

GENERIC · NETWORK

U066C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U066C

Lost Communication With Exhaust Heat Exchanger Bypass Valve Actuator B

U066C is a generic network communication code indicating that the engine control module or another supervisory module has lost the controller area network (CAN) signal from the exhaust heat exchanger bypass valve actuator B. The computer detects this when the actuator's periodic status messages stop arriving within the expected time window, which prevents the module from confirming the bypass valve's commanded position.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) with no other noticeable driving issues
- A stored U066C code accompanied by other communication or actuator codes in the same module
- Reduced engine power or limp-home mode if the bypass valve position is critical to the emissions strategy
- Incorrect exhaust heat management, potentially causing poor heater performance or elevated emissions during warm-up
- Intermittent warning light activation, especially in wet or cold weather if the connector is compromised

Common causes, most likely first

- 1 Damaged or corroded electrical connector at the exhaust heat exchanger bypass valve actuator B
- 2 Open or shorted wiring in the CAN bus circuit between the actuator and the module
- 3 Failed exhaust heat exchanger bypass valve actuator B (internal electronics or motor fault)
- 4 Water intrusion or heat damage affecting the actuator's circuit board or connector pins
- 5 Poor ground connection for the actuator or the module that communicates with it
- 6 Software or calibration issue in the module that monitors the actuator, requiring reflash
- 7 CAN bus network fault elsewhere that disrupts communication with multiple modules, including the actuator



How to diagnose and fix it

- 1 Inspect the actuator connector and wiring for corrosion, water intrusion, or physical damage, and clean or repair as needed
- 2 Check for continuity and resistance on the CAN bus lines between the actuator and the control module, comparing to manufacturer specifications
- 3 Verify the actuator's ground circuit and power supply are intact and within specification
- 4 Perform a bidirectional actuator test with a scan tool to confirm the actuator responds to commands and reports position correctly
- 5 Substitute a known-good actuator of the same part number to see if the communication code clears
- 6 Check for technical service bulletins (TSBs) or software updates for the module that sets the code, and reflash if applicable
- 7 If wiring and actuator are good, diagnose the control module itself for internal CAN communication faults

Common traps when diagnosing U066C

- A loose or corroded connector at the actuator is the most frequent cause, yet many technicians replace the actuator before checking the pins and seals.
- The code can set intermittently due to vibration or thermal cycling, so a wiggle test of the harness while monitoring live data often reveals the fault.
- U066C may appear alongside other U-codes if the CAN bus is degraded, so always check for multiple communication codes before condemning the actuator.
- Some vehicles use the exhaust heat exchanger bypass valve for cabin heating and emissions control, so a failed actuator can cause subtle driveability or comfort issues that are overlooked.
- After repairing the fault, the code may remain stored until a complete drive cycle is performed, leading some to believe the repair was unsuccessful.

Can I keep driving with U066C?

You can generally continue driving with U066C, but avoid heavy loads or extended idling until the fault is repaired, as the bypass valve may not function correctly and could affect emissions or heater performance. If the warning light flashes or the engine enters limp mode, stop driving and seek professional diagnosis.

Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for continuity and voltage checks
- Wiring diagram and connector pinout for the specific vehicle
- Test light or logic probe for CAN bus signal verification
- Socket set and trim removal tools for accessing the actuator



Reading U066C

- U** Network: communication between the vehicle's control modules.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 6** Network communication.
- 6C** The exact fault within that area.

Often seen with

U0100 Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U066B** Lost Communication With Turbocharger/Supercharger Bypass Val · **U066D** Lost Communication With Charge Air Cooler Temperature Sensor

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u066c/>

