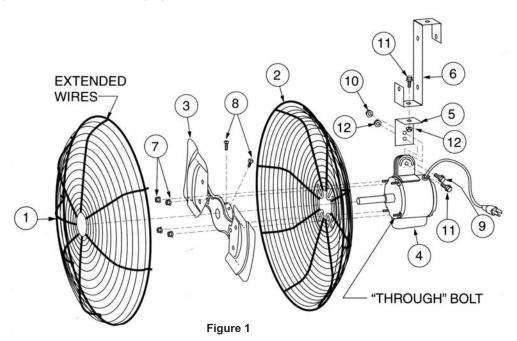
ACME ENGINEERING & MANUFACTURING CORPORATION P.O. Box 978 Muskogee, OK 74402 Phone 918/682-7791 Fax 918/682-0134 www.acmeag.com www.acmehort.com

This unit has rotating parts and safety precautions should be exercised during installation, operation and maintenance. OSHA approved guards must be installed when fan is within reach of people or within 8 feet (2.5 meters) of working level or when deemed advisable for safety. Guards currently installed on HAF12A4, Do not meet OSHA requirements.

## INSTALLATION INSTRUCTIONS HORIZONTAL AIR FLOW FAN MODEL HAF

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.

- 1. Verify all parts listed in Table 1 are present.
- 2. As shown in Figure 1, mount the rear guard to the motor using the motor bolts. Install and tighten the 4 #8-32 nuts to the bolts until the motor is firmly seated to the guard.
- 3. Slide the propeller onto the motor shaft with the hub side of the prop facing the motor as shown in Figure 1. Do not tighten the screws. To center the propeller between the front and rear guards, temporarily place the front guard in its proper position. Center the propeller between the front and rear guards. Remove the front guard and securely tighten the two screws.
- 4. Attach the front guard to the rear guard by hooking the front guard "extended wires" under the outer ring of the rear guard.
- 5. The "S" hanging bracket top has approximately a  $1\frac{5}{8}$ " (4.127 cm) opening on one end and a 2" (5.08 cm) on the other. Determine which of these best fits the structure to which the fan will be mounted. To the opposite end, attach the bracket bottom using one of the  $\frac{3}{8}$ "-16 X  $\frac{3}{4}$ " bolts and nut as shown in Figure 1. Do not tighten.
- 6. As shown in Figure 1, fasten the hanging bracket assembly to the motor using the  $\frac{1}{4}$ " 20 X  $\frac{3}{4}$ " bolt and nut in the top slot. Use a  $\frac{3}{8}$ " 16 X  $\frac{3}{4}$ " bolt and nut in the bottom hole. Do not tighten. Note: If mounted as in Figure 2B, the fan will hang at a slight downward angle rather than perpendicular as in Figure 2A.
- 7. Attach the hanging bracket assembly to the structure where the fan is to be mounted using an appropriate fastener (supplied by others).
- 8. Adjust the fan direction and angle to the desired position and securely tighten all bolts on the hanging bracket and the motor.



HAF20 PART DESCRIPTION		
ITEM	DESCRIPTION	QTY
1	Front Guard	1
2	Rear Guard	1
3	Prop - 20" (50.8 cm) 2 Blades for 1/15 HP Prop - 20" (50.8 cm) 3 Blades for 1/3 HP	1
4	Motor - $\gamma_{15}$ HP or $\gamma_3$ HP 115/230/1 Phase	1
5	Hanging Bracket - Bottom	1
6	Hanging Bracket - Top "S"	1
7	Whiz Lock Nut - #8 - 32	4
8	Set Screws (for prop)	2
9	Whiz Lock Bolt - 1/4" - 20 X 3/4"	1
10	Whiz Lock Nut - 1/4" - 20	1

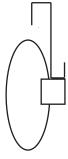


Figure 2A

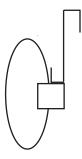
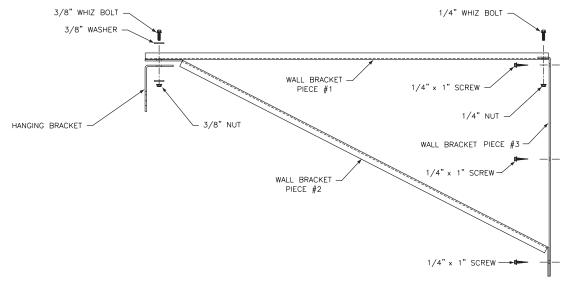


Figure 2B

## **OPTIONAL WALL HANGING BRACKET**

9. Assemble Wall Hanging Bracket as shown and attach to wall using three 1/4" x 1" screws.



## NOTICE

These instructions cover the usual installation, operation and maintenance methods for which the product(s) was designed. They do not purport to cover all details or variations in the product(s) nor to provide for every possible contingency that might be met in connection with the installation, operation and maintenance. For any departures from these instructions, or should particular problems arise which are not covered sufficiently for the purchaser's purpose, the matter should be referred to the Company.

