

GENERIC · POWERTRAIN

P0803

OBD-II TROUBLE CODE

P0803

1-4 Upshift (Skip Shift) Solenoid Control Circuit

P0803 indicates that the powertrain control module (PCM) has detected a fault in the electrical circuit controlling the 1-4 upshift solenoid, also known as the skip shift solenoid. This solenoid is used on manual-transmission vehicles to force a shift from first gear directly to fourth gear under light-load, low-speed conditions to improve fuel economy; the code means the PCM cannot properly command or monitor that solenoid.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- The skip-shift feature may stop working, allowing the driver to shift from first to second gear freely instead of being forced to fourth.
- In rare cases, the solenoid may stick engaged, making it difficult or impossible to shift out of first gear into second.
- A slight electrical burning smell or blown fuse if the solenoid coil has shorted internally.
- Rough or inconsistent engine operation during low-speed driving if the PCM enters a default mode that affects ignition timing or fuel delivery.

Common causes, most likely first

- 1 Failed 1-4 upshift solenoid, typically an open or shorted internal coil.
- 2 Damaged, chafed, or disconnected wiring between the PCM and the solenoid, often near the transmission bellhousing or exhaust components.
- 3 Corroded or loose electrical connector at the solenoid or at the PCM.
- 4 Blown fuse or faulty relay that supplies power to the solenoid circuit.
- 5 Internal PCM driver failure, though this is less common than wiring or solenoid faults.
- 6 Aftermarket tuning or a programmer that has disabled or altered the skip-shift function, causing a circuit plausibility error.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission or engine codes that might indicate a shared power or ground fault.
- 2 Inspect the solenoid connector and wiring harness for obvious damage, corrosion, or loose pins, repairing as needed.
- 3 Check the fuse and relay that feed the solenoid circuit, replacing any failed components.
- 4 Measure the resistance of the solenoid coil with a multimeter and compare it to the manufacturer's specification; replace the solenoid if out of range.
- 5 Test the control circuit from the PCM to the solenoid for continuity and short-to-ground or short-to-power conditions, repairing the harness if faulty.
- 6 If the wiring and solenoid test good, command the solenoid on and off with a scan tool to verify PCM operation; if the PCM does not respond, diagnose or replace the PCM.
- 7 Clear the code and perform a road test to confirm the repair and ensure the skip-shift function operates correctly.

Skip-shift solenoid quirks and hidden failures

- Many drivers never notice the skip-shift feature until it fails, so a P0803 can appear with no drivability complaint beyond the warning light.
- A stuck-open solenoid often causes no symptoms at all, while a stuck-closed solenoid can create a dangerous forced 1-4 shift that feels like a transmission problem.
- Technicians sometimes replace the transmission control module or PCM when the real fault is a chafed wire near the exhaust manifold that only shorts when the engine is hot.
- Aftermarket remote starters or alarm systems that tap into the vehicle's wiring can inadvertently disturb the solenoid circuit and set P0803.
- The code can be set by a momentary voltage spike or low battery condition, so always check battery health and charging system operation before condemning the solenoid.

Can I keep driving with P0803?

The vehicle remains safe to drive in most cases because the skip-shift feature is a fuel-economy aid, not a safety system. Avoid aggressive acceleration or heavy loads until the fault is repaired, and if the transmission becomes stuck in first gear, stop driving and seek service to prevent clutch or transmission damage.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wire repair kit with crimpers and heat-shrink tubing
- Fuse puller and test light
- Vehicle-specific service information for circuit specifications



Reading P0803

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

Often seen with

P0801 Reverse Inhibit Control Circuit · **P0802** Transmission Control System MIL Request Circuit/Open · **P0804** 1-4 Upshift (Skip Shift) Lamp Control Circuit · **P0805** Clutch Position Sensor Circuit · **P0806** Clutch Position Sensor 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/p0803/>

