

# **Service Bulletin**

# INFORMATION

## Subject: Information on Manual Regeneration Displayed on Drivers Information Center (DIC)

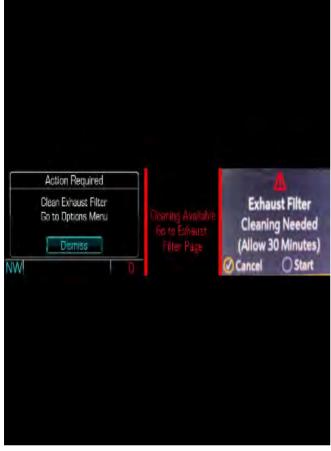
Brand:	Model:	Model Year:		VIN:		Engine	Transmission:
		from	to	from	to	Engine:	Transmission.
Chevrolet	Silverado	2018	2018				
	Silverado 2500/3500	2019	2020			L5P	
GMC	Sierra	2018	2018			LOP	
	Sierra 2500/3500	2019	2020				

Involved Region or Country	North America, Middle East, Israel, Palestine		
Condition	Some customers may comment that messages on the Drivers Information Center (DIC) are related to manual regeneration operation.		
Additional Options (RPOs)	Manual regeneration (FPF) Emergency vehicle calibration (ANM)		
Cause	<ul> <li>This condition may be caused by a vehicle with a DPF, requiring periodic regenerations.</li> <li>Due to the usage requirements of some fleet vehicles and emergency vehicles, it may be difficult for the vehicle to perform an automatic regeneration.</li> </ul>		
Correction	The use of the Manual Regeneration function when prompted or on a regular basis will reduce the chance of a vehicle having regeneration issues. This communication describes how this function works.		

# Information

# **Messages Displayed on DIC**

• First Level - Message



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At approximately 90% soot load in the DPF, one of the messages in the graphic above will be displayed on the DIC.

These messages indicate that Manual Regeneration is available. No action is required; however, the operator may choose to perform a manual regeneration. See performing a manual regeneration below. If the message is dismissed and the vehicle has not performed a regeneration, this message will appear again on the next key on cycle.

#### • Second Level - No Message

If the manual regeneration option was not performed and the soot level climbs to 100% there will be no additional DIC message, however the vehicle will try to start an automatic regeneration. Once all conditions are met for running the regeneration, the vehicle will start the process. If this regeneration is interrupted or the vehicle is turned off, on the next key cycle, the vehicle will try to continue the regeneration once conditions again become right. This will continue until the regeneration is complete.

• Third Level - Message

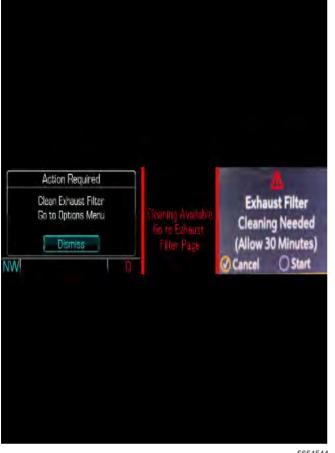


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If the soot level climbs to a level near 110 - 115% in the DPF while the vehicle is moving and the vehicle is still not able to start an automatic regeneration, the message in the graphic above will display.

If the message is displayed, continue driving safely at a steady speed as close to the posted speed limit as possible until the message turns off. This can take up to 30 minutes.





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If the vehicle is shifted to park, one of the messages in the graphic above will appear.

These messages indicate that Manual Regeneration is available.

- Refer to Performing a Manual Regeneration below.
- Fourth Level Message



If the soot level climbs to a level near 130% in the DPF while the vehicle is moving and the vehicle is still not able to start a regeneration, the message in the graphic above is displayed.

If the vehicle is placed into park, the above message will not change and there will not be an opportunity to perform a manual regeneration. The vehicle must be driven to initiate an automatic regeneration. Continue driving safely at a steady speed as close to the posted speed limit as possible, until the message turns off. This can take up to 30 minutes.

#### Fifth Level - Message

When the soot level in the DPF reaches about 140%, the vehicle will no longer attempt to perform a regeneration. The vehicle is put into reduced power and the SES light is illuminated to give the driver as much mileage as possible until the filter is completely plugged. If the vehicle is driven in reduced power long enough, the filter can become so plugged that the engine will not be able to run anymore.

#### **Requirements for Performing a Manual Regeneration:**

Warning: During DPF self-cleaning or during extended idling in P (Park), the exhaust system and exhaust gases are very hot. Things that burn could touch hot exhaust parts under the vehicle and ignite. You or others could be burned. Do not park, or idle for an extended period of time, near or over papers, leaves, dry grass, or other things that can burn. Keep the exhaust area clear of material that could ignite or burn.

**Caution:** Extended idle should be avoided because the DPF system is not capable of self cleaning at idle. During extended idle operation, monitor the instrument cluster telltale lights and Driver Information Center for messages and take appropriate indicated action. Continued idling with the warning light/message on could cause irreversible damage to the DPF requiring repair and possible replacement that might not be covered by the vehicle warranty.

Before starting the manual regeneration, make sure all of the following safety conditions are met:

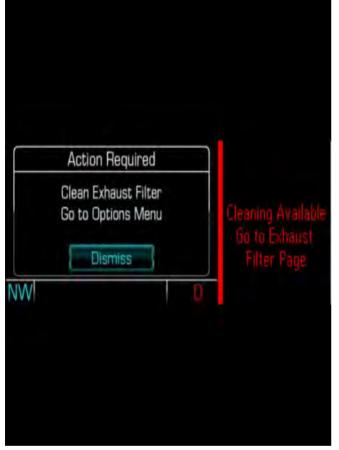
- The vehicle is parked on level ground, away from any flammable materials.
- The vehicle is parked outdoors, away from any walls or buildings.
- The vehicle is at least 3 m (10 ft) from any obstructions or materials that may combust or melt.
- The shift lever is in P (Park).
- The fuel tank is at least one-eighth full.
- All fluids are at the proper level.
- No diagnostic trouble codes have been set, and the malfunction indicator lamp is not on.
- The engine coolant temperature is above 71 °C (160 °F).

