

GENERIC · POWERTRAIN

P0A94

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A94

DC/DC Converter A Performance

P0A94 indicates that the powertrain control module has detected a performance fault in the DC/DC converter, which is the component that steps high-voltage battery power down to charge the 12-volt system on hybrid and electric vehicles. The computer monitors the converter's output voltage and current against commanded values and sets this code when the response falls outside the expected range.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or a dedicated hybrid system warning lamp
- The 12-volt battery may run down because the converter is not charging it properly
- Electrical accessories such as lights, radio, or climate control may dim or behave erratically
- The vehicle may enter a reduced-power or limp mode with limited speed
- In some cases there are no noticeable symptoms besides the warning light

Common causes, most likely first

- 1 A failing DC/DC converter internal to the hybrid battery pack assembly
- 2 Corroded, loose, or damaged wiring and connectors between the converter and the 12-volt system
- 3 A weak or failing 12-volt auxiliary battery that cannot accept charge properly
- 4 High-voltage cable or connector faults causing intermittent power transfer
- 5 A software calibration issue in the powertrain control module requiring an update
- 6 A faulty current or voltage sensor within the converter circuit

How to diagnose and fix it

- 1 Perform a thorough visual inspection of all low-voltage and high-voltage wiring and connectors related to the converter
- 2 Test the 12-volt battery state of charge and load capacity, replacing it if it fails
- 3 Check for any applicable technical service bulletins or software updates for the powertrain control module
- 4 Measure the converter's output voltage and compare it to the commanded value using a scan tool with live data
- 5 Perform a voltage drop test on the charging circuit to identify excessive resistance
- 6 If the converter is internal to the battery pack, follow the manufacturer's high-voltage safety procedures to test or replace the assembly



What technicians overlook on P0A94

- A weak 12-volt battery is often the root cause of this code because the converter cannot maintain proper output into a failing load.
- Corroded ground connections can mimic a failed converter by introducing resistance that skews voltage readings.
- The code can be set by a momentary glitch during a low-voltage event, so clearing it and verifying whether it returns is a valid first step.
- On some vehicles the DC/DC converter is integrated into the high-voltage battery pack, making replacement a costly and labor-intensive job that should be confirmed with proper testing.
- High-voltage safety procedures must be followed strictly; never probe high-voltage circuits without the proper training and personal protective equipment.

Can I keep driving with P0A94?

Driving with this code is not recommended because the 12-volt system may not be charged, leading to a stalled vehicle or loss of electrical power. If you must drive, limit the distance and avoid using unnecessary electrical accessories, and have the vehicle inspected promptly.

Tools that help

- Scan tool with live data and hybrid system capabilities
- Digital multimeter with high-voltage safety rating
- Battery load tester
- Insulation tester for high-voltage cables
- Manufacturer-specific diagnostic software

Reading P0A94

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

Often seen with

P0A0A High Voltage System Interlock Circuit A · **P0A95** High Voltage Fuse A · **P0A96** Hybrid/EV Battery Pack Cooling Fan 2 Control Circuit/Open · **P0A97** Hybrid/EV Battery Pack Cooling Fan 2 Performance/Stuck Off · **P0A98** Hybrid/EV Battery Pack Cooling Fan 2 Stuck On



See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0a94/>

