

Preliminary Information

PIP5421C Malfunction Indicator Lamp Illuminated With DTC P0300

<u>Models</u>

Brand:	Model:		Model Years:	VIN:		Engine:	Transmissions:	
				from	to	Engine:	Transmissions.	
Chevrolet	Malibu		2016 - 2017	All	All	1.5L LFV	All	
Involved Region or Country USA, Cana		ıda						
Additional RPOs: LFV		LFV	v					
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:

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.

Fill the crankcase with current specification Dexos 1 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 Air Flow Compensation Reset function in GDS2.

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





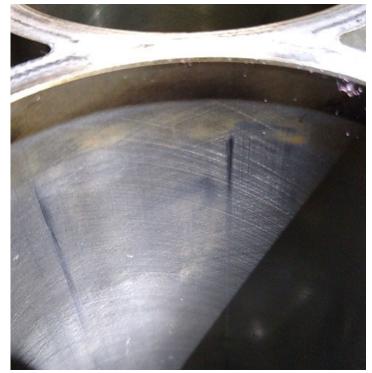




Shown below are several examples of light vertical marks visible on the cylinder wall. In these examples, none of the marks in the cylinder walls could be felt with the finger tip or nail and engine replacement is not recommended.







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

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

Version History

Version	5		
	09/30/2016 - Updated Service Procedure.		
Modified	1/20/2017 - Updated Service Procedure and model list and added part number.		
Modified	02/28/2017- Updated repair information		
	04/04/2017 - Updated to reference 16-NA-367		

