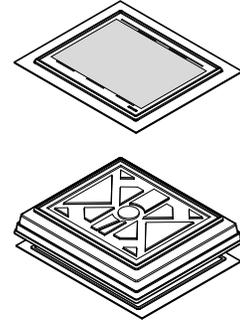


## ROOF-MOUNT REMOTE SOLAR POWERED ATTIC VENTILATOR



### READ AND SAVE THESE INSTRUCTIONS

#### WARNING

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, disable the ventilator by covering the solar panel with cardboard or disconnecting the wires from the motor terminals (note wire locations when disconnecting).
3. Installation work must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. If removing an existing 120 VAC powered attic ventilator, use only a qualified person(s) to remove any electrical wiring in accordance with all applicable codes and standards.
5. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturer's guidelines and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
6. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

#### TOOLS AND MATERIALS REQUIRED

- Slotted Screwdriver
- Drill
- 1/4" Drill Bit
- Sabre Saw or Keyhole Saw
- Hammer
- Ruler / Tape Measure
- Pencil, Marker or Scribe
- Utility Knife
- Pry Bar (to remove roofing nails)
- 5/16" Socket and Extension
- Roofing Cement
- Galvanized Roofing Nails (1<sup>3</sup>/<sub>4</sub>" min.)

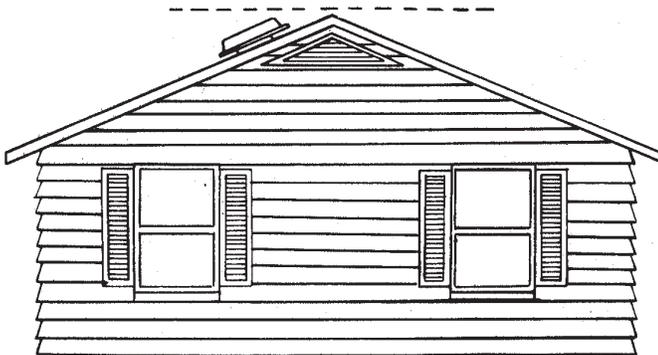
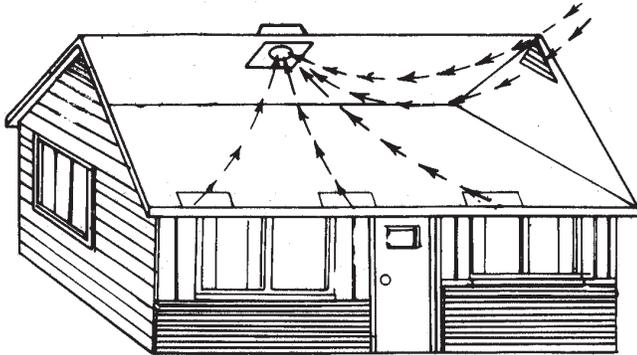
#### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. This unit has an unguarded impeller. Do not use in locations readily accessible to people or animals.
4. This ventilator operates when the solar panel is exposed to sun light. To reduce risk of injury while installing, servicing or cleaning unit, cover the solar panel with cardboard or disconnect the wires from the motor terminals (note wire locations when disconnecting).
5. The recommended open air inlet for this ventilator is 4.25 square feet. The best location for these air intake vents are under the eaves with direct access to the attic. Failure to provide these intakes could cause natural-draft gas appliances to backdraft.
6. Your attic fan installation will create a screened opening into your attic space. During a heavy rain storm there could be a light spray of rain into this attic space. This is a normal condition with all attic ventilators and will not cause any damage to the structure. We recommend that you do not store any valuable articles directly under the fan opening in the roof.
7. This ventilator is intended for roof installation. Broan Models 353 & 353SOBK Gable Mount Ventilators are available for side wall applications.
8. The plastic ventilator dome and base may be painted with high quality paint. Follow the paint manufacturer's recommendations for acrylic and ABS plastic as appropriate. Take care to avoid getting paint on the solar panel.
9. Please read specification label on product for further information and requirements.
10. The installation instructions contained in this document are only a recommendation and individual professionals may have their own methods of installation. If your roof has an existing warranty, installation of this product by anyone other than those who installed the roof may jeopardize any future warranty claim. Please check with the original installer of your roof if this is a concern.
11. When working with asphalt shingles in cold weather (below 40° F), take care to avoid damage to the shingle edges and corners.

