

GM · POWERTRAIN

P1566

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1566 · GM

Speed Control System/Engine RPM Too High

P1566 on a GM vehicle means the engine control module (ECM) has detected that engine speed exceeded the limit allowed while the speed control system was active, so it has disabled cruise control to protect the powertrain. The ECM compares actual engine RPM against a calibrated threshold whenever cruise is engaged and sets this code when the two disagree beyond that limit.

SYSTEM

Powertrain

CODE TYPE

GM specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Cruise control will not engage or drops out shortly after being set
- The cruise control indicator on the instrument cluster flashes or stays off
- Engine may flare or surge briefly when cruise is switched on
- Reduced fuel economy on highway trips because cruise is unavailable
- Often no symptoms besides the warning light and disabled cruise control

Common causes, most likely first

- 1 A sticking or misadjusted cruise control cable or throttle actuator linkage holding the throttle open
- 2 A faulty speed control servo or actuator that fails to release when commanded
- 3 A malfunctioning throttle position sensor (TPS) reporting incorrect throttle angle to the ECM
- 4 Wiring damage or corrosion in the speed control circuit between the servo, switches and ECM
- 5 A failing vehicle speed sensor (VSS) or erratic speed signal causing the ECM to misjudge road speed versus RPM
- 6 A faulty brake pedal position switch that fails to disengage cruise when the pedal is pressed
- 7 An internal ECM calibration or memory fault that misinterprets normal RPM data



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes and record freeze-frame data for P1566 before clearing anything
- 2 Inspect the cruise control cable and throttle linkage for binding, kinks or incorrect adjustment and correct as needed
- 3 Test the brake pedal position switch and clutch switch (on manual vehicles) for proper continuity and adjustment
- 4 Check the speed control servo and its connector for corrosion, then command the servo through a scan tool to confirm it releases
- 5 Compare scan-tool RPM and vehicle speed readings against actual values to rule out a faulty VSS or TPS
- 6 Trace and test the speed control wiring harness for opens, shorts or high resistance between the servo, switches and ECM
- 7 If all inputs and actuators test good, check for an updated ECM calibration or reprogram the module per GM service information

Why P1566 often is not the servo

- A binding cruise cable is the most common cause on older GM trucks and SUVs, and technicians frequently replace the servo before checking the cable.
- A misadjusted brake pedal switch can set this code because the ECM sees conflicting brake and cruise signals and commands a throttle release that never happens.
- An erratic vehicle speed sensor signal can make the ECM calculate an impossible RPM-to-speed ratio, triggering P1566 even though the engine itself is running normally.
- This code does not always mean the engine actually over-revved; it can be set by a signal fault that makes the ECM believe RPM was too high.
- Aftermarket throttle body spacers or intake modifications that alter airflow can push RPM slightly past the cruise threshold on some GM calibrations.

Can I keep driving with P1566?

The vehicle remains safe to drive because the ECM disables cruise control when this code sets, but avoid using cruise until the fault is repaired. If the engine flares or surges unexpectedly, have the vehicle inspected before continuing highway driving.

Tools that help

- OBD-II scan tool with GM manufacturer-specific capability
- Digital multimeter
- Service information with cruise control wiring diagrams
- Hand tools for cable and linkage adjustment
- Vacuum gauge or smoke machine for servo testing



Reading P1566

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

Often seen with

P1564 Idle Speed Control Throttle Position Low Voltage During Adap · **P1564** Cruise Control System Vehicle Accel Too High · **P1564** Cruise Control System Vehicle Accel Too High · **P1564** Control Module Selection · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0500** Vehicle Speed Sensor Malfunction · **P0501** Vehicle Speed Sensor Range/Performance · **P0571** Brake Switch 'A' Circuit

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1566/>

