

Blower Motor Resistor

What It Does: The blower motor resistor is in the fan motor control circuit to lower the voltage level available to the fan motor thus controlling fan speed. A typical fan motor control circuit will have the fan switch applying voltage to the appropriate circuit of the blower motor resistor; the resistor controls the voltage level in the circuit. The fan motor high speed circuit is usually a direct power circuit from the fan switch.

Location: The blower motor resistor will typically be in the blower fan case. Because of the heat created by the resistor, the air movement of the fan is needed to keep the resistor temperature in control. Excessive heat will damage the blower resistor. Depending on the vehicle application, the resistor may be accessed from inside the engine compartment in the passenger rear corner or from inside the vehicle in the area below the glove compartment storage area.

Failure Symptoms: Depending on the failure mode, the blower fan may lose one speed when the resistor fails or it may lose all speeds except high. Excessive heat will cause the thermal fuse within the resistor to open causing a loss of all lower fan speeds.

Diagnostic Hints: Blockage of the cowl area near the wiper arms with leaves and debris will cause a loss of air flow around the resistor and lead to a possible failure of the blower resistor. Also, a blower motor may operate as expected but electrically it may be drawing too much current. Always check circuit amperage of the blower motor circuit when replacing a blower motor resistor. Consult a repair resource for proper circuit amperage.