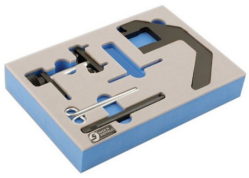

LASER 3577 Timing Tool Kit Instructions

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LASER 3577 Timing Tool Kit

Product Information

Engine Timing Tool Set

Part No. 3577

The Engine Timing Tool Set is designed for use with BMW 2.0/3.0 16V Diesel engines (M47/57). It is a comprehensive tool kit that enables correct timing to be made when servicing these engines. The kit includes various components such as Crankshaft TDC Setting Pin, Camshaft Setting Plate, Clamp assembly for Camshaft Alignment,4.0mm Tensioner Retaining Pin (2), and upgrade components available separately.

The Engine Timing Tool Set is compatible with various BMW models including 1 Series, 3 Series, 5 Series, 6 Series, 7 Series, X3, and X5. It also works with Land Rover Freelander TD4 and Rover 75 2.0 diesel M47R.

Engine Codes compatible with this tool set include
(E81/82/87/88), (E46), (E90/91/92/93), (E39), (E60/61), (E63/64), (E38), (E65/66), (E83), (E53), (E70), (E71), (L314), and (L322).

Always refer to the website for the most up-to-date applications: **www.lasertools.co.uk/product/3577**

Note: The use of this engine timing tool kit is at the user's discretion. The Tool Connection Ltd. cannot be held responsible for any damage caused.

Product Usage Instructions

A. Crankshaft TDC Setting Pin

This tool fits all engines and is inserted through the flywheel casing and into the timing position hole in the flywheel after the crankshaft has been turned to TDC (Top Dead Centre) on No.1 cylinder. Check for corrosion on the steel engine block and clean away any corrosion that may prevent the Setting Pin from being fitted.

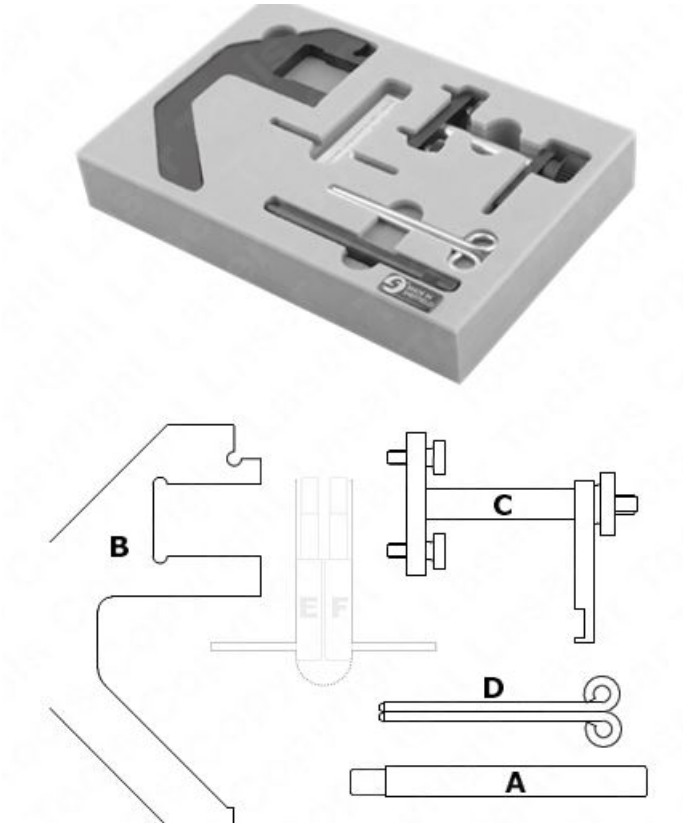
B. Inlet Camshaft / Exhaust Camshaft Camshaft Locking Tool

This tool is fitted to the inlet and exhaust camshaft in turn.

The outside faces of the tool must make contact on the cylinder head, as shown by the arrows, after being fitted over the flats on the camshaft. If the correct fitting and contact cannot be achieved, adjustment to the timing is required.

C. Clamp
This clamp is used for Camshaft Alignment. Please refer to the user manual for detailed instructions on how to use this component.

