Solar Star® Roof Mount Vent Installation Instructions

WARNING: DO NOT PROCEED WITH THE INSTALLATION UNTIL YOU HAVE READ THE ENTIRE INSTRUCTIONS AND WARNINGS.



PARTS LIST Quantity 1. Solar Star Fan Assembly (1) 2. Roof Flashing (Pitched or no pitch) (1) 3. Fastener Kit a. Solar Star Mounting Screws -#8x1/2 in (13mm) (4) b. Flashing Screws -#10x2 in (50 mm) (8) 4. Roof Sealant (Sold Separately) (0)**Required Tools:** 1. Saber or reciprocating saw 2. Hammer and nail 3. Power drill 4. Ladder 5. Flat bar 6. Cauking gun 7. Lumber crayon

Solar Star® Roof Mount Vent Installation Instructions



WARNING



Do not proceed with the installation until you have read the entire instructions, including these warnings.

Precautions: Install at your own risk!

Installation requires climbing and working at dangerous heights, including on ladders, scaffolding, roofs, and in attic spaces. Risk of death, personal injury, and property damage may result from a fall, or from falling objects. Use extreme caution to minimize risk of accidental injury, including, but not limited to the following:

- · Avoid working on surfaces that are slippery or wet.
- · Use foot wear with excellent traction.
- · Use only strong, well supported ladders.
- · Work only in calm dry weather.
- When in attic, ensure that your weight is supported at all times with structurally sound framing; dry wall material is not designed to carry a
 person's weight.

To reduce the risk of fire, electrical shock, and personal injury; basic safety precautions should always be followed when using electric tools, including always wearing safety goggles or other suitable eye protection, and ensuring work area is clear of all electrical wires, gas pipes, water pipes, and other obstacles.

When working in an attic or other dusty area, use of a mask or respirator is recommended to avoid lung irritation. Attic spaces may be dark, confined, and subject to extreme temperatures. Beware of sharp protruding objects. Do not attempt installation without having someone within range of your voice or close enough to come to your aid if necessary.

Solar Star products may have sharp edges. Always wear leather or canvas work gloves while handling and installing Solar Star products. Solar Star products have an unguarded fan blade. Do not use Solar Star products in areas that are easily accessible. Keep children out of attic area and away from Solar Star products.

Keep Solar Star solar panels covered until product is mounted and sealed to roof. Cover solar panel whenever motor, fan or unit is to be serviced. Fan blade is controlled by solar panel and may become operational when panel is exposed to sunlight.

Carbon monoxide may be drawn into a house or attic space with the operation of Solar Star products if fuel-burning equipment is not serviced or monitored regularly. Carbon Monoxide (CO) is a colorless, odorless gas that can be hazardous to your health and may cause death. Fuel-burning equipment must have proper ventilation, Solar Star products are not designed to provide ventilation for fuel-burning products.

Solar Star products are designed for general ventilation purposes only. Do not exhaust any hazardous materials such as flammable, explosive or incendiary materials.

Installation Tips:

- 1. Solar Star products develop 100% of their operational power from the sun; therefore, it is very important that the solar panel be exposed to as much sunlight as possible. The best location for the Solar Star Roof Mount Vent is on a south-facing slope.
- 2. Install the Solar Star Roof Mount Vent just below the top ridge of the roof, since hot moist air will naturally rise to the top portion of the attic. Ensure net free air opening is minimum of 1/150 of attic or is meeting your local building code requirements.
- 3. Install intake vents (not provided) low on the roof slope to create continuous airflow through your attic. Soffit or eve vents are preferred.
- 4. If your home has gable vents, install the Solar Star roof mount vent between gable vents or consider the Solar Star Conversion Kit.

Note: Research has shown that for the highest level of effectiveness, Solar Star products, matched with proper location and static intake vents, provide balanced ventilation. Airflow will vary according to latitude as well as atmospheric and climate conditions.

SELECT YOUR SPOT

Look for a sunny rooftop exposure, then find the approximate roof opening location from within the attic. Drive a nail through the roof sheathing between the roof joists.

ROOF FLASHING INSTALLATION

Step1: Take the roof flashing, Solar Star fan assembly, flashing screws, Solar Star mounting screws, sealant and appropriate tools onto the roof. Center the flashing over the nail and mark the inside circumference onto the shingles with a lumber crayon (Diagram A). Using a saber or reciprocating saw, cut through the roof ½ in (12mm) outside the marked line.

Note: If rafter spacing does not permit cutting 1/2 in (12 mm) larger than the marked circle, cut the shingles and felt underlayment ½ in (12 mm) outside the marked line to expose the roof deck (Diagram B). Turn the flashing upside-down and center over the nail. Trace the inner circumference of the flashing turret onto the bare roof (Diagram C). Using a reciprocating or jig saw, cut outside the line, being careful not to cut any framing members, concealed pipes or electrical wires.

Step 2: Using a flat bar, break the asphalt sealing tabs of the shingles and carefully pull out the staples or nails above the midpoint to upper edge of the hole. Remove enough shingles to expose the felt underlayment at the middle and surrounding the top of the roof opening (Diagram C).

Step 3: With a caulking gun, apply a 3/8 in (10mm) bead of roof sealant around the underside of the flashing base along the line of screw holes (Diagram D). Use only Solatube recommended sealant for the installation. The top half of the flashing seals to the roof underlayment. The bottom half of the flashing seals to the shingles.

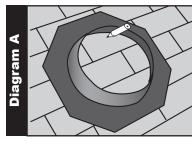
Step 4: Turn the flashing upright and center over the roof opening, fasten flashing to the roof and underlayment with 2 in (50mm) flashing screws applied at each pre-punched hole. Do not over tighten. Coat the screw heads with sealant. Replace the shingles and refasten them into place. Fill all the old fastening holes, and resecure the shingle tabs every 4 in (100mm) with spots of roofing sealant under each tab (Diagram E).

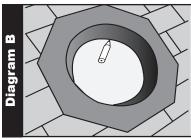
SOLAR STAR ROOF MOUNT VENT INSTALLATION

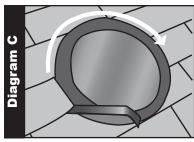
Step 1: Place the Solar Star fan assembly onto the flashing with the panel label located on the high side of the flashing. Align the Solar Star screw holes with the flashing pre-drilled holes. Fasten the Solar Star fan assembly to the flashing using the four Solar Star mounting screws (Diagram F).

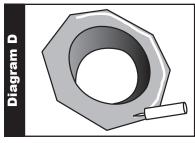
Note: If installing the Solar Star fan assembly with a pitched flashing, install one Solar Star mounting screw to the top of the flashing turret ½ in (12mm) down from inside of turret edge (Diagram G). Place the Solar Star fan assembly onto the flashing with the panel label located on the high side of the flashing and align the screw hole on the Solar Star with the screw on the flashing (Diagram H). Fasten the Solar Star fan assembly to the flashing with the remaining three Solar Star mounting screws (Diagram F).

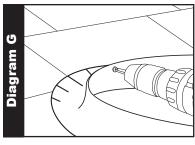
For tile or metal roof installation instructions visit our website at www.solatube.com.















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Solatube International, Inc., 2210 Oak Ridge Way, Vista CA 92081-8341 Phone (800) 966-7652 • Fax (760) 599-5181 Part No. 951900 v1.2 www.solatube.com