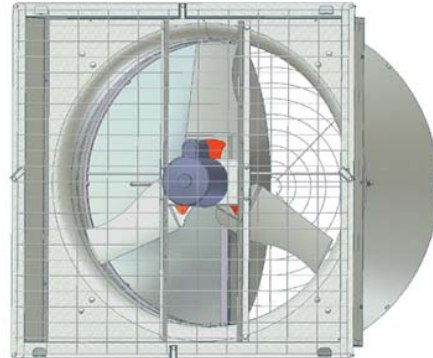
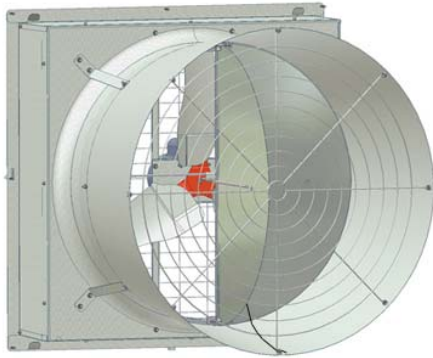


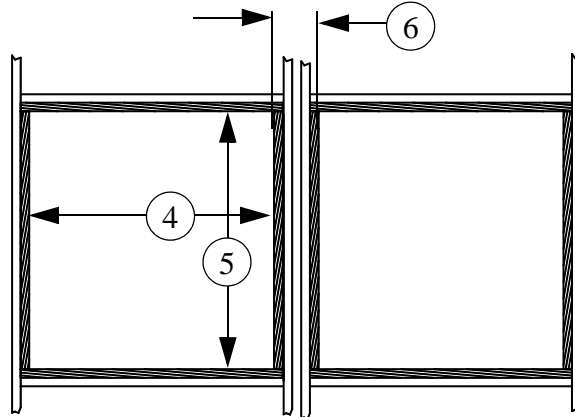
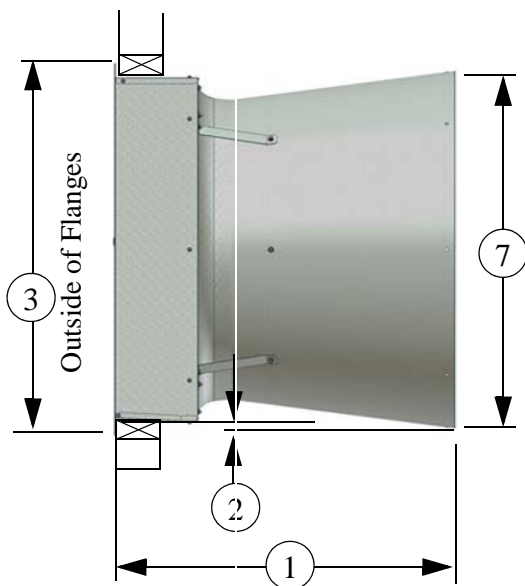


36" Galvanized Direct Drive Hyflo® Fan Fan Part Number (50372-XX) Installation and Operators Instruction Manual



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.**



| Item | Description | Dimension |
|------|-----------------------------|--------------------|
| 1 | Bottom Length | 41-1/2" [105.41cm] |
| 2 | Vertical Dim. of Cone | 1" [2.54cm] |
| 3 | Height (Outside of Flanges) | 45-1/2" [115.57cm] |
| 4 | Rough Opening Width | 43" [109.22cm] |
| 5 | Rough Opening Height | 42-1/2" [107.95cm] |
| 6 | Minimum Spacing | 3-1/2" [8.89cm] |
| 7 | Outside Diameter of Cone | 43-3/4" [111.13cm] |

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**.

