

# AT4256 ENGINE TIMING TOOL SET - RENAULT DCi

**WARNING - INCORRECT OR OUT OF PHASE TIMING CAN RESULT IN MECHANICAL CONTACT BETWEEN THE VALVE HEAD AND THE PISTON CROWN CAUSING SERIOUS DAMAGE TO THE ENGINE. No responsibility can be accepted for any damage arising from the incorrect use of these specialised tools.**

The following general guidelines outline some of the general safety precautions and standard workshop practices applicable to engine timing procedures when replacing an engine timing belt / chain

**ALLOW THE ENGINE TO REACH THE AMBIENT TEMPERATURE OF THE WORKSHOP BEFORE WORKING ON THE ENGINE.**

**DO NOT USE TIMING PINS TO LOCK THE ENGINE WHEN UNDOING OR TIGHTENING PULLEY BOLTS - refer to your workshop manual for detailed procedures for each specific vehicle.**

**ALWAYS turn engine in the normal direction of rotation (clockwise) unless otherwise stated in your workshop manual.**

**DO NOT turn the camshaft, crankshaft, or diesel injector pump when the timing belt has been removed.**

**DO NOT turn the crankshaft from the camshaft or other drive sprockets via the timing belt.**

**REMOVING spark plugs or glow plugs will make it easier to turn the engine over manually.**

**MARK DIRECTION of rotation if timing belt is to be re-fitted. Always refit so that the original direction of rotation is maintained.**

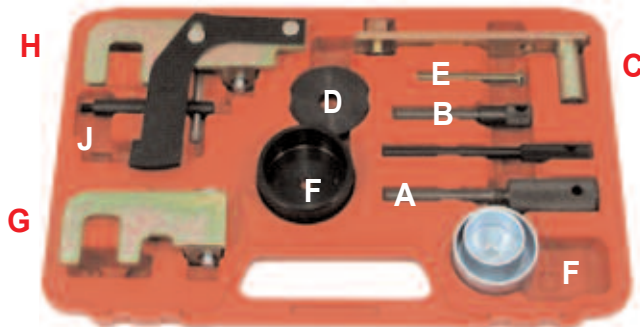
**ALWAYS check diesel injection pump / ignition timing after replacing the engine timing belt.**

**AFTER USE REMOVE ALL SETTING PINS / LOCKING PLATE. TURN THE ENGINE OVER TWICE BY HAND TO COMPLETE A FULL CYCLE. RE-GAIN ENGINE SETTING POSITION (USUALLY TOP DEAD CENTRE) RE-INSERT SETTING TOOLS TO RE-CHECK THAT THE ALIGNMENT IS CORRECT.**

**REMOVE SETTING TOOLS AND CHECK TO ENSURE THERE IS NO OBSTRUCTION BY TURNING THE ENGINE OVER TWICE BY HAND TO COMPLETE A FULL CYCLE.**

Clio Espace Kangoo Laguna Megane Modus Scenic Twingo Master Traffic  
GM Vivaro Movano / Nissan Almera Micra Note Primera Qashai etc

Diesel : 1.5 K9K / 1.9 F9Q - 2.2 G9T / 2.5 G9U - DCi / DTi - belt driven engines



**ALWAYS REFER TO A REPUTABLE WORKSHOP MANUAL FOR THE SPECIFIC VEHICLE TO BE SERVICED TO OBTAIN DETAILED STEP BY STEP INSTRUCTIONS COVERING THE CORRECT USE OF THESE SPECIALISED TOOLS**

**PLEASE SEE NOTES OVERLEAF - REGARDING THE USE OF ITEMS G + H**

<u>REF</u>	<u>DESCRIPTION</u>		<u>OEM</u>	<u>REF</u>
A	Crankshaft Timing Pin	(1.5 DCi)	MOT1489	A
B	Crankshaft & Camshaft Timing Pin	(1.5 / 1.9 DCi)	MOT1430	B
C	Belt Tensioner	(1.9 DCi)	MOT1543	C
D	Belt Tensioner	(1.9 DCi)	MOT1543	D
E	M6 Bolt to adjust Tensioner	(1.9 DCi)	MOT1543	E
F	3 Spacers for Tensioner	(1.9 DCi)	MOT1543	F
G	Inlet Camshaft Alignment Tool	(2.2 / 2.5 DCi)	MOT1534	G
H	Exhaust Camshaft Alignment Tool	(2.2 / 2.5 DCi)	MOT1537	H
I	Crankshaft Timing Pin	(2.2 / 2.5 DCi)	MOT1536	I
J	High Pressure Pump Sprocket Pin	(2.2 / 2.5 DCi)	MOT1538	J

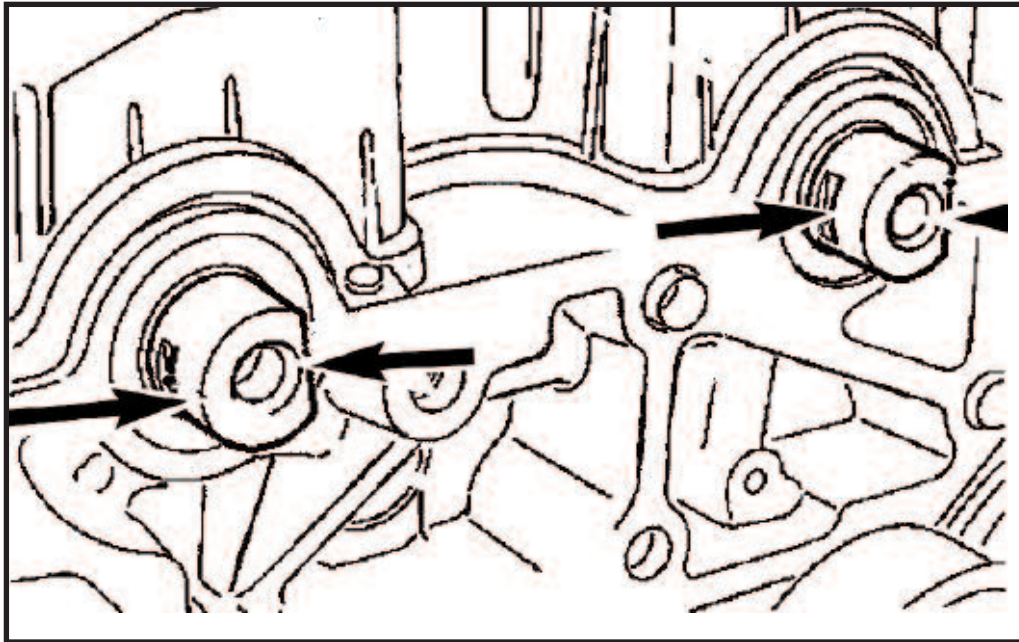
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FOR USE WHEN REPLACING ENGINE TIMING BELTS :

**2.2 DCi / 2.5 DCi** G9T / G9U Diesel Engines

Espace / Master (2000 - 2004) GM Movano 2.2 DTi (2000 - 2004)



## CAMSHAFT ALIGNMENT GUIDANCE NOTES

The camshaft alignment tools G & H should locate into the camshafts.

Check that the camshafts are aligned correctly - the flat surfaces on the ends of the camshafts should be in a vertical position and the grooves in the camshafts must be on the left-hand side.

If this is not so, then remove the Crank Timing Pin, rotate the crankshaft one turn and re-fit the Crank Timing Pin.