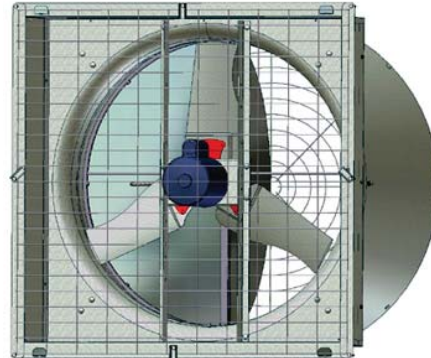
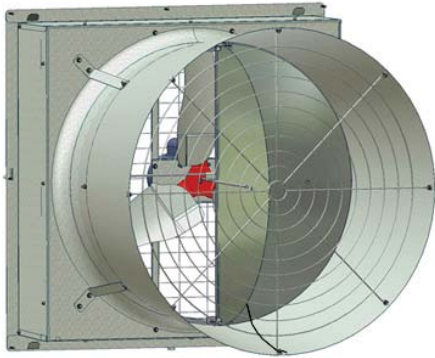




36" Galvanized Direct Drive Hyflo® Fan Fan Part Number (50372-XX) Installation and Operators Instruction Manual



Fan and Framing Dimensions

Planning the layout of the spacing between Fans is very important. Spacing too close together will cause interference between the discharge Cones. **The Rough Opening dimensions for Fans are shown below.**

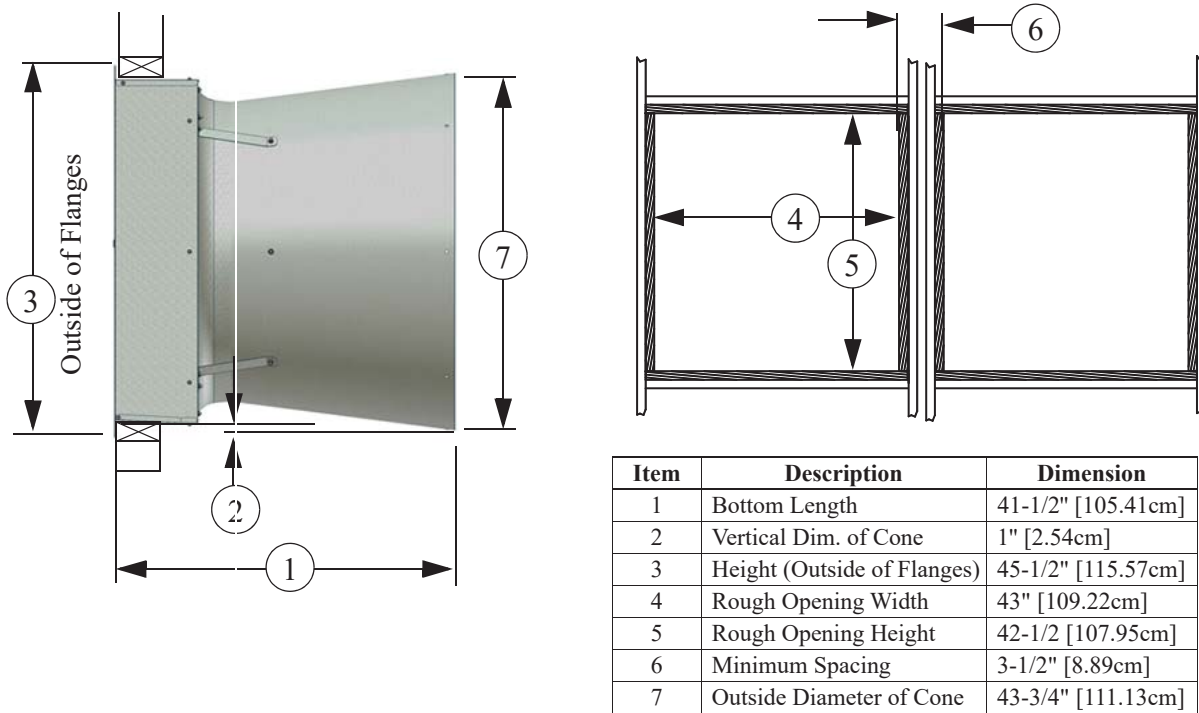


Figure 1. Framing Dimensions

The Fan Inlet and exhaust must be kept clear of obstructions. Failure to keep the Fan airflow path clear of obstructions could cause loss of Fan performance and Fan damage.

Do Not operate these Fans with a variable speed control device. Operating static pressure should be less than 0.15 inches water column.

Fan Installation

Installing Screen Clips

Set the Fan into the framed opening, but leave it hang out a few inches to allow for the insertion of four Screen Clips (**Item 1, Figure 2**). With the Screen Clips oriented with the tab lock as shown, push them into the slots in the Fan Housing Panels and rotate them forward until they lock into place **as shown**.

