

Left and Right Timing Chain Covers

Special tools and workshop equipment required

Use hand drill with plastic brush attachment

Use protective eye wear

Use sealant, refer to [→ Electronic Parts Catalog "ETKA "](#)

Removal

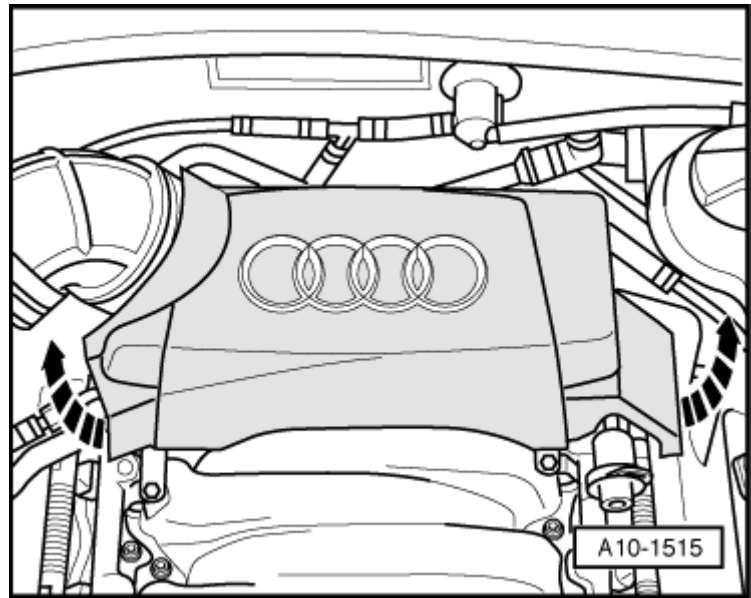


Note

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

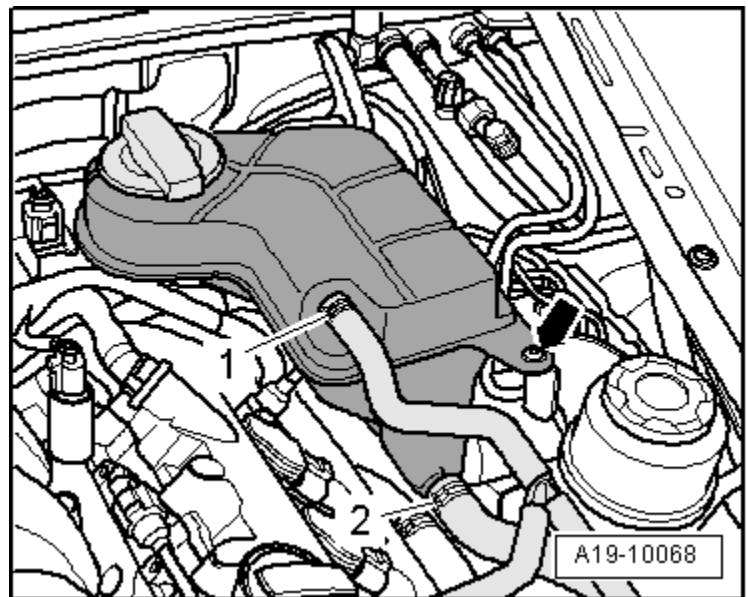
- Pull rear engine cover off -arrow s-.

Left timing chain cover:

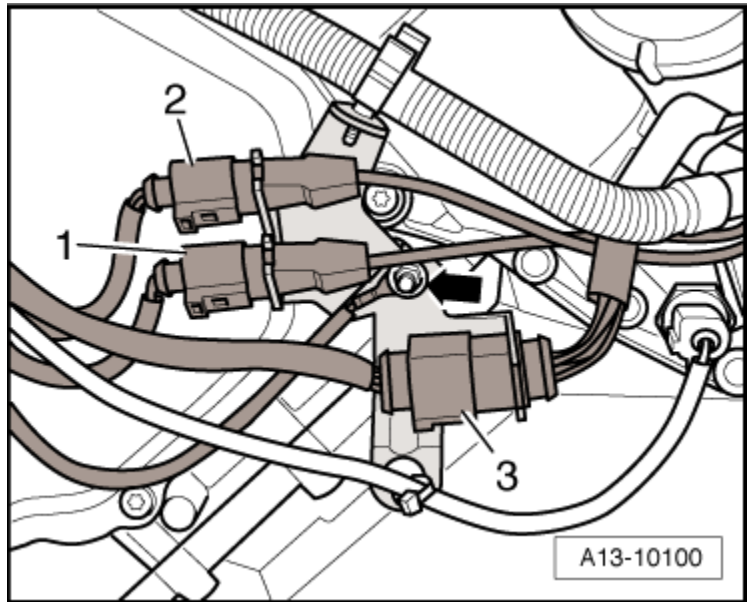


- Remove coolant expansion tank -arrow -.

