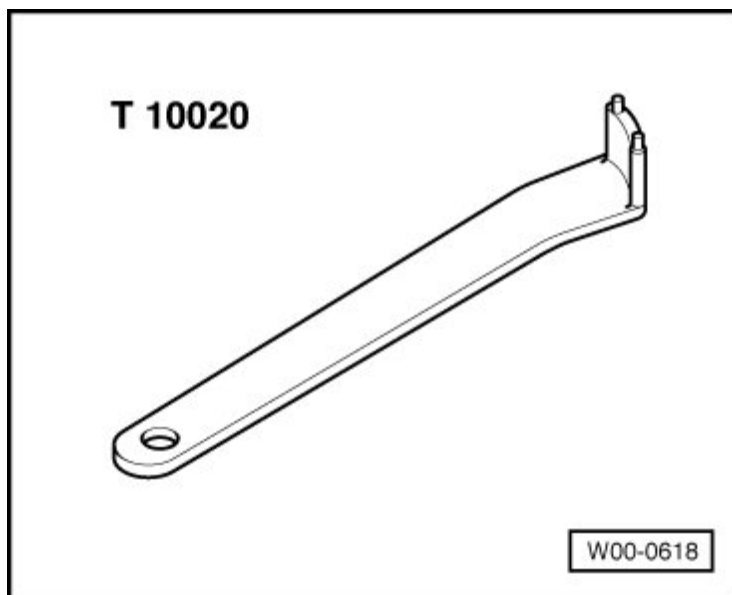


Removing and installing toothed belt

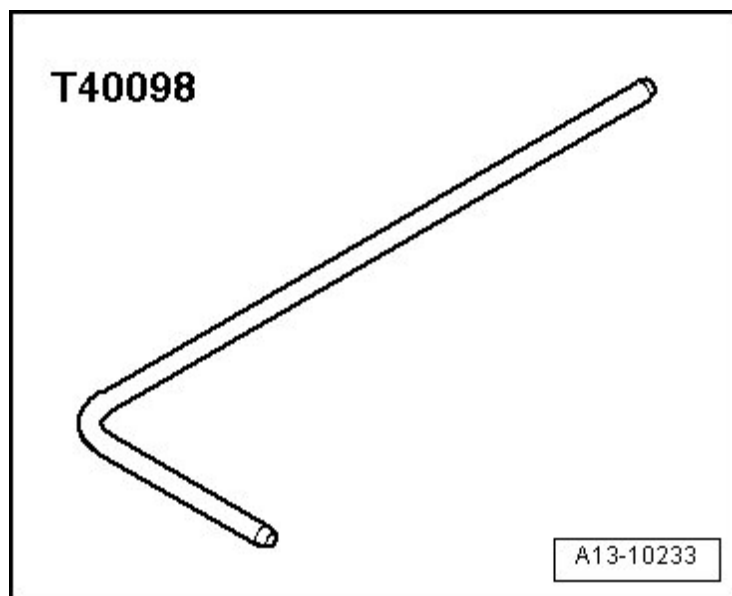
Special tools and workshop equipment required

2-hole pin wrench -T10020-



Locking pin -T40098-

Removing



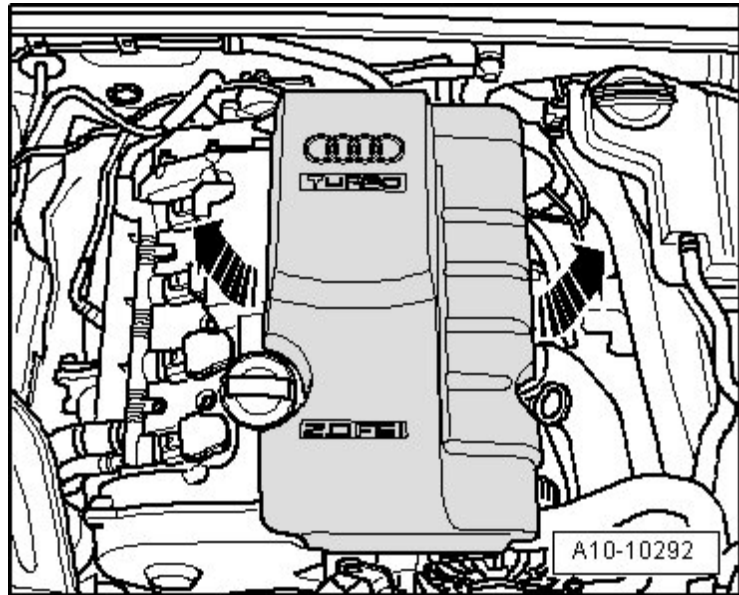
- Pull off engine cover panel -arrows-.



