Service Bulletin

Bulletin No.: 19-NA-122
Date: June, 2019

TECHNICAL

Subject: Rough Running Engine, Malfunction Indicator Lamp (MIL) Illuminated - DTC P0300 Set

This Bulletin replaces PIP5421G. Please discard PIP5421G.

Brand:	Model:	Model Year:		VIN Breakpoint:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Malibu	2016	2017	SOP	HF214702	1.5L (LFV)	

Involved Region or Country	North America, Israel
Condition	Some customers may comment on one or more of the following conditions: • Rough running engine • MIL illuminated Some technicians may find DTC P0300 (Engine Misfire Detected) set along with a misfire low compression in one or more cylinders.
Cause	This condition may be caused by a damaged piston.
Correction	Repair the engine mechanical concern based on the results of the Service Procedure testing below.

Service Procedure

Important: This bulletin does not apply to 2017 vehicles built with VIN sequence HF214702 and higher as they have the updated piston assemblies installed.

Repair the engine mechanical concern based on the results of the Service Procedure below.

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.

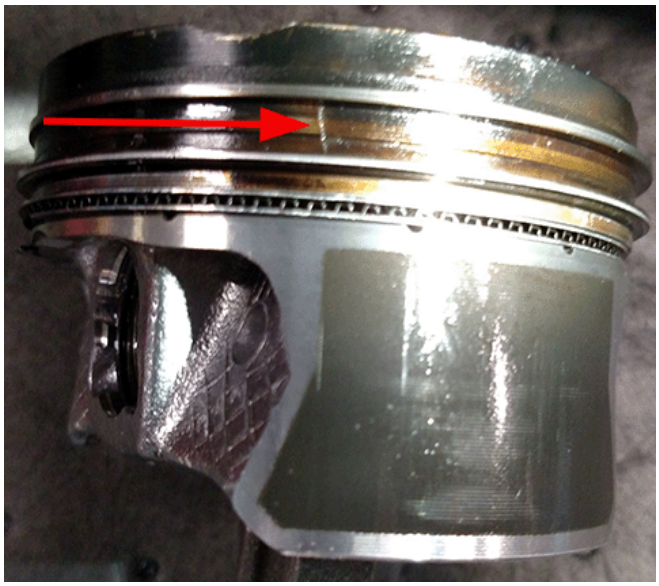
1. Perform *Engine Compression Testing* in SI.
2. If low compression is found, perform *Cylinder Leakage Testing* in SI and record the test results to isolate the concern.
   - If excessive leakage to the crankcase is isolated, check piston and cylinder wall condition.
   - If the cylinder wall surface has not been compromised, replace all four piston and rod assemblies.
3. Fill the crankcase with current specification Dexos oil (Refer to Corporate Bulletin Number 16-NA-367).
4. Check that the vehicle is up to the latest released calibration available.
   ⇒ If not, reprogram the engine control module (ECM).

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 SI, followed by Throttle Body Idle relearn and Air Flow Compensation Reset function in GDS2.

Examples of pistons with varying levels of damage:



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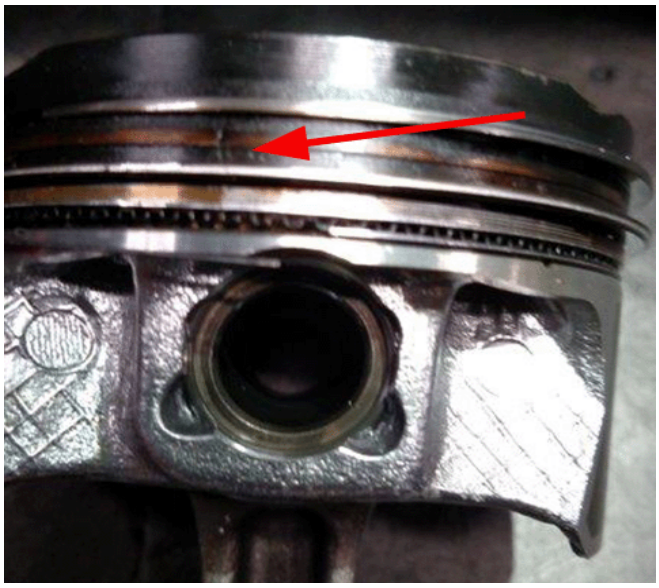

