

## STAR ONLINE PUBLICATION

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**Case Number: S2025000006**

**Release Date: 7/02/2020**

**Symptom/Vehicle Issue:** Malfunction Indicator Lamp (MIL) Illumination. Diagnostic Trouble Code (DTC) P206D – Reductant Quality Sensor Circuit High Set.

**Discussion:** A small number of customers may experience a MIL illumination. Upon further investigation a technician may find DTC P206D set in the Powertrain Control Module (PCM) memory.

**Note: Current diagnostics indicate that this DTC is electrical based. However, this DTC can also be caused by DEF quality issues as well. This SOL publication addresses the DEF quality portion of the diagnostic**

Prior to clearing the DTCs and proceeding with normal diagnostics, please be sure to save the following information:

- Vehicle Scan Report
- “Urea (DEF) Concentration” In Wi-Tech PCM data
- “Urea (DEF) Tank Temperature At Quality Sensor” In Wi-Tech PCM data
- “Urea (DEF) Tank Temperature Sensor” In Wi-Tech data \*\*this is a separate reading from the in-tank temperature sensor\*\*
- DEF Concentration when tested with the appropriate DEF Refractometer
- Hydrocarbon Test Strip results
- Customer driving cycle and approximate weather conditions at the time of the failure.

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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Please document and/or attach all information gathered to the warranty claim when filing.

Proceed with the normal published diagnostics for the DTC set to rule out any potential electrical issue causing the DTC. If normal diagnostics lead to replacing the DEF tank perform the following procedure to ensure the tank is the cause.

1. Remove the tank and drain all fluid. If frozen, be sure to thoroughly thaw the tank before draining.
2. Add .5 to 1 gallon of fresh DEF fluid.
3. Gently slosh (shake) the DEF tank to break up, and reconstitute any crystalline material built up on the bottom of the tank.
4. Completely drain the tank.
5. Reinstall the tank and add 3.5 to 5 gallons of fresh DEF

**Note: Only use appropriate funnels or tools that have not been used to fill any other type of fluid. Otherwise, contamination of the new DEF fluid may result.**

6. Clear the DTCs and drive the vehicle for 10 minutes. If the DTC returns, or is still active and will not clear, then replace the DEF tank.

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