

21: Transmission, D5244T

V70 (00-08), 2002, D5244T, M56, YV1SW793222206297, 206297

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## 21: Transmission, D5244T

### Replacing the timing belt

#### Special tools:

999 5433

951 2050

**Note!** Since the illustrations in this service information are used for different model years and/or models, some variation may occur. However, the essential information is always correct.

#### Removing the timing belt

##### Preparation

**Caution!** Remove the ignition key.

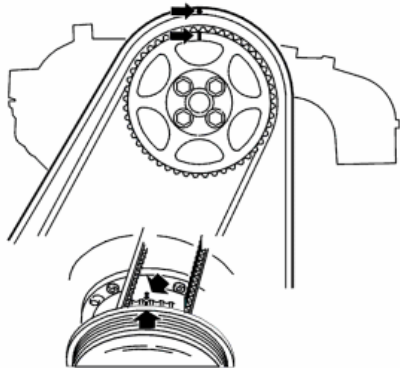
##### Remove:

- n the tie strap for the servo hose from the engine stabiliser brace
- n the cross stay between the suspension turrets
- n the timing belt cover
- n the servo reservoir. Lift up and place on top of the engine.

**Warning!** Ensure that no power steering fluid is spilled. Extremely flammable!

Remove the auxiliaries belt.

Position the engine according to the marking

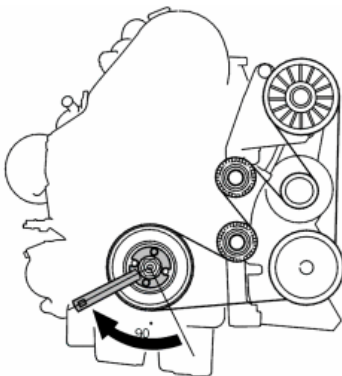


Remove:

- n the right front wheel
- n the nuts for the cover in the wing liner

Turn the crankshaft clockwise until the markings on the crankshaft and camshaft pulley roughly correspond. Fine adjustment is carried out after removing the vibration damper.

Removing the vibration damper



Turn the crankshaft further by approximately 90° clockwise to slacken off the crankshaft center nut.

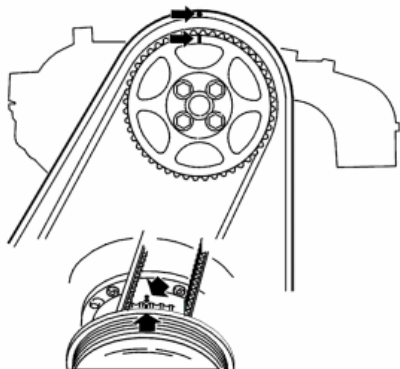
Remove the center nut. Use: 999 5433 .

**Caution!** Use longer screws (35-40 mm) with the tool.

Use: 999 5433 and turn the crankshaft back until the markings on the crankshaft and camshaft pulley correspond.

Remove the vibration damper.

Position the engine according to the marking



Install the center nut. Tighten the nut so that the crankshaft can be adjusted according to the markings.

Turn the crankshaft clockwise until the markings on the crankshaft and camshaft pulley (see the

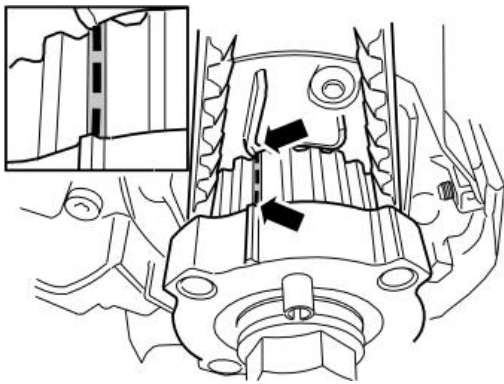


illustration) correspond.

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

The markings are illustrated.

#### Slacken off the belt tensioner



**Caution!** Do not turn the camshafts or the crankshaft when the timing belt has been removed.

Slacken off the centre screw for the belt tensioner slightly.

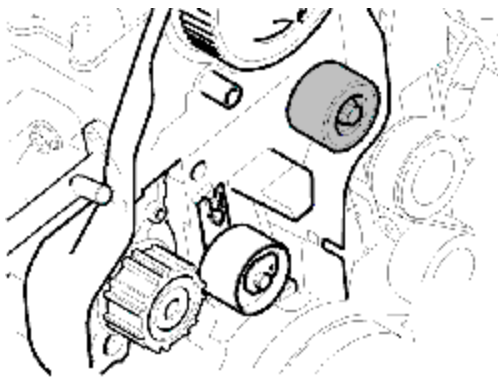
Turn the tensioner eccentric using a 6 mm Allen key. Turn clockwise to 10 o'clock.

Remove the timing belt from the timing gear pulley.

**Note!** The component can be reused unless it has been subjected to abnormal mechanical stress, damage or oil contamination.

#### Checking the tensioner pulley and idler pulley

Check the bearings for wear



Spin the idler pulley and listen for noise.

If replacing with a new idler pulley, tighten to 25 Nm.

