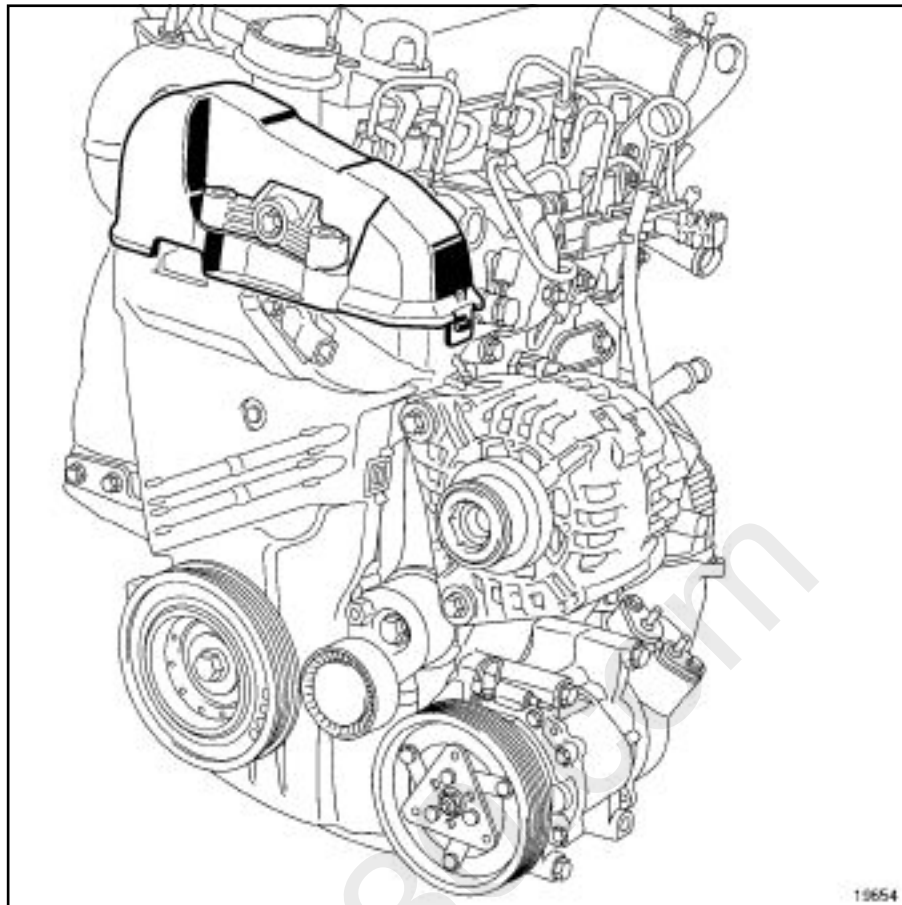


Timing - cylinder head: Refitting

K9K, and 274 or 276 or 714 or 716 or 718 or 766 or 768



19654

Refit the high-pressure pump position sensor.

Tighten to torque the **high-pressure pump position sensor bolt (8 Nm)** .

Refit the upper timing cover.

Special tooling required

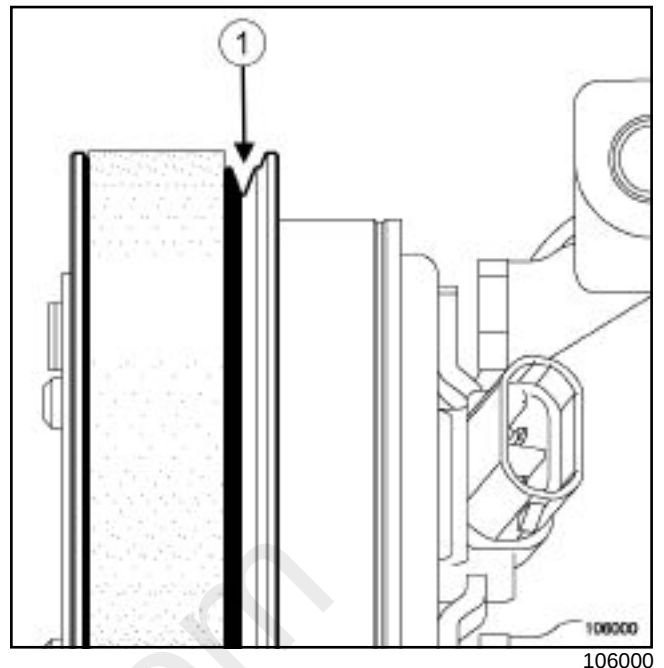
Mot. 1638	Accessories belt tension tool. For engines fitted with a mechanical tensioning roller.
Mot. 1505	Belt tension setting tool (frequency meter)
Mot. 1715	Belt tension checking tool (frequency indicator).