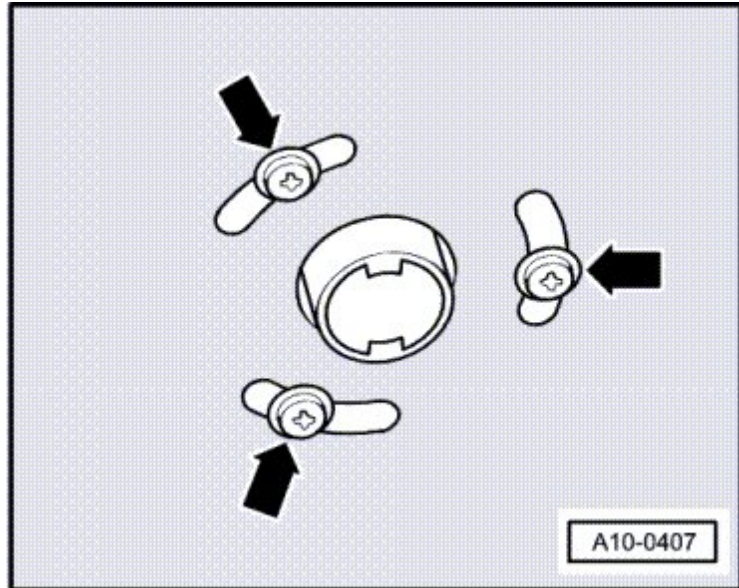
WARNING

Hot steam/hot coolant may escape when opening expansion tank. Cover cap with cloth and open carefully.

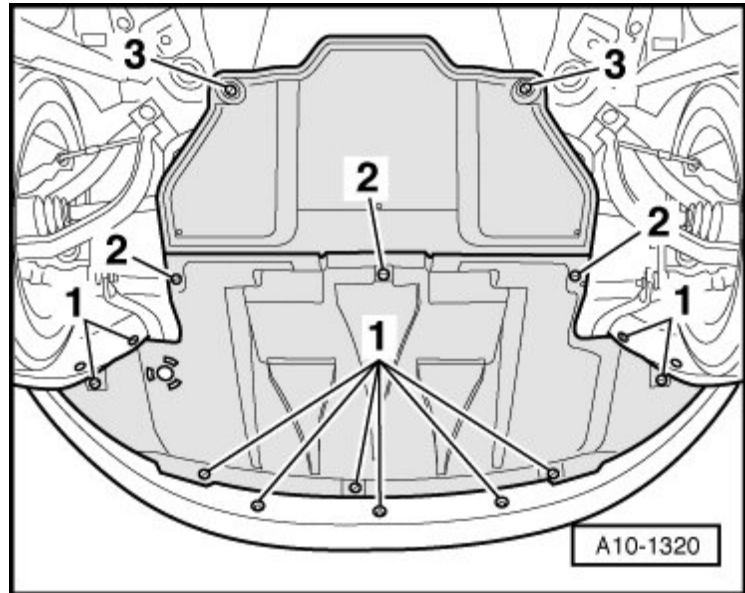
- Open filler cap on coolant expansion tank



- Vehicles with auxiliary heater: remove bolts - arrows- securing exhaust pipe for auxiliary/additional heater to noise insulation.



