

## **Service Bulletin**

Bulletin No.: 23-NA-063

Date: April, 2023

## **TECHNICAL**

Subject: Malfunction Indicator Lamp (MIL) Illuminated - DTC P11D5, P22FE, P20EE and/or

P2C7A Set

Brand:	Model:	Model Year:		VIN:		Engino	Transmission:
		from	to	from	to	Engine:	Transmission.
Chevrolet	Silverado 1500	2023	2023			2.01 (1.70)	
GMC	Sierra 1500					3.0L (LZ0)	

Involved Region or Country	North America, Israel, Palestine, Middle East	
	Some customers may comment that the MIL is illuminated.	
	Some technicians may find one or more of the following DTCs set in the Engine Control Module (ECM):	
Condition	P11D5: Nitrogen Oxides Sensor 2 Exceeded Minimum Learning Limit	
	P20EE: Nitrogen Oxides Catalytic Converter Efficiency Below Threshold	
	P22FE: Nitrogen Oxides Sensor 2 Performance - Sensing Element	
	P2C7A: Nitrogen Oxides Catalytic Converter 2 Efficiency Below Threshold	
	This condition may be caused by a software anomaly.	
Cause	<ul> <li>The vehicle could produce DEF crystals inside of the exhaust if the vehicle is driven in cold ambient conditions, near 32° F (0° C). These deposits could interfere with the spray from the injector. The result could lead to the setting of the above codes.</li> </ul>	
Correction	If any of the DTCs are set in the ECM, refer to the Service Procedure below.	

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**

- 1. Raise and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in the Service Manual.
- Remove the First Emissions Reductant Injector from the exhaust.
- 3. Utilizing a bore scope, Inspect for any crystal or DEF buildup.
  - If any is found, using care, remove the obstructions by knocking them out or into the exhaust pipe.
- 4. Reinstall the injector.
- 5. Lower the vehicle.

- 6. Perform a service regen.
- 7. After the regen completes, perform a Malfunction Warning Service Bay Test.
  - If the test passes, return the vehicle to the customer.
  - If the test fails, refer SI for the code that was set in the ECM.

## **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		
4088968*	Diagnosis of DTC P11D5, P22FE, P20EE and/or P2C7A Set	0.3 hr		
Add	Cleaning of Crystal Deposits and Testing	1.8 hr		
*This is a unique Labor Operation for Bulletin use only.				

Version	1
Modified	Released April 06, 2023