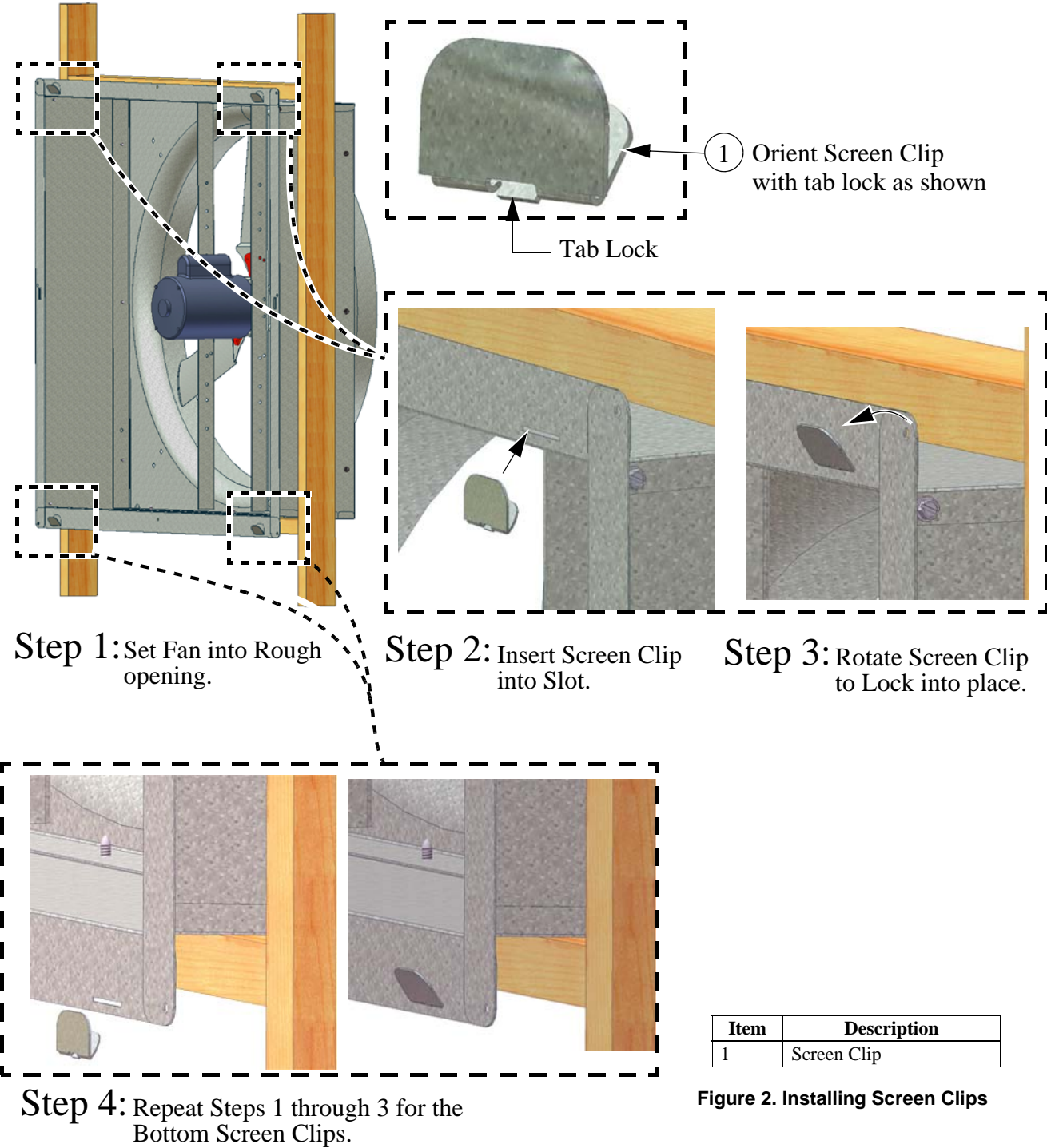


Figure 2. Installing Screen Clips

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**.

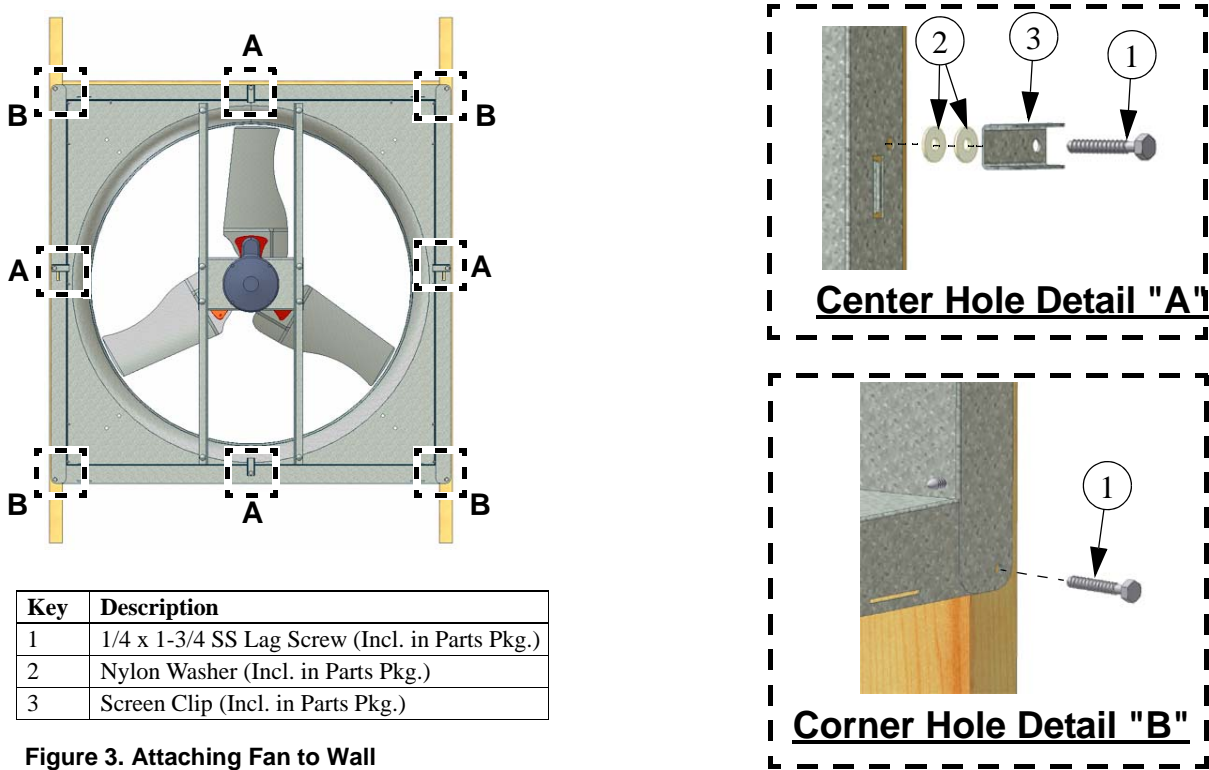


Figure 3. Attaching Fan to Wall

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.

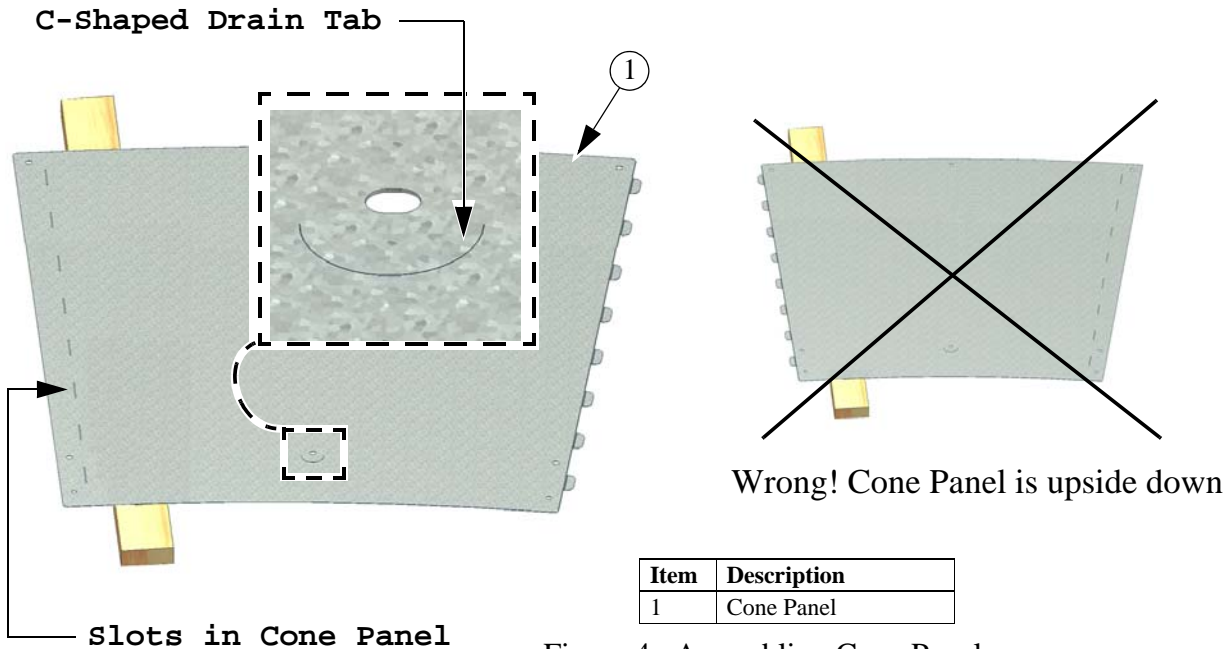
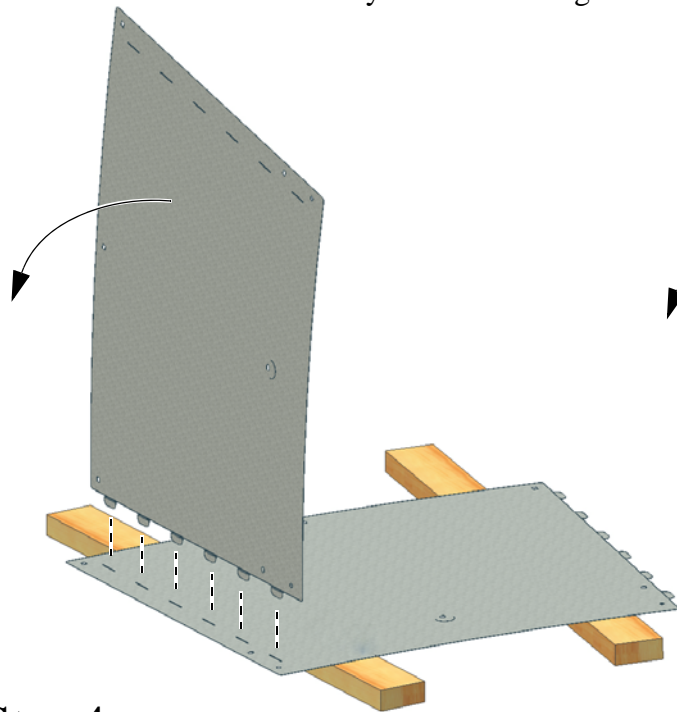


