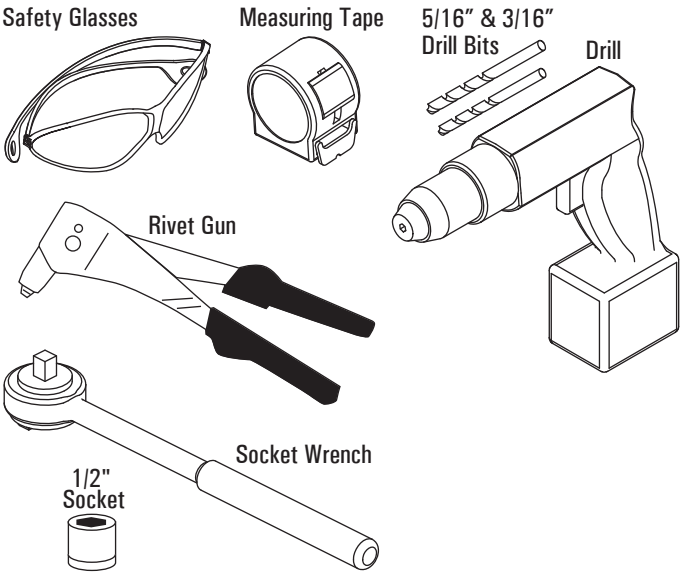
J&D Manufacturing

TITAN II

WARRANTY

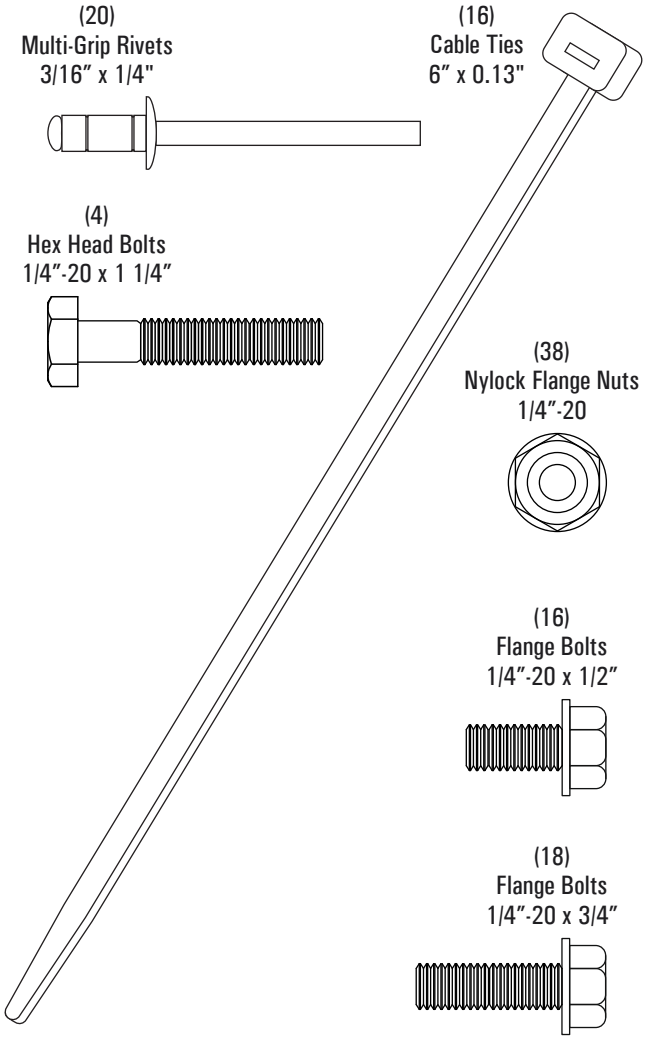
J&D Mfg. warrants all products are free from defects in materials and workmanship under normal use for the period of one year from date of purchase and our warranty does not cover normal or regular wear and tear. J&D Mfg can repair or replace at our option, any product or part of the product that is found to be defective. Our warranty applies to materials only and does not include return freight, delivery, loss or damage to personal property, cost of removal or installation, any incidental or consequential damages or labor. This warranty does not apply to products which are misused, abused, altered, improperly installed or subject to negligence. All warranties must be approved through our warranty department. The original purchaser must present a copy of the invoice for the defective product. One year is our standard warranty unless specified on our literature or in the installation instructions/user manuals.

RECOMMENDED TOOLS FOR INSTALLATION AND ASSEMBLY (NOT PROVIDED)



