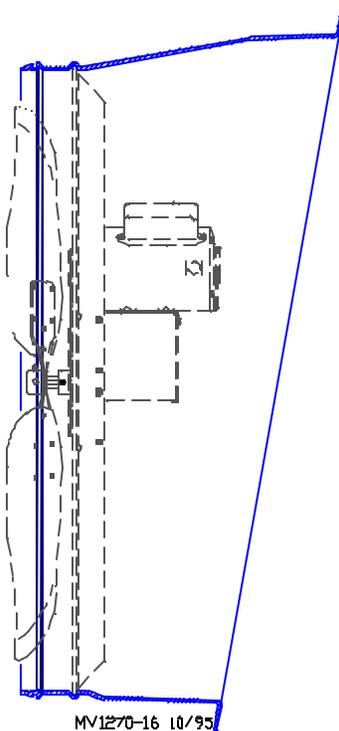


TURBO™
Cone Fans & Grill Fans
Installation & Operator's Manual
(48" Belt Drive)



WARRANTY INFORMATION

Chore-Time Equipment warrants each new product manufactured by it to be free from defects in material or workmanship for one year from the date of initial installation by the original purchaser. If such a defect is found by Chore-Time to exist within the one year period, Chore-Time will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement.

Additional extended warranties are herewith provided to the original purchaser as follows:

1. TURBO™ and RLX™ Fans, less motors, for three years from date of installation.
- *2. Poultry feeder pans that become unusable within five years from date of installation. Warranty prorated after three years usage.
3. MEAL-TIME® Hog Feeder pans that become unusable within five years of installation.
4. Rotating centerless augers, excluding applications involving High Moisture Corn (exceeding 18%), for ten years from date of installation. Note: MULTIFLO® and applications involving High Moisture Corn are subject to a one year warranty.
5. Chore-Time manufactured roll-formed steel auger tubes for ten years from date of installation.
- *6. Laying cages that become unusable within ten years. Warranty prorated after three years usage.
- *7. ULTRAFLO® Auger and ULTRAFLO® Feed Trough (except ULTRAFLO® Trough Liners) are warranted for a period of five (5) years from date of original purchase against repeated breakage of the auger or wear-through of the feed trough caused solely by the auger.

Conditions and limitations:

1. The product must be installed and operated in accordance with instructions published by Chore-Time or warranty will be void.
2. Warranty is void if all components of a system are not supplied by Chore-Time.
3. This product must be purchased from and installed by an authorized Chore-Time dealer or certified representative thereof, or the warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under this warranty.
5. This warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this warranty.

Chore-Time shall not be liable for any consequential or special damage which any purchaser may suffer or claim to have suffered as a result of any defect in the product. "Consequential" or "special damages" as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.

THIS WARRANTY CONSTITUTES CHORE-TIME'S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Any exceptions to this warranty must be authorized in writing by an officer of the company. Chore-Time reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

*See separate Chore-Time Cage Wire Warranty as to these products.

CHORE-TIME EQUIPMENT, A Division of CTB, Inc.
P.O. Box 2000, Milford, Indiana 46542-2000 U.S.A.

Support Information

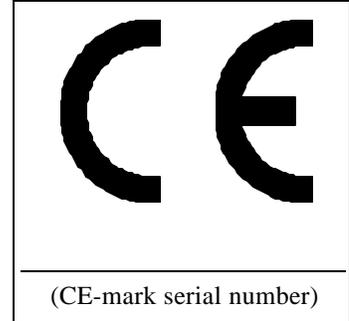
The Chore-Time TURBO™ Fans are designed to be used as exhaust fans in highly corrosive environments. The primary components are made from plastic or stainless steel materials. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury and/or death.

This manual is designed to provide comprehensive planning, installation, wiring, operation, and parts listing information. The Table of Contents provides a convenient overview of the information in this manual. The Table of Contents also specifies which pages contain information for the sales personal, installer, and consumer (end user).

IMPORTANT: CE stands for *certified Europe*. It is a standard which equipment must meet or exceed in order to be sold in Europe. CE provides a benchmark for safety and manufacturing issues. CE is required only on equipment sold in Europe.

Chore-Time Equipment recognizes CE Mark and pursues compliance in all applicable products. Please fill in the CE-Mark serial number in the blank space provided for future reference.

Please include the name and address of your Chore-Time Distributor and installer.



Please fill in the following information about your Chore-Time TURBO Fans. Keep this manual in a clean, dry place for future reference.

Distributor's Name _____

Distributor's Address _____

Distributor's Phone _____ **Date of Purchase** _____

Installer's Name _____

Installer's Address _____

Installer's Phone _____ **Date of Installation** _____

System Specifications _____

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*Legend: C = Customer (end user), D = Distributor (sales), I = Installer of equipment

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety signs.

Chore-Time equipment is designed to be installed and operated as safely as possible...however, hazards do exist. Using the equipment for purposes other than specified in this manual may cause personal injury or damage to the equipment.

SIGNAL WORDS

Signal words are used in conjunction with the safety-alert symbol to identify the severity of the warning.

DANGER..... indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION indicates a hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.



