



## BMW ENGINE LOCKING KIT CT3589



### GENERAL

This timing tool kit is used to check and adjust the engine timing and is required for such replacing the timing chain, camshaft and other work on the engine timing.

The kit contains essential tools for positioning the VANOS, crankshaft, camshaft and balancershaft.

The set is suitable for BMW models with timing chain.

1 Series E81 / E82 / E87 / E88, 2006-2012

3 Series E90 / E91 / E92 / E93, 2006-2012

5 Series E60 / E61, 2007-2010

Engines: N43 (B16A/AA), N43 (B20A), N43 (B20AA), N43 (B20AY), N43 (B20KO), N43 (B20UO)

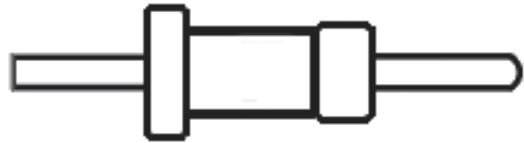
### SAFETY ADVICE

- DO NOT use the set if any parts are missing or damaged.
- Never lay tools on the vehicle's battery. This may short the terminals together.
- Be careful when working on running engines. Loose clothes, tools and other things can be caught up in revolving parts which may lead to serious injuries.
- Keep children and other unauthorised persons away from the working area.
- Be careful when working on hot engines – risk of burn!
- Remove the ignition key before repair so that the engine will not start unintentionally.
- This manual is just brief information and will not replace a garage handbook.
- Always consult specific service literature for information about torques, assemblies and disassemblies etc.
- After any successful maintenance and before starting the engine, you should rotate the engine for two turns manually to check the new control time..

## CONTENTS

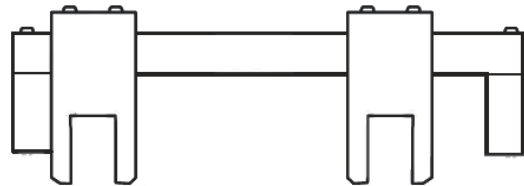
### Chain Tensioner Tool

to be used as OEM 11 9 340  
(11 9 341 / 11 9 342)



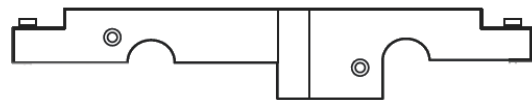
### Camshaft Locking Tool

to be used as OEM 11 8 690  
(11 8 691 / 11 8 692 / 11 8 693 )



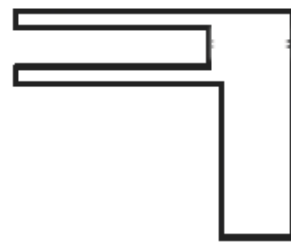
### Adjusting Tool for Vanos

to be used as OEM 11 8 710  
(11 8 711 / 11 8 712)



### Balance Shaft Locking Tool

to be used as OEM 11 8 700



### Crankshaft Locking Pin

to be used as OEM 11 5 120



### Chain Tensioner Locking Pin

to be used as OEM 11 3 340



## APPLICATION

### Chain Tensioner Tool

Used to fix the camshaft in timing position. The tool is mounted on the gear side end of the camshaft, when first cylinder is in TDC. (Fig.1)

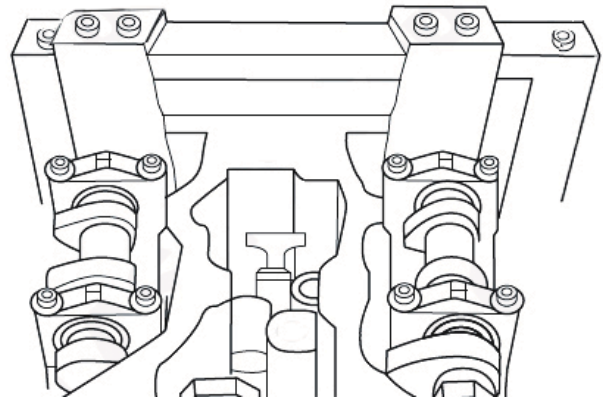


Fig.1

### Adjusting Tool for Vanos

The tool is used to align the sensor of the vanos. (Fig. 2)

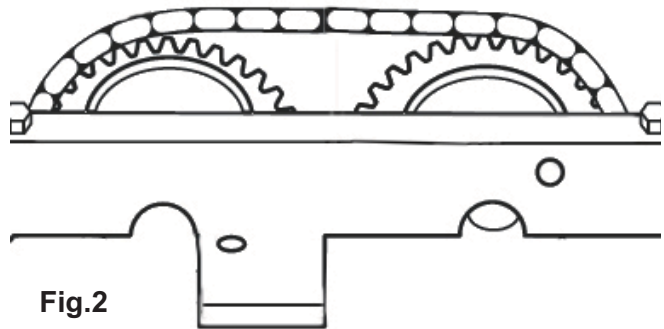


Fig.2

### Chain Tensioner Tool

Is used for dissolving the chain tensioner and is required for all work if a removal of the chain is required.

### Chain Tensioner Locking Pins

Is needed in order to keep the chain tensioner in disassembly position.

### Balance Shaft Locking Tool

Is used to fixing of the balance shafts in assembly position. (Fig. 3)

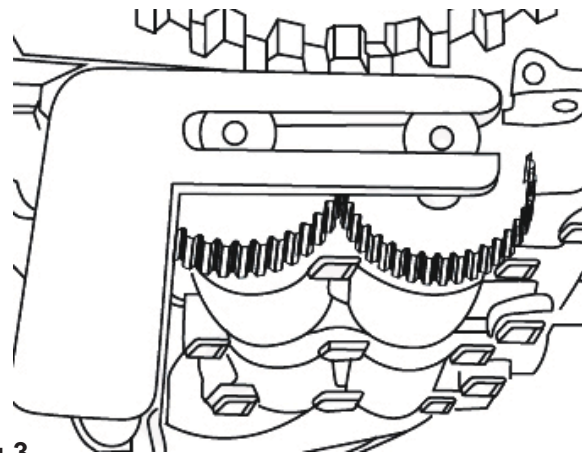


Fig.3

### Crankshaft Locking Pin

The tool locks the crankshaft in the TDC position. A lock is held on the flywheel. (Fig. 4)

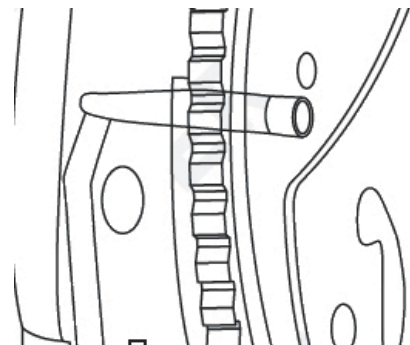


Fig.4