

Alfa MiTo 1.4 TB petrol timing belt guide

The 1.4-litre TB petrol engine used in the MiTo, features a timing belt driven water pump. As replacing the belt also requires the auxiliary drive system to be removed, Dayco recommend that all the systems' components - timing drive and auxiliary drive - be replaced at the same time. This step-by-step technical guide from Dayco will help you through the process, avoiding complications and ensuring a first-rate job.

As with all primary drive system jobs, the work should be undertaken when the engine is cold. Ideally, the vehicle will not have been run for at least four hours.

Remove the cowl from under the engine and the driver's side front wheel arch to expose the auxiliary belt system. Slacken the auxiliary belt tensioner with a spanner and take off the belt, then remove the crankshaft pulley. This will reveal two electrical connectors, which need to be disconnected, followed by the tensioner.

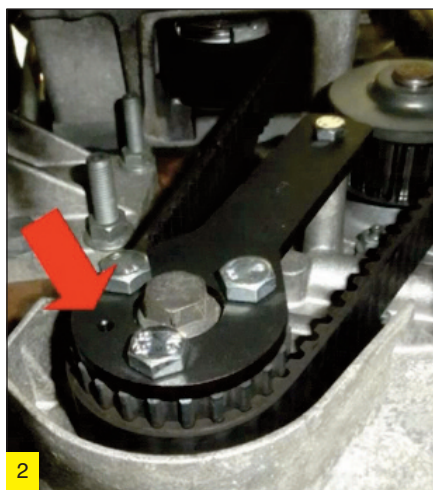
Take off the upper engine case, loosen the fasteners on the air filter hoses and then remove the complete air filter housing to access the timing case cover. Undo the screws of the timing case, while taking care



to detach the wiring connected to the upper half (figure 1) and remove both parts of the timing case.

At the opposite end of the head, remove the oil vapour collection housing, followed by the vacuum pump mounting bracket and then the pump itself, to allow the installation of the camshaft timing tool (2000034400). Returning to the timing drive end, install the crankshaft timing tool (2000004500) ensuring that the pin in the pulley is located correctly (figure 2).

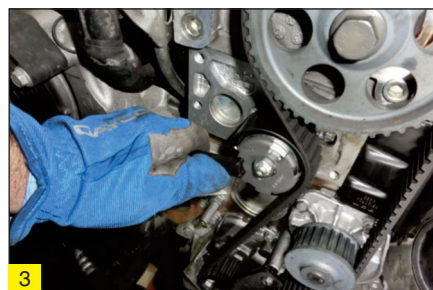
After suitably supporting the engine from underneath, remove the upper engine mount and bracket to reveal the entire timing drive system. Loosen the tensioner



bolt. Remove the tensioner and belt, followed by the water pump.

Ensuring that the cooling system has been flushed through and no debris is present, install the new water pump from Dayco kit KTBWP2853, complete with a replacement seal.

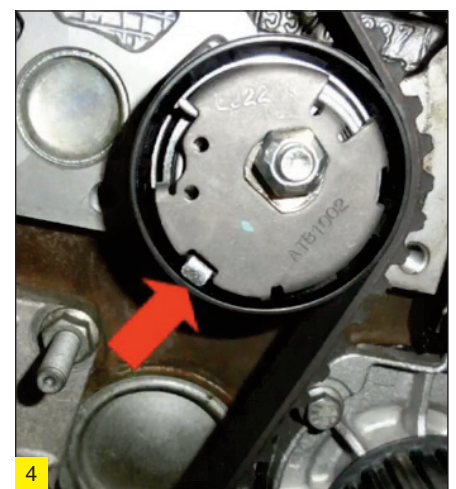
Hold the camshaft pulley and loosen,



but do not remove its bolt, so the pulley can rotate on the shaft. Replace the tensioner and the belt with the new ones from the kit and using tool (1860987000), rotate the tensioner anti-clockwise to the end of its stroke (figure 3) and tighten the nut to 27Nm. Making sure the camshaft pulley doesn't move by holding it with a suitable

tool, tighten the bolt to 132Nm.

Remove the camshaft and crankshaft timing tools, and by using the crankshaft pinion, rotate the engine several times and reinstall the tools. Then, while holding the tensioner with the tool, loosen the fastener and rotate the tensioner until its index is centred in the reference window (figure 4), then retighten the fastening to 27Nm.



Remove the timing tools and refit all the components in their reverse order, but check, and if necessary, replace the alternator pulley with Dayco ALP2440, crankshaft pulley with Dayco DPV1028 (the fasteners for which should be tightened to 28Nm) and the auxiliary belt tensioner with Dayco APV1079. However, Dayco recommend the auxiliary belt 5PK1150S should always be replaced.

For more information regarding Dayco OEM power transmission products, please email info.uk@dayco.com or visit www.dayco.com.