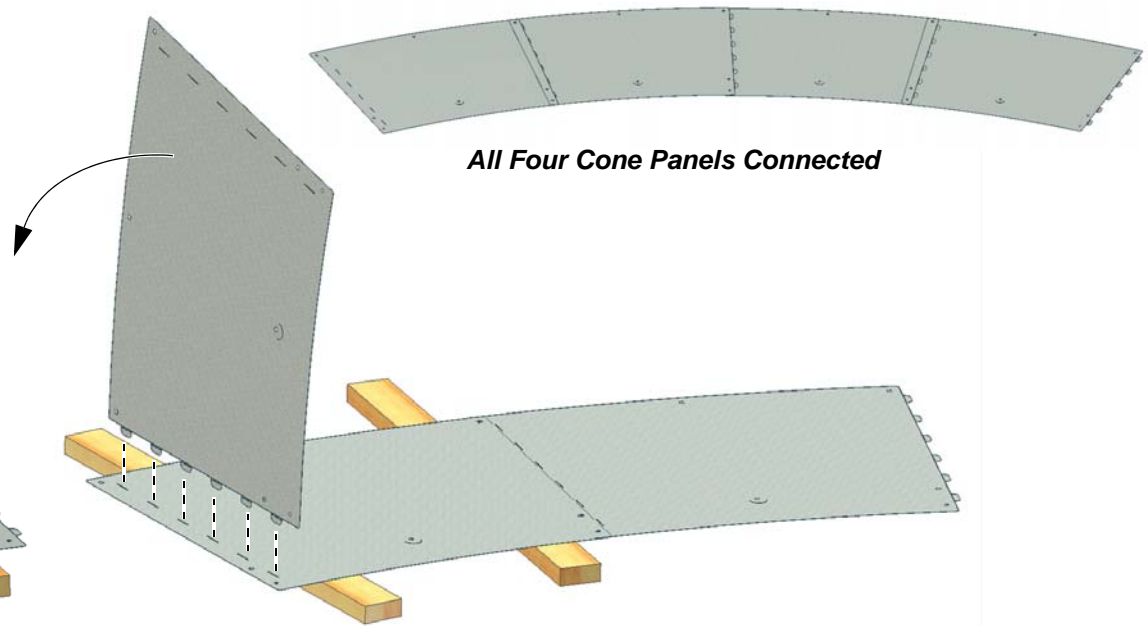
Figure 4. Assembling Cone Panels

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.

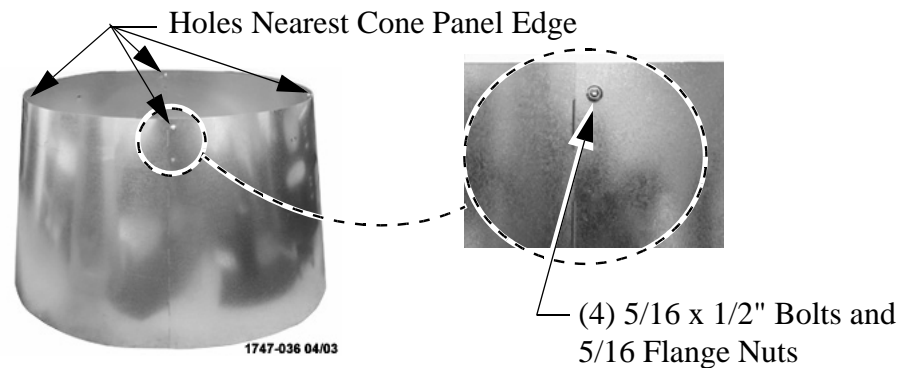
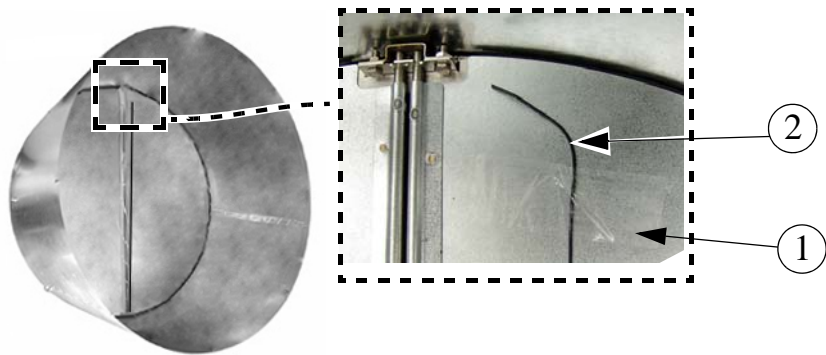