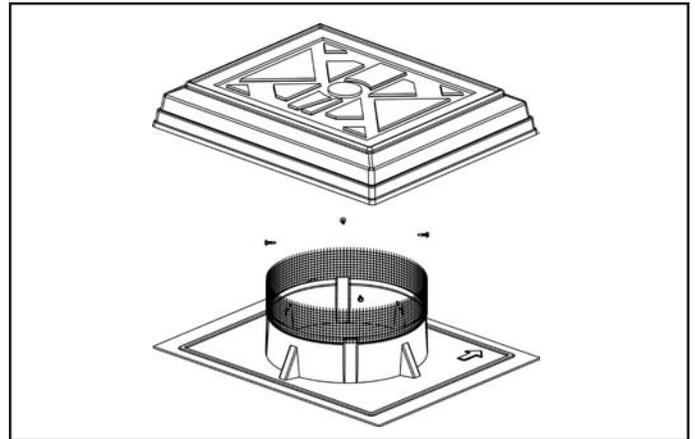
Register your product online at:  
[www.broan.com/register](http://www.broan.com/register)

## INSTALLATION

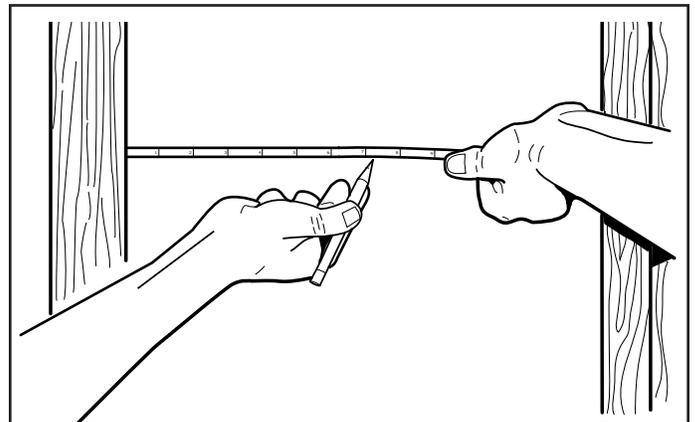
**Note:** This ventilator is capable of replacing an existing 120 volt powered attic ventilator. Only a qualified person should remove any electrical wiring in accordance with local codes and standards.



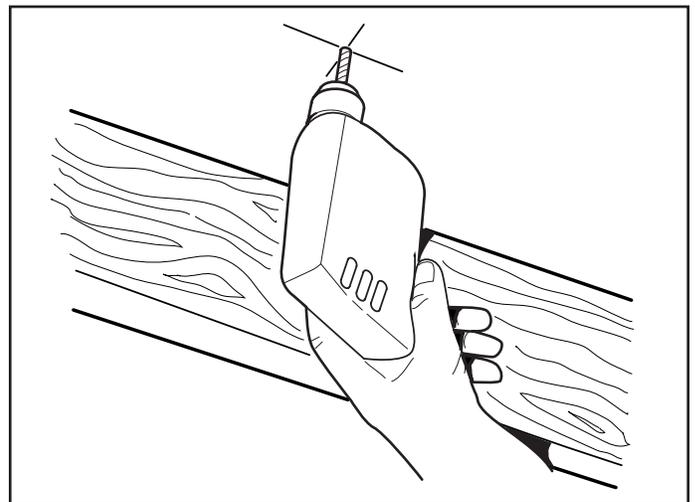
1. Locate the ventilator at the center of the rear slope of the roof. Generally, we recommend a point located 24" – 36" on center below the roof peak and centrally along the ridgeline. The roof should be free of obstacles (television antenna, electrical lines, etc.).
2. Locate the remote solar panel on your roof where the sun's exposure is best barring shade (trees, other buildings etc) at 4:00pm in the hottest month of the year. The solar panel comes from the factory with 15 feet of wire. If the desired location of the solar panel is greater than 15 feet away from the ventilator, an additional 50 ft of 14 AWG (minimum) UL listed or recognized copper wire may be used.
3. Prior to installation, we recommend setting up the ventilator and solar panel to verify operation. Take the fan and solar panel to a location exposed to sun. Connect the solar panel wires to the motor terminals (red wire to positive terminal and black wire to negative terminal). Removing the cardboard cover from the solar panel should cause the ventilator to operate. Place cardboard over solar panel (for safety), disconnect wire from motor terminals.



