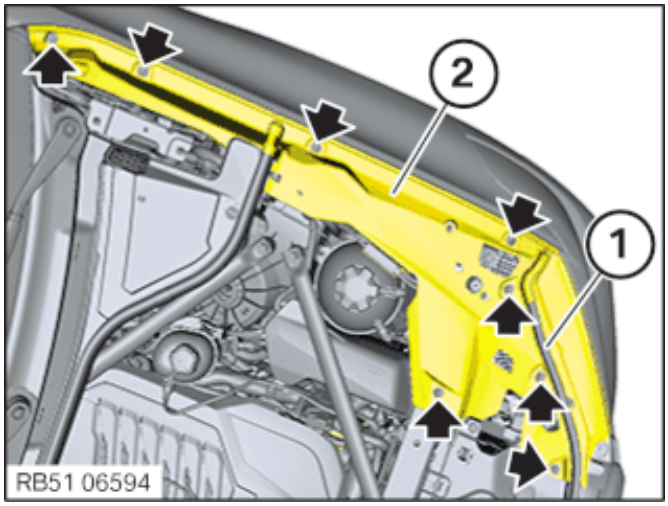
- Release the acoustic cover (1) upwards out of the rubber mounts (markings).

Removing the top right and left cover in the engine compartment

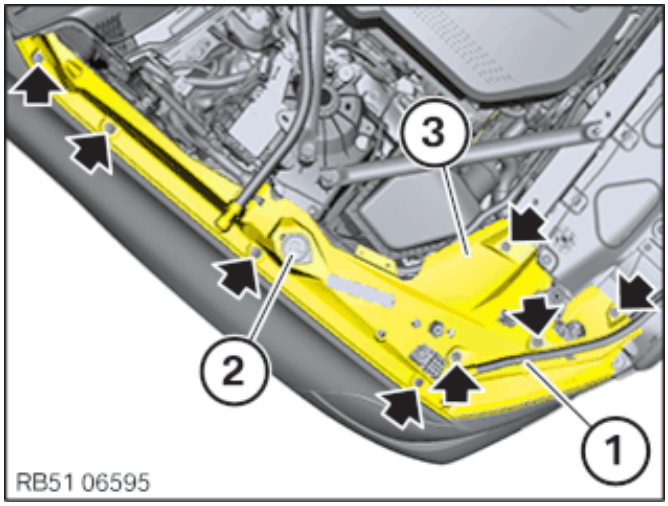
▶ Remove the cover in the engine compartment on top



- Release the seal for the hood (1) in the cover area (2) at the clips with the special tool **2 298 505** .
- Release the expanding rivets (arrows).
- Guide out and remove the cover (2).

◀

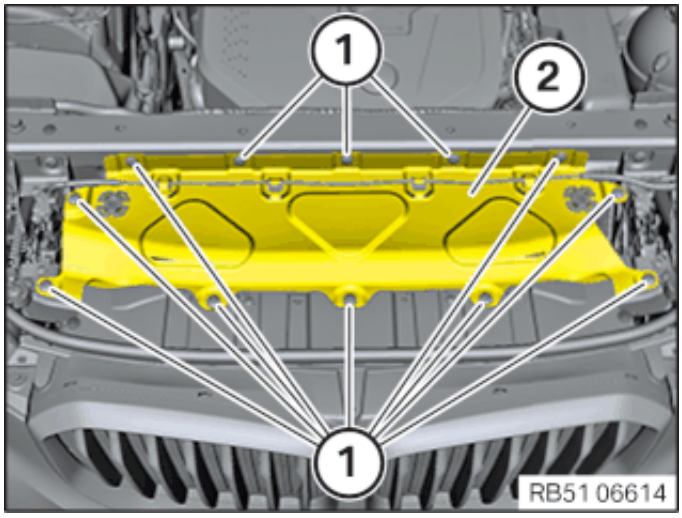
▶ Remove the top right cover in the engine compartment



- Release the seal for the hood (1) in the cover area (3) at the clips with the special tool **2 298 505** .
- Release the expanding rivets (arrows).
- Open and remove the cover (2) of the washer fluid reservoir.
- Guide out and remove the cover (3).

◀

Removing upper cross connection



- Loosen screws (1).
- Detach the Bowden cable .
- Feed out the cross connection(2) and remove upwards.

Remove the tension strut at the shock tower on the left and right

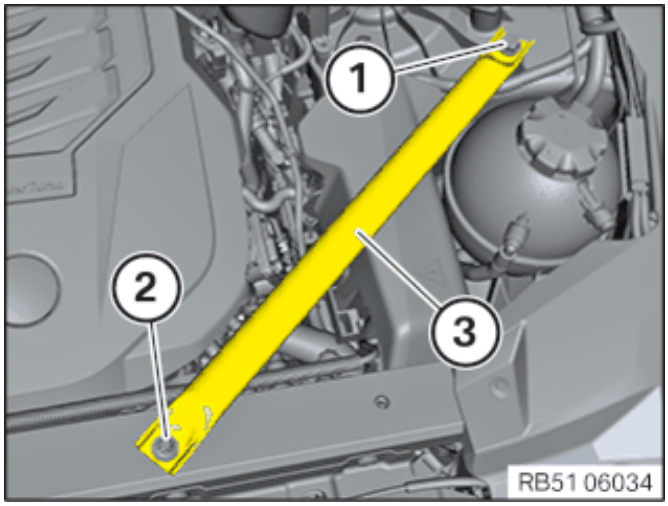
NOTE

Description is for left component only. Procedure on the right side is identical.

▶ Remove trailing link at spring bolt

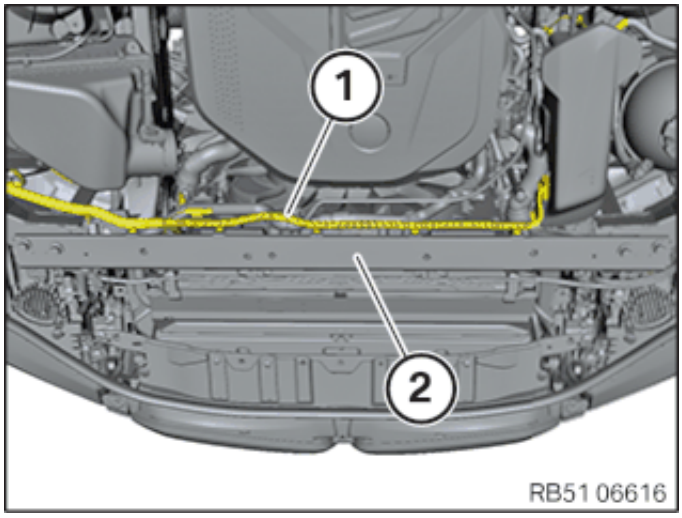
TECHNICAL INFORMATION

Driving without the strut brace/front-end strut or tension strut is not permitted.

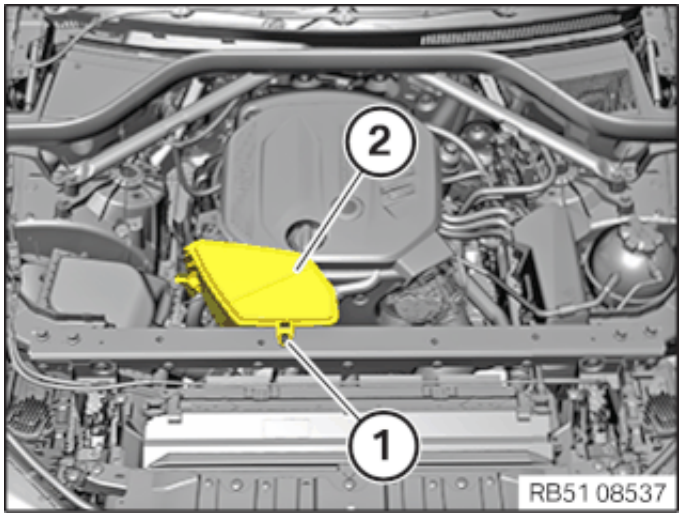


- Loosen screws (1) and (2).
- Remove tension strut (3) at the shock tower upwards.

Remove the rear top cross connection

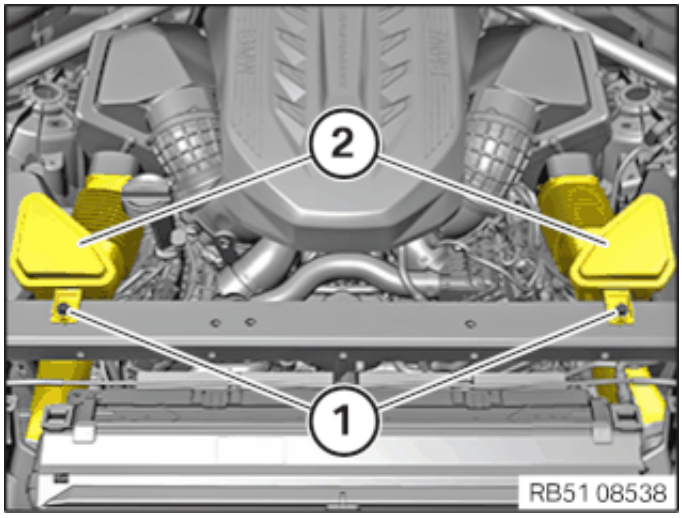


- Unclip the vehicle wiring harness (1) from the rear top cross connection (2).