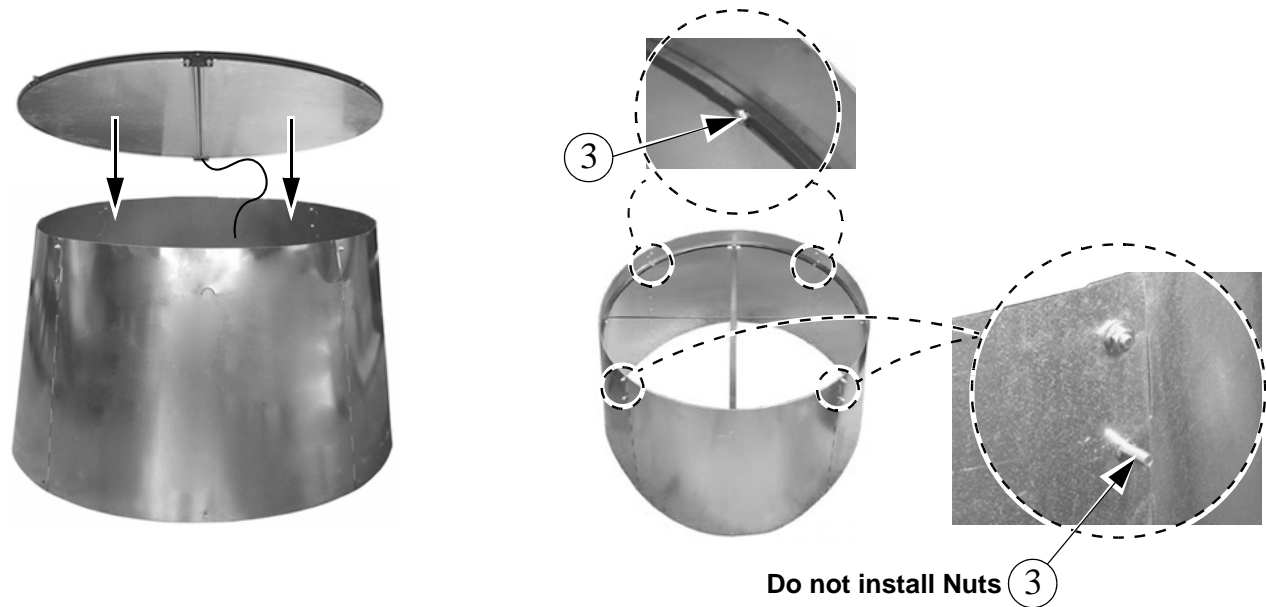
Figure 4. Assembling Cone Panels

Installing Door Assembly

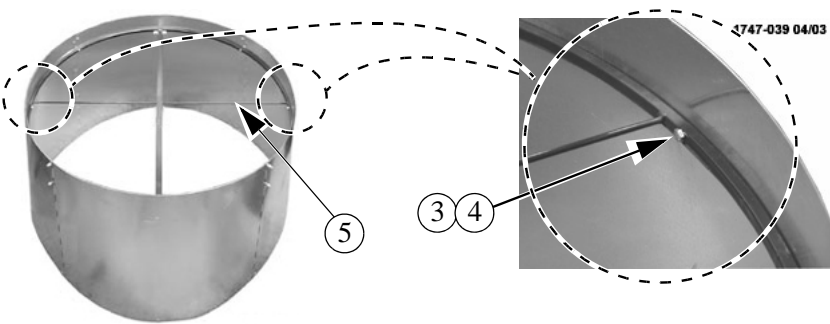
Step 1: Remove Tape (**Item 1**) holding the Nylon Cable (**Item 2**) to the Door.



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.

