

GM · POWERTRAIN

P1191

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1191 · GM

Intake Air Duct Leak

P1191 on GM vehicles indicates that the engine control module has detected an intake air duct leak, meaning unmetered air is entering the intake tract downstream of the mass airflow sensor. The computer typically recognizes this condition when fuel trim values exceed a calibrated threshold, signaling that the engine is receiving more air than the mass airflow sensor is reporting.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough or erratic idle, especially when the engine is cold
- Hesitation or stumble during light acceleration
- Whistling or hissing sound from the engine bay while running
- Poor fuel economy due to the engine running lean
- Occasional lean misfire codes or a pending P0171 alongside P1191

Common causes, most likely first

- 1 Cracked or split intake air duct between the mass airflow sensor and throttle body
- 2 Loose or improperly seated air duct clamp at the throttle body or air cleaner housing
- 3 Disconnected or damaged vacuum hose connected to the intake duct
- 4 Failed or missing intake air duct seal or grommet
- 5 Aftermarket intake system installed with poor fitment or missing components
- 6 Cracked intake manifold or throttle body gasket causing a leak near the duct
- 7 Mass airflow sensor housing not fully seated or its O-ring seal damaged



How to diagnose and fix it

- 1 Inspect the entire intake air duct for cracks, splits, or loose connections, paying close attention to the accordion section and clamp areas
- 2 Start the engine and listen for a hissing or whistling sound around the duct while gently wiggling the duct to reveal hidden cracks
- 3 Use a scan tool to monitor fuel trims and confirm a lean condition, then spray carburetor cleaner around suspect duct joints to see if the engine idle changes
- 4 Tighten or replace any loose clamps and ensure the duct is fully seated on the throttle body and air cleaner housing
- 5 Replace a cracked or deteriorated intake air duct with a new assembly, ensuring all vacuum lines and fittings are reconnected
- 6 Clear the diagnostic trouble codes and perform a drive cycle to verify the repair and confirm that fuel trims return to normal

Hidden intake leaks that fool technicians

- A leaking intake air duct often sets P1191 without ever triggering a check engine light on some GM models because the leak is small enough to be masked by normal fuel trim adaptation.
- Technicians frequently replace the mass airflow sensor when the real problem is a cracked duct that lets unmetered air bypass the sensor, so always inspect the duct before condemning the sensor.
- The intake air duct on many GM V6 and V8 engines develops hairline cracks underneath the accordion ribs that are invisible until the duct is flexed or removed for inspection.
- A missing or damaged oil filler cap or dipstick can create a crankcase vacuum leak that mimics an intake air duct leak and set P1191 on some GM engines.
- Aftermarket cold air intake systems with poor quality couplers are a common cause of P1191 on modified GM vehicles, especially when the coupler collapses under vacuum.

Can I keep driving with P1191?

You can usually drive short distances with P1191, but avoid hard acceleration and sustained high-speed driving because the lean condition can cause misfires and overheating. Have the leak repaired promptly to prevent catalytic converter damage from unburned fuel.

Tools that help

- OBD-II scan tool with live data capability
- Carburetor cleaner or propane enrichment tool
- Flashlight and inspection mirror
- Socket set and screwdriver set
- Smoke machine for EVAP and intake leak testing



Reading P1191

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (GM): its meaning depends on the make.
- 1** Fuel and air metering.
- 91** The exact fault within that area.

Often seen with

P0101 Mass/Volume Air Flow Circuit Range/Performance · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0442** EVAP System Leak Detected (Small)

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1191/>

