

# LASER®

Part No. 8148

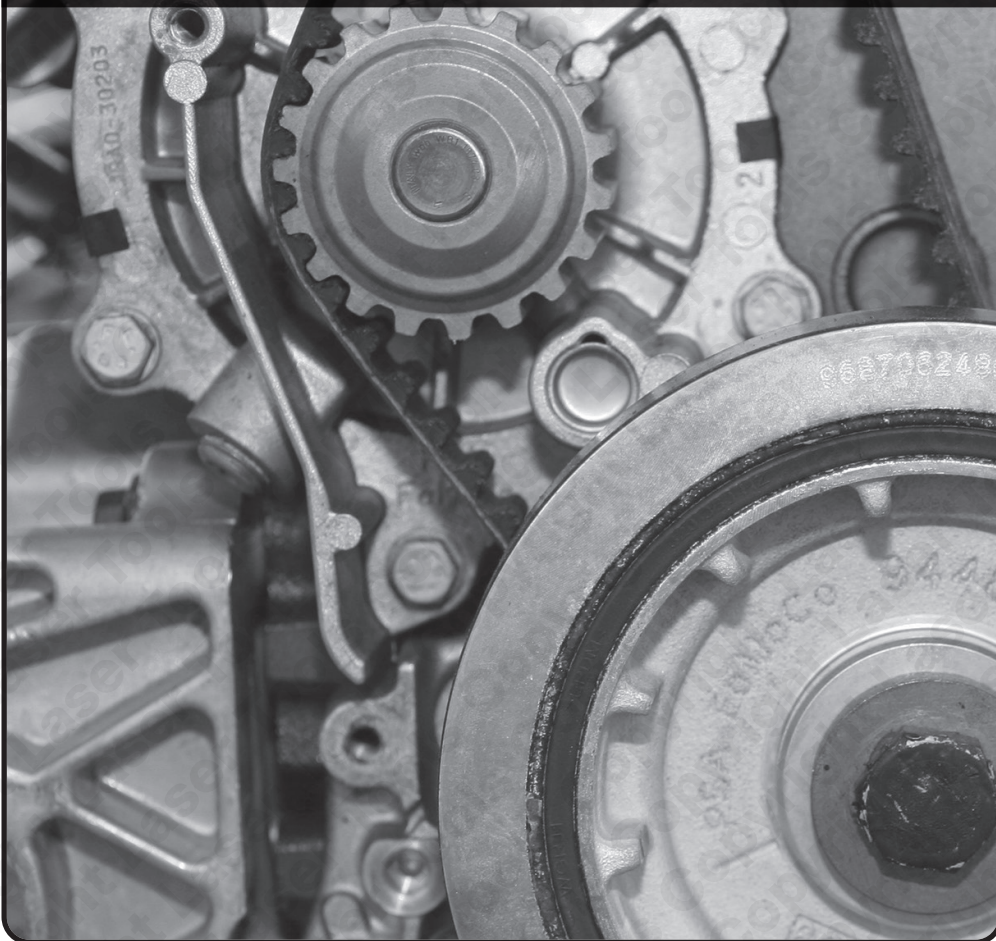
## Instructions

### Engine Timing Tool Kit

 **MADE IN  
SHEFFIELD**

Mercedes-Benz, Renault  
1.3L Petrol

**EU REGISTERED  
DESIGN**



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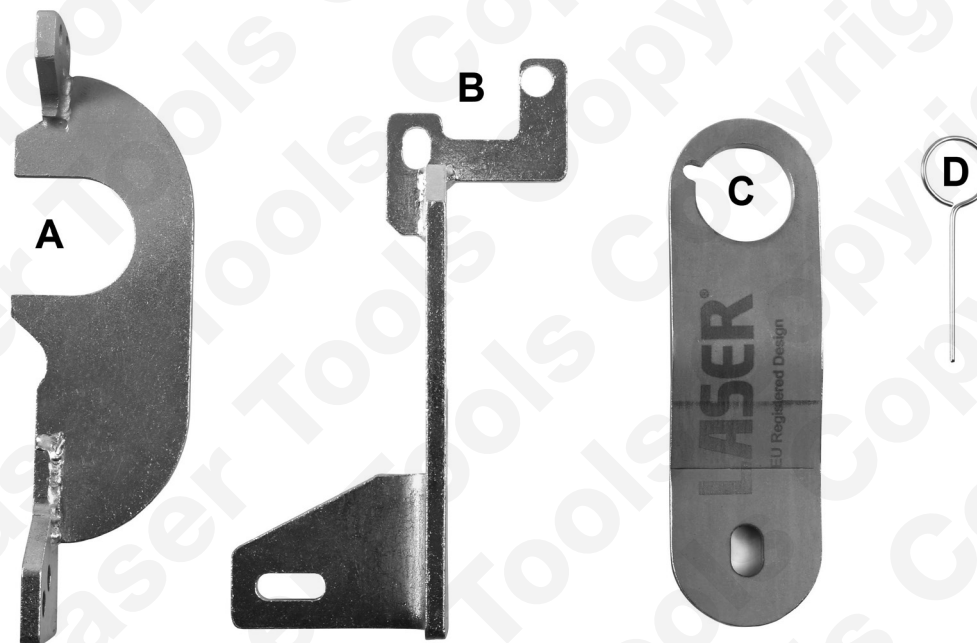
## Introduction