- Release quick-fasteners -1- and -2- and take off front noise insulation.
- Drain off coolant **Chapter**
- Move lock carrier to service position **Chapter.**

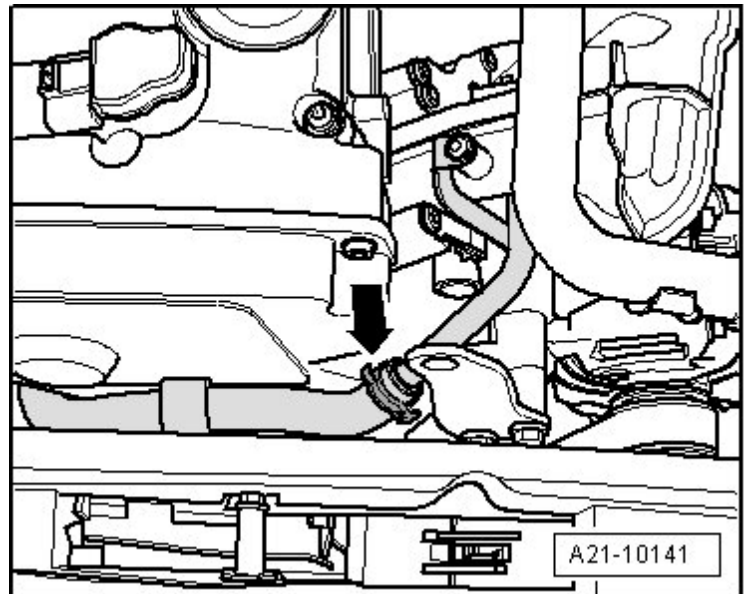


- Disconnect coolant pipe -arrow-.

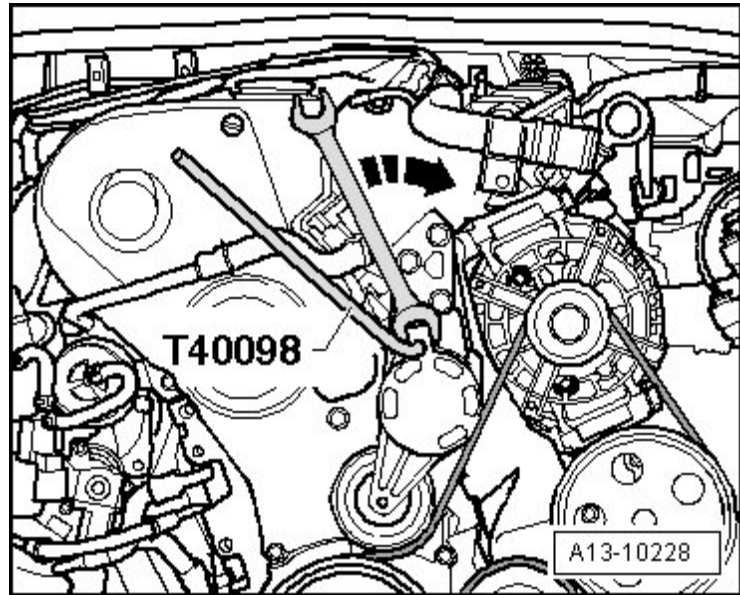
**Note**

Before removing, mark direction of rotation of poly V-belt with chalk or felt-tipped pen. If the belt runs in the opposite direction when it is refitted, this can cause breakage.

