

Left and right timing chain covers, removing and installing

Special tools and workshop equipment required

- ◆ Hand drill with plastic brush attachment
- ◆ Protective glasses
- ◆ Sealant → [Electronic Parts Catalog "ETKA"](#)

Removing

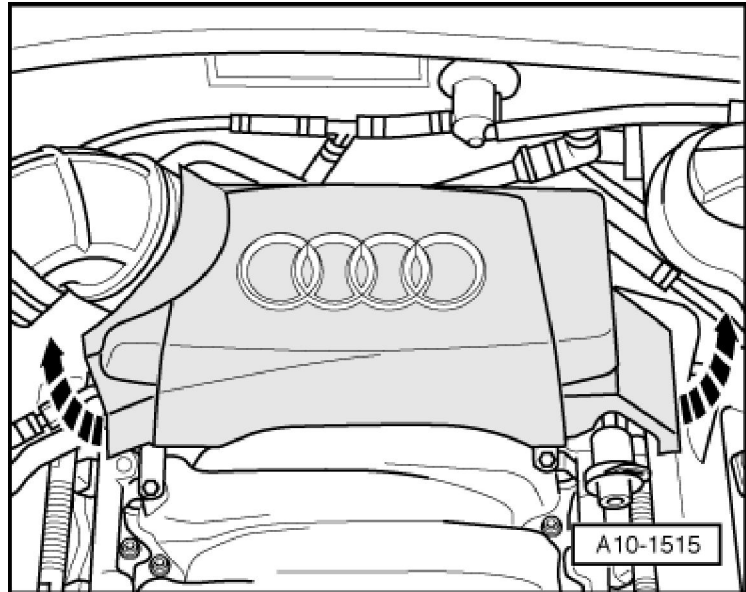


Note

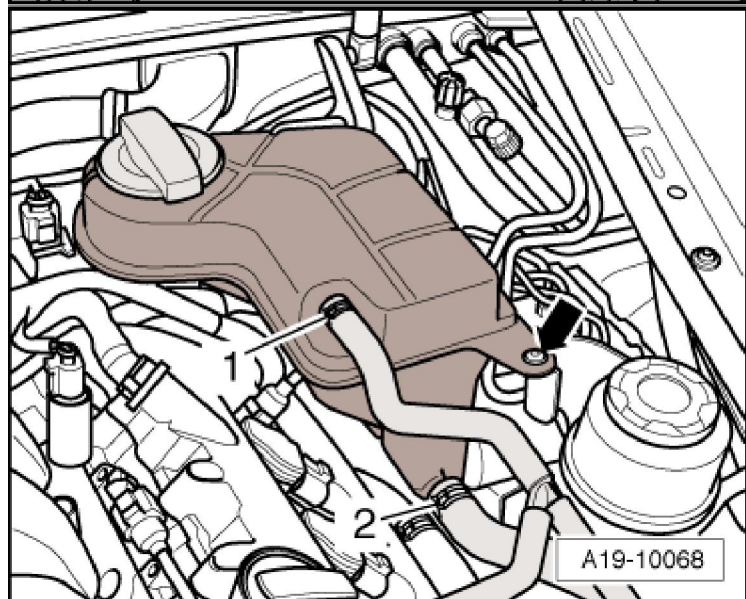
All cable ties which are opened or cut open when removing, must be replaced in the same position when installing.

- Remove rear engine cover -arrows-.