INSTALLATION HARDWARE IS NOT PROVIDED

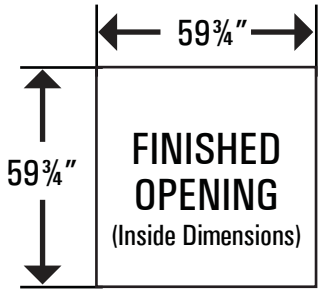
INCLUDED ASSEMBLY HARDWARE - TO SCALE



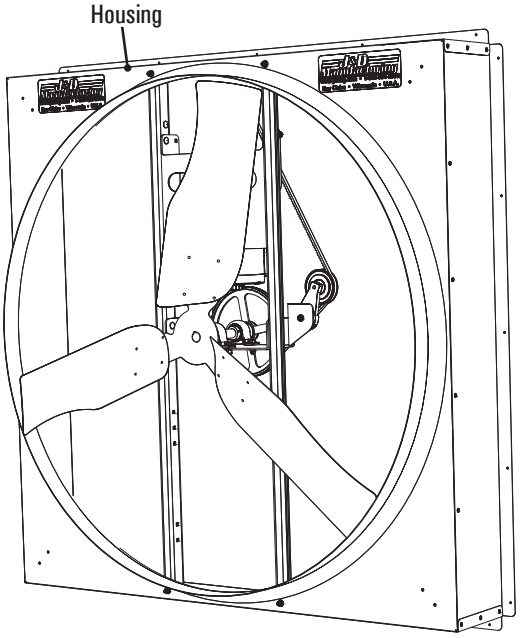
INSTALLATION

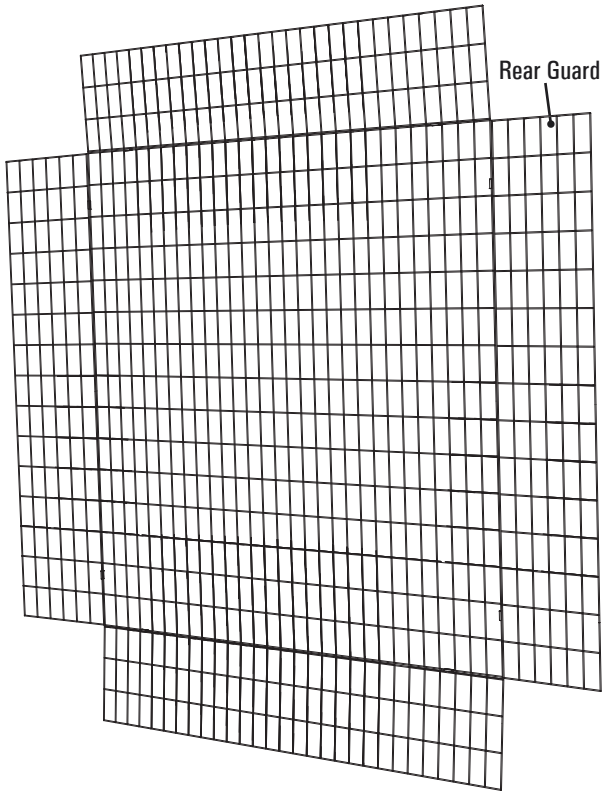
Please read over all instructions carefully before you begin. If you have any questions please call your local dealer, or contact J&D Manufacturing at 1-800-998-2398.

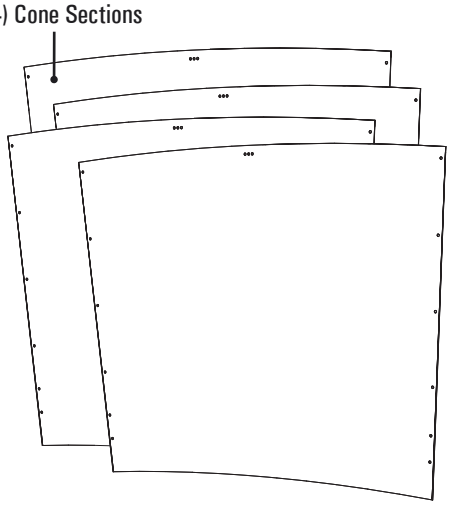
Construct structurally sound 59¾" square finished opening.

