

CADILLAC P1646: EVAP VENT SOLENOID CONTROL CIRCUIT MALFUNCTION

OVERVIEW

Severity	:	Medium
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$100-\$250
Can I Still Drive?	:	Yes (Short-term only)

What Does The Cadillac P1646 Code Mean?

Engine runtime over 10 seconds, and the PCM detected an unexpected "low" voltage condition on the EVAP Vent Solenoid control circuit for 2 seconds.

What Are The Potential Causes Of The Cadillac P1646 Code?

Below are some potential causes of this DTC:

- EVAP vent solenoid circuit is open or shorted to ground
- EVAP vent solenoid power circuit is open (test SHIFTSOL fuse)
- EVAP vent solenoid is damaged or has failed
- PCM has failed

Reference Sources

GM, 2013, [Service Bulletin - Prior To Any Circuit Testing](#).