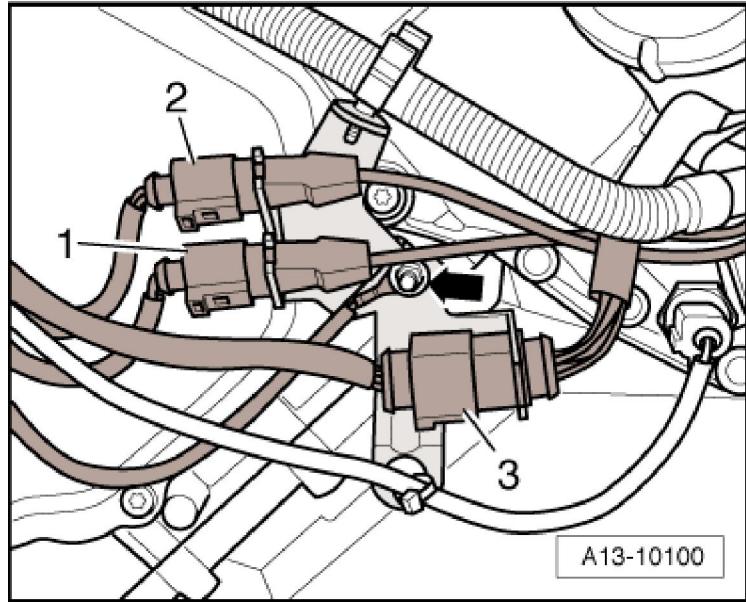
Left timing chain cover:



- Remove coolant expansion tank - arrow-.
- Disconnect electrical connection from Engine Coolant Level (ECL) Warning Switch -F66- at bottom of coolant reservoir and set aside coolant reservoir with coolant hoses -1- and -2- connected.



- Disconnect electrical harness connectors -1 to 3-
- Remove nut -arrow-
- Remove retainer for connection -3-
- Remove double-bolt lying beneath.
- Remove retainer for connections -1- and -2-.



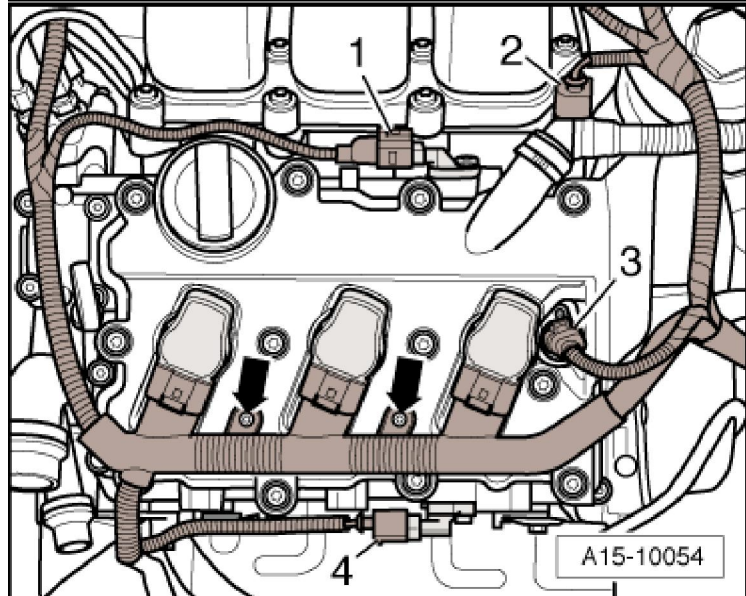
- Remove bolts -arrows- and separate electrical connections at ignition coils.



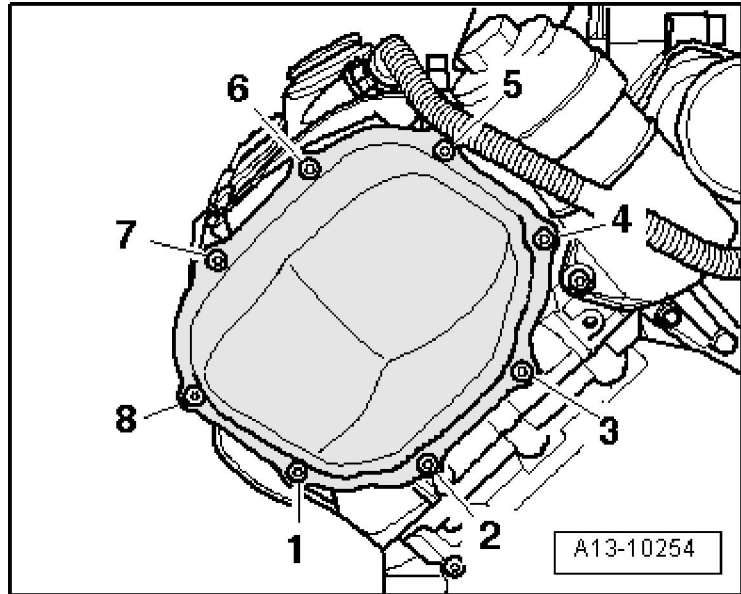
Note

Ignore items -1 to 4-

- Free up electrical wiring.

