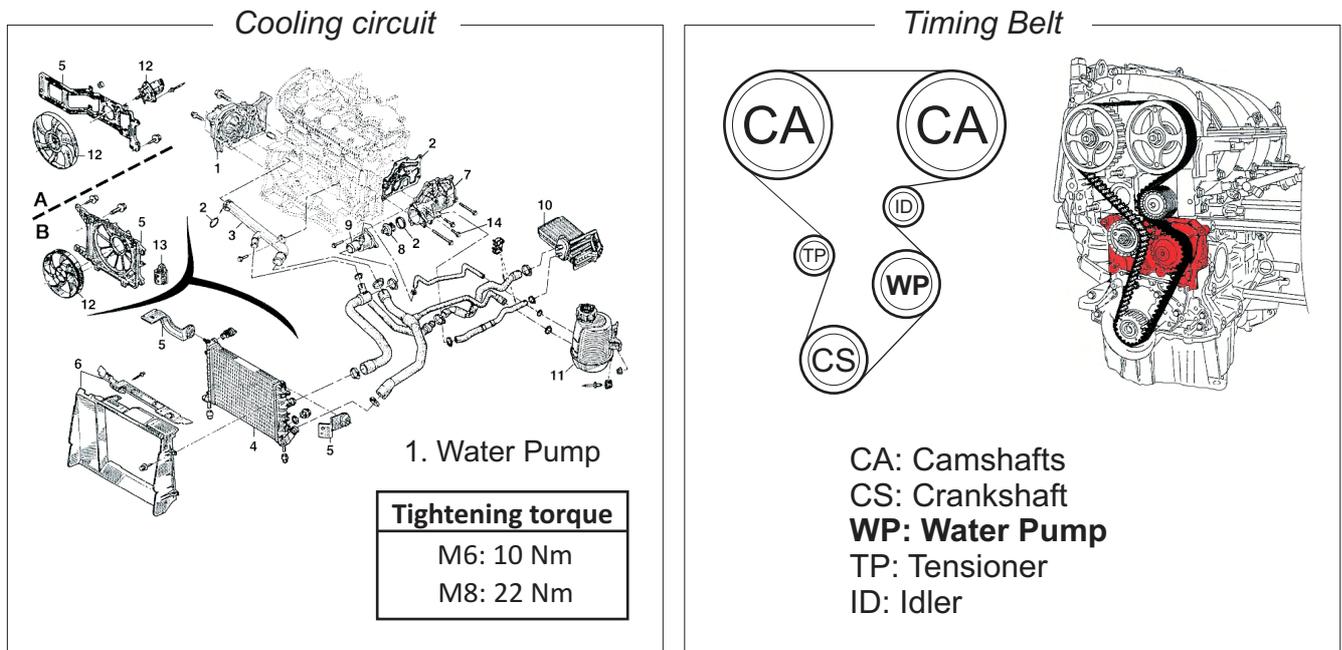


TECHNICAL INFORMATION SHEET

PART NUMBER: 1641

Renault Clio II - 1.4i 16v. engine (K4J 712)



How to Remove the Timing Belt and Change Water Pump

Timing belt replacement interval: every 120.000 km or 5 years.

Specific tools:

- Specific tool to camshafts (1) [FIG. 1].
- Specific tool to camshafts pulleys (2) [FIG. 1].
- Lock pin to crankshaft (3) [FIG. 1].

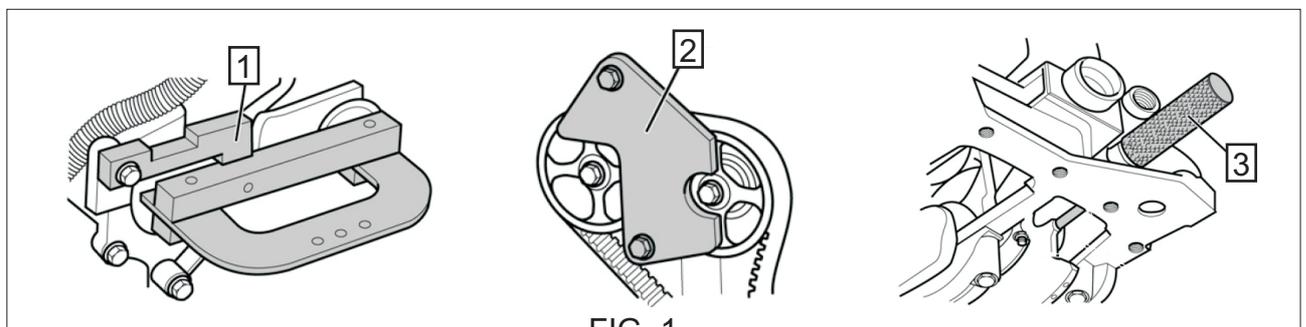


FIG. 1

Disassembly

The first steps, the most common for vehicles, are to disconnect the battery and dismount all necessary components to gain access to timing belt, for example, the right front wheel, wheel arch, auxiliary belt, crankshaft pulley, motor bracket, plastic covers, ...