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 ex-perience occasional failures and this possibility should be recognized by the Purchaser and all End Users. If these products are used in a life support ventilation system where fail-ure could result in loss or injury, the Purchaser and all End Users 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. Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA).

CAUTION 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 accurately in all Company literature; however such illustrations and descriptions are for the sole purpose of identification and do not express or imply any warranty.

## LIMITED WARRANTY

WARRANTY AND DISCLAIMER: the Company ex-tends this limited warranty to the original purchaser and warrants that products supplied by the Company, shall be free from original defects in workmanship and shall be free from original defects in workmanship and materials for two years from date of shipment (except for the warranty periods noted for products listed be-low), provided same have been properly handled, stored, installed, serviced, maintained and operated. This warranty shall not apply to products which have been altered or repaired without the Company's ex-press authorization, or altered or repaired in any way so as, in the Company's judgment, to affect its perfor-mance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or acci-dent, or incorrectly used in combination with other substances. The Purchaser assumes all risks and lia-bility for results of use of all products.

Dilly for results of use or an products. Evaporative cooling pads are warranted to be free of defects in materials and workmanship 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 me-chanical abuse that may cause tearing, crushing or undue deterioration, nor used on a system or in a man-ner other than that for which it was designed as ex-plained in the product literature. plained in the product literature.

The following product merative. The following products are warranted to be free of de-fects in materials and workmanship for the periods shown from date of shipment: Acme's exclusive du-plex split pillow block bearings and shaft five years, belts one year, Polyethylene tubing 90 days, AIR40 Heater warranty one year, AIR40 Emitter warranty three years and DDP fan lifetime warranty on its pro-neller come and housing peller, cone, and housing.



peller, cone, and housing. 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 ex-piration of two years from the date of shipment by the Com-pany of the product claimed de-tective, and Purchaser shall be barred from any remedy if Pur-chaser fails to make such claim within such period.

LIMITED WARKANTY Within 30 days after receipt of a timely claim, the Com-pany shall have the option either to inspect the product while in Purchaser's possession or to request Pur-chaser to return the product to the Company at Pur-chaser'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 Purchaser F.O.B. point of shipment; provided, how-ever, if circumstances are such as in the Company's judgment to prohibit repair or replacement to remedy the warranted defects, the Purchaser's sole and exclu-sive remedy shall be a refund to the Purchaser 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 re-moval 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.

The warranties set forth above do not apply to any components, accessories, parts or attachments man-ufactured by other manufacturers; such being subject to the manufacturer's warranty, if any. To the extent not prohibited by the manufacturer's warranty, the Company shall pass through to Purchaser such man-ufacturer's warranty.

utacturer's warranty. THE COMPANY'S WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRAN-TIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED AND WAIVED. THIS WARRANTY CONSTITUTES THE COMPANY'S SOLE AND EXCLUSIVE WARRANTY FOR DEFEC-TIVE GOODS AND PURCHASER'S SOLE AND EX-CLUSIVE REMEDY FOR DEFECTIVE PRODUCTS.

No employee, agent, dealer, or other person is au-thorized 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 or-dered, purchaser warrants that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replace-ment parts are installed, the resultant installation will op-

erate in a safe manner, at speeds and temperatures for which the original product was purchased.

TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER: Notwithstanding any past practice or dealings or any custom of the trade, sales shall not in-clude 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 addi-tional charge. tional charge.

The Company assumes no obligation or liability on ac-count 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 Purchaser's and End User's risk and shall not constitute any warranty or guarantee of such products or their performance. such products or their performance.

LIMITATION OF LIABILITY The cumulative liability of the Company to the Purchaser and any other per-sons for all claims in any way relating to or arising out of the products, including, but not limited to, any cause of action sounding in contract, tort, or strict liability, shall not exceed the total amount of the purchase price paid for those products which are the subject of any such claim. This limitation of liability is intended to ap-ply without regard to whether other provisions of this agreement have been breached or have proven inef-fective even if the Company has been advised of the possibility of such claims or demands. In o event shall the Company be liable to the Purchaser or any other person for any loss of profits or any incidental, special, exemplary, or consequential damages for any claims or demands brought by the Purchaser or such other persons. LIMITATION OF LIABILITY The cumulative liability other persons.

other persons. **INDEMNITY** The Company's maximum liability to Purchaser and to any end user is as set forth above. The Company makes no warranty to anyone for any products not manufactured by the Company and shall have no liability for any use or installation of any prod-ucts (whether manufactured by the Company or other manufacturers) not specifically authorized by this sale. Purchaser acknowledges various warnings by the Company regarding the products and its installa-tion and use. If the Company incurs any claims, law-suits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage in-cluding, but not limited to, claims arising out of the Pur-chaser's or any end user's installation or use of the products, the Purchaser shall indemnify and hold the Company harmless.