

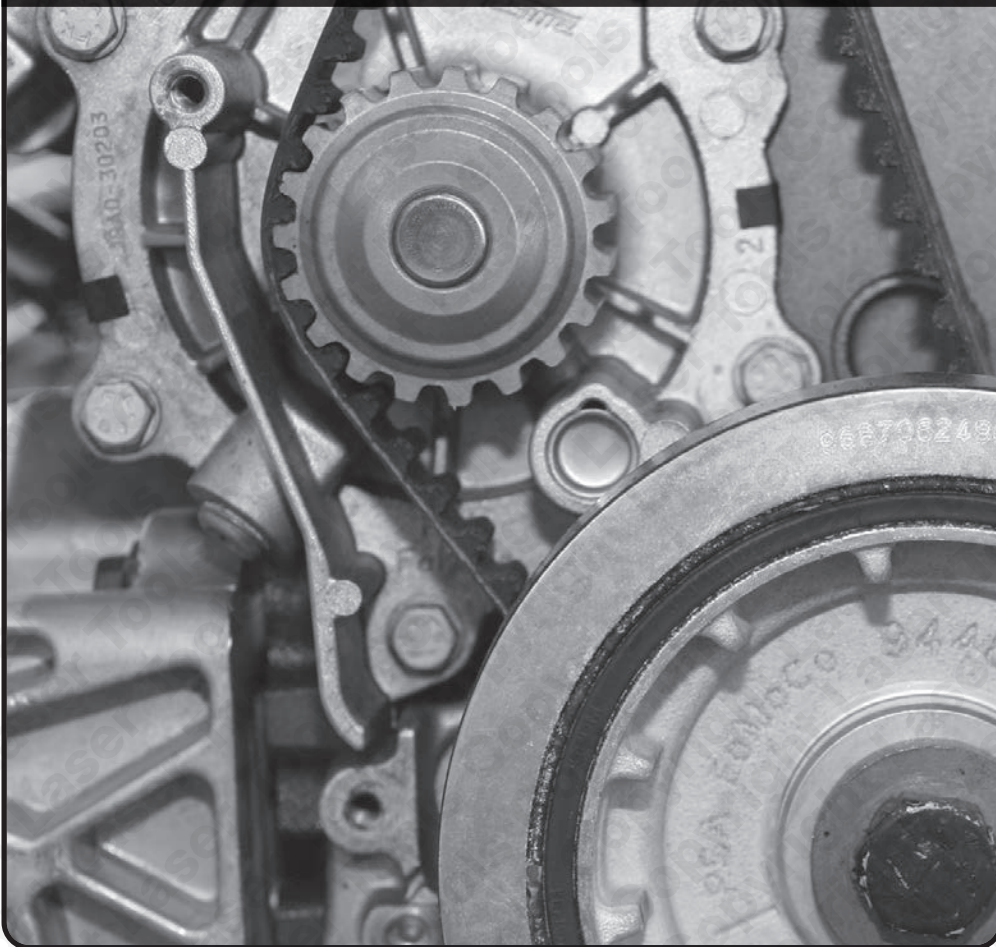
LASER[®]

Part No. 4773

Instructions

Engine Timing Tool Kit

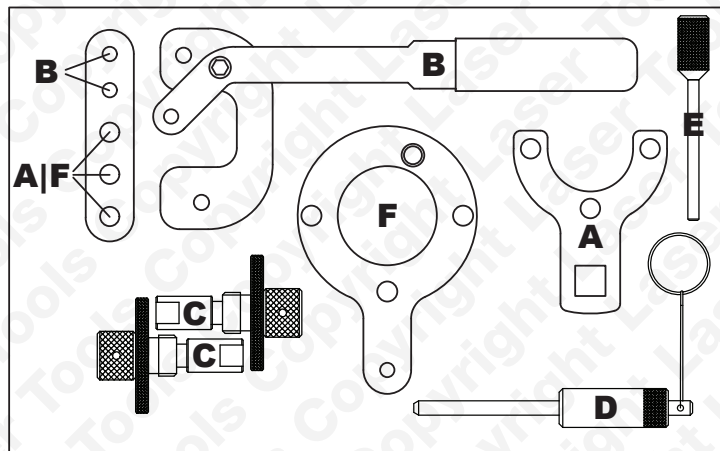
Ford, Fiat, Opel, PSA 1.3 Diesel



*Please refer to www.lasertools.co.uk/toolpoint
to check the most up to date product applications.*

