



U040E

Invalid Data Received From Turbocharger/Supercharger Control Module B

U040E is a communication fault where the engine control module (ECM) or another primary controller receives invalid or corrupted data from the turbocharger/supercharger control module B over the vehicle's controller area network (CAN) bus. The computer has detected that the messages from the forced-induction controller are missing, out of range, or fail the internal checksum, so it cannot trust the boost control data.

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 malfunction indicator lamp (MIL) with no noticeable change in engine performance.
- Reduced engine power or a limp-home mode triggered by the ECM defaulting to a fixed boost pressure.
- Rough idle, hesitation, or stumble during acceleration if the boost control module is offline.
- Poor fuel economy or black smoke from the exhaust if the ECM substitutes a rich default fueling strategy.
- Intermittent warning light that comes and goes with vibration or temperature changes.
- Often no symptoms besides the warning light when the fault is purely a data integrity issue.

Common causes, most likely first

- 1 Corroded, loose, or damaged electrical connectors at the turbocharger/supercharger control module B.
- 2 Chafed or open wiring in the CAN bus or power/ground circuits feeding the boost control module.
- 3 Failed turbocharger/supercharger control module B internal circuitry or software corruption.
- 4 Low battery voltage or a weak charging system causing the module to drop offline intermittently.
- 5 Water intrusion or heat damage affecting the module or its harness in the engine bay.
- 6 A software calibration mismatch after a module replacement or reprogramming event.
- 7 CAN bus communication interference from another failing module on the same network.



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then check for related communication codes in other modules.
- 2 Inspect the turbocharger/supercharger control module B connectors for corrosion, pushed pins, and tight fit; clean and reseat as needed.
- 3 Perform a voltage drop test on the module's power and ground circuits while wiggling the harness to reveal intermittent faults.
- 4 Check the CAN bus wiring for continuity, shorts to ground or power, and proper termination resistance at the diagnostic connector.
- 5 Verify battery state of charge and charging system output; recharge or replace the battery if it fails a load test.
- 6 If wiring and power are good, substitute a known-good module of the same part number and recheck communication before condemning the original.
- 7 After repair, clear codes and perform a road test with the scan tool recording live data to confirm the boost control module reports valid data.

What most technicians miss on U040E

- A weak or failing battery is a frequent culprit because the boost control module may boot up slowly and send invalid data before the ECM is ready, setting U040E without any hard wiring fault.
- The code can be set by a software update or relearn procedure that was interrupted, so always check service bulletins for calibration updates before replacing hardware.
- U040E often appears alongside U0100 or U0401, and chasing only the boost module can miss a network-wide issue such as a failing gateway or a shorted CAN line.
- Aftermarket piggyback tuners or boost controllers that splice into the factory harness commonly corrupt the data stream and trigger this code even when the factory module is healthy.
- A module that passes a static communication test can still fail under heat or vibration, so a wiggle test and a hot-soak road test are more reliable than a key-on check alone.

Can I keep driving with U040E?

The vehicle is usually safe to drive to a workshop because the ECM defaults to a safe boost level, but avoid heavy acceleration or towing until the fault is repaired. If the engine enters limp mode or stalls, stop driving and arrange a tow.



Tools that help

- OBD-II scan tool with live data and bidirectional communication capability
- Digital multimeter with voltage drop and resistance functions
- CAN bus breakout box or oscilloscope for signal integrity checks
- Battery load tester and charging system analyzer
- Factory service information for connector pinouts and module location
- Terminal pick and contact cleaner for connector repair

Reading U040E

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.
0E	The exact fault within that area.

Often seen with

P0045 Turbo/Super Charger Boost Control Solenoid Circuit/Open · **P0234** Engine Overboost Condition · **P0299** Turbo/Supercharger Underboost · **U0100** Lost Communication With ECM/PCM A · **U0401** Invalid Data Received From ECM/PCM

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/u040e/>

