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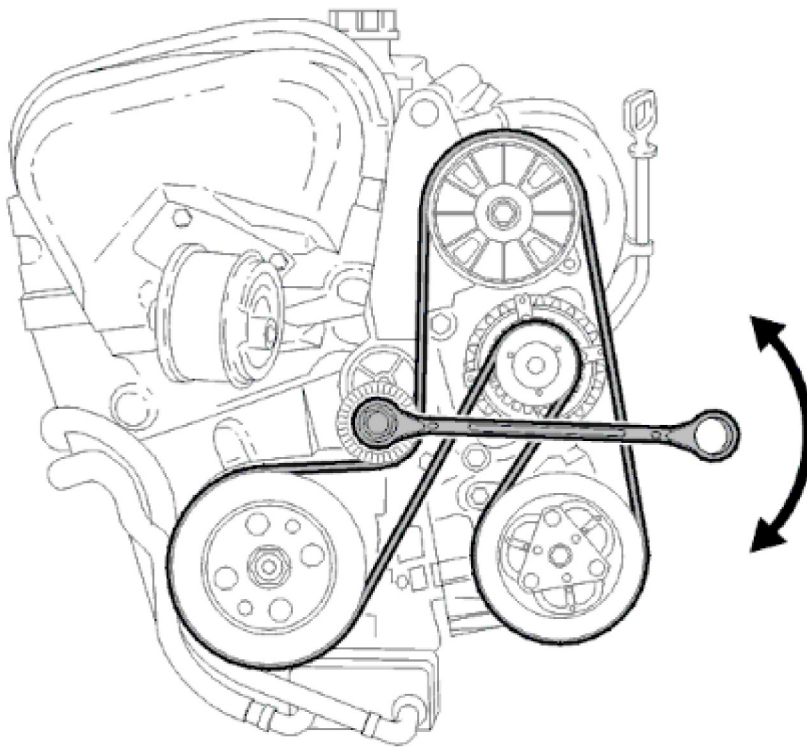
## Replacing the timing belt

[999 5006](#)

[999 5383](#)

[999 5460](#)

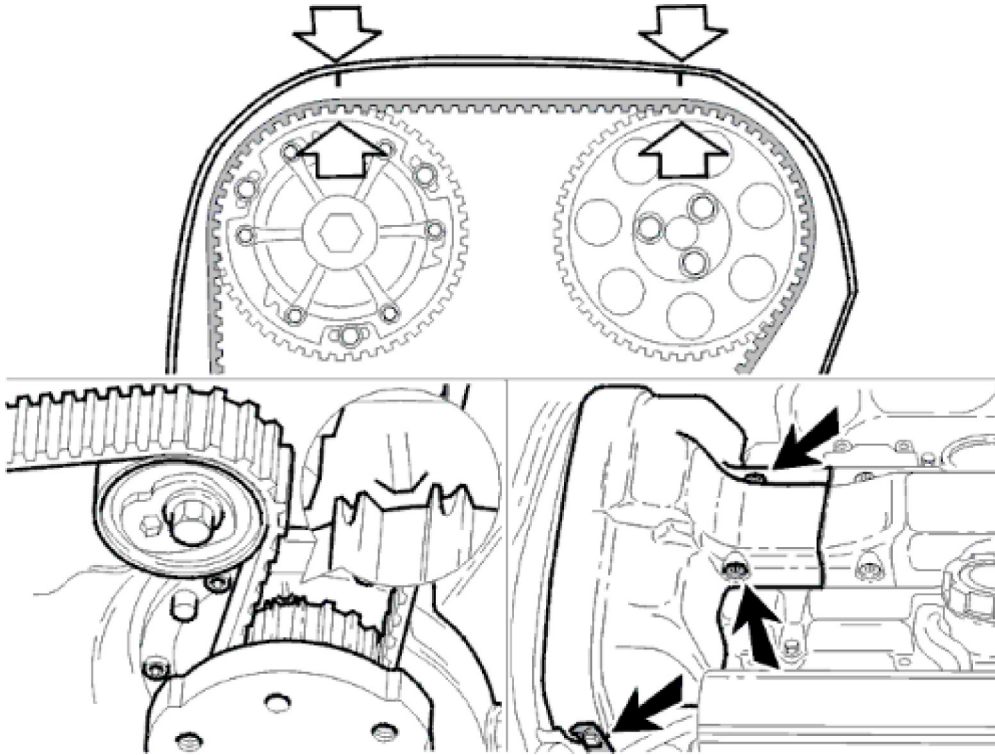
## Removing the auxiliaries belt



- Turbocharged engines: remove the right hand engine cover and the cover over the right headlamp
- Slacken off the auxiliaries belt by turning the screw on the tension pulley clockwise
- Remove the auxiliaries belt.