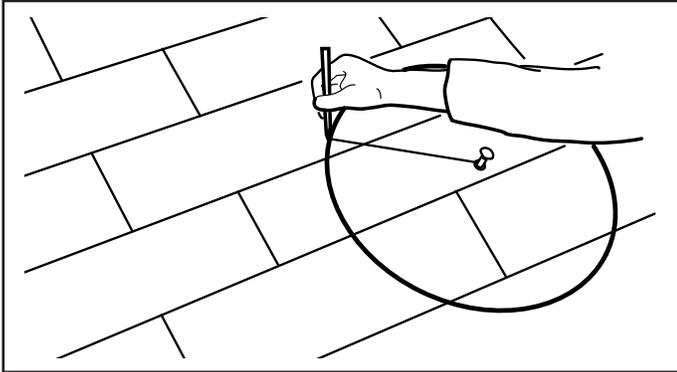
4. Separate the ventilator dome from the ventilator base by removing the four (4) stainless steel 5/16" sheet metal screws. Lift the ventilator dome off the ventilator base and proceed to the following steps.



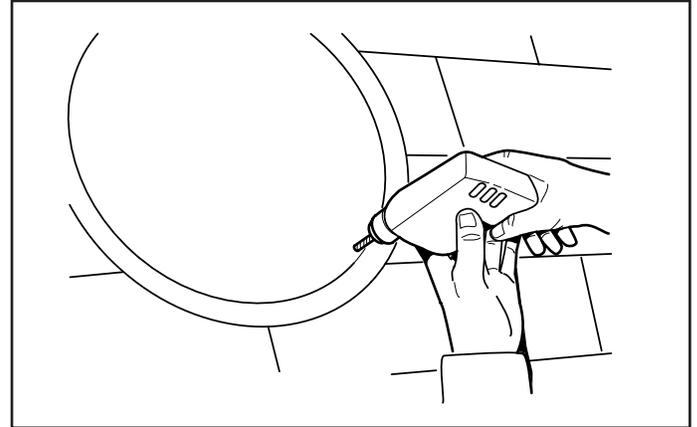
5. Working from the inside of your attic, find the desired ventilator location and mark a spot halfway between rafters at a point that is 24" – 36" below the roof ridge.



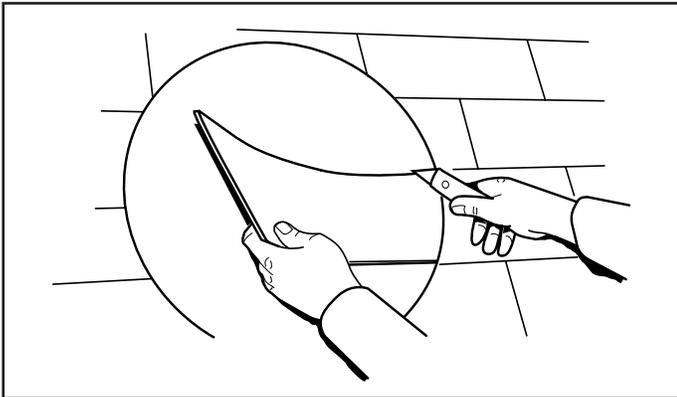
6. Drill a guide hole through the roof at this mark.



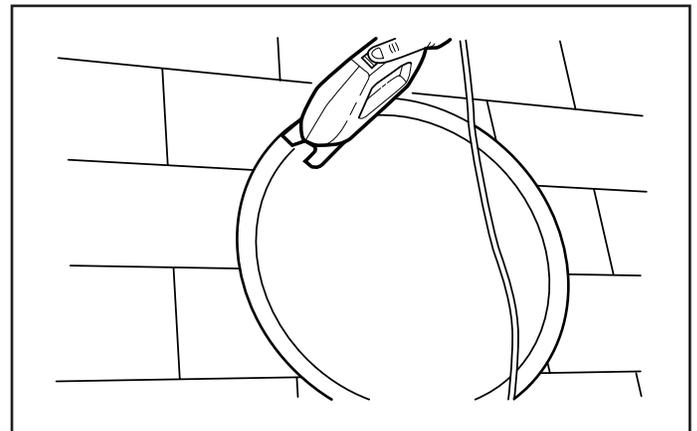
7. From the roof side, using the guide hole as the center point, use a nail and string to scribe a 16-1/2" diameter circle on the shingles. Note: If replacing an existing ventilator, the hole diameter may be larger than 16-1/2". This is acceptable provided the roofing material overlaps the ventilator by at least 1" on all sides.



