

GENERIC · POWERTRAIN

# P0D22

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P0D22

### Battery Charger A Output Current Performance

P0D22 indicates that the powertrain control module has detected a performance issue with the output current from the auxiliary battery charger, which is typically part of the high-voltage system in hybrid and electric vehicles. The computer monitors the charger's current output and sets this code when the actual current does not match the commanded value within an expected range, often due to a fault in the charger itself, its wiring, or the battery pack.

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

#### Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Reduced charging capability, leading to longer charging times or inability to fully charge the battery
- The vehicle may enter a reduced power mode or fail to start if the battery state of charge becomes too low
- Possible audible whine or clicking from the charger area during charging attempts
- Other warning lights related to the high-voltage system may appear

#### Common causes, most likely first

- 1 Faulty battery charger assembly, such as internal circuit failure or damaged components
- 2 Damaged or corroded wiring and connectors between the charger and the battery pack
- 3 Poor electrical connections at the charger, including loose ground straps
- 4 Software or calibration issue in the charger control module
- 5 High-voltage battery pack degradation causing abnormal current draw
- 6 Faulty current sensor integrated into the charger or battery pack



## How to diagnose and fix it

- 1 Perform a thorough visual inspection of the charger, its wiring, and connectors for signs of damage, corrosion, or loose connections
- 2 Use a scan tool to retrieve all stored codes and freeze-frame data, and check for any related technical service bulletins
- 3 Measure the charger's output current with a clamp meter and compare it to the commanded value from the scan tool to confirm the fault
- 4 Check the integrity of the ground circuits and power supply to the charger using a multimeter and wiring diagram
- 5 If wiring and connections are good, test the charger's internal components or replace the charger assembly as needed
- 6 Reprogram or update the charger control module software if a known calibration issue exists
- 7 Clear codes and perform a road test or charging cycle to verify the repair

## Charger Current Faults Often Misdiagnosed

- A weak or failing 12-volt auxiliary battery can cause erratic behavior in the high-voltage charger control module, leading to false P0D22 codes.
- Intermittent faults often stem from poor connector pin tension or chafed wiring that only acts up under specific vibration or temperature conditions.
- The code may be set by a charger that is functioning correctly but is receiving incorrect current commands due to a faulty battery management system or CAN communication error.
- Technicians sometimes replace the charger unnecessarily when the real problem is a degraded high-voltage battery that cannot accept the commanded current.
- Always check for aftermarket accessories or improper previous repairs that may have disturbed the high-voltage wiring harness.

## Can I keep driving with P0D22?

It is generally safe to drive with this code if the vehicle operates normally, but avoid long trips or relying on the charger until the fault is repaired. If the vehicle enters reduced power mode or shows other high-voltage warnings, stop driving and seek professional service.

## Tools that help

- OBD-II scan tool with live data capability
- Clamp meter for measuring DC current
- Digital multimeter
- Factory service information and wiring diagrams
- Insulated hand tools for high-voltage safety



## Reading P0D22

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

## Often seen with

**P0A0D** High Voltage System Interlock Circuit A High · **P0A94** DC/DC Converter A Performance · **P0D21** Battery Charger A Output Voltage Too Low · **P0D23** Battery Charger A Output Shorted · **P0D24** Battery Charger A Temperature Too High

## See it working

Watch the animated explainer [How a Knock Sensor Works: Spark Timing and Octane](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d22/>