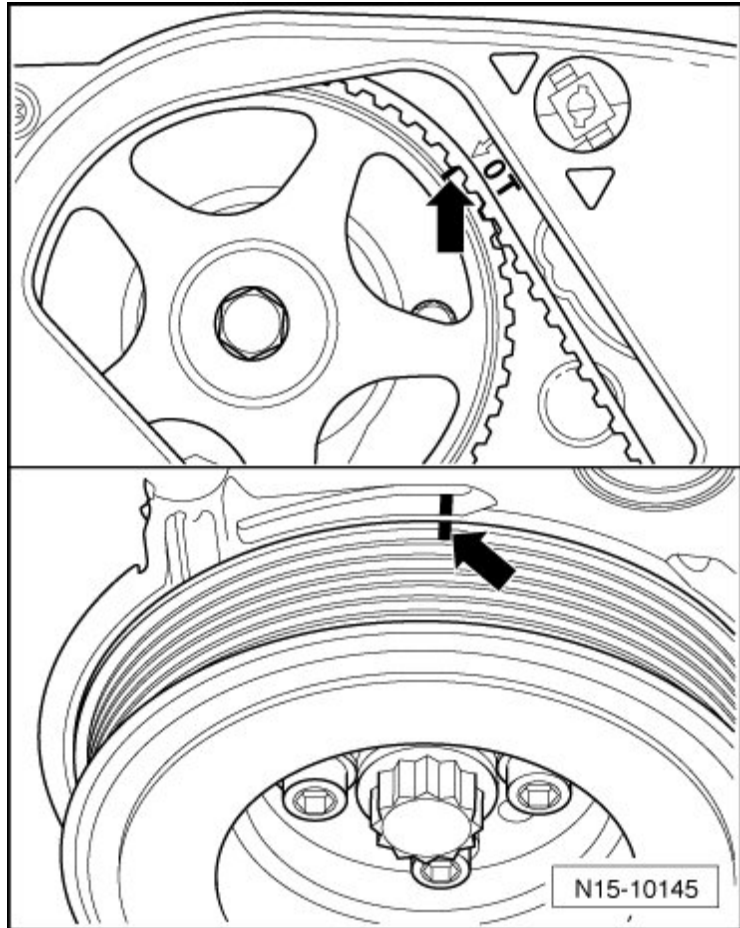
- Mark direction of rotation of poly V-belt.



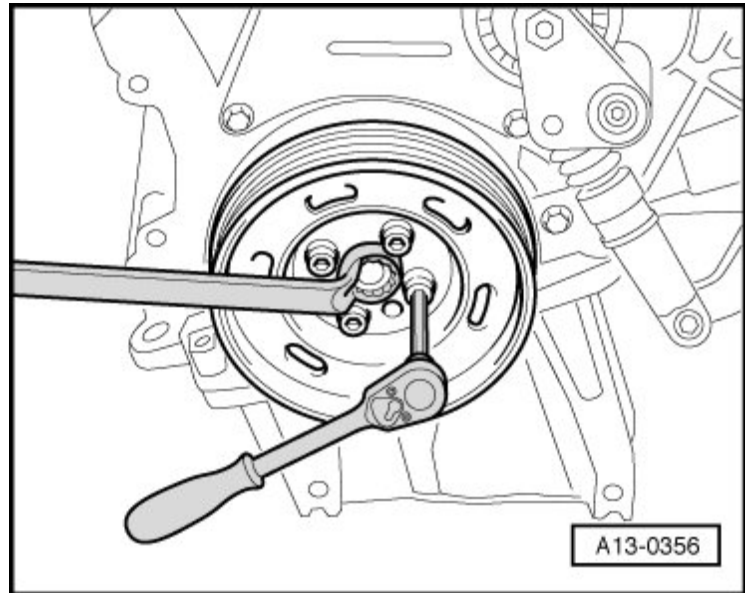
- To slacken poly V-belt, turn belt tensioner/damper in direction of -arrow-.
- Lock tensioner in position with locking pin - T40098-.
- Remove poly V-belt.



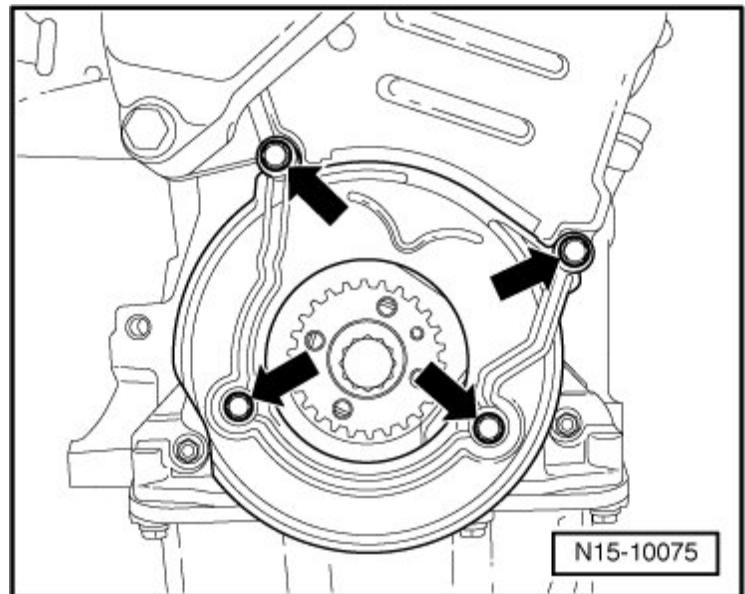
- Set camshaft sprocket to TDC marking by turning crankshaft. Marking on camshaft sprocket must align with arrow on toothed belt cover.



