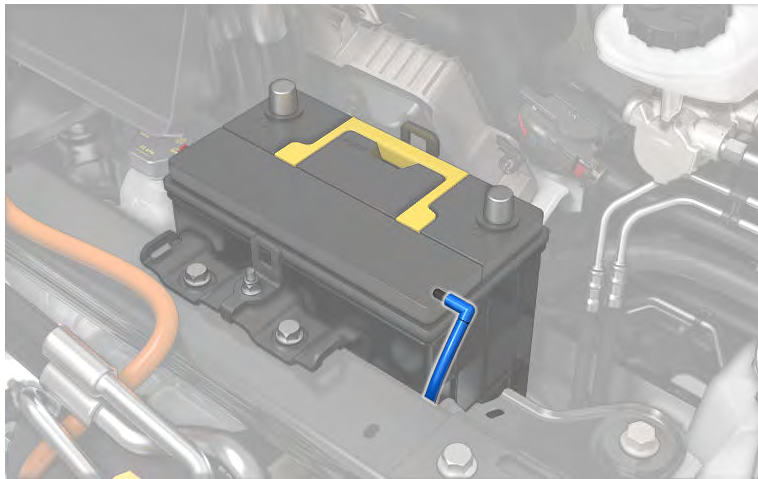
7. With a 10mm socket, release the terminal cover and loosen the nut that secures the positive (+) terminal clamp to the positive (+) post on the lead-acid battery. Release the terminal clamp from the positive (+) post and cover the terminal clamp with a dry rag.



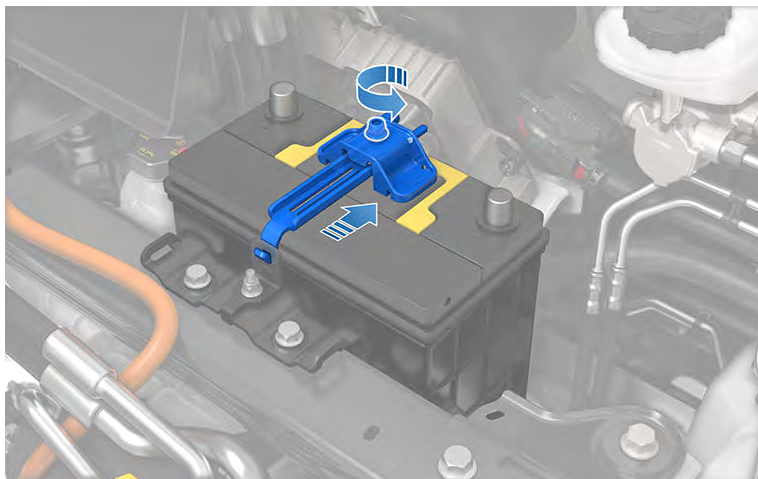
CAUTION: Do not allow the positive (+) terminal clamp to contact nearby components like the lead-acid battery hold down bracket or A/C cooling lines.



8. Unplug the vent tube hose from the negative (-) terminal side of the lead-acid battery.



9. Loosen the nut on the battery hold down on the top of the lead-acid battery with a 10mm socket. To release the battery hold down, unhook and slide the strap back. If needed, tilt the battery hold down backward so it does not slip into the vehicle.



10. Using the battery handle, carefully remove the lead-acid battery, taking care not to touch or damage the surrounding components.

⚠ WARNING: When lifting out the lead-acid battery, stand in front of the vehicle and use proper lifting technique. The lead-acid battery weighs approximately 25 lb (12 kg). Failure to do so may cause serious injury.



11. Inspect the new lead-acid battery to ensure it has a red plug in the casing on the positive (+) terminal side. If the new lead-acid battery does not have a red plug, use a small trim tool to transfer the red plug from the old battery to the new one.

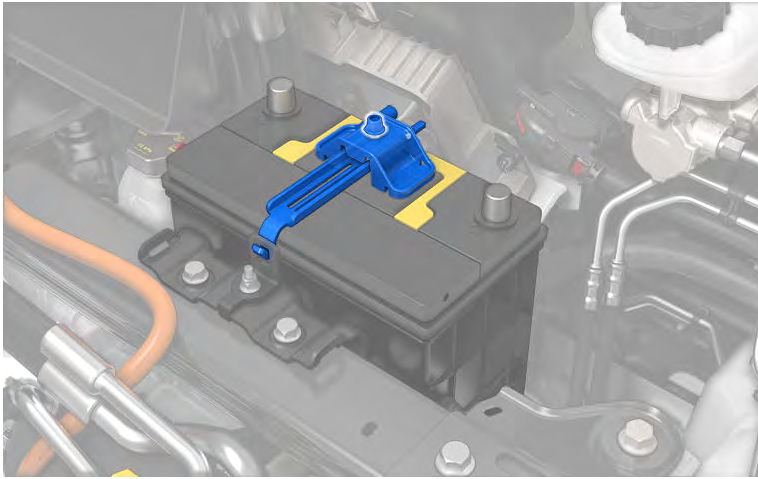


CAUTION: Dispose of the old lead-acid battery according to local laws, such as dropping it off at a battery recycling facility. Keep the lead-acid battery upright and place it on a towel or piece of cardboard when transporting it.

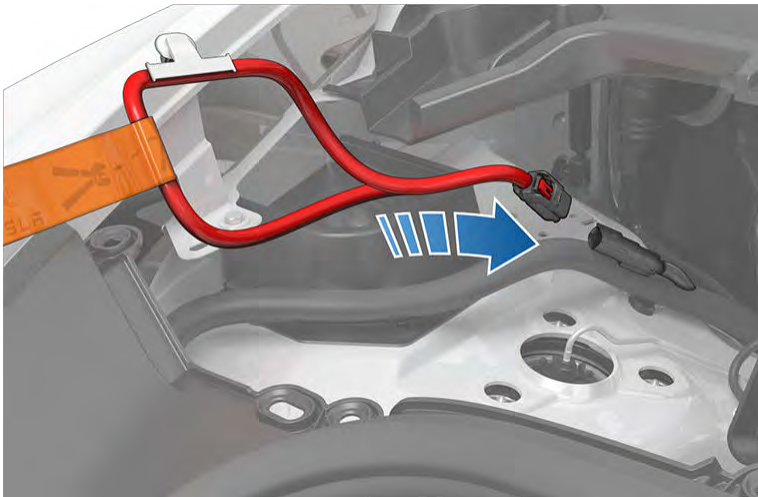


Installation:

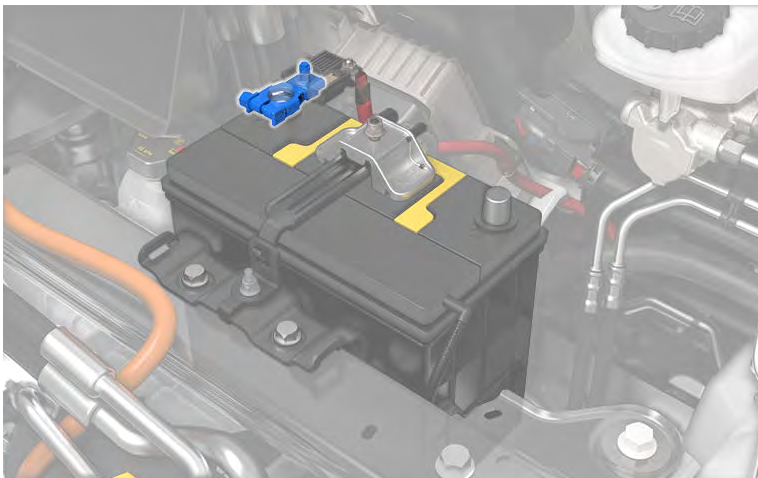
1. Carefully maneuver the new lead-acid battery into place, taking care not to touch or damage nearby components.
2. Install the lead-acid battery hold down and use a 10mm socket to tighten the nut that secures it to the 12V battery. Torque the nut to 6 Nm (4.4 ft-lb).



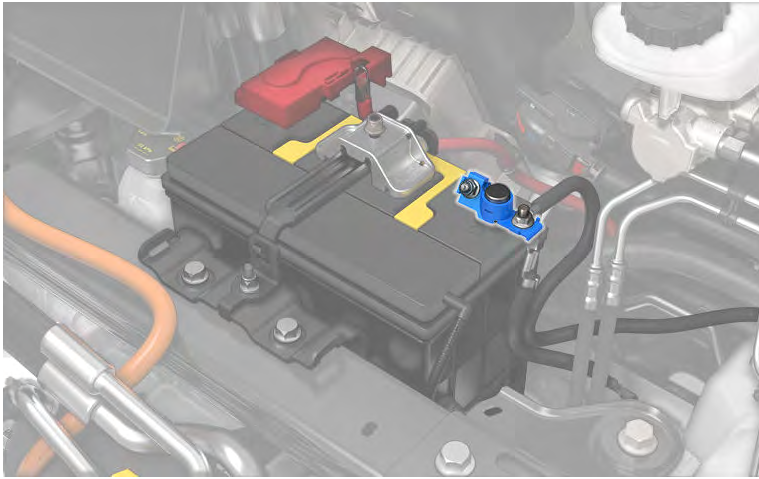
3. Reconnect the first responder loop.



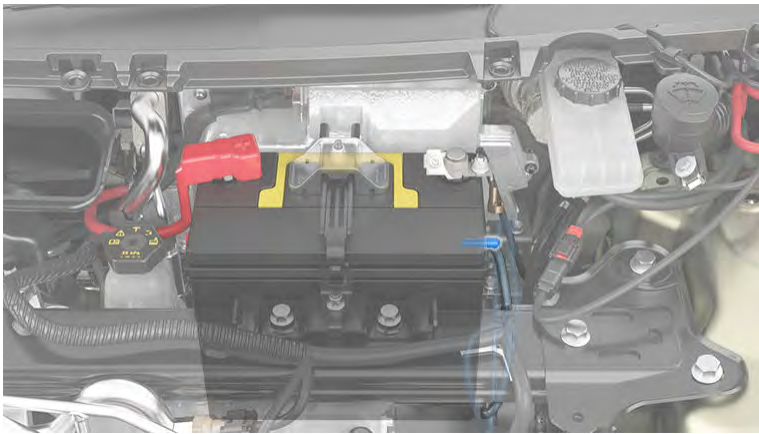
4. Remove the protective caps from the positive (+) and negative (-) posts on the new low voltage lead-acid battery.
5. Connect the positive (+) terminal by positioning the clamp over the positive (+) post. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb).



6. Install the positive (+) terminal cover.
7. Connect the negative (-) terminal by positioning the clamp over the negative (-) post. Using a 10mm socket, torque the nut to 6 Nm (4.4 ft-lb).



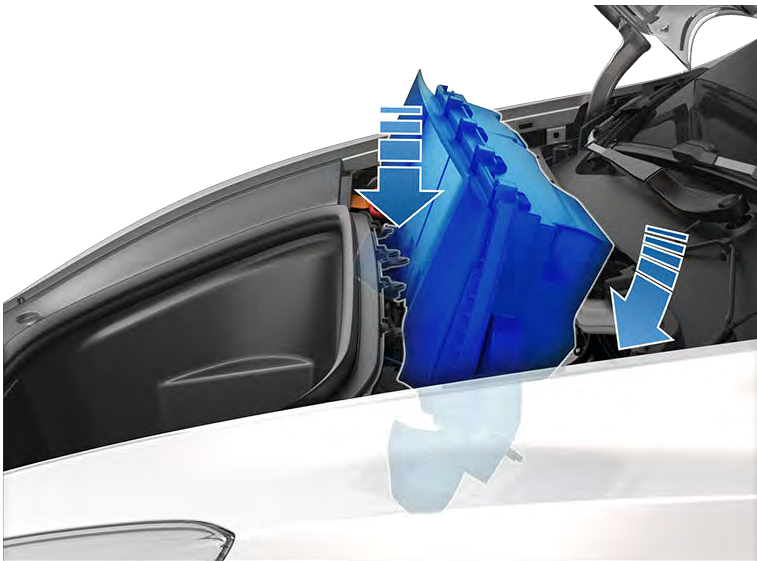
8. Connect the vent tube hose into the negative (-) terminal side of the lead-acid battery.



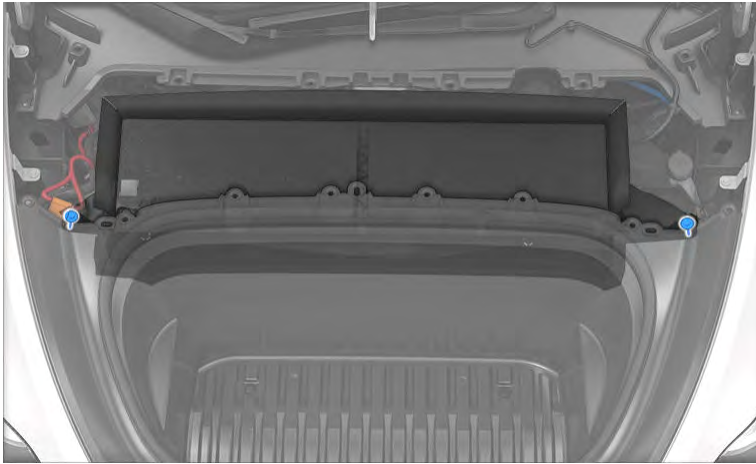
9. Open one of the vehicle's doors to ensure power has been correctly restored and the touchscreen turns on (this may take several minutes).

10. If equipped, install the HEPA filter:

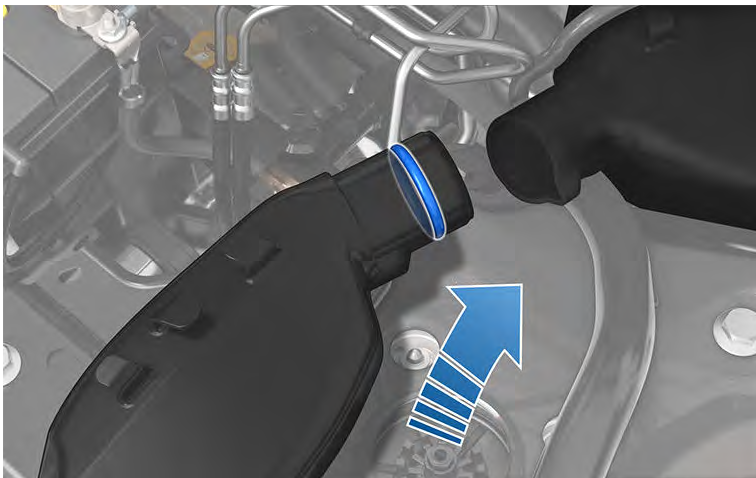
- a. Carefully maneuver the HEPA filter assembly into place, taking care not to touch or damage other components.



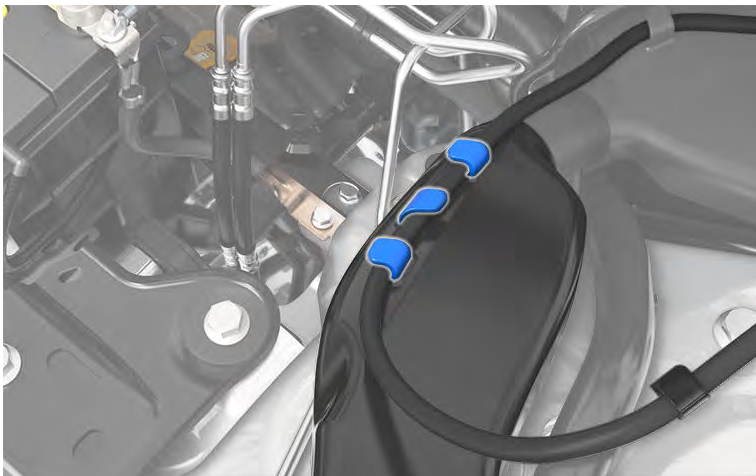
- b. With a 10mm socket, tighten the bolts (x2) and torque them to 5 Nm (3.7 ft-lb).



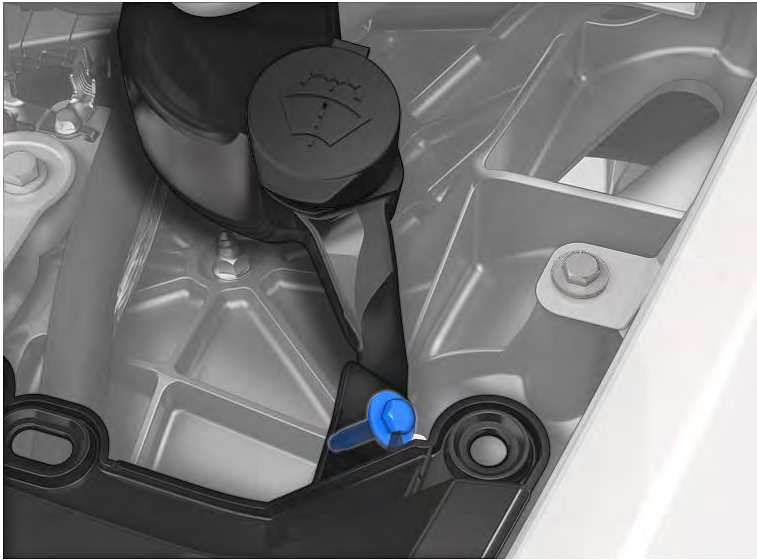
- c. Ensure the O-ring on the washer tank neck is fully seated, then install the washer tank neck by inserting it into the washer tank.



- d. Route the hose so that it is secured by the tab.



- e. Use a 10mm socket to install the bolt that attaches the washer fluid reservoir neck to the underhood storage unit. Torque the bolt to 5 Nm (3.7 ft-lb).



11. Replace the underhood apron by aligning the clips into their openings in the front trunk. Press down to lock them in place. The clips make an audible clicking sound when secured.



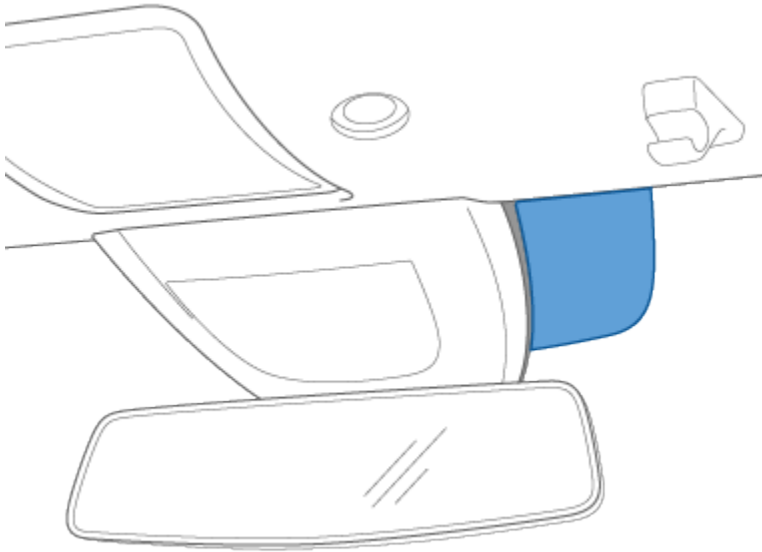
12. Close the front trunk. If an alert to replace the low-voltage battery was previously shown on the touchscreen, ensure the alert no longer appears.

Using RFID Transponders

When attaching an RFID transponder (used by many automated toll systems) inside Cybertruck Model S Model X Model 3 Model Y, place the transponder near the topmost area of the windshield next to the rear view mirror on the bottom corner of the windshield. This ensures best results and minimizes any obstruction to your driving view. Refer to the RFID manufacturer's instructions for specific placement.

Model S has a metallic coating on the windshield that can interfere with signals sent from RFID transponders used by many toll systems. Most Model S vehicles, depending on date of manufacture, include an area in the windshield in which the metallic coating is cut out to accommodate transponders. This area, located on the right side of the rear view mirror, is the best location to mount a transponder. If your vehicle does not include this cut out area, mount the transponder to the rear window.

NOTE: You can also attach a weather-proof transponder to the front license plate or behind the nose cone (for details on how to remove the nose cone, see [Instructions for Transporters on page 894](#)).



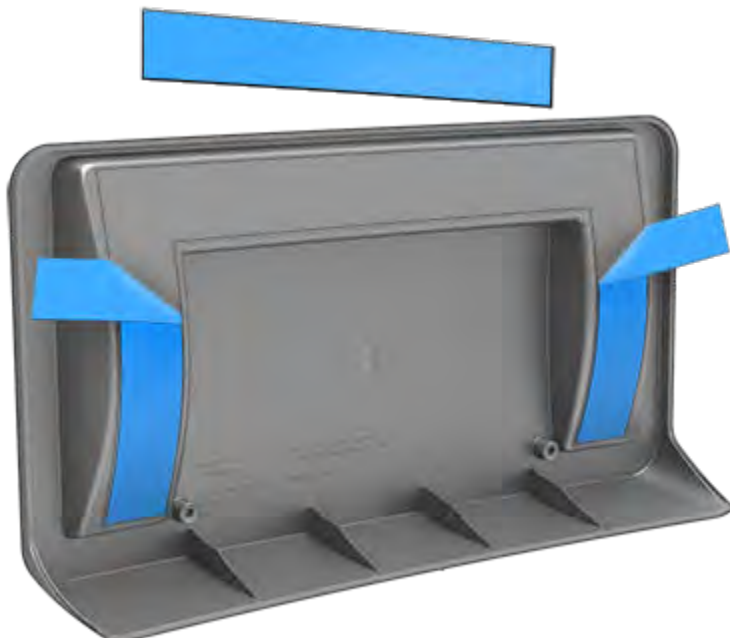
Installing Front License Plate Bracket

To accommodate jurisdictions that require a license plate on the front of your vehicle, Cybertruck Model S Model X Model 3 Model Y is equipped with a license plate bracket. This bracket conforms to the shape of your vehicle's front bumper and is adhered to it using strong adhesive.

NOTE: Tesla recommends performing this procedure on a clean, dry vehicle during a warm day. Cold and/or wet conditions may result in reduced performance of the adhesive.

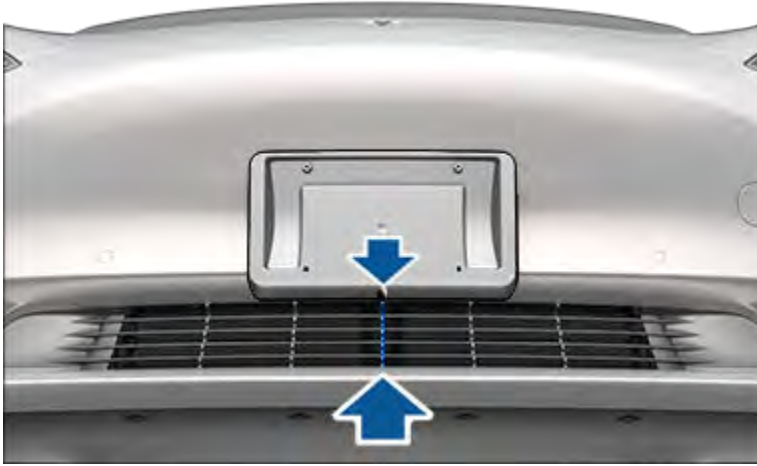
To install the front license plate bracket:

1. Get isopropyl alcohol and test it on a non-visible painted surface of your vehicle to confirm that it does not damage or remove the paint.
2. Clean the mounting site with isopropyl alcohol and allow to dry for at least one minute.
3. Fully remove the protective tape from the adhesive at the top of the bracket and partially remove the tape from the top of the adhesive on each side. Leave the bottom half of the tape on the sides in place and fold the unattached tape outward for easy removal after aligning the bracket to the bumper.





4. While tilting the top of the license plate bracket away from the bumper (to prevent adhering it to the wrong location), align the bottom center of the license plate bracket with the middle of the grille as shown.



NOTE: Be as precise as possible when aligning the bracket because you will be unable to reposition it once adhered to the bumper.

5. While correctly aligned, move the top of the bracket against the bumper and apply pressure so that it is held in place by the adhesive.



6. Remove the remaining tape from the sides of the bracket then press the entire bracket firmly against the bumper, ensuring the bracket is held in place by all adhesive areas.
7. Once the bracket is securely mounted, use the four supplied screws to attach your license plate to the bracket (tighten to 3 Nm/2.2 ft-lbs).





Do It Yourself Maintenance

Learn how to perform simple Do It Yourself procedures, such as replacing wiper blades and cabin filters, or installing the paint protection film kits such as replacing the wiper blade and HEPA filter. Go to <https://www.tesla.com/support/do-it-yourself-guides> for instructions, animations, and videos of these procedures.

NOTE: Due to market region or vehicle configuration specifics, some parts and procedures may not be available for your vehicle. When navigating to <https://www.tesla.com/support/do-it-yourself-guides>, select your vehicle, region, and/or language to see an updated list of parts and accessories available for your region.

⚠ CAUTION: Perform each procedure in a dry and well-lit area. For your safety, only perform a procedure if you feel comfortable doing so, and always follow provided instructions.

Specifications

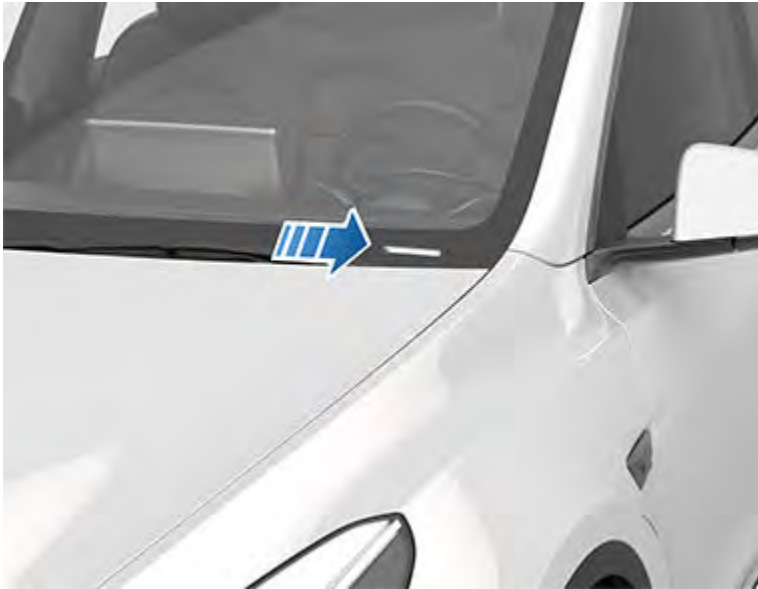
Identification Labels

Vehicle Identification Number

You can find the VIN at the following locations:

- Touch **Controls** > **Software** on the touchscreen.
- Stamped on a plate located at the top of the dashboard. Can be seen by looking through the windshield.





- Printed on the Vehicle Certification label, located on the door pillar. This can be seen when the driver's door is open.





- Cars manufactured in Gigafactory Shanghai starting September 2020: The VIN is stamped onto the floor and can be seen by moving the front passenger seat rearward and lifting the carpet.



- Cars manufactured in Gigafactory Shanghai: The VIN is stamped onto the floor and can be seen by moving the front passenger seat rearward and lifting the carpet.



Emission Control Label

The emission control label is located on the opening face of the liftgate.

NOTE: For vehicles with a model year of 2022 or newer, the emission control label is now located on the inside of the front hood and may not match the label shown.



Identification Labels

Vehicle Identification Number

You can find the VIN at the following locations:



- Touch **Controls** > **Software**.
- Stamped on a plate located at the top of the dashboard. Can be seen by looking through the windshield on the driver's side of the vehicle.



- Printed on the Vehicle Certification label, located on the door pillar. Can be seen when the driver's door is open.

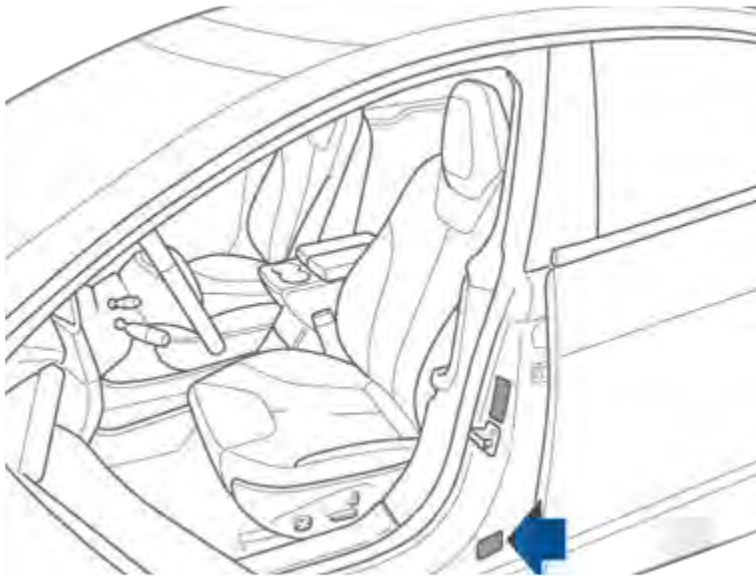




Vehicle Identification Number

You can find the VIN at the following locations:

- Touch **Controls** > **Software**.
- Stamped on a plate located at the top of the dashboard. Can be seen by looking through the windshield.
- Printed on the Vehicle Certification label, located on the door pillar. Can be seen when the driver's door is open.



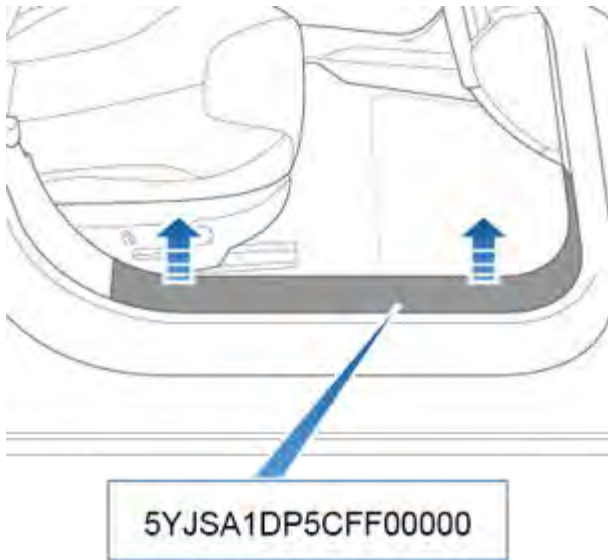
- On vehicles manufactured before August 2015, the VIN is stamped on the chassis and can be seen by removing the maintenance panel.
- On vehicles manufactured as of August 2015, the VIN is stamped on the chassis and can be seen by removing the sill panel on the front passenger door by gently prying it upward using a flat-bladed tool.



Owners Manual

NOTE: The VIN was not stamped on the chassis on vehicles manufactured between approximately June 2, 2016 and Feb 28, 2017.

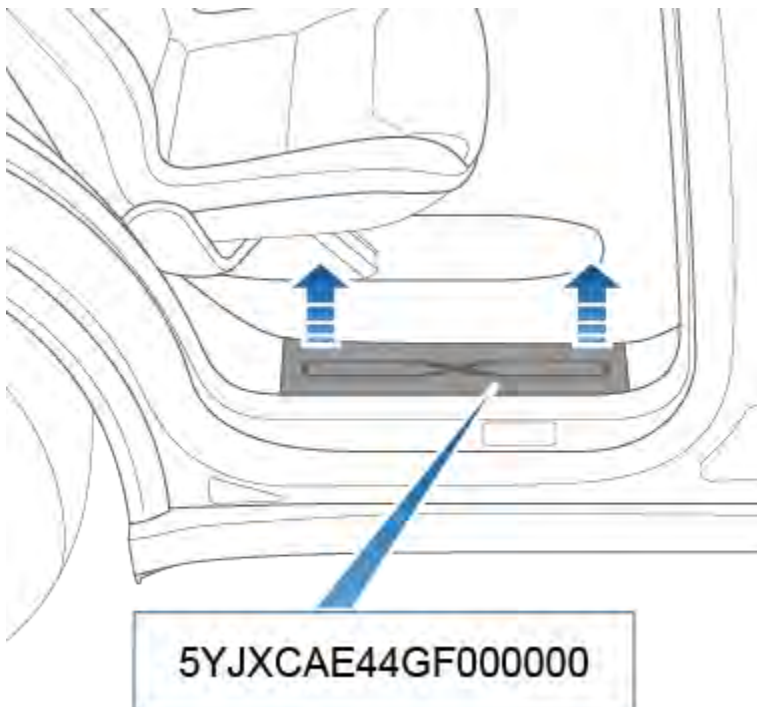
CAUTION: Removing the sill panel to view the VIN is not recommended because damage is likely to occur. The panel is held in place with fragile clips that break easily. Damage caused by removing the sill panel is not covered by the warranty.



- On vehicles manufactured prior to August 2015, a VIN label can be found in the front trunk, beneath the underhood apron.
- Stamped on the chassis under the sill panel on the rear passenger door. To remove the sill panel, gently pry it upward using a flat-bladed tool.

NOTE: The VIN was not stamped on the chassis on vehicles manufactured between approximately June 2, 2016 and Feb 28, 2017.

CAUTION: Removing the sill panel to view the VIN is not recommended because damage is likely to occur. The panel is held in place with fragile clips that break easily. Damage caused by removing the sill panel is not covered by the warranty.

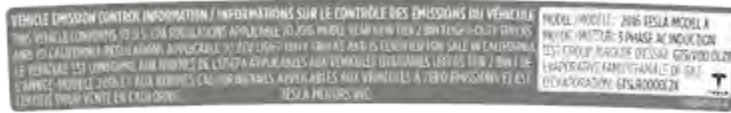




Emission Control Label

The emission control label is located on the opening face of the liftgate.

NOTE: For vehicles with a model year of 2022 or newer, the emission control label is now located on the inside of the front hood and may not match the label shown.





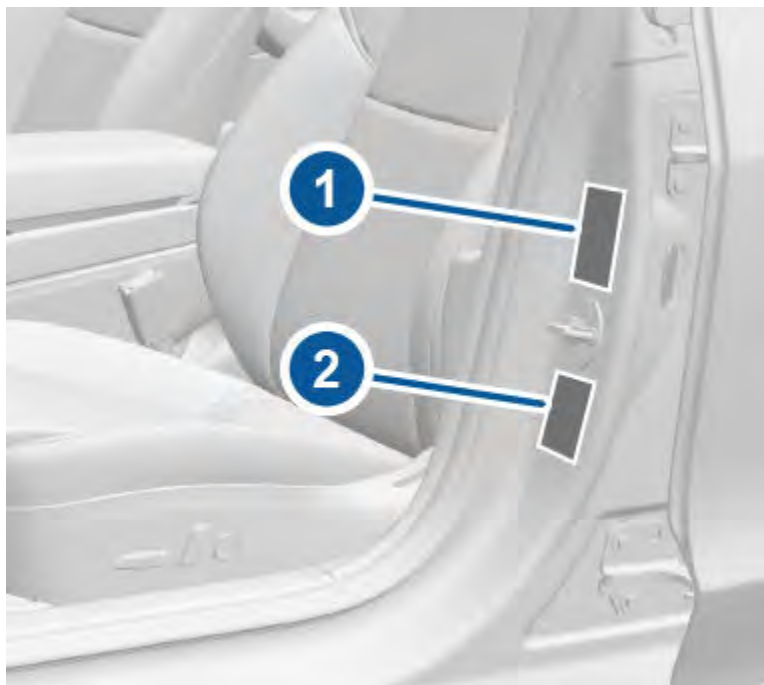
Vehicle Loading

Vehicle Labeling

It is important to understand your vehicle's original tire sizes and pressures, and the GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating). This information can be found on two labels attached to CybertruckModel SModel XModel 3Model Y.

Both labels are visible on the door pillar when the front door is open.

NOTE: If your CybertruckModel SModel XModel 3Model Y is fitted with Tesla accessory wheels or tires, your CybertruckModel SModel XModel 3Model Y may include an additional label indicating that values may differ from what is stated on the label. If this is the case, see [Accessory Wheels and Tires on page 802](#).



1. Tire and Loading Information Label



2. Vehicle Certification Label

WARNING: Overloading CybertruckModel SModel XModel 3Model Y has an adverse effect on braking and handling, which can compromise your safety or cause damage.

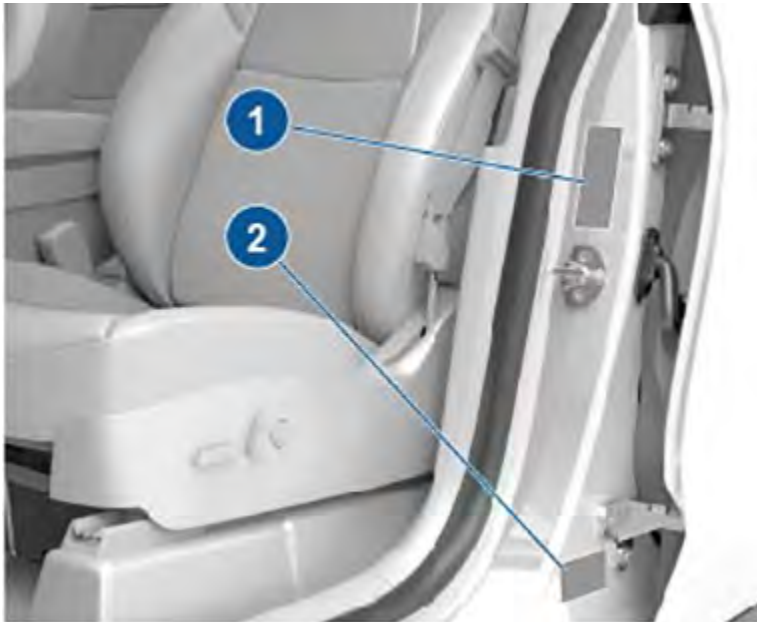
CAUTION: Never store large amounts of liquid in CybertruckModel SModel XModel 3Model Y. A significant spill can cause electrical components to malfunction.

Vehicle Labeling

It is important to understand your vehicle's original tire sizes and pressures, and the GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating). This information can be found on two labels attached to CybertruckModel SModel XModel 3Model Y.

Both labels are visible on the door pillar when the front door is open.

NOTE: If your CybertruckModel SModel XModel 3Model Y is fitted with Tesla accessory wheels or tires, your CybertruckModel SModel XModel 3Model Y may include an additional label indicating that values may differ from what is stated on the label.



1. Tire and Loading Information Label

2. Tire Information Label

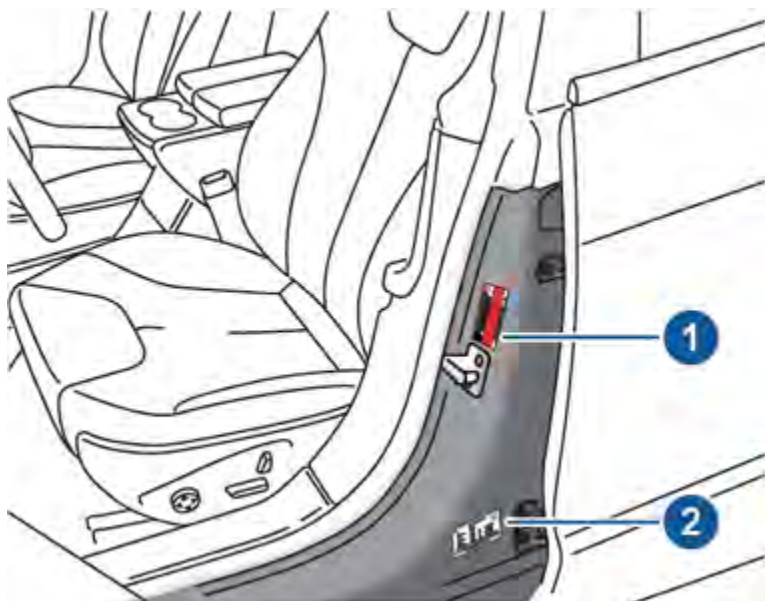
3. Vehicle Certification Label

WARNING: Overloading CybertruckModel SModel XModel 3Model Y has an adverse effect on braking and handling, which can compromise your safety or cause damage.

CAUTION: Never store large amounts of liquid in CybertruckModel SModel XModel 3Model Y. A significant spill can cause electrical components to malfunction.

Vehicle Labeling

It is important to understand your vehicle's original tire sizes and pressures, and theGVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating). This information can be found on two labels attached to CybertruckModel SModel XModel 3Model Y.



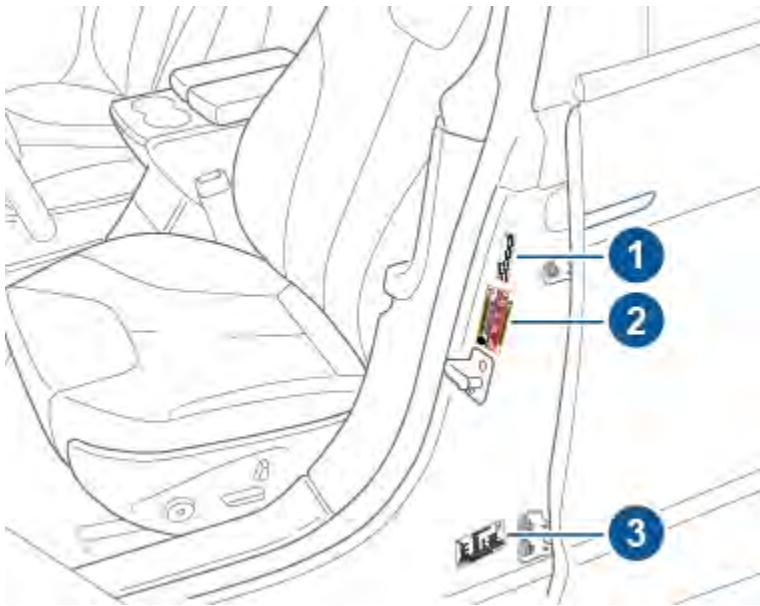
1. Tire and Loading Information Label
2. Vehicle Certification Label

⚠ WARNING: Overloading CybertruckModel SModel XModel 3Model Y has an adverse effect on braking and handling, which can compromise your safety or cause damage.

⚠ CAUTION: Never store large amounts of liquid in CybertruckModel SModel XModel 3Model Y. A significant spill can cause electrical components to malfunction.

Vehicle Labeling

It is important to understand your vehicle's original tire sizes and pressures, and the GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating). This information can be found on two labels attached to CybertruckModel SModel XModel 3Model Y.



1. Towing label (if equipped)
2. Tire and Loading Information Label
3. Vehicle Certification label

NOTE: Towing capability is available only if Model X is equipped with the Towing Package.

⚠ WARNING: Overloading Model X has an adverse effect on braking and handling, which can compromise your safety or cause damage.

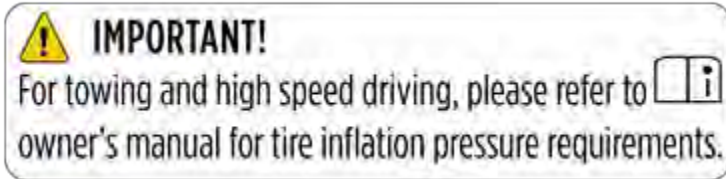
⚠ CAUTION: Never store large amounts of liquid in Model X. A significant spill can cause electrical components to malfunction.



Towing Label

NOTE: Depending on date the vehicle was manufactured, Cybertruck Model S Model X Model 3 Model Y may or may not have a towing label.

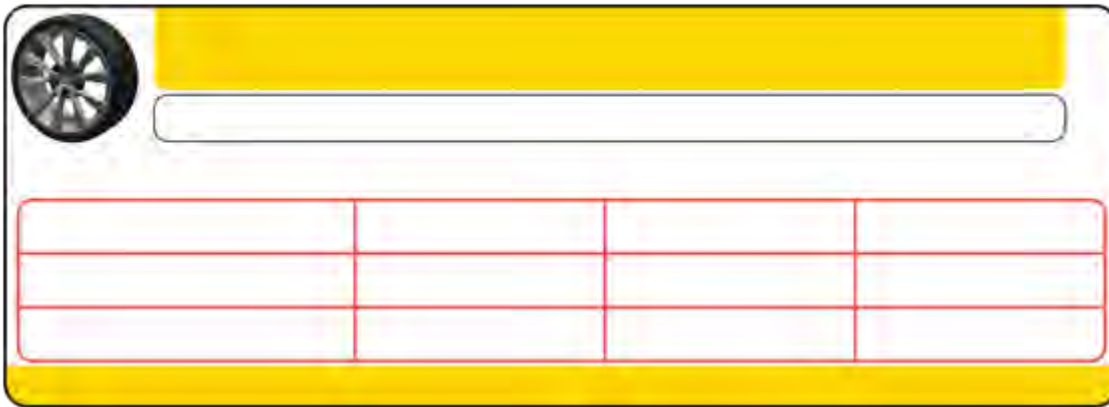
Towing capability is available only if Model X is equipped with the Towing Package. If equipped with the towing package, the Towing Label instructs you to refer to the owner's manual for tire pressures that should be used when towing a trailer. Do not use the tire pressures printed on the Tire Information Label. Instead, see the topic "Towing a Trailer" in the Driving section of the onscreen Owner's Manual.



Tire and Loading Information Label

- The maximum number of occupant seating positions.
- The maximum vehicle capacity weight.
- The size of the original tires.
- The cold inflation pressures for the original front and rear tires. These pressures are recommended to optimize ride and handling characteristics.

Label Format:



Never change this label, even if you use different tires in the future.

NOTE: If Cybertruck Model S Model X Model 3 Model Y is loaded to its full capacity, double check all tires to ensure they are inflated to their recommended pressure levels.

WARNING: Tire pressures printed on the Tire and Loading Information label DO NOT APPLY to towing. When towing, tire pressures must be increased. For information about the tire pressures required when towing, see [Towing and Accessories on page 537](#).

WARNING: Tire pressures printed on the Tire and Loading Information label DO NOT APPLY to towing. When towing, tire pressures must be increased. For information about the tire pressures required when towing, see [Towing and Accessories on page 528](#).

Vehicle Certification Label

The Vehicle Certification label provides:



- GVWR - Gross Vehicle Weight Rating. The maximum allowable total mass of CybertruckModel SModel XModel 3Model Y. This is calculated as the weight of CybertruckModel SModel XModel 3Model Y equipped with the heaviest factory selectable options, all passengers, fluids, and cargo.
- GAWR FRT and GAWR RR - Gross Axle Weight Rating for the front and rear axles. The GAWR is the maximum distributed weight that each axle can support.

United States:

United States:

MFD BY TESLA, INC.			
GVWR	WITH TIRES		
GAWR FRT	WITH TIRES	RIM	COLD TIRE PRESSURE
GAWR RR	WITH TIRES	RIM	COLD TIRE PRESSURE

THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

Canada:

Canada:

EC	MFD BY TESLA, INC./FABRIQUÉ PAR TESLA, INC.		
	GVWR/PMBV	WITH TIRES/AVEC PNEUS	
GAWR FRT/PMBE AVT	WITH TIRES/AVEC PNEUS	RIM/JANTE	COLD TIRE PRESSURE/PRESSION DES PNEUS À FROID
GAWR FRT/PMBE AVT	WITH TIRES/AVEC PNEUS	RIM/JANTE	COLD TIRE PRESSURE/PRESSION DES PNEUS À FROID

THIS VEHICLE CONFORMS TO ALL APPLICABLE STANDARDS PRESCRIBED UNDER THE CANADIAN MOTOR VEHICLE SAFETY REGULATIONS IN EFFECT ON THE DATE OF MANUFACTURE.
 CE VÉHICULE EST CONFORME À TOUTES LES NORMES QUI LUI SONT APPLICABLES EN VERTU DU RÈGLEMENT SUR LA SÉCURITÉ DES VÉHICULES AUTOMOBILES DU CANADA EN VIGUEUR À LA DATE DE SA FABRICATION.

EC	MFD BY TESLA, INC./FABRIQUÉ PAR TESLA, INC.		
	GVWR/PMBV	WITH TIRES/AVEC PNEUS	
GAWR FRT/PMBE AVT	WITH TIRES/AVEC PNEUS	RIM/JANTE	COLD TIRE PRESSURE/PRESSION DES PNEUS À FROID
GAWR FRT/PMBE AVT	WITH TIRES/AVEC PNEUS	RIM/JANTE	COLD TIRE PRESSURE/PRESSION DES PNEUS À FROID

THIS VEHICLE CONFORMS TO ALL APPLICABLE STANDARDS PRESCRIBED UNDER THE CANADIAN MOTOR VEHICLE SAFETY REGULATIONS IN EFFECT ON THE DATE OF MANUFACTURE.
 CE VÉHICULE EST CONFORME À TOUTES LES NORMES QUI LUI SONT APPLICABLES EN VERTU DU RÈGLEMENT SUR LA SÉCURITÉ DES VÉHICULES AUTOMOBILES DU CANADA EN VIGUEUR À LA DATE DE SA FABRICATION.

Mexico:



Owners Manual

MFD DE TESLA MOTORS, INC.
3500 Deer Creek Rd, Palo Alto, CALIFIA 94304

GVWR:	CON LLANTAS		
GAWR FRT	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS
GAWR RR	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS

ESTE VEHÍCULO CUMPLE CON TODOS LOS ESTÁNDARES MEXICANOS Y LOS ESTADOS UNIDOS DE AMÉRICA APLICABLES CON RESPECTO A LA SEGURIDAD AUTOMOTRIZ, ESTÁNDARES DE PARACHOQUES Y PREVENCIÓN DE ROBOS EN VIGOR EN LA FECHA DE FABRICACIÓN QUE SE MUESTRA ARRIBA.

Mexico:

Mexico:

MFD DE TESLA, INC.
3500 DEER CREEK RD, PALO ALTO, CA, USA 94304

GVWR	CON LLANTAS		
GAWR FRT	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS
GAWR RR	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS

ESTE VEHÍCULO CUMPLE CON TODOS LOS ESTÁNDARES MEXICANOS Y LOS ESTADOS UNIDOS DE AMÉRICA APLICABLES CON RESPECTO A LA SEGURIDAD AUTOMOTRIZ Y PREVENCIÓN DE ROBOS EN VIGOR EN LA FECHA DE FABRICACIÓN QUE SE MUESTRA ARRIBA.

MFD DE TESLA, INC.
3500 DEER CREEK RD, PALO ALTO, CA, USA 94304

GVWR	CON LLANTAS		
GAWR FRT	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS
GAWR RR	CON LLANTAS	RIM	PRESIÓN DE AIRE DE LLANTAS FRÍAS

ESTE VEHÍCULO CUMPLE CON TODOS LOS ESTÁNDARES MEXICANOS Y LOS ESTADOS UNIDOS DE AMÉRICA APLICABLES CON RESPECTO A LA SEGURIDAD AUTOMOTRIZ Y PREVENCIÓN DE ROBOS EN VIGOR EN LA FECHA DE FABRICACIÓN QUE SE MUESTRA ARRIBA.

CAUTION: To prevent damage, never load CybertruckModel SModel XModel 3Model Y so that it is heavier than GVWR or exceeds the individual GAWR weights.

Towing a Trailer

WARNING: Do not use CybertruckModel SModel XModel 3Model Y for towing purposes. CybertruckModel SModel XModel 3Model Y does not support a trailer hitch. Installing one could cause damage and increase the risk of a collision.

CAUTION: Using CybertruckModel SModel XModel 3Model Y for towing may void the warranty.

Towing a Trailer

WARNING: Do not use CybertruckModel SModel XModel 3Model Y for towing purposes. CybertruckModel SModel XModel 3Model Y does not currently support towing. Towing can cause damage and increase the risk of a collision.

CAUTION: Using CybertruckModel SModel XModel 3Model Y for towing without Tesla-approved towing components and accessories may void the warranty.



Towing a Trailer

WARNING: Do not use Cybertruck Model S Model X Model 3 Model Y for towing purposes. Cybertruck Model S Model X Model 3 Model Y does not currently support towing. Towing can cause damage and increase the risk of a collision.

CAUTION: Using Cybertruck Model S Model X Model 3 Model Y for towing without Tesla-approved towing components and accessories may void the warranty.

Roof Racks

A Model S equipped with a glass roof, or a panoramic sunroof, can carry up to 165 lbs (75 kg) using a Tesla-approved roof rack (see [Parts and Accessories on page 802](#)). A Model S equipped with a solid body color roof is incompatible with roof racks.

CAUTION: Do not use roof racks, or place any load, on the roof of a Model S that is equipped with a solid color roof. Doing so can cause significant damage.

Roof Racks

Cybertruck Model S Model X Model 3 Model Y supports the use of Tesla-approved roof racks using a Tesla mounting accessory. To install roof racks, you must use this accessory and you must use only roof rack systems that have been approved by Tesla (see [Parts and Accessories on page 802](#)). Failure to do so can cause significant damage.

Calculating Load Limits

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on the "Tire and Loading Information" label.
2. Determine the combined weight of all occupants that will ride in the vehicle.
3. Subtract the combined weight of the occupants from XXX lbs or XXX kg (see Step 1).
4. The resulting figure equals the available cargo load capacity. For example, if the "XXX" amount equals 1400 lbs (635 kg) and there will be five 150 lb (68 kg) passengers in the vehicle, the amount of available cargo capacity is 650 lbs (1400 - 750 (5 x 150) = 650 lbs) or 295 kg (635 - 340 (5 x 68) = 295 kg).
5. Determine the combined cargo weight being loaded on the vehicle. That weight must not exceed the available cargo load capacity calculated in Step 4.

WARNING: Trunks are the preferred places to carry objects. In a collision, or during hard braking and sharp turns, loose items in the cabin could injure occupants.

Example Load Limit Calculations

How much cargo Cybertruck Model S Model X Model 3 Model Y can carry depends on the number and weight of passengers. The following calculated load limit examples assume passengers weigh 150 lbs (68 kg). If passengers weigh more or less, available cargo weight decreases or increases respectively.

Driver and one passenger

Description	Total
Vehicle capacity weight	954 lbs (433 kg)
Subtract occupant weight (2 x 150 lbs/68 kg)	300 lbs (136 kg)
Available cargo weight	654 lbs (297 kg)

Driver and four passengers

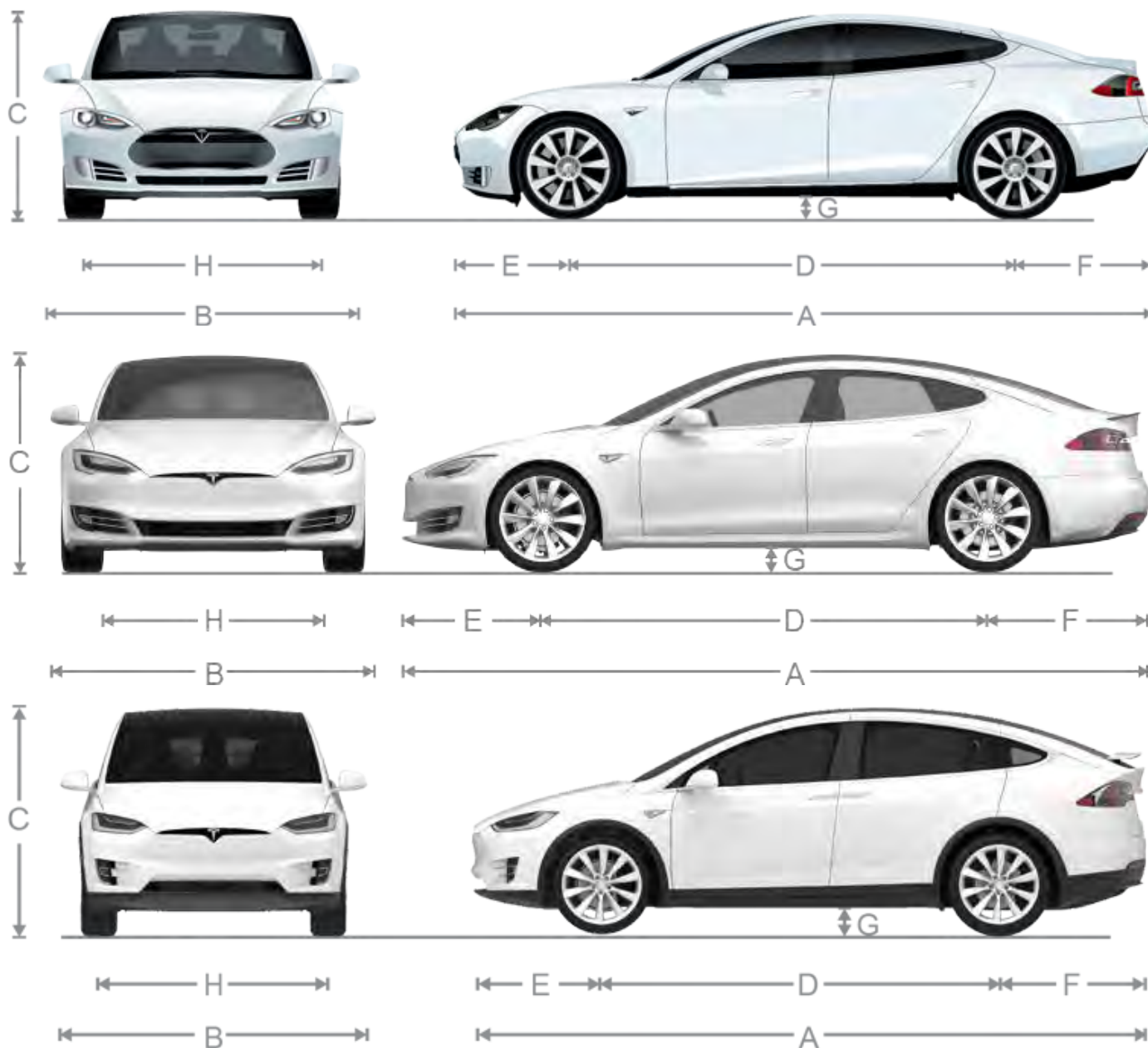
Description	Total
Vehicle capacity weight	954 lbs (433 kg)
Subtract occupant weight (5 x 150 lbs/68 kg)	750 lbs (340 kg)
Available cargo weight	204 lbs (93 kg)

When carrying cargo, distribute the weight as evenly as possible between the front and rear trunks. For maximum load limits specific to the trunks, see [Front Trunk Load Limit on page 188](#) and [Rear Trunk Load Limits on page 178](#).



Dimensions

Exterior Dimensions



A	Overall Length	196 in	4,970 mm
B	Overall Width (including mirrors)	86.2 in	2,189 mm
	Overall Width (excluding mirrors)	77.3 in	1,964 mm
C	Overall Height	56.9 in*	1,445 mm*
D	Wheel Base	116.5 in	2,960 mm
E	Overhang - Front	37 in	929 mm
F	Overhang - Rear	42.5 in	1,080 mm
G	Ground Clearance - Coil Suspension (Rear Wheel Drive vehicle)	5.5 in*	139.7 mm*



G	Ground Clearance - Coil Suspension (All-Wheel Drive vehicle)	5.3 in*	134.6 mm*
G	Ground Clearance - Air Suspension	4.6 - 6.3 in	116.8 - 160 mm
H	Track - Front Track - Rear	65.4 in 66.9 in	1,662 mm 1,700 mm
*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.			

A	Overall Length	196 in	4,970 mm
B	Overall Width (including mirrors) Overall Width (excluding mirrors)	86.2 in 77.3 in	2,189 mm 1,964 mm
C	Overall Height	56.9 in*	1,445 mm*
D	Wheel Base	116.5 in	2,960 mm
E	Overhang - Front	36.9 in	929 mm
F	Overhang - Rear	42.55 in	1,081 mm
G	Ground Clearance - Coil Suspension (Rear Wheel Drive vehicle)	5.5 in*	139.7 mm*
G	Ground Clearance - Coil Suspension (All-Wheel Drive vehicle)	5.3 in*	134.6 mm*
G	Ground Clearance - Air Suspension	4.6 - 6.3 in	116.8 - 160 mm
H	Track - Front Track - Rear	65.4 in 66.9 in	1,662 mm 1,700 mm
*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.			

A	Overall Length	198.3 in	5,036 mm
B	Overall Width (including mirrors) Overall Width (including folded mirrors) Overall Width (excluding mirrors)	89.4 in 81.6 in 78.7 in	2,271 mm 2,072 mm 1,999 mm
C	Overall Height	66 in*	1,684 mm*
D	Wheel Base	116.7 in	2,965 mm
E	Overhang - Front	38.3 in	974 mm
F	Overhang - Rear	43.2 in	1,097 mm
G	Ground Clearance: Standard, with skis Standard, without skis Very high, with skis Very high, without skis	7 in 7 in 8 in 9 in	171 mm 183 mm 211 mm 223 mm
H	Track - Front Track - Rear	67.1 in 67.3 in	1,705 mm 1,710 mm
*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.			



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CAUTION: Depending on configuration (such as suspension height or wheel selection), your vehicle's liftgate can open up to approximately 7.5 feet (2.3 meters)8 feet (2.5 meters) high. See [Adjusting Liftgate Opening Height on page 171](#) to adjust the liftgate height and prevent it from coming into contact with low ceilings or other objects.

Interior Dimensions

Head Room	Front	38.8 in	986 mm
	Rear	35.3 in	897 mm
Leg Room	Front	42.7 in	1,085 mm
	Rear	35.4 in	899 mm
Shoulder Room	Front	57.7 in	1,466 mm
	Rear	55 in	1,397 mm
Hip Room	Front	55 in	1,397 mm
	Rear	54.7 in	1,389 mm
Head Room	Front	41.7 in	1059 mm
	Rear	40.9 in	1039 mm
	Third	37.1 in	942 mm
Leg Room	Front	41.2 in	1046 mm
	Rear	38.4 in	975 mm
	Third	32.7 in	831 mm
Shoulder Room	Front	60.7 in	1542 mm
	Rear	56.8 in	1442 mm
	Third	40 in	1016 mm
Hip Room	Front	55.6 in	1412 mm
	Rear	59 in	1498 mm
	Third	38.5 in	978 mm

Cargo Volume

Total cargo volume (Rear Wheel Drive vehicles, rear seats not folded)	31.6 cu ft	894.85 L
Total cargo volume (All-Wheel Drive vehicles, rear seats not folded)	28.8 cu ft	815.5 L
Total cargo volume (rear seats not folded)	28.4 cu ft	804.2 L
Rear cargo volume	26.3 cu ft	744.7 L
Rear cargo volume (with seats folded down)	58.1 cu ft	1,645.2 L
Front cargo volume (Rear Wheel Drive vehicles)	5.3 cu ft	150.1 L
Front cargo volume (All-Wheel Drive vehicles)	2.5 cu ft	70.8 L



Front cargo volume	2.1 cu ft	59.5 L
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	Front Trunk	Rear*	Total
Seven Seat Vehicles	6.6 cu ft (187 L)	76.5 cu ft (2166 L)**	83.1 cu ft (2353 L)
Six Seat Vehicles	6.6 cu ft (187 L)	70.7 cu ft (2002 L)**	77.3 cu ft (2189 L)
Five Seat Vehicles	6.6 cu ft (187 L)	81.2 cu ft (2299.5 L)**	87.8 cu ft (2486.5 L)

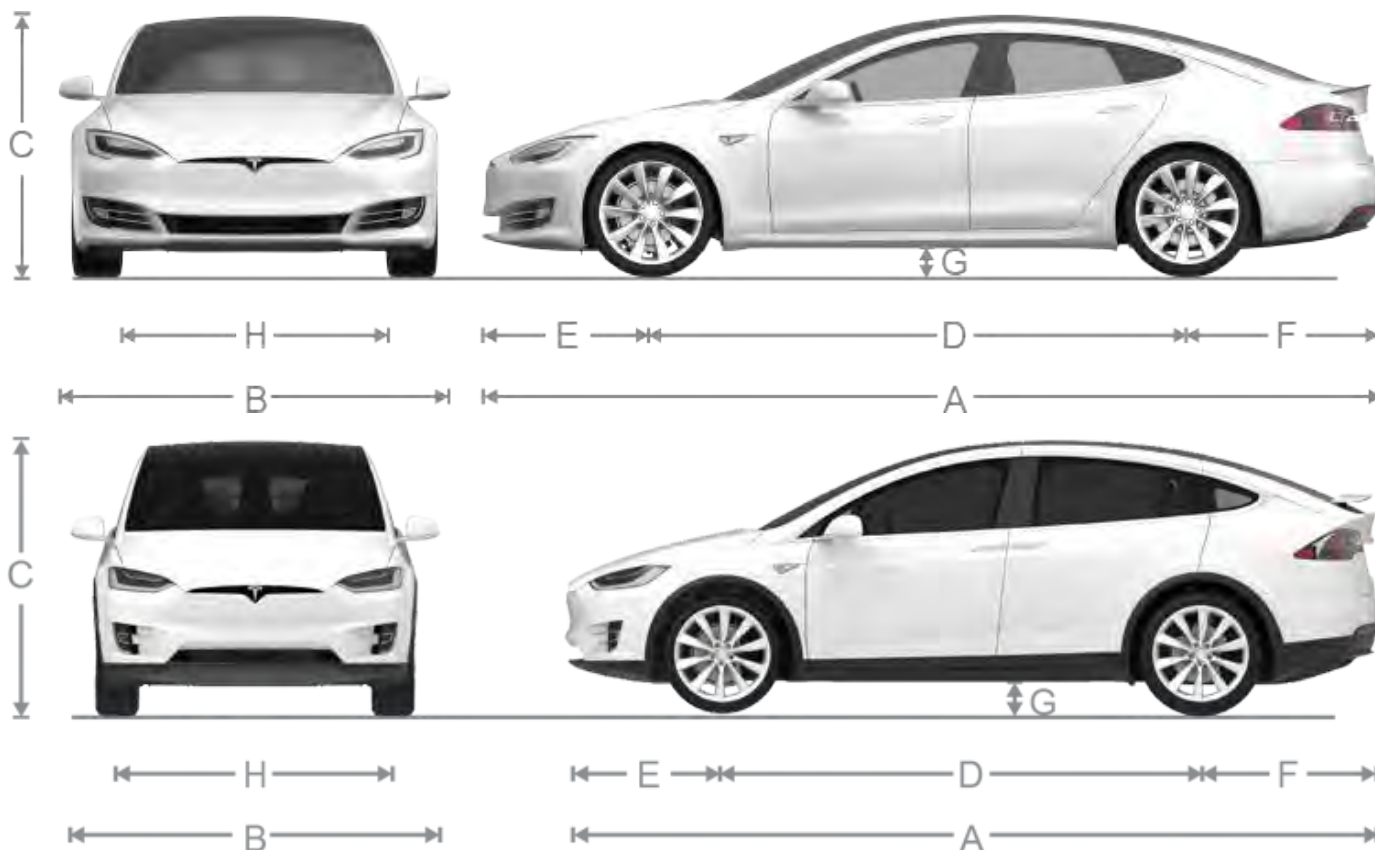
* Maximum cargo volume behind the front row seats. Includes the 12.6 cu ft (357 L) cargo area in the rear trunk (area behind the third row seats, if equipped).

** Second row seats fully forward and/or folded.



Dimensions

Exterior Dimensions



A	Overall Length	196 in	4,970 mm
B	Overall Width (including mirrors)	86.2 in	2,189 mm
	Overall Width (excluding mirrors)	77.3 in	1,964 mm
C	Overall Height	56.9 in*	1,445 mm*
D	Wheel Base	116.5 in	2,960 mm
E	Overhang - Front	36.9 in	929 mm
F	Overhang - Rear	42.55 in	1,081 mm
G	Ground Clearance - Coil Suspension (Rear Wheel Drive vehicle)	5.5 in*	139.7 mm*
G	Ground Clearance - Coil Suspension (All-Wheel Drive vehicle)	5.3 in*	134.6 mm*
G	Ground Clearance - Air Suspension	4.6 - 6.3 in	116.8 - 160 mm
H	Track - Front	65.4 in	1,662 mm
	Track - Rear	66.9 in	1,700 mm

*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.

A	Overall Length	198.9 in	5,052 mm
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B	Overall Width (including mirrors)	89.4 in	2,271 mm
	Overall Width (including folded mirrors)	81.6 in	2,072 mm
	Overall Width (excluding mirrors)	78.7 in	1,999 mm
C	Overall Height	66 in*	1,684 mm*
D	Wheel Base	116.7 in	2,965 mm
E	Overhang - Front	38.9 in	989 mm
F	Overhang - Rear	43.2 in	1,098 mm
G	Ground Clearance: Standard, with skis	7 in	171 mm
	Standard, without skis	7 in	183 mm
	Very high, with skis	8 in	211 mm
	Very high, without skis	9 in	223 mm
H	Track - Front	67.1 in	1,705 mm
	Track - Rear	67.3 in	1,710 mm

*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.



CAUTION: Depending on configuration (such as suspension height or wheel selection), your vehicle's liftgate can open up to approximately 7.5 feet (2.3 meters) 8 feet (2.5 meters) high. See [Adjusting Liftgate Opening Height on page 171](#) to adjust the liftgate height and prevent it from coming into contact with low ceilings or other objects.

Interior Dimensions

Head Room	Front	38.8 in	986 mm
	Rear	35.3 in	897 mm
Leg Room	Front	42.7 in	1,085 mm
	Rear	35.4 in	899 mm
Shoulder Room	Front	57.7 in	1,466 mm
	Rear	55 in	1,397 mm
Hip Room	Front	55 in	1,397 mm
	Rear	54.7 in	1,389 mm
Head Room	Front	41.7 in	1059 mm
	Rear	40.9 in	1039 mm
	Third	37.1 in	942 mm
Leg Room	Front	41.2 in	1046 mm
	Rear	38.4 in	975 mm
	Third	32.7 in	831 mm



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Shoulder Room	Front Rear Third	60.7 in 56.8 in 40 in	1542 mm 1442 mm 1016 mm
Hip Room	Front Rear Third	55.6 in 59 in 38.5 in	1412 mm 1498 mm 978 mm

Cargo Volume

Total cargo volume (Rear Wheel Drive vehicles, rear seats not folded)	31.6 cu ft	894.85 L
Total cargo volume (All-Wheel Drive vehicles, rear seats not folded)	28.8 cu ft	815.5 L
Total cargo volume (rear seats not folded)	28.4 cu ft	804.2 L
Rear cargo volume	26.3 cu ft	744.7 L
Rear cargo volume (with seats folded down)	58.1 cu ft	1,645.2 L
Front cargo volume (Rear Wheel Drive vehicles)	5.3 cu ft	150.1 L
Front cargo volume (All-Wheel Drive vehicles)	2.5 cu ft	70.8 L
Front cargo volume	2.1 cu ft	59.5 L

	Front Trunk	Rear*	Total
Seven Seat Vehicles	6.6 cu ft (187 L)	76.5 cu ft (2166 L)**	83.1 cu ft (2353 L)
Six Seat Vehicles	6.6 cu ft (187 L)	70.7 cu ft (2002 L)**	77.3 cu ft (2189 L)
Five Seat Vehicles	6.6 cu ft (187 L)	81.2 cu ft (2299.5 L)**	87.8 cu ft (2486.5 L)

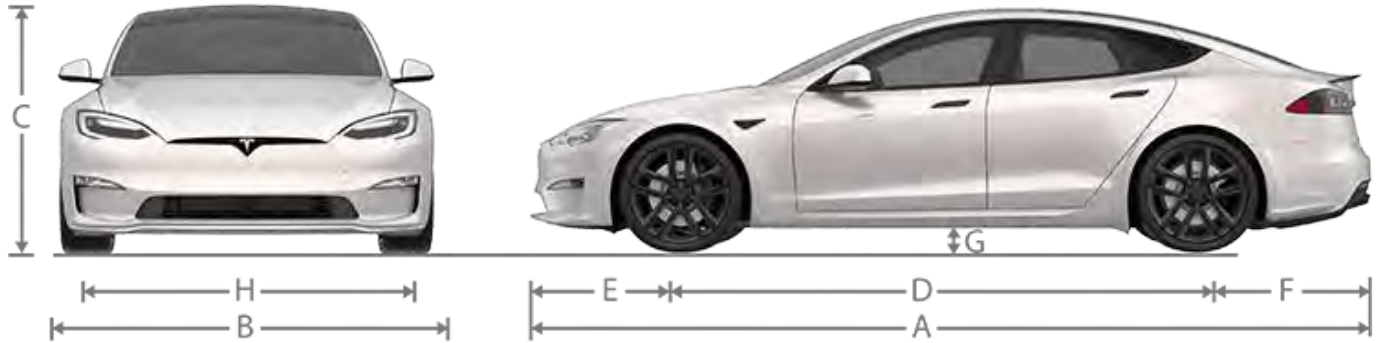
* Maximum cargo volume behind the front row seats. Includes the 12.6 cu ft (357 L) cargo area in the rear trunk (area behind the third row seats, if equipped).

** Second row seats fully forward and/or folded.



Dimensions

Exterior Dimensions



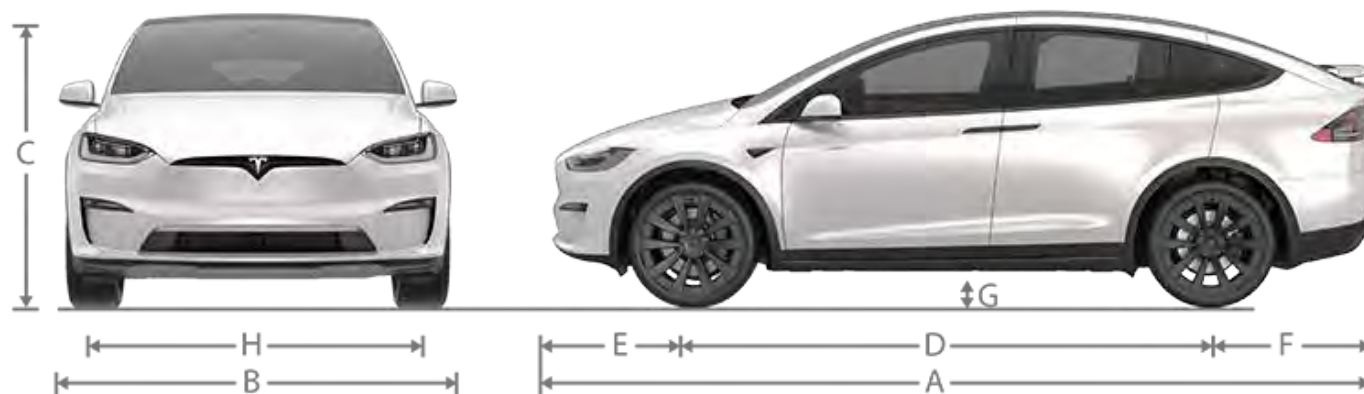
Callout	Description	Measurement (in)	Measurement (mm)
A	Overall Length	197.7	5,021
B	Overall Width (including mirrors)	86.2	2,189
	Overall Width (excluding mirrors)	78.2	1,987
C	Overall Height*:		
	- suspension set to medium	56.3	1,431
	- suspension set to highest**	58.1	1,478
D	Wheel Base	116.5	2,960
E	Overhang - Front	37.8	961
F	Overhang - Rear	43.3	1,100
G	Ground Clearance*:		
	- suspension set to lowest	4.6	117
	- suspension set to medium	5.0	126
	- suspension set to highest**	6.2	158
H	Track - Front and Rear	66.5	1,690

*Values are approximate and based on 19" wheels. Values can vary depending on a vehicle's options and various other factors.

**When vehicle is in Transport Mode, the suspension is automatically set to the highest setting.



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Callout	Description**	Measurement (in)	Measurement (mm)
A	Overall Length	199.1	5,057
B	Overall Width (including mirrors)	89.4	2,271
	Overall Width (excluding mirrors)	78.7	1,999
C	Overall Height*: - suspension set to medium	66.1	1,680
	- suspension set to highest**	68.5	1,740
D	Wheel Base	116.7	2,965
E	Overhang - Front	38.9	988
F	Overhang - Rear	43.5	1,104
G	Ground Clearance*: - suspension set to lowest	5.7	146
	- suspension set to medium	6.6	166
	- suspension set to highest**	8.1	206
H	Track - Rear	67.3	1,710

*Values are approximate and based on 20" wheels. Values can vary depending on a vehicle's options and various other factors.

**When vehicle is in Transport Mode, the suspension is automatically set to the highest setting.

⚠ CAUTION: Depending on configuration (such as suspension height or wheel selection), your vehicle's liftgate can open up to approximately 7.5 feet (2.3 meters) 8 feet (2.5 meters) high. See [Adjusting Liftgate Opening Height](#) on page 171 to adjust the liftgate height and prevent it from coming into contact with low ceilings or other objects.

Interior Dimensions

Area	Location	Measurement (in)	Measurement (mm)
Head Room	Front	39.7	1,008
	Rear	38.1	968
Leg Room	Front	42.4	1,077
	Rear	35.5	901



Area	Location	Measurement (in)	Measurement (mm)
Shoulder Room	Front	58.4	1,484
	Rear	55.1	1,399
Hip Room	Front	54.8	1,393
	Rear	50.3	1,278

Area	Row	Measurement (in)	Measurement (mm)
Head Room	First	41.7	1,059
	Second (5/7 seats)	41.0	1,042
	Second (6 seats)	40.9	1,040
	Third	37.1	944
Leg Room	First	41.1	1,046
	Second (5/7 seats)	38.7	983
	Second (6 seats)	39.8	1,012
	Third (6 seats)	32.2	819
	Third (7 seats)	29.8	756
Shoulder Room	First	60.7	1,543
	Second (5/7 seats)	56.9	1,446
	Second (6 seats)	56.8	1,442
	Third	40.7	1,034
Hip Room	First	55.7	1,414
	Second (5/7 seats)	58.9	1,496
	Second (6 seats)	59.0	1,498
	Third	38.7	982

Cargo Volume

Area	Volume (liters)	Volume (cubic feet)
Front trunk	89	3.1
Behind first row, second row folded flat	1,739	61.4
Behind second row	709	25.0
Maximum total cargo volume with driver and front passenger	1,828	64.6
Maximum total cargo volume with driver and 4 passengers	798	28.2

5-Seater Cargo Volumes

Area	Volume (liters)	Volume (cubic ft)
Front trunk	183	6.5
Behind first row, second row folded flat	2,410	85.1
Behind second row	1,050	37.1
Maximum total cargo volume with driver and front passenger	2,593	91.6
Maximum total cargo volume with 5 passengers	1,233	43.5



6-Seater Cargo Volumes

Area	Volume (liters)	Volume (cubic ft)
Front trunk	183	6.5
Behind first row, second row in max cargo position, third row folded flat	2,431	85.8
Behind second row, third row folded flat	935	33
Behind third row	425	15
Maximum total cargo volume with driver and front passenger	2,614	92.3
Maximum total cargo volume with 6 passengers	608	21.5

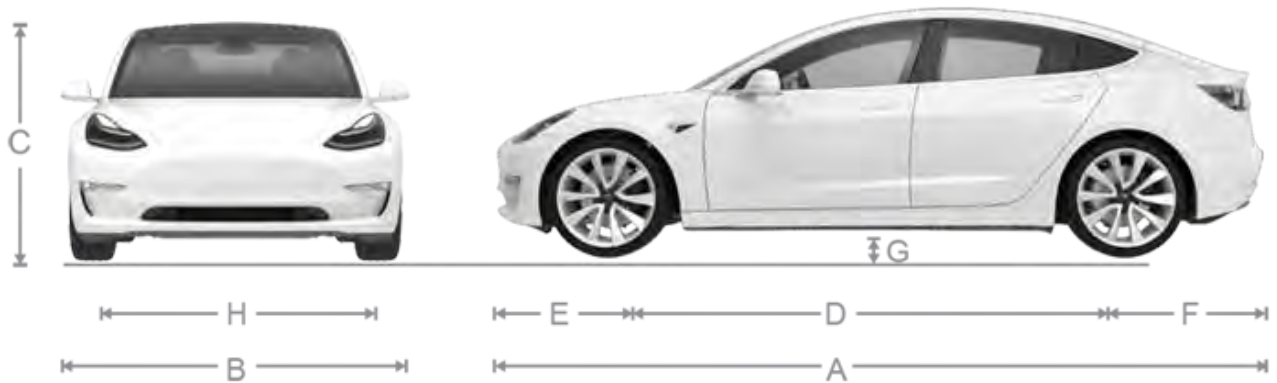
7-Seater Cargo Volumes

Area	Volume (liters)	Volume (cubic ft)
Front trunk	183	6.5
Behind first row, second row folded flat	2,314	81.7
Behind second row, third row folded flat	957	33.8
Behind third row	425	15
Maximum total cargo volume with driver and front passenger	2,497	88.2
Maximum total cargo volume with 7 passengers	608	21.5



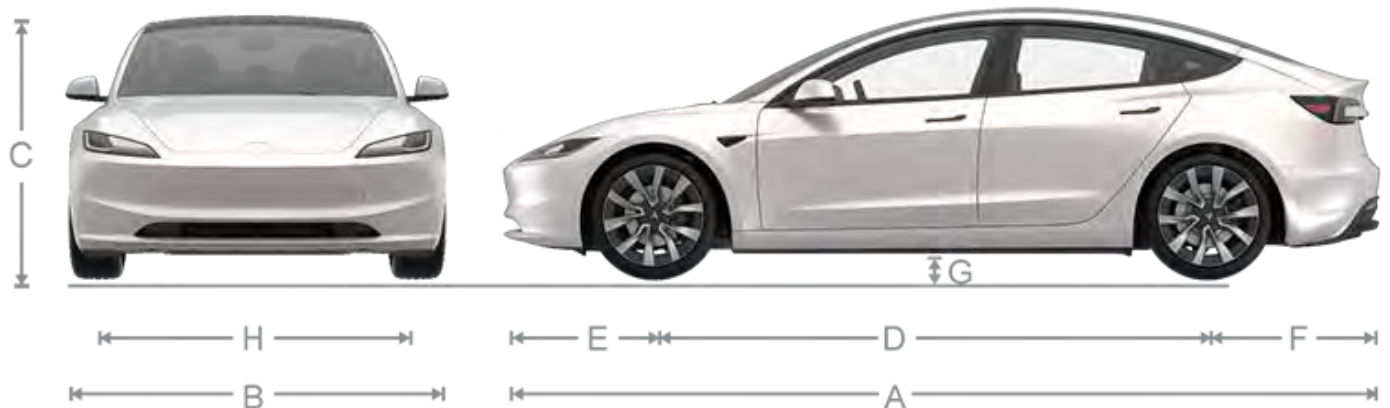
Dimensions

Exterior Dimensions



A	Overall Length	184.8 in	4,695 mm
B	Overall Width (including mirrors) Overall Width (including folded mirrors) Overall Width (excluding mirrors)	82.2 in 76.1 in 72.8 in	2,088 mm 1,933 mm 1,850 mm
C	Overall Height	56.8 in	1,445 mm
D	Wheel Base	113.2 in	2,875 mm
E	Overhang - Front	33 in	841 mm
F	Overhang - Rear	39 in	978 mm
G	Ground Clearance	5.5 in	140 mm
H	Track - Front Track - Rear	62.2 in 62.2 in	1,580 mm 1,580 mm

*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.



Rear-Wheel Drive/Long Range		Measurement (inches)	Measurement (mm)
A	Overall Length	185.8	4,720



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Rear-Wheel Drive/Long Range		Measurement (inches)	Measurement (mm)
B	Overall Width (including mirrors)	82.2	2,089
	Overall Width (including folded mirrors)	76.1	1,933
	Overall Width (excluding mirrors)	72.8	1,850
C	Overall Height	56.7	1,441
D	Wheel Base	113.2	2,875
E	Overhang - Front	34.2	868
F	Overhang - Rear	38.5	977
G	Ground Clearance	5.4	138
H	Track - Front	62.4	1,584
	Track - Rear	62.4	1,584

*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.

Performance		Measurement (inches)	Measurement (mm)
A	Overall Length	185.9	4,720
B	Overall Width (including mirrors)	82.2	2,089
	Overall Width (including folded mirrors)	76.1	1,933
	Overall Width (excluding mirrors)	72.8	1,850
C	Overall Height	56.3	1,431
D	Wheel Base	113.2	2,875
E	Overhang - Front	34.3	872
F	Overhang - Rear	38.5	978
G	Ground Clearance	5.0	128
H	Track - Front	62.4	1,584
	Track - Rear	61.8	1,570

*Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.

⚠ CAUTION: Depending on configuration (such as wheel selection), your vehicle's rear trunk can open up to approximately 6.5 feet (2 meters) high. See [Adjusting Opening Height of Powered Trunk on page 173](#) to adjust the rear trunk height and prevent it from coming into contact with low ceilings or other objects.

Interior Dimensions

Head Room	Front	40.3 in	1,024 mm
	Rear	37.7 in	958 mm
Leg Room	Front	42.7 in	1,085 mm
	Rear	35.2 in	894 mm
Shoulder Room	Front	56.3 in	1,430 mm
	Rear	54 in	1,372 mm



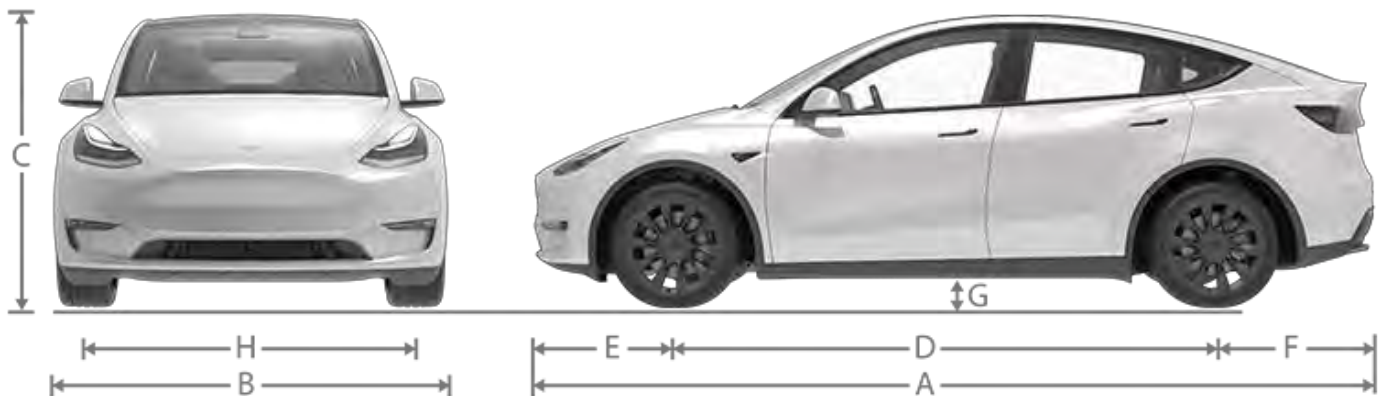
Hip Room	Front	53.4 in	1,356 mm
	Rear	52.4 in	1,331 mm
Head Room	Front	40.3 in	1,023 mm
	Rear	37.8 in	961 mm
Leg Room	Front	42.7 in	1,084 mm
	Rear	34.5 in	877 mm
Shoulder Room	Front	56.7 in	1,441 mm
	Rear	54.2 in	1,376 mm
Hip Room	Front	53 in	1,344 mm
	Rear	52.3 in	1,328 mm

Cargo Volume

Front Trunk	3.1 cu ft (88 L)
Behind 2nd row	19.8 cu ft (561 L)
Maximum total cargo volume with 5 passengers	22.9 cu ft (649 L)
Front Trunk	3.1 cu ft (88 L)
Behind 2nd row	21 cu ft (594 L)
Maximum total cargo volume with 5 passengers	24.1 cu ft (682 L)

Dimensions

Exterior Dimensions




A	Overall Length	187 in	4751 mm
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B	Overall Width (including mirrors)	83.8 in	2129 mm
	Overall Width (including folded mirrors)	77.9 in	1978 mm
	Overall Width (excluding mirrors)	75.6 in	1921 mm
C	Overall Height	64 in	1624 mm
D	Wheel Base	113.8 in	2890 mm
E	Overhang - Front	34.4 in	875 mm
F	Overhang - Rear	38.8 in	986 mm
G	Ground Clearance (with 2 passengers)	Performance 6.2 in	Performance 157 mm
		Non-Performance 6.8 in	Non-Performance 172 mm
H	Track, non 21" wheels - Front	64.4 in	1636 mm
	Track, non 21" wheels - Rear	64.4 in	1636 mm
	Track, 21" wheels - Front	64.8 in	1646 mm
	Track, 21" wheels - Rear	64.2 in	1630 mm
Values are approximate. Dimensions can vary depending on a vehicle's options and various other factors.			

 **CAUTION:** Depending on configuration (such as wheel selection), your vehicle's liftgate can open up to approximately 7.5 feet (2.3 meters) high. See [Adjusting Liftgate Opening Height on page 171](#) to adjust the liftgate height and prevent it from coming into contact with low ceilings or other objects.

Interior Dimensions

Model Y with 5 Seats:

Head Room	Front	41.0 in	1041 mm
	Rear	39.4 in	1001 mm
Leg Room	Front	41.8 in	1063 mm
	Rear	40.5 in	1029 mm
Shoulder Room	Front	56.4 in	1432 mm
	Rear	54 in	1373 mm
Hip Room	Front	53.8 in	1367 mm
	Rear	50.6 in	1286 mm

Model Y with 7 Seats:



Head Room	Front Second Row Third Row	41.0 in 38.7 in 34.6 in	1041 mm 984 mm 880 mm
Leg Room	Front Second Row Third Row	41.8 in 41.6 in 26.5 in	1063 mm 1057 mm 673 mm
Shoulder Room	Front Second Row Third Row	56.4 in 54 in 41 in	1432 mm 1372 mm 1041 mm
Hip Room	Front Second Row Third Row	53.8 in 50.8 in 36.5 in	1367 mm 1290 mm 928 mm

Cargo Volume

Model Y with 5 Seats:

Front trunk	4.1 cu ft (117 L)
Behind first row, second row seats folded	72.1 cu ft (2041 L)
Behind second row, seats not folded	30.2 cu ft (854 L)
Maximum total cargo volume with driver and front passenger	76.2 cu ft (2158 L)
Maximum total cargo volume with 5 passengers	34.3 cu ft (971 L)

Model Y with 7 Seats:

Front trunk	4.1 cu ft (117 L)
Behind first row, second and third row seats folded	67.9 cu ft (1923 L)
Behind second row, third row seats folded	26.6 cu ft (753 L)
Behind third row	12.8 cu ft (363 L)
Maximum total cargo volume with driver and front passenger	72 cu ft (2040 L)
Maximum total cargo volume with 7 passengers	17 cu ft (480 L)

Subsystems

Motor Type(s)

Rear motor: AC permanent magnet synchronous motor, liquid-cooled, with variable frequency drive.

Front motor (AWD vehicles): AC induction motor, liquid-cooled, with variable frequency drive.



Motor Type

Motor	Specifications
Front Motor	AC permanent magnet synchronous motor, liquid-cooled, with variable frequency drive
Rear Motor	AC induction motor, liquid-cooled, with variable frequency drive
Nominal Voltage	320 volts

Motor Type

Motor Type	Model S Model X	Model S Plaid Model X Plaid
Front and rear motor	AC permanent magnet synchronous motor, liquid-cooled, with variable frequency drive	AC permanent magnet synchronous motor, carbon-fiber-wrapped rotor, liquid-cooled, with variable frequency drive (2x motors in the rear)

Transmission

Transmission	Specifications
Type	Single speed fixed gear
Gearbox Ratio	9:1

Transmission	Specifications
Type	Single speed fixed gear
Gearbox Ratio	9:1
Gearbox Ratio	9.03:1

Transmission	Specifications
Type	Single speed fixed gear
Overall Final Drive Ratio	Small motor: 9.3:1 Large motor: 9.7:1
Reverse Gear	Reverse direction of motor, limited to 15 mph (24 km/h)

Type	Model S	Model S Plaid
Front transmission	Single speed fixed gear, 7.56:1	Single speed fixed gear, 7.56:1. Enhanced lubrication
Overall Final Drive Ratio	Front unit motor: 7.56:1 Rear unit motor: 9.04:1	Front unit motor: 7.56:1 Rear unit motor: 7.56:1
Rear transmission	Single speed fixed gear, 9.04:1	Independent single speed fixed gear, 7.56:1. Dry sump lubrication

Type	Specifications
Type	Single speed fixed gear



Type		Specifications
Overall Final Drive Ratio		Small motor: 9.0:1 Large motor: 9.7:1
Reverse Gear		Reverse direction of motor, limited to 15 mph (24 km/h)

Transmission	Model X	Model X Plaid
Type	Single speed fixed gear	Single speed fixed gear
Overall Final Drive Ratio	Front unit motor: 7.56:1 Rear unit motor: 9.04:1	Front unit motor: 7.56:1 Rear unit motor: 7.56:1
Reverse Gear	Reverse direction of motor, limited to 15 mph (24 km/h)	Reverse direction of motor, limited to 15 mph (24 km/h)

Steering

Steering	Specifications
Type	Rack and pinion with electronic power steering, speed sensitive
Number of turns lock to lock	2.00
Turning Circle (curb to curb)	39.8 ft (12.1 m)

Steering	Specifications
Type	Rack and pinion with electronic power steering, speed sensitive
Number of turns lock to lock	2.00
Turning Circle (curb to curb)	38 ft (11.6 m)

Steering	Specifications
Type	Rack and pinion with electronic power steering, speed sensitive
Number of turns lock to lock	2.14
Turning Circle (curb to curb)	38.4 ft (11.7 m)

Steering	Specifications
Type	Variable ratio rack and pinion with electronic power steering, speed sensitive
Number of turns lock to lock	2.33
Turning Circle (curb to curb)	40.3 ft/12.3 m

Steering	Specifications
Type	Variable rack and pinion with electronic power steering, speed sensitive
Number of turns lock to lock	2.33
Turning Circle (curb to curb)	40.3 ft/12.3 m



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Brakes

Brakes	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system
Rotor Diameter (ventilated)	Front (non-Performance): 14.0"/355 mm Front (Performance): 14.0"/355 mm Rear (non-Performance): 13.2"/335 mm Rear (Performance): 13.2"/335 mm
Front Rotor thickness	New (non-performance): 0.98"/25 mm New (performance): 1.06" / 27 mm Service limit (non-performance): 0.91"/23 mm Service limit (performance): 0.98" / 25 mm
Rear Rotor thickness	New (non-performance): 0.79"/20 mm New (performance): 0.87" / 22 mm Service limit (non-performance): 0.71"/18 mm Service limit (performance): 0.79" / 20 mm
Lateral runout	0.050 mm
Chordal runout	0.040 mm
Disk thickness variation (DTV)	0.010 mm
Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.085"/2.15 mm
Rear Brake Pad Thickness (excluding back plate)	New: 0.354"/9 mm Service limit: 0.078"/2 mm
Performance Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.085"/2.15 mm
Performance Rear Brake Pad Thickness (excluding back plate)	New: 0.354" / 9 mm Service limit: 0.071"/1.8 mm
Parking brake	Electrically actuated parking brake integrated into rear caliper

Brakes	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system



Brakes	Specifications
Rotor Diameter (ventilated)	Front (non-Performance): 12.6"/320 mm Front (Performance): 13.98"/355 mm Rear (non-Performance): 13.2"/335 mm Rear (Performance): 13.2"/335 mm
Front Rotor thickness	New: 0.98"/25 mm Service limit: 0.91"/23 mm
Rear Rotor thickness	New: 0.79"/20 mm Service limit: 0.71"/18 mm
Lateral runout	0.050 mm
Chordal runout	0.040 mm
Disk thickness variation (DTV)	0.010 mm
Non-Performance Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.110"/2.8 mm
Non-Performance Rear Brake Pad Thickness (excluding back plate)	New: 0.354"/9 mm Service limit: 0.078"/2 mm
Performance Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.085"/2.15 mm
Performance Rear Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.071"/1.8 mm
Parking brake	Electrically actuated parking brake integrated into rear caliper
RWD/AWD	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system
Non-Performance Rotor Diameter (ventilated)	Front: 12.6"/320 mm Rear: 13.2"/335 mm
Performance Rotor Diameter (ventilated)	Front: 13.98"/355 mm Rear: 13.2"/335 mm



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RWD/AWD	Specifications
Front Rotor thickness	New: 0.98"/25 mm Service limit: 0.91"/23 mm
Rear Rotor thickness	New: 0.79"/20 mm Service limit: 0.71"/18 mm
Lateral runout	0.050 mm
Chordal runout	0.040 mm
Disk thickness variation (DTV)	0.010 mm
Non-Performance Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.110"/2.8 mm
Non-Performance Rear Brake Pad Thickness (excluding back plate)	New: 9 mm Service limit: 2.1 mm
Performance Front Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.085"/2.15 mm
Performance Rear Brake Pad Thickness (excluding back plate)	New: 0.393"/10 mm Service limit: 0.071"/1.8 mm
Parking brake	Electrically actuated parking brake integrated into rear caliper

Brakes	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system
Rotor Diameters (ventilated)	Front: 13.98"/355 mm Rear: 14.37"/365 mm
Front Rotor thickness	New: 1.26"/32 mm Service limit: 1.18"/30 mm
Rear Rotor thickness	New: 1.10"/28 mm Service limit: 1.02"/26 mm
Front Brake Pad Thickness (excluding back plate)	0.346"/8.8 mm
Rear Brake Pad Thickness (excluding back plate)	0.354"/9 mm
Parking brake	Electrically actuated parking brake calipers
Brake Disc Friction Pair	Front: .31"/8 mm



Brakes	Specifications
	Rear: .28"/7 mm
Brakes	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system
Rotor Diameters (ventilated)	Front: 15.59"/395 mm Rear: 14.37"/365 mm
Front Rotor thickness	New: 1.26"/32 mm Service limit: 1.18"/30 mm
Rear Rotor thickness	New: 1.10"/28 mm Service limit: 1.02"/26 mm
Front Brake Pad Thickness (excluding back plate)	New: 0.41"/10.5 mm (MIN) Service limit: 0.09"/ 2.3 mm
Rear Brake Pad Thickness (excluding back plate)	New: 0.33"/8.5 mm (MIN) Service limit: 0.11"/ 2.7 mm
Parking brake	Electrically actuated parking brake calipers

Suspension

Suspension	Specifications
Front	Independent, double wishbone, coil spring/telescopic damper, sway bar
Rear	Independent, multi-link, coil spring/telescopic damper

Suspension	Specifications
Front	Independent, double wishbone, coil spring/telescopic damper, sway bar
Rear	Independent, multi-link, coil spring/telescopic damper

Suspension	Specifications
Front	Independent, double wishbone, air spring or coil spring/telescopic damper, sway bar
Rear	Independent, multi-link, air spring or coil spring/telescopic damper, sway bar (air suspension vehicles only)

Suspension	Specifications
Front	Independent, virtual pivot double wishbone
Rear	Independent, virtual pivot double wishbone

Suspension	Specifications
Front	Independent, double wishbone, air spring with adaptive damper, stabilizer bar
Rear	Independent, multi-link, air spring with adaptive damper, stabilizer bar



Battery - Low Voltage

Battery - Low Voltage	Specifications
Rating	33 amp hour or higher
Voltage and Polarity	Low voltage negative (-) ground

Battery - Low Voltage	Specifications
Rating	33 amp hour or higher
Voltage and Polarity	Low voltage negative (-) ground

Lead Acid Battery - Low Voltage	Specifications
Rating	45 amp hour
Voltage and Polarity	12V

Lithium Ion Battery - Low Voltage	Specifications
Rating	6.9 amp hour
Voltage	15.5V

Battery - Low Voltage	Specifications
Rating	6.9 amp hour
Voltage	15.5V

Battery - Low Voltage	Specifications
Rating	6.9 amp hour
Voltage	15.5V

Battery - High Voltage

For LI-ION Battery:

Battery - High Voltage	Specifications
Type	Li-ion
Nominal Voltage	355V DC
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.

For LFP Battery: You can determine whether your vehicle is equipped with an LFP Battery by navigating to **Controls > Software > Additional Vehicle Information**.

Type	Lithium iron phosphate (LFP)
Nominal Voltage	345V DC
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.



Type	Liquid-cooled lithium ion (Li-ion)
Nominal Voltage	345 V DC
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.

Battery - High Voltage		Specifications
Type	Liquid-cooled lithium ion (Li-ion)	
Nominal Voltage - 85, 90, and 100 kWh	350 V DC	
Nominal Voltage - 60, 70, and 75 kWh	300 V DC	
Nominal Voltage - 75 and 100 kWh	350 V DC	
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.	

Battery - High Voltage		Specifications
Type	Liquid-cooled lithium ion (Li-ion)	
Nominal Voltage	350 V DC	
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.	

Battery - High Voltage		Specifications
Type	Liquid-cooled lithium ion (Li-ion)	
Nominal Voltage	407 V DC	
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 149° F (65° C) or below -22° F (-30° C) for more than 24 hours at a time.	

Wheels and Tires

Wheel Specifications (Factory)

Wheel Diameter	Location	Width (in)	Offset (mm)
19"	Front/Rear	9.5	45
20"	Front/Rear	9.5	45
21"	Front	9.5	40
21"	Rear	10.5	48

Wheel Diameter	Location	Width (in)	Offset (mm)
18"	Front/Rear	8.5	40
19"	Front/Rear	8.5	40
20" (Non-Performance brakes)	Front/Rear	8.5	40
20" (Performance brakes)	Front/Rear	8.5	35



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Wheel Diameter	Location	Width (in)	Offset (mm)
18"	Front/Rear	8.5	40
19" (not available in Canada/Mexico as of approximately April 2023)	Front/Rear	8.5	40
20"	Front/Rear	9.0	34

Wheel Diameter	Location	Size	Offset (mm)
18"	Front/Rear	18X8.5J	38
19"	Front/Rear	19X8.5J	38
20"	Front	20X9.0J	34
	Rear	20X10.0J	45

Wheel Type	Location	Size	Offset
19"	Front	8.0J x 19	1.575" (40 mm)
19"	Rear	8.0J x 19	1.575" (40 mm)
19"	Front	8.5J x 19	1.378" (35 mm)
19"	Rear	8.5J x 19	1.378" (35 mm)
21"	Front	8.5J x 21	1.575" (40 mm)
21"	Rear	8.5J x 21	1.575" (40 mm)
21" Performance Plus vehicles	Rear	9.0J x 21	1.575" (40 mm)

Wheel Type	Location	Size	Offset (mm)
19"	Front	9.5J x 19	40
	Rear	10.5J x 19	45
20"	Front	10J x 20	40
	Rear	11J x 20	40
21"	Front	9.5J x 21	40
	Rear	10.5J x 21	45

Wheel Type	Size	Offset
20" All Season - Front	9.0J x 20	1.575" (40 mm)
20" All Season - Rear	9.5J x 20	1.378" (35 mm)
20" Summer - Front	9.0J x 20	1.575" (40 mm)
20" Summer - Rear	10.0J x 20	1.378" (35 mm)
22" Summer - Front	9.0J x 22	1.575" (40 mm)
22" Summer - Rear	10.0J x 22	1.378" (35 mm)

Wheel Type	Size	Offset (mm)
20" Front	9.0J x 20	40
20" Rear	10.0J x 20	35
22" Front	9.0J x 22	40
22" Rear	10.0J x 22	35



Lug Nut Torque	129 lb. ft (175 Nm)
Lug Nut Socket Size	21 mm

NOTE: For instructions on how to jack/lift Cybertruck Model S Model X Model 3 Model Y, see [Jacking and Lifting on page 795](#).

Tire Specifications (Factory)

Tire Size	Location	Size
19"	Front/Rear	255/45R19 XL
20"	Front/Rear	255/40R20 XL
21"	Front	255/35R21 XL
21"	Rear	275/35R21 XL

Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see [Maintaining Tire Pressures on page 754](#)).

Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.

Tire Size	Location	Size
18"	Front/Rear	235/45R18
19" (not available in Canada/Mexico as of approximately April 2023)	Front/Rear	235/40R19
20"	Front/Rear	235/35R20

Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see [Maintaining Tire Pressures on page 754](#)).

Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.

Tire Size	Location	Size
18"	Front/Rear	235/45R18
19"	Front/Rear	235/40R19
20"	Front Rear	235/35R20 275/30R20

Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see [Maintaining Tire Pressures on page 754](#)).

Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.

*May not be available in some regions

Tire Type	Location	Size
19" wheels	All	P245/45R19
21" wheels	Front Rear	P245/35R21 P265/35R21*



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Tire Type	Location	Size
*On a Performance All-Wheel Drive vehicle, the width of the rear tires may vary depending on date of manufacture. Some vehicles may be equipped with P245/35R21 tires on both front and rear.		
Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see Maintaining Tire Pressures on page 754).		
Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.		

Tire Type	Location	Size
In U.S., Canada, Puerto Rico and Korea:		
19" All-Season	Front	255/45R19
	Rear	285/40R19
19" Summer	Front	255/45R19
	Rear	285/40R19
20" Summer	Front	285/35R20
	Rear	305/30R20
21" Summer	Front	265/35ZR21
	Rear	295/30ZR21
21" All-Season	Front	265/35R21
	Rear	295/30R21
In Mexico:		
19" Summer	Front	255/45R19
	Rear	285/40R19
21" Summer	Front	265/35ZR21
	Rear	295/30ZR21

Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see [Maintaining Tire Pressures on page 754](#)).

Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.

Tire Type	Size	Load Index / Speed Rating
20" - Continental - Front	265/45R20	108 / V
20" - Continental - Rear	275/45R20	110 / V
22" - Continental, Goodyear, or Pirelli - Front	265/35R22	102 / W
22" - Continental, Goodyear, or Pirelli - Rear	285/35R22	106 / W

Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the driver's door pillar and is visible when the driver's door is open (see [Maintaining Tire Pressures on page 754](#)).



Tire Type	Size	Load Index / Speed Rating
Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.		
Tire Type	Location	Size
In U.S., Canada, Puerto Rico and Korea:		
20" All Season	Front	265/45R20
	Rear	275/45R20
22" All Season	Front	265/35R22
	Rear	285/35R22
In Mexico:		
20" Summer	Front	255/45R20
	Rear	275/45R20
22" Summer	Front	265/35R22
	Rear	285/35R22
Tire pressures vary depending on the type of tires fitted. Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (see Maintaining Tire Pressures on page 754).		
Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.		



Understanding Tire Markings

Laws require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire. It also provides the tire identification number (TIN) for certification of safety standards, and in case of a recall.















NOTE: You can identify a Tesla-approved tire by the "T-mark" specification on the tire's sidewall (for example, T0, T1, T2). Tesla-approved tires are designed to work with your vehicle and optimize performance, safety, reliability, and durability. For more information about Tesla-approved replacement tires, refer to the [Service Manual](#).

1. **Tire category:** P indicates that the tire is for passenger vehicles.
2. **Tire width:** This 3-digit number is the width (in millimeters) of the tire from sidewall edge to sidewall edge.
3. **Aspect ratio:** This 2-digit number is the sidewall height as a percentage of the tread width. So, if the tread width is 205 mm, and the aspect ratio is 50, the sidewall height is 102 mm.
4. **Tire construction:** R indicates that the tire is of Radial ply construction.
5. **Wheel diameter:** This 2-digit number is the diameter of the wheel rim in inches.
6. **Load index:** This 2 or 3-digit number is the weight each tire can support. This number is not always shown.
7. **Speed rating:** When stated, indicates the maximum speed (in mph) at which the tire can be used for extended periods. Q=99 mph (160 km/h), R=106 mph (170 km/h), S=112 mph (180 km/h), T=118 mph (190 km/h), U=124 mph (200 km/h), H=130 mph (210 km/h), V=149 mph (240 km/h), W=168 mph (270 km/h), Y=186 mph (300 km/h), (Y)=vehicle's top speed (exceeds the "Y" rating).
8. **Load range:** Shown as Standard Load (SL) or Extra Load (XL), the load range determines how much weight your tires can support at a specified tire pressure. When replacing tires, only use tires of the same load range. If towing with snow tires, ensure they are the same load range of the tires your vehicle came equipped with.
9. **Tire composition and materials:** The number of plies in both the tread area and the sidewall area indicates how many layers of rubber coated material make up the structure of the tire. Information is also provided on the type of materials used.



10. **Maximum tire load:** The maximum load which can be carried by the tire.
11. **Maximum permissible inflation pressure:** This pressure should not be used for normal driving.
12. **U.S. DOT Tire Identification Number (TIN):** Begins with the letters DOT and indicates that the tire meets all federal standards. The next 2 digits/letters represent the plant code where it was manufactured, and the last 4 digits represent the week and year of manufacture. For example, the number 1712 is used to represent the 17th week of 2012. The other numbers are marketing codes used at the manufacturer's discretion. This information can be used to contact consumers if a tire defect requires a recall.
13. **Treadwear grade:** This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. A tire rated at 400, for example, lasts twice as long as a tire rated at 200.
14. **Traction grade:** Indicates a tire's ability to stop on wet roads. A higher graded tire should allow you to stop your vehicle in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as AA, A, B, and C.
15. **Temperature grade:** The tire's resistance to heat is grade A, B, or C, with A indicating the greatest resistance. This grading is provided for a correctly inflated tire, which is being used within its speed and loading limits.



Uniform Tire Quality Grading

The following information relates to the tire grading system developed by the National Highway Traffic Safety Administration (NHTSA), which grades tires by tread wear, traction and temperature performance. Tires that have deep tread, and winter tires, are exempt from these marking requirements.

Where applicable, quality grades are found on the tire's sidewall between the tread shoulder and maximum section width. For example:

- TREADWEAR 180
- TRACTION AA
- TEMPERATURE A

The quality grades are described next.

NOTE: In addition to the marking requirements, passenger car tires must conform to Federal Safety Requirements.

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 wears one and a half times better on a government test course than a tire graded 100. The relative performance of tires depends on the actual conditions of their use, however, and can depart significantly from the norm due to variations in driving habits, service practices, road characteristics, and climate.

Traction

The traction grades, from highest to lowest, are: AA, A, B, and C. These grades represent a tire's ability to stop on wet pavement as measured under controlled conditions on test surfaces of asphalt and concrete. A tire marked C might have poor traction performance.

⚠ WARNING: Defective tires are dangerous. Do not drive if a tire is damaged, excessively worn, or is inflated to an incorrect pressure. The safety of the vehicle and occupants can be adversely affected. Check tires regularly for wear and to ensure there are no cuts, bulges or exposure of the ply/cord structure.

⚠ WARNING: The traction grade assigned to the tire is based on straight-ahead braking tests, and does not include: acceleration, cornering, hydroplaning or peak traction characteristics.

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to the minimum level of performance that all passenger car tires must meet under the Federal Motor Safety Standard No. 109. Grades B and A represent levels of performance on the laboratory test wheel that exceed the minimum requirements.


⚠ WARNING: A tire's temperature grade is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Tire and Loading Glossaries

General Wheel and Tire Terms

Accessory Weight	The combined weight (in excess of those items replaced) of items available as factory installed equipment.
Bead	The inner edge of a tire that is shaped to fit to the rim and form an air tight seal. The bead is constructed of steel wires which are wrapped, or reinforced, by the ply cords.



Cold Tire Pressure	The air pressure in a tire that has been standing in excess of three hours, or driven for less than one mile.
Curb Weight	The weight of a standard vehicle, including any optional equipment fitted, and with the correct fluid levels.
Gross Vehicle Weight	The maximum permissible weight of a vehicle with driver, passengers, load, luggage, and equipment.
kPa (kilo pascal)	A metric unit used to measure pressure. One kilo pascal equals approximately 0.145 psi.
Maximum Inflation Pressure	The maximum pressure to which the tire should be inflated. This pressure is given on the tire side wall in psi (lbf/in ²).  CAUTION: This pressure marked on the tire is the maximum allowed by the tire manufacturer. It is not the pressure Tesla recommends using for Cybertruck Model S Model X Model 3 Model Y.
Maximum Loaded Vehicle Weight	The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.
Production Options Weight	The combined weight of options installed which weigh in excess of 3 lb (1.4 kg) more than the standard items that they replaced, and are not already considered in curb or accessory weights.
PSI (lbf/in ²)	Pounds per square inch (the unit used to measure tire pressure).
Recommended Tire Inflation Pressure	Tire inflation pressure, established by Tesla, which is based on the type of tires that are mounted on the vehicle at the factory. This information can be found on the Tire and Loading Information label located on the door pillar.
Rim	The metal support for a tire, or tire and tube, upon which the tire beads are seated.
Vehicle Capacity Weight	The number of seats multiplied by 150 lbs (68 kg) plus the rated amount of load/luggage.

Load Carrying Definitions

Normal occupant weight	68 kilograms (150 lbs) times the number of occupants specified in the second column of the tables for calculating load limits (see the Vehicle Loading topic of this Owner's Manual).
Occupant distribution	Distribution of occupants in a vehicle.
Passenger car tire	(P or Hard Metric) A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a Gross Vehicle Weight Rating (GVWR) of 10,000 lbs (4536 kg) or less.
Light truck tire	(LT) A tire for use where additional load carrying capability is needed.
Rim diameter	Nominal diameter of the bead seat.
Rim size designation	Rim diameter and width.
Rim type designation	The manufacturing industry's designation for a rim by style or code.
Rim width	Nominal distance between the rim's flanges.
Vehicle maximum load on the tire	Load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.
Vehicle normal load on the tire	Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by two.

Pneumatic Radial Tire Definitions

Bead separation	A breakdown of the bond between components in the bead.
Bias ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the center line of the tread.
Carcass	The tire structure, except tread and sidewall rubber which, that when inflated, bears the load.



Chunking	The breaking away of pieces of the tread or sidewall.
Cord	The strands forming the plies in the tire.
Cord separation	The parting of cords from adjacent rubber compounds.
Cracking	Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.
Extra load tire	A tire designed to operate at higher loads and higher inflation pressure than the corresponding standard tire.
Groove	The space between two adjacent tread ribs.
Inner liner	The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.
Inner liner separation	The parting of the inner liner from cord material in the carcass.
Load rating	The maximum load that a tire is rated to carry for a given inflation pressure.
Maximum load rating	The load rating for a tire at the maximum permissible inflation pressure for that tire.
Measuring rim	The rim on which a tire is fitted for physical dimension requirements.
Open splice	Any parting at any junction of tread, sidewall, or inner liner that extends to the cord material.
Outer diameter	The overall diameter of an inflated new tire.
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.
Ply	A layer of rubber-coated parallel cords.
Ply separation	A parting of rubber compound between adjacent plies.
Pneumatic tire	A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.
Radial ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the center line of the tread.
Reinforced tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.
Section width	The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.
Sidewall	The portion of a tire between the tread and bead.
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall.
Snow tire	A tire that attains a traction index equal to or greater than 110, compared to the ASTM E1136-93 (re-approved 2003, incorporated by reference, see §571.5) Standard Reference Test Tire when using the snow traction test as described in ASTM F1805-00 (incorporated by reference, see §571.5), and that is marked with an Alpine Symbol specified in S5.5(i) on at least one sidewall.
Test rim	The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire.
Tread	The portion of a tire that comes into contact with the road.
Tread rib	A tread section running around the circumference of a tire.
Tread separation	The pulling away of the tread from the tire carcass.
Tread wear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing.



Instructions for Transporters



Instructions for Transporters

When Transporting CybertruckModel SModel XModel 3Model Y

Always transport CybertruckModel SModel XModel 3Model Y with all four tires off the ground. A flatbed truck or comparable transport vehicle is recommended. A wheel lift and dolly can be used only when transporting CybertruckModel SModel XModel 3Model Y for a very short distance to reposition the vehicle for loading onto a flatbed truck or comparable transport vehicle (for example, the vehicle is located in a low-clearance garage) or if otherwise specified by Tesla. When transporting, whether on a flatbed truck or using a wheel lift and dolly, CybertruckModel SModel XModel 3Model Y can face either direction.

Do not transport CybertruckModel SModel XModel 3Model Y using any other method unless specified by Tesla. Follow the steps provided and observe all warnings and cautions. Damage caused by transporting your vehicle is not covered by the warranty.

NOTE: The following illustrations are for demonstration purposes only.





WARNING: CybertruckModel SModel XModel 3Model Y is equipped with high voltage components (see [High Voltage Components on page 714](#)). Before transporting CybertruckModel SModel XModel 3Model Y as a result of an event (such as a collision) that may have compromised a high voltage component, it is important to assume that these components are energized. Always follow high voltage safety precautions (wearing personal protective equipment, etc.) until emergency response professionals have evaluated the vehicle and can accurately confirm that all high voltage systems are no longer energized. Failure to do so may result in serious injury or death.

Disable Self-Leveling (air suspension vehicles only)

If CybertruckModel SModel XModel 3Model Y is equipped with the air suspension system, it automatically self-levels, even when power is off. To prevent damage, you must activate Jack Mode to disable self-leveling:

1. Touch **Controls** > **Suspension** on the touchscreen.
2. Press the brake pedal, then touch **Very High** to maximize height.
3. Touch **Controls** > **Service** > **Jack Mode**.



When Jack mode is active, CybertruckModel SModel XModel 3Model Y displays this indicator light on the instrument panel touchscreen, along with a message telling you that active suspension is disabled.

NOTE: Jack Mode cancels when CybertruckModel SModel XModel 3Model Y is driven over 4 mph (7 km/h).

WARNING: Failure to activate Jack Mode on a CybertruckModel SModel XModel 3Model Y equipped with the air suspension system can result in the vehicle becoming loose during transport, which may cause significant damage.

Activate Tow Mode

CybertruckModel SModel XModel 3Model Y may automatically shift into Park when it detects the driver leaving the vehicle, even if it has previously been shifted into Neutral. To keep CybertruckModel SModel XModel 3Model Y in Neutral (which disengages the brake), you must use the touchscreen to activate Tow Mode:

1. Shift into Park.



2. Check the tires or otherwise ensure CybertruckModel SModel XModel 3Model Y is stable.
3. Press and hold the brake pedal, then on the touchscreen touch **Controls > Service > Tow Mode**.

Ensure the vehicle is not connected to a charger. Transport Mode is not available if CybertruckModel SModel XModel 3Model Y is still plugged in.



When Tow Mode is active, CybertruckModel SModel XModel 3Model Y displays this yellow indicator light on the instrument panel, along with a message telling you that CybertruckModel SModel XModel 3Model Y is free-rolling.

To cancel **Tow Mode**, shift CybertruckModel SModel XModel 3Model Y into Park.

⚠ CAUTION: If the electrical system is not working, and you therefore cannot release the electric parking brake, attempt to jump start the low voltage battery (see [Jump Starting on page 938](#)). If a situation occurs where you cannot disengage the parking brake, use a self-loading dolly or tire skates. Before doing so, always check the manufacturer's specifications and recommended load capacity.

Pull onto the Flatbed Truck

The method used to pull CybertruckModel SModel XModel 3Model Y onto the truck depends on whether a tow eye is available (provided with your vehicle at time of purchase).

If equipped with a tow eye:

1. Remove the nose cone by inserting a plastic pry tool into the top right corner, and gently prying it toward you. When the clip releases, pull the nose cone toward you, without twisting or bending, to release the three remaining clips.

NOTE: If the nose cone is equipped with a removable slot, which is distinguished by the ridge that sits directly below the slot, remove the slot by prying it from the bottom and around the edge until the entire slot is removed.

Remove the tow eye cover by inserting a small flat screwdriver into the slot located along the top of the cover, then prying gently to release the cover from the top snap. Remove the tow eye cover by inserting a small flat screwdriver into the slot located along the top of the cover, then prying gently to release the cover from the top snap.

⚠ CAUTION: Keep the tow eye cover in a safe place so you can replace it when transporting is complete.





2. If Cybertruck Model S Model X Model 3 Model Y is equipped with sensors on the nose cone, you also need to disconnect the electrical connectors. To do so, press down on the tab and pull to release.



3. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.





4. Attach the winch cable to the tow eye.



CAUTION: Before pulling, make sure the tow eye is securely tightened.

5. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.
6. Shift CybertruckModel SModel XModel 3Model Y into Park by pressing the button on the end of the gear selector.

If not equipped with a tow eye:



WARNING: If the vehicle is pulled onto the flatbed truck without a tow eye, all suspension fasteners should be checked for proper torque and all components should be visually inspected for damage prior to driving the vehicle again. If a fastener is loose, or if any damage is found, the affected component(s) should be replaced.

1. Attach the tow straps to the large hole on each of the rearmost lower suspension arms underneath the front of the vehicle.



2. To protect the underbody from any damage, place a protective barrier (such as a piece of wood) between the tow strap and the underbody.
3. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.
4. Shift CybertruckModel SModel XModel 3Model Y into Park by pressing the button on the end of the gear selector.

Secure the Tires

The vehicle's tires must be secured onto the truck using the eight-point tie-down method.

- Ensure any metal parts on the tie-down straps do not contact painted surfaces or the face of the wheels.
- Do not place tie-down straps over body panels or through the wheels.



CAUTION: Attaching tie-down straps to the chassis, suspension or other parts of the vehicle's body may cause damage.

If Vehicle Has No Power

If CybertruckModel SModel XModel 3Model Y has no low voltage power, perform the following steps to open the hood or jump start the low voltage battery.



1. Open the hood. See [Opening the Hood with No Power on page 932](#) for more information on opening the hood if the vehicle does not have power.
2. Jump start the low voltage battery (see [Jump Starting on page 938](#)).

NOTE: Tow providers: See [Running Out of Range on page 932](#) for more information on transporting the vehicle to a charging station and preparing the vehicle to charge.



Instructions for Transporters

DO NOT TRANSPORT WITH WHEELS ON THE GROUND

The front/rear motor in Cybertruck/Model S/Model X/Model 3/Model Y generates power when the wheels spin. Always transport Cybertruck/Model S/Model X/Model 3/Model Y with all four tires off the ground. Ensure that the tires are unable to spin at any time during transport.

⚠ WARNING: NEVER TRANSPORT YOUR VEHICLE WITH THE TIRES IN A POSITION WHERE THEY CAN SPIN. DOING SO CAN LEAD TO SIGNIFICANT DAMAGE AND OVERHEATING. IN RARE CASES EXTREME OVERHEATING MAY CAUSE THE SURROUNDING COMPONENTS TO IGNITE.





Do not transport Cybertruck Model S Model X Model 3 Model Y using any method that is not specified by Tesla. Adhere to the instructions provided in the following sections and observe all warnings and cautions provided. Damage caused by improper transporting of your vehicle is not covered by the warranty.

NOTE: Tesla is not liable or responsible for reimbursing services not dispatched through Tesla Roadside Assistance.

Approved Methods for Transporting

NOTE: The tires are allowed to rotate slowly (under 3 mph or 5 km/h) and for a very short distance (less than 30 feet or 10 meters) only when Transport Mode is enabled (see [Activate Transport Mode on page 905](#)) while the vehicle is being winched onto a flatbed truck or pulled out of a parking space for repositioning. Exceeding these boundaries can lead to significant damage and overheating that is not covered by the warranty.

A flatbed truck or comparable transport vehicle is the recommended method of transporting Cybertruck Model S Model X Model 3 Model Y. The vehicle can face either direction when using a flatbed.





If CybertruckModel SModel XModel 3Model Y must be transported without a flatbed truck, then wheel lifts and dollies must be used to ensure that all four wheels are off of the ground. This method may only be used for a maximum of 35 miles (55 km), and must not exceed the manufacturer speed rating of the dollies. With this method, Tesla recommends the vehicle facing forward so that the front wheels are lifted and the rear wheels are on dollies.

NOTE: Transporting CybertruckModel SModel XModel 3Model Y with the front wheels on dollies is not recommended, but may be done if an external steering wheel lock is applied and care is taken to prevent the front wheels from spinning. **DO NOT TRANSPORT YOUR VEHICLE IF THERE IS ANY CHANCE OF THE FRONT WHEELS SPINNING.**



CAUTION: Enable Transport Mode (see [Activate Transport Mode on page 905](#)) before winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck (see [Pull onto the Flatbed Truck – With Tow Eye on page 905#unique_1092 on page #unique_1093 on page](#) and [#unique_1094 on page](#)). If Transport Mode is not available or the touchscreen is not accessible, self-loading dollies or tire skates must be used to load the vehicle into the approved transportation position. Tesla is not responsible for any damage caused by or during the transport of CybertruckModel SModel XModel 3Model Y, including personal property damage or damage caused by using self-loading dollies or tire skates.

WARNING: CybertruckModel SModel XModel 3Model Y is equipped with high voltage components that may be compromised as a result of a collision (see [High Voltage Components on page 714](#)). Before transporting CybertruckModel SModel XModel 3Model Y, it is important to assume these components are energized. Always follow high voltage safety precautions (wearing personal protection equipment, etc.) until emergency response professionals have evaluated the vehicle and can accurately confirm that all high voltage systems are no longer energized. Failure to do so may result in serious injury.



Disable the Self-Leveling Air Suspension System

If CybertruckModel SModel XModel 3Model Y is equipped with the air suspension system, it automatically self-levels, even when power is off. To prevent damage, you must activate Jack Mode to disable self-leveling:

1. Touch **Controls** > **Suspension** on the touchscreen.
2. Press the brake pedal, then touch **Very High** to maximize height.
3. Touch **Controls** > **Service** > **Jack Mode**.

When Jack mode is active, CybertruckModel SModel XModel 3Model Y displays this indicator light on the instrument paneltouchscreen, along with a message telling you that active suspension is disabled.



NOTE: Jack Mode cancels when driving speed exceeds 4 mph (7 kph).

WARNING: Failure to activate Jack Mode on a vehicle equipped with the air suspension system can result in the vehicle becoming loose during transport, which may cause significant damage.

Activate Transport Mode

Transport Mode keeps the parking brake disengaged while winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck. When active, Transport Mode displays a message indicating that the vehicle will remain free-rolling. The following are required to enable Transport Mode:

- Low voltage power is required. You are unable to use the touchscreen to activate Transport Mode if CybertruckModel SModel XModel 3Model Y has no power.
- CybertruckModel SModel XModel 3Model Y must detect a key fob. Transport Mode is available only when a key fob is detected.
- Ensure the vehicle is not connected to a charger. Transport Mode is not available if CybertruckModel SModel XModel 3Model Y is still plugged in.

To activate Transport Mode:

1. Ensure the vehicle is in Park.
2. Chock the tires or otherwise ensure CybertruckModel SModel XModel 3Model Y is secure.
3. Press and hold the brake pedal, then on the touchscreen, touch **Controls** > **Service** > **Towing**. The touchscreen displays a message reminding you how to properly transport CybertruckModel SModel XModel 3Model Y.
4. Press the **Transport Mode** button. You can tell Transport Mode is enabled because this button is blue. CybertruckModel SModel XModel 3Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) or winched.

To cancel Transport Mode, shift CybertruckModel SModel XModel 3Model Y into Park.

NOTE: If CybertruckModel SModel XModel 3Model Y loses low voltage power after Transport Mode is enabled, Transport Mode cancels.

CAUTION: If the electrical system is not working, and you therefore cannot use the touchscreen to activate Transport Mode, use self-loading dollies or tire skates. Before doing so, always check the manufacturer's specifications and recommended loading capacity.

Pull onto the Flatbed Truck - With Tow Eye

1. Locate the tow eye.
2. Remove the tow eye cover by inserting a small flat screwdriver into the slot located along the top of the cover, then prying gently to release the cover from the top snap.



NOTE: Keep the tow eye cover in a safe place so you can replace it when towing is complete.

3. Fully insert the tow eye into the opening, then turn it counter-clockwise until securely fastened.



4. Attach the winch cable to the tow eye.



CAUTION: Before pulling, make sure the tow eye is securely fastened.

5. Activate Transport Mode by touching **Controls > Service > Towing**.

6. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.



Pull onto the Flatbed Truck - Without Tow Eye

CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

WARNING: If the vehicle is pulled onto the flatbed truck without a tow eye, all suspension fasteners should be checked for proper torque and all components should be visually inspected for damage prior to driving the vehicle again. If a fastener is loose, or if any damage is found, the affected component(s) should be replaced.

It is strongly recommended that you connect the winch to your vehicle's tow eye, as described previously. However, if a situation arises in which the tow eye is not available (lost, misplaced, etc.), the following instructions describe how to attach tow straps.

1. Attach the tow straps to each of the lower suspension arms underneath the front of the vehicle.



2. To protect the underbody from damage, place a protective barrier (such as a piece of wood) between the tow strap and underbody.
3. Activate Transport Mode by touching **Controls > Service > Towing**.
4. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.

Secure the Tires

The vehicle's tires must be secured onto the truck using the eight-point tie-down method.

- Ensure any metal parts on the tie-down straps do not contact painted surfaces or the face of the wheels.
- Do not place tie-down straps over body panels or through the wheels.

CAUTION: Attaching the tie-down straps to the chassis, suspension or other parts of the vehicle's body may cause damage.





If Vehicle Has No Power

If Cybertruck Model S Model X Model 3 Model Y has no low voltage power, perform the following steps to open the hood or jump start the low voltage battery.

1. Open the hood. See [Opening the Hood with No Power on page 932](#) for more information on opening the hood if the vehicle does not have power.
2. Jump start the low voltage battery (see [Jump Starting on page 938](#)).

NOTE: Tow providers: See [Running Out of Range on page 932](#) for more information on transporting the vehicle to a charging station and preparing the vehicle to charge.



Instructions for Transporters

DO NOT TRANSPORT WITH WHEELS ON THE GROUND

The front and rear motors in CybertruckModel SModel XModel 3Model Y generate power when the wheels spin. Always transport CybertruckModel SModel XModel 3Model Y with all four tires off the ground. Ensure that the tires are unable to spin at any time during transport.

⚠ WARNING: NEVER TRANSPORT YOUR VEHICLE WITH THE TIRES IN A POSITION WHERE THEY CAN SPIN. DOING SO CAN LEAD TO SIGNIFICANT DAMAGE AND OVERHEATING. IN RARE CASES EXTREME OVERHEATING MAY CAUSE THE SURROUNDING COMPONENTS TO IGNITE.





Do not transport CybertruckModel SModel XModel 3Model Y using any method that is not specified by Tesla. Adhere to the instructions provided in the following sections and observe all warnings and cautions provided. Damage caused by improper transporting of your vehicle is not covered by the warranty.

NOTE: Tesla is not liable or responsible for reimbursing services not dispatched through Tesla Roadside Assistance.

Approved Methods for Transporting

A flatbed truck or comparable transport vehicle is the recommended method of transporting CybertruckModel SModel XModel 3Model Y. The vehicle can face either direction when using a flatbed.



If CybertruckModel SModel XModel 3Model Y must be transported without a flatbed truck, then wheel lifts and dollies must be used to ensure that all four wheels are off of the ground. This method may only be used for a maximum of 35 miles (55 km), and must not exceed the manufacturer speed rating of the dollies. With this method, Tesla recommends the vehicle faces forward so that the front wheels are lifted and the rear wheels are on dollies.

NOTE: Transporting CybertruckModel SModel XModel 3Model Y with the front wheels on dollies is not recommended, but may be done if an external steering wheelsteering yoke (or steering wheel) lock is applied and care is taken to prevent the front wheels from spinning.

CAUTION: DO NOT TRANSPORT YOUR VEHICLE IF THERE IS ANY CHANCE OF ANY OF THE WHEELS SPINNING.



CAUTION: Enable Transport Mode (see [Activate Transport Mode on page 913](#)) before winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck. If Transport Mode is not available or the touchscreen is not accessible, self-loading dollies or tire skates must be used to load the vehicle into the approved transportation position. Tesla is not responsible for any damage caused by or during the transport of CybertruckModel SModel XModel 3Model Y, including personal property damage or damage caused by using self-loading dollies or tire skates.



NOTE: Transport Mode is only intended to allow for winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck or repositioning the vehicle out of a parking space. While in Transport Mode, the tires are allowed to rotate slowly (under 3 mph or 5 km/h) and for a very short distance (less than 30 feet or 10 meters). See [Activate Transport Mode on page 913](#). Exceeding these boundaries can lead to significant damage and overheating that is not covered by the warranty.

⚠ WARNING: CybertruckModel SModel XModel 3Model Y is equipped with high voltage components that may be compromised as a result of a collision (see [High Voltage Components on page 714](#)). Before transporting CybertruckModel SModel XModel 3Model Y, it is important to assume these components are energized. Always follow high voltage safety precautions (wearing personal protection equipment, etc.) until emergency response professionals have evaluated the vehicle and can accurately confirm that all high voltage systems are no longer energized. Failure to do so may result in serious injury.

Disable the Self-Leveling Air Suspension System

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to use the touchscreen. See [If Vehicle Has No Power on page 920](#).

Your CybertruckModel SModel XModel 3Model Y is equipped with an air suspension system that automatically self-levels the vehicle, even when power is off. To prevent damage, you must activate Jack mode to disable self-leveling:

1. Touch **Controls > Suspension** on the touchscreen.
2. Press the brake pedal, and then touch **Very High** to maximize height.
3. Touch **Controls > Service > Jack Mode**.

NOTE: Jack mode cancels when driving speed exceeds 4 mph (7 km/h).

Activate Transport Mode

Transport Mode keeps the parking brake disengaged while winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck. When active, Transport Mode displays a message indicating that the vehicle will remain free-rolling. The following are required to enable Transport Mode:

- Low voltage power. You are unable to use the touchscreen to activate Transport Mode if CybertruckModel SModel XModel 3Model Y has no power.
- CybertruckModel SModel XModel 3Model Y must detect a key. Transport Mode is available only when a key is detected.
- Ensure the vehicle is not connected to a charger. Transport Mode is not available if CybertruckModel SModel XModel 3Model Y is still plugged in.

To activate Transport Mode:

1. Ensure the vehicle is in Park.
2. Chock the tires and make sure CybertruckModel SModel XModel 3Model Y is secure.
3. Press and hold the brake pedal, and then on the touchscreen, touch **Controls > Service > Towing**. The touchscreen displays a message reminding you how to properly transport CybertruckModel SModel XModel 3Model Y.
4. Press the **Transport Mode** button. You can tell Transport Mode is enabled because this button is blue. CybertruckModel SModel XModel 3Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) or winched.

To cancel Transport Mode, shift CybertruckModel SModel XModel 3Model Y into Park.

NOTE: If the electrical system is not working, and you therefore cannot use the touchscreen to activate Transport Mode, use self-loading dollies or tire skates. Before doing so, always check the manufacturer's specifications and recommended loading capacity.

Pull Onto Flatbed Truck From Front (Using Tow Eye)

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to open the hood or use the touchscreen. See [If Vehicle Has No Power on page 920](#).

⚠ CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

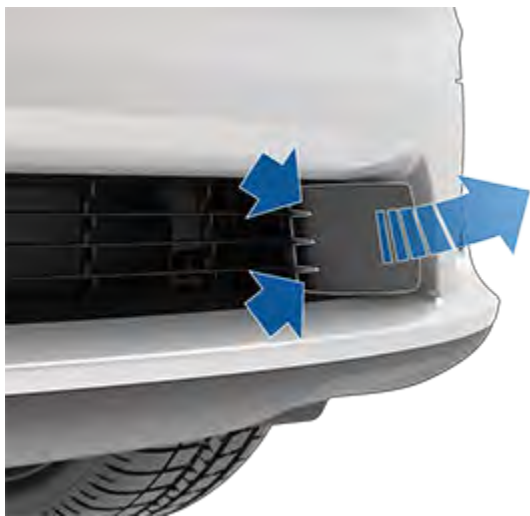
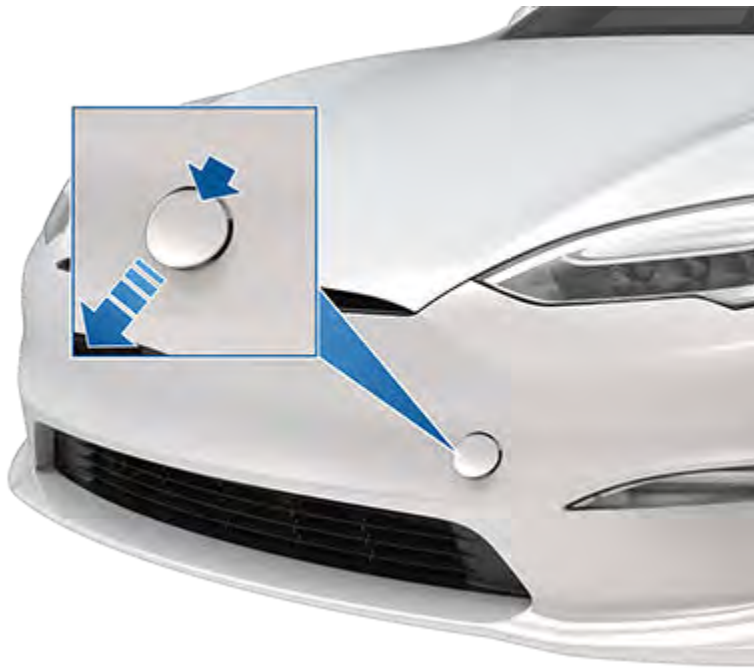


1. Locate the tow eye. The tow eye is located in the front trunk.

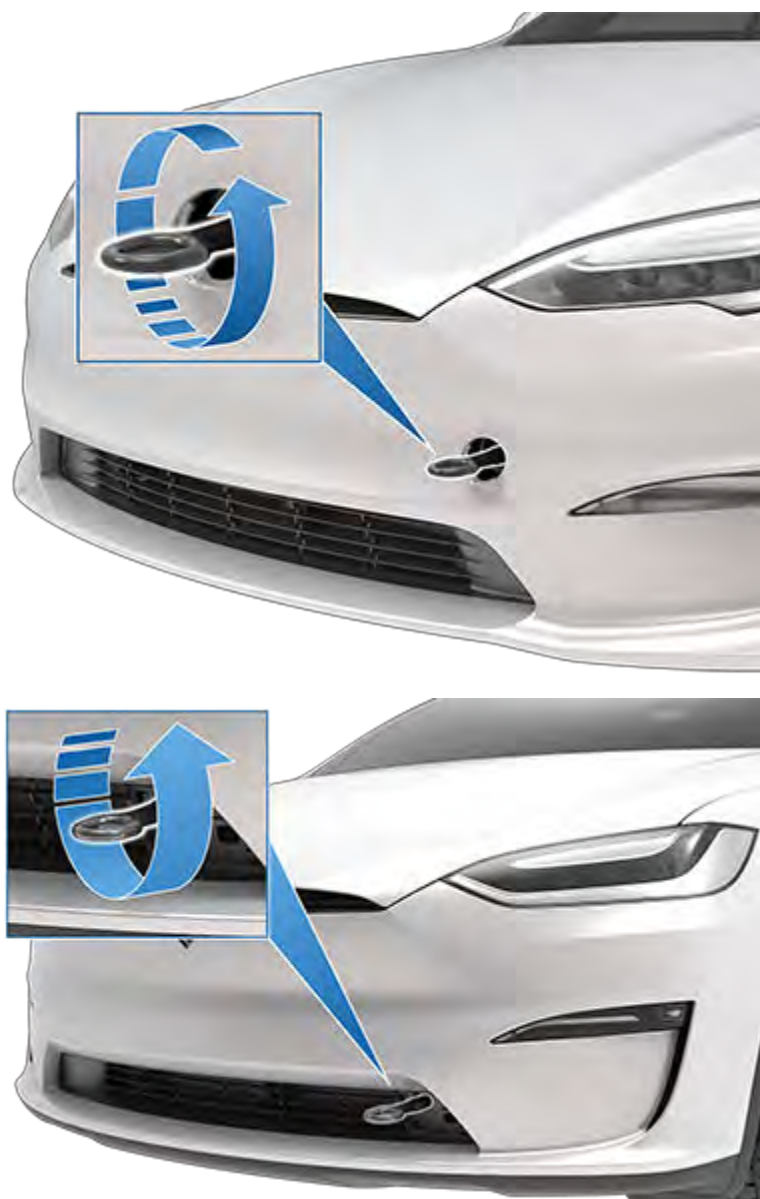


2. Release the front tow eye cover by pressing firmly on its top right perimeter until it pivots inward, then gently pulling the raised section toward you. To remove the tow eye cover, insert a small, flat screwdriver into the top and bottom slots, release the snaps and pull the cover towards you.

NOTE: The front tow eye cover is connected to the vehicle's black negative (-) terminal.



3. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.



4. Attach the winch cable to the tow eye.

⚠ CAUTION: Before pulling, make sure the tow eye is securely tightened.

5. Activate Transport Mode.

6. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.

Pull Onto Flatbed Truck From Rear (Using Tow Eye)

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to open the hood or use the touchscreen. See [If Vehicle Has No Power on page 920](#).

NOTE: Vehicles equipped with a hitch receiver cannot be pulled from the rear tow eye. Use the tow bar or hitch receiver only to pull the vehicle to a safe location, such as onto a flatbed truck. Do not transport the vehicle with wheels on the ground.

⚠ CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

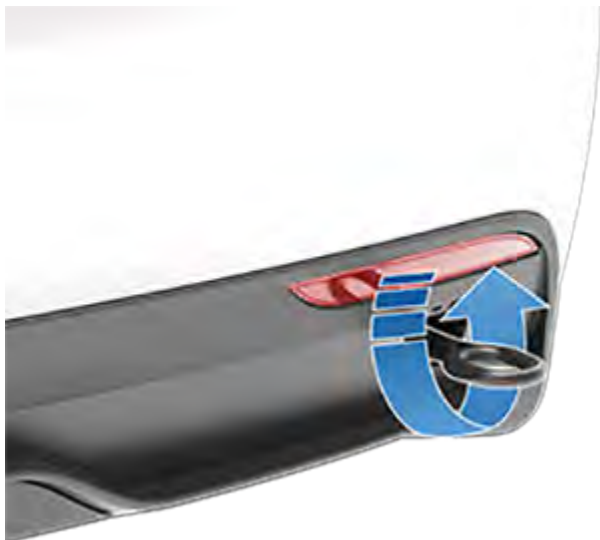
1. Locate the tow eye. The tow eye is located in the front trunk.



2. Release the rear tow eye cover by pressing firmly on its bottom perimeter until it pivots inward, then gently pulling the raised section toward you.



3. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.



4. Attach the winch cable to the tow eye.



CAUTION: Before pulling, make sure the tow eye is securely tightened.

5. Activate Transport Mode.
6. Pull Cybertruck Model S Model X Model 3 Model Y slowly onto the flatbed truck.

Pull onto the Flatbed Truck From Front (Without Tow Eye)



CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.



WARNING: If the vehicle is pulled onto the flatbed truck using this method, all suspension fasteners should be checked for proper torque and all components should be visually inspected for damage prior to driving the vehicle again. If a fastener is loose, or if any damage is found, the affected component(s) should be replaced.

It is strongly recommended that you connect the winch to your vehicle's tow eye, as described previously. However, if a situation arises in which the tow eye is not available (lost, misplaced, etc.), the following instructions describe how to attach tow straps.

1. Attach the tow straps to each of the lower suspension arms underneath the front of the vehicle.



CAUTION: Do not attach the tow straps to any other suspension component. Only attach tow straps to the lower suspension arms, as shown below.



2. To protect the underbody from damage, place a protective barrier (such as a piece of wood) between the tow strap and underbody.
3. Activate Transport Mode.



4. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.

Pull Onto Flatbed Truck From Rear

CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the tow hitch, chassis, frame, or suspension components to pull the vehicle can result in damage.

NOTE: Make sure Transport Mode is activated prior to pulling CybertruckModel SModel XModel 3Model Y onto the flatbed truck.

It is strongly recommended that you connect the winch to your vehicle's tow eye, as described previously. However, if a situation arises in which the vehicle must be pulled from the rear, Tesla recommends attaching the winch to the tow hitch. Refer to the owner's manual for instructions on how to connect the tow hitch.

Secure the Tires

The vehicle's tires must be secured onto the truck using the eight-point tie-down method.

- Ensure any metal parts on the tie-down straps do not contact painted surfaces or the face of the wheels.
- Do not place tie-down straps over body panels or through the wheels.

CAUTION: Attaching the tie-down straps to the chassis, suspension or other parts of the vehicle's body may cause damage.





If Vehicle Has No Power

If Cybertruck Model S Model X Model 3 Model Y has no low voltage power, perform the following steps to open the hood or jump start the low voltage battery.

1. Open the hood. See [Opening the Hood with No Power on page 932](#) for more information on opening the hood if the vehicle does not have power.
2. Jump start the low voltage battery (see [Jump Starting on page 938](#)).

NOTE: Tow providers: See [Running Out of Range on page 932](#) for more information on transporting the vehicle to a charging station and preparing the vehicle to charge.



Instructions for Transporters

DO NOT TRANSPORT WITH WHEELS ON THE GROUND

The motor(s) in CybertruckModel SModel XModel 3Model Y generates power when the wheels spin. Always transport CybertruckModel SModel XModel 3Model Y with all four tires off the ground. Ensure that the tires are unable to spin at any time during transport.

⚠ WARNING: NEVER TRANSPORT YOUR VEHICLE WITH THE TIRES IN A POSITION WHERE THEY CAN SPIN. DOING SO CAN LEAD TO SIGNIFICANT DAMAGE AND OVERHEATING. IN RARE CASES EXTREME OVERHEATING MAY CAUSE THE SURROUNDING COMPONENTS TO IGNITE.



Do not transport CybertruckModel SModel XModel 3Model Y using any method that is not specified by Tesla. Adhere to the instructions provided in the following sections and observe all warnings and cautions provided. Damage caused by improper transporting of your vehicle is not covered by the warranty.

NOTE: Tesla is not liable or responsible for reimbursing services not dispatched through Tesla Roadside Assistance.

Approved Methods for Transporting

A flatbed truck or comparable transport vehicle is the recommended method of transporting CybertruckModel SModel XModel 3Model Y. The vehicle can face either direction when using a flatbed.



If CybertruckModel SModel XModel 3Model Y must be transported without a flatbed truck, then wheel lifts and dollies must be used to ensure that all four wheels are off of the ground. This method may only be used for a maximum of 35 miles (55 km), and must not exceed the manufacturer speed rating of the dollies. With this method, Tesla recommends the vehicle facing forward so that the front wheels are lifted and the rear wheels are on dollies.



⚠ CAUTION: Enable Transport Mode (see [Activate Transport Mode on page 922](#)) before winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck (see [Pull onto the Flatbed Truck on page 923](#)[Pull Onto Flatbed Truck From Front on page 926](#) and [Pull Onto Flatbed Truck From Rear on page 928](#)). If Transport Mode is not available or the touchscreen is not accessible, self-loading dollies or tire skates must be used to load the vehicle into the approved transportation position. Tesla is not responsible for any damage caused by or during the transport of CybertruckModel SModel XModel 3Model Y, including personal property damage or damage caused by using self-loading dollies or tire skates.

NOTE: Transport Mode is only intended to allow for winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck or repositioning the vehicle out of a parking space. While in Transport Mode, the tires are allowed to rotate slowly (under 3 mph or 5 km/h) and for a very short distance (less than 30 feet or 10 meters). See [Activate Transport Mode on page 922](#). Exceeding these boundaries can lead to significant damage and overheating that is not covered by the warranty.

⚠ WARNING: CybertruckModel SModel XModel 3Model Y is equipped with high voltage components that may be compromised as a result of a collision (see [High Voltage Components on page 714](#)). Before transporting CybertruckModel SModel XModel 3Model Y, it is important to assume these components are energized. Always follow high voltage safety precautions (wearing personal protection equipment, etc.) until emergency response professionals have evaluated the vehicle and can accurately confirm that all high voltage systems are no longer energized. Failure to do so may result in serious injury.

Activate Transport Mode

Transport Mode keeps the parking brake disengaged while winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck. When active, Transport Mode displays a message indicating that the vehicle will remain free-rolling. To enable Transport Mode:



- Low voltage power is required. You will be unable to use the touchscreen to activate Transport Mode if CybertruckModel SModel XModel 3Model Y has no power.
- CybertruckModel SModel XModel 3Model Y must detect a key. Transport Mode is available only when a key is detected.
- Ensure the vehicle is not connected to a charger. Transport Mode is not available if CybertruckModel SModel XModel 3Model Y is still plugged in.

To activate Transport Mode:

1. Ensure CybertruckModel SModel XModel 3Model Y is in Park.
2. Chock the tires or make sure CybertruckModel SModel XModel 3Model Y is secure.
3. Press and hold the brake pedal, then on the touchscreen, touch **Controls > Service > Towing**. The touchscreen displays a message reminding you how to properly transport CybertruckModel SModel XModel 3Model Y.
4. Press the **Transport Mode** button. You can tell Transport Mode is enabled because this button is blue. CybertruckModel SModel XModel 3Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) or winched.

To cancel Transport Mode, shift CybertruckModel SModel XModel 3Model Y into Park.

NOTE: If your vehicle is equipped with a lead-acid low voltage battery (see [Jump Starting on page 938](#)): Transport Mode may cancel if CybertruckModel SModel XModel 3Model Y loses low voltage power after Transport Mode is enabled.

⚠ CAUTION: If the electrical system is not working, and you therefore cannot use the touchscreen to activate Transport Mode, use self-loading dollies or tire skates. Before doing so, always check the manufacturer's specifications and recommended loading capacity.

Pull onto the Flatbed Truck

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to open the hood or use the touchscreen (see [Jump Starting on page 938](#)).

⚠ CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

1. Locate the tow eye. The tow eye is located in the front trunk.





2. Release the tow eye cover by pressing firmly on its top right perimeter until it pivots inward, then gently pull the raised section toward you.

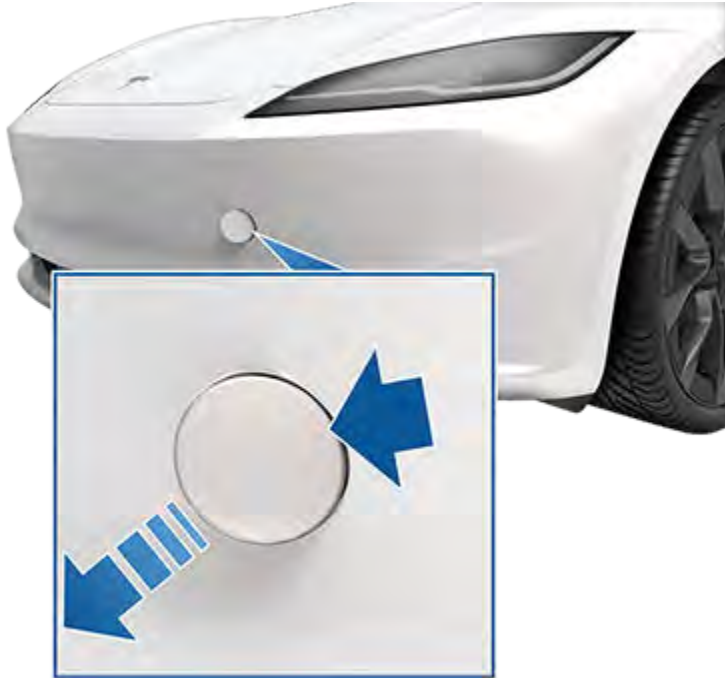
NOTE: The tow eye cover is connected to the vehicle's black negative (-) terminal.



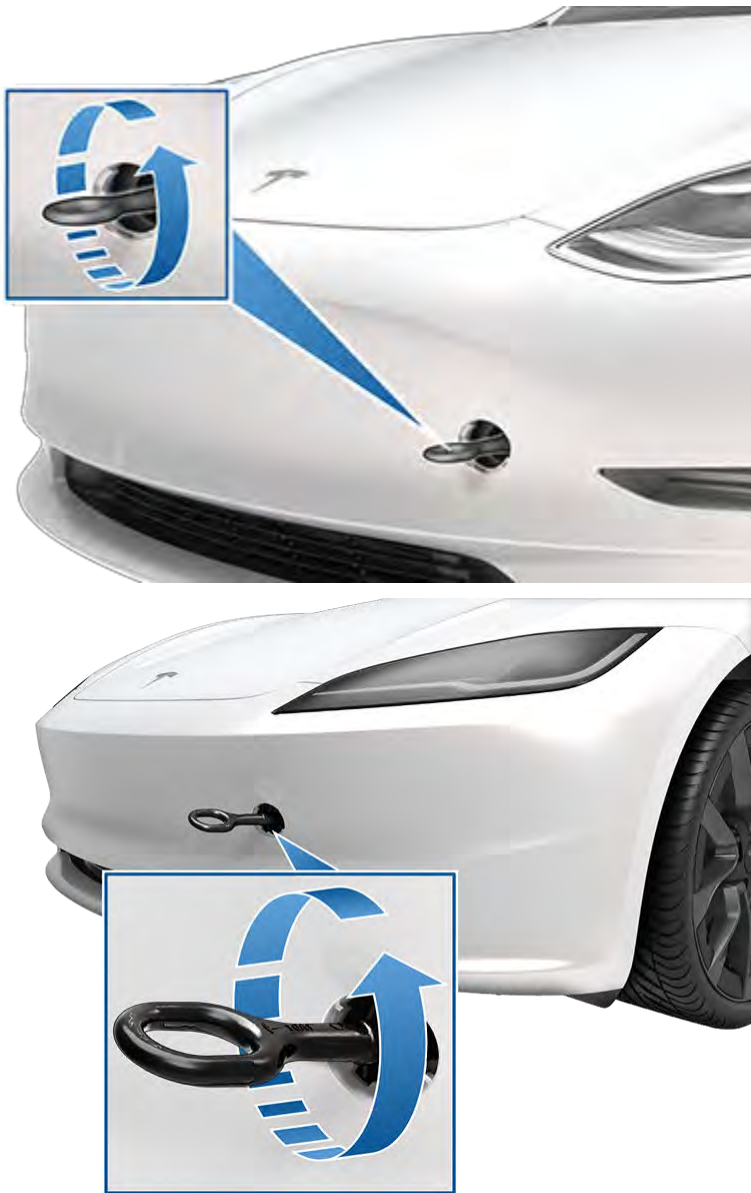
3. Your vehicle is equipped with two tow eye covers: one in the front, and one in the rear. To open either tow eye cover, release the tow eye cover by pressing firmly on its top right perimeter until it pivots inward, then gently pull the raised section toward you.




