

GENERIC · POWERTRAIN

P2014

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2014

Intake Manifold Runner Position Sensor/Switch Circuit (Bank 1)

P2014 indicates that the powertrain control module (PCM) has detected an out-of-range or implausible signal from the intake manifold runner position sensor or switch circuit on bank 1. This sensor monitors the position of the intake manifold runner control (IMRC) valve, which adjusts airflow to optimize engine performance; the PCM sets the code when the voltage or switch state does not match expected values for the current operating conditions.

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
- Decreased fuel economy due to incorrect airflow management
- In some cases, a noticeable loss of power at higher engine speeds
- Occasional engine misfire or surging under light throttle

Common causes, most likely first

- 1 Faulty intake manifold runner position sensor or switch
- 2 Damaged or disconnected wiring or connector at the sensor
- 3 Sticking or binding intake manifold runner control valve linkage
- 4 Vacuum leak affecting the intake manifold runner actuator
- 5 Failed intake manifold runner control solenoid or actuator
- 6 Corroded or damaged PCM connector pins
- 7 Rarely, a fault within the PCM itself



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, wiring, and connectors for obvious damage or disconnection
- 2 Use a scan tool to check for related codes and freeze-frame data to understand when the fault occurs
- 3 Test the sensor's resistance and voltage output according to the manufacturer's specifications
- 4 Check the intake manifold runner control valve for free movement and proper vacuum operation
- 5 Verify wiring continuity and check for shorts to ground or power using a multimeter
- 6 If the sensor tests bad, replace it and clear the codes to see if the fault returns
- 7 If the sensor and wiring are good, test the IMRC solenoid and actuator, and repair as needed

Common Misdiagnosis Traps for P2014

- A sticking intake manifold runner valve is frequently overlooked because the sensor itself tests fine, but the mechanical binding causes implausible readings.
- Vacuum leaks at the intake manifold runner actuator can mimic a sensor failure, so a smoke test is often necessary to find the real cause.
- The code can set intermittently due to a loose connector that only loses contact during engine vibration or temperature changes.
- Some vehicles use a switch instead of a position sensor, and the switch may fail mechanically while still showing correct electrical resistance.
- A faulty PCM is rarely the cause, but corroded pins at the PCM connector can create resistance that skews sensor signals without setting other codes.

Can I keep driving with P2014?

You can usually continue driving with P2014, but avoid aggressive acceleration or heavy loads because the engine may hesitate or lack power. Prolonged driving with the fault can lead to increased emissions and reduced fuel economy, so schedule a diagnosis soon.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand vacuum pump
- Smoke machine for vacuum leak detection
- Basic hand tools (screwdrivers, socket set, pliers)



Reading P2014

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

Often seen with

P2004 Intake Manifold Runner Control Stuck Open (Bank 1) · **P2008** Intake Manifold Runner Control Circuit/Open (Bank 1) · **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 [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2014/>