Components



Ref.	Code	OEM Ref.	Description
A	C020	11-2-300	Crankshaft TDC Setting Pin
B	C028	11-6-320	Camshaft Setting Plate
C	C029	11-6-322	Clamp assembly for Camshaft Alignment Tool
D	C030	11-3-340	4.0mm Tensioner Retaining Pin (2)
E	C526	11-5-180	Upgrade component available separately – Part No. 5166
F	C527	11-6-080	Upgrade component available separately – Part No. 5166

Applications

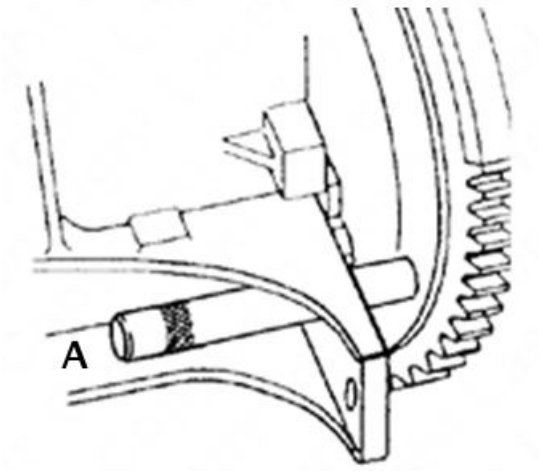
Make, Model, Range, Year					Engine Codes
BMW	1 Series	118d, 120d	(E81/82/87/88)	2004 - 2007	**2,0** 20 4D 1 20 4D 4 * **2,5** 25 6D 1 25 6D 2 * **3,0** 30 6D 1 30 6D 2 30 6D 3 * 30 6D 4 * 30 6D 5 *
	3 Series	318d, 318td, 320d, 320td, 330d	(E46)	1998 - 2007	
	3 Series	318d, 320d, 325d, 330d, 335d	(E90/91/92/93)	2005 - 2013	
	5 Series	520d, 525d, 530d	(E39)	1998 - 2003	
	5 Series	520d, 525d/Xd/xDrive, 530d, 535d	(E60/61)	2003 - 2010	
	6 Series	635d	(E63/64)	2007 - 2011	
	7 Series	730d	(E38)	1998 - 2002	
	7 Series	730d	(E65/66)	2002 - 2008	
	X3	2.0d, 3.0d/sd, xDrive 30d, xDrive 35d	(E83)	2003 - 2010	
	X5	3.0 D Turbo	(E53)	2003 - 2007	
	X5	3.0 sd, xDrive 30d, xDrive 35d	(E70)	2006 - 2010	
	X6	xDrive 30d, xDrive 35d	(E71)	2008 - 2010	
MG	ZT/ZT-T			2001 - 2005	**2,0 CDTi** M47R
Rover	75			1999 - 2005	
Land Rover	Freelander	(L314)	(L314)	2000 - 2006	**2,0 TD4** 204D3/TD4 **3,0 TD6** 306D1/TD6
	Range Rover	(L322)	(L322)	2002 - 2006	

Always refer to the website for most up to date applications: www.lasertools.co.uk/product/3577

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.

