

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.



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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.

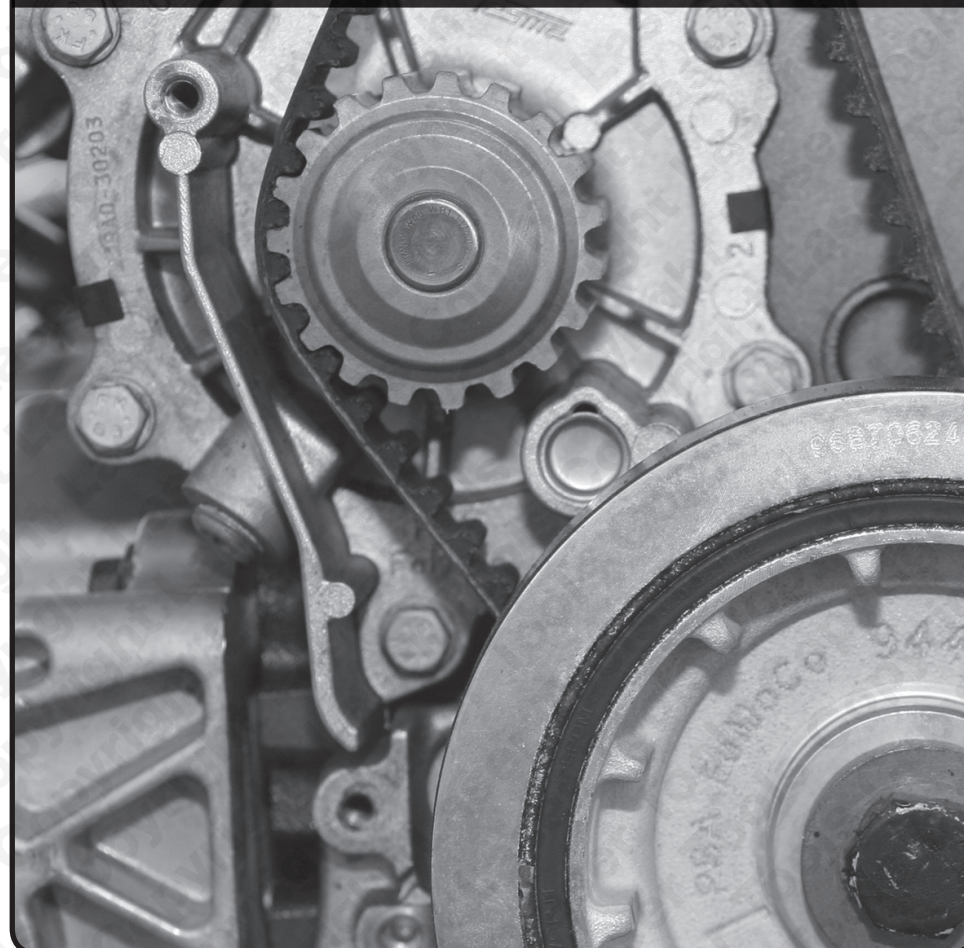
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LASER®

Part No. 5934

Engine Timing Tools

Alfa Romeo | Fiat Multiair



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Introduction



Part No. 5934 Engine Timing Tool Kit Alfa Romeo | Fiat Multiair

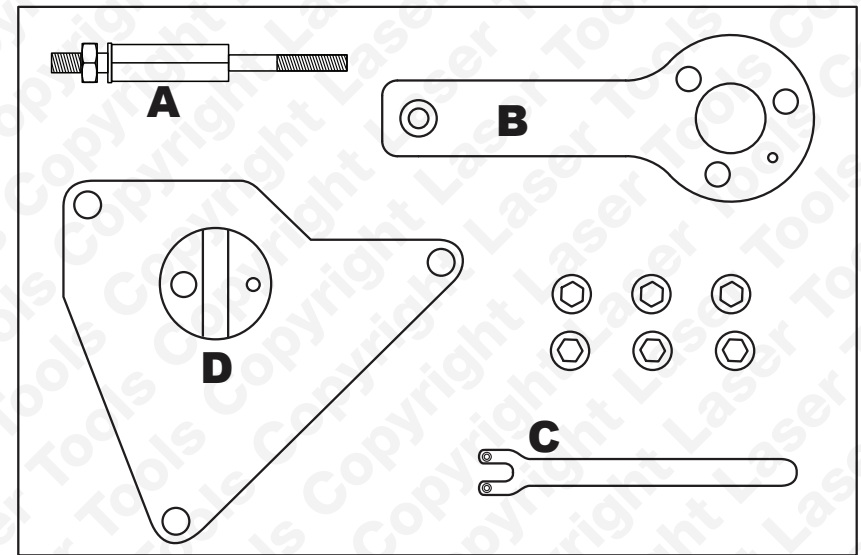
Alfa Romeo Mito | Giulietta Multiair 105 | Multiair Turbo135 | 163 | 170 from 2009-2013
with engine code 955A6.000 | 955A2.000 | 955A7.000 | 955A8.000 | 940A2.000.

