

GENERIC · POWERTRAIN

P0584

OBD-II TROUBLE CODE

P0584

Cruise Control Vacuum Control Circuit High

P0584 indicates that the powertrain control module (PCM) has detected an abnormally high voltage on the cruise control vacuum control circuit, which typically points to an open circuit, a short to voltage, or a faulty vacuum control solenoid. The PCM expects a specific voltage range when commanding the cruise servo, and a reading above the threshold triggers this code.

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

Symptoms you may notice

- Cruise control may be completely inoperative or fail to engage
- The cruise control may disengage unexpectedly while driving
- Illumination of the check engine light or a cruise control warning light
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Rough or erratic engine idle in some cases due to vacuum leaks
- The cruise control indicator may flash or not illuminate at all

Common causes, most likely first

- 1 Open or broken wire in the vacuum control circuit (high resistance)
- 2 Short to voltage on the vacuum control circuit (e.g., chafed wire touching a power source)
- 3 Failed cruise control vacuum solenoid or servo motor
- 4 Corroded or damaged electrical connector at the solenoid or PCM
- 5 Faulty PCM driver for the vacuum control circuit (rare)
- 6 Vacuum hose disconnected or leaking, causing the solenoid to draw abnormal current
- 7 Aftermarket accessories or poor previous repairs interfering with the circuit



How to diagnose and fix it

- 1 Inspect the vacuum control solenoid connector and wiring for corrosion, damage, or loose pins
- 2 Check the vacuum hoses for cracks, disconnected fittings, or leaks
- 3 Measure resistance of the vacuum control solenoid and compare to manufacturer specifications
- 4 Backprobe the vacuum control circuit at the PCM and solenoid to check for open or short to voltage
- 5 Test the circuit for continuity and voltage drop while wiggling the harness to find intermittent faults
- 6 If the solenoid tests good, verify the PCM command signal with a scan tool and oscilloscope
- 7 Replace the faulty solenoid, repair wiring, or reprogram/replace the PCM as needed

What a high voltage reading really means

- A high voltage code often results from an open circuit rather than a short, because the PCM pulls the circuit up and sees high voltage when the solenoid is disconnected.
- The vacuum control solenoid is frequently misdiagnosed as the PCM, but a simple resistance check can rule out the solenoid before condemning the computer.
- Corrosion inside the solenoid connector can create high resistance that mimics an open circuit, so always inspect the terminals closely.
- A disconnected or leaking vacuum hose can cause the solenoid to operate outside its normal duty cycle, leading to unusual voltage readings that set this code.
- This code can be set by a faulty cruise control switch or module on some vehicles, even though the vacuum circuit itself is intact.

Can I keep driving with P0584?

The vehicle remains safe to drive because cruise control is a convenience feature and the fault does not affect engine operation or braking. Avoid using cruise control until the fault is repaired, as it may not engage or could disengage unexpectedly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Vacuum gauge
- Wire probe set
- Service manual with wiring diagrams



Reading P0584

- 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.
- 84** The exact fault within that area.

Often seen with

P0565 Cruise Control On Signal · **P0566** Cruise Control Off Signal · **P0583** Cruise Control Vacuum Control Circuit Low · **P0585** Cruise Control Multi-Function Input 'A'/'B' Correlation · **P0586** Cruise Control Vent Control Circuit/Open

See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0584/>

