

GM · POWERTRAIN

P1836

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1836 · GM

Kick-Down Switch Failed Open

P1836 on GM vehicles indicates that the powertrain control module (PCM) has detected an open circuit in the kick-down switch circuit, which is used to signal a forced downshift for passing or climbing. The PCM expects to see a voltage pull-down when the accelerator pedal is pressed past the detent, but it sees no change, meaning the switch or its wiring is not completing the circuit.

SYSTEM

Powertrain

CODE TYPE

GM specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The transmission does not downshift when the accelerator pedal is pressed fully to the floor, reducing passing power.
- The check engine light or service engine soon light is illuminated on the instrument cluster.
- The transmission may feel sluggish or hesitate to kick down at highway speeds.
- Often no symptoms besides the warning light, especially if the driver rarely uses the kick-down feature.
- In some cases, the transmission may shift harshly or hold gears longer than usual as the PCM adapts.
- Cruise control may be disabled or behave erratically if the kick-down switch shares a circuit with the cruise system.

Common causes, most likely first

- 1 Failed kick-down switch (open internally) mounted on or near the accelerator pedal assembly.
- 2 Broken or disconnected electrical connector at the kick-down switch.
- 3 Corroded, chafed, or open wiring in the kick-down switch circuit between the switch and the PCM.
- 4 Blown fuse or poor ground connection affecting the switch circuit.
- 5 Misadjusted or stuck accelerator pedal mechanism that does not actuate the switch.
- 6 Faulty PCM (rare) with an internal open circuit on the kick-down input.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission or cruise control codes.
- 2 Inspect the kick-down switch connector and wiring for damage, corrosion, or looseness; repair as needed.
- 3 Test the kick-down switch operation with a multimeter for continuity or voltage change when the pedal is pressed.
- 4 Check the fuse and ground circuits associated with the kick-down switch.
- 5 If the switch tests faulty, replace the kick-down switch and clear the code.
- 6 If the switch and wiring are good, backprobe the PCM connector to check for an open circuit; repair wiring as necessary.
- 7 Clear codes and perform a road test to confirm the kick-down function and that the code does not return.

Kick-Down Switch Open: Common Oversights

- A misadjusted accelerator pedal or floor mat can prevent the kick-down switch from being actuated, setting P1836 without any electrical fault.
The kick-down switch is often integrated with the accelerator pedal position sensor on newer GM vehicles, so a faulty pedal assembly can cause this code even if the switch itself seems fine.
- Technicians sometimes replace the transmission or PCM when the real problem is a simple open in the kick-down circuit, so always perform a continuity test before condemning major components.
- On some GM models, the kick-down switch shares a ground with the cruise control module, so a bad ground can set P1836 along with cruise control issues.
P1836 can be stored intermittently if the switch contacts are dirty or worn, so wiggle-test the wiring while monitoring live data to catch an intermittent open.

Can I keep driving with P1836?

The vehicle remains safe to drive under normal conditions, but avoid relying on kick-down for passing or merging until the fault is repaired. The transmission will still downshift automatically based on throttle input, though forced downshifts may not occur.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific GM model
- Socket set and trim removal tools
- Test light or jumper wires



Reading P1836

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

Often seen with

P1835 Pressure Control Solenoid 5 Short To B+ · **P1835** Kick-Down Switch · **P1837** Kick-Down Switch Failed Short · **P0700** Transmission Control System Malfunction · **P0705** Transmission Range Sensor Circuit Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction

See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1836/>

