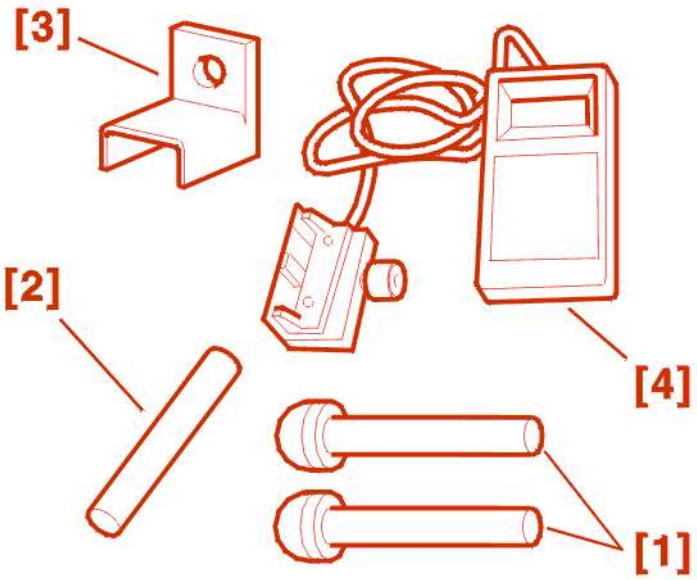
B1CJ0EK1 - 406D9 XU7JP4 ENGINE XU10J4R ENGINE

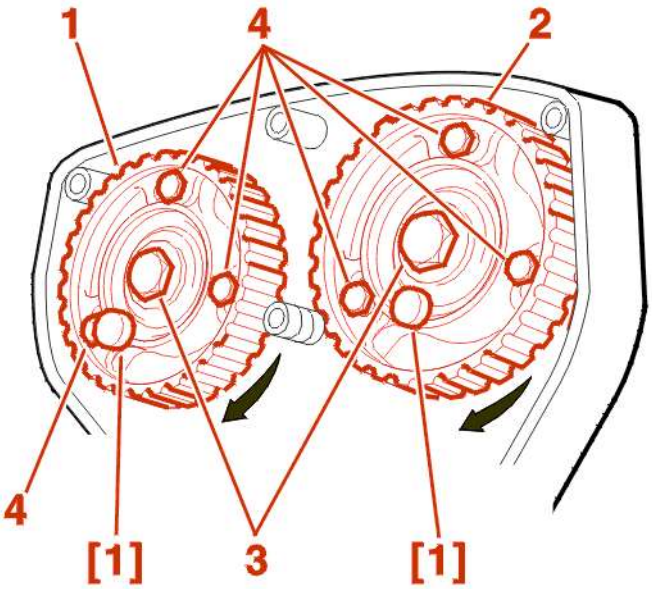
REASSEMBLY 16 VALVE ENGINE(S) - (TIMING)

1 - SPECIAL TOOLS



reference	description	reference	reference
[1]	camshaft hub setting rods (XU10J4 engine)	(-).0153-AB (-).0153-M	9041 - T.Z 7004 - T.M
[2]	crankshaft setting rod	(-).0153-G	7004 - T
[3]	flywheel stop	(-).0153-AF	-
[4]	tension measuring equipment	SEEM	SEEM

2 - REASSEMBLY



Fit :

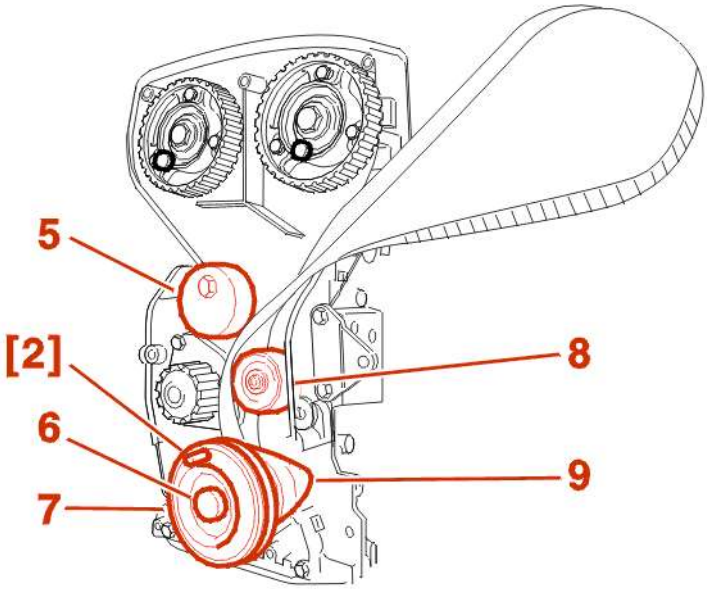
- the camshaft pulleys (1) and (2)

