

Air Flow Systems

Blower Motor Assemblies

One of the most basic controls for maintaining a comfortable passenger compartment is the blower motor assembly. This is a fan that forces air through the evaporator and the heater core and into the passenger compartment.

In most cases, the blower motor speed is adjustable. By changing the switch position on the control panel, the operator can adjust the speed of the blower motor from low to high, in three or four steps.

The slower the fan speed, the longer the air sits along the evaporator and heater coils. This removes more heat, and reduces the temperature of the air being discharged from the vents, in A/C cooling mode. Conversely, in the heat mode, slow fan speeds increase the discharge air temperature.

In addition, cooler air holds less moisture than warm air. The longer the air stays near the evaporator fins, the more moisture will condense on the fins and the drier the air coming into the passenger compartment. As more condensation builds up on the evaporator fins, it begins to run off, and drains out of the HVAC module through the evaporator condensate drain tube.

This also helps to purify the air to some degree. Dust and pollen particles that come in contact with the wet evaporator are pulled out of the air stream and wash out through the condensate drain.



Plastic and Metal Blower Motor Assemblies