

GENERIC · NETWORK

U3525

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U3525

High Voltage System Interlock Circuit G

U3525 indicates that the high-voltage interlock loop for circuit G has detected a voltage level above the expected range, which typically means the safety circuit is compromised or a measurement circuit is faulty. The vehicle's control module monitors this loop to ensure the high-voltage system is safely isolated, and it sets the code when the signal voltage exceeds the calibrated threshold.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	High	Professional	Network communication

Symptoms you may notice

- High-voltage system warning light or message displayed on the dashboard
- Vehicle may refuse to start or enter 'ready' mode, especially in electric and hybrid models
- Reduced power or limp-home mode due to high-voltage system shutdown
- Often no symptoms besides the warning light if the fault is intermittent
- Possible inability to charge the high-voltage battery on plug-in vehicles
- Other high-voltage related codes stored in multiple modules

Common causes, most likely first

- Damaged or corroded high-voltage interlock connector, terminal, or wiring in circuit G
- Faulty high-voltage component (e.g., battery pack, inverter, motor) with an internal interlock switch issue
- Water intrusion or contamination in a high-voltage connector causing increased resistance or voltage shift
- Loose or improperly seated high-voltage service disconnect plug
- Failed interlock detection circuit within the battery energy control module or vehicle control module
- 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 corrosion, damage, or loose pins, starting with the service disconnect plug
- 2 Check for technical service bulletins (TSBs) or recalls related to the high-voltage interlock system for the specific vehicle
- 3 Measure interlock loop voltage and resistance at the control module connector and compare to factory specifications
- 4 Perform a voltage drop test on the interlock circuit G to identify excessive resistance or an open circuit
- 5 Substitute a known-good component or use a jumper to bypass sections of the interlock loop to isolate the fault
- 6 Repair or replace damaged wiring, connectors, or the faulty high-voltage component as needed
- 7 Clear codes and verify the repair by performing a complete drive cycle and confirming the code does not return

Interlock Circuit G Voltage Diagnostics

- A high voltage reading on the interlock circuit often indicates a poor ground connection rather than a true overvoltage condition, so check grounds first.
- The interlock loop is a safety circuit; bypassing it for testing should only be done with proper high-voltage safety precautions and never left in place.
- This code can be set by a low 12-volt battery or charging system issue causing the control module to misread the interlock voltage.
- Some vehicles require the high-voltage battery to be disconnected and the service plug removed before any interlock circuit testing, following manufacturer procedures.
- Intermittent U3525 codes are frequently caused by a connector that is not fully latched after previous service work, so verify all connectors are seated and locked.

Can I keep driving with U3525?

Do not continue driving with this code active, as the high-voltage system may be disabled or unsafe; have the vehicle inspected by a qualified high-voltage technician immediately. Avoid attempting to clear the code or bypass the interlock circuit, and do not touch orange high-voltage cables.

Tools that help

- Digital multimeter with high-voltage rating
- OBD-II scan tool capable of reading hybrid/EV-specific codes
- Manufacturer-specific diagnostic software
- Insulated hand tools and personal protective equipment (PPE)
- Wiring diagram and service information for the specific vehicle



Reading U3525

- 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.
- 25** 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' · **U3524** High Voltage System Interlock Circuit F High · **U3526** High Voltage System Interlock Circuit G Performance

See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u3525/>

