Self Study Program 891213

The ID.4 New Model Overview

Tablet Format



Volkswagen Group of America, LLC
Volkswagen Academy
Published in U.S.A.
3/2021

Course Number SSP 891213

©2020 Volkswagen Group of America, LLC.

All rights reserved. All information contained in this manual is based on the latest information available at the time of publishing and is subject to the copyright and other intellectual property rights of Volkswagen Group of America, LLC., its affiliated companies and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, nor may these materials be modified or reposted to other sites without the prior expressed written permission of the publisher.

All requests for permission to copy and redistribute information should be referred to Volkswagen Group of America, LLC.

Always check Technical Bulletins and the latest electronic repair information for information that may supersede any information included in this booklet.

Trademarks: All brand names and product names used in this manual are trade names, service marks, trademarks, or registered trademarks; and are the property of their respective owners.

Table of Contents

Introduction 1
Body 6
High-voltage Systems 13
Power Transmission 16
Running Gear 20
Driver Assist Systems 21
Climate Control 22
Electrical System 31
Infotainment 41

Introduction

The ID.4 - a Departure into a New Era

In the North American Region, the ID.4 launches a new defining model generation at Volkswagen.

It is an electric vehicle built on the new Modular Electric Drive Matrix (MEB), that networks with the internet, has digital display and control elements, natural voice control and other pioneering technologies to signal the beginning of a new era.

Intelligent, innovative and sustainable – the ID.4





Introduction

Production Sites

zero IMPACT FACTORY





The Volkswagen ID.4 is being built at Zwickau and Chattanooga.

Zwickau is playing a key role with the start of production: for the first time, a large car factory has been completely re-equipped for electric mobility. In the final expansion stage from 2021, the Zwickau plant will build six electric models for three Group brands with a volume of up to 330,000 vehicles per year. The site is developing into Europe's largest and most efficient electric car factory and is leading the way in the transformation of Volkswagen's global production network.

Production of the ID.4 will be coming to Chattanooga in 2022. To support this, Volkswagen is expanding it's Chattanooga operations with a 564,000 square-foot electric vehicle expansion and a 198,000 square foot battery assembly facility. This expansion will solidify Volkswagen's hub for electric vehicles in the region. Along with increasing regional engineering capabilities, this step also supports the effort to localize all aspects of vehicle development and production.

Product Features of ID.4

The Innovative and striking product features are:

Disctinctive exterior lighting

Five-link rear axle

Three-phase current drive in different battery power levels



Rear drum brakes with Electromechanical Parking Brake EMPB

Second Generation Electromechanical Brake Booster

Modular high-voltage battery

Single-pinion power steering, speed-dependent

New Keyless Access (KESSY) vehicle functions



Equipment varies from country to country.

Introduction

Exterior

The exterior of the ID.4 has the following features:

- LED headlights
- Illuminated light strips in the front trim on the left and right of the front VW badge
- Panoramic glass sunroof (optional)
- 19″ and 20″ alloy wheel rims
- LED tail light clusters
- Light strip between the VW logo and the tail lights
- Composite rear wing above the rear glass











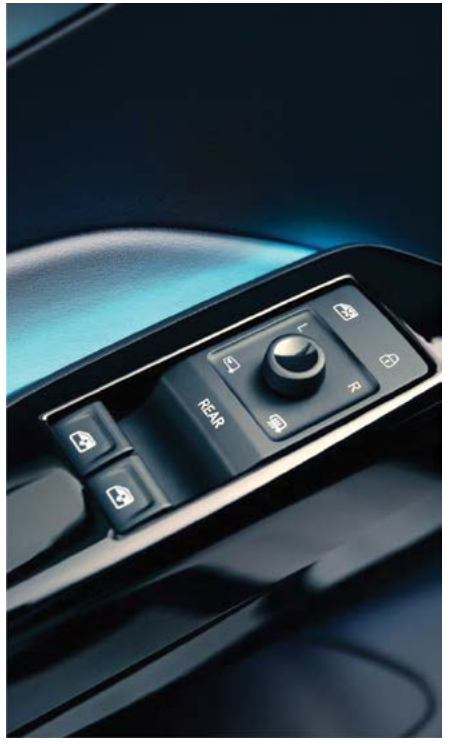


Introduction

Interior

The interior of the ID.4 has the following features:

- ID.Light, an intuitive light strip in the front area of the dash panel. It indicates locking status, driver assist information, navigation system information, braking prompts, charge level and incoming phone calls
- Either 10 or 30-color ambient lighting across the dash panel, in the door handles and in the cell phone compartment in the center console
- Multifunction steering wheel with touch control
- 12" display and control panel with integrated temperature and volume adjustment
- 5.3" dash panel insert with integrated driving mode selector
- Pedals featuring "Play & Pause" design (1st Edition Only)
- 30.3 cubic feet of cargo area with the rear seat up







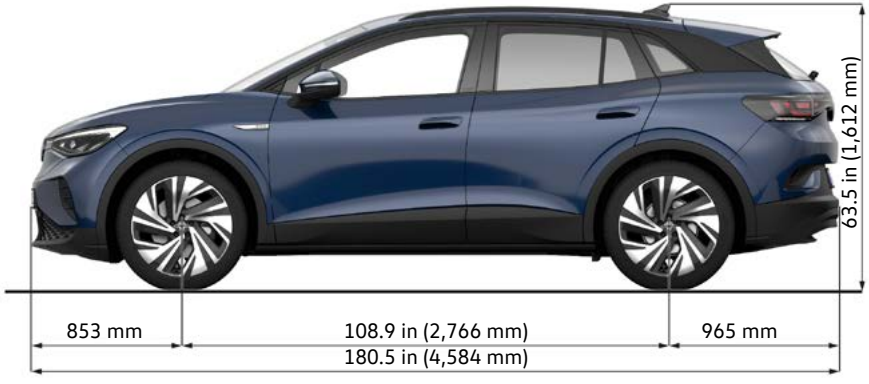






Technical Data

Exterior dimensions and weights







Weight and additional information

Gross vehicle weight rating	5,644 - 6,019 lb 2,560 - 2,730 kg
Curb weight according to DIN*	4,599 - 4,888 lb 2,068 - 2217 kg
Turning radius	33.5 - 38 ft 10.2 - 11.6 m
Ground clearance	6.4 in - 163 mm
Drag coefficient**	0.28 Cd

* DIN German Institute for Standarization
** According to equipment

Technical Data

Interior dimensions and capacities







Volume and power

Luggage compartment volume	30.3 ft³ (858 liters)
Luggage compartment volume with rear seat backrest folded down	64.2 ft³ (1817 liters)
Through load width between wheel housing	39.4 in (1001 mm)
Weight of high-voltage battery	1087 lb (493 kg)
Nominal energy (net):	82 kWh
Max. output front (optional) Max. torque front (optional) Max output rear Max Torque Rear	107 hp (80 kW) 119.5 lb-ft (162 Nm) 201 hp (150 kW) 228 lb-ft (310 Nm)

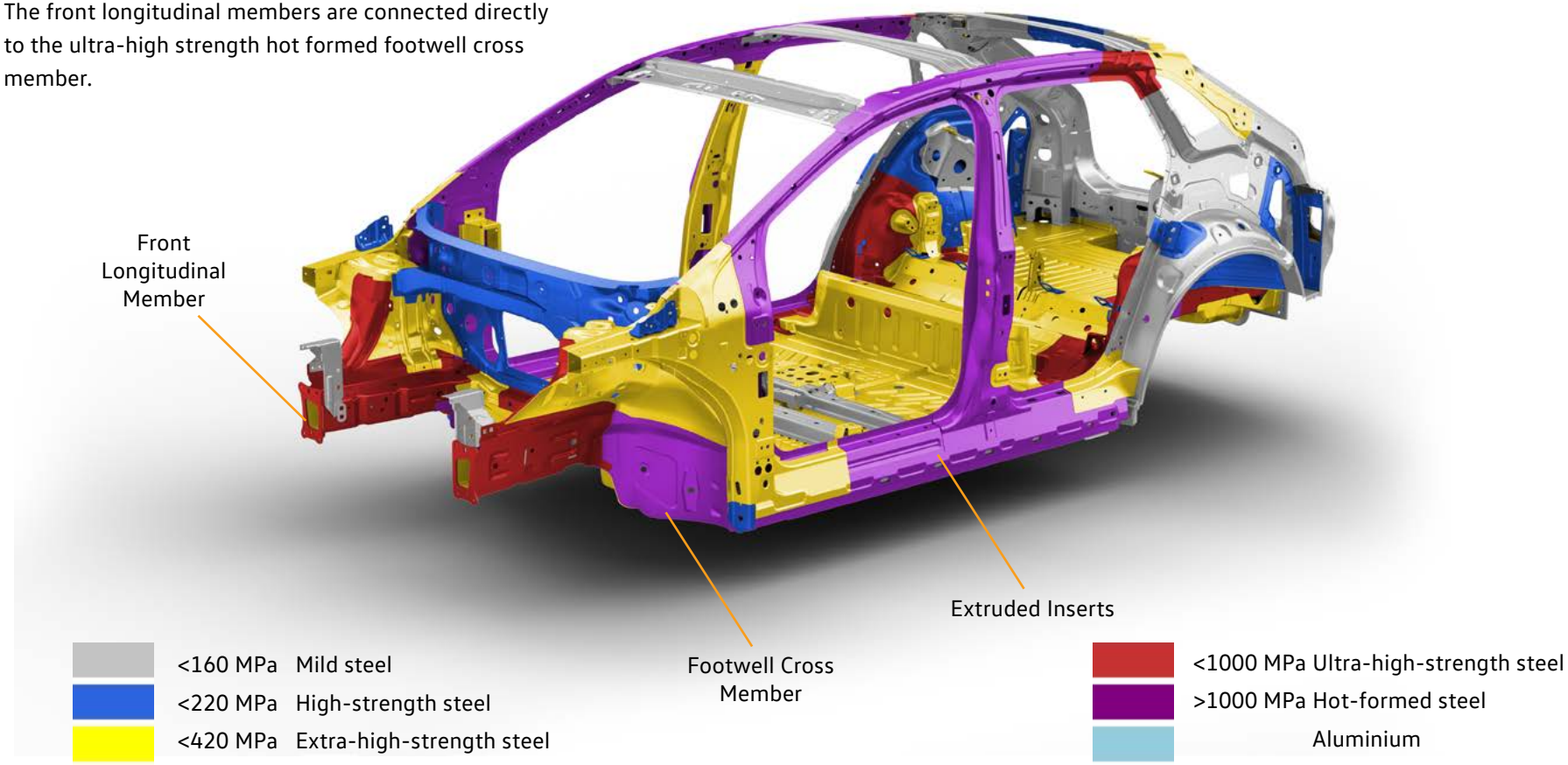
Body

Body Structure Overview

The new strategy of the Modular Electric Drive Matrix (MEB) is based on the floorplan. The wheelbase is longer and the overhangs at the front and rear are shorter compared with the MQB. The battery is bolted to the vehicle floor between the front and rear axles. A battery located on the vehicle floor provides a lower center of gravity, more balanced weight distribution in the body and better driving dynamics.

