

# The Complete solution for...

## JTD Multijet timing chain failure

**NEW**  
from Blue Print



### The Kit...

**ADK873500**

Different from most competitors, Blue Print's timing kit contains not only the 'standard' components (chain, camshaft and crankshaft sprockets, both chain guides and hydraulic tensioner) but also the following extra components to create a truly complete kit to do the job 'Right First Time':

**Timing Cover Gasket** – the gasket on this engine is fragile and may be damaged when being removed. It also has rubber elements that will age and perish, so it is good practice to change the gasket while you have the timing cover off.

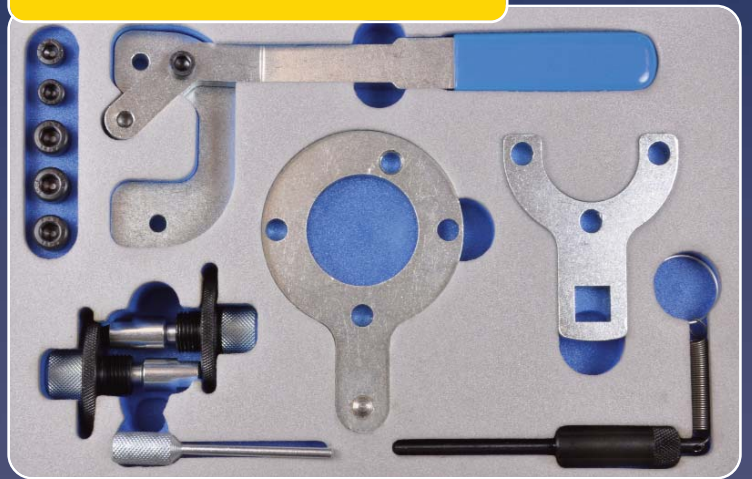
**Timing Tensioner bolts x2** – If the failure has been caused by the original bolts working their way loose, then the vibrations may have damaged the threads. Either way, it is good practice to replace them.

**Crankshaft oil seal** – Another perishable component that should also be changed as part of the repair job.

**Remember, if its not 10 pieces then it isn't a complete kit!**

### PLUS - The Tool...

**ADK85501**



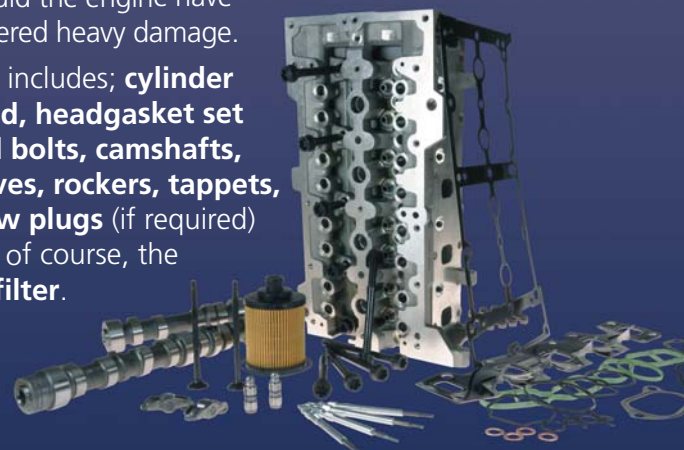
**In order to do the job properly you will need an engine locking and timing tool which is also available from Blue Print – part number ADK85501.**

This complete tool kit for the 1248cc JTD multijet engine is unlike most other kits currently available, in that it has been specifically designed to be used with all the FIAT, Vauxhall/Opel, Suzuki, Alfa and Ford applications.

## Heavy Damage?

Blue Print also have the parts you need should the engine have suffered heavy damage.

This includes; **cylinder head, headgasket set and bolts, camshafts, valves, rockers, tappets, glow plugs** (if required) and of course, the **oil filter**.



# Technical briefing - JTD Multijet timing chain issues

## The Engine...

The 1248cc JTD Multijet engine is fitted to a number of popular vehicles:

- |                           |                              |
|---------------------------|------------------------------|
| ■ Alfa Romeo MiTo 2008>   | ■ Ford KA 2009>              |
| ■ Fiat 500 2007>          | ■ Suzuki Splash 2008>        |
| ■ Fiat Doblo 2004>        | ■ Suzuki Swift 2005>         |
| ■ Fiat Fiorino 2008>      | ■ Vauxhall/Opel Agila 2003>  |
| ■ Fiat Idea 2004>         | ■ Vauxhall/Opel Astra 2005>  |
| ■ Fiat Panda 2004>        | ■ Vauxhall/Opel Corsa 2003>  |
| ■ Fiat Punto 2003>        | ■ Vauxhall/Opel Combo 2003>  |
| ■ Fiat Grande Punto 2005> | ■ Vauxhall/Opel Meriva 2005> |
| ■ Fiat Qubo 2007>         | ■ Vauxhall/Opel Tigra 2004>  |

## The Problem...

Timing chain failure on the JTD Multijet engine is not unusual, with snapped chains on cars under three years old and with as little as 40,000 miles an unfortunate reality for some owners.

## The Cause...

One common reason for failure appears to be the bolts that secure the tensioner work their way loose, thus the chain becomes slack and either rattles for a while before snapping, or sometimes fails very quickly with little or no notice. Lubrication, oil feed and low oil pressure, often due to lack of servicing and wrong oil choice, can also cause chain and tensioner issues.

## The Symptoms...

**From the research that we've carried out, the failures frequently follow the same pattern:**

- The chain starts to rattle on cold start-ups which can lessen as the engine warms up. Being a diesel, the noise often goes unnoticed by the driver who thinks it's normal and carries on driving.
- The noise worsens until one of two things happens... the chain jumps a few teeth, which has a marked effect on engine power / performance, at which time the driver no longer ignores the problem and brings it in for diagnosis/repair.

**OR**

- The chain snaps and the vehicle arrives at your garage on the back of a recovery truck!

## The Result...

Chain failure can result in anything from no engine damage (replace timing chain kit and off you go) to substantial damage to the top of the engine - cylinder head, camshafts, valves and rockers. FIAT technicians have told us that the engine has 'shear' rockers that are supposed to absorb any further valve-train damage, but we've heard of many cases where engine damage has been quite substantial.

