

GENERIC · POWERTRAIN

P03C9

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P03C9

Cylinder 6 Pressure Sensor Circuit Low

P03C9 means the powertrain control module (PCM) has detected a low-voltage signal from the cylinder 6 pressure sensor circuit, which is used on engines with in-cylinder pressure sensing for combustion feedback. The PCM expects the sensor signal to stay within a calibrated voltage range, and a sustained low reading indicates a short to ground, a faulty sensor, or a wiring problem.

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 under light load
- Reduced engine power or limp mode in some vehicles
- Poor fuel economy or increased emissions
- Hard starting or intermittent stalling in severe cases
- A stored misfire or fuel trim code alongside P03C9

Common causes, most likely first

- 1 Faulty cylinder 6 pressure sensor
- 2 Damaged or chafed sensor wiring shorted to ground
- 3 Corroded or loose electrical connector at the sensor
- 4 PCM internal fault or corrupted calibration
- 5 Mechanical damage to the sensor mounting or sealing area
- 6 Aftermarket or incorrect sensor installed previously

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code is current and not history
- 2 Visually inspect the cylinder 6 pressure sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Measure sensor reference voltage and signal voltage with a digital multimeter (DMM) and compare to manufacturer specifications
- 4 Perform a wiggle test on the harness while monitoring sensor voltage to reveal intermittent shorts
- 5 Check sensor resistance and compare to a known-good sensor or factory values
- 6 If wiring and connector are good, replace the cylinder 6 pressure sensor with a quality OEM-equivalent part
- 7 Clear codes, road test, and verify the repair with a scan tool before returning the vehicle



What the low signal really tells you

- A low signal code often comes from a short to ground in the harness rather than a failed sensor, so always inspect the wiring before replacing parts.
- Cylinder pressure sensors are sensitive to oil contamination and carbon buildup, which can skew readings without setting a hard fault until the signal drops out of range.
- Some vehicles use a shared reference voltage for multiple pressure sensors, so a fault in one sensor can pull down the reference and set codes for other cylinders.
- A weak battery or charging system fault can cause low sensor voltage codes because the PCM and sensors may not receive stable power during cranking.
- Replacing the sensor without checking the connector terminal tension often leads to a repeat code within a few hundred miles.

Can I keep driving with P03C9?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long trips because the fault can affect combustion control and emissions. If the engine runs rough or enters limp mode, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM)
- Back probe pins or breakout leads
- Factory service information for voltage and resistance specifications
- Basic hand tools for connector and sensor access

Reading P03C9

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.
C9	The exact fault within that area.

Often seen with

P0171 System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0306** Cylinder 6 Misfire Detected · **P03C8** Cylinder 6 Pressure Sensor Circuit Range/Performance · **P03CA** Cylinder 6 Pressure Sensor Circuit High



See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p03c9/>

