

GENERIC · POWERTRAIN

P20D5

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P20D5

Exhaust Aftertreatment Fuel Injector B Stuck Open

This code indicates that the powertrain control module has detected a stuck-open condition in the circuit for exhaust aftertreatment fuel injector B, which is used to inject diesel fuel into the exhaust stream to raise temperature for regeneration of the diesel particulate filter. The computer monitors the injector circuit and recognizes that current flow remains higher than expected even when the injector should be closed, signalling a short to ground or a failed injector.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- A noticeable fuel smell from the exhaust, especially after the engine is shut off
- White or bluish smoke from the tailpipe due to unburned fuel entering the exhaust
- Reduced fuel economy as extra fuel is injected when it should not be
- Possible rough running or misfire if the excess fuel affects exhaust backpressure
- In some cases, the vehicle may enter limp mode or limit regeneration events

Common causes, most likely first

- 1 Exhaust aftertreatment fuel injector B internally shorted or stuck open
- 2 Chafed or shorted wiring in the injector control circuit contacting ground
- 3 Corroded or damaged electrical connector at the injector
- 4 Failed driver circuit inside the powertrain control module
- 5 Contamination or debris holding the injector pintle open
- 6 Exhaust system modifications or leaks that allow moisture into the injector



How to diagnose and fix it

- 1 Use a scan tool to verify the code and check for related codes in the aftertreatment system
- 2 Inspect the injector wiring harness and connector for chafing, corrosion, or loose pins
- 3 Measure the resistance of the injector with a multimeter and compare to specifications
- 4 Disconnect the injector and check for a short to ground on the control wire
- 5 If the circuit tests good, remove and inspect the injector for sticking or contamination
- 6 Replace the faulty injector and clear the codes, then perform a regeneration test drive
- 7 If the code returns, test the powertrain control module driver circuit or replace the module

Before replacing the exhaust fuel injector

- A stuck-open injector often causes no driveability symptoms, so the code may be the only clue and should not be ignored.
- Wiring harness damage near the exhaust manifold is a common cause that is frequently overlooked when only the injector is replaced.
- Excess fuel from a stuck-open injector can wash down cylinder walls and dilute engine oil, so check oil level and condition.
- The code can be set by a short to ground in the control wire even if the injector itself is good, so always test the circuit first.
- After repairs, a forced regeneration with a scan tool is often needed to verify the fix and prevent repeat codes.

Can I keep driving with P20D5?

It is not recommended to drive for long with this code because unburned fuel can overheat and damage the diesel particulate filter. If you must drive, avoid heavy loads and long idling, and schedule service as soon as possible.

Tools that help

- OBD-II scan tool with live data and regeneration capability
- Digital multimeter
- Wiring diagram for the aftertreatment fuel injector circuit
- Socket set and basic hand tools
- Exhaust backpressure gauge



Reading P20D5

- 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.
- D5** The exact fault within that area.

Often seen with

P2002 Particulate Trap Efficiency Below Threshold (Bank 1) · **P20D3** Exhaust Aftertreatment Fuel Injector B Control Circuit Low · **P20D4** Exhaust Aftertreatment Fuel Injector B Control Circuit High · **P20D6** Exhaust Aftertreatment Fuel Injector B Stuck Closed · **P2463** Diesel Particulate Filter Restriction - Soot Accumulation

See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p20d5/>