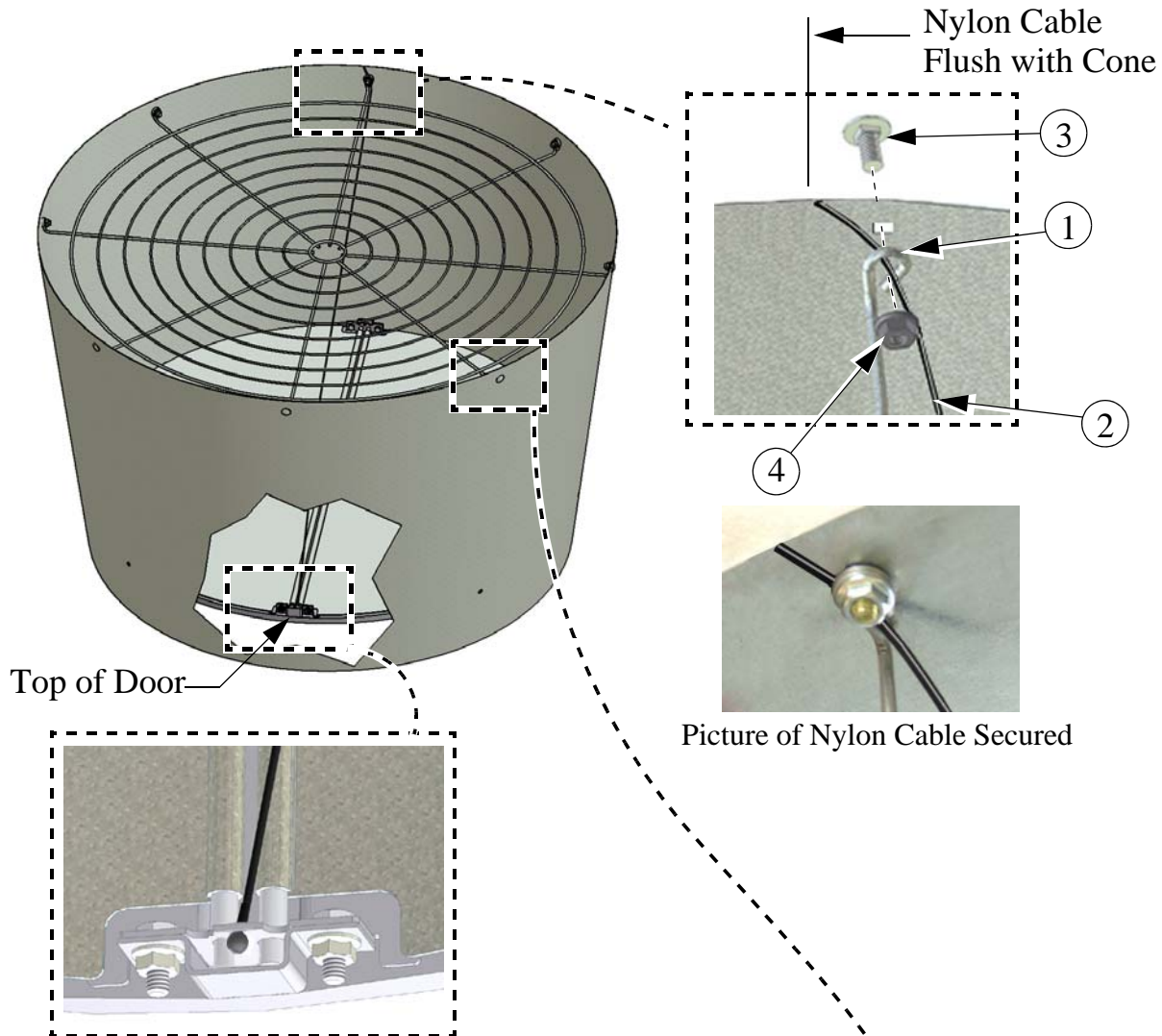


| Item | Description |
|------|--------------------|
| 1 | Tape |
| 2 | Nylon Cable |
| 3 | 5/16 x 1-1/4" Bolt |
| 4 | 5/16 Flange Nut |
| 5 | Door Center Brace |

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 |

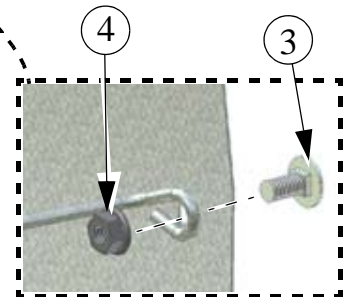
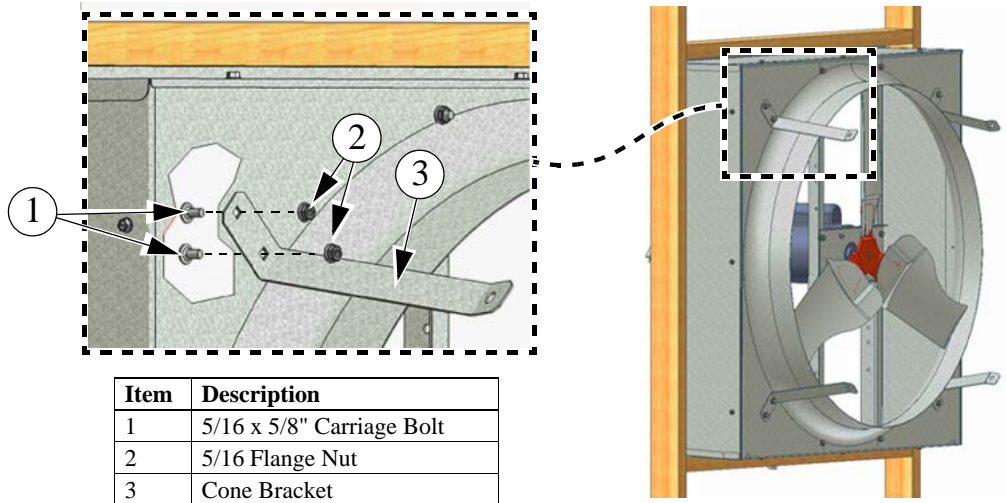


Figure 6. Attaching Door Stop Cable

Attaching the Cone

Attaching Cone Brackets to Shroud

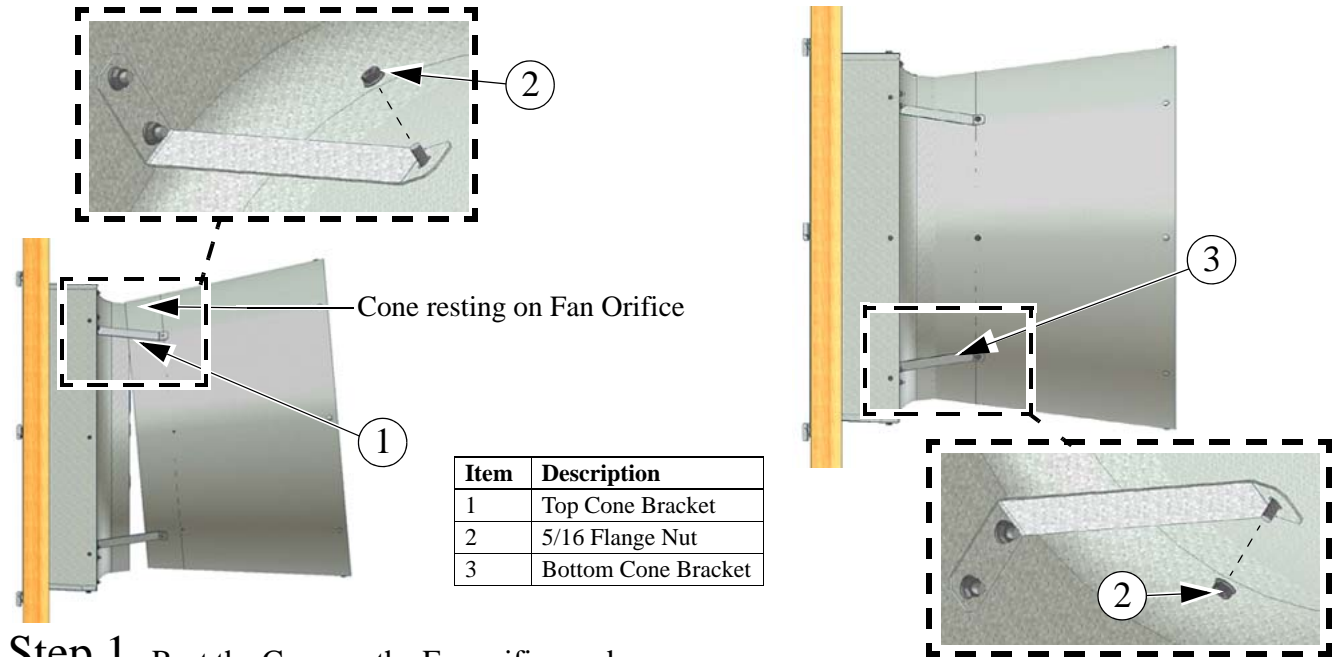
Use 5/16 x 5/8" Carriage Bolts (**Item 1, Figure 7**) and 5/16 Flange Nuts (**Item 2**) to attach the four Cone Brackets (**Item 3**) to the Fan Shroud as shown below.



