

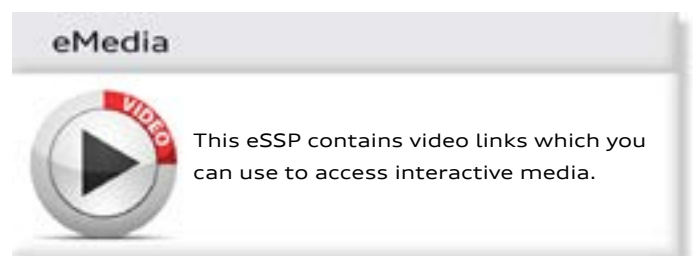


The 2016 Audi TT Roadster

Audi of America, LLC
Service Training
Created in the U.S.A.
Created 5/2015
Course Number 990253
©2015 Audi of America, LLC

All rights reserved. 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 Audi 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 Audi of America, LLC.

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



Introduction	1
Body	6
Body reinforcements	8
Convertible top.....	10
Overview	10
Components	12
Convertible top control	14
Installation locations	14
Displays and operation of convertible top	16
Convertible top opening sequence	22
Convertible top closing sequence	24
Components	28
Wind deflector	37
Emergency operation of convertible top	40
Passive safety	42
Components	42
System overview	44
Engine and power transmission	46
Chassis.....	47
Electrical system	48
Installation locations of control modules	49
Topology	50
Control modules	52
Climate control.....	54
Introduction	54
Seat systems	55
Head area heater	56
Flow-through ventilation of the cabin	57
Service	58
Inspection and maintenance	58
Self study programs	60
Knowledge assessment.....	61

This eSelf Study Program teaches a basic knowledge of the design and functions of new models, new automotive components or technologies.

It is not a Repair Manual! All values given are intended as a guideline only.

For maintenance and repair work, always refer to the current technical literature.



Note



Reference

Introduction

The third generation TT Roadster marks the continuation of a great tradition. The designers at Audi have re-interpreted the styling of this classic vehicle and complemented it with innovative new components.

Like the 2016 TT Coupe, the Roadster will feature a 2.0L TFSI engine and DSG transmission as well as quattro.

The flat and taut top of the TT Roadster provides a clear contrast with the body and is defined by the short side window design that is typical of the Roadster. The TT is equipped with an electrically operated fabric top.

The body shell of the new TT Roadster represents a new evolution of the Audi Space Frame (ASF) based on the modular transverse matrix (MQB). Compared with the Coupe, the body of the Roadster has been modified in key areas. Ultra-high strength components made from hot-stamped steel reinforce the front end and the occupant cell floor. Aluminium is used in the cell as well as in all outer skin parts and attachments in the form of three typical semi-finished products – die-cast nodal elements, extruded profiles and sheet metal.

The new TT Roadster combines the dynamic ride of a sports car with the driving experience of an open top two-seater. This was accomplished in part by struts in the underbody and body that enhance torsional rigidity and thus ride comfort.

The innovative new Audi virtual cockpit will also be standard on the TT Roadster. This new display and control concept received the Car Connectivity Award and the Interior Innovation of the Year at the 2014 Automotive Interiors Expo Awards.



Here is a quick summary of the technical highlights of 2016 TT Roadster explained in detail in this Self-Study Program.

Engine

Four cylinder engine with turbocharger:

- ▶ 2.0L TFSI 220 hp (169 kW).

Assistance systems

The following systems are optionally available:

- ▶ Audi side assist.
- ▶ Park assist system with ambient display.



Climate control

Automatic climate control air conditioning system. All control functions are integrated into the air vents. The air conditioning system has small displays which show the selected setting.

The Audi TT Roadster is optionally available with sport seats including a head space heater.

Body

Audi Space Frame (ASF) body made from aluminum and steel with high-strength and ultra-high-strength steel alloys, die-cast aluminum nodal elements and side panels.

Internal steel ribbing ensures the aluminum sills have high-strength properties. V-shaped steel struts reinforce the zones underneath the engine compartment and the luggage compartment, and connect the axle carriers.



631_043

Power transmission

Full-time quattro drive – systematically developed and refined for the TT – with electro-hydraulic multiplate clutch on the rear axle. It is possible to customize the all-wheel drive characteristics with Audi drive select.

Occupant safety systems

Rigid rollover bars protect the occupants in the event of a rollover. The front side airbags (head-thorax airbags) protect the occupants in the event of a side impact.

Displays and operation

Fully digital Audi virtual cockpit instrument cluster with dynamic animations and graphics. New MMI control panel on the center tunnel console with 2 toggle buttons. On each side of the central rotary pushbutton, there are two buttons together with a main menu button and a back button. Touch-sensitive touch pad on the top of the rotary pushbutton.

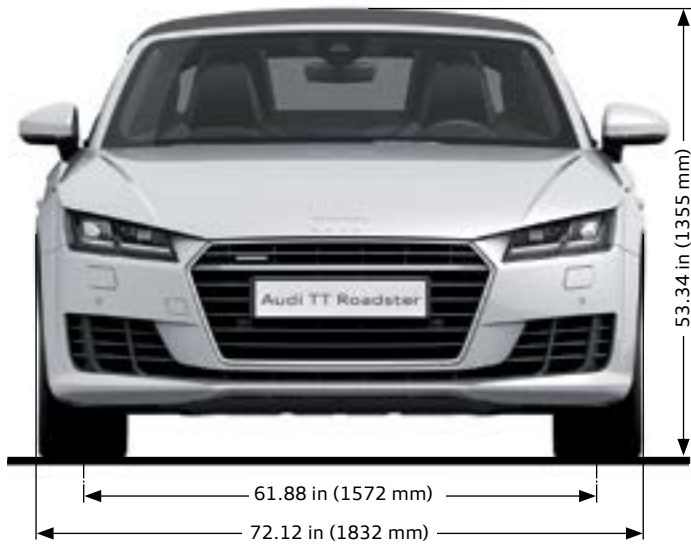
Convertible top

Electrically actuated convertible top. Graphical display of convertible top operation in Audi virtual cockpit. A power operated wind deflector improves ride comfort when driving with the top down.

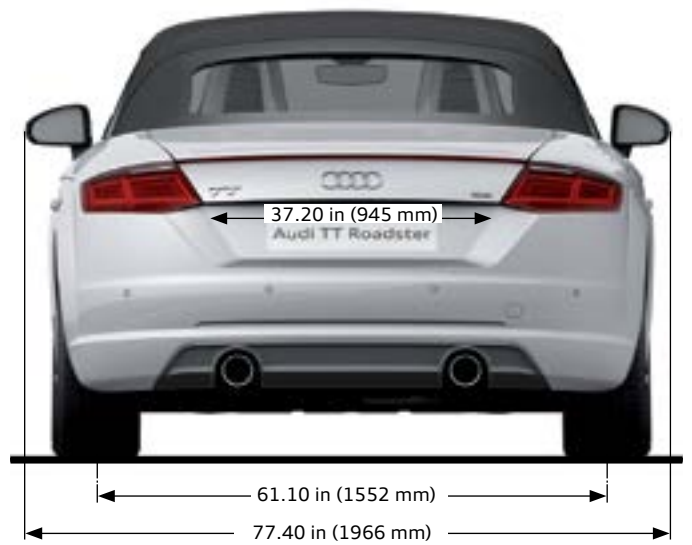
Chassis

Electro-mechanical progressive steering, where the steering ratio becomes more direct with increasing steering input.

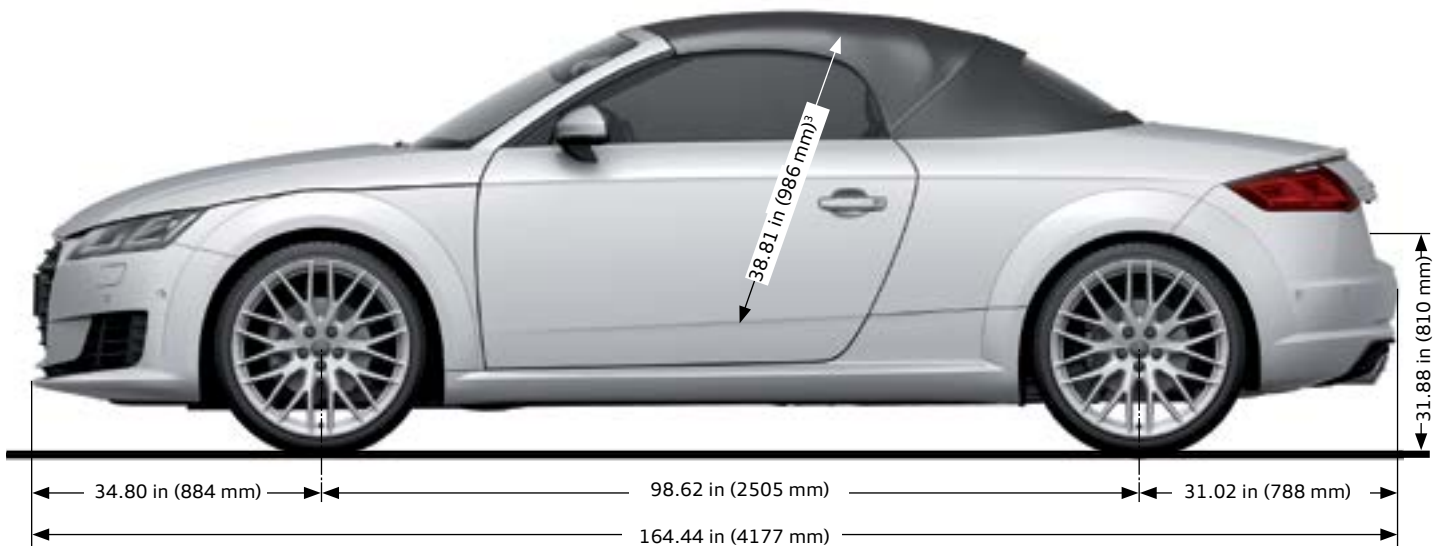
Dimensions



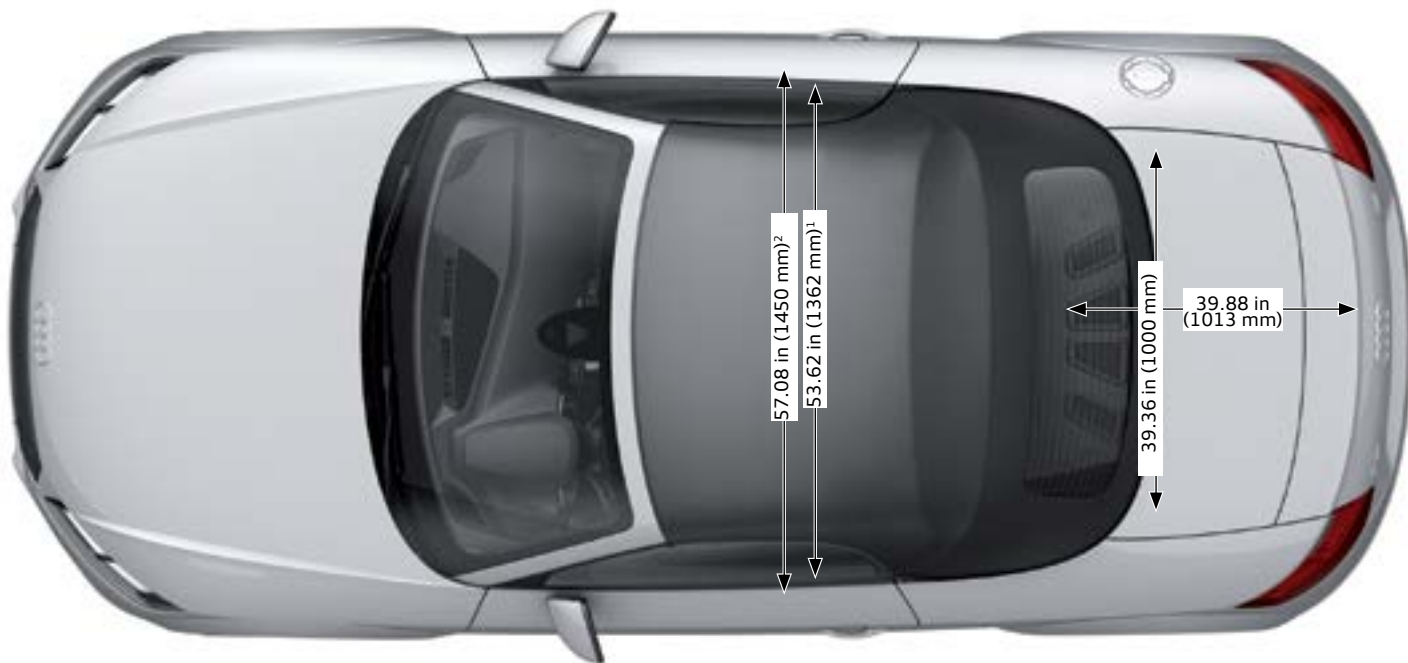
631_065



631_066



631_067



631_068

Exterior dimensions and weights

Length in (mm)	164.44 in (4177 mm)
Width in (mm)	72.12 in (1832 mm) ⁴⁾
Height in (mm)	53.34 in (1355 mm)
Front track width in (mm)	61.88 in (1572 mm)
Rear track width in (mm)	61.10 in (1552 mm)
Wheelbase in (mm)	98.62 in (2505 mm)
Curb weight lb (kg)	3384 (1535) ⁵⁾
Gross vehicle weight lb (kg)	3990 (1810) ⁵⁾

Interior dimensions and other specifications

Front cabin width in (mm)	57.08 in (1450 mm) ²⁾
Front headroom in (mm)	38.81 in (986 mm) ³⁾
Front shoulder width in (mm)	53.62 in (1362 mm) ¹⁾
Rear headroom in (mm)	33.77 in (858 mm)
Through-loading width in (mm)	39.36 in (1000 mm)
Load sill height in (mm)	31.88 in (810 mm)
Drag coefficient c_w	0.30 ⁶⁾
Capacity of fuel tank in gal (L)	14.5 gal (55 l)

¹⁾ Shoulder room width

²⁾ Elbow room width

³⁾ Maximum headroom

⁴⁾ Excluding mirror

⁵⁾ With 2.0l TFSI engine, quattro, 6-speed DSG transmission

⁶⁾ When the convertible top is closed

All dimensions are given in inches and millimeters and refer to the unladen weight of the vehicle.

Body

The bodyshell of the TT Roadster is based on the modular transverse matrix (MQB). Ultra high strength components made from hot-stamped steel reinforce the front end and the occupant cell floor. Aluminum is used in the cell as well as in all outer skin parts and attachments in the form of three typical semi-finished products - die-cast nodal elements, extruded profiles and sheet metal. In total, 50% cold formed steel and 11% hot formed steel are used in the new TT Roadster.

The 37% share of aluminum is distributed as follows:

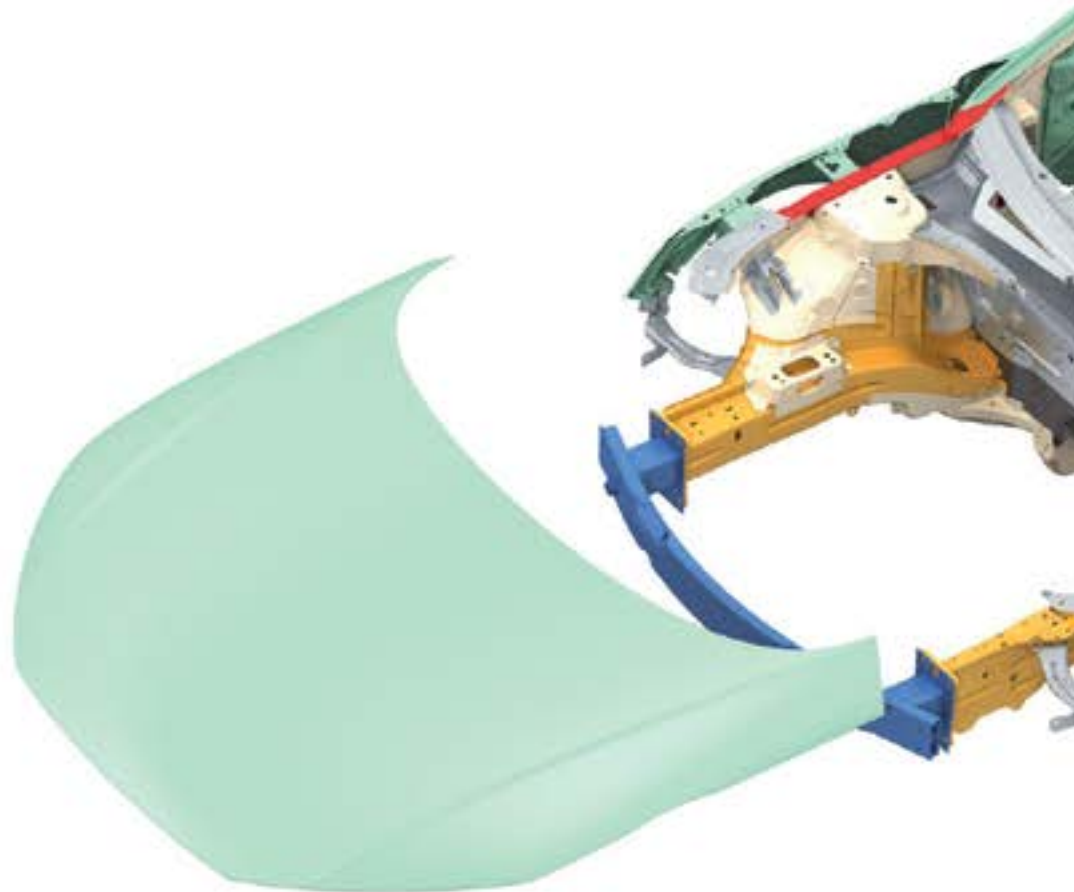
- ▶ 21% sheet aluminum.
- ▶ 8% die-cast aluminum.
- ▶ 8% aluminum profile.

Altogether, the body of the Audi TT Roadster including attachments weighs 741lbs (336kg). The crash safety performance of the TT Roadster is formidable due to the intelligent hybrid construction concept.

Outer skin

The entire outer skin of the Audi TT Roadster is made of aluminum. This includes:

- ▶ Front fenders.
- ▶ Side panels.
- ▶ Hood attachments.
- ▶ Doors.
- ▶ Trunk lid.