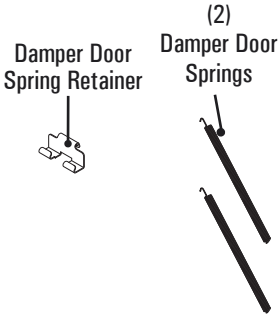


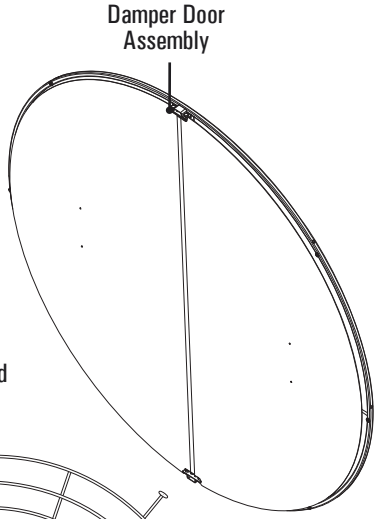
PARTS LEGEND

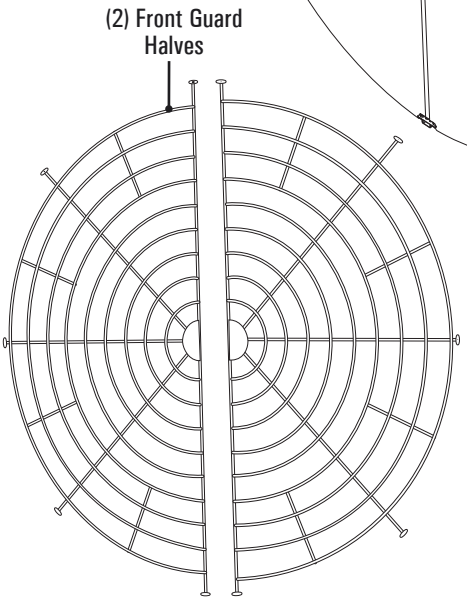


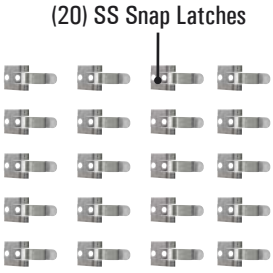


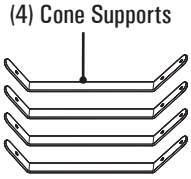


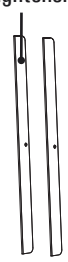










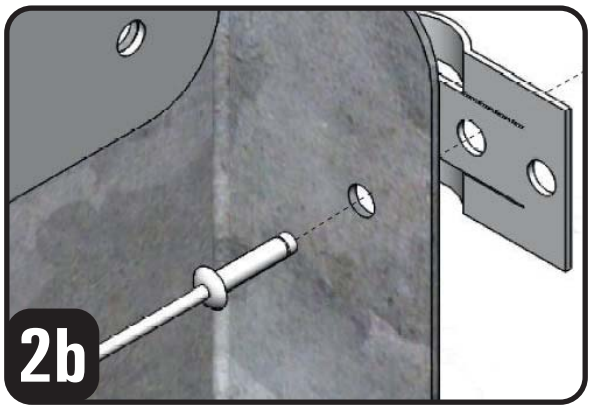


All 4 mounting flanges have 5 pre-drilled holes for mounting snap latches.

1

Position snap latch with tongue of clip pointed toward inside of housing as shown in **Step 2a**. Attach snap latch using 3/16" multi-grip rivet inserted and secured from the back of the flange as shown in **Step 2b**. Repeat **Steps 2a and 2b** for each of the (20) snap latches.

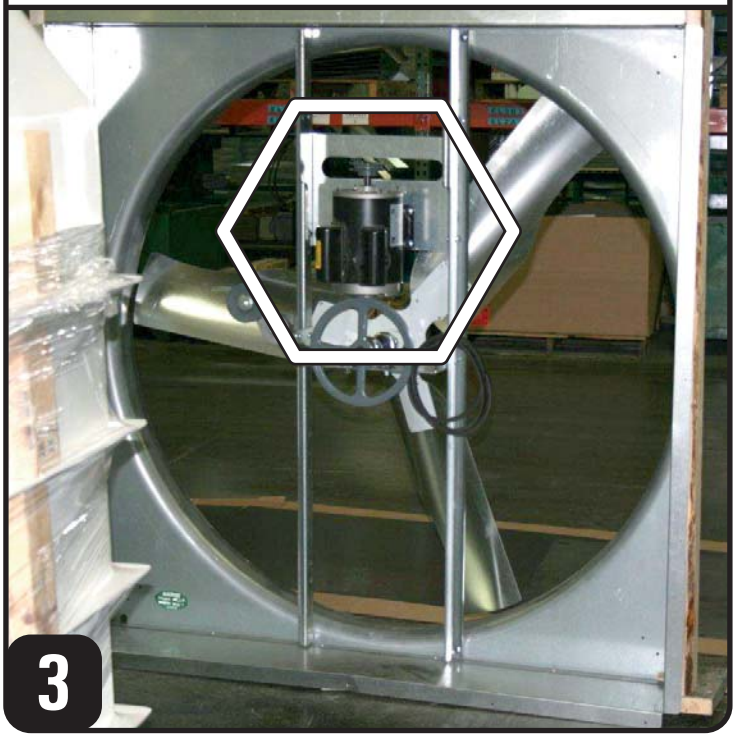
2a



2b

2

Install the Titan II with the motor located in the center ABOVE the fan shaft as shown in the image.

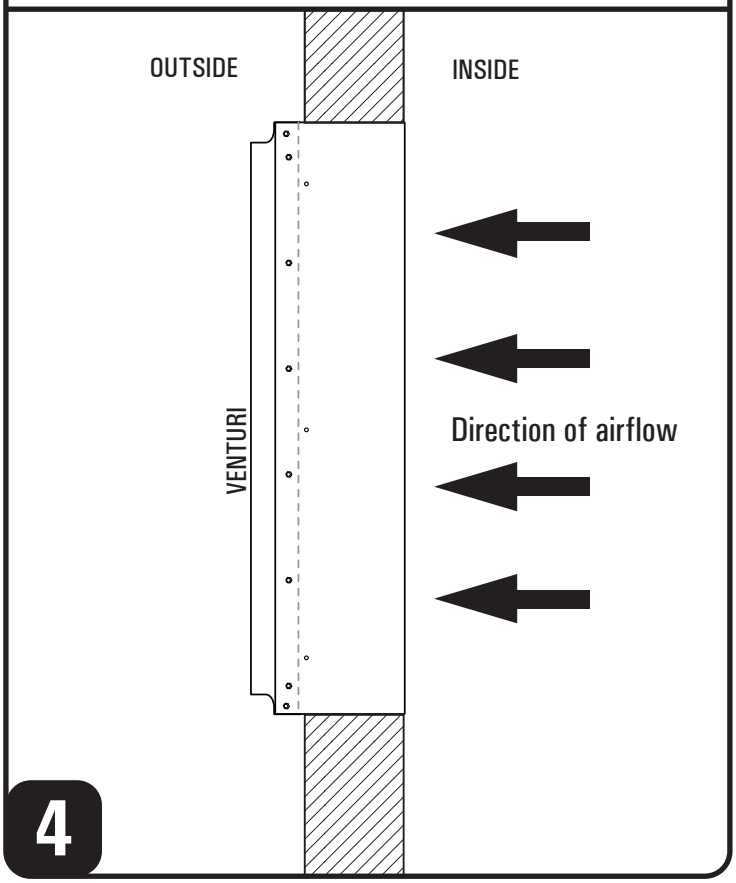


3

Insert fan into your framed opening with the venturi facing the outside of your structure as shown in the illustration.