DANGER

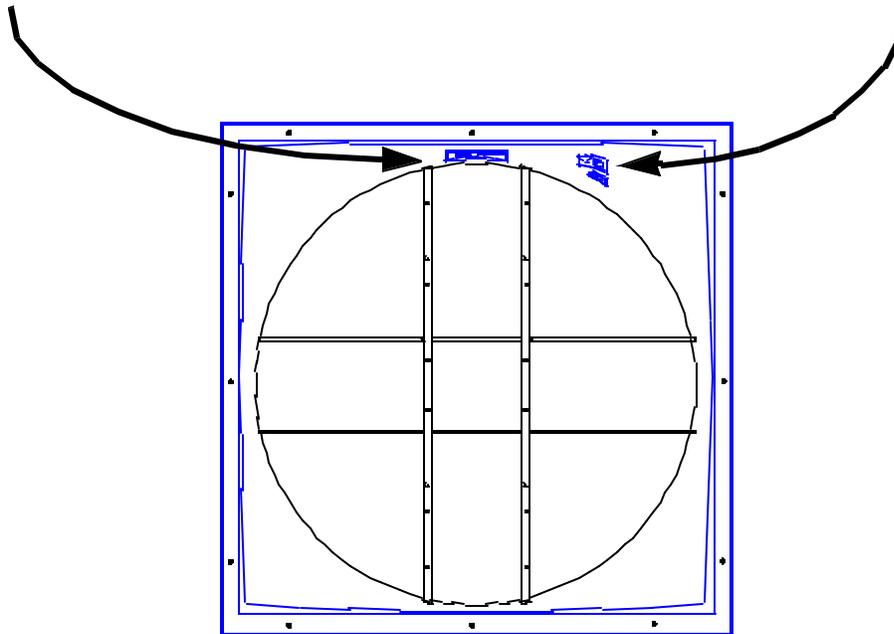
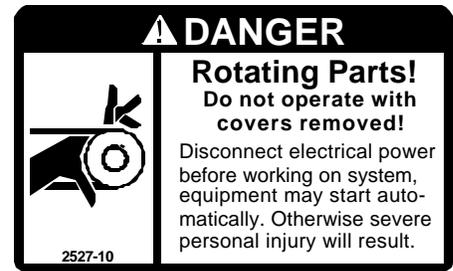


WARNING



CAUTION

This diagram shows the proper location of the safety decals as shipped from the factory. Replace damaged or missing decals. Make sure the decals may be easily seen at all times.



2527-10

Technical Information

Motor Specifications:

Horsepower-	- - - - -	1 H.P.
Voltage	- - - - -	208-230/460 V
Hz.	- - - - -	60 Hz. or 50 Hz.
Phase	- - - - -	Single Phase or Three Phase
R.P.M.	- - - - -	1725

Blade:

Size	- - - - -	48" (121.9 cm)
Type	- - - - -	Stainless Steel

Important

Chore-Time Equipment strongly recommends that a good alarm system should be installed in confinement buildings to warn of power failure and high temperature.

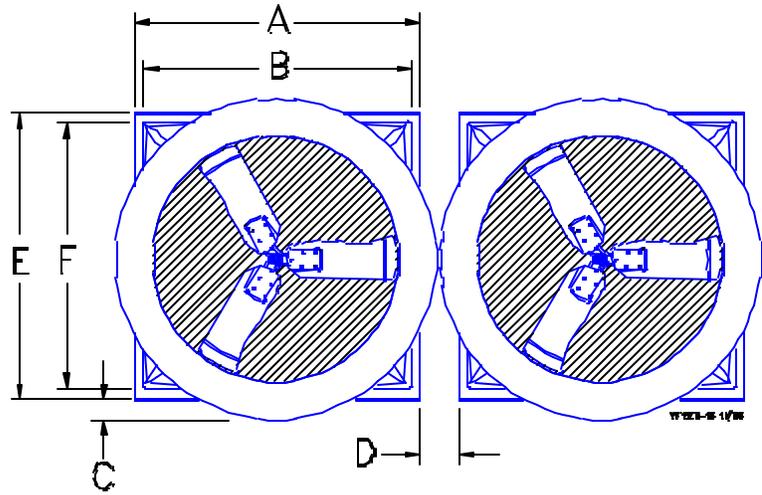
Chore-Time Equipment also recommends that an alternate power source be available for confinement buildings in case of power failure.

Tools needed to install your Fans include:

1. Regular Screwdriver
2. Allen Wrenches
3. Box-End Wrenches
4. Rubber Mallet
5. Wire Cutters
6. Wire Strippers
7. Adequate Size and Quantity of Electrical Wire
8. Electrical Drill and Drill Bits
- 8 Large pliers or channel locking pliers
9. Another person to help!!

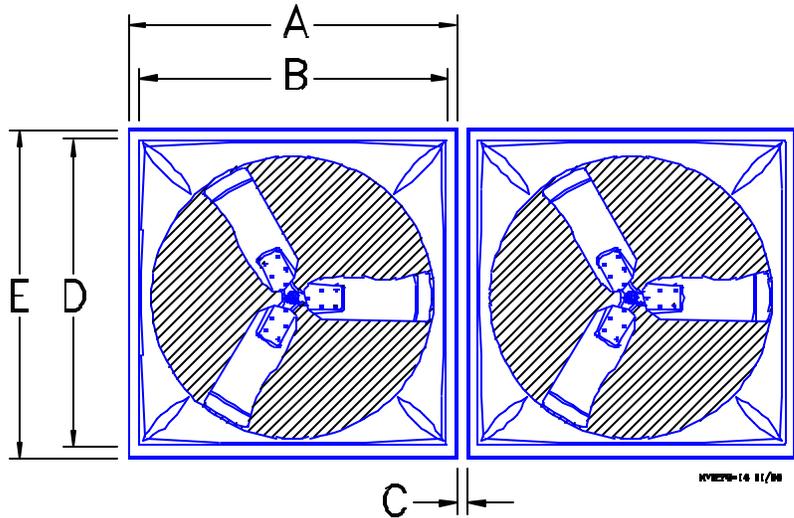
Planning the Fan Installation:

Carefully plan the installation. Dimensions are provided for the 48" Fan with Cones (Figure 1) and without Cones (Figure 2). Be sure to allow enough space to install fans without interfering with other fans or equipment.