NOTE: Only the front tow eye cover contains positive (+) and negative terminals to open the front trunk.



4. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.



5. Attach the winch cable to the tow eye.


 **CAUTION:** Before pulling, make sure the tow eye is securely tightened.

6. Activate Transport Mode.

7. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.

Pull Onto Flatbed Truck From Front

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to open the hood or use the touchscreen.

 **CAUTION:** To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

1. Locate the tow eye. The tow eye is located in the front trunk.

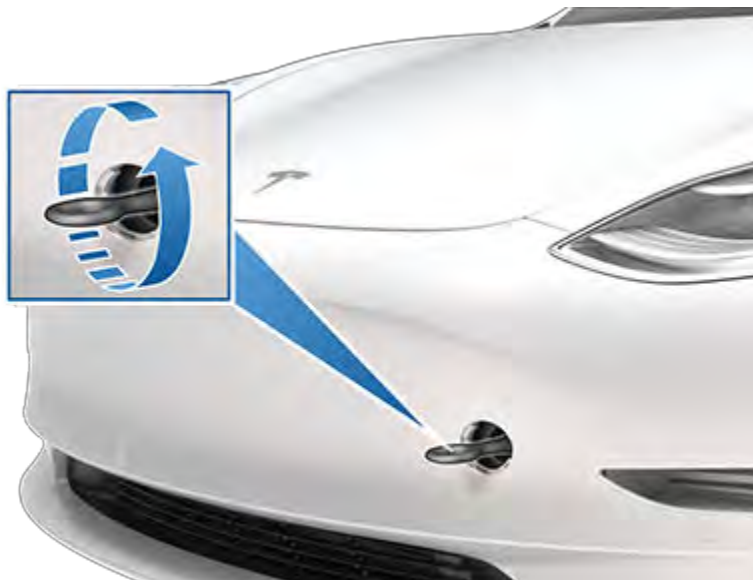


2. Release the front tow eye cover in the front or rear by pressing firmly on its top right perimeter until it pivots inward, then gently pulling the raised section toward you.

NOTE: The front tow eye cover is connected to the vehicle's black negative (-) terminal.



3. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.





4. Attach the winch cable to the tow eye.

CAUTION: Before pulling, make sure the tow eye is securely tightened.

5. Activate Transport Mode.

6. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.

Pull Onto Flatbed Truck From Rear

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you need an external low voltage power supply to open the hood or use the touchscreen.

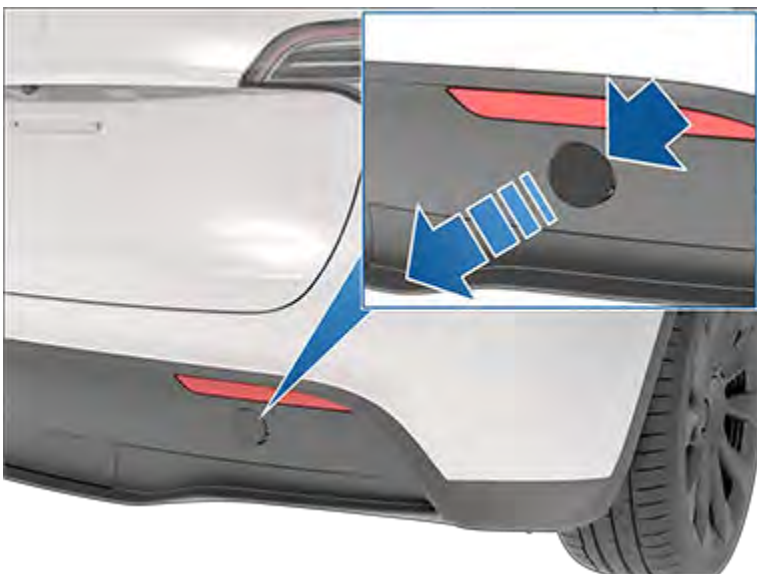
CAUTION: To avoid damage, only pull the vehicle onto a flatbed truck using a properly-installed tow eye. Using the chassis, frame, or suspension components to pull the vehicle can result in damage.

1. Locate the tow eye. The tow eye is located in the front trunk.



2. Release the rear tow eye cover by pressing firmly on its top right perimeter until it pivots inward, then gently pulling the raised section toward you.

NOTE: Vehicles equipped with a hitch receiver cannot be pulled from the rear tow eye. Use the tow bar or hitch receiver only to pull the vehicle to a safe location, such as onto a flatbed truck. Do not transport the vehicle with wheels on the ground.



3. Fully insert the tow eye into the opening, then turn it **counter-clockwise** until securely fastened.



4. Attach the winch cable to the tow eye.

⚠ CAUTION: Before pulling, make sure the tow eye is securely tightened.

5. Activate Transport Mode.

6. Pull Cybertruck Model S Model X Model 3 Model Y slowly onto the flatbed truck.

Secure the Tires

The vehicle's tires must be secured onto the truck using the eight-point tie-down method:

- Ensure any metal parts on the tie-down straps do not contact painted surfaces or the face of the wheels.
- Do not place tie-down straps over the body panels or through the wheels.

⚠ CAUTION: Attaching the tie-down straps to the chassis, suspension or other parts of the vehicle's body may cause damage.





If Vehicle Has No Power

If CybertruckModel SModel XModel 3Model Y has no low voltage power, perform the following steps to open the hood or jump start the low voltage battery.

1. Open the hood. See [Opening the Hood with No Power on page 932](#) for more information on opening the hood if the vehicle does not have power.
2. Jump start the low voltage battery (see [Jump Starting on page 938](#)).

NOTE: Tow providers: See [Running Out of Range on page 932](#) for more information on transporting the vehicle to a charging station and preparing the vehicle to charge.

! **CAUTION:** Because the windows automatically lower slightly when you open or close a door, always connect to an external, low voltage power supply before opening a door if the vehicle has no power to avoid breaking a window (see [Jump Starting on page 938](#)).

In Case of Emergency

Contacting Tesla Roadside Assistance

Tesla Roadside Assistance is available to you 24 hours a day, 365 days a year, for the duration of your warranty period. Tesla Roadside Assistance is also available to speak with roadside service professionals to answer any questions and explain the proper procedure for transporting your vehicle.

When contacting Tesla Roadside Assistance, please provide:

- The Vehicle Identification Number (VIN). The VIN is displayed when you touch **Controls > Software**. The VIN can also be seen by looking through the driver's side of the windshield.
- Your exact location.
- The nature of the problem.

If available in your region, you can also expedite your request, by choosing the Roadside Assistance option in the Tesla mobile app.

NOTE: For a detailed description of Tesla's Roadside Assistance policy, go to the support page on the Tesla web site for your region.

Regional Phone Number(s)

Canada: [1-877-79TESLA \(1-877-798-3752\)](tel:1-877-79TESLA)



Mexico: 800-228-8145

United States: 1-877-79TESLA (1-877-798-3752)

NOTE: The phone number is also available by touching **Controls > Service**.



Running Out of Range

⚠ CAUTION: It is your responsibility to monitor the state of the high voltage Battery and the remaining range of your vehicle. Do not assume that there is any range available when the range displayed on the instrument cluster touchscreen is at 0 miles (0 km) (or 0%). Damage to the low voltage battery due to running out of range is not covered by the warranty.

NOTE: In the unlikely event your vehicle runs out of range while driving, pull over when safe to do so and contact [Tesla Roadside Assistance on page 930](#) or your preferred tow provider.

If CybertruckModel SModel XModel 3Model Y runs out of range, the low voltage battery is no longer supported – and when low voltage is not supported, the vehicle cannot charge. Therefore, the low voltage battery must be supported by an external power supply to allow you to charge the High Voltage (HV) Battery. Once the vehicle begins charging, the external power supply is no longer required.

If CybertruckModel SModel XModel 3Model Y runs out of range, the low voltage system is no longer supported – and when the low voltage battery runs out of power, the vehicle cannot charge. Therefore, the low voltage system must be supported by an external power supply to allow you to charge the High Voltage (HV) Battery. Once the vehicle begins charging, the external power supply is no longer required.

In the case of running out of range away from a charger, the tow provider should transport CybertruckModel SModel XModel 3Model Y to the nearest charging station and unload the vehicle within the charging cable's reach. Once the vehicle is positioned next to a charger, follow these instructions:

NOTE: If the vehicle is being transported to a charger, make sure the tow provider does not leave until confirming that the vehicle's high voltage Battery is successfully charging.

1. Jump start the low voltage system (see [Jump Starting on page 938](#)[Jump Starting on page 1455](#)). The low voltage battery must be jump started to support the high voltage Battery.
2. Wait a few minutes. Once the touchscreen powers on, plug the charge cable into CybertruckModel SModel XModel 3Model Y to begin charging the high voltage Battery.
3. When CybertruckModel SModel XModel 3Model Y begins to charge, disconnect the external power supply from the low voltage battery jump posts.

⚠ WARNING: Shut off the external power supply before removing either cable. Removing the cables while the external power source is active may cause arcing.

NOTE: If CybertruckModel SModel XModel 3Model Y is still not able to shift into Drive after charging the high voltage Battery, the low voltage battery may need additional time to recover. Reconnect the charge cable, wait several minutes, disconnect the charge cable, and then try again.

Before transporting to a non-Tesla charger, ensure your vehicle is equipped with an adapter that accommodates the specific type of charging station you will be using. Even at a non-Tesla charger, you will need to jump start the low voltage system before you can begin charging.

⚠ CAUTION: Always ensure CybertruckModel SModel XModel 3Model Y has enough range for your drive, or for being stored for an extended period. Do not rely on the range estimates displayed on the touchscreen or mobile app as range can decrease faster than projected due to ambient temperature, driving habits, wind, vehicle settings (such as Sentry Mode), etc.

NOTE: Towing your vehicle as a result of running out of range is not covered by the warranty.

Opening the Hood with No Power

Opening the Hood with No Power

In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the front trunk using the touchscreen, key fob, or mobile app. To open the front trunk in this situation:

NOTE: The following steps do not open the front trunk if CybertruckModel SModel XModel 3Model Y is locked and has low voltage power.



1. Locate an external low voltage power supply (such as a portable jump starter).
2. Release the tow eye cover by pressing firmly on the top right perimeter of the cover until it pivots inward, then gently pulling the raised section toward you.

NOTE: Depending on production date, either the positive or negative terminal may be attached to the tow eye cover.

NOTE: Your vehicle may also have a tow eye cover near the rear bumper. That is used for transporting only, and does not contain the proper wires for jump starting. Only use the front tow eye cover.

3. To remove the tow eye cover, insert a small, flat screwdriver into the top and bottom slots, release the snaps and pull the cover towards you.



4. Pull the two wires out of the tow eye opening to expose both terminals.



5. Connect the low voltage power supply's red positive (+) cable to the red positive (+) terminal.
6. Connect the low voltage power supply's black negative (-) cable to the black negative (-) terminal.



NOTE: Applying external low voltage power to these terminals only releases the hood latches. You cannot charge the low voltage battery using these terminals. Do not leave the low voltage power cables connected to the terminals for more than 30 seconds – remove from the vehicle's terminals as soon as the hood latches.

7. Turn on the external power supply (refer to the manufacturer's instructions). The hood latches are immediately released and you can now open the hood to access the front trunk area.
8. Disconnect both cables, beginning with the black negative (-) cable.
9. If pulling the vehicle onto a flatbed truck, do not replace the tow eye cover yet. If necessary, install the tow eye cover by inserting the wires into the tow eye opening and aligning the tow eye cover into position and snapping it into place.

Opening the Hood with No Power

If Model X has no electrical power, or if you are unable to open the front trunk using the touchscreen or key, follow these steps to open it:

1. Remove the tow eye cover (see [Instructions for Transporters on page 894](#)[Instructions for Transporters on page 902](#)).
2. Locate the two straps. One of these straps is labeled 'A' and the other is labeled 'B'.
3. Pull strap 'A' to release the primary latch.
4. Pull strap 'B' to release the secondary latch.
5. Lift the hood. You may need to push the hood down slightly to release the pressure against the secondary latch.



NOTE: It is important to pull the straps in the correct sequence or the appropriate latch does not release and the front trunk can not open.

When opening the front trunk using this method, the latches remain in the open position and you can not close it again without electrical power. To close a front trunk that has been opened by pulling the manual straps:

1. Charge the low voltage battery (for instructions, contact Tesla).
2. Press the **Front Trunk** button on the touchscreen to reset the primary and secondary latches.

Opening the Hood with No Power

This procedure is intended for Model S vehicles manufactured after approximately April 2016.

If Cybertruck Model S Model X Model 3 Model Y has no electrical power, or if you are unable to open the front trunk using the touchscreen or key, you must manually open the front trunk.

Locate the release cable housed in the front wheel arch liners on both front wheels of the vehicle (there are two release cables total). Follow these instructions to open the front trunk manually:

1. Release the cover in the RH front wheel well.
2. Pull the strap to release the primary latch.
3. Release the cover in the LH front wheel well.
4. Pull the strap to release the secondary latch.
5. Lift the hood. You may need to push the hood down slightly to release the pressure against the secondary latch.



|

NOTE: It is important to pull the straps in the correct sequence or the appropriate latch does not release and the front trunk can not open.

When opening the front trunk using this method, the latches remain in the open position and you can not close it again without electrical power. To close a front trunk that has been opened by pulling the manual straps:

1. Charge the low voltage battery (for instructions, contact Tesla).
2. Press the **Front Trunk** button on the touchscreen to reset the primary and secondary latches.

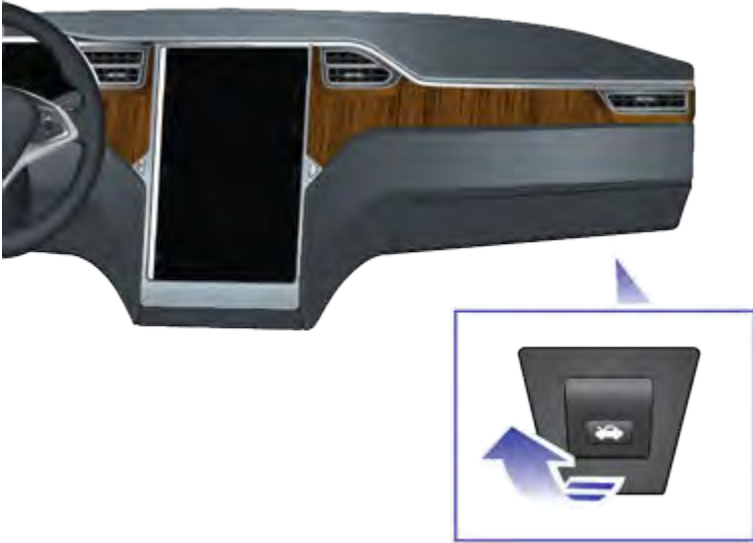
Opening the Hood with No Power

This procedure is intended for Model S vehicles built before April, 2016 which are equipped with a nose cone affixed to the front bumper.

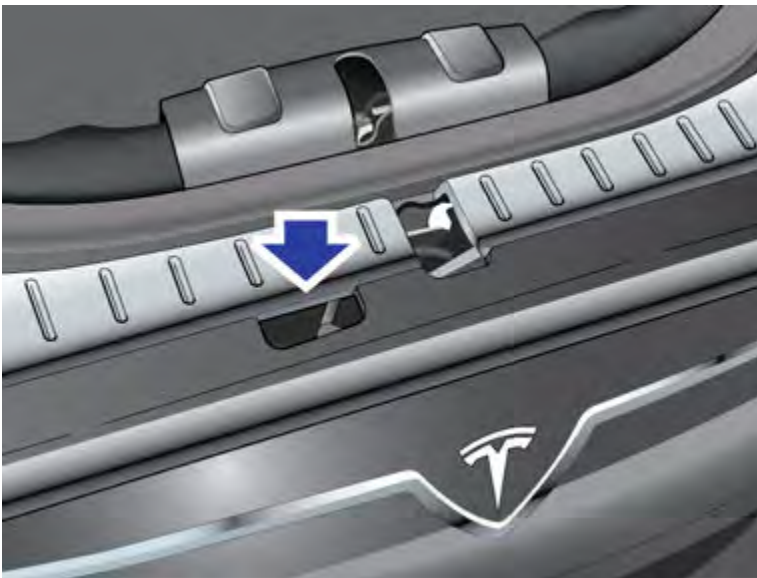


NOTE: The mechanical release lever described below is not available on all versions of CybertruckModel SModel XModel 3Model Y. For All-Wheel Drive vehicles and on some newer models, contact Tesla for assistance.

If CybertruckModel SModel XModel 3Model Y has no electrical power, or if you are unable to open the front trunk using the touchscreen or key, pull the mechanical release lever located below the glove box if you are inside the vehicle. This releases the primary catch.



Then, push down on the secondary latch lever and lift the hood. You may need to push the hood down slightly to release the pressure against the secondary catch.



NOTE: The mechanical release lever described below is not available on all versions of CybertruckModel SModel XModel 3Model Y. Some models are equipped with the positive (+) and negative (-) jump posts directly behind the nose cone, so you don't need to open the hood in order to connect a jump starter. For All-Wheel Drive vehicles and on some newer models, contact Tesla for assistance.

If you are outside of the vehicle and unable to get back in, or if the mechanical release does not work as expected:

1. Pry the nose cone toward you using a plastic pry tool in the top right corner. Ensure you don't damage the parking sensor cable, which is connected to the back of the nose cone.
2. Disconnect the parking sensor cable by pressing down on the tab of the clip, then pull to release.
3. Pull the primary release lever under the front middle of the hood on the left.



NOTE: On some vehicles, the positive (+) and (-) jump posts are located right behind the nose cone and does not require you to open the front trunk.

4. Release the secondary release lever under the front of the hood to the right and push up on the hood to open it.



Jump Starting

The procedure for jump starting differs depending on whether the low voltage battery is lead-acid or lithium-ion. To determine which battery your vehicle uses, touch **Controls > Software > Additional Vehicle Information**. Both procedures are provided in this section.

The procedure for jump starting differs depending on whether the low voltage battery is lead-acid or lithium-ion. To determine which battery your vehicle uses, touch **Controls > Software > Additional Vehicle Information**. Both procedures are provided in this section.

The following instructions assume you are using an external low voltage power supply (such as a portable jump starter). If jump starting CybertruckModel SModel XModel 3Model Y using another vehicle, refer to the vehicle manufacturer's instructions.

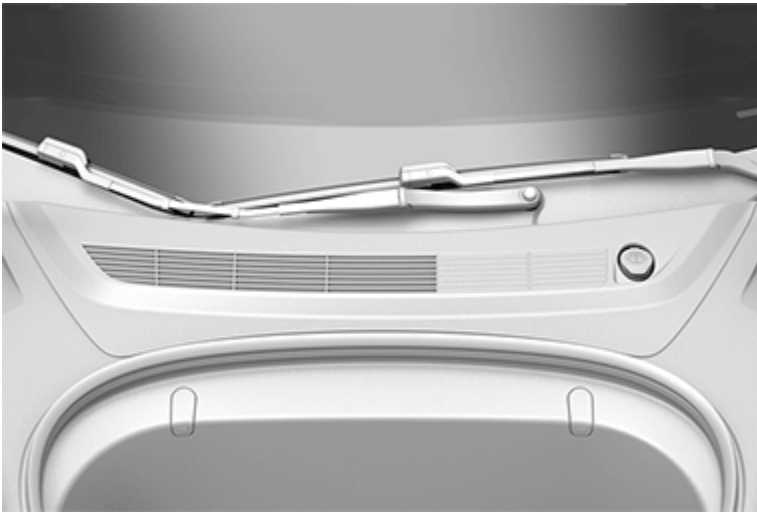
⚠ CAUTION: CybertruckModel SModel XModel 3Model Y cannot be used to jump start another vehicle. Doing so can result in damage.

⚠ CAUTION: Avoid short circuits when jump starting CybertruckModel SModel XModel 3Model Y. Connecting cables to the wrong jump post, touching leads together, etc., can damage CybertruckModel SModel XModel 3Model Y.

Jump Starting the Low Voltage (Lead-Acid) Battery

Vehicles manufactured in Gigafactory Shanghai before approximately October 2021, and in the Fremont Factory before approximately December 2021, are equipped with a Lead-Acid low voltage battery.

If jump starting CybertruckModel SModel XModel 3Model Y using another vehicle, refer to that vehicle manufacturer's instructions. The following instructions assume you are using an external low voltage power supply (such as a portable jump starter).



1. Open the hood (see [Opening the Hood with No Power on page 932](#)).
2. Remove the maintenance panel by pulling it upwards to release the trim clips that hold it in place.
3. Remove the cabin intake trim panel by pulling it upwards to release the trim clips that hold it in place.
4. If equipped with a HEPA filter, carefully fold the HEPA filter gasket towards the front of the vehicle to gain access to the low voltage battery.

NOTE: Space to access the low voltage battery is limited. Consider removing the push clips from the rear cowl to improve accessibility.

5. Connect the low voltage power supply's red positive (+) cable to the red positive (+) terminal on the low voltage battery.

⚠ CAUTION: To avoid damaging CybertruckModel SModel XModel 3Model Y, do not allow the positive cable to contact other metal components, such as the battery tie-down bracket.

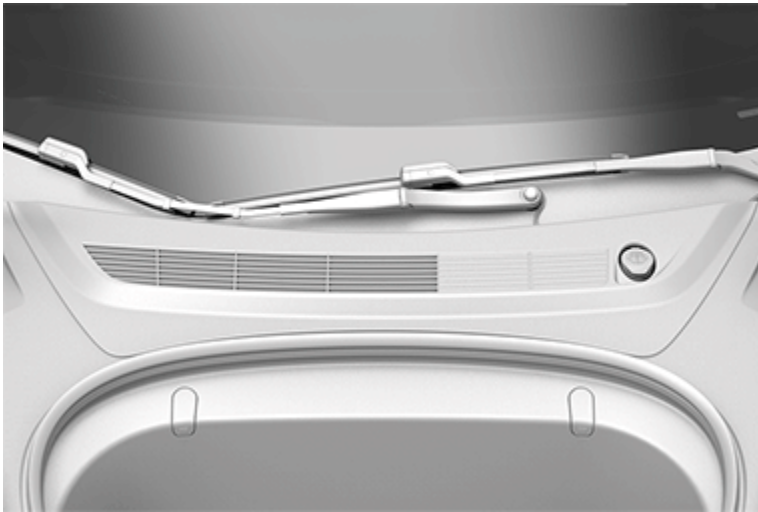


6. Connect the low voltage power supply's black negative (-) cable to the black negative (-) terminal on the low voltage battery.
7. Turn on the external power supply (refer to the manufacturer's instructions). Touch the touchscreen to wake it up.
NOTE: It may take several minutes to receive enough power to wake up the touchscreen.
8. When external low voltage power is no longer required, disconnect both cables from the terminals on the battery, beginning with the black negative (-) cable.
9. Reinstall the cabin intake trim panel by placing it back in its original location and pressing down until it is secure.
10. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.
11. Close the hood.

Jump Starting the Low Voltage (Lead-Acid) Battery

Vehicles manufactured in Gigafactory Shanghai before approximately October 2021, and in the Fremont Factory before approximately December 2021, are equipped with a Lead-Acid low voltage battery.

If jump starting CybertruckModel SModel XModel 3Model Y using another vehicle, refer to that vehicle manufacturer's instructions. The following instructions assume you are using an external low voltage power supply (such as a portable jump starter).



1. Open the hood (see [Opening the Hood with No Power on page 932](#)).
2. Remove the maintenance panel by pulling it upwards to release the trim clips that hold it in place.
3. Remove the cabin intake trim panel by pulling it upwards to release the trim clips that hold it in place.
4. If equipped with a HEPA filter, carefully fold the HEPA filter gasket towards the front of the vehicle to gain access to the low voltage battery.

NOTE: Space to access the low voltage battery is limited. Consider removing the push clips from the rear cowl to improve accessibility.

5. Connect the low voltage power supply's red positive (+) cable to the red positive (+) terminal on the low voltage battery.



CAUTION: To avoid damaging CybertruckModel SModel XModel 3Model Y, do not allow the positive cable to contact other metal components, such as the battery tie-down bracket.

6. Connect the low voltage power supply's black negative (-) cable to the black negative (-) terminal on the low voltage battery.
7. Turn on the external power supply (refer to the manufacturer's instructions). Touch the touchscreen to wake it up.
NOTE: It may take several minutes to receive enough power to wake up the touchscreen.
8. When external low voltage power is no longer required, disconnect both cables from the terminals on the battery, beginning with the black negative (-) cable.

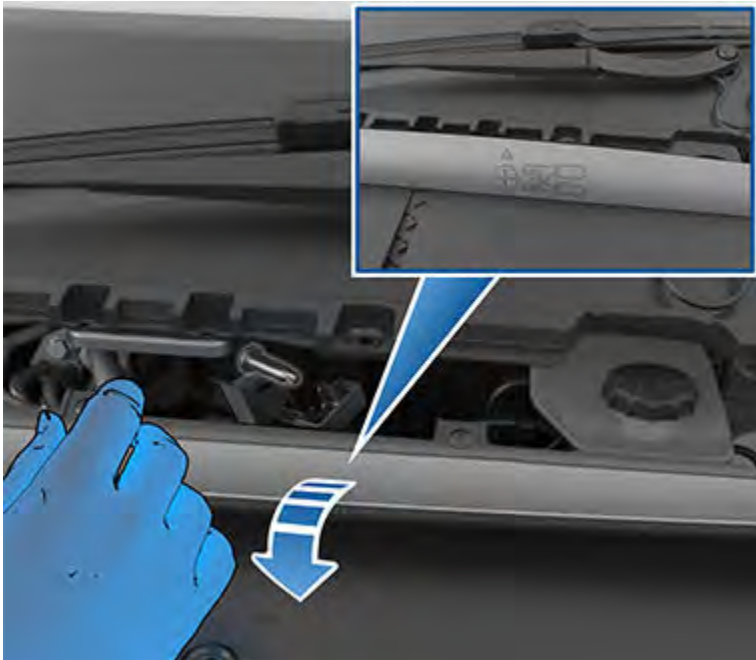


9. Reinstall the cabin intake trim panel by placing it back in its original location and pressing down until it is secure.
10. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.
11. Close the hood.

Jump Starting the Low Voltage (Lithium-Ion) Battery

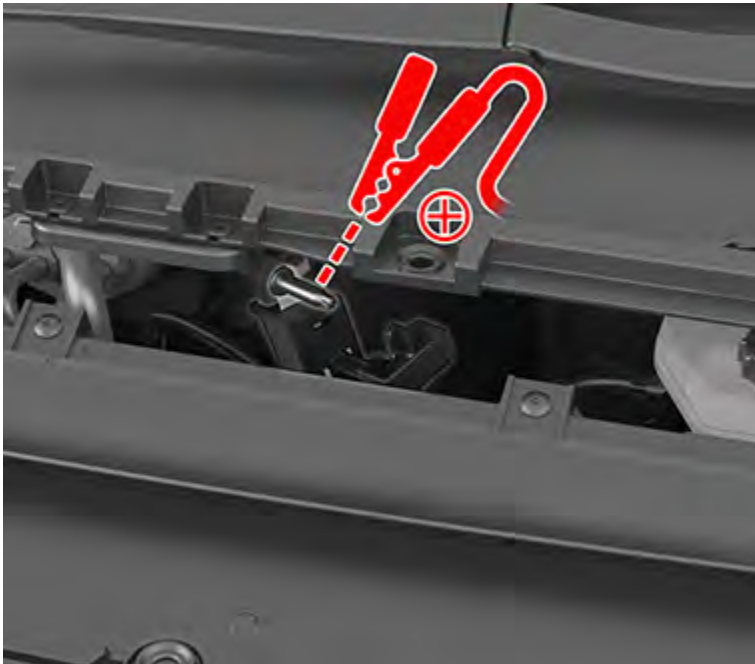
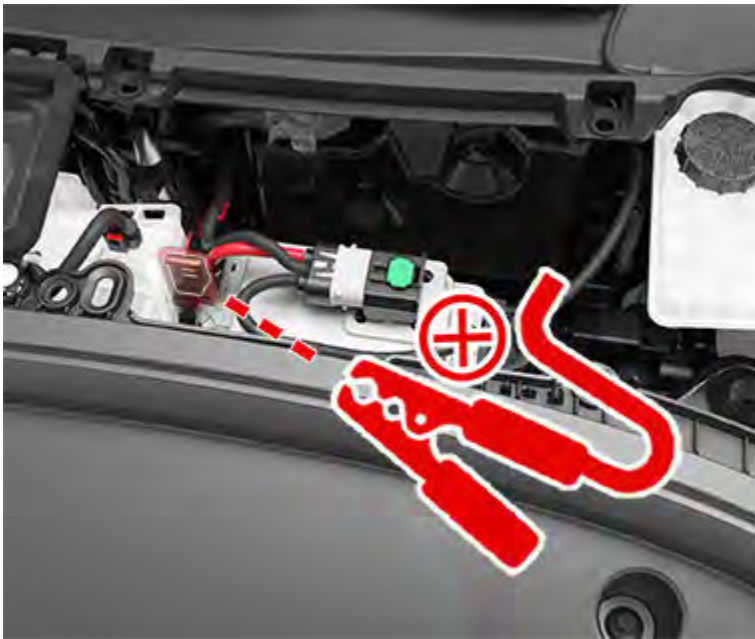
Vehicles manufactured in Gigafactory Shanghai after approximately October 2021, and in the Fremont Factory after approximately December 2021, are equipped with a Lithium-Ion low voltage battery.

1. Open the hood (see [Opening the Hood with No Power on page 932](#)).
2. Remove the maintenance panel by pulling it upwards to release the trim clips that hold it in place.
3. If equipped with a HEPA filter, carefully fold the HEPA filter gasket towards the front of the vehicle to gain access to the low voltage jump post.

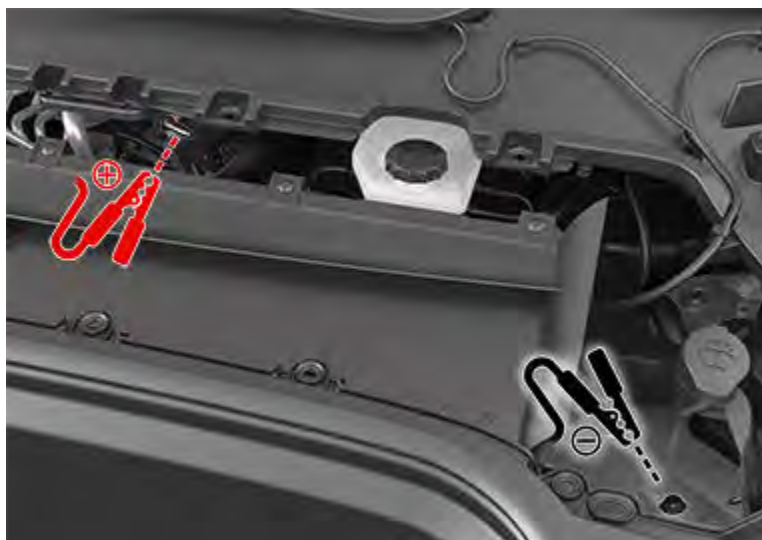


4. Pull back the black seal to reveal the positive jump post. Remove the red cover and connect the external low voltage power supply's red positive (+) cable to the red positive (+) jump post.

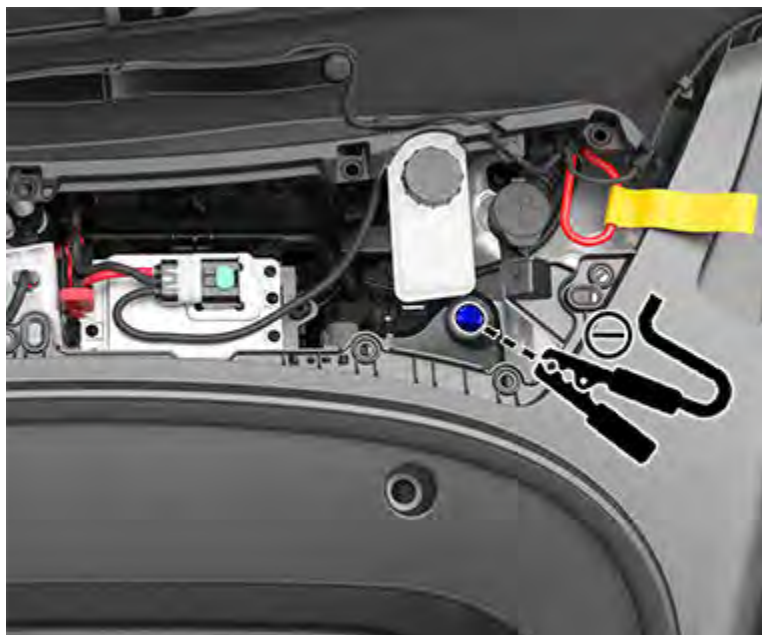
⚠ CAUTION: To avoid damaging the vehicle, do not allow the positive cable to contact other metal components.



5. The HEPA filter bolt (shown below) serves as the negative (-) jump post. Connect the low voltage power supply's black negative (-) cable to the black negative HEPA jump post.



6. Connect the external low voltage power supply's black negative (-) cable to the bolt located between the brake fluid reservoir and the front trunk next to the brake fluid reservoir. The bolt is used as a grounding location for the external support.





7. Connect the external low voltage power supply's black negative (-) cable to the
8. Turn on the external power supply (refer to the manufacturer's instructions) for 20 seconds only, then switch off or disconnect the power supply.

⚠ CAUTION: If you leave the power supply on for longer than 20 seconds, the low voltage battery may not self-recover and the vehicle might not be able to shift into Drive. If this occurs, after disconnecting the power supply, disconnect the low voltage battery, then reconnect the low voltage battery to enable another battery self-recovery attempt.

NOTE: If attempting to activate Transport Mode (to winch the vehicle onto a flatbed truck), the low voltage battery is not required to self-recover. Leave the power supply connected continuously until the vehicle has been secured.

9. Open the driver door and wait two minutes.
10. Ensure the vehicle is able to shift into Drive.
11. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.
12. Close the hood.

Follow these steps:

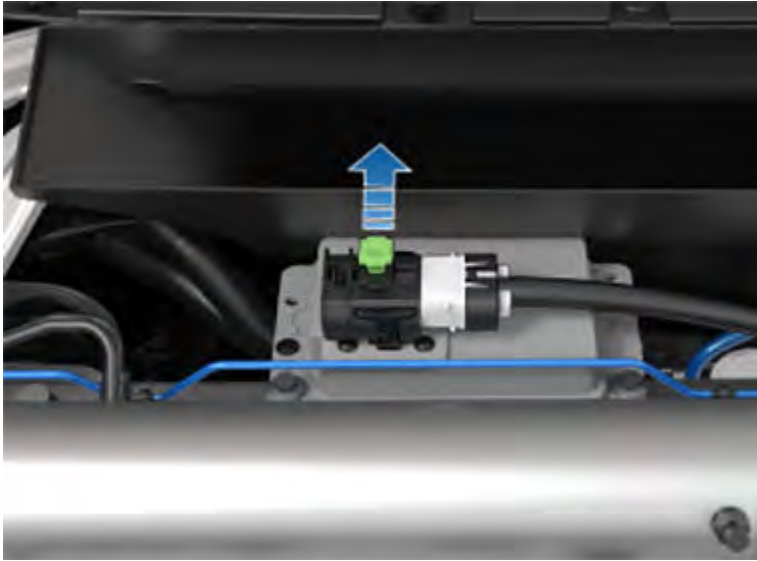
1. Open the hood (see [Opening the Hood with No Power on page 932](#)).
2. Remove the maintenance panel by pulling it upwards to release the trim clips that hold it in place.



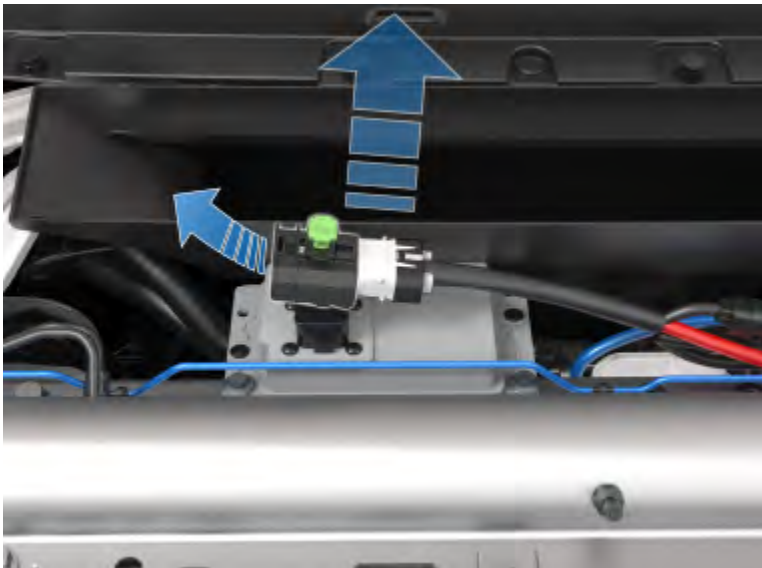
3. On top of the low voltage battery, lift the locking tab that attaches the electrical connector to the connector housing.



NOTE: The appearance of the electrical connector and connector housing may vary, but the procedure remains the same.



4. On top of the low voltage battery, pull the connector housing to the left. The electrical connector releases from the low voltage battery.



5. Lay a dry cloth on top of the metal beams surrounding the positive (+) terminal connector. The terminal connector is located under the wiper motor and white, rectangular fluid reservoir.
6. Reach around and under the wiper motor to release the cover from the red positive (+) jump post, and then connect the low voltage power supply's red positive (+) cable to the red positive (+) jump post. Release the cover from the red positive (+) jump post, and then connect the low voltage power supply's red positive (+) cable to the red positive (+) jump post.

⚠ CAUTION: To avoid damaging Cybertruck Model S Model X Model 3 Model Y, do not allow the positive cable to contact other metal components.

NOTE: Depending on date of manufacture, the cover and the red positive (+) jump post location may differ slightly.

For vehicles manufactured prior to approximately January 2023:

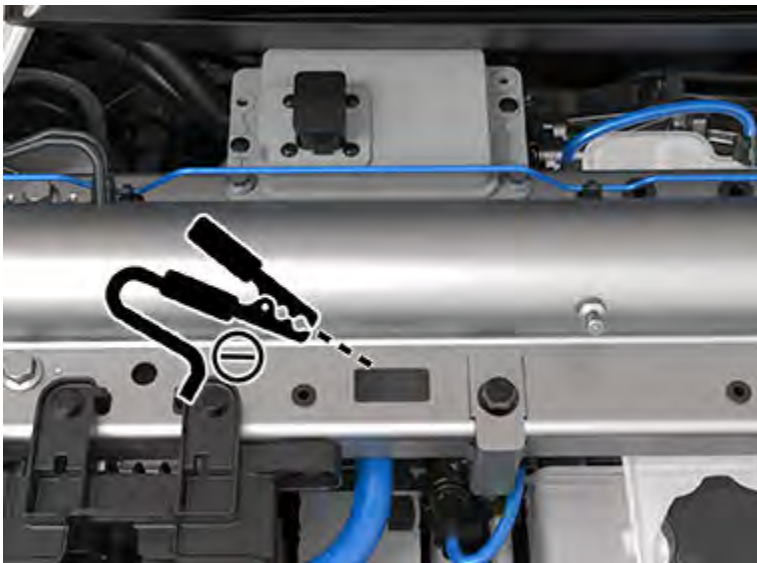


For vehicles manufactures after approximately January 2023:





7. Connect the low voltage power supply's black negative (-) cable to the vehicle in the location shown.



8. Turn on the external power supply (refer to the manufacturer's instructions). Touch the touchscreen to wake it up.

NOTE: It may take several minutes to receive enough power to wake up the touchscreen.

9. When external low voltage power is no longer required, disconnect both cables, beginning with the black negative (-) cable.

10. On top of the low voltage battery, push the connector housing towards the electrical connector so that the electrical connector engages the low voltage battery.

11. On top of the low voltage battery, push down the locking tab that attaches the electrical connector to the connector housing.

12. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.

13. Close the hood.

Follow these steps:

Ensure you have an external power supply. After opening the hood:

1. Remove the maintenance panel.



2. Find the positive (+) and negative (-) jump posts.
3. Release the cover from the red positive (+) jump post, and then connect the low voltage power supply's red positive (+) cable to the red positive (+) jump post.
4. Connect the low voltage power supply's black negative (-) cable to the vehicle.
5. Turn on the external power supply (refer to the manufacturer's instructions). Touch the touchscreen to wake it up.
NOTE: It may take several minutes to receive enough power to wake up the touchscreen.
6. When external low voltage power is no longer required, disconnect both cables, beginning with the black negative (-) cable.
7. On top of the low voltage battery, push the connector housing towards the electrical connector so that the electrical connector engages the low voltage battery.
8. On top of the low voltage battery, push down the locking tab that attaches the electrical connector to the connector housing.
9. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.
10. Close the hood.

Opening Doors with No Power

To open a front door in the unlikely situation when CybertruckModel SModel XModel 3Model Y has no power, pull up the manual door release located in front of the window switches.



WARNING: Do not use the manual door release while the vehicle is moving.

CAUTION: Manual door releases are designed to be used only in situations when CybertruckModel SModel XModel 3Model Y has no power. When CybertruckModel SModel XModel 3Model Y has power, use the button located at the top of the interior door handle.

NOTE: Only the front doors are equipped with a manual door release.



Opening Doors with No Power

Opening a Front Door with No Power

To open a front door in the unlikely situation when CybertruckModel SModel XModel 3Model Y has no power, pull up the manual door release located in front of the window switches.



Opening a Rear Door with No Power

You can open a rear door manually in the unlikely situation in which CybertruckModel SModel XModel 3Model Y has no power:



1. At the bottom of the rear door pocket, there is a slot in front of the release cover. Slide your finger into the slot and lift to remove the cover.
2. Pull the mechanical release cable forward.

⚠ WARNING: Do not use the manual door release while the vehicle is moving.



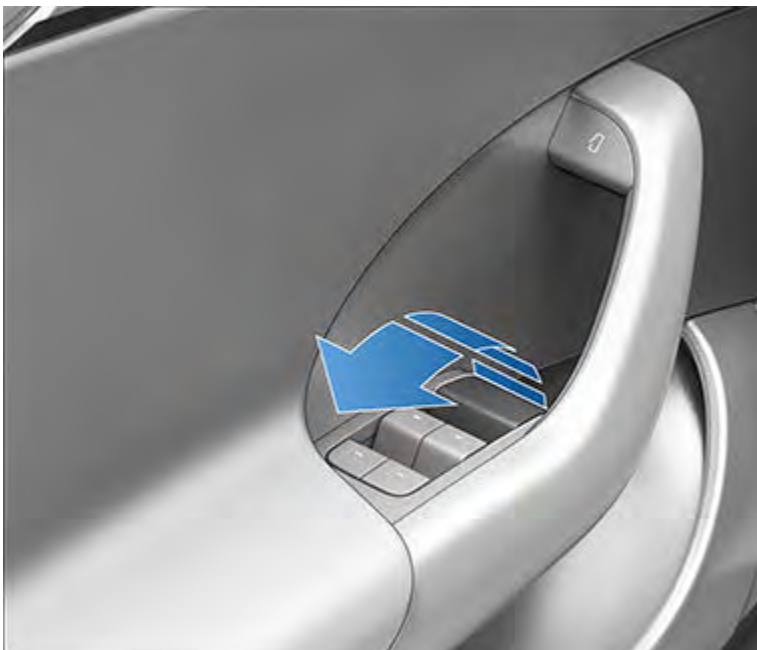
CAUTION: Manual door releases are designed to be used only in situations when CybertruckModel SModel XModel 3Model Y has no power. When CybertruckModel SModel XModel 3Model Y has power, use the button located at the top of the interior door handle.

Opening Doors with No Power

Opening a Front Door with No Power

To open a front door in the unlikely situation when CybertruckModel SModel XModel 3Model Y has no power, pull up the manual door release located in front of the window switches.

If CybertruckModel SModel XModel 3Model Y has no electrical power, the front doors open as usual using the interior door handles.





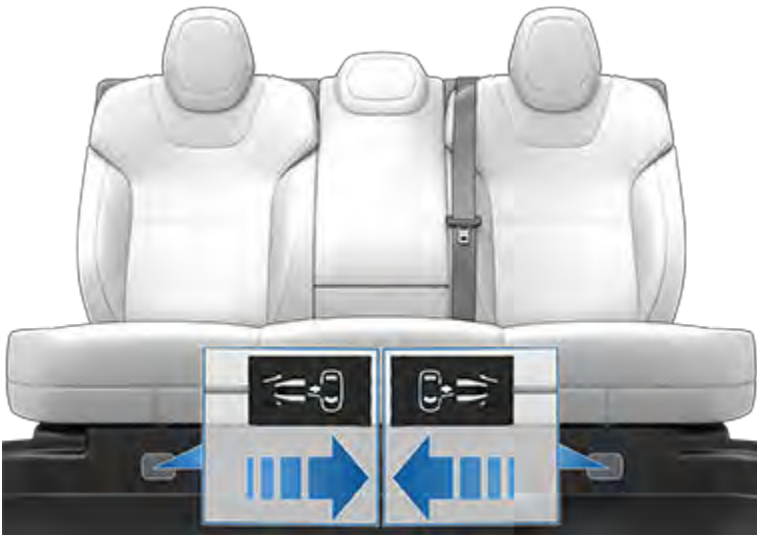
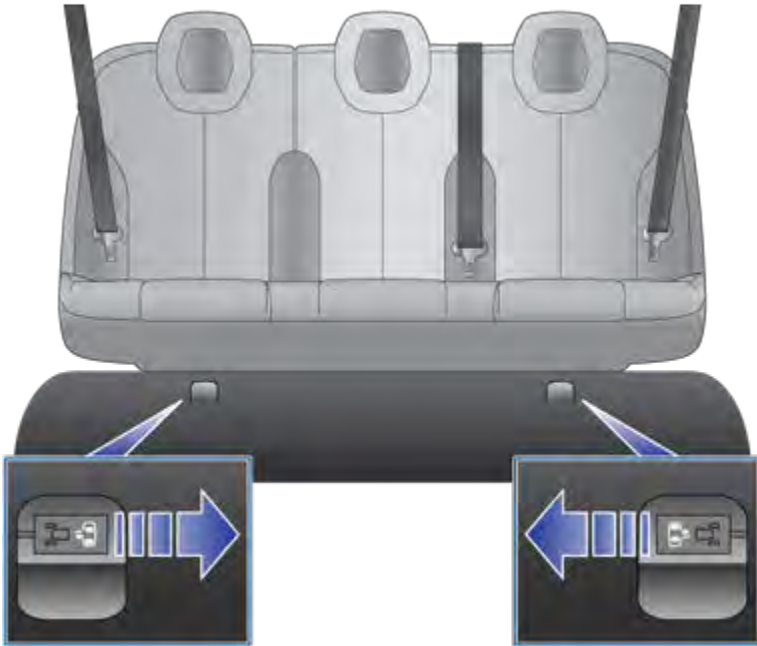
Opening a Rear Door with No Power

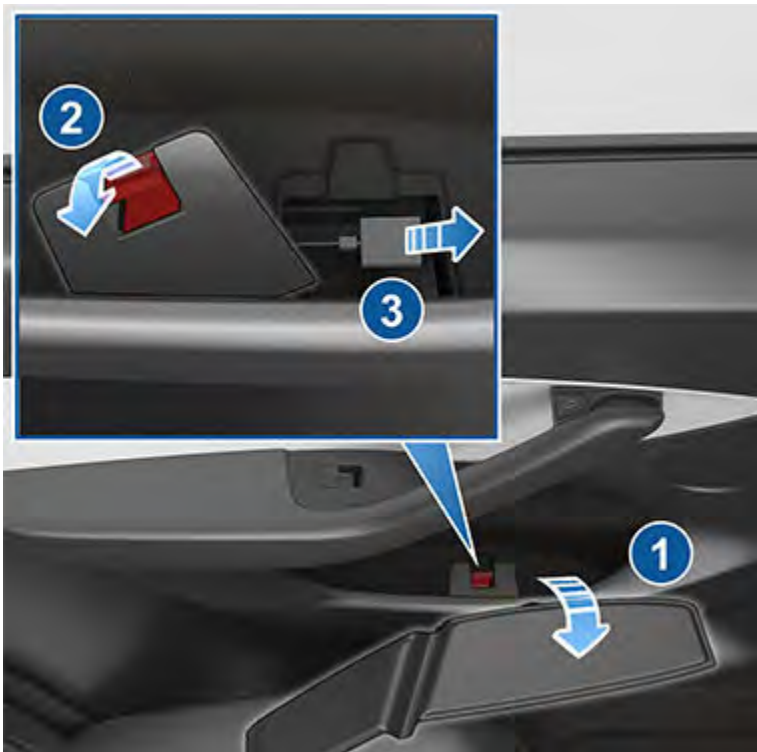
To open a rear door in the unlikely situation when Cybertruck Model S Model X Model 3 Model Y has no power, fold back the edge of the carpet below the rear seats to expose the mechanical release cable. Pull the mechanical release cable toward the center of the vehicle.

To open the falcon wing doors in the unlikely situation when Cybertruck Model S Model X Model 3 Model Y has no power, carefully remove the speaker grille from the door and pull the mechanical release cable down and towards the front of the vehicle. After the latch is released, manually lift up the door.

If equipped, you can open a rear door manually in the unlikely situation in which Cybertruck Model S Model X Model 3 Model Y has no power:

NOTE: Not all Cybertruck Model S Model X Model 3 Model Y vehicles are equipped with a manual release for the rear doors.





1. Remove the mat from the bottom of the rear door pocket.
2. Press the red tab to remove the access door.
3. Pull the mechanical release cable forward.



⚠ CAUTION: Manual door releases are designed to be used only in situations when CybertruckModel SModel XModel 3Model Y has no power. When CybertruckModel SModel XModel 3Model Y has power, use the button located at the top of the interior door handle.

Troubleshooting

Troubleshooting Alerts

APP_w009

**Automatic Emergency Braking is unavailable
Feature may be restored on next drive**

What this alert means:

The Automatic Emergency Braking feature is unavailable for the rest of your current drive. This alert does not specifically indicate any other braking functions or features are unavailable.

This alert may be present for several reasons. Other alerts may be present for conditions that also cause Automatic Emergency Braking to be unavailable.

What to do:

No action is typically required. Automatic Emergency Braking will usually be available again when you start your next drive.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.

For more information, see [Collision Avoidance Assist on page 645](#).

APP_w048

**Autopilot features temporarily unavailable
Features may be restored on next drive**

What this alert means:

Autopilot features are currently unavailable on your vehicle. Depending on the configuration of your vehicle, Autopilot features that are disabled may include:

- Autosteer
- Traffic-Aware Cruise Control
- Automatic Emergency Braking
- Forward Collision Warning
- Lane Departure Warning

What to do:

This alert can be set for several reasons. Check for additional alerts that indicate the cause of this condition.

Typically, Autopilot features are restored on your next drive. If this alert persists across multiple drives, schedule service at your earliest convenience.

For more information and the full list of Autopilot features, see [About Autopilot on page 550](#).

APP_w207

Autosteer temporarily unavailable

What this alert means:

Autosteer is temporarily unavailable. This could be a temporary condition caused by an external factor, such as:

- Missing or faded lane markers.



- Narrow or winding roads.
- Poor visibility due to rain, snow, fog, or other weather.
- Extremely hot or cold temperatures.
- Bright light due to other vehicle headlights, direct sunlight, or other light sources.

This alert will also be present if you exceeded the maximum speed limit for Autosteer with Autosteer active. In this case, Autosteer will not be available for the rest of your current drive.

What to do:

Continue to your destination. If Autosteer is not available by the time you reach your destination, and remains unavailable during your next planned drive, check for the following:

- Damage or obstruction caused by mud, ice, snow, or other environmental factors
- Obstruction caused by an object mounted on the vehicle, like a bike rack
- Obstructions caused by adding paint or adhesive products like wraps, stickers, or rubber coatings to your vehicle
- A damaged or misaligned bumper

If there are no obvious obstructions, or if you find damage to the vehicle, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#) [Autopilot Features on page 553](#).

APP_w218**Autosteer speed limit exceeded
Take control of steering wheel****What this alert means:**

Autosteer is unavailable because your vehicle has exceeded the maximum speed limit for this driver assistance feature.

What to do:

Take immediate control of the steering wheelsteering yoke (or steering wheel) and maintain control until you reach your destination.

In most cases, Autosteer will not be available for the rest of your current drive. To reset it, bring the vehicle to a complete stop and shift into Park. When you shift into Drive to travel to your next destination, Autosteer should be available again.

NOTE: If this alert becomes active while you are driving in Germany, Autosteer should be available again once your vehicle is traveling below the Autosteer speed limit.

If Autosteer is not available during your next drive, and remains unavailable throughout subsequent drives, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#) [Autopilot Features on page 553](#).

APP_w221**Cruise control unavailable
Reduced front radar visibility****What this alert means:**

Traffic-Aware Cruise Control and Autosteer are unavailable because the radar located in the front bumper area of your vehicle has no or low visibility.

This could be a temporary obstruction caused by factors like snow, ice, dirt, or mud.

What to do:



Continue to your destination. Your vehicle is OK to drive. Traffic-Aware Cruise Control and Autosteer will remain unavailable as long as the radar lacks adequate visibility.

If the alert persists throughout your drive, examine the front bumper before your next planned drive and attempt to clear any obstruction.

If this alert persists throughout subsequent drives but no obstruction is visible on the front bumper where the radar is located, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w222

Cruise control unavailable

Reduced front camera visibility

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because one or more of the front cameras in your vehicle is blocked or blinded by external conditions.

Traffic-Aware Cruise Control and Autosteer will remain unavailable while a front camera lacks adequate visibility. Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.
- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive.

This is often a temporary issue that clears up on its own. If the alert does not clear by the end of your drive:

- Inspect and clean the front camera area at the top center of the windshield before your next planned drive.
- Check the camera surface for condensation, dirt, or other debris and attempt to clear any obstruction.

See [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#) for more information on clearing dirt or debris from that area of the vehicle.

Although condensation on the inside of the front camera enclosure cannot be wiped clean, you can usually clear it quicker by following these steps:

1. Pre-condition the cabin with the temperature set to High and A/C turned ON.
2. Turn on the front windshield defroster.

If this alert persists throughout subsequent drives but no front camera obstruction is visible, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w224

Cruise control unavailable

Continue driving to allow cameras to calibrate

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because the cameras on your vehicle are not fully calibrated.

Your vehicle must maneuver with great precision when features like Traffic-Aware Cruise Control and Autosteer are active. Before these features can be used for the first time, the cameras must complete an initial self-calibration. Occasionally, one or more cameras can become uncalibrated.

**What to do:**

Continue to your destination. Your vehicle is OK to drive.

Traffic-Aware Cruise Control and Autosteer will remain unavailable until camera calibration is complete.

When calibration is complete, Traffic-Aware Cruise Control and Autosteer should be available.

For your convenience, a calibration progress indicator is displayed on the touchscreen. Calibration typically completes after your vehicle has driven 20–25 miles (32–40 km), but the distance varies depending on road and environmental conditions. For example, driving on a straight road with highly visible lane markings helps the cameras calibrate quicker.

If the alert persists and camera calibration has not completed after your vehicle has driven 100 miles (160 km) or more, or Traffic-Aware Cruise Control and Autosteer remain unavailable despite successful camera calibration, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w304**Camera blocked or blinded****Clean camera or wait for it to regain visibility****What this alert means:**

One or more of the vehicle cameras has limited visibility, or no visibility at all, due to external conditions. When the cameras on your vehicle cannot provide accurate visual information, some or all Autopilot features may be temporarily unavailable.

Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.
- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive. This is often a temporary issue that will be resolved when condensation evaporates, or when a particular environmental condition or feature is no longer present.

If the alert does not clear by the time you reach your destination, check camera surfaces for condensation, dirt, or other debris. For camera locations, see [Cameras on page 101](#)[Cameras on page 1136](#).

Clean the cameras as necessary before your next planned drive. For recommended cleaning procedures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If you continue to see this alert after cleaning the cameras, check the inside surfaces of the door pillar camera enclosures for condensation. Although condensation inside the camera enclosures cannot be wiped clean, you can usually clear it faster by following these steps:

1. Precondition the cabin by turning Climate ON, setting temperature to High, and making sure A/C is ON.
2. Turn on the front windshield defroster.
3. Direct the air vents toward the door pillar cameras.

For more information on clearing condensation from camera enclosures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If the alert does not clear by the end of your next planned drive, despite cleaning the indicated camera(s) and following recommended steps to clear condensation, schedule service at your next convenient opportunity. Your vehicle is OK to drive in the meantime.



BMS_a066

Maximum charge level and range may be reduced

OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. As a result, maximum charge level and range may be reduced. Service is required to restore full performance.

What to do:

Your vehicle is OK to drive.

If this alert persists, schedule service at your earliest convenience. Without service, you may notice further reductions in your vehicle's maximum charge level and range.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a067

High voltage battery performance limited

OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

Your vehicle is OK to drive.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a068

High voltage battery requires service

Acceleration and charging performance reduced

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

Service is required to restore full performance.

What to do:

Your vehicle is OK to drive.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.



While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a069
Battery charge level low
Charge now

What this alert means:

Your vehicle has detected that the high voltage battery does not have enough energy remaining to support driving. This alert is usually present because your vehicle's high voltage battery charge level has been reduced through normal operation.

Your vehicle will be unable to drive or continue driving until charged.

If this alert is present while you are driving, your vehicle needs to shut down. A separate vehicle alert should be present to indicate this condition. It is also possible your vehicle may shut down unexpectedly.

If this alert is present when your vehicle is parked, you may be unable to drive.

What to do:

Charge your vehicle immediately. Charging your vehicle should restore your vehicle's ability to drive.

If this alert occurs during subsequent drives, despite a displayed battery charge level of 5% or higher, schedule service at your earliest convenience.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CC_a001
Unable to charge - Insufficient grounding
Proper wiring or outlet grounding must be verified

What this alert means:

No ground connection detected in the Wall Connector.

What to do:

Have the Wall Connector inspected by an electrician to make sure it is properly grounded. Your electrician should ensure there is proper grounding at your circuit breaker or power distribution box and also ensure that appropriate connections are made to the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a002
Unable to charge - Insufficient grounding
Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a003

Unable to charge - Wall Connector GFCI tripped
Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a004

Unable to charge - Wall Connector issue
Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a005

Unable to charge - Wall Connector GFCI tripped
Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.



Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a006

**Unable to charge - Wall Connector overcurrent
Disconnect and retry or use different equipment**

What this alert means:

Over current protection.

What to do:

Reduce the vehicle's charge current setting. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a007

**Unable to charge - Input voltage too high
Voltage must be within Wall Connector rating**

What this alert means:

Over or under voltage protection.

What to do:

Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a008

**Unable to charge - Input voltage too low
Voltage must be within Wall Connector rating**

What this alert means:

Over or under voltage protection.

What to do:

Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a009

**Unable to charge - Input wired incorrectly
Input wiring to Wall Connector must be corrected**

What this alert means:

Input miswired: possibly Line and Neutral are swapped.

What to do:

The wiring between the wall power and the Wall Connector has been incorrectly installed. Consult your electrician.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a010

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a011

Unable to charge - Wall Connector too hot Let Wall Connector cool and try again

What this alert means:

Over temperature protection (latchoff).

What to do:

Make sure the Wall Connector is not covered by anything and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a012

Unable to charge - Wall connection too hot Outlet or Wall Connector wiring must be checked

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has stopped to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

To regain normal charge operation, try the following steps.

If the Wall Connector is plugged into a wall outlet, make sure:

- The plug is fully inserted into the receptacle / outlet
- The plug / outlet area is not blocked or covered by anything



- There is no heat source nearby

If the issue persists or the Wall Connector is hard-wired, contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a013

Unable to charge - Charge handle too hot

Check charge handle or charge port for debris

What this alert means:

Over temperature protection (latchoff).

What to do:

Make sure the connector is fully inserted into the charge inlet in the vehicle's charging port, is not covered by anything, and there is no heat source nearby. If the issue persists in normal ambient temperatures (under 100°F or 38°C), service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a014

Unable to charge - Wall Connector issue

Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a015

Unable to charge - Vehicle connection issue

Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

**What to do:**

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a016**Unable to charge - Vehicle connection issue****Insert charge handle fully into charge port****What this alert means:**

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a017**Unable to charge - Vehicle connection issue****Insert charge handle fully into charge port****What this alert means:**

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a018**Unable to charge - Vehicle connection issue****Insert charge handle fully into charge port****What this alert means:**

A communication error occurred between the Wall Connector and the vehicle.

What to do:



Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a019

Unable to charge - Vehicle connection issue Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a020

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a021

Unable to charge - No primary Wall Connector
Check that primary unit is powered and available

What this alert means:

Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).

For more information, see the [installation guide](#) for your Wall Connector.

CC_a022

Unable to charge - More than 1 primary unit
Ensure only 1 Wall Connector is set as primary

What this alert means:

Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).

For more information, see the [installation guide](#) for your Wall Connector.

CC_a023

Unable to charge - Too many Wall Connectors
Ensure no more than 3 units paired with primary

What this alert means:

Load sharing (circuit breaker sharing) network: More than three Wall Connectors are paired with the same primary unit.

What to do:

Consult your electrician to have one or more paired Wall Connectors moved to a different circuit and disconnected (unpaired) from this load sharing (circuit breaker sharing) network.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a024

Unable to charge - Low Wall Connector current
Primary unit current setting must be increased

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.



If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.

Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a025

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a026

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.



3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a027

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a028

Unable to charge - Incorrect switch setting Wall Connector rotary switch must be adjusted

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.

If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.

Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

**CC_a029****Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port****What this alert means:**

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a030**Unable to charge - Primary / paired unit mismatch
Wall Connector current ratings must match****What this alert means:**

Load sharing (circuit breaker sharing) network: The paired Wall Connectors have different maximum current capabilities.

What to do:

Only Wall Connectors with the same maximum current capabilities can be paired in a load sharing (circuit breaker sharing) network. Have your electrician inspect the type labels on the Wall Connectors and make sure the current capabilities match. It is further recommended that your electrician only pair Wall Connectors with the same part number, as an easy way to make sure paired units are compatible.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a041**Charge rate reduced - Wall connection hot
Outlet or Wall Connector wiring must be checked****What this alert means:**

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a043**Wall Connector configuration must be completed
Refer to Installation Guide to enable charging****What this alert means:**

Wall Connector configuration is incomplete.

**What to do:**

The Wall Connector needs to be commissioned to appropriately configure the circuit breaker size and protective earth connection type.

For more information, refer to Commissioning Procedure in the Wall Connector Installation Manual. If the issue persists, contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure the power output and grounding connections are properly configured according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CP_a004

**Charging equipment not recognized
Try again or try different equipment**

What this alert means:

The charge port is unable to detect whether a charge cable is inserted, or the type of charge cable connected.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

If this alert appears while a charge cable **is** connected, determine whether the issue is caused by the charging equipment or the vehicle. Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If this alert appears while a charge cable is **not** connected or if the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a010

**Charging equipment communication error
Try again or try different equipment**

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the external charging equipment. It cannot sense a valid control pilot signal coming from the charging equipment.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

First, confirm the lack of effective communication is caused by the external charging equipment rather than an issue with your vehicle. This is usually the case.

Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).



- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a043

Charge port door sensor fault

Charge port may not operate as expected

What this alert means:

One of the charge port door sensors is not functioning normally. When this occurs, the charge port may be unable to accurately sense the charge port door position and the charge port may not operate as expected.

- The charge port latch may intermittently remain engaged when the charge port door is opened.
- The charge port light may illuminate only intermittently when the charge port door is opened.

What to do:

Try closing the charge port door and then opening it again.

For more information, see [Opening the Charge Port on page 726](#)[Opening the Charge Port on page 1370](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a046

Charging equipment communication lost

Check power source and charging equipment

What this alert means:

Charging stopped because communication between the vehicle and the external charging equipment was interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Confirm whether the external charging equipment is powered by looking for any status lights, displays, or other indicators on the equipment.

If the equipment is **not** powered, try to restore the external charging equipment's power source.

- If attempting to charge at a public station and power is unable to be restored, contact the station operator.
- If attempting to charge at a private station (for example: charging at home) and power is unable to be restored, contact an electrician.

If the equipment is powered, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.



You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CP_a051

Charge port may not open when pressed
Use another method to open the charge port

What this alert means:

One of the charge port door sensors is not communicating properly. The charge port may not recognize the request to open when the charge port door is pressed.

What to do:

You can still use all other usual methods to open the charge port door:

- Use the vehicle touchscreen.
- Use the Tesla Mobile App.
- With your vehicle unlocked, press the charge handle button on any Tesla charge cable, including a Wall Connector, Mobile Connector, or Supercharger.
- Hold and press the trunk button on your key fob.

For more information, see [Opening the Charge Port on page 726](#) [Opening the Charge Port on page 1370](#).

CP_a053

Unable to charge - Charge station not powered
Check power source or try a different station

What this alert means:

Charging cannot begin because the charging equipment is not ready. A charge handle is detected, but the charging station is not communicating with the vehicle. This issue could occur because:

- The charging station is not powered.
- The control pilot signal between the charging station and the vehicle is interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If using a Mobile Connector or Wall Connector, first check the status lights on the front. If no status lights are visible, check the power source and contact an electrician to inspect the building wiring connection to the wall outlet or the Wall Connector to confirm that all wires are properly connected and torqued.

If using other external charging equipment, consult the product's owner's manual to learn how to confirm that the station is powered. Contact an electrician to inspect the building wiring and charging equipment as necessary.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

**CP_a054****Charge port latch not engaged****Fully insert charge cable or check for obstruction****What this alert means:**

The charge port latch is unable to latch the charge cable in the charge port inlet. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet.

If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). Make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#) [Manually Releasing Charge Cable on page 740](#) [Manually Releasing Charge Cable on page 1375](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a055**Charging equipment communication lost****Check power source and charging equipment****What this alert means:**

Charging stopped because communication between the vehicle and the external charging equipment was interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Confirm whether the external charging equipment is powered by looking for any status lights, displays, or other indicators on the equipment. For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

If the equipment is **not** powered, try to restore the external charging equipment's power source.

- If attempting to charge at a public station and power is unable to be restored, contact the station operator.
- If attempting to charge at a private station (for example: charging at home) and power is unable to be restored, contact an electrician.



If the equipment is powered, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CP_a056

Charging stopped - Charge cable disconnected

Close charge port - Press brake pedal and retry

What this alert means:

Charging has stopped because your vehicle has detected that the connection between the charge port and charge cable has been unexpectedly interrupted.

What to do:

Before disconnecting a charge cable, make sure you first stop charging.

With some external charging equipment, charging may be stopped by pressing the button on the charge handle.

You can also stop charging from your vehicle touchscreen, your Tesla Mobile App, or the charging station.

For more information, see [Stopping Charging on page 733](#) [Stopping Charging on page 1373](#).

CP_a058

Unable to AC charge - Unplug and retry

Or try DC Fast Charging / Supercharging

What this alert means:

Your vehicle is unable to AC charge because it has detected one of the following conditions and has tried to charge too many times without success:

- The charge port is unable to detect whether a charge cable is inserted or detect the type of charge cable connected.
- Your vehicle is unable to sense a valid pilot control signal coming from the charging station, so it cannot communicate effectively with the external charging equipment.
- Communication between your vehicle and the external charging equipment has been interrupted.
- The external charging equipment has reported an error that prevents your vehicle from charging.

When this alert is present, there will always be at least one other alert present that identifies a more specific condition.

What to do:

For more information and troubleshooting suggestions, check in your vehicle touchscreen under **Controls > Service > Notifications** for other recent alerts that involve charging.

For more information and troubleshooting suggestions, check in your vehicle touchscreen for other recent alerts that involve charging.

CP_a066

Charging equipment not ready

See equipment instructions to start charging

What this alert means:

Charging cannot begin because the charging station is communicating to your vehicle that either the external charging equipment is not ready or charging is not authorized. The control pilot signal that communicates between the charging station and your vehicle indicates that your vehicle is not allowed to start charging.



This could occur because:

- The charging station is actively delaying charging. For example, this can happen because the station has a scheduled charging feature activated.
- The charging station requires further activation before the charge session can begin. Some additional authentication may be needed before the station starts charging your vehicle, such as a charging card, a mobile app, or a credit card.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Check the charging station for any instructions that explain the steps necessary to enable charging. For example, look for a touchscreen terminal, LED status indicators, printed instructions, or a payment interface that might provide guidance. If you cannot enable charging on the current charging station, try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a078

Cable blocked - Charge port latch may be frozen
Try using Defrost Car button in Mobile App

What this alert means:

The charge port latch cannot unlatch the charge cable, and cold ambient temperature is detected.

What to do:

To remove any strain on the cable, re-insert the charge cable fully into the charge port inlet. Try again to unlatch the charge cable.

If the charge cable still cannot be removed, the charge port latch may be frozen.

To help thaw any ice on the charge port latch, press the **Defrost Car** **Defrost Truck** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car** **Defrost Truck** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If the charge cable still cannot be removed, try the charge port manual release cable in your vehicle's trunk.

1. Make sure your vehicle is not actively charging.
 - On your vehicle touchscreen, access the charging screen.
 - If necessary, press Stop Charging.



2. Open the rear trunk.
3. Pull the charge port release cable downwards to unlatch the charge cable.
 - **NOTE:** The release cable is located on the left hand side of the rear trunk. It may be recessed within a small opening of the trunk interior trim.
4. Pull the charge cable from the charge port.

For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a079

Charge rate reduced - Charge port may be frozen
Try using Defrost Car button in Mobile App

What this alert means:

The charge port latch is unable to secure the charge cable in the charge port inlet, and cold ambient temperature is detected. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet. If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). Make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If you have checked for and cleared any debris or foreign objects, but charging is still limited or your vehicle will not charge at all, the charge port latch may be frozen. To help thaw any ice on the charge port latch, press the **Defrost Car****Defrost Truck** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car****Defrost Truck** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If the alert remains present, limited AC charging should still be available.

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

**CP_a101**

**Charge rate reduced - Wall connection hot
Outlet or Wall Connector wiring must be checked**

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

Wall Connector installation guides can be found [here](#).

CP_a102

**Unable to charge - Wall connection too hot
Outlet or Wall Connector wiring must be checked**

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CP_a143

**Charging adapter has electric arc flash hazard
Use different charging equipment**

What this alert means:

Charging is unavailable because your vehicle has detected an electric arc flash hazard in the third-party charging adapter used to connect a Combined Charging System (CCS) charge handle to your vehicle's charge port.

An electric arc flash can occur if you attempt to unplug **while actively charging with the third-party charging adapter**, and an electric arc flash can cause serious bodily injury and/or property damage.

What to do:

Follow the steps below to mitigate this risk:

- Make sure charging is completely stopped.
 1. Use your vehicle touchscreen to confirm charging has stopped, or to stop charging if necessary.
 2. Use the charging station display and controls to confirm charging has stopped, or to end any active charging session.
- Make sure no flashing green or blue light (LED) is visible on your vehicle's charge port.
- Unplug the charging adapter from your vehicle's charge port.
- Confirm again that the charging station indicates no active charging session.
- Unplug the charging adapter from the charge handle.



Use different charging equipment to charge your vehicle. For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CP_a151

**Charge port error detected - Service is required
AC charging may not function / OK to Supercharge**

What this alert means:

Your vehicle's charge port requires service. The charge port is unable to establish a valid control pilot signal and communicate effectively with some AC charging equipment and power sources.

While this alert remains present, AC charging and DC Fast Charging with non-Tesla charging stations may be limited or unavailable.

What to do:

It is recommended that you schedule service to have your vehicle's charge port inspected at your earliest convenient opportunity.

In the meantime, Supercharging should continue to be available. Supercharging locations can be displayed through the map on your vehicle's touchscreen. See [Maps and Navigation on page 699](#) for more details.

AC charging may also be available using a Gen 2 Mobile Connector or Gen 3 Wall Connector. However, it is recommended that you make sure your vehicle's charge port can communicate with your Tesla charging product. Try charging with your Gen 2 Mobile Connector or Gen 3 Wall Connector, and confirm your vehicle is charging as expected, before relying on it.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a164

**Charge handle still detected after unlatch request
Use charge port manual release cable if needed**

What this alert means:

Your vehicle's charge port detects a charge cable / charge handle is still connected after receiving multiple requests to unlatch the charge cable so it can be disconnected.

This alert may indicate the charge port latch is not releasing the charge cable as expected.

What to do:

If the charge cable cannot be removed from the charge port after multiple attempts to unlatch it, try the manual release cable in your vehicle's trunk.

1. Make sure your vehicle is not actively charging.
 - On your vehicle touchscreen, access the charging screen.
 - If necessary, press Stop Charging.
2. Open the rear trunk.
3. Pull the charge port release cable downwards to unlatch the charge cable.
 - **NOTE:** The release cable is located on the left hand side of the rear trunk. It may be recessed within a small opening of the trunk interior trim.
4. Pull the charge cable from the charge port.



For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

If the charge cable still cannot be removed, the charge port latch may be frozen.

To help thaw any ice on the charge port latch, press the **Defrost Car****Defrost Truck** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car****Defrost Truck** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If this alert occurs repeatedly over multiple drives and charging attempts, it is recommended that you schedule service to have your vehicle's charge port inspected at your earliest convenient opportunity.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

If using other external charging equipment, refer to the manufacturer's provided documentation for troubleshooting tips.

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

DI_a138

Front motor disabled - OK to drive
Vehicle power may be limited

What this alert means:

Your vehicle's front motor is unavailable. Power, speed, and acceleration may be reduced as your vehicle uses the rear motor(s) to continue driving.

What to do:

Continue to your destination. Your vehicle is OK to drive.

In some cases, your vehicle may be unable to continue driving. If this occurs, another vehicle alert should also be present to provide more information and recommended actions.

This alert may be caused by a temporary condition that will be resolved automatically. If this alert clears during your current drive, or is no longer present when you start your next drive, it was likely caused by a temporary condition. No action is required.

This alert may also indicate a condition requiring front motor inspection and service. If this alert persists throughout subsequent drives, it is recommended that you schedule service. Your vehicle is OK to drive in the meantime.

DI_a166

Vehicle automatically parked to prevent rollaway
Fasten seatbelt and close door to stay in gear

What this alert means:

Your vehicle has automatically shifted into Park (P) because it determined the driver was leaving or no longer present. This is expected vehicle behavior under various circumstances.

Your vehicle will automatically shift into Park if **all** of these conditions are true:

- Autopark is not active



- Your vehicle is traveling slower than 1.4 mph (2.25 km/h) in Drive or Reverse
- The last driver activity was detected more than 2 seconds ago. Driver activity includes:
 - Pressing the brake and/or accelerator pedal
 - Manually steering the vehicle

And at least **two** of these conditions are true:

1. Driver seatbelt is detected as unbuckled.
2. Driver is not detected as present.
3. Driver door is detected as open.

1. Driver seatbelt is detected as unbuckled
2. Driver is not detected as present
3. Driver door is detected as open
4. One or more of the sensors used to detect the three conditions above (seatbelt buckle, seat occupancy, door latch) is not working as expected

Your vehicle will also automatically shift into Park if **any** of these conditions is true:

- Door is detected as open
- Seatbelt is detected as unbuckled while speed is less than 0.1mph (0.15 km/h) in Drive or Reverse
- No driver activity is detected for 60 seconds

NOTE: If your vehicle is running software from 2015 or later, it will automatically shift into Park immediately when **all three** of the conditions above are true, regardless of vehicle speed or last detected press of the brake / accelerator pedal.

Your vehicle will also automatically shift into Park if **all** of these conditions are true:

- Vehicle hold is engaged
- Your vehicle is in Drive (D) or Reverse (R)
- Driver door is detected as open

NOTE: Your vehicle will also automatically shift into Park when a charge cable is connected to the charge port.

What to do:

For more information on automatic shifting into Park, see [Shifting on page 399](#) [Shifting on page 405](#).

DI_a175

Cruise control unavailable

What this alert means:

Cruise Control, including Traffic-Aware Cruise Control, is currently unavailable.

Cruise Control might be unavailable because:

- The driver canceled the request.
- The driver unbuckled their seatbelt.
- The front trunk or a door is open.
- The front trunk, trunk, or a door is open.
- The vehicle is traveling below the Cruise Control minimum speed of 18 mph (30 km/h).
- There is an environmental condition, such as limited visibility.
- Valet mode is active.



- Track mode is active.

What to do:

Take control and drive your vehicle manually.

When any condition preventing Cruise Control activation is no longer present, Cruise Control should be available. If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Traffic-Aware Cruise Control on page 576](#)[Traffic-Aware Cruise Control on page 554](#).

DI_a184**Autopark canceled****Take control****What this alert means:**

Autopark has been canceled.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.
- The curb cannot be detected.
- A trailer is attached to the vehicle.

What to do:

Park, or finish parking, your vehicle manually. Once you have finished parking, apply the brakes and shift into Park. Your vehicle will otherwise remain free-rolling.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_a185**Autopark Aborted****What this alert means:**

Autopark has aborted and the Electronic Parking Brake has been applied.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.
- The curb cannot be detected.
- A trailer is attached to the vehicle.

What to do:



Park, or finish parking, your vehicle manually.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_a190

Rear tire tread depth low - Schedule service Inspect tires for rotation/replacement

What this alert means:

NOTE: This alert does NOT indicate that there is a flat tire.

Your vehicle has detected that the rear tires have experienced more wear over time than the front tires, exceeding the recommended difference.

What to do:

It is recommended that the tread depth on all tires be inspected. As your tires wear during normal driving, the rear tires generally wear more quickly than the front tires.

Tire rotation is important to balance tire wear evenly across all tires. When staggered tires (different front and rear tire sizes) are installed, regularly rotating the front and rear tires between the left and right sides of your vehicle will still make your tires wear more evenly and extend their life.

Failure to rotate tires as recommended poses a risk of hydroplaning and losing control of the vehicle on wet roads. Failure to rotate tires also decreases the life of your tires, requiring premature replacement.

It is recommended that you schedule service via your Tesla Mobile App or with an independent service provider to have your tires rotated when:

- The difference in tire tread depth between any front and rear tire exceeds 1.5mm
- Your vehicle has been driven for more than 6,250 miles (10,000 km) since the last rotation

Tires may need to be replaced if the rear tread depth is determined to be at an unsafe level and a tire rotation is no longer adequate.

Tires may need to be replaced if the rear tread depth is determined to be at an unsafe level and either of these conditions applies:

- A tire rotation is no longer adequate
- Staggered tires (different front and rear tire sizes) installed on your vehicle make front/rear tire rotation unavailable

Upon completion of tire inspection and any necessary tire service, update your vehicle's tire configuration to optimize your vehicle settings to your tires and clear the alert for at least 6,250 miles. For more information, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).

It is not recommended that you rely on this alert instead of routine checks of tire tread depth. This alert should only be present when your vehicle estimates the tires are far beyond the recommended service interval.

This alert is calibrated for Tesla tires and is not expected to work with tires of different types or sizes, including combinations of different tire brands or models. It may not display, or may display prematurely, on vehicles using tires not recommended by Tesla. For more information on recommended tires, see [Wheels and Tires on page 877](#)[Wheel and Tire Specifications on page 1410](#).

DI_a245

Vehicle Hold feature unavailable Keep brake pedal pressed while stopped

What this alert means:



Vehicle Hold is currently unavailable due to system constraints. When stopping, use the brake pedal to bring your vehicle to a complete stop and keep your vehicle stationary.

What to do:

Continue to your destination. Your vehicle is OK to drive.

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Vehicle Hold on page 493](#) Stopping Mode in [Braking and Stopping on page 1235](#).

DI_a250**Adaptive ride control disabled****Drive with caution****Adaptive ride control unavailable****Vehicle speed limited - Proceed with caution****What this alert means:**

The speed of your vehicle is limited to 90 mph (144 km/h) due to an issue with the Adaptive Suspension Damping system.

The system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and as a result your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel [touchscreen](#). For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

DI_a250**Adaptive ride control disabled****Drive with caution****Adaptive ride control unavailable****Vehicle speed limited - Proceed with caution****What this alert means:**

The speed of your vehicle is limited to 90 mph (144 km/h) due to an issue with the Adaptive Suspension Damping system.

The system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and as a result your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel [touchscreen](#). For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

DIF_a251 / DIR_a251**DIF_a251 / DIR_a251 / DIREL_a251 / DIRER_a251****Gearbox fluid service recommended****Schedule Service****What this alert means:**

Your vehicle has detected a condition requiring gearbox fluid inspection.

What to do:



It is recommended that you schedule service.

Your vehicle is OK to drive with this alert present. However, continuing to drive over an extended period of time with this alert present may result in permanent gearbox / powertrain damage.

EPBL_a195 / EPBR_a195

Vehicle automatically parked to prevent rollaway Fasten seatbelt and close door to stay in gear

What this alert means:

Your vehicle has automatically shifted into Park (P) because it determined the driver was leaving or no longer present. This is expected vehicle behavior under various circumstances.

Your vehicle will automatically shift into Park if **all** of these conditions are true:

- Autopark is not active
- Your vehicle is traveling slower than 1.4 mph (2.25 km/h) in Drive or Reverse
- The last driver activity was detected more than 2 seconds ago. Driver activity includes:
 - Pressing the brake and/or accelerator pedal
 - Manually steering the vehicle

And at least **two** of these conditions are true:

1. Driver seatbelt is detected as unbuckled.
2. Driver is not detected as present.
3. Driver door is detected as open.

1. Driver seatbelt is detected as unbuckled
2. Driver is not detected as present
3. Driver door is detected as open
4. One or more of the sensors used to detect the three conditions above (seatbelt buckle, seat occupancy, door latch) is not working as expected

Your vehicle will also automatically shift into Park if **any** of these conditions is true:

- Door is detected as open
- Seatbelt is detected as unbuckled while speed is less than 0.1mph (0.15 km/h) in Drive or Reverse
- No driver activity is detected for 60 seconds

NOTE: If your vehicle is running software from 2015 or later, it will automatically shift into Park immediately when **all three** of the conditions above are true, regardless of vehicle speed or last detected press of the brake / accelerator pedal.

Your vehicle will also automatically shift into Park if **all** of these conditions are true:

- Vehicle hold is engaged
- Your vehicle is in Drive (D) or Reverse (R)
- Driver door is detected as open

NOTE: Your vehicle will also automatically shift into Park when a charge cable is connected to the charge port.

What to do:

For more information on automatic shifting into Park, see [Shifting on page 399](#) [Shifting on page 405](#).

**ESP_a118****Assist for low brake performance activated****To stop, keep brake pedal firmly pressed****What this alert means:**

Hydraulic Fade Compensation is active. This brake assist function activates temporarily to make sure you have full braking capability in conditions where reduced braking performance is detected by your vehicle.

When this assist function activates, you may feel the brake pedal pull away from your foot and notice a strong increase in brake pressure. You may also hear a pumping sound coming from the brake hydraulic unit at the front of the vehicle. This will usually last for a few seconds, depending on road surface and vehicle speed. This is completely normal and does not indicate any issue with your vehicle.

What to do:

Continue to press the brake pedal as you normally would, and do not "pump" (repeatedly press and release) the pedal as this will interrupt the function.

This alert will clear when your vehicle comes to a stop or you are no longer pressing the brake pedal. It may still be displayed for up to 5 seconds afterward.

Reduced braking performance is usually temporary, and can occur for a number of reasons including high brake temperatures after heavy brake use, or driving in extremely cold or wet conditions. It can also indicate that your brake pads or rotors have worn to the point that normal replacement is needed.

If you continue to experience reduced braking performance which does not improve over time, please contact Tesla service at your convenience for a brake inspection.

For more information, see [Hydraulic Fade Compensation on page 462](#).

HVBATT_a734**High voltage battery performance limited****OK to drive - Schedule service soon****What this alert means:**

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a735**High voltage battery performance limited****OK to drive - Schedule service soon****What this alert means:**

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.



Your vehicle is OK to drive.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a736

High voltage battery requires service

Acceleration and charging performance reduced

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a737

High voltage battery requires service

Acceleration and charging performance reduced

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.



For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

PCS_a016

Cannot charge - Poor grid power quality possible Retry / Try other charge location or Supercharging

What this alert means:

Charging has stopped due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

This may be due to power supply disturbances caused by the external charging equipment or by the electrical power grid. In some cases, this condition may be the result of using nearby electric devices that draw a lot of power.

If these possible causes can be ruled out, then a condition with your vehicle itself may also be affecting AC charging.

What to do:

If this alert is accompanied by another alert that specifies the condition affecting AC charging, start by investigating that alert.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

If this alert persists when attempting to charge at multiple locations and with different charging equipment, it is recommended that you schedule service.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a017

Charging stopped - Power lost while charging Check power source and charging equipment

What this alert means:

Power has been lost during charging. This could result from the charging equipment losing power from the source (for example, a wall outlet) or from an issue with the charging equipment.

What to do:

This alert is often accompanied by other alerts that can help you identify and troubleshoot the issue. Start by investigating any other displayed alerts that relate to charging issues.

Alternatively, you can check Mobile Connector or Wall Connector status lights to confirm power to the device, and also refer to the product owner's manual for troubleshooting information based on blink codes. If using other (non-Tesla) external charging equipment, check for a display or other user interface that provides troubleshooting help.

If there is clearly no power to the charging equipment, check the circuit breaker for the wall outlet / Wall Connector to make sure it has not tripped.

Further troubleshooting tips based on equipment type:



- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a019

Power grid or vehicle issue limiting AC charging Unplug and retry / Try different charging location

What this alert means:

Charging speed has been reduced due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

This may be due to power supply disturbances caused by the external charging equipment or by the electrical power grid. In some cases, this condition may be the result of using nearby electric devices that draw a lot of power.

If these possible causes can be ruled out, then a condition with your vehicle itself may also be affecting AC charging.

What to do:

If this alert is accompanied by another alert that specifies the condition affecting AC charging, start by investigating that alert.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

If this alert persists when attempting to charge at multiple locations and with different charging equipment, it is recommended that you schedule service.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

**PCS_a032****Poor electric grid power quality detected
Try different charging station or location****What this alert means:**

Charging speed has been reduced or charging has been interrupted due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

The onboard charger in your vehicle has detected power supply disturbances in the electrical power grid. These disturbances interfere with your vehicle's charging process.

Typical causes of these power supply disturbances include:

- Issues with the building wiring and/or the wall outlet.
- Issues with the external charging equipment.
- Other large electric devices, such as washing machines or air conditioning units, that temporarily draw a lot of power or otherwise disturb the electrical power grid.
- External conditions affecting the electrical power grid.

What to do:

As this alert is usually specific to external charging equipment and power sources, and it does not typically indicate an issue with your vehicle that can be resolved by scheduling service, it is recommended that you:

- Try charging with different wall outlets.
- Try charging again (disconnect and reconnect to retry) when other large electric devices are not drawing power.
- Try charging with multiple, different types of charging equipment at different locations.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a052**External charging equipment not providing power
Check power source or try different equipment****What this alert means:**

Charging cannot begin due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle has requested AC power from the external charging equipment, but the onboard charger does not detect any supply voltage coming from the equipment.

This can sometimes be caused by a hardware issue specific to the external charging equipment, which prevents the charging equipment from switching power to the vehicle on or off when requested. It could also occur due to another condition affecting the external charging equipment, the power source it is connected to, or your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.



For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a053

Charge rate reduced - Unexpected voltage drop
Remove extension cords / Have wiring inspected

What this alert means:

Charging speed has been reduced because the onboard charger in your vehicle has detected a large voltage drop during charging.

Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.

This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:

- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a054

Charging stopped due to large voltage drop
Remove extension cords / Have wiring inspected

What this alert means:

Charging has been interrupted because the onboard charger in your vehicle has detected an unusually large voltage drop.

Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.

This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:



- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a073

External charging equipment error detected Try different charging equipment

What this alert means:

AC charging cannot begin due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle's onboard charger is detecting input voltage at the charge port when no power has been requested from the external charging equipment, which indicates the external charging equipment is not functioning as expected.

This can sometimes be caused by a hardware issue specific to the external charging equipment, which prevents the charging equipment from switching power to the vehicle on or off when requested. It could also occur due to another condition affecting the external charging equipment, or a condition affecting your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a090

Charging slowed - Some AC phases not powered Check power source and charging equipment

What this alert means:

Charging speed has been reduced due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle's onboard charger has detected that one or more power converters is not receiving the necessary AC input voltage. For example: during three-phase charging, one phase might be missing from the AC input power provided by the external source. This could occur due to a condition affecting the external charging equipment, the power source it is connected to, or your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.



Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PM_a092 / PMF_a092 / PMR_a092
PM_a092 / PMF_a092 / PMR_a092 / PMREL_a092 / PMRER_a092
Powertrain issue detected - Schedule service
Issue may persist even if functionality is restored

What this alert means:

Your vehicle's powertrain requires service. Power, speed, and acceleration may be reduced, and your vehicle may need to shut down while driving.

This alert indicates a persistent condition requiring powertrain inspection and service.

Even if this alert clears after the current drive and does not return during subsequent drives, service is required to resolve the powertrain issue your vehicle has detected.

What to do:

It is recommended that you schedule service for your vehicle's powertrain at your earliest opportunity.

Without service, your vehicle may continue to have reduced power, speed, and acceleration, may experience conditions that require it to shut down while driving, or may become unable to drive.

TAS_a313
Adaptive ride control degraded
Ride comfort may be reduced

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling.

Instead, all dampers are receiving fixed current. Your ride may be softer or firmer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a yellow indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

TAS_a313
Adaptive ride control degraded
Ride comfort may be reduced

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling.

Instead, all dampers are receiving fixed current. Your ride may be softer or firmer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.



This alert is accompanied by a yellow indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

TAS_a314**Adaptive ride control disabled****Drive with caution****Adaptive ride control unavailable****Vehicle speed limited - Proceed with caution****What this alert means:**

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

TAS_a314**Adaptive ride control disabled****Drive with caution****Adaptive ride control unavailable****Vehicle speed limited - Proceed with caution****What this alert means:**

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

UI_a004**Front trunk open****Proceed with caution****What this alert means:**

Your vehicle's front trunk (hood) is detected open while driving.

This alert indicates at least one of the two latches securing the hood, the front trunk primary and/or secondary latch, cannot be confirmed closed (confirmed as fully secured) when your vehicle is shifted into a gear other than Park.

What to do:

As this condition may lead to the front trunk opening while driving, it is recommended that you drive carefully until you can safely bring your vehicle to a stop and shift into Park.

Once your vehicle is parked, check the front trunk (hood) to make sure it is fully closed (both latches are fully engaged). For more information, see Closing instructions for the [Front Trunk on page 181](#) [Powered Frunk on page 1185](#).

The alert should clear once your vehicle is shifted into Park. However, it may return once you start driving if you do not first inspect and fully secure the hood.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.



For more information on the front trunk, see [Front Trunk on page 181](#) [Powered Frunk on page 1185](#).

UI_a006

Service is required

Schedule service now

What this alert means:

This alert is set remotely by Tesla when a condition requiring service is detected on your vehicle.

This alert can be set due to various conditions. When you schedule service, more information should be available.

This alert can only be cleared by a service technician after your vehicle has been serviced.

What to do:

As this alert can be present due to various conditions, it is recommended that you schedule service at your earliest convenience.

UI_a013

Air pressure in tires very low

PULL OVER SAFELY - Check for flat tire

What this alert means:

This alert indicates that one or more of the tires on your vehicle is extremely low or flat.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is significantly lower than the recommended cold tire pressure.

What to do:

You should pull over carefully as soon as possible. In a safe location, check for a flat tire.

You can request Tesla roadside assistance options (mobile tire, loaner wheel, tow) if required. See [Contacting Tesla Roadside Assistance on page 930](#) for more information.

In a non-emergency situation, it is recommended that you visit a local tire shop for assistance or schedule service using your Tesla Mobile App.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

The alert will clear once the TPMS has a consistent tire pressure measurement for each of your tires within 3 psi of the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

UI_a014

Air pressure below recommendation for tires

Check pressure and refill air as needed

What this alert means:

This alert does NOT indicate that there is a flat tire.



The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is at least 20% lower than the recommended cold tire pressure.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

This alert may appear in cold weather because the air in your tires naturally contracts when it becomes cold, decreasing tire pressures.

What to do:

Add air to maintain the recommended cold tire pressure. Although drops in tire pressure are expected in colder weather, the recommended cold tire pressure should be maintained at all times.

The alert may clear as the vehicle is driven. This is because the tires will warm up and the tire pressure will increase. Even if the alert clears, the tires should still be refilled with air once they have cooled.

The alert will clear once the Tire Pressure Monitoring System detects that each of your tires is inflated to the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

If you repeatedly see this alert for the same tire, have the tire inspected for a slow leak. You can visit a local tire shop or schedule service using your Tesla Mobile App.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#).

UI_a137

**Active service connection to vehicle
Service performing remote diagnostics**

What this alert means:

A service technician is remotely logged into your vehicle for diagnosis or repair. You may notice some loss of Infotainment functionality while the connection persists, but this alert does not indicate an issue with your vehicle.

Your vehicle is OK to drive.

What to do:

This alert should clear automatically after the technician completes vehicle diagnosis or repair. You may find it necessary to restart your touchscreen to restore full Infotainment functionality after the alert has cleared. For more information, see [Restarting the Touchscreen in your vehicle's Do It Yourself Guide](#).

If this alert does not clear after 24 hours, it is recommended that you schedule service via your Tesla Mobile App or with an independent service provider. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

UMC_a001

**Unable to charge with Mobile Connector
Inadequate outlet grounding - Try another outlet**

What this alert means:

The Mobile Connector has detected that the electrical outlet has insufficient grounding, likely caused by an inadequate or missing ground connection.



This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

What to do:

Have the electrical installation inspected by an electrician. Your electrician should make sure there is proper grounding at your circuit breaker or power distribution box, and also make sure that appropriate connections are made to the outlet, before you attempt to plug in the Mobile Connector again.

If you need to charge in the meantime, try charging using a different outlet, at another location, or with another type of charging station.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a002**Unable to charge - Mobile Connector GFCI tripped
Unplug charge handle from charge port and retry****What this alert means:**

The vehicle cannot charge because the ground-fault circuit interrupter (GFCI) in the Mobile Connector has tripped.

Like the GFCI in a wall outlet, this feature is designed to stop the flow of electricity when there is a problem. It has interrupted charging to protect your vehicle and the charging equipment.

This could happen for many reasons. The problem could be in the charge cable, the charge handle, the charge port, or even an onboard vehicle component.

What to do:

Inspect the charge port and the charge handle for pooled water or unusual levels of moisture. If you find excessive moisture, wait and let both the inside area of the charge port and the exposed portion of the charge handle dry sufficiently before trying again.

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.

Inspect the charge equipment for damage.

- If the cable is in any way damaged or deteriorated, **do not use it**. Try different charging equipment instead.
- If the cable is in good condition, try charging again with the same Mobile Connector.

If the issue persists and prevents charging, try charging with different charging equipment.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a004**Unable to charge with Mobile Connector
Voltage too high / Try a different wall outlet****What this alert means:**

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:



- Detects the wall outlet voltage is too high, **or**
- Detects an unexpected increase in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a005**Unable to charge with Mobile Connector
Voltage too low / Try a different wall outlet****What this alert means:**

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:

- Does not detect enough supply voltage from the wall outlet, **or**
- Detects an unexpected drop in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a007**Mobile Connector control box temperature high
Let Mobile Connector cool to resume charging****What this alert means:**

Charging has been interrupted because the Mobile Connector has detected a high temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_a008

Unable to charge - Wall plug temperature high
Wall outlet and wiring inspection recommended

What this alert means:

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has stopped to protect the outlet.

This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_a009

Cannot charge - Charge handle temperature high
Check charge handle or charge port for debris

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.

If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a010

Mobile Connector to adapter connection hot
Let cool - Plug adapter fully into Mobile Connector

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.



Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Once the Mobile Connector control box temperature has decreased and any obstruction has been removed, the alert should clear and charging should be possible.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a011

Charging equipment communication error Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector cannot confirm via proximity detection that the charge handle is fully connected to your vehicle.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.

To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

UMC_a012

Charging equipment communication error Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector detects that it cannot generate or maintain a valid control pilot signal.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.



To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

UMC_a013

Wall plug adapter error - Charge rate reduced

Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot monitor the wall plug adapter temperature, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector.

In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a014

Wall plug adapter error - Charge rate reduced

Plug adapter fully into Mobile Connector and retry

What this alert means:



Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a015**Wall plug adapter error - Charge rate reduced
Plug adapter fully into Mobile Connector and retry****What this alert means:**

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_a016

Mobile Connector control box temperature high Maximum charge rate reduced

What this alert means:

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a017

Charge rate reduced - Wall plug temperature high Wall outlet and wiring inspection recommended

What this alert means:

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has been slowed to protect the outlet.

This is not typically an issue with your vehicle or your Mobile Connector, but rather an issue with the outlet. A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_a018

Charge rate reduced - Handle temperature high Check charge handle or charge port for debris

What this alert means:

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.

If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.



You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a019

Mobile Connector to adapter connection hot

Maximum charge rate reduced

What this alert means:

Charge current has been reduced because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture.

It is recommended that any debris / foreign objects be removed. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby. If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

VCLEFT_a130 / VCREAR_a130

Critical issue detected

PULL OVER SAFELY

What this alert means:

Your vehicle has detected a potential issue with its electrical system and/or steering system, and has initiated a controlled shutdown process intended to provide you with an opportunity to pull over at a safe location.

This alert does not mean your vehicle has lost all electrical power or steering functionality, or that the steer-by-wire system is unavailable. This alert indicates a possible issue with one of the multiple redundant sensors and actuators designed to make sure the steer-by-wire system always remains available while driving, or with the electrical system's ability to provide power to the steer-by-wire system.

Your vehicle's speed and power will be limited. Your vehicle will gradually lose all drive torque, and you must pull over.

After you have pulled over and shifted into Park (P), you will have the option to drive again. Your vehicle will be limited to a very low speed for emergency operation, such as repositioning your vehicle before it is towed.

What to do:

Pull over at a safe location, and bring your vehicle to a complete stop, at your earliest reasonable opportunity.

Once your vehicle is in Park (P) with the parking brake applied, you may choose to accept the stated conditions in the message displayed on the touchscreen and shift out of Park (P). Your vehicle's speed and power will be very limited. This limited drive torque will allow you to reposition your vehicle slightly at the parked location or prepare your vehicle to be towed, but your vehicle should not be driven on public roads in this condition.



It is possible that exiting and re-entering your vehicle may clear the alert and restore functionality. If you attempt this successfully, and no further alert messages display in the touchscreen indicating potential electrical or steering system issues, or inability to drive, continue to your destination.

If this alert occurs again during your next drive, or occurs multiple times over subsequent drives, it is recommended that you schedule service.

VCFRONT_a180

VCBATT_a180

VCLEFT_a194

Electrical system power reduced

Vehicle may shut down unexpectedly

What this alert means:

The electrical system cannot maintain the voltage required to support all vehicle features.

If this alert is present while you are driving, it is possible your vehicle will shut down unexpectedly.

If this alert is present when your vehicle is in Park or when it first wakes, it is possible your vehicle may not have adequate electrical power to start driving. A separate vehicle alert may be present to indicate that condition.

What to do:

It is recommended that you eliminate or reduce your use of any non-essential features. This can help your vehicle maintain adequate electrical power for essential functions.

If this alert remains active, schedule service immediately. Without service, your vehicle may shut down unexpectedly or may not restart.

VCFRONT_a182

VCBATT_a182

VCLEFT_a208

Schedule service to replace low voltage battery

Software will not update until battery is replaced

What this alert means:

The low voltage battery is showing degraded performance and needs to be replaced. Until the low voltage battery is replaced, vehicle software updates will not complete.

What to do:

It is recommended that you have the low voltage battery replaced at your earliest convenient opportunity.

You can schedule service via your Tesla Mobile App, or with an independent service provider that offers low voltage battery replacement for your vehicle. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

If the low voltage battery does not have enough electrical power to turn on your vehicle or open the doors, follow the instructions in [Jump Starting on page 938](#) [If Vehicle Has No Power on page 920](#) [Jump Starting on page 1455](#).

For more information on the battery system, see [High Voltage Battery Information on page 724](#).

VCFRONT_a191

VCBATT_a191

VCLEFT_a207

Electrical system power reduced

Vehicle shutting down

What this alert means:

The low voltage battery cannot provide the electrical support necessary to drive or continue driving. Your vehicle is shutting down to preserve energy for essential functions other than driving.



Your vehicle cannot be driven or continue driving while this condition continues.

What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop immediately. It is recommended that you:

- Pull over safely immediately
- Use your Mobile App to contact Tesla Roadside Assistance immediately, or seek other roadside assistance if preferred

If you do not pull over safely within a short time, your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.

When this alert is present, the electrical system cannot maintain the voltage required to support all vehicle features. Many vehicle functions may no longer work.

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#)[Opening Front Doors from Interior on page 135](#)[Opening Doors from the Interior on page 1147](#).

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.

If this alert remains present, it is recommended that you schedule service immediately. Without service, your vehicle may not drive, may shut down unexpectedly, or may not restart.

VCFRONT_a192**VCLEFT_a592****Electrical system is unable to support all features****Switching off features to conserve energy****What this alert means:**

The electrical system cannot support all vehicle features. Your vehicle is shutting down nonessential features to preserve energy for essential functions.

If you are driving when this alert is present, it is possible your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.

Nonessential features may be unavailable, including seat heaters, cabin climate control, and in-vehicle entertainment. This is expected behavior intended to help your vehicle maintain adequate electrical power for essential functions, including the ability to operate headlights, windows and doors, hazard lights, and the front trunk (frunk).

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#)[Opening Front Doors from Interior on page 135](#)[Opening Doors from the Interior on page 1147](#).

What to do:

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.

VCFRONT_a216**Vehicle may not restart - Service is required****Electrical system issue detected****What this alert means:**

An abnormally large and sustained power draw while driving or Supercharging / DC Fast Charging has made your vehicle's electrical system unable to support all features and functions.

Your vehicle will not restart until the electrical system has been serviced.

Cabin climate control and air vent positioning, powered trunk liftgate, and steering column adjustments may be limited or unavailable.



Other features and functions may also be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to restart, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCFRONT_a220

VCBATT_a220

VCLEFT_a221

Electrical system is unable to support all features

Schedule service

What this alert means:

The low voltage battery is not available and cannot provide electrical support for vehicle features.

The low voltage battery cannot provide the electrical support necessary to drive or continue driving.

It is possible your vehicle will shut down unexpectedly. It is also possible that your vehicle will not restart after the current drive.

You may notice that some nonessential features are not available. This is expected behavior due to your vehicle preserving energy for essential functions.

What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop as soon as possible. Pull over safely at your earliest opportunity.

It is recommended that you eliminate or reduce your use of any nonessential features. This can help your vehicle maintain adequate electrical power for essential functions other than driving, until it can be serviced.

If this alert remains present, it is recommended that you schedule service immediately. Without service, your vehicle may not drive, may shut down unexpectedly, or may not restart.

VCLEFT_a365 / VCREAR_a365

Incline too steep to park vehicle and trailer

Parking brake may not hold - Move to flatter area

What this alert means:

Your vehicle has detected an attempt to park on a slope of 10% grade or greater while Trailer Mode is active. This alert displays whenever Trailer Mode is active and your vehicle is parked on a steep slope, even if no trailer is attached.

What to do:

- **No trailer attached:** Exit Trailer Mode manually via your vehicle touchscreen, so the alert no longer displays when parking on steep slopes without a trailer.
 - For more information, see Trailer Mode in [Towing a Trailer on page 1258](#).
- **Trailer attached:** It is recommended that you park your vehicle and trailer in a more level area.
 - The parking brake may not hold both vehicle and trailer on slopes of 10% grade or greater.



For more information, see Trailer Mode and Parking with a Trailer in [Towing a Trailer on page 1258](#).

VCFRONT_a402

VCBATT_a402

VCLEFT_a402

**Electrical system backup power is unavailable
Vehicle will consume more energy while idle**

What this alert means:

The backup power source for the electrical system, the low voltage battery, is not available or cannot provide the voltage required to support all vehicle features.

The primary source of electrical power, the high voltage battery system, will continue to support vehicle functions, even when your vehicle is idle. For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

You may notice that some nonessential features are not available. This is expected behavior due to your vehicle preserving energy for essential functions.

You may also notice that your vehicle consumes more energy than usual when you are not driving it, or that your vehicle displays a lower projected range than you would normally expect after charging. This is normal vehicle behavior when this alert is present, and it will continue until the backup power source is restored.

There is a chance that an issue affecting the primary power source could cause your vehicle to shut down unexpectedly.

What to do:

It is recommended that you limit or avoid the use of any nonessential features. This can help your vehicle maintain adequate electrical power for essential functions.

It is recommended that you schedule service at your earliest opportunity, so the backup power source for the electrical system can be restored.

VCFRONT_a496

VCBATT_a496

VCLEFT_a496

**Vehicle is preparing to shut down
PULL OVER SAFELY**

What this alert means:

The electrical system cannot provide adequate support to drive or continue driving. Your vehicle is preparing to shut down to preserve energy for essential functions other than driving.

Your vehicle cannot be driven or continue driving while this condition continues.

What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop as soon as possible. It is recommended that you:

- Pull over safely at your earliest opportunity
- Use your Mobile App to contact Tesla Roadside Assistance immediately, or seek other roadside assistance if preferred

If you do not pull over safely within a short time, your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#)[Doors on page 131](#)[Opening Doors from the Interior on page 1147](#).

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.



VCFRONT_a592

Unable to drive - Service is required

Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Cabin climate control, powered trunk liftgate, and steering column adjustments may be limited or unavailable. Many features and functions on the left side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCFRONT_a593

Unable to drive - Service is required

Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Cabin climate control, powered trunk liftgate, and steering column adjustments may be limited or unavailable. Many features and functions on the left side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

**VCFRONT_a596****Unable to drive - Service is required
Electrical system issue detected****What this alert means:**

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Air vent positioning may be limited or unavailable. Many features and functions on the right side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCFRONT_a597**Unable to drive - Service is required
Electrical system issue detected****What this alert means:**

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Air vent positioning may be limited or unavailable. Many features and functions on the right side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).



VCSEC_a221

Air pressure below recommendation for tires

Check pressure and refill air as needed

What this alert means:

This alert does NOT indicate that there is a flat tire.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is at least 20% lower than the recommended cold tire pressure.

See [Maintaining Tire Pressures on page 754](#)[Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

This alert may appear in cold weather because the air in your tires naturally contracts when it becomes cold, decreasing tire pressures.

What to do:

Add air to maintain the recommended cold tire pressure. Although drops in tire pressure are expected in colder weather, the recommended cold tire pressure should be maintained at all times.

The alert may clear as the vehicle is driven. This is because the tires will warm up and the tire pressure will increase. Even if the alert clears, the tires should still be refilled with air once they have cooled.

The alert will clear once the Tire Pressure Monitoring System detects that each of your tires is inflated to the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

If you repeatedly see this alert for the same tire, have the tire inspected for a slow leak. You can visit a local tire shop or schedule service using your Tesla Mobile App.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).

VCSEC_a228

Air pressure in tires very low

PULL OVER SAFELY - Check for flat tire

What this alert means:

This alert indicates that one or more of the tires on your vehicle is extremely low or flat.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is significantly lower than the recommended cold tire pressure.

What to do:

You should pull over carefully as soon as possible. In a safe location, check for a flat tire.

You can request Tesla roadside assistance options (mobile tire, loaner wheel, tow) if required. See [Contacting Tesla Roadside Assistance on page 930](#) for more information.

In a non-emergency situation, it is recommended that you visit a local tire shop for assistance or schedule service using your Tesla Mobile App.

See [Maintaining Tire Pressures on page 754](#)[Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.



The alert should clear once the Tire Pressure Monitoring System has a consistent tire pressure measurement for each of your tires of at least 30 psi.

The alert should clear once the Tire Pressure Monitoring System has a consistent tire pressure measurement for each of your tires that is no longer significantly below the recommended cold pressure (RCP).

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

Troubleshooting Alerts

APP_w009

Automatic Emergency Braking is unavailable
Feature may be restored on next drive

What this alert means:

The Automatic Emergency Braking feature is unavailable for the rest of your current drive. This alert does not specifically indicate any other braking functions or features are unavailable.

This alert may be present for several reasons. Other alerts may be present for conditions that also cause Automatic Emergency Braking to be unavailable.

What to do:

No action is typically required. Automatic Emergency Braking will usually be available again when you start your next drive.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.

For more information, see [Collision Avoidance Assist on page 645](#).

APP_w048

Autopilot features temporarily unavailable
Features may be restored on next drive

What this alert means:

Autopilot features are currently unavailable on your vehicle. Depending on the configuration of your vehicle, Autopilot features that are disabled may include:

- Autosteer
- Traffic-Aware Cruise Control
- Automatic Emergency Braking
- Forward Collision Warning
- Lane Departure Warning

What to do:

This alert can be set for several reasons. Check for additional alerts that indicate the cause of this condition.

Typically, Autopilot features are restored on your next drive. If this alert persists across multiple drives, schedule service at your earliest convenience.

For more information and the full list of Autopilot features, see [About Autopilot on page 550](#).



APP_w207

Autosteer temporarily unavailable

What this alert means:

Autosteer is temporarily unavailable. This could be a temporary condition caused by an external factor, such as:

- Missing or faded lane markers.
- Narrow or winding roads.
- Poor visibility due to rain, snow, fog, or other weather.
- Extremely hot or cold temperatures.
- Bright light due to other vehicle headlights, direct sunlight, or other light sources.

This alert will also be present if you exceeded the maximum speed limit for Autosteer with Autosteer active. In this case, Autosteer will not be available for the rest of your current drive.

What to do:

Continue to your destination. If Autosteer is not available by the time you reach your destination, and remains unavailable during your next planned drive, check for the following:

- Damage or obstruction caused by mud, ice, snow, or other environmental factors
- Obstruction caused by an object mounted on the vehicle, like a bike rack
- Obstructions caused by adding paint or adhesive products like wraps, stickers, or rubber coatings to your vehicle
- A damaged or misaligned bumper

If there are no obvious obstructions, or if you find damage to the vehicle, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#)[Autopilot Features on page 553](#).

APP_w218

Autosteer speed limit exceeded

Take control of steering wheel

What this alert means:

Autosteer is unavailable because your vehicle has exceeded the maximum speed limit for this driver assistance feature.

What to do:

Take immediate control of the steering wheelsteering yoke (or steering wheel) and maintain control until you reach your destination.

In most cases, Autosteer will not be available for the rest of your current drive. To reset it, bring the vehicle to a complete stop and shift into Park. When you shift into Drive to travel to your next destination, Autosteer should be available again.

NOTE: If this alert becomes active while you are driving in Germany, Autosteer should be available again once your vehicle is traveling below the Autosteer speed limit.

If Autosteer is not available during your next drive, and remains unavailable throughout subsequent drives, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#)[Autopilot Features on page 553](#).

APP_w221

Cruise control unavailable

Reduced front radar visibility

What this alert means:



Traffic-Aware Cruise Control and Autosteer are unavailable because the radar located in the front bumper area of your vehicle has no or low visibility.

This could be a temporary obstruction caused by factors like snow, ice, dirt, or mud.

What to do:

Continue to your destination. Your vehicle is OK to drive. Traffic-Aware Cruise Control and Autosteer will remain unavailable as long as the radar lacks adequate visibility.

If the alert persists throughout your drive, examine the front bumper before your next planned drive and attempt to clear any obstruction. See [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#) for more information on clearing dirt or debris from that area of the vehicle.

If this alert persists throughout subsequent drives but no obstruction is visible on the front bumper where the radar is located, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w222

**Cruise control unavailable
Reduced front camera visibility**

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because one or more of the front cameras in your vehicle is blocked or blinded by external conditions.

Traffic-Aware Cruise Control and Autosteer will remain unavailable while a front camera lacks adequate visibility. Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.
- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive.

This is often a temporary issue that clears up on its own. If the alert does not clear by the end of your drive:

- Inspect and clean the front camera area at the top center of the windshield before your next planned drive.
- Check the camera surface for condensation, dirt, or other debris and attempt to clear any obstruction.

See [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#) for more information on clearing dirt or debris from that area of the vehicle.

Although condensation on the inside of the front camera enclosure cannot be wiped clean, you can usually clear it quicker by following these steps:

1. Pre-condition the cabin with the temperature set to High and A/C turned ON.
2. Turn on the front windshield defroster.

If this alert persists throughout subsequent drives but no front camera obstruction is visible, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.



APP_w224

Cruise control unavailable

Continue driving to allow cameras to calibrate

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because the cameras on your vehicle are not fully calibrated.

Your vehicle must maneuver with great precision when features like Traffic-Aware Cruise Control and Autosteer are active. Before these features can be used for the first time, the cameras must complete an initial self-calibration. Occasionally, one or more cameras can become uncalibrated.

What to do:

Continue to your destination. Your vehicle is OK to drive.

Traffic-Aware Cruise Control and Autosteer will remain unavailable until camera calibration is complete.

When calibration is complete, Traffic-Aware Cruise Control and Autosteer should be available.

For your convenience, a calibration progress indicator is displayed on the touchscreen. Calibration typically completes after your vehicle has driven 20-25 miles (32-40 km), but the distance varies depending on road and environmental conditions. For example, driving on a straight road with highly visible lane markings helps the cameras calibrate quicker.

If the alert persists and camera calibration has not completed after your vehicle has driven 100 miles (160 km) or more, or Traffic-Aware Cruise Control and Autosteer remain unavailable despite successful camera calibration, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w304

Camera blocked or blinded

Clean camera or wait for it to regain visibility

What this alert means:

One or more of the vehicle cameras has limited visibility, or no visibility at all, due to external conditions. When the cameras on your vehicle cannot provide accurate visual information, some or all Autopilot features may be temporarily unavailable.

Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.
- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive. This is often a temporary issue that will be resolved when condensation evaporates, or when a particular environmental condition or feature is no longer present.

If the alert does not clear by the time you reach your destination, check camera surfaces for condensation, dirt, or other debris. For camera locations, see [Cameras on page 101](#)[Cameras on page 1136](#).

Clean the cameras as necessary before your next planned drive. For recommended cleaning procedures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If you continue to see this alert after cleaning the cameras, check the inside surfaces of the door pillar camera enclosures for condensation. Although condensation inside the camera enclosures cannot be wiped clean, you can usually clear it faster by following these steps:



1. Precondition the cabin by turning Climate ON, setting temperature to High, and making sure A/C is ON.
2. Turn on the front windshield defroster.
3. Direct the air vents toward the door pillar cameras.

For more information on clearing condensation from camera enclosures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If the alert does not clear by the end of your next planned drive, despite cleaning the indicated camera(s) and following recommended steps to clear condensation, schedule service at your next convenient opportunity. Your vehicle is OK to drive in the meantime.

BMS_u006

Vehicle shutting down - PULL OVER SAFELY

Battery charge level too low

What this alert means:

Your vehicle has detected that the high voltage battery does not have enough energy remaining to support driving.

Your vehicle will be unable to drive or continue driving until charged.

If this alert is present while you are driving, your vehicle needs to shut down. A separate vehicle alert should be present to indicate this condition. It is also possible your vehicle may shut down unexpectedly.

If this alert is present when your vehicle is parked, you may be unable to drive.

This alert is usually present because your vehicle's high voltage battery charge level has been reduced through normal operation.

What to do:

Charge your vehicle immediately. Charging your vehicle should restore your vehicle's ability to drive.

If this alert occurs during subsequent drives, despite a displayed battery charge level of 5% or higher, schedule service at your earliest convenience.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

BMS_u018

Maximum battery charge level reduced

OK to drive - Schedule service

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. As a result, maximum charge level and range are reduced. Service is required to restore full performance.

What to do:

If this alert persists, schedule service soon. Without service, your vehicle's maximum charge level and range will remain limited.

Your vehicle is OK to drive and charge.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_u030

Charging adapter has electric arc flash hazard

Use different charging equipment

What this alert means:



Charging is unavailable because your vehicle has detected an electric arc flash hazard in the third-party charging adapter used to connect a Combined Charging System (CCS) charge handle to your vehicle's charge port.

An electric arc flash can occur if you attempt to unplug **while actively charging with the third-party charging adapter**, and an electric arc flash can cause serious bodily injury and/or property damage.

What to do:

Follow the steps below to mitigate this risk:

- Make sure charging is completely stopped.
 1. Use your vehicle touchscreen to confirm charging has stopped, or to stop charging if necessary.
 2. Use the charging station display and controls to confirm charging has stopped, or to end any active charging session.
- Make sure no flashing green or blue light (LED) is visible on your vehicle's charge port.
- Unplug the charging adapter from your vehicle's charge port.
- Confirm again that the charging station indicates no active charging session.
- Unplug the charging adapter from the charge handle.

Use different charging equipment to charge your vehicle. For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

BMS_u031

Battery fuse requires replacement soon
OK to drive - Schedule service

What this alert means:

A fuse in your vehicle's high voltage battery is very near the end of its lifetime and requires replacement.

What to do:

It is recommended that you schedule service as soon as possible to have the high voltage battery fuse replaced.

Your vehicle is OK to drive in the meantime. However, you may notice reduced speed and acceleration while driving.

For more information on the high voltage battery system, see [High Voltage Battery Information](#).

BMS_u032

Battery fuse replacement required
OK to drive - Schedule service

What this alert means:

A fuse in your vehicle's high voltage battery is very near the end of its lifetime and requires replacement.

What to do:

It is recommended that you schedule service as soon as possible to have the high voltage battery fuse replaced.

Your vehicle is OK to drive in the meantime. However, you may notice reduced speed and acceleration while driving.

For more information on the high voltage battery system, see [High Voltage Battery Information](#).

BMS_w176

Battery fuse replacement required
OK to drive - Schedule service immediately

What this alert means:



A fuse in your vehicle's high voltage battery is at the end of its lifetime and requires immediate replacement.

What to do:

It is recommended that you schedule service immediately to have the high voltage battery fuse replaced.

Continue to your immediate destination. Your vehicle is OK to drive. However, you may notice reduced speed and acceleration while driving.

For more information on the high voltage battery system, see [High Voltage Battery Information](#).

CC_f001

**Unable to charge - Insufficient grounding
Proper wiring or outlet grounding must be verified**

What this alert means:

No ground connection detected in the Wall Connector.

What to do:

Have the Wall Connector inspected by an electrician to make sure it is properly grounded. Your electrician should ensure there is proper grounding at your circuit breaker or power distribution box and also ensure that appropriate connections are made to the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f002

**Unable to charge - Insufficient grounding
Disconnect and retry or use different equipment**

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f003

**Unable to charge - Wall Connector GFCI tripped
Disconnect and retry or use different equipment**

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f004

**Unable to charge - Wall Connector issue
Wall Connector needs service**

What this alert means:



Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f005

**Unable to charge - Wall Connector GFCI tripped
Disconnect and retry or use different equipment**

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f006

**Unable to charge - Wall Connector overcurrent
Disconnect and retry or use different equipment**

What this alert means:

Over current protection.

What to do:

Reduce the vehicle's charge current setting. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f007

**Unable to charge - Input voltage too high
Voltage must be within Wall Connector rating**

What this alert means:

Over or under voltage protection.

What to do:



Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f008

**Unable to charge - Input voltage too low
Voltage must be within Wall Connector rating**

What this alert means:

Over or under voltage protection.

What to do:

Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f009

**Unable to charge - Input wired incorrectly
Input wiring to Wall Connector must be corrected**

What this alert means:

Input miswired: possibly Line and Neutral are swapped.

What to do:

The wiring between the wall power and the Wall Connector has been incorrectly installed. Consult your electrician.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f010

**Unable to charge - Wall Connector issue
Wall Connector needs service**

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.



CC_f011

**Unable to charge - Wall Connector too hot
Let Wall Connector cool and try again**

What this alert means:

Over temperature protection (latchoff).

What to do:

Make sure the Wall Connector is not covered by anything and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C) , service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f012

**Unable to charge - Wall connection too hot
Outlet or Wall Connector wiring must be checked**

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has stopped to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

To regain normal charge operation, try the following steps.

If the Wall Connector is plugged into a wall outlet, make sure:

- The plug is fully inserted into the receptacle / outlet
- The plug / outlet area is not blocked or covered by anything
- There is no heat source nearby

If the issue persists or the Wall Connector is hard-wired, contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f013

**Unable to charge - Charge handle too hot
Check charge handle or charge port for debris**

What this alert means:

Over temperature protection (latchoff).

What to do:

Make sure the connector is fully inserted into the charge inlet in the vehicle's charging port, is not covered by anything, and there is no heat source nearby. If the issue persists in normal ambient temperatures (under 100°F or 38°C) , service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f014

**Unable to charge - Wall Connector issue
Wall Connector needs service**

What this alert means:

Wall Connector hardware issue. Possible issues include:



1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f015

Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f016

Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.



For more information, see the [installation guide](#) for your Wall Connector.

CC_f017

Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f018

Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f019

Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

**CC_f020****Unable to charge - Wall Connector issue
Wall Connector needs service****What this alert means:**

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f021**Unable to charge - No primary Wall Connector
Check that primary unit is powered and available****What this alert means:**

Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).

For more information, see the [installation guide](#) for your Wall Connector.

CC_f022**Unable to charge - More than 1 primary unit
Ensure only 1 Wall Connector is set as primary****What this alert means:**

Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).



For more information, see the [installation guide](#) for your Wall Connector.

CC_f023

Unable to charge - Too many Wall Connectors
Ensure no more than 3 units paired with primary

What this alert means:

Load sharing (circuit breaker sharing) network: More than three Wall Connectors are paired with the same primary unit.

What to do:

Consult your electrician to have one or more paired Wall Connectors moved to a different circuit and disconnected (unpaired) from this load sharing (circuit breaker sharing) network.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f024

Unable to charge - Low Wall Connector current
Primary unit current setting must be increased

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.

If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.

Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f025

Unable to charge - Wall Connector issue
Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.



3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f026

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f027

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.



3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f028

Unable to charge - Incorrect switch setting Wall Connector rotary switch must be adjusted

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.

If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.

Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f029

Unable to charge - Vehicle connection issue Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f030

Unable to charge - Primary / paired unit mismatch Wall Connector current ratings must match

What this alert means:

Load sharing (circuit breaker sharing) network: The paired Wall Connectors have different maximum current capabilities.

What to do:



Only Wall Connectors with the same maximum current capabilities can be paired in a load sharing (circuit breaker sharing) network. Have your electrician inspect the type labels on the Wall Connectors and make sure the current capabilities match. It is further recommended that your electrician only pair Wall Connectors with the same part number, as an easy way to make sure paired units are compatible.

For more information, see the [installation guide](#) for your Wall Connector.

CC_f041

**Charge rate reduced - Wall connection hot
Outlet or Wall Connector wiring must be checked**

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CHG_f035

**Charging equipment communication error
Try again or try different equipment**

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the external charging equipment. It cannot sense a valid control pilot signal coming from the charging equipment.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

First, confirm the lack of effective communication is caused by the external charging equipment rather than an issue with your vehicle. This is usually the case.

Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).



CHG_f083

**Cannot charge - Poor grid power quality possible
Retry / Try other charge location or Supercharging**

What this alert means:

Power has been lost during charging. This could result from the charging equipment losing power from the source (for example, a wall outlet) or from an issue with the charging equipment.

What to do:

This alert is often accompanied by other alerts that can help you identify and troubleshoot the issue. Start by investigating any other displayed alerts that relate to charging issues.

Alternatively, you can check Mobile Connector or Wall Connector status lights to confirm power to the device, and also refer to the product owner's manual for troubleshooting information based on blink codes. If using other (non-Tesla) external charging equipment, check for a display or other user interface that provides troubleshooting help.

If there is clearly no power to the charging equipment, check the circuit breaker for the wall outlet / Wall Connector to make sure it has not tripped.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_f091

**Charging equipment not recognized
Try again or try different equipment**

What this alert means:

The charge port is unable to detect whether a charge cable is inserted, or the type of charge cable connected.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

If this alert appears while a charge cable **is** connected, determine whether the issue is caused by the charging equipment or the vehicle. Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.



If this alert appears while a charge cable is **not** connected or if the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CHGS_f083

**Cannot charge - Poor grid power quality possible
Retry / Try other charge location or Supercharging**

What this alert means:

Power has been lost during charging. This could result from the charging equipment losing power from the source (for example, a wall outlet) or from an issue with the charging equipment.

What to do:

This alert is often accompanied by other alerts that can help you identify and troubleshoot the issue. Start by investigating any other displayed alerts that relate to charging issues.

Alternatively, you can check Mobile Connector or Wall Connector status lights to confirm power to the device, and also refer to the product owner's manual for troubleshooting information based on blink codes. If using other (non-Tesla) external charging equipment, check for a display or other user interface that provides troubleshooting help.

If there is clearly no power to the charging equipment, check the circuit breaker for the wall outlet / Wall Connector to make sure it has not tripped.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u001

**Charge rate reduced - Unexpected voltage drop
Remove extension cords / Have wiring inspected**

What this alert means:

Charging speed has been reduced because the onboard charger in your vehicle has detected a large voltage drop during charging.



Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.

This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:

- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u002

Charging stopped due to large voltage drop

Remove extension cords / Have wiring inspected

What this alert means:

Charging has been interrupted because the onboard charger in your vehicle has detected an unusually large voltage drop.

Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.

This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:

- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.



You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u004

Charging stopped - Power lost while charging

Check power source and charging equipment

What this alert means:

Power has been lost during charging. This could result from the charging equipment losing power from the source (for example, a wall outlet) or from an issue with the charging equipment.

What to do:

This alert is often accompanied by other alerts that can help you identify and troubleshoot the issue. Start by investigating any other displayed alerts that relate to charging issues.

Alternatively, you can check Mobile Connector or Wall Connector status lights to confirm power to the device, and also refer to the product owner's manual for troubleshooting information based on blink codes. If using other (non-Tesla) external charging equipment, check for a display or other user interface that provides troubleshooting help.

If there is clearly no power to the charging equipment, check the circuit breaker for the wall outlet / Wall Connector to make sure it has not tripped.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u005

Unable to charge - Charge station not powered

Check power source or try a different station

What this alert means:

Charging cannot begin because the charging equipment is not ready. A charge handle is detected, but the charging station is not communicating with the vehicle. This issue could occur because:

- The charging station is not powered.
- The control pilot signal between the charging station and the vehicle is interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

**What to do:**

Try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If using a Mobile Connector or Wall Connector, first check the status lights on the front. If no status lights are visible, check the power source and contact an electrician to inspect the building wiring connection to the wall outlet or the Wall Connector to confirm that all wires are properly connected and torqued.

If using other external charging equipment, consult the product's owner's manual to learn how to confirm that the station is powered. Contact an electrician to inspect the building wiring and charging equipment as necessary.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CHG_u006**Charge port latch not engaged****Fully insert charge cable or check for obstruction****What this alert means:**

The charge port latch is unable to latch the charge cable in the charge port inlet. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet.

If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). Make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

**CHG_u007****Charging equipment reports error****Check equipment for error code or message****What this alert means:**

Charging was interrupted because the external charging equipment has reported a fault that prevents the vehicle from charging.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Inspect the external charging equipment and look for status lights, displays, or other status indicators on the equipment. For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

Try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CHG_u010**External charging equipment error detected****Try different charging equipment****What this alert means:**

AC charging cannot begin due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle's onboard charger is detecting input voltage at the charge port when no power has been requested from the external charging equipment, which indicates the external charging equipment is not functioning as expected.

This can sometimes be caused by a hardware issue specific to the external charging equipment, which prevents the charging equipment from switching power to the vehicle on or off when requested. It could also occur due to another condition affecting the external charging equipment, or a condition affecting your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u012**Power grid or vehicle issue limiting AC charging****Unplug and retry / Try different charging location****What this alert means:**

Charging speed has been reduced due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.



This may be due to power supply disturbances caused by the external charging equipment or by the electrical power grid. In some cases, this condition may be the result of using nearby electric devices that draw a lot of power.

If these possible causes can be ruled out, then a condition with your vehicle itself may also be affecting AC charging.

What to do:

If this alert is accompanied by another alert that specifies the condition affecting AC charging, start by investigating that alert.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

If this alert persists when attempting to charge at multiple locations and with different charging equipment, it is recommended that you schedule service.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u013

Charging equipment communication lost

Check power source and charging equipment

What this alert means:

Charging stopped because communication between the vehicle and the external charging equipment was interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Confirm whether the external charging equipment is powered by looking for any status lights, displays, or other indicators on the equipment. For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

If the equipment is **not** powered, try to restore the external charging equipment's power source.

- If attempting to charge at a public station and power is unable to be restored, contact the station operator.
- If attempting to charge at a private station (for example: charging at home) and power is unable to be restored, contact an electrician.

If the equipment is powered, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.



For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CHG_u014**Charging equipment reports error****Check equipment for error code or message****What this alert means:**

Charging was interrupted because the external charging equipment has reported a fault that prevents the vehicle from charging.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Inspect the external charging equipment and look for status lights, displays, or other status indicators on the equipment. For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

Try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CHG_w032**Charge rate reduced - Wall connection hot****Outlet or Wall Connector wiring must be checked****What this alert means:**

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

Wall Connector installation guides can be found [here](#).

CHG_w037**Unable to charge - Wall connection too hot****Outlet or Wall Connector wiring must be checked****What this alert means:**

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.



For more information, see the [installation guide](#) for your Wall Connector.

CP_w043

Charge port door sensor fault

Charge port may not operate as expected

What this alert means:

One of the charge port door sensors is not functioning normally. When this occurs, the charge port may be unable to accurately sense the charge port door position and the charge port may not operate as expected.

- The charge port latch may intermittently remain engaged when the charge port door is opened.
- The charge port light may illuminate only intermittently when the charge port door is opened.

What to do:

Try closing the charge port door and then opening it again.

For more information, see [Opening the Charge Port on page 726](#)[Opening the Charge Port on page 1370](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_w054

Charge port latch not engaged

Fully insert charge cable or check for obstruction

What this alert means:

The charge port latch is unable to latch the charge cable in the charge port inlet. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet.

If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). Make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

**DI_f138****Front motor disabled - OK to drive****Vehicle power may be limited****What this alert means:**

Your vehicle's front motor is unavailable. Power, speed, and acceleration may be reduced as your vehicle uses the rear motor(s) to continue driving.

What to do:

Continue to your destination. Your vehicle is OK to drive.

In some cases, your vehicle may be unable to continue driving. If this occurs, another vehicle alert should also be present to provide more information and recommended actions.

This alert may be caused by a temporary condition that will be resolved automatically. If this alert clears during your current drive, or is no longer present when you start your next drive, it was likely caused by a temporary condition. No action is required.

This alert may also indicate a condition requiring front motor inspection and service. If this alert persists throughout subsequent drives, it is recommended that you schedule service. Your vehicle is OK to drive in the meantime.

DI_u006**Vehicle automatically parked to prevent rollaway****Fasten seatbelt and close door to stay in gear****What this alert means:**

Your vehicle has automatically shifted into Park (P) because it determined the driver was leaving or no longer present. This is expected vehicle behavior under various circumstances.

Your vehicle will automatically shift into Park if **all** of these conditions are true:

- Autopark is not active
- Your vehicle is traveling slower than 1.4 mph (2.25 km/h) in Drive or Reverse
- The last driver activity was detected more than 2 seconds ago. Driver activity includes:
 - Pressing the brake and/or accelerator pedal
 - Manually steering the vehicle

And at least **two** of these conditions are true:

1. Driver seatbelt is detected as unbuckled.
 2. Driver is not detected as present.
 3. Driver door is detected as open.
-
1. Driver seatbelt is detected as unbuckled
 2. Driver is not detected as present
 3. Driver door is detected as open
 4. One or more of the sensors used to detect the three conditions above (seatbelt buckle, seat occupancy, door latch) is not working as expected

Your vehicle will also automatically shift into Park if **any** of these conditions is true:

- Door is detected as open
- Seatbelt is detected as unbuckled while speed is less than 0.1mph (0.15 km/h) in Drive or Reverse
- No driver activity is detected for 60 seconds



NOTE: If your vehicle is running software from 2015 or later, it will automatically shift into Park immediately when **all three** of the conditions above are true, regardless of vehicle speed or last detected press of the brake / accelerator pedal.

Your vehicle will also automatically shift into Park if **all** of these conditions are true:

- Vehicle hold is engaged
- Your vehicle is in Drive (D) or Reverse (R)
- Driver door is detected as open

NOTE: Your vehicle will also automatically shift into Park when a charge cable is connected to the charge port.

What to do:

For more information on automatic shifting into Park, see [Shifting on page 399](#)[Shifting on page 405](#).

DI_u015

Cruise control unavailable

What this alert means:

Cruise Control, including Traffic-Aware Cruise Control, is currently unavailable.

Cruise Control might be unavailable because:

- The driver canceled the request.
- The driver unbuckled their seatbelt.
- The front trunk or a door is open.
- The front trunk, trunk, or a door is open.
- The vehicle is traveling below the Cruise Control minimum speed of 18 mph (30 km/h).
- There is an environmental condition, such as limited visibility.
- Valet mode is active.
- Track mode is active.

What to do:

Take control and drive your vehicle manually.

When any condition preventing Cruise Control activation is no longer present, Cruise Control should be available. If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Traffic-Aware Cruise Control on page 576](#)[Traffic-Aware Cruise Control on page 554](#).

DI_u024

Autopark canceled

Take control

What this alert means:

Autopark has been canceled.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.



- The curb cannot be detected.
- A trailer is attached to the vehicle.

What to do:

Park, or finish parking, your vehicle manually.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_u025**Autopark aborted****What this alert means:**

Autopark has aborted and the Electronic Parking Brake has been applied.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.
- The curb cannot be detected.
- A trailer is attached to the vehicle.

What to do:

Park, or finish parking, your vehicle manually.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_u032**Adaptive ride control disabled****Drive with caution****What this alert means:**

The speed of your vehicle is limited to 90 mph (144 km/h) due to an issue with the Adaptive Suspension Damping system.

The system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and as a result your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument paneltouchscreentouchscreen. For more information, see [Air Suspension on page 471](#)[Suspension on page 1240](#)[Suspension on page 502](#).



DI_w039

Regenerative braking unavailable

Use brake pedal as needed

What this alert means:

Regenerative braking performance is temporarily reduced, and there is less automatic deceleration when you lift your foot off the accelerator pedal while driving.

This alert may occur when:

- High voltage battery is near full charge. Regenerative braking is reduced when the battery is at 95% charge or higher.
- High voltage battery is not warm enough. This can happen at the beginning of a drive. It may happen frequently in colder climates.

What to do:

Your vehicle is OK to drive.

Use the brake pedal as needed to slow your vehicle, just as you would in a gas-powered, non-electric vehicle.

Driving your vehicle usually clears this alert, because it reduces the battery charge below 95% and/or sufficiently heats the battery.

NOTE: In colder climates, this alert may remain present indefinitely and automatic deceleration may remain limited, as driving your vehicle may not heat the battery enough to restore full regenerative braking performance. You can use Defrost Car in the Tesla Mobile App to warm up the high voltage battery before you drive and restore normal regenerative braking. For more information, see [Cold Weather Best Practices on page 693](#).

This alert, by itself, does not typically indicate a condition requiring service. If this alert persists across drives, it may indicate a condition affecting your vehicle's regenerative braking ability, and it is recommended you schedule service at your earliest convenience.

For more information, see [Regenerative Braking on page 463](#).

DI_w138

Front motor disabled - OK to drive

Vehicle power may be limited

What this alert means:

Your vehicle's front motor is unavailable. Power, speed, and acceleration may be reduced as your vehicle uses the rear motor(s) to continue driving.

What to do:

Continue to your destination. Your vehicle is OK to drive.

In some cases, your vehicle may be unable to continue driving. If this occurs, another vehicle alert should also be present to provide more information and recommended actions.

This alert may be caused by a temporary condition that will be resolved automatically. If this alert clears during your current drive, or is no longer present when you start your next drive, it was likely caused by a temporary condition. No action is required.

This alert may also indicate a condition requiring front motor inspection and service. If this alert persists throughout subsequent drives, it is recommended that you schedule service. Your vehicle is OK to drive in the meantime.

DI_w168

Vehicle Hold feature unavailable

Keep brake pedal pressed while stopped

What this alert means:



Vehicle Hold is currently unavailable due to system constraints. When stopping, use the brake pedal to bring your vehicle to a complete stop and keep your vehicle stationary.

What to do:

Continue to your destination. Your vehicle is OK to drive.

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Vehicle Hold on page 493](#) Stopping Mode in [Braking and Stopping on page 1235](#) .

DI_w172

Powertrain requires service

Avoid hard acceleration

What this alert means:

An issue has been detected in the powertrain system.

Your vehicle has detected excessive backlash (lash) between the drive unit and the wheels. High, or excessive, lash is indicative of mechanical wear.

There are many possible causes, so a powertrain inspection is needed.

What to do:

It is recommended that you schedule service as soon as possible for a powertrain inspection.

Your vehicle is OK to drive in the meantime. You can drive to your immediate destination and to a service center. Avoid hard or heavy acceleration, as this puts more stress on the powertrain.

Schedule a service appointment at your earliest opportunity. If this issue is not addressed, your vehicle might unexpectedly stop while you are driving.

GTW_w017

Electrical system power reduced

Non-essential features may be unavailable

What this alert means:

Some non-essential features, like seat heaters or cabin heating / cooling, may be unavailable or may operate at a reduced level. This is expected behavior designed to help your vehicle maintain adequate electrical power for essential functions.

What to do:

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other alerts specific to conditions affecting your vehicle's electrical system.

GTW_w018

Electrical system power reduced

Non-essential features may be unavailable

What this alert means:

Some non-essential features, like seat heaters or cabin heating / cooling, may be unavailable or may operate at a reduced level. This is expected behavior designed to help your vehicle maintain adequate electrical power for essential functions.

What to do:

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other alerts specific to conditions affecting your vehicle's electrical system.



GTW_w174

12V battery must be replaced - Schedule service
Software will not update until battery is replaced

What this alert means:

The low voltage battery is showing degraded performance and needs to be replaced. Until the low voltage battery is replaced, vehicle software updates will not complete.

What to do:

It is recommended that you have the low voltage battery replaced at your earliest convenient opportunity.

You can schedule service via your Tesla Mobile App, or with an independent service provider that offers low voltage battery replacement for your vehicle. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

Your vehicle is OK to drive with this alert present. However, if you delay the low voltage battery replacement, your vehicle may eventually not have enough electrical power to start or to restart after a recent drive.

If the low voltage battery does not have enough electrical power to turn on your vehicle or open the doors, see [Battery Care on page 724](#) for recommended actions.

For more information on the battery system, see [High Voltage Battery Information on page 724](#).

GTW_w360

Assist for low brake performance activated
To stop, keep brake pedal firmly pressed

What this alert means:

Hydraulic Fade Compensation is active. This brake assist function activates temporarily to make sure you have full braking capability in conditions where reduced braking performance is detected by your vehicle.

When this assist function activates, you may feel the brake pedal pull away from your foot and notice a strong increase in brake pressure. You may also hear a pumping sound coming from the brake hydraulic unit at the front of the vehicle. This will usually last for a few seconds, depending on road surface and vehicle speed. This is completely normal and does not indicate any issue with your vehicle.

What to do:

Continue to press the brake pedal as you normally would, and do not "pump" (repeatedly press and release) the pedal as this will interrupt the function.

This alert will clear when your vehicle comes to a stop or you are no longer pressing the brake pedal. It may still be displayed for up to 5 seconds afterward.

Reduced braking performance is usually temporary, and can occur for a number of reasons including high brake temperatures after heavy brake use, or driving in extremely cold or wet conditions. It can also indicate that your brake pads or rotors have worn to the point that normal replacement is needed.

If you continue to experience reduced braking performance which does not improve over time, please contact Tesla service at your convenience for a brake inspection.

For more information, see [Hydraulic Fade Compensation on page 462](#).

GTW_w405

Electrical system power reduced
Vehicle may shut down unexpectedly

What this alert means:

The electrical system cannot maintain the voltage required to support all vehicle features.

If this alert is present while you are driving, it is possible your vehicle will shut down unexpectedly.



It is also possible that your vehicle will not restart after the current drive.

What to do:

It is recommended that you eliminate or reduce your use of any non-essential features. This can help your vehicle maintain adequate electrical power for essential functions. It may also prevent your vehicle from shutting down before you reach your immediate destination, although this is not guaranteed.

If this alert remains active, schedule service immediately. Without service, your vehicle may shut down unexpectedly or may not restart.

MCU_u005**Front trunk open****Proceed with caution****What this alert means:**

Your vehicle's front trunk (hood) is detected open while driving.

This alert indicates at least one of the two latches securing the hood, the front trunk primary and/or secondary latch, cannot be confirmed closed (confirmed as fully secured) when your vehicle is shifted into a gear other than Park.

What to do:

As this condition may lead to the front trunk opening while driving, it is recommended that you drive carefully until you can safely bring your vehicle to a stop and shift into Park.

Once your vehicle is parked, check the front trunk (hood) to make sure it is fully closed (both latches are fully engaged). For more information, see Closing instructions for the [Front Trunk on page 181](#) [Powered Frunk on page 1185](#).

The alert should clear once your vehicle is shifted into Park. However, it may return once you start driving if you do not first inspect and fully secure the hood.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.

For more information on the front trunk, see [Front Trunk on page 181](#) [Powered Frunk on page 1185](#).

MCU_u019**Active service connection to vehicle****Service performing remote diagnostics****What this alert means:**

A service technician is remotely logged into your vehicle for diagnosis or repair. You may notice some loss of Infotainment functionality while the connection persists, but this alert does not indicate an issue with your vehicle.

Your vehicle is OK to drive.

What to do:

This alert should clear automatically after the technician completes vehicle diagnosis or repair. You may find it necessary to restart your touchscreen to restore full Infotainment functionality after the alert has cleared. For more information, see [Restarting the Touchscreen in your vehicle's Do It Yourself Guide](#).

If this alert does not clear after 24 hours, it is recommended that you schedule service via your Tesla Mobile App or with an independent service provider. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

MCU_w008**Air pressure in tires very low****PULL OVER SAFELY - Check for flat tire****What this alert means:**



This alert indicates that one or more of the tires on your vehicle is extremely low or flat.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is significantly lower than the recommended cold tire pressure.

What to do:

You should pull over carefully as soon as possible. In a safe location, check for a flat tire.

You can request Tesla roadside assistance options (mobile tire, loaner wheel, tow) if required. See [Contacting Tesla Roadside Assistance on page 930](#) for more information.

In a non-emergency situation, it is recommended that you visit a local tire shop for assistance or schedule service using your Tesla Mobile App.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

The alert will clear once the TPMS has a consistent tire pressure measurement for each of your tires within 3 psi of the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

MCU_w010

**Air pressure below recommendation for tires
Check pressure and refill air as needed**

What this alert means:

This alert does NOT indicate that there is a flat tire.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is at least 20% lower than the recommended cold tire pressure.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

This alert may appear in cold weather because the air in your tires naturally contracts when it becomes cold, decreasing tire pressures.

What to do:

Add air to maintain the recommended cold tire pressure. Although drops in tire pressure are expected in colder weather, the recommended cold tire pressure should be maintained at all times.

The alert may clear as the vehicle is driven. This is because the tires will warm up and the tire pressure will increase. Even if the alert clears, the tires should still be refilled with air once they have cooled.

The alert will clear once the Tire Pressure Monitoring System detects that each of your tires is inflated to the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.



If you repeatedly see this alert for the same tire, have the tire inspected for a slow leak. You can visit a local tire shop or schedule service using your Tesla Mobile App.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#).

MCU_w029

Service is required
Schedule service now

What this alert means:

This alert is set remotely by Tesla when a condition requiring service is detected on your vehicle.

This alert can be set due to various conditions. When you schedule service, more information should be available.

This alert can only be cleared by a service technician after your vehicle has been serviced.

What to do:

As this alert can be present due to various conditions, it is recommended that you schedule service at your earliest convenience.

TAS_a313

Adaptive ride control degraded
Ride comfort may be reduced

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling.

Instead, all dampers are receiving fixed current. Your ride may be softer or firmer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a yellow indicator light on the instrument panel [touchscreen](#). For more information, see [Air Suspension on page 471](#)[Suspension on page 1240](#)[Suspension on page 502](#).

TAS_a314

Adaptive ride control degraded

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel [touchscreen](#). For more information, see [Air Suspension on page 471](#)[Suspension on page 1240](#)[Suspension on page 502](#).

THC_u0005

Air conditioning temporarily reduced
Vehicle systems being cooled

What this alert means:



Cabin air conditioning performance has been temporarily reduced because your vehicle needs to focus on cooling the high voltage battery (Battery) and/or powertrain. This is completely normal and does not indicate a problem with your vehicle or the air conditioning (A/C) system.

In addition to cooling the vehicle interior, the A/C system also cools the Battery. The A/C system's priority is to cool the Battery to make sure it stays within an optimal temperature range that supports longevity and best performance.

In high temperature environments, it is normal for your vehicle to focus more for brief periods on cooling the Battery. When this happens, it is most often because the vehicle is supercharging in hot weather.

What to do:

No action is required. Your vehicle is OK to drive.

The alert should clear in a short time, and cabin air conditioning performance should return to normal. In some cases, the alert and vehicle behavior will continue until supercharging is complete.

If the alert persists over multiple drives and is accompanied by other alerts that indicate potential issues with the A/C system, contact Tesla Service at your convenience to schedule an A/C system inspection.

THC_w0100

**Battery heating unavailable - Charge rate reduced
Charging may be unavailable in cold temperatures**

What this alert means:

A condition affecting the performance of your vehicle's high voltage battery heater has been detected.

Without adequate heating of the high voltage battery, charging speed (charge rate) may be reduced. Your vehicle may also be unable to charge in cold ambient temperatures (cold weather) while high voltage battery heating remains unavailable.

What to do:

Your vehicle is OK to drive. Your vehicle is also OK to charge and connect to a charging station. However, your vehicle may be unable to charge, or may charge more slowly than expected, in cold ambient temperatures.

If possible, try charging your vehicle in a closed environment like a garage, where warmer ambient temperatures may make high voltage battery heating unnecessary.

If driving in cold ambient temperatures, it is recommended that you do **NOT** rely on charging stations along your route to reach your destination, as the high voltage battery may be too cold to charge.

- If you need to charge, try to charge your vehicle immediately after a drive. The high voltage battery may still be warm from the previous drive.
- Leaving your vehicle parked in cold ambient temperatures after a drive will cause the high voltage battery to cool, and charging may become unavailable.

Similarly, it is recommended that you do not rely on regenerative braking to charge the high voltage battery while driving in cold ambient temperatures, as regenerative braking may be unavailable if the battery temperature is too low. For more information, see [Regenerative Braking on page 463](#).

This alert may be present due to many conditions. It may be caused by a temporary condition that requires no action to resolve.

However, if this alert persists over multiple drives, or is accompanied by other alerts indicating potential issues with your vehicle's heating and/or air conditioning system, it is recommended that you schedule service at your earliest reasonable opportunity.

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

**UMC_w001****Unable to charge with Mobile Connector
Inadequate outlet grounding - Try another outlet****What this alert means:**

The Mobile Connector has detected that the electrical outlet has insufficient grounding, likely caused by an inadequate or missing ground connection.

This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

What to do:

Have the electrical installation inspected by an electrician. Your electrician should make sure there is proper grounding at your circuit breaker or power distribution box, and also make sure that appropriate connections are made to the outlet, before you attempt to plug in the Mobile Connector again.

If you need to charge in the meantime, try charging using a different outlet, at another location, or with another type of charging station.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w002**Unable to charge - Mobile Connector GFCI tripped
Unplug charge handle from charge port and retry****What this alert means:**

The vehicle cannot charge because the ground-fault circuit interrupter (GFCI) in the Mobile Connector has tripped.

Like the GFCI in a wall outlet, this feature is designed to stop the flow of electricity when there is a problem. It has interrupted charging to protect your vehicle and the charging equipment.

This could happen for many reasons. The problem could be in the charge cable, the charge handle, the charge port, or even an onboard vehicle component.

What to do:

Inspect the charge port and the charge handle for pooled water or unusual levels of moisture. If you find excessive moisture, wait and let both the inside area of the charge port and the exposed portion of the charge handle dry sufficiently before trying again.

Inspect the charge equipment for damage.

- If the cable is in any way damaged or deteriorated, **do not use it**. Try different charging equipment instead.
- If the cable is in good condition, try charging again with the same Mobile Connector.

If the issue persists and prevents charging, try charging with different charging equipment.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_w004

Unable to charge with Mobile Connector
Voltage too high / Try a different wall outlet

What this alert means:

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:

- Detects the wall outlet voltage is too high, **or**
- Detects an unexpected increase in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w005

Unable to charge with Mobile Connector
Voltage too low / Try a different wall outlet

What this alert means:

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:

- Does not detect enough supply voltage from the wall outlet, **or**
- Detects an unexpected drop in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w007

Mobile Connector control box temperature high
Let Mobile Connector cool to resume charging

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.



You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w008

**Unable to charge - Wall plug temperature high
Wall outlet and wiring inspection recommended**

What this alert means:

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has stopped to protect the outlet.

This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_w009

**Cannot charge - Charge handle temperature high
Check charge handle or charge port for debris**

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.

If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w010

**Mobile Connector to adapter connection hot
Let cool - Plug adapter fully into Mobile Connector**

What this alert means:



Charging has been interrupted because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.

Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Once the Mobile Connector control box temperature has decreased and any obstruction has been removed, the alert should clear and charging should be possible.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w011

Charging equipment communication error

Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector cannot confirm via proximity detection that the charge handle is fully connected to your vehicle.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.

To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

UMC_w012

Charging equipment communication error

Try again or try different equipment

What this alert means:



Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector detects that it cannot generate or maintain a valid control pilot signal.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.

To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

UMC_w013**Wall plug adapter error - Charge rate reduced
Plug adapter fully into Mobile Connector and retry****What this alert means:**

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot monitor the wall plug adapter temperature, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector.

In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_w014

Wall plug adapter error - Charge rate reduced Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w015

Wall plug adapter error - Charge rate reduced Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.



You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w016**Mobile Connector control box temperature high****Maximum charge rate reduced****What this alert means:**

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w017**Charge rate reduced - Wall plug temperature high****Wall outlet and wiring inspection recommended****What this alert means:**

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has been slowed to protect the outlet.

This is not typically an issue with your vehicle or your Mobile Connector, but rather an issue with the outlet. A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_w018**Charge rate reduced - Handle temperature high****Check charge handle or charge port for debris****What this alert means:**

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.



If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_w019

Mobile Connector to adapter connection hot Maximum charge rate reduced

What this alert means:

Charge current has been reduced because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture.

It is recommended that any debris / foreign objects be removed. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby. If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

Consumer Information



About this Owner Information

Document Applicability

For the latest and greatest information that is customized to your vehicle, view the Owner's Manual on your vehicle's touchscreen by touching **Controls > Service > Owner's Manual**. The information is specific to your vehicle depending on the features you purchased, vehicle configuration, market region and software version. In contrast, owner information that is provided by Tesla elsewhere is updated as necessary and may not contain information unique to your vehicle.

Information about new features is displayed on the touchscreen after a software update, and can be viewed at any time by touching **Controls > Software > Release Notes**. If the content in the Owner's Manual on how to use your vehicle conflicts with information in the Release Notes, the Release Notes take precedence.

Illustrations

The illustrations provided in this document are for demonstration purposes only. Depending on vehicle options, software version and market region, the information displayed on the touchscreen in your vehicle may appear slightly different.

Feature Availability

Some features are available only on some vehicle configurations and/or only in specific market regions. Options or features mentioned in the Owner's Manual does not guarantee they are available on your specific vehicle. See [Feature Availability Statement on page 1056](#) for more information.

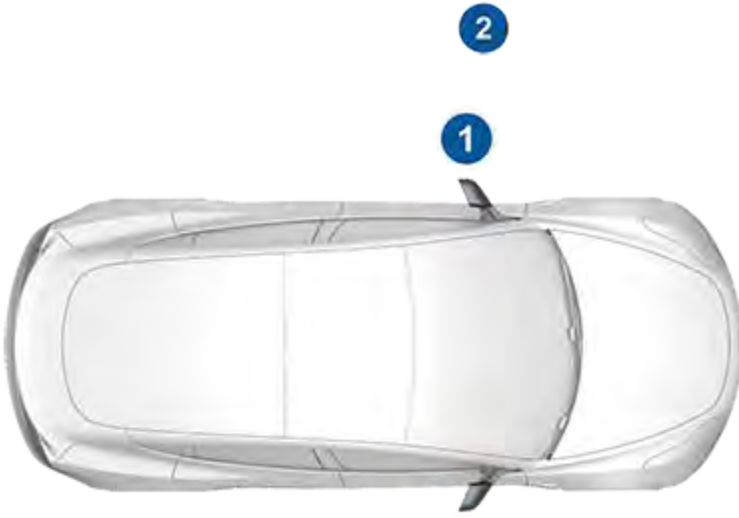
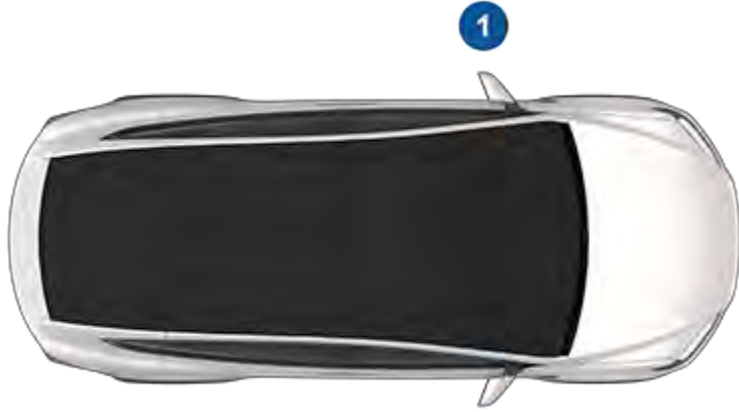
Errors or Inaccuracies

All specifications and descriptions are known to be accurate at time of publishing. However, because continuous improvement is a goal at Tesla, we reserve the right to make product modifications at any time. To communicate any inaccuracies or omissions, or to provide general feedback or suggestions regarding the quality of the Owner's Manual, send an email to ownersmanualfeedback@tesla.com.