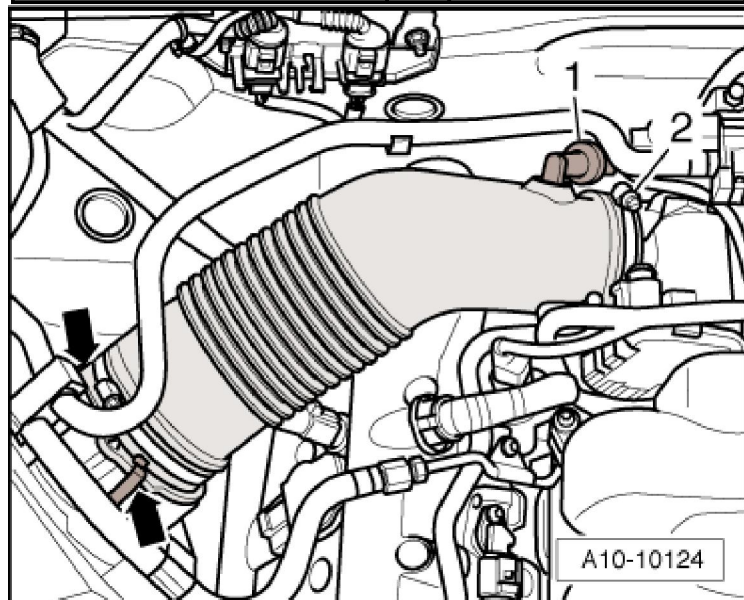


- Remove bolts -1 to 8- and remove left timing chain cover.

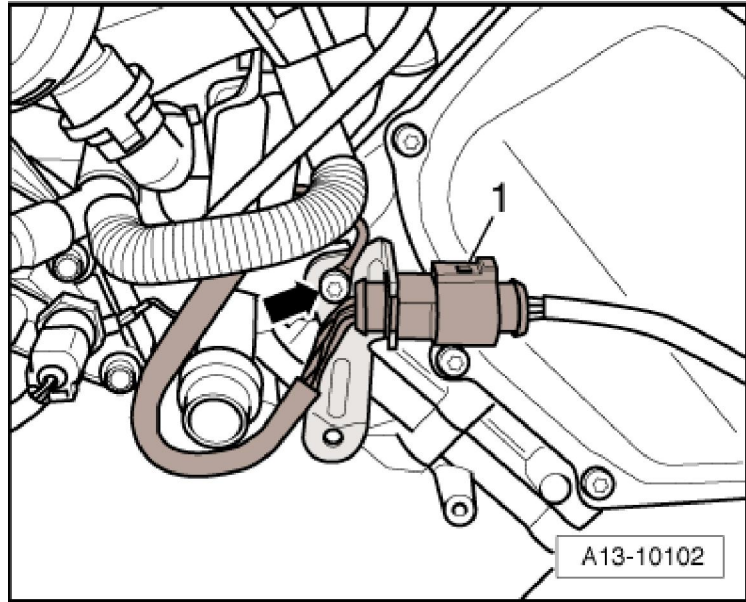


Right timing chain cover:

- Disconnect check valve -1- from connection at air duct hose.
- Remove air duct hose, thereby loosening hose clamp -2- and opening clips -arrows-.



- Disconnect electrical connector -1-.
- Remove bolt -arrow- and remove retainer for connection.



- Remove bolts -1 to 8- and remove right timing chain cover.

