

GENERIC · POWERTRAIN

P099D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P099D

Shift Solenoid H Control Circuit Range/Performance

P099D indicates that the transmission control module (TCM) has detected an abnormal range or performance issue in the control circuit for shift solenoid H, which is responsible for managing hydraulic pressure to a specific clutch pack or gear set. The TCM monitors the solenoid's electrical current and the resulting mechanical response, and it sets this code when the circuit's behavior falls outside the expected parameters for the commanded state.

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, particularly when the affected gear is engaged or disengaged
- Transmission may enter limp mode, limiting operation to a single gear or a reduced set of gears
- Slipping or flaring during gear changes, where engine speed rises without corresponding vehicle acceleration
- Inconsistent shift quality that varies with temperature or driving conditions
- In some cases, the transmission may fail to engage certain gears entirely

Common causes, most likely first

- 1 Faulty shift solenoid H, including a stuck valve, worn internal seals, or a failed coil
- 2 Damaged or corroded wiring harness or connector at the solenoid or TCM
- 3 Low or contaminated transmission fluid, leading to poor hydraulic performance
- 4 Valve body issues, such as sticking valves or worn bores that affect solenoid H's circuit
- 5 TCM software calibration errors or internal TCM faults
- 6 Mechanical wear in the transmission, such as worn clutch packs or bushings, causing abnormal solenoid performance
- 7 Electrical interference or poor grounds affecting the solenoid control circuit



How to diagnose and fix it

- 1 Verify transmission fluid level and condition; top off or replace fluid if contaminated or low
- 2 Perform a visual inspection of the solenoid H wiring harness and connectors for damage, corrosion, or loose pins
- 3 Use a scan tool to command solenoid H on and off while monitoring circuit voltage and current to check for proper operation
- 4 Measure the resistance of solenoid H and compare to manufacturer specifications to identify an open or shorted coil
- 5 Check for TCM software updates and reflash if applicable
- 6 Remove the transmission pan and inspect the valve body and solenoid H for debris or mechanical binding
- 7 If electrical and hydraulic checks pass, perform a transmission pressure test and internal inspection for mechanical wear

What P099D really tells you about solenoid H

- A P099D code can be set by a simple low-fluid condition, so always check fluid level and condition before condemning the solenoid.
- The solenoid itself may test fine electrically but still cause this code due to a sticking valve body or worn bore, which is a common misdiagnosis trap.
- In some vehicles, this code appears only after the transmission reaches operating temperature, indicating a thermal-related electrical fault in the solenoid or wiring.
- A faulty TCM or a software glitch can mimic a solenoid H circuit fault, so checking for technical service bulletins and software updates is worthwhile.
- Related codes such as P099C or P099E often accompany P099D and can help pinpoint whether the issue is electrical or hydraulic.

Can I keep driving with P099D?

You can usually drive the vehicle with this code, but avoid aggressive acceleration or heavy towing, as the transmission may shift harshly or enter limp mode. If the transmission slips severely or fails to engage gears, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for circuit and resistance testing
- Transmission fluid level indicator and fluid condition checker
- Factory service information for solenoid resistance specifications and circuit diagrams
- Transmission pressure gauge for hydraulic testing
- Socket set and trim removal tools for accessing the solenoid and wiring



Reading P099D

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 9** Transmission.
- 9D** The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P0750** Shift Solenoid 'A' · **P0970** Pressure Control Solenoid 'C' Control Circuit Low · **P099C** Shift Solenoid G Control Circuit High · **P099E** Shift Solenoid H Control Circuit Low

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/p099d/>

