

GENERIC · POWERTRAIN

P2165

OBD-II TROUBLE CODE

P2165

Throttle/Pedal Position Sensor 'C' Maximum Stop Performance

P2165 indicates that the engine control module (ECM) has detected a performance problem with the maximum stop position of throttle or pedal position sensor 'C'. The ECM expects a specific signal when the throttle or pedal is fully released, but the sensor's output does not meet that expectation, often due to mechanical binding, electrical faults, or sensor wear.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode, limiting acceleration
- Unresponsive or delayed throttle response when pressing the accelerator
- Incorrect or erratic idle speed
- Transmission may shift harshly or refuse to downshift due to invalid throttle data

Common causes, most likely first

- 1 Throttle body or accelerator pedal assembly mechanical binding or carbon buildup preventing full return to the stop
- 2 Faulty throttle or pedal position sensor 'C' (internal wear or damage)
- 3 Damaged, corroded, or loose wiring or connector at the sensor or throttle body
- 4 Poor electrical ground connection for the sensor circuit
- 5 Failed or miscalibrated electronic throttle control module or ECM software issue
- 6 Contamination or debris obstructing the throttle plate or pedal mechanism



How to diagnose and fix it

- 1 Inspect the throttle body and accelerator pedal assembly for mechanical binding, debris, or carbon buildup; clean and lubricate as needed
- 2 Check the sensor 'C' electrical connector and wiring for corrosion, damage, or loose pins; repair or replace as necessary
- 3 Measure the sensor 'C' signal voltage with a multimeter while slowly moving the throttle or pedal through its full range, comparing to manufacturer specifications
- 4 Perform a throttle body and pedal position sensor calibration or relearn procedure using a scan tool
- 5 Test the sensor 'C' resistance or voltage output for dead spots or abnormal readings; replace the sensor or assembly if faulty
- 6 Verify the integrity of the sensor ground circuit and repair any excessive resistance
- 7 If all else fails, update or reprogram the ECM and recheck for the presence of the code

Common Misdiagnosis Traps for P2165

- A dirty throttle body is frequently the root cause, but many technicians replace the sensor first without cleaning and recalibrating the throttle plate.
- The code can be set by a weak battery or charging system issue that causes voltage spikes, so always check battery health and grounds before condemning sensors.
- After replacing a throttle body or pedal assembly, a calibration or relearn procedure is mandatory; skipping it will often cause P2165 to return immediately.
- Wiring harness chafing near the throttle body or pedal is a common hidden cause that visual inspection alone may miss; wiggle-test the harness while monitoring sensor data.
- P2165 can be stored intermittently due to a poor connection that only acts up under vibration or temperature changes, so road-test with a scan tool recording live data.

Can I keep driving with P2165?

The vehicle may enter limp mode with reduced power, which can be unsafe in traffic. Avoid aggressive acceleration and have the fault diagnosed promptly; continuing to drive with an active throttle fault can lead to stalling or loss of power.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Throttle body cleaner and soft brush
- Basic hand tools (screwdrivers, socket set)
- Feeler gauge or feeler blades for mechanical clearance checks



Reading P2165

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 1** Fuel and air metering.
- 65** The exact fault within that area.

Often seen with

P0121 Throttle Position Sensor A Circuit Range/Performance · **P0221** Throttle Position Sensor B Circuit Range/Performance · **P2101** Throttle Actuator Control Motor Circuit Range/Performance · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation

See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2165/>

