

GM · POWERTRAIN

P1188

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1188 · GM

Engine Oil Pressure Sensor Circuit High Voltage

P1188 on a GM vehicle means the engine control module (ECM) has detected an abnormally high voltage on the engine oil pressure sensor signal circuit, which usually indicates an open circuit, a short to voltage, or a failed sensor. The ECM compares the sensor's return voltage against expected values for the current engine speed and temperature, and it flags this code when the signal stays above the high threshold for a calibrated time.

SYSTEM

Powertrain

CODE TYPE

GM specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light or a message in the driver information center, often with no other noticeable symptoms
- Oil pressure gauge reading pegged at maximum or fluctuating erratically on vehicles with a real gauge
- A warning chime or 'low oil pressure' message that appears intermittently even when the engine is running normally
- Reduced engine power or a limp-home mode on some applications because the ECM cannot trust the oil pressure input
- Remote start or auto-stop/start functions disabled as a protective measure
- No drivability change at all in many cases, since the oil pressure sensor is primarily an monitoring input

Common causes, most likely first

- 1 Failed engine oil pressure sensor sending unit, which is the most common cause on high-mileage GM engines
- 2 Open or damaged signal wire between the sensor and the ECM, often from chafing or a broken connector pin
- 3 Corroded or loose electrical connector at the oil pressure sensor, especially on engines exposed to road splash
- 4 Short to voltage on the signal circuit, which can be caused by a pinched harness near the exhaust or accessory drive
- 5 Faulty ECM or a poor ground at the ECM, though this is far less likely than a sensor or wiring fault
- 6 Low oil level or severely degraded oil that causes the sensor to read outside its normal range, though this usually sets a different code first



How to diagnose and fix it

- 1 Verify oil level and condition with the dipstick, then confirm the engine has correct oil pressure with a mechanical gauge before condemning any electrical part
- 2 Inspect the oil pressure sensor connector and the harness routing for corrosion, pushed-back pins, or chafed insulation
- 3 Measure the sensor signal voltage at the connector with the key on and engine off, comparing it to the manufacturer's expected range for that engine
- 4 Backprobe the signal circuit at the ECM connector to check for an open or a short to voltage while wiggling the harness
- 5 Replace the oil pressure sensor if the wiring checks out and the signal voltage is stuck high or absent
- 6 Clear the code and perform a road test with a scan tool watching the oil pressure parameter to confirm the repair
- 7 If the code returns after a known-good sensor and verified wiring, check ECM grounds and consider a relearn or ECM replacement as a last resort

What the oil pressure sensor code hides

- A P1188 can be set by a sensor that is mechanically fine but electrically open internally, so a resistance check across the sensor terminals often reveals the fault even when the gauge looks normal
- Many GM engines use the oil pressure sensor input for variable valve timing and cylinder deactivation logic, so a high-voltage fault can cause drivability symptoms that seem unrelated to oil pressure
- Technicians sometimes replace the sensor only to find the real problem is a chafed signal wire behind the intake manifold or near the exhaust manifold, so a thorough harness inspection is essential
- The code does not always mean the engine has low oil pressure; a high signal voltage usually points to an open circuit or a short to voltage rather than a mechanical oiling failure
- On some GM trucks and SUVs, a failing oil pressure sensor can cause the fuel pump prime or remote start to be inhibited, which owners mistake for a security or battery problem

Can I keep driving with P1188?

You can usually drive the vehicle short distances to a repair shop because the code most often reflects an electrical fault rather than an actual loss of oil pressure, but avoid heavy loads and high speeds until the oil pressure has been verified with a mechanical gauge. If the oil pressure warning light is on or the gauge reads zero, stop driving immediately and check the oil level before proceeding.



Tools that help

- Scan tool with live data capability
- Digital multimeter
- Mechanical oil pressure test gauge
- Wire terminal pick and connector release tools
- Flashlight and mirror for harness inspection

Reading P1188

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

Often seen with

P1189 Linear Oxygen Sensor Compensation Resistor Short To B+ · **P1189** Pump Speed Signal · **P1189** O2 Sensor Heater Circuit Low Resistance Fault 1 · **P1189** Engine Oil Pressure Switch Circuit · **P1189** Pump Speed Signal Fault · **P1189** Engine Oil Pressure Switch Circuit · **P1189** Fuel Control Bank 2 Sensor 1 · **P0520** Engine Oil Pressure Sensor/Switch Circuit Malfunction · **P0521** Engine Oil Pressure Sensor/Switch Circuit Range/Performance · **P0522** Engine Oil Pressure Sensor/Switch Circuit Low Voltage · **P0523** Engine Oil Pressure Sensor/Switch Circuit High Voltage

See it working

Watch the animated explainer [How Drive-by-Wire Works: Electronic Throttle Body](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1188/>

