

GENERIC · POWERTRAIN

P00B8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P00B8

MAP - Mass or Volume Air Flow Correlation Bank 2

P00B8 indicates that the powertrain control module has detected a mismatch between the manifold absolute pressure sensor signal and the combined mass or volume air flow sensor readings for bank 2 of the engine. The computer compares expected airflow derived from the MAP sensor against actual airflow reported by the MAF or volume air flow sensor, and it sets this code when the two values deviate beyond a calibrated threshold for a sustained period.

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 unstable engine speed, particularly when the engine is cold
- Hesitation or stumble during acceleration from a stop
- Reduced fuel economy as the computer struggles to calculate the correct air-fuel ratio
- Intermittent surging or lack of power under load
- Occasionally, a rich or lean exhaust condition that may trigger additional codes

Common causes, most likely first

- 1 Vacuum leak or unmetered air entering the intake tract downstream of the mass air flow sensor
- 2 Contaminated or failing mass air flow sensor element
- 3 Faulty or clogged manifold absolute pressure sensor
- 4 Wiring damage, corrosion, or poor connection at the MAP or MAF sensor connectors
- 5 Restricted intake or dirty air filter element causing skewed airflow readings
- 6 Exhaust gas recirculation valve sticking or leaking, altering intake pressure
- 7 Engine mechanical issues such as a vacuum leak from a failed intake gasket or PCV hose



How to diagnose and fix it

- 1 Inspect the air intake tract for cracks, loose clamps, or disconnected hoses between the MAF sensor and throttle body
- 2 Check the air filter element and replace it if it is visibly dirty or restricted
- 3 Use a scan tool to view live data for both MAP and MAF sensors and compare readings at idle and during a snap throttle test
- 4 Perform a visual inspection of the MAP and MAF sensor connectors and wiring for corrosion, chafing, or loose pins
- 5 Clean the MAF sensor element with a dedicated MAF cleaner following the manufacturer's procedure
- 6 Test the MAP sensor with a vacuum pump and multimeter to verify its voltage output changes smoothly with applied vacuum
- 7 Smoke-test the intake system to locate any vacuum leaks that are not visible during a visual inspection

What the correlation code really tells you

- A dirty MAF sensor often causes this code without setting a MAF-specific fault because the sensor still reports a plausible signal, just not one that matches the MAP sensor's expected value.
- Bank 2 designation on a V-engine refers to the cylinder bank that does not contain cylinder number one, so technicians must confirm which bank is bank 2 before replacing parts on the wrong side.
- A leaking or stuck-open EGR valve can skew MAP readings at idle and trigger this correlation code even when both sensors are functioning correctly.
- After any repair, the code may remain in memory until several drive cycles complete, so clearing it immediately and returning the vehicle without a road test can lead to a false comeback.
- On some engines, a failing intake manifold gasket creates a vacuum leak that only appears when the engine is cold, making the code intermittent and difficult to reproduce during a warm-engine diagnostic.

Can I keep driving with P00B8?

The vehicle is generally safe to drive to a repair shop, but avoid heavy acceleration, towing, or long trips until the fault is diagnosed because incorrect airflow calculations can cause poor fuel economy and eventually damage the catalytic converter. If the engine runs rough or stalls, stop driving and arrange a tow.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Hand vacuum pump
- Smoke machine
- MAF sensor cleaner
- Basic hand tools for intake and sensor removal



Reading P00B8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 0** Fuel and air metering and auxiliary emission controls.
- B8** The exact fault within that area.

Often seen with

P00B7 Engine Coolant Flow Low/Performance · **P0101** Mass/Volume Air Flow Circuit Range/Performance · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2)

See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p00b8/>