Tightening torques

mechanical tensioning roller mounting bolts	35 ± 3.5 Nm
auto tensioner mounting bolt	40 ± 4 Nm

I - RECOMMENDATIONS FOR REPAIR**IMPORTANT**

Wear protective gloves during every operation.

**WARNING**

Certain accessories belts have five teeth whereas the air conditioning compressor pulley, power-assisted steering pump pulley, and alternator pulley all have six teeth. In this case, it is essential to check that the inner tooth (1) of the pulleys remains free when fitting the accessories belt.

Never turn the engine in the opposite direction to its normal operating direction.

Use a brush to remove any deposits from the crankshaft accessories pulley V grooves.

For engines fitted with a mechanical tensioning roller, it is essential to replace the tensioning roller mounting bolts.

II - PARTS AND CONSUMABLES FOR THE REPAIR**Parts always to be replaced**

- The mechanical or automatic tensioning roller,
- The mechanical tensioning roller mounting bolts with **M8 bolts - 125 X 20** , part no. **77 03 002 059** ,
- The accessories belt.

III - EQUIPMENT REQUIRED

- Brush,
- Torque wrench

- Protective gloves,
- Tubular hexagon box spanner (**16 mm**),
- Offset wrench (**16 mm**).

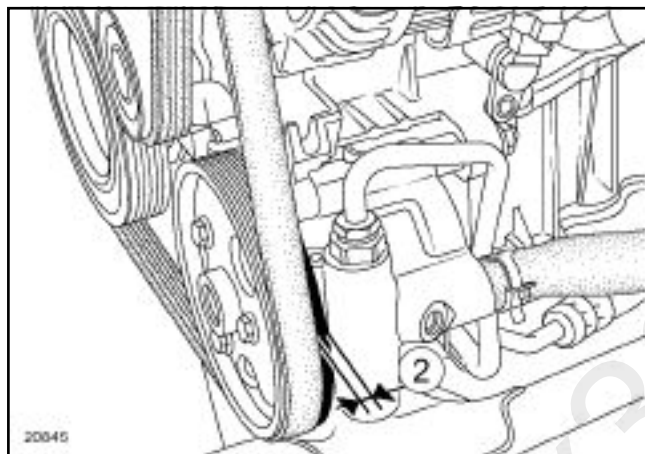
IV - REFITTING

1 - Engine without air conditioning

Use a brush to remove any deposits from the crankshaft accessories pulley V grooves.

Refit:

- the tensioning roller,
- the new tensioning roller mounting bolts.

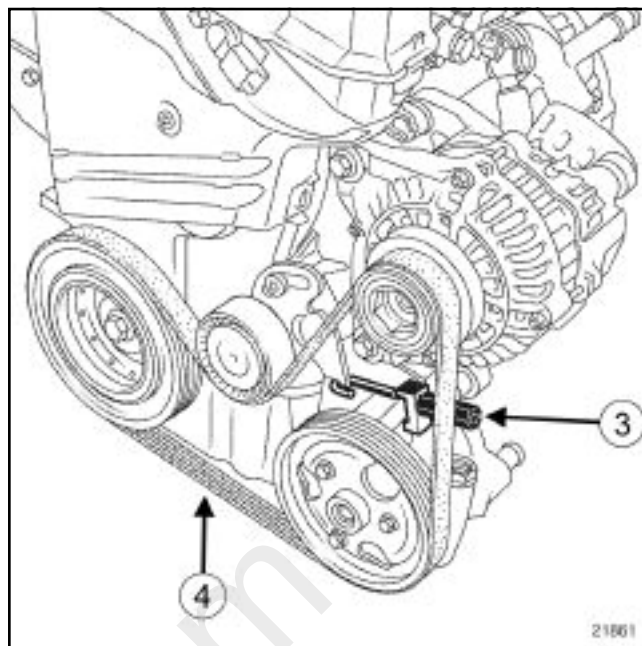


20845

It is essential to leave one inner tooth (2) of the pulleys free for engines fitted with a belt with five teeth for pulleys with six teeth.

Refit the accessories belt.

Check that the two mechanical tensioning roller bolts are not overtightened.



21861

Fit the **(Mot. 1638)** into the tensioning roller notch (as indicated in the diagram).

Tension the accessories belt using the **(Mot. 1638)** by tightening nut (3) .

Check the accessories belt tension at (4) using the **(Mot. 1505)** or **(Mot. 1715)** .

The accessories belt tension must be between **223 and 245 Hz** .

It is essential to turn the engine through two revolutions to position the accessories belt correctly.

Check that the accessories belt tension is between **223 and 245 Hz** at measuring point (4) .

Adjust the accessories belt tension if necessary.

Tighten to torque the **mechanical tensioning roller mounting bolts** (**35 ± 3.5 Nm**) .

2 - Engine with air conditioning

Use a brush to remove any deposits from the crankshaft accessories pulley V grooves.