

INSTALLATION INSTRUCTIONS



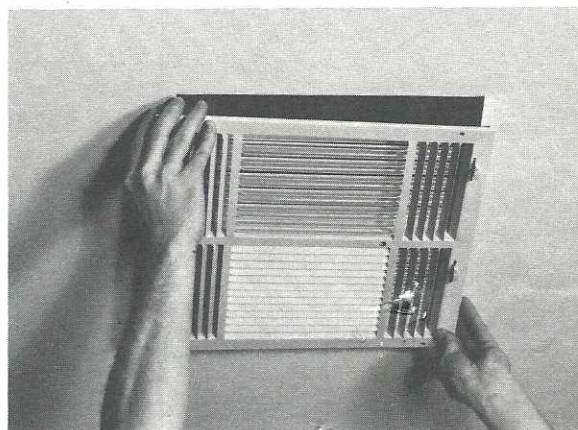
MODELS RV-12 & RV-110 POWER VENTILATORS FOR RECREATIONAL VEHICLES

(Read Instructions Carefully and Completely Before Starting Installation)

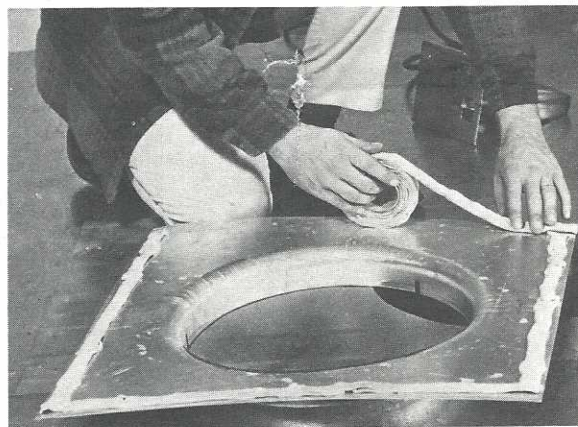
1. **VENTILATOR LOCATION** — Your Kool-O-Matic ventilator may be installed in any existing 14" x 14" skylite or air conditioning opening. If required, a 14" x 14" ventilator opening may be cut in the roof and ceiling between rafters.

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 A.C. operation has an electrical load of 4.0 amps. Model RV-12 for 12 volt D.C. operation has a maximum load of 8.0 amps.

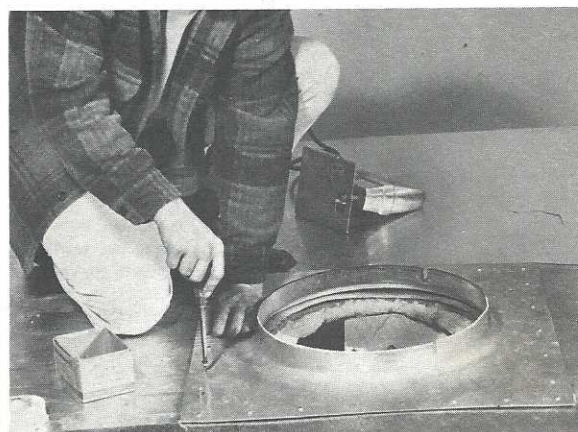
Power supply wires should be furnished to the roof opening area from any convenient source. You'll find many recreational vehicle manufacturers pre-wire skylite and air conditioning openings for future power accessory installation.



3. **INSTALLING CEILING GRILLE** — Press the two damper operator levers provided into position in the slotted openings in the grille. Facing the front of the Recreational Vehicle, install the ceiling grille assembly, with the damper operators on the right side, to the ceiling with 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. On curved ceilings and overall roof thickness less than required, a wood spacer between the ceiling and grille will be required. The Model RV-12 Roof Ventilator is designed for minimum roof thickness of 1 1/2", maximum thickness 3". The Model RV-110 Roof Ventilator is designed for minimum roof thickness of 2 3/8", maximum thickness 3 7/8". For thick roofs or special applications, refer to the factory for installation instructions.