Dimension	A	B	C	D	E	F
	57" (144.8 cm)	54" (137.2 cm)	12" (30.5 cm)	16" (40.6 cm)	57" (144.8 cm)	54" (137.2)

Figure 1. Planning and Layout Diagram w/ Cones (front view).



Dimension	A	B	C	D	E
	57" (144.8 cm)	54" (137.2 cm)	0" Minimum	54" (137.2)	57" (144.8 cm)

Figure 2. Planning and Layout Diagram w/o Cones (front view).

Fan Installation

Build wall framing as specified in Figure 3. The required wall opening for each fan is included in the chart below.

Refer to the planning section for minimum dimension between fans.

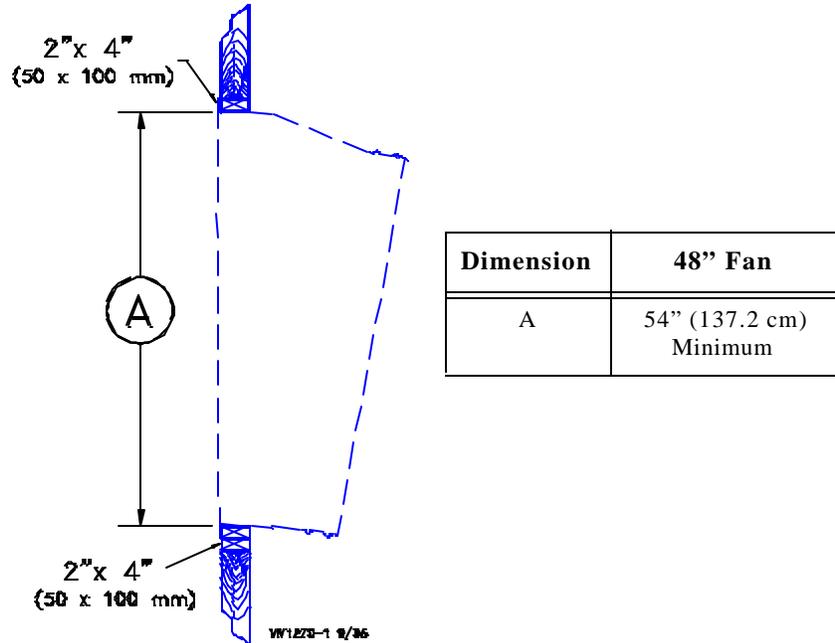


Figure 3. Wall opening requirements (side view).

The Hardware Kit, supplied, includes (12) #8 screws to secure the fan to the framed opening. See Figure 4.

Do not allow the top or sides of the shroud to sag when securing to the wall. The Shroud Flange should be secured square in the opening.

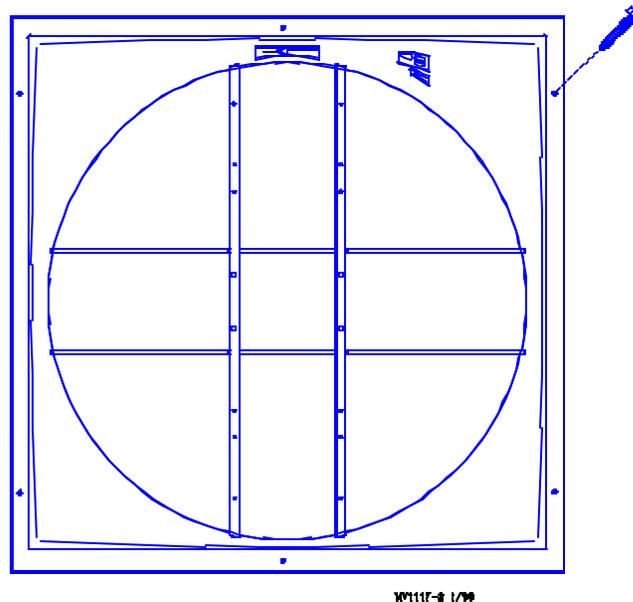


Figure 4. Fan installation (front view).

Note: The 48" Belt Drive Fan may be ordered with or without the Motor. The following instructions provide complete installation information for fans ordered without the Motor. If your fans include the Motors, install the Fan Module and Motor Assembly as specified in Figure 5. Skip ahead to Figure 8 for Blade Assembly installation.

Secure the Module Assembly between the Motor Support Post, as shown in Figure 5. Hardware is included in the Hardware Package.

