

Self Study Program 890183

## The 2019 Jetta Introduction

Design and Function - Tablet Format Version 2.0



Volkswagen Group of America, LLC  
Volkswagen Academy  
Printed in U.S.A.  
Printed 4/2018

Course Number SSP 890183 Version 2.0

©2018 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 printing 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

<b>Introduction</b> .....	<b>1</b>
<b>Body</b> .....	<b>6</b>
<b>Occupant Protection</b> .....	<b>11</b>
<b>Engines</b> .....	<b>13</b>
<b>Transmissions</b> .....	<b>16</b>
<b>Running Gear</b> .....	<b>18</b>
<b>Heating and Air Conditioning</b> .....	<b>24</b>
<b>Electrical System</b> .....	<b>27</b>
<b>Infotainment</b> .....	<b>42</b>
<b>Car-Net</b> .....	<b>48</b>

# Introduction

---

## The New Jetta - Fun to be in!

The Jetta has been a great sales success in the North American market, and the 2019 Jetta has three outstanding values:

**Fresh interior and exterior design:** The front view is enhanced by the wide chrome grill and LED headlights. On the inside, the ambient lighting on the front doors and instrument cluster puts the spotlight on the new Jetta's personality. This helps the Jetta to project a solid, secure image.

**Fun to be in:** Exclusive features include a 10.25 inch instrument cluster, state of the art radios with up to 8-inch screens and more connectivity with up to two USB ports.

**High level of safety and comfort:** State-of-the-art driver assistance systems including Adaptive Cruise Control and Blind Spot Monitoring, Lane Assist and Light Assist. The new Jetta has improved safety and driving comfort.

These values make the new Jetta a family car that combines the traditional European ride with cutting-edge technology.



S588\_002



The instrument cluster's multi-function indicator displays and infotainment displays shown in this Self-Study Program are just examples and do not necessarily correspond to the features and languages for all countries.

# Introduction

---

## Outstanding Features

- Panoramic sliding sunroof
- Information screen display up to 8"
- Ambient light color selection
- 5.5 liter (1.4 gallon) capacity center console
- LED headlights
- Driving mode selection
- Up to two USB ports



S588\_078



S588\_079

- Start-Stop System
- LED taillights
- Keyless Access
- Heated and ventilated seats
- Driver Assistant



Features included depend on trim level and options.

# Introduction

## Distinctive Features

Wide Chrome Grill  
and LED Headlights



10.25" Instrument Cluster



Heated and  
Ventilated Seats



Ambient Light  
Color Selection



Driver Mode Selection



Panoramic Sunroof



Rear Spoiler and  
LED Lighting

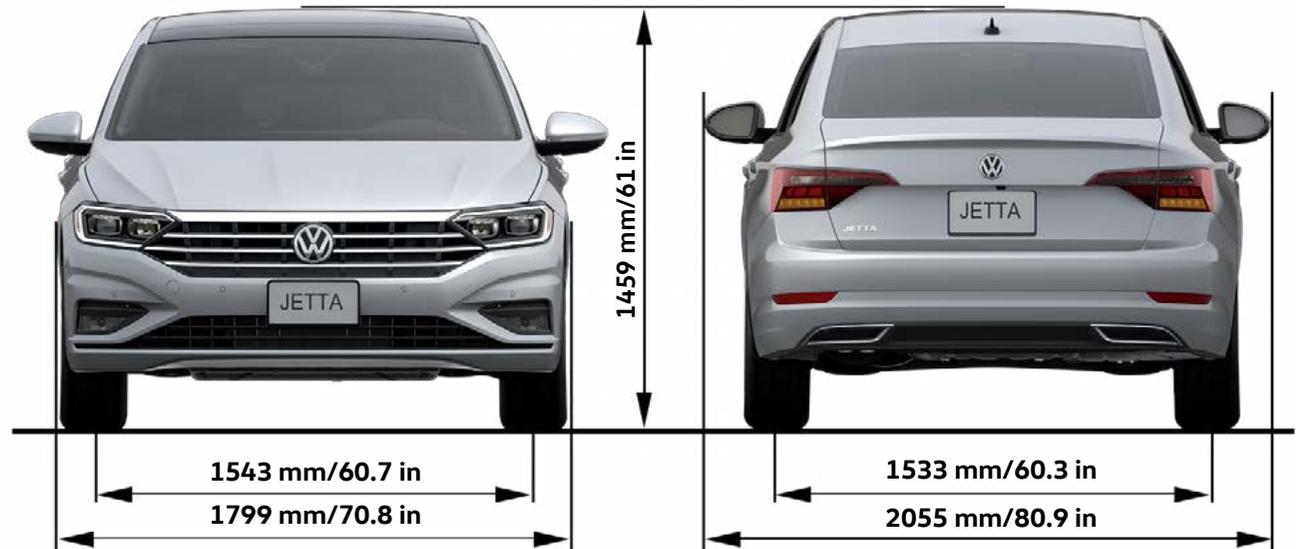
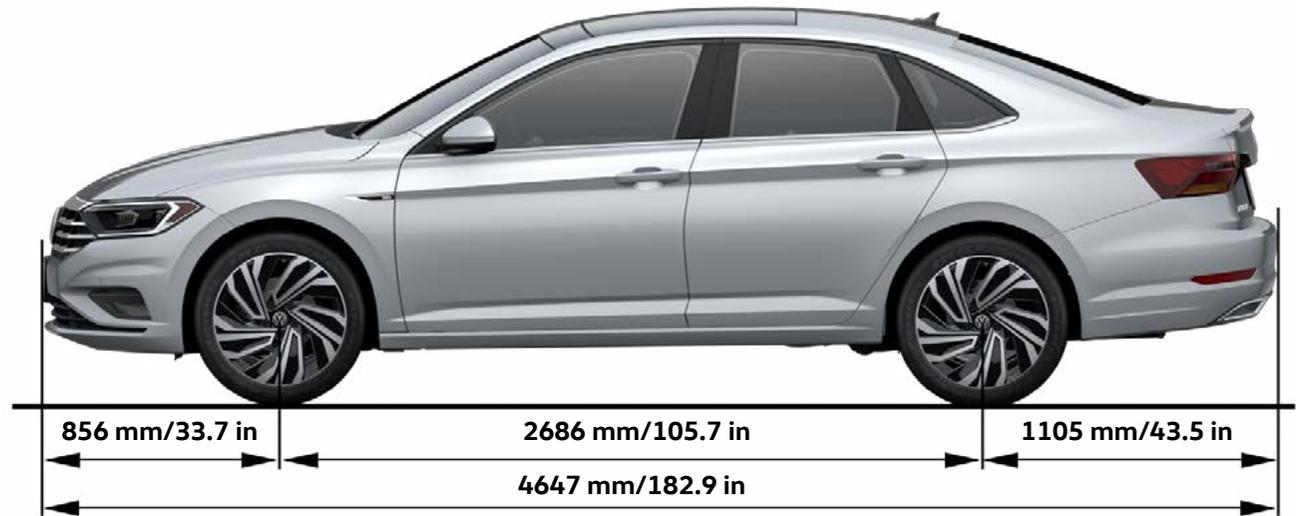


# Introduction

## The Technical Data

This Jetta data refers to a vehicle with a 1.4L TSI engine, a 6-speed manual transmission and 225/55 R17 tires and an empty vehicle.

Turning Diameter	11.2 m	36.7 ft
Maximum Vehicle Weight	1830 kg	4034 lb
Wheelbase	2686 mm	105.7 in
Curb Weight	1309-1373 kg	2887-3027 lb
Maximum roof load	75 kg	165.3 lb

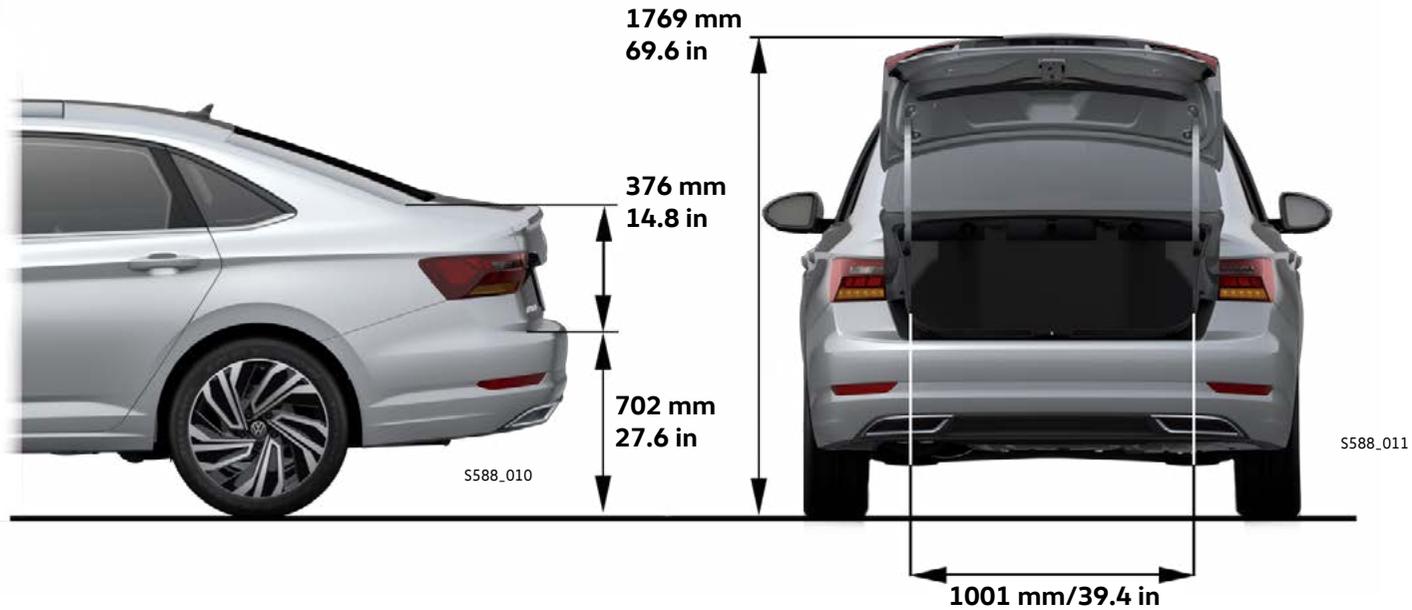
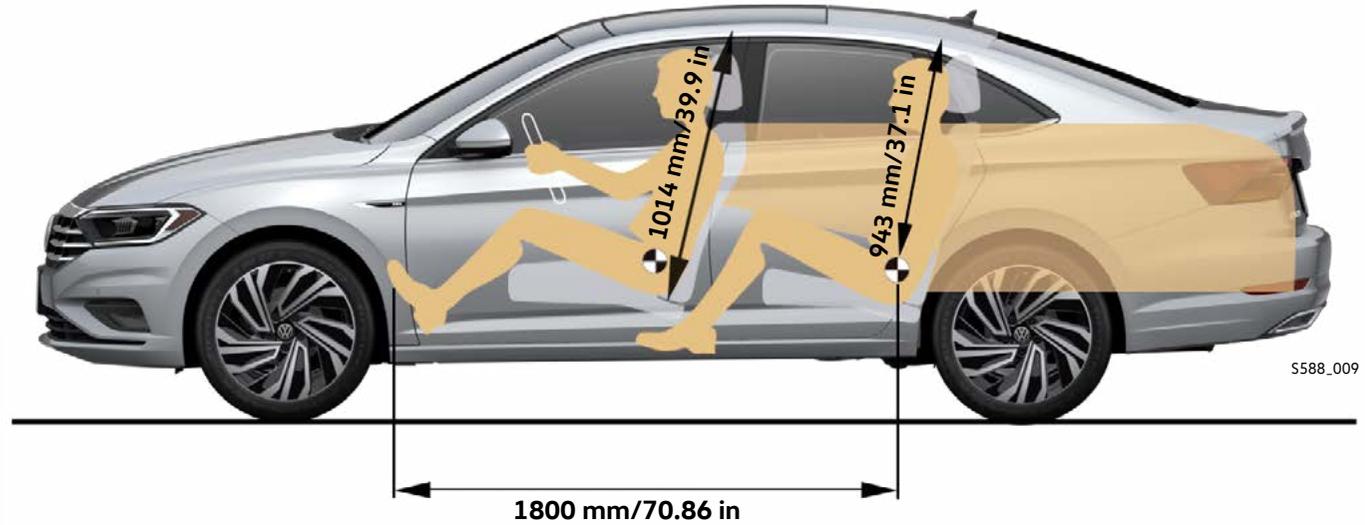


# Introduction

## Interior Dimensions and Volumes

Interior Dimensions and Volumes

Trunk Volume	510 Liters	135 Gallons
Trunk Volume with Rear Seat Backrest Folded Forward	986 Liters	34.8 Cubic ft
Fuel Tank Capacity	50 Liters	13.2 Gallons
Back Seat Knee Space	70 mm	2.75 in

