

GENERIC · POWERTRAIN

P213B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P213B

EGR Throttle Control Circuit B Range/Performance

P213B indicates that the engine control module (ECM) has detected an out-of-range or performance fault in the EGR throttle control circuit B, which is the second throttle plate used to regulate exhaust gas recirculation flow. The ECM compares commanded throttle position against actual position and sets this code when the correlation falls outside the expected range for a calibrated time.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stumbling when the EGR throttle is commanded to move
- Hesitation or poor acceleration during light throttle applications
- Reduced fuel economy due to incorrect EGR flow management
- Intermittent surging or uneven engine speed at steady cruise
- Possible limp-home mode with reduced power on some vehicles

Common causes, most likely first

- 1 Carbon buildup or sludge on the EGR throttle plate or bore causing it to stick
- 2 Faulty EGR throttle position sensor or its internal circuitry
- 3 Damaged or corroded wiring harness or connector at the EGR throttle actuator
- 4 Failed EGR throttle actuator motor (binding or open winding)
- 5 Vacuum leak or restricted vacuum supply to the EGR throttle actuator on vacuum-operated systems
- 6 ECM software calibration issue or internal driver fault (less common)
- 7 Mechanical binding in the throttle shaft or return spring



How to diagnose and fix it

- 1 Inspect the EGR throttle body for carbon deposits and clean the plate and bore with approved intake cleaner
- 2 Check the electrical connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Measure resistance and voltage signals from the EGR throttle position sensor and compare to manufacturer specifications
- 4 Command the EGR throttle actuator with a scan tool and observe actual position movement for binding or no response
- 5 Test the actuator motor circuit for power, ground, and control signal integrity
- 6 If the actuator or sensor is faulty, replace the EGR throttle assembly or component as required
- 7 Clear the code and perform a relearn or adaptation procedure if specified, then verify the repair with a road test

Carbon buildup often mimics a failed EGR throttle

- A sticking EGR throttle plate from carbon deposits is frequently misdiagnosed as a failed actuator, so cleaning should always precede parts replacement.
- The code can set intermittently due to a marginal electrical connection that only acts up under vibration or temperature changes, so wiggle tests are valuable.
- Some vehicles use the EGR throttle for intake air flow control during regeneration or cold start, so a fault may appear without any EGR-related driveability complaint.
- A vacuum leak or weak vacuum pump can cause the EGR throttle to respond sluggishly and set P213B even when the throttle body itself is healthy.
- After replacement, many ECMs require a throttle position relearn; skipping this step can cause the code to return immediately.

Can I keep driving with P213B?

The vehicle is generally safe to drive with P213B, but avoid heavy acceleration or sustained high-load conditions until the fault is repaired. Prolonged driving with a stuck EGR throttle can lead to poor emissions, reduced fuel economy, and potential damage to the catalytic converter over time.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Hand tools for removing intake components
- Intake cleaner and soft brushes
- Vacuum gauge (for vacuum-operated systems)



Reading P213B

- 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.
- 3B** The exact fault within that area.

Often seen with

P0401 EGR Flow Insufficient Detected · **P0402** EGR Flow Excessive Detected · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation · **P213A** EGR Throttle Control Circuit B/Open · **P213C** EGR Throttle Control Circuit B Low

See it working

Watch the animated explainer [How a Wideband Air-Fuel Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p213b/>

