

GENERIC · POWERTRAIN

P204B

OBD-II TROUBLE CODE

P204B

Reductant Pressure Sensor Circuit Range/Performance

P204B means the engine computer has detected that the reductant pressure sensor signal is outside the expected range or is not performing as designed, even though the circuit itself may be intact. The computer compares the sensor's voltage or pressure reading against a plausibility model and flags the code when the signal does not behave as expected during key-on or while the dosing system is active.

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

- Illuminated check engine light, often with no other noticeable symptoms
- Reductant (diesel exhaust fluid) low-pressure warning or service message on the dashboard
- Reduced engine power or limp mode in some vehicles when the fault is active
- Rough running or hesitation if the system enters a default pressure strategy
- Increased diesel exhaust fluid consumption or failed dosing events
- Difficulty clearing the code after refilling the diesel exhaust fluid tank

Common causes, most likely first

- 1 Faulty reductant pressure sensor giving an erratic or biased reading
- 2 Contaminated or crystallized diesel exhaust fluid at the sensor port
- 3 Wiring damage or poor connector contact at the sensor or controller
- 4 Restricted reductant filter or pickup screen causing pressure to fall outside the expected range
- 5 Weak or failing reductant pump unable to build or hold commanded pressure
- 6 Air intrusion or a small leak in the reductant line affecting pressure stability
- 7 Software calibration issue in the reductant control module misinterpreting a valid signal



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P204B before clearing anything
- 2 Inspect the reductant pressure sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Check diesel exhaust fluid level, concentration, and contamination; drain and refill if suspect
- 4 Replace the reductant filter or pickup screen if restricted, then clear and retest
- 5 Command the reductant pump with a scan tool and compare actual pressure to the sensor reading
- 6 Perform a pressure hold test on the reductant line to rule out leaks or air intrusion
- 7 If pressure tracks correctly but the signal remains implausible, replace the pressure sensor and relearn adaptations

What the pressure sensor code really means

- A P204B can set from a perfectly good sensor when the diesel exhaust fluid has crystallized at the pressure port and blocks the true pressure from reaching the diaphragm.
- Technicians often replace the pump first, but a biased pressure sensor reading that is only slightly off at key-on can trigger this code without any driveability complaint.
- The code can be stored by a low reductant level that has just been refilled, because the controller may need a complete key cycle and a dosing event before the pressure plausibility check passes.
- A restricted filter or a weak pump can set P204B without ever setting a low-pressure code, because the sensor signal stays within circuit range but fails the performance model.
- After any sensor or pump replacement, the reductant control module often requires a pressure adaptation reset, and skipping that step will make the code return immediately.

Can I keep driving with P204B?

You can usually drive the vehicle to a workshop, but avoid long trips and heavy loads because the system may enter limp mode or stop dosing diesel exhaust fluid, which can lead to a more severe derate. If the check engine light starts flashing or the vehicle limits speed, stop driving and have it diagnosed.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter for sensor signal and wiring checks
- Diesel exhaust fluid refractometer to verify concentration
- Pressure gauge kit rated for reductant system pressures
- Basic hand tools and terminal pick set for connector inspection



Reading P204B

- 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.
- 4B** The exact fault within that area.

Often seen with

P204A Reductant Pressure Sensor Circuit · **P204C** Reductant Pressure Sensor Circuit Low · **P204D** Reductant Pressure Sensor Circuit High · **P20B9** Reductant Heater A Control Circuit/Open · **P20BA** Reductant Heater A Control Performance

See it working

Watch the animated explainer [Master the Four-Stroke Engine Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p204b/>

