

GENERIC · POWERTRAIN

P099B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P099B

Shift Solenoid G Control Circuit Low

P099B indicates that the transmission control module (TCM) has detected a low-voltage condition on the control circuit for shift solenoid G, which is one of the solenoids that manages hydraulic pressure for gear shifts. The circuit is either shorted to ground, has excessive resistance, or the solenoid itself has failed, causing the TCM to see voltage below its expected threshold.

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 gear shifts, particularly when the transmission is cold
- The transmission may enter limp mode, sticking in a single gear or refusing to shift
- Slipping between gears or a flare during upshifts
- Poor fuel economy due to improper shift timing
- In some cases, the vehicle may fail to engage certain gears entirely

Common causes, most likely first

- 1 Faulty shift solenoid G, where the internal coil has shorted or failed
- 2 Damaged or chafed wiring in the solenoid control circuit, causing a short to ground
- 3 Corroded or loose electrical connector at the solenoid or TCM
- 4 Transmission fluid contamination or low fluid level affecting solenoid operation
- 5 Failed TCM driver circuit for solenoid G
- 6 Internal transmission mechanical damage causing abnormal solenoid load

How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if contaminated
- 2 Inspect the solenoid G electrical connector for corrosion, tightness, and damaged pins
- 3 Disconnect the solenoid and measure its resistance with a multimeter, comparing to manufacturer specifications
- 4 Check the control circuit wiring for continuity and shorts to ground using a wiring diagram
- 5 Test the TCM output signal to the solenoid with a oscilloscope or bidirectional scan tool if available
- 6 Replace the shift solenoid G if resistance is out of spec or the coil is open/shorted
- 7 Clear the code and perform a relearn or adaptation drive cycle to verify the repair



What a low solenoid circuit really means

- A low circuit code often results from a short to ground in the wiring harness rather than a failed solenoid, so always inspect the harness before replacing parts.
- Transmission fluid that is dark or smells burnt can indicate internal clutch wear that stresses the solenoid, and simply replacing the solenoid may not solve the underlying issue.
- Some vehicles use shift solenoid G for multiple functions, so a failure can cause symptoms that mimic other transmission problems like torque converter clutch issues.
- A weak battery or charging system fault can cause the TCM to misreport solenoid circuit codes, so verify battery voltage and grounds before diving into transmission diagnostics.
- After replacing a solenoid, some TCMs require an adaptive learning reset or a specific drive cycle to clear the code permanently and restore smooth shifting.

Can I keep driving with P099B?

You can usually drive the vehicle to a repair shop, but avoid aggressive acceleration or heavy towing because the transmission may shift erratically or enter limp mode. If the vehicle refuses to shift or slips severely, stop driving and seek professional diagnosis to prevent further transmission damage.

Tools that help

- OBD-II scan tool with transmission code reading capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and Torx bits for solenoid removal
- Transmission fluid level dipstick or scan tool for fluid temperature
- Oscilloscope (optional for signal testing)

Reading P099B

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

Often seen with

P0750 Shift Solenoid 'A' · **P0755** Shift Solenoid 'B' · **P0760** Shift Solenoid 'C' · **P099A** Shift Solenoid G Control Circuit Range/Performance · **P099C** Shift Solenoid G Control Circuit High



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/p099b/>