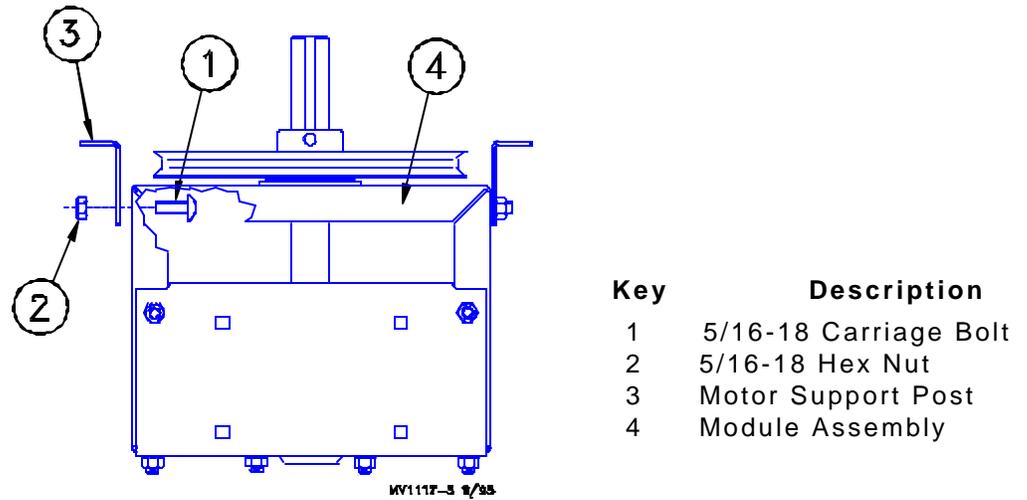


Figure 5. Fan Module installation (top view).

Set the Motor on the Module Assembly and secure in place, as shown in Figure 6. Hardware is included in the Hardware Package.

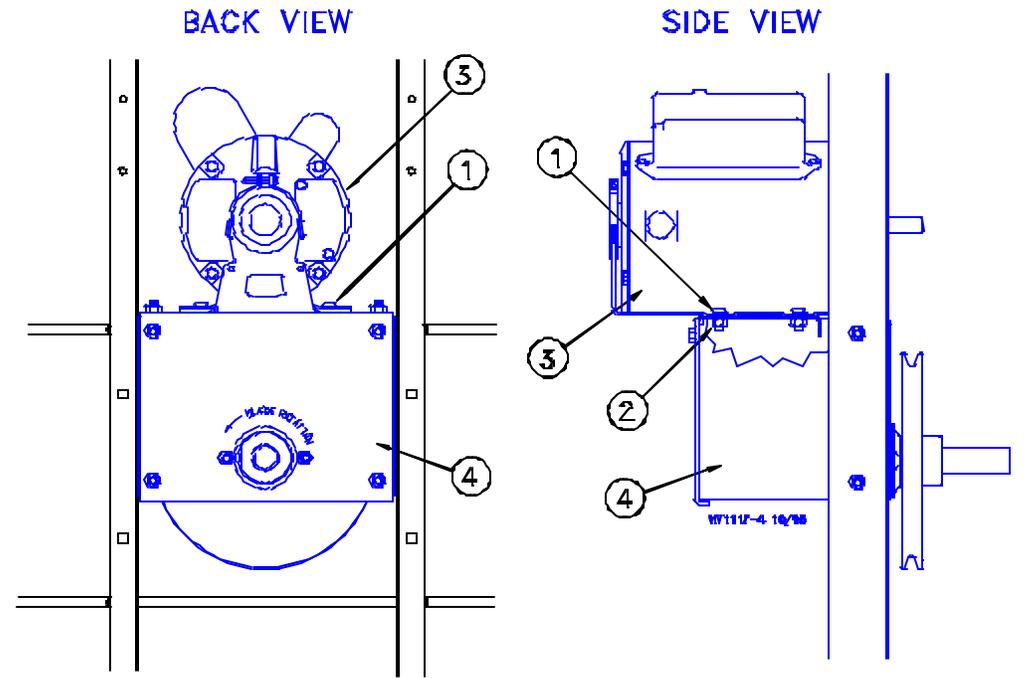
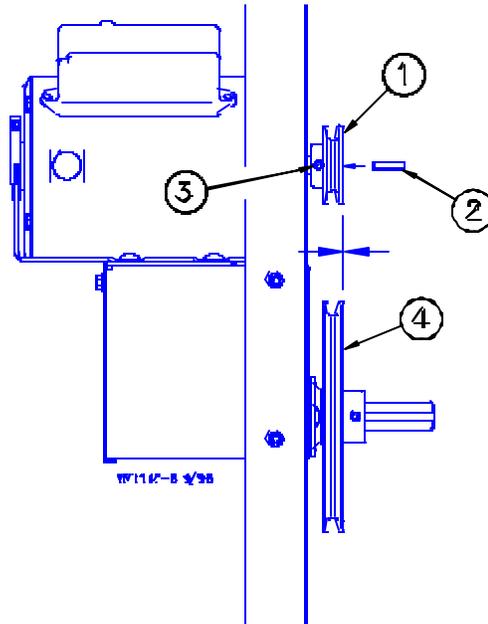


Figure 6. Fan Motor installation (side view)

Install the Motor Sheave on the output shaft of the Motor, as shown in Figure 7. Make sure the Motor Sheave is aligned with the Fan Sheave...the belt must track straight.

Insert the key in the keyway of the output shaft. Tighten 5/16" set screw in the Motor Sheave to secure the Motor Sheave in place.



