AIRBLASTER - 3 Louver & 4 Louver

3 Louver Uni-Directional

4 Louver Bi-Directional

WARRANTY

J&D Mfg. warrants this products is free from defects in materials and workmanship under normal use for the period of three years from date of purchase. Our warranty does not cover ordinary 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.

RECOMMENDED TOOLS FOR INSTALLATION AND ASSEMBLY (NOT PROVIDED)

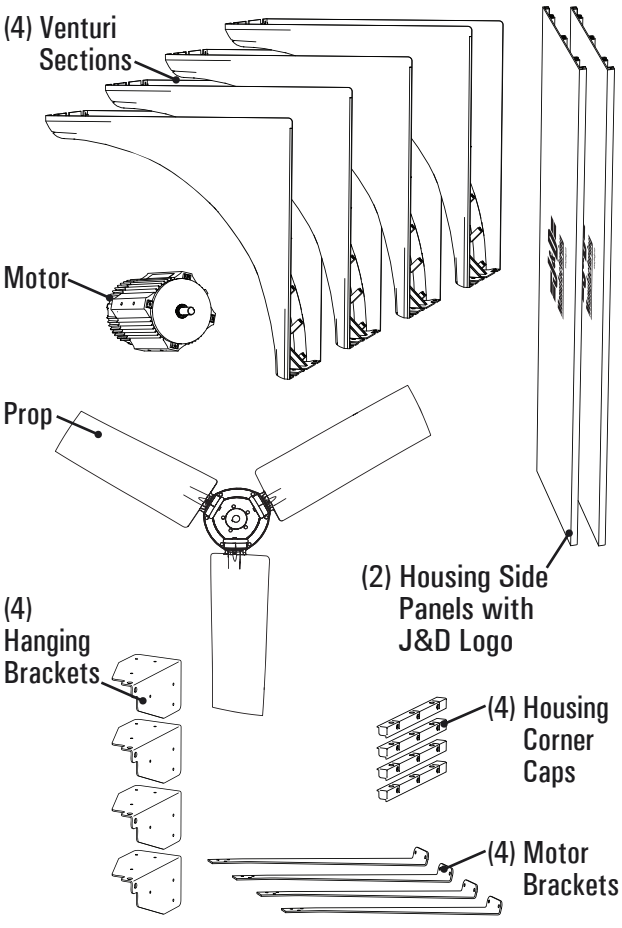
- Safety Glasses
- Socket Wrench
- 1/2" Socket
- 1/2" Wrench
- Impact Driver
- 10 ft-lb Torque Wrench
- 23 ft-lbs Torque Wrench

INSTALLATION

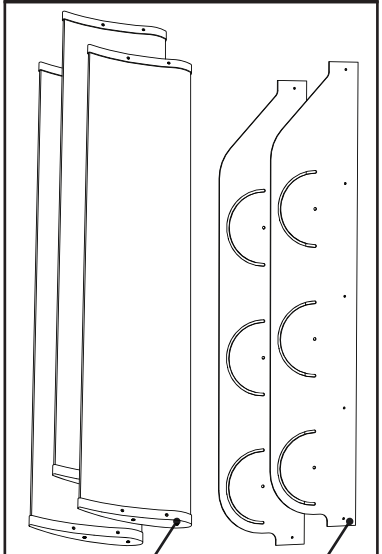
Please read over ALL instructions carefully before you begin.

If you have any questions please call your local dealer, or contact J&D Manufacturing at 1-800-998-2398.

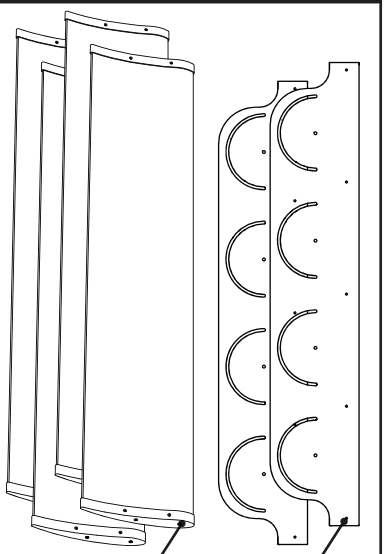
PARTS LEGEND

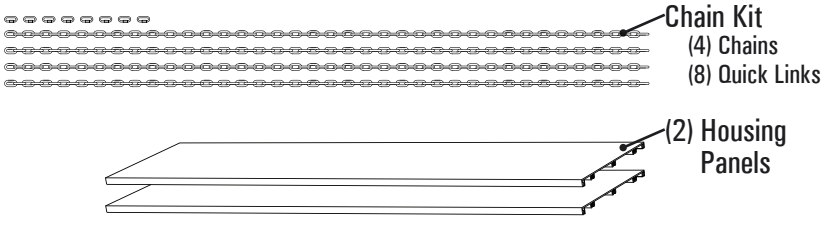


3 Louver Models



4 Louver Models





Bag 1 (Tools)

- #3 Phillips Bit

Bag 2 (Housing)

Bag 2 (Part 1)
- (28) 5/16"-18 x 7/8" Bolts

Bag 2 (Part 2)
- (28) 5/16"-18 Serrated Flange Nuts

Bag 2 (Part 3)
- (58) #14-10 x 2" Screws (Use **#3 Phillips Bit from Bag 1**)

Bag 3 (Motor)

- (8) 3/8"-16 x 3/4" Bolts
- (8) 3/8" Washers

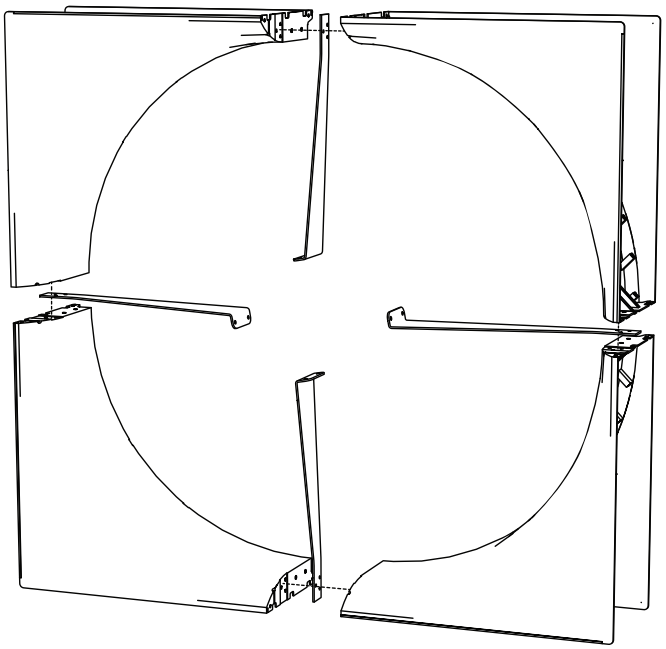
Bag 4 (Motor Key & Louver Hardware)

- (1) 1/4" x 2" Machine Key
- (16) 5/16"-18 x 7/8" SS Bolts *(not all will be used for 3 louver models)*
- (16) 5/16" SS Washers *(not all will be used for 3 louver models)*

Venturi Assembly:

