

FORD · POWERTRAIN

P1784

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1784 · Ford

Transmission Mechanical Failure First And Reverse

P1784 on Ford vehicles indicates that the transmission control module (TCM) has detected a mechanical failure affecting first gear and reverse operation, typically through abnormal slip or ratio errors. The TCM compares input and output shaft speeds and flags this code when the expected gear ratio cannot be maintained in first or reverse.

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

Symptoms you may notice

- Harsh or delayed engagement when shifting into drive or reverse
- Transmission may slip or shudder in first gear and reverse
- Failure to move in first or reverse despite engine revving
- Transmission may default to a limp mode with only one gear available
- Illuminated check engine light or transmission warning light
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- Low or contaminated transmission fluid causing poor hydraulic pressure
- Worn or damaged first/reverse clutch packs or bands
- Sticking or faulty shift solenoid or valve body issues
- Damaged transmission internal hard parts such as planetary gears or bearings
- Faulty transmission range sensor or wiring to the TCM
- TCM software calibration issue or internal TCM fault

How to diagnose and fix it

- Check transmission fluid level and condition; top off or replace if burnt or contaminated
- Perform a visual inspection of wiring and connectors at the transmission and TCM
- Use a scan tool to read live data and compare input/output shaft speeds during first and reverse operation
- Test shift solenoids and valve body operation according to Ford service procedures
- Inspect transmission range sensor alignment and signal
- If internal mechanical damage is suspected, remove transmission for bench inspection and repair
- After repair, clear codes and perform a relearn or adaptive drive cycle



What P1784 really tells you about first and reverse

- This code often sets when the transmission cannot achieve the correct gear ratio in first or reverse, but it can also be triggered by a faulty range sensor misreporting the selected gear.
- A low fluid level or a clogged filter can cause pressure loss that mimics a mechanical failure, so always verify fluid condition before condemning the transmission.
- Intermittent P1784 may be caused by a chafed wire harness near the transmission, especially on older Ford models with brittle insulation.
- Some aftermarket tuners or incorrect TCM calibrations can set false P1784 codes, so ensure the vehicle has the latest factory software.
- The code does not always mean the transmission must be replaced; valve body and solenoid issues are common culprits that are far cheaper to fix.

Can I keep driving with P1784?

Driving with P1784 is not recommended because first and reverse may fail unexpectedly, leading to loss of mobility or unsafe situations. If you must move the vehicle, limit driving to a short distance at low speed and avoid situations requiring reverse gear.

Tools that help

- OBD-II scan tool with live data capability
- Transmission fluid level dipstick or fluid inspection kit
- Digital multimeter for electrical testing
- Factory service information for solenoid and valve body testing
- Transmission jack and stands for removal if needed

Reading P1784

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

Often seen with

P1780 Engine Intervention Readable · **P1780** Park Neutral Position Switch Malfunction Only For A/T · **P1780** Transmission Control Switch Circuit Overdrive Off Switch Not · **P1780** Modulation Pressure Switchover Valve ATCC Y34 Or Upshift Del · **P1780** Transmission Control Switch Circuit, Overdrive Off Switch No · **P1780** Park/Neutral Position Switch Circuit · **P1780** Transmission Control Switch Circuit is Out of Self-Test Rang · **P1780** CAN Torque Reduction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0731** Gear 1 Incorrect Ratio · **P0732** Gear 2 Incorrect Ratio · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off

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-p1784/>