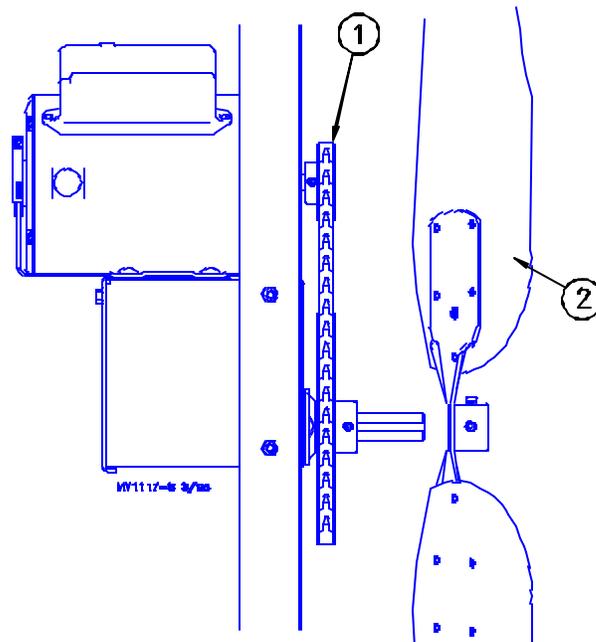
Key	Description
1	Motor Sheave
2	1/4" Sq. Key
3	5/16" Set Screw
4	Fan Sheave

Figure 7. Motor Sheave installation (side view).

Position the Fan Belt around the Motor Sheave. Make sure the arrows on the Fan Belt point in the direction of rotation (which is counterclockwise facing incoming end of fan).

Route the Fan Belt as far around the Fan Sheave as far as possible. Carefully turn the Fan Sheave to completely install the Fan Belt.

Slide the Fan Blade Assembly onto the Fan Sheave Shaft. The hub of the Fan Blade Assembly should be approximately flush with the end of the Fan Sheave Shaft. See Figure 8.



Key	Description
1	Fan Belt
2	Fan Blade

Figure 8. Fan Blade Assembly installation (top view).

Position the Retainer Ring seam near the top of the Shroud, against the Motor Mount Ring. See Figure 9.

Slide the remainder of the Retainer Ring into the vertical position, against the Motor Mount Ring.

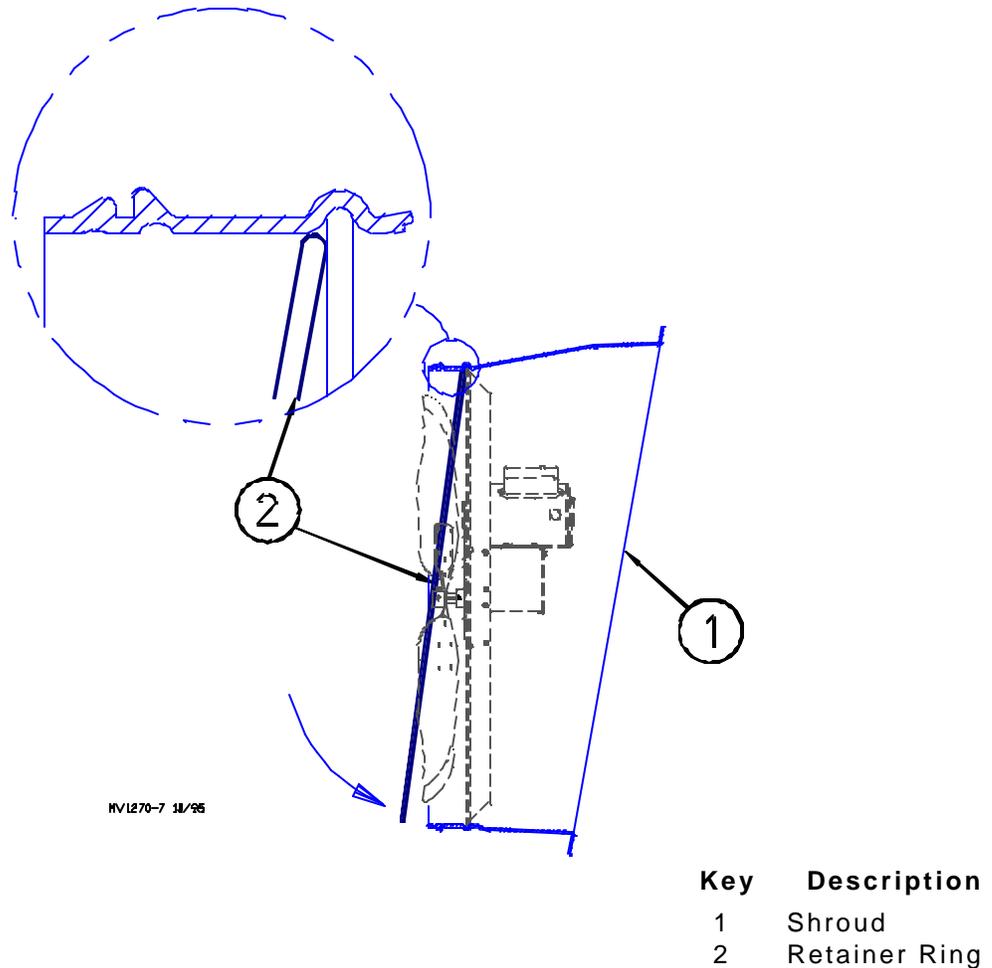


Figure 9. Retainer Ring Installation (side view).

