

GENERIC · POWERTRAIN

P201C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P201C

Intake Manifold Runner Control Actuator Supply Voltage Low (Bank 2)

P201C indicates that the powertrain control module has detected a low supply voltage on the circuit feeding the intake manifold runner control actuator for bank 2. The actuator motor or solenoid is not receiving the voltage it needs to move the intake runner flaps, so the computer flags the circuit as faulty.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine performance or a lack of power at higher engine speeds
- Rough idle or stumbling when the engine is cold
- Poor fuel economy compared to normal driving
- In some cases, a slight hesitation during acceleration

Common causes, most likely first

- 1 A blown fuse or corroded fuse contact supplying power to the intake manifold runner control actuator circuit
- 2 Damaged or chafed wiring between the fuse box and the actuator, causing an open or high-resistance connection
- 3 A faulty intake manifold runner control actuator with an internal short or open winding
- 4 Corroded or loose electrical connector pins at the actuator or at the powertrain control module
- 5 High resistance in the ground circuit for the actuator, preventing proper current flow
- 6 A failing powertrain control module driver circuit, though this is less common



How to diagnose and fix it

- 1 Check all fuses related to the intake manifold runner control system and replace any that are blown
- 2 Inspect the wiring harness and connectors at the actuator for damage, corrosion, or loose pins, and repair as needed
- 3 Measure the supply voltage at the actuator connector with the key on and engine off, comparing to battery voltage to confirm the low-voltage condition
- 4 Perform a voltage drop test on both the power and ground sides of the actuator circuit to locate excessive resistance
- 5 Test the actuator itself by applying battery voltage directly and observing movement, or measure its resistance and compare to specifications
- 6 If the actuator fails the direct test, replace it and clear the code
- 7 If the circuit and actuator test good, check for a faulty powertrain control module or have it professionally tested

Don't overlook the simple fuse and ground

- A low-voltage code for the intake manifold runner control actuator is frequently caused by a blown fuse that also powers other components, so check those systems for related issues.
- Corrosion inside the actuator connector is a common hidden cause, especially on vehicles driven in wet or salty conditions, and can mimic a failed actuator.
- The intake manifold runner control system often shares a power feed with other engine actuators, so a single wiring fault can set multiple codes beyond P201C.
- A technician should not condemn the actuator until voltage drop testing confirms the circuit can carry current under load, because a meter reading of 12 volts with no load can be misleading.
- On some engines, the bank 2 actuator is difficult to access, and a poor ground connection at the engine block can cause this code without any visible damage to the actuator itself.

Can I keep driving with P201C?

You can usually continue driving with this code, but avoid aggressive acceleration or heavy engine loads because the intake runner flaps may not function correctly, which can reduce performance and fuel economy. Have the fault diagnosed soon to prevent potential damage to the actuator or related components.

Tools that help

- Digital multimeter with voltage and resistance measurement
- Fuse puller or test light
- Socket and ratchet set
- Wire terminal pick and electrical contact cleaner
- Scan tool capable of reading live data and clearing codes



Reading P201C

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Fuel and air metering and auxiliary emission controls.
- 1C** The exact fault within that area.

Often seen with

P2019 Intake Manifold Runner Position Sensor/Switch Circuit (Bank 1 · **P201A** Reductant Injection Valve Circuit Range/Performance (Bank 2 · **P201B** Intake Manifold Runner Control Actuator Supply Voltage Low (· **P201D** Intake Manifold Runner Control Actuator Internal Performance · **P201E** Intake Manifold Runner Control Actuator Internal Performance

See it working

Watch the animated explainer **V6 Engine Explained: 60° Bank and Firing Order** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p201c/>

