



VKML 82000

Technical Bulletin – September 2015



Fiat Group 1.3 JTD, GM Group 1.3 D, 1.3 CDTI
PSA 1.3 HDI, Ford 1.3 TDCI, Suzuki 1.3 DDIS

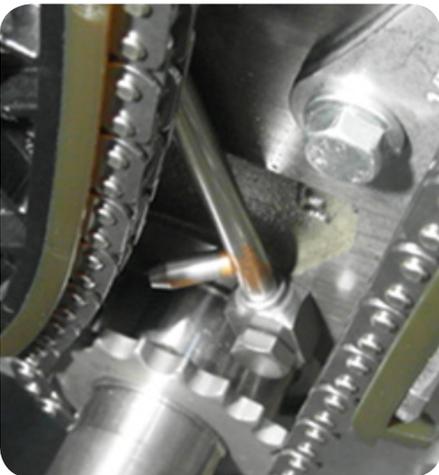


SKF recommendation for timing chain replacement.

Car Makes	Models	Engine	Complete kit OE Number
Fiat Group	Doblo, Idea, Mito, Panda, Punto, Qubo, 500, Musa, Ypsilon	1.3 JTD	71776647
Chevrolet	Aveo	1.3 D	-
Citroen/Peugeot	Bipper, Nemo	1.3 HDI	-
Ford	Ka	1.3 TDCI	-
Opel/Vauxhall	Agila, Astra, Combo, Corsa, Meriva, Tigra	1.3 CDTI	6 36 597, 95518770
Suzuki	Ignis II, Swift III, Wagon R+	1.3 DDIS	-

Proper lubrication is one of the most important precautions for maximum timing chain durability. It is often observed clogged/blocked oil spray pipes. The awareness of this phenomenon from mechanics and failure modes study, lead SKF to include the oil spray pipe in the kit VKML 82000.

Main root causes can be poor engine internal operating conditions due to mixing different specification oils or exceeded oil change intervals. This could result in contamination or sludge type residue formed through the degraded lubricant properties plus engine gases, and, in worst cases in total blockage of the spray pipe.



Note! Blocked oil spray jet can be easily overlooked or missed. Don't risk possible early failure of new parts.



Attention! Include the oil pipe contained in the kit in your maintenance procedure on above engines!



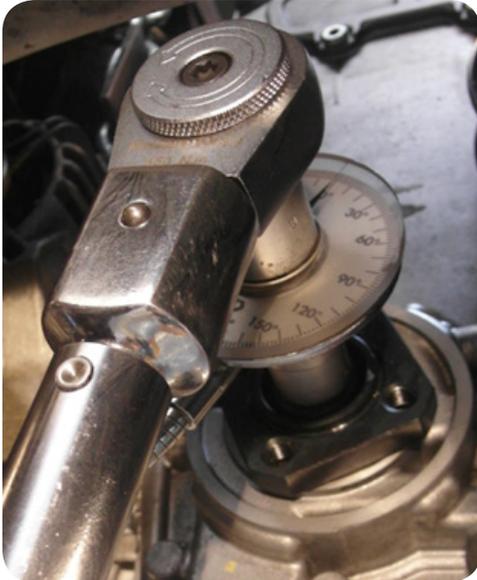
The SKF VKML 82000 timing chain kit with its components.

Advices for crankshaft bolt removal and tightening (VKA 10006)

The crankshaft sprocket doesn't have a key slot between crankshaft and sprocket, therefore **always** use a blocking tool before slacking the bolt. **Important:** the crankshaft bolt has a left thread:

Untighten =  Clockwise direction

Tighten =  Anticlockwise direction



Note! Due to high and different torquing methods, please check car manufacturers recommended specific torques. The torque value per brand can differ, even when the engine design is very similar.

 See Car Brand Torque table on following page.

Advices for camshaft sprocket change – bolt loosen and tightening



Attention! The camshaft sprocket does not have a key slot between camshaft and sprocket. Never use camshaft blocking tool to block the camshaft when removing the camshaft bolt! The high forces could destroy the blocking tool inside the engine and damage the camshaft!

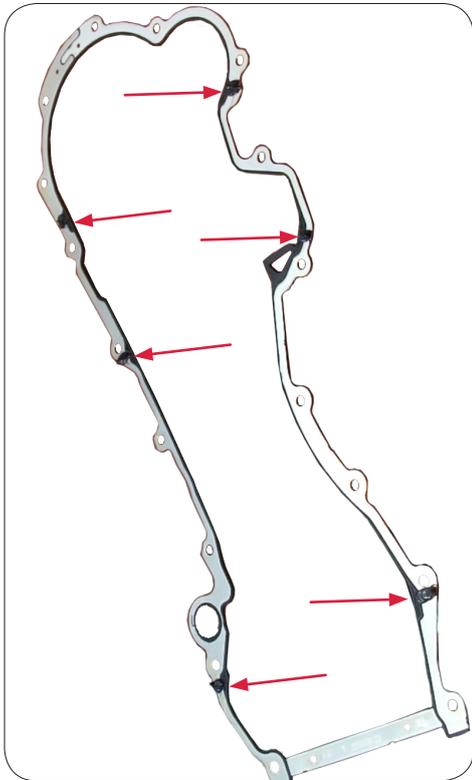
Advice! Remove the camshaft blocking tool before loosening the camshaft bolt and always use an appropriate camshaft retaining tool.

Note! The camshaft bolt is tightened with a high torque. Apply the recommended torque as preconized by car manufacturers.

 See Car Brand Torque table on following page.

Advices to avoid a moving gasket during installation

For a complete and professional repair, the metal gasket is included in SKF timing chain kit VKML 82000. It's strongly recommended to add some sealing paste points (avoid excessive paste) to keep the gasket in position during the repair.



Car Brand Torque table

Car Brand torque table	GM Group	PSA	Ford	Fiat	Alfa Romeo	Suzuki
Camshaft gearwheel bolt	150 Nm	150 Nm	168 Nm	120 Nm	150 Nm	120 Nm
2 x hydraulic piston bolt	9 Nm	9 Nm	9 Nm	9 Nm	9 Nm	9 Nm
Movable chain guide bolt	9 Nm	9 Nm	9 Nm	9 Nm	9 Nm	9 Nm
2 x fixed chain guide bolt	9 Nm	10 Nm	28 Nm	9 Nm	9 Nm	9 Nm
Central crankshaft pulley bolt	50 Nm + 90°	50 Nm + 75°	50 Nm + 90°	230 Nm	50 Nm + 75°	230 Nm
4 x small pulley bolt	25 Nm	25 Nm	25 Nm	25 Nm	25 Nm	25 Nm
2 x valve cover retaining bolt	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm



To perform an optimum and professional timing chain repair, always use manufacturers tools with SKF Timing chain kits!

Install confidence
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