

1974-79 EXHAUST EMISSION SYSTEMS

Chrysler Corp. Thermostatic Air Cleaners

All Models

DESCRIPTION

Air cleaner is equipped with an air control valve (inside snorkel) which allows either heated exhaust shroud air or cooler ambient air into carburetor, depending on valve position. Valve position is controlled by a vacuum motor which responds to a bimetal temperature sensor, located inside air cleaner housing, on all models except Champ and Colt (FWD). On Champ and Colt (FWD), a bimetal sensor, located at hinge of control valve, sets valve position.

OPERATION

When incoming air temperature, as sensed by bimetal, is below a predetermined temperature, air control valve will be up (hot air position). When temperature has reached a predetermined temperature, control valve will be down (cold air position). Between predetermined temperatures, control valve will be positioned to blend both hot and cold air to moderate temperatures reaching carburetor. Through this method, air temperature being used by carburetor is kept nearly constant.

1979 AIR CONTROL VALVE TEMPERATURE SETTINGS

Application	Hot Air °F (°C)	Cold Air °F (°C)
Arrow, Colt, Challenger & Sapporo 1600cc Engine	41 (5)	108 (12)
2600cc Engine	84 (29)	113 (45)
Champ & Colt (FWD)	41 (5)	108 (42)
Arrow & D50 Pickup	84 (29)	113 (45)

TESTING

1) After engine has cooled down, start engine. Check position of air control valve and observe valve as engine warms up. Check to see if the heated air intake port is fully closed at an underhood temperature of above 108°F (42°C). If not, replace air cleaner snorkel and/or casing.

2) If equipped with vacuum motor, apply 15 in. Hg to motor while engine is cold. Air valve should be up (heat on). If not, or if valve goes down immediately, a vacuum leak or defective motor is indicated. Replace assembly.

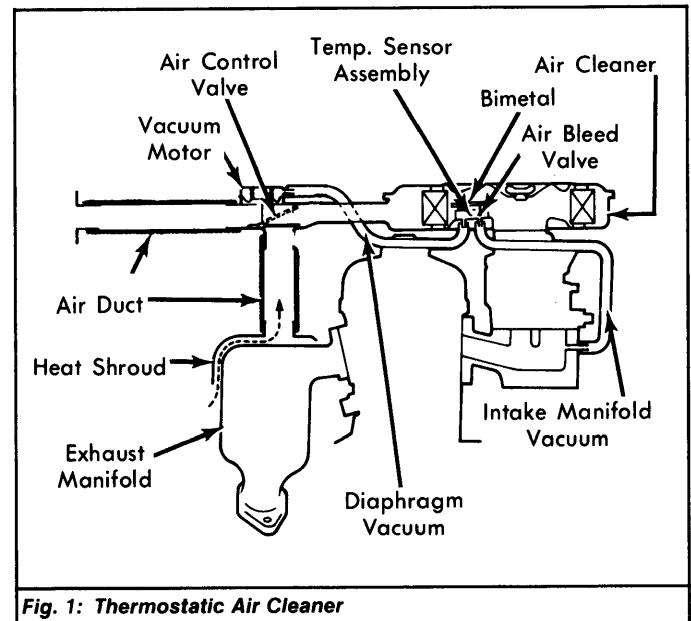


Fig. 1: Thermostatic Air Cleaner