

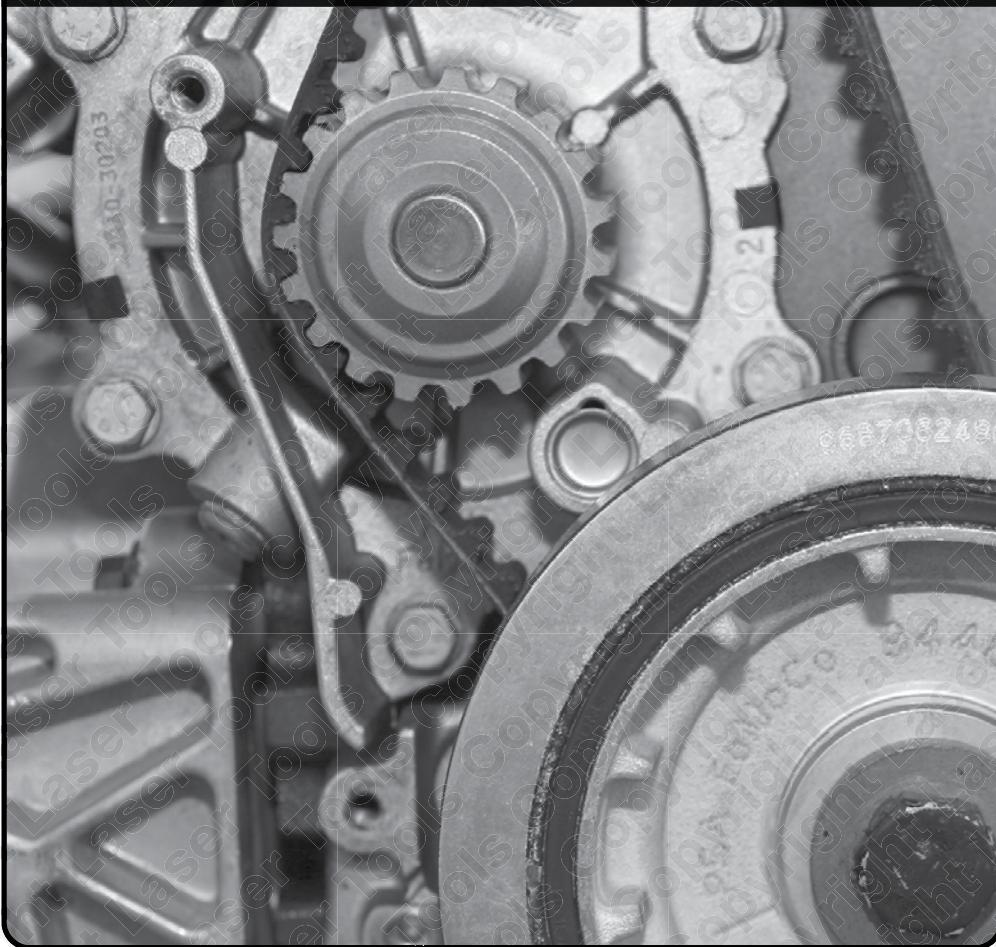
# LASER<sup>®</sup>

Part No. 7913

## Instructions

### Engine Timing Tool Kit

VAG 4.2, 5.0 & 5.2L Petrol



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## Introduction

**Engine applications:** 4.2, 5.0 & 5.2L petrol engines.

**Audi:** A6, A8, Q7, R8, RS4, RS5, RS6, S5, S6, S8 (2005 to 2017).

**Volkswagen:** Touareg (2005 to 2017).

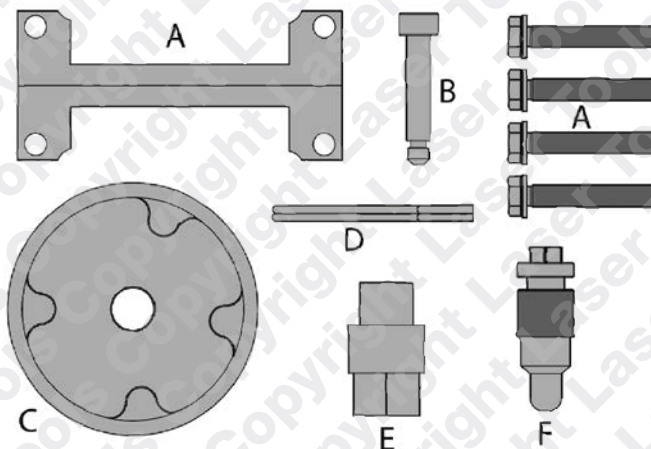
Equivalent to OEM T40070, T40227, T40079, T40071, T40058/3242.

For use with Crankshaft Turning Tool - Audi V6/V8 Petrol Engines - please see Laser Part No. 7559.

Made in Sheffield. Use in accordance with OEM instructions only.

The 7913-K01004-A has been developed to allow the user to lock the engines of the vehicles listed below in their "timed" position so the camshaft drive chains can be safely removed and replaced or the engine timing checked.

