



P01C0

Fuel Rail Pressure Sensor Circuit Low Bank 2

P01C0 means the powertrain control module (PCM) has detected a low-voltage signal on the fuel rail pressure sensor circuit for bank 2 of the engine. The sensor reports the pressure inside the high-pressure fuel rail, and a low signal tells the PCM that either the actual pressure is far below what the engine needs or the sensor circuit is losing voltage.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Reduced engine power or limp-home mode when the PCM substitutes a default pressure value
- Rough idle, misfire, or stalling after startup or during acceleration
- Difficulty starting, especially when the engine is cold or has been sitting
- Poor fuel economy or black smoke from the exhaust if the PCM over-fuels in response
- A noticeable hesitation or flat spot when accelerating under load

Common causes, most likely first

- 1 Faulty fuel rail pressure sensor on bank 2, reading lower than actual pressure
- 2 Damaged or chafed wiring in the sensor signal circuit, causing a short to ground or an open circuit
- 3 Corroded, loose, or water-intruded connector pins at the sensor or PCM
- 4 Low actual fuel pressure from a weak high-pressure fuel pump, a stuck-open pressure relief valve, or a restricted fuel filter
- 5 PCM internal fault or a poor ground reference shared with the sensor circuit
- 6 Aftermarket or incorrect sensor installed previously that does not match the PCM calibration



How to diagnose and fix it

- 1 Connect a scan tool and record the freeze-frame data and live fuel rail pressure reading to confirm the low signal matches the code
- 2 Inspect the sensor connector and the wiring harness for chafing, corrosion, or loose pins, and repair any damage found
- 3 Measure the sensor reference voltage and ground at the connector with a multimeter to rule out a supply or ground fault
- 4 Compare the sensor's reported pressure against a mechanical gauge reading on the rail to determine whether the sensor or the actual fuel system is at fault
- 5 Check the high-pressure fuel pump output and the pressure relief valve for a genuine low-pressure condition before condemning the sensor
- 6 Replace the bank 2 fuel rail pressure sensor only after electrical and mechanical checks confirm it is the source of the low signal
- 7 Clear the code and perform a road test with live data to verify the repair and confirm the code does not return

What a low rail pressure signal really means

- A low signal code does not automatically mean the sensor has failed; a genuinely low fuel pressure from a weak pump or a leaking relief valve will set the same code because the sensor is accurately reporting low pressure.
- The bank 2 sensor shares its reference voltage and ground with other sensors on many engines, so a fault in a shared ground circuit can pull the signal low and set P01C0 without any problem at the sensor itself.
- Technicians often replace the sensor first and find the code returns because the real cause was a chafed signal wire near the engine mount or a corroded connector pin that only loses contact when the engine moves.
- On engines with two fuel rails, bank 2 pressure can legitimately read slightly lower than bank 1 at idle, so a marginal sensor or a small mechanical restriction can trigger the code without a hard failure.
- A stuck-open fuel injector on bank 2 can bleed rail pressure down and set this code, so injector balance and return-flow tests belong in the diagnostic sequence before any parts are ordered.

Can I keep driving with P01C0?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration, towing, and long trips because the PCM may be limiting power or over-fuelling to compensate. If the engine stalls, misfires badly, or enters limp mode, stop driving and have it towed.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probe pins
- Fuel pressure test gauge rated for high-pressure fuel systems
- Wiring diagram and connector pinout for the specific engine
- Hand tools for connector and sensor access

Reading P01C0

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.
C0	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0088** Fuel Rail/System Pressure - Too High · **P0192** Fuel Rail Pressure Sensor Circuit Low Input · **P01C1** Fuel Rail Pressure Sensor Circuit High Bank 2 · **P01C2** Fuel Rail Pressure Sensor Circuit Intermittent/Erratic Bank

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p01c0/>

