P0522: ENGINE OIL PRESSURE SENSOR/SWITCH LOW

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$100-$200**
Can I Still Drive?	:	**Yes** (Short-term only)

What Does The P0522 Code Mean?

The vehicle's main computer called the Powertrain Control Module (PCM) is in control of many sensors, controls, and electronics in the vehicle. One of the sensors called the oil pressure sensor or sender detects the amount of (mechanical) oil pressure in the engine and relays that in the form of a voltage reading/value to the PCM. In some vehicles, that oil pressure value is then relayed to a gauge in the instrument cluster to show the driver the oil pressure, other times that gauge is not there but there will be a warning light if there is a problem.

This specific P0522 engine code is triggered when the PCM sees too low of a value in the engine oil pressure sender/sensor. If the engine oil pressure actually does drop too low, the engine can be permanently damaged, so if you notice low oil pressure, it is critical that you pull over and shut off the vehicle as soon as safely possible. For this trouble code, the cause is more than likely electrical related.

Note: This code is severe, you need to act right away to diagnose & repair. This code is related to P0520, P0521, P0523, and P0524.

What Are The Symptoms Of The P0522 Code?

Symptoms of a P0522 DTC may include:

- Oil pressure gauge reading low or zero
- Oil pressure indicator lamp illuminated

- Engine may not start
- Engine may quit or stall while driving

What Are The Potential Causes Of The P0522 Code?

Potential causes of a P0522 code include:

- Faulty wiring or connection/connector in the oil pressure sender circuit
- Faulty oil pressure sender/sensor
- Open or short in circuit wiring
- Low oil level, wrong oil, oil passage blockage

How Can You Fix The P0522 Code?

NOTE: There is a known service bulletin that applies to a number of GM vehicles including Chevrolet, Cadillac, , Pontiac, Buick, and Saab. The bulletin number is PIP4786.Check for any applicable TSBs (Technical Service Bulletins) for your vehicle even if it's not one of those before going too far into diagnostics. There is also a TSB for certain 2011 model year Chrysler & Dodge vehicles where the fix is to reprogram the PCM.

First and especially if you have other oil related DTCs, check the oil level & condition. Make sure you have the correct type and weight of oil and the oil filter is not clogged.

Visually inspect the wiring and connectors at the oil pressure sending unit. Look for broken or frayed wires, burnt spots, loose or exposed wiring, etc. Refer to a model specific resource for the location of the sender. Do the same for the wiring and connectors leading to the PCM.

Use a digital volt ohm meter (DVOM) to check the sensor itself, and if it does not meet manufacturers specifications you should replace it. This is a 5 volt circuit. Replacing the sensor/sender will be the most likely repair for this code. If it checks out OK, test the wiring and connectors from the sensor to the PCM. Verify there are no breaks in the wiring or a short to ground due to chafing, pinching, etc. Make sure the electrical connectors are tight and corrosion free.

A technician may also put on a mechanical oil pressure gauge to verify actual oil pressure and compare that to the sensor reading using an advanced scan tool. If your problem is not resolved by fixing/replacing wiring/sensor then check the actual pressure in the engine.

As you can see there are a number of possible reasons for this code P0522. If the sending unit is cheap you could try replacing it first and see if that fixes it, but a proper diagnosis definitely recommended so you don't replace perfectly good parts. Good luck, if you need help stop by our car repair forum.

Reference Sources

Diagnostic Trouble Code (DTC) Guide for P0522 - Ominitek Advanced Technologies, pages 113-114.