

GENERIC · POWERTRAIN

P2013

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2013

Intake Manifold Runner Control Circuit High (Bank 2)

P2013 is a generic powertrain code indicating that the engine control module has detected a high voltage condition on the intake manifold runner control circuit for bank 2. The intake manifold runner control system uses a motor or solenoid to adjust airflow through the intake runners, and a high voltage reading typically means the circuit is open, shorted to power, or the actuator has failed.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stumbling, especially when the engine is cold
- Reduced engine performance or hesitation during acceleration
- Poor fuel economy due to incorrect airflow tuning
- In some cases, a noticeable loss of power at higher RPMs

Common causes, most likely first

- 1 Faulty intake manifold runner control actuator or solenoid on bank 2
- 2 Open or damaged wiring in the intake manifold runner control circuit
- 3 Corroded or loose electrical connector at the actuator or ECM
- 4 Short to voltage in the control circuit
- 5 Failed engine control module (rare but possible)
- 6 Carbon buildup or mechanical binding in the intake manifold runner mechanism



How to diagnose and fix it

- 1 Use a scan tool to verify the code and check for any related codes in the intake manifold runner control system
- 2 Visually inspect the actuator, wiring, and connectors for damage, corrosion, or loose pins
- 3 Measure resistance of the actuator and compare to manufacturer specifications
- 4 Check for voltage on the control circuit with the key on and engine off to detect a short to power
- 5 Test the circuit for continuity and shorts to ground using a multimeter
- 6 If the actuator is faulty, replace it and clear the code
- 7 If wiring is damaged, repair or replace the affected section and retest

What the high voltage reading really means

- A high voltage code often results from an open circuit rather than a short, so check for broken wires or disconnected plugs first.
- The intake manifold runner control system may be vacuum-operated on some engines, so a stuck actuator can cause a high voltage signal without an electrical fault.
- Carbon buildup on the intake runner flaps can cause mechanical binding that mimics an electrical failure, so inspect the mechanical components as well.
- This code is sometimes set by a failing ECM driver, but that is rare and should only be suspected after all other possibilities are ruled out.
- Incorrect readings can occur if the battery voltage is low or unstable, so ensure the charging system is healthy before diagnosing.

Can I keep driving with P2013?

You can usually continue driving with this code, but expect reduced engine performance and fuel economy. Avoid aggressive acceleration or heavy loads until the fault is repaired, as prolonged driving may cause further damage to the intake system or catalytic converter.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Basic hand tools (screwdrivers, socket set)
- Wiring diagram for the specific vehicle
- Vacuum pump (if applicable)



Reading P2013

- 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.
- 13** The exact fault within that area.

Often seen with

P2012 Intake Manifold Runner Control Circuit Low (Bank 2) · **P2014** Intake Manifold Runner Position Sensor/Switch Circuit (Bank · **P2015** Intake Manifold Runner Position Sensor/Switch Circuit Range/ · **P2016** Intake Manifold Runner Position Sensor/Switch Circuit Low (B · **P2017** Intake Manifold Runner Position Sensor/Switch Circuit High (

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2013/>

