

GENERIC · POWERTRAIN

P211A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P211A

Throttle Actuator B Control System - Stuck Open

P211A indicates that the engine computer has detected a fault in the electronic throttle actuator circuit for bank B, specifically that the throttle plate is stuck open or the actuator cannot return it to the closed position. The computer monitors throttle position sensor feedback and actuator commands, and when the actual throttle position does not match the commanded position within a calibrated time, it sets this code.

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

Symptoms you may notice

- Illuminated check engine light, often with reduced engine power or limp mode
- Engine idle speed higher than normal or fluctuating
- Unexpected acceleration or inability to decelerate smoothly when releasing the accelerator pedal
- Hesitation or stumble when pressing the accelerator pedal
- Transmission may shift harshly or refuse to shift due to torque management
- Often no symptoms besides the warning light if the fault is intermittent

Common causes, most likely first

- 1 Carbon buildup or mechanical binding on the throttle plate or bore, preventing free movement
- 2 Faulty throttle actuator motor (worn brushes, shorted windings, or open circuit)
- 3 Damaged or corroded wiring and connectors in the throttle actuator circuit
- 4 Failed throttle position sensor (TPS) or accelerator pedal position sensor providing incorrect feedback
- 5 Engine control module (ECM) software issue or internal driver fault
- 6 Contamination or debris in the throttle body from a damaged air intake or filter
- 7 Extreme temperatures causing temporary actuator stiffness or lubricant failure



How to diagnose and fix it

- 1 Inspect the throttle body for carbon buildup and clean it with approved throttle body cleaner and a soft brush
- 2 Check the throttle plate for free movement by hand (with the ignition off) and listen for binding or scraping
- 3 Perform a visual inspection of the throttle actuator wiring and connectors for chafing, corrosion, or loose pins
- 4 Use a scan tool to command the throttle actuator through its full range and observe throttle position sensor feedback for smoothness and correlation
- 5 Measure resistance and voltage on the actuator motor and sensor circuits according to the manufacturer's specifications
- 6 If the actuator motor or sensor is faulty, replace the throttle body assembly or the specific component as required
- 7 After repair, clear the code and perform a throttle body relearn or idle relearn procedure with a capable scan tool

Don't overlook carbon and wiring before replacing the throttle body

- A sticking throttle plate due to carbon buildup is a very common cause of P211A, especially on engines with direct injection or high mileage, and cleaning often resolves the issue without parts replacement.
- The code can be set by a faulty accelerator pedal position sensor even though the fault is reported for the throttle actuator, because the ECM compares both signals and may misinterpret a pedal signal as a stuck throttle.
- Intermittent wiring faults, such as a broken wire inside the insulation or a poor ground, can mimic a failed actuator and are often missed during a quick visual inspection.
- Some vehicles require a throttle body relearn procedure after cleaning or replacement; skipping this step can cause the code to return immediately or result in poor idle quality.
- A low battery or charging system issue can cause voltage drops that affect the electronic throttle control, leading to false P211A codes; always verify battery and charging system health first.

Can I keep driving with P211A?

If the vehicle is in limp mode or the throttle is stuck open, do not drive it because unintended acceleration is a serious safety risk. If the code is stored but the vehicle drives normally, you can drive cautiously to a repair shop, but avoid aggressive acceleration and be prepared for sudden limp mode activation.

Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter for circuit testing
- Throttle body cleaner and soft brush
- Socket set and screwdrivers for throttle body removal
- Wiring diagram and service information for the specific vehicle
- Torque wrench for reassembly



Reading P211A

- 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.
- 1A** 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 · **P2119** Throttle Actuator Control Throttle Body Range/Performance · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p211a/>

