



P2D7B

Charging Stop Switch Circuit Low

P2D7B indicates that the powertrain control module has detected a low-voltage condition on the charging stop switch circuit, which is used to suspend charging under certain conditions. The computer sees the circuit voltage below its expected threshold, signaling a short to ground, an open circuit, or a faulty switch.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Often no symptoms besides the warning light
- Charging system warning light may also be illuminated
- Reduced fuel economy due to continuous charging
- Battery may not maintain proper charge or may overcharge
- Possible electrical accessories malfunctioning if the circuit affects shared power

Common causes, most likely first

- 1 Faulty charging stop switch (internal short or failure)
- 2 Damaged or chafed wiring in the charging stop switch circuit (short to ground)
- 3 Corroded or loose electrical connectors at the switch or control module
- 4 Open circuit in the signal or ground circuit
- 5 Failed powertrain control module (rare)
- 6 Water intrusion or contamination in the switch connector

How to diagnose and fix it

- 1 Connect a scan tool and verify P2D7B is current or stored, then check for related codes in other modules
- 2 Inspect the charging stop switch and its connector for corrosion, damage, or loose pins
- 3 Measure resistance of the switch in both positions and compare to manufacturer specifications
- 4 Check the signal circuit for a short to ground using a multimeter with the switch disconnected
- 5 Check for continuity and voltage drop on the ground circuit back to the control module
- 6 If wiring and switch test good, perform a wiggle test on the harness while monitoring live data
- 7 Replace the charging stop switch if faulty, clear codes, and verify the repair with a test drive



Charging stop switch circuit pitfalls

- A low-voltage code on this circuit often results from a chafed wire grounding against the engine or chassis, not a failed switch.
- The charging stop switch may be integrated into the brake pedal position sensor on some vehicles, so a brake light issue can trigger this code.
- Technicians sometimes replace the switch only to find the connector terminals have spread and lost tension, causing an intermittent low signal.
- This code can set if the battery voltage drops during cranking, so always check battery health and connections before condemning the switch.
- The charging stop switch circuit may share a ground with other sensors, so a bad ground elsewhere can cause this code to appear alongside others.

Can I keep driving with P2D7B?

You can usually drive the vehicle with this code, but avoid long trips or heavy electrical loads until repaired. If the charging system warning light is on or the battery is not charging, limit driving to prevent a no-start condition.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the charging stop switch circuit
- Test light
- Socket set and trim removal tools

Reading P2D7B

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
7B	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **P2D7A** Charging Stop Switch Circuit High · **P2D7C** Charging Stop Switch Circuit Performance



See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2d7b/>

