

GENERIC · POWERTRAIN

P206B

OBD-II TROUBLE CODE

P206B

Reductant Quality Sensor Circuit Range/Performance

P206B indicates that the powertrain control module has detected an out-of-range or performance fault in the reductant quality sensor circuit, which monitors the diesel exhaust fluid quality on selective catalytic reduction equipped vehicles. The computer compares the sensor signal against expected values and flags the code when the reading falls outside the valid range or fails a rationality check.

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

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode triggered by the SCR system
- A message on the dash indicating poor diesel exhaust fluid quality or a refill reminder
- Increased diesel exhaust fluid consumption as the system attempts to compensate
- Possible rough running or hesitation if the fault affects dosing strategy
- Failure to pass an emissions inspection due to the stored code

Common causes, most likely first

- Contaminated or degraded diesel exhaust fluid in the tank
- Faulty reductant quality sensor or its internal electronics
- Damaged or corroded wiring and connectors between the sensor and the control module
- Failed reductant quality sensor heater circuit causing erratic readings
- Software calibration issue in the powertrain control module requiring an update
- Low diesel exhaust fluid level causing the sensor to read outside its normal range
- A malfunctioning diesel exhaust fluid pump or dosing module affecting sensor performance



How to diagnose and fix it

- 1 Verify the diesel exhaust fluid level and top up with fresh, API-certified fluid if low
- 2 Use a scan tool to read live data from the reductant quality sensor and compare it to specifications
- 3 Inspect the sensor wiring harness and connectors for chafing, corrosion, or loose pins
- 4 Test the reductant quality sensor heater resistance and circuit continuity with a multimeter
- 5 Drain and refill the diesel exhaust fluid tank with known-good fluid, then clear the code and retest
- 6 Replace the reductant quality sensor if live data confirms an out-of-range signal
- 7 Check for and install any available powertrain control module software updates related to the SCR system

Before you replace the reductant quality sensor

- Contaminated diesel exhaust fluid from a dirty funnel or an old container is a frequent cause that many technicians overlook when chasing this code.
- The reductant quality sensor often shares a heater circuit with the tank heater, so a blown fuse can set P206B without any sensor fault at all.
- A low diesel exhaust fluid level can cause the sensor to read outside its valid range, so always verify fluid level and quality before condemning parts.
- After refilling or replacing fluid, the vehicle may require a specific driving cycle or a scan-tool reset procedure to clear the code and relearn the sensor.
- This code does not always mean the sensor is bad; wiring corrosion at the connector behind the tank is a common misdiagnosis trap on aging vehicles.

Can I keep driving with P206B?

You can usually continue driving to a workshop, but avoid heavy loads and long trips because the SCR system may enter limp mode and reduce power. Do not ignore the warning light, as continued driving with poor diesel exhaust fluid quality can damage the selective catalytic reduction catalyst.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Diesel exhaust fluid refractometer
- Socket and wrench set
- Fluid transfer pump or drain pan



Reading P206B

- 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.
- 6B** The exact fault within that area.

Often seen with

P206A Reductant Quality Sensor Circuit · **P206C** Reductant Quality Sensor Circuit Low · **P206D** Reductant Quality Sensor Circuit High · **P20B9** Reductant Heater A Control Circuit/Open · **P20BE** Reductant Heater B Control Circuit Performance

See it working

Watch the animated explainer [Disc Brake Trainer: How Car Brakes Stop a Wheel](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p206b/>

