

Crankcase Ventilation

1961-63 CHRYSLER CORP. OPEN SYSTEM (Cont.)

SERVICE PROCEDURES

If the ventilation system should become plugged it may cause excessive engine crankcase sludge formation and rough or erratic engine idle. It is very important that the ventilator valve be cleaned at regular intervals. See chart for regular servicing intervals below.

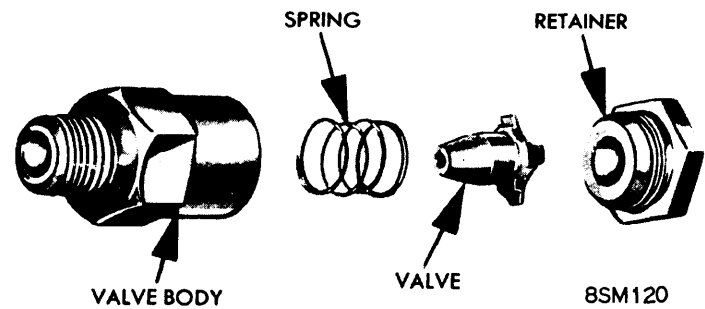
Servicing Intervals

1961	① 10,000 miles
1962	① 8,000 miles
1963	① 6 months

① - Under cold weather conditions where vehicle speeds are slow and engine temperatures are low, more frequent servicing of the ventilator valve is needed.

Ventilator Valve Cleaning and Checking - Remove valve from cap. Soak valve in a suitable carburetor cleaner and blow out with compressed air. If valve has been properly cleaned the unit will click when shaken. Check to see if outlet passage is clean. If valve is badly plugged and cannot be cleaned by this procedure, it must be disassembled and all elements properly cleaned. When disassembling valve take care not to stretch spring and to reassemble the pieces in the proper order. *NOTE* - Free height of spring is 9/16". While ventilation valve and cap assembly are removed for cleaning, put a finger over open end of ventilator hose and have engine started. If ventilator

hose and carburetor passages are operating normally a strong suction will be felt and a change in engine idle quality noted, with the end of the hose uncovered. If system is plugged these conditions will not be observed. When reassembling valve make sure spring is properly re-installed. If spring is not correctly installed valve will not seat properly, resulting in improper engine idle. A spring that has been stretched can cause the same trouble. *NOTE* - If improper action of spring is suspected due to the spring being distorted, bent or stretched from corrosive action, the valve assembly should be replaced.



CRANKCASE VENTILATION VALVE (DISASSEMBLED)

1964-67 CHRYSLER CORP. OPEN SYSTEM

DESCRIPTION

The "open" crankcase ventilating system "TYPE I" was used from 1964-67. It is similar, but not identical, to systems used on the previous models. This system consists of a crankcase ventilator valve and cap mounted on cylinder head cover, a special carburetor with hose fitting in base, and hose connecting ventilator valve to carburetor base fitting. There are two ventilator valves used by Chrysler Corp. On 170" and 225" engines a MoPar Ventilator Valve is used which is identified by a "6" on the end, a step on the end face, or a white washer. On all other engines, a MoPar Ventilator Valve, identified by a letter "H" stamped on the end, a flat end or a black end washer, is used.

OPERATION

Operation of system is very similar to the operation of the "open" system used on previous years. Air drawn into oil filler cap is circulated through engine, drawn out of cylinder head cover, into combustion chambers and expelled with the exhaust gases.

SERVICE PROCEDURES

The system must be kept clean to maintain good engine performance durability as deposits will accumulate