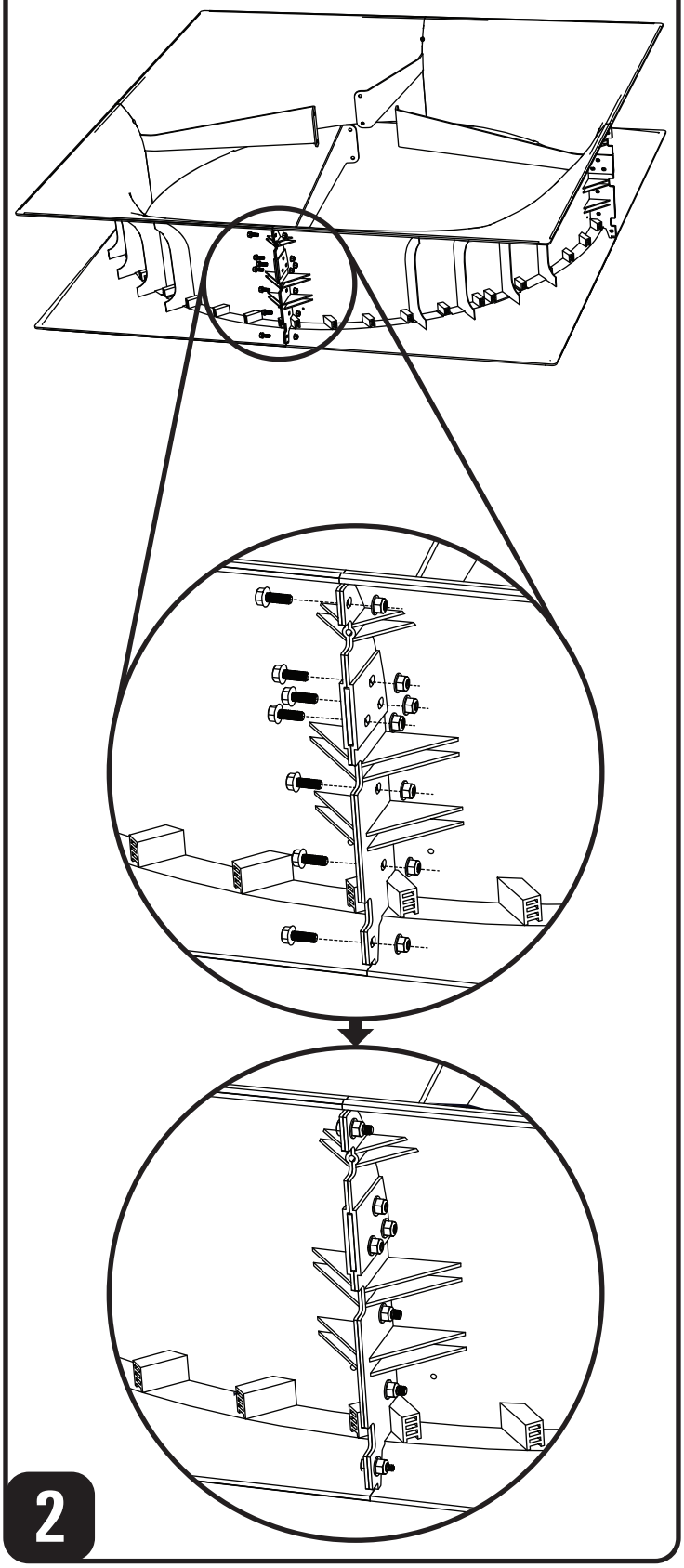
- Lay out the (4) venturi sections flat on the floor with the curve side of the sections facing up.
- Assemble the motor mount brackets (flat side down) in-between each venturi section.

View from Above



1

- Using (28) 5/16"-18 x 7/8" **Bolts from Bag 2 (Part 1)** and (28) 5/16" -18 Serrated Flange **Nuts from Bag 2 (Part 2)**, assemble the motor mount brackets and venturi sections.
  - Tighten only the bolts and nuts securing venturi sections.
  - Holding the motor brackets up so the back side is flush to the outside of the venturi sections, tighten the bolts and nuts securing motor mounts and venturi sections.

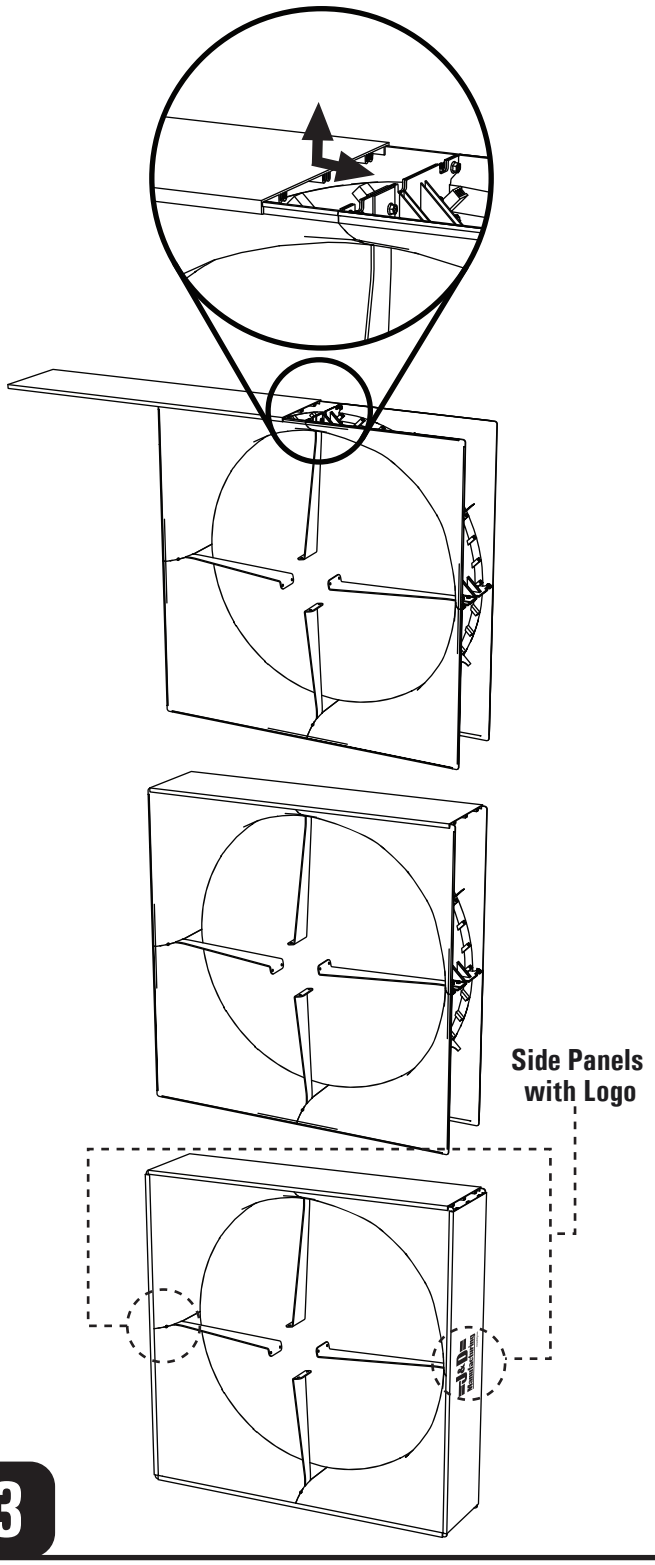


2

Housing Panel Assembly:

NOTE: Panels with J&D logo should be on opposite sides of the fan with logo orientated as shown below.

- Start on a corner. With the front and back venturi section channels inserted into the grooves of the housing side panel, slide the housing panel across the top until it hits the center seam of the assembled venturi sections.
- Lift up on the center of the housing panel and continue to slide housing panel until it is centered.
- Repeat until all four sides have housing panels installed.