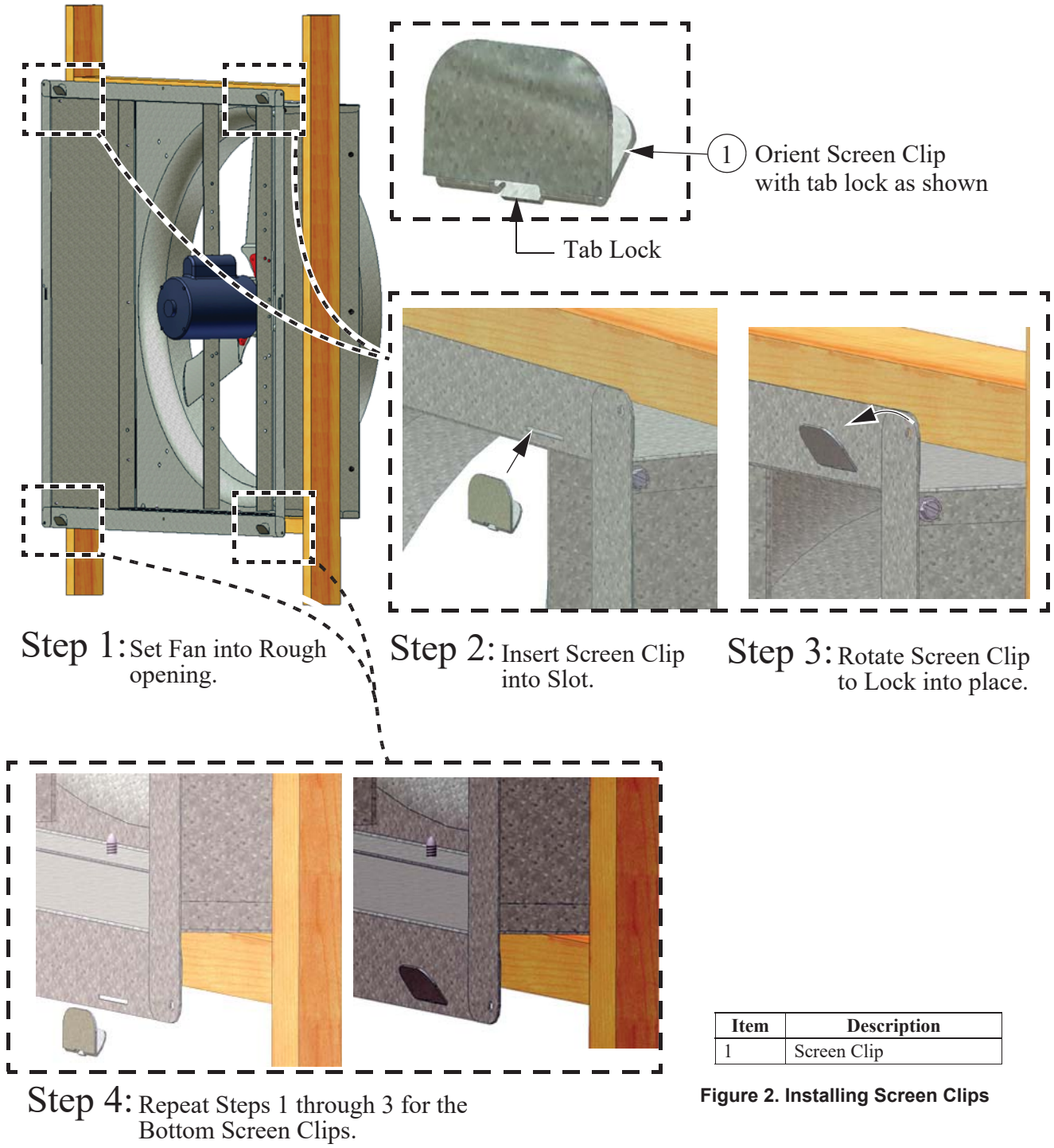


Figure 2. Installing Screen Clips

Attaching Fan to Wall

Slide the Fan assembly into the rough opening and starting with the four Center hole locations (**Detail A**), use 1/4 x 1-3/4" Lag Screws (**Item 1, Figure 3**), two Nylon Washers (**Item 2**), and Screen Retainers (**Item 3**) to attach the Fan to the Wall as shown. At the Fan's four corners (**Detail B**) use 1/4 x 1-3/4" Lag Screws as shown.

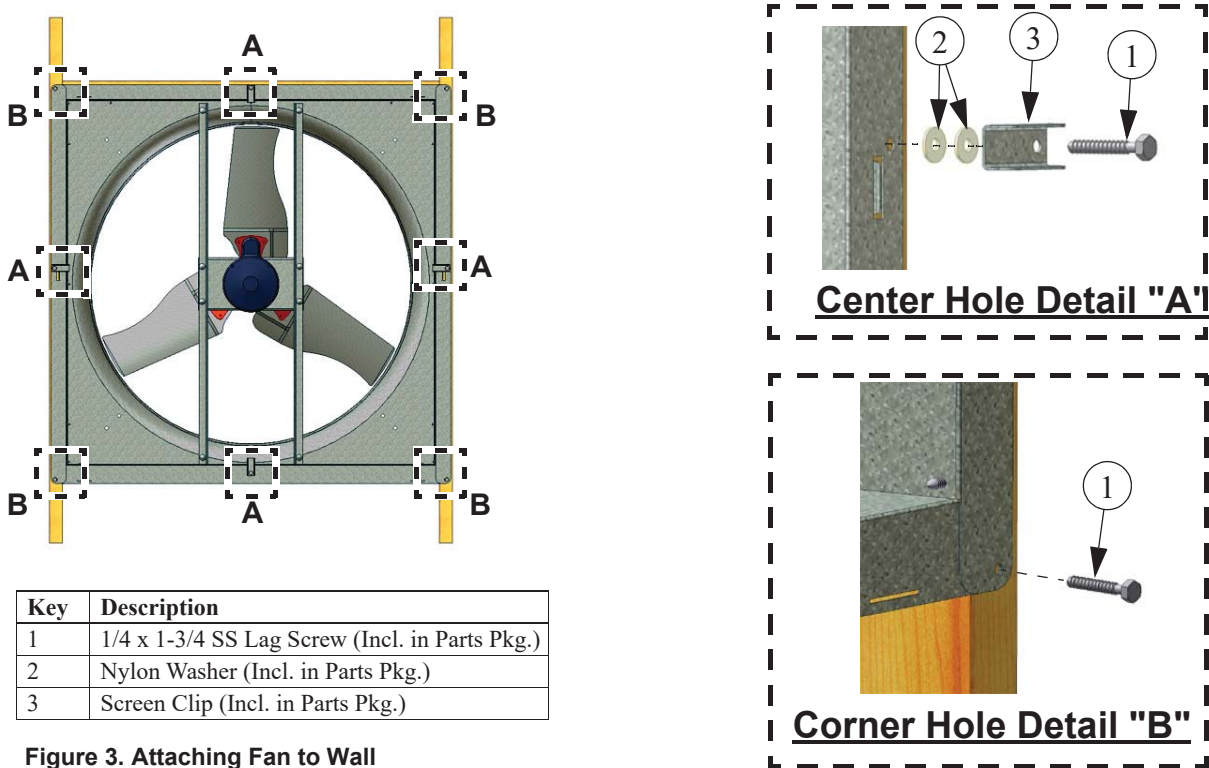


Figure 3. Attaching Fan to Wall

Cone Assembly and Installation

Step 1: Lay a Cone Panel down (Drain Tab at the bottom and slots to the left) and Prop the end up (Slotted end) with a 2 x 4 board.

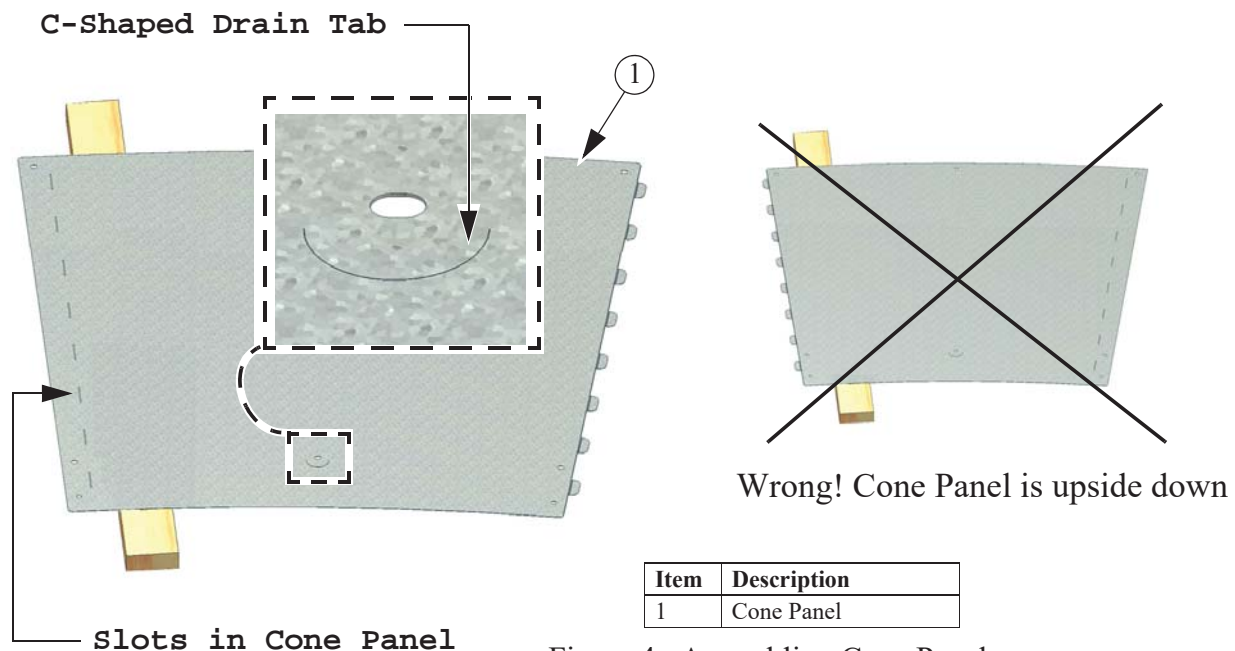
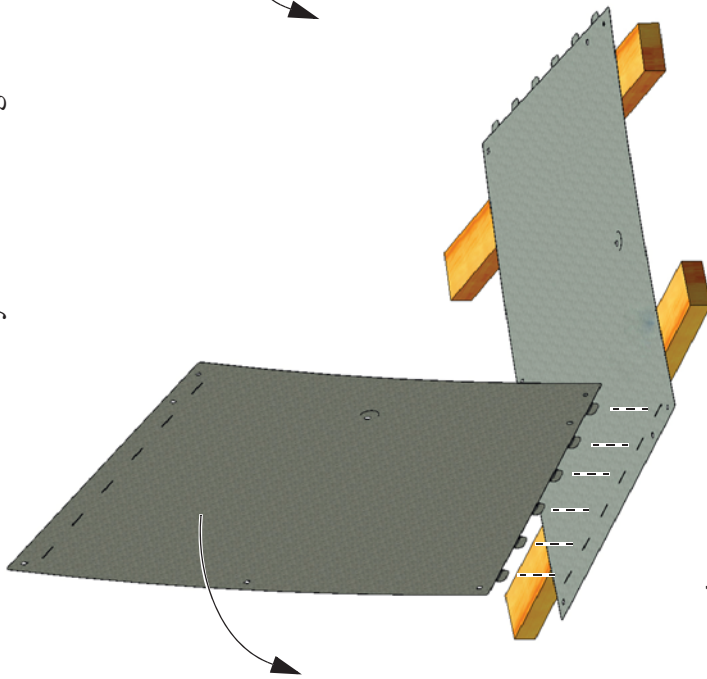


