

REMOVING - REFITTING : TIMING BELT :*INJECTION EW7J4 OR INJECTION EW10J4*

URGENT : Respect the precautions to be taken before repair (refer to the brochure: "RECOMMENDATIONS - PRECAUTIONS") .

1. Recommended tools

Tool box C.0189 .

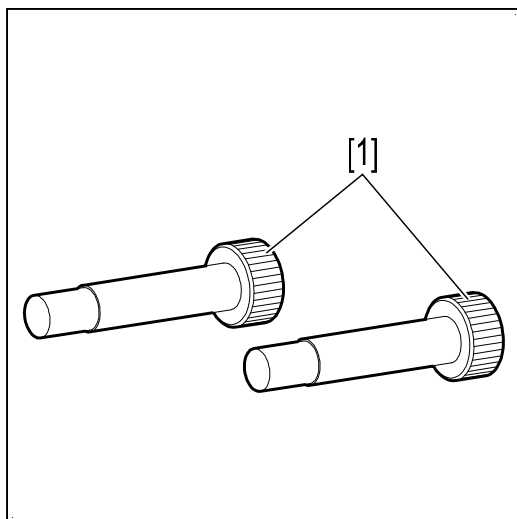


Figure : E5AP1J0C

[1] camshaft setting rod (-).0189.A .

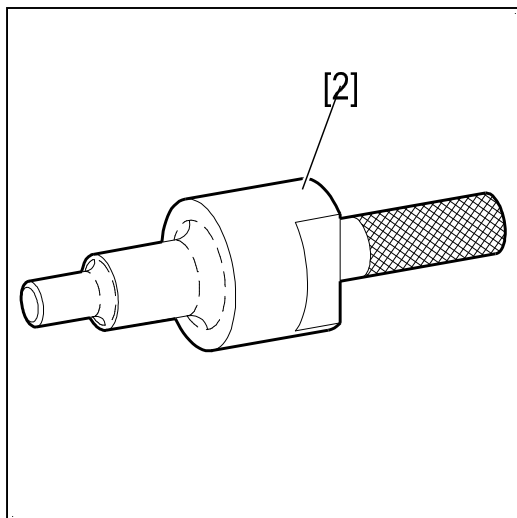


Figure : E5AP27AC

[2] crankshaft setting rod (-).0189.R .

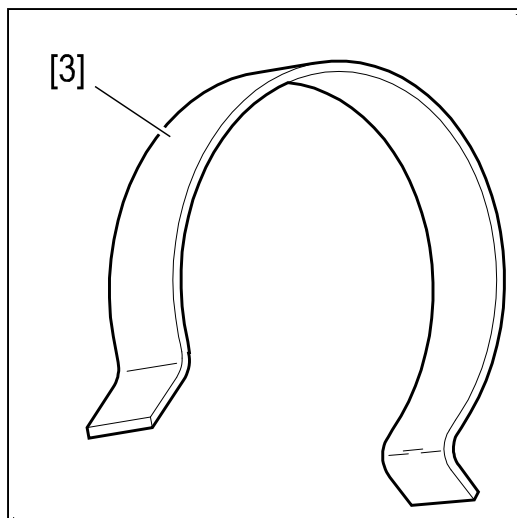


Figure : E5AP1J1C

[3] Timing belt locking pin (-).0189.K .

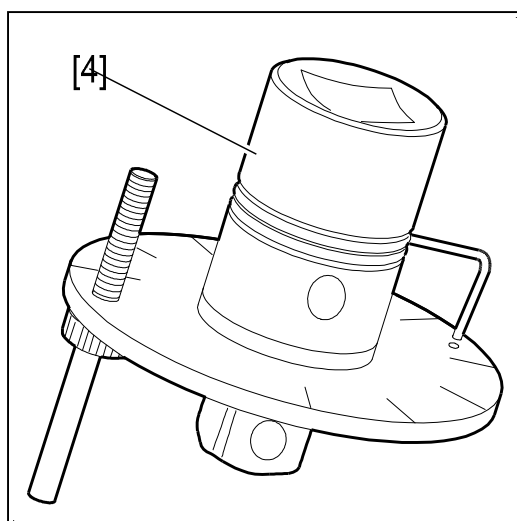


Figure : E5AP052C

[4] adaptor for angular tightening 4069-T .

