

GENERIC · POWERTRAIN

P203A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P203A

Reductant Level Sensor A Circuit

P203A indicates that the powertrain control module has detected an abnormal condition in the electrical circuit for the reductant level sensor, which measures the diesel exhaust fluid level in the tank. The computer monitors voltage or resistance on the sensor signal circuit and sets this code when the reading falls outside the expected range for the current operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light or a specific reductant system warning lamp
- A message on the driver information display indicating low or incorrect diesel exhaust fluid level
- The vehicle may enter a reduced power or limp mode after a certain number of ignition cycles
- The remote start system may be disabled as a precaution
- Often no symptoms besides the warning light, especially if the sensor signal is only intermittently out of range

Common causes, most likely first

- 1 Faulty reductant level sensor or sending unit inside the diesel exhaust fluid tank
- 2 Damaged, corroded, or disconnected wiring or connector at the sensor or control module
- 3 Open or short circuit in the sensor signal or ground circuit
- 4 Diesel exhaust fluid contamination or crystallization affecting sensor operation
- 5 Failed reductant pump control module or power supply issue to the sensor
- 6 Software calibration issue in the powertrain control module requiring an update



How to diagnose and fix it

- 1 Perform a visual inspection of the reductant tank, sensor connector, and wiring for damage, corrosion, or fluid leaks
- 2 Check for technical service bulletins or calibration updates specific to the vehicle make and model
- 3 Use a scan tool to read live data from the reductant level sensor and compare it with the actual fluid level
- 4 Measure resistance and voltage on the sensor signal circuit and ground circuit to verify integrity
- 5 Test the sensor with a known-good replacement or simulate the signal to confirm the fault follows the sensor
- 6 Inspect the diesel exhaust fluid for contamination or crystallization and flush the system if necessary
- 7 Replace the reductant level sensor or sending unit if electrical tests confirm it is faulty, then clear codes and verify repair

Reductant level sensor circuit pitfalls

- A common misdiagnosis is replacing the entire reductant pump assembly when only the level sensor is faulty, so always test the sensor circuit independently before condemning the pump.
Diesel exhaust fluid crystallization on the sensor connector pins can mimic a failed sensor and is often overlooked during visual inspection.
- In some vehicles, a weak battery or low charging system voltage can cause intermittent sensor codes, so verify battery and charging system health first.
- The code can be set by a software glitch in the control module that may be resolved by a calibration update rather than hardware replacement.
After repairs, the vehicle may require a specific driving cycle or scan tool routine to clear the code and restore full power, so do not assume the fix failed if the light remains on immediately.

Can I keep driving with P203A?

It is generally safe to continue driving with P203A set, but avoid long distances or heavy loads until the fault is repaired because the vehicle may eventually enter reduced power mode. Do not ignore the warning light, as continued operation with a faulty reductant level sensor can lead to more severe emissions system faults and potential limp mode.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools for connector and sensor access
- Diesel exhaust fluid refractometer (to check concentration)



Reading P203A

- 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.
- 3A** The exact fault within that area.

Often seen with

P203B Reductant Level Sensor A Circuit Range/Performance · **P203C** Reductant Level Sensor A Circuit Low · **P203D** Reductant Level Sensor A Circuit High · **P20E8** Reductant Pressure Too Low · **P20E9** Reductant Pressure Too High

See it working

Watch the animated explainer [How a Car Thermostat Works: Wax Pellet and Cooling Fan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p203a/>

