



The 2015 A3 Cabriolet



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

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eMedia



This eSSP contains video links which you can use to access interactive media.

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

Audi A3 Cabriolet '15

Sporty, elegant and multi-faceted - the new 2015 Audi A3 Cabriolet. This compact four seater impresses at first glance with its flowing lines and soft top. It is also at the top of its class technically with systematic lightweight design, new engines, sophisticated networking and high performance driver assistance systems.

The A3 Cabriolet has a soft top that is stretched over a lightweight magnesium and steel kinematic mechanism. At the press of a button, the top opens or closes electro-hydraulically in less than 18 seconds; even when driving up to speeds of 31 mph (50 km/h). The fully automatic top has a glass rear window with an electric rear defroster. An active rollover protection system protects the occupants in case of a rollover accident.

As with every Audi, workmanship quality is uncompromisingly high, and the vehicle's controls are simple, intuitive and convenient. The A3 Cabriolet offers enough room for four adults. The rear seats can be folded down to create a wide through-load area when the top is up. The interior features new steering wheel and seat designs as well as an electro-mechanical parking brake operated by a push button on the center console.

All engines in the new A3 Cabriolet combine the high technologies of direct fuel injection and turbocharging. On average, the two engines offered at market launch have excellent fuel economy while offering a high performance driving experience (1.8 and 2.0L).

The chassis of the A3 Cabriolet uses sophisticated technology that delivers sporty handling, superior vehicle safety and a high level of comfort. Some components of the MacPherson strut front suspension are made of aluminum while the four-link rear suspension handles longitudinal and transverse forces separately. The power steering system features an efficient electro-mechanical drive.

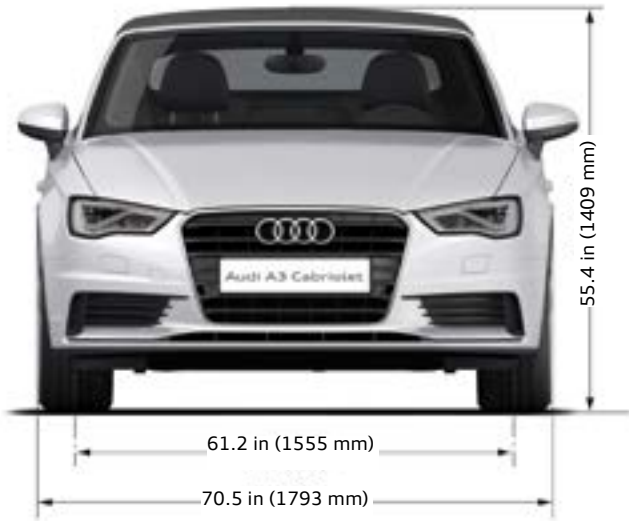
The ABS/ESP system has all the features offered on other Audi vehicles which provide safe, stable and predictable operation.



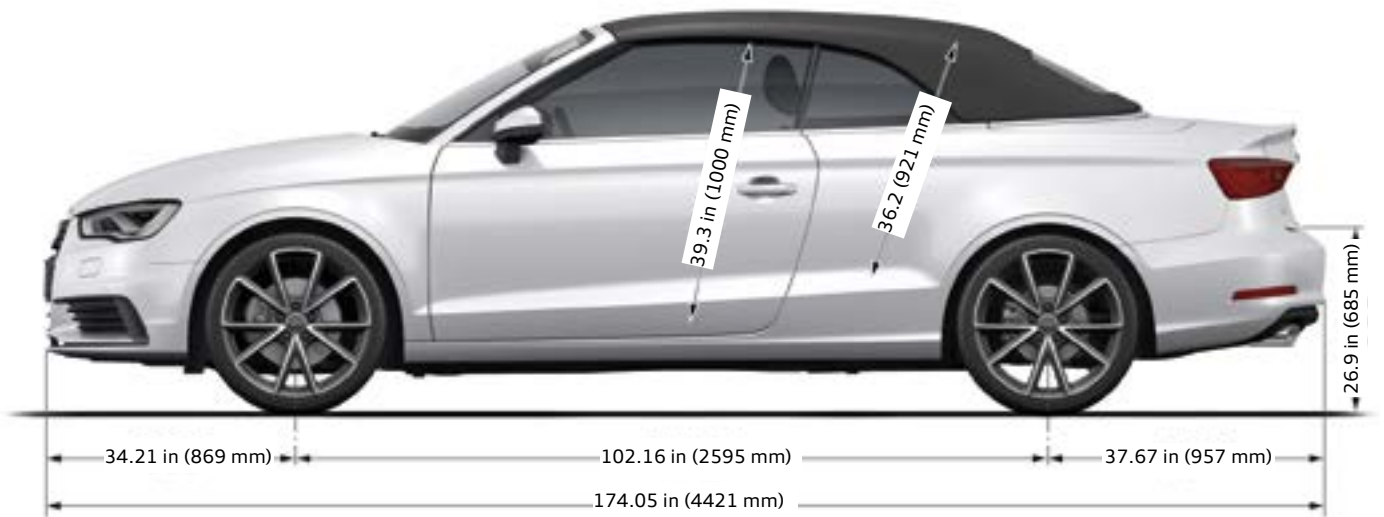
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Introduction

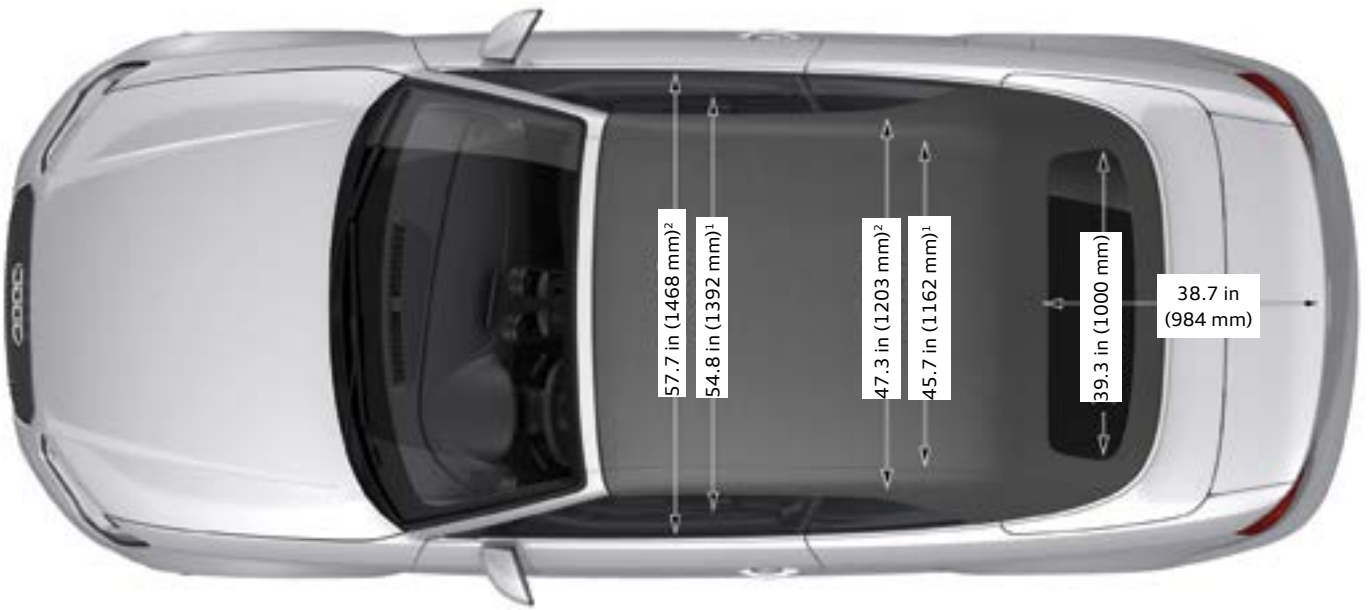
Dimensions



623_002



623_003



623_004

Length	174.05 in (4421 mm)	Cabin width, front¹⁾	57.7 in (1468 mm)
Width	70.5 in (1793 mm)	Cabin width, rear	47.3 in (1203 mm)
Height	55.4 in (1409 mm) ³⁾	Headroom, front²⁾	39.3 in (1000 mm)
Track width, front	61.2 in (1555 mm)	Headroom, rear	36.2 in (921 mm)
Track width, rear	60.07 in (1526 mm)	Load sill height	26.9 in (685.0 mm)
Wheelbase	102.1 in (2595 mm)	Trunk capacity	11.3 cu ft (320 l)
Trailer load with brake at a gradient of 8 %	3968.3 lb (1800 kg)	Fuel tank capacity	13.2 gal (50.0 l)
Curb weight	3152.6 lb (1403 kg)	Drag coefficient in c_w	0.30
Max. gross weight	4254.9 lb (1930 kg)		

¹⁾ Shoulder room width

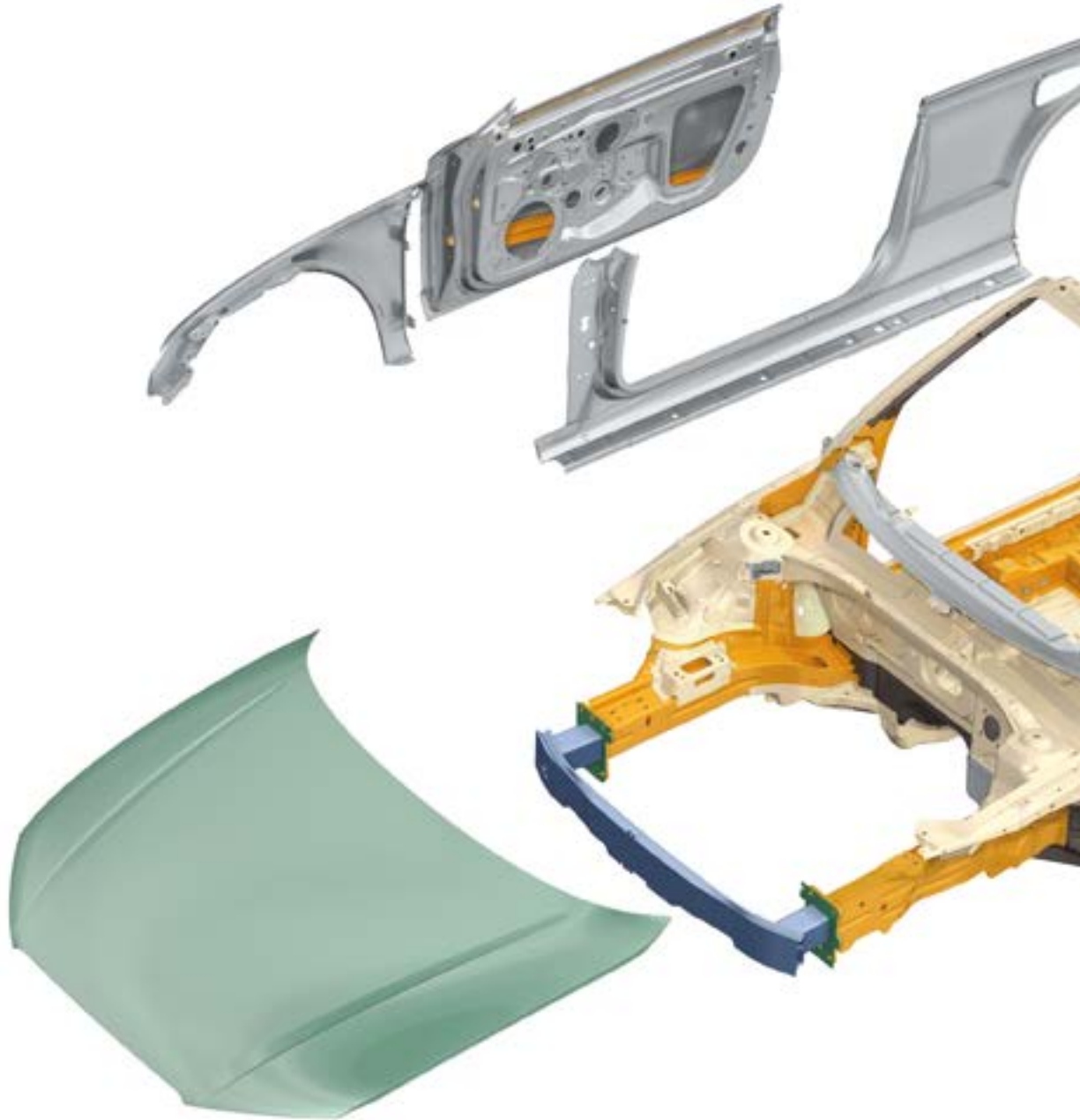
²⁾ Maximum headroom

³⁾ excluding mirror

Body

Structure/materials

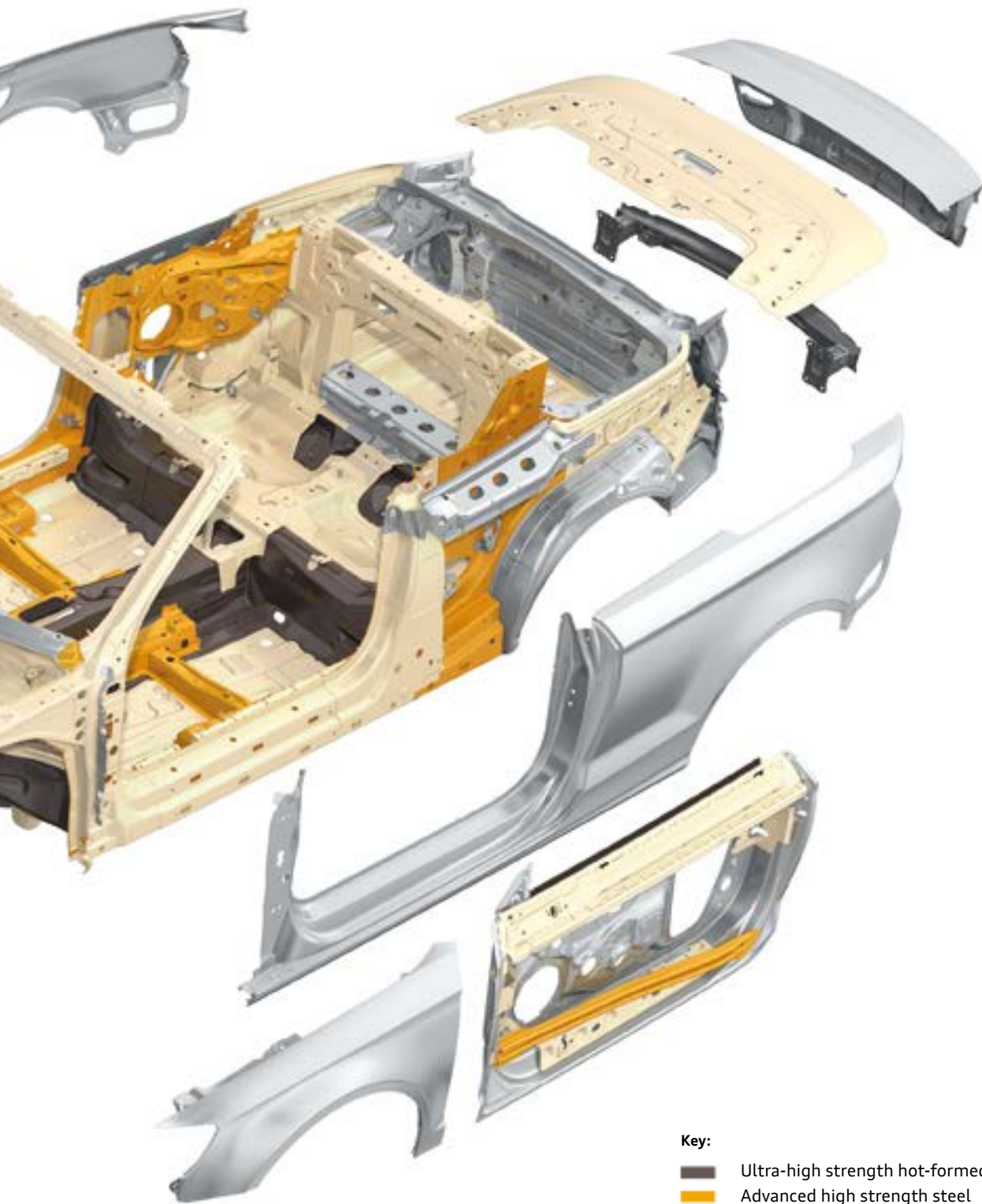
The body of the 2015 A3 Cabriolet is based on the 2015 A3 sedan. Thanks to Audi ultra-lightweight technology, convertible specific elements such as the 'A' pillar, front roof frame, rear bulkhead and the underbody are designed so they do not add undesirable weight to the vehicle.



Lightweight steel components







The front fenders, doors, convertible top box lid, trunk lid and rear bumper cross member are made from lightweight steel.

The front bumper cross member and hood are made from aluminum.



623_106

Key:

-  Ultra-high strength hot-formed steel
-  Advanced high strength steel
-  High strength steel
-  Low strength steel
-  Sheet aluminium
-  Aluminium section

A-pillar reinforcement

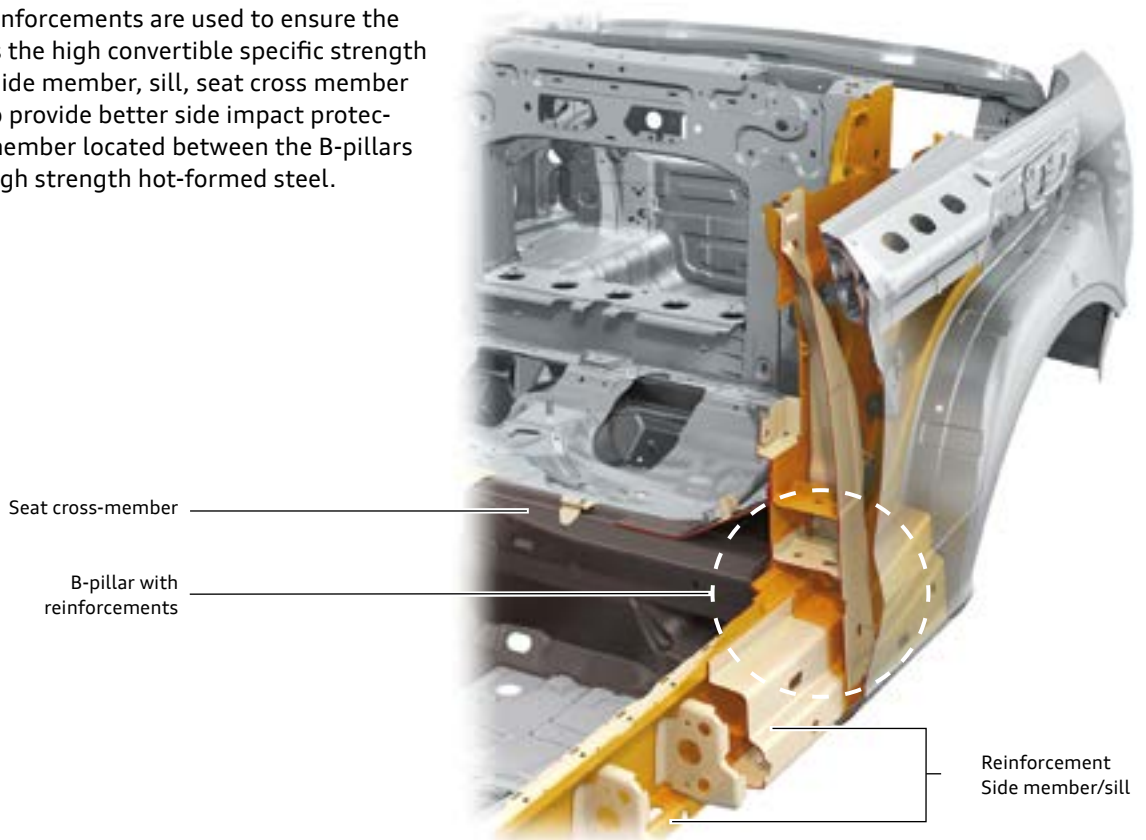
The 2015 A3 cabriolet affords a high level of safety in the event of a rollover accident through its extremely stiff two-component A-pillar structure.

The A-pillar is constructed with a modern high tensile strength inner plate and a ultra-high strength hot-formed steel reinforcement tube.



Side member, sill, and seat cross member reinforcements

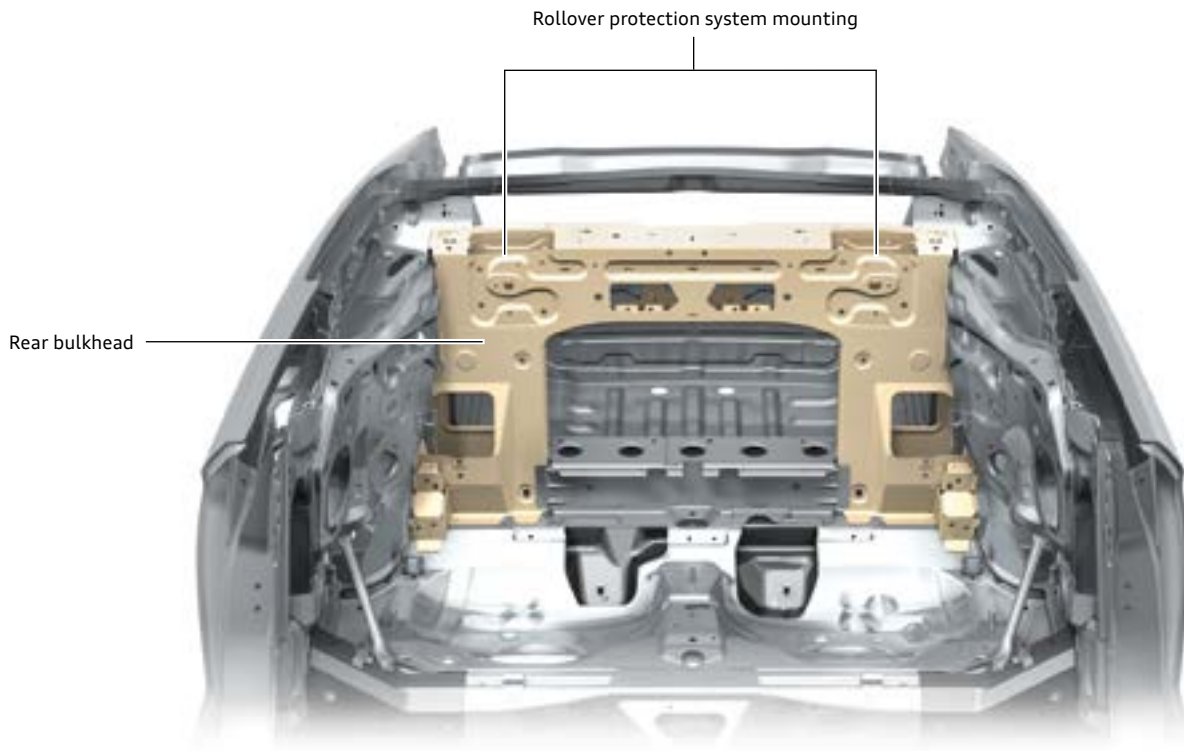
Various additional reinforcements are used to ensure the body structure meets the high convertible specific strength requirements in the side member, sill, seat cross member and B-pillar areas. To provide better side impact protection, the seat cross member located between the B-pillars is made from ultra-high strength hot-formed steel.