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 the double-bolt lying beneath.
- Remove retainer for connections -1- and -2-.



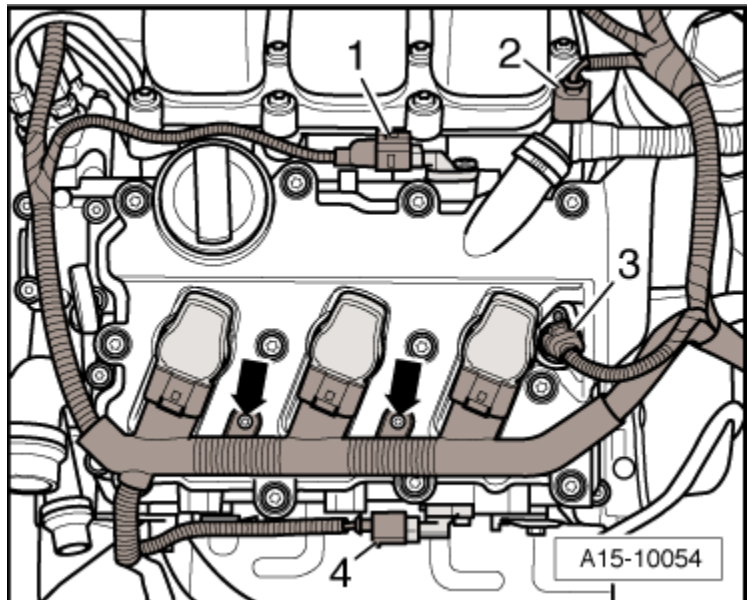
- Remove the bolts -arrow s- and separate the electrical connections at the ignition coils.



Note

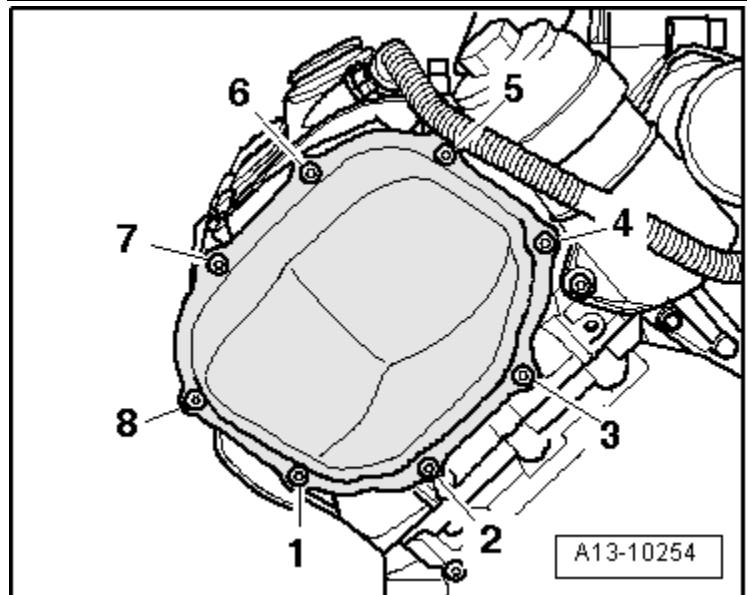
Ignore items -1 to 4-.

- Free up electrical wiring.

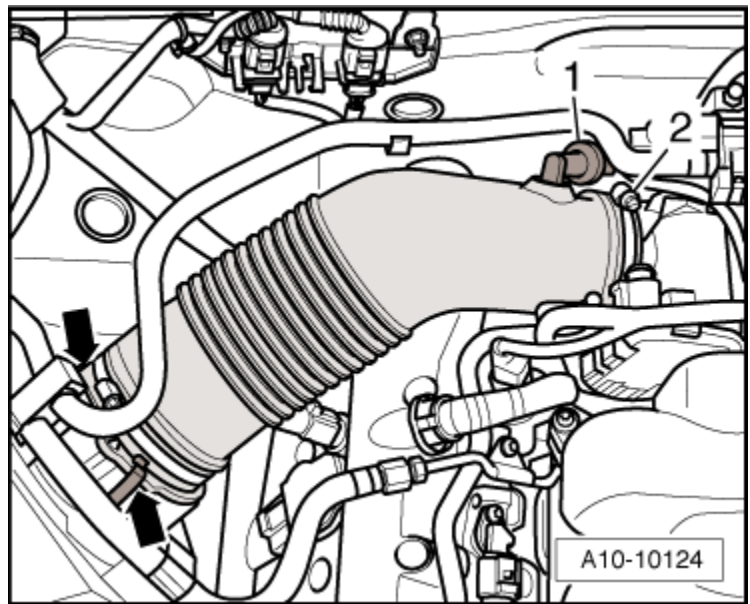


- Remove the bolts -1 through 8- and then remove the left cover for the timing chain from the bond.