The interior space is also greater because many components normally found in an internal-combustion engine vehicle have been removed, such as space for the combustion engine, transmission, transmission tunnel, fuel tank and exhaust system. The electric drive motors are located directly on the axles, which saves space and also lowers the center of gravity.

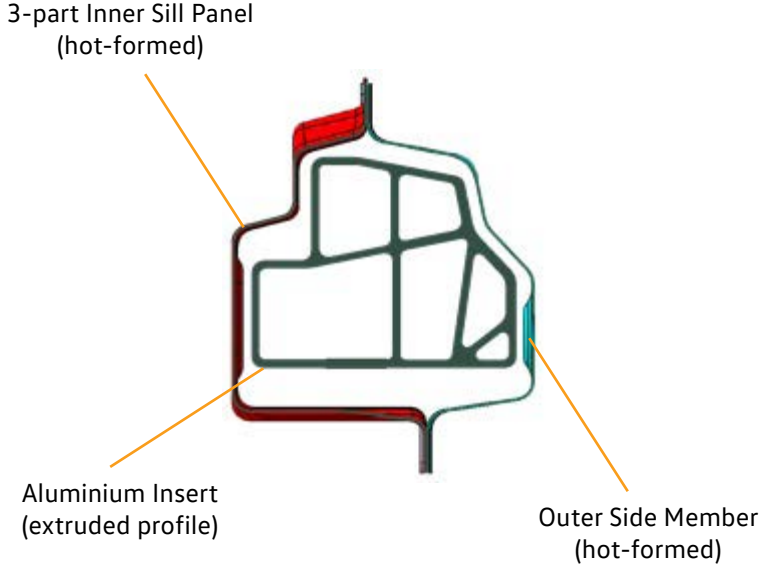
The front longitudinal members are connected directly to the ultra-high strength hot formed footwell cross member.

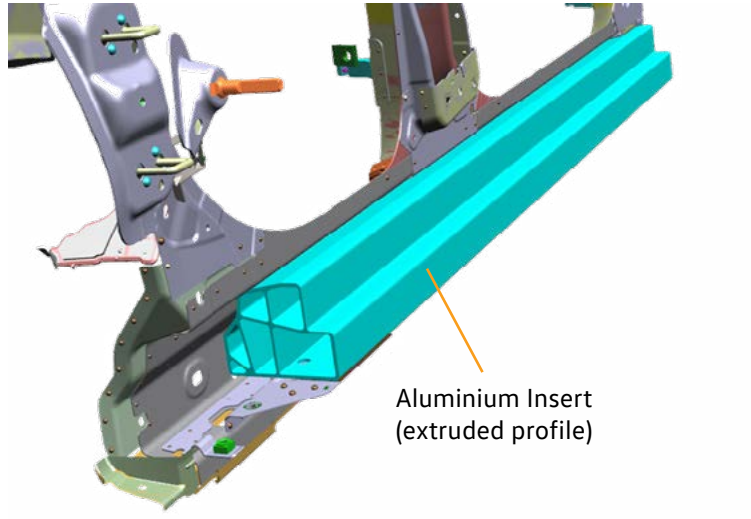


Body Structure

Extruded Profile

The battery is protected by the hot formed side members that have internal extruded aluminium inserts. These side members absorb side impact energy and distributes it to other parts of the vehicle.





Body Assembly

Rear Lid

The rear lid on the ID.4 has:

- New Volkswagen logo
- A one-piece rear lid with integrated spoiler on the upper sides
- Side spoilers (“aerodecks”) on the rear lid
- Black side spoilers and upper spoiler area
- A trim panel under the spoiler that holds the third brake light



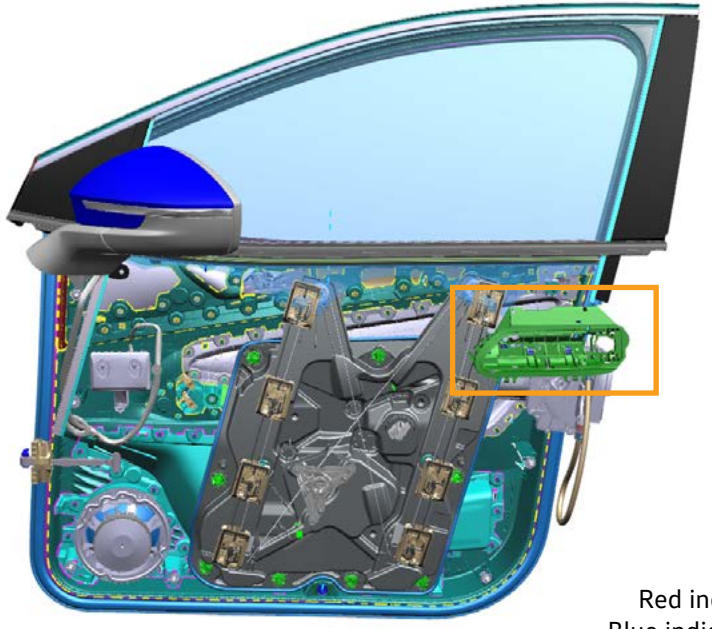
Body Assembly

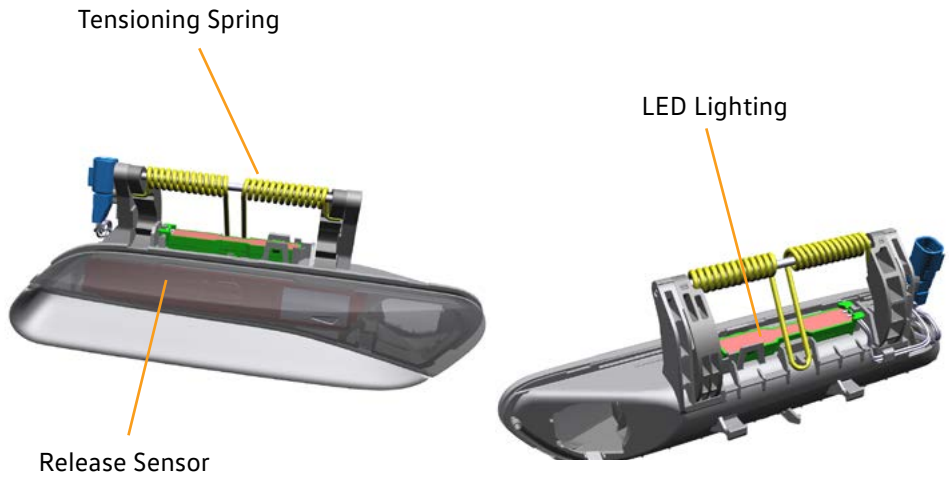
Door Handle

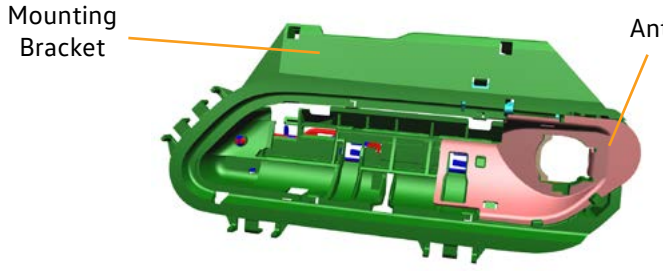
The door handle on the ID.4 is significantly different from other Volkswagen vehicles. It is flush with the door skin. To open the vehicle, only a gentle touch is needed to activate the microswitch in the handle. This microswitch signals the latch to release, opening the door.

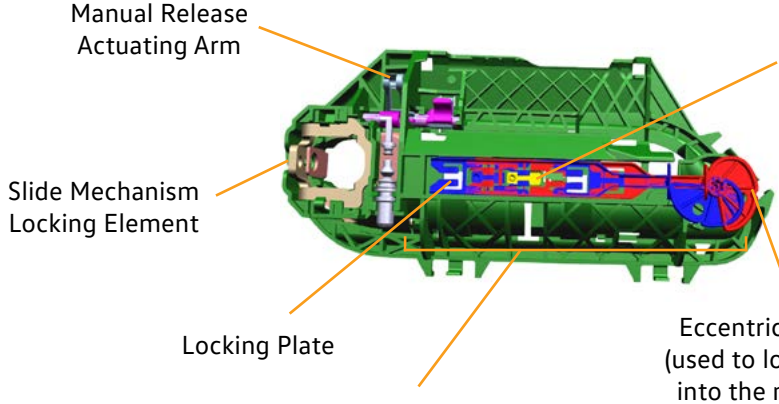
If the vehicle does not have electrical power, mechanical manual operation is possible. Using enough force, the door handle can be moved upward actuating the door latch via Bowden cable.

If the vehicle loses electrical power when locked, a lock cylinder is located under a removable trim piece on the driver's door handle.









Red indicates the starting position of the handle locking assembly.
Blue indicates when the door handle is in its locked and secure position.

Safety Equipment

Occupant Protection

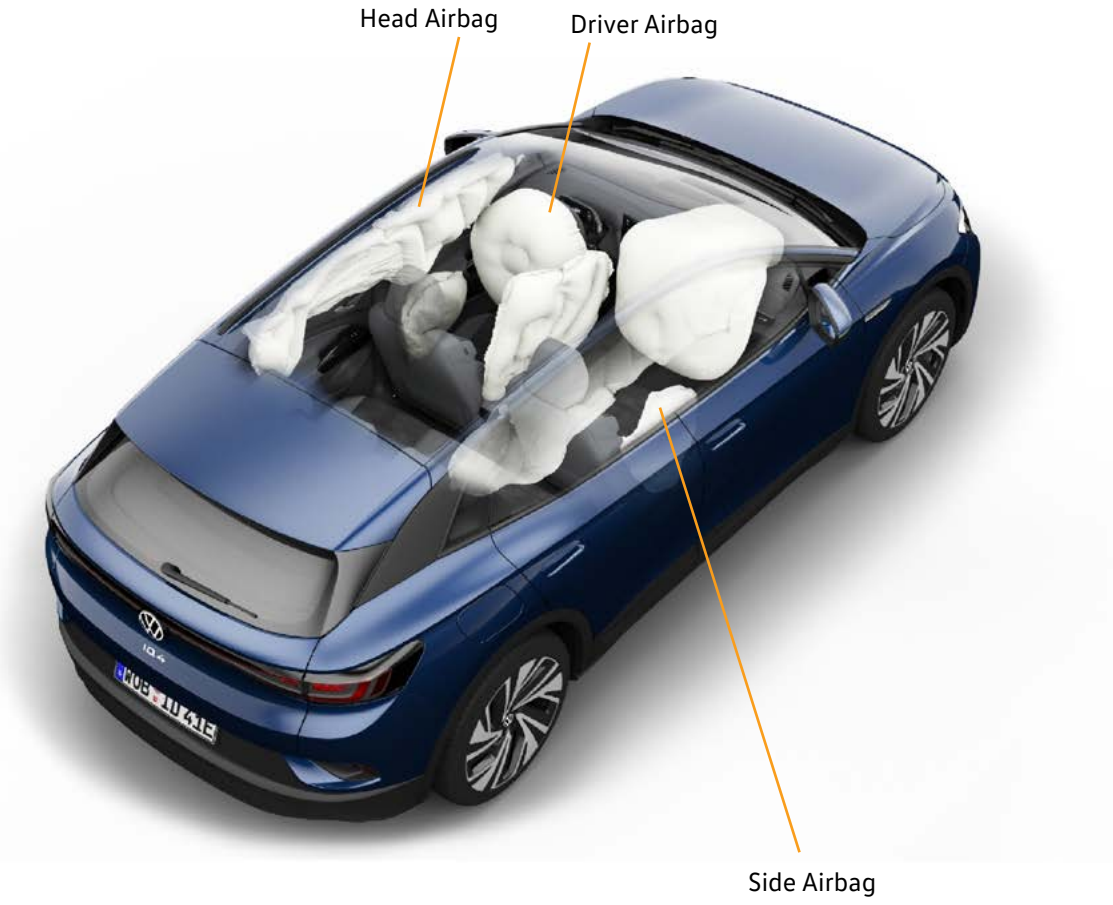
The ID.4 comes with the maximum range of safety features. Numerous assist systems ensure the highest possible level of safety and comfort.

