

Tips and Technology

For Bosch partners

Current information for the successful workshop No. 04/2016

Electrics / Electronics



BOSCH
Invented for life

Drive Belts and Kits: Complementary installation instructions



Drive belts are wear parts and are exposed to high stress in the vehicle. Please note the instructions below in addition to the ESI[tronic] installation guide when changing the timingbelt or complete kits.

Applies to the following models:

- Audi A4, A6, A8 2,5 TDI
- Škoda Superb 2,5 TDI
- VW Passat 2,5 TDI

Bosch TTN/order numbers:

- 1 987 949 541 Timing belt
- 1 987 948 037 Timing-belt/tensioner-pulley kit

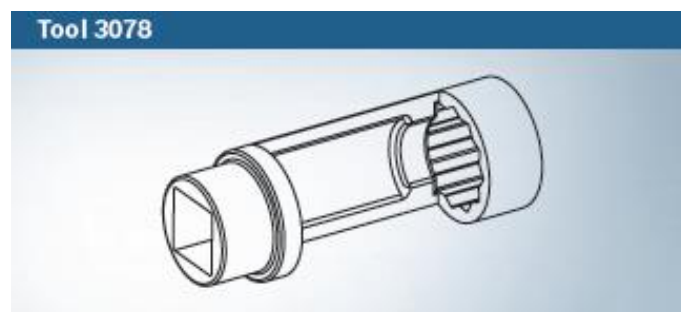
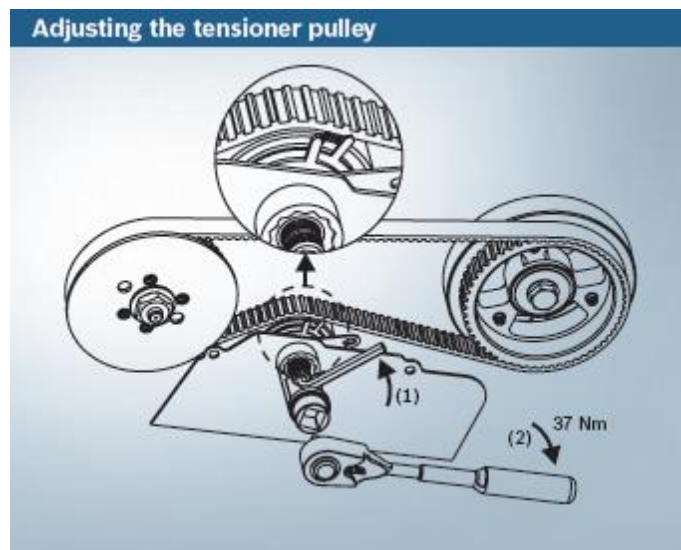
For the injection-pump drive.

- 1 987 948 152 Timing-belt/tensioner-pulley kit with hydraulic tensioning damper
- 1 987 948 260 Timing-belt/tensioner-pulley kit without hydraulic tensioning damper
- 1 987 948 518 Water-pump kit
- 1 987 948 519 Water-pump kit

For the injection-pump and the camshaft drive.

Injection-pump drive

- Place tool 3078 onto the hexagonal nut of the tensioner pulley using a torque wrench
- Place a commercially available hex key into the opening of tool 3078 and into the shaft of the tensioner pulley.
- Adjust the pretension force of the tensioner pulley turning the hex key to the left (1)
- The correct tension is set once the pointer of the tensioner pulley is aligned with the pointer of the base plate.
- Tighten the tensioner-pulley nut to 37 Nm using tool 3078 (2)



Attention:

Adjust the timing-belt tension only by turning the hex key to the left. Danger of damaging the engine!

Camshaft drive

The tensioner-pulley system consists of tensioner pulley, clamping arm/deflection lever and hydraulic tensioning dampers.

Correct positioning of tensioner pulley and deflection lever:

1. Stop pin of the tensioner roller must rest on the contact surface of the deflection lever
2. For the tensioner pulley to spin freely, a washer has to be used on its side pointing towards the engine



- Tighten the tensioner pulley to 15 Nm turning the hex key counterclockwise and keep it in that position. Tighten the tensioner-pulley fixing bolt to 42 Nm.
- Check the position of the hydraulic tensioning damper



Once the timing belt has been installed and the belt tension has been adjusted, the piston of the hydraulic belt tensioner is to be positioned absolutely vertically onto the stop collar of the deflection lever – that is, the angle between the piston rod and the red line is to be 90°.

Attention:

In case the tensioner pulley is installed incorrectly, it might block the lever thus leading to a heat build-up at the timing belt. As a consequence, the bearing of the deflection pulley can be damaged or destroyed. This affects both the belt tension and the engine timing. Danger of damaging the engine!