

GENERIC · POWERTRAIN

P055A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P055A

Engine Oil Pressure Sensor/Switch B Circuit

P055A indicates that the powertrain control module has detected an electrical fault in the circuit for engine oil pressure sensor or switch B, which is a secondary oil pressure monitoring device on many modern engines. The computer compares the signal voltage from this sensor against expected values and sets the code when the circuit is out of range, open, shorted, or erratic.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

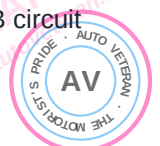
- Illumination of the check engine light or oil pressure warning light on the dashboard
- Often no symptoms besides the warning light, especially if the primary oil pressure sensor is still functioning
- Intermittent or flickering oil pressure warning under certain driving conditions
- Reduced engine performance or limp mode if the PCM derates power to protect the engine
- Erratic or inaccurate oil pressure gauge readings if the vehicle is equipped with a real gauge

Common causes, most likely first

- 1 Faulty engine oil pressure sensor or switch B, including internal failure or contamination
- 2 Damaged or corroded wiring harness or connector at the sensor B circuit
- 3 Open or shorted circuit in the signal or ground wire between the sensor and the PCM
- 4 Low engine oil level or degraded oil causing incorrect pressure readings
- 5 PCM software issue or internal fault in the pressure sensor input circuit
- 6 Aftermarket oil filter or incorrect oil viscosity causing pressure deviations that trigger the code

How to diagnose and fix it

- 1 Check engine oil level and condition, and top off or change oil if necessary
- 2 Inspect the sensor B connector and wiring for corrosion, chafing, or loose pins
- 3 Use a scan tool to view live oil pressure sensor B data and compare with a mechanical gauge
- 4 Perform a voltage drop test on the sensor B signal and ground circuits to identify resistance
- 5 Replace the engine oil pressure sensor or switch B if electrical tests confirm it is faulty
- 6 Clear the code and verify the repair by running the engine and monitoring live data for the sensor B circuit



Don't overlook the oil condition first

- A dirty or clogged oil filter can cause pressure fluctuations that mimic a sensor B failure, so always verify oil maintenance history before replacing parts.
- The sensor B circuit often shares a ground with other engine sensors, so a bad ground can set P055A along with other unrelated codes.
- On some vehicles, sensor B is a switch rather than an analog sensor, and the PCM only expects a simple on/off signal, so a stuck switch can set the code without any drivability symptoms.
- A faulty oil pressure relief valve in the oil pump can cause actual low oil pressure that triggers the code, so mechanical pressure testing is essential before condemning the sensor.
- Intermittent wiring faults that only appear when the engine is hot or vibrating are common, so wiggle-test the harness while watching live data to catch them.

Can I keep driving with P055A?

If the oil pressure warning light is not illuminated and the engine sounds normal, you can drive cautiously to a repair shop, but avoid heavy loads and high speeds. If the warning light is on or the engine is making ticking or knocking noises, stop driving immediately and have the vehicle towed to prevent catastrophic engine damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Mechanical oil pressure gauge
- Socket and ratchet set
- Wire terminal pick and electrical contact cleaner

Reading P055A

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Vehicle speed, idle control and auxiliary inputs.
5A	The exact fault within that area.

Often seen with

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 · **P055B** Engine Oil Pressure Sensor/Switch B Range/Performance



See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p055a/>