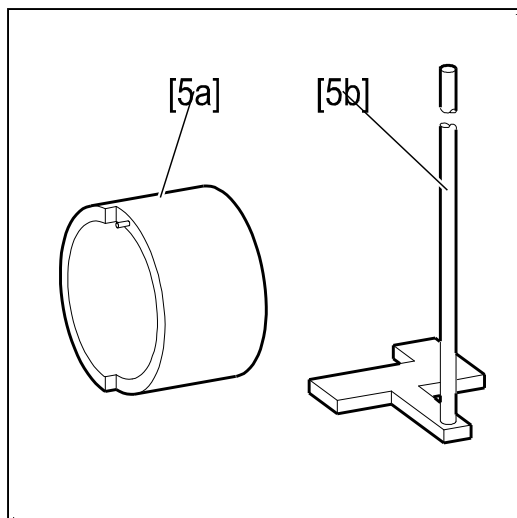


Figure : E5AP27BC

[5] hub immobilising tool (-).0189.S .

[5a] (-).0189.S1 .

[5b] (-).0189.S2 .

Additional tools : Pliers for removing plastic pegs 7504-T .

2. Removing

Disconnect the battery negative terminal (see the relevant operation) .

Lift and support the vehicle with the front wheels suspended .

Remove the accessories drive belt (see the relevant operation) .

Unclip and release the fuel inlet hose from the timing housing .

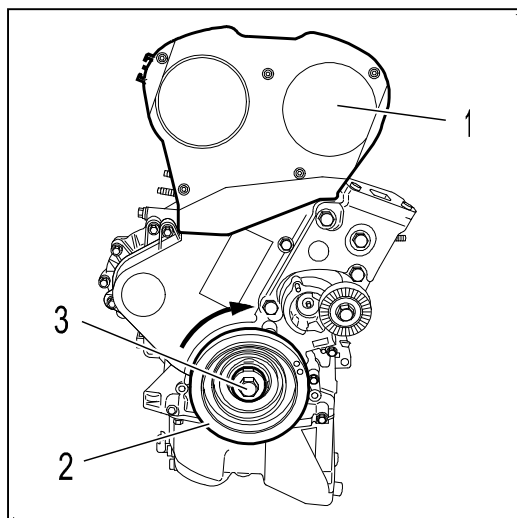


Figure : B1BP2V4C

Remove the upper timing cover (1) .

Rotate the engine using the bolt (3) of the crankshaft pinion (2) until it is in the pegging position .

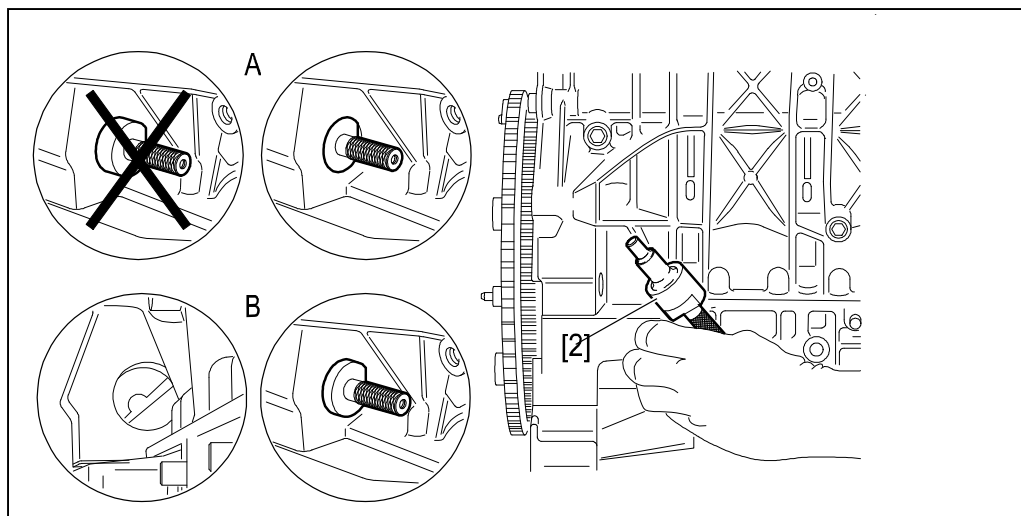


Figure : B1BP2V3D

A : Pegging on manual gearbox .

B : Pegging on automatic gearbox .

Peg the crankshaft Using tool [2] .

