

GENERIC · POWERTRAIN

P01C5

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P01C5

Fuel Pressure Sensor A Circuit Low

P01C5 indicates that the powertrain control module (PCM) has detected a low voltage signal on the fuel pressure sensor A circuit, which typically measures fuel pressure in the high-pressure fuel system on gasoline direct-injection engines. The PCM compares the sensor's output to expected values and sets this code when the signal falls below the calibrated minimum for a specified time, indicating a short to ground, an open circuit, or a faulty sensor.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode due to the PCM limiting fuel pressure
- Rough idle, misfires, or stalling, especially when the engine is cold or under load
- Difficulty starting or extended cranking times
- Poor fuel economy or black smoke from the exhaust if the engine runs rich

Common causes, most likely first

- 1 Faulty fuel pressure sensor A, internally shorted or failed
- 2 Damaged or corroded wiring harness to the sensor, including chafed wires or loose pins
- 3 Poor electrical connection at the sensor or PCM connector
- 4 Open circuit or high resistance in the sensor ground or signal return circuit
- 5 Low fuel pressure from a weak high-pressure fuel pump or a clogged fuel filter, causing the sensor to read low
- 6 PCM internal fault, though this is rare and should be diagnosed last

How to diagnose and fix it

- 1 Connect a scan tool and record freeze-frame data and fuel pressure sensor voltage to confirm the low signal
- 2 Visually inspect the sensor, wiring, and connectors for damage, corrosion, or loose pins, and repair as needed
- 3 Measure reference voltage and ground at the sensor connector with a multimeter to verify the circuit integrity
- 4 Check for continuity and resistance in the signal wire between the sensor and PCM, looking for opens or shorts
- 5 Test the fuel pressure sensor with a known-good sensor or perform a voltage output test to confirm failure
- 6 If the sensor tests bad, replace it and clear the code, then verify fuel pressure readings return to normal
- 7 If the circuit and sensor are good, check fuel pump operation and pressure, and inspect the PCM for faults

Don't overlook the fuel pump driver module

- A low signal from the fuel pressure sensor often results from a failing fuel pump control module that reduces pump output, not just a bad sensor.
- Corrosion inside the sensor connector can mimic a failed sensor, so always perform a voltage drop test on the ground circuit before replacing parts.
- On some vehicles, a low fuel pressure sensor code can be set by a restricted fuel filter that causes actual low pressure, so verify mechanical pressure with a gauge.
- The PCM may set this code intermittently if the sensor signal wire is routed too close to high-voltage ignition components, causing electrical interference.
- After replacing the sensor, some vehicles require a fuel pressure sensor relearn procedure with a scan tool to prevent the code from returning.

Can I keep driving with P01C5?

It is not recommended to drive with this code because low fuel pressure can cause stalling, misfires, or a sudden loss of power, especially under load. If you must drive, avoid heavy acceleration and high speeds, and have the vehicle diagnosed as soon as possible.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Fuel pressure test gauge
- Basic hand tools and wire repair kit

Reading P01C5

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
1	Fuel and air metering.
C5	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0088** Fuel Rail/System Pressure - Too High · **P0190** Fuel Rail Pressure Sensor Circuit Malfunction · **P01C6** Fuel Pressure Sensor A Circuit High · **P01C7** Fuel Pressure Sensor A Circuit Intermittent/Erratic



See it working

Watch the animated explainer [How a Rotary Engine Works: Wankel in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p01c5/>