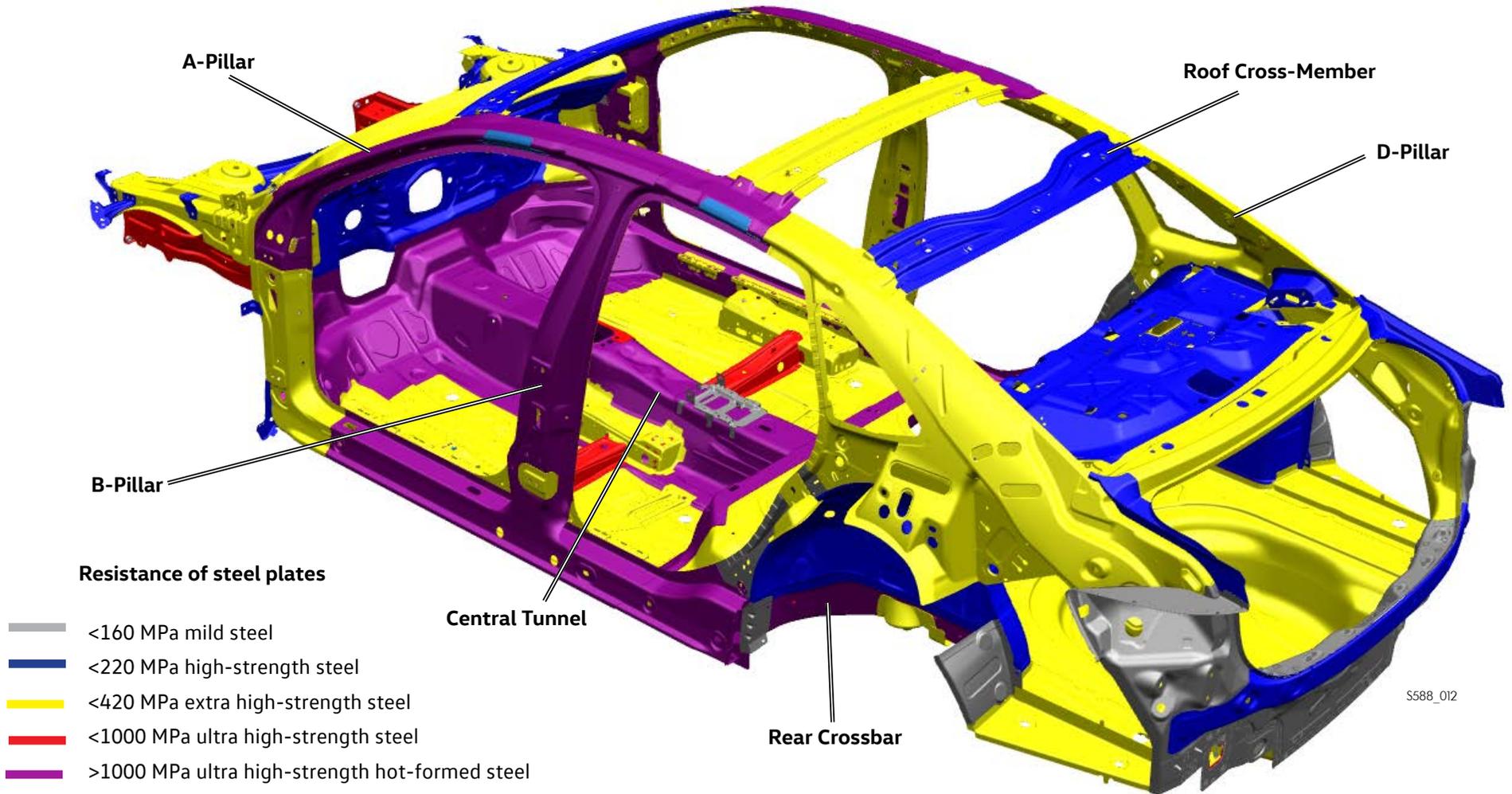


# Body

## Body Structure

The body is based on the Modular Transverse Matrix (MQB) platform.

As in other vehicles based on this platform, it is built with varying strength steels to provide the highest passenger safety possible.



# Body

## Instrument Panel and Center Console

The new Jetta's instrument panel is a completely innovative design. It has a fantastic view when driving, is elegant and of high quality. In addition, the infotainment system is more prominent than ever before. The center of the instrument panel is slightly tilted towards the driver, as is the center console.

The new front center armrest with storage compartment ensures driver comfort.

New ambient lighting can change intensity and color depending on the desires of the occupants.



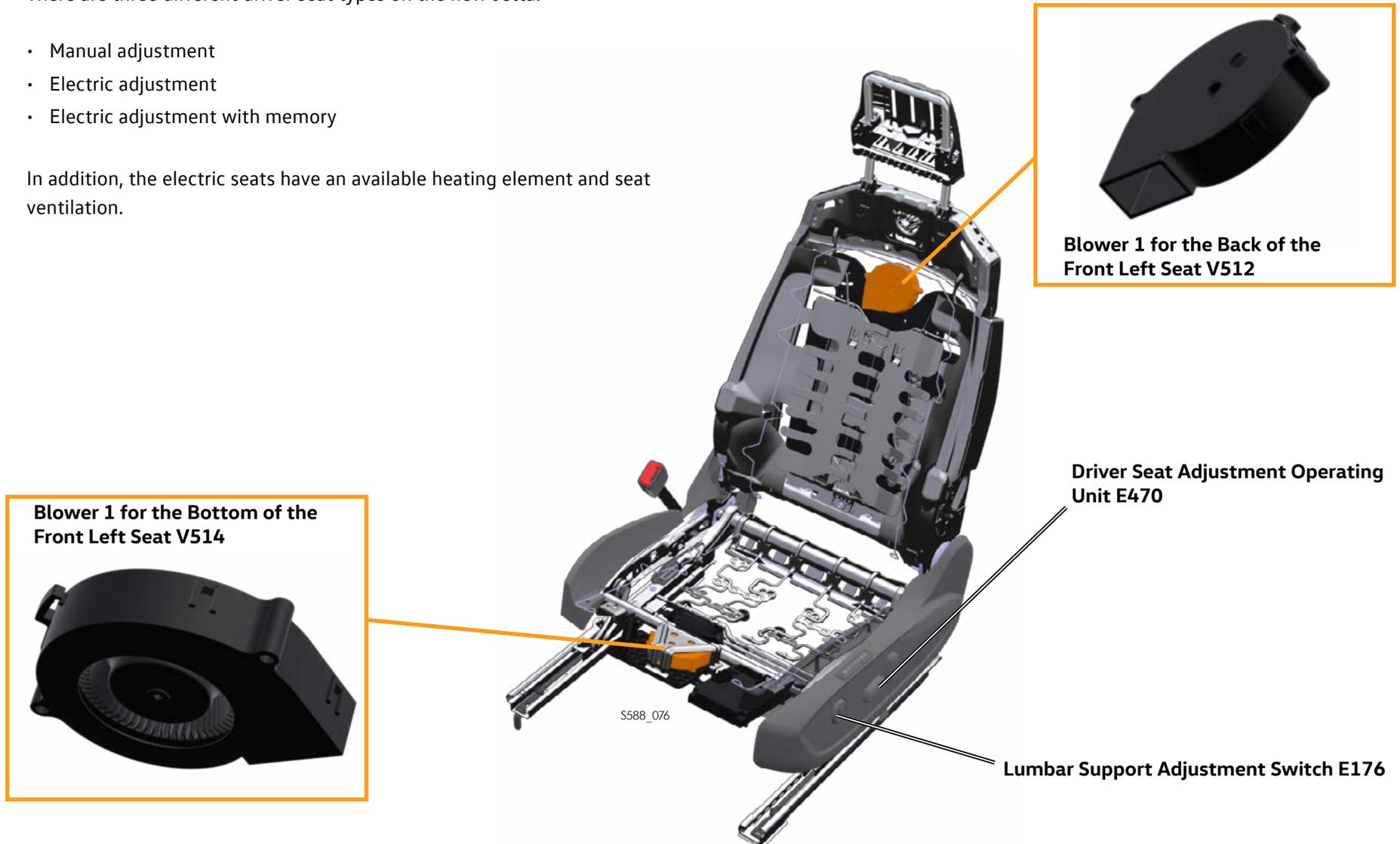
# Body

## Driver Side Front Seat

There are three different driver seat types on the new Jetta:

- Manual adjustment
- Electric adjustment
- Electric adjustment with memory

In addition, the electric seats have an available heating element and seat ventilation.



# Body

## Passenger Side Front Seat

There are three passenger seat types. All have an occupant detection sensor:

- Without heating element
- With heating element
- With heating element and seat ventilation

**Blower 1 for the Bottom of the Front Right Seat V518**



**Blower 1 for the Back of the Front Right Seat V516**

S588\_077

# Body

---

## Panoramic Sunroof with Wind Deflector

The panoramic sunroof with wind deflector is mounted to the roof. It has pinch protection and a manual sunshade.



S588\_014

The glass cover is mounted using an R2R (Rail2Rail) system. This design eliminates roof side moldings.

# Occupant Protection

---

## Passenger Protection

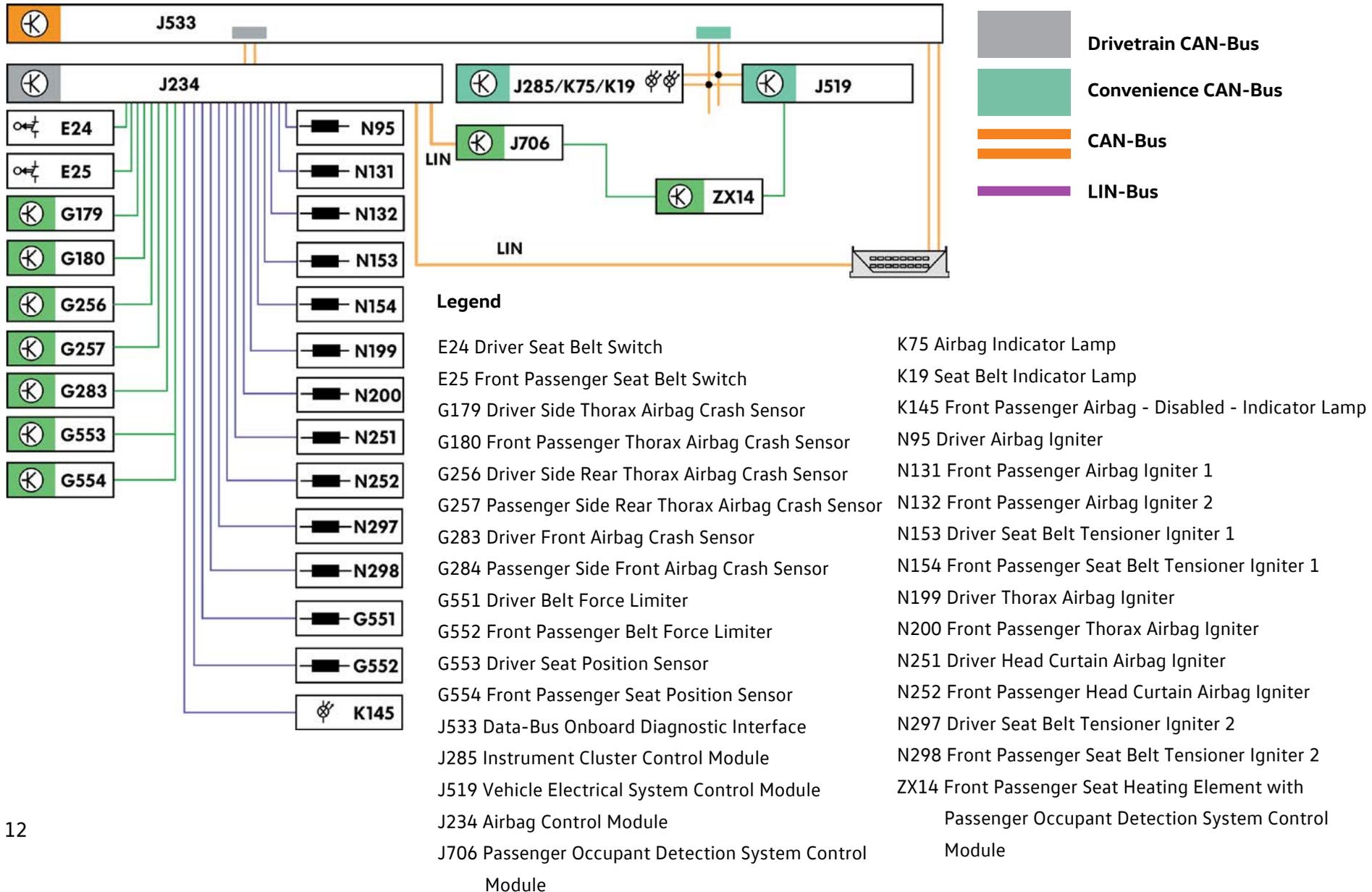
### Features

- Single-stage driver airbag
- Dual-stage passenger airbag
- Front side airbags
- Left and right curtain airbags
- Audible and visual alert to remind occupants to use driver side safety belt
- Passenger seat occupant detection sensor to change passenger airbag to active mode
- Safety belts with force limiters
- Safety belt force limiters in the front and outer rear seats
- Top Tether system
- Lower Anchors and Tethers for Children (LATCH) system



# Occupant Protection

## Passenger Protection Electrical Diagram



# Engines

## Combinations of Engines and Transmissions

Engines	1.4 I TSI DJXA Engine	1.4 I TSI DGXA Engine
		
<b>Transmissions</b>  <b>6 speed Manual Transmission</b> <b>MQ250 02S</b>		
<b>8 speed Automatic Transmission</b> <b>AQ300 09S</b>		

# Engines

---

## 1.4L TSI 147 hp Engine

This engine is based on the EA211 generation engine and has different engine codes to meet different emission regulations.