All ID.4 vehicles have the following standard features:

- Driver and front passenger airbags
- Front side airbag
- Head airbags (curtain) front and rear
- Belt tensioners on front and outer rear seats
- Reversible belt tensioners with single-stage belt force limiters at front
- Rear seat top tether

Active Safety:

- Multicollision Brake 2.0
- Front Assist with Pedestrian Monitoring
- PreCrash basic
- Emergency Assist

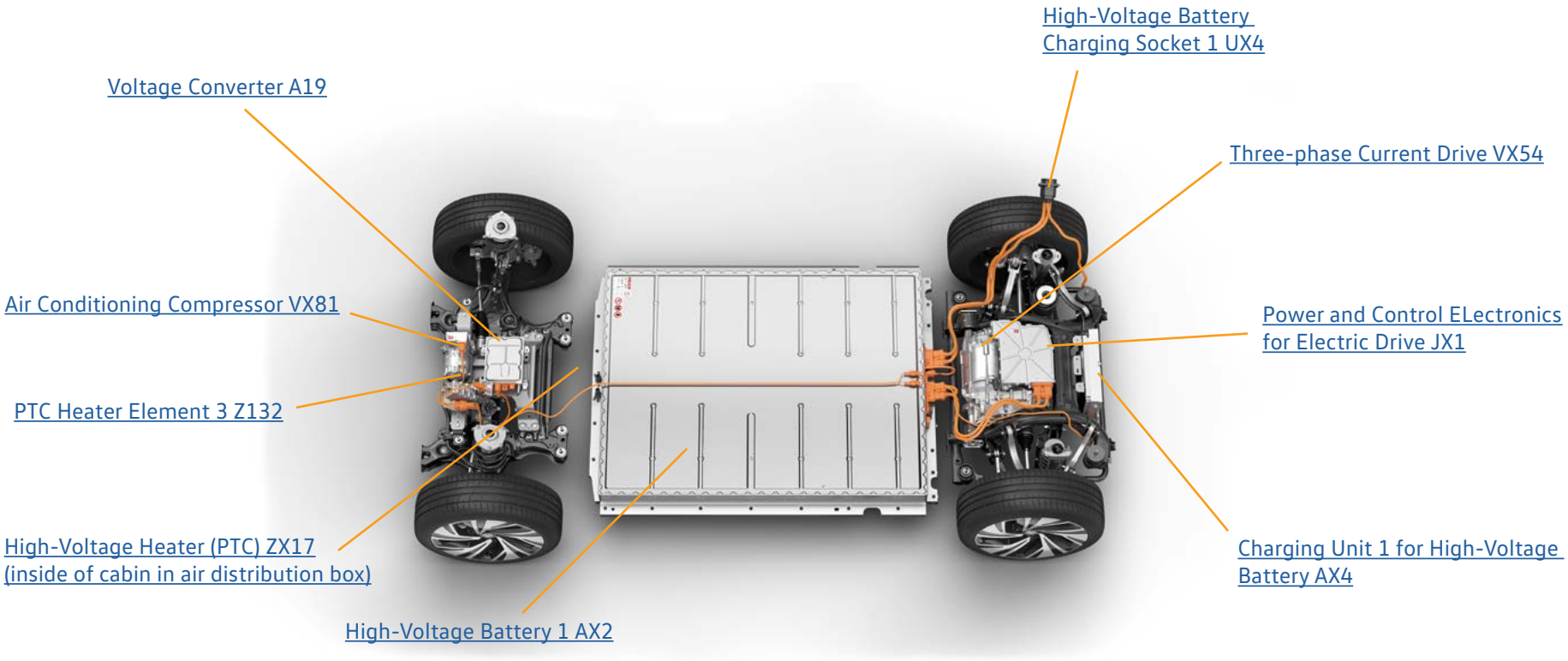




The center airbag shown in this image is not for the North American market.

High-Voltage System

Overview of High-Voltage Components



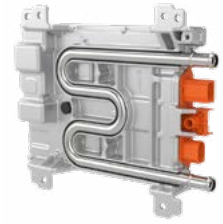
The following two pages have a summary of each component. It can be accessed by selecting the hyperlinked text on this page or by scrolling to the next pages.



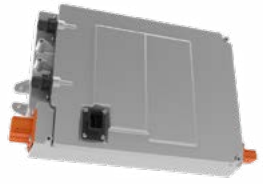
For additional information about the high-voltage system reference SSP 811213 The ID.4 High-Voltage System.

High-Voltage System

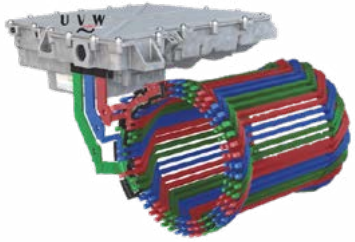
A19 Voltage Converter provides the 12-volt electrical system with voltage and pre-charges the capacitor in the Power and Control Electronics for Electric Drive.



AX4 Charging Unit 1 for High-Voltage Battery is located in the rear of the ID.4. It converts the alternating current from the charging connection into a direct current for charging the high-voltage battery.



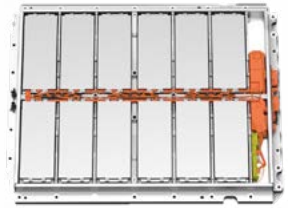
JX1 Power and Control Electronics for Electric Drive converts the customer's power requests into electrical signals. The power electronics control the three-phase current drive. DC voltage from the high-voltage battery is converted into a three-phase AC voltage for acceleration.



AX2 High-voltage Battery 1 is a lithium-ion battery. This is located on the vehicle underbody. This placement provides a low center of gravity and optimized weight distribution. The High-voltage Battery 1 AX2 supplies the electrical energy for driving and is offered in both a 62 and an 82 kWh configuration. Only the 82 kWh battery will be available at launch.



62 kWh



82 kWh



VX81 Air Conditioning Compressor is integrated into the high-voltage system. It is used for cooling both the interior and the high-voltage battery.

Back to Overview Page

High-Voltage System

UX4 High-Voltage Battery Charging Socket 1 can charge the high-voltage battery. Either AC or DC charging is possible. Status lights indicate the vehicle's current charging status.



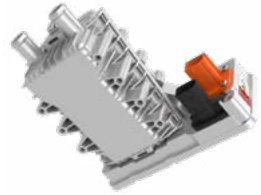
VX54 Three-phase Current Drive can drive the vehicle as an electric motor or charge the high-voltage battery as an alternator.

The three-phase current drive provides 201 hp (150 kW)



Z132 PTC Heater Element 3 both heats the coolant for the high-voltage battery and for active heating.

It is controlled by the Battery Regulation Control Unit J840 using LIN-bus communication.



ZX17 High-Voltage Heater (PTC) is a cabin air heater and contains both the high-voltage heater (PTC) Z115 and the control module. It has an output of up to 6,000 watts and can be regulated in three stages.

The air conditioning control module controls this heater.



Back to Overview Page

One-speed Transmission 0MH

General Design

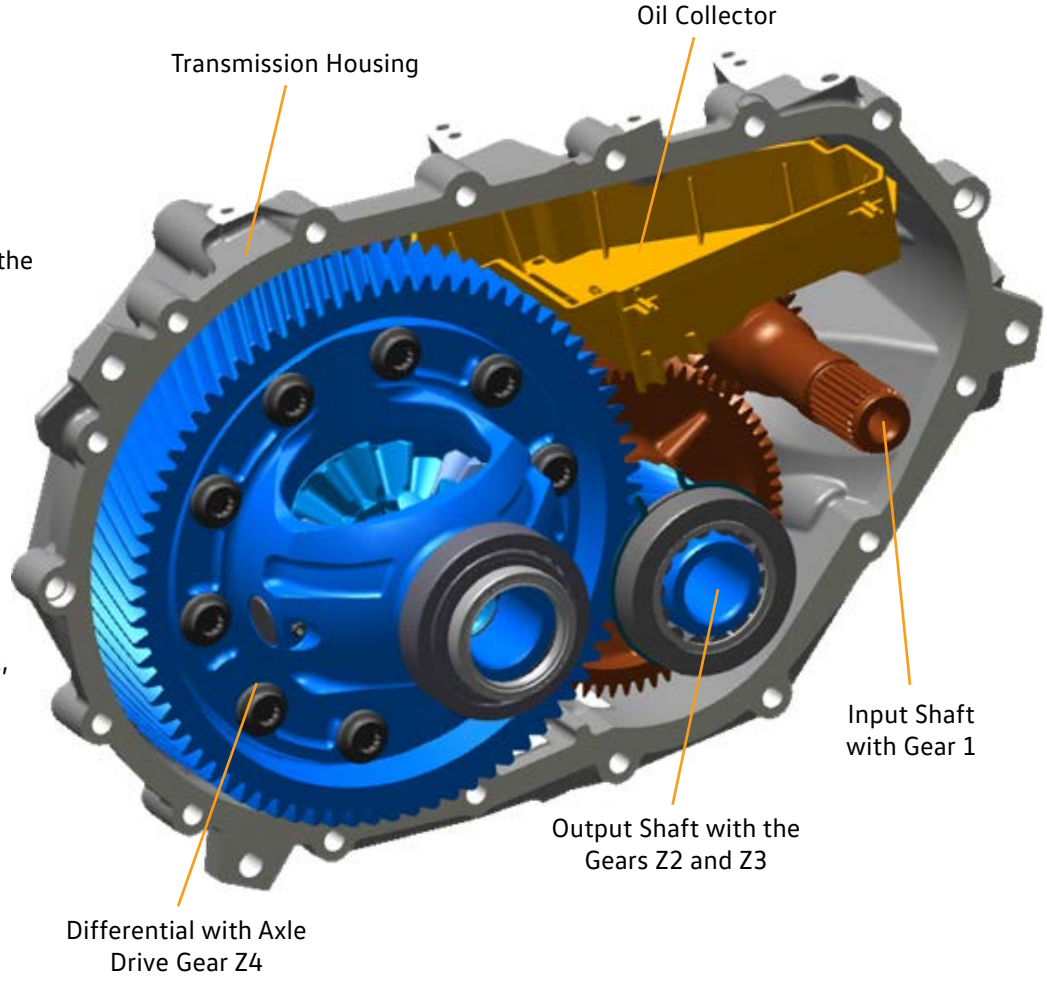
The single-speed transmission 0MH is attached to the Three-phase Current Drive VX54 on the rear axle. When compared with the e-Golf transmission, it is considerably more compact, lighter and more durable. However, the transmission design is very similar.

