

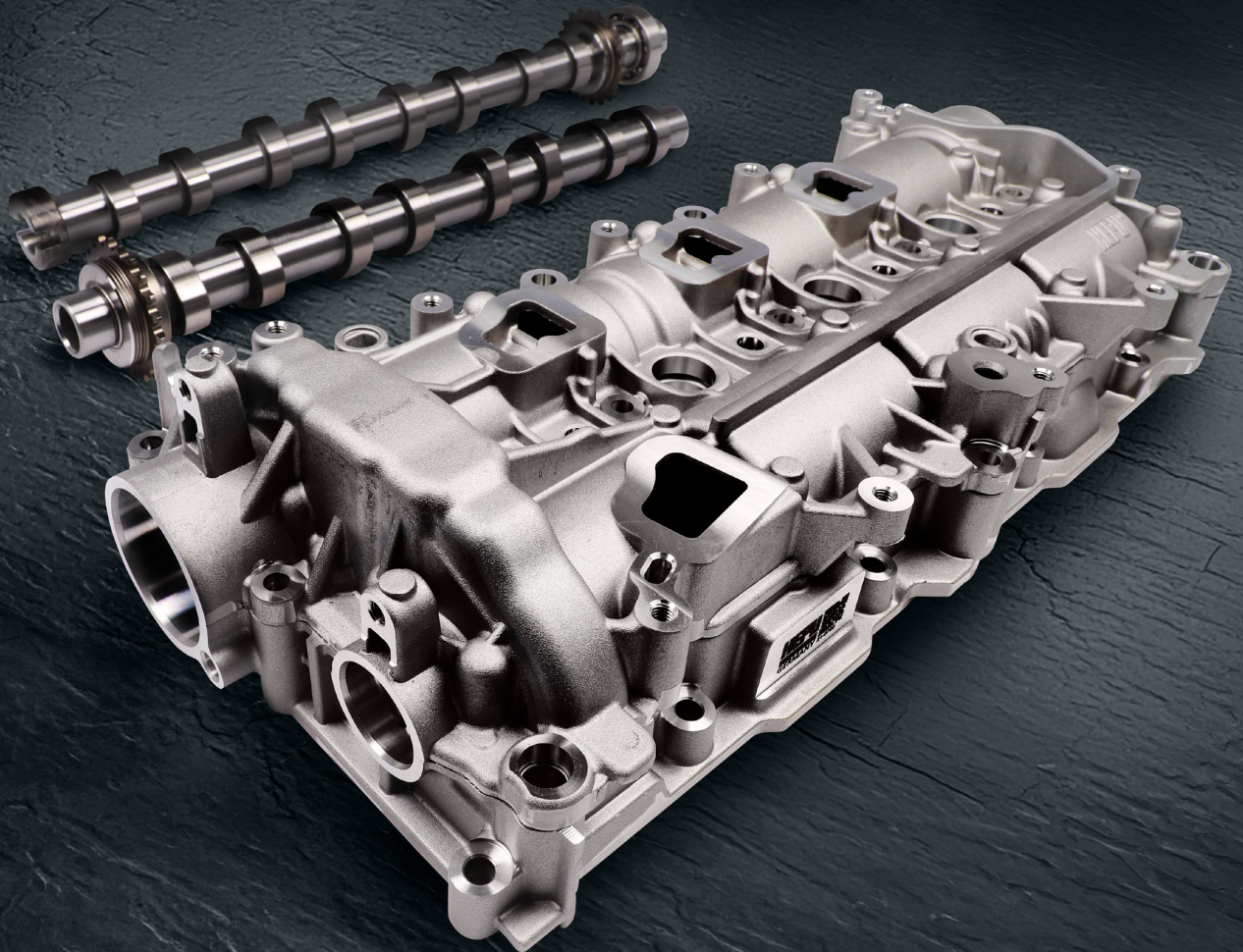
HEPU®



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DV5 Engine Repair & Upgrade.

TIMING CHAIN CONVERSION 21-0700 TIMING KIT SETUP



PUMP TECHNOLOGIES / TIMING KITS /
THERMAL MANAGEMENT / FLUIDS



THE PROBLEM

Modern engines such as the PSA DV5 are equipped with EGR and DPF systems to reduce emissions and lower fuel consumption.

However, the high exhaust gas recirculation rates cause **soot and combustion residues to enter the engine**. These deposits accumulate in the intake tract, the crankcase and the lubrication circuit.

Fine soot particles enter the engine oil and circulate throughout the entire lubrication system.

These particles act as abrasives and **cause increased stress on the engine and its components**. Due to a design flaw in the chain geometry, the timing drive cannot withstand this elevated load.



7 mm TIMING CHAIN – THE WEAK POINTS

- ✗ Excessive chain curvature ▶ increased stress on timing chain & camshaft sprockets
- ✗ High tensile forces ▶ rapid chain elongation
- ✗ EGR/DPF-related stress on the lubricant film ▶ additional abrasive wear
- ✗ By design, even a new 7 mm chain operates beyond its rated load capacity

Result: Noise development, tensioner wear, chain elongation - in extreme cases: chain failure

Risk: Engine damage caused by timing drive failure

Solution

– Complete 8 mm Upgrade

To address the known **chain wear** issues, the manufacturer undertook a comprehensive revision of the timing drive in early **2023** and switched to a stronger **8 mm timing chain**. Vehicles from model years 2018 - 2022 are predominantly still equipped with the problematic 7 mm version. For vehicles prior to this technical change, a **conversion to the new system** is recommended in the event of damage or noticeable chain elongation. At the same time, switching to a **high-quality 5W-30** engine oil **and shortening the oil change interval where appropriate is advised**.