Use a level to check that the unit housing is vertical.

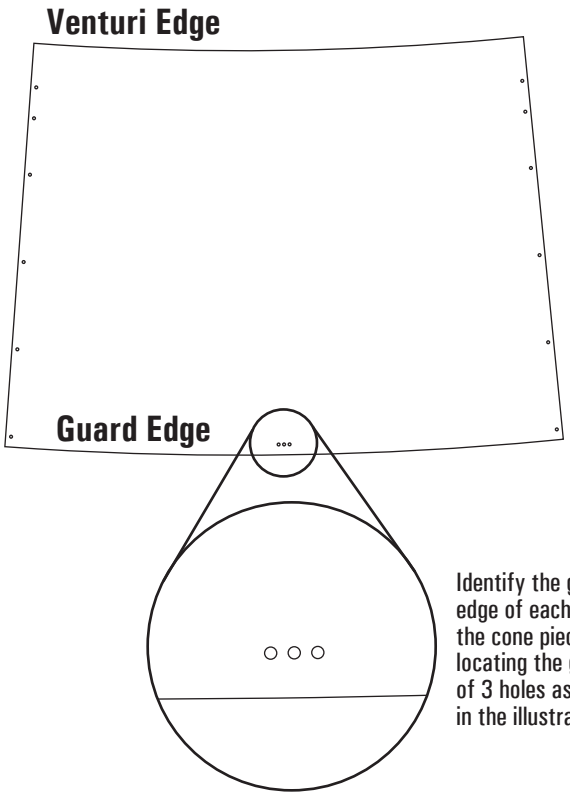
Secure all 4 flanges to structure using suitable washers and fasteners for your structure (not supplied).



4

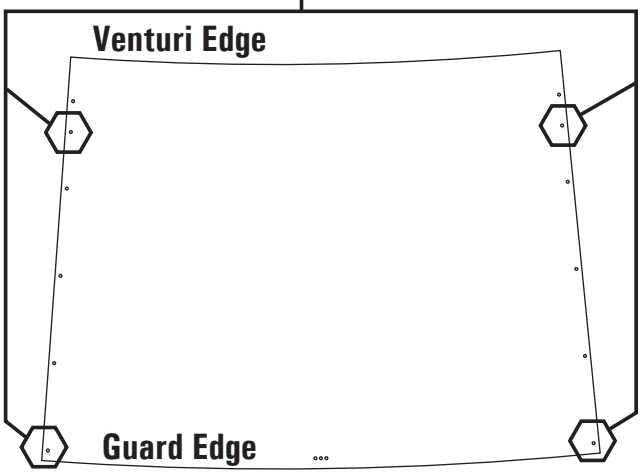
Gather the (4) cone pieces and using the below illustrations identify and mark the following on each cone piece:

- Venturi edge and guard edge
- Cone to venture mounting holes
- Guard mounting holes



Identify the guard edge of each of the cone pieces by locating the group of 3 holes as shown in the illustration.

Note: 2nd hole from venturi edge of cone panel and the hole closest to the guard edge are left vacant until Step 10

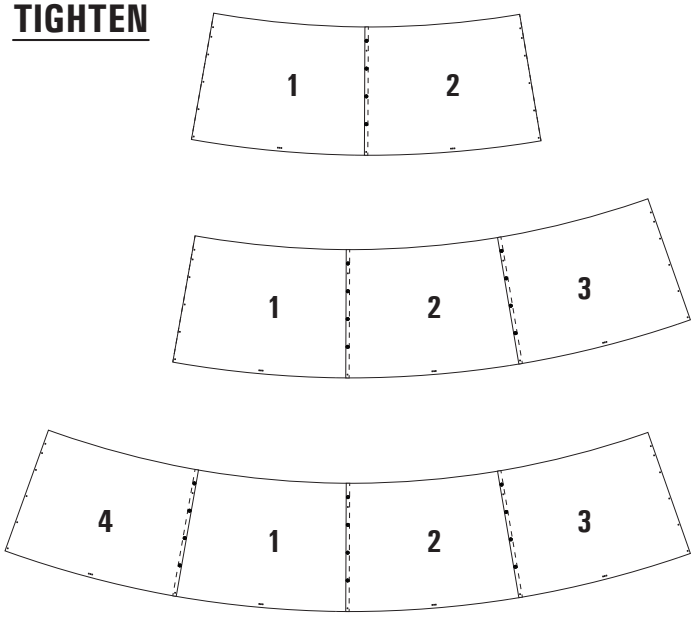


5

Assemble the cone using (12) 1/2" Flange Bolts and (12) 1/4" Nylock Flange Nuts.