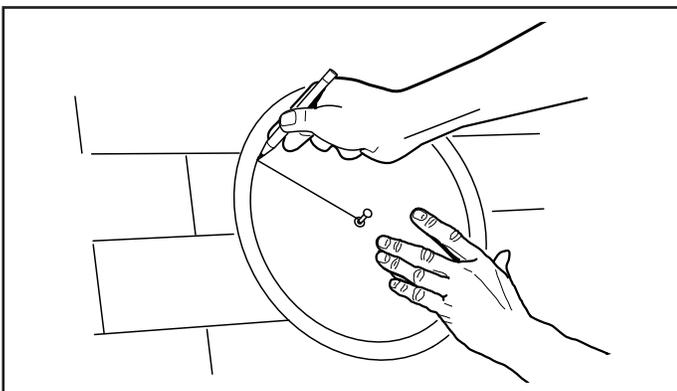
10. Drill a large starting hole for the sabre saw just inside of the line or the 14" circle created in Step 8.



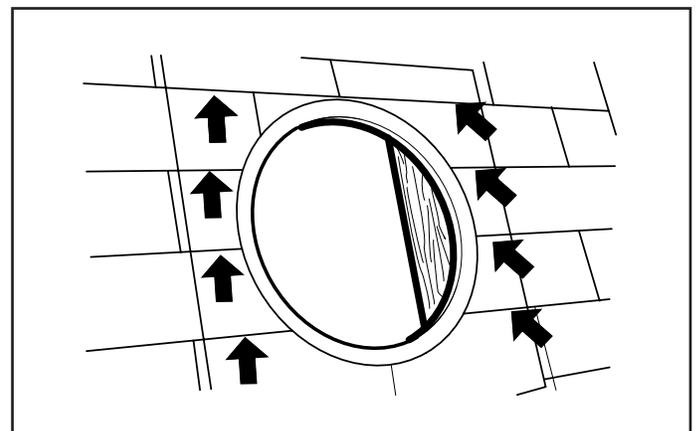
8. Cut out the shingles inside of the circle.



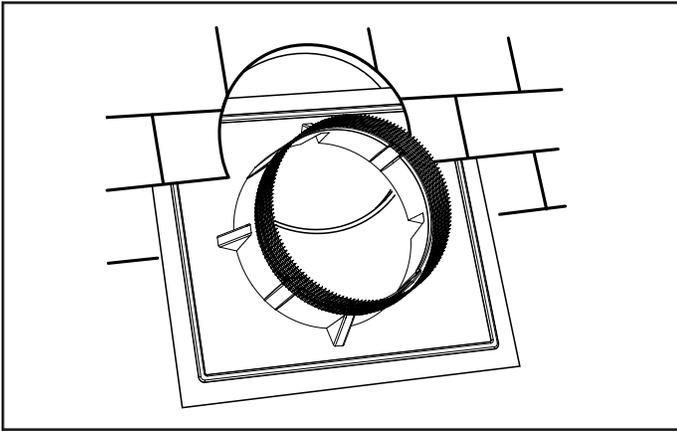
11. Cut out the roof board(s) inside of the line.



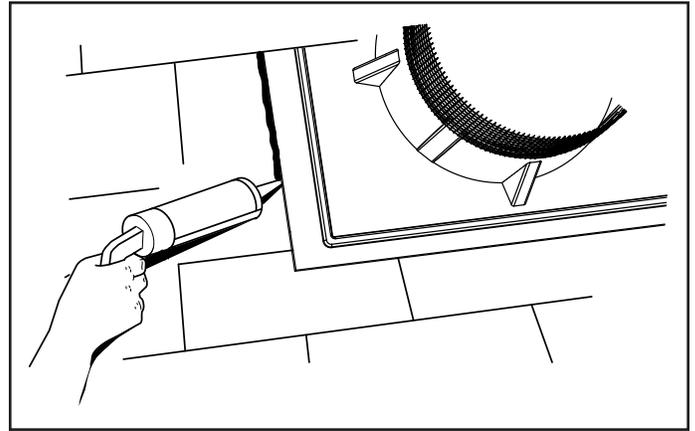
9. Using the same nail and string shown in step 6, scribe a 14" diameter circle on the black paper or roof decking. Note: if replacing an existing ventilator the hole diameter may be larger than 14". This is acceptable provided the ventilator base is adequately supported by the roof decking.



