P0496 CADILLAC
Evaporative Emission System Flow During Non-Purge

Possible causes

- Faulty EVAP Canister Vent Valve
- Faulty EVAP Canister Purge valve
- Plugged EVAP canister condition
- Faulty EVAP Pressure Sensor
- EVAP Canister Vent Valve harness is open or shorted
- EVAP Canister Vent Valve circuit poor electrical connection

Description

The evaporative emission (EVAP) control system limits fuel vapors from escaping into the atmosphere. Fuel tank vapors are allowed to move from the fuel tank, due to pressure in the tank, through the vapor pipe, into the EVAP canister. Carbon in the canister absorbs and stores the fuel vapors. Excess pressure is vented through the vent line and EVAP vent solenoid to the atmosphere. The EVAP canister stores the fuel vapors until the engine is able to use them. At an appropriate time, the PCM will command the EVAP purge valve open, allowing engine vacuum to be applied to the EVAP canister. With the EVAP vent valve open, fresh air will be drawn through the valve and vent line to the EVAP canister. Fresh air is drawn through the canister, pulling fuel vapors from the carbon. The air/fuel vapor mixture continues through the EVAP purge pipe and EVAP purge valve into the intake manifold to be consumed during normal combustion. The EVAP system requires the PCM be able to detect a leak as small as 0.040 inch in the EVAP system. The PCM uses several tests to determine if the EVAP system is leaking.

When is the code detected?

The ECM has detected pressure in the EVAP system during a non-purge condition.