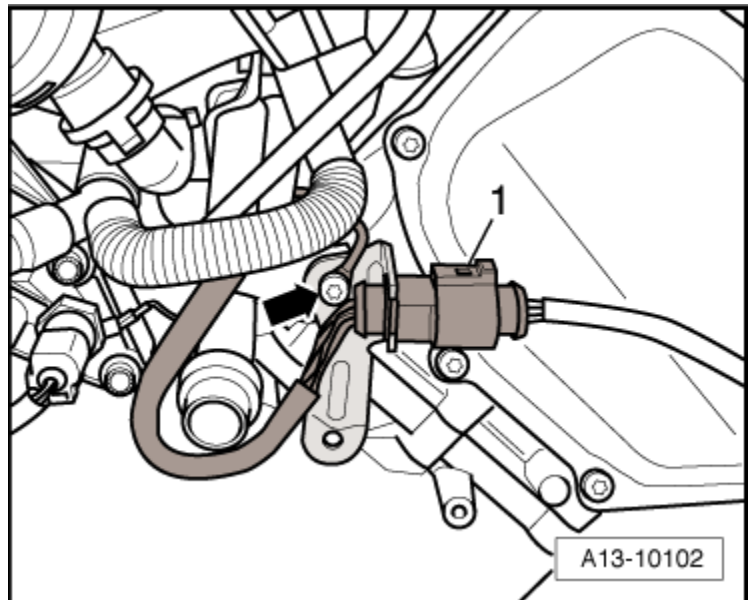
Right timing chain cover:



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



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



- Remove the bolts -1 through 8- and then remove the right cover for the timing chain from the bond.

Installing



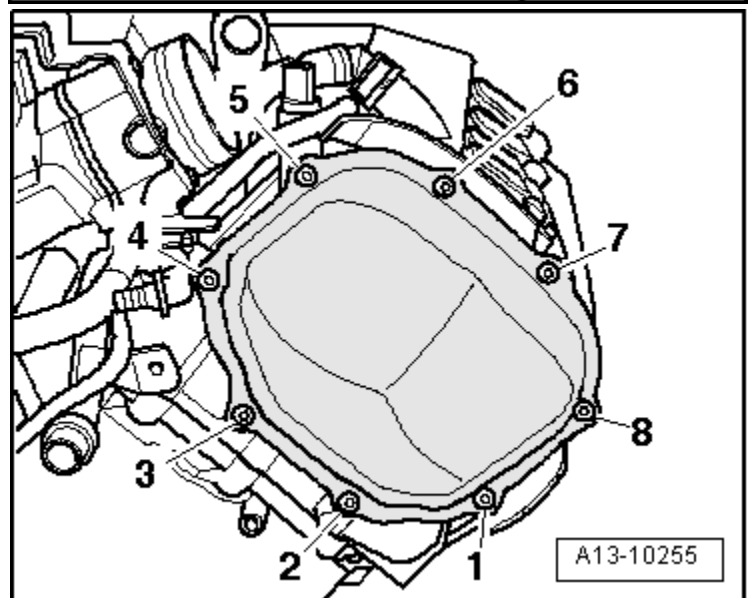
Note

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



WARNING

Wear safety glasses.



