

Timing belt, replacing

Special tools: [999 7103](#), [999 5185](#), [999 5433](#), [999 7109](#)

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

Removal

Removing components

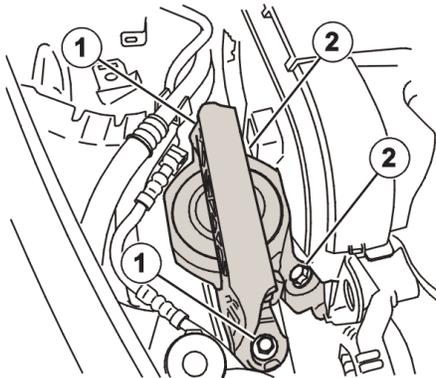
Remove:

- the right-hand engine pad. See: [Engine pad right, replacing](#)
- the screws for the front transmission covers
- the front transmission covers.

Raise the vehicle.

Remove:

- the right-hand front wheel
- the fender liner. Lower the vehicle so that the timing belt pulley is visible and the lifting beam accessible.

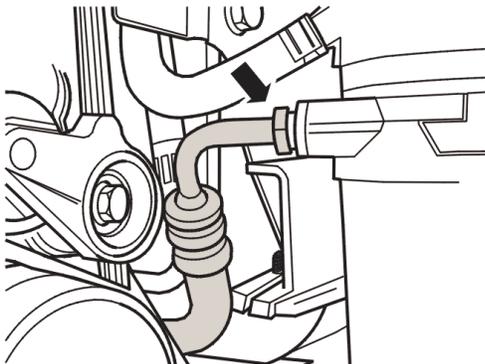


Removing the power steering pump pressure line

Caution! Seal the openings.

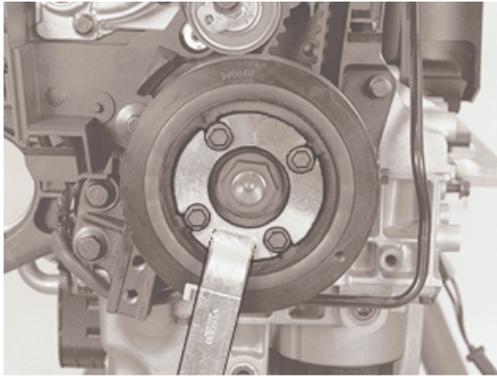
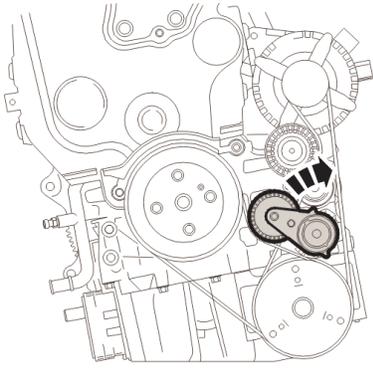
Note! Clear up any oil spillage under the delivery line.

Disconnect the delivery line from the power steering pump.



Removing the auxiliaries belt

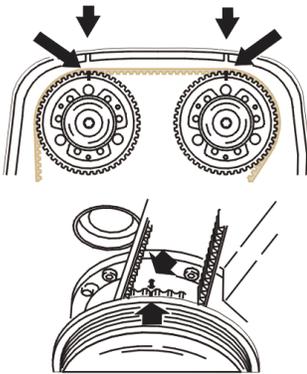
Turn up the belt tensioner. Move the outer auxiliaries belt **clockwise**. Use: [999 7109](#)
Remove the belt.



Removing the vibration damper

Remove the 4 screws. Use the crankshaft center nut as a counterhold. Install counterhold. Use: [999 5433](#) . Remove the center nut.

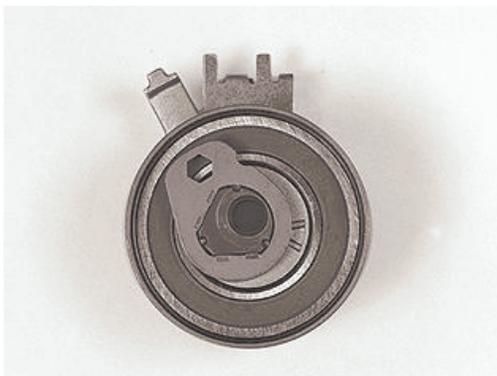
Remove the counterhold. Use: [999 5433](#) . Work the vibration damper loose.



Setting up the engine

Note! Lower the engine until the belt tensioner screws can be accessed from beneath.

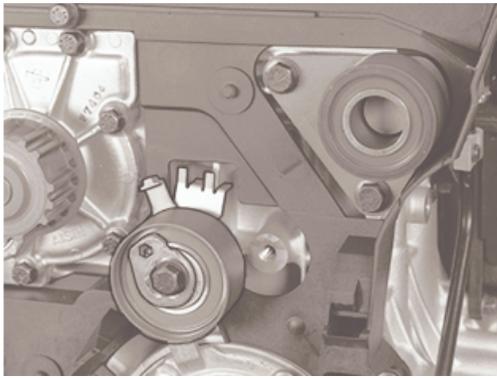
Turn the crankshaft **clockwise** until the markings on the crankshaft and camshaft pulleys correspond. The markings are illustrated. Lower the engine until the belt tensioner screw can be accessed from beneath.



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. Turn to 10 o'clock. Remove the timing belt from the tension pulley, camshaft pulley, idler pulley and water pump.

Removing the belt tensioner and idler pulley



Remove:

- the belt tensioner
- the idler pulley and discard both.

Installation

Note! For tightening torques, see: [Tightening torque](#) .

Installing new tension pulley and idler pulley

Caution! The tension pulley and idler pulley must always be replaced when replacing the timing belt.

