

GENERIC · POWERTRAIN

P0CF9

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0CF9

Control Pilot Charging Switch A Range/Performance

P0CF9 indicates that the control pilot circuit's charging switch A is not performing within its expected range, as detected by the vehicle's charging control module. The computer monitors the switch's electrical behavior and flags the code when the signal falls outside the manufacturer's specified parameters for voltage, current, or timing.

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

Symptoms you may notice

- The charging system warning light or service vehicle soon light illuminates on the dashboard.
- The vehicle may fail to initiate or complete a charging session, especially on AC Level 2 equipment.
- Intermittent charging interruptions where the session stops and restarts without driver input.
- A noticeable reduction in charging speed or the vehicle defaulting to a lower current limit.
- Often no symptoms besides the warning light, with the vehicle charging normally in most conditions.
- In some cases, the charging port door or latch may not release properly after a fault is detected.

Common causes, most likely first

- Faulty control pilot switch A inside the charge port assembly, causing erratic resistance or stuck contacts.
- Damaged or corroded wiring in the control pilot circuit between the charge port and the charging control module.
- Water intrusion or contamination in the charge port connector leading to signal degradation.
- A failing charging control module that misinterprets the pilot signal or loses calibration.
- Loose or backed-out terminals at the charge port or module connector causing intermittent opens.
- Aftermarket charging equipment or a non-compliant EVSE (Electric Vehicle Supply Equipment) that sends an out-of-spec pilot signal.
- Software or firmware issues in the charging system that require a recalibration or update.



How to diagnose and fix it

- 1 Inspect the charge port and connector for debris, corrosion, or water intrusion, and clean or dry as needed.
- 2 Perform a visual and wiggle test of the control pilot circuit wiring and connectors, looking for chafing or loose pins.
- 3 Use a scan tool to read live data for the control pilot switch status and compare against the service manual specifications.
- 4 Test the control pilot circuit with a multimeter for continuity, resistance, and voltage drop according to the manufacturer's procedure.
- 5 Try a known-good EVSE (Electric Vehicle Supply Equipment) to rule out an external charging station fault.
- 6 If the switch or port assembly is faulty, replace the charge port assembly or the specific serviceable switch component.
- 7 After repair, clear the codes and verify the charging system completes a full session without resetting the fault.

What the control pilot switch really does

- The control pilot switch A is part of the vehicle's charge port assembly and communicates the vehicle's readiness to accept charge; a fault here can mimic a bad charging station.
- Many technicians replace the charge port only to find the real problem is a corroded pin in the harness connector several inches away.
- This code can be set by a brief intermittent glitch that never recurs, so always check for stored freeze-frame data before condemning parts.
- Aftermarket or damaged EVSE cables that send an out-of-range pilot signal can set this code even though the vehicle's own components are healthy.
- A weak 12-volt battery or poor ground connection can cause the charging module to misread the pilot signal, so check the basics first.

Can I keep driving with P0CF9?

You can usually continue driving the vehicle because the fault affects charging rather than propulsion, but avoid relying on high-power charging until the issue is resolved. If the vehicle fails to charge at all, arrange for service promptly to prevent being stranded with a depleted battery.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with back-probing pins
- Manufacturer service information for control pilot circuit specifications
- Known-good EVSE charging station or cable
- Terminal pick and electrical contact cleaner



Reading P0CF9

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- C** Hybrid propulsion.
- F9** The exact fault within that area.

Often seen with

P0CF8 Control Pilot Charging Switch A Circuit/Open · **P0CFA** Control Pilot Charging Switch A Circuit Low · **P0CFB** Control Pilot Charging Switch A Circuit High · **U0111** Lost Communication With Battery Energy Control Module 'A'

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0cf9/>

