

## **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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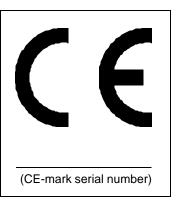
# **Support Information**

The Chore-Time E-Z Fans are designed to be used as circulating or exhaust fans. The E-Z Fans may be shipped unassembled to save on shipping charges. 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**

	ng information about your Product. ean, 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	

# **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.

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, <b>WILL</b> result in death or serious injury.	
WARNING	indicates a potentially hazardous situation which, if not avoided, <b>COULD</b> result in death or serious injury.	
CAUTION	indicates a hazardous situation which, if not avoided, <b>MAY</b> result in minor or moderate injury.	







#### **DANGER: Electrical Hazard**

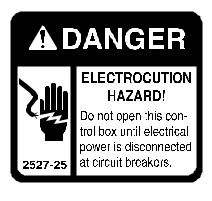
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

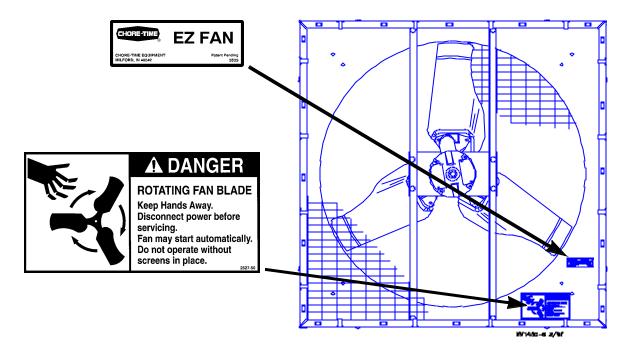
All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



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. If the fan is purchased unassembled, the Chore-Time Fan Assembly Part Number Decal will be packed with this instruction manual. 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 14 for 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.

### **E-Z Fan Options**

The E-Z Fan may be ordered assembled or unassembled (knock-down). If the Fan is to be suspended from the ceiling, the Slant Wall Kit is not used. If the Fan is to be installed in a side wall, the Slant Wall Kit may be used. There are a variety of Motors available for the E-Z Fans. See the motor specifications chart in the parts list section of this manual. The E-Z Fans may be ordered with standard width Side Panels or Deep Box Side Panels. The standard width Side Panels are 12-1/2" (31.8 cm) or 15-3/4" (40.0 cm), respectively, for the 36" and 48" Fans. The Deep Box Side Panels are 21" (53.3 cm) wide.

### **Tools Required**

- Regular Screwdriver
- Hammer
- 1/2" Open End Wrench or Socket Wrench with 1/2" Socket
- Wire Cutters & Strippers
- Adequate Size & Quantity of Electrical Wire
- 5/16" Hex Key Wrench
- 5/16" Open End Wrench or a 12 Point 3/8" Socket and Ratchet

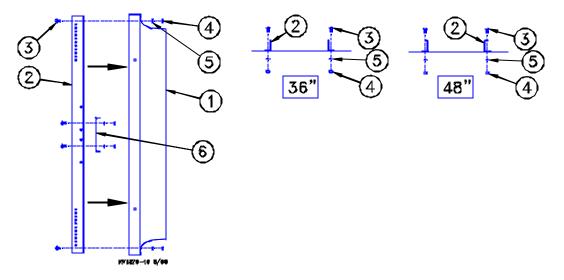
### **Fan Assembly Procedure**

**Installation Note:** Many of the graphics provided reflect the standard Side Panels. Side Panels for the Deep Box Fans look similar, only wider.

Secure the Motor Mount Post to the Fan Shroud using the 5/16-18 x 5/8" carriage bolts and hex nuts provided in the Hardware Package

The Motor Mount Post must be installed as shown in Figure 1.

Secure the Motor Support, as shown in Figure 1.