Installing



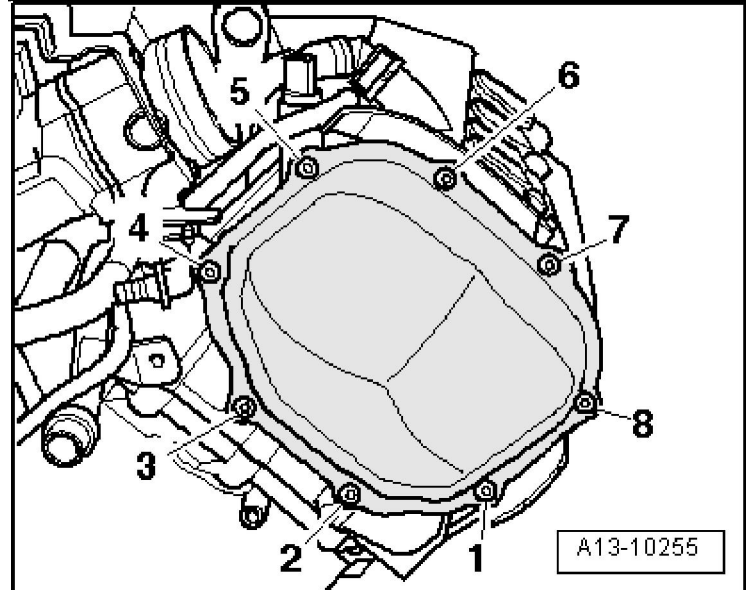
Note

During installation, all cable ties must be re-installed at the same location.



WARNING

Wear safety glasses.



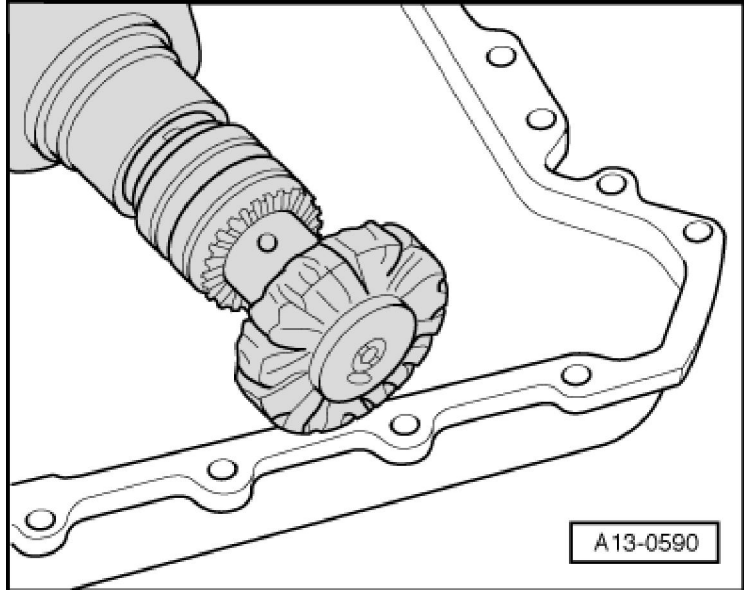
- Using e.g. a rotating plastic brush, remove sealant residue on covers for timing chain and on cylinder block and head.



Caution

Make sure that no sealant residue enters the engine.

- Clean sealing surfaces so they are completely free of any oil or grease.