Location of Components

Owner information may specify the location of a component as being on the left or right side of the vehicle. As shown, left (1) and right (2) represent the side of the vehicle when sitting inside.







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T E S L A



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Feature Availability Statement

Your Tesla is constantly changing, with new features being added and improved upon with every software update. However, depending on the firmware release operating on your vehicle, your vehicle may not be equipped with all features or may not operate exactly as described in this Owner's Manual. The features on your vehicle vary depending on market region, vehicle configuration, options purchased, software updates, and more.

Referencing options or features mentioned in this Owner's Manual does not guarantee they are available on your specific vehicle. The best way to ensure you are getting the latest and greatest features is update your vehicle's software as soon as you receive the notification to do so. You can also set your preferences to **Controls > Software > Software Preferences > Advanced**. See [Software Updates on page 749](#) for more information. For the features available on your vehicle, always comply with local laws and limits to ensure the safety of you, your passengers, and those around you.



Disclaimers

Event Data Recorder (EDR)

CybertruckModel SModel XModel 3Model Y is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, data such as an airbag deployment or hitting a road obstacle, to better understand how the vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in CybertruckModel SModel XModel 3Model Y is designed to record data such as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was pressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

The data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the EDR under normal driving conditions and no personal data (for example, name, gender, age, and crash location) is recorded. However, other parties, such as law enforcement, could combine the EDR data with person identifying data they routinely acquire during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have this special equipment, can read the information if they have access to the vehicle or the EDR. Tesla may also access the EDR remotely in some crash circumstances.

Vehicle Telematics

CybertruckModel SModel XModel 3Model Y is equipped with electronic modules that monitor and record data from various vehicle systems, including the motor, Autopilot components, Battery, braking and electrical systems. The electronic modules record information about various driving and vehicle conditions, including braking, acceleration, trip and other related information regarding your vehicle. These modules also record information about the vehicle's features such as charging events and status, the enabling/disabling of various systems, diagnostic trouble codes, VIN, speed, direction and location.

The data is stored by the vehicle and may be accessed, used and stored by Tesla service technicians during vehicle servicing or periodically transmitted to Tesla wirelessly through the vehicle's telematics system. This data may be used by Tesla for various purposes, including, but not limited to: providing you with Tesla telematics services; troubleshooting; evaluation of your vehicle's quality, functionality and performance; analysis and research by Tesla and its partners for the improvement and design of our vehicles and systems; to defend Tesla; and as otherwise may be required by law. In servicing your vehicle, Tesla can potentially resolve issues remotely simply by reviewing your vehicle's data log.

Tesla's telematics system wirelessly transmits vehicle information to Tesla on a periodic basis. The data is used as previously described and helps ensure the proper maintenance of your vehicle. Additional CybertruckModel SModel XModel 3Model Y features may use your vehicle's telematics system and the information provided, including features such as charging reminders, software updates, and remote access to, and control of, various systems of your vehicle.

Tesla does not disclose the data recorded in your vehicle to any third party except when:

- An agreement or consent from the vehicle's owner (or the leasing company for a leased vehicle) is obtained.
- Officially requested by the police or other authorities.
- Used as a defense for Tesla.
- Ordered by a court of law.
- Used for research purposes without disclosing details of the vehicle owner or identification information.
- Disclosed to a Tesla affiliated company, including their successors or assigns, or our information systems and data management providers.

For additional information regarding how Tesla processes data collected from your vehicle, please review Tesla's Privacy Notice at <http://www.tesla.com/about/legal>.



Data Sharing

For quality assurance and to support the continuous improvement of advanced features such as Autopilot, your CybertruckModel SModel XModel 3Model Y may collect analytics, road segment, diagnostic, and vehicle usage data and send to Tesla for analysis. This analysis helps Tesla improve products and services by learning from the experience of billions of miles that Tesla vehicles have driven. Although Tesla shares this data with partners that contribute similar data, the collected information does not identify you personally and can be sent to Tesla only with your explicit consent. In order to protect your privacy, personal information is either not logged at all, is subject to privacy preserving techniques, or is removed from any reports before being sent to Tesla. You have control over what data you share by touching **Controls > Software > Data Sharing**.

For additional information regarding how Tesla processes data collected from your vehicle, please review Tesla's Privacy Notice at <http://www.tesla.com/about/legal>.

NOTE: Although CybertruckModel SModel XModel 3Model Y uses GPS in connection with driving and operation, as discussed in this document, Tesla does not record or store vehicle-specific GPS information, except the location where a crash occurred. Consequently, Tesla is unable to provide historical information about a vehicle's location (for example, Tesla is unable to tell you where CybertruckModel SModel XModel 3Model Y was parked/traveling at a particular date/time).

Quality Control

You might notice a few miles/km on the odometer when you take delivery of your CybertruckModel SModel XModel 3Model Y. This is a result of a comprehensive testing process that ensures the quality of your CybertruckModel SModel XModel 3Model Y.

The testing process includes extensive inspections during and after production. The final inspection takes place at Tesla and includes a road test conducted by a technician.

Sound Library




"Free Sounds Library" (if equipped).

Free Sound Effects Site.

License: Attribution 4.0 International (CC BY 4.0). You are allowed to use sound effects free of charge and royalty free in your multimedia projects for commercial or non-commercial purposes.

<http://www.freesoundlibrary.com>

California Proposition 65

-  **WARNING:** Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including phthalates and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, wear gloves or wash your hands frequently when servicing your vehicle. For more information go to: www.P65Warnings.ca.gov/passenger-vehicle.
-  **WARNING:** Certain components of this vehicle such as airbag modules and seat belt pre-tensioners may contain Perchlorate Material. Special handling may be required for service or vehicle end of life disposal. See www.dtsc.ca.gov/hazardouswaste/perchlorate.
-  **WARNING:** Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.



Reporting Safety Defects

Contacting Tesla

For detailed information about your CybertruckModel SModel XModel 3Model Y, go to <http://www.tesla.com> and log on to your Tesla account or sign up to get an account.

If you have any questions or concerns about your CybertruckModel SModel XModel 3Model Y, in the United States, Canada or Puerto Rico, call 1-877-79TESLA (1-877-798-3752) and in Mexico, call 1-800-228-8145.

NOTE: You can also use voice commands to provide feedback to Tesla. Say "Report", "Feedback", or "Bug report" followed by brief comments. CybertruckModel SModel XModel 3Model Y takes a snapshot of its systems, including your current location, vehicle diagnostic data, and screen captures of the touchscreen and instrument panel. Tesla periodically reviews these notes and uses them to continue improving CybertruckModel SModel XModel 3Model Y.

Reporting Safety Defects - US

If you believe that CybertruckModel SModel XModel 3Model Y has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Tesla.

If NHTSA receives similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Tesla.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to www.safercar.gov or write to: Administrator, National Highway Traffic Safety, 1200 New Jersey Avenue SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from www.safercar.gov.

Reporting Safety Defects - Canada

If you believe that your CybertruckModel SModel XModel 3Model Y has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada, in addition to notifying Tesla. To contact Transport Canada, call their toll-free number: 1-800-333-0510.

Certification Conformity

FCC and ISSED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
B-Pillar Endpoint (manufactured prior to 2022)	Tesla	1089773E	13.56	2AEIM-1089773E	20098-1089773E
		1509518D	2400-2483.5	2AEIM-1509518D	20098-1509518D
B-Pillar Endpoint (manufactured from approx. 2022+)	Tesla	1783148Y	13.56	2AEIM-1783148Y	20098-1783148Y
			2400-2483.5		
Center Console	Tesla	1089774	13.56	2AEIM-1089774	20098-1089774
			2400-2483.5	2AEIM-1089774	
Rear Endpoint	Tesla	1089775	2400-2483.5	2AEIM-1089775	20098-1089775
		1509516		2AEIM-1509516	20098-1509516
Key fob	Tesla	1133148	2400-2483.5	2AEIM-1133148	20098-1133148



Owners Manual

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
TPMS	Continental	TIS-01	433.92	KR5TIS-01	7812-TIS01
	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
In-Cabin Radar* (if equipped)	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Homelink (if equipped)	Gentex	ADHL5C	286-440MHz	NZLADHL5C	4112A-ADHL5C
Car PC Manufactured approx. 2017-2019	Tesla	1098058		YZP-RBHP-B216C RI7LE940B6NA	RBHP-B216C 5131A-LE940B6NA
Car PC Manufactured approx. 2019-2022	Tesla	1506277		YZP-RBHP-B216C RI7LE940B6NA	RBHP-B216C 5131A-LE940B6NA
Car PC Manufactured approx. January-July 2022	Tesla	1960100		XMR2020AG525RGL YZP- ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Car PC Manufactured approx. August 2022+	Tesla	1960100 1960400		XMR2020AG525RGL XMR202201AF51Y	10224A-2020AG525R 10224A-202201AF51Y
Wireless Charger	Tesla	WC2	--	2AEIM-WC2	20098-WC2
		WC3	127.72KHz	2AEIM-WC3	20098-WC3

*In-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference; and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:



- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.

⚠ CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Canada

CAN ICES-3 (B)/NMB-3(B)

CAN ICES-003(B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPTE1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
B-Pillar Endpoint (manufactured prior to 2022)	Tesla	1089773E	13.56	2AEIM-1089773E	20098-1089773E
		1509518D	2400-2483.5	2AEIM-1509518D	20098-1509518D



Owners Manual

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
B-Pillar Endpoint (manufactured from approx. 2022+)	Tesla	1783148Y	13.56 2400-2483.5	2AEIM-1783148Y	20098-1783148Y
Center Console	Tesla	1089774	13.56 2400-2483.5	2AEIM-1089774 2AEIM-1089774	20098-1089774
Rear Endpoint	Tesla	1089775 1509516	2400-2483.5	2AEIM-1089775 2AEIM-1509516	20098-1089775 20098-1509516
Key fob	Tesla	1133148	2400-2483.5	2AEIM-1133148	20098-1133148
TPMS	Continental Tesla	TIS-01 1472547G	433.92 2400-2483.5	KR5TIS-01 2AEIM-1472547G	7812-TIS01 20098-1472547G
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
In-Cabin Radar* (if equipped)	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Homelink (if equipped)	Gentex	ADHL5C	286-440MHz	NZLADHL5C	4112A-ADHL5C
Car PC Manufactured approx. 2017-2019	Tesla	1098058		YZP-RBHP-B216C RI7LE940B6NA	RBHP-B216C 5131A-LE940B6NA
Car PC Manufactured approx. 2019-2022	Tesla	1506277		YZP-RBHP-B216C RI7LE940B6NA	RBHP-B216C 5131A-LE940B6NA
Car PC Manufactured approx. January-July 2022	Tesla	1960100		XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R7414C-ATC5CPC001
Car PC Manufactured approx. August 2022+	Tesla	1960100 1960400		XMR2020AG525RGL XMR202201AF51Y	10224A-2020AG525R 10224A-202201AF51Y
Wireless Charger	Tesla	WC2 WC3	-- 127.72KHz	2AEIM-WC2 2AEIM-WC3	20098-WC2 20098-WC3

*In-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions:



1. This device may not cause harmful interference; and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Canada

CAN ICES-3 (B)/NMB-3(B)

CAN ICES-003(B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPTE1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:



1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
B-Pillar endpoint	Tesla	1783148	13.56, 2400-2483.5, 6000-8500	2AEIM-1783148	20098-1783148
Interior endpoint	Tesla	1815669	2400-2483.5, 6000-8500	2AEIM-1815669	20098-1815669
Rear left BLE	Tesla	1817073	2400-2483.5, 6000-8500	2AEIM-1817073	20098-1817073
Vivaldi Endpoint	Tesla	1752108	2400-2483.5, 6000-8500	2AEIM-1752108	20098-1752108
Fascia endpoint	Tesla	1733130	2400-2483.5, 6000-8500	2AEIM-1733130	20098-1733130
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
TPMS	Tesla	1849171	2400-2483.5	2AEIM-1849171	20098-1849171
Glove Box BT USB Module	Tesla	1776863	2400-2483.5	2AEIM-1776863	2AEIM-1776863
In-cabin radar (if equipped)*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Homelink (if equipped)	Gentex	ADHL5C	286-440MHz	NZLADHL5C	4112A-ADHL5C
TCU	Tesla	1727111	--	XMR2020AG525RGL XMR202303AF51Y	10224A-2020AG525R 10224A-202201AF51Y
Wireless phone charger	Tesla	WC5	13.56 MHz, 127.72 KHz	2AEIM-WC5	20098-WC5

* The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference; and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.



- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Canada

CANICES-003 (B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPTTE1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
B Pillar Endpoint	Tesla	1614291	13.56 2400-2483.5 6000-8500	2AEIM-1614291	20098-1614291
B Pillar Endpoint	Tesla	1783148	13.56 2400-2483.5 6000-8500	2AEIM-1783148	20098-1783148



Owners Manual

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
Security Controller	Tesla	1614280	2400-2483.5	2AEIM-1614280	20098-1614280
Fascia Endpoint	Tesla	1613851	2400-2483.5 6000-8500	2AEIM-1613851	20098-1613851
Fascia Endpoint	Tesla	1733130	2400-2483.5 6000-8500 315 or 433.9	2AEIM-1733130	20098-1733130
Key fob	Tesla	1614283	2400-2483.5 6000-8500	2AEIM-1614283	20098-1614283
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Tire, Michelin PS4S Summer T2	Michelin	1420298-*** 1420299-***	2400- 2483.5	FI5TMSAF02	5056ATMSAF02
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
Radar	Tesla	1541584	76000-77000	2AEIM-1541584	20098-1541584
Homelink (if equipped)	Gentex	ADHL5C	286-440	NZLADHL5C	4112A-ADHL5C
CarPC	Tesla	1960000	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
CarPC	Tesla	1960600	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Wireless Charger	Tesla	WC4	127.72 KHz 13.56 2400-2483.5	2AEIM-WC4	20098-WC4
Wireless Charger	Tesla	WC3	127.72KHz	2AEIM-WC3	20098-WC3
BT USB hub	Tesla	1642783	2400-2483.5	2AEIM-1642783	20098-1642783
In-cabin radar*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631

* The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

Key fob, model: 1614283, IFT#: RLVTE1621-3394

TPMS, model: 1472547G, IFT#: RCPTE1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Canada

CAN ICES-003 (B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.



Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Certification Conformity

Key and Passive Unlocking System

FCC Certification

Model Number	Mfr	Frequency	Tested For
A-0749G02	Pektron	315 MHz	USA Canada Mexico Taiwan
A-0749G12	Pektron	315 MHz	USA Canada Mexico Taiwan
WC1	Tesla	127.7 KHz	Global

The devices listed above comply with Part 15 of the FCC rules, Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

La Operación de Este Equipo no está Sujeta a las dos following conditions:

1. Es Posible Que Este Equipo o Dispositivo no causar interferencia perjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Radiation Exposure Statement

The product complies with the FCC/IC RF Exposure for Low Power Consumer Wireless Power Transfer. The RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The furthest RF exposure that compliance was demonstrated at 20cm and greater separation from the user body or set the device to lower output power if such function is available.

IC Certification

CAN ICES-3 (B)/NMB-3(B)

The following device is used in vehicles in Canada:

- Key fob Model Number: 002 and A-0749G12 (315 MHz)



- Key fob Manufacturer: Pektron

Per IC 10176A-002, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'Appareil ne doit pas produire de brouillage, et
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations:

Le produit est conforme à l'exposition RF IC pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

IC Certification

La Operación de Este Equipo no está Sujeta a las dos condiciones siguientes:

1. Es Posible Que Este Equipo o Dispositivo no causar interferencia perjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

MIC Certification

Model Number	Mfr	MHz	Tested For
A-0749G04/A-0749G14	Pektron	315	Japan

CE Certification

Model #	Mfr	MHz	Tested For
A-0749G01 and A-0749G11	Pektron	433	Europe Australia New Zealand Singapore South Korea
A-0749G05 and A-0749G15	Pektron	433	China Hong Kong Korea



The devices listed above comply with CE standards. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Tire Pressure Monitoring System

FCC IDs: TZSTPMS201, Z9F-201FS43X

IC ID: 11852A-201FS4X

The tire pressure monitoring system (TPMS) complies with Part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

HomeLink

This device complies with Part 15 of the FCC rules, RSS-210 Industry Canada, and with EU Directive 2014/53/EU.

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications to the device not expressly approved by the manufacturer or Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Certification Conformity

Key and Passive Unlocking System

FCC Certification

Model Number	Mfr	Frequency	Tested For
Key fob 1048598	Tesla	2.4 GHz	USA Canada Mexico Taiwan
WC1	Tesla	127.7KHz	Global

The devices listed above comply with Part 15 of the FCC rules, Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

La Operación de Este Equipo no está Sujeta a las dos following conditions:

1. Es Posible Que Este Equipo o Dispositivo no causar interferencia perjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Radiation Exposure Statement

The product complies with FCC/IC RF Exposure for Low Power Consumer Wireless Power Transfer. The RF exposure limit set forth for an uncontrolled environment is safe for the operations intended, as described in this manual. Compliance was demonstrated at a distance of 20 cm or greater between the human body and the device. If the function is available, the device's output power could be lowered.

IC Certification

The following device is used in vehicles in Canada:

- Key fob Model Number: 1048598 (2.4 GHz)
- Key fob Manufacturer: Tesla

Per IC 20098-1048598, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'Appareil ne doit pas produire de brouillage, et
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.



Déclaration d'exposition aux radiations:

Le produit est conforme à l'exposition RF IC pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

IC Certification

La Operación de Este Equipo no está Sujeta a las dos condiciones siguientes:

1. Es Posible Que Este Equipo o Dispositivo no causar interferenciaperjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Central Body Controller

FCC Certification

Model Number	Mfr	MHz / GHz	Tested For
Central Body Controller 1031503	Tesla	315 / 2.4	USA Canada

Per FCC ID 2AEIM-1031503, the devices listed above comply with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

IC Certification

The following device is used in vehicles in Canada:

- Central Body Controller Model Number: 1031503 (315 MHz / 2.4 GHz)
- Central Body Controller Manufacturer: Tesla

Per IC 20098-1031503, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Integral Component Only

The Central Body Controller is an integral part of the vehicle that is installed and secured around other interior trim components. The Central Body Controller is designed and intended for use only as an integral component and cannot be sold and/or marketed separately.

Tire Pressure Monitoring System

FCC IDs: TZSTPMS201, Z9F-201FS43X

IC ID: 11852A-201FS4X



The tire pressure monitoring system (TPMS) complies with Part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

HomeLink

This device complies with Part 15 of the FCC rules, RSS-210 Industry Canada, and with EU Directive 2014/53/EU.

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications to the device not expressly approved by the manufacturer or Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
B Pillar Endpoint	Tesla	1607773	13.56 2400-2483.5 6000-8500	2AEIM-1607773	20098-1607773
Security Controller	Tesla	1614280	2400-2483.5	2AEIM-1614280	20098-1614280
Fascia Endpoint	Tesla	1613851	2400-2483.5 6000-8500	2AEIM-1613851	20098-1613851
Fascia Endpoint	Tesla	1733130	2400-2483.5 6000-8500 315 or 433.9	2AEIM-1733130	20098-1733130



Owners Manual

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
Key fob	Tesla	1614285	2400-2483.5 6000-8500	2AEIM-1614285	20098-1614285
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Tire, Michelin PSEV Summer T0	Michelin	1620245-00-A 1620246-00-A	2400 - 2483.5	FI5TMSAF02	5056ATMSAF02
Tire, Pirelli SZero A/S	Pirelli	1620243-00-A 1620244-00-A	2400 - 2483.5	2ANX7CPSN1	24121-CPSN1
Tire, Michelin Sport EV	Michelin	1620245-* 1620246-*	2400-2483.5	FI5TMSAF02 FI5TMSAL01	5056A-TMSAF02 5056A-TMSAL01
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
Radar	Tesla	1541584	76000-77000	2AEIM-1541584	20098-1541584
Homelink (if equipped)	Gentex	ADHL5C	286-440	NZLADHL5C	4112A-ADHL5C
CarPC	Tesla	1960000	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
CarPC	Tesla	1960600	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Wireless Charger	Tesla	WC4	127.72 KHz 13.56 2400-2483.5	2AEIM-WC4	20098-WC4
BT USB hub	Tesla	1642783	2400-2483.5	2AEIM-1642783	20098-1642783
In-Cabin Radar*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Wireless Charger	Tesla	WC3	127.72 KHz	2AEIM-WC3	20098-WC3

*The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Canada

CAN ICES-3 (B)/NMB-3(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations:

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPT1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:



1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.



Gen 1

Safety Information

Save These Important Safety Instructions

This document contains important instructions and warnings that must be followed when using your Mobile Connector.

Warnings

**WARNING:**

- For use with electric vehicles.
- Automatic CCID reset provided.
- Do not use this product if there is any damage to the unit.
- Do not use this product if the electric vehicle cable is damaged.
- Read this manual before using.
- Enclosure: Type 4X



WARNING: Risk of explosion. This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches (46 cm) above the floor.



WARNING: This device is intended only for charging vehicles not requiring ventilation during charging.



WARNING: Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user-serviceable parts inside.



WARNING: Read this entire document before using the Mobile Connector. Failure to do so or to follow any of the instructions or warnings in this document can result in fire, electrical shock, serious injury or death.



WARNING: Use the Mobile Connector only within the specified operating parameters.



WARNING: The Mobile Connector is designed only for charging a battery electric vehicle that uses the North American Charging Standard (NACS), including Tesla vehicles (with the exception of the Tesla Roadster). Do not use it for any other purpose or with any other vehicle or object.



WARNING: Do not use the Mobile Connector's adapters in any outlet for which they are not designed.



WARNING: Do not use (or discontinue using) the Mobile Connector if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.



WARNING: Do not attempt to open, disassemble, repair, tamper with, or modify the Mobile Connector. Contact Tesla for any repairs.



WARNING: Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.



WARNING: Do not disconnect the Mobile Connector from the wall outlet when the vehicle is charging.



WARNING: Do not plug the Mobile Connector into a damaged, loose or worn power outlet. Ensure that the prongs on the Mobile Connector fit snugly into the wall outlet.



WARNING: Do not connect the Mobile Connector into a power outlet that is not properly grounded.



WARNING: Do not use or store the Mobile Connector in a recessed area or below floor level.



WARNING: Do not use the Mobile Connector when either you, the vehicle or the Mobile Connector is exposed to severe rain, snow, electrical storm or other inclement weather.









WARNING: When transporting the Mobile Connector, handle with care to prevent damage to any of its components. Do not subject the Mobile Connector to strong force or impact. Do not pull, twist, tangle, drag or step on the Mobile Connector or any of its components.






WARNING: Protect the Mobile Connector from moisture, water and foreign objects at all times. If any exist or appear to have corroded or damaged the Mobile Connector, do not use the Mobile Connector.



Mobile Connector

-  **WARNING:** If rain falls during charging, do not allow rain water to run along the length of charge cable, causing the electrical outlet or charging port to become wet.
-  **WARNING:** Do not plug the Mobile Connector into an electrical outlet that is submerged in water or covered in snow. If, in this situation, the Mobile Connector is already plugged in and needs to be unplugged, turn off the breaker before unplugging the Mobile Connector.
-  **WARNING:** Do not touch the Mobile Connector's end terminals with sharp metallic objects, such as wire, tools or needles. Do not forcefully fold any part of the Mobile Connector or damage it with sharp objects. Do not insert foreign objects into any part of the Mobile Connector.
-  **WARNING:** Ensure that the Mobile Connector's charging cable does not obstruct pedestrians or other vehicles or objects.
-  **WARNING:** Use of the Mobile Connector may affect or impair the operation of medical or implantable electronic devices, such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator. Before using the Mobile Connector, check with the electronic device manufacturer concerning the effects that charging may have on any such electronic device.
-  **WARNING:** Do not use cleaning solvents to clean the Mobile Connector.

Cautions

-  **CAUTION:** Do not use private power generators as a power source for charging.
-  **CAUTION:** Do not operate the Mobile Connector in temperatures outside its operating range of -22°F to +122°F (-30°C to +50°C).
-  **CAUTION:** Store the Mobile Connector in a clean dry place in temperatures between -40°F and +185°F (-40°C and +85°C).


General Information

Specifications

Use only a 120 volt, 208 volt or 240 volt AC supply, 50/60 hertz wall outlet that has a dedicated and properly grounded circuit, and is rated for at least 15 amps.

If possible, use a dedicated receptacle with a single socket. If the receptacle has two sockets, do not plug any other items into the other socket.

The Mobile Connector is 20 feet (6 meters) long. Use an existing outlet or install a new outlet within approximately 13 feet (4 meters) of the vehicle's charge port and at least 18 inches (45 cm) above the ground. The charge port is located on the left side of the vehicle, behind a door that is part of the rear tail light assembly.

-  **WARNING:** Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.

Charging Time

Charging times vary based on the voltage and current available from the power outlet, subject to various conditions. Charge time also depends on ambient temperature and the vehicle's Battery temperature. If the Battery is not within the optimal temperature range for charging, the vehicle heats or cools the Battery before or during charging.

To estimate the total time it takes to recharge the Battery in hours (from near empty to near 100%), divide the battery size (kWh) by power (kW). Note that different adapters provide different current and power outputs.

If you are charging a Tesla, you can also touch the **Charging** icon to review the charging status information; it displays the time remaining until fully charged at the currently selected charge level.

For more information on how long it takes to charge your Tesla vehicle, go to www.tesla.com.

Adapters

The Mobile Connector includes two outlet adapters: one for a standard 120 volt household outlet and a second adapter for a 240 volt outlet. For faster charging, use a 240 volt outlet. Consult an electrician to install a 240 volt outlet where you plan to park your Tesla vehicle.



NEMA 5-15 Adapter



NEMA 14-50 Adapter



Mobile Connector



Additional adapters are available for purchase. For details, go to: shop.tesla.com.

NOTE: Images in this document are for demonstration purposes only.

Removing the Adapter

To remove an adapter, push the button on the Mobile Connector's charge cable and pull the adapter from its socket.



Attaching the Adapter

To attach an adapter, line up the adapter with the Mobile Connector's charge cable and push until it snaps into place.



How to Charge

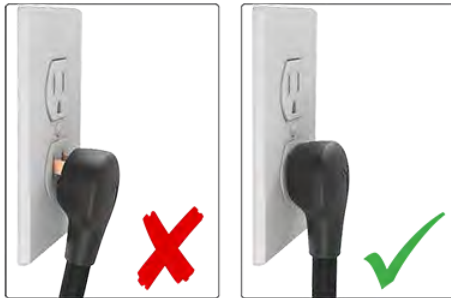
Plugging In

⚠ CAUTION: Always inspect the Mobile Connector and adapter for damage prior to each use.

NOTE: Illustrations are provided for conceptual understanding only. Your specific vehicle and mobile connector may appear slightly different.

NOTE: If you are charging a Tesla vehicle, find more information about how to charge your vehicle (how to adjust charge settings, view charging status, etc.) in the Charging Instructions topic in the Owner's Manual. To display the Owner's Manual on your vehicle's touchscreen, touch the app launcher and select the Manual app.

1. Ensure that the Mobile Connector's adapter matches the outlet you want to use.
2. Plug the Mobile Connector's adapter into the power outlet. The adapter should be inserted completely into the power outlet.



3. Open the charge port door. If you are charging a Tesla vehicle, press the button on the top of the Mobile Connector handle with your vehicle unlocked and in Park to open the charge port door.

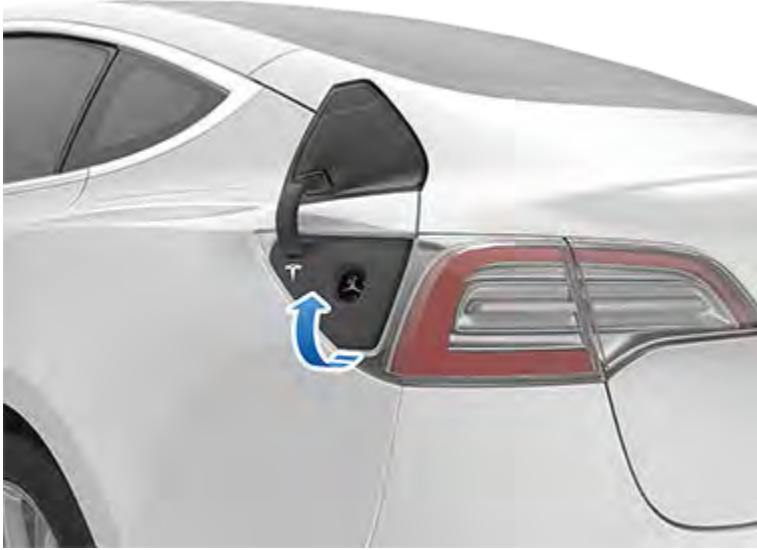




Mobile Connector

NOTE: If you are charging a Tesla vehicle, your vehicle is unlocked when the key is nearby and automatic unlocking is enabled. You can also open the charge port door using any of these methods:

- Display the charging screen on your vehicle's touchscreen and touch **Open Charge Port**.
- On the key fob (if equipped), hold down the rear trunk button for 1-2 seconds.
- Press the charge port door when the vehicle is unlocked.
- Use a voice command (you can also use a voice command to close the charge port door, and to start or stop charging).







Mobile Connector



4. Plug the Mobile Connector handle into your vehicle's charge port.
5. When you plug the Mobile Connector into a Tesla vehicle, the charge port indicator light pulses green during charging, and the vehicle displays charging information. The display turns off after you close all doors, and the charge port indicator light stops pulsing shortly after you lock the vehicle.

Unplugging

When charging is complete on a Tesla vehicle, the charge port indicator light stops pulsing and turns solid green.

1. With the vehicle unlocked, press and hold the button on the Mobile Connector handle, wait for the charge port indicator light to turn white, and then pull the Mobile Connector out of the charge port.

NOTE: To prevent unauthorized unplugging of the charge cable, the vehicle must be unlocked or able to recognize a key nearby before you can disconnect the charge cable.

NOTE: When the latch in the charge port retracts, the Mobile Connector stops supplying power and you can safely unplug it from the vehicle.

2. The charge port door automatically closes after you remove the charge cable from a Tesla vehicle.

NOTE: If your vehicle is not equipped with a motorized charge port door, you may need to push the charge port door closed.

Tesla recommends leaving the Mobile Connector plugged into the wall outlet to reduce wear and tear from day-to-day use. If you do not plan to use the Mobile Connector for a while (such as when you leave for vacation), unplug it and store it in an appropriate location.

Troubleshooting

Gen 1 Mobile Connector Status Lights

Under normal conditions, when charging is in progress, the Mobile Connector's lights illuminate sequentially, and the red light is off. Identify problems by paying attention to these lights.

NOTE: In some cases, you may need to reset the device by pressing the **RESET** button located on the back.

Front





Back



Green Lights	Red Light	What it means	What to do
All lights streaming	Off	Charging is in progress	Nothing. The Mobile Connector is successfully charging.
All on	Off	Power on. Mobile Connector is powered, but not charging, or scheduled charging is enabled	Make sure the Mobile Connector is plugged into the vehicle.
Off	1 flash	Ground fault. Electrical current is leaking through a potentially unsafe path	This should automatically reset in 15 minutes. If not, ensure no one is touching or inside the vehicle, then press the RESET button.
Off	2 flashes	Self check failed	Unplug the Mobile Connector from the vehicle and press the RESET button. Plug the Mobile Connector back into the vehicle. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in. When plugging back in, always plug it into the outlet first.
Off	3 flashes	Contacter failed	Unplug the Mobile Connector from the vehicle and wait 10 seconds. If the error persists, contact your closest Service Center (https://www.tesla.com/findus).
Off	4 flashes	The ground assurance monitoring circuit has detected loss of ground	Make sure the power outlet is properly grounded. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	5 flashes	Sense circuit fault	Make sure the Mobile Connector's adapter is attached properly.
Off	6 flashes	Thermal fault	Consider charging in a cooler area, such as indoors or in the shade.
Off	More than 6 flashes	The Mobile Connector may need repair	Contact your closest Service Center (https://www.tesla.com/findus).
Off	Off	Power lost	Unplug the Mobile Connector and check that the power outlet has power.

Questions?

For 24/7 technical support: [1-877-79TESLA \(1-877-798-3752\)](tel:1-877-79TESLA)

Gen 2

Safety Information

Save These Important Safety Instructions


This document contains important instructions and warnings that must be followed when using your Mobile Connector.




Warnings


WARNING:


- For use with electric vehicles.
- Automatic CCID reset provided.
- Do not use this product if there is any damage to the unit.
- Do not use this product if the electric vehicle cable is damaged.
- Read this manual before using.
- Enclosure: Type 4X


 **WARNING:** Risk of explosion. This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches (46 cm) above the floor.


 **WARNING:** This device is intended only for charging vehicles not requiring ventilation during charging.

 **WARNING:** Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user-serviceable parts inside.


 **WARNING:** Read this entire document before using the Mobile Connector. Failure to do so or to follow any of the instructions or warnings in this document can result in fire, electrical shock, serious injury or death.


 **WARNING:** Use the Mobile Connector only within the specified operating parameters.


 **WARNING:** The Mobile Connector is designed only for charging a battery electric vehicle that uses the North American Charging Standard (NACS), including Tesla vehicles (with the exception of the Tesla Roadster). Do not use it for any other purpose or with any other vehicle or object.


 **WARNING:** Do not use the Mobile Connector's adapters in any outlet for which they are not designed.


 **WARNING:** Do not use (or discontinue using) the Mobile Connector if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.

 **WARNING:** Do not attempt to open, disassemble, repair, tamper with, or modify the Mobile Connector. Contact Tesla for any repairs.


 **WARNING:** Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.


 **WARNING:** Do not disconnect the Mobile Connector from the wall outlet when the vehicle is charging.


 **WARNING:** Do not plug the Mobile Connector into a damaged, loose or worn power outlet. Ensure that the prongs on the Mobile Connector fit snugly into the wall outlet.


 **WARNING:** Do not connect the Mobile Connector into a power outlet that is not properly grounded.


 **WARNING:** Do not use or store the Mobile Connector in a recessed area or below floor level.


 **WARNING:** Do not use the Mobile Connector when either you, the vehicle or the Mobile Connector is exposed to severe rain, snow, electrical storm or other inclement weather.

 **WARNING:** When transporting the Mobile Connector, handle with care to prevent damage to any of its components. Do not subject the Mobile Connector to strong force or impact. Do not pull, twist, tangle, drag or step on the Mobile Connector or any of its components.




 **WARNING:** Protect the Mobile Connector from moisture, water and foreign objects at all times. If any exist or appear to have corroded or damaged the Mobile Connector, do not use the Mobile Connector.

 **WARNING:** If rain falls during charging, do not allow rain water to run along the length of charge cable, causing the electrical outlet or charging port to become wet.




 **WARNING:** Do not plug the Mobile Connector into an electrical outlet that is submerged in water or covered in snow. If, in this situation, the Mobile Connector is already plugged in and needs to be unplugged, turn off the breaker before unplugging the Mobile Connector.

 **WARNING:** Do not touch the Mobile Connector's end terminals with sharp metallic objects, such as wire, tools or needles. Do not forcefully fold any part of the Mobile Connector or damage it with sharp objects. Do not insert foreign objects into any part of the Mobile Connector.



-  **WARNING:** Ensure that the Mobile Connector's charging cable does not obstruct pedestrians or other vehicles or objects.
-  **WARNING:** Use of the Mobile Connector may affect or impair the operation of medical or implantable electronic devices, such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator. Before using the Mobile Connector, check with the electronic device manufacturer concerning the effects that charging may have on any such electronic device.
-  **WARNING:** Do not use cleaning solvents to clean the Mobile Connector.

Cautions

-  **CAUTION:** Do not use private power generators as a power source for charging.
-  **CAUTION:** Do not operate the Mobile Connector in temperatures outside its operating range of -22°F to +122°F (-30°C to +50°C).
-  **CAUTION:** Store the Mobile Connector in a clean dry place in temperatures between -40°F and +185°F (-40°C and +85°C).



Mobile Connector

General Information

Mobile Connector Component Overview



1. Handle
2. Button on handle
3. Cable
4. NEMA 5-15 Adapter
5. NEMA 14-50 Adapter (if equipped)
6. Mobile Connector controller
7. Status lights

Specifications

Use only a 120 volt, 208 volt or 240 volt AC supply, 50/60 hertz wall outlet that has a dedicated and properly grounded circuit, and is rated for at least 15A.



If possible, use a dedicated receptacle with a single socket. If the receptacle has two sockets, do not plug any other items into the other socket.

The Mobile Connector is 20 feet (6 meters) long. Use an existing outlet or install a new outlet within approximately 13 feet (4 meters) of the vehicle's charge port and at least 18 inches (45 cm) above the ground. The charge port is located on the left side of the vehicle, behind a door near the rear tail light assembly.

⚠ WARNING: Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.

Specifications Reference

Description	Specifications
Voltage	100-240 volt AC single-phase
Maximum Current	32A maximum; controlled by the appropriate adapter
Grid Frequency	50 or 60 Hz
Cable Length	20 ft (6 m) with adapter installed
Mobile Connector Controller Dimensions	Height: 7.1 in (179.8 mm) Width: 3.2 in (81.7 mm) Depth: 1.9 in (47.3 mm)
Weight	5.2 lbs (2.4 kg)
Operating Temperature	-22°F to +122°F (-30°C to +50°C)
Enclosure Type	4X
Ventilation	Not Required

Charging Time

Charging times vary based on the voltage and current available from the power outlet, subject to various conditions. Charge time also depends on ambient temperature and the vehicle's Battery temperature. If the Battery is not within the optimal temperature range for charging, the vehicle heats or cools the Battery before or during charging.

To estimate the total time it takes to recharge the Battery in hours (from near empty to near 100%), divide the battery size (kWh) by power (kW). Note that different adapters provide different current and power outputs.

If you are charging a Tesla, you can also touch the **Charging** icon to review the charging status information; it displays the time remaining until fully charged at the currently selected charge level.

For more information on how long it takes to charge your Tesla vehicle, go to www.tesla.com.

Charging Rate Reference

Adapter	Current	Power at 120 Volts
5-20	16A	1.7 kW
5-15	12A	1.3 kW

Adapter	Current	Power at 240 Volts
14-50, 6-50	32A	7.6 kW
14-30, 10-30	24A	5.7 kW
6-20	16A	3.8 kW



Mobile Connector

Adapter	Current	Power at 240 Volts
6-15	12A	2.8 kW

Adapters

The Mobile Connector includes two adapters: one for a standard 120 volt household outlet and a second adapter for a 240 volt outlet. For faster charging, use a 240 volt outlet. Consult an electrician to install a 240 volt outlet where you plan to park your Tesla vehicle.

NOTE: Depending on date of manufacture, your Mobile Connector may not include the NEMA 14-50 adapter. However, one can be purchased from Tesla.

NEMA 5-15 Adapter



NEMA 14-50 Adapter



To purchase adapters, go to www.tesla.com.

Removing the Adapter

To remove an adapter, firmly grasp the adapter and pull it from its socket.



Attaching the Adapter

To attach an adapter, line up the adapter with the controller of the Mobile Connector and push it into the socket until it snaps into place.

NOTE: The Mobile Connector automatically detects the attached adapter and sets the appropriate current draw.





How to Charge

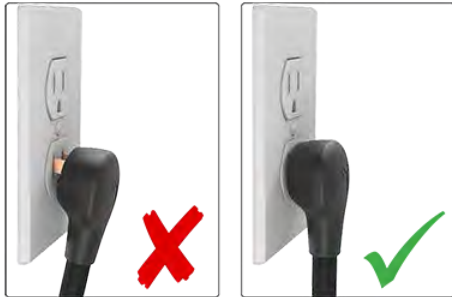
Plugging In

CAUTION: Always inspect the Mobile Connector and adapter for damage prior to each use.

NOTE: Illustrations are provided for conceptual understanding only. Your specific vehicle and mobile connector may appear slightly different.

NOTE: If you are charging a Tesla vehicle, find more information about how to charge your vehicle (how to adjust charge settings, view charging status, etc.) in the Charging Instructions topic in the Owner's Manual. To display the Owner's Manual on your vehicle's touchscreen, touch the app launcher and select the Manual app.

1. Ensure that the Mobile Connector's adapter matches the outlet you want to use.
2. Plug the Mobile Connector's adapter into the power outlet. The adapter should be inserted completely into the power outlet.



3. Open the charge port door. If you are charging a Tesla vehicle, press the button on the top of the Mobile Connector handle with your vehicle unlocked and in Park to open the charge port door.

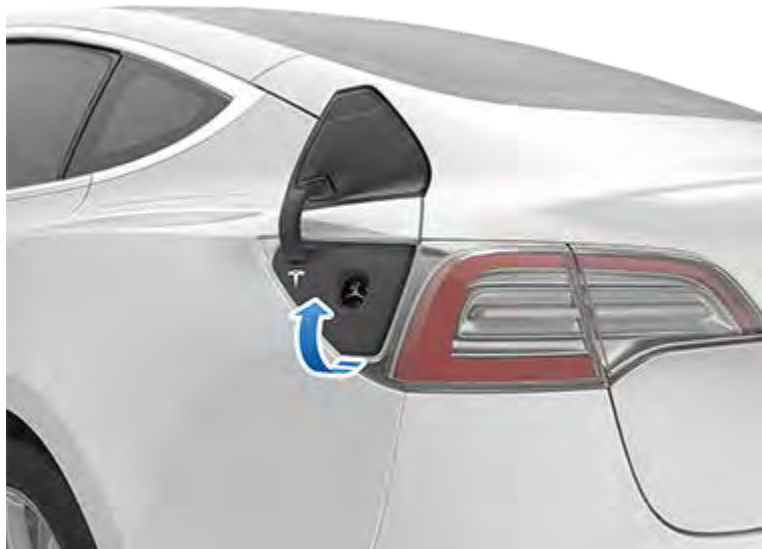


NOTE: If you are charging a Tesla vehicle, your vehicle is unlocked when the key is nearby and automatic unlocking is enabled. You can also open the charge port door using any of these methods:

- Display the charging screen on your vehicle's touchscreen and touch **Open Charge Port**.
- On the key fob (if equipped), hold down the rear trunk button for 1-2 seconds.
- Press the charge port door when the vehicle is unlocked.
- Use a voice command (you can also use a voice command to close the charge port door, and to start or stop charging).



Mobile Connector





4. Plug the Mobile Connector handle into your vehicle's charge port.
5. When you plug the Mobile Connector into a Tesla vehicle, the charge port indicator light pulses green during charging, and the vehicle displays charging information. The display turns off after you close all doors, and the charge port indicator light stops pulsing shortly after you lock the vehicle.

Unplugging

When charging is complete on a Tesla vehicle, the charge port indicator light stops pulsing and turns solid green.



Mobile Connector

1. With the vehicle unlocked, press and hold the button on the Mobile Connector handle, wait for the charge port indicator light to turn white, and then pull the Mobile Connector out of the charge port.

NOTE: To prevent unauthorized unplugging of the charge cable, the vehicle must be unlocked or able to recognize a key nearby before you can disconnect the charge cable.

NOTE: When the latch in the charge port retracts, the Mobile Connector stops supplying power and you can safely unplug it from the vehicle.

2. The charge port door automatically closes after you remove the charge cable from a Tesla vehicle.

NOTE: If your vehicle is not equipped with a motorized charge port door, you may need to push the charge port door closed.

Tesla recommends leaving the Mobile Connector plugged into the wall outlet to reduce wear and tear from day-to-day use. If you do not plan to use the Mobile Connector for a while (such as when you leave for vacation), unplug it and store it in an appropriate location.

Troubleshooting

Gen 2 Mobile Connector Status Lights

When charging is in progress and conditions are normal, the Tesla logo lights illuminate sequentially and the red light is off. Identify problems by paying attention to these lights.



In some cases, you may need to reset the device by unplugging the Mobile Connector from the vehicle or from the power outlet.

Green Lights	Red Light	What it means	What to do
All on for 1 second	Off	Start-up sequence.	Nothing. The Mobile Connector is starting up.
All on	Off	Power on. Mobile Connector is powered and standing by, but not charging.	Make sure the Mobile Connector is plugged into the vehicle.
Streaming	Off	Charging is in progress.	Nothing. The Mobile Connector is successfully charging.
Streaming	1 flash	Charging current is reduced due to high temperature detected in the vehicle connector.	Unplug the Mobile Connector from the vehicle, and then plug it back in. Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
Streaming	2 flashes	Charging current is reduced due to high temperature detected in the input plug that connects to the Mobile Connector controller.	Unplug the Mobile Connector from both the vehicle and the wall. Ensure that the adapter is fully inserted, plug the Mobile Connector into the wall, and then plug it into the vehicle. If the error persists, contact your closest Service Center.



Green Lights	Red Light	What it means	What to do
Streaming	3 flashes	Charging current is reduced due to high temperature detected in the Mobile Connector controller.	Unplug the Mobile Connector from the vehicle, and then plug it back in. Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
Streaming	4 flashes	Charging current is reduced due to high temperature detected in the wall plug.	Make sure the power outlet is suitable for charging and that the plug is seated correctly. Consider connecting to a different outlet. If uncertain, ask your electrician.
Streaming	5 flashes	Charging current is reduced due to a detected fault in the adapter.	Make sure the Mobile Connector's adapter is attached properly.
Off	1 flash	Ground fault. Electrical current is leaking through a potentially unsafe path.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	2 flashes	Ground loss. The Mobile Connector detects a loss of ground.	Make sure the power outlet is properly grounded. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	3 flashes	Relay/contactor fault.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	4 flashes	Over- or under-voltage protection.	Make sure the power outlet is suitable for charging and that the plug is seated correctly. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	5 flashes	Adapter fault.	Make sure the Mobile Connector's adapter is attached properly.
Off	6 flashes	Pilot fault. The pilot level is incorrect.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	7 flashes	Software error or mismatch.	Update the vehicle's software, if available. If an update is not available, contact your closest Service Center.
Off	On	Self check failed.	Unplug the Mobile Connector from the vehicle then plug it back in. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in.
All on	1 flash	Thermal fault.	Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
All on	5 flashes	Adapter fault. Charging current is limited to 8A.	Unplug the Mobile Connector from the vehicle. Plug the Mobile Connector back into the vehicle. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in.
Off	Off	Power lost.	Unplug the Mobile Connector and check that the power outlet has power.

Questions?

For 24/7 technical support: [1-877-79TESLA \(1-877-798-3752\)](tel:1-877-79TESLA)



Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
B-Pillar Endpoint (manufactured prior to 2022)	Tesla	1089773E	13.56	2AEIM-1089773E	20098-1089773E
		1509518D	2400-2483.5	2AEIM-1509518D	20098-1509518D
B-Pillar Endpoint (manufactured from approx. 2022+)	Tesla	1783148Y	13.56 2400-2483.5	2AEIM-1783148Y	20098-1783148Y
Center Console	Tesla	1089774	13.56	2AEIM-1089774	20098-1089774
			2400-2483.5	2AEIM-1089774	
Rear Endpoint	Tesla	1089775	2400-2483.5	2AEIM-1089775	20098-1089775
		1509516		2AEIM-1509516	20098-1509516
Key fob	Tesla	1133148	2400-2483.5	2AEIM-1133148	20098-1133148
TPMS	Continental	TIS-01	433.92	KR5TIS-01	7812-TIS01
	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
In-Cabin Radar* (if equipped)	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Homelink (if equipped)	Gentex	ADHL5C	286-440MHz	NZLADHL5C	4112A-ADHL5C
Car PC Manufactured approx. 2017-2019	Tesla	1098058		YZP-RBHP-B216C	RBHP-B216C
				RI7LE940B6NA	5131A-LE940B6NA
Car PC Manufactured approx. 2019-2022	Tesla	1506277		YZP-RBHP-B216C	RBHP-B216C
				RI7LE940B6NA	5131A-LE940B6NA
Car PC Manufactured approx. January-July 2022	Tesla	1960100		XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Car PC Manufactured approx. August 2022+	Tesla	1960100		XMR2020AG525RGL XMR202201AF51Y	10224A-2020AG525R 10224A-202201AF51Y
		1960400			
Wireless Charger	Tesla	WC2	--	2AEIM-WC2	20098-WC2



Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC ID
		WC3	127.72KHz	2AEIM-WC3	20098-WC3

*In-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference; and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Canada

CAN ICES-3 (B)/NMB-3(B)

CAN ICES-003(B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.



Radio Regulatory Compliance

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPT1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
B Pillar Endpoint	Tesla	1614291	13.56 2400-2483.5 6000-8500	2AEIM-1614291	20098-1614291
B Pillar Endpoint	Tesla	1783148	13.56 2400-2483.5 6000-8500	2AEIM-1783148	20098-1783148
Security Controller	Tesla	1614280	2400-2483.5	2AEIM-1614280	20098-1614280
Fascia Endpoint	Tesla	1613851	2400-2483.5 6000-8500	2AEIM-1613851	20098-1613851
Fascia Endpoint	Tesla	1733130	2400-2483.5 6000-8500 315 or 433.9	2AEIM-1733130	20098-1733130
Key fob	Tesla	1614283	2400-2483.5 6000-8500	2AEIM-1614283	20098-1614283
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Tire, Michelin PS4S Summer T2	Michelin	1420298-***-*	2400- 2483.5	FI5TMSAF02	5056ATMSAF02
		1420299-***-*			
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B
Radar	Tesla	1541584	76000-77000	2AEIM-1541584	20098-1541584
Homelink (if equipped)	Gentex	ADHL5C	286-440	NZLADHL5C	4112A-ADHL5C



Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
CarPC	Tesla	1960000	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
CarPC	Tesla	1960600	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Wireless Charger	Tesla	WC4	127.72 KHz 13.56 2400-2483.5	2AEIM-WC4	20098-WC4
Wireless Charger	Tesla	WC3	127.72KHz	2AEIM-WC3	20098-WC3
BT USB hub	Tesla	1642783	2400-2483.5	2AEIM-1642783	20098-1642783
In-cabin radar*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631

* The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016

Key fob, model: 1614283, IFT#: RLVTE1621-3394

TPMS, model: 1472547G, IFT#: RCPTE1421-4384

La operación de este equipo está sujeta a las siguientes dos condiciones:




Radio Regulatory Compliance

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.

 **CAUTION:** This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Canada

CAN ICES-003 (B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Certification Conformity

Key and Passive Unlocking System

FCC Certification

Model Number	Mfr	Frequency	Tested For
A-0749G02	Pektron	315 MHz	USA Canada Mexico Taiwan



Model Number	Mfr	Frequency	Tested For
A-0749G12	Pektron	315 MHz	USA Canada Mexico Taiwan
WC1	Tesla	127.7 KHz	Global

The devices listed above comply with Part 15 of the FCC rules, Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

La Operación de Este Equipo no está Sujeta a las dos following conditions:

1. Es Posible Que Este Equipo o Dispositivo no causar interferencia perjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Radiation Exposure Statement

The product complies with the FCC/IC RF Exposure for Low Power Consumer Wireless Power Transfer. The RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The furthest RF exposure that compliance was demonstrated at 20cm and greater separation from the user body or set the device to lower output power if such function is available.

IC Certification

CAN ICES-3 (B)/NMB-3(B)

The following device is used in vehicles in Canada:

- Key fob Model Number: 002 and A-0749G12 (315 MHz)
- Key fob Manufacturer: Pektron

Per IC 10176A-002, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'Appareilne doit pas produire de brouillage, et
2. L'Utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre lefonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour unenvironnement non contrôlé.

Déclaration d'exposition aux radiations:



Radio Regulatory Compliance

Le produit est conforme à l'exposition RF IC pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

IC Certification

La Operación de Este Equipo no está Sujeta a las dos condiciones siguientes:

1. Es Posible Que Este Equipo o Dispositivo no causar interferenciaperjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

MIC Certification

Model Number	Mfr	MHz	Tested For
A-0749G04/A-0749G14	Pektron	315	Japan

CE Certification

Model #	Mfr	MHz	Tested For
A-0749G01 and A-0749G11	Pektron	433	Europe Australia New Zealand Singapore South Korea
A-0749G05 and A-0749G15	Pektron	433	China Hong Kong Korea

The devices listed above comply with CE standards. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Tire Pressure Monitoring System

FCC IDs: TZSTPMS201, Z9F-201FS43X

IC ID: 11852A-201FS4X

The tire pressure monitoring system (TPMS) complies with Part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.



Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

HomeLink

This device complies with Part 15 of the FCC rules, RSS-210 Industry Canada, and with EU Directive 2014/53/EU.

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications to the device not expressly approved by the manufacturer or Tesla could void your authority to operate the equipment.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Certification Conformity

Key and Passive Unlocking System

FCC Certification

Model Number	Mfr	Frequency	Tested For
Key fob 1048598	Tesla	2.4 GHz	USA Canada Mexico Taiwan
WC1	Tesla	127.7KHz	Global

The devices listed above comply with Part 15 of the FCC rules, Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

La Operación de Este Equipo no está Sujeta a las dos following conditions:

1. Es Posible Que Este Equipo o Dispositivo no causar interferencia perjudicial.



Radio Regulatory Compliance

2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Radiation Exposure Statement

The product complies with FCC/IC RF Exposure for Low Power Consumer Wireless Power Transfer. The RF exposure limit set forth for an uncontrolled environment is safe for the operations intended, as described in this manual. Compliance was demonstrated at a distance of 20 cm or greater between the human body and the device. If the function is available, the device's output power could be lowered.

IC Certification

The following device is used in vehicles in Canada:

- Key fob Model Number: 1048598 (2.4 GHz)
- Key fob Manufacturer: Tesla

Per IC 20098-1048598, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'Appareilne doit pas produire de brouillage, et
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre lefonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour unenvironnement non contrôlé.

Déclaration d'exposition aux radiations:

Le produit est conforme à l'exposition RF IC pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

IC Certification

La Operación de Este Equipo no está Sujeta a las dos condiciones siguientes:

1. Es Posible Que Este Equipo o Dispositivo no causar interferenciaperjudicial.
2. Este Equipo o Dispositivo debe Aceptar Cualquier interferencia. Incluyendo La Que Pueda causar do Operación no Deseada.

Central Body Controller

FCC Certification

Model Number	Mfr	MHz / GHz	Tested For
Central Body Controller 1031503	Tesla	315 / 2.4	USA Canada



Per FCC ID 2AEIM-1031503, the devices listed above comply with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

IC Certification

The following device is used in vehicles in Canada:

- Central Body Controller Model Number: 1031503 (315 MHz / 2.4 GHz)
- Central Body Controller Manufacturer: Tesla

Per IC 20098-1031503, this device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Integral Component Only

The Central Body Controller is an integral part of the vehicle that is installed and secured around other interior trim components. The Central Body Controller is designed and intended for use only as an integral component and cannot be sold and/or marketed separately.

Tire Pressure Monitoring System

FCC IDs: TZSTPMS201, Z9F-201FS43X

IC ID: 11852A-201FS4X

The tire pressure monitoring system (TPMS) complies with Part 15 of the FCC rules and RSS-210 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

HomeLink

This device complies with Part 15 of the FCC rules, RSS-210 Industry Canada, and with EU Directive 2014/53/EU.

Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications to the device not expressly approved by the manufacturer or Tesla could void your authority to operate the equipment.



Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Certification Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
B Pillar Endpoint	Tesla	1607773	13.56 2400-2483.5 6000-8500	2AEIM-1607773	20098-1607773
Security Controller	Tesla	1614280	2400-2483.5	2AEIM-1614280	20098-1614280
Fascia Endpoint	Tesla	1613851	2400-2483.5 6000-8500	2AEIM-1613851	20098-1613851
Fascia Endpoint	Tesla	1733130	2400-2483.5 6000-8500 315 or 433.9	2AEIM-1733130	20098-1733130
Key fob	Tesla	1614285	2400-2483.5 6000-8500	2AEIM-1614285	20098-1614285
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G
Tire, Michelin PSEV Summer T0	Michelin	1620245-00-A 1620246-00-A	2400 - 2483.5	FI5TMSAF02	5056ATMSAF02
Tire, Pirelli SZero A/S	Pirelli	1620243-00-A 1620244-00-A	2400 - 2483.5	2ANX7CPSN1	24121-CPSN1
Tire, Michelin Sport EV	Michelin	1620245-*- 1620246-*-	2400-2483.5	FI5TMSAF02 FI5TMSAL01	5056A-TMSAF02 5056A-TMSAL01
Radar (if equipped)	Continental	ARS 4-B	76000-77000	OAYARS4B	4135A-ARS4B



Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
Radar	Tesla	1541584	76000-77000	2AEIM-1541584	20098-1541584
Homelink (if equipped)	Gentex	ADHL5C	286-440	NZLADHL5C	4112A-ADHL5C
CarPC	Tesla	1960000	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
CarPC	Tesla	1960600	--	XMR2020AG525RGL YZP-ATC5CPC001	10224A-2020AG525R 7414C-ATC5CPC001
Wireless Charger	Tesla	WC4	127.72 KHz 13.56 2400-2483.5	2AEIM-WC4	20098-WC4
BT USB hub	Tesla	1642783	2400-2483.5	2AEIM-1642783	20098-1642783
In-Cabin Radar*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631
Wireless Charger	Tesla	WC3	127.72 KHz	2AEIM-WC3	20098-WC3

*The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations


Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.



Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.

 **CAUTION:** This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Canada

CAN ICES-3 (B)/NMB-3(B)

L'appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations:

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

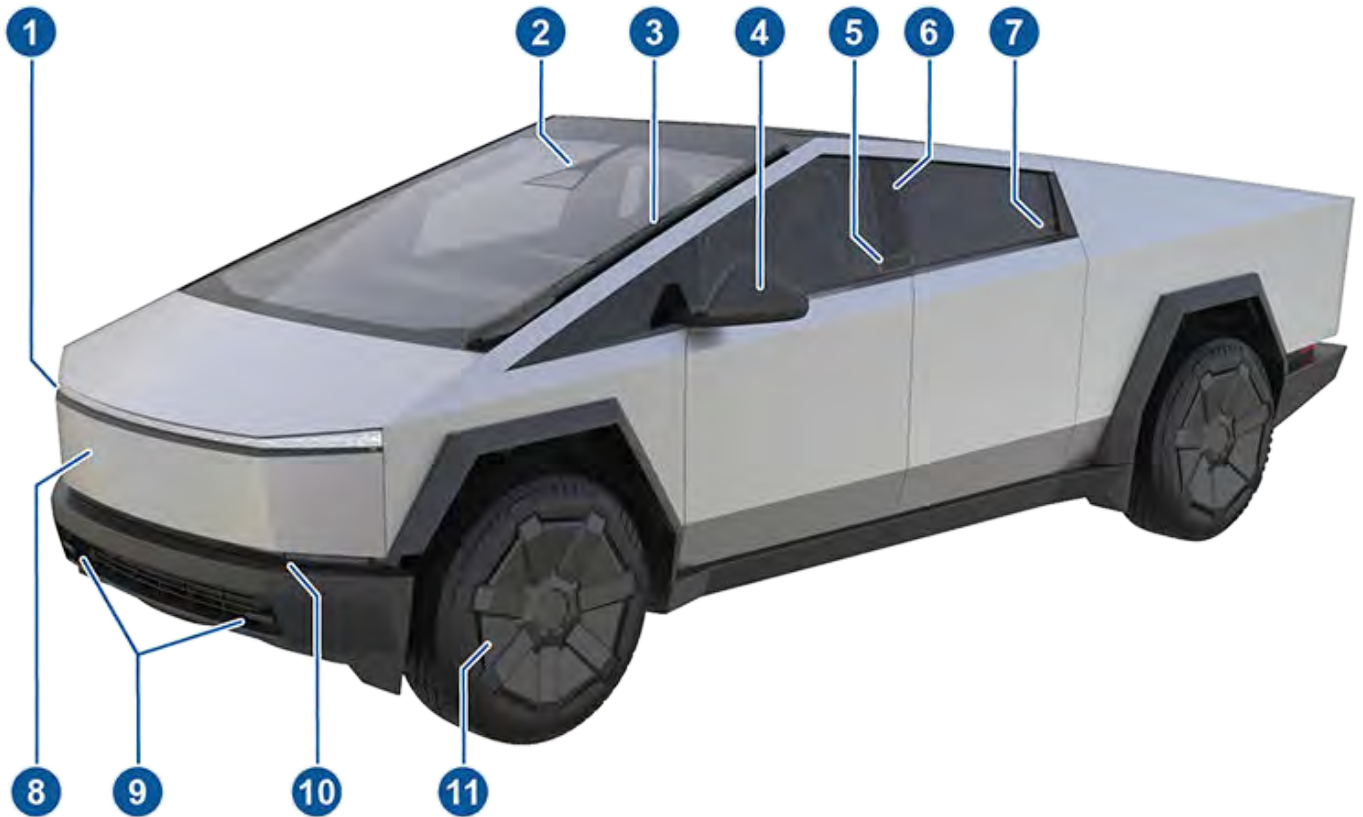
IFT-008-SCFI-2015 / NOM-208-SCFI-2016

TPMS, model: 1472547G, IFT#: RCPT1421-4384

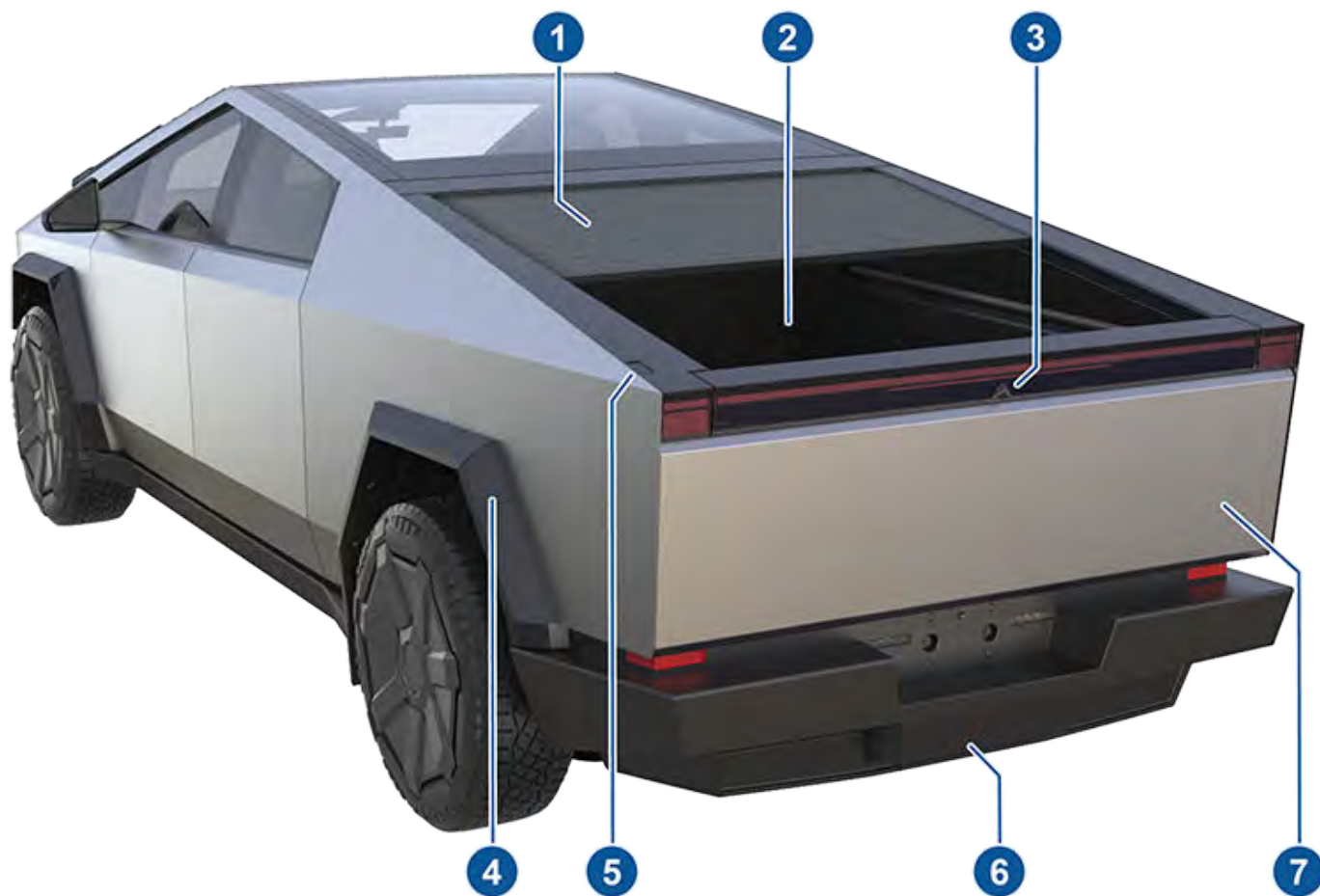
La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Exterior

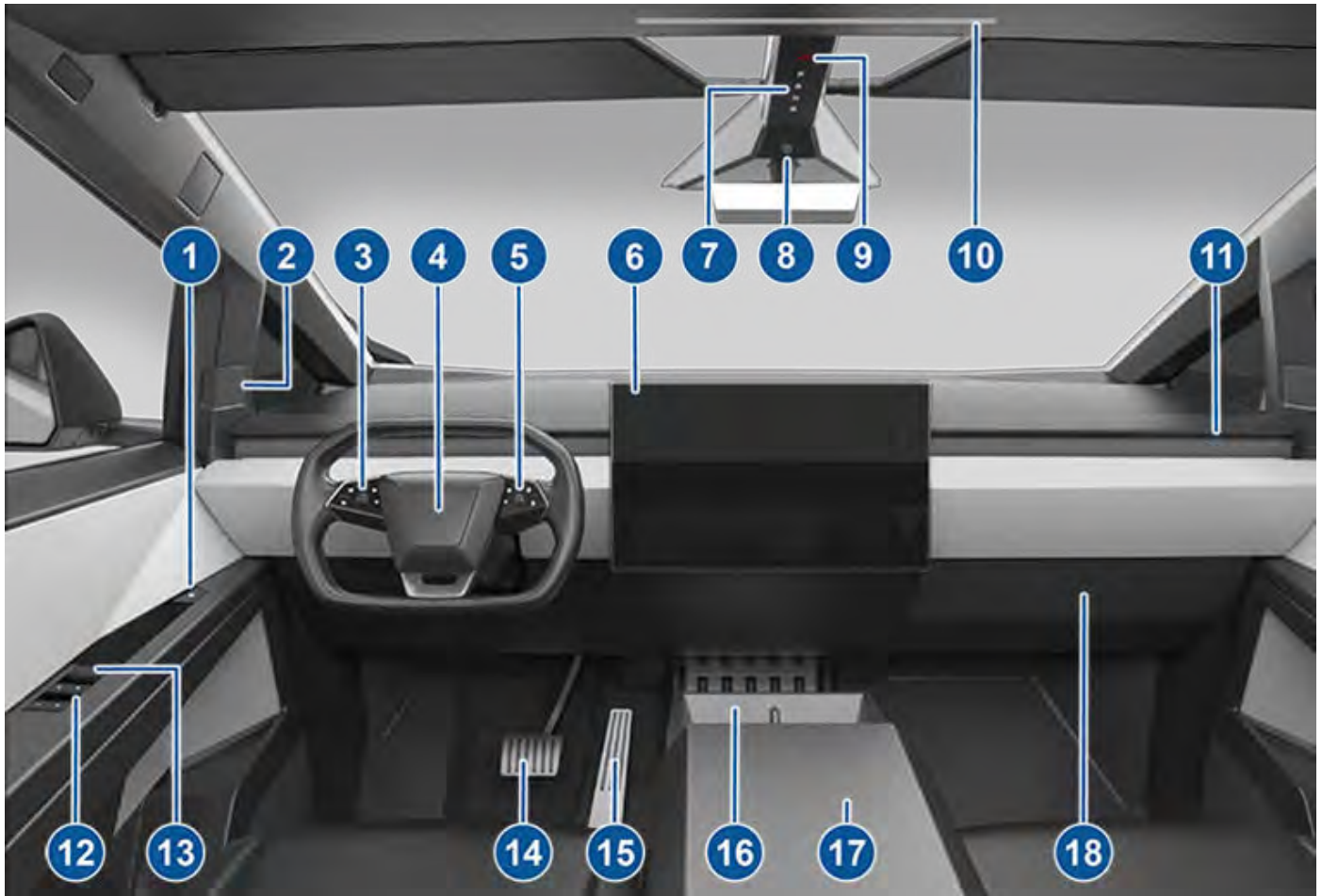


1. Signature light bar ([Lights on page 1229](#))
2. Autopilot cameras ([Cameras on page 1136](#))
3. Wiper blade ([Windshield Wiper and Washers on page 1233](#))
4. Exterior mirrors ([Mirrors on page 1226](#))
5. Front exterior door release button ([Doors on page 1146](#))
6. Key card reader ([Keys on page 1142](#))
7. Rear exterior door release button ([Doors on page 1146](#))
8. Powered frunk ([Powered Frunk on page 1185](#))
9. Front tow hooks ([Instructions for Transporters on page 1445](#))
10. Front exterior lights ([Lights on page 1229](#))
11. Wheels and tires ([Wheel and Tire Specifications on page 1410](#))



1. Tonneau cover ([Cargo Bed on page 1188](#))
2. Cargo bed ([Cargo Bed on page 1188](#))
3. Rear-facing camera ([Rear-Facing Camera on page 1138](#))
4. Charge port ([Charging Instructions on page 1370](#))
5. Exterior cargo bed switch ([Accessing the Cargo Bed on page 1189](#))
6. Tow hitch cover ([Towing a Trailer on page 1258](#))
7. Tailgate ([Cargo Bed on page 1188](#))

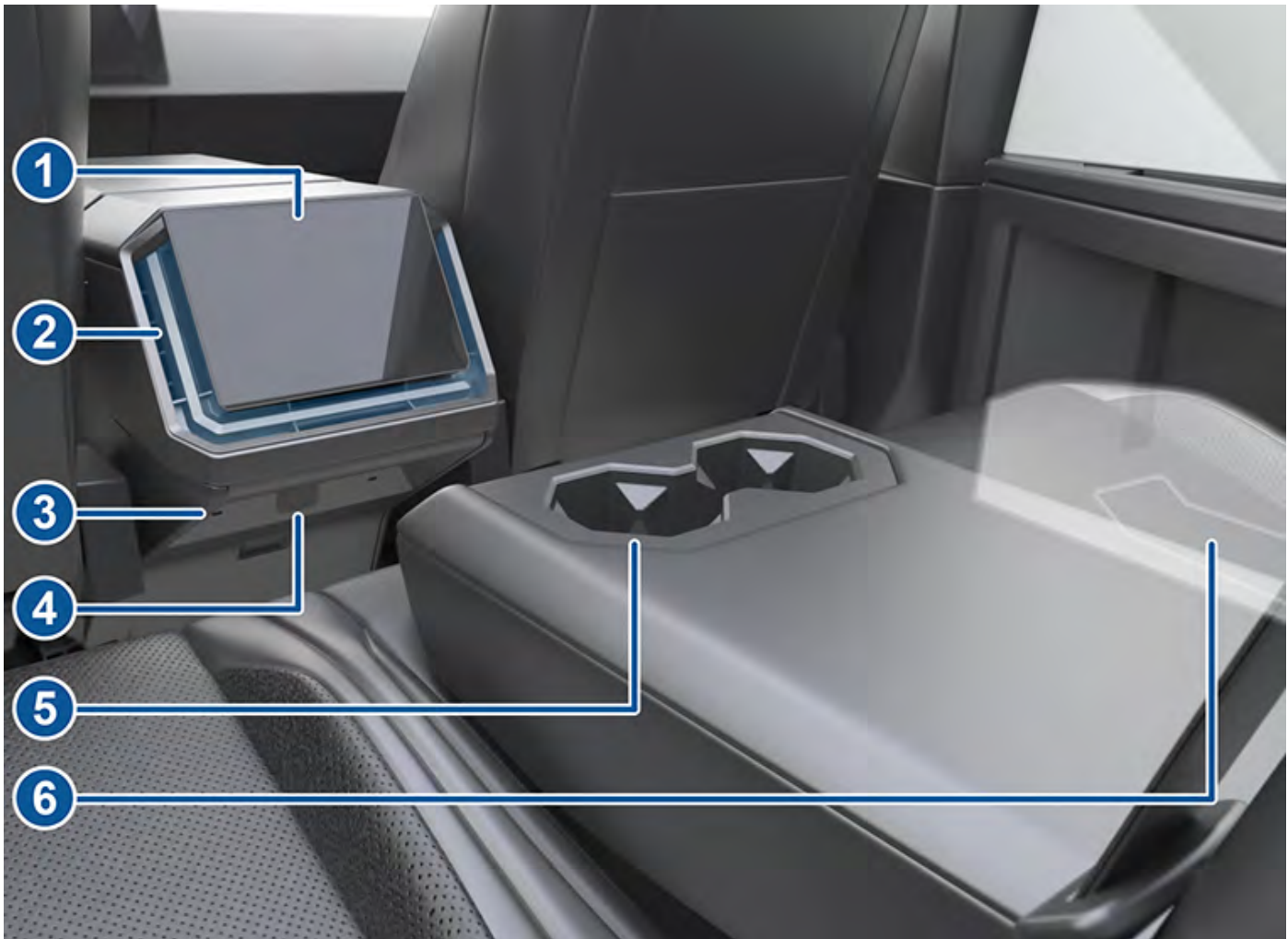
Interior



1. Interior door open button ([Doors on page 1146](#))
 2. Blind spot indicator and speaker ([Blind Spot Warning Light on page 643](#))
 3. Left scroll button ([Left Scroll Button on page 1222](#))
 4. Horn ([Horn on page 1224](#))
 5. Right scroll button ([Right Scroll Button on page 1224](#))
 6. Touchscreen ([Touchscreen on page 1112](#))
 7. Secondary drive mode selector on overhead console ([Shifting on page 405](#))
 8. Cabin camera ([Cabin Camera on page 1139](#))
 9. Hazard warning flashers ([Hazard Warning Flashers on page 1231](#))
 10. Front passenger dome light ([Lights on page 1229](#))
- ⚠ CAUTION:** CybertruckModel SModel XModel 3Model Y is equipped with an in-cabin sensor located near the front passenger dome light to ensure certain vehicle and safety components are working properly. Do not block or obstruct the sensor. Doing so may cause inaccurate readings, such as for occupant detection, parking brake engagement, vehicle display settings, etc.
11. Climate control vent ([Adjusting the Front and Rear Vents on page 1343](#))
 12. Power window switches ([Windows on page 1150](#))
 13. Manual door release ([Opening Doors with No Power on page 1457](#))
 14. Brake pedal ([Braking and Stopping on page 1235](#))
 15. Accelerator pedal ([On-Road Modes on page 1242](#))
 16. Wireless phone chargers and key card readers ([Wireless Phone Chargers on page 1126](#) and [Key Card on page 1143](#))
 17. Center console ([Center Console on page 1181](#))



18. Glovebox (Glovebox on page 1183)



1. Rear touchscreen ([Rear Touchscreen on page 1117](#))
2. Rear climate control vents ([Adjusting the Front and Rear Vents on page 1343](#))
3. USB ports ([USB-C Ports on page 1125](#))
4. Rear outlet (120V) ([Interior Electronics on page 1125](#))
5. Cup holders ([Rear Console on page 1181](#))
6. Rear door mechanical release ([Opening a Rear Door with No Power on page 1457](#))

NOTE: The door mechanical release should only be used in emergency situations.

Touchscreen

NOTE: Throughout this Owner's Manual, the front touchscreen is referred to as the "touchscreen" whereas the rear touchscreen is referred to as the "rear touchscreen".

⚠ WARNING: Always pay attention to road and traffic conditions when driving. To minimize driver distraction and ensure the safety of vehicle occupants as well as other road users, avoid using the touchscreen to adjust settings while the vehicle is in motion.



Use the touchscreen to control many features that, in traditional vehicles, are controlled using physical buttons (for example, adjusting the cabin heating and air conditioning, headlights, etc.). You also use the touchscreen to control media, navigate, use entertainment features, and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. For hands-free access to common touchscreen controls, use voice commands (see [Voice Commands on page 97](#)).

If the touchscreen is unresponsive or demonstrates unusual behavior, you can restart it (see [Restarting the Touchscreen on page 1115](#)).

⚠ CAUTION: Do not apply a screen protector on the touchscreen. Doing so can result in unintended inputs to the touchscreen (phantom inputs), delayed response or unresponsiveness to touches, electrostatic discharge which can damage the touchscreen, etc. Any damage caused by installing a screen protector is not covered by the warranty.

The following shows the touchscreen while CybertruckModel SModel XModel 3Model Y is parked.

NOTE: Illustrations are provided to improve conceptual understanding only. Depending on vehicle options, software version, market region and regional and language settings, the details displayed on the screen will differ.



- 1. Navigation:** Find or navigate to a destination (see [Maps and Navigation on page 699](#)).
- 2. Status bar:** This area on the top of the touchscreen displays the time of day, the outside temperature, and more (see [Top Status Bar Icons on page 1114](#)).
- 3. Drive mode strip:** Use to shift into Park, Reverse, or Drive. Swipe right from the upper-left side of the screen to display the drive mode strip (see [Shifting on page 405](#)).
NOTE: To shift into Neutral, open **Controls**, then press and hold the **Neutral** icon.
- 4. Vehicle status:** This area dynamically displays the current status of CybertruckModel SModel XModel 3Model Y as you drive, park, open doors, turn lights on, etc. Monitor this area when driving as it displays important information such as driving speed and warning messages (see [Vehicle Status on page 1119](#)). When in Park, you can interact with the vehicle and open the powered frunk, tonneau, tailgate, and charge port door, and change the ride height setting. This area is also used for shortcut cards for media, tire pressures, and trip information.
- 5. Controls:** Control various features and customize CybertruckModel SModel XModel 3Model Y to suit your preferences. The Controls screen appears over the map. Touch an option on the Controls screen to display the various settings and preferences associated with the chosen option.



Overview

To search for a specific setting, touch **Search** at the top of the Controls tab.



When an information icon displays beside a specific setting, touch to display a popup that provides helpful details about the associated setting.

NOTE: Many vehicle controls, settings, and preferences (such as climate, media, and navigation) can be adjusted hands-free using voice commands (see [Voice Commands on page 97](#)).

6. **Climate controls (driver):** Use the left and right arrows to decrease/increase cabin temperature. Touch **Split** on the popup to display separate controls for the driver and passenger. Touch the temperature icon to customize climate control settings (see [Operating Climate Controls on page 1338](#)). The passenger climate controls display when temperature controls have been **Split** to provide separate controls for the driver and passenger.
7. **Map Orientation:** Touch to toggle the orientation of the map between North Up and Heading Up (see [Maps and Navigation on page 699](#)).
8. **My Apps:** For one-touch access to frequently used apps and controls, you can choose what displays here (see [Customizing My Apps on page 1118](#)).
9. **App Launcher:** Touch the app launcher to open the app tray. Then touch any app to open it. The app you choose displays on top of the map. To close an app, drag it downward or press the **X** in the corner of the app.
10. **Recent App(s):** Displays the most recently used app(s). The number of recent apps displayed here depends on how many apps have been added to **My Apps**. If you add the maximum number of apps to **My Apps**, only the most recent app displays.
11. **Volume Control:** Controls the volume of media player and phone calls (see [Volume Controls on page 708](#)). The volume of navigation instructions is controlled separately (see [Maps and Navigation on page 699](#)).

Top Status Bar Icons



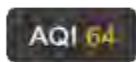
Touch to lock/unlock all doors and closures.



Displays the local weather conditions. Touch to display more detailed information about the weather and air quality, including chance of rain, humidity, and UV index. Requires premium connectivity.



Displays the current temperature. If your vehicle is equipped with premium connectivity, you can also touch to display more detailed information about the weather and air quality, including chance of rain, humidity, and UV index.



Displays on the touchscreen status bar only when CybertruckModel SModel XModel 3Model Y detects that the local Air Quality Index (AQI) value is poor. A poor AQI will have yellow, orange, red, purple, or maroon numbers. Touch to display more detailed information about the weather and air quality, including chance of rain, humidity, and UV index. Requires premium connectivity.

4:20 pm

Your vehicle automatically updates the time. If the time is incorrect, confirm your vehicle has internet and GPS connectivity with the latest software. To switch between 12 and 24 hour format, touch **Controls > Display**.



Displays on the touchscreen status bar only when CybertruckModel SModel XModel 3Model Y detects a programmed myQ Smart Garage within range (see [Smart Garage on page 365](#)).



Displays on the touchscreen status bar only when CybertruckModel SModel XModel 3Model Y is parked. Add, configure (including **Valet Mode** and **Use Easy Entry**), or quickly switch driver profiles. Driver profiles can also be accessed from the top of any Controls screen (see [Driver Profiles on page 514](#)).



Available when CybertruckModel SModel XModel 3Model Y is parked, touch to manually enable or disable Sentry Mode for the current drive cycle. To automatically turn Sentry Mode on (or off) every time you leave your vehicle, enable the setting from **Controls > Safety > Sentry Mode** (see [Sentry Mode on page 664](#)).

NOTE: If you turn Sentry Mode on or off from **Controls > Sentry Mode**, the shortcuts on the vehicle's touchscreen and mobile app will only work for the current drive cycle.



Displays when CybertruckModel SModel XModel 3Model Y is connected to a Wi-Fi network.



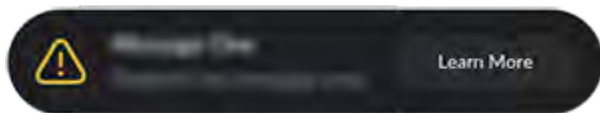
Displays when CybertruckModel SModel XModel 3Model Y cellular connectivity is available or being used.



Appears when your vehicle's GPS location is actively being accessed in the Tesla app by the owner, an added driver, or a third party app you're using. To disable, navigate to **Controls > Safety > Allow Mobile Access** on the touchscreen.

Popup Messages and Vehicle Alerts

Popup messages appear at the bottom of the touchscreen. For example, a seat belt reminder appears if a seat belt is unfastened in an occupied seat, an alert appears to notify you of an incoming phone call, and voice commands appear when in use. If applicable, touch options from these popup messages (for example, accept/decline a phone call, choose an option from the headlight menu, etc.). To dismiss a popup message, swipe it downward.



If an alert appears on your vehicle's touchscreen, touch **Learn More** for more details regarding the alert and how it can be resolved (see [Troubleshooting Alerts on page 952](#)). You can view a list of vehicle alerts and notifications by touching the bell icon at the top of **Controls**.

NOTE: Not all alerts provide additional information at this time.

Restarting the Touchscreen

You can restart your touchscreen if it is unresponsive or demonstrates unusual behavior.



WARNING: Only restart the touchscreen while the vehicle is stopped and in Park. The vehicle status display, safety warnings, backup camera, etc. will not be visible during the restart.

1. Shift into Park.
2. Hold down both scroll buttons on the steering wheel until the touchscreen turns black.

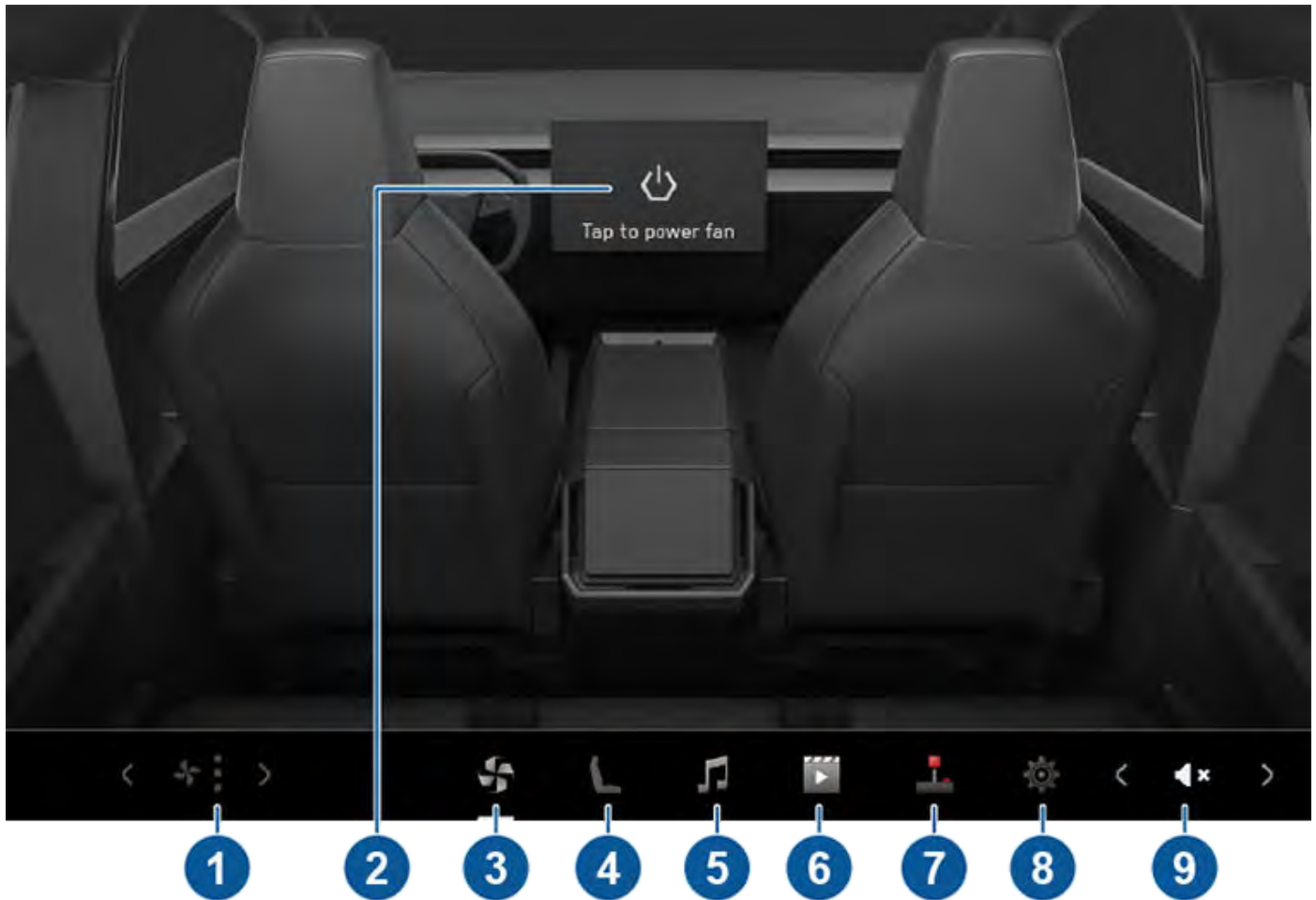


3. Wait approximately 30 seconds for the touchscreen to restart. If the touchscreen is still unresponsive or demonstrating unusual behavior after a few minutes, try power cycling the vehicle, if possible (see [Starting and Powering Off](#) on page 373).

NOTE: Restarting the touchscreen also activates the drive mode selector on the overhead console.

NOTE: Pressing the scroll buttons only restarts the touchscreen. It does not restart any other vehicle component and does not power CybertruckModel SModel XModel 3Model Y off and on.

Rear Touchscreen



The rear touchscreen provides rear passengers with access to:

1. **Fan Speed:** Touch the arrows to decrease/increase the fan speed.
NOTE: You can also use the front touchscreen to adjust climate settings in the rear cabin (see [Operating Climate Controls on page 1338](#)).
2. **Power:** Touch to turn the rear climate control system on or off.
3. **Climate:** Touch to turn the rear fan on or off and control the direction of air flow from the rear vents (see [Adjusting the Front and Rear Vents on page 1343](#)).
4. **Seats:** Control rear seat heaters and move the front passenger seat forward/rearward using the arrows.
5. **Media:** Play, pause, skip or rewind through the currently playing song (see [Media on page 707](#)).
6. **Video:** Access video streaming services.
7. **Arcade:** Play various video games on the rear touchscreen.
8. **Settings:** Touch to pair up to two sets of Bluetooth headphones, change the brightness or clean the display.
NOTE: Connect headphones to listen to audio from the rear touchscreen. The vehicle supports up to two Bluetooth devices at a time (such as one phone and one headset).
9. **Volume:** Touch the arrows to adjust the volume.

NOTE: Adjusting the media and volume controls also adjusts the front cabin settings.



Rear Screen Remote Control



To control the rear screen from the front display, open the rear screen remote control app from the app launcher. Besides audio, video and climate controls, you can lock the rear display in the app or by touching **Controls > Display > Lock Rear Display**.

Customizing My Apps

For one-touch access to commonly used apps and controls, you can customize what displays in the **My Apps** area on the touchscreen's bottom bar:

1. Enter customization mode by touching and holding any app or control in the **My Apps** area. If this area is empty, touch the app launcher (the ellipsis icon).
2. Drag your desired app or control from the app tray onto the **My Apps** area in the bottom bar.

NOTE: Controls (for example, defrosters and seat heaters) appear in the app tray only when you enter customization mode by touching and holding an app. Seat heaters selected from the app tray appear next to the temperature, instead of in the **My Apps** area.

Remove an app or control from the **My Apps** area by touching and holding, then touching its associated "X".

When you've added the maximum number of apps or controls to **My Apps**, adding an additional app removes the rightmost app.

Customizing Display and Sound Settings

Touch **Controls > Display** to adjust display settings to suit your preferences:

- **Appearance:** Customize the display to be **Dark** or **Light**. When set to **Auto**, the brightness changes automatically based on ambient lighting conditions.
- **Reduce Blue Light:** When enabled, the display automatically adjusts to use warmer colors at night.
- **Cybertruck Logo:** When enabled, the display shows the CybertruckModel SModel XModel 3Model Y logo when it is powered on. When disabled, the display shows the Tesla logo when it is powered on.
- **Brightness:** Drag the slider to manually control the brightness level. If **Display Mode** is set to **Auto**, the touchscreen further adjusts based on both the ambient lighting conditions and your brightness preference. CybertruckModel SModel XModel 3Model Y remembers your chosen brightness preference and adjusts the touchscreen accordingly.
- **Rear View Camera:** Choose when to display the feed from the rear view camera. When set to **Auto**, the rear view camera feed displays automatically when the tonneau cover is closed.
- **Screen Clean Mode:** When enabled, your touchscreen darkens and temporarily disables to facilitate cleaning. Follow the onscreen instructions to exit Screen Clean Mode.
- **Touchscreen Language:** Select the language that the touchscreen displays.
NOTE: CybertruckModel SModel XModel 3Model Y must be in Park to change the language. When you change the language, you experience a brief delay as the touchscreen restarts.
- **Lock Rear Display:** Lock access to the rear touchscreen.
- **Time:** Choose to display time in either 12 or 24 hour format.
- **Energy Display:** Choose to display remaining energy and charging units as either a percentage of battery energy remaining, or as an estimate of the distance you can drive.
NOTE: When anticipating when you need to charge, use energy estimate as a general guideline only. Many factors have an impact on energy consumption (see [Getting Maximum Range on page 745](#)).
- **Distance:** Choose to display range using miles or kilometers.

- **Temperature:** Choose to display temperature using Fahrenheit or Celsius.
- **Tire Pressure:** Choose to display tire pressures using BAR or PSI.

In addition to customizing the display, you can enable Joe Mode to reduce the volume of all chimes that are not related to critical safety issues. Touch **Controls > Safety > Joe Mode** to enable.

Naming your Vehicle

To further personalize your vehicle, you can name it. Touch **Controls > Software > Name Your Vehicle** located on the right side of the touchscreen below the image of your CybertruckModel SModel XModel 3Model Y.

If your vehicle already has a name, touch the existing name to change it. Enter the new name in the popup and touch **Save**. The name of your CybertruckModel SModel XModel 3Model Y appears in the Tesla mobile app, where you can also change it.

Erasing Personal Data

You can erase all personal data (saved addresses, music favorites, etc.) and restore all customized settings to their factory defaults. This is useful when transferring ownership of CybertruckModel SModel XModel 3Model Y. Touch **Controls > Service > Factory Reset**. Before erasing, CybertruckModel SModel XModel 3Model Y verifies your credentials by prompting you to enter the user name and password associated with your Tesla account.

Vehicle Status

Overview

The touchscreen displays the status of CybertruckModel SModel XModel 3Model Y at all times. What you see depends on whether the vehicle is:

- Parked (see [Touchscreen on page 1112](#)).
- Driving (see [Driving Status on page 1123](#)).
- Charging (see [Charging Status on page 1371](#)).

When CybertruckModel SModel XModel 3Model Y is parked, the status area shows the drive mode, estimated range, suspension height and available adjustments, and an exterior view of the vehicle with buttons you can touch to open the tonneau cover, tailgate, powered frunk, and charge port door.

When you press the brake pedal, CybertruckModel SModel XModel 3Model Y powers up and indicator lights flash briefly. Unless an indicator light applies to the current situation (for example, a seat belt is not fastened), it should turn off. If an indicator light fails to turn on or off, schedule a service appointment.

Cards

The bottom of the vehicle status display also shows shortcut "Cards" for quick access to Media, tire pressure data, trip information, and more. Swipe the cards to the left or right to customize your cards shortcuts.

Indicator Lights

The following indicator lights illuminate to advise or alert you of a specific status or condition.



If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

USA:



Overview

Canada:



If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

USA:



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

Canada:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

USA:



If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

Canada:



A seat belt for an occupied seat is not fastened. See [Seat Belts on page 1157](#).



Airbag safety. If this indicator does not flash on briefly when CybertruckModel SModel XModel 3Model Y prepares to drive, or if it remains on, contact Tesla immediately. See [Airbag Status Indicator on page 1173](#).



A door or the powered frunk is open.



CybertruckModel SModel XModel 3Model Y detects a faulty electrical connection for the trailer lights. Some, or all, trailer lights may not be functioning. Pull over as soon as safety permits and inspect the trailer lights for faulty cabling or connections. If the issue is resolved and the red icon persists, manually turn Trailer Mode off and on again. See [Towing a Trailer on page 1258](#).



Tire pressure warning. The pressure of a tire is out of specification. If a fault with the Tire Pressure Monitoring System (TPMS) is detected, the indicator flashes. For a TPMS fault, schedule a service appointment. See [Tire Pressures on page 1400](#).



The tailgate is open. See [Cargo Bed](#) on page 1188.



The powered frunk is open. See [Powered Frunk](#) on page 1185.



This indicator flashes when the electronic stability control systems are actively minimizing wheel spin by controlling brake pressure and motor power. See [Traction Control](#) on page 1239. If this indicator remains on, a fault is detected and you should immediately contact Tesla.



Electronic stability control systems are no longer minimizing wheel spin. See [Off-Road Driving](#) on page 1249.

ABS

USA:

The ABS indicator briefly flashes amber on the touchscreen when you first start Cybertruck Model S Model X Model 3 Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

Canada:



The ABS indicator briefly flashes amber on the touchscreen when you first start Cybertruck Model S Model X Model 3 Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

BRAKE

USA:

The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation](#) on page 1236).



Canada:

The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation](#) on page 1236).



Vehicle power is currently being limited because the energy remaining in the Battery is low, the vehicle's systems are being heated or cooled, or an error is detected by a drive inverter.



Rear fog lights are enabled. See [Lights](#) on page 1229.



Overview



CybertruckModel SModel XModel 3Model Y detects a connection for trailer lights but Trailer Mode is disabled. It is likely that a carrying accessory has been connected. See [Towing a Trailer on page 1258](#)



Appears when regenerative braking is limited. See [Regenerative Braking on page 1236](#) for more information.



Fog lights are enabled. See [Lights on page 1229](#).



Parking lights are on (side marker lights, tail lights, and license plate lights). See [Lights on page 1229](#).



Low beam headlights are on. See [Lights on page 1229](#).



High beam headlights are on and Auto High Beam is disabled or currently unavailable. See [Headlights on page 1229](#).



Auto High Beam is enabled and high beams are on. CybertruckModel SModel XModel 3Model Y is ready to turn off the high beams if needed. See [Headlights on page 1229](#).



Trailer Mode is active. See [Towing a Trailer on page 1258](#).



Some of the energy stored in the Battery may not be available due to cold weather conditions. In cold weather, charging rates may also be limited. If CybertruckModel SModel XModel 3Model Y is plugged in, you can heat your Battery by turning on climate control with the mobile app. This icon disappears when the Battery is sufficiently warm.



Vehicle Hold is actively applying the brakes. See [Vehicle Hold on page 1237](#).



Pedestrian Warning System is disabled. See [Pedestrian Warning System on page 527](#).

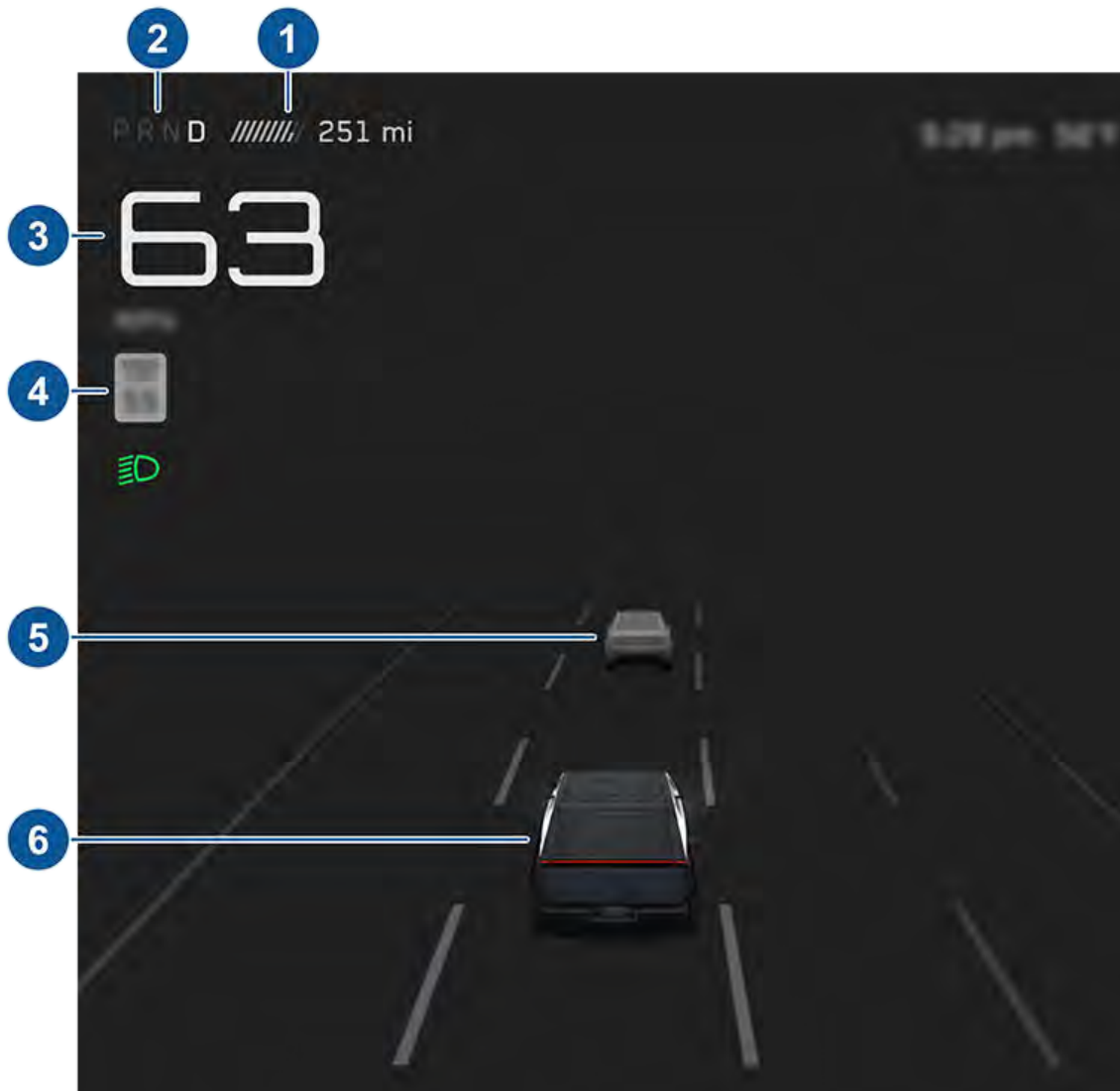


Auto High Beam is enabled but high beams are not on because another vehicle is detected in front of CybertruckModel SModel XModel 3Model Y. When there is no longer another vehicle detected, high beams automatically turn back on. See [Headlights on page 1229](#).

See [Popup Messages and Vehicle Alerts on page 1115](#) for more information about alert popups on your vehicle's touchscreen.

Driving Status

When CybertruckModel SModel XModel 3Model Y is driving (or ready to drive), the touchscreen shows your current driving status and real-time visualization of the road as detected by the Autopilot components (see [Cameras on page 1136](#)). The visualization automatically zooms in and out to better utilize touchscreen space and inform you when a vehicle is detected in your blind spot.



The touchscreen also shows the following:

1. Total estimated driving distance (or energy) available. You can toggle between driving distance and percentage of Battery energy remaining by touching the displayed value. You can also change how energy is displayed by touching **Controls** > **Display** > **Energy Display**. When anticipating when you need to charge, use range estimates as a general guideline only.
2. Currently selected drive mode: Park, Reverse, Neutral, or Drive (see [Shifting on page 405](#)).
3. Driving speed.





Overview

4. The speed limit that is currently being detected by Speed Assist (see [Speed Assist on page 651](#)). The icon associated with the detected speed limit reflects the style of speed limit signs used in your market region.

NOTE: A blue outline may appear around the speed limit icon to notify that you are above the speed limit.

5. Other cars detected on the road (as applicable).
6. Your CybertruckModel SModel XModel 3Model Y. Colored lines radiate from the image of your CybertruckModel SModel XModel 3Model Y as objects are detected (other motorists, guard rails, etc.). The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represents the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being very close and requiring your immediate attention. See [Lane Assist on page 638](#).

 **WARNING:** Pay attention to important alert messages that display at the bottom of the vehicle status area of the touchscreen. Ignoring these messages can result in serious injury or death.

 **WARNING:** Although the touchscreen shows surrounding traffic, some vehicles may not be displayed. Never rely on the detected displayed vehicles to determine if a vehicle is present (for example, in your blind spot). Always use your mirrors and perform shoulder checks.

Interior Electronics

In addition to storage compartments and cup holders (see [Interior Storage on page 1181](#)), the Cybertruck Model S Model X Model 3 Model Y interior supports various electronics such as an RFID transmitter that reads key cards (see [Keys on page 1142](#)), USB-C ports, wireless phone chargers, a power outlet in the center console, and a power outlet below the rear touchscreen.

USB-C Ports

Cybertruck Model S Model X Model 3 Model Y has four USB ports.

There are three USB-C ports in the center console, each of which can provide up to 65W of power:

- One USB-C port is located in the front compartment of the center console. This port can be used to charge a USB-C device.



- Two USB-C ports are located below the rear touchscreen and can be used to charge USB-C devices.





Overview

NOTE: Use USB 3.0 compliant cables to connect a device to a USB-C port. Using non-compliant cables may result in slower charging, connection problems, or degraded performance.

NOTE: If all three USB-C ports are in use at the same time, power to each port will be reduced.

⚠ CAUTION: Do not use the USB-C ports to power a device with a power rating that exceeds the limits listed above.

There is also a USB-A port in the glovebox. This port is equipped with a USB-A flash drive. This port can be used to play media from a phone or USB-A drive (see [Playing Media from Devices on page 709](#)) or to save Sentry Mode and Dashcam video footage.



NOTE: Do not connect multiple devices using a USB hub. This can prevent connected devices from charging or from being recognized by Media Player, Sentry Mode, Dashcam, etc.

Wireless Phone Chargers

Wireless phone chargers are integrated into the front console, providing up to 15W of power to charge Qi-enabled phones. To charge your phone, place it on one of the two charge pads. The phone must be in direct contact with the wireless charger. Your device may feel warm while charging, but this is a normal effect of inductive charging.

⚠ CAUTION: Before you charge, remove any objects (coins, keys, metal objects, etc.) between the phone and charger, as well as any NFC cards (for example, the vehicle key card, credit cards, or hotel key) placed on or behind the phone (like with integrated phone cases). Damage to NFC cards can occur when you charge the phone without first removing the card.

NOTE: The wireless phone chargers are in the same location as the key card readers (see [Key Card on page 1143](#)).



When placed on the wireless charger, your phone charges whenever the vehicle is powered on (the touchscreen is on and you are in the vehicle). Your phone does not charge when you leave the vehicle unless a feature, such as Sentry Mode, is enabled.



NOTE: The phone must be in direct contact with the wireless charger. If you place objects between the phone and the charger (for example, credit cards, key cards, coins, keys, metal objects, etc.), or if your phone case is too large or is made of metal, the wireless charger may not work. Try removing the phone from its case before placing it on the charger.

NOTE: The wireless phone charger does not charge if the vehicle's high voltage Battery is discharged.

Interior Power Outlets

The CybertruckModel SModel XModel 3Model Y center console is equipped with two NEMA 5-20 120V power outlets capable of providing up to 20A combined. To enable power to the outlets, touch **Controls > Outlets & Mods**. Touch **Enable Cabin Outlets on Entry** to enable them by default when you enter CybertruckModel SModel XModel 3Model Y.

If an outlet is not providing power as expected, see [Troubleshooting AC Outlets on page 1130](#).

NOTE: The 120V power outlets provide 20A maximum draw between both outlets. If multiple devices are plugged in and drawing power at the same time, power to each device may be reduced or interrupted.

NOTE: Power to AC outlets may be disabled in very low ambient temperatures.

NOTE: Power to AC outlets is disabled when an AC charging cable is connected to CybertruckModel SModel XModel 3Model Y even if the vehicle is not actively charging.

Power to AC outlets is still available when CybertruckModel SModel XModel 3Model Y is DC charging (while Supercharging, for example). See [Charging Instructions on page 1370](#).

NOTE: Two 120V power outlets are also located in the cargo bed, in addition to a 240V power outlet (see [Cargo Bed Outlets on page 1129](#)).








To access the front power outlet, open the front compartment of the center console (see [Interior Storage on page 1181](#)). The power outlet is located on the front wall of the compartment:



The rear power outlet is located below the rear touchscreen:



NOTE: To have the cabin outlets continue supplying power even when CybertruckModel SModel XModel 3Model Y is not occupied, touch **Controls > Outlets & Mods** and enable **Keep On Cabin and Bed Outlets** (see [Keep On Cabin and Bed Outlets on page 1130](#)). You can also enable **CyberTent Mode** and turn on outlets to keep them on when camping (see [CyberTent Mode on page 1130](#)).

-  **CAUTION:** Leaving a device plugged in depletes the high voltage Battery. Power to the outlets shuts off when the capacity of the high voltage Battery is very low.
-  **CAUTION:** Damage to a device or data loss (such as from a laptop or external drive) due to a sudden loss of power is not covered by the warranty.
-  **CAUTION:** Always check each outlet for damage before use.
-  **CAUTION:** Damage to CybertruckModel SModel XModel 3Model Y caused by an external device that is plugged in to an outlet is not covered by the warranty.
-  **WARNING:** The power outlets and a device's plug can become hot.
-  **WARNING:** As with any outlet, do not leave children unattended near the cabin outlets.
-  **WARNING:** Do not insert any objects into the outlets other than electrical plugs. Treat the outlets on CybertruckModel SModel XModel 3Model Y the same as you would any other outlet, and take care to ensure proper handling. Misusing outlets can cause serious injury.

Cargo Bed Outlets

Your CybertruckModel SModel XModel 3Model Y has three AC power outlets located in the cargo bed.

To access the outlets:

1. Open the tailgate (see [Cargo Bed on page 1188](#)).
2. Locate the outlet cover on the left side of the bed.
3. Pull the left side of the panel to open the cover.

The outlet cover must be open in order for the outlets to provide power.



1. 120V power outlets (20A maximum draw, combined)
2. 240V power outlet (40A maximum draw, combined)

The 120V power outlets provide a maximum of 20A across both cargo bed outlets. This is independent from the 120V outlets in the cabin which also provide a maximum of 20A across both cabin outlets (see [Interior Power Outlets on page 1127](#)). It is possible to pull 20A from the cabin and 20A from the cargo bed at the same time. All AC power outlets combined (120V cabin, 120V cargo bed, and the 240V cargo bed outlet) are limited to a combined maximum of 40A. If multiple devices are plugged in and drawing power at the same time, power to each device may be reduced or interrupted.

The outlets stop providing power when CybertruckModel SModel XModel 3Model Y is no longer occupied (when you leave the vehicle and close the doors).

To enable power to the outlets, touch **Controls > Outlets & Mods** on the touchscreen. From here you can toggle power to all AC outlets and each power feed (see [Connecting Accessories to the 48V Power Feeds on page 1426](#)). While the outlets are supplying power, the touchscreen shows the amount of power being used.

You can also enable power to the outlets and power feeds using the mobile app.

NOTE: Leaving a device plugged in depletes the high voltage Battery. Even if nothing is plugged in, the outlets draw small amounts of power from the Battery whenever they are enabled. When the charge level of the high voltage Battery is very low, power to the outlets shuts off and a message is displayed on the touchscreen. Leaving a device plugged in does not deplete the low voltage battery.



CAUTION: Do not use the AC outlets to power a device with a power rating that exceeds the limits listed above.



Keep On Cabin and Bed Outlets

If you want the outlets to continue supplying power even when the vehicle is not occupied, touch **Controls > Outlets & Mods** and enable **Keep On Cabin and Bed Outlets**. After 12 hours, or once the high voltage Battery has less than 5% remaining energy, the outlets shut off. **Keep On Cabin and Bed Outlets** is automatically enabled whenever you turn on the outlets using the mobile app.

CyberTent Mode

After installing the CyberTent, enable **CyberTent Mode** for optimal comfort. **CyberTent Mode**:

- Levels the suspension.
- Opens the tonneau cover and keeps it open by disabling the switches.
- Displays controls to adjust the front and rear lights.
- Allows outlets to be kept on indefinitely.

NOTE: Using **CyberTent Mode** and keeping the outlets or lights on may increase power usage.

- Disables walk-away lock.

NOTE: It is your responsibility to ensure the vehicle is appropriately locked or attended to at all times.

To enable, touch **Controls > Outlets & Mods > CyberTent Mode**. CybertruckModel SModel XModel 3Model Y cannot be driven while **CyberTent Mode** is enabled.

Overload Capability

The AC outlets on CybertruckModel SModel XModel 3Model Y are all capable of providing additional surge current to start almost all devices (such as power tools, motors, and compressors) up to 110LRA.


Troubleshooting AC Outlets


AC outlets may be disabled in the following scenarios:

- Very low ambient temperatures.
- When an AC charging cable is connected to CybertruckModel SModel XModel 3Model Y even if the vehicle is not actively charging.
- The high voltage Battery does not have enough charge.
- GFCI or overcurrent detection has been tripped.

If one or more outlets unexpectedly stops providing power, first ensure that you have enabled power to the outlets (touch **Controls > Outlets & Mods**) and that the high voltage Battery has enough remaining charge.

Each power outlet in CybertruckModel SModel XModel 3Model Y is equipped with overcurrent detection and a ground fault circuit interrupter (GFCI), which interrupts the power supply to an outlet if an issue is detected, such as a current leakage. In this case, the outlets will turn off. Overcurrent detection may happen if multiple devices plugged in at once draw too much power from the AC power outlets.

 **CAUTION:** Use only "UL" Listed devices with the AC power outlets in CybertruckModel SModel XModel 3Model Y.

 **CAUTION:** Damage to a device or data loss (such as from a laptop or external drive) due to a sudden loss of power is not covered by the warranty.













If an outlet is still not providing power, the GFCI or overcurrent detection may have been tripped. When an outlet is faulted, an option to reset the outlets becomes available. To reset:

1. Disconnect all devices from all AC outlets (three outlets in the cargo bed and two in the center console).
2. Touch **Controls > Outlets & Mods > Reset**.
3. Reconnect devices and re-enable power to the outlets by touching **Controls > Outlets & Mods > AC Outlets**.



NOTE: Power to AC outlets is still available when CybertruckModel SModel XModel 3Model Y is DC charging (while Supercharging, for example). See [Charging Instructions on page 1370](#).

Warnings and Cautions

-  **CAUTION:** Always check each outlet for damage before use.
-  **CAUTION:** Keep the outlet cover closed when the cargo bed outlets are not in use.
-  **CAUTION:** Keep the outlet cover closed when Cybertruck is AC charging, especially in wet weather. AC charging may be disabled if moisture enters one of the outlets.
-  **CAUTION:** Damage to CybertruckModel SModel XModel 3Model Y caused by an external device that is plugged in to an outlet is not covered by the warranty.
-  **CAUTION:** Use caution when driving CybertruckModel SModel XModel 3Model Y while devices are plugged into the cargo bed outlets. Ensure that all objects in the cargo bed are properly secured (see [Securing Cargo on page 1193](#)).
-  **WARNING:** A power outlet and a device's plug can become hot. Use caution when unplugging a device.
-  **WARNING:** Do not insert any objects into the outlets other than electrical plugs. Treat the outlets on CybertruckModel SModel XModel 3Model Y the same as you would any other outlet, and take care to ensure proper handling. Misusing outlets can cause serious injury.
-  **WARNING:** Protect the cargo bed outlets from moisture, water, and foreign objects at all times. If you see a foreign object in an outlet, or if the outlets appear corroded or damaged, do not use them.
-  **WARNING:** Do not use the cargo bed outlets if they are wet or covered in snow.
-  **WARNING:** If rain falls while an accessory is plugged in and drawing power from the cargo bed outlets, do not allow rain water to run along the length of charge cable, causing the outlets to become wet.
-  **WARNING:** Do not connect a power source (such as a solar panel or external battery) to a cargo bed outlet.
-  **WARNING:** As with any power outlet, do not leave children unattended near the cargo bed outlets and ensure the outlet cover is closed when the outlets are not in use.



Voice Commands

NOTE: For your convenience, Tesla allows you to choose from a variety of languages to use for voice commands. To choose a different language, touch **Controls > Display > Voice Recognition Language**.

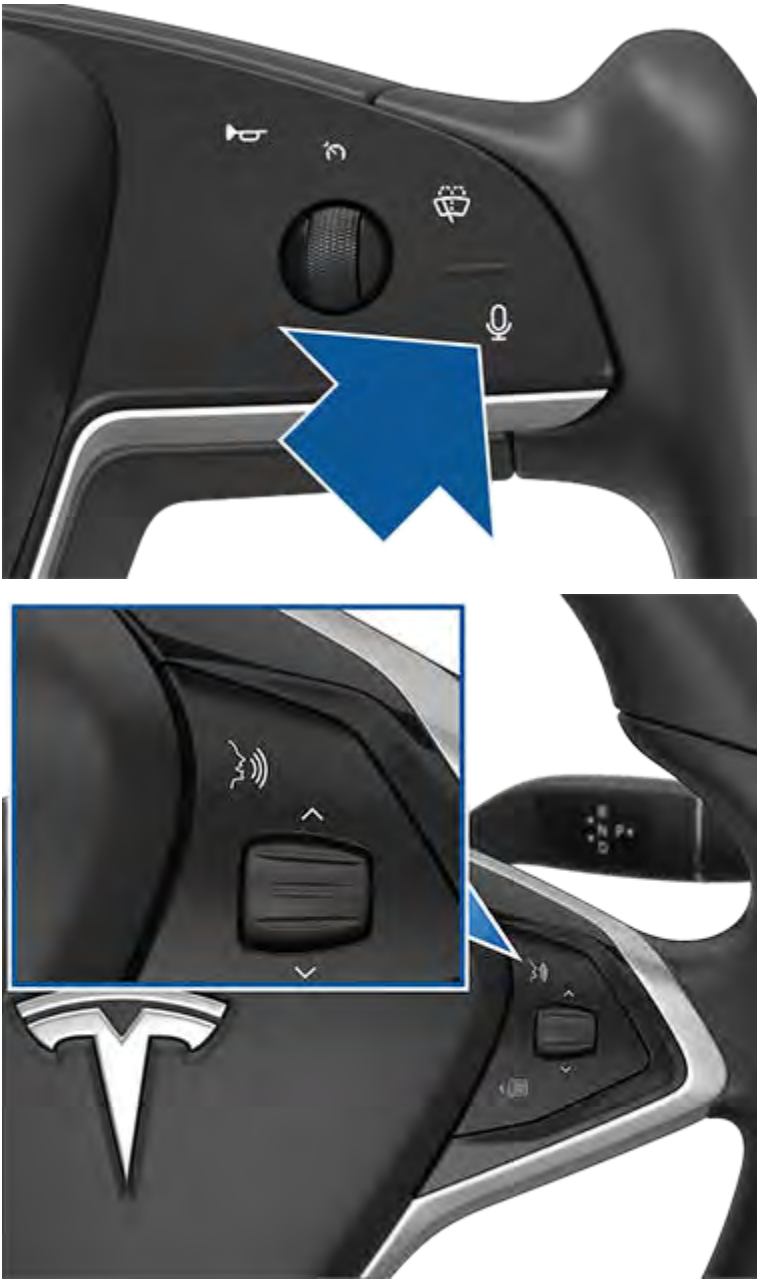
Use voice commands to easily control settings and preferences without using the touchscreen. Voice commands are designed to understand natural requests. The following is a non-exhaustive list of actions that you can perform with voice commands:

- Adjust climate preferences
- Tweak the windshield wiper speed and frequency
- Control various aspects of your vehicle
- Navigate to a location
- Call a contact
- Interact with apps and settings

To initiate a voice command, press and release the right scroll wheel button on the steering wheelsteering yoke (or steering wheel)press and release the right scroll wheel button on the steering wheelsteering yoke (or steering wheel)fully press the microphone button on the right side of the steering wheelsteering yoke (or steering wheel)fully press the microphone button on the right side of the steering wheelsteering yoke (or steering wheel)touch the voice button on the right side of the steering wheelsteering yoke (or steering wheel). When a chime sounds, make your request.







Examples of Voice Commands

Here is a list of example voice commands. This is not an exhaustive list. Tesla is constantly working to improve voice commands.

NOTE: Your vehicle must be in Park to enable some voice commands (such as Sentry Mode, Dog Mode, etc.).

Climate Controls

Adjust your climate preferences:

- "Make it cooler"
- "Make it warmer"
- "Turn on/off the driver's seat heater"
- "Cool down the passenger"
- "Direct airflow to my face"



- "Sync climate"
- "Increase/decrease the fan speed"
- "Turn on/off rear defroster"
- "Set the temperature/fan..."
- "Turn on recirculate"

Windshield Wipers

Update the windshield wiper speed and frequency based on changing road and weather conditions:

- "Speed up the wipers"
- "Speed up the wiper"
- "Turn on/off the wiper"
- "Increase/decrease windshield wiper speed by..."
- "Turn on/off the wipers"

Vehicle Controls

Modify various controls in your vehicle:

- "Sentry Mode on/off"
- "Keep my car safe"
- "Keep my truck safe"
- "Lock/unlock the doors"
- "Turn on Dog Mode"
- "Fold/unfold the mirrors"
- "Open/close charge port"
- "Start/stop charging"
- "Open service settings"
- "Open the glovebox"

Navigation

Search for or navigate to a location:

- "Where is [location]?"
- "Drive to [location]"
- "Navigate to [location]"
- "Show nearby Superchargers"
- "I'm feeling hungry/lucky" (see [Maps and Navigation on page 699](#)).
- "Stop navigation"
- "Mute voice guidance"

If you have defined a navigation address for your home or work locations, you can use a voice command to navigate there by saying "Navigate home" or "Take me to work".

Contacts

To call or text a contact on your Bluetooth-connected phone (see [Phone, Calendar, and Web Conferencing on page 363](#)), say:

- "Call [contact name/phone number]"



- "Text [contact name/phone number]"

Media

Listen to media and adjust your playback preferences:

- "Listen to [song name]"
- "Lower/raise the volume"
- "Skip to next"
- "Pause/play song"
- "Change the source to [media source]"

To improve voice command recognition accuracy, provide multiple cues in your command, such as artist and song.

Apps and Settings

Easily navigate through your apps and settings:

- "Open [Toybox/browser/theater/phone]"
- "Search for..."
- "The screen is too bright"
- "Show me the Owner's Manual"

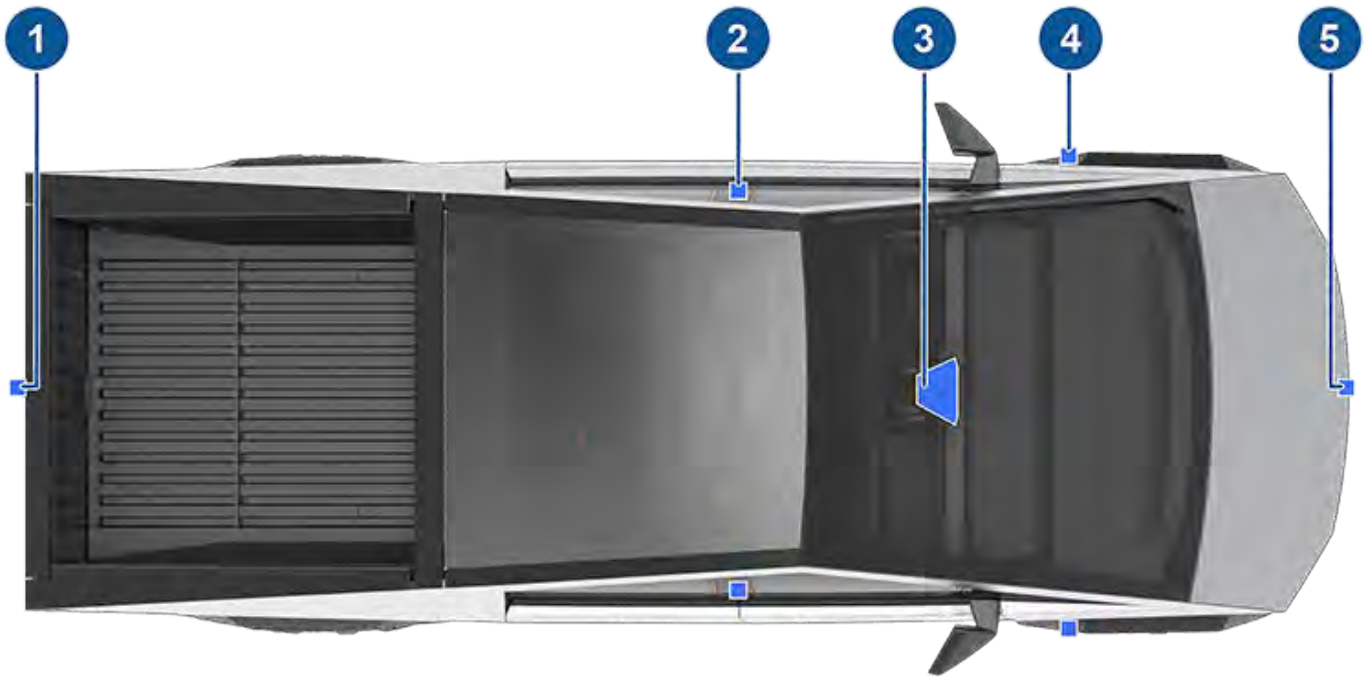
You can also file a bug report by saying "Report", "Feedback", or "Bug report".

For more information on voice commands, go to <https://www.tesla.com/support/voice-commands>.

NOTE: To support ongoing quality improvements, Tesla captures and processes voice command transcriptions (such as "set the temperature..."). Audio voice recordings are not collected, and transcriptions are not associated with your Tesla account or with your vehicle's identification number. To further protect your privacy, voice commands containing personal data are not captured (such as "Navigate to..." or "Make a call to...").

Cameras

Your CybertruckModel SModel XModel 3Model Y includes the following components that actively monitor the surrounding area:



1. A camera is mounted on the tailgate.
2. A camera is mounted in each door pillar.
3. Two cameras are mounted to the windshield above the rear view mirror.
4. A camera is mounted above each front wheel.
5. A camera is mounted above the grille on the front bumper.

Viewing Camera Feeds

The Camera app shows the views from the side cameras, rear-facing camera, and front-facing camera. To open the Camera app, you can either:

- Open the app launcher and touch the Camera app.



- Touch the camera icon on the right side of the steering wheel.



Swipe up or down to switch between the rear and front camera views.

The camera app opens automatically when you shift into Reverse.

Rear-Facing Camera

CybertruckModel SModel XModel 3Model Y is equipped with a rear-facing camera mounted on the tailgate.



Whenever you shift into Reverse, the touchscreen displays the view from the rear-facing camera. Lines show your driving path based on the position of the steering wheel. These lines adjust as you move the steering wheel. The tailgate must be fully closed in order to see the rear view and lines on the display.

You can choose to always show the rear view camera feed when the tonneau cover is closed by touching **Controls > Display > Rear View Camera > Auto**.

If a black screen appears on the touchscreen instead of the rear view camera feed when in Reverse, use the rear view mirrors and ensure your surroundings are safe before continuing to Reverse. If inoperability of the rear view camera persists, try restarting the touchscreen (see [Restarting the Touchscreen on page 1115](#)). If the camera feed still shows as a black screen after that, use the mobile app to schedule a service appointment.



⚠ WARNING: Never depend on the cameras to inform you if the area around you is free of objects and/or people. The cameras may not detect objects or barriers that can potentially cause damage or injury. In addition, several external factors can reduce the performance of the cameras, including a dirty or obstructed lens. Therefore, depending on the cameras to determine if CybertruckModel SModel XModel 3Model Y is approaching an obstruction can result in damage to the vehicle and/or objects and can potentially cause serious injury. Always inspect the area with your own eyes. When reversing, perform shoulder checks and use all mirrors. Use the cameras for guidance purposes only. It is not intended to replace your own direct visual checks and is not a substitute for careful driving.

Front-Facing Camera

Your CybertruckModel SModel XModel 3Model Y is equipped with a front-facing camera located above the grille on the front fascia.



To display the view from the front-facing camera at any time, open the app launcher and touch the Camera app or touch the camera icon on the right side of the steering wheel. Swipe up or down to switch between the rear, front, and side camera views.

⚠ WARNING: Never depend on the camera to inform you if the area around you is free of objects and/or people. The camera may not detect objects or barriers that can potentially cause damage or injury. In addition, several external factors can reduce the performance of the cameras, including a dirty or obstructed lens. Therefore, depending on the cameras to determine if CybertruckModel SModel XModel 3Model Y is approaching an obstruction can result in damage to the vehicle and/or objects and can potentially cause serious injury. Always inspect the area with your own eyes. Use the camera for guidance purposes only. It is not intended to replace your own direct visual checks and is not a substitute for careful driving.

Cabin Camera

Your CybertruckModel SModel XModel 3Model Y is equipped with a cabin camera located above the rear view mirror.



The cabin camera can determine driver inattentiveness and enhances active safety features (such as Forward Collision Warning). You can also view the feed from this camera in the Tesla mobile app when Sentry Mode Live Camera is enabled (see [Sentry Mode on page 664](#)).

Data Sharing

By default, images and video from the camera do not leave the vehicle itself and are not transmitted to anyone, including Tesla, unless you enable data sharing. If you enable data sharing and a safety critical event occurs (such as a collision), CybertruckModel SModel XModel 3Model Y shares short cabin camera video clips with Tesla to help us develop future safety enhancements and continuously improve the intelligence of features that rely on the cabin camera. Data may also be shared if diagnostics are required on cabin camera functionality. Cabin camera does not perform facial recognition or any other method of identity verification. To protect your privacy, cabin camera data is not associated with your vehicle identification number.

To adjust your data sharing preferences touch **Controls > Software > Data Sharing > Allow Cabin Camera Analytics**. You can change your data sharing settings at any time.

Cleaning a Camera

To ensure a clear picture, the camera lens must be clean and free of obstructions, condensation, or damage.

Condensation can form inside the camera enclosures, especially if you park outside in cold or wet conditions. The touchscreen may display an alert stating that a camera is blocked and that some (or all) Autopilot features may be temporarily restricted until the camera vision is clear. To proactively dry the condensation, precondition the cabin by setting it to a warm temperature, turning the windshield defroster on, and directing the front air vents toward the door pillars (see [Mobile App on page 355](#)).

Remove any build-up of dirt or debris by spraying water onto the camera lens and carefully drying it with a microfiber cloth. Clean the camera lens at least weekly during wet weather (snow, rain, sleet) and every month during dry weather.



The front-facing camera is equipped with a sprayer nozzle. To clean the front-facing camera, touch the app launcher, select the Camera app, and press the spray icon.

CAUTION: Do not use chemical-based or abrasive cleaners. Doing so can damage the surface of the lens.

Drive to Calibrate Cameras

Before some Autopilot features can be used for the first time or after some types of service repairs, cameras must complete a self-calibration process. When the cameras are calibrating, the instrument clustertouchscreen displays a progress indicator. When calibration is complete, Autopilot features are available for use.



Calibration typically completes after driving 20-25 miles (32-40 km), but the distance varies depending on the conditions. Calibration completes more quickly when driving on a straight road that has multiple lanes and highly visible lane markings in both the driving lane and adjacent lanes (at least two lanes over on each side of the vehicle). For best results, drive in the middle lane of a multi-lane highway (ideally with at least five lanes) that has clear lane markings and minimal traffic.

Schedule a service appointment only if your CybertruckModel SModel XModel 3Model Y has not completed the calibration process after driving approximately 100 miles (160 km) in the described conditions.

If a camera has shifted from its previously calibrated position (for example, the camera or windshield was replaced), clear the calibration by touching **Controls > Service > Camera Calibration > Clear Calibration**. When the calibration is cleared, CybertruckModel SModel XModel 3Model Y repeats the calibration process.

NOTE: CybertruckModel SModel XModel 3Model Y must repeat the calibration process if the cameras are serviced by Tesla, and in some cases after a software update.

NOTE: If you attempt to use a feature that is not available until the calibration process is complete, the feature is not available and the touchscreen displays a message.



Keys


Types of Keys

NOTE: In the event you lose both key cards, schedule a service appointment through the mobile app to replace and pair them.


CybertruckModel SModel XModel 3Model Y supports the following types of keys:

- **Phone key** – You can set up your personal phone as a "phone key" that communicates with CybertruckModel SModel XModel 3Model Y using Bluetooth (BLE). A phone key supports automatic locking and unlocking.
- **Key card** – Tesla provides key cards that communicate with CybertruckModel SModel XModel 3Model Y using short range radio-frequency identification (RFID) signals. The key card is used to "authenticate" phone keys to work with CybertruckModel SModel XModel 3Model Y and to add or remove other keys. Unlike the phone key, the key card does not support automatic locking and unlocking and must be touched against a card reader. In situations where your phone key has a dead battery, or is lost or stolen, use your key card to unlock, drive, and lock CybertruckModel SModel XModel 3Model Y.

CybertruckModel SModel XModel 3Model Y supports a total of 19 keys, which can include phone keys and key cards.

 **CAUTION:** Remember to bring a key (and a backup key) with you when you drive. Although you can drive CybertruckModel SModel XModel 3Model Y away from a detected key, you will be unable to power it back on after it powers off.

Phone Key

 **CAUTION:** Do not leave your paired phone in your vehicle (for example, if you are hiking or at the beach). If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off and ensure that you keep a key card with you.

Using your phone as a key is a convenient way to access your CybertruckModel SModel XModel 3Model Y. As you approach your vehicle, the smartphone's Bluetooth signal is detected and the doors unlock when you press a door open button. Likewise, when you exit and walk away with the phone key, doors automatically lock (provided the **Walk-Away Door Lock** feature is turned on; see [Walk-Away Door Lock on page 1148](#)).

Before you can use a phone to access CybertruckModel SModel XModel 3Model Y, follow these steps to authenticate it:

1. Download the Tesla mobile app to your phone.
2. Log into the Tesla mobile app using your Tesla account username and password.

NOTE: You must remain logged in to your Tesla account to use your phone to access CybertruckModel SModel XModel 3Model Y.

NOTE: If multiple vehicles are linked to your Tesla account, CybertruckModel SModel XModel 3Model Y opens the most recent vehicles in the mobile app for easy access.

3. Confirm:
 - Your phone's Bluetooth setting is turned on.
 - The Tesla mobile app can access your phone's Bluetooth. On your phone, navigate to Settings, choose the Tesla mobile app, and ensure the Bluetooth setting is turned on.
 - Allow the Tesla mobile app to access your location. For the best experience, keep the mobile app running in the background.
 - Mobile access is enabled for your vehicle. On the touchscreen, touch **Controls > Safety > Allow Mobile Access**.

NOTE: CybertruckModel SModel XModel 3Model Y communicates with your phone using Bluetooth. Keep in mind that your phone must have enough battery power to support Bluetooth (some phones disable Bluetooth when the battery is low).

4. While inside or near the vehicle, open the Tesla mobile app and touch **Set Up Phone Key** on the main screen, or navigate to **Security > Set Up Phone Key**. Follow the prompts on the mobile app and vehicle touchscreen to set up your phone key.



NOTE: You must have your key card available in order to set up a phone key.

To view a list of keys that can currently access CybertruckModel SModel XModel 3Model Y, or to remove a phone key, touch **Controls > Locks** (see [Managing Keys on page 1144](#)).

CybertruckModel SModel XModel 3Model Y can connect to three phone keys simultaneously. Therefore, if more than three phone keys are detected and you want to authenticate or pair a different phone, move the other connected phone key(s) out of range or turn off its Bluetooth setting.

Once a phone has been authenticated, it no longer requires an internet connection to be used as a phone key for CybertruckModel SModel XModel 3Model Y. However, to use the phone hands-free, access your phone's contacts, play media from it, etc., you must also pair it and connect it as a Bluetooth device (see [Bluetooth on page 360](#)).

NOTE: Some Android smartphones with NFC capability can be used to lock/unlock your vehicle, just like using a key card. Ensure the Tesla mobile app is correctly paired to your vehicle and enable the NFC function on your phone. Once enabled, simply hold the phone to the driver's side door pillar to lock or unlock the door. Refer to your smartphone's instructions for specific information on how to do this.

Key Card

Tesla provides you with two CybertruckModel SModel XModel 3Model Y key cards, designed to fit in your wallet.

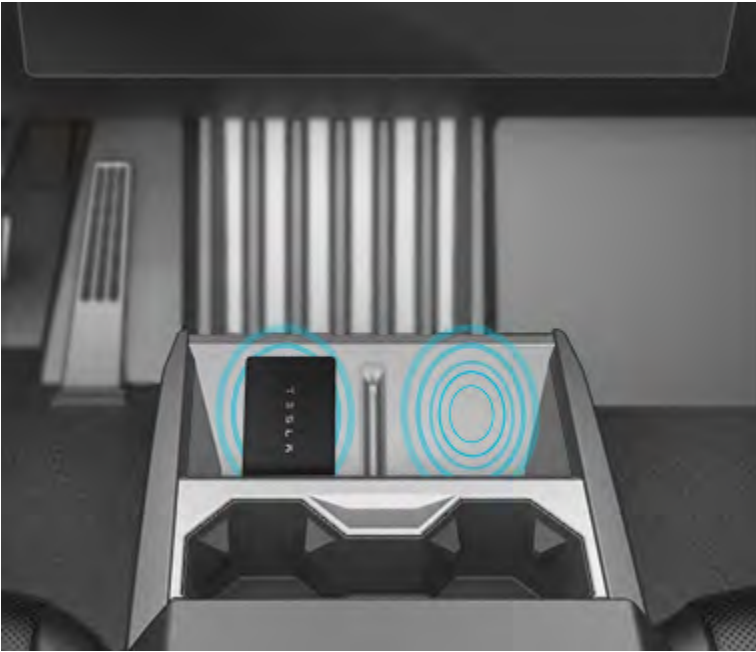
To use a key card to unlock or lock CybertruckModel SModel XModel 3Model Y from outside, position the card as shown and tap it against the card reader located approximately one third the way up of the driver's side door pillar. When CybertruckModel SModel XModel 3Model Y detects the key card, the exterior lights flash, the mirrors unfold or fold (if Fold Mirrors is on), the horn sounds (if Lock Confirmation Sound is on), and the doors unlock or lock. You may need to hold the key card against the transmitter for a few seconds.



Once inside, power up CybertruckModel SModel XModel 3Model Y by pressing the brake pedal within two minutes of scanning the key card (see [Starting and Powering Off on page 373](#)). If you wait longer than two minutes, you must re-authenticate by placing the key card near one of the card readers located on the wireless phone chargers on the center console. When your key card is detected, your two-minute authentication period restarts.



Opening and Closing



NOTE: If enabled, Walk-Away Door Lock (see [Walk-Away Door Lock on page 1148](#)) operates only when you walk away using a phone key. When you walk away carrying your key card, CybertruckModel SModel XModel 3Model Y does not automatically lock.

Managing Keys

To display a list of all keys that can access CybertruckModel SModel XModel 3Model Y, touch **Controls > Locks**. An icon displays next to each key to indicate whether the key is a phone key or a key card. Use this list to manage keys that have access to CybertruckModel SModel XModel 3Model Y. To add or delete keys, see [Adding Keys from the Touchscreen on page 1144](#).

CybertruckModel SModel XModel 3Model Y supports up to 19 keys. When you reach this limit, you must delete a key before adding a new one.

NOTE: You can use the same key for more than one Tesla vehicle. This prevents you from having to deal with multiple keys when you switch vehicles. If you customize the name of an authenticated key card on one vehicle (by touching the pencil icon), any other vehicle to which the key card is authenticated also displays the changed name.

Adding Keys from the Touchscreen

If you have a key card that is already paired with your vehicle, you can pair a new key using the touchscreen.

1. On the touchscreen, touch **Controls > Locks > Keys > Add Key**.
2. Scan your key card on one of the card readers located on the wireless phone chargers on the center console.
3. Scan a key card that has already been paired to the vehicle to confirm new key pairing.
4. When complete, the key list includes the new key. Touch the associated pencil icon to customize the name of the key.

Adding Keys from the Mobile App

In the event that you don't have a working key card, you can add a new key using the mobile app.

NOTE: Only the owner of the vehicle is able to pair a new key using the mobile app.

NOTE: Pairing a key with the mobile app is supported with version 4.29.0 of the Tesla mobile app on vehicles with software versions 2022.40 or higher.

1. While inside or near the vehicle, open the Tesla mobile app on your smartphone.
2. Touch **Security & Drivers**.



3. Touch **Add Key Card**.
4. Scan your key card on one of the card readers located on the wireless phone chargers on the center console.
5. When the key is paired successfully, the mobile app shows a confirmation message. Touch **Done** in the mobile app and remove the key card from the card reader.
6. When complete, the key list on the touchscreen includes the new key. Touch the associated pencil icon to customize the name of the key.

Removing Keys

When you no longer want a key to access CybertruckModel SModel XModel 3Model Y (for example, you lost your phone or key card, etc.), follow these steps to remove it.

1. On the touchscreen, touch **Controls > Locks**.
2. In the key list, find the key that you would like to delete and touch its associated trash icon.
3. When prompted, scan an authenticated key on the card reader to confirm the deletion. When complete, the key list no longer includes the deleted key.

NOTE: CybertruckModel SModel XModel 3Model Y requires at least one authenticated key card or key fob or key fob at all times. If only one key card remains on the key list, you cannot delete it.

Replacing Key cards

If you lose a key card, you can purchase replacement ones on the Tesla Shop. When ready to pair, simply follow the steps in [Managing Keys on page 1144](#). Remember to remove your old key cards from **Controls > Locks > Keys** for security purposes.

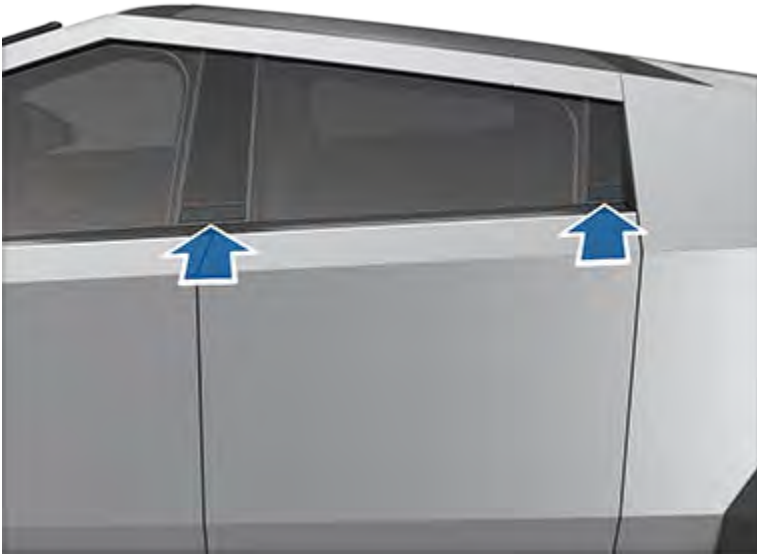


Opening and Closing

Doors

Opening and Closing Doors from Outside

Doors are electrically powered. When you approach CybertruckModel SModel XModel 3Model Y carrying a phone key, the doors and tailgate automatically unlock. To open a door, press the exterior door release button on the pillar to the right of each door.



The doors do not automatically lock/unlock when you approach CybertruckModel SModel XModel 3Model Y carrying only a key card. You must manually lock/unlock the vehicle. See [Keys on page 1142](#) for more information.

- ⚠ WARNING:** Use caution around the panel edges on CybertruckModel SModel XModel 3Model Y, including the doors, powered frunk, tailgate, and surrounding panels.
- ⚠ WARNING:** When pulling the door open, always grasp the door at the top, as shown. Keep hands and fingers away from the opening edge and supervise children if they open and close the doors. This is especially important when handling a front door where the opening edge can cause injury when opening or closing the associated rear door. Neglecting to follow the correct opening procedure for front and rear doors can lead to injury.



Whenever a door is open, the Door Open indicator displays on the touchscreen. Also, the image of the CybertruckModel SModel XModel 3Model Y on the touchscreen's **Controls** window provides a visual representation of the open door(s).

To close a door from the outside, manually push it shut. Make sure no objects are in the way before closing the door.

Opening Doors from the Interior

To open a door while sitting inside, press interior door open button, located at the top of the interior door handle, and push the door open.



NOTE: To prevent children from opening the rear doors, turn on child locks (see [Child Locks on page 1149](#)).

NOTE: In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the doors with the interior door open button. See [Opening Doors with No Power on page 1457](#) for more information.

Interior Locking and Unlocking

While sitting inside CybertruckModel SModel XModel 3Model Y, you can lock or unlock all doors, the tailgate, and the powered frunk by touching the lock icon on the touchscreen.



The icon changes to indicate whether doors are locked or unlocked.

When you stop CybertruckModel SModel XModel 3Model Y and engage Park, you can choose to unlock all doors. To turn this feature on or off, touch **Controls > Locks > Unlock on Park**.

CybertruckModel SModel XModel 3Model Y automatically locks all doors (including the powered frunk and tailgate) when your driving speed exceeds 5 mph (8 km/h). The touchscreen displays a message if the tailgate remains open after the vehicle locks.

Walk-Away Door Lock

NOTE: CybertruckModel SModel XModel 3Model Y will still lock, even if the tonneau cover is open. In other words, once the vehicle is locked, the tonneau cover is locked in its current position and cannot be open/closed using the tonneau cover switch on the vehicle. Always double check to make sure the tonneau cover is closed.

The doors, tailgate, and powered frunk can automatically lock when you walk away carrying your phone key. To turn this feature on or off, touch **Controls > Locks > Walk-Away Door Lock**.

When the vehicle locks, the exterior lights flash once. To also sound a confirmation chime when CybertruckModel SModel XModel 3Model Y locks, touch **Controls > Locks > Lock Confirmation Sound**.

CybertruckModel SModel XModel 3Model Y does not automatically lock if:

- You choose **Exclude Home** and CybertruckModel SModel XModel 3Model Y is parked at the location you have designated as Home. For details on how to designate a location as Home, see [Home, Work, and Favorite Destinations on page 703](#).
- A key is detected inside CybertruckModel SModel XModel 3Model Y (such as your phone or a key card resting on the card reader).
- A door or the powered frunk is not fully closed.
- The phone key's Bluetooth is not able to communicate with the vehicle or the phone's battery is dead.
- If CybertruckModel SModel XModel 3Model Y detects an authenticated phone key for several minutes after you exit the vehicle and close all doors, Walk-Away Lock disables and doors do not lock when you walk away. In this case, you must manually lock your vehicle using a key card until after your next drive.
- The driver exits the vehicle without using the driver's door.

NOTE: It is your responsibility to ensure CybertruckModel SModel XModel 3Model Y is locked, even when Walk-Away Door Lock is enabled. You can check if CybertruckModel SModel XModel 3Model Y is locked from the Tesla mobile app (see [Mobile App on page 355](#)).

Driver Door Unlock Mode

Enabling **Controls > Locks > Driver Door Unlock Mode** only unlocks the driver's door when you first unlock CybertruckModel SModel XModel 3Model Y. To unlock the remaining doors, long press the interior door open button, or use the touchscreen or mobile app.

Disabling **Driver Door Unlock Mode** unlocks all doors, the powered frunk, and the tailgate when you first unlock CybertruckModel SModel XModel 3Model Y.



Car Left Open Notifications

Receive a mobile notification if a door, the powered trunk and/or windows are left open or if CybertruckModel SModel XModel 3Model Y is left unlocked unexpectedly. Touch **Controls > Locks > Car Left Open Notifications**.

NOTE: CybertruckModel SModel XModel 3Model Y will still lock, even if the tonneau cover is open. Always double check to make sure the tonneau cover is closed. **Car Left Open Notifications** may not notify you if the tonneau cover is left open.

Child Locks

CybertruckModel SModel XModel 3Model Y has child locks on the rear doors to prevent them from being opened using the interior door open buttons. On the touchscreen, touch **Controls > Locks > Child Lock**. You can choose **Both** to engage the child lock on both rear doors, or you can choose **Left** or **Right** to engage it on just a specific door.



WARNING: Tesla recommends turning on child locks whenever a child is seated in a rear seat.



Opening and Closing

Windows

Opening and Closing

CAUTION: The windows automatically lower slightly when you open or close a door. This is normal and avoids damage to the window when the door opens. If you manually raise a window when the door is open, ensure it is slightly lowered before closing the door.

Press down on a switch to lower the associated window. Window switches operate at two levels:

- To lower a window fully, press the switch all the way down and immediately release.
- To lower a window partially, press the switch gently and release when the window is where you want it.



Similarly, pull a switch to raise the associated window:

- To raise a window fully, pull the switch all the way up and immediately release.
- To raise a window partially, pull the switch gently and release when the window is where you want it.

NOTE: If a window is fully lowered and you open the associated door, the window rises slightly. Likewise, if you fully lower a window while the door is already open, it stops slightly above the edge of the door. To fully lower a window while the door is open, press the switch again.

If a window is left open unintentionally, CybertruckModel SModel XModel 3Model Y can send a notification to the mobile app (touch **Controls** > **Locks** > **Car Left Open Notification**, then choose **Doors & Windows**). However, it is your responsibility to ensure windows are closed after leaving the vehicle; do not rely on notifications to inform you.

Enable **Close Windows on Lock** by touching **Controls** > **Locks** > **Close Windows on Lock** to automatically close the windows whenever the vehicle locks.

NOTE: See [Cold Weather Best Practices on page 693](#) for information on preparing windows for cold weather.

WARNING: Before closing a window, it is the driver's responsibility to ensure that all occupants, especially children, do not have any body parts extended through the window's opening. Failure to do so can cause serious injury.

WARNING: Never leave children unattended in CybertruckModel SModel XModel 3Model Y.

Locking Rear Windows

To disable the rear window switches, touch **Controls** > **Locks** > **Window Lock**. Once locked, the rear windows can only be controlled from the driver's window switch. Touch **Window Lock** again to re-enable the rear window switches.



⚠ WARNING: To ensure safety, it is recommended that you lock the rear window switches whenever children are seated in the rear seats.

Calibrating Windows

In the unlikely event that a window behaves unexpectedly (fails to open or close properly, goes down more than normal when the door opens, etc.), you can calibrate it to potentially fix the issue.

To calibrate a window:

1. Close the door with the affected window.
2. Sit in the driver's seat and close the driver door.
3. Using the window's switch on the driver's door, fully **raise** the affected window until it stops.
4. Using the window's switch on the driver's door, fully **lower** the affected window until it stops.
5. Repeat step 3 and fully **raise** the affected window until it stops.

If this does not resolve the issue after performing a few times, use your mobile app to schedule a Service appointment.

UV Index Rating

The windshield, windows, and glass roof in CybertruckModel SModel XModel 3Model Y are excellent at protecting you from UV (ultraviolet) rays. The glass components score less than two on the UV Index scale. Review your region's UV Index specifications for more information.

⚠ WARNING: It is the occupant's responsibility to take the necessary precautions to ensure adequate UV protection.

Sun Visors and Vanity Mirrors

To protect occupants from sunlight coming through the windshield and side windows, flip the sun visor downward.



You can lower the extender or pivot the entire sun visor to the driver's window side provide maximum shade. Simply pull the inboard side of the sun visor out of the magnetic clip and pivot toward the window. Pivot the sun visor to return it back to its initial position and lock in place.



Opening and Closing



To expose the vanity mirror, lower the visor extender, then lower the mirror cover. While the cover is lowered, the mirror is exposed and lights are illuminated.



Front and Rear Seats

Correct Driving Position

The seat, head support, seat belt and airbags work together to maximize your safety. Using these correctly ensures greater protection.



Position the seat so you can wear the seat belt correctly, while being as far away from the front airbag as possible:

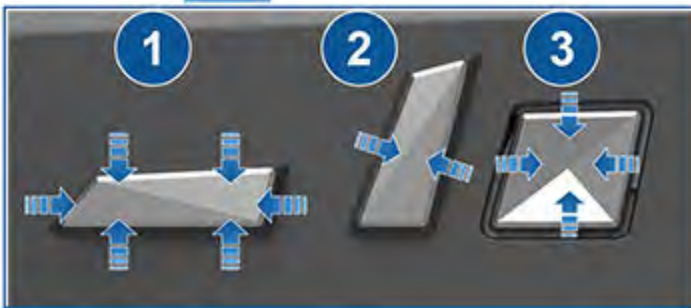
1. Sit upright with both feet on the floor and the seat back in an upright position.
2. Make sure you can easily reach the pedals and that your arms are slightly bent when holding the steering wheel. Your chest should be at least 10 inches (25 cm) from the center of the airbag cover.
3. Place the shoulder section of the seat belt mid-way between your neck and your shoulder. Fit the lap section of the belt tightly across your hips, not across your stomach.

Adjusting Front Seats

NOTE: Only front seats in CybertruckModel SModel XModel 3Model Y can be adjusted. The rear bench seat is stationary.



Seating and Safety Restraints



1. Move seat forward/backward and adjust the seat's height and tilt angle up/down.
2. Adjust backrest.
3. Adjust lumbar support.

- ⚠ WARNING:** Before adjusting a front seat, check that the area around the seat is free of obstacles (people and objects).
- ⚠ WARNING:** Do not adjust seats while driving. Doing so increases the risk of a collision.
- ⚠ WARNING:** Riding in a moving vehicle with the seat back reclined too much can result in serious injuries in a collision, as you could slide under the lap belt or be propelled into the seat belt. Ensure seat backs are reclined no more than 30 degrees when the vehicle is moving.



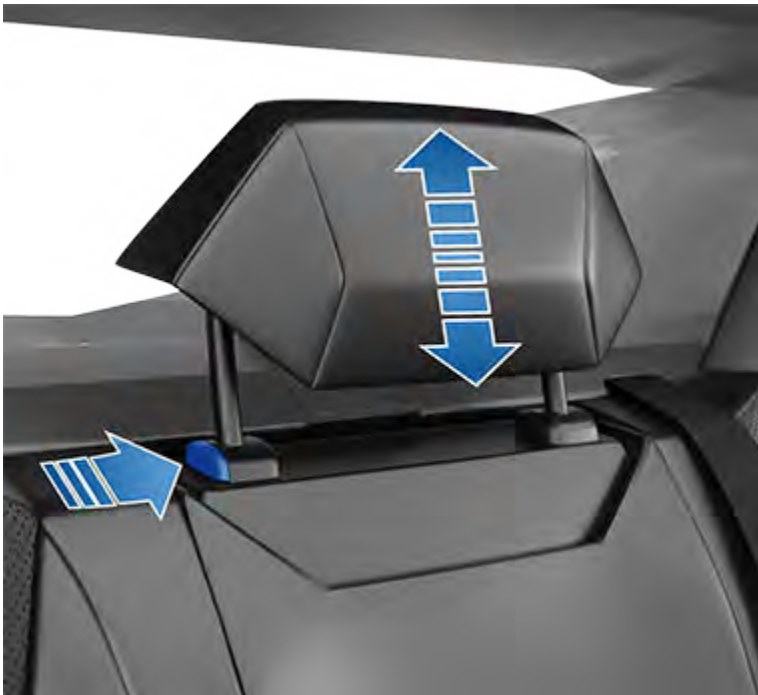
Head Supports

The front seats and the rear outboard seats are equipped with integrated head supports that you cannot adjust.

