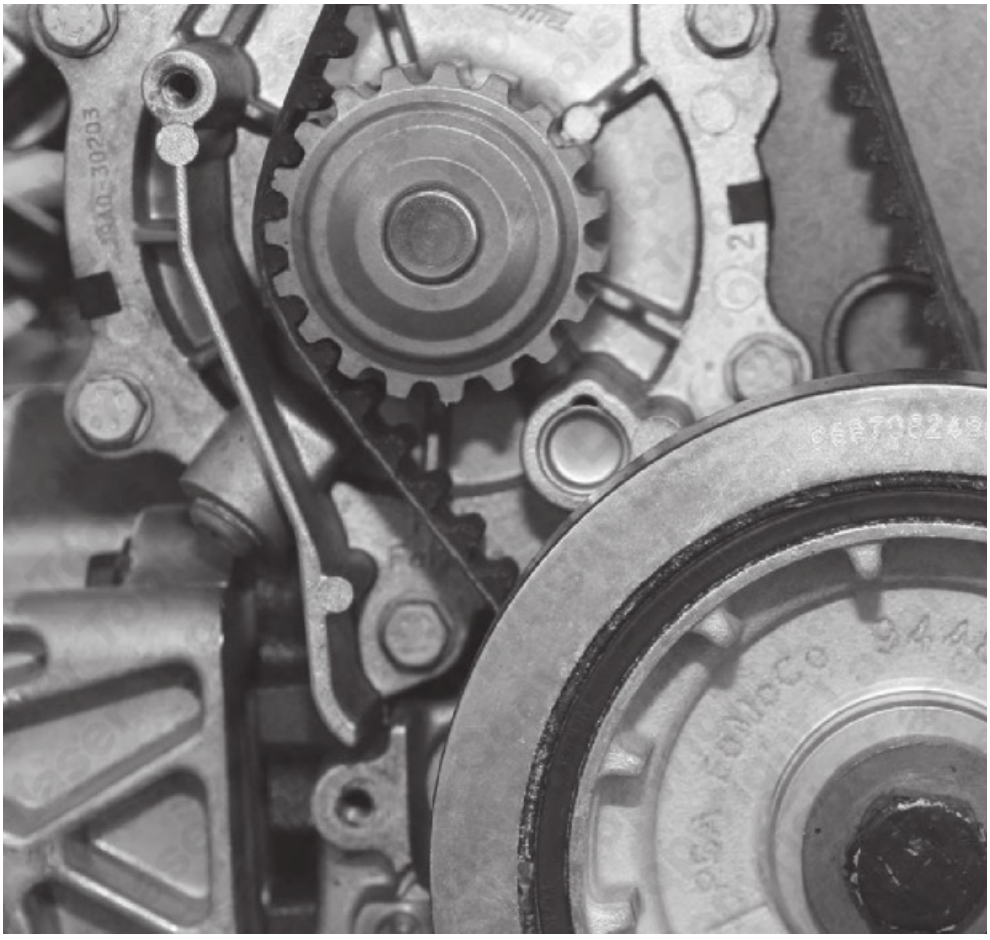
LASER 7323 Engine Timing Tool Kit Instructions

Part No. 7323
Instructions
Engine Timing Tool Kit
Ford 2.0L EcoBlue TDCi



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Always refer to the website for most up to date applications:
www.lasertools.co.uk/product/7323

