

removing dirt and pollen, making a filter unnecessary.

The humidity within the car is lowered, as this moisture from the car interior changes to a liquid and then drips down to the bottom of the evaporator where it drains out the bottom of the housing onto the street. The drains should be inspected regularly to see that they do not become plugged, as a large amount of water condenses, particularly on damp days.

#### Electrical Circuit (Fig. 14-5)

The Air Conditioner electrical circuit runs from the accessory terminal of the ignition switch to the 25 ampere fuse in the fuse holder. The current then flows to the 'Off-On' switch where it branches off - one circuit going to the compressor clutch solenoid and one circuit going to the 4 speed blower motor switch, the 3 unit resistor, and then to the blower motor itself.

Current for the fast idle solenoid is furnished from the Air Conditioner 'On-Off' switch with the ground being completed through the neutral safety switch. This mechanism is used to speed up the engine, which in turn provides more cooling when the car is standing in Neutral or Park.

A separate circuit from the 25 ampere fuse is provided for the 67 series with the extra cooling unit in the rear. A single wire runs to the rear seat right hand arm rest where there is a switch to control 3 different blower motor speeds of the 2 rear unit blowers.

#### Vacuum Circuit

The 1959 Air Conditioner air circulating circuit is controlled by two air valves and three vacuum operated power units. The three power units are the Air Conditioner-heater vacuum power unit, 100% vacuum power unit, and the 20% vacuum power unit.

Vacuum is furnished by the engine for the operation of these units. A check valve is used at the manifold to assure operation of the air valves during periods of low vacuum caused by wide throttle opening.

In the 'Off' position, Fig. 14-6, vacuum is cut off to all power units and the two air valves are in the closed position, that is, the outside air valve is closed and the Air Conditioner-heater valve is in the heater position.

When the Air Conditioner levers are moved away from the left hand stop, Fig. 14-7 (normal recirculate switch in recirculate position), vacuum is applied to the 20% power unit which partially opens the air valve to allow 20% outside air to mix with 80% inside air. At the same time, vacuum is applied to the Air Conditioner-heater power unit, opening this air valve to allow the air mixture to pass through the blower assembly to the evaporator.

With the normal-recirculate vacuum switch in the normal position, Fig. 14-8, vacuum is applied to the 100% power unit. With this unit in operation, the linkage overrides the 20% power unit and opens the air valve to 100% outside air.

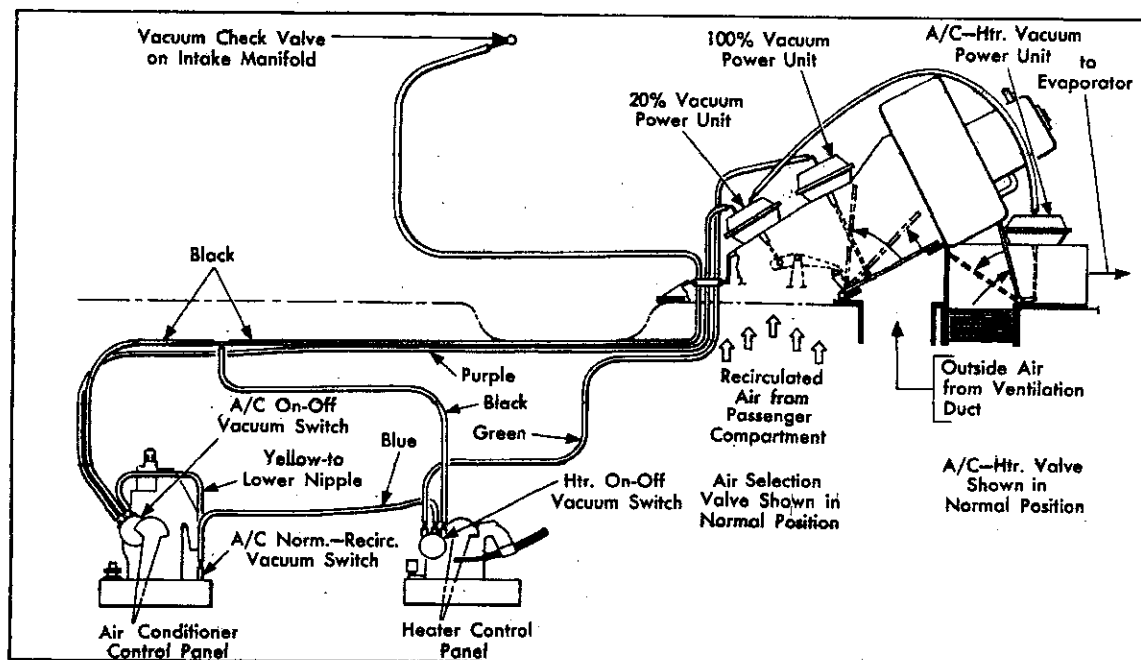


Fig. 14-6 Air Conditioner and Heater Vacuum Circuit