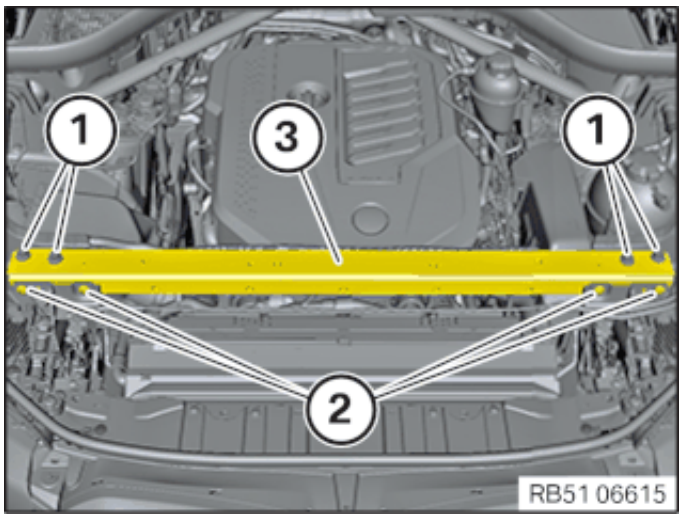
- **If fitted:**

  Release the screw (1) from the resonator (2).



- **If fitted:**

  Release the screws (1) from the resonator (2).

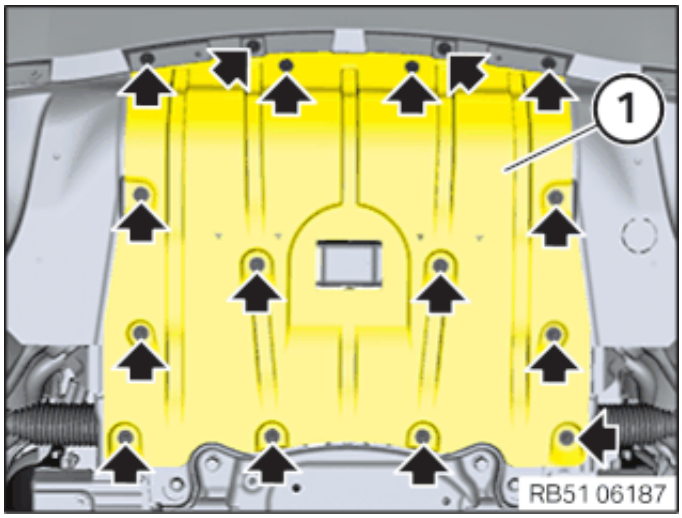


- Loosen screws (1).
- Loosen screws (2).
- Thread out and remove the top rear cross connection (3).

Removing the front underbody protection

i TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

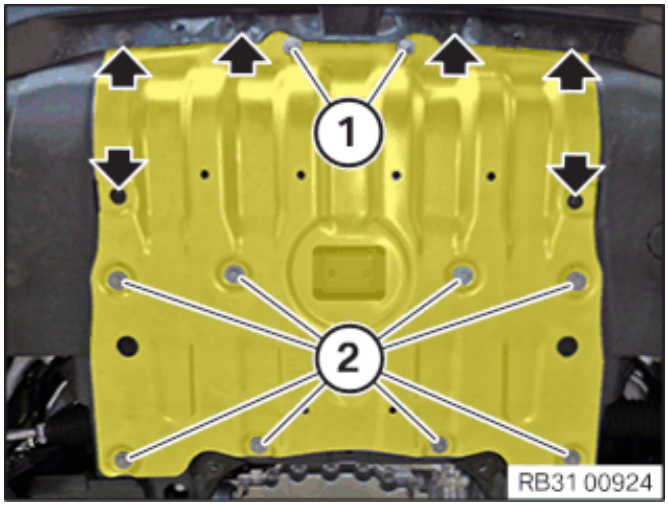


- Remove screws (arrows).
- Feed out and remove the front underbody protection (1).

▶ Removing the front skid plate

NOTE

The following step(s) must be performed if the listed component(s) is/are installed.



TECHNICAL INFORMATION

Secure component against falling.

- Remove screws (arrows).
- Loosen screws (1) and (2).
- Feed out and remove the front skid plate.

◀

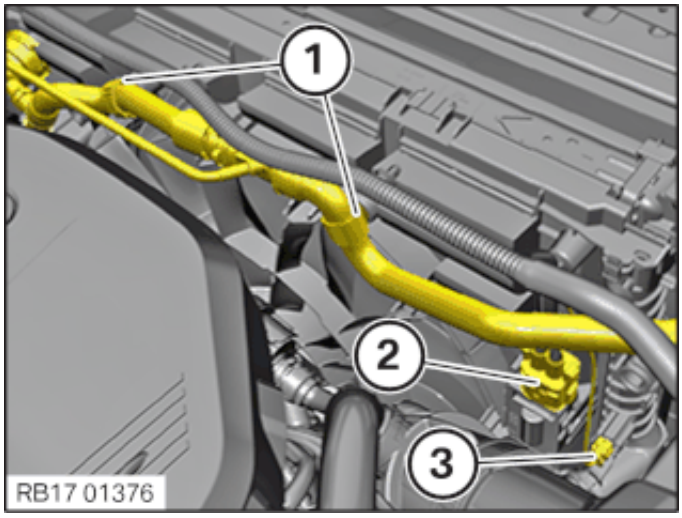
Remove fan cowl

Precondition

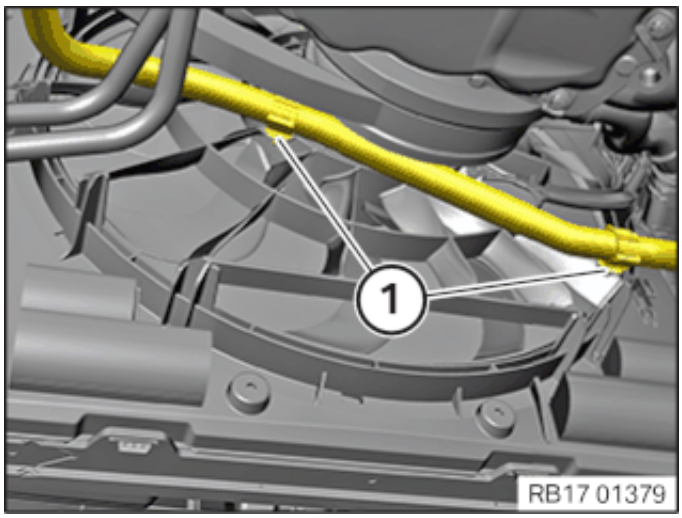
Ignition is switched off.

TECHNICAL INFORMATION

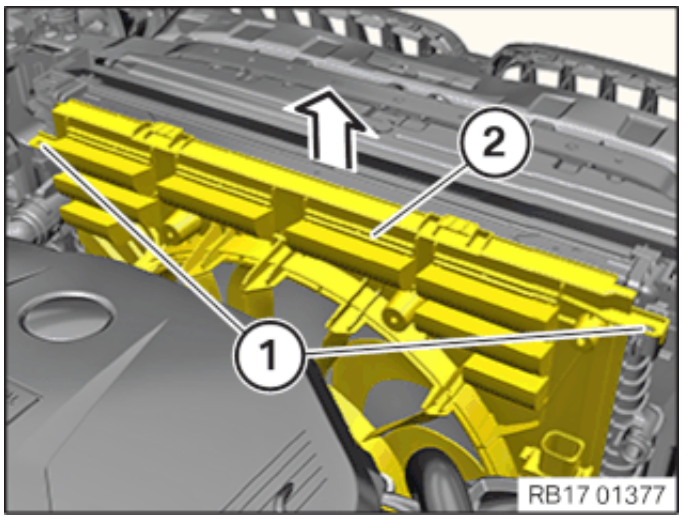
When the engine is stopped after the completion of trip, it may be necessary to run the electric fan. In rare cases, operation of the electric fan can last up to 11 min. This protects the components. In this case, replacing the electric fan will not remedy the problem!



- Unlock the clamps (1) and release the coolant hose from the fan cowl.
- Unlock and disconnect connector (2).
- Unlock and disconnect connector (2).
- Unlock the left and right locking mechanisms (arrows).
- Slide out fan cowl (1) in arrow direction and remove.



- Unlock the clamps (1) and release the coolant hose at bottom from the fan cowl.

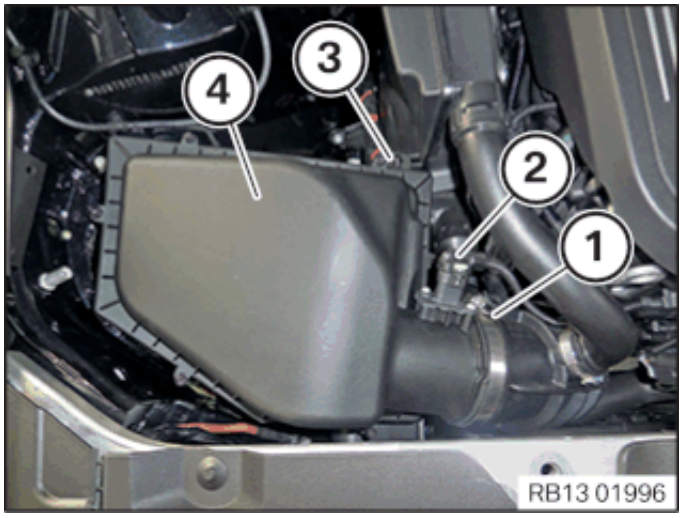


- Unlock locking mechanisms (1) on left and right.
- Slide out fan cowl (2) in arrow direction and remove.

Removing the intake filter housing (tension strut on shock tower removed)

Precondition

The tension strut on the shock tower is removed.



- Unfasten circlip (1).
- Unlock and detach the connector (2) of the hot film air mass meter.
- Loosen screw (3).
- Pull out and remove the intake silencer housing (4) from the rubber mounts towards the top.