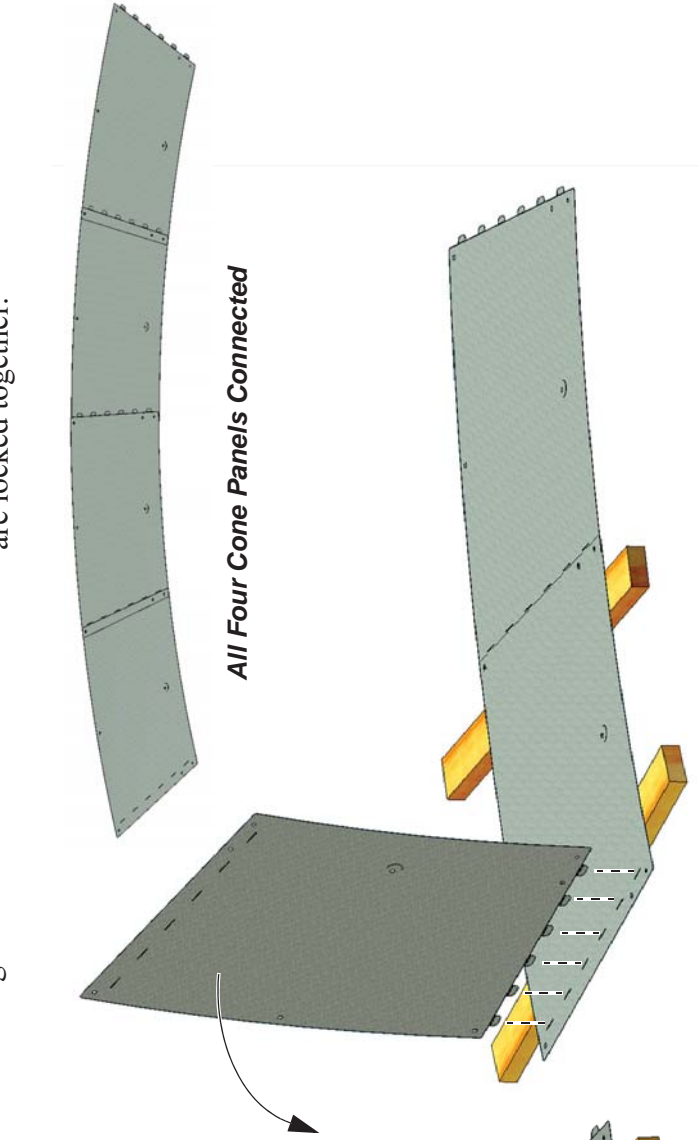
Figure 4. Assembling Cone Panels

Cone Assembly and Installation

Step 2: Insert the Tabs of a second Cone Panel into the slots of the 1st Panel and Lay it down locking the two Panels together.



Step 3: Repeat Step 2 until all four Cone Panels are locked together.



Step 4: Stand the Panels up on edge and curl the Panels around making a Cone shape with the smaller diameter up. Insert the Tabs of the last Panel into the Slots of the 1st and allow the Cone to take its shape.

Step 5: Fasten the Cone Panels together with (4) 5/16" x 1/2" Hex Bolts threaded from inside the finished Cone. Do not tighten down the Nuts at this time. Leave the Nuts loose until the Cone is attached to the Fan.

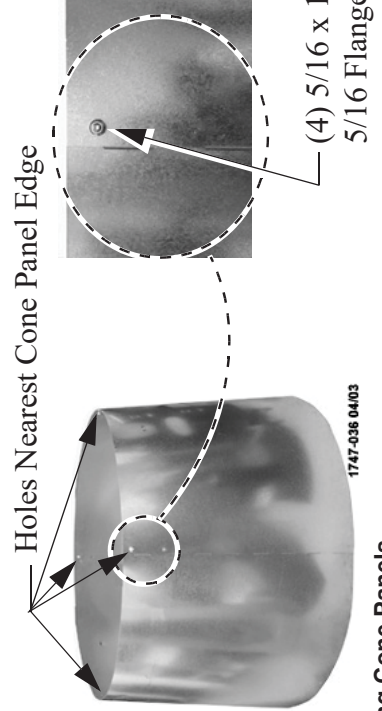
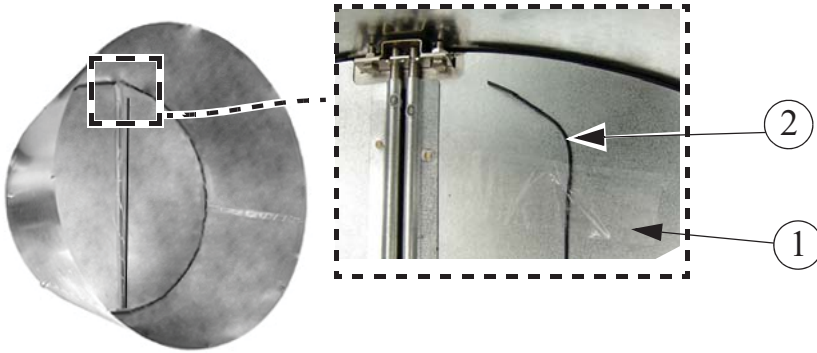