## Removing the timing covers



### Remove:

- the upper timing cover
- the front timing cover.

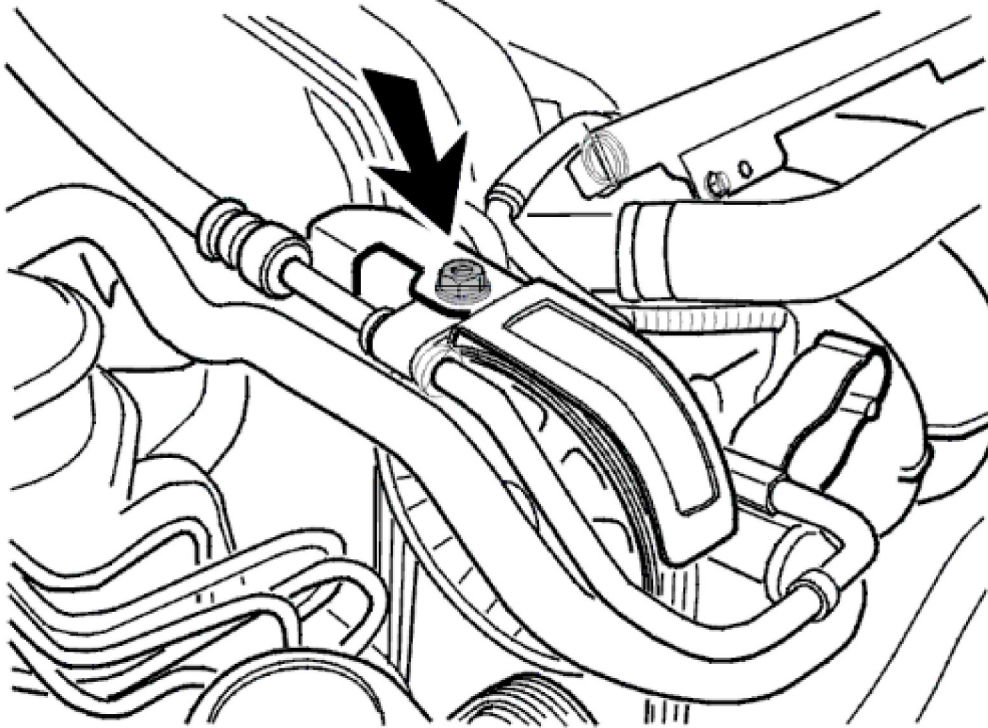
## Checking work

### Function test:

- Test drive the engine.



