

GENERIC · POWERTRAIN

P0D16

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D16

Battery Charging System A High Voltage Interlock Circuit Performance

P0D16 indicates that the battery charging system's high-voltage interlock loop has reported a performance fault, meaning the safety circuit that confirms all high-voltage connectors are properly seated is not behaving as expected. The computer monitors the interlock circuit for continuity and signal integrity, and it has detected a condition outside the normal operating range, which can prevent the high-voltage system from energizing or charging.

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

Symptoms you may notice

- Illumination of the high-voltage system warning light or service vehicle soon message
- The vehicle may refuse to start or enter ready-to-drive mode
- Charging may be disabled or interrupted, leaving the high-voltage battery depleted
- A message indicating a high-voltage interlock fault or safety system error
- Often no symptoms besides the warning light, with the vehicle operating normally

Common causes, most likely first

- 1 A high-voltage connector that is not fully latched or has a damaged interlock pin
- 2 Corrosion or water intrusion in a high-voltage interlock connector
- 3 A broken or chafed interlock wire in the harness
- 4 A faulty high-voltage component with an internal interlock switch, such as the battery pack, inverter, or charger
- 5 A malfunctioning battery energy control module or interlock detection circuit
- 6 Aftermarket accessories or improper previous repairs disturbing the high-voltage wiring

How to diagnose and fix it

- 1 Inspect all high-voltage connectors for proper seating, latch engagement, and signs of corrosion or damage
- 2 Check the interlock circuit wiring for continuity and shorts using a multimeter, following the manufacturer's service information
- 3 Verify the interlock signal at the battery energy control module and compare to specifications
- 4 Test individual high-voltage components' interlock switches if accessible, disconnecting the high-voltage battery service plug first
- 5 Repair or replace any damaged connector, terminal, or wire section in the interlock circuit
- 6 Clear the diagnostic trouble codes and perform a road test to confirm the fault does not return



Interlock faults that mimic component failures

- A partially latched high-voltage connector is the most common cause of this code, and it often happens after service work that required disconnecting the high-voltage system.
- The interlock circuit is a low-voltage loop, so a code P0D16 does not necessarily mean the high-voltage battery or motor is defective; the fault is usually in the wiring or connector.
- Some vehicles set this code when the 12-volt battery is weak or has been disconnected, because the module loses its interlock reference during low-voltage conditions.
- Aftermarket alarm or remote start installations that tap into wiring near high-voltage components can disturb the interlock circuit and trigger this code.
- Always follow the manufacturer's high-voltage disconnect procedure before probing interlock circuits, as the system can retain dangerous voltage even with the key off.

Can I keep driving with P0D16?

Do not continue driving if the vehicle will not enter ready mode or shows a high-voltage safety warning, as the high-voltage system may be disabled and the vehicle could lose power unexpectedly. If the only symptom is the warning light and the vehicle drives normally, limit driving to a short distance to a qualified repair facility and avoid charging until diagnosed.

Tools that help

- Digital multimeter with low-voltage and continuity functions
- Manufacturer-specific scan tool capable of reading hybrid/EV high-voltage codes
- High-voltage safety gloves and insulated tools
- Vehicle service information for interlock circuit diagrams and procedures
- Terminal pick and connector release tools

Reading P0D16

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AA6** Hybrid/EV Battery Voltage System Isolation Fault
 · **P0D15** Battery Charging System A High Voltage Interlock Circuit/Open · **P0D17** Battery Charging System A High Voltage Interlock Circuit Low



See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d16/>

