

## 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, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. 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 guideline 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.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit (ceiling installation only).
8. This unit must be grounded.

### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up. **DO NOT MOUNT THIS PRODUCT IN A WALL.**
3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
4. Please read specification label on product for further information and requirements.

## CLEANING & MAINTENANCE

For quiet and efficient operation, long life, and attractive appearance - lower or remove grille and vacuum interior of unit with the dusting brush attachment.

The motor is permanently lubricated and never needs oiling. If the motor bearings are making excessive or unusual noises, replace the blower assembly (includes motor and impeller).

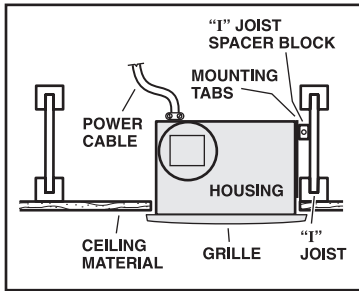
## OPERATION

Use an on/off switch or speed control to operate this ventilator. See "Connect Wiring" for details. Use of speed controls other than the Broan Models 78V and 78W may cause a motor humming noise.

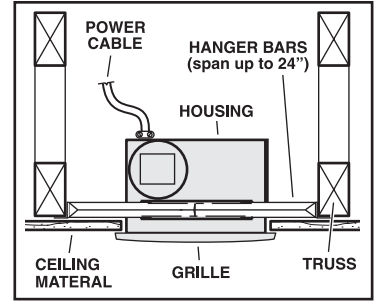
## TYPICAL INSTALLATIONS

Housing mounted to I-joists.

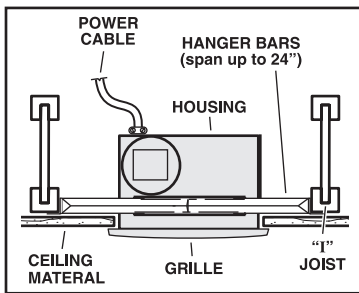
Use I-joist spacer block (provided).



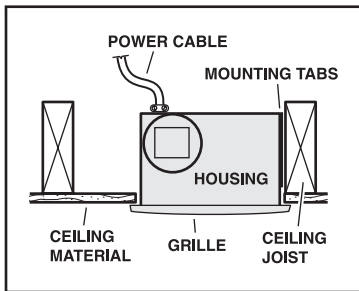
Housing mounted anywhere between trusses using hanger bars.



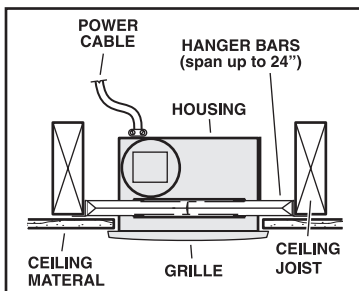
Housing mounted anywhere between I-joists using hanger bars.



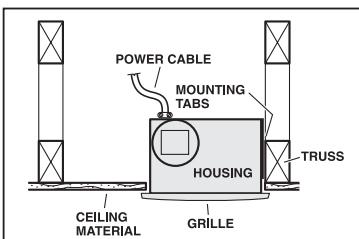
Housing mounted to joists.