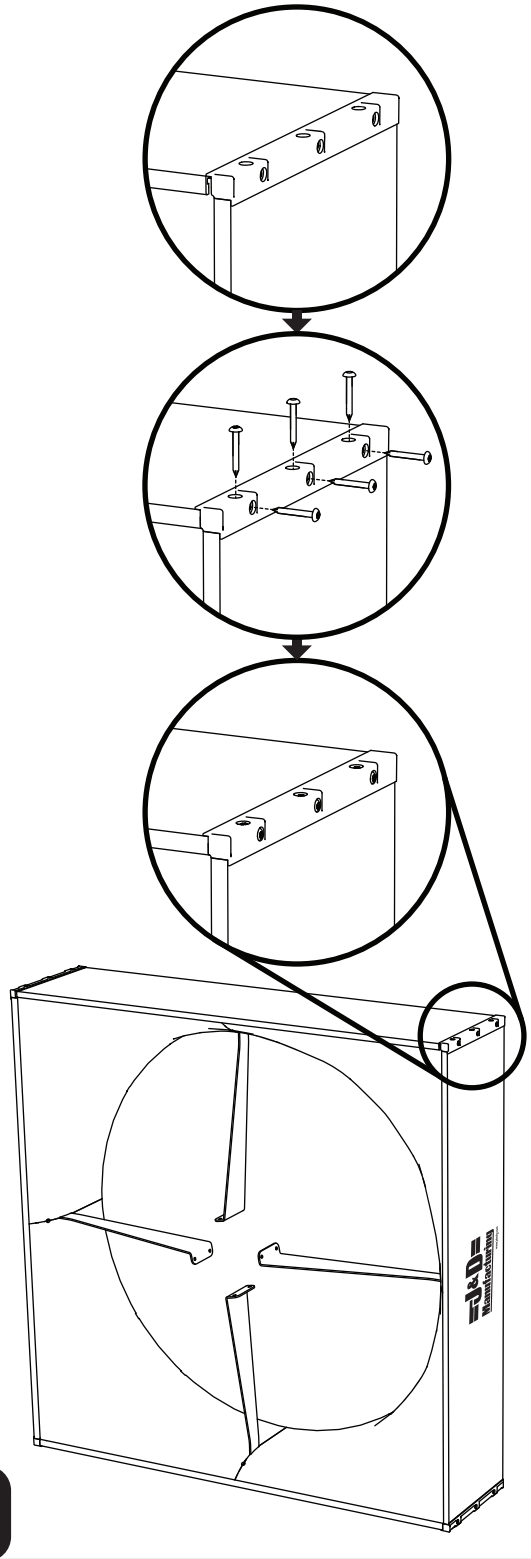
3

Installing Housing Corner Caps:

- Place a housing corner cap onto the housing between (2) housing side panels assembled in the previous step.
- Using the included **#3 Phillips Bit from Bag 1 (Tools)** and (6) #14-10 x 2" **Screws from Bag 2 (Part 3)**, screw the corner to the panels.

NOTE: The screws should draw the housing side panel up tight to the housing corner cap, but the housing side panel may need to be pushed/pulled as it is being screwed together.

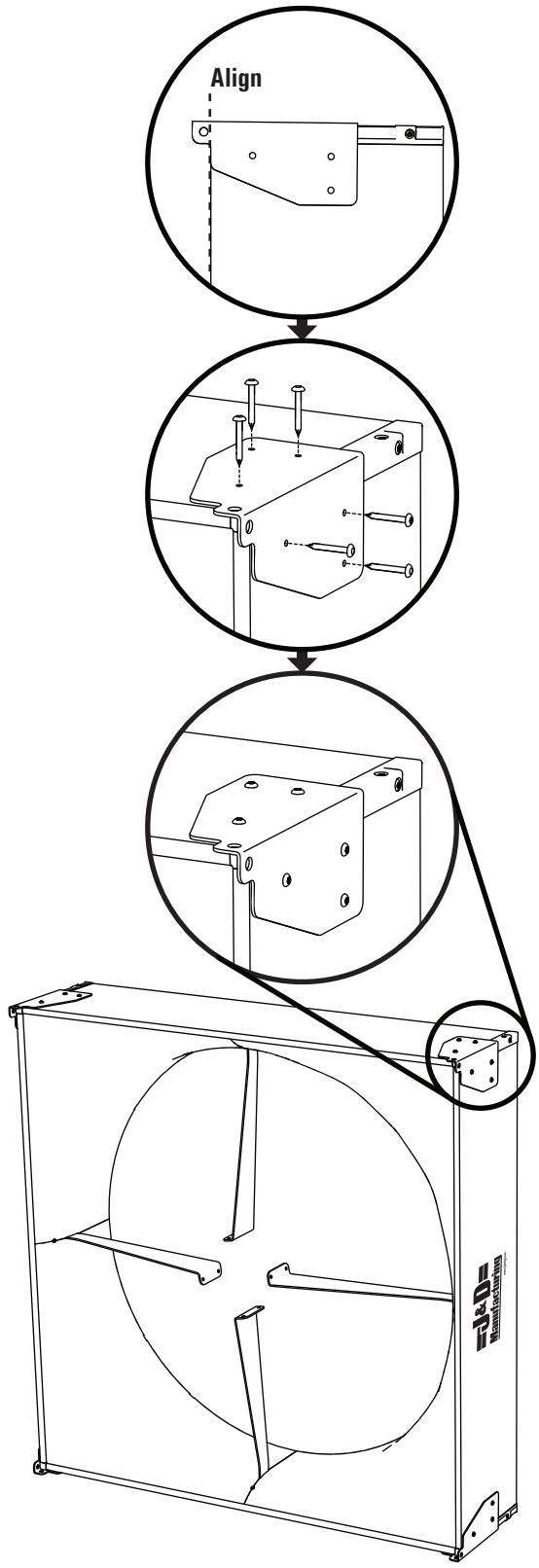
- Repeat until all four housing corner caps have been installed.



4

Installing Hanging Brackets:

- Place a hanging bracket over the just installed corner cap.
- Align narrow edge of hanging bracket with edge of fan housing as shown below.
- Using the included **#3 Phillips Bit from Bag 1 (Tools)** and (6) #14-10 x 2" **Screws from Bag 2 (Part 3)**, screw the corner to the panels.
- Repeat until all four hanging brackets have been installed.

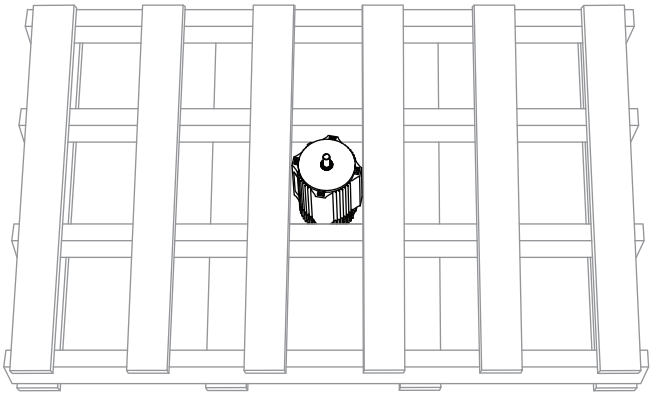


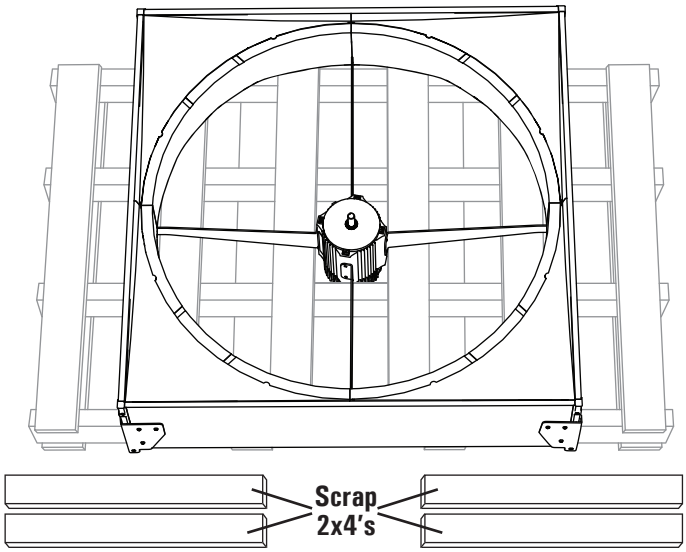
5

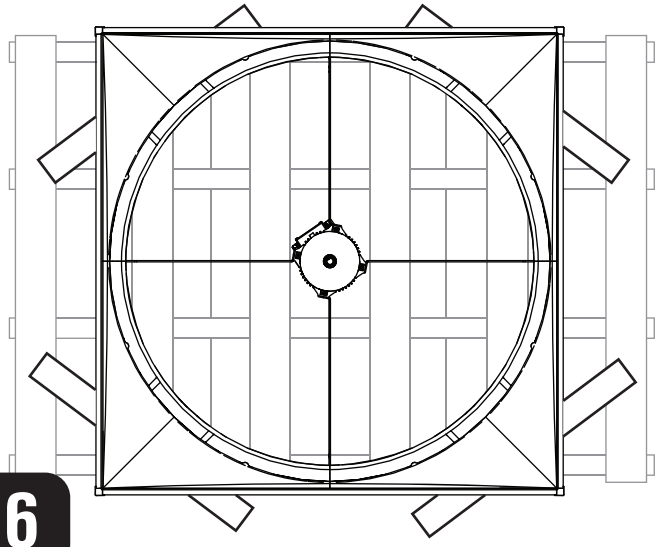
Motor Installation:

NOTE: 2 person lift is recommended for handling of 105lb motor

- Using the pallet the fan came on, place the motor in the center between the pallet slats with the shaft facing up.
- Place housing onto pallet curved side down.
- Use scrap wood 2x4's or other items to lay between the pallet and the fan housing to align motor brackets with motor and to support the housing.

