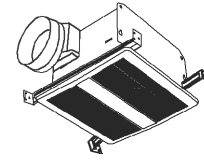




MODEL : VQ080ESa VQ110ES
VQ090ESa VQ150ES
VQ120ES



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.
9. Never place a switch where it can be reached from a tub or shower.
10. To reduce the risk of fire use only metal ductwork.

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 motor with the exact service motor. The impeller should also be replaced.

OPERATION

Use an on/off switch to operate this fan. See "Connect Wiring" for details.

WARRANTY

LIMITED WARRANTY Acme Engineering and Manufacturing Corporation extends this limited warranty to the original purchaser and warrants that products described herein shall be free from original defects in workmanship and materials for two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated. THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS AND TUBES. Refer to Form MS149 for complete limited warranty terms and conditions. This form is available to anyone at www.acmefan.com. The Company's warranty is in lieu of all other warranties, express or implied, arising by law or otherwise, including without limitation the implied warranties of merchantability and fitness for a particular purpose, which are hereby expressly disclaimed and waived.

Acme products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the Purchaser and End User. If these products are used in a life support ventilation system where failure could result in loss or injury, the Purchaser and End User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

WARNING DO NOT use in HAZARDOUS ENVIRONMENTS where fans electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments. Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA). Guards must be installed when fan is within reach of personnel or within eight (8) feet (2.5 m) of working level or when deemed advisable for safety.

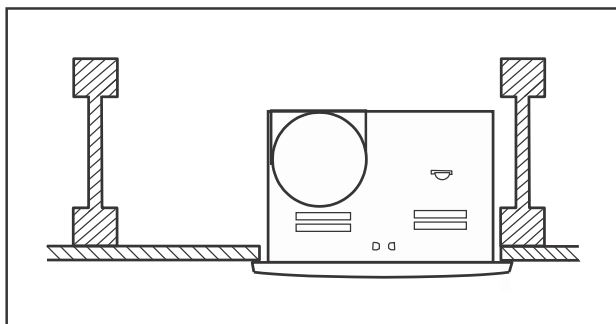
DISCLAIMER The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose.

INDEMNITY Purchaser acknowledges various warnings by the Company regarding the products and its installation and use. If the Company incurs any claims, lawsuits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage including, but not limited to, claims arising out of the Purchasers or any end users installation or use of the products, the Purchaser shall indemnify and hold the Company harmless.

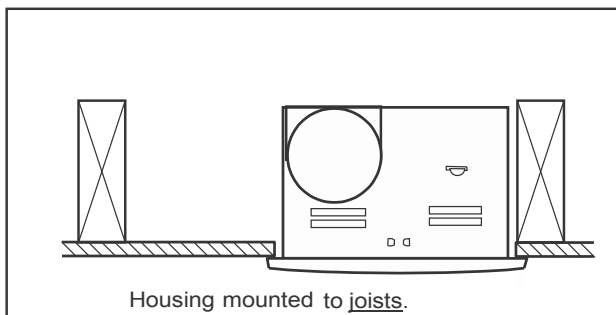
Acme Engineering and Manufacturing Corporation
1820 N. York St., Muskogee, OK 74403
918-682-7791

Installer: Leave this manual with the owner.

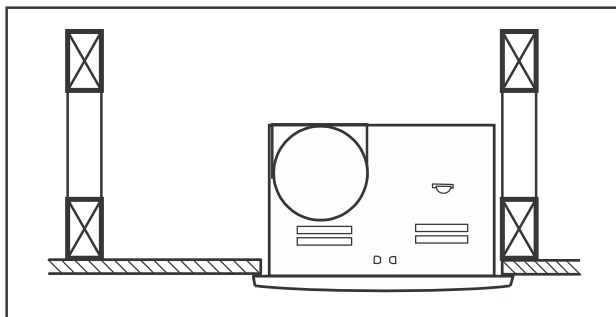
TYPICAL INSTALLATIONS



Housing mounted to I-joists.

