



U054F

Invalid Data Received From Side Obstacle Detection Control Module C

U054F means the vehicle's main computer network received data from the side obstacle detection control module C that it judged invalid or corrupted, so it flagged the message as untrustworthy. The module itself may be reporting a fault, or the data may have been damaged in transit on the communication bus, and the computer stores this code to record that the information could not be used.

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

Symptoms you may notice

- A warning light or message on the dashboard for the blind spot or side obstacle system, often with no other noticeable change in how the car drives.
- The side obstacle detection feature may stop working or give false alerts, such as warning of a vehicle that is not there.
- Cross-traffic alert or lane-change assistance may be disabled or behave erratically if those features share the same module.
- In some vehicles the driver may see a generic 'service driver assist' or 'sensor blocked' message instead of a specific fault.
- Often no symptoms besides the warning light, because the fault can be intermittent and the system may recover on the next ignition cycle.

Common causes, most likely first

- 1 A failing side obstacle detection control module C, often due to water intrusion, impact damage, or internal electronics failure.
- 2 Damaged, corroded, or loose wiring and connectors at the module or along the harness, especially where the harness passes through a door or bumper.
- 3 Low or unstable battery voltage, or a weak ground connection, causing the module to send corrupted data on the network.
- 4 A communication bus fault, such as a shorted or open data line, that corrupts messages between the module and the main computer.
- 5 Another module on the same network flooding the bus with errors, which can make the side obstacle module's data appear invalid.
- 6 A software or configuration mismatch after a module replacement or battery service, where the new module is not properly initialized.



How to diagnose and fix it

- 1 Verify battery voltage and condition, and check that the charging system is working, because low voltage is a common cause of invalid data codes.
- 2 Inspect the side obstacle detection control module C and its connectors for water, corrosion, loose pins, or impact damage, and clean or reseat as needed.
- 3 Check the communication bus wiring for shorts, opens, or excessive resistance, and repair any damaged sections of the harness.
- 4 Use a scan tool to read live data and freeze-frame information from the side obstacle module to see whether it is communicating and what fault it reports internally.
- 5 Perform a module self-test or recalibration if the manufacturer requires it after service, and clear the code to see whether it returns.
- 6 If the module is confirmed faulty after electrical checks, replace or reprogram it according to the manufacturer's procedure, then verify the repair with a road test.
- 7 Check for technical service bulletins or software updates for the side obstacle system that address invalid data or communication faults.

Why side obstacle data goes invalid

- A common misdiagnosis is to replace the side obstacle module immediately, but a chafed harness in the rear bumper or a corroded connector often causes the same invalid data code for far less cost.
- This code does not always mean the side obstacle module itself is bad; a weak battery or a bad ground can corrupt network messages and set U054F even when the module is healthy.
- On some vehicles the side obstacle detection module shares a network segment with parking sensors or rear camera, so a fault in one of those systems can produce invalid data from module C.
- Intermittent U054F codes that appear only in cold or wet weather often point to water intrusion in a connector or a harness rubbed through near a body seam.
- Clearing the code without checking freeze-frame data can hide whether the fault was a one-time communication glitch or a recurring module failure.

Can I keep driving with U054F?

The vehicle is generally safe to drive because the side obstacle system is a driver aid and not a primary control system, but you should not rely on blind spot or cross-traffic warnings until the fault is repaired. Avoid driving in heavy traffic or changing lanes aggressively if the system is disabled, and have the fault checked soon if the warning light stays on.



Tools that help

- OBD-II scan tool with manufacturer-level or enhanced diagnostic capability
- Digital multimeter for voltage, resistance, and continuity checks
- Wiring diagram and connector pinout for the side obstacle detection system
- Trim removal tools for accessing modules and harnesses behind bumpers or interior panels
- Battery load tester or conductance tester

Reading U054F

- 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.
- 4F** The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0122** Lost Communication With Vehicle Dynamics Control Module · **U0140** Lost Communication With Instrument Panel Cluster · **U054E** Invalid Data Received From Seat Control Module J · **U0550** Invalid Data Received From Side Obstacle Detection Control M

See it working

Watch the animated explainer [EV Powertrain Trainer: How an Electric Car Drives](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u054f/>