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

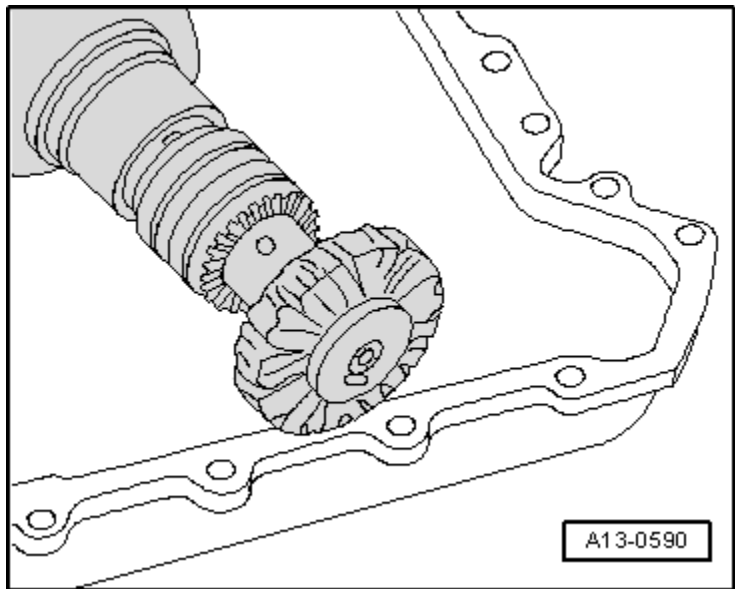
**!** Caution

Make sure that no sealant residue enters the engine.

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

**i** Note

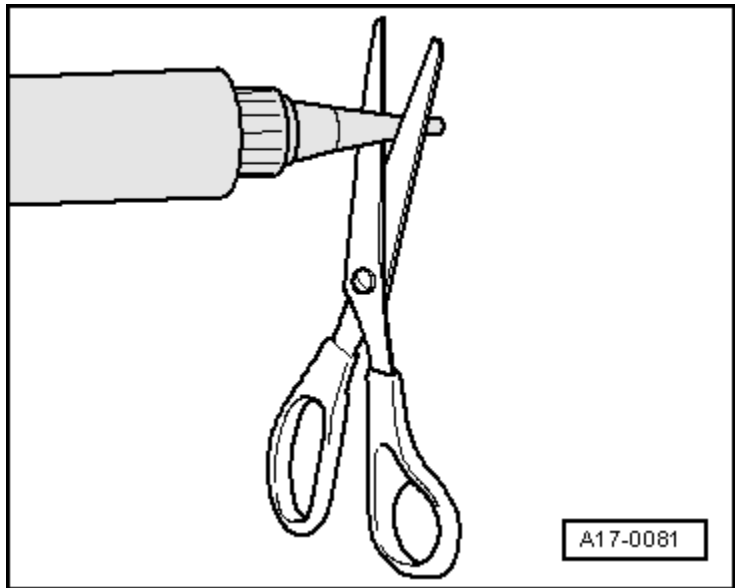
Note the expiration date of the sealing compound.



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

**i** Note

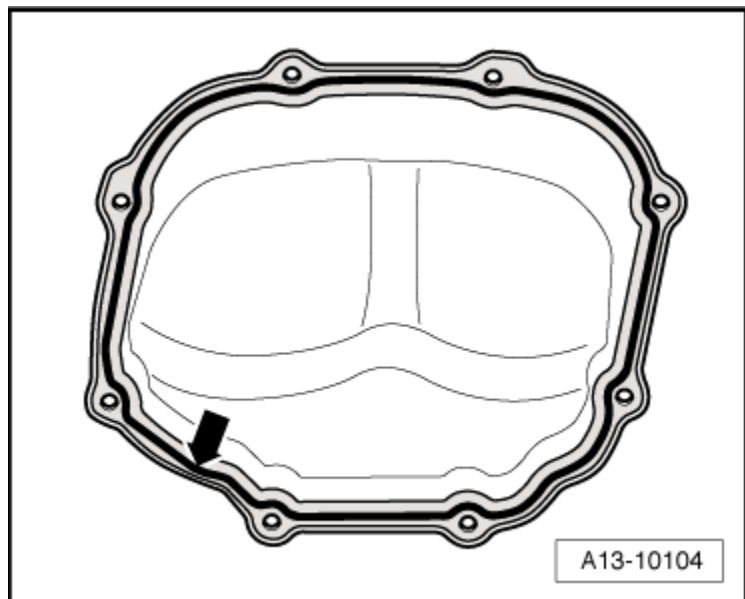


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Covers for timing chain must be installed within 5 minutes after applying sealant.

