

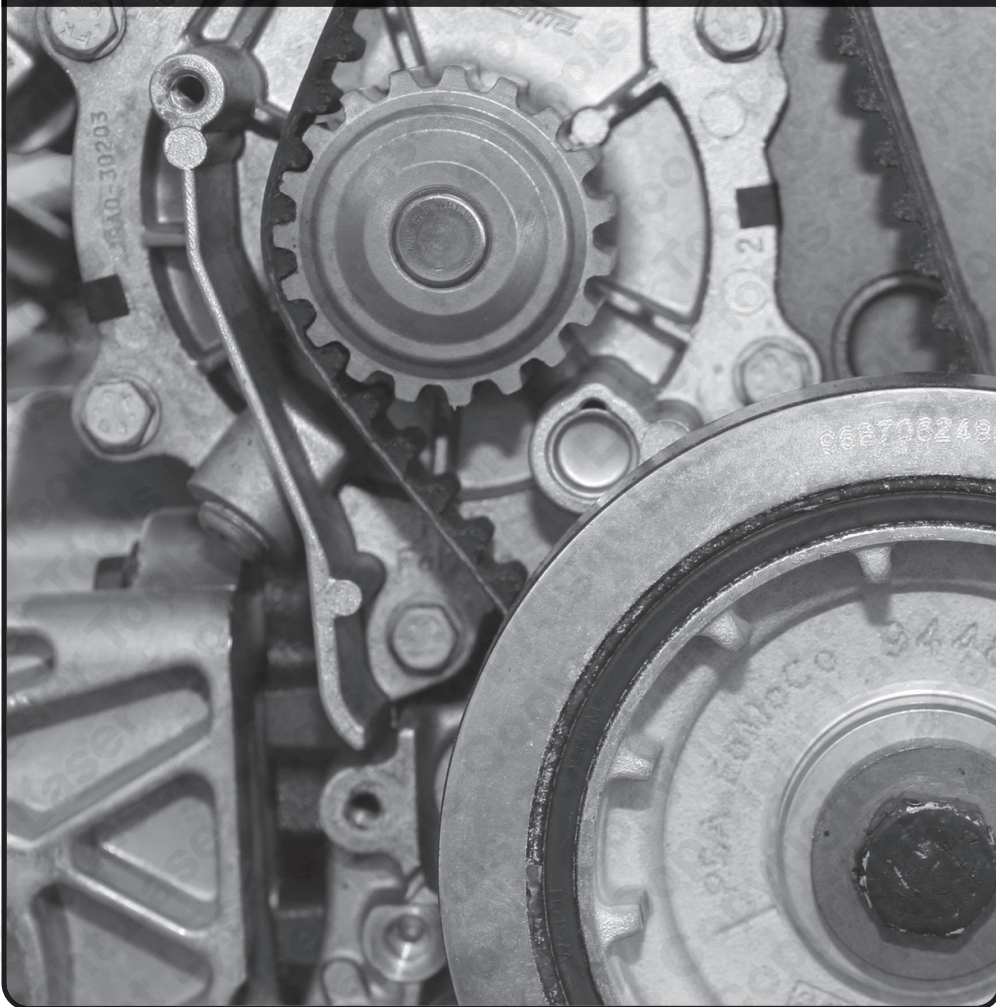
# LASER<sup>®</sup>

Part No. 8507

## Instructions

### Engine Timing Tool Kit

JLR AJ200 Ingenium Petrol



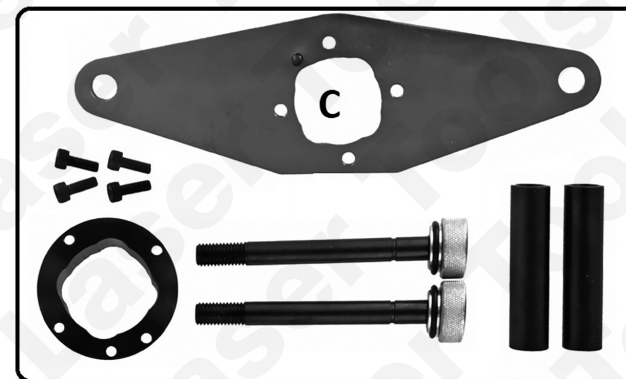
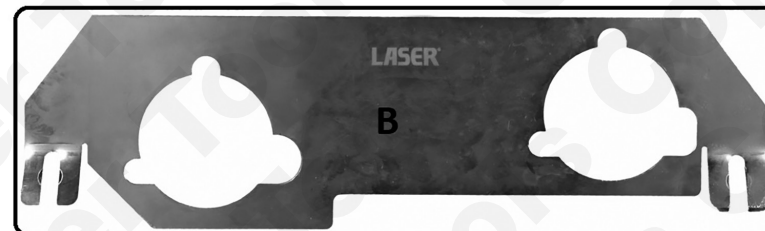
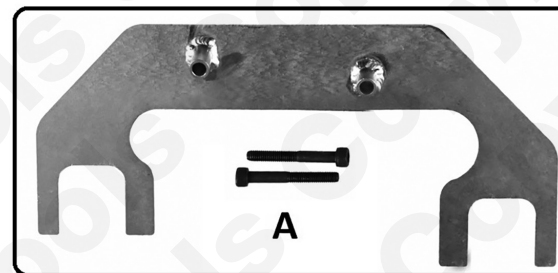
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## Introduction