## Installing the lifting beam and lifting hook

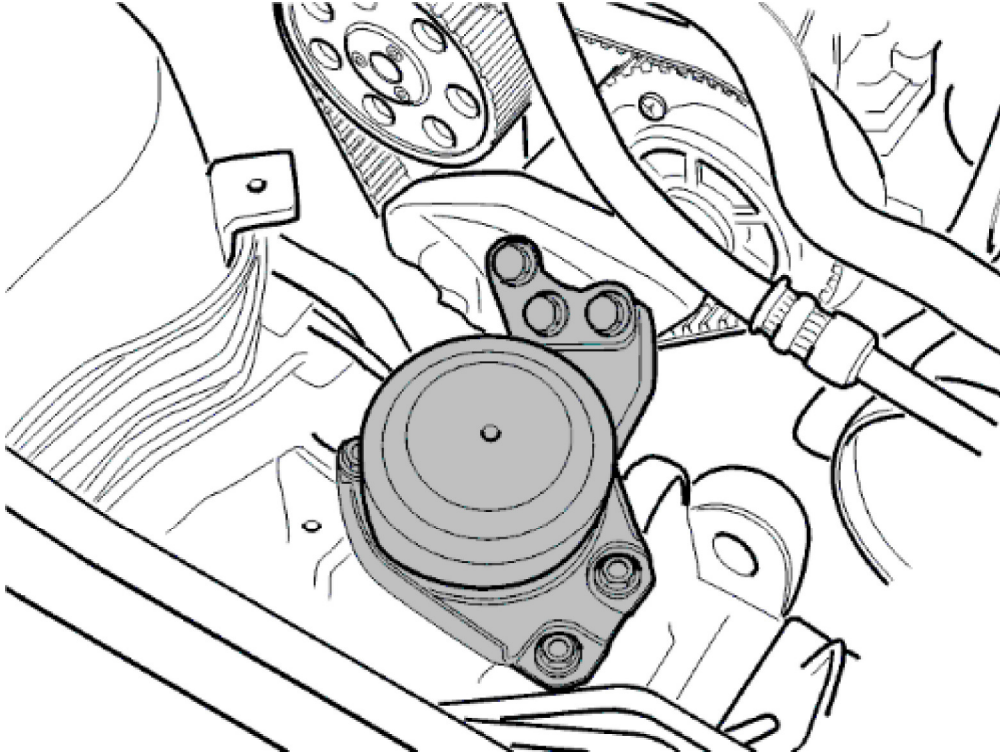


Remove the metal bracket for the servo hose from the rotation protection for the auxiliaries belt.

Position lifting beam Special Tool: [999 5006](#) slightly in front of the front lifting eyelet for the engine. Use lifting arm Special Tool: [999 5383](#) and lifting hook Special Tool: [999 5460](#) to raise the front of the engine a few millimeters.



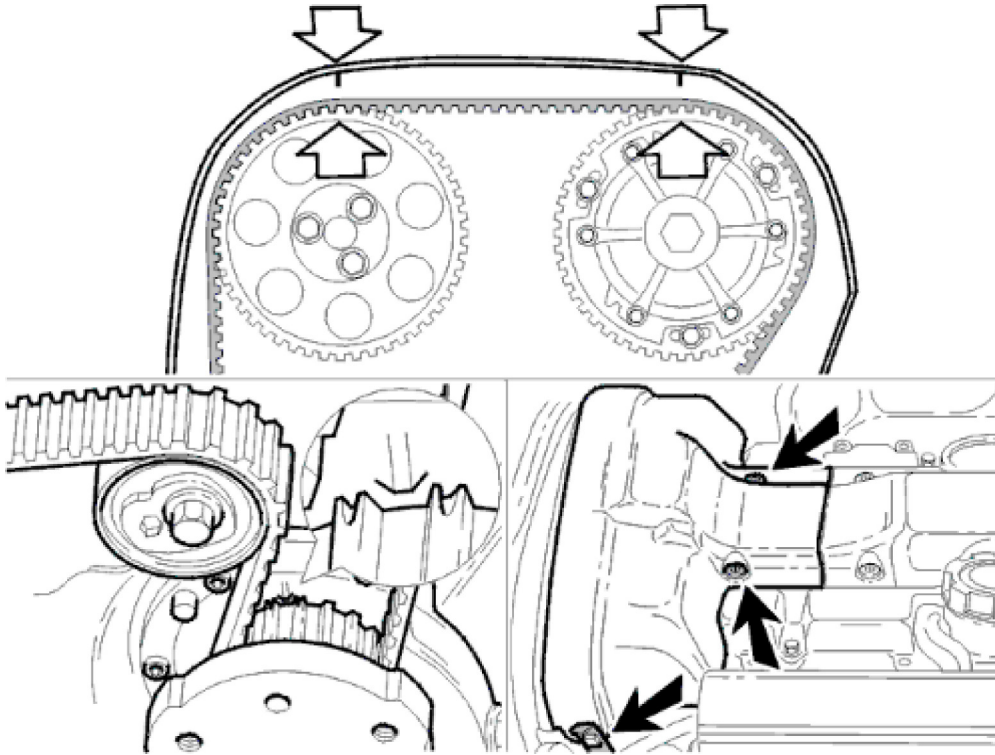
## Removing the right-hand engine mounting



- the screws for the servo holder
- the engine mounting screws
- the engine mounting
- the lower timing cover.