The rear center seat is equipped with an adjustable head support that you can raise and lower:

- When the seat is occupied by a passenger that is not in a child safety seat, align the center of the corresponding head support with the center of the occupant's head, and ensure the head support is locked into position.
- When the seat is occupied by a child safety seat equipped with an upper tether strap, leave the head support in the raised position after routing the upper tether straps under it.

To raise the head support, pull it upward to the desired position. To lower it, press and hold the button on the base of the post on the right side of the head support while pushing the head support downward.



⚠ WARNING: To minimize the risk of severe injury or death in the event of a collision, ensure that the rear center head support is positioned correctly before driving.

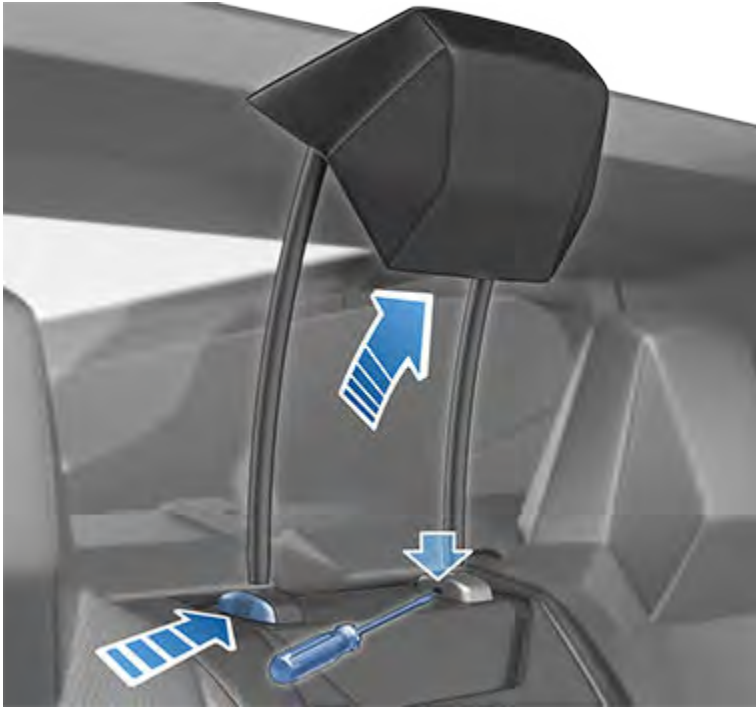
Removing/Installing the Rear Center Head Support

To remove the rear center head support:

1. Fully raise the head support by pulling it upward.
2. Press and hold the button located on the base at the right side of the head support.
3. Insert a short, flat object (such as a small flat-head screwdriver) into the opening in the base of the opposite post and pull the head support upward.



Seating and Safety Restraints



To re-install the rear center head support:

1. With the front of the head support facing forward, align both posts into the corresponding holes on the seat back.
2. While holding the button on the base of the post, press downward on the head support until it clicks into place.
3. Pull upward on the head support to ensure that it is secure.

⚠ WARNING: Ensure that the head support is correctly installed before seating an occupant. Failure to do so increases the risk of injury or death if a collision occurs.

Seat Heaters

All seats (except the rear center seat) are equipped with seat heaters that operate at three levels from 3 (highest) to 1 (lowest). For details on how to operate the seat heaters, see [Climate Controls on page 1338](#).

⚠ WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.

Seat Covers

⚠ WARNING: Do not use seat covers on a seat equipped with a seat-mounted airbag (see [Location of Airbags on page 1172](#)). Doing so could restrict deployment of the seat-mounted side airbags if a collision occurs. Also, if the vehicle is equipped with an occupant detection system that is used to determine the status of the passenger front airbag, seat covers may interfere with this system.



Seat Belts

Wearing Seat Belts

Using seat belts and child safety seats is the most effective way to protect occupants if a collision occurs. Therefore, wearing a seat belt is required by law in most jurisdictions.

All seats are equipped with three-point inertia reel seat belts. Inertia reel belts are automatically tensioned to allow occupants to move comfortably during normal driving conditions.

Seat Belt Reminders



The seat belt reminder on the touchscreen alerts you if a seat belt for an occupied driver or passenger seat is unbuckled. If all occupants are buckled up and the reminder stays on, re-buckle seat belts to ensure they are correctly latched. Also remove any heavy objects (such as a briefcase) from an unoccupied seat. If the reminder light continues to stay on, schedule a service appointment.

You can temporarily disable a seat belt reminder associated with a rear seating position. This is useful when you are carrying an object in a rear seat that triggers the seat belt reminder alert. To disable the reminder, touch the associated seat on the seat belt reminder popup message that displays on the touchscreen when a seat belt reminder is active. When a reminder is disabled, the seat belt reminder icon is replaced by a seat icon, for the current drive only. Touch the seat again to re-enable the reminder.



WARNING: Seat belts must be worn by passengers in all seating positions. Do not disable a seat belt reminder when the seating position is occupied by a passenger.

To Fasten a Belt

1. Ensure correct positioning of the seat (see [Correct Driving Position on page 1153](#)).
2. Draw the belt out smoothly, ensuring the belt lays flat across the pelvis, chest and mid-point of your collar bone, between the neck and shoulder. Ensure the belt is routed correctly and is not twisted. Never sit on the seat belt or any seat belt component.



WARNING: A twisted or incorrectly routed seat belt can cause damage and interfere with the functionality of the seat belt system.

3. Insert the latch plate into the buckle and press together until you hear a click indicating it is locked in place.



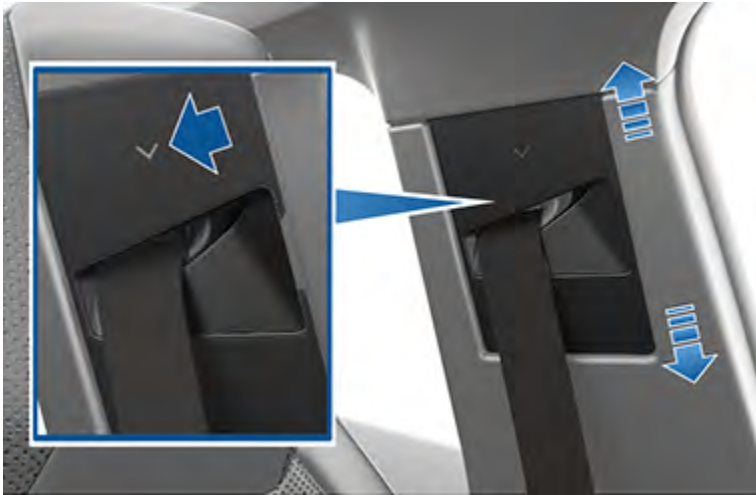
4. Pull the belt to check that it is securely fastened.
5. Pull the diagonal part of the belt toward the reel to remove excess slack.



To Adjust the Shoulder Anchor Height

CybertruckModel SModel XModel 3Model Y is equipped with an adjustable shoulder anchor for each front seat to ensure that the seat belt is positioned correctly. The seat belt should lay flat across the mid-point of your collar bone while in the correct driving position (see [Correct Driving Position on page 1153](#)). Adjust the height of the shoulder anchor if the seat belt is not positioned correctly:

1. To raise the shoulder anchor, slide it upwards.
2. To lower the shoulder anchor, press and hold the arrow above the shoulder anchor while sliding the anchor downward. The arrow has a softer area underneath that engages a release button, allowing you to lower the anchor. Release the button when the shoulder anchor is in the desired position.



3. Without pressing the button, pull firmly downward on the seat belt to check that it is locked into position.

WARNING: Ensure that the seat belt is positioned correctly and that the shoulder anchor is locked into position before driving. Riding in a moving vehicle with the seat belt positioned incorrectly or with the shoulder anchor not locked into position can reduce the effectiveness of the seat belt in a collision.

To Release a Belt

Hold the belt near the buckle to prevent the belt from retracting too quickly, then press the button on the buckle. The belt retracts automatically. Ensure there is no obstruction that prevents the belt from fully retracting. The belt should not hang loose. If a seat belt does not fully retract, schedule a service appointment.

Automatic Locking Retractor

All passenger seat belts include an automatic locking retractor (ALR) that you use to lock the seat belt in place. These self-locking retractors are typically used to securely hold a seat belt retained child safety seat (see [Installing Seat Belt Retained Child Seats on page 1164](#)). To engage the locking retractor:

1. Fully extract the seat belt webbing (beyond the length needed for a typical adult occupant).
2. Fasten the seat belt as you normally would (see [To Fasten a Belt on page 1157](#)).
3. Allow the belt to retract. You will hear a clicking sound. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending.

The automatic locking retractor disengages by unbuckling and fully retracting the seat belt. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency.

WARNING: Do not use the automatic locking retractor (ALR) feature for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.



Wearing Seat Belts When Pregnant

Do not put the lap or shoulder sections of the seat belt over the abdominal area. Wear the lap section of the belt as low as possible across the hips, not the waist. Position the shoulder portion of the belt between the breasts and to the side of the abdomen. Consult your doctor for specific guidance.



- WARNING:** If the seat belt is uncomfortable, adjust the seating position instead of wearing the seat belt incorrectly.
- WARNING:** Never place anything between you and the seat belt to cushion the impact in the event of a collision.

Seat Belt Pre-tensioners

The front seat belts are equipped with pre-tensioners that work in conjunction with the airbags in a collision. The pre-tensioners automatically retract both the seat belt lower anchor and the upper shoulder webbing, reducing slack in both the lap and diagonal portions of the belts, resulting in reduced forward movement of the occupant.



Seating and Safety Restraints



The seat belts in all rear seating positions are equipped with shoulder pre-tensioners to retract the seat belt webbing to reduce forward movement of the occupant. If the pre-tensioners and airbags did not activate in an impact, this does not mean they malfunctioned. It usually means that the strength or type of force needed to activate them was not present.

- ⚠ WARNING:** Do not bend, sit on, or interfere with the pre-tensioner assembly. Doing so can cause damage that interferes with the proper functionality of the seat belt system.
- ⚠ WARNING:** Once the seat belt pre-tensioners have been activated, they must be replaced. After any collision, have the airbags, seat belt pre-tensioners and any associated components checked and, if necessary, replaced.

Testing Seat Belts

To confirm that seat belts are operating correctly, perform these simple checks on each seat belt:

1. With the seat belt fastened, give the webbing nearest the buckle a quick and forceful pull. The buckle should remain securely locked.
2. With the seat belt fastened, give the webbing closest to the door a quick and forceful pull. The permanent seat belt attachment should remain securely locked. Never attempt to remove this attachment.
3. With the belt unfastened, unreel the webbing to its limit. Check that unreeling is free from snags, and visually check the webbing for wear. Allow the webbing to retract, checking that retraction is smooth and complete.
4. With the webbing half unreeled, hold the tongue plate and pull forward quickly. The mechanism should lock automatically and prevent further unreeling.














If a seat belt fails any of these tests, have the vehicle serviced before driving with the seat occupied.

For information about cleaning seat belts, see [Seat Belts on page 781](#).

Seat Belt Warnings

- ⚠ WARNING:** Seat belts should be worn by all occupants at all times, even if driving for a very short distance. Failure to do so increases the risk of injury or death if a collision occurs.
- ⚠ WARNING:** Secure small children in a suitable child safety seat as described in the Owner's Manual. Always follow the child safety seat manufacturer's instructions when installing.



-  **WARNING:** Ensure that all seat belts are worn correctly. An improperly worn seat belt increases the risk of injury or death if a collision occurs.
-  **WARNING:** Never sit on top of any seat belt component. Doing so can cause damage or interfere with the proper deployment of safety equipment.
-  **WARNING:** Do not wear seat belts over hard, fragile or sharp items in clothing, such as pens, keys, eyeglasses, etc. The pressure from the seat belt on such items can cause injury.
-  **WARNING:** Seat belts should not be worn with any part of the strap twisted.
-  **WARNING:** Each seat belt assembly must be used by one occupant only. It is dangerous to put a seat belt around a child being carried on an occupant's lap.
-  **WARNING:** Seat belts that have been worn in a collision must be inspected or replaced, if necessary, even if damage to the assembly is not obvious.
-  **WARNING:** Seat belts that show signs of wear (such as fraying), or have been cut or damaged in any way, must be replaced.
-  **WARNING:** Avoid contaminating a seat belt's components with any chemicals, liquids, grit, dirt or cleaning products. If a seat belt fails to retract or latch into the buckle, it must be replaced immediately.
-  **WARNING:** Do not make modifications or additions that can prevent a seat belt mechanism from taking up slack, or that can prevent a seat belt from being adjusted to remove slack. A seat belt with slack greatly reduces occupant protection.
-  **WARNING:** Do not make modifications that can interfere with the operation of a seat belt, or that can cause a seat belt to become inoperable.
-  **WARNING:** Do not use third party comfort and convenience products that attach to the seat belts.
-  **WARNING:** When seat belts are not in use, they should be fully retracted and not hanging loose. If a seat belt does not fully retract, schedule a service appointment.
-  **WARNING:** The seat belt system has no user serviceable parts and may contain pyrotechnics. Do not disassemble, remove, or replace components.



Seating and Safety Restraints

Child Safety Seats

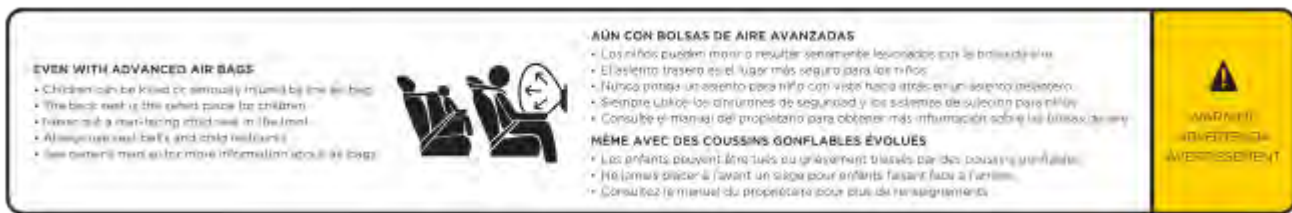
Passenger Front Airbag Must Be OFF

Your CybertruckModel SModel XModel 3Model Y seat belts are designed for adults and larger children. You must restrain infants and small children in the rear seats only, and you must use a suitable child safety seat appropriate for the child's age, weight, and size.

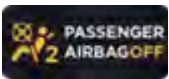
- WARNING:** Never seat a child in the front passenger seat, even if using a child restraint system.
- WARNING:** Never seat a child on a seat with an ACTIVE AIRBAG in front of it. DEATH or SERIOUS INJURY to the child can occur.

Refer to the following label located on the sun visors.

NOTE: The image shown below is representative only and may not be identical to the label in your vehicle.



CybertruckModel SModel XModel 3Model Y has an occupancy sensor in the front passenger seat that controls the status of the passenger front airbag (see [Front Passenger Occupant Detection on page 1175](#)).



Before driving with a child seat on the front passenger seat (if permitted in your market region), always double-check the status of the passenger front airbag to confirm that it is OFF. The Passenger Airbag OFF indicator displays on the touchscreen when the airbag is off. When off, the passenger airbag does not inflate when a collision occurs.

When the vehicle detects a passenger in the front seat, the passenger airbag is on. When on, the Passenger Airbag OFF icon should NOT be visible on the touchscreen. In this case, the airbag will inflate when a collision occurs.

- WARNING:** It is the driver's responsibility to confirm that the passenger front airbag is OFF when a child is seated in the front passenger seat. If the passenger front airbag fails to disable with a child seat in position, place the child and child restraint system in the rear seat and schedule a service appointment.
- WARNING:** Always ensure that all CybertruckModel SModel XModel 3Model Y seats are locked in position before traveling. Failure to do so increases the risk of injury. Pay attention to all warnings displayed on the touchscreen.
- WARNING:** Do not associate the **Easy Entry** setting with the driver's profile when a child is seated in a rear seat. Doing so can cause the driver's seat to push against the child, especially when a child is seated in a forward-facing child seat or booster seat. Do not rely on CybertruckModel SModel XModel 3Model Y to recognize or accommodate a child seated in the rear seats while using this setting (see [Driver Profiles on page 514](#)).



Choosing a Child Safety Seat

All children age 12 and under should ride in the rear seats. Always use a child safety seat suitable for a young child's age and weight. The following table is based on child safety seat recommendations determined by the National Highway Traffic Safety Administration (NHTSA). For more information, go to www.nhtsa.gov/ChildSafety/Guidance.

Category	Infants	Toddlers	Young children
Age	Birth to 1 year*	Over 1 year*	4 years and older, and less than 57 in. (145 cm) tall
Weight	Up to at least 20 lbs (9 kg)*	Over 20 lbs (9 kg) (minimum) and up to 40 lbs (18 kg)*	Over 40 lbs (18 kg)
Type of child safety seat	Rear facing (or convertible)	Forward facing (or convertible)*	Forward facing or seat belt retained booster seat****
Seat position	Rear facing only*	Rear facing as long as possible, then forward facing*	Forward facing
Recommended attachment method	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (lower anchor only) or the seat belt only.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt only.***	If combined weight of child and safety seat is up to 65 lbs (29 kg), attach using either LATCH** (both lower anchors and top tether anchor), or the seat belt and upper tether strap.*** If combined weight of child and safety seat is over 65 lbs (29 kg), attach using the seat belt and upper tether strap.***	Secure the booster seat using lower LATCH anchors (if available) and then restrain the child with the seat belt. If the booster seat is not equipped with LATCH** anchors, then secure the booster seat with the child using the seat belt. However, if the combined weight of the child and booster seat exceeds 65 lbs (29 kg), secure the booster seat with the child using the seat belt only.*****

***Many child safety seats currently available allow children to ride rear-facing using the child safety seat's integrated 5-point harness for a longer period of time BASED UPON SPECIFIC HEIGHT AND WEIGHT LIMITS. Keep your child in a rear facing seat for as long as possible. CHECK THE CHILD SAFETY SEAT MANUFACTURER'S INSTRUCTIONS AND CAREFULLY FOLLOW ALL INSTRUCTIONS.**

****LATCH** ("Lower Anchors and Tethers for Children") and **ISOFIX** are international standards for attachment points for **child safety seats** in passenger cars that enable compliant child safety seats to be quickly and safely secured. The system has other regional names including **LUAS** ("Lower Universal Anchorage System") or **Canfix** in Canada. It has also been called the "Universal Child Safety Seat System" or **UCSSS**.

*****Subject to instructions provided by the child safety seat manufacturer.**

******Keep your child in a forward facing child safety seat with a harness and tether until the child reaches the child safety seat's maximum allowable height or weight as specified by the manufacturer of the child safety seat.**

*******In the center seating position, the vehicle's head support can be adjusted if the booster seat is not equipped with an integrated head support.**

⚠ WARNING: Do not use LATCH anchors with child safety seats or booster seats that have an integral safety belt where the combined weight of the child plus the child safety seat exceeds 65 lbs (29 kg).

⚠ WARNING: Laws that govern how and where children should be carried when traveling in a vehicle are subject to change. It is the driver's responsibility to keep up to date on, and comply with, all current regulations in the region(s) where CybertruckModel SModel XModel 3Model Y is driven. To check the child passenger safety laws for states in the U.S., go to: http://www.ghsa.org/html/stateinfo/laws/childsafety_laws.html.



Seating Larger Children

If a child is too large to fit into a child safety seat, but too small to safely fit into the standard seat belts, use a booster seat appropriate for the child's age and size. Carefully follow the manufacturer's instructions to secure the booster seat.



⚠ WARNING: Larger children in booster seats should wear the seat belt like an adult. Do not fully extend the seat belt webbing to engage the automatic locking retracting (ALR).

Installing Child Safety Seats

There are two general methods used to install child safety seats:

- Seat belt retained - these seats are secured using the vehicle's seat belts. All passenger seating positions in CybertruckModel SModel XModel 3Model Y support the use of seat belt retained child safety seats.
- LATCH retained - these seats attach to anchor bars built into the rear seats. All rear seating positions in CybertruckModel SModel XModel 3Model Y support the use of LATCH retained child safety seats.

Check the child safety seat manufacturer's instructions and the table in this manual to determine which installation method to use. Some child safety seats can be installed using either method. Always follow the child safety seat manufacturer's instructions.

Installing Seat Belt Retained Child Seats

First, make sure that the child safety seat is appropriate for the weight, height, and age of the child.

Avoid dressing the child in bulky clothing and do not place any objects between the child and the restraint system.

Adjust harnesses for every child, every trip.

To securely hold child safety seats, all passenger seating positions are equipped with an automatic locking retractor (ALR) feature that, by fully extracting the seat belt (beyond the length needed for a typical adult occupant), locks the belt into place until the seat belt is unbuckled and the webbing is fully retracted. The ALR mechanism operates as a ratchet, winding in slack and preventing the seat belt from extending any further until it has been completely rewound. When installing a child safety seat with integrated restraints, engage the belt's automatic locking retractor by pulling the seat belt webbing until it is **fully** extended. The ALR system engages only when the seat belt is at its maximum extension point.



The automatic locking retractor (ALR) feature is not used for booster seats in which a large child is restrained by the vehicle's seat belts directly, and therefore not using a child safety seat's integrated restraints.

NOTE: An automatic locking retractor disengages only when the seat belt is unbuckled and fully retracted. The belt can then be worn as a normal belt, sliding freely in and out and locking tight only in an emergency. Once disengaged, the belt must be fully extended to re-engage the locking mechanism whenever you install a child safety seat.

Always follow the detailed instructions provided by the child safety seat manufacturer. General guidelines are provided below.

1. Place the child safety seat in CybertruckModel SModel XModel 3Model Y and fully extend the seat belt (doing so engages the automatic locking retractor (see [Automatic Locking Retractor on page 1158](#))).
2. Route the webbing and buckle the seat belt in accordance with the child safety seat manufacturer's instructions.



3. Allow the seat belt webbing to retract, and remove all slack while firmly pushing the child safety seat into the seat.
4. Once all slack has been removed, forcefully pull the seat belt webbing to confirm that the automatic locking retractor is engaged.
NOTE: The automatic locking retractor disengages only after unbuckling and fully retracting the seat belt webbing. Once disengaged, the belt must be fully extended to re-engage the locking mechanism.
5. Attach the child safety seat's upper tether strap(s) (if equipped), as required by the manufacturer of the child safety seat (see [Attaching Upper Tether Straps on page 1167](#)).

Installing LATCH (ISOFIX) Child Seats

Lower LATCH anchors are provided in all rear seating positions. The anchors are located between the seat's back rest and cushion. The exact location of each anchor is identified by a child safety seat identification label. The label is located on the seat back, directly above its associated anchor.



Seating and Safety Restraints



Carefully read and follow the instructions provided by the manufacturer of the child restraint system. The instructions describe how to slide the child restraint system onto the seat's anchor bars until you hear it "click" into place. You may need to push the child restraint system firmly against the seat back to ensure it fits snugly.



Adjust until the child restraint system is fitted firmly against the seat back. Ensure the child restraint system fits snugly.



Before seating a child, ensure that the child restraint system is securely installed. Grasp the front of the child restraint system with one hand on each side, and attempt to:

- Twist the child restraint system from side to side.
- Pull the child restraint system away from the seat.

If the child restraint system moves away from the seat, both latches are not fully engaged onto the seat's anchor bars. You must reinstall it and try again. It is critical that both latches on the child restraint system are fully engaged.

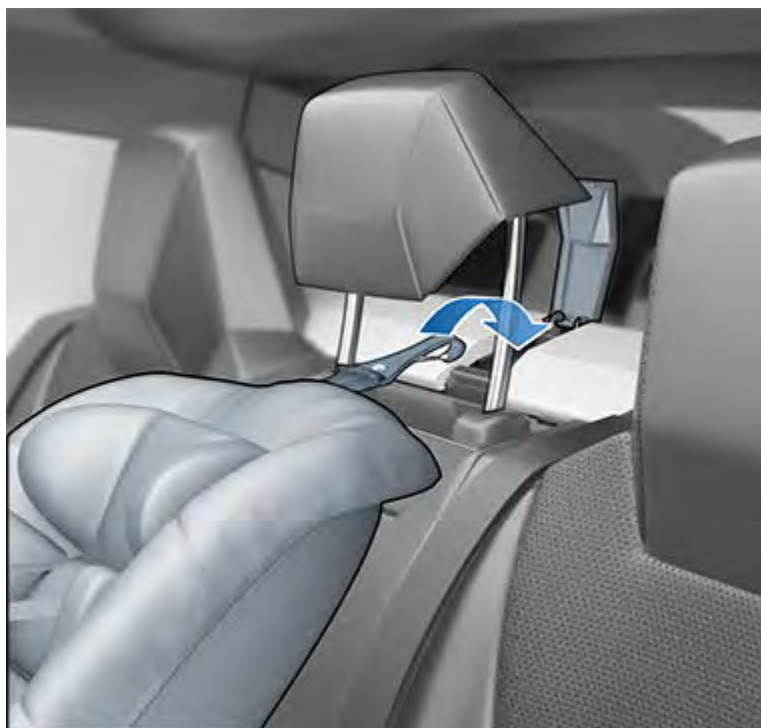
⚠ WARNING: Do not use LATCH anchors with child seats or booster seats that have an integrated safety belt where the combined weight of the child plus the child restraint system exceeds 65 lbs (29 kg).

Attaching Upper Tether Straps

If the child safety seat is equipped with an upper tether strap, attach its hook(s) to the anchor point located behind the associated rear seat. To access the center anchor point, flip the cover upward. To access an outboard anchor point, slide the cover to one side.



Seating and Safety Restraints



⚠ WARNING: Tighten upper tether straps according to the instructions provided by the manufacturer of the child safety seat.

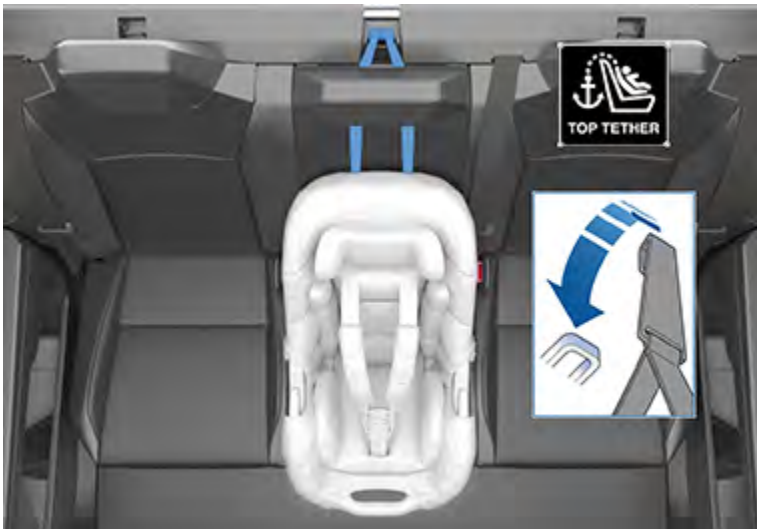
For the outboard seats, position dual-strap tethers on each side of the head support:



For the outboard seats, position single-strap tethers on the outside of the head support:



For the center seat, route dual-strap tethers between the posts under the head support. Lift the head support (see [Head Supports on page 1155](#)), then route the straps. Keep the head support in the raised position.



WARNING: In the center seat, do not run dual-strap tethers on each side of the head support.

For the center seat, route a single-strap tether between the posts under the head support. Lift the head support (see [Head Supports on page 1155](#)), then route the strap. Keep the head support in the raised position.



Seating and Safety Restraints



Testing a Child Safety Seat




Before seating a child, always make sure the child safety seat is not loose:

1. Hold the child safety seat by the belt path and try to slide the safety seat from side to side and front to back.
2. If the seat moves more than one inch (2.5 cm), it is too loose. Tighten the belt or reconnect the LATCH retained child safety seat.
3. If you are unable to reduce slack, try a different seat location or try another child safety seat.

Child Safety Seat Warnings

- WARNING:** Extreme hazard! Do not seat a child on the front passenger seat even if you are using a child safety seat. This seat has an airbag in front of it. Although this airbag is disabled when Cybertruck Model S Model X Model 3 Model Y detects a lightweight passenger, do not rely on technology to protect your child.
- WARNING:** Child restraint systems are designed to be secured in vehicle seats by lap belts or the lap belt portion of a lap-shoulder belt. Children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
- WARNING:** According to collision statistics, a child is safer when properly restrained in a rear seat instead of the front seat.
- WARNING:** Do not use a forward facing child safety seat until your child weighs over 20 lbs (9 kg) and can sit independently. Up to the age of two, a child's spine and neck are not sufficiently developed to avoid injury in a frontal impact.
- WARNING:** Do not allow a baby or infant to be held on an adult's lap. All children must be restrained in an appropriate child safety seat at all times.
- WARNING:** To ensure children are safely seated, follow all instructions provided in this document and by the manufacturer of the child safety seat.
- WARNING:** Children should ride in a rear facing child safety seat using the seat's integrated 5-point harness for as long as possible.
- WARNING:** Do not use seat belt extenders on a seat belt that is being used to install a child safety seat or booster seat.
- WARNING:** When seating larger children, make sure the child's head is supported and the child's seat belt is properly adjusted and fastened. The shoulder portion of the belt must be away from the face and neck, and the lap portion must not be over the stomach.
- WARNING:** Never attach two child safety seats to one anchor point. In a collision, one anchor point may be incapable of securing both seats.
- WARNING:** Child restraint anchors are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.



-  **WARNING:** Always check harnesses and tether straps for damage and wear.
-  **WARNING:** Never leave a child unattended, even if the child is secured in a child safety seat.
-  **WARNING:** Never use a child safety seat that has been involved in a collision. Have the seat inspected or replaced as described in the child safety seat manufacturer's instructions.

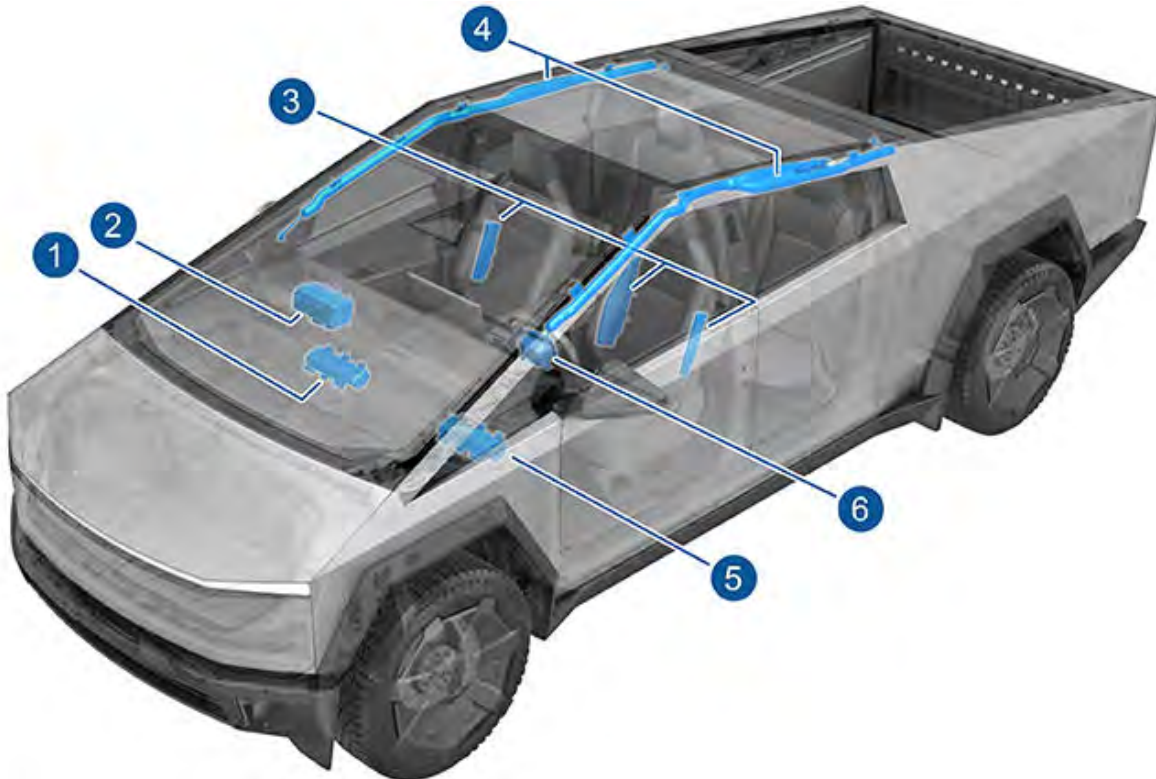


Airbags

Location of Airbags

Airbags are located in the approximate areas shown below. Airbag warning information is printed on the sun visors.

CybertruckModel SModel XModel 3Model Y is equipped with an airbag and lap/shoulder belt at both front seating positions. The airbag is a supplemental restraint at those seating positions. All occupants, including the driver, should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash.




1. Passenger knee airbag
2. Passenger front airbag
3. Seat-mounted airbags
4. Curtain airbags
5. Driver knee airbag
6. Driver front airbag



How Airbags Work

Airbags inflate when sensors detect an impact that exceeds deployment thresholds. These thresholds are designed to predict the severity of a crash in time for the airbags to help protect the vehicle's occupants. Airbags inflate instantly with considerable force accompanied by a loud noise. The inflated bag, together with the seat belts, limits movement of occupants to reduce the risk of injury.

Front airbags are not ordinarily designed to inflate in rear collisions, rollovers, side collisions and when braking heavily or driving over bumps and potholes. Likewise, front airbags may not inflate in all frontal collisions, such as minor front collisions, underride collisions, or minor impacts with narrow objects (such as posts or poles). Significant superficial damage can occur to the vehicle without the airbags inflating and, conversely, a relatively small amount of structural damage can cause airbags to inflate. Therefore, the external appearance of the vehicle after a collision does not represent whether or not the front airbags should have inflated.

 **WARNING:** Before modifying your vehicle to accommodate a person with disabilities in a way that may affect the airbag system, schedule a service appointment.

Types of Airbags

Cybertruck Model S Model X Model 3 Model Y has the following types of airbags:

- **Front airbags:** The front airbags are designed to reduce injuries if larger children or adults are riding in the front seats. Follow all warnings and instructions related to seating a child on the front passenger seat (if permitted in your market region).
- **Knee airbags:** Knee airbags and the front airbags work together. The knee airbags limit the forward motion of the front seat occupants by restricting leg movement, thereby positioning the occupants so that the front airbags work more effectively.
- **Seat-mounted airbags:** A seat-mounted side airbag in the front seats helps protect the pelvis and the thorax region of the torso. The seat-mounted airbag on the inside portion of the driver's seat helps protect the head and torso. Seat-mounted airbags on both the impacted and non-impacted side of the vehicle inflate in the event of a severe side impact or a severe offset frontal impact.
- **Curtain airbags:** Curtain airbags help protect the head. Curtain airbags on both the impacted and non-impacted side of the vehicle inflate only if a severe side impact occurs, or if the vehicle rolls over.

Airbag Status Indicator

The status of the passenger front airbag displays on the touchscreen:



The Passenger Airbag Off indicator displays on the touchscreen when the passenger front airbag is OFF. When the passenger front airbag is OFF, it does not inflate when a collision occurs. When driving with a child seat on the front passenger seat (if permitted in your market region), always double-check the status of the passenger front airbag to confirm that it is OFF.

To protect an adult occupying the front passenger seat, ensure the passenger front airbag is ON – when ON, a Passenger Airbag OFF icon should not be visible on the touchscreen. When the passenger airbag is ON, it may inflate when a collision occurs.



The airbag indicator displays on the touchscreen for a few seconds at the start of every drive while checking the following functionality, as applicable:

- Airbags
- Seat belts with pre-tensioners and load limiters
- Impact sensors
- Occupant sensors
- Seat belt sensors
- Passive safety component wiring harnesses
- Onboard restraint controlled components (ex: accelerometer and other passive safety components)



Seating and Safety Restraints

After this check, the airbag indicator turns off. If the airbag system detects a fault in any of the previously mentioned components, the airbag warning indicator stays on. In this case contact Tesla service immediately. Do not drive the vehicle until the airbag system is inspected by Tesla.



Front Passenger Occupant Detection

Cybertruck Model S Model X Model 3 Model Y has an occupancy sensor in the front passenger seat that controls the status of the front airbag.

NOTE: The occupancy classification system (OCS) meets the regulatory requirement of FMVSS 208 and automatically detects when inflating the passenger front airbag would be unnecessary or potentially harmful.



WARNING: Seating an infant in a rear facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

Object Classification	OCS Passenger Airbag Status*	Indicator status	Notes
Empty	OFF	PASSENGER AIRBAG OFF	
Object	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	Depends on material/contents
Rear-facing child restraint system designed for children up to One Year Old	OFF	PASSENGER AIRBAG OFF	Less than 22 lbs (10 kg)
Forward facing child restraint system	OFF	PASSENGER AIRBAG OFF	Less than 35 lbs (16 kg)
Child in a booster seat	OFF	PASSENGER AIRBAG OFF	Less than 51 lbs (23 kg)
Large child	OFF or ON	PASSENGER AIRBAG OFF or PASSENGER AIRBAG ON	51 lbs (23 kg) or more and less than 103 lbs (47 kg)
5th percentile female or larger (by weight)	ON	PASSENGER AIRBAG ON	Over approximately 103 lbs (47 kg)

*If the passenger airbag status indicator does not match the situation, do not use the seat. The passenger must ride in a different seat. Schedule a service appointment.

NOTE: It takes approximately six seconds after you power on Cybertruck Model S Model X Model 3 Model Y for the occupant classification system (OCS) to report accurate status of the front passenger airbag. As a result, when you first power on Cybertruck Model S Model X Model 3 Model Y, even in situations when it should be OFF because the seat is occupied by a weight of 20 lbs (9 kg) or less, it will take the touchscreen approximately six seconds to display the status, PASSENGER AIRBAG OFF. If it fails to do so, schedule a service appointment and do not seat a child in the front passenger seating position.

To make sure the sensing system can correctly detect occupancy status, eliminate the following:

- Objects lodged under the seat.
- Heavy objects sitting on the seat (briefcase, large purse).
- Objects wedged between the seat back and seat cushion.
- Cargo interfering with the seat.
- Aftermarket items attached to, or sitting on or between, the seat and occupant including but not limited to covers, mats, blankets, etc.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, ask passengers to ride in the rear seats and schedule a service appointment to have the airbag system checked.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front airbags only. The side airbags are not affected.



WARNING: If the front passenger airbag is not turning on or off as expected based on the weight thresholds previously described, schedule a service appointment immediately.



Seating and Safety Restraints

⚠ WARNING: If seating a child in the front passenger seat is legally permissible in your market region, it is the driver's responsibility to ensure that the passenger front airbag is OFF. Never seat a child in a rear facing safety seat in the front passenger seat with an active airbag. DEATH or SERIOUS INJURY to the child can occur. Per recommendations by the National Highway Traffic Safety Administration, all occupants age 12 and under must ride in the rear seats.

⚠ WARNING: Do not use seat covers on the front seats. Doing so could reduce the accuracy of the occupant detection system.



Ensuring Accurate Occupant Detection

To help ensure an occupant in the front passenger seat can be accurately detected, the passenger must:

- Wear a seat belt.
- Sit upright on the center of the seat cushion, with shoulders resting against the seat back and legs extended comfortably in front with feet on the floor. See [Examples of Correct and Incorrect Seating Positions on page 1178](#).
- Remain positioned on the seat cushion and not lift their weight off the seat (for example, by pushing their feet against the floor or pressing on the center console or armrest to lift up).
- Never wear thick, wet, or bulky clothing (such as ski wear or padded clothing).

In addition to the items listed above, the following situations can interfere with the accuracy of the occupant classification system:

- Incorrectly placing a child restraint system so that the entire lower section is not positioned against the seat cushion.
- Objects lodged under the seat or wedged between the seat back and cushion.
- Heavy objects sitting on the seat (briefcase, large purse).
- Cargo interfering with the seat.

These conditions can interfere with the occupancy sensor. If you have eliminated the above possibilities, and the airbag status is still incorrect, instruct passengers to ride in the rear seats and schedule a service appointment to have the airbag system checked.

NOTE: Tesla follows NHTSA (National Highway Traffic Safety Administration) recommendations that all occupants age 12 and under be seated in a rear seat.

NOTE: The front passenger occupancy sensor affects the operation of the passenger front and side airbags.



WARNING: Failure to follow the above instructions can adversely affect the Occupant Classification System (OCS) which can cause serious injury or death.



WARNING: If the front passenger airbag is not turning on or off as expected, do not seat a passenger in the front passenger seat. Schedule a service appointment.



WARNING: To ensure accuracy of the occupant detection system, do not make any modifications to the front passenger seat.



Seating and Safety Restraints

Examples of Correct and Incorrect Seating Positions

Correct seating position:



Incorrect seating position - the passenger's feet must be on the floor:



Incorrect seating position - the passenger must not slide forward on the seat cushion:



Incorrect seating position - the passenger must not recline the backrest to a laying down position when the vehicle is moving:





Seating and Safety Restraints

Inflation Effects

⚠ WARNING: When airbags inflate, a fine powder is released. This powder can irritate the skin and should be thoroughly flushed from the eyes and from any cuts or abrasions.

After inflation, the airbags deflate to provide a gradual cushioning effect for the occupants and to ensure the driver's forward vision is not obscured.

If airbags have inflated, or if your vehicle has been in a collision, always have the airbags, seat belt pre-tensioners and any associated components checked and, if necessary, replaced.

In a collision, in addition to the airbags inflating:

- Doors unlock.
- Hazard warning lights turn on.
- Interior lights turn on.
- High voltage is disabled (you must contact Roadside Assistance to restore high voltage power).
- Seat belt pre-tensioners retract the seat belt anchor and seat belt webbing.

NOTE: Depending on the nature of the impact and the forces involved, doors may not unlock in a collision and/or damage may prevent them from opening. In such cases, the door may need to be opened using the interior manual release, or other means of extrication (for example, exiting through another door, breaking the window, etc.).

Airbag Warnings

⚠ WARNING: Do not place objects over or near airbags because any such objects could cause harm if the vehicle is in a crash severe enough to cause the airbag to inflate.

⚠ WARNING: All occupants, including the driver, should always wear their seat belts, whether or not an airbag is also provided at their seating position, to minimize the risk of severe injury or death in the event of a collision.

⚠ WARNING: Front seat occupants should not place their arms over the airbag module, as an inflating airbag can cause fractures or other injuries.

⚠ WARNING: Airbags inflate with considerable speed and force, which can cause injury. To limit injuries, ensure that occupants are wearing seat belts and are correctly seated, with the seat positioned as far back as possible. The National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of 10 inches (25 cm) between an occupant's chest and an airbag.

⚠ WARNING: Children should not be seated on the front passenger seat unless permitted by regulations in your market region. Follow all regulations in your region for the appropriate way to seat a child based on the child's weight, size, and age. The safest place to seat infants and young children is in a rear seating position. Seating an infant or child in a rear-facing child restraint system on a seat equipped with an operational airbag can cause serious injury or death.

⚠ WARNING: To ensure correct inflation of the side airbags, maintain an unobstructed gap between an occupant's torso and the side of CybertruckModel SModel XModel 3Model Y.

⚠ WARNING: Passengers shouldn't lean their heads against doors. Doing so can cause injury if a curtain airbag inflates.

⚠ WARNING: Do not allow passengers to obstruct the operation of an airbag by placing feet, knees or any other part of the body on or near an airbag.

⚠ WARNING: Do not attach or place objects on or near the front airbags, the side of the front seats, the headliner at the side of the vehicle, or any other airbag cover that could interfere with inflation of an airbag. These include but are not limited to: steering wheel covers, decals, seat cushions or pillows, etc. Objects can cause serious injury if the vehicle is in a collision severe enough to cause the airbag to inflate.

⚠ WARNING: Do not use seat covers on the front seats. Doing so could restrict deployment of the seat-mounted airbags if a collision occurs.

⚠ WARNING: Following inflation, some airbag components are hot. Do not touch until they have cooled.

Interior Storage

Center Console

In addition to housing wireless phone chargers, USB-C outlets, and a 120V power outlet (see [Interior Electronics on page 1125](#)), the center console includes cup holders, a storage compartment, and a rear touchscreen.

To open the main storage compartment, squeeze the latch and pivot the cover upward. To close, lower the cover and make sure it latches shut.



Rear Console

CybertruckModel SModel XModel 3Model Y has a rear console integrated in the center of the second row. This console can serve as an arm rest for rear passengers and includes two cup holders.

To lower the console, pull the loop in the seat back and pull down the center seat head rest. The loop must be fully retracted back into place in order to lock the arm rest in the lowered or raised positions.



Storage Areas



To raise the console, push the head rest all the way upward until the console securely latches into place.

Rear Seat Storage

To maximize cargo space in the second row, the seat cushions can be folded upwards. The rear seat is split into two sections. While pulling the tab on the inside of the rear door, pull the front of the seat upwards until you hear a click.



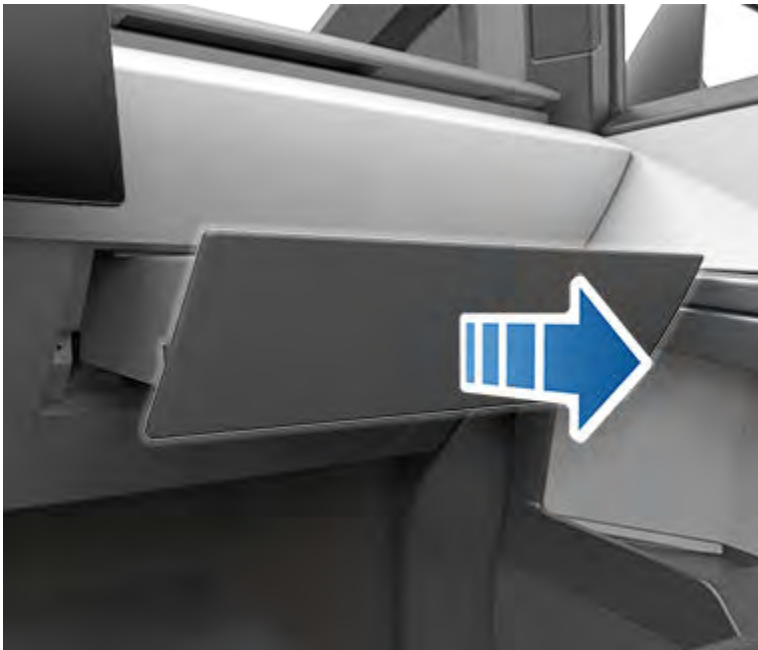
To put the seats down again, pull the tab while pressing down on the corresponding seat cushion.

⚠ WARNING: When folding the rear seat cushion up, ensure that the area is clear of objects and hands and that they are fully locked into place before driving. When folding the rear seat cushions down, ensure that they are fully folded down and locked into place before a passenger sits down.



Glovebox

To open the glovebox, touch **Controls** > **Glovebox**. The glovebox opens and the light turns on. You can also open the glovebox with a voice command (see [Voice Commands on page 97](#)).



To close the glovebox, touch **Glovebox** again.

For additional glovebox security, touch **Controls** > **Safety** > **Glovebox PIN** to set a 4-digit PIN that must be re-entered to open the glovebox (see [Glovebox PIN on page 660](#)).

NOTE: If you leave the glovebox open, its light eventually turns off.

NOTE: The glovebox locks whenever closed and you lock CybertruckModel SModel XModel 3Model Y using the mobile app, key card, you leave CybertruckModel SModel XModel 3Model Y carrying your phone key (if Walk-Away Door Lock is turned on), or if Valet Mode is active (see [Valet Mode on page 516](#)). It does not lock when CybertruckModel SModel XModel 3Model Y is locked by touching the lock icon on the touchscreen.



WARNING: When driving, keep the glovebox closed to prevent injury to a passenger if a collision or sudden stop occurs.

Seat Pockets

A pocket on the back side of each front seat provides convenient storage for small items. Avoid placing sharp objects in the seat pockets to prevent tears.

Door Panels

There is additional storage for small items on the inside of each front and rear door panel.

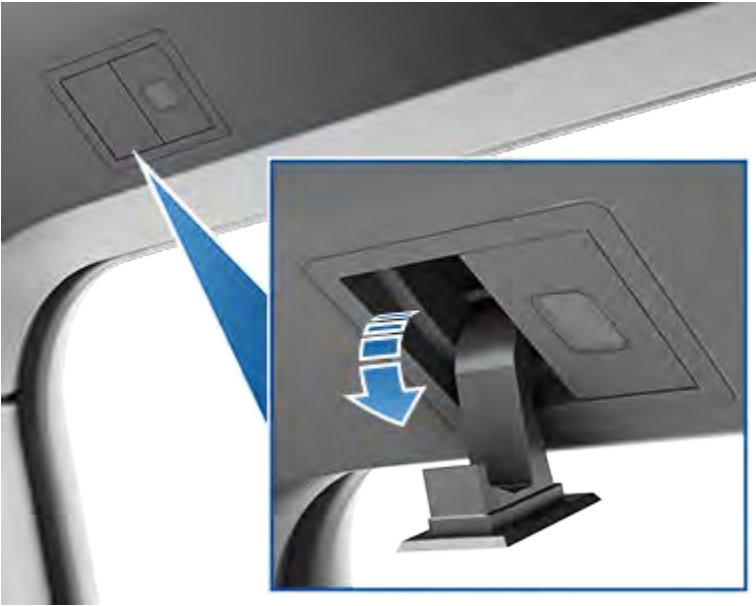
NOTE: In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, a rear door manual release is located in each rear door pocket. For more information, see [Opening Doors with No Power on page 1457](#).

Coat Hangers

Your CybertruckModel SModel XModel 3Model Y has a coat hanger on each side of the vehicle above the rear window in the second row, next to the reading light. Push the coat hanger to release it. Push it again to retract it.





Storage Areas



Powered Frunk

Opening

-  **WARNING:** Before opening or closing the hood, it is important to check that the area around the hood is free of obstacles (people and objects). Failure to do so may result in damage or serious injury.
-  **WARNING:** Use caution around the panel edges on CybertruckModel SModel XModel 3Model Y, including the doors, powered frunk, tailgate, and surrounding panels.

To open the powered frunk, ensure CybertruckModel SModel XModel 3Model Y is in Park, and then do one of the following before opening the hood:

- Touch the associated **Open** icon on the touchscreen.
- Press the **Frunk** button in the mobile app.
- Press the center button under the hood closure.



NOTE: In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the powered frunk using the touchscreen or the button under the hood closure. Instead, see [Opening the Powered Frunk with No Power on page 1451](#).



Storage Areas



When a door or the powered frunk is open, the touchscreen displays the Door Open indicator light. The vehicle avatar also shows the door, powered frunk, or tailgate status.

Adjust the Opening Height of the Powered Frunk

You can adjust the opening height of the powered frunk to make it easier to reach or to avoid low-hanging ceilings or objects (for example, a garage door or light):

1. Open the powered frunk, then manually lower or raise it to the desired opening height.
2. Press and hold the powered frunk button on the front of the vehicle for three seconds until you hear a confirmation chime.
3. Confirm that you have set it to the desired height by closing the powered frunk, then reopening it.

Closing

WARNING: Before driving, you must ensure that the hood is securely latched in the fully closed position by carefully trying to lift the front edge of the hood upward and confirming there is no movement. It is the driver's responsibility to ensure that the powered frunk is properly closed before driving.

Close the powered frunk in any of the following ways:

- Press the center button under the hood closure.



- Press the emergency release button in the powered frunk.
- Press the **Frunk** button in the mobile app.
- Touch the associated **Close** icon on the touchscreen.

WARNING: Ensure that all hands and other objects are free of the powered frunk before closing it.

CAUTION: Do not try to manually close the powered frunk. Doing so may cause damage.

If the powered frunk is left open when you attempt to shift out of Park, a notification requiring you to confirm your intent to drive appears on the touchscreen. If you choose to keep the powered frunk open while driving, your vehicle speed is limited.



The powered frunk locks when:

- You lock Cybertruck Model S Model X Model 3 Model Y using the touchscreen, key or mobile app.



- You leave Cybertruck Model S Model X Model 3 Model Y carrying your phone key (if [Walk-Away Door Lock on page 155](#) [Walk-Away Door Lock on page 141](#) [Walk-Away Door Lock on page 1148](#) is turned on).
- Valet mode is active (see [Valet Mode on page 516](#)).

Load Limits

-  **CAUTION:** Never load more than 440 lbs (200 kg) in the powered frunk. Doing so can cause damage.
-  **WARNING:** When loading cargo, always consider the vehicle's GVWR and GAWR ratings (see [Vehicle Loading on page 1435](#)). The GVWR is the maximum allowable total mass of the vehicle including all passengers, fluids, and cargo, and the GAWR is the maximum allowable total mass permitted on an axle.



Interior Emergency Release



An illuminated interior release button inside the powered frunk allows a person locked inside to get out.

Press the interior release button to unlatch the powered frunk, then push up on the hood. If the powered frunk is already open, pressing the interior release button closes it.

NOTE: The interior release button glows following a brief exposure to ambient light.

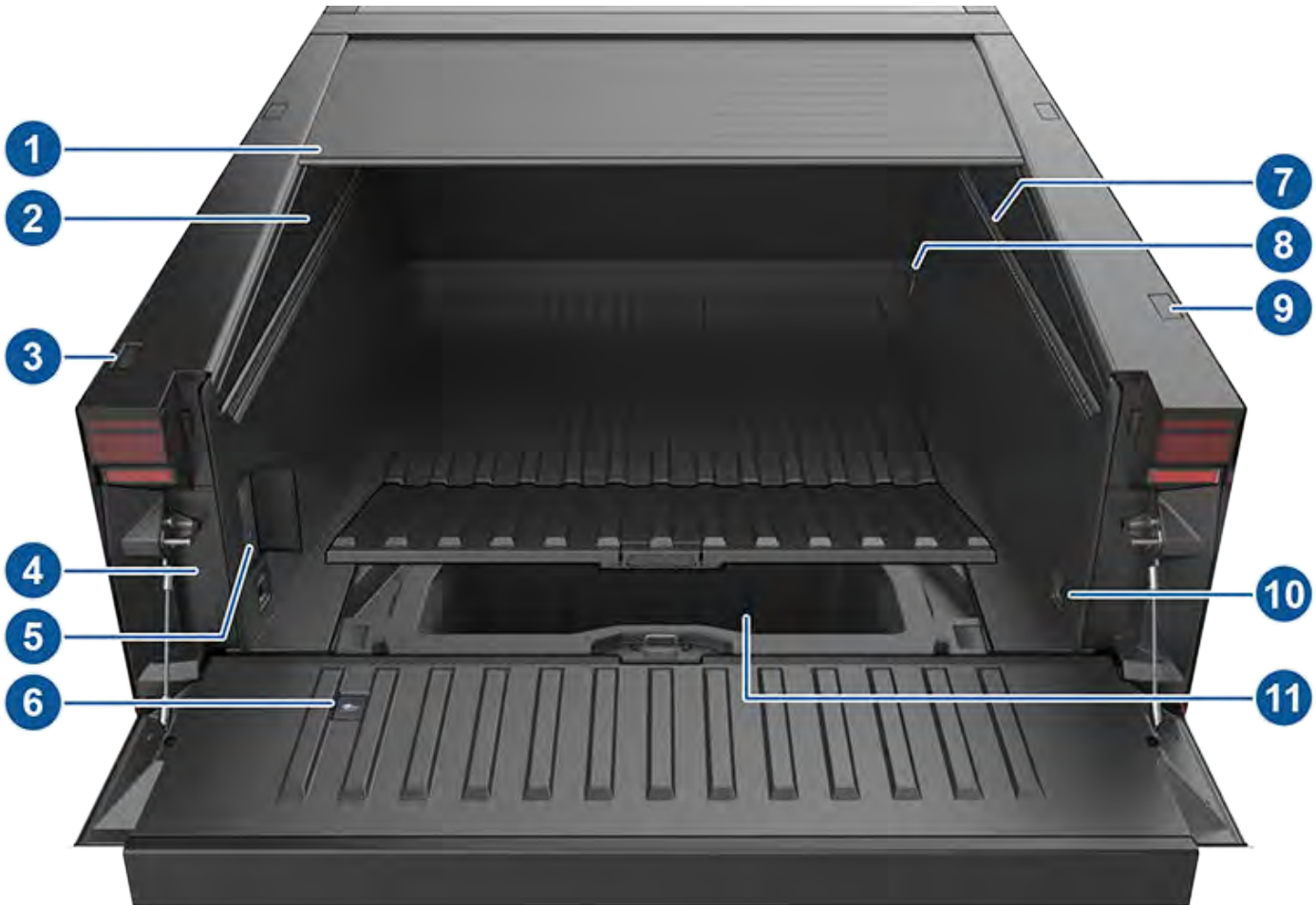
-  **WARNING:** People should never climb inside the powered frunk. Never shut the powered frunk when a person is inside.
-  **WARNING:** Care should be taken to ensure that objects inside the powered frunk do not bump against the release button, causing the hood to accidentally open.



Cargo Bed

Overview

WARNING: Passengers must always be seated in seats with seat belts fastened at all times when the vehicle is in motion. Never allow passengers or pets to ride in the cargo bed, even with the tonneau cover closed. Doing so can result in serious injury or death.



1. Tonneau cover ([Accessing the Cargo Bed on page 1189](#))
2. LED light bars ([Lights on page 1229](#))
3. Tailgate and tonneau cover switches ([Accessing the Cargo Bed on page 1189](#))
4. Charge port manual release ([Manually Releasing Charge Cable on page 1375](#))
5. Power outlets ([Cargo Bed Outlets on page 1129](#))
6. Tailgate emergency release ([Tailgate Emergency Release on page 1191](#))
7. L-tracks ([Securing Cargo on page 1193](#))
8. Front tie-downs ([Securing Cargo on page 1193](#))
9. Attachment points ([Securing Cargo on page 1193](#))
10. Rear tie-downs ([Securing Cargo on page 1193](#))
11. Sealed storage ([Under Bed Compartment on page 1192](#))

For dimensions, weight capacities, and storage volumes of the cargo bed and its associated components, see [Dimensions, Weights, and Cargo Capacity on page 1439](#).

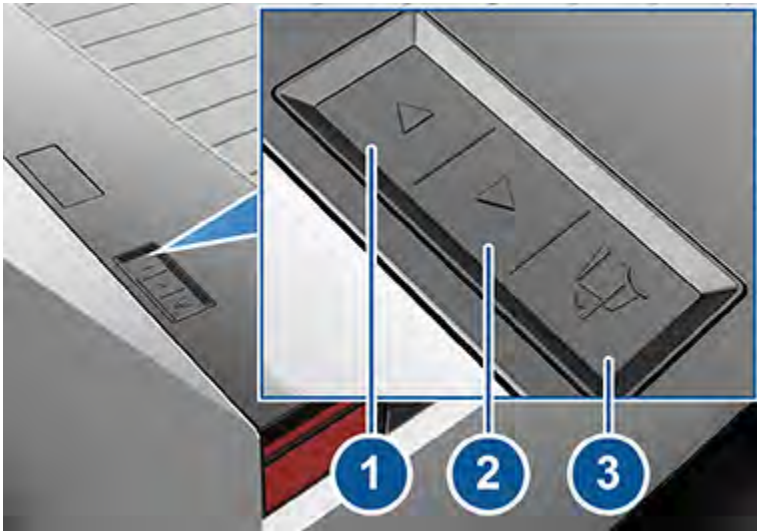


CAUTION: Although the tonneau cover protects contents from the majority of water during rain, snow, etc., it does not make the cargo bed waterproof. Water ingress and/or condensation can occur. Therefore, do not store items that can be damaged by water under the tonneau cover. Store water-sensitive items in the cab, the [Under Bed Compartment on page 1192](#), or the [Powered Frunk on page 1185](#).

WARNING: Never fill, store, or transport volatile solvents, chemicals, or liquids anywhere in the cargo bed or the under bed compartment. Doing so can cause spills, or allow fumes to accumulate, resulting in damage, serious injury, or death.

Accessing the Cargo Bed

When Cybertruck Model S Model X Model 3 Model Y is parked, use these exterior switches to access the cargo bed:



1. **Tonneau Open** - Fully press and release to fully open the tonneau cover. Press a second time to pause the cover. To open the tonneau cover partially, press lightly and release the button when desired.
2. **Tonneau Close** - Fully press and release to fully close the tonneau cover. Press a second time to pause the cover. To close the tonneau cover partially, press lightly and release when desired.
3. **Tailgate Open** - Press to release the tailgate latch. The tailgate drops but integrated struts prevent it from falling forcefully.

NOTE: If the tonneau cover does not open or close when you fully press and release the tonneau open or tonneau close button, respectively, you may need to calibrate the tonneau cover. For more information, see [Troubleshooting the Tonneau Cover on page 1190](#). You can still press lightly to partially open or close the tonneau cover.

You can also use the mobile app and the touchscreen to open and close the tonneau cover. On the touchscreen, touch **Controls > Tonneau**.

CAUTION: Do not drop anything onto the tonneau cover or place objects on top that could fall off. Avoid allowing objects or debris to enter the tracks or interfere with the motors.

To close the tailgate, first remove all objects and ensure the hinge area is free of debris. Then lift the tailgate from the bottom with both hands and press it firmly against the cargo bed to ensure it latches into position. Pull the closed tailgate toward you to ensure it is fully latched into position. If the tailgate is open or unlatched, the touchscreen displays a message.



Storage Areas



- WARNING:** When closing the tonneau cover, keep hands and objects away from the tonneau cover tracks. Failure to do so can cause damage or injury.
- WARNING:** When closing the tailgate, keep hands and objects away from the perimeter, the hinges, etc. Failure to do so can cause damage or serious injury.

Troubleshooting the Tonneau Cover

The tonneau cover does not open or close when:

- CybertruckModel SModel XModel 3Model Y is locked, or is not in Park.
- There is an obstacle blocking the tonneau cover from closing. In this case, remove the object and try again.
 - WARNING:** Although the tonneau cover is designed to stop moving if it detects an obstacle when closing, do not rely on the tonneau cover to prevent damage or injury.
- CybertruckModel SModel XModel 3Model Y has no low voltage power. In this case, it is necessary to open the powered frunk before attempting to jump start CybertruckModel SModel XModel 3Model Y. For more information, see [If Vehicle Has No Power on page 1446](#).

NOTE: The tonneau cover locks into place (whether opened or closed) when **Walk-Away Door Lock** is enabled. Always double check that the tonneau cover is closed, or intentionally left open, before walking away from your vehicle (see [Walk-Away Door Lock on page 1148](#) for more information). **Car Left Open Notifications** may not notify you if the tonneau cover is left open.

If the tonneau cover does not open or close as expected:

1. Make sure that CybertruckModel SModel XModel 3Model Y is unlocked and in Park.
2. Wait several minutes and then try again.
3. Inspect the tracks to ensure there's no debris or object in the way of the tonneau cover.



4. Calibrate the tonneau cover:

- Touch **Calibrate** on the touchscreen (on the exterior view of the vehicle, where you would normally touch to open or close the tonneau cover) and follow the onscreen instructions.

NOTE: The **Calibrate** option only appears on the touchscreen when the tonneau cover needs to be calibrated.

- Or, to calibrate the tonneau cover manually: Press and hold the Open button (1) until the cover is fully open and wait for it to stall. Then, press and hold the Close button (2) until the cover is fully closed and stalled.



If the tonneau cover still does not function as expected, schedule a Service appointment.

Tailgate Emergency Release

An interior release, located on the inside of the tailgate, allows a person trapped in the cargo bed to open the tailgate when Cybertruck Model S Model X Model 3 Model Y is parked.



Storage Areas



To use the emergency release, flip the cover upward to access the pull strap, then pull the strap firmly toward you.

⚠ WARNING: People should never be inside the cargo bed when the Cybertruck Model S Model X Model 3 Model Y is moving. Never shut the tailgate when a person is inside.

Under Bed Compartment

The cargo bed features a sealed storage compartment. To open:

1. Open the tailgate (see [Accessing the Cargo Bed on page 1189](#)).
2. Grasp the handle and flip the cover fully upward.



Once open, integrated struts hold the cover in the raised position.

The under bed compartment features a drain plug that allows you to use it to store water and/or ice. To open the drain plug, simply turn it counter-clockwise and pull it up. Remember to re-install the drain plug once the compartment is fully drained.

To close the under bed compartment, push it fully downward until the latch engages.

⚠ CAUTION: Take care when closing the lid to the under bed storage compartment. Slamming the lid shut may cause damage or injury.

⚠ CAUTION: Do not load more than 220 lb (100 kg) in the under bed compartment. Doing so can cause damage.


Securing Cargo


Cybertruck Model S Model X Model 3 Model Y features multiple options that make it easy to secure cargo:

- Two integrated L-track rails, running lengthwise along the top of each side of the cargo bed are compatible with standard fittings (not included) and provide multiple anchoring options.



- Four tie-down anchors - one at each bottom corner of the cargo bed.

 **CAUTION:** Do not use the tie-down anchors or L-tracks for towing. They are intended to secure cargo such as a spare tire. See [Towing a Trailer on page 1258](#) for more information.

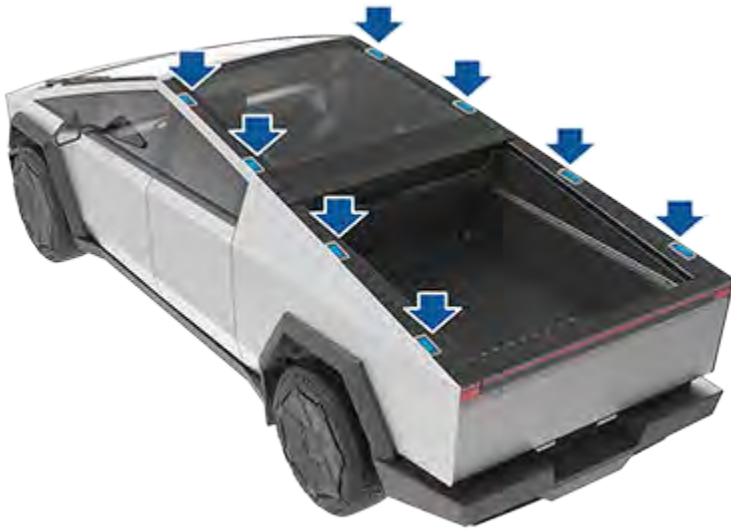
 **CAUTION:** The maximum force between any two anchor points must not exceed 707 lb (320 kg). Doing so may cause damage.



- Eight attachment anchor points, four distributed on each side above the cab and on the rails of the cargo bed. These anchor points are designed to accommodate accessory racks. To access the anchor points, press down on the inboard side of the covers to pivot them to their open position. To close the covers, carefully pull the cover down towards the outboard side of the vehicle until they are flush with the vehicle trim.



Storage Areas



⚠ WARNING: Before driving while carrying objects in the cargo bed, always ensure the cargo is evenly distributed and adequately secured to prevent it from shifting or falling onto a roadway. Failure to do so can compromise vehicle stability, damage the cargo bed, and cause serious personal injury or death to passengers and other road users.

Mobile App

The Tesla mobile app allows you to communicate with CybertruckModel SModel XModel 3Model Y remotely using your iPhone® or Android™ phone.

NOTE: The information below may not represent an exhaustive list of the functions available on the Tesla mobile app. To ensure access to new and improved features, download updated versions of the mobile app as they become available.

To Use the Mobile App

To set up the Tesla mobile app to communicate with your CybertruckModel SModel XModel 3Model Y:

1. Download the Tesla mobile app to your phone.
2. Log in to the Tesla mobile app by entering your Tesla account credentials.
3. Enable mobile access to your CybertruckModel SModel XModel 3Model Y by touching **Controls > Safety > Allow Mobile Access**.
4. Turn your phone's Bluetooth setting **ON** and ensure that Bluetooth is turned on within your phone's global settings for the Tesla mobile app. For example, on your phone, navigate to Settings, choose the Tesla mobile app, and ensure the Bluetooth setting is enabled.

Your phone and vehicle must both be actively connected to cellular service or Wi-Fi for the mobile app to communicate with your vehicle. Tesla recommends that you always have a functional physical key readily available if parking in an area with limited or absent cellular service, such as an indoor parking garage.

NOTE: In the event that you require lockout assistance from Tesla due to a non-warranty issue, such as having limited cellular connectivity and having no secondary key available, your expenses are not covered under the Roadside Assistance policy.

NOTE: Tesla does not support the use of third party applications to contact CybertruckModel SModel XModel 3Model Y.

Overview

When both your phone and the vehicle have internet service, the Tesla mobile app's home screen allows you to:

- Lock or unlock your vehicle.
- Enable or disable the heating or air conditioning and monitor the cabin climate.
- Check your vehicle's charging information. Charging details also appear when a charging cable is plugged in.
- Open or close the charge port.

NOTE: Twisting red lines next to the Battery icon indicate that the Battery is actively heating up (including while charging or preparing to charge).

- Open the tailgate.
- See where your vehicle is located.
- View your vehicle's estimated range.
- Open the front trunk.
- View your vehicle's odometer, VIN, and current software version.

You can configure the shortcut options on the home screen to include opening and closing the powered frunk and tonneau cover.

Media settings appear on the mobile app to pause, play, rewind, fast forward, and adjust the volume of the media currently playing in the vehicle. You may need to enable Media settings by touching **Audio Settings > Options > Allow Mobile Control**.

For supported video sources, send videos to Tesla Theater by sharing the link through the mobile app. Navigate to the movie, show, or video you want to play on your phone and touch the share button. Share the video with the Tesla app and it appears on the touchscreen if CybertruckModel SModel XModel 3Model Y is in Park.

Profile

In the Profile tab located at the top corner, you can:

- Switch to a different vehicle associated with your Tesla account, if you have access to more than one.
- Navigate the Tesla Shop.
- Manage your account information and view your order history.
- View and customize notifications you receive under the Settings tab, such as Calendar sync, when your security alarm has been triggered, charging updates, and new software updates. You can start updates from afar and check its progress.

Controls

The Controls tab allows you to do the following:

- Open the front or rear trunk.
- Open or close the tonneau cover.
- Open the tailgate.
- Open or close the powered frunk.
- Turn on and check the status of the A/C power outlets.
- Control the bed lights.
- Lock or unlock CybertruckModel SModel XModel 3Model Y from afar.
NOTE: Your vehicle does not automatically re-lock if you unlock from the mobile app.
- Open or close the charge port.
- Flash the lights or honk the horn to find where CybertruckModel SModel XModel 3Model Y is parked.
- Enable Keyless Driving.
NOTE: Keyless Driving can be used when you do not have your key or to bypass PIN to Drive in cases where you forgot your PIN or your touchscreen is unresponsive (see [PIN to Drive on page 660](#)).
- Open and close your garage door if your vehicle has a programmed HomeLink connection, if available (see [Smart Garage on page 365](#)).
- Vent the windows.

Climate

You can check the interior temperature and heat or cool the cabin before driving (even if it's in a garage), control the seat heaters, and defrost the windshield:

- Enable or disable **Defrost Car**defrost, which helps melt snow, ice, and frost on the windshield, windows, and mirrors, by swiping up from the bottom of the screen.
- Enable or disable **Dog Mode** or **Camp Mode**.
- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C or just the fan to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available). See [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#) for more information.
- Vent or close the windows.Vent or close the sunroof.Vent the windows.
- Precondition the cabin to your desired temperature and turn on or off the steering wheelsteering yoke (or steering wheel) and seat heaters (if equipped).
- Enable or disable **Defrost Truck**, which helps melt snow, ice, and frost on the windshield, windows, and mirrors, by swiping up from the bottom of the screen.
- Enable or disable **Dog Mode** or **Camp Mode**.

- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available). See [Operating Climate Controls on page 1338](#).
- Vent or close the windows.
- Precondition the cabin to your desired temperature and turn on or off the steering wheel and seat heaters.

Using the mobile app to precondition CybertruckModel SModel XModel 3Model Y also warms the Battery as needed. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

NOTE: In some vehicles, depending on vehicle specifications and date of manufacture, using the mobile app to defrost CybertruckModel SModel XModel 3Model Y also thaws ice on the charge port latch. This is useful in extremely cold weather or icy conditions in which the charge port latch can freeze in place, preventing you from removing or inserting the charge cable.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to precondition your vehicle on **HI** for approximately 30–45 minutes (you must use your mobile app to precondition the vehicle; setting your climate to **HI** using the touchscreen is not effective). This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to enable **Defrost Car** for approximately 30–45 minutes. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use your Tesla mobile app to enable **Defrost Truck** for approximately 30–45 minutes. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

Location

Locate CybertruckModel SModel XModel 3Model Y with directions, or track its movement across a map.

Summon

You can park or retrieve CybertruckModel SModel XModel 3Model Y using Summon (see [Summon on page 624](#)[Summon on page 617](#)) or Smart Summon (see [Smart Summon on page 628](#)[Smart Summon on page 621](#)).

Schedule

Enable scheduled charging or departure, and precondition the vehicle. See [Scheduled Charging and Scheduled Departure on page 743](#)[unique_435 on page](#) for more information. Scheduled charging or departure can also be saved based on a preferred location.

Security

The Security tab allows you to do the following:

- Pair your phone to the vehicle (see [Phone Key on page 109](#)).
- Enable or disable Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\) on page 664](#)).
- Enable or disable Valet Mode (see [Valet Mode on page 516](#)).
- Enable or disable Speed Limit Mode and receive notifications when the vehicle's driving speed is within approximately 3 mph (5 km/h) of your selected maximum speed (see [Speed Limit Mode on page 660](#)).
- Disable Phone Key, if needed (such as when you do not want the vehicle to automatically unlock whenever your phone is nearby).

Upgrades

View and purchase the latest upgrades available for your vehicle, such as full self-driving.

Service

See [Schedule Service on page 751](#) for information on how to schedule service through the mobile app.

Roadside

View roadside resources and request roadside assistance (where applicable). For more information on Roadside Assistance, see [Contacting Tesla Roadside Assistance on page 930](#).

Granting Access to a Second Driver

Add and remove access permission for an additional driver from the Tesla mobile app.

NOTE: Tesla mobile app version 4.3.1 or higher is required. Additional drivers can either use a previously registered Tesla Account or use the app to create a new Tesla Account.

To add an additional driver, in the Tesla mobile app from the vehicle home screen, go to **Security > Add Driver** and follow the onscreen instructions.

NOTE: The additional driver has access to all app features except purchasing upgrades.

To remove access, use the mobile app and go to **Security > Manage Drivers** and follow the onscreen instructions.

Wi-Fi

Wi-Fi is available as a data connection method and is often faster than cellular data networks. Connecting to Wi-Fi is especially useful in areas with limited or no cellular connectivity. To ensure fast, reliable delivery of software and map updates, Tesla recommends leaving CybertruckModel SModel XModel 3Model Y connected to a Wi-Fi network whenever possible (for example, when parked at home).

To connect to a Wi-Fi network:

1. Touch **Controls** > **Wi-Fi**. CybertruckModel SModel XModel 3Model Y begins to scan and display detected Wi-Fi networks that are within range.

NOTE: If a known Wi-Fi network does not appear in the list, move CybertruckModel SModel XModel 3Model Y closer to the access point or consider using a range extender.

NOTE: When connecting to a 5GHz network (if available), check which channels are supported in your region.

5GHz Network Channels Supported

36-48	52-64	100-140	149-165
✓	✓	✓	✓

2. Find and tap the the Wi-Fi network you want to use in **Searching for Wi-Fi Networks** or add it manually in **Add Wi-Fi Networks**, enter the password (if necessary), then touch **Confirm**. When successfully connected, the Wi-Fi network shows in **Known Wi-Fi Networks** along with a green check. Whenever the network is within range, CybertruckModel SModel XModel 3Model Y connects to it automatically.

NOTE: CybertruckModel SModel XModel 3Model Y does not currently support connections to captive Wi-Fi networks (a captive Wi-Fi, commonly used by public hotspots, requires you to access a custom web portal and agree to terms of service prior to allowing you to log in).

NOTE: If more than one previously connected network is within range, CybertruckModel SModel XModel 3Model Y connects to the one most recently used.

NOTE: At Tesla Service Centers, CybertruckModel SModel XModel 3Model Y automatically connects to the Tesla Service Wi-Fi network.

Hotspots

Instead of a Wi-Fi network, you can also use a mobile hotspot (subject to fees and restrictions of your carrier). After connecting to your hotspot, select **Remain Connected in Drive**, if you want to keep the connection active while you are driving.

Troubleshooting Tips

If your vehicle's Wi-Fi connection is slow or it fails to connect, try these tips.

- On the touchscreen, check the number of Wi-Fi icon bars (signal strength). If the bars are low, consider adding a Wi-Fi access point closer to the vehicle to improve the signal.
- Restart the touchscreen (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).
- Remove the Wi-Fi connection and reconnect. Touch **Controls** > **Wi-Fi**, select your network and **Forget Network** then reconnect by touching your network in **Known Networks**.
- Try a different Wi-Fi network.

Bluetooth

Bluetooth® Compatibility



You can use various Bluetooth devices in CybertruckModel SModel XModel 3Model Y provided it is paired and within operating range. For example, you can pair your Bluetooth-capable phone so you can use it hands-free. In addition to phones, you can pair other Bluetooth-enabled devices with CybertruckModel SModel XModel 3Model Y. For example, you can pair an iPod Touch, iPad, Android tablet, etc. from which you can play music.

Before using your phone or other Bluetooth device with CybertruckModel SModel XModel 3Model Y, you must pair it. Pairing sets up CybertruckModel SModel XModel 3Model Y to communicate with supported Bluetooth-capable devices. You can pair up to ten Bluetooth phones. Unless you've specified a specific phone as a **Priority Device**, or if the phone specified as **Priority Device** is not within range, CybertruckModel SModel XModel 3Model Y always connects to the last phone that was used (provided it is within range). To connect to a different phone, see [Switching Between Paired Devices on page 361](#).

NOTE: Authenticating your phone to use as a key (see [Keys on page 109](#)[Keys on page 1142](#)) does not allow you to use the phone hands-free, play media from it, etc. You must also pair it as described below.

NOTE: On many phones, Bluetooth turns off if the phone's battery is low.

NOTE: Although Bluetooth typically supports wireless communication over distances of up to approximately 30 feet (nine meters), performance can vary based on the phone, or other device, you are using.

NOTE: CybertruckModel SModel XModel 3Model Y can pair up to twenty Bluetooth devices at a time but only allows two devices to connect simultaneously (such as one phone and one controller or two controllers) to each front and rear touchscreen (if equipped).

CAUTION: Do not leave your paired phone in your vehicle (for example, if you are hiking or at the beach). If you must leave your phone in the vehicle, disable Bluetooth and/or turn the phone off.

Pairing a Phone or Bluetooth Device

Pairing allows you to use your Bluetooth-capable phone hands-free to make and receive phone calls, access your contact list, recent calls, etc. It also allows you to play media files from your phone. Once a phone is paired, CybertruckModel SModel XModel 3Model Y can connect to it whenever the phone is within range.

1. To pair a phone or a Bluetooth device, sit inside CybertruckModel SModel XModel 3Model Y and ensure the touchscreen is on.
2. Unlock your phone and enable Bluetooth (typically in Settings on your phone).
NOTE: On some phones, this may require you to go to Bluetooth Settings for the remainder of the procedure.
3. On the touchscreen, touch **Controls > Bluetooth** to automatically start Bluetooth scanning for new devices.
4. Wait for your phone to be listed and touch **Connect**.
5. Check that the number displayed on your phone matches the number on the touchscreen. Then, on your phone, confirm that you want to pair.
6. If prompted on your phone, specify whether you want to allow CybertruckModel SModel XModel 3Model Y to access your personal information, such as calendar, contacts and media files (see [Importing Contacts and Recent Calls on page 361](#)). When paired, CybertruckModel SModel XModel 3Model Y lists your phone under **Controls > Bluetooth > Paired Devices**.

To change the settings of a paired device, go to **Controls > Bluetooth > Paired Devices** and expand the dropdown next to the device's name.

If you are experiencing issues importing or connecting to Bluetooth, see [Troubleshooting Bluetooth on page 361](#) for more information.

For vehicles manufactured prior to approximately April 2018: If Bluetooth takes an exceptionally long time to pair, reset Bluetooth functionality by touching **Controls > Service > Reset Bluetooth**. You may need to wait a few minutes. Once reset, try pairing to CybertruckModel SModel XModel 3Model Y again. After you reset Bluetooth, CybertruckModel SModel XModel 3Model Y may forget previously paired devices.

Importing Contacts and Recent Calls

Once a phone is paired, go to **Controls > Bluetooth > Paired Devices** and expand the dropdown next to the device's name to specify whether you want to allow access to your phone's contacts, recent calls and text messages. If you allow access, you can use the phone app to make calls and send messages to people in your list of contacts and on your recent calls list (see [Phone, Calendar, and Web Conferencing on page 363](#)). Before contacts can be imported, you may need to either set your phone to allow syncing, or respond to a popup on your phone to confirm that you want to sync contacts. This varies depending on the type of phone you are using. For details, refer to the documentation provided with your phone.

If you are having trouble importing contacts or pairing with Bluetooth, see [Troubleshooting Bluetooth on page 361](#) for more information.

Disconnecting or Unpairing a Bluetooth Device

If you want to disconnect your phone or Bluetooth device, but keep it paired, touch **Disconnect** in your phone's Bluetooth settings dropdown on the touchscreen (**Controls > Bluetooth > Paired Devices > Your phone**). If you no longer want to use your device with CybertruckModel SModel XModel 3Model Y, touch **Forget Device** and follow the instructions. Once you forget a device, you must pair it again if you want to use it with CybertruckModel SModel XModel 3Model Y (see [Pairing a Phone or Bluetooth Device on page 360](#)).

NOTE: Your phone automatically disconnects when you leave CybertruckModel SModel XModel 3Model Y.

NOTE: Unpairing the phone has no effect on using the phone as a key. To forget an authenticated phone, see [Managing Keys on page 126](#) [Managing Keys on page 1144](#).

Switching Between Paired Devices

CybertruckModel SModel XModel 3Model Y automatically connects to a phone that you designated as **Priority Device**. If you have not set a phone as a priority, CybertruckModel SModel XModel 3Model Y connects to the last phone to which it was connected, provided it is within operating range and has Bluetooth turned on. If the last phone is not within range, it attempts to connect with the next phone that it has been paired with.

To connect to a different phone, touch **Controls > Bluetooth > Paired Devices**. Select the phone you want to connect to, then touch **Connect**. If the phone you want to connect to is not listed, you must pair the phone. See [Pairing a Phone or Bluetooth Device on page 360](#).

When connected, the Bluetooth settings screen displays the Bluetooth symbol next to the phone's name to show that CybertruckModel SModel XModel 3Model Y is connected to the phone.

Troubleshooting Bluetooth

Your vehicle uses Bluetooth and BLE (Bluetooth Low Energy) to seamlessly connect your smartphone to CybertruckModel SModel XModel 3Model Y. Due to several potential factors, Bluetooth or BLE may sometimes disconnect or experience issues in the pairing process. Connecting to Bluetooth allows your vehicle to use phone functions such as audio, phone calls, calendars, text messages, etc.

BLE is used for passive functions like phone key.

NOTE: Do not unpair your vehicle to your phone or remove it as phone key without a working key card nearby.

Try the following to troubleshoot Bluetooth, starting with your smartphone.

Smartphone Troubleshooting

Bluetooth may not connect due to settings and updates on your smartphone:

- Enable Bluetooth on your phone. If already enabled, disable and re-enable Bluetooth again.
- Ensure Airplane Mode is turned off.
- Charge your phone; if your phone battery is too low, it may not support Bluetooth functions.
- Pair your device properly. If already paired, try unpairing and re-pairing again.
- Update your phone to the latest software provided by the manufacturer.



- Check that your vehicle's sound system is selected as the audio output source.
- Ensure your phone's settings allow for Bluetooth (ex: data is turned on or you are connected to Wi-Fi).
- Turn your phone off and on again.
- Ensure location permissions set to "Always On" for the mobile app.

Tesla Mobile App Troubleshooting

Check the Tesla mobile app:

- Confirm the Tesla mobile app is up to date on software.
- Verify you're logged into the Tesla mobile app while using your phone key.
- Ensure the Tesla app is running in the background.
- Double check that you have completely set up your profile in the mobile app and properly configured your settings.

Vehicle Troubleshooting

Your vehicle's settings may affect its ability to pair with your smartphone:

- Charge CybertruckModel SModel XModel 3Model Y: If the vehicle Battery is too low, you may lose Bluetooth function.
- Update vehicle software and make sure it is always up to date. Check for new software updates by navigating to **Controls > Software**.
- Restart the touchscreen. See [Touchscreen on page 24](#).
- Reboot your vehicle.

If Bluetooth still does not work, unpair from your vehicle AND smartphone. Then try re-pairing both again.

For BLE phone key issues, when in the vehicle, navigate to **Controls > Locks** and remove your phone as "Phone as Key". Then set it back up again. But only do this while you are in the vehicle and have a reliable back up key available (such as a key card).

Phone, Calendar, and Web Conferencing

Using the Phone App



When your phone is connected to CybertruckModel SModel XModel 3Model Y using Bluetooth (see [Bluetooth on page 360](#)), and you have allowed access to information on your phone (see [Importing Contacts and Recent Calls on page 361](#)), you can use the phone app to display and make a hands-free call to anyone listed on your phone.

- **Calls:** Displays recent calls in chronological order with the most recent call listed first.
- **Messages:** Displays message in chronological order with the most recent message listed first. You can view, send, and receive text messages. Instead of typing a text message, touch the microphone button on the right side of the steering wheelsteering yoke (or steering wheel) to enter text using your voice.
 - ⚠ **WARNING:** To minimize distraction and ensure the safety of occupants as well as other road users, do not view or send text messages when the vehicle is in motion. Pay attention to road and traffic conditions at all times when driving.
- **Contacts:** Contacts are listed in alphabetical order and can be sorted by first name or last name. You can also choose a letter on the right side of the list to quickly scroll to the names that begin with the selected character. When you touch a name on your contacts list, the contact's available number(s) displays on the right pane, along with other available information (such as address). Touch the contact's number to make a call.
- **Favorites:** Displays the contacts from your phone that you have identified as Favorites.
- **Calendar:** Displays calendar entries from your phone (see [Calendar on page 364](#)). If an entry includes a phone number or an address, you can make a phone call, or navigate to a destination, by touching the corresponding information in the calendar entry.

Making a Phone Call

You can make a phone call by:

- Speaking a voice command (see [Voice Commands on page 97](#)). Voice commands are a convenient, hands-free way to call or text your contacts.
- Selecting a contact or recent call from the menu on your right scroll button (see [Using Right Steering Wheel Buttons on page 385](#)).
- Touching a phone number shown in a list in the phone app – Contacts, Calls, or Calendar.
- Using the CybertruckModel SModel XModel 3Model Y on-screen dialer in the Phone app.

NOTE: If it is safe and legal to do so, you can also initiate a call by dialing the number or selecting the contact directly from your phone.

NOTE: You can also make a phone call by touching a pin on the map and choosing the phone number (if available) on the popup screen.

Receiving a Phone Call

When your phone receives an incoming call, the instrument panel and touchscreen displaytouchscreen displays the caller's number or name (if the caller is in your phone's contact list and CybertruckModel SModel XModel 3Model Y has access to your contacts).

Touch one of the options on the touchscreen to **Answer** or **Ignore** the call. Depending on the phone you are using and what speakers you used for your most recent call, your phone may prompt you to choose which speakers you want to use for the incoming call.

⚠ **WARNING:** Stay focused on the road at all times while driving. Using or programming a phone while driving, even with Bluetooth enabled, can result in serious injury or death.



WARNING: Follow all applicable laws regarding the use of phones while driving, including, but not limited to, laws that prohibit texting and require hands-free operation at all times.

In Call Options

When a call is in progress, you can display the call menu on the instrument panel by pressing the top button on the right side of the steering wheel. Then roll the right scroll button and choose an option (see [Using Right Steering Wheel Buttons on page 385](#)). To adjust the call volume, roll the steering wheel's left scroll button during a call.

In Call Options

When a call is in progress, the call displays on the touchscreen. To adjust the call volume, roll the left scroll button during a call. Tilt the left scroll button left to mute/unmute and tilt right to end the call.

Calendar



The calendar displays scheduled events from your phone's (iPhone® or Android™) calendar for the current and next day. The calendar is conveniently integrated with the phone app so you can dial into your meeting from a Calendar entry. It is also integrated with the navigation system so you can navigate to the event's location.

1. Ensure your phone is paired to CybertruckModel SModel XModel 3Model Y.
2. Ensure you are logged into the Tesla mobile app.
3. In your Tesla mobile app, touch **Profile > Settings > Calendar Sync**.

NOTE: To ensure you have access to all of the calendar's features, it is recommended that you use the most recent version of the mobile app.

4. On your phone, go to **Settings** and allow access/give permission to share your calendar with the Tesla mobile app. The mobile app can then periodically (and automatically) send calendar data from your phone to CybertruckModel SModel XModel 3Model Y.

If a calendar event includes an address, a navigation arrow displays to indicate that you can touch the address to navigate to the event's location.

If an event has a uniquely specified address and takes place within two hours of you entering your vehicle and preparing to drive, CybertruckModel SModel XModel 3Model Y automatically routes you to the event's address (see [Automatic Navigation on page 702](#)).

Touch an event's information icon to display all notes associated with the event. If the notes include one or more phone numbers, the information icon shows a phone icon and the calendar displays the first phone number found. Touch to initiate a phone call. You can also initiate a phone call by touching any number in an event's notes popup screen (this is especially useful for conference calls). If notes include a web link, you can touch the link to open it in the Web browser.

Zoom



Seamlessly take meetings and calls through your vehicle's touchscreen. To set up, touch the Zoom app and sign in or enter the meeting ID. You can even access meetings shown on your calendar or in text messages by touching the Zoom link. Your vehicle's cabin camera can be used in calls over Zoom only when CybertruckModel SModel XModel 3Model Y is Parked. When the vehicle is shifted out of Park in the middle of a Zoom call, the cabin camera turns off and you switch to audio only. Use the touchscreen to turn on/off the video, mute/unmute yourself, and customize various preferences for your meeting.

WARNING: Do not to use the video function when the vehicle is "temporarily parked" on a public road (such as when the vehicle is parked along the curb or in a spot that is not a designated parking spot)..

WARNING: Stay focused on your surroundings and follow all applicable laws while driving, including, but not limited to, laws that require hands-free operation at all times.

Smart Garage

myQ



If equipped, CybertruckModel SModel XModel 3Model Y can intelligently connect to your myQ® smart garage.

myQ is a smart garage control system that works seamlessly with CybertruckModel SModel XModel 3Model Y, and allows you to remotely monitor and control your garage door from the vehicle's touchscreen or a paired phone. This is convenient if you forget to close your garage door, want to allow friends and family inside, or need to open and close it remotely (such as when receiving a package). By linking myQ with CybertruckModel SModel XModel 3Model Y, the garage door can detect your vehicle nearby and automatically open or close to accommodate.

Follow these steps to set up myQ on your vehicle:

1. Your garage door must be myQ compatible. Navigate to **Controls > Garage icon**. Use the myQ Compatibility tool (<https://www.myq.com/app/myq-compatibility>) to determine this.
2. Ensure your garage is Wi-Fi compatible. myQ uses Wi-Fi to communicate with your smart phone and vehicle. Some garages will have a Wi-Fi or myQ symbol on the hub. Your garage must have a strong Wi-Fi signal to control and monitor your garage through your vehicle.
NOTE: If your garage is not compatible, you may be able to purchase an external myQ hub to use this feature.
3. Download the myQ app from your smart phone's app store. Use the app to set up your account information and pair the garage to your phone. myQ requires a paid subscription, which you can purchase in the app.
4. Check that your vehicle is running the latest available software version and has Wi-Fi or LTE connectivity.
5. Touch the garage icon at the top of the touchscreen or navigate to **Controls > Locks > myQ Connected Garage > Link Account** and follow the instructions to pair the garage with CybertruckModel SModel XModel 3Model Y. Once paired, monitoring and controlling the garage becomes available on the touchscreen, where you can further customize myQ.


For more information, questions, or troubleshooting assistance, visit www.myQ.com/Tesla.

HomeLink Universal Transceiver



If your vehicle is equipped with the HomeLink® Universal Transceiver, you can operate up to three Radio Frequency (RF) devices, including garage doors, gates, lights, and security systems.

NOTE: Depending on date of manufacture, market region, and options selected at time of purchase, some vehicles are not equipped with a HomeLink Universal Transceiver.

 **WARNING:** Do not use the HomeLink Universal Transceiver with a device that does not have safety stop and reverse features. Using a device without these safety features increases the risk of injury or death.

Supported Modes

HomeLink supports three different transmit modes, which is how your vehicle and the RF device communicate. Selecting a transmit mode is determined by your RF device's compatibility:

- **Standard Mode:** Use Standard Mode if your RF device is equipped with a remote control that must be used to operate the device (for example, a remote-controlled garage door). This mode is the most commonly used transmit mode for HomeLink devices.



- **D-Mode or UR-Mode:** Use D-Mode or UR-Mode if the RF device does not have a remote control, and the receiver has a "Learn" button (may also be called "Program" or "Smart"). D-Mode and UR-Mode function similarly in that CybertruckModel SModel XModel 3Model Y communicates directly with the device's receiver as opposed to the remote control.

NOTE: D-Mode is used primarily in North America whereas UR-Mode is popular in Europe, the Middle East, and Asia. To determine the mode your device is compatible with, contact HomeLink by going to www.homelink.com or calling 1-800-355-3515.

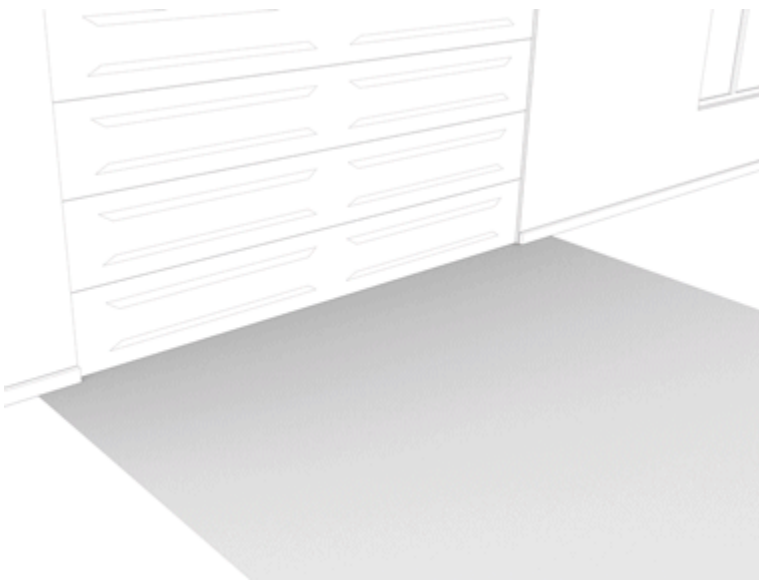
Each of your devices can be set to a different mode. For example, your garage door can be set to Standard Mode, your front gate can be set to D-Mode, etc. To change a transmit mode, touch the HomeLink icon at the top of the touchscreen **Controls** screen and select the device you want to change. Then, select **Program** and choose the desired mode for your device. Confirm by touching **Set Mode** and follow the onscreen instructions.

For older vehicles, changing the mode for one device changes the mode for all devices, so be careful when changing transmit modes. Devices not compatible with your selected mode may not work. Touch the HomeLink icon at the top of the touchscreen, then touch **Change Transmit Mode**.

NOTE: Check the product information for your HomeLink device to determine which mode is compatible with your device.

Programming HomeLink

To program HomeLink®:



1. Park CybertruckModel SModel XModel 3Model Y so that the front bumper is in front of the device you want to program.



CAUTION: Your device might open or close during programming. Therefore, before programming, make sure that the device is clear of any people or objects.

2. Check that the device's remote control has a healthy battery. Tesla recommends replacing the battery in the device's remote control before Programming HomeLink.
3. Touch the HomeLink icon at the top of the touchscreen **Controls** screen.
4. Touch **Create HomeLink**.
5. On the HomeLink screen, enter a name for the device, then touch **Enter** or **Add New HomeLink**.
6. Choose the mode you wish to use (Standard, D-Mode, or UR-Mode), then touch **Set Mode**.
7. Touch **Start** and follow the onscreen instructions.

NOTE: If you see a screen called "Train the receiver" while programming the device, remember that this is a time-sensitive step. After pressing the Learn/Program/Smart button on the device's remote control, you have only approximately 30 seconds to return to your vehicle and press **Continue**, and then press the trained HomeLink device name twice. Consider having an assistant to ensure you can complete this step within 30 seconds.

8. Once your device is programmed, touch **Save** to complete the programming.
9. Ensure HomeLink works as expected. In some cases, you may need to repeat the programming process multiple times before succeeding.

Once programmed, you can operate the device by touching its corresponding HomeLink icon on the touchscreen. HomeLink remembers the location of your programmed devices. When you approach a known location, the HomeLink control on the touchscreen automatically appears. When you drive away, it disappears.

NOTE: The HomeLink icon displays at the top of the touchscreen when CybertruckModel SModel XModel 3Model Y detects a programmed HomeLink device within range, and the touchscreen is not already displaying the HomeLink screen or popup,

NOTE: For additional assistance or compatibility questions, contact HomeLink (www.homelink.com or call 1-800-355-3515).

Auto Opening and Closing

To operate a HomeLink device without using the touchscreen, you can automate the device to open as you approach, and close as you drive away:

1. Touch the HomeLink icon at the top of the touchscreen **Controls** screen, touch **HomeLink Settings**, then choose the device you want to automate.
2. Adjust the device's HomeLink settings as needed:
 - Select the **Auto-open when arriving** checkbox if you want the device to open as you approach.
 - Touch the arrows to specify the distance you want CybertruckModel SModel XModel 3Model Y to be from the device before it opens.
 - Select the **Auto-close when leaving** checkbox if you want the device to close as you drive away.
 - Select the **Auto-fold mirrors** checkbox if you want mirrors to fold when you arrive at the HomeLink location. This is useful for narrow garages.
 - Select the **Chime for Auto-open and Auto-close** checkbox if you want CybertruckModel SModel XModel 3Model Y to sound a chime when a signal has been sent to open or close the device.

HomeLink remembers the vehicle's GPS location at the time of pairing and uses this to determine the vehicle's whereabouts in relation to the HomeLink device. HomeLink does not detect and differentiate between opening and closing (ex: if Auto-open is triggered and the door is already open, the door will close) but typically determines whether to auto-open or -close based on the following:

Auto-Open: Detects when CybertruckModel SModel XModel 3Model Y approaches the garage door (or other HomeLink device) within a specified distance. Auto-open initiates so long as the approaching vehicle is in Drive and HomeLink is enabled. HomeLink does not trigger when the vehicle is already in the area.

Auto-Close: HomeLink triggers when the CybertruckModel SModel XModel 3Model Y shifts from Park into Reverse, and moves at least 23 feet (seven meters) in Reverse.

NOTE: Changing gears multiple times while in the specified distance may interfere with Auto-close.

In situations where you don't want the device to automatically open or close, touch **Skip Auto-Open** or **Skip Auto-Close** at any time during the count-down message.

NOTE: Do not rely on HomeLink to ensure the device fully closes.

Resetting the Location of the HomeLink Device

If you experience situations in which you sometimes drive up to your HomeLink device and it doesn't open, or the touchscreen does not display a notification as you approach a programmed device, you may need to reset the device's location. To do so, park as close as possible to the HomeLink device (garage door, gate, etc.) and display the HomeLink settings page by touching the HomeLink icon at the top of the touchscreen **Controls** screen. Touch the name of the device you want to reset, then touch **Reset Location**.

Deleting a Device

To delete a HomeLink device, touch the HomeLink icon at the top of the touchscreen **Controls** screen, then touch **HomeLink Settings**. Touch the name of the device you want to delete, then touch **Delete**.

NOTE: You can also perform a factory reset to erase your HomeLink settings, along with all other personal data (saved addresses, music favorites, imported contacts, etc.). See [Erasing Personal Data with a Factory Reset on page 40](#).

NOTE: For security reasons, delete your HomeLink devices if you sell your CybertruckModel SModel XModel 3Model Y.

Troubleshooting HomeLink

Standard Mode

In Standard Mode, CybertruckModel SModel XModel 3Model Y records the RF signal from your HomeLink device's remote control. The touchscreen instructs you to stand in front of the vehicle, point the device's remote control at the front bumper, and press and hold the button until the headlights flash. When the headlights flash, CybertruckModel SModel XModel 3Model Y has learned the remote control and you can touch **Continue** on the touchscreen. If the headlights do not flash:

- Check the batteries in the remote control. It is a good idea to replace the batteries before you start programming.
- Ensure you are standing in front of CybertruckModel SModel XModel 3Model Y with the device's remote control positioned within two inches (five cm) of the Tesla emblem.
- Press and hold the button on your device's remote control until the headlights flash. In some cases you must hold the button on the remote control for up to three minutes.

NOTE: Some HomeLink remote controls require multiple short presses (approximately one second each press) instead of one long duration press. If you are unsuccessful after multiple attempts of using long presses, try repeated presses of one second each.

D-Mode and UR-Mode

In D-Mode and UR-Mode, the device's receiver learns CybertruckModel SModel XModel 3Model Y. The touchscreen instructs you to press the "Learn" button (may also be called "Program" or "Smart") on the device's receiver. If this does not work, refer to the following guidelines:

- Park CybertruckModel SModel XModel 3Model Y with its bumper as close as possible to the garage door, gate, etc. that you are trying to program.
- Make sure you are pressing the receiver's Learn/Program/Smart button. For instructions on how to put the receiver into learning mode, refer to the product details provided with your RF device that you are trying to program.
- If you see a screen called "Train the receiver" while programming the device, remember that this is a time-sensitive step. After pressing the Learn/Program/Smart button on the device's remote control or receiver, you only have approximately 30 seconds to return to your vehicle, press **Continue**, then press the trained HomeLink device name twice. Consider having someone assist you with this step.
- Most devices stay in learning mode for only three to five minutes. Immediately after pressing the device's Learn/Program/Smart button, follow the instructions displayed on the vehicle's touchscreen.

For additional assistance or compatibility questions, contact HomeLink (www.homelink.com or call 1-800-355-3515).

Starting and Powering Off

Starting

When you open a door to enter CybertruckModel SModel XModel 3Model Y, the touchscreen powers on and you can operate all controls. To shift CybertruckModel SModel XModel 3Model Y, press the brake pedal and swipe up for Drive or down for Reverse on the touchscreen's drive mode strip (see [Shifting on page 405](#)).

If **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y automatically selects Drive or Reverse based on the detected surroundings. Pressing the brake pedal shifts the vehicle into the selected drive mode displayed on the instrument paneltouchscreen's drive mode strip (provided the driver's door is closed and the driver's seat belt is buckled), and pressing the accelerator moves the vehicle in that direction.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Pedals & Steering > Dynamics > Auto Shift out of Park**.

NOTE: To turn **Auto Shift out of Park** on or off, touch **Controls > Dynamics > Auto Shift out of Park**.

Before accelerating when **Auto Shift out of Park** is enabled, check the instrument paneltouchscreen to make sure that CybertruckModel SModel XModel 3Model Y has shifted into the drive mode you want (Drive or Reverse). If the selection is not correct, or if **Auto Shift out of Park** is not enabled, swipe up for Drive or down for Reverse on the touchscreen's drive mode strip to choose a new drive mode. See [Shifting on page 405](#).

NOTE: If **PIN to Drive** is enabled (see [PIN to Drive on page 660](#)), you must enter a valid PIN on the touchscreen before you can drive CybertruckModel SModel XModel 3Model Y.

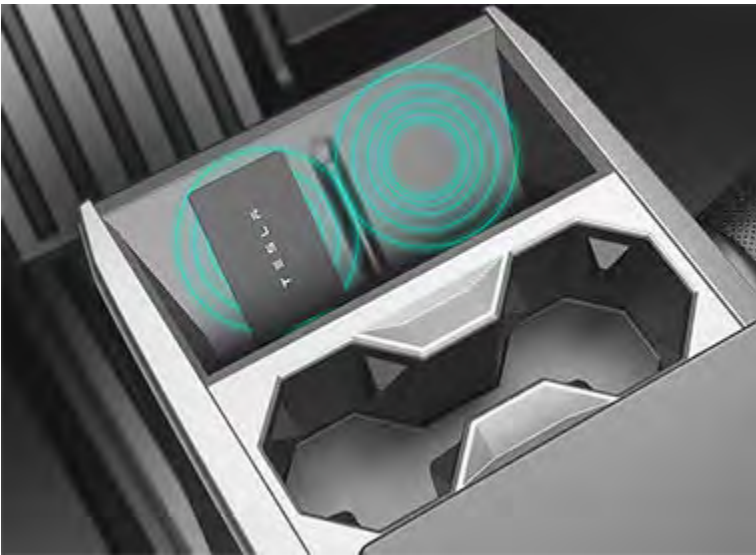
Everything you need to know when driving CybertruckModel SModel XModel 3Model Y displays on the instrument paneltouchscreen.

Drive Disabled - Requires Authentication

If CybertruckModel SModel XModel 3Model Y does not detect a key when you press the brake (a phone key is not detected or two minutes have passed since you used the key card), the touchscreen displays a message telling you that driving requires authentication.

If you see this message, place the key card in either phone dock where the RFID transmitter can read it. The two-minute authentication period restarts and you can start CybertruckModel SModel XModel 3Model Y by pressing the brake pedal.





A number of factors can affect whether CybertruckModel SModel XModel 3Model Y can detect a phone key (for example, the device's battery is low or dead and is no longer able to communicate using Bluetooth).

Always keep your phone key or a key card with you. After driving, your key is needed to restart CybertruckModel SModel XModel 3Model Y. And when you leave the vehicle, you must bring your key with you to lock CybertruckModel SModel XModel 3Model Y, either manually or automatically.

Powering Off

When you finish driving and shift into Park, simply exit the vehicle. When you leave CybertruckModel SModel XModel 3Model Y with your phone key and key fob with your phone key with your phone key, it powers off automatically, turning off the instrument panel and touchscreentouchscreen.

CybertruckModel SModel XModel 3Model Y also powers off automatically after being in Park for 30 minutes, even if you are sitting in the driver's seat.

Although usually not needed, you can power off CybertruckModel SModel XModel 3Model Y while sitting in the driver's seat, provided the vehicle is not moving. Touch **Controls > Safety > Power Off**. CybertruckModel SModel XModel 3Model Y automatically powers back on after a short period if you press the brake pedal or touch the touchscreen.

NOTE: CybertruckModel SModel XModel 3Model Y automatically shifts into Park whenever it determines that you are exiting the vehicle (for example, the driver's seat belt is unbuckled and the vehicle is almost at a standstill). If you shift into Neutral, your vehicle shifts into Park when you open the door to exit. To keep your vehicle in Neutral, see [Instructions for Transporters on page 911](#). To keep your vehicle in Neutral, you will need to activate Transport Mode (see [Instructions for Transporters on page 921](#)[Instructions for Transporters on page 1445](#)).

Power Cycling the Vehicle

You can power cycle CybertruckModel SModel XModel 3Model Y if it demonstrates unusual behavior or displays a nondescript alert.

NOTE: If the touchscreen is unresponsive or demonstrates unusual behavior, reboot it before you power cycle the vehicle (see [Restarting the Touchscreen or Instrument Panel on page 34](#)[Restarting the Touchscreen on page 1115](#)).

1. Shift into Park.
2. On the touchscreen, touch **Controls** > **Safety** > **Power Off**.
3. Wait for at least two minutes without interacting with the vehicle. Do not open the doors, touch the brake pedal, touch the touchscreen, etc.
4. After two minutes, press the brake pedal or open the door to wake the vehicle.

Shifting

Shift Using the Touchscreen

When you press the brake pedal when parked, the drive mode strip displays on one side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: swipe up for Drive, swipe down for Reverse or touch the P for Park or N for Neutral. The drive mode strip is always available on the touchscreen when you touch **Controls**. Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip.



NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen's drive mode strip displays **Park** and **Neutral** at all times. To shift into **Park** when driving below 5 mph (8 km/h), touch the button on the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the **Park** button to slowly bring the vehicle to a stop.

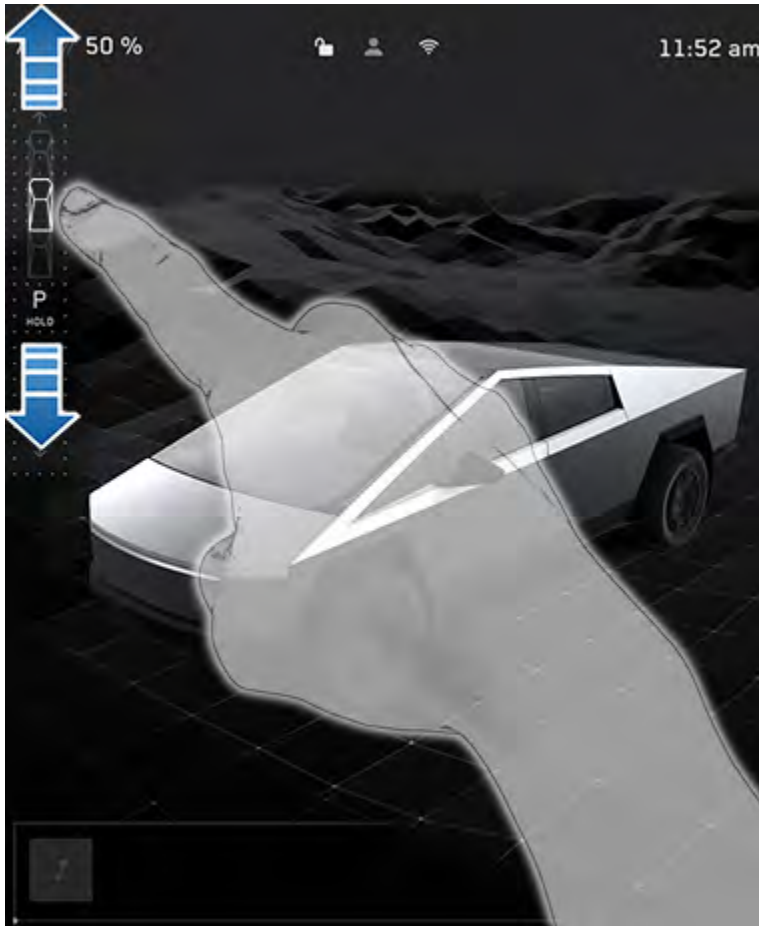
To shift into Neutral, open **Controls** to bring up the drive mode strip, then press and hold **Neutral** until Neutral engages.

The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the center console/overhead console automatically activates and must be used to shift (see [Shift Using the Center Console on page 410](#)/[Shift Using the Overhead Console on page 408](#)).

If you try to shift when it is prohibited by the current driving speed, the instrument panel/touchscreen displays an alert, a chime sounds, and the drive mode does not change.

Shift Using the Touchscreen

When you press the brake pedal when CybertruckModel SModel XModel 3Model Y is parked, the drive mode strip displays on the driver's side of the touchscreen. Use the drive mode strip to shift CybertruckModel SModel XModel 3Model Y: Swipe up for Drive, swipe down for Reverse, or press the drive mode strip for Park.



The touchscreen always shows which gear CybertruckModel SModel XModel 3Model Y is in, but the drive mode strip is hidden when driving at highway speeds. To show the drive mode strip at any time, swipe right from the left edge of the touchscreen.

To shift into **Park** when driving below 5 mph (8 km/h), touch the drive mode strip while pressing the brake pedal. In emergency situations when driving above 5 mph (8 km/h), press and hold the gear strip to slowly bring the vehicle to a stop.

NOTE: To shift from Drive into Reverse or vice versa, the driving speed must be less than 5 mph (8 km/h).

The touchscreen is the preferred method to manually shift. However, in the unlikely situation in which the touchscreen is unavailable and therefore can't be used, the drive mode selector on the overhead console automatically activates and must be used to shift (see [Shift Using the Overhead Console on page 407](#)).

If you try to shift when it is prohibited by the current driving speed, the touchscreen displays an alert, a chime sounds, and the drive mode does not change.


Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 406](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.

 **WARNING:** As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 407](#)).
- The cameras are free of obstructions (see [Cameras on page 1136](#)) and CybertruckModel SModel XModel 3Model Y has enough input to make a selection.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.


Auto Shift out of Park

Auto Shift out of Park is a BETA feature and is disabled by default. When disabled, use the touchscreen or the overhead console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Dynamics > Auto Shift out of Park**.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The touchscreen displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, Park; see [Shift Using the Touchscreen on page 405](#)).

Confirm the drive mode selection and follow the instructions on the touchscreen before you press the accelerator.

 **WARNING:** As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the touchscreen displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the overhead console is not activated (see [Shift Using the Overhead Console on page 408](#)).

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console illuminates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen on page 1115](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift after a short amount of time.

Shift Using the Overhead Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the overhead console. In most situations, these buttons are not available until you press the brake and touch one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the overhead console activates automatically and there is no need to touch it.



NOTE: You can also activate the drive mode selector on the overhead console by simultaneously and *briefly* pressing both scroll buttons on the steering wheel. However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk must be closed to shift using the overhead console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the overhead console, the overhead console automatically deactivates if you don't shift within 10 seconds.

Auto Shift (Beta)

NOTE: **Auto Shift** is a Beta feature and is disabled by default.

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with **Auto Shift** (Beta) or the features may not operate exactly as described.

Auto Shift (Beta) can shift between Drive and Reverse, or out of Park, to assist with actions such as turns, parking, or reversing out of a parking spot. To enable, touch **Controls > Pedals & Steering > Auto Shift (Beta)**, where you can select between **On** or **Out of Park**.

When **On**, **Auto Shift** (Beta) lets you shift without using the touchscreen based on your surroundings. This assists with multi-point turns, reversing out of a parking spot, parallel parking, and similar driving maneuvers. When the vehicle assists with shifting, a readiness indicator appears on the instrument clustertouchscreen .

With **Out of Park**, CybertruckModel SModel XModel 3Model Y is designed to select Drive or Reverse when shifting out of Park (such as pulling out of a parking spot). CybertruckModel SModel XModel 3Model Y selects a drive mode when:

selects a drive mode when:

- **Auto Shift** (Beta) is enabled.
- CybertruckModel SModel XModel 3Model Y is in Park (for **Out of Park**) or in Drive or Reverse (for **On**).
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

Auto Shift (Beta) is designed to enhance your driving experience and may only appear in certain circumstances, such as requiring a vehicle or object in the front and/or rear to begin the maneuver. Confirm the drive mode selection and follow the instructions on the instrument clustertouchscreen before you press the accelerator.

To override the selection, press the brake pedal and use the drive mode strip on the touchscreen to manually shift into your desired Drive Mode. Once you override, you'll need to shift gears again for Auto Shift (Beta) to reappear. If **Auto Shift (Beta)** is unavailable, the instrument clustertouchscreen displays a message.

NOTE: CybertruckModel SModel XModel 3Model Y does not allow Auto Shift (Beta) in certain modes and driving situations, including but not limited to: Valet Mode, Track Mode, Creep, Trailer Mode, etc.

 **WARNING:** Never rely on **Auto Shift (Beta)** without confirming the selection before proceeding. Always remain attentive, monitor your surroundings, and maneuver safely.


Auto Shift out of Park

NOTE: **Auto Shift out of Park** is a BETA feature and is disabled by default.

When **Auto Shift out of Park** is enabled, CybertruckModel SModel XModel 3Model Y is designed to automatically select Drive or Reverse. The instrument panel displays the selected drive mode when the driver's door is closed and seat belt is buckled.

To override the selection, press the brake pedal and use the drive mode strip on touchscreen to shift into your desired drive mode (Drive, Reverse, or Park).

Confirm the drive mode selection and follow the instructions on the instrument panel before you press the accelerator.

 **WARNING:** As always, be aware of your vehicle and surroundings before driving. Never rely on CybertruckModel SModel XModel 3Model Y to automatically select a suitable drive mode without confirming the selection before you start to drive.

If **Auto Shift out of Park** is unavailable, the instrument panel displays a message.

CybertruckModel SModel XModel 3Model Y automatically selects a drive mode when:

- **Auto Shift out of Park** is enabled (touch **Controls > Pedals & Steering > Auto Shift out of Park**).
- CybertruckModel SModel XModel 3Model Y is in Park.
- The driver's seat belt is fastened.
- The brake pedal is pressed.
- All doors and trunks are closed.
- The drive mode selector on the center console is not activated.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically select drive modes in Valet Mode.

Auto Shift out of Park is disabled by default. When disabled, use the touchscreen or the center console to manually shift. To enable **Auto Shift out of Park**, touch **Controls > Pedals & Steering > Auto Shift out of Park**.

Shift Using the Center Console

In addition to manually shifting on the touchscreen, you can shift by pressing P, R, N or D located on the center console. In most situations, these buttons are not available until you press one of the buttons to activate it. When active, the LEDs associated with each button illuminate and when you select P, R, N or D, the associated LED illuminates amber.

In situations where the touchscreen is unavailable (for example, experiencing a technical issue), or CybertruckModel SModel XModel 3Model Y is in Valet or Transport Mode, the drive mode selector on the center console activates automatically and there is no need to touch it.

NOTE: You can also activate the drive mode selector on the center console by simultaneously and *briefly* pressing both scroll buttons on the steering yoke (or steering wheel). However, if you press and *hold* both buttons simultaneously, the drive mode selector activates *and* the touchscreen restarts (see [Restarting the Touchscreen or Instrument Panel on page 34](#)).

NOTE: The front trunk, rear trunk, and doors must be closed to shift using the center console.



1. Park
2. Reverse
3. Neutral
4. Drive

NOTE: When the touchscreen is available for shifting and you have manually activated the drive mode selector on the center console, the center console automatically deactivates if you don't shift within 10 seconds.

Park

To manually shift into Park, press the brake pedal and touch the **Park** button on the touchscreen's drive mode strip. If the touchscreen is unavailable, press Park on the drive mode selector located on the center console/overhead console.

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into Park to prevent roll-away while driving in low speeds. This happens whenever you connect a charge cable, unbuckle your seat belt, or open the door while in Drive or Neutral. Ensure the charge cable is removed, buckle your seat belt, and close the door before shifting out of Park.

Attempting to engage the parking brake above 5 mph (8 km/h) will result in emergency braking (see [Braking and Stopping on page 461](#)/[Braking and Stopping on page 1235](#)).

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to bring Cybertruck/Model S/Model X/Model 3/Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: In emergency situations, if the brakes are not functioning properly, you can press and hold the **Park** button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Do not use this method to stop the vehicle unless absolutely necessary.

NOTE: You must always press the brake pedal to shift *out of* Park.

CAUTION: Cybertruck/Model S/Model X/Model 3/Model Y will not shift out of Park if a charge cable is plugged in, or if the charge port is unable to determine whether a charging cable is plugged in. In situations when Cybertruck/Model S/Model X/Model 3/Model Y does not shift out of Park, check the instrument panel or touchscreen for instructions on how to proceed.

WARNING: It is the driver's responsibility to always ensure the vehicle is in Park before exiting. Never rely on Cybertruck/Model S/Model X/Model 3/Model Y to automatically shift into Park for you.

Drive

To manually shift into Drive, swipe up on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press D on the drive mode selector located on the center console/overhead console. You can shift into Drive when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Reverse.

Reverse

To manually shift into Reverse, swipe down on the drive mode strip located on the touchscreen or, if the touchscreen is unavailable, press R on the drive mode selector located on the center console/overhead console. You can shift into Reverse when Cybertruck/Model S/Model X/Model 3/Model Y is stopped or moving less than 5 mph (8 km/h) in Drive. You can manually close the park assist view on the touchscreen by touching the **X** in the upper corner.

Neutral

Neutral allows Cybertruck/Model S/Model X/Model 3/Model Y to roll freely when you are not pressing the brake pedal. To shift into Neutral, do any of the following:

- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Open **Controls**, then press and hold the **Neutral** icon on the drive mode strip until Cybertruck/Model S/Model X/Model 3/Model Y engages Neutral.
- Swipe from the edge of the touchscreen towards the passenger to bring up the drive mode strip and press **Neutral**.
- Choose **Neutral** from the drive mode selector on the overhead console/overhead console.

NOTE: When Cybertruck/Model S/Model X/Model 3/Model Y is traveling over 5 mph (8 km/h) and you swipe up or down on the touchscreen's drive mode strip, a **Neutral** icon displays at the bottom of the drive mode strip from which you can also choose to engage Neutral.

NOTE: You must press the brake pedal to shift out of Neutral if Cybertruck/Model S/Model X/Model 3/Model Y is moving slower than approximately 5 mph (8 km/h).

Cybertruck/Model S/Model X/Model 3/Model Y automatically shifts into **Park** when you open the driver's door to exit the vehicle unless the vehicle is in certain modes such as Transport or Car Wash Mode which allows the vehicle to stay in **Neutral** even when you leave.

Keeping Your Vehicle in Neutral (Transport Mode)

To keep Cybertruck/Model S/Model X/Model 3/Model Y in Neutral when you exit, allowing it to roll freely (for example, pulling onto a flatbed truck), you must activate Transport mode:

1. Shift into Park.
2. Press the brake pedal.
3. Touch **Controls** > **Service** > **Towing**. The touchscreen displays a message reminding you how to properly transport Cybertruck/Model S/Model X/Model 3/Model Y.
4. Press the **Transport Mode**. It turns blue to show that Cybertruck/Model S/Model X/Model 3/Model Y is now in Transport Mode. Cybertruck/Model S/Model X/Model 3/Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) for short distances or winched (for example, onto a flatbed truck).

For more information on Transport Mode, see [Activate Transport Mode on page 913](#)/[Activate Transport Mode on page 922](#)/[Activate Transport Mode on page 1447](#).

NOTE: In Transport mode, Cybertruck/Model S/Model X/Model 3/Model Y does not shift into a drive mode. You must first cancel Transport mode by touching **Transport Mode** again. Transport mode also cancels if you use the touchscreen or drive mode selector on the center console/overhead console to shift into Park or if you manually apply the parking brake by touching **Controls** > **Safety** > **Parking Brake**.



Steering Wheel/Steering Yoke (or Steering Wheel)

Adjusting the Steering Wheel/Steering Yoke (or Steering Wheel) Position

To adjust the steering wheel/steering yoke (or steering wheel), touch **Controls** and touch the **Steering** icon.



Use the left scroll button on the steering wheel/steering yoke (or steering wheel) to move the steering wheel/steering yoke (or steering wheel) to the desired position:

- To adjust the height/tilt angle of the steering wheel/steering yoke (or steering wheel), roll the left scroll button up or down.
- To move the steering wheel/steering yoke (or steering wheel) closer to you, or further away from you, press the left scroll button to the left or right.

You can also customize what you want the left scroll wheel button to control, such as Climate or Dashcam status.

⚠ WARNING: Do not make steering wheel/steering yoke (or steering wheel) adjustments while driving.

Overview of Buttons

Cybertruck/Model S/Model X/Model 3/Model Y features stalkless driving in which all controls you need when driving are accessible on the steering wheel/steering yoke (or steering wheel).



Left buttons:

1. Right turn signal (see [Turn Signals on page 1231](#))
2. High beam headlights* (see [Headlights on page 1229](#))
3. Multi-functional button (non-functional)
4. Left scroll button (see [Left Scroll Button on page 1222](#))
5. Left turn signal (see [Turn Signals on page 1231](#))



Right Buttons:

1. Cameras (see [Cameras on page 1136](#))
2. Wiper* (see [Windshield Wiper and Washers on page 1233](#))
3. Right scroll button (see [Right Scroll Button on page 1224](#))
4. Voice commands (see [Voice Commands on page 97](#))
5. Cruise control indicator (non-functional)

*The behaviors associated with the buttons for headlight high beams ([Headlights on page 1229](#)) and wiper ([Windshield Wiper and Washers on page 1233](#)) vary depending on whether you press or press and hold the button.

NOTE: If you are experiencing issues with the touchscreen (such as a missing feed from the front- or rear-facing camera), hold down both the left and right scroll buttons simultaneously while CybertruckModel SModel XModel 3Model Y is parked to restart it (see [Restarting the Touchscreen on page 1115](#)).

NOTE: Some controls on the steering wheel are capacitive buttons, meaning they do not have a physical switch, but respond to touch and provide haptic feedback (as a vibration). Do not rest your fingers on them unless intended. Unintentionally touching these buttons can enable or disable them. If a button is mistakenly enabled, remove your fingers from the switches for several seconds to resume normal operation.

Left Scroll Button

Use the left scroll button to adjust the position of the mirrors and steering wheelsteering yoke (or steering wheel). The left scroll button also controls the wiper and media player.



- When using media player, push the button to the left to go back to the previous song or station or push it to the right to skip to the next song or station.
- Roll the scroll button up to increase and down to decrease the volume.

NOTE: The scroll button adjusts the volume for media and phone calls based on what is currently in use. As you adjust the volume, the touchscreen displays the volume level and whether you are adjusting volume for media or phone.
- To mute the media volume, or to pause/play an audio file, push the scroll button.
- When adjusting mirrors, push the button to the left/right to move the associated mirror inward/outward and up/down to position the mirror upward or downward (see [Mirrors on page 1226](#)).
- When adjusting the position of the steering wheelsteering yoke (or steering wheel), roll the button up/down to adjust the tilt/angle and press the button to the left or right to move the steering wheelsteering yoke (or steering wheel) closer or further (see [Adjusting the Steering WheelSteering Yoke \(or Steering Wheel\) Position on page 1220](#)).
- When a menu displays on the touchscreen from which you can choose options (for example, the wiper controls), use the scroll button to choose an option (up, down, left, or right) and push the button to confirm your choice.
- For incoming calls, press the scroll button to answer. During the call, press the scroll button again to hang up.
- Hold down the left scroll button to access the default action set or configure a new default action. Follow the directions on the touchscreen.

Left Scroll Button Customization

Choose from a list to create quick access to a function by touching **Controls > Display > Scroll Wheel Function**. Selecting a function sets the default action when you long press the left scroll button, unless you select **Ask each time**.

Right Scroll Button

Use the right scroll button to control Autopilot features such as Autosteer and Traffic-Aware Cruise Control:



- When driving, push and release the button to engage Autosteer or Traffic-Aware Cruise Control (see [Autopilot Features on page 553](#)). If **Autopilot Activation** is set to **Double Click** (touch **Controls > Autopilot Activation > Autosteer Activation**), a single push engages Traffic-Aware Cruise Control only and you must push and release the button twice to engage Autosteer. Once Autosteer or Traffic-Aware Cruise Control is active, pushing the button cancels it.
- When Traffic-Aware Cruise Control or Autosteer is engaged, roll the scroll button up to increase or down to decrease the set speed, or push the button to the left or right to adjust the distance you want to maintain from a vehicle traveling ahead of you (see [While Using Autopilot on page 566](#)).

Heated Steering Wheel/Steering Yoke (or Steering Wheel)

To warm up the steering wheel/steering yoke (or steering wheel), touch the temperature icon on the touchscreen to display climate controls (see [Operating Climate Controls on page 1338](#)), then touch the steering wheel/steering yoke (or steering wheel) icon. When turned on, radiant heat keeps the steering wheel/steering yoke (or steering wheel) at a comfortable temperature.

To turn the heated steering wheel/steering yoke (or steering wheel) off, use the climate controls or the Tesla mobile app (see [Mobile App on page 355](#)).

Horn

To sound the horn, press and hold the center pad on the steering wheel/steering yoke (or steering wheel).



Steer-by-Wire

CybertruckModel SModel XModel 3Model Y uses steer-by-wire technology, which means that there is no mechanical connection between the steering wheel and the wheels. Instead, sensors in the steering column communicate electronically with the steering racks. As a result, steering CybertruckModel SModel XModel 3Model Y feels more responsive and requires less effort from the driver.

CybertruckModel SModel XModel 3Model Y also has four-wheel steering. When the driver turns the steering wheel, all four wheels respond. This gives CybertruckModel SModel XModel 3Model Y a tighter turning radius.

Emergency Operation

The steer-by-wire system is controlled by multiple redundant sensors and actuators. In the unlikely case that CybertruckModel SModel XModel 3Model Y detects an issue, an alert displays on the touchscreen, a chime sounds, and CybertruckModel SModel XModel 3Model Y gradually reduces drive torque while informing you to pull over.

NOTE: This alert does not mean that CybertruckModel SModel XModel 3Model Y has lost steering, or that the steer-by-wire system has failed. This alert indicates a possible issue with one of the redundant systems.

Once pulled over, you can attempt to recover the system by performing a vehicle power cycle (see [Power Cycling the Vehicle on page 375](#)). If the power cycle attempt is unsuccessful, an override is available for low-speed maneuvering to position the vehicle for transporting on a flatbed truck (see [Instructions for Transporters on page 1445](#)).



Mirrors

Adjusting Exterior Mirrors



Adjust the exterior mirrors by touching **Controls > Mirrors**. Press the left scroll button on the steering wheelsteering yoke (or steering wheel) to choose whether you are adjusting the **Left** or **Right** mirror. Then, use the left scroll button as follows to adjust the selected mirror to its desired position:

- To angle the mirror up or down, roll the left scroll button up or down.
- To angle the mirror inward or outward, press the left scroll button to the left or right.



You can save your side mirror position in your driver profile for your convenience.

Mirror Auto Tilt automatically tilts mirrors downward when backing up. To turn this feature on or off, touch **Controls > Mirrors > Mirror Auto Tilt**. To adjust the auto-tilt position, make mirror adjustments with CybertruckModel SModel XModel 3Model Y shifted into Reverse. When you shift out of Reverse, mirrors tilt back to their normal (upward) position. But now that you have adjusted them for backing up, they automatically tilt to the selected downward position whenever you shift into Reverse.

When certain environmental conditions are met, the exterior side mirrors dim automatically (for example, in low light conditions or to reduce glare when driving at night). To enable or disable this feature, touch **Controls > Mirrors > Mirror Auto Dim**.

NOTE: Both exterior mirrors have heaters that can be controlled through **Climate**.

Folding Mirrors

To manually fold and unfold exterior mirrors (for example, if parking in a narrow garage, tight space, etc.), touch **Controls > Fold/Unfold Mirrors**.

Unfold the mirrors by touching **Controls > Unfold Mirrors**. If the mirrors are still folded when you begin driving, they will automatically unfold when your speed reaches 31 mph (50 km/h). You cannot fold a mirror when driving over 31 mph (50 km/h).

To set the mirrors to fold automatically whenever you exit and lock CybertruckModel SModel XModel 3Model Y touch **Controls > Mirrors > Mirror Auto Fold**. The mirrors unfold automatically when you unlock CybertruckModel SModel XModel 3Model Y.

You can also set mirrors to fold automatically whenever you arrive at a specific location, which saves you from having to manually fold them each time you arrive at a frequented place. To set up, stop at the location you want to save (or drive at less than 3 mph (6 km/h)), and fold the mirrors. Touch **Save Location** when it appears briefly on the **Fold Mirrors** control.



If you no longer want mirrors to fold automatically, touch **Controls > Unfold Mirrors** when they fold at the saved location, then touch **Remove Location**.

When you leave the saved location, the mirrors will unfold automatically when your speed reaches 3 mph (6 km/h) or if you touch **Controls > Unfold Mirrors**.

CAUTION: Mirrors may not automatically fold if you return to a saved location and are driving faster than 3 mph (6 km/h).

NOTE: You can override the automatic folding/unfolding of mirrors at any time (for example, CybertruckModel SModel XModel 3Model Y has no power) by pushing the mirror assembly away from you to unfold, or pulling it toward you to fold.

NOTE: If you expect ice to accumulate when CybertruckModel SModel XModel 3Model Y is parked, turn off **Mirror Auto Fold**. Accumulation of ice can prevent exterior side mirrors from folding or unfolding. See [Cold Weather Best Practices on page 693](#) for information on how to ensure your mirrors function properly in cold weather.

You can integrate auto-folding mirrors with MyQ (see [Smart Garage on page 365](#)).

Rear View Mirror



Adjust the rear view mirror manually.

Vanity Mirrors

To expose and illuminate the vanity mirror, fold the sun visor downwards, then use the tab to lower the mirror cover. The tab can stick to the lower portion of the visor to keep it in place. After closing the mirror cover, the light turns off. See [Sun Visors and Vanity Mirrors on page 1151](#) for more information.

Lights

Overview

CybertruckModel SModel XModel 3Model Y has convenience lights that automatically turn on and off based on what you are doing. For example, interior lights, marker lights, signature lights, door handle lights, and puddle lights turn on when you unlock CybertruckModel SModel XModel 3Model Y, when you open a door, and when you shift into Park. They turn off automatically after a minute or two when you shift out of Park, or when you lock your vehicle.

Touch **Controls > Lights** to control the lights.

NOTE: You can also access an abbreviated lights menu while driving by touching the headlights button on the steering wheelsteering yoke (or steering wheel). A lights menu displays on the touchscreen, providing quick access to headlight controls.

- **Headlights:** Exterior lights (headlights, tail lights, signature lights, side marker lights, parking lights, and license plate lights) are set to **Auto** each time you start CybertruckModel SModel XModel 3Model Y. When set to **Auto**, exterior lights automatically turn on when driving in low lighting conditions. If you change to a different setting, lights always revert to **Auto** on your next drive.

Touch one of these options to change the exterior light setting until adjusted again or the next time you drive:

- **Off:** Exterior lights turn off. When driving, daytime running lights may remain on based on regulations in various market regions.
 - **Parking:** Parking lights, side marker lights, the tail light bar, and license plate lights turn on.
 - **On:** Low beam headlights, side marker lights, parking lights, signature lights, and license plate lights turn on.
- **Dome Lights:** Turn the interior dome (map) lights on or off. If set to **Auto** all interior dome lights turn on when you unlock your vehicle, open a door upon exiting, or shift into Park.

CybertruckModel SModel XModel 3Model Y is also equipped with a rear dome light on each side of the rear seats, located next to the coat hangers (see [Coat Hangers on page 1183](#)).

NOTE: To manually turn an individual dome light on or off, press the lens. If you leave a dome light on, it turns off when CybertruckModel SModel XModel 3Model Y powers off. If the vehicle was already powered off when you manually turned the light on, it turns off after 60 minutes.

- **Ambient Lights:** When enabled, interior ambient lights turn on whenever the headlights are on.
- **Accent Lights:** Choose **Off**, **On**, or **Night Only**. When set to **Night Only**, interior accent lights will automatically illuminate when dim conditions are detected outside your vehicle, or when convenience lights are on. Customize the brightness and color of the lights to your preference.
- **Footwell Lights:** When headlights are enabled, footwell lights illuminate the front and rear footwells. Footwell lights will also enable when you unlock your vehicle, open a door upon entry/exit, or shift into Park.
- **Bed Lights:** The lights running on the sides of the truck cargo bed can be set to **Off**, **On**, or **Auto**. When set to **Auto**, the bed lights turn on when CybertruckModel SModel XModel 3Model Y is parked and the tonneau cover or tailgate is open. You can also toggle the tailgate button to turn the bed lights on or off for your convenience. See [Cargo Bed on page 1188](#) for more information.



CAUTION: Ensure the headlights and tail lights are **On** during low visibility conditions (for example, when it is dark, foggy, snowy, or the road is wet, etc.). The tail lights are off while daytime running lights are on. Failure to do so can cause damage or serious injury.

Headlights

The following indicator lights are visible on the touchscreen to show the status of the headlights. If none of these indicator lights are on, the headlights are off.



Driving

Low beam headlights are on.



The headlights are on. Illuminates when headlights are on but the **Auto High Beam** setting is turned off or if the **Auto High Beam** setting is turned on but is temporarily unavailable.



High beams are currently turned on, and **Auto High Beam** is ready to turn off the high beams if light is detected in front of CybertruckModel SModel XModel 3Model Y.



High beams are temporarily turned off because **Auto High Beam** is operating and light is detected in front of CybertruckModel SModel XModel 3Model Y. When light is no longer detected, high beam headlights automatically turn back on.



Use the headlights button on the left side of the steering wheelsteering yoke (or steering wheel) to control the headlights:

- Press and quickly release to flash headlights.
- Press and hold to turn on headlights - the touchscreen displays a brief timer and you must hold for the duration of the timer to latch the headlights to the on position. When headlights are on, press the button a second time to turn them off.


When you touch or press the headlights button on the left side of the steering wheelsteering yoke (or steering wheel), the touchscreen displays an abbreviated lights menu to provide quick access to control headlights, fog lights (if equipped), and the **Auto High Beam** setting. Use the touchscreen to choose options from this menu.



Auto High Beam

The headlights can automatically switch to low beam when there is light detected in front of CybertruckModel SModel XModel 3Model Y (for example, from an oncoming vehicle). To turn this feature on or off, touch **Controls > Lights > Auto High Beam**. Your chosen setting is retained until you manually change it.

NOTE: Auto High Beam is automatically enabled when Autosteer is engaged. To switch to low beam headlights, press the headlights button on the steering wheelsteering yoke (or steering wheel). **Auto High Beam** is re-enabled every time Autosteer is activated.

 **WARNING: Auto High Beam** is a convenience only feature and is subject to limitations. It is the driver's responsibility to make sure that headlights are always appropriately adjusted for weather conditions and driving circumstances.

Turn Signals

To engage a turn signal, press the corresponding arrow button on the left side of the steering wheelsteering yoke (or steering wheel). A turn signal cancels based on the angle of the steering wheelsteering yoke (or steering wheel) (for example, you finish making a turn). You can also cancel a turn signal by pressing the turn signal button a second time.

If **Controls > Lights > Automatic Turn Signals** is set to **Auto Cancel**, turn signals cancel automatically when CybertruckModel SModel XModel 3Model Y detects completion of a maneuver such as a merge, lane change, or a fork in the roadway. You can override automatic cancellation at any time (for example, you want the turn signal to remain on because you are making more than one lane change). To override, engage the turn signal by pressing and momentarily holding the turn signal button (instead of just pressing). Then, when the first maneuver is complete, the turn signal remains on. If **Automatic Turn Signals** is set to **Off**, you must cancel the turn signal manually by pressing the turn signal button after maneuvers such as a merge, lane change, or fork in the roadway.



When a turn signal is operating, the corresponding indicator lights up on the touchscreen and there is a clicking sound.



Hazard Warning Flashers

To turn on the hazard warning flashers, press the button on the drive mode selector on the overhead console. All turn signals flash. Press again to turn off.



If a severe crash is detected by your vehicle, the hazard lights will automatically turn on and flash quickly to increase visibility. Pressing the hazard lights once will return the lights to its normal cadence. Pressing a second time turns all hazard lights off.

NOTE: Hazard warning flashers operate even without a key nearby.

Headlights After Exit

When you stop driving and park CybertruckModel SModel XModel 3Model Y in low lighting conditions, exterior lights temporarily remain illuminated. They automatically turn off after one minute or when you lock CybertruckModel SModel XModel 3Model Y, whichever comes first.

To turn this feature on and off, touch **Controls > Lights > Headlights After Exit**. When **Headlights After Exit** is off, the headlights turn off immediately when you engage Park and open a door.

Condensation in Headlights or Tail lights

Due to weather changes, humidity levels, or recent exposure to water (such as a car wash), condensation may occasionally accumulate in your vehicle's headlights or tail lights. This is normal— as the weather gets warmer and humidity decreases, condensation often disappears on its own. If you notice water buildup within the exterior lenses, or if the condensation affects the visibility of the exterior lights, use the mobile app to schedule a service appointment.

Windshield Wiper and Washers

You can access wiper settings by touching the wiper button on the steering wheelsteering yoke (or steering wheel) or by accessing the app launcher and touching **Wiper**.

You can also drag the **Wiper** control to your **My Apps** area for easier access.

Press and quickly release the wiper button on the steering wheelsteering yoke (or steering wheel) to wipe the windshield. If the wiper is already operating at a wiper setting and is not set to **Auto**, pressing the wiper button cycles through speeds. Wiper speeds cycle as follows: **I** > **II** > **III** > **IIII** > **III** > **II** > **I**.

Press and hold the wiper button to spray washer fluid onto the windshield. After releasing the button, the wipers perform two additional wipes then, depending on vehicle and environmental conditions, a third wipe a few seconds later. You can also press and hold the wiper button for a continuous spray of washer fluid—the wipers perform the wipes after you release.



Whenever you press the wiper button on the steering wheel, the touchscreen displays the wiper menu, allowing you to adjust wiper settings. Roll the left scroll button on the steering wheelsteering yoke (or steering wheel) up or down to choose your desired setting.

- Turn the wiper off.
- Choose how you want the wiper to operate:
 - **I** - Intermittent, slow.
 - **II** - Intermittent, fast.
 - **III** - Continuous, slow.
 - **IIII** - Continuous, fast.
 - **Auto** - CybertruckModel SModel XModel 3Model Y detects precipitation and adjusts the wiping speed and intensity.

NOTE: Turning on Autopilot features automatically sets wipers to **Auto**.

NOTE: The Auto setting is currently in BETA. If uncertain about using the Auto setting while in the BETA phase, Tesla recommends operating the wipers manually, as necessary.



Choose to heat the wiper blade by touching the windshield icon on the touchscreen.

While driving in the rain, the wiper blade may pause in the horizontal position for approximately 30 seconds before continuing to wipe the windshield. The blade may also move slightly based on vehicle speed to make CybertruckModel SModel XModel 3Model Y more aerodynamic.

Periodically check and clean the edge of the wiper blade. If a blade is damaged, replace it immediately. For details on checking and replacing the wiper blade, see [Windshield Wiper Blade, Jets and Fluid on page 1416](#).

NOTE: If you choose **Auto** and the ability to detect liquid on the windshield becomes unavailable, the wiper setting reverts to the most recently used manual setting. If a manual setting cannot be determined, the wiper turns off.


NOTE: You can also adjust the windshield wiper speed and frequency using voice commands (see [Voice Commands on page 97](#)).

⚠ CAUTION: To avoid the risk of damaging the wiper, do not leave the wiper set to **Auto** when washing CybertruckModel SModel XModel 3Model Y.

⚠ CAUTION: Remove ice from the windshield before turning the wiper on. Ice has sharp edges that can damage the rubber on the wiper blade. In harsh climates, ensure that the wiper blade is not frozen or adhered to the windshield.

Braking and Stopping

Braking Systems

 **WARNING:** Properly functioning braking systems are critical to ensure safety. If you experience a problem with the brake pedal, brake calipers, or any component of a CybertruckModel SModel XModel 3Model Y braking system, contact Tesla immediately.

CybertruckModel SModel XModel 3Model Y has an anti-lock braking system (ABS) that prevents the wheels from locking when you apply brake pressure. This improves steering control during heavy braking in most road conditions because ABS constantly monitors the speed of each wheel and varies the brake pressure according to the grip available.

The alteration of brake pressure can be felt as a pulsing sensation through the brake pedal. This demonstrates that the ABS is operating and is not a cause for concern. Keep firm and steady pressure on the brake pedal while experiencing the pulsing.

ABS

USA:

The ABS indicator briefly flashes amber on the touchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

Canada:



The ABS indicator briefly flashes amber on the touchscreen when you first start CybertruckModel SModel XModel 3Model Y. If this indicator lights up at any other time, an ABS fault has occurred and the ABS is not operating. Contact Tesla. The braking system remains fully operational and is not affected by an ABS failure. However, braking distances may increase. Drive cautiously and avoid heavy braking.

BRAKE

USA:

If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

Canada:



If the touchscreen displays this red brake indicator at any time other than briefly when you first start CybertruckModel SModel XModel 3Model Y, a brake system fault is detected, or the level of the brake fluid is low. Contact Tesla immediately. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so.

BRAKE

USA:

The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 1236](#)).

Canada:



The touchscreen displays this amber brake indicator if a brake booster fault is detected. Apply steady pressure and keep the brake pedal firmly pressed to stop the vehicle when safe to do so. Hydraulic Boost Compensation will be active (see [Hydraulic Boost Compensation on page 1236](#)).





Emergency Braking

In an emergency, fully press the brake pedal and maintain firm pressure, even on low traction surfaces. The ABS varies the braking pressure to each wheel depending on the amount of traction available. This prevents wheels from locking and ensures that you stop as safely as possible.

If an alternative method is needed to bring the vehicle to a stop, press and hold the Park button on the touchscreen's drive mode strip to apply the brakes and remove drive torque while the button is held. Touch **Controls** or press the brake pedal to display the drive mode strip.



Driving

-  **WARNING:** Do not pump the brake pedal. Doing so interrupts operation of the ABS and can increase braking distance.
-  **WARNING:** Always maintain a safe distance from the vehicle in front of you and be aware of hazardous driving conditions. While the ABS can improve stopping distance, it cannot overcome the laws of physics. It also does not prevent the danger of hydroplaning (where a layer of water prevents direct contact between the tires and the road).
-  **CAUTION:** Automatic Emergency Braking (see [Automatic Emergency Braking on page 648](#)) may intervene to automatically brake in situations where a collision is considered imminent. Automatic Emergency Braking is not designed to prevent a collision. It is designed to minimize the impact of a frontal collision by attempting to reduce your driving speed. Depending on Automatic Emergency Braking to avoid a collision can result in serious injury or death.
-  **CAUTION:** In emergency situations, if the brakes are not functioning properly, press and hold the Park button on the overhead console or touchscreen to bring CybertruckModel SModel XModel 3Model Y to a stop. Do not use this method to stop the vehicle unless absolutely necessary.

Brake Disc Wiping


When cold and wet weather is detected, brake disc wiping repeatedly applies an imperceptible amount of brake force to remove water from the surface of the brake discs.

Hydraulic Boost Compensation

CybertruckModel SModel XModel 3Model Y is equipped with a brake booster that activates the brakes when the brake pedal is pressed. Hydraulic boost compensation provides mechanical assistance if the brake booster fails. If a brake booster failure is detected, the brake pedal feels stiffer to press and you may hear a sound when you press the brake pedal. To stop CybertruckModel SModel XModel 3Model Y, apply steady force to the brake pedal without releasing or pumping. Drive cautiously and maintain a safe distance from other road users—brake pedal responsiveness and braking performance may be degraded.

Hydraulic Fade Compensation

Hydraulic fade compensation assists in monitoring brake system pressure and ABS activity for instances of reduced brake performance. If reduced brake performance is detected (for example, as a result of brake fade, or cold or wet conditions), you may hear a sound, feel the brake pedal pull away from your foot, and notice a strong increase in braking. Brake as you normally would and continue to press the brake pedal without releasing or pumping the brakes.

-  **WARNING:** Always maintain a safe driving distance from the vehicle in front of you and exercise caution when driving conditions are hazardous. Brake disc wiping and hydraulic fade compensation are NOT substitutes for adequately applying the brakes.

Regenerative Braking

Whenever CybertruckModel SModel XModel 3Model Y is moving and your foot is off the accelerator, regenerative braking slows down the vehicle and feeds any surplus power back to the Battery. By anticipating your stops and reducing or relieving pressure from the accelerator pedal to slow down, you can take advantage of regenerative braking to increase driving range.

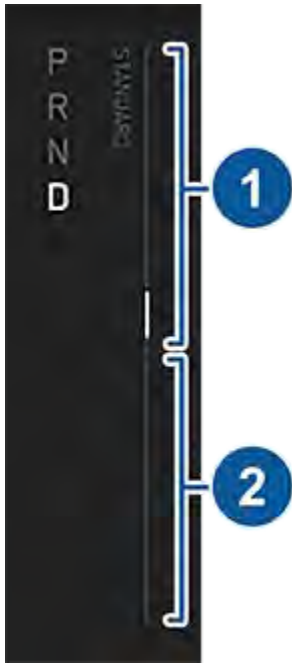
Vehicle deceleration due to regenerative braking may vary depending on the current state of the Battery. For example, regenerative braking may be limited if the Battery is cold or is already fully charged.

To experience the same amount of deceleration whenever you release the accelerator pedal, regardless of the state of the Battery, you can choose to have the regular braking system automatically engage whenever regenerative braking is limited. Touch **Controls > Dynamics > Apply Brakes When Regenerative Braking is Limited**. When enabled, the brake pedal may move or feel stiffer when pressed. This is expected and does not change your ability to slow down CybertruckModel SModel XModel 3Model Y.

NOTE: **Apply Brakes When Regenerative Braking is Limited** may not operate if the brakes are extremely hot.

NOTE: **Apply Brakes When Regenerative Braking is Limited** is not available when **Trailer Mode** is engaged (see [Towing a Trailer on page 1258](#)).


The power meter (a thin vertical line next to the drive mode strip) displays real-time power usage:



1. Shows power being output by the Battery, such as that used to accelerate the vehicle or to cool the cabin. When you press the accelerator pedal, the top half of the power meter fills with black (or white if the display is dark).
2. Represents power generated from regenerative braking, or power that captured from slowing down the vehicle. Power being fed back to the Battery displays in green whereas power used by the regular braking system displays in gray.

NOTE: Installing winter tires with aggressive compound and tread design may result in temporarily-reduced regenerative braking power. However, your vehicle is designed to continuously recalibrate itself, and after changing tires it will increasingly restore regenerative braking power after some straight-line accelerations. For most drivers this occurs after a short period of normal driving, but drivers who normally accelerate lightly may need to use slightly harder accelerations while the recalibration is in progress.

NOTE: If regenerative braking is aggressively slowing CybertruckModel SModel XModel 3Model Y (such as when your foot is completely off the accelerator pedal at highway speeds), the exterior brake lights turn on to alert others that you are slowing down.

 **WARNING:** In snowy or icy conditions, CybertruckModel SModel XModel 3Model Y may experience loss of traction during regenerative braking.

Vehicle Hold

When CybertruckModel SModel XModel 3Model Y is stopped, Vehicle Hold can continue to apply the brakes even after you remove your foot from the brake pedal and is automatically enabled any time the vehicle comes to a complete stop.



This indicator displays on the touchscreen whenever Vehicle Hold is actively holding CybertruckModel SModel XModel 3Model Y while stopped.

To disengage Vehicle Hold, press the accelerator or brake pedal, or shift into Neutral.

NOTE: After actively braking CybertruckModel SModel XModel 3Model Y for approximately ten minutes, CybertruckModel SModel XModel 3Model Y shifts into Park and Vehicle Hold cancels. The parking brake is still applied. CybertruckModel SModel XModel 3Model Y also shifts into Park if it detects that the driver has left the vehicle.

Parking Brake

The parking brake is automatically engaged when in Park, and automatically disengages when shifted out of Park.

To manually engage the parking brake, touch **Controls > Safety > Parking Brake**. Follow the onscreen instructions. Manually disengage the parking brake by selecting **Parking Brake** again.

PARK

When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

USA:



When you manually apply the parking brake using the touchscreen, the red parking brake indicator lights up on the touchscreen.

Canada:

PARK

If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.


USA:





If the parking brake experiences an electrical issue, the amber parking brake indicator lights up and a fault message displays on the touchscreen.

Canada:

NOTE: The parking brake operates on the rear wheels only, and is independent of the pedal-operated brake system.

 **CAUTION:** In the unlikely event that CybertruckModel SModel XModel 3Model Y loses electrical power, you cannot access the touchscreen and are therefore unable to release the parking brake without first jump starting (see [Jump Starting on page 1455](#)).


 **WARNING:** In snowy or icy conditions the rear wheels may not have sufficient traction to prevent CybertruckModel SModel XModel 3Model Y from sliding down a slope, particularly if not using winter tires. Avoid parking on hills in snowy or icy conditions. You are always responsible for parking safely.

 **WARNING:** Your CybertruckModel SModel XModel 3Model Y may display an alert if the road is too steep to safely park, or if the parking brakes are not properly engaged. These alerts are for guidance purposes only and are not a substitute for the driver's judgment of safe parking conditions, including specific road or weather conditions. Do not depend on these alerts to determine whether or not it is safe to park at any location. You are always responsible for parking safely.

Brake Wear

CybertruckModel SModel XModel 3Model Y brake pads are equipped with wear indicators. A wear indicator is a thin metal strip attached to the brake pad that squeals as it rubs against the rotor when the pad wears down. This squealing sound indicates that the brake pads have reached the end of their service life and require replacement.

Brakes must be periodically inspected visually by removing the tire and wheel. For detailed specifications and service limits for rotors and brake pads, see [Subsystems on page 1443](#). Additionally, Tesla recommends cleaning and lubricating the brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter months.

 **WARNING:** Neglecting to replace worn brake pads damages the braking system and can result in a braking hazard.

Traction Control

How It Works

The traction control system constantly monitors the speed of the front and rear wheels. If CybertruckModel SModel XModel 3Model Y experiences a loss of traction, your vehicle minimizes wheel spin by controlling brake pressure and motor power. By default, the traction control system is on. Under normal conditions, it should remain on to ensure maximum safety.

NOTE: When CybertruckModel SModel XModel 3Model Y is in an Off-Road Drive Mode, the traction control system may be disabled or operate differently. For more information about customizing the traction control system while driving off road, see [Off-Road Driving on page 1249](#).



This yellow indicator flashes on the touchscreen whenever the traction control system is actively controlling brake pressure and motor power to minimize wheel spin. If the indicator stays on, a fault is detected with the traction control system. Use the mobile app to schedule a service appointment.



WARNING: Traction control cannot prevent collisions caused by driving dangerously or turning too sharply at high speeds.

Slippery Surfaces

Your vehicle can distribute traction evenly across all tires to provide more traction and stability during slippery conditions, such as rain, snow, or ice. To enable, go to **Controls > Dynamics > Slippery Surface**.


NOTE: Even when this setting is Off, Cybertruck continuously detects characteristics of the current driving surface and automatically adapts Traction Control.

Suspension

CybertruckModel SModel XModel 3Model Y is equipped with adaptive air suspension that offers superior ride quality, balances comfort with range and performance, and maintains a level height between the front and rear axles.