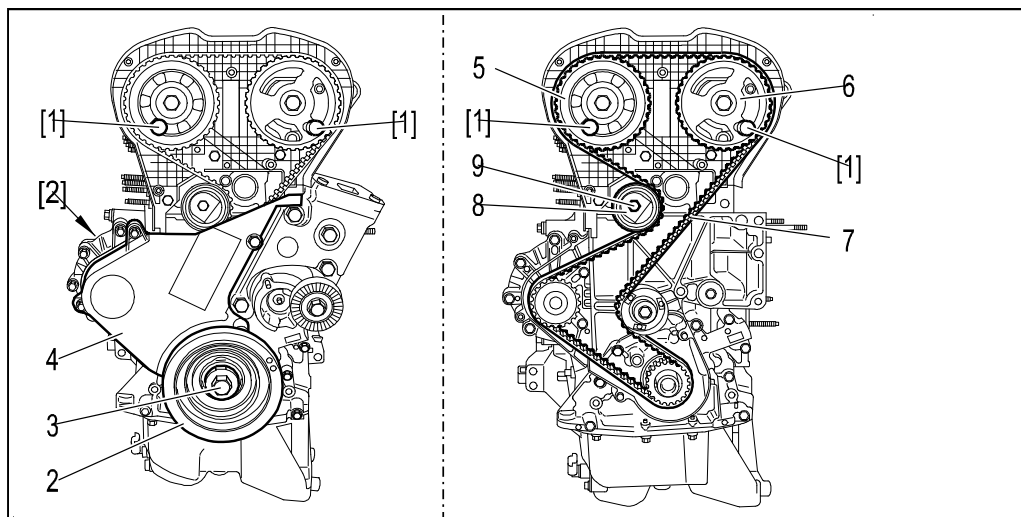


Figure : B1EP1BBD

Peg the camshaft pulleys (5) and (6) using the tool [1] .

Remove :

- The screw (3)
- Crankshaft pulley (2)
- The lower timing cover (4)

URGENT : Never remove the crankshaft pulley (2) without pegging the crankshaft and the camshafts .

Slacken the bolt (9) of the tensioning roller (8) .

Rotate the tensioning roller (8) in a clockwise direction .

Remove the timing belt (7) .

3. Refitting

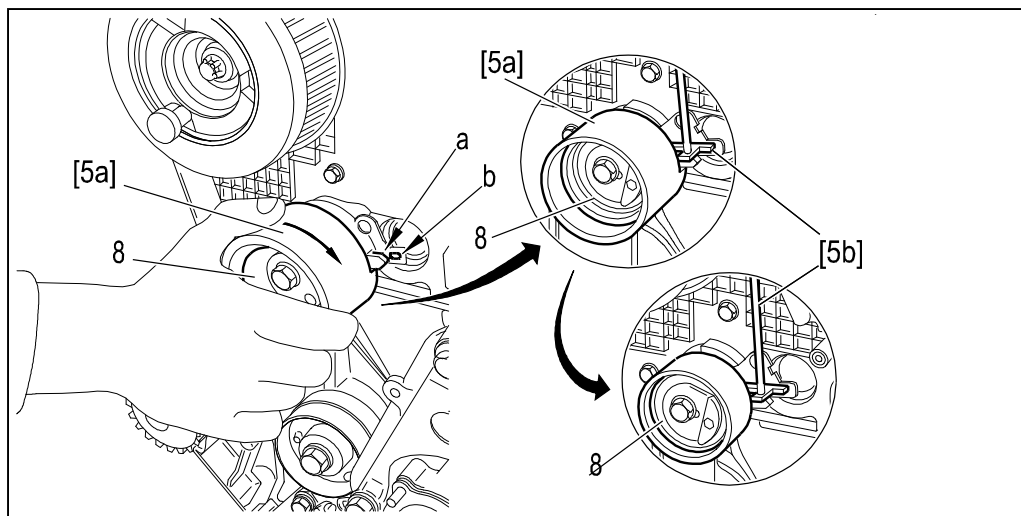


Figure : B1EP1BCD

Turn the tensioner roller (8) ; using tool [5a] to pass notch " b " .
Position tool [5b] to lock the index " a " and take away tool [5a] .

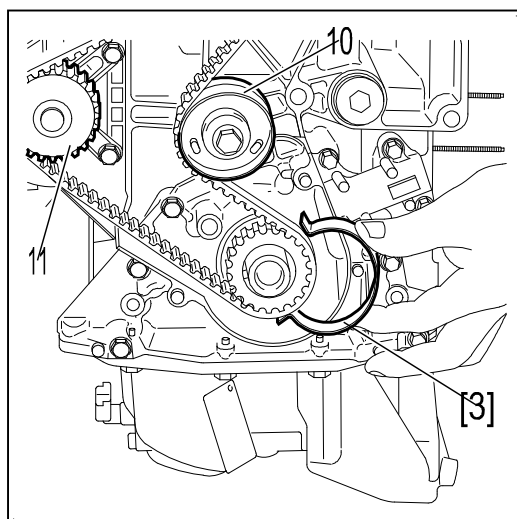


Figure : B1EP1BDC

Reposition the timing belt (7) on the crankshaft pinion (1) .
Hold the timing belt (7) using the tool [3] .

