

GENERIC · POWERTRAIN

P0801

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0801

Reverse Inhibit Control Circuit

P0801 means the powertrain control module (PCM) has detected a fault in the reverse inhibit control circuit, which prevents the transmission from being shifted into reverse under certain conditions. The PCM monitors the circuit for expected voltage or continuity and sets the code when the signal is out of range, indicating an open, short, or component failure.

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

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates on the dashboard.
- The transmission may fail to engage reverse gear when selected.
- The reverse lights may not illuminate when shifting into reverse.
- The vehicle may be able to be shifted into reverse without pressing the brake or meeting other inhibit conditions.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Faulty reverse inhibit solenoid or actuator.
- Damaged or corroded wiring in the reverse inhibit control circuit.
- Blown fuse or poor electrical connection at the PCM or transmission connector.
- Failed reverse inhibit switch or sensor.
- Internal transmission mechanical issue affecting the reverse inhibit mechanism.
- PCM software glitch or internal fault (rare).

How to diagnose and fix it

- Use a scan tool to verify P0801 and check for related codes; clear the code and test-drive to see if it returns.
- Inspect the reverse inhibit circuit wiring and connectors for damage, corrosion, or loose pins.
- Check the fuse and relay associated with the reverse inhibit system.
- Test the reverse inhibit solenoid or actuator for resistance and function according to the manufacturer's specifications.
- Check the reverse inhibit switch or sensor operation with a multimeter or scan tool data.
- If all components test good, perform a continuity and voltage drop test on the circuit to the PCM.
- Repair or replace faulty components as needed, clear codes, and verify the repair with a test drive.



Reverse inhibit circuit quirks and checks

- A common oversight is assuming the transmission is mechanically failed when the issue is simply a bad connection at the reverse inhibit solenoid connector.
- The reverse inhibit system often shares wiring with the backup lamp circuit, so a blown fuse for the reverse lights can also trigger P0801.
- On some vehicles, the reverse inhibit function is integrated into the transmission range sensor, so a faulty range sensor may set this code without any other symptoms.
- Intermittent faults can be caused by chafed wiring near the shifter or transmission, which may only act up when the engine moves under load.
- Always check for technical service bulletins (TSBs) for the specific vehicle, as some manufacturers have known issues with the reverse inhibit circuit.

Can I keep driving with P0801?

If the only symptom is the warning light and reverse still engages normally, you can drive the vehicle but should avoid relying on the reverse inhibit feature and get it diagnosed soon. If reverse is inoperative or the vehicle can be shifted into reverse unexpectedly, avoid driving to prevent transmission damage or unsafe rollaway.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wire probe set
- Service manual or wiring diagram
- Basic hand tools

Reading P0801

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

Often seen with

P0705 Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0850** Park/Neutral Switch Input Circuit · **P0851** Park/Neutral Switch Input Circuit Low · **P0852** Park/Neutral Switch Input Circuit High



See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0801/>

