



**NUMBER:** 09-006-15

**GROUP:** Engine

**DATE:** July 18, 2015

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**SUBJECT:**

Intermittent Engine Shudder While Driving

**OVERVIEW:**

This bulletin involves replacing the engine cylinder heads.

**MODELS:**

2014	(WK)	Jeep Grand Cherokee
2014	(DS)	Dodge Ram

**NOTE: This bulletin applies to vehicles equipped with the 3.0L V6 Turbo Diesel (Sales Code EXF).**

**SYMPTOM/CONDITION:**

A small number of customers may experience a slight engine shudder while driving. They may state that the condition feels and sounds like driving over rumble strips. It may also be perceived as an internal transmission issue or engine misfire. No Diagnostic Trouble Codes (DTCs) will set as a result of this condition.

**DISCUSSION:**

The root cause of the engine shudder has been found to be due to excess carbon build-up on the exhaust valve stems and will typically happen on vehicles driven mostly in light load conditions. As a result, new cylinder heads have been released that are equipped with newly designed valve stem seals. These newly designed seals are designed to help prevent excessive carbon from building up on the valve stems.

Although it may be hard to reproduce, engine shudder resulting from these excess carbon deposits, will typically only happen under the following driving conditions.

- Steady speeds between 50 and 70 mph (80 and 113 kph).
- Engine speed between 1600 - 2000 RPM.
- Present during engine warm up to operating temperature after a cold soak.
- Only present for a few seconds at a time and often during a 6-7 upshift.
- Light load acceleration or while driving up a slight grade.
- Symptom will go away either by aggressively applying the accelerator pedal or going into a zero throttle deceleration.

**DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If the customer describes the symptom/condition listed above, perform the Repair Procedure.

**PARTS REQUIRED:**

Qty.	Part No.	Description
1	68292424AA	Cylinder Head, Right
1	68292425AA	Cylinder Head, Left
1 (AR)	68147398AA	Gasket, Cylinder Head Left (No Hole)
1 (AR)	68147397AA	Gasket, Cylinder Head Left (1 Hole)
1 (AR)	68147399AA	Gasket, Cylinder Head Left (2 Hole)
1 (AR)	68147401AA	Gasket, Cylinder Head Right (no hole)
1 (AR)	68147402AA	Gasket, Cylinder Head Right (1 hole)
1 (AR)	68147403AA	Gasket, Cylinder Head Right (2 Hole)
2	68147492AA	Bolt, Camshaft
1	68229385AA	Line Kit, High Pressure Fuel
2	68148177AA	Gasket, Exhaust Manifold
1	68148135AA	Gasket, Intake Manifold
16	68211172AA	Bolts, Cylinder Head Retaining
6	05072722AA	Seal, Fuel Injector
6	68148333AA	O-Ring, Fuel Injector
2	68148176AA	Gasket, Exhaust Manifold to Turbo
1	68211320AA	Gasket, EGR Pipe
1	68211317AA	Gasket, EGR Pipe

**REPAIR PROCEDURE:**

- Using the operating parameters listed in the above discussion, test drive the vehicle to try and reproduce the condition. Was the shudder condition experienced on the test drive or does the customer's description of the concern match the operating parameters listed above?
  - Yes>>> Proceed to [Step #2](#).
  - No>>> This service bulletin does not apply. Further diagnosis is required.
- Replace both cylinder heads. Follow the detailed service procedures available in DealerCONNECT/TechCONNECT Service Information Section 9 - Engine, 3.0L> Cylinder Head> Removal/Installation.

- 3. Verify the PCM is programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM software.

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

<b>Labor Operation No:</b>	<b>Description</b>	<b>Skill Category</b>	<b>Amount</b>
09-35-03-9A	Road Test - Verify Engine shudder While Driving (3 - Highly Skilled)	9 - Engine Repair	0.3 Hrs.
09-35-03-9B	Head, Cylinder Assembly - Replace Both Sides (DS Only) (3 - Highly Skilled)	9 - Engine Repair	12.4 Hrs
09-35-03-9C	Head, Cylinder Assembly - Replace Both Sides (WK Only) (3 - Highly Skilled)	9 - Engine Repair	14.2 Hrs

**FAILURE CODE:**

ZZ	Service Action
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