#### Figure 1. Motor Mount Installation (side view)

Key	Description
1	Fan Shroud
2	Motor Mount Post
3	5/16-18 x 5/8" Carriage Bolt
4	5/16-18 Hex Nut
5	Lock Washer
6	Motor Support Plate

The Side Panels for the Box Fans are identical. The Panels lock together by inserting the tabs of one Panel into the slot in the end of another Panel. See the detail in **Figure 2**.

Orienting the Side Panels as shown in **Figure 2**, assemble the Side Panels together around the Shroud using the 5/16-18 hardware provided.

**Note:** 36" Fans use (2) bolts, washers, and nuts per side. 48" Fans use (3) bolts, washers, and nuts per side.

Use a hammer to carefully bend the corner tabs over to secure the Side Panels together.

Orient the Shroud with the Shroud Drain Holes at the bottom of the Fan. Remove the (2) knockouts from the bottom Side Panel for water drainage.

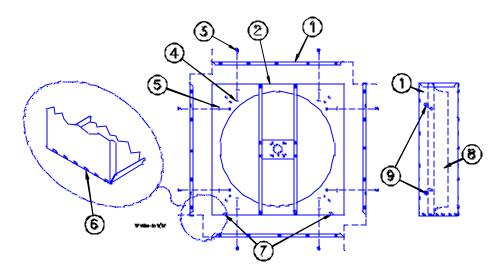


Figure 2. Side Panel Assembly (top view)

Key	Description	
1	Side Panel	
2	Fan Shroud	
3	5/16-18 x 5/8" Carriage Bolt	
4	5/16-18 Hex Nut	
5	Lock Washer	
6	Lock Side Panels together by	
	bending tabs over.	
7	Shroud Drain Holes	
8	Shroud Orifice	
9	Shroud Knockouts	

Secure the Motor to the Motor Support. Fan Motors with capacitors, orient as shown in **Figure 3** and **Figure 4**.

The 36" Fans use external tooth lock washers and hex nuts provided in the Hardware Package. 56 Frame Motors use #10 Hardware and 48 Frame Motors use #8 Hardware. See **Figure 3**.

The 48" Fans use lock washers and 3/8" x 3/4" bolts provided in the Hardware Package. See **Figure 4**.

#### 36" Fan

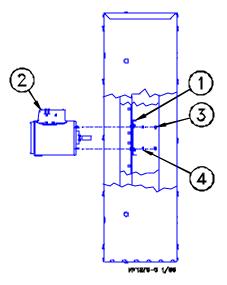
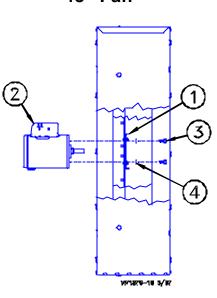


Figure 3. Motor Installation (side view)

Key	Description	
1	Motor Support	
2	Motor	
3	# 10 Hex Nut (56 Frame Motor) #8 Hex Nut (48 Frame Motor)	
4	<ul><li>#10 External Tooth Lock Washer (56 Frame Motor)</li><li>#8 External Tooth Lock Washer (48 Frame Motor)</li></ul>	





Key	Description	
1	Motor Support	
2	Motor	
3	3/8" x 3/4" Bolt	
4	Lock Washer	

48" Fan

Slide the Blade Assembly onto the motor shaft. The Fan Blade Hub should be flush to the end of the motor shaft. See **Figure 5**.

Insert key into keyway on motor shaft.

Tighten the set screw(s) using a 5/16" open end wrench (12 point 3/8" socket and ratchet). Torque the set screws to approximately 150 in./lbs.

See the decal placement instructions on page 4.

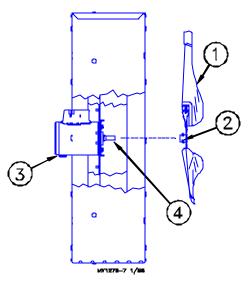


Figure 5. Blade Assembly Installation (side view)

Key	Description
1	Blade Assembly
2	Fan Blade Hub
3	Motor
4	Motor Shaft with key/keyway
	and flat



# **DANGER:** Wire Screen(s) MUST be installed to prevent serious injury or death.

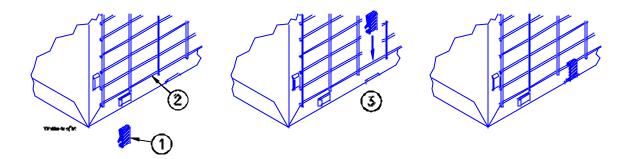
Position the front Screen over the front of the fan.