- Remove vibration damper / pulley.



- Unscrew bolts from toothed belt cover (bottom) -arrows-.



- Unscrew remaining toothed belt cover bolts - arrows- and remove toothed belt cover from engine.
- Mark direction of rotation of toothed belt.
- Loosen tensioning roller and remove toothed belt.
- Turn crankshaft back slightly.

Installing



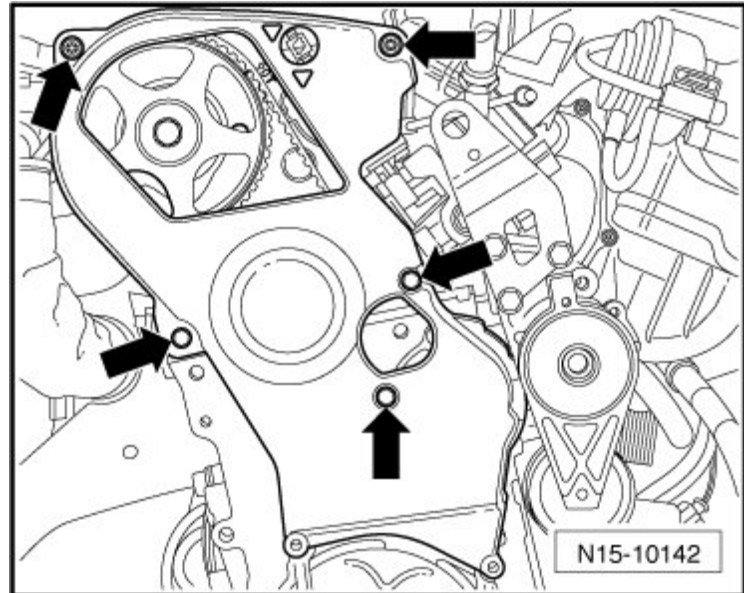
Note

When turning the camshaft, the crankshaft must not be at TDC. Otherwise, there is a risk of damage to valves and piston crowns.

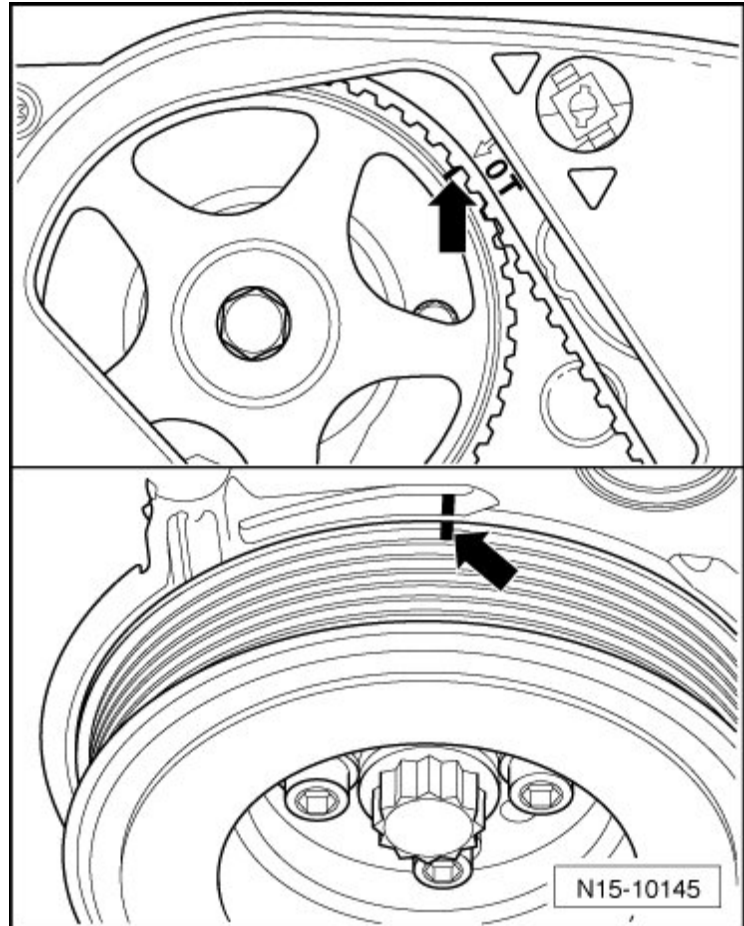
The engine must be no more than warm to

touch.