Key:

- Sheet aluminum
- Die-cast aluminum
- Aluminum section
- Ultra-high strength steel (hot-formed)
- Advanced high strength steel
- High strength steel
- Low strength steel

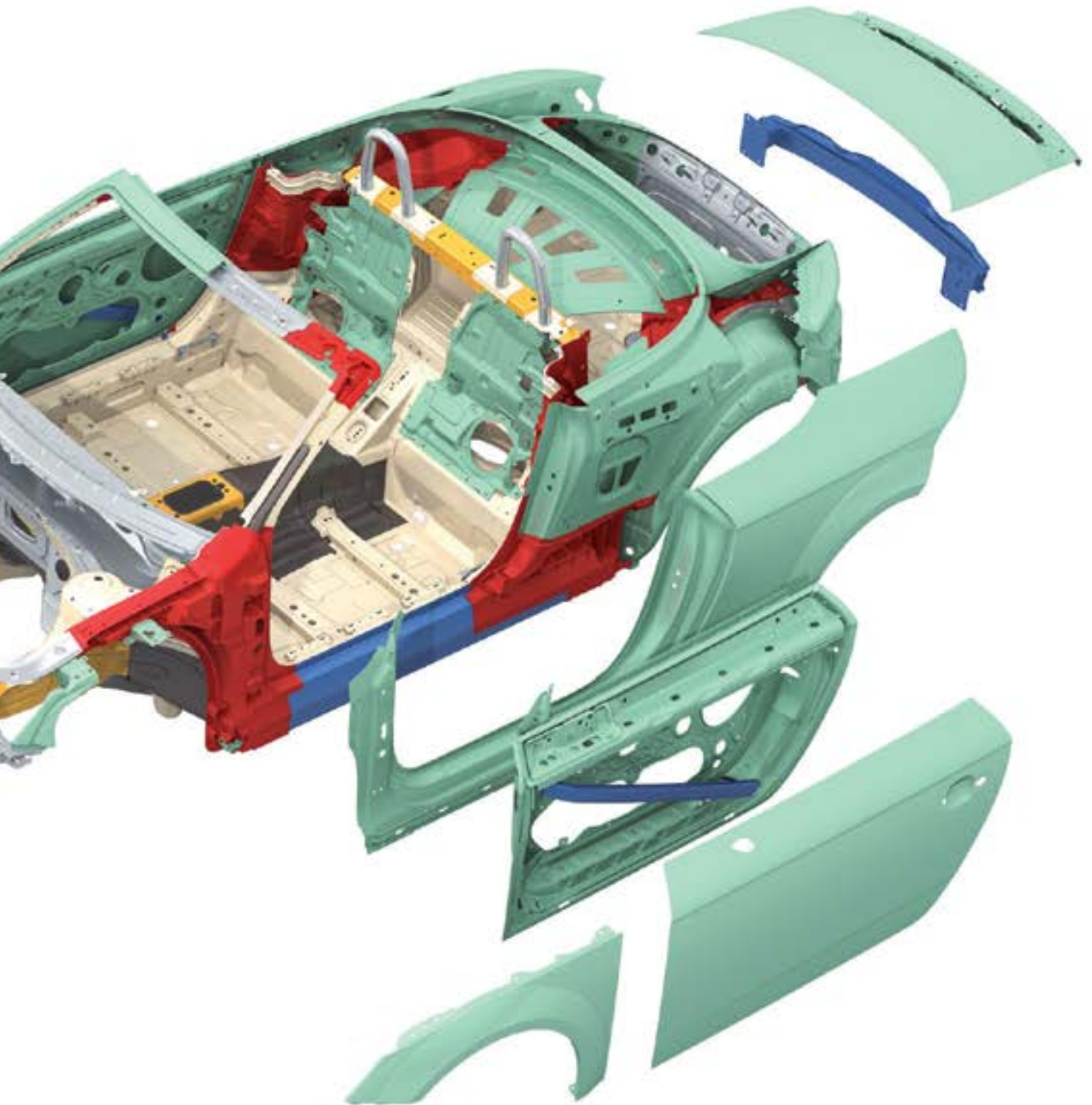
Design

The occupant cell of the Audi TT Roadster weighs 119.04 lb (54 kg). It is an aluminum lattice structure where 10 castings form the nodal points of the bodyshell.

There are large nodal elements at the A-pillars that connect the sill, window cross member and the upper longitudinal section in the front end.

The following components are made of die-cast aluminum:

- ▶ A-pillar.
- ▶ Top front roof frame nodal element.
- ▶ Inner B-pillar.
- ▶ Inner B-pillar connecting part.
- ▶ Rear roof frame nodal element.

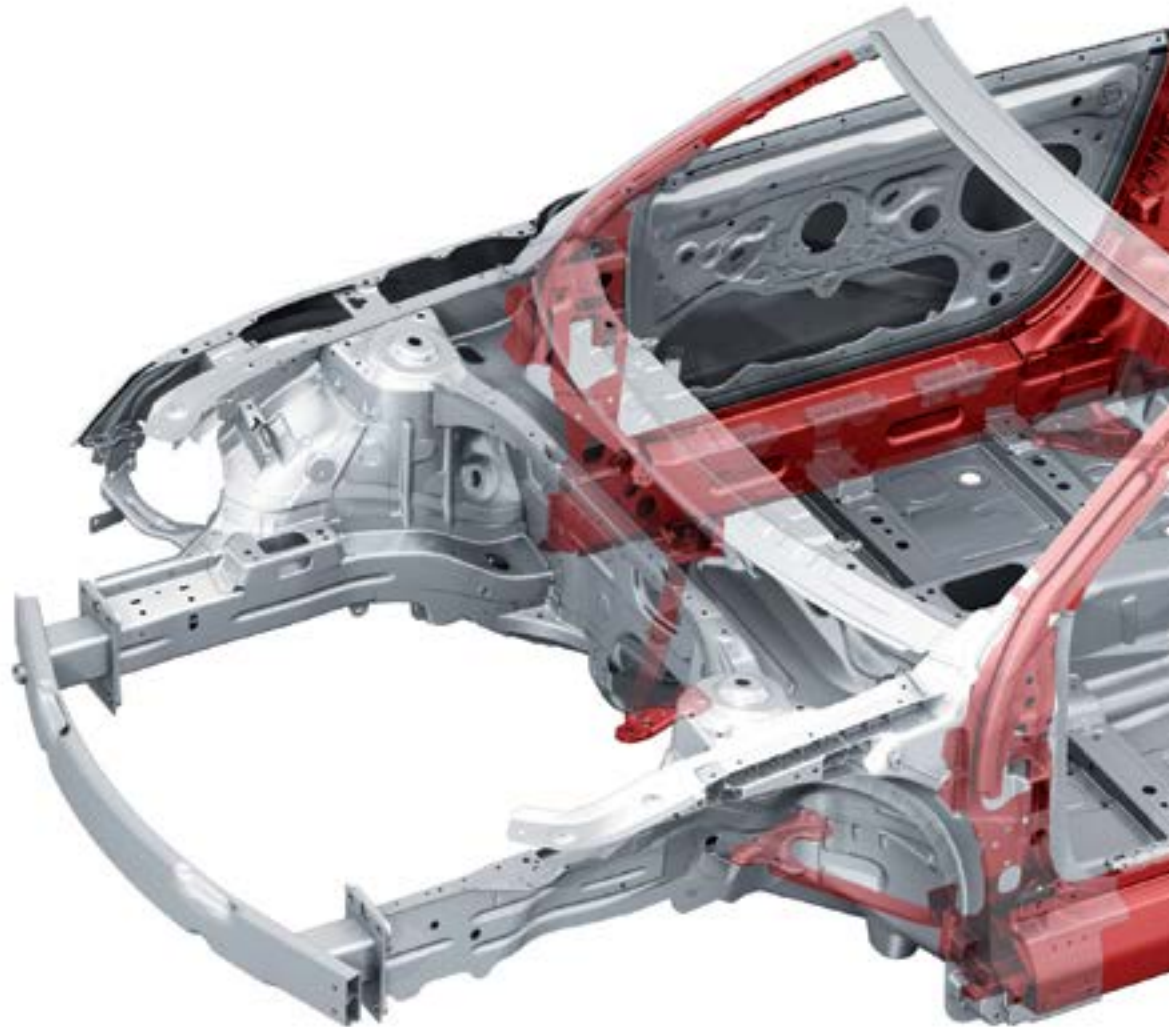


Body reinforcements

A-pillar

Compared with the Coupe, the body of the TT Roadster has been modified in key areas. To provide additional stiffening, an inner panel made of high strength steel and a reinforcing tube are concealed behind the die-cast aluminum A-pillars.

The reinforcing tube is made from ultra high strength hot stamped steel. These components offer the occupants a high level of safety in the event of a rollover.

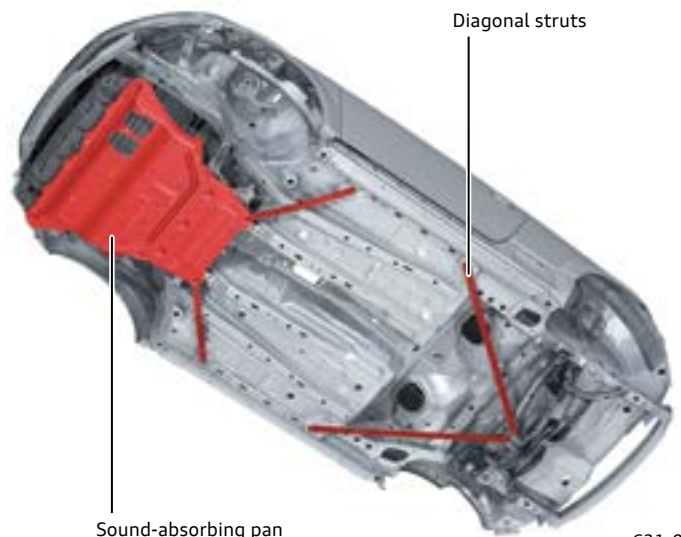


Diagonal struts

Additional V-shaped steel struts reinforce the front and rear axle carriers and connect them to the bodyshell. These supporting measures provide a high level of vehicle rigidity and help reduce the transfer of vibration to the passenger compartment.

Sound-absorbing pan

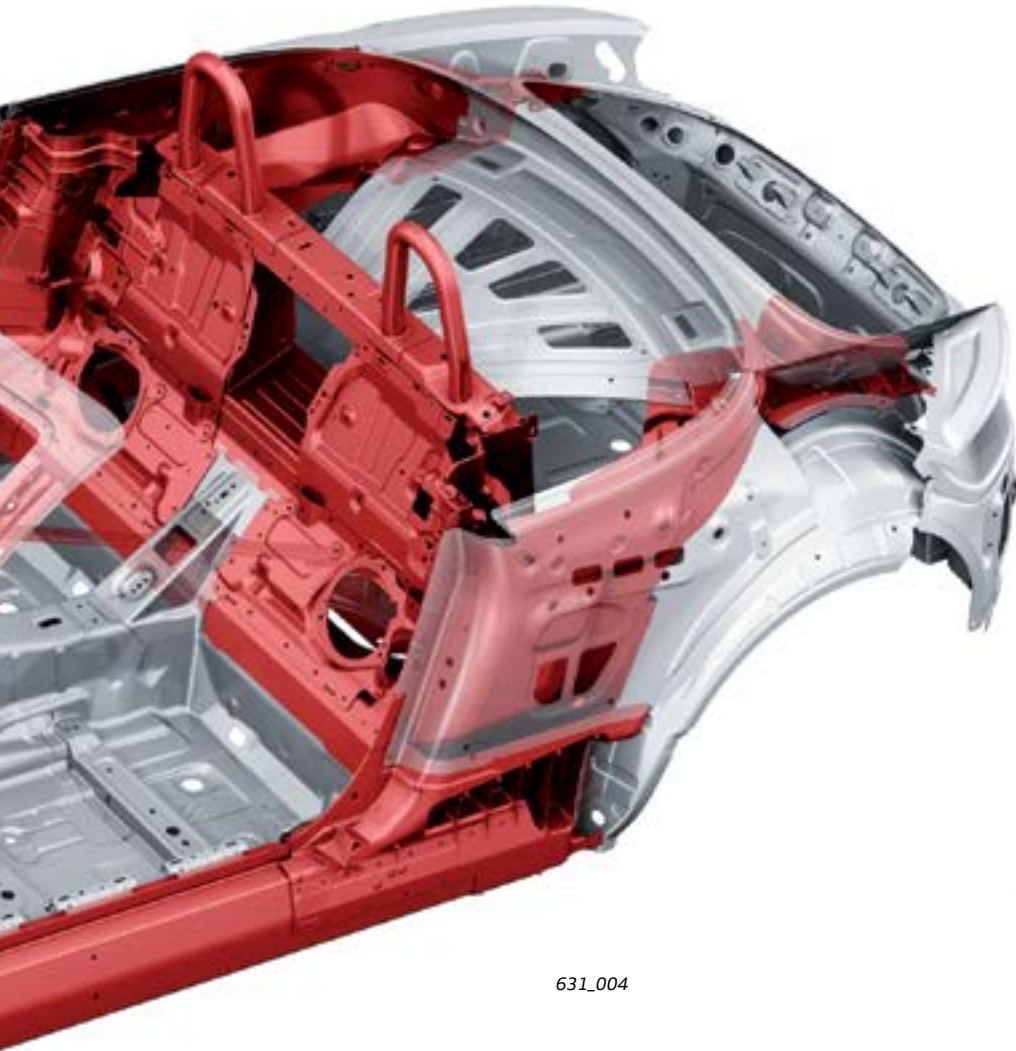
The Audi TT Roadster has an aluminum sound-absorbing pan, which not only reinforces the front end structure, but also provides added sound insulation.



Rear bulkhead

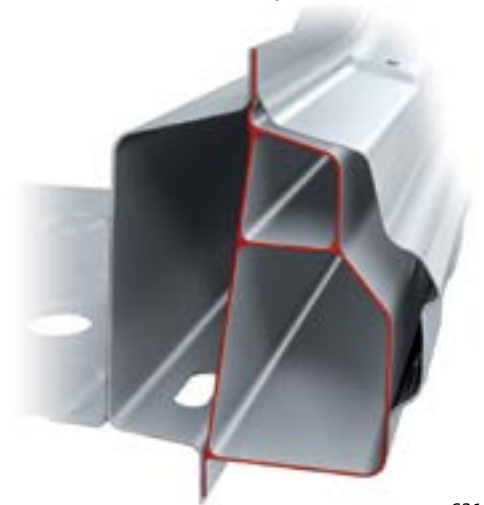
In the Audi TT Roadster, a solid bulkhead made of two box profiles separates the occupant cell from the luggage compartment and replaces the bottom cross member found on the Coupe. The top section of the bulkhead houses the steel rollover bars, a well-known and classic design feature of the Roadster.

Mounting plates seal the openings in the rear bulkhead, which features through-loading as standard.



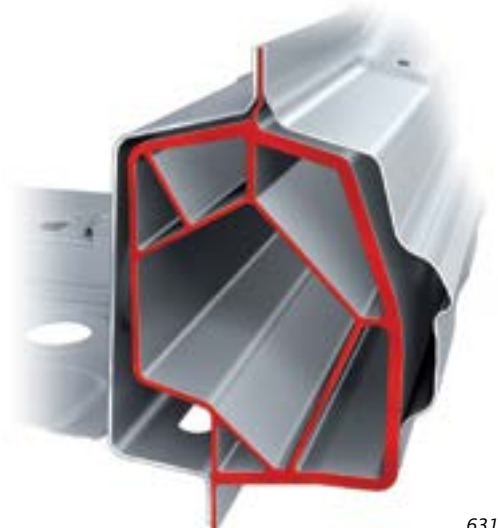
631_004

Door sills of the Audi TT Coupe



631_081

Door sills of the Audi TT Roadster



631_082

Door sill

The door sills made from extruded aluminum profiles give extra strength.

Due to the absence of a roof structure, it is necessary for the door sills of the TT Roadster to be thicker and be integrated into the structure by means of die-cast nodes in the B-pillar. The modified interior geometry provides much higher strength.

Convertible top

Overview

The new Audi TT Roadster features a classical soft top with a Z fold system. While opening, the soft top forms a -Z shape as it folds together into a flat package, which is stored in an aluminum tray behind the seats.

A feature of this space-saving folding system is that the front section of the soft top folds over the fabric as a cover and locks flush with the vehicle body.

With parts made from magnesium, aluminum, steel and plastic, the soft top weighs just 85.98 lb (39 kg).

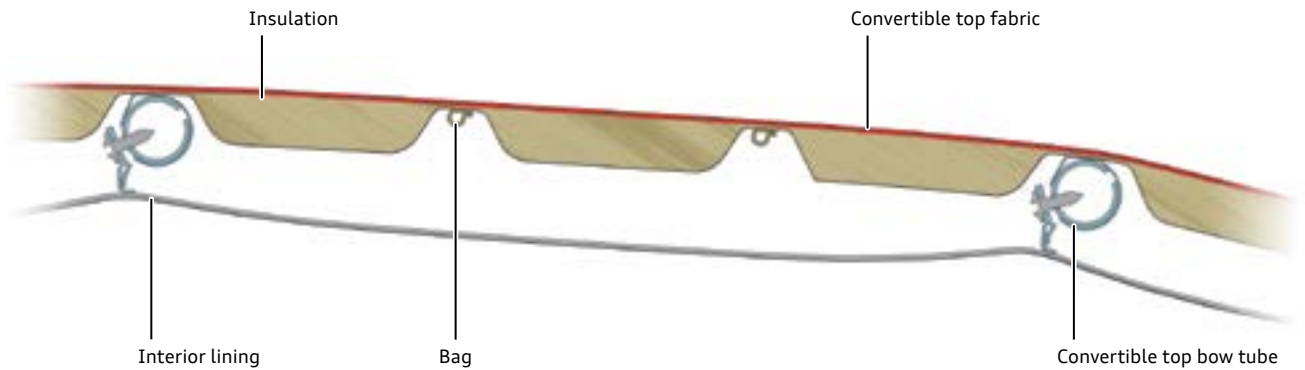


Convertible top fabric

The convertible top fabric of the TT Roadster provides extremely good thermal insulation in addition to reducing noise levels - especially in the airflow frequency range.

The noise level in the interior has been reduced (depending on frequency) by up to 6 dB compared to the predecessor model. The radio antennas are integral with the convertible top and hidden from view.

Because of the elaborate clamping system of the roof, it is held completely taut even at high speeds and presents a homogeneous look that conceals the cross bows.



631_074



Rear window defroster

The heated glass rear window is a component part of the convertible top cover and cannot be replaced individually if damaged. In this case, the complete cover must be replaced.

Convertible top flaps

The side openings for the soft top mechanism drive are covered by the convertible top flaps, eliminating the need for a tonneau cover or convertible top box lid.



631_073

631_072

Components

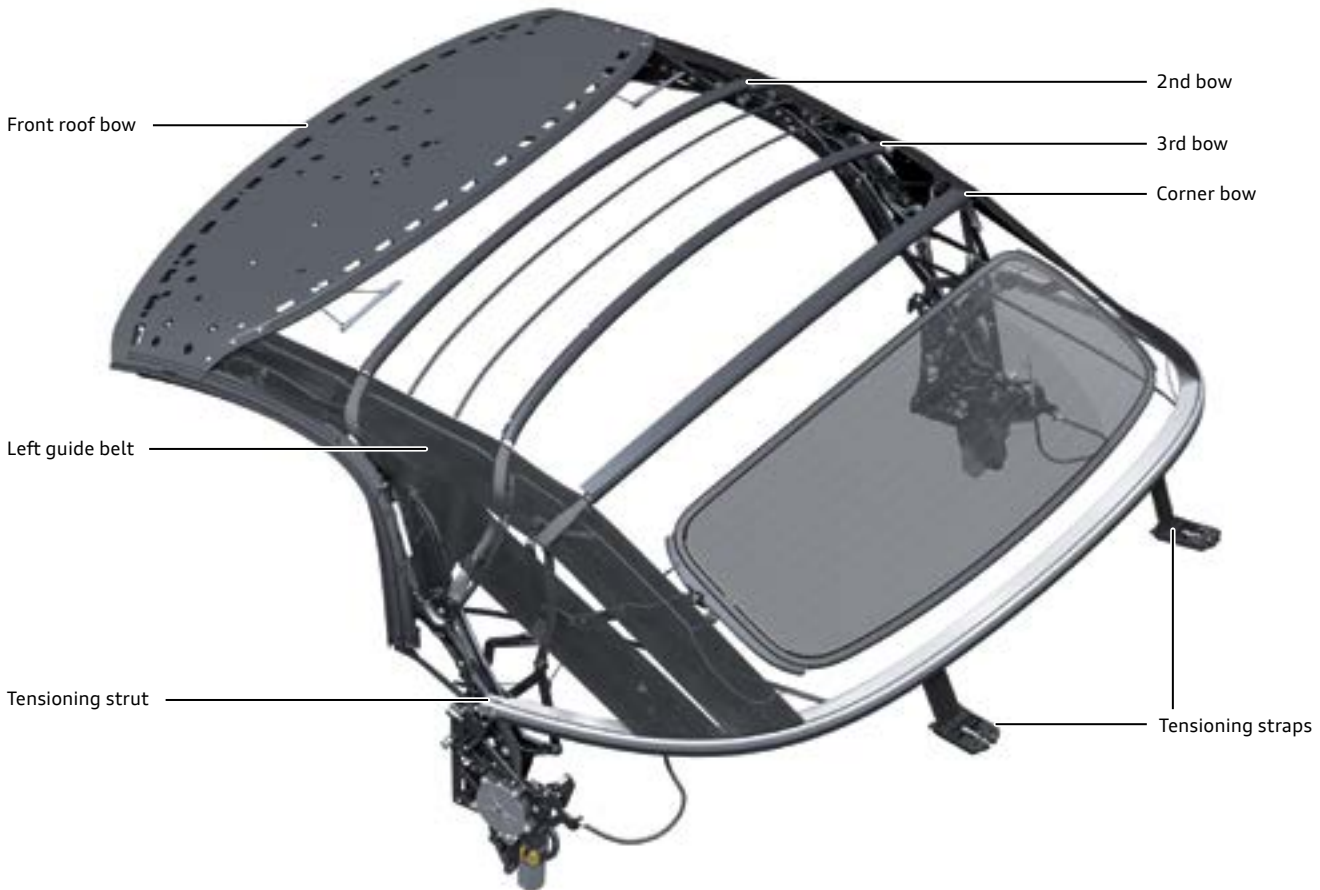
Convertible top frame

The main bearing of the convertible top frame is bolted to the inside of the B-pillar with three bolts on the left and right.

