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TOOL CONNECTION
The Complete Connection

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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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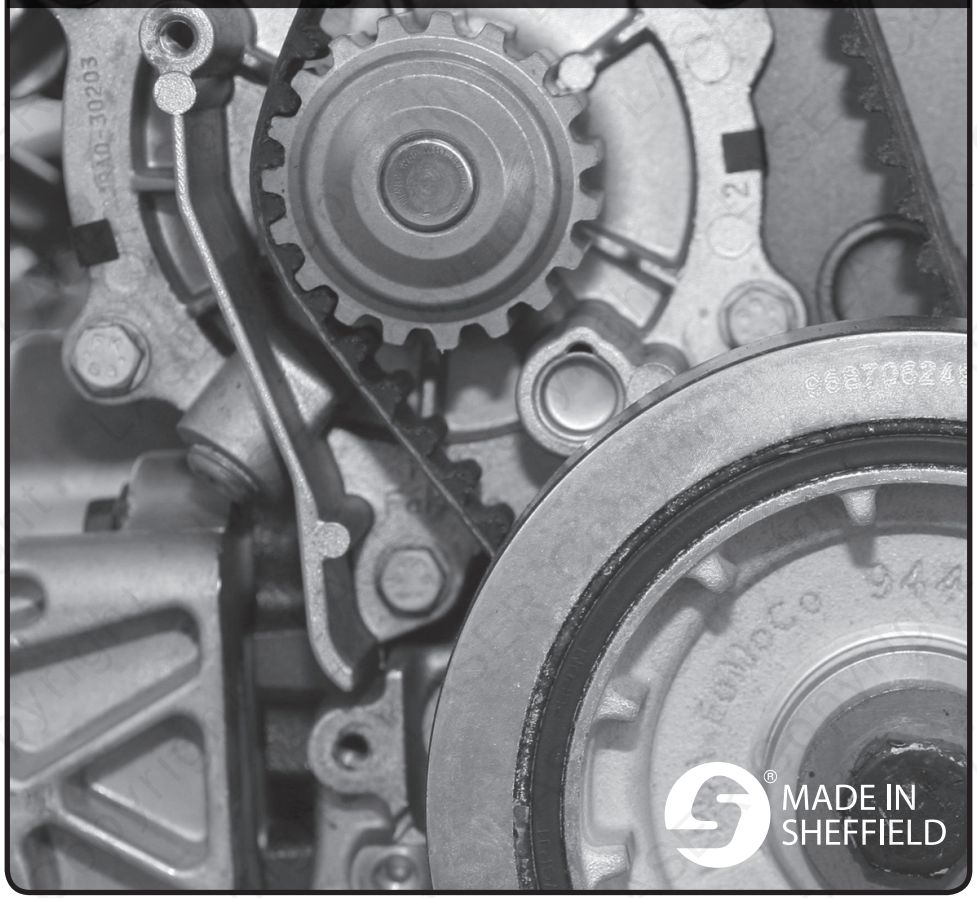
LASER®

Part No. 4066

Engine Timing Tools

Ford Duratorq 1.4 | 1.6 | 2.0 | 2.2 | 2.4
PSA 1.4 | 1.6 HDi



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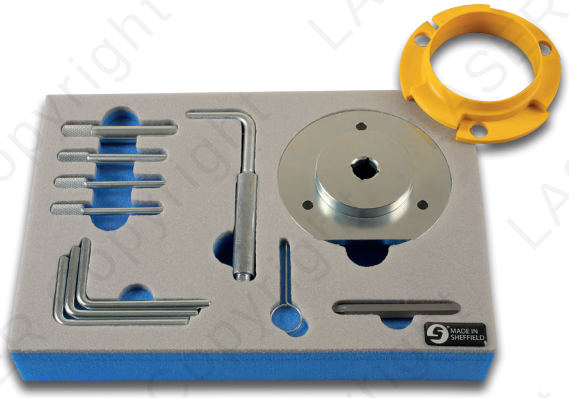
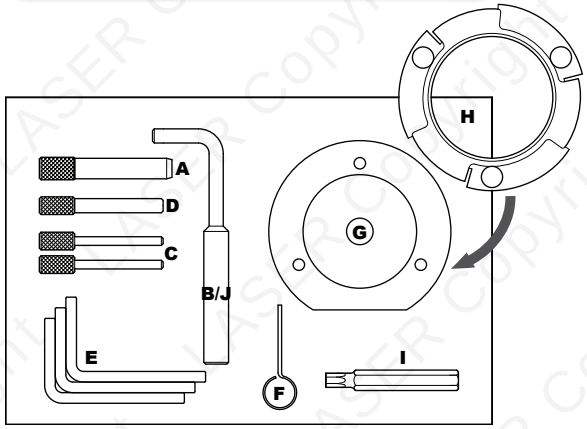
Plan Layout





