

GENERIC · POWERTRAIN

P08BF

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08BF

Pressure Control Solenoid L Control Circuit/Open

P08BF indicates that the transmission control module (TCM) has detected an open circuit or excessive resistance in the control circuit for pressure control solenoid L, which is one of several shift and line pressure solenoids inside the transmission. The TCM commands a current to the solenoid and monitors the resulting voltage or current feedback; when the expected electrical response is missing, it sets this code and typically commands a fail-safe mode.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed shifts, especially when the transmission is cold or under light throttle
- The transmission may default to a fixed gear or fail-safe mode, limiting vehicle speed
- Slipping or flaring during gear changes, particularly on the affected clutch or band
- Rough engagement when shifting from park or neutral into drive or reverse
- In some cases, the vehicle may enter limp mode and refuse to shift out of second or third gear

Common causes, most likely first

- 1 Open or damaged wire in the solenoid control circuit, often due to chafing, corrosion, or a broken connector pin
- 2 Faulty pressure control solenoid L itself, with an open internal coil or seized armature
- 3 Corroded or loose electrical connector at the transmission pass-through or solenoid body
- 4 Transmission fluid contamination or low fluid level causing solenoid overheating and winding failure
- 5 Internal transmission damage, such as a cracked solenoid body or worn valve body bore, that interrupts the circuit
- 6 A failed transmission control module (TCM) driver circuit, though this is less common than wiring or solenoid faults



How to diagnose and fix it

- 1 Verify battery voltage and ground connections, then scan all modules for related transmission codes before focusing on P08BF alone
- 2 Inspect the solenoid L circuit wiring and connectors for chafing, corrosion, or pushed-out pins, and repair as needed
- 3 Measure the resistance of solenoid L at the transmission connector and compare it to the manufacturer's specification
- 4 Check transmission fluid level and condition; service the fluid if it is contaminated or low, as this can cause solenoid faults
- 5 If resistance is out of specification, remove the transmission pan and replace pressure control solenoid L, following the proper torque sequence
- 6 After repair, clear codes and perform a relearn or adaptive drive cycle as required by the manufacturer
- 7 If the code persists after solenoid and wiring repair, test the TCM driver circuit or consult a transmission specialist for internal inspection

What P08BF really tells you about solenoid L

- P08BF is often set by a simple wiring issue rather than a failed solenoid, so always inspect the harness and connectors before condemning the solenoid itself.
- A low or contaminated transmission fluid level can cause solenoid L to overheat and set an open-circuit code, so fluid condition is a critical first check.
- Some vehicles use solenoid L for specific shift functions only, so the code may appear with no drivability symptoms until the vehicle reaches operating temperature or a particular gear.
- The TCM may set P08BF intermittently if the solenoid coil is failing only when hot, so a resistance check on a cold transmission can miss the fault.
- Replacing a solenoid without addressing a corroded connector or damaged wire will lead to a repeat code, so always perform a voltage drop test on the circuit.

Can I keep driving with P08BF?

You can usually drive the vehicle to a repair shop if the transmission has not entered limp mode, but avoid heavy acceleration, towing, or long trips because the transmission may shift harshly or slip. If the vehicle is stuck in a single gear or the warning light flashes, stop driving and have it towed to prevent further transmission damage.



Tools that help

- OBD-II scan tool with transmission module capability
- Digital multimeter for resistance and voltage checks
- Wire repair kit with crimpers and heat shrink
- Transmission fluid level dipstick or scan tool for fluid temperature
- Factory service information for solenoid resistance specifications and torque values

Reading P08BF

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
8	Transmission.
BF	The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P07BF** Input/Turbine Shaft Speed Sensor A Circuit Low · **P08B9** Clutch Pedal Position Sensor A/B Correlation · **P08BE** Pressure Control Solenoid L Intermittent · **P08C0** Pressure Control Solenoid L Control Circuit Range/Performance

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p08bf/>

