

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 114 THEFT PROTECTION

VOLKSWAGEN DE MEXICO S.A. DE C.V.
2019 VOLKSWAGEN JETTA, PASSENGER CAR
NHTSA NO. C20195800

GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443



December 20, 2018

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
WASHINGTON, D.C. 20590**

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Prepared By: Debbie Messick

Approved By: Grant Farrand

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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF TEST

A model year 2019 VOLKSWAGEN JETTA PASSENGER CAR was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 114 testing to determine if the vehicle was in compliance with the requirements of the standard. FMVSS 114 specifies requirements to decrease the likelihood that a vehicle is stolen, or accidentally set in motion.

1.1 The test vehicle was a 2019 VOLKSWAGEN JETTA PASSENGER CAR. The vehicle was identified as follows:

- A. Vehicle Identification Number: 3VWN57BU5KM045982
- B. NHTSA No.: C20195800
- C. Manufacturer: VOLKSWAGEN DE MEXICO S.A. DE C.V.
- D. Manufacture Date: 05/18

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 114 testing on October 2, 2018.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-114-04 and General Testing Laboratories, Inc. (GTL) Test Procedure, TP-114-04, "Theft Protection and Rollaway Prevention".

2.1 SUMMARY OF RESULTS

Test data indicate the FMVSS 114 requirements do not appear to have been satisfied. All test data resulting from the tests were recorded on test data sheets in Section 3.

See page 7, Data Sheet 2 for test anomaly S5.1.3.

SECTION 3

TEST DATA

3.0 TEST RESULTS

The following data sheets document the results of FMVSS 114 testing on the 2019 VOLKSWAGEN JETTA PASSENGER CAR.

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 – VEHICLE IDENTIFICATION

TEST DATE: 10/02/18 LAB.: General Testing Laboratories
 CONTRACT: DTNH22-16-D-00031 VEH. NHTSA NO.: C20195800
 VIN: 3VWN57BU5KM045982 BUILD DATE: 05/18
 MY/MAKE/MODEL/BODY STYLE: 2019 VOLKSWAGEN JETTA PASSENGER CAR

TRANSMISSION TYPE:

Automatic ; Manual X ; Other (describe: 6 Speed)

DRIVE TRAIN TYPE:

Front Wheel X ; Rear Wheel ; 4-Wheel ; AWD

FUEL TANK LEVEL: 100 (% OF max.) MILEAGE: 19 miles

VEHICLE STARTING SYSTEM:

Location of the starting system:

Located on right side of the Steering Column.

Selectable settings:

Off, On, Start

Explain how the system is activated:

The system is activated by depressing the clutch pedal, inserting the key into the ignition switch lock cylinder and turning to desired position.

KEY

Description of the key:

The Key is an Electronic Key FOB with traditional metal key.

STARTING SYSTEM ACTIVATION

Describe how the key is inserted into the starting system:

The Key is inserted into the system by unfolding the metal key from the Key FOB and inserting It into the ignition switch lock cylinder.

Describe how the key is used to activate the starting system:

The Starting System is activated when the transmission is in Park or Neutral and the key with the correct key code is inserted into the Ignition switch and read by the vehicle's computer.

Describe how the key is removed from the starting system:

The key is removed from the starting system by rotating it to the Off position and physically removing it from the ignition switch lock cylinder. The transmission must be in the Park position.

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 continued

GEAR SELECTION CONTROL

Describe the gear selection control:

The gear selection control is a center console mounted selector with standard "H" pattern.

Describe how the gear selection control is activated:

Gear selector control is activated by depressing the clutch pedal and moving gear selector to the desired position.

Describe all of the selectable settings:

Reverse, 1, 2, 3, 4, 5, 6, Neutral

IMMOBILIZER

Is the vehicle equipped with an immobilizer YES X NO

Describe the immobilizer device and how it prevents vehicle theft (if equipped):

The vehicle is equipped with an immobilizer which prevents vehicle from starting without the correct key code.

OPTIONAL RELEASE DEVICES

Describe if the vehicle is equipped with optional release devices:

OPTIONAL RELEASE DEVICES:

Key Removal Gear Selection Control None X Other

VEHICLE FLUIDS

Check all vehicle fluids and adjust to the proper levels for operation: Full

VEHICLE TIRE PLACARD INFORMATION

Vehicle Mfg. Recommended Tire Inflation Pressure

(kPa): Front 250 Rear 250

TIRE INFLATION PRESSURES:

Measured (kPa): LF 250 LR 250 RF 250 RR 250

WEIGHT

Vehicle Curb Weight(kg): 1314.5 Weight of Driver (kg): 91 (target = 91kg)

FMVSS 114, THEFT PROTECTION
DATA SHEET 2 continued

REQUIREMENT S5.1.3	PASS	FAIL
An audible warning is activated whenever the key is in any starting system position with the exception of "on" and "start" and the door closest to the driver's designated seating position is opened. Yes____ No <u>X</u> Identify ALL key/starting system position setting: <u>OFF, ON, START</u>		X

REQUIREMENT S5.1.4	PASS	FAIL
With the vehicle engine or motor shut down and the transmission gear selection control in any position other than "park"; The steering wheel can rotate without locking? Yes <u>X</u> No _____	X	
The vehicle is free to roll forward? Yes <u>X</u> No _____	X	

REMARKS: When physical metal key is left in the ignition switch lock cylinder and driver door is opened, NO audible warning is activated.

RECORDED BY: G. Farrand
APPROVED BY: D. Messick

DATE: 10/02/18

FMVSS 114, ROLLAWAY PREVENTION
DATA SHEET 3
(for vehicles equipped with transmission with a "park" position)

VEH. NHTSA NO.: C20195800

TEST DATE: 10/02/18

REQUIREMENT S5.2.1	PASS	FAIL
The starting system prevents key removal in ALL gear selection control positions except "park". Yes_____ No __ Can the gear selection control be placed between each gear selection position and will it remain there without assistance? Yes_____ No __ If yes, can the key be removed from the starting system? Yes_____ No __ If the key can be removed from the vehicle starting system when the gear selection control is not locked in "park", a mechanism shall exist which, upon key removal, the vehicle transmission or gear selection control shall become locked in "park" as the direct result of removing the key. If such a mechanism exists, describe the mechanism and its function:	N/A	

REQUIREMENT S5.2.2	PASS	FAIL
The gear selection control is locked in the "park" position when the key is removed from the starting system. Yes_____ No_____	N/A	

REMARKS: MANUAL TRANSMISSION

DATA SHEET 3 continued

REQUIREMENT S5.2.3	PASS	FAIL
<u>KEY REMOVAL OVERRIDE OPTION:</u> The vehicle is equipped with an override device that allows the user to Remove the key from the “starting system without the transmission or gear selection control in the “park” position. Yes ____ No <u>X</u> If <u>yes</u>, describe the override device design and mode of activation: Fill in the section below that describes the condition for which the user is allowed to remove the key from the starting system without the transmission or gear selection control in the “park” position: <u>ELECTRICAL FAILURE</u> In the event of an electrical failure, including battery discharge, key removal from the starting system without the transmission or gear selection control locked in “park” is permitted”. Yes ____ No <u>X</u> <u>OVERRIDE DEVICE WITH NO COVER:</u> The following condition is prevented: Steering ____ Self-Mobility ____ The device requires both the use of a tool to activate and simultaneous activation of the override device and removal of the key from the starting system Yes ____ No ____ <u>OVERRIDE DEVICE WITH AN OPAQUE COVER</u> The following condition is prevented: Steering ____ Self-Mobility ____ The device is covered by an opaque surface which prevents sight of and use of the device. Yes ____ No ____ The opaque surface can only be removed by using a screwdriver or other tool: Yes ____ No ____	X X N/A N/A	

REMARKS:

DATA SHEET 3 continued

REQUIREMENT S5.2.4	PASS	FAIL
<u>GEAR SELECTION CONTROL OVERRIDE DEVICE</u> The vehicle is equipped with an override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes____ No <u>X</u> If yes, select the type of override device used: Key____ Opaque Cover____ No Cover_____ Describe the override device design and mode of activation (if equipped): Use a screwdriver to remove cover near gear selector and depress shift lock override button with tool. FILL IN THE SECTION BELOW THAT APPLIES: <u>OVERRIDE OPERATED WITH KEY:</u> The key is required to operate the override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes____ No ____ <u>OVERRIDE DEVICE WITH NO COVER</u> As a direct result of removing the key from the starting system, the following is prevented: Steering____ Self-Mobility_____ The override device requires the use of a tool to operate. Yes____ No ____ Simultaneous activation of the override device and movement of the gear selection control from “park” is required Yes____ No____ <u>OVERRIDE DEVICE WITH AN OPAQUE COVER</u> As a direct result of removing the key from the starting system, the following is prevented: Steering____ Self-Mobility __ The opaque surface cover prevents sight of and use of the device: Yes_____ No_____ The opaque surface cover can only be removed by using a screwdriver or other tool: Yes____ No_____	X	
	N/A	
	N/A	
	N/A	