| Item | Description |
|------|---------------------------|
| 1 | 5/16 x 5/8" Carriage Bolt |
| 2 | 5/16 Flange Nut |
| 3 | Cone Bracket |

Figure 7. Attaching Cone Brackets to Shroud

Attaching the Cone



| Item | Description |
|------|---------------------|
| 1 | Top Cone Bracket |
| 2 | 5/16 Flange Nut |
| 3 | Bottom Cone Bracket |

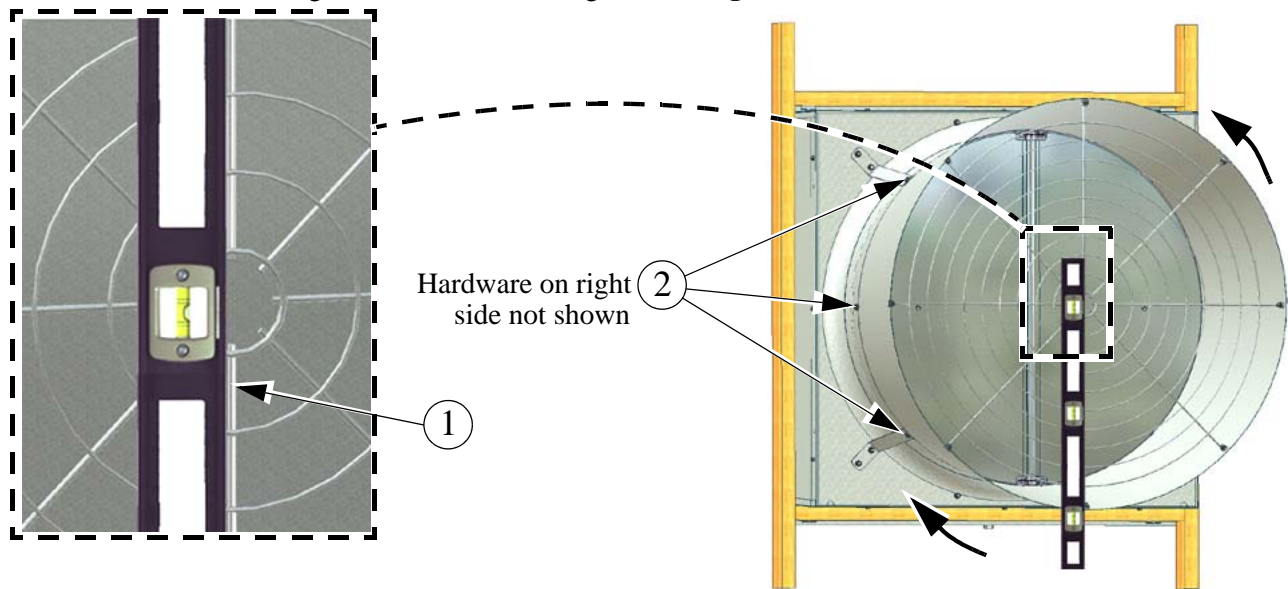
Step 1 Rest the Cone on the Fan orifice and attach it to the top two Cone Brackets (**Item 1**) (Hand tighten only). The Cone will fit snug. Working around the Fan Orifice from inside the Fan, in a circular motion, slide the Cone over the Fan Orifice.

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

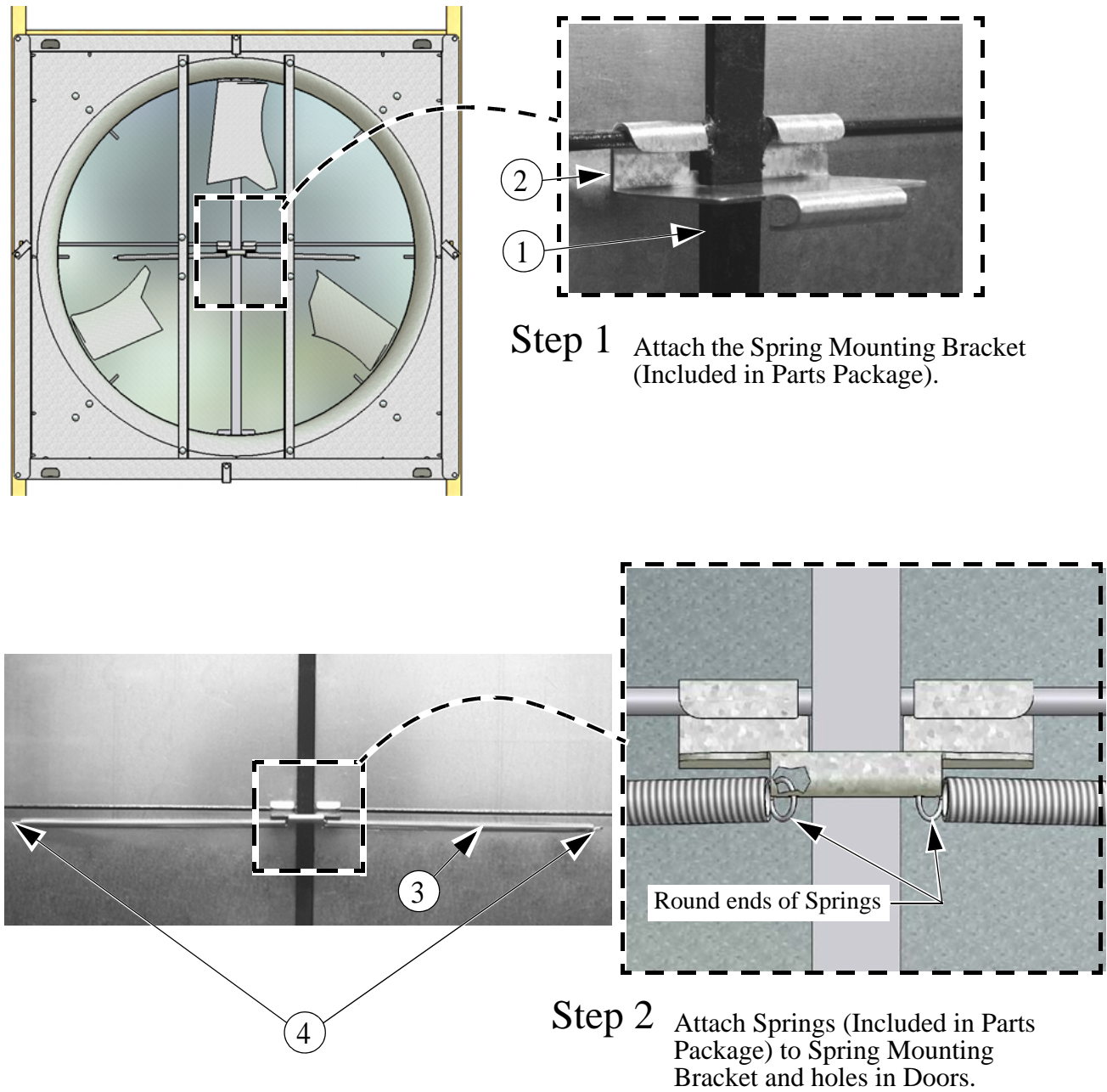
Step 2 Tighten down the four 5/16 Flange Nuts holding the Cone to the Cone Brackets and also the ones holding the Cone Panels together. (Hardware on the right of Fan is not Shown)

