

S80 (-06), 2000, B6294S, M65, L.H.D, YV1TS94K2Y1079445, 079445



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PRINT

Timing belt, replacing

Special tools:
999 5433

Remove components



Caution! Remove the ignition key.

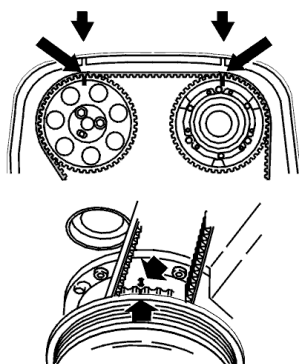
Remove:

- the cross stay between the suspension turrets
 - the upper camshaft belt cover
 - the servo reservoir and expansion tank.
- Lift them up and place them on top of the engine

Warning! Ensure that no power steering fluid is spilled. It is extremely flammable!

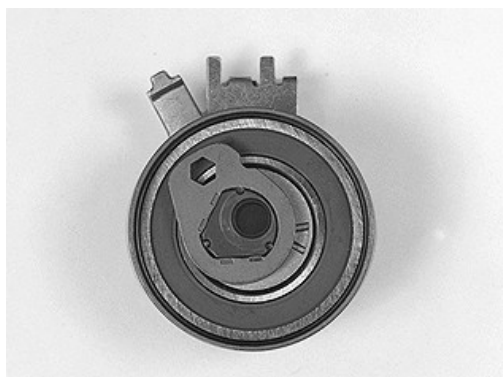
- the auxiliaries belt
- the front camshaft belt cover.

Position the engine according to the marking



Remove the right front wheel.
Remove the nut from the cover in the fender liner.
Install the upper camshaft belt cover.
Turn the crankshaft clockwise until the markings on the crankshaft and camshaft pulley correspond.
Turn the crankshaft a further 1/4 turn clockwise and then back again until the markings correspond. The markings are illustrated.
Remove the upper camshaft belt cover.

Removing the camshaft belt



Slacken off the belt tensioner.

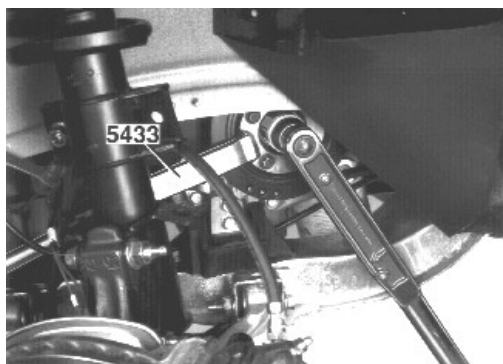
There are two variants of the belt tensioner.

Up to engine number **3188688** the eccentric must be turned clockwise when loosening.

From engine number **3188689** the eccentric must be turned anticlockwise to loosen the belt tension.

- Slacken off the belt tensioner center screw slightly.
- Hold the center screw in position and, depending on the variant, turn the eccentric on the tensioner to 10 o'clock (clockwise) or 2 o'clock (anticlockwise) using a 6 mm allen key.
- **Note! The component can be reused unless it has been subjected to abnormal mechanical stress, damage or oil contamination.**

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



Remove the vibration damper.

Remove the oscillation damper. Use counterhold 999 5433 . Work the oscillation damper loose.

Remove the camshaft belt.

Checking the tension pulley and idler pulley

Check for bearing wear:

Spin the idler pulley and listen for noise. If 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 with the center screw.

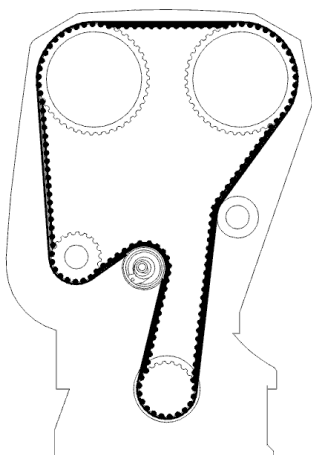


spin the tension pulley and listen for noise. If replacing, screw the tension pulley into place with the center screw.
Screw in the center screw by hand. Ensure that the tensioner fork is centered over the cylinder block rib. Ensure that the allen hole on the eccentric is at "10 o'clock".

