



Service Bulletin

Bulletin No.: 15-06-01-002O

Date: March, 2023

TECHNICAL

Subject: Engine Misfire/Tick Noise, Malfunction Indicator Lamp (MIL) Illuminated - DTC P0300 Set

Models: 2015–2020 Cadillac Escalade
2016–2019 Cadillac CTS-V
2014 Chevrolet Silverado 1500
2014–2019 Chevrolet Corvette
2015–2018 Chevrolet Silverado
2015–2020 Chevrolet Suburban, Tahoe
2016–2023 Chevrolet Camaro
2019 Chevrolet Silverado LD
2014 GMC Sierra 1500
2015–2018 GMC Sierra
2015–2020 GMC Yukon, Yukon XL
2019 GMC Sierra Limited
Equipped with 5.3L Engine (RPOs L83, L8B) or 6.2L Engine (RPOs L86, LT1, LT4)

Attention: This bulletin also applies to any of the above models from North America, Europe, Uzbekistan, Russia, Middle East, Iraq, Israel, Palestine, Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Japan, Cadillac Korea (South Korea), GM Korea Company, China, Taiwan, Thailand, Singapore, Philippines, Egypt, Other Africa, South Africa

This bulletin has been revised to update part numbers. Please discard Corporate Bulletin Number 15-06-01-002N.

Condition

Some customers may comment on a malfunction indicator lamp (MIL) on and/or an engine misfire/tick noise.

Technicians may find DTC P0300 set or in history.

Cause

This may be caused by one of the following conditions:

- Active fuel management (AFM) lifter that is mechanically collapsed and/or stuck all of the time.
- Internal locking pin damage in the lifter, due to oil aeration.
- Lifter that has collapsed and is stuck in the lifter bore.
- The engine may have a bent push rod.

Correction

Note: Thoroughly inspect the camshaft and lifters for any damage to the lobes or rollers. If you find excessive wear on either component, it will be necessary to replace the camshaft and lifters. It is not necessary to replace the engine assembly. Refer to Service Bulletin # 18-NA-073: Repair Guidelines for Engine Component Wear.

If SI diagnosis does not isolate the cause of this concern, technicians should inspect for valve operation. If the valve(s) are not moving, replace the valve lifter oil manifold and affected bank of AFM lifters. Refer to *Valve Lifter Oil Manifold Replacement* and *Valve Lifter Replacement* in SI.

If the lifter has spun the bore, the guides should also be replaced.

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

Recommendation/Instructions

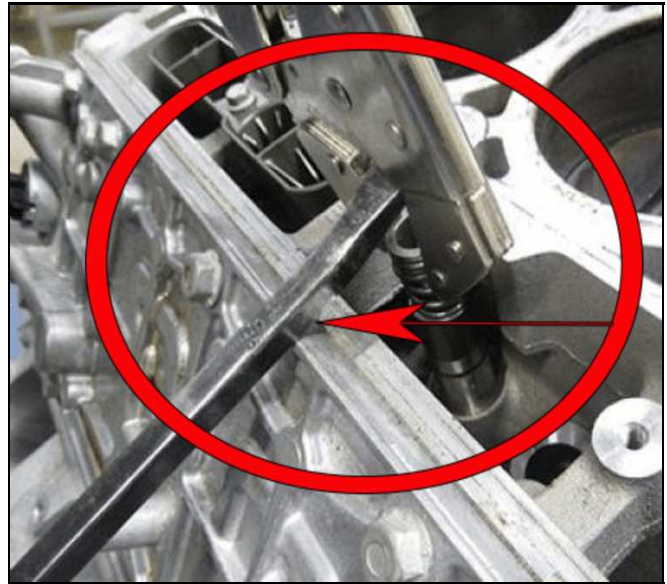
Important: Any time a lifter is replaced, the lifter guide(s) must also be replaced.

There are two approved processes for removing the lifter when stuck in the bore.



4250109

1. Use vice grips with a slide hammer.



4921302

Note: Be sure **NOT** to pry on the sealing surface of the block, as shown in the illustration above.

2. Use vice grips with a small pry bar.

Typically, one of the above approved processes will remove the lifter that is stuck in the bore. If not, the engine will need to be replaced.

