

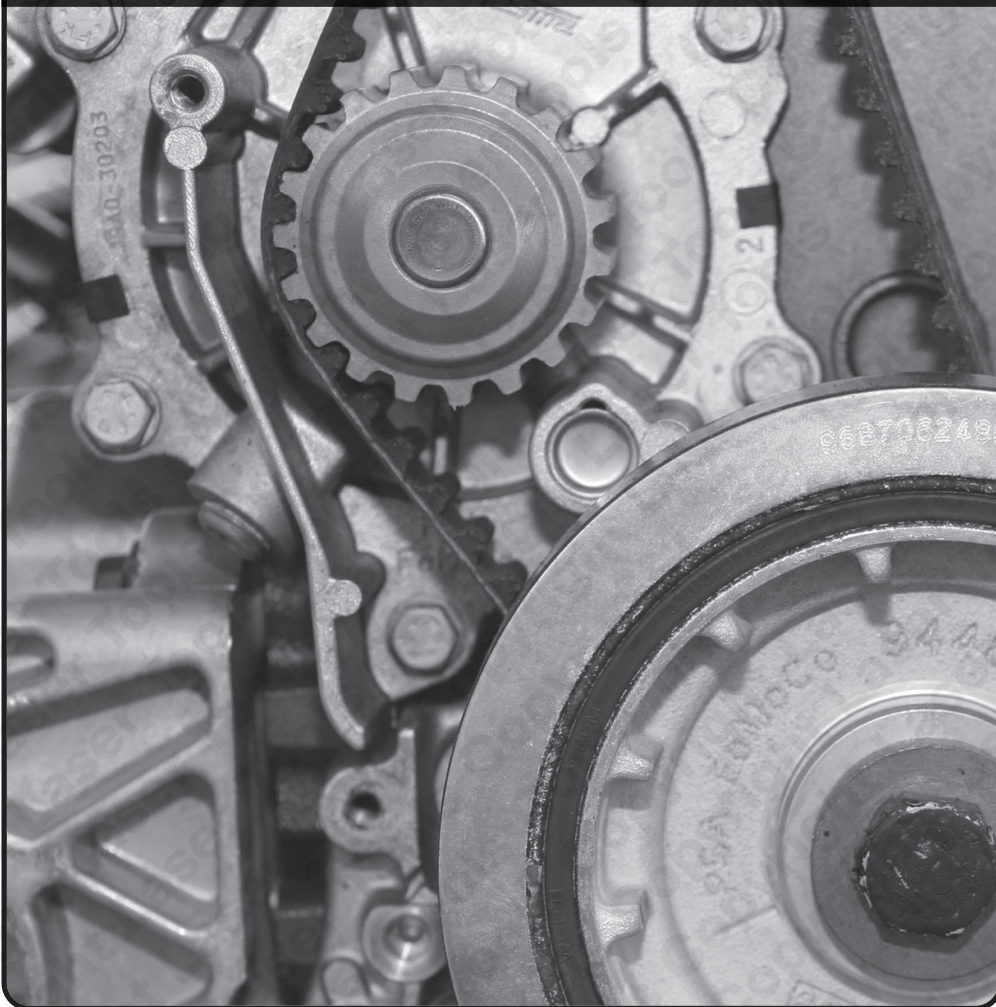
LASER[®]

Part No. 8793

Instructions

Engine Timing Tool Kit

Volvo 1.5L Petrol



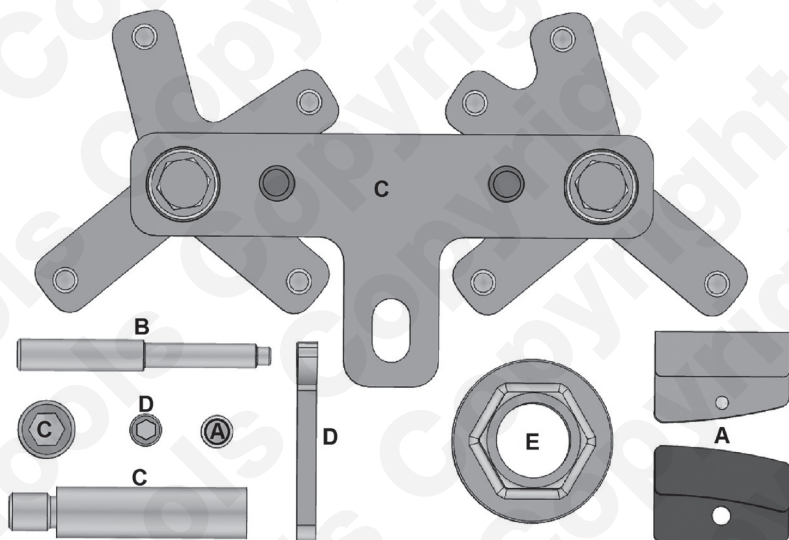
www.lasertools.co.uk

Introduction

This kit has been specifically developed to allow the user to lock the post 2019 1.5L Volvo B3154 petrol engines in their “timed” position so the camshaft drive belt can be safely removed and replaced and the engine timing set and checked.