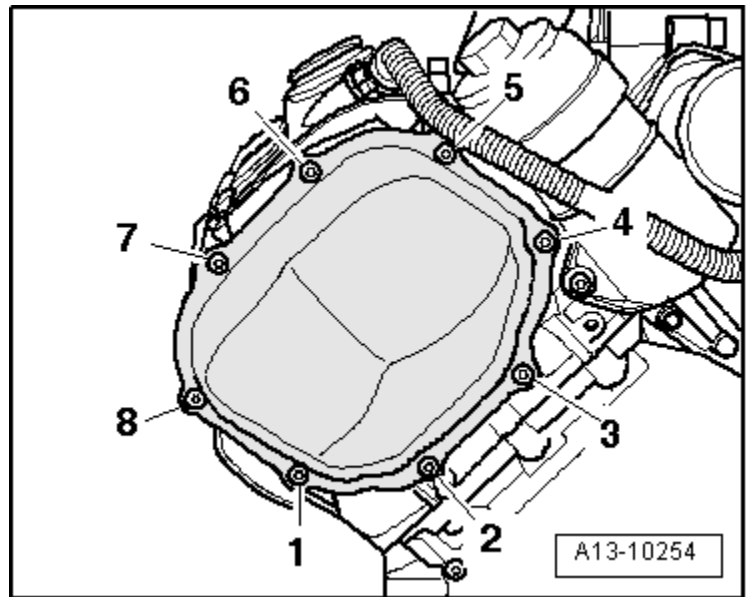
Apply sealant bead -arrow-, as shown in illustration, on clean sealing surfaces of left cover for timing chain.

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



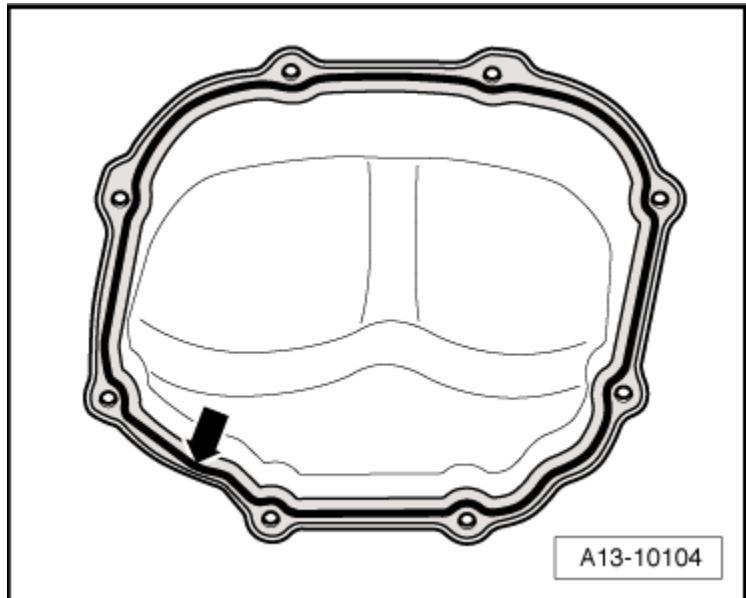
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- Position left timing chain cover and tighten bolts in sequence -1 to 8-



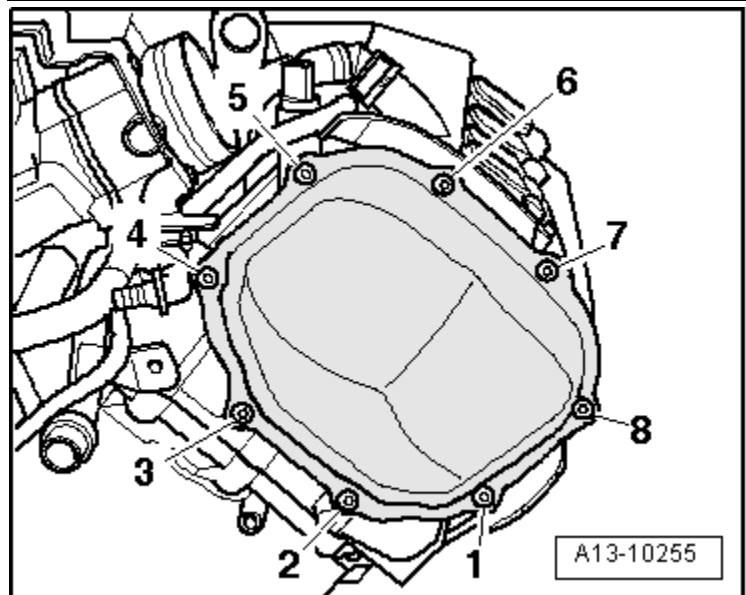
- Apply sealant bead -arrow-, as shown in illustration, on clean sealing surfaces of right cover for timing chain.

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



- Position right timing chain cover and tighten bolts in sequence -1 to 8-
- Further installation is in reverse order of removal.

Tightening Specifications



Component	Nm
Left and right cover for timing chain on engine	5 +90° 1)
Retainer for connections to cylinder head	9
Hose clamps 9 mm wide	3
1 1) Replace bolts.	