REMARKS:

DATA SHEET 3 continued

REQUIREMENTS S5.2.5	PASS	FAIL
<u>VEHICLE FACING UPHILL ON 10% GRADE</u> With the gear selection control in park measure movement of the vehicle down the slope upon releasing the service brake. Test grade: _____ % (9% to 15%) Measured movement: _____ mm (150mm maximum) NOTE: Repeat procedure if vehicle fails on grade in excess of 10%. Test grade: _____ % (9% to 10%) Measured movement: _____ mm (150 mm maximum) <u>VEHICLE FACING DOWNHILL ON 10% GRADE</u> With the gear selection control in park measure movement of the vehicle down the slope upon releasing the service brake. Test grade: _____ % (9% to 15%) Measured movement: _____ mm (150mm maximum) NOTE: Repeat procedure if vehicle fails on grade in excess of 10%. Test grade: _____ % (9% to 10%) Measured movement: _____ mm (150 mm maximum)	N/A	

REMARKS: MANUAL TRANSMISSION

 RECORDED BY: G. Farrand
 APPROVED BY: D. Messick
DATE: 10/02/18

SECTION 4 TEST EQUIPMENT LIST

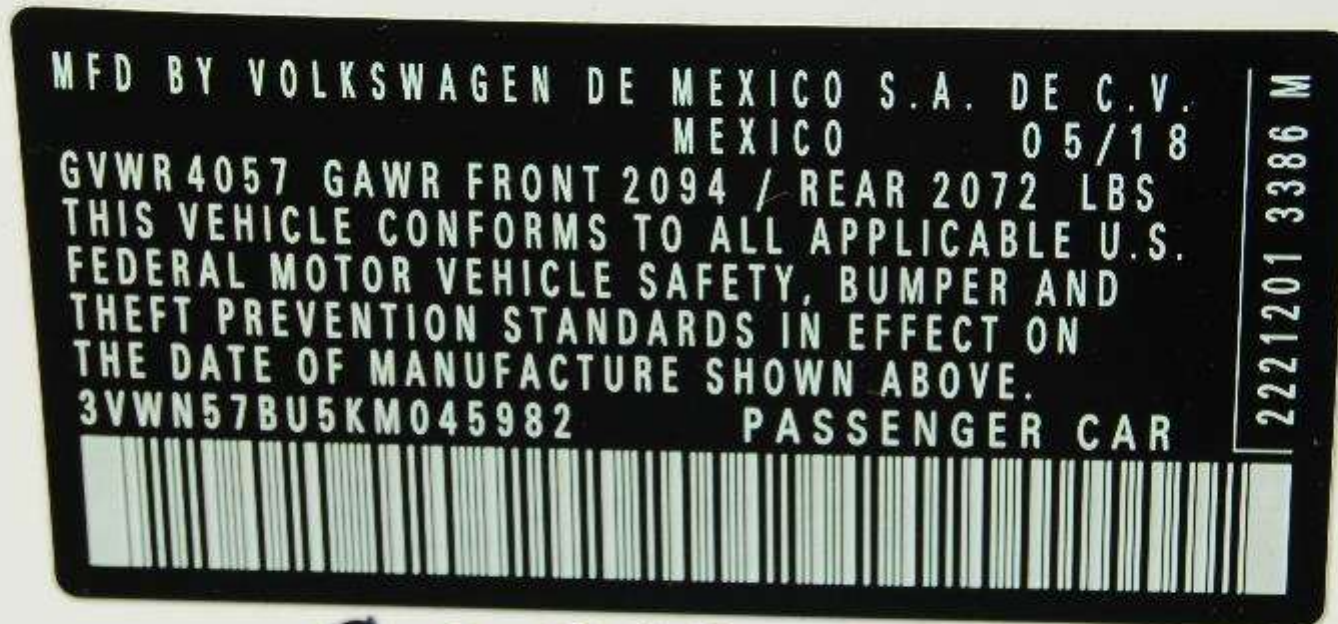
ITEM	MFR	MODEL	S/N	CAL. PERIOD	DATE OF NEXT CALIB.	REMARKS
SLR DIGITAL CAMERA	NIKON	D50	N/A	N/A	N/A	
TIRE PRESSURE GAUGE	WESKLER	45-0/100	107	12 MO.	03/19	
INCLINOMETER	MITUTOYO	PRO 360	950-315	N/A	BEFORE USE	
STEEL TAPE	STANLEY	FAT MAX	33-890	12 MO.	03/19	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/19	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/19	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/19	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/19	
SPRING SCALE	CHATILLON	DPP-10	8761	12 MO.	03/19	

SECTION 5
PHOTOGRAPHS



2018 VOLKSWAGEN JETTA
NHTSA NO. C20195800
FMVSS NO. 114

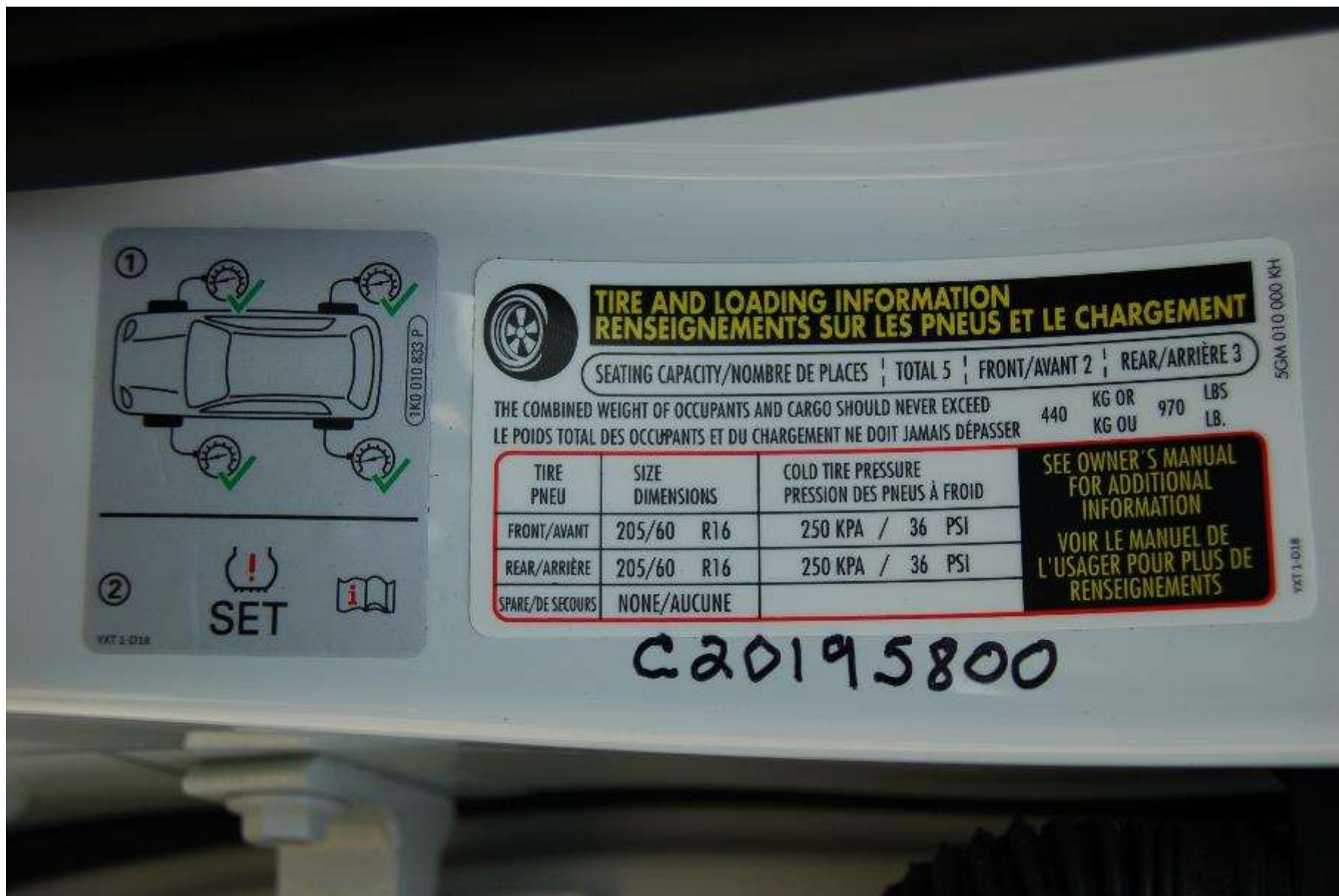
FIGURE 5.1
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