Developed for the 2.0L petrol engine from Jaguar Land Rover (JLR). This kit contains all the essential components required to lock the new JLR 2.0L “Ingenium” petrol engines in their “timed” position so that the engine timing chain can be safely removed and replaced and/or the engine timing checked.

- Vehicle applications include: Jaguar E-Pace (from 2017), F-Pace (from 2017), F-Type (from 2017), XE (from 2017) and XF (from 2017). Land Rover Discovery (from 2017), Discovery Sport (from 2017), Range Rover Evoque (from 2017), Range Rover Sport (from 2017) and Range Rover Velar (from 2017).
- For locking the engine into the timed position so that the engine timing chain can be removed, replaced and/or the engine timing checked.
- Petrol engine codes: AJ-20/PT204, AJ-200/PT204, AJ-200P/PT204, AJ200P, PT204 and AJ200. For the AJ200 diesel please see Laser Part No. 7430.
- Equivalent to OEM tool codes JLR-303-1630, JLR-303-1635 and JLR-303-1636.
- Made in Sheffield.

## Components



Ref.	Comp. Code	OEM Ref.	Description
A	C1006	JLR-303-1635	Camshaft Locking Tool
B	C1007	JLR-303-1636	Camshaft Adjuster Locking Tool
C	C895	JLR-303-1630	Crankshaft pulley locking tool

## Applications

Manufacturer	Model	Sub-model	Year
Jaguar	E-Pace	P200, P250, P300, P200 MHEV, P250 MHEV, P300 MHEV	2017 - on
	F-Pace	25t, 30t, P250, P400e	2017 - on
	F-Type	P300	2017 - on
	XE	P250, P300	2017 - on
	XF	20t, 25t, 30t/Sport, P250, P300	2017 - on
Land Rover	Defender	Si4 P300, P300, P400e PHEV	2019 - on
	Discovery	Si4, P300	2017 - on
	Discovery Sport	Si4, P200 MHEV, P250 MHEV, P290 MHEV	2017 - on
	Range Rover	Si4 P400e, P400e	2017 - 2021
	Range Rover Evoque	Si4	2017 - 2019
	Range Rover Evoque	P200 MHEV, P250 MHEV, P300 MHEV	2019 - on
	Range Rover Sport	Si4, Si4 P400e	2017 - 2022
	Range Rover Velar	P250, P300, P400e PHEV	2017 - on

Manufacturer	Engine Codes
Jaguar	AJ200P/PT204
Land Rover	AJ200P/PT204

Always refer to the website for most up to date applications:  
[www.lasertools.co.uk/product/8507](http://www.lasertools.co.uk/product/8507)

## Instructions

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.



### Basic component use:

NOTE: Due to the timing chains being at the rear of the engine, removal and fitting of the timing chains requires the removal of the transmission and flywheel/drive plate.

- Engine camshaft timing marks at 12 o'clock.
- Front pulley timing mark at 6 o'clock to correspond with 50° after top dead centre (ATDC) cylinder no.1.
- Ensure camshaft adjuster marks are at 12 o'clock.



