

GENERIC · NETWORK

U059D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U059D

Invalid Data Received From Drive Motor Control Module D

U059D is a network communication fault indicating that a control module received invalid or corrupted data from the Drive Motor Control Module D over the vehicle's Controller Area Network (CAN) bus. The receiving module detected that the data frames from the drive motor controller did not match the expected format, checksum, or signal range, so it flagged the message as untrustworthy rather than simply missing.

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

Symptoms you may notice

- Illumination of the check engine light, service vehicle soon message, or hybrid/EV system warning lamp.
- Reduced power or limp-home mode, often accompanied by a message to service the electric drive system.
- Intermittent or complete loss of drive motor function, potentially leaving the vehicle unable to move.
- Erratic operation of other systems that share the same CAN bus, such as the instrument cluster or climate control.
- Often no symptoms besides the warning light if the invalid data is isolated and the module continues to broadcast valid frames.

Common causes, most likely first

- 1 Corroded, loose, or damaged pins in the Drive Motor Control Module D harness connector.
- 2 Chafed or shorted CAN bus wiring between the drive motor controller and the receiving module.
- 3 Failing Drive Motor Control Module D internal circuitry that corrupts outgoing data frames.
- 4 Low or unstable 12-volt supply or poor ground to the drive motor controller, causing voltage-induced data errors.
- 5 Software or calibration mismatch in the drive motor controller after a replacement or update.
- 6 A faulty receiving module that misinterprets valid data due to its own internal fault.
- 7 Electromagnetic interference from degraded high-voltage cable shielding affecting CAN signal integrity.



How to diagnose and fix it

- 1 Record all stored codes and freeze-frame data, then clear codes and test-drive to see if U059D returns immediately or only under specific conditions.
- 2 Inspect the Drive Motor Control Module D connector for corrosion, pushed-back pins, and tight fit, and check the CAN bus wiring for chafing or shorts.
- 3 Measure battery voltage and the 12-volt supply and ground at the drive motor controller connector under load to rule out power or ground faults.
- 4 Use an oscilloscope or a CAN bus analyzer to verify signal integrity on the bus segment between the drive motor controller and the receiving module.
- 5 Check for technical service bulletins or software updates for the drive motor controller and the receiving module that address communication faults.
- 6 If wiring and power are good, substitute a known-good Drive Motor Control Module D or perform a module swap with a programmed unit to confirm the source.
- 7 After repair, clear codes, perform any required module configuration or relearn procedures, and verify that U059D does not reset during a thorough road test.

What invalid data really means on the CAN bus

- U059D is set for invalid data, not missing data, so the receiving module is seeing messages from Drive Motor Control Module D but rejecting their content as corrupted or out of range.
- A weak or failing 12-volt battery is a common hidden cause because voltage dips during cranking or high-load events can corrupt CAN frames without leaving a low-voltage code.
- Technicians often replace the drive motor controller when the real fault is a single chafed CAN wire or a corroded ground that only breaks down under vibration.
- Aftermarket accessories wired into the CAN bus or poorly installed dash cams and alarms can introduce interference that mimics an internal module failure.
- This code can appear alongside high-voltage insulation or interlock faults, so always check for other codes before condemning the drive motor controller.

Can I keep driving with U059D?

Do not continue driving normally because invalid data from the drive motor controller can cause an unexpected loss of propulsion or a sudden limp-home event. Move the vehicle to a safe location and have it diagnosed before driving further, especially at highway speeds.



Tools that help

- OBD-II scan tool with CAN bus capability and live data recording
- Digital multimeter with min/max and duty-cycle functions
- Oscilloscope or CAN bus analyzer
- Wiring diagram and connector pinout for the affected modules
- Terminal pick and contact cleaner for connector repair

Reading U059D

- 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.
- 9D** The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **U0100** Lost Communication With ECM/PCM A · **U0111** Lost Communication With Battery Energy Control Module 'A' · **U059C** Invalid Data Received From Drive Motor Control Module C · **U059E** Invalid Data Received From NOx Sensor A

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u059d/>

