Bulletin No.: PIP5421G
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Preliminary Information

PIP5421G Malfunction Indicator Lamp Illuminated With DTC P0300

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Malibu	2016	All	All	1.5L LFV	All
Chevrolet	Malibu	2017	Start of Production	1G1ZE5ST6HF214701	1.5L LFV	All

Involved Region or Country	**China, Europe, International Operations (GMIO), Korea and North America.**
Condition	**Some customers may comment on a rough running engine with the Malfunction Indicator Lamp on. Upon inspection, a technician may find DTC P0300 set along with a misfire and low compression in one or more cylinders.**
Cause	**This condition may be caused by a damaged piston requiring replacement of all four piston and rod assemblies with an updated part number.**

Correction:

Note: This PI does not apply to 2017 vehicles built with VIN sequence 1G1ZE5ST6HF214702 and higher as they have the updated piston assemblies installed.

Repair the engine mechanical concern based on the results of the service procedure below.

Service Procedure:

Perform Engine Compression Testing in SI.

If low compression is found, perform Cylinder Leakage Testing in SI and record the test results to isolate the concern.

NOTE: (To isolate the source of cylinder leakage to a valve or cylinder sealing issue, it may be necessary to remove the intake and exhaust manifolds).

If excessive leakage to the crankcase is isolated, check piston and cylinder wall condition.

If the cylinder wall surface has not been compromised, replace all four piston and rod assemblies.

NOTE: (The piston and rod assembly referenced in this bulletin arrives with rod bolts that are allowed to be removed and reused one time for final assembly to the complete repair).

The kit does not include the rod bearings.

Fill the crankcase with current specification Dexos oil. (Refer to latest version of Corporate Bulletin Number 16-NA-367).

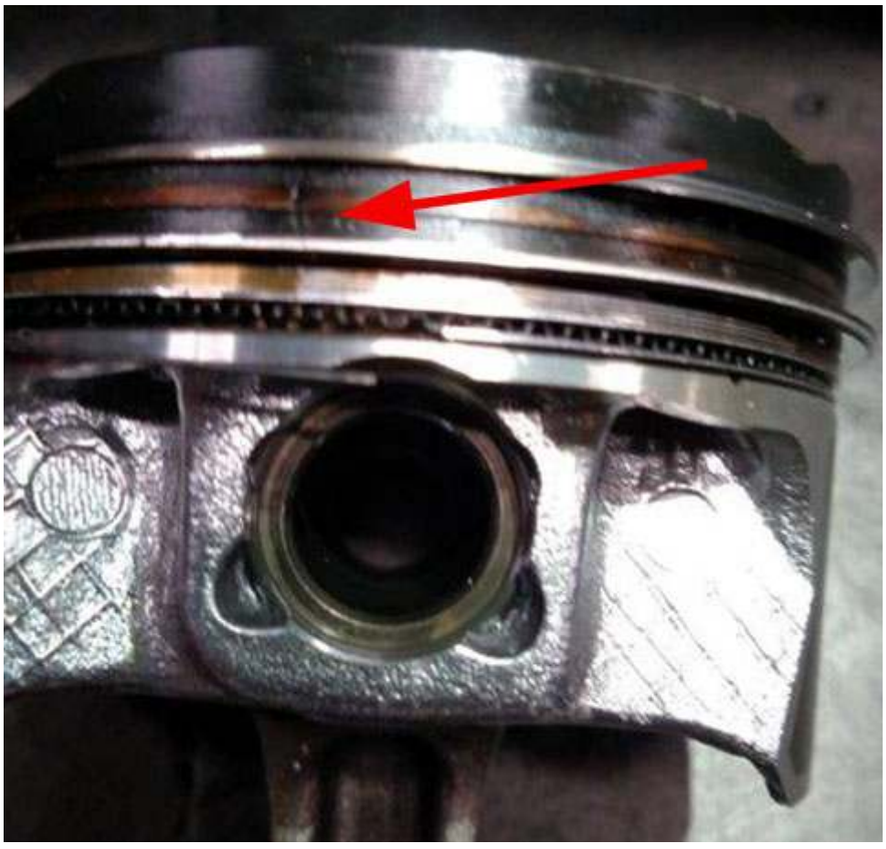
An un-metered air leak in the induction system, or an engine mechanical issue causing rough running, may cause the ECM to learn an incorrect Throttle Body Idle Airflow Compensation value over time.

