

# NT 01012

VKMA 01255 –  
VKMC 01255-1/-2 –  
VKMA 01259 –  
VKMC 01259-1/-2

Audi / Chrysler / Jeep / Mitsubishi /  
Seat / Skoda / Volkswagen /Dodge

VKMA 01255

VKMC 01255-1

VKMC 01255-2

VKMA 01259



VKMC 01259-1

VKMC 01259-2



## 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) Turn the engine to set the crankshaft at TDC. The timing mark (see black arrow) on the crankshaft sprocket is then in vertical position (Fig. B1). Fit the locking tool (5) on the crankshaft sprocket (Fig. B1).

**Caution!** When the teeth shape of the crankshaft sprocket is **ovalshaped**, the timing mark (see black arrow) is facing right (Fig. B2). Fit the locking tool (6) on the crankshaft sprocket (Fig. B2).

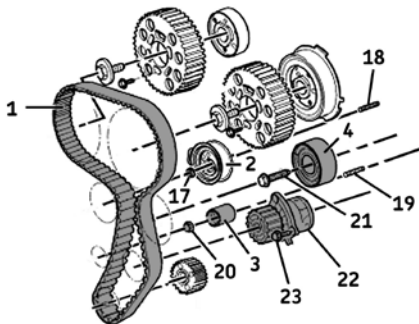
- 4) Lock the camshaft sprockets using the pins (7) (Fig. C).
- 5) Untighten the fastening bolts (8) on the camshaft sprockets until the sprockets can be tilted in their oblong holes (Fig. C).
- 6) Loosen the tensioner roller fastening nut (17) (Fig. A).
- 7) Using the tool (9), turn the adjustment dial (10) of the tensioner roller **counter-clockwise** to loosen the belt (Fig. D).
- 8) Remove RH engine mounting bracket, then remove the timing belt (1).

**Note:** Do not remove the RH engine mounting bracket until the belt has been slackened!

- 9) Remove tensioner roller (2) and the idler rollers (3) and (4) (Fig. A).
- 10) Remove the studs (18) and (19) (Fig. A).
- 11) **Removing the water pump (22)** (VKMC 01255-1/2 VKMC 01259-1/2): firstly bleed the cooling circuit, check it is clean, and clean if required; secondly fully loosen the water pump fastening bolts (23) and remove the pump (Fig. A).



- (5): T10050
- (6): T10100
- (7): 3359/T20102
- (9): T10020/U-30009A
- (15): T10172/T200018A

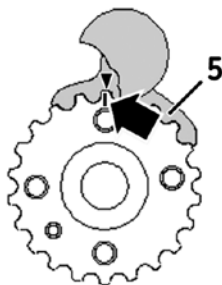


- (8): 25 Nm
- (17): 20 Nm + 45°
- (18)/(19): 15 Nm
- (20): 20 Nm
- (21): M10 Bolt = 40 Nm. +90 degrees (VKMA 01255)  
M12 Bolt = 90 Nm + 90 degrees (VKMA 01259)
- (23): 15 Nm