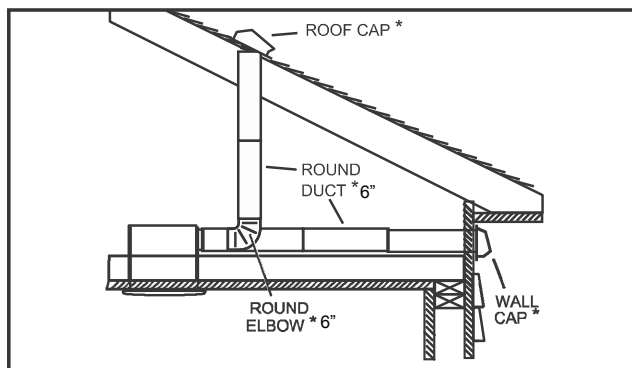
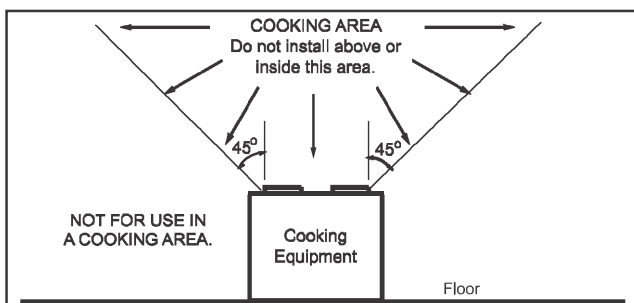


Housing mounted to joists.



Housing mounted to truss.

PLAN THE INSTALLATION

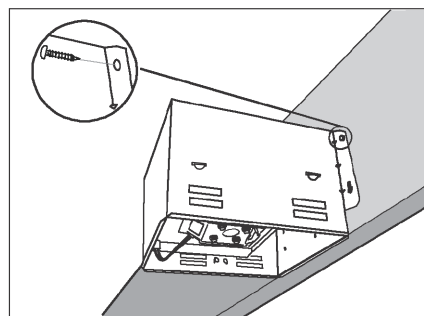


For a more quiet and efficient fan locate fan where the shortest duct run and a minimum number of elbows will be needed.

Use a roof cap or wall cap that has a built-in damper to reduce backdrafts.

INSTALL HOUSING

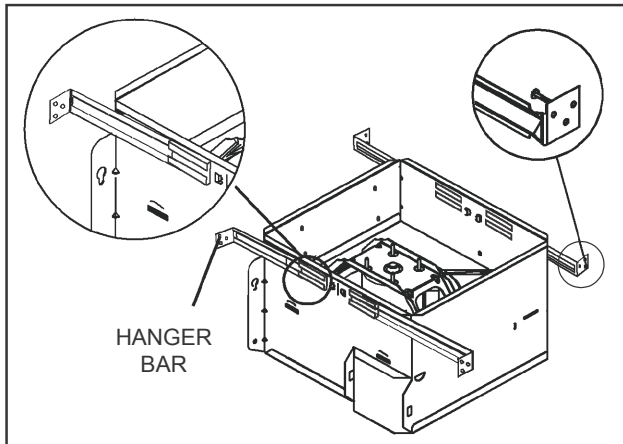
- 1a. Mount housing to joist or I-joist. Hold housing in place so that the housing contacts the bottom of the joist. The housing mounts with two(2) screws or nails. Screw or nail housing to joist through the holes in each mounting flange.



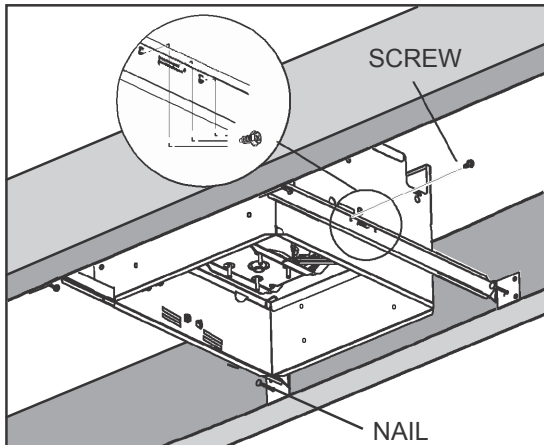
OR

- 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".



