P0449: EVAPORATIVE EMISSION CONTROL SYSTEM VENT VALVE/SOLENOID CIRCUIT MALFUNCTION

OVERVIEW

Severity : Medium

DIY Difficulty Level : Intermediate

Repair Cost : \$150-\$300

Can I Still Drive? : Yes

What Does The P0449 Code Mean?

The Powertrain Control Module (PCM) / Engine Management Computer (EMC) / Engine Control Module (ECM) has detected a fault with the circuit that controls the vent for evaporative emission systems vapor.

As fuel sits in the tank it lets out fuel vapor, while driving this vent opens and allows the vapors to be circulated into the engine intake manifold, a charcoal canister or into the atmosphere, depending on the vehicle. This vent valve is apart of the simple, yet complicated evaporative emissions system.

What Are The Symptoms Of The P0449 Code?

Symptoms of a P0449 DTC will include Malfunction Indicator Lamp (MIL) illumination, you will likely not notice any other symptoms.

What Are The Potential Causes Of The P0449 Code?

Potential causes may include:

- Faulty vent valve
- Wire/circuit issue



• PCM/EMC/ECM fault

How Can You Fix The P0449 Code?

Some steps to take to diagnose and repair this trouble code include the following:

- **Step 1:** Check your fuses, there may be a fuse that powers the vent solenoid.
- **Step 2:** Check for a rubbed-through or chafed wiring harness. Check both wires to see if they are shorted to each other, to ground or power.
- **Step 3:** Visually inspect the vent valve for cracks or damage.
- **Step 4:** Trace the wires to and from the PCM/EMC/ECM and check for continuity using a digital volt ohm meter (DVOM).
- **Step 5:** If you have access to an advanced level scan tool, actuate the valve while reading power and ground at the connector or by simply using a bulb wired to both terminals, it will light up if power and ground are OK.
- **Step 6:** Using a DVOM, check the resistance of the vent, in most cases the resistance reading should be low, refer to the manufacturer's specification or compare it to a new one. Too high or low a value indicates a faulty coil inside the valve, thusly meaning replacement is necessary. This code seems to be prevalent on Dodge, Chrysler, and Jeep products. In those cases the vent valve was bad. With GM products (specifically pickups), GM has released a new updated valve assembly.
- **Step 7:** Finally, remove the valve, you may be able to access the pintle inside and it simply could just be sticking from fuel residue. Clean it and retest.

Other EVAP DTCs: <u>P0440- P0441- P0442- P0443- P0444- P0445- P0446- P0447- P0448- P0452- P0453- P0455- P0456</u>

Reference Sources

P0449 Evaporative Emission Control System Vent Valve/Solenoid Circuit Malfunction, OBD-Codes.

