

GENERIC · POWERTRAIN

P208A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P208A

Reductant Pump A Control Circuit/Open

P208A means the engine control module has detected an open circuit on the control wire for the reductant pump, which is the diesel exhaust fluid (DEF) pump used in selective catalytic reduction systems. The computer commands the pump on and monitors the circuit, and it sees no current flow or an unexpected voltage on the pump control circuit, so it sets this code.

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
- A message on the dash warning of low DEF or a DEF system fault
- The vehicle may enter limp mode or limit engine power after a certain number of restarts
- Rough running or reduced fuel economy if the system enters a derate strategy
- A stored code in the powertrain control module with no drivability complaint in some cases
- The DEF pump may not prime or run when commanded, leading to eventual NOx sensor faults

Common causes, most likely first

- 1 Open or damaged wire in the reductant pump control circuit, often from chafing or corrosion
- 2 Failed reductant pump motor or internal pump control module
- 3 Poor electrical connection at the pump connector or at the powertrain control module
- 4 Blown fuse or corroded fuse box terminal supplying the pump circuit
- 5 Failed relay or power supply issue to the reductant pump control module
- 6 Water or DEF intrusion into the pump connector causing terminal corrosion
- 7 Rarely, a faulty engine control module driver for the pump circuit



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data for P208A
- 2 Inspect the reductant pump connector and wiring harness for corrosion, chafing, or loose pins
- 3 Check the fuse and relay that supply power to the reductant pump control circuit
- 4 Measure resistance and voltage on the pump control wire between the pump and the control module
- 5 Command the reductant pump on with a scan tool and listen for pump operation or check for voltage at the pump
- 6 If the circuit tests good, substitute a known-good pump or perform a resistance test on the pump motor
- 7 Repair or replace the faulty wiring, connector, pump, or module as needed, then clear codes and verify

What the open circuit really means

- An open circuit code does not always mean the pump is dead; a corroded connector or a broken wire in the harness is just as likely and much cheaper to fix.
- The reductant pump control circuit often shares a fuse or relay with other emissions components, so a blown fuse can set P208A along with other codes.
- Some vehicles will not run the pump unless the DEF tank is above a certain level or the engine is at operating temperature, so a commanded pump test may show no activity even on a good system.
- Technicians sometimes replace the pump only to find the new pump sets the same code because the original connector terminals were spread or corroded.
- This code can be set by a low battery or charging system issue that causes a momentary voltage drop on the pump control circuit during cranking.

Can I keep driving with P208A?

You can usually drive the vehicle for a short time with this code, but the DEF system is disabled and the vehicle may eventually limit speed or power. Avoid long trips and heavy loads, and get the circuit diagnosed soon to prevent a derate event.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Wiring diagram for the reductant pump circuit
- Terminal pick and electrical contact cleaner
- Fuse puller and test light



Reading P208A

- 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.
- 8A** The exact fault within that area.

Often seen with

P208B Reductant Pump A Control Performance/Stuck Off · **P208C** Reductant Pump A Control Circuit Low · **P208D** Reductant Pump A Control Circuit High · **P20B9** Reductant Heater A Control Circuit/Open · **P20BE** Reductant Heater B Control Circuit Performance

See it working

Watch the animated explainer [How Drive-by-Wire Works: Electronic Throttle Body](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p208a/>