### Position the engine according to the marking



Remove the right front wheel.

Position the upper timing cover.

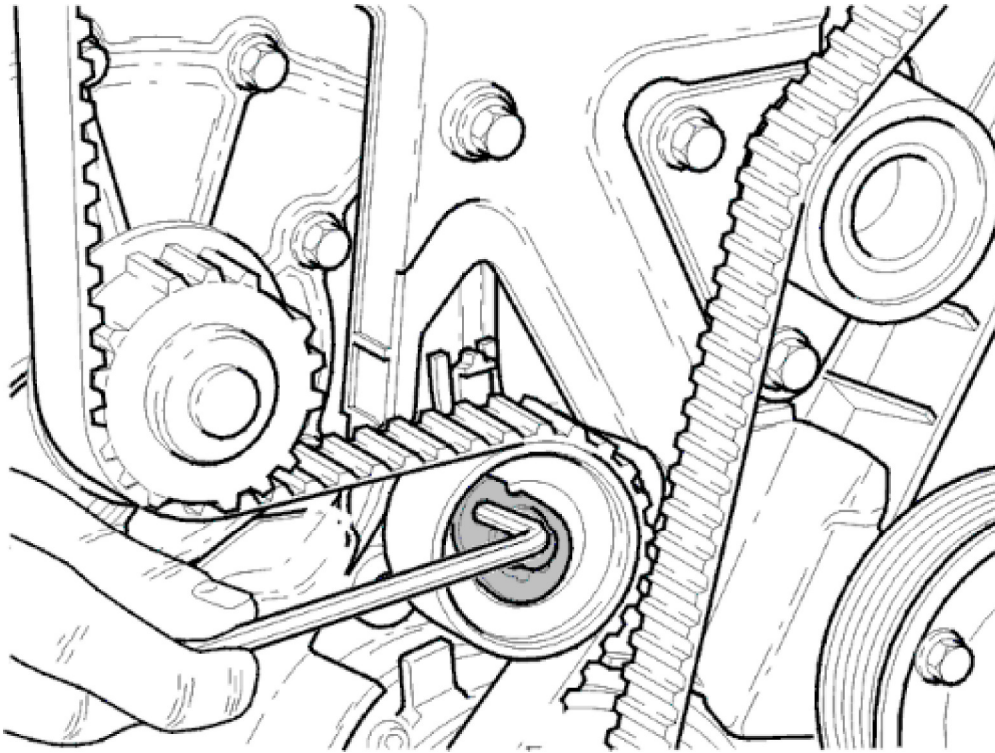
Turn the crankshaft until the markings on the crankshaft and camshaft pulley correspond.

Turn the crankshaft a further  $\frac{1}{4}$  turn clockwise and then back again until the markings correspond. The markings are illustrated.

Remove the upper timing cover.



## Removing the timing belt



Slacken off the center screw for the belt tensioner slightly.

Hold the center screw still. Turn the tensioner eccentric clockwise using a 6 mm Allen key to 10 o'clock.

Remove the timing belt from the tension pulley, camshaft pulley and water pump.

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## Tensioning the tensioner pulley and the idler pulley

Spin the idler pulley and listen for noise. When replacing with a new idler pulley, tighten to **24 Nm** .

Spin the tension pulley and listen for noise. When replacing, screw the tension pulley into place using the center screw.  
Screw in the center screw by hand.