Set the hubs (3) using tools [1] .

Lightly tighten the bolts (4) by hand to obtain :

- correct seating without play between the pulley and the hub (3)
- free rotation of the pulley on its hub (3)

Move the pulleys (1) and (2) against the ends of the slots by turning them in the direction of engine running .



Check that the rollers (5) and (8) turn freely (no play and no tight spots) .

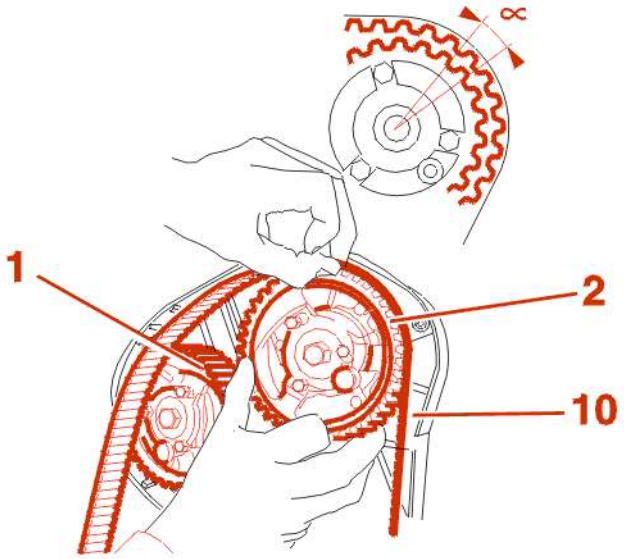
Fit the belt on the crankshaft gear following the direction of fitting .

Fit :

- the casing (9)
- the pulley (7), by tightening bolt (6) pre-coated with LOCTITE FRENETANCH (tightening torque 13 da.Nm)

WARNING : never tighten the bolt (6) with the rod [2] in place (risk of damage) ; use the flywheel retainer [3] .

Peg the crankshaft with the rod [2] .



WARNING : ensure that during this operation the timing belt does not jump a tooth on the crankshaft gear .

Fit the timing belt, run (10) well tensioned, in the following order :

- crankshaft
- roller tensioner

Lay the timing belt on the pulley (2) .

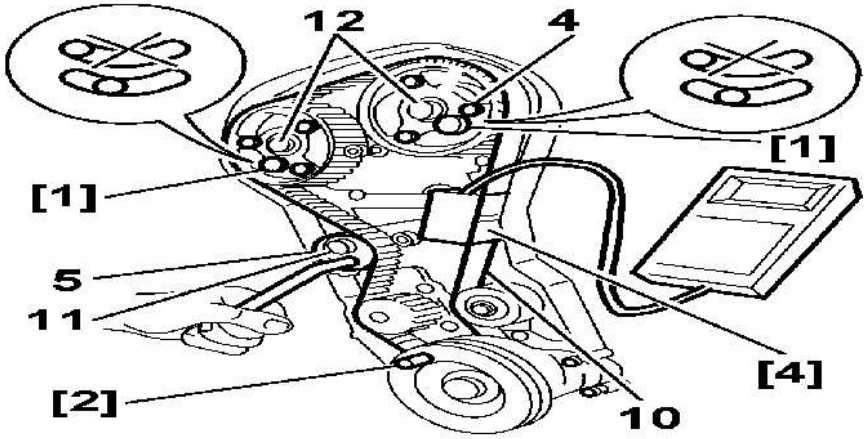
Turn the pulley carefully in the opposite direction to engine rotation to engage the belt on the pulley (2) .

IMPERATIVE : the angular movement (∝) of the pulley in relation to the belt must not be more than one tooth space .

