



# Service Bulletin

Bulletin No.: 18-NA-103

Date: September, 2022

## INFORMATION

**Subject: Information on Diesel Fuel Gelling in Cold Temperatures Causing In-Tank Fuel Pump Whine and Driveability Concerns**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
GM Passenger Cars and Trucks (Excludes Chevrolet Low Cab Forward Medium Duty Trucks)		2010	2023	—	—	Any Diesel	—

<b>Involved Region or Country</b>	North America
<b>Condition</b>	Some customers may comment that the in-tank fuel pump is whining, the engine is hard to start and/or stalls and the Malfunction Indicator Lamp (MIL) is illuminated.
<b>Cause</b>	Some diesel fuels may have blends that are incompatible with cold ambient temperatures causing the diesel fuel to gel and/or develop solids that may block the in-tank fuel pump pickup. Technicians may observe on a scan tool one or more of the following DTCs set in the K20 Engine Control Module: <ul style="list-style-type: none"> <li>• <b>DTC P0087</b> Fuel Rail Low Pressure</li> <li>• <b>DTC P018B</b> Fuel Pressure Sensor Performance</li> <li>• <b>DTC P228A</b> Fuel Pressure Regulator 1 Control - Forced Engine Shutdown</li> <li>• <b>DTC P228B</b> Fuel Pressure Regulator 2 Control - Forced Engine Shutdown</li> <li>• <b>DTC P2635</b> Fuel Pump Flow Performance</li> </ul>
<b>Correction</b>	Bring the vehicle inside to allow the diesel fuel to warm up to more than 0°C (32°F). Confirm the engine will start and the whining noise from the fuel pump is gone.

### Service Recommendation

**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.**

#### Fuel Waxing/Icing

Fuel distributors blend #1 and #2 diesel fuels for seasonal requirements in a particular region. In Canada, diesel fuel blend #1 is categorized as type A (Winter) and diesel fuel blend #2 is categorized as type B (Summer). No other blending of fuels is recommended. However, a customer may desire to use a winter fuel additive to prevent fuel waxing or icing during extreme cold snaps. If a winter fuel additive is to be used, it must not contain any metal based additives,

alcohol or other water emulsifiers that may compromise the water removal effectiveness of the fuel filtering system.

1. Bring the vehicle inside to allow the diesel fuel to warm up to more than 0°C (32°F). Confirm the engine will start and the whining noise from the fuel pump is gone. This may take as little as one to two hours. Fuel temperature sensor data can be monitored with the scan tool. Once the engine can be started and is running, the warm return fuel will further aid in thawing the tank. When the fuel has thawed it is suggested to drain the water separator at the bottom of the fuel filter to ensure any water is removed.
2. DO NOT replace the in-tank fuel pump for this concern. If the fuel pump whine noise is gone after warming the fuel, the fuel blend that was used is most likely incompatible with the climate conditions. Purchasing fuel from a high volume fuel retailer increases the chance that the fuel is fresh and of good quality.

## Parts Information

No parts are required for this repair.

## Warranty Information

**Note: This Condition should not be considered a vehicle problem but an issue with the local fuel blend. Do not submit a warranty claim for this procedure.**

## Version Information

<b>Version</b>	6
<b>Modified</b>	Released April 5, 2018 Revised July 25, 2018 – Added the 2019 Model Year. Revised June 24, 2019 – Added Model Year 2020 vehicles and removed the Supersede stating: This Bulletin replaces PIP5543. Revised October 23, 2020 – Added the 2021 Model Year. Revised January 19, 2022 – Added the 2022 Model Year and exclusion statement to Models section. Revised September 14, 2022 – Added the 2023 Model Year and an Important Statement.