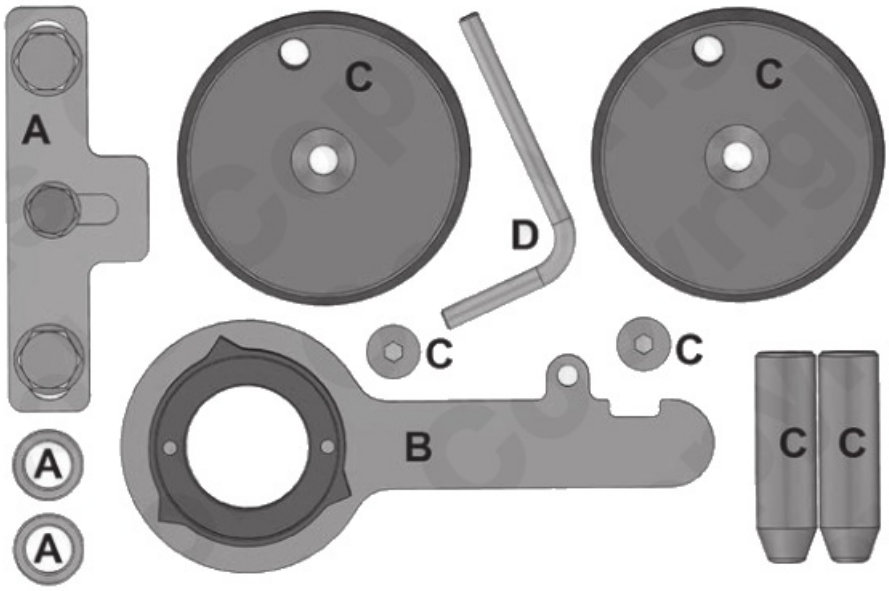
Contents

Introduction

- Equivalent to OEM tools 303-1637, 303-1650, 303-1643.
- For high pressure fuel pump pulley removal, please see Laser Part No. 7324 & Vibration Damper Pulley Puller – Laser Part No. 7334.

Components

This timing kit has been designed for the latest Ford 2.0L EcoBlue TDCi engine which features an innovative “belt in oil” design where the synchronous drive belt is sited inside the oiled area of the engine. The kit consists of the crankshaft alignment, flywheel locking and belt fitting tools required to remove and refit the timing belt without damage.



Ref.	Comp. Code	OEM Ref.	Description
A	C863	303-1643	Flywheel Holding Tool
B	C864	303-1637	Crankshaft Alignment Tool
C	C865	303-1650	Installation Cups
D	C271		6mm Alignment Pins (3)

Applications

Make, Model, Year		
Ford	Edge	2018 – 21
	Focus	2018 – on
	Focus Active	2019 – on
	Galaxy	2018 – 21
	Kuga	2019 – on
	Mondeo	2019 – 21
	Ranger	2019 – on
	S-MAX	2018 – 21
	Transit	2016 – on
	Transit Custom	2016 – on
	Tourneau Custom	2016 – on

Engine Codes			
BC2X	BKFA	YL2X	YMCB
BCCA	BKFB	YLCA	YMCC
BCCB	BKFC*	YLCB	YMDA
BCCC	BKFD*	YLCC	YMF6
BCDA	BKRA	YLDA	YMFA
BCFB	BKRB*	YLDC	YMFB
BCRA	BLFA	YLF6	YMFS
BJFA	BLFB	YLFA	YMHA
BJFB	BLFC*	YLFB	YMR6
BJFC*	BLFD*	YLFS	YMRA
BJFD*	BLHA	YLR6	YN2X
BJRA	BLRA	YLRA	YNCA
BJRB*	BLRB*	YMCA	YNF6

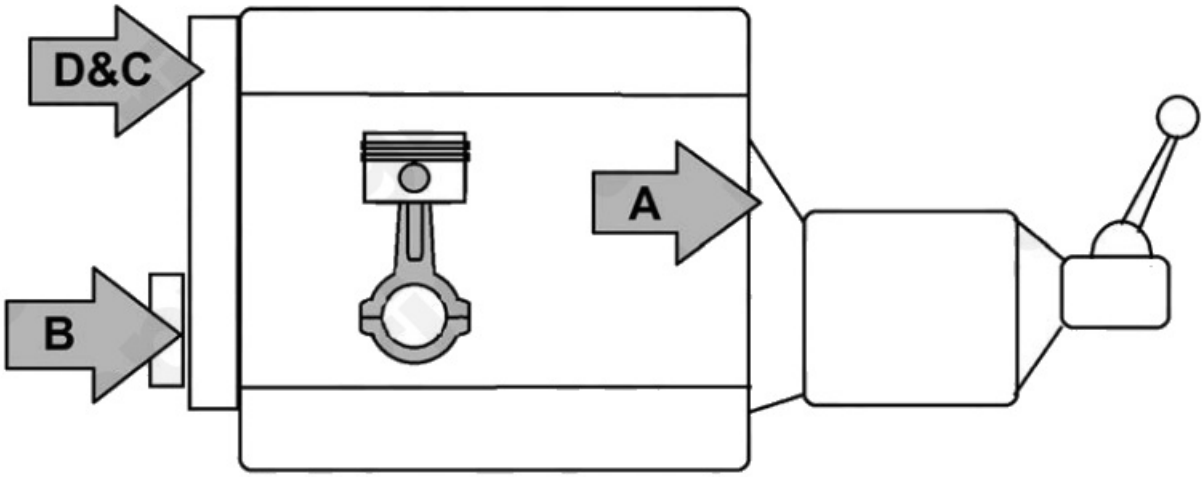
(*2.0 EcoBlue TDCi mHEV)
Always refer to the website for most up to date applications: www.lasertools.co.uk/product/7323
The following instructions are for guidance only. Please refer to OEM derived data such as the vehicle manufacturers' own data or Autodata.
The use of this engine timing tool kit is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused whatsoever.