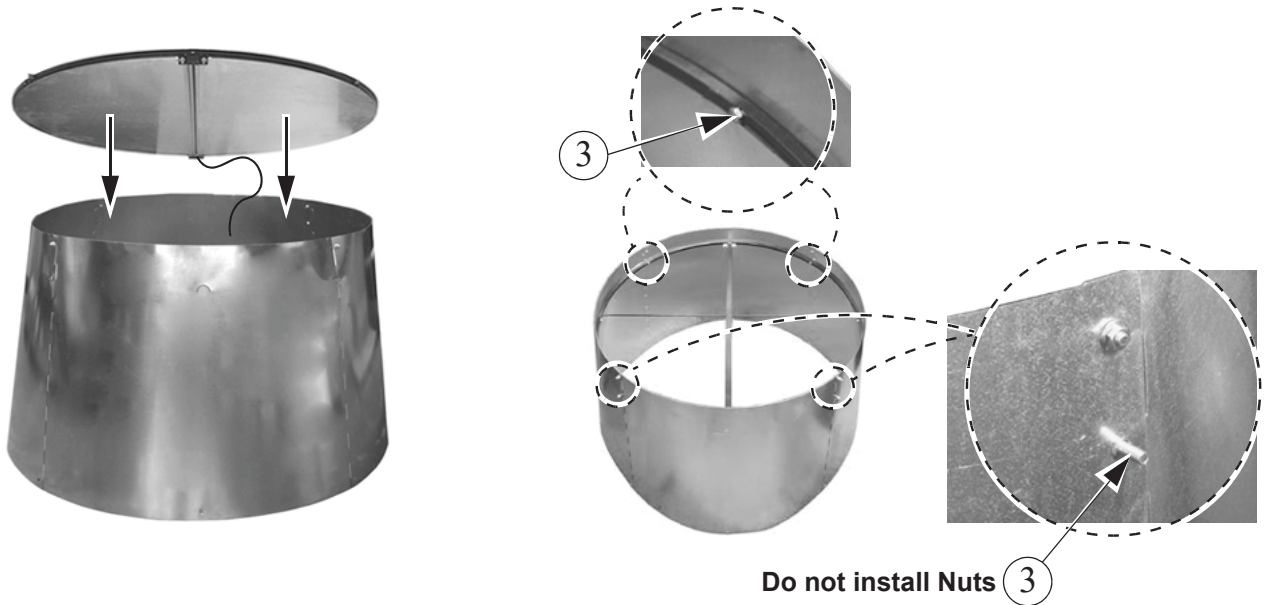
Figure 4. Assembling Cone Panels

Installing Door Assembly

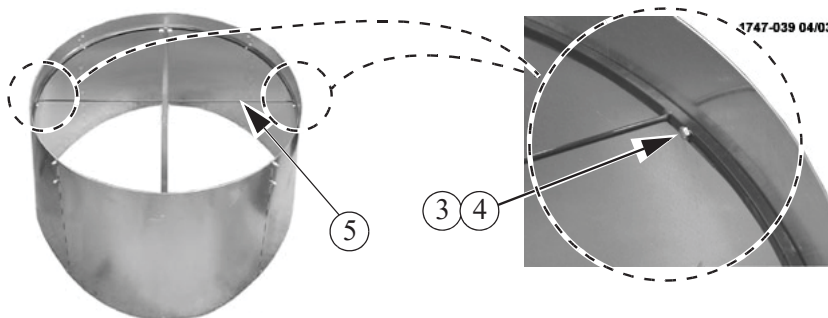
Step 1: Remove Tape (**Item 1**) holding the Nylon Cable (**Item 2**) to the Door.



Step 2: Line up the Four Holes in the Door Ring with the holes in the Cone and thread (4) 5/16 x 1-1/4" Bolts (**Item 3**) in until they are tight. Do not install Nuts at this time. These Bolts will be used later to attach the Cone Brackets to the Cone Assembly.



Step 3: Use (2) 5/16 x 1-1/4" Bolts (**Item 3**) and (2) 5/16" Flange Nuts (**Item 4**) to attach the Ring to the Cone using the holes located on both sides near the Door Center Brace (**Item 5**) as shown. The Nuts go outside the Cone.

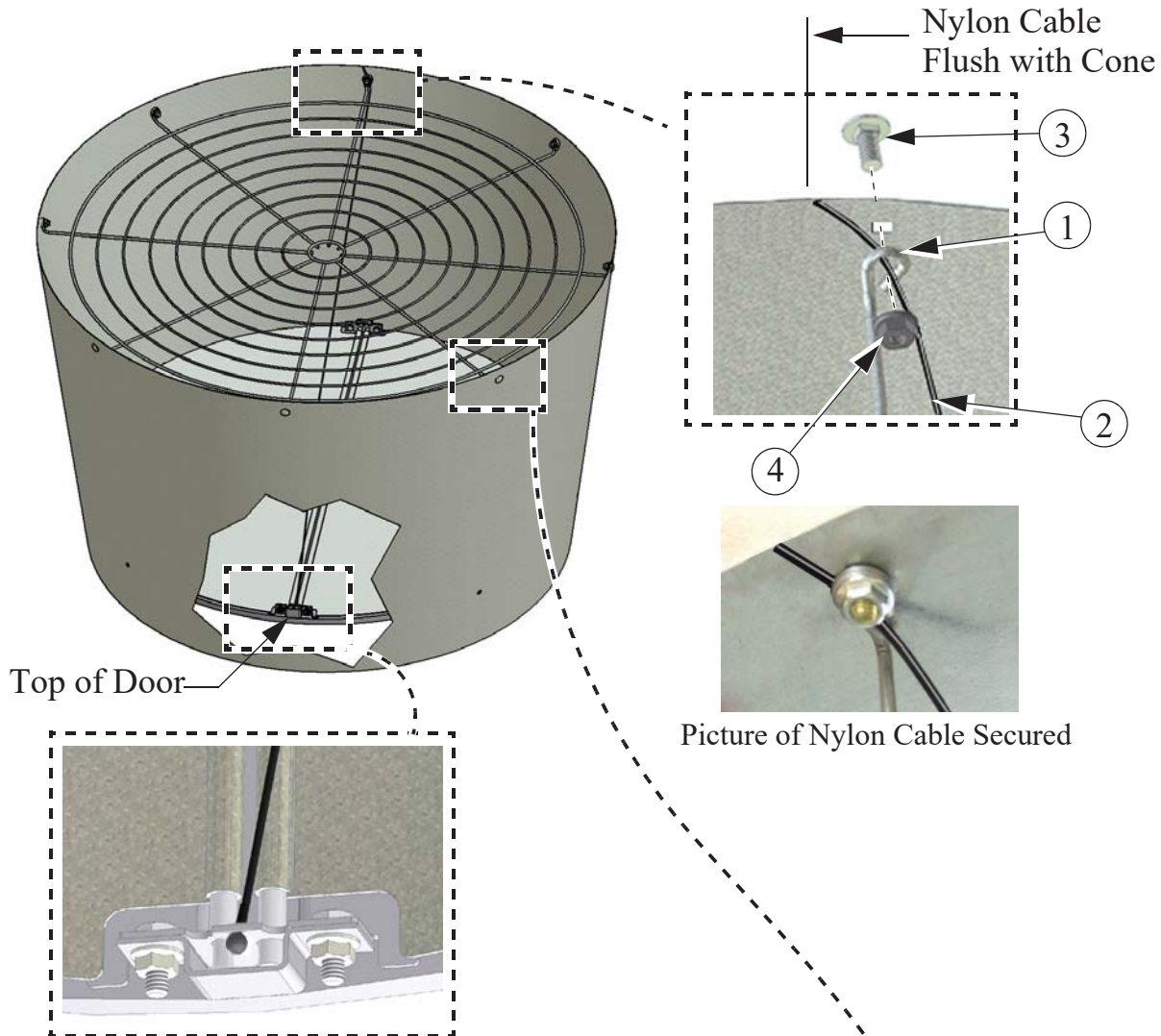


Item	Description
1	Tape
2	Nylon Cable
3	5/16 x 1-1/4" Bolt
4	5/16 Flange Nut
5	Door Center Brace

Figure 5. Installing the Door Assembly

Attaching Fan Cable to Grill, and the Grill to the Cone.

Step 1: Line up the Grill Eyehooks with the holes in the Cone. Thread the free end of the Nylon Cable (**Item 2**) through the bottom Grill Eyehook (**Item 1**) until it is flush with the Cone and secure it with a 5/16-18 Carriage Bolt (**Item 3**) and Flange Nut (**Item 4**) as shown.



