



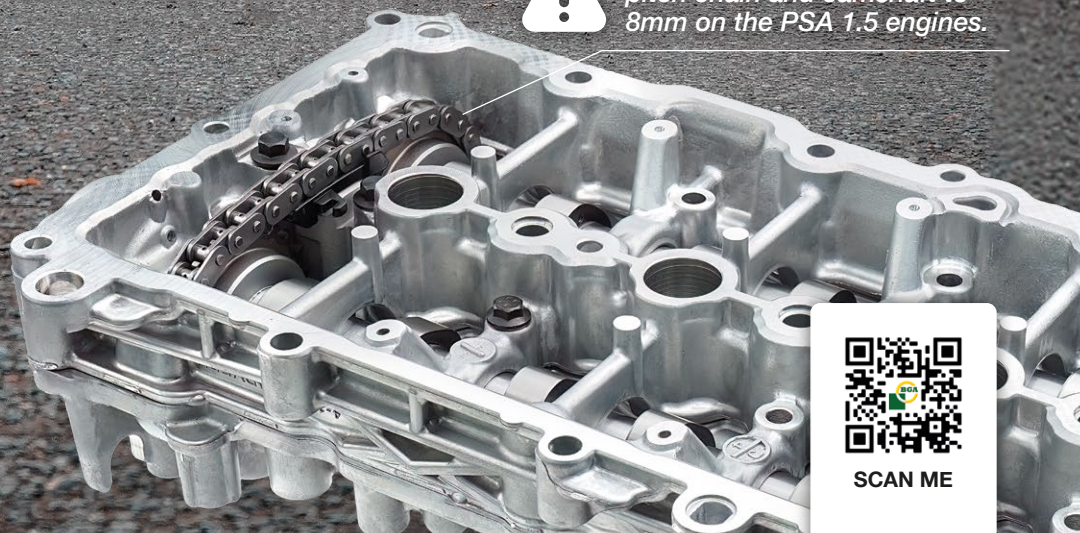
## DV5 Engine Repair & Upgrade.

7mm to 8mm Timing Setup.



### DID YOU KNOW?

OEM have upgraded the 7mm pitch chain and camshaft to 8mm on the PSA 1.5 engines.



SCAN ME

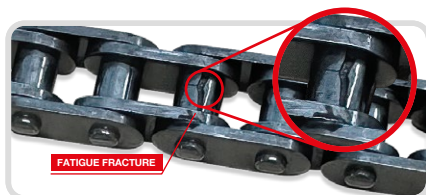


## THE PROBLEM:

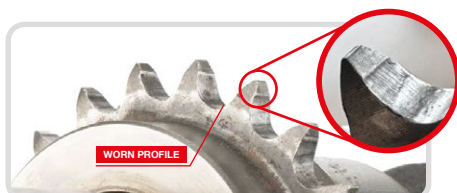
Modern engines including the PSA DV5 are fitted with EGR and DPF to fall in line with Euro emissions control legislation. This provides an improvement in MPG and lowers emissions but has a negative impact on the engine.

Harmful soot deposits accumulate in the internals of the engine and inevitably in the oil. These deposits are abrasive and will be flowing around the engines lubrication system causing lasting damage to the engine internals. The result is premature wear of the Timing Chain and the Camshafts, which have integrated sprockets.

Even a strict maintenance schedule wouldn't stop accumulation of particles. The recommended Oil Change Interval is set at 20,000 miles for this engine and manufactures are now recommending the use of a 5W30 oil not the original 0W30.



*Photographed: A fatigue fracture induced by repeated loading of the chain against a worn camshaft sprocket, which in turn has caused localised structural damage to the chain bush.*



*Photographed: Worn tooth profile on the camshaft sprocket due to the failing chain.*

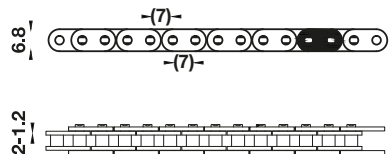


## THE SOLUTION:

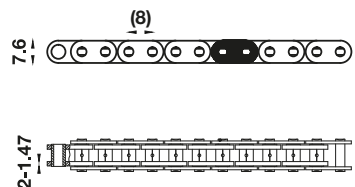
To combat the premature wear of the Timing Chain and Camshaft Sprockets, OE upgraded the components for all new vehicles, making the change around January 2023.

The original 7mm pitch chain was upgraded to 8mm, which in turn changed the integrated sprockets on the Camshafts. The 8mm chain has thicker plates allowing a 16% increase in width and increased tensile strength. To accommodate the increase in size the Cam Carrier has also been modified.

### 7mm Chain



### 8mm Chain



Whilst the upgrades will extend the lifespan of the OE components, it is not a complete fix to the root cause and any vehicles manufactured from 2018-2022 would have the 7mm setup from original production.