- Applications include: Volvo XC40 Recharge (from 2020), T2 (from 2019), T3 (from 2018), T4 “Twin Engine” (2019-2020), T5 “Twin Engine” (2019-2020), Recharge PHEV (from 2020).
- Engine Applications include: 1.5L Petrol B3154T5, B3154T9, B3154T, B3154T2, B3154T4, B3154T7, B3154T10.
- Equivalent to: OEM refs. 999 7690, 999 7697, 999 7676 & 999 7675.
- Use in accordance with instructions supplied.

Components



Ref.	Comp. Code	OEM Ref.	Description
A	C1025	999 7690, 999 7697	Flywheel Locking tools (3 parts)
B	C1026	999 7676	Crankshaft Alignment Pin
C	C1027	999 7675	Camshaft Sprocket Locking & Alignment Tool
D	C1028	N/A	Cambelt Retaining Tool
E	C1029	999 7674	Camshaft Holding Tool

Applications

Manufacturer	Model	Type	Year	Engine Codes
Volvo	XC40	Recharge T5	From 2020	1.5L B3154T5 B3154T9 B3154T B3154T2 B3154T4 B3154T7 B3154T10
		T2	From 2019	
		T3	From 2018	
		T4 Twin Engine	2019 - 2020	
		T5 Twin Engine	2019 - 2020	
		Recharge PHEV	From 2020	

Always refer to the website for most up to date applications:
www.lasertools.co.uk/product/8793

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.



Warning: Hybrid drive vehicles (including PHEV & MHEV):

Where the vehicle is a hybrid electric vehicle there may be a risk of injury due to electric shock. Please ensure all manufacturers’ safety recommendations are followed at all times including any relevant HV disconnection processes and the use of appropriate PPE as specified by the vehicle manufacturer. No liability is accepted by the Tool Connection for injury or shock to personnel, property or equipment, however caused.

Instructions

NOTE: When loosening and tightening pulley or sprocket fixings do not use the camshaft or crankshaft alignment tools to torque against. **ALWAYS** use a sprocket holding tool and /or flywheel holding tool.

Warning: Hybrid and PHEV vehicles - risk of electric shock or other injuries.

Ensure the ignition is switched off and keys/fob removed from the vehicle and isolated, 12v battery should be disconnected and (where the manufacturer requires) the high voltage battery should be isolated before working on or around high voltage components.

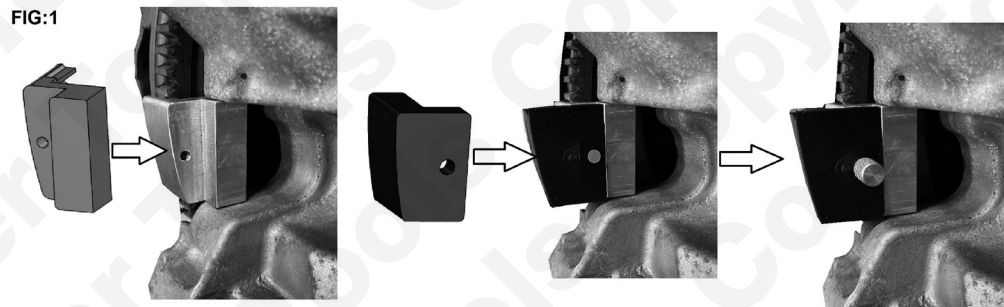
Preparation:

- Raise the vehicle and secure the vehicle.
- Remove the right hand wheel and inner wheel arch.
- Remove the engine upper and lower engine covers.
- Remove flywheel dust cover.
- Remove auxiliary drive belt cover and cam belt covers.
- Coolant expansion tank - Unbolt and move to one side.

Component Descriptions

Component A – Flywheel Locking Tool (3 parts)

Assemble the flywheel locking tools on to the flywheel from underneath the engine between the nearside drive shaft and the engine block. See Figure 1.