Rear bulkhead

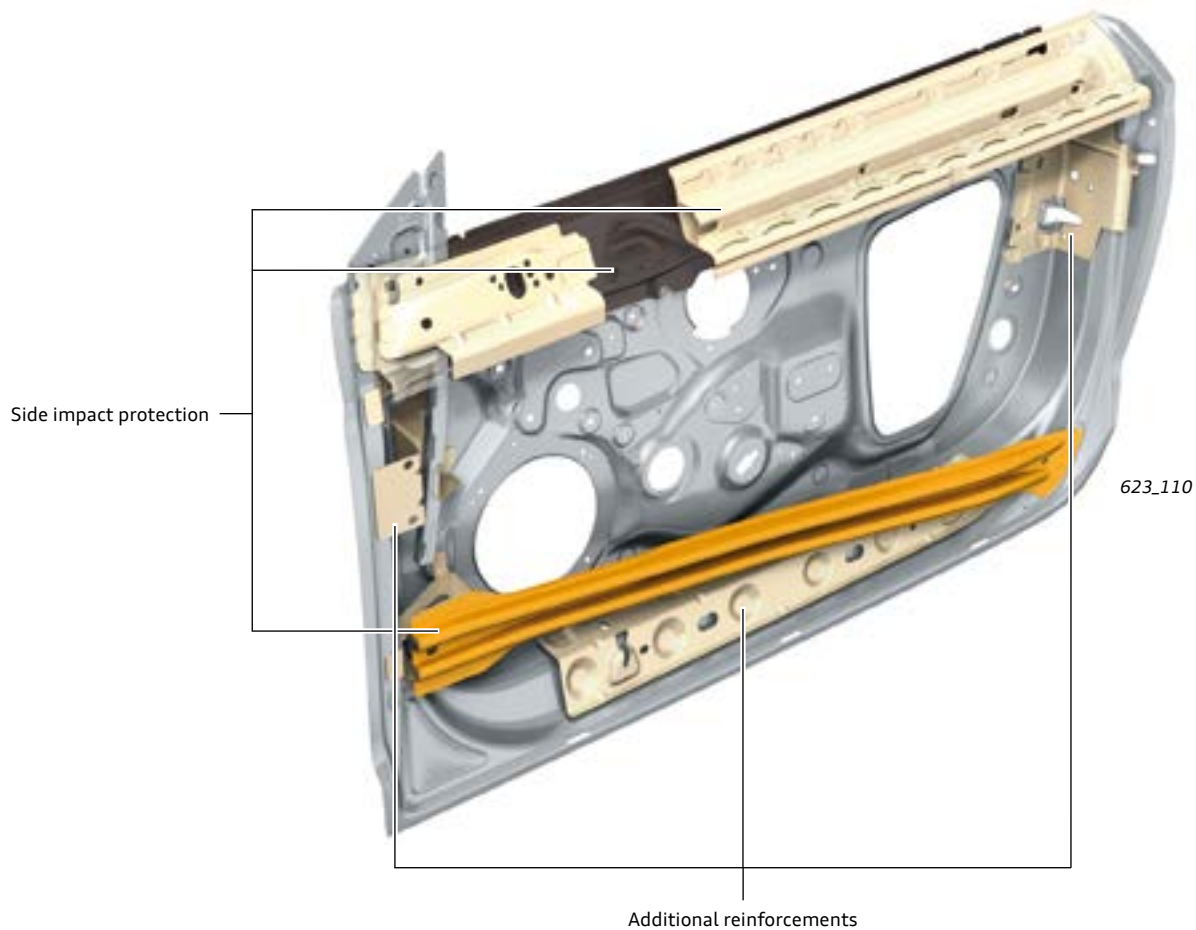
Additional body strengthening is provided by the rear bulkhead. High strength sheet steel is used to provide extremely high rigidity in crash relevant areas like the rollover protection system mounting points.

This not only provides optimum safety for the vehicle occupants, it also increases the stiffness of the occupant cell significantly.



623_109

Door side impact reinforcement



623_110

Convertible top

The Audi A3 Cabriolet roof is a classical soft top design known as a K fold system.

The frame is made of magnesium, aluminum and steel components. It opens electro-hydraulically in less than 18 seconds even while driving at speeds up to 31 mph (50 km/h). When the top is opened it folds into three layers and is stored in its own well.

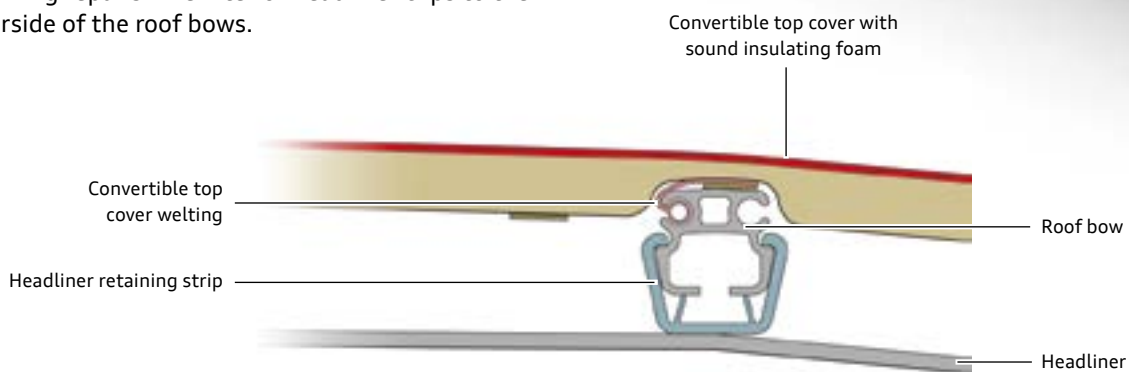
The soft top is made from rugged materials and has an integral heated glass rear window. This makes the A3 Cabriolet suitable even for winter use.

The complete convertible top (frame and cover) weighs approximately 112 lb (51 kg).



Roof bow

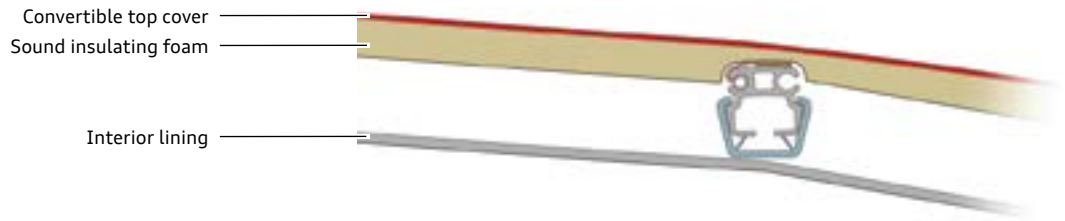
Welting stitched into the convertible top cover slides into grooves in the roof bows. The cover can be removed and installed by pulling or pushing it from the sides, simplifying repairs. The interior headliner clips to the underside of the roof bows.



623_111

Convertible top fabric

The convertible top cover itself is a three-layered structure. The outer layer is made of an acrylic nitrile fabric, the middle layer of butyl rubber while the inner layer is a polyester fabric. The cover is a three part design; it has a middle panel and two side sections.



623_112



Rear window

The glass rear window is made of 3.15 mm toughened safety glass and is electrically heated. It is bonded to the convertible top cover.

AM antenna (AM2, R11)

AM2 is sewn into the convertible top material.

Tensioning strut

The tensioning strut sits on the convertible top box lid when the top is closed and locked into position. This allows the hydraulic system to be depressurized after closing.

623_113



Note

The integrated glass rear window cannot be replaced separately from the convertible top cover.

Movable convertible top well

A movable convertible top well is located in the luggage compartment of the A3 Cabriolet.

The top can only be lowered when the movable convertible top well is in its lowest position. It is lowered manually by using a pull handle.

When the convertible top is closed, the movable convertible top well can be raised to provide more room in the luggage compartment.



Windbreak

The windbreak reduces drafts inside the vehicle for greater comfort when driving with the top down.

It attaches to the rear side trim panels behind the front seats and is then moved into an upright position.

The windbreak can remain installed in the vehicle when the convertible top is closed or it can be stored in its own bag in the luggage compartment when removed.

Convertible top box lid/service position

The convertible top box lid is a lightweight steel component that protects the top when it is down. The lid is opened and closed by two hydraulic cylinders mounted on the left and right hinges.

During repair work on the convertible top, both the top and the convertible top box lid must be moved into a service position. To prevent the top from closing, both knee hinges must be pushed towards the tensioning strut at the upper pivot point as far as the stop.

A tensioning strap (T10038) and two hooks (T40306) are then attached to the top centrally at the front and rear edges and hold the top in its assembly position.

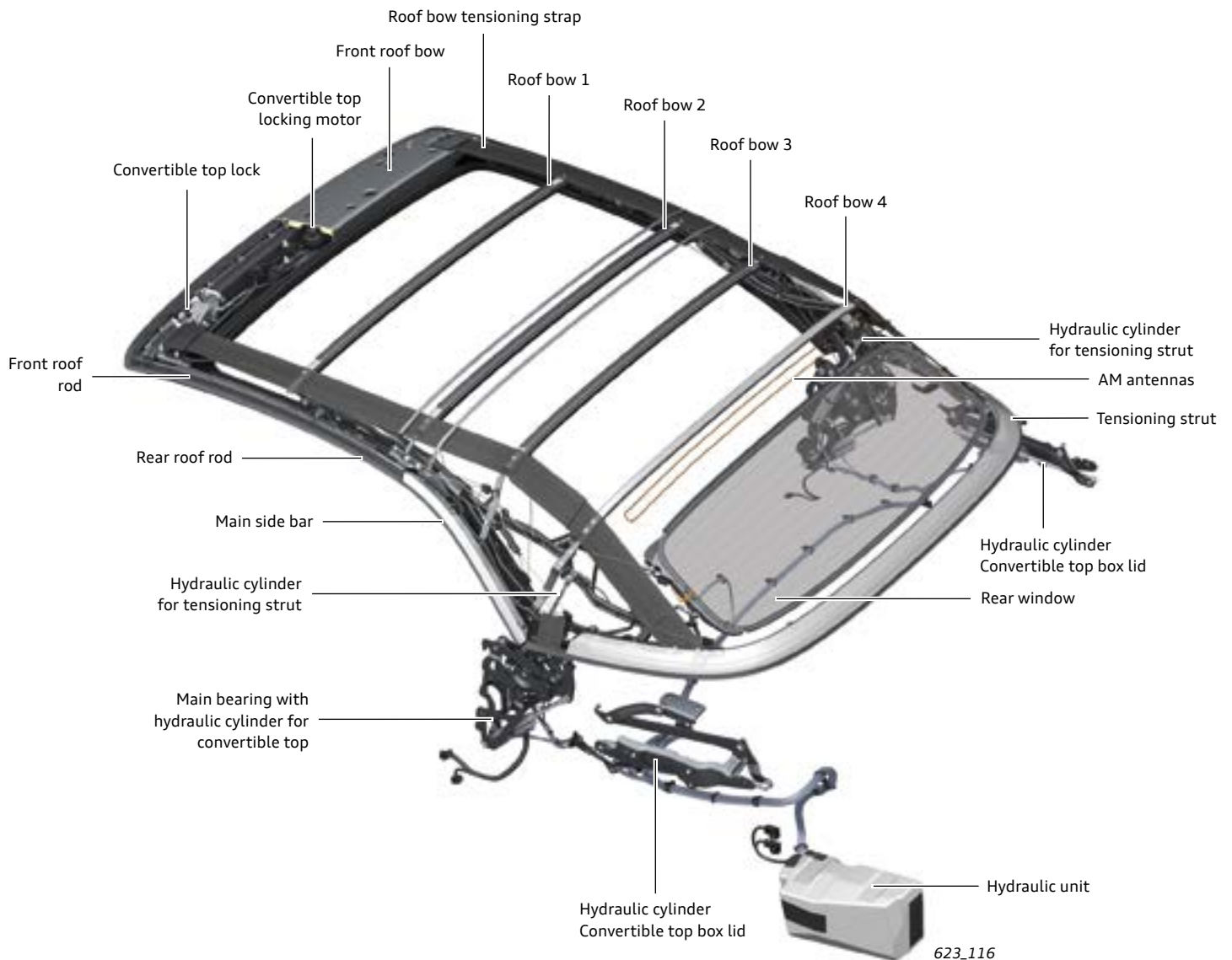


623_115

Convertible top frame

The convertible top frame is bolted to the car body on both the left and right side with a main bearing attached to a mounting plate. The position of the plate is defined by the reference point system (RFS) of the car body during manufacturing and cannot be changed.

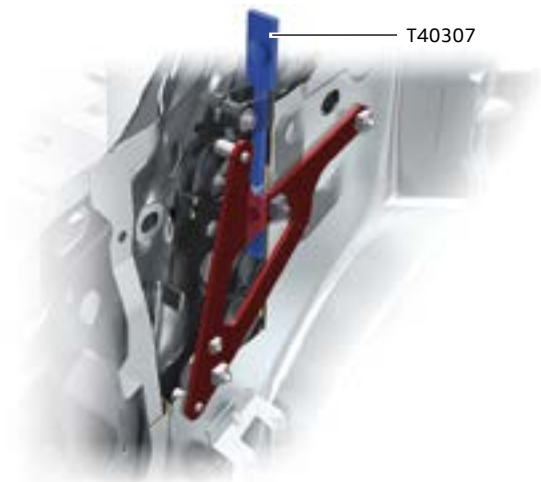
Roof bows 1 - 4 are made from extruded aluminum sections. Because of its complex design, the front roof bow is made from high grade magnesium. The use of these materials enables the top frame to meet high standards for stability and strength.



Main bearing service tools

Two spacers (special tool T40307) are inserted into the left and right main bearings from above when the top is removed. They remain installed in the main bearings during the time the top is removed and stored during repairs.

When the top is removed, the spacers replace the missing stop buffers on the car body and prevent damage to the top cover and frame.



Note

Please follow the instructions given in the Electronics Service Information during all work on the convertible top.

Hydraulic unit

An electric motor, valve block (including pump and valves) and an oil tank make up the hydraulic unit.

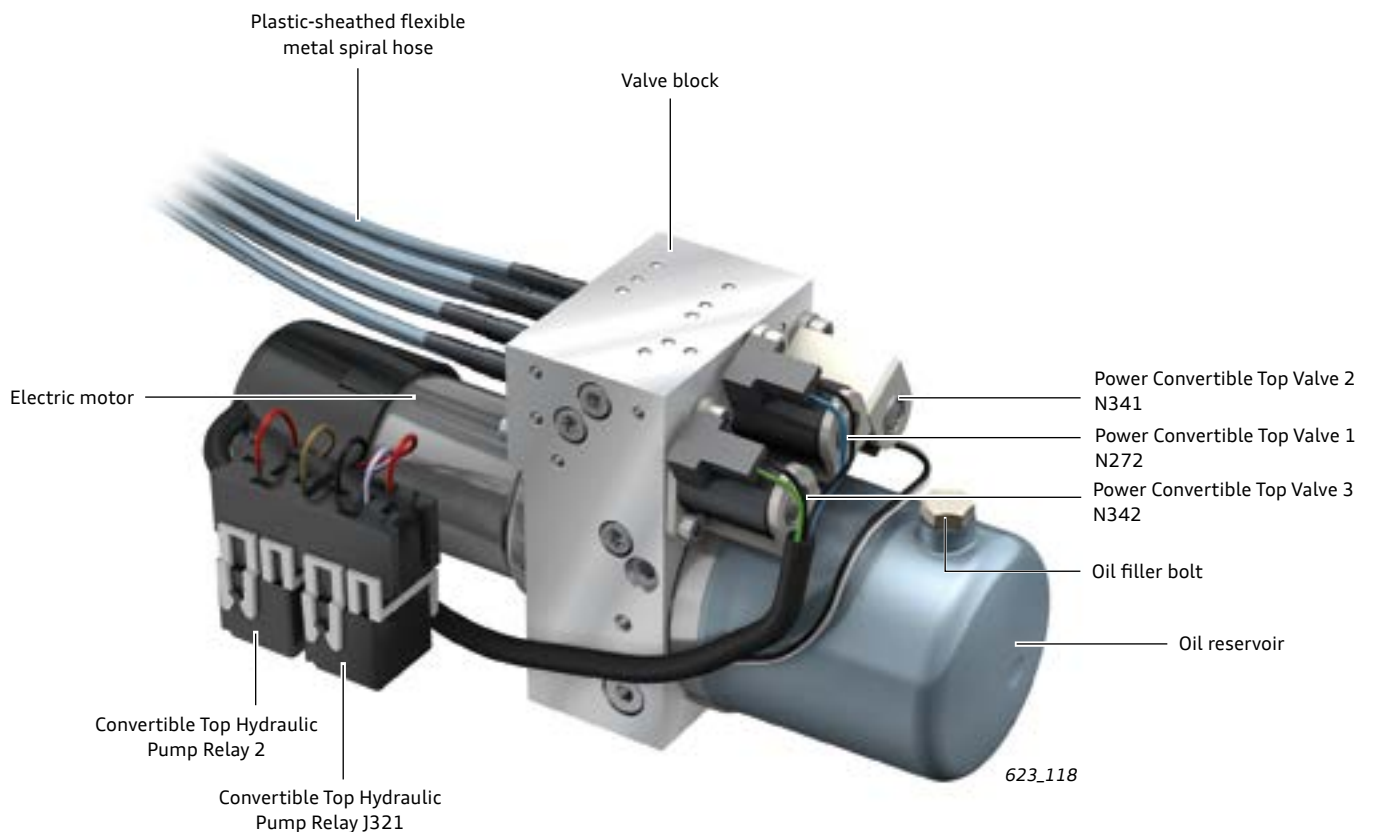
Plastic sheathed flexible metal spiral hoses connect the hydraulic cylinders to the hydraulic unit. Relays J588 and J321 are clipped onto the hydraulic unit and control the operating current for the clockwise and counter-clockwise operation of the pump.

When the top is being raised or lowered, the pump runs and valves 1 - 3 control the flow of fluid according to the required sequence of movements.

The pump rotation only needs to be reversed to move the tensioning strut into position when raising the top.

Pump pressure is limited to 2611 psi (180 bar) by pressure limiting valves.

When the system is at rest, the hydraulic fluid can flow back from the hydraulic cylinders to the fluid reservoir unpressurized. This operating feature also allows the emergency operation of the top.



Bleeding the system

No bleeding process needs to be done after repairs to the hydraulic system. The system is bled automatically during operation.

Solenoid valves

The hydraulic system uses 3/2 way valves (3 connections and 2 switch positions) which are operated by solenoids. Oil flows from the hydraulic cylinders and into the oil reservoir when the valves are de-energized and from the pump to the cylinders when energized.

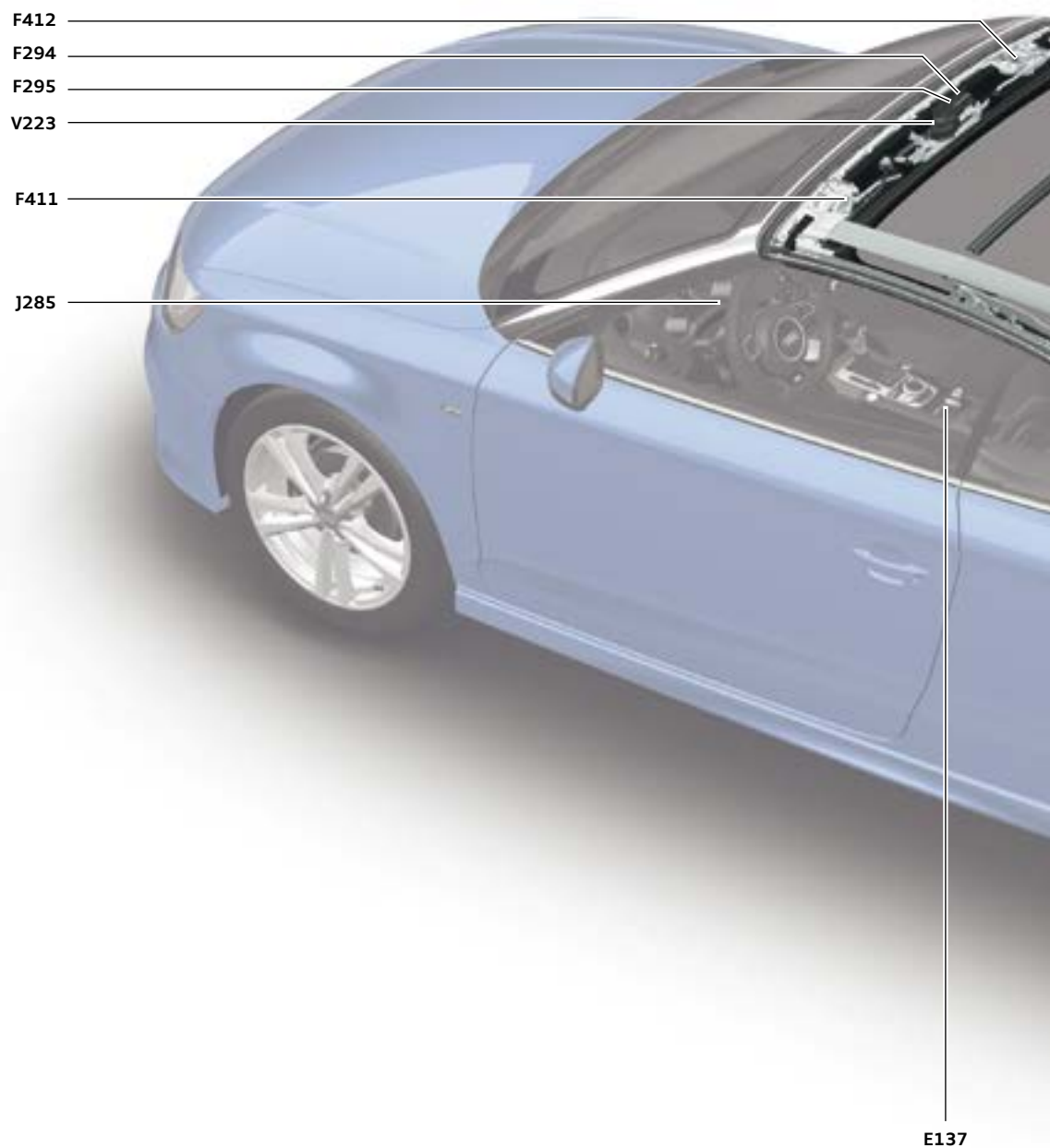
Hydraulic cylinder

Bi-directional hydraulic cylinders are used. They are activated according to the convertible top movement sequence.

The valves are activated by Convertible Top Control Module J256 for up to five minutes. The top can be emergency operated immediately after the valves have been switched off. When the valves are de-energized after five minutes, the hydraulic system depressurizes.

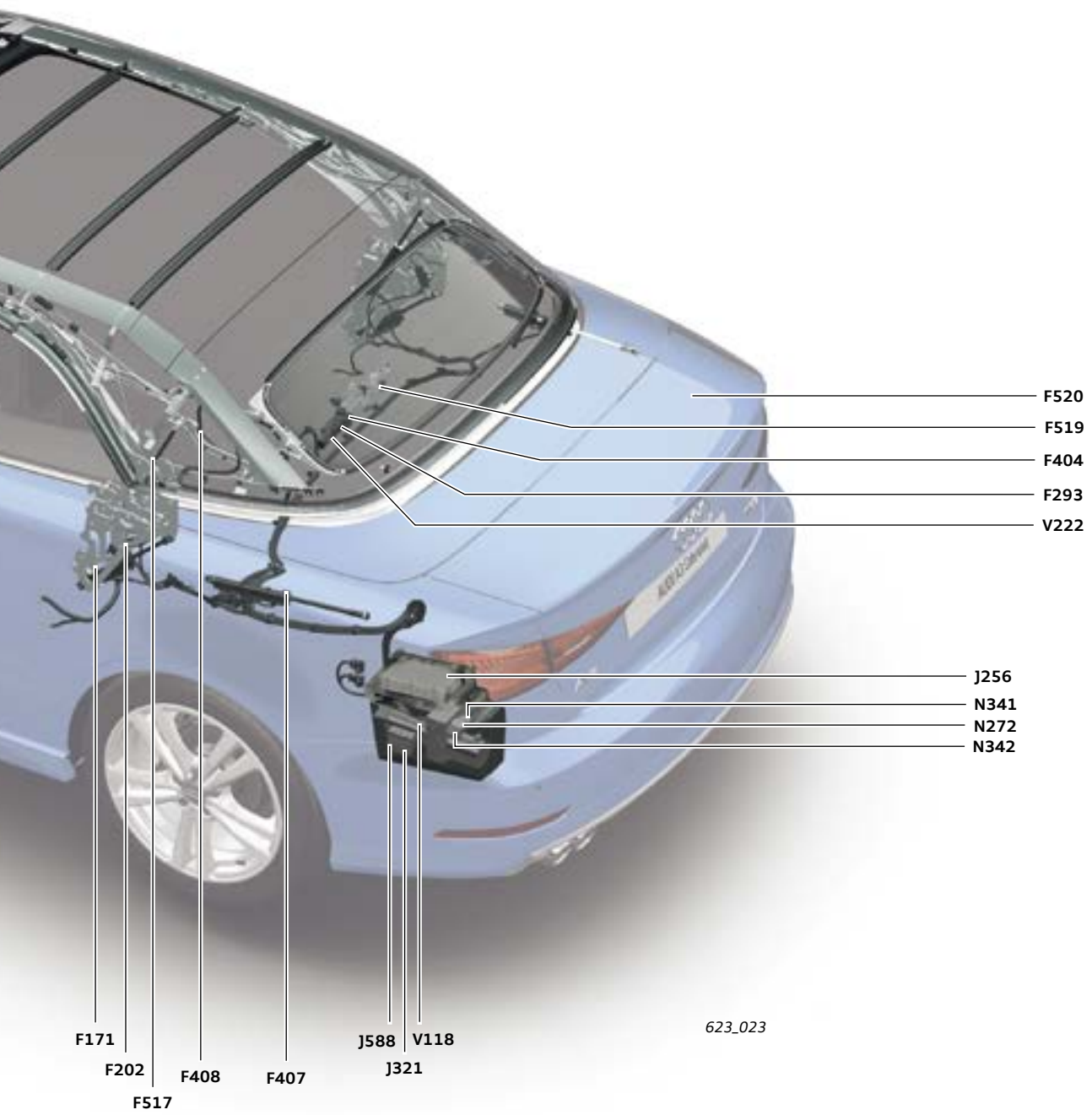
Convertible top control system

Component locations



Key

- | | | | |
|------|---|------|--|
| E137 | Power Top Operation Switch | J256 | Convertible Top Control Module |
| F171 | Convertible Top Open Position Switch | J285 | Instrument Cluster Control Module (diagram showing convertible top status) |
| F202 | Convertible Top Front Closed Position Switch | J321 | Convertible Top Hydraulic Pump Relay |
| F293 | Convertible Top Compartment Latch -Unlocked- Switch | J588 | Convertible Top Hydraulic Pump Relay 2 |
| F294 | Convertible Top Latch -Open- Switch | N272 | Power Convertible Top Valve 1 |
| F295 | Convertible Top Latch -Closed- Switch | N341 | Power Convertible Top Valve 2 |
| F404 | Convertible Top Compartment -Locked- Switch | N342 | Power Convertible Top Valve 3 |
| F407 | Convertible Top Compartment -Open- Switch | V118 | Convertible Top Hydraulic Pump |
| F408 | Upper Tensioning Bow Switch | V222 | Convertible Top Compartment Cover Locking Motor |
| F411 | Left Convertible Top Closed Position Switch | V223 | Convertible Top Locking Motor |
| F412 | Right Convertible Top Closed Position Switch | | |
| F517 | Lower Bracket Switch | | |
| F519 | Convertible Top Compartment Cover -Closed- Switch | | |
| F520 | Lower Convertible Top Compartment Enclosure Switch | | |



623_023

Convertible top operation

Power Top Operation Switch E137

The convertible top opening cycle is started by pulling Power Top Operation Switch E137. To open the convertible top completely, the switch must remain pulled until the opening cycle is complete. When the switch is released, the convertible top cycle stops instantaneously. If the switch is pulled again, the convertible top continues to open. If the switch is pressed, the convertible top closes.