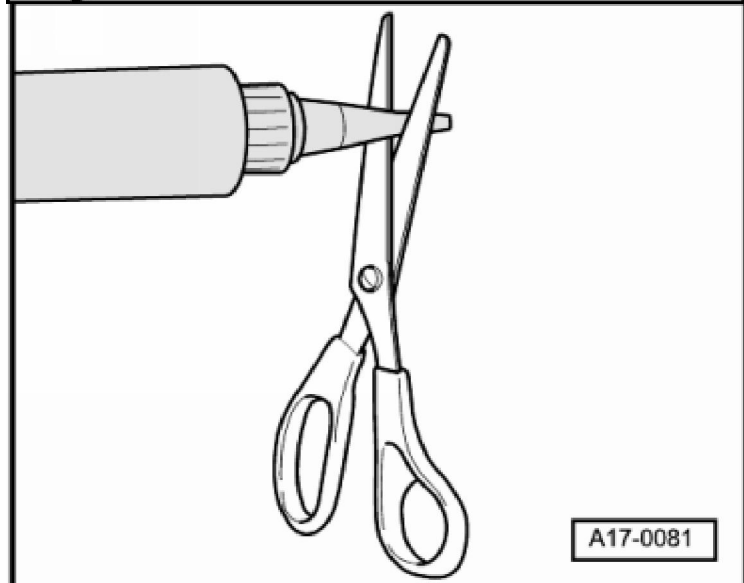


- Cut tube nozzle at front marking (jet dia. approx. 1 mm).

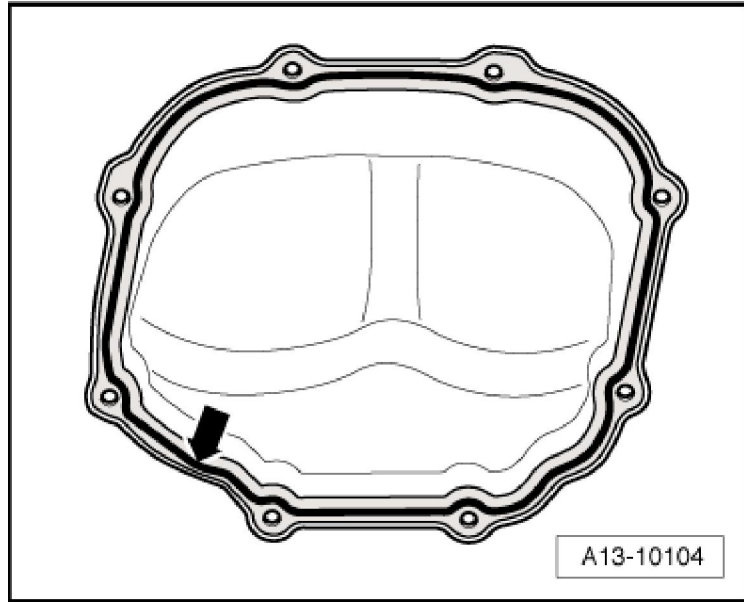


Note

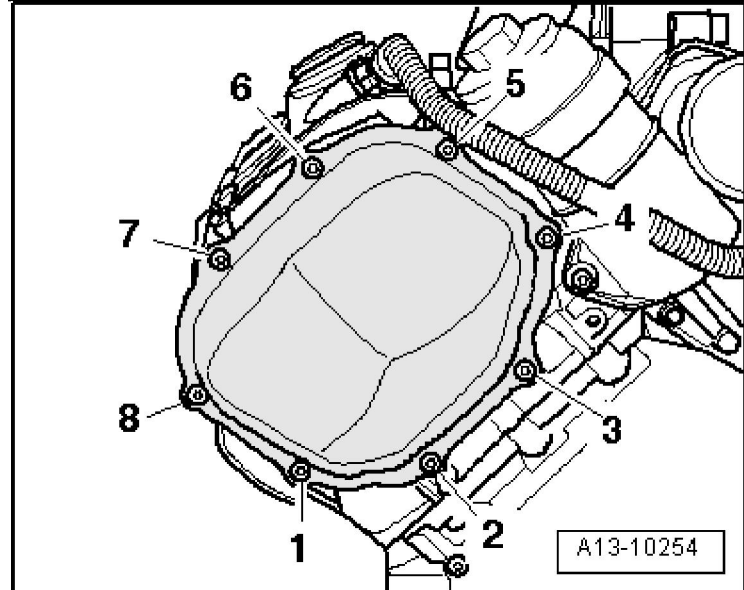
Covers for timing chain must be installed within 5 minutes after applying sealant.