Engine timing kit designed to allow the replacement of the timing chain on the latest Mercedes-Benz and Renault chain driven twin camshaft 4 cylinder 1.3L petrol engines.

- Specifically for Mercedes-Benz 242.914, Renault H5H & also Nissan HR13DDT engines.
- Mercedes-Benz applications include: A, B, CLA, GLA & GLB class (from 2018).
- Renault applications include: Arkana (from 2019), Captur (from 2018), Clio V (from 2019), Kadjar (from 2018), Megane (from 2017), Scenic (from 2018) & Talisman (from 2018). Nissan applications include: Qashqai (from 2018) & X-Trail (2019-2021).
- Equivalent to OEM refs. 282 589 00 23 00 & MOT 2203.
- Kit consists of 2 camshaft timing tools & 1 crankshaft alignment tool.

*For Flywheel locking, please use Laser Part No. 8144.*

## Components



Ref.	Comp. Code	Description	OEM Ref.
A	C968	Inlet Camshaft Timing Tool	282 589 00 23 01 (part of 282 589 00 23 00), MOT 2203
B	C969	Exhaust Camshaft Timing Tool	282 589 00 23 02 (part of 282 589 00 23 00), MOT 2203
C	C970	Crankshaft Alignment Tool	282 589 00 23 03 (part of 282 589 00 23 00)
D	C284	Tensioner Retaining Pin	

## Applications

Manufacturer	Model	Year	Engine Codes
Dacia	Dokker	2019 - 2021	282.914
	Duster	From 2018	H5H 450
	Lodgy	From 2019	H5H 460
Mercedes-Benz	A-Class	From 2018	H5H 470
	B-Class	From 2019	H5H 480
	CLA	2019 - 2023	H5H 490
	GLA	From 2020	H5H 494
	GLB	From 2019	HR13DDT
Nissan	Qashqai	From 2018	
	X-Trail	2019 - 2021	
Renault	Arkana	From 2019	
	Captur	From 2018	
	Clio V	From 2019	
	Kadjar	From 2018	
	Megane IV	From 2017	
	Scenic/Grand Scenic	From 2018	
	Talisman	From 2018	

Always refer to the website for most up to date applications:  
[www.lasertools.co.uk/product/8148](http://www.lasertools.co.uk/product/8148)

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.

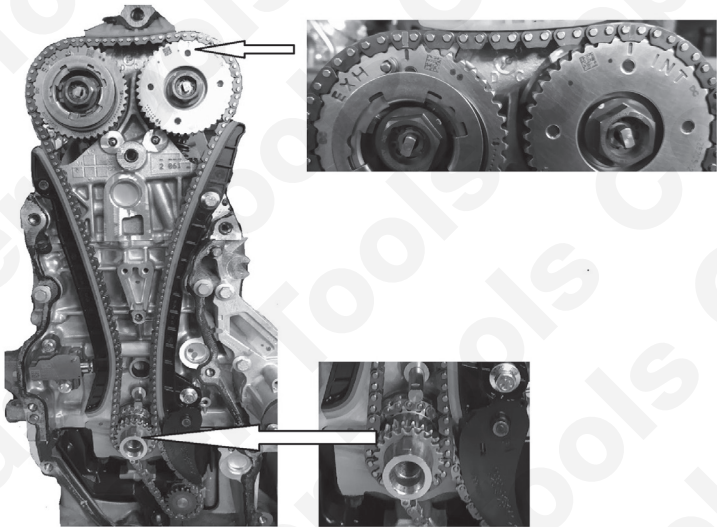


## Instructions

**NOTE:** For some vehicle applications engine removal is required.  
**The camshaft and crankshaft timing tools in this kit are not designed to be torqued against. NEVER loosen or tighten the pulley bolts against these tools.**