This incorrectly learned value may cause various symptoms to occur such as, MIL on with P1101 setting, rough or unstable idle speeds and/or engine stall.

Once the mechanical repairs have been completed, perform Throttle Body Inspection and Cleaning in Service Information, followed by Throttle Body Idle relearn and Air Flow Compensation Reset function in GDS2.

Shown below are examples of pistons with varying levels of damage.



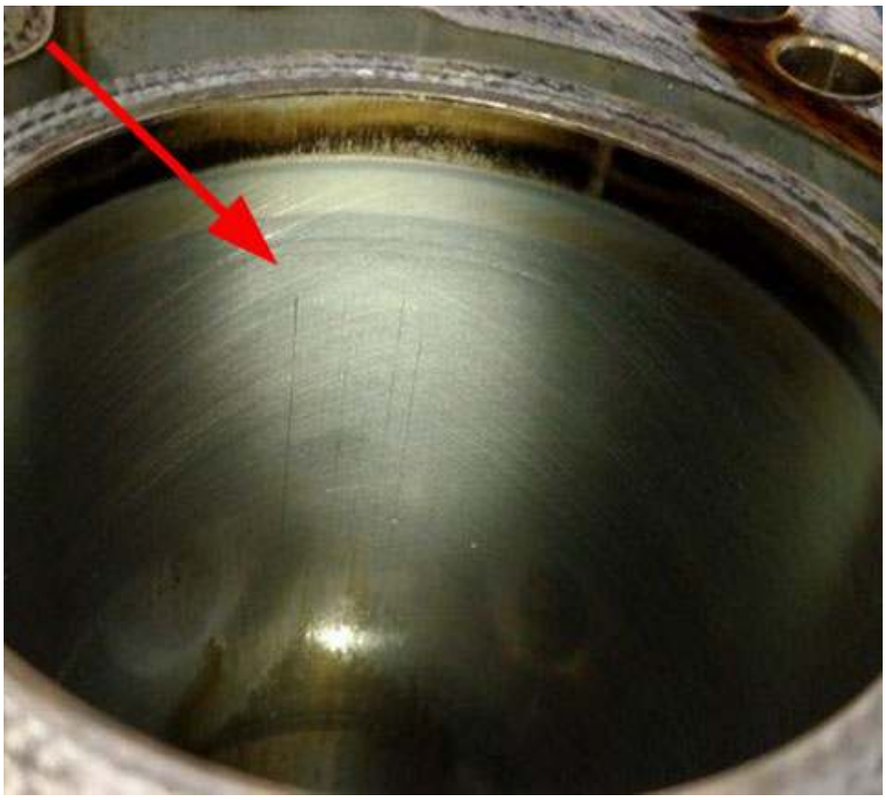






Shown below are several examples of light vertical marks visible on the cylinder wall.

In these examples, none of the marks in the cylinder walls could be felt with the finger tip or nail and engine replacement is not recommended.







Shown below is an example of a damaged cylinder wall.

In this example the scuffing is wide and has removed the crosshatch from the cylinder wall in the area above the arrow.

This would result in oil consumption and requires engine replacement.



Parts Information

Description	Part Number	Quantity
Piston & Rod Assembly	12674549	4 (4 Required)

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
4066890	**Piston, Connecting Rod, and Bearing Replacement**	**Use Published Labor Time**

Version History

Version	9
Modified	09/01/2016 - Created on 09/30/2016 - Updated Service Procedure. 01/20/2017 - Updated Service Procedure and model list and added part number. 02/28/2017- Updated repair information 04/04/2017 - Updated to reference 16-NA-367 08/16/2017 - Updated to list parts included in kit. 10/11/2017 - Updated to add regions. **10/04/2018 - Updated to add in VIN break point for production updated pistons.** **02/07/2019 - Updated to add note related to piston rod bolt usage.**

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