

GENERIC · POWERTRAIN

P213C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P213C

EGR Throttle Control Circuit B Low

P213C indicates that the powertrain control module has detected a low-voltage condition on the signal circuit for the EGR throttle control circuit B, which is the second throttle plate used to regulate exhaust gas recirculation flow. The computer expects a certain voltage range on this circuit and sees it persistently below the acceptable threshold, so it flags the circuit as low.

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 or under light load
- Hesitation or a slight surge during acceleration as the EGR throttle fails to modulate
- Increased exhaust emissions that may cause a state inspection failure
- In some cases, a limp-home mode with reduced engine power
- A faint electrical burning smell or visible chafed wiring near the EGR throttle body

Common causes, most likely first

- 1 A short to ground in the signal wire between the EGR throttle control circuit B and the powertrain control module
- 2 A faulty EGR throttle position sensor or actuator assembly internal to the throttle body
- 3 Corroded, loose, or damaged electrical connector pins at the EGR throttle body or PCM
- 4 A failed powertrain control module driver for that specific circuit, though this is less common
- 5 Aftermarket or improperly installed electrical accessories tapping into the circuit and pulling voltage low
- 6 Water intrusion into the connector or throttle body causing intermittent low-voltage signals



How to diagnose and fix it

- 1 Use a scan tool to verify P213C is current and check for any related pending codes or freeze-frame data
- 2 Visually inspect the EGR throttle body connector and wiring for chafing, corrosion, or loose pins
- 3 Disconnect the EGR throttle body and measure resistance from the signal circuit B terminal to ground to check for a short
- 4 Back-probe the signal circuit at the PCM connector and compare voltage with the throttle body connected and disconnected
- 5 If wiring and connectors are good, substitute a known-good EGR throttle body and clear codes to see if the fault returns
- 6 Check for technical service bulletins or software updates for the PCM that address false low-voltage reporting
- 7 After repair, clear codes and perform a drive cycle that includes EGR activation to confirm the fix

What the low-voltage code really means

- A low-voltage code on a throttle control circuit often comes from a poor ground or a shorted signal wire rather than a failed throttle body, so always check the harness before replacing parts.
- The EGR throttle control circuit B is sometimes shared with other sensors on the same 5-volt reference, and a fault in one can drag down the voltage seen by the PCM and set this code.
- Intermittent low-voltage faults frequently 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 meter check.
- Some vehicles use the EGR throttle for both emissions control and intake air regulation, so a failing circuit can cause drivability symptoms that seem unrelated to the EGR system.
- A generic P213C does not tell you which specific wire or component is at fault, and misdiagnosis often leads to unnecessary replacement of the EGR throttle body when the real issue is a chafed wire near the exhaust manifold.

Can I keep driving with P213C?

You can usually drive the vehicle with P213C set, but avoid heavy acceleration and long uphill grades because the EGR throttle may not regulate properly and could cause poor engine performance or increased emissions. If the check engine light flashes or you notice severe power loss, stop driving and have the fault diagnosed promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with back-probing pins
- Wiring diagram for the specific vehicle
- Hand tools for removing connectors and throttle body
- Electrical contact cleaner and dielectric grease



Reading P213C

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

Often seen with

P0401 EGR Flow Insufficient Detected · **P0404** EGR Circuit Range/Performance · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation · **P213B** EGR Throttle Control Circuit B Range/Performance · **P213D** EGR Throttle Control Circuit B High

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p213c/>

