

P0523: ENGINE OIL PRESSURE SENSOR/SWITCH HIGH

OVERVIEW

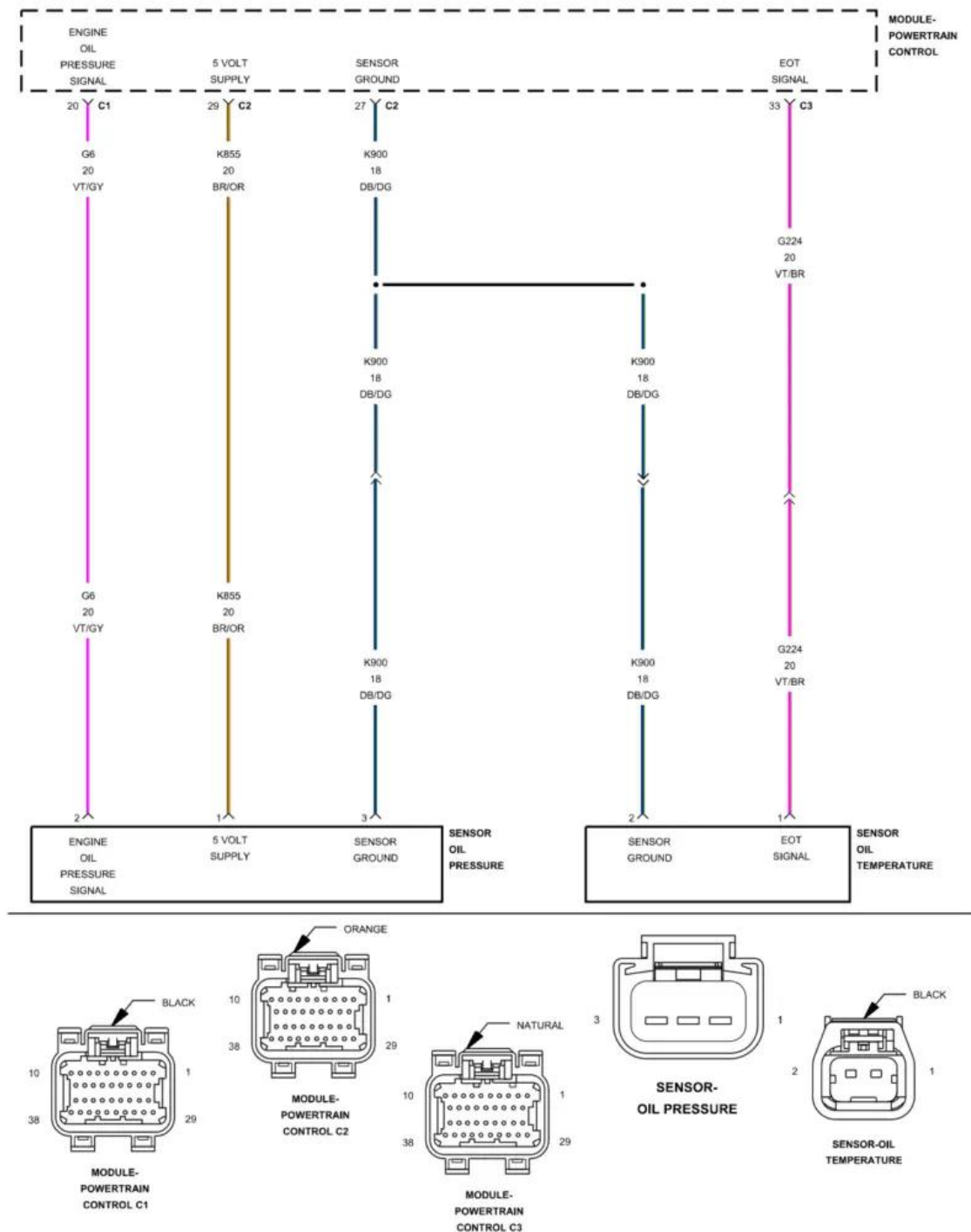
Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$100-\$200
Can I Still Drive?	:	Yes

What Does The P0523 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 P0523 engine code is triggered when the PCM sees too high of a value in the engine oil pressure sender/sensor. The oil pressure sensor operates on a 5 volt circuit. Generally this engine code will be triggered when the voltage is 4.6 or higher. With this trouble code, the cause may be mechanical or electrical, but is most likely to be electrical related. This code is related to these other oil pressure DTCs: [P0520](#), [P0521](#), [P0522](#), and [P0524](#).



P0523 wiring diagram

What Are The Symptoms Of The P0523 Code?

Symptoms of a P0523 DTC may include:

- Oil pressure gauge reading high
- Oil pressure indicator lamp illuminated

What Are The Potential Causes Of The P0523 Code?

Potential causes of a P0523 code include:

- High oil pressure (mechanical oil pump fault)
- High pressure due to obstruction/restriction in oil passage(s)
- Wrong engine oil used
- Faulty wiring or connection/connector in the oil pressure sender circuit
- Faulty oil pressure sender/sensor

How Can You Fix The P0523 Code?

Step 1

It's a good idea to check for technical service bulletins (TSBs) that may apply to your vehicle before going too far into diagnostics.

Step 2

As a vehicle owner/DIYer the first obvious thing to do is to check the oil level using the dipstick. You want to make sure the engine has the correct type and weight of oil and that it's not too old and thick or sludged up.

Step 3

Next, 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.

Step 4

A technician may start by performing a mechanical oil pressure test using a mechanical gauge and compare that reading with the value of the sensor as is being read by the PCM.

They would use an advanced scan tool to do this. If the sensor or wiring is faulty, the mechanical gauge test will give the mechanic or technician an immediate sign of that. If you are DIY'ing this job that is the next step too.

Step 5

Now if you have ruled out that there is an actual problem with oil pressure, the problem lies either within the sensor or the wiring/connectors.

Use a digital volt ohm meter (DVOM) to check the sensor itself, and if it does not meet

manufacturers specifications you should replace it. Also, check the voltage going to the oil pressure sensor, making sure it's getting 5 volts. Replacing the sensor/sender or fixing wiring issues 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 due to chafing, pinching, etc. Make sure the electrical connectors are tight and corrosion free.

Reference Sources

[Diagnostic Trouble Code \(DTC\) Guide for P0523](#) - Ominitek Advanced Technologies, pages 114-115.