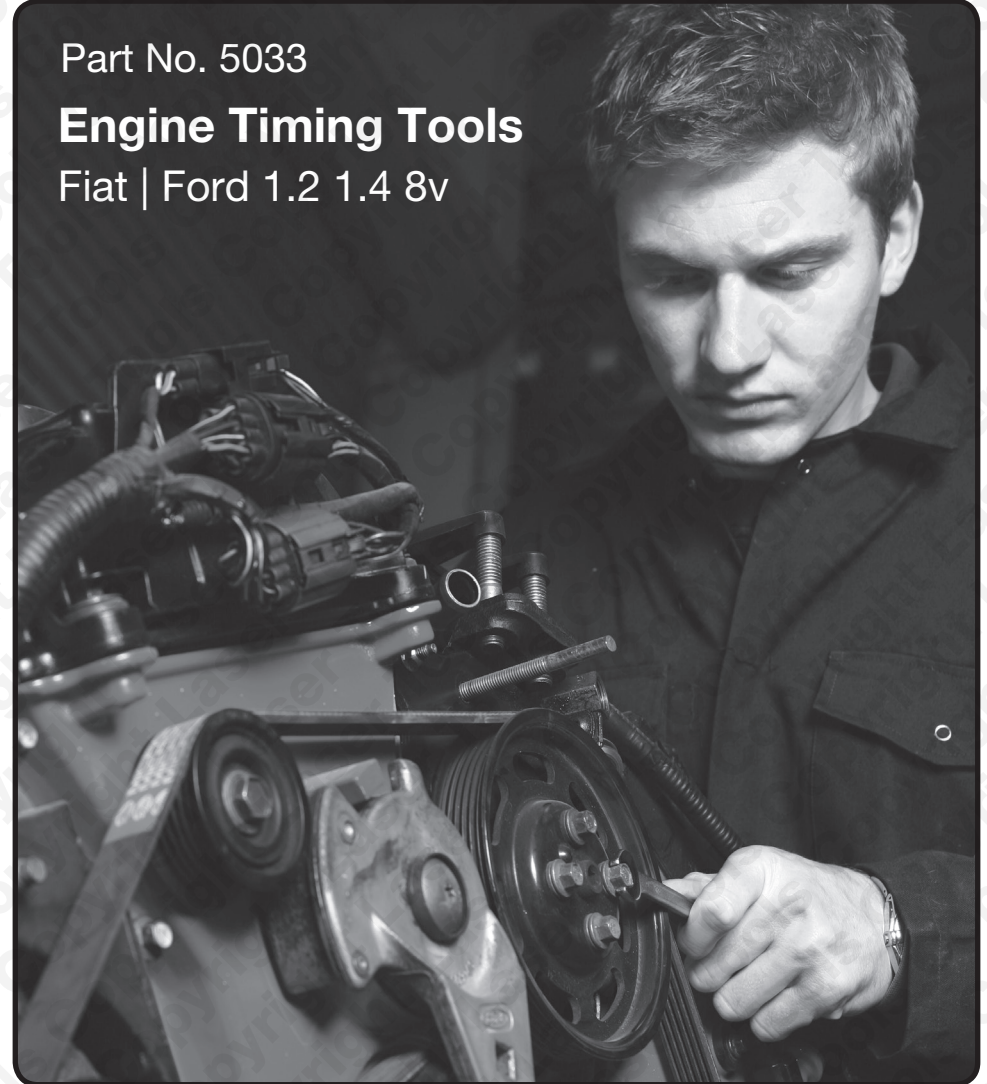


LASER®

Part No. 5033

Engine Timing Tools

Fiat | Ford 1.2 1.4 8v



www.lasertools.co.uk



Distributed by The Tool Connection Ltd
Kington 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 816186**. Normal wear and tear are excluded as are consumable items and abuse.

www.lasertools.co.uk

www.lasertools.co.uk

Introduction



Part No. 5033
Engine Service Tool Kit
Fiat | Ford 1.2 | 1.4 8v

500 | Idea | Linea | Punto | Doblo | Panda | Ford KA
Engine codes 169A4.000 | 199A4.000/350A1.000 | 188A4.000EVO 2 only.

