

# Service Bulletin

Bulletin No.:

n No.: 17-NA-080 Date: February, 2018

# TECHNICAL

## Subject: Malfunction Indicator Lamp (MIL) Illuminated for LCV and LKW Engines - DTC P0411 Set

| Brand:    | Model:            | Model Year: |      | VIN: |    | Engine:            | Transmission: |
|-----------|-------------------|-------------|------|------|----|--------------------|---------------|
| Branu.    | woder.            | from        | to   | from | to |                    |               |
| Cadillac  | ATS               | 2013        | 2014 |      |    |                    |               |
| Chevrolet | Impala<br>(VIN 1) | 2014        | 2014 |      |    | 2.5L<br>(LCV, LKW) |               |
|           | Malibu            | 2013        | 2014 |      |    |                    |               |

| Involved Region or Country | North America and N.A. Export Regions  |  |
|----------------------------|--|--|
| Additional Options (RPOs)  | Secondary Air Injection (SAI) Only   |  |
| Condition                  | Some customers may comment that the Malfunction Indicator Lamp (MIL) is illuminated.<br>The technician may find DTC P0411 set.   |  |
| Cause                      | This condition may be caused by a by-product of using inferior fuel, creating restriction in the SAI ports in the cylinder head causing higher than expected SAI operation pressure. |  |
| Correction                 | If the SAI ports are diagnosed to be the cause of DTC P0411, the air injection ports and passages in the cylinder head will need to be cleaned.                                      |  |

### **Service Procedure**

**Notice:** GM UPPER ENGINE AND FUEL INJECTOR CLEANER is the only injector cleaning agent approved for use with General Motors fuel system components. Other injector cleaners may cause damage to plastics, plated metals or bearings. General Motors has completed extensive laboratory testing of GM Upper Engine and Fuel Injector Cleaner, and can assure its compatibility with General Motors fuel system components, as long as the cleaning procedure is followed correctly.



1. Remove the exhaust manifold (3) and discard the exhaust manifold fasteners (1) and gasket (2). Refer to *Exhaust Manifold Replacement* in SI.

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**Important:** Do Not allow any debris to enter the combustion chamber.

- 2. Roll the engine over so that the exhaust valves are closed.
- 3. Remove the SAI galley plugs (2) from the injection ports (1).

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**Note:** A light and a small pick or screwdriver can be used to validate if the air injection ports are cleared of debris.

4. Using a suitable tool (2) and the Upper Engine and Fuel Injection Cleaner, clean the deposits from the SAI passages and ports (1) taking care not to enlarge or damage the passages.





- 5. Validate all the ports (1) and passages are clean of debris (2).
- 6. Apply threadlocker, GM P/N 12345382 (In Canada, use 10953489) to the edge of the SAI galley plugs.
- 7. Install new SAI galley plugs into cylinder head.
- 8. Install the exhaust manifold.

### **Parts Information**

| Causal<br>Part | Description                             | Part<br>Number                          | Qty |
|----------------|---|---|-----|
|                | CLEANER, F/<br>INJR (& UPPER<br>ENGINE) | 19355198 (in<br>Canada use<br>19355199) | 1   |
|                | Plug, Passage                           | 09427695                                | 3   |
|                | BOLT, EXH<br>MANIF                      | Refer to EPC                            |     |
|                | GASKET, EXH<br>MANIF                    |   |     |
| Version        |   | 2                                       |     |

### Warranty Information

For vehicles repaired under the Emission coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

| Labor<br>Operation | Description   | Labor Time |
|--------------------|---|------------|
| 4081538*           | Clean Debris From<br>Secondary Air Injection<br>Ports | 2.0 hrs    |
| *This is a uniq    | ue Labor Operation for Bulletin                       | use only.  |

| Version  | 2  |
|----------|--|
| Modified | February 23, 2018 – Added information to replace the exhaust manifold bolts. |

