

1975-79 EXHAUST EMISSION SYSTEMS

Ford Motor Co. Vacuum Exhaust Heat Control Valve

1975-76 Ford Motor Co.

DESCRIPTION

Vacuum Operated Exhaust Heat Control Valves (VHC) are used on all engines except 2.3L and 460" engines. Unit consists of a housing and butterfly valve controlled by a vacuum motor. VHC is installed between exhaust pipe and exhaust manifold. The VHC also incorporates a PVS and an intake manifold vacuum tap to control VHC operation.

OPERATION

On cold starts, manifold vacuum is directed to VHC through the top two ports of the VHC PVS, closing the VHC valve against the spring in the vacuum motor. When engine coolant reaches a specified temperature, See VHC PVS IDENTIFICATION CHART, the VHC PVS shuts off vacuum supply and vents VHC vacuum motor to atmosphere. This allows the spring in the vacuum motor to open the VHC butterfly valve.

VHC PVS IDENTIFICATION CHART

PVS Body Color	Opening Temp. (°F)
Black	92-98
Blue	125-131
Purple	157-163

TESTING

- 1) Visually inspect VHC for damage, repair or replace as necessary. Check that vacuum source is working. If a vacuum check valve is used, it must be checked for proper operation.
- 2) Using a hand operated vacuum source, apply specified vacuum to VHC vacuum motor and hold for one minute. See VHC VACUUM SPECIFICATIONS table.
- 3) VHC butterfly valve must start to close and be completely closed when specified vacuum is applied. Vacuum motor must not leak more than 2 in. Hg vacuum when 15 in. Hg vacuum is applied.
- 4) VHC butterfly valve must return to full open position when vacuum is released.

NOTE: VHC butterfly valve is closed if the shaft lever comes within .065" of the stop.

VHC VACUUM SPECIFICATIONS

Engine	Start Closing (in. Hg)	Closed (in. Hg)
302"	1-3	6 or less
351 W"	1-3	6 or less
All Others	3-6	10 or less

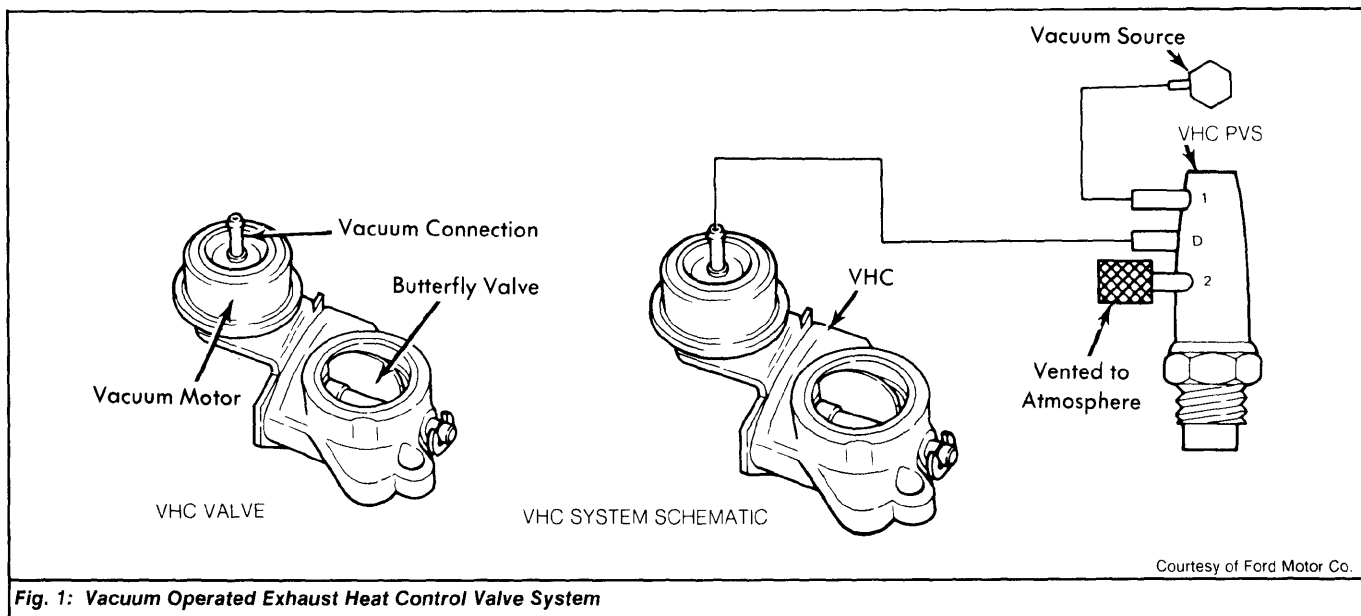


Fig. 1: Vacuum Operated Exhaust Heat Control Valve System