



Service Bulletin

Bulletin No.: 24-NA-020

Date: February, 2024

INFORMATION

Subject: Information on Service Emissions System Displayed on Drivers Information Center (DIC), Malfunction Indicator Lamp (MIL) Illuminated - DTC P249C and/or P20E8 Set

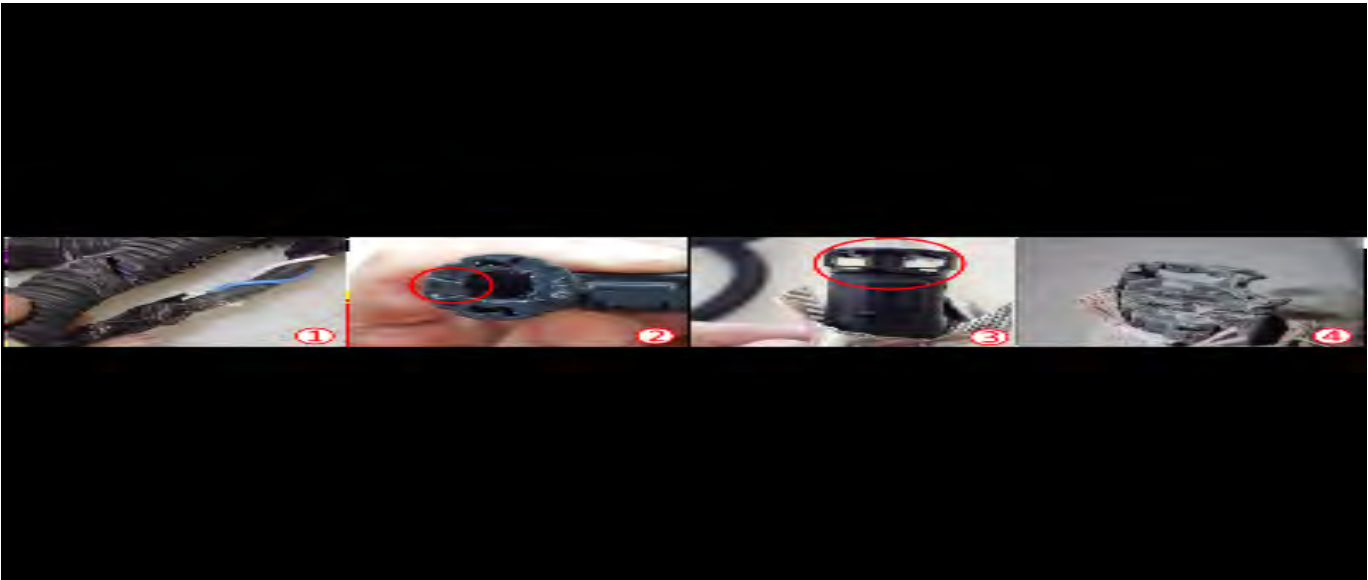
Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	Escalade Models	2021	2024			LM2, LZ0	
Chevrolet	Silverado 1500	2020	2021			LM2, LZ0	
	Silverado 1500 - LTD (RPO J21, VIN Digit 5 = W/Y)	2022	2022				
	Silverado 1500 - New (RPO J22, VIN Digit 5 = A/D)						
	Silverado 1500	2023	2024			L5P	
	Silverado 2500HD/3500HD	2020				LM2, LZ0	
	Suburban	2021					
	Tahoe						
GMC	Sierra 1500	2020	2021			LM2, LZ0	
	Sierra 1500 - Limited (RPO J21, VIN Digit 5 = 8/9)	2022	2022				
	Sierra 1500 - New (RPO J22, VIN Digit 5 = H/U)						
	Sierra 1500	2023	2024			L5P	
	Sierra 2500HD/3500HD	2020				LM2, LZ0	
	Yukon Models	2021					

Involved Region or Country	North America, Middle East, Israel
Condition	<p>Some customers may comment on one or more of the following conditions:</p> <ul style="list-style-type: none"> • MIL illuminated • Service Emissions System displayed on DIC <p>Some technicians may find one or more of the following DTCs set:</p> <ul style="list-style-type: none"> • P249C • P20E8
Cause	This condition may be caused by a disconnected Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe.
Correction	If you encounter a vehicle set with DTC P249C and/or P20E8 currently active or in history, proceed to the Service Procedure. However, if the DTC(s) have set after the installation of a new Emission Reduction Fluid Pump/Tank, please refer to the SI procedure: <i>Emission Reduction Fluid Pump Priming</i> instead

