

GENERIC · NETWORK

U0551

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0551

Invalid Data Received From Impact Classification System Module

U0551 is a communication fault indicating the impact classification system module is sending data the restraint control module or another network node considers invalid or corrupted. The computer has detected a message from the impact classification module that fails its internal plausibility or checksum validation, so the system cannot trust the crash severity information it receives.

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

Symptoms you may notice

- Airbag or supplemental restraint system warning light illuminated on the dashboard
- Often no symptoms besides the warning light, with the vehicle driving normally
- Passenger airbag may be automatically disabled or the passenger sensing system may behave erratically
- Restraint system may default to a conservative deployment strategy, potentially affecting airbag force in a collision
- Intermittent warning light that comes and goes with temperature changes or rough road surfaces
- Remote start or other convenience features may be inhibited on some vehicles as a protective measure

Common causes, most likely first

- 1 Damaged, chafed, or corroded wiring between the impact classification system module and the restraint control module
- 2 Loose or contaminated connector pins at either the impact classification module or the restraint control module
- 3 Failing impact classification system module, often due to water intrusion or internal circuit degradation
- 4 Low or unstable battery voltage causing the module to transmit corrupted data frames
- 5 Failed restraint control module that cannot correctly interpret valid messages from the impact classification module
- 6 Aftermarket accessories or improper previous repairs introducing electrical noise on the communication bus
- 7 Software or calibration mismatch after a module replacement that was not properly configured



How to diagnose and fix it

- 1 Perform a full system scan with a capable scan tool to confirm U0551 is current and check for related communication or restraint codes in other modules
- 2 Inspect and test the battery and charging system, as low voltage is a common root cause of invalid data faults
- 3 Visually inspect the impact classification module harness and connectors for chafing, corrosion, water intrusion, or loose pins
- 4 Check service information for the specific vehicle to locate the impact classification module and verify its power, ground, and communication circuit integrity
- 5 Perform voltage drop and resistance tests on the communication bus circuits between the impact classification module and the restraint control module
- 6 If wiring and power are confirmed good, substitute a known-good impact classification module and recheck for the fault
- 7 After any module replacement, complete the required configuration or calibration procedure with a factory-level scan tool and clear codes

What the impact classification module actually does

- The impact classification system module often refers to the occupant classification sensor or bladder system in the passenger seat, so a fault here can be caused by a heavy object left on the seat or a spilled drink soaking the sensor mat.
- U0551 does not always mean the module has failed; a poor ground connection at the module mounting point can cause valid data to be corrupted before it ever reaches the network.
- Technicians frequently replace the impact classification module only to find the real fault was a chafed wire under the seat track that shorted intermittently as the seat moved.
- Some vehicles store U0551 as a history code after a low-voltage event such as a jump start, and the code may not return once the battery is healthy and the memory is cleared.
- A restraint control module that has been replaced without proper configuration can set U0551 because it does not recognize the impact classification module's data format.

Can I keep driving with U0551?

The vehicle remains driveable in most cases, but the restraint system may not deploy optimally in a crash, so avoid aggressive driving and have the fault diagnosed promptly. Do not ignore the warning light, because the system may default to a reduced-protection strategy until the invalid data fault is resolved.



Tools that help

- OBD-II scan tool with bidirectional control and module communication capability
- Digital multimeter with voltage drop and resistance measurement functions
- Factory service information or wiring diagrams for the specific vehicle
- Battery load tester and charging system analyzer
- Terminal pick and contact cleaner for connector inspection
- Factory-level scan tool or equivalent for module configuration after replacement

Reading U0551

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Network communication.
51	The exact fault within that area.

Often seen with

B00A0 Occupant Classification System · **U0140** Lost Communication With Instrument Panel Cluster · **U0151** Lost Communication With Restraints Control Module · **U0550** Invalid Data Received From Side Obstacle Detection Control M · **U0552** Invalid Data Received From Running Board Control Module B

See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0551/>