## Identifying your vehicle, 7mm or 8mm Timing setup?

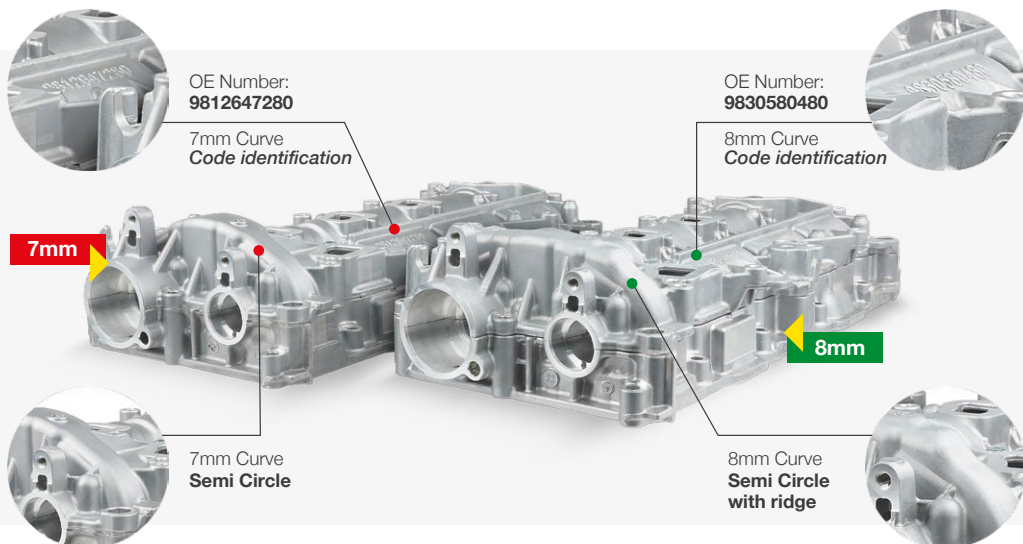
OE systems are not clear by application which Timing Setup has been used during production, with the upgrade change around January 2023. Also some pre 2023 vehicles may have already been upgraded under warranty.

It is possible to identify which Timing Setup you have fitted to your vehicle without removing the cover to inspect the chain and intergraded cam sprockets.

▶ Cam Carrier has been modified to accommodate the increase size of the timing setup.

▶ Original covers will also have different OE numbers on the housing.

Once you have identified your vehicle you can chose the best option for repair.



Once you have the Cam Carrier removed the difference between the 7mm and 8mm Timing Setup can be identified by the number of links of the timing chain or the number of teeth on the integrated camshaft sprockets.

### 7mm Chain



**22 Links = 44 Pins**



**21 Teeth**

### 8mm Chain



**21 Links = 42 Pins**



**22 Teeth**



## THE BGA SOLUTION UPGRADE & REBUILD KITS:

A like for like replacement & rebuild for vehicles fitted with **7mm Timing Setup**



**CS2312K**

### 7MM REPLACEMENT KIT

#### KIT CONTENTS:

CS1414 (7mm) - Camshaft  
CS1415 (7mm) - Camshaft  
TC2312K (7mm) - Timing Chain Kit  
CS1414B - Camshaft Bolt  
OS6703 - Oil Seal  
RK1406 - Gasket  
BGSILC - Silicone Sealant



**CS2337K**

### 7MM REBUILD KIT

#### KIT CONTENTS:

CS2312K KIT CONTENTS, PLUS:

BK3339 - Cylinder Head Bolts  
HL1435 (x16) - Hydraulic Lifters  
RA1435 (x16) - Rocker Arms  
V203632 (x8) - Inlet Vales  
V203633 (x8) - Exhaust Valves

A like for like replacement & rebuild for vehicles fitted with **8mm Timing Setup**



**CS2335K**

### 8MM REPLACEMENT KIT

#### KIT CONTENTS:

CS14003 (8mm) - Camshaft  
CS14004 (8mm) - Camshaft  
TC2335K (8mm) - Timing Chain Kit  
CS1414B - Camshaft Bolt  
OS6703 - Oil Seal  
RK1406 - Gasket  
BGSILC - Silicone Sealant



**CS2336K**

### 8MM REBUILD KIT

#### KIT CONTENTS:

CS2335K KIT CONTENTS, PLUS:

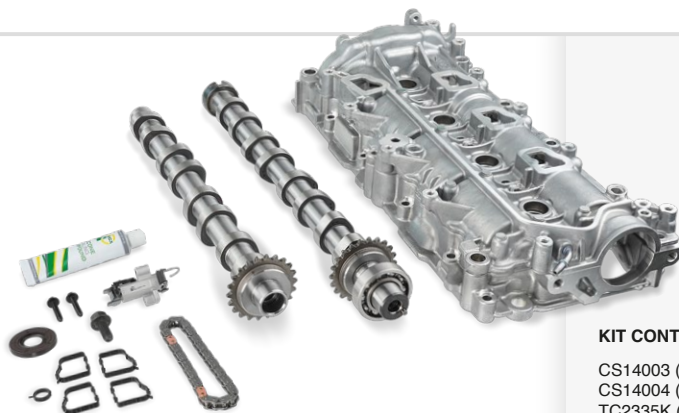
BK3339 - Cylinder Head Bolts  
HL1435 (x16) - Hydraulic Lifters  
RA1435 (x16) - Rocker Arms  
V203632 (x8) - Inlet Vales  
V203633 (x8) - Exhaust Valves