**Note**: Make sure the natural bow of the Screen is away from the fan (to avoid blade interference).

Install (4) Wire Clips on each side to secure the Screen to the Panels. See **Figure 6**. **Box Fan Installations:** The rear Screen is cut out to accommodate the motor. Position the rear Screen over the back of the fan. Install (4) Wire Clips on each side to secure the Screen to the Panels. See Figure 6.

**Slant Wall Fan Installations:** The Shutter will be used in place of the Rear Screen.

Note: A Rear Screen is not included with a Slant Wall Fan.



#### Figure 6. Screen Installation

K	ey	Description
1		Screen Clip
2		Wire Screen
3		Slip Screen Clip over Screen Wire. Snap in slot on Fan Side Panel to secure.

### Slant Wall Kit Assembly (Optional)

If the Fan Assembly is to be installed in a side wall, the E-Z Fan Slant Wall Housing Kit may be assembled and installed.

Refer to **Figure 7** for assembly information.

- 1. Lay assembled fan on work surface (with the motor end up).
- 2. Set the Slant Wall Bottom Panel in place on the Fan Assembly. Secure the Bottom Panel to the Fan Assembly by inserting the tabs into the bridges, as shown in the detail in **Figure 7**.
- 3. Set the Slant Wall Side Panels in place on the Fan Assembly. The Slant Wall Side Panels are also secured to the Fan Assembly by inserting the tabs into the bridges, as shown in the detail in **Figure 7**.
- 4. Set the Slant Wall Top Panel in place on the Fan Assembly. Secure the Top Panel to the Fan Assembly by inserting the tabs into the bridges, as shown in the detail in **Figure 7**.
- 5. The Slant Wall Panels are designed to lock together similar to the Box Fan Panels. Use a hammer to carefully bend the corner tabs over to secure the Slant Wall Panels together.

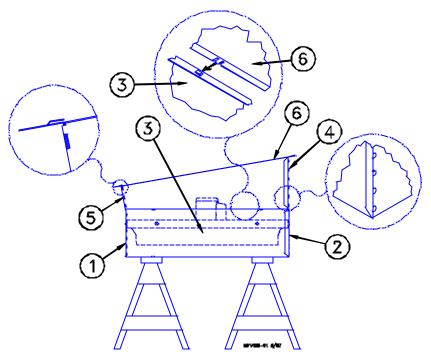


Figure 7. Slant Wall Housing Assembly (side view)

Key	Description	
1	Bottom of Fan Assembly	
2	Top of Fan Assembly	
3	Fan Side Panel	
4	Slant Wall Housing Top Panel	
5	Slant Wall Housing Bottom Panel	
6	Slant Wall Housing Side Panel	

Lock the Slant Wall Kit on the Box Fan by bending the tabs in the Slant Wall Panels into the bridges of the Box Fan Panels as shown in **Figure 8**.

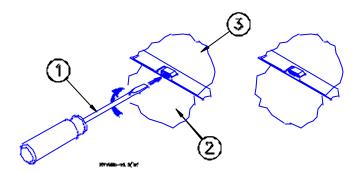


Figure 8. Slant Wall Lock Tab

Key	Description
1	Screwdriver
2	Box Fan Panel
3	Slant Wall Panel

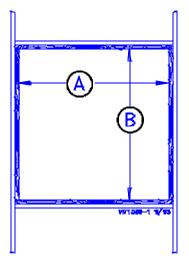
### **Fan Installation**

The E-Z Fan may be installed in a wall or suspended from the ceiling. For installations with the fan suspended from the ceiling, refer to **Figure 12**.

