

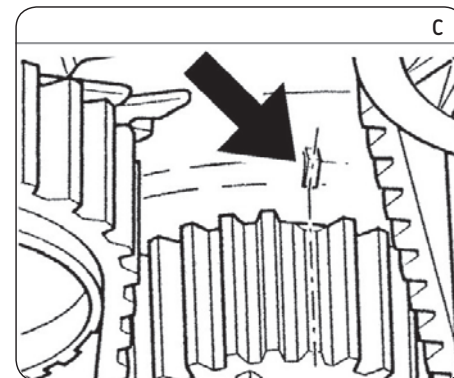
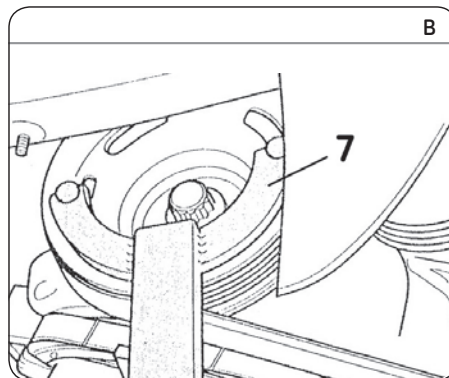
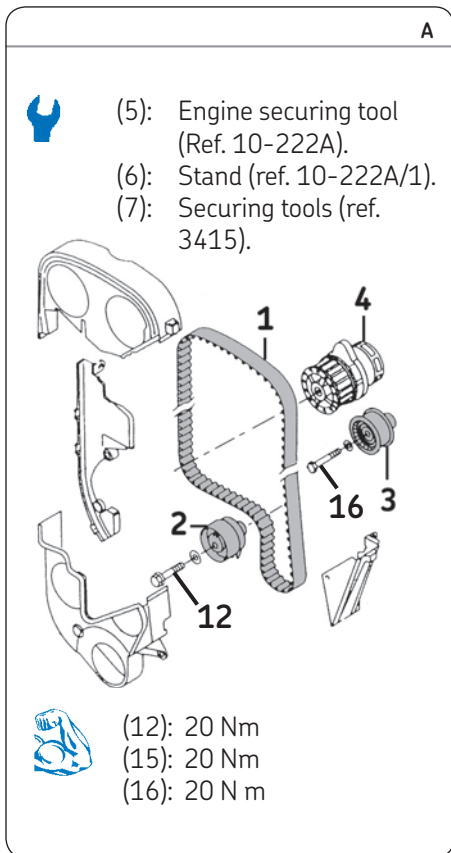
NT 01007
VKMA 01114
VKMC 01114

