



P212C

Throttle Position Sensor/Switch G Circuit Low

P212C indicates that the engine control module (ECM) has detected a low voltage condition on the signal circuit of throttle position sensor or switch G. This sensor is part of the accelerator pedal position system, and the ECM expects a specific voltage range that corresponds to the pedal's position; a low voltage means the signal is below the expected threshold, which can affect throttle control.

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 vehicle speed
- Poor acceleration or hesitation when pressing the accelerator pedal
- Unresponsive or erratic throttle behavior
- In some cases, the engine may stall or idle poorly

Common causes, most likely first

- 1 Faulty throttle position sensor or switch G (accelerator pedal position sensor)
- 2 Damaged or corroded wiring in the sensor's signal circuit
- 3 Poor electrical connection at the sensor or ECM connector
- 4 Short to ground in the signal circuit
- 5 Failed ECM (less common)

How to diagnose and fix it

- 1 Use an OBD-II scanner to confirm the code and check for related codes in the accelerator pedal position system
- 2 Visually inspect the sensor and its wiring for damage, corrosion, or loose connections
- 3 Measure the sensor's signal voltage with a multimeter and compare to manufacturer specifications
- 4 Check the signal circuit for a short to ground using a wiring diagram and multimeter
- 5 If the sensor is faulty, replace it and clear the code
- 6 If wiring is damaged, repair or replace the affected section
- 7 After repairs, clear codes and perform a road test to verify the fix



Common Missteps When Diagnosing P212C

- A low voltage code on sensor G often results from a poor ground connection rather than a failed sensor, so always check ground points before replacing parts.
- The accelerator pedal position sensor may have multiple circuits; a low voltage on one circuit can be caused by a short to ground in a different circuit, so inspect the entire harness.
- Some vehicles use a single assembly for multiple pedal sensors; replacing just one sensor may not be possible, requiring replacement of the whole pedal assembly.
- Intermittent connections can set this code without permanent failure; wiggle-test the harness while monitoring live data to catch intermittent faults.
- After replacing the sensor, a relearn or calibration procedure may be required for the ECM to recognize the new sensor's voltage range.

Can I keep driving with P212C?

If the vehicle enters limp mode or exhibits severe power loss, avoid driving until repaired. If the only symptom is the check engine light, you may drive cautiously to a repair shop, but be prepared for sudden throttle response changes.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (screwdrivers, socket set)
- Electrical contact cleaner

Reading P212C

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.
2C	The exact fault within that area.

Often seen with

P2122 Accelerator Pedal Position Sensor D Circuit Low · **P2123** Accelerator Pedal Position Sensor D Circuit High · **P2127** Accelerator Pedal Position Sensor E Circuit Low · **P2128** Accelerator Pedal Position Sensor E Circuit High · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation



See it working

Watch the animated explainer [How Variable Valve Timing Works: Cam Phaser and VVT Solenoid](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p212c/>