The convertible top linkage includes the following components:

- ▶ A front convertible top bow made of magnesium alloy.
- ▶ Three convertible top bow tubes made of precision steel.
- ▶ A tensioning strut made of aluminum.
- ▶ Multiple roof side bars and main side bars made of flat steel.

Two guide belts hold the convertible top bows in position and two tensioning belts hold the tensioning struts.



631_075

Servicing the convertible top drive

If the gear drive is damaged, a repair kit is available. It includes two gear segments, the necessary bolts and threaded bushings. With the repair kit, the gear segments on the left and right main bearings can be replaced separately.



631_078

Z-folding

Two electric motors (one at each main bearing) rotate gear segments which in turn pivot the main side bars. These motors and the roof side bars are designed as a multi-jointed linkage and ensure that the convertible top folds in three layers over one another in the convertible top compartment.

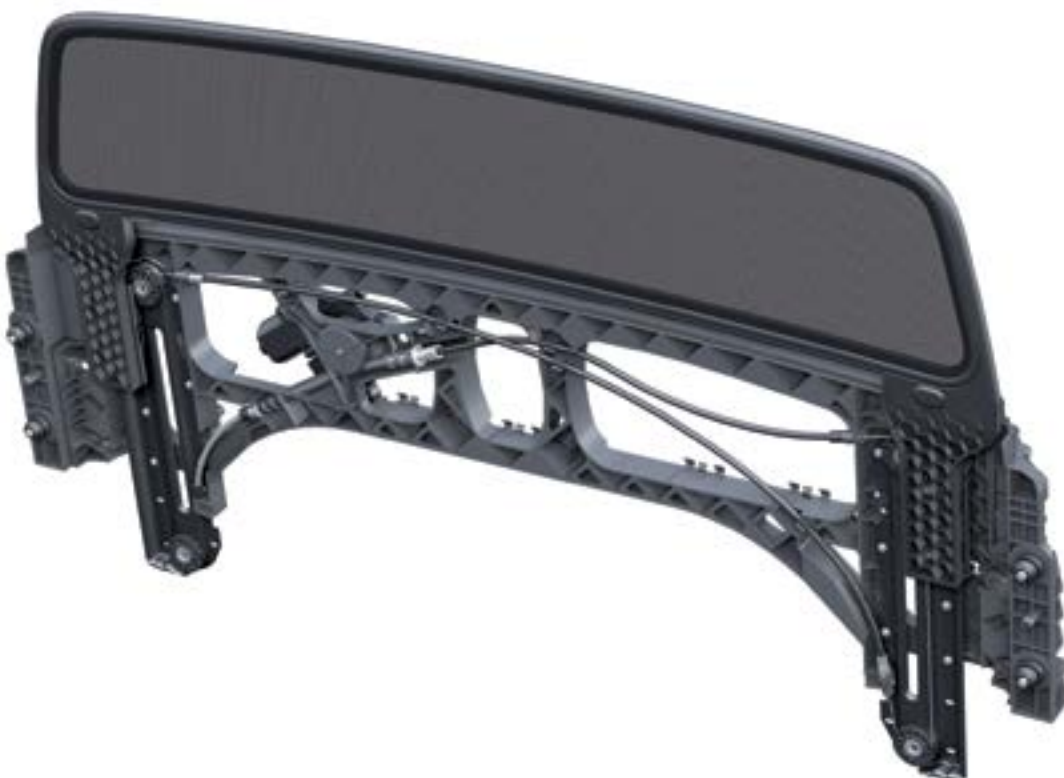


631_077

Wind deflector

To reduce airflow in the interior when the convertible top is open, the TT Roadster is equipped with an electrically extendable wind deflector.

It is possible to remove and install the wind deflector, its support, and Convertible Wind Deflector Motor V186 without removing the convertible top.



631_076

Convertible top control

Installation locations

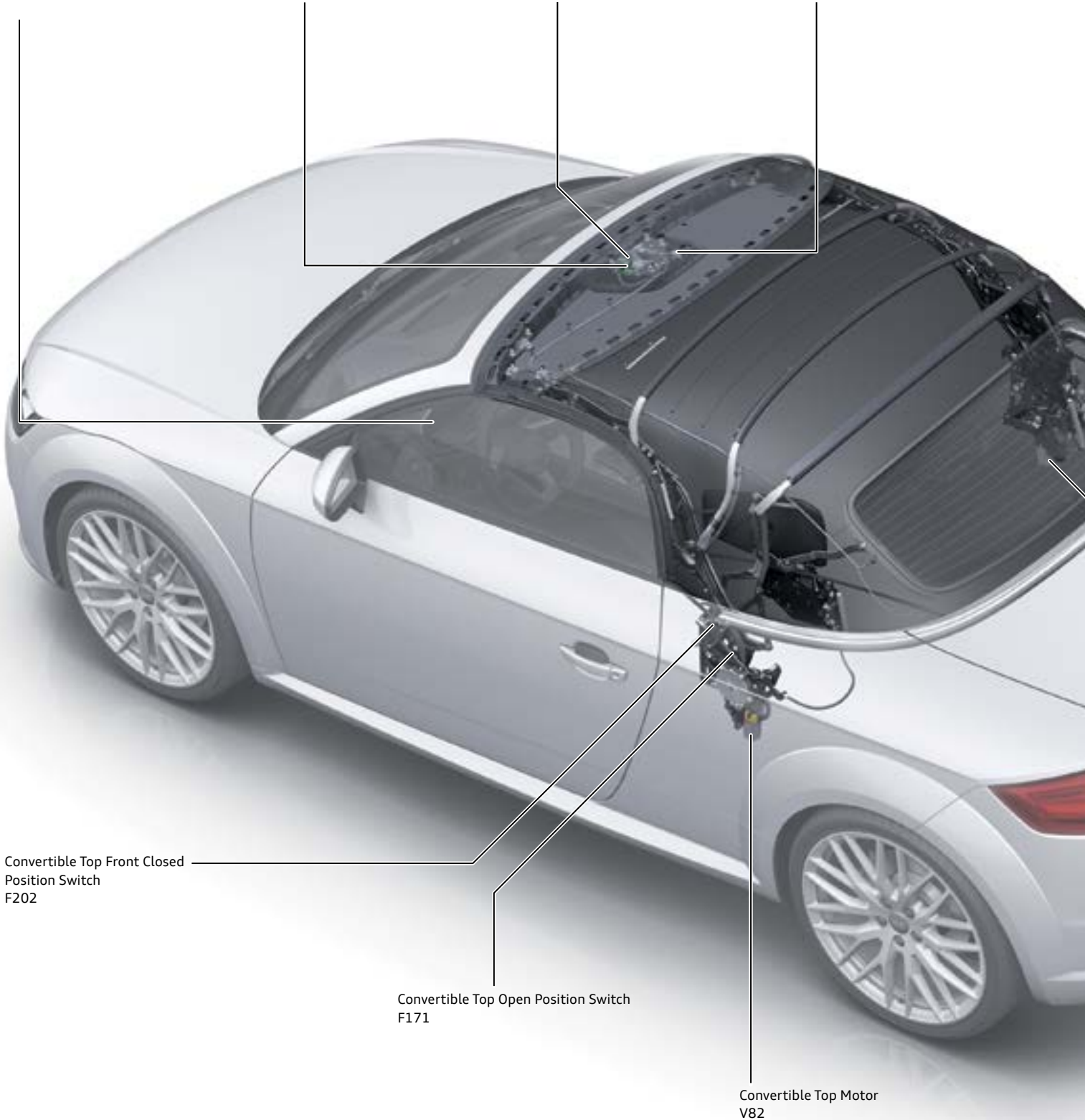
Here is a summary of the components of the convertible top system.

Instrument Cluster Control Module J285
(graphical display of convertible top status)

Convertible Top Latch -open- Switch
F294

Convertible Top Latch -closed- Switch
F295

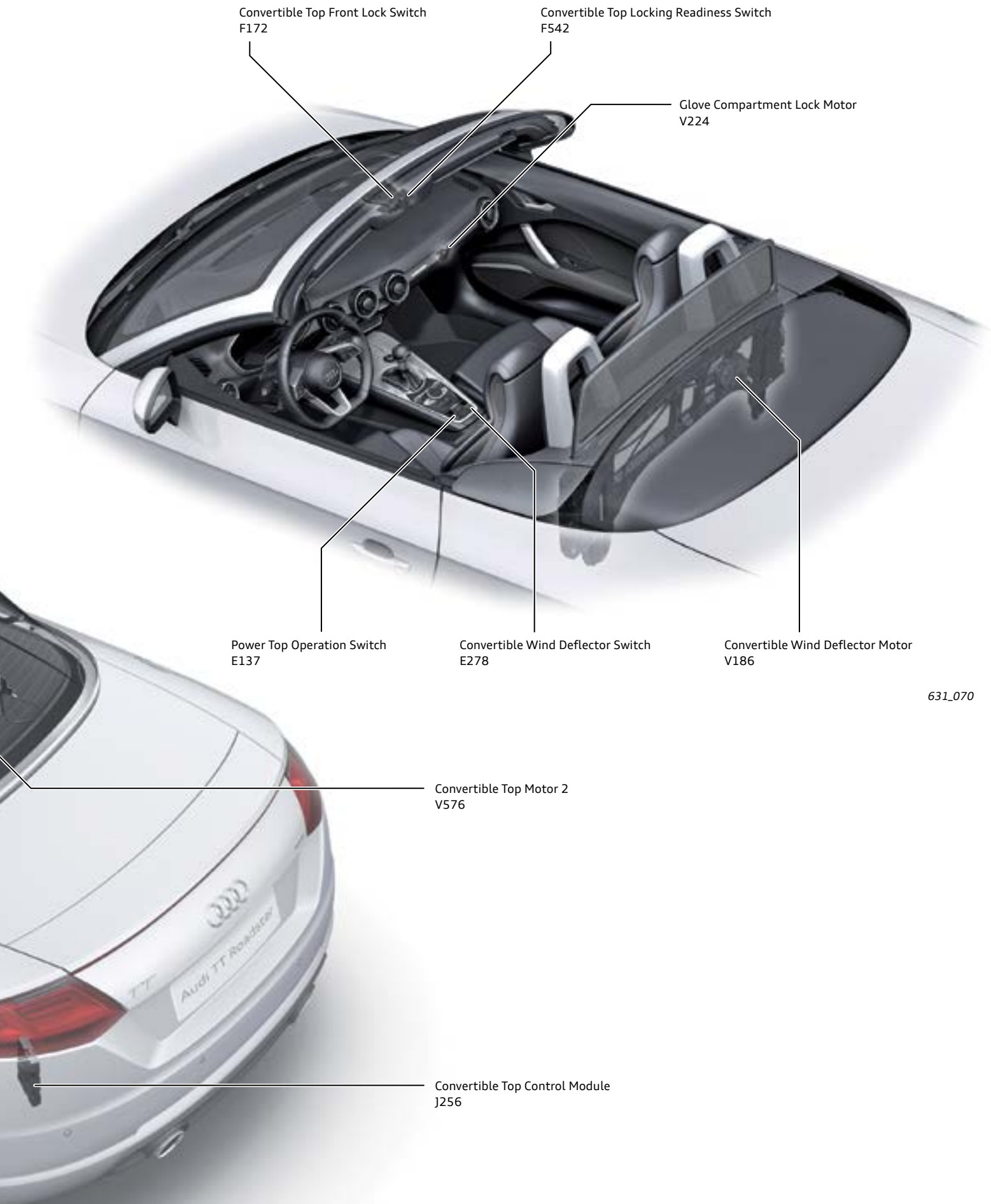
Convertible Top Locking Motor
V223



Convertible Top Front Closed
Position Switch
F202

Convertible Top Open Position Switch
F171

Convertible Top Motor
V82



Convertible Top Front Lock Switch
F172

Convertible Top Locking Readiness Switch
F542

Glove Compartment Lock Motor
V224

Power Top Operation Switch
E137

Convertible Wind Deflector Switch
E278

Convertible Wind Deflector Motor
V186

Convertible Top Motor 2
V576

Convertible Top Control Module
J256

631_070

Displays and operation of convertible top

The convertible top of the TT Roadster has an all electric drive system. It is driven by two electric motors - one on each side of the vehicle - mounted on the main bearings of the top. Roof operation is controlled by Convertible Top Control Module J256.

Basics of convertible top operation

The convertible top can be operated by pressing and holding Power Top Operation Switch E137 until an opening or closing cycle is completed. This is referred to as “manual” operation. The top can also be raised or lowered when the vehicle is moving by pressing and releasing E137. This is referred to as “automatic” operation.



631_007

Power Top Operation Switch
E137

Manual convertible top operating cycle

During manual operation, E137 must be actuated continuously while the top operating cycle is in progress. If the switch is released, the operating cycle stops instantaneously. If the switch is activated again, the cycle is continued. However, Convertible Top Control Module J256 initiates a “soft starting” of Convertible Top Motors V82 and V576.

The purpose of the “soft start” is to ensure top does not wobble or shudder when moving but rather that it starts evenly and smoothly.

Continuing to actuate E137 after the top has been fully opened or closed causes the side windows to close completely. Windows will stop moving if the switch is released.

Automatic convertible top operation

Automatic operation of the top is initiated when the vehicle is travelling between 4 - 31 mph (6 - 50 km/h). E137 must be actuated briefly (for less than 0.5 seconds). The top will open or close automatically depending on the direction of the actuation.

If E137 is actuated again during the automatic operation of the top, the cycle will stop. It can then be restarted by actuation of E137 again.

Automatic operation of the convertible top is not possible when the vehicle is stationary or travelling faster than 31 mph (50 km/h).

Audi virtual cockpit display

There is no separate symbol for the top operating cycle. Instead, when the operating cycle is started, the top position is displayed graphically in Audi virtual cockpit. Depending on the view setting, the displays are positioned either in the center or at the side.

A curved arrow over the convertible top indicates the direction in which the convertible top is moving:

- ▶ Arrow tip pointing backwards: convertible top is opening.
- ▶ Arrow tip pointing forwards: convertible top is closing.

The convertible top is shown in red, as is the case with an open door.



European instrument cluster shown.

631_031

Display for automatic convertible top operating cycle



631_032

During an automatic top operating cycle, an "A" is displayed at the start of the arrow.

Display for discontinued convertible top operating cycle



631_033

If no arrow is displayed over the convertible top, the convertible top operating cycle has been initiated but interrupted. The convertible top is therefore currently in an intermediate position.

Displays for complete convertible top operating cycle

When the top operating cycle is completed, the status (opened or closed) is indicated in the display for approximately two seconds and an audible signal sounds at the same time.

Convertible top operating cycle complete – convertible top open



631_035

Convertible top operating cycle complete – convertible top closed



631_034

Displays when convertible top operation is not possible

If the convertible top cannot be operated, it is indicated in the instrument cluster. An audible signal sounds at the same time.

A warning is given and one of seven different messages is displayed.

Warning display

A warning is given if the top is in an intermediate position, the vehicle is travelling faster than 3 mph (5 km/h) and there is a static DTC in the fault memory.

In addition to the warning, the yellow central warning lamp comes on.

Yellow central warning symbol

Display in driver information tab and warning lamps tab highlighted red

Yellow vehicle/convertible top icon in the status line

Displayed text



631_039

Message displays

Other reasons why the convertible top cannot be operated are displayed as messages.

- ▶ When messages about the convertible top are displayed, the yellow central warning lamp is **not** activated.
- ▶ When these messages are displayed, the vehicle/convertible top icon appears in the status line.
- ▶ Message texts are **not** included in the driver information and warning lamps tab.

If the convertible top is in an end position (open or closed) and a convertible top operating cycle is initiated in the same direction as the limit stop, "no" actions are initiated and no messages are displayed.

This message is displayed if the top is in an end position (open or closed) and E137 is actuated at a speed higher than 31 mph (50 km/h). In this situation, a top operating cycle is not initiated.



631_038

This message is displayed in the following situations:

- ▶ If a convertible top operating cycle is active and the vehicle speed increases to 34 mph (55 km/h). In this case, the operating cycle is stopped.
- ▶ **Or:** If a convertible top operating cycle is active, the vehicle speed increases to 34 mph (55 km/h) and the convertible top still moves into its limit position. For a list of conditions under which the convertible top still moves into its limit position at 34 mph (55 km/h) or higher (refer to page 27).
- ▶ **Or:** If a convertible top operating cycle was active or discontinued (E137 was released) and the convertible top is in an intermediate position. The vehicle speed subsequently increases to at least 31 mph (50 km/h) and the switch is actuated again. In this case, the convertible top operating cycle is not resumed.



631_038

This message is displayed if E137 is actuated to open the top and the ambient temperature is below 5 °F (-15 °C). However, the convertible top can be closed when the ambient temperature is below 5 °F (-15 °C).



631_037

This message is displayed if a DTC is present which prevents the operation of the top.



631_036

This message is displayed if E137 has been actuated with the ignition on (engine not running) and the battery voltage is too low. After starting the engine, the top can be operated again.



631_036

This message is displayed if the circuit breaker (thermal protection) is active when E137 is actuated.



631_036

This message is displayed if there is a static DTC in the Convertible Top Control Module J256 fault memory and a limit position (open or closed) has been reached when E137 is released.



631_036

Convertible top opening sequence

To be able to open the convertible top, the following conditions must be met:

- ▶ The vehicle must be travelling slower than 31 mph (50 km/h).
- ▶ The ignition must be on.
- ▶ The ambient temperature must be above 5 °F (-15 °C).
- ▶ The battery must have sufficient voltage.

Initial situation: the convertible top is closed

Starting the opening cycle

If all conditions have been met, the opening cycle is initiated by lifting E137 continuously until the cycle is completed.

If the vehicle is travelling at a speed between 4 - 31 mph (6 - 50 km/h) the opening cycle can be started by lifting E137 briefly (less than 0.5 seconds) and releasing.



631_008

Power Top Operation Switch E137

First, the side windows open a pre-set distance.



631_023

Display in the Audi virtual cockpit

A display then appears showing the vehicle/convertible top icon and a curved arrow. The arrow tip is pointing backwards.

If the rear window heater is on, it is switched off. The rear window heater can only be switched on if the top is fully closed.



631_032

Convertible top opening

Next, the catch hook in the upper part of the lock in the window frame area moves upwards. Then the top moves back.



631_024

During this movement, the catch hook closes again. Both the left and right convertible top flaps (actuated by Bowden cables) close when the top is nearly stowed. The top folds completely into the top box.



631_025

Finally, the side windows close completely.



631_026

Display in the Audi virtual cockpit

An audible signal as well as a display indicate that the top operating cycle is complete and the convertible top is fully open.



631_035

Convertible top closing sequence

To be able to close the convertible top, the following conditions must be met:

- ▶ The vehicle must be travelling slower than 31 mph (50 km/h).
- ▶ The ignition must be on.
- ▶ The battery must have sufficient voltage.

Initial situation: the convertible top is open

Starting the closing cycle

If all conditions have been met, the closing cycle is initiated by pressing E137 continuously until the cycle is completed.

If the vehicle is travelling at a speed between 4 - 31 mph (6 - 50 km/h) the closing cycle can be started by pressing E137 briefly (less than 0.5 seconds) and releasing.



631_009

Power Top Operation Switch E137

First, the side windows open a pre-set distance.