Installing the camshaft belt

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

Install the camshaft belt over pulley wheel on the crankshaft.
Install the oscillation damper.
Tighten the center nut to **180 Nm**. Use counterhold 999 5433 .
Remove the counterhold and install new screws. Tighten the screws to **25 Nm**. Angle-tighten **30°**



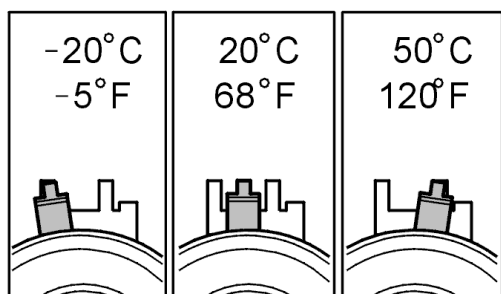
Install the new belt in the following order:

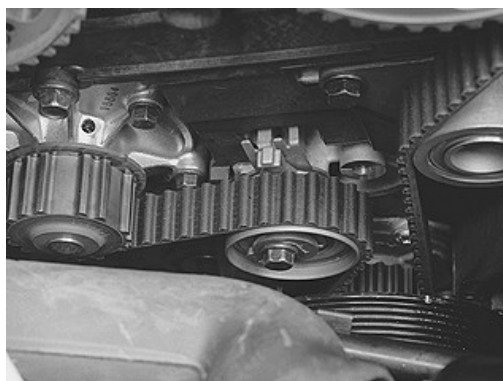
- crankshaft
- idler pulley
- intake camshaft pulley
- exhaust camshaft pulley
- water pump
- belt tensioner.

Tighten 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, for example with engine at operating temperature or at higher ambient temperature, the needle is further to the right. The position of the needle, when aligning the camshaft belt tensioner at different engine temperatures, is shown in the illustration.





Tighten the timing belt:

There are two variants of the belt tensioner.

Up to engine number **3188688** the eccentric must be turned anticlockwise to tighten the belt.

From engine number **3188689** the eccentric must be turned clockwise to tension the belt.

- turn the crankshaft clockwise carefully until the camshaft belt is tensioned. The belt should be tight between the intake camshaft pulley, idler pulley and crankshaft.
- hold the center screw on the belt tensioner in position and turn the eccentric on the belt tensioner clockwise/anticlockwise, depending on the variant, until the tensioner's needle passes the marked position.
Then turn the eccentric back so that the indicator reaches the marked position in the center of the window.
- Secure the eccentric and tighten the center screw to **20 Nm**.

Check that the needle is in the correct position.

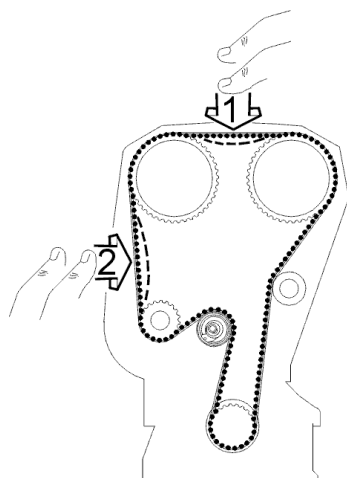
Check

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 and check that the markings on the crankshaft and camshaft pulley correspond.
- check that the indicator on the belt tensioner is within the marked area.

Reinstall

Reinstall the removed





components:

- the front camshaft belt cover.
Tighten to **12 Nm**
- the upper camshaft belt cover
- install the auxiliaries belt
- the servo reservoir
- the expansion tank

Note! Ensure that the hoses are correctly positioned.

- the cross member. Tighten the screws at the suspension turret to **50 Nm** and the screw for the engine bracket to **80 Nm**.
Wipe clean and check the engine compartment
- the cover in the fender liner
- the front wheel according to Installing wheels .

Checking work

Function test:

- Test drive the engine.

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