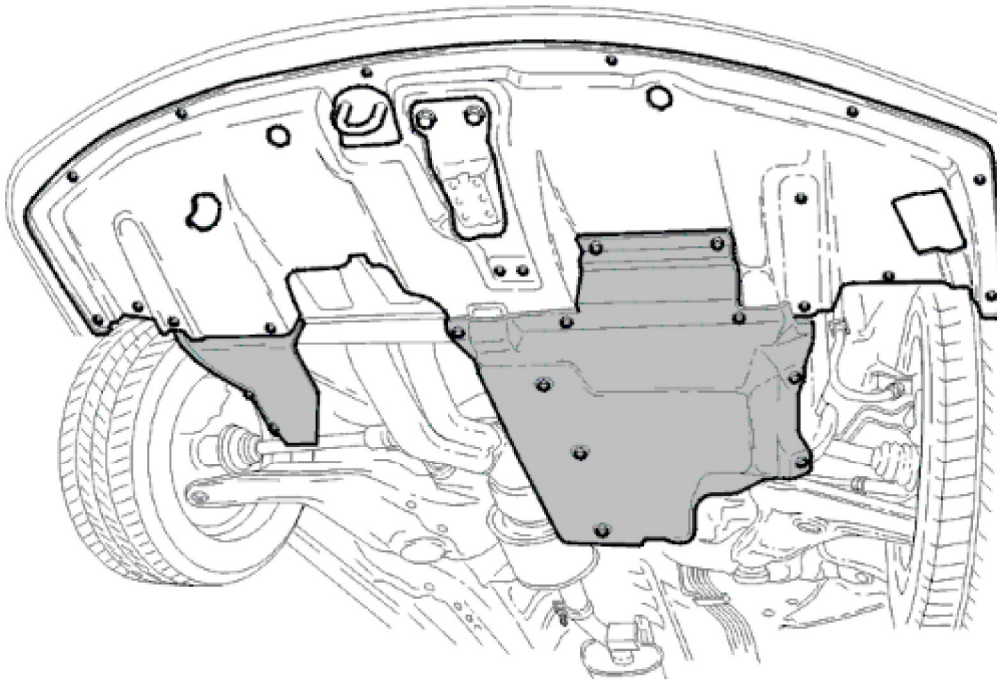
Ensure that the tensioner fork is centered over the cylinder block rib.  
Ensure that the Allen hole on the eccentric is at "10 o'clock".

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## Removing the splash guards under the engine

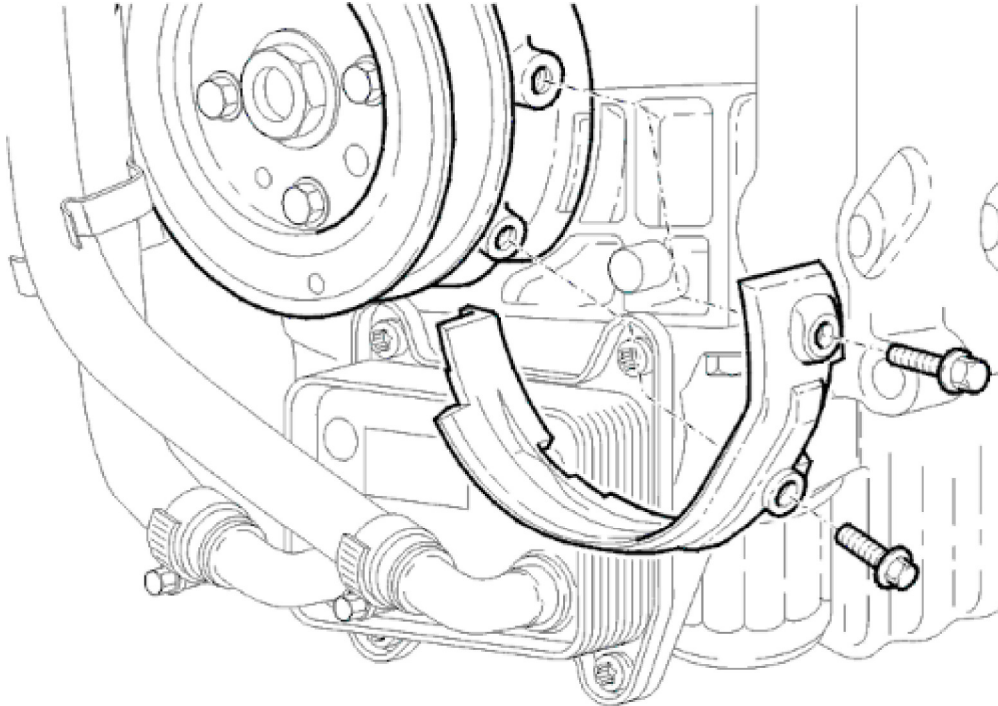


### Remove:

- the front air baffle
- the rear air baffle.



### Removing the timing belt (at the bottom)



#### Remove:

- the two screws from the lower belt cover
- the lower belt guard
- the timing belt using a twisting movement
- clean the surrounding area.



