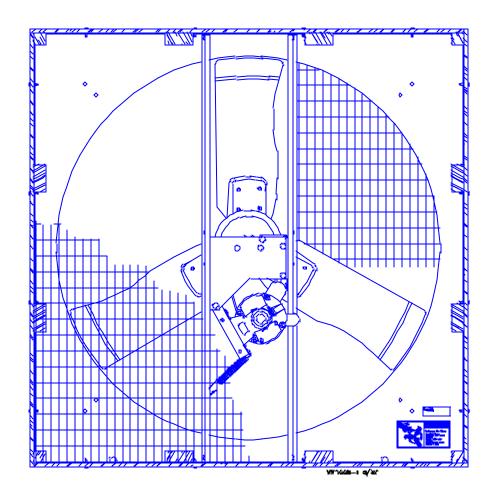


# 48" Wood Crate BD Fan

**Installation & Operator's Instruction Manual** 



July 1997 MV1446A

### **Chore-Time Warranty**

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.

#### **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.

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

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<sup>\*</sup>Legend: C = Customer (end user), D = Distributor (sales), I - Installer of equipment

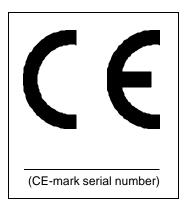
## **Support Information**

The 48" Wood Crate Belt-Drive Fans are designed to be used as circulating or exhaust fans. 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.

This manual is designed to provide comprehensive planning, installation, 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 personnel, installer, and consumer (end user).

IMPORTANT: **CE stands for certified Europe.** It is a standard which equipment must meet or exceed in ordered 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. *Fill in the CE-Mark serial number in the blank space provided for future reference.* 



#### **Distributor and Installer Information**

| Please fill in the following information about your Product.<br>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 Phone  | Date of Installation |  |  |  |
| System Specifications  |                      |  |  |  |
|  |                      |  |  |  |
|  |                      |  |  |  |
|  |                      |  |  |  |

## **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 decals.

Using the equipment for purposes other than specified in this manual may cause personal injury and or damage to the equipment.

#### Safety-Alert Symbol

This is a safety-alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury. This equipment is designed to be installed and operated as safely as possible...however, hazards do exist.



#### 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.

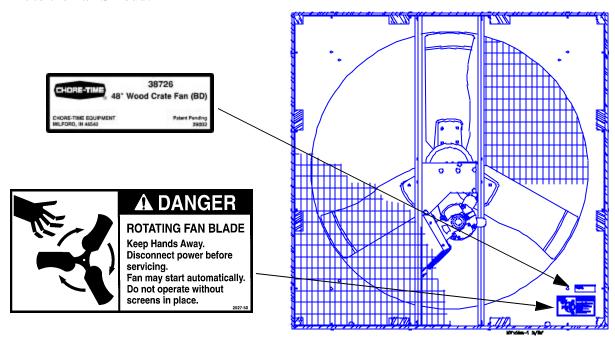






This diagram shows the proper location of the safety decal (DANGER--ROTATING FAN BLADE) as shipped from the factory. Replace damaged or missing decals. Make sure the decals may be easily seen at all times.

Make sure the decal location shown below is clean and dry. Remove the backing of the decal and affix it to the Fan Shroud.



#### **Technical Information**

Motor choices and specifications are provided in the Parts List section of this manual. See page 10 Fan Motor specifications.

#### **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.

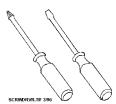
Chore-Time Equipment also recommends that an alternate power source be available for confinement buildings in case of power failure.

# **Fan Options**

There are a variety of Motors available for the Wood Crate Fans. See the motor specifications chart in the parts list section of this manual.

## **Tools Required**

Screwdriver

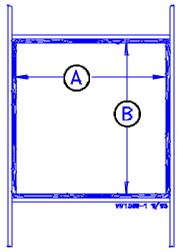


#### **Fan Installation**

The Wood Crate Fan may be installed in a wall or suspended from the ceiling. For installations with the fan suspended from the ceiling, refer to **Figure 3**.

#### **Side Wall Installations:**

Build fan framing out of 2" (50 mm) lumber (not supplied). See **Figure 2**.



| Key | Description         |
|-----|---------------------|
| A   | 56" (142 cm) Width  |
| В   | 56" (142 cm) Height |

Figure 2. Framing Diagram (front view).

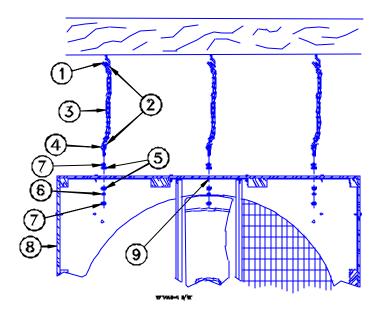
Cut the Wire Ties that are holding the Rear Screen to the Front Screen and set the Rear Screen aside until it is time to install it on the Fan Assembly. Insert the Fan Assembly in the framed opening in the side wall. If an Aluminum Shutter is to be used, the fan must be recessed in from the outside edge of the framed opening approximately 1/2" (13 mm). Secure the Fan Assembly to the framed opening (hardware not supplied). When mounting the Fan Assembly, drill through both the shroud and crate.

Make sure the Shutter can open and close freely.

#### Suspended Fan Installations:

Drill holes through the Wood Crate using holes in the Fan Shroud as pilots and add the suspension components, Items 1 - 7, as shown in **Figure 3**.

