

FORD · POWERTRAIN

P1748

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1748 · Ford

EPC Malfunction

P1748 on Ford vehicles indicates that the powertrain control module (PCM) has detected a malfunction in the electronic pressure control (EPC) circuit, which manages transmission line pressure. The PCM monitors the EPC solenoid's electrical circuit and hydraulic response, and it sets this code when the commanded pressure does not match the actual pressure or when the circuit is out of range.

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

Symptoms you may notice

- Illumination of the transmission control indicator lamp (TCIL) or check engine light
- Harsh or delayed transmission shifts, especially when cold
- Transmission slipping or flaring during gear changes
- Erratic shift points or failure to shift into certain gears
- Limp-home mode with reduced engine power and fixed gear
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty electronic pressure control (EPC) solenoid
- 2 Damaged or corroded wiring harness or connector at the transmission
- 3 Sticking or contaminated transmission valve body
- 4 Low or degraded transmission fluid
- 5 Failed transmission fluid pressure sensor (TFPS) or related sensor
- 6 Internal transmission mechanical wear affecting line pressure
- 7 PCM software or internal fault (rare)

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace if contaminated
- 2 Inspect the EPC solenoid connector and wiring for corrosion, chafing, or loose pins
- 3 Measure the resistance of the EPC solenoid and compare to Ford specifications
- 4 Perform a line pressure test to verify actual hydraulic pressure against commanded values
- 5 Use a scan tool to command the EPC solenoid and observe pressure changes
- 6 Remove the transmission pan and inspect the valve body and solenoid for debris or sticking
- 7 Replace the EPC solenoid or valve body as needed, then clear codes and verify repair



EPC circuit faults often misdiagnosed

- A sticking valve body spool can mimic a failed EPC solenoid, so always verify hydraulic pressure before replacing parts.
- Corroded pins in the transmission connector are a common cause on high-mileage Ford vehicles, often overlooked during diagnosis.
- The EPC solenoid is pulse-width modulated; a failed solenoid may still test good with a simple resistance check, so dynamic testing is essential.
- Low fluid level from a slow leak can set P1748 without any visible leak on the ground, especially on models with a sealed transmission.
- After repairs, the PCM may require a relearn procedure or adaptive shift strategy reset to prevent repeat codes.

Can I keep driving with P1748?

Driving with P1748 can lead to increased transmission wear and potential damage if the EPC system is not functioning correctly. Avoid heavy acceleration or towing, and have the vehicle diagnosed promptly; if the transmission enters limp mode, limit driving to a safe location.

Tools that help

- OBD-II scan tool with transmission diagnostics capability
- Digital multimeter
- Transmission pressure gauge
- Ford-specific diagnostic software (e.g., IDS or Forscan)
- Socket set and torque wrench
- Fluid pump and drain pan

Reading P1748

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



Often seen with

P1746 Transmission Control Unit Relay Malfunction · **P1747** Transmission Control Unit Relay Open Short To Ground · **P1749** Transmission Control Unit Incorrect Coding · **P1746** Electronic Pressure Control Solenoid Circuit Open · **P1747** Electronic Pressure Control Solenoid Circuit · **P1749** Electronic Pressure Control Solenoid Circuit Low · **P1746** Pressure Regulator 2 · **P1747** Pressure Regulator 3 · **P1746** Electronic Pressure Control Solenoid A Open Circuit · **P1747** Electronic Pressure Control Solenoid A Short Circuit · **P1749** Electronic Pressure Control Solenoid Failed Low · **P1746** Transmission Control Module Output Stage · **P1747** CAN Bus Monitoring · **P1749** Secondary Pressure Solenoid Communication Error · **P0730** Incorrect Gear Ratio · **P0741** Torque Converter Clutch Circuit Performance or Stuck Off

See it working

Watch the animated explainer [Four-Stroke Engine Notebook: The Otto Cycle Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1748/>

