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Case Number: S2525000002 Rev B

Release Date: March 2026

Symptom/Vehicle Issue: Diesel Exhaust Fluid (DEF) Gauge Fluctuates Or Is Erratic.
Diagnostic Trouble Code (DTC) P203F – Reductant Level Too Low.

Models Affected: 2025-2026 RAM 2500 (DJ) 2025-2026 RAM 3500 (D2)
2025-2026 RAM 3500 (DD) 2025-2026 RAM 45/5500 (DP)

NOTE: Please Reference Any Applicable TSBs

Discussion: Some customers may experience their DEF gauge fluctuates or is erratic and drops to empty at times while driving. Upon further investigation, the technician may find DTC P203F is setting in the Powertrain Control Module (PCM).

Note: The DEF Level Sensor is no longer part of the DEF Pump assembly

If you receive a vehicle in with this condition, please reference any applicable TSBs and then follow normal published diagnostics for the concern. Be sure to inspect closely that there are no wiring or harness connection issues to the DEF tank and UQS/DEF level sensor.

The DEF should only be filled while the ignition switch is in the off position. Not doing so can cause this issue to be active. If this issue is present only when the vehicle is being driven in rough terrain, this issue is still under investigation.

Ultrasonic level sensors are susceptible to bubble formation/aeration which can result in inaccurate or invalid readings, particularly after filling events or high slosh conditions. Additionally, if the PCM does not detect a filling event it will filter the signal sent by the DEF level sensor at much slower rate and the gauge will slowly update (up to 30 min).

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, eCONTACT or Service Library entry if no solution is found.



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1. Verify the level sensor is sending a valid signal. Monitor the Hardwired level signal from the PCM.

DJD2 Tank Height and Volume		DDDP Tank Height and Volume	
Hardwired Level (mm)	Tank Volume (Gauge)	Hardwired Level (mm)	Tank Volume (Gauge)
64	25	60	25
80	33 (2.5 Gal Jug)	66	28.3 (2.5 Gal Jug)
116	50	108	50
166	75	154	75
216	100	202	100

2. Compare the Hardwired signal with a known volume in the tank. Drain tank and fill the tank with one 2.5 Gallon Jug of DEF. Reference the above tables for known heights at various tank volumes. After adding a 2.5 Gallon Jug, the hardwired level signal should read 80mm for DJ/D2 and 66mm for DD/DP. If sensor is reading at the correct level, there is no issue with the sensor, and the DEF tank does not need to be replaced. If the Hardwired signal does not immediately update key vehicle off and wait 15 min. Key back on and check hardwired level again.

Note: Station pump filling at high flow rates can create the conditions described above and delay an accurate signal reading. Filling with bottles can ensure a more immediate and accurate response from the sensor.

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