The switch must also be remain pressed during the closing cycle.

If the convertible top is closed and the switch is pulled and then released again, the side windows will lower to a defined level. The convertible top cycle will not start. If the button is kept pressed for 5 seconds, the side windows close again.



623_024

Power Top Operation Switch E137

Graphic displays for convertible top operation

The operation of the convertible top is indicated graphically in the Driver Information System (DIS) of Instrument Cluster Control Module J285.

As soon as the top starts to open or close, the graphic display appears in the DIS.

The display will either be in color or monochrome depending on the Instrument Cluster version.

A curved arrow over the convertible top indicates the direction of the convertible top. If the arrow tip is pointing back, the convertible top is opening. If the arrow tip is pointing forward, the convertible top is closing.



Convertible top opening cycle

623_025



Convertible top opening cycle

623_026

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



Convertible top cycle aborted, intermediate position 623_027



Convertible top cycle aborted, intermediate position 623_028

If the convertible top cycle has been completed, the status of the convertible top (opened or closed) is indicated for approximately 2 seconds. An audible signal sounds at the same time.



Convertible top cycle completed, convertible top closed 623_029



Convertible top cycle completed, convertible top closed 623_030



Convertible top cycle completed, convertible top open 623_051



Convertible top cycle completed, convertible top open 623_052

If convertible top operation is not possible, an audible warning is sounded by the Instrument Cluster and one of nine visual warnings is given in the DIS.

The warning is given if:

- ▶ The convertible top is in the intermediate position.
- ▶ There is a DTC in the fault memory.
- ▶ The vehicle is traveling faster than 3.1 mph (5 km/h).

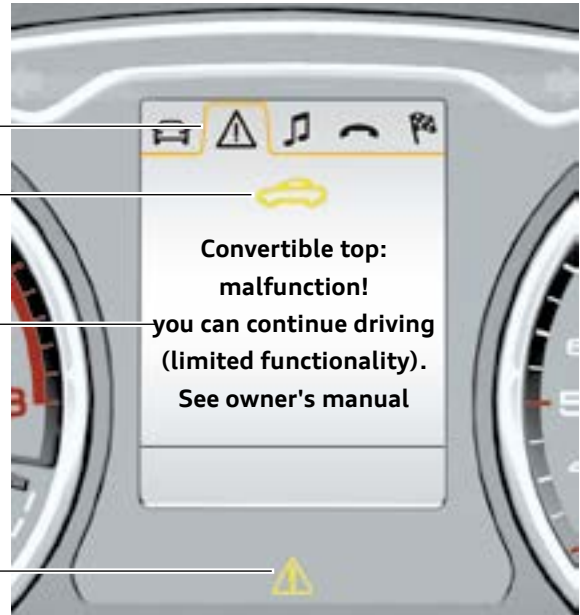
Warnings are indicated via the color DIS as follows:

Triangle with exclamation mark in the driver information and warning lamps tab

Yellow vehicle-with-convertible-top icon in the status line

Displayed text

Yellow central warning lamp



623_031

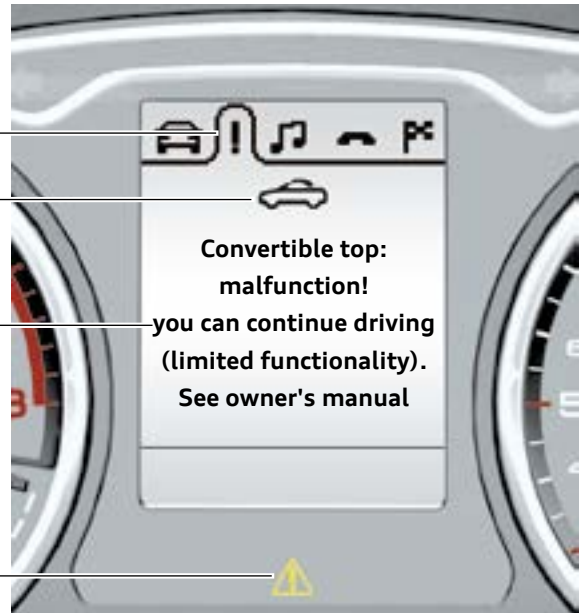
Warnings are indicated via the monochrome DIS as follows:

Exclamation mark in driver information tab and warning lamps tab

Vehicle convertible top icon in the status line

Displayed text

Yellow central warning lamp



623_032

Other reasons why a convertible top operation is not possible are displayed as messages.

Display of the 9 functional or visual messages in the DIS:

- ▶ The yellow warning lamp is NOT activated when the functional or visual messages messages are displayed.
- ▶ Messages are indicated by a white vehicle-with-convertible-top icon in the status line in both the color and mono-chromeDriver Information System displays.
- ▶ Message texts are NOT included in the driver information and warning lamps tab.

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

To activate messages, the following conditions must be met:

The trunk lid is open and the convertible top operating switch is actuated.



623_033

The convertible top well is in the upper position and the convertible top operating switch is actuated in the "open" direction.



623_034

The convertible top is in a limit position (open or closed), the vehicle is travelling faster than 31 mph (50 km/h) and the convertible top operating switch is actuated.



623_035

A convertible top cycle is currently active and the vehicle's speed increases to over 31 mph (50 km/h).

or

the convertible top is in an intermediate position and the vehicle speed exceeds 31 mph (50 km/h).



623_036

The ambient temperature is below 5 °F (-15 °C), the convertible top is closed and the the operating switch is actuated in the "open" direction.

An open convertible top can be closed at temperatures below 5 °F (-15 °F).



623_037

Convertible Top Control Module J256 has registered a DTC and the switch is actuated.



623_038

The vehicle battery voltage has dropped below a threshold value; the ignition is switched ON, the engine is not running, and the convertible top operating switch is actuated.



623_039

The overload protection is active and the convertible top operating switch is actuated.



623_040

Convertible Top Control Module J256 has registered a DTC, the limit position (open or closed) has been reached and the convertible top operating switch is released.



623_041

Convertible top opening sequence

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

- ▶ The vehicle must not be travelling faster than 31 mph (50 km/h)
- ▶ The power top operation switch E137 must be pulled and held
- ▶ The ambient temperature must be above 5 °F (-15 °C)
- ▶ The convertible top well must be in the lower position
- ▶ The trunk lid must be closed
- ▶ The vehicle battery voltage must be sufficient
- ▶ Both front and rear side windows must have pinch protection activated

Initial situation: the convertible top is closed

Assuming the previous conditions are met and Power Top Operation Switch E137 remains pulled up, all the side windows will lower to a defined position.



623_042

Convertible Top Operation Switch E137



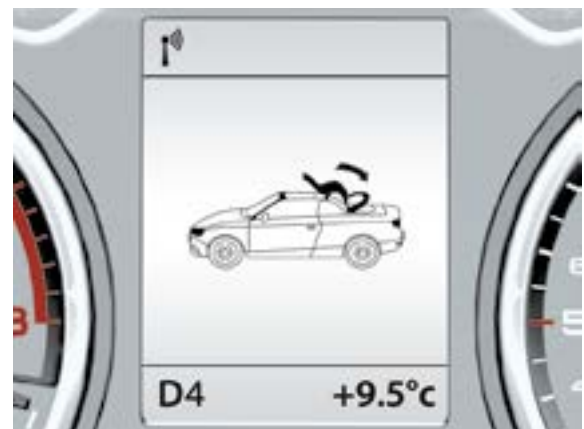
623_043

A vehicle image appears in the Driver Information System display showing the vehicle with a convertible top and a curved arrow. The arrow tip is pointing back.



Convertible top opening cycle

623_044



Convertible top opening cycle

623_045

The Release Button in Rear Lid Handle E234 is deactivated so the trunk lid cannot be opened.

If the rear window defroster is ON, it is switched OFF. The rear window defroster can only be switched ON when the convertible top is fully closed.

The catch hooks in the upper part of the lock in the wind-shield frame area are opened. The tensioning strut begins to move into the upright position.



623_046

At the same time, Convertible Top Compartment Cover Locking Motor V222 opens the convertible top box lid. The tensioning strut moves into the upright position. The convertible top box lid opens fully.



623_047

The convertible top retracts and folds down into the convertible top well. Meanwhile, the catch hooks close again.



623_048

After that, the convertible top box lid closes and V222 locks it into position.



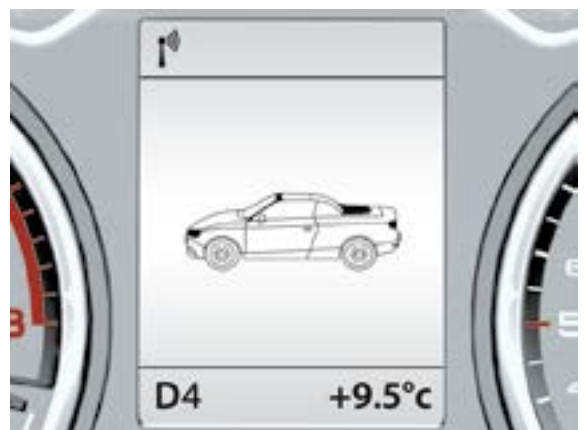
623_049

An acoustic signal and graphic display indicate that the convertible top cycle is complete and the convertible top is fully open.



Convertible top cycle completed, convertible top open

623_051



Convertible top cycle completed, convertible top open

623_052

Finally, the side windows raise to their closed position and the Release Button in Rear Lid Handle E234 is re-activated so the trunk lid can be opened.



623_050

Convertible top closing sequence

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

- ▶ The vehicle must not be travelling faster than 31 mph (50 km/h)
- ▶ The function must be activated
- ▶ The trunk lid must be closed
- ▶ The vehicle battery voltage must be sufficient

Initial situation: the convertible top is open

Assuming the previous conditions are met and Power Top Operation Switch E137 remains pressed, all the side windows will lower to a defined position.



623_042

Power Top Operation Switch E137



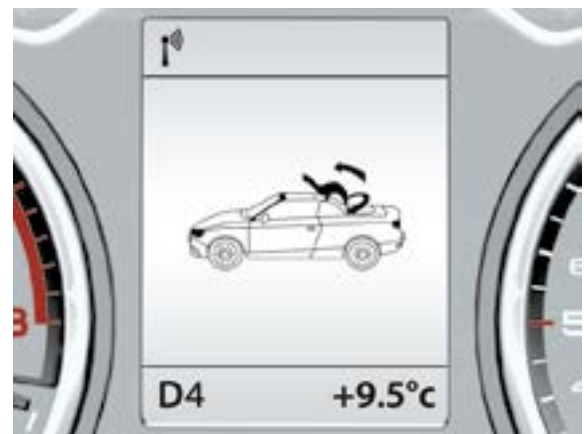
623_046a

A vehicle image appears in the Driver Information System display showing the vehicle with a convertible top and a curved arrow. The arrow tip is pointing forward.



Convertible top closing cycle

623_053



Convertible top closing cycle

623_054

The Release Button in Rear Lid Handle E234 is deactivated so the trunk lid cannot be opened.

Convertible Top Compartment Cover Locking Motor V222 unlocks the convertible top box lid. The convertible top box lid opens fully.



623_046b

The convertible top lifts up out of the convertible top box and the catch hooks in the upper part of the convertible top lock open.



623_046c

The tensioning strut moves into the upper position and the convertible top box lid closes fully. V222 locks the convertible top box lid.



623_046d

The convertible top continues to run until it settles on top of the windshield frame. At the same time, the tensioning strut moves down. The catch hooks then lock the convertible top in place.



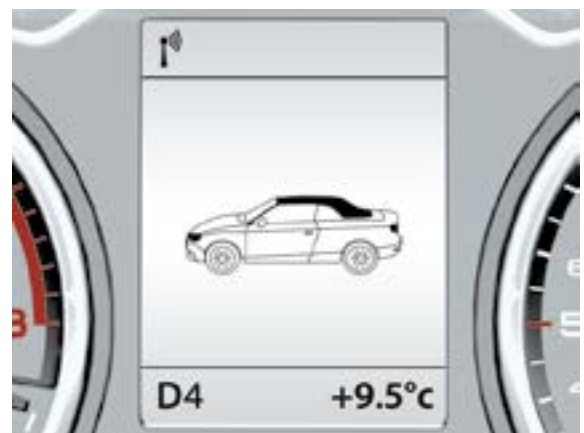
623_046e

An acoustic signal and graphic display indicate that the convertible top cycle is complete and the convertible top is fully closed.



Convertible top cycle completed, convertible top closed

623_055



Convertible top cycle completed, convertible top closed

623_056

If E137 is kept pressed, the side windows raise to their closed position.

The Release Button in Rear Lid Handle E234 is re-activated so the trunk lid can be opened. The rear window defroster can be switched on again.

Opening the convertible top with the vehicle key

The convertible top can be opened and closed using the vehicle key in the driver's door lock cylinder. The following conditions must be met:

- ▶ The convertible top well must be in the lower position.
- ▶ The trunk lid must be closed.
- ▶ The ambient temperature must be above 5 °F (-15 °C).
- ▶ The battery voltage must be sufficient.

To lower the convertible top:

- ▶ Insert the key in the driver's door lock cylinder and turn it in the "open" direction, then release.
- ▶ Turn the key to the "open" direction again within 2 seconds and hold it in that position.

The convertible top cycle will start. The key must be held in the "open" position during the convertible top cycle. If the key is released, the cycle will immediately stop. To resume the cycle, the key must again be turned in the "open" direction and held in that position.

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



623_057

Closing the convertible top with the vehicle key

The convertible top can also be closed using the car key. Before this can be done, the following conditions must be met:

- ▶ The trunk lid must be closed.
- ▶ The battery voltage must be sufficient.

To close the convertible top:

- ▶ Insert the key in the driver's door lock cylinder and turn it in the "close" direction, then release.
- ▶ Turn the key to the "close" direction again within 2 seconds and hold it in that position.

The convertible top cycle will start. The key must be held in the "close" position during the convertible top cycle. If the key is released, the cycle will immediately stop. To resume the cycle, the key must again be turned in the "close" direction and held in that position.

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



623_058



Note

When opening or closing the convertible top with the vehicle key, there may be a short delay between the time the key is turned to when the operation begins.

Operating the convertible top while driving

The convertible top can be opened or closed using Power Top Operation Switch E137 up to a speed of 31 mph (50 km/h).

If the vehicle speed increases to over 31 mph (50 km/h) during the top cycle, the driver will be alerted both audibly and visually. The top cycle is stopped and the top comes to a standstill in its current position. The cycle will not resume until the vehicle speed has dropped below 31 mph (50 km/h) or less.

To do this, the operating switch must be kept pulled or pressed.



Message text

623_059

A convertible top cycle cannot be initiated if the vehicle is travelling at a speed over 31 mph (50 km/h). In this case too, the driver is alerted by audible and visual warnings.



Message text

623_060

Components of the convertible top control system

Power Top Operation Switch E137

The Power Top Operation Switch E137 is located in the center console.



623_061

Power Top Operation Switch E137

Hall sensors

Controlled operation of the convertible top is only possible if Convertible Top Control Module J256 receives information from various sensors and switches during each phase of the operating cycle. The sensors and switches indicate the current position of certain parts of the top assembly to J256.

J256 uses this information to control the actuators, and thus, the operation of the top.

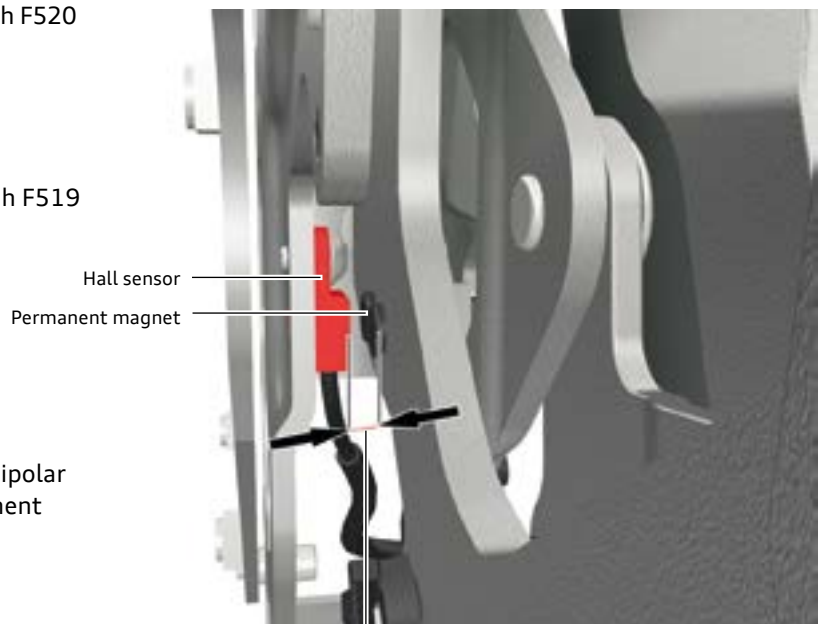
The following Hall sensors react to the fields generated by permanent magnets:

- ▶ Lower Convertible Top Compartment Enclosure Switch F520
- ▶ Left Convertible Top Closed Position Switch F411
- ▶ Right Convertible Top Closed Position Switch F412
- ▶ Convertible Top Compartment Cover -Closed- Switch F519
- ▶ Convertible Top Front Closed Position Switch F202
- ▶ Convertible Top Open Position Switch F171
- ▶ Left Tensioning Bow Switch F408

These Hall sensors are referred to as monopolar or unipolar Hall sensors. They react to the south pole of a permanent magnet.

In a Hall sensor, a magnetic field acts perpendicular to the direction of current flow in an electrical conductor resulting in voltage differences. These voltage differences are converted to signals and utilized by Convertible Top Control Module J256.

The distance between a Hall sensor and permanent magnet is typically 0.1 in (3 mm).



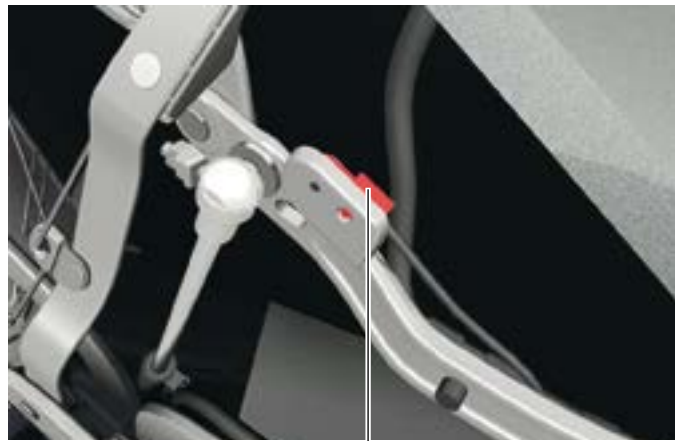
623_063

Switching distance

Upper Tensioning Bow Switch F408

Upper Tensioning Bow Switch F408 is a Hall-type sensor installed on the long tensioning strut pivot arm on the left hand side of the vehicle. A permanent magnet is attached to the joint on the pivot arm.

When the tensioning arm reaches its upper position, F408 and the permanent magnet are facing one another. In this position, Convertible Top Control Module J256 detects that the tensioning strut is up.



Upper Tensioning Bow Switch F408

623_069

Lower Convertible Top Compartment Enclosure Switch F520

F520 is installed on the movable convertible top well at the right hand side of the vehicle. It is a Hall sensor that detects whether the movable convertible top well is in the lowered position. The convertible top cannot be opened when the movable convertible top well is in the upper position.

The convertible top well has to be manually raised or lowered by pulling or pushing on its handle. When the convertible top is closed and the top well raised, an additional 1.4 cu ft (40 liters) of load capacity is available in the trunk and greater access to the seat pass thru is available..



623_064

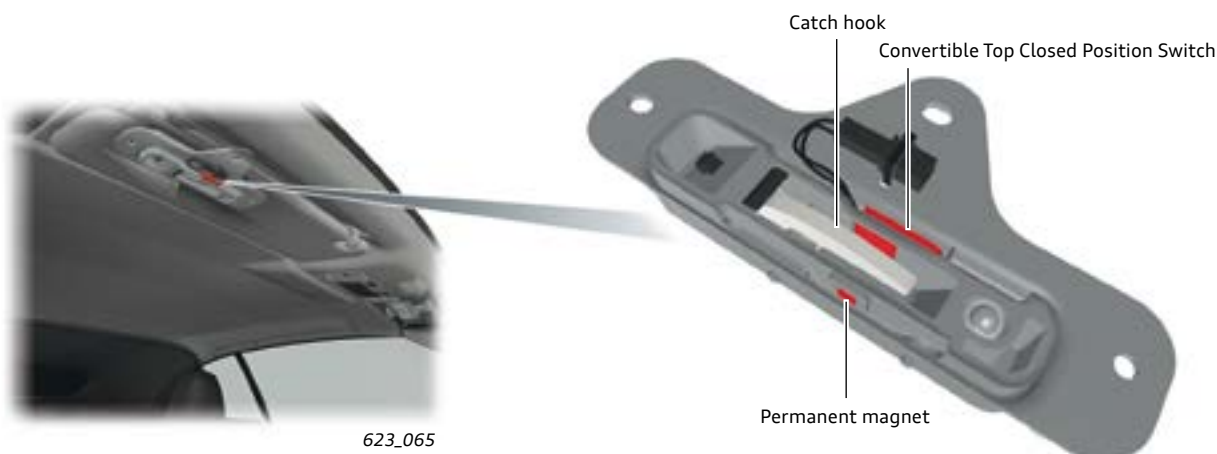
Lower Convertible Top Compartment Enclosure Switch F520



Left Convertible Top Closed Position Switch F411 and Right Convertible Top Closed Position Switch F412

F411 and F412 are located on the left and right hand convertible latch locks. They are both Hall sensors.

Convertible Top Locking Motor V223 engages and disengages the catch hooks on the convertible top. When the catch hooks are engaged in the locks, each switch sends a signal to the Convertible Top Control Module J256 indicating the top is closed.

