



Service Bulletin

Bulletin No.: 18-NA-103

Date: October, 2020

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		2010	2021	—	—	Any Diesel	—

Involved Region or Country	North America
Condition	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.
Cause	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. The technician 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"> • DTC P0087 Fuel Rail Low Pressure • DTC P018B Fuel Pressure Sensor Performance • DTC P228A Fuel Pressure Regulator 1 Control - Forced Engine Shutdown • DTC P228B Fuel Pressure Regulator 2 Control - Forced Engine Shutdown • DTC P2635 Fuel Pump Flow Performance
Correction	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

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

Version	4
Modified	Released April 5, 2018 July 25, 2018 – Added the 2019 Model Year. June 24, 2019 – Added Model Year 2020 vehicles and removed the Supersede stating: This Bulletin replaces PIP5543. October 23, 2020 – Added the 2021 Model Year.

