


VKMA 03258

VKMC 03258



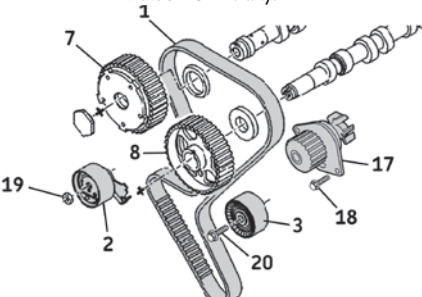
A

 (4): Flywheel timing pin (CIT ref. 4507-T.A / PEU ref. 0132-QY).


(5): Camshaft sprocket centring pin (CIT/PEU ref. 0194 A).

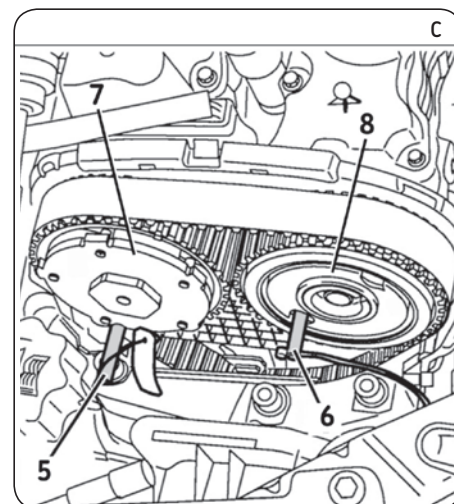
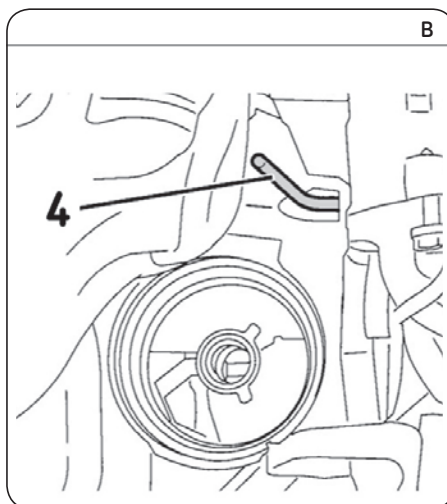
(6): Camshaft sprocket centring pin (CIT ref.4533-T.AC1 / PEU ref.0132-AJ1).

(10): Timing belt assembly tool (CIT ref. 4533 - T.AD/ PEU ref.0132-AK).



(18): M6 = 30 Nm / M8 = 65 Nm
(19): 20 Nm
(20): 20 Nm





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 **clockwise** until you can insert the flywheel pin (4) (Fig. B) and the pins (5) and (6) of the inlet camshaft sprockets (7) and (8) exhaust sprocket (Fig. C).
- 4) Remove the lower right-hand engine bracket.
- 5) Remove the lower timing cover.
- 6) Loosen the tensioner roller fastening nut (19) (Fig. A). Turn the tensioner roller (2) with an Allen key to slacken and remove the timing belt (1).
- 7) Remove the tensioner roller (2) and idler roller (3) (Fig. A).
- 8) **Removing the water pump (VKMC 03258):** firstly bleed the cooling circuit, check it is clean, and clean if required; secondly fully loosen the water pump fastening bolts (18) and remove the pump (17) (Fig. A).

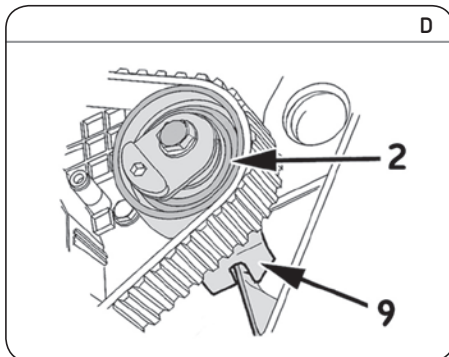
Refitting

Caution! Clean the bearing surfaces of the rollers.

