



P0D17

Battery Charging System A High Voltage Interlock Circuit Low

The battery charging system A high voltage interlock circuit is a safety loop that confirms the high-voltage connectors are fully seated before the vehicle allows high-voltage charging to occur. Code P0D17 is set when the control module detects a low voltage condition on this interlock circuit, meaning the loop is broken or shorted to ground. The computer has commanded the charging system to disable high-voltage charging as a protective measure.

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

Symptoms you may notice

- The high-voltage charging system may be completely disabled, preventing the vehicle from accepting a charge.
- A red or yellow high-voltage warning light illuminated on the dashboard.
- The vehicle may refuse to start or enter a ready-to-drive state if the interlock fault is severe.
- Often no symptoms besides the warning light, especially if the low voltage is intermittent.
- The charging port door or connector may feel loose or fail to latch properly.
- Other high-voltage system codes may be stored alongside P0D17.

Common causes, most likely first

- 1 A high-voltage interlock connector that is not fully seated or has a broken latch, commonly at the charging port or battery pack.
- 2 Corrosion or water intrusion in a high-voltage interlock connector, causing increased resistance or a short to ground.
- 3 A damaged interlock wire (open circuit or short to ground) in the harness between the charging port and the control module.
- 4 A faulty high-voltage interlock switch inside a component such as the charge port assembly or battery disconnect unit.
- 5 A failed control module that monitors the interlock circuit, though this is less common.
- 6 Aftermarket accessories or improper previous repairs that disturbed the high-voltage interlock loop.



How to diagnose and fix it

- 1 Inspect all high-voltage interlock connectors for proper seating, latch integrity, and corrosion, starting at the charging port and working toward the battery pack.
- 2 Use a scan tool to read live data for the interlock circuit voltage and compare it to the service information specification.
- 3 Perform a continuity and short-to-ground test on the interlock circuit wiring using a digital multimeter, following the manufacturer's wiring diagram.
- 4 Check the high-voltage interlock switch inside the charge port assembly for correct operation and replace the assembly if faulty.
- 5 Verify the control module's ground and power supply are intact before condemning the module itself.
- 6 If all wiring and connectors test good, substitute a known-good control module to confirm the fault before replacement.
- 7 Clear the code and perform a road test or charging cycle to verify the repair and ensure the code does not return.

Interlock faults that fool good technicians

- A loose high-voltage connector that looks fully seated can still set P0D17 because the interlock pin makes contact before the main terminals, so always check for a fully latched connector rather than just a visual fit.
- Water intrusion in the charging port interlock circuit is a frequent cause that leaves no visible corrosion until the connector is disassembled, so inspect the pins under magnification.
- The code can be stored intermittently by a driver who forcefully yanks the charging cable out without pressing the release, damaging the interlock switch over time.
- A low voltage on the interlock circuit does not always mean the high-voltage battery is faulty; the fault is often in the low-voltage monitoring loop, so avoid condemning the battery pack prematurely.
- Some vehicles set P0D17 as a companion code when the 12-volt battery is weak or the control module resets during cranking, so always check system voltage stability first.

Can I keep driving with P0D17?

Do not continue driving or charging the vehicle until the interlock fault is repaired, because the high-voltage system may be disabled and the vehicle could lose power unexpectedly. Have the vehicle towed to a qualified service facility if it will not start or charge.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with continuity and voltage measurement
- Manufacturer-specific wiring diagrams and service information
- Insulated hand tools rated for high-voltage work
- Terminal pick and contact cleaner
- Flashlight and inspection mirror

Reading P0D17

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
17	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
 · **P0D16** Battery Charging System A High Voltage Interlock Circuit Per · **P0D18** Battery Charging System A High Voltage Interlock Circuit Hig

See it working

Watch the animated explainer [Inline-Four Engine X-Ray: Firing Order 1-3-4-2](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d17/>

