

GENERIC · NETWORK

U0624

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0624

Lost Communication With Coolant Pump B

U0624 is a generic network communication code indicating that a control module on the vehicle's Controller Area Network (CAN) bus has lost contact with the coolant pump B module or circuit. The computer detected that expected periodic messages from the coolant pump B controller stopped arriving within the required time window, which sets the code and often triggers a warning light.

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

Symptoms you may notice

- Illuminated check engine light or service vehicle soon message on the dashboard
- Often no symptoms besides the warning light, especially if the pump is still running on a default strategy
- Engine temperature gauge reading higher than normal or fluctuating unexpectedly
- Reduced engine power or limp mode if the powertrain control module limits operation to protect the engine
- Cooling fan running constantly or not at all due to lost coordination with the coolant pump
- Intermittent warning light that comes and goes with temperature or vibration

Common causes, most likely first

- 1 Damaged, corroded, or disconnected wiring or connector at the coolant pump B module
- 2 Failed coolant pump B control module or the pump assembly itself
- 3 Blown fuse or poor ground connection serving the coolant pump B circuit
- 4 CAN bus communication fault such as a shorted or open data line between the pump and the network
- 5 Low system voltage or a weak battery causing modules to drop offline intermittently
- 6 Water intrusion or heat damage affecting the pump connector or module electronics
- 7 Aftermarket accessories or poor previous repairs disturbing the network wiring



How to diagnose and fix it

- 1 Scan all modules for related communication and coolant pump codes, and record freeze-frame data before clearing anything
- 2 Inspect the coolant pump B electrical connector and wiring for corrosion, chafing, or loose pins
- 3 Check the fuse and ground for the coolant pump B circuit with a multimeter and verify battery voltage is stable
- 4 Measure CAN bus resistance and voltage at the pump connector to confirm the data lines are intact
- 5 Perform a bidirectional actuator test or command the coolant pump on with a scan tool to see if it responds
- 6 If communication is restored only after wiggling the harness, repair the affected section of wiring and retest
- 7 Replace the coolant pump B module or assembly only after electrical and network tests confirm it is the failed component

What the coolant pump B code really means

- A U0624 code does not automatically mean the coolant pump has failed, because a poor ground or low battery voltage can take the module offline without any mechanical fault.
Many vehicles set this code intermittently when the coolant pump connector gets wet or heat-cycled, so a clear-and-retest after drying the connector often reveals the true cause.
- Technicians sometimes replace the pump only to find the real problem is a chafed CAN wire near the engine mount or a corroded ground stud on the chassis.
- The powertrain control module may substitute a default coolant pump strategy, so the engine can seem to run normally while the code is stored and the pump is not being commanded correctly.
Aftermarket remote starters or alarm wiring tapped into the network can disturb communication and set U0624 without any fault in the coolant pump circuit itself.

Can I keep driving with U0624?

You can usually drive a short distance to a repair shop, but avoid heavy loads, long trips, or stop-and-go traffic because a non-communicating coolant pump can cause overheating. If the temperature gauge climbs above normal or a red warning appears, stop safely and shut the engine off.

Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for voltage, resistance, and CAN bus measurements
- Wiring diagram or service information for the coolant pump B circuit
- Socket and ratchet set for accessing the pump and connectors
- Contact cleaner and dielectric grease for connector repairs



Reading U0624

- 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.
- 24** The exact fault within that area.

Often seen with

P0217 Engine Over-Temperature Condition · **P2183** Engine Coolant Temperature Sensor 2 Circuit Range/Performanc · **U0100** Lost Communication With ECM/PCM A · **U0623** Lost Communication With Coolant Pump A · **U0625** Lost Communication With Fuel Rail Pressure Sensor Bank 1

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0624/>

