

GM · POWERTRAIN

P1596

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1596 · GM

Speed Control Switch Always High

P1596 on a GM vehicle means the body control module (BCM) or engine control module (ECM) has detected that the speed control switch circuit is stuck at a high voltage level, typically near battery voltage, when it should be fluctuating or resting at a lower reference voltage. The computer monitors the signal from the cruise control switch pack on the steering wheel and sets this code when the voltage on the switch signal circuit remains above the expected threshold for a calibrated amount of time.

SYSTEM

Powertrain

CODE TYPE

GM specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The cruise control system does not engage or drops out unexpectedly while driving.
- The cruise control indicator light on the instrument cluster may flash or stay off when you try to set a speed.
- Steering wheel cruise control buttons may feel unresponsive or only work intermittently.
- Often no symptoms besides the warning light, especially if the fault is intermittent or only affects one button function.
- On some models, other steering wheel-mounted controls (horn, audio) may also act erratically if the shared ground or clock spring is involved.
- The check engine light or service vehicle soon message may illuminate depending on the GM model and how the BCM reports the fault.

Common causes, most likely first

- 1 A stuck or shorted cruise control switch assembly on the steering wheel, often due to internal contact failure or contamination.
- 2 A short to voltage in the speed control switch signal circuit, typically from chafed wiring in the steering column or under the dash.
- 3 A faulty clock spring (steering wheel inflatable restraint coil) that intermittently shorts the switch signal to voltage as the wheel turns.
- 4 Corrosion or water intrusion in the steering wheel switch connector or the inline harness connector behind the airbag.
- 5 A malfunctioning body control module (BCM) or engine control module (ECM) that misinterprets the switch voltage, though this is less common.
- 6 Aftermarket accessories or poor previous repairs that tapped into the cruise control wiring and introduced a voltage backfeed.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the BCM and ECM to confirm the fault is active and not history.
- 2 Inspect the cruise control switch connector at the steering wheel for corrosion, loose pins, or signs of water intrusion, and clean or repair as needed.
- 3 Measure the voltage on the speed control switch signal circuit at the switch connector with the key on and compare it to the manufacturer's specification; a constant high voltage points to a short or stuck switch.
- 4 Test the cruise control switch assembly with an ohmmeter or by monitoring scan tool data while pressing each button to see if the voltage changes correctly; replace the switch if it does not.
- 5 Check the clock spring by wiggling the steering wheel and monitoring the switch signal voltage for intermittent shorts; replace the clock spring if the voltage jumps erratically.
- 6 Inspect the wiring harness from the steering column to the BCM for chafed insulation or pinched wires that could short to voltage, and repair any damage.
- 7 If all circuits and components test good, follow the manufacturer's diagnostic flow chart for P1596, which may involve substituting a known-good BCM or ECM to rule out an internal fault.

What a stuck cruise switch really means

- A common misdiagnosis is replacing the cruise control switch when the real problem is a chafed wire in the steering column that only shorts when the wheel is turned, so always wiggle-test the harness.
- The clock spring is a frequent culprit because it carries the switch signal and can develop intermittent shorts as the internal ribbon wears, yet it often passes a static resistance test.
- This code can set even if the cruise control appears to work normally, because the computer may only see the stuck-high condition during specific key-on or self-test routines.
- Aftermarket remote starters or alarm systems that tap into the cruise control wiring can backfeed voltage and set P1596, so check for non-factory accessories before condemning the switch.
- On some GM trucks and SUVs, the speed control switch signal is shared with the horn or audio controls, so a fault in those circuits can also trigger P1596.

Can I keep driving with P1596?

You can usually continue driving safely because the cruise control may be inoperative or unpredictable, but avoid using the cruise control until the fault is repaired. If the steering wheel controls behave erratically or the horn stops working, have the clock spring inspected promptly because it also carries the airbag circuit.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Steering wheel puller
- Trim removal tools
- Wiring diagram for the specific GM model

Reading P1596

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.

96 The exact fault within that area.

Often seen with

P1595 Automatic Transmission Diagnosis Input Signal Circuit Low In · **P1595** Speed Control Solenoid Circuit Open Or Shorted · **P1597** Speed Control Switch Always Low · **P1595** Speed Control Solenoid Circuit Open Or Shorted · **P1597** Speed Control Switch Always Low · **P0562** System Voltage Low · **P0563** System Voltage High · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1596/>

