

Canister Purge Solenoid (PV479)

What does a Canister Purge Solenoid do?

The canister purge solenoid is responsible for purging the EVAP system, acting as a switch that permits vapor into the engine. When the canister purge solenoid fails, it causes problems for the EVAP system, which affects the vehicle's emission-output levels.



Year	Model
2017	GMC Acadia Limited
2019 - 09	Buick Enclave
2016 - 10	Buick LaCrosse
2015 - 13	Cadillac ATS
2015 - 10	Cadillac CTS
2016 - 14	Cadillac ELR
2016 - 10	Cadillac SRX
2019 - 13	Cadillac XTS
2015 - 12	Chevrolet Camaro
2017 - 12	Chevrolet Caprice
2015 - 12	Chevrolet Captiva Sport
2016 - 15	Chevrolet Colorado
2017 - 10	Chevrolet Equinox
2019 - 12	Chevrolet Impala
2016 - 14	Chevrolet Impala Ltd
2019 - 09	Chevrolet Traverse
2015 - 11	Chevrolet Volt
2017 - 09	GMC Acadia
2010	Buick Allure
2016 - 15	GMC Canyon
2017 - 10	GMC Terrain
2011	Saab 9-4X
2010 - 09	Saturn Outlook



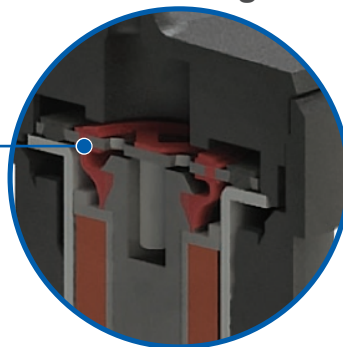
What's the problem?

The OEM design for this canister purge solenoid can develop a leak. If it does, it will not be able to regulate the flow of fuel vapor from the charcoal canister or seal shut for engine diagnostic testing. The Duralast® engineers have eliminated this potential issue.

The Duralast® design uses materials capable of tolerating the extreme temperature changes of under-hood engine applications

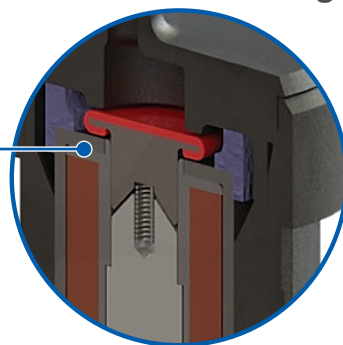


OE Design



OE Design uses a fluorocarbon (FKM) rubber

The Duralast® Design



Our PV479 is a simplified version that removes the necessity for the membrane



Why do they leak?

- The OE design uses a fluorocarbon (FKM) rubber to act as a flexible membrane hinge for the moving plunger
- The membrane separates the EVAP system's charcoal filter from the vacuum pressure generated at the engine's intake
- Extreme temperature and constant flexing of the FKM rubber deteriorates the membrane and elevates the possibility of failure at the thinnest sections of the material
- A failure opens a leak path between the charcoal canister and the intake of the engine

Results of a leaking canister purge solenoid

- OBD flag for EVAP control system
- Poor fuel efficiency
- Rough engine starting or running
- Failure to pass emission testing