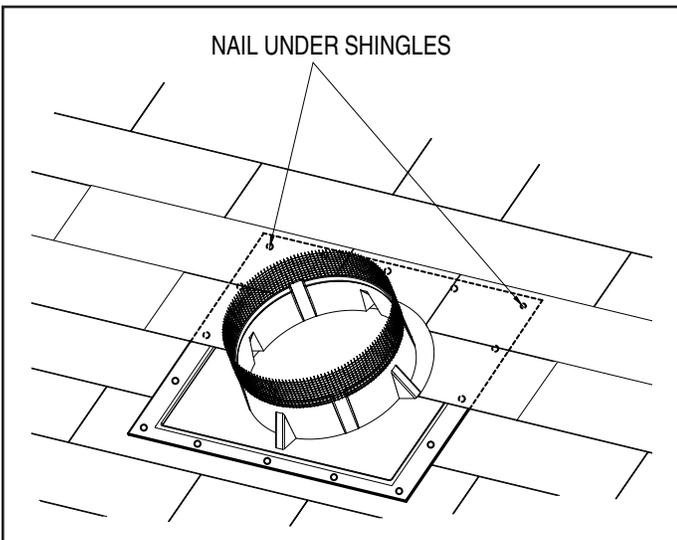
12. For proper removal of roofing nails, draw a 26" square, centered around the hole. Remove nails holding shingles down from top two-thirds of square.



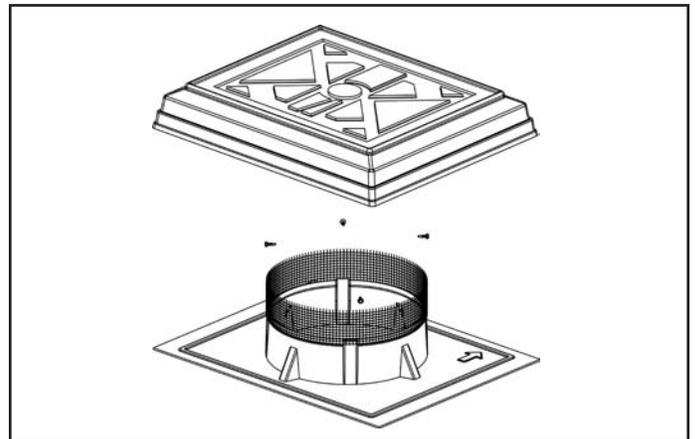
13. Apply a large bead of roofing cement in the molded groove on the bottom side of ventilator base. Making sure the arrow on the ventilator base is pointed toward the roof ridge, start two-thirds of the way down from the top of the 26" square and slide the ventilator base under the shingles. Do not bend the shingles any more than necessary. Center the ventilator base over the hole.



15. Using a good grade of roofing cement material, seal shingles and all nail heads. DO NOT seal the bottom edge of the ventilator base.



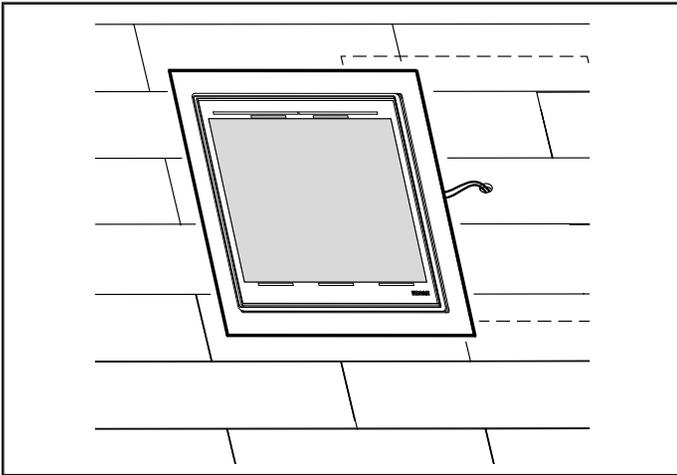
14. Make sure the ventilator base is parallel to the roof ridge, carefully lift shingles and nail or screw base securely to the roof using galvanized roofing nails or screws. Nail all corners and around perimeter of base every 6 inches.