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. Perform a Reductant System Leak Test. Does the test pass?
 - If yes, refer to SI for the diagnostic procedure for DTC P249C and/or P20E8.
 - If no, go to Step 2.
2. Is there a leak at the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe or at the connection to the Reductant Fluid Injector or the Emission Reduction Fluid Pump Outlet Port?
 - ⇒ If no, refer to SI for the diagnostic procedure for DTC P249C and/or P20E8.
 - ⇒ If yes, go to Step 3.



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Note: Examples of a DEF pipe with damage that can not be reused. Replace the DEF pipe if this is noted.

3. Is the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe or the connector damaged in any way?
 - ⇒ If yes, replace the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe, perform a Reductant System Tamper Service Bay Test and release the vehicle back to the customer.
 - ⇒ If no, go to Step 4.
4. Follow the Cleaning Procedure outlined below and perform a Reductant System Tamper Service Bay Test, does the test pass?
 - A DEF pipe with crystallized DEF may not properly seat on the injector and may cause a leak.
 - ⇒ If yes, release the vehicle back to the customer.
 - ⇒ If no, refer to SI for the diagnostic procedure for any active DTC.

Cleaning Procedure



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– Example of a DEF pipe with crystallized DEF. This can be cleaned using the procedure below.

The Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe may be contaminated with crystallized DEF in or around the connector. This procedure outlines the correct cleaning procedure before attempting to re-connect the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe to the Reductant Fluid Injector or the Emission Reduction Fluid Pump Outlet Port.



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Note: This procedure cannot be performed if the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector is contaminated with other forms of contaminants such as frame wax or dirt inside the connector. If this is the case, do not perform the cleaning procedure as the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe will need to be replaced.

1. Fill a clean container with fresh water.
2. Remove or pull back the heat protecting hood from the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector end if present.
3. Fully disconnect the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector from the Reductant Fluid Injector or the Emission Reduction Fluid Pump Outlet Port by following the

Removal Procedure outlined below (detach any clips or liners as needed for access). Wipe off any dust or dirt present on the outside of the connector.



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4. Submerge the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector end into the container filled with clean water, ensuring the open end of the connector is facing up and hold for 1 min. Swash around the connector while it is submerged in water for another minute to dislodge any crystals embedded inside the connector.
5. Which side is the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe disconnected:
 - Reductant Fluid Injector side: To clear any contamination within the connector interface command the Control Function: Reductant Pump at 50% duty cycle, while the connector is still in the container.
 - Emission Reduction Fluid Pump Outlet Port side: Proceed to the next step.
6. Inspect the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector end for any remaining crystallization and repeat the steps above if needed.
7. With a clean rag, wipe off any crystallized DEF on the male pin of the Reductant Fluid Injector or the Emission Reduction Fluid Pump Outlet Port.
8. Re-connect the Emission Reduction Fluid Exhaust Front Pipe Injector Supply Pipe connector to the Reductant Fluid Injector or the Emission Reduction Fluid Pump Outlet Port as per the Installation Procedure outlined below. Re-install heat protecting hood if applicable.

Removal Procedure



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Depress the tab (3) while pushing the female side (1) towards male connector (2) and pull female side (1) straight out to disconnect.

Installation Procedure

Push the Female Side (1) towards the male connector (2) all the way in, until an audible click is heard (if no audible click is heard, pull on the female connector (1) outward to ensure retention). Some connectors may have a locking tab that pops up, activate the locking tab by pressing down on the tab (3) (while keeping pressure towards the male connector (2)). Once latched, pull on the female connector (1) outward to ensure connection is made.

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
4086288*	Inspection and DEF Pipe Cleaning Procedure	1.0 hr
*This is a unique Labor Operation for Bulletin use only.		

Version	3
Modified	Released February 01, 2024 Revised February 12, 2024 - Update the Information Subject and Correction sections, Relocate the Graphic and Note from Step 2 to Step 3, and Add Warranty Information section. Revised February 23, 2024 - Change the Powertrain Warranty to Emissions Warranty.

