Audi / Seat / Volkswagen

VKMC 01100

VKMC 01101

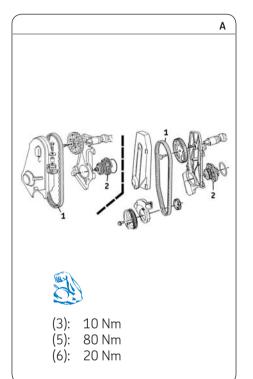


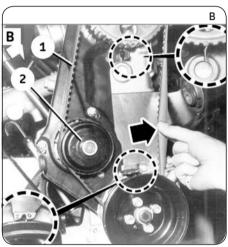
VKMC 01103

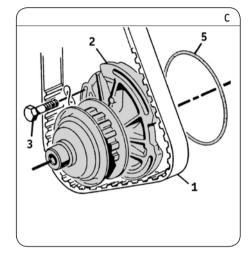


VKMC 01104









Removal

- 1) Disconnect the battery according to the vehicle manufacturing guidelines.
- Prepare the vehicle for the timing replacement according to the vehicle manufacturing guidelines.
- 3) Turn cylinder N° 1 up to TDC to align the mark on the camshaft sprocket with the mark on the cylinder head, and the mark on the crankshaft pulley with the index on the engine block (Fig. B) or the "O" mark on the lower timing casing (for the HZ, MH, NU, AAV, ABD, ABU engines).
- **4)** Lock the flywheel and remove the crankshaft pulley.
- **5)** HZ, MH, NU, AAV, ABD, ABU engines: remove the lower timing casing.

- Loosen the 3 fitting bolts (3) on the water pump (2) (Fig. C).
- Tilt the water pump (2) using a screwdriver in the notch (4) on the water pump body, in order to loosen the timing belt (1) (Fig. D).
- 8) Remove the timing belt (1).
- 9) HZ, MH, NU, AAV, ABD, ABU engines: remove the camshaft sprocket.
- **10)** Remove the rear timing plate.
- **11)** Remove the water pump (2).

Install Confidence



Refitting

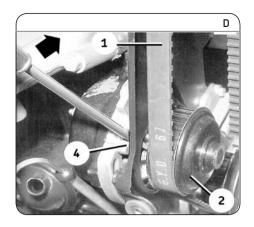
Caution! Clean the bearing surfaces of the rollers.

- **12)** Check visually the sealing of the entire cooling circuit
- 13) Change any cracked or porous hoses.
- **14)** Clean the casing housing the pump.
- **15)** Remove the paper gaskets, fibre, paste, and clean the gasket surfaces properly. Check there are no faults.
- **16)** Smear the new water pump **(2)** with silicon grease.

Caution! Wait the drying time recommended for the grease before filling the cooling circuit.

- 17) Refit the new water pump (2) with its new gasket (5) in the pushed position without locking its fasteners (Fig. C).
- **18)** Check that the water pump pulley turns properly and has no hard nor locking spots.
- 19) Refit the rear timing plate.
- 20) HZ, MH, NU, AAV, ABD, ABU engines: refit the camshaft sprocket, then tighten its fastening bolt (5) at 80 Nm.
- 21) Refit the new timing belt (1).

- 22) Tilt the water pump (2) to tighten the timing helt (1)
- 23) Tighten the water pump fastening bolts (3) at 10 Nm.
- **24)** HZ, MH, NU, AAV, ABD, ABU engines: refit the lower timing casing.
- 25) Lock the flywheel and refit the crankshaft pulley, and tighten its 4 fastening bolts (6) at 20 Nm.
- 26) Turn the crankshaft by two turns in the engine rotation direction, then return to TDC. Check the alignment of the timing marks (Fig. B)
- 27) Check the timing tension (1).
- Refit the timing casing or upper casing (on HZ, MH, NU, AAV, ABD, ABU motors).
- **29)** Refit the elements removed in reverse order to removal.
- **30)** Fill the cooling circuit with the permanent fluid recommended.
- 31) 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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