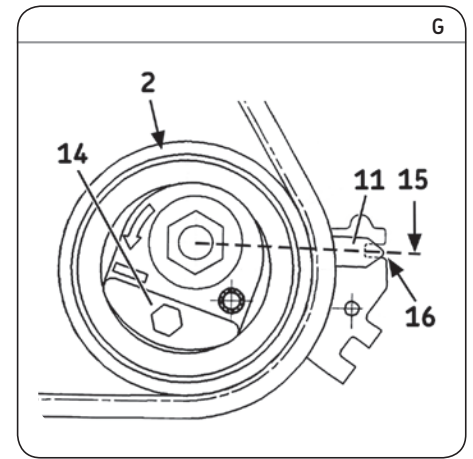
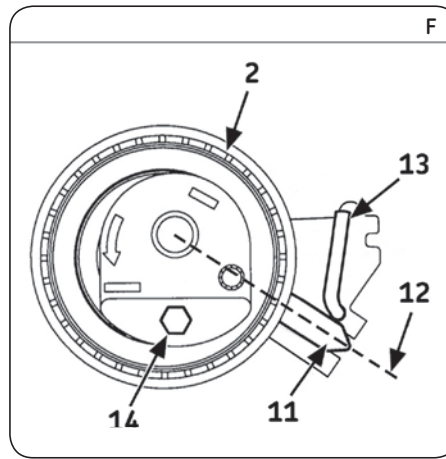
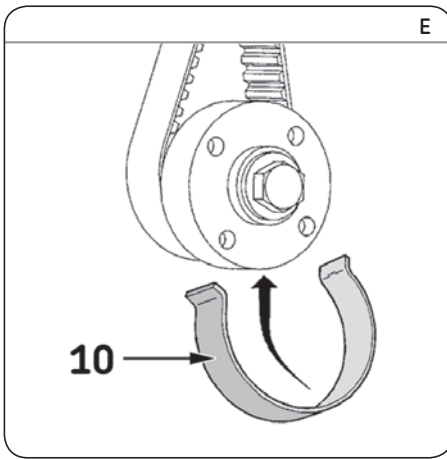
- 9) **Refitting the water pump:** Firstly, fit the new water pump (17), tighten the waterpump bolts; then check that the water pump pulley runs properly, and has no hard or locking spots.
- 10) Fit the new idler roller (3) with the tightening torque 20 Nm to the bolt (20) (Fig. A).
- 11) Fit the new tensioner roller (2): tighten slightly its fastening nut (19).

Note: When refitting the new tensioner roller (2), check that the notch on the rear plate (9) on the roller is correctly placed on the engine block (Fig. D).

- 12) Fit the new timing belt (1) in the following order: Inlet camshaft sprocket (7), exhaust camshaft sprocket (8), idler roller (3), crankshaft sprocket (Fig. A). Hold the belt on the crankshaft sprocket using the tool (10) (Fig. E). Continue fitting the belt on the water pump (17) and the tensioner roller (2) (Fig. A).



Install Confidence



- 13) Remove the pins (4), (5) and (6) (Fig. B and Fig. C) and the tool (10) (Fig. E).
- 14) Check that the moving pointer (11) of the tensioner roller is in position (12) (Fig. F).
- 15) Tighten the fastening nut (19) of tensioner roller to a torque of 20 Nm.
- 16) Turn the crankshaft 4 times in the engine rotation direction until you can insert the pins (4), (5) and (6) (Fig. B and Fig. C).
- 17) Remove the pin (13) from the tensioner roller (Fig. F).
- 18) Loosen the tensioner roller fastening nut (19) and turn the adjustment dial (14) using an Allen key until the moving pointer (11) is in position (15) (Fig. G).

Note: the moving pointer (11) must be aligned with the notch (16) on the tensioner roller plate (Fig. G).

- 19) Tighten the tensioner roller fastening nut (19) to 20 Nm while holding the adjusting hub (14) in position with an Allen key (Fig. G).
- 20) Remove the pins (4) (5) and (6) (Fig. B and Fig. C).
- 21) Turn the crankshaft 2 times in the engine rotation direction until you can insert the pins (4), (5) and (6) (Fig. B and Fig. C).
- 22) Check the tensioner roller setting (2): The moving pointer (11) must be in position (15) (Fig. G).

Note: The timing belt tension is set when the moving pointer (11) on the tension roller is aligned with the notch (16) (Fig. G).

- 23) If the marks are not aligned, replace the tensioner roller (2) in position (12), insert the pin (13) on the rear plate (Fig. F), remove the new timing belt and re-start the tension adjustment operation from step 12).

- 24) Remove the pins (4) (5) and (6) (Fig. B and Fig. C).
- 25) Refit the elements removed in reverse order to removal.
- 26) Fill the cooling circuit with the permanent fluid recommended.
- 27) 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.