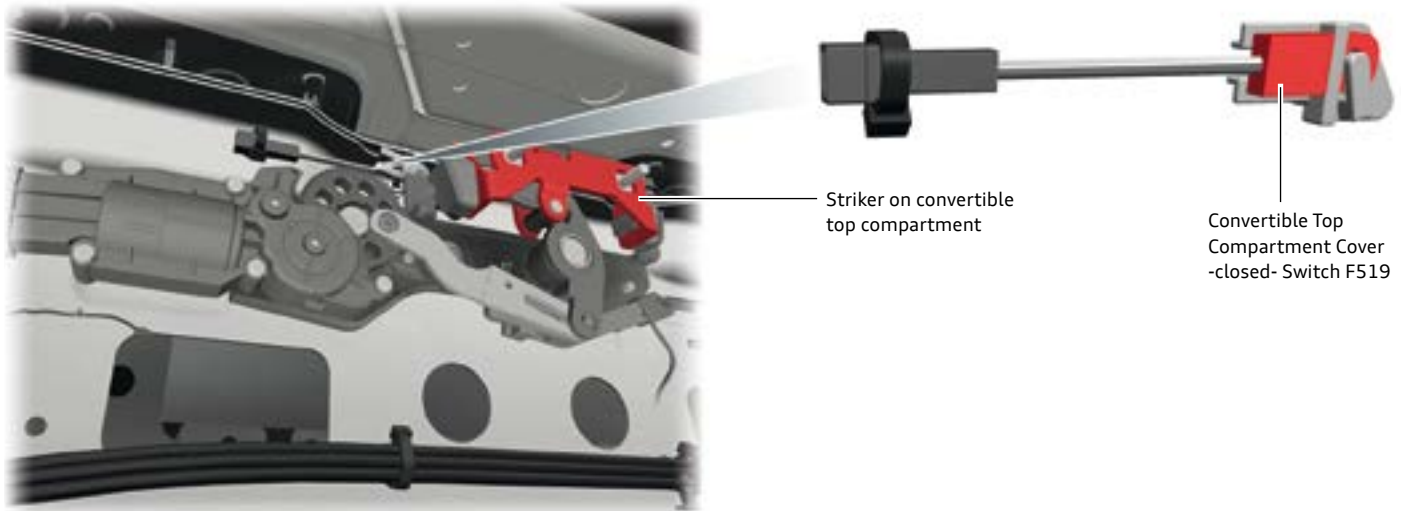


623_065

Convertible Top Compartment Cover -closed- Switch F519

F519 is located on Convertible Top Compartment Cover Locking Motor V222. It is a Hall sensor.

A permanent magnet is attached to the striker. When the convertible top box lid is closed, the magnet is directly facing F519. Convertible Top Control Module J256 detects that the top box lid is closed.



623_066

Convertible Top Front Closed Position Switch F202

F202 is installed in the direction of travel on the stationary part of the main bearing bolted to the body on the left hand side of the vehicle. It is a Hall sensor.

A permanent magnet is attached to the moving part of the main bearing. If the magnet stops within the detection range of the switch, Convertible Top Control Module J256 detects that the top is in the closed position.



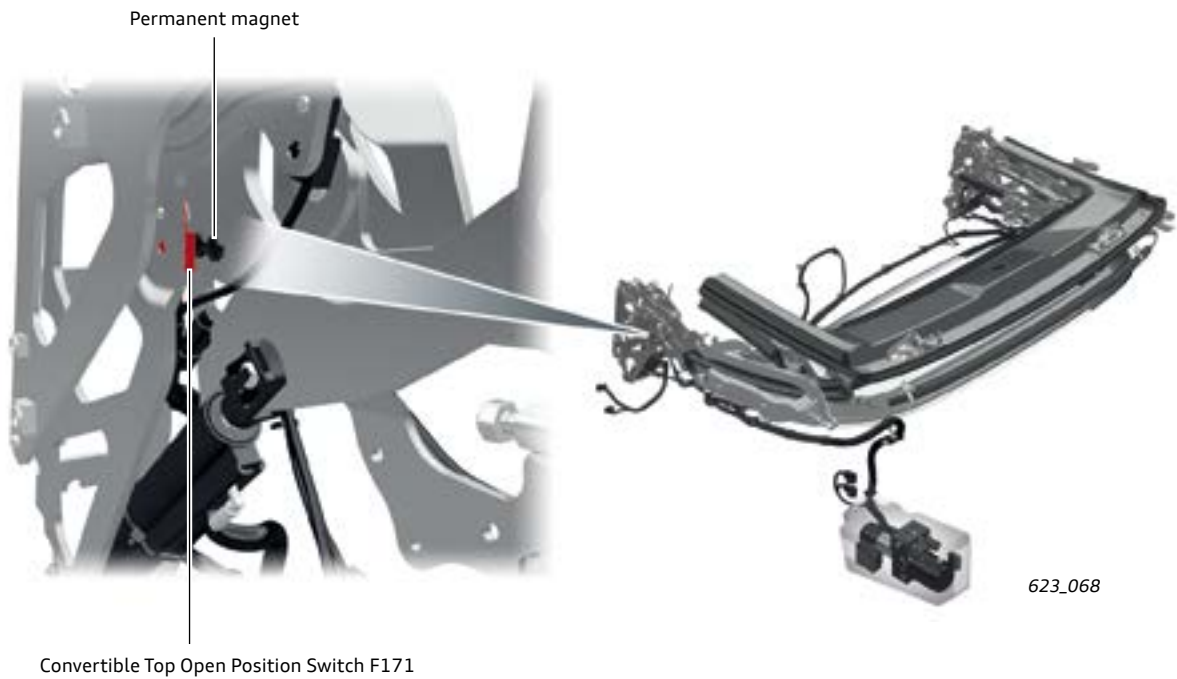
623_067

Convertible Top Front Closed Position Switch F202

Convertible Top Open Position Switch F171

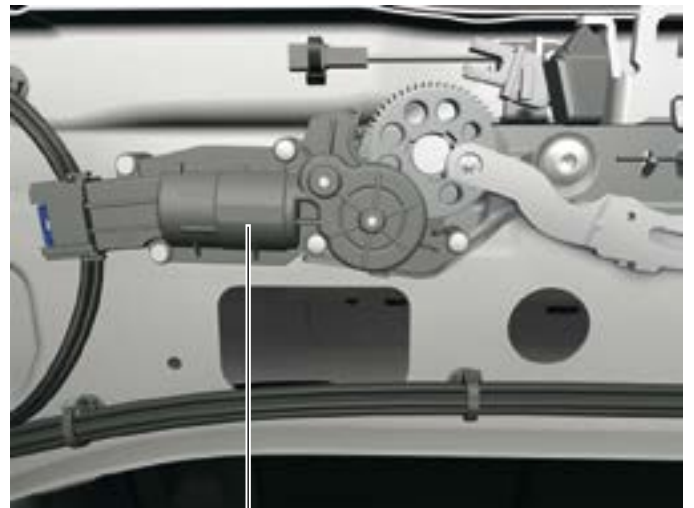
F171 is installed on the stationary part of the main bearing on the left hand side of the vehicle. The switch is a Hall sensor.

A permanent magnet is attached to the moving part of the main bearing. If the magnet stops within the detection range of the switch, Convertible Top Control Module J256 knows that the top is in its fully open position (stowed in the convertible top compartment).



Convertible Top Compartment Cover Locking Motor V222

V222 locks the convertible top box lid. It is activated by Convertible Top Control Module J256.



Convertible Top Compartment Cover Locking Motor V222

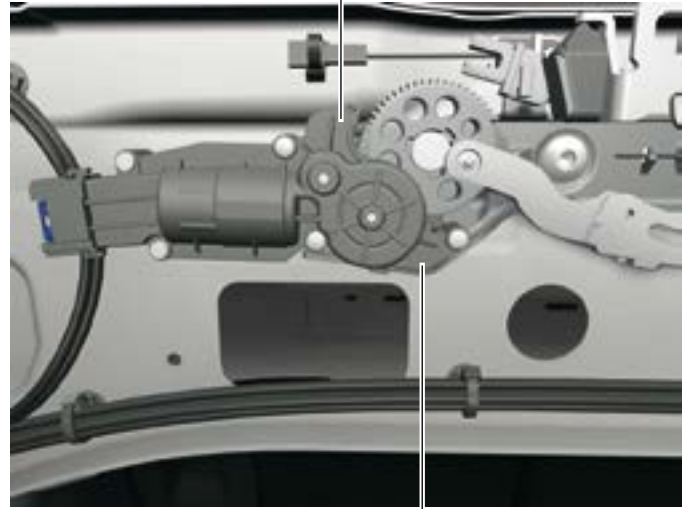
Convertible Top Compartment Latch -unlocked- Switch F293 and Convertible Top Compartment -locked- Switch F404

Both switches are integrated in Convertible Top Compartment Cover Locking Motor V222. These switches tell Convertible Top Control Module J256 whether the convertible top box lid latch is engaged or disengaged.

The microswitches are actuated by tabs on the toothed segment.

This switch tells Convertible Top Control Module J256 whether the convertible top box lid latch is engaged or disengaged.

Convertible Top Compartment Latch -unlocked- Switch F293



623_070

Convertible Top Compartment -locked- Switch F404

Trunk lid

The convertible top can only be operated when the trunk lid is closed. When an opening or closing cycle is initiated, Vehicle Electrical System Control Module J519 prevents the trunk lid from being opened via the Release Button in the Rear Lid Handle E234.



623_072

Switch for releasing the trunk lid

If a convertible top cycle is initiated when the trunk lid is opened, a message is displayed in the DIS advising the driver to close it.



623_073

Convertible Top Hydraulic Pump V118

V118 includes:

- ▶ Convertible Top Hydraulic Pump Relay J321
- ▶ Convertible Top Hydraulic Pump Relay 2 J588
- ▶ Power Convertible Top Valve 1 N272
- ▶ Power Convertible Top Valve 2 N341
- ▶ Power Convertible Top Valve 3 N342

The hydraulic pump together with the relays and valves form a unit. The hydraulic pump is installed in the trunk, behind the luggage compartment trim on the left-hand side as seen in the direction of travel. The hydraulic pump is housed in an acoustic enclosure which provides sound insulation during pump operation.



623_074

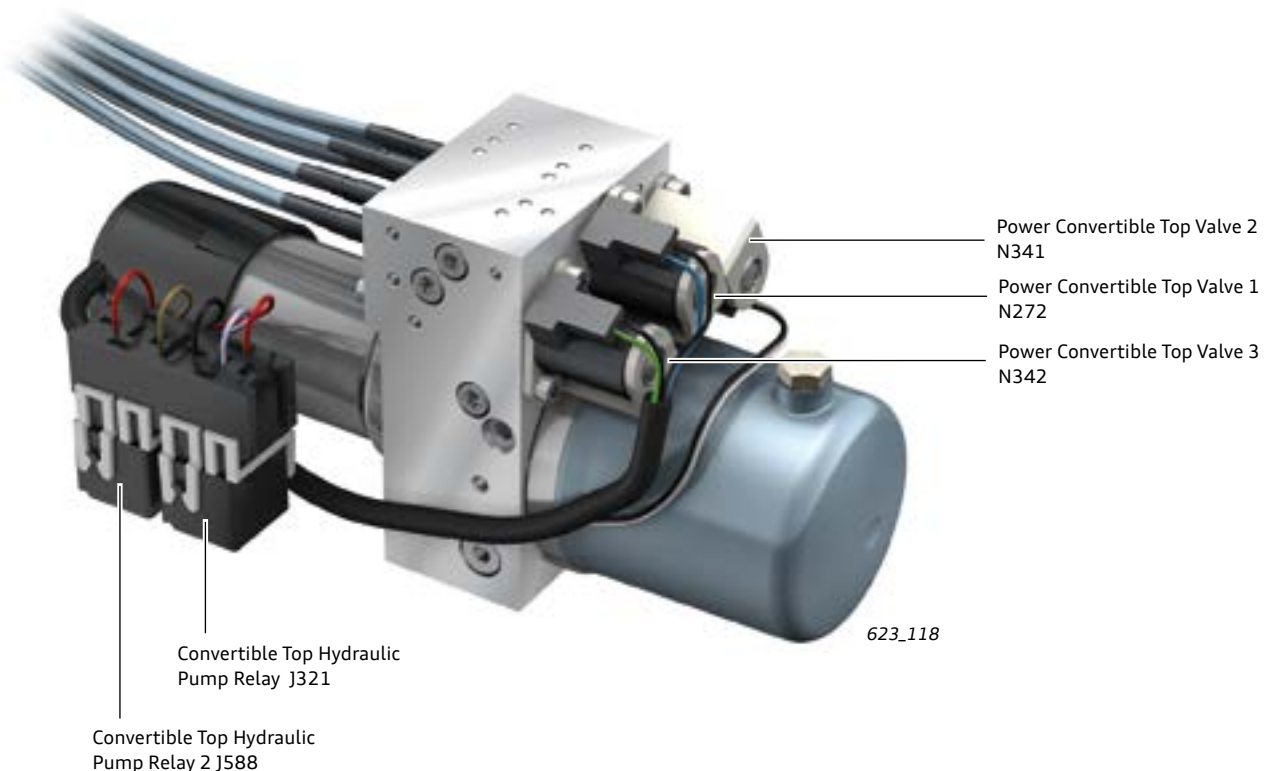
Convertible Top Hydraulic Pump V118

Convertible Top Control Module J256 controls the hydraulic pump via the two relays. The relays control the clockwise and counter-clockwise operation of the pump.

This is done by operating only one of the two relays to supply power to the pump. The non-operated relay supplies the ground circuit for the pump via the 87a terminal on the

relay. By switching the relay being operated, the direction of the motor is controlled which in turn changes the direction of fluid flow from the pump.

The valves guide the oil flow through the hydraulic lines and into the hydraulic cylinders.



The hydraulic system is self-locking. This means that the pressure generated by the pump is maintained within the system for approximately 5 minutes. After 5 minutes, the valves are de-energized and the hydraulic system de-pressurizes.

If the convertible top is in an intermediate position and the hydraulic system de-pressurizes, the top will collapse depending on its position. Also, the convertible top box lid may close depending on its position.

In the worst case scenario, the convertible top will collide with the convertible top box lid and may become damaged.

It may happen that neither the convertible top box lid nor the convertible top reaches one of its limit positions. In this case, it is no longer possible to operate the convertible top because Convertible Top Control Module J256 receives implausible signals. When this happens, the driver will be alerted by a message in the DIS.

To continue operating the convertible top, the convertible top box lid must be moved manually into a limit position. The top cycle can then be resumed. If the limit position was reached by opening the convertible top box lid, it must be secured to prevent it from slamming shut.

The hydraulic system can also be de-pressurized by switching the ignition off and then push or pull the Power Top Operation Switch E137 for approximately 5 seconds.

Collision of the convertible top and convertible top box lid



623_076



623_077

Power Top Operation Switch E137

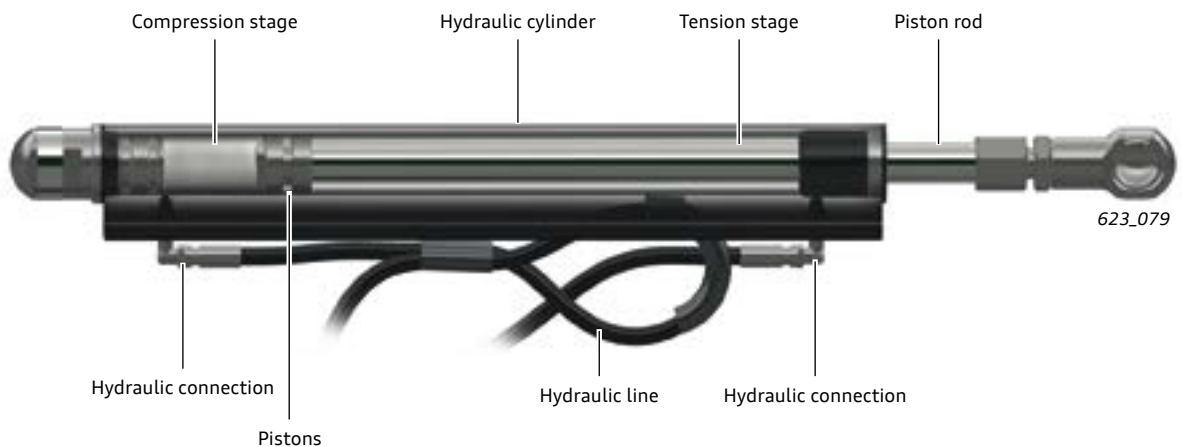
Hydraulic cylinders

The convertible top and convertible top box lid are operated by three pairs of hydraulic cylinders.

Two cylinders are responsible for operating the convertible top box lid. Two are responsible for the tensioning strut and two are responsible for the convertible top.



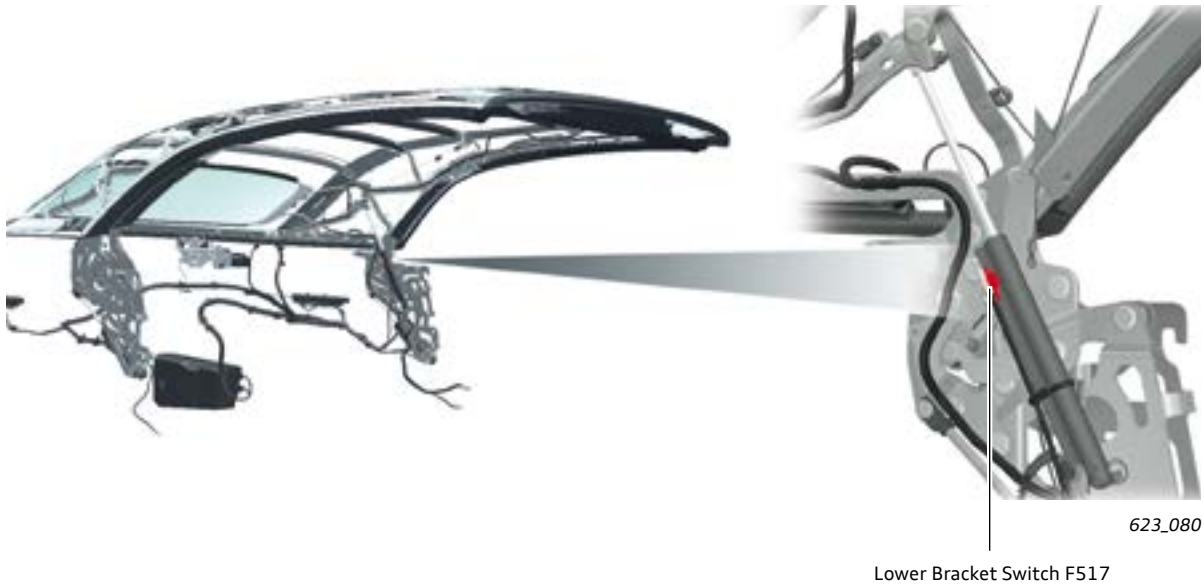
The hydraulic cylinders operate in two working directions.



Lower Bracket Switch F517

F517 is integrated in the hydraulic cylinder responsible for movement of the tensioning strut and is located on the left hand side of the vehicle. It is a Hall sensor and can be replaced separately from the cylinder.

When the tensioning strut is in its lowest position (tensioned), the cylinder is fully extended. The Hall sensor then sends a signal to Convertible Top Control Module J256 that the tensioning strut is down.



Convertible Top Compartment -open- Switch F407

F407 is integrated in the left hand side hydraulic cylinder responsible for movement of the convertible top box lid. It is a Hall sensor and can be replaced separately from the cylinder.

When the convertible top box lid is fully opened, the Hall sensor sends a signal to Convertible Top Control Module J256.



Hydraulic cylinders at main bearings

The two hydraulic cylinders responsible for the movement of the convertible top are mounted at the main bearings.



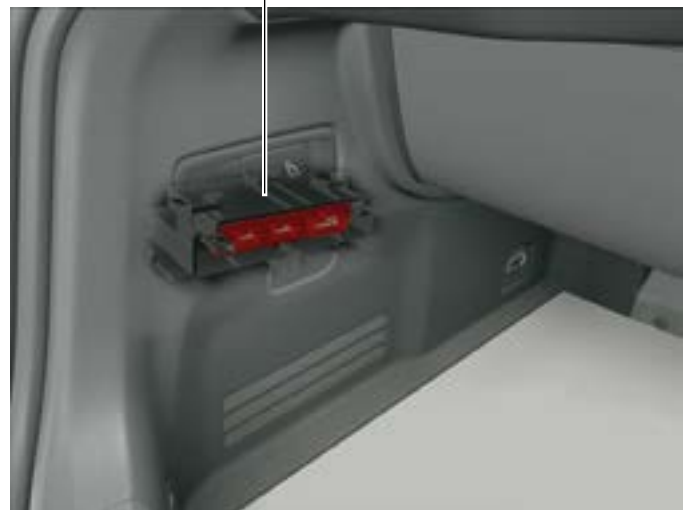
Hydraulic cylinder of main bearing , (left hand side)

Convertible Top Control Module J256

J256 controls and monitors each individual convertible top operating cycle. It collects the information generated by the sensors as well as information from other data bus users. It evaluates and controls the actuators accordingly and it communicates over the Convenience CAN.

J256 is located on the left hand side of the luggage compartment behind the trim cover for Convertible Top Hydraulic Pump V118.

Convertible Top Control Module J256



623_083

J256 is also responsible for system diagnostics. If implausible signals are detected or received at the wrong time, the convertible top cycle is stopped and a DTC is recorded. A warning message to the driver is also displayed in the DIS.



623_084

To protect Convertible Top Hydraulic Pump V118 from being overloaded, its run-time is monitored by J256.

If the top has been running continuously for approximately 2 minutes and is closed by this time, J256 suppresses further operation of the top for approximately 10 minutes.

The maximum continuous operation of the hydraulic pump is limited to approximately 170 seconds at which time the pump shuts off regardless of the top's current position.

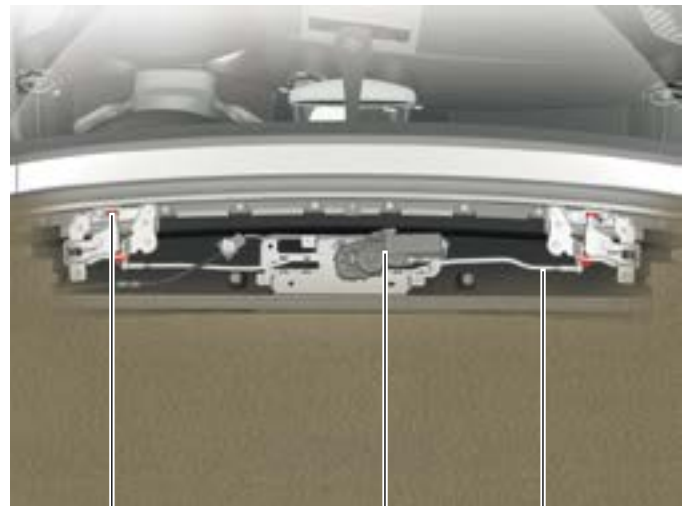
Further operation of the pump is subsequently suppressed for approximately 20 minutes to prevent it from overheating. The driver is warned by a message in the DIS.



623_085

Convertible Top Locking Motor V223

V223 is attached to the front of the convertible top in the middle. The motor uses a linkage to operate the two catch hooks which lock the roof to the window frame.



623_086

Catch hook

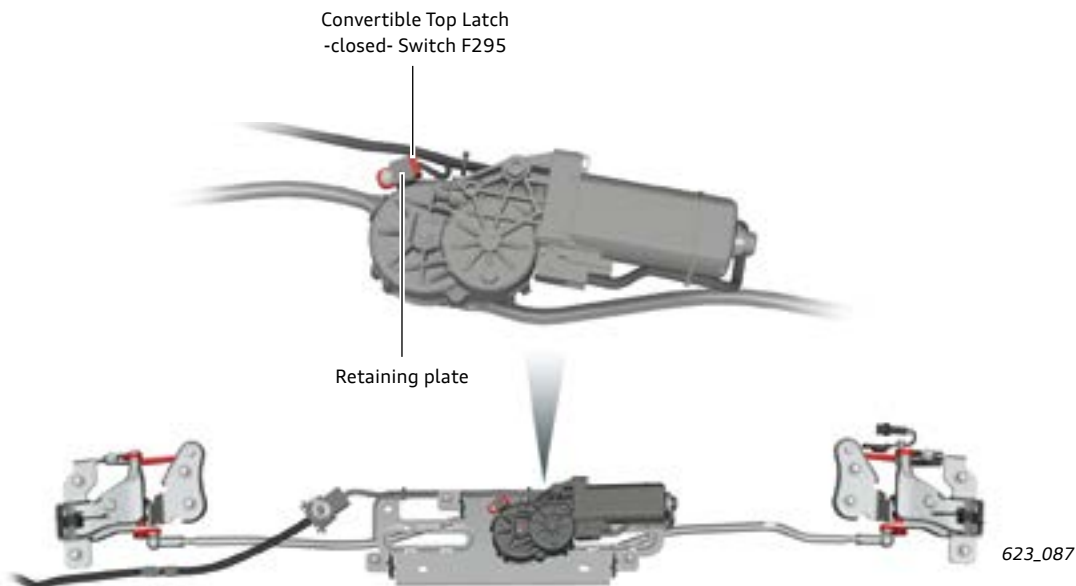
Convertible Top Locking Motor V223

Linkage

Convertible Top Latch -closed- Switch F295

Convertible Top Latch -closed- Switch F295 is integrated with Convertible Top Locking Motor V223. It is a Hall sensor type switch.

