

ALFA ROMEO

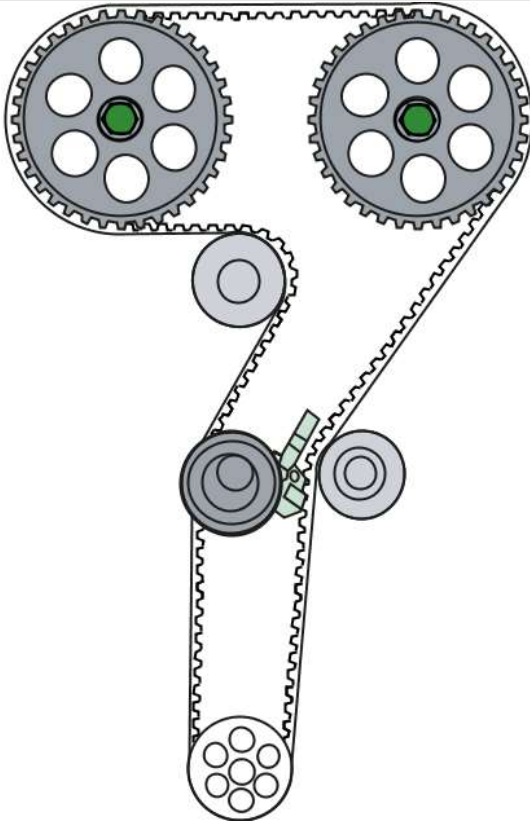
145 (130)1.4 TS 16V AR 33503

1996 - 2000

Timing belt: removal/installation

General

Ensure the locking tools fit correctly before removing the timing belt
(8.00)



Before disconnecting the battery cable, check the audio system security code

Removal

Disconnect the battery earth cable

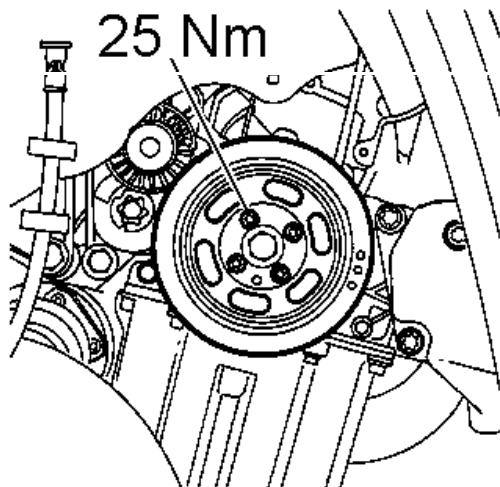
Remove the right front wheel

Remove the right front splash guard

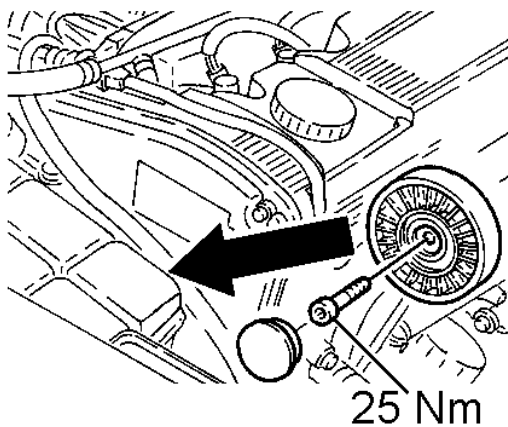
Remove the ancillary drive belt

Remove the crankshaft pulley
(3.00)

Timing belt: removal/installation



Remove the ancillary drive belt idler pulley
(10.00)

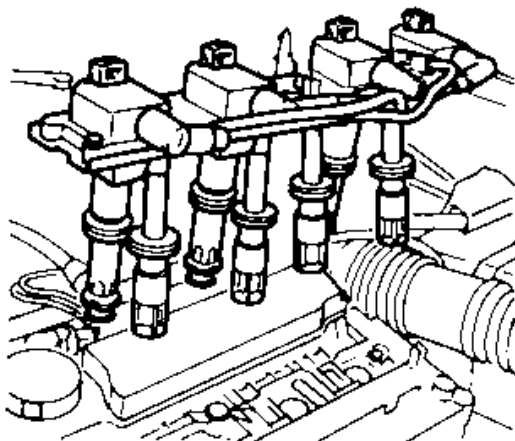


Remove the timing cover(s)

