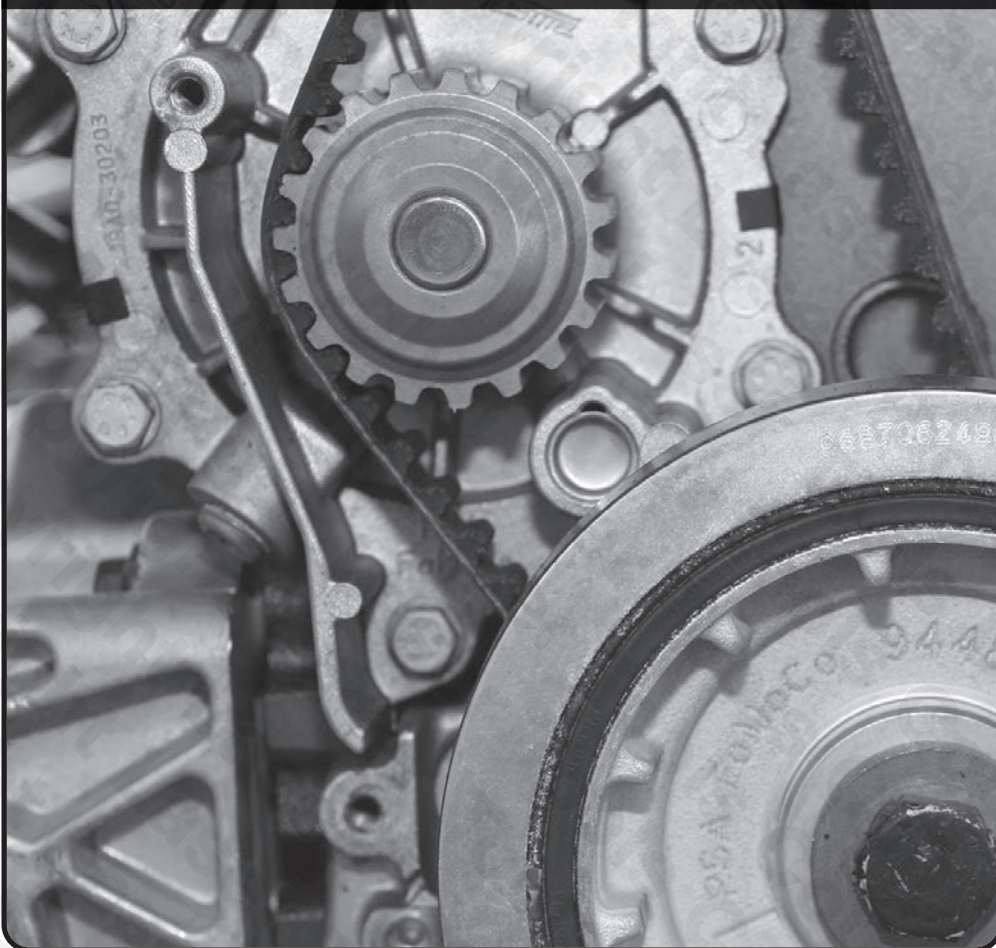


LASER[®]

Part No. 7390

Instructions

Engine Timing Tool Kit BMW/MINI N13, N18



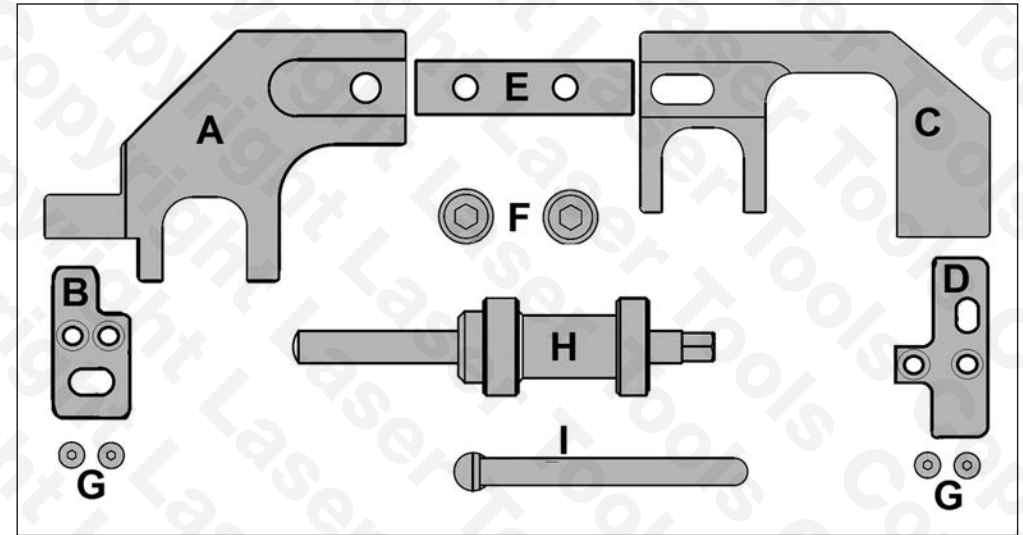
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Introduction