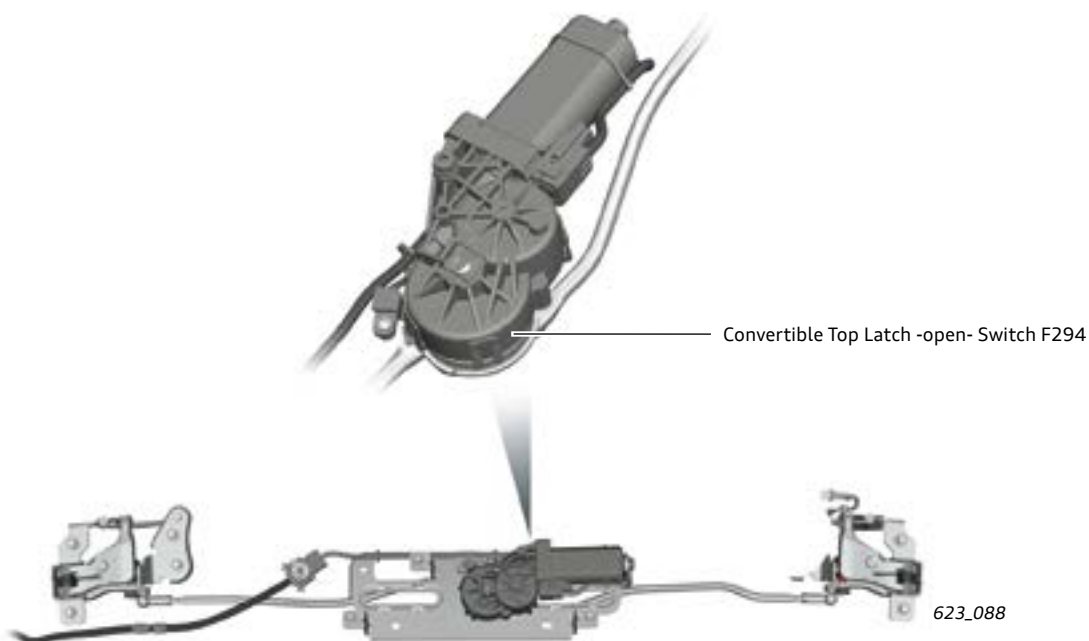
When V223 has locked the convertible top latches, a retaining plate is within the detection range of F295. This produces a “locked closed” signal which is sent to Convertible Top Control Module J256.



Convertible Top Latch -open- Switch F294

F294 is also integrated with Convertible Top Locking Motor V223. It is a Hall sensor configured as an incremental encoder or rotary encoder. It measures the number of revolutions of V223.

Convertible Top Control Module J256 evaluates the signals generated by the Hall sensor. When the corresponding number of revolutions have been registered, J256 detects “convertible top lock open.”



Emergency operation

In the event of a malfunction, the convertible top can be closed manually. If possible this should be done by two people.

The emergency procedure cannot be done unless the hydraulic system has been de-pressurized. The system de-pressurizes automatically approximately 5 minutes after the ignition is switched off. It can also be de-pressurized by pushing or pulling Convertible Top Operation Switch E137 for approximately 5 seconds after the ignition has been switched off.

Closing the convertible top

Conditions:

- ▶ Parking brake applied
- ▶ All side windows lowered
- ▶ Ignition switched off
- ▶ Hydraulic system de-pressurized

The wheel bolt wrench from the vehicle tool kit is required for manual operation of the convertible top.

CAUTION
Be careful to prevent the top tensioning bow from striking the convertible top storage compartment cover if it is in the raised position when depressurizing the hydraulic system.

CAUTION
To reduce the risk of injury or damage to the vehicle, do not reach into the convertible top linkage or other moving parts during the emergency operating procedure.

First, the convertible top box lid must be unlocked. To do this:

- ▶ Open the trunk and fold down the right seat by pulling the lever in the direction of the arrow.



623_014

- ▶ Remove the wheel bolt wrench from the vehicle tool kit and close the trunk lid.

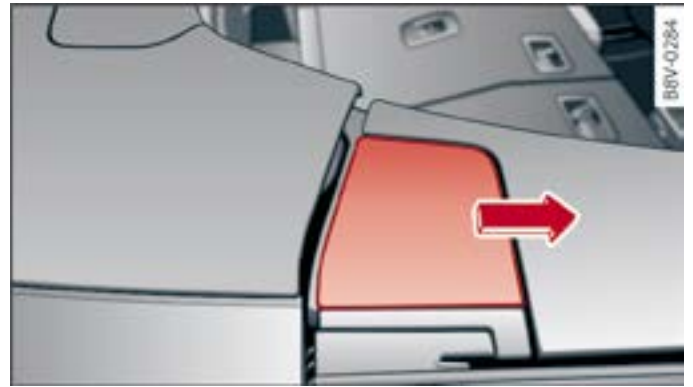
From inside the vehicle,

- ▶ Pull down the release loop (arrow) and unlock the convertible top box lid.



623_015

- ▶ Push the covers on both sides of the vehicle in the direction of the arrow until they engage.



623_016

To prevent the convertible top box lid from closing involuntarily and causing injury or damage,

- ▶ Move the lid into the upright position (1) and hold it there.
- ▶ Push back the left and right knee hinges (arrow 2) until they hold the top in its fully open position.



623_017

- ▶ Remove the trim cover and insert the wheel bolt wrench.

To open or disengage the catch hooks,

- ▶ Turn the box wrench clockwise as far as it will go and then remove it.



623_018

- ▶ Lift out the convertible top completely (in the direction of the arrow) by grabbing it from the front edge.
- ▶ Raise the convertible top tensioning strut until the convertible top box lid can be closed.



623_019

Note:

Two people should always perform this procedure to avoid the risk of injury or damage to the convertible top components.

- ▶ Release the convertible top box lid (1) by pulling the hinges forward and slowly lowering the lid until it closes.
- ▶ Lower the tensioning strut (2) until it rests on the convertible top box lid.



623_020

- ▶ Push the convertible top firmly into the windshield frame (arrow).



623_021

- ▶ Insert the wheel bolt wrench and turn it counter clockwise until the latch hooks are fully engage in the windshield frame.
- ▶ Remove the wrench and stow it in the vehicle tool kit.



623_022

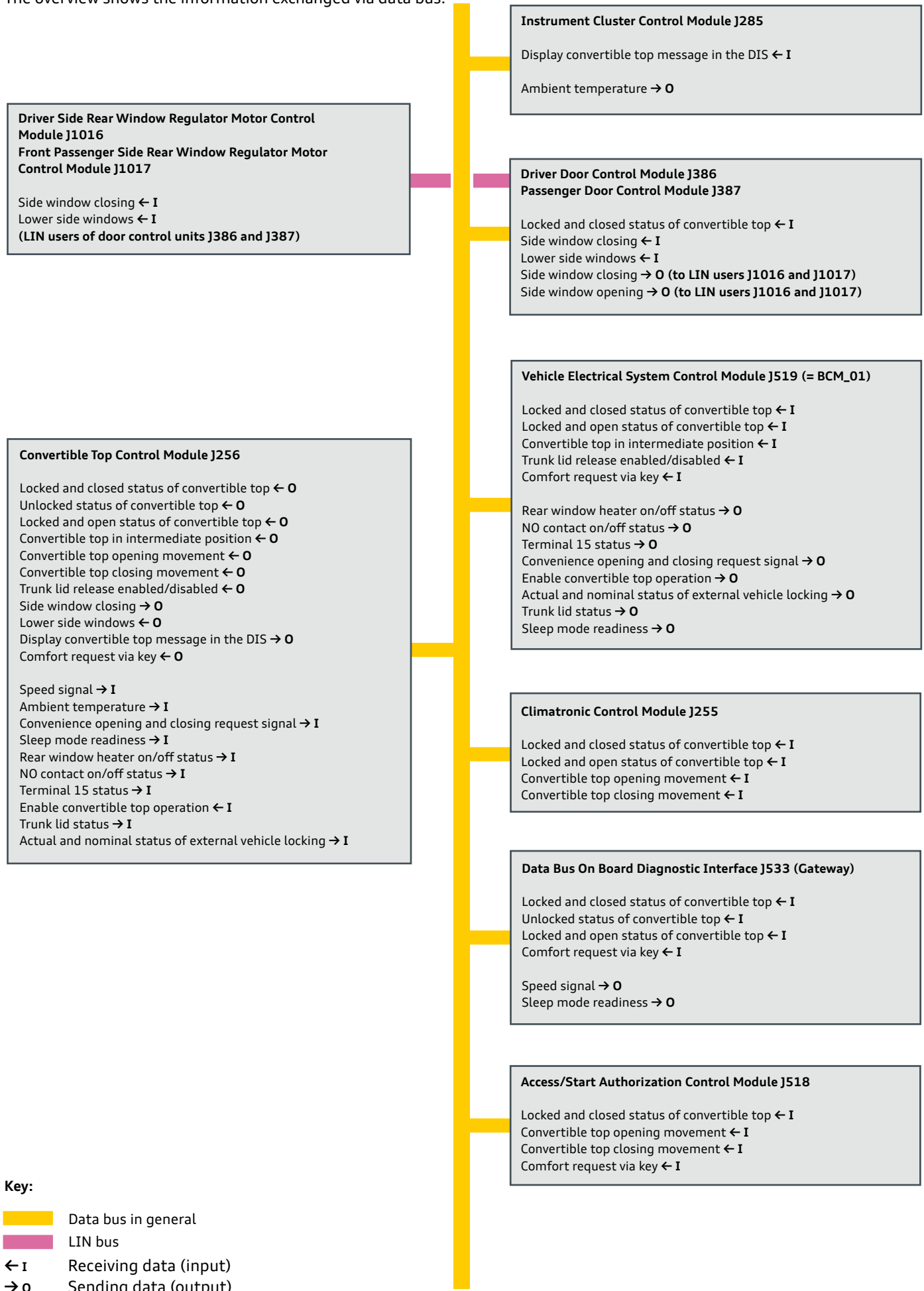


Reference

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

Data bus overview

The overview shows the information exchanged via data bus.



Key:

- Data bus in general
- LIN bus
- ← I Receiving data (input)
- O Sending data (output)

Occupant protection






The A3 Cabriolet has the following occupant protection equipment:

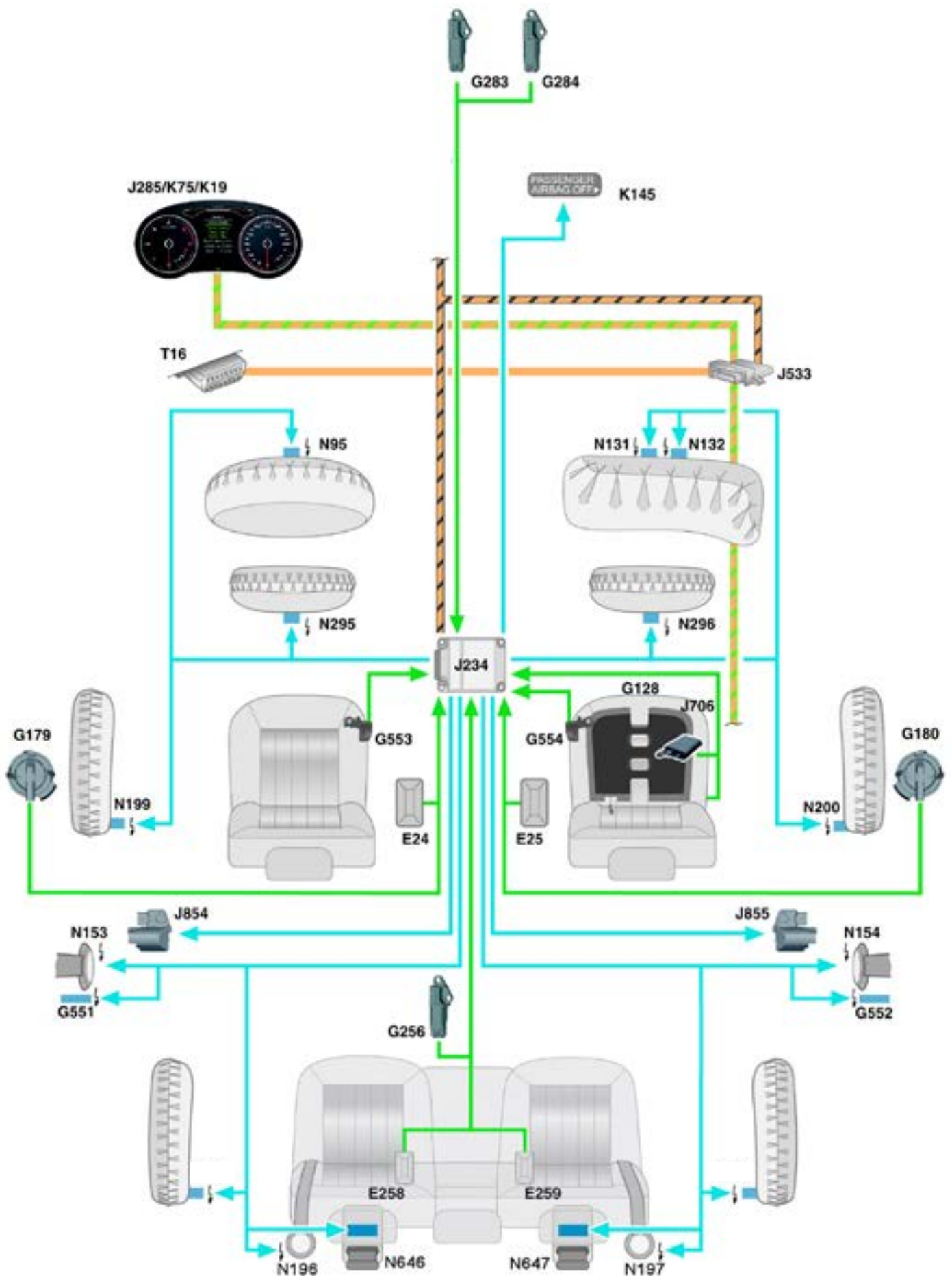
- ▶ Airbag Control Module
- ▶ Driver and passenger front airbags
- ▶ Front side airbags (head/thorax airbag)
- ▶ Knee airbags
- ▶ Front airbag crash sensors
- ▶ Side impact sensors in the front doors
- ▶ Centrally located rear side impact sensor
- ▶ Front inertia reel safety belts with electric and pyrotechnic tensioners
- ▶ Safety belt warning for all seats
- ▶ Front passenger seat occupancy detection sensor
- ▶ Rollover protection



623_005

Key for following page

E24	Driver Seat Belt Switch	N95	Driver Airbag Igniter
E25	Front Passenger Seat Belt Switch	N131	Front Passenger Airbag Igniter 1
E258	Driver Side Rear Seat Belt Switch	N132	Front Passenger Airbag Igniter 2
E259	Passenger Side rear Seat Belt Switch	N153	Driver Seat Belt Tensioner Igniter 1
G452	Front Passenger Seat Occupant Sensor	N154	Front Passenger Seat Belt Tensioner Igniter 1
G179	Driver Side Airbag Crash Sensor	N199	Driver Thorax Airbag Igniter
G180	Front Passenger Side Airbag Crash Sensor	N200	Front Passenger Thorax Airbag Igniter
G256	Centrally located Rear Side Airbag Crash Sensor	N295	Driver Knee Airbag Igniter
G283	Driver Front Airbag Crash Sensor	N296	Front Passenger Knee Airbag Igniter
G284	Passenger Side Front Airbag Crash Sensor	N297	Driver's Seat Belt Tensioner Igniter 2
G551	Driver Belt Force Limiter	N298	Front Passenger Seat Belt Igniter 2
G552	Front Passenger Belt Force Limiter	N646	Driver Side Rollover Protection Igniter
G553	Driver Seat Position Sensor	N647	Front Passenger Side Rollover Protection Igniter
G554	Passenger Seat Position Sensor	T16	Data Link Connector
J234	Airbag Control Module		
J285	Instrument Cluster Control Module		
J533	Data Bus On Board Diagnostic Interface		
J706	Passenger Occupant Detection System Control Module		
J854	Left Front Seat Belt Tensioner Control Module		
J855	Right Front Seat Belt Tensioner Control Module		
K19	Seat Belt Indicator Lamp		
K75	Airbag Indicator Lamp		
K145	Front Passenger Airbag Disabled Indicator Lamp		
			Powertrain CAN bus
			Convenience CAN bus
			Diagnostics CAN bus
			Input signal
			Output signal



Side airbag

The front driver and passenger side airbags are designed as head thorax airbags. They are designed to protect the body and head of the front occupant.

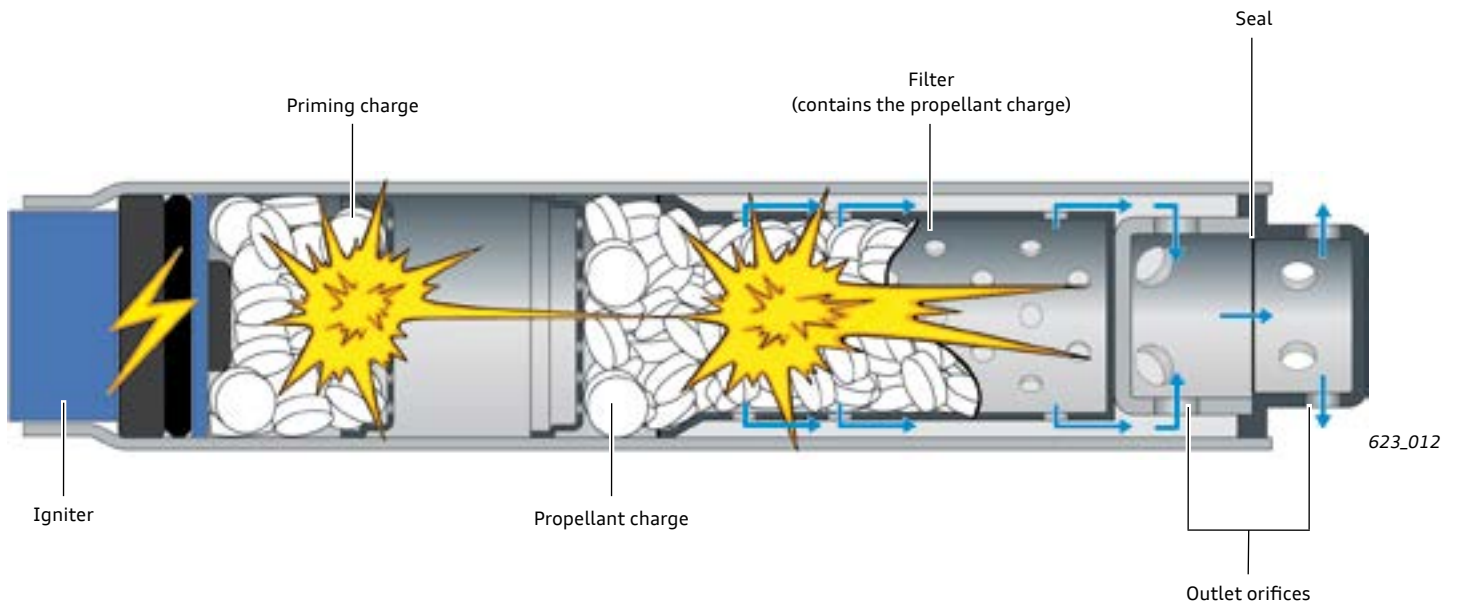
By integrating the side airbags in the front seat backrests, the occupant is optimally positioned relative to the front occupants irrespective of their seating adjustment.



623_011

The side airbags are activated by Airbag Control Module J234. The signal first ignites the priming charge which in turn ignites the solid propellant.

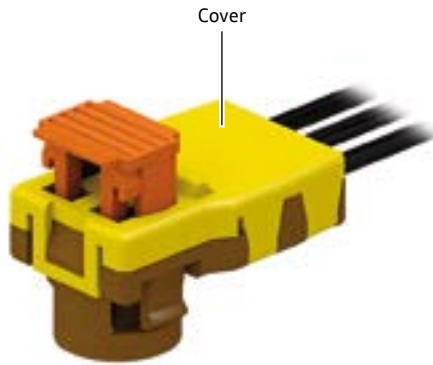
The gases expelled during the combustion of the propellant charge flow through the outlet orifices via the filter into the airbag which unfolds and fully inflates. The seal between the outlet orifices protects the pyrotechnic material from moisture and is destroyed by the heat generated.



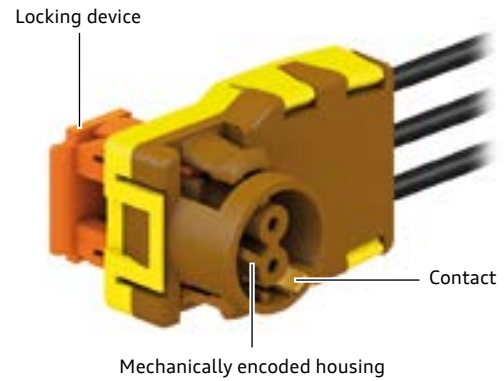
Electrical wiring harness for side airbag

The electrical wiring harness for the front side airbags can now be replaced without replacing the complete airbag module if it is damaged.

This is because the ground wire used to protect the pyrotechnic devices from static connects directly to the airbag module. When connected, the ground wire connects the gas generator housing to the vehicle body.



609_014a



609_014

Driver Side Rear Side Airbag Crash Sensor G256

G256 is a capacitive acceleration sensor. Although it is designated as being for the driver's side rear, it is installed at the center of the back seat area.

If a deployable impact is detected, the Airbag Control Module deploys the safety belt tensioners.

If G256 senses a side impact, it sends its signal to Airbag Control Module J234. The 'Y' sensor in the Airbag Control Module performs a plausibility check.



Driver Side Rear Side Airbag
Crash Sensor G256

623_013

Rollover protection

The A3 Cabriolet is equipped with a rollover protection system. Together with the strength of the body and rigid A-pillars, a protective area is created for the occupants during a rollover accident.

An additional sensor detects an imminent rollover and deploys the protection system. The sensor is located in Airbag Control Module J234 and cannot be replaced separately. If an imminent rollover is detected, the protection system is deployed and the pyrotechnic safety belt tensioners are ignited.

In all crash events in which the airbags and/or safety belt tensioners are ignited, the rollover protection deploys as a precautionary measure. If no rollover occurs in the course of the event, the system can be reset.

