

INSTALLATION INSTRUCTIONS



MODELS RV-12 & RV-110 POWER VENTILATORS FOR RECREATIONAL VEHICLES

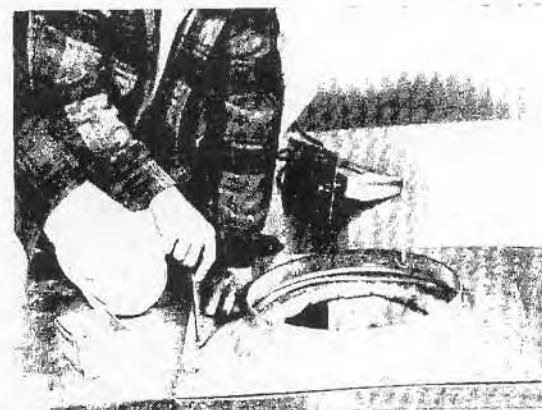
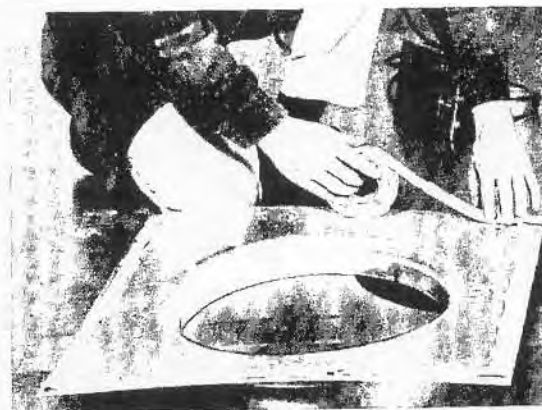
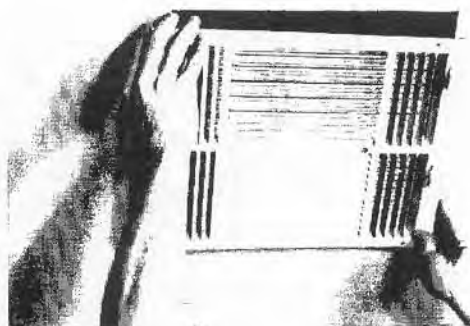
(Read Instructions Carefully and Completely Before Starting Installation)

1. **Ventilator Location** - Your Kool-O-Matic ventilator may be installed in any existing 14" x 14" skylite or vent opening. If required, a 14" x 14" ventilator opening may be cut in the roof and ceiling between rafters.

2. **Electrical Power Supply**- In most cases, your Kool-O-Matic ventilator may be connected to an existing electrical circuit. Model RV-110 for 115 volt AC operation has an electrical load of 4.0 amps. Model RV-12 for 12 volt DC operation has a maximum load of 7.0 amps.

3. **Installing Ceiling Grille** - Facing the front of the Recreational Vehicle, install the ceiling grille assembly, with the damper operators on the right side, using the four wood screws provided. The dampers can now be opened and closed with the lever operators. Leave the dampers in the open position for ventilator installation. For roofs thicker than the maximum a control shaft extension can be furnished on request. On roof thicknesses less than minimum, a wood spacer between the ceiling and grille will be required. The Model RV-12 Roof Ventilator is designed for a minimum roof thickness of 1 1/2", maximum thickness 3". The Model RV-110 Roof Ventilator is designed for a minimum roof thickness of 2 3/8", maximum thickness 3 7/8".

4. **Attaching Flashing Flange to Roof** - Remove three external fan assembly nuts and washers, using a 7/16" wrench. Separate the flashing flange from ventilator assembly. Turn the flange section upside down. Glue the gasket tape provided along all four edges, covering the mounting screw holes. Press the tape firmly in place. Now turn the flange section right side up and position it centered on the opening with the assembly slot located in the center of the flange toward the rear. On the fan assembly swing the control bracket lining up the second mounting screw hole. Install the self tapping screw with star washer provided tightening both screws of the control bracket to the motor assembly. Position the fan and control assembly into the mounting flange slots with the plastic control shaft inserted into the hole provided in the grille. Drill 3/32" screw starting holes in the roof through the flashing flange mounting holes. Beginning with the center holes install the no. 8 screws provided and tighten all screws evenly from the flange center toward each corner. **DO NOT OVER-TIGHTEN**, as the roof screw holes may strip. Tightening the mounting screws from the center outward will prevent wrinkles or air gaps in the flange gasket. If desired, apply a coating of roof cement around the edges of the flashing and the heads of mounting screws. Check the control mounting bracket to make sure it clears the top of the open damper blades by a minimum 1/8 inch. If the control bracket is in contact with the damper blade, a spacer will be required between the grille and ceiling as outlined in paragraph 3.