You can manually adjust the ride height to suit your circumstances. For example, you can raise CybertruckModel SModel XModel 3Model Y when you need extra ground clearance (such as when driving on a steep driveway or ramp, in deep snow, over large speed bumps, parking curbs, etc.) or temporarily lower CybertruckModel SModel XModel 3Model Y when you need extra space above the vehicle (such as in a parking garage) or to increase handling and range.

NOTE: When CybertruckModel SModel XModel 3Model Y starts, you may hear the sound of the compressor as the air suspension system's reservoir fills with air.

 **CAUTION:** Before adjusting the ride height, ensure CybertruckModel SModel XModel 3Model Y is clear of all obstacles, above and below.

You can adjust the ride height by touching **Controls**. The available ride height settings depend on your driving speed and other conditions, such as the current drive mode. You can also adjust the ride height by touching **Ride Height** on the exterior view of CybertruckModel SModel XModel 3Model Y in the vehicle status area of the touchscreen when CybertruckModel SModel XModel 3Model Y is parked.

NOTE: When you change the ride height from **Controls**, it will automatically lower or raise to the preferred ride height again once your driving speed exceeds 25 mph (40 km/h).



If a fault is detected that reduces the performance of the adaptive air suspension system, a yellow indicator lights up on the touchscreen. If the problem persists, use the mobile app to schedule a service appointment.



If a fault is detected that disables the adaptive air suspension system, a red indicator lights up on the touchscreen. Use the mobile app to schedule a service appointment.

Ride Height Settings - On-Road

The following ride height settings are meant for day-to-day driving when CybertruckModel SModel XModel 3Model Y is in an on-road drive mode. For more information on customizing the preferred ride height, see [On-Road Modes on page 1242](#).

NOTE: Each ride height is shown in relation to **Medium**, which is considered to be 0 in. (0 mm).

Setting	Change in Height	Description
High	2.4 in. (6 cm) above Medium	When the ride height is set to High , it automatically returns to the preferred ride height* after driving approximately 100 ft. (30 meters) or when your driving speed reaches 25 mph (40 km/h).
Low	1.6 in. (4 cm) below Medium	When the ride height is set to Low , it automatically returns to the preferred ride height* after driving approximately 100 ft. (30 meters) or when your driving speed reaches 25 mph (40 km/h).
Entry	2.2 in. (5.5 cm) below Medium	When the ride height is set to Entry , it automatically returns to the preferred ride height* once your driving speed exceeds 10 mph (16 km/h). When Auto Lower is enabled, Cybertruck lowers to the Entry setting when in Park to make it easier to enter or exit the vehicle (see Auto Lower on page 1241).

Setting	Change in Height	Description
* To change the preferred ride height, touch Controls > Dynamics > Preferred Ride Height . For more information, see On-Road Modes on page 1242 .		

Ride Height Settings - Off-Road

The following ride height settings are available when CybertruckModel SModel XModel 3Model Y is in an off-road drive mode. For more information about driving off-road, see [Off-Road Driving on page 1249](#).


NOTE: Each ride height is shown in relation to **Medium**, which is considered to be 0 in. (0 mm).

Setting	Change in Height	Description
Extract	5.9 in. (15 cm) above Medium	Extract is the maximum ride height, designed for use when CybertruckModel SModel XModel 3Model Y is stuck on an underbody obstacle. This is only available in certain off-road modes. When the ride height is set to Extract , vehicle speed is limited to 10 mph (16 km/h), and torque may be limited. The ride height automatically resets to Very High once your driving speed exceeds 10 mph (16 km/h).
Very High	3.9 in. (10 cm) above Medium	Very High increases ground clearance and improves approach, breakover, and departure angles while off-road driving. When the ride height is set to Very High , vehicle speed is limited to 25 mph (40 km/h). The ride height automatically resets to High when your driving speed exceeds 25 mph (40 km/h).
High	2.4 in. (6 cm) above Medium	High increases ground clearance to suit general off-road driving at both low and high speeds.

Auto Lower

To make it easier to get into CybertruckModel SModel XModel 3Model Y, enable **Auto Lower (Controls > Dynamics > Auto Lower)**. Once enabled, your vehicle automatically adjusts to the **Entry** ride height whenever your vehicle shifts into Park.

The suspension automatically raises back to your preferred ride height when you resume driving.

 **CAUTION:** When **Auto Lower** is enabled and you are parking CybertruckModel SModel XModel 3Model Y, ensure that there are no obstacles underneath the vehicle that may contact the underbody when the suspension lowers.

NOTE: **Auto Lower** is not available while in Off-Road Mode.

NOTE: You can also make it easier to enter and exit CybertruckModel SModel XModel 3Model Y by enabling Easy Entry. When Easy Entry is enabled, the steering wheelsteering yoke (or steering wheel) and driver's seat adjust automatically when the vehicle is in Park to allow more room for entering or exiting the vehicle (see [Easy Entry on page 516](#)).

Self-Leveling

To prevent damage when jacking or lifting the vehicle, you must activate **Jack Mode** to disable self-leveling. For more details, see [Jack Mode on page 800](#).

Auto-Raising Locations

Whenever you raise the suspension, your vehicle saves the suspension setting based on the location. By saving the location, you do not need to manually raise the suspension every time you arrive at a frequently-used location where you have previously raised the suspension. When you return to the saved location, CybertruckModel SModel XModel 3Model Y raises the suspension and the touchscreen displays a message indicating that the suspension is adjusting.

When returning to a saved location and driving faster than the suspension settings allow, the suspension does not adjust until the vehicle slows down. For example, if you set the suspension to always raise on a particular street to account for speed bumps, but you are traveling at more than 25 mph (40 km/h) when you reach that location, the ride height is not raised until your speed falls below 25 mph (40 km/h).

If CybertruckModel SModel XModel 3Model Y reaches a saved location and the existing suspension setting is already higher than the level that has been saved for that location, the ride height is not adjusted. After leaving a saved location, the suspension automatically lowers to the preferred ride height. However, it may not lower until your vehicle meets the speed and distance threshold at which the suspension lowers.

NOTE: CybertruckModel SModel XModel 3Model Y may not raise the suspension in a saved location where connectivity is poor (for example, in an underground parking garage).

To remove an auto-raising location

If no longer want the suspension to automatically raise at a location, touch to deselect **Always raise at this location** in the popup that appears when you arrive at a saved location.

On-Road Modes

To choose how CybertruckModel SModel XModel 3Model Y accelerates and handles for day-to-day driving on public roads, touch **Controls > Dynamics**.


Choose between three Drive Modes. **Comfort** and **Sport** automatically set the **Acceleration**, **Ride & Handling**, and **Preferred Ride Height** to balance ride comfort, handling, and range. **Custom** allows you to customize these options as you see fit.

To access additional performance and acceleration, select **Beast** (if equipped) and follow the on-screen prompts.

In addition, you can choose to enable **Auto Shift out of Park** (see [Shifting on page 405](#)) or **Auto Lower** (see [Suspension on page 1240](#)).

Customization Options

Setting	Options	Description
Acceleration	Chill	Limits acceleration for a smooth and gentle ride. When Chill is selected, Chill displays on the touchscreen above the driving speed.
	Standard	Provides the normal level of acceleration.
Ride & Handling	Relaxed	Prioritizes comfort over dynamic handling response. CybertruckModel SModel XModel 3Model Y will feel smoother and more comfortable, especially on rough or uneven roads.
	Focused	Provides higher damping for more dynamic driving. CybertruckModel SModel XModel 3Model Y will feel more responsive and connected to the road.
Preferred Ride Height	Lower	Sets the Preferred Ride Height to Lower . The ride height remains at Low on and off the highway by default, optimizing handling and range (see Suspension on page 1240).
	Higher	Sets the Preferred Ride Height to Higher . When set to Higher , the ride height automatically adjusts between Medium and Low to balance ride comfort with handling and range. On highways or while driving at highway speeds, ride height adjusts to Low (see Suspension on page 1240).

 **CAUTION:** Do not use off-road locking differentials while driving on high-traction surfaces, such as asphalt. Using locking differentials in inappropriate situations can cause significant damage to the vehicle. Damage to the vehicle due to improper use of locking differentials is not covered by the warranty.

Driver Profiles

When you first adjust the driver's seat, steering wheelsteering yoke (or steering wheel) position, or exterior side mirrors, the touchscreen prompts you to create a driver profile to save these adjustments. Your profile also saves various preferences you make while customizing CybertruckModel SModel XModel 3Model Y.

To save your profile settings to the cloud and access them across multiple Tesla vehicles, set up a Tesla Profile (see [Using Tesla Profiles on page 514](#)).

To save your profile settings to the cloud and access them across multiple Tesla vehicles, set up a Tesla Profile (see [Using Tesla Profiles on page 515](#)).



To add a new driver profile, touch the driver profile icon at the top of the touchscreen in **Controls**. Then touch **Driver Profile Settings > Add New Driver**, type the driver's name and touch **Create Profile**. Follow the onscreen instructions to save mirror and steering wheel position to the driver profile to save mirror and steering wheel position to the driver profile.

Check the **Use Easy Entry** checkbox if you want to save (or use existing) **Easy Entry** settings in which the driver's seat and the steering wheelsteering yoke (or steering wheel) are automatically adjusted to make it easy to enter and exit CybertruckModel SModel XModel 3Model Y.

If you change the position of the driver's seat, steering wheelsteering yoke (or steering wheel), or exterior side mirrors after you have saved or chosen a driver profile, the touchscreen prompts you to **Save** the new position or **Restore** the previously saved position (other settings are automatically saved). To change a setting without saving or restoring, just ignore the prompt.

To delete a driver profile, touch the driver profile icon at the top of the touchscreen in **Controls**, touch **Driver Profile Settings** and select the driver profile you want to remove. Once selected, **Delete** the driver profile.

NOTE: Valet mode is a built-in driver profile that limits speed and restricts access to some CybertruckModel SModel XModel 3Model Y features (see [Valet Mode on page 516](#)).

NOTE: Depending on date of manufacture and options selected at time of purchase, some Model S vehicles are not equipped with the driver profile feature. Also, in cases where the vehicle is equipped with driver profiles, some features may not be automatically saved and adjusted based on the driver profile (for example, mirror position).

NOTE: To stop automatic adjustments that are in process based on a driver's profile, touch **Stop** on the Driver Profile dropdown menu. Automatic adjustments also stop if you manually adjust a seat, mirror, or the steering wheelsteering yoke (or steering wheel).

Selecting Between Driver Profiles



To adjust CybertruckModel SModel XModel 3Model Y based on a driver's profile, touch the driver profile icon at the top of the touchscreen **Controls** screen **Controls** screen. Then choose the driver, and CybertruckModel SModel XModel 3Model Y is adjusted based on the settings that have been saved to the chosen driver profile. See [Using Tesla Profiles on page 514](#) to learn more about saving profile settings to the cloud for easy access across multiple Tesla vehicles. See [Using Tesla Profiles on page 515](#) to learn more about saving profile settings to the cloud for easy access across multiple Tesla vehicles.

NOTE: Your preferred Stopping Mode setting does not sync to your driver profile. For more information, see [Braking and Stopping on page 461](#).

Using Tesla Profiles

(If equipped) Driver profile settings, such as seat adjustments, temperature preferences, navigation Recents and Favorites, media settings, and data sharing preferences can be saved into a Tesla Profile that is synced to every supported vehicle under your Tesla Account. This provides convenient access to your profile settings and preferences across all your Tesla supported vehicles.

To set up your Tesla Profile, navigate to **Driver Profile Settings** and select your Tesla Account name. You can choose to set it up as a New Profile or copy the settings from an existing driver profile that you were previously using.

To set up a Tesla Profile for additional drivers, share your vehicle with them from the mobile app and navigate to **Security & Drivers > Manage Drivers > Add Driver**. Their Tesla Profile will appear in the Driver Profile settings after accepting the invitation from their Tesla Account. If you remove their access to the vehicle, it also removes their Tesla Profile. For more information on granting mobile app access, see [Granting Access to a Second Driver on page 358](#). In addition, you can change your profile picture from your Tesla Mobile App.

NOTE: Some vehicle settings are synced only between similar vehicle models. If the seat, steering, and mirror positions do not restore as expected, touch **Controls > Service > Driver Seat, Steering, & Mirrors Calibration** on the affected vehicles. If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)). If the setting for **Autopilot Activation** does not restore as expected, touch **Controls > Autopilot > Autopilot Activation** (see [Autopilot Settings on page 553](#)).

NOTE: Tesla Profiles are supported on vehicles with software versions 2022.24 or higher.

To remove your Tesla Profile from a vehicle, remove that vehicle from your Tesla account:

1. In the Tesla mobile app, touch the profile icon in the top-right corner.
2. Touch **Add/Remove Products**.
3. Touch **Remove**.
4. Select the vehicle you'd like to remove.

Using Tesla Profiles

Driver profile settings, such as seat adjustments, temperature preferences, navigation Recents and Favorites, media settings, and data sharing preferences can be saved into a Tesla Profile that is synced to every supported vehicle under your Tesla Account. This provides convenient access to your profile settings and preferences across all your Tesla supported vehicles.

To set up your Tesla Profile, navigate to **Driver Profile Settings** and select your Tesla Account name. You can choose to set it up as a New Profile or copy the settings from an existing driver profile that you were previously using.

To set up a Tesla Profile for additional drivers, share your vehicle with them from the mobile app and navigate to **Security & Drivers > Manage Drivers > Add Driver**. Their Tesla Profile will appear in the Driver Profile settings after accepting the invitation from their Tesla Account. If you remove their access to the vehicle, it also removes their Tesla Profile. For more information on granting mobile app access, see [Granting Access to a Second Driver on page 358](#). In addition, you can change your profile picture from your Tesla Mobile App.

NOTE: Some vehicle settings, such as seat, mirror, steering wheel, and air vent positions are only synced between the same vehicle models. If the seat or steering positions do not restore as expected, touch **Controls > Service > Seat & Steering Calibration** on the affected vehicles.

To remove your Tesla Profile from a vehicle, remove that vehicle from your Tesla account:

1. In the Tesla mobile app, touch the profile icon in the top-right corner.
2. Touch **Add/Remove Products**.
3. Touch **Remove**.
4. Select the vehicle you'd like to remove.

Saved Settings

A subset of the settings that you choose to customize your CybertruckModel SModel XModel 3Model Y are automatically saved to your driver's profile. Once saved, a green check mark appears next to the driver profile icon on the touchscreen. Examples of automatically saved driver profile settings are:

- Navigation, temperature, lights and display settings.
- Autopilot and driving preferences.

NOTE: The settings that are associated with driver profiles vary depending on the vehicle's date of manufacture and version of software installed.

Linking a Driver Profile to a Key Fob

You can link a driver profile to a specific key fob to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key fob is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key fob, enter CybertruckModel SModel XModel 3Model Y with the key fob and touch the driver profile icon at the top of the touchscreen. Select the driver profile you would like to link to the key fob, then touch **Link to Key Fob**.

NOTE: CybertruckModel SModel XModel 3Model Y detects only one key fob at a time. The driver profile is linked to the key fob that is detected by the vehicle at that time. Therefore, if you want to link driver profiles to multiple key fobs, ensure that only the key fob that you would like to link the driver profile to is within detection range while performing the linking procedure. Move all other key fobs outside of the detection range (at least three feet (one meter) away from CybertruckModel SModel XModel 3Model Y).

NOTE: CybertruckModel SModel XModel 3Model Y can support up to threeeight linked key fobs. However, a driver profile can only be linked to one key fob.

To remove the link between a driver profile and key fob, touch the driver profile icon at the top of the touchscreen. Select the driver profile, then touch the **X** next to **Linked to Key Fob**.

Linking a Driver Profile to a Key

You can link a driver profile to a key (or keys) to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key, first ensure you are using your desired driver profile, then touch **Controls > Locks > Keys**. You can toggle the driver icon to link or delete a key to the desired driver profile. The name of the driver profile appears under the key to show that it is linked.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to 10 driver profiles. You can link multiple keys to a driver profile, but you cannot link multiple driver profiles to a single key.

Linking a Driver Profile to a Key


You can link a driver profile to a key (or keys) to allow CybertruckModel SModel XModel 3Model Y to automatically select the correct driver profile when the linked key is detected as you approach the vehicle and open the driver's door. To link a driver profile to a key, first ensure you are using your desired driver profile, then touch **Controls > Locks > Keys**. You can toggle the driver icon to link or delete a key to the desired driver profile. The name of the driver profile appears under the key to show that it is linked.

NOTE: CybertruckModel SModel XModel 3Model Y supports up to 10 driver profiles. You can link multiple keys to a driver profile, but you cannot link multiple driver profiles to a single key.

Easy Entry

You can define an Easy Entry setting that moves the steering wheelsteering yoke (or steering wheel) and driver's seat to make it easy to enter and exit CybertruckModel SModel XModel 3Model Y. Any driver can use the Easy Entry setting by associating it with their driver profile. When the Easy Entry setting is associated with a driver profile, the steering wheelsteering yoke (or steering wheel) and driver's seat automatically adjust when in Park and the driver's seat belt is unbuckled, allowing an easy exit from (and next entrance into) CybertruckModel SModel XModel 3Model Y. When returning to the vehicle and stepping on the brake pedal, settings automatically adjust back to the settings used by the most recent driver profile (or based on the key if it's linked to a driver profile).

To use **Easy Entry** with a driver profile, ensure the **Use Easy Entry** box is checked.

 **WARNING:** Never use Easy Entry to move the driver's seat to the full rearward position when a child safety seat is installed on a rear seat located behind the driver's seat. With reduced clearance, the movement of the seat may impact a child's legs, cause injury, or dislodge the seat.

NOTE: You can also make it easier to enter or exit CybertruckModel SModel XModel 3Model Y by enabling Auto Lower. For more information, see [Auto Lower on page 1241](#).

Valet Mode

When CybertruckModel SModel XModel 3Model Y is in Valet mode, the following restrictions apply:

- Key card must be used to access and drive CybertruckModel SModel XModel 3Model Y.
- Key card must be used to access and drive CybertruckModel SModel XModel 3Model Y.
- Speed is limited to 70 mph (113 km/h).
- Maximum acceleration and power are limited.
- Front trunk and glovebox are locked.

- Home and Work locations are not available in the navigation system.
- Voice commands are disabled.
- Cruise control is disabled.
- Autopilot convenience features are disabled.
- The Allow Mobile Access setting cannot be changed.
- HomeLink (if available in your market region) is not accessible.
- Driver Profiles are not accessible.
- Some apps, such as Toybox and Theater, are not accessible.
- The touchscreen does not display the list of keys that can access CybertruckModel SModel XModel 3Model Y (see [Managing Keys on page 126](#)).
- The touchscreen does not display the list of keys that can access CybertruckModel SModel XModel 3Model Y (see [Managing Keys on page 1144](#)).
- Wi-Fi and Bluetooth are disabled. When CybertruckModel SModel XModel 3Model Y is in Valet mode, you cannot pair new Bluetooth devices or view or delete existing paired devices. However, if a Bluetooth-paired device or a known Wi-Fi network is within range, CybertruckModel SModel XModel 3Model Y connects to it.

NOTE: CybertruckModel SModel XModel 3Model Y does not automatically shift when in Valet Mode.

Starting Valet Mode

With CybertruckModel SModel XModel 3Model Y in Park, touch the driver profile icon at the top of the touchscreen **Controls** screen **Controls** screen, then touch **Valet Mode**.

The first time you enter Valet mode, the touchscreen prompts you to create a 4-digit PIN you will use to cancel Valet mode.


When Valet mode is active, the instrument panel touchscreen displays the word **Valet** while the driver profile changes to **Valet Mode** on the touchscreen.


You can also use the mobile app to start and cancel Valet mode (if CybertruckModel SModel XModel 3Model Y is in Park). When using the mobile app, you do not need to enter a PIN because you are already required to log into the app using your Tesla Account credentials.


NOTE: If **PIN to Drive** is enabled (see [PIN to Drive on page 660](#)), you must enter the driving PIN before you can define or enter a Valet PIN. Once in Valet mode, CybertruckModel SModel XModel 3Model Y can be driven without the valet needing to enter the driving PIN.

NOTE: The **PIN to Drive** setting is not available when Valet mode is active.

If you forget your valet PIN, reset it from inside CybertruckModel SModel XModel 3Model Y by entering your Tesla Account credentials (which also cancels Valet mode). You can also reset your PIN using the mobile app.

 **WARNING:** Do not use Valet mode when towing a trailer. The torque limitations of Valet mode can make it difficult for CybertruckModel SModel XModel 3Model Y to pull a trailer up a hill.

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Canceling Valet Mode

With CybertruckModel SModel XModel 3Model Y in Park, touch the **Valet Mode** driver profile icon at the top of the touchscreen **Controls** screen **Controls** screen, and enter your 4-digit PIN.

When you cancel Valet mode, all settings associated with the most recently used driver profile and climate control settings are restored, and all features are available.

NOTE: You do not need to enter a PIN to cancel Valet mode from the mobile app.

Trip Information

Displaying Trip Information

Trip information displays on the touchscreen in the cards area on the car status display, or in the "Cards" area on the vehicle status display, or when you touch **Controls > Trips**. For the current trip, you can display distance, duration and average energy usage. You can also show distance and total and average energy used since your last charge and for additional trips.

To name or rename a trip, touch the trip's name, enter a new name for the trip, then press **Save**. To reset a particular trip meter, touch its associated **Reset** button.

You can display information for up to three trips on the instrument panel. Use the checkboxes to specify the trip(s) you want to display. Then use the scroll wheel on the right side of the steering wheel to display the chosen trip(s) (see [Using Right Steering Wheel Buttons on page 385](#)).

Odometer

To display the odometer and view vehicle mileage, do either of the following:

- Touch **Controls > Software**.
- Touch **Controls > Trips**.
- Open the mobile app and scroll down to the bottom of the main screen.

The odometer also displays on the instrument panel.



Pedestrian Warning System

The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 25 mph (40 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.


The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 25 mph (40 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 32 km/h (19 mph), or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 19 mph (32 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

(If equipped) The Pedestrian Warning System causes CybertruckModel SModel XModel 3Model Y to emit sound when driving below approximately 19 mph (32 km/h) or while driving in reverse. Electric vehicles operate quietly and this sound helps to alert pedestrians of your oncoming vehicle. The sound, which activates whenever CybertruckModel SModel XModel 3Model Y is shifted out of Park, gets louder as speed increases.

For vehicles manufactured prior to approximately November 2021: In situations where you need to turn the sound off (such as in stop and go highway traffic), touch **Controls > Safety > Pedestrian Warning > Pause**. The sound is paused for the current drive only. On your next drive, the sound automatically turns back on. The switch may not be available for vehicles manufactured after this date.

 **WARNING:** Use the Pause switch to silence the alarm only when absolutely necessary and when there are no other road users in the surrounding area. You must turn the Pedestrian Warning System back on immediately after the circumstances that required you to turn it off have passed.




The instrument panel touchscreen displays this indicator when the Pedestrian Warning System has been paused and is therefore not active.

NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2020.

NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2019.


NOTE: The Pedestrian Warning System may not be available in vehicles manufactured prior to approximately September 1, 2020.


 **WARNING:** If sound cannot be heard, pedestrians may not be aware of your oncoming vehicle, which may increase the likelihood of a collision resulting in serious injury or death. Never rely on the Pedestrian Warning System to make sure that pedestrians are aware of your vehicle. If the Pedestrian Warning System is not operating, schedule a service appointment.

Off-Road Driving

Off-road driving is driving your vehicle on an unpaved surface such as sand, silt, dirt, or mud, or on rocky or snow-covered surfaces. When CybertruckModel SModel XModel 3Model Y is in Off-Road Mode, you have access to settings and drive modes that allow you to manage steep ascents, descents, uneven terrain, shallow creeks, and other obstacles you may encounter.

The Off-Road app provides greater control over traction, stability, acceleration, and braking. Various modes and settings also allow you to quickly adjust the ride height of CybertruckModel SModel XModel 3Model Y (see [Suspension on page 1240](#)).


 **CAUTION:** Carefully read all cautions and warnings before driving CybertruckModel SModel XModel 3Model Y off road (see [Limitations and Warnings on page 1256](#)). Always pay close attention and monitor the area to the front, rear, and sides of CybertruckModel SModel XModel 3Model Y for obstacles while off-road driving.

 **CAUTION:** Any damage caused by off-road driving is not covered by the warranty.

Off-Road Modes and settings include the following:

- **Overland:** Maximizes traction on various terrains at low speeds. See [Overland on page 1251](#).
- **Baja:** Optimizes the suspension and traction control of CybertruckModel SModel XModel 3Model Y for high speed driving on dirt roads or desert environments. See [Baja on page 1251](#).
- **Wade Mode:** Raises the suspension and pressurizes the high voltage Battery to protect your vehicle from water and debris while navigating shallow bodies of water. See [Wade Mode on page 1252](#).
- **Trail Assist:** Allows you to maintain your speed while driving on a trail. See [Trail Assist on page 1253](#).
- **Locking Differentials:** Engage for more traction while off-roading. See [Locking Differentials on page 1253](#).

Using the Off-Road App

 **WARNING:** Only use Off-Road mode in off-road driving scenarios. Off-Road modes change how CybertruckModel SModel XModel 3Model Y handles, accelerates, and decelerates, and is not appropriate for public roads.



Use the Off-Road app, located in the app tray, to conveniently customize and monitor your off-road settings. After carefully reading the pop-up window, touch **Confirm**.

In the Off-Road app, customize options such as:

- **Off-Road Mode:** Choose between **Overland** and **Baja** and customize your preferences. See [Overland on page 1251](#) and [Baja on page 1251](#) for more information.
- **Locking Differentials:** Engage or disengage locking differentials. See [Locking Differentials on page 1253](#).
- **Pitch, Roll:** These angles determine how capable the vehicle is of climbing over an obstacle or up an incline.

NOTE: If you are approaching a large obstacle or change in incline, you can set the right ride height to **Extract** by touching **Controls > Ride Height > Extract**. When the ride height is set to **Extract**, CybertruckModel SModel XModel 3Model Y has increased approach, breakover, and departure angles.
- **Wade Mode**
- **Rear Steer:** You can set **Rear Steer** to **Off** or **Auto**. **Auto** allows for a tighter turn radius while driving.
- **Light Bar:** Enable or disable the light bar, if installed.
- **Ride Height:** Customize your vehicle's ride height based on terrain and other drive settings. See [Suspension on page 1240](#).

NOTE: CybertruckModel SModel XModel 3Model Y must be in Park to change the off-road drive modes and settings.

NOTE: Your off-road settings remain for approximately 15 minutes after you exit the vehicle. Always double check to ensure your off-road settings are as intended prior to driving.



Off-Road

CAUTION: The TPMS warning thresholds may be lowered to accommodate different off-road needs. Do not rely solely on the TPMS warning indicator when in an Off-Road mode or setting, as these thresholds do not comply with Federal TPMS standards. It is your responsibility to ensure tires are adequately inflated at all times and are inflated back to normal levels before regular driving on roads.

Before Off-Road Driving

- 1. Plan your route:** Carefully consult maps and weather reports before beginning an off-road expedition and familiarize yourself with the different types of terrain you may encounter (gravel, sand, mud, snow, etc.). Research trails before setting out and be aware that weather and environmental conditions can change quickly and unexpectedly. Ensure your vehicle has ample range for your planned route.
- 2. Secure passengers and cargo:** Wearing a seat belt is required by law. Ensure that all passengers are wearing their seat belts properly (see [Seat Belts on page 1157](#)). Make sure that loose items in the cabin are stowed or secured, and ensure that the cargo bed is free of cargo, or that cargo is tightly secured. The tonneau cover can be open or closed while driving off road.
- 3. Evenly distribute vehicle load:** While off-road driving, CybertruckModel SModel XModel 3Model Y performs best when the weight of passengers and cargo is distributed evenly across the front and rear axles (see [Vehicle Loading on page 1435](#)). Detach large or heavily loaded trailers before driving off road.
- 4. Lower tire pressure:** Lower tire pressure to increase traction on softer surfaces such as sand or gravel, and on rocky surfaces. Reducing tire pressure allows tires to make more contact with the terrain, increasing grip and decreasing the risk of punctures.

WARNING: Avoid making hard turns and other sudden maneuvers when tires are inflated under the recommended cold tire pressure. Before driving on public roads again, make sure to fill all tires to the recommended cold tire pressure (see [Tire Pressures on page 1400](#)).

- 5. Be prepared:** Equip your CybertruckModel SModel XModel 3Model Y with supplies in case of emergency, such as a spare tire, a jack, an air compressor, a portable jump starter, and a flashlight.
- 6. Remove wheel fairings:** CybertruckModel SModel XModel 3Model Y has pieces of plastic trim that descend in front of the wheels from the rocker panels on either side of the vehicle. These are the wheel fairings. The wheel fairings increase aerodynamic performance and range, but may be damaged while driving off-road over rough, uneven surfaces, rocks, or obstacles. To prevent damage, remove the front wheel fairings before off-road driving. For more information and instructions for removing the wheel fairings, refer to the Do It Yourself Guide (see [Do It Yourself Maintenance on page 838](#)).
- 7. Remove wheel covers:** To prevent damage, remove the wheel covers before driving off-road. For more information, see [Removing and Installing Wheel Covers on page 1407](#).

While Off-Road Driving

Quickly access off-road settings and vitals from CybertruckModel SModel XModel 3Model Y in the vehicle status area on the touchscreen. You can also keep the Off-Road app open while driving to quickly change settings and preferences based on your driving situation. See quick stats such as:

- Off-Road Status icons
- Tire Pressures
- Locking Differential status
- Battery and motor temperatures
- Ride Height


NOTE: When the ride height is set to **Extract**, vehicle speed is limited to 10 mph (16 km/h), and torque may be limited. The ride height automatically resets to **Very High** once your driving speed exceeds 10 mph (16 km/h).

If your vehicle is covered in mud after off-roading, rinse the entire exterior of the vehicle with water. It is important to regularly clean Cybertruck after off-roading because mud and debris can quickly build up and limit some vehicle functions. See [Cleaning Mud on page 778](#) for more information.

Off-Road Modes

Overland


Overland maximizes traction on various terrains at low speeds. By selecting **Overland**, you can customize the following settings:

Setting	Options	Description
Surface	All Purpose	Automatically adjusts tire slip based on the amount of available traction and sets the Preferred Ride Height to High . All Purpose is best suited for mixed terrain driving.
	Sand	Allows for high amounts of tire slip to provide optimal traction on soft, deformable surfaces like sand and sets the Preferred Ride Height to High .
	Gravel/Deep Snow	Allows for medium amounts of tire slip to provide optimal traction on gravel or deep snow, and sets the Preferred Ride Height to High .
	Rock	Tightly manages tire slip to maximize grip in rock crawl conditions and sets the Preferred Ride Height to Very High . When the ride height is Very High , the suspension system pneumatically connects the springs on the front and rear axles, increasing suspension articulation for maximum traction.
Stopping Mode	Hold	Applies the brakes automatically when CybertruckModel SModel XModel 3Model Y stops, without you having to put your foot on the brake pedal. Whether stopped on a flat surface or a hill, Vehicle Hold keeps the brake applied, provided your foot remains off the accelerator and brake pedals.  WARNING: Never rely on Hold to adequately decelerate or fully stop your vehicle. Many factors can contribute to a longer stopping distance, including downward slopes, and reduced or limited regenerative braking (see Regenerative Braking on page 1236). Always be prepared to use the brake pedal to adequately decelerate or stop.
	Roll	Allows CybertruckModel SModel XModel 3Model Y to roll freely when close to, or at, a complete stop, like a vehicle in Neutral. Therefore, if stopped on a slope, CybertruckModel SModel XModel 3Model Y will roll downward. The brake does not engage, and the motors do not apply torque (until the accelerator pedal is pressed).

Baja


When CybertruckModel SModel XModel 3Model Y is in **Baja**, the ride height raises and adaptive damping dynamically adjusts based on your **Terrain** selection to optimize performance on various off-road scenarios. The electronic stability control system also allows more tire slip on low-traction surfaces. This is especially useful in high speed driving situations, such as desert or sand driving.

You can customize the following settings:

Setting	Options	Description
Handling Balance	Left	Adjusts the vehicle balance such that Cybertruck behaves more like a <i>front-wheel-drive</i> vehicle. When you move the slider to the left, Cybertruck is more stable and is more susceptible to understeer (when you turn the wheel and Cybertruck turns <i>less</i> than normal).
	Right	Adjusts the vehicle balance such that Cybertruck behaves more like a <i>rear-wheel-drive</i> vehicle. When you move the slider to the right, Cybertruck moves with more agility but less stability, and is susceptible to oversteer (when you turn the wheel and Cybertruck turns <i>more</i> than normal).
Stability Assist	Standard	Provides the maximum amount of stability control intervention*.
	Reduced	Reduces the amount of stability control intervention.
	Minimal	Provides a minimal amount of stability control intervention.  WARNING: Drive with caution when customizing Stability Assist . If you lose control of CybertruckModel SModel XModel 3Model Y, less stability control intervention will be applied and the vehicle may not stabilize itself. Use only if you have advanced experience driving beyond grip limits.
Terrain	Smooth	Sets ride height to Medium and increases damping for greater body control and responsive handling. Best for drifting or high-speed driving on smooth or flat terrains (see Suspension on page 1240).




Off-Roading


Setting	Options	Description
	Rugged	Sets ride height to High with damping optimized for rough terrain, medium-sized obstacles, and whoops.
	Clearance	Sets ride height to Very High for traversing large obstacles.
Deceleration Mode	High	Increases the amount of regenerative braking so CybertruckModel SModel XModel 3Model Y slows down more dramatically when you remove your foot from the accelerator pedal, allowing for more dynamic one-pedal driving.  WARNING: Setting the Deceleration Mode to High (located in Dynamics) may cause some loss of traction on loose surfaces (such as snow).
	Standard	Provides the normal level of regenerative braking, allowing CybertruckModel SModel XModel 3Model Y to maintain traction on loose, low-traction surfaces (such as sand, dirt, and gravel).

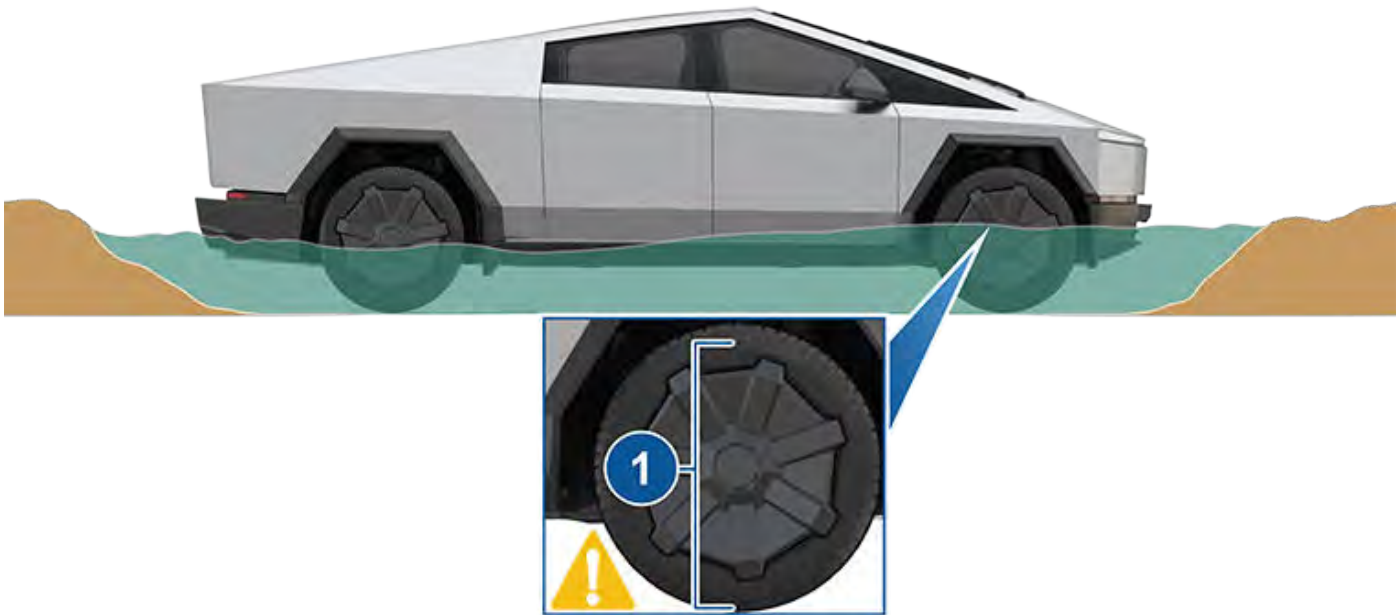
* Stability control intervention modifies motor torque and selectively applies the brakes to each wheel to make Cybertruck more stable and help the driver maintain control of the vehicle. In this setting, stability control is reduced compared to on-road driving.

Wade Mode

Wade Mode allows CybertruckModel SModel XModel 3Model Y to enter and drive through bodies of water, such as rivers or creeks.

 **CAUTION:** It is your responsibility to gauge the depth of any body of water before entering. Damage or water ingress to CybertruckModel SModel XModel 3Model Y as a result of driving in water is not covered by the warranty.

 **CAUTION:** Always inspect underwater conditions (such as debris, etc.) before entering and use your best judgment. Take care to drive slowly and safely. If the water is too deep, return to more shallow water or dry land.



1. The maximum wade depth is approximately 32 in. (815 mm) measuring from the bottom of the tire.

Wade Mode must be used any time you are driving CybertruckModel SModel XModel 3Model Y through a shallow body of water, such as a river. To enable Wade Mode:

1. Ensure all doors and windows are fully closed, and your vehicle speed is less than 20 mph (32 km/h).
2. Access the Off-Road App.

3. Select **Wade**.






When enabled, the Wade Mode icon appears on the touchscreen and starts a countdown for how long Wade Mode is active. Wade Mode duration is limited to 30 minutes.

Wade Mode defaults the vehicle's ride height to **Very High** and protects Cybertruck Model S Model X Model 3 Model Y for up to approximately 32 in (815 mm) of water, driving at slow speeds (1-3 mph (2-5 km/h)). As water depth changes, reduce your vehicle speed accordingly. Do not disable Wade Mode until your vehicle is fully out of water.

In addition, the vehicle's high voltage Battery automatically pressurizes to protect the Battery from water and debris.

Muddy waters can reduce the cooling system effectiveness by adhering to the radiator. See [Cleaning Mud on page 778](#) for information on how to clean your vehicle after a muddy excursion. Wash your vehicle immediately after wading to reduce chances of bacteria buildup and mud hardening after drying. Vehicles driving in waters should be regularly inspected for signs of water ingress or damage to components including (but not limited to) the brakes, horn, lights, etc.

-  **CAUTION:** On soft or muddy underwater surfaces, Cybertruck Model S Model X Model 3 Model Y may sink in, effectively increasing the water level on the vehicle. Take this possibility into account and prepare accordingly.
-  **WARNING:** Never stop or place the vehicle in Park when crossing water. Do not drive in water next to, or immediately after, another vehicle. Currents created by other vehicles can lead to damage.
-  **WARNING:** Do not drive in deep, fast-flowing bodies of water (such as strong currents or rapids). Doing so can result in damage, serious injury, or death.

Trail Assist




Trail Assist is available when Cybertruck Model S Model X Model 3 Model Y is in **Overland**. It maintains the speed of the vehicle to provide greater control during steep ascents and descents.

To enable, touch **Controls > Dynamics > Off-Road > Trail Assist**. Then you can quickly activate or deactivate Trail Assist when needed by single-clicking the right scroll wheel button. You can set the Trail Assist speed between 1 mph (2 km/h) and 25 mph (40 km/h). When active, you can change the set speed by swiping on the right scroll wheel. Small swipes increase the speed in smaller increments, whereas large swipes increase the speed in larger increments.


You can also press the accelerator or brake pedal to temporarily increase or decrease your speed. Once you remove your foot from the pedal, the vehicle returns to your set speed. If you simultaneously brake to a lower speed and swipe down on the right scroll wheel, or accelerate and swipe up, the set speed will automatically snap to the current speed.

NOTE: Unlike other features that allow you to set a cruising speed (such as Traffic-Aware Cruise Control), pressing the brake pedal does **not** disable Trail Assist. However, pressing and holding the brake pedal firmly while at a standstill disables Trail Assist.

NOTE: Trail Assist disengages and returns to your normal driving settings if you accelerate above 30 mph (48 km/h). It re-activates when you drive below 30 mph (48 km/h).

-  **CAUTION:** Trail Assist does not detect objects in front of the vehicle. It is your responsibility to always monitor your vehicle's surroundings and be prepared to brake or steer for unanticipated circumstances.

Locking Differentials

-  **CAUTION:** Do not use off-road locking differentials while driving on high-traction surfaces, such as asphalt. Using locking differentials in inappropriate situations can cause significant damage to the vehicle. Damage to the vehicle due to improper use of locking differentials is not covered by the warranty.



Open Differentials

Most passenger vehicles are equipped with open differentials on the drive axles. When a vehicle with open differentials turns on a corner or paved road, the wheels on the outside of the curve rotate more quickly than the wheels on the inside of the curve to prevent wheel hop and reduce vehicle instability. However, in low-traction scenarios (such as off-roading or driving in snow), additional torque can get directed towards the wheel(s) with less traction, which may lead to the vehicle getting stuck.


Locking Differentials


CybertruckModel SModel XModel 3Model Y is equipped with locking differentials for increased traction during certain low traction and off-road conditions.

Locking differentials lock both wheels of an axle together, which forces the wheels to rotate at the same speed. This distributes the torque across the same axle based on the available traction in each wheel. When one of the locked wheels has significantly reduced traction (on sand, ice, etc.) more torque is applied to the wheel with greater traction. This distribution of torque helps the vehicle continue moving in low traction environments.


Dual Motor Variants: are equipped with mechanical front and rear locking differentials.

Tri-Motor (Cyberbeast) Variants: are equipped with a mechanical front locking differential, and a virtual rear locking differential to provide sufficient torque in each rear wheel. The rear locking differential automatically engages in certain drive modes and speeds, and cannot be manually engaged or disengaged.

 **CAUTION:** Loading CybertruckModel SModel XModel 3Model Y to the Gross Vehicle Weight Rating (GVWR) and engaging the locking differentials may result in damage to the drivetrain (see [Vehicle Loading on page 1435](#)).

 **WARNING:** Do not expect the locking differentials to provide sufficient traction if the vehicle does not have appropriate tires for the conditions, or CybertruckModel SModel XModel 3Model Y is in a situation where all four wheels are spinning.

Engaging Locking Differentials On Road

 **WARNING:** Your vehicle's turning radius increases when locking differentials are engaged. It is your responsibility to be aware of your surroundings and drive carefully.

Engaging locking differentials while driving on roads is intended for specific situations where you temporarily need extra grip on loose or uneven terrain, such as getting un-stuck from a snow bank. Do not engage locking differentials unless it is needed for the road conditions. Navigate to **Controls > Dynamics > Engage Rear Locking Differential**. When enabled, **Slippery Surface** also enables (see [Slippery Surfaces on page 1239](#)). **Engage Rear Locking Differential** should not be used for regular driving on slick surfaces.

When you engage locking differentials while driving on roads, your speed is limited to 35 mph (56 km/h). The stability control icon may appear momentarily while the locking differentials disengage (see [Vehicle Status on page 1119](#)).

NOTE: This option is not available on Tri-Motor (Cyberbeast) vehicles.

Engaging Locking Differentials Off Road

Before you engage locking differentials, consider your driving situation (such as the terrain, weather, etc.). The rear locking differentials are ideal for off-roading uphill or on level surfaces. Front locking differentials are typically used when you need more traction at the front of the vehicle, like rock crawling. To engage:

1. Access the Off-Road app.
2. Select the locking differentials you want to enable.

For dual motor variants:

- **All On**
- **Rear Only**
- **Off**

For Tri-Motor (Cyberbeast) variants:

- **Front Only**

- **Off**

Or touch the associated locking differential icon in the vehicle status area and select which locking differential(s) you want to engage:



Gray: Locking differential is disengaged.



Orange: Locking differential is engaged. This icon may blink orange while the locking differential is engaging or disengaging.



Orange question mark (?): Unknown locker position.



Red exclamation point (!): System fault or locking differential unavailable (see [Troubleshooting on page 1255](#)).

You may need to drive a short distance to engage or disengage once enabled.

Once the locking differentials are fully engaged, the vehicle may slightly rock side to side when turning at low speeds. This is normal behavior when the touchscreen indicates a fully engaged locker (solid orange icon).

The locking differentials may cancel or delay engaging in various cases. If the locking differentials are unable to engage, a chime sounds and a message displays on the touchscreen. See [Troubleshooting on page 1255](#) for more information.

⚠ WARNING: Driving with locked differentials may reduce vehicle responsiveness to steering. Always monitor your vehicle's behavior and the surroundings. Failure to do so may result in damage or serious injury.

Disengaging Locking Differentials

To disengage, touch the differential icon on the touchscreen and select **Off**. You may need to drive a short distance to disengage. The locking differentials also automatically attempt to disengage whenever the vehicle shifts out of Drive, or when a different drive mode is selected.

When you disengage the locking differentials, the icon may blink orange before disappearing from the touchscreen. Ensure the locking differentials are disengaged before you drive on paved roads or at speeds higher than 35 mph (56 km/h). Check the vehicle wheels are not skipping when turning.

Troubleshooting

Behavior	Action(s)
Locking differential(s) are not engaging.	Creep forward.
	Wait for excessive wheel slip to reduce.
	Turn the steering wheel to completely to the left and right, and back again, several times while stationary.
Locking differential takes a long time to disengage.	Creep forward.
	Turn the steering wheel to the left and right while creeping forward.



Off-Roading

Behavior	Action(s)
	Check tires on the axle for uneven wear.
Locking differential cannot disengage after the first engagement.	This may occur if your vehicle has not been driven long enough with the locking differential engaged. After the first engagement, drive Cybertruck (at least 100 ft) while wriggling the steering wheel from left to right to calibrate. During this time, any attempt to disengage is ignored until calibration is complete or times out.
Popping sound while engaging/disengaging.	This is normal. The noise while engaging/disengaging can occur while the mechanism is engaging or releasing.
Locking differential icon stays blinking.	Try performing a U-turn (where it is safe and legal to do so) when lockers are fully disengaged.
Solid orange with an exclamation point appears.	Try shifting into Park, then shift into Drive and try again.
	Use the mobile app to schedule a service appointment.
Locking differentials cancel or delay engagement.	The vehicle doesn't detect a difference in wheel spin between two wheels on the same axle. Continue driving and wait before trying to re-engage.
	The vehicle detects a very high difference in wheel spin between two wheels on the same axle. Continue driving and wait before trying to re-engage.


Troubleshooting

Off-Road Troubleshooting

You may need to increase traction while off-roading (such as for getting unstuck or overcoming an obstacle). Follow these general guidelines to provide more traction to CybertruckModel SModel XModel 3Model Y:

1. Engage **Overland** (see [Overland on page 1251](#) for more information).
2. Adjust the suspension height. Raise the suspension until the vehicle is no longer obstructed. Avoid lowering the suspension to prevent damage (see [Suspension on page 1240](#)).
3. Customize **Terrain** based on the current surface conditions. For high traction terrains, select **Rock**. For looser terrains, select **Sand**.
4. Engage the front and/or rear locking differentials (see [Locking Differentials on page 1253](#)).
5. For softer terrain or steep inclines, engage **Trail Assist** for a steady progression through complex terrain (see [Trail Assist on page 1253](#)).







If you still need more traction, perform the following:

1. Decrease tire pressure to 36 PSI. This increases tire contact with the surface, which can help provide more traction.
 -  **CAUTION:** The TPMS warning thresholds may be lowered to accommodate different off-road needs. Do not rely solely on the TPMS warning indicator when in an Off-Road mode or setting, as these thresholds do not comply with Federal TPMS standards. It is your responsibility to ensure tires are adequately inflated at all times and are inflated back to normal levels before regular driving on roads.
2. Use traction aids, such as traction boards.
3. Tow your vehicle. See [Instructions for Transporters on page 1445](#) for more information on towing CybertruckModel SModel XModel 3Model Y.

Limitations and Warnings

Off-road driving depends on the performance of the air suspension system, brakes, power steering, and other vehicle systems. If there is a condition affecting the performance of any dependent system, a message displays on the touchscreen and off-road driving modes are unavailable.



-  **WARNING:** Before driving off road, carefully survey the terrain and be aware of the weather forecast and other environmental conditions. Exercise extreme caution when approaching steep ascents and descents. While driving off road, always be aware of your surroundings and survey the terrain as necessary. Tesla is not liable for any damage to CybertruckModel SModel XModel 3Model Y resulting from off-road driving.
-  **WARNING:** Never depend on the driving visualization to show you obstacles in front of, behind, or to the sides of CybertruckModel SModel XModel 3Model Y. Always use caution while driving off road and perform visual checks when necessary. The visualization relies on the cameras mounted on CybertruckModel SModel XModel 3Model Y (see [Cameras on page 1136](#)). External factors (such as a dirty or obscured lens) may affect the performance of a camera, and the cameras may not detect objects or barriers that can potentially cause damage or injury.
-  **WARNING:** Visibility may be limited by sharp crests and uneven terrain. Always check what is at the top of a hill and over the crest before driving over it, and be aware of steep descents or other obstacles.
-  **WARNING:** Before approaching an obstacle, ensure that CybertruckModel SModel XModel 3Model Y has enough ground clearance to clear it. If the bottom of CybertruckModel SModel XModel 3Model Y is contacting the ground even with the ride height at the highest setting, reduce your speed or avoid the obstacle altogether.
-  **WARNING:** Exercise extra caution when the terrain surface is wet, sandy, or slippery. Loose gravel, sand, and other environmental conditions may affect the performance of Off-Road Modes.
-  **WARNING:** Before driving off road, make sure that loose items in the cabin are stowed or secured and ensure that the cargo bed is free of cargo, or that cargo is tightly secured.

Towing a Trailer

NOTE: You cannot enable **Off-Road Modes** and **Trailer Mode** at the same time.

NOTE: If the towing capacity on the hitch label conflicts with the information provided in this owner's manual, this owner's manual takes precedence.

Towing Guidelines

Towing a trailer puts additional load on the motors, drive train, brakes, tires, and suspension and significantly decreases range. If you tow a trailer, follow these general guidelines:

- Reduce your driving speed and avoid sudden maneuvers. Keep in mind that when towing a trailer, steering, stability, turning radius, stopping distances, and braking performance are different when compared to driving without a trailer.
- Increase your following distance by maintaining at least twice the typical distance from the vehicle ahead. This helps avoid situations that require heavy braking. Sudden braking may result in skidding or jack-knifing, and loss of control.
- Avoid sharp turns. Sharp turns can cause the trailer to contact CybertruckModel SModel XModel 3Model Y and cause damage. Make wider turns to prevent the trailer from hitting curbs, road signs, trees, or other objects.
- Periodically check the trailer lights and turn signals to confirm that bulbs are still working (see [Trailer Light Test on page 1261](#)). When towing a trailer, the turn signal arrows on the touchscreen flash as normal, even if the bulbs on the trailer are burnt out.
- Periodically confirm the cargo is secure.
- Periodically confirm the trailer brakes are working (see [Trailer Brakes on page 1260](#)).
- Avoid parking on a grade (see [Parking with a Trailer on page 1263](#)).
- Regularly confirm that all towing components are secured.

Before Towing a Trailer

Before towing a trailer, you must do the following:



1. Review all regulations and legal requirements in your state/region that apply to towing a trailer. Failure to comply with regulations can compromise your safety.
2. Inflate tires to the cold tire inflation pressure specified in [Tire Pressures when Towing on page 1259](#).
3. Set the suspension height to match the trailer height. Tesla recommends **Low (Controls > Suspension > Low)**. You must choose a ball mount suitable for your towing needs. See [Ball Mount Specifications on page 1264](#) for more information.
4. Adjust all mirrors to provide a clear rearward view without a significant blind spot.
NOTE: Use towing mirrors for larger trailers.
5. Confirm the trailer load is evenly distributed such that the trailer tongue weight is approximately 10% of the total trailer weight, without exceeding the maximum tongue weights provided in [Towing Capacity on page 1259](#).
6. Engage Trailer Mode (see [Trailer Mode on page 1260](#)).
7. Calibrate the trailer brakes (see [Trailer Brakes on page 1260](#)).

Then, confirm the following:

1. CybertruckModel SModel XModel 3Model Y rests horizontally with the trailer attached. If the vehicle is tipped up at the front, and down at the rear, check that you are not exceeding the maximum towing capacity and tongue weights provided in [Towing Capacity on page 1259](#).
2. All trailer hitch parts and attachments, safety chains, and electrical connectors are in good condition and properly connected. If any problems are apparent, do not tow the trailer.
3. Trailer lights (brake lights, turn signal lights, marker lights, etc.) are working properly.
4. The trailer tongue is securely connected to the hitch ball.

5. Safety chains are properly connected between the trailer and the vehicle. Cross the safety chains under the tongue of the trailer to help prevent the tongue from contacting the road if it separates from the hitch. Leave enough slack in the safety chains to allow for turns and ensure that the chains can never drag on the ground.
6. Wheel chocks are available and easy to access.
7. All cargo is secured.

NOTE: For general information about trailer safety provided by the National Highway Traffic Safety Administration, go to <https://one.nhtsa.gov/cars/problems/equipment/towing/index.htm>.





-  **WARNING:** The trailer tongue weight must be approximately 10% of the total trailer weight without exceeding the maximum tongue weights provided in [Towing Capacity on page 1259](#). Loads that are balanced over the wheels or heavier in the rear can cause trailer sway, resulting in loss of vehicle control.
-  **WARNING:** Always ensure that cargo is secured in the trailer and will not shift. Dynamic load shifts can cause loss of vehicle control, resulting in serious injury or death.

Towing Capacity

The total trailer weight (including all cargo and additional equipment), and the trailer tongue weight, must never exceed the following:

Wheel Size	Maximum Towing Capacity	Maximum Tongue Weight*
20" x 9J	11,000 lb (4,990 kg)	1,110 lb (499 kg)



*The tongue weight is the downward force that the weight of the trailer exerts on the hitch. **It must not exceed 10% of the maximum towing capacity.** Carrying a significant amount of equipment, passengers, or cargo in the tow vehicle can reduce the tongue weight it can handle, which also reduces the maximum towing capacity. Maximum towing capacity is calculated assuming the GVWR (Gross Vehicle Weight Rating) is not exceeded. For GVWR, see [Vehicle Loading on page 1435](#).

-  **CAUTION:** Tesla assumes no responsibility for damage or injuries resulting from towing a trailer, for any errors or omissions in the instructions accompanying towing equipment, or for your failure to follow the proper instructions. Damage caused by towing a trailer is not covered by the warranty.
-  **WARNING:** Do not overload the vehicle or trailer. Doing so can cause poor performance, vehicle damage and loss of vehicle control, resulting in serious injury.
-  **WARNING:** Do not use the trailer hitch to tow/transport Cybertruck Model S Model X Model 3 Model Y.
-  **WARNING:** Never operate a trailer with a negative tongue weight, where the trailer tongue pulls upward on the trailer hitch. Negative tongue weights can significantly increase the risk of trailer sway or loss of stability.

Tire Pressures when Towing

When towing a trailer, tire pressures must be adjusted to accommodate the additional load. Keep tires inflated to the pressures shown below (these pressures override the pressures that are provided on the Tire and Loading information label – see [Vehicle Loading on page 1435](#)):

Tires	Cold Tire Inflation Pressure
20" All Season	50 psi
20" All Terrain	65 psi

-  **WARNING:** Check tire pressures using an accurate pressure gauge when tires are cold (see [Tire Pressures on page 1400](#)). Driving one mile (1.6 km) warms the tires sufficiently to affect tire pressures. Parking the vehicle in direct sunlight or in hot weather can also affect tire pressures. If you must check warm tires, expect increased pressures. Do not let air out of warm tires in an attempt to match recommended cold tire pressures. A hot tire at or below the recommended cold tire inflation pressure is dangerously under-inflated.
-  **WARNING:** Never attempt to tow a trailer when a tire is faulty or has been inflated using a tire repair kit. A temporarily repaired tire is not designed to sustain the towing load. Towing using a faulty or temporarily repaired tire can result in tire failure and loss of vehicle stability.

Trailer Mode

Trailer Mode must always be active when towing a trailer. When you connect a trailer's electrical connection (see [Electrical Connections on page 1264](#)), CybertruckModel SModel XModel 3Model Y automatically engages Trailer Mode. Trailer Mode disengages when you disconnect the trailer's electrical connection. To engage or exit Trailer Mode manually, touch **Controls > Towing & Hauling > Trailer Mode** on the touchscreen. One of the following indicators displays on the touchscreen:

Trailer Mode is active.



CybertruckModel SModel XModel 3Model Y detects a connection for trailer lights but Trailer Mode is disabled. It is likely that a carrying accessory has been connected.



CybertruckModel SModel XModel 3Model Y detects a faulty electrical connection for the trailer lights. Some, or all, trailer lights may not be functioning. Pull over as soon as safety permits and inspect the trailer lights for faulty cabling or connections. If the issue is resolved and the red icon persists, manually turn Trailer Mode off and on again.




Some Autopilot features, and any feature that requires the use of the rear camera, may be unavailable when Trailer Mode is enabled. In addition, some features may operate differently. For example:

- Autosteer (if equipped) is unavailable. Therefore, for Traffic-Aware Cruise Control availability, touch **Controls > Autopilot > Autopilot Activation > Double Click**. This allows you to engage Traffic-Aware Cruise Control with a single click of the right scroll button on the steering wheelsteering yoke (or steering wheel).
- Traffic-Aware Cruise Control increases the following distance from the car in front of you.
- The air suspension system will not make speed-based adjustments from **Medium** to **Low** and does not automatically raise ride height based on saved locations.
- Side collision warnings are active but automatic steering interventions are disabled.
- The braking force provided by Automatic Emergency Braking (see [Collision Avoidance Assist on page 645](#)) is significantly limited.

NOTE: Trailer brakes are only available when Trailer Mode is engaged.

 **WARNING:** Do not rely on CybertruckModel SModel XModel 3Model Y to automatically detect a trailer in all cases. Always check that Trailer Mode is engaged before towing a trailer.

 **WARNING:** Remaining in Trailer Mode will help ensure CybertruckModel SModel XModel 3Model Y remains stable in adverse conditions while towing. Do not exit Trailer Mode while towing a trailer. Exiting Trailer Mode could result in loss of vehicle stability.

Trailer Alarm



When enabled, Cybertruck sounds an alarm if the vehicle detects the trailer is being unplugged while **Trailer Mode** is active and the vehicle is locked.

Trailer Brakes

CybertruckModel SModel XModel 3Model Y is equipped with a trailer brake controller which automatically applies the trailer brakes when you decelerate. To update your trailer brake preferences, navigate to **Controls > Towing & Hauling** where you can:

- Enable/disable [Trailer Mode](#) on page 1260.
- Customize [Trailer Brake Gain](#) on page 1261.

NOTE: Tesla recommends always enabling the trailer brakes, otherwise stopping distance may be increased. To disable the trailer brakes, first disable Trailer Mode or set the Trailer Brake Gain to 0.

- Choose how to manually apply the trailer brakes (either with the touchscreen or right scroll button). The trailer brake activation button is unaffected.
- Adjust [Trailer Brake Boost](#) on page 1261.
- Toggle [Adaptive Regenerative Braking](#) on page 1261.
- Perform the [Trailer Light Test](#) on page 1261.

You can also set up a shortcut for **Towing & Hauling** by adding it to your vehicle "Cards" area, near the bottom of the touchscreen.

Trailer Brake Gain

The Trailer Brake Gain slider is a scale between 0 and 10 that calibrates the degree of trailer braking applied when you press the brake pedal normally. 0 applies no trailer brakes, whereas 10 applies the full trailer brakes.

Set this up each time you connect a trailer to ensure your trailer brakes do not lock up:

1. Ensure the trailer is securely attached to the CybertruckModel SModel XModel 3Model Y hitch assembly.
2. Drive CybertruckModel SModel XModel 3Model Y in a safe, open area at low speeds (10-15mph or 15-25 km/h).
3. Use the right scroll button on the steering wheelsteering yoke (or steering wheel) or Trailer Brake Activation (set your preference in **Towing & Hauling**) to apply the trailer brakes while moving. Adjust the Trailer Brake Gain as needed to ensure the trailer brakes do not lock up when they are applied. If the wheels do lock up, decrease the amount of gain slightly and repeat this process.

The ideal Trailer Brake Gain varies depending on your trailer load, number of axles, and surface conditions. You must adjust as needed while conditions change.




Trailer Brake Boost

Tesla recommends initially setting your Trailer Brake Boost to **Low**. Once Trailer Brake Gain is calibrated, adjust based on your preferences by driving around in a safe, open area and applying the brakes as you would in normal traffic. Increasing will make your brakes react more quickly, although the braking feels more harsh to passengers.

Adaptive Regenerative Braking


At the start of every drive, CybertruckModel SModel XModel 3Model Y estimates the load to determine the proper level of regenerative braking. Regenerative braking will start at the standard level and increase as the vehicle learns your trailer/cargo weight.

NOTE: Weight estimation works best when driving in a straight line on a flat, smooth surface.

-  **WARNING:** It is your responsibility to determine when to enable Adaptive Regenerative Braking. Always drive safely and avoid situations that could require heavy braking.
-  **WARNING:** Towing increases your stopping distance. When towing, increase your following distance and avoid situations that could potentially cause heavy braking. Failure to do so can result in a collision.
-  **WARNING:** Observe all regulations and legal requirements in your regional and national jurisdictions that apply specifically to trailer towing and brake requirements. Many regions require a breakaway switch, located on the tongue of the trailer, to activate the trailer brakes if the trailer separates from the vehicle. Failure to comply with regulations can compromise your safety.

Trailer Light Test

Before towing, and periodically during towing, use **Trailer Light Test** to confirm the trailer lights are working as expected.

-  **WARNING:** Do not tow a trailer if the trailer lights or trailer brakes are not working properly.

Trailer Brake Controller Limitations

⚠ WARNING: It is your responsibility to understand your towing needs, proper towing procedures, trailer brakes (such as their use and limitations), and the risks and limitations of towing. Do not tow with CybertruckModel SModel XModel 3Model Y if you do not have towing knowledge and experience; doing so may result in damage, injury or death. Damage as a result of improper towing is not covered by the warranty.

Keep in mind the following brake controller limitations:

- Properly maintain and use trailer brakes as intended to prevent damage.
- The trailer brake controller and auxiliary output is 12V.
- Abusive or extensively long manual activations of the trailer brake controller may cause overheating with some trailer brake loads.
- Maximum power draw - The onboard trailer controller is designed to support most trailer power applications. The power allocations are:

Standard trailer brakes (when braking power is derived from brake output, e.g. non-EOH Electric Drum brakes)	Lights: Max. 220 Watts total for all light outputs combined.
	Auxiliary power (AUX 12V+ Charging): Max. 270 Watts (20 Amps).
	Trailer brakes: Max. 331 Watts
Electric over Hydraulic trailer brakes (braking power is derived from auxiliary power output, e.g. EOH, Hydraulic disk brakes, see Electric Over Hydraulic (EOH) Brakes on page 1262)	Lights: Max. 220 Watts total for all light outputs combined.
	Auxiliary power (AUX 12V+ Charging): Max. 405 Watts (30 Amps).
	Trailer brakes: Max. 48 Watts (Current draw must be less than 3 Amps).
CybertruckModel SModel XModel 3Model Y switches to the standard brakes if a 3A or higher load on the trailer brake connections is detected.	

Electric Over Hydraulic (EOH) Brakes

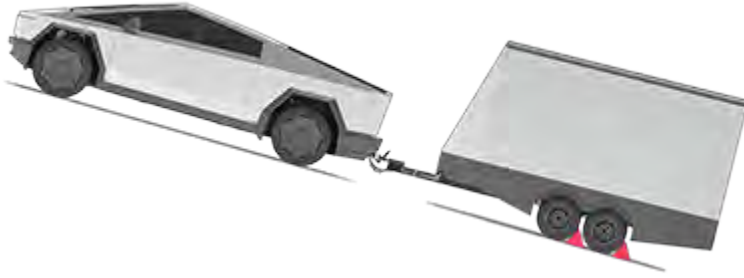
CybertruckModel SModel XModel 3Model Y supports standard electric brakes and Electric over Hydraulic (EOH) brakes. If using EOH brakes, Tesla recommends connecting a battery in parallel with the auxiliary power output to the EOH unit.

The auxiliary output is capable of supplying up to 30 Amps when supporting an EOH trailer brake unit. You are responsible for understanding the power needs of your EOH trailer brake unit. Using an EOH trailer brake controller that draws more than 30 Amps may result in a loss of power to the trailer brakes while braking.

The usage of only an EOH unit with the auxiliary power port is supported for maximum braking availability. A battery in parallel is recommended. The battery must be in good health and is expected to already be present in most states per DOT regulations.

⚠ CAUTION: Tesla does not recommend using EOH trailer brakes simultaneously with other auxiliary power loads. Doing so could lead to complications or loss of power to the EOH trailer brakes unit.

Parking with a Trailer




Whenever possible, avoid parking on a grade. However, if parking on a grade is absolutely necessary, place wheel chocks under the trailer wheels:

1. One person presses and holds the brake pedal.
2. A second person places the wheel chocks under the wheels on the downgrade side of the trailer's tires.
3. When the chocks are in place, slowly release the brake pedal and ensure the chocks hold the weight of the vehicle and trailer.

NOTE: When testing chocks, ensure that Vehicle Hold (see [Vehicle Hold on page 1237](#)) is engaged. If Vehicle Hold is braking CybertruckModel SModel XModel 3Model Y, the associated indicator light appears on the touchscreen. To disengage Vehicle Hold, press and release the brake pedal.

4. Place the vehicle in Park.

 **WARNING:** If parking on a grade is necessary, ensure that all trailer wheels have been securely chocked. Failure to do so can result in serious damage, injury, or death.

Trailer Sway Mitigation

When trailer sway is detected, your vehicle's electronic stability control system attempts to apply the appropriate amount of braking to minimize trailer sway. The touchscreen briefly displays the traction control system indicator. Manually applying the brakes (via right scroll button on the steering wheelsteering yoke (or steering wheel) or the Trailer Brake setting) when the system is actively braking to mitigate trailer sway does not cancel this automatic braking. However, it is still your responsibility to drive carefully and brake when needed, taking into consideration possible trailer sway.

Accessing the Trailer Hitch Assembly

The CybertruckModel SModel XModel 3Model Y trailer hitch assembly is located behind the rear fascia of the vehicle, under the tailgate. Your vehicle is not equipped with a ball mount, which must be purchased separately based on your towing needs.



The trailer hitch cover is attached to the body of the vehicle with three turn clips. Use a flat trim tool or non-marring screwdriver to partially turn and unlock the clips, then remove the trailer hitch cover and place it in a secure, dry place. Once removed, you can see where the ball mount can be installed.



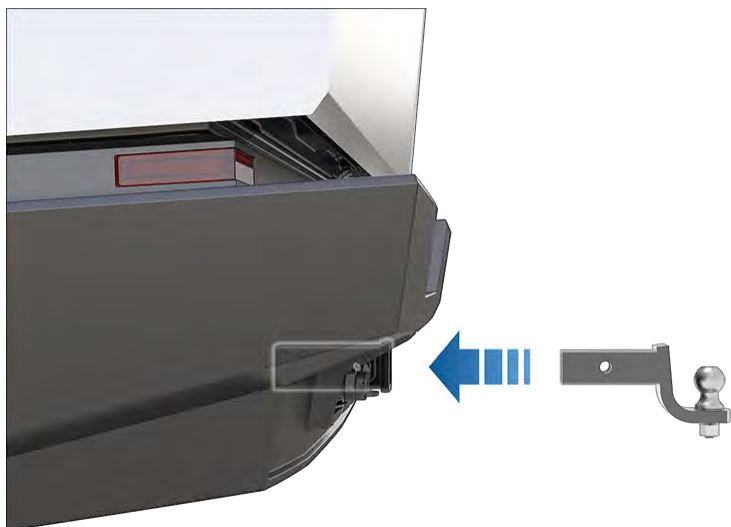
When not actively towing, keep the cover installed to prevent dirt and debris from entering.

NOTE: The maximum permissible rear overhang for the coupling point is 49 in (1.25 m), measuring from the center of the rear tire toward the hitch receiver.

NOTE: Always attach safety chains when towing. See your vehicle Owner's Manual for more information.

Ball Mount Specifications

A ball mount must be purchased separately based on your towing needs. The Cybertruck hitch receiver supports a 2 in (5 cm) ball mount. Follow the ball mount manufacturer's instructions for more information.



NOTE: Refer to the manufacturer's instructions to properly maintain the ball mount.

Electrical Connections

Cybertruck Model S Model X Model 3 Model Y is equipped with a combination electrical outlet, located near the hitch assembly, that supports two types of commonly-used trailer plugs without needing an adapter:

- **7-PIN - SAE J2863** - for heavier trailer loads requiring their own braking system.
- **4-PIN - SAE J1239** - for light trailer loads requiring lights only.

Regulations require that all trailers, at a minimum, are equipped with taillights and turn signals. These are provided on the 4-pin connector, which is adequate when pulling a light load. For heavier loads, the trailer must also be equipped with brakes, available on the 7-pin connector.

Plugging a trailer's wiring into either electrical outlet automatically engages Trailer Mode (see [Trailer Mode on page 1260](#)).

NOTE: Use one outlet only according to your trailering needs. The covers prevent you from opening both outlets simultaneously.

7-PIN Connector






1. Left Turn/Stop Light (Yellow)
2. "-" Ground (White)
3. Trailer Brake Output (Blue)
4. Right Turn/Stop Light (Green)
5. +12V Auxiliary Power (Orange)
6. Running (or Side Marker) Lights (Brown)
7. Reverse Lights (Gray)

4-PIN Connector



1. Ground (White)
2. Tail and License Plate lights (Brown)
3. Left Turn/Stop Light (Yellow)
4. Right Turn/Stop Light (Green)


Loss of trailer lights when towing may be the result of a fault in the trailer wiring or excessive power consumption by the lights connected to the trailer output(s). When this occurs, the touchscreen displays a red Trailer Mode icon. Fix any issues with the wiring and/or reduce the number of lights connected to the trailer output(s), then turn Trailer Mode off and on to try again.

-  **CAUTION:** Always ensure that the trailer's electrical cable does not contact or drag on the ground and there is enough slack in the cable to allow for turns.
-  **WARNING:** Before towing, it is the driver's responsibility to ensure that all electrical connections are working, all trailer lights are operating as expected, and the braking system is fully functioning. CybertruckModel SModel XModel 3Model Y does not detect faulty electrical connections. You must perform manual checks. Failure to do so can result in property damage, personal injury, or death.
-  **WARNING:** Use only the electrical connection designed by Tesla. Do not attempt to directly splice or attempt to connect trailer electrical wiring using any other method. Doing so can damage the vehicle electrical system and cause malfunctions.


Impact on Range

Towing a trailer and carrying accessories increases vehicle weight and drag. As a result, driving range can decrease significantly. Although Trip Planner attempts to adjust estimates based on Trailer Mode, actual energy consumption may vary. Plan trip length and charging destinations accordingly.


Carrying Accessories and Crossbars

-  **WARNING:** Tesla assumes no responsibility for damage or injuries resulting from installing and using a carrier or crossbars, for any omissions in the instructions accompanying a carrier or crossbar, or for your failure to follow the instructions. Damage caused by using a carrier or crossbars is not covered by the warranty.

Carrying Accessories

-  **CAUTION:** The hitch assembly is designed to support vertical loads up to 160 lb (72 kg). Exceeding this maximum weight can cause damage.

The hitch receiver is designed to support vertical loads up to 160 lb (72 kg). When carrying bicycles, skis, or other items on the Cybertruck's hitch, always check to ensure that the maximum weight is not exceeded. When the carrier weighs 40 lbs (18 kg), the weigh threshold is sufficient for carrying two bicycles weighing approximately 60 lb (27 kg) each, or four items weighing approximately 30 lbs (14 kg) each.

-  **CAUTION:** An accessory carrier attached to the rear of CybertruckModel SModel XModel 3Model Y may obscure your view from the rear view mirror and the rear camera.

Follow the instructions provided with your accessory carrier to install onto CybertruckModel SModel XModel 3Model Y. Observe all regulations and legal requirements in your state/region that apply to carrying accessories.

CybertruckModel SModel XModel 3Model Y includes the wiring necessary for using an accessory carrier equipped with lights (see [Electrical Connections on page 1264](#)). CybertruckModel SModel XModel 3Model Y also includes Trailer Mode software (see [Trailer Mode on page 1260](#)).



When you connect an accessory carrier's wiring harness, CybertruckModel SModel XModel 3Model Y detects a connection for trailer lights and displays this indicator on the touchscreen to indicate that Trailer Mode is disabled.

When carrying accessories, periodically confirm that the accessory carrier and its cargo remain secure at all times, and if applicable, that the lights on the accessory carrier are working.

Installing Brackets onto the Appliques

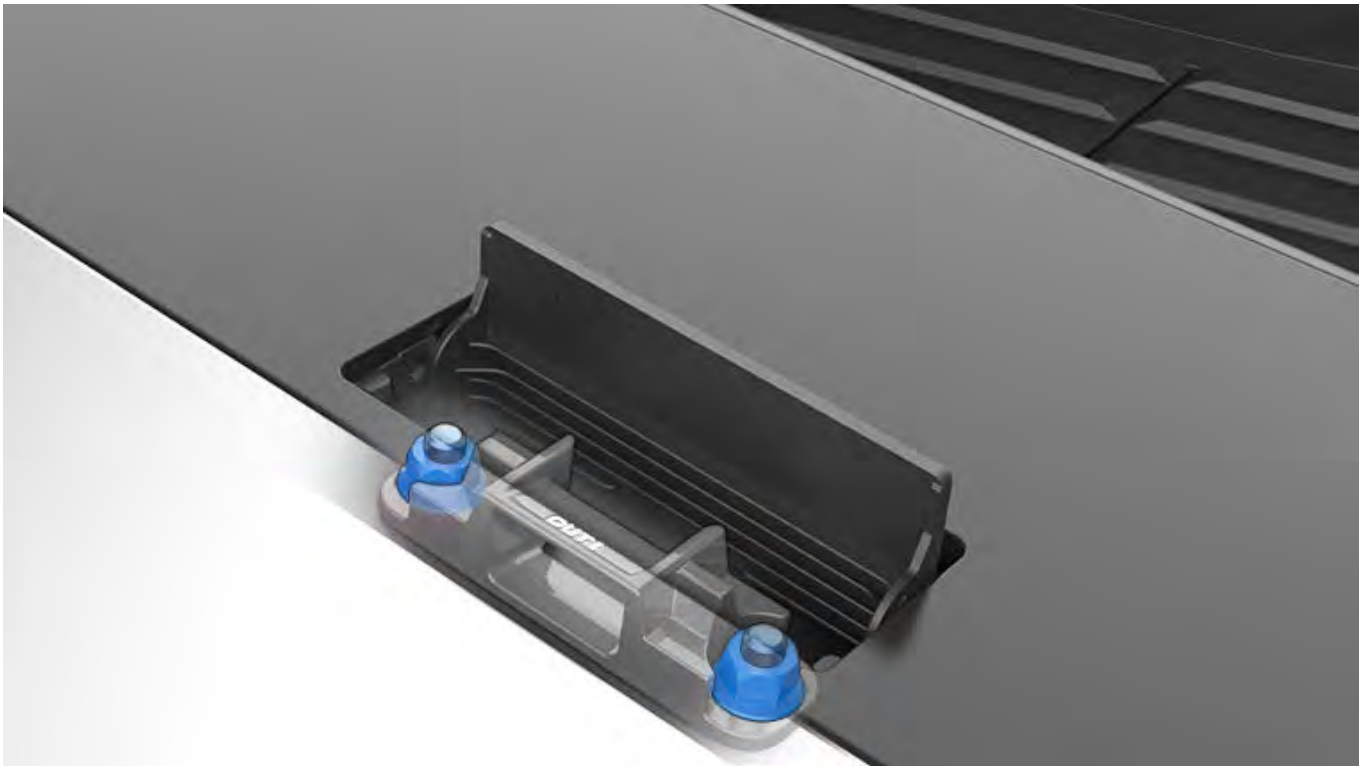
1. Open all 8 applique doors.



2. Use the provided torque wrench to loosen and remove the nuts that are fastened to the threaded studs located within the applique doors.
3. Install a bracket by positioning the bracket so that the raised arrow on it is directed outward, away from the vehicle. Align it with the threaded studs and set it in place.



4. Use the nuts that were removed in step 2 and tighten them back onto the threaded studs with the provided torque wrench.






5. Repeat steps 2-4 for the remaining applique doors.

NOTE: After installing the brackets once, you can leave them installed for future use, unless you want to move the crossbars to different locations on the vehicle.

Installing Crossbars

NOTE: Installing the crossbars requires two people.

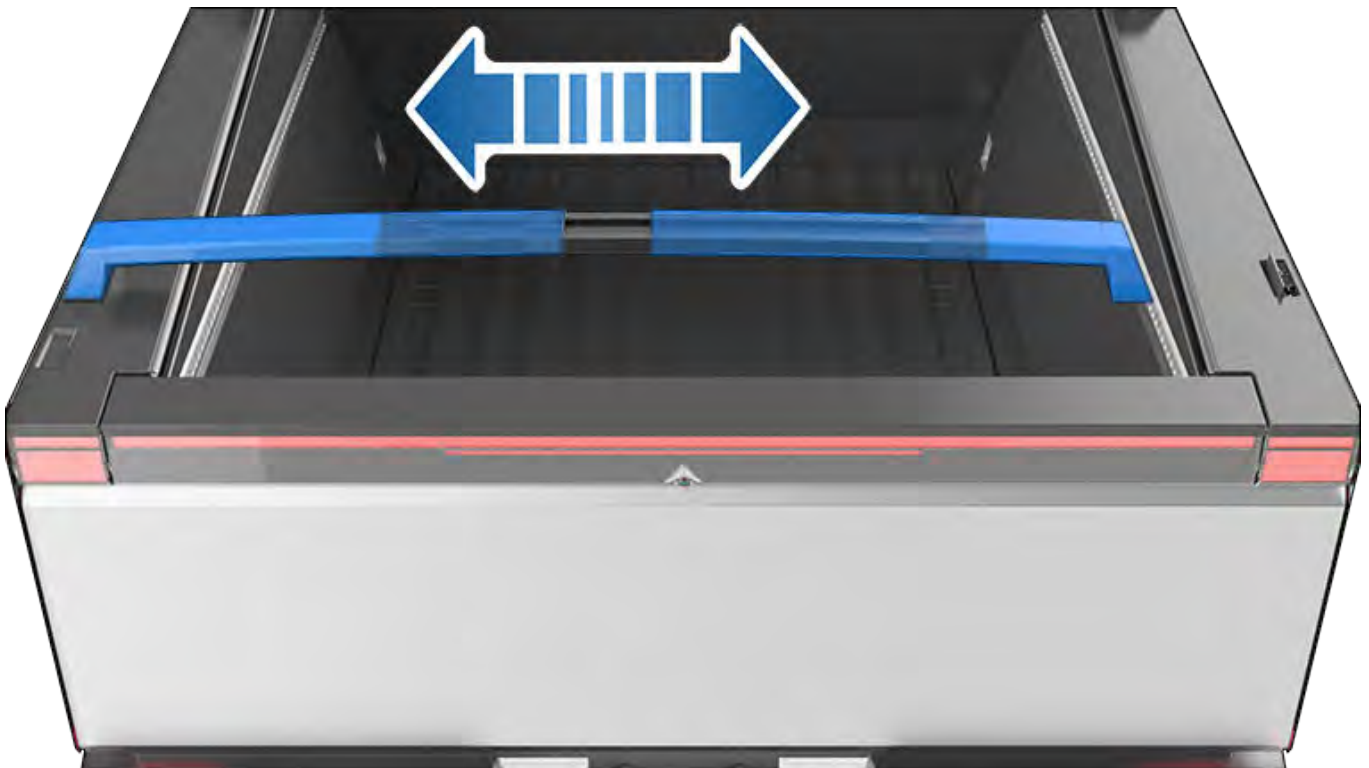
-  **CAUTION:** Crossbars must be installed in tandem. Failure to do so may cause damage.
-  **CAUTION:** It is your responsibility to ensure your accessories are secured to the crossbars. Periodically check to ensure your accessories have not moved or loosened throughout your driving. See the in-box instructions that come with the crossbars for more information.
-  **CAUTION:** If installing a crossbar on the front-most applique doors, make sure that the power feed harness on the passenger side applique is not pinched during installation. If necessary, use a trim tool to release the applique and maneuver the harness away from the studs.

To install the crossbars:

1. Locate the FRONT arrow embossed on the bottom of the crossbar. The arrow should point toward the front of the vehicle.



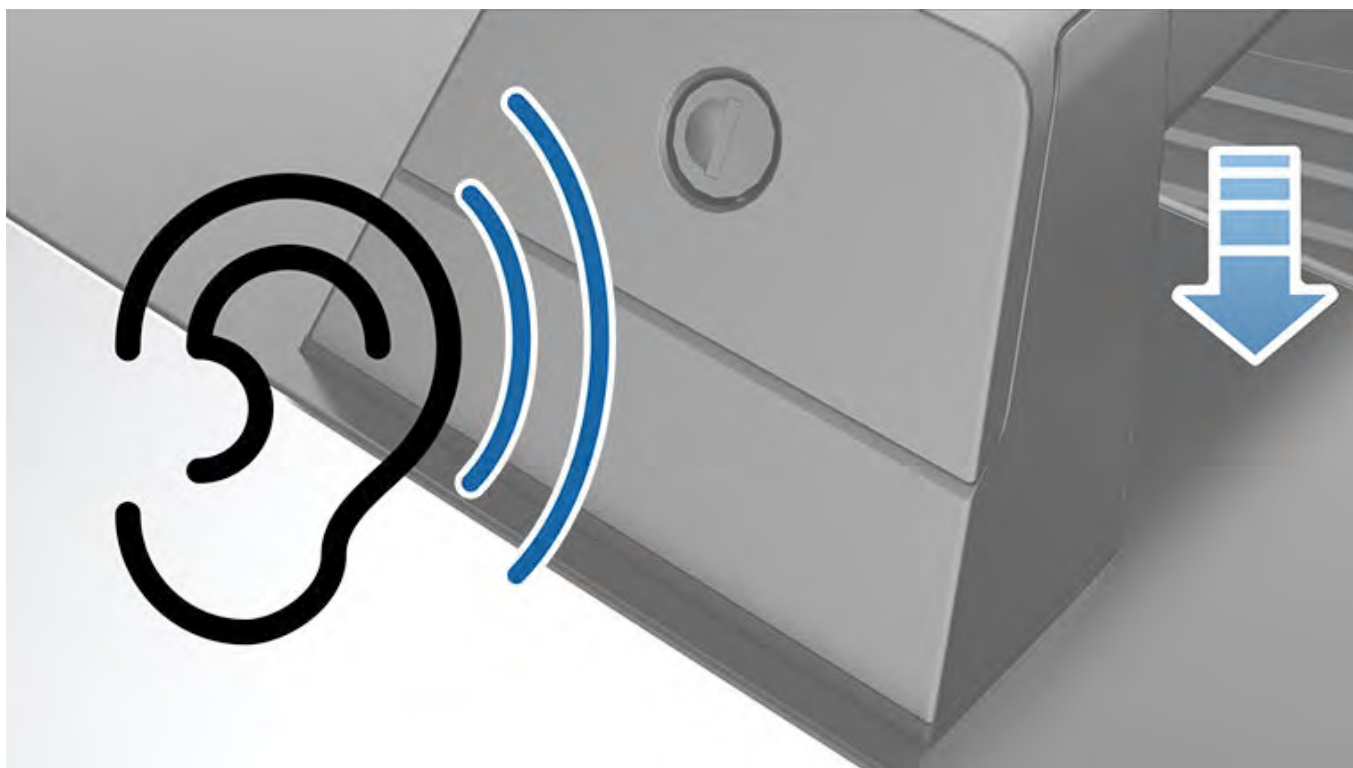
2. Lower one tower (edge of the crossbar) onto the bracket and extend the crossbar so that the other tower aligns with the bracket on the opposite side.



3. Use the key to open the tower doors. Push down to seat both towers.



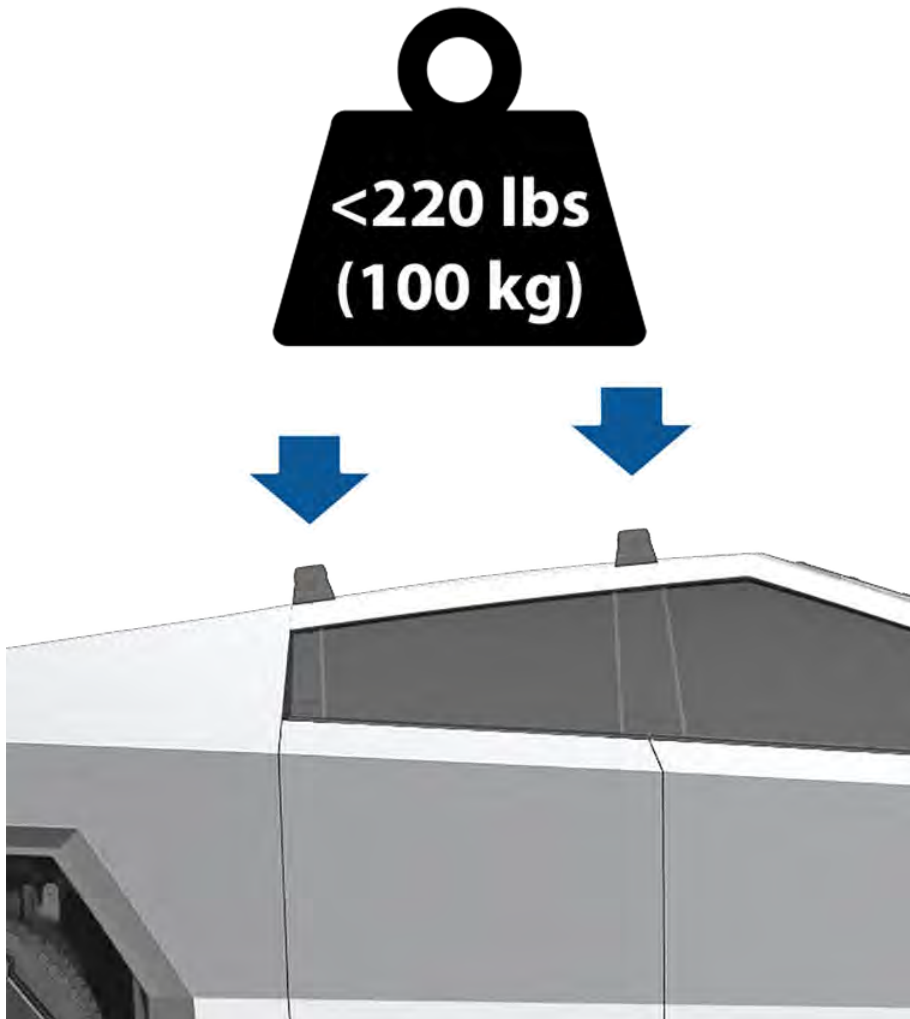
4. Once the towers are completely seated, close the tower doors securely using the key. You will hear and feel a “click” when the tower door is closed completely. If there is resistance to closing or if the door physically cannot be closed, the tower door is not seated properly. Turn the key to open the door, re-position, and use the key to close to door again.



5. Repeat this on the other side of the crossbar.
6. Repeat steps 1-5 to install your second crossbar directly in front of or behind the first one.
7. To test the secure installation of the crossbars, push and pull them in all directions. If any movement is observed at any of the four towers, re-seat the affected crossbars, then retest the installation.

NOTE: Keep the key in a dry, safe area for future use.

Weight limits




The crossbars are capable of supporting up to 220 lbs per crossbar set. See the in-box instructions that come with the crossbars for more information.

About Autopilot

Autopilot is a suite of advanced driver assistance features that are intended to make driving safer and less stressful. None of these features make CybertruckModel SModel XModel 3Model Y fully autonomous or replace you as the driver. Autopilot features come standard with all new Tesla vehicles.


Basic Autopilot includes Traffic-Aware Cruise Control and Autosteer.

- **Traffic-Aware Cruise Control:** Maintains your speed and an adjustable following distance from the vehicle in front of you, if there is one (see [Traffic-Aware Cruise Control on page 554](#)[Traffic-Aware Cruise Control on page 576](#)).
- **Autosteer:** Maintains your speed and distance from a leading vehicle while also intelligently keeping CybertruckModel SModel XModel 3Model Y in its lane (see [Autosteer on page 556](#)[Autosteer on page 587](#)).

 **WARNING:** Basic Autopilot is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury, or death.


Enhanced Autopilot includes additional features. Enhanced Autopilot Features are designed to further reduce driver workload and make common actions, such as changing lanes or parking, easier.

- **Auto Lane Change:** Moves CybertruckModel SModel XModel 3Model Y into an adjacent lane when you engage the turn signal and Autosteer is active (see [Auto Lane Change on page 559](#)[Auto Lane Change on page 590](#)).
- **Navigate on Autopilot:** Actively guides CybertruckModel SModel XModel 3Model Y from a highway's on-ramp to off-ramp, including performing lane changes, navigating interchanges, automatically engaging the turn signal, and taking the correct exit (see [Navigate on Autopilot on page 561](#)[Navigate on Autopilot on page 592](#)).
- **Autopark:** Parks CybertruckModel SModel XModel 3Model Y, either parallel or perpendicularly (see [Autopark on page 614](#)[Autopark on page 609](#)).
- **Summon:** Moves CybertruckModel SModel XModel 3Model Y forward or backward, even while you're outside the vehicle. This is useful for parking in tight parking spots (see [Summon on page 617](#)[Summon on page 624](#)).
- **Smart Summon:** Moves CybertruckModel SModel XModel 3Model Y out of a parking space and through more complex environments, maneuvering around obstacles and other vehicles, to meet you or go to a predetermined target (see [Smart Summon on page 621](#)[Smart Summon on page 628](#)).

 **WARNING:** Enhanced Autopilot is a hands-on feature. Keep your hands on the steering wheel at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

Full Self-Driving Capability includes:


- **Traffic Light & Stop Sign Control:** Maintains your speed, keeps a following distance, and keeps CybertruckModel SModel XModel 3Model Y in its lane while also slowing down and stopping for traffic lights and stop signs (see [Traffic Light and Stop Sign Control on page 597](#)).
- **Autosteer on City Streets (Full Self-Driving (Supervised)):** Attempts to drive to your destination by following curves in the road; stopping at and negotiating intersections, stop signs, and roundabouts; making left and right turns; and entering/exiting highways (see [Full Self-Driving \(Supervised\) on page 603#unique_679 on page](#)).

 **WARNING:** Full Self-Driving Capability is a hands-on feature. Keep your hands on the steering wheel at all times and be mindful of road conditions, surrounding traffic, and other road users (such as pedestrians and cyclists). Pay attention to the road at all times and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

Autopilot uses the cameras on CybertruckModel SModel XModel 3Model Y, which monitor the surrounding area and detect other vehicles, pedestrians, road markings, and obstacles such as barriers and curbs. There are cameras mounted on the front, rear, left, and right sides of CybertruckModel SModel XModel 3Model Y (see [Cameras on page 101](#)[Cameras on page 1136](#)).

CybertruckModel SModel XModel 3Model Y may also be equipped with a cabin camera, mounted in the rear-view mirror, that monitors driver attentiveness. It is your responsibility to keep your hands on the wheel, pay attention to the road, and be ready to take immediate action at any time.

When Autopilot is engaged, CybertruckModel SModel XModel 3Model Y shows a series of escalating warnings reminding you to keep your hands on the wheel and pay attention to the road. If there is no response, Autopilot disengages and is unavailable for the remainder of the drive.

 **WARNING:** Autopilot is designed for your driving comfort and convenience and is not a collision warning or avoidance system. It is your responsibility to stay alert, drive safely, and be in control of the vehicle at all times. Never depend on Autopilot to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.

It is your responsibility to familiarize yourself with the limitations of Autopilot and be ready to take control at all times. For more limitations, cautions, and warnings, see [Limitations and Warnings on page 631](#).

Autopilot Conditions

Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

Before you can use Autopilot features, and after some Service visits, you must drive a short distance to calibrate cameras. For more information, see [Drive to Calibrate Cameras on page 108](#)[Drive to Calibrate Cameras on page 1140](#).

In addition, these features may not work as intended when:

- The road has sharp curves or significant changes in elevation.
- Road signs and signals are unclear, ambiguous, or poorly maintained.
- Visibility is poor (due to heavy rain, snow, hail, etc. or poorly lit roadways at night)
- You are driving in a tunnel or next to a highway divider that interferes with the view of the camera(s)
- Bright light (such as from oncoming headlights or direct sunlight) interferes with the view of the camera(s).

The list above does not represent an exhaustive list of situations that may interfere with proper operation of Autopilot features. For more information, see [Limitations and Warnings on page 631](#).

Autopilot Feature	Available When
Traffic-Aware Cruise Control	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h) <p>NOTE: You can activate Traffic-Aware Cruise Control at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p>
Autosteer	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h) <p>NOTE: You can activate Autosteer at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p> <p>NOTE: On a residential road, a road without a center divider, or a road that is not controlled access, the maximum allowed cruising speed is limited and the instrument paneltouchscreen displays a message. The restricted speed will be the speed limit of the road plus 5 mph (10 km/h).</p> <ul style="list-style-type: none"> • Headlights are set to On or Auto. Although Autopilot is available both during the day and in low light conditions (dusk or dark), Autosteer aborts or is unavailable if headlights are set to Off. When Autosteer is engaged, Auto High BeamAdaptive Headlights Auto High Beam is automatically enabled (see High Beam Headlights on page 436High Beam Headlights on page 435High Beam Headlights on page 437High Beam Headlights on page 422High Beam Headlights on page 1229) and the wiper iswipers are set to Auto.
Navigate on Autopilot	<ul style="list-style-type: none"> • You are driving between 18 mph (30 km/h) and 90 mph (150 km/h)85 mph (140 km/h). <p>NOTE: You can activate Navigate on Autopilot at lower speeds if there is a vehicle detected at least 5 feet (1.5 meters) ahead of CybertruckModel SModel XModel 3Model Y.</p> <ul style="list-style-type: none"> • You are driving on a controlled-access highway. When you leave a controlled-access highway, Navigate on Autopilot reverts to Autosteer.

Autopilot Feature	Available When
Full Self-Driving (Supervised)	<ul style="list-style-type: none"> You are driving less than 85 mph (150 km/h). <p>NOTE: You can activate Full Self-Driving (Supervised) at lower speeds, including when CybertruckModel SModel XModel 3Model Y is at a standstill, whether or not there is a vehicle detected in front of CybertruckModel SModel XModel 3Model Y.</p> <ul style="list-style-type: none"> Headlights are set to On or Auto. Although Full Self-Driving (Supervised) is available both during the day and in low light conditions (dusk or dark), it aborts or is unavailable if headlights are set to Off. When Full Self-Driving (Supervised) is engaged, Auto High Beam is automatically enabled (see High Beam Headlights on page 436High Beam Headlights on page 435 High Beam Headlights on page 422High Beam Headlights on page 1229) and the wiper is/wipers are set to Auto.

Autopilot Features



This topic describes how to enable and use the following driver assistance features.

- Traffic-Aware Cruise Control:** Like traditional cruise control, Traffic-Aware Cruise Control maintains a set driving speed. However, Traffic-Aware Cruise Control also slows down or accelerates CybertruckModel SModel XModel 3Model Y as needed to maintain the following distance from the vehicle in front of you. While Traffic-Aware Cruise Control is engaged, you are still responsible for steering CybertruckModel SModel XModel 3Model Y (see [Traffic-Aware Cruise Control on page 554](#)).
- Autosteer:** Like Traffic-Aware Cruise Control, Autosteer maintains a set speed (if there is not a vehicle in front of you) or a set following distance (if there is a vehicle in front of you). In addition, Autosteer detects lane markings, road edges, and the presence of vehicles and objects to intelligently keep CybertruckModel SModel XModel 3Model Y in its driving lane (see [Autosteer on page 556](#)).

NOTE: Autosteer is a BETA feature.
- Auto Lane Change:** When you engage a turn signal while Autosteer is active, Auto Lane Change moves CybertruckModel SModel XModel 3Model Y into the adjacent lane in the direction indicated by the turn signal (see [Auto Lane Change on page 559](#)).
- Navigate on Autopilot:** Navigate on Autopilot builds on the features of Traffic-Aware Cruise Control and Autosteer. While Autosteer is active, Navigate on Autopilot allows CybertruckModel SModel XModel 3Model Y to suggest and, if configured, automatically change lanes to pass other vehicles and follow the navigation route (see [Navigate on Autopilot on page 561](#)).

NOTE: Navigate on Autopilot is a BETA feature.

Traffic-Aware Cruise Control and Autosteer use information from the cameras on CybertruckModel SModel XModel 3Model Y to detect lane markings, road edges, and other vehicles and road users around CybertruckModel SModel XModel 3Model Y.

-  **CAUTION:** Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).
-  **CAUTION:** It is your responsibility to familiarize yourself with the limitations of Autopilot and the situations in which driver intervention may be needed. For more information, see [Limitations and Warnings on page 631](#).

Autopilot Settings

Before you use Autopilot features, customize how they work by touching **Controls > Autopilot**.



Autopilot

- **Set Speed:** Choose whether Autopilot engages at the currently detected speed limit or your current driving speed. Touch **Controls > Autopilot > Set Speed** and choose either **Speed Limit** or **Current Speed**.
- **Offset:** If you choose **Speed Limit**, you can specify an offset by touching **Set Speed Offset**. You can choose **Fixed** (the cruising speed adjusts by a specific amount on all roads) or **Percentage** (the cruising speed is adjusted as a percentage of the road's detected speed limit).
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Click**, both Traffic-Aware Cruise Control and Autosteer engage when you single-press the right scroll wheel. If set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer.
NOTE: Autopilot Activation must be set to **Double Click** if you want to use Traffic-Aware Cruise Control independently of Autosteer.
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Click**, both Traffic-Aware Cruise Control and Autosteer engage when you single-press the right scroll wheel. If set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer.
NOTE: Autopilot Activation must be set to **Double Click** if you want to use Traffic-Aware Cruise Control independently of Autosteer.
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Pull**, both Traffic-Aware Cruise Control and Autosteer engage when you pull the drive stalk down once. If set to **Double Pull**, you must pull the drive stalk down twice in quick succession to engage Autosteer.
NOTE: Autopilot Activation must be set to **Double Pull** if you want to use Traffic-Aware Cruise Control independently of Autosteer.
- **Autopilot Activation:** Choose how to activate Autosteer. If set to **Single Pull**, both Traffic-Aware Cruise Control and Autosteer engage when you pull the drive stalk down once. If set to **Double Pull**, you must pull the drive stalk down twice in quick succession to engage Autosteer.
NOTE: Autopilot Activation must be set to **Double Pull** if you want to use Traffic-Aware Cruise Control independently of Autosteer.
- **Green Traffic Light Chime:** In Canada and U.S.: If on, a chime will sound when you are waiting at a red traffic light and the light turns green. If you are not actively using Traffic-Aware Cruise Control and are waiting at a red light with a car in front of you, the chime sounds when the car ahead of you advances.

Traffic-Aware Cruise Control

Traffic-Aware Cruise Control is always enabled.



When Traffic-Aware Cruise Control is available but not engaged, the instrument cluster touchscreen displays the cruising speed in gray. The number shown represents the speed that will be set when you engage Traffic-Aware Cruise Control.



When Traffic-Aware Cruise Control is actively cruising at a set speed, the speed is highlighted with blue text.

To engage Traffic-Aware Cruise Control, press the right scroll wheel, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.

NOTE: If **Autopilot Activation** is set to **Single Click**, pressing the right scroll wheel once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Click** to use Traffic-Aware Cruise Control independently of Autosteer when you single-press the right scroll wheel.

To engage Traffic-Aware Cruise Control, press the right scroll wheel, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Click**, pressing the right scroll wheel once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Click** to use Traffic-Aware Cruise Control independently of Autosteer when you single-press the right scroll wheel.

To engage Traffic-Aware Cruise Control when it is available (the car status area of the touchscreen displays the gray cruising speed icon), pull the drive stalk down once, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once.

To engage Traffic-Aware Cruise Control when it is available (the car status area of the touchscreen displays the gray cruising speed icon), pull the drive stalk down once, then release the accelerator pedal to allow Traffic-Aware Cruise Control to maintain the cruising speed. You can apply the accelerator at any time to temporarily override the set cruising speed.



NOTE: If **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once also activates Autosteer (which includes Traffic-Aware Cruise Control). Touch **Controls > Autopilot > Autopilot Activation** and choose **Double Pull** to use Traffic-Aware Cruise Control independently of Autosteer when you pull the drive stalk down once.

If you want a chime to sound when you engage or cancel Traffic-Aware Cruise Control, touch **Controls > Autopilot > Traffic-Aware Cruise Control Chime**.



Autopilot

WARNING: Traffic-Aware Cruise Control is designed for your driving comfort and convenience and is not a collision warning or avoidance system. It is your responsibility to stay alert, drive safely, and be in control of the vehicle at all times. Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death. For more information, see [Limitations and Warnings on page 631](#).

Autosteer

To enable Autosteer:

1. Touch **Controls > Autopilot > Autopilot Features > Autosteer (Beta)**.
2. After carefully reading and understanding the popup window, touch **Yes**.



To indicate that Autosteer is available (but not actively steering CybertruckModel SModel XModel 3Model Y), the instrument paneltop corner of the touchscreen displays a gray Autosteer icon next to the driving gear. In situations where Autosteer is temporarily unavailable, the Autosteer icon disappears. (For example, if your driving speed is not within the speed required for Autosteer to operate.)



To initiate Autosteer, press the right scroll wheelpress the right scroll wheelmove the drive stalk fully down twice in quick successionmove the drive stalk fully down twice in quick succession.

NOTE: If the setting for **Autopilot Activation** is set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Double Click**, you must double-press the right scroll wheel to engage Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once engages Autosteer (see [Autopilot Settings on page 553](#)).

NOTE: If the setting for **Autopilot Activation** is set to **Single Pull**, pulling the drive stalk down once engages Autosteer (see [Autopilot Settings on page 553](#)).





Autosteer confirms activation with an audible chime and briefly displays a message on the instrument clustertouchscreen reminding you to pay attention to the road and be ready to take over at any time.



To indicate that Autosteer is now active, the instrument clustertouchscreen displays the Autosteer icon in blue.

When Autosteer is able to detect lane markings, it displays the edges of the driving lane in blue on the instrument clustertouchscreen.





Autopilot





Whenever Autosteer is active, Traffic-Aware Cruise Control is active as well.

In situations where the speed limit cannot be detected when Autosteer is engaged, Autosteer reduces your driving speed and limits the set cruising speed to 45 mph (70 km/h). Although you can manually accelerate to exceed the limited speed, CybertruckModel SModel XModel 3Model Y will not brake for detected obstacles as long as you are applying the accelerator pedal. Autosteer slows down to the limited speed when you release the accelerator pedal. When you leave the road or disengage Autosteer by using the steering wheelsteering yoke (or steering wheel), you can increase your set speed again, if desired.

⚠ WARNING: Steering is limited when Autosteer is enabled. Therefore, CybertruckModel SModel XModel 3Model Y may not be able to handle tight turns. Be prepared to take control of the vehicle at all times.

⚠ WARNING: Autosteer is a hands-on assistance feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Autosteer and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).

Auto Lane Change

If you engage a turn signal while Autosteer is active, CybertruckModel SModel XModel 3Model Y moves into the adjacent lane in the direction indicated by the turn signal, provided the following conditions are met:

- The turn signal is engaged.
- Lane markings indicate that a lane change is permitted.
- Midway through the lane change, CybertruckModel SModel XModel 3Model Y must detect the target lane's outside lane marking. If this lane marking is not detected, the lane change is aborted and CybertruckModel SModel XModel 3Model Y returns to its original driving lane.
- The view of the camera(s) is not obstructed.
- CybertruckModel SModel XModel 3Model Y does not detect a vehicle in its blind spot, or a vehicle or obstacle up to the center of the target lane. If a vehicle or other obstacle is detected in the target lane, it is shown in red in the visualization on the instrument clustertouchscreen and CybertruckModel SModel XModel 3Model Y does not complete the lane change until it is safe to do so.



NOTE: Auto Lane Change cancels if the lane change cannot be completed in 5 seconds.

⚠ WARNING: Although Autopilot is designed to detect vehicles and obstacles in adjacent lanes, it is your responsibility to always perform visual checks to make sure it is safe and appropriate to move into the target lane. If Autopilot cannot change lanes due to inadequate data, the instrument clustertouchscreen displays a series of warnings. Therefore, when using Auto Lane Change, always pay attention to the instrument clustertouchscreen and be prepared to manually steer CybertruckModel SModel XModel 3Model Y.

The minimum speed at which Autopilot changes lanes may vary depending on region, adjacent lane speeds, and other factors. Always be ready to manually steer and change lanes as necessary. When an automatic lane change is in progress, Overtake Acceleration is activated, allowing CybertruckModel SModel XModel 3Model Y to accelerate closer to a vehicle in front (see [Overtake Acceleration on page 573](#)).

When you engage a turn signal, Autopilot moves CybertruckModel SModel XModel 3Model Y one lane at a time. Moving into an additional lane requires you to engage the turn signal a second time after the first lane change is complete.

As CybertruckModel SModel XModel 3Model Y changes lanes, it is important to monitor its performance by watching the driving path in front of you and the surrounding area. Stay prepared to take over steering at any time. As you are crossing over into the adjacent lane, the instrument clustertouchscreen displays the location in the lane that CybertruckModel SModel XModel 3Model Y is moving into.



Navigate on Autopilot

To enable Navigate on Autopilot, touch **Controls > Autopilot > Navigate on Autopilot (Beta)**. Then, to customize how you want Navigate on Autopilot to operate, touch **Customize Navigate on Autopilot**:

- **Enable at Start of Every Trip:** Choose whether to automatically enable Navigate on Autopilot for every navigation route. When enabled, the Navigate on Autopilot button on the turn-by-turn direction list is already enabled at the start of every trip.
- **Speed Based Lane Changes:** Navigate on Autopilot is designed to perform both route-based and speed-based lane changes. Speed-based lane changes are optional. You can use this setting to disable speed-based lane changes or to specify how assertively you want Navigate on Autopilot to change lanes to achieve the set cruising speed (**Mild**, **Average**, or **Mad Max**).
- **Exit Passing Lane:** Choose whether you want Navigate on Autopilot to maneuver out of a passing lane when navigating to a destination. In addition to route-based and speed-based lane changes, Navigate on Autopilot requests a lane change out of a passing lane as a reminder to stay in a slower lane when you are not passing other vehicles. Choose **No** to disable this and keep CybertruckModel SModel XModel 3Model Y in a passing lane except when needed to stay on the navigation route.
- **Require Lane Change Confirmation:** By default, Navigate on Autopilot requires your confirmation before proceeding with a lane change by pressing the appropriate turn signalengaging the appropriate turn signal. If you do not confirm the lane change within 3 seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes.
- **Lane Change Notification:** You can specify if or how you want to be notified of lane changes (**Off**, **Chime**, **Vibrate**, or **Both**).

If **Enable at Start of Every Trip** is turned on, Navigate on Autopilot engages automatically when:

- Autosteer is active.
- You are navigating to a destination.

Autopilot

- You are on a controlled-access highway.

Once enabled, the Navigate on Autopilot button appears on the map's turn-by-turn direction list whenever a navigation route is active and the route includes at least one controlled-access highway.

If **Enable at Start of Every Trip** is turned off, touch the **Navigate on Autopilot** button above the turn-by-turn directions to enable it. Once the Navigate on Autopilot is selected, it will engage whenever you engage Autosteer.



The Navigate on Autopilot icon shows in the turn-by-turn direction list when you are navigating to a destination and Navigate on Autopilot is available but not active.



If Navigate on Autopilot is active, the icon is blue. If **Enable at Start of Every Trip** is turned on, the Navigate on Autopilot icon is selected whenever you start navigation. Touch the icon to cancel Navigate on Autopilot and revert to Autosteer.

Whenever Navigate on Autopilot is active, the Navigate on Autopilot button is blue and the instrument cluster touchscreen displays the driving lane as a single blue line in front of CybertruckModel SModel XModel 3Model Y:





The turn-by-turn directions display the Autosteer icon next to the maneuvers (such as off-ramps) that Navigate on Autopilot will handle.

When Navigate on Autopilot is engaged CybertruckModel SModel XModel 3Model Y automatically makes both speed-based and route-based lane changes after driver confirmation.

- **Speed Based Lane Changes:** Navigate on Autopilot changes lanes to reduce driving time to your destination. For example, if CybertruckModel SModel XModel 3Model Y is behind a vehicle going below the set cruising speed, Navigate on Autopilot will move into the passing lane to pass it. Speed-based lanes changes are optional.
- **Route Based Lane Changes:** Navigate on Autopilot changes lanes to route you to your destination. For example, Navigate on Autopilot will move into the exit lane as CybertruckModel SModel XModel 3Model Y approaches the off-ramp specified by the navigation route.

When the instrument clustertouchscreen displays a message asking you to confirm the lane change, engage the appropriate turn signal. If you do not confirm the lane change within 3 seconds, a chime sounds to remind you that Navigate on Autopilot requires your confirmation to change lanes. Auto Lane Change cancels if the lane change cannot be completed in 5 seconds.

If you ignore a route-based lane change suggestion (for example, you are driving in the left lane while approaching an off-ramp on the right side of the highway), Navigate on Autopilot is unable to maneuver onto the off-ramp and as a result, you are re-routed to your destination.



NOTE: When determining navigation routes, and maneuvers at interchanges, Navigate on Autopilot considers whether or not you want to use High Occupancy Vehicle (HOV) lanes. Therefore, ensure the **Use HOV Lanes** setting is appropriate for your circumstances (see [Maps and Navigation on page 699](#)). If the setting is off, Navigate on Autopilot never uses a HOV lane, regardless of time of day. If the setting is on, Navigate on Autopilot uses HOV lanes, whenever applicable.

CAUTION: Navigate on Autopilot may not always attempt to exit at an off-ramp or change lanes, even when an exit or lane change is determined by the navigation route. Always remain alert and be prepared to manually steer onto an off-ramp, or make a lane change to prepare for, or to exit at, an off-ramp or interchange.

Navigate on Autopilot activates and deactivates based on the type of road you are driving on. When Navigate on Autopilot is active and you approach an off-ramp or interchange along your navigation route, the appropriate turn signal engages and Autosteer maneuvers CybertruckModel SModel XModel 3Model Y onto the off-ramp or interchange.

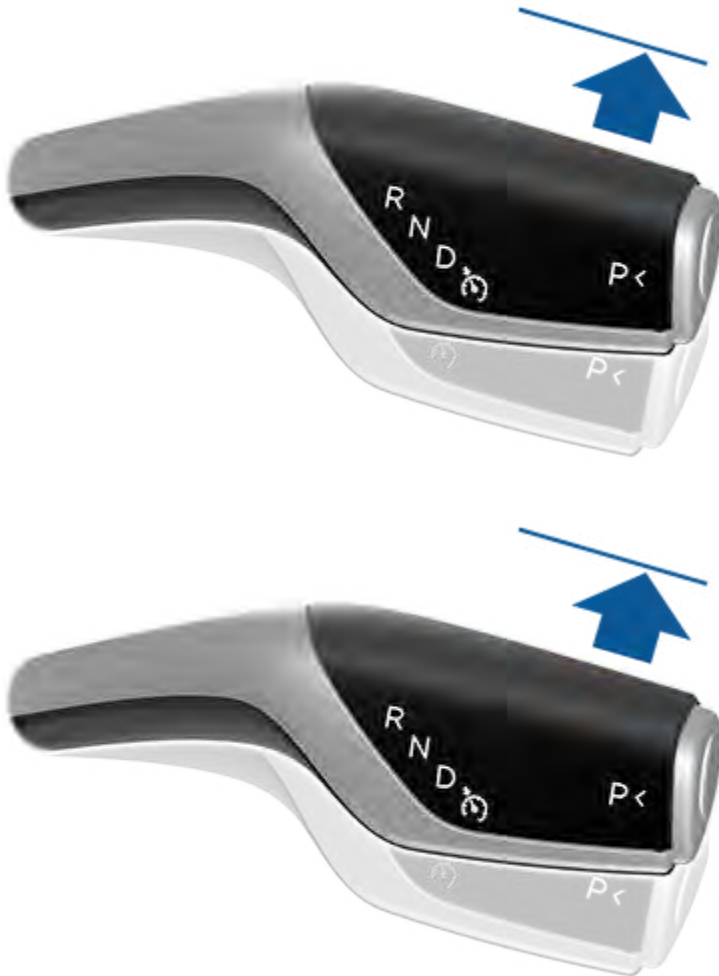
When you leave a controlled-access highway Navigate on Autopilot reverts to Autosteer—a chime sounds and the instrument clustertouchscreen displays the driving lane lines in blue (instead of the single blue in front of CybertruckModel SModel XModel 3Model Y). When Navigate on Autopilot deactivates, Autosteer remains active. Always be prepared to take appropriate action.

WARNING: Navigate on Autopilot is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Navigate on Autopilot and the situations in which it may not work as expected. For more information, see [Limitations and Warnings on page 631](#).

Canceling Autopilot

Traffic-Aware Cruise Control cancels when:


- You move the drive stalk upward.
 - **CAUTION:** If you move the drive stalk upward and hold it up for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- You move the drive stalk upward.
 - **CAUTION:** If you move the drive stalk upward and hold it up for more than one second, CybertruckModel SModel XModel 3Model Y shifts into Neutral after canceling Autosteer.
- You press the right scroll wheel on the steering wheelsteering yoke (or steering wheel).
- You press the right scroll wheel on the steering wheelsteering yoke (or steering wheel).
- You press the brake pedal.
- You exceed 90 mph (150 km/h).
- You shift into Reverse, Park, or Neutral.
- A door is opened.
- An Automatic Emergency Braking event occurs (see [Collision Avoidance Assist on page 645](#)).
- The driver's seatbelt is released, and/or the driver gets out of their seat.





When Traffic-Aware Cruise Control cancels, the cruising speed icon on the instrument cluster touchscreen turns gray to indicate that Traffic-Aware Cruise Control is no longer active.

Autosteer cancels when any of the above actions are taken. In addition, Autosteer cancels when:

- You exceed 85 mph (140 km/h).
- You take over steering manually. You apply rotational force to the steering wheelsteering yoke (or steering wheel) (even a slight amount).

 **WARNING:** If **Autopilot Activation** is set to **Double Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheelsteering yoke (or steering wheel), Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheelsteering yoke (or steering wheel), Traffic-Aware Cruise Control also cancels.

 **WARNING:** If **Autopilot Activation** is set to **Double Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Click** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.

 **WARNING:** If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manuallyapplied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.

⚠ WARNING: If **Autopilot Activation** is set to **Double Pull** and Autosteer cancels because you started steering manually applied rotational force to the steering wheel, Traffic-Aware Cruise Control remains active. If **Autopilot Activation** is set to **Single Pull** and Autosteer cancels because you started steering manually applied rotational force to the steering wheel, Traffic-Aware Cruise Control also cancels.

- You do not respond to repeated reminders to keep your hands on the wheel and subsequent messages on the instrument clustertouchscreen (see [Driver Attentiveness on page 574](#)).

When Autosteer cancels, a chime sounds and the Autosteer icon either turns gray to indicate that Autosteer is no longer active, or disappears to indicate that it is not currently available.

Navigate on Autopilot cancels when Autosteer cancels, as described above. In addition, Navigate on Autopilot cancels when:

- You touch the Navigate on Autopilot button on the map's turn-by-turn direction list. In this case, Autosteer is still active.
- You leave a controlled-access highway. When this happens, Autosteer is still active.

When Navigate on Autopilot cancels but Autosteer remains active, a chime sounds and the visualization goes from a single blue line in the driving lane to two blue lines on either side of the lane.

When Traffic-Aware Cruise Control or Autosteer cancels, CybertruckModel SModel XModel 3Model Y does not coast. Instead, regenerative braking slows down CybertruckModel SModel XModel 3Model Y in the same way as when you move your foot off the accelerator when driving without Traffic-Aware Cruise Control (see [Regenerative Braking on page 463](#)).

While Using Autopilot

When Traffic-Aware Cruise Control is active and Autopilot is maintaining a set speed, the speed is highlighted with blue text on the instrument clustertouchscreen.

When Autosteer is active, the steering wheelsteering yoke (or steering wheel) icon is blue and the lane markings are highlighted in blue on the visualization. If Navigate on Autopilot is also active, the Navigate on Autopilot button is blue and the instrument clustertouchscreen displays the driving lane as a single blue line in front of CybertruckModel SModel XModel 3Model Y.

To display more details about the roadway and its surroundings, such as road markings, stop lights, and objects (such as trash cans and poles), touch **Controls > Autopilot > Full Self-Driving Visualization Preview**.

If unable to detect lane markings, Autosteer may determine the driving lane based on a vehicle you are following. In most cases, Autosteer attempts to center CybertruckModel SModel XModel 3Model Y in the driving lane. However, there may be situations in which Autosteer follows a driving path that is offset from the center of the lane (for example, if guard rails are detected).

Maintaining the Set Speed

When Autopilot is active, CybertruckModel SModel XModel 3Model Y maintains your set cruising speed whenever a vehicle is not detected in front of it. When cruising behind a vehicle, CybertruckModel SModel XModel 3Model Y accelerates and decelerates as needed to maintain a chosen following distance (see [Adjusting the Following Distance on page 569](#)), up to the set speed.

You can manually accelerate at any time by pressing the accelerator pedal, but when you release the pedal CybertruckModel SModel XModel 3Model Y resumes cruising at the set speed.

CybertruckModel SModel XModel 3Model Y also adjusts the cruising speed when entering and exiting curves.

When CybertruckModel SModel XModel 3Model Y is actively slowing down to maintain the selected distance from the vehicle ahead, brake lights turn on. You may notice slight movement of the brake pedal. However, when CybertruckModel SModel XModel 3Model Y is accelerating, the accelerator pedal does not move.

Changing the Set Speed

Roll the right scroll wheel up to increase, or down to decrease, the set speed.

You can also change the cruising speed to the current speed limit (including any offset you've specified), by either:



You can also change the cruising speed to the current speed limit (including any offset you've specified), by either:

- Pushing the drive stalk downward and briefly holding.
- Touching and briefly holding the speed limit sign on the touchscreen until you see the cruising speed change.
- Pushing the drive stalk downward and briefly holding.
- Touching and briefly holding the speed limit sign on the touchscreen until you see the cruising speed change.







It may take a few seconds for CybertruckModel SModel XModel 3Model Y to reach the new cruising speed.

Adjusting the Following Distance

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, press the steering wheel's right scroll button to the left or right.

NOTE: If Full Self-Driving (Supervised) is active, pressing the steering wheel's right scroll button to the left or right changes the Full Self-Driving (Supervised) profile (see [Full Self-Driving \(Supervised\)](#) on page 603).

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, touch **Controls > Autopilot > Cruise Follow Distance**.

To adjust the following distance you want to maintain between CybertruckModel SModel XModel 3Model Y and a vehicle traveling ahead of you, touch **Controls > Autopilot > Cruise Follow Distance** or press the right scroll button on the steering wheel to the left or right.



The closest following distance is 2. The closest following distance is 1.





Each setting corresponds to a time-based distance that represents how long it takes for CybertruckModel SModel XModel 3Model Y, from its current location, to reach the location of the rear bumper of the vehicle ahead of you. Autopilot retains your setting until you change it again.

As you adjust the following distance, the touchscreen displays the current setting.

As you adjust the following distance, the touchscreen displays the current setting.



Stopping and Slowdowns

When moving significantly faster than vehicles in adjacent lanes, CybertruckModel SModel XModel 3Model Y automatically reduces the driving speed. This is especially helpful in heavy traffic situations or when vehicles are constantly merging into different lanes. When CybertruckModel SModel XModel 3Model Y detects other vehicles driving significantly slower, the instrument clustertouchscreen highlights the adjacent lanes with arrows and detected vehicles in gray, and CybertruckModel SModel XModel 3Model Y reduces the driving speed as appropriate. To temporarily override this feature, press the accelerator pedal.



When following a vehicle, Autopilot remains active at low speeds, even when CybertruckModel SModel XModel 3Model Y comes to a full stop. For example, Autopilot remains active even if CybertruckModel SModel XModel 3Model Y slows down to a complete or near-complete stop in heavy, stop-and-go traffic on a highway. When traffic starts moving more rapidly, Autopilot again accelerates up to the set speed.

Sometimes when CybertruckModel SModel XModel 3Model Y is at a full stop, Autopilot goes into a HOLD state. If this happens, briefly press the accelerator pedal to resume cruising.



When the HOLD status is active, the instrument clustertouchscreen displays the HOLD icon and a message that indicates that you need to resume cruise control.

CybertruckModel SModel XModel 3Model Y goes into HOLD state while Autopilot is active in the following circumstances:

- CybertruckModel SModel XModel 3Model Y has been at a standstill for 5 minutes.
- CybertruckModel SModel XModel 3Model Y detects a pedestrian (the HOLD state may clear when the pedestrian is no longer detected).
- CybertruckModel SModel XModel 3Model Y suddenly loses visibility of the vehicle in front of you.
- An obstacle is detected in front of CybertruckModel SModel XModel 3Model Y.

Cruising Near or On Exits

When you are cruising near an exit on a controlled-access highway and engage the turn signal toward the off-ramp, Autopilot assumes you are exiting and begins to slow down CybertruckModel SModel XModel 3Model Y. If you do not drive onto the off-ramp, Autopilot resumes cruising at the set speed.

In a region with right hand traffic, this occurs only when you engage the right turn signal when driving in the right-most lane within 164 ft. (50 meters) of an exit. Likewise in regions with left hand traffic, this occurs when engaging the left turn signal when driving in the left-most lane within 164 ft. (50 meters) of an exit.

NOTE: If Navigate on Autopilot is active, CybertruckModel SModel XModel 3Model Y will perform a route-based lane change to enter the exit lane and take the off-ramp as necessary to follow the navigation route.

When enabled while on a highway interchange or off-ramp, Traffic-Aware Cruise Control may reduce your set speed in 5 mph (5 km/h) increments – to as slow as 25 mph (40 km/h) – to better match the reported speeds of other Tesla vehicles that have driven at that specific location. To override this and continue cruising at your set speed, tap the accelerator pedal. The new set speed is maintained for the duration of the interchange or off-ramp (unless you override it or cancel Autopilot). After the interchange or off-ramp, the set speed may revert or change as necessary based on the new location. For example, if you merged onto a different highway, the set cruising speed reverts to what it was before driving on the interchange.

⚠ WARNING: In some cases (such as having insufficient data), Traffic-Aware Cruise Control may not automatically reduce the set speed on the highway interchange or off-ramp. Do not rely on Traffic-Aware Cruise Control to determine an appropriate driving speed. Tesla recommends driving at a speed that is safe for road conditions and within posted speed limits.

When cruising onto an on-ramp to a controlled-access highway, Autopilot automatically adjusts the set cruising speed to the speed limit of the highway, plus any offset you have specified. If Navigate on Autopilot is engaged, it disengages as you leave the controlled-access highway (see [Canceling Autopilot on page 564](#)). In this case, Autosteer remains active.

Overtake Acceleration

Engage the turn signal momentarily to accelerate CybertruckModel SModel XModel 3Model Y towards the vehicle ahead of it. By momentarily holding the turn signal stalk up or down stalk up or down, you can quickly accelerate up to your set speed without having to press the accelerator pedal as long as:

- Traffic-Aware Cruise Control is operating and detects a vehicle in front of you.
- No obstacles or vehicles are detected in the target lane.
- CybertruckModel SModel XModel 3Model Y is traveling below the set speed, but over 45 mph (72 km/h).

NOTE: If Autosteer is active and you fully engage the turn signal, CybertruckModel SModel XModel 3Model Y will change lanes automatically (see [Auto Lane Change on page 559](#)).

CybertruckModel SModel XModel 3Model Y stops accelerating when you reach your set cruising speed, if changing lanes takes too long, or if CybertruckModel SModel XModel 3Model Y gets too close the vehicle ahead. CybertruckModel SModel XModel 3Model Y also stops accelerating if you disengage the turn signal.

Stop Light and Stop Sign Warning

While Autopilot is in use, CybertruckModel SModel XModel 3Model Y displays a warning on the instrument clustertouchscreen and sounds a chime if it detects that you are likely to run through a red stop light or stop sign. If this happens, **TAKE IMMEDIATE CORRECTIVE ACTION!**

The visual and audible warnings cancel after a few seconds or when you press the brake pedal, whichever comes first.

Stop Light and Stop Sign Warning provides warnings only. It does not slow down or stop CybertruckModel SModel XModel 3Model Y at red traffic lights, stop signs, road markings, etc. If equipped with Traffic Light and Stop Sign Control, you can enable this feature to automatically stop CybertruckModel SModel XModel 3Model Y at traffic lights and stop signs (see [Traffic Light and Stop Sign Control on page 597](#)).

Emergency Vehicles

CybertruckModel SModel XModel 3Model Y automatically reduces driving speed when lights from an emergency vehicle are detected when using Autosteer at night on a high speed road. When this happens, the instrument clustertouchscreen displays a message informing you of the slowdown. You will also hear a chime, and see a reminder to keep your hands on the steering wheelsteering yoke (or steering wheel). When the light detections pass by or cease to appear, Autopilot resumes your cruising speed. Alternatively, you may tap the accelerator to resume your cruising speed.

Never depend on Autopilot features to determine the presence of emergency vehicles. CybertruckModel SModel XModel 3Model Y may not detect lights from emergency vehicles. Keep your eyes on your driving path and always be prepared to take immediate action.

Driver Attentiveness

Autosteer determines how best to steer CybertruckModel SModel XModel 3Model Y. When active, Autosteer requires you to hold the steering wheel. If it does not detect your hands on the steering wheel for a period of time, a flashing blue light appears at the top of the vehicle status section of the instrument clustertouchscreen and the following message displays:

Steering yoke alert:



Autopilot



Apply slight turning force to steering yoke

Steering wheel alert:



Apply slight turning force to steering wheel

When your hands are detected, the message disappears and Autosteer resumes normal operation. Autosteer detects your hands by recognizing slight resistance as the steering wheel turns, or from you manually turning the steering wheel very lightly (without enough force to take over steering). Autosteer also qualifies your hands as being detected if you engage a turn signal or use a button or scroll wheel on the steering wheel.

Autosteer requires that you pay attention to your surroundings and remain prepared to take control at any time. If Autosteer still does not detect your hands on the steering wheel, the flashing light on the vehicle status section of the instrument clustertouchscreen increases in frequency and a chime sounds.

If you repeatedly ignore Autosteer's prompts to apply slight force to the steering wheel, Autosteer disables for the rest of the drive and displays the following message requesting you to drive manually.



Autosteer unavailable for the rest of this drive. Hold steering wheelsteering yoke (or steering wheel) to drive manually.

For the rest of the drive, you must steer manually. Autosteer is available again on your next drive (after you stop and shift CybertruckModel SModel XModel 3Model Y into Park).

If you don't resume manual steering, Autosteer sounds a continuous chime, turns on the warning flashers, and slows the vehicle to a complete stop.

Autosteer Suspension

Use of Autosteer will be suspended if improper usage is detected.

When you or another driver of your vehicle receives five forced Autopilot disengagements, use of Autosteer is suspended for a week. A forced disengagement is when the Autopilot system disengages for the remainder of a trip after the driver receives several audio and visual warnings for inattentiveness. Driver-initiated disengagements do not count as improper usage.

You can see how many disengagements are remaining before Autosteer access is suspended by touching **Controls > Autopilot**.

A disengagement is forgiven after 7 days, as long as you don't receive another forced disengagement in that time.

NOTE: If your access to Autosteer is suspended, you are still able to use Traffic-Aware Cruise Control and all active safety features are still enabled.

Take Over Steering Immediately

In situations where Autosteer is unable to steer CybertruckModel SModel XModel 3Model Y, Autosteer sounds a warning chime and displays the following message on the touchscreeninstrument panel.



Take over immediately

When you see this message, **TAKE OVER STEERING IMMEDIATELY.**

Traffic Light and Stop Sign Control

NOTE: *Traffic Light and Stop Sign Control is a BETA feature and works best on roads that are frequently driven by Tesla vehicles. Traffic Light and Stop Sign Control attempts to stop at all traffic lights and may also stop at green lights.*

Traffic Light and Stop Sign Control is designed to recognize and respond to traffic lights and stop signs, slowing CybertruckModel SModel XModel 3Model Y to a stop when using Traffic-Aware cruise control or Autosteer. This feature uses the vehicle's forward-facing cameras, in addition to GPS data, and slows the car for all detected traffic lights, including green, blinking yellow, and off lights in addition to stop signs and some road markings. As CybertruckModel SModel XModel 3Model Y approaches an intersection, the instrument clustertouchscreen displays a notification indicating the intention to slow down. You must confirm that you want to continue or CybertruckModel SModel XModel 3Model Y stops at the red line displayed on the instrument clustertouchscreen's driving visualization.

⚠ WARNING: NEVER make assumptions and predict when and where Traffic Light and Stop Sign Control will stop or continue through an intersection or road marking. From a driver's perspective, the behavior of Traffic Light and Stop Sign Control may appear inconsistent. Always pay attention to the roadway and be prepared to take immediate action. It is the driver's responsibility to determine whether to stop or continue through an intersection. Never depend on Traffic Light and Stop Sign Control to determine when it is safe and/or appropriate to stop or continue through an intersection.

Before Using

Before using Traffic Light and Stop Sign Control, you must:


- Ensure that forward-facing cameras are unobstructed (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)) and calibrated (see [Drive to Calibrate Cameras on page 108](#)[Drive to Calibrate Cameras on page 1140](#)). Traffic Light and Stop Sign Control depends on the ability of the cameras to detect traffic lights, stop signs, and road markings.
- Ensure that the latest version of maps has been downloaded to CybertruckModel SModel XModel 3Model Y. Although Traffic Light and Stop Sign Control primarily uses visual data received from the vehicle's cameras, greater accuracy is achieved when using the most recent map data. To check which version of maps is currently downloaded, touch **Controls > Software**. You must connect to a Wi-Fi network to receive updated maps (see [Map Updates on page 706](#)).
- Enable the feature. With the vehicle in Park, touch **Controls > Autopilot > Traffic Light and Stop Sign Control**. Once enabled, Traffic Light and Stop Sign Control operates whenever Traffic-Aware Cruise Control or Autosteer is active.

How it Works

When Traffic Light and Stop Sign Control is enabled and you are using Autosteer, Traffic-Aware Cruise Control, or Full Self-Driving (Supervised), the instrument clustertouchscreen displays a popup message to inform you that an upcoming traffic light, stop sign, or road marking has been detected. As it approaches the stop location, **even at an intersection where the traffic light is green**, CybertruckModel SModel XModel 3Model Y slows down and displays a red line to indicate where CybertruckModel SModel XModel 3Model Y will stop. To continue through the intersection—even if the traffic light is green—you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to give the vehicle permission to proceed. When you've confirmed that you want to proceed, the red stop line turns gray and CybertruckModel SModel XModel 3Model Y continues through the intersection and resumes your set cruising speed.


NOTE: If CybertruckModel SModel XModel 3Model Y is approaching a green light and detects that a vehicle in front of you is continuing through the intersection, CybertruckModel SModel XModel 3Model Y continues through the intersection without requiring your confirmation, provided you are not in a turning lane and the vehicle can detect that your hands are on the steering wheelsteering yoke (or steering wheel).


NOTE: If, after you pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to continue through the intersection, the traffic signal changes before you enter the intersection (for example, the light changes from green to yellow or from yellow to red), CybertruckModel SModel XModel 3Model Y may determine that it is not appropriate to proceed. Therefore, CybertruckModel SModel XModel 3Model Y stops and you must press the accelerator to proceed. At all times, it is your responsibility to ensure the vehicle stops or accelerates appropriately and safely.


 **WARNING:** Traffic Light and Stop Sign Control DOES NOT turn CybertruckModel SModel XModel 3Model Y through an intersection unless Full Self-Driving (Supervised) is engaged. When in a turning lane, CybertruckModel SModel XModel 3Model Y stops at the red stop line. To proceed, pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal—CybertruckModel SModel XModel 3Model Y continues *straight* through the intersection (even when in a turning lane), so you MUST manually steer CybertruckModel SModel XModel 3Model Y through the intersection (which cancels Autosteer).


Traffic Light and Stop Sign Control is designed to operate as described only when the following conditions are met:


- Autosteer, Full Self-Driving (Supervised), or Traffic-Aware Cruise Control is engaged.
- The cameras can detect an upcoming traffic light, stop sign or road marking (for example, cameras are unobstructed and have a clear line-of-sight to the traffic light, stop sign, or road marking).
- The instrument clustertouchscreen on CybertruckModel SModel XModel 3Model Y is displaying an upcoming traffic light in "bold" format. CybertruckModel SModel XModel 3Model Y does not acknowledge traffic lights that the instrument clustertouchscreen shows as faded. If a traffic light is not directly ahead of the camera (for example, it is located at an angle of the camera's view, or located in an adjacent lane) the instrument clustertouchscreen displays it as faded and CybertruckModel SModel XModel 3Model Y does not slow down and stop for it.


 **WARNING:** If the instrument clustertouchscreen is not displaying a red stop line at an upcoming intersection, CybertruckModel SModel XModel 3Model Y does not slow down or stop. It is the driver's responsibility to pay attention to upcoming intersections and monitor traffic conditions to determine when and if the vehicle should stop and then to take appropriate action as needed.


 **WARNING:** Never depend on Traffic Light and Stop Sign Control to determine whether to stop at, or proceed through, an intersection. Drive attentively by watching the road and paying attention to the roadway, upcoming intersections, traffic conditions, crosswalks, and other road users. It is always the driver's responsibility to determine whether to stop or proceed. Be prepared to take immediate action. Failure to do so can result in injury or death.

 **WARNING:** In some situations, Traffic Light and Stop Sign Control may inaccurately detect a traffic light or stop sign, causing CybertruckModel SModel XModel 3Model Y to slow down unexpectedly. Be prepared to take immediate action at all times.

 **WARNING:** You must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to proceed through an intersection, regardless of the status of the traffic light. If you do not confirm, CybertruckModel SModel XModel 3Model Y stops at the red stop line displayed on the instrument clustertouchscreen, even if stopping may be inappropriate. Stopping at a green light may confuse other drivers and may result in a collision, injury or death. Therefore, always pay attention to upcoming intersections and be prepared to manually brake or accelerate in response to surroundings.

 **WARNING:** Never assume that your ability to see a traffic light, stop sign, or road marking (especially at a complex intersection, or an intersection in which a traffic light or sign is partially obstructed, etc.) means that CybertruckModel SModel XModel 3Model Y can also see it and respond appropriately.





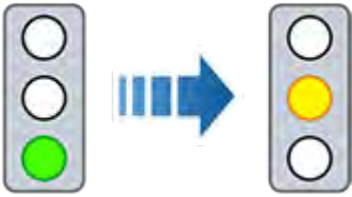
 **WARNING:** Even the most recent map data does not include all traffic lights and stop signs. Therefore, Traffic Light and Stop Sign Control relies heavily on the ability of the cameras to detect traffic lights, stop signs, road markings, etc. As a result, CybertruckModel SModel XModel 3Model Y may ignore an intersection that is blocked from the camera's view (for example, obstructed by a tree or a large vehicle or object, or located near a steep hill or sharp curve).

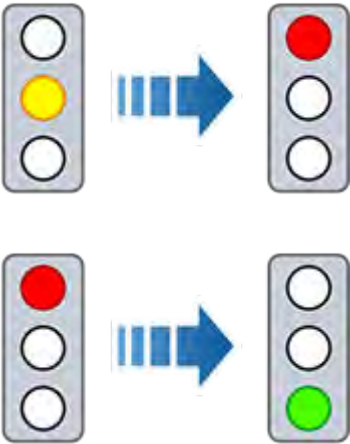


 **WARNING:** Traffic Light and Stop Sign Control is not a substitute for attentive driving and sound judgment.



Traffic Lights

When driving with Autosteer or Traffic-Aware Cruise Control engaged, and Traffic Light and Stop Sign Control enabled, CybertruckModel SModel XModel 3Model Y is designed to respond as follows when approaching intersections controlled by a traffic light:





Type of Traffic Light	Vehicle Intended Response
 	<p>At a solid green traffic light, or at a traffic light that is currently off (not illuminated), CybertruckModel SModel XModel 3Model Y slows down.</p> <p>If you are following a car in front of you that continues through the intersection, the instrument clustertouchscreen displays a green stop line and provided your hands are detected on the steering wheelsteering yoke (or steering wheel), CybertruckModel SModel XModel 3Model Y also continues. If a car is not in front of you, the instrument clustertouchscreen displays a red stop line and you must confirm that you want to continue through the intersection by pulling the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly pressing the accelerator pedal. If you don't confirm, CybertruckModel SModel XModel 3Model Y stops at the red stop line.</p> <p>NOTE: CybertruckModel SModel XModel 3Model Y resumes the set cruising speed when it continues through the intersection, taking into consideration the speed of a vehicle in front of you.</p>
 	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to continue through the intersection (for example, the light turns green again, or once CybertruckModel SModel XModel 3Model Y has come to a complete stop), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p>
	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection (for example, the light turns green again), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p> <p>NOTE: If the traffic light changes <i>after</i> you've confirmed that you want to proceed (for example, a green traffic light turns yellow), CybertruckModel SModel XModel 3Model Y may stop instead of continuing, especially if CybertruckModel SModel XModel 3Model Y determines that it can safely stop before entering the intersection.</p> <p>NOTE: CybertruckModel SModel XModel 3Model Y is not designed to proceed through an intersection when the traffic light is red or if the light turns yellow in situations when there is adequate distance to safely stop before entering the intersection.</p> <p>NOTE: You can take over driving at any time by manually braking to cancel Autosteer or Traffic-Aware Cruise Control.</p>



Type of Traffic Light	Vehicle Intended Response
	
	<p>CybertruckModel SModel XModel 3Model Y slows down. To proceed, you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal. If you don't, CybertruckModel SModel XModel 3Model Y stops at the red stop line displayed on the instrument clustertouchscreen.</p> <p>NOTE: To prevent CybertruckModel SModel XModel 3Model Y from stopping, and to minimize how much it slows down as it approaches, you can confirm that you want to proceed by pulling the Autopilot stalk toward you or press down on the drive stalk or briefly pressing the accelerator pedal at any time after the instrument clustertouchscreen displays the red stop line.</p> <p>CybertruckModel SModel XModel 3Model Y resumes your set cruising speed immediately after you confirm (taking into consideration the speed of a vehicle in front of you).</p> <p>⚠ WARNING: Approach attentively and be prepared to press the brake pedal to slow down or stop.</p>
	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection (for example, traffic laws and conditions indicate it is safe and legal to proceed), you must pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal.</p>





Stop Signs and Road Markings

When driving with Autosteer or Traffic-Aware Cruise Control engaged, and Traffic Light and Stop Sign Control enabled, CybertruckModel SModel XModel 3Model Y is designed to respond as follows when approaching intersections controlled by stop signs, stop lines, or road markings:

Type of Intersection	Vehicle Intended Response
 <p>No Traffic Control</p>  <p>Arm of T-junction</p>	<p>CybertruckModel SModel XModel 3Model Y assumes the right of way and continues straight without slowing down or stopping.</p>
 <p>End of T-junction</p>	<p>If CybertruckModel SModel XModel 3Model Y detects a T-junction based on the map data, CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed, you must take over steering and acceleration.</p> <p>⚠ WARNING: CybertruckModel SModel XModel 3Model Y may not stop at a T-junction that does not have a stop sign or stop line, or if the T-junction is not included in the map data. Drive attentively and be prepared to stop (when necessary and/or appropriate).</p>
 <p>Stop Sign</p>	<p>CybertruckModel SModel XModel 3Model Y slows down and comes to a complete stop at the red stop line displayed on the instrument clustertouchscreen. When you want to proceed through the intersection, you must pull the Autopilot stalk toward you or press down on the drive stalk or briefly press the accelerator pedal.</p> <p>NOTE: If you confirm that you want to proceed through an intersection controlled by a stop sign by pulling the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly pressing the accelerator pedal before CybertruckModel SModel XModel 3Model Y has stopped, your confirmation is ignored. CybertruckModel SModel XModel 3Model Y is not designed to proceed through a stop sign without stopping.</p> <p>NOTE: Even when using Autosteer, and even if you have engaged a turn signal, you must turn the steering wheelsteering yoke (or steering wheel) yourself (which cancels Autosteer) to complete a turn at an intersection.</p>

Type of Intersection	Vehicle Intended Response
	
<p>Stop Sign and Road Marking</p>	
	
<p>Road Marking</p>	

-  **WARNING:** CybertruckModel SModel XModel 3Model Y also slows down and stops at a roundabout. You must take over steering (which cancels Autosteer) and pull the Autopilot stalk toward you or press down on the drive stalk or press down on the drive stalk or briefly press the accelerator pedal to confirm that you want to continue through the roundabout.
-  **WARNING:** At crosswalks, CybertruckModel SModel XModel 3Model Y may slow down and may stop, depending on whether the crosswalk is controlled by a traffic light and whether the cameras detect pedestrians, bicyclists, etc. in the crosswalk. Pay particular attention at crosswalks and be prepared to take over at any time. Failure to do so can result in injury or death.

Limitations

Depending on many different circumstances and environmental conditions, Traffic Light and Stop Sign Control *may or may not* stop at:

- Railroad crossings.
- Keep-out zones.
- Toll booths.
- Crosswalk systems.
- Yield signs or temporary traffic lights and stop signs (such as at construction areas).
- Miscellaneous traffic U-turn lights, bicycle and pedestrian crossing lights, lane availability lights, etc.

In addition, Traffic Light and Stop Sign Control is particularly unlikely to operate as intended, can disengage, or may not operate, when one or more of the following conditions are present:

- Driving through consecutive light-controlled intersections that are very close to each other.
- Visibility is poor (heavy rain, snow, fog, etc.) or weather conditions are interfering with camera or sensor operation.
- Bright light (such as direct sunlight) is interfering with the view of the camera(s).



- A camera is obstructed, covered, damaged, or not properly calibrated.
- Driving on a hill or on a road that has sharp curves on which the cameras are unable to see upcoming traffic lights or stop signs.
- A traffic light, stop sign, or road marking is obstructed (for example, a tree, a large vehicle, etc.).
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it, which is blocking the view of a camera.

⚠ WARNING: The limitations listed above are not an exhaustive list of reasons why CybertruckModel SModel XModel 3Model Y may not operate as expected. Many unforeseen circumstances can adversely impact the accurate operation of Traffic Light and Stop Sign Control. Using this feature does not reduce or eliminate the need to drive attentively and responsibly. You must be prepared to take appropriate and immediate action at all times.

Limitations and Warnings

This topic includes warnings, cautions, and limitations pertaining to the following Autopilot features.

- [Traffic-Aware Cruise Control on page 554](#)[Traffic-Aware Cruise Control on page 576](#)
- [Autosteer on page 556](#)[Autosteer on page 587](#)
- [Navigate on Autopilot on page 634](#)[Navigate on Autopilot on page 592](#)
- [Autosteer on City Streets \(Full Self-Driving \(Supervised\)\) on page 634](#)
- [Autopark on page 635](#)[Autopark on page 609](#)
- [Summon on page 636](#)[Summon on page 624](#)
- [Smart Summon on page 636](#)[Smart Summon on page 628](#)

⚠ WARNING: Read the following warnings and limitations carefully before using Autopilot. Failure to follow all warnings and instructions can result in property damage, serious injury, or death.

NOTE: Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).


Traffic-Aware Cruise Control

While using Traffic-Aware Cruise Control, **it is the driver's responsibility to stay alert, drive safely, and be in control of the vehicle at all times.** Always keep your eyes on the road when driving and be prepared to take corrective action as needed.


In addition, it is the driver's responsibility to cruise at a safe speed and maintain a safe following distance based on road conditions and applicable speed limits. Be aware of the following limitations while Traffic-Aware Cruise Control is active.


- There may be situations where the cruising speed may not change when the speed limit changes.
- Traffic-Aware Cruise Control does not adapt driving speed based on road and driving conditions. Do not use Traffic-Aware Cruise Control on winding roads with sharp curves, on icy or slippery road surfaces, or when weather conditions (such as heavy rain, snow, fog, etc.) make it inappropriate to drive at a consistent speed.
- Do not rely on Traffic-Aware Cruise Control to maintain an accurate or appropriate following distance.
- Traffic-Aware Cruise Control may be unable to provide adequate speed control because of limited braking capability and hills. It can also misjudge the distance from a vehicle ahead. Driving downhill can increase driving speed, causing CybertruckModel SModel XModel 3Model Y to exceed your set speed (and potentially the road's speed limit).
- Traffic-Aware Cruise Control may occasionally cause CybertruckModel SModel XModel 3Model Y to brake when not required or when you are not expecting it. This can be caused by closely following a vehicle ahead, detecting vehicles or objects in adjacent lanes (especially on curves), etc.


- Due to limitations inherent in the onboard GPS (Global Positioning System), you may experience situations in which CybertruckModel SModel XModel 3Model Y slows down, especially near exits or off-ramps where a curve is detected and/or you are navigating to a destination and not following the route.
- In some cases (such as having insufficient data), Traffic-Aware Cruise Control may not automatically reduce the set speed on the highway interchange or off-ramp.
- Traffic-Aware Cruise Control may not detect all objects and, especially when cruising over 50 mph (80 km/h), may not brake/decelerate when a vehicle or object is only partially in the driving lane or when a vehicle you are following moves out of your driving path and a stationary or slow-moving vehicle or object is in front of you.
- Traffic-Aware Cruise Control may react to vehicles or objects that either do not exist, or are not in your lane of travel, causing CybertruckModel SModel XModel 3Model Y to slow down unnecessarily or inappropriately.

 **WARNING:** Traffic-Aware Cruise Control is particularly unlikely to operate as intended in the following types of situations:


- The road has sharp curves or significant changes in elevation.
- Road signs and signals are unclear, ambiguous, or poorly maintained.
- Visibility is poor (due to heavy rain, snow, hail, etc. or poorly lit roadways at night)
- You are driving in a tunnel or next to a highway divider that interferes with the view of the camera(s)
- Bright light (such as from oncoming headlights or direct sunlight) interferes with the view of the camera(s).


 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Traffic-Aware Cruise Control. Traffic-Aware Cruise Control can cancel unexpectedly at any time for unforeseen reasons. Always watch the road in front of you and stay prepared to take appropriate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.


 **WARNING:** Traffic-Aware Cruise Control is designed for your driving comfort and convenience and is not a collision warning or avoidance system. Never depend on Traffic-Aware Cruise Control to adequately slow down CybertruckModel SModel XModel 3Model Y. Always watch the road in front of you and be prepared to take corrective action at all times. Failure to do so can result in serious injury or death.

 **WARNING:** Although Traffic-Aware Cruise Control is capable of detecting pedestrians and cyclists, never depend on Traffic-Aware Cruise Control to adequately slow CybertruckModel SModel XModel 3Model Y down for them. Failure to do so can result in serious injury or death.

Autosteer

 **WARNING:** Autosteer is a hands-on feature. Keep your hands on the steering wheel at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death.

 **WARNING:** Autosteer is intended for use on controlled-access highways with a fully attentive driver. Do not use Autosteer in construction zones, or in areas where bicyclists or pedestrians may be present.

 **WARNING:** Never depend on Autosteer to determine an appropriate driving path.



CAUTION: Autosteer and its associated functions are particularly unlikely to operate as intended when:

- Autosteer is unable to accurately determine lane markings. For example, lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction, are changing quickly (lanes branching off, crossing over, or merging), objects or landscape features are casting strong shadows on the lane markings, or the road surface contains pavement seams or other high-contrast lines.
- Visibility is poor (heavy rain, snow, fog, etc.) or weather conditions are interfering with sensor operation.
- A camera(s) or sensor(s) is obstructed, covered, or damaged.
- Driving on hills.
- Approaching a toll booth.
- Driving on a road that has sharp curves or is excessively rough.
- Bright light (such as direct sunlight) is interfering with the view of the camera(s).
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- A vehicle is detected in your blind spot when you engage the turn signal.
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it, which is blocking the view of the camera(s).



WARNING: Many unforeseen circumstances can impair the operation of Autosteer. Always keep this in mind and remember that as a result, Autosteer may not steer CybertruckModel SModel XModel 3Model Y appropriately. Always drive attentively and be prepared to take immediate action.



WARNING: Autosteer is not designed to, and will not, steer CybertruckModel SModel XModel 3Model Y around objects partially in a driving lane and in some cases, may not stop for objects that are completely blocking the driving lane. Always watch the road in front of you and stay prepared to take immediate action. It is the driver's responsibility to be in control of CybertruckModel SModel XModel 3Model Y at all times.

Auto Lane Change



CAUTION: When changing lanes using Auto Lane Change, It is the driver's responsibility to determine whether a lane change is safe and appropriate. Therefore, before initiating a lane change, always check blind spots, lane markings, and the surrounding roadway to confirm it is safe and appropriate to move into the target lane.





CAUTION: Be aware of the following limitations while using Auto Lane Change.

- Never depend on Auto Lane Change to determine an appropriate driving path. Drive attentively by watching the road and traffic ahead of you, checking the surrounding area, and monitoring the touchscreen for warnings. Always be prepared to take immediate action.
- Do not use Auto Lane Change on roads where traffic conditions are constantly changing and where bicycles and pedestrians are present.
- The performance of Auto Lane Change depends on the ability of the camera(s) to recognize lane markings.
- Do not use Auto Lane Change on winding roads with sharp curves, on icy or slippery roads, or when weather conditions (such as heavy rain, snow, fog, etc.) may be obstructing the view from the camera(s) or sensors (if equipped).
- Overtake Acceleration can cancel for many unforeseen reasons in addition to those listed above (for example, lack of GPS data). Stay alert and never depend on Overtake Acceleration to increase your driving speed.
- Overtake Acceleration increases your driving speed whenever the appropriate turn signal is engaged, and accelerates CybertruckModel SModel XModel 3Model Y closer to the vehicle ahead. Although Traffic-Aware Cruise Control continues to maintain distance from the vehicle ahead, it is important to be aware that your selected following distance is reduced when Overtake Acceleration is active, particularly in cases where it may not be your intention to overtake the vehicle you are following.






Stop Light and Stop Sign Warning







WARNING: Stop Light and Stop Sign Warning requires on-board maps to know that a particular stop light or stop sign exists at a location. In some cases, map data is inaccurate or outdated and may not include all stop lights or stop signs. Therefore, Stop Light and Stop Sign Warning may not detect all stop lights and stop signs.

-  **WARNING:** The Stop Light and Stop Sign Warning feature does not apply the brakes or decelerate CybertruckModel SModel XModel 3Model Y and may not detect all stop lights and stop signs. Stop Light and Stop Sign Warning is designed for guidance purposes only and is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Stop Light and Stop Sign Warning to warn you of a stop light or stop sign.
-  **WARNING:** Stop Light and Stop Sign Warning is designed to warn you only when approaching a visible red stop sign, solid red or later portion of a yellow traffic light. It may not warn you of intersections with flashing lights and it does not warn you of yield signs or temporary stop and yield signs (such as those used in construction areas). Additionally, Stop Light and Stop Sign Warning does not warn you of approaching stop lights or stop signs when you are pressing the accelerator pedal or brake pedal (which disables Autosteer).

Navigate on Autopilot

-  **WARNING:** Never depend on Navigate on Autopilot to determine an appropriate lane at an off-ramp. Stay alert and perform visual checks to ensure that the driving lane is safe and appropriate.
-  **WARNING:** If you turn off **Require Lane Change Confirmation**, Navigate on Autopilot notifies you of upcoming lane changes and off-ramps, but it remains your responsibility to monitor the environment and maintain control of CybertruckModel SModel XModel 3Model Y at all times. Lane changes can occur quickly and suddenly. Always keep your hands on the wheel and your eyes on the driving path in front of you.
-  **WARNING:** Navigate on Autopilot does not make driving autonomous. You must pay attention to the road, keep your hands on the steering wheel at all times, and remain aware of your navigation route.
-  **WARNING:** As is the case with normal driving, be extra careful around blind corners, interchanges, and on-ramps and off-ramps - obstacles can appear quickly and at any time.
-  **WARNING:** Navigate on Autopilot may not recognize or detect oncoming vehicles, stationary objects, and special-use lanes such as those used exclusively for bikes, carpools, emergency vehicles, etc. Remain alert at all times and be prepared to take immediate action. Failure to do so can cause damage, injury or death.