## Components



Ref.	Code	OEM	Description
A	C356	T40070	Camshaft Locking Tools
B	C937	T40227	Crankshaft Locking Pin
C	C754	T40079	Camshaft Adjuster Holding Tool
D	C358	T40071	Timing Chain Tensioner Pins (x2)
E	C395	T40058	Crankshaft Turning Tool
F	C043	3242, T40237	Crankshaft Locking Pin

## Applications

Make Model Year			Engine Codes	
Audi	A6	2006 to 2011	4,2	5,0
	A8	2006 to 2012	BNS	BUH
	Q7	2006 to 2010	CDRA	5,2
	R8	2007 to 2015	CFSA	BUJ
	RS4	2005 to 2016	BYH	CTYA
	RS5	2010 to 2017	CNDA	CTPA
	RS6	2007 to 2010	BVJ	CMPA
	S5	2007 to 2011	BAR	BGS
	S6	2005 to 2010	CAUA	BXA
	S8	2005 to 2010	CGNA	BSM
Volkswagen	Touareg	2006 to 2017		

## Instructions

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

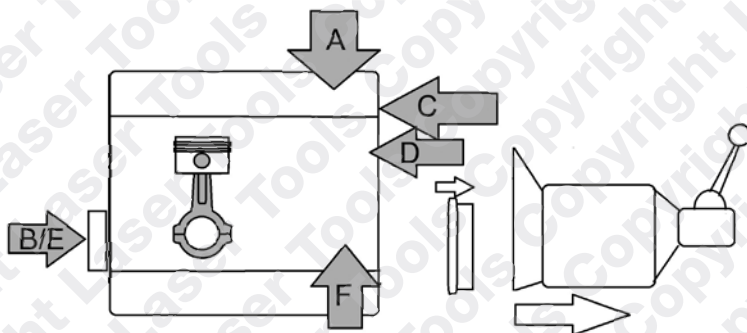
The use of this engine timing tool kit is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused whatsoever.

Due to the range of engines covered by this kit it is not possible to give detailed instructions for all the engines listed. Therefore Laser recommends the use of OEM derived information and instructions.

Note: The timing chains are located at the rear of the engine requiring engine removal for access.

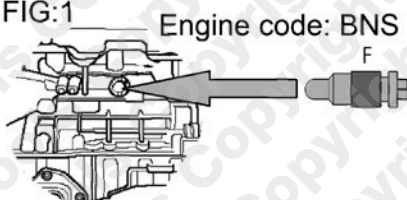


## Instructions

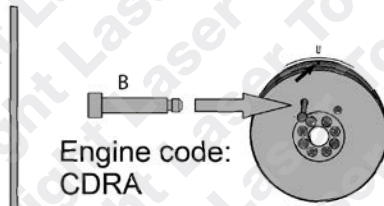


1. Using component (E) turn the engine to just before TDC number on number 1 cylinder.
2. Insert the appropriate crankshaft setting pin (B) or (F) depending on engine application. Refer to OEM data. See Figure 1.

FIG:1



Engine code: BNS



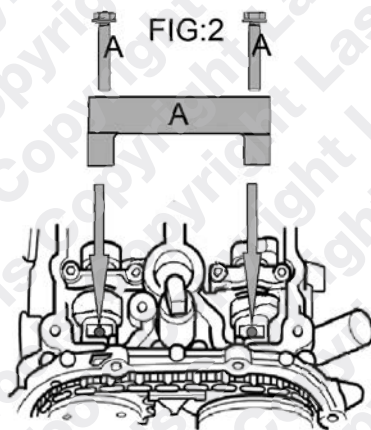
Engine code:  
CDRA

NOTE: Component (B) fits through an alignment hole in the engine front pulley. Component (F) fits in to an alignment hole in the side of the engine block. When using (F) remove the blanking plug and fit the pin just before TDC and then turn the crankshaft clockwise to TDC until the locking pin (F) can be fully inserted and tightened (20Nm).



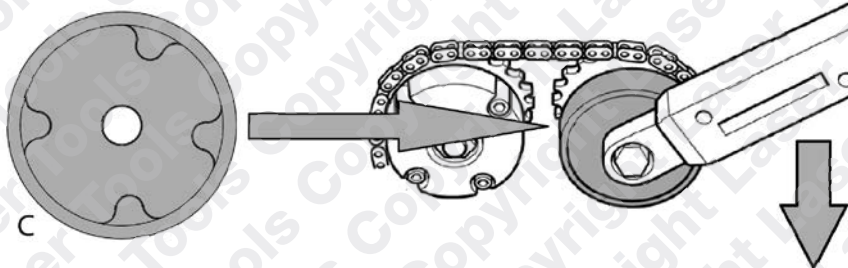
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3. Check all camshafts to ensure the threaded holes in the camshaft point up and fit the camshaft locking tools (A) to both heads. See figure 2.



4. Components (D) – use to lock the camshaft tensioner in the retracted position.
5. Component (C) is used to pre-tension the camshaft chains while torquing up the camshaft fixings. Refer to figure 3 and OEM engine code specific instructions.

FIG:3





## Safety Warnings - please read

- Disconnect the battery earth leads (check radio code is available)
- Remove spark or glow plugs to make the engine turn easier
- Do not use cleaning fluids on belts, sprockets or rollers
- Always make a note of the route of the auxiliary drive belt before removal
- Turn the engine in the normal direction (clockwise unless stated otherwise)
- Do not turn the camshaft, crankshaft or diesel injection pump once the timing chain has been removed (unless specifically stated)
- Do not use the timing chain to lock the engine when slackening or tightening crankshaft pulley bolts
- Do not turn the crankshaft or camshaft when the timing belt/chain has been removed
- Mark the direction of the chain before removing
- It is always recommended to turn the engine slowly, by hand and to re-check the camshaft and crankshaft timing positions
- Crankshafts and camshafts may only be turned with the chain drive mechanism fully installed
- Do not turn crankshaft via camshaft or other gears
- Check the diesel injection pump timing after replacing the chain
- Observe all tightening torques
- Always refer to the vehicle manufacturers' service manual or a suitable proprietary instruction book
- Incorrect or out of phase engine timing can result in damage to the valves

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When you have finished with this product please recycle it

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