With the lifter removed, be sure to inspect the bore for any damage. Typically, the lifter bores will look good with no indication of damage.

Note: Refer to Service Bulletin # 20-NA-038 for additional information on AFM and DFM usage.

Parts Information

Note: Only select the parts that coincide with the repair performed. **Replace the part with the P/N outlined in the Electronic Parts Catalog (EPC) in accordance with the vehicle VIN.**

Note: Only replace the valve lifter oil manifold assembly (LOMA) if SI diagnosis leads to a fault within the manifold assembly.

| Causal Part | Part Number | Description | Qty |
|-------------|---------------------|--|-----|
| N/A | 12697806 | MANIFOLD, VLV LFTR OIL (L83, L86, L8B or LT1) | 1 |
| N/A | 12698946 | LIFTER, VLV (ACTIVE) | 4 |
| N/A | 12677002 1st Design | PIPE, FUEL FEE INTER (PIPE ONLY) (FROM PUMP TO RAIL) (L83, L86, L8B or LT1) (NOTE: need to confirm what pipe part number was removed from engine. They are different.) | 1 |
| | 12703668 2nd Design | | |
| N/A | 12677003 1st Design | PIPE, FUEL FEED INTER (LT4) (NOTE: need to confirm what pipe part number was removed from engine they are different) | 1 |
| | 12703669 2nd Design | | |
| N/A | 12677004 | PIPE, FUEL FEED INTER (182 mm) (FROM PUMP TO RAIL) (L83 L86) | 1 |
| N/A | 12677005 | PIPE, FUEL FEE INTER (PIPE ONLY) (FROM PUMP TO RAIL) (LT4) | 1 |
| N/A | 12677006 | PIPE, FUEL FEED INTER (177 mm) (FROM PUMP TO RAIL) (L83) | 1 |
| N/A | 12679463 | PIPE, FUEL FEED INTER (FROM PUMP TO RAIL) (LT1) | 1 |
| N/A | 12697807 | MANIFOLD, VLV LFTR OIL (LT4) | 1 |
| N/A | 12669185 | GUIDE, VLV LFTR (see catalog reference) | 2 |
| N/A | 12669184 | GUIDE, VLV LFTR (see catalog reference) | 2 |
| N/A | 12688943 | GASKET-CYL HD (6.2L) | 1 |
| N/A | 12622325 | GASKET-CYL HD (5.3L) | 1 |
| N/A | 11546959 | RIGHT SIDE CYLINDER HEAD BOLTS | 10 |
| N/A | 11611976 | LEFT SIDE CYLINDER HEAD BOLT | 1 |
| N/A | 11546959 | LEFT SIDE CYLINDER HEAD BOLTS | 9 |
| N/A | 12657093 | GASKET-EXH MANIF | 1 |
| N/A | 12626354 | GASKET-INT MANIF | 8 |
| N/A | Refer to EPC | SEAL, EXH SYS | 1 |
| N/A | 12619787 | GASKET-VLV RKR ARM CVR | 1 |
| N/A | 12623308 | GASKET-F/PMP BRKT | 1 |
| N/A | 12672366 | SEAL KIT-F/INJR (O RING) | 2 |
| N/A | 11546600 | BOLT, EXH MANIF | 5 |

Warranty Information

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

| Labor Operation | Description | Labor Time |
|--|---|--|
| 4080978* | Valve Lifter Oil Manifold and Valve Lifter Left Side Replacement | 9.4 hrs (Silverado, Sierra) |
| | | 14.8 hrs (CTS-V) |
| | | 9.2 hrs (Escalade, Suburban, Tahoe, Yukon) |
| | | 11.7 hrs (Corvette) |
| | | 7.0 hrs (Camaro) |
| 4080988* | Valve Lifter Oil Manifold and Valve Lifter Right Side Replacement | 10.9 hrs (Silverado, Sierra) |
| | | 15.5 hrs (CTS-V) |
| | | 9.3 hrs (Escalade, Suburban, Tahoe, Yukon) |
| | | 11.4 hrs (Corvette) |
| | | 9.0 hrs (Camaro) |
| *This is a unique Labor Operation for bulletin use only. | | |