#### Side Wall Installations:

Build fan framing out of 2" (50 mm) lumber (not supplied). The required wall opening is provided in the chart below. See **Figure 9**.

Allow a minimum 4" spacing between framed openings for adjacent Slant Wall Fans to allow clearance for the Slant Wall Fans 2" mounting flange.



Dimension (minimum)	Α	В
36" Box Fan	42-1/4"	42-1/4"
& Panel Fan	(107.3 cm)	(107.3 cm)
36" Box Fan	43"	(107.3 cm) 43"
w/Slant Wall Kit	(109.2 cm)	(109.2 cm)
48" Box Fan	54-5/8"	54-5/8"
& Panel Fan	(138.7 cm)	(138.7 cm)
48" Box Fan	55"	55"
w/Slant Wall Kit	(139.7 cm)	(139.7 cm)

Figure 9. Framing Diagram (front view)

#### Fan Assembly without Slant Wall Housing:

Insert the Fan Assembly in the framed opening in the side wall. If an Aluminum Shutter is to be installed, the fan must be recessed in from the outside edge of the framed opening approximately 1/2" (13 mm). Secure the Fan Assembly and Shutter to the framed opening (hardware not supplied).

Make sure the Shutter can open and close freely.

#### Fan Assembly with Slant Wall Housing:

Insert the Fan Assembly and Slant Wall Housing through the framed opening in the side wall. Center the Slant Wall Housing in the framed opening, left to right. Allow the Slant Wall Housing to set on the bottom of the framed opening.

Secure the Slant Wall Housing to the framed opening, using (1) 1/4" x 1-3/4" Lag Screw through the middle hole on each side and (3) 1/4" x 1-3/4" Lag Screws across the bottom panel. See **Figure 10**. Lag Screws are supplied in the Hardware Package.

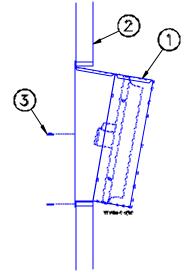


Figure 10. Fan installation (side view)

Key	Description
1	Fan and Slant Wall Housing Assembly
2	Side Wall of Building
3	1/4" x 1-3/4" Lag Screws (5 used)

Install the Shutter Clips, as shown in **Figure 11**, in the remaining holes on the sides and top of the Slant Wall Kit. The Shutter Clips need to be tight, but loose enough to be turned.

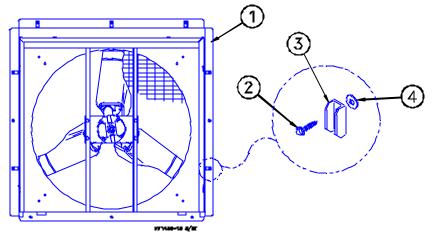


Figure 11. Shutter Clip installation (front view)

Key	Description
1	Slant Wall Housing
2	1/4 x 1-3/4" Lag Screw
3	Shutter Clip
4	Nylon Flat Washer

#### **Suspended Fan Installations:**

Replace Items 9 - 11 from both sides of the top of the fan with the suspension components, Items 1 - 7, as shown in **Figure 12**. Discard Items 9 - 11. The 36" E-Z Fan Assembly weighs approximately 120 lbs. (43.1 kg). The ceiling,

rafters, or trusses must be capable of bearing the required weight. The 48" E-Z Fan Assembly weighs approximately 175 lbs. (70.3 kg). The ceiling,

rafters, or trusses must be capable of bearing the required weight.

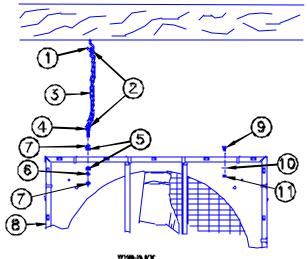


Figure 12. Suspending the Fan (front view)

Key	Description
1	Screw Hook
2	S-Hook
3	Chain
4	Eye Bolt
5	Flat Washer
6	Lock Washer

	Key	Description
	7	Hex Nut
	8	E-Z Box Fan
	9	5/16-18 Carriage Bolt
	10	Flat Washer
	11	Hex Nut

#### Wiring:

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.