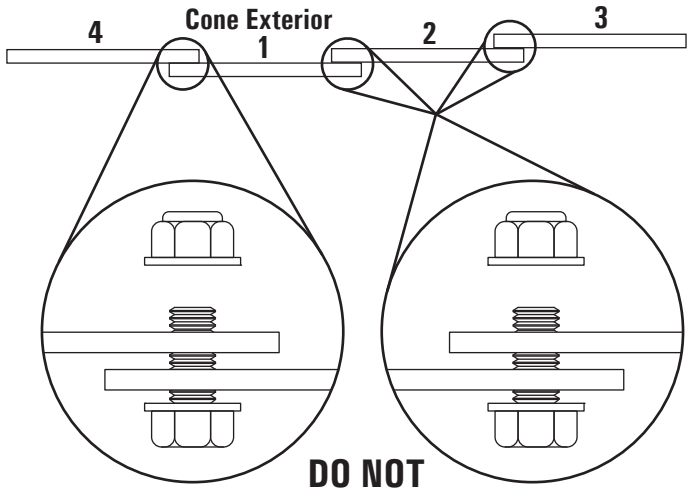
- All bolts should be assembled with nuts facing to the exterior of the cone when fully assembled.
- **Do NOT tighten bolts.** Leave bolts and nuts loose to allow for movement during additional assembly.
- In the illustrations below pay particular attention to the order of assembly of the cone sections to ensure proper overlap for repelling rain and to encourage drainage. (For additional assistance review images in **Step 7**)

DO NOT TIGHTEN



Correct Assembly

Bolts should be assembled so nuts face the exterior of the cone



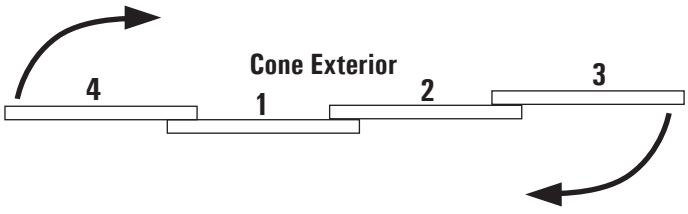
DO NOT TIGHTEN

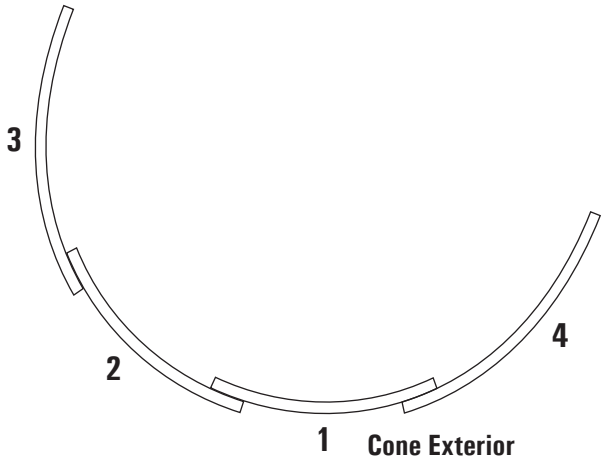
6

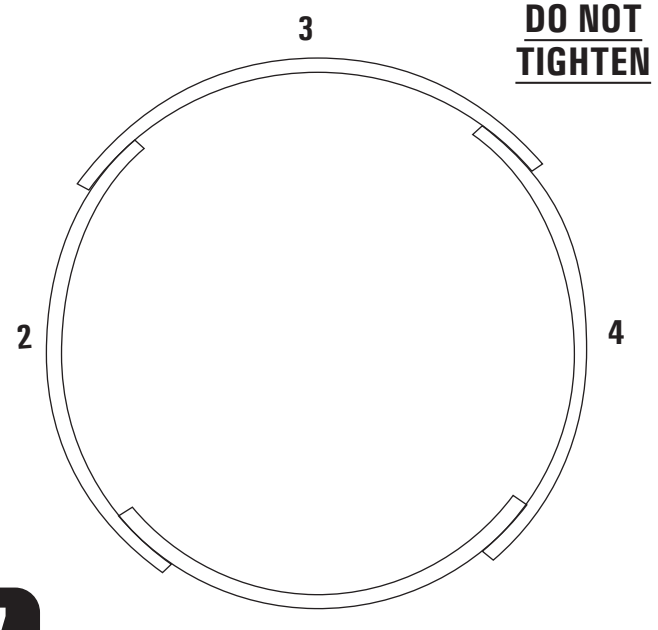
Flip assembled cone panels so the cone exterior with protruding bolts is face down as shown.

Flex the cone assembly until you are able to overlap panel 3 over panel 4, align holes and secure with (4) 1/2" Flange Bolts and (4) 1/4" Nylock Flange Nuts.

- All bolts should be assembled with nuts facing to the exterior of the cone.
- **Do NOT tighten bolts.** Leave bolts and nuts loose to allow for movement during additional assembly.

