

GENERIC · POWERTRAIN

P0D00

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D00

Control Pilot Charging Ventilation Switch Circuit/Open

P0D00 indicates that the control pilot circuit for the charging ventilation switch is open, meaning the vehicle's computer has detected a break in the electrical path that monitors the ventilation system during high-voltage battery charging. This circuit ensures proper venting of gases from the battery pack while charging, and an open circuit prevents the system from confirming that ventilation is functioning.

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, especially if the ventilation system is not actively needed
- Charging system may default to a reduced charging rate or refuse to initiate charging in some vehicles
- A warning message on the dash indicating a charging system fault or ventilation issue
- In rare cases, a noticeable odor or slight accumulation of gases near the battery pack if ventilation is compromised

Common causes, most likely first

- 1 Broken or disconnected wire in the control pilot ventilation switch circuit
- 2 Failed ventilation switch or sensor integrated into the charging system
- 3 Corroded or damaged electrical connector at the ventilation switch or control module
- 4 Faulty charging control module that interprets the switch signal incorrectly
- 5 Open circuit inside the wiring harness due to chafing or rodent damage
- 6 Poor ground connection for the ventilation switch circuit



How to diagnose and fix it

- 1 Use a scan tool to confirm P0D00 is active and check for any related codes in the charging system
- 2 Visually inspect the ventilation switch, its connector, and the wiring harness for obvious damage or disconnection
- 3 Perform a continuity test on the control pilot ventilation switch circuit to locate the open
- 4 Check the resistance of the ventilation switch itself and compare to manufacturer specifications
- 5 Inspect and clean the ground connection for the ventilation circuit
- 6 If the switch tests faulty, replace the ventilation switch or sensor assembly
- 7 If the wiring is damaged, repair or replace the affected section of the harness and clear the code

Don't overlook the ventilation switch connector

- A common cause of P0D00 is a loose or corroded connector at the ventilation switch, which can mimic a failed switch and is often overlooked during diagnosis.
- The code does not always mean the ventilation switch itself has failed; an open in the wiring or a faulty control module can set the same code.
- On some vehicles, the ventilation switch is part of the battery pack assembly and may require dropping the pack for access, making it a costly repair if misdiagnosed.
- Technicians sometimes replace the charging control module prematurely when the actual fault is a simple broken wire in the control pilot circuit.
- This circuit is only active during charging, so the code may not set immediately after clearing unless the vehicle is plugged in and charging is initiated.

Can I keep driving with P0D00?

You can generally continue driving the vehicle, but avoid charging until the fault is repaired, as the ventilation system may not function correctly during charging. If charging is necessary, monitor for unusual odors or warnings and seek service promptly.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wire probe kit
- Service manual with wiring diagrams
- Basic hand tools for trim and connector removal



Reading P0D00

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

Often seen with

P0C00 Drive Motor A Current Low · **P0C01** Drive Motor A Current High · **P0D01** Control Pilot Charging Ventilation Switch Range/Performance · **P0D02** Hybrid/EV Charging System Voltage Out Of Range · **P0D03** Control Pilot Charging Ventilation Switch Circuit High

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d00/>

