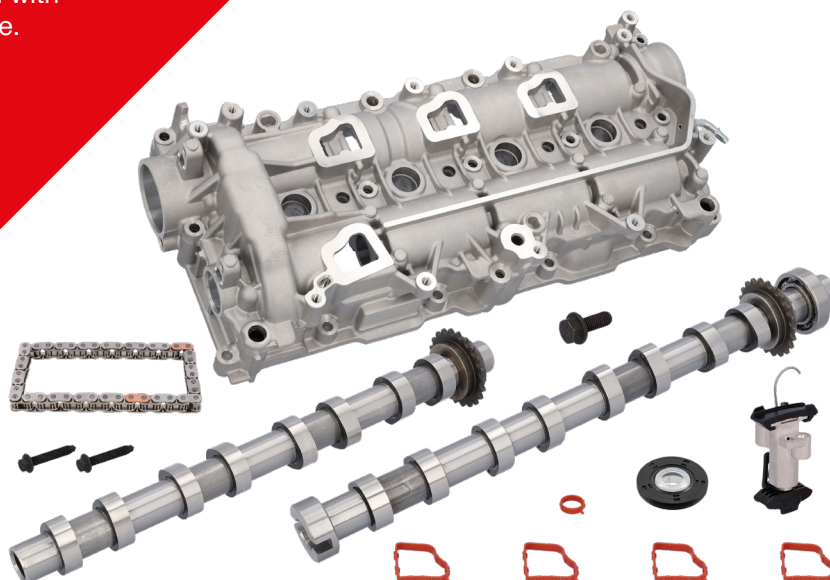


febi 196827, 1000002, 1000003, 1000004



To fit: Various Citroën, DS, Peugeot, Fiat, Ford, Toyota, Vauxhall and Opel models fitted with the four-cylinder 16 valve 1.5 HDi engine.



EN

Timing Chain and Camshaft Kits

Problem

Engine unable to start or rattling noise from the engine bay. Disruption or offsetting of the camshaft drive chain setting can cause the chain to jump teeth on the sprocket. This causes incorrect valve timing, leading to the engine running rough and the illumination of the check engine light. It can also result in contact between the valves and pistons, causing serious engine damage.

Cause

Engines manufactured before January 2023 are susceptible to elongation of the timing chain which drives the camshafts.

Solution

The vehicle manufacturer introduced a reinforced timing chain to address this issue, increasing the size of the chain and camshaft sprockets.

The condition of the camshaft drive chain and tensioner must be checked before commencing any repairs on an engine presenting these symptoms.

To identify which camshaft drive chain is fitted, locate the part number for the camshaft carrier which can be found near the oil filter. The part number for vehicles fitted with the 7 mm camshaft chain drive is 9812647280, and for vehicles with the 8 mm camshaft chain drive it is 9830580480.

Check the engine management ECU software and update if required to improve the oil pump lubrication of this engine.

Note: The condition of the combustion chambers will determine whether the camshaft chain drive can be updated or if the internal combustion engine needs to be replaced.

febi 196827, 1000002, 1000003, 1000004



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Production Changes from January 2023

A completely updated timing chain kit for the 1.5 HDi engine was introduced with the changes listed below:

- Wider timing chain 7 mm – 8 mm with increased tensile strength and tensioner
- New camshafts
- New camshaft carrier
- Sprockets with an enhanced tooth design

Engines produced post January 2023 – or those updated in service prior to the production change with the new wider camshaft drive chain – are not susceptible to the start-up rattling noise typical of the earlier engines if maintained regularly.

However, the recommended oil replacement interval is now every 20,000 miles/32,000 km for this engine, and the manufacturer recommends using 5W30 grade oil (febi oil part numbers 198691, 198692, 198693) instead of the original 0W30 specification.

febi offers a complete range of Timing Chain Kits for this engine, incorporating all technical improvements made throughout its production run. This includes the upgraded and reinforced Camshaft Kit 1000004 for engines produced before 2023 which features an 8 mm camshaft chain, tensioner, inlet and exhaust camshafts, camshaft carrier, fixings and seals.

This kit can be retrofitted to earlier engines to take advantage of the improved performance characteristics.

Note: It is recommended to use replacement Timing Belt Kit 183551 at the same time when replacing the camshaft drive chain drive.

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To fit: Various Citroën, DS, Peugeot, Fiat, Ford, Toyota, Vauxhall and Opel models fitted with the four-cylinder 16 valve 1.5 HDi engine.

Part Description	8 mm Chain Small Kit 196827	8 mm Chain Medium Kit 1000002	8 mm Full Chain Kit 1000003	7 mm to 8 mm Upgrade Kit 1000004
Chain	X	X	X	X
Tensioner	X	X	X	X
Shaft Seal	X	X	X	X
Camshaft Inlet		X	X	X
Camshaft Outlet		X	X	X
Tensioner Bolt		X	X	X
Camshaft Bolt		X	X	X
Gasket Set		X	X	X
Fixings		X	X	X
Timing Belt Kit			X	
Camshaft Housing				X
Production Date	From 01.2023			Without Date Restriction

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