There is no parking lock in the transmission. This function is performed by the Electromechanical Parking Brake (EMPB).

The following parts are located in the transmission:

- Input shaft with gear Z1
- Output shaft with gears Z2 and Z3
- Differential with axle drive gear Z4
- Oil collector

The output shaft allows the overall ratio to be created in two steps (Z1 + Z2, then Z3 + Z4). This creates a compact and lightweight design.



One-speed Transmission 0MH

Technical Data

Workshop/Internal Designation	One Speed Transmission 0MH / EQ310-1P
Gearbox code	UMF (ID.4)
Number of gears	1
Transmission steps	2
Transmission ratios	Total: 12.976 Step 1: 2.957 (Z1=23; Z2=68) Step 2:4.388 (Z3=18; Z4=79)
Maximum input torque	310 Nm (229 lb/ft)
Maximum input speed	16,000 rpm
Total Weight	21.4 kg (47 lb)
Oil quantity/maintenance	0.81 + 0.1L / lifetime fill (always check the Repair Manual for the latest information)
Input shafts	Splined connection

One-speed Transmission 0MH - Operation

Driving Mode Selection and Parking Brake

The driving mode is selected using the drive mode selector located on the steering column switch module.

The Electromechanical Parking Brake (EMPB) is activated with the EMPB Button E538. The button is connected directly to the ABS Control Module J104.

Driving Mode Selector

When the driving mode selector is turned to select a gear, two detents can be overcome in both directions of rotation. If it is turned one detent upward, the forward gear **D** is selected. If it is turned again in that direction, it switches from **D** to **B** and vice versa.

If the switch is turned one detent downward from this driving mode, driving mode **N** will be activated. If it is turned past two pressure points, **R** will be immediately selected.

If, when turning upward, two pressure points are passed at once, the **D/B** driving mode previously deselected will be active again. This fast change allows the vehicle to be rocked free in case it is stuck.

When released, the driving mode selector will always spring back to its initial position.

The EMPB is engaged by pressing the button E538 or by using the Auto P function.



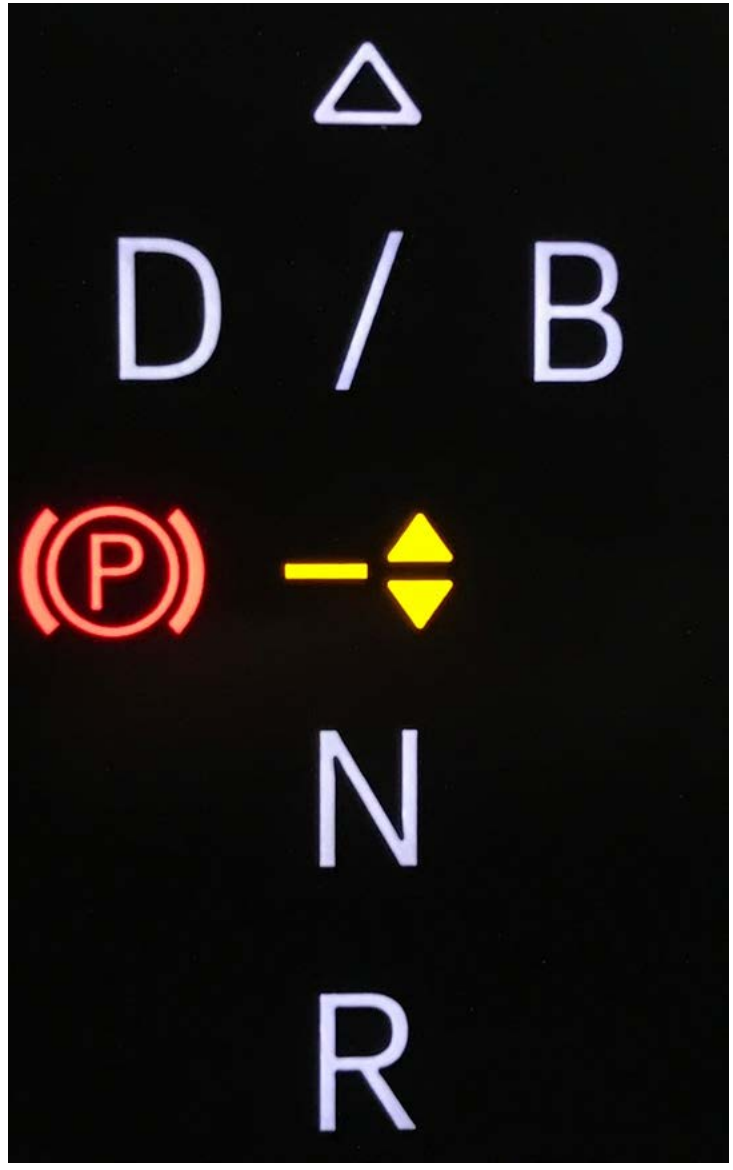
One-speed Transmission 0MH - Operation

Driving Mode Display

Transmission Range Display is part of the Driver Information System Control Module with Display Unit J1254.

The active driving mode is highlighted in amber. Inactive driving modes are white.

- **D** – Continuous setting for forward travel – The electric drive is in the normal program (automatic energy recovery is enabled when ECO assist system is activated).
- **B** – High energy recovery on deceleration or when off-throttle.
- **P** – The driven wheels are locked by the EMPB.
- **N** – The electric drive is in neutral position. No power is transferred to the wheels and the braking effect of the electric drive is not available.
- **R** – Reverse gear is engaged.



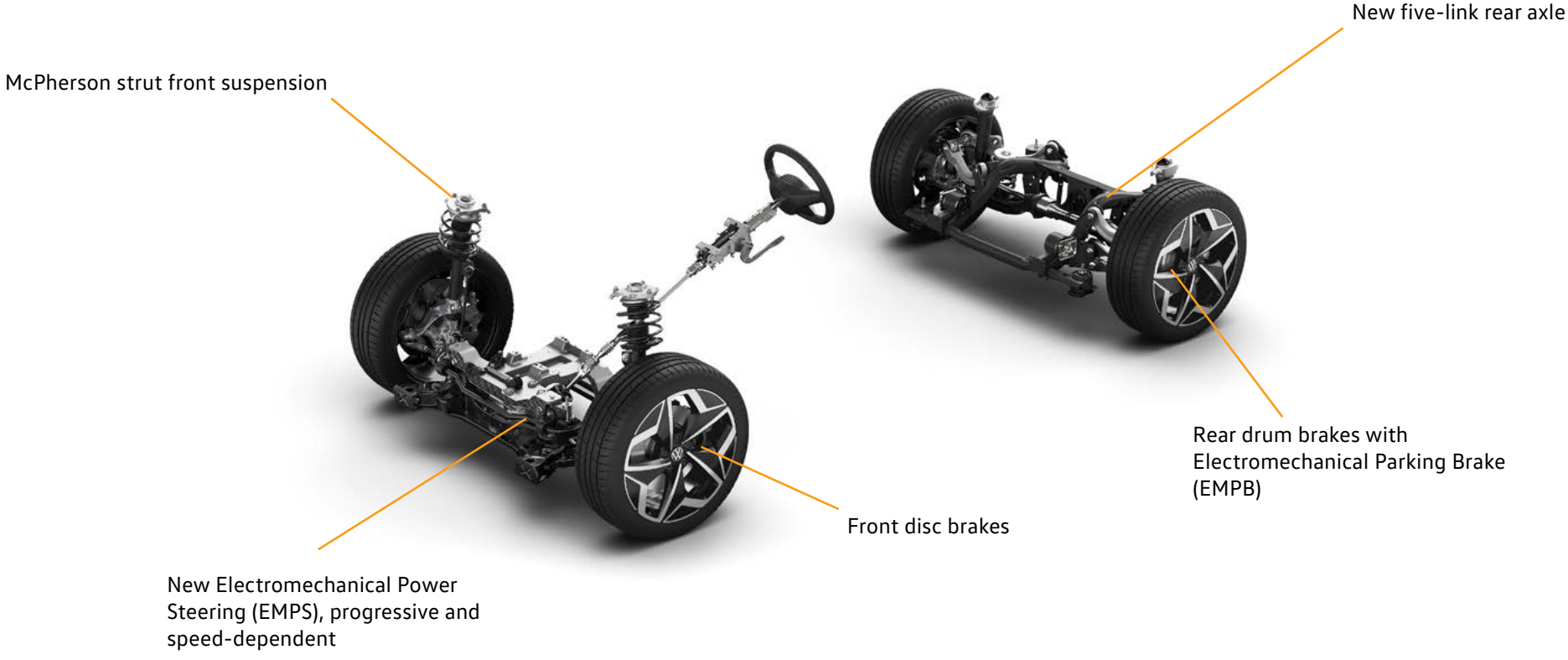
Running Gear

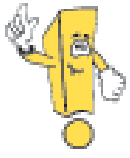
Running Gear Overview

The illustration shows standard and optional running gear for the ID.4.

The following items are not pictured:

- ABS/ESC by ZF-TRW is in a similar location to MQB vehicles
- Electronic Brake Servo (eBKV)
- Staggered tires (different sizes front and rear)





Additional chassis information is located in the SSP 862213 ID.4 Chassis and Driver Assistance Systems.

Additional information on the Electronic Brake Servo is located in the SSP 861213 The ID.4 Electromechanical Brake Servo

Driver Assist Systems

The illustration shows standard and optional driver assist and other safety systems for the ID.4.

