

21: Drive train, B6284T

S80 (-06), 1999, B6284T, 4T65EV-GT, L.H.D

17/3/2013

21: Drive train, B6284T**PRINT****Replacing the timing belt****Special tools:**

999 5433

999 5456

Removing the timing belt**Preparation****Caution! Remove the ignition key.****Remove**

- the screw for the torque rod mounting at the bracket on the engine.
- the screws at the cross rod mounting to the suspension turret.
- the cross stay.

Applies only to B6xx4T:

Remove the plastic pipes between the turbocharger (TC) and charge air cooler (CAC) and between the air cleaner (ACL) / turbocharger (TC). Place them to one side.

Remove the clamp for the intake manifold at the turbocharger (TC) for cylinders 1, 2 and 3 and turn the upper section of the pipe towards the firewall.



Relieve the load from the belt tensioner. Remove the auxiliaries belt.

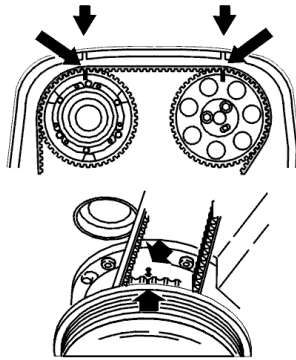
Remove the upper camshaft belt cover.

Remove the front camshaft belt cover.

Lift up the servo reservoir and place it on top of the engine.

Note! Ensure that the power steering oil does not leak from the breather hole in the filler cap.

Seal the hose between the expansion tank and the radiator.



Disconnect the hose at the tank.
Lift up the expansion tank and
place it on top of engine.

Raise the car.

Remove

- the right front wheel.
- the plastic nuts 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 pulleys correspond.
Turn the crankshaft a further 1/4
turn clockwise.

Then turn back counter-clockwise
until the markings correspond.
Remove the upper camshaft belt
cover.

Remove the 4 vibration damper
screws. Counterhold the crankshaft
central nut.

Remove

- the vibration damper.
- the auxiliaries belt.



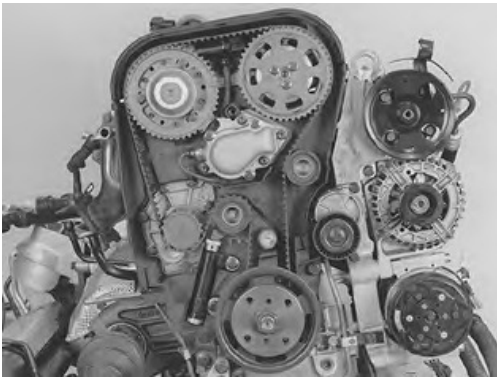
Install counterhold 999 5433 .

- the crankshaft center nut.
Remove counterhold
999 5433.
- the pulley for the auxiliaries
belt.

Removing the timing belt

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

First remove the upper screw for
the tensioner / damping unit.
Then remove the lower screw.



Turn the tensioner / damping unit so that the cylinder comes free.

Remove

- the lower screw.
- the tensioner / damping unit.
- the timing belt.

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

Note! The crankshaft or camshafts must not be rotated while the timing belt is removed.

Checking the tensioner and idler pulleys

Spin the pulleys and listen for noise from the bearings. Check that the pulley surfaces to the belt are clean and smooth.

Check the tension pulley lever and mounting.

The tension pulley lever. Torque 30 Nm.

The idler pulley, tightening torque 25 Nm.

Installing the tensioner / damping unit

Check that there is no visible leakage.

Press the tensioner/damping unit together with tool 999 5456 .

Position the tensioner/damping unit in the tool and screw the tool center nut to the bottom. Wait until it is compressed and then install a lock pin in the piston.

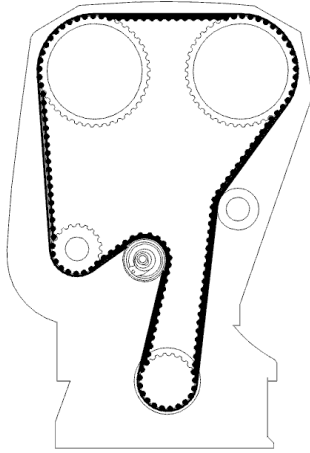
Note! The tensioner damping unit must be replaced if there is leakage or there is no resistance when pushed in or if it cannot be pushed in.



Install the tensioner/damping unit.
Tighten to **25 Nm**.

Installing the timing belt

Installing the timing belt

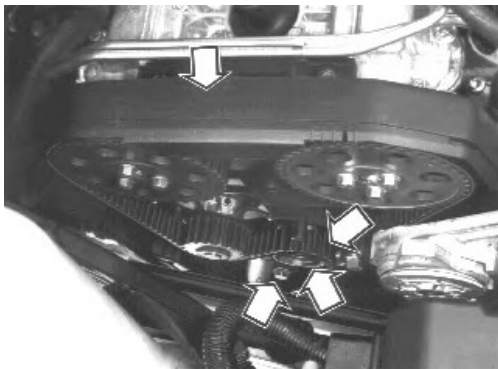


Install the belt in the following order:

- crankshaft.
- idler pulley.
- intake cam.
- exhaust cam.
- water pump.
- tension pulley.

Note! The variable valve timing unit on B6304S does not have a return spring. The unit is easily dislodged when reinstalling the timing belt.

Tighten the timing belt and check



Pull the lock pin out of the tensioner / damping unit.
Install the pulley for the auxiliaries belt.
Install the crankshaft center nut.
Turn the crankshaft two revolutions and check that the markings on the crankshaft and camshaft pulleys align.

Finishing

Install counterhold 999 5433
tighten the crankshaft's center nut to **300 Nm**.
Install the auxiliaries belt around the pulley on the crankshaft.

Install

- the vibration damper with **new screws**. Tighten to **35 Nm**. Angle-tighten **50°**. Use the crankshaft center nut as a counterhold.
- the plastic nuts in the cover in the right fender liner.
- the right front wheel. See Installing wheels .

Lower the car.





- the front camshaft belt cover.

Tension the auxiliaries belt.

- the expansion tank
- the hose between the expansion tank and the radiator. Remove the lock grip pliers.
- the servo reservoir.
- the upper camshaft belt cover.

Applies only to B6xx4T:

Turn the intake pipe for the turbocharger for cylinders 1, 2 and 3 into place and tighten the clamp. Install the plastic hoses between the turbocharger (TC) / charge air cooler and the air cleaner (ACL) / turbocharger (TC).

Tighten the hose clamps.

- the cross stay. Use **new screws**. Tighten to **50 Nm**.
- **a new screw** for the torque rod mounting at the bracket on the engine. Tighten to **80 Nm**.



Final check

Check and top up if required

- the coolant level.
- the servo fluid level.

Test-run the engine.

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