

VKMA 06101



VKMA 06103



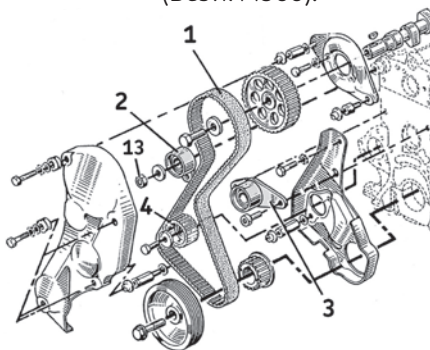
VKMA 06123



A



- (5): TDC gauge \varnothing 8 mm (Eng. 861).
- (6): TDC gauge (Eng. 1054).
- (11): Belt tension controller (Mot. 1273).
 - Engine locking tool (Eng. 1159-01).
 - Engine locking tool (Eng. 1290).
 - Engine locking tool (Desvil M300).



- (11): Tension controller:
 - 29 ± 2 , 9 units SEEM for the F3R engine;
 - 25 ± 2 , 5 units SEEM for other engines.
- (13): Tensioner nut:
 - 50 Nm for the F3R engine.
 - 40 Nm for other engines.

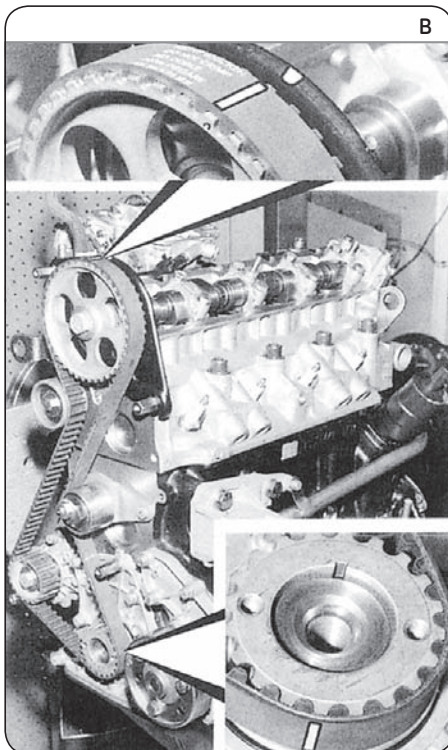
Removal

- 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) To facilitate engine rotation, remove the spark plugs.
- 4) Lock the flywheel and remove the crankshaft pulley.
- 5) Remove the timing cover(s).
- 6) Set the engine to TDC by aligning the timing marks on the camshaft sprocket and crankshaft sprocket opposite the fixed marks (Fig. B).

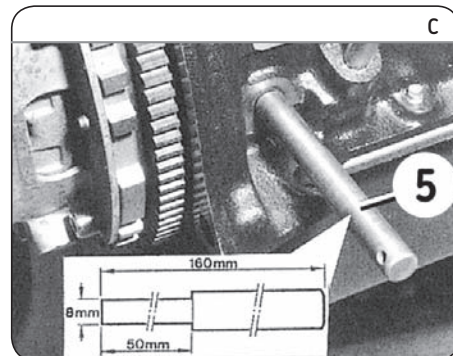
Note: if the rear cover of the timing belt does not have any marks, make them in the alignment of the belt marks (1) (Fig. B).

- 7) If necessary, remove the TDC gauge cap.
- 8) Fit the gauge (5) in the appropriate hole (Fig. C). Position the gauge (6) (Fig. D) for the Renault Espace, Laguna and Megane.
- 9) Untighten the tensioner roller (2) and remove the belt (1).
- 10) Remove the tensioner rollers (2) and idler roller (3). If you are fitting the VKMA 06123, also remove the idler roller (4) (Fig. A).

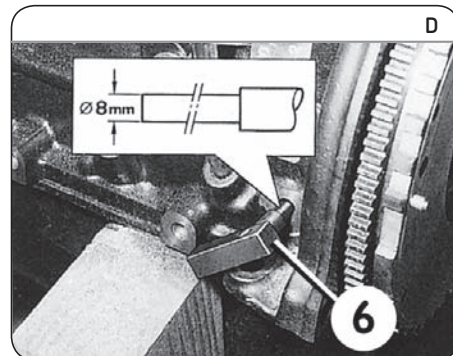
B



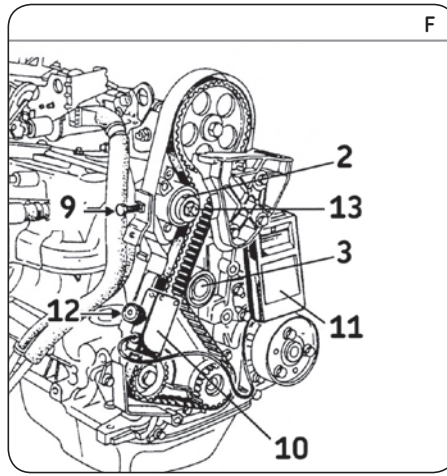
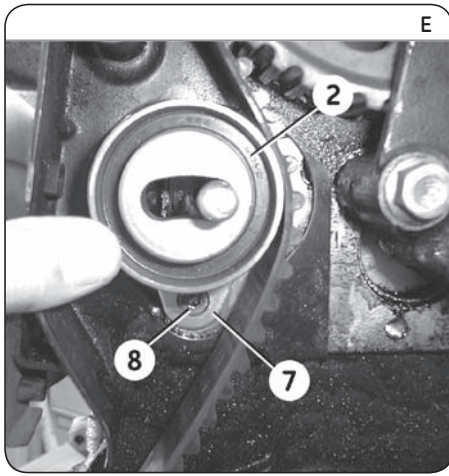
C



D



Install Confidence



Refitting

Caution! Clean the bearing surfaces of the rollers.

- 11) Check the alignment of the different timing marks.
- 12) Check that the TDC gauge (5) or (6) is still in place (Fig. C and D).
- 13) Fit the new idler roller (3). If you are fitting the VKMA 06123, also fit the new idler roller (4) (Fig. A).
- 14) Fit the tensioner roller (2). The hole in the plate (7) of the roller must be placed on the positioning pin (8) (Fig. E).
- 15) Place the new timing belt (1), respecting its fitting orientation: the arrows located on the back of the belt must be set between the idler roller (4) and the tensioner roller (2). Then tighten the belt (1) by screwing a M6 x 45 mm bolt (9) on the rear timing cover (Fig. F).
- 16) Fit the sensor (10) of the tension controller (11) onto the belt (1) (Fig. F).
- 17) Turn knob (12) on the sensor (10) until you hear three "clicks" (Fig. F).
- 18) Tighten the belt (1) with the bolt (9) (Fig. F) until the controller (11) shows the value:
 - 29 ± 2,9 units SEEM for the F3R engine ;
 - 25 ± 2,5 units SEEM for other engines.
- 19) Tighten the tension roller mounting nut (13) (Fig. F) to:
 - 50 Nm for the F3R engine.
 - 40 Nm for other engines.
- 20) Remove the TDC gauge (5) or (6) (Fig. C and D) and the sensor (10) (Fig. F).
- 21) Turn the crankshaft by 3 turns in the engine rotation direction.
- 22) Refit the gauge (5) or (6) (Fig. C and D) and the sensor (10) (Fig. F)
- 23) Check the tension value of the belt. Otherwise, readjust this value using the tensioner roller (2).
- 24) Remove the gauge (5) or (6), the bolt (9) and the sensor (10).
- 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.

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