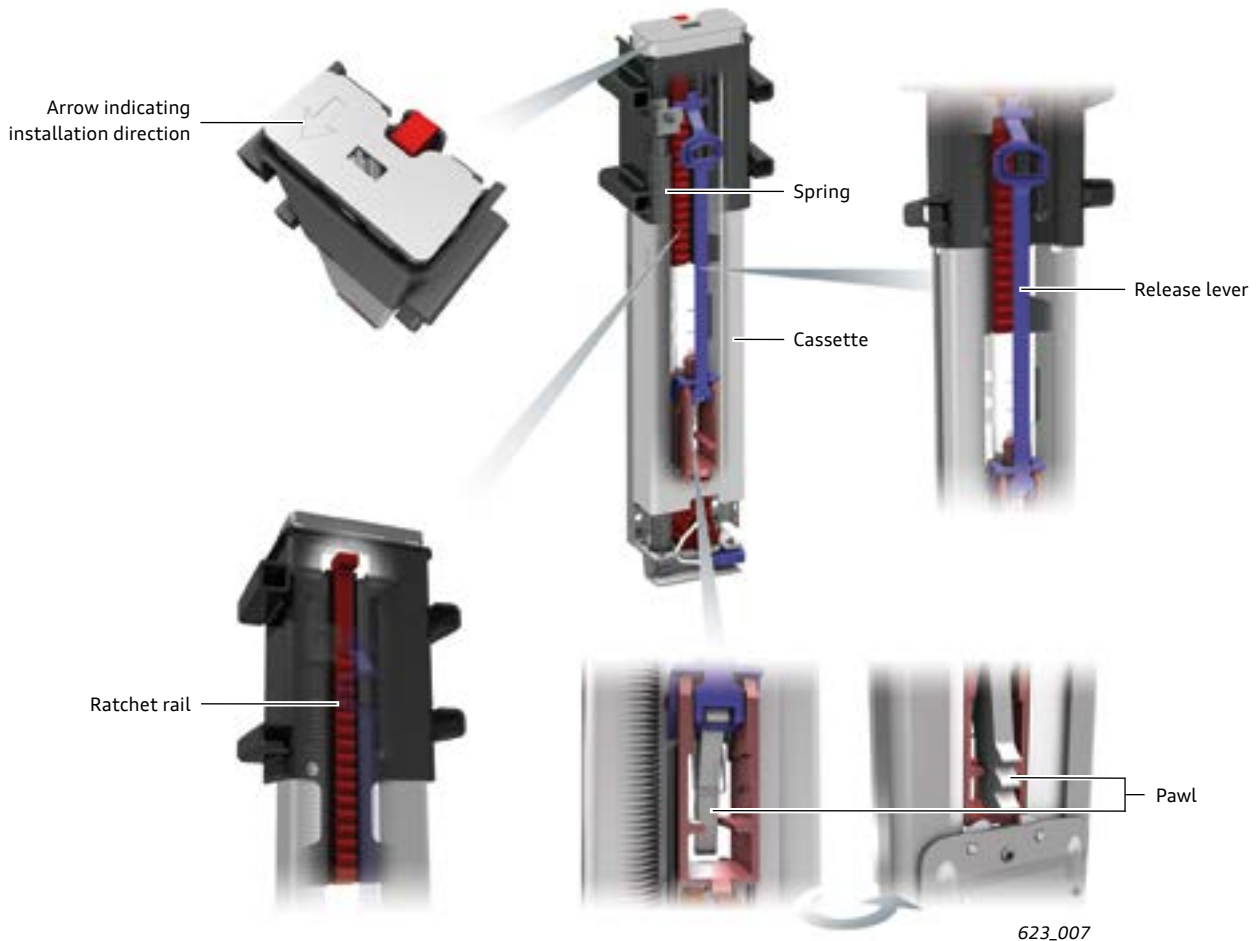


623_005a

Cassettes with protective roll bars

The rollover protection system on the A3 Cabriolet consists of two cassettes that hold the protective roll bars and other components. Different cassettes are used for the driver and passenger side of the vehicle. The cassettes must be installed on the correct side of the vehicle.

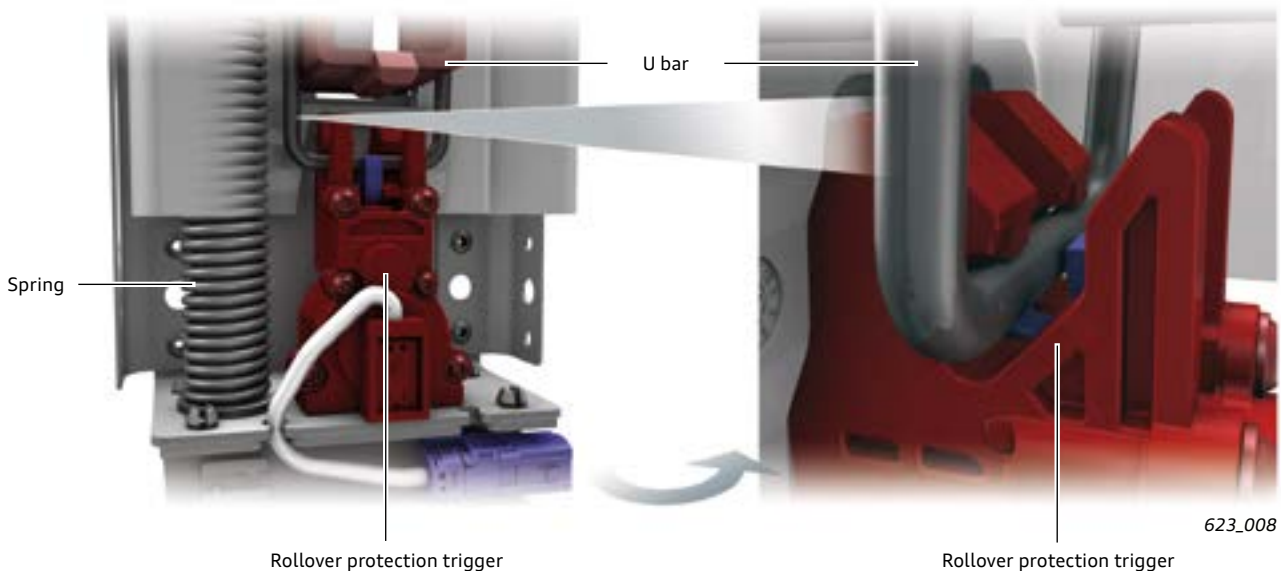
The correct installation direction of each cassette is indicated by a stamped arrow. A specific tightening sequence must be followed when they are installed.



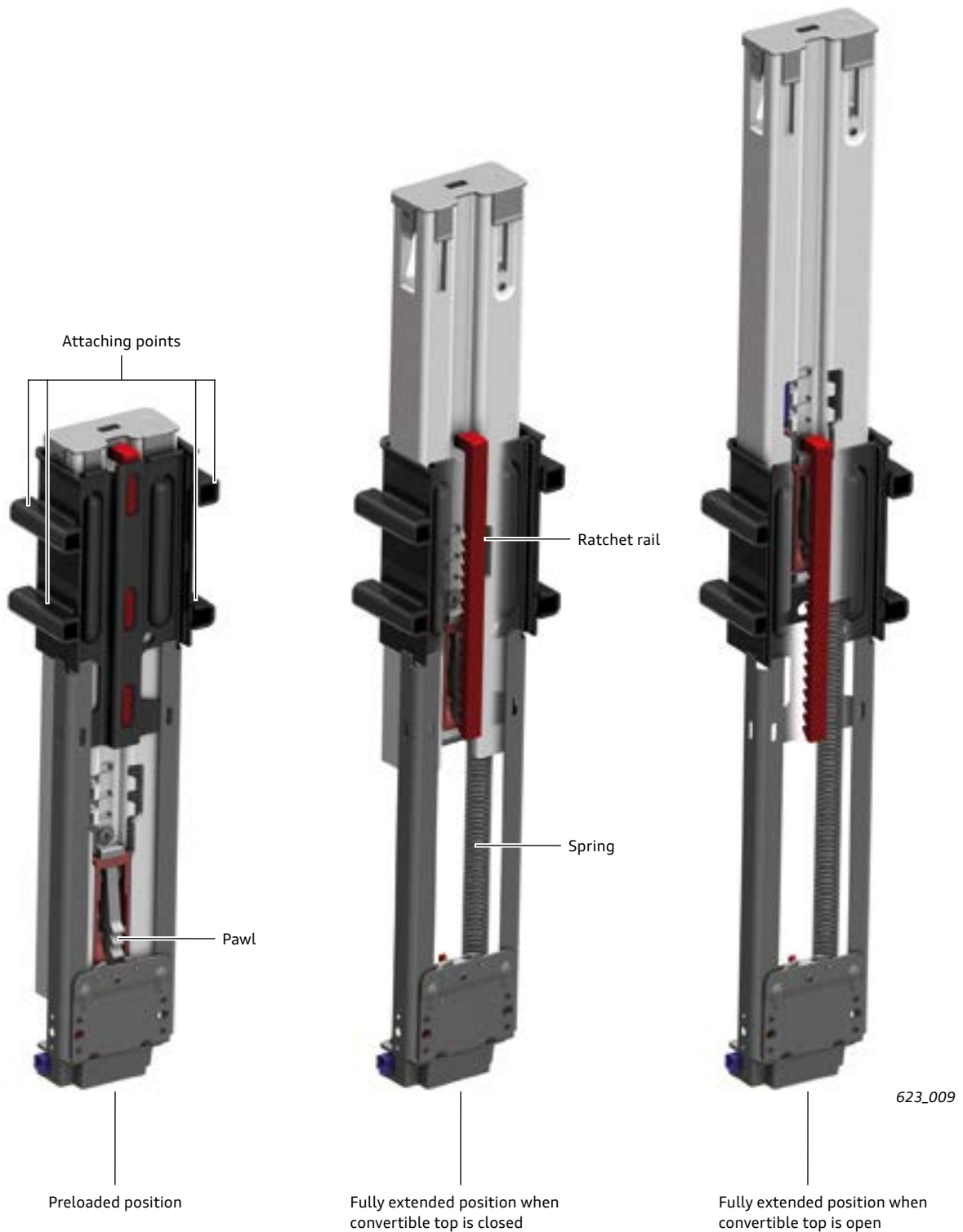
Driver Side Rollover Protection Igniter N646 and Front Passenger Side Rollover Protection Igniter N647

The retractable protective roll bars are pre-loaded by a spring. The bar is held in its lowered position by the U bar of the rollover protection trigger. When the trigger is energized by Airbag Control Module J234, it releases the U bar and the bar deploys upward in approximately 130 milliseconds.

When the protective roll bar reaches its fully extended position, a pawl engages the ratchet rail and locks the bar in position.



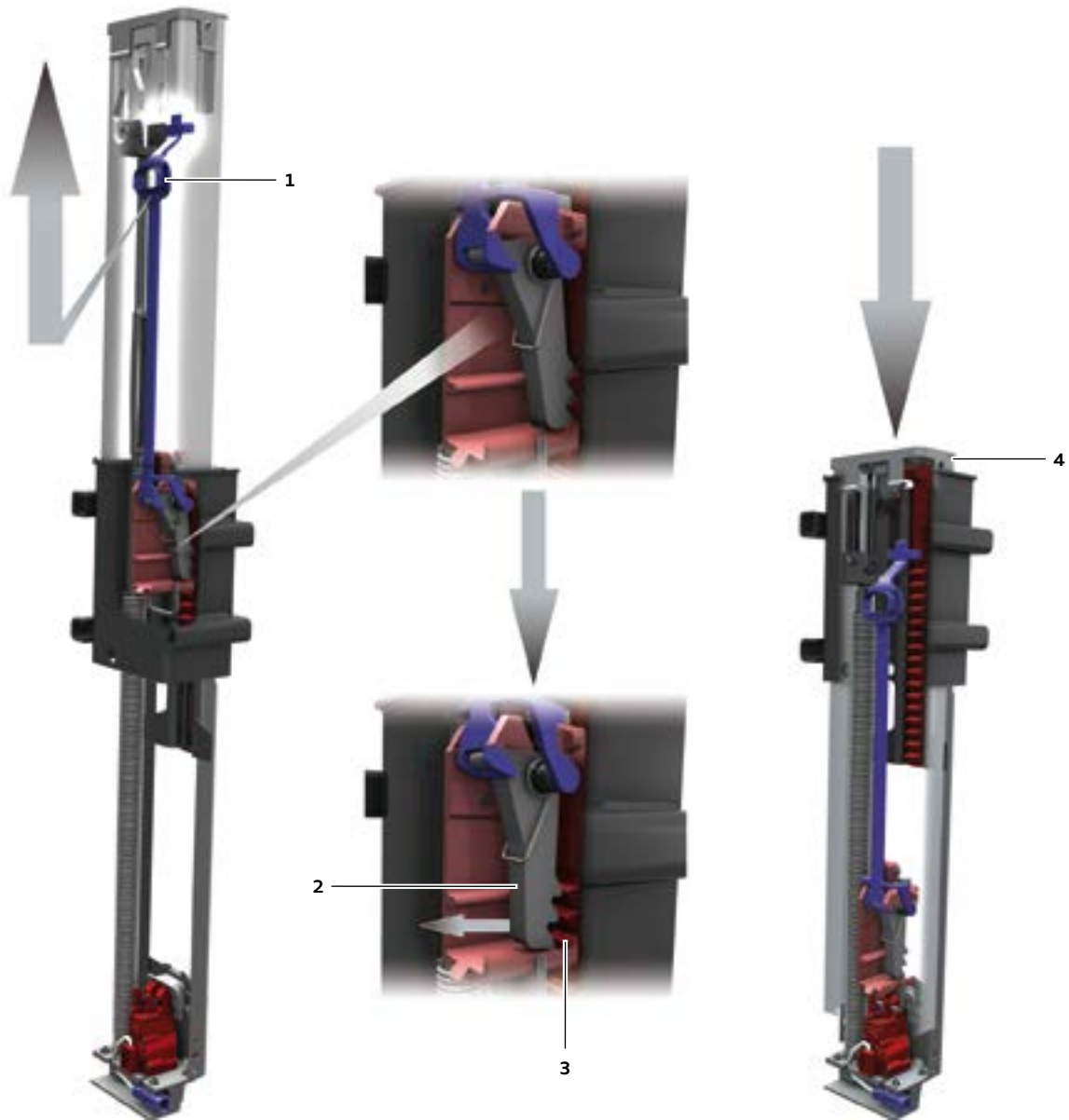
When the convertible top is open, the protective roll bar travels approximately 12.5 in (320 mm) when it is deployed. When the convertible top is closed, the travel of the bar is limited and it deploys approximately 7.4 in (190 mm). This helps minimize damage to the convertible top.



Resetting a deployed protective roll bar

Pulling the release lever **1** pulls the pawl **2** out of the ratchet rail **3** and releases the bar.

The rollover protection system can be reset by pushing back the bar **4** at the same time (the U bar must lock into place).



623_010

Diagnostics

N646 and N647 are monitored by Airbag Control Module J234. The Airbag Control Module records each deployment of the rollover protection system. The protection system can be tested by deploying through an Output check diagnosis using the VAS Scan Tool.

The number of deployments is limited and can be read from the MVBs. Once 127 deployments have been recorded, a DTC (rollover protection system faulty) is registered by J234 and the cassettes have to be replaced.

Therefore, unnecessary deployments should be avoided. Please consult the maintenance schedule to determine when a check of the system should be performed.



Reference

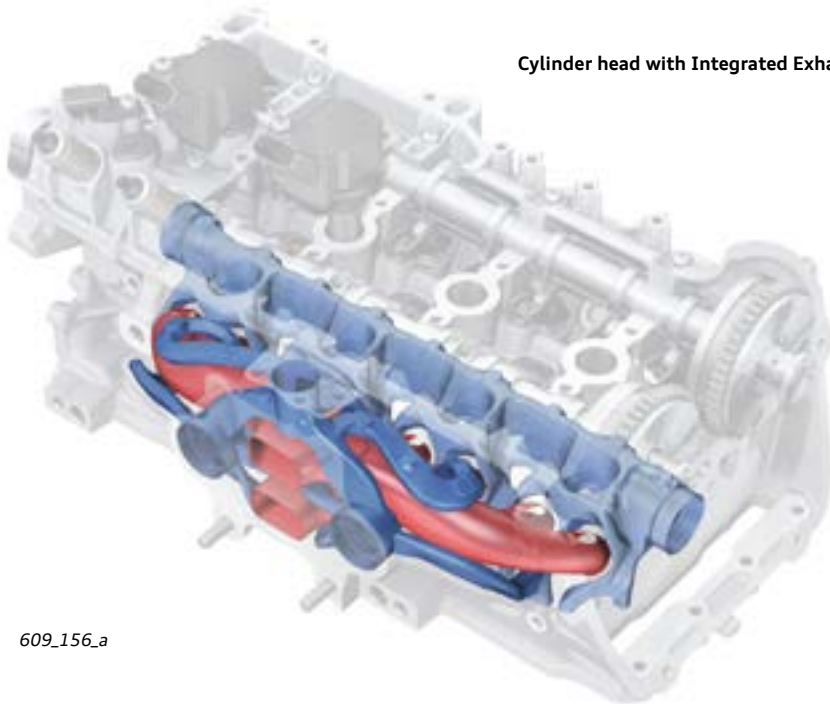
For further information about the rollover protection system, refer to the Electronics Service Information, Guided Fault Finding and the maintenance schedule.

Engines

1.8L and 2.0L TFSI engines

Technical feature overview

Cylinder head with Integrated Exhaust Manifold (IEM)

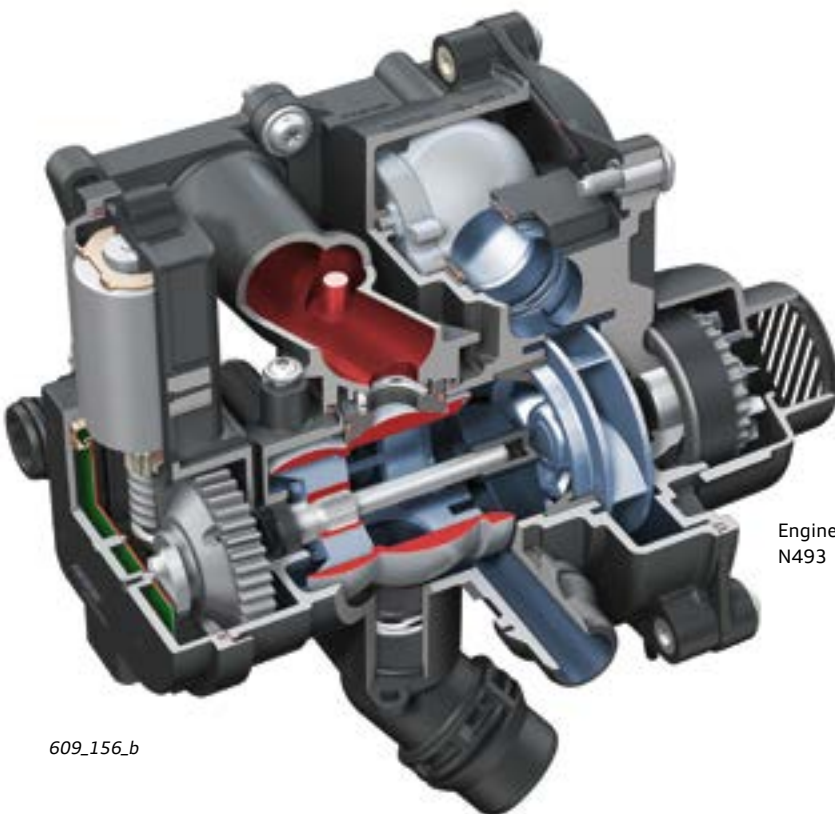


609_156_a

2.0L TFSI engine shown. The 1.8L TFSI engine does not have continuously adjustable exhaust camshaft timing.



Optimized thermal management



Engine Temperature Control Actuator N493

609_156_b

Both the 1.8L TFSI and 2.0L TFSI engines for the North American market will only have the FSI injection system. The dual injection may be introduced at a later date.

Combined FSI/MPI injection



609_156_c

Friction optimization and lightweight design



609_156



609_156_d



Reference

For detailed information about the 1.8L and 2.0L TFSI engines, please see eSelf-Study Program 920243, *Third generation Audi 1.8L and 2.0L engines from the EA888 model family.*

Engine/transmission combinations

1.8l TFSI engine



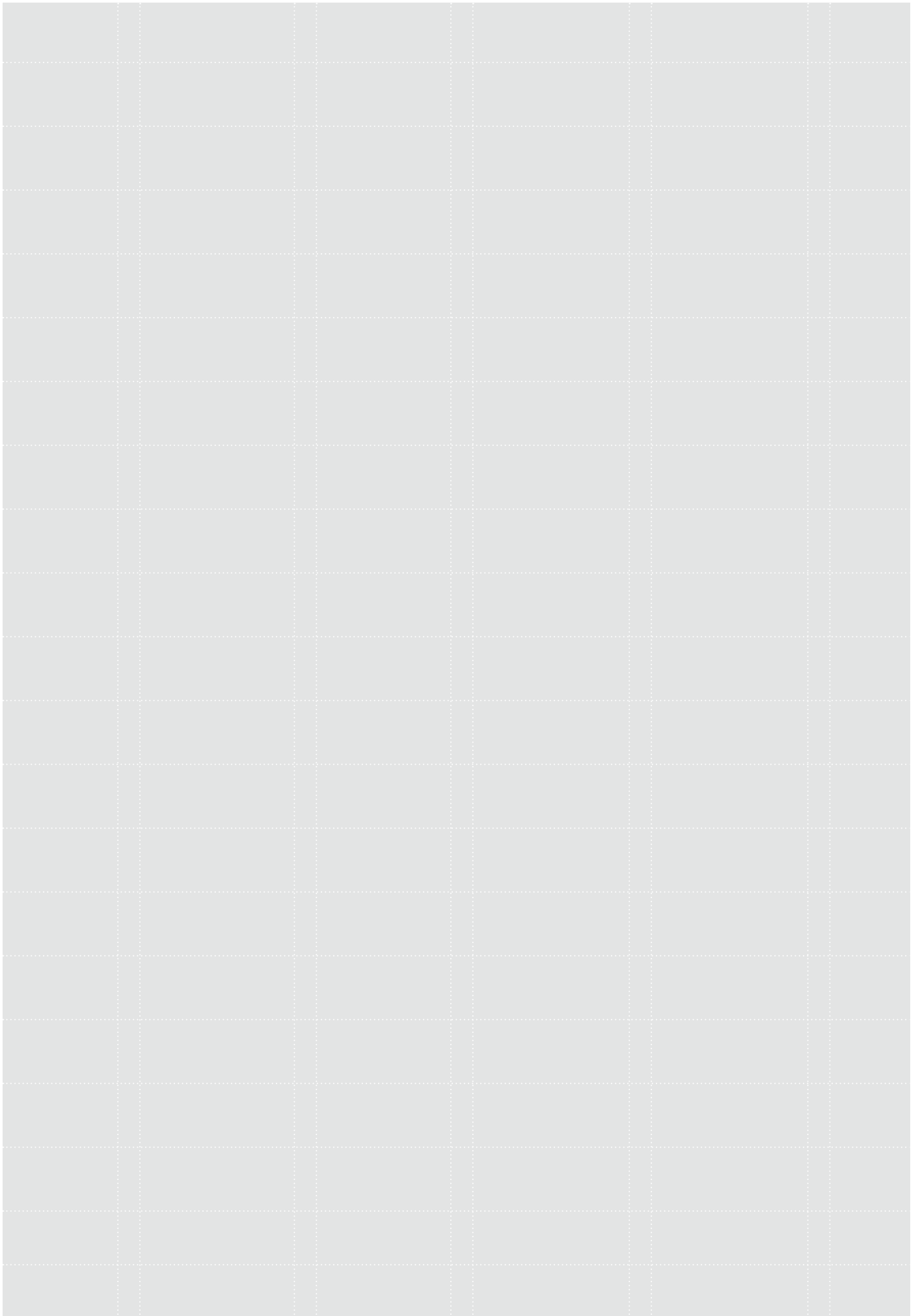
OD9 front

2.0l TFSI engine



OD9 quattro

Notes



Suspension

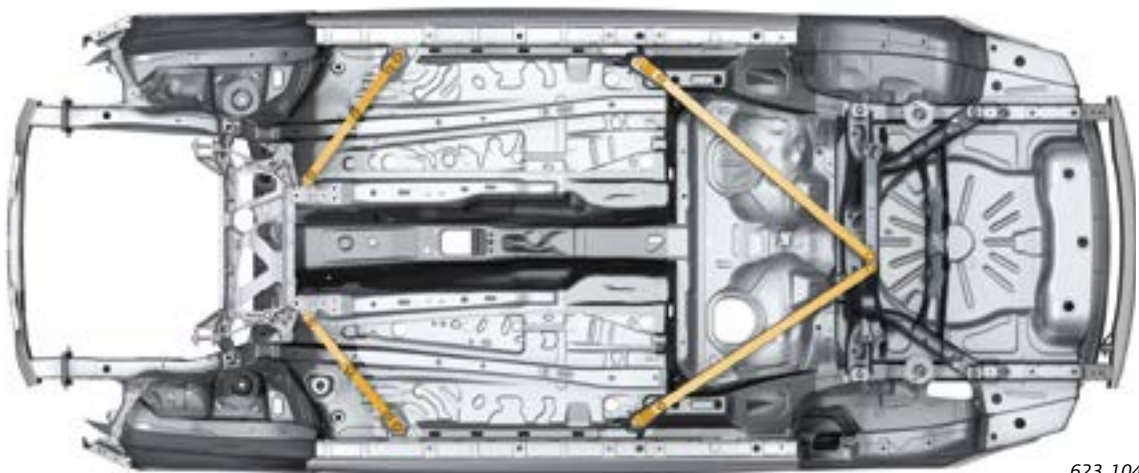
Overall concept

By using key suspension components from the 2015 A3 sedan, special emphasis was placed on lightweight design as part of the Audi Ultra Strategy. Some suspension components are made from aluminum.



