1968-74 FORD MOTOR CO. DISTRIBUTOR VACUUM CONTROL VALVE (PVS)

DESCRIPTION

This device is a temperature sensitive three-outlet vacuum valve controlling vacuum to distributor vacuum advance unit. It is designed to eliminate engine overheating at prolonged idle by switching vacuum source to intake manifold vacuum line thus permitting full distributor vacuum advance at idle and increasing engine idling speed. This will improve fan and water pump action resulting in reduction of heat rejection to the coolant.

OPERATION

When the coolant temperature rises (at idle) to between 220°F and 235°F, the distributor vacuum valve is actuated. Valve will now move to allow full engine vacuum to be directed to the distributor, to advance timing and allow engine to run cooler. *NOTE – This will be the only instance when vacuum is directed to the distributor at idle.* The distributor outlet leading from the valve is in the middle position of the three outlets and is designated "D". Hookups of this system will vary considerably, depending upon; type of carburetor, single or dual diaphragm distributor, and whether or not a filter is employed on the valve.

TESTING

1) Check all vacuum hoses for installation and routing.

2) Attach tachometer to engine.

3) Start engine, bring to operating temperature and assure that choke plate is in vertical position. *NOTE – Do not overheat engine.*

4) With transmission in neutral and carburetor throttle in curb idle position, note idle RPM.

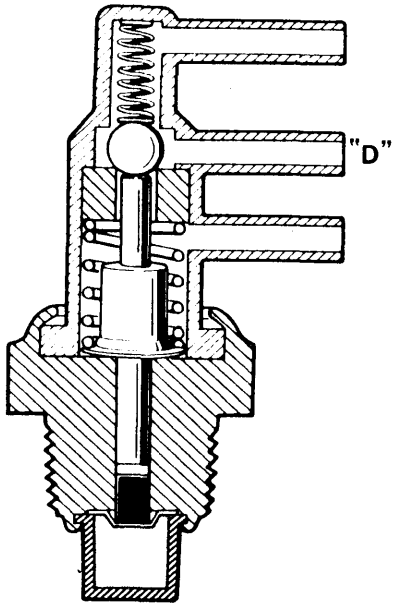
5) Remove vacuum intake manifold hose from distributor vacuum valve and plug or clamp hose.

6) Note idle RPM after disconnecting hose, if no change in speed, valve is acceptable to this point. If a drop in idle speed occurs, of 100 RPM or greater, valve is defective and should be replaced.

7) Attach vacuum line to manifold fitting and check that all season cooling mixture is at correct specifications, also insure that specified pressure cap has been installed.

8) Induce high temperature condition by covering radiator.

9) Run engine until temperature light comes on or temperature gauge reaches abnormally high temperature. If engine idle speed has now increased 100 RPM or more, valve is functioning properly, if not, replace valve. *NOTE – Do not excessively overheat engine.*



DISTRIBUTOR VACUUM CONTROL VALVE OR PORTED VACUUM SWITCH (PVS)