631_027

Display in the Audi virtual cockpit

A display then appears showing the vehicle/convertible top icon and a curved arrow. The arrow tip is pointing forward.

When an automatic top operating cycle is in progress (the vehicle is moving), an "A" is displayed at the start of the arrow.



631_040

Convertible top closing

The convertible top is lifted out of the convertible top box and, at the same time, the convertible top flap covers on the left and right are opened mechanically by Bowden cables.



631_028

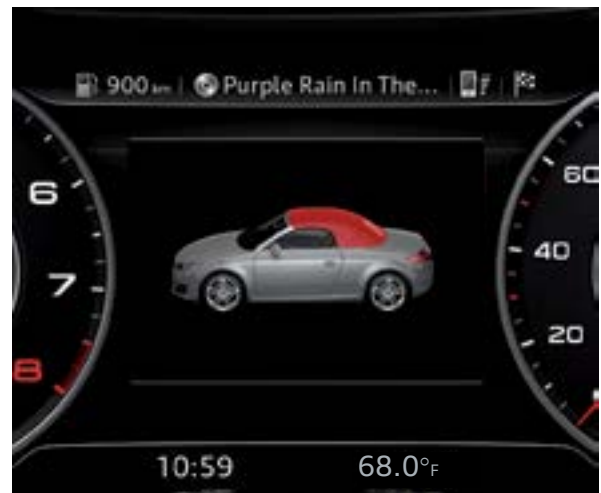
The catch hook moves upwards (1) and the top continues to close until it is in proximity to the windscreen frame. The catch hook closes (2), pulling the top onto the windshield frame, and locks the top in place.



631_029

Display in the Audi virtual cockpit

An audible signal as well as a display indicate that the top operating cycle is complete and the top is fully closed.



631_034

Operating the convertible top with the car key via the lock cylinder on the driver's door

The convertible top can be opened or closed via the driver's door locking cylinder.

This can be done using the integrated emergency key or the so-called wallet key.

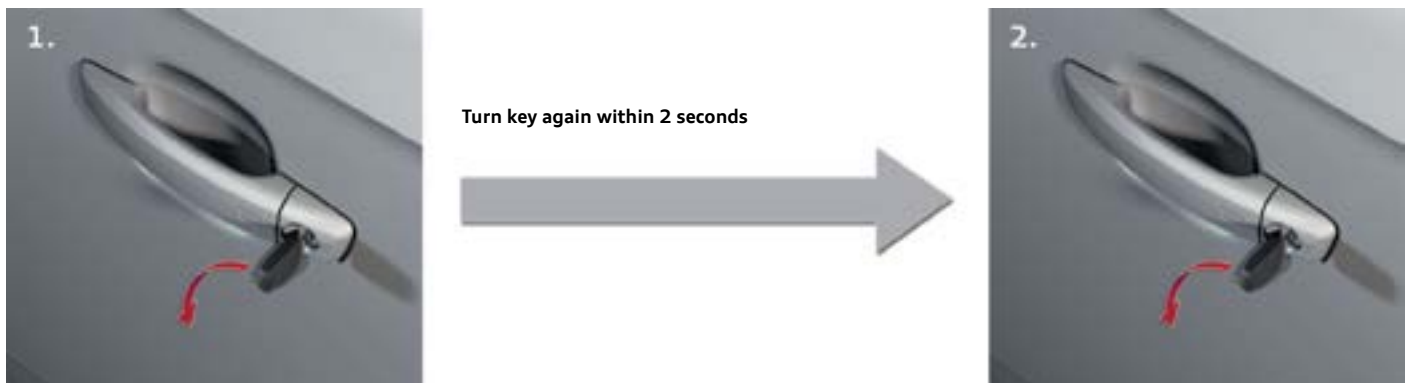
Opening

To open the convertible top, the following conditions must be met:

- ▶ The vehicle must not be moving.
- ▶ The battery must have sufficient voltage.
- ▶ The ambient temperature must be above 5 °F (-15 °C).

To open the convertible top, first unlock the vehicle with the car key. Then insert the car key into the lock cylinder on the driver's door and turn it in the "open" direction (1).

If the car key is now turned in the "open" direction again within 2 seconds and held in this position (2.), the convertible top operating cycle will start. The car key must be kept held in the "open" position while the convertible top operating cycle is in progress. When the car key is released, the convertible top operating cycle stops instantaneously. To resume the convertible top opening cycle, the car key must again be turned in the "open" direction and held in this position. If the car key is turned in the "close" direction and held in this position, the convertible top will close again.



631_042

Closing

To close the convertible top, the following conditions must be met:

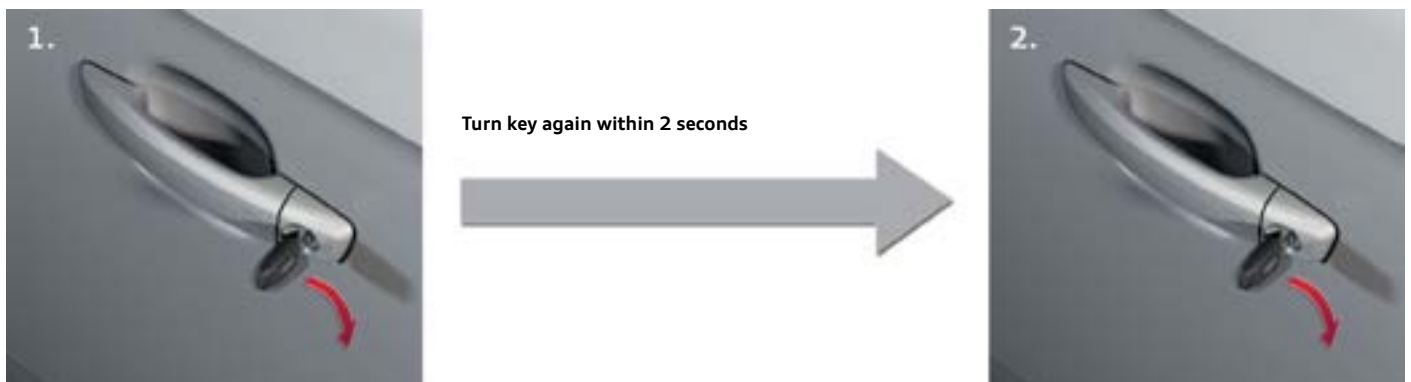
- ▶ The vehicle must not be moving.
- ▶ The battery must have sufficient voltage.

Insert the car key into the lock cylinder on the driver's door and turn it in the "close" direction (1). If the car key is now turned in the "close" direction again within 2 seconds and held in this position (2), the convertible top operating cycle will start.

The car key must be kept held in the "close" position while the convertible top operating cycle is in progress. When the car key is released, the convertible top operating cycle stops instantaneously.

To resume the convertible top operating cycle, the car key must again be turned in the "close" direction and held in this position.

If the car key is turned in the "open" direction and held in this position, the convertible top will open again.



631_041



Note

When actuating a top opening or closing cycle using the vehicle key, there may be a delay between key movement and the top beginning to move.

Operating the convertible top while driving

The top can be opened while the vehicle is moving up to a speed of 31 mph (50 km/h).

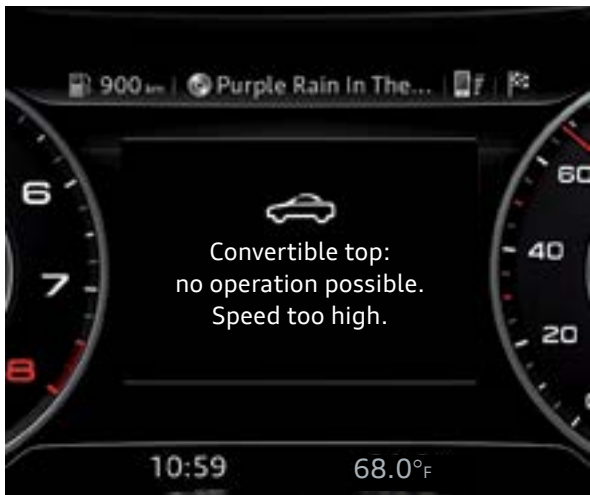
If the vehicle speed rises to 34 mph (55 km/h) while a top operating cycle is in progress, the cycle will normally stop and the driver is alerted by audible and visual warnings. There are exceptions to this.



631_058

Convertible top operating cycle at high speed

If the vehicle speed rises to 34 mph (55 km/h) while a top operating cycle is in progress, the top behaves differently when opening or closing.



631_038



631_038

Opening

If the top is opening and the vehicle speed increases to 34 mph (55 km/h) or higher, the operating cycle is not interrupted. The top opens fully.

Exception:

A top operating cycle is discontinued if the vehicle has reached a speed of 34 mph (55 km/h) and the top has still not left the front zone. The determination that the top is still in the front zone is done by the signal of Convertible Top Front Closed Position Switch F202. In this situation, the opening cycle is discontinued or not initiated. The convertible top operating cycle cannot be restarted until the vehicle speed has dropped below 31 mph (50 km/h).

Closing

If the top is closing and the vehicle speed increases to 34 mph (55 km/h) the operating cycle is interrupted. The top stops in its current position. The operating cycle cannot be restarted until the vehicle speed drops to below 31 mph (50 km/h).

Exception:

The convertible top closing cycle is not interrupted when the vehicle speed increases to over 34 mph (55 km/h) if Convertible Top Locking Readiness Switch F542 has been actuated. In this situation, the top will close completely.

Components

Power Top Operation Switch E137

Power Top Operation Switch E137 is used to initiate the opening and closing cycles of the convertible top.

If E137 sends an “actuated” signal continuously for more than approximately 60 seconds, an implausible signal message is registered in the DTC memory of Convertible Top Control Module J256. This can occur for example if the switch is inadvertently actuated by an object (cell phone, purse, etc.). Once the switch is free, the DTC entry changes to “sporadic” and it is possible to operate the top.



631_007

Power Top Operation Switch E137

Convertible top flaps

The left and right hand convertible top flaps are mechanically operated by Bowden cables.

When the top is open, the flaps conceal the main bearings and operating motors. When the top is closed, the flaps are open.



631_013

Left hand convertible top flap

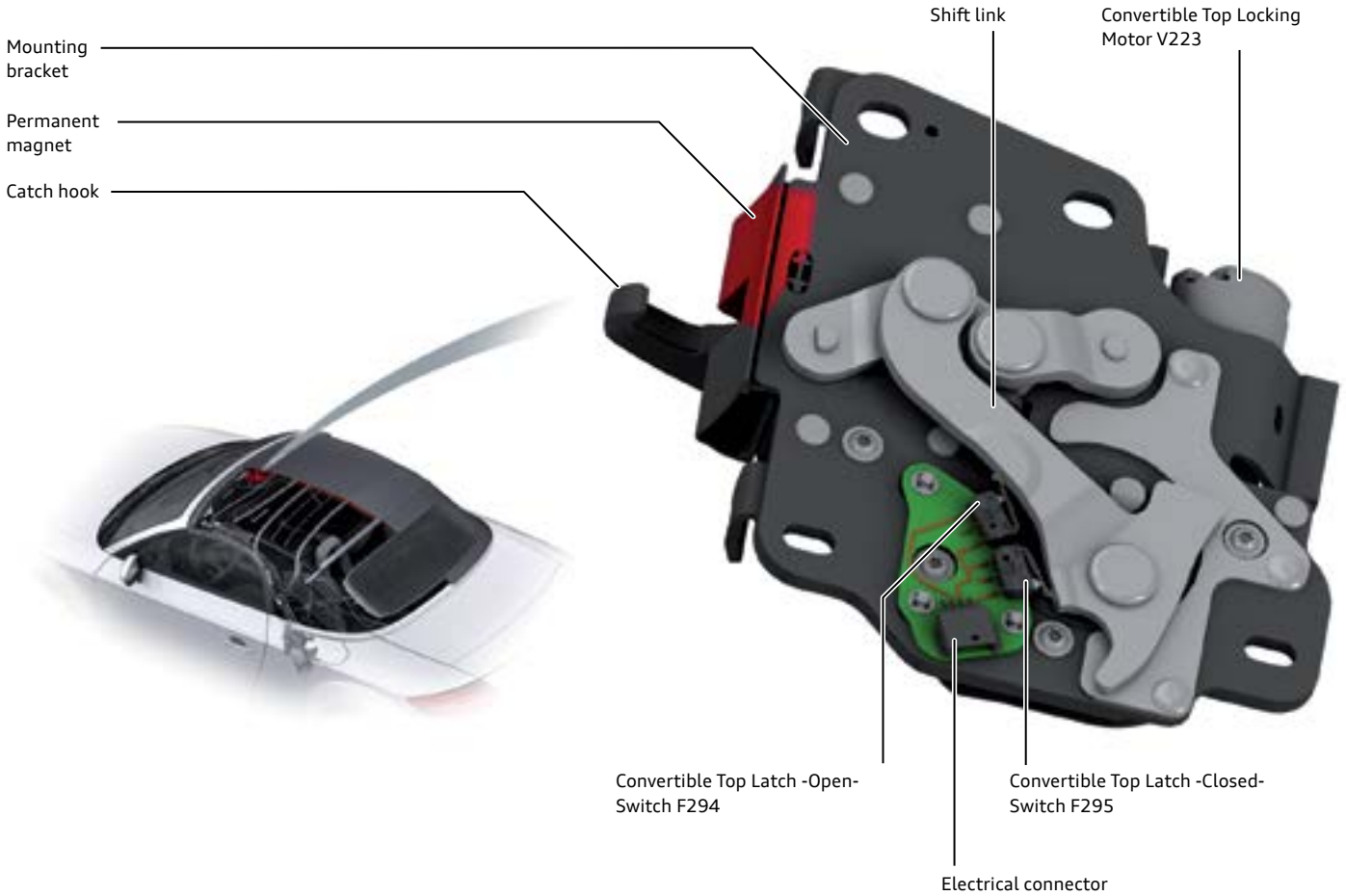
Right hand convertible top flap

Convertible Top Locking Motor V223

Convertible Top Locking Motor V223 is mounted to the front roof bow of the convertible top. It is mounted on a bracket with Convertible Top Latch -Open- Switch F294, Convertible Top Latch -Closed- Switch F295, the catch hook and a permanent magnet.

If the permanent magnet is within the detection range of Convertible Top Locking -Readiness- Switch F542 (see page 31), Convertible Top Control Module J256 instructs Convertible Top Locking Motor V223 to open or close the catch hook depending on the direction of actuation.

View from above



631_049

View from below



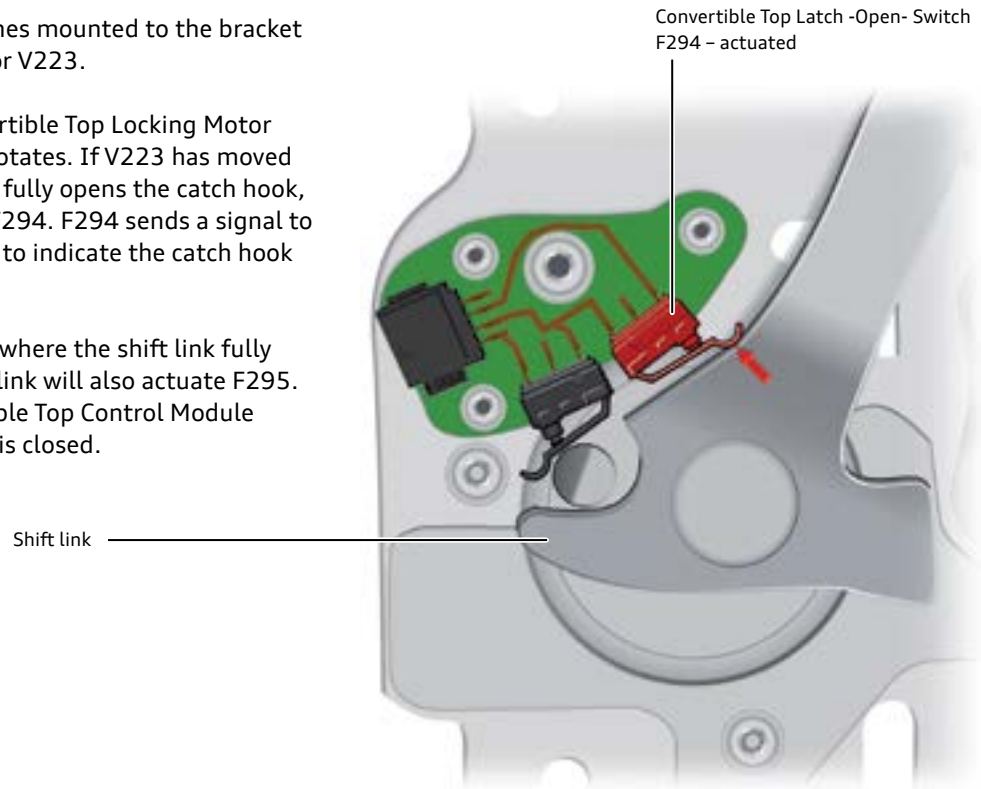
631_060

Convertible Top Latch -Open/Closed- Switches F294 and F295

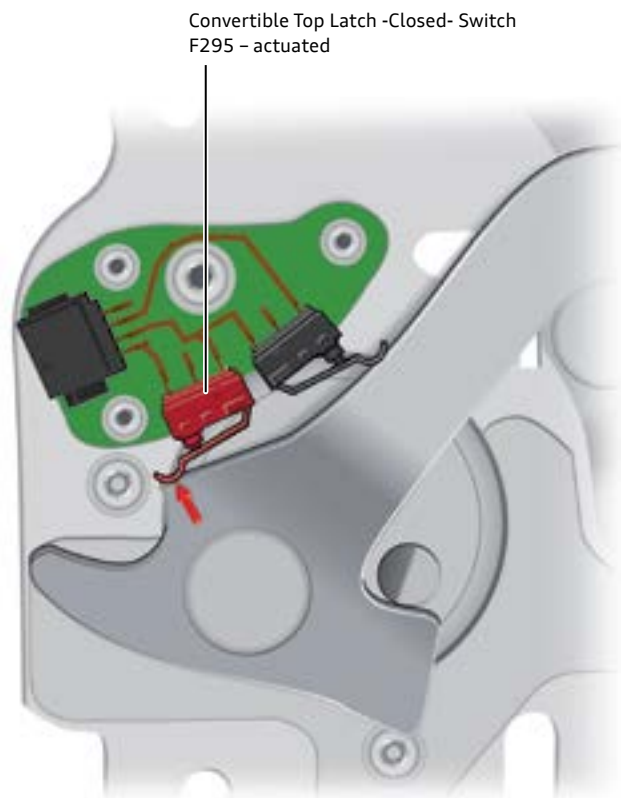
F294 and F295 are micro-switches mounted to the bracket of Convertible Top Locking Motor V223.

A shift link is mounted to Convertible Top Locking Motor V223 and moves as the motor rotates. If V223 has moved to the point where the shift link fully opens the catch hook, the shift gate will also actuate F294. F294 sends a signal to Power Top Control Module J256 to indicate the catch hook is open.

If V223 has moved to the point where the shift link fully closes the catch hook, the shift link will also actuate F295. F295 sends a signal to Convertible Top Control Module J256 to indicate the catch hook is closed.