Ref	Code	Oem Code	Description
A	C057	303-734/21-262	Flywheel Locking Pin 11.6mm
B	C058	21-234/303-675	Flywheel Locking Pin
C	C089	303-732/21-260	Crankshaft/Fuel Pump Alignment Pin (2)
D	C101	303-735/21-263	Camshaft Sprocket Locking Pin
E	C271		Camshaft Sprocket Alignment Pin (3)
F	C272		Chain Tensioner Locking Pin
G	C274	303-679A/21-238A	Fuel Pump Cover Remover
H	C273	303-1151	Pump Alignment Tool
I	C301	310-083A	Torx® T45 Key
J	C342	303-698/21-251	Flywheel Locking Pin

Warning

Incorrect or out of phase engine timing can result in damage to the valves. The Tool Connection cannot be held responsible for any damage caused by using these tools in anyway.

Safety Precautions – 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
- 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 manufacturer's service manual or a suitable proprietary instruction book
- 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

Applications

The application list for this product has been compiled cross referencing the OEM Tool Code with the Component Code.

In most cases the tools are specific to this type of engine and are necessary for Cam belt or chain maintenance.

If the engine has been identified as an interference engine valve to piston damage will occur if the engine is run with a broken Cam belt.

A compression check of all cylinders should be performed before removing the cylinder head.

Always consult a suitable work shop manual before attempting to change the Cam belt or Chain.

The use of these engine timing tools is purely down to the user's discretion and Tool Connection cannot be held responsible for any damage caused what so ever.

ALWAYS USE A REPUTABLE WORKSHOP MANUAL

Manufacturer	Model	Style	Engine Code
Ford		2.0	
		2.4	
Citroën	C3	1.4 HDi	DV4TD I DV4TED4
Ford	Fiesta	1.4 TDCi	F6JA
	Fusion	1.4 TDCi	F6JA
Peugeot	206	HDi	DV4TD I DV4TED4
	307	HDi	DV6TED4
LDV	Convoy		D5BA I D6BA I FMBA/B
Ford	Mondeo	2.0 TD I TDCi	D5BA I D6BA I FMBA/B
	Transit	2.2 I 2.4D	D5BA I D6BA I FMBA/B
LDV	Convoy		D2FA I D4FA I F4FA
Ford	Transit	2.2/2.4D	D2FA I D4FA I F4FA

Engine Timing & Diesel Pump Removal Kit – Ford Duratorq

This kit was developed to remove and replace the timing chain or timing belts found on the Ford Duratorq range of engines and PSA/Ford 1.4/1.6 HDi engines.

In addition to the engine timing tools the kit also includes the special tools required to enable the High Pressure diesel pump to be removed without disturbing the timing chain.

N.B The information given below is for reference only. The Tool Connection recommends the use of instructions from the Manufacturer or Autodata.

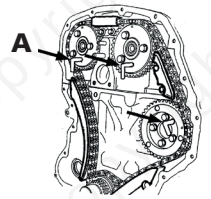
Preparation

To gain access to the Duratorq engines it may be necessary to remove the following components:

- Disconnect the Battery
- Remove air intake and air filter components
- Top and bottom engine covers (remember to reinstall the oil filler cap after removing the top engine cover).
- Turn the engine only in the normal direction of rotation when required to align the timing marks
- For pump removal clean the area before disconnecting any pipes to help reduce the ingress of dirt.
- For pump removal remove all pipes, the fuel metering valves and temperature sensor.

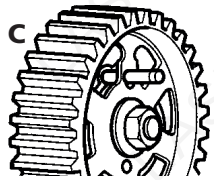
Instruction

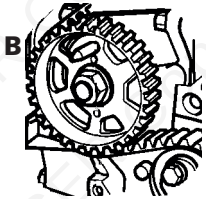
Pin **(A)** is used to align the two sprockets and the fuel pump.



The camshaft sprocket setting pin **(C)** enables the camshaft to be aligned prior to servicing the engine.

The fuel pump alignment pin **(B)** is inserted through the fuel pump sprocket.





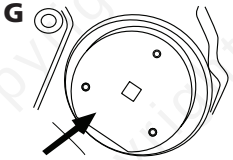
Flywheel alignment pins enable the crankshaft to be locked in the correct timing position.

Setting pin **(B)** locks the timing position of both the crankshaft and the fuel pump.

Remove the crankshaft position sensor before fitting the flywheel locking tool **(D)**

To remove and replace the fuel pump access cover use tool **(G)** with a 1/2" sq. drive wrench. The three pins are located into the appropriate cover holes.

The injection pump sprocket locking tool **(H)** is required to retain the pump timing position and is fitted in a clockwise direction with the three bayonet slots locating on the aperture lugs.



The holes enable access to the three pump securing bolts using T45 Key **(I)**

The Tensioner contact is first pushed back whilst releasing the pawl to enable the Locking Pin **(F)** to be inserted to lock back / deactivate the chain tensioner prior to its removal.