

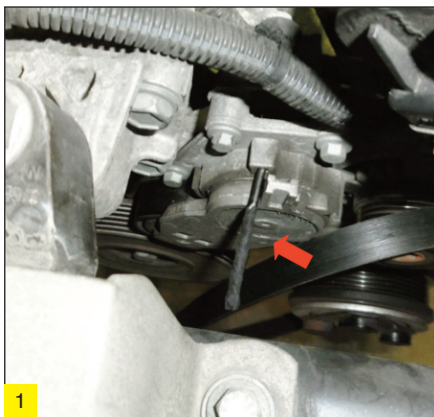
Timing Belt Installation

Ford C-Max 1.6 TDCi

The 1.6-litre TDCi Ford C-MAX diesel engine, as well as several Citroen, Mini, Peugeot and Volvo models, features a timing belt driven water pump. 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.

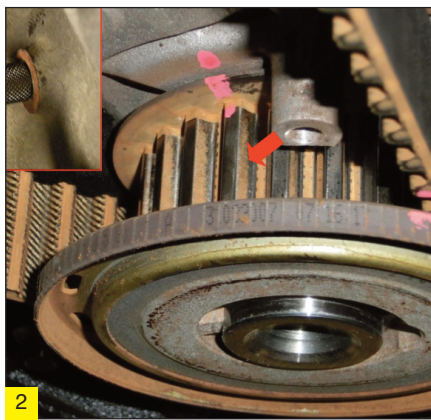
As with all primary drive system jobs, the work should be undertaken when the engine is cold, so ideally the vehicle will not have been run for at least four hours.

Remove the cowl from within the front wheel arch of the driver's side to expose the auxiliary belt system. Slacken the auxiliary belt tensioner with a spanner, and hold the tensioner in position with a 6mm + pin (Fig. 1) in order to take off the belt, then remove the tensioner, followed by the crankshaft pulley. This will reveal the phonic sensor and the RPM sensor connector, which needs to be disconnected.



Remove the lower screws of the timing case and move the coolant reservoir to one side to gain access to the engine mount. Once the engine has been suitably supported from below, remove the mount, along with the engine mount flange. Remove the upper half of the timing case, which allows the bottom half to be removed and exposes the timing drive system.

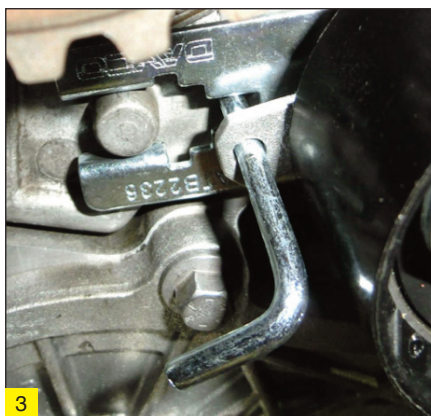
Using a suitable pin, such as drill bit, hold the camshaft pulley in its timing position. The crankshaft timing must be carried out with a pin inserted in a hole in



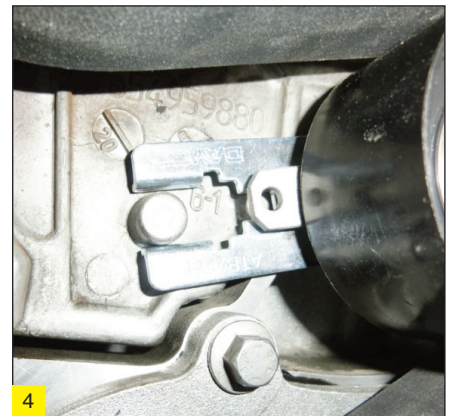
the engine block (Fig. 2). As this is difficult to reach, it is wise to paint a mark on the crankshaft pinion and engine case.

Loosen the bolt on the timing belt tensioner and remove both bolt and tensioner, followed by the timing belt. Replace the idler with the new one from the Dayco kit KTBWP4930 and tighten the nut to 35Nm. Using another suitable pin, hold the fuel injection pump pulley in the correct position and then remove the water pump.

Ensuring that the cooling system has been flushed through and no debris is present, install the new water pump,



complete with its seal, followed by the new tensioner, taking care to position it as shown (Fig. 3). While observing its direction of rotating arrows, install the new HT timing belt, with its slack section facing the tensioner.



With an Allen key, rotate the tensioner anticlockwise to tension the belt correctly and tighten the bolt to 25Nm. Rotate the engine and check the timing. The correct belt tension has been achieved if the tensioner is positioned as indicated (Fig. 4). Naturally, repeat the process if necessary.

Refit all the components in their reverse order, but check, and if necessary, replace the crankshaft pulley with Dayco DPV1068, the fastener for which should be tightened to 30Nm + 180 degrees, and the auxiliary belt tensioner APV1076. Dayco recommend the auxiliary belt 6PK975 should always be replaced.

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