631_050



631_051

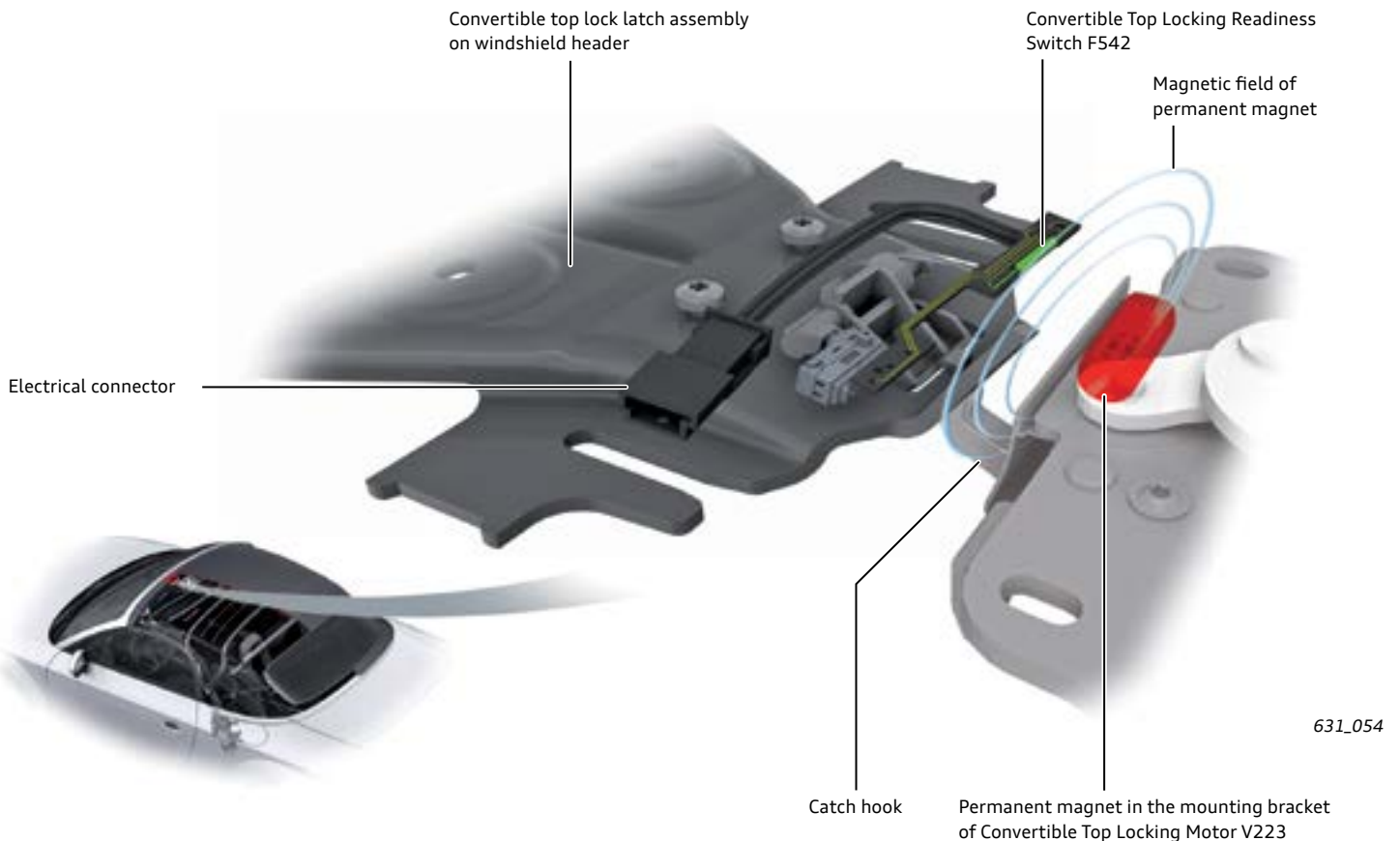
Convertible Top Locking Readiness Switch F542

F542 is integrated in the convertible top latch assembly on the windshield header.

A permanent magnet is mounted to the bracket for Convertible Top Locking Motor V223. If the top is in the front position and the permanent magnet is within the detection range of F542, Convertible Top Control Module J256 instructs Convertible Top Locking Motor V223 to open or close the catch hook (depending on the desired direction of the top).

Design

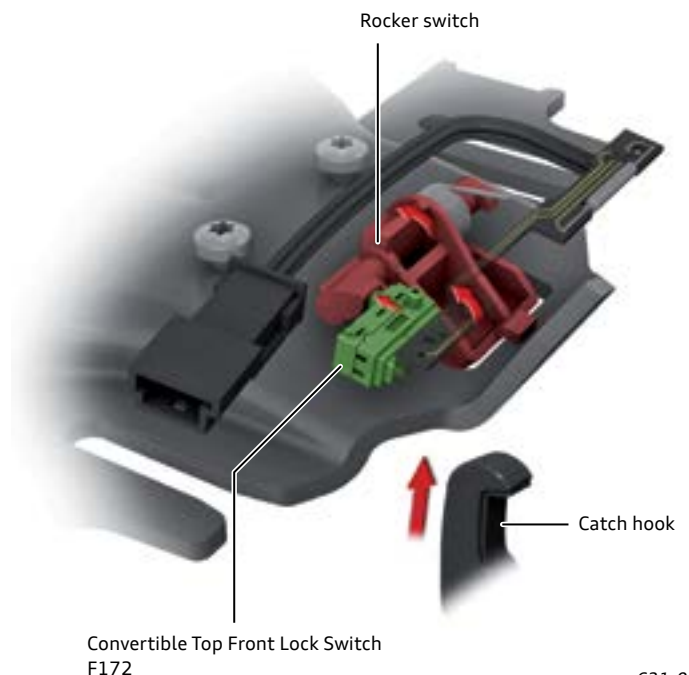
F542 is a reed sensor. It consists of a glass tube containing fused ferromagnetic contact tabs. In its rest state, the contact tabs are spaced apart. When a magnetic field acts on the reed sensor, a North and South pole form on the contact tabs and they attract each other closing the reed sensor.



Convertible Top Front Lock Switch F172

F172 is a micro-switch integrated with the top latch lock mechanism on the windshield frame header.

When the catch hook is fully engaged inside the lock, it actuates a rocker. This rocker actuates F172. When actuated, F172 sends a signal to Convertible Top Control Module J256 to indicate the catch hook is fully engaged in the lock.



Power Top Control Module J256

Convertible Top Control Module J256 is installed in the left rear corner of the luggage compartment behind a trim panel. It is responsible for the operation and diagnostics of the convertible top system and can be accessed using the VAS Scan Tool under Address Word 26.

J256 is a participant of the Convenience CAN bus. It receives and evaluates information from its system sensors and other bus users and controls the actuators accordingly.



631_045

In luggage compartment, on left:
Convertible Top Control Module
J256

Glove Compartment Lock Motor V224

Glove Compartment Lock Motor V224 is discreetly wired to Convertible Top Control Module J256. When the vehicle is locked or unlocked, Vehicle Electrical System Control Module 1 J519 places that information on the CAN bus.

When J256 receives this information, it instructs the glove compartment to lock or unlock depending on the position of the convertible top. J256 also monitors V224 for short and open circuits.



631_046



In glove compartment lid:
Glove Compartment Lock Motor V224

Convertible Top Front Closed Position Switch F202

F202 is a Hall effect sensor installed on the stationary part of the main bearing of the convertible top frame on the left hand side of the vehicle.

F202 is actuated by ferromagnetic metals. When the convertible top mechanism comes within the detection range of the Hall effect sensor there is a change in its voltage. Convertible Top Control Module J256 evaluates this signal and detects that the convertible top is in its fully closed position.



631_048

Convertible Top Open Position Switch F171

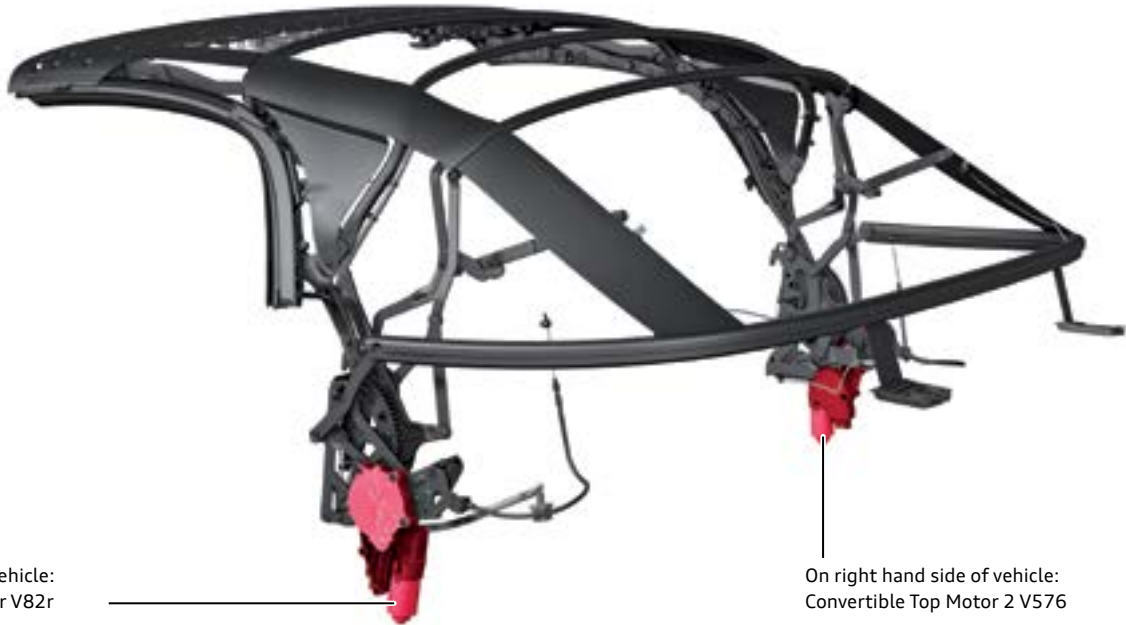
Like switch F202, Hall sensor Convertible Top Open Position Switch F171 is installed on the stationary part of the main bearing of the convertible top frame on the left hand side of the vehicle.

It functions the same as F202. When the convertible top mechanism comes within the detection range of the Hall effect sensor there is a change in its voltage. Convertible Top Control Module J256 evaluates this signal and detects that the top is open and stowed in the convertible top box.

Convertible Top Motor V82 and Convertible Top Motor 2 V576

Convertible Top Motors V82 and V576 are mounted on the left and right side of the respective top main bearings. An additional gear is flange-mounted to each motor.

The additional gears control the movement of the top. In addition, each motor has two integral Hall effect sensors. The sensors register both the speed and direction of the motors.



On left hand side of vehicle:
Convertible Top Motor V82r

On right hand side of vehicle:
Convertible Top Motor 2 V576

631_047

Integrated Hall effect sensors

The Hall effect sensors of the motors cannot be replaced separately. In the event of failure, the motor must be replaced.

Convertible Top Control Module J256 monitors the data generated by the Hall sensors compares the values of both motors.

If J256 detects a difference of approximately 65 pulses between the two motors (see page 36), the operating cycle is disabled in the current direction of travel. The driver is alerted by audible and visual warnings. However, the top may be operated in the opposite direction. If a difference is also detected, the convertible top will stop and not operate further. Again the driver is alerted by audible and visual warnings.



631_036

This message is displayed when the convertible top reaches its limit position.



631_039

This warning is displayed when the convertible top is in an intermediate position.

Effects of signal loss

If one of the four Hall effect sensors fails, it is still possible to operate the top. A DTC is registered in the Fault Memory of J256 but no messages are displayed in the instrument cluster. If two of the sensors fail, operation of the top is no longer possible.

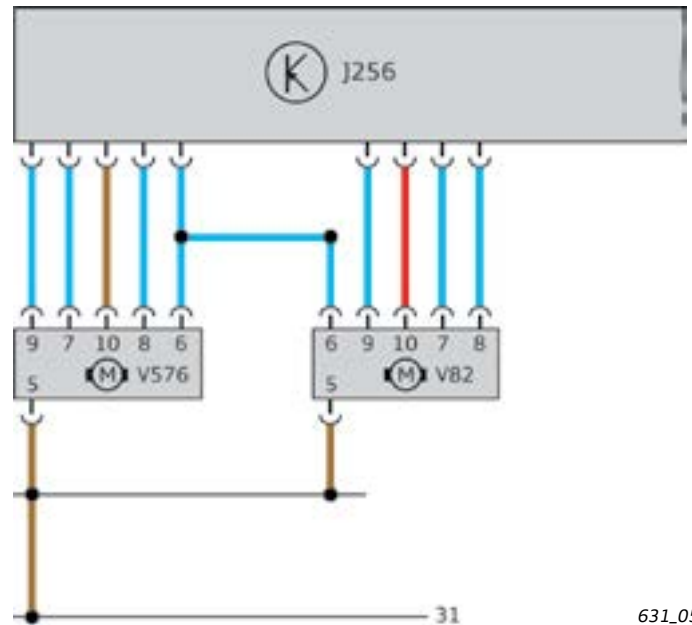
Installation of the motors

Convertible Top Operating Motors V82 and V576 are identical. However, when installed in the vehicle, they turn in different directions. The determination if a motor is on the left or right side of the vehicle is accomplished by pinning out the connectors differently.

Convertible Top Operating Motor V82 is connected to positive (+) at PIN 10 while Convertible Top Operating Motor V576 is connected to negative (-) at PIN 10.

Key:

J256 Convertible Top Control Module
V82 Convertible Top Operating Motor
V576 Convertible Top Operating Motor 2



631_052

Thermal cutout

Both operating motors are protected against overload by a thermal cut-out. Convertible Top Control Module J256 monitors the run-time of the motors and can switch them off if required.

The number of top operating cycles until the thermal cut-out is activated depends on:

- ▶ Ambient temperature.
- ▶ Battery voltage.
- ▶ Ease of movement of the convertible top mechanism (tolerances).

Activation

The thermal cut-out is activated in two stages depending on power consumption.

Stage 1:

Occurs if the top has been in continuous operation between 60 and 120 seconds from a closed position and has not opened. There is a delay period of five minutes until the top can be operated again.



631_036

Stage 2:

Occurs if the convertible top has been in continuous operation for between 70 and 140 seconds. The momentary position of the convertible top is irrelevant. After stage 2, there is a delay of 8.5 minutes until it is again possible to operate the convertible top.

Initialization of the motors

The position and speed of the convertible top motors is recorded by integral Hall effect sensors in each motor. The revolutions of the motors are counted by using counting pulses. The duration of a complete opening or closing sequence of the convertible top is approximately 1300 pulses. A deviation of 65 pulses will register a DTC in the control module.

A deviation in pulses can occur for the following reasons:

- ▶ The number of pulses of both motors may deviate from one another during the operating time of the convertible top due to the convertible top moving back and forth several times without reaching an end position.
- ▶ No further pulses are counted after J256 has entered sleep mode. If forces act on the convertible top in this mode and the convertible top is in an intermediate position, the convertible top may collapse into itself depending on its position. In certain situations its own weight may be enough to cause this. Depending on the position of the convertible top after collapsing, J256 may not be able to detect the current position of the motors.

If the vehicle is parked with the top down, the motors are initialized when the ignition is switched on and the vehicle moves forward at a speed greater than about 3.72 mph (6 km/h). If the vehicle is parked with the top closed, the system is initialized when the ignition is switched on.

Initializing the motors when they are in end positions (top fully open or fully closed) resets the start of pulse counting to a defined initial value. This eliminates irrelevant pulse deviations during normal top operating cycles.



631_078

Collapsing of the convertible top

If the convertible top is in an intermediate position, it may collapse depending on its position.

- ▶ The ignition is off and Convertible Top Control Module J256 enters sleep mode.
- ▶ The ignition is off and the E137 is pushed or pulled for about 5 seconds.



631_059



Note

Caution: do not reach into the convertible top linkage or other moving parts at any time. There is a danger of injury.

Wind deflector

The wind deflector reduces air turbulence in the passenger compartment and thus enhances ride comfort.

It can be manually retracted and extended (by continuously pushing or pulling the switch) and retracted in automatic mode (by briefly touching the switch).



631_010

Operation

The wind deflector is controlled by Convertible Wind Deflector Switch E278. It can only be extended or retracted if the convertible top is fully open.

If the wind deflector is extended when the top is closed, it will automatically retract. This allows “one touch” operation with Power Top Operation Switch E137 when closing the top.



631_011

Power Top Operation Switch
E137

Convertible Wind Deflector Switch
E278

Components

Convertible Wind Deflector Switch E278

E278 operates the wind deflector in both directions. It is located in the center console to the right of Power Top Operation Switch E137.



631_012

Manual operation

During manual operation of the wind deflector, E278 must be continually pushed or pulled. The deflector stops if the switch is released. If the switch is actuated again, the deflector continues in the corresponding direction.

Automatic operation

The wind deflector can be retracted automatically but cannot be raised. Automatic operation happens when E278 is pressed briefly (less than 0.5 seconds). In this situation, the deflector retracts automatically. If E278 is pushed again during automatic operation, it stops. Movement can be resumed by pressing the switch again. It is similar in principle to the one-touch lowering of the power windows.

Activation mechanism

Convertible Top Control Module J256 controls E278 and monitors its actuation time.

If E278 sends an “actuated” signal continuously for approximately 60 seconds, a DTC for an implausible signal is registered in the fault memory. This can happen if something like a cell phone or purse accidentally presses on the switch.

Once the interfering object has been removed, the DTC changes to sporadic and operation of the wind deflector is possible.

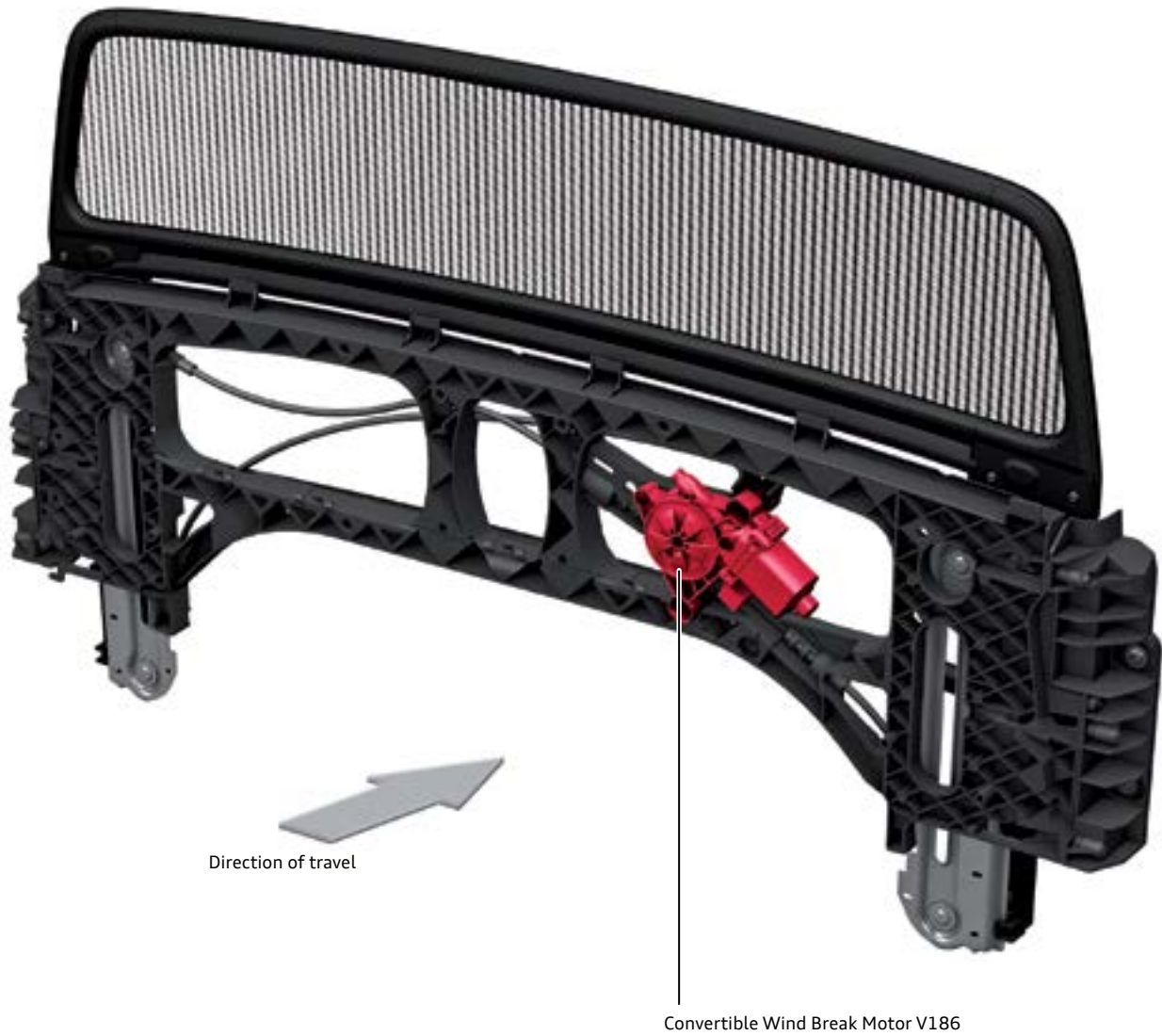


631_061

Convertible Top Control Module J256

Convertible Wind Deflector Motor V186

The wind deflector is operated by Convertible Wind Deflector Motor V186. V186 is in turn controlled by Convertible Top Control Module J256.



