



P0577

Cruise Control Input Circuit High

P0577 means the engine computer has detected a high-voltage condition on the cruise control input circuit, which is the wire that tells the computer the driver wants to set or resume speed. The computer expects a specific voltage range on that signal wire, and a reading above the normal threshold triggers this code because the circuit is either shorted to power or the switch is stuck in a position that keeps voltage high.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Low	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The cruise control system stops working entirely and will not engage at any speed
- The cruise control indicator light on the dashboard may flash or stay off when you press the set button
- The check engine light illuminates and stays on while the engine runs normally
- Often no symptoms besides the warning light, because the fault is confined to the cruise control input circuit
- The set, resume, and cancel buttons on the steering wheel may feel unresponsive or require repeated presses
- In some vehicles the horn or other steering-wheel-mounted controls may behave erratically if they share a common ground path

Common causes, most likely first

- 1 A stuck or failed cruise control switch on the steering wheel that keeps the signal circuit at battery voltage
- 2 A short to power in the wiring harness between the cruise control switch and the engine computer, often from chafing against a metal bracket
- 3 Corrosion or water intrusion in the clock spring connector, which carries the cruise control signal through the steering wheel
- 4 A faulty clock spring assembly that internally shorts the cruise control signal wire to a power feed
- 5 A poor ground connection at the cruise control switch or at the computer, causing the reference voltage to float high
- 6 A failed engine computer that misreads the cruise control input voltage, though this is the least common cause



How to diagnose and fix it

- 1 Use a scan tool to read the cruise control switch voltage in live data and compare it to the expected range with the buttons released and pressed
- 2 Visually inspect the cruise control switch and its connector on the steering wheel for corrosion, bent pins, or signs of liquid damage
- 3 Disconnect the switch and measure resistance across the switch contacts in each button position to confirm the switch is not stuck closed
- 4 Check the wiring harness between the switch and the computer for continuity to power, looking for chafed insulation or pinched wires near the steering column
- 5 Test the clock spring by measuring resistance through the cruise control circuit while turning the steering wheel from lock to lock
- 6 Verify the ground circuit for the cruise control switch has less than one ohm of resistance to the battery negative terminal
- 7 If all wiring and switches test good, substitute a known-good engine computer only after confirming the signal wire is not shorted to power with the computer disconnected

What a high cruise input really means

- A high voltage on the cruise input circuit is almost always a short to power or a stuck switch, not a failed computer, so technicians who replace the computer first waste money and time.
- The clock spring is a common hidden culprit because the cruise control signal passes through it, and a partial short inside the clock spring can set P0577 without any airbag warning light.
- Some vehicles use a single analog voltage wire for all steering-wheel buttons, so a stuck volume or mode button can pull the cruise input voltage high and set this code even though the cruise buttons themselves test fine.
- Aftermarket accessories wired into the steering column or tapped into the cruise circuit, such as remote starters or phone mounts, frequently cause a short to power that sets P0577.
- P0577 does not mean the cruise control actuator or throttle control motor is bad, so do not replace those parts until the input circuit voltage is verified correct at the computer connector.

Can I keep driving with P0577?

You can drive the vehicle safely because the fault only disables the cruise control system and does not affect engine power, braking, or steering. Avoid using the cruise control until the repair is complete, and do not attempt to bypass the switch or wiring because a short to power in that circuit could affect other steering-wheel controls.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with resistance and voltage measurement
- Wiring diagram for the cruise control circuit
- Trim removal tools for steering column covers
- Torx or Phillips screwdriver set for switch removal

Reading P0577

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
77	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0575** Cruise Control Input Circuit · **P0576** Cruise Control Input Circuit Low · **P0578** Cruise Control Multi-Function Input 'A' Circuit Stuck · **P0579** Cruise Control Multi-Function Input 'A' Circuit Range/Perfor

See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0577/>

