

DAYCO EXTENDS ITS BEST PRACTICE ADVICE FOR FORD'S 1.0-LITRE ECOBOOST 'FOX' ENGINE

Dayco is a leading supplier of original equipment (OE) components to vehicle manufacturers across Europe and around the world. It is also a major player in the aftermarket, with power transmission components forming a large part of its growing range of products, many of which are supported by technical advice and installation guidance.



As the OE supplier of the timing and auxiliary drive systems used for the Ford 1.0-litre EcoBoost engine, not only is Dayco able to provide a genuine like-for-like replacement for the independent aftermarket, it's also the source of much helpful technical advice and direction, which is available in print, online and through various instructional videos.

In its latest bulletin, Dayco has extended this advice further to address some of the wider issues of the timing belt replacement on this unit because, although with the correct locking tools, the belt and tensioner replacement and timing reset are not particularly complicated tasks in themselves. Several associated steps need to be understood and applied correctly, to ensure a full and thorough repair.

This begins with the sealant that must be used on the timing belt cover and the sump, to ensure there is no leakage when the engine is refitted and refilled with oil. It is strongly recommended that this is sourced through a Ford dealer, as its specification is crucial and as it only has a 10 minute window before it starts to become hard and unmanageable, it's important for technicians to have all the tools and the cover bolts laid out and ready, before applying the sealant. However, further preparation is necessary before the application stage.

First, it is wise to replace the crankshaft oil seal before refitting the timing belt cover, but easier to fit the new one once the cover is secured in place and second, replacing the water pump is another best practice procedure and as two of the seven bolts that secure it are incorporated into the timing belt cover, it's also an obvious thing to do.

As the pump comes in a Dayco timing belt and water pump kit (Dayco KBIOWPO20 or KBIOWPO30 dependent

on the engine variant), it's also an easy option for workshops when ordering the parts, but installing the water pump properly is equally important. So, cleaning the mating surfaces and flushing out the old coolant, as well as priming the new pump, must not be overlooked and, as to seal correctly, it only needs the new gasket supplied with the kit, no sealant should be used.

To ensure that the sealant applied to the timing belt cover is in the correct quantity, on the right surfaces and the specified tightening sequence and torque values are followed, technicians must refer to a reputable source of service and repair data, such as that supplied by Autodata or HaynesPro. Likewise for the refitting of the sump.

Two crucial steps remain on this side of the timing belt installation, one is to fit a new friction washer, which is a part that is not fitted when the engine is originally built and only comes into play when a timing belt replacement is carried out, and the second the correct torque value and process for tightening the replacement crankshaft pulley bolt.

Although, providing the mating surfaces have been cleaned with brake and clutch dust remover, fitting the friction washer is straightforward, installing the new pulley bolt and applying the correct torque, without the pulley slipping, is less so.

The correct torque for the bolt is 300Nm plus 90°, so a torque multiplier will need to be used for the final tightening, but before that value is applied, the bolt first needs to be tightened to 25 and then 75Nm. However, as there is not a keyway in the pulley/crankshaft, to prevent it from slipping during the tightening procedure, a locking tool (supplied with the timing locking kit) must be inserted through a hole in the pulley, into the matching hole in the timing belt cover.

By using the appropriate Dayco timing belt kit (Dayco KBIO02 or KBIO03 dependent on the engine variant) and following these additional best practice procedures, technicians can tackle the replacement process with confidence and in the knowledge that they are able to make a first class repair.

For more information regarding the OE quality power transmission products in the Dayco range, please email: info.uk@dayco.com or visit: www.daycoaftermarket.com