

GENERIC · POWERTRAIN

P0399

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0399

Cylinder 1 Pressure Sensor Circuit Intermittent/Erratic

P0399 means the powertrain control module (PCM) has detected an intermittent or erratic signal from the cylinder 1 pressure sensor, which is used on some engines to monitor combustion pressure for feedback control. The PCM sets this code when the sensor's voltage or signal pattern jumps unpredictably or drops out momentarily, rather than failing completely.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

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 that comes and goes
- 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 or failing cylinder 1 pressure sensor
- 2 Damaged or chafed wiring in the sensor circuit, especially near hot or moving components
- 3 Corroded or loose electrical connector at the sensor or PCM
- 4 Poor ground connection for the sensor circuit
- 5 Internal PCM fault affecting the sensor signal processing
- 6 Mechanical issue such as carbon buildup or valve problem altering combustion pressure readings

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for damage, corrosion, or looseness; clean and secure as needed
- 2 Check the sensor circuit for continuity and shorts to ground or power using a multimeter
- 3 Verify the sensor's reference voltage and signal return at the connector with the key on
- 4 Swap the cylinder 1 pressure sensor with a known-good one from another cylinder if accessible, and see if the code moves
- 5 Perform a cylinder contribution or compression test to rule out mechanical faults
- 6 If wiring and sensor check out, test the PCM for proper signal processing or reflash/replace as required
- 7 Clear codes and road-test to confirm the repair



What a cylinder pressure sensor code hides

- A loose or corroded connector often mimics a failed sensor, so always wiggle-test the harness while watching live data before condemning the sensor.
- Intermittent codes like P0399 can be caused by heat-related expansion of wiring, so inspect the harness routing near exhaust components.
- Some engines use the cylinder pressure sensor for misfire detection, so a P0399 may be accompanied by misfire codes even if the engine feels fine.
- A weak battery or charging system can cause erratic sensor signals; check system voltage under load before deep diagnostics.
- Replacing the sensor without addressing a damaged connector or chafed wire will lead to a repeat code within a short drive cycle.

Can I keep driving with P0399?

You can usually drive with P0399, but avoid heavy acceleration or towing until it is diagnosed, because an erratic signal can affect combustion control and may lead to misfires or reduced power. If the engine runs rough or stalls, stop driving and seek repair.

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
- Compression tester (if mechanical fault suspected)

Reading P0399

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.
99	The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0397** Cylinder 1 Pressure Sensor Circuit Low · **P0398** Cylinder 1 Pressure Sensor Circuit High



See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0399/>