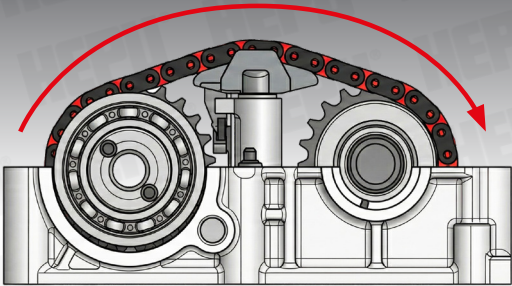
The 8 mm chain introduced from 2023 onwards provides a longer-lasting solution to this known problem.



WHY THE 8 mm SYSTEM IS THE PERMANENT SOLUTION

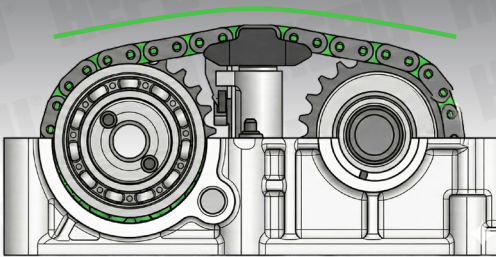
- ✓ Revised chain geometry and modified chain sprockets ▶ less chain curvature
- ✓ 16% wider chain ▶ higher tensile strength
- ✓ More stable operation ▶ no permanent overload conditions
- ✓ Significantly reduced chain elongation ▶ longer service life

7 mm TIMING CHAIN (PROBLEM ZONE)



- Why replacing 7 mm with 7 mm is NOT recommended:**
- The 7 mm geometry represents a fundamental design flaw
 - The timing chain operates beyond its rated load capacity from the factory
 - Stronger 7 mm chains do not eliminate the root cause
 - The OEM has fully switched to 8 mm geometry

8 mm TIMING CHAIN (SOLUTION)



- Important for workshops:**
- Replace 7 mm ▶ 7 mm = problem remains
 - Upgrade to 8 mm = sustainable repair solution
 - Fewer warranty claims
 - Higher customer satisfaction

Vehicle identification – 7 mm vs. 8 mm?

The two chain versions (7 mm vs. 8 mm) can be clearly identified by the number of chain links and the tooth count of the integrated camshaft sprockets.

MODEL YEAR	SYSTEM	STATUS
2018–2022	7 mm	Problematic
Early 2023	Mixed	Inspection required
From 2023	8 mm	OEM-Upgrade

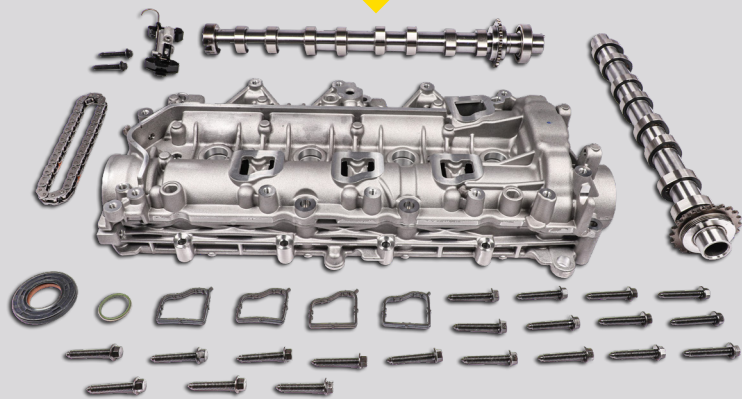
Recommendation: For a permanently reliable repair, always install the complete 8 mm upgrade system.

7 mm TIMING CHAIN (PROBLEM ZONE)	8 mm TIMING CHAIN (SOLUTION)
22 links = 44 pins	21 links = 42 pins
21 teeth	21 teeth

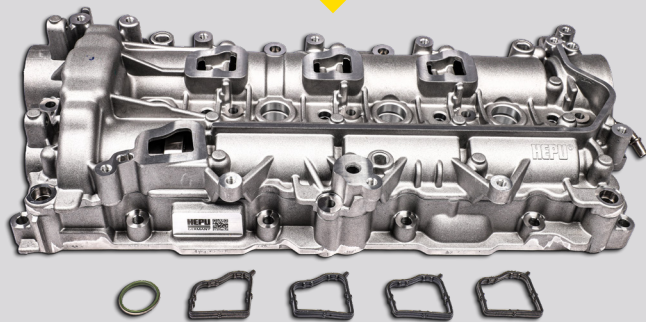


DV5 Engine Repair & Upgrade

21-0700 TIMING CHAIN UPGRADE KIT



Also available as a pre-assembled version: **21-0700-AS**



ALTERNATIVE KITS – Timing Chain Kits & Water Pump Kits

MODEL YEAR	CHAIN WIDTH	TIMING CHAIN KIT	WATER PUMP KIT (incl. chain)
Up to 2023	7 mm	21-0695	PK19010-XT1
From 2023	8 mm	21-0696	PK19010-XT2

Notice: 21-0695 / 21-0696 = Timing chain kit
PK19010-XT1 / XT2 = Complete kits incl. timing chain, belt, tensioner and water pump

XT1



**SERVICE /
REPAIR**

XT2

