

GENERIC · NETWORK

U0086

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0086

Vehicle Communication Bus F - Low

U0086 indicates that the vehicle's communication network has detected a low-voltage condition on the data bus designated as 'F' by the manufacturer. The computers that share this bus cannot reliably exchange messages, so modules may log communication faults or stop reporting data until the bus voltage returns to its normal range.

SYSTEM

Network

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Network wiring and bus faults

Symptoms you may notice

- Multiple warning lights on the dashboard, often including the check engine light, ABS, and airbag lights
- One or more electronic modules stop responding to a scan tool or appear offline
- Intermittent operation of features that depend on shared data, such as the radio, climate control, or instrument cluster
- The engine may start and run normally, or it may crank without starting if the affected bus carries critical powertrain data
- Often no symptoms besides the warning light when the low-voltage event was brief and has since cleared

Common causes, most likely first

- 1 A poor connection or corrosion at a module connector on bus F, causing the bus voltage to sag under load
- 2 A chafed or shorted bus wire touching ground or another circuit, pulling the bus voltage low
- 3 A failing module on bus F that loads the bus and drags its voltage below the normal threshold
- 4 Low system voltage from a weak battery or failing alternator, which affects all bus voltages including bus F
- 5 Water intrusion into a connector or module on bus F, creating a partial short or high resistance
- 6 A damaged or improperly installed aftermarket accessory wired into the bus F circuit



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes from every module to see which systems share bus F and which are offline
- 2 Measure battery voltage at rest and while cranking, and test the charging system, because low system voltage can set this code without any bus fault
- 3 Locate the bus F wiring and inspect every connector on that bus for corrosion, loose terminals, or water intrusion, cleaning and reseating as needed
- 4 With the bus powered down, measure resistance from the bus F data line to ground and to battery voltage to check for a short
- 5 Disconnect modules one at a time from bus F and recheck bus voltage and communication to isolate a module that is loading the bus
- 6 Repair or replace the faulty section of harness or the offending module, then clear codes and verify that all modules on bus F communicate reliably

What a low bus voltage really means

- A low-voltage code on a data bus often originates from a weak battery or a failing ground connection rather than from the bus wiring itself, so always verify system voltage before chasing the network.
- Bus F is a manufacturer-assigned label, so the actual wire color, pin location, and module list vary by make and model, and a wiring diagram for the specific vehicle is essential.
- A module that has failed internally can hold the bus voltage low even when its connector looks clean, so disconnecting modules one at a time is a reliable isolation method.
- Aftermarket alarms, remote starters, and phone chargers tapped into the wrong wire can introduce a partial short on bus F that only appears when the accessory is active.
- This code does not always mean the bus is dead; a brief low-voltage event during cranking can set it, and the code may never return after clearing if the battery and connections are healthy.

Can I keep driving with U0086?

If the vehicle starts, runs, and all major systems appear normal, you can drive it to a repair shop, but avoid long trips and do not tow a trailer until the fault is repaired. If the engine cranks without starting or multiple safety systems are disabled, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with module-level communication and live data capability
- Digital multimeter with min/max recording
- Battery load tester and charging system tester
- Wiring diagram for the specific vehicle
- Terminal pick and contact cleaner
- Oscilloscope for viewing bus voltage waveforms



Reading U0086

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

Often seen with

U0085 Vehicle Communication Bus F - Open · **U0087** Vehicle Communication Bus F - High · **U0100** Lost Communication With ECM/PCM A · **U0140** Lost Communication With Instrument Panel Cluster · **U0155** Lost Communication With Body Control Module

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0086/>