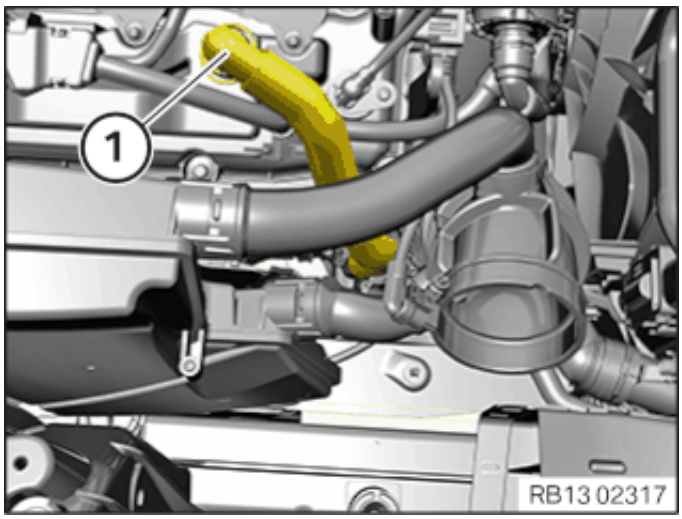
Removing clean air pipe and resonator

WARNING

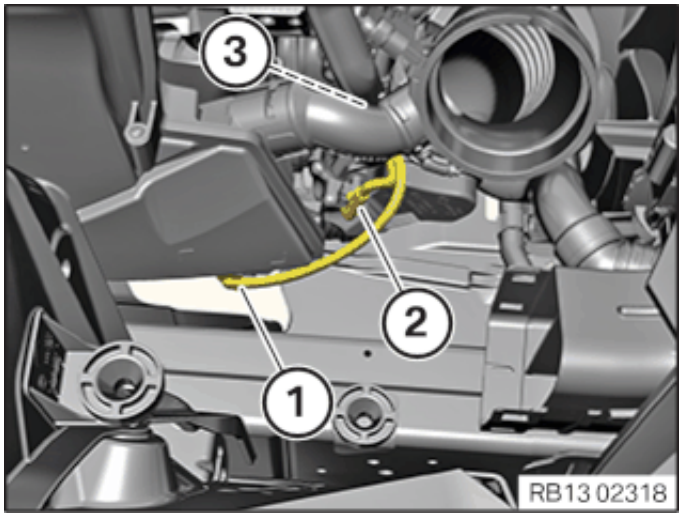
Hot surfaces.

Risk of burning!

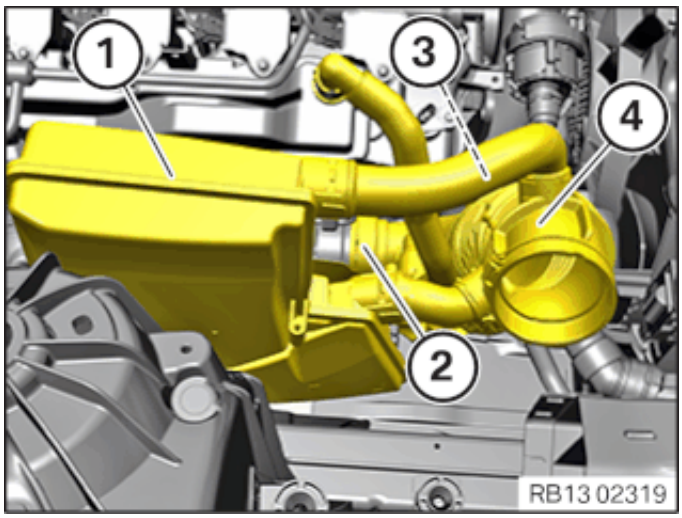
- Perform all work only on components that have cooled down.



- Unlock and loosen engine ventilation line (1).



- Unlock plug connection (1) and disconnect.
- Unlock plug connection (2) and disconnect.
- Remove cable bracket (3) from the engine ventilation line.



- Detach resonator (1) upwards from the rubber mount.
- Unlock and loosen the clamp (2) on the exhaust turbocharger.
- Unlock and release tank vent line (3).
- Feed out and remove the clean air pipe (4) with resonator (1).

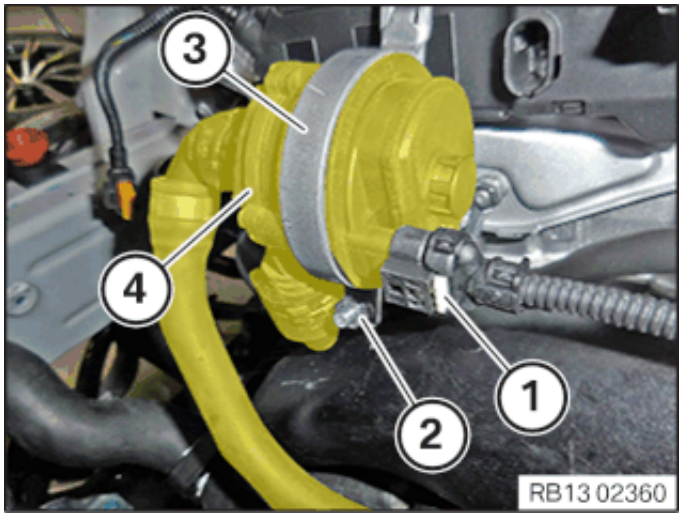
Remove charge air line

WARNING

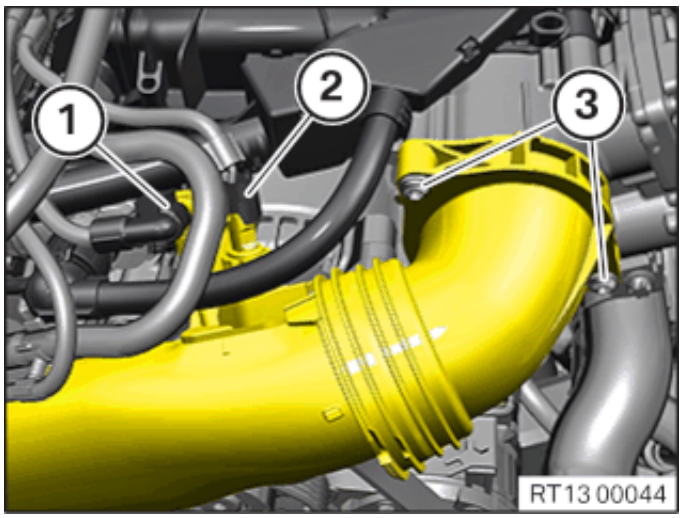
Hot surfaces.

Risk of burning!

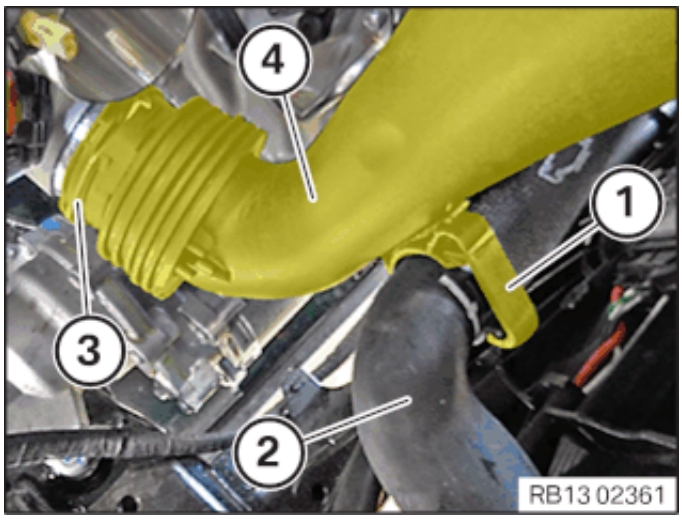
- Perform all work only on components that have cooled down.



- Unlock plug connection (1) and disconnect.
- Loosen nut (2).
- Pull out and remove the retainer (3).
- Feed out auxiliary coolant pump (4) and set aside.



- Unlock plug connection (1) and disconnect.
- Unlock plug connection (2) and disconnect.
- Loosen screws (3).



- Unlock the clamp (1).
- Feed out the coolant hose (2) and set it aside.
- Unlock the clamp (3).
- Feed the charge air line (4)out to the top and remove.

Main Works

Removing the drive belt for the starter motor generator

⚠ CAUTION

Spring preload.

Injury hazard!

- The use of the specified special tool (tool) is mandatory.
- Carry out the described steps properly.

CAUTION

Component with preload.

Injury hazard!

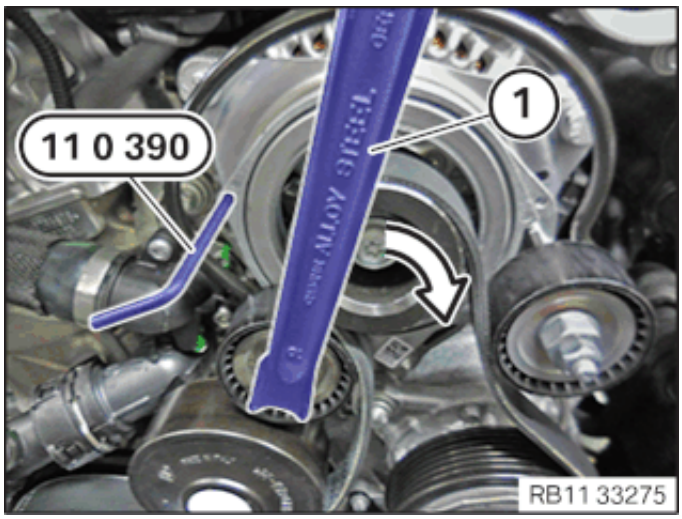
- Reduce preload as far as possible before disassembly. Relieve component.