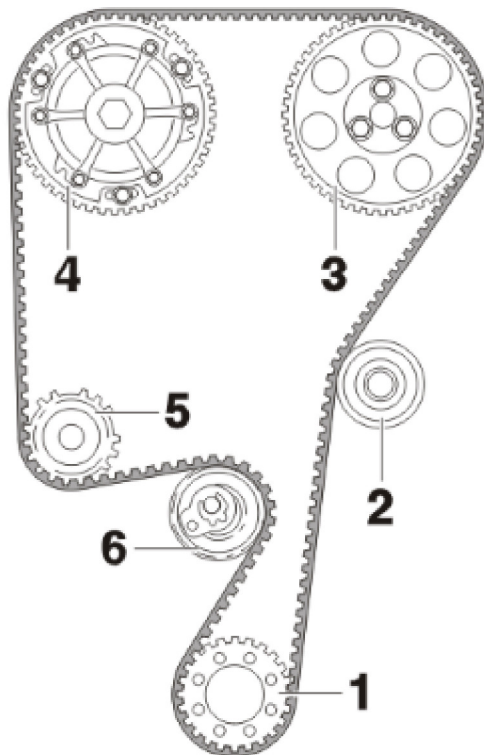


## Installing the timing belt

Install the timing belt over the pulley on the crankshaft.

### Install:

- the lower belt guard
- the front air baffle
- the rear air baffle.



### Install the new belt in the following order:

- crankshaft
- the idler pulley
- intake camshaft
- exhaust camshaft
- water pump
- belt tensioner.

## Tension the timing belt

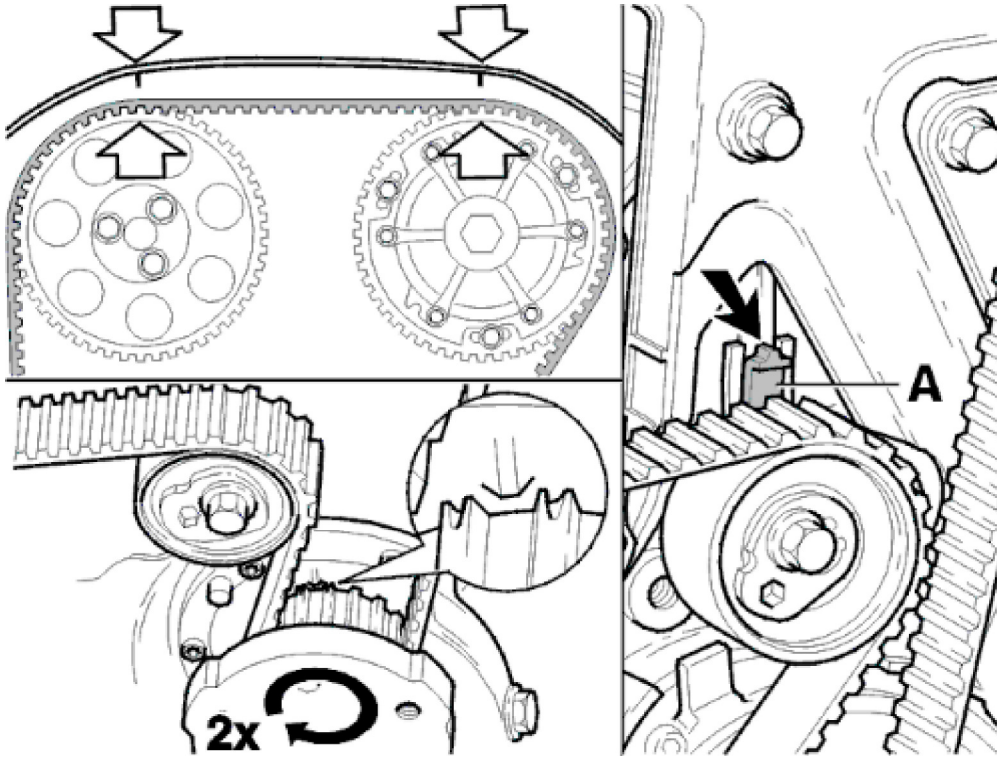
### Note!

This adjustment is to be made with a cold engine. Suitable temperature is approximately 20°C/67°F.

