

GENERIC · POWERTRAIN

P057B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P057B

Brake Pedal Position Sensor A Circuit Range/Performance

P057B indicates that the powertrain control module (PCM) has detected an out-of-range or erratic signal from the brake pedal position sensor A circuit, which is used to determine how far the brake pedal is depressed. The computer compares the sensor voltage to expected values and sets this code when the signal falls outside the normal operating range or fails a rationality check.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the brake system warning light or check engine light
- Often no symptoms besides the warning light
- Extended cranking or no-start condition because the PCM may not recognize the brake pedal is pressed
- Inability to shift the transmission out of Park (shift interlock not releasing)
- Cruise control may not engage or may disengage unexpectedly
- Reduced engine power or limp mode in some vehicles

Common causes, most likely first

- 1 Faulty brake pedal position sensor
- 2 Damaged or corroded electrical connector at the sensor
- 3 Wiring harness chafing, open circuit, or short to ground or power
- 4 Misadjusted or loose sensor mounting
- 5 Brake pedal assembly wear or binding
- 6 Failed or improperly calibrated sensor after replacement
- 7 PCM software issue or internal fault (rare)



How to diagnose and fix it

- 1 Verify the brake lights operate correctly and check for any related codes in other modules
- 2 Inspect the sensor connector and wiring for corrosion, damage, or loose pins
- 3 Measure sensor reference voltage and signal voltage with a multimeter while pressing the brake pedal
- 4 Check sensor mounting and adjustment; ensure the pedal moves freely and returns fully
- 5 Replace the brake pedal position sensor if resistance or voltage readings are out of specification
- 6 Clear codes and perform a relearn or calibration procedure if required by the manufacturer
- 7 Road test the vehicle to confirm the code does not return and all brake-related functions work

Before you replace the brake pedal sensor

- A misadjusted sensor or a worn brake pedal bushing can mimic a failed sensor, so always check pedal free play and sensor alignment first.
- The PCM may set P057B if the brake pedal position signal does not match the signal from the stop lamp switch, so a faulty stop lamp switch can be the real culprit.
- Corrosion inside the connector is a common cause that is easily overlooked; always back-probe the terminals rather than just visually inspecting.
- After replacing the sensor, some vehicles require a calibration procedure using a scan tool, and skipping it will cause the code to return immediately.
- This code can be set by a low battery or charging system issue that causes voltage spikes, so check battery health and grounds before condemning the sensor.

Can I keep driving with P057B?

If the brake lights work normally and the pedal feels fine, you can drive cautiously to a repair shop, but avoid relying on cruise control or any system that uses brake pedal input. If the brake lights are inoperative or the pedal feels abnormal, do not drive because brake system functionality may be compromised.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire probe set or back-probe pins
- Socket and ratchet set
- Service manual or wiring diagram for the vehicle



Reading P057B

- 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.
- 7B** The exact fault within that area.

Often seen with

C0040 Left Rear Wheel Speed Sensor Circuit · **P0504** Brake Switch 'A'/'B' Correlation · **P057C** Brake Pedal Position Sensor A Circuit Low · **P057D** Brake Pedal Position Sensor A Circuit High · **P057E** Brake Pedal Position Sensor A Circuit Intermittent/Erratic

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p057b/>