TECHNICAL INFORMATION

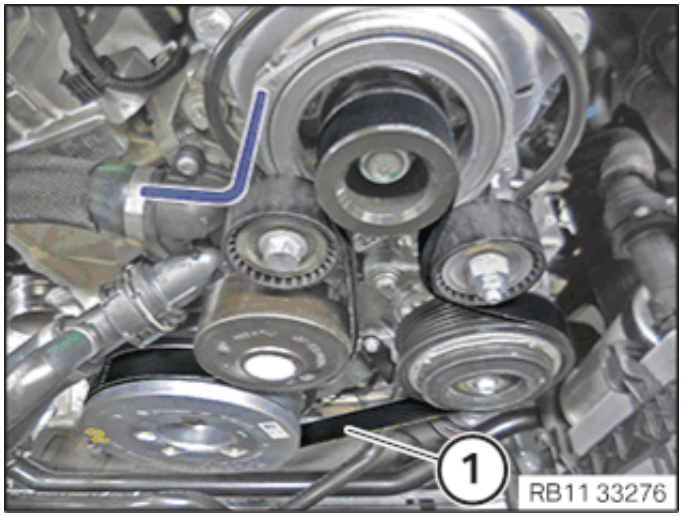
If the drive belt is reused: Mark the direction of rotation and reinstall the drive belt in same direction of rotation.

TECHNICAL INFORMATION

Replace drive belt if it is contaminated with coolant and oil residue.



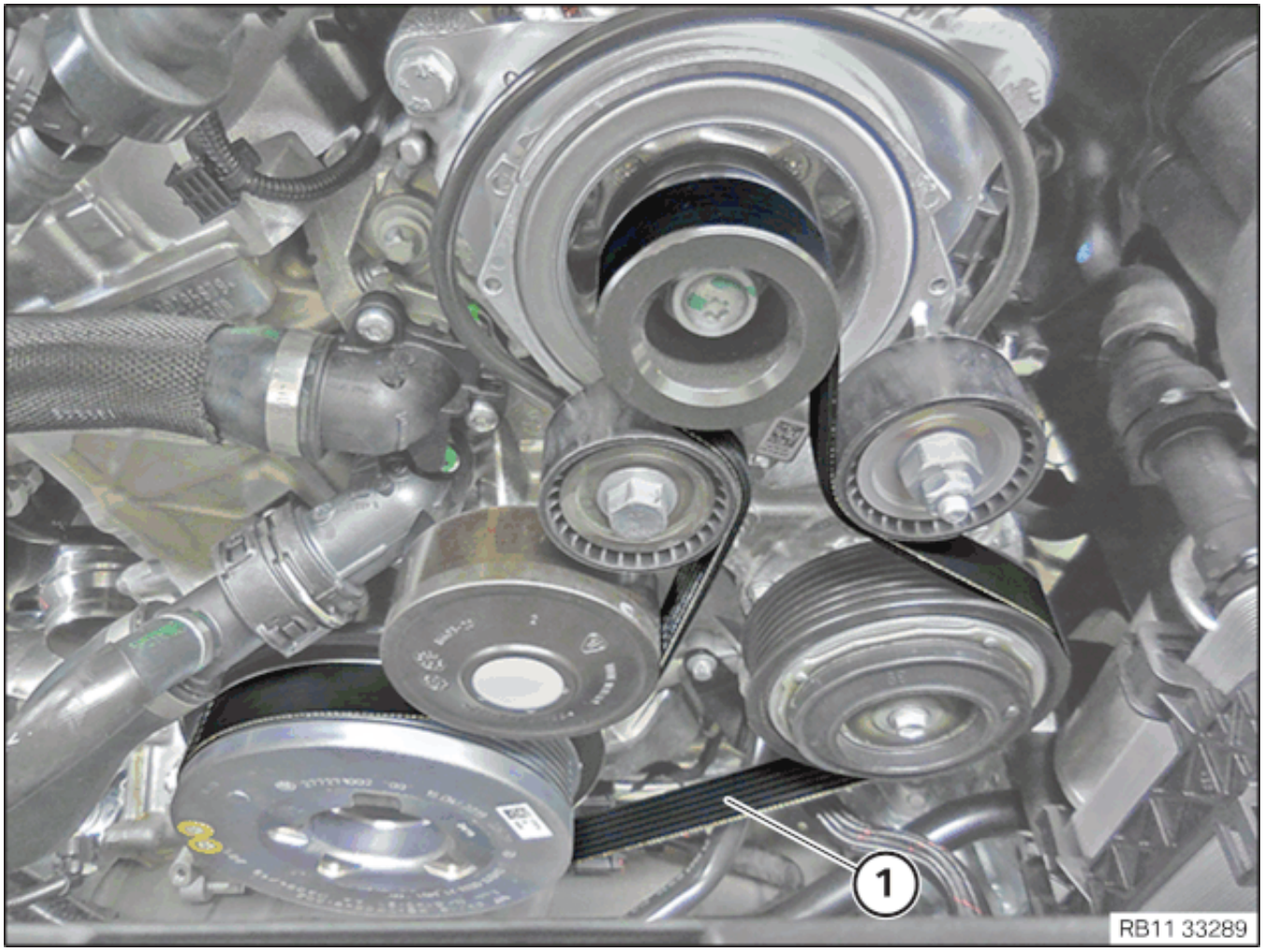
- Increase the preload on the belt tensioner using the conventional tools (1) **in** the **arrow direction**.
- Secure the belt tensioner with the special tool **0 496 268 (11 0 390)**.



- Guide out and remove the drive belt for the starter motor generator (1).

Installing the drive belt for the starter motor generator

Drive belt for the starter motor generator



1 Drive belt for the starter motor generator

RISK OF DAMAGE

Wrong setting of the drive belt.
Reduced service life of drive belt, subsequent damage.

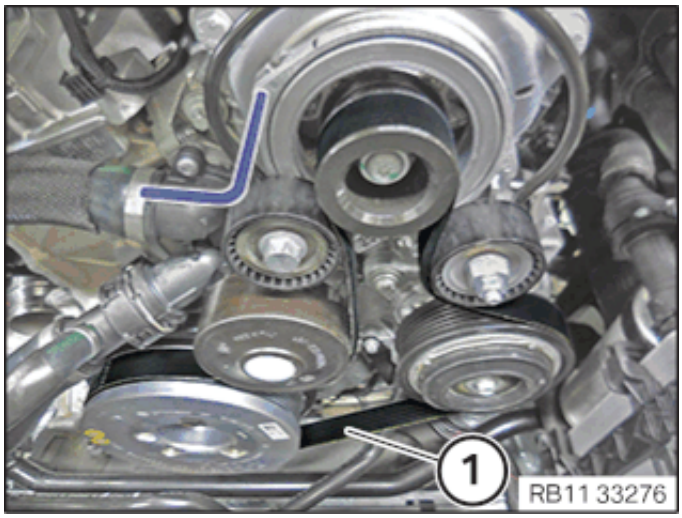
- Check the setting of the belt tensioner in the adjustment range after each removal / installation or replacement of the drive belt. The marks must be aligned.

i TECHNICAL INFORMATION

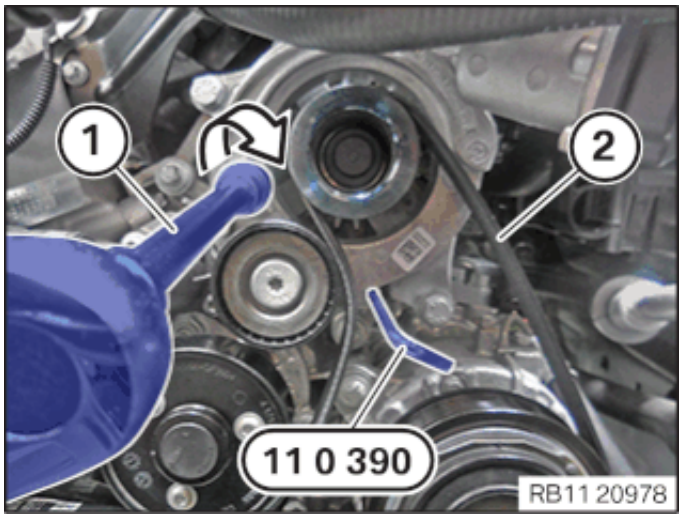
If the drive belt is reused: Mark the direction of rotation and reinstall the drive belt in same direction of rotation.

i TECHNICAL INFORMATION

Replace drive belt if it is contaminated with coolant and oil residue.



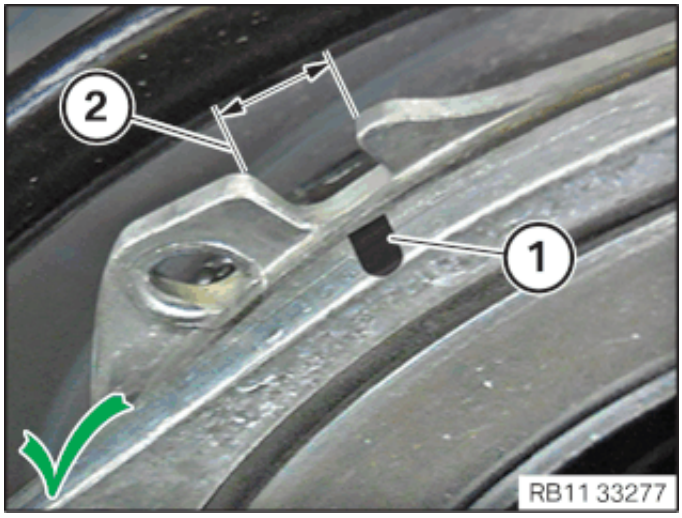
- Feed in the drive belt (1) for the starter motor generator and position it.



