

GENERIC · POWERTRAIN

P05E7

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P05E7

Park Brake Sensor/Switch Circuit Intermittent/Erratic

P05E7 indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal from the park brake sensor or switch circuit. The PCM expects a stable voltage or resistance from the park brake switch, and when the signal jumps or drops out unpredictably, it sets this code.

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

Symptoms you may notice

- The red brake warning light on the dashboard may flicker or stay illuminated.
- The park brake may not release or engage properly, or the release may feel inconsistent.
- A message such as 'Park Brake Fault' or 'Service Parking Brake' may appear on the driver information display.
- The vehicle may fail to start if the park brake switch is part of the starting interlock system.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- A faulty park brake switch that has worn contacts or internal corrosion.
- Damaged or chafed wiring in the park brake switch circuit, often near the lever or pedal.
- Loose or corroded electrical connector at the park brake switch or at the PCM.
- A poor ground connection for the park brake switch circuit.
- Water intrusion into the switch or connector, leading to intermittent shorts.
- A failing PCM, though this is rare and should be considered only after all other causes are ruled out.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules.
- 2 Inspect the park brake switch and its connector for physical damage, corrosion, or loose pins.
- 3 Test the switch operation with a multimeter, checking for continuity or voltage changes when the park brake is applied and released.
- 4 Wiggle-test the wiring harness while monitoring the switch signal on a scan tool to identify intermittent faults.
- 5 Check and clean the ground connections for the park brake switch circuit.
- 6 Repair or replace any damaged wiring or connectors as needed.
- 7 If all else fails, substitute a known-good park brake switch and recheck; replace the PCM only as a last resort after confirming all other possibilities.

Intermittent park brake switch faults

- A common oversight is failing to check the park brake switch's mechanical adjustment; a switch that is not properly depressed or released can cause erratic signals.
The code can be set by a momentary loss of signal that does not leave a permanent fault, so the switch may test good when stationary.
- On some vehicles, the park brake switch shares a circuit with the brake fluid level sensor, so a fault in that sensor can trigger P05E7.
- Aftermarket accessories or poor previous repairs to the wiring near the park brake lever are frequent culprits that are often missed.
The PCM may set this code if the battery voltage is low during cranking, causing a momentary drop in the switch signal.

Can I keep driving with P05E7?

The vehicle is generally safe to drive because the park brake switch is not a critical safety system, but the park brake may not function correctly, so avoid parking on steep inclines until the fault is repaired. Have the issue diagnosed soon to prevent the park brake from failing to engage when needed.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wire probe set
- Electrical contact cleaner
- Vehicle service manual for wiring diagrams



Reading P05E7

- 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.
- E7** The exact fault within that area.

Often seen with

P05E6 Park Brake Sensor/Switch Circuit Range/Performance · **P05E8** Engine Oil Bypass Valve Control Circuit/Open · **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/p05e7/>

