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WM 194019 Removing and installing coolant reservoir

Tools

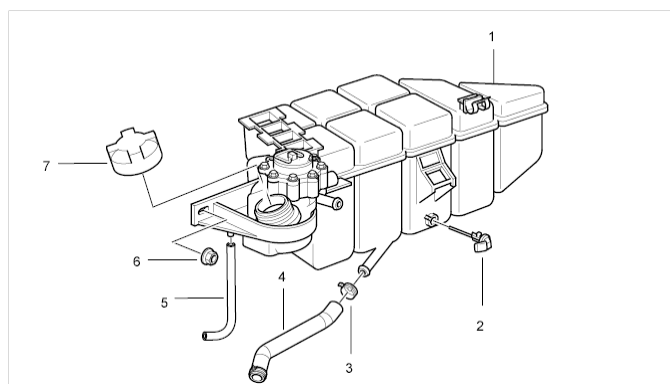
Designation	Type	Number	Description	
retainer plate	Special tool	P 9592		<p>PORSCHE</p> <p>siehe Handbuch Werkstattausrüstung</p> <p>Voir le Manuel Equipement d'atelier</p> <p>Refer to the Workshop Equipment manual</p> <p>Vease Manual de Equipamiento de Taller</p> <p>Vedere il Manuale dell'attrezzatura d'officina</p> <p>ワークショップ・イクイップメント・マニュアルを参照</p>

Technical values

Location	Description		Basic value	Tolerance 1	Tolerance 2
Collar nut on engine mounting threaded bolt	M12	Tightening torque	85 Nm (63 ftlb.)		

Information

Information



Overview of coolant reservoir

- 1 - Coolant reservoir
- 2 - Engine coolant level sensor
- 3 - Spring band clamp
- 4 - Coolant supply hose
- 5 - Overflow hose
- 6 - Fastening nut
- 7 - Cap

Preliminary work

Preliminary work



Risk of injury from hot engine and hot engine fluids.

- **Danger of burns, scalding, damage to skin, injury to the eyes.**

→ Do not carry out work on the engine while it is hot.

1. Raise the vehicle.



Vehicle can fall down

- **Risk of squashing or crushing**
- **Risk of damage to the vehicle**

- Do not place any solid objects under the raised vehicle.
- Ensure that the lifting platform is prevented from lowering.
- Remove solid objects before lowering the vehicle.
- Raise the vehicle only at the jacking points provided.
- The outer jacking points should be used primarily.



Information

- *When raising the vehicle, take care to maintain access to the screws for the diagonal struts in the vicinity of the rear jacking points.*

→ *4X00IN01 Lifting the vehicle.*

2. Remove air cleaner housing.

→ *242519 Removing and installing air cleaner housing - section on "Removing".*

3. Drain coolant.

→ *193817 Draining and filling in coolant (includes bleeding).*



Coolant is hazardous to health.

- **Risk of skin irritation.**

→ Wear protective gloves and goggles.

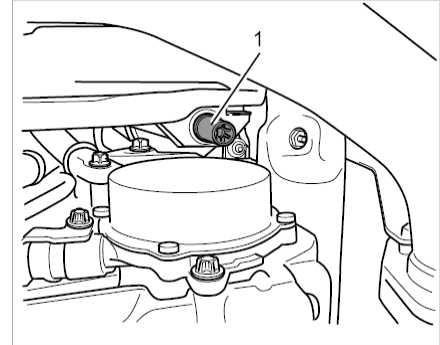
→ In the event of contact with the skin or eyes, wash immediately with plenty of water.

4. Lower the engine.

The engine can be lowered by max. 40 mm.

Support the engine with a jack and **retainer plate P 9592**.

Screw off M12 collar nuts **-1-** on the engine mounting. Carefully lower the engine using the jack.



*Engine carrier to engine mounting
(view of cylinder bank 4-6)*

Removing coolant reservoir

Removing reservoir for coolant



DANGER

Fuel can escape when fuel line is opened.

- **Risk of fatal injury!**
- **Risk of damage to skin.**

- Do not work on the fuel system when the engine is hot!
- Do not smoke, avoid fire and naked flames!
- Wear fuel-resistant protective gloves and goggles.
- Attach warning sign to vehicle in a clearly visible position.



WARNING

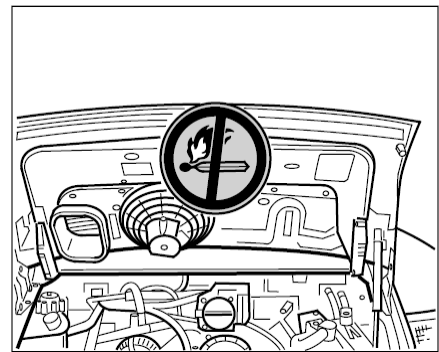
Coolant is hazardous to health.