S588\_018

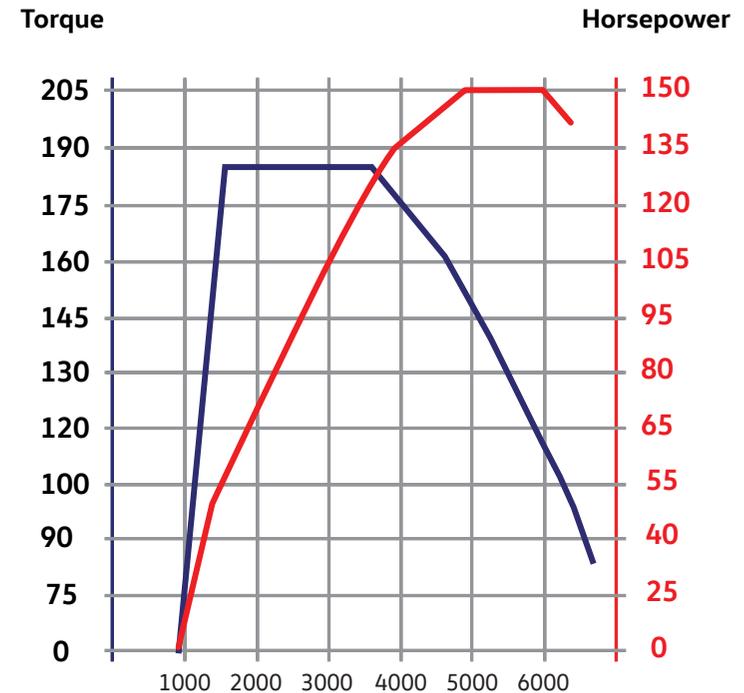
### Technical Specifications

- Exhaust manifold integrated into engine cylinder heads
- Toothed belt camshaft drive
- Coolant pump integrated into the thermostat housing
- A toothed belt from the exhaust camshaft drives the coolant pump
- Turbocharger with electric boost pressure actuator
- Intake and exhaust camshaft adjustment
- Oil pump with external gear to allow two-stage oil pressure regulation
- Two element pan (top element made of aluminum, bottom element made of sheet metal)

# Engines

Engine Code	DJXA	DGXA
Architecture	Inline 4-cylinder engine	
Cylinder Capacity	1,395 cm <sup>3</sup>	
Cylinder Diameter	74.5 mm	
Stroke	80 mm	
Valves per Cylinder	4	
Compression Ratio	10.0:1	
Maximum Power	147 hp at 5000-6000 rpm	
Maximum Torque	184 lb/ft at 1600-3500 rpm	
Engine Control Module	Bosch Motronic ME 17	
Fuel	87 octane unleaded	
Exhaust Gas Treatment	3-way catalytic converter, lambda sensor upstream and another downstream of the catalytic converter	

Torque and Power Diagram



# Transmission

## 8 speed 09S Automatic Transmission

The new Jetta uses a new 8 speed 09S automatic transmission.

<b>Manufacturer</b>	<b>AISIN AW Co. LTD. Japan</b>
<b>Production Code</b>	<b>AQ300</b>
<b>Service Code</b>	<b>09S</b>

The AISIN 8 speed 09S automatic transmission is a variant of the 8 speed 09P automatic transmission currently used in the Tiguan LWB and Atlas.

The 8 forward speeds are created using a modified planetary gear system.

The 09S automatic transmission is designed with Start-Stop capability using a new solenoid valve that keeps the clutch engaged shifting to first gear while stopping or starting, ensuring a smooth take off or slow down transition.



S588\_028

### Outstanding Features

- The B1 band brake was replaced with a multi-disc brake
- The F125 Multi-Function Transmission Range Switch was replaced by the J587 Selector Lever Sensor System Control Module
- The manual valve has been removed
- Hydraulic pump now chain driven
- New ATF transmission fluid with high friction properties
- Several pressure switches were added to monitor working pressure

# Transmission

## Application of Clutch and Brakes in the 8 speed 09S Transmission

The following is the sample chart showing how clutch and brakes are applied, depending on the operational gear.

Gear	Components						
	K1	K2	K3	K4	B1	B2	F
I	O					O	O
II	O				O		
III	O		O				
IV	O			O			
V	O	O					
VI		O		O			
VII		O	O				
VIII		O			O		
Reverse			O		X	O	

**O - applied/operational/on**

**X - not applied/off**

Where:

- The letter "K" designates the different plates in the multi-plate clutch (from 1 to 4)
- The term B1 designates the multi-disc brakes
- The term B2 designates the multi-disc brakes
- The letter F designates the free wheel mechanism

Engine braking happens when selecting the first gear in Tiptronic mode to control specific driving conditions such as downhill driving.

The B2 disc in the multi-disc brake only closes in first gear when the Tiptronic mode is activated. This mode is also known as first manual gear.

# Running Gear

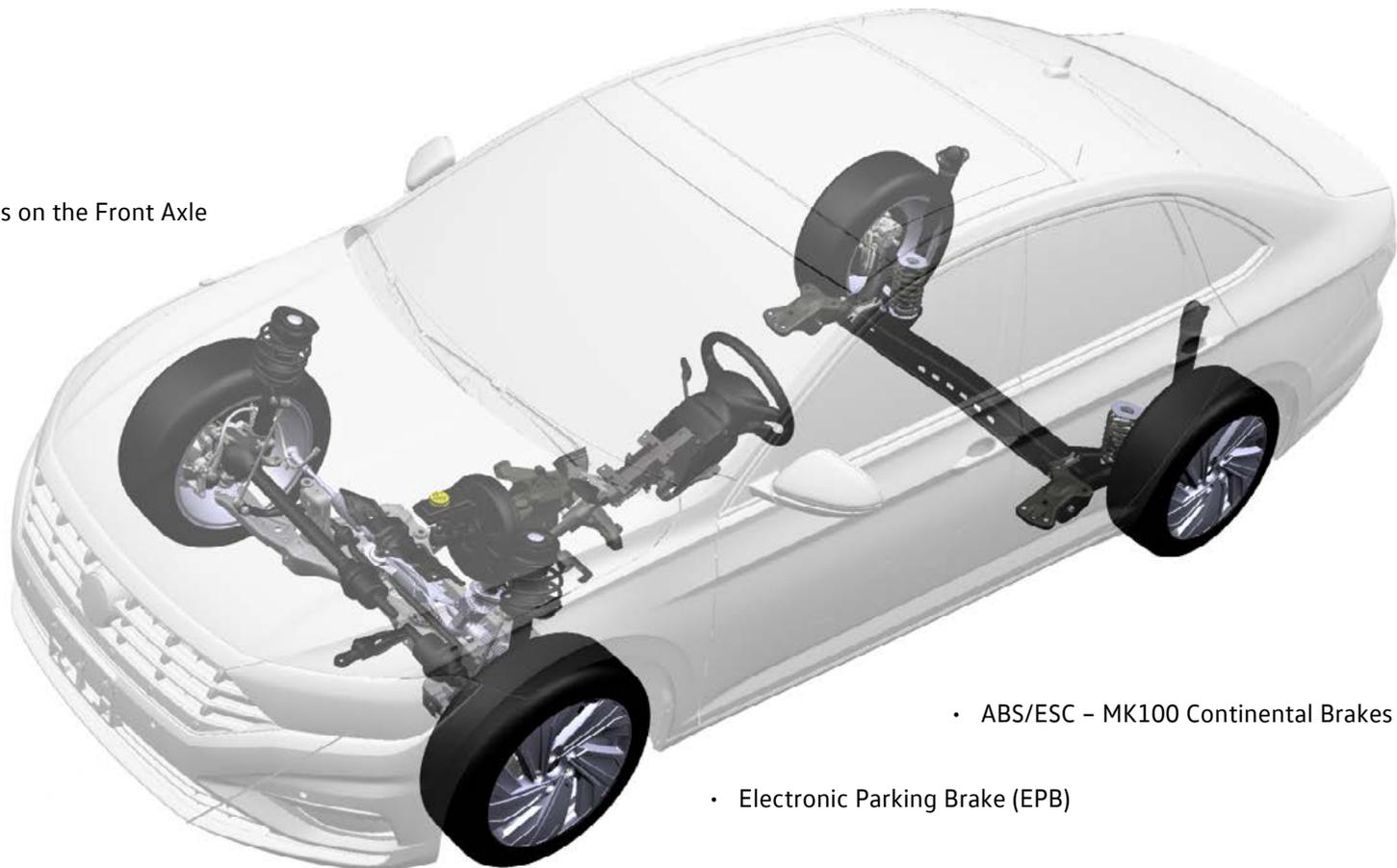
## Running Gear Overview

The Jetta chassis may be equipped with a standard chassis or sport chassis.

### Running Gear:

- Electro-mechanical power steering with Axially Parallel Actuation (APA)
- Semi-rigid Rear Axle with Swing Arms

- MacPherson Struts on the Front Axle



- ABS/ESC – MK100 Continental Brakes

- Electronic Parking Brake (EPB)

S588\_029

# Running Gear

## Driver Assistance Systems Overview



Light Assist



Adaptive Cruise Control



Front Assist



Lane Assist



Blind Spot Monitor



Rear Traffic Alert



S588\_030

# Running Gear

---

## Driver Assistance Systems Descriptions

### Multi-Function Camera (MFC) for the following systems:

- **Light Assist (FLA)** - Recognizes oncoming traffic and vehicles that are in front of the camera. The system automatically switches between low beam and high beam at speeds above 38 mph (60 km/h).
- **Lane Assist** - Lane markers are recognized by the camera; if the car moves over to a lane without having activated the turn signal, Lane Assist can help steer you to keep you in the current lane.

### Medium Range Radar (MRR) for the following functions:

- **Forward Collision Warning (FCW)** - Developed especially for city driving, this system can help reduce or prevent a front collision when traveling at speeds of up to 18 mph (30 km/h).
- **Adaptive Cruise Control (ACC)** - ACC works like conventional cruise control but has an additional functionality based on radar: If the system recognizes vehicle movement ahead, it automatically adjusts the speed to match. When it no longer recognizes the car, it will reestablish the speed set by the driver. If necessary, the system can even bring the Jetta to a complete stop.

### Front Assist:

- **Front Assist** monitors the traffic situation in front of your car, warning you when you get too close and applies the brakes to help avoid collision. It uses radar sensors to measure the distance and relative speed of other vehicles ahead and provides you with an early warning system. If it detects a potential collision, Front Assist alerts you visually and audibly, while also preparing the brakes for emergency braking.

**Blind Spot Monitoring** - The radar sensors mounted in the rear of the vehicle can detect vehicles in the blind spot up to about 80 feet away and alert the driver with indicators on the outside mirrors. This system can assist to prevent accidents, especially when changing lanes.

**Rear Traffic Alert** - When backing out of a parking spot, the system can spot a car coming down the street and alert the driver of the risk. If the driver does not react, the vehicle will automatically apply the vehicle's brakes.

# Running Gear

## Drive Mode Selection

### Push button drive mode selection

Option to change the car's operation. With the push of a button, depending on the driver's needs:

- Sport
- Comfort
- Eco
- Custom

All modes have the option to save ambient light settings if Automatic is selected.



S588\_031

### New ECO button (in some trim levels)

By activating the ECO function, the vehicle electronically adjusts certain features like the engine rpm, torque, air conditioning, gear changing, and ambient lighting.

### Other relevant safety systems:

ABS with ESP / Traction Control / Automatic Post Collision Braking



S588\_032

# Running Gear

---

## Front Radar Sensor

In the new Jetta, the front radar sensor for the Front Assist and ACC is mounted behind the Volkswagen emblem. This emblem is specially designed so radar signals can pass directly through it.

The new Jetta has a new generation of radar sensor. The sensor's calculation capacity is much greater to provide better detection, evaluation and differentiation between objects.

### Sensor technical specifications:

- Mid-range radar sensor
- Manufacturer: Bosch
- Frequency: 77GHz
- Range: 525 ft (160 m)

**The Control Module for Adaptive Cruise Control, J428, is located behind the Volkswagen emblem**



S588\_033

# Running Gear

## Static Calibration

There is a procedure for dynamic calibration of the sensors using the scan tool. However, after some repairs, it is necessary to perform static calibration. For static calibration, the VAS 6430/10 adjustment fixture must be aligned correctly to the front of the vehicle.

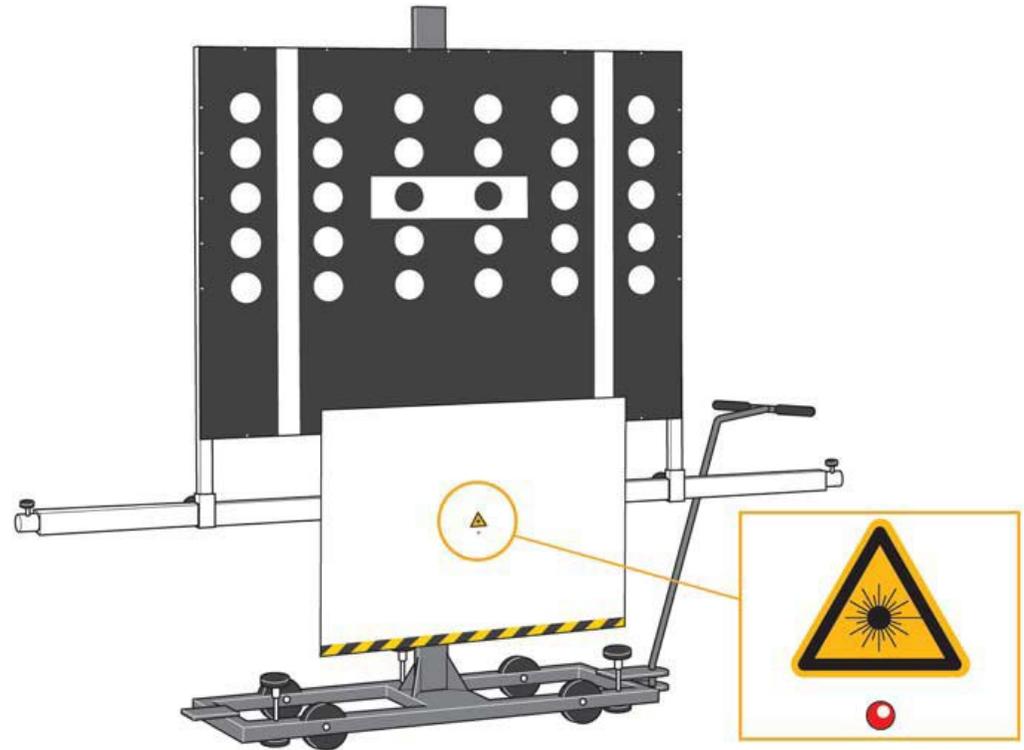
During calibration, the front radar sensor self-adapts based on the adjustment fixture's orientation to the vehicle's axle. The calibration procedure is activated in the Scan Tool test program, and is performed automatically. A mechanical adjustment with adjustment screws is no longer possible, nor necessary.