An engine timing kit designed to allow the timing to be set and checked on the 1.6 BMW engines found in the BMW & MINI ranges from 2010 to 2017. Engine codes covered include the popular N13 & N18 BMW petrol engines.

- Applications: BMW 1.6 petrol engines N13, N18.
- BMW models: 1 Series, 3 Series.
- Mini models: Clubman, Countryman, Coupe, Mini Paceman, Roadster.
- Exhaust/Inlet Camshaft alignment EU registered design.

Components



Ref.	Comp. Code	Description	OEM Ref.
A	C789	Exhaust Camshaft Alignment Tool	11 7 440
B		Exhaust Camshaft Alignment Tool Foot	
C	C792	Inlet Camshaft Alignment Tool	
D		Inlet Camshaft Alignment Tool Foot	
E	N/A	Link Bar	
F	N/A	M10 x 15 Cap Head Screws x 2 use with E	
G	N/A	M5 x 10mm Countersunk Screws x 4	
H	C786	Dummy Timing Chain Tensioner	11 9 340
I	C785	Flywheel Timing Pin	2 299 362

Applications

Manufacturer	Model		Range	Year	Engine Codes
BMW	1 Series	114i, 116i, 118i, 120i	F20/21	2011 - 2015	1.6
	3 Series	316i, 320i EfficientDynamics	F30/31	2012 - 2015	N13 B16A
Mini	Clubman	Cooper S, JCW	R55	2011 - 2014	1.6
	Mini	Cooper S, JCW	R56/57	2010 - 2015	N18 B16A
	Coupe	Cooper S, JCW	R58	2011 - 2015	N18 B16A/MO
	Roadster	Cooper S, JCW	R59	2012 - 2015	N18 B16A/MO
	Countryman	Cooper, Cooper S, JCW	R60	2010 - 2017	N18 B16C
	Paceman	Cooper, Cooper S, JCW	R61	2013 - 2017	N18 B16C/TO

Always refer to the website for most up to date applications:
www.lasertools.co.uk/product/7390

Instructions

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

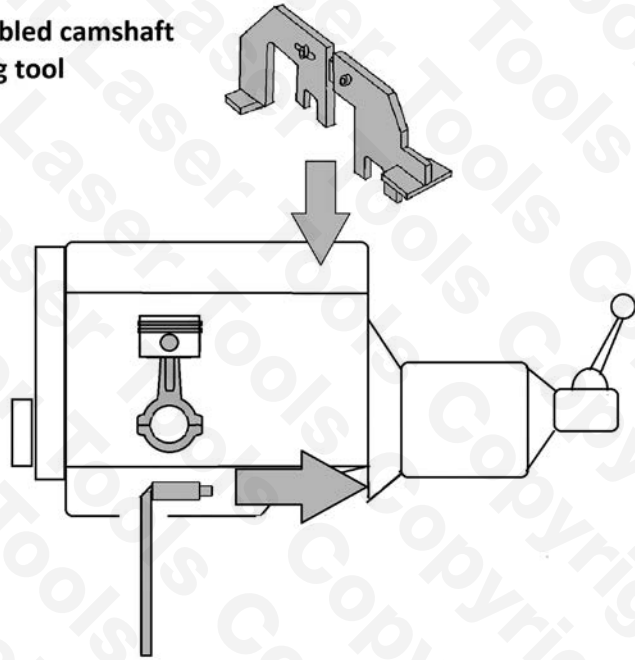
The use of this engine timing tool kit is purely down to the user's discretion and The Tool Connection Ltd cannot be held responsible for any damage caused whatsoever.



