



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** Engineering Information - Investigation to Better Understand the Conditions that Cause Mechanical Seal Loss of NOx Sensors, DTCs P2A00, P2A01, P2A02 and/or P22FB Set

**Attention:** Proceed with this EI ONLY if the customer has commented about this concern AND the PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the EI does not show in GWM/IVH, disregard the PIE and proceed with diagnostics found in published service information. THIS IS NOT A RECALL refer to Service Bulletin 04-00-89-053 for more details on the use of Engineering Information bulletins.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	Escalade Models	2022	2022	—	—	Equipped with 3.0L Engine (RPO LM2)	—
Chevrolet	Silverado 1500 New (RPO J22, VIN Digit 5 = A / D)						
	Suburban						
	Tahoe						
GMC	Sierra 1500 New (RPO J22, VIN Digit 5 = H / U)						
	Yukon models						

<b>Involved Region or Country</b>	North America
<b>Condition</b>	<p>The purpose of this investigation is to help GM engineering to better understand the conditions that causes mechanical seal loss of the NOx sensors.</p> <p>Technicians may find one or more of the following DTCs set:</p> <p><b>table-item</b></p> <ul style="list-style-type: none"> <li>• P2A00 - O2S Circuit Range/Performance Bank 1 Sensor 1</li> <li>• P2A01 - Heated Oxygen Sensor 2 Performance</li> <li>• P2A02 - Heated Oxygen Sensor 3 Performance</li> <li>• P22FB - NOx Sensor 1 Performance - Sensing Element</li> </ul>

<b>Cause</b>	GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix.
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## Correction

**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.**

If you encounter a vehicle with the above concern, perform the following steps and contact the engineer listed below with your findings:

1. Was the NOx sensor loose in the exhaust? If so, please take a picture.
2. Is the tip of the NOx sensor damaged?
3. Is there any damage to the exhaust pipe such as deformations, corrosion or abrasions?
4. Does the sensor look like it was installed correctly and not tightened or cross threaded?
5. Does the sensor have anti-seize paste on the threads of both, the original equipment and parts for service?  
**Note:** If replacing a NOx sensor, please perform a NOx sensor reset in GDS.
6. Take pictures and email them to giandomenico.licinio@gm.com. for the following:
  - 6.1. That represent how far the sensor is loose in the exhaust.
  - 6.2. Showing the threads on the removed sensor.
  - 6.3. Showing the threads in the exhaust pipe.

## Contact Information

The Contact Information has been redacted.

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

## Warranty Information

If engineer was contacted or required information was provided, use:

Labor Operation	Description	Labor Time
4088728*	Engineering Information - Investigation to Better Understand the Conditions that Cause Mechanical Seal Loss of NOx Sensors	0.4 Hrs
*This is a unique Labor Operation for bulletin use only.		

<b>Version</b>	1
<b>Modified</b>	Released June 15, 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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