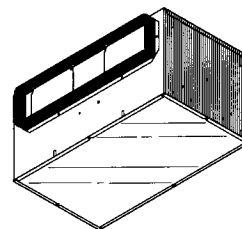




# IN-LINE VENTILATORS



## 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. To reduce the risk of fire, use only metal ductwork.
8. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Interrupter) - protected branch circuit.
9. Never place a switch where it can be reached from a tub or shower.
10. This unit must be grounded.

### 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. **If ventilator is installed in an unconditioned space (such as an attic):** Surround the ventilator with thermal insulation - to minimize possible condensation.
4. Please read specification label on product for further information and requirements.

### TABLE OF CONTENTS

This manual is divided into sections as follows:

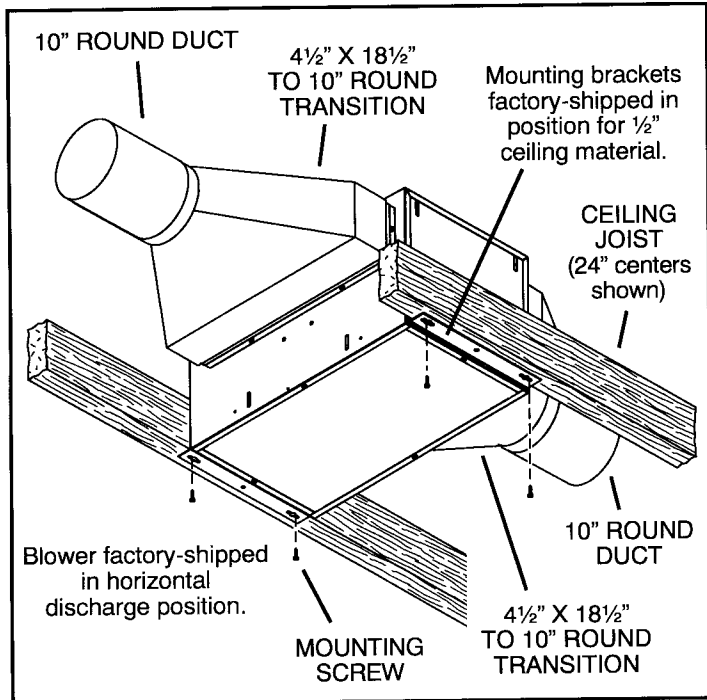
- **“TYPICAL INSTALLATION”**  
This section shows a common installation in new and existing, frame construction.
  - Mounting (new construction)
  - Mounting (existing construction)
  - Wiring
  - Ducting (straight-through blower discharge)
- **“MOUNTING OPTIONS”**
- **“WIRING OPTIONS”**  
-Wiring Plate Position
- **“DUCTING OPTIONS”**  
- Blower Discharge Positions  
- Ducting (right angle blower discharge)
- **“USE AND CARE”**
- **“SERVICE PARTS”**
- **“WARRANTY”**

