

GENERIC · NETWORK

# U3514

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## U3514

# High Voltage System Interlock Circuit B High

U3514 indicates that the high-voltage interlock loop for circuit B has reported a voltage above the expected threshold, which the vehicle's control module interprets as a potential safety breach. The interlock is a low-voltage safety circuit that runs through high-voltage connectors and components, and it is designed to disable the high-voltage system if any connection is broken or compromised. The computer detected an abnormally high voltage on this specific interlock circuit, which can trigger a shutdown of the high-voltage system to prevent electric shock hazards.

|                          |                                         |                         |                                       |                                      |
|--------------------------|-----------------------------------------|-------------------------|---------------------------------------|--------------------------------------|
| SYSTEM<br><b>Network</b> | CODE TYPE<br><b>Generic (all makes)</b> | SEVERITY<br><b>High</b> | FIX DIFFICULTY<br><b>Professional</b> | AREA<br><b>Network communication</b> |
|--------------------------|-----------------------------------------|-------------------------|---------------------------------------|--------------------------------------|

## Symptoms you may notice

- High-voltage system disabled, preventing the vehicle from starting or driving
- Instrument cluster displays a high-voltage system fault or service vehicle soon message
- Reduced power or limp mode if the vehicle remains drivable
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Inability to charge the high-voltage battery on plug-in vehicles
- Audible alerts or chimes accompanying the warning light

## Common causes, most likely first

- 1 Damaged or corroded high-voltage interlock connector pins or terminals
- 2 Frayed, pinched, or open interlock wiring harness
- 3 Failed high-voltage component (e.g., battery pack, inverter, motor) with internal interlock fault
- 4 Water intrusion or contamination in a high-voltage connector
- 5 Loose or improperly seated high-voltage connector
- 6 Faulty interlock detection circuit within the control module
- 7 Aftermarket accessories or improper previous repairs interfering with the interlock loop



## How to diagnose and fix it

- 1 Perform a visual inspection of all high-voltage connectors and wiring for damage, corrosion, or loose connections
- 2 Use a scan tool to read all stored codes and freeze-frame data, and check for related codes in other modules
- 3 Consult the factory service information for the specific interlock circuit B routing and test procedures
- 4 Measure resistance and voltage on the interlock circuit B at the control module and at each connector, comparing to specifications
- 5 Disconnect and reseat each high-voltage connector in the circuit, checking for proper terminal tension and cleanliness
- 6 If a faulty component is identified, replace or repair it following manufacturer procedures, then clear codes and verify the repair
- 7 If the fault persists, perform pinpoint tests on the control module and interlock circuit as directed by service information

## Interlock faults are not always component failures

- A common cause of U3514 is a partially disconnected high-voltage connector that still makes contact but has high resistance, which can set the code without any visible damage.
- The interlock circuit is a low-voltage loop, so a high voltage reading on it often indicates a short to voltage rather than an open circuit, which changes the diagnostic approach.
- Many technicians replace high-voltage components unnecessarily when the real problem is a chafed interlock wire behind a connector or under a harness cover.
- After any high-voltage repair, the interlock circuit must be verified for continuity and correct voltage before the system will re-enable, and some vehicles require a specific reset procedure.
- This code can be set by a low 12-volt battery or poor ground connection, causing the control module to misread interlock voltage, so always check the basics first.

## Can I keep driving with U3514?

Do not continue driving with this code active, as the high-voltage system may be disabled or in a compromised state, and driving could risk electric shock or further damage. Have the vehicle towed to a qualified service facility for diagnosis and repair.

## Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter with high-voltage safety rating
- Insulation tester (megohmmeter) for high-voltage circuits
- Factory service information for interlock circuit diagrams and test procedures
- High-voltage safety gloves and insulated tools
- Terminal pick and connector release tools



## Reading U3514

- U** Network: communication between the vehicle's control modules.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Network communication.
- 14** 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  
 · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U3513** High Voltage System Interlock Circuit B Low · **U3515** High Voltage System Interlock Circuit C

## See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3514/>