Remove the engine upper cover

Remove the ignition coils
(2.00)

Timing belt: removal/installation



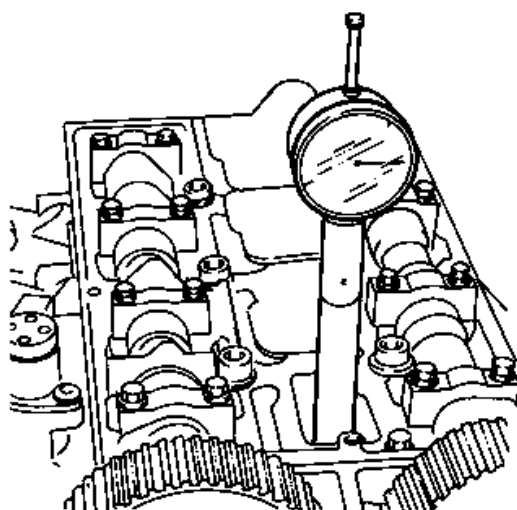
Release the wiring

Disconnect the breather hose

Remove the camshaft cover

Remove the spark plugs

Insert the micrometer gauge in the first cylinder spark plug hole (1.825.013.000)
(4.00)



Turn the camshaft to TDC for cylinder 1

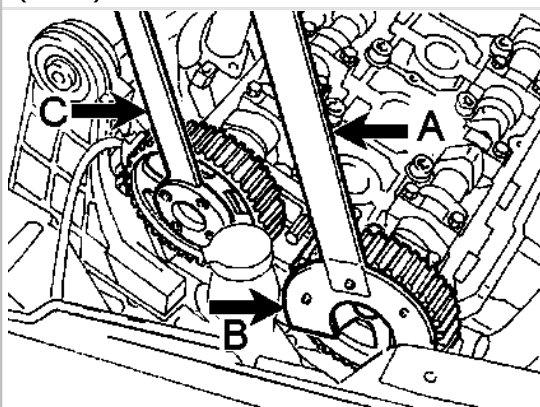
Remove the third camshaft bearing cap on the exhaust side and fit the special tool (1.825.042.000
(10 Nm))

Timing belt: removal/installation

Remove the second camshaft bearing cap on the inlet side and fit the special tool (1.825.042.000 (10 Nm))

Loosen the camshaft gearwheel (exhaust)

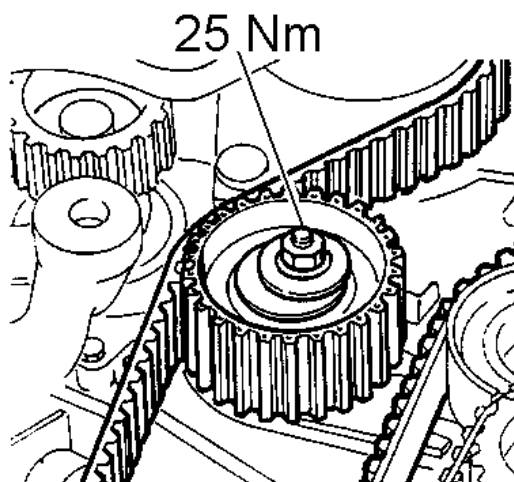
Use the special tools (1.822.156.000 (A) / 1.822.147.000 (B)) (20.00)



Loosen the camshaft gearwheel (inlet)

Use the special tool (1.822.155.000 (C))

Loosen the tensioner (13.00)



Remove the timing belt

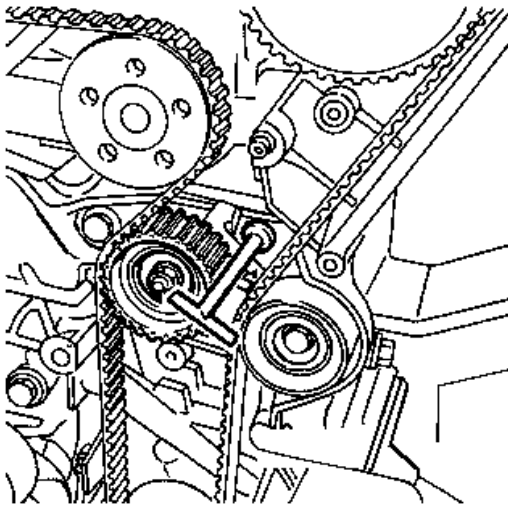
Installation

Timing belt: removal/installation

Fit the timing belt

Turn the tensioner to the maximum timing belt tension

Use a special tool: (1.822.149.000)
(14.00)