The Control Module for Adaptive Cruise Control J428 needs calibration when:

- The J428 control module has been replaced
- The locking plate has been replaced
- The rear axle toe has been adjusted
- The locking plate has been placed in the service position
- There is a customer claim
- There is a record in the event memory



Always follow the ElsaPro and ODIS Service instructions when performing vehicle procedures.



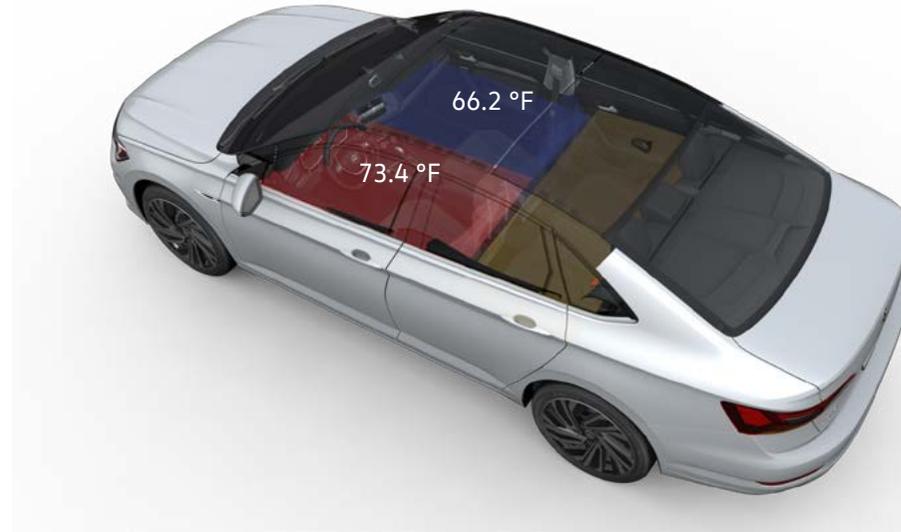
**VAS 6430/10 Adjustment Fixture**

S588\_034

# Heating and Air Conditioning

## Climate Control System

The new Jetta uses the (MQB) climate control systems. The basic system is manual climate control. A Climatronic dual-zone system is available as an option.



## Electric Manual Regulation Climate Control

This is the same as the version used in the 2017 Tiguan. To reduce impurities present in the outside air from coming into the vehicle, it uses an allergen filter.

S588\_035

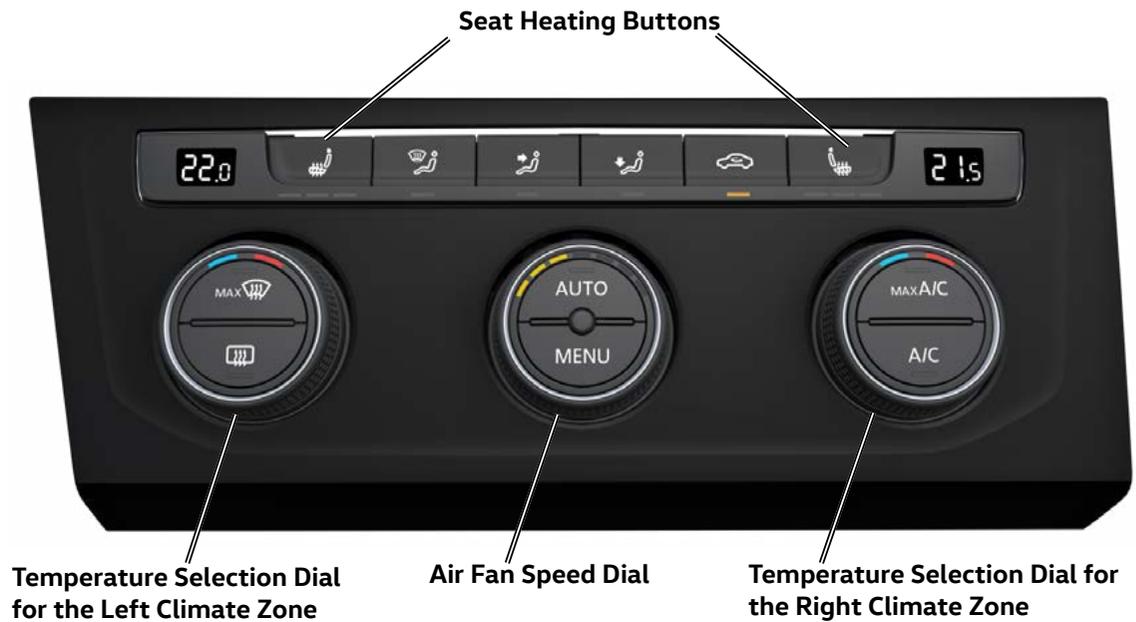


S588\_036

# Heating and Air Conditioning

## Climatronic Dual-zone Automatic Climate Control

The Climatronic dual-zone climate control allows different temperatures for the driver side and the passenger side. Temperature regulation is completely automatic.



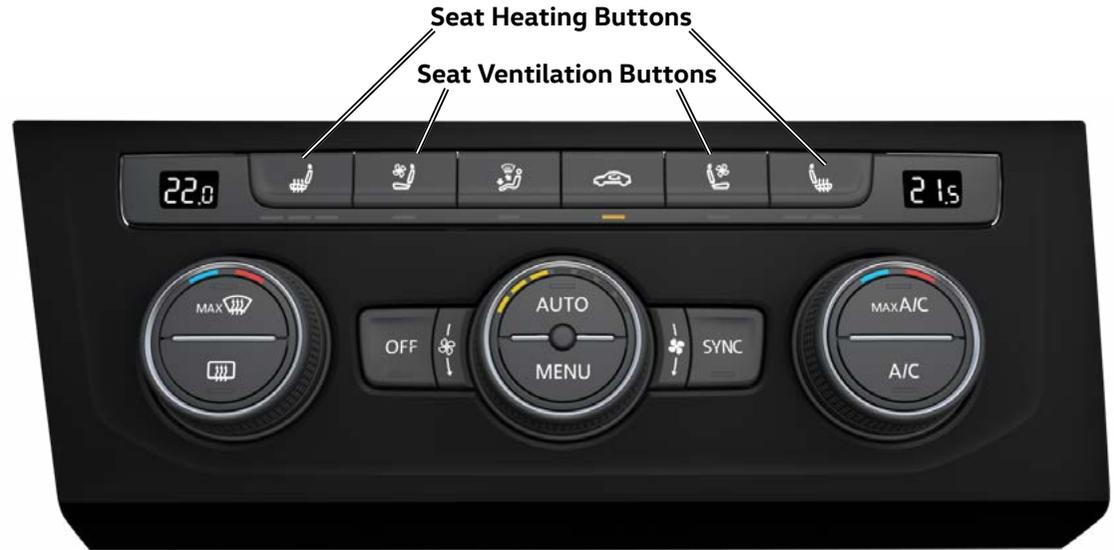
Just as in the 2017 Tiguan, Climatronic has the MENU function which can be used to control climate settings and activate functions.

S588\_038

# Heating and Air Conditioning

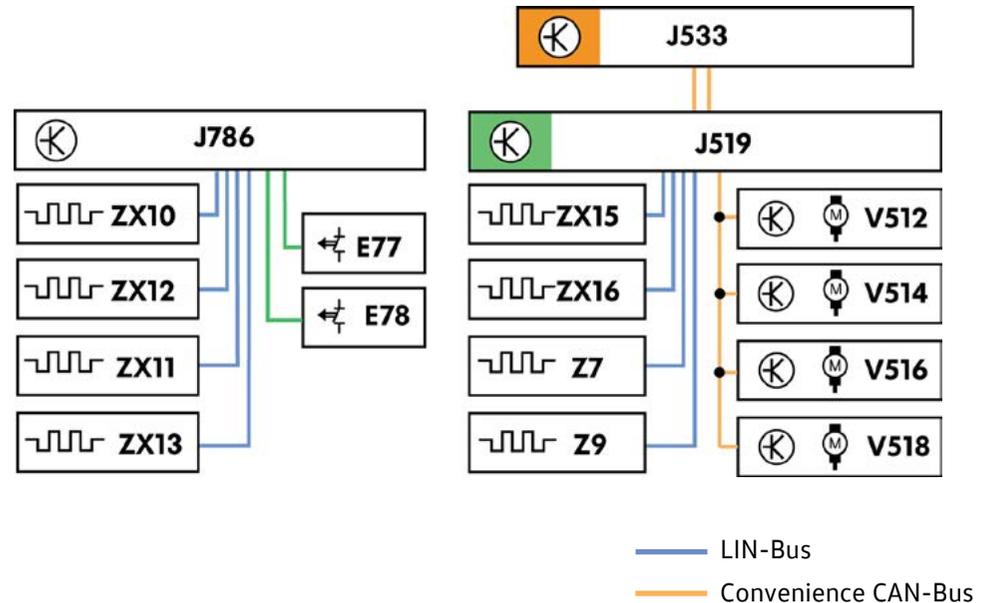
## Seat Heating and Ventilation

Seat heating and ventilation is operated with buttons located on the Climatronic control module. Both heating and ventilation have three intensity levels and may also be operated from the temperature control command or the Infotainment screen.



### Legend

- E77 Left Rear Heated Seat Switch
- E78 Right Rear Heated Seat Switch
- J519 Vehicle Electrical System Control Module
- J533 Data-Bus Onboard Diagnostic Interface
- J786 Rear Seat Heating Control Module
- V512 Left Front Seat Backrest Fan 1
- V514 Left Front Seat Cushion Fan 1
- V516 Right Front Seat Backrest Fan 1
- V518 Right Front Seat Cushion Fan 1
- Z7 Driver Backrest Heating Element
- Z9 Front Passenger Backrest Heating Element
- ZX10 Left Rear Seat Heater
- ZX11 Left Front Seat Heater
- ZX12 Right Rear Seat Heater
- ZX13 Right Front Seat Heater
- ZX15 Driver Side Heated Seat
- ZX16 Front Passenger Side Heated Seat



If equipped with seat heater and passenger side occupant detection sensor, Z16 is replaced by the Z14 heating elements with occupant detection sensors. See the Wiring Diagram for more information.

# Electrical System

## Electric System and Infotainment System Overview

There may be differences depending on trim levels.



S588\_042

# Electrical System

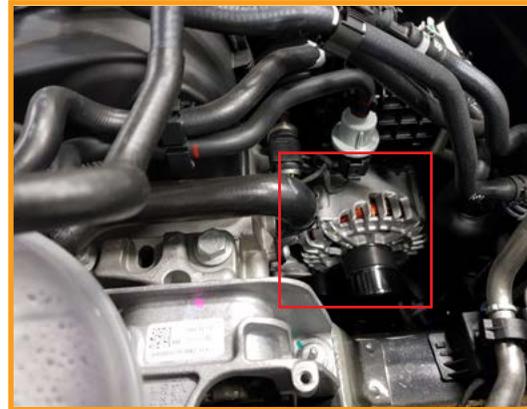
## Onboard Network Locations

Depending on vehicle features included, various alternators and batteries may be used. All Jetta models will have an Enhanced Flooded Battery (EFB+). This battery requires either the VAS 6161 or the GRX 3000 for testing and/or charging, with the EFB battery type selected.

