

CHRYSLER · POWERTRAIN

P1290

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1290 · Chrysler

CNG Fuel Pressure Too High

P1290 on Chrysler compressed natural gas (CNG) vehicles indicates that the powertrain control module (PCM) has detected a fuel pressure reading from the CNG pressure sensor that is higher than the calibrated maximum for the current operating conditions. The PCM compares the actual CNG fuel pressure against expected values and sets this code when the signal indicates excessive pressure, often to protect the fuel system and engine from overpressure damage.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

**Fuel and air
metering (injector
circuits)**

Symptoms you may notice

- Malfunction indicator lamp (MIL) illuminated, often with no other noticeable symptoms
- Rough idle or engine stumble, especially when switching between gasoline and CNG operation
- Reduced engine power or limp mode if the PCM enters a protection strategy
- Fuel smell or audible hissing from the CNG system in severe cases
- Hard starting or no-start on CNG, particularly after refueling
- Poor fuel economy or increased CNG consumption

Common causes, most likely first

- 1 Faulty CNG fuel pressure sensor sending an inaccurate high signal
- 2 Sticking or failed CNG pressure regulator allowing pressure to exceed the setpoint
- 3 Restricted or kinked CNG return line causing pressure to build up
- 4 Contaminated or degraded CNG fuel causing regulator malfunction
- 5 Wiring issue (short to voltage, chafed harness) in the pressure sensor circuit
- 6 PCM calibration error or internal fault in the pressure control logic
- 7 Mechanical failure inside the CNG tank valve or high-pressure regulator assembly



How to diagnose and fix it

- 1 Connect a scan tool and verify the CNG pressure sensor reading in live data against a known-good mechanical gauge
- 2 Inspect the CNG pressure sensor connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Check the CNG pressure regulator for proper operation and replace if it is sticking or leaking internally
- 4 Inspect the CNG return line for restrictions, kinks, or blockage and clear or replace as necessary
- 5 Test the CNG pressure sensor with a multimeter for proper reference voltage and signal return, and replace if out of specification
- 6 Verify fuel quality and drain or filter the CNG if contamination is suspected
- 7 Reflash or update the PCM calibration if no hardware faults are found, then clear codes and retest

CNG pressure sensor signal traps to avoid

- A common misdiagnosis is replacing the CNG pressure regulator when the actual fault is a skewed pressure sensor that reads high only at certain temperatures, so always compare live data to a mechanical gauge.
- The PCM may set P1290 intermittently if the CNG system is overpressurized during refueling on a hot day, and the code may not return after the tank cools, so check for recent refueling events in freeze frame data.
- Wiring harness chafing near the CNG regulator is a frequent cause that is often overlooked because the sensor itself tests good on the bench.
- This code does not always mean the CNG system is unsafe to drive; however, ignoring it can lead to regulator damage and expensive repairs, so address it promptly.
- On some Chrysler CNG vehicles, a weak battery or low charging voltage can cause false pressure sensor readings, so verify battery and charging system health before condemning CNG components.

Can I keep driving with P1290?

It is generally safe to drive with P1290 illuminated if the vehicle runs normally, but avoid aggressive driving and refueling until the fault is diagnosed. If you notice a fuel smell, hissing, or reduced power, stop driving and have the CNG system inspected by a qualified technician.

Tools that help

- Scan tool with live data capability
- Digital multimeter
- CNG pressure gauge set
- Hand tools for harness and component inspection
- Leak detection solution



Reading P1290

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

Often seen with

P1295 No 5 Volt Supply To TP Sensor · **P1294** Target Idle Speed Not Reached · **P1293** CNG Pressure Sensor Voltage Too Low · **P1295** Loss Of 5 Volts To TP Sensor · **P1294** Target Idle Not Reached · **P1292** CNG Pressure Sensor Voltage Too High · **P1291** No Temp Rise Seen From Fuel Heaters · **P1293** Injector High Side Open Bank 1 · **P1294** Injector High Side Open Bank 2 Target Idle Not Reached · **P1292** Injector High Side Short To GND Or VBATT Bank 2 · **P1295** Multi-faults Bank 1 With Low Side Shorts · **P1291** Injector High Side Short To GND Or VBATT Bank 1 · **P1293** CNG Pressure Sensor Voltage Too Low · **P1291** No Temp Rise Seen From Fuel Heaters · **P1294** Target Idle Not Reached · **P1292** CNG Pressure Sensor Voltage Too High · **P1295** Loss Of 5 Volts To TP Sensor

See it working

Watch the animated explainer [How a Fuel Injector Works: Pulse Width and Spray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1290/>

