



P206C

Reductant Quality Sensor Circuit Low

P206C means the engine computer has detected a low-quality signal from the reductant quality sensor, which monitors the diesel exhaust fluid (DEF) for proper urea concentration. The sensor circuit is reporting a voltage or signal below the expected range, so the computer cannot trust the DEF quality reading and will likely limit vehicle operation to reduce emissions.

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 accompanied by a message about DEF quality or emissions system fault
- Driver information display warning such as 'Incorrect DEF quality' or 'Service DEF system'
- Reduced engine power or speed limitation after a certain number of restarts
- Poor fuel economy or increased DEF consumption in some cases
- Often no symptoms besides the warning light until the system triggers a countdown or derate

Common causes, most likely first

- 1 Contaminated or diluted diesel exhaust fluid (DEF) with incorrect urea concentration
- 2 Failed reductant quality sensor or its internal circuitry
- 3 Damaged or corroded wiring or connector at the sensor
- 4 Open or short circuit in the sensor signal or ground circuit
- 5 Faulty DEF control module or aftertreatment control module
- 6 DEF fluid that has degraded due to age or exposure to high temperatures

How to diagnose and fix it

- 1 Verify DEF fluid quality with a refractometer and replace fluid if concentration is outside specification
- 2 Inspect the reductant quality sensor connector and wiring for corrosion, damage, or loose pins
- 3 Check sensor resistance and signal voltage against manufacturer specifications
- 4 Test the sensor circuit for opens, shorts, and grounds using a digital multimeter
- 5 Replace the reductant quality sensor if electrical tests indicate a failed component
- 6 Clear the diagnostic trouble codes and perform a road test to confirm the repair
- 7 If the code persists, diagnose the DEF control module and reprogram or replace as needed



What a low reductant quality code really means

- A low signal from the reductant quality sensor often results from diluted DEF rather than a failed sensor, so always verify fluid quality before replacing parts.
- The sensor measures urea concentration indirectly and can be fooled by contamination from fuel, oil, or incorrect fluids added to the DEF tank.
- Some vehicles will not illuminate a warning until the fault occurs multiple times, so a single P206C may not trigger a derate immediately.
- A weak battery or charging system can cause erratic sensor signals and set this code without any actual sensor fault.
- After replacing the sensor, a relearn or adaptation procedure may be required for the system to recognize the new component.

Can I keep driving with P206C?

You can usually continue driving for a short period, but the vehicle may enter a power reduction or speed limitation after a number of restarts. Avoid long trips and have the fault diagnosed promptly to prevent being stranded or facing costly emissions system repairs.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Refractometer for DEF quality testing
- Hand tools for sensor removal
- Manufacturer service information for wiring diagrams and specifications

Reading P206C

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.
6C	The exact fault within that area.

Often seen with

P206B Reductant Quality Sensor Circuit Range/Performance · **P206D** Reductant Quality Sensor Circuit High · **P207F** Reductant Quality Performance · **P20B9** Reductant Heater A Control Circuit/Open · **P20BA** Reductant Heater A Control Performance



See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p206c/>

