

GENERIC · POWERTRAIN

P0395

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0395

Cylinder 1 Pressure Sensor Circuit

P0395 indicates that the powertrain control module has detected an implausible signal from the cylinder 1 pressure sensor, which is used to monitor combustion pressure for feedback control. The computer compares this signal with expected values from other sensors and sets the code when the voltage or pressure reading falls outside the normal range.

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 shuddering, especially when the engine is cold
- Reduced engine performance or sluggish acceleration due to incorrect fuel or timing adjustments
- Poor fuel economy as the computer may default to a rich fuel mixture
- Intermittent stalling or hesitation during acceleration in some cases

Common causes, most likely first

- 1 Faulty cylinder 1 pressure sensor itself, due to internal failure or contamination
- 2 Damaged or corroded wiring harness or connector at the sensor
- 3 Open or short circuit in the sensor signal or reference voltage circuit
- 4 Poor electrical connection at the powertrain control module connector
- 5 Mechanical issue such as a leaking injector seal or carbon buildup affecting sensor readings
- 6 Extreme engine operating conditions that temporarily exceed sensor range, though this rarely sets a hard code

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for damage, corrosion, or loose pins, and repair as needed
- 2 Check for technical service bulletins or known issues for your specific vehicle make and model
- 3 Measure the sensor reference voltage and ground circuits with a multimeter to verify integrity
- 4 Test the sensor signal output with an oscilloscope or scan tool to confirm it responds correctly to pressure changes
- 5 Compare cylinder 1 pressure sensor readings with other cylinders or a known-good sensor if accessible
- 6 Replace the cylinder 1 pressure sensor if testing confirms it is faulty, then clear the code and verify repair
- 7 If the code persists, diagnose the powertrain control module and its connections for internal faults



What the pressure sensor code hides

- A P0395 can be set by a simple loose connector that intermittently loses contact, so always wiggle-test the harness while watching live data before condemning the sensor.
- Many vehicles use the cylinder pressure sensor for closed-loop combustion control, so a faulty sensor can cause the computer to alter injection timing and create driveability symptoms that mimic other faults.
- The code does not always mean the sensor is bad; a mechanical problem like a sticking injector or valve issue can produce pressure readings outside the expected range and trigger the code.
- On some engines, the cylinder pressure sensor is integrated into the glow plug or injector, making replacement more involved and often requiring special tools.
- After replacing the sensor, a relearn or adaptation reset may be necessary for the computer to recognize the new sensor's signal, otherwise the code may return.

Can I keep driving with P0395?

You can generally continue driving with P0395, but avoid heavy acceleration or towing until the fault is repaired, as the engine may be running with less efficient combustion control. If the check engine light begins flashing or you notice severe misfiring, stop driving and seek professional diagnosis.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope for signal analysis
- Basic hand tools for connector and sensor access
- Vehicle-specific service information for wiring diagrams and torque specifications

Reading P0395

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.
95	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0301** Cylinder 1 Misfire Detected · **P0396** Cylinder 1 Pressure Sensor Circuit Range/Performance · **P0397** Cylinder 1 Pressure Sensor Circuit Low · **P0398** Cylinder 1 Pressure Sensor Circuit High



See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0395/>