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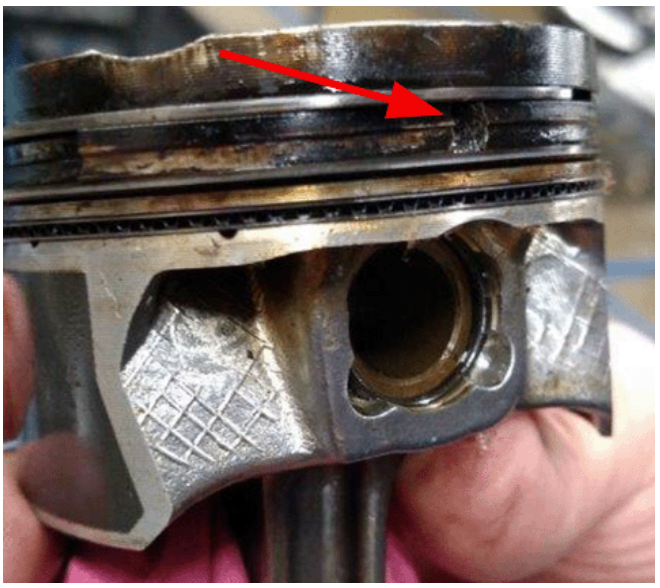

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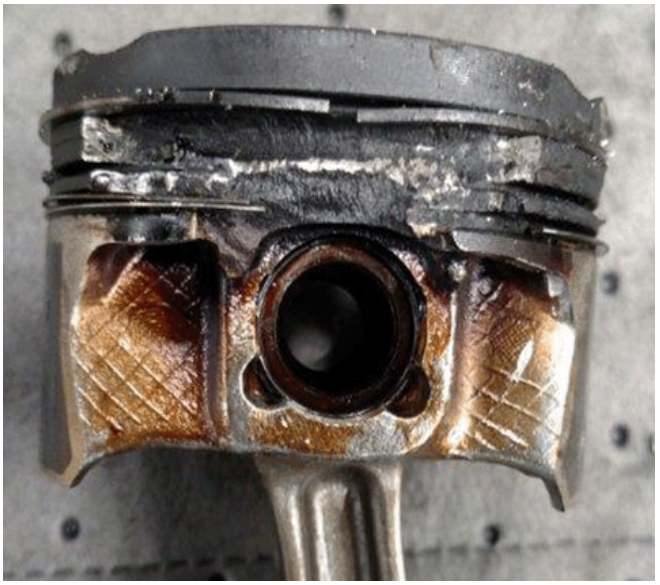

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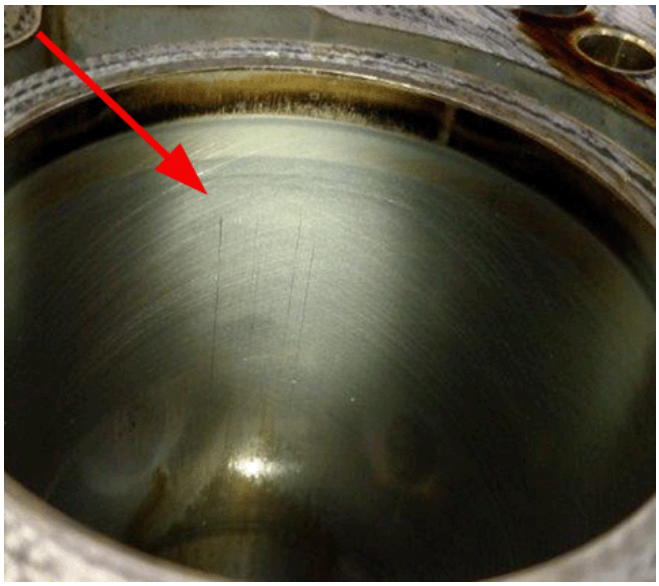
Examples of light vertical marks visible on the cylinder wall:



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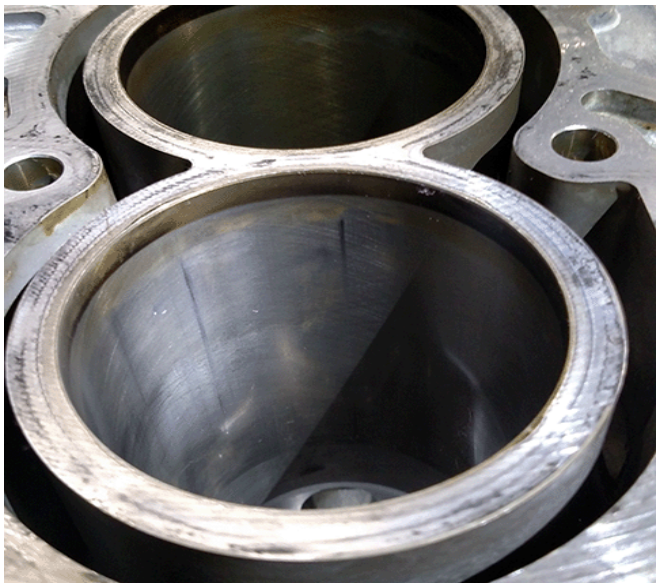

