

GM · POWERTRAIN

P1875

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1875 · GM

4WD Low Switch Circuit

P1875 on a GM vehicle means the transfer case control module (TCCM) has detected an implausible signal from the four-wheel-drive (4WD) low range switch circuit. The TCCM expects a specific voltage or ground state when the transfer case is in low range, and the circuit is not reporting that state correctly.

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

Symptoms you may notice

- The 4WD Low indicator light on the dash may flash or fail to illuminate when low range is selected.
- The transfer case may not shift into or out of 4WD Low, leaving the vehicle stuck in high range or neutral.
- A service 4WD message may appear on the driver information center.
- The vehicle may default to two-wheel drive (2WD) or 4WD High regardless of switch position.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- Failed or misadjusted 4WD low range switch on the transfer case.
- Damaged, corroded, or disconnected wiring or connector at the switch or TCCM.
- Open or shorted circuit in the 4WD low switch signal or ground wire.
- Faulty transfer case control module (TCCM) not interpreting the switch signal correctly.
- Mechanical binding or incorrect transfer case shift linkage preventing the switch from being actuated.
- Water intrusion or debris in the switch connector causing intermittent signals.

How to diagnose and fix it

- Scan all modules for related codes and record freeze-frame data to understand when the fault occurs.
- Visually inspect the 4WD low switch, its connector, and the wiring harness for damage, corrosion, or loose pins.
- Test the switch circuit with a digital multimeter: check for continuity or voltage changes as the transfer case is shifted manually.
- Verify the switch is properly actuated by the transfer case shift mechanism; adjust or repair linkage if needed.
- Backprobe the TCCM connector to confirm the signal reaches the module correctly.
- If the circuit and switch test good, substitute a known-good TCCM to rule out module failure.
- Clear codes and perform a transfer case shift test to confirm the repair.



Before you replace the transfer case switch

- A common mistake is replacing the 4WD low switch without checking the ground circuit, which often corrodes and causes the same code.
- The switch may test fine with a multimeter but still fail intermittently due to heat or vibration, so a wiggle test while monitoring live data is essential.
- On some GM trucks, a weak battery or low charging voltage can cause the TCCM to set false switch codes, so always check battery health first.
- The code can be set by a mechanical problem in the transfer case shift mechanism that prevents the switch from being fully depressed, even if the electrical circuit is perfect.
- Do not overlook the TCCM ground connections; a poor ground can cause multiple transfer case codes including P1875.

Can I keep driving with P1875?

You can usually drive the vehicle in 2WD or 4WD High without immediate risk, but avoid relying on 4WD Low and do not attempt heavy off-road use until the fault is repaired. If the transfer case is stuck in neutral or the vehicle exhibits strange shifting behavior, stop driving and seek professional service.

Tools that help

- OBD-II scan tool with GM-specific software
- Digital multimeter
- Wiring diagram for the transfer case circuit
- Basic hand tools (socket set, screwdrivers)
- Test light

Reading P1875

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

Often seen with

P1860 Kick Down Switch Error Message From Engine Control · **P1860** TCC PWM Solenoid Circuit Electrical · **P1874** TCC Stator Temp Switch Circuit High · **P1876** Transmission Transfer Case 2-Wheel Drive Solenoid Circuit Fa · **P1877** Transmission Transfer Case 2-Wheel Drive Solenoid Circuit Sh · **C0306** Ride Height Sensor Front Left



See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1875/>

