

GM · POWERTRAIN

P1587

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1587 · GM

Cruise Control Clutch Control Circuit Low

P1587 on a GM vehicle means the powertrain control module (PCM) has detected a low-voltage condition on the cruise control clutch control circuit, which is the wire that tells the PCM when the clutch pedal is pressed so cruise control can be disengaged. The PCM monitors this circuit and sets the code when the voltage stays below the expected threshold for longer than a calibrated time, indicating a short to ground, an open circuit, or a faulty switch.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Low	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Cruise control will not engage or will drop out unexpectedly when the clutch pedal is touched
- The cruise control indicator light may flash or stay off entirely
- Often no symptoms besides the warning light, especially if the driver rarely uses cruise control
- The engine may hesitate or stumble momentarily when the clutch pedal is pressed if the PCM misreads the switch signal
- On manual-transmission vehicles, the clutch pedal may feel normal but the cruise system refuses to set
- A stored P1587 may be accompanied by other cruise-control or clutch-switch codes in the PCM memory

Common causes, most likely first

- 1 Failed clutch pedal position switch (cruise control cutout switch) on the clutch pedal bracket
- 2 Damaged or chafed wiring between the clutch switch and the PCM, often near the pedal assembly or through the firewall
- 3 Corroded or loose electrical connector at the clutch switch or at the PCM harness
- 4 Short to ground in the cruise control clutch control circuit, such as a pinched wire against the body or transmission
- 5 Misadjusted or improperly installed clutch switch after a clutch replacement or pedal repair
- 6 Faulty PCM driver circuit for the clutch control input, though this is less common than switch or wiring faults
- 7 Aftermarket alarm or remote-start wiring tapped into the clutch circuit causing a low-voltage condition



How to diagnose and fix it

- 1 Use a scan tool to read live data for the clutch pedal position switch and confirm the PCM sees the switch state change when the pedal is pressed
- 2 Visually inspect the clutch switch, its connector, and the wiring harness for damage, corrosion, or loose pins, especially around the pedal bracket
- 3 Check the clutch switch adjustment and verify it is fully seated and actuated by the pedal
- 4 Disconnect the clutch switch and measure resistance across its terminals in both pedal positions to confirm it opens and closes correctly
- 5 Perform a voltage drop test on the signal wire from the clutch switch to the PCM while wiggling the harness to find intermittent opens or shorts
- 6 Repair or replace the faulty clutch switch or the damaged section of wiring, then clear the code and verify cruise control operation on a test drive
- 7 If the switch and wiring test good, check for a short to ground on the control circuit and inspect the PCM connector for corrosion or backed-out terminals

Clutch switch faults that mimic P1587

- A clutch switch that tests fine with a multimeter can still set P1587 intermittently because the PCM looks for a specific voltage window, not just continuity, so a dirty contact or slight misadjustment can drop the signal below threshold.
- Many technicians replace the clutch switch only to find the real problem is a chafed wire behind the pedal assembly where the harness rubs on the steering column or clutch pedal arm during normal driving.
- P1587 can be set by a weak or failing vehicle battery or a poor ground connection at the PCM, because low system voltage can pull the clutch control circuit below the expected threshold even when the switch is good.
- On some GM manual-transmission vehicles, the cruise control clutch switch shares a ground with the brake pedal switch, so a faulty brake switch or its wiring can cause a low-voltage condition on the clutch circuit and set P1587.
- After a clutch replacement, the pedal position switch is often reinstalled without proper adjustment, and the PCM may see the circuit as low because the switch never fully opens when the pedal is released.

Can I keep driving with P1587?

You can drive the vehicle normally because P1587 only affects cruise control operation and does not impair engine performance or safety systems. Avoid using cruise control until the fault is repaired, and if the check engine light is accompanied by other symptoms such as engine hesitation, have the vehicle inspected promptly.



Tools that help

- Scan tool with live data capability
- Digital multimeter
- Test light
- Wire repair kit with crimpers and heat shrink
- Trim removal tool for accessing the clutch pedal area

Reading P1587

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (GM): its meaning depends on the make.

5 Vehicle speed, idle control and auxiliary inputs.

87 The exact fault within that area.

Often seen with

P1588 Engine Mount Solenoid Valves Open Circuit · **P1588** Cruise Control Clutch Control Circuit High · **P1588** Throttle Control Unit Detected Loss of Return Spring · **P1588** Cruise Control Clutch Control Circuit High · **P0704** Clutch Switch Input Circuit Malfunction · **P0830** Clutch Pedal Switch 'A' Circuit · **P0831** Clutch Pedal Switch 'A' Circuit Low · **P0832** Clutch Pedal Switch 'A' Circuit High

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1587/>

