



U044D

Invalid Data Received From Generator B Control Module

The U044D code means the engine control module (ECM) or another supervisory module received invalid or missing data over the controller area network (CAN) from the generator B control module, which is the electronic controller for the second generator on the vehicle. The computer detected a communication fault where the generator module's messages were either absent, corrupted, or outside the expected range for a set number of drive cycles.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Professional	Invalid data received from a module

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message, often with no other noticeable symptoms
- The charging system warning light may also be on if the generator B module is not communicating
- Reduced or absent charging from the second generator, leading to a battery that drains over time
- Electrical accessories may behave erratically or shut down if system voltage drops
- In some vehicles, the engine may enter a reduced power or limp mode as a protective strategy

Common causes, most likely first

- 1 Damaged or corroded wiring or connectors in the CAN bus circuit between the generator B control module and the ECM
- 2 Faulty generator B control module, often due to internal electronic failure or heat damage
- 3 Poor ground connection at the generator B module or the engine block
- 4 Open or shorted CAN bus wires caused by chafing, rodent damage, or improper previous repairs
- 5 Low battery voltage or a weak battery that causes modules to drop off the network intermittently
- 6 Software or calibration issue in the generator B control module requiring a reflash or update



How to diagnose and fix it

- 1 Perform a thorough visual inspection of the generator B module wiring and connectors for corrosion, damage, or loose pins
- 2 Check battery voltage and state of charge, and load test the battery to rule out low-voltage communication faults
- 3 Use a scan tool to retrieve all codes from all modules and check for other CAN communication codes that may point to a shared bus fault
- 4 Measure resistance and continuity on the CAN bus circuits between the generator B module and the ECM, looking for opens or shorts
- 5 Verify power and ground at the generator B module connector with a multimeter or test light
- 6 If wiring and power are good, substitute a known-good generator B control module or perform a module swap to confirm the fault
- 7 After repair, clear codes and perform a drive cycle to verify the U044D does not return and that charging system data is normal

What the generator B module really does

- The generator B control module often controls a second alternator on vehicles with high electrical demand, so a fault may not affect basic charging but will limit accessory performance.
- A common misdiagnosis is replacing the generator itself when the actual problem is a chafed CAN wire near the generator mounting bracket or a corroded ground strap.
- Low battery voltage from a failing battery can cause the generator B module to drop off the CAN bus intermittently, setting U044D without any wiring fault.
- Some vehicles require a software update to the generator B module to correct communication errors that set this code under normal operation.
- The code can be stored alongside U0100 or U0140 if the CAN bus has a broader issue, so always check for other communication codes before condemning the generator B module.

Can I keep driving with U044D?

You can usually drive the vehicle short distances to a repair shop, but avoid long trips or heavy electrical loads because the second generator may not be charging and the battery could drain. If the charging system warning light is on or the battery voltage gauge reads low, limit driving to essential trips only.

Tools that help

- OBD-II scan tool with CAN bus capability and module communication functions
- Digital multimeter with resistance and voltage measurement
- Wiring diagram for the generator B control module circuit
- Test light or power probe for checking power and ground
- Battery load tester and charger



Reading U044D

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Invalid data received from a module.
- 4D** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **U0100** Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U044C** Invalid Data Received From Hybrid/EV Battery Inductive Charge

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u044d/>

