

GENERIC · POWERTRAIN

P0D82

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D82

Battery Charger Input Circuit Low

P0D82 indicates that the powertrain control module has detected a low voltage condition on the battery charger input circuit, which is used to monitor the charging system's connection to the battery. The computer sets this code when the signal from the charger input circuit falls below the expected threshold, often due to a wiring fault, poor connection, or a failing charger component.

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
- Battery warning light may also be on if the charging system is affected
- Possible slow engine crank or dead battery if the charger is not functioning
- Electrical accessories may dim or operate erratically
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Corroded or loose battery charger input circuit wiring or connector
- 2 Open or shorted battery charger input circuit (wiring harness damage)
- 3 Faulty battery charger assembly (internal failure)
- 4 Poor ground connection for the charger circuit
- 5 Failed powertrain control module (rare but possible)
- 6 Water intrusion or physical damage to the charger circuit components

How to diagnose and fix it

- 1 Inspect the battery charger input circuit wiring and connectors for corrosion, looseness, or damage
- 2 Check the charger circuit ground connections for cleanliness and tightness
- 3 Measure voltage on the charger input circuit with a multimeter and compare to specifications
- 4 Test the battery charger assembly for proper output and internal faults
- 5 Repair or replace any damaged wiring or connectors in the charger input circuit
- 6 Clear the diagnostic trouble codes and verify the repair with a test drive



Charger Circuit Faults Often Misdiagnosed

- A low voltage on the charger input circuit can be caused by a simple blown fuse that protects the circuit, which is often overlooked during diagnosis.
- The code may set intermittently due to vibration or temperature changes affecting a marginal connection, so wiggle-testing the harness while monitoring live data is crucial.
- Some vehicles use the battery charger input circuit for both charging and battery monitoring, so a fault here can also affect stop-start functionality or battery management systems.
- Replacing the battery charger assembly without first verifying the integrity of the wiring and grounds is a common misdiagnosis that leads to repeat repairs.
- This code can be set by a weak or failing battery itself, as a low battery can cause voltage drops on the charger input circuit during cranking or load tests.

Can I keep driving with P0D82?

You can usually continue driving with this code, but avoid long trips or heavy electrical loads until the fault is repaired, as the charging system may not be operating at full capacity. If the battery warning light is also on or you notice dimming lights, have the system checked promptly to prevent a no-start condition.

Tools that help

- OBD-II scanner
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (sockets, wrenches, screwdrivers)
- Test light

Reading P0D82

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

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **P0D83** Battery Charger Input Circuit High · **P0D84** Battery Charger Input Circuit Intermittent/Erratic



See it working

Watch the animated explainer **Fuel Trims Explained: Short-Term and Long-Term** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d82/>