Step 2: Use 5/16 Carriage Bolts (**Item 3**) and Nuts (**Item 4**) to fasten Grill to Cone at remaining 7 locations.

Item	Description
1	Bottom Grill Eyehook
2	Door Stop Cable (Nylon Cable)
3	5/16-18 x .625 Carriage Bolt
4	5/16-18 Flange Nut

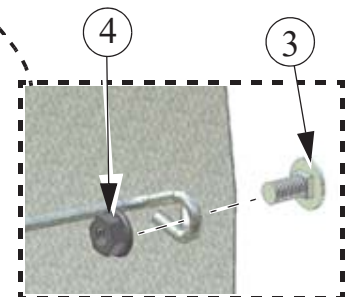


Figure 6. Attaching Door Stop Cable

Attaching the Cone

Attaching Cone Brackets to Shroud

Use 5/16 x 5/8" Carriage Bolts (**Item 1, Figure 7**) and 5/16 Flange Nuts (**Item 2**) to attach the four Cone Brackets (**Item 3**) to the Fan Shroud as shown below.

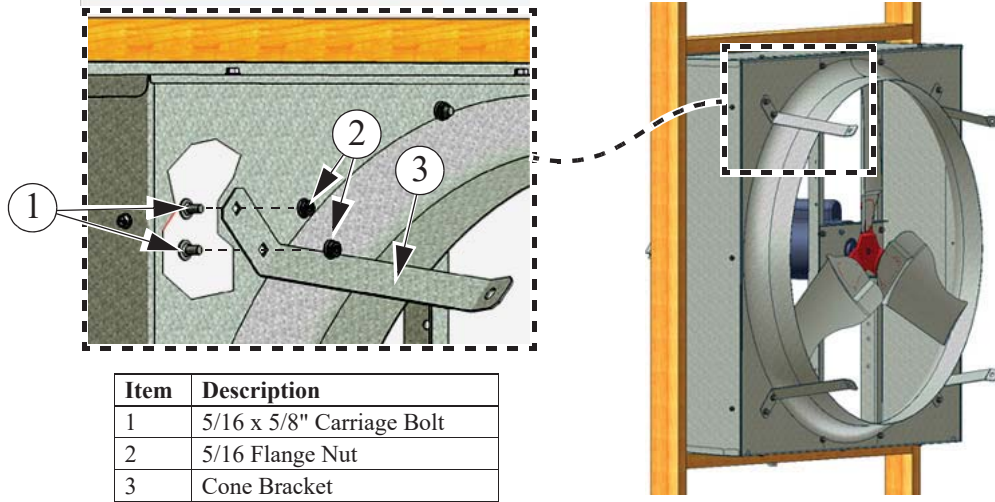
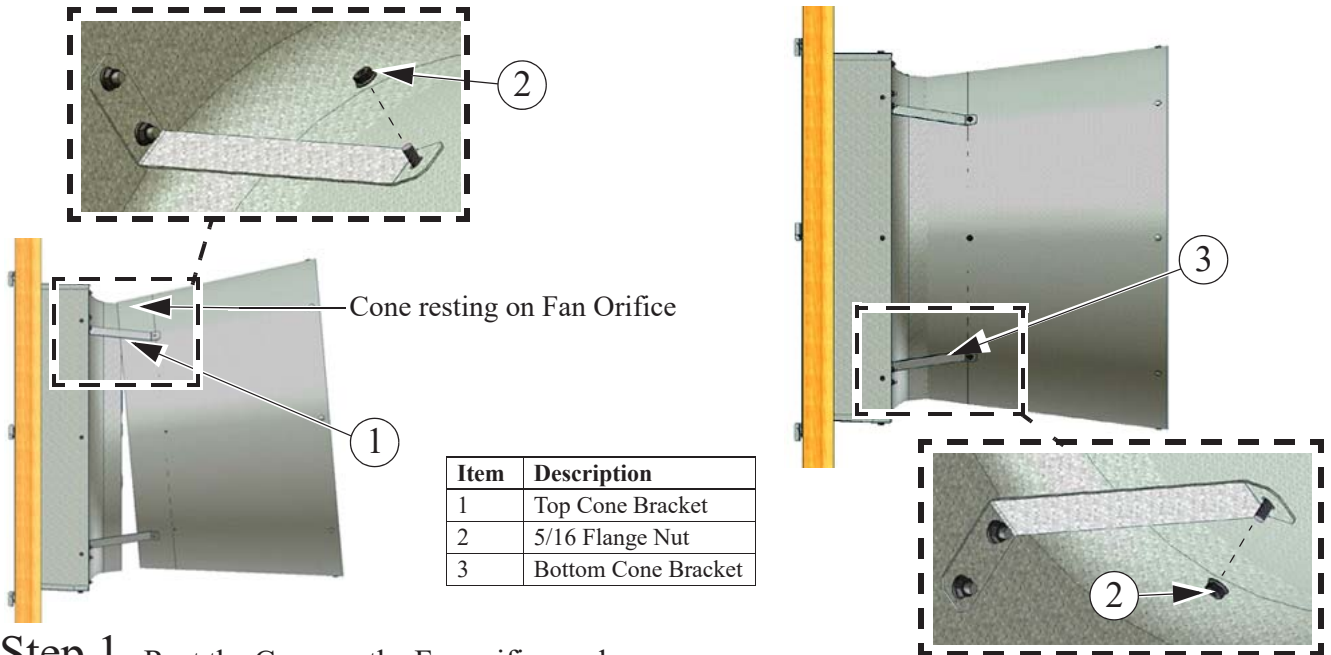


Figure 7. Attaching Cone Brackets to Shroud

Attaching the Cone



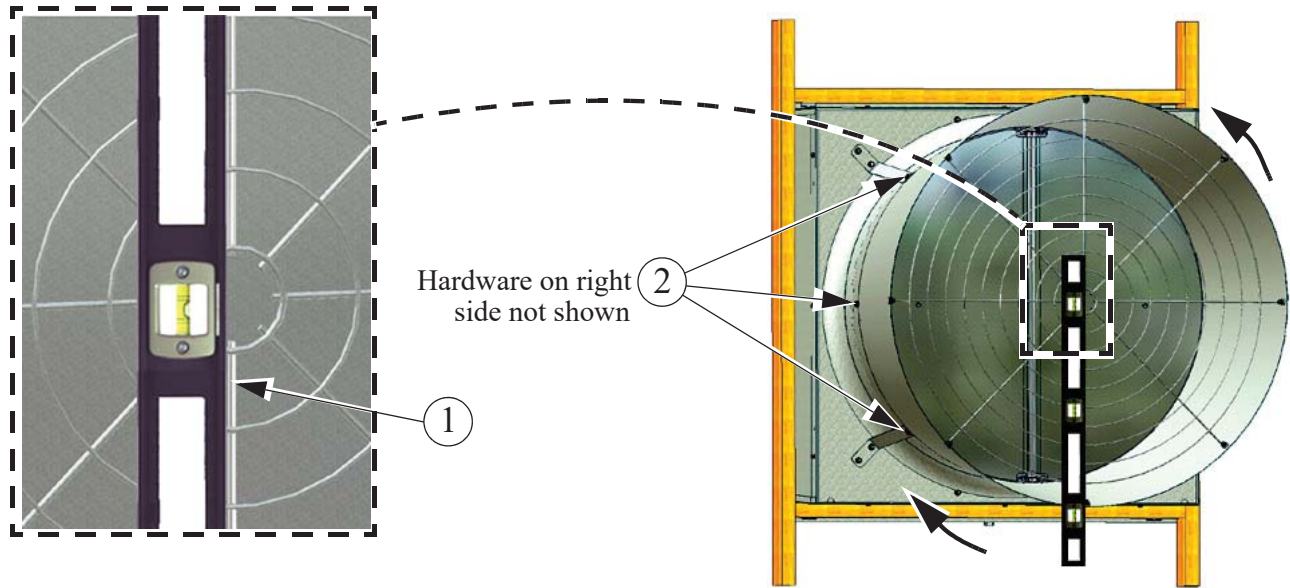
Step 1 Rest the Cone on the Fan orifice and attach it to the top two Cone Brackets (**Item 1**) (Hand tighten only). The Cone will fit snug. Working around the Fan Orifice from inside the Fan, in a circular motion, slide the Cone over the Fan Orifice.

