



P03C1

Cylinder 5 Pressure Sensor Circuit Intermittent/Erratic

P03C1 indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal from the cylinder 5 pressure sensor circuit, which is used on engines with direct fuel injection to monitor combustion pressure. The PCM sets this code when the sensor voltage or signal pattern falls outside expected limits for a calibrated period, often due to a loose connection, wiring fault, or failing sensor.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or misfire-like shudder, especially when the engine is cold
- Hesitation or stumble during acceleration
- Reduced fuel economy or power output
- In rare cases, the engine may enter limp mode or stall

Common causes, most likely first

- 1 Faulty cylinder 5 pressure sensor
- 2 Damaged or corroded electrical connector at the sensor
- 3 Chafed, broken, or shorted wiring in the sensor circuit
- 4 Loose or poor ground connection for the sensor
- 5 Internal PCM driver or signal processing fault
- 6 Mechanical issue such as carbon buildup or valve problem affecting cylinder pressure readings

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for damage, corrosion, or looseness; clean and reseal as needed
- 2 Perform a wiggle test on the harness while monitoring live data to identify intermittent faults
- 3 Check sensor resistance and compare to manufacturer specifications; replace if out of range
- 4 Verify reference voltage and ground at the sensor connector with a multimeter
- 5 Check for technical service bulletins (TSBs) or software updates for the PCM related to this code
- 6 If wiring and sensor are good, test the PCM signal circuit for continuity and shorts
- 7 Replace the cylinder 5 pressure sensor if all other checks pass, then clear codes and verify repair



Intermittent faults often hide in the harness

- A loose ground or chafed wire can mimic a failed sensor, so always inspect the harness before replacing parts.
- The code may set only under specific conditions such as cold starts or high load, making it hard to reproduce in the shop.
- Carbon buildup on the sensor tip can cause erratic readings without a complete failure, so cleaning may resolve the issue.
- Related codes for other cylinders may indicate a shared power or ground circuit problem rather than individual sensor faults.
- Some aftermarket sensors have poor calibration and can set this code even when new, so OEM-quality parts are recommended.

Can I keep driving with P03C1?

You can usually continue driving with this code, but avoid aggressive acceleration or heavy loads until it is diagnosed, as an erratic sensor can affect fuel delivery and emissions. If the engine runs rough or enters limp mode, seek service promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools for connector and sensor access
- Oscilloscope (optional for signal analysis)

Reading P03C1

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
C1	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0300** Random/Multiple Cylinder Misfire Detected · **P0305** Cylinder 5 Misfire Detected · **P03C0** Cylinder 5 Pressure Sensor Circuit High · **P03C2** Cylinder 5 Pressure Too Low



See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p03c1/>