## Power Supply

- 12V Battery in the engine compartment
- Three fuse panels distribute the electricity to the vehicle:
  - A SA multifuse fuse panel in the engine compartment fuse box
  - An SB relay panel and fuse panel in the fuse box
  - An SC relay panel and fuse panel under the left side of the instrument cluster behind the storage compartment

Alternator

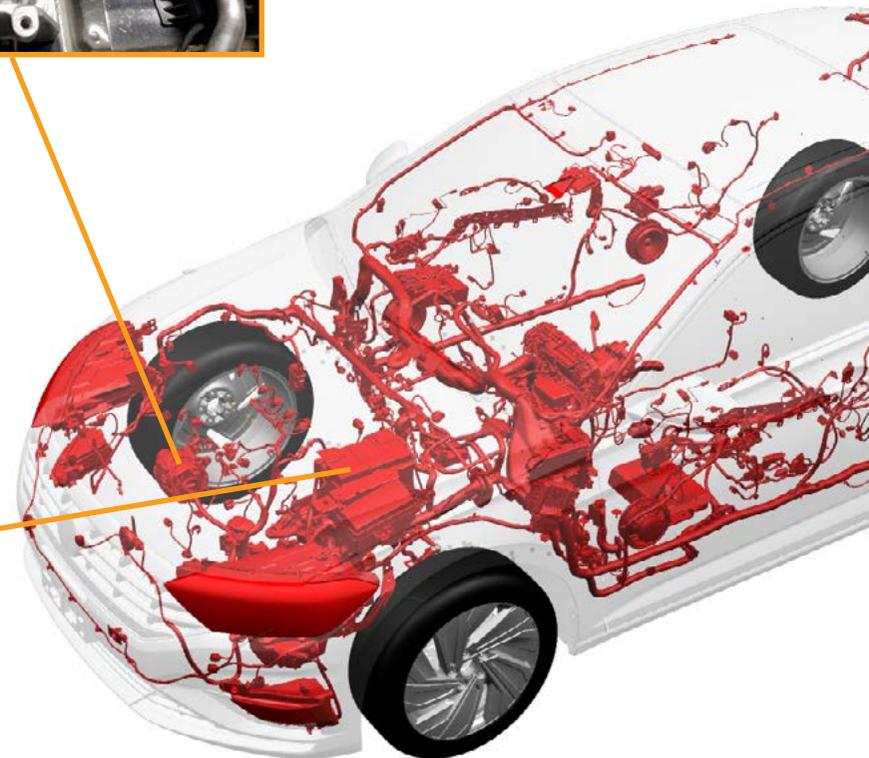


S588\_043

12V Battery in the Engine Compartment

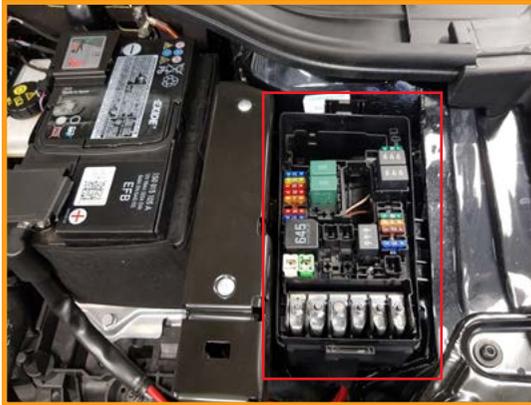


S588\_044

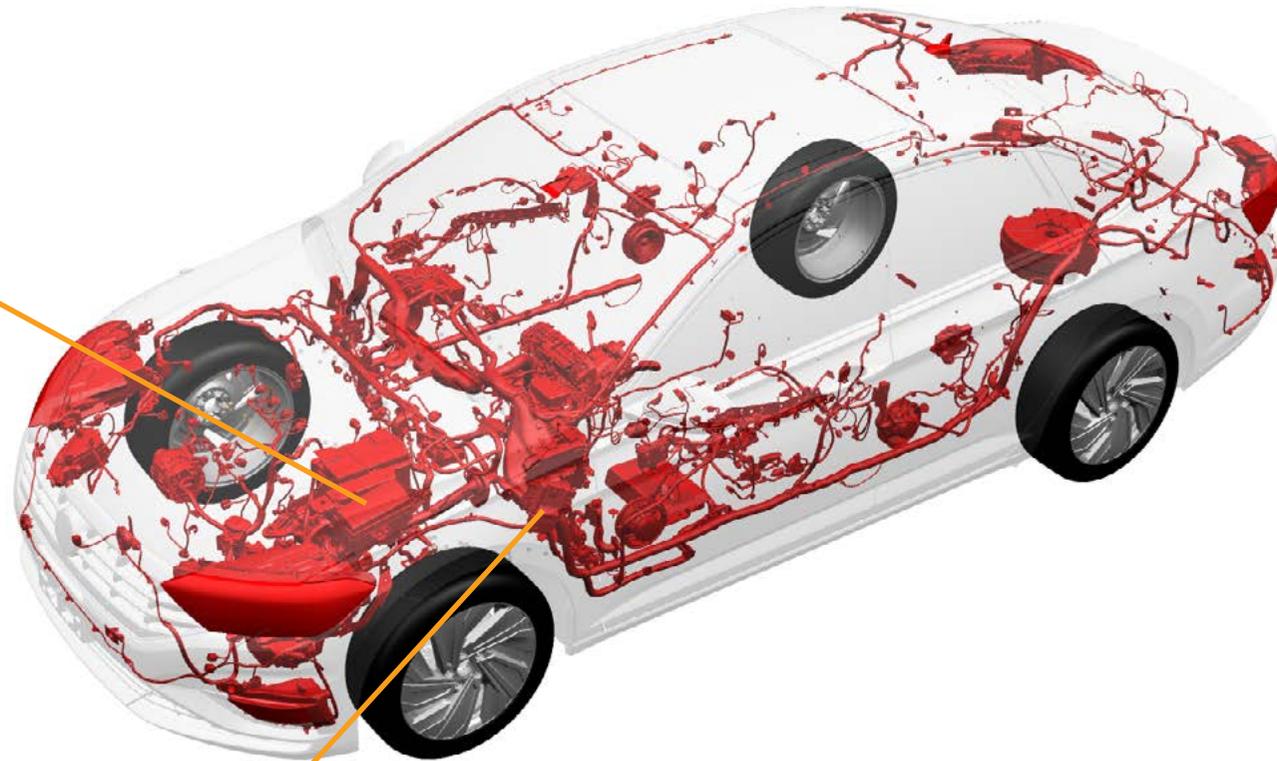


# Electrical System

SA/SB Fuse Box



S588\_045



SC Relay Panel and Fuse Panel



S588\_046

# Electrical System

## Ambient Lighting with Dynamic Light Change

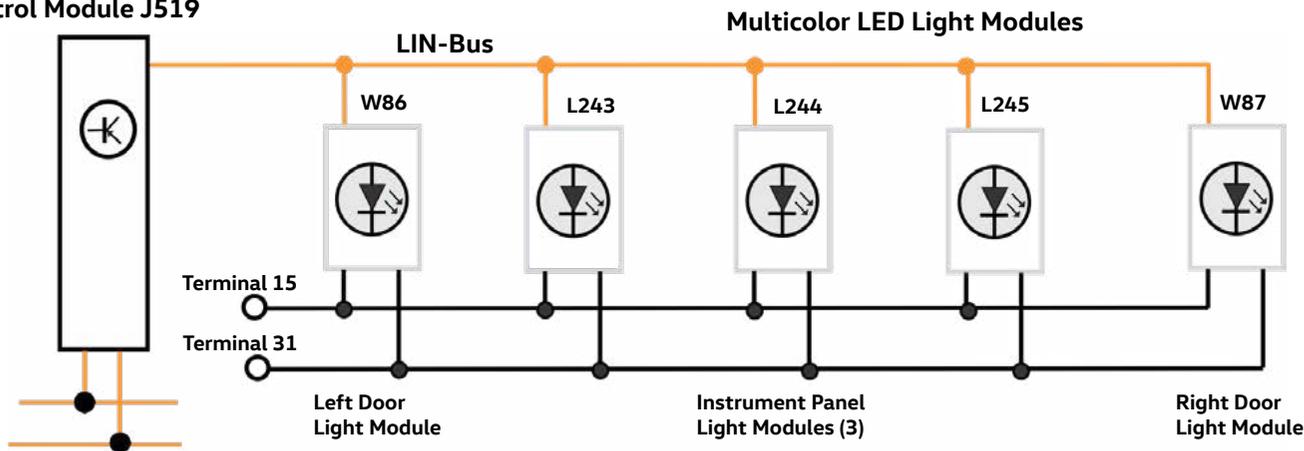
A warm atmosphere is created when the car turns on, creating a sensory experience, depending on the driving profile selected. The driving profile button, together with the ambient lighting change, instantaneously lets you feel the Volkswagen experience of "Fun2Drive" in Sports mode, "Innovative Comfort" in Comfort Mode, or "Environmentally Friendly" in Eco Mode.



S588\_047

### Ambient Lighting Electric Diagram

#### Vehicle Electrical System Control Module J519



Modes of operation: "Sport" (Bright Red), "Comfort" (Candle light), "Eco" (Bright blue) and Individual.

Up to 10 different colors can be selected in the Individual mode, including Red, White, Amber, Blue, Orange, Green, Yellow and Pink. This is adjusted on the Infotainment screen.

The colors also change instantaneously in combination with the drive mode selector button, depending on settings.

# Electrical System

## Headlights

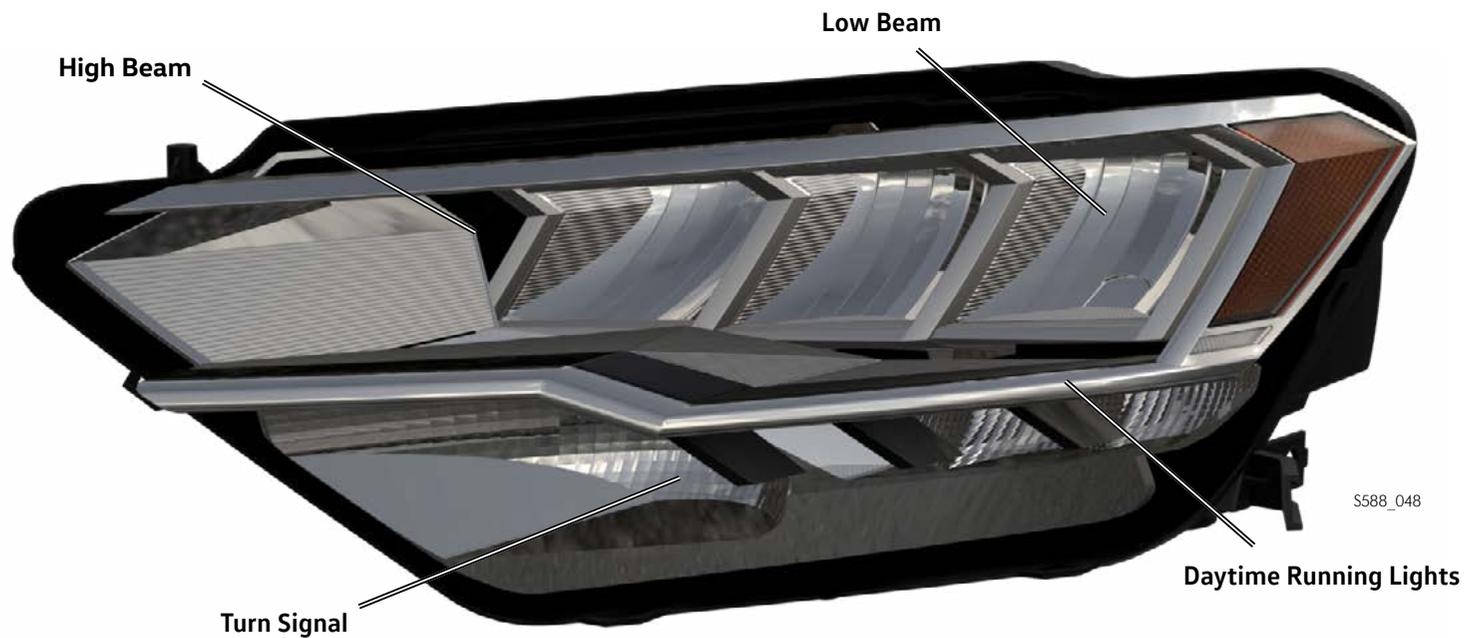
Two types of headlights are available for the new Jetta:

- LED Eco headlights
- LED High headlights with optional Light Assist.

### LED Eco Headlights

Eco LED headlights have the following functions: low beam, high beam, position lamp, turn signal and daytime running light. With the exception of the turn signal, all the light functions use LED technology.

The daytime running lights are LED modules that operate at 10% brightness.



# Electrical System

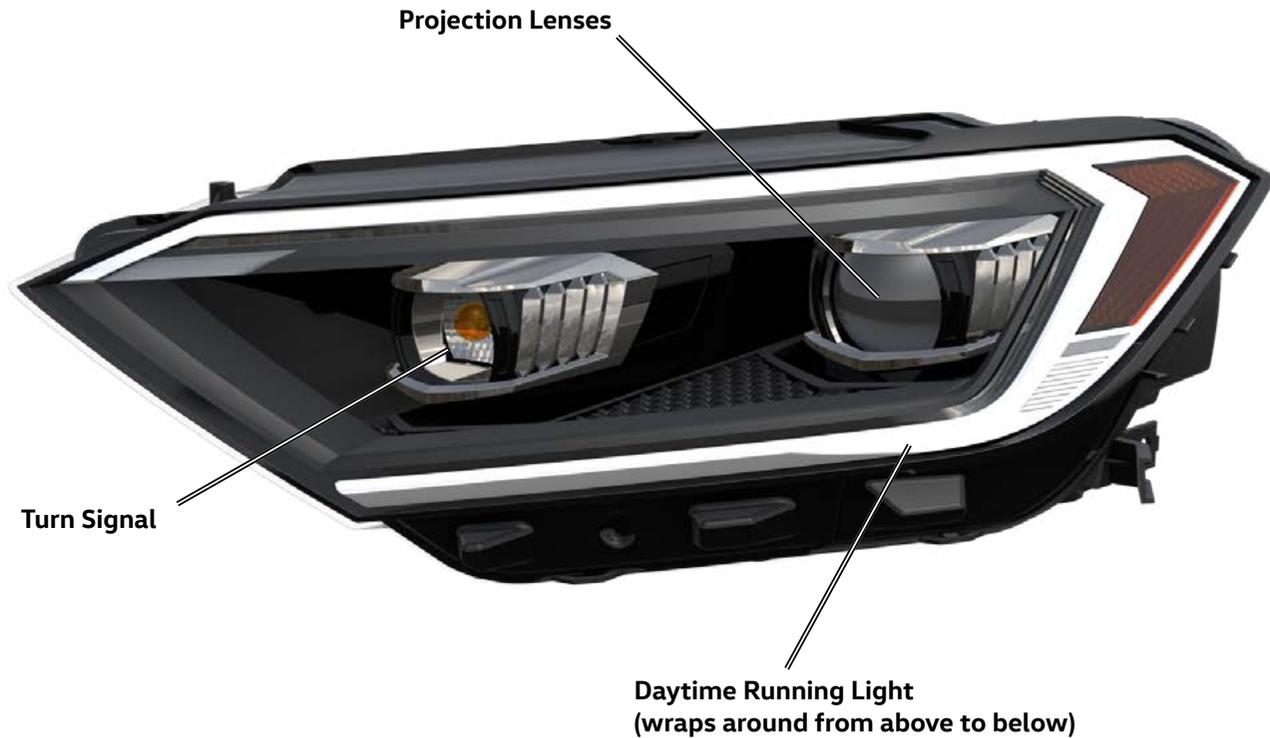
---

## High LED Headlight

The High LED headlight is another headlight available in the new Jetta.