Adaptive Cruise Control (ACC)

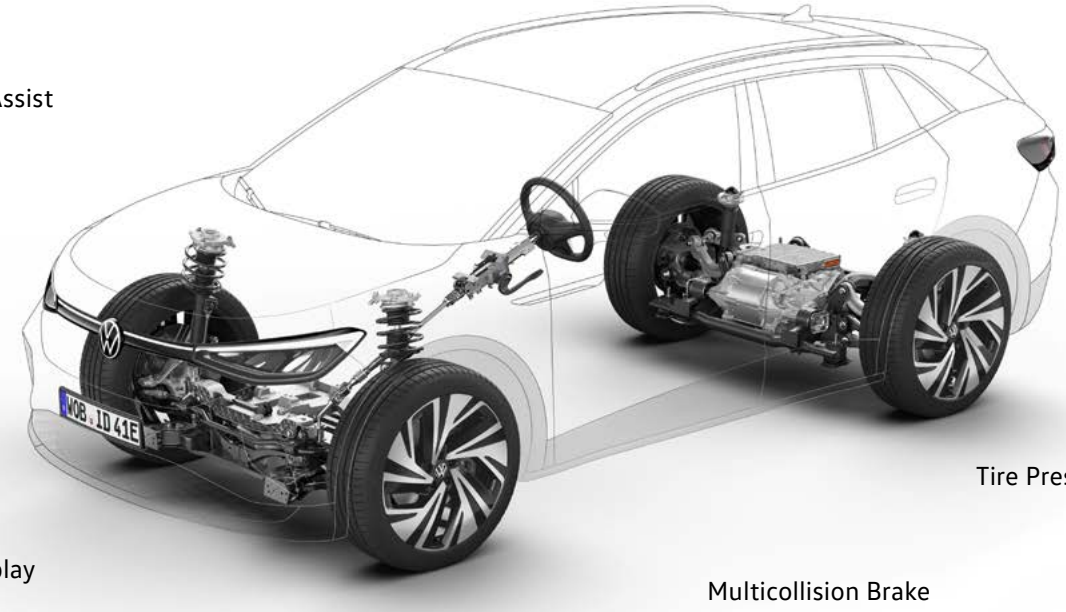
Lane Assist

Front Assist emergency braking function with:
- Pedestrian / cyclist monitoring
- Oncoming vehicle braking when turning
- Distance warning
- Swerve support

Blind Spot Monitoring (Side Assist)

Rear Traffic Alert

Lane departure warning - Lane Assist



Rear View Camera

Emergency Assist

Park Distance Control with Rear Braking

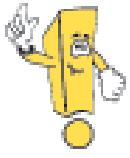
Travel Assist

Tire Pressure Monitoring System- TPMS

Dynamic Road Sign Display

Multicollision Brake

Light Assist



Additional chassis information is located in the SSP 862213 ID.4 Chassis and Driver Assistance Systems.

Climate Control

Climatronic Operation

General Operation

The all-new look continues seamlessly through the interior. Futuristic, comfortable and clearly laid out. All Climatronic functions are simple and quick to activate using the large touchscreen (ID.Cockpit) and the light and visibility cluster on the left.



Climate Control

Climatronic Operation

All functions of the 1-zone and 2-zone Climatronic can be operated using the center touch screen. The direct access button below the screen opens the air conditioning menu.

In the air conditioning operating display, three air conditioning menus are available:

- Smart Climate (only with 2-zone Climatronic)
- Classic Climate
- Air Care

Direct Access Button - Center Switch Module in Dash Panel EX22



Air Conditioning Menu Button

Climate Control

Smart Climate Menu

The following functions are available in the “Smart Climate” menu. Only one can be selected at a time.

Defog windows:

- Volume of air flowing towards the windshield increases
- The vent temperature is adjusted as needed
- Air drying increases by lowering the evaporator temperature



Warm my feet:

- Volume of air flowing into the footwell increases
- Vent temperature increases

Warm my hands:

- Volume of air flowing towards occupants increases
- Vent temperature increases

Cool my feet:

- Volume of air flowing into the footwell increases
- Vent temperature decreases

Fresh air:

- Volume of air increases (without changing the air distribution)
- Vent temperature decreases
- Switch over from (automatic or manual) air recirculation mode to fresh air mode. Manual activation of air recirculation mode when the “Fresh Air” function is active will end the function.

Quick cooling:

- Maximum cooling output of the A/C system

Climate Control

Classic Climate Menu

The Classic Climate menu has the familiar air conditioning system buttons and functions.

If the Climatronic system is switched off, it can be activated using the ON/OFF function or using the defrost function button in the light and visibility cluster.

The temperature regulation for the steering wheel and seat heating can also be activated and adjusted on this screen.



Air Care Menu

This Air Care system has an air quality sensor to detect pollutants and an active biogenic filter to prevent them from coming into the cabin. This special filter is even more efficient than traditional pollen filters and stops fungal spores and extremely small allergens.

When the Air Care function is activated in the Climatronic operating menu, fresh air is drawn in. The proportion of recirculated air in the interior is mixed and cleaned to provide a high level of air quality. In addition, an air quality sensor detects if the ambient air is polluted with certain harmful substances.

If necessary, the Air Care Climatronic switches completely to air recirculation mode so that pollutants such as exhaust gases from other vehicles do not enter the interior.



Climate Control

Voice Control

Many operations in the ID.4 can be controlled using voice control. The system can be easily activated by saying “Hello ID...” (the wake-up phrase) or by pressing the Voice button on the steering wheel.

The ID.4 will respond by saying by saying phrases such as “Yes?” or “What would you like to do?” and reacts intuitively to voice commands such as “I feel cold” when the 2-zone Climatronic is installed. New digital microphones drastically improve voice recognition and quality when making phone calls and pinpoint who is speaking (driver or front passenger).



Climate Control

Operating Unit for Lighting EX59

The front window defrost and heated rear window function have both been moved into the light and visibility cluster. This cluster provides all light and visibility functions into one easy-to-reach control.



Windscreen defrost function on/off

Heated rear window on/off

ID.4 Component Locations

Heater and Air Conditioning Control Module J979

The heater and air conditioning control module is located to the right of the air conditioning unit under the dash panel.

Vehicle Interior Temperature Sensor G1090

The vehicle interior temperature sensor is located between the center vent and the storage compartment in the center console.



Climate Control

Heater and Air Conditioning Unit R1234yf/R744

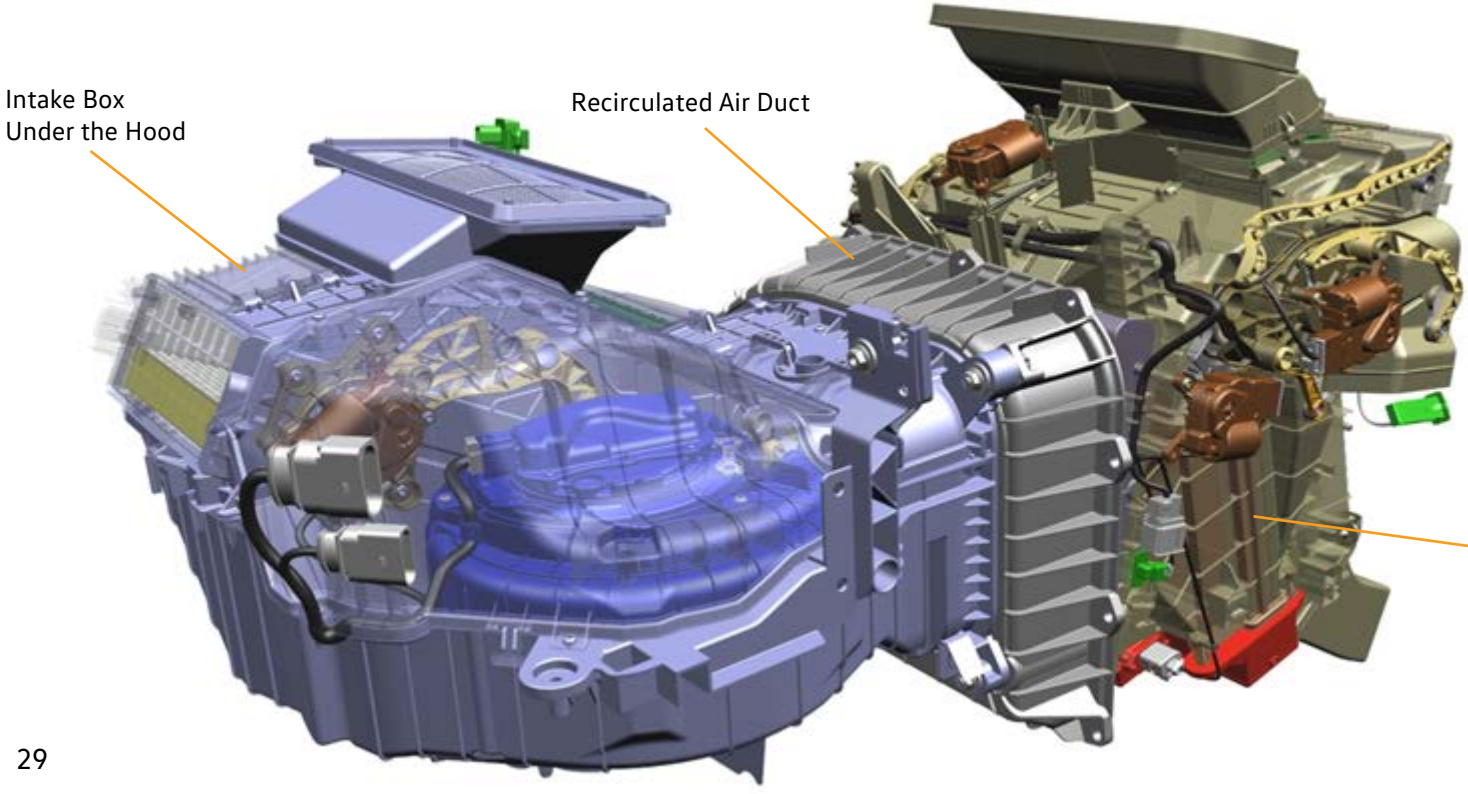
2-part Basic Concept

The MEB has a completely new heater and air conditioning unit. The unit is two pieces. There is an intake box in front of the bulkhead (under the hood) and a distribution box in the cabin.

Interior heating uses a PTC heating element. Vehicles utilizing R744 refrigerant (Canada) are equipped with a heat pump heat exchanger system.