Each vehicle may have fewer or more components to dismount, which are specified in the vehicle repair manuals.

TECHNICAL INFORMATION SHEET

Disassembly (continued)

- ① The next step is to drain the coolant circuit and turn the crankshaft until cylinder n°1 is positioned at TDC.
- ② Disassembly rear covers for camshaft and make sure camshafts are aligned [FIG. 2].
- ③ Remove engine block bolt (1) [FIG. 3] and fit the lock pin to crankshaft (2) [FIG. 3], making sure that the crankshaft abuts the lock pin (3) [FIG. 3].
- ④ Fit the specific tool to camshafts (1) [FIG. 1].
- ⑤ Loosen tensioner nut, separate it from timing belt and remove the tensioner.
- ⑥ Remove the timing belt, the idler and the water pump.
- ⑦ Remove camshafts pulleys using specific tool (2) [FIG. 1], the crankshaft pulley and clean them. Then, mount them again.

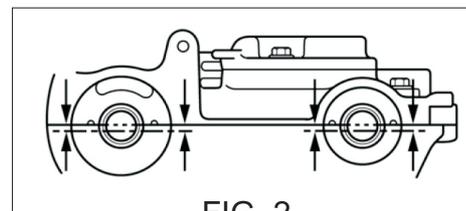


FIG. 2

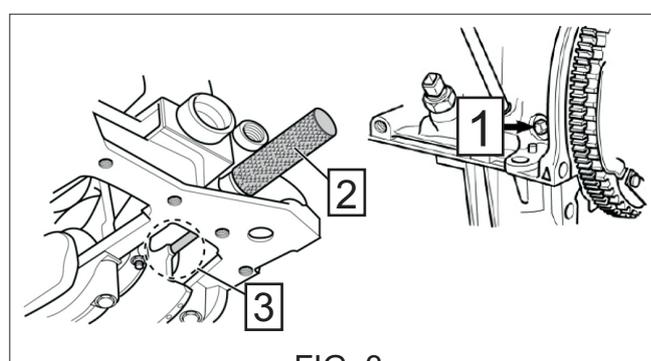


FIG. 3

AIRTEX. RECOMMENDS:

- ⑧ Clean the coolant circuit and replace all belt drive components.

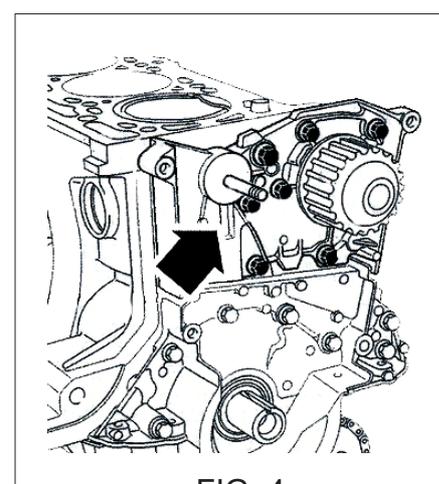
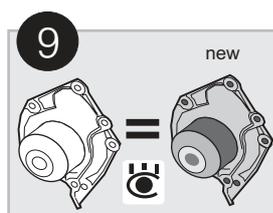


FIG. 4

Assembly

- ① Fit the idler and tighten the bolt (50 Nm).
- ② Mount the Airtex water pump and tighten water pump bolts to tightening torque described on page 1.
- ③ Fit the tensioner make sure it is mounted correctly [FIG. 4], and tighten tensioner nut by hand.
- ④ Mount timing belt starting at crankshaft pulley.
- ⑤ Turn the tensioner clockwise until mobile indicator (1) [FIG. 5] is aligned with the groove (2) [FIG. 5]. Then, tighten the tensioner nut (27 Nm).

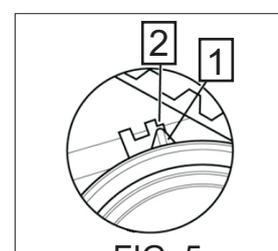
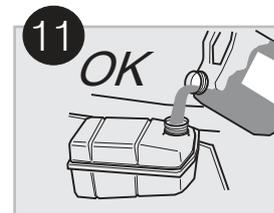
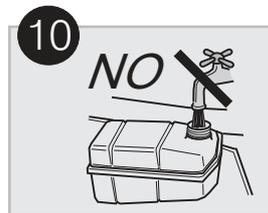


FIG. 5

TECHNICAL INFORMATION SHEET**Assembly (continued)**

- ⑥ Dismount specific tool to camshafts (1) [FIG. 1] and the lock pin to crankshaft (2) [FIG. 3].
- ⑦ Rotate the crankshaft turning it 4 times until it is possible to mount timing tools. Then, check the mobile indicator is aligned with the groove [FIG. 5]. Repeat the process if it is not correct.
- ⑧ Remove timing tools.
- ⑨ Proceed with the rest of the assembly

AIRTEX RECOMMENDS:

Please Note: Fill up the cooling circuit with a suitable coolant and antifreeze before switching on the engine.