



Service Bulletin

File in Section: -

Bulletin No.: 18-NA-061

Date: February, 2018

TECHNICAL

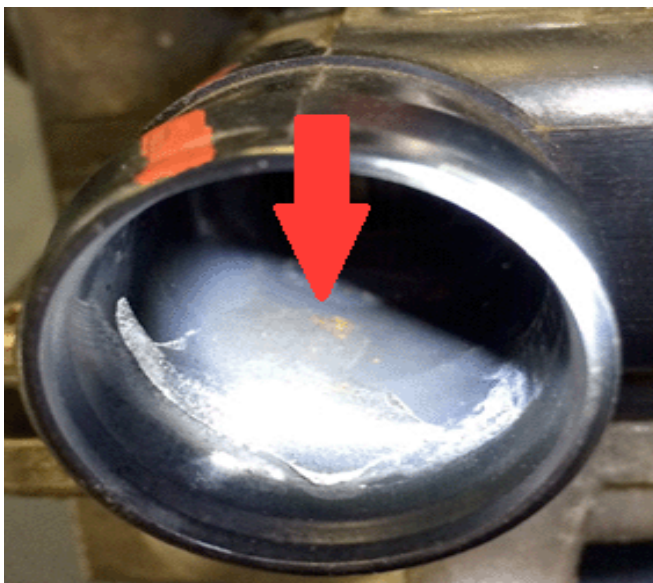
Subject: Malfunction Indicator Lamp (MIL) Illuminated for LEA Engines - DTC P0411 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Equinox	2013	2015			LEA	
GMC	Terrain						

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. The Technician may find DTC P0411 (Secondary Air Injection System Incorrect Air Flow Detected) set in the Engine Control Module (ECM).
Cause	This condition may be caused by moisture and/or ice build up in cold climate areas. This condition may also 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

If Moisture/Icing has been found in SAI system:



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1. Remove SAI components and inspect thoroughly for moisture/ice.

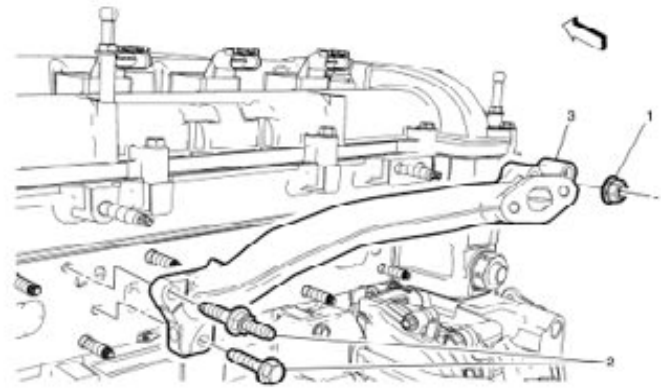
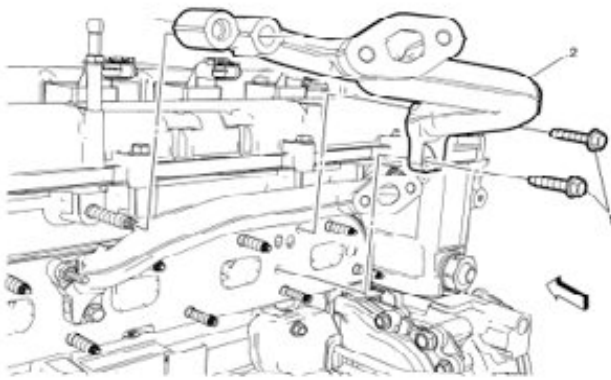
2. Remove moisture/Ice from any of the affected components.

- If any of the above conditions are present, allow time for possible ice build up in the SAI system to melt by allowing the vehicle to thaw in a warm climate.

- If visible signs of heavy rust/corrosion are present on any SAI components, replace as needed and retest.
- ⇒ If moisture/ice has been confirmed to be the cause of the condition listed above, do not proceed with the bulletin.
- ⇒ If no signs of moisture has been confirmed but condition listed has returned after testing, proceed to If Contaminates/Debris has been found in SAI system.