Tighten the tensioner pulley (25 Nm)

Tighten the camshaft gearwheel bolts

Remove the camshaft locking tools

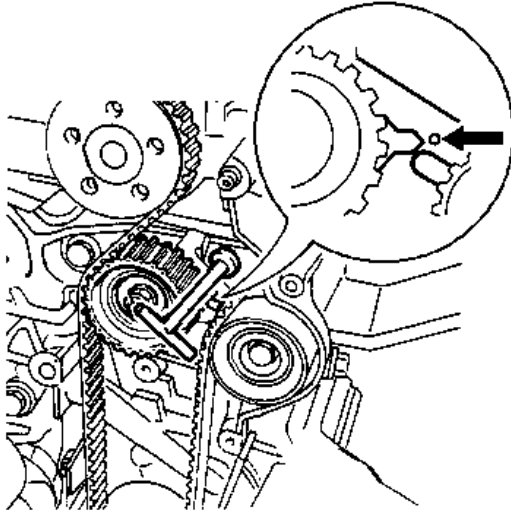
Refit the camshaft bearing caps (15 Nm)

Rotate the engine 2 rotations by hand

Loosen the tensioner pulley

Align the marks on the tensioner
(9.00)

Timing belt: removal/installation



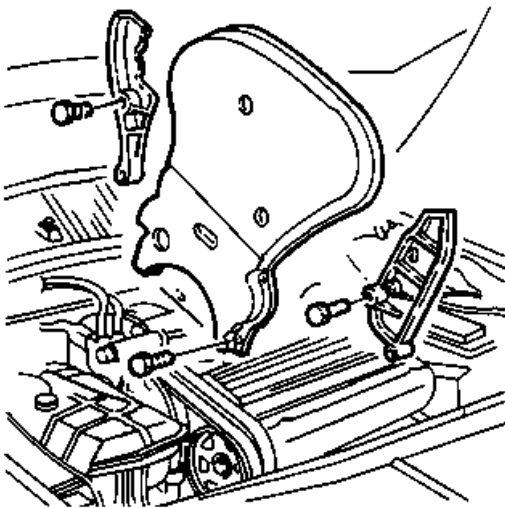
Tighten the tensioner pulley (25 Nm)

Remove the crankshaft turning tool

Remove the gauge

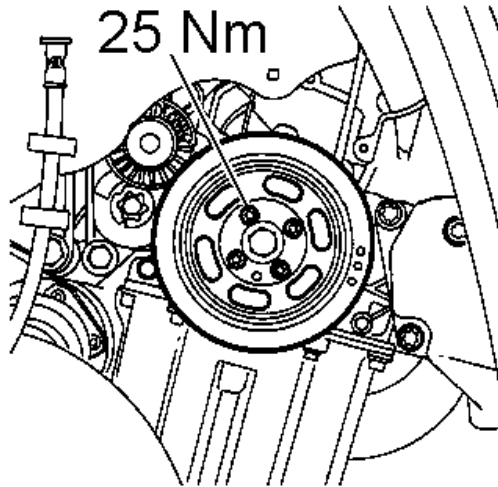
Refit the spark plugs

Refit the timing covers
(1.00)

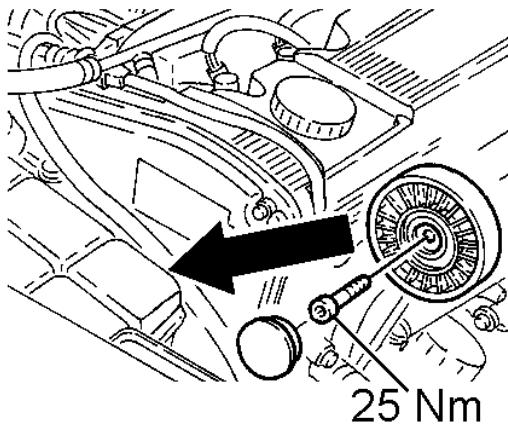


Refit the crankshaft pulley
(3.00)