**Slant Wall Fans:** Route the motor cord (not supplied) toward the upper left corner of fan and attach the cord to the top panel using the 3/8" cord clip mounted in the 1/4" hole in the top panel. See **Figure 13**.

# Important: If an Aluminum Shutter will be installed, route the motor cord through the Rubber Grommet.

Some installations may require an exit hole for the motor cord 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.

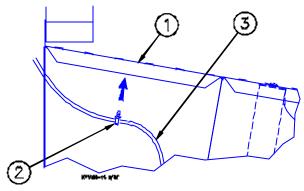


Figure 13. Installing Cord Clip.

Key	Description
1	Slant Wall Top Panel
2	Cord Clip
3	Cord

#### **Shutter Installation**

Install the Grommet in the corner of the Aluminum Shutter only. See **Figure 14**. For fans with plastic shutters, cut a 3/8" slot in the left end of the top flange of the shutter to route the cord through when the shutter is installed. See detail in **Figure 14**.

The Slant Wall Bottom Panel is designed to hold the Shutter. Slide the bottom of the Shutter into position in the Bottom Panel of the Slant Wall kit, lean the Shutter back and lock it in place by rotating the Shutter Clips. See **Figure 14**.

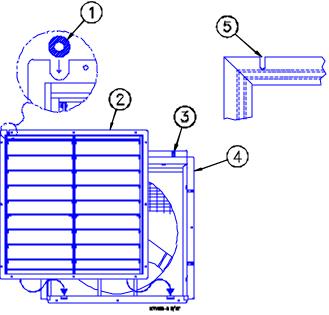


Figure 14. Shutter Installation (front view)

Key	Description
1	Grommet (Aluminum Shutter
	Only)
2	Shutter
3	Shutter Clip
4	Slant Wall Housing
5	3/8" Slot in Plastic Shutter

### **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.

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### Direct Drive E-Z Fan Part Numbers and Motor Specifications

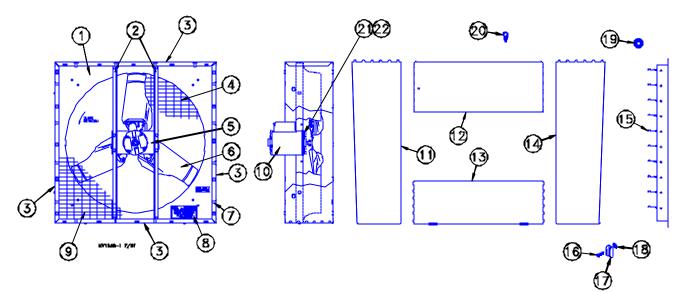
#### **Direct Drive E-Z Box Fans**

Fan Description		Assembled Fans	Unassembled Fans	Electrical Specs.				
		Fan P/N +	Fan P/N +	Voltage	HZ	Phase	HP	Motor P/N
36" Direct Drive E-Z Fans	Box	37124-3610 37124-3620 37124-3640 40401-3620	37125-3610 37125-3620 37125-3640 40408-3620	115 208-230 208-230/460 230	60 60 60 60	1 1 3 1	1/2 1/2 1/2 1/2	27536 28936 27536-3PH 37525
	Deep Box	38109-3610 38109-3620 38109-3640 37555-3620	38110-3610 38110-3620 38110-3640 37960-3620	115 208-230 208-230/460 230	60 60 60 60	1 1 3 1	1/2 1/2 1/2 1/2	27536 28936 27536-3PH 37525
	Slant Wall	38789-361X 38789-362X 38789-364X 40402-362X	38796-361X 38796-362X 38796-364X 40409-362X	115 208-230 208-230/460 230	60 60 60 60	1 1 3 1	1/2 1/2 1/2 1/2	27536 28936 27536-3PH 37525
	Deep Slant Wall	38790-361X 38790-362X 38790-364X 39007-362X	38797-361X 38797-362X 38797-364X 39024-362X	115 208-230 208-230/460 230	60 60 60 60	1 1 3 1	1/2 1/2 1/2 1/2	27536 28936 27536-3PH 37525
	Panel	40404-3610 40404-3620 40404-3640 40405-3620	40411-3610 40411-3620 40411-3640 40412-3620	115 208-230 208-230/460 230	60 60 60 60	1 1 3 1	1/2 1/2 1/2 1/2	27536 28936 27536-3PH 37525
48" Direct Drive E-Z Fans	Box	38439-4820 38439-4840	38782-4820 38782-4840	230 460	60 60	1 3	1 1	37726 39020
	Deep Box	38440-4820 38440-4840	38783-4820 38783-4840	230 460	60 60	1 3	1 1	37726 39020
	Slant Wall	38785-482X 38785-484X	38792-482X 38792-484X	230 460	60 60	1 3	1 1	37726 39020
	Deep Slant Wall	38786-482X 38786-484X	38793-482X 38793-484X	230 460	60 60	1 3	1 1	37726 39020
	Panel	40406-4820 40406-4840	40414-4820 40414-4840	230 460	60 60	1 3	1 1	37726 39020

