

Audi > B4 > 1993 -1995

2.8 Liter V6 2V Engine Mechanical, Engine Code(s): AAH , AFC

13 - Engine - Crankshaft, Cylinder block

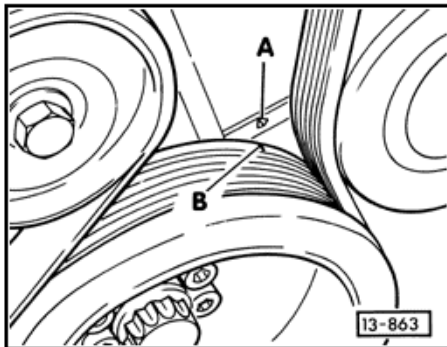
Toothed cam shaft drive belt, removing and installing

Removing

CAUTION!

Mark the running direction of the belt with a crayon or marker before removing. Reinstalling a used belt in reversed running direction could damage the belt.

- Remove ribbed belt => Page [13-3](#).
- Remove ribbed belt tensioner.
- Unclip cam shaft drive belt guard on both sides.
- Turn crankshaft by hand to Top Dead Center (TDC) position.

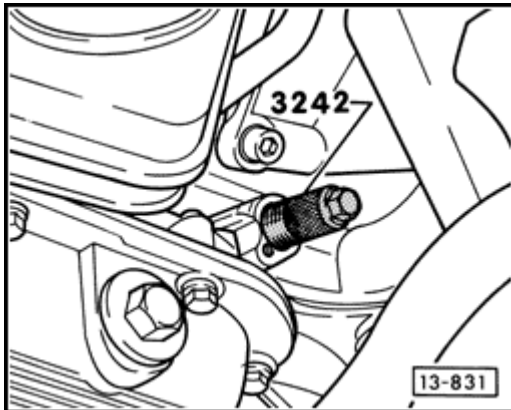


- 1 Notch -A- must align with notch -B-.
- Check cam shaft position.
- 1 Large holes in cam shaft sprocket backing plates must face each other.

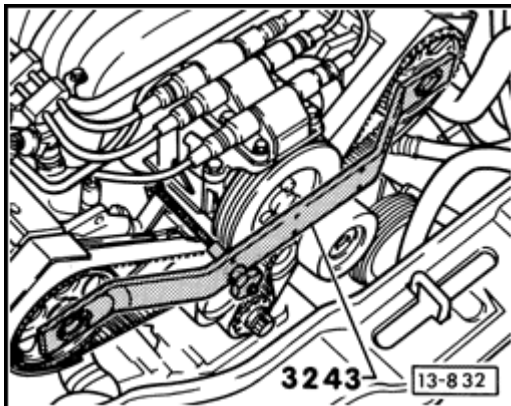
If not:

- Turn crankshaft one more revolution.
- Remove Crankshaft Position (CKP) sensor from left-hand side of cylinder block, behind oil cooler (above oil pan).

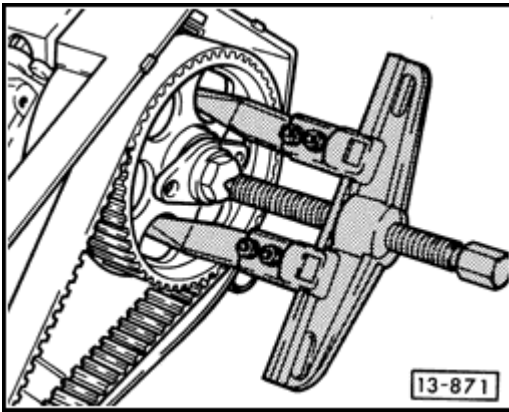
- 1 TDC recess in crankshaft must be positioned behind open hole for CKP sensor (inspect visually or by touch).



- Thread crankshaft holding tool 3242 into CKP sensor hole, and tighten slightly.
- Remove vibration damper => Page [13-12](#).
- Remove lower belt guard.



- Install cam shaft holding tool 3243.
- Loosen left and right cam shaft sprocket bolts approx. 3 turns.
DO NOT remove the bolts.
- Remove cam shaft holding tool 3243.



- Loosen right and left cam shaft sprockets from tapered ends of cam shafts using puller (Kukko 20/10 shown).

* Puller arms must engage on rear of sprocket

* With engine installed in vehicle, use puller 3032

- Loosen and remove toothed belt.

Installing

- Install toothed belt over both cam shaft sprockets.

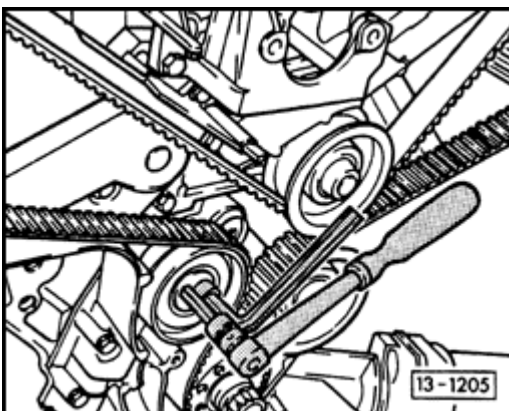
- Install cam shaft holding tool 13243.

- Install toothed belt over remaining sprockets, then over tensioner roller last.

Note:

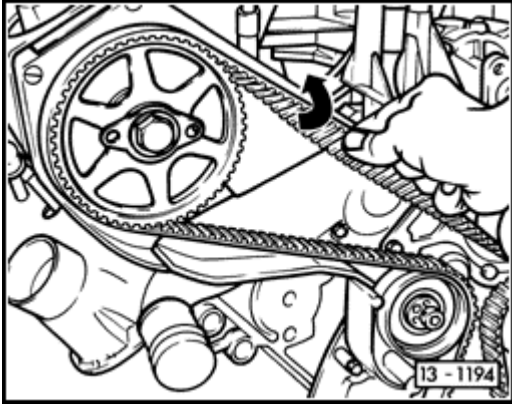
The cam shaft sprockets must be loose enough on the tapered ends of the cam shafts so that the cam shafts can still be turned, but not so loose that the sprockets tilt out of alignment.

Adjusting belt tension



The toothed belt tension adjustment is done by turning the tensioning roller with 8 mm hex-key wrench.

- Adjust tensioner so it can just be moved slightly by hand.



- Check belt tension by gripping belt halfway between cam shaft sprocket and coolant pump.

Twisting the belt with the thumb and index finger, it must be just possible to twist it approx. 90° .

- Fully tighten tensioner center bolt with 8 mm hex-key wrench.

Tightening torque: 45 Nm (33 ft lb)

- Fully tighten cam shaft sprocket bolts.

Tightening torque: 30 Nm (22 ft lb) plus 1/2-turn (180°)

- Remove crankshaft holding tool 3243.

- Reinstall Crankshaft Position (CKP) sensor.

Tightening torque: 10 Nm (7 ft lb)

Note:

If crankshaft center bolt has been removed:

- * Always replace.
- * Use only new double hex-head (12-pt.) cap screw, grade 9.8.
- * Tightening torque (with bolt oiled): 200 Nm (148 ft lb) plus additional 1/2-turn (180°)