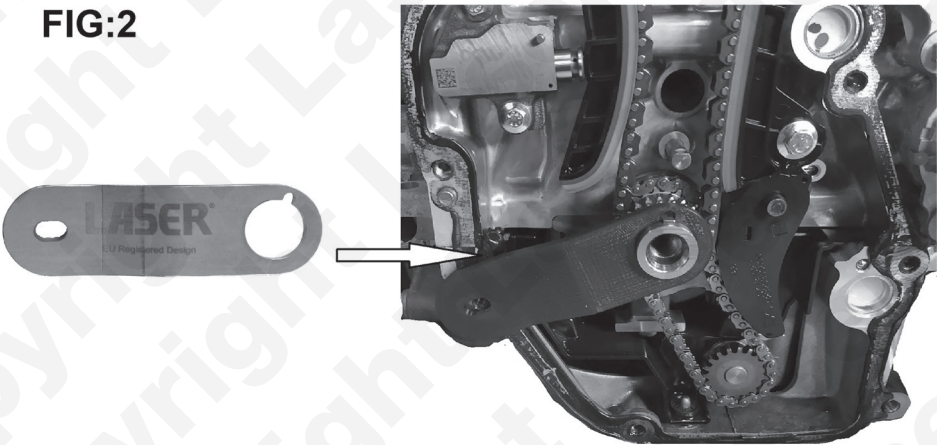
- Set the engine to TDC number 1 cylinder.
- Check the crankshaft timing mark is in the 6 o'clock position (crankshaft woodruff key at 12 o'clock). See figure 1.
- Check both camshaft timing marks are at 12 o'clock. See figure 1.

FIG:1



- Fit the crankshaft alignment tool (C) as shown in figure 2.

FIG:2



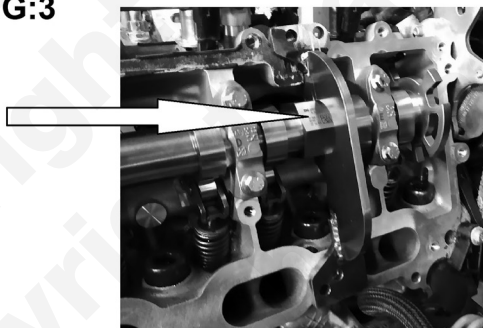
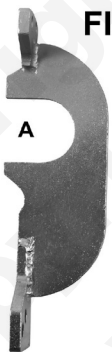


## Instructions

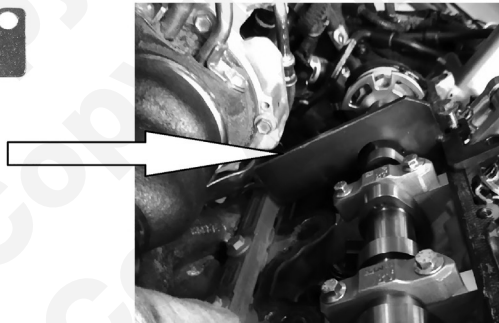
**NOTE: The camshaft and crankshaft timing tools in this kit are not designed to be torqued against. NEVER loosen or tighten the pulley bolts against these tools.**

- Fit the camshaft timing tools (A & B) as shown in figure 3 and 4.

**FIG:3**

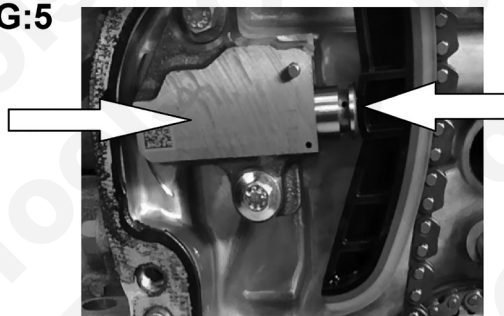


**FIG:4**



- Push the chain tensioner piston back into the tensioner and lock it using the tensioner pin (D) as shown in figure 5.

**FIG:5**



**NOTE: When removing & refitting the crankshaft pulley, do not tighten it with the camshaft tools in place. Always use the appropriate flywheel locking tool to hold the crankshaft. Laser recommends the use of Laser Flywheel locking tool Laser 8144.**

For refitting of the timing chain please refer to OEM 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.

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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.

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