

GENERIC · POWERTRAIN

P0828

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0828

Up and Down Shift Switch Circuit High

P0828 indicates that the transmission control module (TCM) has detected a high voltage condition on the up and down shift switch circuit, which is typically part of the manual shift gate or steering wheel paddle shifters. The TCM expects the circuit to operate within a specific voltage range, and a high reading usually means the circuit is open, shorted to power, or the switch is stuck in an inactive state.

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.
- Manual shift commands from the gear lever or paddle shifters do not respond.
- The transmission may remain in a single gear or default to a limp mode.
- Upshift or downshift requests are ignored or delayed.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Faulty up/down shift switch assembly (worn contacts or internal failure).
- Open circuit in the signal wire between the switch and the TCM.
- Short to voltage on the signal circuit, often due to chafed wiring.
- Poor electrical connection at the switch or TCM connector (corrosion, loose pins).
- Defective TCM (rare but possible).
- Water intrusion or contamination in the switch or connector.
- Aftermarket accessories or wiring modifications interfering with the circuit.



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes and freeze-frame data to confirm P0828 is current.
- 2 Inspect the up/down shift switch and its connector for physical damage, corrosion, or loose pins.
- 3 Disconnect the switch and measure resistance across its terminals while operating it; compare to manufacturer specifications.
- 4 Check the signal circuit for continuity to ground and for short to voltage using a digital multimeter.
- 5 Inspect the wiring harness along its routing for chafing, pinches, or heat damage, especially near moving components.
- 6 If the circuit tests good, substitute a known-good switch and clear codes to see if the fault returns.
- 7 If the switch and wiring are confirmed good, follow the manufacturer's diagnostic flow for TCM testing or replacement.

Before you replace the shift switch

- A high voltage reading on the up/down shift switch circuit often results from a simple open circuit, such as a broken wire in the steering column or shift lever, rather than a failed switch.
- On some vehicles, the up/down shift switch is part of a larger multifunction switch assembly, and a fault in an unrelated function can set P0828 as a secondary code.
- Intermittent P0828 codes can be caused by a poor ground connection at the TCM or chassis, which raises the reference voltage on the signal circuit.
- Aftermarket remote starters or alarm systems that tap into the shift circuit can introduce voltage spikes that trigger this code.
- The TCM may set P0828 even when the switch works perfectly if the circuit's pull-up resistor inside the TCM fails, so always verify TCM internal resistance if the external circuit tests good.

Can I keep driving with P0828?

If the vehicle drives normally and only the warning light is on, you can drive to a repair shop, but avoid using manual shift mode. If the transmission is stuck in limp mode or shifts erratically, limit driving to a short distance at low speed and seek professional diagnosis promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter (DMM)
- Wiring diagram for the specific vehicle
- Trim removal tools
- Contact cleaner and dielectric grease



Reading P0828

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

Often seen with

P0700 Transmission Control System Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P0826** Up and Down Shift Switch Circuit · **P0827** Up and Down Shift Switch Circuit Low · **P0829** 5-6 Shift

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/p0828/>

