

GENERIC · POWERTRAIN

P20D8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P20D8

Exhaust Aftertreatment Fuel Supply Control Performance

P20D8 indicates that the powertrain control module (PCM) has detected a performance fault in the exhaust aftertreatment fuel supply control circuit, which manages the delivery of diesel fuel into the exhaust stream for regeneration or thermal management. The PCM monitors the system's ability to achieve the commanded fuel flow or pressure and sets this code when the actual response falls outside the expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light, especially during normal driving
- Reduced engine power or limp mode if the fault escalates
- Increased diesel particulate filter (DPF) regeneration frequency or failure to regenerate
- Exhaust smoke or odor due to improper fuel dosing
- Possible rough running or misfire if fuel delivery is severely affected

Common causes, most likely first

- 1 Faulty exhaust aftertreatment fuel injector (dosing valve) clogged or stuck
- 2 Wiring harness damage or corroded connectors at the fuel dosing injector or control module
- 3 Failed fuel supply pump for the aftertreatment system, providing insufficient pressure
- 4 Restricted fuel line or filter in the aftertreatment fuel supply circuit
- 5 Defective exhaust aftertreatment fuel pressure sensor giving inaccurate readings
- 6 PCM software issue or internal driver fault in the fuel control circuit
- 7 Exhaust system leaks upstream of the dosing point affecting sensor readings



How to diagnose and fix it

- 1 Connect a scan tool and verify the code is current, then check for related codes and freeze-frame data
- 2 Inspect the wiring and connectors at the aftertreatment fuel injector and control module for damage or corrosion
- 3 Test the fuel dosing injector for resistance and proper spray pattern, and clean or replace if necessary
- 4 Measure fuel pressure at the aftertreatment supply circuit and compare to specification
- 5 Check the fuel supply pump operation and replace if it fails to build adequate pressure
- 6 Inspect the exhaust system for leaks or blockages that could affect fuel delivery performance
- 7 Reprogram or replace the PCM if all other components test good and the fault persists

Diagnosing P20D8 Without Throwing Parts

- A clogged dosing injector is frequently misdiagnosed as a failed pump; always test injector flow before replacing expensive components.
- The code can be set by a simple exhaust leak upstream of the dosing point, which skews sensor readings and causes the PCM to command incorrect fuel flow.
- Incorrect fuel quality or contamination in the aftertreatment fuel supply can cause performance issues that mimic electrical faults.
- Some vehicles require a relearn or adaptation reset after repairing the fuel supply system to prevent the code from returning.
- The PCM may set P20D8 intermittently if the fuel supply pump is weak but not completely failed, so intermittent codes should not be ignored.

Can I keep driving with P20D8?

You can usually continue driving with this code, but avoid heavy loads or long trips until it is diagnosed, as continued operation may lead to more severe aftertreatment system damage and reduced fuel economy.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Fuel pressure gauge
- Hand tools for wiring and component access
- Diagnostic smoke machine for exhaust leak detection



Reading P20D8

- 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.
- D8** The exact fault within that area.

Often seen with

P20D7 Exhaust Aftertreatment Fuel Supply Control Circuit/Open · **P20D9** Exhaust Aftertreatment Fuel Supply Control Circuit Low · **P20DA** Exhaust Aftertreatment Fuel Supply Control Circuit High · **P20DB** Exhaust Aftertreatment Fuel Supply Control Stuck Open · **P20DC** Exhaust Aftertreatment Fuel Supply Control Stuck Closed

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p20d8/>

