

## STAR ONLINE PUBLICATION

**Case Number: S2008000120**

**Release Date: 8/13/2020**

**Symptom/Vehicle Issue:** Malfunction Indicator Lamp (MIL) Illumination. Diagnostic Trouble Code (DTC) P0461 – Fuel Level Sensor 1 Performance Set

**NOTE:** This only applies to vehicles equipped with the 50 gallon fuel tank option (Sales Code NFC).

**Discussion:** A small number of customers may experience a MIL illumination. Upon further investigation, a technician will find DTC P0461 set in the Powertrain Control Module (PCM) memory.

The P0461 diagnostic only runs when the fuel tank falls below 14.9%, at which time a mileage counter begins to accumulate. If the vehicle accumulates over 240 miles without seeing the fuel level go above 14.9%, this DTC will set.

Reports from the field have indicated that this DTC is setting due to the improper tank configuration being programmed into the PCM. If you receive a vehicle in with this DTC, and the vehicle has the 50-gallon fuel tank option (sales code NFC), please collect a Vehicle Configuration Report. Navigate to the PCM Configuration Data portion of the report, and note the Fuel Tank Option. If the Fuel Tank Option is set to “All Others” then the PCM is not programmed for the correct fuel tank. See (Figure 1).

### PCM CONFIGURATION

NAME	VALUE	UNITS
Fuel Tank Type	All Others	

**Figure 1**

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**

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To correct this, navigate WiTECH to the PCM “Misc Functions” tab, and perform the “Enable 50 Gallon Fuel Tank” routine. Once complete cycle the key, and obtain another Vehicle Configuration Report. Verify the PCM configuration now shows the 50-gallon tank option is now set.

If you find that the tank configuration is correct, or the DTC returns after correcting the option, it is also possible that the customer’s fueling habits could set this DTC. If a customer allows the tank level to fall below 14.9%, and only adds small amounts of fuel to the tank keeping the fuel level below 14.9% during the 240-mile counter, this DTC can set. Before replacing any parts, please review the customer’s fueling habits prior to the DTC setting.

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