

GM · POWERTRAIN

P1826

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1826 · GM

Internal Mode Switch Circuit C High

P1826 on GM vehicles means the transmission control module (TCM) has detected an abnormally high voltage on the internal mode switch (IMS) circuit C, which is one of the switch's position signal lines. The TCM uses this circuit to confirm the selector lever position and internal manual valve state, so a high-voltage fault prevents reliable range detection and can trigger limp-home or harsh shifting.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Medium	Professional	Transmission

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The transmission may default to a single gear or limp-home mode with reduced performance.
- Harsh or delayed shifts, especially when selecting drive or reverse.
- The gear indicator on the instrument cluster may be blank, flashing, or show the wrong range.
- The engine may crank but not start if the TCM cannot confirm park or neutral.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- A faulty internal mode switch (IMS) inside the transmission, commonly due to worn contacts or fluid contamination.
- A damaged or chafed wire in circuit C between the IMS and the TCM, often near the transmission connector or harness bend.
- Corrosion or poor pin tension at the transmission pass-through connector or the TCM connector.
- Transmission fluid leaking into the IMS connector, causing a short or high resistance.
- A failed TCM that misreads the IMS voltage signal, though this is less common than switch or wiring faults.
- A misadjusted or loose IMS mounting that prevents proper contact with the manual valve detent.



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P1826 before clearing anything.
- 2 Inspect the transmission harness and connector for chafing, corrosion, or fluid intrusion, and repair any damaged wiring or pins.
- 3 Check the IMS circuit C voltage and resistance at the TCM connector with a multimeter, comparing it to the service manual specification.
- 4 Remove and inspect the internal mode switch for worn contacts, debris, or fluid contamination, and replace it if faulty.
- 5 Verify the new or existing IMS is properly aligned and torqued to the manual valve detent during installation.
- 6 Clear codes and perform a relearn or adaptive reset if required, then test-drive through all gear ranges to confirm the repair.

What the IMS circuit C really tells you

- A high-voltage code on circuit C often comes from an open circuit or a disconnected IMS connector rather than a short to power, so check continuity before condemning the switch.
- Technicians frequently replace the IMS only to find the real fault is a chafed wire in the harness near the transmission mount, so always flex-test the harness while watching live data.
- Fluid contamination inside the IMS connector can mimic a failed switch, and cleaning the connector may restore normal operation without parts replacement.
- P1826 can set intermittently from a loose IMS mounting bolt, so verify torque and alignment even when the switch tests good on the bench.
- A weak or failing TCM ground can cause false high-voltage readings on the IMS circuits, so check grounds before replacing the module.

Can I keep driving with P1826?

You can usually drive the vehicle to a repair shop if it remains in a forward gear and the warning light is steady, but avoid highway speeds and heavy loads because limp-home mode may limit power. If the transmission slips, refuses to engage a gear, or the engine will not start in park or neutral, stop driving and have it towed.

Tools that help

- OBD-II scan tool with GM-specific transmission data and bidirectional controls
- Digital multimeter with back-probe pins
- Transmission service manual or wiring diagram for the specific GM model
- Basic hand tools for connector and switch access
- Transmission fluid drain pan and clean lint-free rags



Reading P1826

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (GM): its meaning depends on the make.
- 8** Transmission.
- 26** The exact fault within that area.

Often seen with

P1825 Pressure Control Solenoid 3 Short To B+ · **P1828** Pressure Control Solenoid 4 Electrical · **P1825** Internal Mode Switch Illegal Range · **P1828** Transmission Transfer Case Counter Clockwise Shift Relay Coi · **P0705** Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1826/>