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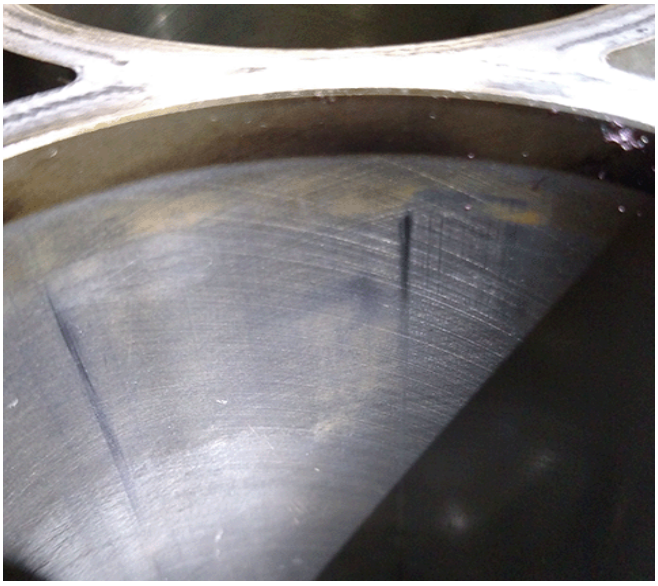

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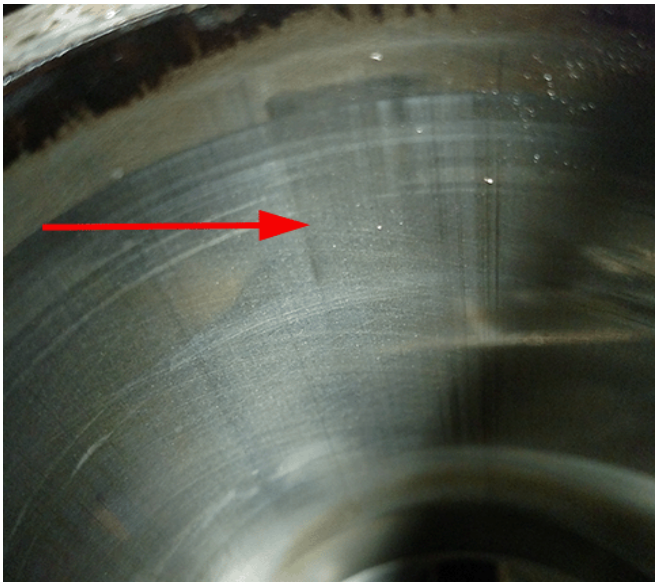
None of the marks in the cylinder walls could be felt with the fingernail and engine replacement is not recommended.

Example of a damaged cylinder wall:



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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

Causal Part	Description	Part Number	Qty
X	Piston	12674549	4
N/A	Bearing Kit	12674806	4
	Gasket Kit	12687228	1
	Seal, Cr/sft Frt	12661527	1
	Filter	12696048	1
	Gasket, O/Pmp	12644557	1
	Gasket, O/Pmp	12644558	1
	Pan	12637773	1
	Pipe, Fuel	12684046	1
	Gasket, Manifold	12637018	1
	Gasket, Ctltc Conv	12641115	1
	Shield, Heat	12673929	1
	Seal, Turbo Cool	12662185	4
	Fitting, Turbo Cool	12676405	1
	Washer	12662184	2
	Fitting, Turbo Pipe	12685113	1
	Gasket, Turbo Oil	12653753	1
	Gasket, Turbo Oil	12640468	1
	Seal Kit, F/Injn	12659782	1
	Seal, F/Pmp	12645181	1
	Gasket, Wat Out	12627061	1
	Gasket, Therm	12635750	1
	Gasket, Exh	23238284	1
	Gasket, Exh	22816982	1
	Bolt, Cr/Shf	11611070	1
	Nut, Turbo	11546365	4
	Bolt, Fuel Pmp	11588724	2
	Bolt, Eng Mnt	11547918	3
	Bolt, Eng Mnt	11588754	3
	Oil, Engine	Refer to EPC	

Warranty Information

The correction for this concern may be one of several repairs described above. For vehicles repaired under warranty, please use the appropriate warranty Labor Operation based on the original cause in addition to well documented straight time.

Version	1
Modified	Released May 30, 2019