

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



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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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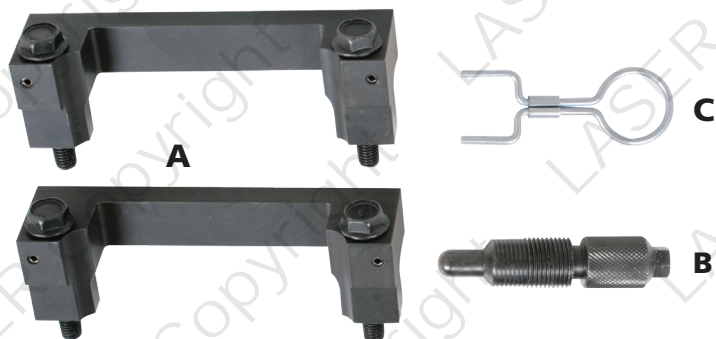
Timing Tool Kit

**Audi A4 | A6 | A8 2.4 | 3.2
FSi Chain Engines**



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Plan Layout



Ref	Code	Oem Code	Description
A	C356	T40070	Camshaft Locking Tool (2)
B	C357	T40069	Crank Locking Timing Pin
C	C358	T40071	Timing Chain Tensioner Locking Pin

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 Tool Connection 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
- German
- Italian
- Dutch

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

Instruction

The timing chains are positioned at the rear of the engine.

It is therefore necessary to remove the engine, transmission and flywheel before it is possible to remove and replace the timing chains.

The Crankshaft Pulley may require turning to a position just before Top Dead Centre to enable the Crankshaft Alignment Pin **(B)** to be inserted.

The threaded holes in the camshafts must face upwards and lock the Balancer Shaft in position.

Fit the Camshaft Locking Tools **(A)** in position, and tighten the securing bolts to 20Nm. (If this tool cannot be fitted, the valve timing is incorrect).

It will be necessary to remove the chain tensioners to enable chain removal and replacement.

The Tensioner plunger must be depressed and locked in position with Tensioner Locking Pin **(C)**

With the chains removed align the Camshafts and refit the Camshaft Alignment tools **(A)**

Refit the chains.

It is recommended that following the removal of all tools the crankshaft is turned twice and the valve timing positions re-checked by re-fitting the camshaft and crankshaft tools.

Other tools required:

T10172	Camshaft Adjuster Pre-tensioning tool
T10172/2	Camshaft Adjuster Pre-tensioning tool
T40058	Crankshaft pulley bolt adaptor (23162-95)
T10035	Camshaft Sprocket Adaptor
3212	Two pin Wrench