Install:

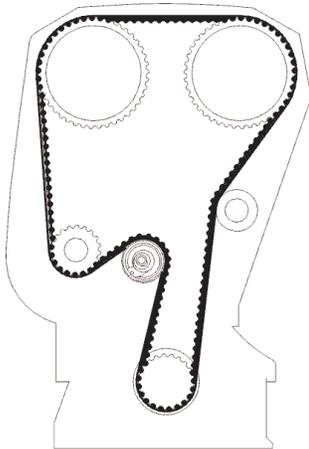
- a new tension pulley together with the center screw. Screw in the center screw by hand. Ensure that the tensioner fork is centered over the cylinder block rib. Ensure that the Allen hole on the eccentric is at 10 o'clock
- new idler pulley. Tighten the screws.

Installing the timing belt

Caution! Check that all the markings correspond. Adjust if necessary.

Install the new belt in the following order:

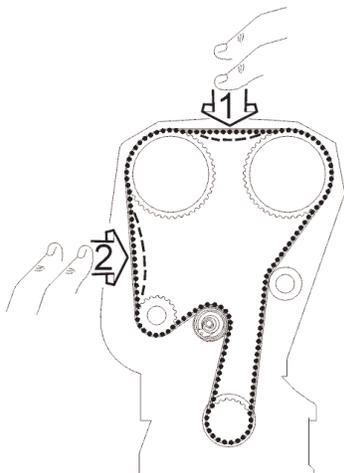
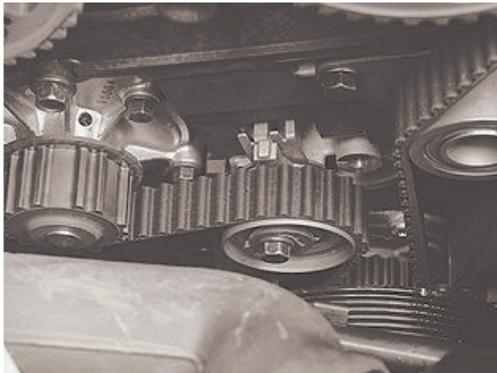
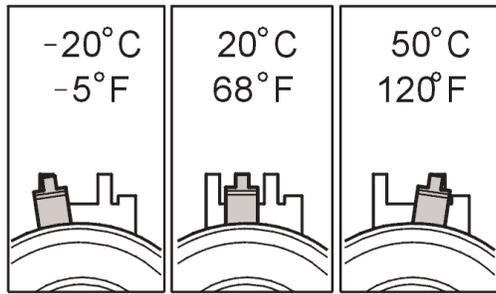
- crankshaft
- the idler pulley
- the intake camshaft pulley
- the exhaust camshaft pulley
- the water pump
- the belt tensioner.



Adjusting the timing belt

This adjustment is to be made with a cold engine. A suitable temperature is approximately **20°C/68°F**.

At higher temperatures (with the engine at



operating temperature or a high outside temperatures for example) the indicator is further to the right. The illustration shows the position of the indicator when aligning the timing belt tensioner at different temperatures.

Adjusting the timing belt, continued

Install the vibration damper nut. Carefully turn the crankshaft **clockwise** until the timing belt is tensioned. The belt must be in tension between the intake camshaft pulley, the idler pulley and the crankshaft.

Hold the belt tensioner center screw 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 center of the window. Hold the eccentric secure. Tighten the center screw. Tighten. See: [Tightening torque](#) . Check that the indicator is in the correct position.

Checking markings

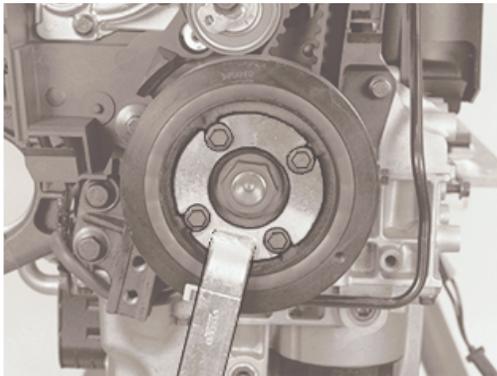
Checking markings:

- press the belt to check that the indicator on the tensioner moves easily
- install the upper timing belt cover
- 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. If not, adjust the belt tension.

Installing components

Install:

- Install the vibration damper. Tighten. See: [Tightening torque](#) . Use counterhold: [999](#)



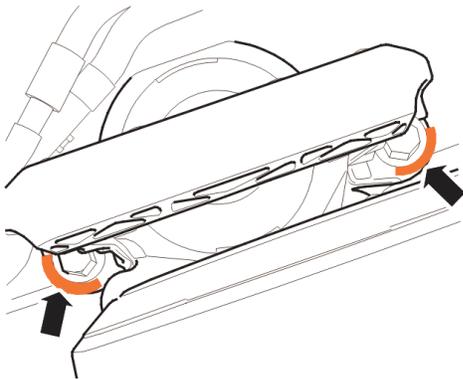
5433 . Remove the counterhold and install new screws. Tighten
- the auxiliaries belt. Turn the tensioner clockwise and position the belt.

Install:

- the pressure hose for the power steering pump. Remove the seals
- the fender liner
- the front wheel. See: [Wheels, installing](#) . Lower the vehicle.

Installing the engine pad

Install the engine pad according to the markings.



Installing components, continued

Install:

- the front transmission covers
- the screws for the front transmission covers
- the right-hand engine pad. See: [Engine pad right, replacing](#)
- the screws for the upper transmission covers
- the expansion tank. Secure the hoses according to the previous procedure.

Finishing

Checks

Start the engine and check the function.