**Installer: Leave this manual with the homeowner.  
Homeowner: Use and Care information on page 3.**



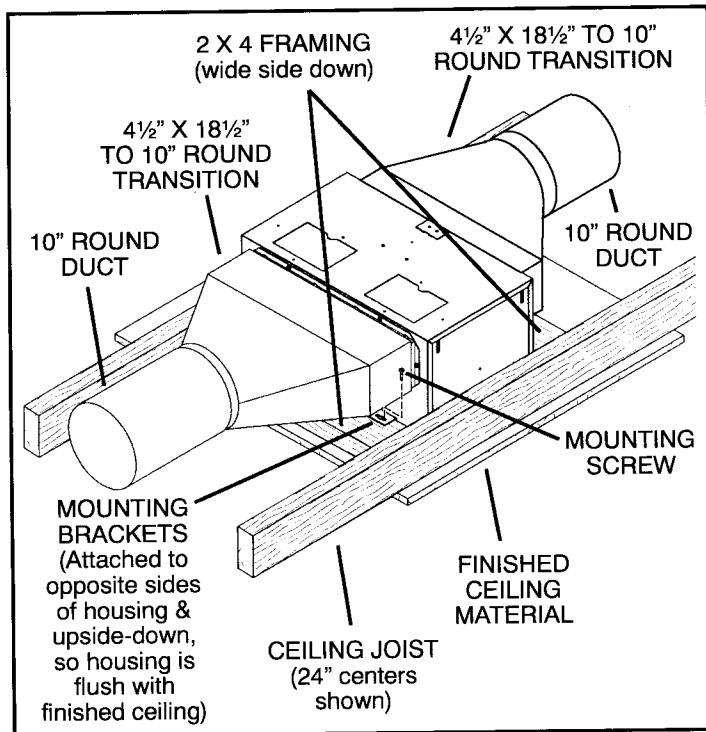
## TYPICAL INSTALLATION

### MOUNTING (*New Frame Construction*)



Factory-shipped unit installed in new construction.

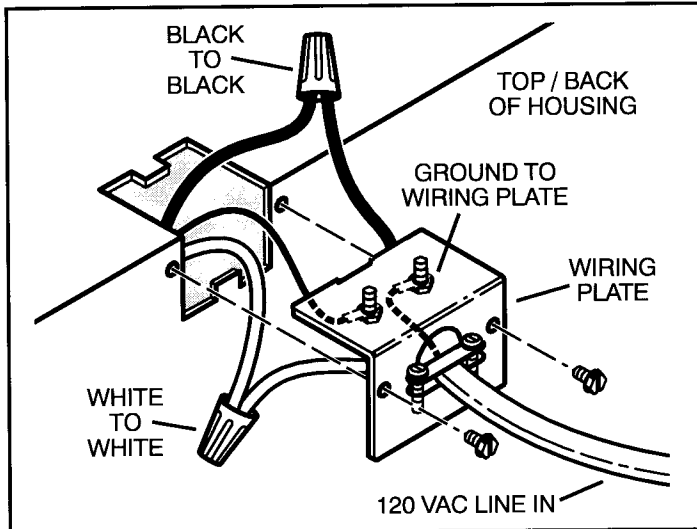
### MOUNTING (*Existing Frame Construction*)



Factory-shipped unit installed in existing construction.

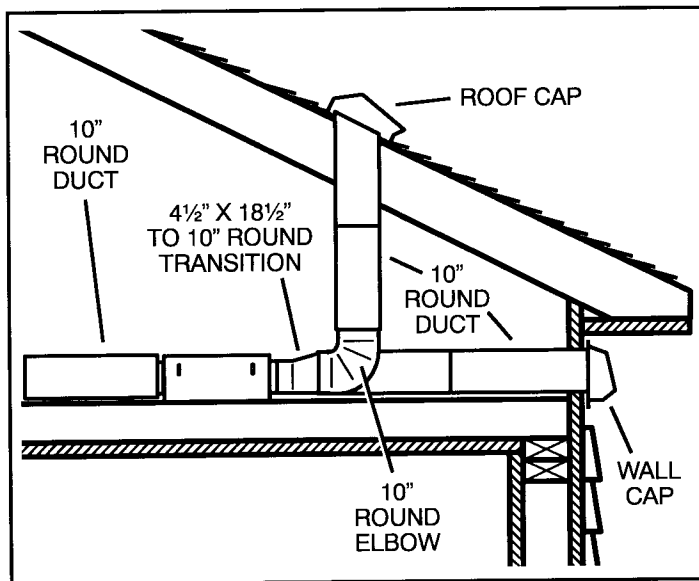
## TYPICAL INSTALLATION

### WIRING



Ventilator can be wired from outside of housing.  
 Use UL approved connectors to wire per local codes.

### DUCTING (*Straight-through blower discharge*)



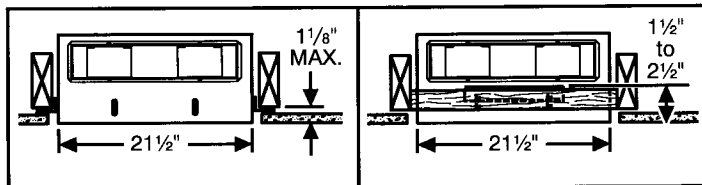
Two ways to connect ductwork to a factory-shipped unit.

NOTE: Make sure the shipping tape is removed from the damper flap and that damper flap opens and closes freely inside the ductwork. Use duct tape to make ductwork connections secure and air-tight.