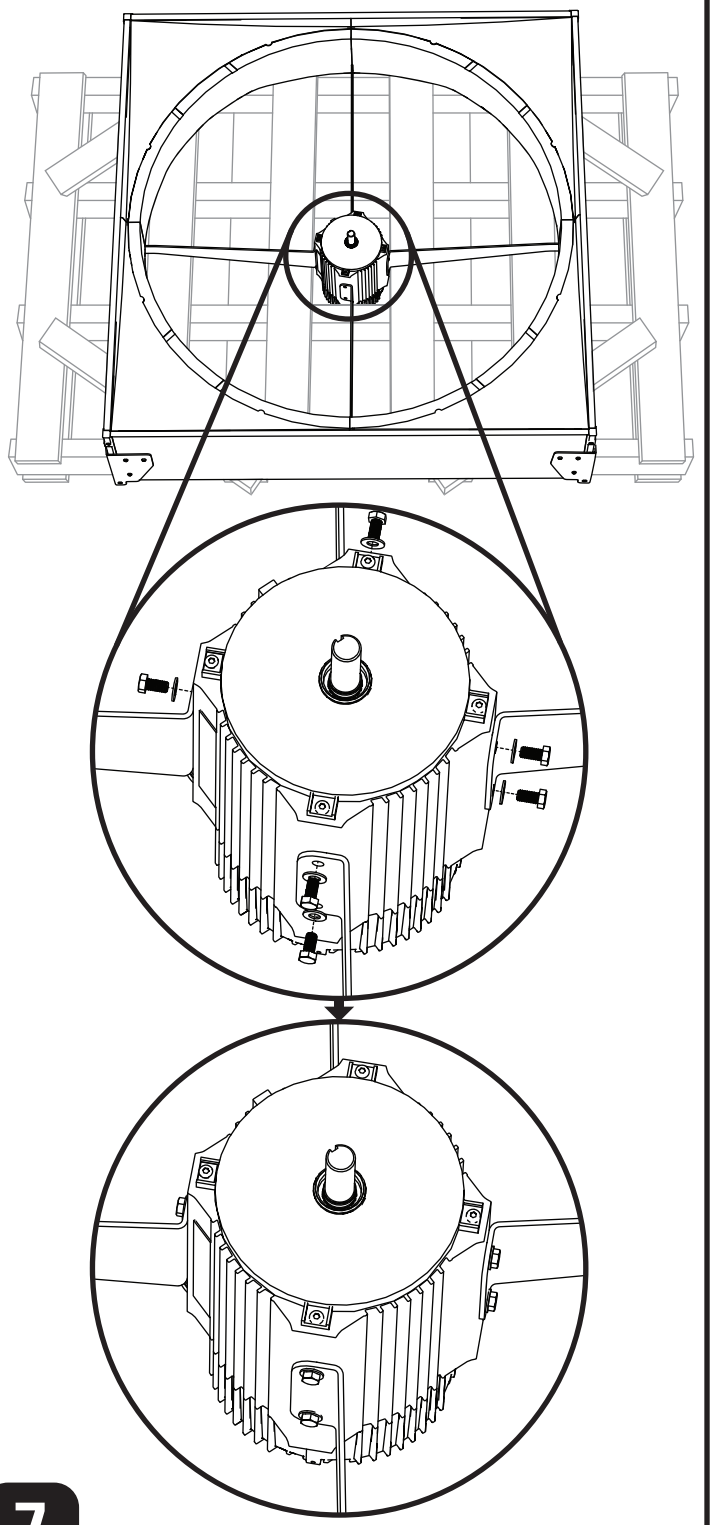






6

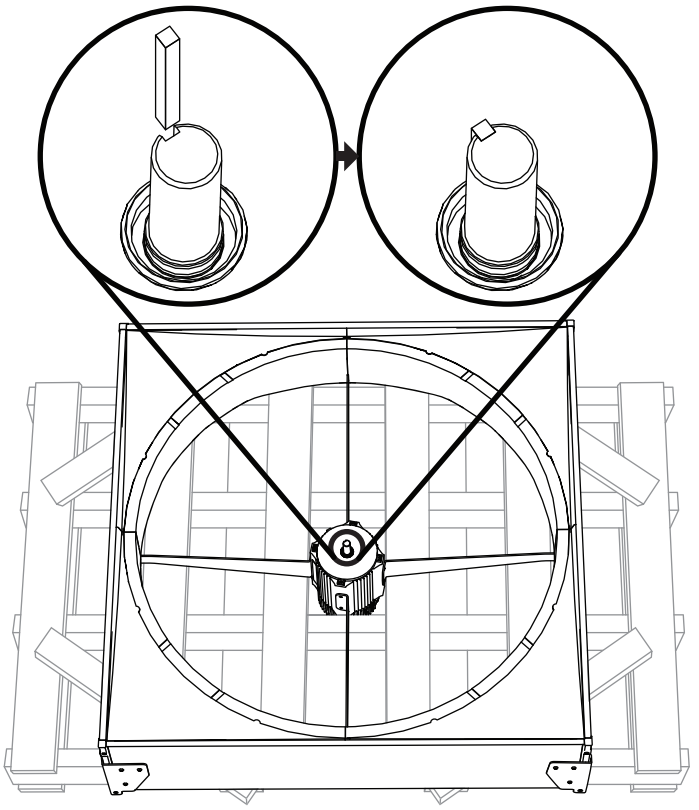
- Line up the holes of the motor mount brackets to the holes in the motor housing.
- Assemble the (8) 3/8"-16 x 3/4" **Bolts** and (8) 3/8" **Washers from Bag 3 (Motor)**
- Starting each bolt and washer assembly **by hand**, begin attaching motor to brackets - since motor has an aluminum housing **care must be taken to not cross-thread or strip-out the motor mounting threads**
- Once all motor mounting hardware has been hand started, torque the bolts to 23 ft-lbs using hand tools only

