



Service Bulletin

Bulletin No.: 22-NA-224

Date: November, 2022

TECHNICAL

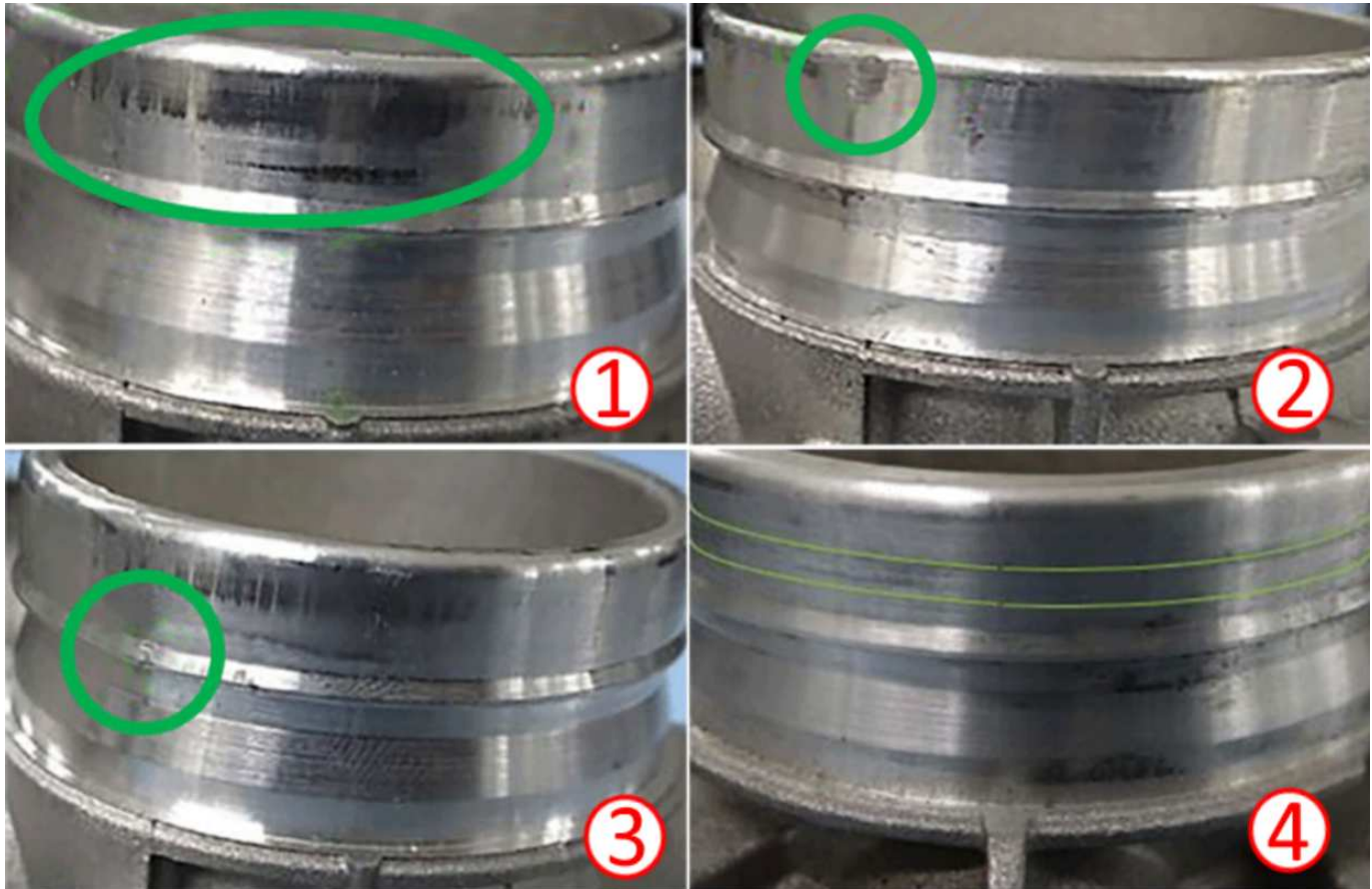
Subject: Reduced Engine Power, Malfunction Indicator Lamp (MIL) Illuminated - DTC's P0101, P0172, P0299, P0506 and/or P1101 Set

This bulletin replaces PIP5651G. Please discard PIP5651G.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Equinox	2018	2022			1.5 LYX	
Holden	Equinox		2020			1.5 LYX	
Chevrolet	Malibu		2022			1.5 LFV	
GMC	Terrain		2022			1.5 LYX	

Involved Region or Country	North America, Israel, Australia
Condition	Some customers may comment on one or more of the following conditions: " Reduced engine power " Mil illuminated Some technicians may find one or more of the following DTC is set in the Engine Control Module: " P0101: Mass Air Flow (MAF) Sensor Performance " P0172: Fuel Trim System Rich " P0299: Engine Underboost " P0506: Idle Speed Low " P1101: Intake Air Flow System Performance
Cause	This condition may be caused by the Charge Air Cooler (CAC) outlet tube to throttle body connection has become separated.
Correction	Confirm the connection of the charge air cooler outlet pipe at the throttle body: " If the charge air outlet tube is not disconnected from the throttle body, proceed with published SI diagnostics for the failed DTC's. " If the tube is disconnected from the throttle body, inspect the charge air cooler tube, tube retainer clip and throttle body for damage. In rare cases, if either the charge air cooler tube and throttle body are damaged, replace the damaged part (reference photos below showing normal and damaged throttle body). Note: The throttle body and mass airflow (MAF) sensor associated with the listed codes should only be replaced if they are damaged or found to be the cause of the code.

Additional Information



5400480

Graphics 1–4 show normal witness marks on the throttle body and normally will not require replacement.



Graphics 5-7 show abnormal witness marks or damage to throttle body and replacement would be required.

When the charge air cooler outlet tube has become disconnected from the throttle body, the tube end should be inspected for contact damage or a missing O-ring seal from blowing off.

If the tube is found to be damaged or the O-ring seal is missing, replace the tube assembly.

Parts Information

Use the vehicle identification number (VIN), SI and the GMElectronic Parts Catalog to determine the correct part(s) to order.

Warranty Information

Important: Only use the Labor Operation number that coincides with the repair performed.

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.

Note: Warranty Coverage Code E applies to Labor Operations 4086948 and 4087138.

Labor Operation	Description	Labor Time
4086948	Install Charge Air Tube Retainer Kit	0.4 hr
Additional Times if Needed		
Add	Replace Charge Air Cooler Outlet Tube	0.6 hr (Equinox, Terrain)
		2.2 hr (Malibu)
Add	Throttle Body Replacement	0.2 hr

Version	1
Modified	Released November 04, 2022

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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