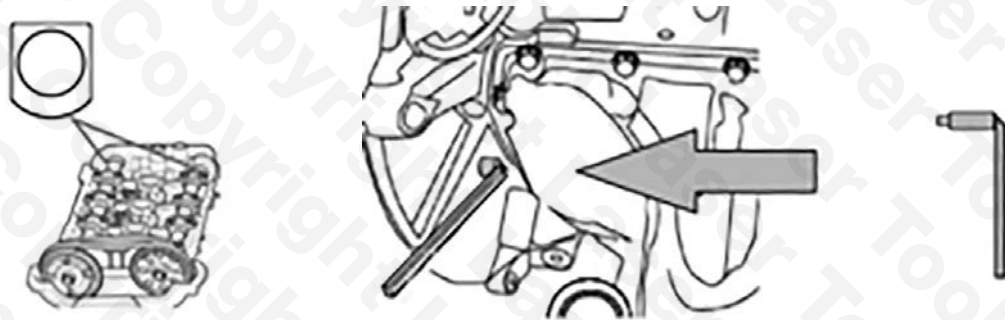
Instructions

Basic Component Use

Assembled camshaft locking tool



- Lock the engine with all pistons at equal heights, use a suitable rod or measurement tool to ensure piston 3 and 4 are level. Insert the flywheel timing pin (I).
- Ensure the camshafts are correctly aligned with their alignment flats positioned as shown.

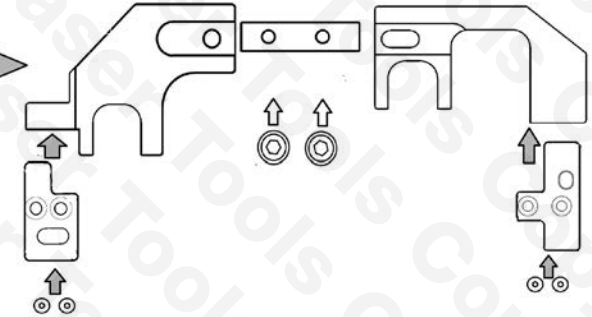


Instructions

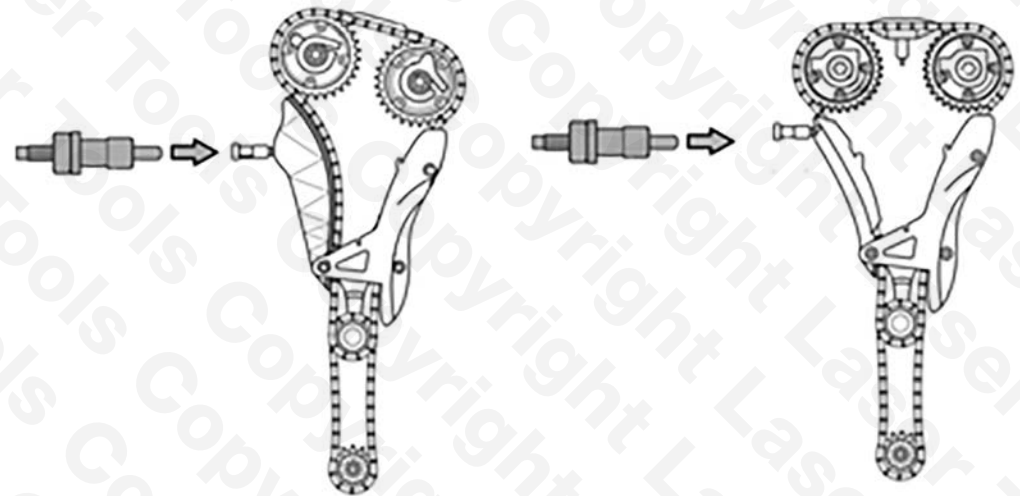
- Assemble the camshaft locking tools as shown below.
- Lock both camshafts.

NB: Mount the camshaft locking components with the link bar (E) facing the gearbox end of the engine.

BMW N13/N18 = A+B+C+D+E+F+G
OEM = 11 7 440



Use component (H) dummy timing chain tensioner tool to pre-load the timing chain when setting the timing. Tighten the pre-tensioner to OEM specification.



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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Guarantee

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