Fit the timing belt (7), strictly in the following order :

- Guide roller (10)
- Input camshaft pulley (6)
- Exhaust camshaft pulley (5)
- Water pump (11)
- Roller tensioner (8)

N.B. : Fit the belt (7) so that it is as flush as possible with the outer faces of the various pinions and rollers .

Remove :

- The tool [3]
- The tool [1] from the exhaust camshaft pulley
- The tool [5b] from the tensioner roller (8)

Fit :

- The lower timing cover (4)
- The crankshaft pulley (2)
- The crankshaft pulley bolt (3)

Tighten the screw (3) to $4 \pm 0,4$ m.daN .

Carry out an angular tightening of $53 \pm 4^\circ$ Using tool [4] .

4. Tensioning the timing belt

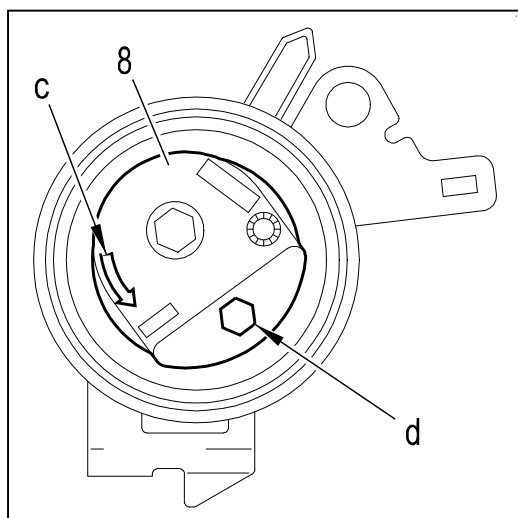


Figure : B1EP1BEC

Rotate the tensioning roller (8) in the direction of the arrow " c " Using an Allen key at " d " .

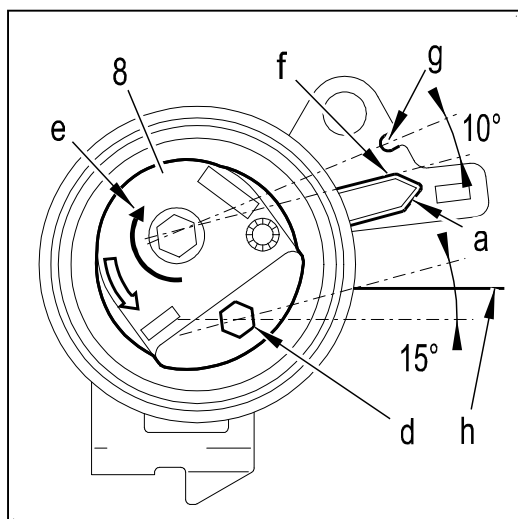


Figure : B1EP1BFC

Position the index " a " in position " f " .

URGENT : The index " a " should pass the notch " g " by an angular value of at least 10° . If not, replace the tensioning roller or both timing belt and tensioning roller .

Then bring the index " a " to its setting position " g " , by rotating the tensioning roller in the direction of the arrow " e " .

CAUTION : The index " a " must not go past the slot " g " . If it does, repeat the timing belt tensioning operation .

URGENT : The tensioning roller must not rotate whilst being tightened in its mounting . If it does, repeat the timing belt tensioning operation .

Tighten the bolt (9) of the tensioning roller (8) to $2,1 \pm 0,2$ m.daN .

URGENT : The hexagonal drive of the tensioning roller must be at approximately 15° below the cylinder head gasket level " h " . If not, replace the tensioning roller or both timing belt and tensioning roller .

5. Refitting (continued)

Remove tools [1] and [2] .

Turn the crankshaft 10 turns in the normal direction of rotation .

URGENT : No pressure or external force should be applied to the timing belt .

Peg the input camshaft pulley using the tool [1] .

6. Checks

Tensioning the timing belt .

URGENT : Check the position of the index " a " , it should be opposite the slot " g " . If the position of the index " a " is not correct, repeat the timing belt tensioning operations .

7. Refitting (continued)

Refit the upper timing cover (1) .

Clip the fuel inlet hose onto the timing housing .

Refit the auxiliary equipment drive belt (see the relevant operation) .

Return the vehicle to its wheels .

Reconnect the battery (see the relevant operation) .