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**Note:** If your truck is equipped with RPO PTO see <u>www.gmupfitter.com</u> Bulletin 120 for additional detail. After making sure all the safety conditions have been met, press the trip odometer reset stem or  $\sqrt{}$  on the steering wheel control for at least one second to select 'Start' on the DIC.

### Performing a Manual Regeneration:



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If the vehicle is being driven and the message in the graphic above is displayed, the operator may choose to stop the vehicle to perform a manual regeneration.

⇒ Please be sure to note and locate the vehicle in accordance with the warning and safety conditions listed above.



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When shifting to park Scroll through the DIC pages to find the Exhaust Cleaning menu. Depending on whether the vehicle has a base or up level cluster, it may be under the Settings menu. The DIC will display a reference to refer to the Owners Manual as shown in the graphic above.

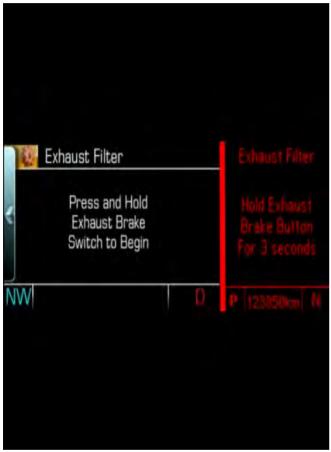


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After making sure all the safety conditions have been met, press the trip odometer reset stem or the Check-Mark on the steering wheel control for at least one second to select Start on the DIC. The DIC will display in the graphic above.

Follow the instructions in the DIC messages. Select Yes or Accept to acknowledge that all the safety conditions have been met and to activate regeneration.

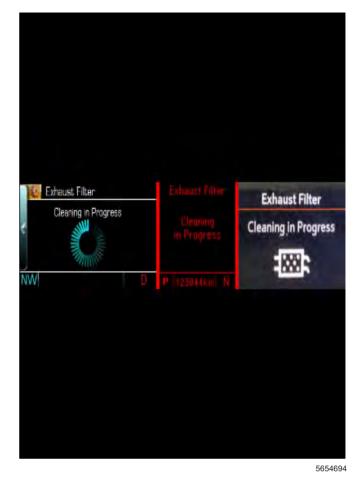
If the DIC returns to the previous screen, then one or more of the necessary operating conditions has not been met. If you cannot determine which condition has not been met, refer to *www.gmupfitter.com* to contact the GM Upfitter Integration Group for assistance.



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If all requirements for the manual regeneration are met, the DIC will display to Press and Hold Exhaust Brake Switch to Begin as shown in the graphic above.

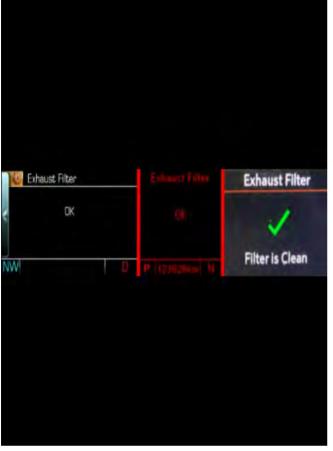
Hold the exhaust brake switch on the center stack below the climate controls for more than three seconds, and then release it, to begin the regeneration process. If the EXHAUST BRAKE ON message displays, then the switch was released too soon. Press it again to turn off the exhaust brake, then try again when the DIC message prompts.



When manual regeneration begins, the engine speed increases, the engine cooling fan sound increases and the message in the graphic above will be display.

# Warning: Do not leave the vehicle unattended during the Manual Regeneration.

Cleaning could take up to 30 minutes. Upon completion, the engine will return to normal idle, but exhaust components will remain hot for several minutes. Do not move the vehicle until the exhaust has had time to cool. Manual regeneration can be canceled at any time by pressing the brake pedal or turning the engine off. Unusual noises may be heard if regeneration is interrupted.





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For vehicles equipped with FPF and NOT ANM, the message in the graphic above will be display when the regeneration process is finished.

The message will remain when cleaning is not necessary.

For vehicles equipped with FPF AND ANM, the message in the graphic above will be display.

If a manual regen was just performed, the presence of this message is not an indication that the vehicle needs another regeneration. The DPF is clean. This is displayed because manual regeneration can only be initiated if the above message is displayed. Since a vehicle with ANM is permitted to perform a regeneration at any soot level in the DPF, once the regeneration is complete, the above message needs to be displayed. Provided that the engine idled up, the exhaust sound changed and/or there was a different smell from the exhaust, be assured that there is a very low soot level in the DPF when this message reappears.

It may be useful to develop a schedule to perform a manual regeneration at a certain interval to reduce the possibility of having a regeneration issue while the vehicle is in use. If the vehicle is used in roughly the same conditions each day, it may be useful to use the table below to collect data to be able to develop an interval for performing manual regenerations. Record the information below whenever the First level message (90% soot load) is displayed.

Date	Mileage	Total Engine Hours	Comments on the drive (Extra idle time, Drove on long trip, …)	

## **Parts Information**

No parts are required for this repair.

Version	1		
Modified	Released October 07, 2020		

GM bulletins are intended for use by professional technicians, NOT a "<u>do-it-yourselfer</u>". 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, <u>DO NOT</u> 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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