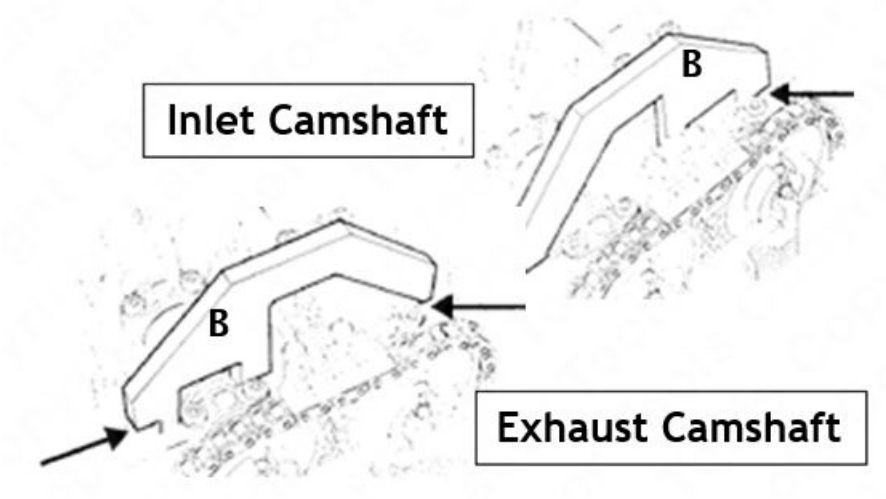
Instructions

This set of tools enables the correct timing to be made when servicing the BMW M47/57 engines as fitted in models 320d (E46), 520d (E39), Land Rover Freelander TD4, Rover 75 2.0 diesel M47R.
Upgrade component for M57 | M47S available separately –
Part No. 5166 (OEM 11 5 180/11 6 080).
Supplied in a cardboard storage case fitted with a 'tool-control' tray.
(Metal case also available separately – Part No. 4536).



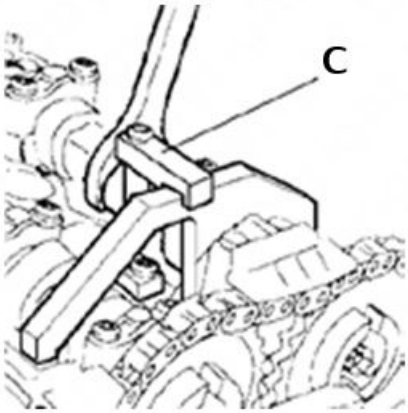
Crankshaft TDC Setting Pin
This tool fits all engines and is inserted through the flywheel casing and into the timing position hole in the flywheel after the crankshaft has been turned to TDC (Top Dead Centre) on No.1 cylinder.

Note. Check for corrosion on the steel engine block, normally found on the straight 4 cylinder engine as this may prevent the Setting Pin from being fitted, clean away the corrosion.



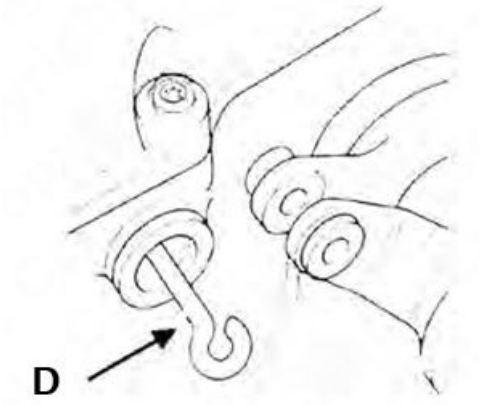
Camshaft Locking Tool
This tool is fitted to the inlet and exhaust camshaft in turn. The outside faces of the tool must make contact on the cylinder head, as shown by the arrows, after being fitted over the flats on the camshaft.
Adjustment to the timing is required if the correct fitting and contact cannot be achieved.

Clamp C – Camshaft Locking Plate
These tools are used when timing adjustment is necessary. The camshafts are turned to the correct timing position after the Sprocket retaining fasteners have been loosened.
The camshaft is held using an open-ended spanner on the hexagon.
The sprockets should be free to rotate but not too loose to tilt.
The camshaft Locking Plate Clamp is fitted first, using the mounting screws provided.



The Clamp Plate is then fitted over the camshaft and the camshaft position adjusted until all the contact points register. This position is then held by attaching the top latch of the clamp over the locking plate and securing. Additionally hold the camshaft position with and open-ended spanner whilst the sprocket is retightened.

Tensioner Retaining Pins (2)
Before the removal of the camshafts, sprockets and timing chain the Tensioner is compressed by turning the exhaust camshaft slowly in an anti-clockwise direction using an open-ended spanner, it is necessary to retain the tensioner by using the Retaining Pins. Both pins are used if the Tensioner has to be removed.
It is recommended the tensioner be retained with the Pins prior to removal, as considerable force is required to compress it.



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.

When you have finished with this leaflet please recyde it

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Guarantee
If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear and tear are excluded as are consumable items and abuse.

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Documents / Resources

	**LASER 3577 Timing Tool Kit** [pdf] Instructions 3577 Timing Tool Kit, 3577, Timing Tool Kit, Tool Kit

References

- **Laser Tools | Premier Automotive Hand Tools designed to make easy work of difficult and awkward jobs.**
- **Laser Tools 3577 Timing Tool Kit - for BMW, Land Rover**