Seat / Volkswagen

VKMA 01114

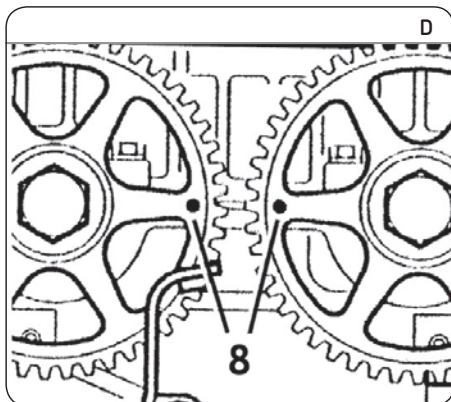


VKMC 01114



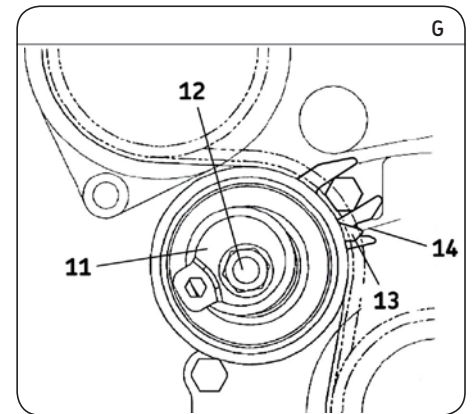
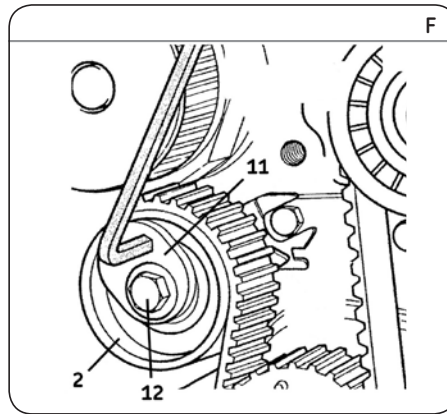
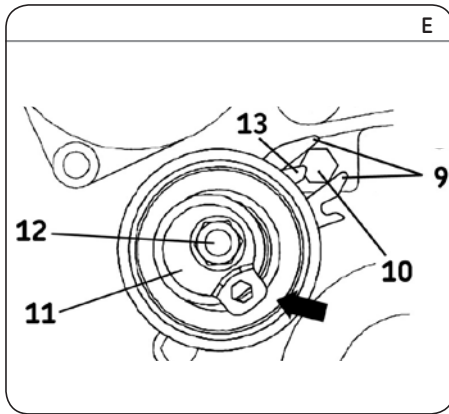
Removal

- 1) Disconnect the battery according to the vehicle manufacturing guidelines.
- 2) Prepare the vehicle for the timing replacement according to the vehicle manufacturing guidelines.
- 3) Remove the crankshaft pulley while maintaining it using (7) (Fig. B).
- 4) Refit the pulley bolts with two washers on the crankshaft sprocket.
- 5) Turn cylinder Nr1 up to TDC by aligning the tooth with the chamfer on the crankshaft sprocket opposite the fixed mark on the sealing flange (Fig. C).
- 6) Check the alignment of the marks (8) on the camshaft sprockets (Fig. D).
- 7) Remove timing belt (1), tensioner roller (2) and idler roller (3) (Fig. A).
- 8) **Removing the water pump (VKMC 01114):** firstly bleed the cooling circuit, check it is clean, and clean if required; secondly fully loosen the water pump (4) fastening bolts and remove the pump (Fig. A).



Install Confidence





Refitting

Caution! Clean the bearing surfaces of the rollers.

- 9) **Refitting the water pump:** firstly fit the new water pump (4), apply the torque **20 Nm** to the waterpump bolts (15); then check that the water pump pulley runs properly, and has no hard or locking spots.
- 10) Refit the new idler roller (3) and tighten its bolt (16) at a torque of **20 Nm**.
- 11) Fit the new tensioner roller (2): set the slot located between the fingers (9) on the centring nut (10) (Fig. E). Turn the adjustment dial (11) using an Allen wrench until it reaches the "5 o'clock" position (see black arrow in Fig. E) then tighten slightly by hand the securing bolt (12) on the tensioner roller (Fig. E).
- 12) Check the alignment of the marks (8) of the camshaft sprockets (Fig. D) and cylinder Nr 1 is at TDC.
- 13) Refit new timing belt (1).
- 14) Tighten the timing belt (1): turn the adjustment dial (11) on the tensioner roller (2) **clockwise** using an Allen wrench, while holding the fastening screw (12) of the roller in position using a hex nut wrench (Fig. F). Continue turning the setting plate until the moving pointer (13) is aligned with the notch (14) (Fig. G). Then tighten the fastening bolt (12) (Fig. G) at **20 Nm**.
- 15) Turn the crankshaft by two turns in the engine rotation direction up to the timing point (check cylinder Nr 1 is at TDC (Fig. C) and check the marks (8) (Fig. D)).
- 16) Check the setting of the moving pointer (13) (Fig. G) (the index must be aligned with the notch (14)).
- 17) If the marks on the tensioner roller are not aligned, proceed as follows: maintain the tensioner roller (2) in position with the Allen wrench while slightly loosening the fastening bolt (12) (Fig. F). Then turn the adjustment dial (11) (Fig. E) counter-clockwise to set the moving pointer in the initial position (13) (Fig. E) (position before refitting the roller on the engine), and remove the timing belt. Then, restart the tension setting operation in step 13).

- 18) Refit the elements in the reverse order to removal, tightening to the following tightening torques:
 - Crankshaft pulley bolt: **90 Nm + 90°** (new lubricated bolt).
- 19) Fill the cooling circuit with the permanent fluid recommended.
- 20) Check the circuit's leak-tightness when the engine reaches its running temperature and secure the level of coolant when the engine is at ambient temperature (20 °C).

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