

GENERIC · POWERTRAIN

P08DD

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P08DD

Shift Solenoid K Control Circuit/Open

P08DD indicates that the transmission control module (TCM) has detected an open circuit or excessive resistance on the control circuit for shift solenoid K, which is one of the solenoids that manages hydraulic pressure for gear shifts. The TCM commands the solenoid on or off and monitors the circuit for expected voltage or current feedback; when the feedback falls outside the expected range, it sets this code and typically illuminates the malfunction indicator lamp (MIL).

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.
- Harsh or delayed gear shifts, or the transmission may fail to shift into certain gears.
- The transmission may enter limp mode, holding a single gear to protect the unit.
- A noticeable clunk or jolt when shifting between gears.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 Damaged or corroded wiring or connector terminals at the shift solenoid K or along its circuit.
- 2 Open or shorted shift solenoid K coil (internal failure of the solenoid).
- 3 Poor electrical connection at the transmission control module (TCM) or transmission pass-through connector.
- 4 Contaminated transmission fluid causing solenoid sticking or erratic operation.
- 5 Internal transmission mechanical wear that affects solenoid K's hydraulic circuit.
- 6 A faulty TCM driver circuit for solenoid K (less common).



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission codes; clear the code and test-drive to see if it returns.
- 2 Inspect the wiring harness and connectors at the transmission and TCM for chafing, corrosion, or loose pins; repair as needed.
- 3 Measure the resistance of shift solenoid K at the transmission connector and compare to the manufacturer's specification; replace the solenoid if out of range.
- 4 Check transmission fluid level and condition; service the fluid if contaminated or burnt.
- 5 Perform a voltage drop test on the control circuit to identify excessive resistance under load.
- 6 If the circuit and solenoid test good, suspect the TCM; follow the manufacturer's diagnostic flow chart before replacement.
- 7 After repair, clear codes and perform a relearn or adaptation drive cycle as required by the vehicle manufacturer.

Don't overlook the wiring harness

- A common oversight is replacing the solenoid without checking the entire circuit; chafed wires near the transmission mount or heat sources often cause intermittent opens.
- The code can be set by a poor connection at the transmission pass-through connector, which is frequently misdiagnosed as an internal solenoid failure.
- Contaminated transmission fluid can cause solenoid K to stick or draw excessive current, setting the code even when the solenoid is electrically sound.
- Some vehicles use shift solenoid K for multiple functions, so a failure may affect more than one gear and mimic other transmission codes.
- Always check for technical service bulletins (TSBs) for the specific vehicle, as some manufacturers have updated harness routing or solenoid designs.

Can I keep driving with P08DD?

If the vehicle is in limp mode or shifting harshly, avoid highway driving and seek service soon; continuing to drive with a faulty shift solenoid can cause further transmission damage. If the only symptom is the warning light and the transmission shifts normally, you may drive cautiously to a repair shop, but avoid heavy loads or aggressive acceleration.



Tools that help

- OBD-II scan tool with transmission code capability
- Digital multimeter (DMM)
- Vehicle-specific service information (wiring diagrams and resistance specifications)
- Socket and wrench set
- Transmission fluid level gauge and fluid pump
- Wire repair kit (splices, heat shrink, electrical tape)

Reading P08DD

P Powertrain: engine, transmission and emissions.

0 Generic (SAE) code: it means the same thing on every OBD-II vehicle.

8 Transmission.

DD The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P08DC** Shift Solenoid K Control Circuit High · **P08DE** Shift Solenoid L · **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/p08dd/>

