

FORD · POWERTRAIN

P1634

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1634 · Ford

Data Output Link Circuit Failure

P1634 on Ford vehicles indicates a failure in the data output link circuit, which is the communication path used by the powertrain control module (PCM) to send data to other modules or scan tools. The PCM detects an abnormal condition, such as a short to ground or voltage, or an open circuit, on this link and stores the code.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp).
- Often no symptoms besides the warning light.
- Scan tool may be unable to communicate with certain modules.
- Intermittent or complete loss of dashboard warning indicators.
- Possible drivability issues if the link affects other systems.
- Other modules may set communication codes (U-codes).

Common causes, most likely first

- 1 Damaged or chafed wiring in the data output link circuit.
- 2 Corroded or loose connectors at the PCM or other modules.
- 3 Faulty PCM (rare but possible).
- 4 Short to ground or power in the data link wiring.
- 5 Open circuit in the data link wiring.
- 6 Failed module on the network causing interference.

How to diagnose and fix it

- 1 Use a scan tool to verify the code and check for other communication codes.
- 2 Inspect wiring and connectors for damage, corrosion, or loose pins.
- 3 Perform continuity and resistance tests on the data link circuit.
- 4 Check for shorts to ground or voltage on the data link wiring.
- 5 Disconnect modules one by one to isolate a faulty module.
- 6 Repair or replace damaged wiring or connectors as needed.
- 7 Clear codes and verify the repair with a test drive.



Data Link Faults Often Misdiagnosed

- A faulty module on the network can pull down the data link, causing P1634 without any wiring issue.
- The code can be set by a scan tool or aftermarket device improperly connected to the data link.
- Corrosion inside a connector that looks fine externally is a common cause, especially in older Ford vehicles.
- P1634 may be accompanied by U-codes that point to the specific module or circuit at fault.
- Always check for aftermarket accessories wired into the data link before replacing the PCM.

Can I keep driving with P1634?

The vehicle may be drivable, but communication issues can affect other systems and cause unpredictable behavior. Avoid long trips and have the fault diagnosed promptly to prevent further complications.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter
- Wiring diagram for the specific Ford model
- Terminal test kit
- Soldering iron and heat shrink tubing

Reading P1634

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Ford): its meaning depends on the make.
6	Computer and output circuits.
34	The exact fault within that area.

Often seen with

P1633 Accelerator Pedal Position Sensor 2 Signal Too Low · **P1635** Data Bus Powertrain Missing Message From Air Condition Contr · **P1633** ECM · **P1633** Battery Overcharge Fault · **P1633** Battery Overcharge · **P1633** Ignition Power Circuit Low Voltage · **P1635** 5V Reference Voltage to Sensors Low · **P1635** Tire Axle Ratio Out of Acceptable Range · **P1633** Throttle Valve Adaptation Limp Home Position · **P1635** Throttle Valve Adaptation Lower Mechanical Stop Not Adapted · **U0001** Loss of Bus Communication · **U0100** Lost Communication With ECM/PCM A · **U0155** Lost Communication With Body Control Module



See it working

Watch the animated explainer [How a Refrigerator Works: The Cooling Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1634/>