| 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**).

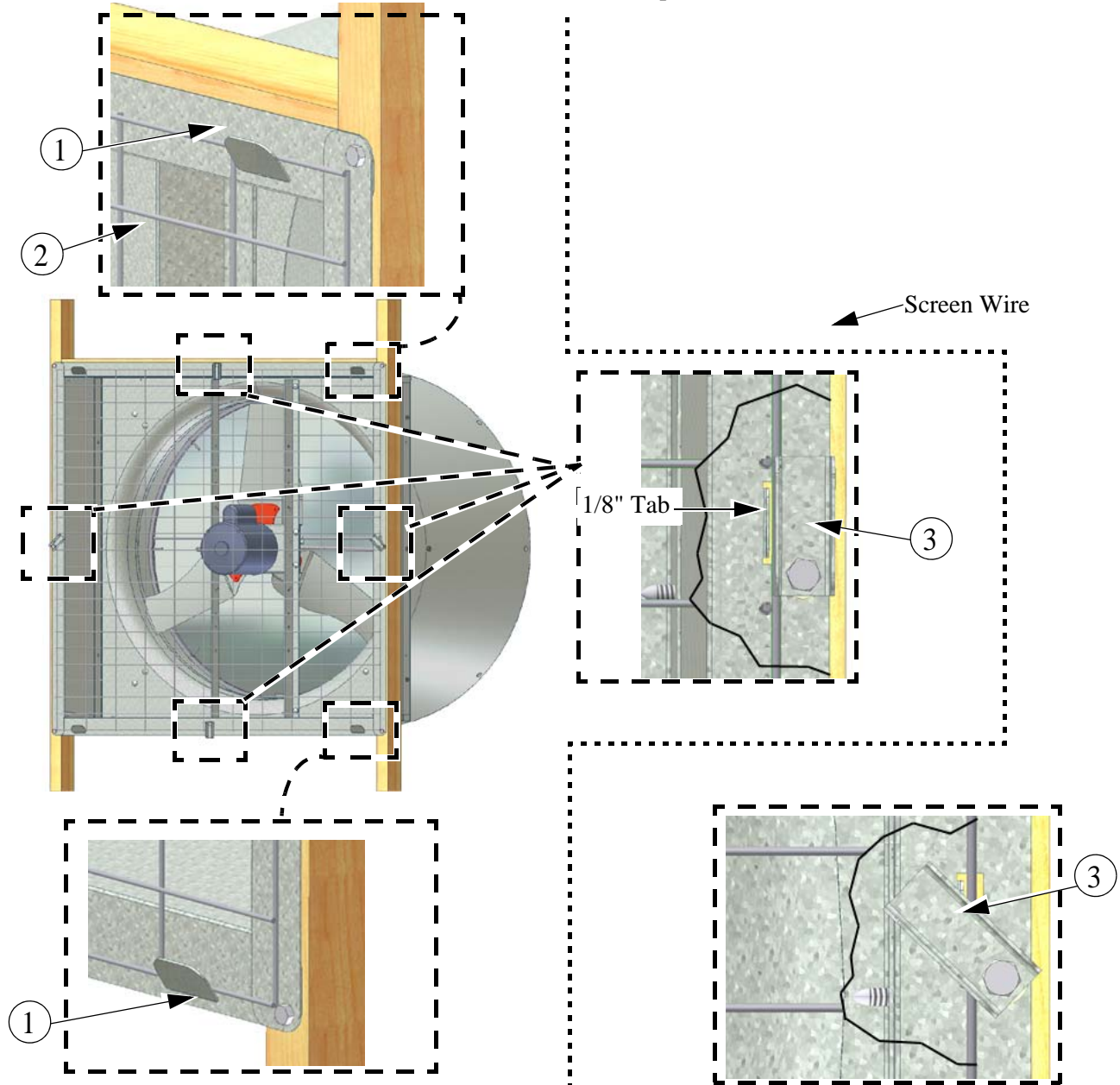


| Item | Description |
|------|-------------------------|
| 1 | Door Center Brace |
| 2 | Spring Mounting Bracket |
| 3 | Door Spring |
| 4 | 3/32" Hole in Door |

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.

