

# NUMBER 033

#### 31/12/2009



Renault 1.4 & 1.6 16V / Synchronous Drive / Installation Info.

GATES REFERENCE: | 5501XS, 5671XS & related kits.

MAKE: DACIA / LADA / NISSAN / RENAULT.

MODEL: Clio, Duster, Fluence, Kangoo, Kubistar,
Laguna, Largus, Logan, Megane, Modus,

Sandero, Scenic, Symbol, Thalia, Twingo, Wind

MOTOR: Petrol 1.4 16V, 1.6 16V.

MOTOR CODE: K4J/K4M.



#### **Explanation:**

In this drive, excessive play from the water pump bearing often occurs, this leads to belt tracking forward and forces the camshaft pulley flanges to detach and possibly enter the drive system. The result is belt failure. Also earlier mechanical damage to the flanges can lead to this (Fig.1). The camshaft pulley design has changed on these engines (but the OE ref. remained the same), in order to prevent this failure mode.



Flange detached

Fig. 1

We always recommend servicing with a complete water pump kit. While changing the water pump, make sure the correct bolts/washers are used and torqued correctly.



# NUMBER 033

## 31/12/2009



Fig. 2 shows the little space between water pump bolt and tensioner pulley.

Fig.2

Incorrect part or bolt coming loose leads to tensioner pulley contact (Fig. 3).



Fig. 3

While installing the new idler pulley, ensure that the spacer (sitting between the old pulley and the engine block) is re-fitted between the new pulley and the engine block. If not, the idler pulley can touch the water pump, causing idler and belt failure (Fig. 4 and 5).



Fig. 4

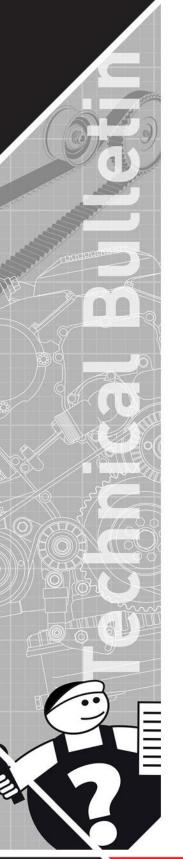
Rubbing mark

Fig. 5



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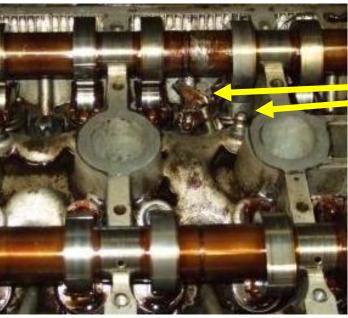
The crankshaft bolt can't be re-used. (OE ref. is 8200557644. This is supplied with the kit). The correct torque setting of this bolt is very important and varies per engine code or model. Incorrect torque causes bolt shear. (Fig. 6)



Bolt sheared

Fig. 6

In the event of an engine repair, after piston to valve contact, a close inspection of the camshaft rockers is essential. It is possible that rockers sustained damage. If so, the rockers must be replaced. Neglecting their replacement causes seizing of the camshaft. (Fig. 7)



Rocker broken

Fig. 7

It is recommended to use installation tool kit (GAT4960) to service this drive.

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