

GENERIC · POWERTRAIN

P20D0

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P20D0

Exhaust Aftertreatment Fuel Injector A Stuck Closed

P20D0 indicates that the powertrain control module (PCM) has commanded the exhaust aftertreatment fuel injector for bank A to open, but the circuit or component response indicates it remains closed. The PCM monitors the injector circuit for expected electrical current and feedback; when the injector fails to open or the circuit is open, the PCM sets this code and disables the associated regeneration strategy.

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

- Malfunction indicator lamp (MIL) illuminated, often with no other noticeable symptoms
- Reduced engine power or limp mode if the PCM disables regeneration and derates torque
- Increased diesel particulate filter (DPF) regeneration frequency or failure to complete regeneration
- Exhaust smoke or odor during regeneration attempts due to incomplete fuel delivery
- Poor fuel economy or elevated exhaust temperatures during active regeneration
- Possible rough running or misfire if the injector leaks or shorts internally

Common causes, most likely first

- 1 Failed exhaust aftertreatment fuel injector (stuck closed, clogged nozzle, or open coil)
- 2 Open or shorted wiring harness to the injector, including chafed or corroded connectors
- 3 Blown fuse or faulty relay supplying power to the injector circuit
- 4 PCM driver circuit failure or software calibration issue
- 5 Restricted fuel supply to the injector (clogged filter, low pressure, air in lines)
- 6 Exhaust system blockage or excessive backpressure preventing injector operation
- 7 Corrosion or water intrusion in the injector connector causing high resistance



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for related codes in the aftertreatment system
- 2 Inspect the injector connector and wiring for damage, corrosion, or loose pins
- 3 Check the fuse and relay for the aftertreatment fuel injector circuit
- 4 Measure injector resistance and compare to manufacturer specification
- 5 Test for power and ground at the injector connector with the key on and during commanded activation
- 6 Perform an injector activation test with a bidirectional scan tool to confirm mechanical operation
- 7 If electrical and supply checks pass, replace the exhaust aftertreatment fuel injector and clear codes

Don't condemn the injector before checking these

- A clogged fuel filter or low fuel pressure can mimic a stuck-closed injector by starving it of fuel, so always verify supply pressure first.
- The PCM may set P20D0 if the injector circuit is open even when the injector itself is good, so a simple resistance check at the connector can save an unnecessary replacement.
- Exhaust backpressure from a restricted DPF or catalyst can prevent the injector from opening fully, causing a false stuck-closed indication.
- Some vehicles require a software update to correct overly sensitive injector monitoring logic before any hardware is replaced.
- After replacing the injector, a regeneration drive cycle is usually needed to clear the code and restore normal aftertreatment operation.

Can I keep driving with P20D0?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy loads and long trips because the DPF may not regenerate and can become overloaded. If the engine enters limp mode or you notice excessive smoke, stop driving and seek professional diagnosis.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Fuel pressure gauge
- Wiring diagram and service information
- Basic hand tools and socket set



Reading P20D0

- 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.
- D0** The exact fault within that area.

Often seen with

P2002 Particulate Trap Efficiency Below Threshold (Bank 1) · **P20D1** Exhaust Aftertreatment Fuel Injector B Control Circuit/Open · **P20D2** Exhaust Aftertreatment Fuel Injector B Control Performance · **P20D3** Exhaust Aftertreatment Fuel Injector B Control Circuit Low · **P2463** Diesel Particulate Filter Restriction - Soot Accumulation

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p20d0/>