Fiat Punto Evo | Punto | Bravo 2009-2013 with engine codes 198A7.000 | 955A6.000.

Lancia Delta 2010-2013 with engine code 955A7.000.

Chrysler Delta 2011-13

Plan Layout



Code	Oem Code	Description
A C013	2 190 754 200	Fixing Stud for Crankshaft Locking Tool
B C491	2 000 004 500	Crankshaft Locking tool
C C256	1 860 987 000	Tensioner Tool
D C590	2 000 034 400	Camshaft Locking plate

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.

Make	Model	Size	Type	Engine Code	Year
Alfa Romeo	Giulietta	1.4	Turbo MultiAir 170	940A2.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 170 Turbo	940A2.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 135 Turbo	955A2.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 105	955A6.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 135 Turbo	955A7.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 163 Turbo	955A8.000	2009-13
Alfa Romeo	Mito	1.4	MultiAir 170 Turbo	955A8.000	2009-13
Chrysler	Delta	1.4	140 M-Air	198A7.000	2011-13
Fiat	Bravo	1.4	Turbo MultiAir 140	198A7.000	2009-13
Fiat	Punto	1.4	Turbo MultiAir 135	955A2.000	2009-13
Fiat	Punto Evo	1.4	Turbo MultiAir 135	955A2.000	2009-13
Fiat	Punto	1.4	MultiAir 105	955A6.000	2009-13
Fiat	Punto Evo	1.4	MultiAir 105	955A6.000	2009-13
Fiat	Punto	1.4	Abarth	955A8.000	2009-13
Fiat	Punto	1.4	Abarth Esseeesse	955A8.000	2009-13
Fiat	Punto Evo	1.4	Abarth	955A8.000	2009-13
Fiat	Punto Evo	1.4	Abarth Esseeesse	955A8.000	2009-13
Lancia	Delta	1.4	Turbo MultiAir	198A7.000	2010-13

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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

Developed to lock the cam and crankshaft in position to allow the removal and replacement of the timing belt fitted to the new generation 1.4 Fiat MultiAir engines.

N.B The information given below is for reference only.

The Tool Connection recommends the use of Manufacturer data or Autodata.

Preparation:

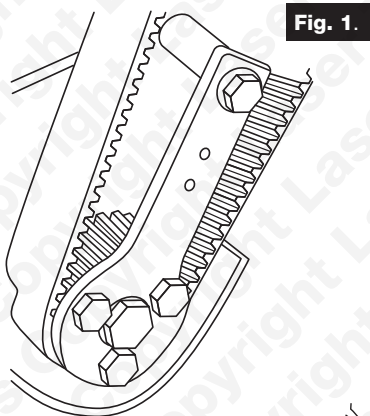
- Raise vehicles and remove right front wheel
- Remove the under shield
- Remove inner wheel arch
- Remove engine top cover
- Remove the vacuum pump from the gearbox of the end of the camshaft

Component Descriptions

Components A/B = Fixing post, Crankshaft locking plate, fixing bolts

A/B are used to lock the crankshaft in its timed position. In order to fit these components the crankshaft auxiliary drive belt pulley must first be removed.

Fit **A/B** as shown in **Fig. 1**.

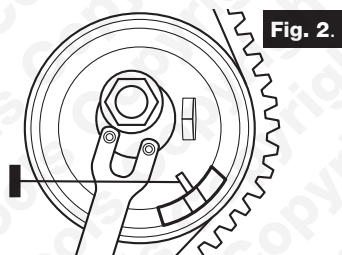


Component C = Tensioner adjusting tool

Use component C to turn the belt adjuster to tension the timing belt.

Ensure the camshaft pulley fixing bolt has been loosened to allow the pulley to turn freely but with out tilting. Turn the tensioner in an anticlockwise direction to adjust the belt and then tighten the pulley. See **Fig. 2**.

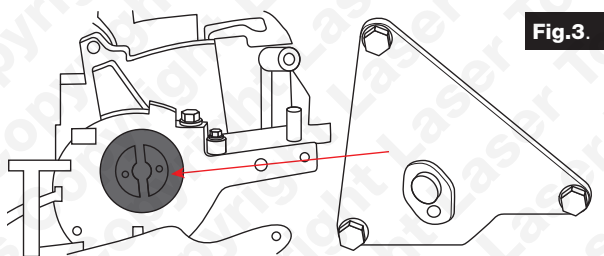
In order to loosen and tighten the pulley bolt with out turning the camshaft or overloading the camshaft timing plate (**D**) it is advised an appropriate pulley holding tool be used.



Components D = Camshaft Timing plate and Fixings

Component **D** is used to lock the camshaft in its timed position. It fits to the opposite end of the camshaft once the vacuum pump has been removed.

See **Fig. 3**.



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