

GENERIC · POWERTRAIN

P2154

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2154

Fuel Injector Group 'C' Supply Voltage Circuit High

P2154 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the supply circuit feeding fuel injector group 'C'. This group typically includes one bank of injectors or a specific set of injectors, and the high voltage suggests a short to power, an open circuit, or a faulty driver inside the PCM.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire, especially if the affected injectors stop firing
- Engine hesitation or stumble during acceleration
- Reduced fuel economy due to improper fuel delivery
- Possible rich or lean fuel trim codes if the injector circuit is partially shorted
- In rare cases, the engine may stall or fail to start if multiple injectors are affected

Common causes, most likely first

- 1 Short to voltage on the injector supply circuit (wiring harness chafed against a power wire)
- 2 Open circuit in the injector supply wire or a poor connection at the injector connector
- 3 Faulty fuel injector with an internal short to power
- 4 Corroded or damaged PCM connector pins at the injector driver output
- 5 Failed PCM injector driver (internal short to power)
- 6 Aftermarket accessories or modifications tapping into the injector circuit
- 7 Damaged wiring from rodents or previous repairs



How to diagnose and fix it

- 1 Inspect the injector group 'C' wiring harness for visible damage, chafing, or loose connectors; repair as needed
- 2 Disconnect the injectors in group 'C' and check for battery voltage on the supply circuit with the key on; if voltage is present when it should not be, trace the short to power
- 3 Measure resistance of each injector in group 'C' and compare to specifications; replace any injector that is out of range or shorted
- 4 Check for continuity and voltage drop on the ground side of the injector circuit to rule out a bad ground
- 5 Backprobe the PCM connector to verify the driver signal; if the signal is incorrect, suspect the PCM
- 6 Perform a wiggle test on the harness while monitoring the circuit with a multimeter or scan tool to catch intermittent faults
- 7 If all external circuits and injectors test good, replace and reprogram the PCM as a last resort

Don't overlook the injector group wiring

- A common mistake is replacing the PCM first; always rule out a shorted injector or chafed wire before condemning the module.
- Group 'C' injectors are often on the same power feed, so a single shorted injector can set the code for the whole group.
- The code can be set by a poor connection at the injector connector that causes intermittent high voltage spikes, not just a hard short.
- Aftermarket alarm or remote start installations that tap into injector wiring are a frequent hidden cause of this code.
- On some vehicles, a failing ignition coil or spark plug can create electrical noise that mimics an injector circuit fault, so check secondary ignition components as well.

Can I keep driving with P2154?

If the engine runs smoothly and the only symptom is the check engine light, you can drive cautiously to a repair shop, but avoid hard acceleration or towing. If the engine misfires, runs rough, or stalls, stop driving and have the vehicle towed to prevent catalytic converter damage or unsafe driving conditions.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM) with voltage and resistance measurement
- Test light or noid light for injector pulse testing
- Wiring diagram for the specific vehicle
- Backprobe pins and connector removal tools
- Oscilloscope (optional for advanced diagnostics)



Reading P2154

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Fuel and air metering.
- 54** The exact fault within that area.

Often seen with

P0200 Injector Circuit Malfunction · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P2153** Fuel Injector Group 'C' Supply Voltage Circuit Low · **P2155** Fuel Injector Group 'D' Supply Voltage Circuit/Open

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2154/>