- **Risk of skin irritation.**

- Wear protective gloves and goggles.
- In the event of contact with the skin or eyes, wash immediately with plenty of water.

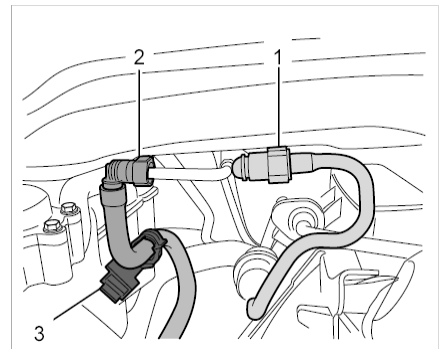
1. Disconnect fuel lines.

1.1. Before opening the fuel lines, put up or attach a warning sign in a clearly visible position on the vehicle.



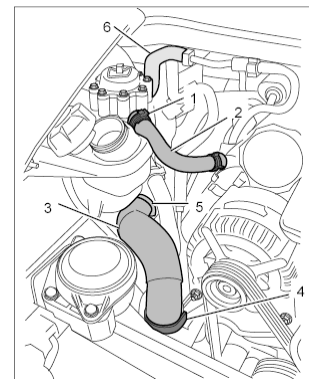
Example of a warning sign

- 1.2. Open fuel pressure line (low pressure) **-2-** . Press locking lugs on plug-in coupling and pull line apart. Collect emerging fuel with a cloth.



Fuel line connections

- 1.3. Unclip fuel line from the holder on the coolant reservoir **-3-** .
2. Disconnect and remove coolant hoses.
 - 2.1. Remove supply hose (reservoir to engine) **-3-** .



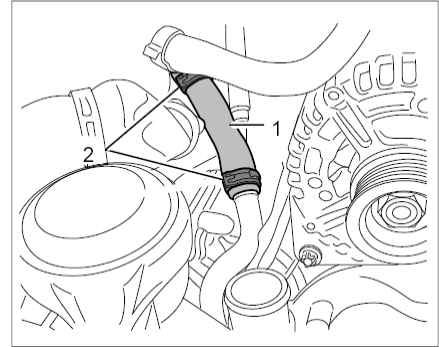
Coolant hoses on reservoir

- 2.1.1. Open the spring band clamp **-4-** and pull off the coolant hose **-3-** at the thermostat housing.
- 2.1.2. Release spring clamps on the Henn couplings **-5-** and pull off coolant hose **-3-** on the coolant pipe.

Make sure that the spring clamps are not overstretched.

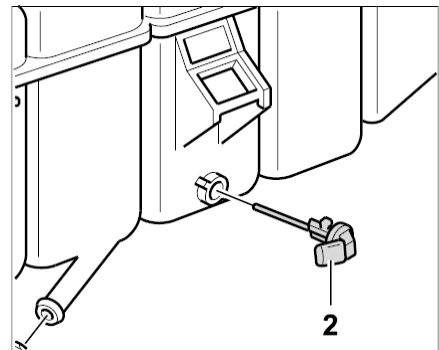
- 2.2. Disconnect coolant bleeder hose on the reservoir.

- 2.2.1. Open spring band clamp **-1-** on the coolant bleeder hose **-2-** and pull off coolant bleeder hose **-2-** .
- 2.3. Disconnect coolant hose on the reservoir.
 - 2.3.1. Open the spring band clamp on the coolant hose **-6-** and pull off the coolant hose **-6-** .
 - 2.3.2. Unclip coolant hose **-6-** at the holder.
- 2.4. Disconnect coolant hose for thermostat housing.



Coolant hose for thermostat housing

- 2.4.1. Open the spring band clamp **-2-** and pull off the coolant hose **-1-** .
3. Remove engine coolant level sensor **-2-** .



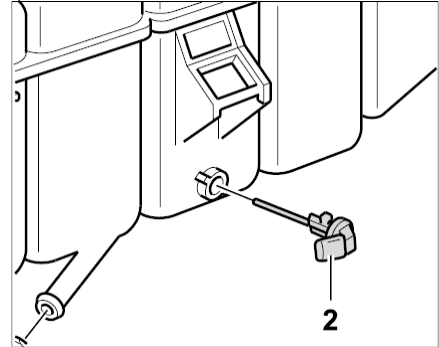
Engine coolant level sensor

- 3.1. To do this, pull off the cable plug.
- 3.2. Turn the sensor **-2-** on the reservoir 90° anti-clockwise (bayonet lock) and pull it out of the reservoir.
4. Remove coolant reservoir.
 - 4.1. Screw off the collar nut used to secure the coolant reservoir to the body.
 - 4.2. Pull coolant reservoir out of the holder.
 - 4.3. Guide the coolant reservoir diagonally backwards out of the engine compartment.