631_044

Thermal cutout

A thermal cut-out is activated if the wind deflector has been running continuously for about a minute. A seven minute time-out period is initiated during which the deflector cannot be operated. No message is displayed in the instrument cluster for this situation.

Emergency operation of convertible top

In the event of a malfunction, the convertible top can be closed manually.

Closing the convertible top

During all stages of the emergency closing DO NOT reach into the top linkage or other moving parts. There is a risk of severe injury. When ever possible, the emergency closing procedure should be done by two people.

Tools required

All tools necessary to perform the emergency closing procedure are located in the vehicle tool kit.

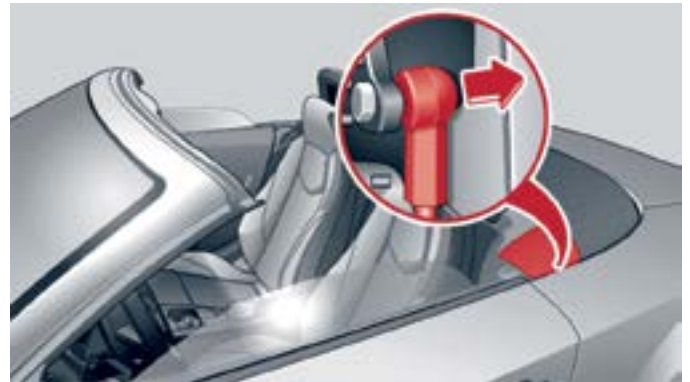
Conditions:

- ▶ The parking brake must be applied.
- ▶ All side windows are lowered.
- ▶ The function is deactivated.



631_014

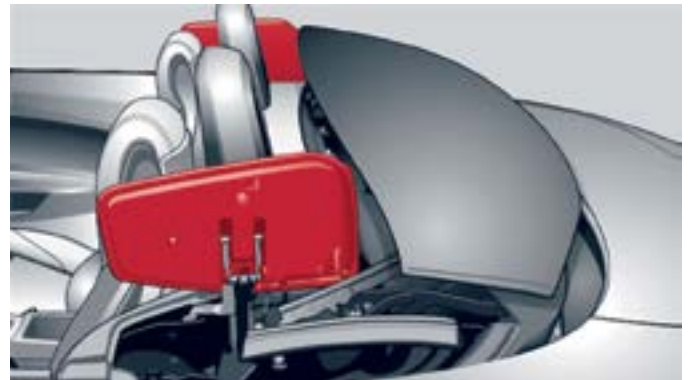
1. Separate push rod from ball head in direction of arrow



631_015

2. Raise convertible top flaps

Raise the convertible top flaps and stow the push rod in the designated recess. Repeat both procedures on the other side of the vehicle.



631_016



Note

During the entire duration of emergency operation make sure that both covers are fully open and that the push rods have been stowed in the recess, in order to avoid causing damage when raising the convertible top.

3. Undo bolts

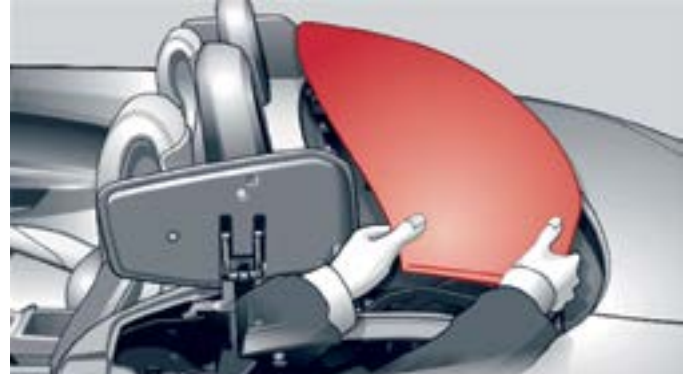
Remove the bolt using the hexagon socket wrench from the tool kit by turning it fully in the direction of the arrow. Repeat the procedure on the other side.



631_017

4. Lift out the convertible top

Lift the convertible top out of the convertible top compartment, if possible with the aid of a second person, and pull it out completely.



631_018

5. Place the convertible top on the window frame

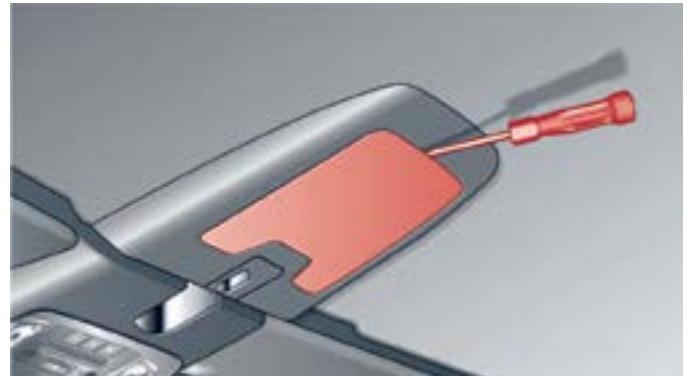
Push the convertible top in the direction of the arrow onto the windshield frame.



631_019

6. Remove cover

Remove the cover at the center of the convertible top using the screwdriver from the tool kit.



631_020

7. Lock the convertible top

Insert the crank from the tool kit fully into the socket of Convertible Top Lock Motor V223.

Pull the convertible top down at the side until it is fully seated on the window frame. Turn the crank in the direction of the arrow (clockwise) until the convertible top is fully locked. Then remove the crank.



631_021



Note

During all stages of emergency convertible top operation, there is a risk of trapping hands or causing injury to other persons.



Reference

Please refer to the Owner's Manual for further information on emergency operation.

Passive safety

Components

Depending on country version and trim level, the passive occupant system in the Audi TT Roadster can have the following components and systems:

- ▶ Airbag Control Module.
- ▶ Driver airbag.
- ▶ Front passenger airbag.
- ▶ Front side airbags. (head-thorax airbag)
- ▶ Knee airbag, driver and front passenger sides.
- ▶ Front airbag crash sensors.
- ▶ Front crash sensors for side crash detection. (pressure sensors)
- ▶ Rear crash sensor for side crash detection. (acceleration sensor)
- ▶ Front inertia-reel seat belts with pyrotechnic belt pretensioners.
- ▶ Front inertia-reel seat belts with active belt force limiters.
- ▶ Seat belt warning for all seats.
- ▶ Seat belt switches on all seats in the seat belt buckles.
- ▶ Seat occupancy sensor in front passenger seat.
- ▶ Airbag disabling switch, front passenger side.
- ▶ Front passenger airbag **OFF** and **ON** warning lamps.
- ▶ Driver and front passenger seat position sensors.
- ▶ Battery interrupter.

Side airbags (head-thorax airbags)

The side airbags are configured as head-thorax airbags.

The head-thorax airbags are designed to help protect not only the body, but also the head of the front occupants. By integrating the side airbags in the front seat backs, the airbags are positioned in proximity to the front occupants irrespective of the seat position.

Rollover protection system

The Audi TT Roadster comes equipped with rigid rollover bars behind the rear seats.





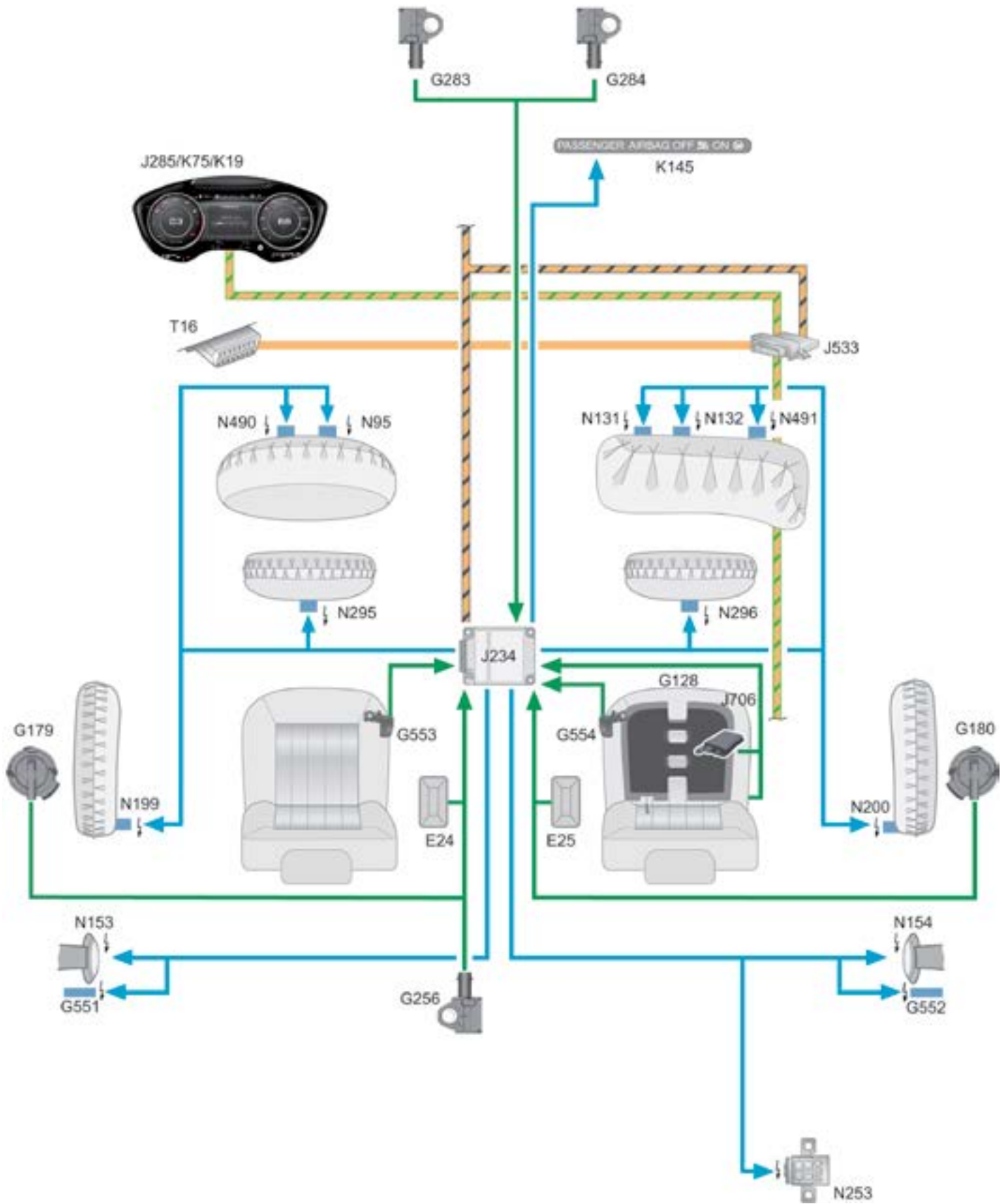
Front passenger airbag

Knee airbag

Side airbag
(head-thorax airbag)

Side airbag
(head-thorax airbag)

System overview








Equipment

Equipment specifications can vary due to the different requirements and statutory provisions for car makers in the various markets.

Key to illustration on page previous page:

E24	Driver Seat Belt Switch	K19	Seat Belt Indicator Lamp
E25	Front Passenger Seat Belt Switch	K75	Airbag Indicator Lamp
G128	Front Passenger Occupant Detection Sensor	K145	Front Passenger Airbag -disabled- Indicator Lamp (ON and OFF status of front passenger airbag is indicated)
G179	Driver Side Airbag Crash Sensor	N95	Driver Airbag Igniter
G180	Front Passenger Side Airbag Crash Sensor	N131	Front Passenger Airbag Igniter 1
G256	Driver Side Rear Side Airbag Crash Sensor	N132	Front Passenger Airbag Igniter 2
G283	Driver Front Airbag Crash Sensor	N153	Driver Seat Belt Tensioner Igniter 1
G284	Passenger Side Front Airbag Crash Sensor	N154	Front Passenger Seat Belt Tensioner Igniter 1
G551	Driver Belt Force Limiter	N199	Driver Thorax Airbag Igniter
G552	Front Passenger Belt Force Limiter	N200	Front Passenger Thorax Airbag Igniter
G553	Driver Seat Position Sensor	N253	Battery Interrupt Igniter
G554	Front Passenger Seat Position Sensor	N295	Driver Knee Airbag Igniter
J234	Airbag Control Module	N296	Front Passenger Knee Airbag Igniter
J285	Instrument Cluster Control Module	N490	Driver Airbag Release Valve Igniter
J533	Data Bus On Board Diagnostic Interface (Gateway)	N491	Front Passenger Airbag Release Valve Igniter
J706	Passenger Occupant Detection System Control Module	T16	Data Link Connector

Wire colors:

 Powertrain CAN bus	 Diagnostics CAN bus	 Input signal
 Convenience CAN bus		 Output signal

Engine and power transmission

Engine	2.0l TFSI engine (CHHC) 169 kW
---------------	---



**6-speed
quattro double-
clutch transmission**
OD9
DQ250-6A



Rear axle drive
OCQ
5th generation
Haldex coupling



Breakdown of manufacturer codes:
for example: MQ350-6F

- M** Manual transmission
- D** Double-clutch transmission
- Q** Transverse mounting
- 350** Rated torque capacity
- 6** Number of gears
- F** Front-wheel drive
- A** quattro all-wheel drive

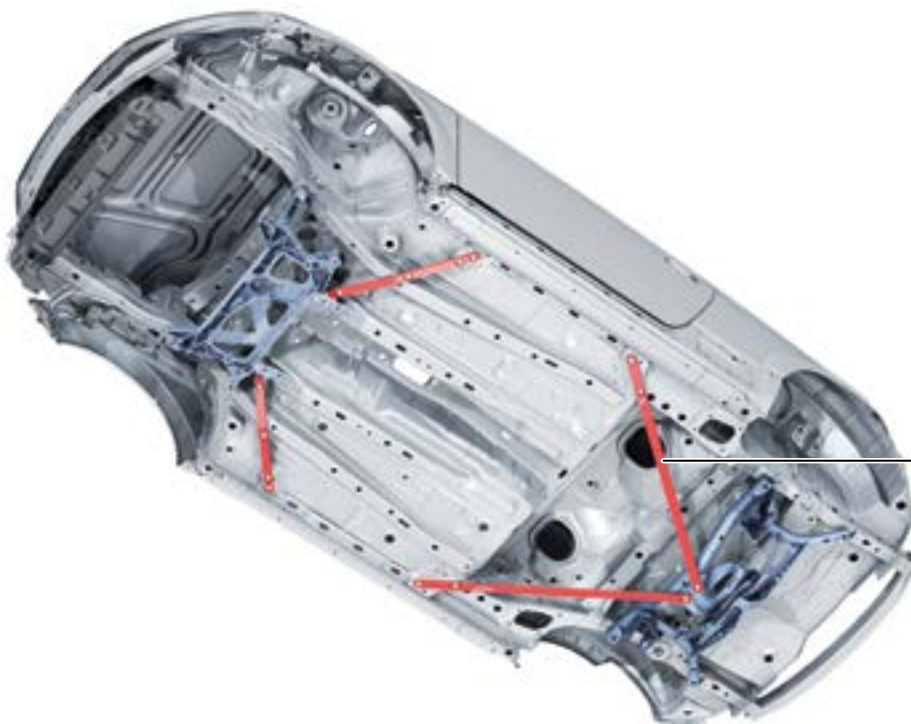
Chassis



631_092

The chassis of the Audi TT Roadster is based on that of the Audi TT Coupe. To meet requirements with regard to static and dynamic body rigidity, special diagonal struts have been integrated into the front and rear axles).

In addition, the rear axle sub-frame is rigidly bolted to the body in quattro models. For visual differentiation, the TT Roadster comes with a wider range of wheels than the TT Coupe.



Diagonal struts

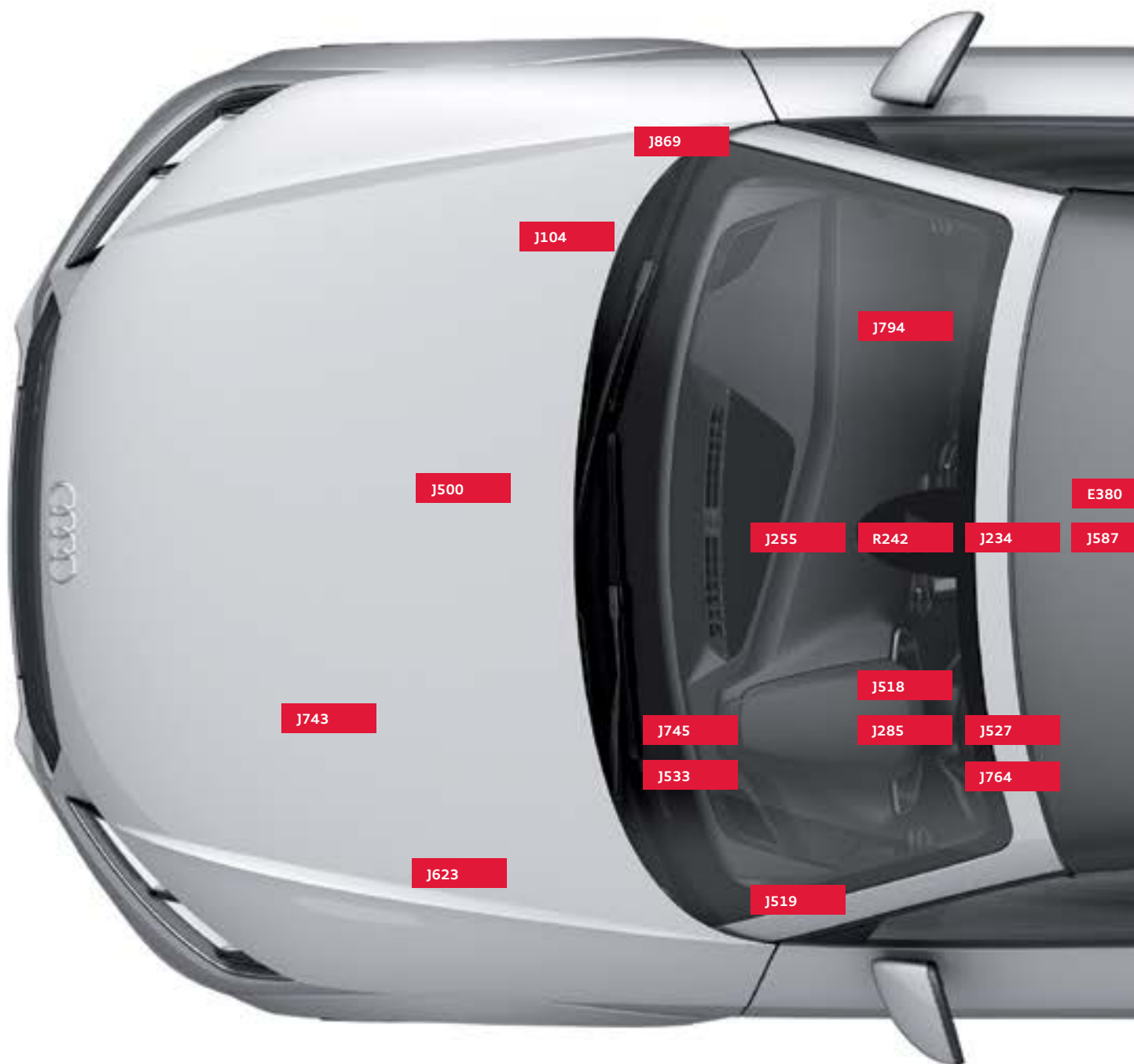
631_091

Electrical system

The electrical system of the TT Roadster is very similar to that of the TT Coupe.