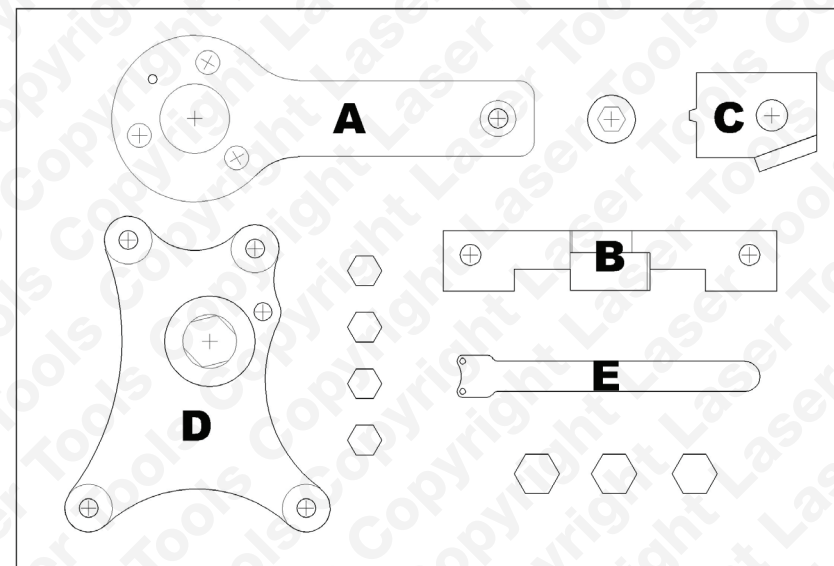
Warning

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
- 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 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

Plan Layout



Code	Oem Code	Description
A C491	2 000 004 500 2 190 754 500	Crankshaft Locking Tool
B C492	2 000 004 400 2 190 754 400	Camshaft Setting Bracket
C C493	2 000 004 200 2 190 754 200	Camshaft Sprocket Locking Tool (M10)
D C494	2 000 004 300	Camshaft Cover Alignment Tool
E C256	1 860 987 000	Tension Tool

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.

Autodata

Our applications data is supplied by Autodata and we are able to supply this data to you in a PDF format.

If this is a specific kit for a group of engine codes the application list has been supplied showing the main vehicles this kit is designed for and does not list every model each pin fits.

If this is a master kit then all vehicles are included.

The data is the copyright of The Tool Connection Ltd and should not be reproduced

If the application data is extensive we have included a CD with the application list in .pdf format.

Languages

We have also included where possible translations for the instructions in the following languages:

- French
- Spanish
- Italian
- Dutch
- German
- Portuguese

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

ALWAYS USE A REPUTABLE WORKSHOP MANUAL

For up to date information go to:

www.lasertools.co.uk/toolpoint

Instruction

Preparation

Access to the timing belt end of the engine is restricted on these engines. For this reason some or all of the following may need to be removed:

Right hand front wheel, inner wheel arch, sub frame connection bar and air intake system. It will be necessary to remove the right hand engine mounting and bracket. For this reason an additional engine support will be required. (Refer to manufacturer's information for details).

A Crankshaft Locking Tool

Fit component (A) to the crankshaft and lock the crankshaft in position with the bolt provided. Loosen the tensioner fixing, back the tensioner off and remove the belt.

N.B. Manufacturer vehicles specific instructions should be consulted when setting the belt tension.

B Camshaft Setting Bracket

Turn the crankshaft so that the notch in the camshaft is in the 12.o'clock position and fit component B (Camshaft Setting Bracket) so the bracket locks the end of the camshaft (opposite end to the belt)

C Camshaft Sprocket Locking Tool

The component C is designed to allow the user to lock the camshaft sprocket in position to allow it to be loosened with out turning the camshaft (engines fitted with VVT, 350A1 000).

D Camshaft Cover Alignment Tool

Component D is used to ensure the Cam end cover (1.4 engines with VVT) is fitted in the correct position to ensure the Camshaft sensor is correctly aligned.

E Tensioner Adjuster

Required to back off and adjust the belt tensioners fitted to these engines.