Autosteer on City Streets (Full Self-Driving (Supervised))

-  **WARNING:** Always remember that **Full Self-Driving (Supervised)** (also known as **Autosteer on City Streets**) does not make CybertruckModel SModel XModel 3Model Y autonomous and requires a fully attentive driver who is ready to take immediate action at all times.
-  **WARNING:** Full Self-Driving (Supervised) is a hands-on feature. Keep your hands on the steering wheelsteering yoke (or steering wheel) at all times, be mindful of road conditions and surrounding traffic, and always be prepared to take immediate action. Failure to follow these instructions could cause damage, serious injury or death. It is your responsibility to familiarize yourself with the limitations of Full Self-Driving (Supervised) and the situations in which it may not work as expected.
-  **WARNING:** Failure to follow all warnings and instructions can result in property damage, serious injury or death.
-  **CAUTION:** Full Self-Driving (Supervised) and its associated functions may not operate as intended and there are numerous situations in which driver intervention may be needed. Examples include (but are not limited to):
- Interactions with pedestrians, bicyclists, and other road users.
 - Unprotected turns with high-speed cross traffic.
 - Multi-lane turns.
 - Simultaneous lane changes.
 - Narrow roads with oncoming cars or double-parked vehicles.
 - Rare objects such as trailers, ramps, cargo, open doors, etc. protruding from vehicles.
 - Merges onto high-traffic, high-speed roads.
 - Debris in the road.
 - Construction zones.
 - High curvature roads, particularly at fast driving speeds.

Visibility is critical for Full Self-Driving (Supervised) to operate. Low visibility, such as low light or poor weather conditions (rain, snow, direct sun, fog, etc.) can significantly degrade performance.



WARNING: CybertruckModel SModel XModel 3Model Y may quickly and suddenly make unexpected maneuvers or mistakes that require immediate driver intervention.

The list above represents only a fraction of the possible scenarios that can cause Full Self-Driving (Supervised) to make sudden maneuvers and behave unexpectedly. In fact, CybertruckModel SModel XModel 3Model Y can suddenly swerve even when driving conditions appear normal and straight-forward. Stay alert and always pay attention to the roadway so you can anticipate the need to take corrective action as early as possible. Remember that this is an early access feature that must be used with extra caution.

CAUTION: As Full Self-Driving (Supervised) deployment expands, Tesla will gradually make it available to eligible customers in select countries outside the United States. Because every country contains unique infrastructure, driving behaviors, and traffic patterns that Full Self-Driving (Supervised) must adapt to over time, it is essential for drivers using Full Self-Driving (Supervised) in newly eligible countries to be extra attentive and overly cautious. You must be ready to take over safely at any time.

Autopark

CAUTION: Autopark's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to curbs, objects, and other vehicles. Be aware of the following warnings before and while using Autopark:

- Do not use Autopark if anything, such as a ball hitch, bike rack, or trailer, is attached to the tow hitch. Autopark may not stop for hitches when parking between or in front of other vehicles.
- Never depend on Autopark to find a parking space that is legal, suitable, and safe. Autopark may not always detect objects in the parking space. Always perform visual checks to confirm that a parking space is appropriate and safe.
- When Autopark is actively steering CybertruckModel SModel XModel 3Model Y, the steering wheel moves in accordance with Autopark's adjustments. Do not interfere with the movement of the steering wheel. Doing so cancels Autopark.
- During the parking sequence, continually check your surroundings. Be prepared to apply the brakes to avoid vehicles, pedestrians, or objects.
- When Autopark is active, monitor the touchscreen to ensure that you are aware of the instructions that Autopark is providing.


CAUTION:

Autopark is particularly unlikely to operate as intended in these situations:


- The road is sloped. Autopark is designed to operate on flat roads only.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- The curb is constructed of material other than stone, or the curb cannot be detected.
- The target parking space is directly adjacent to a wall or pillar (for example, the last parking space of a row in an underground parking structure).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) operation.
- The sensors (if equipped) are affected by other electrical equipment or electrical interference.


WARNING: Many unforeseen circumstances can impair Autopark's ability to park CybertruckModel SModel XModel 3Model Y. Keep this in mind and remember that as a result, Autopark may not steer CybertruckModel SModel XModel 3Model Y appropriately. Pay attention when parking CybertruckModel SModel XModel 3Model Y and stay prepared to immediately take control.

Summon


 **CAUTION:** Summon's performance depends on the ability of the cameras and sensors (if equipped) to determine the vehicle's proximity to objects, people, animals, and other vehicles. Summon is unlikely to operate as intended in the following types of situations:


- The driving path is sloped. Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Summon does not move CybertruckModel SModel XModel 3Model Y over an edge that is higher than approximately 1 in (2.5 cm).
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached.

 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.

 **WARNING:** CybertruckModel SModel XModel 3Model Y cannot detect obstacles that are located lower than the bumper, are very narrow, or are hanging from a ceiling (for example, bicycles). In addition, many unforeseen circumstances can impair Summon's ability to move in or out of a parking space and, as a result, Summon may not move CybertruckModel SModel XModel 3Model Y appropriately. Therefore, you must continually monitor the vehicle's movement and its surroundings and remain prepared to stop CybertruckModel SModel XModel 3Model Y at any time.

Smart Summon

 **CAUTION:** Smart Summon is a BETA feature. You must continually monitor the vehicle and its surroundings and stay prepared to take immediate action at any time. It is the driver's responsibility to use Smart Summon safely, responsibly, and as intended.


 **CAUTION:** Smart Summon is designed and intended for use only on parking lots and driveways located on private property where the surrounding area is familiar and predictable. Do not use Smart Summon on public roads.

NOTE: Smart Summon is disabled if CybertruckModel SModel XModel 3Model Y is in Valet mode (see [Valet Mode on page 516](#)).

 **CAUTION:**







Smart Summon is unlikely to operate as intended in the following types of situations:

- GPS data is unavailable due to poor cellular coverage.
- The driving path is sloped. Smart Summon is designed to operate on flat roads only (up to 10% grade).
- A raised concrete edge is detected. Depending on the height of the concrete edge, Smart Summon may not move CybertruckModel SModel XModel 3Model Y over it.
- One or more of the sensors (if equipped) or cameras is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor (if equipped) or camera operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- CybertruckModel SModel XModel 3Model Y is in Trailer Mode or an accessory is attached

 **WARNING:** The list above does not represent an exhaustive list of situations that may interfere with proper operation of Smart Summon. It is the driver's responsibility to remain in control of CybertruckModel SModel XModel 3Model Y at all times. Pay close attention whenever Smart Summon is actively moving CybertruckModel SModel XModel 3Model Y and stay prepared to take immediate action. Failure to do so can result in serious property damage, injury or death.



Autopilot

-  **WARNING:** Smart Summon must only be used on paved surfaces.
-  **WARNING:** Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all traffic. Smart Summon does not recognize the direction of traffic, does not navigate around empty parking spaces, and may not anticipate crossing traffic.
-  **WARNING:** When using Smart Summon, you must maintain a clear line of sight between you and CybertruckModel SModel XModel 3Model Y and stay prepared to stop the vehicle at any time by releasing the button on the mobile app.
-  **WARNING:** When you release the button to stop CybertruckModel SModel XModel 3Model Y, a slight delay occurs before the vehicle stops. Therefore, it is critical that you pay close attention to the vehicle's driving path at all times and proactively anticipate obstacles that the vehicle may be unable to detect.
-  **WARNING:** Use extreme caution when using Smart Summon in environments where movement of obstacles can be unpredictable. For example, where people, children or animals are present.
-  **WARNING:** Smart Summon may not stop for all objects (especially very low objects such as some curbs, or very high objects such as a shelf) and may not react to all oncoming or side traffic. Pay attention and be ready to stop CybertruckModel SModel XModel 3Model Y at all times by releasing the button on the mobile app.



Lane Assist

CybertruckModel SModel XModel 3Model Y monitors the markers on the lane you are driving in as well as the surrounding areas for the presence of vehicles or other objects.

NOTE: For vehicles manufactured as of approximately October 2022, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

NOTE: For vehicles manufactured as of approximately October 2022, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

NOTE: For vehicles manufactured as of approximately January 2023, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

NOTE: For vehicles manufactured as of approximately late May 2023, Lane Assist does not show visualizations (colored lines on the instrument clustertouchscreen corresponding to detected objects) when CybertruckModel SModel XModel 3Model Y is in motion, or the visualizations may not look exactly as described.

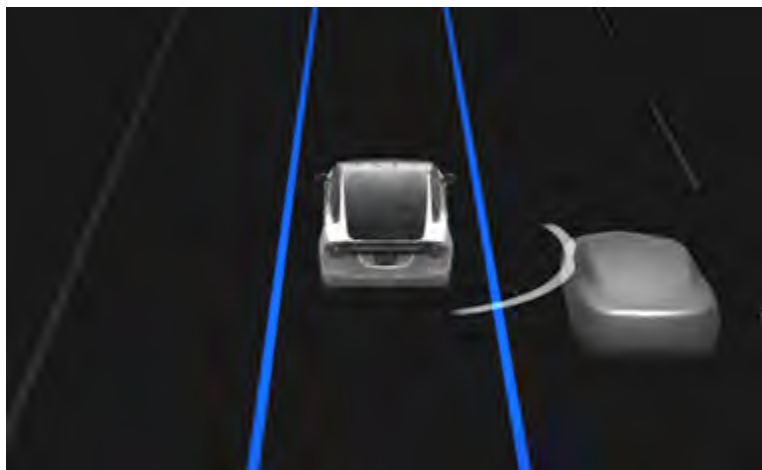
When an object is detected in your blind spot or near the side of CybertruckModel SModel XModel 3Model Y (such as a vehicle, guard rail, etc.), the instrument clustertouchscreen displays colored lines radiating from the image of your vehicle. The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represent the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being the closest and requiring your immediate attention. These colored lines only display when driving between approximately 7 and 85 mph (12 and 140 km/h). When Autosteer is active, these colored lines also display if driving slower than 7 mph (12 km/h). However, the colored lines do not display if CybertruckModel SModel XModel 3Model Y is at a standstill (for example, in heavy traffic).

When an object is detected in your blind spot or near the side of CybertruckModel SModel XModel 3Model Y (such as a vehicle, guard rail, etc.), the instrument clustertouchscreen displays colored lines radiating from the image of your vehicle. The location of the lines correspond to the location of the detected object. The color of the lines (white, yellow, orange, or red) represent the object's proximity to CybertruckModel SModel XModel 3Model Y, with white being the farthest and red being the closest and requiring your immediate attention. These colored lines only display when driving between approximately 7 and 85 mph (12 and 140 km/h). When Autosteer is active, these colored lines also display if driving slower than 7 mph (12 km/h). However, the colored lines do not display if CybertruckModel SModel XModel 3Model Y is at a standstill (for example, in heavy traffic).





Active Safety Features





- ⚠ WARNING:** Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).
- ⚠ WARNING:** Lane Assist features are for guidance purposes only and are not intended to replace your own direct visual checks. Before changing lanes, always use side mirrors and perform the appropriate shoulder checks to visually determine if it is safe and appropriate to change lanes.
- ⚠ WARNING:** Never depend on Lane Assist to inform you if you unintentionally drive outside of the driving lane, or to inform you that there is a vehicle beside you or in your blind spot. Several external factors can reduce the performance of Lane Assist (see [Limitations and Inaccuracies on page 644](#)). It is the driver's responsibility to stay alert and pay attention to the driving lane and other road users. Failure to do so can result in serious injury or death.



Steering Interventions

Lane Assist provides steering interventions if CybertruckModel SModel XModel 3Model Y drifts into (or close to) an adjacent lane in which an object, such as a vehicle, is detected. In these situations, CybertruckModel SModel XModel 3Model Y automatically steers to a safer position in the driving lane. This steering is applied only when CybertruckModel SModel XModel 3Model Y is traveling between 30 and 85 mph (48 and 140 km/h) on major roads with clearly visible lane markings. When a steering intervention is applied, the instrument paneltouchscreen briefly displays a warning message.

Lane Departure Warning

Lane Departure Warning alerts you of undesired lane departures by slightly vibrating the steering wheelsteering yoke (or steering wheel) if a front wheel passes over a lane marking when the associated turn signal is off. To turn this warning on or off, touch **Controls > Autopilot > Lane Departure Warning**. Lane Departure Warning is active only when driving between approximately 40 and 90 mph (64 and 145 km/h).

Lane Departure Avoidance

NOTE: Depending on date of manufacture, software version, and vehicle configuration, your vehicle may not be equipped with Lane Departure Avoidance, or the feature may not operate exactly as described.




Lane Departure Avoidance is designed to warn you if CybertruckModel SModel XModel 3Model Y is drifting out of, or nears the edge of, your driving lane.

Lane Departure Avoidance operates when driving between 40 and 90 mph (64 and 145 km/h) on roads with clearly visible lane markings. You can choose if and how you want Lane Departure Warning to operate by touching **Controls > Autopilot > Lane Departure Avoidance** and selecting between these options:

- **Off:** You are not warned of lane departures or potential collisions with a vehicle in an adjacent lane.
- **Warning:** If a front wheel passes over a lane marking, a blue indicator line appears on the instrument clustertouchscreen and the steering wheelsteering yoke (or steering wheel) vibrates.the touchscreen displays a warning. (For vehicles equipped with Full Self-Driving (Supervised): if a front wheel passes over a lane marking, the steering wheelsteering yoke (or steering wheel) vibrates.)
- **Assist:** A blue indicator line, corresponding to the line being crossed by the vehicle, appears on the touchscreen. Corrective steering is applied to keep CybertruckModel SModel XModel 3Model Y in a safe position if CybertruckModel SModel XModel 3Model Y drifts into an adjacent lane or near the edge of the road.

When Lane Departure Avoidance is enabled and Traffic-Aware Cruise Control is active, if CybertruckModel SModel XModel 3Model Y drifts out of the driving lane when the associated turn signal is off, Lane Assist also checks to see whether your hands are on the steering wheelsteering yoke (or steering wheel). If hands are not detected, the instrument paneltouchscreen displays a series of alerts, similar to those that are used when driving with Autosteer. If hands are repeatedly not detected CybertruckModel SModel XModel 3Model Y gradually slows down to 15 mph (25 km/h) below the detected speed limit, or below the set cruising speed, and the hazard lights start flashing.

NOTE: Lane Departure Avoidance does not warn you of lane departures, or provide steering interventions, if the associated turn signal is on, which indicates an intentional lane change.

-  **WARNING:** Lane Departure Avoidance is intended to help keep you safe, but it does not work in every situation and does not replace the need to remain attentive and in control.
-  **WARNING:** Keep your hands on the steering wheelsteering yoke (or steering wheel) and drive attentively at all times.
-  **WARNING:** Steering interventions are minimal and are not designed to move CybertruckModel SModel XModel 3Model Y out of its driving lane. Do not rely on steering interventions to avoid side collisions.

Emergency Lane Departure Avoidance

NOTE: Depending on date of manufacture, software version, and vehicle configuration, your vehicle may not be equipped with Emergency Lane Departure Avoidance, or the feature may not operate exactly as described.

Emergency Lane Departure Avoidance automatically applies steering to avoid a potential collision in situations where:




- CybertruckModel SModel XModel 3Model Y is departing a lane and may collide with a vehicle traveling in the same direction in the adjacent lane (regardless of the status of the turn signal).
- CybertruckModel SModel XModel 3Model Y is departing a lane into an oncoming lane, the turn signal is off, and an oncoming vehicle is detected.
- CybertruckModel SModel XModel 3Model Y is departing the road and the turn signal is off (for example, very close to the edge of the road and a collision may occur).

To turn this feature on or off, touch **Controls > Autopilot > Emergency Lane Departure Avoidance**.

When Emergency Lane Departure Avoidance applies steering, a chime sounds and the instrument paneltouchscreen displays a warning and highlights the lane marking in red.

Emergency Lane Departure Avoidance operates when CybertruckModel SModel XModel 3Model Y is traveling between 40 and 90 mph (64 and 145 km/h) on a road with clearly visible lane markings, curbs, etc.


 **WARNING:** Emergency Lane Departure Avoidance is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Emergency Lane Departure Avoidance to prevent a collision. Several factors can reduce or impair performance. Depending on Emergency Lane Departure Avoidance to prevent a potential collision can result in serious injury or death.

Blind Spot Assist

Automatic Blind Spot Camera


You can turn it on/off by touching **Controls > Safety > Automatic Blind Spot CameraControls > Autopilot > Automatic Blind Spot Camera** on the touchscreen.


Once enabled, when the turn signal is engaged, the touchscreen displays the image from the corresponding side repeater camera. When a vehicle is detected in your blind spot in an adjacent lane, a vertical red bar appears on the image to warn you. For example, when the left turn signal is engaged and a vehicle is detected, a vertical red bar appears on the left side of the image. You can move the image to a different location on the touchscreen. To do so, touch and drag the image to the new location (valid locations are indicated by shaded areas that display when you touch and hold the image).

 **WARNING:** Automatic Blind Spot Camera does not eliminate the need to drive attentively and manually perform shoulder checks when changing lanes.

Blind Spot Collision Warning Chime

If you want a chime to sound when a vehicle is in your blind spot and a possible collision is detected, touch **Controls > Safety > Blind Spot Collision Warning Chime Controls > Autopilot > Blind Spot Collision Warning Chime**.

 **WARNING:** Blind Spot Camera does not eliminate the need to drive attentively and manually perform shoulder checks when changing lanes.

 **WARNING:** Blind Spot Collision Warning Chime cannot detect every collision. It is the driver's responsibility to remain alert and perform the appropriate shoulder checks when changing lanes.

Blind Spot Warning Light

Both front door pillars are equipped with a blind spot indicator in the upper speaker grille. You can enable or disable the indicators by touching **Controls > Safety > Blind Spot Warning Light**. When a vehicle is detected in your blind spot in an adjacent lane a red light appears in the upper speaker grille.

- A solid red light indicates a vehicle has been detected in your blind spot.
- A blinking red light indicates that a vehicle is in your blind spot while the turn signal is indicating your intent to turn that direction.
- A rapid blinking red light indicates that a vehicle is detected and immediate corrective action is required to avoid a collision.



Active Safety Features



⚠ WARNING: Do not rely on Blind Spot Warning Light to detect a vehicle in your blind spot. Always visually confirm that a lane is free from obstacles and vehicles before exiting your lane.

Blind Spot Warning Light

Both front door pillars are equipped with a blind spot warning light in the upper speaker grille. You can enable or disable the warning lights by touching **Controls > Safety > Blind Spot Warning Light**. When a vehicle is detected in your blind spot in an adjacent lane a red light appears in the upper speaker grille.

- A solid red light indicates a vehicle has been detected in your blind spot.
- A blinking red light indicates that a vehicle is in your blind spot while the turn signal is indicating your intent to turn that direction.
- A rapid blinking red light indicates that a vehicle is detected and immediate corrective action is required to avoid a collision.



⚠ WARNING: Do not rely on Blind Spot Warning Light to detect a vehicle in your blind spot. Always visually confirm that a lane is free from obstacles and vehicles before exiting your lane.



Limitations and Inaccuracies

Lane Assist features cannot always detect lane markings and you may experience unnecessary or invalid warnings when:

- Visibility is poor and lane markings are not clearly visible (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- A vehicle in front of CybertruckModel SModel XModel 3Model Y is blocking the view of the camera(s).
- The windshield is obstructing the view of the camera(s) (fogged over, dirty, covered by a sticker, etc.).
- Lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction, or are changing quickly (for example, lanes branching off, crossing over, or merging).
- The road is narrow or winding.
- Objects or landscape features are casting strong shadows on lane markers.

Lane Assist may not provide warnings, or may apply inappropriate warnings, when:

- One or more of the sensors (if equipped), or cameras is damaged, dirty, or obstructed (by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coatings, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- An object that is mounted to CybertruckModel SModel XModel 3Model Y is interfering with and/or obstructing a sensor (such as a bike rack or a bumper sticker).

In addition, Lane Assist may not steer CybertruckModel SModel XModel 3Model Y away from an adjacent vehicle, or may apply unnecessary or inappropriate steering, in these situations:

- You are driving CybertruckModel SModel XModel 3Model Y on sharp corners or on a curve at a relatively high speed.
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- You are drifting into another lane but an object (such as a vehicle) is not present.
- A vehicle in another lane cuts in front of you or drifts into your driving lane.
- CybertruckModel SModel XModel 3Model Y is not traveling within the speeds at which the Lane Assist feature is designed to operate.
- One or more of the sensors (if equipped) is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.
- An object mounted to CybertruckModel SModel XModel 3Model Y (such as a bike rack or a bumper sticker) is interfering with or obstructing a sensor.
- Visibility is poor and lane markings are not clearly visible (due to heavy rain, snow, fog, etc.).
- Lane markings are excessively worn, have visible previous markings, have been adjusted due to road construction or are changing quickly (for example, lanes branching off, crossing over, or merging).



CAUTION: Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times, including on track. Driver Assistance features automatically re-enable when Track Mode is turned Off.



WARNING: The lists above do not represent every possible situation that may interfere with Lane Assist features. There are many reasons why Lane Assist may not operate as intended. To avoid a collision, stay alert and always pay attention to the road so you can anticipate the need to take corrective action as early as possible.



Collision Avoidance Assist

If your CybertruckModel SModel XModel 3Model Y is equipped with Autopilot components (see [Cameras on page 101](#)), the following collision avoidance features are designed to increase the safety of you and your passengers:

The following collision avoidance features are designed to increase the safety of you and your passengers:

- **Forward Collision Warning** - provides visual and audible warnings in situations when CybertruckModel SModel XModel 3Model Y detects that there is a high risk of a frontal collision (see [Forward Collision Warning on page 645](#)).
- **Automatic Emergency Braking** - automatically applies braking to reduce the impact of a collision (see [Automatic Emergency Braking on page 648](#)[Automatic Emergency Braking on page 649](#)).
- **Obstacle-Aware Acceleration** - reduces acceleration if CybertruckModel SModel XModel 3Model Y detects an object in its immediate driving path (see [Obstacle-Aware Acceleration on page 650](#)).

⚠ CAUTION: Ensure all cameras are clean and free of obstructions before each drive and before using Autopilot features (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Dirty cameras and sensors (if equipped), as well as environmental conditions such as rain and faded lane markings, can affect Autopilot performance. If a camera is obstructed or blinded, CybertruckModel SModel XModel 3Model Y displays a message on the instrument clustertouchscreen and Autopilot features may not be available. For more information on specific alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

⚠ WARNING: Forward Collision Warning is for guidance purposes only and is not a substitute for attentive driving and sound judgment. Keep your eyes on the road when driving and never depend on Forward Collision Warning to warn you of a potential collision. Several factors can reduce or impair performance, causing either unnecessary, invalid, inaccurate, or missed warnings. Depending on Forward Collision Warning to warn you of a potential collision can result in serious injury or death.

⚠ WARNING: Automatic Emergency Braking is not designed to prevent all collisions. In certain situations, it can minimize the impact of a collision by attempting to reduce your driving speed. Depending on Automatic Emergency Braking to avoid a collision can result in serious injury or death.

⚠ WARNING: Obstacle-Aware Acceleration is not designed to prevent a collision. In certain situations, it can minimize the impact of a collision. Depending on Obstacle-Aware Acceleration to avoid a collision can result in serious injury or death.

Forward Collision Warning

CybertruckModel SModel XModel 3Model Y monitors the area in front of it for the presence of an object such as a vehicle, motorcycle, bicycle, or pedestrian. If a collision is considered likely unless you take immediate corrective action, Forward Collision Warning is designed to sound a chime and highlight the vehicle in front of you in red on the instrument paneltouchscreentouchscreen. If this happens, **TAKE IMMEDIATE CORRECTIVE ACTION!**







Active Safety Features








Visual and audible warnings cancel automatically when the risk of a collision has been reduced (for example, you have decelerated or stopped CybertruckModel SModel XModel 3Model Y, or the object in front of your vehicle has moved out of your driving path).

If immediate action is not taken when CybertruckModel SModel XModel 3Model Y issues a Forward Collision Warning, Automatic Emergency Braking (if enabled) may automatically apply the brakes if a collision is considered imminent (see [Automatic Emergency Braking on page 648](#)[Automatic Emergency Braking on page 649](#)).

By default, Forward Collision Warning is turned on. To turn off or adjust sensitivity, touch **Controls > Autopilot > Forward Collision Warning**. Instead of the default warning level of **Medium**, you can turn the warning **Off**, or you can choose to be warned **Late** or **Early**.

NOTE: Your chosen setting is retained until you manually change it.


-  **WARNING:** The camera(s) and sensors (if equipped) associated with Forward Collision Warning are designed to monitor an approximate area of up to 525 feet (160 meters) in your driving path. The area being monitored by Forward Collision Warning can be adversely affected by road and weather conditions. Use appropriate caution when driving.
-  **WARNING:** Forward Collision Warning is designed only to provide visual and audible alerts. It does not attempt to apply the brakes or decelerate CybertruckModel SModel XModel 3Model Y. When seeing and/or hearing a warning, it is the driver's responsibility to take immediate corrective action.
-  **WARNING:** Forward Collision Warning may provide a warning in situations where the likelihood of collision may not exist. Stay alert and always pay attention to the area in front of CybertruckModel SModel XModel 3Model Y so you can anticipate whether any action is required.

Forward Collision Warning operates only when driving between approximately 7 mph (10 km/h) and 90 mph (150 km/h).

Forward Collision Warning operates only when driving between approximately 7 mph (10 km/h) and 90 mph (150 km/h).

Forward Collision Warning operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Forward Collision Warning operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

-  **WARNING:** Forward Collision Warning does not provide a warning when the driver is already applying the brake.

Automatic Emergency Braking

CybertruckModel SModel XModel 3Model Y is designed to determine the distance from detected objects. When a collision is considered unavoidable, Automatic Emergency Braking is designed to apply the brakes to reduce the vehicle's speed and therefore, the severity of the impact. The amount of speed that is reduced depends on many factors, including driving speed and environment.

When Automatic Emergency Braking applies the brakes, the instrument paneltouchscreentouchscreen displays a visual warning and sounds a chime. You may also notice abrupt downward movement of the brake pedal. The brake lights turn on to alert other road users that you are slowing down.



Emergency braking in progress

Automatic Emergency Braking operates only when driving between approximately 6 mph (10 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 5 mph (8 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking does not apply the brakes, or stops applying the brakes, when:

- You turn the steering wheelsteering yoke (or steering wheel) sharply.
- You press and release the brake pedal while Automatic Emergency Braking is applying the brakes.



Active Safety Features

- You accelerate hard while Automatic Emergency Braking is applying the brakes.
- The vehicle, motorcycle, bicycle, or pedestrian is no longer detected in the front or rear of the vehicle.

Automatic Emergency Braking is always enabled when you start CybertruckModel SModel XModel 3Model Y. To disable for your current drive, shift into Park and touch **Controls > Autopilot > Automatic Emergency Braking**. Even if you disable Automatic Emergency Braking, your vehicle may still apply the brakes after detecting an initial collision to reduce further impact (see [Multi-Collision Braking on page 650](#)). When disabled, the touchscreen displays a visual message.



Automatic Emergency Braking is disabled

WARNING: It is strongly recommended that you do not disable Automatic Emergency Braking. If you disable it, CybertruckModel SModel XModel 3Model Y does not automatically apply the brakes in situations where a collision is considered likely.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal collisions only.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal and reverse collisions with limited functionality while in Reverse.

In the event Automatic Emergency Braking is unavailable, the touchscreen displays a visual warning.



Automatic Emergency Braking is not available

WARNING: Automatic Emergency Braking is designed to reduce the severity of an impact. It is not designed to avoid a collision.

WARNING: Several factors can affect the performance of Automatic Emergency Braking, causing either no braking or inappropriate or untimely braking, such as when a vehicle is partially in the path of travel or there is road debris. It is the driver's responsibility to drive safely and remain in control of the vehicle at all times. Never depend on Automatic Emergency Braking to avoid or reduce the impact of a collision.

WARNING: Automatic Emergency Braking is not a substitute for maintaining a safe traveling distance between you and the vehicle in front of you.

WARNING: The brake pedal moves downward abruptly during automatic braking events. Always ensure that the brake pedal can move freely. Do not place material under or on top of the driver's floor mat (including an additional mat) and always ensure that the driver's floor mat is properly secured. Failure to do so can impede the ability of the brake pedal to move freely.

Automatic Emergency Braking

CybertruckModel SModel XModel 3Model Y is designed to determine the distance from detected objects. When a collision is considered unavoidable, Automatic Emergency Braking is designed to apply the brakes to reduce the vehicle's speed and therefore, the severity of the impact. The amount of speed that is reduced depends on many factors, including driving speed and environment.

When Automatic Emergency Braking applies the brakes, the instrument paneltouchscreentouchscreen displays a visual warning and sounds a chime. You may also notice abrupt downward movement of the brake pedal. The brake lights turn on to alert other road users that you are slowing down.



Emergency braking in progress

Automatic Emergency Braking operates only when driving between approximately 6 mph (10 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 5 mph (8 km/h) and 90 mph (150 km/h).

Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).



Automatic Emergency Braking operates only when driving between approximately 3 mph (5 km/h) and 124 mph (200 km/h).

Automatic Emergency Braking does not apply the brakes, or stops applying the brakes, when:

- You turn the steering wheel/steering yoke (or steering wheel) sharply.
- You press and release the brake pedal while Automatic Emergency Braking is applying the brakes.
- You accelerate hard while Automatic Emergency Braking is applying the brakes.
- The vehicle, motorcycle, bicycle, or pedestrian is no longer detected in the front or rear of the vehicle.

Automatic Emergency Braking is always enabled when you start CybertruckModel SModel XModel 3Model Y. To disable it for your current drive, touch **Controls > Autopilot > Automatic Emergency Braking**. Even if you disable Automatic Emergency Braking, your vehicle may still apply the brakes after detecting an initial collision to reduce further impact (see [Multi-Collision Braking on page 650](#)).

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal collisions only.

NOTE: Automatic Emergency Braking is designed to reduce the impact of frontal and reverse collisions with limited functionality while in Reverse.



WARNING: It is strongly recommended that you do not disable Automatic Emergency Braking. If you disable it, CybertruckModel SModel XModel 3Model Y does not automatically apply the brakes in situations where a collision is considered likely.



WARNING: Automatic Emergency Braking is designed to reduce the severity of an impact. It is not designed to avoid a collision.



WARNING: Several factors can affect the performance of Automatic Emergency Braking, causing either no braking or inappropriate or untimely braking, such as when a vehicle is partially in the path of travel or there is road debris. It is the driver's responsibility to drive safely and remain in control of the vehicle at all times. Never depend on Automatic Emergency Braking to avoid or reduce the impact of a collision.



WARNING: Automatic Emergency Braking is not a substitute for maintaining a safe traveling distance between you and the vehicle in front of you.



WARNING: The brake pedal moves downward abruptly during automatic braking events. Always ensure that the brake pedal can move freely. Do not place material under or on top of the driver's floor mat (including an additional mat) and always ensure that the driver's floor mat is properly secured. Failure to do so can impede the ability of the brake pedal to move freely.

Multi-Collision Braking

In addition to Automatic Emergency Braking, CybertruckModel SModel XModel 3Model Y may apply the brakes to prevent or mitigate a subsequent impact after an initial collision if airbag deployment is detected. The brakes may be applied regardless of driving speed.

Obstacle-Aware Acceleration

Obstacle-Aware Acceleration is designed to reduce the impact of a collision by reducing motor torque and in some cases applying the brakes, if CybertruckModel SModel XModel 3Model Y detects an object in its driving path. The instrument panel touchscreen displays a visual warning and sounds a chime when the brakes are automatically applied. For example, CybertruckModel SModel XModel 3Model Y, while parked in front of a closed garage door with Drive engaged, detects that you have pressed hard on the accelerator pedal. Although CybertruckModel SModel XModel 3Model Y still accelerates and hits the garage door, the reduced torque may result in less damage.

Obstacle-Aware Acceleration is designed to operate only when all of these conditions are simultaneously met:

- Drive or Reverse is engaged.
- CybertruckModel SModel XModel 3Model Y is stopped or traveling less than 10 mph (16 km/h).
- CybertruckModel SModel XModel 3Model Y detects an object in its immediate driving path.




To disable Obstacle-Aware Acceleration, touch **Controls > Autopilot > Obstacle-Aware Acceleration**.



WARNING: Obstacle-Aware Acceleration is designed to reduce the severity of an impact. It is not designed to avoid a collision.




Active Safety Features


-  **WARNING:** Obstacle-Aware Acceleration may not limit torque in all situations, such as performing a sharp turn into a parking space. Several factors, including environmental conditions, distance from an obstacle, and a driver's actions, can limit, delay, or inhibit Obstacle-Aware Acceleration.
-  **WARNING:** Do not rely on Obstacle-Aware Acceleration to control acceleration or to avoid, or limit, the severity of a collision, and do not attempt to test Obstacle-Aware Acceleration. Doing so can result in serious property damage, injury, or death.
-  **WARNING:** Several factors can affect the performance of Obstacle-Aware Acceleration, causing an inappropriate or untimely reduction in motor torque and/or undesired braking. It is the driver's responsibility to drive safely and remain in control of CybertruckModel SModel XModel 3Model Y at all times.


Limitations and Inaccuracies

Collision Avoidance features cannot always detect all objects, vehicles, bikes, or pedestrians, and you may experience unnecessary, inaccurate, invalid, or missed warnings for many reasons, particularly if:

- The road has sharp curves.
- Visibility is poor (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- A camera or sensor is obstructed (dirty, covered, fogged over, covered by a sticker, etc.).
- One or more of the sensors (if equipped) is damaged, dirty, or obstructed (such as by mud, ice, or snow, or by a vehicle bra, excessive paint, or adhesive products such as wraps, stickers, rubber coating, etc.).
- Weather conditions (heavy rain, snow, fog, or extremely hot or cold temperatures) are interfering with sensor operation.
- The sensors (if equipped) are affected by other electrical equipment or devices that generate ultrasonic waves.

 **CAUTION:** If a fault occurs with a Collision Avoidance Assist feature, CybertruckModel SModel XModel 3Model Y displays an alert. Contact Tesla Service.

 **CAUTION:** Driver assistance features are automatically disabled when Track Mode is On. It is the driver's responsibility to drive safely and be in control of the vehicle at all times, including on track. Driver Assistance features automatically re-enable when Track Mode is turned Off.

 **WARNING:** The limitations previously described do not represent an exhaustive list of situations that may interfere with proper operation of Collision Avoidance Assist features. These features may fail to provide their intended function for many other reasons. It is the driver's responsibility to avoid collisions by staying alert, paying attention, and taking corrective action as early as possible.

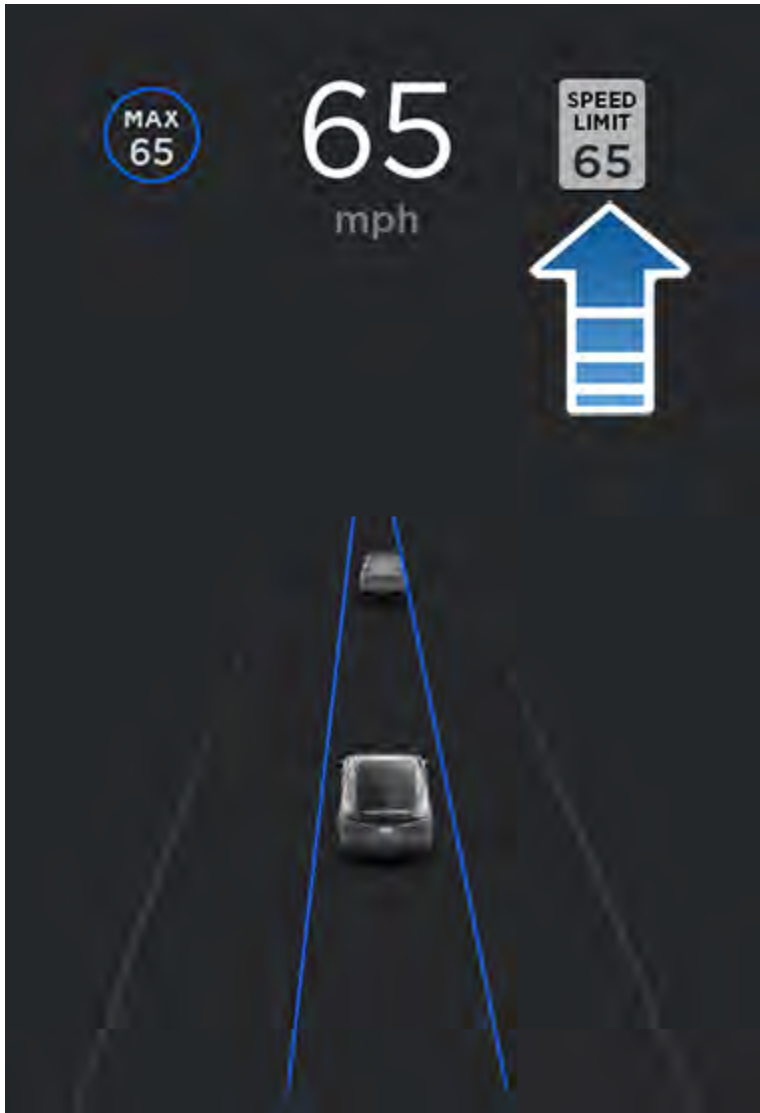
Speed Assist

How Speed Assist Works

CybertruckModel SModel XModel 3Model Y displays a speed limit on the instrument paneltouchscreentouchscreen and you can choose if and how you are warned when you exceed the speed limit. In addition, a blue outline may appear around the speed limit icon to notify that you are above the speed limit.

Instead of using the detected speed limit, you can base warnings on an arbitrary speed limit that you enter manually.

NOTE: When using Traffic-Aware Cruise Control, you can touch this speed limit sign to change your set cruising speed to the detected speed limit (including any offsets that you have set).





Active Safety Features



In situations where CybertruckModel SModel XModel 3Model Y is unable to determine a speed limit, or if Speed Assist is uncertain that an acquired speed limit is accurate, the instrument paneltouchscreentouchscreen may not display a speed limit sign and warnings do not take effect.

NOTE: Speed limit warnings go away after ten seconds, or when CybertruckModel SModel XModel 3Model Y slows down below the specified limit.

⚠ WARNING: Do not rely on Speed Assist to determine the appropriate speed limit or driving speed. Always drive at a safe speed based on traffic and road conditions.



Controlling Speed Assist

To adjust the Speed Limit Warning setting, touch **Controls > Autopilot > Speed Limit Warning**, then choose one of these options:

- **Off** - Speed limit warnings do not display and chimes are not sounded.
- **Display** - Speed limit signs display on the instrument panel touchscreen and the sign increases in size when you exceed the determined limit.
- **Chime** - In addition to the visual display, a chime is sounded when you exceed the determined speed limit.

You can also specify how the speed limit is determined:

- **Relative** - You can set a speed limit offset (+ or -) if you want to be alerted only when you exceed the offset speed limit by a specified amount. For example, you can increase the offset to +10 mph (10 km/h) if you only want to be warned when you exceed the speed limit by 10 mph (10 km/h).

NOTE: The offset from speed limit also affects the number shown in the gray speed icon on the instrument panel touchscreen.

- **Absolute** - Manually specify any speed limit between 20 and 140 mph (30 and 240 km/h).

NOTE: Speed Assist is not always accurate. In some situations, the location of a road can be miscalculated and Speed Assist can display a speed for a directly adjacent road that may have a different speed limit. For example, Speed Assist can assume CybertruckModel SModel XModel 3Model Y is on a controlled-access highway when it is actually on a nearby surface street, and vice versa.

NOTE: Your chosen setting is retained until you manually change it.

Limitations and Inaccuracies

Speed Assist may not be fully functional or may provide inaccurate information in these situations:

- Visibility is poor and speed limit signs are not clearly visible (due to heavy rain, snow, fog, etc.).
- Bright light (such as from oncoming headlights or direct sunlight) is interfering with the view of the camera(s).
- CybertruckModel SModel XModel 3Model Y is being driven very close to a vehicle in front of it which is blocking the view of the camera(s).
- The windshield is obstructing the view of the camera(s) (fogged over, dirty, covered by a sticker, etc.).
- Speed limit signs are concealed by objects.
- The speed limits stored in the map database are incorrect or outdated.
- CybertruckModel SModel XModel 3Model Y is being driven in an area where GPS or map data is not available or where speed limit signs can not be detected.
- Traffic signs that do not conform to standard recognizable formats, such as digital or temporary speed signs.
- A road or a speed limit has recently changed.



WARNING: The list above does not represent an exhaustive list of situations that may interfere with proper operation of Speed Assist. Speed Assist may fail to provide warnings for many other reasons.



Safety & Security Settings

About the Security System

If CybertruckModel SModel XModel 3Model Y does not detect a key nearby and a locked door or trunk is opened, an alarm sounds. The headlights and turn signals also flash. To deactivate the alarm, press any button on the key fob.

If CybertruckModel SModel XModel 3Model Y does not detect an authenticated phone or key and a locked door or trunk is opened, an alarm sounds. The headlights and turn signals also flash. To deactivate the alarm, press any button on the mobile app or tap your key card or key fob or key fob against the card reader located just below the Autopilot camera on the driver's side door pillar approximately one third the way up of the driver's side door pillar on the driver's side door pillar.

To manually enable or disable the alarm system, touch **Controls > Safety > Security Alarm**. When enabled, CybertruckModel SModel XModel 3Model Y activates its alarm one minute after you exit, the doors lock, and a recognized key is no longer detected.

A battery-backed siren (if equipped) sounds in situations where a locked door or trunk is opened and CybertruckModel SModel XModel 3Model Y does not detect a key nearby. If you also want this siren to sound in situations where the vehicle detects motion inside the cabin, enable **Tilt/Intrusion** (see [Tilt/Intrusion \(if equipped\) on page 659](#)).

NOTE: If CybertruckModel SModel XModel 3Model Y is in Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\) on page 664](#)), the **Security Alarm** setting is not available.

About the Security System

The vehicle security system activates when CybertruckModel SModel XModel 3Model Y does not detect an authenticated phone or key and:

- A locked door is opened
- The locked tailgate is opened
- The powered front trunk is opened

When your vehicle detects this, the siren sounds, headlights and turn signals flash, and you receive a notification on your mobile app that the security alarm is triggered. To deactivate the alarm, press any button on the mobile app or tap your key card against the card reader located on the driver's side door pillar.

To enable the alarm system, touch **Controls > Safety > Security Alarm**. When enabled, CybertruckModel SModel XModel 3Model Y.

Sentry Mode and the vehicle alarm system are two separate things: the alarm system works similar to other vehicles (a siren sounds when a locked door is opened), whereas Sentry Mode uses cameras and audio to detect suspicious activity nearby (see [Sentry Mode on page 664](#) for more information). If CybertruckModel SModel XModel 3Model Y is in Sentry Mode, the **Security Alarm** setting is not available.

Tilt/Intrusion (if equipped)

Depending on configuration, market region, and date of manufacture, your vehicle may not be equipped with this feature.

The **Security Alarm** must be on to enable **Tilt/Intrusion**.

Tilt/Intrusion sounds the alarm in your vehicle if CybertruckModel SModel XModel 3Model Y detects motion inside the cabin, or is moved or tilted (for example, with a tow truck or jack). To enable, touch **Controls > Safety > Tilt/Intrusion**.

The intrusion sensor automatically disables in situations where the climate control system is operating when you leave your vehicle. To override, you can manually turn the Tilt/Intrusion Sensor on again after choosing Keep Climate On, Dog, or Camp Mode.

The tilt/intrusion sensor automatically re-enables at the start of every drive cycle.

NOTE: The **Tilt/Intrusion** alarm must be turned off to use **Cabin Overheat Protection** (see [Cabin Overheat Protection on page 678](#)).



NOTE: If you plan to leave something that moves inside your locked vehicle, remember to turn off **Tilt/Intrusion**. If this setting is on, any motion detected inside CybertruckModel SModel XModel 3Model Y activates the intrusion alarm.

NOTE: If CybertruckModel SModel XModel 3Model Y is in Sentry Mode (see [How to Use Sentry Mode \(With a USB Flash Drive\)](#) on page 664), the **Tilt/Intrusion** setting is not available.

Enhanced Anti-Theft Upgrade (if equipped)

If your vehicle is equipped with the Enhanced Anti-Theft upgrade, the horn sounds in situations where a locked door or trunk is opened and CybertruckModel SModel XModel 3Model Y does not detect a key nearby. If **Tilt/Intrusion** is on, the horn also sounds if CybertruckModel SModel XModel 3Model Y detects motion inside the cabin or if the vehicle is moved or tilted (for example, with a tow truck or jack). To turn the Tilt/Intrusion detection system on or off, touch **Controls > Safety > Tilt/Intrusion**.

PIN to Drive

For an added layer of security, prevent CybertruckModel SModel XModel 3Model Y from being driven until a 4-digit PIN (Personal Identification Number) is entered. To enable this setting, touch **Controls > Safety > PIN to Drive** and follow the on-screen prompts to create a driving PIN.

When enabled, in addition to entering the 4-digit driving PIN to drive, you must also use it to enter Valet mode for the first time and create the 4-digit valet PIN to enter and exit Valet mode. In Valet mode, CybertruckModel SModel XModel 3Model Y can be driven without the need for the valet to enter a driving PIN. The **PIN to Drive** setting is disabled whenever Valet mode is active.

If you forget your driving PIN, touch the link to enter your Tesla login credentials on the PIN to Drive popup, then follow the instructions on the touchscreen.

NOTE: In the unlikely event that your touchscreen is unresponsive, you may be unable to enter the PIN. In this case, first try to restart the touchscreen (see [Restarting the Touchscreen or Instrument Panel on page 34](#)[Restarting the Touchscreen on page 115](#)). If the touchscreen is still unresponsive, you can still bypass PIN to Drive by turning on Keyless Driving in the Tesla mobile app.

Glovebox PIN

Protect the contents in your glovebox with a 4-digit PIN (not related to PIN to Drive). To enable, touch **Controls > Safety > Glovebox PIN** and follow the directions on the touchscreen. When enabled, you are prompted to enter the PIN to open the glovebox. Select the toggle to disable and then enter the PIN to remove this added security protection.

If you forget your glovebox PIN, reset it by entering your Tesla login credentials, then follow the directions on the touchscreen.

NOTE: Using a **Glovebox PIN** allows the glovebox to be opened even when CybertruckModel SModel XModel 3Model Y is in Valet mode.

Speed Limit Mode

Speed Limit Mode allows you to limit acceleration and maximum driving speed to a chosen value between 50 and 120 mph (80 and 193 km/h). The first time you use this feature, you must create a 4-digit PIN that you must use to enable and disable Speed Limit Mode. When enabled and the driving speed approaches within approximately 3 mph (5 km/h) of the maximum speed, a chime sounds, the instrument clustertouchscreen displays a message, and CybertruckModel SModel XModel 3Model Y sends a notification to the mobile app. You can also touch **Security > Speed Limit Mode** to enable from the Tesla mobile app. To enable Speed Limit Mode:

1. Ensure CybertruckModel SModel XModel 3Model Y is in Park.
2. Touch **Controls > Safety > Speed Limit Mode** on the touchscreen.
3. Select the maximum driving speed.
4. Drag the slider to the **On** position.
5. Enter the 4-digit PIN that you want to use to enable and disable Speed Limit Mode.

NOTE: If you forget the PIN, you can disable Speed Limit Mode by entering login credentials for your Tesla account.

NOTE: While Speed Limit Mode is enabled, the acceleration setting automatically sets to **Chill**.



Dashcam, Sentry, and Security

WARNING: Driving downhill can increase driving speed and cause CybertruckModel SModel XModel 3Model Y to exceed your chosen maximum speed.

WARNING: Speed Limit Mode is not a replacement for good judgment, driver training, and the need to closely monitor speed limits and driving conditions. Accidents occur at any speed and it is your responsibility to drive safely.

Trailer Alarm



When enabled, Cybertruck sounds an alarm if the vehicle detects the trailer is being unplugged while **Trailer Mode** is active and the vehicle is locked.

Clear Browser Data

You can clear your vehicle's browser data (like you would on a computer or smartphone) by navigating to **Controls > Service > Clear Browser Data**. This is useful for many situations, such erasing settings or searches from another driver.

Check the boxes on the touchscreen popup to exclude bookmarks and/or history for your convenience.

Dashcam

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Dashcam or the features may not operate exactly as described. **It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.**

Dashcam records video footage of your vehicle's surroundings while driving. Use Dashcam to record driving incidents or other notable events, like you would for an external dashcam on other vehicles.

The Dashcam icon is located in the app launcher. You can add the Dashcam app to the bottom bar for easy access (see [Customizing My Apps on page 32](#)[Customizing My Apps on page 1118](#)). When CybertruckModel SModel XModel 3Model Y is in Park, touching the Dashcam icon displays the Viewer (see [Viewing Video Recordings on page 667](#)).



To protect your privacy, video recordings are saved locally to a formatted USB flash drive's onboard memory. Recordings are not sent to Tesla. CybertruckModel SModel XModel 3Model Y does not record videos when Dashcam is **Off**.

How to Use Dashcam

1. Format a USB flash drive. Dashcam requires a properly formatted USB drive inserted in your vehicle's USB port to store and retrieve footage. Vehicles manufactured beginning approximately 2020 are equipped with a pre-formatted USB flash drive in the glove box. There are two ways to format the flash drive if needed:
 - Format the flash drive with CybertruckModel SModel XModel 3Model Y. Insert the flash drive into the USB port and navigate to **Controls > Safety > Format USB Drive**.
 - Format the flash drive on a computer. See [USB Drive Requirements for Recording Videos on page 666](#) for more information.
2. Insert the USB flash drive into your vehicle's USB port, preferably the one in the glovebox (if equipped).



NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

3. Enable Dashcam by touching **Controls > Safety > Dashcam**. Dashcam allows you to choose how and when footage is saved. You can choose between:

- **Auto:** Dashcam automatically saves a recording to the USB drive when CybertruckModel SModel XModel 3Model Y detects a safety-critical event, such as a collision or airbag deployment. When **Auto** is selected, detection can vary and is subject to your vehicle's power, sleep, and Autopilot state.

NOTE: Several factors determine whether Dashcam automatically saves a recording of a safety-critical event (for example, amount of force, whether or not airbags deploy, etc.). Do not rely on Dashcam to automatically record all safety-critical events.

- **Manual:** You must manually touch the Dashcam icon to save a recording of the most recent ten minutes of footage.
- **On Honk:** When you press the horn, Dashcam saves a recording of the most recent ten minutes of footage. You can enable this along with **Auto** or **Manual** simultaneously.

4. Once enabled, the Dashcam icon indicates when footage is saved. You can also view the status of the Dashcam icon in **Controls**:



The icon changes to show the status of Dashcam:



RECORDING: Dashcam is recording. To save video footage, touch the icon. To pause recording, press and hold the icon.



AVAILABLE: Dashcam is available but not actively recording. Touch the dashcam icon to start recording footage.



PAUSED: Dashcam is paused. To resume recording, touch the icon. To avoid losing video footage, pause Dashcam before removing the flash drive.



BUSY: Dashcam is in the process of loading, saving, or overwriting footage. While dashcam is busy, footage is not being captured and recorded.



SAVED: Footage is saved. You can also save Dashcam clips by touching the Dashcam icon in the app launcher while Driving.



RECORDING: Dashcam is recording. To save video footage, touch the icon. To pause recording, press and hold the icon.



Dashcam, Sentry, and Security



AVAILABLE: Dashcam is available but not actively recording. Touch the dashcam icon to start recording footage.



PAUSED: Dashcam is on, but not currently recording or saving anything. This may happen while the viewer is launched, for example.



BUSY: Dashcam is in the process of loading, saving, or overwriting footage. While dashcam is busy, footage is not being captured and recorded.



SAVED: Footage is saved. You can also save Dashcam clips by touching the Dashcam icon in the app launcher while Driving.

5. When your desired footage is saved, view the clips on the touchscreen or a computer:
 - Touchscreen: Ensure Cybertruck Model S Model X Model 3 Model Y is in Park and touch the Dashcam icon in the app launcher. Videos are organized by timestamp. See [Viewing Video Recordings on page 667](#) for more information.
 - Computer: Insert the USB flash drive into a computer and navigate to the TeslaCam folder. Videos are organized by timestamp. See [Viewing Video Recordings on page 667](#) for more information.
6. To turn Dashcam off, navigate to **Controls > Safety > Dash cam > Off**. If set to **Auto**, **Manual**, or **On Honk**, Dashcam automatically enables (but may not be actively saving footage, depending on your preferences) every time you drive.



Sentry Mode

NOTE: Depending on market region, vehicle configuration, options purchased, and software version, your vehicle may not be equipped with Sentry Mode or the features may not operate exactly as described. **It is your sole responsibility to consult and comply with all local regulations and property restrictions regarding the use of cameras.**

When enabled, your vehicle's cameras and sensors (if equipped) remain powered on and ready to record suspicious activity around your vehicle when CybertruckModel SModel XModel 3Model Y is locked and in Park. Think of Sentry Mode as an intelligent vehicle security system that alerts you when it detects possible threats nearby.

If a threat is detected or the vehicle sensors determine there is a lot of jerky movement like when getting towed or shaken, Sentry Mode pulses the headlights, sounds the alarm, and displays a message on the touchscreen indicating that the cameras may be recording to inform individuals outside of the vehicle. The mobile app alerts you of the alarm and saves footage of the event to a USB drive (if installed).

Sentry Mode is disabled by default. You can use voice commands or the Tesla mobile app to easily enable or disable Sentry Mode. To enable Sentry Mode using voice commands, say "Keep Tesla safe," "Keep my car safe," "Sentry on," or "Enable Sentry" (see [Voice Commands on page 97](#)).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Sentry Mode requires your Battery to be at least 20% charged. If the Battery falls below 20%, Sentry Mode turns off and the mobile app sends you a notification. Power consumption may increase when Sentry Mode is active.

NOTE: When Sentry Mode is enabled, the Security Alarm settings (**Controls > Safety > Security Alarm**) are not available.



CAUTION: Do not rely on Sentry Mode to protect CybertruckModel SModel XModel 3Model Y from all possible security threats. Sentry Mode uses many factors to determine whether to activate the security alarm. All impacts may not be detected and the alarm may not activate in all situations. While it may help deter some threats, no security system can prevent all attacks.

NOTE: Sentry Mode only sends notifications to the mobile app when the alarm is triggered or sudden jerky motions are detected by the vehicle.

How to Use Sentry Mode (With a USB Flash Drive)

1. Sentry Mode requires a properly formatted USB drive inserted in your vehicle's USB port. Vehicles manufactured beginning approximately 2020 are equipped with a pre-formatted USB flash drive in the glove box. There are two ways to format the USB drive:
 - Insert the USB drive into the USB port and navigate to **Controls > Safety > Format USB Drive**. Your vehicle automatically formats the USB drive for you.
 - Format the USB drive on a computer. See [USB Drive Requirements for Recording Videos on page 666](#) for more information.
2. Insert the USB drive into the vehicle's USB port, preferable the one in the glove box (if equipped).
3. With your vehicle in Park, enable Dashcam by navigating to **Controls > Safety > Dashcam** (Dashcam must be enabled for Sentry Mode to work).
4. Touch **Controls > Safety > Sentry Mode > On**. Once enabled, the Sentry Mode icon in **Controlson** the status bar turns red.



NOTE: Rear camera recordings are available only on vehicles manufactured after approximately February 2018.

When enabled, Sentry Mode is idle, ready to sound the alarm and save a recording of the security event if triggered. See [Viewing Video Recordings on page 667](#) for information on viewing footage.



Dashcam, Sentry, and Security

5. To silence the security alarm and audio system when the alarm is triggered, navigate to **Controls > Safety > Disable Sentry Sounds**. When enabled, Sentry Mode still sends a notification through the mobile app and saves the last 10 minutes footage.
6. To silence the security alarm and audio system when the alarm is triggered, navigate to **Controls > Safety > Disable Sentry Sounds**. When enabled, Sentry Mode still sends a notification through the mobile app and saves the last 10 minutes footage.
7. To manually enable/disable Sentry Mode until the next drive, touch the Sentry Mode icon. Sentry Mode is Off when the icon is no longer red.



Turn Sentry Mode **Off** in **Controls > Safety > Sentry Mode** to disable for more than one drive cycle.

How to Use Sentry Mode (Without a USB Flash Drive)

When Sentry mode is enabled and a security event is detected but without a USB drive plugged into a USB port, your vehicle alerts you through the mobile app, without any camera recordings.

Sentry Mode Settings

• Exclude specific locations

In **Controls > Safety > Sentry Mode**, you can determine if you want Sentry Mode to *not* enable in certain locations (see [Home, Work, and Favorite Destinations on page 703](#) for more information):

- **Exclude Home:** Sentry Mode does not automatically enable at the location set as Home in your Favorites list.
- **Exclude Work:** Sentry Mode does not automatically enable at the location set as Work in your Favorites list.
- **Exclude Favorites:** Sentry Mode does not automatically enable at any location in your Favorites list.

NOTE: To recognize a location listed as Home, Work, or a Favorite, CybertruckModel SModel XModel 3Model Y must be parked within approximately 1,640 feet (500 meters) of the saved location.

To set up your Home or Work location, touch **Navigate > Set Home/Set Work**. To set up a **Favorite**, touch the star when viewing an address on the map. Manually turning Sentry Mode on or off using the touchscreen or the mobile app overrides your Home, Work, or Favorite exclusion preferences until your next drive.

• Set Camera-Based Detection

When **Camera-Based Detection** is enabled, Sentry Mode uses the vehicle's external cameras in addition to vehicle sensors to detect a security event while parked. If disabled, your vehicle only saves clips to the USB drive if a physical threat is detected. To adjust, touch **Controls > Safety > Sentry Mode > Camera-Based Detection**.

• View Live Camera

NOTE: View Live Camera requires premium connectivity and version 4.2.1 (or newer) of the Tesla mobile app installed on a phone that has been paired as a key to CybertruckModel SModel XModel 3Model Y.

When Sentry Mode is enabled, use the mobile app to remotely view the area surrounding CybertruckModel SModel XModel 3Model Y as seen through the exterior cameras. To enable, touch **Controls > Safety > Sentry Mode > View Live Camera via Mobile App** on the touchscreen to see what Sentry Mode records in real-time. Ensure there are no occupants in the vehicle and all doors are locked. Then, on the mobile app, navigate to **Safety > Sentry Mode > View Live Camera**.

When **View Live Camera** is actively in use, CybertruckModel SModel XModel 3Model Y periodically flashes its exterior lights and displays a message on the touchscreen to notify others that the area surrounding the vehicle is being viewed through the cameras.

View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.



If CybertruckModel SModel XModel 3Model Y is equipped with a pedestrian warning speaker (see [Pedestrian Warning System on page 527](#)), you can press and hold the microphone button on the mobile app to transmit your voice through this speaker.

You can also enable Dog Mode at the same time and switch the live camera view to see through the interior camera on the mobile app. See [Keep Climate On, Dog, and Camp on page 677](#) for more information. This feature is not supported in vehicles with Autopilot computer 2.0 or 2.5. Touch **Controls > Software > Autopilot computer** to find out which computer your vehicle has.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet.

NOTE: Video quality can vary depending on network connectivity. No audio is captured.

NOTE: The live camera feed is fully encrypted and cannot be accessed by Tesla.

• View Live Camera

NOTE: **View Live Camera** requires the Tesla mobile app installed on a phone that has been paired as a key to CybertruckModel SModel XModel 3Model Y.

When Sentry Mode is enabled, use the mobile app to remotely view the area surrounding CybertruckModel SModel XModel 3Model Y as seen through the exterior cameras. To enable, touch **Controls > Safety > Sentry Mode > View Live Camera via Mobile App** on the touchscreen to see what Sentry Mode records in real-time. Ensure there are no occupants in the vehicle and all doors are locked. Then, on the mobile app, navigate to **Safety > Sentry Mode > View Live Camera**.

When **View Live Camera** is actively in use, CybertruckModel SModel XModel 3Model Y periodically flashes its exterior lights and displays a message on the touchscreen to notify others that the area surrounding the vehicle is being viewed through the cameras.

View Live Camera is limited to approximately one hour (or 15 minutes for some regions) of cumulative usage per day.

If CybertruckModel SModel XModel 3Model Y is equipped with a pedestrian warning speaker (see [Pedestrian Warning System on page 527](#)), you can press and hold the microphone button on the mobile app to transmit your voice through this speaker.

You can also enable Dog Mode at the same time and switch the live camera view to see through the interior camera on the mobile app. See [Keep Climate On, Dog, and Camp on page 1340](#) for more information.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet if the alarm sounds while they are in your vehicle.

NOTE: Video quality can vary depending on network connectivity. No audio is captured.

NOTE: The live camera feed is fully encrypted and cannot be accessed by Tesla.

See [Viewing Video Recordings on page 667](#) for more information on viewing Sentry Mode footage.

NOTE: When the internal storage reaches full capacity, new recordings overwrite the older recordings.

USB Drive Requirements for Recording Videos

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. To play media files or to format and view video footage, use the USB-A port in the glovebox (see [Interior Electronics on page 41](#)).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. To play media files or to format and view video footage, use the USB-A port in the glovebox (see [Interior Electronics on page 41](#)).

Some features require you to use a USB drive (for example, Dashcam, Sentry Mode and Track Mode, if equipped, and Track Mode, if equipped,) that meet these requirements:

- Minimum storage capacity of 64 GB. Use a USB drive with as much available storage as possible. Video footage can occupy a large amount of space.
- A sustained write speed of at least 4 MB/s. Note that sustained write speed differs from peak write speed.



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- USB 2.0 compatible. If using a USB 3.0 drive, it must also support USB 2.0.
- Properly formatted (either automatically or [manually on page 667](#)).

NOTE: The USB-C ports in the center console and below the rear touchscreen do not support the ability to format, save, and view video footage. For any of these functions, use the USB-A port in the glovebox (see [Interior Electronics on page 57](#)).

NOTE: In some market regions you can purchase recommended USB drives on <http://www.tesla.com>.

Automatically Formatting a USB Drive

Insert the USB drive into a front USB port that supports the ability to format, save, and view video footage (see [Interior Electronics on page 41](#)[Interior Electronics on page 41](#)[Interior Electronics on page 57](#)[Interior Electronics on page 57](#)[Interior Electronics on page 1125](#)). and touch **Controls** > **Safety** > **Format USB Drive**. This automatically formats the USB drive as exFAT and creates folders for TeslaCam and TeslaTrackMode (if equipped) and TeslaTrackMode (if equipped). The USB drive is now ready to record and save video footage.

Format USB Drive is available only when a USB drive (with one or fewer partitions) is inserted into a front USB port. Choosing **Format USB Drive** erases any existing content on the USB drive. Before using this feature, move any content you want to keep to a different device.

Manually Formatting a USB Drive

If CybertruckModel SModel XModel 3Model Y is unable to format the USB drive, format it using a computer:

1. Format the USB drive as exFAT, MS-DOS FAT (for Mac), ext3, or ext4 (NTFS is currently not supported).
2. Create a base-level folder titled **TeslaCam**. For Track Mode (if equipped), create another base-level folder called **TeslaTrackMode**. For Track Mode (if equipped), create another base-level folder called **TeslaTrackMode**. You can use one USB drive for Dashcam, Sentry Mode, Track Mode (if equipped), Track Mode (if equipped), and audio files, but you must create separate partitions or folders on the exFAT USB drive.
3. Once formatted, insert the USB drive into the glovebox USB port (if equipped), otherwise use a front USB port in the center console. Do not use a rear USB port because they can only charge devices. It may take a few seconds for CybertruckModel SModel XModel 3Model Y to recognize the USB drive.
4. Once recognized, ensure icons for Dashcam and Sentry Mode appear at the top of your touchscreen. Icons for Dashcam and Sentry Mode are available when you touch **Controls**. CybertruckModel SModel XModel 3Model Y is now ready to record videos.

NOTE: You may need to first enable Sentry Mode by touching **Controls** > **SentryControls** > **Safety** > **Sentry Mode**.

Viewing Video Recordings

If footage is saved, you can view the clips on the touchscreen or a computer.

When the USB drive runs out of storage space, video footage can no longer be saved. To prevent the USB drive from getting full, regularly move saved videos to another device and delete them from the USB drive.

Viewing on the Touchscreen

You can view recorded footage on the touchscreen when CybertruckModel SModel XModel 3Model Y is in Park. Touch the Dashcam icon located in the app launcher. The tabs display a list of all video clips, organized by location and timestamp. Pause, rewind, fast forward, and delete clips as needed. Swipe to the right or press and hold to quickly delete certain clips.

Navigate to **Controls** > **Safety** > **Delete Dashcam Clips** to delete all Dashcam and Sentry Mode footage.

NOTE: Dashcam recording pauses when you launch the Viewer.

Viewing on a Computer

Insert the USB drive into a computer and navigate to the TeslaCam or TeslaTrackMode (if equipped) or TeslaTrackMode (if equipped) folder.

The TeslaCam folder contains these sub-folders:



- **RecentClips:** Contains the last 60 minutes of recorded content.
- **SavedClips:** Contains all recordings that are saved and renamed from the RecentClips folder.
- **SentryClips:** Contains recordings from all Sentry Mode security events. If storage space on the USB drive becomes limited, the oldest Sentry Clips are deleted to provide space for new ones. Once deleted, you cannot retrieve them.



Operating Climate Controls

Overview of Climate Controls

Climate controls are available at the bottom of the touchscreen. By default, climate control is set to **Auto**, which maintains optimum comfort in all but the most severe weather conditions. When you adjust the cabin temperature while in **Auto**, the system automatically adjusts the heating, air conditioning, air distribution, and fan speed to maintain the cabin at your selected temperature.

Touch the displayed temperature at the bottom of the touchscreen to access the main climate controls screen, where you can adjust your climate preferences. You can return to Auto at any time by touching **Auto**. Touch the power button on the main climate controls screen to toggle on or off. For quick access to common controls, touch the temperature at the bottom of the screen to display the climate popup.

The touchscreen may display **Warming Up** or **Cooling Down** while getting to your preferred temperature. You may hear the fan speed increase or decrease during this time.

NOTE: The climate control system is powered by the high voltage Battery. Therefore, prolonged use decreases driving range.

WARNING: To avoid burns resulting from prolonged use, individuals who have peripheral neuropathy, or whose capacity to feel pain is limited because of diabetes, age, neurological injury, or some other condition, should exercise caution when using the climate control system and seat heaters.









Adjusting Climate Control Settings

Easily adjust your climate preferences, such as turning on the seat heater or changing the cabin temperature, hands-free by using voice commands (see [Voice Commands on page 97](#)).

NOTE: For one-touch access to seat heaters and defrosters, you can add these controls to My Apps. See [Customizing My Apps on page 1118](#).

The climate controls allow you to customize temperature, fan, and more, such as:

	<p>Turn the climate control system on or off. Turning it off reduces cooling, but saves energy. When the climate control system is operating, the front passenger vent can be turned off independently of the driver's vent. For more information, see Adjusting the Front and Rear Vents on page 1343.</p> <p>NOTE: Because CybertruckModel SModel XModel 3Model Y runs much quieter than a gasoline-powered vehicle, you may notice the sound of the air conditioning compressor as it is operating. To minimize noise, reduce the fan speed.</p>
	<p>Control the flow of air inside the cabin. Air can be drawn into CybertruckModel SModel XModel 3Model Y from outside or air can be recirculated inside the cabin.</p>
	<p>Adjust the fan speed using the slider. When in Auto, the fan speed levels change to Low/ Medium/ High.</p> <p>NOTE: Adjusting the fan speed may change the selected setting for how air is drawn into CybertruckModel SModel XModel 3Model Y in order to increase or reduce air flow.</p>
AUTO	<p>Adjust climate settings for the front and rear cabin. If Auto is enabled and a passenger is detected, the set temperature is maintained for the rear cabin.</p>
	<p>Choose where air flows into the front cabin (windshield, face-level, or foot-level vents). You can choose one or more vents.</p>

		Touch the driver's, or passenger's, side seat icon to adjust seat heaters for the driver. The seat operates at three levels from 3 (highest) to 1 (lowest). The seat icon displays twisting lines that turn red (heating) or blue (cooling) corresponding with the set level. Auto , which displays when the climate control system is set to Auto , warms or cools the front seats based on cabin temperature. For one-touch access to seat heaters, you can add them to the touchscreen's bottom bar (see Customizing My Apps on page 1118).
		Adjust the heated steering wheelsteering yoke (or steering wheel). The icon displays red twisting lines that correspond to the set level. If set to Auto , the steering wheel is heated as needed, based on cabin temperature, whenever the climate control system is set to Auto . For one-touch access, you can add this control to the touchscreen's bottom bar (see Customizing My Apps on page 1118).
		Turn on the wiper defroster.
		When in Park, Keep Climate On, Dog, and Camp allow you to keep the climate control system operating, even when you leave CybertruckModel SModel XModel 3Model Y (see Keep Climate On, Dog, and Camp on page 1340).
FRONT REAR		Customize the front or rear climate settings
		When in Park, touch Schedule to set a recurring daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive by preconditioning the Battery and cabin climate and/or charging during off-peak hours (see #unique_435 on page).
		The HEPA filter ensures the best quality air inside the cabin whenever the climate control system is on and outside air is entering the cabin (recirculate is off). The HEPA filter is extremely effective at removing particles, including pollution, allergens, bacteria, pollen, mold spores, and viruses. When you engage Bioweapon Defense Mode, the positive pressure inside the cabin minimizes the amount of outside air that can enter the vehicle. NOTE: Some gases, such as carbon monoxide, are not effectively removed by activated carbon.
		Warm up the side mirrors and the charge port.
		Defog or Defrost the windshield. Touch once to <i>defog</i> the windshield (the icon turns blue). Touch a second time to <i>defrost</i> the windshield. Touch a third time to turn off and restore the air distribution, heating, and fan to their previous settings. In low ambient temperatures, the exterior side mirrors are also heated whenever the windshield defroster is operating. See Cold Weather Best Practices on page 693 for more information on preparing for cold weather.

Climate Popup

Touch the temperature arrows on the bottom of the touchscreen to display a popup for easy access to some of the most common climate controls:

NOTE: For one-touch access to seat heaters and defrosters, you can add these controls to My Apps. See [Customizing My Apps on page 1118](#).

- Touch to access the main climate controls screen.
- Enable or disable heated or cooled seats (if equipped).
- Enable or disable the front or rear windshield defrosters.
- Modify the cabin temperature by dragging the slider. You can also enable temperature splitting which allows the driver and front passenger to customize their own climate preferences. The front passenger can touch the temperature icon on the bottom of the touchscreen or the main climate controls screen to adjust. Touch **Split** again to disable climate splitting.

Keep Climate On, Dog, and Camp

These settings allow you to keep the climate control system running when in Park, whether you stay inside of, or leave, your vehicle. These settings are useful when it is important to maintain the cabin temperature in hot or cold weather conditions.

Keep Climate On: Maintains the climate control system on at a desire temperature. For example, when leaving groceries in CybertruckModel SModel XModel 3Model Y on hot days, you may want to use Keep Climate On to pre-condition the cabin to maintain a particular temperature.

Dog: Keeps the cabin at a comfortable temperature for your pet while you actively and frequently monitor this temperature using the mobile app (which requires both your phone and the vehicle to have cellular connectivity plenty of battery). When in Dog, the touchscreen displays the current cabin temperature to inform people passing by that your pet is safe. This setting is not intended for people, and should only be used for short periods of time while you stay in close proximity should you need to return to the vehicle in situations where the temperature can no longer be maintained.

NOTE: To avoid accidentally pressing the window switch (such as your dog stepping on it), the windows cannot be rolled down while Dog is enabled.

NOTE: If Dog and Sentry are enabled at the same time, Sentry defaults to **Disable Sentry Sounds** to protect your pet. The cabin camera shows the inside of the vehicle so you can check on your pet at any time. See [Sentry Mode on page 664](#) for more information.

Camp: Allows you to power electronics through the USB ports and low voltage outlets and maintain the cabin temperature. The touchscreen remains on so you can play music, browse the internet, play games, or watch shows in Tesla Theater. You can also control media and climate settings from a paired phone. Camp is ideal for remaining inside your vehicle, such as camping or staying with a child. While active, Sentry Mode and the vehicle alarm system are disabled. Walk-Away Door Lock is inactive.

To operate Keep Climate On, Dog, or Camp:

1. Make sure the Battery's charge level is at least 20%.
2. Engage Park. These settings are available only when CybertruckModel SModel XModel 3Model Y is in Park.
3. Adjust the climate settings.
4. On the climate controls screen, touch **Keep Climate On, Dog, or Camp**.

NOTE: You can also control **Dog** and **Camp** from the mobile app by swiping up from the gray bar on the Climate screen.

The climate control system attempts to maintain your climate settings until you shift out of Park or manually turn it off. Avoid using these features when the Battery's charge level is low. If the Battery's charge level drops below 20%, the Tesla mobile app attempts to repeatedly send notifications reminding you to check on anything that you have left in CybertruckModel SModel XModel 3Model Y.




NOTE: Software updates cannot be performed when Keep Climate On, Dog, or Camp is active.



WARNING: Never leave a child unattended in your vehicle.



WARNING: Check local laws for any restrictions on leaving pets unattended in your vehicle.

-  **WARNING:** You are responsible for the safety of your dog or pet. Never leave them in CybertruckModel SModel XModel 3Model Y for long periods of time. Constantly monitor the vehicle temperature and their well-being. Make sure you have sufficient cellular coverage on your phone and time to return to the vehicle, if necessary.
-  **WARNING:** In the unlikely event that your climate control system needs service or is not working as expected, avoid using Keep Climate On, Dog, and Camp. Never rely on your vehicle to protect something irreplaceable.
-  **WARNING:** You can adjust and monitor the climate control system remotely using the mobile app. However, if you use the mobile app to turn off the climate control system, Keep Climate On, Dog, and Camp stop operating.

Cabin Overheat Protection



Cabin Overheat Protection prevents the cabin from getting too hot in scorching ambient conditions. While not necessary to activate whenever you leave CybertruckModel SModel XModel 3Model Y, the climate control system can reduce and maintain the temperature of your vehicle's cabin. This can prevent the cabin from getting too hot after leaving it parked in the sun, making the vehicle more comfortable when you return. Cabin Overheat Protection may take up to 15 minutes to enable once you exit the vehicle. This feature is intended for passenger comfort and has no impact on the reliability of your vehicle's components.

To turn on, touch **Controls > Safety > Cabin Overheat Protection** and choose:

- **On:** The air conditioning operates when the cabin temperature exceeds 105° F (40° C), or the selected temperature on the touchscreen or mobile app. Customizing temperatures may require the most recent version of the mobile app.
- **Off:** Disables Cabin Overheat Protection.

You can also enable Cabin Overheat Protection remotely through the mobile app by touching **Climate**. Swipe up on the bottom menu and select a setting under **Cabin Overheat Protection** (see [Mobile App on page 355](#)).

Cabin Overheat Protection operates until 12 hours has elapsed once you exit CybertruckModel SModel XModel 3Model Y, or until the Battery energy drops below 20%, whichever comes first. Using Cabin Overheat Protection requires energy from the Battery, which may decrease range.

-  **WARNING:** Due to automatic shut-off, extreme outside conditions, or other potential inability to maintain the selected temperature, the inside of the vehicle can become dangerously hot, even when Cabin Overheat Protection is enabled. If you experience temperatures exceeding the selected temperature repeatedly, contact Tesla service.
-  **WARNING:** Never leave children or pets in the vehicle unattended. Due to automatic shut-off or extreme outside conditions, the inside of the vehicle can become dangerously hot, even when Cabin Overheat Protection is enabled.

Climate Control Operating Tips

Normal behavior:

- When you use the mobile app to turn on the climate control system, it automatically turns off when the charge level drops to 20%, or if two hours has passed. To cool or heat the cabin for a longer period of time, charge the vehicle and re-enable your climate control preference through the mobile app.
- To reduce the temperature in the cabin in hot weather conditions, the fan may turn on to vent the cabin when the vehicle is parked. This occurs only if the Battery's charge level is above 20%.
- In addition to cooling the interior, the air conditioning compressor also cools the Battery. Therefore, in hot weather, the air conditioning compressor can turn on even if you turned it off. This is normal because the system's priority is to cool the Battery to ensure it stays within an optimum temperature range to support longevity and optimum performance.
- You may hear the sound of the climate system inside the cabin of CybertruckModel SModel XModel 3Model Y when parked. It makes a low fan noise. The climate system attempts to dry itself out to minimize additional moisture or musty odors. This is a normal operation and not a cause for concern.
- Even when not in use, you may hear CybertruckModel SModel XModel 3Model Y emit a whining noise or the sound of water circulating. These sounds are normal and occur when the internal cooling systems turn on to support various vehicle functions, such as maintaining the low voltage battery and balancing the temperature of the high voltage Battery.
- In very humid conditions, it is normal for the windshield to fog slightly when you first turn on the air conditioning.
- It is normal for a small pool of water to form under CybertruckModel SModel XModel 3Model Y when parked. Extra water produced by the dehumidifying process is drained underneath.



Tips:

- If the climate control system is louder than you prefer, manually reduce the fan speed.
- Improve the efficiency of the cabin heating or cooling by reducing your rate of acceleration. This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.
- To ensure the climate control system operates efficiently, close all windows and ensure that the exterior grille in front of the windshield is free of ice, snow, leaves, and other debris.
- Your charge port latch may freeze in extremely cold weather or icy conditions. In cases where you cannot remove or insert the charge cable, or your vehicle is not Supercharging due to the latch being frozen in place, enable **Defrost Truck** in the mobile app. This helps thaw ice on the charge port latch so the charge cable can be removed or inserted. See [Cold Weather Best Practices on page 693](#) for more information.

Adjusting the Front and Rear Vents

CybertruckModel SModel XModel 3Model Y has a unique horizontal face-level vent that spans the width of the dashboard. It also has vents at the top and bottom of the rear console.

NOTE: Outside air is drawn into CybertruckModel SModel XModel 3Model Y through the grill in front of the windshield. Keep the grill clear of obstructions, such as leaves and snow.

Using the front and rear touchscreens, you can pinpoint exactly where you want to direct the air flowing from this vent when heating or cooling the cabin. When the face-level vent is on you can adjust the direction of the air flow from each vent. To adjust the direction of the air flow, touch the radiating air waves from the corresponding vent on the touchscreen. The air flows in a single stream when centered or splits into mirrored air streams when air is directed outward or inward from the center of the vent.

NOTE: When you split a vent into two separate air flows, the air flow in each direction is not as strong as when all air is flowing in a single direction.

Front passengers can turn off the flow of air from the passenger vent. To turn off air flow, press and hold the front passenger air waves on the touchscreen. You can turn on the flow of air again by touching the front passenger vent.

Cabin Air Filter(s)

CybertruckModel SModel XModel 3Model Y has a HEPA filter to prevent pollen, industrial fallout, road dust and other particles from entering through the vents.

NOTE: The HEPA filter requires periodic replacement. See [Service Intervals on page 750](#).

Cold Weather Best Practices

To ensure that CybertruckModel SModel XModel 3Model Y provides you with the best ownership experience possible in harsh cold weather conditions, follow these best practices.

Before Driving

When snow and ice accumulate on your vehicle, moving parts, such as the door handlesdoors, windows, mirrors, and wipers the wiper can freeze in place. To achieve maximum range and performance, it is helpful to warm the cabin and Battery before driving. There are several ways to do so:

- Touch **Schedule**, available on both the charging and climate control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).
- In the mobile app, navigate to **Climate** to customize the temperature at which you want to heat the cabin. This also warms the high voltage Battery as needed.
- In the mobile app, navigate to **Climate > Defrost Car > Defrost** to melt snow, ice, and frost on the windshield, charge port, charge port (if equipped), windows, and mirrors. This also warms the high voltage Battery as needed.

NOTE: Tesla recommends activating climate settings at least 30–45 minutes before departure (see [Operating Climate Controls on page 669Operating Climate Controls on page 1338](#)). Preconditioning times depend on outside temperature and other factors. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

Charge Port

If your charge port latch freezes in place and a charging cable becomes stuck in the charge port, try manually releasing the charge cable. See [Manually Releasing Charge Cable on page 737Manually Releasing Charge Cable on page 740Manually Releasing Charge Cable on page 737Manually Releasing Charge Cable on page 1375](#).

In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In these weather conditions, on some vehicles, you can thaw ice on the charge port latch so the charge cable can be removed and inserted. To do so, enable **Defrost Car** using the mobile app.

In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. In cases where you cannot remove or insert the charge cable, or the vehicle is not Supercharging due to the latch being frozen in place, use the **Defrost Car** setting in the mobile app. This can help thaw ice on the charge port latch so the charge cable can be removed or inserted.

You can also prevent the occurrence of a charge port latch freezing in place by using the **Schedule** settings (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).

NOTE: If your charge port latch is frozen in place, it may not lock the charging cable in place when inserted, but it can still charge at a slow AC rate even if the latch is not engaged.

Charging

By using Trip Planner (if available) to navigate to a Tesla charging location, CybertruckModel SModel XModel 3Model Y pre-heats the high voltage Battery to ensure when you arrive at the charger, the temperature of the Battery is optimal and ready to charge. This reduces the amount of time it takes to charge. See (see [Trip Planner on page 705](#)).

NOTE: Tesla recommends using Trip Planner to navigate to a charging location for at least 30–45 minutes before arrival to ensure optimal Battery temperature and charging conditions. If the drive to the charging location is less than 30–45 minutes, consider preconditioning the Battery before driving (see [Before Driving on page 693](#)).

NOTE: The thermal system may produce steam under certain conditions for vehicles equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**). For example, odorless steam can come from the front of your vehicle while charging at a Supercharger in cold temperature. This is normal and not a cause for concern.

Windows

In the mobile app, go to **Climate** and select **Defrost CarDefrost Truck**, which helps melt snow, ice, and frost on the windshield, windows, and mirrors.

In cold temperatures, CybertruckModel SModel XModel 3Model Y automatically makes a slight adjustment to the position of the windows to make it easier to open doors.

NOTE: Always connect to an external, low voltage power supply before opening a door when the vehicle has no power to avoid breaking a window.

Use the mobile app to schedule a service appointment for Tesla to provide hydrophobic coating to the side and rear windows (not the front windshield) for a nominal fee.

Doors


In severe winter conditions, ice buildup can make it more difficult to open door handles. You can use the mobile app to pop open the driver door in this situation.

1. In the mobile app, touch and hold any of the four quick control buttons and follow the instructions to customize quick controls with **Unlatch Door**.
2. When you are next to your car, touch **Unlatch Door** to pop open the driver door.

Removing Ice From Door Handle

In severe winter conditions, ice buildup within the door handle can prevent the door handle from opening. The process for freeing a CybertruckModel SModel XModel 3Model Y door handle is slightly different than others to remove ice buildup.

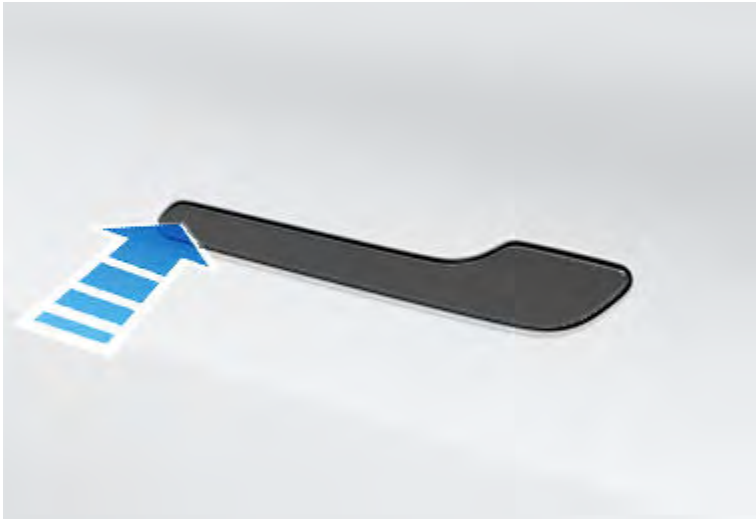
NOTE: Preemptively applying WD-40 to the door handle pivot pins can help prevent ice buildup inside your door handle.

 **CAUTION:** Do not attempt to use tools or excessive force to release the door handle from ice buildup.

If your vehicle's door handles are black: Perform the following to remove ice from the door handle:



1. Forcefully press the frontmost part of the door handle. It will rock slightly inward to help break the ice.



2. Press the rearmost part of the door handle to try to open as you normally would.
3. Once the door handle is able to move, open and close it a few more times to release any remaining ice buildup. Make sure the door handle is fully pressed in (retracted) prior to entering the vehicle, and check that the door is fully closed before driving away.

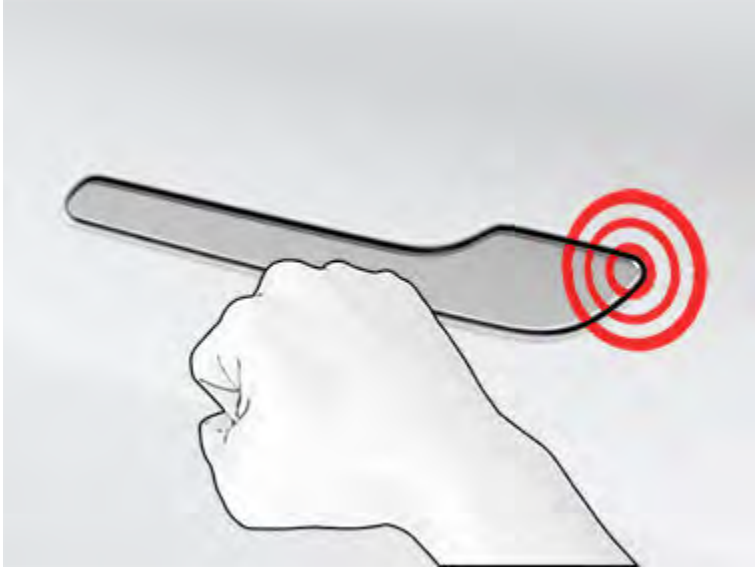
If your vehicle's door handles are silver: You can usually remove the ice with a few forceful bumps to the door handle using the bottom of your fist. Perform the following to remove ice from the door handle:


⚠ CAUTION: Remove any jewelry or objects that can damage the paint prior to performing the procedure, and do not attempt to use tools or excessive force.



1. Forcefully press the rearmost part of the door handle to try to open the door handle.
2. Working in a circular pattern around the perimeter of the door handle, use the bottom of your fist to forcefully bump the door handle to break and release the ice buildup.

3. Aiming for the rearmost end of the wide part of the door handle, use the bottom of your fist to forcefully bump the door handle. Increase the intensity of the bumps as necessary, repeating steps 1 through 3 until the ice is removed and the door handle can be opened.



 **CAUTION:** Never bump the vehicle so hard as to cause a dent; the force used should be similar to knocking on your neighbor's front door.

4. Once the door handle is able to move, open and close it a few more times to release any remaining ice buildup. Make sure the door handle is fully pressed in (retracted) prior to entering the vehicle, and check that the door is fully closed before driving away.

Mirrors

If ice buildup is expected when parking, turn off **Auto-Fold Mirrors**. Touch **Controls > Vehicle > Auto-Fold**. Ice can prevent exterior side mirrors from folding or unfolding.

NOTE: Side mirrors automatically heat as needed during preconditioning, or when the rear defroster is turned on.

Wipers

If you expect snow or ice to build up when parked, touch **Controls > Service > Wiper Service Mode**. This raises the wipers against the windshield so they can defrost when the windshield defrosts (see [Wipers and Washers on page 453](#)). You can also turn on wiper defrosters (if equipped). See [Operating Climate Controls on page 669](#).

Tires and Tire Chains

Use winter tires to increase traction in snowy or icy conditions. You can purchase winter tires on the Tesla Shop (see [Seasonal Tire Types on page 769](#)) (see [Seasonal Tire Types on page 1405](#)).

Tire chains provide additional traction when driving in snowy or icy conditions. Check local regulations to determine if tire chains are recommended or required during winter months. See [Using Tire Chains on page 770](#) [Tire Chains on page 1406](#) for more information.

Your vehicle's tire pressures will drop in cold ambient temperatures. If the TPMS indicator light appears, inflate the tires before driving. The tires will lose one PSI for every 10° F (6° C) drop in outside temperature (see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#)). Proper tire pressures help protect tires from potholes and improve range when properly inflated.

While Driving

Cold weather can increase energy consumption because more power is required for driving, cabin and Battery heating. Follow these suggestions to reduce energy consumption:



- Use seat heaters to keep warm. Seat heaters use less energy than the cabin heater. Lowering the cabin temperature and using seat heaters reduces energy consumption (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)).
- Slow down your driving and avoid frequent and rapid acceleration.
- Turn on Range Mode to automatically limit the power that the climate control system uses to maintain the temperature of the Battery and the cabin area. Range Mode also turns off signature lights (if equipped) and adjusts the front and rear motor torque split to maximize range (see [Getting Maximum Range on page 745](#)).
- If your vehicle is equipped with a heat pump (to determine if your vehicle has a heat pump, touch **Controls > Software > Additional Vehicle Information**), you can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.
- You can improve the efficiency of the cabin heating by reducing your selected acceleration mode (see [Acceleration Modes on page 497](#)[Acceleration Modes on page 501](#)). This allows the heat pump system to take more heat from the Battery to efficiently heat the cabin, instead of maintaining the Battery's ability to provide peak acceleration performance. This helps to maximize driving efficiency in colder weather. Note that when subsequently increasing the acceleration mode, the Battery requires time to warm up before the increased level of acceleration is available.

Regenerative Braking

Regenerative braking can be limited if the Battery is too cold. As you continue to drive, the Battery warms up and regenerative power increases (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)).

NOTE: Limited regenerative braking can be avoided if you allow enough time to precondition your vehicle or if you use **Schedule** to precondition CybertruckModel SModel XModel 3Model Y before your departure time (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).

NOTE: Installing winter tires can result in temporarily reduced regenerative braking power but after a short period of driving, CybertruckModel SModel XModel 3Model Y recalibrates to correct this. Touch **Service > Wheel & Tire > Tires** to select winter tires and quicken this process.

Cold Battery



A blue snowflake icon appears on your instrument panel touchscreen when some of the stored energy in the Battery is unavailable because the Battery is cold. This portion of unavailable energy displays in blue on the Battery meter. Regenerative braking, acceleration, and charging rates may be limited. The snowflake icon no longer displays when the Battery is sufficiently warm.

After Driving

Leave CybertruckModel SModel XModel 3Model Y plugged in when not in use. This uses the charging system, rather than the Battery itself, to keep the Battery warm (see [High Voltage Battery Information on page 724](#)).

Scheduled Departure

When parked, plug in CybertruckModel SModel XModel 3Model Y and use the **Schedule** settings, available on both the charging and climate control screens, to set a time when you want to precondition CybertruckModel SModel XModel 3Model Y (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)). You can also use **Schedule** to prevent the charge port latch freezing in place. Your vehicle determines the appropriate time to begin charging so it is complete during off-peak hours and the cabin and Battery are warm by your set departure time.

Storage

If you leave CybertruckModel SModel XModel 3Model Y parked for an extended period of time, plug the vehicle into a charger to prevent normal range loss and to keep the Battery at an optimal temperature. Your vehicle is safe to stay plugged in for any length of time.

When not in use, CybertruckModel SModel XModel 3Model Y enters a sleep mode to conserve energy. Reduce the number of times you check your vehicle's status on the mobile app, as this automatically wakes up your vehicle and starts normal energy consumption.

Hot Weather Best Practices

To ensure that CybertruckModel SModel XModel 3Model Y provides you with the best ownership experience possible in hot ambient conditions, follow these best practices.

Before Driving

There are several ways to prepare your vehicle for a drive, without having to get into an already hot vehicle:

- Precondition the cabin by moving the direction of air flow from the vents, and turn the seat heaters on or off. In the mobile app, navigate to **Climate** to customize the temperature at which you want to cool the cabin.
- Touch **Schedule**, available on both the Charging and Climate Control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).
- Enable **Cabin Overheat Protection**, which prevents the cabin from getting too warm in hot ambient conditions. You can choose whether you want the A/C or just the fan to run when the temperature in the cabin exceeds 105° F (40° C) or the selected temperature (if available).
- In the mobile app, navigate to **Controls** to vent the windows.

NOTE: Tesla recommends activating climate settings at least 30–45 minutes before departure (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)). Preconditioning times depend on outside temperature and other factors. The mobile app will notify you once your vehicle has reached the desired preconditioning temperature.

After Driving

Leave CybertruckModel SModel XModel 3Model Y plugged in when not in use, especially if using Preconditioning or Cabin Overheat Protection. This uses the charging system, rather than the battery itself, to maintain a comfortable temperature (see [High Voltage Battery Information on page 724](#)). In addition, there are several ways to minimize a hot cabin:

- Before leaving your vehicle (to run errands, for example), use Dog Mode to keep the cabin cool for pets or perishable goods. See [Keep Climate On, Dog, and Camp on page 677](#)[Keep Climate On, Dog, and Camp on page 1340](#) for more information.
- Tesla recommends turning the air conditioning off approximately 30 seconds before pressing Park to reduce puddling below the vehicle.
- Park in the shade to help reduce power consumption and maintain cooler cabin temperatures.
- Use a sun shade (available on the Tesla Shop) if you have to park outside in the sun.
- When parked, plug in CybertruckModel SModel XModel 3Model Y and **Schedule** your charging. Your vehicle determines the appropriate time to begin charging so it is complete during off-peak hours. The cabin and Battery are also prepared by your set departure time. For more information, see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#) .

Charging

When using Trip Planner or navigating to a Supercharger station, your vehicle automatically prepares the Battery for most efficient charging. In extreme heat, you may not see the message that the vehicle is preconditioning the Battery while navigating to a Supercharger, but it is still preparing the Battery for charging.

NOTE: Tesla recommends using Trip Planner to navigate to a charging location for at least 30–45 minutes before arrival to ensure optimal Battery temperature and charging conditions. If the drive to the charging location is less than 30–45 minutes, consider preconditioning the Battery before driving (see [Before Driving on page 693](#)).

If possible, leave your vehicle plugged into a charger whenever not in use, even in warm weather, especially if using Preconditioning or Cabin Overheat Protection.

Storage

If you leave CybertruckModel SModel XModel 3Model Y parked for an extended period of time, plug the vehicle into a charger to prevent normal range loss and to keep the Battery at an optimal temperature. Your vehicle is safe to stay plugged in for any length of time.



Climate

When not in use, CybertruckModel SModel XModel 3Model Y enters a sleep mode to conserve energy. Reduce the number of times you check your vehicle's status on the mobile app, as this automatically wakes up your vehicle and starts normal energy consumption.



Maps and Navigation

Map Overview

The touchscreen displays a map at all times (except when CybertruckModel SModel XModel 3Model Y is shifted into Reverse).

Use your finger(s) to interact with the map:

- To move the map in any direction, hold and drag a finger.
- To rotate the map in any direction, hold and turn two fingers.
- To zoom the map in or out, expand or pinch two fingers, respectively.

NOTE: When you rotate or move the map, your current location is no longer tracked. The message "Tracking Disabled" displays briefly next to the map orientation icon and the icon turns gray. To re-enable tracking, touch the map's orientation icon and choose North Up or Heading Up.

NOTE: The map zooms in and out automatically when a navigation route is active.

To change the orientation of the map, toggle between these options:



North Up: North is always at the top of the screen.



Heading Up: The direction you are driving is always at the top of the screen. The map rotates as you change direction. This icon has an integrated compass that indicates the direction you are driving.

NOTE: Touching this icon while navigating to a destination displays the route overview.



Route overview is available when you are navigating to a destination and displays when you expand the turn-by-turn direction list (by swiping it downward). When you collapse the turn-by-turn direction list by swiping it upward, the map displays your previously chosen orientation.

Map Display

When CybertruckModel SModel XModel 3Model Y is in Park, the following icons display on the map to allow you to customize the type of information the map displays. To access these icons when driving, touch anywhere on the map (they disappear after a few seconds).



Satellite imagery (if equipped with premium connectivity).



Traffic conditions (if equipped with premium connectivity).



Navigation and Entertainment



Map details (such as points of interest).

Drop a pin anywhere on the map by pressing and holding your finger on a desired location. When you drop a pin, or touch an existing pin, the chosen location is centered on the map and a popup screen provides information about the location. From this popup, you can navigate to the location add or remove the location from your list of favorite destinations (see [Home, Work, and Favorite Destinations on page 703](#)).



Charging locations. Shows a popup list that includes the city and proximity of the corresponding stations on the map. Charging locations include Tesla Superchargers, destination charging sites, third-party fast chargers, and public chargers that you have used previously. See [Charging Locations on page 703](#). Touch the lightning bolt icons in the popup list to filter by the types of chargers based on max power.

NOTE: In some market regions, third-party fast chargers are also included on the map as dark gray pins when you display chargers.

Navigation Settings

NOTE: The navigation settings available can vary depending on region and vehicle configuration.



The navigation settings icon displays when you touch ... once you start navigating to a destination.

NOTE: You can also access navigation settings by touching **Controls > Navigation**.

Touch the navigation settings icon to customize the navigation system to suit your preferences (the available settings vary depending on your market region and vehicle configuration):

- **Navigation Guidance:** Touch **Voice** to enable an audible reading for navigation instructions.
- Touch - or + to increase or decrease the volume of spoken navigation instructions. Decreasing all the way to the left or touching the speaker icon mutes the instructions. You can also mute/unmute navigation instructions by touching the speaker icon. This volume setting applies only to the navigation system's spoken instructions. Volume for Media Player and Phone does not change.
NOTE: Volume may automatically be adjusted based on driving speed and climate settings.
NOTE: Navigation instructions are muted when the paired phone has an ongoing phone call.
- Enable **Automatic Navigation** if you want Cybertruck Model S Model X Model 3 Model Y to automatically initiate a navigation destination when you get in your vehicle. Destinations are predicted based on commonly driven routes, time of day, and calendar entries (see [Automatic Navigation on page 702](#)).
- Enable **Trip Planner** (if available in your market region) to add Supercharger stops as needed. Supercharging stops are added to navigation routes with the goal of minimizing the amount of time you spend driving and charging (see [Trip Planner on page 705](#)).
- Enable **Online Routing** to automatically route to avoid heavy traffic and to get real-time traffic conditions along navigation routes, if available in your region (see [Online Routing on page 705](#)).
- Touch **Avoid Ferries** to be automatically routed to avoid ferries.
- Touch **Avoid Tolls** to be automatically routed to avoid tolls, if possible.
- Touch **Use HOV Lanes** to include High Occupancy Vehicle (HOV) lanes on navigation routes. This is particularly useful when using Navigate on Autopilot (see [Navigate on Autopilot on page 592](#) [Navigate on Autopilot on page 561](#)).



Navigating to a Destination

To navigate to a location, touch the search bar in the corner of the map and enter a destination, send the destination from your phone, or use voice commands (see [Voice Commands on page 97](#)) for an address, landmark, business, etc. When you touch the search bar, you can also choose from the following types of locations:

- A saved **Home** or **Work** location (see [Home, Work, and Favorite Destinations on page 703](#)).
- A **Charging** destination (see [Charging Locations on page 703](#)).
- A **Recent** destination (the most recent destination is listed at the top).
- A destination you have marked as a **Favorite** (see [Home, Work, and Favorite Destinations on page 703](#)).
- A popular restaurant when you're feeling **Hungry** or a popular destination (such as museums and amusement parks) when you're feeling **Lucky** (see [Lucky and Hungry on page 702](#)).

NOTE: You can start navigation remotely from your iOS® or Android™ device using the "share" functionality on your device after allowing access to the Tesla mobile app.

When you specify a location, the touchscreen zooms out to provide an overview of the route you need to travel and displays a turn-by-turn direction list. Estimated arrival time, driving time, and mileage displays at the bottom of the direction list. Note the following about the turn-by-turn direction list:

- The Battery icon on the turn list provides a visual representation showing an estimate of how much energy will remain when you reach your destination, and how much will remain if you make a round trip back to your current location. See [Predicting Energy Usage on page 704](#).
- If charging is needed to reach your destination and Trip Planner is enabled (and available in your market region), the navigation route automatically includes Supercharger stops (see [Trip Planner on page 705](#)).
- If you won't have enough energy to reach your destination and there is no Supercharger on the route, an alert tells you that charging is needed to reach your destination.
- Each turn is preceded by the distance to the maneuver.
- To see the bottom of the list, you may need to drag the list upward.
- Touch the top of the list to minimize it.

While navigating, the map tracks your location and displays the current leg of your trip. You can display the entire route at any time by swiping down to expand the turn-by-turn direction list or touching the route overview icon.

Below the turn-by-turn list, a progress bar shows how close you are to your destination or next stop. If online routing is enabled, the progress bar also shows live traffic conditions on your route (see [Online Routing on page 705](#)).

To stop navigating, touch **Cancel**, located in the bottom corner of the turn-by-turn direction list. Swipe right on the suggested location or press and hold the location to quickly delete certain recent navigation searches.

NOTE: If a data connection is not available, onboard maps allow you to navigate to any destination, but you must enter the exact and complete address.



If **Navigate on Autopilot** is enabled, you can turn it on for the navigation route by touching **Navigate on Autopilot** in the turn-by-turn direction list (when the feature is active, the icon is blue). **Navigate on Autopilot** automatically changes lanes and steers CybertruckModel SModel XModel 3Model Y on controlled-access roads (like highways and freeways), along a navigation route. For details, see [Navigate on Autopilot on page 561](#).





Navigation and Entertainment

Selecting an Alternate Route

Depending on market region and vehicle configuration, this feature may not be available on your vehicle. Your vehicle must be equipped with Premium Connectivity.

After you have entered a destination with one stop, the map displays up to three alternate routes. This allows you to easily compare total travel time and traffic information for each route. If you do not select a preferred route within the timeout period, the fastest route is automatically selected.

Adding Stops to a Route

After entering a destination, edit your route by adding, deleting or reordering stops. Touch the three dots at the bottom of the turn-by-turn direction list to view options to edit your route.



Add Stop allows you to add a stop by searching for a location or adding a Home, Recent or Favorite destination. You can also add a stop by touching any pin on the map and selecting **Add** from the popup.



Edit Stop allows you to set up a complex trip by adding or deleting stops on your route. Drag and drop stops by touching the equal sign to reorder your trip.

You can also use the Tesla mobile app to edit your route (if available in your region). In the Tesla mobile app, go to **Locations > Navigate** and enter a destination, touch **Edit Trip > Add Stop** to edit your route, then touch **Send to Car** to share the trip with your vehicle.

NOTE: Requires Tesla mobile app version 4.27.5 or newer.

Automatic Navigation

NOTE: Automatic Navigation may not be available in all market regions and on all vehicle configurations.

Automatic Navigation can predict a destination when you get in your vehicle. When your phone's calendar is synced to CybertruckModel SModel XModel 3Model Y, and the calendar includes an event that takes place within two hours of when you get in your vehicle to drive, Automatic Navigation suggests the location of the event (assuming a valid address is associated with the event).

In addition, if you are Home and drive on weekdays (Monday to Friday) from 5:00 AM to 11:00 AM, Automatic Navigation can automatically route you to your specified Work location (see [Home, Work, and Favorite Destinations on page 703](#)). Likewise, if you are at work on weekdays from 3:00 PM to 11:00 PM, Automatic Navigation can automatically route you to your specified Home location.

To enable Automatic Navigation, touch **Controls > Navigation > Automatic Navigation**. You must have your phone's calendar synced to CybertruckModel SModel XModel 3Model Y and the event must include a uniquely specified and valid address (see [Phone, Calendar, and Web Conferencing on page 363](#)).

NOTE: Navigation instructions that you enter manually, or send to CybertruckModel SModel XModel 3Model Y, override routes suggested by Automatic Navigation.

Lucky and Hungry

NOTE: Features may not be available in all market regions and on all vehicle configurations.

In addition to navigating to a destination of your choice, CybertruckModel SModel XModel 3Model Y can also suggest nearby locations based on whether you are feeling **Hungry** or **Lucky**. In the navigation search bar, touch **Hungry** or **Lucky**. **Hungry** suggests a list of popular restaurants, whereas **Lucky** suggests a list of popular destinations (such as museums and amusement parks). Once you discover an interesting destination, touch **Navigate** to proceed to the destination.

This feature requires the latest version of Navigation maps. To download, connect CybertruckModel SModel XModel 3Model Y to Wi-Fi and touch **Controls > Software** to check if an update is available (see [Map Updates on page 706](#)).



Home, Work, and Favorite Destinations

If you frequently drive to a destination, add it as a favorite to avoid entering the location's name or address each time. When you add a destination as a Favorite, you can easily navigate to it by touching the navigation search bar and then touching **Favorites** and choosing it from your list of favorite destinations.



To add a destination to your Favorites list, touch its pin on the map, then touch the star icon on the popup screen that appears. Enter a name (or leave as-is to accept the default name), then touch **Add to Favorites**. The star becomes solid and the destination is included on your Favorites list.

To delete a Recent or Favorite destination, touch it on the destination list and hold it down briefly until the **X** appears. Then touch the **X** to delete it from the list.

Home and **Work** locations also display under the navigation search bar. Touch to set an address to the corresponding location. After entering the address, touch **Save as Home** or **Save as Work**. Then simply touch these shortcuts whenever you want to navigate home or to work.

To change or delete the corresponding address, press and hold the **Home** or **Work** icon. A popup allows you to enter a new address and **Save as Home** or **Save as Work**. Once a Home or Work location is saved, CybertruckModel SModel XModel 3Model Y may prompt you to navigate to your Work location in the mornings and to your Home location in the evenings and provide an estimated driving time based on current traffic conditions. See [Automatic Navigation on page 702](#). Touch **Clear Home** or **Clear Work** to remove associated addresses entirely. Based on your usage patterns, CybertruckModel SModel XModel 3Model Y may prompt you to save a location as Home or Work.

For security reasons, if you sell, transfer ownership, or allow others to drive CybertruckModel SModel XModel 3Model Y, it is recommended that you delete your Home and Work locations. You can delete these individually or you can perform a factory reset to erase all personal data (touch **Controls** > **Service** > **Factory Reset**).

Charging Locations

To display charging locations on the map, touch the map's search bar, then touch **Charging**. Charging locations are shown in a list (with the closest charging location at the top of the list) and represented by corresponding pins on the map. Touch a pin to display more information, navigate to, or mark it as a favorite.

Touch the lightning bolt icons to specify the types of charging locations you want the map to include (by default, the map displays only Superchargers):



Touch to include low power stations up to 25 kW, such as destination charging locations.

Touch to include low power stations up to 70 kW, such as destination charging locations.

Touch to include low power stations up to 70 kW, such as destination charging locations.



Touch to include medium power chargers 25 kW to 75 kW.



Touch to include high power chargers 75 kW and above.

Touch to include high power chargers above 70 kW.

Touch to include high power chargers above 70 kW.

NOTE: In some market regions, third-party fast chargers are also included as dark gray pins when you choose to display all charging stations.

The appearance of a charging location's pin reveals the predicted status about the location. Touch the pin to display details.



Navigation and Entertainment



The Supercharger location is operational and the number displayed on the pin represents the predicted number of available Supercharger stalls upon arrival.

NOTE: A Supercharger located on your current navigation route is colored black (or white, if the touchscreen is in night mode).



The Supercharger location is predicting a high volume of users. You may need to wait before charging.



The Supercharger location may be operating at a reduced capacity.



The Supercharger location may be closed.



The Supercharger location has no data available but should be operational.



The location is either a destination charging location, a third-party fast charger, or a public charging station that you have previously used. Touch to display more information such as usage restrictions and available charge current.

NOTE: When the map is zoomed out and more than one destination charging location is available in an area, the pin is round and displays the number of stations. Touch the pin to zoom in. Then you can touch an individual pin for details about a specific location.

Touch a charging location's pin to display a popup from which you can:

- Determine its exact location and approximate distance from your current location.
- View amenities that are available at the charging location, including restrooms, restaurants, lodging, shopping, and Wi-Fi. On a Supercharger popup, touch an amenity icon to search the surrounding area for the associated amenity.
- Touch the arrow icon to navigate to the charging location.

NOTE: When navigating to a Supercharger (or third-party fast charger in some regions), CybertruckModel SModel XModel 3Model Y preconditions the Battery to prepare for charging. This ensures you arrive with an optimal Battery temperature, reducing the amount of time it takes to charge. In some circumstances (such as cold weather), it is normal for the motor(s) and components to make noise as it generates heat to warm the Battery (see [Charging on page 693](#)).

- View how busy a Supercharger location typically is during different times of the day, along with corresponding charging fees and idle fees (see [Supercharger Fees on page 736](#)[Supercharger Fees on page 1375](#)).

Predicting Energy Usage

When navigating to a destination, CybertruckModel SModel XModel 3Model Y helps you anticipate your charging needs by calculating the amount of energy that remains when you reach your destination. When navigating, the map displays this calculation next to the Battery icon on the turn-by-turn direction list (see [Navigating to a Destination on page 701](#)). When the turn-by-turn direction list is compressed, touch the top of the list to expand it.



The calculation that predicts how much energy you will use is an estimate based on driving style (predicted speed, etc.) and environmental factors (wind speed and direction, ambient and forecasted temperatures, air density and humidity, etc.). As you drive, CybertruckModel SModel XModel 3Model Y continuously learns how much energy it uses, improving accuracy over time. CybertruckModel SModel XModel 3Model Y predicts energy usage based on the driving style of the individual vehicle. For example, if you drive aggressively for a period of time, future range predictions will assume higher consumption. Some factors that contribute to predicted energy (such as forecasted temperatures and wind speed) are available only when CybertruckModel SModel XModel 3Model Y has internet connectivity.

NOTE: If you purchase a used Tesla vehicle, it is recommended that you perform a factory reset (**Controls > Service > Factory Reset**) to ensure the predicted energy is as accurate as possible.

Throughout your route, CybertruckModel SModel XModel 3Model Y monitors energy usage and updates the estimate of energy remaining at the end of your trip. A popup warning displays on the turn-by-turn direction list in these situations:

- A yellow warning displays when you have very little energy remaining to reach your destination, requiring you to drive slowly to conserve energy. For tips on conserving energy, see [Getting Maximum Range on page 745](#).
- A red warning displays when you must charge to reach your destination.

To determine if you have enough energy for a round trip, touch the Battery icon on the turn-by-turn direction list to display an estimated calculation of your round trip energy usage.

Online Routing

CybertruckModel SModel XModel 3Model Y detects real-time traffic conditions and automatically adjusts the estimated driving and arrival times. In situations where traffic conditions may delay your estimated time of arrival and an alternate route is available, the navigation system can reroute you to your destination. To decline the alternate route, tap the reroute notification on your touchscreen. You can also specify the minimum number of minutes that must be saved before you are rerouted. Turn this feature on or off by touching **Controls > Navigation > Online Routing**.

When **Online Routing** is enabled, real-time traffic condition icons display along navigation routes when detected, if available in your region (Premium Connectivity required).



Appears when a speed camera is detected. As you are approaching the speed camera, CybertruckModel SModel XModel 3Model Y can also sound a chime. To enable this feature, touch **Controls > Navigation > Speed Camera Chime**.



Displays stop signs and traffic lights.

Trip Planner

Trip Planner (if available in your region) helps you take longer road trips with confidence. If reaching your destination requires charging, Trip Planner routes you through the appropriate Supercharger locations. Trip Planner selects a route and provides charging times to minimize the amount of time you spend driving and charging. To enable Trip Planner, touch the map's settings icon (see [Navigation Settings on page 700](#)), then touch **Trip Planner**.

When Trip Planner is enabled and charging is required to reach your destination, the turn-by-turn direction list includes Supercharger stops, recommended charging times at each Supercharger, and an estimate of how much energy will be available when you arrive at the Supercharger location.

To remove Supercharger stops and display directions only, touch **Remove all charging stops** at the bottom of the turn-by-turn direction list. If you remove charging stops, the turn-by-turn direction list may display an alert indicating that charging is needed to reach your destination. To add Supercharger stops back to the turn-by-turn direction list, touch **Add charging stops**.



Navigation and Entertainment

While charging at a Supercharger, the charging screen displays the remaining charging time needed to drive to your next Supercharger stop or destination (if no further charging is needed). If you charge for a shorter or longer length of time, charging time at subsequent Supercharger stops is adjusted accordingly. You can also use the mobile app to monitor remaining charging time needed.

NOTE: When navigating to a Supercharger or, in some regions, a third-party fast charger using Trip Planner, CybertruckModel SModel XModel 3Model Y may allocate some energy to pre-heat the Battery to arrive at the Supercharger or third-party fast charger with an optimal Battery temperature. This reduces charging time (see [Charging on page 693](#)).

If Trip Planner estimates that you won't have enough energy for your round trip, and there are no Superchargers available on your route, Trip Planner displays an alert at the top of the turn-by-turn direction list notifying you that charging is needed to reach your destination.

NOTE: If a Supercharger on your navigation route experiences an outage, Trip Planner displays a notification and attempts to reroute you to a different Supercharger location.

Map Updates

As updated maps become available, they are automatically sent to CybertruckModel SModel XModel 3Model Y over Wi-Fi. To ensure you receive them, periodically connect CybertruckModel SModel XModel 3Model Y to a Wi-Fi network (see [Wi-Fi on page 359](#)). The touchscreen displays a message informing you when new maps are installed.



Media

Overview

NOTE: Media apps vary depending on market region, vehicle configuration, options purchased, and software version. Some apps described may not be available in your market region, or may be replaced by different ones.

The Media Player displays on the touchscreen and is used to play various types of media. You can drag Media Player upward to expand it (allowing you to browse), and downward to minimize it so that just the Miniplayer displays. The convenient Miniplayer, which occupies the least amount of space on the touchscreen, displays what's currently playing and provides only the basic functions associated with what's playing. You can also drag Media Player to display on the left or right side of the touchscreen.

Streaming services are available only when a data connection is available (for example, Wi-Fi or Premium Connectivity). For some media services, you can use a default Tesla account. For others, you may need to enter account credentials the first time you use it.

NOTE: Instead of launching a different media app, you can change the source from within the Media Player screen by choosing a source from the dropdown list.



Radio: Choose from a list of available radio stations or touch the numeric keypad to directly tune the radio to a specific frequency. Touch the next or previous arrows to move from one frequency to the next (or previous).



Bluetooth: Play audio from a bluetooth-connected phone or USB device (see [Playing Media from Devices on page 709](#)).



Streaming: Play the audio streaming service available in your market region (for example, Slacker Radio), if equipped.



Spotify: Play audio available on Spotify.
NOTE: A Spotify Premium account is required for use.



Apple Music: Play audio available on Apple Music.



Caraoke (if equipped): Sing along with various songs (see [Caraoke on page 709](#)).



Tuneln: Play audio available on Tuneln.



Tidal: Play audio available on Tidal.



Tidal: Play audio available on Tidal.



NOTE: You can show or hide any media app/source. See [Media Settings on page 708](#).

When listening to internet radio or a music streaming service, the options available on the Media Player screen vary depending on what you are listening to. Touch the next (or previous) arrows to play the next (and in some cases previous) available station, episode, or track. You can also play next/previous using the left scroll button on the steering wheelsteering yoke (or steering wheel).

NOTE: You can use voice commands to adjust media settings and preferences, such as volume control, playing certain songs, or switching the media source (see [Voice Commands on page 97](#)).

Volume Controls

Volume can be controlled by:

- Roll the scroll button on the left side of the steering wheelsteering yoke (or steering wheel) up or down to increase or decrease volume respectively. This adjusts the volume for media, voice commands, and phone calls.
- Volume may be adjusted based on your driving speed and climate settings.
- Touch the <> arrows associated with the speaker icon on the bottom corner of the touchscreen.
- To mute the volume, press the left scroll button. Press again to unmute.
- Pressing the left scroll button during a phone call mutes both the sound and your microphone.

Media Settings

NOTE: The settings available vary depending on market region. Also, a setting may not be applicable to all audio sources.

Press the settings icon located in the Media Player's search bar to access audio settings.



You can adjust these settings:

- **Tone:** Drag the sliders to adjust the subwoofer and any of the five frequency bands (Bass, Bass/Mid, Mid, Mid/Treble, and Treble). If equipped with premium audio, you can adjust the level of sound immersion to make your music experience more engaging by dragging the immersive sound slider according to your preferences.
- **Balance:** Drag the center circle to the location in CybertruckModel SModel XModel 3Model Y where you want to focus the sound.
- **Options:** Set preferences for optional features. For example, you can turn **DJ Commentary**, **Explicit Content** and **Allow Mobile Control** on or off.
- **Sources:** Displays all available media sources and allows you to choose whether you want to show or hide each source. You may want to hide media sources that you never use. Once hidden, the media source does not appear on the drop down list in Media Player, nor will it appear in the app tray when you touch the App Launcher. You can re-display a hidden media source at any time by returning to this settings screen.

Searching Audio Content



Touch Media Player's magnifying glass icon to search for a particular song, album, artist, podcast, or station. You can also use voice commands to search hands-free (see [Voice Commands on page 97](#)). If available, touch **HD®** to play high definition versions of the selected frequency.



SiriusXM Satellite Radio (if equipped)

If equipped, you can listen to SiriusXM, a subscription-based satellite radio service. To receive satellite radio channels, you must provide the radio service provider with the radio ID for your touchscreen.

To display the radio ID:

1. Touch the radio source icon, then select SiriusXM from the list.
2. Move the channel selector to channel 0.
3. The Radio ID displays in the station information area.

To select a SiriusXM channel, you can either manually scroll through channel numbers, or you can browse channels by category.

Caraoke

NOTE: Depending on vehicle configuration and market region, Caraoke may not be available on your vehicle. Caraoke requires premium connectivity.

Navigate to Media Player and select the drop down menu to change the media source to Caraoke. Or add Caraoke as an app in the app launcher. You can browse through various songs and select the song you want to sing. Touch the microphone icon to enable or disable the song's main vocals. Disabling the microphone leaves only the song's instrumentals and background vocals. Touch the lyrics icon (located next to the microphone icon) to enable or disable the song's lyrics.

WARNING: Never read Caraoke lyrics while driving. You must always pay attention to the road and traffic conditions. When driving, the Caraoke lyrics are intended only for use by a passenger.

Recents and Favorites

For most source content, recents and favorites display at the top for easy access.



To add a currently playing station, podcast, or audio file to your Favorites list, touch the **Favorites** icon on Media Player.



To remove an item as a favorite, touch the highlighted **Favorites** icon. You can also remove multiple favorites by expanding Media Player to show all favorites for the applicable type of source content. Then press and hold any favorite. An **X** appears on all favorites and you can then touch the **X** to remove them from your Favorites list.



Your recently played selections are updated continuously so you don't need to remove them.

NOTE: Selections you play on FM (if equipped) radio are not included in the Recents list.

Playing Media from Devices

USB Flash Drives

Insert a flash drive into a front USB port (see [USB Ports on page 57](#)[USB Ports on page 58](#)[USB Ports on page 44](#)[USB Ports on page 41](#)[USB-C Ports on page 1125](#)). Touch **Media Player** > **USB**, then touch the name of the desired folder. To play media from a USB connection, CybertruckModel SModel XModel 3Model Y recognizes flash drives only. To play media from other types of devices (such as an iPod), you must connect the device using Bluetooth (see [Bluetooth Connected Devices on page 710](#)).

NOTE: Media Player supports USB flash drives with exFAT formatting (NTFS is not currently supported).



Navigation and Entertainment

NOTE: Use a USB port located at the front of the center console. The USB connections at the rear of the console are for charging only.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports may only support charging devices. Use the USB port inside the glove box for all other functions.

Bluetooth Connected Devices

Pair your Bluetooth-capable device to CybertruckModel SModel XModel 3Model Y (see [Bluetooth on page 360](#)) to play stored audio files. Choose Media Player's **Phone** source, touch the name of your Bluetooth-connected device, then touch **CONNECT**.



Theater, Arcade, and Toybox

Overview

NOTE: Entertainment options may vary depending on market region, date of manufacture, and vehicle configuration.



Theater: Play various video streaming services (such as Netflix, YouTube, Hulu, etc.) while parked. Available only if CybertruckModel SModel XModel 3Model Y is connected to WiFi, or is equipped with premium connectivity and a cellular signal is available.



Arcade: Want to game? You may need to use the steering wheelsteering yoke (or steering wheel) buttons or a Bluetooth or USB controller to play. See [Gaming Controllers and Headphones and Headphones on page 713](#).

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports can only be used to charge devices. On these vehicles, you must use the USB port inside the glove box.



Toybox: Play in the Toybox while parked.



WARNING: Use these features only when CybertruckModel SModel XModel 3Model Y is parked. Always pay attention to road and traffic conditions when driving. Using these features while driving is illegal and very dangerous.

NOTE: You can also use voice commands to access these features (see [Voice Commands on page 97](#)).

Toybox

Your vehicle's toybox includes features that can be fun to use. Here's an example of the types of features you can find in Toybox:

Select This...	To Do This...
007 (air suspension vehicles only)	You are no longer a "Driver", you're a "Diver"! Touch Controls > Suspension to change your depth.
Boombox	If CybertruckModel SModel XModel 3Model Y is equipped with a Pedestrian Warning System, delight pedestrians with a variety of sounds from your vehicle's external speaker while in Park. See Boombox on page 712 for more details. NOTE: Check local laws before using Boombox in public areas.
Emissions	Fun can come in surprising ways. Select your preferred fart style and target seat. Use your turn signal or press the left scroll wheel when you're ready to "release" your prank. For those lucky vehicles equipped with a Pedestrian Warning System, you can choose to broadcast externally when your vehicle is parked. But wait-- the fun doesn't stop there! Use the mobile app to conduct remote emissions testing by touching and holding any of the four quick control buttons and selecting the fart button.
Light Show	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones. NOTE: Light show should not be used when parked on or near public roads. Doing so can be distracting to other road users. Before activating, it is the driver's responsibility to ensure the use of light show complies with local laws and regulations. NOTE: Light show supports multiple custom shows from one USB drive to enjoy and share with others (follow the instructions onscreen).



Navigation and Entertainment

Light Show	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones. Light show should not be used when parked on or near public roads. Doing so can be distracting to other road users. Before activating, it is the driver's responsibility to ensure the use of light show complies with local laws and regulations. NOTE: Light Show enthusiasts can also play multiple custom Light Shows from the same USB flash drive. Save the files to a directory named "LightShow" on your flash drive, connect, and pick your favorite.
Model Xmas	Park outside, turn the volume up, roll down your windows, then enjoy the show. Schedule the light show for a future time and customize the song to surprise your loved ones.
Ludicrous Speed (P100D vehicles only)	Press and hold the Ludicrous setting (open the Controls drawer and touch Controls > Pedals & Steering > Acceleration > Ludicrous) for approximately five seconds. Touch Yes, bring it on! if you want to go fast. To display power and acceleration readings on the instrument panel, press either scroll button briefly until the available options are displayed. Then, roll the scroll button to highlight Readout then press the scroll button again.
Mars	The map shows your CybertruckModel SModel XModel 3Model Y as a rover on the Martian landscape, and the About Your Tesla box displays SpaceX's interplanetary spaceship.
Rainbow Charge Port	When CybertruckModel SModel XModel 3Model Y is locked and charging, press the button on the mobile connector ten times in quick succession. Neat, huh?
Rainbow Road	Need more cowbell? Visit Rainbow Road by pulling the Autopilot stalk toward youmoving the drive stalk fully downmoving the drive stalk fully down four times in quick succession while Autosteer is enabled.
Romance	You can't roast chestnuts by an open fire in your car, but you can still cozy up with your loved ones by this virtual fireplace. Cue the music and get your romance on!
Sketchpad	Channel your inner Picasso. Show us what you got! Touch Publish to submit your artistic compositions to Tesla for critiquing.
TRAX	It's never too late to follow your dream of becoming a world-famous DJ. With TRAX, you can turn your vehicle into your own personal music studio. While in Park, choose from an array of instruments and unique sounds to create the next hit song. Microphone and headset are not included.
The Answer to the Ultimate Question of Life, The Universe, and Everything	Rename your vehicle to 42 (touch Controls > Software and touch the vehicle's name). Notice the new name.
Car Colorizer (if equipped)	Change the color of your CybertruckModel SModel XModel 3Model Y on the touchscreen. Touch the color swatch next to the vehicle name and customize the exterior color, tone, and more.

Boombox

NOTE: Check local laws before using Boombox in public places.

Using Boombox, you can play sound externally through the Pedestrian Warning System (PWS) speaker when CybertruckModel SModel XModel 3Model Y is in Park. For example:

- **Play current media.**
- Use **Megaphone** to project a modulated version of your voice.
- Press the horn to play the first five seconds of any sound from a compatible USB device.

NOTE: If Camp mode is enabled in Climate Controls, you can exit the vehicle and use the Tesla app to control the volume.

Prepare a USB drive for Boombox

Follow these steps to add up to five custom Boombox sounds:

1. On a computer, format a USB drive to exFAT, MS-DOS FAT (for Mac), ext3, or ext4 (NTFS is currently not supported).
2. Create a folder on the USB drive called **Boombox**.



NOTE: The USB drive can only contain one folder. For example, it cannot be shared with Dashcam.

3. Add .wav and .mp3 audio files to the folder. Although you can add as many files as the USB drive's capacity allows, you can only select from the first five, as listed alphabetically. File names, of any length, can contain upper or lower case alpha characters (a-z/A-Z), numbers from 0-9, periods (.), a dashes (-), and underscores (_).
4. Plug the USB drive into a front USB port.

NOTE: For some vehicles manufactured after approximately November 1, 2021, the center console USB ports can only be used to charge devices. On these vehicles, you must use the USB port inside the glove box.

5. Choose a sound from the USB drive by selecting from the **Boombox** dropdown menu.

Uninstall Games

Uninstalling games is useful if you want to free up your vehicle's onboard storage. To uninstall a game, navigate to **Arcade**, select the game you wish to uninstall, then touching **Uninstall**. Once you uninstall a game, you must download it before you can play the game again.

Gaming Controllers and Headphones and Headphones

You can pair Bluetooth Classic gaming controllers to CybertruckModel SModel XModel 3Model Y by following the same steps as pairing your phone (see [Phone, Calendar, and Web Conferencing on page 363](#)). After pairing, the controller automatically connects to the vehicle. Once connected, you can use the controller to play select games. CybertruckModel SModel XModel 3Model Y supports up to two Bluetooth devices at a time (such as two controllers, or one phone and one controller).

For vehicles manufactured prior to approximately November 1, 2021, you can connect USB-compatible game controllers to the front USB ports in the vehicle's center console. For vehicles manufactured after approximately November 1, 2021, you must use the glovebox USB port.

You can pair Bluetooth Classic headphones by navigating to **Bluetooth Devices** and adding new headphones on the rear touchscreen. Once connected, you can use the headphones to listen to audio from the rear touchscreen.

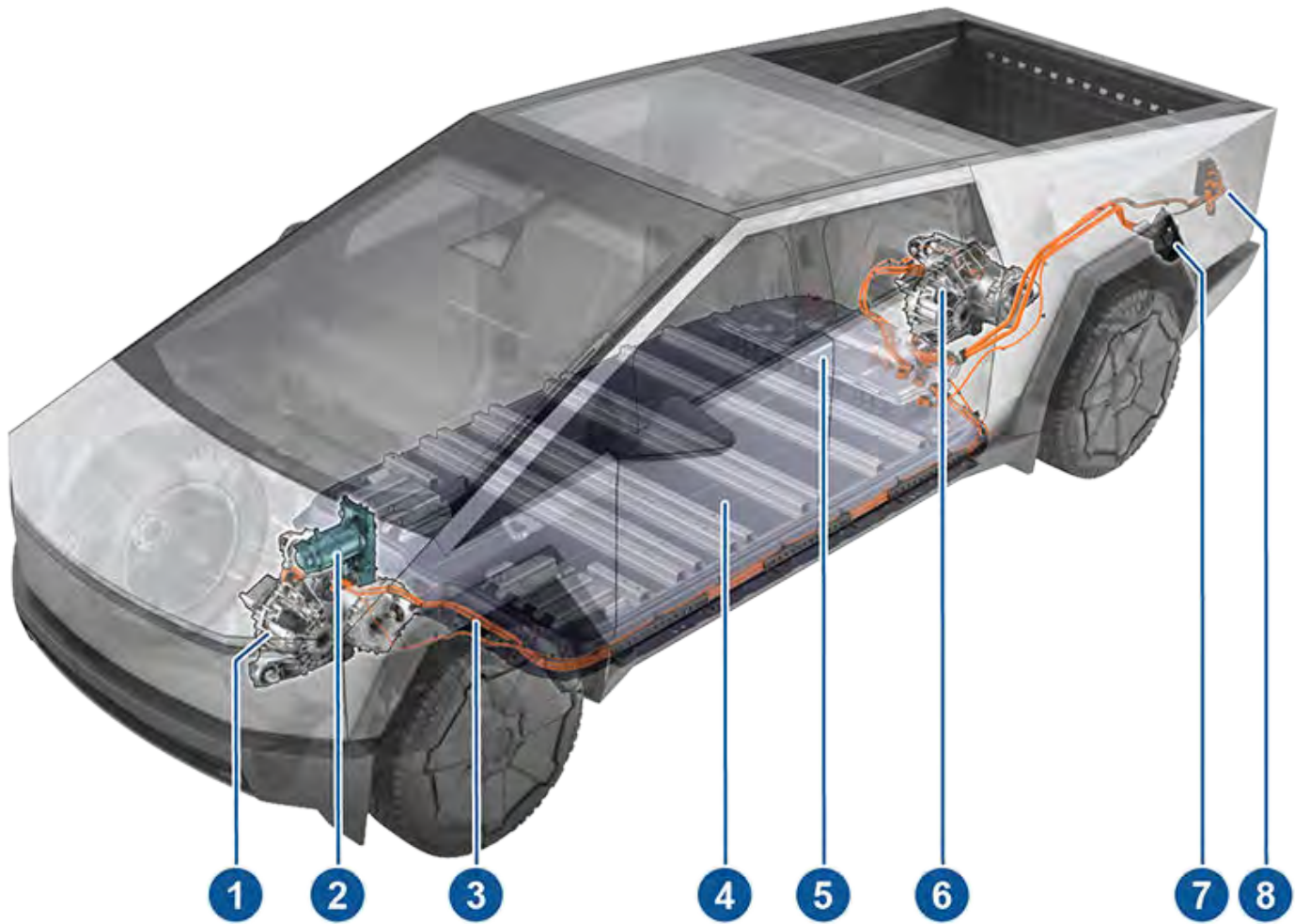
NOTE: Some vehicles manufacture before approximately September 2021 may require additional hardware to be compatible with wireless headphones. If the touchscreen displays this message, use the mobile app to schedule a service appointment.

You can pair Bluetooth Classic headphones by navigating to **Settings > Bluetooth Devices** and adding new headphones on the rear touchscreen. Once connected, you can use the headphones to listen to audio from the rear touchscreen.



Electric Vehicle Components

High Voltage Components



1. Front drive unit
2. Heat pump assembly
3. High voltage cables
4. High voltage Battery
5. Service access panel for high voltage components (ancillary bay)
6. Rear drive unit(s)
7. Charge port
8. Cargo bed outlets

⚠ WARNING: The high voltage system must be serviced **only** by a trained technician. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are typically colored orange for easy identification.

⚠ WARNING: Read and follow all instructions provided on the labels that are attached to CybertruckModel SModel XModel 3Model Y. These labels are there for your safety.

⚠ WARNING: In the unlikely event that a fire occurs, exit the vehicle, move to an area at least 100 ft. (30 meters) away from CybertruckModel SModel XModel 3Model Y, and immediately contact your local fire emergency responders.



Charging Equipment

Charging equipment designed specifically to charge your CybertruckModel SModel XModel 3Model Y is available from Tesla.

For information on the charging equipment **available for your region**, go to <http://shop.tesla.com>.

Tesla offers:

- **Wall Connector:** Installs in your parking space and is the fastest way to charge your vehicle for daily use.
- **Mobile Connector:** Allows you to plug into most commonly used power outlets. When using the Mobile Connector, attach the smart adapter (if required) to the Mobile Connector before plugging it in to the power outlet, and then plug in your vehicle.
- **Adapters:** Allows you to plug into the most commonly used public charging stations in your region. At a public charge station, first attach the adapter to the station's charging connector and then plug in your vehicle.

There is also a network of Superchargers, destination chargers, and other fast charging stations for when charging while traveling.

Low Voltage Battery



CybertruckModel SModel XModel 3Model Y uses a 48V lithium-ion low voltage battery. The 48V battery powers the windows, doors, touchscreen, and other low voltage vehicle systems when the high voltage Battery is unavailable. The 48V battery also provides a redundant source of power for critical systems (such as power steering).

NOTE: 48V low voltage connectors are colored blue for easy identification, and wires that operate at 48V are marked with blue tape.

By using a 48V low voltage battery instead of the 12V lead-acid battery found in many conventional vehicles, CybertruckModel SModel XModel 3Model Y is able to operate more efficiently.



WARNING: Assume that the low voltage components of CybertruckModel SModel XModel 3Model Y, including all cables and connectors, are always energized. Do not handle low voltage cables or connect/disconnect connectors when the low voltage system is powered. Because the 48V low voltage system operates at a higher voltage than a typical low voltage system, there is an increased risk of personal injury, arcing, or component damage if the low voltage components of CybertruckModel SModel XModel 3Model Y are handled improperly.



High Voltage Battery Information

CybertruckModel SModel XModel 3Model Y has one of the most sophisticated battery systems in the world. The most important way to preserve the high voltage Battery is to **LEAVE YOUR VEHICLE PLUGGED IN** when you are not using it. This is particularly important if you are not planning to drive CybertruckModel SModel XModel 3Model Y for several weeks.

NOTE: When left idle and unplugged, your vehicle periodically uses energy from the Battery for system tests and recharging the low voltage battery when necessary.

There is no advantage to waiting until the Battery's level is low before charging. In fact, the Battery performs best when charged regularly.

NOTE: If you allow the Battery to discharge to 0%, other components may become damaged or require replacement (for example, the low voltage battery). In these cases, you are responsible for repair and/or transporting expenses. Discharge-related expenses are not covered by the warranty or under the Roadside Assistance policy.

The peak charging rate of the Battery may decrease slightly after a large number of DC Fast Charging sessions, such as those at Superchargers. To ensure maximum driving range and Battery safety, the Battery charge rate is decreased when the Battery is too cold, the Battery's charge is nearly full, and when the Battery conditions change with usage and age. These changes in the condition of the Battery are driven by battery physics and may increase the total Supercharging duration by a few minutes over time. You can minimize the amount of charge time by using Trip Planner (if available in your market region) to warm the Battery while driving to a Supercharger. See [Trip Planner on page 705](#) for more information.

Battery Care

Never allow the Battery to fully discharge.

Even when CybertruckModel SModel XModel 3Model Y is not being driven, its Battery discharges very slowly to power the onboard electronics. The Battery can discharge at a rate of approximately 1% per day, though the discharge rate may vary depending on environmental factors (such as cold weather), vehicle configuration, and your selected settings on the touchscreen. Situations can arise in which you must leave CybertruckModel SModel XModel 3Model Y unplugged for an extended period of time (for example, at an airport when traveling). In these situations, keep the 1% in mind to ensure that you leave the Battery with a sufficient charge level. For example, over a two week period (14 days), the Battery may discharge by approximately 14%.

Discharging the Battery to 0% may result in damage to vehicle components. To protect against a complete discharge, CybertruckModel SModel XModel 3Model Y enters a low-power consumption mode when the displayed charge level drops to approximately 0%. In this mode, the Battery stops supporting the onboard electronics and auxiliary low voltage battery. Once this low-power consumption mode is active, immediately plug in CybertruckModel SModel XModel 3Model Y to prevent a jump start and low voltage battery replacement.

NOTE: If CybertruckModel SModel XModel 3Model Y is unresponsive and does not unlock, open, or charge, the low voltage battery may be discharged. In this situation, try jump starting the low voltage battery (see [Jump Starting on page 938](#)[Jump Starting on page 1455](#)). If the vehicle is still unresponsive, use the mobile app to schedule a service appointment.

Temperature Limits

For better long-term performance, avoid exposing CybertruckModel SModel XModel 3Model Y to ambient temperatures above 140° F (60° C) or below -22° F (-30° C) for more than 24 hours at a time.

Energy Saving Feature

CybertruckModel SModel XModel 3Model Y has an energy-saving feature that reduces the amount of energy being consumed by the displays when CybertruckModel SModel XModel 3Model Y is not in use. On newer vehicles, this feature is automated to provide an optimal level of energy saving. However, on older vehicles, you can control the amount of energy being consumed by the displays by touching **Controls > Display > Energy Saving**. For more information on maximizing range and saving energy, see [Getting Maximum Range on page 745](#).

Submerged Vehicle





As with any vehicle, if your Tesla has been exposed to flooding, extreme weather events or has otherwise been submerged in water (especially in salt water), treat it as if it's been in an accident and contact your insurance company for support. Do not attempt to operate the vehicle before Tesla Service has inspected it, but you should tow or move it away from any structures.



An unintentionally submerged vehicle is different than a vehicle that intentionally enters water while off-roading. In these situations, use **Wade Mode**. See [#unique_892 on page](#) for more information.

NOTE: Damage caused by water is not covered under warranty.

Battery Warnings and Cautions

-  **WARNING:** The high voltage system must be serviced **only** by a trained technician. Under no circumstances should you open or tamper with the Battery. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are typically colored orange for easy identification.
-  **CAUTION:** If the Battery's charge level falls to 0%, you must plug it in. If you leave it unplugged for an extended period, it may not be possible to charge or use CybertruckModel SModel XModel 3Model Y without jump starting or replacing the low voltage battery. Leaving CybertruckModel SModel XModel 3Model Y unplugged for an extended period can also result in permanent Battery damage. If you are unable to charge CybertruckModel SModel XModel 3Model Y after attempting to jump start the low voltage battery, schedule a service appointment.
-  **CAUTION:** The Battery requires no owner maintenance. Do not remove the coolant filler cap and do not add fluid. If the instrument paneltouchscreentouchscreen warns you that the fluid level is low, use the mobile app to schedule a service appointment.
-  **CAUTION:** Do not use the Battery as a stationary power source. Doing so voids the warranty.



Charging Instructions

Opening the Charge Port

The charge port is located above the driver's side rear wheel of CybertruckModel SModel XModel 3Model Y.

With CybertruckModel SModel XModel 3Model Y in Park and a valid key is detected, press and release the button on the Tesla charge cable to open the charge port door.



You can also open the charge port door using any of these methods:


- On the touchscreen, touch the charge port on the vehicle avatar and touch **Open**.
- On the touchscreen, touch **Controls > Charging > Open Charge Port**.
- Press the charge port door when CybertruckModel SModel XModel 3Model Y is unlocked and an authenticated phone is nearby.
- When the vehicle is locked with an authenticated key in range, you can also press the button on the charge cable to open the charge port door (see [Keys on page 1142](#)).
- Use voice commands. You can also use voice commands to close the charge port door, and begin or stop charging (see [Voice Commands on page 97](#)).
- Use the mobile app.





The Cybertruck icon lights up white when you open the charge port door (see [Charge Port Light on page 1373](#)). If you do not insert a charge cable into the charge port within a few minutes after opening the charge port door, the charge port door closes. If this happens, open the charge port door again.

NOTE: In extremely cold weather or icy conditions, it is possible that your charge port latch may freeze in place. If this happens, you can thaw ice on the charge port latch by turning on the rear defrost or by enabling preconditioning using the mobile app. To prevent this from occurring, use the **Schedule** settings, which are also available on both the charging and climate control screens, to schedule a **Precondition by** (see [Preconditioning on page](#)).

 **CAUTION:** Do not try to force the charge port door open.

During Charging


Tesla strongly recommends leaving CybertruckModel SModel XModel 3Model Y plugged in when not in use. This maintains the Battery at the optimum level of charge.

During charging, the charge port light (the Cybertruck icon) pulses green, and the touchscreen displays real-time charging status. The frequency at which the green charge port light pulses slows down as the charge level approaches full. When charging is complete, the light stops pulsing and is solid green. If CybertruckModel SModel XModel 3Model Y is locked, the charge port light does not light up. For more information, see [Charge Port Light on page 1373](#).


If the charge port light turns red while charging, there is an issue with charging. Check the touchscreen for an alert describing the issue. An issue can occur due to something as common as a power outage. If a power outage occurs, charging resumes automatically when power is restored.

NOTE: The thermal system may produce steam while CybertruckModel SModel XModel 3Model Y charges. For example, odorless steam can come from the front of your vehicle while charging at a Supercharger in cold temperatures. This is normal and not a cause for concern. Likewise, it is normal to hear sounds during charging. Particularly at high currents, the refrigerant compressor and fan operate as needed to keep the Battery cool.

NOTE: Air conditioning performance is generally not affected by charging. However, in some circumstances (for example, charging at high currents during a particularly warm day), the air coming from the vents may not be as cool as expected and a message displays on the touchscreen. This is normal and ensures that the Battery stays within an optimal temperature range while charging to support longevity and optimum performance.

 **WARNING:** Never spray liquid at a high velocity (for example, a pressure washer) towards the charge port while charging. Doing so can result in serious injury or damage to the vehicle, charging equipment, or property.

 **WARNING:** Do not use third-party charging adapters with CybertruckModel SModel XModel 3Model Y.

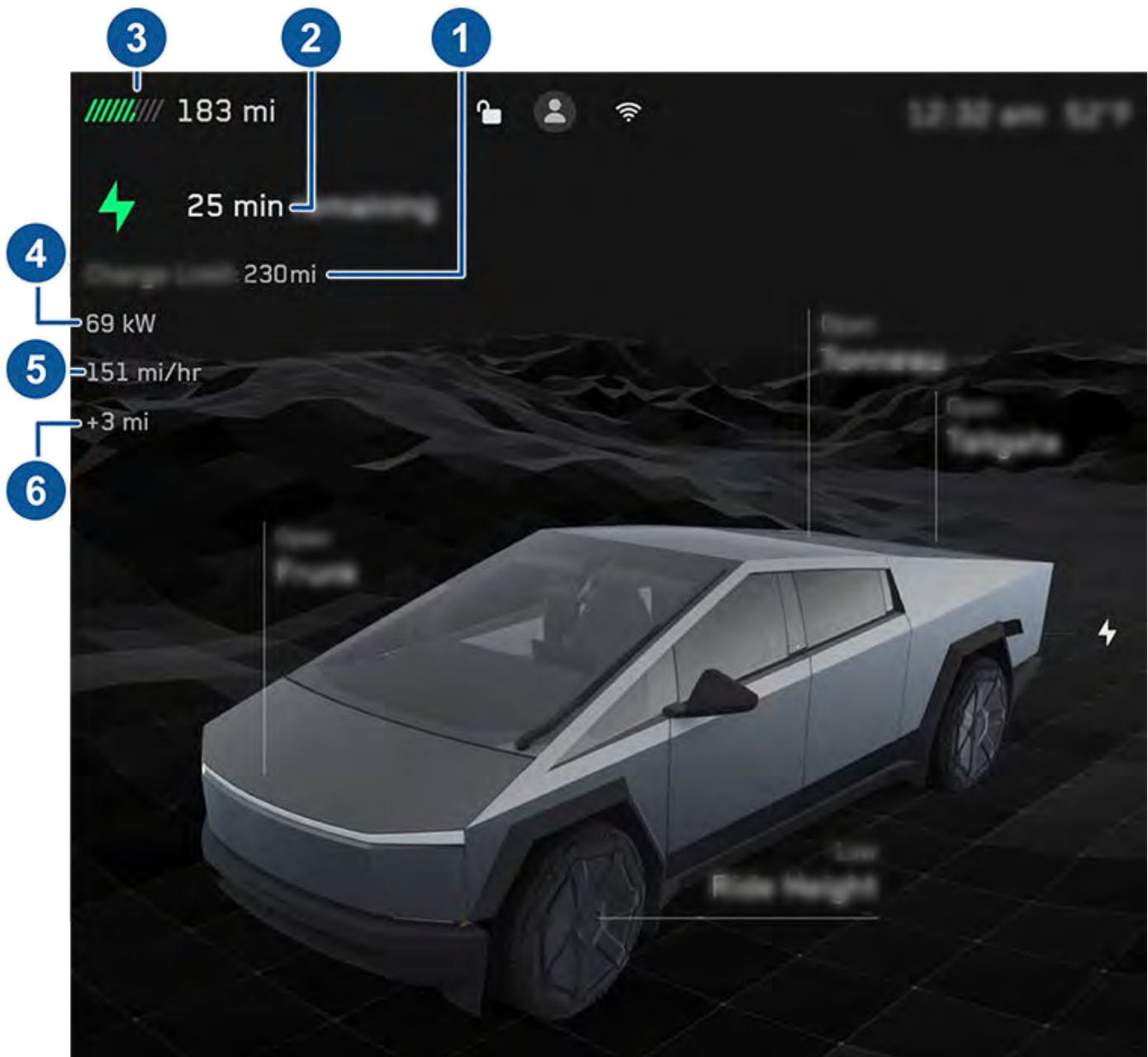
 **CAUTION:** Keep the cargo bed outlet cover closed when Cybertruck is charging, especially in wet weather. Charging may be disabled if moisture enters one of the outlets.

Charging Status

On the touchscreen, the charging status displays at the top of the vehicle status area when the charge port door is open.



Charging and Energy Consumption



- 1. Charge limit:** The set charge limit. The charge limit is the capacity at which CybertruckModel SModel XModel 3Model Y will stop charging. To change the charge limit, touch **Controls > Charging**.
- 2. Time remaining:** The estimated time remaining to charge to your set limit. Or, if you are navigating to a destination, the estimated time remaining until you can continue your trip.
NOTE: When charging to 100%, the CybertruckModel SModel XModel 3Model Y may continue to charge with low power when charging is displayed as complete. This is expected. Because the added energy beyond this point is low, it is usually not beneficial to continue charging.
- 3. Range:** The total estimated driving distance or energy percentage (depending on your display setting) available.
NOTE: To change how energy units are displayed, touch **Controls > Display > Energy Display**. You can also touch the driving distance or energy percentage on the touchscreen to switch between them.
- 4. Charging:** The amount of power currently being provided by the charger.
- 5. Charging rate:** The speed at which the vehicle is charging, shown in range gained per hour.
- 6. Range gained:** The estimated increase in driving distance achieved in the charging session.



Charge Port Light

Above the charge port, the charge port light shows charging status. The charge port light turns off after a short period of time if the vehicle is locked (for example, if you walk up to the vehicle after it has been charging for a while).

After you insert a charge cable into CybertruckModel SModel XModel 3Model Y, wait a few seconds and confirm that the charge port light begins blinking green and that your vehicle is charging. If the light is amber or red, troubleshoot the issue before you leave to ensure a successful charging session.



WHITE: The charge port door is open. CybertruckModel SModel XModel 3Model Y is ready to charge and the connector is not inserted, or the charge port latch is unlocked and the connector is ready to be removed.



BLUE, BLINKING: CybertruckModel SModel XModel 3Model Y is communicating with the charger but has not started charging or providing power yet (such as when your vehicle is preparing to charge, or when your vehicle is preparing to provide power from the high voltage Battery).



BLUE: The charger is connected, but CybertruckModel SModel XModel 3Model Y is not charging (such as when scheduled charging is active).



PURPLE, BLINKING: CybertruckModel SModel XModel 3Model Y is providing power from the high voltage Battery. The frequency of blinking corresponds to the amount of power that Cybertruck is providing (more frequent blinks correspond to more power being provided). For more information, see [Powershare Home Backup on page 1383](#).



GREEN, BLINKING: Charging is in progress. As CybertruckModel SModel XModel 3Model Y approaches a full charge, the frequency of the blinking slows.



GREEN, SOLID: Charging is complete.



AMBER, BLINKING: CybertruckModel SModel XModel 3Model Y is charging at a reduced current because the connector is not fully plugged in.



AMBER, SOLID: CybertruckModel SModel XModel 3Model Y is not charging because the connector is not fully plugged in. Realign the connector to the charge port and insert fully.



RED: A fault is detected and charging has stopped. Check the touchscreen for an alert. In some cases, an alert can be easily cleared by unplugging the charge cable, returning it to the charger, then trying again. In other cases (such as a tripped fuse or a faulty charger), you may need to check the power source. If the red light persists, try using a different charger.

Stopping Charging

Stop charging at any time by pressing the button on the charge cable to disconnect, or touch **Stop Charging** on the touchscreen or mobile app. To disconnect the charge cable:

1. Ensure your vehicle is unlocked. To prevent unauthorized unplugging of the charge cable, the charge cable latch remains locked and CybertruckModel SModel XModel 3Model Y must be unlocked before you can disconnect the charge cable.
2. Press and hold the button on the connector handle to release the latch.
3. Pull the connector from the charge port. The charge port door automatically closes.

To disconnect the charge cable when using an adapter at a public charge station:

1. Unlock CybertruckModel SModel XModel 3Model Y.
2. While holding the public charging handle in one hand and the adapter in the other hand, press and hold the button on the public charging handle and pull both outwards, removing the handle and adapter at the same time.

NOTE: If the charging station handle separates from the adapter, leaving the adapter in CybertruckModel SModel XModel 3Model Y, use the touchscreen to unlock the charge port.

3. Press and hold the button on the charging handle again to release the adapter from the public charging handle.

The charge port door closes automatically shortly after you remove the charge cable.

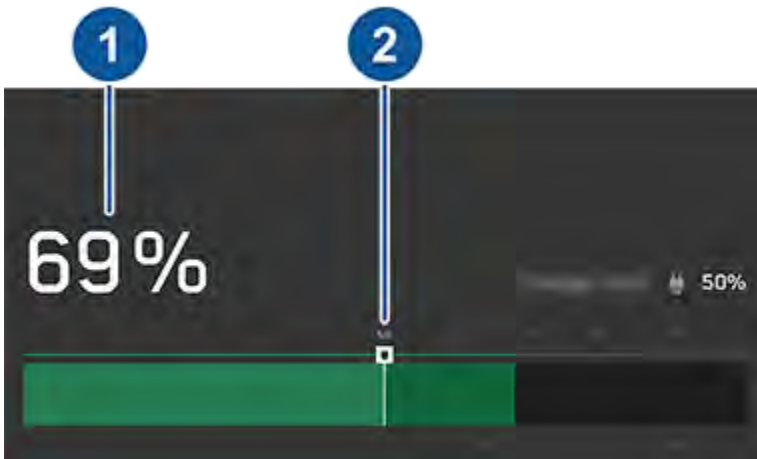


Charging and Energy Consumption

You can also automatically stop charging from a specified time by creating a charge schedule. For more information, see [#unique_1692__unique_1692_Connect_42_GUID-B5CABEAD-127F-4716-B9C7-74D3BB91A8AB](#) on page .

Charge Settings

Access charge settings by touching **Controls** > **Charging** when CybertruckModel SModel XModel 3Model Y is in Park. You can also touch the Battery icon on the touchscreen to access charge settings.



1. **Energy available:** Displays the remaining energy available in the high voltage Battery. To show the remaining energy as estimated driving distance (miles or kilometers) rather than a percentage, touch **Controls** > **Display** > **Energy Display**.
2. **Set charge limit:** Adjust the charge slider to the level of charging you want. The setting you choose applies to immediate and scheduled charging sessions.

NOTE: Refer to the information on the touchscreen (navigate to **Controls** > **Charging**) or mobile app (touch the **Charging** icon) for recommended daily and trip charging limits.

NOTE: A portion of the Battery image may appear blue. This indicates that a small portion of the energy stored in the Battery is not available because the Battery is cold. This is normal and no reason for concern. When the Battery warms up, the blue portion no longer displays.

Open/Unlock Charge Port

When not charging, touch **Open Charge Port** or **Unlock Charge Port** to open the charge port door or to unlock the charge cable from the charge port.

Stop Charging

Use **Stop Charging** when you are finished charging.

Charge Current at this Location

The current automatically sets to the maximum current available from the attached charge cable, unless it was previously reduced to a lower level. If needed, touch - or + to change the current (for example, you may want to reduce the current if you are concerned about overloading a domestic wiring circuit shared by other equipment). It is not possible to set the charging current to a level that exceeds the maximum available from the attached charge cable. When you change the current, CybertruckModel SModel XModel 3Model Y remembers the location.

NOTE: When charging with the Mobile Connector, your vehicle may automatically select a default charge current. Override this default current to a higher setting by customizing **Charge Current at this location** or through the mobile app.

If CybertruckModel SModel XModel 3Model Y is charging and detects unexpected fluctuations in input power, the charging current is automatically reduced by 25%. For example, a 40 amp current is reduced to 30 amps. This automatic current reduction increases robustness and safety in situations when an external problem exists (for example, a home wiring system, receptacle, adapter or cord is unable to meet its rated current capacity). As a precaution, when CybertruckModel SModel XModel 3Model Y automatically reduces current, it saves the reduced current at the charging location. Although you can manually increase it, Tesla recommends charging at the lower current until the underlying problem is resolved and the charging location can provide consistent power.



Supercharging

Displays Supercharger usage fees, the location, the time that charging started, and a cost estimate for the session. To reduce congestion at high-usage Supercharger sites, you may be limited to a maximum charge of 80% when not using Trip Planner (if available in your market region). See [Supercharger Fees on page 1375](#).

NOTE: Tesla does not recommend using low-power charging equipment (such as a 120V NEMA 5-15 outlet and the Universal Mobile Connector) to charge Cybertruck, especially in low ambient temperatures. Due to the size of the high voltage Battery, charging with equipment that produces less than 2 kW of power will charge Cybertruck very slowly. If you are charging Cybertruck with such a method, turn off climate to reduce idle power consumption while charging.

Supercharger Fees

When charging at a Tesla Supercharger, information about the charging session displays at the bottom of the charging screen. This includes the location, the time that charging started, and a cost estimate for the session. When you stop Supercharging, the estimated cost of the session displays until a new Supercharging session begins.

NOTE: Estimated cost may not reflect the final cost of the Supercharging session. Final pricing for Supercharging sessions can be found in your Tesla account.