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.
- Store in a dry place when not in use.

Do not use these tools to torque or loosen fixings against unless otherwise stated.
Warning: Normal direction of rotation of the crankshaft is clockwise; however the direction of rotation of the camshafts is anti-clockwise.

Where Used



Preparation

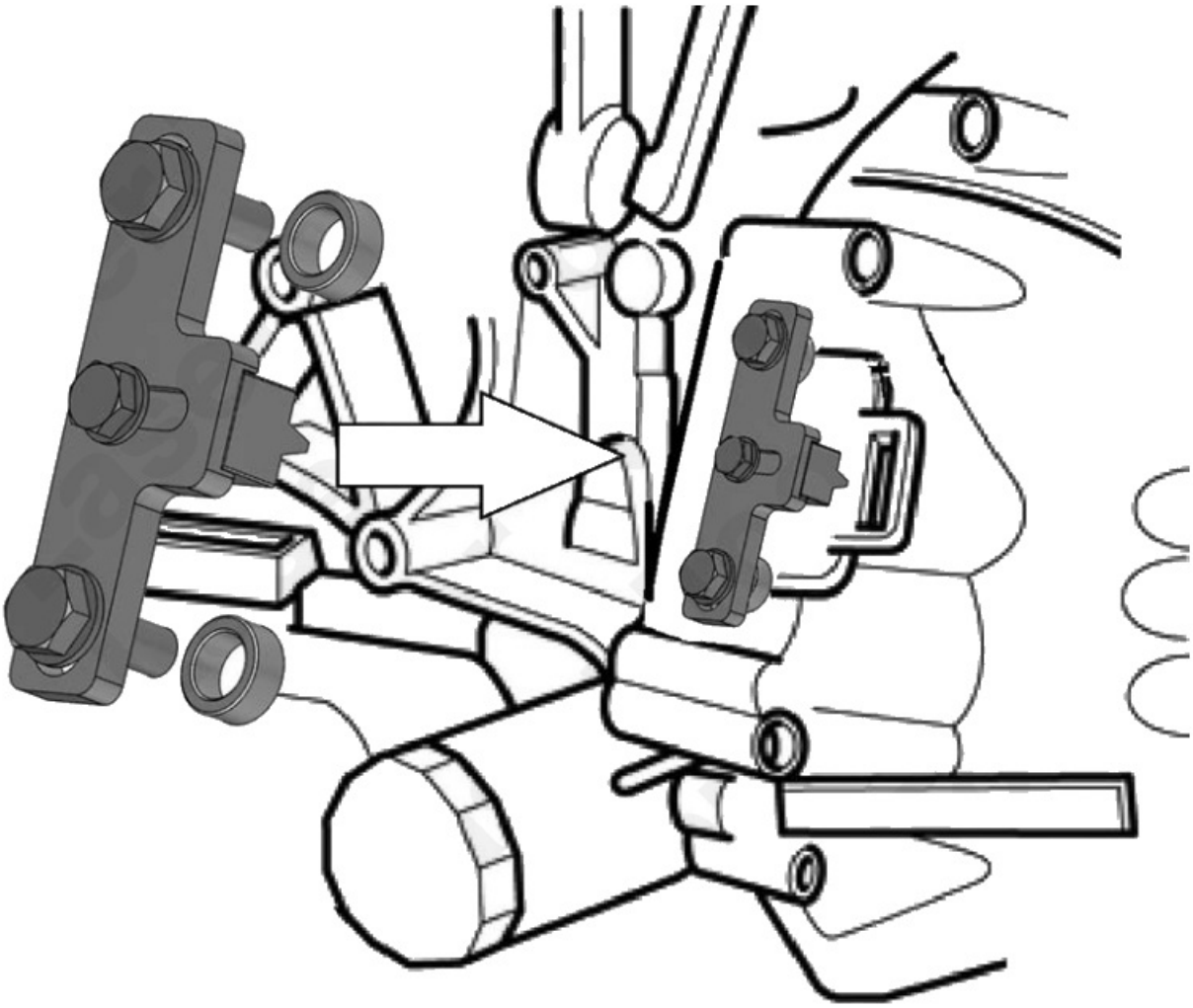
- Remove starter motor and install flywheel locking tool.
- Remove auxiliary drive belt.
- Remove crankshaft pulley.
- Remove timing belt cover.
- Additional component may need to be removed according to vehicle model.