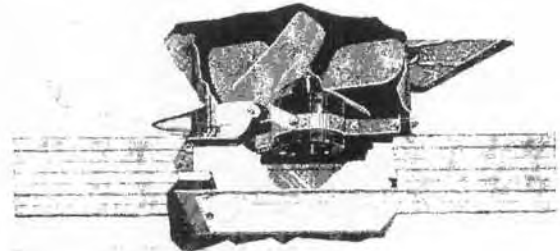
5. **HOOD ASSEMBLY INSTALLATION** - Slip the hood assembly over the flashing flange collar. Make sure the three hood slots line up with fan and motor assembly mounting bolts. Replace and tighten the three mounting washers and nuts. **DO NOT OVER-TIGHTEN AS DAMAGE TO THE MOUNTING ISOLATOR WILL RESULT.** Secure the three hood assembly tie down straps to the roof with the three No. 8 screws provided.



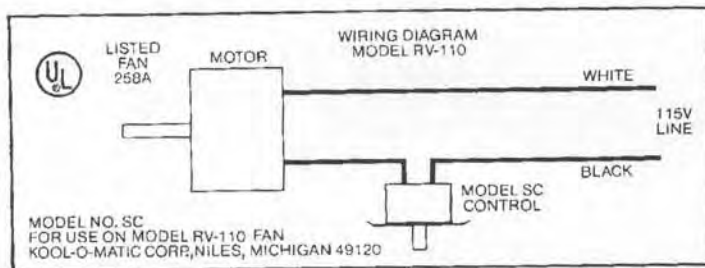
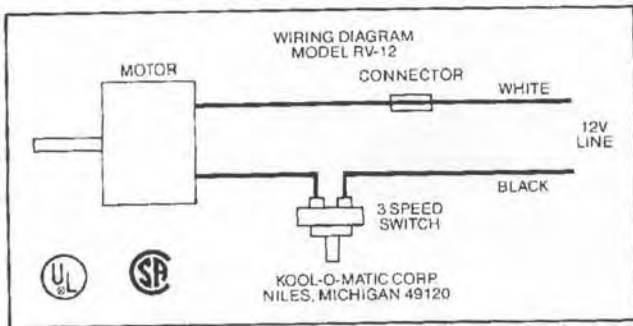
6. **ELECTRICAL CONNECTION** - From inside the recreational vehicle remove the ceiling grille. Electrically connect per the wiring diagram shown, the motor and fan control to the power supply using the connectors provided. Check to make sure wires are secured and clear of the fan blade operation and speed control heating coils.

Place the two plastic retainer strips on the back edge of the ceiling grille flange. Install the grille assembly to the ceiling with the plastic strips between the ceiling and the mounting flange. Cut the plastic control shaft 3/8" from the face of the ceiling grille using side cutter pliers. Press the control knob furnished onto the control shaft.

7. **OPERATING YOUR KOOL-O-MATIC VENTILATOR** Your ventilator is now completely installed and ready to operate. To operate the Model RV-12, turn the control knob to one of three speeds for the ventilation level desired. To operate the Model RV-110 turn the solid state infinite speed control to the ventilation level desired. **WHEN OPERATING THE VENTILATOR OPEN FORWARD AND REAR WINDOWS A FEW INCHES TO PROVIDE FLOW THROUGH VENTILATION AND COOLING.** The grille dampers should always be open during ventilator operation for proper operation and control cooling.



8. **COLD WEATHER GRILLE COVER** - The plastic inside grille cover furnished, is provided for winter close-off to eliminate back drafts during fall or winter use of your recreational vehicle. Place the cover over the grille snapping the cover into the two plastic retainers. The cover with the gasket seal on the outer edge will provide a seal against outside back drafts. During winter storage of your recreational vehicle, the cover should be removed and the dampers opened for natural ventilation to control condensation inside the vehicle.



KOOL-O-MATIC GUARANTEE

The Kool-O-Matic fan, speed control and ceiling grille are guaranteed against defective material and workmanship for a period of two years. All merchandise must be returned to the factory, transportation prepaid and if same is found to be defective, it will be replaced or repaired free of charge, F.O.B. factory, at the option of the manufacturer.

DATE PURCHASED _____

PURCHASED FROM _____

CAUTION - Disconnect electrical power before connecting RV ventilator and controls. All electrical connections must conform to electrical code requirements. Be sure your power supply is suitable for the Kool-O-Matic ventilator model being installed.

Models RV-12 and RV-110 meet all requirements of ANSI Standard A119.2.



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