Timing belt: removal/installation

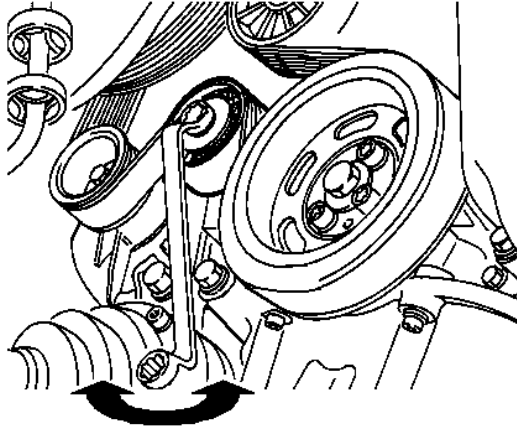


Fit the ancillary drive belt tensioner
(10.00)

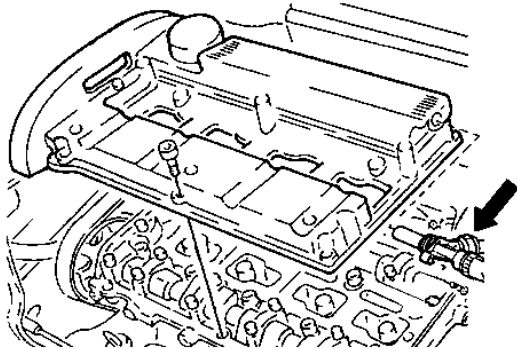


Fit the ancillary drive belt
(11.00)

Timing belt: removal/installation



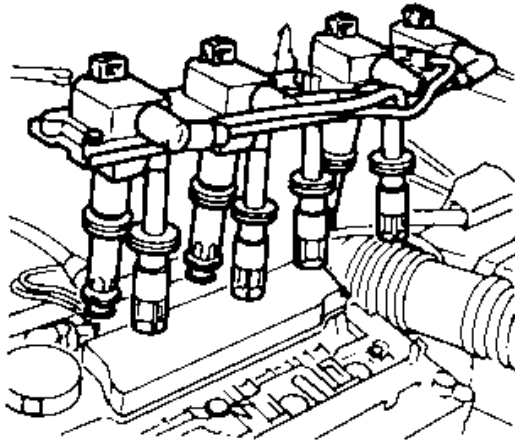
Refit the camshaft cover
(15.00)



Reconnect the breather hose

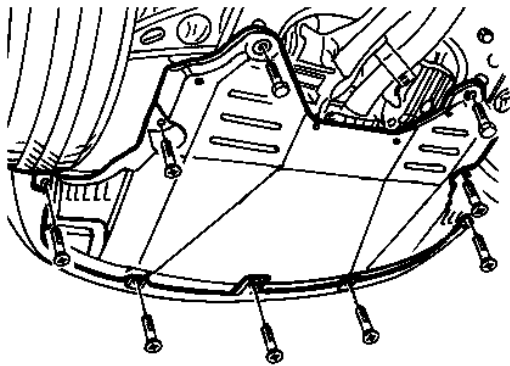
Refit the ignition coil(s)
(2.00)

Timing belt: removal/installation



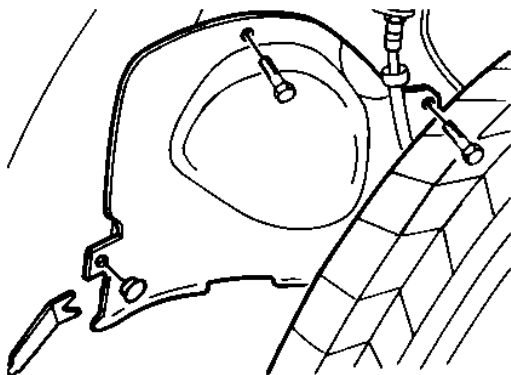
Refit the engine upper cover(s)

Refit the engine lower covers
(7.00)



Refit the front right splash guard
(12.00)

Timing belt: removal/installation



Refit the front right wheel

Reconnect the battery earth cable

Torque settings

Tensioner pulley: (25 Nm)

Camshaft gearwheel (inlet): (M6: 10 Nm)

Camshaft gearwheel (exhaust): (M12: 100-120 Nm)

Camshaft bearing caps: (15 Nm)

Special tools

Dial gauge holder: (1.825.013.000)

Camshaft locking tool: (1.825.042.000)

Counterhold tool: (1.822.156.000)

Counterhold tool: (1.822.147.000/1.822.155.000)

Tensioning tool: (1.822.149.000)