- Apply sealant bead -arrow-, as shown in illustration, on clean sealing surfaces of left cover for timing chain.
- The groove of sealing surface must be completely filled with sealant.
- Sealant bead must stand 1.5 to 2.0 mm above sealing surface.

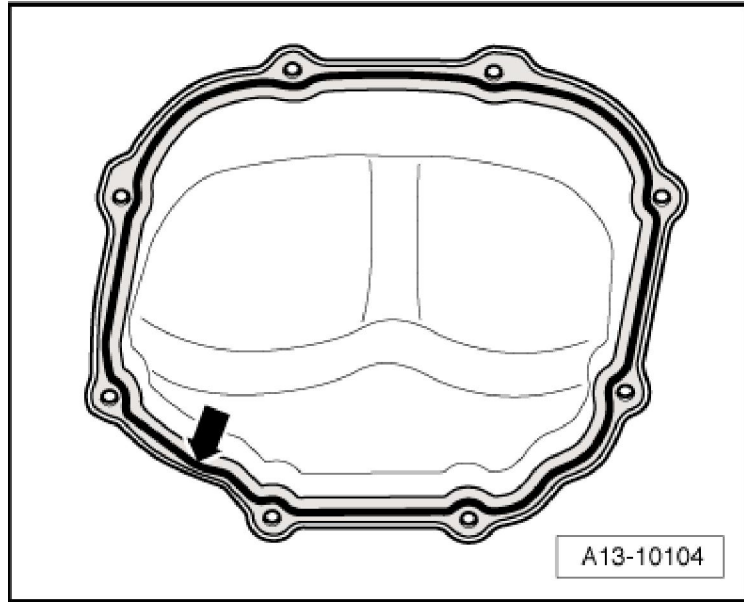


- Position left timing chain cover and tighten bolts in sequence -1 to 8-.



Apply sealant bead -arrow-, as shown in illustration, on clean sealing surfaces of right cover for timing chain.

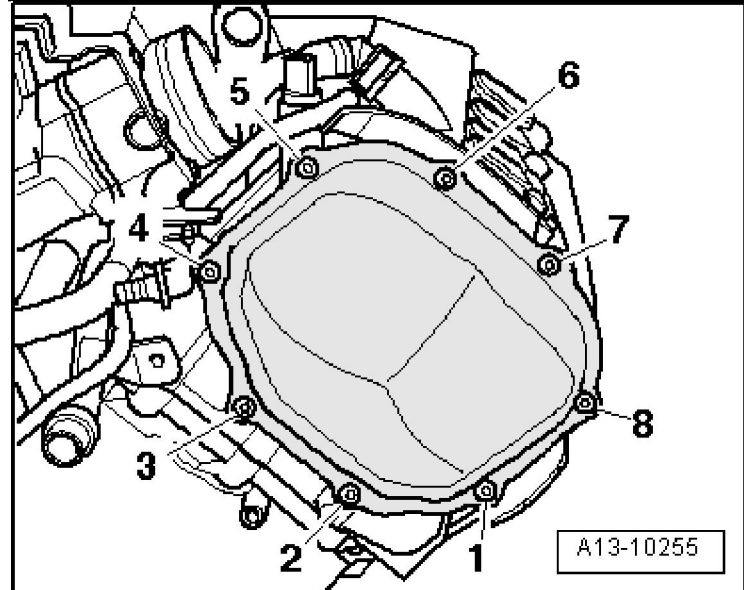
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- The groove of sealing surface must be completely filled with sealant.
- Sealant bead must stand 1.5 to 2.0 mm above sealing surface.



Position right timing chain cover and tighten bolts in sequence -1 to 8-.

Further installation is in reverse order of removal.

Torque specifications



Component	Nm
Left and right cover for timing chain on engine	5 + 90° ¹⁾²⁾
Retainer for connections to cylinder head	9
Hose clamps 9 mm wide	3
<ul style="list-style-type: none"> • ¹⁾ Replace bolts. • ²⁾ 90° corresponds to a quarter turn. 	