You are subject to additional fees after charging is complete or, at a busy Supercharger location, after your vehicle has reached the congestion limit. Superchargers are designed for fast charging, and these fees encourage drivers to move their vehicles when charging is complete.

Idle fees apply when half or more of the Superchargers at a site are occupied, and begin accruing when the vehicle reaches its charge limit. The Tesla mobile app notifies you when charging is almost complete, and again when charging is complete. Additional notifications are sent if idle fees are incurred. Idle fees are waived if you move your vehicle within five minutes of when charging completed.

The rate structure for each site, including whether idle fees apply, can be found on the site's popup on the touchscreen (see [Charging Locations on page 703](#)) or in the Tesla mobile app.

Log into your Tesla account to view fees and details about Supercharger sessions, set up a payment method, and make payments. Once a payment method is saved, fees are automatically paid from your account.

Manually Releasing Charge Cable



CAUTION: Use the release cable **only** in situations where you can not release the charge cable using the usual methods. Frequent use can damage the release cable or charging equipment.



WARNING: Do not perform this procedure when your vehicle is charging, or if any orange high voltage connectors are exposed. Failure to follow these instructions can result in electric shock and serious injury or damage to the vehicle. If you are uncertain as to how to safely perform this procedure, use the mobile app to schedule a service appointment.

If the usual methods for releasing a charge cable from the charge port (using the charge handle release button, touchscreen, or mobile app) do not work, carefully follow these steps:

1. Ensure that CybertruckModel SModel XModel 3Model Y is not actively charging by navigating to **Controls > Charging** on the touchscreen, or use the mobile app. If necessary, touch **Stop Charging**.
2. Open the tailgate.
3. Pull firmly on the edges of the panel on the left side of the bed to release the panel's clips and expose the release cable. The panel does not fully come off, but can be pulled just far enough to reach the cable.



Charging and Energy Consumption



4. Pull the release cable to unlatch the charge cable.

⚠ WARNING: Do not pull the release cable while simultaneously attempting to remove the charge cable from the charge port. Always pull the release cable *before* attempting to remove the charge cable. Failure to follow these instructions can result in electric shock and serious injury.



NOTE: The release cable may be recessed within the opening of the trim.

5. Pull and release the charge cable from the charge port.



6. Reinstall the panel, ensuring that the clips are fully engaged.

Charging Best Practices

- Avoid allowing the Battery to get too low (the Battery icon turns yellow when the capacity remaining in the Battery drops to 20% or below).
- Refer to the information on the vehicle touchscreen (navigate to **Controls > Charging**) or the mobile app (touch the **Charging** icon) for recommended daily and trip charging limits.
- After you plug in your vehicle, confirm that the charge port light begins blinking green (indicating that CybertruckModel SModel XModel 3Model Y is charging) before you walk away. If CybertruckModel SModel XModel 3Model Y does not begin charging after a few seconds, the connector may not be fully inserted into the charge port, or there may be an issue preventing charging. Check the touchscreen for an alert with more information.

NOTE: If the charge port light begins blinking amber, CybertruckModel SModel XModel 3Model Y is charging at a reduced current. If the charge port light is solid blue, the charger is connected but the vehicle is not charging (such as when a charge is scheduled). For more information, see [Charge Port Light on page 1373](#).

Fast charging tips:

- Find fast chargers by filtering for three lightning bolts in the navigation search bar.
- Navigate to fast chargers to allow for preconditioning of the high voltage Battery. An optimal Battery temperature can help speed up charging.
- Typically, a lower state of charge results in faster charging.

NOTE: It is your responsibility to monitor your vehicle's charge at all times. Do not wait until the vehicle is discharged to plug it in. Always ensure you have more than enough charge to safely get to a charger.

- At Superchargers, leave some space between other vehicles, as neighboring stalls may share power.



Scheduled Charging and Scheduled Departure

Toggle between Scheduled Departure and Scheduled Charging by touching **Controls** > **Charging** > **Switch to Scheduled Charging/Scheduled Departure** when CybertruckModel SModel XModel 3Model Y is in Park.

NOTE: Scheduled Charging/Scheduled Departure settings are also available on the Climate Controls screen and in the Tesla mobile app.

Think of **Scheduled Charging** as "When do I want charging to start?" and think of **Scheduled Departure Off-Peak Charging** which is "When do I want charging to be complete?"

Scheduled Charging can be used together with **Scheduled Departure Preconditioning** but not with **Scheduled Departure Off-Peak Charging**.

Scheduled Charging/Scheduled Departure settings are automatically saved for each location.

NOTE: If you plug in CybertruckModel SModel XModel 3Model Y with both **Off-Peak Charging** and **Scheduled Charging** deselected, your vehicle charges immediately.

Using Scheduled Charging

Use **Scheduled Charging** to specify a daily time in which you want CybertruckModel SModel XModel 3Model Y to **start** charging.

With **Scheduled Charging** selected, enable the feature then set a daily time to start charging.

NOTE: Scheduled Charging starts charging immediately if CybertruckModel SModel XModel 3Model Y is plugged in up to six hours after the scheduled start time. However, if CybertruckModel SModel XModel 3Model Y is plugged in after six hours of the scheduled charging time, charging may not start until the scheduled time on the next day.

Using Scheduled Departure

Use **Scheduled Departure** to set a daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive. CybertruckModel SModel XModel 3Model Y automatically calculates when it needs to start preconditioning and/or charging. This ensures that charging is complete and/or the cabin climate and Battery are preconditioned by your departure time.

When **Scheduled Departure** is displayed, touch **Schedule** to set a daily time when you want CybertruckModel SModel XModel 3Model Y to be ready to drive. Specify a time, then touch **Settings** to enable one or both of the following departure features. When plugging in with **Off-Peak Charging** enabled, the vehicle briefly draws power (you may hear clicking) to calculate the necessary charging start time.

After you've specified your desired settings, touch **Set**. The touchscreen displays your scheduled departure time.

- **Preconditioning** warms the Battery for improved performance and ensures a comfortable cabin climate at your set departure time.

NOTE: When CybertruckModel SModel XModel 3Model Y is not plugged in, preconditioning operates but only when the Battery's charge level is above 20%.

- **Off-Peak Charging** delays charging and automatically starts charging in order to finish before your scheduled departure time while also ensuring to charge the Battery during off-peak hours to reduce energy costs. Touch **Change Off-Peak Hours** to customize the time when off-peak utility rates end.

NOTE: Choosing **Off-Peak Charging** can reduce energy costs even in market regions where off-peak utility rates are not applicable. For example, if charging starts as soon as you plug in, charging may complete much sooner. This causes the Battery to cool down to ambient temperatures and requires energy to warm it back up by your departure time. Therefore, even if off-peak utility rates are not applicable to you, it is recommended that you set Off-Peak Hours to the same time as your departure time in order to reduce energy consumption.

NOTE: If there is not enough time to reach the charge limit, charging starts immediately in order to charge as much as possible.

NOTE: Once charging has started and there is not enough time to complete charging during off-peak hours, charging continues until the charge limit is reached.

Charging and Energy Consumption



You can limit **Preconditioning** and **Off-Peak Charging** to weekdays only.



Getting Maximum Range

Factors Affecting Energy Consumption

While driving:

- Elevated driving speed.
- Environmental conditions such as cold or hot weather and wind.
- Using climate controls to heat or cool the cabin.
- Uphill travel: Driving uphill requires more energy and depletes range at a faster rate. However, driving downhill allows your vehicle to regain a portion of its expended energy through regenerative braking (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)).
- Short trips or stop-and-go traffic: It takes energy to bring the cabin and Battery to a specified temperature when starting the vehicle. You may see a higher average consumption when the vehicle is used for very short trips or in heavy traffic.
- Heavy cargo load.
- Windows rolled down.
- The tonneau cover staying open.
- Towing a trailer.
- Driving on soft or sandy terrain (see [Off-Road Driving on page 1249](#)).
- Wheels and tires not maintained.
- Customized settings or third-party accessories (roof or trunk racks, third party wheels).

While parked and not plugged in to a charger:

- Preconditioning the cabin or using climate controls.
- Summon.
- Vehicle infotainment and climate controls system.
- Sentry mode.
- Tesla or third-party mobile app requests.
- The outlets in the cabin or the cargo bed are in use. For more information, see [Interior Electronics on page 1125](#) and [Cargo Bed Outlets on page 1129](#).

Tips to Maximize Range

You can maximize your driving range using the same driving habits you use to conserve fuel in a gasoline-powered vehicle. To achieve maximum range:

- Slow down your driving and avoid frequent and rapid acceleration. Consider using Chill Mode (touch **Controls** > **Pedals & Steering** > **Dynamics** > **Acceleration**) and Speed Assist (see [Speed Assist on page 651](#)) to assist in controlling your acceleration and speed.
- If safe to do so, modulate the accelerator pedal instead of using the brake pedal when gradually slowing down. Whenever CybertruckModel SModel XModel 3Model Y is moving and you are not pressing the accelerator pedal, regenerative braking slows down the vehicle and feeds surplus energy back to the Battery (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)).
- Limit the use of resources such as heating and air conditioning. Using seat and steering wheelsteering yoke (or steering wheel) heaters (if equipped) to keep warm is more efficient than heating the cabin using climate controls.
- With your vehicle plugged in, use the mobile app to precondition your vehicle to ensure the cabin is at a comfortable temperature and windows are defrosted (if needed) before your drive by touching **Climate** > **On** and customizing your preferences (see [Mobile App on page 355](#)).
- Touch **Schedule**, available on both the charging and climate control screens, to set a time when you want your vehicle to be ready to drive (see [Scheduled Charging and Scheduled Departure on page 743#unique_435 on page](#)).



- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds.
- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds (see [Stopping Mode on page 466](#)).
- Set Stopping Mode to **Hold** to gain the benefit of regenerative braking at low driving speeds (see [Stopping Mode on page 467](#)).
- Ensure the wheels are aligned to specification, the tires are kept at the recommended inflation pressures (see [Tire Care and Maintenance on page 754](#)[Tire Pressures on page 1400](#)), and are rotated when needed (see [Maintenance Service Intervals on page 750](#)).
- Install aero covers (if equipped) to reduce wind resistance (see [Removing and Installing Aero Covers on page 760](#)).
- Install wheel covers (if equipped) to reduce wind resistance.
- Lighten your load by removing any unnecessary cargo.
- Fully raise all windows and close the tonneau cover.
- Turn on Range Mode (see [Range Mode on page 748](#)).
- Features such as Sentry Mode and Cabin Overheat Protection can impact range. Disable features when not needed.
- To prevent an excessive amount of energy consumption while the vehicle is idle, keep the vehicle plugged in when not in use.

It is normal for estimated range to decrease slightly over the first few months before leveling off. Over time, you may see a gradual, but natural, decrease in range at full charge – this depends on factors such as the mileage and age of the Battery. Your CybertruckModel SModel XModel 3Model Y will inform you in the unlikely event a hardware issue is causing excessive Battery or range degradation.

The power meter on the instrument paneltouchscreen provides feedback on energy usage.

Range Assurance

The driving range displayed in CybertruckModel SModel XModel 3Model Y is an estimate of the remaining battery energy and, when set to Rated (**Controls > Display > Energy Display**), is based on EPA-rated consumption or ECE R101 (depending on market region). It may not account for your personal driving patterns or external conditions. The displayed range on the instrument paneltouchscreen may decrease faster than the actual distance driven. To view estimated range based on your recent energy consumption, open the Energy app to display the graph.

NOTE: Rated driving range is based on EPA-rated consumption in the United States, which deviates from tests advertised and performed in other jurisdictions.

Your vehicle continuously monitors its energy level and proximity to known charging locations.



Touch **Chargers** in the Navigation search bar to toggle between types of chargers, including Superchargers and destination charging sites.

When you are at risk of driving beyond the range of known charging locations, the touchscreen displays a message giving you the opportunity to display a list of charging locations that are within range. When you select a charging location from the list, CybertruckModel SModel XModel 3Model Y provides navigation instructions and the turn-by-turn direction list displays the predicted amount of energy that will remain when you arrive at the charging destination.

Trip Planner (if available in your market region) routes you through Supercharger locations to minimize the amount of time you spend charging and driving. To enable, touch **Controls > Navigation > Trip Planner**.

Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage.



Charging and Energy Consumption



Touch to open the Energy app and choose from the different tabs. The energy chart's colored line represents your actual driving energy consumption whereas the gray line represents predicted usage. You can customize the chart units by touching **Controls** → **Display** → **Energy Display**.

Drive: Monitor the amount of energy being used while driving. You can track the real-time energy consumption broken down by categories, compare against different baseline projections, and view range tips tailored to your drive to understand how to improve energy efficiency.

- Choose **Trip** while navigating to a destination to compare the actual usage against the estimated projection.
- Choose **Rated** to compare the actual energy or range usage against the estimated driving distance (or energy) available.
- Choose between **Current Drive** to view data from your current drive or **Since Last Charged** to include data since the vehicle was last charged.
- View **Range Tips** to understand impacts on battery consumption and suggestions to maximize range and efficiency.

Park: Monitors the amount of energy lost while CybertruckModel SModel XModel 3Model Y is parked.

- Choose between **Since Last Drive** or **Since Last Charge**.
- View how much idle energy has been consumed while your vehicle is parked and suggestions to decrease energy loss.

Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage.



1. Locate the Energy app in the bottom bar by touching the app launcher (the three dots).
2. Touch to open the Energy app and choose from the different tabs. The energy chart's colored line represents your actual driving energy consumption whereas the gray line represents predicted usage.

NOTE: You can customize the chart values by touching **Controls** > **Display** > **Energy Display**.

- **Drive:** Monitor the amount of energy being used while driving. You can track the real-time energy consumption broken down by categories, compare against different baseline projections, and view range tips tailored to your drive to understand how to improve energy efficiency.
 1. Choose **Trip** while navigating to a destination to compare the actual usage against the estimated projection.
 2. Choose **Rated** to compare the actual energy or range usage against the estimated driving distance (or energy) available.
 3. Choose between **Current Drive** to view data from your current drive or **Since Last Charged** to include data since the vehicle was last charged.
 4. View **Range Tips** to understand impacts on battery consumption and suggestions to maximize range and efficiency.
- **Park:** Monitors the amount of energy lost while CybertruckModel SModel XModel 3Model Y is parked.
 1. Choose between **Since Last Drive** or **Since Last Charge**.
 2. View how much idle energy has been consumed while your vehicle is parked and suggestions to decrease energy loss.
- **Consumption:** Display how much energy CybertruckModel SModel XModel 3Model Y has consumed over the past 5, 15 or 30 miles (10, 25 or 50 km).
 1. Touch **Instant Range** to adjust the projected range estimation. Instant Range uses only the latest few data points to estimate the projected range.
 2. Touch **Average Range** to use the past 5, 15 or 30 miles (10, 25 or 50 km) of energy consumption to provide a more accurate projected range.



Energy App

The Energy app provides a visual representation of your vehicle's real-time and projected energy usage. To use the Energy app, navigate to **Application Launcher > Energy** on the touchscreen. Choose from two types of charts:

- **Consumption:** Display how much energy CybertruckModel SModel XModel 3Model Y has consumed over the past 5, 15 or 30 miles (10, 25 or 50 km).

Touch **Instant Range** or **Average Range** to adjust the projected range estimation. Instant Range uses only the latest few data points to estimate the projected range, whereas Average Range uses the past 5, 15 or 30 miles (10, 25 or 50 km) of energy consumption to provide a more accurate projected range.

- **Trip:** You can monitor the amount of energy being used while navigating to a destination. You can track actual usage against the initial prediction. The green line represents the actual usage whereas the gray line represents predicted usage. To change the zoom level, touch the zoom icon located in the top right corner of the chart.

NOTE: The Trip chart displays energy usage only if you are currently navigating to a destination.

Range Mode

Range Mode conserves energy by limiting the power of the climate control system and turns off the signature lights. Turn Range Mode on by touching **Controls > Driving > Range Mode**. When turned on in an All-Wheel Drive vehicle, Range Mode also optimizes torque distribution between the motors to maximize range.

Saving Energy

CybertruckModel SModel XModel 3Model Y has an energy-saving feature that reduces the amount of energy being consumed when CybertruckModel SModel XModel 3Model Y is not in use. On newer vehicles, this feature is automated to provide an optimal level of energy saving. However, on older vehicles, you can touch **Controls > Display > Energy Saving** and choose from the following options:

- **OFF** - CybertruckModel SModel XModel 3Model Y automatically shifts to the energy-saving mode only at night (10 pm to 5 am). Idle energy consumption may increase.
- **ON** - Significantly less energy is consumed whenever CybertruckModel SModel XModel 3Model Y is not in use. The start-up time of the instrument panel touchscreen and Bluetooth could be slower.
- **Always Connected** - Preserves cellular connectivity when energy saving is active. This allows the mobile app to connect to CybertruckModel SModel XModel 3Model Y quicker, and provides immediate internet access when entering the car. Slightly more energy is consumed.

Powershare Home Backup

Prerequisites

Before you can use Powershare Home Backup, make sure that the following requirements are met:

- CybertruckModel SModel XModel 3Model Y is running vehicle firmware 2024.14 or later.
- You have the Tesla mobile app version 4.31 or later (see [Mobile App on page 355](#)).
- You have the Tesla Universal Wall Connector with Powershare Gateway installed in your home.

For more information about installation and to purchase a Tesla Universal Wall Connector, go to the Tesla shop: <https://shop.tesla.com/>.

To Use Powershare Home Backup

Before using Powershare Home Backup, enable it from your vehicle's instrument clustertouchscreen by touching **Controls > Charging > Powershare Home Backup**.

Once Powershare Home Backup is enabled, your CybertruckModel SModel XModel 3Model Y automatically begins to provide power to your house when:



Charging and Energy Consumption

- The electric grid stops providing power to your home (there is a power outage).



CAUTION: When the grid first stops providing power to your home, your home may lose power briefly as CybertruckModel SModel XModel 3Model Y prepares to begin Powershare Home Backup.

- The high voltage Battery has more energy remaining than the Powershare discharge limit (see [Setting the Discharge Limit on page 1385](#)).
- CybertruckModel SModel XModel 3Model Y is connected to the Universal Wall Connector.



When Powershare Home Backup is actively providing power to your home, the instrument clustertouchscreen displays the Tesla Powershare icon.

The charge port status light is also purple to indicate that CybertruckModel SModel XModel 3Model Y is providing power from the high voltage Battery (see [Charge Port Light on page 1373](#)).

You can also see the status of the high voltage Battery on the instrument clustertouchscreen, or in the mobile app.





1. **Energy remaining:** The total estimated driving distance or energy percentage (depending on your display setting) available. The amount of energy available to Powershare Home Backup (the amount remaining above the Powershare limit) is shown in purple.
2. **Powershare rate:** The amount of power currently being provided by the high voltage Battery.
3. **Powershare discharge limit:** The level of energy remaining at which at the high voltage Battery stops providing power.

Maximum Draw

CybertruckModel SModel XModel 3Model Y provides a maximum draw of 11.5 kW.

NOTE: The maximum draw may be limited by the charger installed in your home. Tesla strongly recommends that the charger (such as a Tesla Wall Connector) that you use for Powershare Home Backup is connected to a 240V circuit.

Setting the Discharge Limit

You can set the discharge limit from the Tesla mobile app by adjusting the slider.

When Powershare Home Backup is active, you can see how much energy is remaining in the high voltage Battery above the discharge limit in the vehicle status area of the touchscreen, or by touching **Controls > Charging**.

To Stop Powershare Home Backup

To stop CybertruckModel SModel XModel 3Model Y from providing power to your home, touch **Controls > Charging > Stop Powershare**.

To restart Powershare, touch **Controls > Charging > Start Powershare**.

Powershare Home Backup also stops providing power when:

- The high voltage Battery discharges past the Powershare discharge limit.
- The electric grid starts supplying power (the power outage ends).

When the grid is about to start providing power again, you receive a notification from the Tesla mobile app and on the vehicle touchscreen.



CAUTION: When the grid begins providing power to your home again, your home may lose power for several seconds as CybertruckModel SModel XModel 3Model Y stops providing power.

Limitations

Be aware of the following limitations when using Powershare Home Backup.

- While CybertruckModel SModel XModel 3Model Y is actively providing power to your home, the AC outlets in the cabin and in the cargo bed are disabled (see [Interior Electronics on page 1125](#) and [Cargo Bed Outlets on page 1129](#)).

If Powershare Home Backup stops providing power, you receive a notification on the vehicle touchscreen and through the Tesla mobile app. This may happen for one of the following reasons.

- Your home is drawing more power than Powershare Home Backup can provide. In this case, reduce the load as much as possible (for example, by turning off large appliances).
- The high voltage Battery is cold. This is more likely in low ambient temperatures (for example, if CybertruckModel SModel XModel 3Model Y is parked in a cold garage) or if CybertruckModel SModel XModel 3Model Y has not been driven recently.
- There is an issue with the Universal Wall Connector, with your vehicle's charge port, or with your vehicle's high voltage Battery. Check the touchscreen for an alert with more information.



Backup Troubleshooting

- If a brownout or blackout is experienced during backup operation, reduce the loads and check that the load breakers have not opened.

NOTE: See tesla.com/support/energy/powerwall/own/best-practices-during-power-outages for best practices to extend the backup duration of your system during an outage.

- If it is necessary to restart the Powershare Gateway, Tesla support may direct you to press the Reset button on the device.



1. Powershare Gateway RESET button
2. Powershare Gateway circuit breaker (in most whole-home backup systems)

Technical Support

If you need further assistance, contact the Tesla Support team via the *Contact Us* page:

tesla.com/support/energy/more/additional-support/contact-us

Have the following information available when contacting Tesla:

- Owner name
- Best way for Tesla to contact you (name, phone number, email)
- Powershare Gateway serial number
- Brief description of the issue

Find the serial number on a sticker on the panel cover of Powershare Gateway.





Software Updates

Loading New Software

Tesla updates your vehicle's software wirelessly, constantly providing new features. Tesla recommends you install software updates at the earliest opportunity on your vehicle. To ensure the fastest and most reliable delivery of software updates, leave Wi-Fi turned on and connected whenever possible. In most cases, your vehicle must be connected to Wi-Fi to download the software update (see [Wi-Fi on page 359](#)).

Downloading vs. Installing New Software

There are two steps to receiving a new update: downloading the software (which requires Wi-Fi), and installing it. For your convenience, you can start downloads and installations using the Tesla mobile app.

Download

When a software update is available for download, the download occurs automatically, showing a green arrow at the top of the touchscreen. If the vehicle is not connected to Wi-Fi, a yellow download icon appears. Although you can drive while the software update is being downloaded, doing so can interrupt the download if your vehicle loses the Wi-Fi connection. When the software update is fully downloaded and ready to install, a clock icon displays at the top of the touchscreen.

NOTE: To ensure the fastest and most reliable download of software updates, leave the Wi-Fi turned on and connected whenever possible (see [Wi-Fi on page 359](#)).

Install


You CANNOT drive while software is being installed. If plugged in, your vehicle will stop charging until the installation is complete. To start the installation, touch the yellow clock icon at the top of the touchscreen. Touch **Install Now** to begin the installation immediately or touch **Set For This Time** to choose a different start time. At any time before the update installs, you can touch this clock icon to reschedule. If you are driving CybertruckModel SModel XModel 3Model Y at the scheduled update time, the update is canceled and must be rescheduled. You can also view, download, and install software updates by navigating to **Controls > Software**. If available, connect to Wi-Fi to download the update.

Software updates are not performed when certain features are active, such as Keep Climate On, Dog Mode, or Camp Mode and Smart Preconditioning.

NOTE: Software updates will not install if Keep, Dog, or Camp mode are enabled (see [Keep Climate On, Dog, and Camp on page 677](#)[Keep Climate On, Dog, and Camp on page 1340](#)).

NOTE: On an as-needed basis, Tesla also sends software updates using a cellular connection.

NOTE: Some software updates take approximately 30 minutes to complete (some may take longer). CybertruckModel SModel XModel 3Model Y must be in Park while the software is being updated.

 **WARNING:** Do not attempt to use the vehicle while the software is being installed. Vehicle functions, including some safety systems and opening or closing the doors or windows, may be limited or disabled when installation is in progress and you could damage the vehicle.

Software Update Preferences

Tesla determines how, when, and where to send updates to vehicles based on various factors unique to each release. In **Controls > Software**, you can choose how quickly you want to receive updates that are ready for your vehicle. Be an early adopter by selecting **Advanced** (which will have additional releases), or wait until others have installed (which will result in fewer releases) by selecting **Standard**. Choosing **Advanced** does not enroll your vehicle in Tesla's early access program.

Tesla does not update your software upon request for those wanting to receive the latest features and improvements. Selecting **Advanced** and consistently connecting to Wi-Fi (see [Wi-Fi on page 359](#)) is the best way to quickly receive the latest software updates.

If the touchscreen displays a message indicating that a software update was not successfully completed, wait for the next software update to deploy to your vehicle.



NOTE: The software update screen persists until you install the update. Install a software update as soon as possible. Any harm resulting from failure to install a software update is not covered by the vehicle's warranty. Failure or refusal to install updates can cause some vehicle features to become inaccessible or digital media devices may become incompatible.

NOTE: Tesla may update or reinstall your vehicle's software as part of the normal diagnostic, repair, and maintenance process within Tesla Service.

NOTE: Reverting to a previous software version is not possible.

Charging

If CybertruckModel SModel XModel 3Model Y is charging when the software update begins, charging stops. Charging resumes automatically when the software update is complete.

Viewing Release Notes

When a software update is complete, read the release notes displayed on the touchscreen to learn about changes or new features. To display release notes about the current version of your vehicle's software at any time, touch **Controls > Software > Release Notes**.

Tesla strongly recommends reading all release notes. They may contain important safety information or operating instructions for your CybertruckModel SModel XModel 3Model Y.

Maintenance Service Intervals

Service Intervals

Tesla recommends the following maintenance items and intervals, as applicable to your vehicle, to ensure continued reliability and efficiency of your CybertruckModel SModel XModel 3Model Y.

For additional information on vehicle alerts, see [Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 952](#)[Troubleshooting Alerts on page 1009](#).

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 24 years.
- Cabin air filter replacement every 2 years.
- HEPA filters and replacement every 3 years.
- HEPA filters and carbon filters replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.
- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 3 years.
- Cabin air filter replacement every 3 years.
- HEPA filters replacement every 3 years.
- HEPA filters and carbon filters replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.
- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 4** years.
- Cabin air filter replacement every 2 years.



Maintenance

- HEPA filter (x2) and carbon filter (x2) replacement every 3 years.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

**A/C desiccant bag replacement can be extended to 6 years on vehicles manufactured between approximately 2017-2021.

- Brake fluid health check every 4 years (replace if necessary)*.
- A/C desiccant bag replacement every 8 years.
- HEPA filter replacement every 2 years, or every year in cases of off-road/dirt road driving.
- Clean and lubricate brake calipers every year or 12,500 miles (20,000 km) if in an area where roads are salted during winter.
- Rotate tires every 6,250 miles (10,000 km) or if tread depth difference is 2/32 in (1.5 mm) or greater, whichever comes first.

*Heavy brake usage due to towing, mountain descents, or performance driving -- especially for vehicles in hot and humid environments -- may necessitate more frequent brake fluid checks and replacements.

NOTE: Any damage caused by opening the Battery coolant reservoir is excluded from the warranty.

NOTE: The above intervals are based on typical driving behaviors and scenarios. Depending on various circumstances such as driving behavior, usage, environmental conditions, etc., the above maintenance items may need to be performed more or less frequently than specified. Additionally, the above list should not be considered comprehensive and does not include consumable parts such as windshield wiper, the windshield wiper, brake pads, low voltage battery (if applicable), etc.

NOTE: Damages or failures caused by maintenance or repairs performed by non-Tesla certified technicians are not covered by the warranty.

For more do-it-yourself maintenance procedures and information, see <https://www.tesla.com/support/do-it-yourself-guides>.

Schedule Service

Scheduling a service visit through the mobile app is easy. After touching **Service**, select the type of service needed and follow the directions in the mobile app. Provide as much detail as possible to better help the Service team identify the cause of concern, such as:

- Photos, sound recordings, or videos.
- Date(s), time(s), and time zone when the issue occurred.
- Country of use and location.
- Approximate speed the vehicle was traveling (if applicable).
- Environmental conditions (rain, snow, cold, etc.).
- Road name and type of road (if applicable).
- Quality of lane markings (if applicable).
- Applicable vehicle settings.
- Identifiable symptoms.

Visit <https://www.tesla.com/support/service-visits> for more information on scheduling service.

Daily Checks

- Check the Battery's charge level, displayed on the instrument panel touchscreen or mobile app.
- Check the condition and pressure of each tire (see [Tire Care and Maintenance on page 754](#) [Tire Pressures on page 1400](#)).
- Check that all exterior lights, horn, turn signals, and wiper, the wiper and washers are working.
- Check for any unexpected indicator lights or vehicle alerts on the touchscreen or instrument panel.



- Check the operation of the brakes, including the parking brake.

NOTE: Because CybertruckModel SModel XModel 3Model Y uses regenerative braking (see [Regenerative Braking on page 463](#)[Regenerative Braking on page 1236](#)), the brake pads are typically used less frequently than those in traditional braking systems. To avoid the accumulation of rust and corrosion, Tesla recommends frequently pressing the brake pedal to apply the mechanical brakes, which dries the brake pads and rotors.

- Check the operation of the seat belts (see [Seat Belts on page 254](#)[Seat Belts on page 1157](#)).
- Look for abnormal fluid deposits underneath CybertruckModel SModel XModel 3Model Y that might indicate a leak. It is normal for a small pool of water to form (caused by the air conditioning system's dehumidifying process).
- Look around the exterior of CybertruckModel SModel XModel 3Model Y and immediately remove any corrosive substances (such as bird droppings, tree resin, tar spots, dead insects, industrial fallout, etc.) to prevent damage to the exterior (see [Cleaning on page 777](#)).

Weekly Checks

- During wet weather, clean Autopilot cameras weekly (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)). Otherwise, clean them monthly during dry weather.

Monthly Checks

- Check windshield washer fluid level and top up if necessary (see [Topping Up Windshield Washer Fluid on page 784](#)[Topping Up Windshield Washer Fluid on page 1416](#)).
- Check that the air conditioning system is operating correctly (see [Operating Climate Controls on page 669](#)[Operating Climate Controls on page 1338](#)).

NOTE: In addition to cooling the interior, the air conditioning compressor also cools the Battery. Therefore, in hot weather, the air conditioning compressor can turn on even if you turned it off. This is normal because the system's priority is to cool the Battery to ensure it stays within an optimum temperature range to support longevity and optimum performance. Also, even when not in use, you may hear CybertruckModel SModel XModel 3Model Y emit a whining noise or the sound of water circulating. These sounds are normal and occur when the internal cooling systems turn on to support various vehicle functions, such as maintaining the low voltage battery and balancing the temperature of the high voltage Battery.

Fluid Replacement Intervals

Battery coolant and brake fluid levels should only be checked by Tesla or a professional automotive repair shop. Specific service information is available in the Service Manual.

- **Battery coolant:** Your Battery coolant does not need to be replaced for the life of your vehicle under most circumstances.
NOTE: Any damage caused by opening the Battery coolant reservoir is excluded from the warranty.
- **Brake fluid:** Do not top up your brake fluid.

Software

Updating software is important to ensure proper operation and longevity of your vehicle's components. You must install a software update at the earliest opportunity. See [Software Updates on page 749](#).

Tesla may update or reinstall your vehicle's software as part of the normal diagnostic, repair, and maintenance process within Service.

High Voltage Safety

Your CybertruckModel SModel XModel 3Model Y has been designed and built with safety as a priority. However, be aware of these precautions to protect yourself from the risk of injury inherent in all high-voltage systems:

- Read and follow all instructions provided on the labels that are attached to CybertruckModel SModel XModel 3Model Y. These labels are there for your safety.



Maintenance

- The high voltage system has no user-serviceable parts. Do not disassemble, remove or replace high voltage components, cables or connectors. High voltage cables are colored orange for easy identification.
- If a collision occurs, do not touch any high voltage wiring, connectors, or components connected to the wiring.
- In the unlikely event that a fire occurs, immediately contact your local fire emergency responders.

⚠ WARNING: Assume that the low voltage components of CybertruckModel SModel XModel 3Model Y, including all cables and connectors, are always energized. 48V low voltage connectors are colored blue for easy identification, and wires that operate at 48V are marked with blue tape.

Do not handle low voltage cables or connect/disconnect connectors when the low voltage system is powered. Because the 48V low voltage system operates at a higher voltage than a typical low voltage system, there is an increased risk of personal injury, arcing, or component damage if the low voltage components of CybertruckModel SModel XModel 3Model Y are handled improperly.

⚠ WARNING: Always disconnect the charge cable before working underneath CybertruckModel SModel XModel 3Model Y, even if charging is not in progress.

⚠ WARNING: Keep your hands and clothing away from cooling fans. Some fans operate even when CybertruckModel SModel XModel 3Model Y is powered off.

⚠ WARNING: Some fluids (Battery acid, Battery coolant, brake fluid, windshield washer additives, etc.) used in vehicles are poisonous and should not be inhaled, swallowed, or brought into contact with open wounds. For your safety, always read and follow instructions printed on fluid containers.

Replacing the Low Voltage Battery

You can replace the low voltage battery yourself on some vehicles. See [Replacing the Low Voltage Lead-Acid Battery on page](#) [Replacing the Low Voltage Lead-Acid Battery on page](#) for more information and procedure instructions.

Replacing the Low Voltage Battery

You can replace the low voltage battery yourself on some vehicles. See [Replacing the Low Voltage Lead-Acid Battery on page](#) [Replacing the Low Voltage Lead-Acid Battery on page](#) for more information and procedure instructions.

Cleaning


Cleaning the Exterior

To prevent damage to the exterior, immediately remove corrosive substances (such as grease, oil, bird droppings, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.). Do not wait until CybertruckModel SModel XModel 3Model Y is due for a complete wash. If necessary, use denatured alcohol to remove tar spots and stubborn grease stains, then immediately wash the area with water and a mild, non-detergent soap to remove the alcohol.

NOTE: It is normal for the stainless steel exterior to mature over time, resulting in minor changes to the reflective properties and color of the metal.

Dents and Scratches

The stainless steel exterior of CybertruckModel SModel XModel 3Model Y is more resistant to dents and dings than most other vehicles. However, CybertruckModel SModel XModel 3Model Y does not have a clear coat on the surface of the exterior body panels, meaning any scratches that appear are in the stainless steel panels themselves. Anyone performing scratch repair should refer to the applicable "Exterior Stainless Steel Panel Refinishing" procedure within the Collision Repair Manual on service.tesla.com. In addition, do not use, and/or immediately remove, chemical, corrosive, or non-pH neutral substances (including but not limited to: acidic liquids or materials, grease, oil, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.) as they can cause corrosion on the vehicle's exterior.

 **CAUTION:** Tesla is not liable for any damage caused by failing to refer to official guidance.

To prevent damage to the paint, immediately remove corrosive substances (grease, oil, bird droppings, tree resin, dead insects, tar spots, road salt, industrial fallout, etc.). Do not wait until CybertruckModel SModel XModel 3Model Y is due for a complete wash. If necessary, use denatured alcohol to remove tar spots and stubborn grease stains, then immediately wash the area with water and a mild, non-detergent soap to remove the alcohol.


Surface Contamination

Over time, you may notice contamination on the surface of the stainless steel body panels. These spots may appear as orange or brown rust. However, it is important to note that your Cybertruck is not rusting. Refer to the [DIY Guide](#) for more information.


Keep the exterior cameras free of dirt, condensation, or obstructions. These substances can cause unclear pictures or Autopilot and safety features to stop working (see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#)).

Follow these steps when washing the exterior of CybertruckModel SModel XModel 3Model Y:

1. Before washing, flush grime and grit from the vehicle using a hose. Flush away accumulations of mud in areas where debris easily collects (such as wheel wells and panel seams). If salt has been used on the highways (such as during winter months), thoroughly rinse all traces of road salt from the underside of the vehicle, wheel wells, and brakes.
2. Mix a mild, pH-neutral soap (such as car shampoo) with water until it gets soapy.
3. Soak a soft cleaning sponge in the soap mixture and hand wash CybertruckModel SModel XModel 3Model Y.

 **CAUTION:** Some cleaners and car shampoos contain chemicals that can cause damage or discoloration, especially for plastic trim pieces, exterior lights, or camera lenses. For example, some car cleaning formulas contain hydroxide or other highly alkaline or caustic ingredients that can damage exterior components. Do not use acidic products either. Damage or discoloration resulting from cleaning products is not covered by the warranty.

4. Hand wash CybertruckModel SModel XModel 3Model Y using a clean soft cloth and cold or lukewarm water and a dish soap with mild degreasing properties. Mix the dish soap and water until it resembles water you would wash your dishes in. mild, high-quality car shampoo.

 **CAUTION:** Some cleaners and car shampoos contain chemicals that can cause damage or discoloration, especially for plastic trim pieces, exterior lights, or camera lenses. For example, some car cleaning formulas contain hydroxide or other highly alkaline or caustic ingredients that can damage exterior components. Do not use acidic products either. Damage or discoloration resulting from cleaning products is not covered by the warranty.

5. After washing, rinse with clean water to prevent soap from drying on the surfaces.



Maintenance

6. Dry thoroughly with microfiber cloths (ensure the cloths are clean of sand, dirt, rocks, etc.), one in each hand, rotating in circular motions until the surface is dry.
7. Dry thoroughly with a chamois. If necessary, dry the brakes by going on a short drive and applying the brakes multiple times.

For a waterless wash:

1. Hand wash using a non-ionic pH-neutral waterless wash with a high quality microfiber towel.
2. Dry any streaks thoroughly with a chamois.
3. Remove oil and grease with an organic solvent, such as alcohol or ethyl alcohol.

NOTE: Do not use alcohol or ethyl alcohol on the head or tail lights.

For spot cleaning: Use a glass cleaner and microfiber cloth. Spray glass cleaner and wipe in a zig-zag motion when cleaning large areas, such as entire panels.

Use isopropyl alcohol wipes (such as those used to clean glasses or screens) to clean away small stains.

NOTE: Tesla does not recommend taking Cybertruck through an automatic car wash.

Cleaning Mud

If your vehicle is covered in mud, such as after off-roading, rinse the entire exterior of the vehicle with water. It is important to regularly clean the exterior of Cybertruck after off-roading because mud and debris can quickly build up and limit some vehicle functions.

For certain components, such as the underside, wheel wells, panel seams, and radiator, use a power washer to remove stuck-on mud or debris. Then follow the rest of the [regular cleaning on page 777](#) steps, as explained above. Wipe away mud from the headlights, tail lights, and cameras, as it may affect your vehicle's ability to drive safely.



CAUTION: Damage to the vehicle as a result of debris or mud buildup is not covered by the warranty.

Window Cleaning and Treatments

Clean windows and mirrors using an automotive glass cleaner. Do not scrape or use any abrasive cleaning fluid on glass or mirrored surfaces. Follow the directions in [Cleaning the Exterior on page 777](#) for best practices in cleaning the exterior glass.

To add a hydrophobic coating to your vehicle's windows, apply the coating only to the side and rear windows, not the front windshield—doing so may affect the visibility of the autopilot cameras. Follow the hydrophobic coating manufacturer's instructions for application details.

NOTE: Tesla is not responsible for any damage associated with applying window treatments on your vehicle.

Car Wash Mode

When taking CybertruckModel SModel XModel 3Model Y to a car wash, Car Wash Mode closes all windows, locks the charge port, and disables windshield wipers, Sentry Mode, walk-away door locking, and parking sensor chimes. To enable, touch **Controls > Service > Car Wash Mode**. Your vehicle must be stationary and not actively charging.

If using an automatic car wash, **Enable Free Roll** keeps your vehicle in Neutral and activates free roll for the duration of the wash, while preventing CybertruckModel SModel XModel 3Model Y from applying the Parking brake if you leave the driver's seat. To enable, press on the brake pedal and touch **Enable Free Roll**; or shift into Neutral.

Car Wash Mode disables if the vehicle's speed exceeds 9 mph (15 km/h) or by touching **Exit** on the touchscreen.



CAUTION: Failure to put CybertruckModel SModel XModel 3Model Y in Car Wash Mode may result in damage (for example, to the charge port or windshield wipers). Damage caused by car washes is not covered by the warranty.



Car Wash

If taking CybertruckModel SModel XModel 3Model Y to an automatic car wash is necessary, Car Wash Mode closes all windows, locks the charge port, and disables windshield wipers, Sentry Mode, and walk-away door locking. To enable, touch **Controls > Car Wash**. Your vehicle must be stationary and not actively charging.

If using an automatic car wash, **Enable Free Roll** keeps your vehicle in Neutral and activates free roll for the duration of the wash, while preventing CybertruckModel SModel XModel 3Model Y from applying the Parking brake if you leave the driver's seat. To enable, press on the brake pedal and touch **Enable Free Roll**; or shift into Neutral.

Car Wash Mode disables if the vehicle's speed exceeds 9 mph (15 km/h) or by touching **Exit** on the touchscreen.



CAUTION: Failure to put CybertruckModel SModel XModel 3Model Y in Car Wash Mode may result in damage (for example, to the charge port or windshield wipers). Damage caused by car washes is not covered by the warranty.

Cleaning a Camera

To ensure a clear picture, the camera lens must be clean and free of obstructions. There are two different methods to clean a camera, depending on when your vehicle was built.

For vehicles built prior to approximately January 12, 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens with a spray bottle. Do not attempt to remove dirt or debris by wiping an exposed lens with your hands or a cloth. This debris can damage the surface of the lens when rubbed against it during wiping.

For vehicles built as of approximately January 12, 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens and drying it with a microfiber cloth. Clean the camera lens every week during wet weather (snow, rain, sleet) and every month during dry weather.



CAUTION: Do not use chemical-based or abrasive cleaners. Doing so can damage the surface of the lens.



CAUTION: Do not clean an ultrasonic sensor (if equipped) or camera lens with a sharp or abrasive object that can scratch or damage its surface.

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For vehicles built from Fremont and Gigafactory Austin prior to approximately late May 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens with a spray bottle. Do not attempt to remove dirt or debris by wiping an exposed lens with your hands or a cloth. This debris can damage the surface of the lens when rubbed against it during wiping.


For vehicles built from Fremont and Gigafactory Austin as of approximately late May 2023: Remove any build-up of dirt or debris by spraying water onto the camera lens and drying it with a microfiber cloth. Clean the camera lens every week during wet weather (snow, rain, sleet) and every month during dry weather.



Maintenance

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 **CAUTION:** Do not use chemical-based or abrasive cleaners. Doing so can damage the surface of the lens.


 **CAUTION:** Do not clean an ultrasonic sensor (if equipped) or camera lens with a sharp or abrasive object that can scratch or damage its surface.

Cautions for Exterior Cleaning


 **CAUTION:** Do not wash in direct sunlight.


 **CAUTION:** Do not use windshield treatment fluids. Doing so can interfere with wiper friction and cause a chattering sound.


 **CAUTION:** Do not use hot water, detergents, highly alkaline or caustic cleaning ingredients or solvents, specifically those containing hydroxide.


 **CAUTION:** If using a pressure washer, maintain a distance of at least 12" (30 cm) between the nozzle and the surface of CybertruckModel SModel XModel 3Model Y. Avoid aiming the water jet directly at parking sensors. Keep the nozzle moving and do not concentrate the water jet on any one area.

 **CAUTION:** Do not aim water hoses directly at windows, door, or hood seals or at electronic modules or exposed cabling.


 **CAUTION:** To avoid corrosive damage that may not be covered by the warranty, rinse away any road salt from the underside of the vehicle, wheel wells, and brakes. After cleaning the vehicle, dry the brakes by going on a short drive and applying the brakes multiple times.


 **CAUTION:** Avoid using tight-napped or rough cloths, such as washing mitts. A high-quality microfiber cleaning cloth is recommended.

 **CAUTION:** If washing in an automatic car wash, use touchless car washes only. These car washes have no parts (brushes, etc.) that touch the surfaces of CybertruckModel SModel XModel 3Model Y. Some touchless car washes use caustic solutions that, over time, can cause discoloration of decorative exterior trim. Avoid exposure to soaps and chemicals above pH 13. If unsure, check the product label or ask the staff at the car wash. Damage caused by improper washing is not covered by the warranty.

 **CAUTION:** If washing in an automatic car wash, make sure the vehicle is locked. In addition, avoid using controls on the touchscreen that can result in accidentally opening doors or trunks while the vehicle is being washed. Any damage caused is not covered by the warranty.

 **CAUTION:** Ensure the wipers are off before washing CybertruckModel SModel XModel 3Model Y to avoid the risk of damaging the wipers.

 **CAUTION:** Do not use chemical based wheel cleaners or pre-wash products. These can damage the finish on the wheels.

 **WARNING:** Never spray liquid at a high velocity (for example, if using a pressure washer) towards the charge port while CybertruckModel SModel XModel 3Model Y is charging. Failure to follow these instructions can result in serious injury or damage to the vehicle, charging equipment, or property.

Cleaning the Interior

Frequently inspect and clean the interior to maintain its appearance and to prevent premature wear. If possible, immediately wipe up spills and remove marks. For general cleaning, wipe interior surfaces using a soft cloth (such as microfiber) dampened with a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use). To avoid streaks, dry immediately with a soft lint-free cloth.



Interior Glass

Do not scrape, or use any abrasive cleaning fluid on glass or mirrored surfaces. This can damage the reflective surface of the mirror and the heating elements in the rear window.

Airbags

Do not allow any substance to enter an airbag cover. This could affect correct operation.

Dashboard and Plastic Surfaces

Do not polish the upper surfaces of the dashboard. Polished surfaces are reflective and could interfere with your driving view.

Seats

Wipe spills and chemical residues from interior surfaces as soon as possible using a soft cloth moistened with warm water and non-detergent soap. Wipe gently in a circular motion. Then wipe dry using a soft, lint-free cloth.

Although seating surfaces are designed to repel stains, Tesla recommends regular cleaning to maintain performance and an as-new appearance. Promptly treat dye transfer from clothing, such as indigo-dyed denim. Avoid contact with harsh chemicals, including certain cosmetics. Never use cleaners containing alcohol or bleach. Spot-test cleaners on an inconspicuous area before applying to visible surfaces.

If equipped with leather seats, note that leather is prone to dye-transfer which can cause discoloration, particularly on light colored leather. White and tan leather is coated with an anti-soiling treatment. Using detergents or commercially available leather cleaners and conditioners is not recommended because they can discolor or dry out the leather.

Vacuum seats as needed to remove any loose dirt.



CAUTION: Aftermarket, non-Tesla seat covers may inhibit the sensitivity of a seat's occupancy sensors and may cause staining or damage.



CAUTION: The front seats are equipped with microphones (see [Active Road Noise Reduction on page 62](#)) that must not be exposed to liquids. To prevent damage to these microphones when cleaning, do not over-saturate the area of the seats where these microphones are located.

Carpets

Avoid over-wetting carpets. For heavily soiled areas, use a diluted upholstery cleaner.

Seat Belts

Extend the belts to wipe. Do not use any type of detergent or chemical cleaning agent. Allow the belts to dry naturally while extended, preferably away from direct sunlight.

Door Seals

Wipe door seals with a damp cloth to remove any debris. Excessive debris on the door seals can cause damage when contacting surrounding surfaces. Avoid using alcohol wipes or any chemical products that can potentially deteriorate the coating on the door seals.

Tesla Built-In Rear Facing Child Seats

Vacuum the seats to remove any loose dirt. Wipe the seats with a soft cloth dampened with warm water. You can also use an upholstery cleaner designed for automotive use. Extend the belts to wipe. Allow the belts to dry naturally, preferably away from direct sunlight.

Touchscreen Front and Rear Touchscreens Front and Rear Touchscreens Touchscreen, Rear Touchscreen, and Instrument Panel Touchscreen and Instrument Panel

Clean the touchscreen(s) and instrument panel using a soft lint-free cloth specifically designed to clean monitors and displays. Do not use cleaners (such as a glass cleaner) or alcohol-based gel products (such as hand sanitizer) and do not use a wet wipe or a dry statically-charged cloth (such as a recently washed microfiber). To wipe the front touchscreen without activating buttons and changing settings, you can enable Screen Clean Mode. Touch **Controls > Display > Screen Clean Mode**. The display darkens to make it easy to see dust and smudges. To exit Screen Clean Mode, press and hold **HOLD TO EXIT**.








Maintenance

Chrome and Metal Surfaces

Polish, abrasive cleaners, alcohol-based gel products (such as hand sanitizer), and hard cloths can damage the finish on chrome and metal surfaces.

Cautions for Interior Cleaning

-  **CAUTION:** Using solvents (including alcohol), alcohol-based gel products (such as hand sanitizer), bleach, citrus, naphtha, or silicone-based products or additives on interior components can cause damage.
-  **CAUTION:** Statically-charged materials can cause damage to the touchscreen or instrument panel.
-  **WARNING:** If you notice any damage on an airbag or seat belt, contact Tesla immediately.
-  **WARNING:** Do not allow any water, cleaners, or fabric to enter a seat belt mechanism.
-  **WARNING:** Exposure to chemical cleaners can be hazardous and can irritate eyes and skin. Read and observe the instructions provided by the manufacturer of the chemical cleaner.



Polishing, Touch Up, and Body Repair

To preserve the cosmetic appearance of the body, you can occasionally treat the paint surfaces with an approved polish containing:

- Very mild abrasive to remove surface contamination without removing or damaging the paint.
- Filling compounds that fill scratches and reduce their visibility.
- Wax to provide a protective coating between the paint and environmental elements.

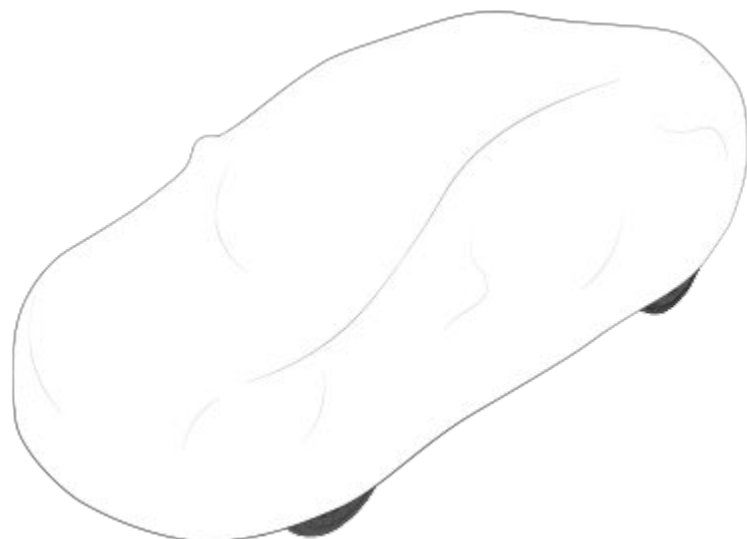
Regularly inspect the exterior paint for damage. Treat minor chips and scratches using a paint touch-up pen (available for purchase from Tesla, depending on market region). Use the touch-up pen after washing but before polishing or waxing.

Repair rock chips, fractures or scratches. Refer to <https://www.tesla.com/support/body-shop-support> for more information on repair locations and available services.

-  **CAUTION:** Do not use cutting pastes, color restoration compounds, or polishes containing harsh abrasives. These can scour the surface and permanently damage the paint.
-  **CAUTION:** Do not use chrome polish or other abrasive cleaners.

Using a Car Cover

To preserve the cosmetic appearance of the body when CybertruckModel SModel XModel 3Model Y is not being used, use a genuine Tesla car cover. Car covers can be purchased online from the Tesla Shop.





CAUTION: Use only a Tesla-approved car cover when Cybertruck Model S Model X Model 3 Model Y is plugged in. Using a non-Tesla car cover can prevent the Battery from being adequately cooled during charging.

Floor Mats

To extend the life of your carpet and make them easier to clean, use genuine Tesla floor mats available online at <http://www.tesla.com>. Maintain floor mats by regularly cleaning them and checking that they are properly attached. Replace floor mats if they become excessively worn.

WARNING: To avoid potential interference with a foot pedal, ensure that the driver's floor mat is securely fastened, and never place an additional floor mat on top of it. Floor mats should always rest on top of the vehicle carpeting surface and not on another floor mat or other covering.



Tire Pressures

Displaying Tire Pressures

Tire pressures display on the touchscreen by touching **Controls** > **Service**, or use the mobile app. The pressure of each tire displays in the visualization of Cybertruck Model S Model X Model 3 Model Y, in addition to the time the tire pressures were last read by the system.

The touchscreen also displays your vehicle's recommended cold tire pressures so you can easily determine how much to inflate your tires.

To choose whether to display tire pressures using Bar or PSI, touch **Controls** > **Display** > **Tire Pressure**.

NOTE: You may need to drive briefly before the visualization displays the tire pressure values.

Maintaining Tire Pressures



Keep tires inflated to the recommended pressures, even if it differs from the pressure printed on the tire itself. The Tire and Loading Information label on the center door pillar is visible when the driver door is open and represents a nominal driving scenario in which the vehicle is carrying cargo in the front trunk and up to five passengers. When carrying heavy loads, up to the vehicle's GVWR, in a Cybertruck equipped with All Terrain tires, the tire pressures should be increased.

Tires (Front and Rear)	Normal Load*	GVWR**
20" All Season	50 psi	50 psi
20" All Terrain	50 psi	65 psi

*Normal Load assumes a fully loaded front trunk and up to five occupants (see [Calculating Load Limits on page 1437](#)).

**GVWR load capacity not exceeding the vehicle's Gross Vehicle Weight Rating (see [Weights - Vehicle on page 1441](#)).



⚠ CAUTION: If you are towing a trailer, do not use the tire pressures printed on the Tire and Loading Information Label. Instead, refer to the tire pressures published (see [Tire Pressures when Towing on page 1259](#)).




The Low Tire Pressure indicator light on the touchscreen alerts you if a tire is under-inflated. This light does not immediately turn off when you adjust tire pressure. After inflating the tire to the recommended pressure, you must drive over 15 mph (25 km/h) for a short amount of time to activate the Tire Pressure Monitoring System (TPMS), which turns off the Low Tire Pressure indicator light.

If the indicator light flashes for one minute whenever you power on CybertruckModel SModel XModel 3Model Y, a fault with the TPMS is detected.

Your vehicle's tire pressures will drop in cold ambient temperatures. If the TPMS indicator light appears, inflate the tires before driving. The tires will lose approximately one PSI for every 10° F (6° C) drop in outside temperature. Proper tire pressures help protect tires from potholes and improve range and tire longevity when properly inflated.

-  **WARNING:** The Low Tire Pressure indicator light alerts you only in situations when a tire is below the recommended threshold (as indicated on the Tire and Loading Information label) under normal driving conditions. It does not alert you when a tire is under-inflated based on the load you are carrying.
-  **WARNING:** Under-inflation is the most common cause of tire failures and can cause a tire to overheat, resulting in severe tire cracking, tread separation, or blowout. This may lead to unexpected loss of vehicle control and increased risk of injury. Under-inflation also reduces the vehicle's range and tire tread life.

Checking and Adjusting Tire Pressures

-  **WARNING:** Check tire pressures using an accurate pressure gauge when tires are cold. It takes only about one mile (1.6 km) of driving to warm up the tires sufficiently to affect tire pressures. Parking the vehicle in direct sunlight or in hot weather can also affect tire pressures. If you must check warm tires, expect increased pressures. Do not let air out of warm tires in an attempt to match recommended cold tire pressures. A hot tire at or below the recommended cold tire inflation pressure is dangerously under-inflated.

Follow these steps when tires are cold and CybertruckModel SModel XModel 3Model Y has been stationary for over three hours:

1. Refer to the Tire and Loading Information label located on the driver's center door pillar for the target tire pressure.
2. Remove the wheel cover (see [Removing and Installing Wheel Covers on page 1407](#)).
3. Remove the valve cap.
4. Firmly press an accurate tire pressure gauge onto the valve to measure pressure.

NOTE: You can also view tire pressures on the touchscreen.



5. If required, add or remove air to reach the recommended pressure.
NOTE: You can release air by pressing the metal stem in the center of the valve.
6. Re-check pressure using the accurate tire gauge.
7. Repeat steps 5 and 6 as necessary until the tire pressure is correct.
8. Reinstall the valve cap to prevent dirt from entering. Periodically check the valve for damage and leaks.
9. Reinstall the wheel cover.

Tire Pressure Monitoring



The Cybertruck Model S Model X Model 3 Model Y is equipped with a tire pressure monitoring system that warns the driver of significant under-inflation or over-inflation of the tires by displaying the Tire Pressure Indicator Light. Check the Tire Information label located on the driver's door pillar for more details, or see [Maintaining Tire Pressures on page 1400](#).

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.



TPMS Malfunction

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.



The TPMS malfunction indicator is combined with the tire pressure indicator light. If CybertruckModel SModel XModel 3Model Y detects a fault with the TPMS, this indicator flashes for one minute whenever you power on CybertruckModel SModel XModel 3Model Y.

NOTE: Installing accessories that are not approved by Tesla can interfere with the TPMS.

NOTE: If a tire has been replaced or repaired using a different tire sealant than the one available from Tesla, and a low tire pressure is detected, it is possible that the tire sensor has been damaged.



Inspecting and Maintaining Tires

Regularly inspect the tread and side walls for any sign of distortion (bulges), foreign objects, cuts or wear.

⚠ WARNING: Do not drive CybertruckModel SModel XModel 3Model Y if a tire is damaged, excessively worn, or inflated to an incorrect pressure. Check tires regularly for wear, and ensure there are no cuts, bulges or exposure of the ply/cord structure.

To improve the mileage you get from your tires, maintain tires at the recommended tire pressures, observe speed limits and advisory speeds, and avoid:

- Pulling away quickly, or hard acceleration.
- Fast turns and heavy braking.
- Potholes and objects in the road.
- Hitting curbs when parking.
- Contaminating tires with fluids that can cause damage.

Tire Wear

Adequate tread depth is important for proper tire performance.

CybertruckModel SModel XModel 3Model Y is originally fitted with tires that have wear indicators molded into the tread pattern. When the tread has been worn down to $2/32''$ (1.6 mm), the indicators start to appear at the surface of the tread pattern, producing the effect of a continuous band of rubber across the width of the tire. For optimal performance and safety, Tesla recommends replacing tires before the wear indicators are visible.

Tires with a tread depth less than $4/32''$ (3 mm) are more likely to hydroplane and should not be used when driving in wet conditions. Tires with a tread depth less than $5/32''$ (4 mm) do not perform well in snow and slush and should not be used when driving in winter conditions.

To improve vehicle handling characteristics and minimize hydroplaning in wet conditions, put tires with the most tread on the rear of the car.

Tire Rotation, Balance, and Wheel Alignment

Tesla recommends rotating the tires every 6,250 miles (10,000 km) or if tread depth difference is $2/32$ in (1.6 mm) or greater, whichever comes first.

Tire rotation is an essential part of tire maintenance. It helps maintain an even tread wear pattern which enhances the tire's overall wear quality, decreases road noise and maximizes tire life.

Unbalanced wheels (sometimes noticeable as vibration through the steering wheel) affect vehicle handling and tire life. Even with regular use, wheels can get out of balance. Therefore, they should be balanced as required.

If tire wear is uneven (on one side of the tire only) or becomes abnormally excessive, check the wheel alignment.

Punctured Tires

A puncture eventually causes the tire to lose pressure, which is why it is important to check tire pressures frequently. Permanently repair (if safe to do so) or replace punctured or damaged tires as soon as possible.

Your tubeless tires may not leak when penetrated, provided the object remains in the tire. If, however, you feel a sudden vibration or ride disturbance while driving, or you suspect a tire is damaged, immediately reduce your speed. Drive slowly, while avoiding heavy braking or sharp steering and, when safe to do so, stop the vehicle and contact Roadside Assistance.

NOTE: In some cases, you can temporarily repair small tire punctures (under $1/4''$ (6 mm)) using an optional tire repair kit available from Tesla. This allows you to slowly drive CybertruckModel SModel XModel 3Model Y to a nearby tire repair facility.

⚠ WARNING: Do not drive with a punctured tire that has not been repaired, even if the puncture has not caused the tire to deflate. A punctured tire can deflate suddenly at any time.



Flat Spots


If CybertruckModel SModel XModel 3Model Y is stationary for a long period, tires can form flat spots. When CybertruckModel SModel XModel 3Model Y is driven, these flat spots cause a vibration which gradually disappears as the tires warm up and regain their original shape.


To minimize flat spots during storage, inflate tires to the maximum pressure indicated on the tire's sidewall. Then, before driving, release air to adjust tire pressure to the recommended levels.

Tire Pressure Monitoring System (TPMS)

After replacing one or more wheels (but not after just replacing a tire or rotating wheels), the TPMS sensors are reset to ensure tire pressure warnings are accurate. TPMS sensors reset automatically after driving over 15 mph (25 km/h) for longer than 10 minutes.

NOTE: After replacing a wheel, false tire pressure warnings may display before you've driven 15 mph (25 km/h) for longer than 10 minutes.

 **WARNING:** If your CybertruckModel SModel XModel 3Model Y is equipped with aftermarket tires that differ in size from those printed on the Tire and Loading Information Label (see [Vehicle Loading on page 1435](#)), it is the driver's responsibility to determine the correct tire pressure. Do not drive on public roads when tires are not inflated to the correct pressure.

 **WARNING:** Do not depend on TPMS sensors to accurately determine pressures and trigger alerts. It is the driver's responsibility to maintain correct tire pressures (see [Maintaining Tire Pressures on page 1400](#)). Over or under-inflated tires can result in loss of control or tire damage, which can lead to serious injury.

TPMS Malfunction

CybertruckModel SModel XModel 3Model Y has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly.



The TPMS malfunction indicator is combined with the tire pressure indicator light. When the system detects a malfunction, the indicator flashes for approximately one minute, then remains continuously lit. This sequence continues upon subsequent vehicle start-ups as long as the malfunction exists. When the TPMS malfunction indicator is on, the system might not be able to detect or signal under-inflated tires as intended.

TPMS malfunctions can occur for a variety of reasons, including installing replacement or alternate tires or wheels that prevent the TPMS from functioning properly. Always check the TPMS malfunction indicator light after replacing one or more tires or wheels on your vehicle to ensure that the replacement tires or wheels allow the TPMS to continue to function properly.

NOTE: If a tire has been replaced or repaired using a different tire sealant than the one available from Tesla, and a low tire pressure is detected, it is possible that the tire sensor has been damaged. Use the mobile app to schedule a service appointment to have the fault repaired as soon as possible.

Replacing a Tire Sensor

If the Tire Pressure warning indicator displays frequently, schedule a service appointment to determine if a tire sensor needs to be replaced. Non-Tesla Service Center must replace using a Tesla OEM sensor.

Seasonal Tire Types

Understand Your Tire Type

The type of tires that your vehicle is originally equipped with depends on vehicle model and market region. It is important to understand the capabilities of your vehicle's tires and whether they are suited for summer, all-season, or winter driving. Check the information on the sidewall of a tire for information about a tire's performance characteristics (see [Tire Pressures on page 1400](#)).



Summer and All-Season Tires

Summer tires and all season tires are designed for maximum dry and wet road performance but are not designed to perform well in winter conditions. All-season tires are designed to provide adequate traction in most conditions year-round, but may not provide the same level of traction as winter tires in snowy or icy conditions. All-season tires can be identified by "ALL SEASON" and/or "M+S" (mud and snow) on the tire sidewall.

If driving in cold temperatures or on roads where snow or ice may be present, Tesla recommends using winter tires.

⚠ WARNING: In cold temperatures or on snow or ice, summer and all-season tires do not provide adequate traction. Selecting and installing the appropriate tires for winter conditions is important to ensure the safety and optimum performance of your Cybertruck Model S Model X Model 3 Model Y.

All-Terrain Tires

Use all-terrain tires if you regularly drive on gravel and dirt roads. All-terrain tires are suitable for driving on both paved roads (city streets, highways, etc.) as well as off-road (sand, dirt, mud, etc.). All-terrain tires must be the same diameter, brand, construction and tread pattern on all four wheels.

When driving with all-terrain tires, you may experience more road noise, shorter tread life, and less traction on dry roads.

Winter Tires

Use winter tires to increase traction in snowy or icy conditions. When installing winter tires, always install a complete set of four tires at the same time. Winter tires must be the same diameter, brand, construction and tread pattern on all four wheels.



Winter tires can be identified by a mountain/snowflake symbol on the tire's sidewall.

When driving with winter tires, you may experience more road noise and shorter tread life.

Driving in Low Temperatures

Tire performance is reduced in low ambient temperatures, resulting in reduced grip and an increased susceptibility to damage from impacts. Performance tires (summer applications) have reduced traction in ambient temperatures below 5° C/40° F (5° C), and are not recommended in snow/ice conditions. Performance tires can temporarily harden when cold, causing you to hear rotational noise for the first few miles (kilometers) until the tires warm up.

Tire Chains

Only use tire chains on the REAR tires.

Tesla has tested and approved the following tire chains to increase traction in snowy conditions. Install tire chains on rear tires only. The approved tire chains can be purchased from Tesla.

⚠ CAUTION: You must remove wheel covers before installing tire chains. Failure to do so can cause damage not covered by the warranty.

Tire Size	Recommended Chain
20"	Konig XD-16 Pro Size 285

When installing tire chains, follow the instructions and warnings provided by the tire chain manufacturer. Mount them evenly and as tight as possible.





When using tire chains:

- Inspect the tire chains for loose fittings and damaged links before each use.
- Set air suspension to **Medium** and turn off the **Preferred Ride Height to Low** setting (see [Suspension on page 1240](#)).



- Avoid heavily loading CybertruckModel SModel XModel 3Model Y (heavy loads can reduce the clearance between the tires and the body).
- Do not drive the vehicle without the chains properly installed.
- Drive slowly. Do not exceed 30 mph (48 km/h).
- Remove the tire chains as soon as conditions allow.

NOTE: Tire chains are prohibited in some jurisdictions. Check local laws before installing tire chains.

-  **CAUTION:** Using non-recommended tire chains, or using tire chains on other sized tires can damage the suspension, body, wheels, and/or brake lines. Damage caused by using non-recommended tire chains, or incorrectly installing tire chains, is not covered by the warranty.
-  **CAUTION:** Never deflate your tires to put on tire chains. When re-inflated, the chains might fit too tightly and cause tire damage.
-  **CAUTION:** Install tire chains on rear tires only. Installing chains on front tires can cause damage.
-  **CAUTION:** Ensure that the tire chains cannot touch suspension components or brake lines. If you hear the chains making unusual noises that would indicate contact with CybertruckModel SModel XModel 3Model Y, stop and investigate immediately.

Removing and Installing Wheel Covers

If your CybertruckModel SModel XModel 3Model Y is equipped with wheel covers, you must remove them to access the valve stem and the lug nuts.

To remove a wheel cover:

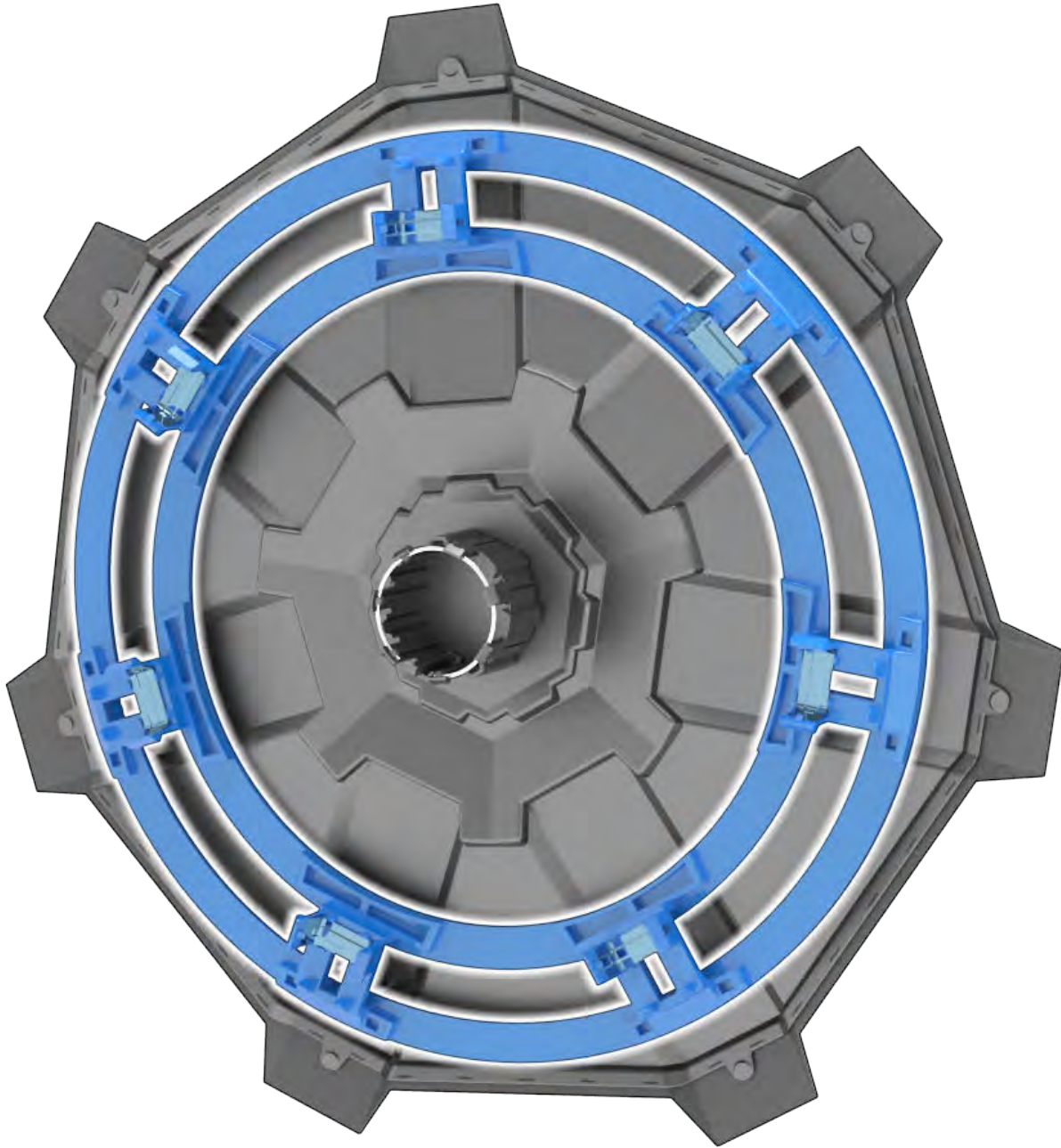
1. Grasp the cover firmly with both hands.
2. Pull the cover toward you to release the retaining clips.



NOTE: Make sure the mounting ring is removed with the wheel cover.

To install a wheel cover:

1. Separate the mounting ring from the wheel cover by pulling the plastic ring from the inside of the wheel cover.




2. Align the mounting ring with the spokes of the wheel. Firmly press the mounting ring into the wheel to secure it.



3. Align the wheel cover with the design of the tire.
4. Firmly press the center of the cover to secure it in place, then work your way out to firmly pressing the outer perimeter of each spoke. You may need to hold the opposite side of the cover until all spokes are secured.
5. Firmly press the center of the cap with your hands (do not hit the cover with your hands) to ensure it is secured.
6. As a final check, quickly pull each spoke to confirm it is secured in place.



 **CAUTION:** To prevent the wheel cover from falling off, ensure that it is fully secured before driving.



Wheel and Tire Specifications

Wheel Specifications (Factory)

Configuration - Location	Size (in)	Offset (mm)
Dual Motor - Front and Rear	20 x 9.0J	ET58.5
Tri Motor - Front and Rear	20 x 9.0J	ET58.5
Lug Nut Torque	151 lb. ft (205 Nm)	
Lug Nut Socket Size	21 mm	

NOTE: For instructions on how to jack/lift Cybertruck Model S Model X Model 3 Model Y, see [Jacking and Lifting on page 795](#).

Tire Specifications (Factory)

Location	Type/Purpose	Name	Design	Size
Front and Rear	20" All Season	Pirelli Scorpion ATR	Hard Metric	285/65R20
Front and Rear	20" All Terrain	Goodyear Wrangler Territory RT	Light Truck	LT285/65R20

Refer to the tire pressures printed on the Tire and Loading Information label. This label is located on the center door pillar and is visible when the driver's door is open (also see [Checking and Adjusting Tire Pressures on page 1401](#)).

Winter tires can be purchased from a Tesla service center or may be available for purchase on the Tesla web site.

⚠ WARNING: Do not use tires with a load carrying capacity that is lower than the original tires. Doing so can reduce the maximum GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating) as printed on the door pillar ([Weights - Vehicle on page 1441](#)). Conversely, replacement tires with a higher load capacity do not increase the GVWR and GAWR.

Understanding Tire Markings

Laws require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire. It also provides the tire identification number (TIN) for certification of safety standards, and in case of a recall.



NOTE: You can identify a Tesla-approved tire by the "T-mark" specification on the tire's sidewall (for example, T0, T1, T2). Tesla-approved tires are designed to work with your vehicle and optimize performance, safety, reliability, and durability. For more information about Tesla-approved replacement tires, refer to the [Service Manual](#).

- 1. Tire category:** P (passenger), LT (light truck), or None (hard metric) indicates the tire classification and corresponding load classification.
- 2. Tire width:** This 3-digit number is the width (in millimeters) of the tire from sidewall edge to sidewall edge.
- 3. Aspect ratio:** This 2-digit number is the sidewall height as a percentage of the tread width. So, if the tread width is 205 mm, and the aspect ratio is 50, the sidewall height is 102 mm.
- 4. Tire construction:** R indicates that the tire is of Radial ply construction.
- 5. Wheel diameter:** This 2-digit number is the diameter of the wheel rim in inches.
- 6. Load index:** This 2 or 3-digit number is the weight each tire can support. This number is not always shown.



Maintenance

7. **Speed rating:** When stated, indicates the maximum speed (in mph) at which the tire can be used for extended periods. Q=99 mph (160 km/h), R=106 mph (170 km/h), S=112 mph (180 km/h), T=118 mph (190 km/h), U=124 mph (200 km/h), H=130 mph (210 km/h), V=149 mph (240 km/h), W=168 mph (270 km/h), Y=186 mph (300 km/h), (Y)=vehicle's top speed (exceeds the "Y" rating).
8. **Load range:** Shown as Standard Load (SL) or Extra Load (XL), the load range determines how much weight your tires can support at a specified tire pressure. When replacing tires, only use tires of the same load range. If towing with snow tires, ensure they are the same load range of the tires your vehicle came equipped with.
9. **Tire composition and materials:** The number of plies in both the tread area and the sidewall area indicates how many layers of rubber coated material make up the structure of the tire. Information is also provided on the type of materials used.
10. **Maximum tire load:** The maximum load which can be carried by the tire.
11. **Maximum permissible inflation pressure:** This pressure should not be used for normal driving.
12. **U.S. DOT Tire Identification Number (TIN):** Begins with the letters DOT and indicates that the tire meets all federal standards. The next 2 digits/letters represent the plant code where it was manufactured, and the last 4 digits represent the week and year of manufacture. For example, the number 1712 is used to represent the 17th week of 2012. The other numbers are marketing codes used at the manufacturer's discretion. This information can be used to contact consumers if a tire defect requires a recall.
13. **Treadwear grade:** This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. A tire rated at 400, for example, lasts twice as long as a tire rated at 200.
14. **Traction grade:** Indicates a tire's ability to stop on wet roads. A higher graded tire should allow you to stop your vehicle in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as AA, A, B, and C.
15. **Temperature grade:** The tire's resistance to heat is grade A, B, or C, with A indicating the greatest resistance. This grading is provided for a correctly inflated tire, which is being used within its speed and loading limits.

Uniform Tire Quality Grading

The following information relates to the tire grading system developed by the National Highway Traffic Safety Administration (NHTSA), which grades tires by tread wear, traction and temperature performance. Tires that have deep tread, and winter tires, are exempt from these marking requirements.

Where applicable, quality grades are found on the tire's sidewall between the tread shoulder and maximum section width. For example:

- TREADWEAR 180
- TRACTION AA
- TEMPERATURE A

The quality grades are described next.

NOTE: In addition to the marking requirements, passenger car tires must conform to Federal Safety Requirements.


Treadwear


The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course.

For example, a tire graded 150 wears one and a half times better on a government test course than a tire graded 100. The relative performance of tires depends on the actual conditions of their use, however, and can depart significantly from the norm due to variations in driving habits, service practices, road characteristics, and climate.

Traction

The traction grades, from highest to lowest, are: AA, A, B, and C. These grades represent a tire's ability to stop on wet pavement as measured under controlled conditions on test surfaces of asphalt and concrete. A tire marked C might have poor traction performance.


 **WARNING:** Defective tires are dangerous. Do not drive if a tire is damaged, excessively worn, or is inflated to an incorrect pressure. The safety of the vehicle and occupants can be adversely affected. Check tires regularly for wear and to ensure there are no cuts, bulges or exposure of the ply/cord structure.

 **WARNING:** The traction grade assigned to the tire is based on straight-ahead braking tests, and does not include: acceleration, cornering, hydroplaning or peak traction characteristics.

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to the minimum level of performance that all passenger car tires must meet under the Federal Motor Safety Standard No. 109. Grades B and A represent levels of performance on the laboratory test wheel that exceed the minimum requirements.

 **WARNING:** A tire's temperature grade is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.


Tire and Loading Glossaries

General Wheel and Tire Terms

Accessory Weight	The combined weight (in excess of those items replaced) of items available as factory installed equipment.
Bead	The inner edge of a tire that is shaped to fit to the rim and form an air tight seal. The bead is constructed of steel wires which are wrapped, or reinforced, by the ply cords.



Maintenance

Cold Tire Pressure	The air pressure in a tire that has been standing in excess of three hours, or driven for less than one mile.
Curb Weight	The weight of a standard vehicle, including any optional equipment fitted, and with the correct fluid levels.
Gross Vehicle Weight	The maximum permissible weight of a vehicle with driver, passengers, load, luggage, and equipment.
kPa (kilo pascal)	A metric unit used to measure pressure. One kilo pascal equals approximately 0.145 psi.
Maximum Inflation Pressure	The maximum pressure to which the tire should be inflated. This pressure is given on the tire side wall in psi (lbf/in ²).  CAUTION: This pressure marked on the tire is the maximum allowed by the tire manufacturer. It is not the pressure Tesla recommends using for Cybertruck Model S Model X Model 3 Model Y.
Maximum Loaded Vehicle Weight	The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.
Production Options Weight	The combined weight of options installed which weigh in excess of 3 lb (1.4 kg) more than the standard items that they replaced, and are not already considered in curb or accessory weights.
PSI (lbf/in ²)	Pounds per square inch (the unit used to measure tire pressure).
Recommended Tire Inflation Pressure	Tire inflation pressure, established by Tesla, which is based on the type of tires that are mounted on the vehicle at the factory. This information can be found on the Tire and Loading Information label located on the door pillar.
Rim	The metal support for a tire, or tire and tube, upon which the tire beads are seated.
Vehicle Capacity Weight	The number of seats multiplied by 150 lbs (68 kg) plus the rated amount of load/luggage.

Load Carrying Definitions

Normal occupant weight	68 kilograms (150 lbs) times the number of occupants specified in the second column of the tables for calculating load limits (see the Vehicle Loading topic of this Owner's Manual).
Occupant distribution	Distribution of occupants in a vehicle.
Passenger car tire	(P or Hard Metric) A tire intended for use on passenger cars, multipurpose passenger vehicles, and trucks, that have a Gross Vehicle Weight Rating (GVWR) of 10,000 lbs (4536 kg) or less.
Light truck tire	(LT) A tire for use where additional load carrying capability is needed.
Rim diameter	Nominal diameter of the bead seat.
Rim size designation	Rim diameter and width.
Rim type designation	The manufacturing industry's designation for a rim by style or code.
Rim width	Nominal distance between the rim's flanges.
Vehicle maximum load on the tire	Load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.
Vehicle normal load on the tire	Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by two.

Pneumatic Radial Tire Definitions

Bead separation	A breakdown of the bond between components in the bead.
Bias ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the center line of the tread.
Carcass	The tire structure, except tread and sidewall rubber which, that when inflated, bears the load.



Chunking	The breaking away of pieces of the tread or sidewall.
Cord	The strands forming the plies in the tire.
Cord separation	The parting of cords from adjacent rubber compounds.
Cracking	Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.
Extra load tire	A tire designed to operate at higher loads and higher inflation pressure than the corresponding standard tire.
Groove	The space between two adjacent tread ribs.
Inner liner	The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.
Inner liner separation	The parting of the inner liner from cord material in the carcass.
Load rating	The maximum load that a tire is rated to carry for a given inflation pressure.
Maximum load rating	The load rating for a tire at the maximum permissible inflation pressure for that tire.
Measuring rim	The rim on which a tire is fitted for physical dimension requirements.
Open splice	Any parting at any junction of tread, sidewall, or inner liner that extends to the cord material.
Outer diameter	The overall diameter of an inflated new tire.
Overall width	The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.
Ply	A layer of rubber-coated parallel cords.
Ply separation	A parting of rubber compound between adjacent plies.
Pneumatic tire	A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.
Radial ply tire	A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the center line of the tread.
Reinforced tire	A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.
Section width	The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.
Sidewall	The portion of a tire between the tread and bead.
Sidewall separation	The parting of the rubber compound from the cord material in the sidewall.
Snow tire	A tire that attains a traction index equal to or greater than 110, compared to the ASTM E1136-93 (re-approved 2003, incorporated by reference, see §571.5) Standard Reference Test Tire when using the snow traction test as described in ASTM F1805-00 (incorporated by reference, see §571.5), and that is marked with an Alpine Symbol specified in S5.5(i) on at least one sidewall.
Test rim	The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire.
Tread	The portion of a tire that comes into contact with the road.
Tread rib	A tread section running around the circumference of a tire.
Tread separation	The pulling away of the tread from the tire carcass.
Tread wear indicators (TWI)	The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.
Wheel-holding fixture	The fixture used to hold the wheel and tire assembly securely during testing.



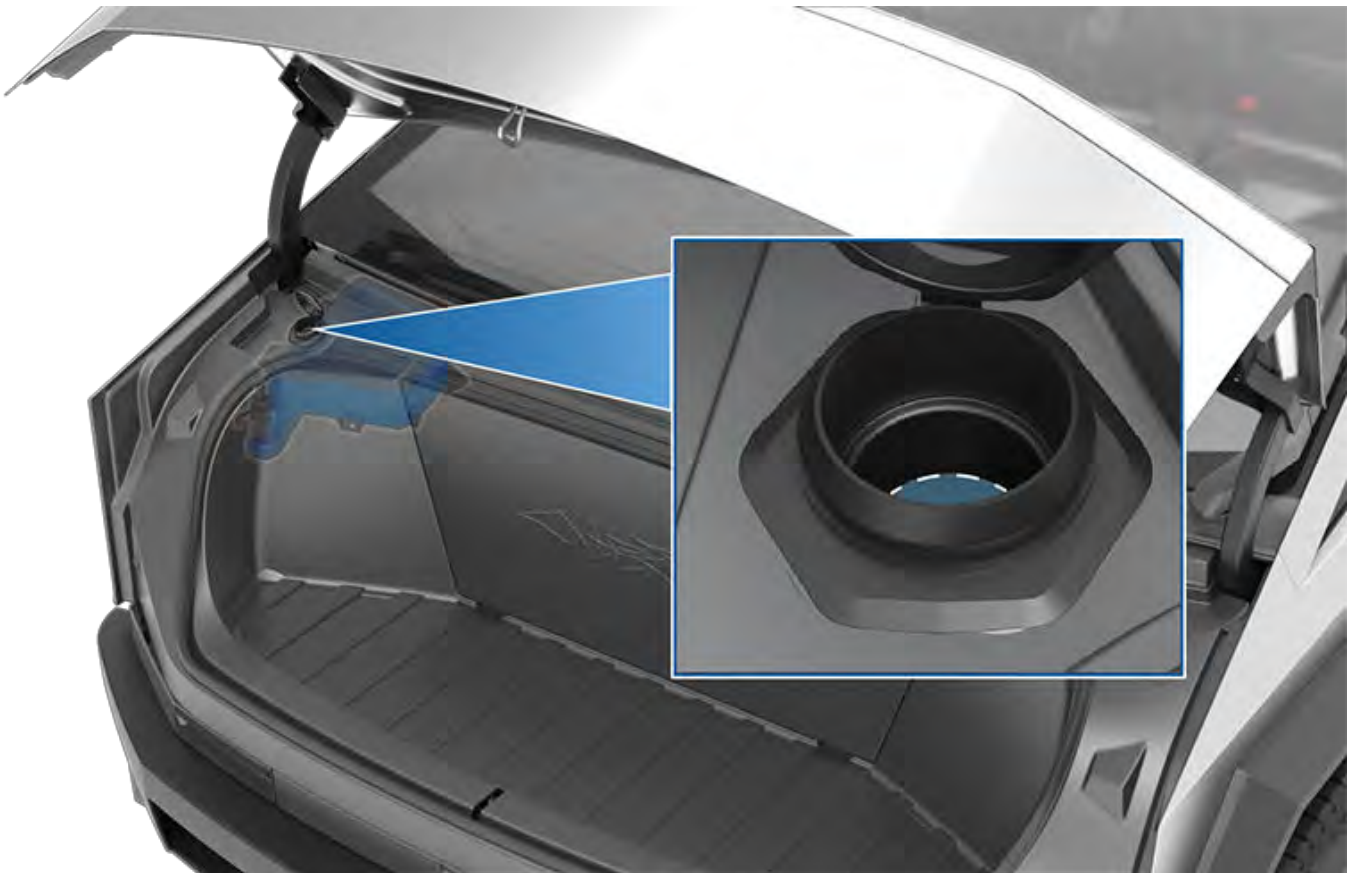
Windshield Wiper Blade, Jets and Fluid

Topping Up Windshield Washer Fluid

The only reservoir into which you can add fluid is the windshield washer fluid reservoir, which is located behind the powered frunk liner. When the level is low, a message displays on the touchscreen.


To top up the washer fluid:

1. Open the powered frunk.
2. Use a microfiber cloth to clean around the filler cap before opening it to prevent dirt from entering the reservoir.
3. Open the filler cap.
4. While avoiding spilling, fill the reservoir until the fluid level is visible just below the filler neck. The reservoir has a total capacity of 4.2 liters.



5. Wipe up any spills immediately and wash the affected area with water.
6. Close the filler cap.

- ⚠ CAUTION:** Some national or local regulations restrict the use of Volatile Organic Compounds (VOCs). VOCs are commonly used as freeze protection in washer fluid. Use a washer fluid with limited VOC content only if it provides adequate freeze resistance for all climates in which you drive Cybertruck Model S Model X Model 3 Model Y.
- ⚠ CAUTION:** Use only ethanol-based windshield washer fluid meant for automotive vehicles. Using other substances, such as untreated water, can result in bacterial growth within the climate control system resulting in odor or potential damage that is not covered by warranty. Untreated pure water expands to ice when freezing, which may result in damage.
- ⚠ CAUTION:** Do not add formulated washer fluids that contain water repellent or bug wash. These fluids can cause streaking, smearing, and squeaking or other noises.
- ⚠ WARNING:** In temperatures below -32°F (0°C), use a washer fluid with antifreeze. In cold weather, using a washer fluid without antifreeze can impair visibility through the windshield.

 **WARNING:** Windshield washer fluid can irritate eyes and skin. Read and observe the instructions provided by the washer fluid manufacturer.


Cleaning the Wiper Blade

Periodically clean the edge of the wiper blade and check the rubber for cracks, splits, and roughness. If damaged, replace the blade immediately to prevent damage to the glass and improve visibility.

Contaminants on the windshield or wiper blade can reduce the effectiveness of the wiper. Contaminants include ice, wax spray from car washes, washer fluid with bug and/or water repellent, bird droppings, tree sap, and other organic substances.

Follow these guidelines for cleaning:


1. Lift the wiper arm a short distance away from the windshield, just far enough to access the wiper blade. Do not lift the wiper arm beyond its intended position.
2. Place a towel between the wiper arm and windshield to avoid scratching or cracking the windshield.
3. Clean the windshield and wiper blade using washer fluid or non-abrasive glass cleaner approved for use on automotive glass and rubber.

 **CAUTION:** Inappropriate products can cause damage or smears and create glare on the windshield.

4. Gently place the wiper blade back onto the windshield.
5. Test the wiper blade again. If the wiper remains ineffective after cleaning, replace the wiper blade.


Replacing the Wiper Blade

For optimum performance, replace the wiper blade at least once a year. You can purchase a replacement wiper blade on the Tesla Shop.

 **CAUTION:** Only install a replacement blade that is identical to the original blade. Using an inappropriate blade can damage the wiper system and windshield.

To replace the wiper blade:

1. Shift into Park and turn off the wiper. Ensure the wiper setting is **Off** and not in **Auto**, because the wiper blade may still sweep if there is any liquid detected on the windshield.
2. Place a towel between the wiper arm and windshield to avoid scratching or cracking the windshield.
3. Lift the wiper arm a short distance away from the windshield, just far enough to access the wiper blade.

 **CAUTION:** Wiper blade does not lock into a lifted position. Do not lift the wiper arm beyond its intended position or drop it onto the windshield.

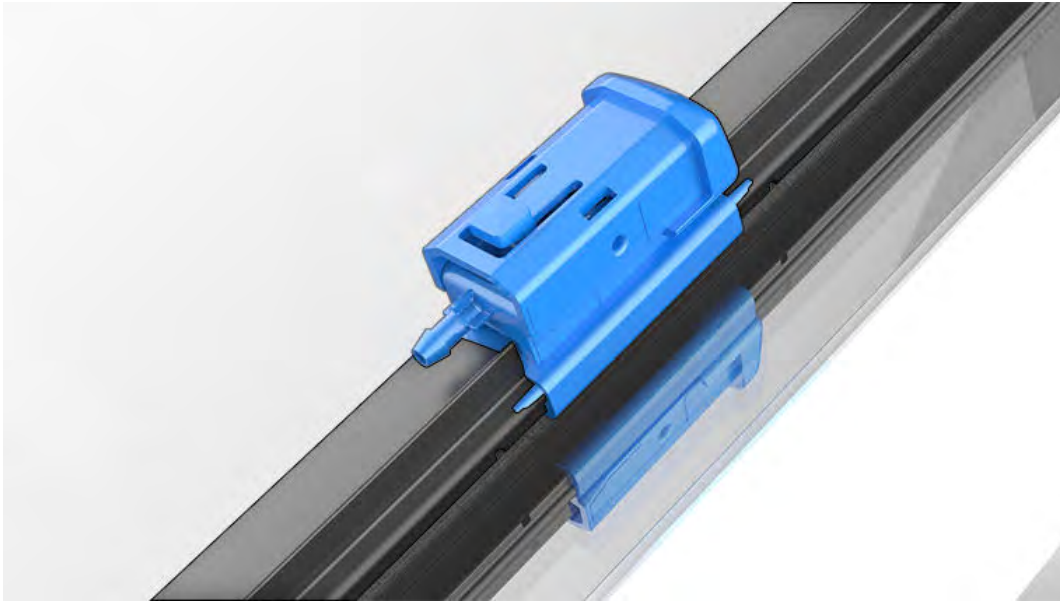
4. While holding the wiper arm, press the locking tab, then slide the blade away from the arm. Set the wiper blade next to the wiper arm.



5. Disconnect the washer hose from the wiper blade by pulling the hose from the barb fitting.



6. Connect the new washer hose to the barb fitting on the new wiper blade.



7. Align the new wiper blade on the wiper arm and slide it toward the base of the wiper arm until it locks into place.
8. Ensure the wiper blade is fully secured by lightly pushing and pulling on the blade. The blade should not jostle or move around.
9. Remove the towel and gently place the wiper blade against the windshield.

Washer Jets

The windshield washer fluid sprays from nozzles along the length of the wiper blade. You cannot adjust them. If a windshield washer nozzle becomes blocked, use a thin strand of wire to clear any blockages.

If the blade is not dispensing washer fluid, make sure there is enough wiper fluid in the reservoir and refill if needed. If this issue still persists, check the hose connection between the arm and blade for any leaks, kinks, or disconnections.



WARNING: Do not operate the washers while cleaning Cybertruck Model S Model X Model 3 Model Y. Windshield washer fluid can irritate eyes and skin. Read and observe the washer fluid manufacturer's instructions for safe handling.



Jacking and Lifting

WARNING: Ensure the equipment you are using is rated for the weight of Cybertruck Model S Model X Model 3 Model Y, including any cargo, installed accessories, or upgrades before attempting to lift.

Follow the steps below to lift Cybertruck Model S Model X Model 3 Model Y. Ensure that any non-Tesla repair facility is aware of these instructions, including lift points and warnings.

1. Position Cybertruck Model S Model X Model 3 Model Y centrally between the lift posts.
2. If your Cybertruck Model S Model X Model 3 Model Y is equipped with air suspension, it automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off (see [Jack Mode on page 800](#)). Use the touchscreen to set the suspension as follows:
 - Touch **Controls** > **Suspension**.
 - Press the brake pedal, then touch **Very High** to maximize the height of the suspension.
 - Touch **Controls** > **Service** > **Jack Mode** to disable self-leveling.

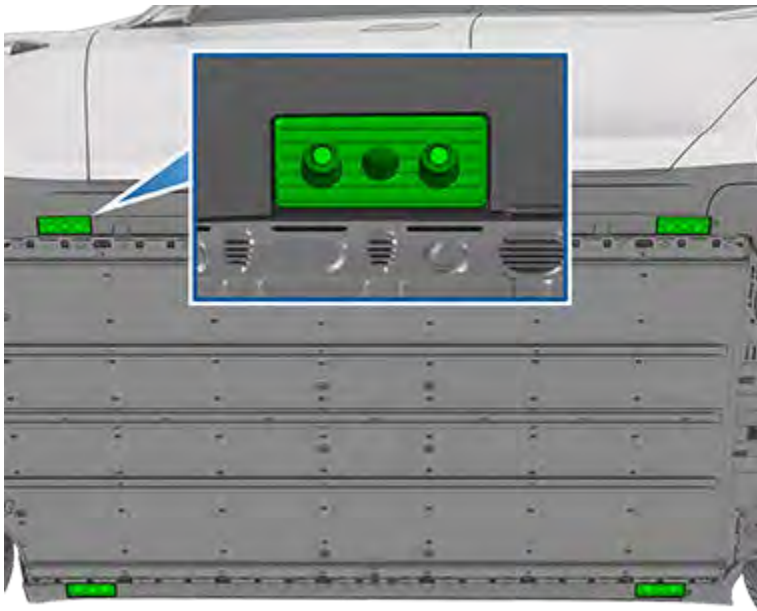


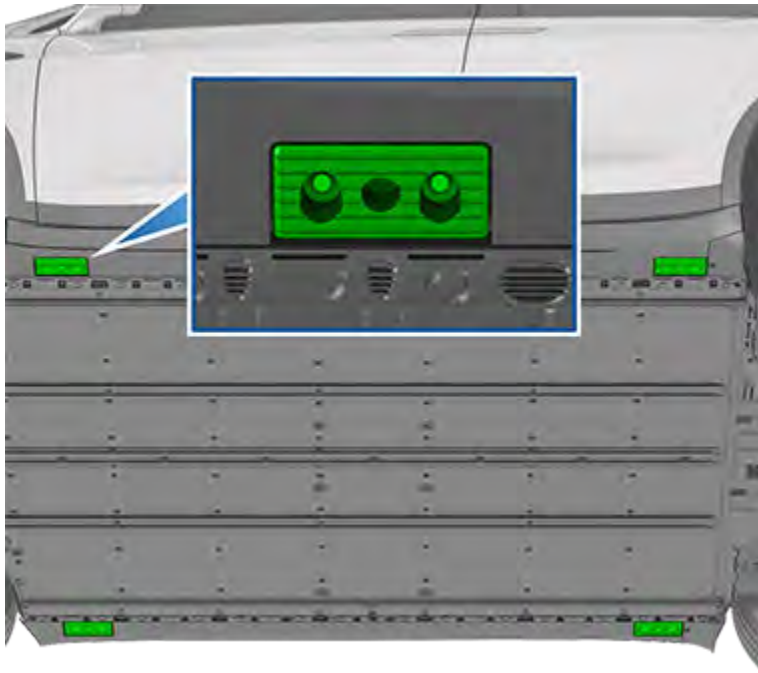
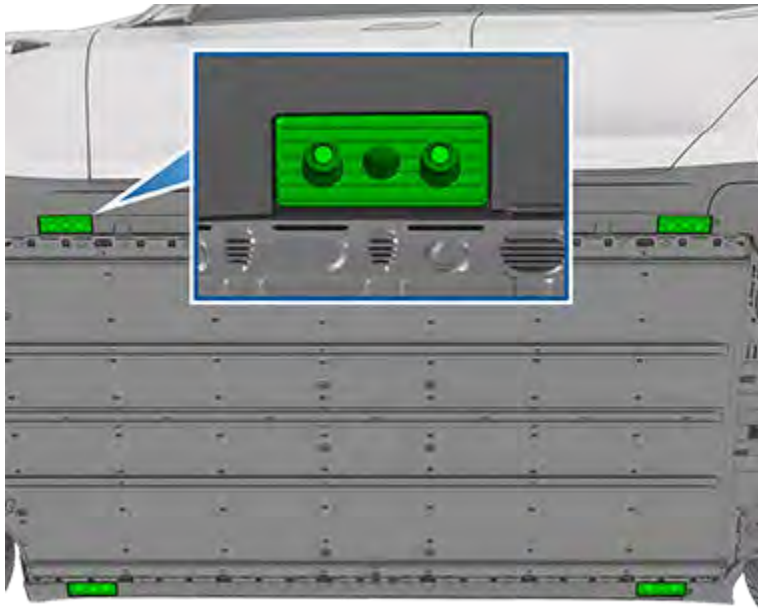
When Jack mode is active, Cybertruck Model S Model X Model 3 Model Y displays this indicator light on the instrument panel touchscreen, along with a message telling you that active suspension is disabled.

3. Close the falcon wing doors.
4. Position the lift arm pads under the designated body lift points at the locations shown.

WARNING: DO NOT position the lift arm pads under the Battery or side rails.

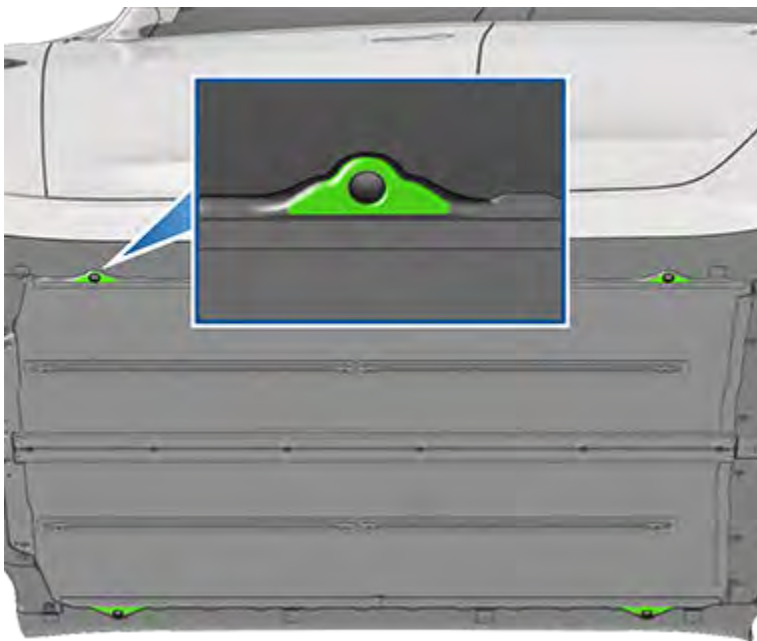
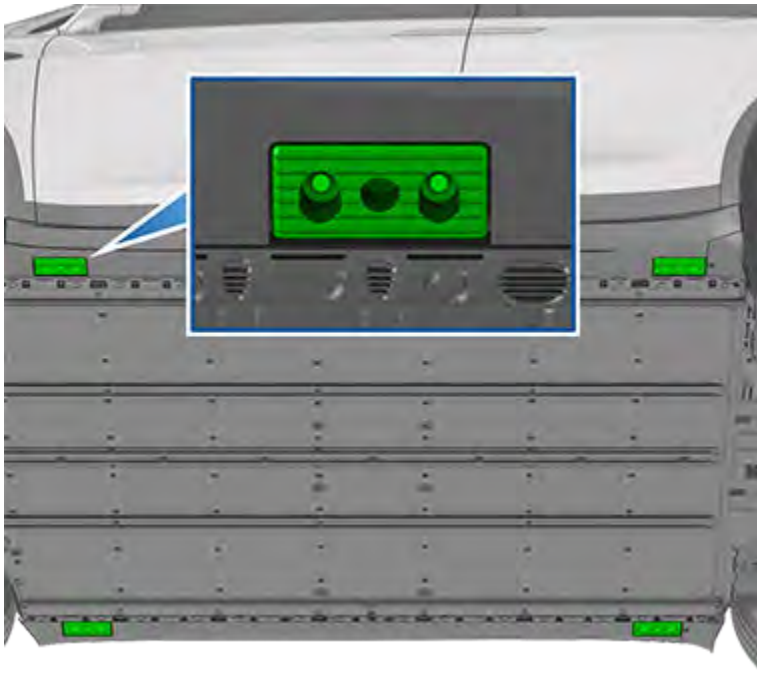
NOTE: The following illustration is provided to improve conceptual understanding. The exact location of the lift points may differ slightly. Check the vehicle itself for exact location of lift points.

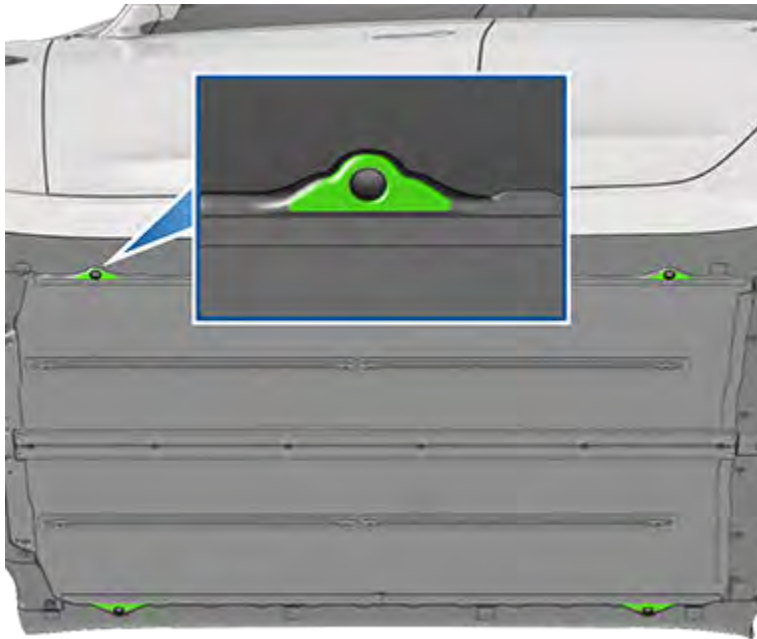






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5. Adjust the height and position of the lift arm pads to ensure that they are correctly located.
6. With assistance, raise the lift to the desired height, ensuring the lift arm pads remain in their correct positions.
7. Engage any lift safety locks. Follow the lift manufacturer's instructions.
8. After lowering the vehicle, disengage Jack Mode by touching **Controls** > **Service**.

Using a Jack and Jack Stand

1. Ensure Cybertruck Model S Model X Model 3 Model Y is located in a flat, stable, and secure area with enough space surrounding the vehicle to jack it.
2. Ensure the vehicle ride height is set to **Medium** and enable Jack Mode (**Controls** > **Service** > **Jack Mode** see [Jack Mode on page 800](#)) to disable self-leveling.

 **WARNING:** You MUST enable Jack Mode, otherwise the vehicle may try to self-level while on the jack. Failing to engage Jack Mode may cause serious injury or death.

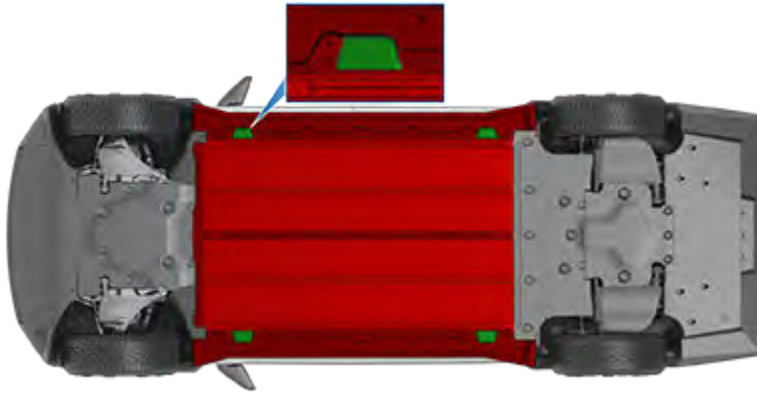
3. If available, chock the wheel diagonal to the corner you're working on (for example, if you are replacing the rear driver's side tire, chock the front passenger's side tire).
4. Remove the wheel cover from the wheel with the flat tire (see [Removing and Installing Wheel Covers on page 1407](#)).
5. Use the lug nut wrench to break loose the lug nuts on the wheel.
6. Place the jack under the vehicle's lift point (shown in green) corresponding to the location you are working on.

 **WARNING: DO NOT** position the jack under the Battery or side rails (shown in red).

Lift points:



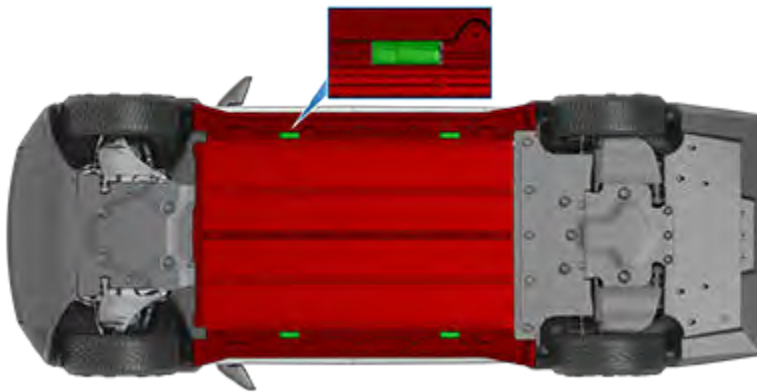
Maintenance



7. Following the jack manufacturer's instructions, begin to lift the vehicle, making sure to constantly monitor the contact with the lift point.
8. Place the jack stand under the appropriate jack stand location in the image corresponding to the area you're working on. Ensure the jack stand is appropriately oriented and does not touch any of the red areas in the image. Adjust to meet the jack's height. The vehicle should be able to be solely propped up with the jack stand.

⚠ WARNING: Do not get under the vehicle when it is propped up on the jack or jack stands. Doing so may cause serious injury or death.

Jack stand points:



9. Slowly lower the jack following manufacturer instructions, constantly monitoring the contact between the vehicle and the jack stand. Then release the jack from the vehicle's lift point and check that it is secure.
10. To lower the vehicle off of the jack stand, use the jack to raise the vehicle until the jack stand is no longer supporting the vehicle, remove the jack stand, and slowly lower the vehicle down.
11. Disengage Jack Mode by touching **Controls > Service > Jack Mode**.

Using a 2-Post Lift:

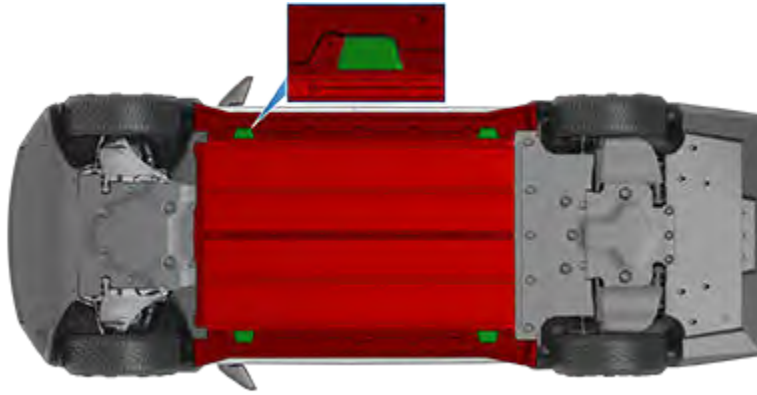
1. Ensure the vehicle ride height is set to **Medium** and enable Jack Mode (**Controls > Service > Jack Mode** see [Jack Mode on page 800](#)) to disable self-leveling.

⚠ WARNING: You **MUST** enable Jack Mode, otherwise the vehicle may try to self-level while on the jack. Failing to engage Jack Mode may cause serious injury or death.

2. Position the lift arm pads under the lift points at the locations shown.

⚠ WARNING: DO NOT position the lift arm pads under the Battery or side rails.

Lift points:



3. Lift the vehicle to working height.
4. Engage any lift safety locks. Follow the lift manufacturer's instructions for details.

⚠ WARNING: Failure to correctly engage the safety locks can result in serious injury or death.

5. When done, lower the vehicle down slowly and safely.
6. Disengage Jack Mode by touching **Controls > Service > Jack Mode**.

⚠ WARNING: The air suspension system automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. You **MUST** disable this system by engaging Jack mode before lifting or jacking. If you do not disable the air suspension, CybertruckModel SModel XModel 3Model Y can attempt to self-level, causing serious damage, bodily injury, or death.

⚠ WARNING: Never raise CybertruckModel SModel XModel 3Model Y when the charge cable is connected, even if charging is not in progress.

⚠ WARNING: Do not work on an incorrectly supported vehicle. Doing so can cause serious damage, bodily injury, or death.

⚠ CAUTION: It is your responsibility to be observant of the vehicle and its surroundings. Ensure the area is clear when lifting and lowering CybertruckModel SModel XModel 3Model Y and that the doors, front trunk, and liftgate/rear trunk/tailgate are closed as necessary to avoid damage.

⚠ CAUTION: **DO NOT** lift from under the Battery or side rails. Place the lift arm pads under the designated body lift points only. The locations shown are the only approved lifting points for CybertruckModel SModel XModel 3Model Y. Lifting at any other points can cause damage. Damage caused by incorrectly lifting CybertruckModel SModel XModel 3Model Y is not covered by the warranty.

Jack Mode

⚠ WARNING: Failure to enable Jack Mode can result in the vehicle self-leveling, resulting in damage, injury, or death.

If CybertruckModel SModel XModel 3Model Y is equipped with air suspension, it automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. To prevent damage when jacking or lifting the vehicle, you must activate Jack mode to disable self-leveling. Jack mode prevents the self-leveling that occurs automatically.

CybertruckModel SModel XModel 3Model Y automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. Before enabling **Jack Mode**:

1. Set the Suspension to **Very High** to allow for enough ground clearance for the jack.
2. Set the ride height to **Medium** to allow for enough ground clearance for the jack.

NOTE: Due to the large wheels and height of CybertruckModel SModel XModel 3Model Y, setting the ride height to **High** or **Very High** may not provide sufficient clearance for you to safely change the tire.

3. Enable **Jack Mode** (**Controls > Service > Jack Mode**).
4. To deactivate **Jack Mode**, press the brake pedal and touch **Controls > Service > Jack Mode** again. **Jack Mode** automatically cancels when you start to drive.



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When CybertruckModel SModel XModel 3Model Y is in **Jack Mode** mode, a red air suspension indicator lights up on the instrument panel.



NOTE: Jack mode may be unexpectedly enabled in situations where an object is supporting the vehicle's weight (for example the bumper of the vehicle is resting on a curb).

Parts and Accessories

Parts, Accessories, and Modifications

Use only genuine Tesla parts and accessories. Tesla performs rigorous testing on parts to ensure their suitability, safety, and reliability. Purchase these parts from Tesla, where they can be professionally installed and you can receive expert advice about modifications to CybertruckModel SModel XModel 3Model Y. Accessories are available for purchase online at the Tesla Shop. Some accessories may not be available in your market region or compatible with your exact vehicle.

NOTE: Adding accessories to your vehicle may impact expected range, vehicle dimensions, etc.

Tesla is unable to assess parts manufactured by other distributors and therefore accepts no responsibility if you use non-Tesla parts on CybertruckModel SModel XModel 3Model Y.

⚠ WARNING: Installing non-approved parts and accessories, or performing non-approved modifications, can affect the performance of CybertruckModel SModel XModel 3Model Y and the safety of its occupants. Any damage caused by using or installing non-approved parts, or by performing non-approved modifications, is not covered by the warranty.

⚠ WARNING: Tesla does not accept liability for death, personal injury or damage that occurs if you use or install non-approved accessories or make non-approved modifications.

Body Repairs

If your CybertruckModel SModel XModel 3Model Y is in a collision, contact Tesla or a Tesla-approved Body Shop to ensure that it is repaired with genuine Tesla parts. Tesla has selected and approved body shops that meet strict requirements for training, equipment, quality, and customer satisfaction.

Some repair shops and insurance companies might suggest using non-original equipment or salvaged parts to save money. However, these parts may not meet Tesla's high standards for quality, fit, and corrosion resistance. In addition, non-original equipment and salvaged parts (and any damage or failures they might cause) are not covered by the warranty.

Connecting Accessories to the 48V Power Feeds

CybertruckModel SModel XModel 3Model Y is equipped with two power feeds. The power feeds provide access to the 48V low voltage system, which can be used to power accessories.

⚠ CAUTION: Do not connect a power source (such as a solar panel or external battery) to a power feed. Doing so may damage CybertruckModel SModel XModel 3Model Y.

⚠ WARNING: The two power feeds are the only points at which you can connect accessories directly to the low voltage system. Do not use any other low voltage wiring in CybertruckModel SModel XModel 3Model Y to power accessories. Doing so can lead to unpredictable or unexpected results (such as a total loss of power steering) and can affect the performance of CybertruckModel SModel XModel 3Model Y and the safety of its occupants. Any damage caused by using or installing non-approved parts, or by performing non-approved modifications, is not covered by the warranty. Tapping into the power feeds should only be done by knowledgeable and experienced individuals. Tesla does not accept liability for death, personal injury or damage that occurs if you install accessories using non-approved methods or circuits.

48V Power Feed Specifications

There are two power feeds:

- One power feed is located on the roof (400W maximum draw).
- One power feed is located in the powered frunk (400W maximum draw).


Each power feed operates in the following range:

- Minimum: 28V
- Nominal: 44–50V
- Maximum: 58V

Each power feed contains three wires:


Wire Color	Function
Red with a blue stripe	Positive (+) terminal: Provides 48V power
Green	Provides access to the Local Interconnect Network (LIN)
Roof power feed: Black with a blue stripe Powered frunk power feed: Brown with a blue stripe	Negative (-) terminal: Provides a grounding point

NOTE: The power feeds are designed to stop providing power when current that exceeds the listed specifications is detected. If a power feed unexpectedly stops providing power, reset them by touching **Controls > Outlets & Mods > Reset**.

 **CAUTION:** If the wires in the vehicle do not match this information, use the mobile app to schedule a service appointment.

Accessing the Power Feed on the Roof

1. Ensure that CybertruckModel SModel XModel 3Model Y is powered off (see [Powering Off on page 374](#)).

 **WARNING:** Failure to ensure the vehicle is powered off can result in serious injury. Tesla recommends wearing appropriate personal protective equipment to mitigate any potential for injury.

2. Locate the strip of applique on the right side of the roof and use a flat, non-marring tool to gently lift under the edge and release the five clips that hold it in place. Lift upwards to remove the applique.



3. Locate the shrink-wrapped loop of wires. This is the power feed.



4. Remove the shrink wrap from the power feed, then splice or solder the accessory's wire harness to it.



WARNING: Use extreme care when accessing the power feed. Assume that the low voltage components of CybertruckModel SModel XModel 3Model Y, including all wires and connectors, are always energized. Because the 48V low voltage system operates at a higher voltage than a typical low voltage system, there is an increased risk of personal injury, arcing, or component damage if the low voltage components of CybertruckModel SModel XModel 3Model Y are handled improperly.



CAUTION: Carefully check the wiring of the accessory and ensure that you are connecting the positive (+) wire of the accessory to the positive wire (red with a blue stripe) of the power feed, and the negative (-) wire of the accessory to ground (black with a blue stripe). See [48V Power Feed Specifications on page 1426](#). Accessories without proper power and grounding may not function as expected, and may be damaged as a result.



CAUTION: Ensure that the wires are properly insulated (taped or heatshrunk) after splicing or soldering an accessory's wiring to the power feed.

5. Ensure your accessory or attachment is properly secured to the vehicle.
6. Replace the roof applique by pressing it into place to ensure that the trim clips are secured.
7. Power on the vehicle (see [Starting and Powering Off on page 373](#)) and enable power to the power feed, if desired (see [Enabling Power to the Power Feeds on page 1431](#)).

Accessing the Power Feed in the Powered Frunk

To access the power feed in the powered frunk, you must first remove the frunk lining.

1. Open the powered frunk (see [Powered Frunk on page 1185](#)).
2. Ensure that CybertruckModel SModel XModel 3Model Y is powered off (see [Powering Off on page 374](#)).



WARNING: Failure to ensure the vehicle is powered off can result in serious injury. Tesla recommends wearing appropriate personal protective equipment to mitigate any potential for injury.

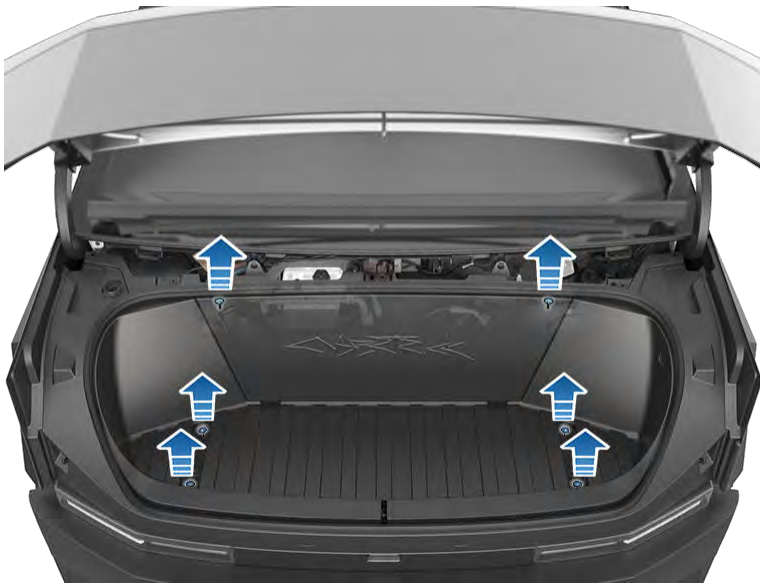
3. Remove the frunk maintenance panel by pulling it upwards to release the trim clips that hold it in place.



4. Remove the two bump stops (one on each side above the headlights) by turning them counterclockwise.
5. Remove the windshield washer fluid cap.
6. Using a trim tool or flat, plastic tool, remove the two pieces of trim on the bottom of the frunk lining to expose the four bolts that hold the lining in place.



7. Using a 10 mm socket, remove the four bolts on the bottom of the frunk and the two bolts beneath the maintenance panel.



8. Carefully lift the frunk lining partially upward and unplug the emergency interior release connector. Once the connector is unplugged, the frunk lining can be removed.



CAUTION: As you remove the frunk lining, be careful not to damage or jostle the connector for the powered frunk emergency interior release.

9. Locate the shrink-wrapped wires. This is the power feed.



10. Remove the shrink wrap from the power feed, then splice or solder the accessory's wire harness to it.

- ⚠ WARNING:** Use extreme care when accessing the power feed. Assume that the low voltage components of CybertruckModel SModel XModel 3Model Y, including all wires and connectors, are always energized. Because the 48V low voltage system operates at a higher voltage than a typical low voltage system, there is an increased risk of personal injury, arcing, or component damage if the low voltage components of CybertruckModel SModel XModel 3Model Y are handled improperly.
- ⚠ CAUTION:** Carefully check the wiring of the accessory and ensure that you are connecting the positive (+) wire of the accessory to the positive wire (red with a blue stripe) of the power feed, and the negative (-) wire of the accessory to ground (brown with a blue stripe). See [48V Power Feed Specifications on page 1426](#). Accessories without proper power and grounding may not function as expected, and may be damaged as a result.
- ⚠ CAUTION:** Ensure that the wires are properly insulated (taped or heatshrinked) after splicing or soldering an accessory's wiring to the power feed.

11. Ensure your accessory or attachment is secured to the vehicle.
12. Replace the powered trunk lining, connect the emergency interior release connector, and replace all fasteners and trim. Torque the bolts to 12 Nm (8.87 ft-lb).
13. Power on the vehicle (see [Starting and Powering Off on page 373](#)) and enable power to the power feed, if desired (see [Enabling Power to the Power Feeds on page 1431](#)).

Enabling Power to the Power Feeds

Once you have connected an accessory to a power feed, enable power from the touchscreen. Touch **Controls > Outlets & Mods** and then touch a power feed on the touchscreen to enable it.

- ⚠ CAUTION:** Leaving an accessory powered depletes the High Voltage Battery. Power to the power feed shuts off when the capacity of the High Voltage Battery is very low.

By default, the power feeds stop providing power when you exit CybertruckModel SModel XModel 3Model Y and close the doors. To instead keep the power feeds on when you leave the vehicle, touch **Keep On Cabin and Bed Outlets** (see [Keep On Cabin and Bed Outlets on page 1130](#)).

Using RFID Transponders

When attaching an RFID transponder (used by many automated toll systems) inside CybertruckModel SModel XModel 3Model Y, place the transponder next to the rear view mirror. This ensures best results and minimizes any obstruction to your driving view. Refer to the RFID manufacturer's instructions for specific placement.


NOTE: You can also attach a weather-proof transponder to the front license plate.



Do It Yourself Maintenance

Learn how to perform simple Do It Yourself procedures, such as replacing wiper blades and cabin filters, or installing the paint protection film kitsuch as replacing the wiper blade and HEPA filter. Go to <https://www.tesla.com/support/do-it-yourself-guides> for instructions, animations, and videos of these procedures.

NOTE: Due to market region or vehicle configuration specifics, some parts and procedures may not be available for your vehicle. When navigating to <https://www.tesla.com/support/do-it-yourself-guides>, select your vehicle, region, and/or language to see an updated list of parts and accessories available for your region.

 **CAUTION:** Perform each procedure in a dry and well-lit area. For your safety, only perform a procedure if you feel comfortable doing so, and always follow provided instructions.



Identification Labels

Vehicle Identification Number

You can find the VIN at the following locations:

- The Tesla mobile app.
- Touch **Controls** > **Software**.
- Stamped onto the driver's side A-pillar. Can be seen by looking through the windshield on the driver's side of the vehicle.



- Printed on the Vehicle Certification label, located on the door pillar. Can be seen when the driver's door is open.





Emission Control Label

The emission control label is located on the opening face of the powered frunk.





Vehicle Loading

It is important to understand your vehicle's original tire sizes and pressures, and the GVWR (Gross Vehicle Weight Rating) and GAWR (Gross Axle Weight Rating). This information can be found on two labels attached to the front door pillar on the driver's side of the vehicle.



1. Tire and Loading Information Label
2. Vehicle Certification Label

 **WARNING:** Overloading CybertruckModel SModel XModel 3Model Y has an adverse effect on braking and handling, which can compromise your safety or cause damage.

 **CAUTION:** Never store large amounts of liquid in CybertruckModel SModel XModel 3Model Y. A significant spill can cause electrical components to malfunction.

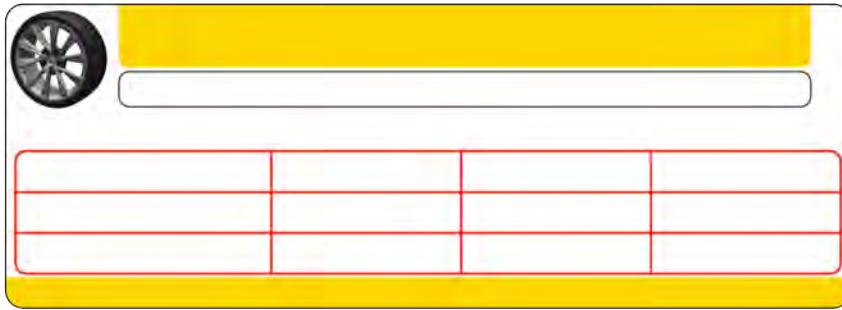
Tire and Loading Information Label

The Tire and Loading Information label provides:

- The maximum number of occupant seating positions.
- The maximum vehicle capacity weight.
- The size of the original tires.
- The cold inflation pressures for the original front and rear tires. These pressures are recommended to optimize ride and handling characteristics.



Specifications



Never change this label, even if you use different tires in the future.

NOTE: If CybertruckModel SModel XModel 3Model Y is loaded to its full capacity, double check all tires to ensure they are inflated to their recommended pressure levels (see [Maintaining Tire Pressures on page 1400](#)).

⚠ WARNING: Tire pressures printed on the Tire and Loading Information label DO NOT APPLY to towing. When towing, tire pressures must be increased. For information about the tire pressures required when towing, refer to see [Towing a Trailer on page 1258](#).

Vehicle Certification Label

⚠ WARNING: The Vehicle Certification label specifies the weight ratings for CybertruckModel SModel XModel 3Model Y based on the tires that were installed at time of manufacture and the tire pressures indicated on the Tire and Loading Information label. However, the weight ratings will change if you change the factory-installed tires or inflate tires to a pressure that differs from those shown on the Tire and Loading Information label.

The Vehicle Certification label provides:

- GVWR - Gross Vehicle Weight Rating. The maximum allowable total mass of CybertruckModel SModel XModel 3Model Y. This is calculated as the weight of CybertruckModel SModel XModel 3Model Y equipped with the heaviest factory selectable options, all passengers, fluids, and cargo.
- GAWR FRT and GAWR RR - Gross Axle Weight Rating for the front and rear axles. The GAWR is the maximum distributed weight that each axle can support.

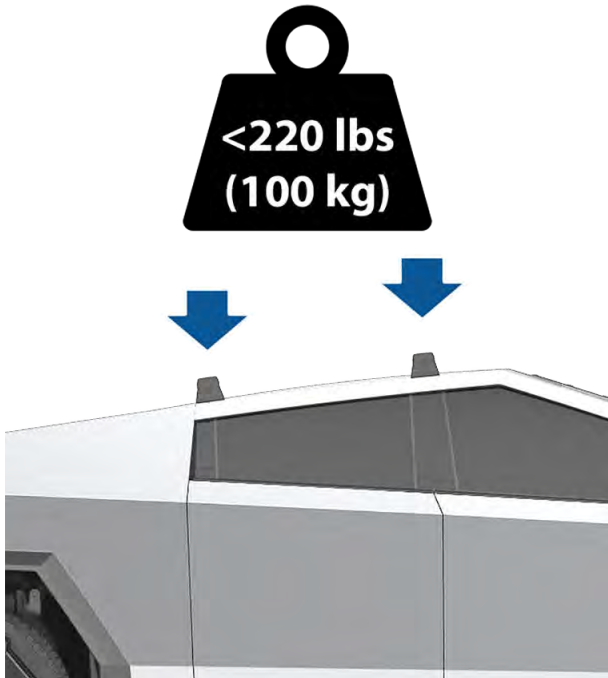


⚠ CAUTION: To prevent damage, never load CybertruckModel SModel XModel 3Model Y so that it is heavier than GVWR or exceeds the individual GAWR weights.

Roof Racks

CybertruckModel SModel XModel 3Model Y supports the use of Tesla-approved roof racks. Roof racks can be installed over the roof, over the bed, or both. To install roof racks, you must use only roof rack systems that have been approved by Tesla. You can find the roof rack instructions in the box or on the Tesla Shop.

Maximum Load on Roof Racks: 220 lb (100 kg) per 2-crossbar set. For example, a 2-crossbar set placed on the roof has a maximum load of 220 lb. An additional 2-crossbar set placed over the cargo bed also has a maximum load of 220 lb (100 kg).



See [Carrying Accessories and Crossbars on page 1266](#) for more information.

CAUTION: Failure to use the correct roof racks and follow the instructions can cause significant damage.

WARNING: When loading the roof racks, distribute the load evenly and maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving heavily loaded roof racks.

Calculating Load Limits

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX lbs or XXX kg" on the "Tire and Loading Information" label.
2. Determine the combined weight of all occupants that will ride in the vehicle.
3. Subtract the combined weight of the occupants from XXX lbs or XXX kg (see Step 1).
4. The resulting figure equals the available cargo load capacity. For example, if the "XXX" amount equals 1400 lbs (635 kg) and there will be five 150 lb (68 kg) passengers in the vehicle, the amount of available cargo capacity is 650 lbs (1400 - 750 (5 x 150) = 650 lbs) or 295 kg (635 - 340 (5 x 68) = 295 kg).
5. Determine the combined cargo weight being loaded on the vehicle. That weight must not exceed the available cargo load capacity calculated in Step 4.

WARNING: The powered frunk and the cargo bed are the preferred places to carry objects. In a collision, or during hard braking and sharp turns, loose items in the cabin could injure occupants.

Example Load Limit Calculations

How much cargo Cybertruck Model S Model X Model 3 Model Y can carry depends on the number and weight of passengers. The following calculated load limit examples assume passengers weigh 150 lbs (68 kg). If passengers weigh more or less, available cargo weight decreases or increases respectively.

Driver and one passenger

Description	Total
Vehicle capacity weight	954 lbs (433 kg)
Subtract occupant weight (2 x 150 lbs/68 kg)	300 lbs (136 kg)





Specifications

Description	Total
Available cargo weight	654 lbs (297 kg)

Driver and four passengers

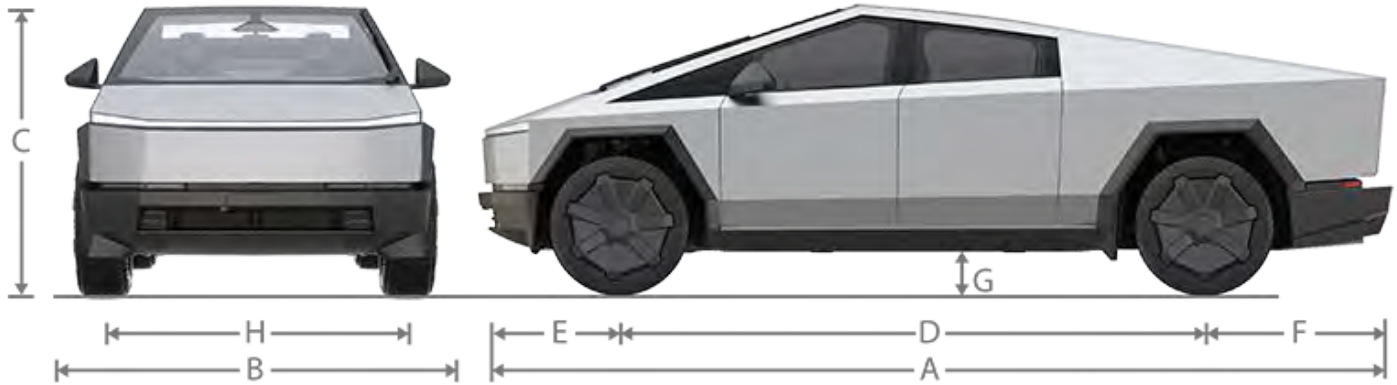
Description	Total
Vehicle capacity weight	954 lbs (433 kg)
Subtract occupant weight (5 x 150 lbs/68 kg)	750 lbs (340 kg)
Available cargo weight	204 lbs (93 kg)

Cautions and Warnings

-  **WARNING:** Drive cautiously when Cybertruck is carrying a large load. Increase braking distance, reduce speed when making sharp turns, and avoid abrupt steering. Failure to drive cautiously increases the risk of losing control which can result in property damage, personal injury, and death.
-  **WARNING:** The loading capacity of your vehicle is limited either by how much space is available (volume capacity) or by how much weight the vehicle can carry (payload capacity). When you have loaded Cybertruck to its maximum weight capacity, do not add more cargo, even if there is space available. Overloading, or improper loading, can contribute to property damage, personal injury, or death.

Dimensions, Weights, and Cargo Capacity

Dimensions - Exterior



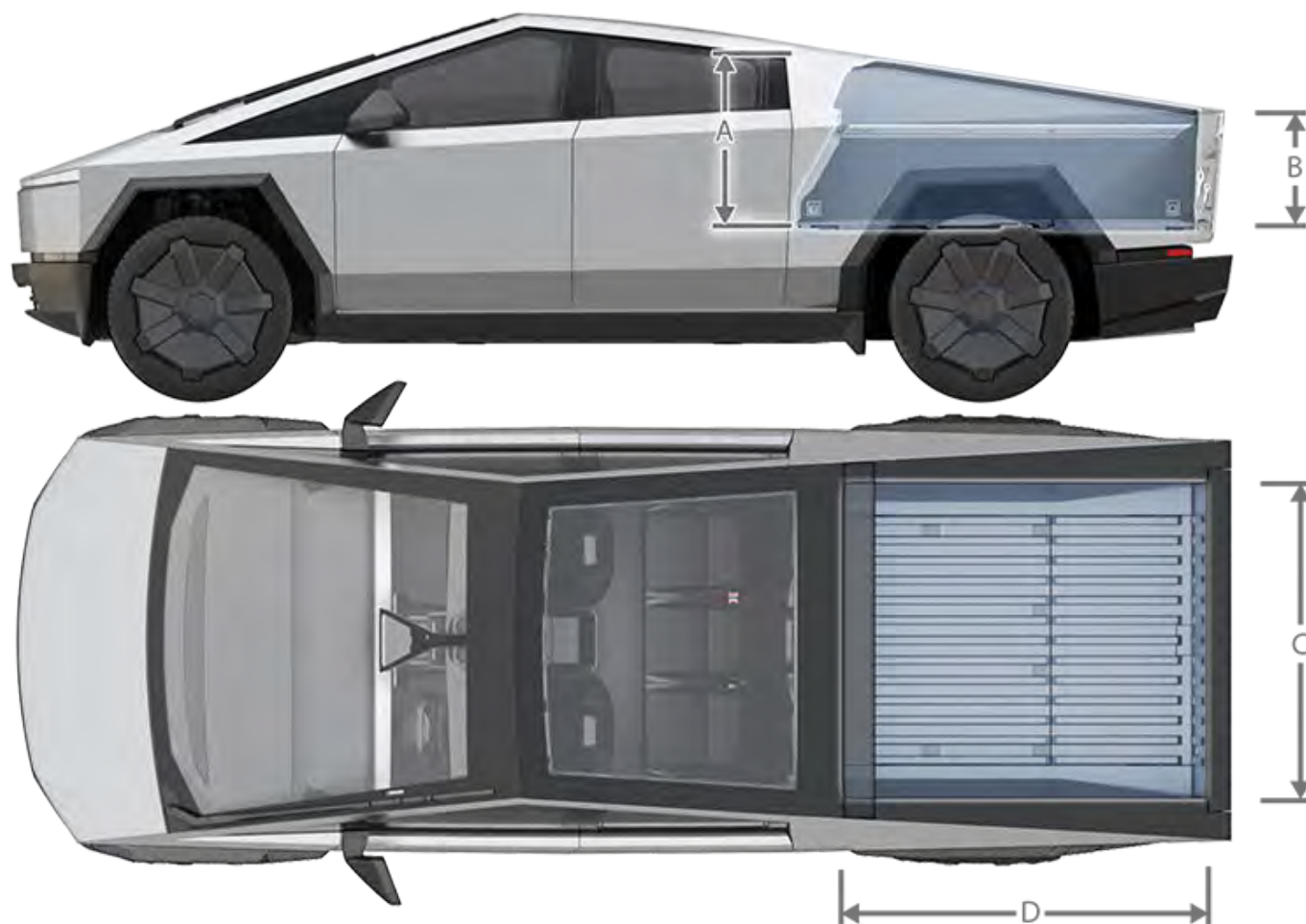
NOTE: Adding accessories can affect the dimensions listed.

Callout	Description	Measurement (in)	Measurement (mm)
A	Overall Length	223.74	5,682.9
B - Overall Width	Including mirrors	95.01	2,413.3
	Folded mirrors	86.64	2,200.7
	Excluding mirrors	79.99	2,031.8
C - Overall Height	Entry/Exit air setting	68.54	1740.8
	Low air setting	69.13	1755.8
	Medium air setting	70.70	1795.8
	High air setting	73.06	1855.8
	Very High air setting	74.64	1895.8
	Extract (highest) air setting	76.61	1945.8
D	Wheelbase	143.11	3,635.0
E - Overhang	Front	34.58	878.3
F - Overhang	Rear	46.05	1,169.6
G - Ground Clearance	Entry/Exit air setting	7.93	201.3
	Low air setting	8.52	216.3
	Medium air setting	10.09	256.3
	High air setting	12.45	316.3
	Very High air setting	14.03	356.3
	Extract (highest) air setting	16.00	406.3
H - Track	Front and Rear	69.76	1,772.0



Specifications

Dimensions - Cargo Bed



Callout	Description	Measurement (in)	Measurement (mm)
A	Maximum Height - Front	28.66	727.9
B	Maximum Height - Rear	19.89	505.2
C	Width at Floor	51.00	1,295.4
D	Length at Floor	72.92	1,852.2

Dimensions - Interior Cabin

Location	Measurement (in)	Measurement (mm)
Head Room - Front	41.69	1,058.8
Head Room - Rear	39.05	991.9
Leg Room - Front	41.09	1,043.6
Leg Room - Rear	40.90	1,038.8
Shoulder Room - Front	63.31	1,608.0
Shoulder Room - Rear	62.06	1,576.4

Location	Measurement (in)	Measurement (mm)
Hip Room - Front	57.22	1,453.3
Hip Room - Rear	57.22	1,453.5

Weights - Vehicle

NOTE: Weight values are approximate and can vary slightly depending on a vehicle's options.

	Dual Motor All Season	Dual Motor All Terrain	Tri Motor All Season	Tri Motor All Terrain
Curb Mass Total*	6,634 lb (3,009 kg)	6,669 lb (3,025 kg)	6,863 lb (3,113 kg)	6,898 lb (3,129 kg)
Curb Mass - Front Axle	3,287 lb (1,491 kg)	3,305 lb (1,499 kg)	3,336 lb (1,513 kg)	3,353 lb (1,521 kg)
Curb Mass - Rear Axle	3,347 lb (1,518 kg)	3,364 lb (1,526 kg)	3,527 lb (1,600 kg)	3,545 lb (1,608 kg)
Payload	2,200 lb (998 kg)	2,500 lb (1,134 kg)	2,000 lb (907 kg)	2,270 lb (1,030 kg)
GVWR Total**	8,834 lb (4,007 kg)	9,169 lb (4,159 kg)	8,863 lb (4,020 kg)	9,169 lb (4,159 kg)
GVWR - Front Axle	4,096 lb (1,858 kg)	4,107 lb (1,863 kg)	4,019 lb (1,823 kg)	4,160 lb (1,887 kg)
GVWR - Rear Axle	4,738 lb (2,149 kg)	5,062 lb (2,296 kg)	4,844 lb (2,197 kg)	5,009 lb (2,272 kg)
GAWR - Front Axle***	4,255 lb (1,930 kg)	4,255 lb (1,930 kg)	4,255 lb (1,930 kg)	4,255 lb (1,930 kg)
GAWR - Rear Axle	5,009 lb (2,272 kg)	5,247 lb (2,380 kg)	5,009 lb (2,272 kg)	5,247 lb (2,380 kg)
Maximum Towing Capacity	11,000 lb (4,990 kg)	11,000 lb (4,990 kg)	11,000 lb (4,990 kg)	11,000 lb (4,990 kg)

For more details on towing, see [Towing a Trailer on page 1258](#).



Specifications

	Dual Motor All Season	Dual Motor All Terrain	Tri Motor All Season	Tri Motor All Terrain
*Curb Mass = Weight of the vehicle with correct fluid levels, no occupants and no cargo. **GVWR = Gross Vehicle Weight Rating ***GAWR = Gross Axle Weight Rating				

WARNING: When loading cargo, always consider the vehicle's Gross Vehicle Weight Rating (GVWR). The GVWR is the maximum allowable total mass of the vehicle including all passengers, fluids, and cargo. In addition, never exceed the GAWR (Gross Axle Weight Rating) on a single axle. GVWR and GAWR are printed on the [Vehicle Certification Label on page 1436](#), located on the door pillar and are also detailed in [Weights - Vehicle on page 1441](#).

CAUTION: Follow all local regulations when driving with loaded cargo on public roads.

Weights - Nominal GVWR Reference

The following loading scenario assumes that cargo is uniformly distributed in their respective areas (cargo bed and front trunk), and the cabin is fully occupied by five people weighing 150 lb (68 kg) each. In this scenario, loads heavier than the combined weights as specified for passengers or cargo would exceed the vehicle's GVWR.

Location	Dual Motor All Season	Dual Motor All Terrain	Tri Motor All Season	Tri Motor All Terrain
Cargo Bed	1,010 lb (458 kg)	1,310 lb (594 kg)	919 lb (417 kg)	1080 lb (490 kg)
Front Trunk	441 lb (200 kg)	441 lb (200 kg)	331 lb (150 kg)	441 lb (200 kg)

Cargo - Weight Limits

CAUTION: Exceeding the weights specified can cause damage not covered by the warranty.

The front trunk and under bed compartments are designed to hold the following weights:

Front Trunk	Maximum 441 lb (200 kg)
Under Bed Compartment	Maximum 220 lb (100 kg)

Cargo - Volumes

WARNING: The loading capacity of your vehicle is limited either by how much space is available (volume capacity) or by how much weight the vehicle can carry (payload capacity). When you have loaded Cybertruck to its maximum weight capacity, do not add more cargo, even if there is space available. Overloading, or improper loading, can contribute to property damage, personal injury, or death.

Location	Cubic Feet	Liters
Front trunk	7.1	200
Cargo Bed (enclosed) - Above load floor	56.2	1,591
Cargo Bed - Lower storage compartment	3.4	97
Cabin - Behind front seats with rear seat cushions folded up	54.2	1,533



Location	Cubic Feet	Liters
Total volume with five passengers	66.7	1,888
Total volume with two passengers	120.9	3,421

Subsystems

Motor Type

Motor Type	Dual Motor	Tri-Motor
Front	One AC induction motor, liquid-cooled, with variable frequency drive.	One AC permanent magnet synchronous motor, liquid-cooled, with variable frequency drive.
Rear	One AC permanent magnet synchronous motor, liquid-cooled, with variable frequency drive.	Two AC induction motors, liquid-cooled, with variable frequency drive.

Transmission

Type	Dual Motor	Tri-Motor
Type	Single speed fixed gear	Single speed fixed gear
Overall Final Drive Ratio	Front and Rear unit motors: 15.02:1	Front unit motor: 15.02:1 Rear unit motor: 2 Independent Gearsets: 15.02:1
Reverse Gear	Reverse direction of motor, limited to 15 mph (24 km/h).	Reverse direction of motor, limited to 15 mph (24 km/h).

Steering

Steering	Specifications
Type	4-wheel directional steer-by-wire
Number of turns lock to lock	0.94 (340 degrees)
Turning Circle (curb to curb)	Approximately 43.5 ft (13.25 meters)

Brakes

Brakes	Specifications
Type	4-wheel anti-lock braking system (ABS) with Electronic Brake Force Distribution, Integrated Advanced Stability Control and Electronic Accelerator pedal actuated regenerative braking system.
Calipers	Front: Four piston, fixed
	Rear: Single piston, floating
Rotor Diameters (ventilated)	Front: 13.8 in (351 mm)
	Rear: 14 in (356 mm)
Front Rotor thickness	New: 1.26 in (32 mm)



Specifications

Brakes	Specifications
	Service limit: 1.18 in (30 mm)
Rear Rotor thickness	New: 0.91 in (23 mm)
	Service limit: 0.83 in (21 mm)
Front Brake Pad Thickness (excluding back plate)	New: 0.39 in (10 mm)
	Service limit: 0.12 in (3 mm)
Rear Brake Pad Thickness (excluding back plate)	New: 0.43 in (11 mm)
	Service limit: 0.08 in (2 mm)
Parking brake	Electrically actuated parking brake calipers

Suspension

Suspension	Specifications
Front	Independent, double wishbone, air spring with adaptive damper, stabilizer bar.
Rear	Independent, double wishbone, air spring with adaptive damper, stabilizer bar.

Battery - Low Voltage

Battery - Low Voltage	Specifications
Rating	4 amp hour
Voltage	48V

Battery - High Voltage

Battery - High Voltage	Specifications
Type	Liquid-cooled lithium ion (Li-ion)
Nominal Voltage	700V DC
Temperature Range	Do not expose CybertruckModel SModel XModel 3Model Y to ambient temperatures above 149° F (65° C) or below -22° F (-30° C) for more than 24 hours at a time.

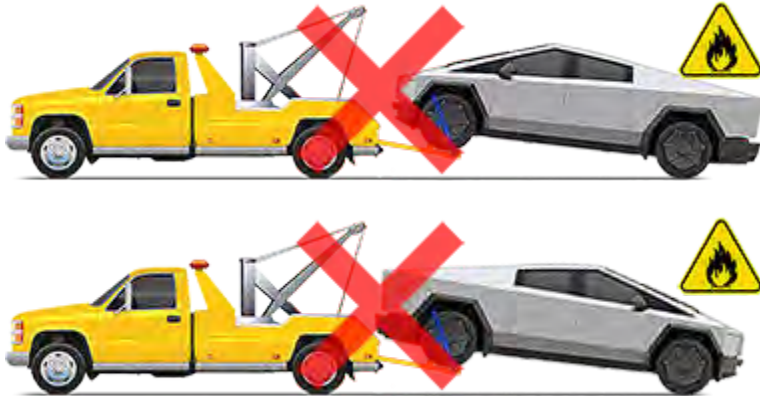


Instructions for Transporters

DO NOT TRANSPORT WITH WHEELS ON THE GROUND

The front motor and rear motor(s) in CybertruckModel SModel XModel 3Model Y may generate power when the wheels spin. Always transport CybertruckModel SModel XModel 3Model Y with all four tires off the ground. Ensure that the tires are unable to spin at any time during transport.

⚠ WARNING: NEVER TRANSPORT YOUR VEHICLE WITH THE TIRES IN A POSITION WHERE THEY CAN SPIN. DOING SO CAN LEAD TO SIGNIFICANT DAMAGE AND OVERHEATING. IN RARE CASES EXTREME OVERHEATING MAY CAUSE THE SURROUNDING COMPONENTS TO IGNITE.



Do not transport CybertruckModel SModel XModel 3Model Y using any method that is not specified by Tesla. Adhere to the instructions provided here and observe all warnings and cautions. Damage caused by improper transporting of your vehicle is not covered by the warranty.

NOTE: Tesla is not liable or responsible for reimbursing services not dispatched through Tesla Roadside Assistance.

Approved Methods for Transporting

A flatbed truck or comparable transport vehicle is the recommended method of transporting CybertruckModel SModel XModel 3Model Y. CybertruckModel SModel XModel 3Model Y can face either direction on the truck bed.



⚠ CAUTION: Use a flatbed truck with a bed that is at least 21 ft (6.5 meters) long (A). Before attempting to tow CybertruckModel SModel XModel 3Model Y, always check the tow truck's recommended loading capacity against the gross vehicle weight rating (GVWR) of CybertruckModel SModel XModel 3Model Y (see [Dimensions, Weights, and Cargo Capacity on page 1439](#)) to ensure that the flatbed truck is capable.

Activate Transport Mode before repositioning CybertruckModel SModel XModel 3Model Y (if necessary) and winching it onto a flatbed tow truck. For more information, see [Activate Transport Mode on page 1447](#).



Instructions for Transporters

If CybertruckModel SModel XModel 3Model Y has no low voltage power, attempt to jump start the low voltage system first so that you can then activate Transport Mode. For more information about jump starting, see [If Vehicle Has No Power on page 1446](#).

⚠ CAUTION: CybertruckModel SModel XModel 3Model Y uses steer-by-wire technology. As a result, you will be unable to use the steering wheel to turn the wheels if CybertruckModel SModel XModel 3Model Y has no power.

NOTE: Do not transport CybertruckModel SModel XModel 3Model Y with the front or rear wheels on dollies unless absolutely necessary for a short distance. If you are transporting CybertruckModel SModel XModel 3Model Y on dollies, ensure that a steering wheelsteering yoke (or steering wheel) lock is applied and care is taken to prevent the front wheels from spinning.

⚠ CAUTION: Before using dollies, check the manufacturer's specifications and recommended loading capacity against the vehicle weight rating and axle weight rating of CybertruckModel SModel XModel 3Model Y, as specified by the vehicle certification label (see [Vehicle Loading on page 1435](#)).

⚠ CAUTION: DO NOT TRANSPORT YOUR VEHICLE IF THERE IS ANY CHANCE OF ANY OF THE WHEELS SPINNING.

⚠ CAUTION: Tesla is not responsible for any damage caused by or during the transport of CybertruckModel SModel XModel 3Model Y, including personal property damage or damage caused by using self-loading dollies or tire skates.

⚠ WARNING: CybertruckModel SModel XModel 3Model Y is equipped with high voltage and low voltage components that may be compromised as a result of a collision (see [Electric Vehicle Components on page 1366](#)). Before transporting CybertruckModel SModel XModel 3Model Y, it is important to assume these components are energized. Always follow high voltage safety precautions (wearing personal protection equipment, etc.) until emergency response professionals have evaluated the vehicle and can accurately confirm that all high voltage systems are no longer energized. Failure to do so may result in serious injury.

If Vehicle Has No Power

If CybertruckModel SModel XModel 3Model Y has no low voltage power:

1. Open the powered frunk. See [Opening the Powered Frunk with No Power on page 1451](#).
2. Jump start the low voltage battery. See [Jump Starting on page 1455](#).

CybertruckModel SModel XModel 3Model Y must have low voltage power to open the doors from the outside or use the instrument clustertouchscreen.

⚠ WARNING: It may be more difficult to steer CybertruckModel SModel XModel 3Model Y when the vehicle is being supported by an external low voltage power supply. The wheels may not be as responsive to the steering wheel as expected, and extreme caution should be taken when repositioning CybertruckModel SModel XModel 3Model Y.

⚠ CAUTION: CybertruckModel SModel XModel 3Model Y uses a 48V low voltage architecture. As a result, some functions may be unavailable or degraded if you are supporting CybertruckModel SModel XModel 3Model Y with less than 30V (for example, another vehicle or a 12V portable jump starter).

⚠ CAUTION: Avoid using low voltage components of CybertruckModel SModel XModel 3Model Y (such as the climate control system, cabin USB-C ports, lights, etc.) when the vehicle is being supported by an external low voltage power supply. Doing so may disable low voltage systems and make it necessary to jump start CybertruckModel SModel XModel 3Model Y again.

NOTE: Tow providers: If the vehicle ran out of range, see [Running Out of Range on page 932](#) for more information on transporting the vehicle to a charging station and preparing the vehicle to charge.

If you are unable to jump start CybertruckModel SModel XModel 3Model Y and the touchscreen is not accessible, use tire skates to re-position the rear tires, keeping front tires on the ground. When using tire skates, be sure to use skates of sufficient size to avoid contact between the tire and the bed/pavement. Before using tire skates, always check the manufacturer's specifications and recommended loading capacity.

Disable the Self-Leveling Air Suspension System

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power (or is being supported by an external low voltage power supply) you will not be able to enter Jack Mode.

Your CybertruckModel SModel XModel 3Model Y is equipped with an air suspension system that automatically self-levels, even when the vehicle is "asleep" and the touchscreen is powered off. To prevent damage, you must activate Jack Mode to disable self-leveling:



1. Touch **Controls** > **Ride and Handling** on the touchscreen.
2. Press the brake pedal, and then touch **Medium** to maximize ride height.
3. Touch **Controls** > **Service** > **Jack Mode**.



NOTE: Jack Mode cancels if you touch the button again or when driving speed exceeds 4 mph (7 km/h).

Activate Transport Mode

Transport Mode keeps the parking brake disengaged while winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck. When active, Transport Mode displays a message indicating that the vehicle will remain free-rolling. The following are required to enable Transport Mode:

- Low voltage power. If CybertruckModel SModel XModel 3Model Y has no low voltage power, attempt to jump start the low voltage system so that you can use the touchscreen to activate Transport Mode (see [If Vehicle Has No Power on page 1446](#)).
- CybertruckModel SModel XModel 3Model Y must detect a key. Transport Mode is available only when a key is detected.
- Ensure the vehicle is not connected to a charger. Transport Mode is not available if CybertruckModel SModel XModel 3Model Y is still plugged in.

To activate Transport Mode:

1. Ensure the vehicle is in Park and that it is not connected to a charge cable.
2. Check the tires and make sure CybertruckModel SModel XModel 3Model Y is secure.
 -  **WARNING:** Ensure that the wheels are secure and that CybertruckModel SModel XModel 3Model Y has continuous low voltage support while it is in Transport Mode. If there is a loss of low voltage power (for example, if the low voltage battery does not self-recover before activating Transport Mode or if the external power supply becomes disconnected) there is a risk of rollaway.
3. Press and hold the brake pedal, and then on the touchscreen, touch **Controls** > **Service** > **Towing**. The touchscreen displays a message reminding you how to properly transport CybertruckModel SModel XModel 3Model Y.
4. Touch **Transport Mode**. The **Transport Mode** button turns blue, and CybertruckModel SModel XModel 3Model Y is now free-rolling and can slowly be rolled (no faster than walking speed) for short distances or winched.
 -  **WARNING:** Power steering may be disabled when CybertruckModel SModel XModel 3Model Y is in Transport Mode. The steering system may be less responsive and the steering wheel may be more difficult to turn. Use extreme caution when repositioning the wheels of CybertruckModel SModel XModel 3Model Y while in Transport Mode.