4. **ATTACHING FLASHING FLANGE TO ROOF** — Remove three external fan assembly nuts and washers, using 7/16" wrench. Separate flashing flange from ventilator assembly. Turn flange section upside down. Apply putty tape provided along all four edges, covering mounting screw holes. Press tape firmly in place and remove protective paper. Now turn the flange section right side up and position it centered on the opening with the assembly to the motor bracket. Position the fan and control assembly into the mounting flange slots with the plastic control shaft inserted into the hole provided in the grille. Make starting holes in roof for screws. Begin with center hole in each side of flange. Drive nail into roof, using flange holes as guides. Insert a No. 8 screw into each of these holes and tighten. Repeat the procedure for remaining screw holes. Tighten all screws from each flange center toward each corner. This prevents wrinkles in flange or air gaps in putty seal. Tighten all screws until putty protrudes from under the flange edges. **DO NOT OVERTIGHTEN**, as the roof screw holes will strip. If desired, apply a coating of roof cement around edges of flashing and heads of mounting screws.



5. **ELECTRICAL CONNECTION** — 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.

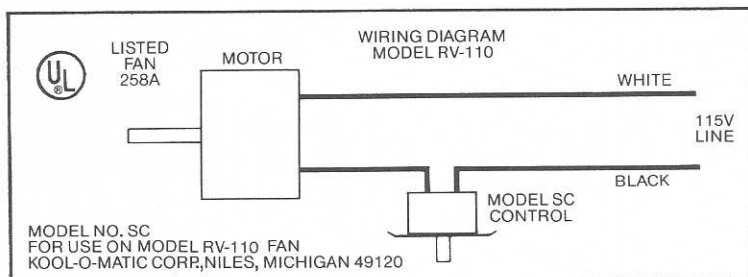
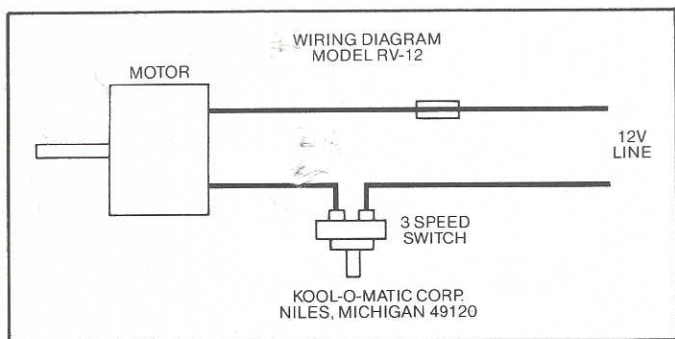
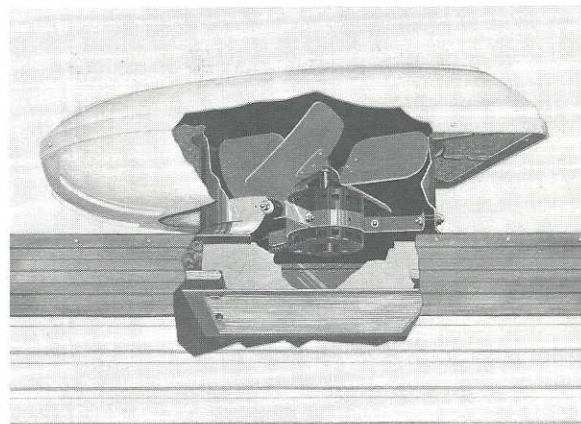
Carefully reaching through the fan blade assembly, electrically connect the motor and control to the power supply using the insulated connectors and terminals provided. Electrical connection should be made as shown in the electrical diagrams. Make sure that the power supply wires clear the fan blades and do not lay on top of the grille damper in the open position.

6. **HOOD ASSEMBLY INSTALLATION** — Slip hood assembly over 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.

7. **OPERATING YOUR KOOL-O-MATIC VENTILATOR** — From inside your recreational vehicle, cut the plastic control shaft 9/16" from the face of the ceiling grille using a hack saw blade. Feather the edge of the control shaft with a file and install the control knob. 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.

The Dampers should always be open when operating the ventilator to prevent control overheating. Windows or other air intakes should also be open during ventilator operation for proper air flow ventilation 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. Simply place the cover over the grille assembly which is then held in place by the magnetic strips attached inside the cover. During winter storage of your recreational vehicle, the cover should be removed and the dampers opened for 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 one year. 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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