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Components



Ref.	Code	OEM Ref	Description
A	C415	1 871 000 200 KM-662-C 303-1469	Crankshaft Pulley Flange Holding Wrench
B	C416	1 870 900 400	Timing Chain Tensioner Lever
C	C255	1 871 000 900 EN 46781 0104-A 303-1472	Camshaft Alignment Tool x2
D	C276	EN 46785	Flywheel Pin with Spring
E	C101	303-735	8mm Crank Locking (Flat)
F	C417	1 870 900 300 303-1468	Crankshaft Timing Position Tool

Applications

The following instructions are for guidance only. Please refer to OEM derived data such as the vehicle manufacturers' own data or Autodata.

The use of this engine timing tool kit is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused whatsoever.



- Always consult a suitable work shop manual before attempting to change the Cam belt or Chain.
- The use of these engine timing tools is purely down to the user's discretion and The Tool Connection cannot be held responsible for any damage caused what so ever.

ALWAYS USE A REPUTABLE WORKSHOP MANUAL

Applications

Marque	Model	Year	Engine Codes
Alfa Romeo	MiTo	2008 - 2018	1,3 JTDM
			330A1.000
			199A3.000
			199B1.000
			199B4.000
Chevrolet	Aveo	2011 - 2015	1,3 VCDi
			LDV/A13DTC LSF/A13DTR
Chrysler	Ypsilon	2011 - 2015	1,3 MultiJet
			199B1.000
Citroen	Nemo	2010 - 2016	1,3 HDi
			FHZ (F13DTE5)
Fiat	500/500C	2007 - 2019	1,3 MultiJet
	500L	2012 - on	55266963
	500X	2015 - on	55283775
	Doblo	2004 - 2019	169A1.000
	Fiorino	2008 - 2019	169A5.000
	Grande Punto	2005 - 2012	188A8.000
	Idea	2004 - 2012	188A9.000
	Linea	2007 - 2016	199A2.000
	Panda/Panda Classic	2003 - 2019	199A3.000
	Punto/Punto Classic	2003 - 2019	199A9.000
	Qubo	2008 - on	199B1.000
	Tipo	2015 - on	199B2.000
			199B4.000
			199B8.000
			223A9.000
			225A2.000
			263A2.000
			263A6.000
			312A8.000
			312B1.000
			312B2.000
			312B5.000
			330A1.000
			955B2.000

Applications

Marque	Model	Year	Engine Codes
Ford	Ka	2008 - 2015	1,3 TDCi
			169A1.000 (FD4) / BAAA/B
Lancia	Musa	2004 - 2013	1,3 MultiJet
	Ypsilon	2003 - 2015	188A9.000
			199A2.000
Opel/ Vauxhall	Agila	2003 - 2010	199A3.000
	Astra-H	2004 - 2009	199A9.000
	Astra-J	2009 - 2015	199B1.000
	Combo-C	2003 - 2012	843A2.000
	Combo-D	2012 - 2018	1,3 CDTi
	Corsa-C	2003 - 2007	A13DTC
	Corsa-D	2006 - 2014	A13DTE
	Meriva-A	2003 - 2010	A13DTR
	Meriva-B	2010 - 2015	D13A
	Tigra-B	2004 - 2010	LDV/A13DTC
	Zafira-B	2006 - 2010	LN9/A13DT (263A2.000)
Peugeot	Bipper	2010 - 2016	LSF/A13DTC
			LSF/A13DTE
Subaru	Justy G3X	2004 - 2009	Y13DT
			Z13DT
Suzuki	Ignis	2003 - 2009	Z13DTE
	Splash	2008 - 2011	Z13DTH
	Swift	2004 - 2015	Z13DTI
	Wagon R+	2003 - 2008	Z13DTJ

Always refer to the website for most up to date applications: www.lasertools.co.uk/product/4773

Instructions

Preparation

- Support engine and remove the timing chest side engine mounting to gain access to the engine service hatches.
- Lift the fuel rail and engine wiring clear to gain access to the camshaft locking blanking plugs.