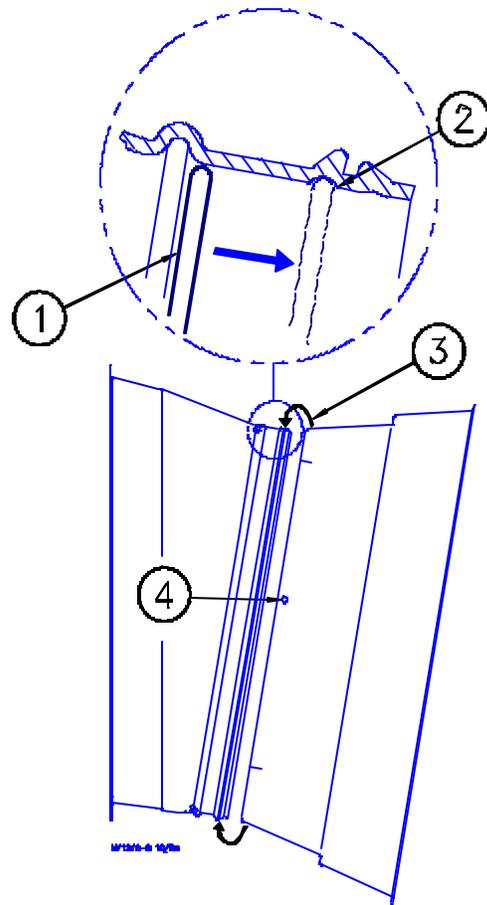
Cones may be installed to improve the performance of the Fans. If Cones **are not** to be installed, proceed to the section describing how to position the Retainer Ring in the Retainer Ring groove on page 11 (Figure 10 & 11).

Begin by positioning the flange of the Cone in the groove of the Shroud near the top and around both sides. It is helpful if there is someone on each side to support the Cone in the groove.

Note: Position the Cone so that one of the slits is straight down.

Use a screwdriver or long tool to pry the remaining portion of the Cone onto the Shroud. A rubber mallet may be used to help drive the Cone onto the Shroud.

If necessary, the Cone may be secured to the Shroud using stainless steel, self-drilling screws (not supplied). See Figure 10.



Key	Description
1	Retainer Ring
2	After the Cone has been installed, slide the Retainer Ring out to the Retainer Ring Groove.
3	Set the lip of the Cone in the groove of the Shroud.
4	The Cone may be secured to the Shroud using self-drilling screws (not supplied).

Figure 10. Cone Installation (side view).

Beginning at the Retainer Ring seam, slide the Retainer Ring out into the Retainer Ring Groove, as shown in Figure 11. It may be necessary to use a large set of pliers to pry the Retainer Ring into position.

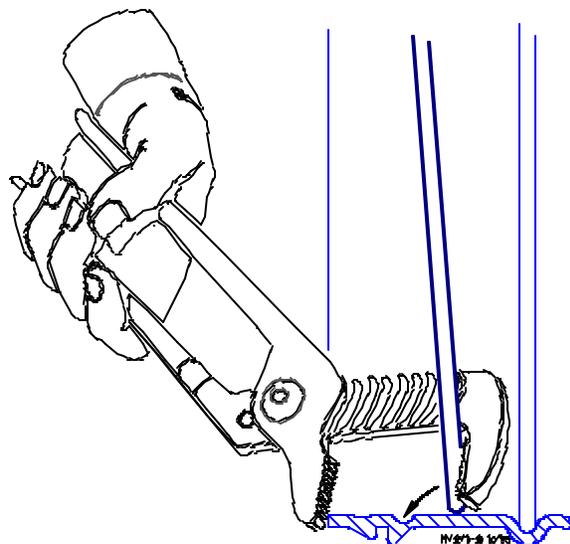


Figure 11. Seating the Retainer Ring in its final position (side view).

Grills **must** be installed over the Shroud or Cone to prevent injury from rotating blades.

Installations *using* Cones, refer to Figure 12 for Cone Grill installation.

Installations *using* Grills only, refer to Figure 13 for Shroud Grill installation.