Step 2 Use the Bolts previously threaded through the Ring and Cone and hand tighten the 5/16 Flange Nuts (**Item 2**) to secure the bottom of the Cone to the two Bottom Cone Brackets (**Item 3**).

Figure 8. Attaching Cone to Cone Brackets

Leveling Doors and tightening down Cone Hardware

Use a Level and rotate the Cone and Door Assembly until the Center Screen Wire (**Item 1, Figure 9**) is Vertical (**See Figure**). Once the Cone and Door Assembly is vertical, tighten the four 5/16 Flange Nuts (**Item 2**) holding the Cone to the Cone Brackets and also the four 5/16 Flange Nuts holding the Cone Panels together that were hand tightend in **Figure 5**.



Step 1 Using a Level, Rotate the Cone and Door Assembly until the Center Grill Wire is Vertical

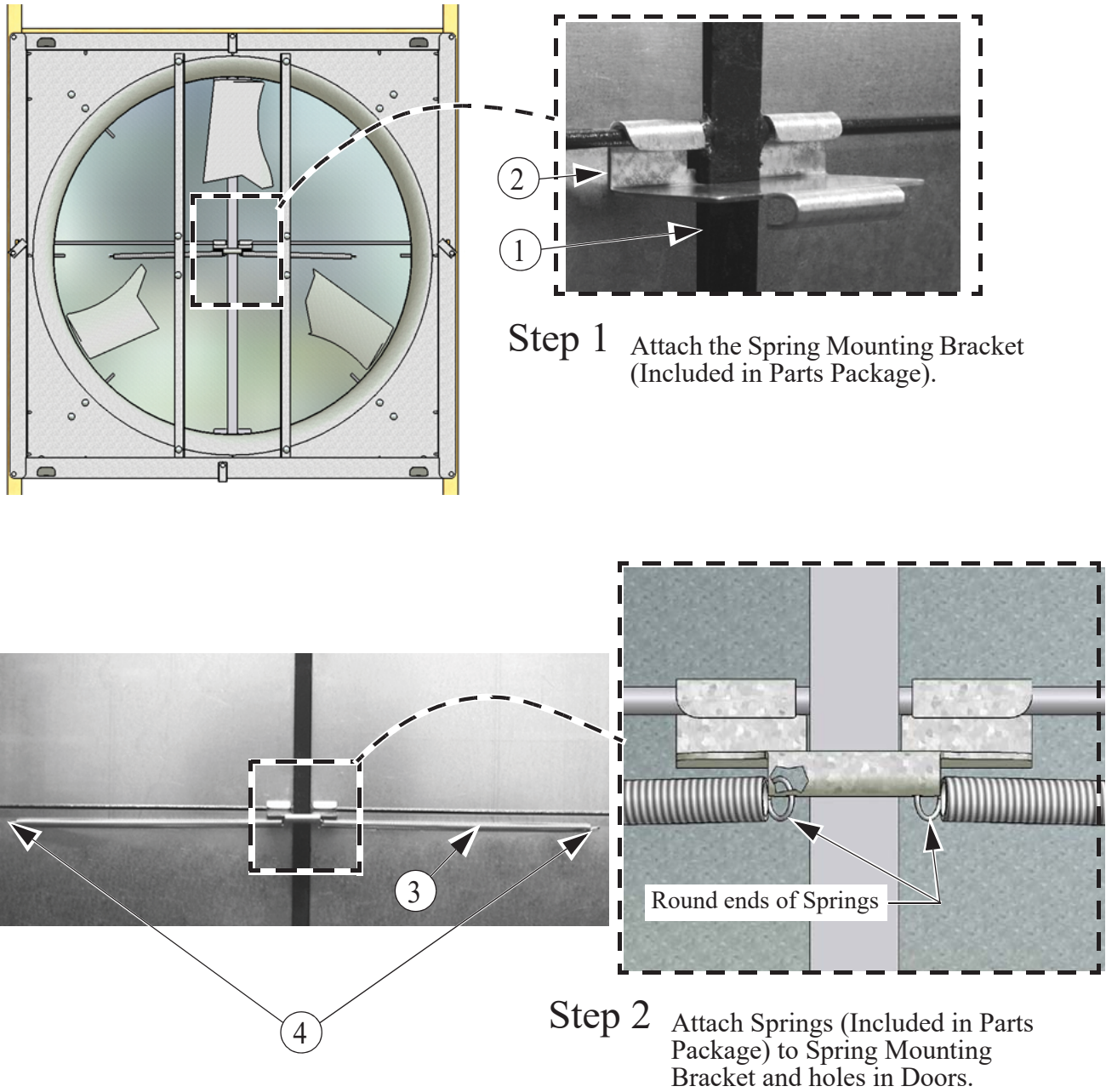
Step 2 Tighten down the four 5/16 Flange Nuts holding the Cone to the Cone Brackets and also the ones holding the Cone Panels together. (Hardware on the right of Fan is not Shown)

Item	Description
1	Center Grill Wire
2	5/16 Flange Nut

Figure 9. Leveling Doors and tightening down Cone Hardware

Door Spring Installation

At the middle of the Door Center Brace (**Item 1, Figure 10**), attach the Spring Mounting Bracket (**Item 2, Included in the Parts Package**) as shown in **Step 1** below. Hook the rounded ends of the Door Springs (**Item 3**) onto the Spring Mounting Bracket. Stretch the Door Springs out and hook them on the 3/32" holes (**Item 4**) in the Doors (**See Step 2**).