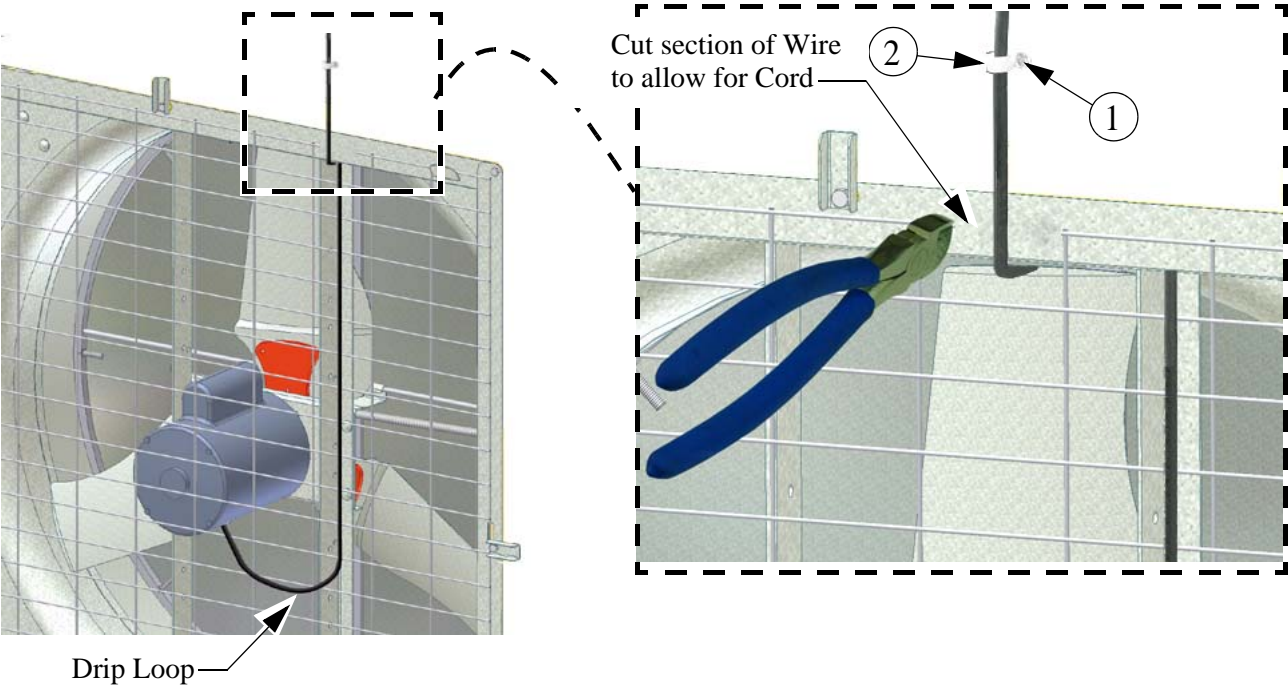
Step 2 Rotate the Four Screen Retainers to capture the Screen.

| Item | Description |
|------|-----------------|
| 1 | Screen Clip |
| 2 | Screen |
| 3 | Screen Retainer |

Figure 11. Installing the Screen

Motor Wiring

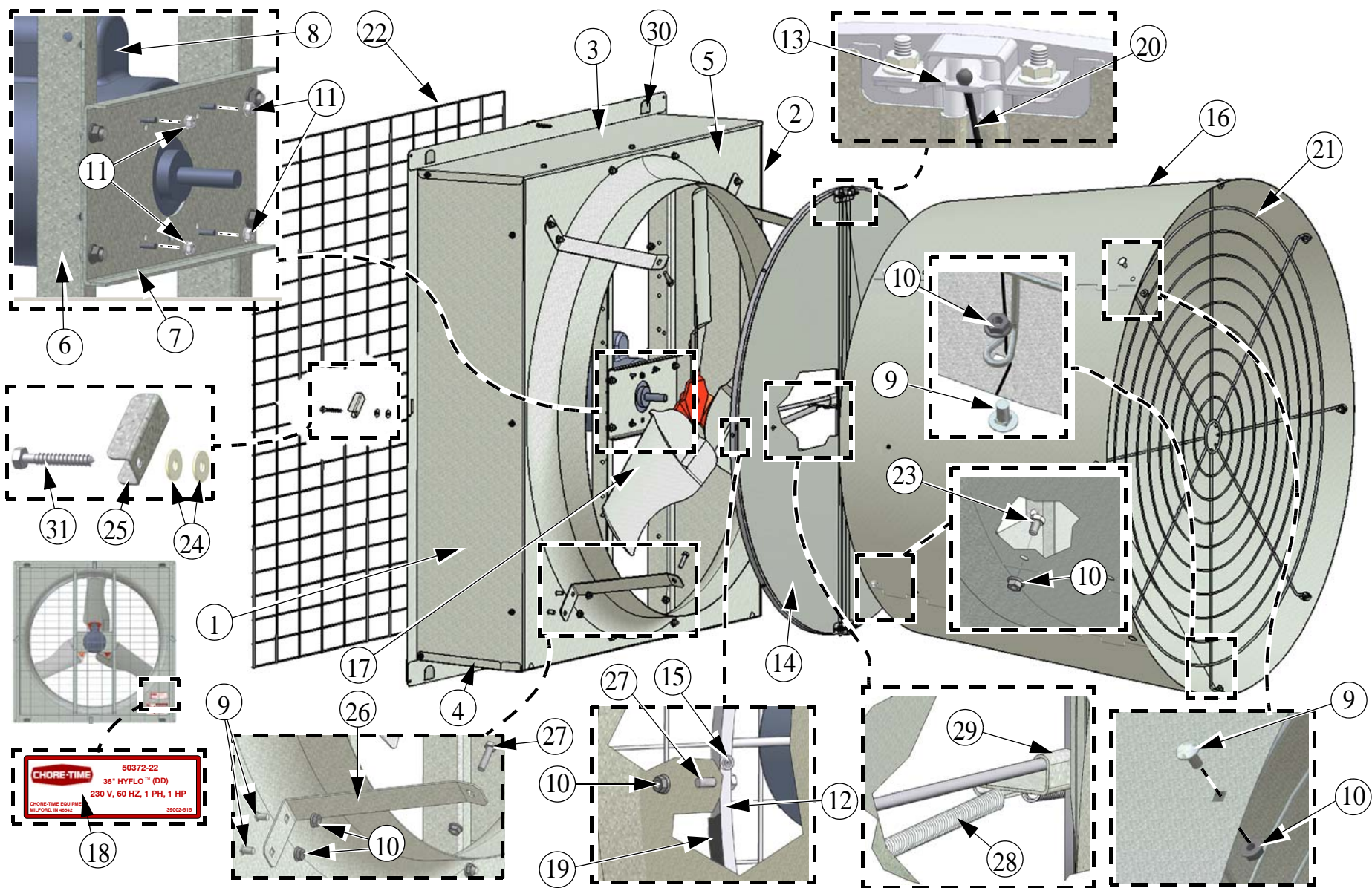
1. Check that the electrical power being supplied to the Fan matches the electrical Specifications on the Fan and Motor Decals.
2. Remove the Motor Access Cover.
3. Install an electrical disconnect within reach of each Fan installed.
4. Connect the cord to the motor according to the wiring diagram on 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, .5,1PH,60Hz, 208-230V | 28936 | 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

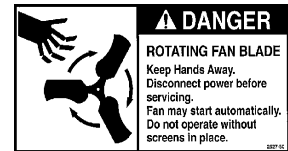
Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices. Keep safety signs in good condition. Replace missing or damaged safety signs.

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.



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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."
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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.



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Built to last.**

Revisions to this Manual

| Page No. | Description of Change |
|-----------------|---|
| Various | Various changes to Clarify and improve. |

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

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