

GENERIC · POWERTRAIN

P05E3

OBD-II TROUBLE CODE

P05E3

Park Brake Sensor/Switch Circuit

P05E3 indicates that the powertrain control module (PCM) has detected an implausible or missing signal from the park brake sensor or switch circuit. The PCM expects a specific voltage or state change when the park brake is applied or released, and this code sets when the signal does not match the expected value.

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

Symptoms you may notice

- The red brake warning light on the instrument cluster may stay illuminated or fail to illuminate when the park brake is applied.
- The park brake may not release fully, causing dragging or a burning smell while driving.
- A message such as 'Park Brake Fault' or 'Service Parking Brake' may appear on the driver information display.
- The vehicle may not start if the park brake switch is part of the starting interlock logic.
- Often no symptoms besides the warning light, especially if the switch is only intermittently faulty.
- Electronic parking brake (EPB) systems may fail to engage or disengage automatically.

Common causes, most likely first

- Faulty park brake switch or sensor, such as worn contacts or a failed internal component.
- Damaged or corroded wiring in the park brake switch circuit, including open or short circuits.
- Loose or disconnected electrical connector at the park brake switch or control module.
- Failed park brake control module or electronic parking brake actuator (on vehicles with EPB).
- Water intrusion or contamination in the switch or connector, leading to intermittent signals.
- Misadjusted park brake switch or sensor mounting, causing incorrect signal timing.
- Software glitch in the PCM or park brake control module requiring recalibration or update.



How to diagnose and fix it

- 1 Verify the park brake warning light operation and check for any related diagnostic trouble codes (DTCs) using a scan tool.
- 2 Inspect the park brake switch and its connector for physical damage, corrosion, or loose pins.
- 3 Test the park brake switch with a multimeter for continuity or voltage changes when the brake is applied and released.
- 4 Check the wiring harness between the switch and the control module for opens, shorts, or high resistance.
- 5 If equipped with an electronic parking brake, perform a system calibration or reset procedure as specified by the manufacturer.
- 6 Replace the park brake switch or sensor if testing confirms it is faulty.
- 7 Clear the DTC and verify the repair by cycling the park brake and confirming the code does not return.

Park brake switch faults often misdiagnosed

- A common mistake is replacing the park brake control module when the actual fault is a simple chafed wire under the console or near the pedal assembly.
- On vehicles with electronic parking brakes, the switch is often part of a complex circuit that includes the ABS module, so a fault in the ABS system can trigger this code.
- Intermittent switch failures may not set the code during a static test; a wiggle test of the harness while monitoring live data is often necessary.
- The park brake switch signal is sometimes used by other systems, such as the cruise control or hill-start assist, so a failure can cause unrelated symptoms.
- After replacing a park brake switch on some models, a relearn or calibration procedure is required to avoid a repeat code.

Can I keep driving with P05E3?

If the park brake warning light is on and the brake appears to function normally, you can drive cautiously to a repair shop, but avoid relying on the park brake for holding the vehicle on inclines. If the park brake drags or fails to release, stop driving immediately to prevent brake overheating and damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the park brake circuit
- Trim removal tools for accessing the switch
- Basic hand tools (screwdrivers, socket set)



Reading P05E3

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.
E3	The exact fault within that area.

Often seen with

P05E2 A/C Refrigerant Pressure Sensor B Circuit Intermittent/Errat · **P05E4** Park Brake Sensor/Switch Circuit Low · **U0128** Lost Communication With Park Brake Control Module

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/p05e3/>