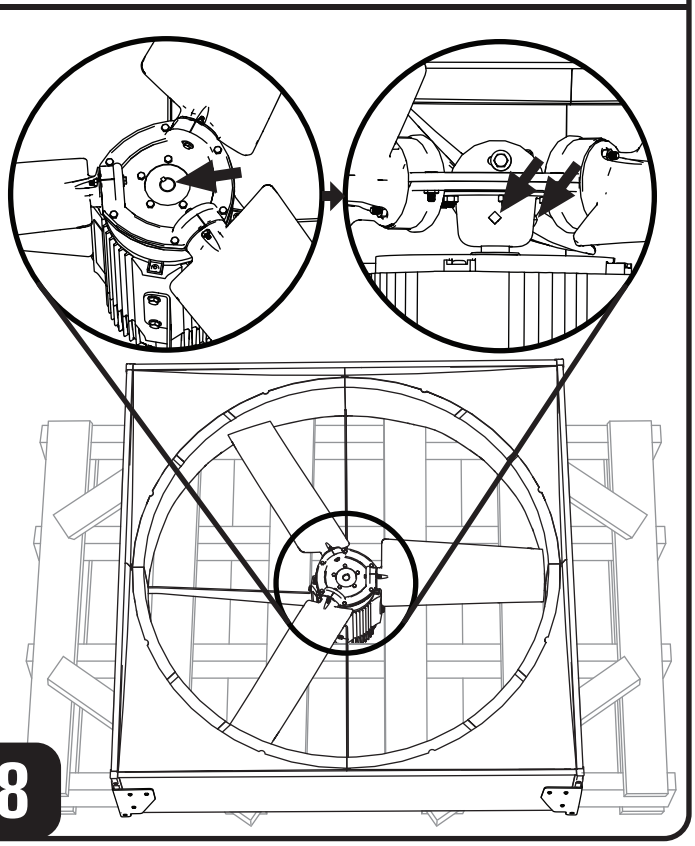


7

Prop Installation:

- Insert the 1/4" x 2" **Machine Key from Bag 4 (Motor Key & Louver Hardware)** into the keyway on the motor shaft
- Slide prop onto the keyed motor shaft until flush with end of motor shaft.
- Secure prop by tightening the (2) set screws (located on underside of prop) to 10 ft-lbs
- Rotate the blade to make sure there is no interference.





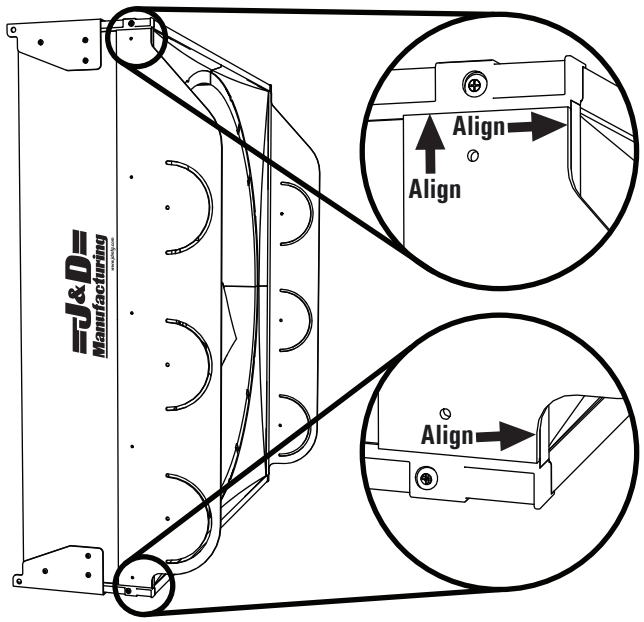
8

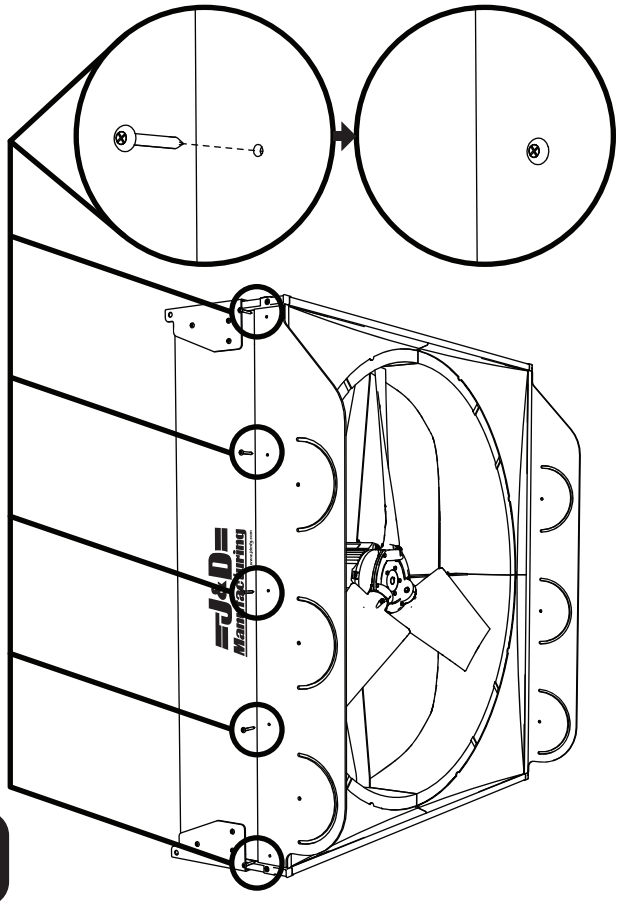
If installing the 3 Louver AirBlaster proceed to Step 9.

If installing the 4 Louver AirBlaster skip to Step 15.

3 Louver Guides Installation:

- On side housing panels with J&D logo align indicated edges of louver guides as shown below
- Using the included **#3 Phillips Bit from Bag 1 (Tools)** and (5) #14-10 x 2" **Screws from Bag 2 (Part 3)**, secure each louver guide to the housing

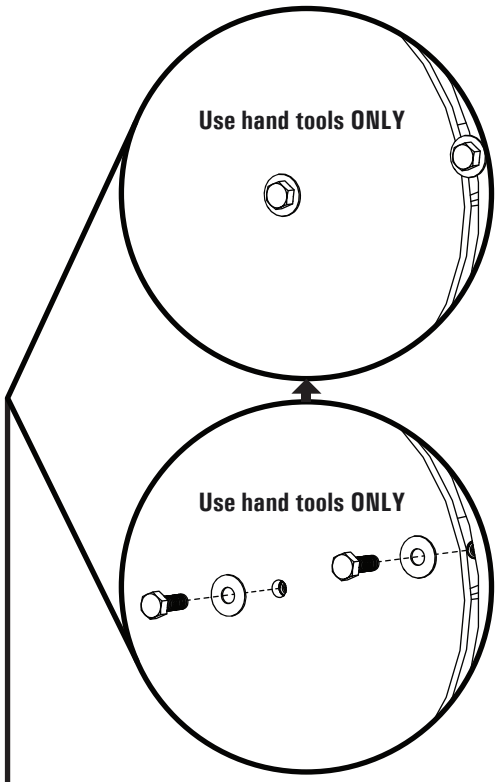


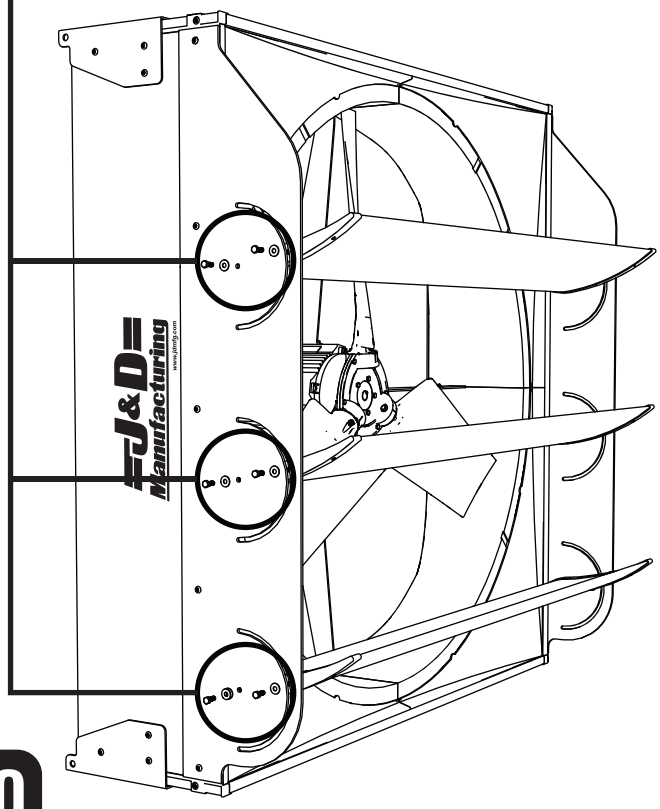


9

3 Louver Installation:

- Assemble (12) 5/16"-18 x 7/8" **Bolts** and (12) 5/16" **Washers from Bag 4 (Motor Key & Louver Hardware)**
- Using only hand tools **(DO NOT USE IMPACT DRIVER)** secure each louver to the louver guides as shown below