The High LED headlight has the following functions: low beam and high beam generated from the same light module using a projection lens, turn signal with incandescent bulb and LED daytime running light.

The daytime running lights are LED modules that operate at 10% brightness.

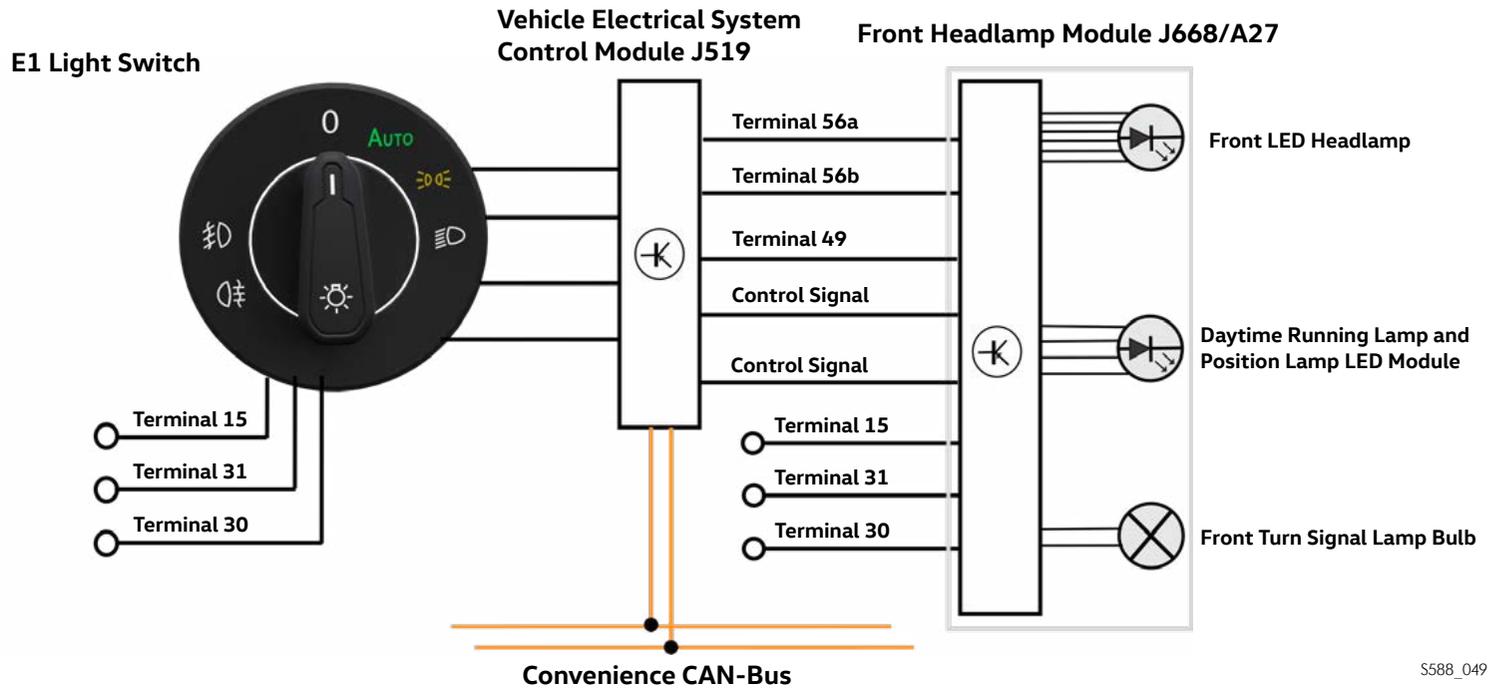


S588\_050

# Electrical System

## Electric Connections

The Front Headlamp Module J668 is responsible for the headlight control and is connected to the Convenience CAN-Bus. This allows quick data exchange with Convenience CAN-Bus control modules.



S588\_049

# Electrical System

## Taillights

The taillights in the new Jetta are equipped exclusively with LED technology.



S588\_052



S588\_053

# Electrical System

## Light Functions

Taillight



S588\_054

Taillight with Brake Light



S588\_055

Taillight with Reverse Light

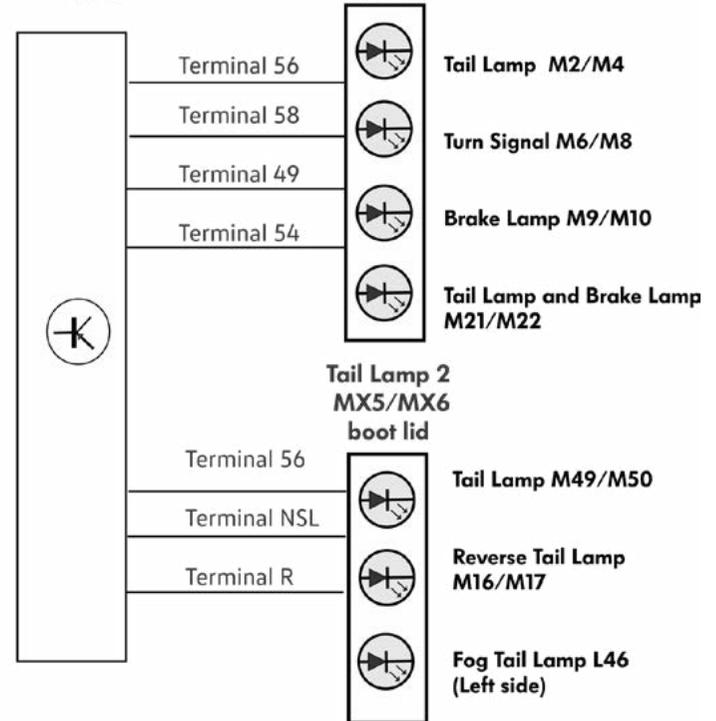


S588\_057

## Electrical Diagram

Vehicle Electrical System  
Control Module  
J519

Tail Lamp 1  
MX3/MX4  
Lateral



S588\_058

# Electrical System

## Instrument Cluster



S588\_059

- Center screen, color with 240x320 pixel resolution.
- Transitions between images with animations
- Multi-function indicator with the following information:
  - Time, odometer, trip odometer
  - Vehicle warning light messages in symbols and text in 24 languages
  - Driving range or gear shift indicator
  - Onboard computer with efficiency indicator
  - Outside temperature, ice warning
  - Speed regulator indicator
  - Speed limit indicator
  - Speed warning
  - Date indicator
  - Service reminder display
  - Additional driver assistance systems
  - Navigation destination guidance
  - Telephone numbers list
  - Radio station list
  - Oil temperature indicator

### New Instrument Cluster Warning Lights



- Limited engine RPMs
- Limited electro-mechanical power steering functionality
- Rain and light sensor fault
- Windshield wiper damaged
- Adaptive Cruise Control (ACC) not available
- Fault or high temperature in the DSG transmission
- Auto Hold function
- Front Assist System deactivated
- Exit Assist
- Dynamic Light Assist
- Low consumption ECO driving

# Electrical System

## Digital Cockpit



S588\_061

In the Digital Cockpit the analog gauges are presented virtually. The following warning lights, relevant to driver safety, are still set indicators and are available separately on the screen:

- Turn signal
- Warning light for exhaust gas issues
- Anti-lock braking system warning light
- Central warning light (depending on the message displayed)
- Electro-mechanical power steering warning light
- Brake system warning light
- Electronic parking brake warning light
- Airbag warning light

A custom driver profile can show additional information about the driving, navigation and assistance functions in the center zone in the speedometer and RPM gauge.

### Functions and Features

- 10.25" screen with 133 dpi resolution
- Has all the basic functions
- Engine temperature and fuel level indicators
- Several display options are available
- Automatically switch between displays depending on the active function
- Graphic display in 2D and 3D
- Navigation and media indication display

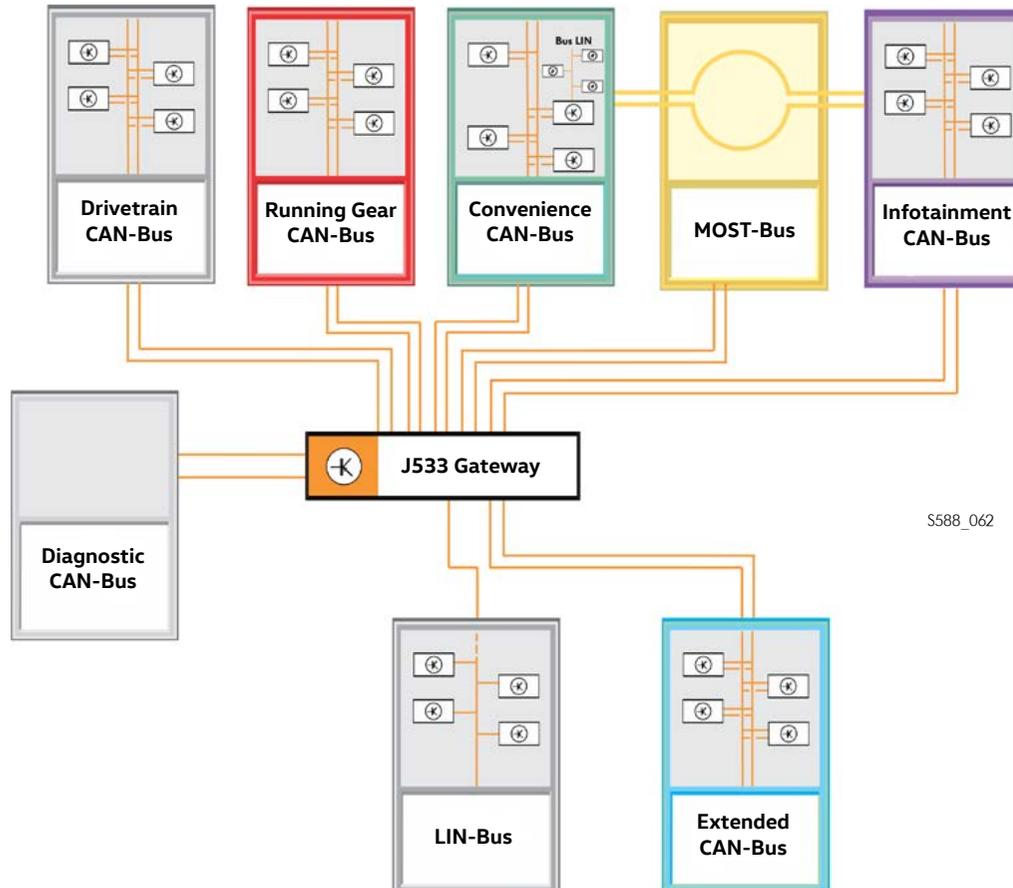
# Electrical System

## Networking System

### Chart of the Data-Bus Systems Used

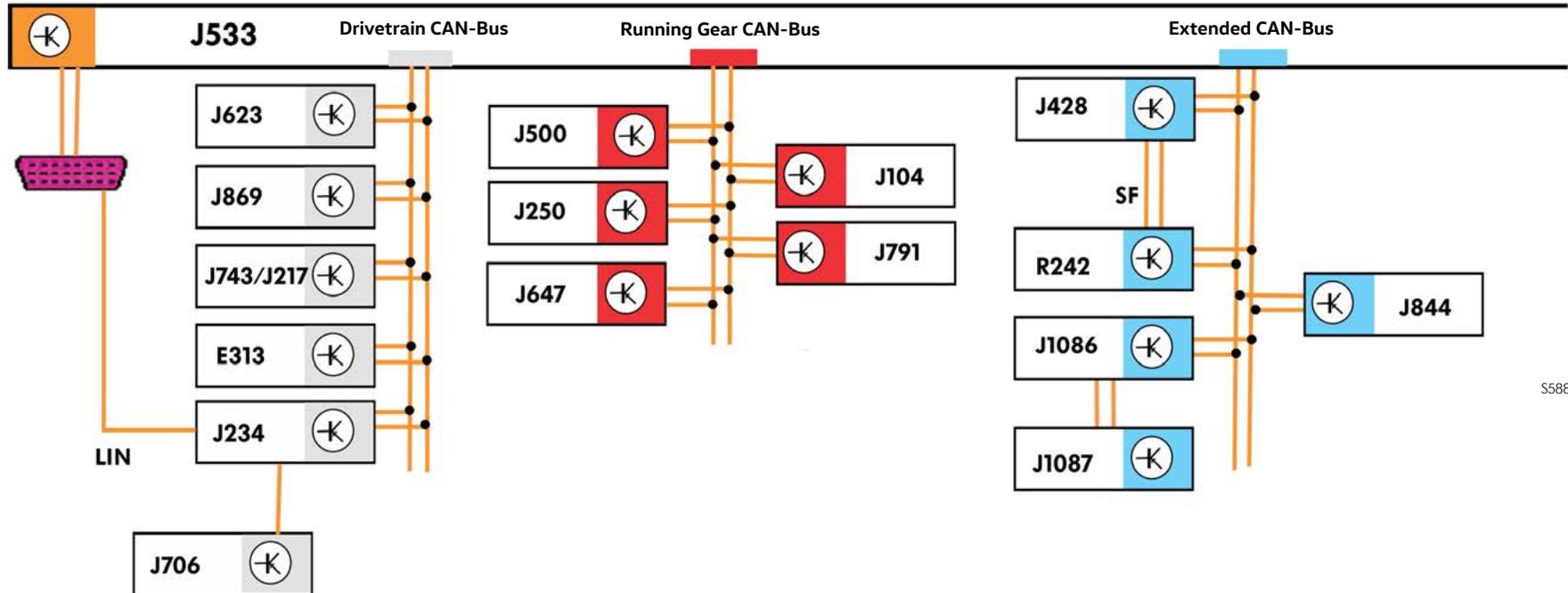
All of the Jetta's CAN-Bus systems have a transmission speed of 500 kBit/s. The LIN-Busses transmit at a speed of 19.2 kBit/s, while the MOST150 Data-Bus with fiber optic technology transmit at a rate of 150 MBit/s.