- Fit toothed belt on crankshaft sprocket (note rotation direction).
- Secure toothed belt cover (bottom section) with the two bolts at the bottom.
- Install vibration damper / pulley with new bolts.



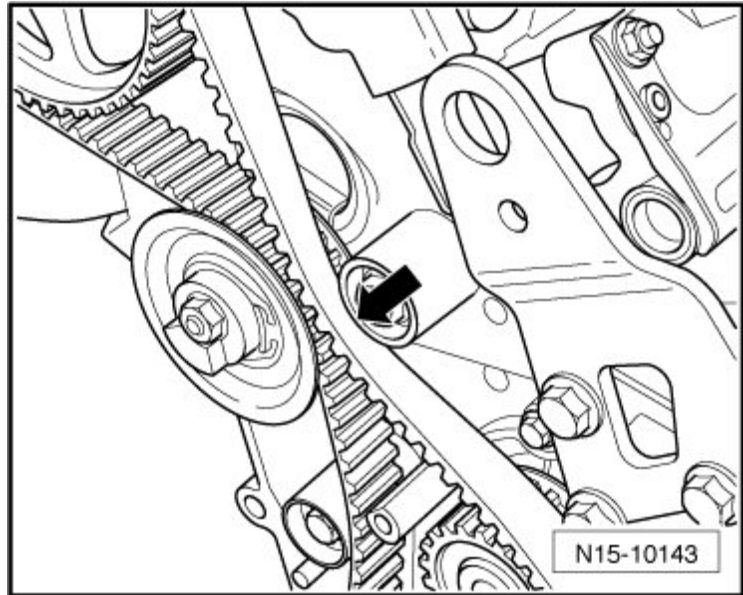
- Turn crankshaft and camshaft to TDC No. 1 cylinder -arrows-.



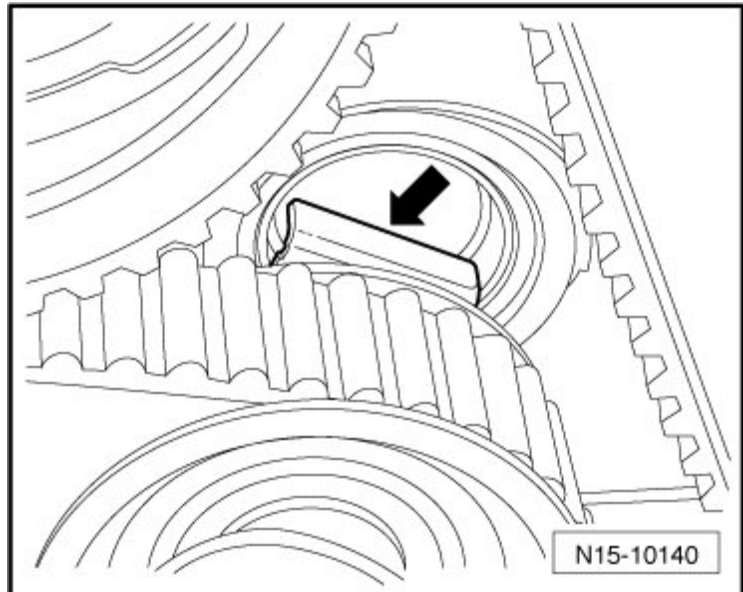
- Fit toothed belt in the sequence: tensioning roller, camshaft sprocket, coolant pump and last onto idler roller -arrow-.