C20195800

2018 VOLKSWAGEN JETTA
NHTSA NO. C20195800
FMVSS NO. 114

FIGURE 5.2
VEHICLE CERTIFICATION LABEL



2018 VOLKSWAGEN JETTA
 NHTSA NO. C20195800
 FMVSS NO. 114

FIGURE 5.3
 VEHICLE TIRE INFORMATION LABEL



2018 VOLKSWAGEN JETTA
NHTSA NO. C20195800
FMVSS NO. 114

FIGURE 5.4
CLOSE-UP VIEW OF KEY



2018 VOLKSWAGEN JETTA
NHTSA NO. C20195800
FMVSS NO. 114

FIGURE 5.5
KEY RECEPTACLE/SWITCH



2018 VOLKSWAGEN JETTA
NHTSA NO. C20195800
FMVSS NO. 114

FIGURE 5.6
CLOSE-UP VIEW OF GEAR SELECTOR CONTROL

SECTION 6
VEHICLE OWNER'S MANUAL (APPLICABLE PAGES)

Opening and closing Vehicle key set

Introduction

DANGER

20 mm button cells and other lithium batteries will cause serious personal injury and even death within a short time if swallowed.

- Always keep remote control vehicle key fobs with batteries, spare batteries, as well as dead button cell and larger 20 mm batteries out of the reach of children.
- Get medical attention immediately if you suspect that a battery has been swallowed.

WARNING

Improper use of vehicle keys can result in serious personal injury.

- Always switch off the engine and the ignition and take the key with you when you leave the vehicle. It can be used to start the engine and operate vehicle systems such as the power windows, leading to serious personal injury. Children or other unauthorized persons could also lock the doors and the trunk lid.

- Never leave children, disabled persons, or anyone who cannot help themselves in the vehicle. The doors can be locked with the remote control vehicle key. This could leave people trapped in the vehicle in an emergency. Depending on the time of year, people trapped in the vehicle can be exposed to very high or very low temperatures.

- A closed vehicle can become very hot or very cold, depending on the season. Particularly in the summer, heat buildup in the passenger and luggage compartment of a parked vehicle can result in temperatures in the vehicle that are much higher than the outside temperatures. Temperatures can quickly reach levels that can cause unconsciousness and death, particularly to small children.

- Never remove the key from the ignition switch or turn off the ignition with the start button while the vehicle is moving or rolling to a stop. The electronic steering column

could suddenly lock, you would not be able to steer, and you could lose control of the vehicle, crash, and seriously injure yourself and others.

Remote control vehicle key

Please read the introductory information and heed the Warnings and Notice **!** and **!** on page 104.

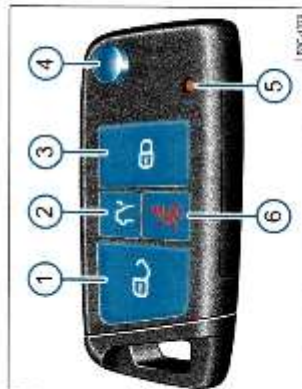


Fig. 52 Remote control vehicle key with panic button (vehicles without Remote Start).

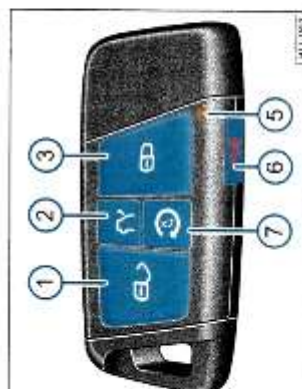


Fig. 53 Remote control vehicle key with panic button (vehicles with Remote Start).

Key to fig. 52:

- 1 Unlock the vehicle
- 2 Unlock the trunk lid
- 3 Lock the vehicle
- 4 Key bit release
- 5 Indicator light

6 Panic button

7 Remote Start button

Remote control vehicle key

The remote control vehicle key can unlock and lock the vehicle from a distance → page 108, Power locking system.

The remote transmitter and battery are inside the remote control vehicle key. The receiver is inside the passenger compartment. The operating range of the remote control vehicle key for a fresh battery is several yards (meters) around the vehicle.

If the remote control vehicle key will not lock or unlock your vehicle, you probably need to replace the battery in the remote control vehicle key → page 106, Replacing the remote control vehicle key battery (vehicles without Remote Start), or → page 107, Replacing the remote control vehicle key battery (vehicles with Remote Start). If this is not the problem, the key should be resynchronized by an authorized Volkswagen dealer, an authorized Volkswagen Service Facility, or another qualified workshop.

Folding the key bit in or out

Pressing button **4**, releases the key bit and folds it out.

To fold the key bit in, press the button **4** and push the key bit in until it clicks.

For vehicles with remote start → fig. 53, there is an emergency key → page 108, Emergency key.

Indicator light in the remote control vehicle key

If a button on the remote control vehicle key is pressed briefly, the indicator light **5** will flash once briefly. If you push and hold a button, it flashes repeatedly.

If the indicator light in the remote control vehicle key does not come on when the button is pressed, the battery inside the key must be replaced → page 106, Replacing the remote control vehicle key battery (vehicles without Remote Start), or → page 107, Replacing the remote control vehicle key battery (vehicles with Remote Start).

A Declaration of Compliance with United States FCC and Industry Canada regulations is found in the Consumer Information section of this Manual → page 364, Declaration of Compliance, Telecommunications and Electronic Systems.

Panic button

Press the panic button **4** only in emergencies! After pushing the panic button, the horn will sound and the turn signals will flash. Press the panic button again or press the **4** button on the remote control vehicle key to switch off the panic feature.

Remote start button

Depending on equipment, pressing the **7** button **2** times after pressing the **4** button **3** activates the remote start feature. If certain requirements are met → page 177, Remote start feature.

Synchronizing the remote control vehicle key
If the **4** button is pressed often while outside the operating range, it is possible that the vehicle cannot be locked or unlocked anymore with the remote control vehicle key. Synchronize the vehicle key as follows:

- Depending on equipment, unfold the key bit on the remote control vehicle key, or remove the emergency key → page 108, Emergency key.
- Remove the cap from the door handle on the driver door → page 116, Manually unlocking and locking the driver door.
- Press the **4** button on the remote control vehicle key. Stand immediately next to vehicle while doing so.
- Manually unlock the vehicle using the key bit. The synchronization is complete.
- Reinstall the cap.

Replacement vehicle keys

The vehicle identification number is required to get a replacement key or an additional remote control vehicle key.

Each new vehicle key contains a microchip and must be coded with the data from the vehicle's electronic immobilizer. A vehicle key will not work if it does not contain a microchip or contains a chip that is not coded, even if the key bit was cut correctly.

You can obtain additional or duplicate remote control vehicle keys from authorized Volkswagen dealers, authorized Volkswagen Service Facilities, and from certain independent repair facilities and locksmiths which are qualified to make remote control vehicle keys.

Replacing the remote control vehicle key battery (vehicles without Remote Start)

ⓘ Please read the introductory information and heed the Warnings and Notice ⚠ and ▲ on page 104.



Fig. 54 Remote control vehicle key: Opening the battery compartment cover and removing the old battery.

Key to fig. 54:

- ① Cover
- ② Battery

Volkswagen recommends having the battery in the remote control vehicle key changed by an authorized Volkswagen dealer or an authorized Volkswagen Service Facility → ①.

The battery is on the back of the remote control vehicle key under a cover ①.

When changing the battery, pay attention to the correct polarity and use the same type of battery.

Replacing the battery

- Unfold the key bit on the remote control vehicle key → page 104, Remote control vehicle key.
- Remove the cover on the back of the remote control vehicle key ① in the direction of the arrow using a suitable object such as a coin → ②. This action may require some force.
- Use a thin object to pry the battery out of the battery compartment ②.
- Position the new battery (opposite direction of the arrow) → ③.
- Position the cover as shown and press it down (opposite direction of the arrow) until you hear it click into place.

Each vehicle key must be programmed by an authorized Volkswagen dealer, an authorized Volkswagen Service Facility, or certain independent repair facilities in order for it to work with your vehicle.

To find the nearest qualified independent repair facility, locksmith, or Volkswagen dealer which can cut and code replacement vehicle keys, call the VW Customer Care Hotline at 1-800-822-8987 or visit <http://www.vw.com> and search for "Replacement keys."

