

SUZUKI · POWERTRAIN

P1875

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1875 · Suzuki

4WD Low Switch Circuit Malfunction

P1875 on Suzuki vehicles means the four-wheel-drive control module has detected an unexpected signal from the 4WD Low range switch circuit, so it cannot confirm whether low range is engaged. The module monitors the switch's voltage return and flags the code when the signal stays outside the expected range for the commanded transfer case position.

SYSTEM

Powertrain

CODE TYPE

Suzuki specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

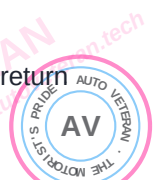
- The 4WD Low indicator light flashes or stays illuminated when low range is not selected
- The transfer case refuses to shift into or out of 4WD Low, leaving the vehicle stuck in high range
- The 4WD warning lamp on the instrument cluster comes on steadily
- The selector button or lever feels normal but the system does not respond
- Often no symptoms besides the warning light, with normal high-range driving unaffected

Common causes, most likely first

- 1 Faulty 4WD Low position switch on the transfer case, worn or contaminated internally
- 2 Damaged, chafed or corroded wiring between the switch and the 4WD control module
- 3 Loose or corroded connector pins at the switch or module harness
- 4 Transfer case shift motor or actuator not reaching the low-range detent, so the switch never closes
- 5 Poor ground connection shared by the switch circuit
- 6 Failed 4WD control module, less common but possible after other causes are ruled out

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P1875 before clearing anything
- 2 Inspect the transfer case switch connector and harness for corrosion, chafing and pushed-back pins
- 3 Check switch continuity and resistance through its full travel with a multimeter, comparing against the service specification
- 4 Verify the switch signal voltage at the 4WD control module connector while an assistant operates the selector
- 5 Check the transfer case shift motor and actuator operation, confirming the case actually reaches the low-range position
- 6 Repair or replace the faulty switch, harness section or connector as indicated by the tests
- 7 Clear codes and perform a road test through all transfer case ranges to confirm the code does not return



What the low-range switch test misses

- A switch that tests fine on the bench can still set P1875 because the transfer case never mechanically reaches the low-range detent, so always confirm actuator travel before condemning the switch.
- Corrosion inside the switch connector is a frequent culprit on older Suzuki 4WD models, and cleaning the pins often cures the code without any new parts.
- This code does not always mean the switch has failed; a weak battery or low charging voltage during a shift attempt can produce a false signal that stores the fault.
- After any transfer case repair, the 4WD control module may need a relearn or calibration procedure before the low-range indicator behaves correctly.
- A binding or incorrectly adjusted shift linkage can hold the switch just off its contact point, mimicking an electrical failure.

Can I keep driving with P1875?

The vehicle remains safe to drive in high range, but avoid relying on 4WD Low until the fault is repaired because the system may not engage or disengage low range when needed. Do not force the transfer case selector if it resists, and have the circuit checked before off-road use.

Tools that help

- OBD-II scan tool with manufacturer-specific 4WD module access
- Digital multimeter
- Electrical contact cleaner and dielectric grease
- Vehicle service information for switch resistance specifications
- Basic hand tools for trim and connector access

Reading P1875

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

Often seen with

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 · **C0300** ABS Control System Malfunction · **C0305** Inlet Valve Rear Left Performance



See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

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