## Instructions

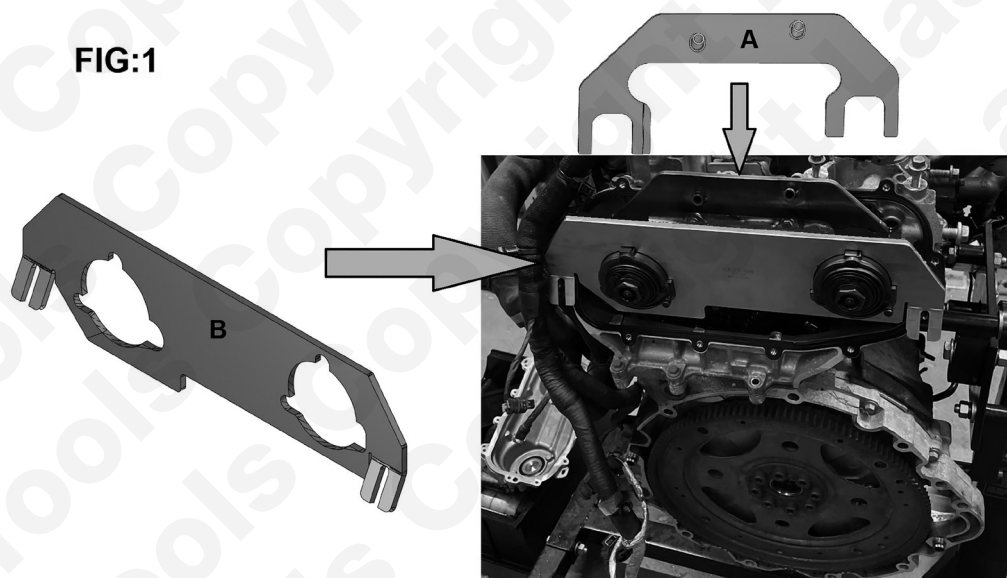
### Component A - Camshaft locking tool.

With the front pulley and camshaft marks correctly aligned, fit component A as shown in figure 1. Fix with the bolts provided.

### Component B - Camshaft Adjuster Locking/Holding Tool

Fit the Camshaft Adjuster Locking Tool (B) as shown in figure 1. Fix using 2 of the engine front cover bolts.

FIG:1

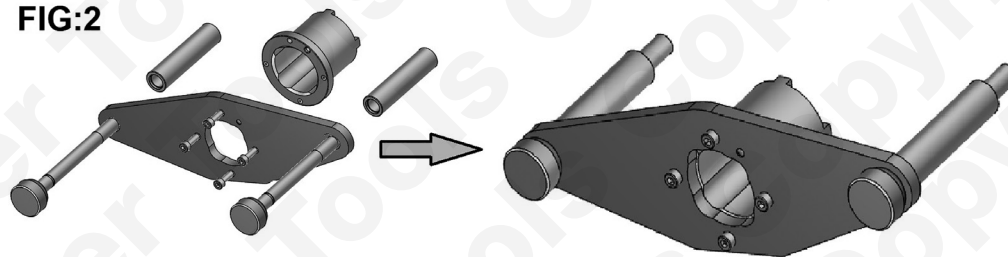


## Instructions

### Component C - Crankshaft Pulley Locking Tool

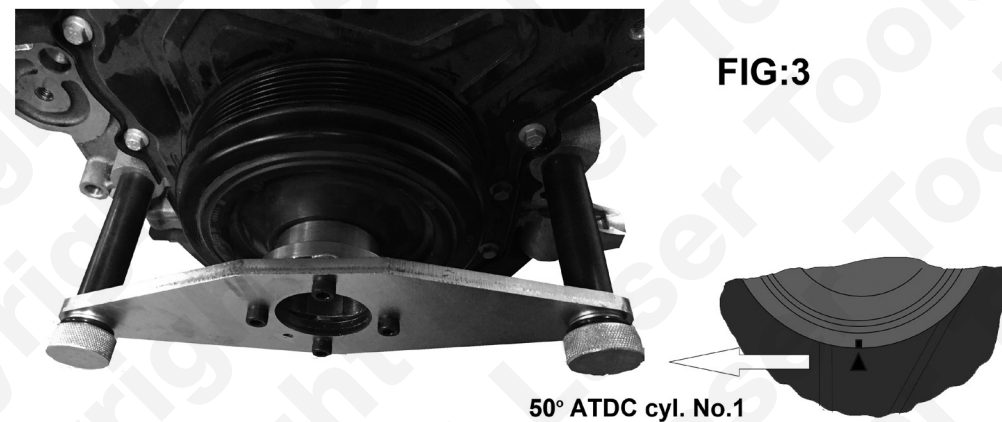
Assemble components C as shown in figure 2.

FIG:2



Working from the front of the engine fit assembly C to the crankshaft pulley as shown in figure 3.

FIG:3



## 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.

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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