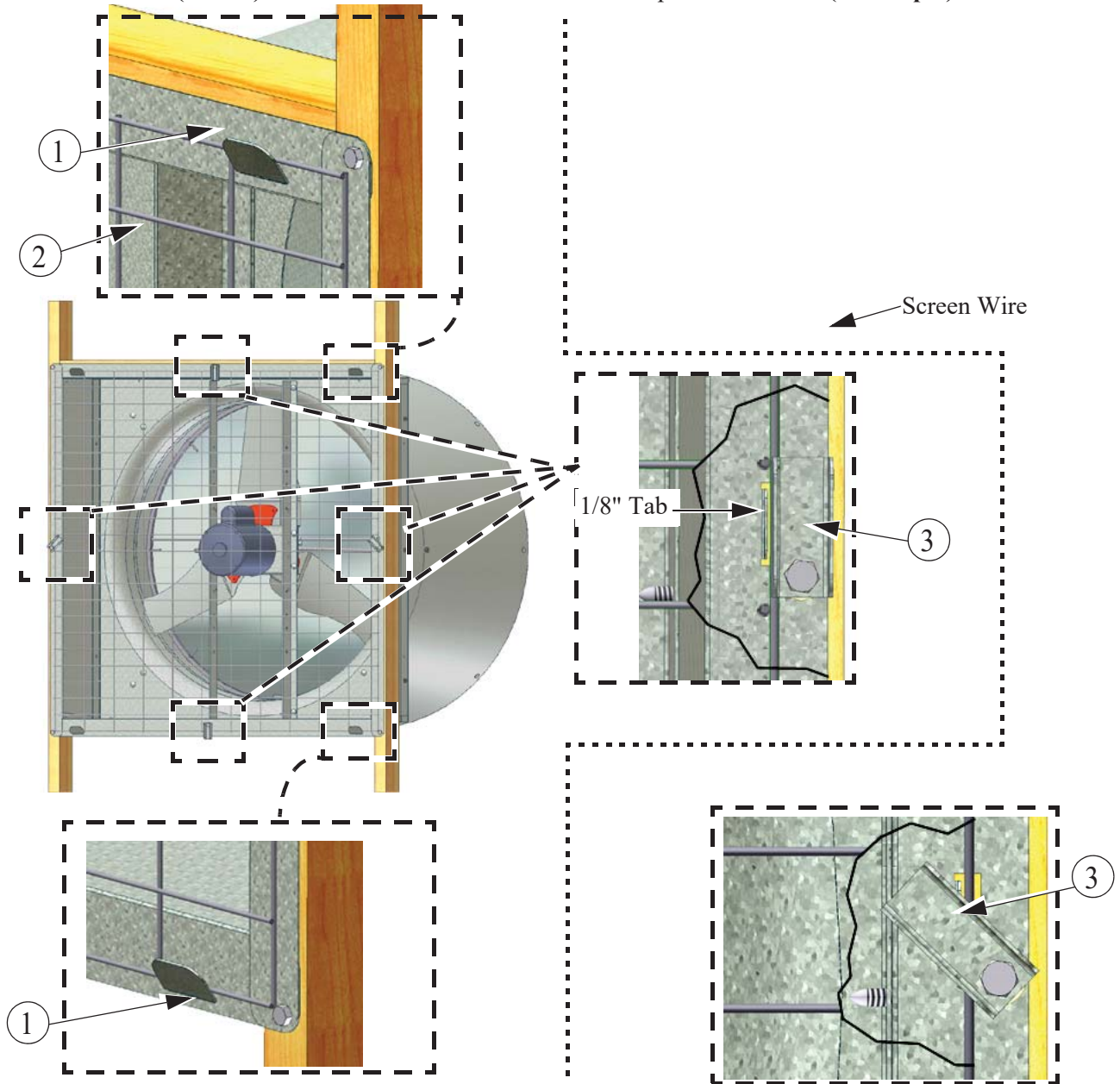


Item	Description
1	Door Center Brace
2	Spring Mounting Bracket
3	Door Spring
4	3/32" Hole in Door

Figure 10. Attaching the Spring Mounting Bracket

Installing the Screen

Hang the Rear Screen on the four Screen Clips (**Item 1, Figure 11**) located in the corners of the Fan. Position the Screen (**Item 2**) so that the Screen Wire is captured between the 1/8" tall tabs and the Screen Retainers (**Item 3**). Rotate the four Screen Retainers to capture the Screen (**See Step 2**).



Step 1 Hang the Screen on the Screen Clips and position so that the Screen Wire is captured between 1/8" tall Tabs and Screen Clips.

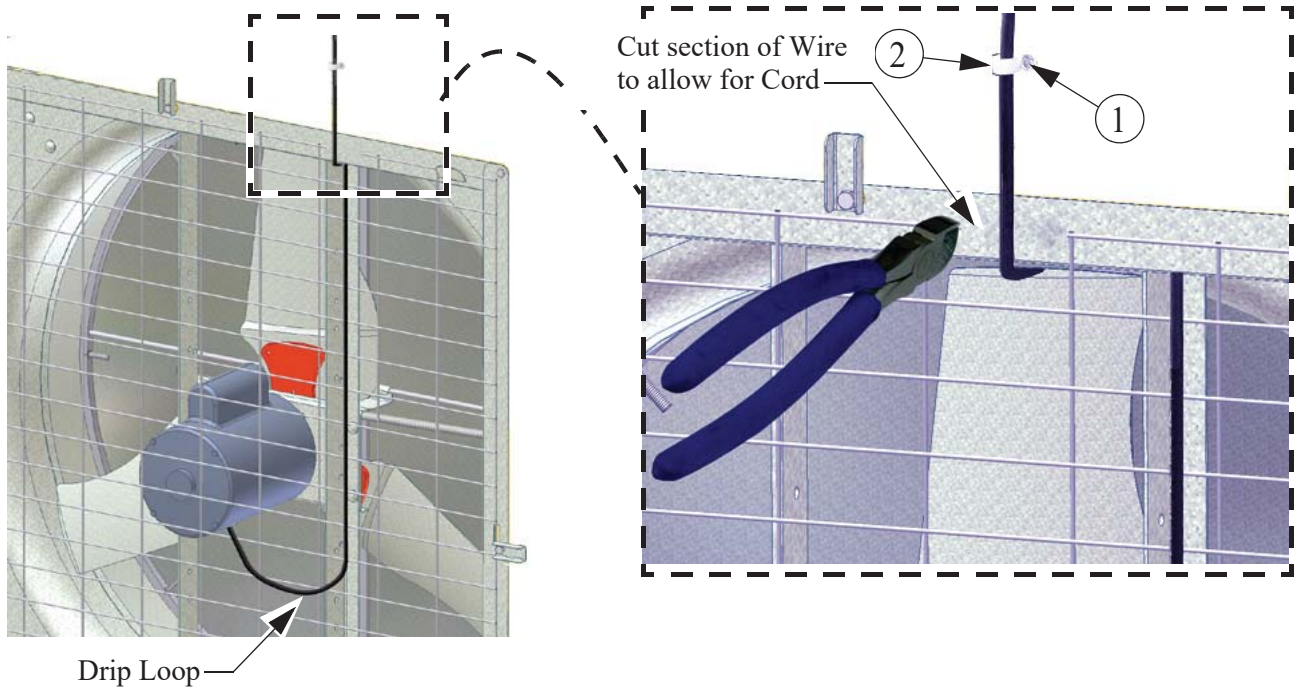
Step 2 Rotate the Four Screen Retainers to capture the Screen.