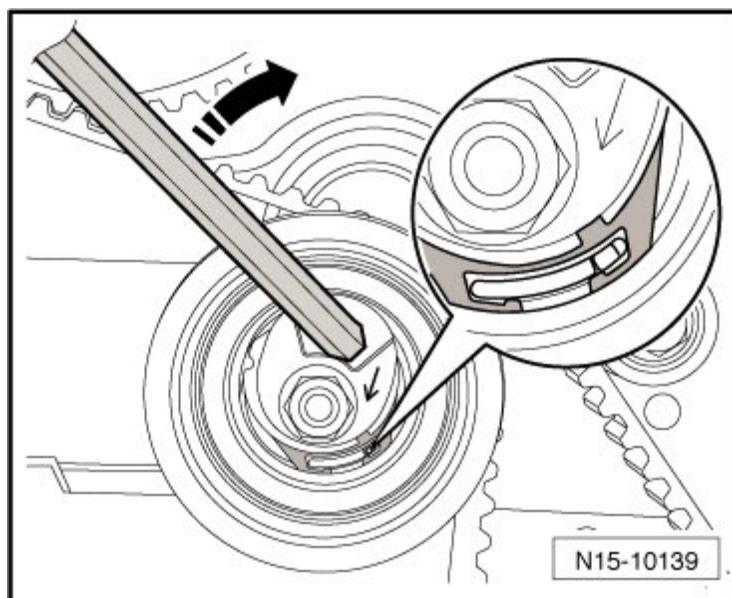
Note



Check tensioning roller is seated correctly in cylinder head.



- Tension toothed belt. To do so, turn hexagon key at the eccentric adjuster clockwise (direction of arrow) until the notch is above the indicator.
- Then release tension on toothed belt.
- Now tension toothed belt until the notch and the indicator are aligned.
- Tighten securing nut for tensioning roller.
- Turn crankshaft two turns in direction of engine rotation and set again to TDC. Make sure that the engine is rotated without stopping during the final 45° ($\frac{1}{8}$ turn).
- Check tension of toothed belt again.
Specification: indicator and notch must align.

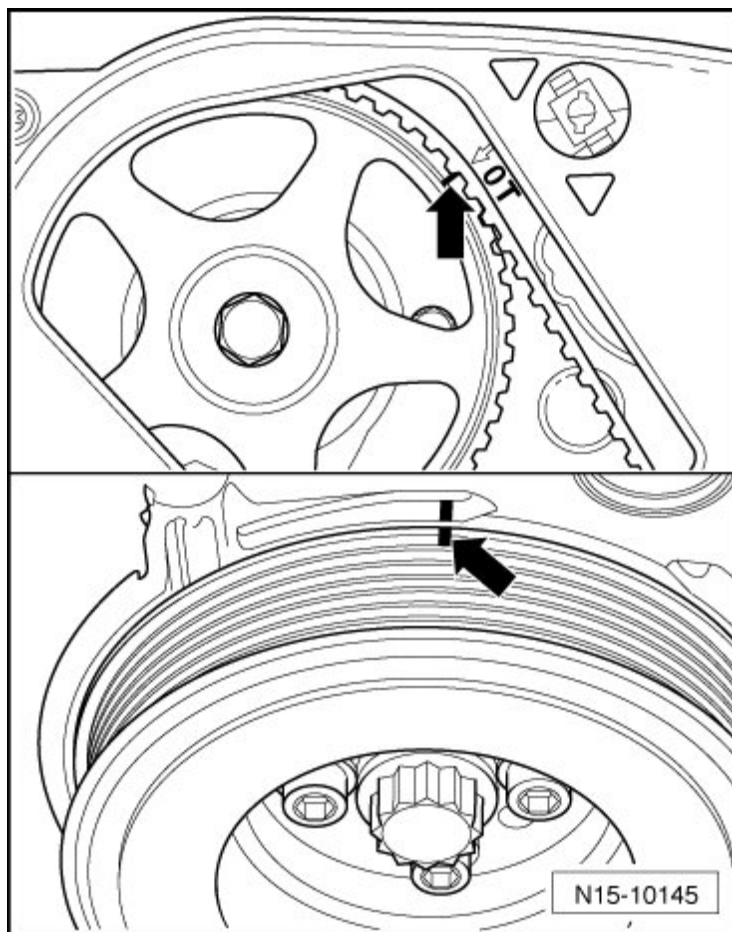


- Check valve timing again.