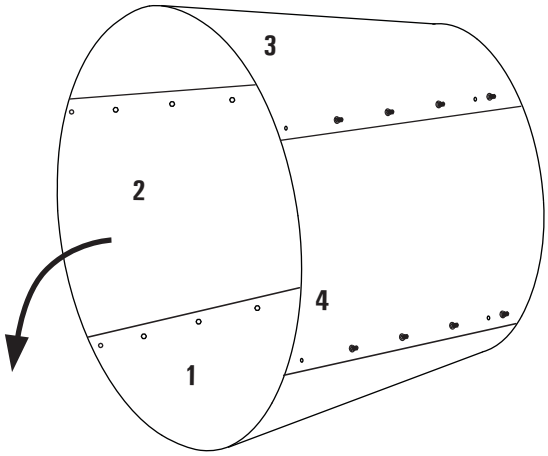


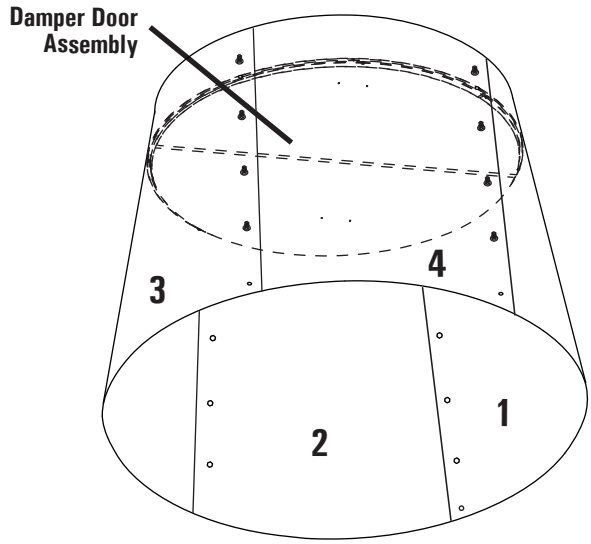


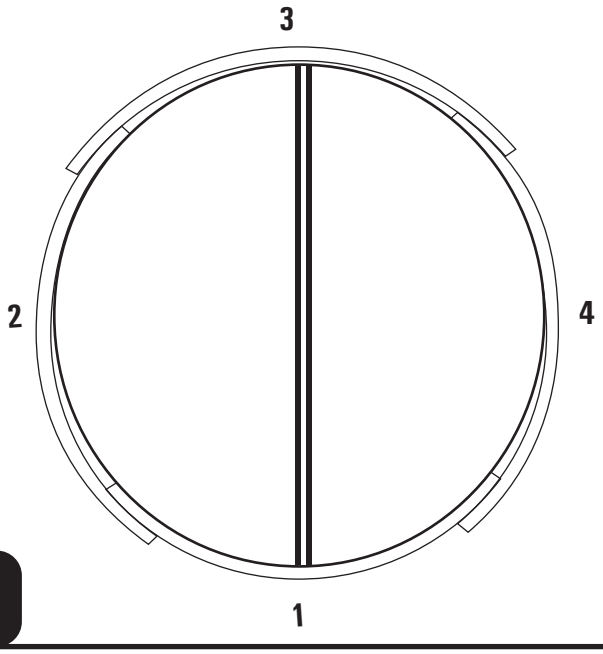


7

Set the cone upright as shown with the guard edge on the floor. From the venturi edge of the cone and flexing the cone as needed insert the damper door assembly. Rotate damper door assembly so the center bars are aligned with the top and bottom of the cone and to align the unused screw holes in the cone.

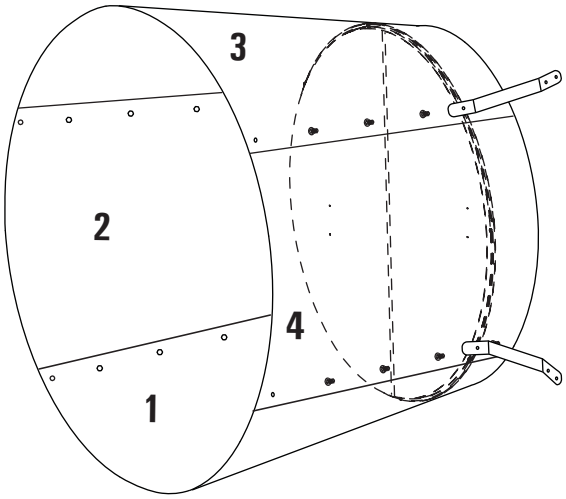






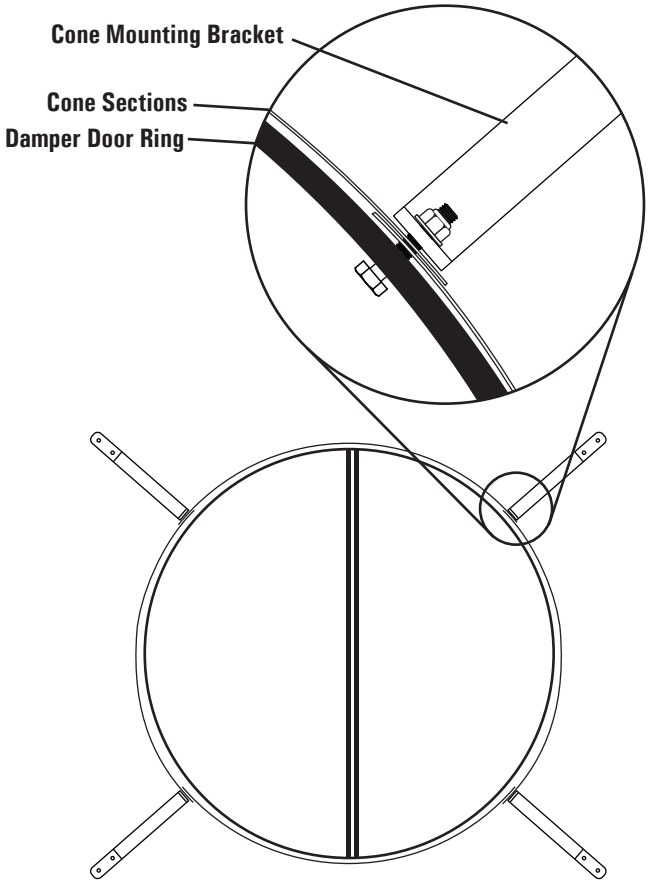
8

Secure damper door assembly and cone supports to the cone using (4) 1/4" x 1-1/4" Hex Head Bolts and (4) 1/4" Nylock Flange Nuts. All bolts should be assembled with nuts facing to the exterior of the cone.