Underhood Intake Box

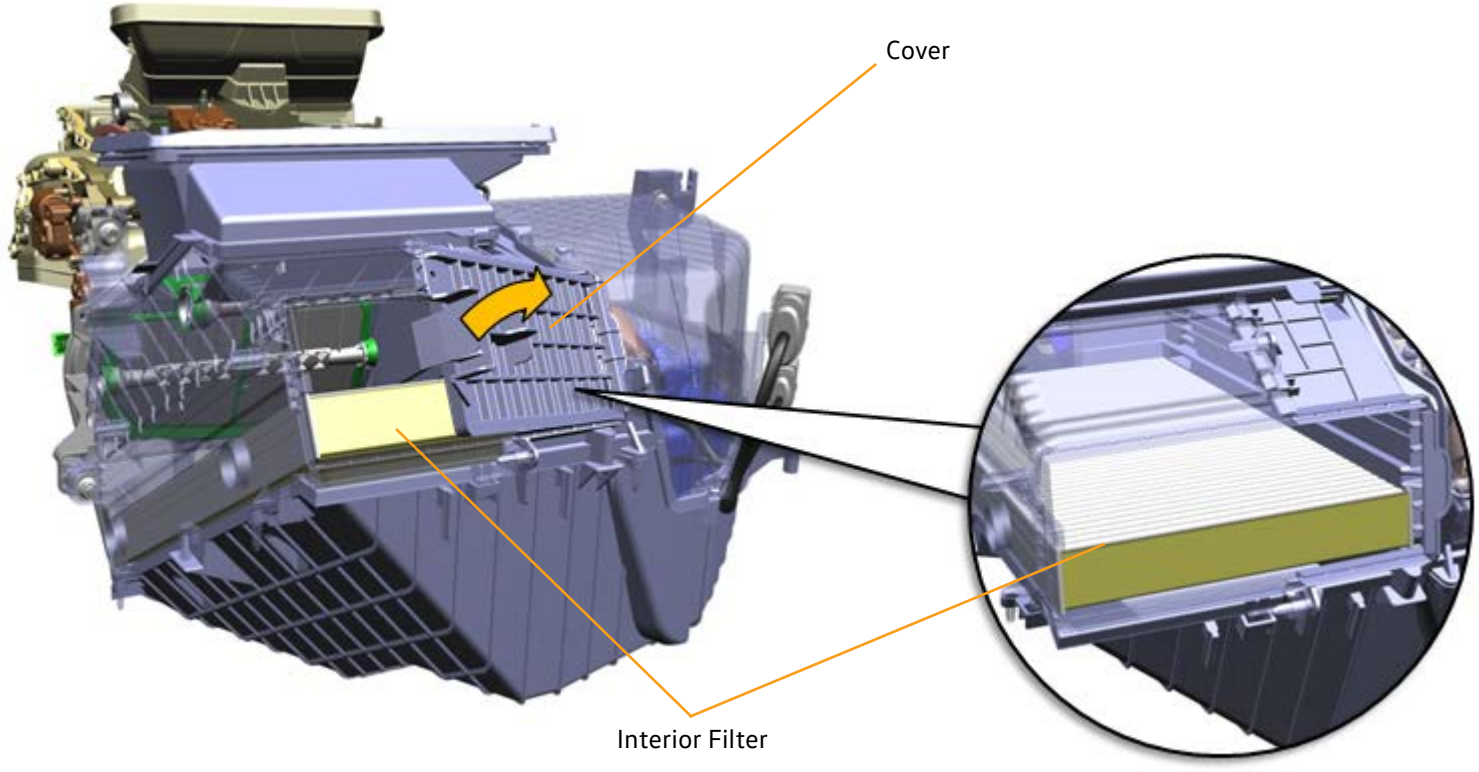


Heater and Air Conditioning Unit R1234yf/R744

Interior Filter

The dust and pollen filter is accessed through the engine compartment and can be removed by unclipping the cover.

The air intake box is designed to accommodate two filters. The North American Region uses a single filter element.



Networking in the ID.4

There are new and extensive high-speed communication channels in the ID.4. These range in speed between 500 kbit/s and 1 Gbit/s. These modules utilize some existing, and some new bus systems.

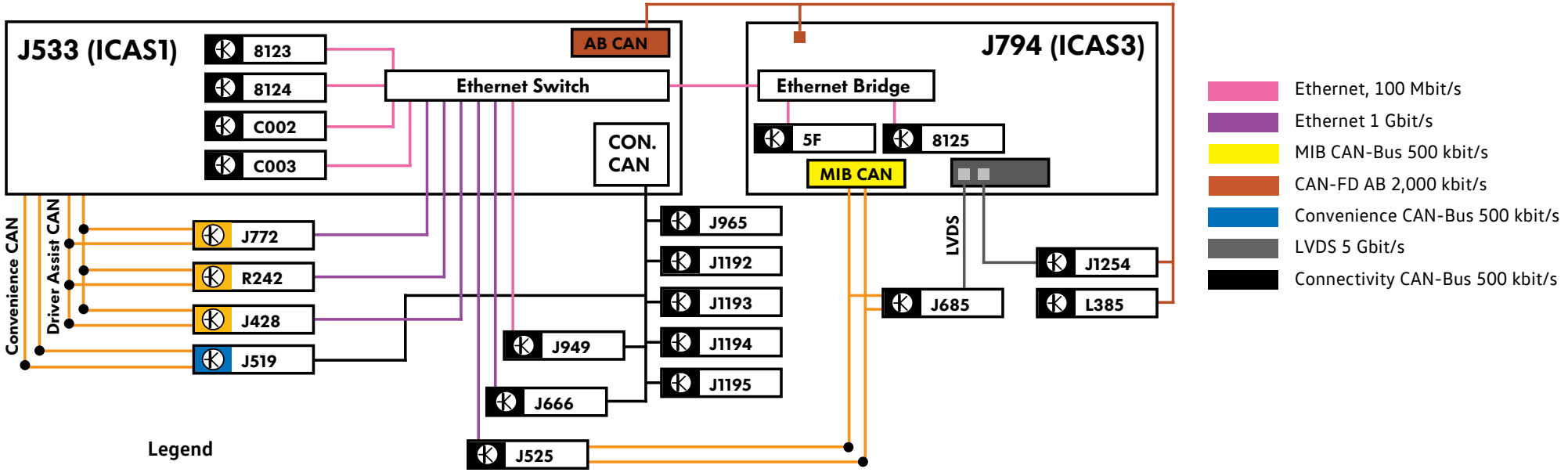
EV CAN-Bus	Battery CAN-Bus	Multifunction Steering Wheel CAN-Bus	Running Gear CAN-Bus	Powertrain CAN-Bus	Convenience CAN-Bus
2,000 kbit/s	500 kbit/s	500 kbit/s	2,000 kbit/s	2,000 kbit/s	500 kbit/s



Driver Assistance CAN-Bus	Ethernet	Ethernet	Connectivity CAN-Bus	MIB CAN-Bus	Display CAN-Bus
2,000 kbit/s	100 Mbit/s	1 Gbit/s	500 kbit/s	500 kbit/s	2,000 kbit/s

Networking in the ID.4

Two new control modules, the J533 (ICAS1) and J794 (ICAS3) are the primary processors. ICAS (In-Car Application Server) modules are central computers/servers that bring together a variety of basic services and vehicle functions to control the vehicle systems.



Legend

5F Information Electronics Display Control
8123 Application Server 1 System 1 Adaptive
8124 Application Server 1 System 2 Java
8125 Application Server 3, System 1 for Infotainment
C002 Software Cluster, Imbedded 1
C003 Software Cluster, Housekeeping 1
J428 Control Module for Adaptive Cruise Control
J519 Vehicle Electrical System Control Module
J525 Digital Sound System Control Module
J533 Data Bus on Board Diagnostic Interface (ICAS1)
J666 Internet Access Control Module
J685 Front Information Display Control Head
J794 Information Electronics Control Module 1
J949 Control Module for Emergency Call Module and Communication Unit
J965 Access/Start System Interface
J1192 Burglary Protection Control Module 2
J1193 Burglary Protection Control Module 3
J1194 Burglary Protection Control Module 4
J1195 Burglary Protection Control Module 5
J1254 Driver Information System Control Module with Display Unit
L385 Dynamic Lighting Strip 1 for Information in Instrument Panel
R242 Driver Assistance Systems Front Camera



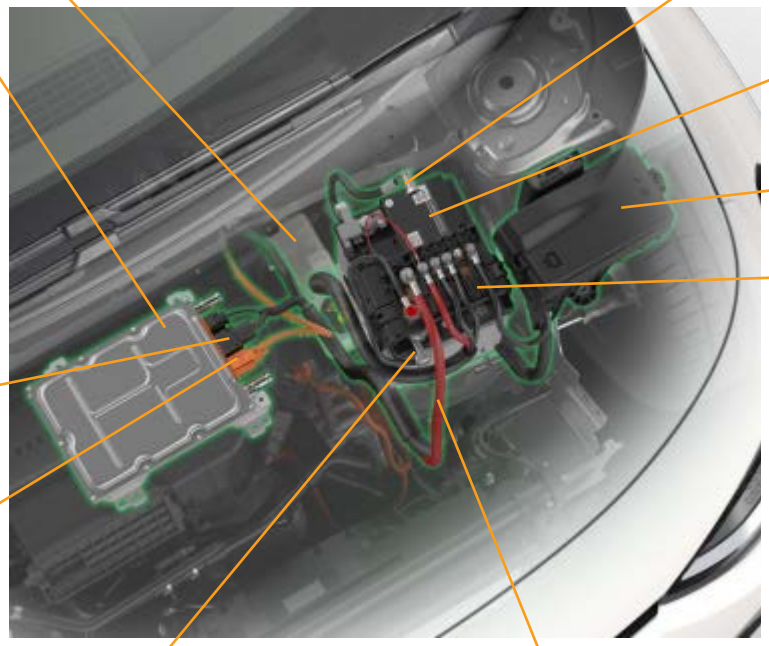
More information regarding the ID.4 networking system can be found in SSP 871213 ID.4 Electrical Systems.

Electrical System

Onboard Supply

The 12V battery is needed for the electrical demands of all 12V consumers. In addition, the 12-volt battery is needed to enable high voltage flow. The 12-volt system controls the high-voltage contactors that connect the high-voltage battery to the high-voltage circuit. A electric vehicle with discharged 12-volt battery cannot be "started."

Once the high voltage system is enabled, the Voltage Converter A19 provides the 12-volt vehicle electrical system with power from the high-voltage battery.







If a jump box is ever used to "start" an ID.4, do not leave it connected after the vehicle "starts."

Exterior Lighting - Headlights

Two headlight assemblies are available for the ID.4:

- Basic
- High Headlight

Basic Headlight



High Headlight





More information regarding the ID.4 lighting system can be found in SSP 871213 ID.4 Electrical Systems.

Tail Light Clusters

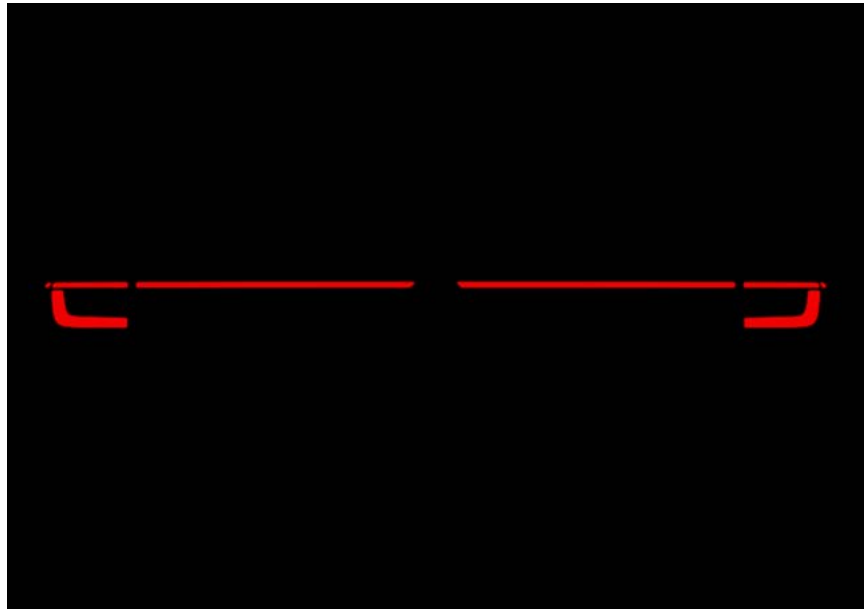
One tail light clusters is available on the ID.4 in North America. It uses LED technology.