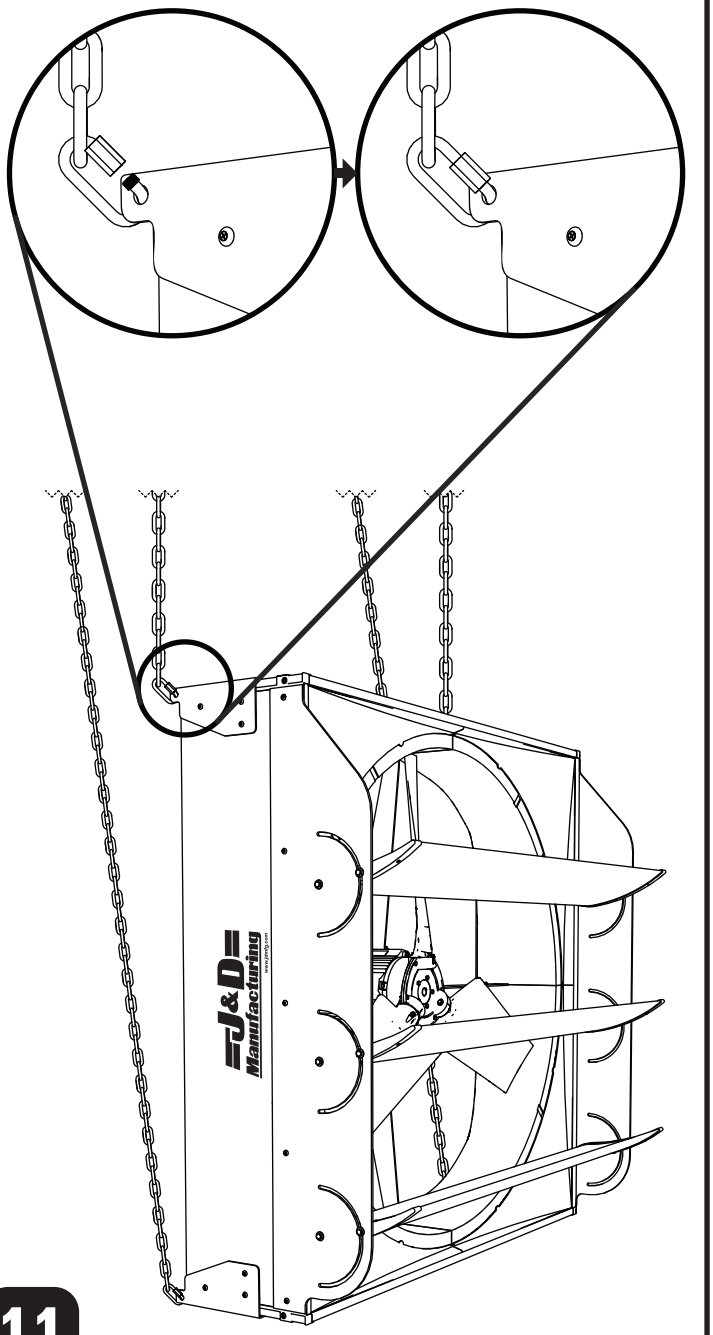




10

Attaching Hanging Chain Kit:

- Attach (1) hanging chain to each mounting bracket using (1) quick link as shown below.
- Secure connections by fully closing each quick link by rotating the barrel until opening is closed and barrel no longer turns.



11

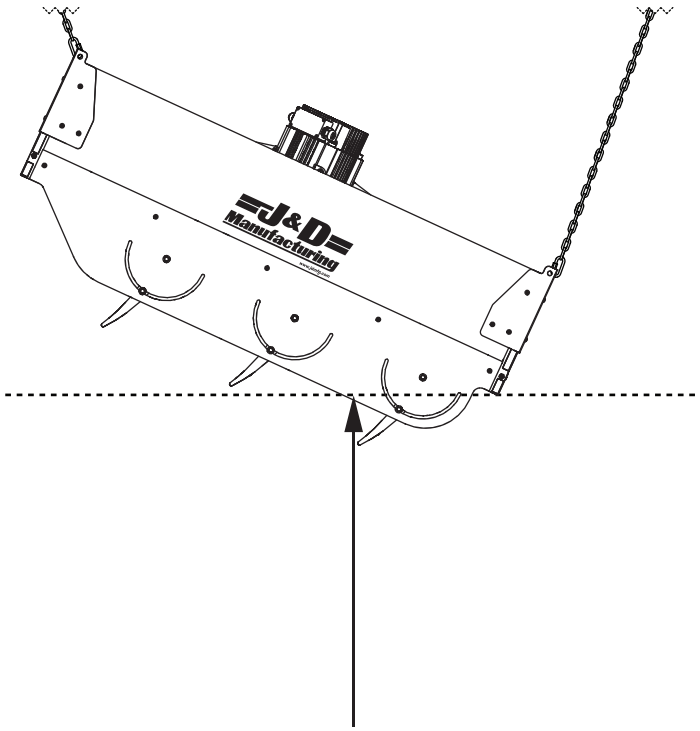
Site Requirements:

- **Structure and anchor hardware (not provided) must be rated for 350lbs**

Weight 350lbs

12

3 Louver Mounting Height Recommendations:



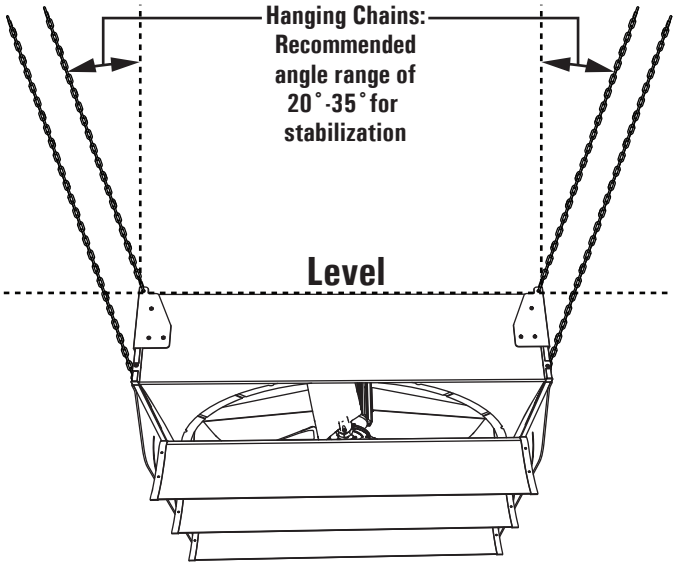
OSHA requires this fan to be mounted a minimum of 7' above the floor.

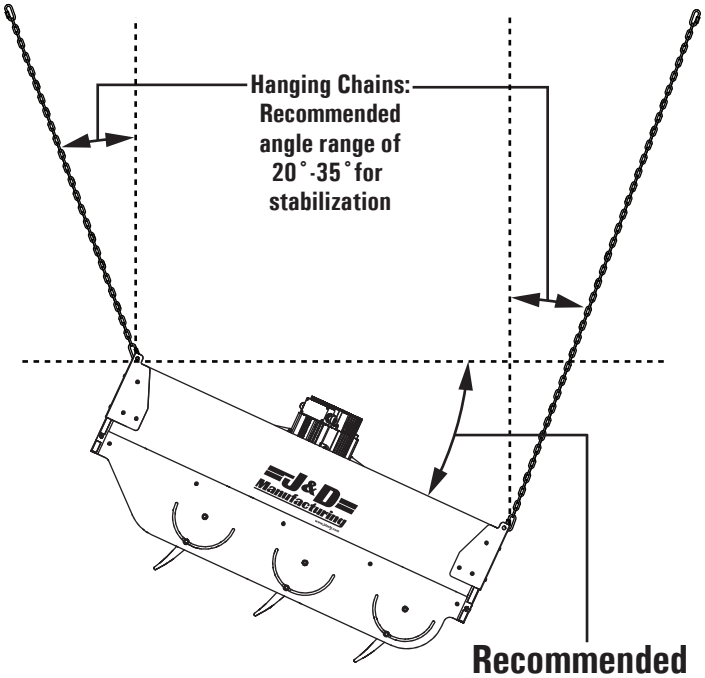
NOTE: Consideration of the height of frequently used machinery should be taken into account to avoid damage and inconvenience.

