

Belt tensioner for toothed belt drive

Technical Info No. 1609

The previous belt tensioner (RUVILLE No. 55432) has been replaced by this version with toothed belt wear indicator.

Vehicle manufacturers:

Audi, Seat, Skoda, VW
(please consult our current sales literature for the exact allocation of vehicle and engine)

Affected engines:

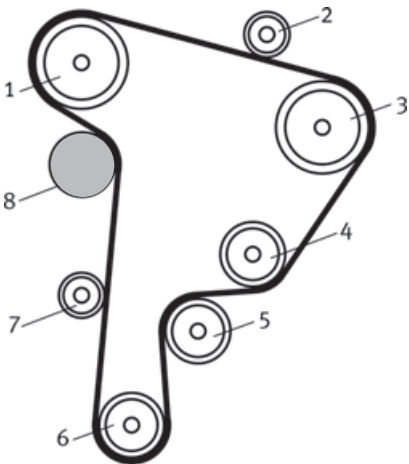
- 1.9 TDI engines from model year 1996, engine code: AGR, ALH, AHF, ASV
- 1.9 SDI engines from model year 1996, engine code: AGP, AQM, ASY, AEY, AYQ

Important:

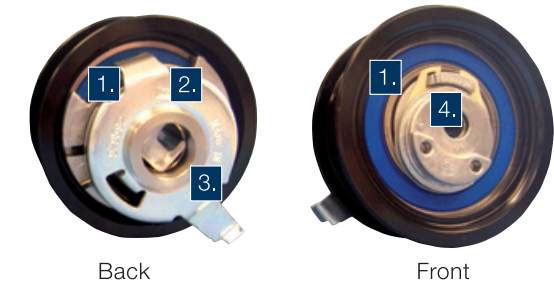
For these engines it is important that the control times are adjusted with great precision. Even minor inaccuracies can cause engine damage. TDC cylinder 1 must always be adjusted according to the corresponding specifications issued by the vehicle manufacturer!

Required spare parts:

No.	Part name	RUVILLE No.
1	Camshaft	
2	Deflection pulley	55441
3	Injection pump	
4	Water pump	
5	Deflection pulley	55433
6	Crankshaft	
7	Deflection pulley	55457
8	Belt tensioner	55491



The new belt tensioner differs visually from the previous one in the following points:



1. Blue sealing ring
2. Pale rear (silver to golden)
3. Shorter spacer on the back
4. Cross hatching on the belt tensioner eccentric

The new belt tensioner has a wear indicator for the toothed belt

This wear indicator consists of cross hatching embossed on the belt tensioner next to the recess for adjusting the tension. A new toothed belt is correctly tensioned when the two adjusting notches on the belt tensioner point into the recess.



cross hatching

During operation, the toothed belt stretches with increased wear. The belt tensioner twists to compensate for this elongation. The two adjusting notches migrate towards the cross hatching. To warrant perfect functioning of this wear indicator, the belt tensioner, deflection pulleys and toothed belts must always be replaced together. RUVILLE recommends using the belt drive kit (RUVILLE No. 5549170 with toothed belt), because all pulleys in the toothed belt drive are subject to wear depending on the period of use. For existing new toothed belts in OEM quality, RUVILLE recommends using the belt drive set (RUVILLE No. 5549150 without toothed belt).

Installation instructions:

- Always only turn the engine in the engine's direction of rotation (i.e. clockwise)!
- If the engine jumps over the TDC setting, never "turn it back"! Turn the engine through once clockwise and adjust the TDC setting again.
- Always turn the engine at the central screw of the crankshaft wheel.
- Comply exactly with the dismantling and installation instructions issued by the vehicle manufacturer.

Adjusting the toothed belt tension:

1. Check the TDC setting of the camshaft, crankshaft and injection pump according to the manufacturer's instructions.

- Never turn the engine when the toothed belt has been removed.
- Adjust TDC cylinder 1 before removing the old toothed belt!

2. Fit the new belt tensioner, deflection pulleys and new toothed belt.

- Clean the contact surface of the belt tensioner on the engine block.
- Do not use any screws when fitting the toothed belt (e.g. screwdriver) because this could damage the toothed belt. Nor spray any lubricant on the toothed belt.
- The retaining nose of the belt tensioner must fit correctly in the corresponding bore hole in the controller housing. Make sure during the entire installation procedure that the retaining nose is not damaged.
- Tighten the belt tensioner until it lies fully on the engine block. The belt tensioner must still turn/tighten easily.

3. Tighten the toothed belt.

- Turn the belt tensioner with the special tool until the two adjusting notches are in line with the recess.
- Use a small mirror to help making the adjustment because of the inadequate visibility when the belt tensioner is fitted.

4. Tighten the belt tensioner.

- Tighten the belt tensioner with 23 Nm. Use a torque wrench! Never overtighten the fastening screw.
- Use the special tool to hold the belt tensioner in position.
- Check and if necessary adjust the setting.

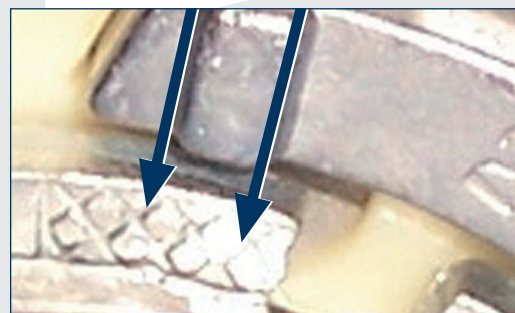
5. Check the toothed belt tension.

- Remove all special tools.
- Turn the crankshaft clockwise completely twice.
- Adjust the camshaft, crankshaft and injection pump to TDC cylinder 1 according to the manufacturer's instructions. Use the special tools.
- Use a small mirror to check the setting.
- The two adjusting notches on the belt tensioner must be within the recess (see point 3). If the belt tensioner is not correctly adjusted, repeat the adjustment procedure (point 3) and check (point 5).



Both notches are in the recess (arrows).

This setting is correct!



Both notches are outside the recess (arrows).

This setting must be corrected!