



Service Bulletin

Bulletin No.: 21-NA-123

Date: January, 2023

TECHNICAL

Subject: Rough Idle with Misfire Counts on Random Cylinders, Malfunction Indicator Lamp (MIL) Illuminated

This bulletin replaces PIP5715B. Please discard PIP5715B.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Corvette	2020	2023	—	—	6.2L (RPO LT2)	—

Involved Region or Country	North America, Paraguay, Europe, Uzbekistan, Middle East, Japan, GM Korea Company, China
Condition	<p>Some customers may comment on a rough idle condition and/or the MIL may be illuminated.</p> <ul style="list-style-type: none"> – This is typically noticed on vehicles at low mileage (like PDI) or vehicles that may have been started then shut off multiple times such as marshaling. Upon inspection, the technician may also notice random misfires on multiple cylinders.
Cause	<p>This condition may be caused by marshaling the vehicle around and/or short runtime soot, fouling the spark plugs.</p> <ul style="list-style-type: none"> – The LT2 engine in the Corvette is a very capable and powerful powerplant, the jewel within the all-new mid-engine design. Producing 495 horsepower at 6450 rpm and 470 lb-ft. of torque at 5150 rpm with performance exhaust, this engine produces more naturally aspirated HP per liter of displacement than any Corvette engine in history. – To fully enable this extreme level of engine performance, the LT2 was designed to be driven. Like many performance car engines, the LT2 is sensitive to short run-time starts where the spark plug does not have time to heat up. In these cases, carbon from the combustion process can accumulate on the spark plug and result in rough idle or misfire. The best way to keep your spark plugs clean is to safely exercise your Corvette on your favorite roads or track. Both running your engine and spirited driving can clean plugs that may be partially impacted. – Whenever possible, try to run the engine until it has reached a coolant temperature greater than 51°C (125°F), and/or at least 3 minutes of engine run time, instead of frequent, short duration start/stop cycles. <p>If you encounter a vehicle that is in for this condition and meets the criteria above, follow the Correction steps.</p>
Correction	<p>If you encounter this condition, utilizing the GDS2, command the engine speed up to 2000 rpm for 10 minutes and re-evaluate the concern.</p> <ul style="list-style-type: none"> • If the misfires stop counting, return the vehicle to the customer. • If the concern is not completely gone, the vehicle may need to be driven to finish cleaning the spark plugs. • If the above steps do not resolve the concern, it will be necessary to replace all 8 spark plugs.

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

Service Procedure

Refer to *Gas Engine Ignition Spark Plug Replacement - Right Side* in the Service Manual and/or *Gas Engine Ignition Spark Plug Replacement - Left Side* in the Service Manual.

Parts Information

Causal Part	Description	Part Number	Qty
X	SPARK PLUG, GAS ENG IGN	12622442	8

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4020870	Gas Engine Ignition Spark Plug Replacement - Left Side	Use Published Labor Operation Time
4020871	Gas Engine Ignition Spark Plug Replacement - Left Side - Multiple	
4020880	Gas Engine Ignition Spark Plug Replacement - Right Side	
4020881	Gas Engine Ignition Spark Plug Replacement - Right Side - Multiple	

Version	2
Modified	Released June 29, 2021 Revised January 17, 2023 – Added the 2022–2023 Model Years, Europe to the Involved Region or Country section, Important statement and Service Procedure.

Additional SI Keywords: P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308