End View

DO NOT TIGHTEN

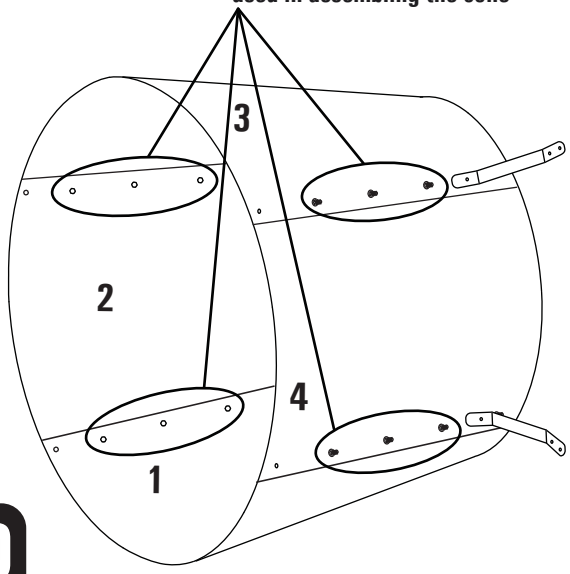


9

Before proceeding to the next step tighten the first 3 bolts used in assembling the cone from **Steps 6 and 7**.

DO NOT tighten the bracket / damper bolts or the bolts behind the brackets at this time.

Tighten ONLY the first 3 bolts used in assembling the cone



10

NOTE: This step requires the use of multiple people.

With panel 3 of the cone in the top position, slide the cone over the fan venturi.

Assemble but do not tighten to the fan housing (2) 1/4" x 3/4" Flange Bolts and (2) 1/4" Nylock Flange Nuts per cone mounting bracket. Repeat for all 4 cone mounting brackets.

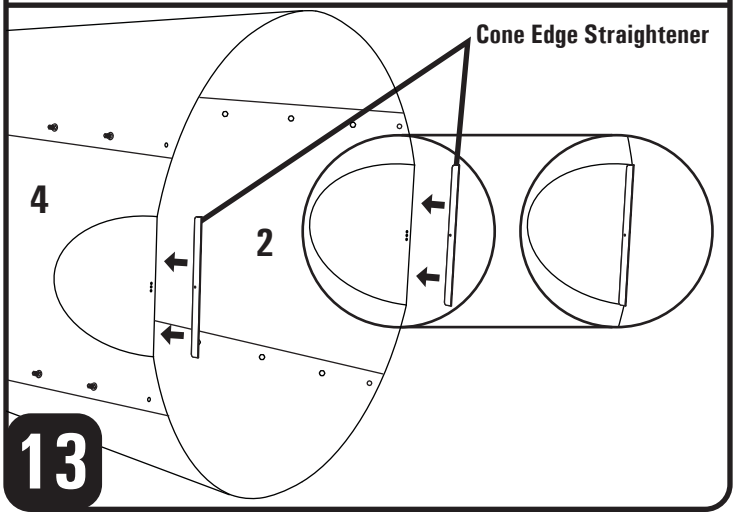
11

Once ALL cone mounting brackets have been assembled to the housing tighten all (12) of the bracket / damper bolts assembled in **Step 9 and 11** then tighten the (4) bolts in the cone closest to the fan venturi.

12 NOW TIGHTEN

Flex edge of cone panel 2, slide Cone Edge Straightener onto the edge of cone. Align the hole in the Cone Edge Straightener with the center of the 3 holes in the cone edge.

Repeat for edge of cone panel 4.



13

Using (5) 1/4" x 3/4" Flange Bolts and (5) 1/4" Nylock Flange Nuts per cone guard half, assemble guard to cone. DO NOT tighten at this time.

Repeat for other guard half.

Once entire guard is mounted to the cone tighten all hardware and secure the 2 halves of the guard together where indicated using (6) cable ties.

14

Install the Damper Door Spring Retainer by hanging it on the crossbar of the damper door ring directly in front of the fan shaft as shown in the image below.

Attach one end of each of the a Damper Door Springs to the Damper Door Spring Retainer.