Canadian customers can contact an authorized Volkswagen dealer or Volkswagen Service Facility or call the Volkswagen Canada Customer CARE Center at 1-800-822-8987.

NOTICE

The remote control vehicle keys contain electrical components. Protect them from damage, moisture and rough handling.

ⓘ Do not press the buttons on the remote control vehicle key unless you actually want to use the function in question. Since terrain and conditions vary, pressing a button on the remote control vehicle key when it is not necessary may unlock the vehicle or set off the panic alarm, even if you think you are out of range.

ⓘ Remote control vehicle key functions can be temporarily disrupted by interference from transmitters near the vehicle that use the same frequency range (such as radio equipment or mobile phones).

ⓘ Things between the remote control vehicle key and vehicle, bad weather, as well as a weak battery can reduce the operating range.

ⓘ If the remote control vehicle key buttons → page 110, Unlocking or locking the vehicle from the outside or the power locking buttons → page 110, Unlocking or locking the vehicle from the inside are pushed repeatedly in quick succession, the power locking system is switched off for a brief period to help keep it from being overloaded. During this period, the vehicle can be unlocked only once. After several seconds, the power locking system is switched back on and the vehicle can be locked again.



Fig. 56 Remote control vehicle key: Changing the battery.

Key to fig. 55:

- ① Insert the flat blade of a screwdriver to unlock the cover.
- ② Turn the screwdriver in the direction of the arrow.
- ③ Open the cover on the back of the remote control vehicle key in the direction of the arrow.

Volkswagen recommends having the battery in the remote control vehicle key changed by an authorized Volkswagen dealer or an authorized Volkswagen Service Facility → ①.

The battery is on the back of the remote control vehicle key under a cover ③.

When changing the battery, pay attention to the correct polarity and use the same type of battery.

Replacing the battery

- Remove the emergency key → page 108, Emergency key.
- Insert a small, flat-blade screwdriver into the emergency key slot ①.
- Turn the screwdriver in the direction of the arrow until the cover opens → fig. 55/②.
- Remove the cover in the direction of the arrow ③.
- Use a thin object to pry the battery out of the battery out of the battery compartment in the direction of the arrow → fig. 56.
- Position the new battery and press it into the battery compartment (opposite direction of the arrow) → fig. 56 → ④.
- Press the cover into place until you hear it click.
- Replace the emergency key.

Replacing the remote control vehicle key battery (vehicles with Remote Start)

ⓘ Please read the introductory information and heed the Warnings and Notice ⚠ and ▲ on page 104.



Fig. 55 Remote control vehicle key: Opening the battery compartment cover.

NOTICE

- Changing the battery improperly can damage the remote control vehicle key.
- Using the wrong battery can damage the remote control vehicle key. Replace a dead battery with a new one that has the same voltage, size, and specifications.
- Make sure the plus and minus poles of the battery are correctly positioned.

Dispose of old batteries in an environmentally responsible manner and keep them out of the reach of children.

Batteries of the type used in your remote control vehicle key may contain **Perchlorate** Material. Special handling may apply – see <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>. Obey all legal requirements regarding handling and disposal of these batteries. Authorized Volkswagen dealers and authorized Volkswagen Service Facilities are familiar with the requirements, and we recommend that you have them perform this service for you.

Emergency key

Please read the introductory information and heed the Warnings and Notice and on page 104.

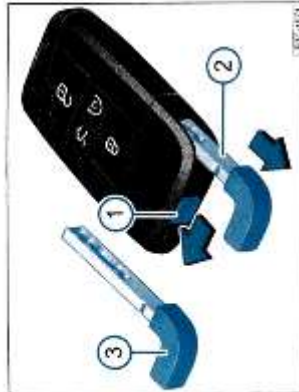


Fig. 57 Releasing the emergency key and removing it from the remote control vehicle key.

Key to Fig. 57:

- Emergency key release.
- Removing the emergency key.
- Emergency key bit.

If your vehicle is equipped with the remote start feature, there is an emergency key ③ inside the remote control vehicle key fob.

You can do the following with the emergency key:

- Manually lock or unlock the vehicle → page 116, *Manually unlocking and locking the driver door* → page 117, *Manually locking the passenger doors*.
- Activate the child safety lock → page 115, *Child safety lock*.

To remove the emergency key: Move the sliding lock ① in the direction of the arrow. At the same time, push the emergency key out of the slot in the remote control vehicle key in the direction of the arrow ②.

Power locking system

Introduction

The power locking system works properly only when all doors and the trunk lid are completely closed. When the driver door is open, the vehicle cannot be locked with the remote control vehicle key.

For vehicles equipped with Keyless Access with push-button start, the vehicle can be locked only if the ignition is switched off and the driver door is closed.

WARNING

Improper use of power locks can result in serious personal injury.

- The power locking button locks all doors. Locking the doors from the inside can help prevent unintended door opening during a

collision and can also prevent unwanted entry from the outside. Locked doors can, however, delay assistance to vehicle occupants and rescue from the outside in an accident or other emergency.

- Never leave children or anyone who cannot help themselves behind in the vehicle. All doors can be locked from the inside with the power lock button. This could leave people trapped in the vehicle in an emergency. Depending on the time of year, people trapped in the vehicle can be exposed to very high or very low temperatures.
- A closed vehicle can become very hot or very cold, depending on the season. Particularly in the summer, heat buildup in the passenger and luggage compartment of a parked vehicle can result in temperatures in the vehicle that are much higher than the outside temperatures. Temperatures can quickly reach levels that can cause unconsciousness and death, particularly to small children.
- Never allow passengers to remain in a locked vehicle. In an emergency any person still inside the vehicle might not be able to get out.

Certain settings are automatically saved by the driver personalization feature → page 40, *Driver personalization*.

Indicator light in the driver door

Please read the introductory information and heed the Warnings and Notice on page 108.

The indicator light for the power locking system is in the driver door → page 11, *Driver door overview*.

If the vehicle is locked: The red LED light flashes for about 2 seconds in short intervals, then slowly

If there is a locking system malfunction: Red LED light flashes for about 2 seconds in short intervals, then lights up continuously for about 30 seconds. See an authorized Volkswagen dealer or an authorized Volkswagen Service Facility.

NOTICE

Failure to heed warning lights or text WARNINGS can result in vehicle damage.

Description of the power locking system

Please read the introductory information and heed the Warnings and Notice on page 108.

The power locking system lets you unlock and lock all doors and the trunk lid.

The doors can be locked manually if the remote control vehicle key or the power locking system is not working → page 114, *Doors*.

When the vehicle is locked from the outside, the fuel filler flap is also locked.

Depending on equipment, certain central locking functions can be turned on and off in the information system by pressing the **OFF** button followed by the **ON** and **Unlocking and closing** function keys → page 33, *Vehicle settings menu*, or by an authorized Volkswagen dealer or authorized Volkswagen Service Facility.

Automatic locking (Auto lock)

The vehicle locks automatically when it reaches a speed of about 10 mph (15 km/h). When the vehicle is locked, the indicator light comes on in the power locking button → page 110, *Unlocking or locking the vehicle from the inside*.

Automatic unlocking (Auto unlock)

Auto unlock works only if the vehicle has been automatically locked with the Auto lock feature. When one of the following conditions is met, the doors will unlock automatically.

- The selector lever is in Park (P).
- OR: The ignition is switched off.
- OR: You open a door from inside the vehicle.
- OR: The airbags inflate after a collision → page 114, *Locking the vehicle after airbag inflation*.

The indicator light goes out in the power locking button when the doors unlock → page 110, *Unlocking or locking the vehicle from the inside*. Automatic unlocking after airbag inflation allows emergency responders to access the vehicle.

If the remote control vehicle key buttons → fig. 52 or the power locking buttons → fig. 59 are pushed repeatedly in quick succession, the power locking system is switched off for a brief period to help keep it from being overloaded. During this period, the vehicle can be

1 NOTICE

- Always distribute the load evenly and as low as possible in the vehicle. The vehicle capacity weight figures apply when the load is distributed evenly in the vehicle (passengers and luggage).
- When transporting a heavy load in the luggage compartment, carry the load as close to the rear axle (as far forward) as possible so that the vehicle's handling and braking are affected as little as possible.

Driving with an open trunk lid

- Please read the introductory information and heed the Warnings and Notice on page 162.

Driving with an open trunk lid can lead to serious personal injury. If you have to drive with an open trunk lid, make sure that all objects and the trunk lid itself are properly secured and take appropriate measures to keep toxic exhaust fumes from entering the vehicle.