16. Install the ventilator dome to the ventilator base using the four (4) stainless steel 5/16" sheet metal screws removed during step 4.

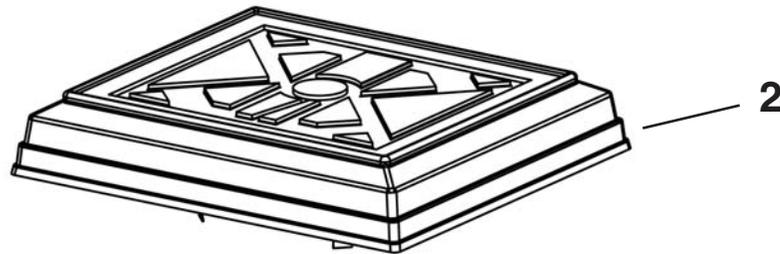
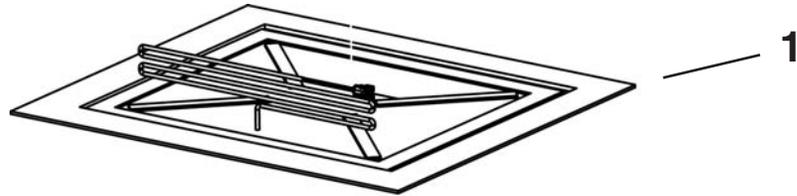
## REMOTE SOLAR PANEL INSTALLATION

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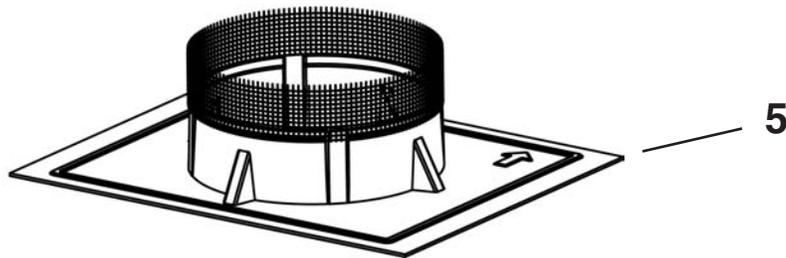


17. Working from inside the attic, find the center of the selected solar panel location identified in step 2, drill a small hole in the roof decking large enough for the solar panel wire to fit through.
18. Feed the solar panel wire through the hole into the attic.
19. Run a bead of silicone or roof cement around the perimeter of the underside of the solar panel and secure to the roof using nails or screws. Nail or screw all corners and perimeter of base every 6 inches. Seal the fastener heads with silicone or roof cement.
20. From inside the attic, apply silicone around the wire where it enters the roof.
21. Connect the red wire to the positive motor terminal and the black wire to the negative motor terminal. Tape or tie extra wire to prevent contact with the fan blade.
22. Remove cardboard from the solar panel and verify that the ventilator operates.

## SERVICE PARTS



Replacement parts  
can now be ordered  
on our website.  
Please visit us at  
[www.Broan.com](http://www.Broan.com)



Key No.	Model 355RSOBK (Black)	Model 355RSOBR (Brown)	Description
1	S99527255	S99527256	Solar Panel Assembly
2	S99527273	S99527274	Dome Assembly
3	S99527261	S99527261	Fan Blade w/ Set Screw
4	S99527257	S99527257	Motor, DC
5	S99527250	S99527251	Roof Sheet Panel

**WARRANTY**

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**BROAN-NUTONE LLC  
– Exclusive Limited Warranty –**

The Exclusive Limited Warranty Agreement (the "Warranty") is entered into by and between Customer and Broan-NuTone LLC ("Broan"). Customer has carefully reviewed this Warranty and agrees that Broan's performance of its obligations hereunder will provide Customer with an adequate remedy which will serve the essential purpose of the parties' agreement relating to the products manufactured by Broan and identified on the reverse side hereof (the "Products"). Customer acknowledges and agrees that he/she is purchasing the Products for residential purposes (and not for industrial or commercial purposes) after careful inspection of the same. Customer's rights and benefits hereunder inure solely to Customer, as the original purchaser of the Products, and are non-assignable and non-transferable. No other party or entity, including, without limitation, subsequent purchasers or owners of the Products shall have or be entitled to assert any rights or benefits hereunder.