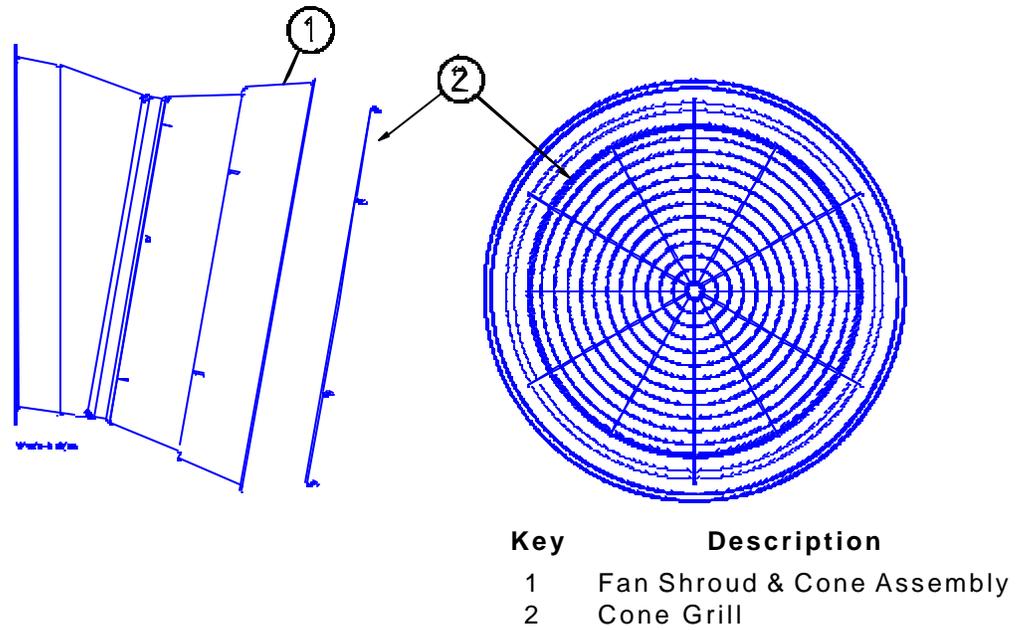


Figure 12. Cone Grill installation

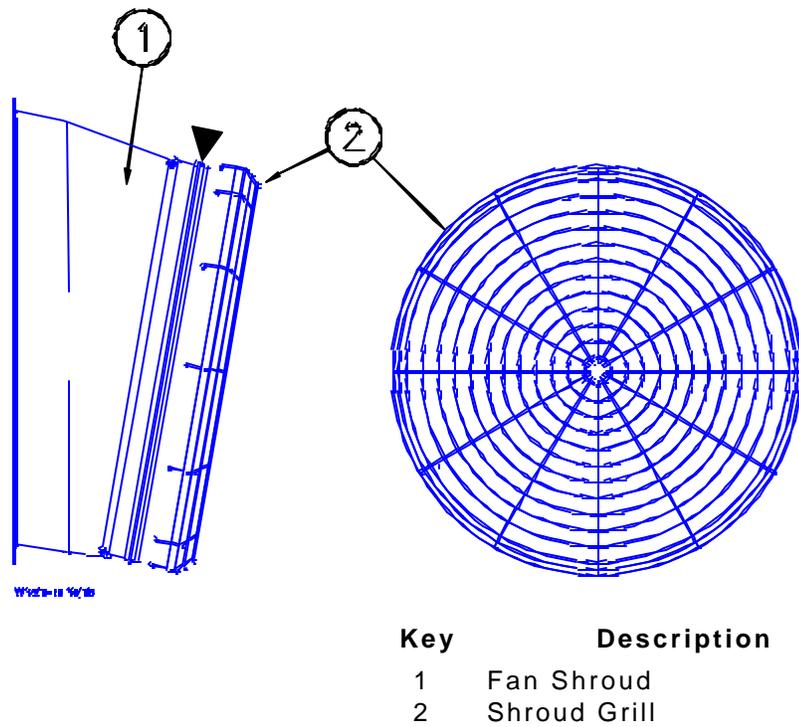
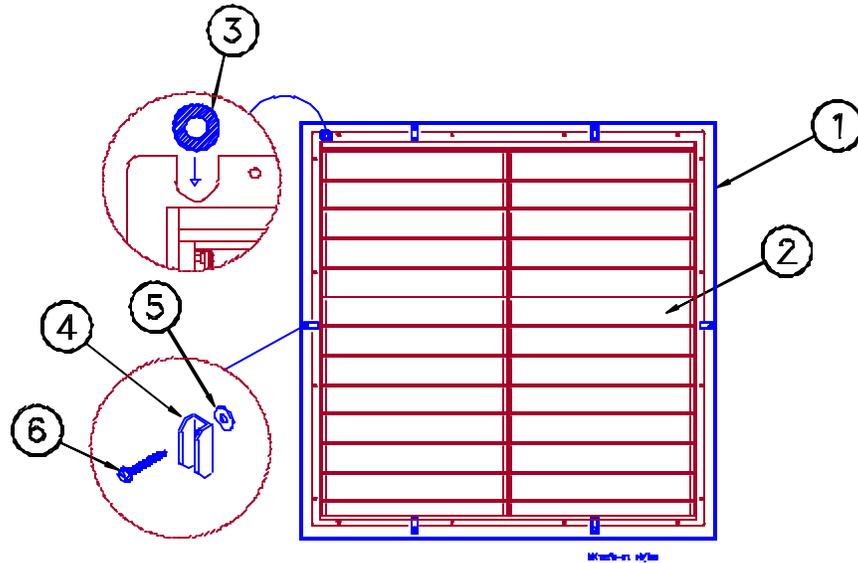


Figure 13. Shroud Grill installation

Install the Shutters on the front of the fans, as shown in Figure 14.

For ease of installation, secure the bottom (2) Shutter Brackets first. Set the Shutter in place, on the Brackets. Check the Shutter for proper operation...the Shutter must be able to open and close freely, without obstructions. Secure the remaining (6) Shutter Brackets around the Shutter.

Note: Make sure that the Shutter can be removed when the Brackets are rotated 90°.



Key	Description
1	Shroud
2	Shutter
3	Grommet
4	Shutter Bracket
5	S.S. Flat Washer
6	2" S.S. Screw

Figure 14. Shutter installation (side view).

A slot is provided in the upper left-hand corner of the Shutter to route electrical conduit/wires or SJO cord through. Install the Grommet in the slot to protect the electrical wire

Some installations may require an exit hole be drilled in the side of the Shroud. These installations must have electrical wires routed through conduit to protect them from damage.

Note: Make sure the conduit or wires do not interfere with the Fan Blades or Shutter operation.

Wire the motor to fan controls according to the instructions packed with the fan controls.

