

GENERIC · POWERTRAIN

P08D8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08D8

Shift Solenoid K Electrical

P08D8 indicates that the transmission control module (TCM) has detected an electrical fault in the circuit for shift solenoid K, which is one of the solenoids that controls hydraulic pressure to engage or release a specific clutch or brake inside the transmission. The TCM monitors the solenoid's electrical current and voltage and sets this code when the circuit is open, shorted to ground or power, or when the solenoid's resistance is outside the expected range.

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

Symptoms you may notice

- Illumination of the malfunction indicator lamp (MIL) on the dashboard
- Transmission may enter limp mode, staying in a single gear or defaulting to a higher gear
- Harsh or delayed shifts, or a noticeable flare between gears
- Transmission may slip or fail to engage certain gears
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty shift solenoid K itself (open or shorted internal coil)
- 2 Damaged or corroded wiring harness or connector at the solenoid or TCM
- 3 Open or shorted circuit in the wiring between the TCM and the solenoid
- 4 Poor electrical connection at the transmission pass-through connector
- 5 Contaminated transmission fluid causing solenoid sticking or electrical interference
- 6 Failed TCM driver circuit (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 Inspect the transmission wiring harness and connectors for chafing, corrosion, or loose pins, especially near the solenoid and TCM
- 3 Measure the resistance of shift solenoid K at its connector and compare to the manufacturer's specification
- 4 Check for short to ground or power on the solenoid control circuit using a multimeter or oscilloscope
- 5 If the solenoid tests out of specification, replace it and clear the codes
- 6 If the circuit is intact and the solenoid is good, test the TCM output or substitute a known-good TCM to rule out a driver failure
- 7 After repairs, clear codes and perform a road test to verify the transmission shifts correctly and the code does not return

Don't overlook the wiring before replacing the solenoid

- A common misdiagnosis is replacing the solenoid when the real problem is a chafed wire or corroded connector that only acts up when the transmission is hot or vibrating.
- Intermittent faults often set this code without any drivability symptoms, so always check for pending codes and freeze-frame data before condemning parts.
- Transmission fluid contamination can cause solenoid electrical faults by bridging internal contacts, so always check fluid condition and level as part of the diagnosis.
- The TCM may set P08D8 if the solenoid's resistance is slightly out of range even though it still functions, so a resistance test is more reliable than a simple click test.
- Some vehicles require relearning the transmission adaptive values after solenoid replacement, and failing to do so can cause harsh shifts that mimic a recurring fault.

Can I keep driving with P08D8?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration or towing because the transmission may be in limp mode and shifting erratically. If the transmission slips severely or refuses to engage a gear, stop driving and have it towed to prevent internal damage.

Tools that help

- OBD-II scan tool with transmission module capability
- Digital multimeter
- Oscilloscope (optional for waveform analysis)
- Vehicle-specific service information for resistance specifications and wiring diagrams
- Socket set and trim removal tools for accessing the solenoid and connectors



Reading P08D8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 8** Transmission.
- D8** 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 · **P08D7** Shift Solenoid K Stuck On · **P08D9** Shift Solenoid K Intermittent

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/p08d8/>

