## **≝ febi 45052, 48577,**

49517, 102140, 104259, 107797, 172944, 174460



To Fit:

Various Volkswagen, Audi, Seat and Škoda models fitted with the four-cylinder 1.2 TSi engine

Engine code: CBZA, CBZB, CBZC





(EN)

## Timing Chain and Timing Chain Kits

The Volkswagen group 1.2 TSi engine, manufactured before October 2011, is susceptible to timing chain elongation.

Symptoms include:

- A rattling noise from the engine bay
- In extreme cases the timing chain can jump teeth on the sprocket, causing incorrect valve timing. This can result in the engine running unevenly and the illumination of the 'check engine' light. In addition, contact can occur between the valves and pistons, resulting in serious engine damage.

As a result of these issues, the vehicle manufacturer introduced a reinforced timing chain to address this problem, which now prevents elongation.

Nevertheless, there may still be a rattling noise which can be heard in the first five seconds after start-up. This noise originates from the hydraulic chain tensioner since it takes time to accumulate oil pressure as the spring inside the chain tensioner weakens over time. This rattling noise is more likely to be heard in older, higher mileage engines.

## **Production Changes During 2011**

A completely updated timing chain kit for the 1.2 TSi engine was introduced at the end of 2011. These changes included:

- · Wider timing chain
- · New chain guides
- · An improved, larger chain tensioner
- Sprockets with an enhanced tooth design

For more technical information please visit: partsfinder.bilsteingroup.com

## **≡ febi 45052, 48577,**

49517, 102140, 104259, 107797, 172944, 174460



To Fit:

Various Volkswagen, Audi, Seat and Škoda models fitted with the four-cylinder 1.2 TSi engine

Engine code: CBZA, CBZB, CBZC



(EN)

The engines produced post 2011 with the new timing chain kit are not susceptible to the start-up rattling noise of the earlier engines (if maintained regularly).

febi offers a broad range of timing chain kits for this engine, including all technical improvements throughout its production period. febi also offers a kit (174460) which is complete, upgraded and strengthened. This kit can also be retrofitted to earlier engines in order to take advantage of the improved performance characteristics which are not available from OE.

Part Description	Single Chain 48577	Small Chain Kit 49517	Medium Chain Kit 104259	Large Chain Kit 172944	Single Chain 45052	Small Chain Kit 102140	Medium Chain Kit 107797	Large Chain Kit 174460
Chain	X	Х	Χ	Χ	Х	X	Х	Х
Tensioner		X	Χ	Χ		X	Χ	X
Chain guide rail		X	Χ	Χ		X	Χ	X
Chain guide rail		X	Χ	Χ		X	Χ	X
Camshaft sprocket			Χ	Χ			Χ	X
Crankshaft sprocket								X
Crankshaft seal		X	Χ	Χ			Χ	X
Crankshaft bolt		X	Χ	Χ			Χ	X
Camshaft bolt				Χ			Χ	X
Chain cover bolt x1				Χ				X
Chain cover bolt x12				Χ				X
	Up to 10.2011				From 10.2011			without date restriction

For more technical information please visit: partsfinder.bilsteingroup.com