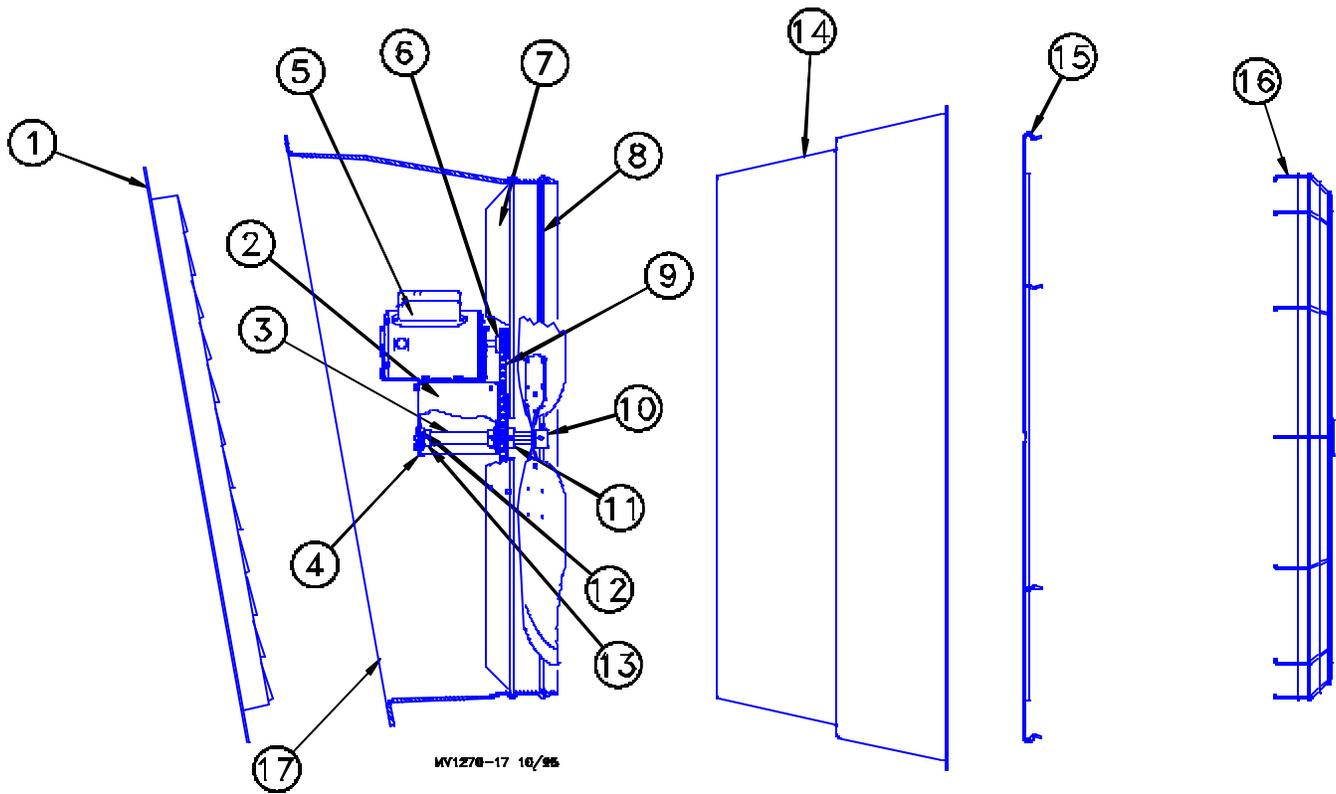
MAINTENANCE:

Service and maintenance of fans should be done only by a qualified technician.

DISCONNECT POWER PRIOR TO MAINTAINING OR CLEANING THE FAN!
The fan may start automatically causing serious injury or death.

Keep the fan clean for maximum life and best performance.

48" Belt Drive TURBO™ Fan

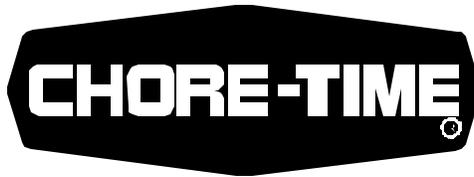


Item	Description	Part No.	Item	Description	Part No.
1	Shutter	34914	9	Segmented V-Belt	30374
2	Front Bearing Mount	35684	10	Fan Blade Assembly	35950
3	1" Shaft	34723	11	8-1/4" Sheave	35009
4	Rear Bearing Mount	35683	12	Flangette	20191-1
5	Motor (1-Phase, 50/60 Hz.)	35874	13	Bearing	20191-2
	Motor (3-Phase, 50/60 Hz.)	36142	14	Cone	35065
6	Sheave (1-Phase, 60 Hz.)	35333	15	Cone Grill	35199
	Sheave (1-Phase, 50 Hz.)	8773	16	Shroud Grill	35200
	Sheave (3-Phase, 50 Hz.)	24697	17	48" Fan Shroud	35064
7	Motor Mount Weldment Ring	35201	--	Shutter Clips	36560
8	Spacer Ring	36824	--	Nylon Washers (for Shutter Clips)	4856
			--	Grommet	7256

Fan Motor Module	Motor Specifications and Part Numbers					Motor Sheave Part No.
	H.P.	Hz.	Phase	Voltage	Motor Part No.	
35687-LM	--	--	--	--	--	35333
35687-2	1	60	1	115/208-230	35874	35333
35687-3	1	50	1	115/220-240	35874	8773
35687-5	1	50	3	230/380-415	36142	24697
35687-6	1	60	3	230/380-415	36142	35333

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*THANK-YOU for purchasing a
Chore-Time Fan.*



Made to work.

Built to last.™

Contact your nearby Chore-Time distributor or representative for additional parts and information.

Chore-Time Equipment, A Division of CTB, Inc.

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Phone: 219-658-4101

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