

GENERIC · NETWORK

U0630

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0630

Lost Communication With Engine Coolant Temperature Sensor 4

This code means the engine control module (ECM) has lost communication with the circuit for engine coolant temperature (ECT) sensor 4, which is typically a second or auxiliary coolant sensor used on some vehicles for independent monitoring or control. The ECM expects a regular signal from this sensor and sets U0630 when the signal is missing or erratic for a calibrated time, often indicating a wiring or module communication fault rather than a simple sensor failure.

SYSTEM

Network

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Network communication

Symptoms you may notice

- Illumination of the check engine light or service engine soon light, often with no other noticeable symptoms.
- Erratic or inaccurate temperature gauge readings if the sensor is used for the dashboard display.
- Cooling fan may run continuously or not at all, depending on how the ECM uses sensor 4 data.
- Poor fuel economy or driveability issues if the ECM substitutes a default temperature value.
- In rare cases, the engine may enter a limited power mode or fail to start if the sensor is critical for starting logic.

Common causes, most likely first

- 1 Damaged or corroded wiring between the ECT sensor 4 and the ECM, including open circuits or chafed harnesses.
- 2 Failed ECT sensor 4 itself, such as an open internal element or shorted winding.
- 3 Loose, dirty, or disconnected electrical connector at the sensor or ECM.
- 4 Water or oil intrusion into the sensor connector causing signal interference.
- 5 Faulty ECM or a communication bus issue affecting the sensor's signal path.
- 6 Aftermarket accessories or poor previous repairs that disturbed the sensor circuit.



How to diagnose and fix it

- 1 Inspect the ECT sensor 4 connector and wiring for corrosion, looseness, or physical damage, and clean or repair as needed.
- 2 Measure the sensor's resistance with a multimeter and compare it to the manufacturer's temperature-resistance chart to verify sensor operation.
- 3 Check for continuity and shorts in the wiring between the sensor and ECM, repairing any open or shorted circuits.
- 4 Clear the code and test-drive the vehicle to see if the code returns, monitoring live data for the sensor 4 signal.
- 5 If the sensor is faulty, replace it with a quality part and clear the code.
- 6 If wiring and sensor are good, diagnose the ECM and communication bus for faults, which may require professional scan tool capabilities.

Before you replace the coolant sensor

- A common mistake is replacing the ECT sensor 4 when the real problem is a chafed wire near the exhaust manifold or a corroded connector pin.
- This code can be set by a weak battery or charging system issue that causes the ECM to drop communication intermittently, so check battery health first.
- Some vehicles use ECT sensor 4 for cylinder head temperature monitoring, and a failure may not affect the temperature gauge, leading owners to ignore it.
- Aftermarket remote starters or alarm systems tapped into the coolant sensor wiring can introduce resistance and trigger this code.
- The ECM may not set this code immediately; it often requires multiple drive cycles with the fault present, so intermittent wiring faults can be elusive.

Can I keep driving with U0630?

You can usually continue driving with this code if the engine temperature gauge reads normally and there are no overheating symptoms, but avoid long trips or heavy loads until diagnosed. If the temperature gauge is erratic or the engine overheats, stop driving and seek professional service to prevent engine damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and wire probe kit
- Contact cleaner and dielectric grease



Reading U0630

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

Often seen with

P0115 Engine Coolant Temperature Circuit Malfunction · **P0116** Engine Coolant Temperature Circuit Range/Performance · **P0117** Engine Coolant Temperature Circuit Low Input · **P0118** Engine Coolant Temperature Circuit High Input · **U0100** Lost Communication With ECM/PCM A

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/u0630/>