Roadster-specific control modules:

- ▶ Convertible Top Control Module J256.
- ▶ Seat Belt Microphone Control Module J886.
- ▶ Left Head Area Heater Control Module J846.
- ▶ Right Head Area Heater Control Module J847.



Key:

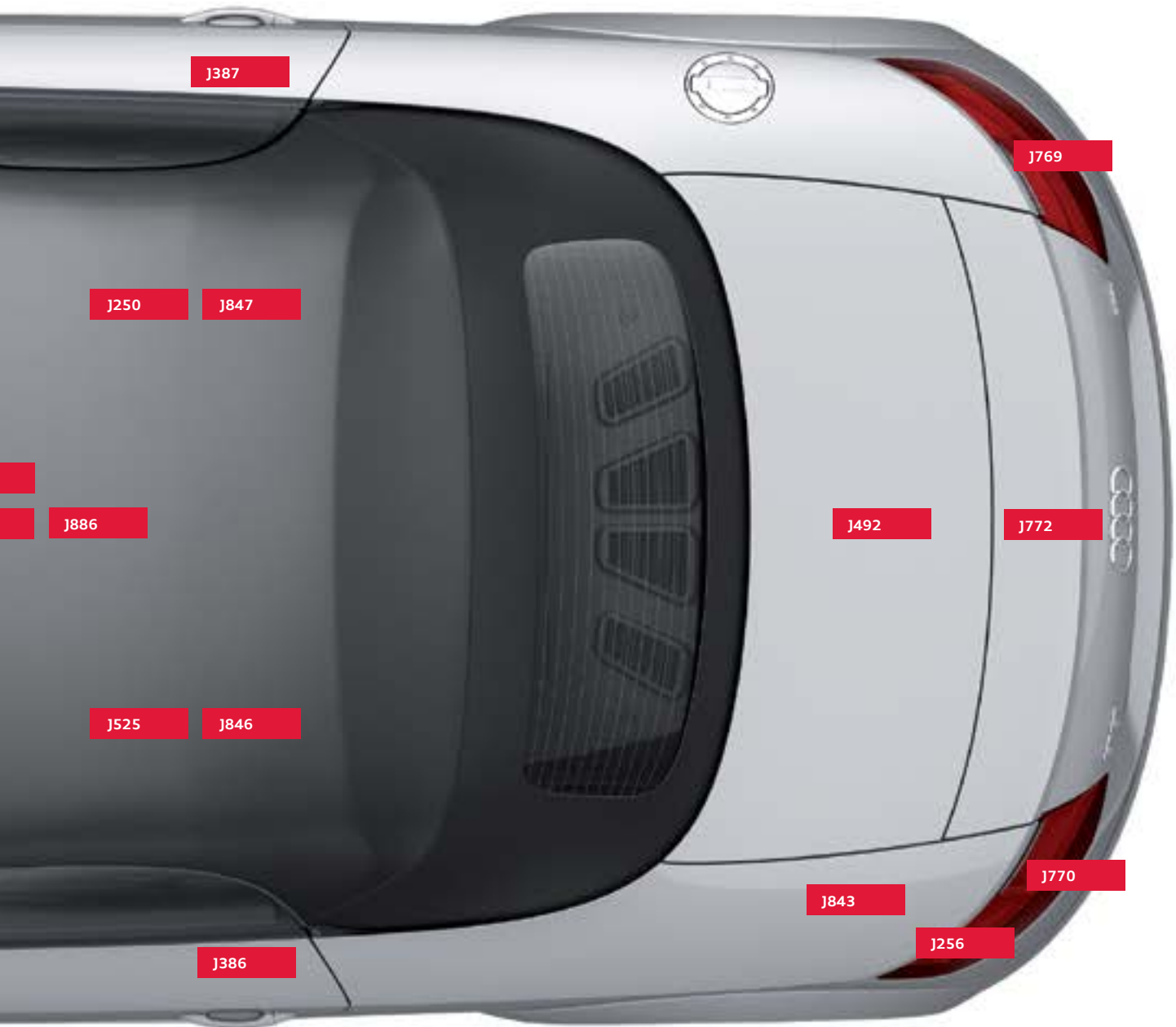
E380	Multi-media System Control Head
J104	ABS/ESP Control Module
J234	Airbag Control Module
J250	Electronic Damping Control Module
J255	Climatronic Control Module
J256	Convertible Top Control Module
J285	Instrument Cluster Control Module
J386	Driver Door Control Module
J387	Passenger Door Control Module

J492	All Wheel Drive Control Module
J500	Power Steering Control Module
J518	Access/Start Authorization Control Module
J519	Vehicle Electrical System Control Module 1
J525	Digital Sound System Control Module
J527	Steering Column Electronics Control Module
J533	Data Bus On Board Diagnostic Interface
J587	Selector Lever Sensor System Control Module
J623	Engine Control Module

Installation locations of control modules

Some of the control modules shown in the overview are optional and/or country-specific equipment.

Please use ElsaPro for identifying the exact locations of control modules and their removal and installation instructions.

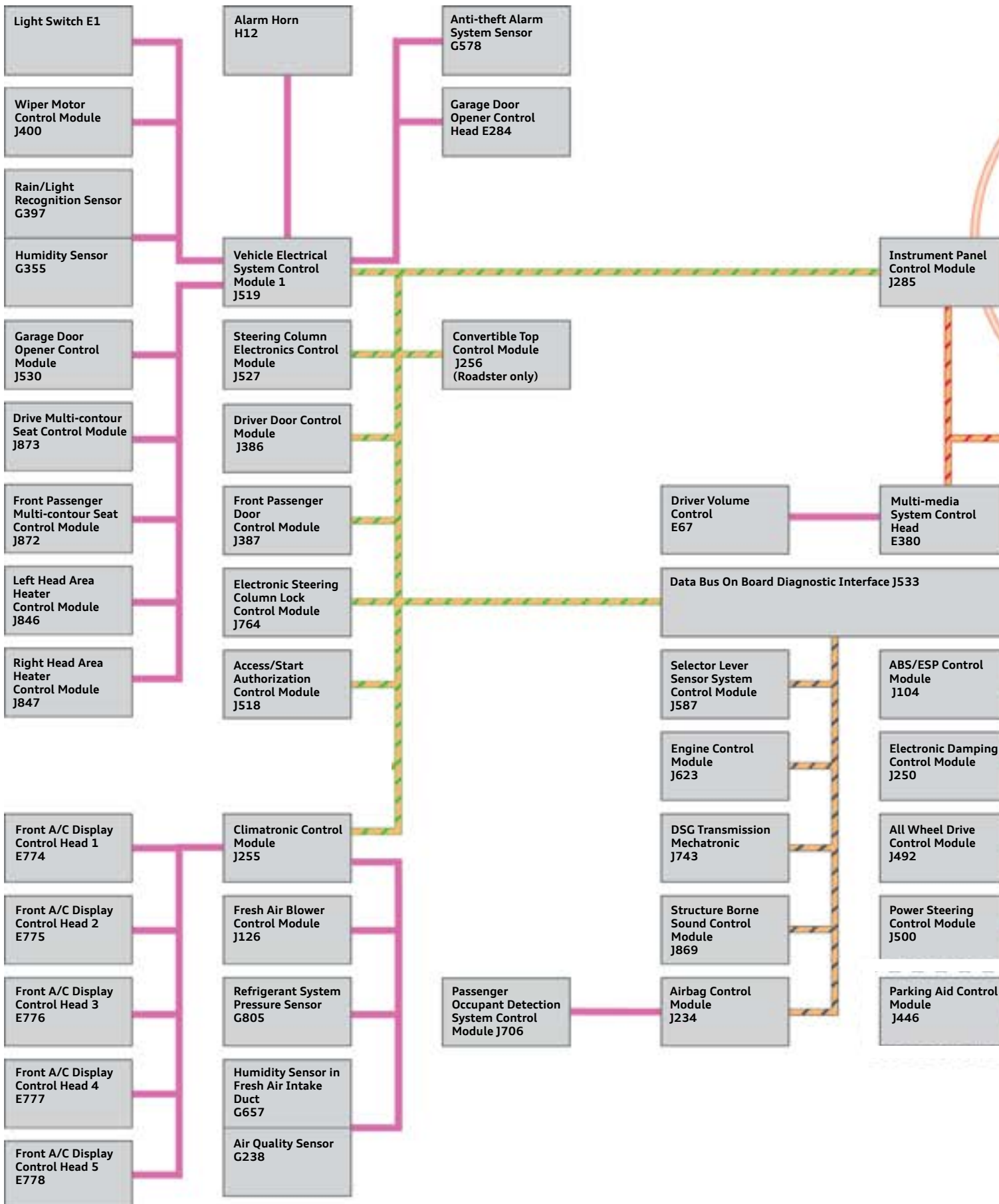


631_084

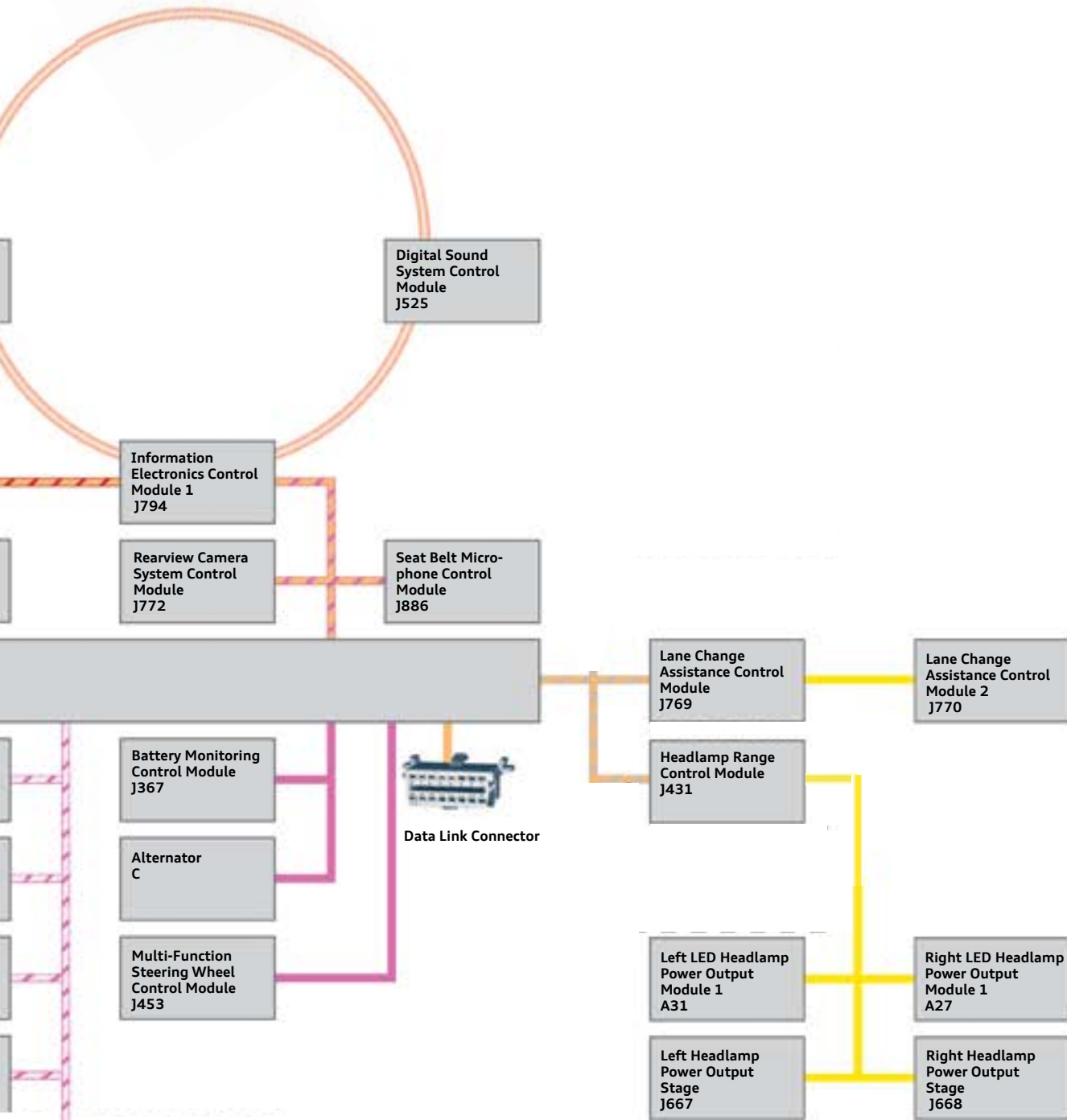
J743 DSG Transmission Mechatronic
J745 Cornering Lamp and Headlamp Range Control Module
J764 Electronic Steering Column Lock Control Module
J769 Lane Change Assistance Control Module
J770 Lane Change Assistance Control Module 2
J772 Rearview Camera System Control Module
J794 Information Electronics Control Module 1

J846 Left Head Area Heater Control Module
J847 Right Head Area Heater Control Module
J869 Structure-borne Sound Control Module
J886 Seat Belt Microphone Control Module
R242 Driver Assistance Systems Front Camera

Topology



Some of the control modules shown here are optional, country specific or may be introduced at a later date.



631_062

Key:

- Powertrain CAN bus
- Convenience CAN bus
- Extended CAN bus
- "OR" configuration

- Infotainment CAN bus
- Diagnostics CAN bus
- Suspension CAN bus
- Modular infotainment system (MIB)

- LIN bus
- Sub-bus systems
- MOST bus

Control modules

Convertible top control

Designation	Convertible Top Control J256
Equipment	Always installed
Installation location	In left hand side of luggage compartment behind trim panel.
Function	Control and monitor the power-operated convertible top
Address Word	26 - Electronic roof control
Data bus communication	Convenience CAN bus user
Special features	Also controls the power-operated wind deflector (optional equipment, PR No.: 7S1)
Further information	Page 14

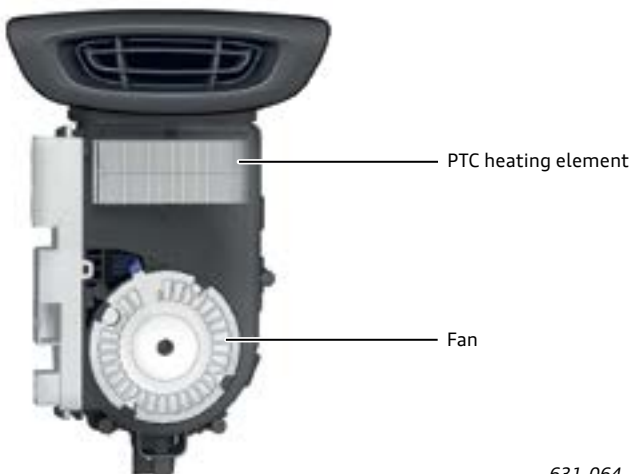


In luggage compartment, on left:
Convertible Top Control Module
J256

631_061

Head area heating system

Designation	Left and Right Head Area Heater Control Modules J846 and J847
Equipment	Optional equipment, PR No.: 9K1
Installation location	In the seat back of each seat
Function	Control the fan and the heating element
Address Word	None - diagnostics via Electrical System Control Module 1 J519
Data bus communication	LIN slave of J519
Special features	<ul style="list-style-type: none"> ▶ Control modules are combined with the fan and the PTC heating element as a unit. ▶ Left hand and right hand modules are identical.
Further information	Page 56



631_064

Seat belt microphone

Designation	Seat Belt Microphone Control Module J886
Equipment	
Installation location	Under the center console
Function	Select the best microphone signal and relay the signals to Information Electronics Control Module 1 J794
Address Word	A6 - microphone control unit
Data bus communication	Infotainment CAN bus user



Seat Belt Microphone Control Module J886

631_083

For optimal speech communication quality, the Audi TT Roadster is equipped with three microphones. One microphone is located in the overhead module, and one microphone in each of the front seat belts. Three microphone capsules are integrated in each seat belt.

Seat Belt Microphone Control Module J886 always selects the best microphone signal and relays it via discreet wiring to Information Electronics Control Module 1 J794.

J886 receives information via the CAN buses to determine whether the driver or front passenger seat belt is inserted into the buckle. The CAN connection is also used for diagnostics.

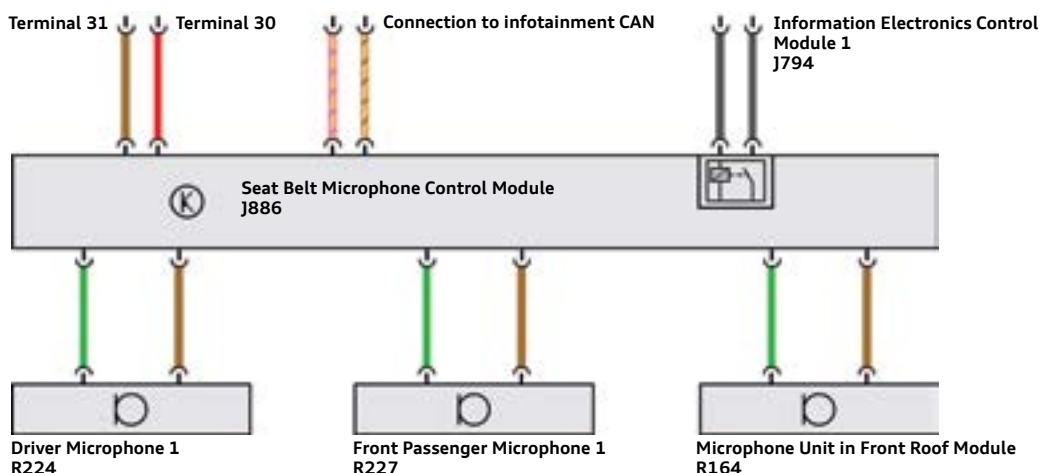
The information received by J886 can result in the following scenarios (refer to table):

Driver's seat belt buckle	<ul style="list-style-type: none"> ▶ Seat belt "inserted" into buckle = seat belt microphone active. ▶ Seat belt "not inserted" into buckle = microphone in overhead microphone active.
Front passenger's seat belt buckle	<ul style="list-style-type: none"> ▶ Seat belt "inserted" into buckle and front passenger airbag active = driver and front passenger microphone active / signal selection (best signal) through both seat belt microphones. ▶ Seat belt "inserted" into buckle and front passenger airbag deactivated = only with active driver's seat belt microphone (interpretation: child seat). ▶ Seat belt "not inserted" into buckle = only driver microphone active.

Special feature

A relay is built into J886 upstream of the output to Information Electronics Control Module 1 J794.

If J886 is faulty or de-energized, the relay connects the overhead microphone directly to J794.



631_090

Climate control

Introduction

The climate control system of the Audi TT Roadster is based on that of the Audi TT Coupe.