At higher temperatures (with the engine at operating temperature or a high outside temperature for example) the indicator is further to the right.



## Check



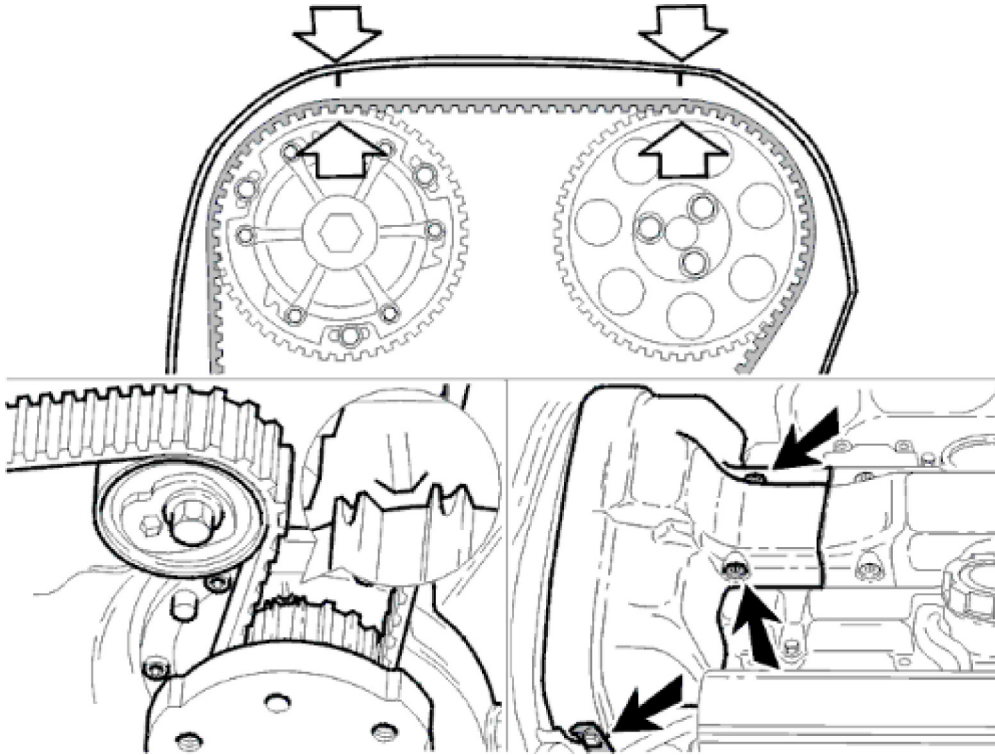
- Press the belt to check that the indicator on the tensioner moves easily
- Install the upper timing cover
- Turn the crankshaft two turns. Check that the markings on the crankshaft and camshaft pulley correspond.

