

GENERIC · POWERTRAIN

P217F

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P217F

Fuel Injector Group H Supply Voltage Circuit High

P217F indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the supply circuit for fuel injector group H, which typically feeds a set of injectors on one bank or a specific grouping. The PCM monitors the voltage on the control circuit and sets this code when the signal exceeds the expected threshold, often due to a short to power or an open circuit in the return path.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illuminated check engine light (malfunction indicator lamp) with no other noticeable symptoms
- Rough idle or misfire if the injector group is not firing correctly
- Reduced engine performance and poor fuel economy
- Engine may stall or hesitate during acceleration
- Possible fuel smell or rich running condition if injectors are stuck open
- In some cases, the engine may enter limp mode to protect the catalytic converter

Common causes, most likely first

- 1 Faulty fuel injector with an internal short to power
- 2 Damaged wiring harness or connector at the injector group, causing a short to voltage
- 3 Corroded or loose electrical connections at the injector or PCM
- 4 PCM driver circuit failure for that injector group
- 5 Aftermarket or improperly installed electrical accessories tapping into the injector circuit
- 6 Moisture intrusion into the wiring harness or connector causing a short



How to diagnose and fix it

- 1 Inspect the wiring harness and connectors for the affected injector group for signs of chafing, corrosion, or loose pins
- 2 Disconnect the injectors in group H one at a time and check if the code clears to isolate a faulty injector
- 3 Measure resistance across each injector in the group and compare to specifications
- 4 Check for short to voltage on the supply circuit using a multimeter with the key on and injectors disconnected
- 5 Verify the PCM ground and power supply are clean and tight
- 6 If wiring and injectors test good, suspect the PCM and perform a pinpoint test according to the service manual
- 7 Replace the faulty injector or repair the wiring as needed, then clear codes and verify the repair with a test drive

Don't overlook the injector group wiring

- A common oversight is assuming the injector itself is at fault when the real problem is a rubbed-through wire in the harness near the intake manifold or valve cover.
The code may set intermittently due to vibration or heat, so a wiggle test of the harness while monitoring live data can reveal the issue.
- Group H is not necessarily all injectors on one bank; it can be a specific set determined by the manufacturer, so consult the service manual for the exact grouping.
- A shorted injector can cause the PCM to shut down the entire group, leading to multiple misfire codes that may distract from the root cause.
Aftermarket alarm or remote start installations often tap into injector wiring and can introduce this fault if not properly soldered and insulated.

Can I keep driving with P217F?

Driving with P217F is generally not recommended because the affected injectors may not fire correctly, leading to misfires that can damage the catalytic converter. If the engine runs smoothly and the light is steady, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools



Reading P217F

- 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.
- 7F** The exact fault within that area.

Often seen with

P0200 Injector Circuit Malfunction · **P0261** Cylinder 1 Injector Circuit Low · **P0264** Cylinder 2 Injector Circuit Low · **P0267** Cylinder 3 Injector Circuit Low · **P0270** Cylinder 4 Injector Circuit Low

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p217f/>

