

GENERIC · POWERTRAIN

P210D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P210D

Throttle Actuator B Control Motor Circuit High

P210D indicates that the powertrain control module (PCM) has detected an abnormally high current or voltage on the control circuit for throttle actuator motor B, which is the second motor in a dual-motor electronic throttle body. The PCM commands a specific throttle plate position and monitors the motor circuit for expected electrical behavior; a high reading means the circuit is drawing too much current or the voltage is above the expected range, so the PCM sets this code and typically forces the throttle into a limited default position.

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

Symptoms you may notice

- Illumination of the check engine light, often accompanied by the electronic throttle control (ETC) warning light or reduced power message.
- The engine may enter limp mode, limiting throttle opening and vehicle speed to a low default value.
- Poor or delayed acceleration response when pressing the accelerator pedal.
- Rough idle or stalling immediately after startup or during deceleration.
- In some cases, no noticeable drivability symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 A short to voltage or short to ground in the wiring harness between the PCM and the throttle actuator motor B control circuit.
- 2 A seized or binding throttle plate or actuator motor B, causing excessive current draw.
- 3 Internal failure of the electronic throttle body assembly, such as a shorted motor winding or damaged internal connector.
- 4 Corrosion or water intrusion in the throttle body electrical connector, creating a high-resistance or intermittent short.
- 5 A faulty PCM driver circuit for throttle actuator motor B, though this is less common.
- 6 Aftermarket or damaged components in the throttle control system that alter circuit resistance.



How to diagnose and fix it

- 1 Perform a visual inspection of the throttle body, its connector, and the wiring harness for chafing, corrosion, or loose pins.
- 2 Use a scan tool to command the throttle plate through its full range and observe actuator motor B current and voltage parameters for anomalies.
- 3 Disconnect the throttle body connector and measure resistance across the motor B control circuit terminals; compare to the manufacturer's specification.
- 4 Check for shorts to voltage or ground on the control circuit wires with a multimeter, wiggle-testing the harness while monitoring.
- 5 If wiring and connectors are intact, substitute a known-good throttle body and clear the code to see if it returns.
- 6 If the code persists with a known-good throttle body, test the PCM control circuit output with an oscilloscope or bidirectional scan tool.
- 7 After any repair, clear the codes and perform a throttle body relearn or idle relearn procedure as required by the manufacturer.

What a high circuit code really means

- A high circuit code does not automatically condemn the throttle body; a shorted wire or corroded connector can produce the same high-current reading and is far cheaper to fix.
- Intermittent faults often occur only when the engine is hot or vibrating, so a wiggle test of the harness while monitoring live data is more reliable than a static resistance check.
- Some vehicles use a dual-motor throttle body where motor B is a backup; a failure may not cause immediate limp mode but will set the code and disable redundancy.
- A binding throttle plate from carbon buildup can increase motor current enough to trigger P210D without any electrical fault, so clean the bore before replacing parts.
- Clearing the code without performing a throttle relearn can cause a temporary high idle or poor running that mimics a recurring fault.

Can I keep driving with P210D?

If the vehicle is in limp mode or the throttle response is severely limited, do not drive on public roads; have it towed to a repair shop. If the only symptom is the warning light and the car drives normally, you may drive cautiously to a nearby garage, but avoid heavy acceleration or high speeds because the fault can suddenly worsen and trigger limp mode.



Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter with min/max recording
- Oscilloscope for waveform analysis of the motor control circuit
- Wiring diagram and manufacturer service information
- Socket set and torx bits for throttle body removal
- Contact cleaner and dielectric grease for connector repair

Reading P210D

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.
0D	The exact fault within that area.

Often seen with

P0121 Throttle Position Sensor A Circuit Range/Performance · **P210C** Throttle Actuator B Control Motor Circuit Low · **P210E** Throttle/Pedal Position Sensor/Switch C/F Voltage Correlatio · **P2110** Throttle Actuator Control System - Forced Limited RPM · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p210d/>