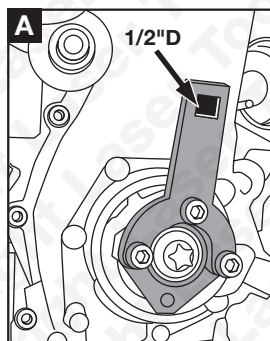
Instructions

Component A

Use this tool to hold the Crankshaft Pulley Flange still whilst releasing the pulley flange centre bolt (left hand thread). In order to gain access to the pulley flange the pulley must first be removed by removing the 4 outer fixings pulley fixings.

NB: Do not release the pulley flange centre bolt until the cam and crank timing pins are in place.

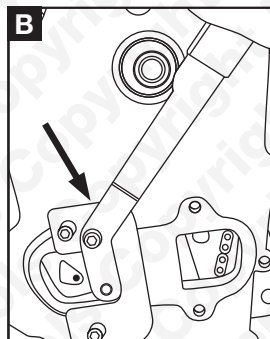
Do not attempt to loosen or tighten the pulley centre bolt with out holding the flange with the flange tool or the crankshaft and camshaft tools will be damaged.



Component B

The Timing Chain tensioning tool is used to clamp the timing chain when replacing the gasket on the one-piece cylinder head. The tool is attached in alignment with the inspection opening on the engine control cover so that the pin acts upon the ribs of the chain slider. Retract the chain tensioner piston so that it moves back to its locked position using the lever.

Ensure the tensioner has fully extended before attempting to retract it.



Instructions

Components C

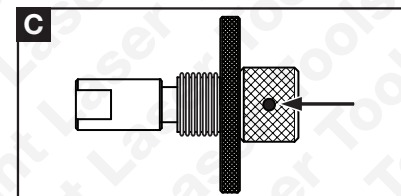
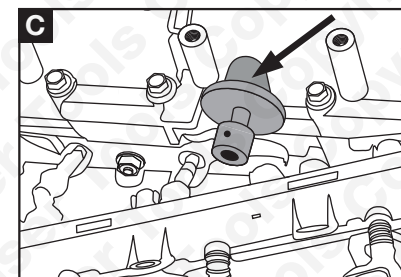
These camshaft locking tools are used to lock the camshafts in position.

Access must first be gained to the blanking plugs that are positioned one on the front of the cam cover and one on the rear of the cam cover. Lift the high pressure fuel rail and engine wiring harness to gain access.

Remove the blanking plugs and screw the locking tools into place with the flats on the inner section of the tools horizontal.

The tools are correctly fitted when the inner section of the tools can be easily pushed in with finger pressure.

NB: These tools are for setting the position of the camshafts. Do not attempt to loosen or tighten any fixings on the camshaft using these tools to lock the camshaft as damage will result.



Components D & E (application dependent)

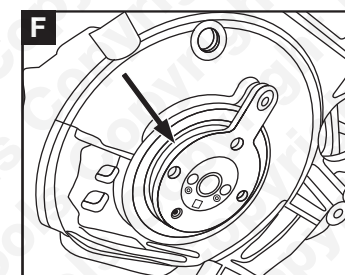
The flywheel alignment pins are used to lock the position of the flywheel to ensure the crankshaft is in the correct timed position to match the camshafts.

NB: These tools are for setting the position of the crankshaft, do not attempt to loosen or tighten any fixings on the crankshaft using these tools to lock the crank as damage will result.

Components F

This tool is used to set the control position of the crankshaft (flywheel end) with engine removed when a complete engine rebuild is required. The tool is attached to the crankshaft using the three fasteners (From Item A) in place of the flywheel.

Always follow the vehicle manufacturers' instructions.



Safety Warnings - please read

- If the engine has been identified as an Interference engine, damage to the engine will occur if the timing belt has been damaged. A compression check of all the cylinders should be taken before the cylinder head (s) are removed.
- Do not turn crankshaft or camshaft when the timing belt/chain has been removed.
- To make turning the engine easier, remove the spark plugs/glow plugs or injectors.
- Observe all tightening torques.
- Do not turn the engine using the camshaft or any other sprocket.
- Disconnect the battery earth lead (check Radio code is available).
- Do not use cleaning fluids on belts, sprockets or rollers.
- Some toothed timing belts are not interchangeable. Check the replacement belt has the correct tooth profile.
- Always mark the belt with the direction of running before removal.
- Do not lever or force the belt onto its sprockets.
- Do not use timing pins to lock the engine when slackening or tightening the crankshaft pulley bolts.
- ALWAYS REFER TO A REPUTABLE MANUFACTURERS WORKSHOP MANUAL.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



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