13

3 Louver Hanging Recommendations:

- Take into account recommendations from **Steps 12 & 13** and the below recommended angles of the fan and chains. Hang fan.
- Attach each chain end to structure using (1) quick link
- Secure by fully closing each quick link by rotating the barrel as shown in **Step 11**



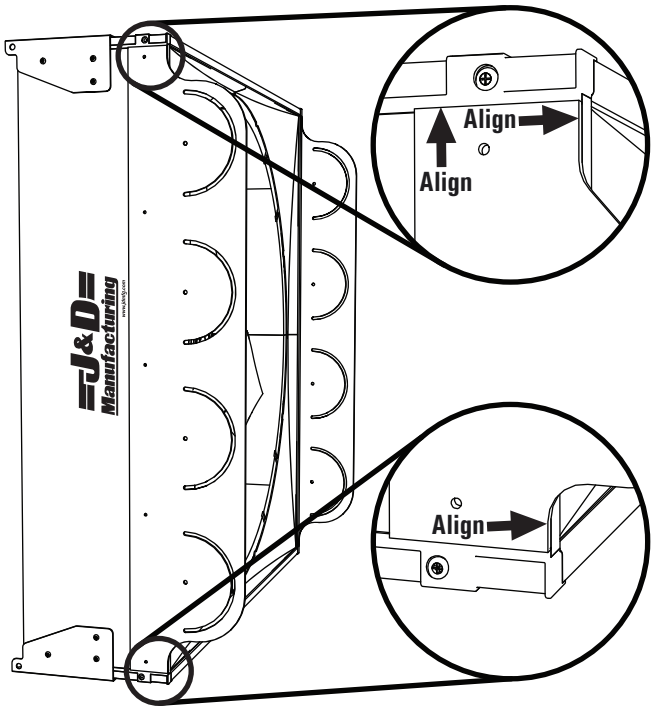


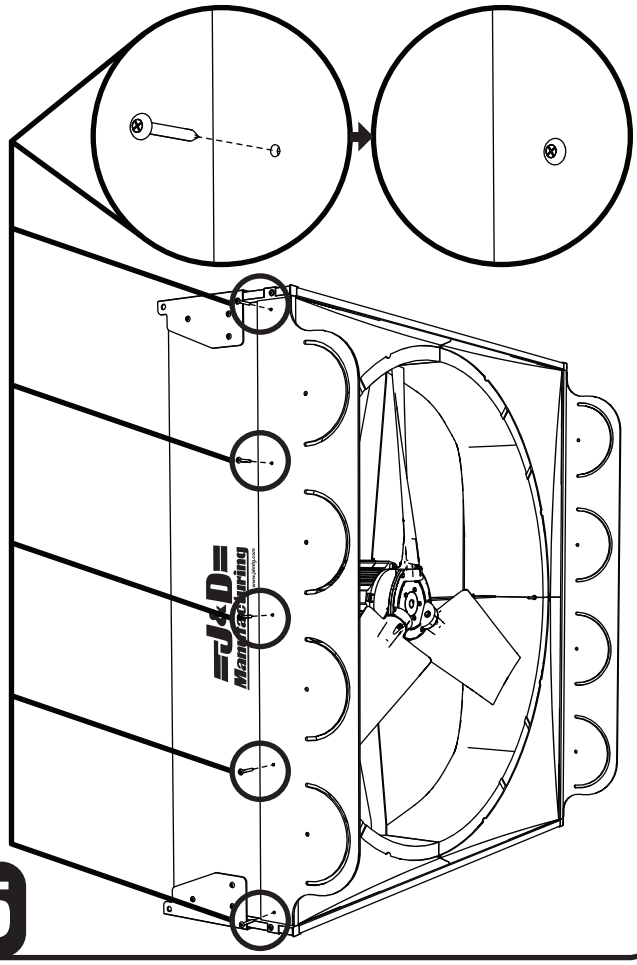
14

If installing the 3 Louver AirBlaster skip to Step 21.

4 Louver Guides Installation:

- On side housing panels with J&D logo align indicated edges of louver guides as shown below
- Using the included **#3 Phillips Bit from Bag 1 (Tools)** and (5) #14-10 x 2" **Screws from Bag 2 (Part 3)**, secure each louver guide to the housing

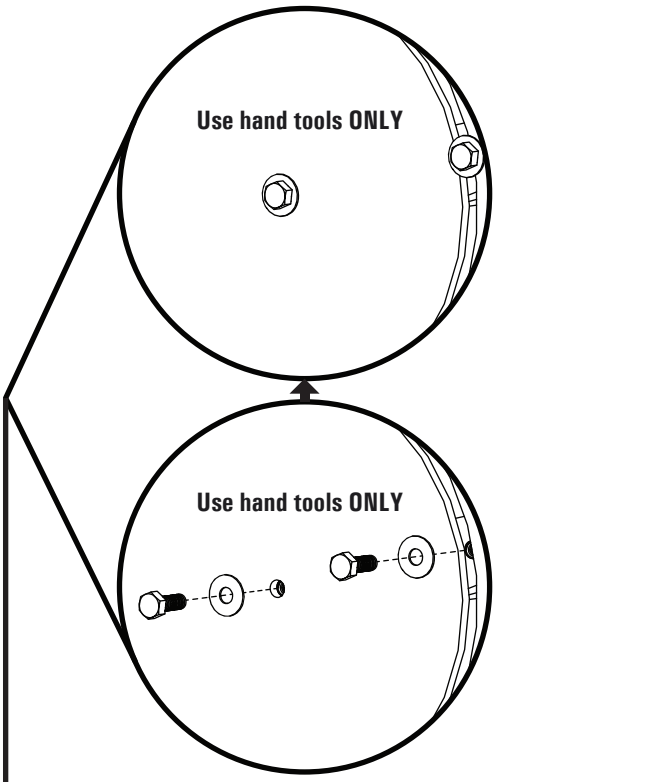


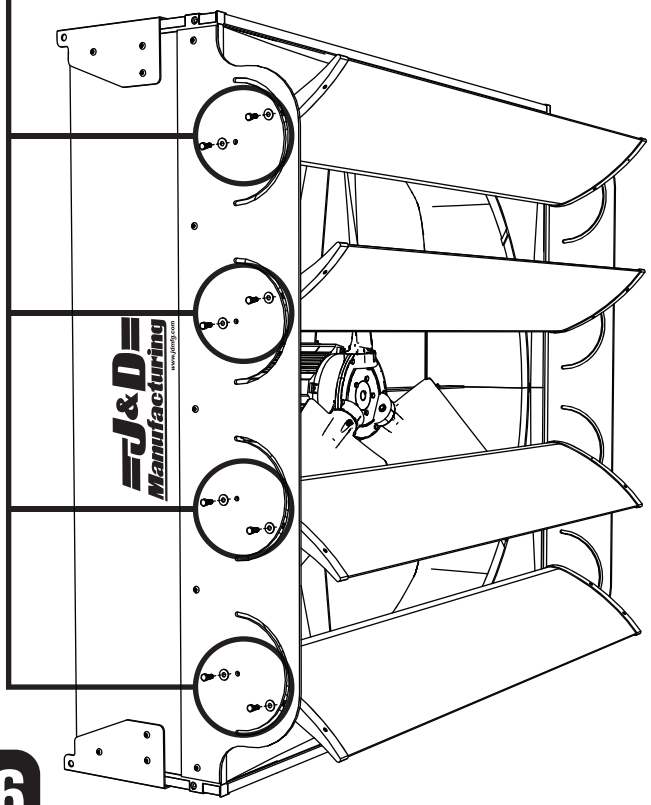


15

4 Louver Installation:

- Assemble (16) 5/16"-18 x 7/8" **Bolts** and (16) 5/16" **Washers from Bag 4 (Motor Key & Louver Hardware)**
- Using only hand tools **(DO NOT USE IMPACT DRIVER)** secure each louver to the louver guides as shown below

