

# 1975-79 EXHAUST EMISSION SYSTEMS

## Chrysler Corp. OSAC Valve

### DESCRIPTION

The Orifice Spark Advance Control (OSAC) valve is used on some engines to assist in control of NO<sub>x</sub> emissions. This system controls vacuum to the vacuum advance actuator of the distributor. A tiny orifice in the OSAC valve delays ported vacuum to the distributor for about 10-27 seconds (depending on application), when going from idle to part throttle. When changing from part throttle to idle, vacuum change is instantaneous.

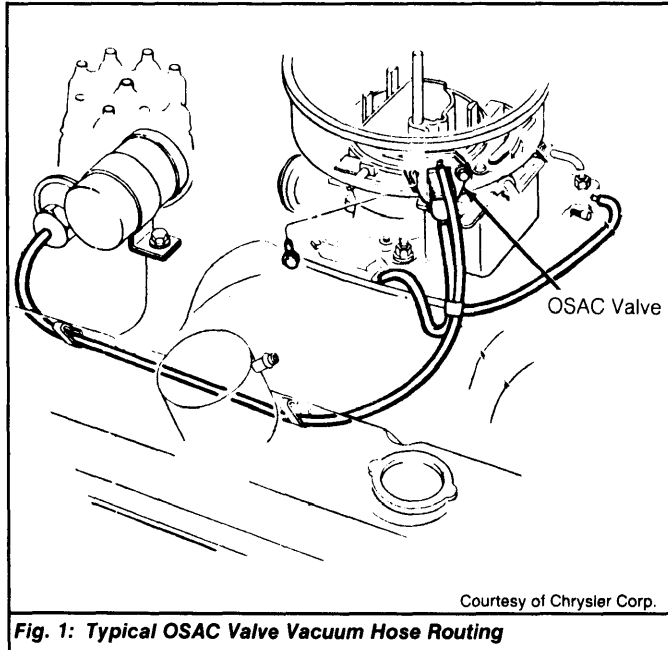


Fig. 1: Typical OSAC Valve Vacuum Hose Routing

**NOTE:** For vacuum hose routings on all engines, see **CHRYSLER CORP. VACUUM DIAGRAMS** at end of this section.

### OPERATION

Vacuum is obtained by a vacuum tap just above throttle valves of carburetor. This type of tap provides no vacuum at idle, but provides manifold vacuum as soon as throttle valves are opened slightly. Proper operation requires air tight fittings.

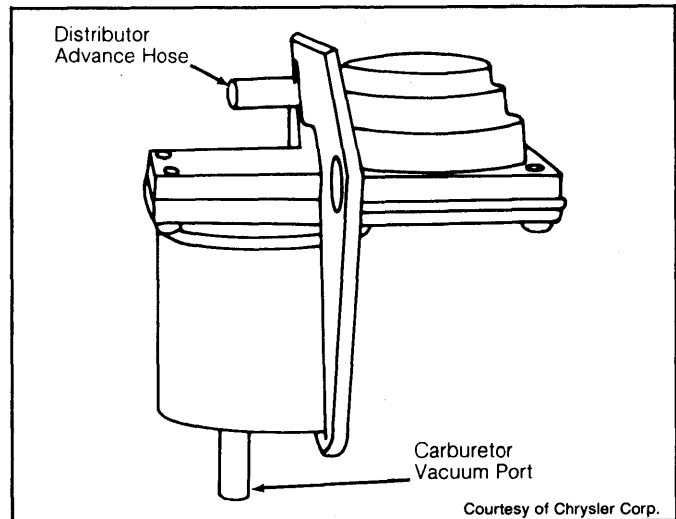


Fig. 2: Illustration of OSAC Valve Connections

### TESTING

- 1) Inspect hose connections between valve, carburetor and distributor. Replace any hardened or faulty hoses that may allow air leakage.
- 2) With engine warmed up, tee a vacuum gauge into hose at OSAC valve leading to distributor. Set parking brake and run engine at 2000 RPM in Neutral.
- 3) Valve is operating properly if a very gradual increase from zero vacuum is observed. About 20 seconds may be required to reach a stabilized level.
- 4) If vacuum immediately rises to same level as manifold vacuum, the OSAC valve is not operating properly and must be replaced.
- 5) If no increase in vacuum is observed, OSAC valve is defective and must be replaced.

**NOTE:** OSAC valve may be by-passed during very hot engine operating temperatures. See **CHRYSLER CORP. THERMAL IGNITION CONTROL (TIC) VALVE** article in this section.