WARNING

Driving with an unlatched or open trunk lid can lead to serious personal injury.

- Never transport objects larger than those that fit completely in the luggage compartment, because the trunk lid cannot be fully closed properly.
- After closing the trunk lid, always pull up on it to make sure that it is properly closed and cannot open suddenly when the vehicle is moving.
- Always stow all objects securely in the luggage compartment. Loose objects can fall out of the luggage compartment and injure others on the road behind you.
- Drive carefully, anticipate what other drivers will do.
- Avoid abrupt or sudden acceleration, steering, or braking, because the unlatched trunk lid can move suddenly.
- Always mark objects sticking out from the luggage compartment clearly for others to see. Obey all applicable legal requirements.

- Never use the trunk lid to "clamp" or "hold" objects that stick out of the luggage compartment.

- Always remove any luggage rack or other rack mounted on the trunk lid (along with any luggage on the rack) before driving with an open trunk lid.

WARNING

Driving with an open trunk lid can cause poisonous carbon monoxide in the engine exhaust to get into the passenger compartment.

- Carbon monoxide causes drowsiness, inattentiveness, poisoning, and loss of consciousness. It can lead to accidents and severe personal injuries.
- Always keep the trunk lid closed while driving to help keep poisonous exhaust fumes from being drawn into the vehicle.
- Never transport objects that are too large to fit completely into the luggage area, because then the trunk lid cannot be fully closed.
- If you absolutely must drive with an open trunk lid, do the following to reduce the risk of carbon monoxide poisoning:
 - Close all windows and the power sunroof.
 - Switch off the climate control system's air recirculation feature.
 - Open all air vents in the instrument panel.
 - Set the fresh air fan to the highest speed.

1 NOTICE

The open trunk lid changes the vehicle length and height.

Driving through water on roads

- Please read the introductory information and heed the Warnings and Notice on page 162.

Note the following to help prevent vehicle damage when driving through water, for example on flooded roads:

- Check the depth of the water before driving through it. The water must not be any higher than the bottom of the vehicle body.
- Do not drive faster than walking speed.

Never stop the vehicle, and do not drive in reverse or switch the engine off when driving through water.

Oncoming vehicles may create waves that raise the water level and make it too deep for your vehicle to drive through safely.

Always manually deactivate the Start-stop system before driving through water → page 160, Start-stop system.

WARNING

After driving through water, mud, sludge, etc., the brakes react slower and need longer stopping distances.

- Always dry the brakes and clean off any ice coatings with a few careful applications of the brake. Make sure not to endanger other motorists or cyclists or disobey legal requirements.

- Avoid abrupt or sudden braking maneuvers immediately after driving through water.

1 NOTICE

- Vehicle components such as the engine, transmission, suspension or electrical system can be severely damaged by driving through water.

- Never drive through salt water. Salt causes vehicle corrosion. Thoroughly rinse with fresh water all vehicle parts that were exposed to salt water.

Break-in period

- Please read the introductory information and heed the Warnings and Notice on page 162.

Note applicable requirements for breaking in new parts.

Breaking in a new engine

A new engine must be carefully broken in during the first 1000 miles (1600 kilometers). During the first few hours of driving, the engine's internal friction is higher than later when all moving parts have been broken in.

Engine life is influenced by how you drive the vehicle for the first 1000 miles (1600 km). Even afterwards, driving at moderate engine speeds, especially when the engine is cold, will tend to reduce engine wear and help the engine to last

longer and go farther. But do not drive at an excessively low engine speed, either. Always downshift if the engine is not running smoothly. For the first 600 miles (1000 km):

- Do not use full throttle.
- Don't let the engine speed get above 2/3 of the maximum speed.
- Do not tow a trailer.

From 600 to 1000 miles (1000 to 1600 km):

Speed may gradually be increased to maximum permissible road and engine speed.

New tires and brake pads

- New tires and replacement tires → page 307, Tires and wheels.
- Brakes → page 166, About the brakes.

Breaking in a new engine gently will increase service life and reduce oil consumption.

Starting and stopping the engine

Introduction

Immobilizer display

If an unauthorized vehicle key is used or the system malfunctions, a message may appear in the instrument cluster display. The engine cannot be started.

Push-starting and tow-starting

Never try to push-start or tow-start the vehicle. Unburned fuel can get into the catalytic converter and damage it. The steering column may also be locked. Jump-start the vehicle instead while following proper and safe procedures → page 277, Jump-starting.

WARNING

Switching off the engine while the vehicle is moving can make the vehicle harder to stop and result in loss of vehicle control, leading to collisions and severe personal injuries.

- The ignition must be on for the airbag system and safety belt pretensioners to work.

- Never apply additional undercoating or rust-proofing on or near the exhaust manifold, exhaust pipes, catalytic converter, or heat shields.

Indicator lights

❏ Please read the introductory information and heed the Warnings and Notice  on page 171.

Lights up	Possible cause and proper response
	Brake pedal not depressed. Apply the brake pedal to start the engine.
Flashes	Possible cause and proper response
	The release button in the selector lever did not engage. Vehicle movement is prevented. Engage the selector lever release button → page 182.

When the ignition is switched on, several warning and indicator lights come on briefly for a function check. They go out after a few seconds.

WARNING

Failure to heed warning lights and instrument cluster text messages can cause the vehicle to break down in traffic and result in a collision and serious personal injury.

- Never ignore warning lights or text WARNINGS.
- Always stop the vehicle as soon as it is safe to do so.
- Whenever stalled or stopped for repair, move the vehicle a safe distance off the road, turn on the emergency flashers, stop the engine, and use other warning devices to warn approaching traffic.

NOTICE

Failure to heed warning lights or text WARNINGS can result in vehicle damage.

- Braking and steering assistance systems only work when the engine is running.
- Switch off the engine only when the vehicle is not moving.

WARNING

To reduce the risk of serious personal injury when starting and running the vehicle's engine:

- Never start the engine or let it run in a confined or enclosed area. Engine exhaust contains carbon monoxide, a poisonous, colorless, and odorless gas. Carbon monoxide can cause unconsciousness and death.
- Never start the engine or let it run if oil, fuel, or other flammable substances are under, around, or have leaked from the vehicle, for example, due to vehicle damage.
- Never leave the vehicle unattended with the engine running, especially when it is in gear. The vehicle could move suddenly or some other unexpected event could occur, resulting in property damage, fire, or personal injury.
- Never use starting assist fluids. Starting fluids can explode and can cause a "run-away" vehicle condition.

WARNING

To reduce the risk of serious personal injury when you leave the vehicle.

- Always switch off the engine and ignition and take the key with you when you leave the vehicle. Never let the engine run in a confined or enclosed area. Engine exhaust contains carbon monoxide, a poisonous, colorless, and odorless gas. Carbon monoxide can cause unconsciousness and death.

WARNING

The vehicle exhaust system and the catalytic converter get very hot. They can cause fires and serious personal injury.

- Never park the vehicle where the hot exhaust system or catalytic converter could ignite flammable materials, such as brush, leaves, dry grass, spilled fuel, etc.

Ignition switch

❏ Please read the introductory information and heed the Warnings and Notice  on page 171.



Fig. 109 In the ignition switch: Vehicle key positions for vehicles without Keyless Access.

If there is no vehicle key in the ignition, the steering column is locked.

Vehicle key position → fig. 109

- ① Ignition switched off. Steering column lock engaged. The vehicle key can be removed.
- ② Ignition is switched on. Steering column lock can be released.
- ③ Start the engine. When the engine starts, release the vehicle key. When released, the vehicle key returns to position ①.

If you use the wrong vehicle key or cannot remove the key from the ignition switch

- Automatic transmission: Press the release button on the transmission selector lever and release. The vehicle key can now be removed.
- Manual transmission: Pull out the vehicle key.

If you leave the ignition on

If you leave the ignition on and open the driver door, a warning message may appear in the instrument cluster. In addition, you may also hear an acoustic warning. This warning reminds you to switch off the ignition before leaving the vehicle → ①.

WARNING

Improper use of vehicle keys can result in serious personal injury.

- Always switch off the engine and the ignition and take the key with you when you leave the vehicle. The engine can be started and

vehicle systems such as the power windows can be operated, leading to serious personal injury.

