



STAR ONLINE PUBLICATION



Case Number: S2118000006

Release Date: May 2021

Symptom/Vehicle Issue: Malfunction Indicator Lamp (MIL) Illumination. Diagnostic Trouble Code (DTC) P20C6 – Reductant Heater 4 Control Circuit, Set.

Discussion: A small number of customers may experience a MIL Illumination. Upon further diagnosis, a technician may find DTC P20C6 set. This DTC may be more prevalent in areas of extreme cold.

An analysis of several returned DEF pumps replaced for these DTCs have shown to be Trouble Not Found (TNF). If you receive a vehicle with the above DTC, please perform the following before replacing any parts.

1. Using wiTECH, observe the Environmental and Urea Tank Temperature parameters in the PCM data. Verify that both temperatures are above 39°F (4°C) to help ensure the DEF tank is thawed. If not, allow the vehicle to sit in a heated shop overnight until the system can be fully thawed.
2. Thoroughly inspect the DEF supply line from the pump to the DEF injector, and verify there are no leaks or blockages. Were any issues found with the DEF supply line?
 - a. Yes>>> Repair the DEF supply line per normal published repair procedures. No further action is required.
 - b. No>>> Proceed to ([Step 3](#))
3. Check the DEF system for proper operation by performing the following steps:

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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- a. Using wiTECH, perform a “DEF Dosing Injection Quantity” test in accordance with published service information. During the initial stages of the routine, the system will attempt to build pressure before beginning to dose. Did the routine abort for failure to build pressure prior to dosing?
 - i. Yes>>> Replace the DEF pump in accordance to published service information. No further action is required.
 - ii. No>>> Proceed to ([Sub step b.](#))
- b. Capture the amount of DEF injected during the routine in accordance with service information. Is the amount of DEF captured during the routine between 26-35 ml?
 - i. Yes>>> System is operating as designed at this time. Do not replace any parts. Engineering is currently investigating the root cause of false failures of this DTC.
 - ii. No>>> Replace the DEF injector in accordance to service information procedures. No further action is required.

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