



Technical Service Bulletin

AUTOMOTIVE <> PASSENGER CAR

Timing Belt Tracking Issues on Renault Engines

Vehicles/Engines Related to this:

Make	Model	Engine	Year
Renault	Clio	1.4L 4 Cyl. (K4J) DOHC	2001-On
Renault	Clio	1.6L 4 Cyl. (K4M) DOHC	2001-On
Renault	Clio	1.4L (E7J) DOHC	1998-On
Renault	Clio	1.4L (K4J) 16v - Exclude Eng. K4J750	1999-On
Renault	Clio	1.6L (K4M) DOHC	1998-On
Renault	Kangoo (X76)	1.6L 4 Cyl. (K4M) DOHC	2004-On
Renault	Megane	1.6L 4 Cyl. (K4M) DOHC	1999-On
Renault	Scenic	1.6L 4 Cyl. (K4M) DOHC	2001-On

Failure Mode: Timing Belt tracking issues.

The timing belt tracks heavily toward the front of the engine which can cause the camshaft pulley flanges to detach and possibly enter the drive system (Fig. 1 shows a detached camshaft flange). This can result in timing system damage and complete timing belt failure.

Solution:

This failure mode originates from excessive movement of a worn or faulty water pump bearing.

To prevent this failure, it is recommended that the water pump is replaced at the same time as the timing belt, even if the Water Pump is not showing visible signs of fatigue.

Note: The OEM has revised the camshaft pulley design on these engines to help avoid this problem; however the OEM part number has remained unchanged.

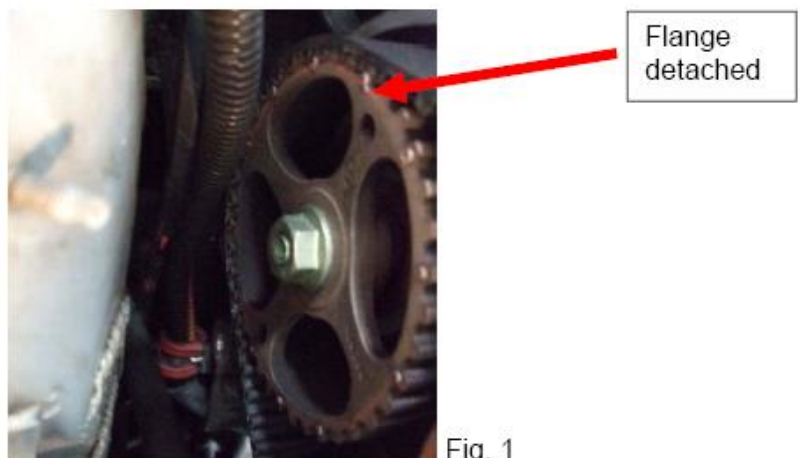


Fig. 1

Important instructions on Water Pump replacement

In the event of the camshaft pulley becoming loose or detached, Gates recommends that an OEM replacement is sourced.

Please note the following key items during installation.

1. While changing the water pump, ensure the original correct OEM bolts/washers are reused and torqued correctly to ensure clearance between the pulley and bolt head is maintained.

The correct bolt and correct clearance are critical items for this application and will cause issues if not correctly applied.



Fig.2

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

There is very little room for error here.



Fig. 3

Fig. 3 shows the result of pulley contact due to an incorrect aftermarket bolt being installed or a bolt coming loose.

2. When installing the new timing 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

Crankshaft Bolt Replacement & Rocker Inspection

3. The crankshaft bolt in this application **cannot** be reused. (OE reference number is 8200557644). Please ensure that the new crank bolt which is supplied in the Gates kit is fitted and correctly torqued.

If timing system failure and piston to valve contact has occurred, close inspection of the camshaft rocker assembly is essential. Breakage of the rocker arms is possible and replacement is necessary, Fig. 7 shows a broken rocker.

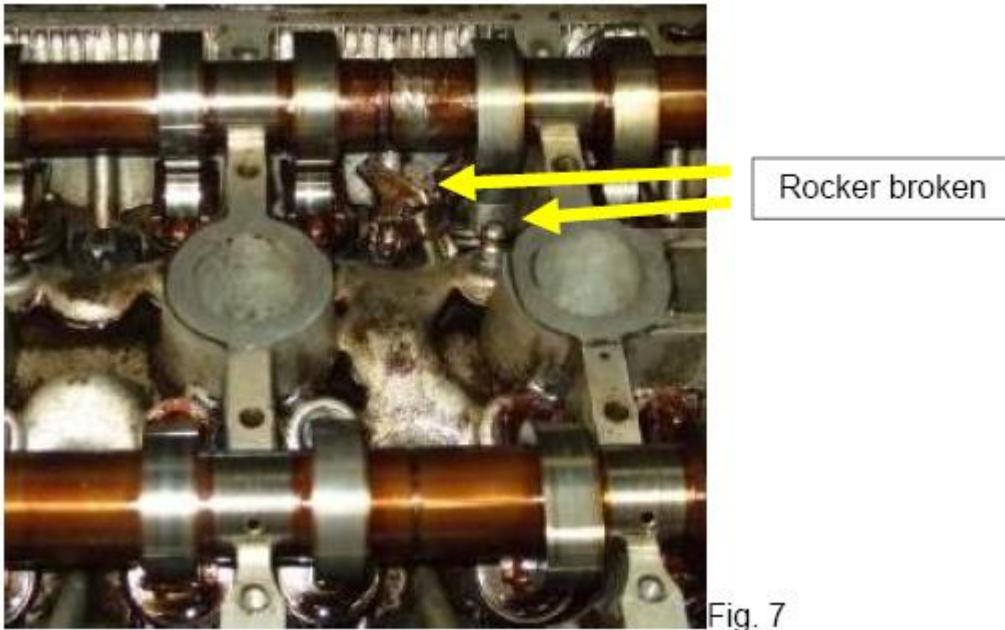


Fig. 7

Gates Timing Belt & Component Kit Part Numbers:

T1095

TCK1095

TCKWP1095 – Suits 1.6L engines only

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