- Never let the engine run in a confined or enclosed area. Engine exhaust contains carbon monoxide, a poisonous, colorless, and odorless gas. Carbon monoxide can cause unconsciousness and death.
- Never leave children, disabled persons, or anyone who cannot help themselves in the vehicle. The doors can be locked with the remote control vehicle key. This could result in people being trapped in the vehicle in an emergency. For example, depending on the time of year, people trapped in the vehicle can be exposed to very high or very low temperatures.
- Never leave children or disabled persons in the vehicle – particularly if the ignition is on or a remote control vehicle key is also in the vehicle. Unsupervised use of the remote control vehicle key also makes it possible to start the engine, or turn on the ignition and operate the windows as well as other vehicle features.
- Heat buildup in the passenger and luggage compartment of a parked vehicle can result in temperatures in the vehicle that are much higher than the outside temperatures, particularly in summer. Temperatures can quickly reach levels that can cause unconsciousness and death, particularly to small children.

NOTICE

- Never remove the key from the ignition switch while the vehicle is moving or rolling to a stop. The steering wheel will lock and you will not be able to steer or control the vehicle.
- Only attach lightweight objects to the remote control vehicle key that weigh no more than a combined total of 3.5 oz (100 g).

Starter button

Please read the introductory information and heed the Warnings and Notice on page 171.



Fig. 110 In the lower center console: Starter button for the Keyless Access system.

Leaving the key in the ignition for a long time when the engine is not running will drain the vehicle battery.

- Always switch off the ignition and remove the key before leaving the vehicle.

Leaving the selector lever in a long period of time in any position other than Park (P) when the ignition is switched off can drain the vehicle battery.

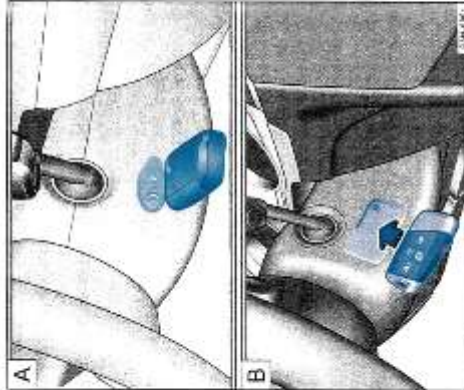


Fig. 111 Hold the remote control vehicle key to the right of the steering column: Emergency starting feature.

For vehicles with Keyless Access with push-button start → page 108, Power locking system, the vehicle can be started and stopped with the starter button in the lower center console → Fig. 110.

The starter button can only be used when an authorized vehicle key is in the vehicle.

When leaving the vehicle, the electronic steering column lock is activated when the ignition is switched off and the driver door is opened → page 188, Steering.

Switching the ignition on and off

- Briefly press the starter button once without depressing the brake or clutch pedals →

Automatic ignition switch-off for vehicles with the Start-stop system

The vehicle ignition switches off automatically when the vehicle is standing still, the Start-stop system is switched on → page 180, Start-stop system, and ALL of the following conditions are met at the same time:

- The driver safety belt is unbuckled.
- No pedal is depressed.
- The driver door is opened.
- The ignition is switched off automatically while the headlights are switched on, the parking lights remain switched on for about 30 minutes.
- The parking lights can be switched off manually or will turn off when the vehicle is locked.

Emergency start feature

If an authorized remote control vehicle key is in the passenger compartment but is not detected, the remote control vehicle key battery may be weak or dead. You can still start the engine using the emergency start feature.

- Make sure the selector lever is in the Park (P) position.
- Press and hold the brake pedal.
- Hold the remote control vehicle key to the right of the steering column trim immediately after pressing the starter button → Fig. 111 A or B).

The ignition automatically switches on and the engine starts.

Emergency shut-off

If the engine does not switch off by briefly pressing the starter button, emergency shut-off is necessary:

- Press the starter button twice within 3 seconds.
- OR: Press and hold the button longer than 1 second → in Stopping the engine on page 177.
- The engine switches off automatically.

If no authorized remote control vehicle key is identified in the passenger compartment after the engine has been switched off, the engine cannot be restarted. A related message is shown in the instrument cluster display.

WARNING

Unintended vehicle movement can cause serious personal injury.

- Do not depress the brake or clutch pedals when switching on the ignition, as the engine could otherwise start immediately.

WARNING

Improper use of vehicle keys can result in serious personal injury.

- Always switch off the engine and the ignition and take the key with you when you leave the vehicle. Children or unauthorized persons may use it to lock the vehicle, start the engine, and operate vehicle systems such as the power windows, leading to serious personal injury.
- Never let the engine run in a confined or enclosed area. Engine exhaust contains carbon monoxide, a poisonous, colorless, and odorless gas. Carbon monoxide can cause unconsciousness and death.
- Never leave children, disabled persons, or anyone who cannot help themselves in the vehicle. The doors can be locked using the remote control vehicle key. This could result in people being trapped in the vehicle in an emergency. For example, depending on the time of year, people trapped in the vehicle can be exposed to very high or very low temperatures.
- Never leave children or disabled persons in the vehicle – particularly if the ignition is on or a remote control vehicle key is also in the vehicle. Unsupervised use of the remote control vehicle key also makes it possible to start the engine, or turn on the ignition and operate the windows as well as other vehicle features.
- Heat buildup in the passenger and luggage compartment of a parked vehicle can result in temperatures in the vehicle that are much higher than the outside temperatures, particularly in summer. Temperatures can quickly reach levels that can cause unconsciousness and death, particularly to small children.



If the ignition is switched on or the engine is running and the driver door is opened, a chime sounds. The chime is also a reminder to

switch off the engine and turn off the ignition before leaving and locking the vehicle from the outside.

Always switch off the engine and ignition before leaving the vehicle. Read and follow any information in the instrument cluster display.

Leaving the ignition on for a long time when the engine is not running will drain the vehicle battery and the engine may not start.

- Always switch off the ignition before leaving the vehicle.

Starting the engine

Please read the introductory information and heed the Warnings and Notice on page 171.

Starting the engine

Please perform these steps only in the order listed:

- Depress the brake pedal and hold it down until step 4 is completed.
Manual transmission: Fully depress clutch pedal and hold until the engine has started.
- Make sure the transmission is in Park (P) or Neutral (N).
- Vehicles without Keyless Access:** Briefly turn the vehicle key to position → fig. 109 ② - do not depress the accelerator pedal.
Vehicles with Keyless Access: Briefly press the starter button → fig. 110 - do not depress the accelerator pedal. An authorized vehicle key must be inside the vehicle in order to start the engine.
- If the engine does not start, switch off the ignition and start again after about 1 minute.
Vehicles with Keyless Access: Use the emergency start feature if necessary → page 175.
- Release the electronic parking brake when you are ready to start driving → page 221.

WARNING

Never leave the vehicle unattended with the engine running, especially when it is in gear. The vehicle could move suddenly or some other unexpected event could occur, resulting in property damage, fire, or personal injury.

WARNING

"Starting fluids" can explode and can cause a "run-away" vehicle condition.

- Never use starting assist fluids.

NOTICE

- You can damage the starter or the engine if you try to start the engine when the vehicle is still moving, or if you try to restart the engine right after switching it off.

- Avoid high engine speeds, full throttle acceleration, and heavy engine loads when the engine is cold.

- Do not try to start the engine by pushing or towing the vehicle. Unburned fuel can get into the catalytic converter and damage it. The steering column may also be locked. Jump-start the vehicle instead while following proper and safe procedures → page 277, Jump-starting.



Do not let your vehicle warm up while standing. Instead, start driving right away after making sure that you have good visibility through all windows. This will help the engine reach operating temperature faster and keep down emissions.

Major consumers of electricity are temporarily switched off when the engine is being started.

After starting a cold engine, there may be increased operating noises for a few seconds. This is normal and harmless.

Stopping the engine

Please read the introductory information and heed the Warnings and Notice on page 171.

Stopping the engine

Please perform these steps only in the order listed:

- Bring the vehicle to a complete stop → ⚠.
- Depress and hold down the brake pedal until step 4 is completed.
- Automatic transmission:** Shift the transmission to Park (P).
- Set the parking brake to help prevent the vehicle from moving → page 221.

Please perform these steps only in the order listed (continued)

- Vehicles without Keyless Access:** Turn the vehicle key to position → fig. 109 ③ in the ignition switch.

Vehicles with Keyless Access: Briefly press the starter button → fig. 110. If the engine shut-off procedure → page 175.

- Manual transmission:** Shift into 1st gear (vehicle on flat surface or pointing uphill) or Reverse (R) (vehicle pointing downhill).

Vehicles without Keyless Access: Removing the vehicle key from the ignition switches off electrical equipment and activates the steering column lock.

Vehicles with Keyless Access: Opening the doors switches off electrical equipment and activates the steering column lock.

WARNING

Never stop the engine before the vehicle has come to a complete stop. You can lose control of the vehicle, crash, and be seriously injured.

