Blower Motor Resistors

Preventing Water Intrusion on GM Blower Motor Resistors

On most full-size GM trucks and SUVs from 2001–2007, the blower motor resistor has two common failure modes: water damage and excess heat. The GM vehicles are unable to manage condensation. If the duct is clogged, condensation will collect, creating a pool of water that can seep into, and flood the blower motor resistor module. Worn OE blower motors can create a demand for current that also damages the module. The excess current melts the wiring and plastic shroud, damaging the interface pins on the controller’s circuit board.

Standard’s RU631 Blower Motor Resistor features several improvements over the OE, including an umbrella cover design that prevents water intrusion and a larger-output power device and upgraded two-ounce copper board that protects against overheating.

Tech Tip: For repairs, use an inductive amp clamp to check that the blower motor current draw is less than 80% of the fuse rating on high. If the current is too high, replace the blower motor. Otherwise, the new resistor will fail, too. You should also inspect the mating connector for signs of damage caused by excess heat.