



U0100

Lost Communication With ECM/PCM A

U0100 means the modules that need to talk to the engine control module (ECM) or powertrain control module (PCM) have stopped receiving its messages over the controller area network (CAN) bus. The detecting module sets this code when it times out waiting for the ECM/PCM heartbeat, so the fault is a communication loss rather than a confirmed internal engine computer failure.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	High	Professional	Lost communication with a control module

Symptoms you may notice

- The check engine light, and often the ABS, traction control, and airbag lights, illuminate together because multiple modules have lost the ECM/PCM signal.
- The engine may crank but not start, or it may start and then stall immediately because the PCM cannot command fuel and spark.
- The transmission may default to a limp mode with harsh or delayed shifts, or the speedometer and tachometer may sit dead.
- Dashboard warning chimes and messages such as 'Service Stabilitrak' or 'Transmission Fault' appear even though those systems are not the root cause.
- Often no symptoms besides the warning light, especially when the communication dropout is intermittent and the vehicle otherwise runs normally.
- Non-critical accessories like the radio, climate control, or power windows may behave erratically if they share the same CAN segment.



Common causes, most likely first

- 1 A weak or dead 12-volt battery, corroded terminals, or a poor ground connection that drops module supply voltage below the threshold needed for reliable CAN communication.
- 2 Wiring damage in the CAN bus, including chafed, pinched, or broken twisted-pair wires between the ECM/PCM and the gateway or other modules.
- 3 Corroded, loose, or backed-out pins in the ECM/PCM connectors or in an intermediate harness connector.
- 4 A failed or intermittent ECM/PCM power relay or blown fuse that feeds the engine computer, leaving it unpowered while other modules stay awake.
- 5 An internal fault in the ECM/PCM itself, which is less common but does happen and is often the first part replaced by mistake.
- 6 A shorted or failed module on the same CAN segment that pulls the bus voltage down and blocks all communication, not just the ECM/PCM.
- 7 Aftermarket accessories or poor previous repairs that tapped into CAN wiring and introduced noise or a short.

How to diagnose and fix it

- 1 Perform a battery and charging system test first, including a load test and a check for voltage drop at the ECM/PCM power and ground pins.
- 2 Inspect the ECM/PCM connectors and the harness for corrosion, loose pins, chafing, and rodent damage, then clear the code and see if it returns.
- 3 Use a scan tool to check whether the ECM/PCM responds at all and to read communication status on each module; a no-response condition points to power, ground, or bus wiring.
- 4 Measure CAN bus resistance and voltage at the diagnostic link connector (DLC) with the battery disconnected and then with the key on to identify a shorted segment or missing termination.
- 5 Disconnect suspect modules one at a time from the CAN bus to see if communication to the ECM/PCM returns, which isolates a module that is dragging the bus down.
- 6 If power, ground, and bus wiring all test good and the ECM/PCM still does not communicate, substitute a known-good ECM/PCM or perform a bench check before condemning the original unit.
- 7 After any repair, clear all codes, perform a road test, and verify that the ECM/PCM communication is stable and that no related codes return.



What U0100 does not always mean

- U0100 is frequently misread as a dead ECM/PCM, but a weak battery or a corroded ground strap is a far more common cause and costs far less to fix.
- A single failed module on the CAN bus can take down communication for every other module, so the code may point at the ECM/PCM while the real culprit is an ABS or body control module.
- Intermittent U0100 codes that appear only in cold weather or after a bump often trace to a harness connector with a backed-out pin rather than a failed computer.
- Some vehicles set U0100 during a low-voltage event such as jump-starting or a battery replacement, and the code clears permanently once stable voltage is restored.
- Aftermarket remote starters, alarms, and stereo installs that splice into CAN wiring are a common source of communication faults that look like an ECM/PCM failure.

Can I keep driving with U0100?

Do not drive the vehicle if it cranks but will not start or stalls, because the ECM/PCM is not controlling the engine and you risk a breakdown in traffic. If the vehicle runs normally and only the warning light is on, limit driving to a short trip to a repair shop and avoid highways until the communication fault is diagnosed.

Tools that help

- OBD-II scan tool with bidirectional communication and CAN bus monitoring capability
- Digital multimeter with min/max recording for voltage and resistance checks
- Battery load tester and charging system tester
- Wiring diagram and connector pinout for the specific vehicle
- CAN bus breakout box or back-probe kit for the diagnostic link connector
- Test light or logic probe for quick power and ground verification

Reading U0100

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
1	Lost communication with a control module.
00	The exact fault within that area.

Often seen with

P0600 Serial Communication Link Malfunction · **U0101** Lost Communication with TCM · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control · **U0140** Lost Communication With Instrument Panel Cluster · **U0155** Lost Communication With Body Control Module



See it working

Watch the animated explainer [Readiness Monitors and the OBD-II Drive Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0100/>

