

GENERIC · POWERTRAIN

P08DE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08DE

Shift Solenoid L

P08DE indicates that the transmission control module has detected an electrical fault in the circuit for shift solenoid L, which is one of the solenoids that controls hydraulic pressure for gear shifting. The computer monitors the solenoid's current draw and voltage and sets this code when the signal falls outside the expected range, often indicating an open circuit, short to ground, or short to power.

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

Symptoms you may notice

- Check engine light or transmission warning light illuminated
- Harsh or delayed gear shifts, sometimes with a noticeable clunk
- Transmission stuck in a single gear or fails to shift into overdrive
- Reduced fuel economy due to improper shift points
- Transmission may enter limp mode with limited gear selection
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- Faulty shift solenoid L, such as a burned coil or stuck plunger
- Damaged or corroded wiring harness or connector at the solenoid or transmission case
- Open or shorted circuit in the wire between the TCM and solenoid L
- Transmission fluid contamination or low fluid level causing solenoid malfunction
- Internal transmission mechanical issue, such as a stuck valve body or worn seals
- Failed transmission control module (TCM) or poor ground connection
- Aftermarket or incorrect solenoid replacement with incompatible specifications



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code and check for related transmission codes
- 2 Inspect the transmission fluid level and condition, looking for contamination or burnt smell
- 3 Visually inspect the solenoid L wiring harness and connector for damage, corrosion, or loose pins
- 4 Measure resistance of solenoid L at the connector and compare to manufacturer specification
- 5 Check for voltage and ground signals at the solenoid connector with a multimeter while cycling the ignition
- 6 If electrical checks pass, remove the transmission pan and test solenoid L directly for proper resistance and operation
- 7 Replace solenoid L if faulty, clear codes, and perform a relearn or adaptation drive cycle

What P08DE often hides

- A loose or corroded connector at the transmission case is a frequent cause that is often overlooked when technicians jump straight to solenoid replacement.
- The code can be set by a momentary glitch from low battery voltage or a poor ground, so always check the charging system and grounds before condemning the solenoid.
- Shift solenoid L may share a power or ground circuit with other solenoids, so a fault in a common wire can trigger multiple solenoid codes simultaneously.
- After replacing the solenoid, the TCM may need a relearn procedure; skipping it can cause harsh shifts that mimic a faulty solenoid.
- In some transmissions, solenoid L is part of the valve body assembly and cannot be replaced separately, requiring a more involved repair.

Can I keep driving with P08DE?

You can usually drive the vehicle to a repair shop if the transmission still shifts, but avoid heavy acceleration or towing because limp mode may engage suddenly. If the transmission slips severely or refuses to engage a gear, stop driving and arrange a tow to prevent further damage.

Tools that help

- OBD-II scan tool with transmission module capability
- Digital multimeter
- Transmission fluid level gauge
- Socket and wrench set
- Wire terminal pick and connector release tools
- Manufacturer service information for solenoid resistance specifications



Reading P08DE

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

Often seen with

P0700 Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **P0740** Torque Converter Clutch Circuit Malfunction · **P08DD** Shift Solenoid K Control Circuit/Open · **P08DF** Shift Solenoid L Performance/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/p08de/>