The Data-Bus Onboard Diagnostic Interface J533 controls some LIN-Busses and acts as a Gateway between the CAN-Bus systems. Other LIN-Busses are connected to different control modules.



# Electrical System

## Networking System

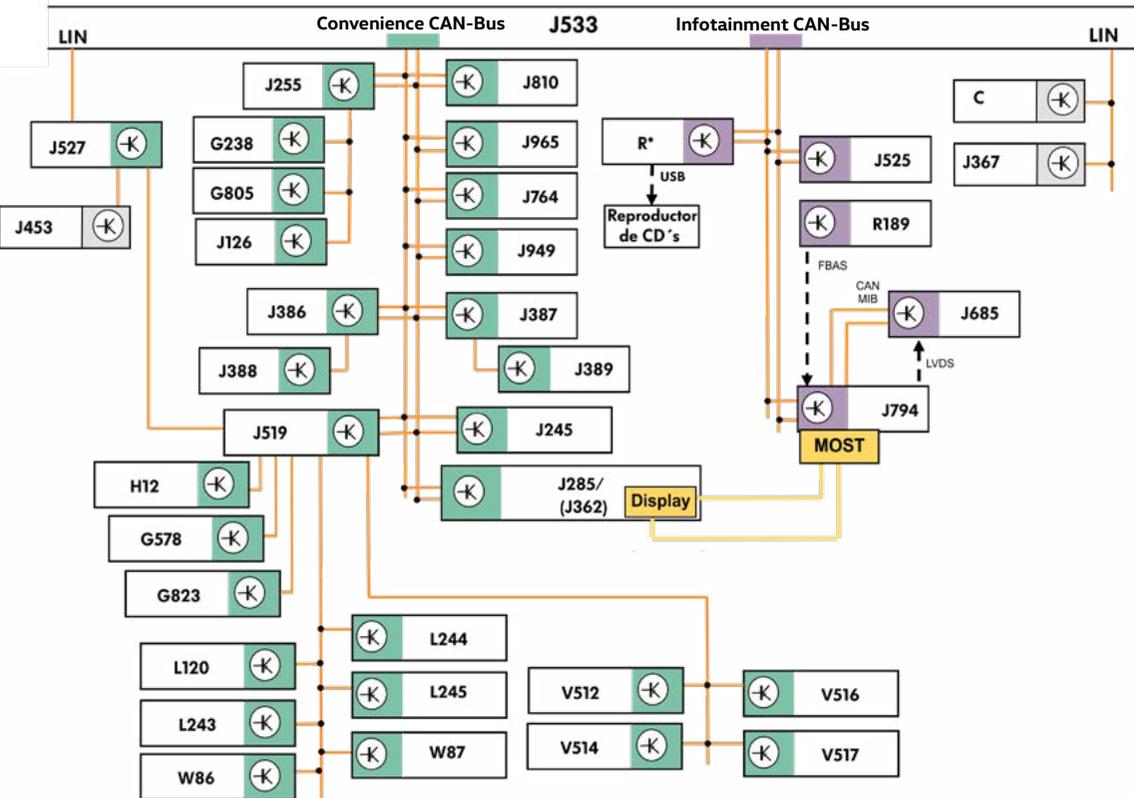


S588\_063

### Legend

- E313 Selector Lever
- J104 ABS Control Module
- J217 Transmission Control Module
- J234 Airbag Control Module
- J250 Electronic Damping Control Module
- J428 Distance Regulation Control Module
- J500 Power Steering Control Module
- J533 Data-Bus On-Board Diagnostic Interface
- J844 Automatic High Beam Assist Control Module
- R242 Driver Assistance Systems Front Camera

# Electrical System



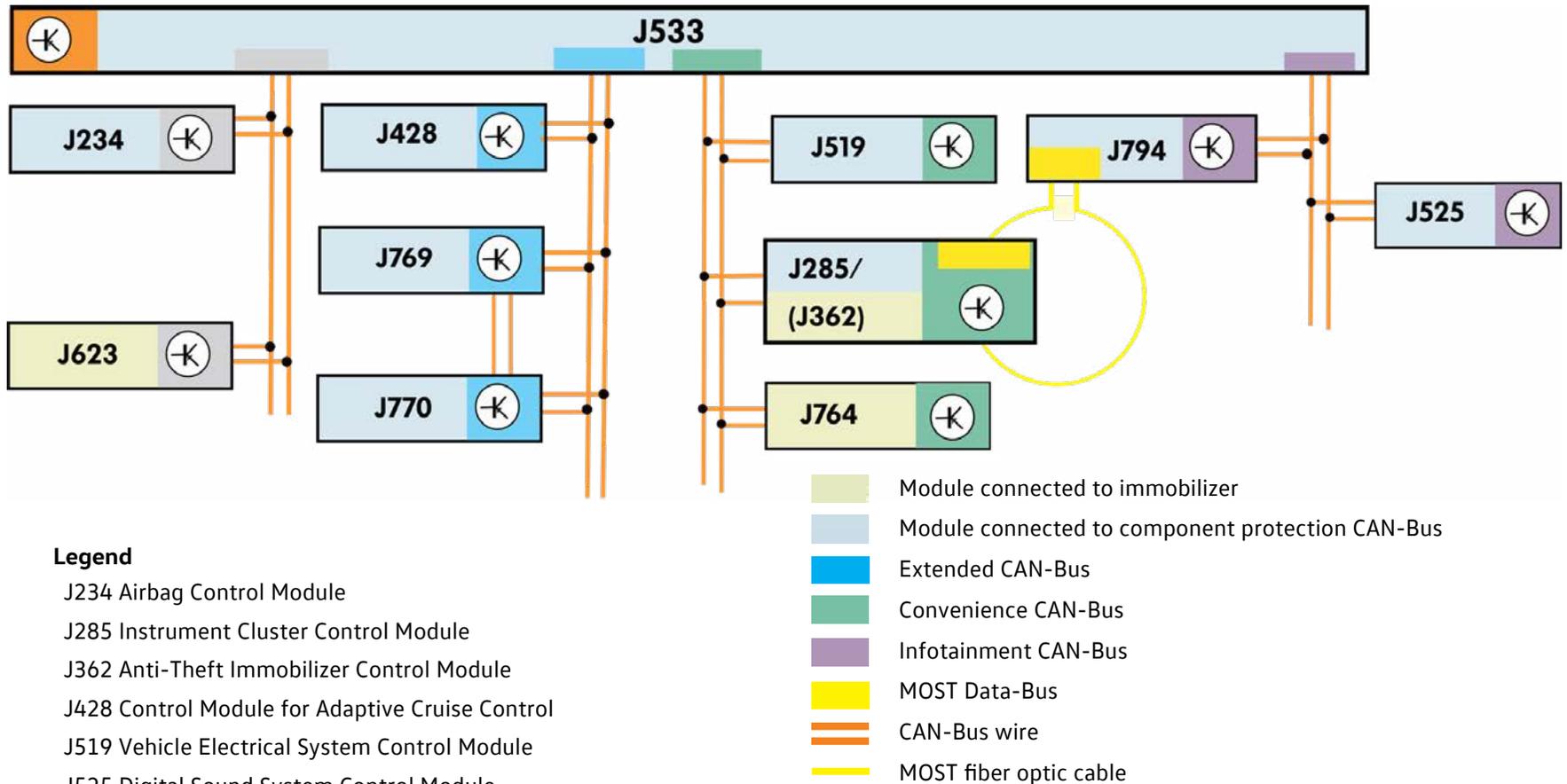
- J387 Front Passenger Door Control Module
- J388 Left Rear Door Control Module
- J389 Right Rear Door Control Module
- J400 Wiper Motor Control Module
- J453 Multi-function Steering Wheel Control Module
- J519 Vehicle Electrical System Control Module
- J525 Digital Sound System Control Module (MIB)
- J527 Steering Column Electronics Control Module
- J533 Data-bus Onboard Diagnostic Interface
- J685 Front Information Display Control Head
- J764 Electronic Steering Column Lock Control Module
- J794 Information Electronics Control Module 1
- J810 Driver Seat Adjustment Control Module
- J949 Control Module for Emergency Call Module and Communication Unit
- J965 Access/Start System Interface
- L120 Storage Compartment Illumination Bulb
- L243 Instrument Panel Contour Illumination Lamp 1
- L244 Instrument Panel Contour Illumination Lamp 2
- L245 Instrument Panel Contour Illumination Lamp 3
- R\* Radio when there is no J794 or J685 installed
- R189 Rearview Camera
- W86 Driver door ambient light
- W87 Passenger door ambient light
- LVDS Low Voltage Differential Signaling
- MIB Infotainment modular system CAN-Bus
- FBAS Color image tracking and synchronization signal
- USB Universal Serial Bus

## Legend

- C Alternator
- G238 Air Quality Sensor
- G355 Humidity Sensor
- G578 Anti-theft Alarm System Sensor
- G805 Refrigerant Circuit Pressure Sensor
- G823 Rain Light and Air Humidity Sensor
- H12 Alarm Horn
- J126 Fresh Air Blower Control Module
- J245 Sunroof Control Module
- J255 Climatronic Control Module
- J285 Instrument Cluster Control Module
- J362 Anti-Theft Immobilizer Control Module
- J367 Battery Monitoring Control Module
- J386 Driver Door Control Module

# Electrical System

## Immobilizer and Component Protection



### Legend

- J234 Airbag Control Module
- J285 Instrument Cluster Control Module
- J362 Anti-Theft Immobilizer Control Module
- J428 Control Module for Adaptive Cruise Control
- J519 Vehicle Electrical System Control Module
- J525 Digital Sound System Control Module
- J533 Data-Bus Onboard Diagnostic Interface
- J623 Engine Control Module
- J764 Electronic Steering Column Lock Control Module
- J769 Lane Change Assistance Control Module
- J770 Lane Change Assistance Control Module 2
- J794 Information Electronics Control Module 1

If an authorized key is detected inside the vehicle, the corresponding component protection control modules are checked for component protection. If the result is positive, the vehicle will operate normally.

If the result is negative, the respective control module either partially or totally blocks its operation (i.e., the radio may be turned on but no sound comes from the speakers). At that point the scan tool should be used to go online to enable the component protection function. This online connection may be established with the FAZIT database responsible for enabling component protection and for all immobilizer component adaptations.

# Infotainment

## Modular Infotainment System (MIB)

The new Jetta has the second-generation modular infotainment system (MIB II). It can have the following radio and navigation systems: Composition Color, Composition Media, Discover Media and BeatsAudio.

### Composition Color

#### Features

- 6.5" color touchscreen with 145 pixel resolution (800x480)
- 4x20 watt output
- Bluetooth to connect mobile phones
- Phase diversity antennas
- SD card reader and AUX-IN multimedia port
- USB multimedia interface
- Compatible with MP3, WMA, AAC and FLAC audio formats
- JPEG Viewer (image viewer)
- Basic mobile phone interface with Bluetooth profiles: HFP, PBAP, A2DP, AVRCP, MAP
- App-Connect standard
- Rear view camera

#### Composition Color Front View



S588\_068



The image shows the standard model. Depending on features included, button names or functions may vary.

# Infotainment

## Composition Media

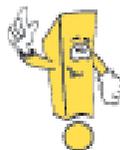
### Features

- 8" color touchscreen with 117 dpi resolution, 800x480 pixels
- CD reader
- Phase diversity antennas
- Proximity sensor
- SD card reader and AUX-IN multimedia port
- USB multimedia interface
- Speed-dependent dynamic compression (GADK)
- Compatible with MP3, WMA, AAC and FLAC audio formats
- JPEG Viewer (image viewer)
- Basic mobile phone interface with Bluetooth profiles: HFP, PBAP, A2DP, AVRCP, MAP, two mobile phones may be paired simultaneously by HFP
- App-Connect standard
- Rear view camera
- BeatsAudio

### Composition Media Front View



S588\_069



The image shows the standard model. Depending on features included, button names or functions may vary.