Tail Light Cluster



Light Configuration





More information regarding the ID.4 lighting system can be found in SSP 871213 ID.4 Electrical Systems.

Background Lighting

The ID.4 has background lighting to illuminate different areas of the vehicle interior.

The color of the lighting offers either 10 or 30 colors, depending on vehicle configuration. There are pre-configured lighting profiles and the option of individually configuring the background lighting in single colors. The single colors can also be assigned to the individual zones of the vehicle interior.

These areas in the vehicle interior are illuminated in the selected color:

- The control clusters on the doors
- The trim strip in the instrument panel
- The mobile telephone storage compartment

The infotainment system background uses the dash panel color selection.





Multifunction Steering Wheel

The steering wheel has controls for both the driver assistance systems and the media system. The controls for the driver assist systems are located on the left-hand side of the steering wheel. The controls for the media system are located on the right-hand side. The most important new features are:

- Touch buttons: the conventional buttons and rocker switches have been replaced by touch buttons on the multifunction steering wheel for the ID.4
- Sliding and two-step operation: new digital functions like sliding and two-step operation are supported
- Black panel effect: individual symbols on the touch buttons can be displayed and hidden



ID. Light

ID. Light is a light strip that stretches across the entire dash panel. Animated light patterns are displayed using LEDs. It is used as a secondary display for some vehicle functions.

The ID.Light supports the following functions:

- Welcome and goodbye
- Locking and unlocking
- Charging process
- Navigation
- Voice control
- Incoming telephone call
- Braking request from Front Assist
- Activation of absolute reserve mode (when battery charge is very low)





Absolute reserve mode is activated when the battery charge level is very low to save energy. More information about this mode can be found in the Owner's Manual.

ID. Light

Display Area Assignments

The individual functions use different display areas along the light strip. The animations are shown in the indicated areas.

Driver Centered		A
Vehicle Centered		B
Across Complete Width		C
Note for Driver or Front Passenger		D



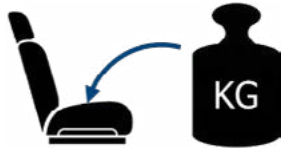
Welcome & Goodbye	A, C
Lock and Unlock	C
Charging Process	C
Navigation	C
Voice Control	D
Incoming Telephone Call	B
Braking Request	C
Absolute reserve Mode	C

Vehicle Activation

Vehicle activation is executed by both the Data Bus on Board Diagnostic Interface J533 (ICAS1) and the Vehicle Electrical System Control Module J519. The J533 is the primary module. The J519 reads the ignition starter button and activates the terminal 15 relay.

Process Start: Vehicle unlocked /driver seat not occupied

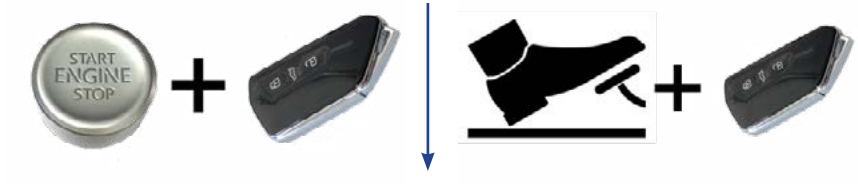
→ The key approaches the vehicle and the vehicle unlocks.



Comfort Ready: Driver seat occupied, ignition off, air conditioning active, infotainment active

→ The "Comfort Ready" state allows the driver to operate the infotainment system and the air conditioning even when the ignition is off. It is activated when the seat occupied sensor detects a weight. The vehicle key does not have to be inside the vehicle.

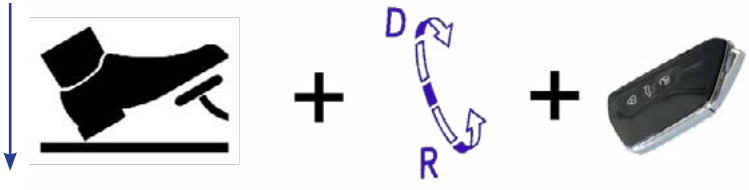
The high-voltage circuit is audibly closed upon activation. A "Welcome driver" message is displayed in the dash panel insert.



Ignition switched on PARK

→ The ignition can be activated using either the ignition starter button on the steering column or by pressing the brake pedal. The display in the dash panel insert switches to the standard view. In addition, all control displays are shown briefly.

The word PARK informs the driver that the parking brake is activated.



Ready to Drive READY

→ To prepare the vehicle for driving, the driver needs to press the brake and select a gear. The parking brake disengages and the word READY appears in the dash panel insert.

The vehicle slowly starts to roll once the driver releases the brake pedal.

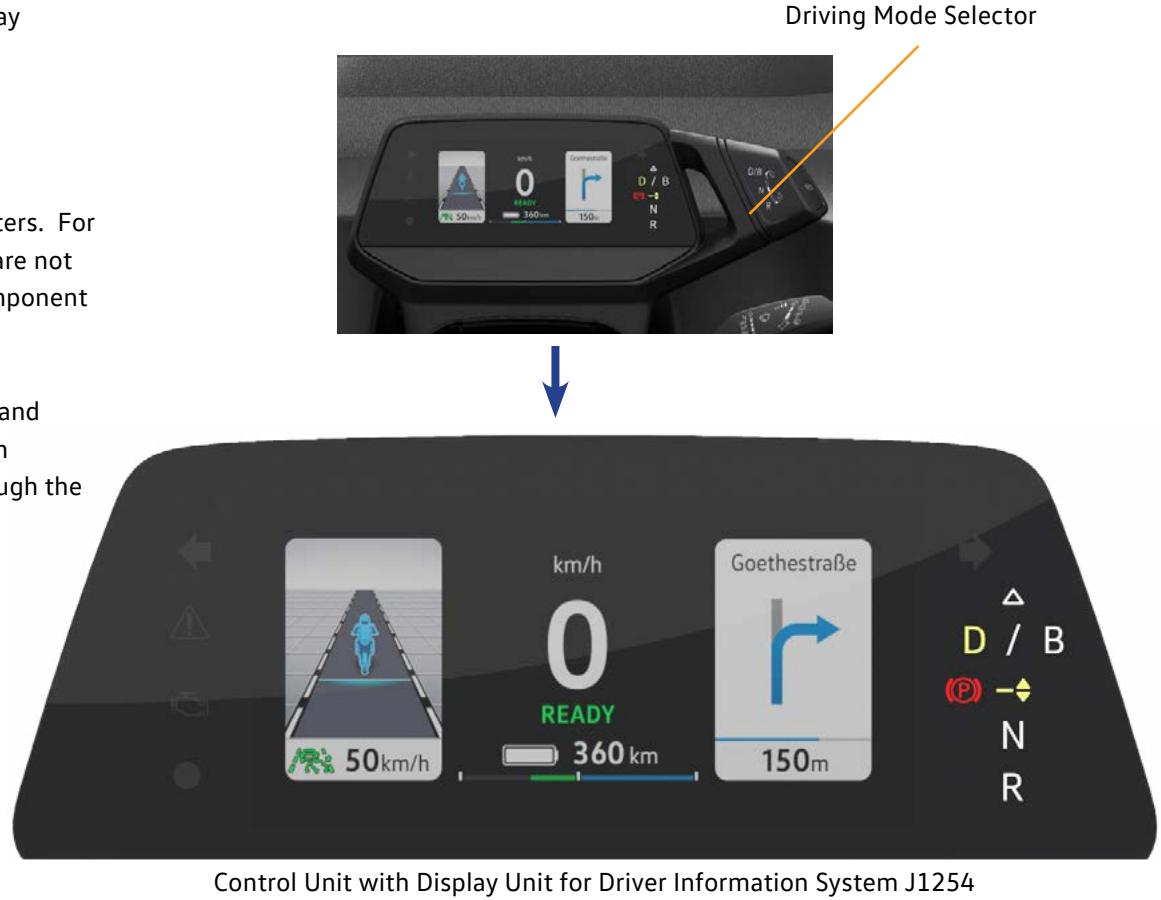
Dash Panel Insert

J1254 - Control Unit with Display Unit for Driver Information System

- Diagonal display of 5.3"
- Display resolution 800 x 400 pixels
- Graphics content provided by ICAS3 (J794)
- Integrated driving mode display using LED's next to the display
- Now only four warning lights in form of LED's
- Subscriber on Display and Operation CAN-Bus

The functions of J1254 differ greatly from MQB instrument clusters. For example, Infotainment content, vehicle status and driving data are not displayed. Also, the control module is not an immobilizer or component protection subscriber.

The display is located in a housing with the drive mode selector and the parking brake button. The component does not have its own loudspeaker. All information and warning tones are output through the audio system.



