

CHRYSLER · POWERTRAIN

P1280

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1280 · Chrysler

Open Or Shorted Condition Detected In The Fuel System Relay Control Circuit

P1280 on Chrysler vehicles means the powertrain control module (PCM) has detected an open or shorted condition in the fuel system relay control circuit, which is the wiring the PCM uses to command the relay on. The PCM monitors the control circuit and sets this code when the voltage on the control wire does not match what it expects for the commanded relay state.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- The check engine light (malfunction indicator lamp) is illuminated, often with no other noticeable symptoms.
- The engine may crank but not start because the fuel pump relay is not being commanded on.
- Intermittent stalling or a no-start condition that comes and goes, especially in wet or hot weather.
- A noticeable click from the relay area may be missing when the key is turned on.
- Rough running or loss of power if the relay circuit makes partial contact and the pump receives low voltage.
- Other relay-controlled systems may act erratically if the fault is in a shared power or ground circuit.

Common causes, most likely first

- 1 A failed fuel system relay (open coil or burned contacts) is the most common cause.
- 2 Corroded, loose, or pushed-back terminals at the relay socket or PCM connector.
- 3 A chafed or broken control wire between the PCM and the relay, often near the underhood fuse box or harness bends.
- 4 A short to ground or short to voltage on the control circuit, sometimes caused by water intrusion into the fuse box.
- 5 A faulty PCM driver for the relay control circuit, though this is less common than wiring or relay faults.
- 6 A poor ground connection for the relay coil or for the PCM, which can mimic a control circuit fault.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related fuel pump or relay codes before replacing parts.
- 2 Inspect the fuel system relay and its socket for corrosion, loose terminals, or a loose relay; swap with an identical known-good relay to test.
- 3 Check the control circuit for continuity from the PCM connector to the relay socket, looking for opens, and check for shorts to ground or voltage with a multimeter.
- 4 Inspect the harness for chafing, especially where it passes near the underhood fuse box and any sharp edges or heat sources.
- 5 Test the PCM driver output with a noid light or logic probe while commanding the relay on with a scan tool, if the tool supports bidirectional control.
- 6 Repair any damaged wiring or terminals, clear the code, and road-test to confirm the repair.
- 7 If all wiring and the relay test good, follow the manufacturer's diagnostic flow for PCM driver testing before condemning the PCM.

Fuel relay circuit faults that fool technicians

- A relay that clicks does not guarantee good contacts; the coil can energize while the internal contacts are burned and fail to pass current to the fuel pump.
- Water intrusion into the underhood fuse and relay box is a frequent hidden cause on older Chrysler vehicles, corroding the relay terminals from the bottom up.
- The PCM may set P1280 even when the fuel pump runs, because the code monitors the control circuit itself, not the pump motor or fuel pressure.
- A shorted fuel pump motor or seized pump can draw excessive current and damage the relay or its control circuit over time, so always check pump current draw after repairs.
- Some Chrysler models use a fuel pump relay that is soldered into the fuse box, making a simple relay swap impossible and requiring fuse box repair or replacement.

Can I keep driving with P1280?

If the engine starts and runs normally, you can drive cautiously to a repair shop, but avoid long trips or high-load driving because the fault can cause an unexpected stall. If the engine cranks but does not start or stalls repeatedly, do not drive until the relay circuit is repaired.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Test light or noid light
- Wire terminal pick and crimping tools
- Factory service information or wiring diagrams for the specific Chrysler model



Reading P1280

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

Often seen with

P0230 Fuel Pump Primary Circuit Malfunction · **P0231** Fuel Pump Secondary Circuit Low · **P0232** Fuel Pump Secondary Circuit High · **P0627** Fuel Pump 'A' Control Circuit /Open · **P0628** Fuel Pump 'A' Control Circuit Low

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1280/>