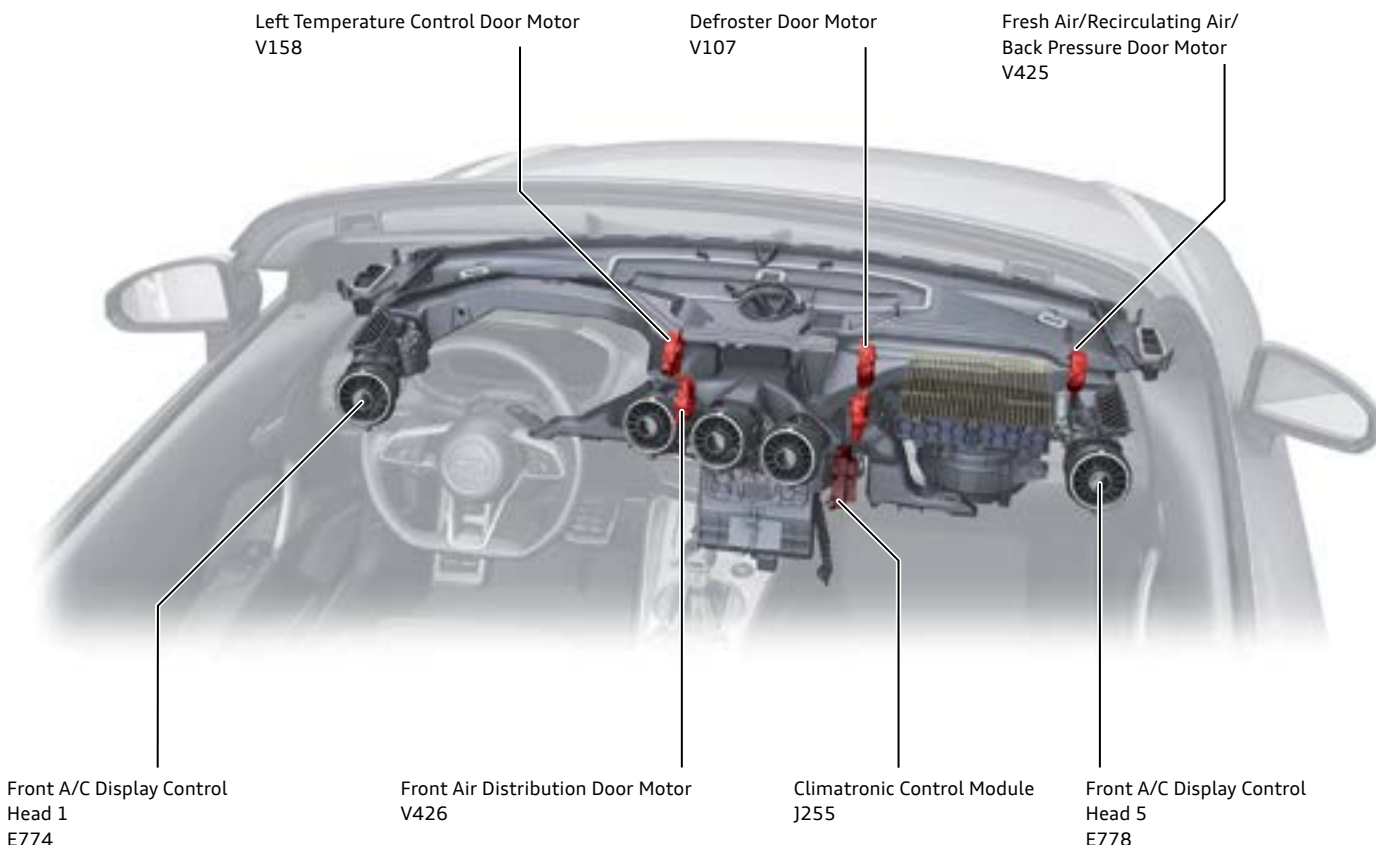
The following components and equipment are identical in the Audi TT Coupe and the Audi TT Roadster:

- ▶ Heater and air conditioner.
- ▶ Water drain.
- ▶ Forced ventilation of the cabin.
- ▶ Dust and pollen filter.
- ▶ The air conditioning system is operated by controls integrated in the 5 outlets.

The maintenance and repair operations for the climate control system are also identical to those of the Audi TT Coupe.

On Audi TT Roadster, the following settings may differ depending on whether the convertible top is open or closed.

- ▶ With Climatronic Control Module J255:
 - ▶ Climatronic settings, for example, A/C on/off, temperature settings, fan speed etc.
- ▶ With Head Area Heater Control Modules J846 and J847:
 - ▶ The head area heating system has 3 different selectable settings for fan speed and PTC heating element output.



631_086



Reference

For more information about the air conditioning system, refer to eSelf-Study Program [990153, The 2016 Audi TT Introduction](#).

Seat systems

The following sport seats are available for the Audi TT Roadster:

- ▶ Basic sport seat, manually adjustable.
- ▶ Optional multicontour S sport seat with integrated head restraint and electrical lumbar support.
- ▶ Optional multicontour S sport seat with pneumatic back rest adjustment and pneumatic lumbar support.

The multicontour S sport seats are optionally available with head area heaters.

Design of the multicontour S sport seat with head area heater



Head area heater

The head area heater is optionally available for the seat heater in the Audi TT Roadster.

Vehicles with the head area heaters also have operating controls and display icons integrated in Front A/C Display Control Head 1 and Front A/C Display Control Head 5. Pushing the control operates the seat heater, turning controls the head area heater (refer to the arrows).



631_088

Outlet

Vehicles with head area heaters can also be identified by the outlets on the seat back in the neck region. Head Area Heater Control Modules J846 and J847 are integrated on the sides of the seat backs of their respective seats.



631_089

Operating cycle of seat heating system and head area heating system

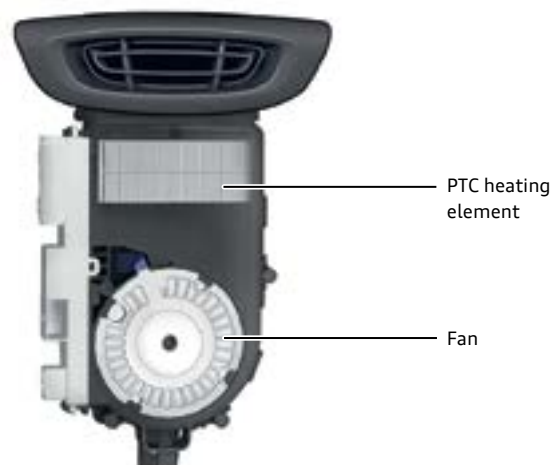
If the seat heater or head space heater is switched on by an occupant, the following components are activated, one after the other:

- ▶ E774 or E778 sends the setting data for the seat heater/head area heater to the Climatronic Control Module J255 by LIN data bus.
- ▶ J255 sends the signals to Vehicle Electrical System Control Module 1 J519 by CAN bus.
- ▶ Depending on the selection made, J519 activates the following components:
 - ▶ Seat heater elements (directly).
 - ▶ Head Area Heater Control Modules J846 or J847 by LIN data bus.

Head Area Heater Control Modules J846 and J847

J846 and J847 are identical and assigned to the driver side or front passenger side by a PIN coding.

Both control modules evaluate the heater setting, the status of the convertible top (open/closed) and then control the fan speed and PTC heating element accordingly. This data is received from Vehicle Electrical System Control Module 1 J519 via a LIN bus.

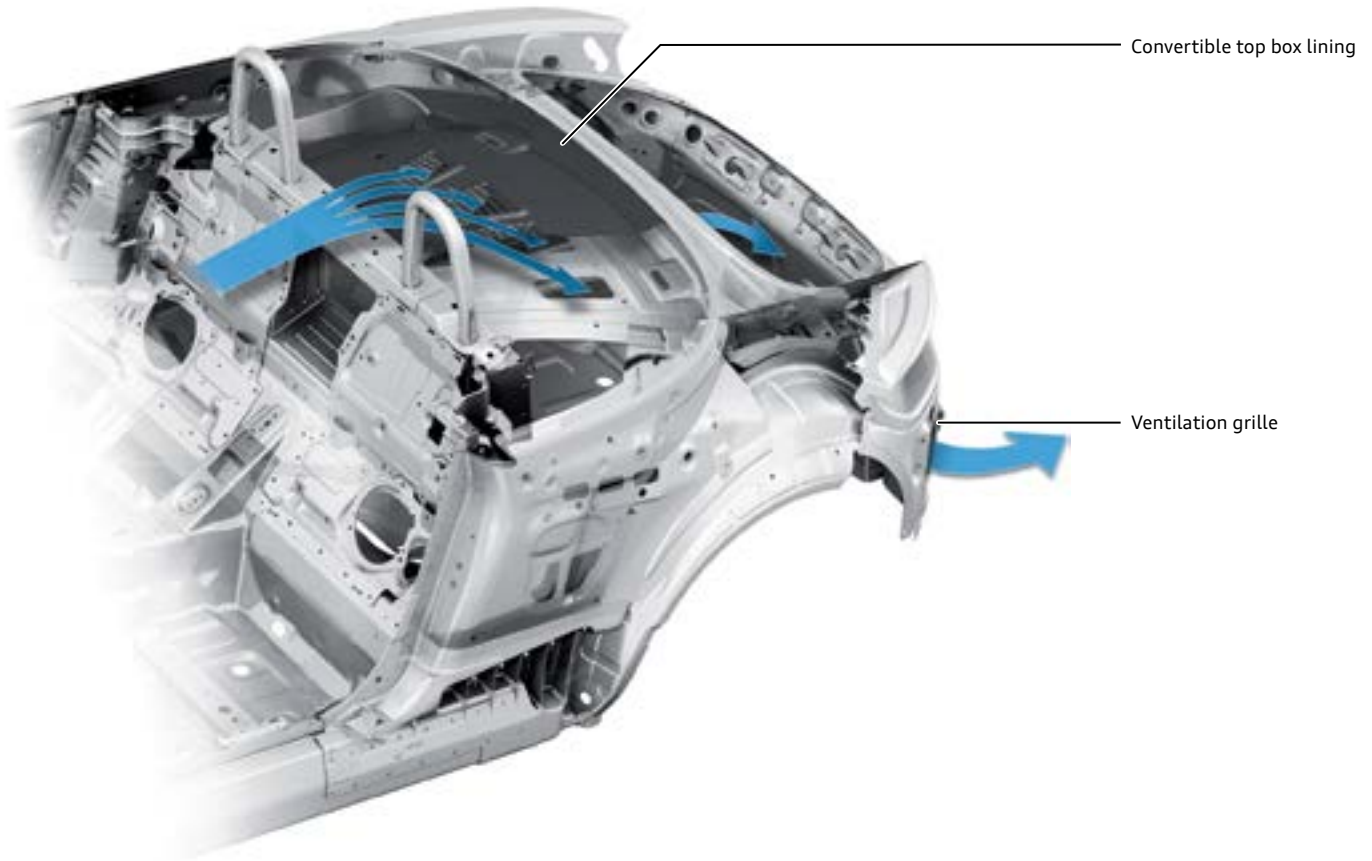


631_064

Flow-through ventilation of the cabin

Flow-through ventilation of the occupant cell in the Audi TT Roadster is done through openings in the convertible top box lining.

The air initially flows through these openings into the luggage compartment, and then through openings in the luggage compartment side trims to the ventilation grilles in the body.



631_063

Key recognition

Various climate control settings are saved after switching off the ignition and assigned to the remote control key in use.



631_079



Reference

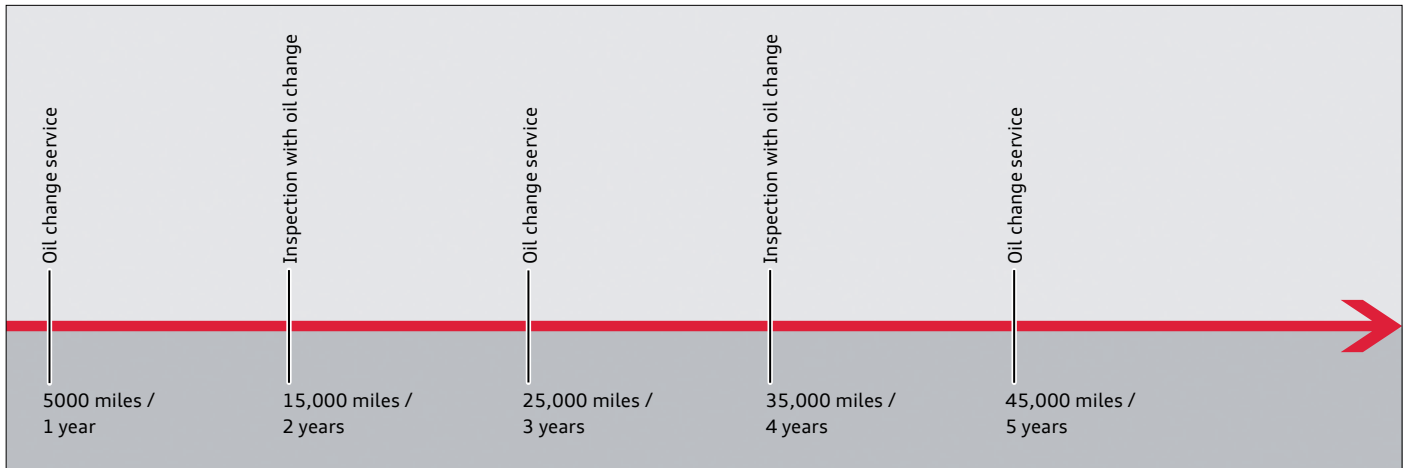
For more information about the car keys, please refer to eSelf-Study Program [970153, The 2016 Audi TT Vehicle Electrics, Electronics, and Infotainment Systems.](#)

Service

Inspection and maintenance

The Audi TT is subject to fixed inspection and maintenance intervals in the USA.

The value indicated for the next oil change is 5,000 miles / 365 days for new vehicles. The next oil change after this is fixed at 10,000 miles / 365 days.



630_023

2.0l TFSI

Oil change	According to service interval display, between 15,000 km / 1 year and 30,000 km / 2 years depending on driving style and conditions of use.
Inspection	30,000 km / 2 years
Pollen filter change interval	60,000 km / 2 years
Air filter change interval	90,000 km
Brake fluid change interval	Change after 3, 5, ... years
Spark plug change interval	60,000 km / 6 years
Fuel filter change interval	-
Timing gear	Chain (lifetime)
Gear oil change interval ¹⁾	60,000 km

¹⁾ S tronic



Note

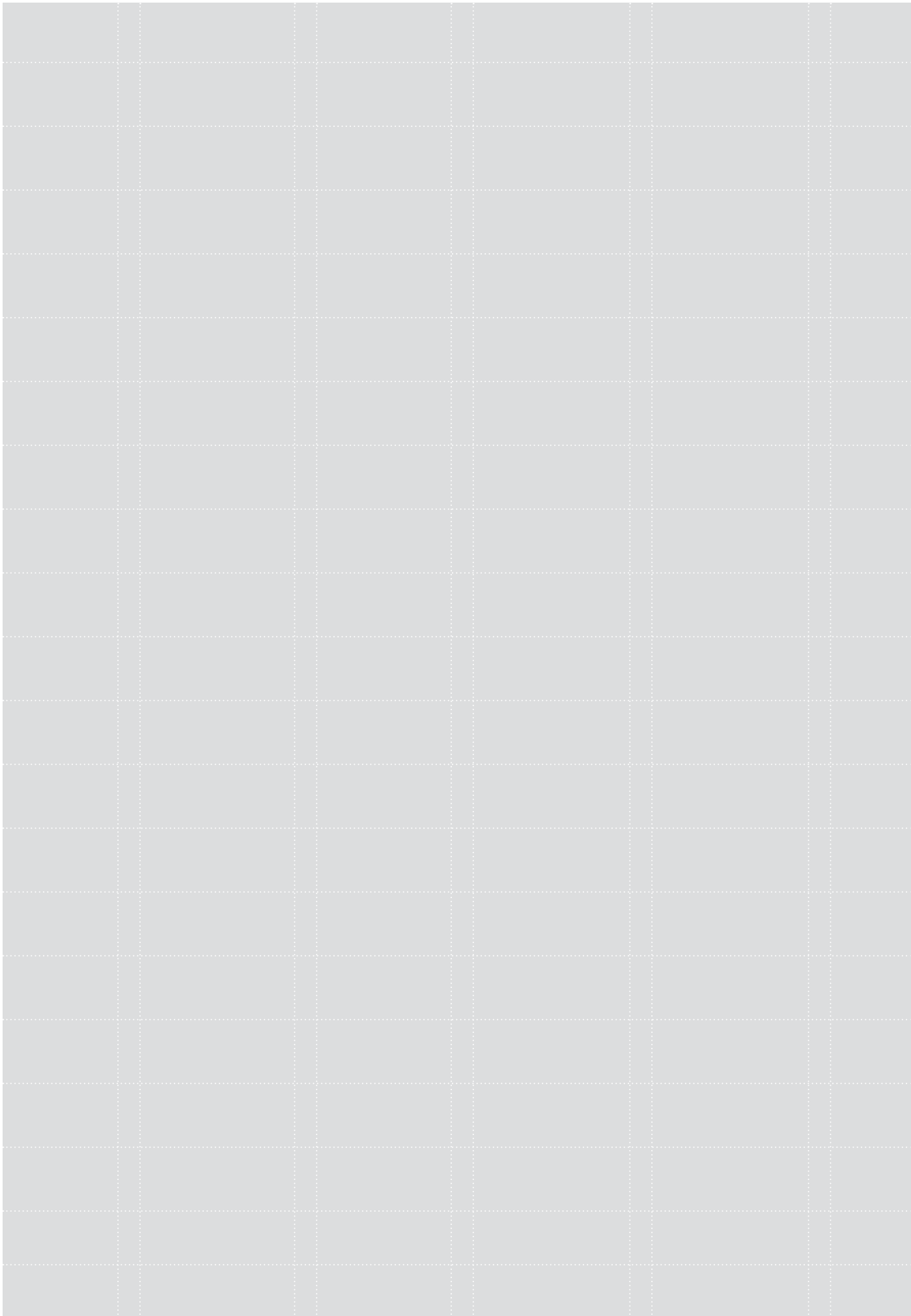
Always consult ElsaPro for the latest information about maintenance schedules and service procedures.



Note

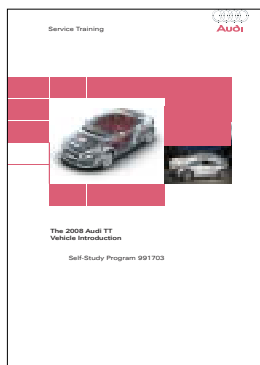
Always check the Fluid Capacity Chart in ServiceNet for the correct oil specification and fluid level before changing oil. Always use special tool T40178 when measuring the engine oil level.

Notes

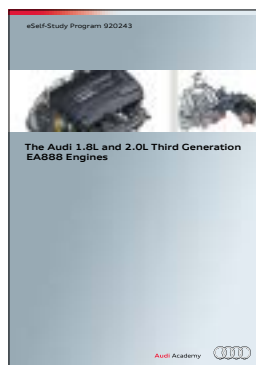


Self study programs

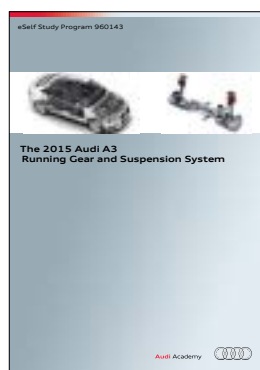
For more information about the technology of the Audi TT Roadster, please refer to the following self study programs.



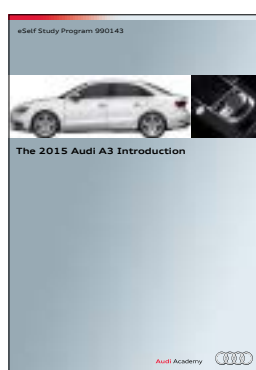
991703
The 2008 Audi TT Vehicle Introduction



920243
The Audi 1.8L and 2.0L Third Generation EA888 Engines



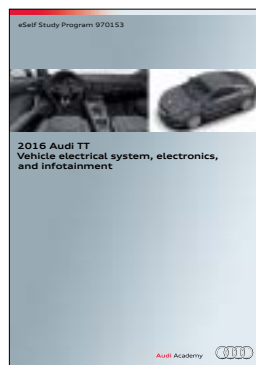
960143
The 2015 Audi A3 Running Gear and Suspension System



990143
The 2015 Audi A3 Introduction



910153
Audi Virtual Cockpit



970153
The 2016 Audi TT Vehicle Electrical, Electronics, and Infotainment Systems

Knowledge assessment

An On-Line Knowledge Assessment (exam) is Available for this eSelf-Study Program.

The Knowledge Assessment is required for Certification credit.

You can find this Knowledge Assessment at:

www.accessaudi.com

From the accessaudi.com Homepage:

- ▶ Click on the “ACADEMY” tab
- ▶ Click on the “Academy site” link
- ▶ Click on the Course Catalog Search and select “990253 - The 2016 Audi TT Roadster”

Please submit any questions or inquiries via the Academy CRC Online Support Form which is located under the “Support” tab or the “Contact Us” tab of the Academy CRC.

Thank you for reading this eSelf-Study Program and taking the assessment.

All rights reserved.
Technical specifications are
subject to change without notice.

Audi of America, LLC
2200 Ferdinand Porsche Drive
Herndon, VA 20171