Proceed in the same way for the pulley (1) .

Engage the belt on the roller tensioner and on the coolant pump gear .

3 - PRE-TENSIONING VALUE FOR FITTING THE TIMING BELT



Without removing the rods :

- fit the equipment [4] to the belt run (10) taking care it is not constrained by its surroundings
- turn the roller tensioner (5) anti-clockwise using the square drive until 45 SEEM units are displayed
- tighten the bolt (11) to 2 da.Nm. without altering the position of the roller
- by removing one bolt from each of the camshaft gears, check that the 6 bolts (4) are not against the ends of the slots

If they are, restart the fitting operation .

Tighten the 6 bolts (4) to 1 da.Nm. .

Remove :

- the equipment [4]
- the pegs [2]-[1]

4 - BELT FITTING TENSION

IMPERATIVE : never turn the crankshaft in the reverse direction .

Turn the crankshaft two turns in the direction of running .

Peg the crankshaft with the rod [2] .

Slacken the 6 bolts (4) .

Lightly tighten the bolts (4) by hand to obtain :

- correct seating without play between the pulley and the hub (3)
- free rotation of the pulley on its hub

Peg the camshaft hubs with the rods [1] turning them a little by means of the bolts (12) (If necessary) .

Slacken the bolt (8) .

Proceed as for the timing belt pre-tensioning operation observing the following points :

- display 26 SEEM units
- tighten the bolt (11) to 2 da.Nm
- tighten the 6 bolts (4) to 1 da.Nm.

Remove :

- the equipment [4]
- the pegs [2]-[1]

5 - CHECKING BELT TENSION

IMPERATIVE : never turn the crankshaft in the reverse direction .

Turn the crankshaft two turns in the direction of running .

Fit the crankshaft setting rod (Using the tool [2]) .

Slacken the 6 bolts (4) .

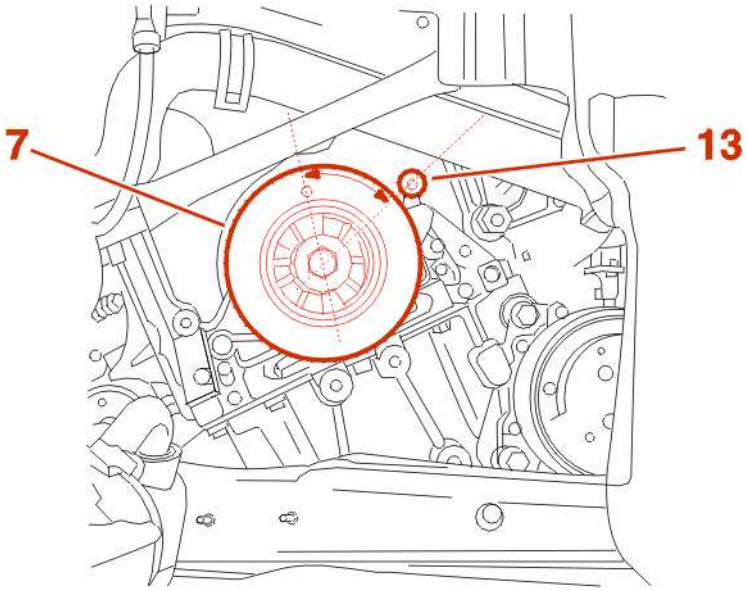
Lightly tighten the bolts (4) by hand to obtain :

- correct seating without play between the pulley and the hub (3)
- free rotation of the pulley on its hub

Peg the camshaft hubs with the rods [1] turning them a little by means of the bolts (12) (If necessary) .

Tighten the bolts (4) to 1 daN.m .

Remove setting rods [2] and [1] .



IMPERATIVE : never turn the crankshaft in the reverse direction .

Turn the crankshaft 1/4 turn(s) in the direction of running .

Move the pulley timing hole (7) until it is opposite the bolt (13) .

Fit the equipment [4] on the run (10) taking care that it is not constrained by its surroundings .

The tension value should be between 32 and 40 SEEM units .

If this is not the case, restart the timing belt tensioning operation .

Refit the various components in the reverse order to removal .

Route and clip exactly as before .