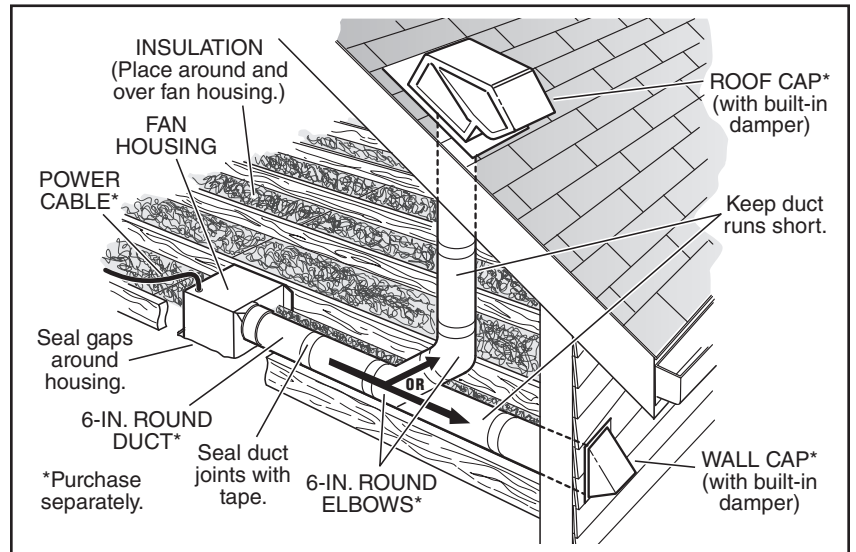
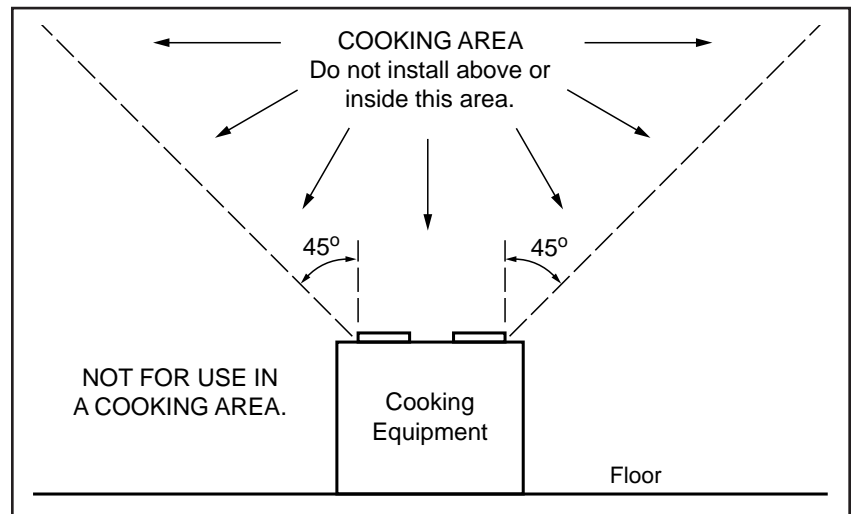
Housing mounted anywhere between joists using hanger bars.



Housing mounted to truss.



## PLAN THE INSTALLATION

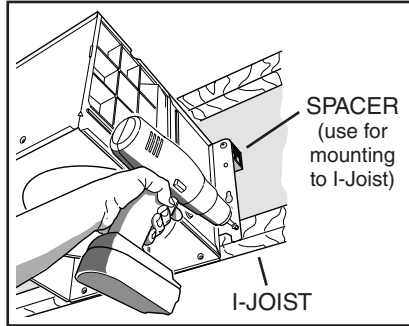


The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.

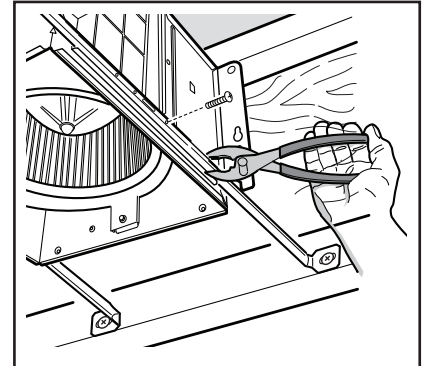
### INSTALLATION

#### 1a. Mount housing to joist.

Hold housing in place so that bottom edge of housing will be flush with finished surface of ceiling. For 1/2" thick ceiling material, position bottom of each mounting flange flush with the bottom of joist. The housing mounts with four (4) screws or nails. Screw or nail housing to joist through lowest holes in each mounting flange, then through highest holes. NOTE: Mounting to I-JOIST (shown) requires use of SPACERS (included) between the highest hole of each mounting flange and the I-joist.