**EXCLUSIVE LIMITED WARRANTY; LIMITATION OF REMEDIES.** Broan hereby warrants the Customer that the Products' motors are and will remain for a period of two (2) years from the date of delivery to Customer; and the Products are and will remain for a period of six (6) years from the date of delivery to Customer (collectively, the "Warranty Period"), free of defects in materials and workmanship, provided that such Products are used for their intended purpose and are properly serviced in accordance with the User's Manual provided to Customer. Subject to the foregoing, if at any time during the Warranty Period any Product fails to conform to the foregoing warranty by reason of defects in materials or workmanship, Customer shall properly notify Broan in writing and shall include with such notice a sales receipt or proof of purchase of the defective Product, and Broan at its option shall repair or replace the defective Product or component part without charge to Customer, except for: (A) costs incurred in transporting the Products or component parts to and from Broan's designated dealer or its manufacturing plant in Hartford, Wisconsin; and (B) charges for labor or other costs incidental to the removal or remounting of component parts repaired or replaced under this Warranty, both of which shall be borne by Customer. Notwithstanding any provision herein to the contrary, this Warranty shall not extend or obligate Broan to take any action with respect to: (A) Products which have been modified, altered, installed, used or operated in a manner which is not recommended by Broan, including any Products in which parts not manufactured or approved by Broan have been installed; (B) Products which have not been regularly or properly serviced in accordance with the User's Manual or which have otherwise been neglected; and (C) ordinary wear and tear, service and maintenance and replacement items. **THIS WARRANTY APPLIES ONLY TO MACHINERY, EQUIPMENT AND COMPONENT PARTS MANUFACTURED BY BROAN. THIS WARRANTY DOES NOT APPLY OR EXTEND TO: (A) PARTS PURCHASED SEPARATELY FROM SUCH MACHINERY AND EQUIPMENT, WHICH ARE COVERED BY A SEPARATE WRITTEN WARRANTY; OR (B) ITEMS OF EQUIPMENT OR ACCESSORIES MANUFACTURED BY PARTIES OTHER THAN BROAN.**

**EXCEPT AS SPECIFICALLY STATED IN THE PARAGRAPH IMMEDIATELY ABOVE, BROAN MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE WARRANTY SET FORTH IN THE PRECEDING PARAGRAPH AND THE OBLIGATIONS AND LIABILITIES OF BROAN THEREUNDER REPRESENT CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES AND ARE EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER REMEDIES, WARRANTIES, GUARANTIES OR LIABILITIES, EXPRESS OR IMPLIED, ALL OF WHICH ARE HEREBY EXPRESSLY WAIVED BY CUSTOMER. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT SHALL BROAN'S LIABILITY HEREUNDER EXCEED THE PURCHASE PRICE FOR THE PRODUCTS. ADDITIONALLY, BROAN SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER.**

Broan reserves the right to modify, alter or improve any products or equipment manufactured by Broan without incurring any duty or obligation to modify, alter, improve or replace any of the Products covered hereby.

**THIS WARRANTY SETS FORTH THE PARTIES' FINAL, COMPLETE AND EXCLUSIVE AGREEMENT CONCERNING THE PRODUCTS AND BROAN'S WARRANTY OBLIGATIONS. NO AFFIRMATION OF FACT, PROMISE, DESCRIPTION, DEMONSTRATION, SAMPLE OR MODEL CONSTITUTES A WARRANTY OR OTHERWISE MODIFIES, EXTENDS OR ALTERS THIS WARRANTY UNLESS IN A WRITTEN INSTRUMENT SIGNED BY AN AUTHORIZED BROAN OFFICER.**

This Warranty shall be governed by and construed in accordance with the laws of the State of Wisconsin. The venue for any action arising out of or related to this Warranty shall be in Washington County, Wisconsin.