- The airbags and safety belt pretensioners will not work when the ignition is switched off.
- The brake booster does not work when the engine is not running. More brake pedal pressure will be needed to stop the vehicle.
- The power steering system does not work when the engine is not running, and you will need more force to steer the vehicle.

- Never remove the key from the ignition switch or turn off the ignition with the starter button while the vehicle is moving or rolling to a stop. The electronic steering column could suddenly lock; you would not be able to steer, and you could lose control of the vehicle, crash, and seriously injure yourself and others.

WARNING

The vehicle exhaust system and the catalytic converter get very hot. They can cause fires and serious personal injury.

- Never park where the hot exhaust system could ignite flammable materials, such as brush, leaves, dry grass, spilled fuel, etc.

- Never apply additional anti-corrosion or underbody protection products to the vehicle heat shields.

NOTICE

If the vehicle has been driven hard for a long time, the engine could overheat when it is stopped. To reduce the risk of engine damage, let the engine idle in Neutral for about 2 minutes before you switch off the ignition.

After the engine has been switched off, the radiator fan in the engine compartment may keep running for several minutes, or may start running after the vehicle has been parked for a while, even if the ignition is switched off and the vehicle key has been removed. The radiator fan shuts off automatically when the engine has cooled down enough.

If the ignition is switched on or the engine is running and the driver door is opened, a chime sounds. The chime is also a reminder to switch off the engine and turn off the ignition before leaving and locking the vehicle from the outside.

Remote start feature

Please read the introductory information and heed the Warnings and Notice on page 171.

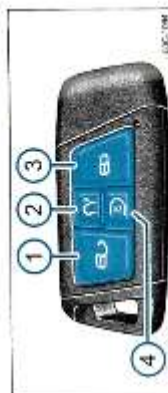


Fig. 112 Remote control vehicle key with remote start button.

In some vehicles, you can start the engine from outside of the vehicle with the remote start button → fig. 112 ④ on the remote control vehicle key. This feature helps to cool or warm the passenger compartment to about +72 °F (+20 °C) → ⚠.

Requirements for a remote start

The following conditions must all be met at the same time to use the remote start feature. Otherwise, the engine will not start, the remote start feature will stop, or the engine will switch off automatically.

- ✓ The vehicle must be ready to drive. For instance, there must be enough engine coolant → page 297, *Engine coolant*.
- ✓ There must be enough fuel in the fuel tank, and the low fuel indicator light  must not have come on before the engine was last switched off → page 26, *Indicator lights and fuel gauge*, → page 252, *Fuel and emission control system*.
- ✓ The selector lever must be in Park (P) → page 184, *Automatic transmission selector lever*.
- ✓ All doors, the engine hood, and the trunk lid must be completely closed and locked.
- ✓ The vehicle battery must be charged → page 302, *Vehicle battery*.
- ✓ The yellow engine Malfunction Indicator light (MIL)  must not have come on before the engine was last switched off → page 258, *Engine control and emission control system*.
 - The remote start feature will not work if the yellow indicator light (MIL)  comes on during a remote start.

Using the remote start feature

1. Press the  button on the vehicle key one time .
2. Within the next 3 seconds, press the  button twice in a row .

The turn signals flash each time you press a button, and the parking lights and the daytime running lights (DRL) turn on while the vehicle is in remote start mode. When you open the driver door while the vehicle is in remote start mode, certain warning and indicator lights come on, and a driver information message appears in the instrument cluster display.

If the remote start feature is not interrupted, the engine will run for about 10 minutes. A maximum of 2 remote starts in a row are possible, regardless of how long each one is allowed to run.

To be able to run 2 remote starts again, you must switch the ignition on and then off again → page 171, *Starting and stopping the engine*. All the remote start requirements must be met.

Climate control settings for remote start mode

The following climate control settings are automatically applied during remote start, unless you change them from the controls inside the vehicle during a remote start. Some features only turn on at certain outside temperatures:

Function activated	Automatic setting
Seat heating (if equipped)	Level 2, turns on at temperatures below +59 °F (+15 °C)
Outside mirror heating	Turns on at temperatures below +68 °F (+20 °C)
Rear window defroster	Turns on at temperatures below +39 °F (+4 °C)
Climatronic	Temperature: +72 °F (+22 °C)
Manual air conditioning	Temperature: +72 °F (+22 °C)

You can use the air conditioning controls and/or the buttons for seat heating or ventilation (if equipped) while the engine is in remote start mode to adjust settings. However, any changes will be replaced by the automatic settings during the next remote start. It is not possible to change settings in the Infotainment system → page 153, *Climate control*.

To change the automatic climate control settings, see an authorized Volkswagen dealer or an authorized Volkswagen Service Facility.

Remote start mode overrides any personalized settings. After the driver has taken over the vehicle, personalized settings are reactivated.

Interrupting or stopping the remote start feature

With the vehicle key:

- Press the  button  or the panic button on the vehicle key → fig. 53  to switch the engine off.

From inside the vehicle:

- Turn on the emergency flashers.
- OR: Press the starter button. Do not depress the brake pedal at the same time.

Driving after a remote start

In order to drive the vehicle when the engine is running in remote start mode, you must first depress the brake pedal and press the starter button at the same time. During this process, the engine continues to run → page 171, *Starting and stopping the engine*.

WARNING

Improper use of the remote start feature can cause fire, burns and other serious injuries.

- Always park the vehicle in a place that is vented to the outdoors and has a continuous exchange of fresh, outside air.
- Only use the remote start feature when no one is next to or inside the vehicle.
- Always make sure that you can see the vehicle when the engine is running.
- Never leave children, disabled persons, anyone who cannot help themselves, or pets in the vehicle. The doors are locked when the engine is running with the remote start feature. Vehicle occupants would be trapped in the vehicle in an emergency and rescue from the outside would be delayed.
- Never start the engine if children or animals are inside the vehicle. When the engine is running, electrical equipment including electrical seat adjustment controls can be operated and cause serious injuries.
- Never start the engine or let it run in a garage, in an enclosed or confined area. Engine exhaust contains carbon monoxide, a poisonous, colorless and odorless gas. Carbon monoxide can cause dizziness, nausea, unconsciousness and even death.
- Always make sure that the area where the engine runs in the remote start mode is well ventilated. Carbon monoxide in a garage or other enclosed area can cause dizziness, impair the ability to drive, and even result in unconsciousness.
- Never start the engine when the vehicle is covered with a protective cover. Hot vehicle components and exhaust could ignite the protective cover.
- Never start the engine near combustible or explosive materials. The exhaust could ignite flammable materials.

NOTICE

- Do not use the remote start feature if the yellow engine Malfunction Indicator Light (MIL)  has come on, smoke or unusual smells come from the vehicle, an unusual or unexpected operating condition occurs and the condition has not been diagnosed and corrected. Please see an authorized Volkswagen dealer or authorized Volkswagen Service Facility.

- Remote start is possible when one or more windows are open. Always remember that unauthorized access to the vehicle through open windows is possible when the engine is running in remote start mode. Always make sure that all of the windows are securely closed to help prevent unauthorized access to the vehicle, its features and contents.

Using the remote start feature can increase fuel consumption and drain the vehicle battery.

Use of the remote start feature may be regulated or prohibited in some areas. In some areas you may be required to be able to see the vehicle when it is running in remote start mode. Please inform yourself about state and local requirements that may apply and be sure to follow them when using the remote start feature.

Various vehicle functions, such as the low beam headlights and the windshield wipers, are disabled when the engine is running during a remote start.

Electronic immobilizer

Please read the introductory information and heed the Warnings and Notice  on page 171.

The immobilizer helps to prevent the engine from being started and driven with an unauthorized vehicle key.

There is a microchip inside the vehicle key. The chip deactivates the immobilizer automatically when an authorized vehicle key is inserted into the ignition switch or the starter button is pressed.

The electronic immobilizer is automatically activated when the remote control vehicle key is pulled out of the ignition switch. On vehicles

with Keyless Access, the vehicle key must be outside the vehicle → page 111, *Unlocking or locking the vehicle with Keyless Access*.

The engine can therefore only be started with an authorized and correctly coded genuine Volkswagen vehicle key. Coded vehicle keys are available from authorized Volkswagen dealers, authorized Volkswagen Service Facilities, and from certain independent repair facilities and locksmiths who are qualified to make these vehicle keys → page 104, *Vehicle key set*.

If an unauthorized vehicle key is used, a message may appear in the instrument cluster display. The vehicle cannot be operated with this key.

A Declaration of Compliance with the United States FCC and Industry Canada regulations is on → page 364, *Declaration of Compliance, Telecommunications and Electronic Systems*.