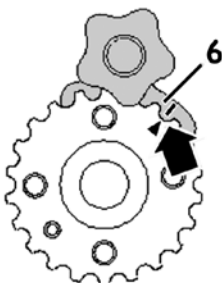


B

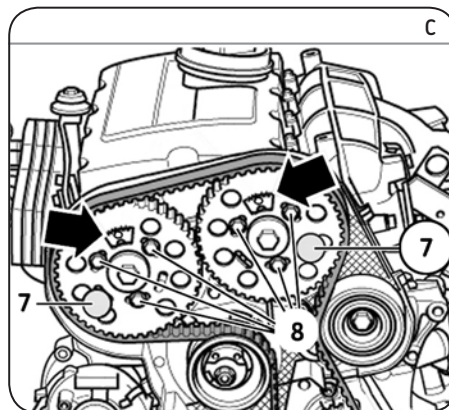
B1



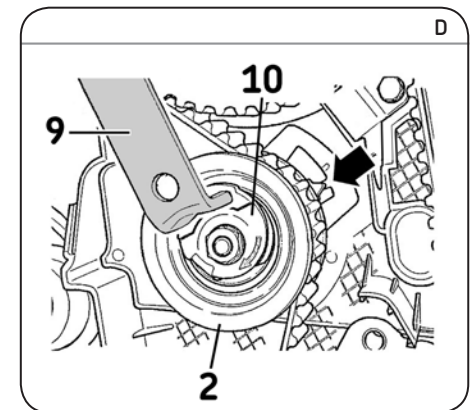
B2



C



D



## Install Confidence

VKN 1000



## Refitting

**Caution!** Clean the bearing surfaces of the rollers.

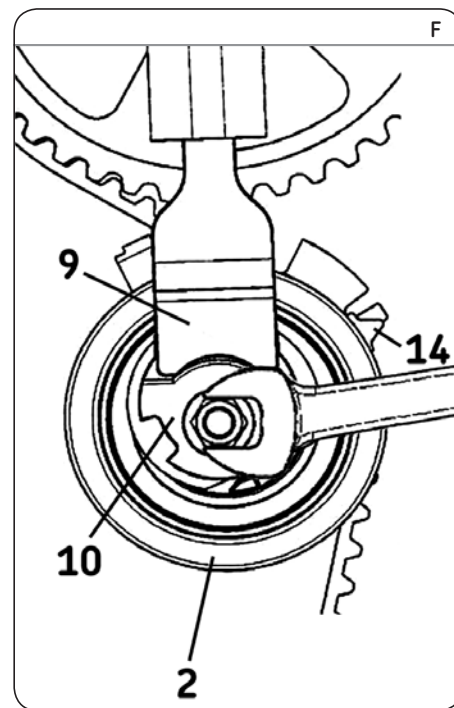
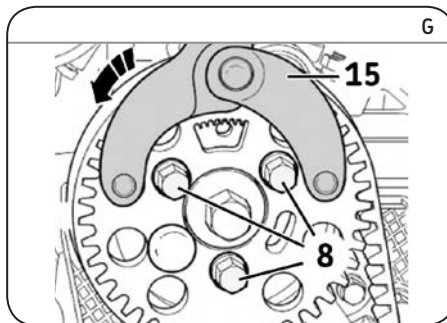
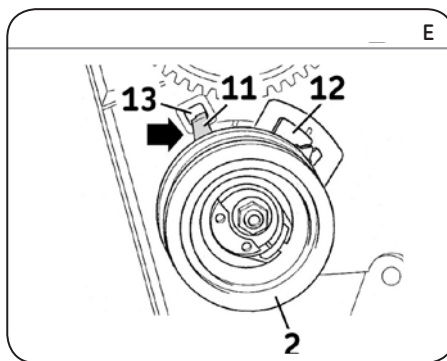
- 12) **Refitting the water pump:** firstly, fit the new water pump (22), apply the torque **15 Nm** to the waterpump bolts (23) (Fig. A); then check that the water pump pulley runs properly, and has no hard or locking spots.
- 13) **Fit and tighten the new studs (18) and (19) to 15 Nm.**
- 14) First fit the new idler (3) and tighten the new nut (20) to **20 Nm**. Then fit the new idler (4) (VKMA/C 01255 M10 = 40 Nm. + 90 Degrees) (VKMA/C 01259 M12 = 90 Nm. + 90 Degrees)

**Note:** In the VKMA/C 01259 the idler retaining bolt **must be torqued to manufacturer recommendations!** Failure to do so could cause excessive vibrations, and damage to the engine!

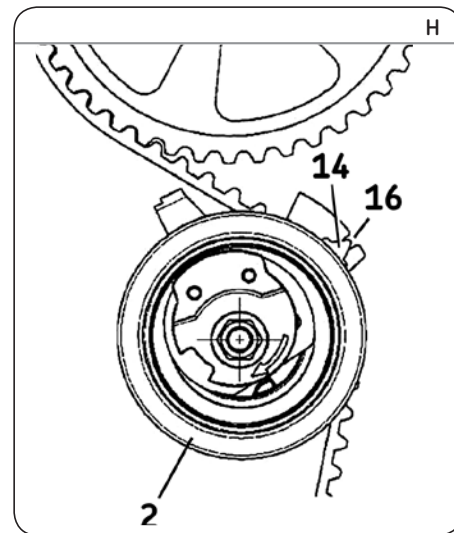
- 15) Fit the new tensioner roller (2). Tighten slightly its new fastening nut (17).

**Note:** When refitting the new tensioner roller (2), check that the positioning stud (11) on the roller plate (12) is properly engaged in the slot (13) of the engine block (Fig. E).

- 16) Check the timing of the crankshaft and camshaft (timing tool (5) or (6) (Fig. B1 or B2) and gauges (7) (Fig. C)).
- 17) Fit the new timing belt (1) in position in the following order: crankshaft sprocket, idler roller (3) tensioner roller (2), camshaft sprockets, idler roller (4), and water pump sprocket
- 18) Tighten the timing belt (1): turn the adjustment dial (10) on the tensioner roller (2) clockwise using the tool (9), while holding the fastening nut (17) of the roller in position using a hex nut wrench (Fig. F). Continue turning the adjustment dial (10) until the moving index (14) is aligned with the right edge of the roller plate (Fig. F). Then tighten the fastening nut (17) at **20 Nm + 45°**.
- 19) Fit the tool (15) in order to tighten the fastening bolts (8) at **25 Nm** on the camshaft sprockets (Fig. G).
- 20) Remove all the tools.
- 21) Rotate the crankshaft 2 turns in the engine rotation direction up to TDC.
- 22) Lock the camshaft sprockets using the pins (7) (Fig. C).
- 23) Fit the timing tool (5) or (6) on the crankshaft sprocket (Fig. B1 or B2).
- 24) Check the setting of the moving index (14) (Fig. H) should be aligned with the notch (16).



- 25) If the timing tools cannot be fitted easily and/or the marks on the tensioner roller are not aligned, proceed as follows: hold the tensioner roller (2) in position with the tool (9) (Fig. D) while slightly untightening its fastening nut (17). Then turn the adjustment dial (10) (Fig. D) **counter-clockwise** to set the moving index in the initial position (position before refitting the roller on the engine), then remove the timing belt. Then restart the belt refitting operation at step 17).
- 26) Remove all the timing tools.
- 27) Refit the remainder of the removed elements in the reverse order to removal.
- 28) Fill the cooling circuit with the permanent fluid recommended.
- 29) 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).



**Notice:** Always follow the vehicle manufacturer instructions when working on the engine. The SKF KITS are designed for the automotive repair professional and must be fitted using tooling used by these professionals. These instructions are to be used as a guideline only. This document is the exclusive property of SKF. Any representation, partial or full reproduction, is forbidden without prior written consent from SKF.