



P1712 · Ford

Trans Torque Reduction Request Signal Malfunction

P1712 on Ford vehicles means the powertrain control module (PCM) commanded a torque reduction from the transmission but did not receive the expected confirmation signal back from the transmission control module (TCM) or the controller area network (CAN) path between them. The PCM monitors the torque reduction request circuit and sets this code when the electrical signal is missing, out of range, or implausible during a commanded event.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Professional	Transmission

Symptoms you may notice

- Illumination of the check engine light or powertrain malfunction indicator
- Harsh or delayed transmission shifts, especially during high-load upshifts
- A noticeable hesitation or stumble when the PCM requests torque reduction during a shift
- Transmission may default to a limp-home mode with reduced power
- Often no symptoms besides the warning light if the fault is intermittent

Common causes, most likely first

- 1 Damaged or corroded wiring harness between the PCM and transmission, particularly at connectors
- 2 Faulty transmission control module (TCM) or internal transmission solenoid pack
- 3 Poor electrical ground connection at the transmission or chassis
- 4 Failed torque reduction request signal circuit inside the transmission (open or short)
- 5 PCM software calibration issue or internal PCM driver fault
- 6 Aftermarket electronic tuner or piggyback module interfering with CAN communication

How to diagnose and fix it

- 1 Inspect the transmission wiring harness for chafing, corrosion, or loose connectors, especially near the bellhousing and PCM
- 2 Check and clean all ground connections related to the PCM and transmission
- 3 Use a scan tool to monitor live data for torque reduction request and confirmation signals during a test drive
- 4 Perform a wiggle test on the harness while monitoring the signal to identify intermittent opens
- 5 Check for technical service bulletins (TSBs) or PCM calibration updates specific to this code
- 6 If wiring and grounds are good, test the transmission solenoid pack and TCM with a multimeter or oscilloscope
- 7 Replace the faulty TCM, solenoid pack, or PCM only after confirming the signal circuit failure



Don't overlook the CAN bus and grounds

- A common misdiagnosis is replacing the transmission when the real fault is a chafed wire in the harness near the exhaust manifold or a corroded ground strap.
- Aftermarket tuners or piggyback modules that tap into the CAN bus can corrupt the torque reduction request signal and set P1712 without any hard wiring fault.
- The code can be set by a weak battery or charging system issue that causes voltage spikes, so always check battery health and alternator output first.
- On some Ford models, a faulty brake pedal position sensor or cruise control switch can interfere with torque reduction requests, as the PCM uses those inputs for shift strategy.
- P1712 is often stored alongside communication codes like U0100 or U0155, which points to a network issue rather than a transmission internal failure.

Can I keep driving with P1712?

You can usually drive the vehicle to a repair shop, but avoid heavy throttle and towing because the transmission may not manage torque properly during shifts. If the transmission enters limp mode or shifts harshly, limit driving to low speeds and seek service promptly.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Oscilloscope for signal analysis
- Wiring diagram for the specific Ford model
- Breakout box for PCM/transmission connector testing

Reading P1712

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Ford): its meaning depends on the make.
7	Transmission.
12	The exact fault within that area.

Often seen with

P1711 Wheel Speed Signal 1 Range Performance · **P1711** Engine Torque Control Signal 1 Circuit Malfunction · **P1711** Transmission Fluid Temperature Sensor Circuit Out Of Self Test · **P1713** Transmission Fluid Temperature Sensor Circuit · **P1711** Transmission Fluid Temperature Sensor Out of Self-Test Range · **P1713** TFT Sensor In Range Failure Low Value · **P0700** Transmission Control System Malfunction · **U0100** Lost Communication With ECM/PCM A · **U0155** Lost Communication With Body Control Module



See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1712/>

