GENERIC · POWERTRAIN

P080B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P080B

Upshift/Skip Shift Solenoid Control Circuit Range/Performance

P080B indicates that the powertrain control module (PCM) has detected an abnormal range or performance in the upshift/skip shift solenoid control circuit, which is used on manual transmissions to force a 1st-to-4th gear skip shift for fuel economy. The PCM monitors the circuit for expected voltage or current changes when the solenoid is commanded on or off, and it sets this code when the feedback does not match the commanded state within a calibrated time.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- The skip shift feature may become inoperative, allowing the driver to shift from 1st to 2nd gear without the forced 1st-to-4th lockout.
- A slight hesitation or surge during light-throttle acceleration if the solenoid sticks intermittently.
- Rough or inconsistent engagement of the skip shift solenoid, sometimes felt as a clunk or jolt during the 1st-to-4th shift.
- In rare cases, the transmission may remain in the skip shift mode longer than intended, causing poor acceleration from a stop.
- No drivability symptoms at all if the fault is only in the feedback circuit and the solenoid still functions mechanically.

Common causes, most likely first

1. Faulty upshift/skip shift solenoid with an open or shorted internal coil.
2. Damaged or corroded wiring harness or connector at the solenoid or PCM.
3. High resistance in the control circuit due to chafed wires or loose terminals.
4. Failed PCM driver for the solenoid control circuit, though this is less common.
5. Contamination or mechanical binding inside the solenoid valve causing it to respond sluggishly.
6. Low fluid level or degraded transmission fluid affecting solenoid performance, especially on shared hydraulic circuits.

How to diagnose and fix it

1. Connect a scan tool and verify the code is current, then check for any related codes in the transmission control module (TCM) or PCM.
2. Inspect the solenoid connector and wiring for corrosion, loose pins, or chafed insulation, and repair as needed.
3. Measure the resistance of the upshift/skip shift solenoid with a multimeter and compare it to the manufacturer's specification.
4. Command the solenoid on and off with a scan tool while listening for an audible click and monitoring the circuit feedback on the data stream.
5. Check transmission fluid level and condition, and service the fluid if it is low or contaminated.
6. If the solenoid fails electrical or functional tests, replace it and clear the code to verify the repair.
7. If the circuit tests good but the code persists, perform a voltage drop test on the control circuit and inspect the PCM connector for damage.

Skip shift solenoid diagnosis pitfalls

- A P080B can be set by a perfectly functional solenoid if the feedback circuit has high resistance, so always check the return wire before condemning the solenoid.
- Many drivers never notice the skip shift feature because it only activates under specific conditions such as light throttle and low engine temperature, so the absence of symptoms does not mean the circuit is healthy.
- Aftermarket tuners sometimes disable the skip shift feature in software, which can cause a P080B if the solenoid circuit is left disconnected or modified.
- The same solenoid circuit may be shared with other shift solenoids on some transmissions, so a fault in a related circuit can trigger P080B as a secondary code.
- A weak battery or charging system can cause erratic solenoid operation and set this code without any hard failure in the solenoid itself.

Can I keep driving with P080B?

You can generally continue driving with P080B because the skip shift feature is an emissions and fuel-economy aid, not a safety system, but avoid aggressive acceleration if you feel hesitation or surging. Have the circuit inspected soon to prevent potential transmission damage from a sticking solenoid.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wire repair kit with crimpers and heat shrink
- Manufacturer service information for circuit specifications
- Transmission fluid level dipstick or scan tool fluid level check

Reading P080B

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

Often seen with

P080A Clutch Position Not Learned · **P080C** Upshift/Skip Shift Solenoid Control Circuit Low · **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/p080b/