Installing coolant reservoir

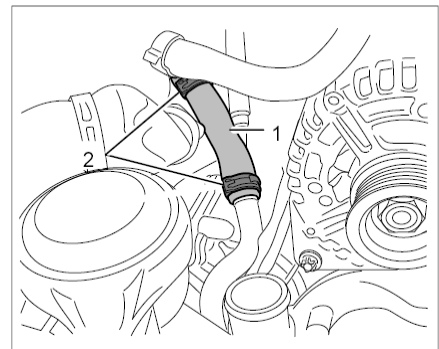
Installing coolant reservoir

1. Install coolant reservoir.
 - 1.1. Guide the coolant reservoir diagonally backwards into the engine compartment.
 - 1.2. Slide coolant reservoir into the holder.
 - 1.3. Screw on the collar nut used to secure the coolant reservoir to the body.
2. Install engine coolant level sensor **-2-**.



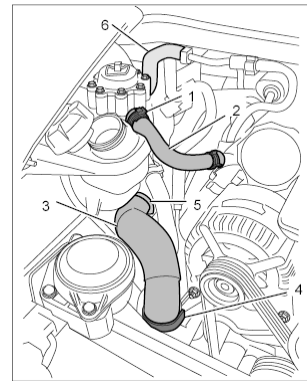
Engine coolant level sensor

- 2.1. Guide the sensor **-2-** into the reservoir and turn it 90° clockwise (bayonet lock).
- 2.2. Connect cable plug.
3. Connect and install coolant hoses.
 - 3.1. Connect coolant hose for thermostat housing.
Push on coolant hose **-1-** and fit the spring band clamp.



Coolant hose for thermostat housing

- 3.2. Connect coolant hose on the reservoir.



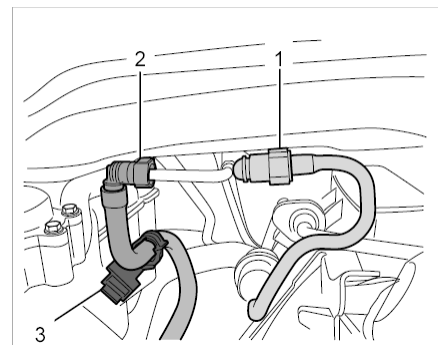
Coolant hoses on reservoir

- 3.2.1. Fit and secure the coolant hose **-6-** and clip it into the bracket.
- 3.3. Connect the coolant bleeder hose on the reservoir.
 - 3.3.1. Connect the coolant bleeder hose **-2-** and fit the spring band clamp **-1-** on the coolant bleeder hose **-2-**.
- 3.4. Install supply hose (reservoir to engine) **-3-**.
 - 3.4.1. Connect the coolant hose **-3-** to the coolant pipe and secure with the spring clamps on the Henn couplings **-5-**.

The Henn coupling must lock with an audible click.

- 3.4.2. Push on coolant hose **-3-** on the thermostat housing and tighten the spring band clamp **-4-**.
- 4. Connect fuel lines.
 - 4.1. Clip fuel line into the holder on the coolant reservoir **-3-**.
 - 4.2. Connect fuel pressure line (low pressure) **-2-**.

The plug-in couplings must lock with an audible click.



Fuel line connections

Subsequent work

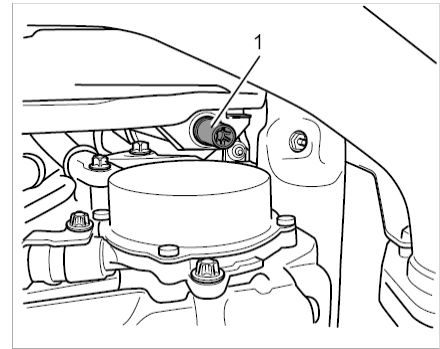
Subsequent work

1. Raise the engine.

Raise the engine into installation position with a jack, using **retainer plate P 9592** to do this.

Screw in and tighten M12 collar nuts -1- .

→ **Tightening torque: 85 Nm (63 ftlb.)**



*Engine carrier to engine mounting
(view of cylinder bank 4-6)*

2. Fill in coolant and bleed the system.

→ *193817 Draining and filling in coolant (includes bleeding).*

3. Install air cleaner housing.

→ *242519 Removing and installing air cleaner housing - section on "Installing".*

4. Test-drive the vehicle and correct the engine coolant level in the reservoir if necessary (observe Min/Max marking).

997110, 997111, 997120, 997121, 997140, 997141, 997310, 997311, 997320, 997321, 997410, 997411, 997430, 997431, 997510, 997511, 997520, 997521, 997610, 997611, 997620, 997621, 997720, 997721, 997160, 997161, 997170, 997360, 997361, 997460, 997461, 997560, 997561, 997150, 997151, 997350, 997351, 997370, 997660, 997661

Model year as of 2009

C00, C02, C05, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C45, C46, C98, C99