



P213A

EGR Throttle Control Circuit B/Open

P213A indicates that the engine control module has detected an open circuit or excessive resistance in the 'B' circuit of the EGR throttle control, which is the second throttle plate used to regulate exhaust gas recirculation flow. The computer monitors the electrical path to the EGR throttle actuator and sets this code when the expected voltage or current is outside the normal range, typically indicating a break in the wiring or a failed actuator.

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
- Rough idle or stumbling when the engine is cold
- Slight hesitation or surge during light acceleration
- Reduced fuel economy due to improper EGR flow
- In some cases, a noticeable lack of power at low RPM
- Intermittent misfire codes may accompany this code if EGR flow is disrupted

Common causes, most likely first

- 1 Open or damaged wire in the EGR throttle control circuit B (broken, corroded, or disconnected)
- 2 Failed EGR throttle actuator motor or position sensor
- 3 Corroded or loose electrical connector at the EGR throttle body
- 4 Faulty engine control module driver for the EGR throttle circuit (rare)
- 5 Carbon buildup or mechanical binding of the EGR throttle plate causing the actuator to overheat and fail
- 6 Rodent damage to the wiring harness near the EGR throttle body



How to diagnose and fix it

- 1 Visually inspect the EGR throttle body connector and wiring for damage, corrosion, or loose pins; clean and reseat as needed
- 2 Use a scan tool to command the EGR throttle open and closed while watching live data for the actuator position and circuit voltage
- 3 Measure resistance and continuity of the 'B' circuit wiring between the EGR throttle actuator and the ECM; repair any open or high-resistance faults
- 4 Check for mechanical binding of the EGR throttle plate by manually moving it (with the engine off) and clean carbon deposits if present
- 5 Swap the EGR throttle actuator with a known-good unit (if accessible) to confirm whether the actuator is faulty
- 6 If wiring and actuator are good, test the ECM driver circuit with a oscilloscope or substitute a known-good ECM for diagnosis
- 7 Clear the code and perform a drive cycle to verify the repair; recheck for pending codes

What most technicians overlook with P213A

- A loose or corroded ground connection for the EGR throttle body can mimic an open circuit and set P213A even when the actuator and wiring test good.
- The 'B' circuit often refers to the second throttle plate in a dual-throttle EGR system, not the main throttle body, so misdiagnosis occurs when technicians inspect the wrong component.
- Carbon buildup on the EGR throttle plate can cause the actuator to draw excessive current, eventually burning out the motor or tripping the open-circuit detection.
- In some vehicles, the EGR throttle control circuit is shared with other actuators, so a fault elsewhere can set P213A as a secondary code.
- A faulty battery or charging system causing low voltage can trigger this code intermittently, so always verify battery condition before replacing parts.

Can I keep driving with P213A?

You can generally continue driving with P213A, but avoid heavy acceleration or prolonged idling because improper EGR flow may cause rough running or increased emissions. Have the fault diagnosed soon to prevent potential damage to the EGR throttle actuator or catalytic converter.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket set and screwdrivers
- Contact cleaner and dielectric grease



Reading P213A

- 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.
- 3A** 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 · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation · **P213B** EGR Throttle Control Circuit B Range/Performance

See it working

Watch the animated explainer [How a Six-Speed Manual Gearbox Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p213a/>

