



U040D

Invalid Data Received From Turbocharger/Supercharger Control Module A

U040D means the engine control module (ECM) or another controller on the network received data from the turbocharger/supercharger control module that it judged invalid, out of range, or inconsistent with other sensor readings. The code is a communication fault, not a direct statement that the turbocharger itself has failed, so the computer is flagging a data integrity problem rather than a mechanical breakdown.

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

- Illumination of the check engine light or service vehicle soon message, often with no other symptoms besides the warning light
- Reduced engine power or limp mode triggered by the ECM when boost data is deemed unreliable
- Poor acceleration or sluggish throttle response because the ECM may default to a fixed boost strategy
- Rough running, hesitation, or surging under load if the ECM substitutes default values for boost control
- Transmission shift quality changes on some vehicles because torque calculations rely on boost data
- In rare cases, no drivability change at all and the code is found only during a scan

Common causes, most likely first

- 1 Damaged, chafed, or corroded wiring in the controller area network (CAN) bus or dedicated data circuit between the turbocharger control module and the ECM
- 2 Loose or corroded electrical connector pins at the turbocharger control module or at the ECM harness
- 3 Low or unstable battery voltage or a weak ground connection causing the module to transmit corrupted data frames
- 4 Software or calibration mismatch in the turbocharger control module, often after a battery replacement or module reflash
- 5 Internal fault in the turbocharger/supercharger control module causing it to broadcast invalid or implausible data
- 6 A failing boost pressure sensor or actuator position sensor feeding bad data into the turbocharger control module
- 7 Aftermarket electronic accessories or poor wiring repairs introducing electromagnetic interference on the network



How to diagnose and fix it

- 1 Record all stored and pending codes with a scan tool, then clear them and test-drive to see whether U040D returns immediately or only under specific conditions
- 2 Inspect the turbocharger control module connector and the ECM connector for bent pins, corrosion, water intrusion, and loose terminals
- 3 Check battery voltage and ground connections at the battery, engine block, and turbocharger control module; repair any voltage drop or ground issue
- 4 Perform a wiggle test on the harness between the turbocharger control module and the ECM while watching live data for dropouts or invalid frames
- 5 Use a scan tool to compare turbocharger control module live data such as boost pressure, actuator position, and commanded boost against actual sensor readings for plausibility
- 6 Check for technical service bulletins or calibration updates for the turbocharger control module and ECM, and reflash if an update applies
- 7 If wiring and power are confirmed good and data remains invalid, substitute a known-good turbocharger control module or perform a module relearn and retest

What U040D really tells you about the turbo module

- U040D is a data-validity code, so the turbocharger control module may be communicating perfectly while the values it sends are implausible; a simple continuity test on the CAN bus will not catch this.
- A weak or failing battery is a common hidden cause because modules that boot with low voltage can broadcast corrupted frames that the ECM rejects as invalid.
- Technicians often replace the turbocharger control module too quickly when the real fault is a chafed harness near a hot exhaust component or a corroded ground that only fails when the engine bay is hot.
- Aftermarket piggyback tuners, boost gauges, or poor splice repairs on the data circuit can introduce interference that sets U040D without any factory component being defective.
- The code can appear after a module replacement or reflash if the new module is not properly configured or learned to the vehicle network, so a relearn procedure is part of the repair.

Can I keep driving with U040D?

The vehicle is usually safe to drive to a repair shop because the ECM defaults to a conservative boost strategy, but avoid heavy acceleration, towing, or sustained high-load driving until the fault is diagnosed. If the engine enters limp mode or runs poorly, limit driving to a short distance at low speed.



Tools that help

- OBD-II scan tool with live data and bidirectional control capability
- Digital multimeter for voltage, resistance, and continuity checks
- Wiring diagram and connector pinout for the turbocharger control module circuit
- CAN bus breakout box or oscilloscope for signal integrity testing
- Battery load tester and charging system tester
- Terminal pick and electrical contact cleaner for connector repair

Reading U040D

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.
0D	The exact fault within that area.

Often seen with

P0045 Turbo/Super Charger Boost Control Solenoid Circuit/Open · **P0046** Turbo/Super Charger Boost Control Solenoid Circuit Range/Per · **P0234** Engine Overboost Condition · **P0235** Turbocharger Boost Sensor A Circuit Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u040d/>