Important Notes

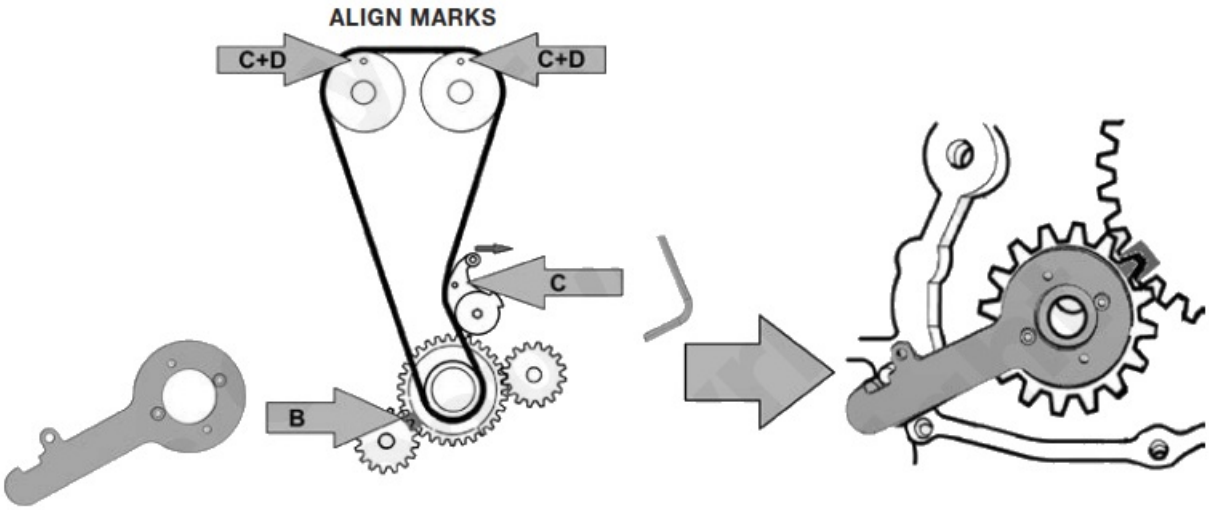
- Water pump “stretchy” auxiliary drive belt once removed should not be re-used.
- Mark position of RH engine mounting before removal.
- Replacement of the timing belt also requires replacement of the tensioner and cover.
- Alignment of the crankshaft gear and the intermediate gear timing marks occurs every fourteenth turn of the crankshaft.