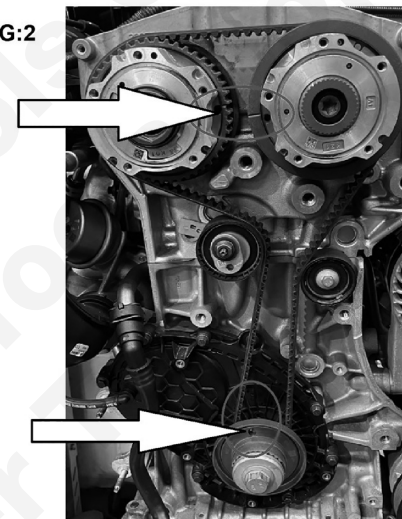
With the flywheel locked, slacken and remove the crankshaft pulley bolt, remove the crankshaft pulley and loosely refit the crankshaft bolt. Remove the locking tool.

Instructions

Component B - Crankshaft Alignment Pin

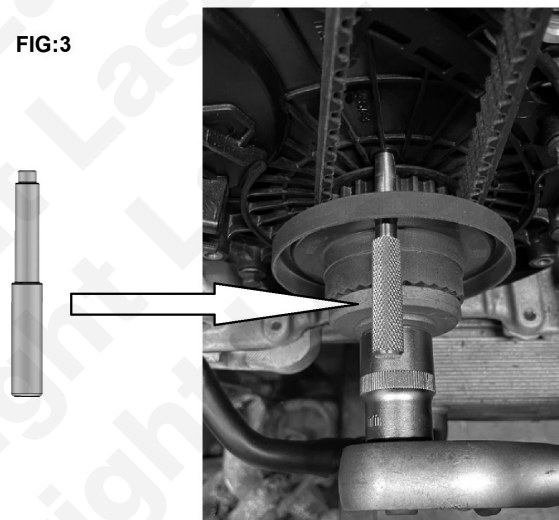
Align the crankshaft pulley and camshafts as shown in Figure 2.

FIG:2



Fit the crankshaft alignment pin as shown in Figure 3.

FIG:3

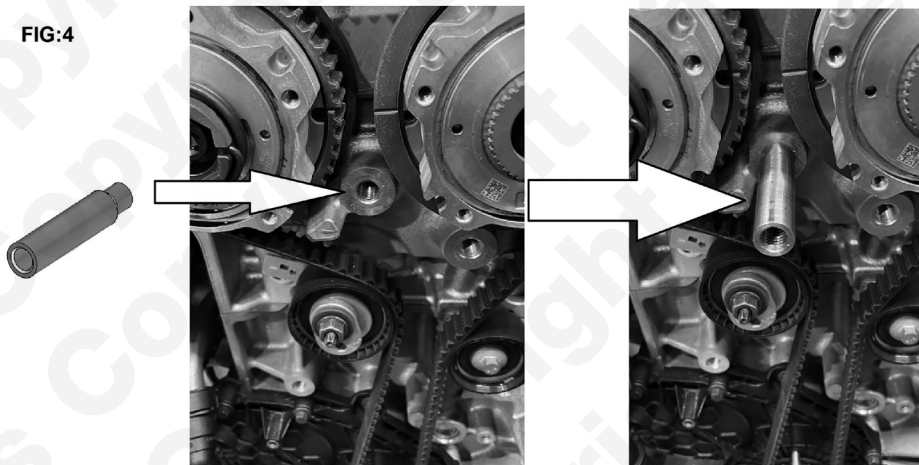


Instructions

Component C - Camshaft Sprocket Locking & Alignment Tool

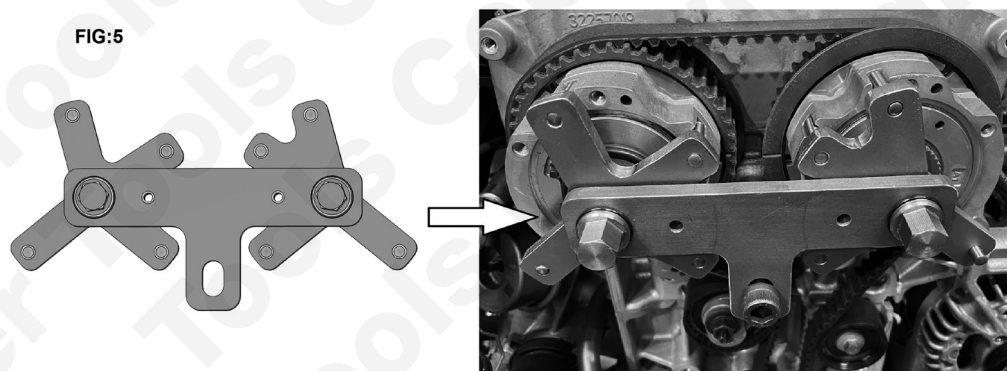
Before fitting the camshaft sprocket locking tool (C) remove the locking pins and fit the camshaft sprocket locking tool holding boss as shown in Figure 4.

