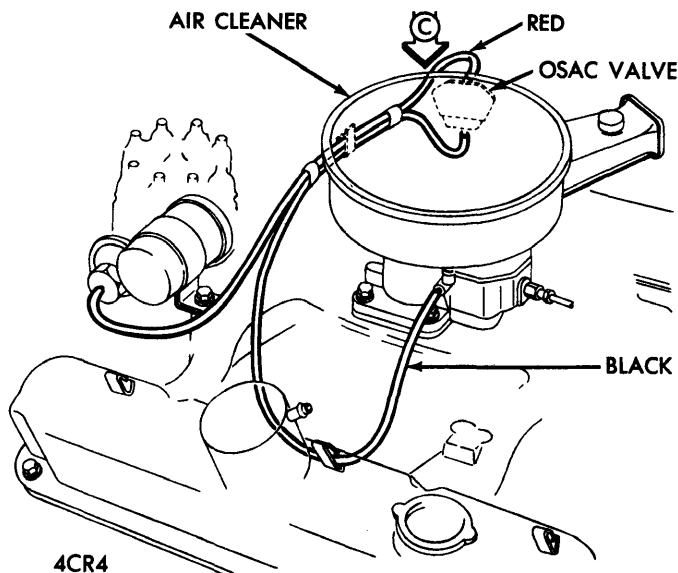


# Exhaust Emission Systems

## CHRYSLER CORP. OSAC VALVE

### DESCRIPTION

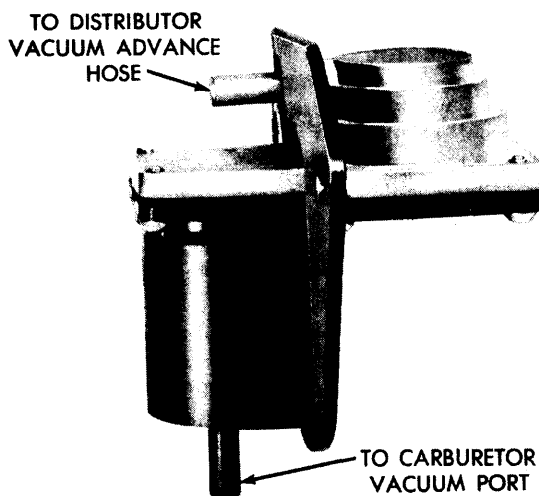
Orifice Spark Advance System (OSAC) is used on all light duty emission engines to aid in control of NO<sub>x</sub> (Oxides of Nitrogen). It controls vacuum to vacuum advance actuator of distributor. A tiny orifice incorporated in OSAC valve delays change in ported vacuum to distributor by about 17 seconds (or 27 seconds on some models) when going from idle to part throttle. When going from part throttle to idle, change in ported vacuum to distributor will be instantaneous.



**OSAC VALVE VACUUM HOSE ROUTING  
(TYPICAL)**

### 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.



**OSAC VALVE**

### TESTING

Inspect all hoses for leaks or damage. With engine running at 2000 RPM in neutral, disconnect hose at OSAC valve that leads to distributor. Attach vacuum gauge to fitting. Valve is operating properly if a very gradual increase in vacuum is observed, about 20 seconds to a stabilized level (this will vary with different engines). If vacuum immediately goes up to same level as manifold vacuum, OSAC valve is bad and must be replaced. If no increase in vacuum is observed, OSAC valve is also bad and must be replaced.

*NOTE — OSAC valve may be by-passed during very hot engine operating temperatures. See Chrysler Corp. NO<sub>x</sub> System Temperature Operated, Vacuum By-Pass Valve (Thermal Ignition Control Valve).*