- Increase the preload on the tensioning device using commercially-available tools (1), **in the arrow direction**.
- Feed out the special tool **0 496 268 (11 0 390)** from the belt tensioner out and remove it.

  The drive belt (2) for the starter motor generator must be correctly installed.

Check



- Check if the marking (1) of the belt tensioner aligns in adjustment range (2).

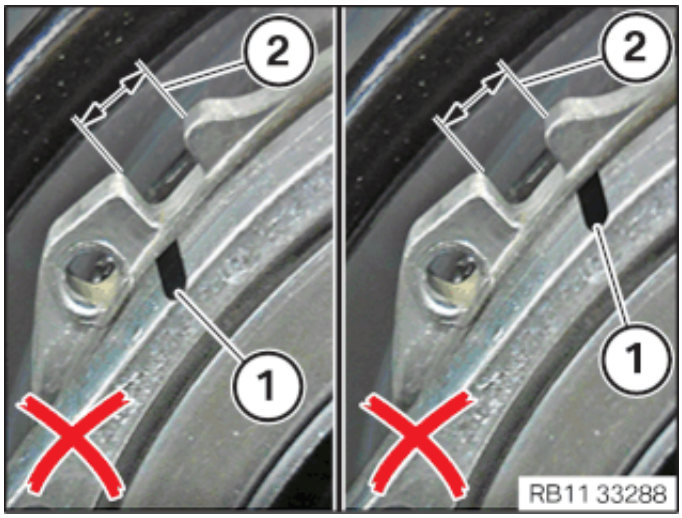
Result

» Mark (1) of the belt tensioner is aligned within the adjustment range (2).

Measure

- No measures required.

Check



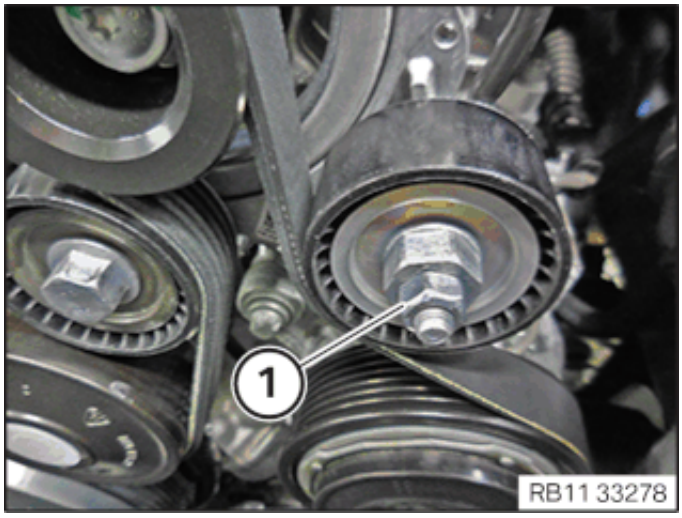
- Check if the marking (1) of the belt tensioner aligns in adjustment range (2).

Result

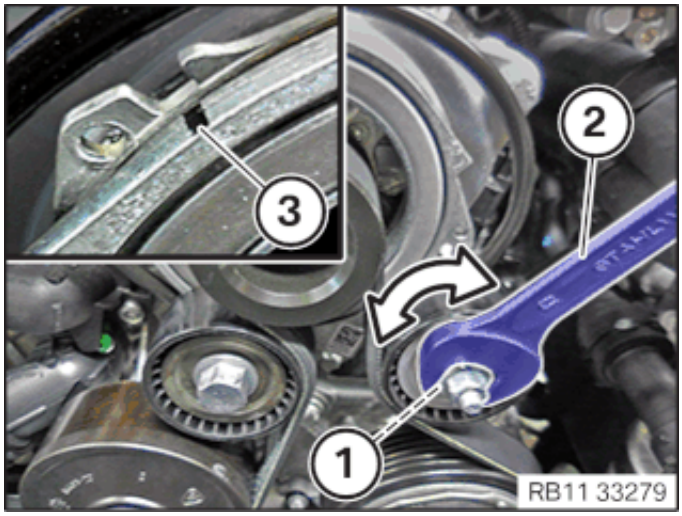
» Mark (1) of the belt tensioner is **not** aligned within the adjustment range (2).

Measure

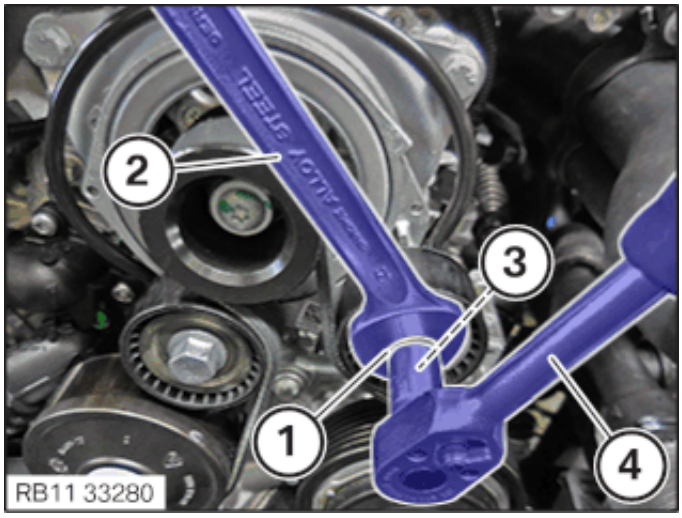
- Set the tension of the drive belt for the starter motor generator.



- Release the nut (1) by 90°.



- Turn eccentric (1) with a commercially-available tool (2) **in the arrow direction** such that the mark (3) aligns in the adjustment range.



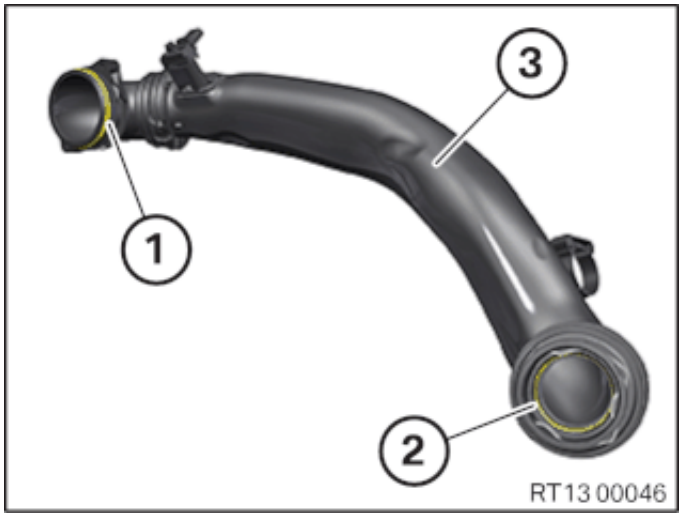
- Counter support the eccentric (1) with a conventional tool (2).
- Tighten the nut(3) with a conventional tool (4).

Tightening torques

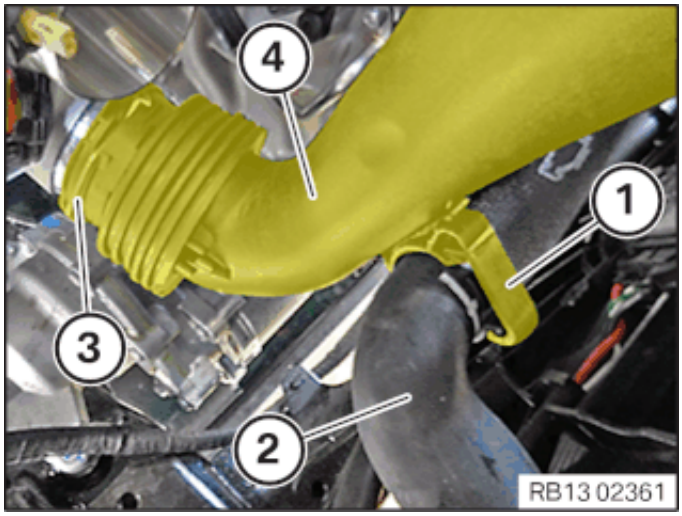
Lock nut of the tensioning device on eccentric	
M8	**tightening torque** 22Nm

Follow-up works

Install charge air line

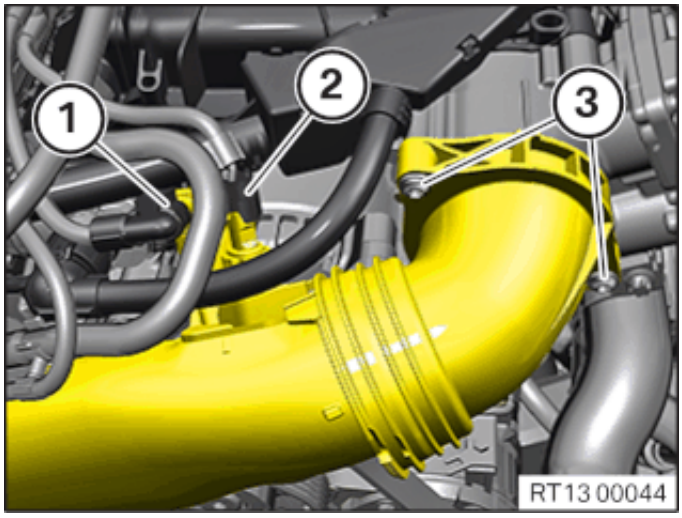


- Check sealing ring (1) on the charge air line (3) for damage, if necessary replace with the special tool **0 496 714 (00 9 030)**.
- Check sealing ring (2) on the charge air line (3) for damage, if necessary replace with the special tool **0 496 714 (00 9 030)**.



- Insert and install charge air line (4).
- Lock clamp (3).