If the markings do not align:

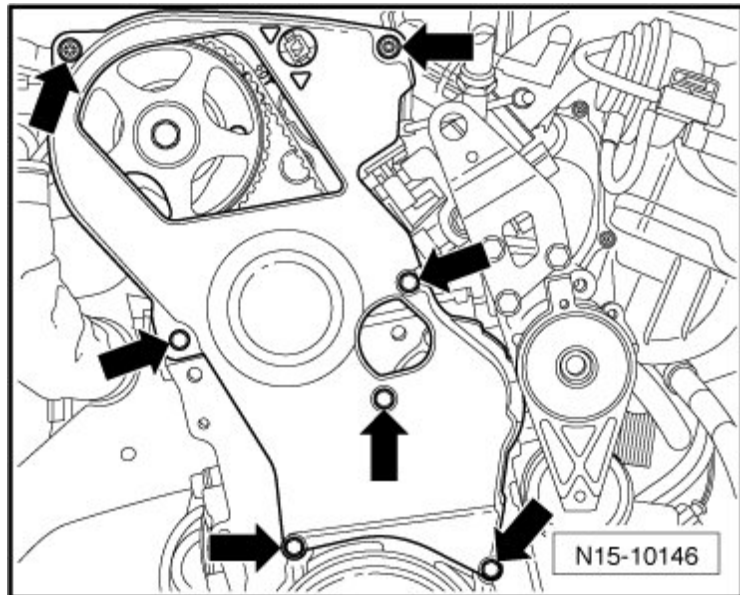
- Repeat adjustment of valve timing.

If the markings align:



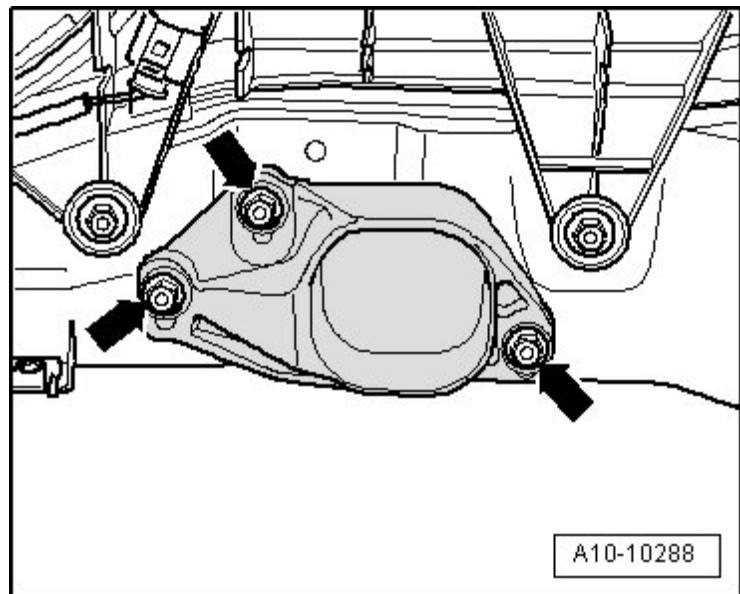
- Install toothed belt cover -arrows-.
- Install crankshaft pulley [Chapter](#).
- Install poly V-belt [Chapter](#).
- Fill up with coolant [Chapter](#).

- Install lock carrier with attachments **Rep. Gr.50.**



- Allow stop for torque reaction support to rest on rubber buffer for torque reaction support under its own weight and tighten nuts -arrows-.
- Install front bumper cover **Rep. Gr.63.**
- Check headlight adjustment **Booklet8E.**
- Install insulation tray.
- Fit engine cover panel.

Tightening torques



Component		Nm
Toothed belt tensioning roller to cylinder head		23
Toothed belt cover (bottom) to cylinder block		10 ³⁾
Toothed belt cover (centre) to cylinder block		10 ³⁾
Vibration damper/pulley		10 + 90° ¹⁾²⁾
Stop for torque reaction support		28
¹⁾ Renew bolt ²⁾ 90° = a quarter of a turn ³⁾ Apply locking fluid when fitting		