To cancel Transport Mode, touch **Transport Mode** again or shift CybertruckModel SModel XModel 3Model Y into Park. If your phone key is not detected, canceling **Transport Mode** powers off CybertruckModel SModel XModel 3Model Y. You may need your key card to restart the vehicle.

NOTE: Transport Mode is only intended to allow for winching CybertruckModel SModel XModel 3Model Y onto a flatbed truck or repositioning the vehicle out of a parking space. While in Transport Mode, the tires are allowed to rotate slowly (under 3 mph or 5 km/h) and for a very short distance (less than 30 feet or 10 meters). Exceeding these boundaries can lead to significant damage and overheating that is not covered by the warranty.

NOTE: If you are unable to activate Transport Mode (because, for example, the electrical system is not working and you are unable to jump start the low voltage system), use tire skates to reposition CybertruckModel SModel XModel 3Model Y. Before doing so, always check the manufacturer's specifications and recommended loading capacity.

Pull onto the Flatbed Truck From the Rear

To pull CybertruckModel SModel XModel 3Model Y from the rear, use the tow hitch:

1. Check the tires.
2. Remove the rear tow hitch cover. See [Accessing the Trailer Hitch Assembly on page 1263](#).
3. Attach the winch cable to the cutouts on either side of the tow hitch.



Instructions for Transporters



4. Activate Transport Mode. See [Activate Transport Mode on page 1447](#).

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you will need to jump start it before activating Transport Mode. See [If Vehicle Has No Power on page 1446](#).

5. Remove the tire chocks.
6. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.
7. If CybertruckModel SModel XModel 3Model Y is in Transport Mode, deactivate it by touching **Transport Mode** again.

Pull onto the Flatbed Truck From the Front

To pull CybertruckModel SModel XModel 3Model Y onto a flatbed truck from the front, use one or both of the square tow hooks beneath the front fascia:

1. Chock the tires.
2. Attach the winch cable to the tow hook(s). Either one or both tow hooks can be used.



3. Activate Transport Mode. See [Activate Transport Mode on page 1447](#).

NOTE: If CybertruckModel SModel XModel 3Model Y has no low voltage power, you will need to jump start it before activating Transport Mode. See [If Vehicle Has No Power on page 1446](#).

4. Remove the tire chocks.
5. Pull CybertruckModel SModel XModel 3Model Y slowly onto the flatbed truck.
6. If CybertruckModel SModel XModel 3Model Y is in Transport Mode, deactivate it by touching **Transport Mode** again.



Secure the Tires

The vehicle's tires must be secured onto the flatbed using the eight-point tie-down method.

- Remove any wheel covers before securing the tires.

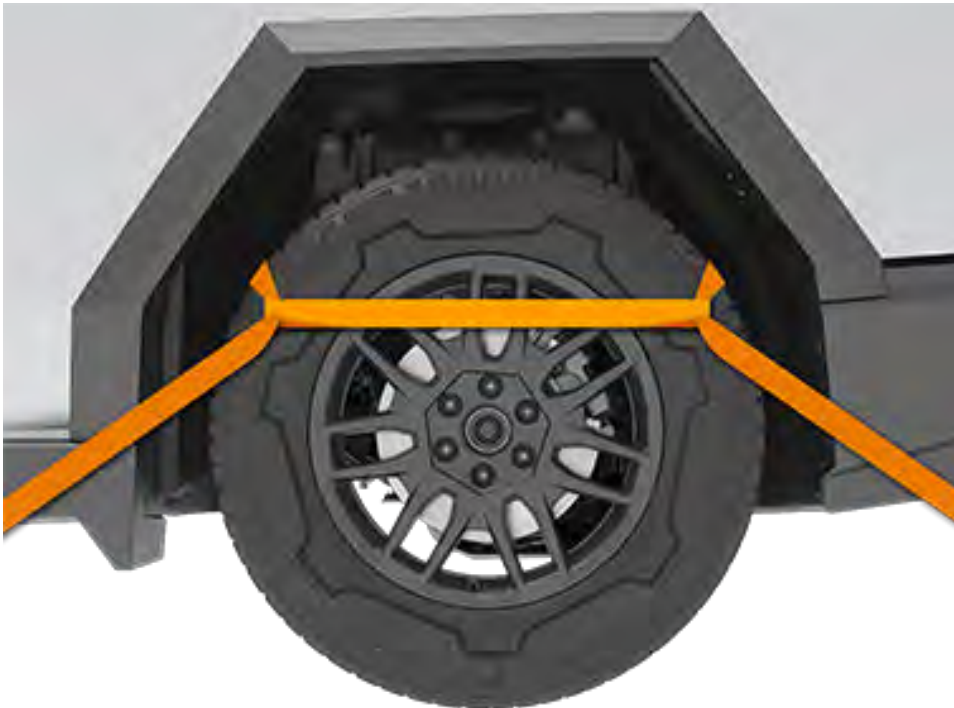


CAUTION: Failure to remove wheel covers before attaching tie-down straps may result in damage to the wheel covers.

- Ensure any metal parts on the tie-down straps do not touch the face of the wheels.
- Do not place tie-down straps over body panels or through the wheels.



CAUTION: Attaching the tie-down straps to the chassis, suspension or other parts of the vehicle's body may cause damage.





Contacting Tesla Roadside Assistance

Tesla Roadside Assistance is available to you 24 hours a day, 365 days a year, for the duration of your warranty period. Tesla Roadside Assistance is also available to speak with roadside service professionals to answer any questions and explain the proper procedure for transporting your vehicle.

When contacting Tesla Roadside Assistance, please provide:

- The Vehicle Identification Number (VIN). The VIN is displayed when you touch **Controls** > **Software**. The VIN can also be seen by looking through the driver's side of the windshield.
- Your exact location.
- The nature of the problem.

If available in your region, you can also expedite your request, by choosing the Roadside Assistance option in the Tesla mobile app.

NOTE: For a detailed description of Tesla's Roadside Assistance policy, go to the support page on the Tesla web site for your region.

Regional Phone Number(s)

Canada: [1-877-79TESLA](tel:1-877-79TESLA) ([1-877-798-3752](tel:1-877-798-3752))

Mexico: [800-228-8145](tel:800-228-8145)

United States: [1-877-79TESLA](tel:1-877-79TESLA) ([1-877-798-3752](tel:1-877-798-3752))

NOTE: The phone number is also available by touching **Controls** > **Service**.



Running Out of Range

⚠ CAUTION: It is your responsibility to monitor the state of the high voltage Battery and the remaining range of your vehicle. Do not assume that there is any range available when the range displayed on the instrument cluster touchscreen is at 0 miles (0 km) (or 0%). Damage to the low voltage battery due to running out of range is not covered by the warranty.

NOTE: In the unlikely event your vehicle runs out of range while driving, pull over when safe to do so and contact [Tesla Roadside Assistance on page 930](#) or your preferred tow provider.

If CybertruckModel SModel XModel 3Model Y runs out of range, the low voltage battery is no longer supported – and when low voltage is not supported, the vehicle cannot charge. Therefore, the low voltage battery must be supported by an external power supply to allow you to charge the High Voltage (HV) Battery. Once the vehicle begins charging, the external power supply is no longer required.

If CybertruckModel SModel XModel 3Model Y runs out of range, the low voltage system is no longer supported – and when the low voltage battery runs out of power, the vehicle cannot charge. Therefore, the low voltage system must be supported by an external power supply to allow you to charge the High Voltage (HV) Battery. Once the vehicle begins charging, the external power supply is no longer required.

In the case of running out of range away from a charger, the tow provider should transport CybertruckModel SModel XModel 3Model Y to the nearest charging station and unload the vehicle within the charging cable's reach. Once the vehicle is positioned next to a charger, follow these instructions:

NOTE: If the vehicle is being transported to a charger, make sure the tow provider does not leave until confirming that the vehicle's high voltage Battery is successfully charging.

1. Jump start the low voltage system (see [Jump Starting on page 938](#)[Jump Starting on page 1455](#)). The low voltage battery must be jump started to support the high voltage Battery.
2. Wait a few minutes. Once the touchscreen powers on, plug the charge cable into CybertruckModel SModel XModel 3Model Y to begin charging the high voltage Battery.
3. When CybertruckModel SModel XModel 3Model Y begins to charge, disconnect the external power supply from the low voltage battery jump posts.

⚠ WARNING: Shut off the external power supply before removing either cable. Removing the cables while the external power source is active may cause arcing.

NOTE: If CybertruckModel SModel XModel 3Model Y is still not able to shift into Drive after charging the high voltage Battery, the low voltage battery may need additional time to recover. Reconnect the charge cable, wait several minutes, disconnect the charge cable, and then try again.

Before transporting to a non-Tesla charger, ensure your vehicle is equipped with an adapter that accommodates the specific type of charging station you will be using. Even at a non-Tesla charger, you will need to jump start the low voltage system before you can begin charging.

⚠ CAUTION: Always ensure CybertruckModel SModel XModel 3Model Y has enough range for your drive, or for being stored for an extended period. Do not rely on the range estimates displayed on the touchscreen or mobile app as range can decrease faster than projected due to ambient temperature, driving habits, wind, vehicle settings (such as Sentry Mode), etc.

NOTE: Towing your vehicle as a result of running out of range is not covered by the warranty.

Opening the Powered Frunk with No Power

In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will be unable to open the powered frunk using the touchscreen, mobile app, or powered frunk button.

It is necessary to open the powered frunk before attempting to jump start CybertruckModel SModel XModel 3Model Y. For more information, see [Jump Starting on page 1455](#).



In Case of Emergency

To open the powered frunk when CybertruckModel SModel XModel 3Model Y has no power, you need a power source that provides between 9V and 16.5V (such as a 12V portable jump starter or another vehicle), or a power source that provides between 30V and 50V. A standard 9V battery may not have enough power to open the powered frunk if CybertruckModel SModel XModel 3Model Y has no power. Instead, use a portable jump starter or another vehicle.

The steps below assume you are using an external low voltage power supply (such as a portable jump starter).

NOTE: The following steps do not open the powered frunk if CybertruckModel SModel XModel 3Model Y is locked and has low voltage power.

1. Locate the front trunk access terminal beneath the front-left wheel well, behind the headlights.



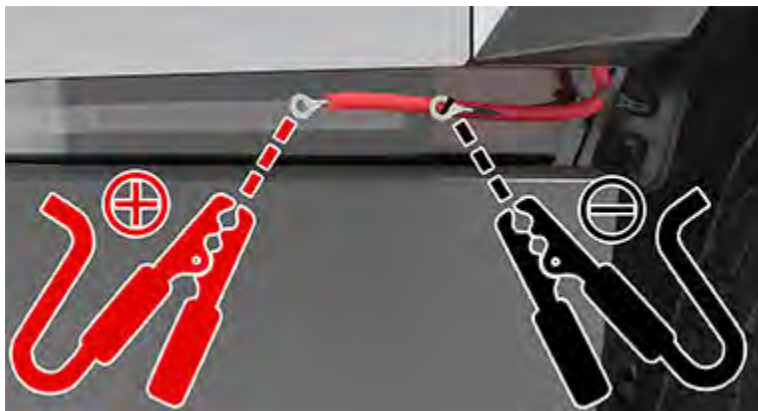
2. Use your finger to loosen the cover, then pull it down and toward you to remove it and expose the terminals. The cover is attached to a loop of cable containing both the red positive (+) and the black negative (-) terminals.



3. Carefully pull the terminals out from the cavity.



4. Connect the low voltage power supply's red positive (+) cable to the red positive (+) terminal.
5. Connect the low voltage power supply's black negative (-) cable to the black negative (-) terminal.



NOTE: Applying external low voltage power to these terminals only releases the hood latches. You cannot charge the low voltage battery using these terminals. Do not leave the low voltage power cables connected to the terminals for more than 30 seconds – remove from the vehicle's terminals as soon as the hood latches.

6. If you are using a variable power supply, set the supplied voltage to a value between 9V and 16.5V or between 30V and 50V.
7. Turn on the external power supply (refer to the manufacturer's instructions). The latches are immediately released and you can now open the powered frunk to access the front trunk area.
 - ⚠ **CAUTION:** If you are using a variable power supply, do not change the supplied voltage while the cables are connected.
8. Shut off the external power supply.
 - ⚠ **WARNING:** Shut off the external power supply before removing either cable. Removing the cables while the external power source is active may cause arcing.
9. Disconnect both cables, beginning with the black negative (-) cable.
10. Feed the terminals back into the cavity and then press the cover gently but firmly back into place to ensure that it is secured.



In Case of Emergency





Jump Starting

To jump start CybertruckModel SModel XModel 3Model Y, use an external power source that is capable of supplying at least 12V, such as a portable jump starter or another vehicle.

- CAUTION:** When jump starting CybertruckModel SModel XModel 3Model Y, use jump cables that are 30 ft. (9 meters) or less in length. Using cables that are longer than 30 ft. (9 meters) may result in damage to CybertruckModel SModel XModel 3Model Y or to the external power source.

The steps below assume you are using an external low voltage power supply (such as a portable jump starter). If you are using another vehicle to jump start CybertruckModel SModel XModel 3Model Y, follow the manufacturer's instructions.

- WARNING:** It may be more difficult to steer CybertruckModel SModel XModel 3Model Y when the vehicle is being supported by an external low voltage power supply. The wheels may not be as responsive to the steering wheel as expected, and extreme caution should be taken when repositioning CybertruckModel SModel XModel 3Model Y.
- CAUTION:** CybertruckModel SModel XModel 3Model Y uses a 48V low voltage architecture. As a result, some functions may be unavailable or degraded if you are supporting CybertruckModel SModel XModel 3Model Y with less than 30V (for example, another vehicle or a 12V portable jump starter).
- CAUTION:** Avoid using low voltage components of CybertruckModel SModel XModel 3Model Y (such as the climate control system, cabin USB-C ports, lights, etc.) when the vehicle is being supported by an external low voltage power supply. Doing so may disable low voltage systems and make it necessary to jump start CybertruckModel SModel XModel 3Model Y again.
- CAUTION:** CybertruckModel SModel XModel 3Model Y cannot be used to jump start another vehicle. Doing so can result in damage.
- CAUTION:** Avoid short circuits when jump starting CybertruckModel SModel XModel 3Model Y. Connecting cables to the wrong jump post, touching leads together, etc., can damage CybertruckModel SModel XModel 3Model Y.

1. Open the powered frunk (see [Opening the Powered Frunk with No Power on page 1451](#)).
2. Remove the maintenance panel by pulling it upwards to release the trim clips that hold it in place.



3. Connect the external low voltage power supply's red positive (+) cable to the horizontal jump post mounted next to the brake fluid reservoir. The positive jump post is marked with a + sign.



In Case of Emergency



CAUTION: To avoid damaging Cybertruck Model S Model X Model 3 Model Y, do not allow the positive cable to contact other metal components.

4. Connect the external low voltage power supply's black negative (-) cable to the vertical jump post. The negative jump post is marked with a - sign. This jump post is used as a grounding location for the external support.



5. If you are using a variable power supply, set the supplied voltage to a value between 12V and 16.5V or between 30V and 50V.
6. Turn on the external power supply.

CAUTION: If you are using a variable power supply, do not change the supplied voltage while the cables are connected. Doing so may cause damage to the vehicle.

7. Open the driver door and ensure that the touchscreen is on and the low voltage system is responsive. This may take up to two minutes.
8. Ensure the touchscreen is on and that the low voltage system is responsive.

NOTE: If attempting to activate Transport Mode (to winch the vehicle onto a flatbed truck), leave the power supply connected continuously until the vehicle has been secured. For more information, see [Activate Transport Mode on page 1447](#).



9. Once external power is no longer required, shut off the external power supply.

WARNING: Shut off the external power supply before removing either cable. Removing the cables while the external power source is active may cause arcing.

10. Disconnect both cables, beginning with the black negative (-) cable.

NOTE: CybertruckModel SModel XModel 3Model Y may not be able to shift into Drive until after the high voltage Battery has been charged and the low voltage system is able to recover fully. See [Running Out of Range on page 932](#).

11. Replace the maintenance panel by placing it back in its original location and pressing down until it is secure.

12. Close the powered frunk (see [Closing on page 1186](#)).

Opening Doors with No Power

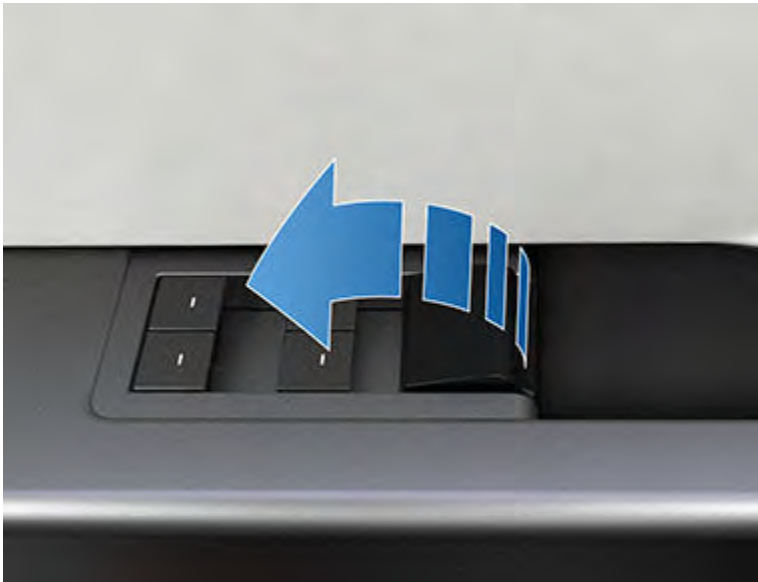
In the unlikely event that CybertruckModel SModel XModel 3Model Y has no low voltage power, you will not be able to open the doors from the interior by pressing the interior door open buttons. Instead, use the manual door releases.

CAUTION: Manual door releases are designed to be used only in situations when CybertruckModel SModel XModel 3Model Y has no power. When CybertruckModel SModel XModel 3Model Y has power, use the interior door open buttons.

WARNING: Do not use the manual door release while the vehicle is moving.

Opening a Front Door with No Power

To open a front door manually, pull up the manual door release located in front of the window switches and push the door open.



Opening a Rear Door with No Power

To open a rear door manually, perform the following steps:

1. Remove the rubber mat on the bottom of the rear door's map pocket.



In Case of Emergency



2. Pull back the flap of plastic trim (if equipped), then pull the mechanical release cable forward and push the rear door open.





Cybertruck Off-Road Guide



Cybertruck Off-Road Guide



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1 - Sand. Dirt. Mud. Rocks. Snow.

Cybertruck is tough enough to go anywhere. Off-road mode is an advanced user setting which puts the driver in ultimate control by disabling control, hardware protections and collision avoidance safety features. What makes Cybertruck so capable off road:

- **Four-Wheel Steering**- Cybertruck has four-wheel steering. When the driver turns the steering wheel, all four wheels respond. This gives
- **Steer-by-Wire**- Cybertruck uses steer-by-wire technology, meaning there is no physical connection between the steering wheel and tire. As a result, steering feels more responsive and adaptive based on the terrain and driving speed.
- **Instant, Linear, and Predictable Torque**- Torque availability at zero speed is a unique difference from combustion engines and makes climbing. Stalling the motors for an extended time may cause them to overheat.
- **Adaptive Damping**- The compression and rebound of the dampers are adjusted based on your driving mode to maximize traction and control.
- **Adjustable Air Springs**- Enable adjustable ride height. **High** represents the ideal setting for compression and rebound balance. Increasing clearance but comes with a trade-off, reducing your available compression and will make the ride harsher. In several ride heights the vehicle may experience damage. **Very High** (25mph) and **Extract** (10 mph).
- **Differential Lockers**- Cybertruck is equipped with locking differentials for increased performance and stability during low-traction and off-road (roads).

Locking differentials lock both wheels of an axle together, which forces the wheels to rotate at the same speed. This distributes the torque and traction in each wheel. When one of the locked wheels has significantly reduced traction (on sand, ice, etc.), more torque is applied to the other wheel. In cases, such as when one wheel is in the air, all available torque is sent to the wheel on the ground with traction. This distribution of torque is beneficial in low-traction environments.

-  **WARNING:** Do not use locking differentials while driving on high-traction surfaces, such as asphalt.
-  **WARNING:** Driving with locked differentials may reduce vehicle response to steering and cause unpredictable vehicle dynamics.



P R N D 65 %

13.0

MPH · OFF-ROAD

13.0

MPH

50 psi

Battery Temp

50 psi



50 ps

Front M

Rear Mo

50 ps



2 - Off-Roading Vitals

Monitor the health of Cybertruck on the left side of the touchscreen.

Common Vitals:

- **Tire Pressure**- Current read out of tire pressure from each wheel.
- **Motor Temp, and Battery Temp**- Current temperatures of the air suspension compressor, front and rear motor(s) and high voltage battery
 - When operating within ideal temperature range, no color is displayed.
 - If performance is reduced due to temperature, value is shown in **yellow**.
 - If performance becomes critically limited, temperature is shown in **red**.
- **Locker State**- Drive unit differential locker status.

Overland Vitals:

- **Roll/Pitch/Bearing**- Degree of vehicle Roll, Pitch, and the bearing of travel.
- **Ground Clearance**- Current vehicle ground clearance up to the battery.



Off-Road Mode

Overland	Baja
----------	------

Surface i

All-Purpose	Rock	Gravel/ Deep Snow	Sand
-------------	------	----------------------	------

Stopping Mode

Hold	Roll
------	------

Locking Differentials

Off	Rear On	All On
-----	---------	--------



Rear Steer

Off
W

Ride Height

High	V
------	---



3 - Off-Roading Controls: Overland

Quickly access off-road settings on the right side of the touchscreen:

- **Camera Views:** Backup camera and side repeaters are displayed. Swipe left or right to see other views.
- **Off-Road Mode:** Choose between **Overland** and **Baja** and customize your preferences.
- **Surface:** Manually adjust the surface on which you are driving.
- **Stopping Mode:** Choose if you want to roll freely or automatically hold the brake when you come to a stop.
- **Locking Differentials:** Engage or disengage locking differential(s).
- **Pitch / Roll / Heading:** These angles determine how capable the vehicle is of climbing over an obstacle or up an incline.
- **Rear Steer:** You can set **Rear Steer** to **Off** or **Auto**. **Auto** allows for a tighter turn radius while driving. This is useful for off-camber driving.
- **Wade Mode:** Use when navigating through shallow bodies of water.
- **Ride Height:** Customize your vehicle's ride height based on terrain and other drive settings.



Off-Road Mode

Overland

Baja

Handling Balance

Front: 50 - Rear: 50

Stability Assist

Standard

Reduced

Min

Locking Differentials

Off

Rear On

All On



Rear Steer

Off

Terrain

Smooth



4 - Off-Roading Controls: Baja

Quickly access off-road settings on the right side of the touchscreen.

- **Handling Balance:** Adjust left for more stable front-wheel drive behavior, or right for more agile rear-wheel-drive behavior.
- **Stability Assist:** Select the desired amount of stability control intervention.
- **Locking Differential:** Engage or disengage rear locking differential(s)—applicable to Dual Motor only.
- **Terrain:** **Smooth** sets ride height to **Medium**. **Rugged** sets ride height to **High**. **Clearance** sets ride height to **Very High**.



5 - Best Practices

Always be aware of your surroundings. Drive slowly and carefully, staying within existing tracks. Do not harm nature and give way to wildlife.

Always keep both hands on the steering wheel. Avoid aggressive steering maneuvers and brake gradually to maximize traction.

Assess any potential off-roading risks or obstacles ahead. Where necessary, get out of Cybertruck and check the terrain. Use the touchscreen to adjust settings.

Upon returning to normal roads, remove any debris that may be a hazard to other road users and check steering and suspension components, wheel covers and wheel fairings.



6 - Before You Go Off-Road Checklist

1. **Plan your route.** Consult maps and weather reports. Familiarize yourself with the different types of terrain you may encounter. Research weather and environmental conditions can change quickly and unexpectedly. Let someone know where you're going. Download maps offline when you do not.
2. **Be prepared.** Equip your Cybertruck with supplies in case of emergency, such as a spare tire, a jack, an air compressor, which are available in the frunk, a charged phone, and a flashlight. Consider bringing recovery gear such as a kinetic rope, soft shackles, traction boards, and a shovel.
3. **Evenly distribute vehicle load.** Cybertruck performs best when the weight of passengers and cargo is distributed evenly across the vehicle. You should understand the tongue weight contribution to your vehicle payload and consider leaving the trailer parked while you enjoy the view.
4. **Secure passengers and cargo.** Confirm all passengers are wearing seat belts properly. Stow or secure loose items. The tonneau is not a storage area. Items should be secured into the bed. The powered frunk and gear locker are dry zones unless submerged.



Troubleshooting

5. **Charge up.** Ensure your vehicle has ample energy for your planned route. Charge beforehand and locate the nearest Supercharger to reach. Range will be higher off road and may vary with terrain.
6. **Lower tire pressure if needed** at the destination to increase traction on surfaces such as sand or on rocks. Reducing tire pressure allows for increasing grip and decreasing the risk of punctures. However, this does increase the risk of breaking the seal on the tire sidewall (de-beading). The recommended range of tire pressure on stock wheels and tires is 36 psi.
7. **Remove wheel aero covers and front fascia wheel fairings** to prevent damage. Rear wheel rocker fairings can also be removed if doing more off-road. See the [Service Manual](#) for removal and replacement instructions.



7 - Spotting Ground Rules

A spotter is the second set of eyes to help a driver navigate difficult obstacles. Spotters are usually in front of the vehicle, using hand signals to steer the vehicle and other directions. Having a spotter makes a huge difference in off-roading.

Ground Rules:

- One spotter at a time should guide the driver. An exception to this is when a second spotter is located behind the vehicle for secondary spotting.
- The spotter should always remain in clear sight of the driver.
- While spotting, do not stand too close to the line of travel or directly downhill of a vehicle, as not only a safety precaution, but to be able to see the vehicle and any potential obstacles.
- Non-verbal communication, especially previously agreed-upon hand signals, work best to prevent directions from being drowned out by noise.



- Signals need to be large, clear gestures that are not misunderstood for other commands.
- The driver should do no more and no less than directed by the spotter, until the spotter provides additional instruction.
- While inside the vehicle, spotters should continue to assist the driver by keeping an eye out for hazards on the sides of the vehicle, l



8 - Off-Road Modes



Troubleshooting

Off-Road Modes give Cybertruck owners access to settings and preferences that allow customization to different environments. Customization includes cross-linking, traction, stability, pedal sensitivity, and vehicle stopping behaviors.

Off-Road Controls that are available in all modes:

- **Vehicle Hold or Roll** – Choose if you prefer the vehicle to roll freely, or automatically hold the brake when you come to a stop.
- **Rear Steering On/Off** – Disables the rear steering actuator at low speeds. Useful for off-camber driving, or drifting on very loose surfaces.
- **Double Pedal** – (Brake and accelerator) is allowed in off-road modes. This enables tight drive control when on a steep incline/decline.

If you cannot adjust your ride height:

- First, check that **Jack Mode** is not enabled (it can automatically enable when wheels leave the ground). If it is enabled accidentally, you can disable **Jack Mode**.
- Second, check that the compressor is not overheated. A notification appears on the touchscreen if overheated. Wait for it to cool down.

To maximize your efficiency:

- Use **Baja** and move torque to bias to the Permanent Magnet motor (for Dual Motor All-Wheel Drive this is the rear, for Tri-Motor Cybertruck this is the front).
- Reduce use of the accelerator pedal and switch to **Roll**.

Donuts:

- We know you want to do them. Best results achieved on a loose surface, in **Baja** with handling set to full oversteer and stability set to minimum.
- Ensure you have sufficient clear space and be aware stability controls are disabled. Donuts may cause property damage, so do not do them near people or property.





9 - Overland

Handle all surfaces including sand, gravel, and rocks with maximized traction at low speeds.

Recommended ride height is **High** for all-purpose, gravel, and sand modes. **Rock** will default to **Very High**. You can manually adjust the set ride height to 25mph in **Very High**, and 10mph in **Extract**. Torque is also limited in **Extract**.

See [appendix on page 1488](#) for ground clearance and approach/break-over/departure angles in each mode.

- **All-Purpose** - Automatically adjusts tire slip based on the amount of available traction. All-purpose is best suited for mixed terrain driving.
- **Gravel / Deep Snow**- Allows for medium amounts of tire slip to provide optimal traction on gravel and deep snow.
- **Rock** - Tightly manages tire slip to maximize grip in rock crawl conditions. Also enables air suspension cross-linking, where the suspension links the front and rear axles, balancing vertical force under large suspension articulation for maximum traction.



- **Sand** - Allows for high amounts of tire slip to provide optimal traction on soft, deformable surfaces like sand.









10 - How to Drive on Certain Surfaces

- **Rock** - slow and measured. Aim to overcome obstacles with precision and with only as much power as needed. Hitting immovable obstacles is a good recipe to break something.
- **Water** - slow and measured. Viscosity of water is about 55x that of air, so driving fast through water puts a lot of stress on all the parts in the car. In deep water, check the depth and bottom condition before going in blindly as it can be difficult to get unstuck when tires are sucked into the bottom.
- **Sand/Snow** - maintain momentum (don't stop in deep sand/snow, and if you do, start slowly) and avoid high side slip. It's easy for a deflated tire to lose traction while sliding sideways and puts the vehicle at rollover risk.





11 - Wade Mode

Enter and drive through shallow bodies of water, such as defined crossing points of rivers or creeks using **Wade Mode**.

Check the water depth and current speed before entering. Cross through water slowly-- driving quickly through water can impart immense

Refer to the [Owner's Manual](#) for more information on **Wade Mode**.

Wade Mode defaults ride height to **Very High**, switches HVAC to recirculate, and pressurizes the battery pack to protect from water and del

Intended for water up to 32 inches (815 mm) deep, measuring from the bottom of the tires in **Very High** ride height. It is not required for dep

Wade Mode duration is limited to 30 minutes and may take up to 10 minutes to completely fill the air system and pressurize the battery pack



12 - Baja

Drive high-speed on dirt roads or in the desert with optimized suspension and traction control.

Ride height is set to **High** to optimize suspension travel. Rebound and compression damping are adjusted to provide more stability as well as the electronic stability control system allows more tire slip for dynamic driving on low-traction surfaces.

You can adjust the handling balance from understeer, to neutral, to oversteer with the slider.

Additionally you can adjust the level of stability control:

- **Standard** – Allows much more vehicle yaw and wheel slip than on-road and Overland modes. However, stability control still augments.
- **Reduced** – Further increases vehicle yaw allowance, stability control is greatly reduced.
- **Min** – Minimizes stability control.

If Cybertruck detects it is airborne, the dampers will adjust to attempt to protect the vehicle while landing.




13 - Climbing Over or Up

If approaching a large obstacle or change in incline, set the ride height to **Very High** to increase approach, breakover, and departure angles to determine how capable Cybertruck is climbing over an obstacle or up an incline. **Extract** can be used for extreme cases but will be a very slow process. Switching into **Extract** multiple times can cause the air compressor to overheat. You can monitor this on the vitals screen and allow time to cool down.

Locking Differentials: If one wheel becomes airborne while climbing up or over an obstacle, the locking differentials will apply torque to the wheel that is still moving.

Dual Motor Variants are equipped with mechanical front and rear locking differentials.

Tri-Motor (Cyberbeast) Variants are equipped with a mechanical front locking differential and a virtual rear locking differential to provide superior traction. The virtual locking differential automatically engages in certain drive modes and speeds, and cannot be manually engaged or disengaged.

 **WARNING:** Large steering angle or high acceleration with lockers engaged will cause the vehicle to jerk and may damage your drivetrain on hard surfaces like asphalt.

Tips:

While engaging (icon blinking), you can move slowly forward or reverse while turning the steering slightly, or while stationary turn full lock to the left or right to allow the locker to engage.



While disengaging (icon blinking), driving slowly in a straight line will typically be all that is needed. If not, consider the direction you are driving in the opposite direction to relieve the torsional stress. When you can turn without the wheels scrubbing, the locker has disengaged.



14 - Trail Assist

Think of this as a low-speed cruise control.

This can be very helpful when navigating difficult terrain where your focus is best spent on steering. You can set trail assist from 1.0mph

To use this feature, click the right scroll wheel on the steering wheel to enable, then scroll up or down to adjust set speed.

You can drive collaboratively with trail assist by using the brake or accelerator pedal.

To turn off **Trail Assist** either click the scroll wheel a second time or hold the brake, bringing the vehicle to a stop and then press firmly i



15 - If You Get Stuck

Increase traction in Off-Road Mode:

1. Put Cybertruck into **Overland Mode**.
2. **Adjust Suspension height.** Raise until the vehicle isn't obstructed by obstacles. Avoid lowering to prevent underbody damage.
3. **Adjust Terrain Mode.** Based on surface conditions, determine the balance required between traction and momentum. For high traction terrain, momentum may be required. For maximum momentum, use **Sand**.
4. **Engage front and/or rear locking differentials.**
5. For soft surfaces or steep inclines, engage **Trail Assist** for a steady progression through complex surfaces.

Additional counter-measures:

1. **Decrease tire pressures.** Decreasing tire pressures to 36psi will increase tire contact with the surface and can aid in traction to help get out.
2. **Use traction aids.** Traction boards can improve the traction of individual wheels to increase chances of recovery.
3. **Stack rocks.**
4. **Get assistance from another vehicle using recovery equipment.**

Tips:



- Being smooth and avoiding wheel spin in general is the best way to keep traction in technical driving situations—**Trail Assist** is helpful. An obstacle should be a last resort as it commonly results in vehicle damage.
- In sand and snow, however, momentum is key to avoid sinking and being stuck, so avoid stopping in deep sand and snow if possible. **Trail Assist** and set to a very low speed to crawl out.



16 - Auxiliary Power

Cybertruck is equipped with two 48V auxiliary power feeds. These feeds can be independently enabled on the touchscreen and can provide power depending on the LV state of charge. Power feeds are located on the roof and in the powered frunk, and each provide up to 400W of power.

Power consumption may increase while using the vehicle to power other electronics and objects.

Refer to the [Owner's Manual](#) for more information on accessing the Cybertruck Power Feeds.

Off-Road Light Bar

You can purchase an Off-Road Light Bar from the Tesla Shop. This light bar is designed to work with existing high beams and communicate with the vehicle to control forward-facing or ditch lighting on separately as well as controlling the overall brightness of the light bar.

The off-road Light Bar is only intended for off-road use and should never be used on public roads. Always be aware of oncoming vehicles and drivers.



17 - Vehicle Modifications

- **Tires:** Adding larger tires can compromise turning radius, as well as increasing chassis loads and potentially rubbing on the body. 18" wheels add more cushion, provided the overall tire dimensions are equal or less than the OEM tire.
- **Aftermarket Tires:** Tires not designed for electric vehicles typically have lower efficiency and higher road noise.
 - **All-Terrain** is the least aggressive off-road tire, good for all-purpose driving, and will impact road noise and efficiency the least.
 - **3 Peak Mud and Snow Rated All Terrain** is a good option for cold weather driving where you expect to encounter snow and ice.
 - **Mud Terrain** is the most aggressive tire, useful for driving in dirt and mud but will come with the largest trade-off in range and road noise.



WHEELS AND TIRES



CYBERTRUCK SPARE TIRE + TOOL KIT
\$1,250



CYBERTRUCK 20" SNOW CHAINS
\$345

AVAIL.

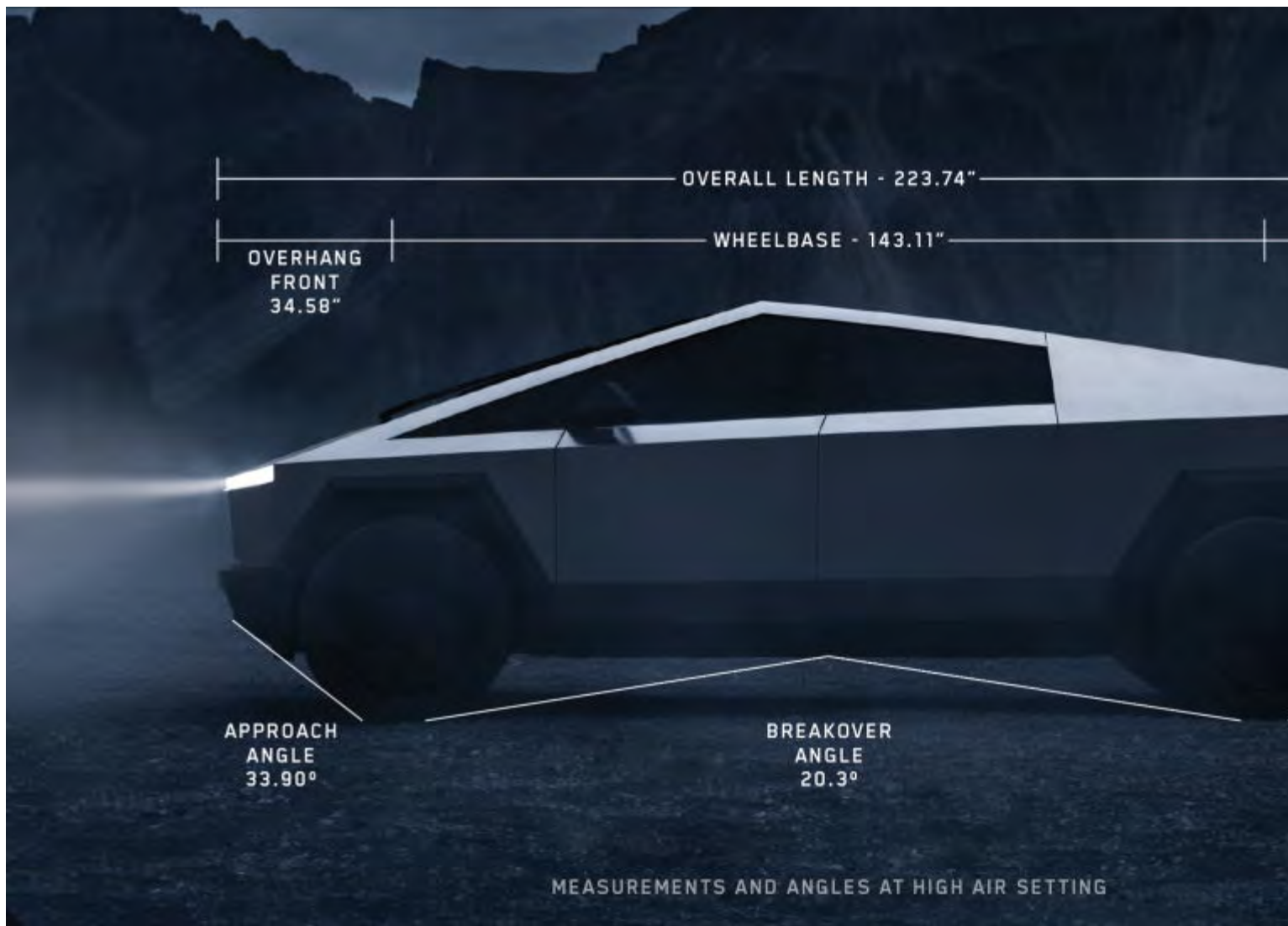
CYBER
\$550

18 - Cybertruck Accessories

Visit shop.tesla.com for Cybertruck accessories like the air compressor, snow chains, and spare tire.



Troubleshooting



19 – Cybertruck Dimensions

Overall Length: 223.74"

Overall Height: 73.06"

Overhang Front: 34.58"

Overhang Rear: 46.05"

Wheelbase: 143.11"

Approach Angle: 33.90°

Breakover Angle: 20.3°

Departure Angle: 22.30°

Ground Clearance: 12.45"

20 - APPENDIX

GROUND CLEARANCE AND APPROACH/BREAK-OVER/DEPARTURE ANGLES

	Approach / Breakover / Departure	Angle
Approach Angles	Approach Angle - Entry/Exit Air Setting	25.0°
	Approach Angle - Low Air Setting	26.3°
	Approach Angle - Medium Air Setting	29.5°
	Approach Angle - High Air Setting	33.9°
	Approach Angle - Very High Air Setting	36.6°
	Approach Angle - Extract (Highest) Air Setting	39.9°
Breakover Angles	Breakover Angle - Entry/Exit Air Setting	13.0°
	Breakover Angle - Low Air Setting	13.9°
	Breakover Angle - Medium Air Setting	16.5°
	Breakover Angle - High Air Setting	20.3°
	Breakover Angle - Very High Air Setting	22.9°
	Breakover Angle - Extract Air Setting	26.0°
Departure Angles	Departure Angle - Entry/Exit Air Setting	14.4°
	Departure Angle - Low Air Setting	16.3°
	Departure Angle - Medium Air Setting	18.8°
	Departure Angle - High Air Setting	22.3°
	Departure Angle - Very High Air Setting	24.7°
	Departure Angle - Extract Air Setting	27.6°

Troubleshooting Alerts

APP_w009

Automatic Emergency Braking is unavailable Feature may be restored on next drive

What this alert means:

The Automatic Emergency Braking feature is unavailable for the rest of your current drive. This alert does not specifically indicate any other braking functions or features are unavailable.

This alert may be present for several reasons. Other alerts may be present for conditions that also cause Automatic Emergency Braking to be unavailable.

What to do:

No action is typically required. Automatic Emergency Braking will usually be available again when you start your next drive.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.

For more information, see [Collision Avoidance Assist](#) on page 645.

APP_w048

Autopilot features temporarily unavailable Features may be restored on next drive

What this alert means:



Troubleshooting

Autopilot features are currently unavailable on your vehicle. Depending on the configuration of your vehicle, Autopilot features that are disabled may include:

- Autosteer
- Traffic-Aware Cruise Control
- Automatic Emergency Braking
- Forward Collision Warning
- Lane Departure Warning

What to do:

This alert can be set for several reasons. Check for additional alerts that indicate the cause of this condition.

Typically, Autopilot features are restored on your next drive. If this alert persists across multiple drives, schedule service at your earliest convenience.

For more information and the full list of Autopilot features, see [About Autopilot on page 550](#).

APP_w207

Autosteer temporarily unavailable

What this alert means:

Autosteer is temporarily unavailable. This could be a temporary condition caused by an external factor, such as:

- Missing or faded lane markers.
- Narrow or winding roads.
- Poor visibility due to rain, snow, fog, or other weather.
- Extremely hot or cold temperatures.
- Bright light due to other vehicle headlights, direct sunlight, or other light sources.

This alert will also be present if you exceeded the maximum speed limit for Autosteer with Autosteer active. In this case, Autosteer will not be available for the rest of your current drive.

What to do:

Continue to your destination. If Autosteer is not available by the time you reach your destination, and remains unavailable during your next planned drive, check for the following:

- Damage or obstruction caused by mud, ice, snow, or other environmental factors
- Obstruction caused by an object mounted on the vehicle, like a bike rack
- Obstructions caused by adding paint or adhesive products like wraps, stickers, or rubber coatings to your vehicle
- A damaged or misaligned bumper

If there are no obvious obstructions, or if you find damage to the vehicle, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#) [Autopilot Features on page 553](#).

APP_w218

Autosteer speed limit exceeded Take control of steering wheel

What this alert means:

Autosteer is unavailable because your vehicle has exceeded the maximum speed limit for this driver assistance feature.



What to do:

Take immediate control of the steering wheelsteering yoke (or steering wheel) and maintain control until you reach your destination.

In most cases, Autosteer will not be available for the rest of your current drive. To reset it, bring the vehicle to a complete stop and shift into Park. When you shift into Drive to travel to your next destination, Autosteer should be available again.

NOTE: If this alert becomes active while you are driving in Germany, Autosteer should be available again once your vehicle is traveling below the Autosteer speed limit.

If Autosteer is not available during your next drive, and remains unavailable throughout subsequent drives, schedule service at your convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Autosteer on page 587](#)[Autopilot Features on page 553](#).

APP_w221

**Cruise control unavailable
Reduced front radar visibility**

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because the radar located in the front bumper area of your vehicle has no or low visibility.

This could be a temporary obstruction caused by factors like snow, ice, dirt, or mud.

What to do:

Continue to your destination. Your vehicle is OK to drive. Traffic-Aware Cruise Control and Autosteer will remain unavailable as long as the radar lacks adequate visibility.

If the alert persists throughout your drive, examine the front bumper before your next planned drive and attempt to clear any obstruction.

If this alert persists throughout subsequent drives but no obstruction is visible on the front bumper where the radar is located, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w222

**Cruise control unavailable
Reduced front camera visibility**

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because one or more of the front cameras in your vehicle is blocked or blinded by external conditions.

Traffic-Aware Cruise Control and Autosteer will remain unavailable while a front camera lacks adequate visibility. Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.
- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive.



This is often a temporary issue that clears up on its own. If the alert does not clear by the end of your drive:

- Inspect and clean the front camera area at the top center of the windshield before your next planned drive.
- Check the camera surface for condensation, dirt, or other debris and attempt to clear any obstruction.

See [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#) for more information on clearing dirt or debris from that area of the vehicle.

Although condensation on the inside of the front camera enclosure cannot be wiped clean, you can usually clear it quicker by following these steps:

1. Pre-condition the cabin with the temperature set to High and A/C turned ON.
2. Turn on the front windshield defroster.

If this alert persists throughout subsequent drives but no front camera obstruction is visible, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w224

Cruise control unavailable

Continue driving to allow cameras to calibrate

What this alert means:

Traffic-Aware Cruise Control and Autosteer are unavailable because the cameras on your vehicle are not fully calibrated.

Your vehicle must maneuver with great precision when features like Traffic-Aware Cruise Control and Autosteer are active. Before these features can be used for the first time, the cameras must complete an initial self-calibration. Occasionally, one or more cameras can become uncalibrated.

What to do:

Continue to your destination. Your vehicle is OK to drive.

Traffic-Aware Cruise Control and Autosteer will remain unavailable until camera calibration is complete.

When calibration is complete, Traffic-Aware Cruise Control and Autosteer should be available.

For your convenience, a calibration progress indicator is displayed on the touchscreen. Calibration typically completes after your vehicle has driven 20–25 miles (32–40 km), but the distance varies depending on road and environmental conditions. For example, driving on a straight road with highly visible lane markings helps the cameras calibrate quicker.

If the alert persists and camera calibration has not completed after your vehicle has driven 100 miles (160 km) or more, or Traffic-Aware Cruise Control and Autosteer remain unavailable despite successful camera calibration, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

APP_w304

Camera blocked or blinded

Clean camera or wait for it to regain visibility

What this alert means:

One or more of the vehicle cameras has limited visibility, or no visibility at all, due to external conditions. When the cameras on your vehicle cannot provide accurate visual information, some or all Autopilot features may be temporarily unavailable.

Cameras may have limited or no visibility due to:

- Dirt or debris on the camera surface.
- Environmental conditions like rain, fog, snow, or dew.
- Bright sunlight or glare from another light source.



- Low or limited light conditions, including unlit or poorly lit roadways at night.
- Condensation (water droplets or mist) on the camera surface.
- Monotonous environmental features, including tunnel walls or highway dividers.

What to do:

Continue to your destination. Your vehicle is OK to drive. This is often a temporary issue that will be resolved when condensation evaporates, or when a particular environmental condition or feature is no longer present.

If the alert does not clear by the time you reach your destination, check camera surfaces for condensation, dirt, or other debris. For camera locations, see [Cameras on page 101](#)[Cameras on page 1136](#).

Clean the cameras as necessary before your next planned drive. For recommended cleaning procedures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If you continue to see this alert after cleaning the cameras, check the inside surfaces of the door pillar camera enclosures for condensation. Although condensation inside the camera enclosures cannot be wiped clean, you can usually clear it faster by following these steps:

1. Precondition the cabin by turning Climate ON, setting temperature to High, and making sure A/C is ON.
2. Turn on the front windshield defroster.
3. Direct the air vents toward the door pillar cameras.

For more information on clearing condensation from camera enclosures, see [Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 779](#)[Cleaning a Camera on page 780](#)[Cleaning a Camera on page 1140](#).

If the alert does not clear by the end of your next planned drive, despite cleaning the indicated camera(s) and following recommended steps to clear condensation, schedule service at your next convenient opportunity. Your vehicle is OK to drive in the meantime.

BMS_a066

Maximum charge level and range may be reduced OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. As a result, maximum charge level and range may be reduced. Service is required to restore full performance.

What to do:

Your vehicle is OK to drive.

If this alert persists, schedule service at your earliest convenience. Without service, you may notice further reductions in your vehicle's maximum charge level and range.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a067

High voltage battery performance limited OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

**What to do:**

Your vehicle is OK to drive.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a068**High voltage battery requires service****Acceleration and charging performance reduced****What this alert means:**

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

Service is required to restore full performance.

What to do:

Your vehicle is OK to drive.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

BMS_a069**Battery charge level low****Charge now****What this alert means:**

Your vehicle has detected that the high voltage battery does not have enough energy remaining to support driving. This alert is usually present because your vehicle's high voltage battery charge level has been reduced through normal operation.

Your vehicle will be unable to drive or continue driving until charged.

If this alert is present while you are driving, your vehicle needs to shut down. A separate vehicle alert should be present to indicate this condition. It is also possible your vehicle may shut down unexpectedly.

If this alert is present when your vehicle is parked, you may be unable to drive.

What to do:

Charge your vehicle immediately. Charging your vehicle should restore your vehicle's ability to drive.

If this alert occurs during subsequent drives, despite a displayed battery charge level of 5% or higher, schedule service at your earliest convenience.



For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CC_a001

Unable to charge - Insufficient grounding Proper wiring or outlet grounding must be verified

What this alert means:

No ground connection detected in the Wall Connector.

What to do:

Have the Wall Connector inspected by an electrician to make sure it is properly grounded. Your electrician should ensure there is proper grounding at your circuit breaker or power distribution box and also ensure that appropriate connections are made to the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a002

Unable to charge - Insufficient grounding Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a003

Unable to charge - Wall Connector GFCI tripped Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a004

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:



Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a005

Unable to charge - Wall Connector GFCI tripped Disconnect and retry or use different equipment

What this alert means:

Ground fault. Current is leaking through an unsafe path. Possible Line to ground or Neutral to ground fault.

What to do:

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle. If the issue persists, consult your electrician or contact Tesla.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a006

Unable to charge - Wall Connector overcurrent Disconnect and retry or use different equipment

What this alert means:

Over current protection.

What to do:

Reduce the vehicle's charge current setting. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a007

Unable to charge - Input voltage too high Voltage must be within Wall Connector rating

What this alert means:

Over or under voltage protection.

What to do:

Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a008

Unable to charge - Input voltage too low Voltage must be within Wall Connector rating

What this alert means:

Over or under voltage protection.

What to do:

Consult your electrician to ensure appropriate voltage on the circuit breaker that services the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a009

Unable to charge - Input wired incorrectly Input wiring to Wall Connector must be corrected

What this alert means:

Input miswired: possibly Line and Neutral are swapped.

What to do:

The wiring between the wall power and the Wall Connector has been incorrectly installed. Consult your electrician.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a010

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.



1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a011

Unable to charge - Wall Connector too hot Let Wall Connector cool and try again

What this alert means:

Over temperature protection (latchoff).

What to do:

Make sure the Wall Connector is not covered by anything and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a012

Unable to charge - Wall connection too hot Outlet or Wall Connector wiring must be checked

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has stopped to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

To regain normal charge operation, try the following steps.

If the Wall Connector is plugged into a wall outlet, make sure:

- The plug is fully inserted into the receptacle / outlet
- The plug / outlet area is not blocked or covered by anything
- There is no heat source nearby

If the issue persists or the Wall Connector is hard-wired, contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a013

Unable to charge - Charge handle too hot Check charge handle or charge port for debris

What this alert means:

Over temperature protection (latchoff).



What to do:

Make sure the connector is fully inserted into the charge inlet in the vehicle's charging port, is not covered by anything, and there is no heat source nearby. If the issue persists in normal ambient temperatures (under 100°F or 38°C) , service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a014
Unable to charge - Wall Connector issue
Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a015
Unable to charge - Vehicle connection issue
Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a016

Unable to charge - Vehicle connection issue Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a017

Unable to charge - Vehicle connection issue Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a018

Unable to charge - Vehicle connection issue Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.



For more information, see the [installation guide](#) for your Wall Connector.

CC_a019 **Unable to charge - Vehicle connection issue** **Insert charge handle fully into charge port**

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a020 **Unable to charge - Wall Connector issue** **Wall Connector needs service**

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a021 **Unable to charge - No primary Wall Connector** **Check that primary unit is powered and available**

What this alert means:



Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).

For more information, see the [installation guide](#) for your Wall Connector.

CC_a022

Unable to charge - More than 1 primary unit Ensure only 1 Wall Connector is set as primary

What this alert means:

Load sharing (circuit breaker sharing) network: Need one (and only one) Wall Connector set as primary.

What to do:

Only one Wall Connector can be set to a primary configuration. Have your electrician confirm:

1. Only one of the Wall Connectors is set as primary.
2. All other Wall Connectors linked to the primary unit are set to paired position (position F).

For more information, see the [installation guide](#) for your Wall Connector.

CC_a023

Unable to charge - Too many Wall Connectors Ensure no more than 3 units paired with primary

What this alert means:

Load sharing (circuit breaker sharing) network: More than three Wall Connectors are paired with the same primary unit.

What to do:

Consult your electrician to have one or more paired Wall Connectors moved to a different circuit and disconnected (unpaired) from this load sharing (circuit breaker sharing) network.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a024

Unable to charge - Low Wall Connector current Primary unit current setting must be increased

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.



If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.

Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a025 **Unable to charge - Wall Connector issue** **Wall Connector needs service**

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a026 **Unable to charge - Wall Connector issue** **Wall Connector needs service**

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.



2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a027

Unable to charge - Wall Connector issue Wall Connector needs service

What this alert means:

Wall Connector hardware issue. Possible issues include:

1. Contactor not working
2. Self-test of internal ground fault monitoring circuit failed
3. Thermal sensor disconnected
4. Other hardware component issues

What to do:

An internal issue was detected by the Wall Connector.

1. Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.
2. If the issue persists, turn OFF the circuit breaker for the Wall Connector, wait 10 seconds, and turn the circuit breaker ON again. Then try reconnecting the Wall Connector to the vehicle.
3. If the issue persists, have an electrician make sure all wires are properly connected and torqued according to the instructions in the Wall Connector Installation Manual.
4. Once your electrician has completed all work and restored power to the Wall Connector, try charging again by reconnecting the Wall Connector to the vehicle.
5. If the issue persists, the Wall Connector requires service.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a028

Unable to charge - Incorrect switch setting Wall Connector rotary switch must be adjusted

What this alert means:

Incorrect rotary switch setting.

What to do:

Have your electrician adjust the Wall Connector's internal rotary switch to a valid operating current setting. They should first make sure there is no power to the Wall Connector. The correlation between switch setting and current should be printed on the inside of the Wall Connector. Your electrician should also refer to the Set the Operating Current section in the Wall Connector Installation Manual.

If the Wall Connector is set up for load sharing (circuit breaker sharing) and paired with other Wall Connectors, the rotary switch of the primary unit must be set to an operating current setting that allows each paired Wall Connector to receive at least 6A of charge current.



Example: Three Wall Connectors are paired for load sharing. The primary unit needs to be set to a current of at least $3 * 6A = 18A$ or greater.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a029

Unable to charge - Vehicle connection issue

Insert charge handle fully into charge port

What this alert means:

A communication error occurred between the Wall Connector and the vehicle.

What to do:

Try charging again by disconnecting the Wall Connector from the vehicle and reconnecting.

1. If the issue persists, turn OFF the circuit breaker servicing the Wall Connector, wait 10 seconds, turn the circuit breaker ON again, then try reconnecting the Wall Connector to the vehicle.
2. If the issue persists and other charging equipment is available, plug the vehicle into another Wall Connector or a Mobile Connector to determine if the vehicle is able to communicate with other charging equipment.
3. If the issue persists, service is required.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a030

Unable to charge - Primary / paired unit mismatch

Wall Connector current ratings must match

What this alert means:

Load sharing (circuit breaker sharing) network: The paired Wall Connectors have different maximum current capabilities.

What to do:

Only Wall Connectors with the same maximum current capabilities can be paired in a load sharing (circuit breaker sharing) network. Have your electrician inspect the type labels on the Wall Connectors and make sure the current capabilities match. It is further recommended that your electrician only pair Wall Connectors with the same part number, as an easy way to make sure paired units are compatible.

For more information, see the [installation guide](#) for your Wall Connector.

CC_a041

Charge rate reduced - Wall connection hot

Outlet or Wall Connector wiring must be checked

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.



CC_a043

Wall Connector configuration must be completed Refer to Installation Guide to enable charging

What this alert means:

Wall Connector configuration is incomplete.

What to do:

The Wall Connector needs to be commissioned to appropriately configure the circuit breaker size and protective earth connection type.

For more information, refer to Commissioning Procedure in the Wall Connector Installation Manual. If the issue persists, contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure the power output and grounding connections are properly configured according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.

CP_a004

Charging equipment not recognized Try again or try different equipment

What this alert means:

The charge port is unable to detect whether a charge cable is inserted, or the type of charge cable connected.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

If this alert appears while a charge cable **is** connected, determine whether the issue is caused by the charging equipment or the vehicle. Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If this alert appears while a charge cable is **not** connected or if the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a010

Charging equipment communication error Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the external charging equipment. It cannot sense a valid control pilot signal coming from the charging equipment.



This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

First, confirm the lack of effective communication is caused by the external charging equipment rather than an issue with your vehicle. This is usually the case.

Try charging the vehicle using different external charging equipment (including charge cable, charging station, or charging stall).

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

If the issue is suspected to be with the vehicle, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a043
Charge port door sensor fault
Charge port may not operate as expected

What this alert means:

One of the charge port door sensors is not functioning normally. When this occurs, the charge port may be unable to accurately sense the charge port door position and the charge port may not operate as expected.

- The charge port latch may intermittently remain engaged when the charge port door is opened.
- The charge port light may illuminate only intermittently when the charge port door is opened.

What to do:

Try closing the charge port door and then opening it again.

For more information, see [Opening the Charge Port on page 726](#)[Opening the Charge Port on page 1370](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a046
Charging equipment communication lost
Check power source and charging equipment

What this alert means:

Charging stopped because communication between the vehicle and the external charging equipment was interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Confirm whether the external charging equipment is powered by looking for any status lights, displays, or other indicators on the equipment.



If the equipment is **not** powered, try to restore the external charging equipment's power source.

- If attempting to charge at a public station and power is unable to be restored, contact the station operator.
- If attempting to charge at a private station (for example: charging at home) and power is unable to be restored, contact an electrician.

If the equipment is powered, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

CP_a051

Charge port may not open when pressed Use another method to open the charge port

What this alert means:

One of the charge port door sensors is not communicating properly. The charge port may not recognize the request to open when the charge port door is pressed.

What to do:

You can still use all other usual methods to open the charge port door:

- Use the vehicle touchscreen.
- Use the Tesla Mobile App.
- With your vehicle unlocked, press the charge handle button on any Tesla charge cable, including a Wall Connector, Mobile Connector, or Supercharger.
- Hold and press the trunk button on your key fob.

For more information, see [Opening the Charge Port on page 726](#)[Opening the Charge Port on page 1370](#).

CP_a053

Unable to charge - Charge station not powered Check power source or try a different station

What this alert means:

Charging cannot begin because the charging equipment is not ready. A charge handle is detected, but the charging station is not communicating with the vehicle. This issue could occur because:

- The charging station is not powered.
- The control pilot signal between the charging station and the vehicle is interrupted.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.



- If the vehicle still does not charge, the issue may be with the vehicle.

If using a Mobile Connector or Wall Connector, first check the status lights on the front. If no status lights are visible, check the power source and contact an electrician to inspect the building wiring connection to the wall outlet or the Wall Connector to confirm that all wires are properly connected and torqued.

If using other external charging equipment, consult the product's owner's manual to learn how to confirm that the station is powered. Contact an electrician to inspect the building wiring and charging equipment as necessary.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CP_a054

Charge port latch not engaged

Fully insert charge cable or check for obstruction

What this alert means:

The charge port latch is unable to latch the charge cable in the charge port inlet. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet.

If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#)[Manually Releasing Charge Cable on page 740](#)[Manually Releasing Charge Cable on page 1375](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

CP_a055

Charging equipment communication lost

Check power source and charging equipment

What this alert means:

Charging stopped because communication between the vehicle and the external charging equipment was interrupted.



Troubleshooting

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Confirm whether the external charging equipment is powered by looking for any status lights, displays, or other indicators on the equipment. For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

If the equipment is **not** powered, try to restore the external charging equipment's power source.

- If attempting to charge at a public station and power is unable to be restored, contact the station operator.
- If attempting to charge at a private station (for example: charging at home) and power is unable to be restored, contact an electrician.

If the equipment is powered, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CP_a056

Charging stopped - Charge cable disconnected

Close charge port - Press brake pedal and retry

What this alert means:

Charging has stopped because your vehicle has detected that the connection between the charge port and charge cable has been unexpectedly interrupted.

What to do:

Before disconnecting a charge cable, make sure you first stop charging.

With some external charging equipment, charging may be stopped by pressing the button on the charge handle.

You can also stop charging from your vehicle touchscreen, your Tesla Mobile App, or the charging station.

For more information, see [Stopping Charging on page 733](#) [Stopping Charging on page 1373](#).

CP_a058

Unable to AC charge - Unplug and retry

Or try DC Fast Charging / Supercharging

What this alert means:

Your vehicle is unable to AC charge because it has detected one of the following conditions and has tried to charge too many times without success:

- The charge port is unable to detect whether a charge cable is inserted or detect the type of charge cable connected.
- Your vehicle is unable to sense a valid pilot control signal coming from the charging station, so it cannot communicate effectively with the external charging equipment.
- Communication between your vehicle and the external charging equipment has been interrupted.
- The external charging equipment has reported an error that prevents your vehicle from charging.

When this alert is present, there will always be at least one other alert present that identifies a more specific condition.



What to do:

For more information and troubleshooting suggestions, check in your vehicle touchscreen under **Controls > Service > Notifications** for other recent alerts that involve charging.

For more information and troubleshooting suggestions, check in your vehicle touchscreen for other recent alerts that involve charging.

CP_a066

**Charging equipment not ready
See equipment instructions to start charging**

What this alert means:

Charging cannot begin because the charging station is communicating to your vehicle that either the external charging equipment is not ready or charging is not authorized. The control pilot signal that communicates between the charging station and your vehicle indicates that your vehicle is not allowed to start charging.

This could occur because:

- The charging station is actively delaying charging. For example, this can happen because the station has a scheduled charging feature activated.
- The charging station requires further activation before the charge session can begin. Some additional authentication may be needed before the station starts charging your vehicle, such as a charging card, a mobile app, or a credit card.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Check the charging station for any instructions that explain the steps necessary to enable charging. For example, look for a touchscreen terminal, LED status indicators, printed instructions, or a payment interface that might provide guidance. If you cannot enable charging on the current charging station, try charging the vehicle with different charging equipment or at a different charging station.

- If the vehicle begins charging, the issue was likely with the equipment.
- If the vehicle still does not charge, the issue may be with the vehicle.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a078

**Cable blocked - Charge port latch may be frozen
Try using Defrost Car button in Mobile App**

What this alert means:

The charge port latch cannot unlatch the charge cable, and cold ambient temperature is detected.

What to do:

To remove any strain on the cable, re-insert the charge cable fully into the charge port inlet. Try again to unlatch the charge cable.

If the charge cable still cannot be removed, the charge port latch may be frozen.



Troubleshooting

To help thaw any ice on the charge port latch, press the **Defrost Car** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If the charge cable still cannot be removed, try the charge port manual release cable in your vehicle's trunk.

1. Make sure your vehicle is not actively charging.
 - On your vehicle touchscreen, access the charging screen.
 - If necessary, press Stop Charging.
2. Open the rear trunk.
3. Pull the charge port release cable downwards to unlatch the charge cable.
 - **NOTE:** The release cable is located on the left hand side of the rear trunk. It may be recessed within a small opening of the trunk interior trim.
4. Pull the charge cable from the charge port.

For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#) [Manually Releasing Charge Cable on page 740](#) [Manually Releasing Charge Cable on page 1375](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a079

Charge rate reduced - Charge port may be frozen

Try using Defrost Car button in Mobile App

What this alert means:

The charge port latch is unable to secure the charge cable in the charge port inlet, and cold ambient temperature is detected. If the latch is not engaged, AC charging (for example, charging with a Mobile Connector or Wall Connector) will be limited to 16A and DC Fast Charging / Supercharging will be unavailable.

The charge port light will pulse amber if this alert appears during AC charging and will be solid amber if this alert appears when attempting to DC Fast Charge / Supercharge.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

What to do:

Try re-inserting the charge cable fully into the charge port inlet. If your vehicle begins charging and the charge port light pulses green, the charge cable may not have been fully inserted before. AC charging should no longer be limited, and DC Fast Charging / Supercharging should be available.

If charging is still limited or the vehicle will not charge at all, make sure the charge port latch manual release cable (located on the left-hand side in the trunk) has not been pulled. Make sure the handle (usually ring-shaped or a strap) for the manual release cable is free of obstructions and that nothing is attached to it (like a cargo net or umbrella). Make sure the charge port manual release has not been actuated. For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#) [Manually Releasing Charge Cable on page 740](#) [Manually Releasing Charge Cable on page 1375](#).



If charging is still limited or the vehicle will not charge at all, inspect the charge port inlet and the charge cable connector for any obstructions, such as debris, moisture, and/or foreign objects. Make sure any charge port inlet obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the cable into the charge port.

If you have checked for and cleared any debris or foreign objects, but charging is still limited or your vehicle will not charge at all, the charge port latch may be frozen. To help thaw any ice on the charge port latch, press the **Defrost Car/Defrost Truck** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car/Defrost Truck** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If the alert remains present, limited AC charging should still be available.

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

CP_a101

Charge rate reduced - Wall connection hot Outlet or Wall Connector wiring must be checked

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

Wall Connector installation guides can be found [here](#).

CP_a102

Unable to charge - Wall connection too hot Outlet or Wall Connector wiring must be checked

What this alert means:

High temperature detected by Wall Connector alerts indicate the building connection to the Wall Connector is getting too warm, so charging has been slowed to protect the wiring and Wall Connector.

This is not typically an issue with your vehicle or your Wall Connector, but rather an issue with the building wiring. This may be caused by a loose building wiring connection to the Wall Connector and can be fixed quickly by an electrician.

What to do:

Contact an electrician to inspect the building wiring connection to the Wall Connector. They should make sure that all wires are properly connected and torqued according to the installation guide for the Wall Connector.

For more information, see the [installation guide](#) for your Wall Connector.



CP_a143

Charging adapter has electric arc flash hazard

Use different charging equipment

What this alert means:

Charging is unavailable because your vehicle has detected an electric arc flash hazard in the third-party charging adapter used to connect a Combined Charging System (CCS) charge handle to your vehicle's charge port.

An electric arc flash can occur if you attempt to unplug **while actively charging with the third-party charging adapter**, and an electric arc flash can cause serious bodily injury and/or property damage.

What to do:

Follow the steps below to mitigate this risk:

- Make sure charging is completely stopped.
 1. Use your vehicle touchscreen to confirm charging has stopped, or to stop charging if necessary.
 2. Use the charging station display and controls to confirm charging has stopped, or to end any active charging session.
- Make sure no flashing green or blue light (LED) is visible on your vehicle's charge port.
- Unplug the charging adapter from your vehicle's charge port.
- Confirm again that the charging station indicates no active charging session.
- Unplug the charging adapter from the charge handle.

Use different charging equipment to charge your vehicle. For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

CP_a151

Charge port error detected - Service is required

AC charging may not function / OK to Supercharge

What this alert means:

Your vehicle's charge port requires service. The charge port is unable to establish a valid control pilot signal and communicate effectively with some AC charging equipment and power sources.

While this alert remains present, AC charging and DC Fast Charging with non-Tesla charging stations may be limited or unavailable.

What to do:

It is recommended that you schedule service to have your vehicle's charge port inspected at your earliest convenient opportunity.

In the meantime, Supercharging should continue to be available. Supercharging locations can be displayed through the map on your vehicle's touchscreen. See [Maps and Navigation on page 699](#) for more details.

AC charging may also be available using a Gen 2 Mobile Connector or Gen 3 Wall Connector. However, it is recommended that you make sure your vehicle's charge port can communicate with your Tesla charging product. Try charging with your Gen 2 Mobile Connector or Gen 3 Wall Connector, and confirm your vehicle is charging as expected, before relying on it.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).



CP_a164

Charge handle still detected after unlatch request Use charge port manual release cable if needed

What this alert means:

Your vehicle's charge port detects a charge cable / charge handle is still connected after receiving multiple requests to unlatch the charge cable so it can be disconnected.

This alert may indicate the charge port latch is not releasing the charge cable as expected.

What to do:

If the charge cable cannot be removed from the charge port after multiple attempts to unlatch it, try the manual release cable in your vehicle's trunk.

1. Make sure your vehicle is not actively charging.
 - On your vehicle touchscreen, access the charging screen.
 - If necessary, press Stop Charging.
2. Open the rear trunk.
3. Pull the charge port release cable downwards to unlatch the charge cable.
 - **NOTE:** The release cable is located on the left hand side of the rear trunk. It may be recessed within a small opening of the trunk interior trim.
4. Pull the charge cable from the charge port.

For more information on using the charge port manual release, see [Manually Releasing Charge Cable on page 737](#) [Manually Releasing Charge Cable on page 740](#) [Manually Releasing Charge Cable on page 1375](#).

If the charge cable still cannot be removed, the charge port latch may be frozen.

To help thaw any ice on the charge port latch, press the **Defrost Car** **Defrost Truck** button in your Tesla Mobile App to defrost your vehicle for approximately 30 to 45 minutes.

NOTE: Be sure to use **Defrost Car** **Defrost Truck** in your Mobile App to defrost your vehicle. Adjusting the climate control settings in your vehicle's touchscreen is not as effective.

It may also be possible to thaw any ice affecting the charge port latch by turning on rear defrost via your vehicle touchscreen. Some vehicles are equipped with a charge port inlet heater that turns on when you turn on the rear defrost in cold weather conditions. It may also be possible to thaw any ice affecting the charge port latch by warming up the side mirrors via your vehicle touchscreen, as your vehicle is equipped with a charge port inlet heater that turns on when you turn on side mirror heating in cold weather conditions.

For more information on charging in cold weather conditions, see [Cold Weather Best Practices on page 693](#).

If this alert occurs repeatedly over multiple drives and charging attempts, it is recommended that you schedule service to have your vehicle's charge port inspected at your earliest convenient opportunity.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

If using other external charging equipment, refer to the manufacturer's provided documentation for troubleshooting tips.

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).

DI_a138

Front motor disabled - OK to drive Vehicle power may be limited

What this alert means:



Troubleshooting

Your vehicle's front motor is unavailable. Power, speed, and acceleration may be reduced as your vehicle uses the rear motor(s) to continue driving.

What to do:

Continue to your destination. Your vehicle is OK to drive.

In some cases, your vehicle may be unable to continue driving. If this occurs, another vehicle alert should also be present to provide more information and recommended actions.

This alert may be caused by a temporary condition that will be resolved automatically. If this alert clears during your current drive, or is no longer present when you start your next drive, it was likely caused by a temporary condition. No action is required.

This alert may also indicate a condition requiring front motor inspection and service. If this alert persists throughout subsequent drives, it is recommended that you schedule service. Your vehicle is OK to drive in the meantime.

DI_a166

Vehicle automatically parked to prevent rollaway Fasten seatbelt and close door to stay in gear

What this alert means:

Your vehicle has automatically shifted into Park (P) because it determined the driver was leaving or no longer present. This is expected vehicle behavior under various circumstances.

Your vehicle will automatically shift into Park if **all** of these conditions are true:

- Autopark is not active
- Your vehicle is traveling slower than 1.4 mph (2.25 km/h) in Drive or Reverse
- The last driver activity was detected more than 2 seconds ago. Driver activity includes:
 - Pressing the brake and/or accelerator pedal
 - Manually steering the vehicle

And at least **two** of these conditions are true:

1. Driver seatbelt is detected as unbuckled.
2. Driver is not detected as present.
3. Driver door is detected as open.

1. Driver seatbelt is detected as unbuckled
2. Driver is not detected as present
3. Driver door is detected as open
4. One or more of the sensors used to detect the three conditions above (seatbelt buckle, seat occupancy, door latch) is not working as expected

Your vehicle will also automatically shift into Park if **any** of these conditions is true:

- Door is detected as open
- Seatbelt is detected as unbuckled while speed is less than 0.1mph (0.15 km/h) in Drive or Reverse
- No driver activity is detected for 60 seconds

NOTE: If your vehicle is running software from 2015 or later, it will automatically shift into Park immediately when **all three** of the conditions above are true, regardless of vehicle speed or last detected press of the brake / accelerator pedal.

Your vehicle will also automatically shift into Park if **all** of these conditions are true:



- Vehicle hold is engaged
- Your vehicle is in Drive (D) or Reverse (R)
- Driver door is detected as open

NOTE: Your vehicle will also automatically shift into Park when a charge cable is connected to the charge port.

What to do:

For more information on automatic shifting into Park, see [Shifting on page 399](#) [Shifting on page 405](#).

DI_a175

Cruise control unavailable

What this alert means:

Cruise Control, including Traffic-Aware Cruise Control, is currently unavailable.

Cruise Control might be unavailable because:

- The driver canceled the request.
- The driver unbuckled their seatbelt.
- The front trunk or a door is open.
- The front trunk, trunk, or a door is open.
- The vehicle is traveling below the Cruise Control minimum speed of 18 mph (30 km/h).
- There is an environmental condition, such as limited visibility.
- Valet mode is active.
- Track mode is active.

What to do:

Take control and drive your vehicle manually.

When any condition preventing Cruise Control activation is no longer present, Cruise Control should be available. If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Traffic-Aware Cruise Control on page 576](#) [Traffic-Aware Cruise Control on page 554](#).

DI_a184

Autopark canceled

Take control

What this alert means:

Autopark has been canceled.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.
- The curb cannot be detected.
- A trailer is attached to the vehicle.

**What to do:**

Park, or finish parking, your vehicle manually. Once you have finished parking, apply the brakes and shift into Park. Your vehicle will otherwise remain free-rolling.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_a185

Autopark Aborted

What this alert means:

Autopark has aborted and the Electronic Parking Brake has been applied.

Autopark might have been canceled because:

- The driver pressed the Cancel button on the touchscreen.
- The driver used the gear stalk or used the gear stalk or moved the steering wheelsteering yoke (or steering wheel).
- The driver pressed the accelerator pedal, pressed the brake pedal, or opened a door.
- There is a steep slope / grade.
- There is a weather condition affecting visibility.
- The curb cannot be detected.
- A trailer is attached to the vehicle.

What to do:

Park, or finish parking, your vehicle manually.

Autopark should be available again during your next drive.

For more information, see [To Cancel Parking on page 617](#)[To Cancel Parking on page 613](#) and [Limitations and Warnings on page 631](#)[Limitations on page 613](#).

DI_a190

Rear tire tread depth low - Schedule service Inspect tires for rotation/replacement

What this alert means:

NOTE: This alert does NOT indicate that there is a flat tire.

Your vehicle has detected that the rear tires have experienced more wear over time than the front tires, exceeding the recommended difference.

What to do:

It is recommended that the tread depth on all tires be inspected. As your tires wear during normal driving, the rear tires generally wear more quickly than the front tires.

Tire rotation is important to balance tire wear evenly across all tires. When staggered tires (different front and rear tire sizes) are installed, regularly rotating the front and rear tires between the left and right sides of your vehicle will still make your tires wear more evenly and extend their life.

Failure to rotate tires as recommended poses a risk of hydroplaning and losing control of the vehicle on wet roads. Failure to rotate tires also decreases the life of your tires, requiring premature replacement.



It is recommended that you schedule service via your Tesla Mobile App or with an independent service provider to have your tires rotated when:

- The difference in tire tread depth between any front and rear tire exceeds 1.5mm
- Your vehicle has been driven for more than 6,250 miles (10,000 km) since the last rotation

Tires may need to be replaced if the rear tread depth is determined to be at an unsafe level and a tire rotation is no longer adequate.

Tires may need to be replaced if the rear tread depth is determined to be at an unsafe level and either of these conditions applies:

- A tire rotation is no longer adequate
- Staggered tires (different front and rear tire sizes) installed on your vehicle make front/rear tire rotation unavailable

Upon completion of tire inspection and any necessary tire service, update your vehicle's tire configuration to optimize your vehicle settings to your tires and clear the alert for at least 6,250 miles. For more information, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

It is not recommended that you rely on this alert instead of routine checks of tire tread depth. This alert should only be present when your vehicle estimates the tires are far beyond the recommended service interval.

This alert is calibrated for Tesla tires and is not expected to work with tires of different types or sizes, including combinations of different tire brands or models. It may not display, or may display prematurely, on vehicles using tires not recommended by Tesla. For more information on recommended tires, see [Wheels and Tires on page 877](#) [Wheel and Tire Specifications on page 1410](#).

DI_a245

Vehicle Hold feature unavailable Keep brake pedal pressed while stopped

What this alert means:

Vehicle Hold is currently unavailable due to system constraints. When stopping, use the brake pedal to bring your vehicle to a complete stop and keep your vehicle stationary.

What to do:

Continue to your destination. Your vehicle is OK to drive.

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

For more information, see [Vehicle Hold on page 493](#) [Stopping Mode in Braking and Stopping on page 1235](#).

DI_a250

Adaptive ride control disabled Drive with caution Adaptive ride control unavailable Vehicle speed limited - Proceed with caution

What this alert means:

The speed of your vehicle is limited to 90 mph (144 km/h) due to an issue with the Adaptive Suspension Damping system.

The system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and as a result your ride may be softer than usual.

What to do:



Troubleshooting

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

DI_a250

Adaptive ride control disabled

Drive with caution

Adaptive ride control unavailable

Vehicle speed limited - Proceed with caution

What this alert means:

The speed of your vehicle is limited to 90 mph (144 km/h) due to an issue with the Adaptive Suspension Damping system.

The system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and as a result your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

DIF_a251 / DIR_a251

DIF_a251 / DIR_a251 / DIREL_a251 / DIRER_a251

Gearbox fluid service recommended

Schedule Service

What this alert means:

Your vehicle has detected a condition requiring gearbox fluid inspection.

What to do:

It is recommended that you schedule service.

Your vehicle is OK to drive with this alert present. However, continuing to drive over an extended period of time with this alert present may result in permanent gearbox / powertrain damage.

EPBL_a195 / EPBR_a195

Vehicle automatically parked to prevent rollaway

Fasten seatbelt and close door to stay in gear

What this alert means:

Your vehicle has automatically shifted into Park (P) because it determined the driver was leaving or no longer present. This is expected vehicle behavior under various circumstances.

Your vehicle will automatically shift into Park if **all** of these conditions are true:

- Autopark is not active
- Your vehicle is traveling slower than 1.4 mph (2.25 km/h) in Drive or Reverse
- The last driver activity was detected more than 2 seconds ago. Driver activity includes:
 - Pressing the brake and/or accelerator pedal
 - Manually steering the vehicle



And at least **two** of these conditions are true:

1. Driver seatbelt is detected as unbuckled.
 2. Driver is not detected as present.
 3. Driver door is detected as open.
-
1. Driver seatbelt is detected as unbuckled
 2. Driver is not detected as present
 3. Driver door is detected as open
 4. One or more of the sensors used to detect the three conditions above (seatbelt buckle, seat occupancy, door latch) is not working as expected

Your vehicle will also automatically shift into Park if **any** of these conditions is true:

- Door is detected as open
- Seatbelt is detected as unbuckled while speed is less than 0.1mph (0.15 km/h) in Drive or Reverse
- No driver activity is detected for 60 seconds

NOTE: If your vehicle is running software from 2015 or later, it will automatically shift into Park immediately when **all three** of the conditions above are true, regardless of vehicle speed or last detected press of the brake / accelerator pedal.

Your vehicle will also automatically shift into Park if **all** of these conditions are true:

- Vehicle hold is engaged
- Your vehicle is in Drive (D) or Reverse (R)
- Driver door is detected as open

NOTE: Your vehicle will also automatically shift into Park when a charge cable is connected to the charge port.

What to do:

For more information on automatic shifting into Park, see [Shifting on page 399](#) [Shifting on page 405](#).

ESP_a118

Assist for low brake performance activated To stop, keep brake pedal firmly pressed

What this alert means:

Hydraulic Fade Compensation is active. This brake assist function activates temporarily to make sure you have full braking capability in conditions where reduced braking performance is detected by your vehicle.

When this assist function activates, you may feel the brake pedal pull away from your foot and notice a strong increase in brake pressure. You may also hear a pumping sound coming from the brake hydraulic unit at the front of the vehicle. This will usually last for a few seconds, depending on road surface and vehicle speed. This is completely normal and does not indicate any issue with your vehicle.

What to do:

Continue to press the brake pedal as you normally would, and do not "pump" (repeatedly press and release) the pedal as this will interrupt the function.

This alert will clear when your vehicle comes to a stop or you are no longer pressing the brake pedal. It may still be displayed for up to 5 seconds afterward.

Reduced braking performance is usually temporary, and can occur for a number of reasons including high brake temperatures after heavy brake use, or driving in extremely cold or wet conditions. It can also indicate that your brake pads or rotors have worn to the point that normal replacement is needed.



Troubleshooting

If you continue to experience reduced braking performance which does not improve over time, please contact Tesla service at your convenience for a brake inspection.

For more information, see [Hydraulic Fade Compensation on page 462](#).

HVBATT_a734

High voltage battery performance limited

OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a735

High voltage battery performance limited

OK to drive - Schedule service soon

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest convenience. Without service, your vehicle may continue to show further reductions in maximum range and charging performance and may also begin to show reduced power and acceleration when driving.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a736

High voltage battery requires service

Acceleration and charging performance reduced

What this alert means:



Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

HVBATT_a737

High voltage battery requires service Acceleration and charging performance reduced

What this alert means:

Your vehicle has detected a condition internal to the high voltage battery that is limiting the battery's performance. Service is required to restore full performance.

Your vehicle is OK to drive.

You may notice that your vehicle's top speed is reduced and it responds slower than previously to acceleration requests.

Your vehicle's maximum range may be reduced, and your vehicle may take longer to charge than before. Maximum charge rate varies, as always, based on location, power source, and charging equipment.

What to do:

While this alert remains present, keep your vehicle charged to 30% capacity or higher to avoid any discrepancy between the estimated range displayed on your vehicle's touchscreen and the actual high voltage battery charge level.

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle may continue to show reduced power, acceleration, range, and charging performance.

For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

PCS_a016

Cannot charge - Poor grid power quality possible Retry / Try other charge location or Supercharging

What this alert means:

Charging has stopped due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

This may be due to power supply disturbances caused by the external charging equipment or by the electrical power grid. In some cases, this condition may be the result of using nearby electric devices that draw a lot of power.

If these possible causes can be ruled out, then a condition with your vehicle itself may also be affecting AC charging.

What to do:

If this alert is accompanied by another alert that specifies the condition affecting AC charging, start by investigating that alert.



Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

If this alert persists when attempting to charge at multiple locations and with different charging equipment, it is recommended that you schedule service.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a017

Charging stopped – Power lost while charging

Check power source and charging equipment

What this alert means:

Power has been lost during charging. This could result from the charging equipment losing power from the source (for example, a wall outlet) or from an issue with the charging equipment.

What to do:

This alert is often accompanied by other alerts that can help you identify and troubleshoot the issue. Start by investigating any other displayed alerts that relate to charging issues.

Alternatively, you can check Mobile Connector or Wall Connector status lights to confirm power to the device, and also refer to the product owner's manual for troubleshooting information based on blink codes. If using other (non-Tesla) external charging equipment, check for a display or other user interface that provides troubleshooting help.

If there is clearly no power to the charging equipment, check the circuit breaker for the wall outlet / Wall Connector to make sure it has not tripped.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.



For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a019

Power grid or vehicle issue limiting AC charging Unplug and retry / Try different charging location

What this alert means:

Charging speed has been reduced due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

This may be due to power supply disturbances caused by the external charging equipment or by the electrical power grid. In some cases, this condition may be the result of using nearby electric devices that draw a lot of power.

If these possible causes can be ruled out, then a condition with your vehicle itself may also be affecting AC charging.

What to do:

If this alert is accompanied by another alert that specifies the condition affecting AC charging, start by investigating that alert.

Further troubleshooting tips based on equipment type:

- If using a Mobile Connector, try charging the vehicle with a different wall outlet.
 - If the vehicle starts to charge, the issue was likely with the original wall outlet.
 - If the vehicle still does not charge, the issue may be with the Mobile Connector.
- If using a Wall Connector, try charging the vehicle with different charging equipment like a Mobile Connector powered by a separate wall outlet.
 - If the vehicle starts to charge, the issue was likely with the Wall Connector.

If the issue is with the original wall outlet or the Wall Connector, contact an electrician to inspect the wiring connection.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

If this alert persists when attempting to charge at multiple locations and with different charging equipment, it is recommended that you schedule service.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a032

Poor electric grid power quality detected Try different charging station or location

What this alert means:

Charging speed has been reduced or charging has been interrupted due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

The onboard charger in your vehicle has detected power supply disturbances in the electrical power grid. These disturbances interfere with your vehicle's charging process.

Typical causes of these power supply disturbances include:

- Issues with the building wiring and/or the wall outlet.
- Issues with the external charging equipment.
- Other large electric devices, such as washing machines or air conditioning units, that temporarily draw a lot of power or otherwise disturb the electrical power grid.



- External conditions affecting the electrical power grid.

What to do:

As this alert is usually specific to external charging equipment and power sources, and it does not typically indicate an issue with your vehicle that can be resolved by scheduling service, it is recommended that you:

- Try charging with different wall outlets.
- Try charging again (disconnect and reconnect to retry) when other large electric devices are not drawing power.
- Try charging with multiple, different types of charging equipment at different locations.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a052

External charging equipment not providing power Check power source or try different equipment

What this alert means:

Charging cannot begin due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle has requested AC power from the external charging equipment, but the onboard charger does not detect any supply voltage coming from the equipment.

This can sometimes be caused by a hardware issue specific to the external charging equipment, which prevents the charging equipment from switching power to the vehicle on or off when requested. It could also occur due to another condition affecting the external charging equipment, the power source it is connected to, or your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a053

Charge rate reduced - Unexpected voltage drop Remove extension cords / Have wiring inspected

What this alert means:

Charging speed has been reduced because the onboard charger in your vehicle has detected a large voltage drop during charging.

Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.



This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:

- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a054
Charging stopped due to large voltage drop
Remove extension cords / Have wiring inspected

What this alert means:

Charging has been interrupted because the onboard charger in your vehicle has detected an unusually large voltage drop.

Likely causes of this issue include:

- Problems with the building wiring and/or the wall outlet.
- An extension cord or other wiring that cannot support the requested charge current.

This issue can also result from turning on electric devices that draw a lot of power from the same branch circuit while the vehicle is charging.

What to do:

If this issue has occurred multiple times at your normal charging location, contact an electrician to inspect the electrical installation. They should check the following:

- Any installed charging equipment and its connection to the building wiring.
- The building wiring, including any wall outlet used with a Mobile Connector.
- The electrical connection to the power utility line where it enters the building.

Discuss with the electrician whether the charge current on the vehicle should be lowered, or if the installation should be upgraded to support a higher charge current.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).



PCS_a073

External charging equipment error detected

Try different charging equipment

What this alert means:

AC charging cannot begin due to a condition that prevents your vehicle from charging with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle's onboard charger is detecting input voltage at the charge port when no power has been requested from the external charging equipment, which indicates the external charging equipment is not functioning as expected.

This can sometimes be caused by a hardware issue specific to the external charging equipment, which prevents the charging equipment from switching power to the vehicle on or off when requested. It could also occur due to another condition affecting the external charging equipment, or a condition affecting your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PCS_a090

Charging slowed - Some AC phases not powered

Check power source and charging equipment

What this alert means:

Charging speed has been reduced due to a condition that affects your vehicle's ability to charge with AC power. DC fast charging / Supercharging should still function as expected.

Your vehicle's onboard charger has detected that one or more power converters is not receiving the necessary AC input voltage. For example: during three-phase charging, one phase might be missing from the AC input power provided by the external source. This could occur due to a condition affecting the external charging equipment, the power source it is connected to, or your vehicle itself.

What to do:

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

Try charging with multiple, different types of charging equipment.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector or Wall Connector status lights, refer to the product's Owner's Manual at [Charging & Adapter Product Guides](#).

PM_a092 / PMF_a092 / PMR_a092

PM_a092 / PMF_a092 / PMR_a092 / PMREL_a092 / PMRER_a092

Powertrain issue detected - Schedule service

Issue may persist even if functionality is restored

What this alert means:



Your vehicle's powertrain requires service. Power, speed, and acceleration may be reduced, and your vehicle may need to shut down while driving.

This alert indicates a persistent condition requiring powertrain inspection and service.

Even if this alert clears after the current drive and does not return during subsequent drives, service is required to resolve the powertrain issue your vehicle has detected.

What to do:

It is recommended that you schedule service for your vehicle's powertrain at your earliest opportunity.

Without service, your vehicle may continue to have reduced power, speed, and acceleration, may experience conditions that require it to shut down while driving, or may become unable to drive.

TAS_a313
Adaptive ride control degraded
Ride comfort may be reduced

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling.

Instead, all dampers are receiving fixed current. Your ride may be softer or firmer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a yellow indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

TAS_a313
Adaptive ride control degraded
Ride comfort may be reduced

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling.

Instead, all dampers are receiving fixed current. Your ride may be softer or firmer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a yellow indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#) [Suspension on page 1240](#) [Suspension on page 502](#).

TAS_a314
Adaptive ride control disabled
Drive with caution
Adaptive ride control unavailable
Vehicle speed limited - Proceed with caution

What this alert means:



Troubleshooting

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#), [Suspension on page 1240](#), and [Suspension on page 502](#).

TAS_a314

Adaptive ride control disabled

Drive with caution

Adaptive ride control unavailable

Vehicle speed limited - Proceed with caution

What this alert means:

There is an issue with your vehicle's Adaptive Suspension Damping system. As a result, the system cannot provide real-time adjustments to the suspension system to optimize both ride and handling, and your ride may be softer than usual.

What to do:

If this alert persists throughout subsequent drives, schedule service at your earliest convenience. Your vehicle is OK to drive in the meantime.

This alert is accompanied by a red indicator light on the instrument panel touchscreen. For more information, see [Air Suspension on page 471](#), [Suspension on page 1240](#), and [Suspension on page 502](#).

UI_a004

Front trunk open

Proceed with caution

What this alert means:

Your vehicle's front trunk (hood) is detected open while driving.

This alert indicates at least one of the two latches securing the hood, the front trunk primary and/or secondary latch, cannot be confirmed closed (confirmed as fully secured) when your vehicle is shifted into a gear other than Park.

What to do:

As this condition may lead to the front trunk opening while driving, it is recommended that you drive carefully until you can safely bring your vehicle to a stop and shift into Park.

Once your vehicle is parked, check the front trunk (hood) to make sure it is fully closed (both latches are fully engaged). For more information, see Closing instructions for the [Front Trunk on page 181](#) and [Powered Frunk on page 1185](#).

The alert should clear once your vehicle is shifted into Park. However, it may return once you start driving if you do not first inspect and fully secure the hood.

If this alert persists across multiple drives, or occurs with increasing frequency over several drives, it is recommended that you schedule service at your earliest convenience.

For more information on the front trunk, see [Front Trunk on page 181](#) and [Powered Frunk on page 1185](#).

**UI_a006****Service is required
Schedule service now****What this alert means:**

This alert is set remotely by Tesla when a condition requiring service is detected on your vehicle.

This alert can be set due to various conditions. When you schedule service, more information should be available.

This alert can only be cleared by a service technician after your vehicle has been serviced.

What to do:

As this alert can be present due to various conditions, it is recommended that you schedule service at your earliest convenience.

UI_a013**Air pressure in tires very low
PULL OVER SAFELY - Check for flat tire****What this alert means:**

This alert indicates that one or more of the tires on your vehicle is extremely low or flat.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is significantly lower than the recommended cold tire pressure.

What to do:

You should pull over carefully as soon as possible. In a safe location, check for a flat tire.

You can request Tesla roadside assistance options (mobile tire, loaner wheel, tow) if required. See [Contacting Tesla Roadside Assistance on page 930](#) for more information.

In a non-emergency situation, it is recommended that you visit a local tire shop for assistance or schedule service using your Tesla Mobile App.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

The alert will clear once the TPMS has a consistent tire pressure measurement for each of your tires within 3 psi of the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#) [Inspecting and Maintaining Tires on page 1404](#).

UI_a014**Air pressure below recommendation for tires
Check pressure and refill air as needed****What this alert means:**

This alert does NOT indicate that there is a flat tire.



Troubleshooting

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is at least 20% lower than the recommended cold tire pressure.

See [Maintaining Tire Pressures on page 754](#)[Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

This alert may appear in cold weather because the air in your tires naturally contracts when it becomes cold, decreasing tire pressures.

What to do:

Add air to maintain the recommended cold tire pressure. Although drops in tire pressure are expected in colder weather, the recommended cold tire pressure should be maintained at all times.

The alert may clear as the vehicle is driven. This is because the tires will warm up and the tire pressure will increase. Even if the alert clears, the tires should still be refilled with air once they have cooled.

The alert will clear once the Tire Pressure Monitoring System detects that each of your tires is inflated to the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

If you repeatedly see this alert for the same tire, have the tire inspected for a slow leak. You can visit a local tire shop or schedule service using your Tesla Mobile App.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#).

UI_a137

Active service connection to vehicle Service performing remote diagnostics

What this alert means:

A service technician is remotely logged into your vehicle for diagnosis or repair. You may notice some loss of Infotainment functionality while the connection persists, but this alert does not indicate an issue with your vehicle.

Your vehicle is OK to drive.

What to do:

This alert should clear automatically after the technician completes vehicle diagnosis or repair. You may find it necessary to restart your touchscreen to restore full Infotainment functionality after the alert has cleared. For more information, see [Restarting the Touchscreen in your vehicle's Do It Yourself Guide](#).

If this alert does not clear after 24 hours, it is recommended that you schedule service via your Tesla Mobile App or with an independent service provider. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

UMC_a001

Unable to charge with Mobile Connector Inadequate outlet grounding - Try another outlet

What this alert means:



The Mobile Connector has detected that the electrical outlet has insufficient grounding, likely caused by an inadequate or missing ground connection.

This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

What to do:

Have the electrical installation inspected by an electrician. Your electrician should make sure there is proper grounding at your circuit breaker or power distribution box, and also make sure that appropriate connections are made to the outlet, before you attempt to plug in the Mobile Connector again.

If you need to charge in the meantime, try charging using a different outlet, at another location, or with another type of charging station.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a002

Unable to charge - Mobile Connector GFCI tripped Unplug charge handle from charge port and retry

What this alert means:

The vehicle cannot charge because the ground-fault circuit interrupter (GFCI) in the Mobile Connector has tripped.

Like the GFCI in a wall outlet, this feature is designed to stop the flow of electricity when there is a problem. It has interrupted charging to protect your vehicle and the charging equipment.

This could happen for many reasons. The problem could be in the charge cable, the charge handle, the charge port, or even an onboard vehicle component.

What to do:

Inspect the charge port and the charge handle for pooled water or unusual levels of moisture. If you find excessive moisture, wait and let both the inside area of the charge port and the exposed portion of the charge handle dry sufficiently before trying again.

Inspect the cargo bed outlets for signs of moisture. If any moisture is detected, this may be the issue. Allow any moisture in the outlets to dry completely before attempting to AC charge again.

Inspect the charge equipment for damage.

- If the cable is in any way damaged or deteriorated, **do not use it**. Try different charging equipment instead.
- If the cable is in good condition, try charging again with the same Mobile Connector.

If the issue persists and prevents charging, try charging with different charging equipment.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_a004

Unable to charge with Mobile Connector Voltage too high / Try a different wall outlet

What this alert means:

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:

- Detects the wall outlet voltage is too high, **or**
- Detects an unexpected increase in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a005

Unable to charge with Mobile Connector Voltage too low / Try a different wall outlet

What this alert means:

The vehicle cannot charge, or charging is interrupted, because **either** the Mobile Connector:

- Does not detect enough supply voltage from the wall outlet, **or**
- Detects an unexpected drop in supply voltage from the wall outlet.

What to do:

Try charging the vehicle with a different wall outlet. If the vehicle starts to charge, the issue was likely with the original wall outlet. Contact an electrician to inspect the building wiring connection to that outlet.

If the vehicle still does not charge when you try a different wall outlet, try charging at a different location.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a007

Mobile Connector control box temperature high Let Mobile Connector cool to resume charging

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a008 **Unable to charge - Wall plug temperature high** **Wall outlet and wiring inspection recommended**

What this alert means:

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has stopped to protect the outlet.

This does not indicate an issue with your Mobile Connector or vehicle, but instead points to an issue with the wall outlet / electrical installation the Mobile Connector is connected to.

A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_a009 **Cannot charge - Charge handle temperature high** **Check charge handle or charge port for debris**

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.

If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).



UMC_a010

Mobile Connector to adapter connection hot

Let cool - Plug adapter fully into Mobile Connector

What this alert means:

Charging has been interrupted because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.

Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Once the Mobile Connector control box temperature has decreased and any obstruction has been removed, the alert should clear and charging should be possible.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a011

Charging equipment communication error

Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector cannot confirm via proximity detection that the charge handle is fully connected to your vehicle.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.

To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#) [Charging Instructions on page 1370](#).



UMC_a012

Charging equipment communication error

Try again or try different equipment

What this alert means:

Your vehicle is unable to charge because it cannot communicate effectively with the Mobile Connector. The Mobile Connector detects that it cannot generate or maintain a valid control pilot signal.

What to do:

First, confirm the lack of effective communication is caused by the Mobile Connector rather than an issue with your vehicle. This is usually the case.

To confirm this, try charging the vehicle using different external charging equipment.

- If the vehicle begins charging, the issue was likely with the Mobile Connector.
- If the vehicle still does not charge, the issue may be with the vehicle.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions (use a flashlight as necessary). Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

This alert is usually specific to external charging equipment and power sources and does not typically indicate an issue with your vehicle that can be resolved by scheduling service.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

For more information on charging, see [Charging Instructions on page 726](#)[Charging Instructions on page 1370](#).

UMC_a013

Wall plug adapter error - Charge rate reduced

Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot monitor the wall plug adapter temperature, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector.



In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a014

Wall plug adapter error - Charge rate reduced Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.
4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a015

Wall plug adapter error - Charge rate reduced Plug adapter fully into Mobile Connector and retry

What this alert means:

Your Mobile Connector is unable to communicate with the wall plug adapter. Because your Mobile Connector cannot identify the type of wall outlet the wall plug adapter is connected to, charge current is automatically reduced to 8A.

What to do:

1. Unplug your Mobile Connector, including the wall plug adapter, completely from the wall outlet.
2. Make sure the connection between the wall plug adapter and the main body of your Mobile Connector is secure.
 - a. Disconnect the wall plug adapter completely from the main body of your Mobile Connector.
 - b. Fully reinsert the wall plug adapter into the main body of your Mobile Connector by pushing it into the socket until it snaps into place.
3. Try charging again by plugging the Mobile Connector, including wall plug adapter, fully into the wall outlet.



4. If the alert persists, try using a different wall plug adapter (see steps above to make sure the adapter is fully connected to your Mobile Connector).
 - a. If the alert is no longer present, the issue is likely with the wall plug adapter you were using previously.
 - b. If the alert persists, the issue is likely with your Mobile Connector.

If needed, obtain another wall plug adapter or Mobile Connector. In the meantime, you can continue to charge with the same equipment. The charge rate will be reduced, as charge current will be limited to 8A while this condition persists.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a016

Mobile Connector control box temperature high

Maximum charge rate reduced

What this alert means:

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature inside its control box housing.

What to do:

Make sure the Mobile Connector is not covered by anything, and that there is no heat source nearby. If the problem persists in normal ambient temperatures (under 100°F or 38°C), service is required.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a017

Charge rate reduced - Wall plug temperature high

Wall outlet and wiring inspection recommended

What this alert means:

High temperature detected by Mobile Connector alerts indicate the outlet used to charge is becoming too warm, so charging has been slowed to protect the outlet.

This is not typically an issue with your vehicle or your Mobile Connector, but rather an issue with the outlet. A warm outlet may be caused by a plug that is not fully inserted, a loose building wiring connection to the outlet, or an outlet that is beginning to wear out.

What to do:

Make sure your adapter is fully plugged into the outlet. If charging speed does not return to normal, contact an electrician to inspect the outlet and building wiring connections to the outlet and complete any repairs needed.

If the outlet is worn, it should be replaced with a high-quality outlet. Consider upgrading to a Tesla Wall Connector for greater convenience and highest charging speed.

UMC_a018

Charge rate reduced - Handle temperature high

Check charge handle or charge port for debris

What this alert means:



Troubleshooting

Charge current has been temporarily reduced because the Mobile Connector has detected increased temperature in the charge handle that connects to your vehicle's charge port.

What to do:

Make sure the Mobile Connector is fully inserted into your vehicle's charge port inlet.

Inspect the charge port inlet and the Mobile Connector handle for any obstructions or moisture. Make sure any obstruction in the charge port or Mobile Connector handle has been removed and any moisture has been allowed to dry, then try re-inserting the Mobile Connector handle into the charge port.

Also make sure the charge handle of the Mobile Connector is not covered by anything, and that there is no heat source nearby.

If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

UMC_a019

Mobile Connector to adapter connection hot Maximum charge rate reduced

What this alert means:

Charge current has been reduced because the Mobile Connector has detected a high temperature at the connection between the wall plug adapter and the control box.

What to do:

Make sure the wall plug adapter is fully connected to the Mobile Connector control box.

After unplugging from the power source (wall outlet), inspect the wall plug adapter connection and the Mobile Connector control box connection for any obstructions or moisture.

It is recommended that any debris / foreign objects be removed. Make sure any obstruction has been removed and any moisture has been allowed to dry, then try re-inserting the wall plug adapter into the Mobile Connector and then connecting to the power source (wall outlet).

Also make sure the wall plug adapter is not covered by anything, and that there is no heat source nearby. If the alert persists in normal ambient temperatures (under 100°F or 38°C), and occurs during multiple charging attempts, this may indicate a condition affecting the Mobile Connector or your vehicle. It is recommended that you schedule service at your convenience.

You can also try charging your vehicle using a Tesla Supercharger or Destination Charging location, all of which can be located through the map on your vehicle's touchscreen display. See [Maps and Navigation on page 699](#) for more details.

For more information on troubleshooting Mobile Connector status lights and charging issues, refer to the [product's owner's manual](#).

VCLEFT_a130 / VCREAR_a130

Critical issue detected PULL OVER SAFELY

What this alert means:

Your vehicle has detected a potential issue with its electrical system and/or steering system, and has initiated a controlled shutdown process intended to provide you with an opportunity to pull over at a safe location.



This alert does not mean your vehicle has lost all electrical power or steering functionality, or that the steer-by-wire system is unavailable. This alert indicates a possible issue with one of the multiple redundant sensors and actuators designed to make sure the steer-by-wire system always remains available while driving, or with the electrical system's ability to provide power to the steer-by-wire system.

Your vehicle's speed and power will be limited. Your vehicle will gradually lose all drive torque, and you must pull over.

After you have pulled over and shifted into Park (P), you will have the option to drive again. Your vehicle will be limited to a very low speed for emergency operation, such as repositioning your vehicle before it is towed.

What to do:

Pull over at a safe location, and bring your vehicle to a complete stop, at your earliest reasonable opportunity.

Once your vehicle is in Park (P) with the parking brake applied, you may choose to accept the stated conditions in the message displayed on the touchscreen and shift out of Park (P). Your vehicle's speed and power will be very limited. This limited drive torque will allow you to reposition your vehicle slightly at the parked location or prepare your vehicle to be towed, but your vehicle should not be driven on public roads in this condition.

It is possible that exiting and re-entering your vehicle may clear the alert and restore functionality. If you attempt this successfully, and no further alert messages display in the touchscreen indicating potential electrical or steering system issues, or inability to drive, continue to your destination.

If this alert occurs again during your next drive, or occurs multiple times over subsequent drives, it is recommended that you schedule service.

VCFRONT_a180

VCBATT_a180

VCLEFT_a194

**Electrical system power reduced
Vehicle may shut down unexpectedly**

What this alert means:

The electrical system cannot maintain the voltage required to support all vehicle features.

If this alert is present while you are driving, it is possible your vehicle will shut down unexpectedly.

If this alert is present when your vehicle is in Park or when it first wakes, it is possible your vehicle may not have adequate electrical power to start driving. A separate vehicle alert may be present to indicate that condition.

What to do:

It is recommended that you eliminate or reduce your use of any non-essential features. This can help your vehicle maintain adequate electrical power for essential functions.

If this alert remains active, schedule service immediately. Without service, your vehicle may shut down unexpectedly or may not restart.

VCFRONT_a182

VCBATT_a182

VCLEFT_a208

**Schedule service to replace low voltage battery
Software will not update until battery is replaced**

What this alert means:

The low voltage battery is showing degraded performance and needs to be replaced. Until the low voltage battery is replaced, vehicle software updates will not complete.

What to do:



It is recommended that you have the low voltage battery replaced at your earliest convenient opportunity.

You can schedule service via your Tesla Mobile App, or with an independent service provider that offers low voltage battery replacement for your vehicle. Please note that independent service provider options may vary, based on your vehicle configuration and your location.

If the low voltage battery does not have enough electrical power to turn on your vehicle or open the doors, follow the instructions in [Jump Starting on page 938](#)[If Vehicle Has No Power on page 920](#)[Jump Starting on page 1455](#).

For more information on the battery system, see [High Voltage Battery Information on page 724](#).

VCFRONT_a191

VCBATT_a191

VCLEFT_a207

Electrical system power reduced

Vehicle shutting down

What this alert means:

The low voltage battery cannot provide the electrical support necessary to drive or continue driving. Your vehicle is shutting down to preserve energy for essential functions other than driving.

Your vehicle cannot be driven or continue driving while this condition continues.

What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop immediately. It is recommended that you:

- Pull over safely immediately
- Use your Mobile App to contact Tesla Roadside Assistance immediately, or seek other roadside assistance if preferred

If you do not pull over safely within a short time, your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.

When this alert is present, the electrical system cannot maintain the voltage required to support all vehicle features. Many vehicle functions may no longer work.

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#)[Opening Front Doors from Interior on page 135](#)[Opening Doors from the Interior on page 1147](#).

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.

If this alert remains present, it is recommended that you schedule service immediately. Without service, your vehicle may not drive, may shut down unexpectedly, or may not restart.

VCFRONT_a192

VCLEFT_a592

Electrical system is unable to support all features

Switching off features to conserve energy

What this alert means:

The electrical system cannot support all vehicle features. Your vehicle is shutting down nonessential features to preserve energy for essential functions.

If you are driving when this alert is present, it is possible your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.



Nonessential features may be unavailable, including seat heaters, cabin climate control, and in-vehicle entertainment. This is expected behavior intended to help your vehicle maintain adequate electrical power for essential functions, including the ability to operate headlights, windows and doors, hazard lights, and the front trunk (frunk).

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#) [Opening Front Doors from Interior on page 135](#) [Opening Doors from the Interior on page 1147](#).

What to do:

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.

VCFRONT_a216
Vehicle may not restart - Service is required
Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw while driving or Supercharging / DC Fast Charging has made your vehicle's electrical system unable to support all features and functions.

Your vehicle will not restart until the electrical system has been serviced.

Cabin climate control and air vent positioning, powered trunk liftgate, and steering column adjustments may be limited or unavailable.

Other features and functions may also be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to restart, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCFRONT_a220
VCBATT_a220
VCLEFT_a221
Electrical system is unable to support all features
Schedule service

What this alert means:

The low voltage battery is not available and cannot provide electrical support for vehicle features.

The low voltage battery cannot provide the electrical support necessary to drive or continue driving.

It is possible your vehicle will shut down unexpectedly. It is also possible that your vehicle will not restart after the current drive.

You may notice that some nonessential features are not available. This is expected behavior due to your vehicle preserving energy for essential functions.



What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop as soon as possible. Pull over safely at your earliest opportunity.

It is recommended that you eliminate or reduce your use of any nonessential features. This can help your vehicle maintain adequate electrical power for essential functions other than driving, until it can be serviced.

If this alert remains present, it is recommended that you schedule service immediately. Without service, your vehicle may not drive, may shut down unexpectedly, or may not restart.

VCLEFT_a365 / VCREAR_a365

Incline too steep to park vehicle and trailer

Parking brake may not hold - Move to flatter area

What this alert means:

Your vehicle has detected an attempt to park on a slope of 10% grade or greater while Trailer Mode is active. This alert displays whenever Trailer Mode is active and your vehicle is parked on a steep slope, even if no trailer is attached.

What to do:

- **No trailer attached:** Exit Trailer Mode manually via your vehicle touchscreen, so the alert no longer displays when parking on steep slopes without a trailer.
 - For more information, see Trailer Mode in [Towing a Trailer on page 1258](#).
- **Trailer attached:** It is recommended that you park your vehicle and trailer in a more level area.
 - The parking brake may not hold both vehicle and trailer on slopes of 10% grade or greater.

For more information, see Trailer Mode and Parking with a Trailer in [Towing a Trailer on page 1258](#).

VCFRONT_a402

VCBATT_a402

VCLEFT_a402

Electrical system backup power is unavailable

Vehicle will consume more energy while idle

What this alert means:

The backup power source for the electrical system, the low voltage battery, is not available or cannot provide the voltage required to support all vehicle features.

The primary source of electrical power, the high voltage battery system, will continue to support vehicle functions, even when your vehicle is idle. For more information on the high voltage battery, see [High Voltage Battery Information on page 724](#).

You may notice that some nonessential features are not available. This is expected behavior due to your vehicle preserving energy for essential functions.

You may also notice that your vehicle consumes more energy than usual when you are not driving it, or that your vehicle displays a lower projected range than you would normally expect after charging. This is normal vehicle behavior when this alert is present, and it will continue until the backup power source is restored.

There is a chance that an issue affecting the primary power source could cause your vehicle to shut down unexpectedly.

What to do:

It is recommended that you limit or avoid the use of any nonessential features. This can help your vehicle maintain adequate electrical power for essential functions.

It is recommended that you schedule service at your earliest opportunity, so the backup power source for the electrical system can be restored.



VCFRONT_a496

VCBATT_a496

VCLEFT_a496

Vehicle is preparing to shut down

PULL OVER SAFELY

What this alert means:

The electrical system cannot provide adequate support to drive or continue driving. Your vehicle is preparing to shut down to preserve energy for essential functions other than driving.

Your vehicle cannot be driven or continue driving while this condition continues.

What to do:

If this alert is present while you are driving, your vehicle needs to come to a stop as soon as possible. It is recommended that you:

- Pull over safely at your earliest opportunity
- Use your Mobile App to contact Tesla Roadside Assistance immediately, or seek other roadside assistance if preferred

If you do not pull over safely within a short time, your vehicle may shut down unexpectedly. It is also possible that your vehicle will not restart once parked.

It is possible your vehicle may lose all electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#) [Doors on page 131](#) [Opening Doors from the Interior on page 1147](#).

This alert may be present due to various vehicle conditions. For more information and further recommended actions, check for other active vehicle alerts.

VCFRONT_a592

Unable to drive - Service is required

Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Cabin climate control, powered trunk liftgate, and steering column adjustments may be limited or unavailable. Many features and functions on the left side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).



VCFRONT_a593

Unable to drive - Service is required Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Cabin climate control, powered trunk liftgate, and steering column adjustments may be limited or unavailable. Many features and functions on the left side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCFRONT_a596

Unable to drive - Service is required Electrical system issue detected

What this alert means:

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Air vent positioning may be limited or unavailable. Many features and functions on the right side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

**VCFRONT_a597****Unable to drive - Service is required
Electrical system issue detected****What this alert means:**

An abnormally large and sustained power draw has made your vehicle's electrical system unable to support all features and functions.

While this alert is present, your vehicle is unable to drive and will not restart.

Air vent positioning may be limited or unavailable. Many features and functions on the right side of your vehicle may be unavailable, or their performance may be affected. These include:

- Powered doors
- Powered windows
- Front seat (movement and heating)
- Rear seat heaters
- Side mirror movement

What to do:

It is recommended that you schedule service at your earliest opportunity. Without service, your vehicle will remain unable to drive, and the electrical system will remain unable to support all features and functions.

Some or all of the powered doors and windows in your vehicle may lose electrical power. If this occurs, you can still use the manual door releases to exit the vehicle if necessary. For more information, see [Opening Doors from the Interior on page 133](#).

VCSEC_a221**Air pressure below recommendation for tires
Check pressure and refill air as needed****What this alert means:**

This alert does NOT indicate that there is a flat tire.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is at least 20% lower than the recommended cold tire pressure.

See [Maintaining Tire Pressures on page 754](#) [Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

This alert may appear in cold weather because the air in your tires naturally contracts when it becomes cold, decreasing tire pressures.

What to do:

Add air to maintain the recommended cold tire pressure. Although drops in tire pressure are expected in colder weather, the recommended cold tire pressure should be maintained at all times.

The alert may clear as the vehicle is driven. This is because the tires will warm up and the tire pressure will increase. Even if the alert clears, the tires should still be refilled with air once they have cooled.

The alert will clear once the Tire Pressure Monitoring System detects that each of your tires is inflated to the recommended cold pressure.

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.



- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

If you repeatedly see this alert for the same tire, have the tire inspected for a slow leak. You can visit a local tire shop or schedule service using your Tesla Mobile App.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).

VCSEC_a228

Air pressure in tires very low

PULL OVER SAFELY - Check for flat tire

What this alert means:

This alert indicates that one or more of the tires on your vehicle is extremely low or flat.

The tire pressure monitoring system (TPMS) has detected that the air pressure in one or more of your tires is significantly lower than the recommended cold tire pressure.

What to do:

You should pull over carefully as soon as possible. In a safe location, check for a flat tire.

You can request Tesla roadside assistance options (mobile tire, loaner wheel, tow) if required. See [Contacting Tesla Roadside Assistance on page 930](#) for more information.

In a non-emergency situation, it is recommended that you visit a local tire shop for assistance or schedule service using your Tesla Mobile App.

See [Maintaining Tire Pressures on page 754](#)[Tire Pressures on page 1400](#) for detailed information on where to find the recommended cold pressure (RCP) for your vehicle's tires, how to check tire pressures, and how to keep your tires properly inflated.

The alert should clear once the Tire Pressure Monitoring System has a consistent tire pressure measurement for each of your tires of at least 30 psi.

The alert should clear once the Tire Pressure Monitoring System has a consistent tire pressure measurement for each of your tires that is no longer significantly below the recommended cold pressure (RCP).

- The alert and Tire Pressure indicator light may still be present immediately after you have filled your tires to the recommended cold pressure, but both should clear once you have driven a short distance.
- You may need to drive over 15 mph (25 km/h) for at least 10 minutes for the Tire Pressure Monitoring System to measure and report your updated tire pressures.

For more information on tire pressure and inflation, see [Tire Care and Maintenance on page 754](#)[Inspecting and Maintaining Tires on page 1404](#).



About this Owner Information

Document Applicability

For the latest and greatest information that is customized to your vehicle, view the Owner's Manual on your vehicle's touchscreen by touching **Controls > Service > Owner's Manual**. The information is specific to your vehicle depending on the features you purchased, vehicle configuration, market region and software version. In contrast, owner information that is provided by Tesla elsewhere is updated as necessary and may not contain information unique to your vehicle.

Information about new features is displayed on the touchscreen after a software update, and can be viewed at any time by touching **Controls > Software > Release Notes**. If the content in the Owner's Manual on how to use your vehicle conflicts with information in the Release Notes, the Release Notes take precedence.

Illustrations

The illustrations provided in this document are for demonstration purposes only. Depending on vehicle options, software version and market region, the information displayed on the touchscreen in your vehicle may appear slightly different.

Feature Availability

Some features are available only on some vehicle configurations and/or only in specific market regions. Options or features mentioned in the Owner's Manual does not guarantee they are available on your specific vehicle. See [Feature Availability Statement on page 1056](#) for more information.

Errors or Inaccuracies

All specifications and descriptions are known to be accurate at time of publishing. However, because continuous improvement is a goal at Tesla, we reserve the right to make product modifications at any time. To communicate any inaccuracies or omissions, or to provide general feedback or suggestions regarding the quality of the Owner's Manual, send an email to ownersmanualfeedback@tesla.com.

Location of Components

Owner information may specify the location of a component as being on the left or right side of the vehicle. As shown, left (1) and right (2) represent the side of the vehicle when sitting inside.





Consumer Information





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Feature Availability Statement

Your Tesla is constantly changing, with new features being added and improved upon with every software update. However, depending on the firmware release operating on your vehicle, your vehicle may not be equipped with all features or may not operate exactly as described in this Owner's Manual. The features on your vehicle vary depending on market region, vehicle configuration, options purchased, software updates, and more.

Referencing options or features mentioned in this Owner's Manual does not guarantee they are available on your specific vehicle. The best way to ensure you are getting the latest and greatest features is update your vehicle's software as soon as you receive the notification to do so. You can also set your preferences to **Controls > Software > Software Preferences > Advanced**. See [Software Updates on page 749](#) for more information. For the features available on your vehicle, always comply with local laws and limits to ensure the safety of you, your passengers, and those around you.



Disclaimers

Event Data Recorder (EDR)

CybertruckModel SModel XModel 3Model Y is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, data such as an airbag deployment or hitting a road obstacle, to better understand how the vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in CybertruckModel SModel XModel 3Model Y is designed to record data such as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was pressing the accelerator and/or brake pedal; and,
- How fast the vehicle was traveling.

The data can help provide a better understanding of the circumstances in which crashes and injuries occur.

NOTE: EDR data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the EDR under normal driving conditions and no personal data (for example, name, gender, age, and crash location) is recorded. However, other parties, such as law enforcement, could combine the EDR data with person identifying data they routinely acquire during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have this special equipment, can read the information if they have access to the vehicle or the EDR. Tesla may also access the EDR remotely in some crash circumstances.

Vehicle Telematics

CybertruckModel SModel XModel 3Model Y is equipped with electronic modules that monitor and record data from various vehicle systems, including the motor, Autopilot components, Battery, braking and electrical systems. The electronic modules record information about various driving and vehicle conditions, including braking, acceleration, trip and other related information regarding your vehicle. These modules also record information about the vehicle's features such as charging events and status, the enabling/disabling of various systems, diagnostic trouble codes, VIN, speed, direction and location.

The data is stored by the vehicle and may be accessed, used and stored by Tesla service technicians during vehicle servicing or periodically transmitted to Tesla wirelessly through the vehicle's telematics system. This data may be used by Tesla for various purposes, including, but not limited to: providing you with Tesla telematics services; troubleshooting; evaluation of your vehicle's quality, functionality and performance; analysis and research by Tesla and its partners for the improvement and design of our vehicles and systems; to defend Tesla; and as otherwise may be required by law. In servicing your vehicle, Tesla can potentially resolve issues remotely simply by reviewing your vehicle's data log.

Tesla's telematics system wirelessly transmits vehicle information to Tesla on a periodic basis. The data is used as previously described and helps ensure the proper maintenance of your vehicle. Additional CybertruckModel SModel XModel 3Model Y features may use your vehicle's telematics system and the information provided, including features such as charging reminders, software updates, and remote access to, and control of, various systems of your vehicle.

Tesla does not disclose the data recorded in your vehicle to any third party except when:

- An agreement or consent from the vehicle's owner (or the leasing company for a leased vehicle) is obtained.
- Officially requested by the police or other authorities.
- Used as a defense for Tesla.
- Ordered by a court of law.
- Used for research purposes without disclosing details of the vehicle owner or identification information.
- Disclosed to a Tesla affiliated company, including their successors or assigns, or our information systems and data management providers.

For additional information regarding how Tesla processes data collected from your vehicle, please review Tesla's Privacy Notice at <http://www.tesla.com/about/legal>.



Data Sharing

For quality assurance and to support the continuous improvement of advanced features such as Autopilot, your CybertruckModel SModel XModel 3Model Y may collect analytics, road segment, diagnostic, and vehicle usage data and send to Tesla for analysis. This analysis helps Tesla improve products and services by learning from the experience of billions of miles that Tesla vehicles have driven. Although Tesla shares this data with partners that contribute similar data, the collected information does not identify you personally and can be sent to Tesla only with your explicit consent. In order to protect your privacy, personal information is either not logged at all, is subject to privacy preserving techniques, or is removed from any reports before being sent to Tesla. You have control over what data you share by touching **Controls > Software > Data Sharing**.

For additional information regarding how Tesla processes data collected from your vehicle, please review Tesla's Privacy Notice at <http://www.tesla.com/about/legal>.

NOTE: Although CybertruckModel SModel XModel 3Model Y uses GPS in connection with driving and operation, as discussed in this document, Tesla does not record or store vehicle-specific GPS information, except the location where a crash occurred. Consequently, Tesla is unable to provide historical information about a vehicle's location (for example, Tesla is unable to tell you where CybertruckModel SModel XModel 3Model Y was parked/traveling at a particular date/time).

Quality Control

You might notice a few miles/km on the odometer when you take delivery of your CybertruckModel SModel XModel 3Model Y. This is a result of a comprehensive testing process that ensures the quality of your CybertruckModel SModel XModel 3Model Y.

The testing process includes extensive inspections during and after production. The final inspection takes place at Tesla and includes a road test conducted by a technician.

Sound Library

"Free Sounds Library" (if equipped).

Free Sound Effects Site.

License: Attribution 4.0 International (CC BY 4.0). You are allowed to use sound effects free of charge and royalty free in your multimedia projects for commercial or non-commercial purposes.

<http://www.freesoundlibrary.com>

California Proposition 65

⚠ WARNING: Operating, servicing and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including phthalates and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, wear gloves or wash your hands frequently when servicing your vehicle. For more information go to: www.P65Warnings.ca.gov/passenger-vehicle.

⚠ WARNING: Certain components of this vehicle such as airbag modules and seat belt pre-tensioners may contain Perchlorate Material. Special handling may be required for service or vehicle end of life disposal. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

⚠ WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.



Reporting Safety Defects

Contacting Tesla

For detailed information about your CybertruckModel SModel XModel 3Model Y, go to <http://www.tesla.com> and log on to your Tesla account or sign up to get an account.

If you have any questions or concerns about your CybertruckModel SModel XModel 3Model Y, in the United States, Canada or Puerto Rico, call 1-877-79TESLA (1-877-798-3752) and in Mexico, call 1-800-228-8145.

NOTE: You can also use voice commands to provide feedback to Tesla. Say "Report", "Feedback", or "Bug report" followed by brief comments. CybertruckModel SModel XModel 3Model Y takes a snapshot of its systems, including your current location, vehicle diagnostic data, and screen captures of the touchscreen and instrument panel. Tesla periodically reviews these notes and uses them to continue improving CybertruckModel SModel XModel 3Model Y.

Reporting Safety Defects - US

If you believe that CybertruckModel SModel XModel 3Model Y has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Tesla.

If NHTSA receives similar complaints, it may open an investigation. If it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Tesla.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to www.safercar.gov; or write to: Administrator, National Highway Traffic Safety, 1200 New Jersey Avenue SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from www.safercar.gov.

Reporting Safety Defects - Canada

If you believe that your CybertruckModel SModel XModel 3Model Y has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada, in addition to notifying Tesla. To contact Transport Canada, call their toll-free number: 1-800-333-0510.

Certifications of Conformity

FCC and ISED Certification

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
B Pillar Endpoint	Tesla	1948204	13.56 2400-2483.5 6000-8500	2AEIM-1948204	20098-1948204
Interior Endpoint	Tesla	1815669	2400-2483.5 6000-8500	2AEIM-1815669	20098-1815669
Fascia Endpoint	Tesla	1613851	2400-2483.5 6000-8500	2AEIM-1613851	20098-1613851
Vivaldi Endpoint	Tesla	1752108	2400-2483.5 6000-8500	2AEIM-1752108	20098-1752108
Fascia Endpoint	Tesla	1733130	2400-2483.5 6000-8500 315 or 433.9	2AEIM-1733130	20098-1733130
TPMS	Tesla	1472547G	2400-2483.5	2AEIM-1472547G	20098-1472547G



Consumer Information

Component	Manufacturer	Model	Operating Frequency (MHz)	FCC ID	IC
TPMS	Tesla	1849171	2400-2483.5	2AEIM-1849171	20098-1849171
Tire, Pirelli Scorpion ATR	Pirelli	1250241-00-A	2400- 2483.5	2ANX7CPSN1	24121-CPSN1
Tire, Goodyear Wrangler Territory	Goodyear	1250242-00-A	2402-2483.5	YMY-030218	1M02FXD
TCU	Tesla	1727111	--	XMR2020AG525RGL XMR202303AF51Y	10224A-2020AG525R 10224A-202201AF51Y
Wireless Phone Charger	Tesla	WC6	127.72 KHz 13.56 MHz	2AEIM-WC6	20098-WC6
Glovebox BT USB Module	Tesla	1776863	2400-2483.5	2AEIM-1776863	20098-1776863
In-cabin radar*	Tesla	1616631	60000-64000	2AEIM-1616631	20098-1616631

* The in-cabin radar is restricted to factory installation.

The devices listed above comply with Part 15 of the FCC rules and Industry Canada's license-exempt RSS Standard(s) and EU Directive 2014/53/EU.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Tesla could void your authority to operate the equipment.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radiation Exposure Statement

The products comply with the FCC/ISED RF Exposure for Low Power Consumer Wireless Power Transfer. RF exposure limits are set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The farthest RF exposure demonstrated by compliance was at 20cm and farther from the user's body; set the device to low output power if such function is available.

TCU device has been tested and meets applicable limits for Radio Frequency(RF) exposure. TCU can be installed and is able to operate with a minimum distance of 1 inch (25mm) between the radiator and human body.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.

Mexico

IFT-008-SCFI-2015 / NOM-208-SCFI-2016



TPMS, model: 1472547G, IFT#: RCPTE1421-4384

TPMS, model: 1849171, IFT#: TETE1823-09546

La operación de este equipo está sujeta a las siguientes dos condiciones:

1. Es posible que este equipo o dispositivo no cause interferencia perjudicial.
2. Este equipo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Radio Frequency Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician to help.



CAUTION: This equipment and its antennas must not be co-located or operated with another antenna or transmitter.

Canada

CAN ICES-003 (B)/NMB-003(B)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radioexempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé.

Déclaration d'exposition aux radiations

Le produit est conforme à l'exposition RF ISED pour le transfert de puissance sans fil de consommateurs de faible puissance. La limite d'exposition RF fixée pour un environnement non contrôlé est sans danger pour le fonctionnement prévu tel que décrit dans ce manuel. L'exposition RF supplémentaire que la conformité a été démontrée à 20cm et plus de séparation du corps de l'utilisateur ou de mettre l'appareil à la puissance de sortie inférieure si une telle fonction est disponible.




Gen 1


















Safety Information

Save These Important Safety Instructions







This document contains important instructions and warnings that must be followed when using your Mobile Connector.

Warnings




-  **WARNING:**
 - For use with electric vehicles.
 - Automatic CCID reset provided.
 - Do not use this product if there is any damage to the unit.
 - Do not use this product if the electric vehicle cable is damaged.
 - Read this manual before using.
 - Enclosure: Type 4X

-  **WARNING:** Risk of explosion. This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches (46 cm) above the floor.
-  **WARNING:** This device is intended only for charging vehicles not requiring ventilation during charging.
-  **WARNING:** Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user-serviceable parts inside.
-  **WARNING:** Read this entire document before using the Mobile Connector. Failure to do so or to follow any of the instructions or warnings in this document can result in fire, electrical shock, serious injury or death.
-  **WARNING:** Use the Mobile Connector only within the specified operating parameters.
-  **WARNING:** The Mobile Connector is designed only for charging a battery electric vehicle that uses the North American Charging Standard (NACS), including Tesla vehicles (with the exception of the Tesla Roadster). Do not use it for any other purpose or with any other vehicle or object.
-  **WARNING:** Do not use the Mobile Connector's adapters in any outlet for which they are not designed.
-  **WARNING:** Do not use (or discontinue using) the Mobile Connector if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.
-  **WARNING:** Do not attempt to open, disassemble, repair, tamper with, or modify the Mobile Connector. Contact Tesla for any repairs.
-  **WARNING:** Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.
-  **WARNING:** Do not disconnect the Mobile Connector from the wall outlet when the vehicle is charging.
-  **WARNING:** Do not plug the Mobile Connector into a damaged, loose or worn power outlet. Ensure that the prongs on the Mobile Connector fit snugly into the wall outlet.
-  **WARNING:** Do not connect the Mobile Connector into a power outlet that is not properly grounded.
-  **WARNING:** Do not use or store the Mobile Connector in a recessed area or below floor level.
-  **WARNING:** Do not use the Mobile Connector when either you, the vehicle or the Mobile Connector is exposed to severe rain, snow, electrical storm or other inclement weather.
-  **WARNING:** When transporting the Mobile Connector, handle with care to prevent damage to any of its components. Do not subject the Mobile Connector to strong force or impact. Do not pull, twist, tangle, drag or step on the Mobile Connector or any of its components.
-  **WARNING:** Protect the Mobile Connector from moisture, water and foreign objects at all times. If any exist or appear to have corroded or damaged the Mobile Connector, do not use the Mobile Connector.



-  **WARNING:** If rain falls during charging, do not allow rain water to run along the length of charge cable, causing the electrical outlet or charging port to become wet.
-  **WARNING:** Do not plug the Mobile Connector into an electrical outlet that is submerged in water or covered in snow. If, in this situation, the Mobile Connector is already plugged in and needs to be unplugged, turn off the breaker before unplugging the Mobile Connector.
-  **WARNING:** Do not touch the Mobile Connector's end terminals with sharp metallic objects, such as wire, tools or needles. Do not forcefully fold any part of the Mobile Connector or damage it with sharp objects. Do not insert foreign objects into any part of the Mobile Connector.
-  **WARNING:** Ensure that the Mobile Connector's charging cable does not obstruct pedestrians or other vehicles or objects.
-  **WARNING:** Use of the Mobile Connector may affect or impair the operation of medical or implantable electronic devices, such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator. Before using the Mobile Connector, check with the electronic device manufacturer concerning the effects that charging may have on any such electronic device.
-  **WARNING:** Do not use cleaning solvents to clean the Mobile Connector.

Cautions

-  **CAUTION:** Do not use private power generators as a power source for charging.
-  **CAUTION:** Do not operate the Mobile Connector in temperatures outside its operating range of -22°F to +122°F (-30°C to +50°C).
-  **CAUTION:** Store the Mobile Connector in a clean dry place in temperatures between -40°F and +185°F (-40°C and +85°C).


General Information

Specifications

Use only a 120 volt, 208 volt or 240 volt AC supply, 50/60 hertz wall outlet that has a dedicated and properly grounded circuit, and is rated for at least 15 amps.

If possible, use a dedicated receptacle with a single socket. If the receptacle has two sockets, do not plug any other items into the other socket.

The Mobile Connector is 20 feet (6 meters) long. Use an existing outlet or install a new outlet within approximately 13 feet (4 meters) of the vehicle's charge port and at least 18 inches (45 cm) above the ground. The charge port is located on the left side of the vehicle, behind a door that is part of the rear tail light assembly.

-  **WARNING:** Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.

Charging Time

Charging times vary based on the voltage and current available from the power outlet, subject to various conditions. Charge time also depends on ambient temperature and the vehicle's Battery temperature. If the Battery is not within the optimal temperature range for charging, the vehicle heats or cools the Battery before or during charging.

To estimate the total time it takes to recharge the Battery in hours (from near empty to near 100%), divide the battery size (kWh) by power (kW). Note that different adapters provide different current and power outputs.

If you are charging a Tesla, you can also touch the **Charging** icon to review the charging status information; it displays the time remaining until fully charged at the currently selected charge level.

For more information on how long it takes to charge your Tesla vehicle, go to www.tesla.com.

Adapters

The Mobile Connector includes two outlet adapters: one for a standard 120 volt household outlet and a second adapter for a 240 volt outlet. For faster charging, use a 240 volt outlet. Consult an electrician to install a 240 volt outlet where you plan to park your Tesla vehicle.



Mobile Connector

NEMA 5-15 Adapter



NEMA 14-50 Adapter



Additional adapters are available for purchase. For details, go to: shop.tesla.com.

NOTE: Images in this document are for demonstration purposes only.

Removing the Adapter

To remove an adapter, push the button on the Mobile Connector's charge cable and pull the adapter from its socket.



Attaching the Adapter

To attach an adapter, line up the adapter with the Mobile Connector's charge cable and push until it snaps into place.



Mobile Connector



How to Charge

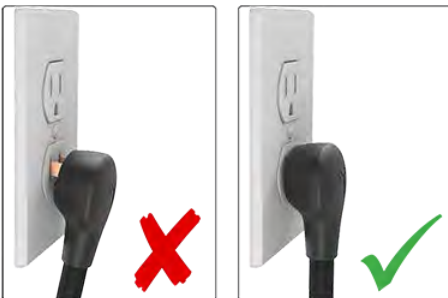
Plugging In

⚠ CAUTION: Always inspect the Mobile Connector and adapter for damage prior to each use.

NOTE: Illustrations are provided for conceptual understanding only. Your specific vehicle and mobile connector may appear slightly different.

NOTE: If you are charging a Tesla vehicle, find more information about how to charge your vehicle (how to adjust charge settings, view charging status, etc.) in the Charging Instructions topic in the Owner's Manual. To display the Owner's Manual on your vehicle's touchscreen, touch the app launcher and select the Manual app.

1. Ensure that the Mobile Connector's adapter matches the outlet you want to use.
2. Plug the Mobile Connector's adapter into the power outlet. The adapter should be inserted completely into the power outlet.



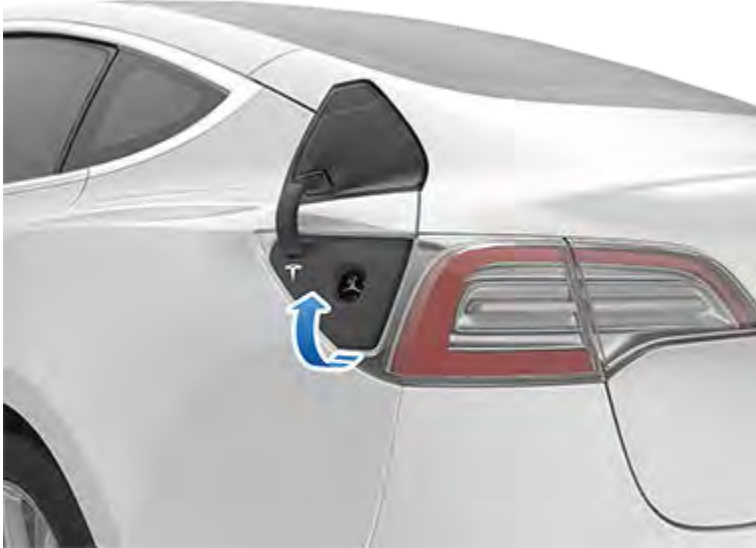
3. Open the charge port door. If you are charging a Tesla vehicle, press the button on the top of the Mobile Connector handle with your vehicle unlocked and in Park to open the charge port door.





NOTE: If you are charging a Tesla vehicle, your vehicle is unlocked when the key is nearby and automatic unlocking is enabled. You can also open the charge port door using any of these methods:

- Display the charging screen on your vehicle's touchscreen and touch **Open Charge Port**.
- On the key fob (if equipped), hold down the rear trunk button for 1-2 seconds.
- Press the charge port door when the vehicle is unlocked.
- Use a voice command (you can also use a voice command to close the charge port door, and to start or stop charging).





Mobile Connector





4. Plug the Mobile Connector handle into your vehicle's charge port.
5. When you plug the Mobile Connector into a Tesla vehicle, the charge port indicator light pulses green during charging, and the vehicle displays charging information. The display turns off after you close all doors, and the charge port indicator light stops pulsing shortly after you lock the vehicle.

Unplugging

When charging is complete on a Tesla vehicle, the charge port indicator light stops pulsing and turns solid green.

1. With the vehicle unlocked, press and hold the button on the Mobile Connector handle, wait for the charge port indicator light to turn white, and then pull the Mobile Connector out of the charge port.

NOTE: To prevent unauthorized unplugging of the charge cable, the vehicle must be unlocked or able to recognize a key nearby before you can disconnect the charge cable.

NOTE: When the latch in the charge port retracts, the Mobile Connector stops supplying power and you can safely unplug it from the vehicle.

2. The charge port door automatically closes after you remove the charge cable from a Tesla vehicle.

NOTE: If your vehicle is not equipped with a motorized charge port door, you may need to push the charge port door closed.

Tesla recommends leaving the Mobile Connector plugged into the wall outlet to reduce wear and tear from day-to-day use. If you do not plan to use the Mobile Connector for a while (such as when you leave for vacation), unplug it and store it in an appropriate location.

Troubleshooting

Gen 1 Mobile Connector Status Lights

Under normal conditions, when charging is in progress, the Mobile Connector's lights illuminate sequentially, and the red light is off. Identify problems by paying attention to these lights.

NOTE: In some cases, you may need to reset the device by pressing the **RESET** button located on the back.

Front





Mobile Connector

Back



Green Lights	Red Light	What it means	What to do
All lights streaming	Off	Charging is in progress	Nothing. The Mobile Connector is successfully charging.
All on	Off	Power on. Mobile Connector is powered, but not charging, or scheduled charging is enabled	Make sure the Mobile Connector is plugged into the vehicle.
Off	1 flash	Ground fault. Electrical current is leaking through a potentially unsafe path	This should automatically reset in 15 minutes. If not, ensure no one is touching or inside the vehicle, then press the RESET button.
Off	2 flashes	Self check failed	Unplug the Mobile Connector from the vehicle and press the RESET button. Plug the Mobile Connector back into the vehicle. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in. When plugging back in, always plug it into the outlet first.
Off	3 flashes	Contactors failed	Unplug the Mobile Connector from the vehicle and wait 10 seconds. If the error persists, contact your closest Service Center (https://www.tesla.com/findus).
Off	4 flashes	The ground assurance monitoring circuit has detected loss of ground	Make sure the power outlet is properly grounded. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	5 flashes	Sense circuit fault	Make sure the Mobile Connector's adapter is attached properly.
Off	6 flashes	Thermal fault	Consider charging in a cooler area, such as indoors or in the shade.
Off	More than 6 flashes	The Mobile Connector may need repair	Contact your closest Service Center (https://www.tesla.com/findus).
Off	Off	Power lost	Unplug the Mobile Connector and check that the power outlet has power.

Questions?

For 24/7 technical support: 1-877-79TESLA (1-877-798-3752)

Gen 2

Safety Information

Save These Important Safety Instructions

This document contains important instructions and warnings that must be followed when using your Mobile Connector.



Warnings



WARNING:

- For use with electric vehicles.
- Automatic CCID reset provided.
- Do not use this product if there is any damage to the unit.
- Do not use this product if the electric vehicle cable is damaged.
- Read this manual before using.
- Enclosure: Type 4X



WARNING: Risk of explosion. This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches (46 cm) above the floor.



WARNING: This device is intended only for charging vehicles not requiring ventilation during charging.



WARNING: Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user-serviceable parts inside.



WARNING: Read this entire document before using the Mobile Connector. Failure to do so or to follow any of the instructions or warnings in this document can result in fire, electrical shock, serious injury or death.



WARNING: Use the Mobile Connector only within the specified operating parameters.



WARNING: The Mobile Connector is designed only for charging a battery electric vehicle that uses the North American Charging Standard (NACS), including Tesla vehicles (with the exception of the Tesla Roadster). Do not use it for any other purpose or with any other vehicle or object.



WARNING: Do not use the Mobile Connector's adapters in any outlet for which they are not designed.



WARNING: Do not use (or discontinue using) the Mobile Connector if it is defective, appears cracked, frayed, broken or otherwise damaged, or fails to operate.



WARNING: Do not attempt to open, disassemble, repair, tamper with, or modify the Mobile Connector. Contact Tesla for any repairs.



WARNING: Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.



WARNING: Do not disconnect the Mobile Connector from the wall outlet when the vehicle is charging.



WARNING: Do not plug the Mobile Connector into a damaged, loose or worn power outlet. Ensure that the prongs on the Mobile Connector fit snugly into the wall outlet.



WARNING: Do not connect the Mobile Connector into a power outlet that is not properly grounded.



WARNING: Do not use or store the Mobile Connector in a recessed area or below floor level.



WARNING: Do not use the Mobile Connector when either you, the vehicle or the Mobile Connector is exposed to severe rain, snow, electrical storm or other inclement weather.



WARNING: When transporting the Mobile Connector, handle with care to prevent damage to any of its components. Do not subject the Mobile Connector to strong force or impact. Do not pull, twist, tangle, drag or step on the Mobile Connector or any of its components.



WARNING: Protect the Mobile Connector from moisture, water and foreign objects at all times. If any exist or appear to have corroded or damaged the Mobile Connector, do not use the Mobile Connector.



WARNING: If rain falls during charging, do not allow rain water to run along the length of charge cable, causing the electrical outlet or charging port to become wet.






WARNING: Do not plug the Mobile Connector into an electrical outlet that is submerged in water or covered in snow. If, in this situation, the Mobile Connector is already plugged in and needs to be unplugged, turn off the breaker before unplugging the Mobile Connector.






WARNING: Do not touch the Mobile Connector's end terminals with sharp metallic objects, such as wire, tools or needles. Do not forcefully fold any part of the Mobile Connector or damage it with sharp objects. Do not insert foreign objects into any part of the Mobile Connector.



Mobile Connector

-  **WARNING:** Ensure that the Mobile Connector's charging cable does not obstruct pedestrians or other vehicles or objects.
-  **WARNING:** Use of the Mobile Connector may affect or impair the operation of medical or implantable electronic devices, such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator. Before using the Mobile Connector, check with the electronic device manufacturer concerning the effects that charging may have on any such electronic device.
-  **WARNING:** Do not use cleaning solvents to clean the Mobile Connector.

Cautions

-  **CAUTION:** Do not use private power generators as a power source for charging.
-  **CAUTION:** Do not operate the Mobile Connector in temperatures outside its operating range of -22°F to +122°F (-30°C to +50°C).
-  **CAUTION:** Store the Mobile Connector in a clean dry place in temperatures between -40°F and +185°F (-40°C and +85°C).



General Information

Mobile Connector Component Overview



1. Handle
2. Button on handle
3. Cable
4. NEMA 5-15 Adapter
5. NEMA 14-50 Adapter (if equipped)
6. Mobile Connector controller
7. Status lights

Specifications

Use only a 120 volt, 208 volt or 240 volt AC supply, 50/60 hertz wall outlet that has a dedicated and properly grounded circuit, and is rated for at least 15A.



Mobile Connector

If possible, use a dedicated receptacle with a single socket. If the receptacle has two sockets, do not plug any other items into the other socket.

The Mobile Connector is 20 feet (6 meters) long. Use an existing outlet or install a new outlet within approximately 13 feet (4 meters) of the vehicle's charge port and at least 18 inches (45 cm) above the ground. The charge port is located on the left side of the vehicle, behind a door near the rear tail light assembly.

WARNING: Do not use an extension cord, a multi-outlet adapter, a multi-plug, a conversion plug, or a power strip to plug in the Mobile Connector.

Specifications Reference

Description	Specifications
Voltage	100-240 volt AC single-phase
Maximum Current	32A maximum; controlled by the appropriate adapter
Grid Frequency	50 or 60 Hz
Cable Length	20 ft (6 m) with adapter installed
Mobile Connector Controller Dimensions	Height: 7.1 in (179.8 mm) Width: 3.2 in (81.7 mm) Depth: 1.9 in (47.3 mm)
Weight	5.2 lbs (2.4 kg)
Operating Temperature	-22°F to +122°F (-30°C to +50°C)
Enclosure Type	4X
Ventilation	Not Required

Charging Time

Charging times vary based on the voltage and current available from the power outlet, subject to various conditions. Charge time also depends on ambient temperature and the vehicle's Battery temperature. If the Battery is not within the optimal temperature range for charging, the vehicle heats or cools the Battery before or during charging.

To estimate the total time it takes to recharge the Battery in hours (from near empty to near 100%), divide the battery size (kWh) by power (kW). Note that different adapters provide different current and power outputs.

If you are charging a Tesla, you can also touch the **Charging** icon to review the charging status information; it displays the time remaining until fully charged at the currently selected charge level.

For more information on how long it takes to charge your Tesla vehicle, go to www.tesla.com.

Charging Rate Reference

Adapter	Current	Power at 120 Volts
5-20	16A	1.7 kW
5-15	12A	1.3 kW

Adapter	Current	Power at 240 Volts
14-50, 6-50	32A	7.6 kW
14-30, 10-30	24A	5.7 kW
6-20	16A	3.8 kW



Adapter	Current	Power at 240 Volts
6-15	12A	2.8 kW

Adapters

The Mobile Connector includes two adapters: one for a standard 120 volt household outlet and a second adapter for a 240 volt outlet. For faster charging, use a 240 volt outlet. Consult an electrician to install a 240 volt outlet where you plan to park your Tesla vehicle.

NOTE: Depending on date of manufacture, your Mobile Connector may not include the NEMA 14-50 adapter. However, one can be purchased from Tesla.

NEMA 5-15 Adapter



NEMA 14-50 Adapter



To purchase adapters, go to www.tesla.com.

Removing the Adapter

To remove an adapter, firmly grasp the adapter and pull it from its socket.



Attaching the Adapter

To attach an adapter, line up the adapter with the controller of the Mobile Connector and push it into the socket until it snaps into place.

NOTE: The Mobile Connector automatically detects the attached adapter and sets the appropriate current draw.





How to Charge

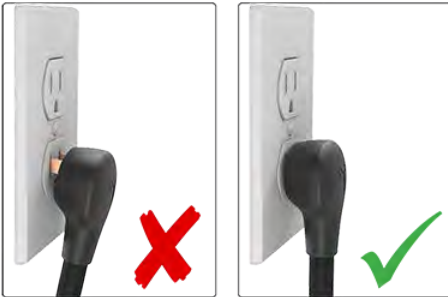
Plugging In

CAUTION: Always inspect the Mobile Connector and adapter for damage prior to each use.

NOTE: Illustrations are provided for conceptual understanding only. Your specific vehicle and mobile connector may appear slightly different.

NOTE: If you are charging a Tesla vehicle, find more information about how to charge your vehicle (how to adjust charge settings, view charging status, etc.) in the Charging Instructions topic in the Owner's Manual. To display the Owner's Manual on your vehicle's touchscreen, touch the app launcher and select the Manual app.

1. Ensure that the Mobile Connector's adapter matches the outlet you want to use.
2. Plug the Mobile Connector's adapter into the power outlet. The adapter should be inserted completely into the power outlet.

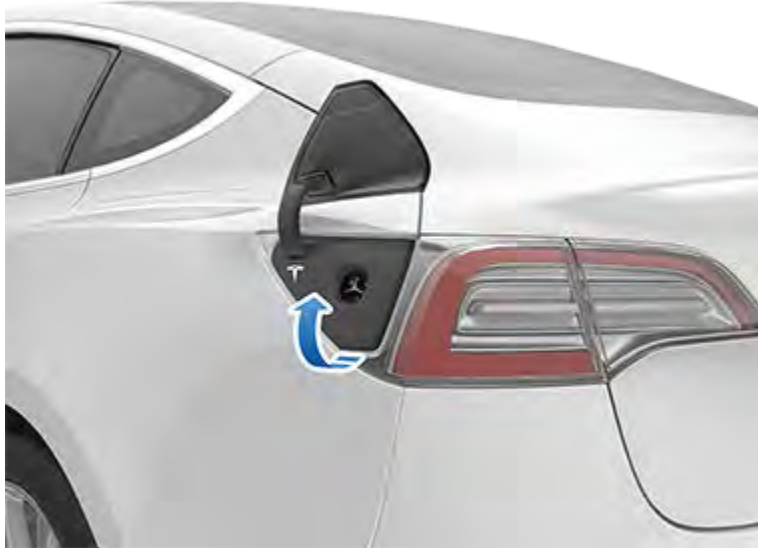


3. Open the charge port door. If you are charging a Tesla vehicle, press the button on the top of the Mobile Connector handle with your vehicle unlocked and in Park to open the charge port door.



NOTE: If you are charging a Tesla vehicle, your vehicle is unlocked when the key is nearby and automatic unlocking is enabled. You can also open the charge port door using any of these methods:

- Display the charging screen on your vehicle's touchscreen and touch **Open Charge Port**.
- On the key fob (if equipped), hold down the rear trunk button for 1-2 seconds.
- Press the charge port door when the vehicle is unlocked.
- Use a voice command (you can also use a voice command to close the charge port door, and to start or stop charging).





Mobile Connector



4. Plug the Mobile Connector handle into your vehicle's charge port.
5. When you plug the Mobile Connector into a Tesla vehicle, the charge port indicator light pulses green during charging, and the vehicle displays charging information. The display turns off after you close all doors, and the charge port indicator light stops pulsing shortly after you lock the vehicle.

Unplugging

When charging is complete on a Tesla vehicle, the charge port indicator light stops pulsing and turns solid green.



1. With the vehicle unlocked, press and hold the button on the Mobile Connector handle, wait for the charge port indicator light to turn white, and then pull the Mobile Connector out of the charge port.

NOTE: To prevent unauthorized unplugging of the charge cable, the vehicle must be unlocked or able to recognize a key nearby before you can disconnect the charge cable.

NOTE: When the latch in the charge port retracts, the Mobile Connector stops supplying power and you can safely unplug it from the vehicle.

2. The charge port door automatically closes after you remove the charge cable from a Tesla vehicle.

NOTE: If your vehicle is not equipped with a motorized charge port door, you may need to push the charge port door closed.

Tesla recommends leaving the Mobile Connector plugged into the wall outlet to reduce wear and tear from day-to-day use. If you do not plan to use the Mobile Connector for a while (such as when you leave for vacation), unplug it and store it in an appropriate location.

Troubleshooting

Gen 2 Mobile Connector Status Lights

When charging is in progress and conditions are normal, the Tesla logo lights illuminate sequentially and the red light is off. Identify problems by paying attention to these lights.



In some cases, you may need to reset the device by unplugging the Mobile Connector from the vehicle or from the power outlet.

Green Lights	Red Light	What it means	What to do
All on for 1 second	Off	Start-up sequence.	Nothing. The Mobile Connector is starting up.
All on	Off	Power on. Mobile Connector is powered and standing by, but not charging.	Make sure the Mobile Connector is plugged into the vehicle.
Streaming	Off	Charging is in progress.	Nothing. The Mobile Connector is successfully charging.
Streaming	1 flash	Charging current is reduced due to high temperature detected in the vehicle connector.	Unplug the Mobile Connector from the vehicle, and then plug it back in. Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
Streaming	2 flashes	Charging current is reduced due to high temperature detected in the input plug that connects to the Mobile Connector controller.	Unplug the Mobile Connector from both the vehicle and the wall. Ensure that the adapter is fully inserted, plug the Mobile Connector into the wall, and then plug it into the vehicle. If the error persists, contact your closest Service Center.



Mobile Connector

Green Lights	Red Light	What it means	What to do
Streaming	3 flashes	Charging current is reduced due to high temperature detected in the Mobile Connector controller.	Unplug the Mobile Connector from the vehicle, and then plug it back in. Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
Streaming	4 flashes	Charging current is reduced due to high temperature detected in the wall plug.	Make sure the power outlet is suitable for charging and that the plug is seated correctly. Consider connecting to a different outlet. If uncertain, ask your electrician.
Streaming	5 flashes	Charging current is reduced due to a detected fault in the adapter.	Make sure the Mobile Connector's adapter is attached properly.
Off	1 flash	Ground fault. Electrical current is leaking through a potentially unsafe path.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	2 flashes	Ground loss. The Mobile Connector detects a loss of ground.	Make sure the power outlet is properly grounded. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	3 flashes	Relay/contactactor fault.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	4 flashes	Over- or under-voltage protection.	Make sure the power outlet is suitable for charging and that the plug is seated correctly. Consider connecting to a different outlet. If uncertain, ask your electrician.
Off	5 flashes	Adapter fault.	Make sure the Mobile Connector's adapter is attached properly.
Off	6 flashes	Pilot fault. The pilot level is incorrect.	Unplug the Mobile Connector from the vehicle and then plug it back in. Try a different outlet. If the error persists, contact your closest Service Center.
Off	7 flashes	Software error or mismatch.	Update the vehicle's software, if available. If an update is not available, contact your closest Service Center.
Off	On	Self check failed.	Unplug the Mobile Connector from the vehicle then plug it back in. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in.
All on	1 flash	Thermal fault.	Consider charging in a cooler area, such as indoors or in the shade. If the error persists, contact your closest Service Center.
All on	5 flashes	Adapter fault. Charging current is limited to 8A.	Unplug the Mobile Connector from the vehicle. Plug the Mobile Connector back into the vehicle. If the error persists, unplug the Mobile Connector from both the vehicle and the power outlet, then plug it back in.
Off	Off	Power lost.	Unplug the Mobile Connector and check that the power outlet has power.

Questions?

For 24/7 technical support: [1-877-79TESLA \(1-877-798-3752\)](tel:1-877-79TESLA)

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