

GENERIC · POWERTRAIN

P08DF

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08DF

Shift Solenoid L Performance/Stuck Off

P08DF indicates that the transmission control module (TCM) has detected a performance problem with shift solenoid L, specifically that the solenoid is stuck in the off position or not responding as commanded. The TCM monitors the solenoid's electrical circuit and the resulting hydraulic pressure, and it sets this code when the expected gear change does not occur within a calibrated time window.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Transmission

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates on the dashboard.
- The transmission may enter limp mode, defaulting to a single gear or a limited set of gears.
- Harsh or delayed shifts, or a refusal to shift into certain gears.
- Slipping sensation during acceleration or when changing gears.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Faulty shift solenoid L itself, such as a stuck plunger or burned coil.
- Wiring damage (open, short, or chafed insulation) between the TCM and the solenoid.
- Corroded or loose electrical connector at the solenoid or TCM.
- Low or contaminated transmission fluid causing hydraulic pressure issues.
- Valve body wear or a stuck valve in the hydraulic circuit controlled by solenoid L.
- TCM software glitch or internal fault (less common).



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data to understand when the fault occurred.
- 2 Check transmission fluid level and condition; top off or replace fluid if contaminated.
- 3 Inspect the solenoid L electrical connector and wiring for damage, corrosion, or loose pins.
- 4 Measure the resistance of solenoid L with a multimeter and compare to the manufacturer's specification.
- 5 Perform a voltage drop test on the solenoid L circuit while commanding the solenoid on and off with a scan tool.
- 6 If electrical checks pass, remove the valve body and inspect solenoid L and its hydraulic circuit for sticking or debris.
- 7 Replace the faulty solenoid or repair the wiring as needed, then clear codes and verify proper operation with a road test.

What the code does not always mean

- A P08DF code does not automatically condemn the solenoid; wiring harness chafing near hot exhaust components or transmission mounts is a frequent hidden cause.
- Contaminated transmission fluid from neglected maintenance can cause solenoid L to stick intermittently, setting the code without a hard failure.
- Some vehicles use solenoid L for multiple functions, so a fault may only appear under specific driving conditions such as highway cruising or cold starts.
- A stuck-off solenoid can sometimes be freed by cleaning the valve body, but replacement is usually more reliable if the coil resistance is out of spec.
- Always check for technical service bulletins (TSBs) for the specific vehicle, as some TCM calibrations address false P08DF setting.

Can I keep driving with P08DF?

It is generally safe to drive with P08DF if the transmission still shifts reasonably, but avoid heavy acceleration or towing until diagnosed. If the transmission enters limp mode or slips severely, stop driving to prevent internal damage.

Tools that help

- OBD-II scan tool with bidirectional control and transmission data
- Digital multimeter
- Transmission fluid level gauge and pump
- Wire repair kit (splices, heat shrink, electrical tape)
- Factory service information for wiring diagrams and solenoid specifications



Reading P08DF

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

Often seen with

P0700 Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **P08DE** Shift Solenoid L · **P08E0** Shift Solenoid L Stuck On

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/p08df/>

