

CHRYSLER · POWERTRAIN

P1284

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1284 · Chrysler

Fuel Injection Pump Battery Voltage Out Of Range

P1284 on Chrysler vehicles means the engine control module (ECM) has detected that the battery voltage feed to the fuel injection pump circuit is outside the expected range, either too low or too high. The ECM monitors this voltage to ensure the pump's electronic actuator receives stable power for precise fuel delivery, and it sets the code when the signal falls below or rises above calibrated thresholds.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Engine may crank but fail to start or stall shortly after starting
- Rough idle or misfire under load due to incorrect fuel delivery
- Reduced engine power or limp mode in some driving conditions
- Intermittent hesitation or stumble during acceleration

Common causes, most likely first

- 1 Weak or failing battery that cannot maintain stable voltage under load
- 2 Corroded, loose, or damaged battery terminals and cables
- 3 Faulty fuel injection pump relay or blown fuse in the pump power circuit
- 4 Chafed or open wiring between the battery, relay, and fuel injection pump
- 5 Poor ground connection at the engine block or chassis
- 6 Internal fault in the fuel injection pump actuator or its connector
- 7 Voltage regulator issue in the alternator causing overvoltage



How to diagnose and fix it

- 1 Perform a battery load test and inspect terminals for corrosion; clean and tighten as needed
- 2 Check all fuses and relays related to the fuel injection pump circuit and replace any faulty ones
- 3 Measure voltage at the fuel injection pump connector with the key on and engine cranking; compare to battery voltage
- 4 Inspect the wiring harness from the battery to the pump for chafing, breaks, or loose connectors
- 5 Test the ground circuit from the pump to the engine block using a voltage drop test
- 6 If voltage supply is correct, test the fuel injection pump actuator resistance and compare to specifications
- 7 Clear the code and verify repair with a test drive; if it returns, perform a wiggle test on the harness while monitoring live data

Voltage drop tests before parts replacement

- A common misdiagnosis is replacing the fuel injection pump when the real problem is a weak battery or corroded ground that causes voltage to drop only under load.
The code can be set by a failing alternator that produces overvoltage, which damages the pump actuator over time, so always check charging system voltage.
- Intermittent P1284 often traces to a chafed wire in the harness near the pump, which only shorts when the engine moves or the vehicle hits bumps.
- Some Chrysler models require a relearn procedure after battery replacement or pump service, and skipping it can cause the code to reappear even with good voltage.

Can I keep driving with P1284?

If the engine runs normally, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing. If the engine stalls, hesitates, or enters limp mode, stop driving and have the vehicle towed to prevent damage to the fuel injection pump.

Tools that help

- Digital multimeter
- Battery load tester
- OBD-II scan tool with live data capability
- Test light
- Wiring diagram for the specific Chrysler model



Reading P1284

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Chrysler): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 84** The exact fault within that area.

Often seen with

P1285 Fuel Injection Air Control Valve Circuit Short To Ground · **P1282** Accelerator Pedal Position Sensor 2 Circuit Low Voltage · **P1285** Accelerator Pedal Positioning Sensor 2 Circuit · **P1282** Excessive Injection Control Pressure · **P1285** Cylinder Head Over Temp Sensed · **P1282** Fuel Pump Relay Control Circuit Open Or Shorted · **P1285** Fuel Injection Pump Controller Always On · **P1285** Switching Solenoid for Air Assisted Injection Valves Bank 1 · **P0230** Fuel Pump Primary Circuit Malfunction · **P0562** System Voltage Low · **P0563** System Voltage High

See it working

Watch the animated explainer [Excavator Simulator: Hydraulics You Can Operate](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1284/>