Item	Description
1	Screen Clip
2	Screen
3	Screen Retainer

Figure 11. Installing the Screen

Motor Wiring

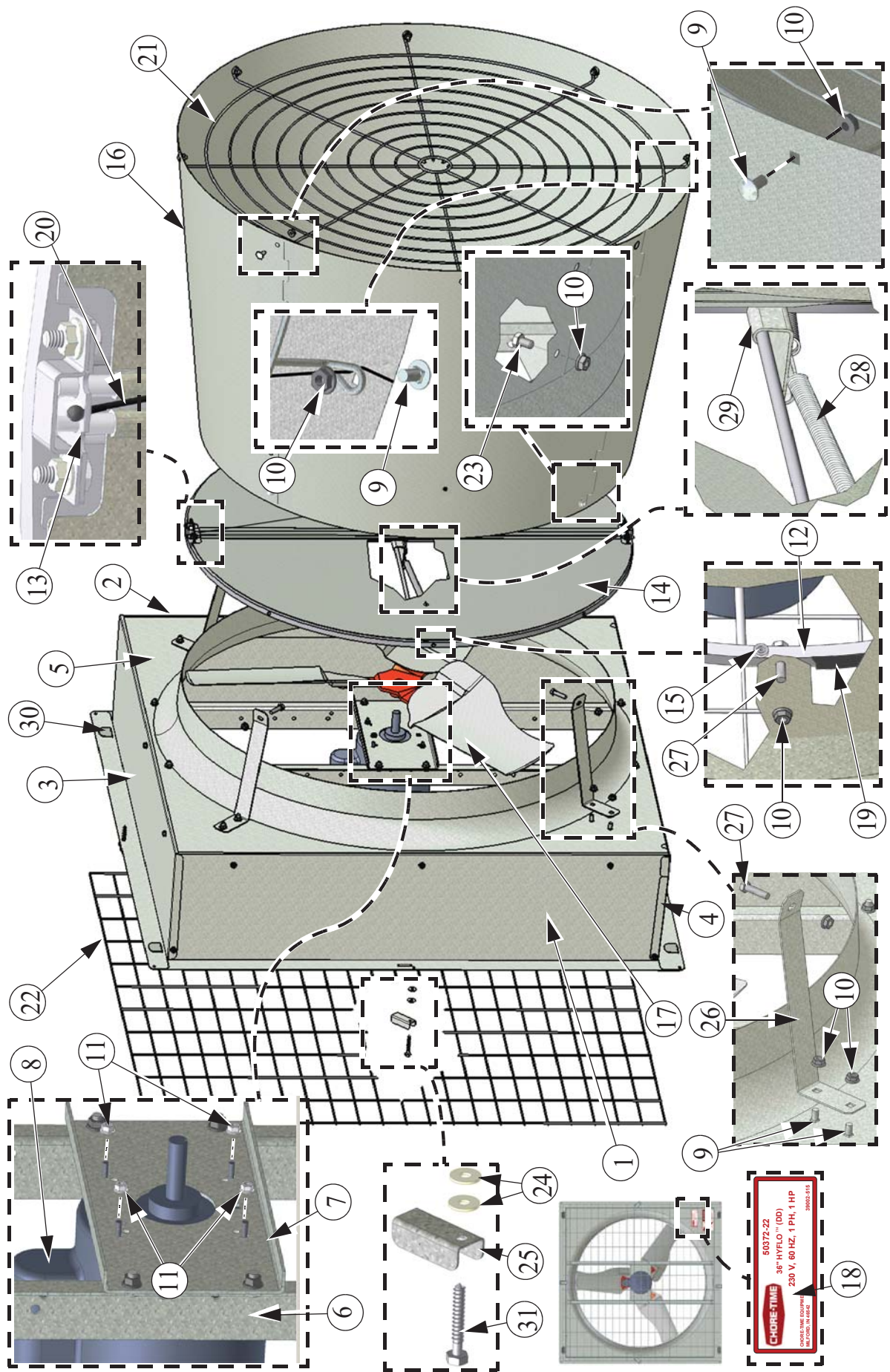
1. Check that the electrical power being supplied to the Fan matches the electrical Specifications on the Fan and Motor Decals.
2. Remove the Motor Access Cover.
3. Install an electrical disconnect within reach of each Fan installed.
4. Connect the cord to the motor according to the wiring diagram on the motor. Verify that the motor is connected for counter clockwise rotation (viewing the back of the motor, opposite the shaft end.)
5. Follow local, state, and national electrical codes for wiring. Cut out one section of the Screen to route the cord out of the Fan: This will allow for the Screen to be removed without interfering with the Cord. (See **Figure 12 below**). Attach the cord to the Wall using a Lag Screw (**Item 1**) and Cord Clip (**Item 2**) (both are included in parts package). Allow enough slack in the cord to form a "drip loop" (See **Figure**) for moisture to fall away from the cord and not into the Motor.



Item	Description
1	Lag Screw (Included in Parts Package)
2	Cord Clip (Included in Parts Package)

Figure 12. Wiring

Itemized Parts



Parts Listing

Item	Description	Part No.	Item	Description	Part No.
1	R.H. Side Housing Panel	50278-2	17	36" Galv. Fan Blade	40358
2	L.H. Side Housing Panel	50278-1	18	Fan Description Decal	39002-515
3	Top Housing Panel	50276	19	1/2" Foam Tape (10')	48425
4	Bottom Housing Panel	50277	20	36" Fan Cable Assembly	50618-3
5	36" Fan Shroud	5538	21	36" Metal Fan Cone Grill	37629
6	36" Fan Post	46127	22	44 x 44, 2x4 Wire Screen	50312
7	36" DD Fan Motor Support	36564	23	5/16-18 x .50 Bolt	1839
8	Motor, .5HP, 1PH, 60Hz, 230V	56061	24	Nylon Washer	4856
9	5/16-18 x .625 Carriage Bolt	8282	25	Screen Retainer Clip	36729
10	5/16-18 Hx Serrated Flange Nut	8490	26	Cone Support Bracket 9/04	49445
11	10-32 Hx Serrated Flange Nut	48113	27	5/16-18 x 1.25 HH5 Bolt	2150
12	36" Door Frame	50293	28	.055 x .50 x 11 SS Spring	49629
13	Fan Door Pivot Plate	49598	29	Door Spring Support 09/04	49450
14	36" Fan Door	50292	30	Screen Clip (.06 offset)	50409
15	.125 x .50 Magnet	48427	31	1/4-10 x 1.75 Lag Screw	39217
16	36" Hyflo® Cone Panel	50285			

Safety

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices. Keep safety signs in good condition. Replace missing or damaged safety signs.

DANGER: Electrical Hazard

Disconnect electrical power before inspecting or servicing equipment. 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.

DANGER: Rotating Fan Blade

Keep Hands away. Disconnect power before servicing. Fan may start automatically. Do not operate the Fan without the screens in place. Disregard to these things will cause serious injury including death.



Warranty

Chore-Time Equipment (“Chore-Time”) warrants each new Chore-Time product manufactured by it to be free from defects in material or workmanship for one year from and after the date of initial installation by or for the original purchaser. If such a defect is found by the Manufacturer to exist within the one-year period, the Manufacturer 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. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void.**
2. Warranty is void if **all components** of the system are not original equipment supplied by the **Manufacturer.**
3. This product must be purchased from and installed by an authorized distributor or certified representative thereof or the Warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity shall not be considered defects under the Warranty. Corrosion, material deterioration and/or equipment malfunction caused by or consistent with excessive additions or application of chemicals, minerals, sediments or other foreign elements with the product shall not be considered defects under the 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.

The **Manufacturer** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer 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 THE MANUFACTURER’S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Chore-Time Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for Chore-Time products in addition to those terms expressly stated above. An officer of CTB, Inc. must authorize any exceptions to this Warranty in writing. The Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

IMPORTANT! Disconnect Power Prior To Maintaining Or Cleaning The Fan. The fan may start automatically causing serious injury or death.

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

Maintenance

- Keep the fan clean for maximum life and best performance. **Do Not spray water on the Fan Shaft Bearings, the Belt Tensioner, or the Motor.**
- Minimize contact of moisture or corrosive chemicals to the surfaces of the fan components to maximize fan life.
- After washing fans, operate fans long enough to remove moisture from all fan surfaces.
- Keep Shutters, Blades, and Housing clear of obstacles for best air performance.



Note: The original, authoritative version of this manual is the [English] version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than [English], and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published [English] version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

**Made to work.
Built to last.**

Revisions to this Manual

Page No.	Description of Change	ECO
13	Changed Motor from 28936 to 56061	33269

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

CTB Inc.
P.O. Box 2000 • Milford, Indiana 46542-2000 • U.S.A.
Phone (574) 658-4101 • Fax (877) 730-8825
E-Mail: ctb@ctbinc.com • Internet: <http://www.ctbinc.com>

Printed in the U.S.A.