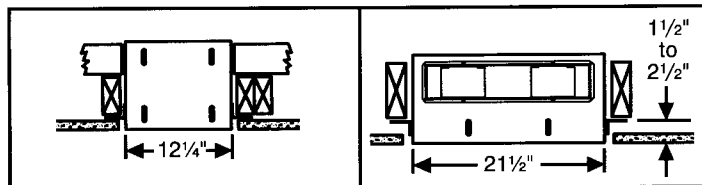
## MOUNTING OPTIONS

1/4-20 hex nuts secure mounting brackets to housing. Loosen and re-tighten or remove and replace nuts as necessary for desired mounting bracket position.



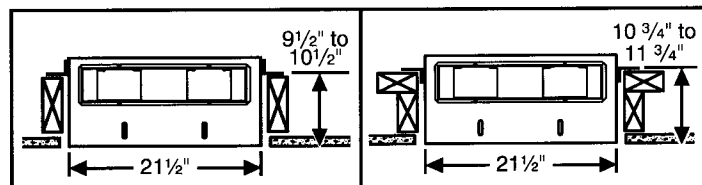
Mounting brackets in factory-shipped position. (Outlet parallel to joists.) (New construction)

Mounting brackets flipped over and mounted to outlet sides of housing. (Outlet parallel to joists.) (Existing construction)



Mounting brackets mounted to outlet sides of housing. (Outlet perpendicular to joists.) (New construction)

Mounting brackets flipped over to give approx. 1" more clearance. (Outlet parallel to joists.) (New construction)

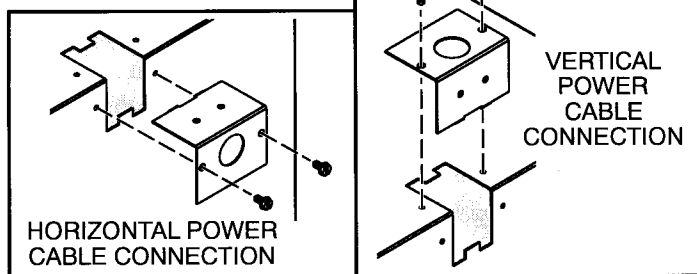


Mounting brackets mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

Mounting brackets flipped over and mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

## WIRING OPTIONS

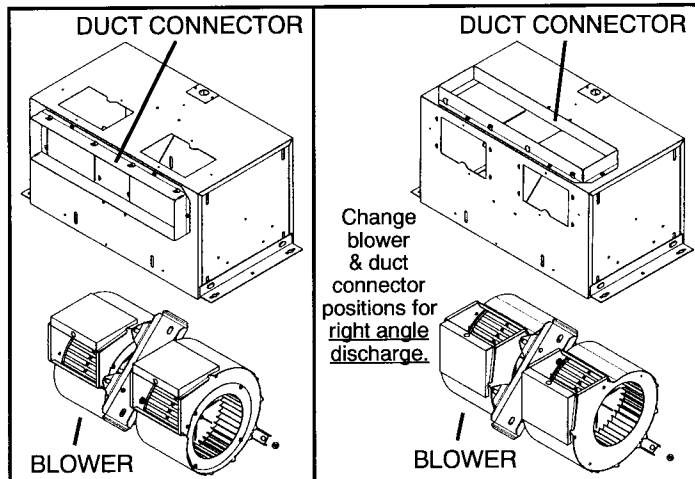
### WIRING PLATE POSITION



Wiring plate mounts to side or top of housing.

## DUCTING OPTIONS

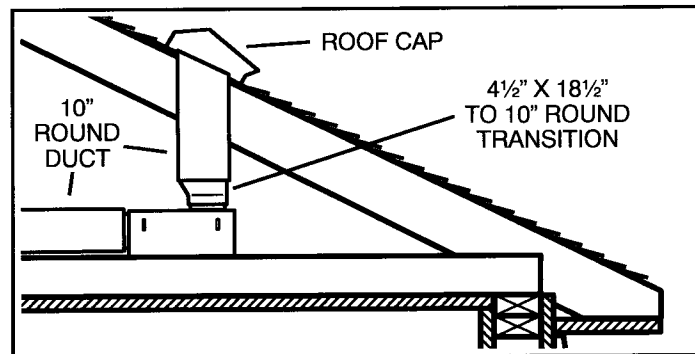
### BLOWER DISCHARGE POSITIONS



Blower and duct connector in straight-through discharge position. (Factory shipped)

Blower and duct connector in right angle discharge position.

