Service Bulletin

Bulletin No.: 20-NA-082
Date: March, 2021

INFORMATION

Subject: **Information on Excessive Diesel Exhaust Fluid (DEF) Usage**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Colorado	2020	2021			LWN	
	Express					LWN	
	Silverado 1500					LM2	
	Silverado 2500HD/3500HD					L5P	
	Silverado 4500HD, 5500HD, and 6500HD					L5D	
GMC	Canyon					LWN	
	Savana					LWN	
	Sierra 1500					LM2	
	Sierra 2500/3500					L5P	
	Sierra 4500HD, 5500HD, and 6500HD					L5D	

Involved Region or Country	North America, Israel, Palestine, Chile (West), Paraguay (West), Uruguay (West)
Condition	Some customers may comment that excessive DEF is being used. Some technicians may find no codes set or messages on the DIC.
Information	The current 2020 Silverado/Sierra is the first to have a DEF level gauge on the IP. This is the first time a customer can see a representation of how much DEF is in the tank up to the full capacity of the tank. This gauge does not operate like the float style gauge that you have in your fuel tank. Because of this, you may see some fluctuation in the gauge. It may also take a few key cycles to register the correct amount in the tank after a fill event. With the new segmented DEF level gauge, it is possible that after adding 5 gallons (18.9 L) of DEF that the gauge reads as a full tank after the fill event. However, if the actual level of DEF is just entering the last segment on the gauge, the gauge is likely to drop by one segment shortly after driving after the fill event. This could give an initial impression that the vehicle consumes a lot of DEF. Every year that GM produces vehicles with diesel engines, the requirements to reduce Nitrogen Oxides (NOx) in the vehicle exhaust continue to get more aggressive. Because DEF is required to reduce the NOx in the exhaust, DEF consumption will increase as NOx reduction requirements increase. When customers trade in an older model year diesel Silverado/Sierra for a newer model year, there will likely be an increase in DEF usage. DEF consumption increases as the newer vehicles meet the more stringent emission requirements for that model year. The amount of DEF usage is also a function of how hard the engine is working, or engine load. Because of this, it is more representative to compare DEF usage to the amount of fuel used, also a function of engine load, instead of miles traveled. In addition to engine load, other factors that affect the DEF usage rate are the humidity, temperature, and altitude where the vehicle is operating. Under certain conditions, the ECM will increase or decrease the amount of DEF used based on learning or adaptive algorithms. In the event of a malfunction and SES light, the ECM may double or even eliminate the amount of DEF that is being used. This will continue until the vehicle is repaired and until the learned value in the ECM is reset.

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Parts Information

No parts are required for this repair.

Version	2
Modified	Released April 03, 2020 Revised March 10, 2021 - Added 2021 to Model Year.

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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