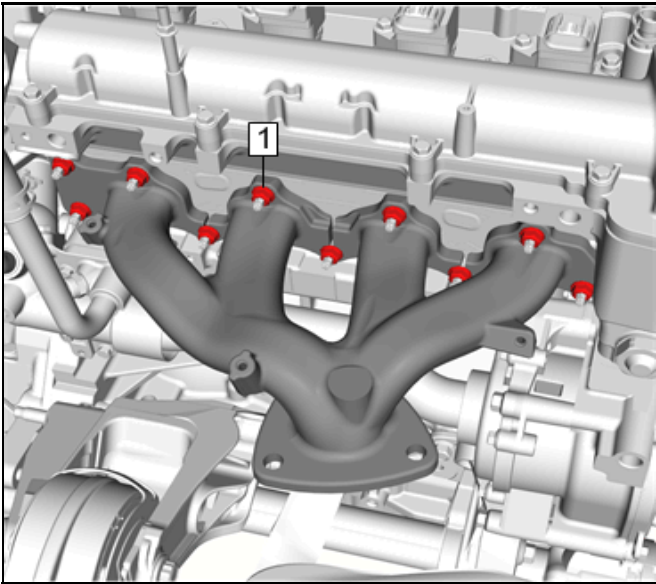
If Contaminates/Debris has been found in SAI system:

Caution: 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.



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1. Remove the SAI Check Valve Adapters (2, 3). Refer to Secondary Air Injection Check Valve Pipe Adapter Replacement - Right Side in SI.

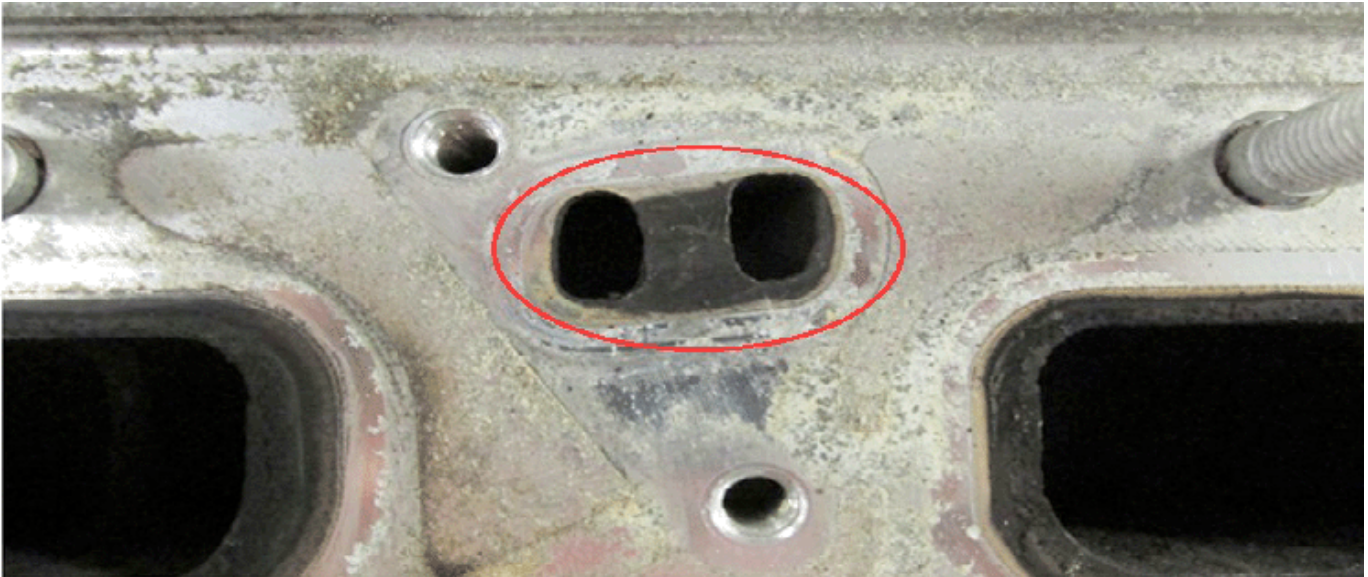


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2. Remove the exhaust manifold and discard the exhaust manifold fasteners (1) and gasket. Refer to *Exhaust Manifold Replacement* in SI.

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

3. Roll the engine over so that the exhaust valves are closed.



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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.



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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 Operation	Description	Labor Time
4086118*	Cleaning Icing/Moisture	1.5 hrs
Add	Clean Debris From Secondary Air Injection Ports	2.3 hrs
Add	With AWD	0.9 hr
*This is a unique Labor Operation for Bulletin use only.		

5. Validate all the ports and passages are clean of debris.
6. Install the exhaust manifold.

Parts Information

Causal Part	Description	Part Number	Qty
N/A	CLEANER, F/ INJR (& UPPER ENGINE)	19355198 (in Canada use 19355199)	1
N/A	NUT, PREVAILING TORQUE TENSION FLG HD	Refer to EPC	
N/A	GASKET, EXH MANIF		

Version	1
Modified	Released February 23, 2018

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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