+ Replace "X" in fan P/N with "1" for an aluminum shutter, or "2" for a plastic shutter

-Slant wall fans include a box fan, slant wall kit, and shutter

## **Direct Drive E-Z Fan Parts List**



#### 36" Fans

Item	Description	Part No.
1	36" Fan Shroud	5538
2	Motor Mount Post	37209
3	36" Fan Panel (12-1/2" Deep)	36006
	36" Fan Panel (21" Deep)	37556
4	Wire Screen	29046
5	Motor Support	36564
6	36" 3 Wing Fan Blade	40358
7	Screen Clip	38891
8	Danger Decal	2527-50
9	Wire Inlet Screen	36629
10	Motor	See Chart
11*	36" S. W. L.H. Side Panel	39013-1
12*	36" S. W. Top Panel	39011
13*	36" S. W. Bottom Panel	39012
14*	36" S. W. R.H. Side Panel	39013-2
15	36" Aluminum Shutter	38259
	36" Plastic Shutter	38027
16*	1/4 x 1-3/4 Lag Screw	39217
17*	Shutter Clip	36729
18*	Nylon Washer	4856
19*	Grommet	7256
20*	Cord Clip	7242
21	#8 Hex Nut (48 Frame Motor)	6519
	#10 Hex Nut (56 Frame Motor)	4297
22	#8 Lock Washer (48 Frame Motor)	35965
	#10 Lock Washer (56 Frame Motor)	305

#### 48" Fans

Item	Description	Part No.		
1	48" Fan Shroud	37583		
2	Motor Mount Post	38390		
3	48" Fan Panel (15-3/4" deep)	38391		
	48" Fan Panel (21" deep)	38438		
4	Wire Screen	6023-22		
5	Motor Support	37941		
6	48" 2 Wing Fan Blade	37727		
7	Screen Clip	38891		
8	Danger Decal	2527-50		
9	Wire Inlet Screen	38749		
10	Motor	See Chart		
11*	48" S. W. L.H. Side Panel	38449-1		
12*	48" S. W. Top Panel	38447		
13*	48" S. W. Bottom Panel	38448		
14*	48" S. W. R.H. Side Panel	38449-2		
15	48" Aluminum Shutter	38260		
	48" Plastic Shutter	38029		
16*	1/4 x 1-3/4 Lag Screw	39217		
17*	Shutter Clip	36729		
18*	Nylon Washer	4856		
19*	Grommet	7256		
20*	Cord Clip	7242		
21	3/8-16 x 3/4 Hex Bolt	2182		
22	3/8 Lock Washer	5747		

\* These items included in 48" Slant Wall Kit Part Number 38446.

\* These items included in 36" Slant Wall Kit Part Number 39018.



### Made to work. Built to last.

#### **Revisions to this Manual**

Page No.Description of Change8,9,13,18,19Add Information for 48 Frame Motors and Panel Fan Assembly Part Numbers

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

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