Using genuine Volkswagen keys helps minimize the risk of malfunctions.

Start-stop system

❗ Please read the introductory information and heed the **Warnings and Notice** on page 171.



Fig. 113 In the lower center console: Button for the Start-stop system.

Switching the Start-stop system on

The feature is automatically activated every time the ignition is switched on. The instrument cluster display shows current status information.

Depending on equipment, additional Start-stop status information may be displayed in the Information system. Press the **i** function key on the screen in the Start-stop menu if applicable.

Indicator lights

Lights up Possible cause

- | | |
|-----|---|
| (A) | Start-stop available, automatic engine stop is active. |
| (B) | Start-stop not available. Check whether all technical requirements have been met.
OR: Start-stop has switched the engine on automatically. |

Requirements for the engine to automatically switch off

- The driver must be wearing their seat belt.
- The driver door must be closed.
- The engine hood must be closed.
- The engine must have reached minimum operating temperature.
- For vehicles with Climatronic: The temperature inside the vehicle must be within the pre-set temperature range and the humidity must not be too high.
- The windshield defrost function must not be switched on.
- The vehicle battery must be sufficiently charged.
- The vehicle battery temperature must not be too low or too high.
- The vehicle must not be on a steep incline.
- The vehicle must not be in reverse gear.

Requirements for the engine to automatically restart

The engine may restart automatically under the following conditions:

- If the vehicle interior becomes very hot or very cold.
- If the vehicle rolls forward or backward.
- If the vehicle battery voltage lowers.
- If the steering wheel is moved.

Conditions that require a manual engine start

You must restart the engine manually if:

- The driver door is opened.
- The engine hood is opened.
- The driver safety belt is unbuckled.

Manually activating and deactivating the Start-stop system

- Press the **A** button → Fig. 113 to deactivate the system. If Start-stop has been deactivated, the indicator light in the button comes on.
- Press the **A** button → Fig. 113 again to reactivate the system.

Every time the **A** button is pressed, the Start-stop system status is shown in the instrument cluster display.

- Start-stop switches the engine off, it will restart if you press the **A** button.

Always manually deactivate Start-stop when driving through water.

WARNING

Never stop the engine before the vehicle has come to a complete stop. You can lose control if the vehicle, crash, and be seriously injured.

- The airbags and safety belt pretensioners will not work when the ignition is switched off.

- The brake booster does not work when the engine is not running. More brake pedal pressure will be needed to stop the vehicle.

- The power steering system does not work when the engine is not running, and you will need more force to steer the vehicle.

- Never remove the key from the ignition switch or turn off the ignition with the start-stop button while the vehicle is moving or rolling to a stop. The electronic steering column could suddenly lock, you would not be able to steer, and you could lose control of the vehicle, crash, and seriously injure yourself and others.

- Switch the Start-stop system off before working in the engine compartment.

WARNING

Failure to heed warning lights and instrument cluster text messages can cause the vehicle to break down in traffic and result in a collision and serious personal injury.

- Never ignore warning lights or text warnings.

- Always stop the vehicle as soon as it is safe to do so.

- Whenever stalled or stopped for repair, move the vehicle a safe distance off the road, turn on the emergency flashers, stop the engine, and use other warning devices to warn approaching traffic.

NOTICE

The vehicle battery may be damaged if the Start-stop system is active for a long time in very hot outside temperatures.

NOTICE

Failure to heed warning lights can result in vehicle damage.

- In certain situations it may be necessary to manually restart the engine. A text message will appear in the instrument cluster display.

- In vehicles with Driving Mode Selection, the Start-stop system is automatically activated in the Eco driving mode.

- Always manually deactivate the Start-stop system when driving through water.

Manual and automatic transmission

Warning and indicator lights

Lights up	Possible cause	Proper response
	Transmission malfunction or transmission overheating.	Do not continue driving! Allow the manual or automatic transmission to cool. For automatic transmissions, shift the selector lever to the P position. If the warning does not turn off, do not continue driving. See your authorized Volkswagen dealer for assistance. Otherwise, serious clutch or transmission damage could result → page 187.
	Manual transmission: Clutch is "slipping" and does not transfer all of the engine torque.	Remove your foot from the clutch pedal, if necessary.
	Brake pedal not depressed.	Depress the brake pedal to select a drive gear → page 166. Also refer to electronic parking brake → page 221.

Flashes	Possible cause	Proper response
	The release button in the selector lever did not engage. Vehicle movement is prevented.	Engage the selector lever release button → page 184.

When the ignition is switched on, several warning and indicator lights come on briefly for a function check. They go out after a few seconds.

WARNING

Failure to heed warning lights and instrument cluster text messages can cause the vehicle to break down in traffic and result in a collision and serious personal injury.

- Never ignore warning lights or text WARNINGS.

Manual transmission gearshift lever

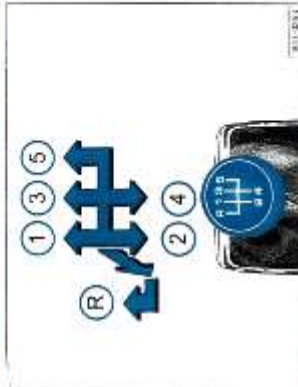


Fig. 114 Gearshift pattern of a 5-speed manual transmission.

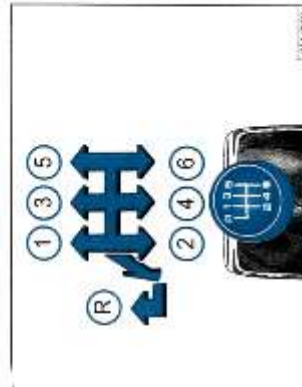


Fig. 115 Gearshift pattern of a 6-speed manual transmission.

The positions of the individual gears are shown on the gearshift lever → fig. 114 or → fig. 115.

- Depress the clutch pedal all the way and hold.
 - Move the gearshift lever into the desired position → .
 - Release the clutch pedal to engage the gear.
- The clutch pedal must be fully depressed to start the engine.

Shifting into reverse

- Only shift to the reverse gear when the vehicle is not moving.
- Depress the clutch pedal fully and hold → .
- Move the gearshift lever to neutral and press down.

- Move the shift lever to the left and then push forward into the reverse gear position → fig. 114  or → fig. 115 .
- Release the clutch pedal to engage the gear.

Downshifting

You should always downshift gear by gear when driving, meaning always into the next lowest gear. Do not downshift when the engine rpm (revolutions per minute) is too high → . At fast speeds or high engine rpm, skipping over one or more gears when downshifting can cause damage to the clutch and transmission, even if a gear is not engaged → .

WARNING

Downshifting to a lower gear incorrectly can result in loss of vehicle control and can cause accidents and serious personal injuries.

WARNING

When the engine is running and a gear is engaged, the vehicle will start to move as soon as the clutch pedal is released. This also applies when the parking brake is engaged.

- Never shift into Reverse (R) when the vehicle is moving.

NOTICE

Shifting down to a gear that is too low when driving at fast speeds or high engine rpm can cause extensive damage to the clutch and transmission. That is true even if the clutch pedal is pressed so that the clutch is not engaged.

NOTICE

To help prevent damage and premature wear:

- Do not rest your hand on the gearshift lever while driving. Over time, the pressure will cause premature wear in the transmission.
- Make sure that the vehicle has come to a complete stop before shifting into Reverse (R).
- Always depress the clutch pedal all the way when changing gears.
- Do not hold the vehicle on a hill using engine power with the clutch pedal partially engaged and the engine running.

SECTION 7

LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS NO.: 114 TEST DATE: 10/02/18

LABORATORY: GTL

CONTRACT NO.: DTNH2216D00031 DELV. ORDER NO.: 693JJ918F000116LABORATORY PROJECT ENGINEER'S NAME: Grant FarrandTEST VEHICLE MAKE/MODEL/BODY STYLE: 2019 Volkswagen JettaVEHICLE NHTSA NO.: C20195800 VIN: 3VWN57BU5KM045982VEHICLE MODEL YEAR: 2019 BUILD DATE: 05/18TEST FAILURE DESCRIPTION: No audible warning when the driver door is opened with
ignition key left in ignition switch lock cylinder.

S114 REQUIREMENT, PARAGRAPH S5.1.3 : Except as noted, an audible warning must
be activated whenever the key is in the starting system and the door closest to the driver door is
opened.

NOTIFICATION TO NHTSA (COTR):

DATE: 10/03/18 BY: Grant FarrandREMARKS: Traditional Metal key with lock cylinder on steering column and manual transmission.