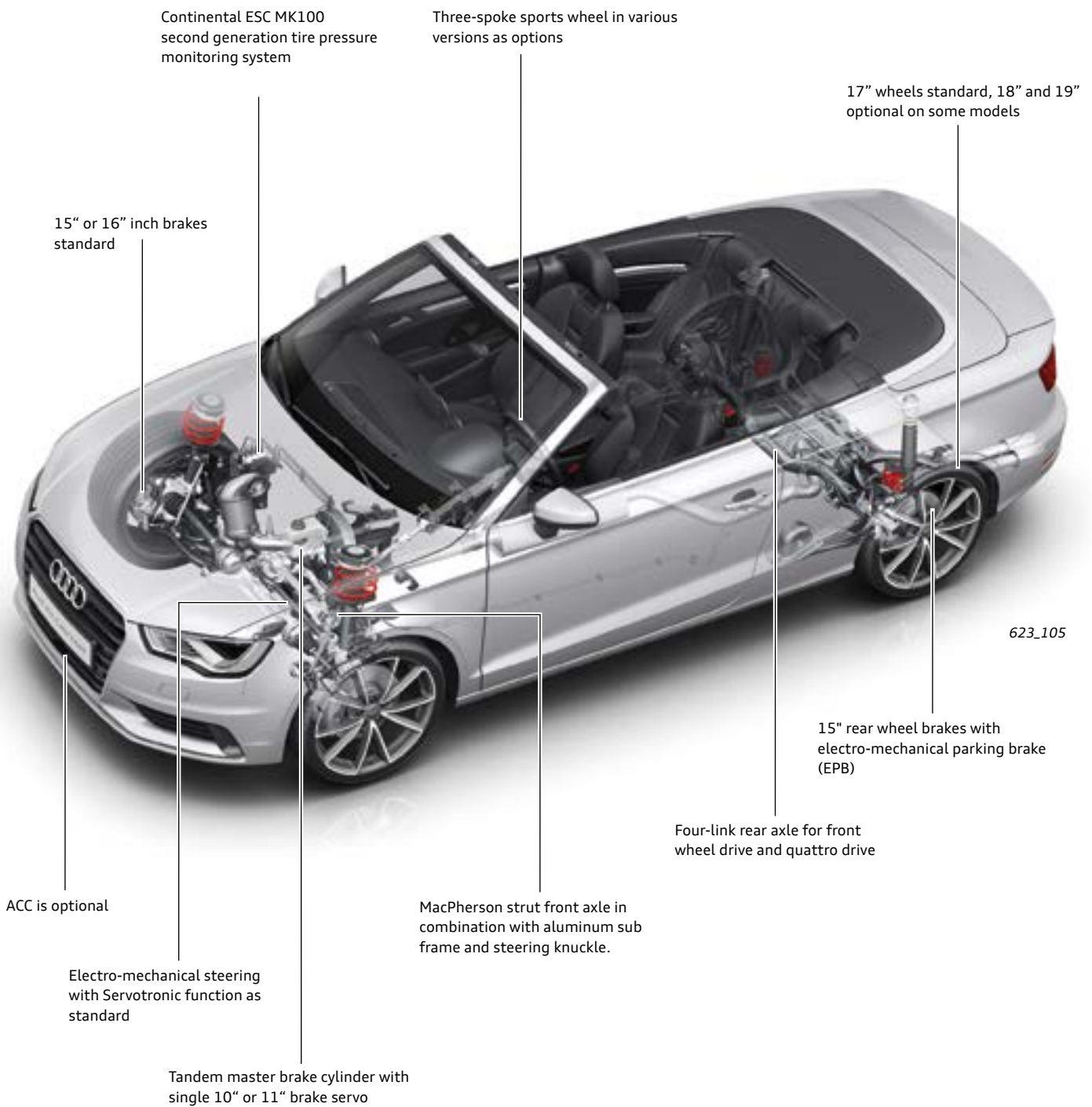
623_103

The front and rear axle carriers are connected to the car body by additional cross pieces. This provides a high level of vehicle rigidity and reduction of vibration.



623_104

Overview



Reference

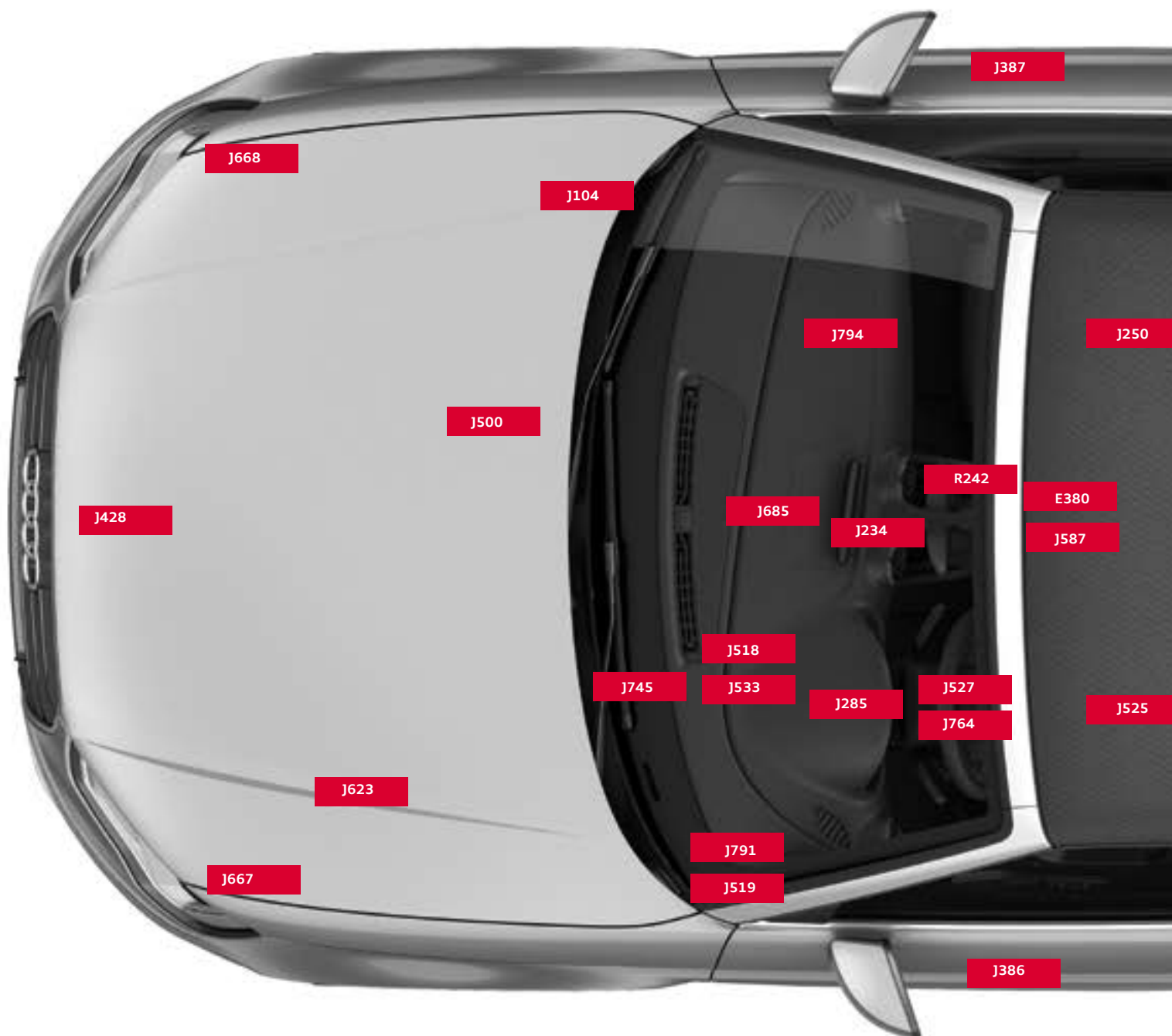
For detailed information about the design and function of the electro-mechanical steering system, refer to eSelf-Study Program 960143, *The 2015 Audi A3 Running Gear and Suspension System*.

Electrical system

Installation locations of control modules

Some of the control modules shown in the overview may be optional or country specific and not available in the North American market.

Refer to the current service literature for details of control module positions, as well as instructions for installation and removal.



Key:

E380 Multimedia System Control Head

J104 ABS/ESP Control Module

J234 Airbag Control Module

J250 ECD Control Module (electronically controlled damping)

J255 Climatronic Control Module

J256 Convertible Top Operation Control Module

J285 Instrument Cluster Control Module

J386 Driver Door Control Module

J387 Passenger Door Control Module

J428 Distance Regulation Control Module

J492 All Wheel Drive Control Module

J500 Power Steering Control Module

J518 Access/Start Authorization Control Module

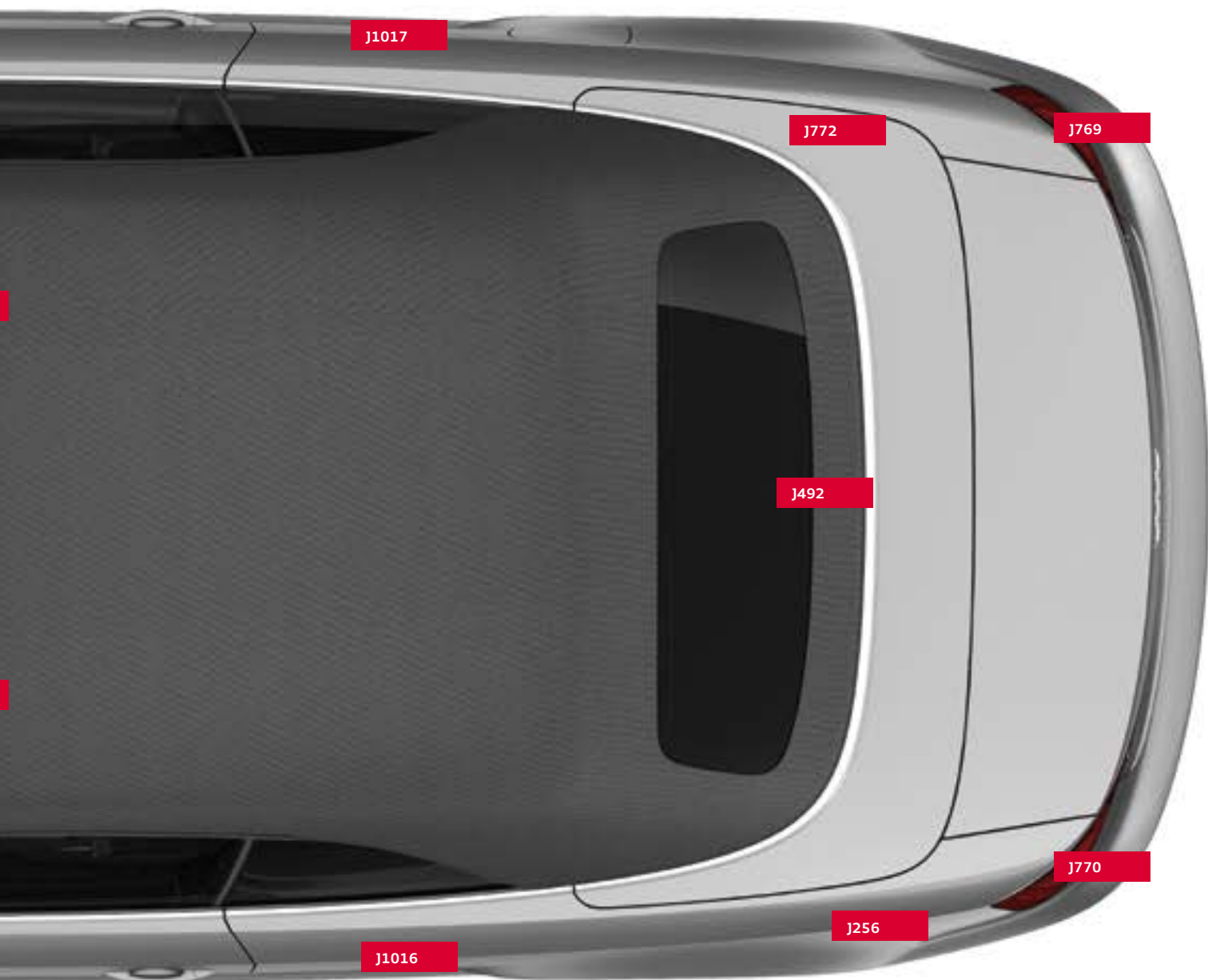
J519 Vehicle Electrical System Control Module 1

J525 Digital Sound System Control Module

J527 Steering Column Electronics Control Module

J533 Data Bus On Board Diagnostic Interface (Gateway)

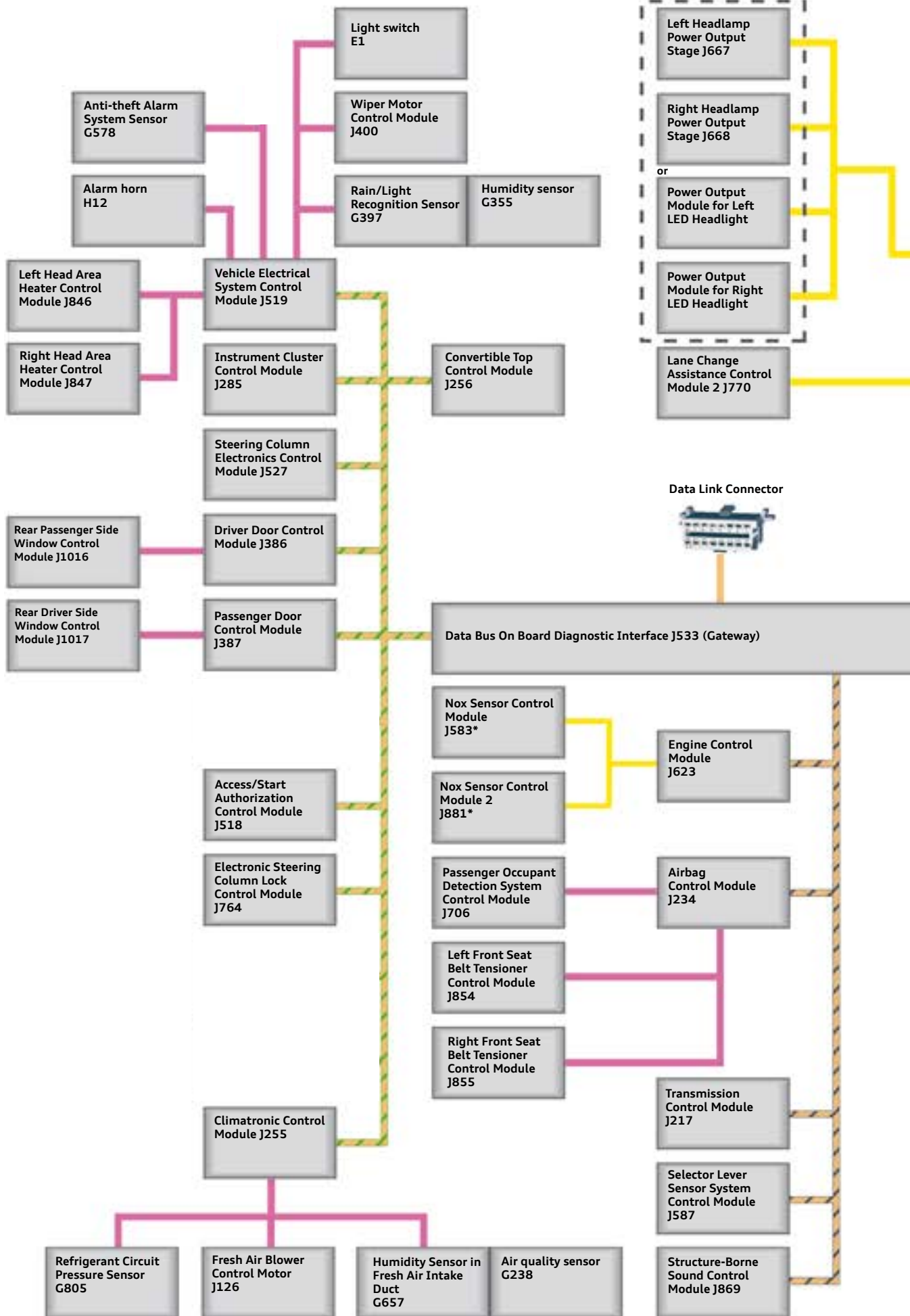
J527 Steering Column Electronics Control Module



623_097

- J623** Engine Control Module
- J667** Left Headlamp Power Output Stage
- J668** Right Headlamp Power Output Stage
- J685** Front Information Display Control Head
- 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** Rear View Camera System Control Module
- J791** Parallel Parking Assistance Control Module
- J794** Information Electronics Control Module 1
- J1016** Rear Driver Side Window Control Module
- J1017** Rear Passenger Side Window Control Module
- R242** Driver Assistance Systems Front Camera

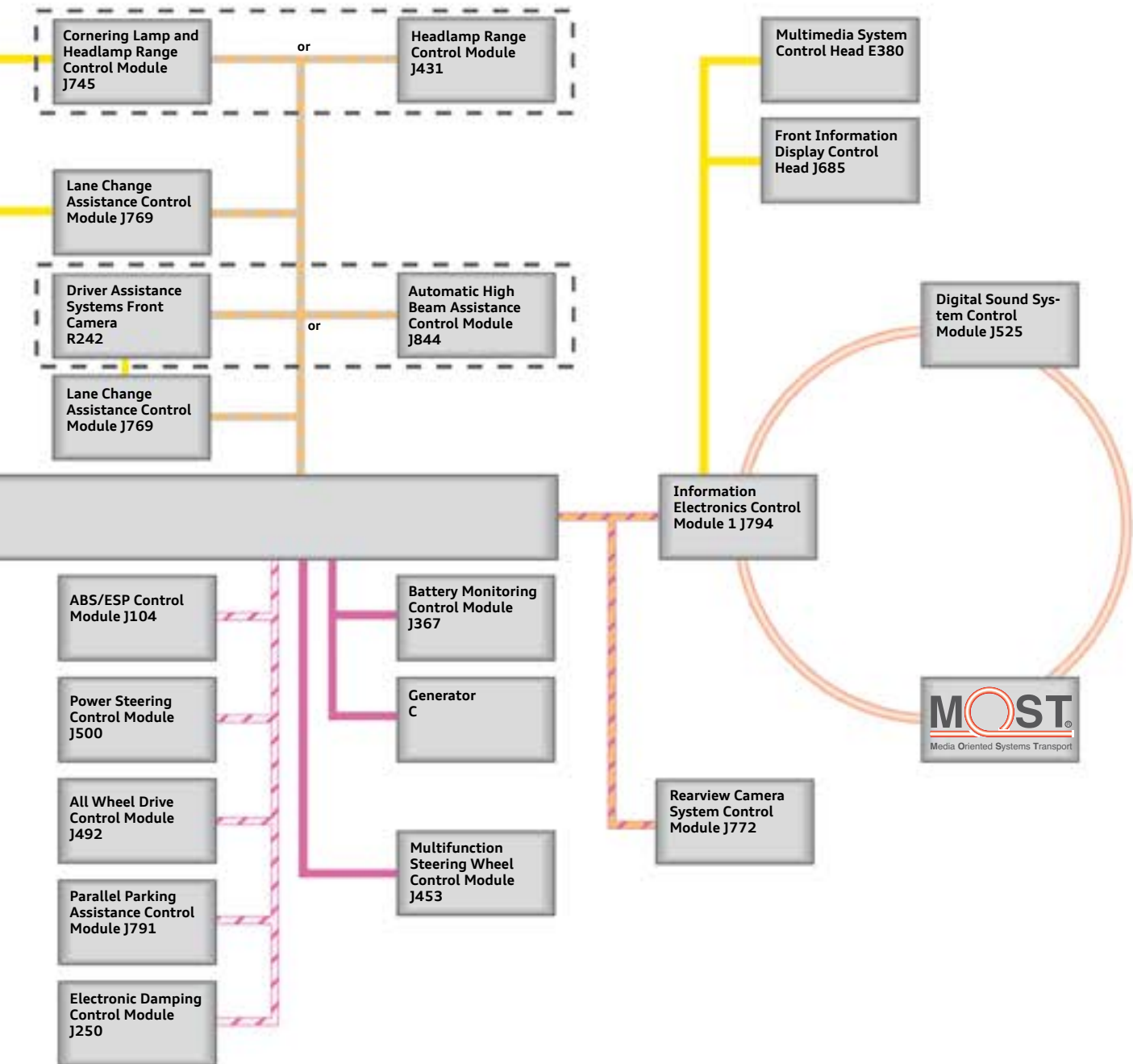
Topology



*TDI engine only

The topology shows all control modules with connectivity to the data bus system. Some of the control modules shown here are optional or country-specific equipment, or may be introduced at a later date.

For example: Cornering Light and Headlamp Range Control Module J745 is never installed in combination with Headlamp Range Control Module J431; only one or the other is installed.



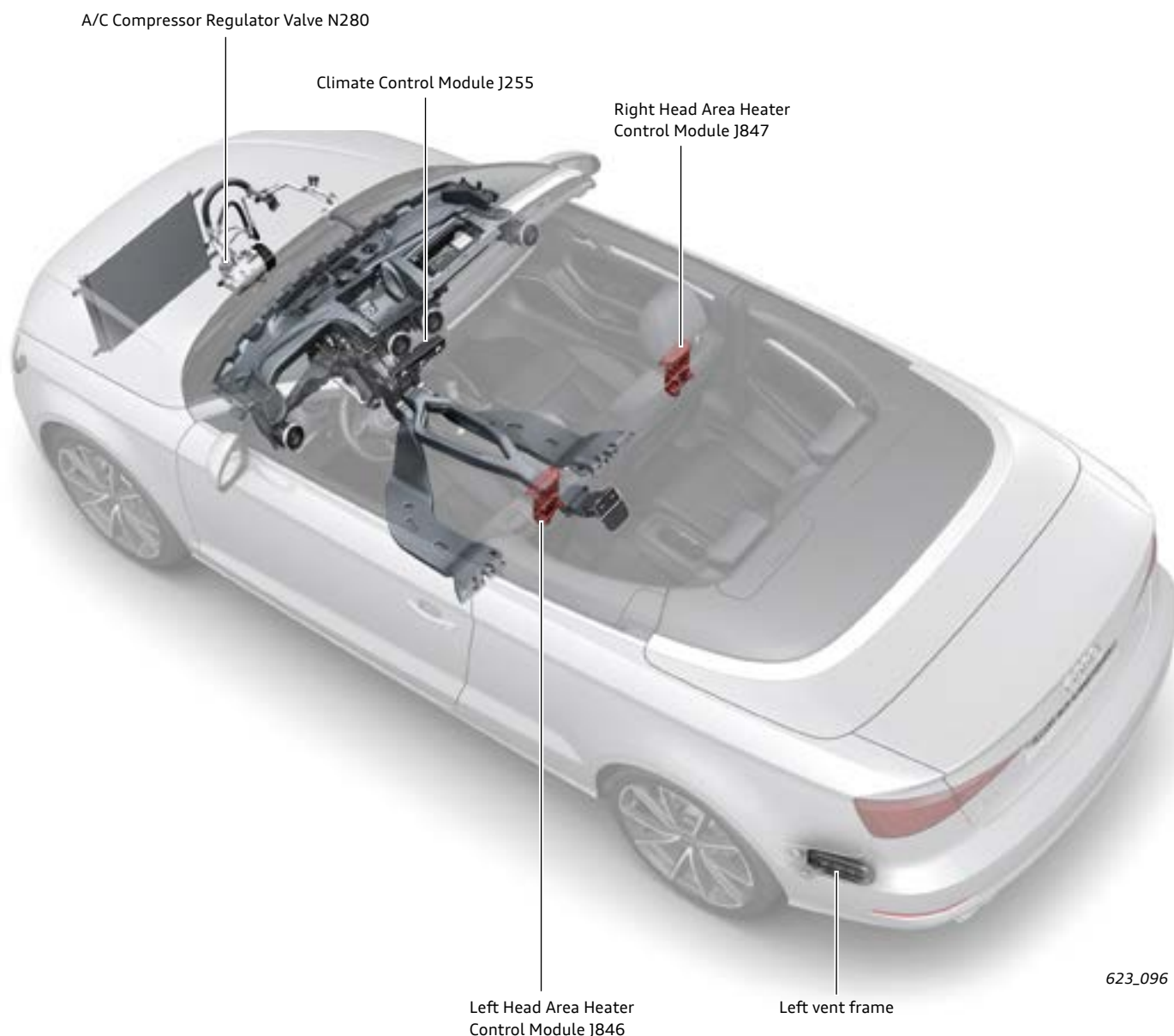
Key:

- Powertrain CAN bus
- Convenience CAN bus
- Extended CAN bus
- Infotainment CAN bus
- Diagnostics CAN bus
- Suspension CAN bus
- LIN bus
- Sub-bus systems
- MOST bus
- "OR" configuration

Climatronic

The A3 Cabriolet will come with Climatronic dual-zone air conditioning as standard equipment.


The Climatronic system has a moisture and enthalpy* control system. The moisture control system is used to detect windshield fogging.



* Enthalpy is the heat content of a system at a constant pressure.