The 48" Wood Crate Belt-Drive Fan Assembly weighs approximately 190 lbs. (86.2 kg). The ceiling, rafters, or trusses must be capable of bearing the required weight.



| Key | Description               |
|-----|---------------------------|
| 1   | Screw Hook                |
| 2   | S-Hook                    |
| 3   | Chain                     |
| 4   | Eye Bolt                  |
| 5   | Flat Washer               |
| 6   | Lock Washer               |
| 7   | Hex Nut                   |
| 8   | Wood Crate Belt-Drive Fan |
| 9   | Hole in Shroud            |

Figure 3. Suspending the Fan (back view).

#### Wiring:

The motor cord will route through the Rear Screen.

See wiring diagram on Motor for Motor electrical connections. Follow local, state and national electric codes for wiring.

Install an electric disconnect within reach of each Fan.

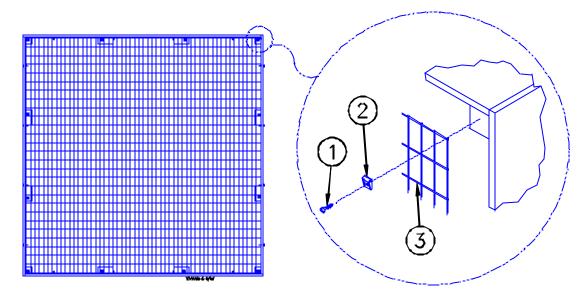
Refer to the appropriate control instruction manual for wiring information.

# **Fan Assembly Procedure**



DANGER: Wire Screen MUST be installed to prevent serious injury or death.

Position the Rear Screen over the back of the Fan. Install the Screen using Nylon Clamps and Screws Provided. See **Figure 1**.



| Key | Part No. | Description |
|-----|----------|-------------|
| 1   | 3327     | Wood Screw  |
| 2   | 28454    | Nylon Clamp |
| 3   | 6023-19  | Screen      |

Figure 1. Fan Module and Motor Installation

#### **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. Do not spray water on Fan Shaft Bearings.

Periodically check the V-Belt. If necessary, adjust the spring tension to prevent the belt from slipping. The spring should be stretched to an overall length of 6" to 7" for proper belt tension.

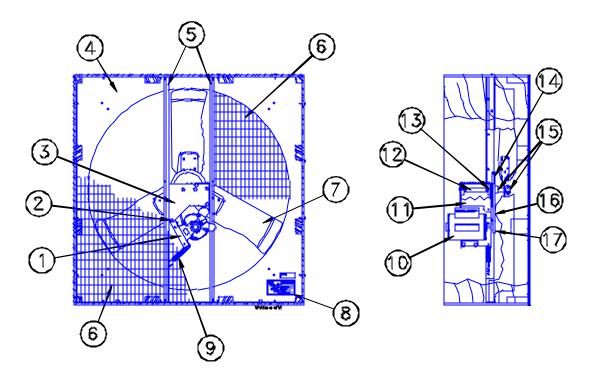
Two options are available for V-Belt replacement. The first option is to use Red Link V-Belt (see parts list), which does not require disassembly of the fan. The second option is to use a black V-Belt (see parts list), which requires removal of the Fan Blade.

The Motor and Fan Shaft Bearings are permanently lubricated. Grease Zerks are provided on the Fan Shaft Bearings for installations where relubrication is preferred. Relubrication is required whenever water comes in contact with the Fan Shaft Bearings. Slowly rotate the Fan Shaft as bearing is filled with Grease. Use only high quality grease and clean all dirt from Zerk before applying grease.

# 48" Wood Crate Belt-Drive Fan Specifications

|            | Electrical Specs. |    |       |    |           |                         |
|------------|-------------------|----|-------|----|-----------|-------------------------|
| Fan P/N    | Voltage           | HZ | Phase | НР | Motor P/N | Cast Iron<br>Sheave P/N |
|            |                   |    |       |    |           |                         |
| 38726-4820 | 115/230           | 60 | 1     | 1  | 39317     | 35333                   |
| 38726-4830 | 230               | 50 | 1     | 1  | 39317     | 8773                    |
| 38726-4840 | 208-230/460       | 60 | 3     | 1  | 36143     | 35333                   |
| 38726-4850 | 220-240/380-415   | 50 | 3     | 1  | 36142     | 24697                   |
| 38726-4860 | 230/380-415       | 60 | 3     | 1  | 36142     | 35333                   |

# 48" Wood Crate Belt-Drive Fan Parts List



| Item | Description                | Part No.  |  |
|------|----------------------------|-----------|--|
| 1    | Motor Mount                | 38895     |  |
| 2    | Module Bushing             | 38896     |  |
| 3    | Module Bracket             | 38893     |  |
| 4    | 48" Fan Shroud             | 37583     |  |
| 5    | Motor Mount Post           | 38390     |  |
| 6    | Wire Screen                | 6023-19   |  |
| 7    | 48" Fan Blade              | 28140     |  |
| 8    | Danger Decal               | 2527-50   |  |
| 9    | Spring                     | 7551      |  |
| 10   | Motor                      | See Chart |  |
| 11   | Module Bracket Support     | 38894     |  |
| 12   | Fan Shaft                  | 34723     |  |
| 13   | 1" Bore Bearing            | 38382     |  |
| 14   | 8-1/4" Sheave              | 35009     |  |
| 15   | 1/4" Square Key            | 2419-2    |  |
| 16   | Black V-Belt (AX35)        | 4468      |  |
|      | Red Link V-Belt (3' Req'd) | 30374     |  |
| 17   | Motor Sheave               | See Chart |  |



# Made to work. Built to last.<sup>™</sup>

# Revisions to this Manual Page No. Description of Change

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

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Printed in the U.S.A.