



P051C

Crankcase Pressure Sensor A Circuit Low

P051C means the powertrain control module (PCM) has detected a low-voltage signal on the crankcase pressure sensor A circuit, which typically indicates a short to ground, an open circuit, or a sensor that is not receiving its reference voltage. The PCM compares the sensor's output to expected values and sets this code when the signal stays below the normal operating range for a calibrated time.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or intermittent stalling if crankcase pressure affects engine breathing
- Oil leaks or excessive crankcase pressure causing seals to weep
- Poor fuel economy or reduced engine performance in some cases
- A pending code that may not trigger a dashboard light until repeated

Common causes, most likely first

- 1 Faulty crankcase pressure sensor A
- 2 Damaged or disconnected wiring harness at the sensor connector
- 3 Corroded or loose sensor connector pins
- 4 Short to ground in the signal circuit
- 5 Failed PCM driver or internal circuit fault (rare)
- 6 Blocked or restricted crankcase vent causing abnormal pressure readings

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for obvious damage, corrosion, or looseness
- 2 Check the sensor's reference voltage and ground circuits with a multimeter
- 3 Measure the signal voltage at the sensor and compare to manufacturer specifications
- 4 Perform a wiggle test on the harness while monitoring live data to catch intermittent faults
- 5 Replace the crankcase pressure sensor if voltage checks confirm it is faulty
- 6 Repair or replace damaged wiring or connector pins as needed
- 7 Clear the code and verify the repair with a test drive and live data review



Before you replace the crankcase pressure sensor

- A low signal code often results from a poor ground connection at the sensor rather than a failed sensor itself, so always verify ground integrity first.
- Oil sludge or carbon buildup can block the pressure port and cause a low reading that mimics an electrical fault.
- Aftermarket sensors sometimes have different voltage curves than the original, leading to repeat codes even when the part is new.
- The PCM may set P051C as a secondary code when other engine management faults, such as a stuck PCV valve, affect crankcase pressure.
- Intermittent wiring faults can be temperature-sensitive, so a cold-engine wiggle test may be necessary to reproduce the issue.

Can I keep driving with P051C?

You can usually continue driving with P051C, but avoid heavy acceleration or towing until the fault is repaired, as prolonged driving with incorrect crankcase pressure data may lead to oil leaks or engine seal damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Hand tools for connector and sensor removal
- Manufacturer service information for voltage specifications

Reading P051C

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
1C	The exact fault within that area.

Often seen with

P051B Crankcase Pressure Sensor A Circuit Range/Performance · **P051D** Crankcase Pressure Sensor A Circuit High · **P0521** Engine Oil Pressure Sensor/Switch Circuit Range/Performance · **P0522** Engine Oil Pressure Sensor/Switch Circuit Low Voltage · **P0523** Engine Oil Pressure Sensor/Switch Circuit High Voltage



See it working

Watch the animated explainer [Four-Stroke Engine Notebook: The Otto Cycle Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p051c/>