BGA STRONGLY RECOMMENDED



# THE MOST COMPREHENSIVE 7mm -> 8mm UPGRADE & REBUILD



**CS2335FK**

**8MM PROFESSIONAL REPLACEMENT KIT**

## KIT CONTENTS:

CS14003 (8mm) - Camshaft  
CS14004 (8mm) - Camshaft  
TC2335K (8mm) - Timing Chain Kit  
CS1414B - Camshaft Bolt  
OS6703 - Oil Seal  
RK1406 - Gasket  
BGSILC - Silicone Sealant  
RC1421 - Camshaft Carrier 8mm



**CS2336FK**

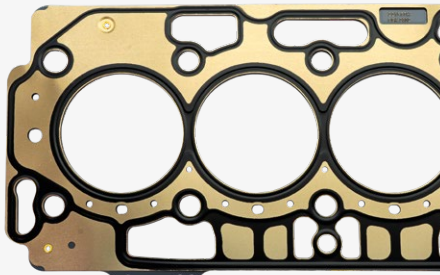
**8MM PROFESSIONAL REBUILD KIT**

## KIT CONTENTS:

CS14003 (8mm) - Camshaft  
CS14004 (8mm) - Camshaft  
TC2335K (8mm) - Timing Chain Kit  
CS1414B - Camshaft Bolt  
OS6703 - Oil Seal  
RK1406 - Gasket  
BGSILC - Silicone Sealant  
RC1421 - Camshaft Carrier 8mm  
BK3339 - Cylinder Head Bolts  
HL1435 (x16) - Hydraulic Lifters  
RA1435 (x16) - Rocker Arms  
V203632 (x8) - Inlet Valves  
V203633 (x8) - Exhaust Valves



# THE COMPLETE DV5 ENGINE SOLUTION



## SEALING

CH6700A (Cylinder Head Gasket 1.25mm)  
 CH6700B (Cylinder Head Gasket 1.30mm)  
 CH6700C (Cylinder Head Gasket 1.35mm)  
 CH6700D (Cylinder Head Gasket 1.40mm)  
 CH6700E (Cylinder Head Gasket 1.45mm)  
 HN1406 (Cylinder Head Gasket Set W/O Head Gasket)  
 RK1406 (Rocker Cover Gasket)  
 OS6703 (Camshaft Oil Seal)  
 OS7339 (Crankshaft Oil Seal)  
 BK3339 (Cylinder Head Bolts)  
 BGSILC (Silicone Sealant)



## BELT DRIVE

DC1412 (Alternator Freewheel Clutch)  
 DC1429 (Drive Belt Tensioner)  
 DP1406 (Crankshaft Pulley)  
 6PK976 (V Ribbed Belt)  
 6PK1145 (V Ribbed Belt)  
 6PK1153 (V Ribbed Belt)



## CAMTRAIN

V203632 (Inlet Valve)  
 V203633 (Exhaust Valve)  
 HL1435 (Hydraulic Lifter)  
 RA1435 (Rocker Arm)



## COOLING

CP1404 (Water Pump)  
 CT6502 (Thermostat)  
 CC3029 (Cooling Cap)



## LUBRICATION

CO1421 (Oil Cooler)  
 CO6705 (Oil Cooler - Automatic)  
 LP1407 (Oil Pump)  
 OCV2308 (Oil Control Valve)  
 SP1420 (Oil Sump - OE - 98 139 732 80)  
 SP1421 (Oil Sump - OE - 98 099 816 80)  
 PK01004 (Sump Plug Washer)  
 PK1406 (Sump Plug)



#### **TIMING BELT**

TB2350K (Timing Belt Kit)

TB2350CPK (Timing Belt Kit + Water Pump)

BC2312-1 (Camshaft Belt Pulley)

## **RECOMMENDED STOCK:**



**CH6700C**  
OE: 9824495780



**HN1406**



**BK3339**  
OE: 0204.A2 (x10)



**RA1435** | OE: 9811677680  
(x16 Required for this engine).



**HL1435** | OE: 9819917580  
(x16 Required for this engine).



**CT6502**  
OE: 9813021980



**V203632** | OE: 9811144580  
(x8 Required for this engine).



**V203633** | OE: 9811144480  
(x8 Required for this engine).



**TB2350K**





**BGA SUPPLY A WHOLE RANGE OF ENGINE PARTS FOR  
THE DV5 ENGINE FOUND IN CITROEN, DS, FIAT, FORD, OPEL,  
PEUGEOT, TOYOTA AND VAUXHALL.**



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