FIG:4



Fit the camshaft sprocket locking tool (C) as shown in Figure 5.

FIG:5



Component C - Camshaft Sprocket Locking & Alignment Tool – Alignment Pins

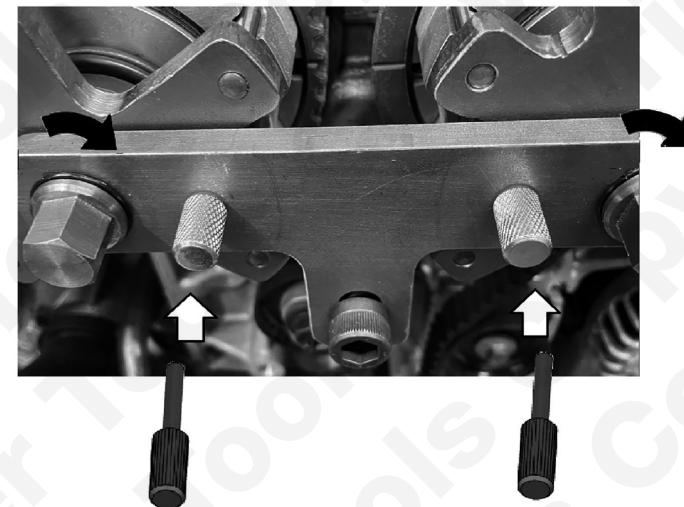
Before removing the old belt, using an appropriate spanner turn the exhaust camshaft to allow the alignment pin to be fitted. Repeat for the inlet camshaft. See Figure 6.

Back-off the belt tensioner and remove the old belt.

Fit the new tensioner pulley, guide pulley and fixings in accordance with the manufacturer instructions.

Instructions

FIG:6



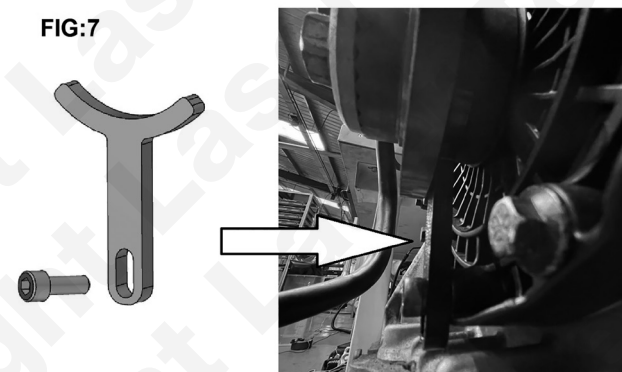
Fitting New Belt

Component D - Cambelt Retaining Tool

Fit the new belt starting at the crankshaft. Fit the belt around the bottom of the crankshaft sprocket and use the cambelt retaining tool (D), as shown in Figure 7, to keep the belt in place while fitting around the other pulleys in an anti-clockwise direction, keeping the belt as tight as possible. Release the tensioner pulley pin and remove all timing tools.

NOTE: Remember to remove the cambelt retaining tool.

FIG:7



Component E – Camshaft Holding Tool

Use component E to hold the camshaft adjuster when removing the camshaft adjuster bolts.

Safety Warnings - please read

Warning – Incorrect or out of phase engine timing can result in damage to the valves. It is always recommended to turn the engine slowly, by hand, and to re-check the camshaft and crankshaft timing positions.

- 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.



Safety First. Be Protected.

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.



5 018341 087937 >

8793_Instructions_V4



When you have finished with this product please recycle it

www.lasertools.co.uk



Distributed by The Tool Connection Ltd

Kineton Road, Southam, Warwickshire CV47 0DR
T +44 (0) 1926 815000 F +44 (0) 1926 815888
info@toolconnection.co.uk www.toolconnection.co.uk

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.

www.lasertools.co.uk