### DUCTING (Right angle blower discharge)



Typical ductwork connection to a ventilator converted to right angle discharge.

## USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or a solid-state, variable speed control. Follow wiring instructions packed with control, and adhere to all local and state codes, and the National Electrical Code.

**WARNING:** To reduce the risk of electric shock, disconnect from power supply before servicing.

**To clean blower assembly:** Remove access panel, unplug blower from housing, remove blower mounting nuts, and carefully remove blower from housing. Use appropriate vacuum attachment or a soft cloth and mild soap or detergent to clean blower discharge area and wheel. DO NOT ALLOW WATER TO ENTER MOTOR. Make sure blower assembly is completely dry before reinstalling.

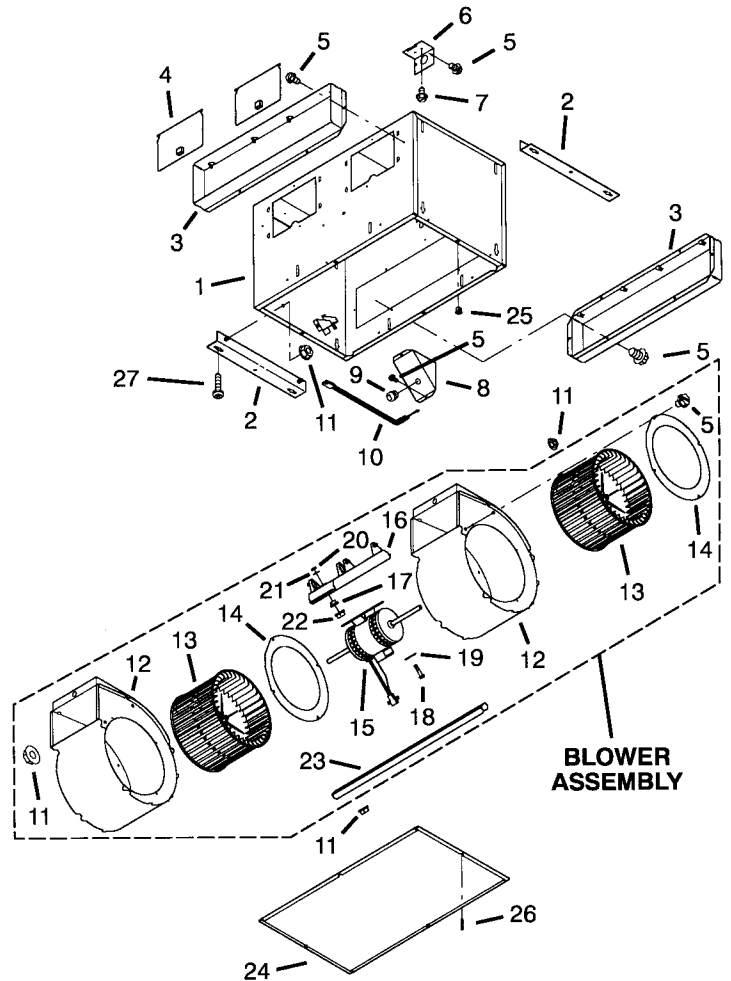
Motor is permanently lubricated. Do not oil or disassemble motor.



