

BEW timing belt checklist

This is a general guide, using factory lockdown tools, through the process of a timing belt change on a 2004 to 2005 Jetta TDI. The process for the 2004 to 2006 Beetle will be similar.

I have done my best to ensure this list is accurate, however it is possible there are errors. The mechanic is responsible for verifying all torque specs and procedures with the factory repair manual before proceeding.

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A4 Golf/Jetta BEW T-belt checklist

Remove engine cover
Remove EGR to intercooler pipe elbow
Unscrew coolant tank
Unbolt power steering reservoir
Disconnect fuel lines
Cap coolant tank and move towards headlight
Remove timing belt cover
De-tension serpentine belt and pin tensioner
Remove Serpentine Belt
Remove Serpentine Belt Tensioner
Raise car, place jack stand
Remove belly pan
Remove lower intercooler pipe
Remove side skirt
Remove vibration damper
Support engine from above and or below
Remove upper engine mount brace
Remove upper engine mount
Remove lower engine mount bracket (raise and lower motor to access bolts)
Remove upper and Lower timing belt covers
Rotate to TDC at crank
(Verify camshaft is at TDC as well)
Lock crankshaft
Loosen timing belt tensioner
Remove tensioner
Remove timing belt

Lock Camshaft
Remove rollers
Install new water pump
Water pump bolts (11 ft-lb)
Install new lower roller (18 ft-lb)
Position new belt over bracket
Install new tensioner, verify tab location
Loosen 3 small bolts on cam pulley
Slightly rotate camshaft at center bolt so lock pin fits without tension
Remove 3 small bolts on cam pulley
Remove cam lock pin
Remove outer camshaft pulley
Position belt on all but camshaft pulley
Position belt over loose cam pulley, then reinstall pulley over camshaft. Check that the cam pulley position allows the 3 bolts to be reinstalled at the approximate middle of their adjustment range. Ensure the cam lock tool can be reinserted. If bolts and lock will not go back in correct orientation, adjust the relative position of the outer pulley to the belt till proper alignment is achieved.

Loosely install 3 small camshaft pulley bolts

REINSTALL CAM LOCK PIN

VERIFY CRANK LOCK IS IN PLACE

Set tension on timing belt tensioner
Tensioner torque (15 ft-lb plus 45°)
Tighten three small cam sprocket bolts (18 ft-lb)
Remove crankshaft lock
Remove camshaft lock pin
Rotate engine 2 full turns at crank bolt

Lock crankshaft

Though the camshaft lock pin will likely not be able to be re-inserted, verify that it is EXTREMELY CLOSE. This is OK

Install metal timing belt covers
Install engine mount bracket (33 ft-lb)
Install vibration damper/pulley (7 ft-lb + 90°)
Install motor mount
Mount bolts to mount bracket (74 ft-lb)

Mount bolts to frame (30 ft-lbs + 90°)
Mount brace bolts (18 ft-lb)
Install Serpentine Belt Tensioner (18 ft-lb)
Install Serpentine Belt
Install side skirt
Install intercooler pipes and elbow
Install belly pan
Install coolant tank
Install power steering reservoir
Re-attach Fuel Lines
Re-fill coolant
Install EGR elbow

Check torsion in vag-com

To adjust, loosen 3 cam pulley bolts
Turn large center cam bolt CW to raise torsion value, CCW to lower torsion value

USE CAUTION THAT THE LARGE CENTER CAMSHAFT BOLT DOES NOT LOOSEN AT ALL.

Reinstall timing belt cover and engine cover