  The clamp (3) must engage audibly.
- Insert and install the coolant hose (2).
- Lock clamp (1).



- Tighten down screws (3).

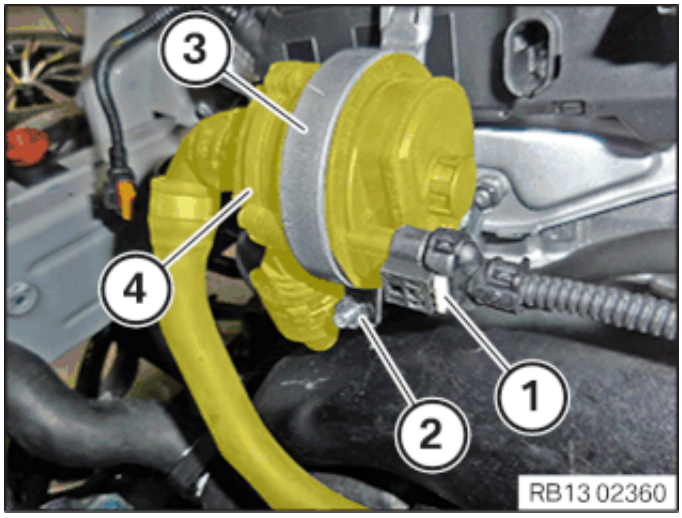
Tightening torques

Charge air line to throttle valve	
M6x30	**tightening torque** 8Nm

- Connect connectors (2) and lock.

  The connector (2) must engage audibly.
- Connect connectors (1) and lock.

  The connector (1) must engage audibly.



- Feed in and position auxiliary coolant pump (4).
- Feed in and position retaining bracket (3).
- Tighten nut (2).

Tightening torques

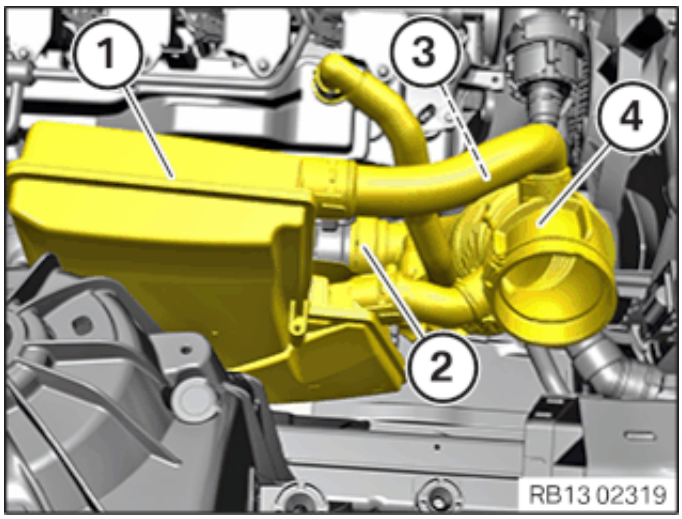
Electric coolant pump to holder

M6	**tightening torque** 8Nm

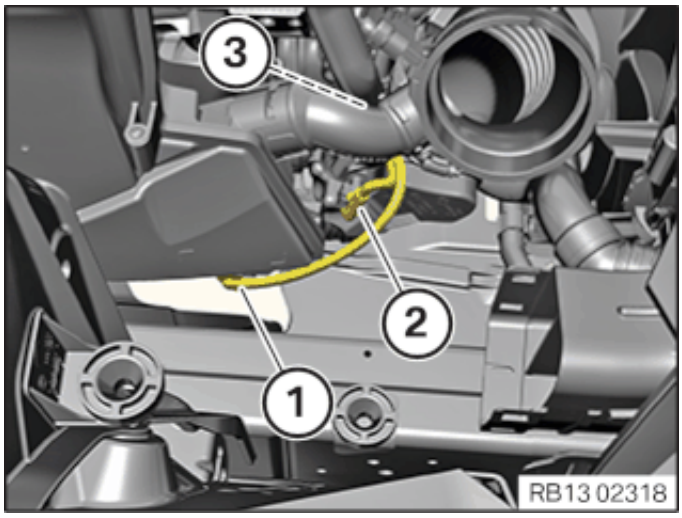
- Connect connectors (1) and lock.

  The connector (1) must engage audibly.

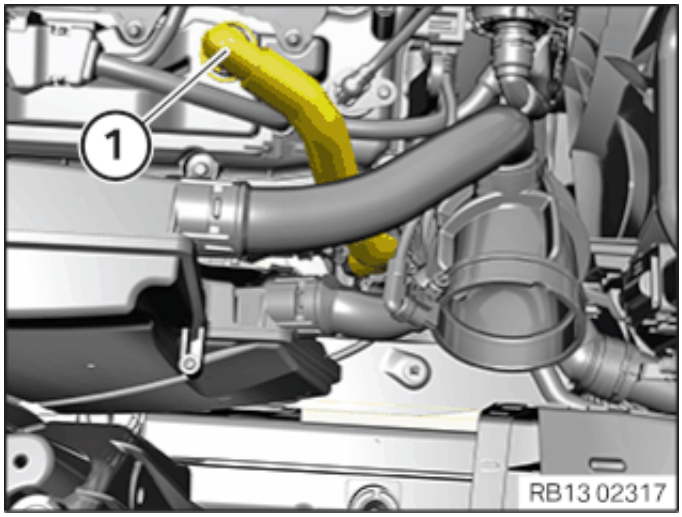
Installing the clean air pipe and the resonator



- Insert the clean air pipe (4) and connect it to the exhaust turbocharger.
- Lock the clamp (2) audibly on the exhaust turbocharger.
- Insert the resonator (1) into the rubber mount and fasten.
- Connect tank vent line (3) and lock.



- Connect connectors (1) and lock audibly.
- Connect connectors (2) and lock audibly.
- Fasten the cable with the cable bracket (3) to the engine ventilation line.

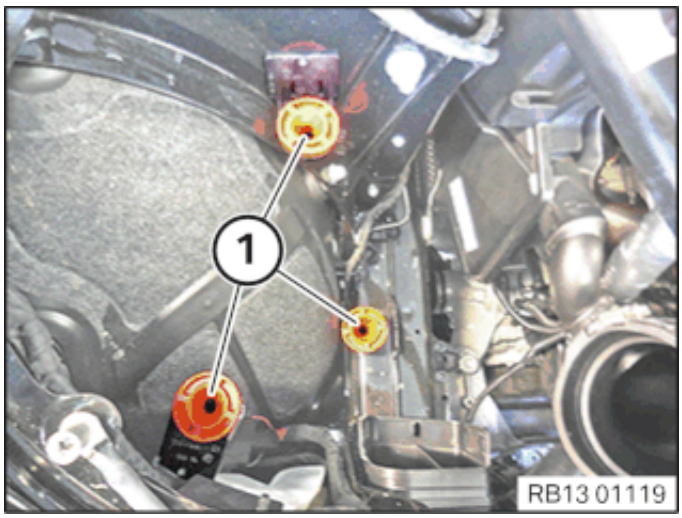


- Connect engine ventilation line (1) and lock.

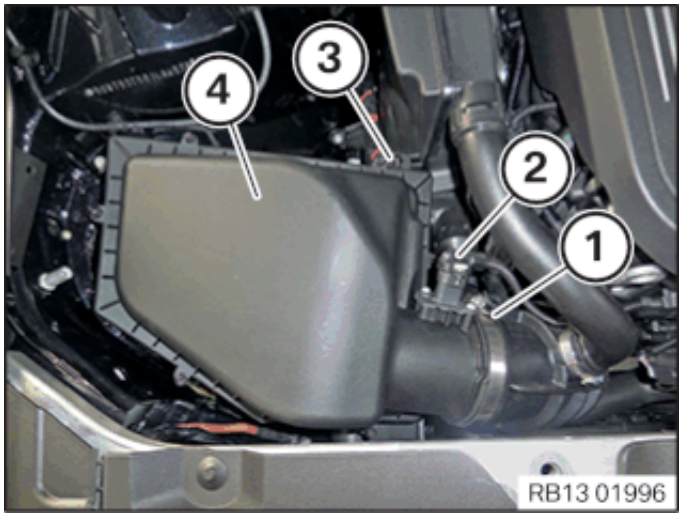
Installing the intake filter housing (tension strut removed on shock tower)

Precondition

The tension strut on the shock tower is removed.



- Check rubber mount (1) for correct fit.



- Insert the intake filter housing (4) and engage in the rubber mounts.
- Tighten down screw (3).

Tightening torques

Intake silencer housing to resonator

TS5x20	**Tightening torque** 2,5Nm

- Connect and lock the connector (2) of the hot film air mass meter.

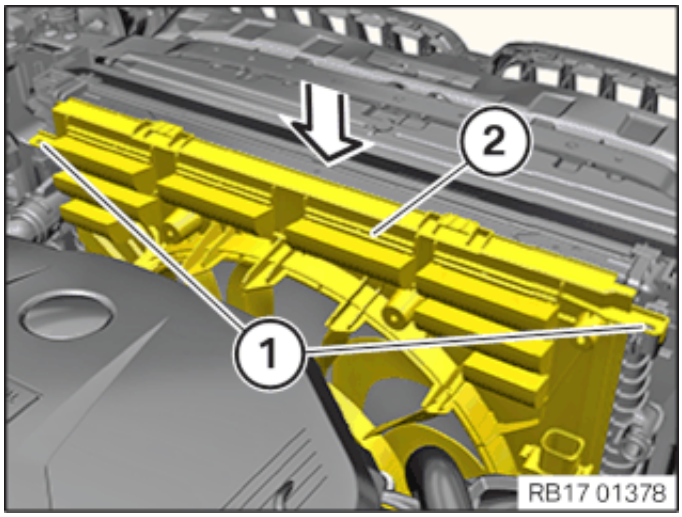
The connector(2) must lock audibly.

