

GENERIC · POWERTRAIN

P203C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P203C

Reductant Level Sensor A Circuit Low

P203C indicates that the powertrain control module (PCM) has detected a low voltage signal on the reductant level sensor A circuit, which monitors the diesel exhaust fluid (DEF) tank level. The sensor's output is below the expected range for the current operating conditions, meaning the PCM cannot reliably determine how much reductant remains in the tank.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- A warning message on the dashboard indicating low DEF level or a fault in the reductant system
- Possible activation of a speed-limiting or engine derate strategy if the code persists
- Inaccurate or fluctuating DEF level gauge readings
- In some cases, the vehicle may enter limp mode or refuse to restart after shutdown

Common causes, most likely first

- 1 Faulty reductant level sensor or sending unit
- 2 Damaged, corroded, or disconnected wiring or connector at the sensor
- 3 Open or short to ground in the signal circuit between the sensor and the PCM
- 4 Poor electrical connection at the PCM harness
- 5 Contaminated or crystallized DEF fluid affecting sensor operation
- 6 Failed PCM driver for the sensor circuit (rare)

How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related pending or stored codes in the reductant system
- 2 Inspect the reductant level sensor connector and wiring for damage, corrosion, or loose pins
- 3 Measure the sensor signal voltage and compare to the manufacturer's specification; repair any open or short circuit
- 4 Check the DEF fluid quality and level; flush and refill if contamination is suspected
- 5 Test the reductant level sensor resistance or output with a multimeter according to the service procedure
- 6 Replace the reductant level sensor if it fails electrical testing
- 7 Clear the code and perform a road test to confirm the repair, ensuring the monitor runs and the light stays off



What a low reductant level code really means

- A low signal voltage does not always mean the tank is empty; it often indicates a wiring fault that mimics a low fluid condition.
- Crystallized DEF around the sensor can bridge electrical contacts and cause a low voltage reading without any visible damage.
- Some vehicles use a combined level and quality sensor, and a failure in the quality sensing element can set a level circuit code.
- After repairs, the DEF level monitor may require a specific drive cycle or a scan-tool reset to relearn the tank level.
- A weak battery or poor ground can cause reference voltage drops that trigger this code intermittently.

Can I keep driving with P203C?

You can usually continue driving with this code, but avoid long trips or heavy loads until it is diagnosed, because a persistent fault may trigger a speed limiter or prevent the engine from restarting after shutdown. Do not ignore the warning light, as the vehicle may enter a derate strategy that reduces power.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the reductant level sensor circuit
- Socket set and trim removal tools
- DEF refractometer (to check fluid quality)

Reading P203C

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
0	Fuel and air metering and auxiliary emission controls.
3C	The exact fault within that area.

Often seen with

P203B Reductant Level Sensor A Circuit Range/Performance · **P203D** Reductant Level Sensor A Circuit High · **P203E** Reductant Level Sensor A Circuit Intermittent/Erratic · **P208B** Reductant Pump A Control Performance/Stuck Off · **P20B9** Reductant Heater A Control Circuit/Open



See it working

Watch the animated explainer [How Variable Valve Timing Works: Cam Phaser and VVT Solenoid](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p203c/>