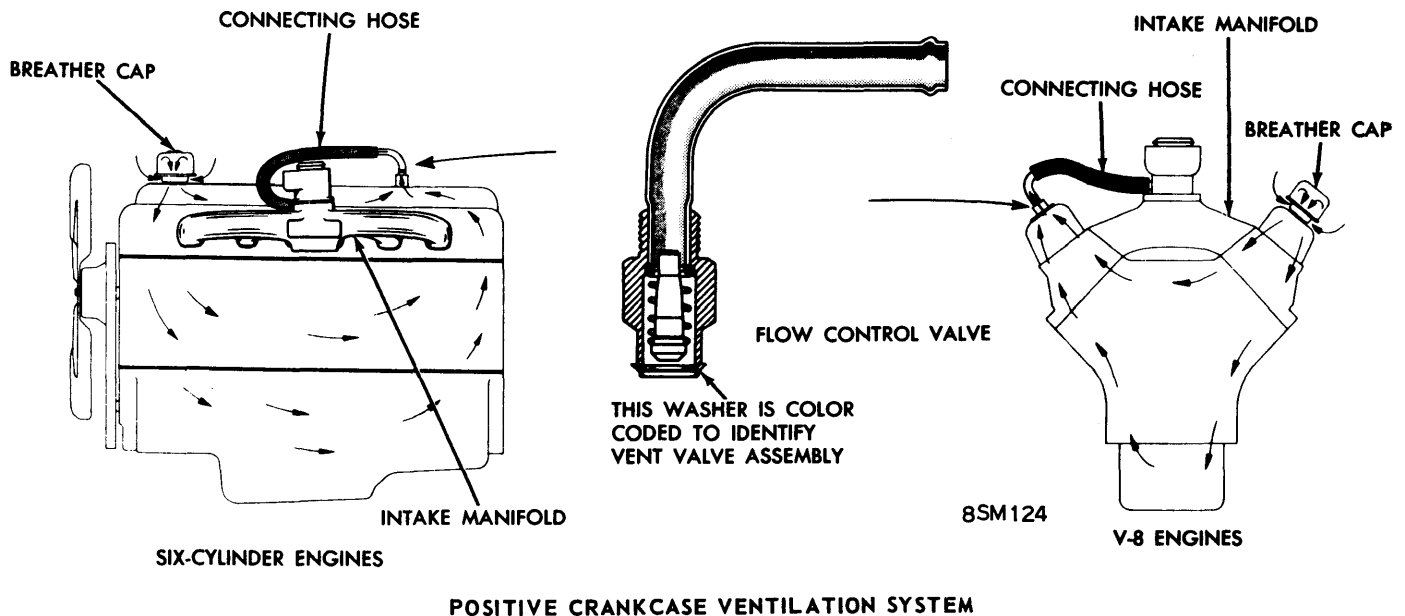
in the valve, hoses, and the carburetor parts, therefore, the ventilation system should be inspected at least every six months and the valve be replaced once a year. This service will be required more frequently if the vehicle is used extensively for short trips (driving less than 10 miles) with frequent idling, such as city traffic.

Testing Ventilation System - There are three checks that should be made in determining if the ventilation system is operating properly. First, with the engine running at idle, remove the ventilator valve and cap assembly from the rocker cover. If the valve is not plugged, a hissing noise will usually be heard as air passes through the valve and a strong vacuum should be felt when a finger is placed over the valve inlet. Reinstall the ventilator valve and cap assembly and remove the inlet breather cap. With the engine still running at idle, loosely hold a piece of stiff paper over the oil fill pipe. Within a few seconds, it should be sucked against the oil fill pipe with a holding force. If this occurs, a final test should be made to be certain the valve shuttle is free. A clicking noise should be heard when the valve is shaken (engine not running). If the noise is heard, the unit is functioning satisfactory and no further service is necessary.

1964-67 CHRYSLER CORP. OPEN SYSTEM (Cont.)

Valve Replacement - If the valve does not click when shaken or if the paper is not sucked against the fill pipe, the valve should be replaced and the system re-tested. Upon re-testing the system if it is found that the vacuum still cannot be felt it must be assumed

that the ventilator hose and the passages in the lower part of the carburetor are plugged. All foreign particles must be cleaned from the ventilator hose and carburetor passages to return the ventilation system to its proper working order.



1965-74 CHRYSLER CORP. CLOSED SYSTEM

DESCRIPTION

1965-67 production included two types of crankcase control systems. Along with the "open" crankcase system, a "closed" crankcase system was also used. "Closed" system was used on all vehicles built for sale in California and as extra equipment in all other states. The "closed" system has a sealed oil filler cap, a crankcase ventilator valve (PCV valve) mounted on valve cover and various connecting hoses. On all California vehicles an outer wrapper is used on outside of air cleaner elements (except High Performance engines with non-silenced air cleaners). All 1968 and later models built for sale in United States use a closed crankcase ventilation system. Crankcase inlet air cleaner is also provided with inlet fittings for a bowl vent hose and vent line hose (V8 engines), or a vent line only (6 Cyl. engines), where evaporative control system (ECS) is used.

OPERATION

Air is drawn from carburetor air cleaner through air cleaner hose and crankcase inlet air cleaner into crankcase. **NOTE** - Where ECS systems are used, fuel tank and float bowl vapors are also drawn into crankcase inlet air cleaner. Air circulated through crankcase and drawn out through PCV valve, passes through PCV valve hose and passage in car-

burator throttle body. Vapors are then drawn into combustion chambers where they are burned and expelled with exhaust gases.

SERVICE PROCEDURES

Proper maintenance of crankcase ventilation system is required to keep system clean and maintain good engine performance and durability. Every 12 months system must be tested for proper operation and cleaned if necessary. This includes inspecting operation of PCV valve, checking hoses and carburetor passages for deposits and cleaning crankcase inlet air cleaner (if equipped) and carburetor air cleaner.

Testing Ventilation System - With engine idling, remove PCV valve from rocker cover. If valve is not plugged, a hissing noise will be heard as air passes through valve, and a strong vacuum should be felt when a finger is placed over valve inlet. Reinstall PCV valve, then remove crankcase inlet air cleaner. Loosely hold a piece of stiff paper over opening in rocker cover. **NOTE** - If vehicle is not equipped with crankcase inlet air cleaner, hold paper over oil filler tube. After allowing about a minute for crankcase pressure to reduce, paper should