# Infotainment

## Discover Media

### Features

- 8" color touchscreen with 117 dpi resolution, 800x480 pixels
- CD reader
- Phase diversity antennas
- Proximity sensor
- SD card reader and AUX-IN multimedia port
- USB multimedia interface
- Speed-dependent dynamic compression (GADK)
- Compatible with MP3, WMA, AAC and FLAC audio formats
- JPEG Viewer (image viewer)
- Basic mobile phone interface with Bluetooth profiles: HFP, PBAP, A2DP, AVRCP, MAP, two mobile phones may be paired simultaneously by HFP
- App-Connect
- Rear view camera
- BeatsAudio
- Navigation

### Discover Media Front View



S588\_070



The image shows the standard model. Depending on features included, button names or functions may vary.

# Infotainment

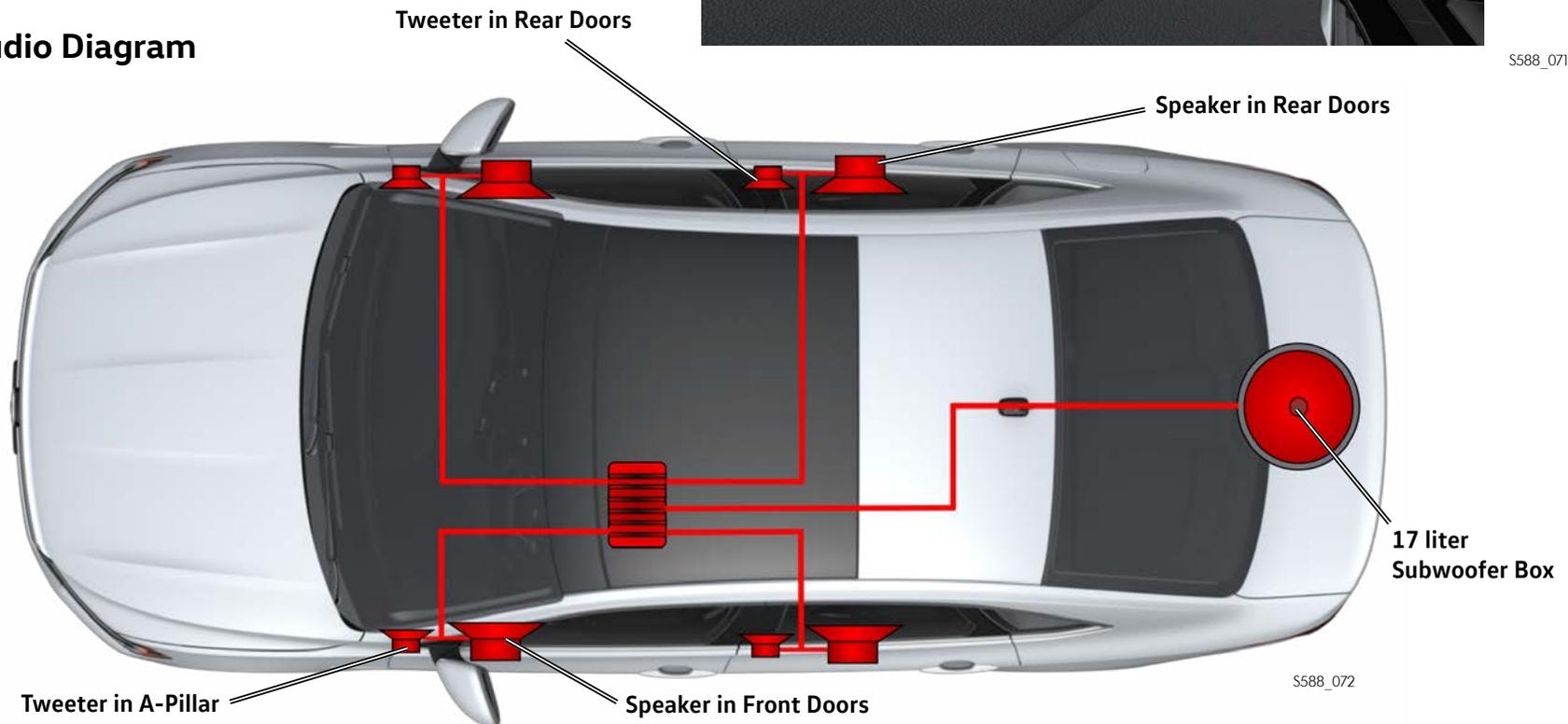
## BeatsAudio

### Features:

- 400 watt amplifier
- 8 speakers
- 1 Subwoofer
- CD reader



### BeatsAudio Diagram



S588\_071

S588\_072

# Infotainment

## Modular Infotainment System (MIB)

The new Jetta has the second-generation Modular Infotainment System (MIB). Since the release of the Composition Media model, the Information Electronics Control Module 1 J794 is mounted in the glove compartment. The following table compares the functions of the 3 radio versions available.

Function	Composition Color	Composition Media	Discover Media
	PR.Nr.: I8C	PR.Nr.: I8F	PR.Nr.: I8F+7UF
6.5" 8" 8" screen	6.5"	8"	8"
Glass touch screen	S	S	S
Radio frequencies	AM/FM	AM/FM	AM/FM
RDS	S	S	S
DAB	N/A	○	○
Radio station logos	N/A	S	S
Diversity system	S	S	S
CD reader	N/A	S	S
USB Type A port	S	S	S
SD card reader	S	S	S (double)
AUX-IN interface	N/A	N/A	N/A
Output volume adjustment	3 areas	5 areas	5 areas
Output	4x20 Watt	4x20 Watt	400 Watt
Voice command	N/A	S	S
Front speakers	S	S	S
Rear speakers	S	S	S
Compatibility with backup camera	S	S	S
Bluetooth basic interface	S	S	S
BeatsAudio Sound system	N/A	S	S
MP3, WMA	S	S	S
AAC, FLAC, OGG, WAV	S	S	S
Navigation	N/A	N/A	S
App-Connect	S	S	S

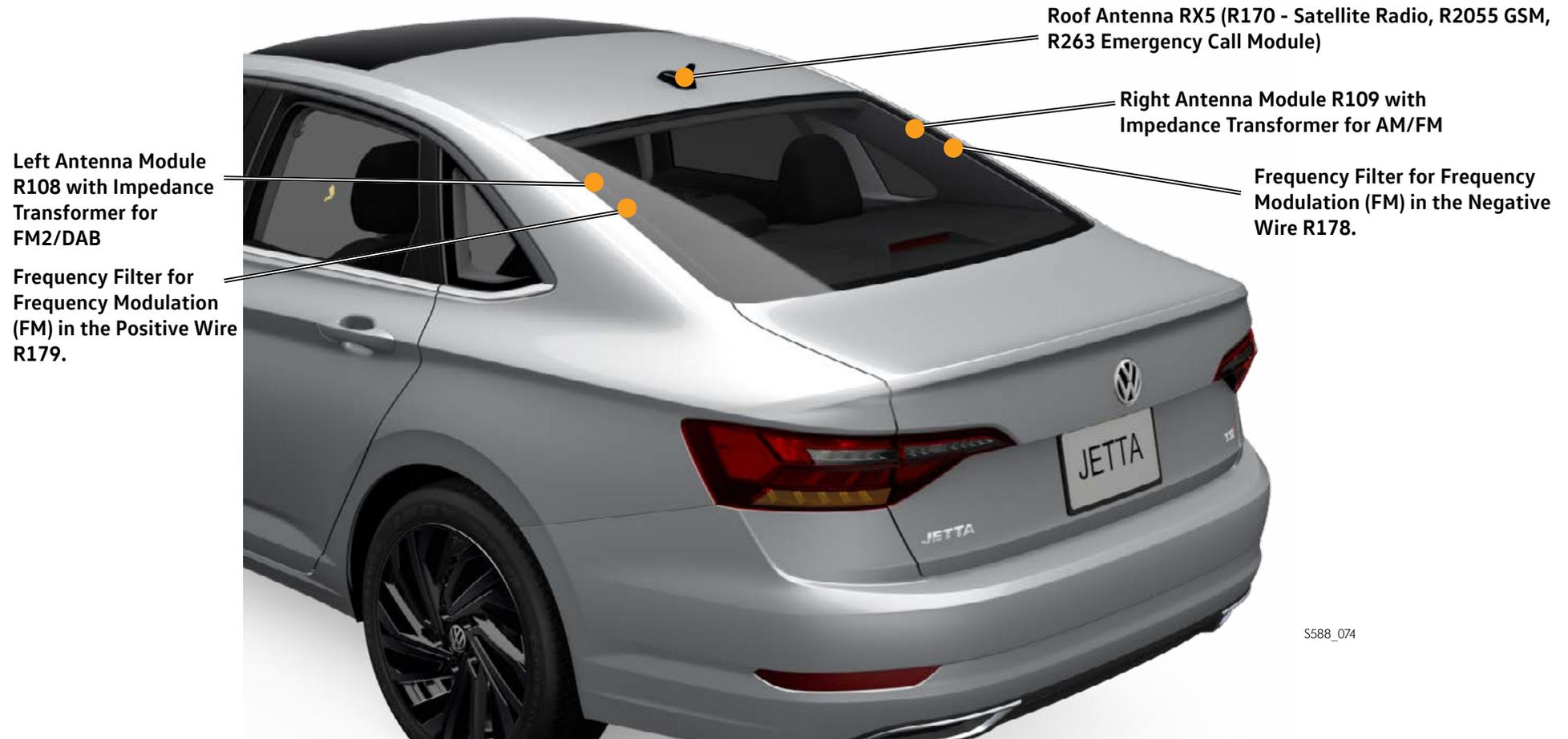
S STANDARD  
 ○ OPTIONAL  
 N/A Not Available

# Infotainment

## Antenna System

The antennas for AM, FM, and DAB radio reception are on the rear window. The GPS antenna is part of the roof antenna.

Antennas mounted on the new Jetta roof cover GSM, Satellite Radio, GPS and Emergency Call Module. The actual telephone antenna installed depends on the vehicle trim and options.



S588\_074

# Car-Net

The new Jetta has the following Car-Net services available:



Guide & Inform



App-Connect



Security & Service

## Control Module for Emergency Call Module and Communication Unit J949

The Control Module for Emergency Call Module and Communication Unit J949 is a data interface with subscriber identification. It transfers and receives data and commands for Car-Net Security & Service.

The J949 can establish an Internet connection through the mobile phone network. This allows receiving, processing and executing commands with the ignition switched on or off. Data exchange is direct and coded. There is no direct data transmission between the customer terminal, the CP (Customer portal) or smartphone (application) and vehicle. The control module is located behind the instrument cluster.



The online applications and functions depend on the country and features included. All services are not available at vehicle launch. You may consult the Car-Net functions available in your market on the following information page: [www.volkswagen-carnet.com](http://www.volkswagen-carnet.com)

# Knowledge Assessment

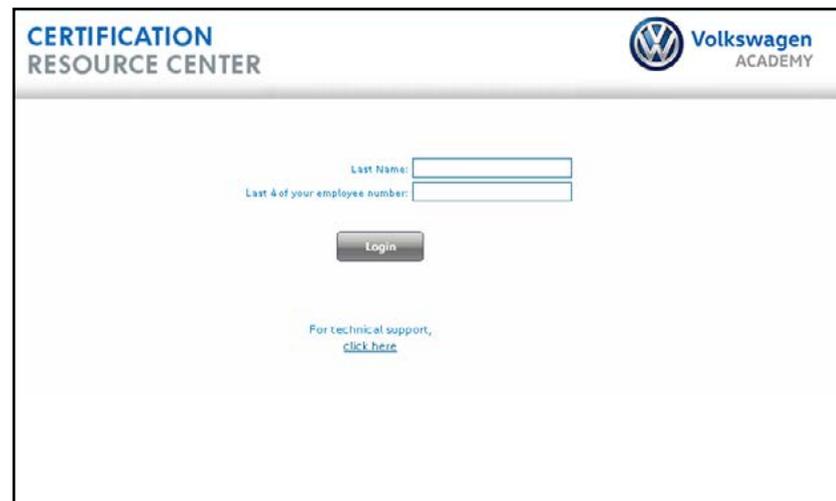
---

An on-line Knowledge Assessment (exam) is available for this Self-Study Program. The Knowledge Assessment may or may not be required for Certification.

You can find this Knowledge Assessment at: [www.vwwebservice.com](http://www.vwwebservice.com)

For Assistance, please call: **Volkswagen Academy, Certification Program Headquarters 1-877-791-4838 (8:00 a.m. to 8:00 p.m. EST)**

Or, E-mail: [concierge@volkswagenacademy.com](mailto:concierge@volkswagenacademy.com)



The screenshot shows the login interface for the Volkswagen Academy Certification Resource Center. At the top left, the text "CERTIFICATION RESOURCE CENTER" is displayed. At the top right, the Volkswagen logo is followed by "Volkswagen ACADEMY". The main content area contains two input fields: "Last Name:" and "Last 4 of your employee number:". Below these fields is a "Login" button. At the bottom, there is a link for technical support: "For technical support, [click here](#)".



Volkswagen Group of America  
2200 Ferdinand Porsche Drive  
Herndon, VA 20171  
April 2018

