

## TIMING CHAIN KITS



GERMAN MARQUES

### VOLKSWAGEN GROUP

#### TC0100K / TC0106K / TC0107K

These kits contain the Electronic Tensioners that the Volkswagen Group have used as a version of variable valve timing. The engine ECU activates the solenoid in the tensioner which allows oil pressure to slightly rotate the inlet camshaft which means the timing of the opening and closing of the inlet valves can be altered according to engine speed. The tensioners can fail for a number of reasons including the wearing out of the pads or deterioration of the plastic itself. This will cause a constant grinding noise and will lead to rough idling, low power and the valves will not be correctly timed. Another type of failure is down to the hydraulic piston which will stop moving in and out leaving the chain to run free. This can lead to the chain scraping the valve cover. The rattling chain at start up is the best indication that this kit needs replacing.



	Engine Code			
<b>TC0100K</b>	AGN	AWT	AUM	AUQ
<b>TC0106K (Left)</b>	BDV	BES	ACK	APR
<b>TC0107K (Right)</b>	BDV	BES	ACK	APR

#### TC0110K

Fits Audi, Seat, Skoda and Volkswagen 2.0 Petrol engines. At around 40,000 miles the chain is known to jump several teeth damaging it and the tensioner when the water pump seizes. If the chain and tensioner aren't replaced then timing the camshafts back up at top dead centre becomes very difficult and the car will struggle at low revs and in reverse. The tensioner in this kit is also known to fail if service intervals are not followed as dirty oil can block the oil ways and prevent the tensioner working correctly. This could lead to the engine losing timing.



#### TC0140K

Fits the 2.0 petrol ALT Volkswagen engine fitted to the A4, A6 and Passat. The timing chain tensioner pads wear out which causes grinding, rough idle and low power, it is also possible that the valves will not be correctly timed. If the piston itself fails the chain can run loose and will scrape against the valve cover. To prevent this if any noise is heard from the chain or tensioner it should be replaced immediately.





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### BMW

#### TC0920K

Fits the BMW M52 and M54 engines. This kit fits the upper part of the timing chain system based around the VANOS VVT units. The tensioner is prone to excessive wear on the plastic pads (it can look like it has been chewed after 60,000 miles) and will require replacement to ensure smooth running.



### MERCEDES

#### TC5610K

Fits Mercedes M272 (2.5, 3.0 and 3.5 litre engines). The damage done by the known fault of the camshaft sprocket being manufactured from defected materials is first identified when the check engine light is illuminated. The damage is done to the chain rather than the sprocket so BGA have launched a kit with an updated split link chain to prevent further damage being done to the engine.

