

GENERIC · POWERTRAIN

P080C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P080C

Upshift/Skip Shift Solenoid Control Circuit Low

P080C means the transmission control module (TCM) has detected that the electrical circuit for the upshift/skip shift solenoid is drawing less current than expected, indicating a low-side fault such as an open circuit or a short to ground. This solenoid is used in automatic transmissions to enable or inhibit certain upshift patterns, including skip-shift functions that improve fuel economy and smoothness.

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

Symptoms you may notice

- Illuminated check engine light or transmission warning light, often with no other noticeable symptoms.
- Harsh or delayed upshifts, particularly when the transmission attempts to skip a gear.
- Transmission may stay in a lower gear longer than normal or refuse to enter overdrive.
- Reduced fuel economy due to altered shift scheduling.
- In some vehicles, the transmission may enter limp mode and limit engine power.
- A stored diagnostic trouble code (DTC) P080C in the TCM, sometimes accompanied by other transmission codes.

Common causes, most likely first

- 1 Open or high-resistance wiring in the solenoid control circuit, such as a broken wire or corroded connector.
- 2 Faulty upshift/skip shift solenoid with an open internal coil.
- 3 Poor electrical connection at the solenoid or TCM harness, including loose pins or water intrusion.
- 4 Short to ground in the control circuit, which can cause low current detection.
- 5 Failed TCM driver circuit for the solenoid, though this is less common.
- 6 Internal transmission mechanical issues that affect solenoid operation, such as a stuck valve, though these typically set different codes.



How to diagnose and fix it

- 1 Connect a scan tool and verify P080C is current or pending, then check for related transmission codes and freeze-frame data.
- 2 Inspect the solenoid wiring harness and connectors for damage, corrosion, or loose pins, especially near the transmission.
- 3 Measure the resistance of the upshift/skip shift solenoid with a multimeter and compare to the manufacturer's specification.
- 4 Check for a short to ground or open circuit in the control wire between the TCM and solenoid using a wiring diagram.
- 5 Test the TCM output signal with a lab scope or bidirectional scan tool if the circuit and solenoid test good.
- 6 Replace the faulty solenoid or repair the wiring as needed, then clear codes and perform a road test to verify the repair.
- 7 If the code persists after electrical repairs, follow the manufacturer's diagnostic flow chart for TCM testing or replacement.

What a low solenoid circuit really means

- A low circuit code often results from a simple open circuit, such as a broken wire or unplugged connector, rather than a failed solenoid itself.
- Some transmissions use the skip shift solenoid only under specific conditions, so the code may set without any noticeable drivability symptom.
- A short to ground in the control wire can mimic a failed solenoid, so always check the wire for continuity to ground before replacing parts.
- After repairs, the TCM may require a relearn or adaptive reset procedure to restore normal shift quality, which is often overlooked.
- This code can be set by a low battery or charging system issue that causes voltage spikes or drops, so check the battery and grounds first.

Can I keep driving with P080C?

You can usually drive with P080C, but avoid aggressive acceleration and towing until the fault is repaired, as the transmission may not shift optimally and could enter limp mode. If the vehicle feels sluggish or shifts harshly, have it diagnosed promptly to prevent further transmission damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Wiring diagram for the specific vehicle
- Lab scope (optional for signal testing)
- Basic hand tools for connector and component access



Reading P080C

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 8** Transmission.
- 0C** 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 · **P080B** Upshift/Skip Shift Solenoid Control Circuit Range/Performanc · **P080D** Upshift/Skip Shift Solenoid 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/p080c/>