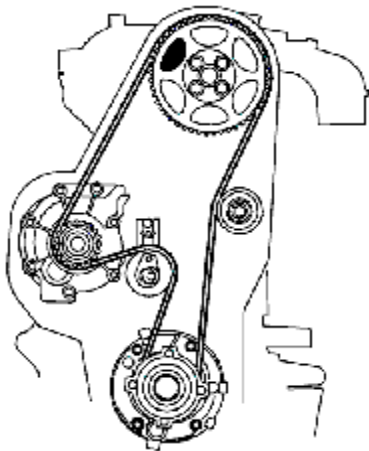
Spin the tension pulley and listen for noise.

When replacing, screw the tension pulley into place using the centre screw.

Screw in the centre screw by hand. Ensure that the tensioner fork is centred over the cylinder block rib. Ensure that the Allen hole on the eccentric is at "10 o'clock".

### Installing the timing belt

### Installing the timing belt

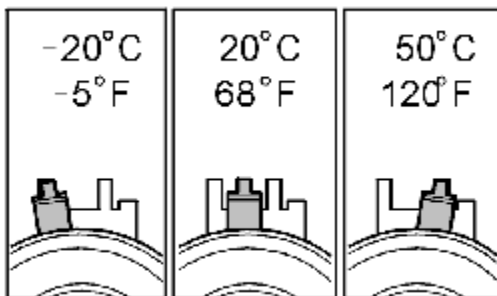


**Note!** The component can be reused unless it has been subjected to abnormal mechanical stress, damage or oil contamination.

Install the new belt in the following order:

- n crankshaft
- n the idler pulley
- n camshaft pulley
- n water pump
- n belt tensioner.

### Tension the timing belt



This adjustment is done with a cold engine.

A suitable temperature is approximately 20°C.

At a higher temperature, for example with a warm engine or a higher ambient temperature, the needle is farther to the right.

The illustration shows the position of the indicator when aligning the timing belt tensioner at different temperatures.

Tension the timing belt as follows:

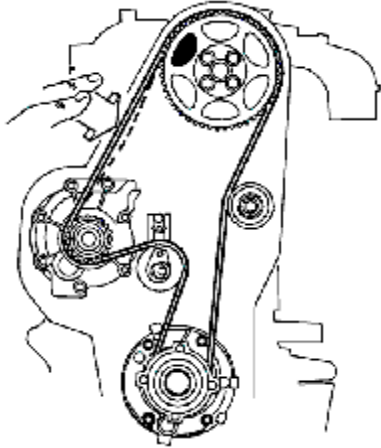
- n carefully turn the crankshaft clockwise until the timing belt is tensioned. The belt must be tensioned between the intake camshaft pulley, the idler pulley and the crankshaft
- n hold the centre screw on the belt tensioner secure. Turn the belt tensioner eccentric counter-clockwise until the tensioner indicator passes the marked position. Then turn the eccentric back so that the indicator reaches the marked position in the centre of the window
- n hold the eccentric secure and

tighten the centre screw.  
Tighten to 27 Nm.

Check that the indicator is in the correct position.

#### Checking markings

Press the belt to check that the indicator on the tensioner moves easily.  
Turn the crankshaft 2 turns. Check that the markings on the crankshaft and camshaft pulley correspond.  
Check that the indicator on the belt tensioner is within the marked area.

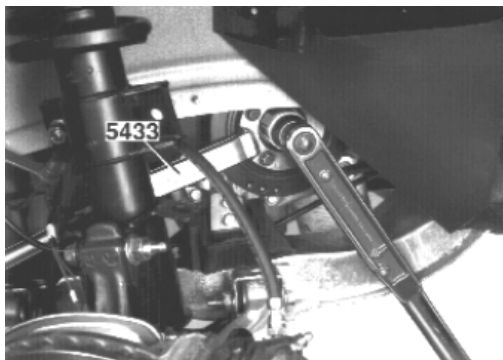


#### Installing the vibration damper

Install the vibration damper.

Tighten the center nut. See: .  
Use: 999 5433 .

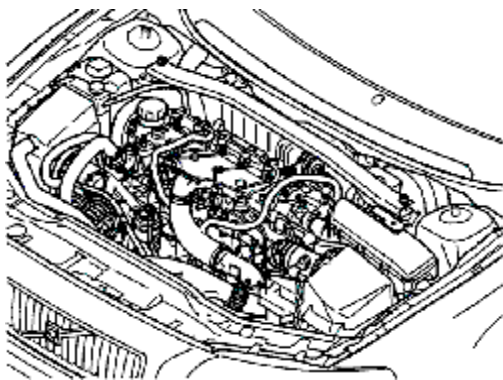
Remove: 999 5433 and tighten according to: . Use: 951 2050 .



#### Installing components

Reinstall the removed components:

- n the front timing belt cover
  - n install the auxiliaries belt
  - n the servo reservoir
  - n the engine stabiliser brace.
- Tighten the screws at the suspension turrets. Tighten to 50 Nm. Tighten the engine bracket screw. Tighten to 80 Nm. Wipe clean and check the engine compartment
- n a new tie strap for the servo hose
  - n the lower timing belt guard



- n the hatch in the wing liner
- n the front wheels. See **Installing wheels** .

**Function test**

Test run the engine.

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