- Tighten clamp (1).

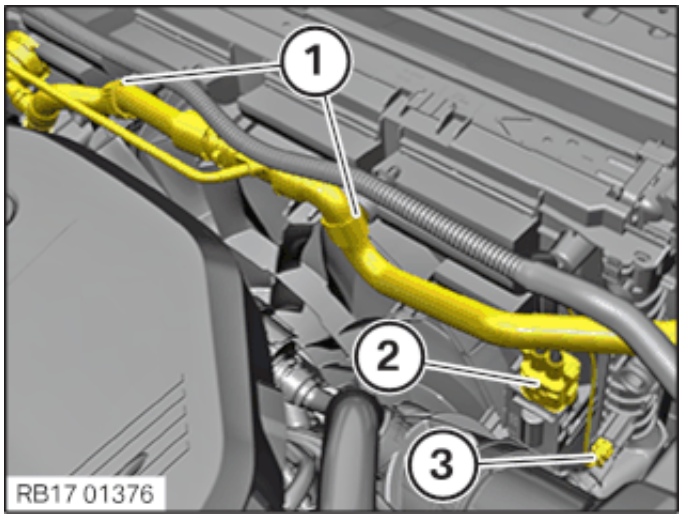
Tightening torques

Clean air pipe to upper section of intake filter housing	
cl.	Tightening torque 3Nm

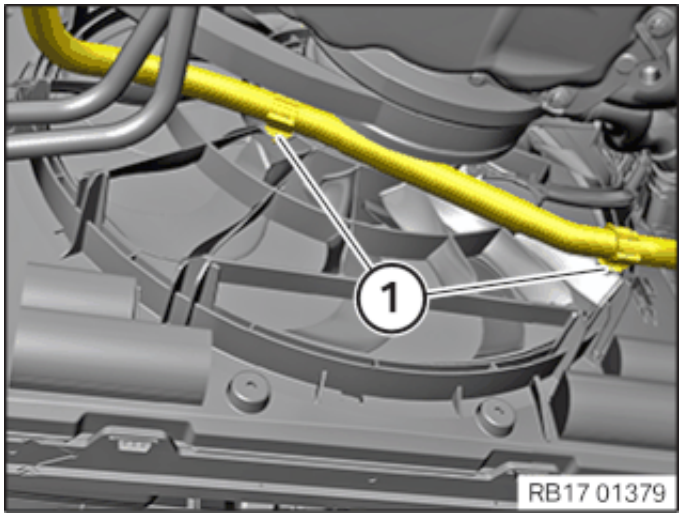
Installing fan cowl



- Feed in and install the fan cowl (2) in the direction of the arrow.
- Lock left and right locking mechanisms (1).

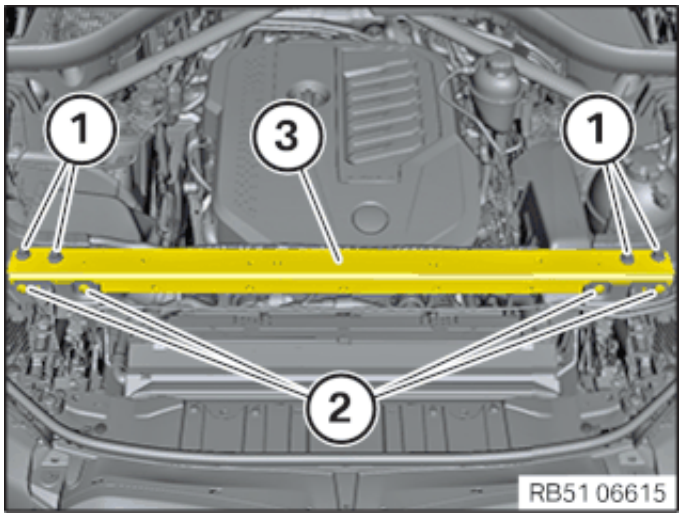


- Fasten the coolant hose to the clamps (1).
- Pin up connector (2) and lock audibly.
- Pin up connector (3) and lock audibly.



- Fasten the coolant hose to the clamps (1) at bottom on the fan cowl.

Install the rear top cross connection



- Feed in and position the rear top (3) cross connection.
- Tighten down screws (2).

Tightening torques

Rear cross connection at the top of the hood lock support

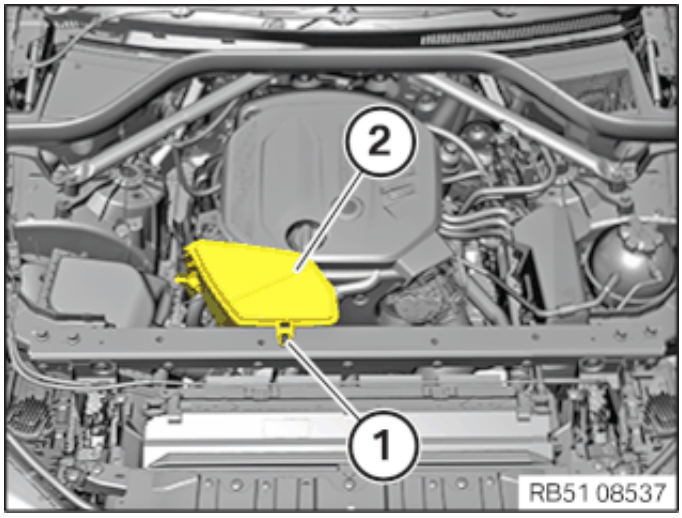
screw	**Tightening torque**
	19Nm

- Tighten down screws (1).

Tightening torques

Rear top cross connection to wheel arch carrier support

M10x35 screw	**Tightening torque**
	56Nm

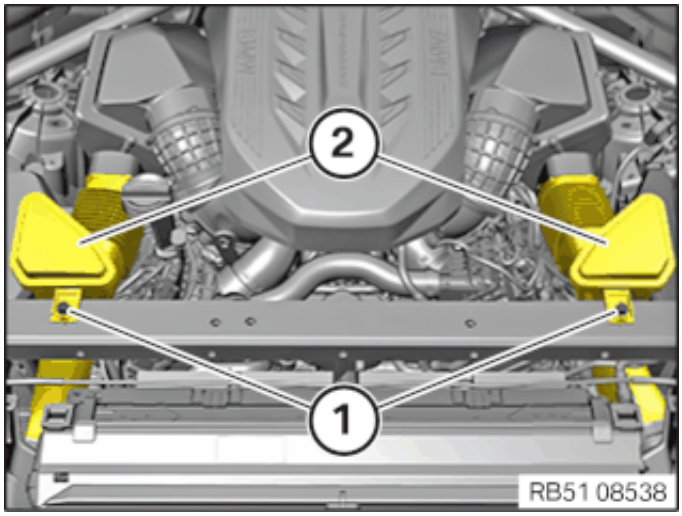


- **If fitted:**

  Position the resonator (2) and tighten the screw (1).

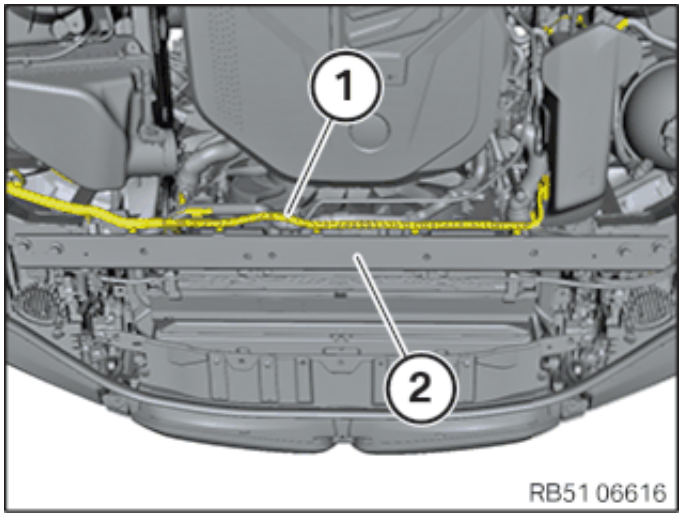
Tightening torques

Resonator to rear top cross connection	
M6x20 screw	**tightening torque** 8Nm



- **If fitted:**

  Position the resonator (2) and tighten the screws (1).



- Clip the vehicle wiring harness (1) onto the rear top cross connection (2).

Install tension strut on left and right shock tower

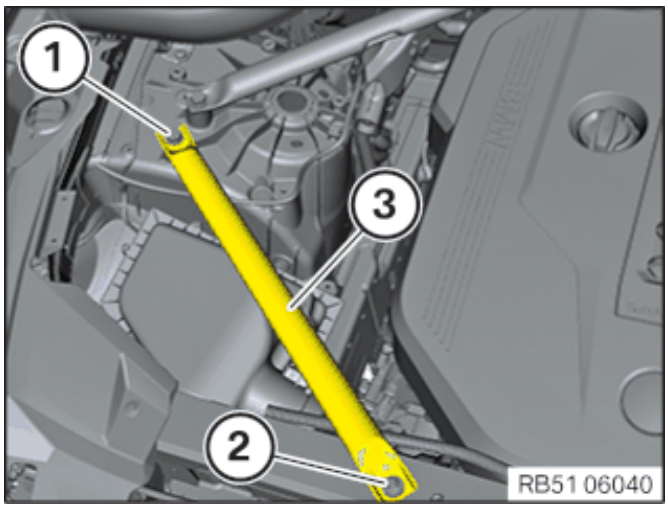
NOTE

Description is for left component only. Procedure on the right side is identical.