Insert hanger bars in slots provided in housing. Make sure TABS face “up” as shown. Use the set of channel mounting holes to mount the housing flush with the bottom of the drywall. Use the other set of holes (not marked) to mount the housing flush with the top of the drywall.



Extend HANGER BARS to the width of the framing.

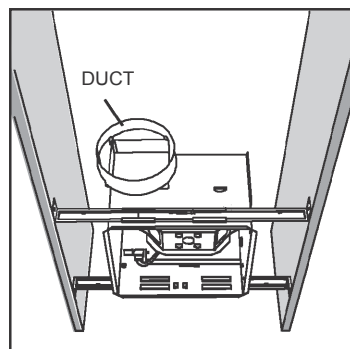
Hold ventilator in place with the hanger bar tabs wrapping around the **BOTTOM EDGE OF THE FRAMING**.

NAIL ventilator to framing or fasten with screws (not provided) through **HOLES** near nails.

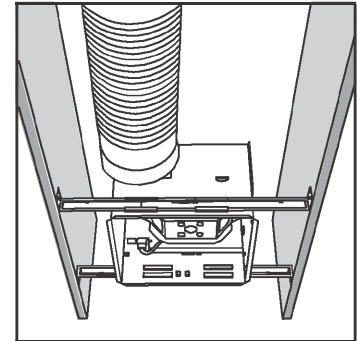
* To ensure a noise-free mount: Secure hanger bars together with **SCREWS** or use pliers to crimp mounting channels tightly around hanger bars.

INSTALL DUCTWORK

1. Attach damper/duct connector. Snap the damper/duct connector onto housing. Make sure the tabs on the connector lock into slots in the housing. Ensure the connector sits flush with the top of the housing and the damper flap falls closed.



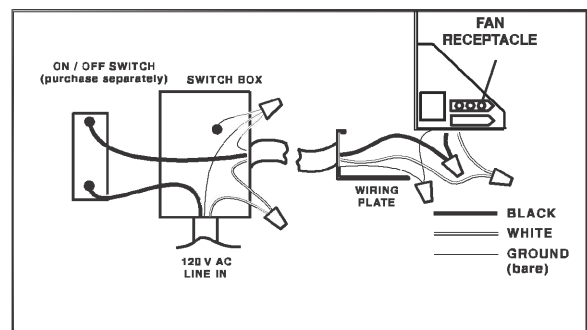
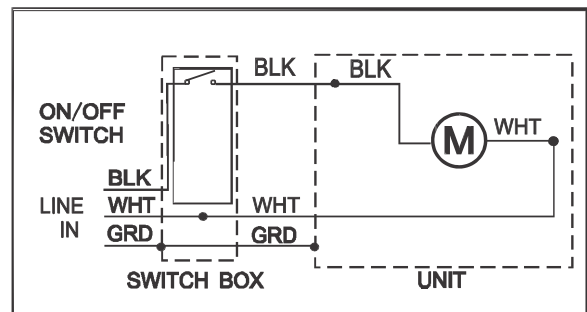
2. Install 6” round duct work.
CAUTION: ALL DUCTING MUST COMPLY WITH LOCAL AND NATIONAL BUILDING CODES
Connect ductwork to fans damper/duct connector. Secure with tape or screw clamp. Connect ductwork to outside through a roof or wall cap. Check damper to make sure it opens freely. Tape all duct connections.



CONNECT WIRING

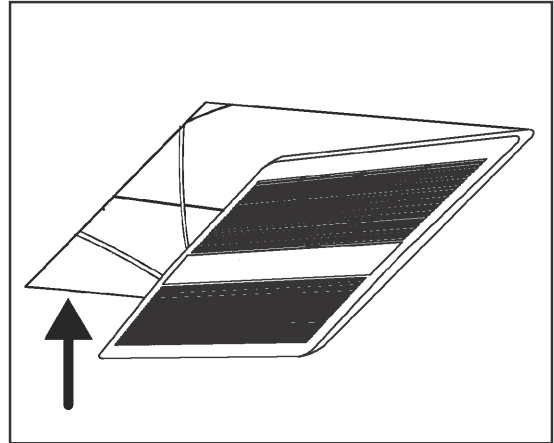
Connect electrical wiring.