Control Unit with Display Unit for Driver Information System J1254

Dash Panel Insert

View

The driver can switch between three views with the VIEW touch control on the multifunction steering wheel:

- Standard
- Navigation
- Driver assist systems



Standard View

The vehicle always starts in the standard view. The following information can be shown in the display area:

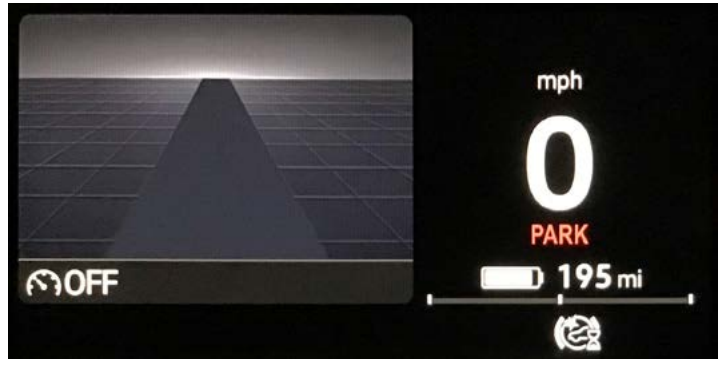
- Warning lamps
- Pop-up warning and information messages
- Current speed
- Battery charge level and remaining range
- Available power and currently used power (blue bar)
- Energy recovery availability and current energy recovery intensity
- Driver assist systems
- Navigation



Navigation View



VIEW Touch Control



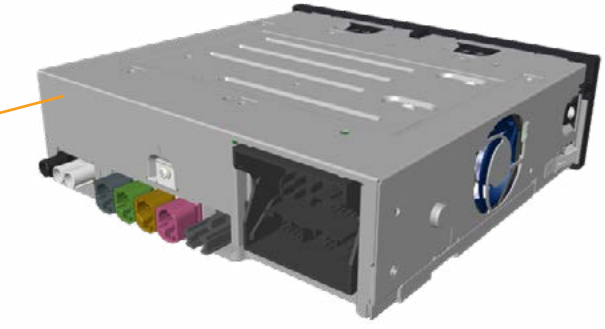
Driver assist systems view

Radio Navigation

Discover Pro Navigation System

- Display and control panel with 12" screen (measured diagonal)
- Screen resolution: Up to 1666 x 820 pixels
- Control module J794 behind glove box
- Display of navigation map on display and control panel
- Contactless gesture control
- FM and HD radio reception
- Data bus connections:
  - Display and operation CAN-Bus
  - LVDS





Control Module for Information Electronics J794

Sound System

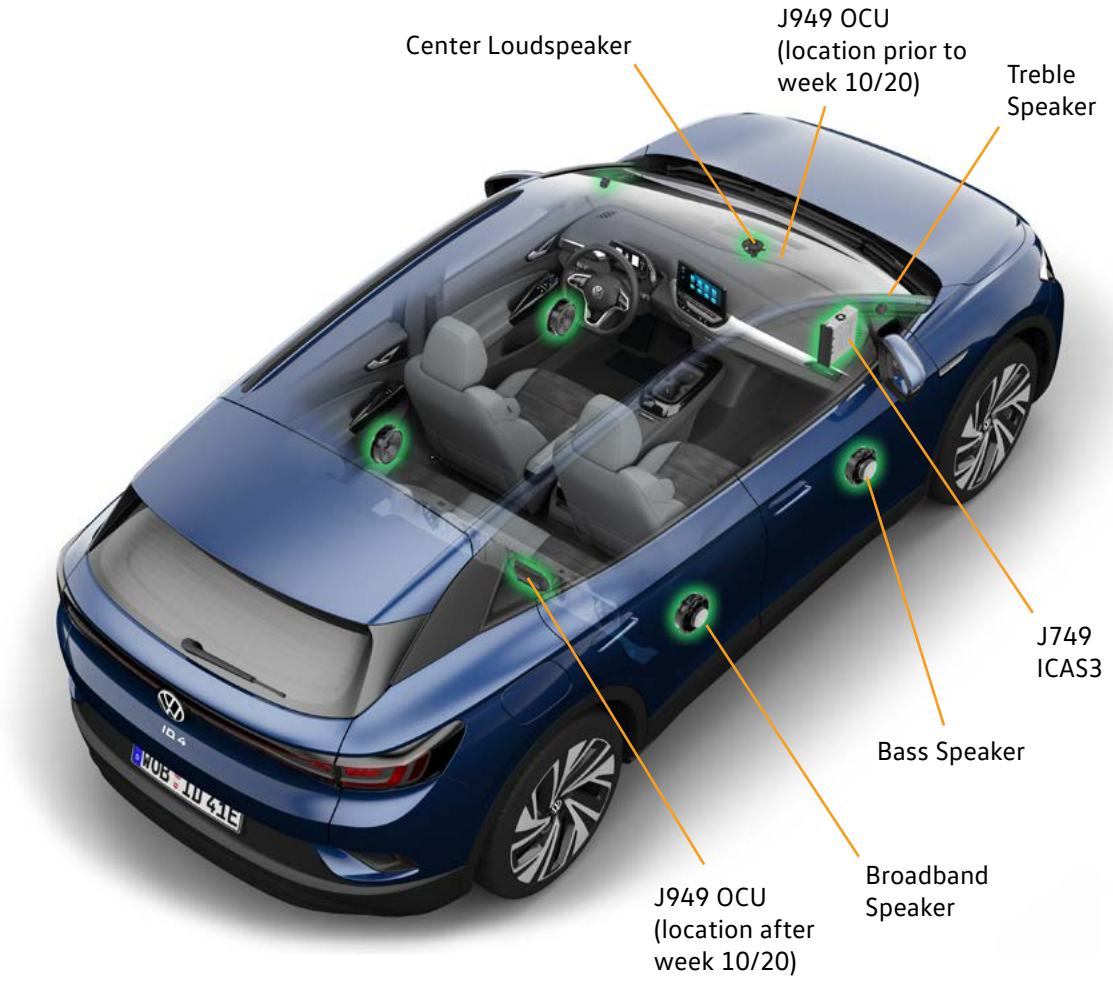
Two sound systems are available for the ID.4:

- Basic sound: 4 + 1 speakers
- Premium sound: 6 + 1 speakers

The standard center speaker has two functions: it is used both for music playback and for emergency call communication. To ensure it functions in an emergency, it is connected to the Control Module for Emergency Call Module and Communication Unit J949 (OCU). The remaining speakers are controlled by the 4-channel amplifier of the Information Electronics J794 (ICAS3).

The sound system speakers are used for all acoustic warnings in the vehicle (parking aid and instrument cluster).

Speakers	Basic Sound	Sound Package
Front Treble	✔	✔
Front Bass	✔	✔
Center	✔	✔
Rear Broadband	-	✔

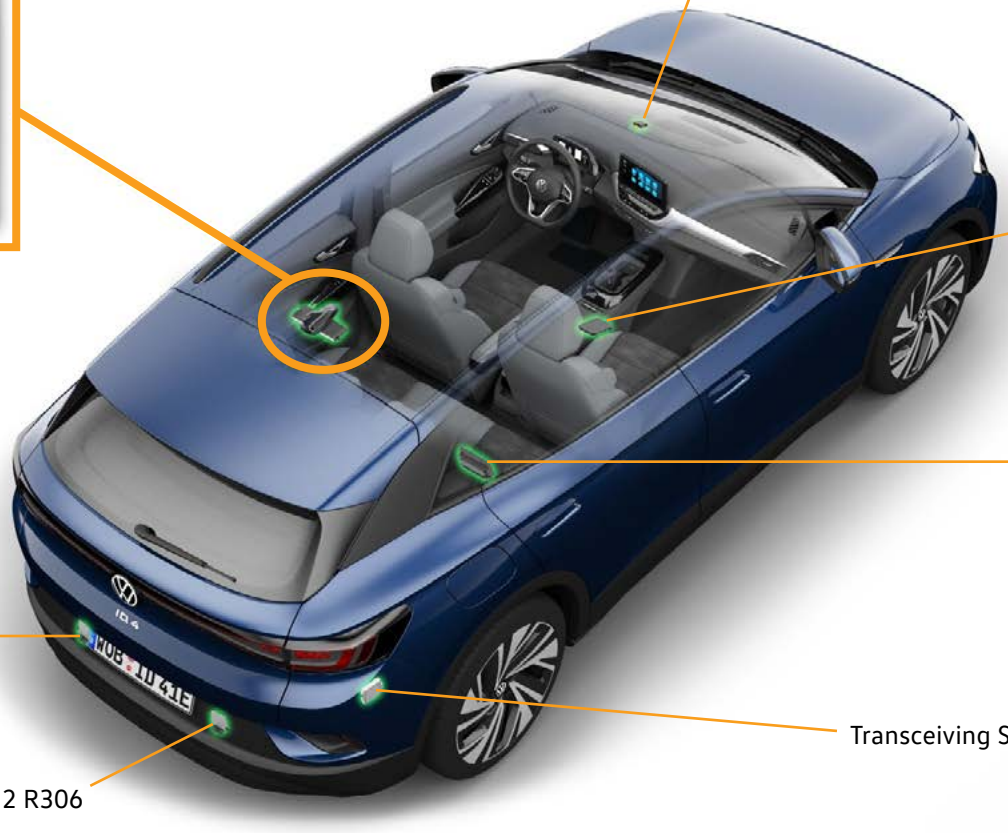


Antenna Systems

Mobile Communications Antennas

The illustration shows the mobile communication aerials. In vehicles with a panoramic sunroof, the Radio Data Transmission Antenna R180 and the Roof Antenna RX5 are located above the front camera.

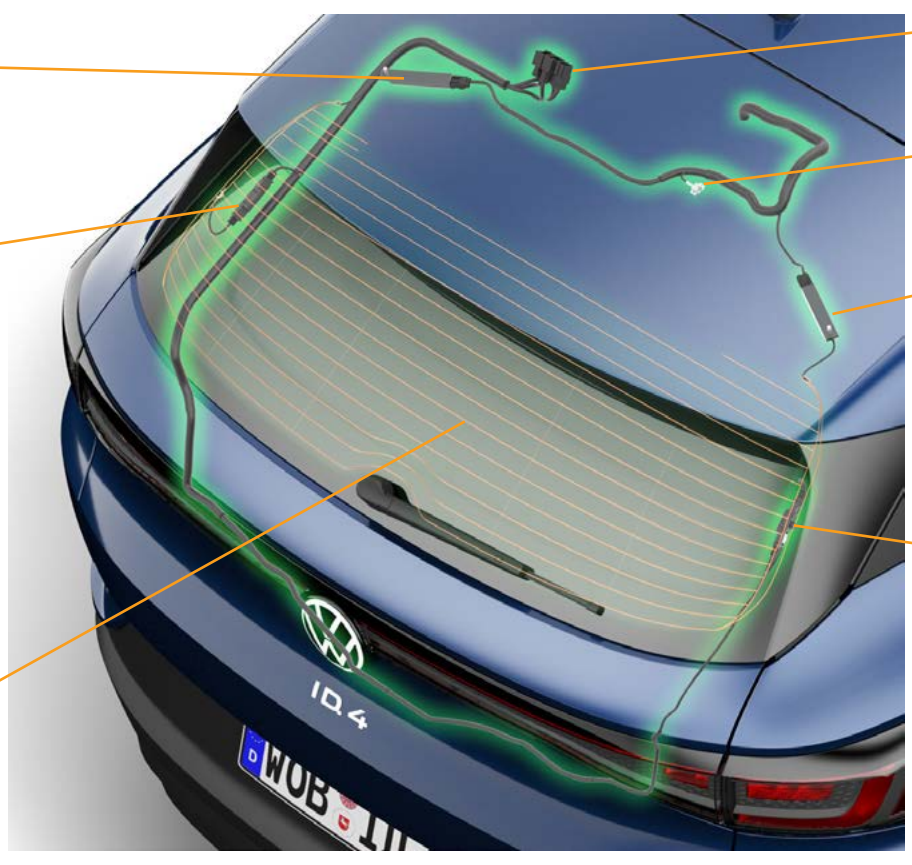




Antenna Systems

Radio Antennas

This illustration shows the antenna components.





Volkswagen Group of America
2200 Ferdinand Porsche Drive
Herndon, VA 20171
March 2021