**Note!**

**Check that the indicator on the belt tensioner is within the marked area.**



## Installing timing covers

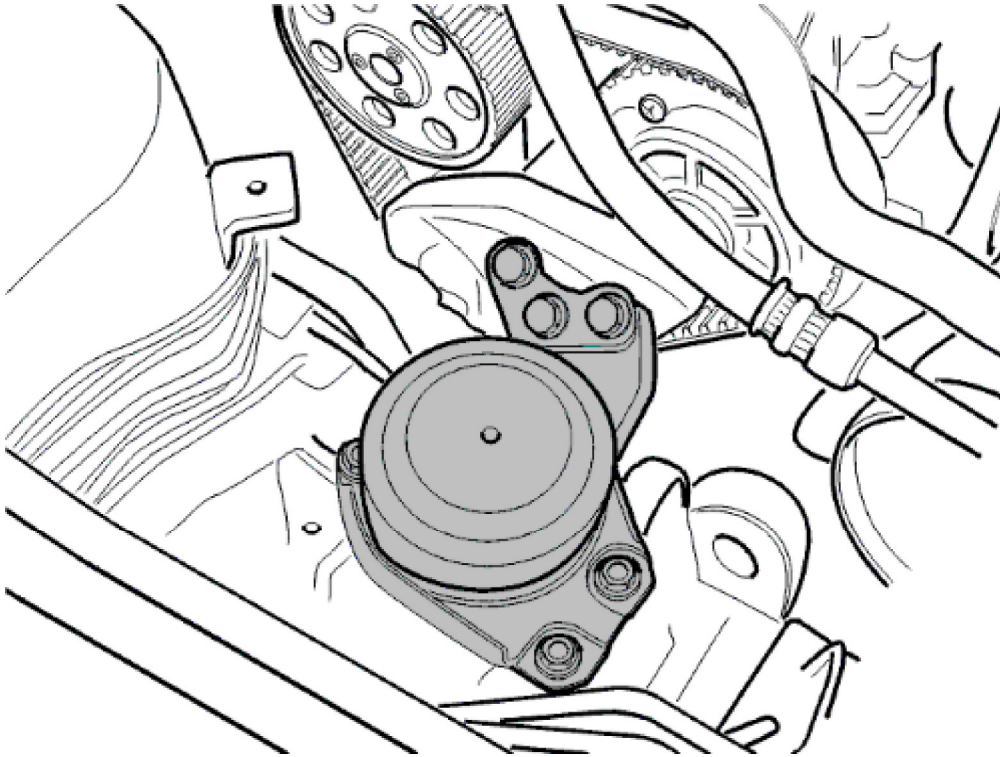


### Install:

- the lower timing cover
- the front timing cover. Tighten to **12 Nm**
- the auxiliaries belt.



## Installing the right engine mounting



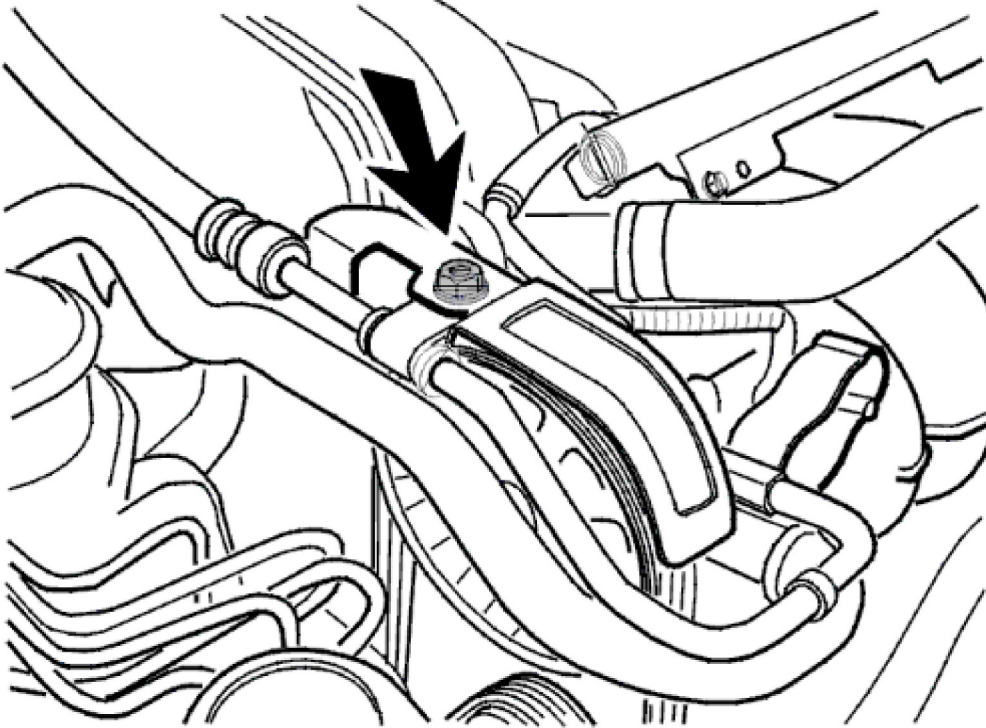
Screw the engine mounting into place on the engine. Tighten to **67 Nm** .

### Install:

- the screws on the bracket for the bodywork. Tighten to **50 Nm**
- the servo reservoir.



## Finishing



Remove the lifting beam and lifting hook.

### Install:

- the metal bracket for the power steering hose on the rotation protection for the auxiliaries belt
- the front wheel according to [Installing the wheels.](#)
- the auxiliaries belt
- turbocharged engines: the right hand engine cover and the cover over the right headlamp unit.