Lock off and test all power sources before unit is wired. All wiring should be in accordance with local ordinances and National Electrical Code, NFPA70. Use proper UL approved connectors to secure wiring to wire plate. Ensure power supply (voltage, frequency, and current capacity of wiring) is in accordance with the motor nameplate. Connect all wiring as shown in wiring diagram.



INSTALL GRILLE

1. Finish ceiling.
Install ceiling material. Cut out around housing.
2. Attach grille to housing.
Squeeze grille springs and insert them into slots on each side of housing.
3. Push grille against ceiling.



USE AND CARE

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND LOCK OUT SERVICE PANEL BEFORE CLEANING OR SERVICING THIS UNIT.

The motor is permanently lubricated. Do not oil or disassemble motor.

TO CLEAN GRILLE:

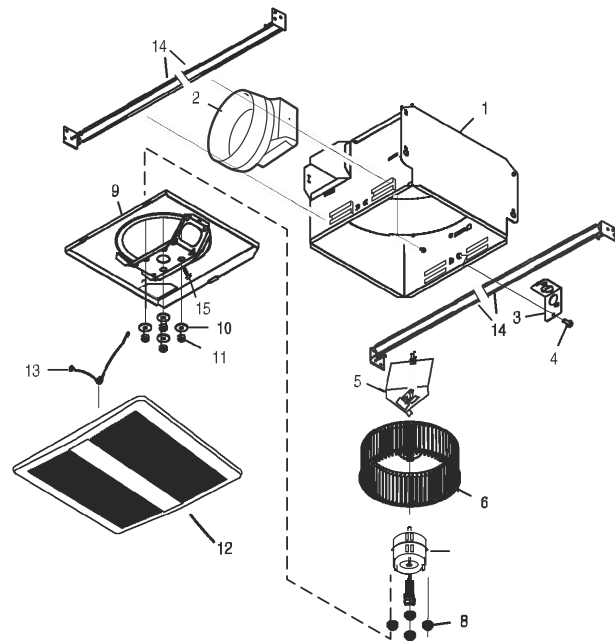
CAUTION: Plastic parts can be cleaned with mild, soapy water (use a mild detergent, such as dishwashing liquid) and dried with a soft cloth. **Do not use abrasive cloth, steel wool pads, or scouring powders.**

TO CLEAN FAN ASSEMBLY:

Unplug fan assembly. To remove motor plate: Find the screw (#15) on the motor plate (located next to the receptacle). Push up near motor plate tab while pushing out on side of housing. Or insert a straight-blade screwdriver into slot in housing (next to tab) and twist screwdriver. Gently vacuum fan, motor and interior of housing. **METAL AND ELECTRICAL PARTS SHOULD NEVER BE IMMERSSED IN WATER.**

SERVICE PARTS

Key No.	Description
1	Housing
2	Damper/Duct Connector
3	Wiring Plate
4	Screw
5	Wire Panel/Harness Assembly
6	Blower Wheel
7	Motor
8	Isolator (4 req'd)
9	Motor Plate
10	Washer (4 req'd)
11	Nut, Hex Lock (4 req'd)
*	Blower Assembly (includes key nos. 6 thru 11)
12	Grille Assembly (includes key nos. 13)
13	Grille Spring (2 req'd)
14	Hanger Bar Kit
15	Screw



Product specifications subject to change without notice.

SERVICE NOTE To remove Blower Assembly: Unplug motor (7). Remove thumbscrew (15) from motor plate (9) flange. Find the single TAB on the motor plate (located next to the receptacle). Push up near motor plate tab while pushing out on side of housing. Or insert a straight-blade screwdriver into slot in housing (next to tab) and twist screwdriver.