Instructions

Component A – Flywheel Holding Tool
Used to lock and hold the flywheel while undoing the crankshaft pulley bolt.
With the starter motor removed bolt component A into the starter motor aperture to lock the flywheel. Remove the pulley bolt and pulley.
Note: Spacers may not be required depending on application

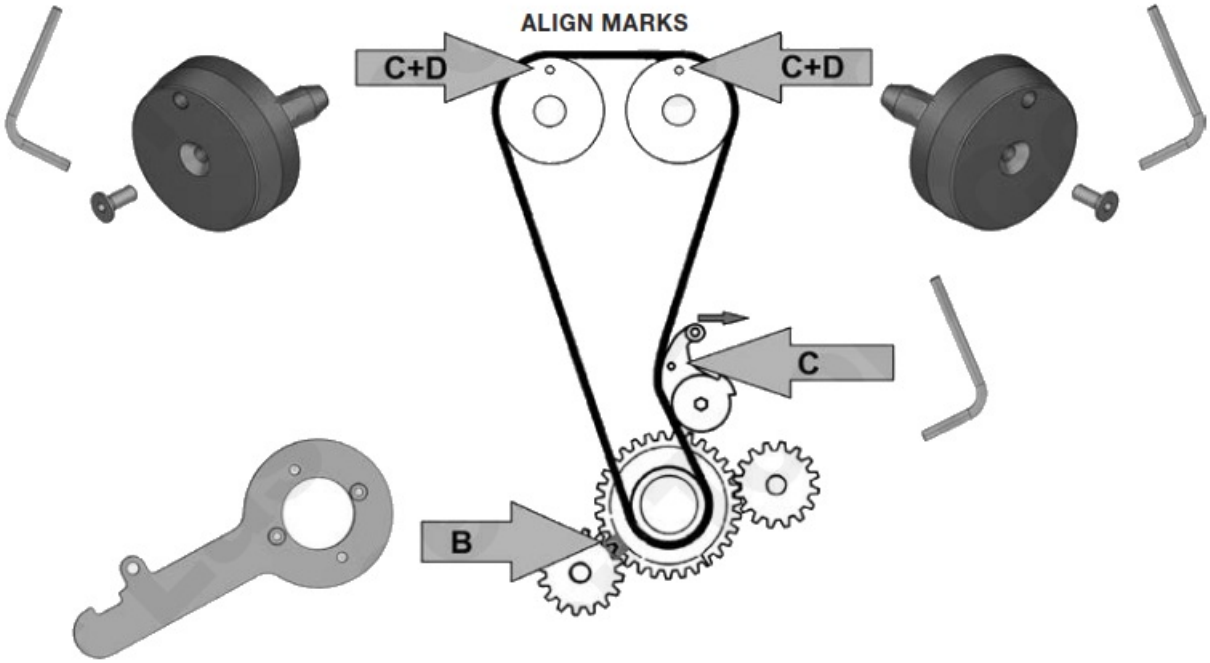


Compomnent B – Crankshaft Alignment Tool
Used to align the crankshaft in its timed position.
With the flywheel locking tool (A) removed, refit the crankshaft pulley bolt and rotate the engine in a clockwise direction until TDC on No.1 cylinder.
With the camshafts, crankshaft and intermediate shaft timing marks all aligned as shown remove the crankshaft bolt and install the crankshaft alignment tool (B) as shown and secure it to the cylinder block.



Components C & D
Assemble components C as shown and fit them onto the camshaft pulleys so 2 of the 6mm alignment pins (D) can be fitted through the cups and into the camshaft pulleys and into the cylinder head. Ensure the pins (D) are fully engaged with the cylinder head.
Using an 8mm Allen key release the tension on the belt tensioner and insert the 3rd 6mm alignment pin (D) into

the tensioner to lock it in its retracted position.



The belt can now be removed and a new belt installed as required.
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

should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognized authority such as Automata.
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.

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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Documents / Resources

	LASER 7323 Engine Timing Tool Kit [pdf] Instructions 7323 Engine Timing Tool Kit, 7323, Engine Timing Tool Kit, Timing Tool Kit, Tool Kit

References

- Laser Tools | Premier Automotive Hand Tools designed to make easy work of difficult and awkward jobs.
- Laser Tools 7323 Engine Timing Kit - for Ford 2.0 EcoBlue Diesel