▶ Install the tension strut on the right shock tower

i TECHNICAL INFORMATION

Driving without the strut brace/front-end strut or tension strut is not permitted.



- (3)Install tension strut on shock tower.
- Renew the screw (1).

  Parts: Screw
- Tighten screw (1) with the special tool **0 490 504 (00 9 120)**.

Tightening torques

Tension strut to shock tower

M10x55 screw Replace screws	**Joining torque** 56Nm **Angle of rotation** 90°

- Tighten down screw (2).

Tightening torques

Tension strut on the rear cross connection

M8x30 screw	**tightening torque** 28Nm

▷ Repairing the thread on the strut tower

- Repair the damaged thread with the Helicoil

thread insert.

Consumable

Helicoil thread insert	M10x25 mm	33 30 6 782 756

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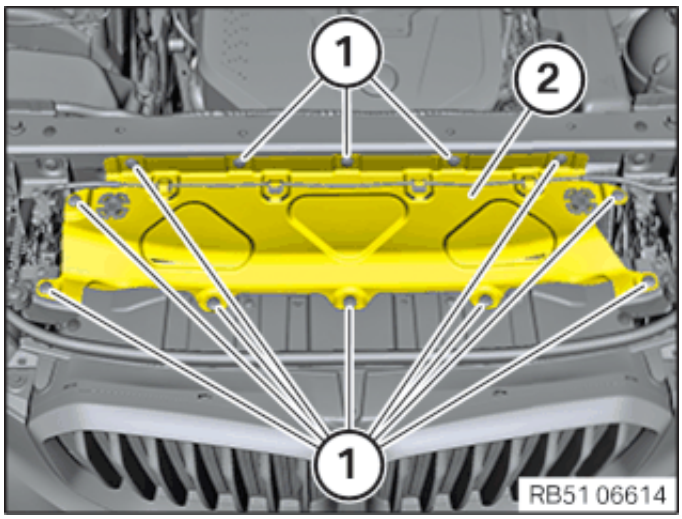
Install upper cross connection



- Feed in cross connection (2).
- Attach the Bowden cable .
- Tighten down screws (1).

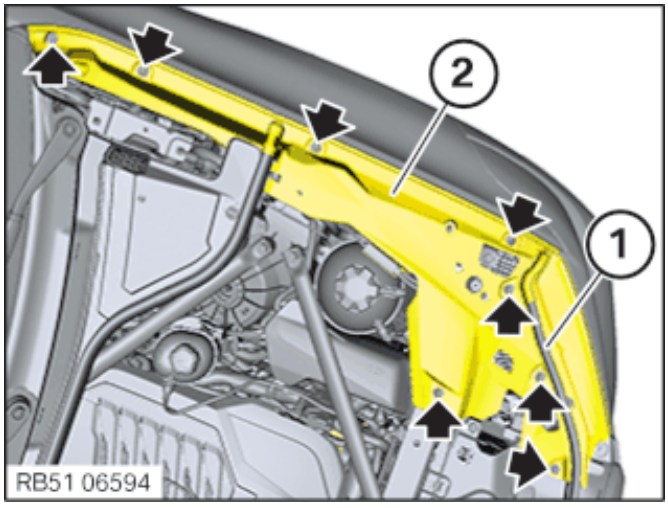
Tightening torques

Front cross connection

screw	Tightening torque
	19Nm

Install the cover in the engine compartment at top left and right

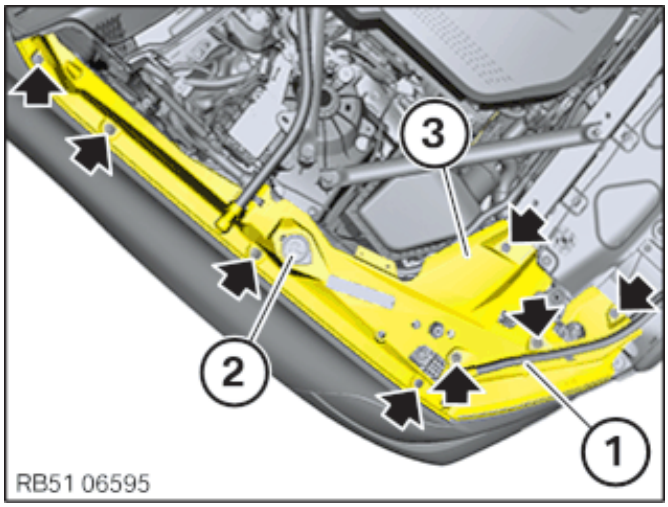
▶ Install the cover in the engine compartment on top



- Guide in and correctly position the cover panel (2).
- Clip in the hood seal (1) in the cover area (2) on the clips.
- Mount the expanding rivets (arrows).

◀

▶ Install the cover in the engine compartment on the top right



- Guide in and correctly position the cover (3).
- Mount the expanding rivets (arrows).
- Clip in the hood seal (1) on the clips in the cover area (3).
- Mount the lid (2) of the washer fluid reservoir .

◀

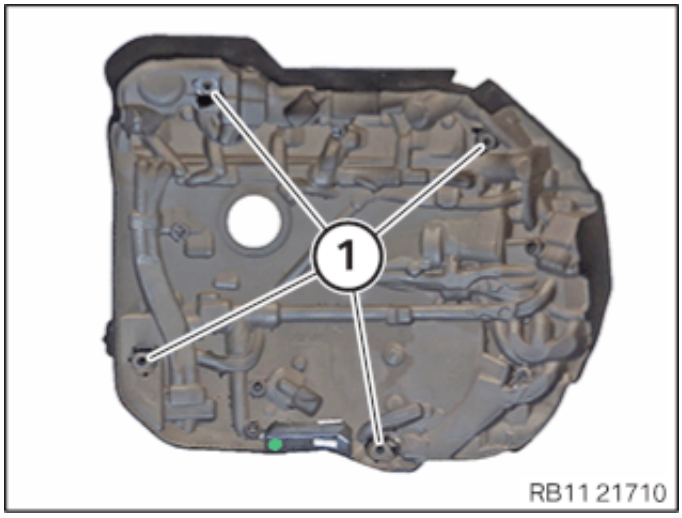
Installing acoustic cover

RISK OF DAMAGE

Damage to the acoustic cover / design cover.

Jerky movements during disassembly and application of excessive force during installation may result in breakage of the acoustic cover / design cover.

- Disassemble or mount the acoustic cover / design cover carefully.
- Disassemble or mount snap-lock couplings of the ball pivots one after the other.
- Disassemble or mount the acoustic cover / design cover only at temperatures > 20 °C.
- Use only distilled water as an auxiliary material during installation, no lubricants.



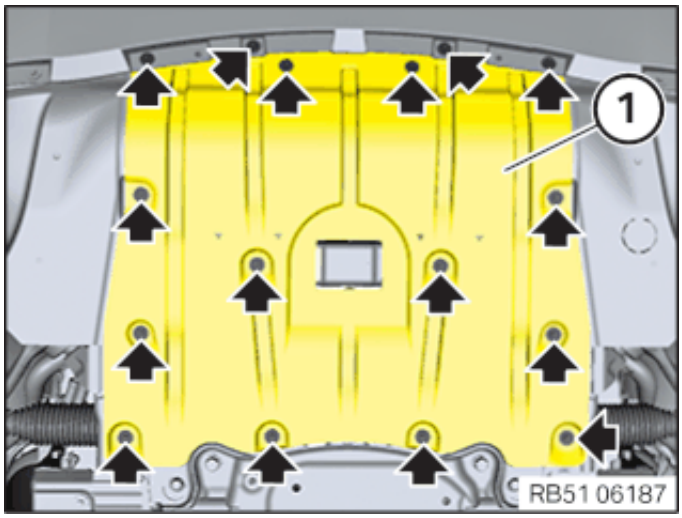
- Check the rubber mount (1) for a correct seat of the acoustic cover.

- Install the acoustic cover (1) and fasten it in the rubber mounts (marks).

Install front underbody protection

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- Insert front underbody protection (1) and position correctly.
- Tighten screws (arrows).

Tightening torques

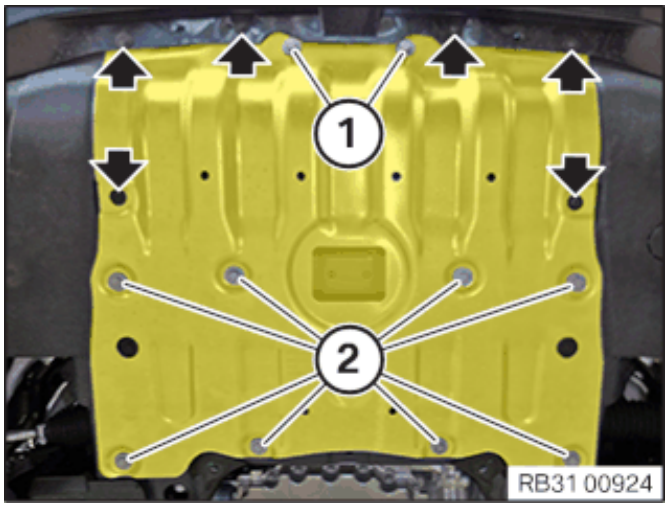
Undershield/frame

Hexagon screw	**tightening torque** 3Nm

▶ Installing the front skid plate

NOTE

The following step(s) must be performed if the listed component(s) is/are installed.



- Feed in and position the front skid plate.
- Tighten down screws (2) and (1).

Tightening torques

Skid plate at the front to front subframe

M8	**Tightening torque** 19Nm

- Tighten screws (arrows).

Tightening torques

Undershield/frame

Hexagon screw	**tightening torque** 3Nm

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