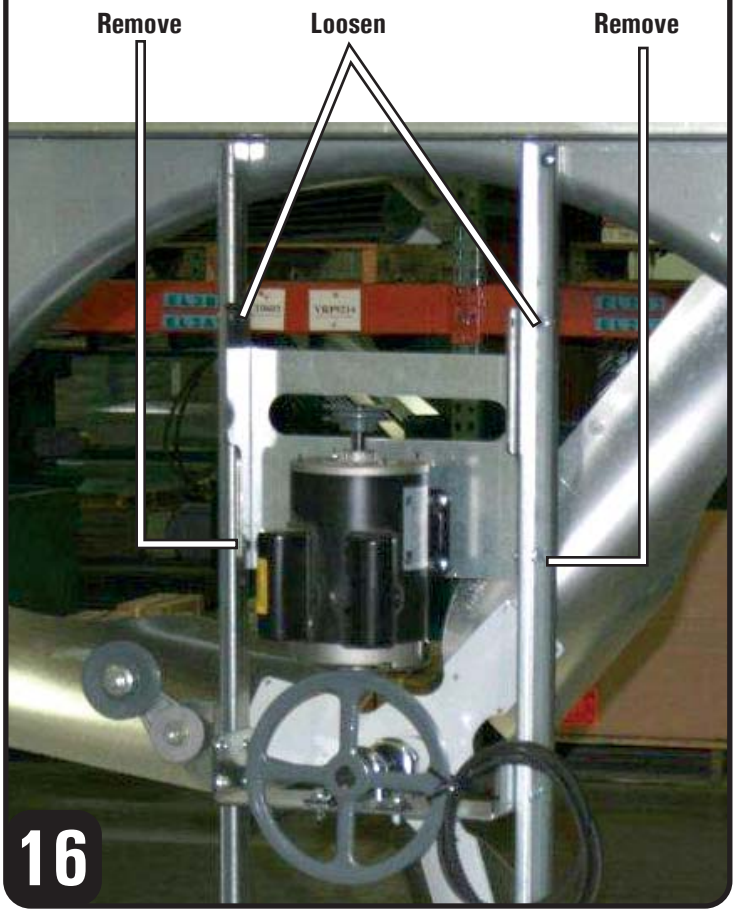
Attach the other end of the Damper Door Springs to the adjacent damper door by inserting the hooked end into the closest spring hole (with age and use the spring will lose some of its tension at that time move spring end to the more distant hole). Repeat for second spring.

15

If installing a 2HP Single Phase unit, proceed to Step 18.

Remove bottom (2) bolts holding motor mount plate.

Loosen but do not remove top (2) bolts holding motor mount plate.



16

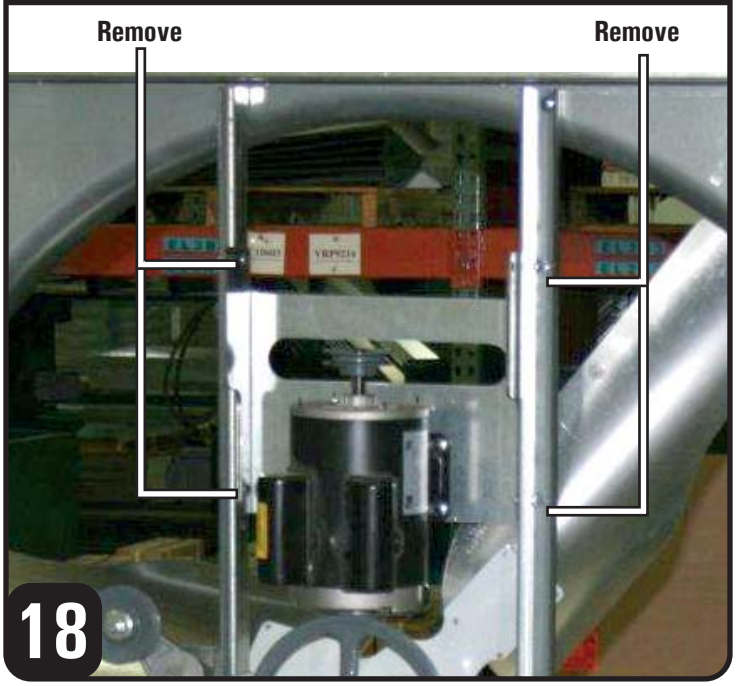
Swing motor mount plate with motor 90° into the position shown below.

Bolts removed in **Step 16** are now installed in the available mounting holes above the loosened bolts, tighten all 4 bolts.

17

Proceed to Step 20.

Remove the (4) bolts holding the motor mount plate to the frame.



18

Rotate motor mount plate with motor 90° into the position shown below.

The (4) bolts removed in **Step 17** are now installed in the available mounting holes at the shaft end of the motor plate and the frame as shown.

19

Install belt through motor mount plate and around motor sheave, prop shaft sheave, and belt tensioner as shown below.

Manually spin prop, check that prop spins with out resistance and the belt travels smoothly.

20

DISCONNECT POWER
BEFORE INSTALLING OR SERVICING.

ALL ELECTRICAL WORK SHOULD BE COMPLETED BY QUALIFIED PERSONNEL AND MEET NATIONAL (NEC), REGIONAL AND LOCAL ELECTRIC CODES.

Connecting power to the unit.

- **Install manual disconnect switch inside building adjacent to fan.**
- **Route wire to motor with drip loop and secure. (Drip loop will drain accumulated moisture away from the motor.)**
- **Configure internal wires to match supply voltage and wire according to motor nameplate. Test to verify correct rotation.**
- **Shut off manual disconnect for remainder of install. Only permit power to unit after guards are fully installed to prevent injury.**

21

Unfold mesh guard and attach to the motor side of the housing with the clips installed in **Step 2**.

Further secure guard corners with (2) cable ties per corner.

22