Operation

Summary of main functions:

Climatronic	
Control panel and control module	Climatronic Control Module J255 with display
	
Functions on the control panel	Two rotary controls for drive and passenger side vent temperature AC button AUTO button Rotary blower control Defroster button Manual air recirculation button Heated rear window button Three buttons for setting the air distribution Optional seat heater button, three-stage
Number of temperature zones	2
Air flow and air flow distribution in the occupant cell	Defroster vents Dash panel vents, left-centre-right Footwell vents, right/left Rear footwell vents, right/left Rear vents
Moisture and enthalpy control system	yes
Automatic aire recycle control	yes
Air quality sensor	yes
Sun sensor	yes
Interior moisture sensor	yes
Exterior moisture sensor	yes
Glove compartment cooling	no

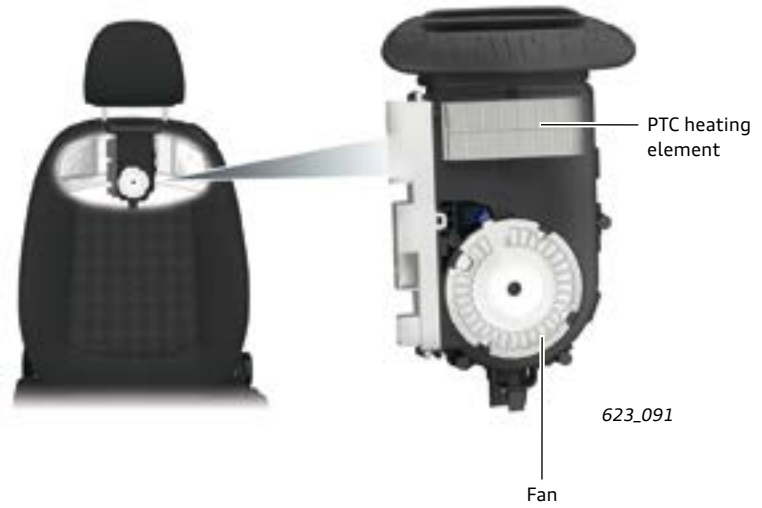
Head area heating*

Head area heating is optional for the front seats of the A3 Cabriolet. Sport seats can also be ordered with head area heating as an option.

Head area heating via the air vents on the upper edge of the backrest provides warmth in the head, neck and shoulder areas of the driver and front passenger.

Head area heating can be switched on when the engine is running, even if the convertible top is open.

Head Area Heater Control Modules J846/J847



The front seats with head space heating have no air intakes. The air required for head space heating is aspirated from the entire seat.

To ensure that enough air flows to Head Area Heater Control Modules J846 and J847, neither the seat fabric nor the rear seat cover are hermetically sealed.



Head space heating button, driver's seat

Climatronic Control Module J255

The head area heater system is switched on and off by switches integrated in Climatronic Control Module J255 just above the seat heater switches.

Three settings can be selected. When the system is on, its setting is indicated by LEDs.

The head area heater intensity level depends on the setting selected and on the position of the convertible top. If the convertible top is open, the heating output of the PTC element and the air flow rate are increased in each setting.



Seat heater button, driver's seat

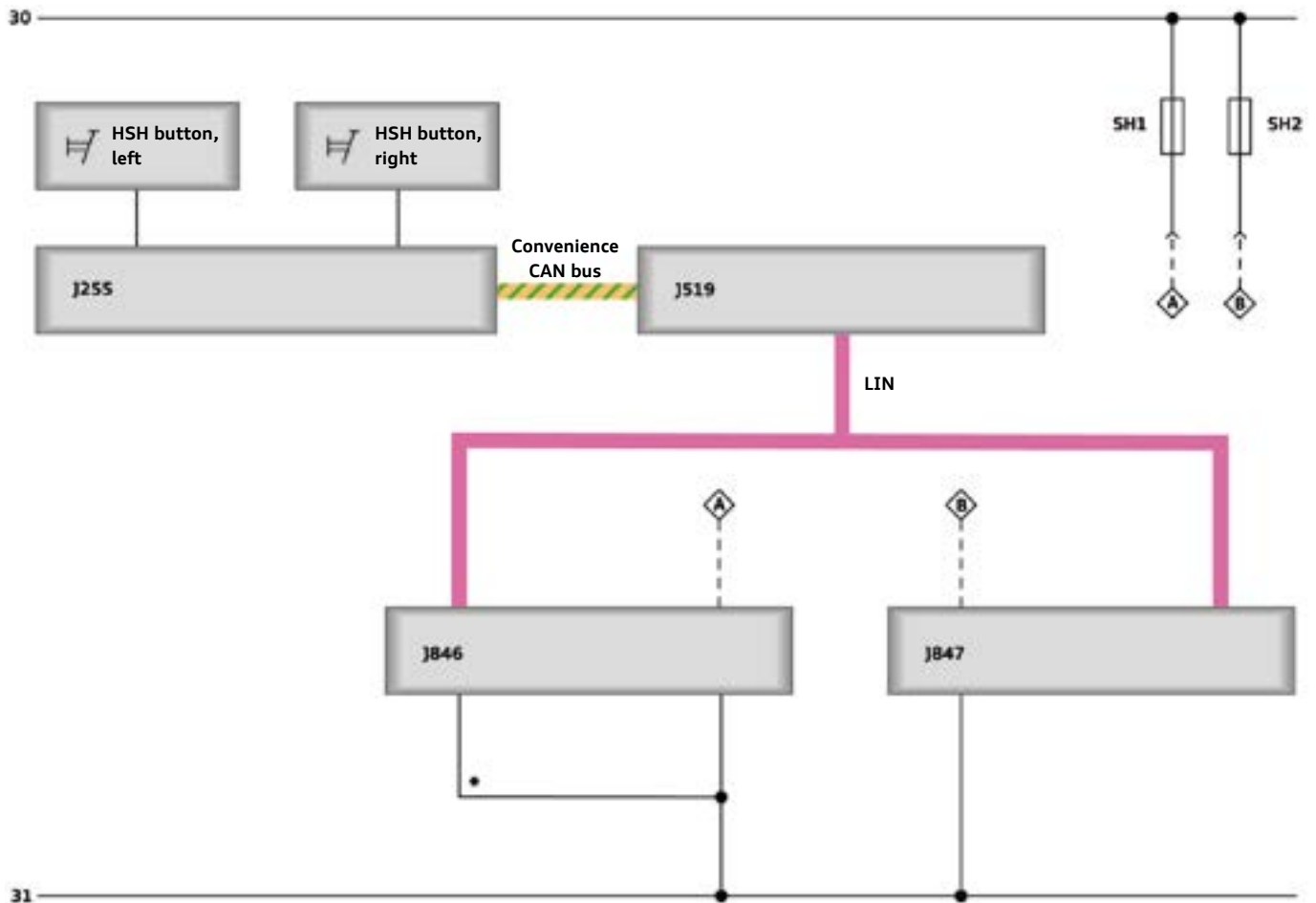
*Head area heating not available for North America at launch.

The head area heating system has a maximum power consumption of approximately 20A per front seat module.

Climatronic Control Module J255 receives input from the heater switches and sends it to Vehicle Electrical System Control Module J519 over the Convenience CAN. J519 transmits the activated head area heater setting and convertible top open or closed position by LIN signal.

The Head Area Heater Control Modules then actuate the corresponding blower setting and the heating output of the PTC element.

Head Area Heater Control Modules J846 and J847 are identical and are may be installed on either the left or right seat by a pin coding assignment.



623_094

- Head space heating (HSH) button, left
- Head space heating (HSH) button, right
- J255 Climatronic Control Module
- J519 Vehicle Electrical System Control Module
- J846 Left Head Area Heater Control Module
- J847 Right Head Area Heater Control Module
- SH1 Fuse 1 on fuse holder H
- SH2 Fuse 2 on fuse holder H
- * PIN coding wire
- LIN
- Convenience CAN bus

Infotainment

In response to the speed at which the development cycles for information and entertainment systems occur, the automotive industry has had to shorten its development cycles as well. Keeping up to date with the latest advances is a growing challenge for car makers.

To meet this challenge, the Volkswagen Group has introduced the Modular Infotainment Platform (MIB).

Central to the development of the MIB, Information Electronics Control Module 1 J794, has been re-designed as a modular component. The control module architecture

allows the hardware to be easily and economically updated so that it always incorporates the latest technological advances.


An important component is the graphics processor made by market-leader Nvidia, with whom Audi enjoys a very successful business relationship. The latest Nvidia processors will continue to be used in Audi vehicles in the future. The new platform means that it will be possible to use the same central processing units (J794) across the entire Group. So, in the future it will be possible to run brand specific variants on four standardized hardware platforms.

Overview of versions

In the North American market, the following versions of the MIB will be available on the 2015 Audi A3:

- ▶ Standard MIB - MMI radio
- ▶ High-spec MIB
 - ▶ MMI navigation plus
 - ▶ MMI navigation plus with Audi connect

eMedia



Click here for a closer look at the Audi A3 sedan Modular Infotainment System.



Reference

For more information about the infotainment systems of the 2015 A3, please see eSelf-Study Program 970143, *Modular Infotainment Platform (MIB)*.

Standard MIB - MMI radio

**High spec MIB
MMI navigation plus**

**High spec MIB
MMI navigation plus with Audi connect**



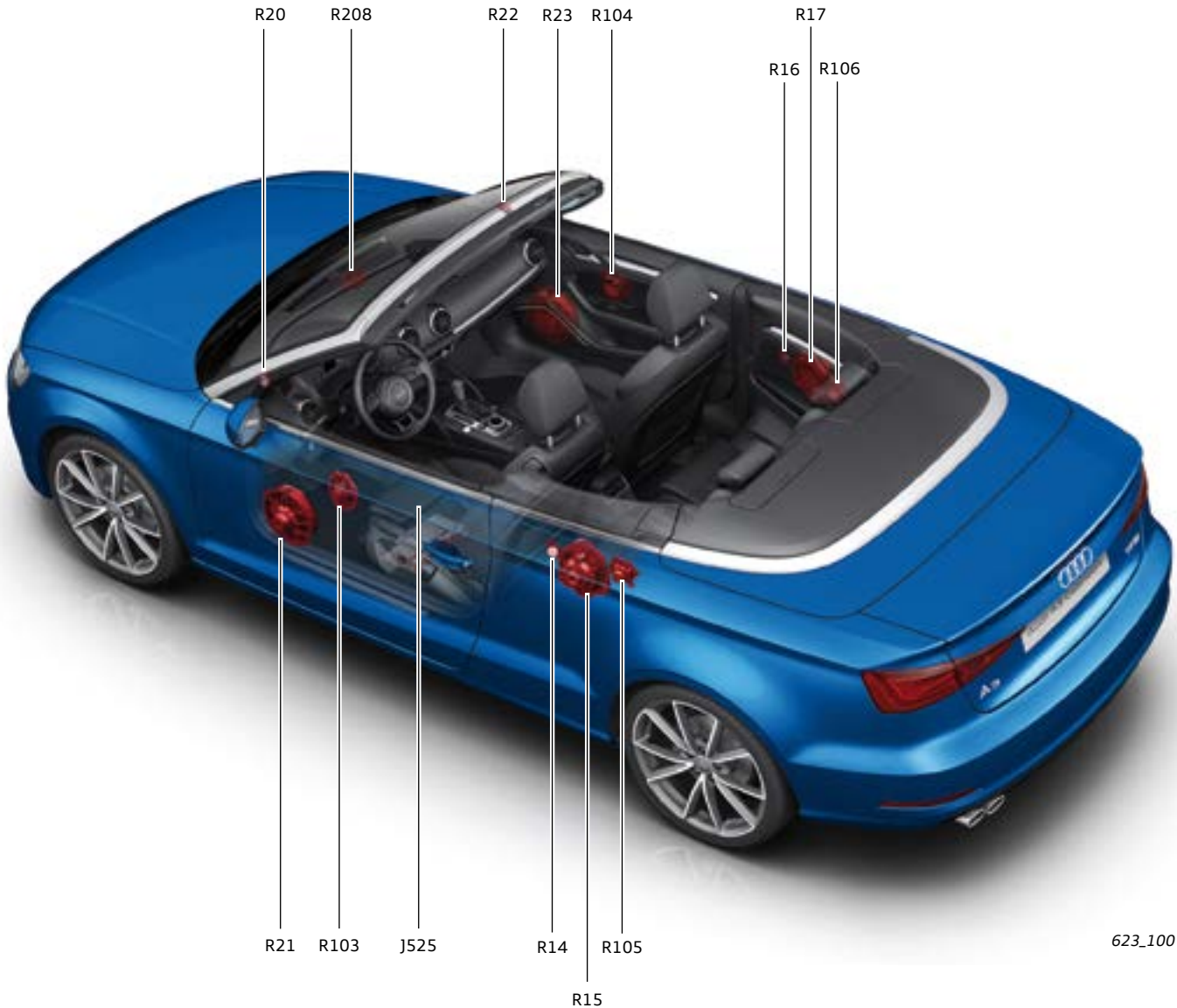
5.8" TFT color monitor with 400 x 240 pixel resolution	7.0" TFT color monitor with 800 x 480 pixel resolution	7.0" TFT color monitor with 800 x 480 pixel resolution
	2D navigation system	3D hard drive navigation system
		MMI touch
AM/FM radio with phase diversity	AM/FM radio with phase diversity and TMC tuner	AM/FM radio with phase diversity and background tuner
Car menu	Car menu	Car menu
CD drive (MP3, WMA, AAC ¹⁾)	CD drive (MP3, WMA, AAC)	DVD drive (audio/video, MP3, AAC, WMA, MPEG4)
1 SD card reader (SDHC cards with up to 32 GB of memory)	2 SD card readers (SDHC cards with up to 32 GB of memory)	2 SD card readers (SDHC cards with up to 32 GB of memory)
		approximately 10 GB for jukebox
AUX (with AMI)	Audi music interface with iPod cable (UE7)	Audi music interface with iPod cable (UE7)
Audi Sound System (9VD)	Audi Sound System (9VD)	Audi Sound System (9VD)
	Bluetooth interface for HFP and A2DP (9ZX)	Bluetooth interface for HFP and A2DP (9ZX)
	Speech dialogue system	Premium speech dialogue system
		1 sim card reader
Bluetooth interface for HFP and A2DP (9ZX) and speech dialogue system		
Optional Audi music interface with iPod cable (UE7)		Bluetooth car phone BTA (market-dependent, Audi connect incl. car phone) (9ZK)
SDARS HD radio (QV3)	SDARS HD radio (QV3)	SDARS HD radio (QV3)
	Bang & Olufsen Sound System (9VS)	Bang & Olufsen Sound System (9VS)

¹⁾ The MMI Radio can only play back AAC files only if the optional Audi music interface is installed.

Optional Bang & Olufsen sound system

Surround sound is provided by 13 high-performance speakers including center speakers and, instead of a subwoofer, two special Kickbass speakers (R17/R15) each delivering 100W.

The speakers are driven through an external 13-channel amplifier (Digital Sound System Control Module J525) with a total power output of 625W.

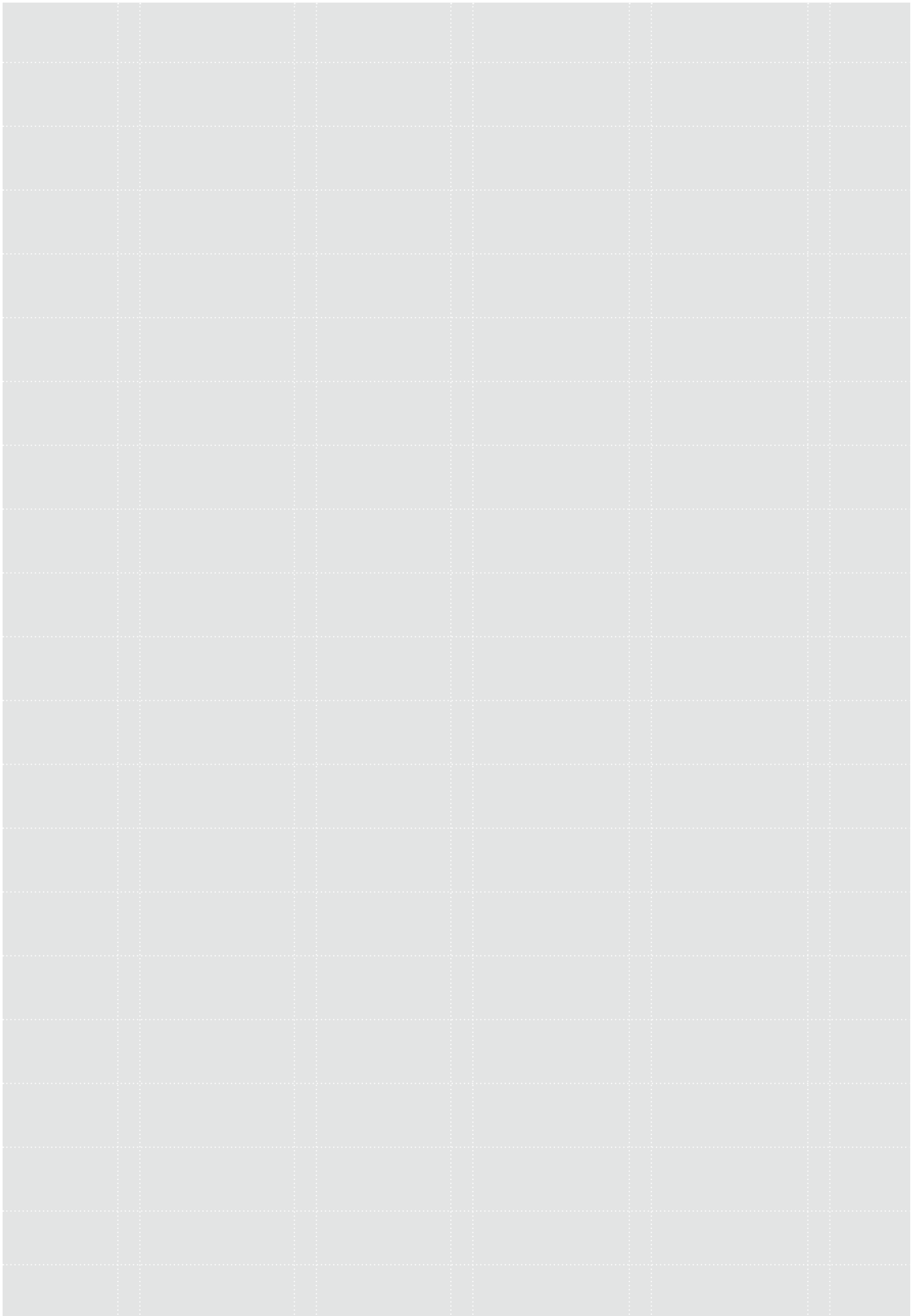


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Key:

- J525 Digital Sound System Control Module
- R14 Left Rear Treble Speaker
- R15 Left Rear Bass Speaker
- R16 Right Rear Treble Speaker
- R17 Right Rear Bass Speaker
- R20 Left Front Treble Speaker
- R21 Left Front Bass Speaker
- R22 Right Front Treble Speaker
- R23 Right Front Bass Speaker
- R103 Left Front Mid-range Speaker
- R104 Right Front Mid-range Speaker
- R105 Left Mid-range Speaker
- R106 Right Mid-range Speaker
- R208 Center Speaker

Notes



Antenna system

To ensure optimal AM reception when the convertible top is open and closed, two antennas for AM reception are installed on the A3 Cabriolet.

The AM1 antenna is integrated in the right rear trim panel, while AM2 R11 is built into the convertible top.

When the convertible top is closed, the signals from the convertible top antenna and Antenna Amplifier R24 are combined to give better reception.

If the convertible top is open, only Antenna Amplifier R24 provides a signal.



Key:

- R11 Antenna (AM2)
- R24 Antenna Amplifier (AM1)
- R50 GPS Antenna
- R55 TV Antenna 1 (not for the North American market)
- R56 TV Antenna 2 (not for the North American market)
- R65 Telephone Antenna
- R78 TV tuner (not for the North American market)
- R82 TV Antenna Amplifier 1 (not for the North American Market)
- R83 TV Antenna Amplifier 2 (not for the North American Market)
- R111 Antenna Amplifier 2
- R112 Antenna Amplifier 3
- R172 Satellite Tuner Antenna
- R183 Digital Radio Antenna
- R205 GSM Antenna
- R248 Radio Antenna
- R267 GSM Antenna 2



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Service

Service interval overview for North American region

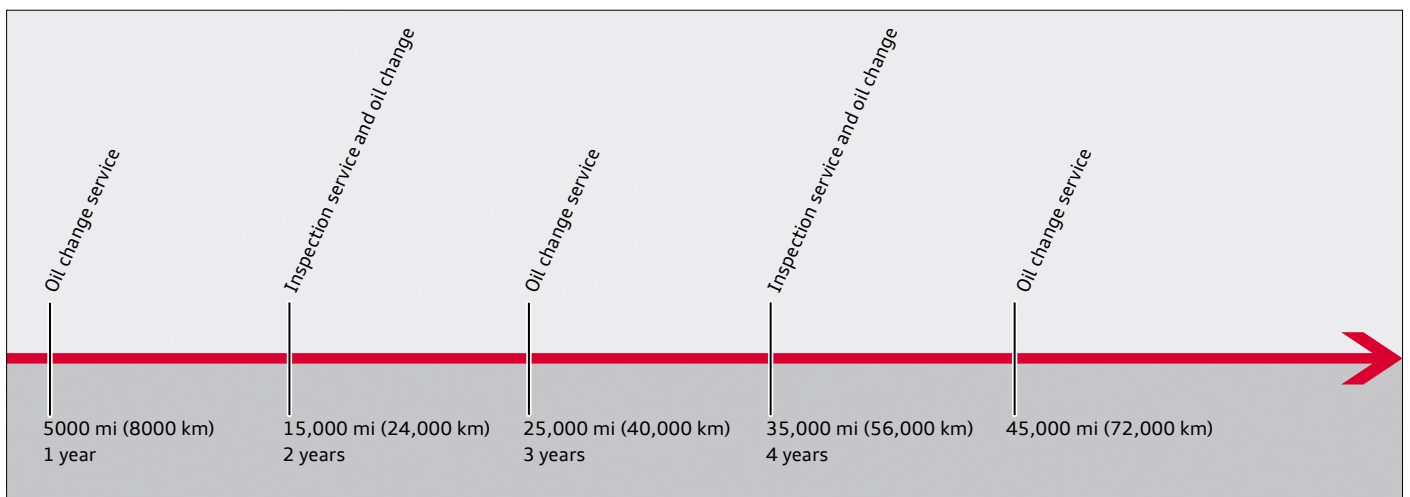
Service recommendations can be viewed through the MMI.

- ▶ Oil change service
- ▶ Mileage based service events
- ▶ time based service events



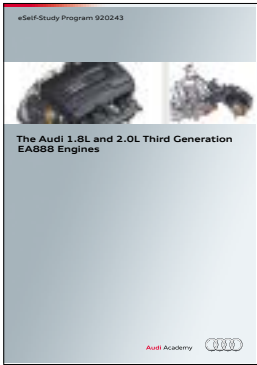
625_073a

The first recommended oil change for A3 Cabriolets in the North American region is at 5000 mi (8000 km) or at one year from the date of delivery. An oil change and inspection service is recommended at 15,000 mi (24,000 km). Oil change service is recommended 10,000 mi (16,000 km) thereafter with. See the chart below.

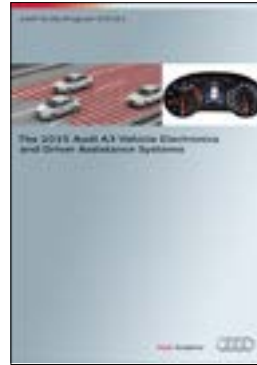


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Self Study Program



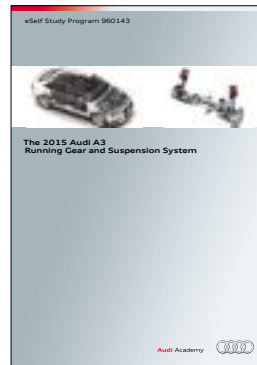
SSP 920243
Audi 1.8L and 2.0L Third Generation EA888 Engines



SSP 970343
The 2015 Audi A3 Vehicle Electronics and Drivers Assistance Systems



SSP 970143
Modular Infotainment Platform (MIB)



SSP 960143
The 2015 Audi A3 Running Gear and Suspension Systems



SSP 970243
The 2015 Audi A3 Onboard Power Supply and Networking Systems



SSP 920143
The Audi 2.0L Third Generation TDI Engine

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- ▶ Click on the “Academy site” link
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