

GENERIC · POWERTRAIN

P0983

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0983

Shift Solenoid 'D' Control Circuit High

P0983 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the control circuit for shift solenoid 'D', which is one of the solenoids that manages hydraulic pressure for gear shifts inside the transmission. The PCM commands the solenoid by grounding its control circuit, so a high-voltage reading tells the module that the circuit is open, shorted to power, or that the solenoid's internal coil has failed.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The transmission may enter limp mode, staying in a single gear or refusing to shift.
- Harsh or delayed gear engagements, especially when shifting into drive or reverse.
- Slipping or flaring during upshifts or downshifts as the affected solenoid cannot regulate pressure.
- Often no symptoms besides the warning light, particularly if the fault is intermittent.

Common causes, most likely first

- 1 A failed shift solenoid 'D' with an open internal coil or damaged connector.
- 2 A break or open in the wiring harness between the PCM and the solenoid.
- 3 Corroded, loose, or damaged electrical connectors at the solenoid or PCM.
- 4 A short to voltage on the control circuit, often from chafed wiring near hot or moving components.
- 5 A faulty PCM driver circuit, though this is less common than wiring or solenoid issues.
- 6 Internal transmission mechanical problems that cause the solenoid to overheat and fail.
- 7 Contaminated transmission fluid that damages the solenoid or restricts its operation.



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 solenoid 'D' connector and the PCM connector for corrosion, loose pins, or damaged wiring.
- 3 Measure the resistance of the shift solenoid 'D' coil with a multimeter and compare it to the manufacturer's specification.
- 4 Check the control circuit for an open or short to voltage using a wiring diagram and a multimeter or test light.
- 5 If the circuit tests good, command the solenoid on and off with a scan tool and listen for an audible click to confirm operation.
- 6 Replace the shift solenoid 'D' if it fails electrical or functional testing, following the manufacturer's procedure.
- 7 Clear the codes, test-drive the vehicle through all gears, and verify that the code does not return.

What a high-voltage solenoid code really means

- A high-voltage code on a solenoid control circuit almost always indicates an open circuit or a short to power, not a short to ground, so testing for voltage where it should not be present is key.
- Many technicians replace the solenoid first, but a chafed wire in the harness or a corroded connector is just as likely and far cheaper to fix.
- In some transmissions, shift solenoid 'D' is used for multiple gear functions, so a failure can cause symptoms that seem unrelated to a single gear.
- The PCM may set P0983 intermittently if the solenoid coil is failing only when hot, so testing the circuit when the transmission is at operating temperature is important.
- Always check for technical service bulletins (TSBs) for the specific vehicle, as some models have known harness routing issues that cause this code.

Can I keep driving with P0983?

You can usually drive the vehicle to a repair shop if the transmission still shifts, but avoid heavy acceleration, towing, or long trips because the transmission may enter limp mode without warning. If the transmission is stuck in one gear or slipping severely, stop driving and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with live data and bidirectional control capabilities
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket and ratchet set
- Transmission fluid drain pan and pump
- Test light



Reading P0983

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

Often seen with

P0979 Shift Solenoid 'C' Control Circuit Low · **P0980** Shift Solenoid 'C' Control Circuit High · **P0981** Shift Solenoid 'D' Control Circuit Range/Performance · **P0982** Shift Solenoid 'D' Control Circuit Low · **P0984** Shift Solenoid 'E' Control Circuit Range/Performance

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/p0983/>

