

## P0456: EVAPORATIVE EMISSIONS SYSTEM - SMALL LEAK DETECTED

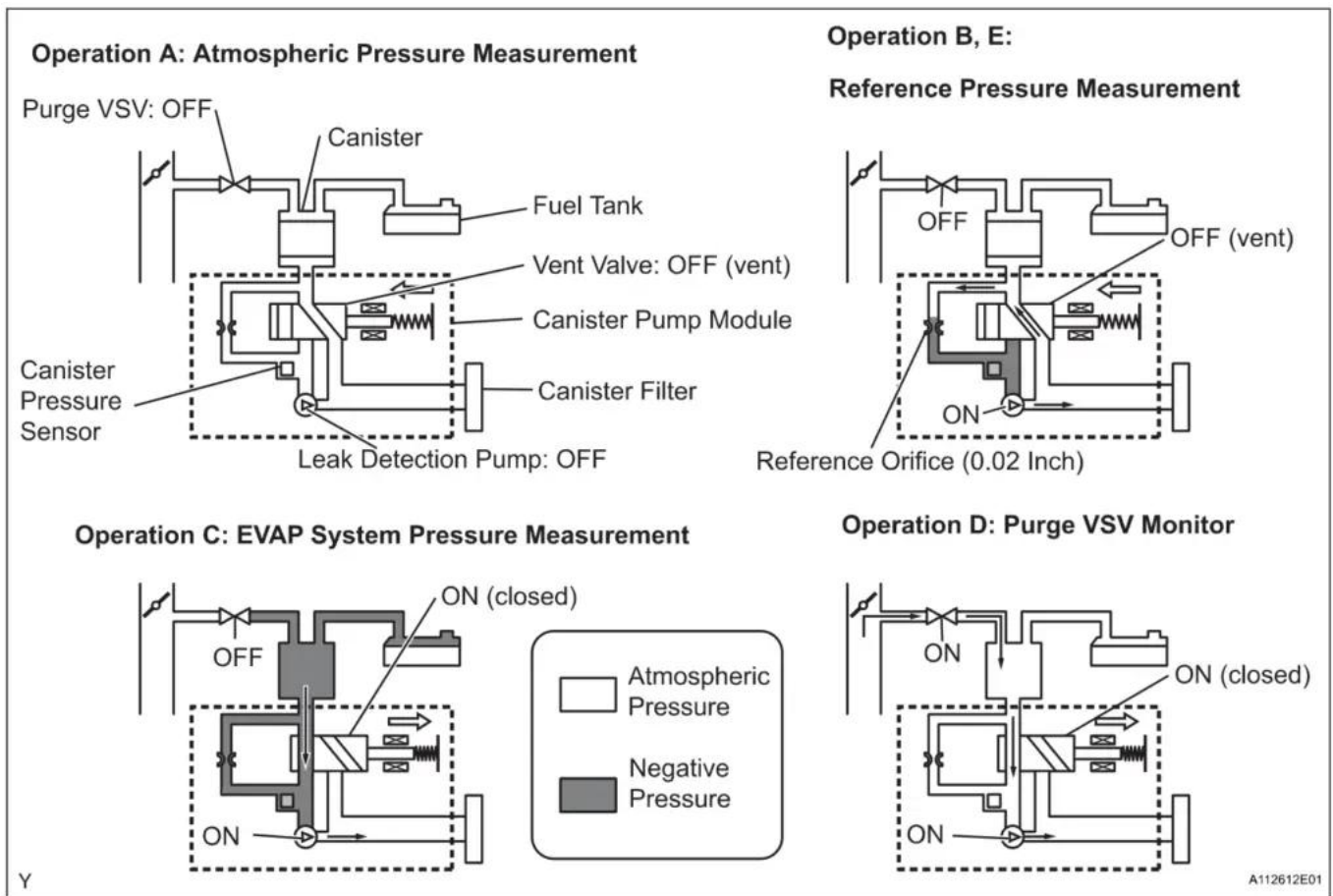
### OVERVIEW

Severity	:	<div><div>Low</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$200-\$600
Can I Still Drive?	:	Yes

### What Does The P0456 Code Mean?

The Powertrain Control Module (PCM) at different times performs various tests on the EVAP system. OBD II Enhanced EVAP systems are in place to keep fuel tank vapors from venting into the atmosphere, and instead purges them into the engine to be burned.

Regular pressure tests are conducted by the PCM to monitor the sealed system for leaks. The PCM monitors the EVAP system pressure by watching the fuel tank pressure (FTP) sensor. When the sensor indicates a small leak in the EVAP system, this code is set.



P0456 wiring diagram

Related evaporative emission trouble codes include [P0450](#), [P0451](#), [P0452](#), [P0453](#), [P0454](#), [P0455](#), [P0457](#), [P0458](#), and [P0459](#).

## What Are The Symptoms Of The P0456 Code?

There will likely be no noticeable symptoms other than the Malfunction Indicator Lamp (MIL). This is because the EVAP system is a closed system and only controls fuel tank vapors, not engine management.

## What Are The Potential Causes Of The P0456 Code?

Usually this P0456 code is caused by an incorrect or faulty gas cap. Filling the fuel tank with the engine running could conceivably cause this code as well or if the cap wasn't properly tightened. Any of the following could also be the cause:

- A small leak in any of the EVAP hoses or fuel tank hoses
- A small leak in the purge valve or vent valve
- The EVAP Canister may be leaking

## How Can You Fix The P0456 Code?

First, using a scan tool activate the vent solenoid, sealing the system. Then monitor the fuel tank pressure (FTP) sensor.

If the system is sealing properly, the number will stay consistent. If it isn't, the pressure sensor will show that as well.

If the system slowly leaks, use a smoke machine and watch for smoke exiting the system at any EVAP component. Anywhere there is smoke exiting the system, that is the faulty component. Do not pressurize the EVAP system with air pressure. Doing so can damage the purge and vent solenoids in the system.

Other EVAP DTCs: P0440- P0441- P0442- P0443- P0444- P0445- P0446- P0447- P0448- P0449- P0452- P0453- P0455

## Reference Sources

[Diagnostic Trouble Code \(DTC\) Charts and Descriptions for P0456](#) - Page 73.