# SERVICE PARTS

KEY NO.	PART NO.	DESCRIPTION
1	97014744	Housing Assembly
2	97014728	Mounting Bracket (2 req.)
3	98009449	Duct Connector (2 req.)
4	97014822	Damper Flap Assembly (2 req.)
5	99150415	Screw, 8-18 x 1/4 (18 req.)*
6	98005512	Wiring Plate
7	99150471	Ground Screw, 10-32 x 1/2 (2 req.)
8	98005513	Wire Box Cover
9	99400035	Strain Relief Bushing
10	97006039	Wire Harness
11	99260477	Nut, 1/4-20 (12 req.)*
12	97014745	Scroll Assembly (2 req.)
13	99110805	Blower Wheel, (2 req.)
14	98009399	Inlet Ring (2 req.)
15	99080486	Motor (VQL400)
	99080487	Motor (VQL500)
	99080488	Motor (VQL700)
16	97014794	Motor Mounting Bracket
17	99100497	Rubber Isolator (4 req.)
18	99160380	Screw, 10-24 x 7/8 (4 req.)*
19	99250399	Washer (4 req.)*
20	99260306	Nut, Hex 10-24 (4 req.)*
21	99250254	Washer (4 req.)*
22	93260456	Nut, Hex Flange 3/8-16
23	98009461	Scroll Mounting Channel
---	-----	Blower Assembly, Complete (Includes Key Nos. 5 & 11-23)
	97014817	(VQL400)
	97014819	(VQL500)
	97014821	(VQL700)
24	98009464	Access Panel
25	99420470	Access Panel Nut (4 req.)
26	99150472	Access Panel Mounting Screw (4 req.)
27	99150591	Screw, 10-16 x 7/8 (4 req.)

# SERVICE PARTS



Order replacement parts by PART NO. - not by KEY NO.  
\* Standard hardware - may be purchased locally.

# WARRANTY

### LIMITED WARRANTY

**WARRANTY AND DISCLAIMER:** Acme Engineering and Manufacturing Corporation extends this limited warranty to the original buyer and warrants that products manufactured by the Company shall be free from original defects in workmanship and materials for two years from date of shipment, provided same have been properly stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's express authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Buyer assumes all risks and liability for results of use of the products. Warranties on purchased parts, such as but not limited to bearings, sheaves, belts, couplings, electric motors, pumps and controls are limited to the terms of warranty extended by our supplier. Polyethylene tubing and cooling pads are warranted to be free of defects in material and workmanship for a period of 90 days from date of shipment and a like warranty applies to the cross fluted cellular type cooling coils for a period of two years from date of shipment provided same have been properly handled, stored, installed, serviced, maintained and operated. And further, not subjected to excessive heat, corrosive agents or chemicals, or mechanical abuse that may cause tearing, crushing or undue deterioration nor used on a system or in a manner other than that for which it was designed as explained in the product literature.

**LIMITATION OF REMEDY AND DAMAGES:** All claims under this warranty must be made in writing and delivered to P. O. Box 978, Muskogee, Oklahoma, 74402, within 15 days after discovery of the defect and prior to the expiration of two years from the date of shipment by the Company of the product claimed defective, and Buyer shall be barred from any remedy if Buyer fails to make such claim within such period. Within 30 days after receipt of a timely claim, the Company shall have the option either to inspect the product while in Buyer's possession or to request Buyer to return the product to the Company at Buyer's expense for inspection by the Company. The Company shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Buyer F.O.B. point of shipment; provided, however, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Buyer's sole and exclusive remedy shall be a refund to the Buyer of any part of the invoice price, paid to the Company, for the defective product or part. The Company is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from the Company's plant, or the installation of the repaired or replaced product or part. Implied warranties, when applicable, shall commence upon the same date as the express warranty provided above, and shall, except for warranties of title, extend only for the duration of the express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. The only remedy provided to you under an applicable implied warranty and the express warranty shall be the remedy provided under the express warranty, subject to the terms and conditions contained therein. The Company shall not be liable for incidental and consequential losses and damages under the express warranty, any applicable implied warranty, or claims for negligence, except to the extent that this limitation is found to be unenforceable under applicable state law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No employee, agent, dealer, or other person is authorized to give any warranties on behalf of the Company or to assume for the Company any other liability in connection with any of its products except in writing and signed by an officer of the Company.

**REPLACEMENT PARTS** If replacement parts are ordered, buyer warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original equipment was purchased.

**TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER:** Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at the Company's sole option and may be subject to additional charge. The Company assumes no obligation or liability on account of any recommendations, opinions or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at your own risk and shall not constitute any warranty or guarantee of such products or their performance.

**GENERAL** In no event shall any claim for consequential damages be made by either party. The Company will comply with all applicable Federal, State, and local laws.

### WARNING

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 User. If these products are used in a life support ventilation system where failure could result in loss or injury, the 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 fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments. **CAUTION** Guards must be installed when fan is within reach of personnel or within seven (7) feet (2.134 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, or that the products will necessarily conform to the illustrations or descriptions or dimension.