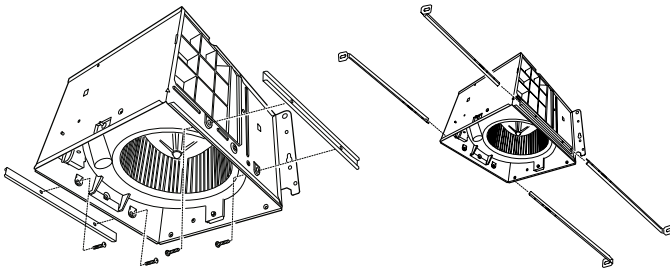


To ensure a noise-free mount: Secure hanging bars together with SCREWS and use a pliers to crimp mounting channels tightly around hanger bars.



OR

#### 1b. Mount housing anywhere between trusses, joists, or I-joists using hanger bars.

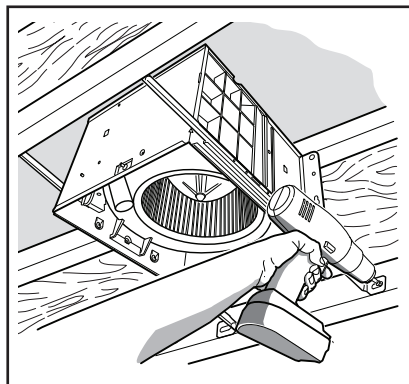


Sliding hanger bars are provided to allow for accurate positioning of housing anywhere between framing. They can be used on all types of framing (I-joist, standard joist, and truss construction) and span up to 24".

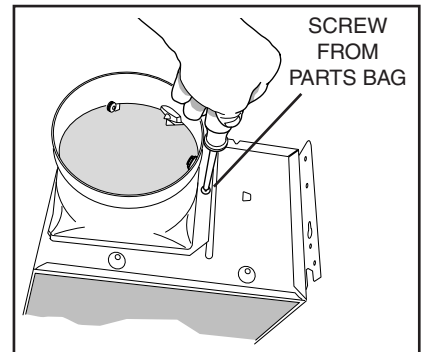
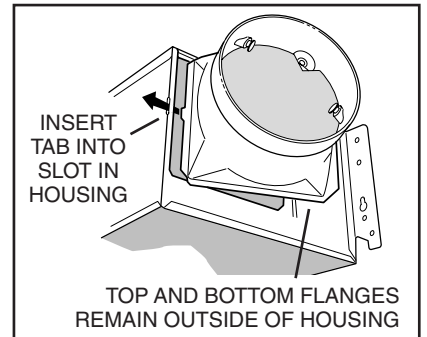
Attach the MOUNTING CHANNELS to the housing using the SCREWS supplied.

Extend HANGER BARS to the width of the framing.

Hold housing in place so that bottom edge of housing will be flush with finished surface of ceiling. For 1/2" thick ceiling material, position bottom of each mounting flange flush with bottom of joist.

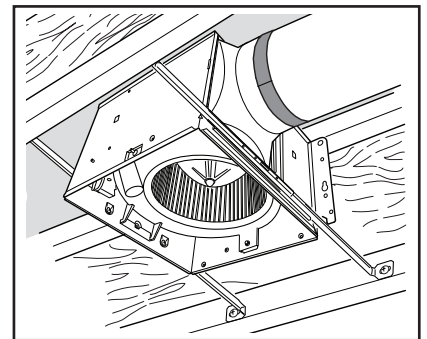


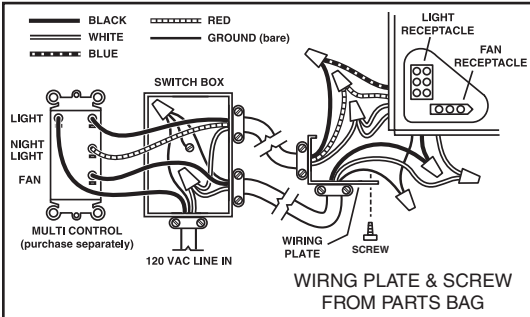
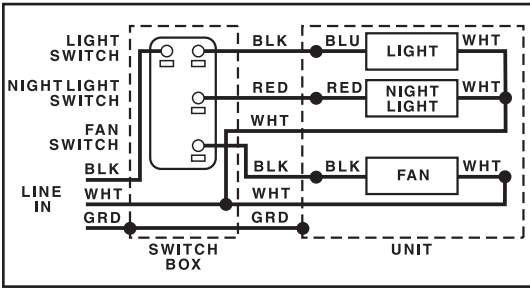
#### 2. Attach damper/duct connector.



