

FORD · POWERTRAIN

P1723

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1723 · Ford

Gear 3 Incorrect Ratio

P1723 on Ford vehicles means the transmission control module (TCM) has calculated that the actual gear ratio in third gear does not match the ratio it expects for that gear. The TCM monitors input shaft speed versus output shaft speed and flags the code when the calculated ratio falls outside the programmed tolerance for third gear.

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

Symptoms you may notice

- Illuminated check engine light or transmission warning light, often with no other symptoms
- Harsh or delayed shifts, especially when the transmission tries to engage third gear
- Transmission may slip or flare during the 2-3 shift or while cruising in third gear
- The TCM may command a limp-home mode, holding the transmission in a single gear
- Poor fuel economy or unusual engine RPM at highway speeds if third gear is not engaging properly
- In some cases, no drivability symptoms besides the warning light

Common causes, most likely first

- 1 Low or degraded automatic transmission fluid (ATF) level or condition
- 2 Faulty or contaminated transmission fluid pressure sensor or solenoid pack
- 3 Sticking or worn third gear shift solenoid or valve body components
- 4 Internal transmission wear, such as a slipping third gear clutch pack or band
- 5 Damaged or corroded wiring or connectors between the TCM and transmission sensors/solenoids
- 6 A faulty transmission range sensor or output shaft speed sensor providing incorrect signals
- 7 TCM software calibration issues or a faulty TCM (less common)

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if degraded
- 2 Perform a visual inspection of transmission wiring and connectors for damage or corrosion
- 3 Use a scan tool to read live data for input and output shaft speeds and compare calculated ratio in third gear
- 4 Test the third gear shift solenoid and pressure control solenoid for resistance and function
- 5 Inspect the valve body for sticking valves or debris, and clean or replace as needed
- 6 Perform a transmission pressure test to check for internal leaks or weak pump pressure
- 7 If internal wear is confirmed, remove and rebuild or replace the transmission



What Ford technicians check before replacing a transmission

- A low fluid level or a clogged transmission filter can cause ratio errors without any internal damage, so always verify fluid condition first.
- The code can be set by a faulty output shaft speed sensor even when the transmission is mechanically sound, so live data comparison is critical.
- On some Ford models, a software update for the TCM can resolve false ratio errors, so check for technical service bulletins before major repairs.
- Wiring harness chafing near the transmission connector is a common hidden cause that mimics internal transmission failure.
- A sticking third gear solenoid may only act up when the transmission is hot, so road test with a scan tool recording data to catch intermittent faults.

Can I keep driving with P1723?

You can drive the vehicle cautiously to a repair shop, but avoid heavy acceleration or towing, and do not continue driving if the transmission slips severely or enters limp mode, as this can cause further internal damage.

Tools that help

- OBD-II scan tool with live data and transmission capabilities
- Digital multimeter for testing solenoids and wiring
- Transmission fluid level dipstick or fluid inspection kit
- Transmission pressure gauge set
- Factory service information for wiring diagrams and specifications

Reading P1723

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

Often seen with

P0715 Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **P0730** Incorrect Gear Ratio · **P0733** Gear 3 Incorrect Ratio · **P0740** Torque Converter Clutch Circuit Malfunction



See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1723/>

