# LASER®

Part No. 7676

# Instructions

# **Engine Timing Tool Kit** Land Rover TDV8 4.4L



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#### Introduction

The 7676 timing kit has been designed for the Land Rover 4.4 TDV8 diesel engines found in the Range Rover and Range Rover Sport from 2010. The 7676 kit consists of the crankshaft alignment, Flywheel locking, front crankshaft pulley locking and camshaft timing tools required to check and adjust engine timing as well as remove and replace the timing chains.

- Applications: Range Rover (from 2010) and Range Rover Sport (from 2014).
- Engine codes include: 448DT (Diesel V8 4.4L).
- Equivalent to OEM Tools: JLR 303-1620, 303-1568, 303-1243, 303-1571.
- Unique camshaft timing tool design EU Registered Design.

## Applications

	Marque	Model	Range	Year	Engine Codes	
	Land Rover	Range Rover	(L322)	2010 - 2013	4.4	
		Range Rover	(L405)	2012 - on	448DR	
		Range Rover Sport	(L494)	2014 - on		

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.





Ref.	Code	OEM Ref.	Description
Α	C675	JLR-303-1620	Crankshaft Locking Pin
В	C924	JLR-303-1568	Camshaft Alignment Tools x2 and Clamps x2
С	C672	JLR-303-1243	Flywheel Locking/Holding Tool
D	C925	JLR-303-1571	Crankshaft Front Pulley Locking Tool

#### Instructions



# Preparation

• Remove engine sump and oil pump.

Please refer to OEM derived data such as the vehicles manufactures own data or Autodata when using these tools.

#### Instructions

#### Component A - Crankshaft Locking Timing Pin (RR Sport 448DT 2013 on).

Component (A) is a used to lock the Crankshaft in its timed position. Align the timing hole on the front pulley to approximately 6 o'clock; Remove the blanking plug from the front right-hand side of the engine block and screw (A) into place, see **Fig.1**. Slowly turn the crankshaft clockwise until it stops against the pin. (Pulley hole now at 9 o'clock).

#### N.B: DO NOT TORQUE AGAINST THIS PIN

Fig.1





#### Instructions

Component B - Camshaft Alignment Tools x2 and Clamps x2

Components (B) are used to lock the camshafts in their timed position as shown in **Fig.2**. Loosely assemble the locking forks using bolts (1) and slide the fork assembly on the camshafts. Tighten bolts (1) and then hold the fork assembly down using clamp and bolt (2).

Note: Ensure both camshafts are positioned with curved faces down as shown in **Fig.2** (3).

Fig.2



**Components C** – Flywheel Locking/Holding Tool (RR Sport 448DT 2013 on). Component (C) is used to lock the flywheel when loosening or tightening the front pulley bolt. Remove the starter motor and Fit (C) in place of the starter motor so it locks the flywheel.

**Component D** – Crankshaft Pulley Locking Tool (Range Rover 448DT 2002 to 2013).

Component (D) is used to lock the crankshaft pulley in its timed position using the holes in the pulley. Fit as shown in Fig.3.







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#### Safety Warnings - please read

- · Personal protection and safety equipment must be used at all times.
- Eye protection and protective gloves must be worn when using these tools.
- Misuse of tools is unsafe, and can cause engine damage.
- Remove damaged tools from use.
- Store in a dry place when not in use.

Do not use these tools to torque or loosen fixings against unless otherwise stated.

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

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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