

BRM timing belt checklist

This is a general guide, using factory lockdown tools, through the process of a timing belt change on a 2005.5 to 2006 Jetta TDI.

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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Remove engine cover
Remove upper charge air plumbing
De-tension serpentine belt and pin tensioner
Remove serpentine belt
Remove serpentine belt tensioner
Unscrew coolant tank
Cap coolant tank and move towards headlight
Remove timing belt cover
Unclip /unbolt fuel filter assembly
Raise car, carefully place on JACK STANDS
Remove belly pan
Remove passenger side skirt
Remove vibration dampener
Remove lower timing belt covers
Support engine from below
Remove upper mount brace
Remove fuel filter bracket
Remove upper engine mount
Remove engine mount bracket
(Raise and lower motor to access bolts)
Rotate crank clockwise to TDC
Lock crankshaft
Loosen timing belt tensioner
Remove tensioner
Remove timing belt
Lock camshaft
Install new water pump (11 ft-lb)
Install new lower roller (19 ft-lb)

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 cam pulley, then reinstall the 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-lbs 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 belt covers
Install engine mount bracket (33 ft-lb)
Install vibration dampener pulley (18 ft-lb)
Install engine mount
Bolts to frame (30 ft-lb + 90°)
Bolts to bracket (74 ft-lb)
Install mount brace (15 ft-lb + 90°)
Install coolant tank
Install serp belt tensioner (15 ft-lb)
Install serp belt

Install fuel filter bracket
Re-clip fuel filter to bracket
Install side skirt
Install upper charge air plumbing
Install belly pan
Re-fill coolant

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