#### 3. Install 6-inch round ductwork.

Connect 6-inch round ductwork to damper / duct connector. Run ductwork to a roof cap or wall cap. Tape all ductwork connections to make them secure and air tight.





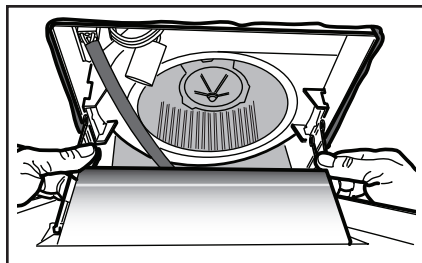
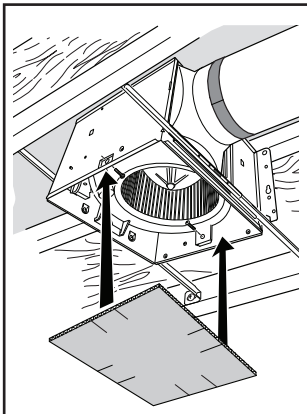
### 4. Connect electrical wiring.

Run 120 VAC house wiring to installation location. Use proper UL approved connector to secure house wiring to wiring plate. Connect wires as shown in wiring diagrams.

### 5. Insert mask and finish ceiling.

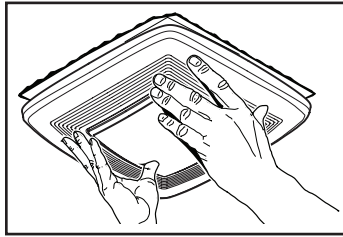
Tape mask into housing. Mask protects unit during construction. Mask protects unit during construction. Remove before installing grille.

Install ceiling material. Cut out around housing.

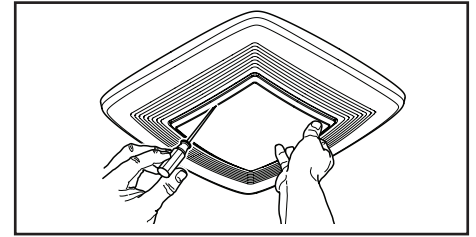


### 6. Attach grille to housing.

Plug light into receptacle. Squeeze grille springs and insert them into tabs on each side of housing.



### 7. Push grille against ceiling.



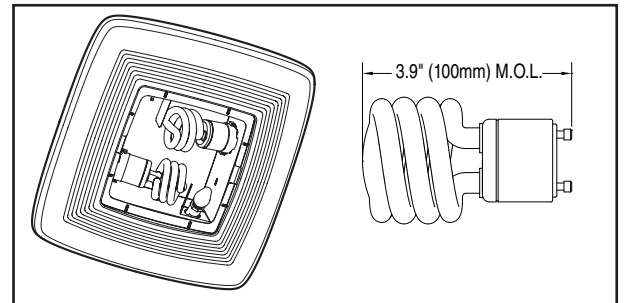
### 8. Remove light lens.

Carefully insert a small flat-blade screwdriver between grille and lens. Pry lens out.

### 9. Install light bulbs.

Product includes (2) 18W (max.), type GU24 fluorescent bulbs with M.O.L. (maximum overall length) of 3.9" (100mm).

Purchase a 4W incandescent night light bulb. Insert bulbs into their sockets. Replace lens.



## SERVICE PARTS

Key No.	Part No.	Description
1	97020009	Housing
2	97018331	Duct Connector
3	97018721	Parts Bags (includes wiring plate & all screws)
4	97018448	Wire Panel/Harness Assembly
5	97020012	Blower Assembly
6	99140208	Grille Spring (2 req'd)
7	97018531	Grille Assembly (includes key nos. 6 & 8)
8	99111399	Lens
9	99271381	Bulb, GU24, 18W Fluorescent (2 req'd)
10	97018014	Spacer (2 supplied)
11	97020013	Hanger Bar Kit

Order service parts by "Part No." - not by "Key No."

