

GENERIC · POWERTRAIN

P047B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P047B

Exhaust Pressure Sensor B Circuit Range/Performance

P047B means the powertrain control module (PCM) has detected that the exhaust pressure sensor B circuit is reporting a signal outside its expected range or is not performing as designed. The PCM compares the sensor's voltage to what it expects under current engine operating conditions and sets this code when the signal is implausible or erratic.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode in some vehicles
- Poor fuel economy or rough running if the sensor is used for load calculations
- Failed emissions test due to the stored code
- In rare cases, a noticeable hesitation or surge during acceleration

Common causes, most likely first

- 1 Faulty exhaust pressure sensor B (internal failure or drift)
- 2 Damaged, corroded, or disconnected wiring or connector at the sensor
- 3 Clogged or restricted exhaust pressure sensor tube or port
- 4 Exhaust leaks upstream of the sensor causing false pressure readings
- 5 Failed or contaminated sensor due to soot buildup
- 6 PCM software issue or internal fault (less common)

How to diagnose and fix it

- 1 Inspect the sensor and its wiring for physical damage, corrosion, or loose connections
- 2 Check the sensor tube and port for blockage or soot buildup and clean if necessary
- 3 Perform a visual inspection for exhaust leaks near the sensor
- 4 Use a scan tool to monitor live sensor data and compare to expected values
- 5 Test the sensor circuit with a multimeter for proper voltage and ground
- 6 Replace the exhaust pressure sensor B if testing confirms it is faulty
- 7 Clear the code and verify the repair with a test drive



Common traps when diagnosing P047B

- A clogged sensor tube is a frequent cause that mimics a failed sensor, so always check the tube before replacing parts.
- Exhaust leaks upstream of the sensor can cause this code even when the sensor itself is good, so inspect the exhaust system carefully.
- Some vehicles use exhaust pressure sensor B for EGR flow calculation, so a fault can affect EGR operation and set related codes.
- The sensor may pass a static resistance test but still fail under operating conditions, so live data monitoring is essential.
- After replacing the sensor, some vehicles require a relearn or adaptation procedure to avoid a repeat code.

Can I keep driving with P047B?

You can generally drive with this code if the engine runs normally, but avoid heavy acceleration or towing until it is repaired. If the engine enters limp mode or runs poorly, seek service promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand tools for sensor removal
- Inspection mirror and flashlight
- Wire brush or cleaning tool for sensor tube

Reading P047B

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Auxiliary emission controls.
7B	The exact fault within that area.

Often seen with

P0401 EGR Flow Insufficient Detected · **P047A** Exhaust Pressure Sensor B Circuit · **P047C** Exhaust Pressure Sensor B Circuit Low · **P047D** Exhaust Pressure Sensor B Circuit High · **P047E** Exhaust Pressure Sensor B Circuit Intermittent/Erratic



See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p047b/>