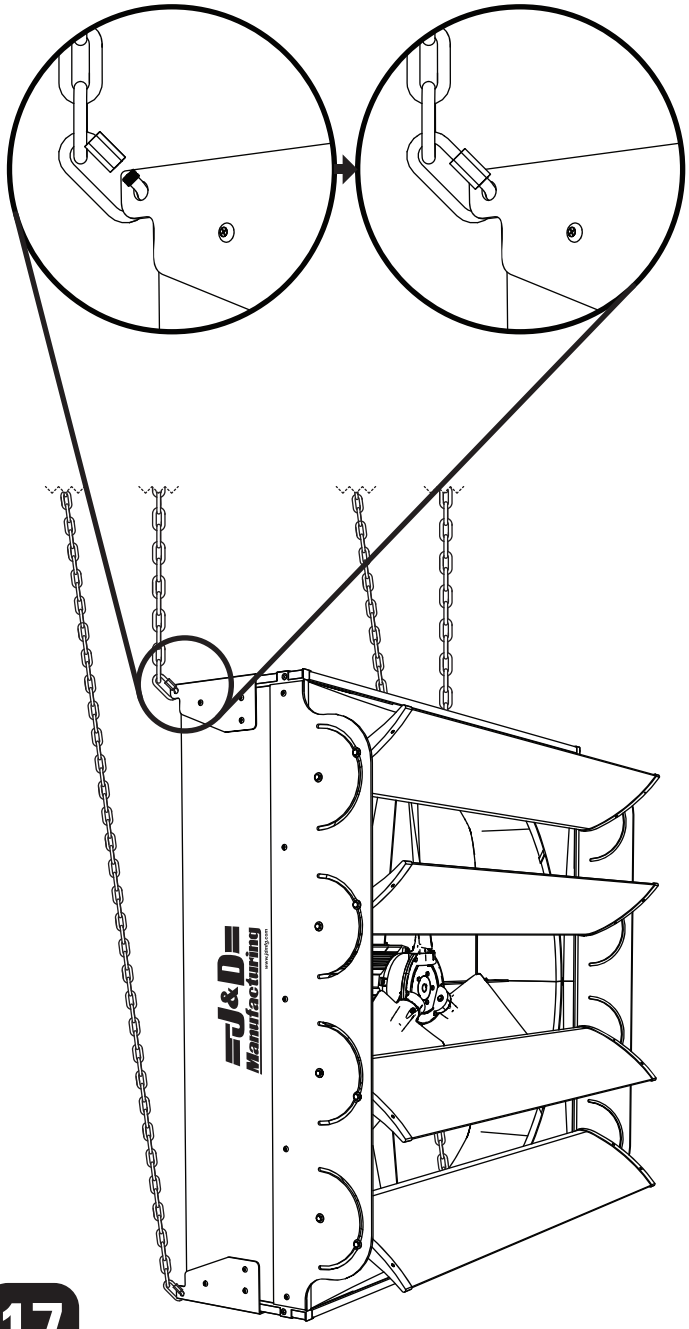




16

Attaching Hanging Chain Kit:

- Attach (1) hanging chain to each mounting bracket using (1) quick link as shown below.
- Secure connections by fully closing each quick link by rotating the barrel until opening is closed and barrel no longer turns.



17

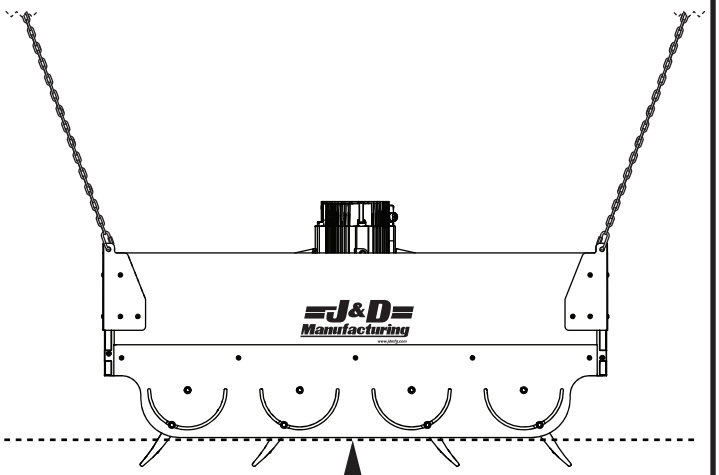
Site Requirements:

- **Structure and anchor hardware (not provided) must be rated for 350lbs**

Weight 350lbs

18

4 Louver Mounting Height Recommendations:



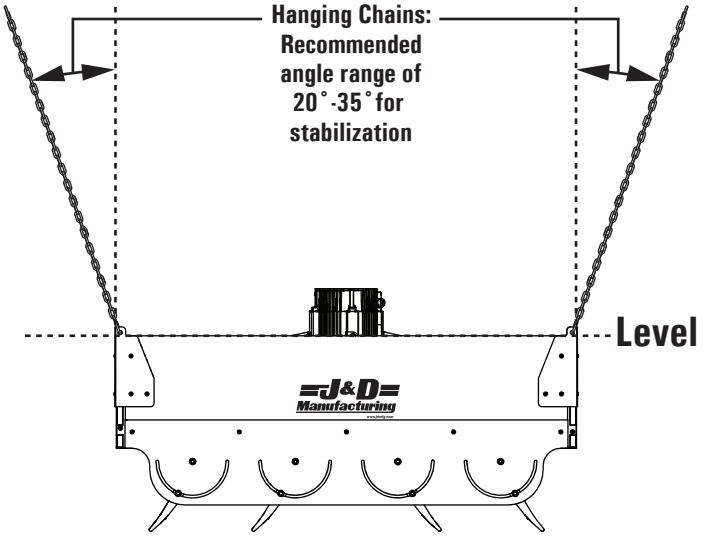
OSHA requires this fan to be mounted a minimum of 7' above the floor.

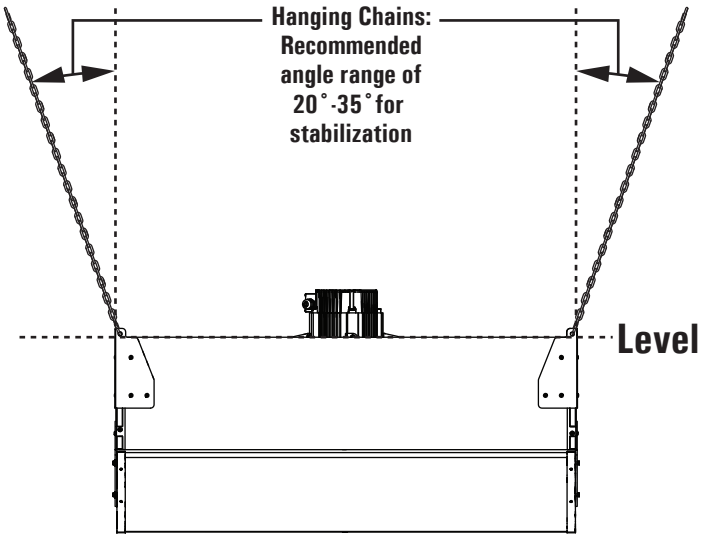
NOTE: Consideration of the height of frequently used machinery should be taken into account to avoid damage and inconvenience.

19

4 Louver Hanging Recommendations:

- Take into account recommendations from **Steps 18 & 19** and the below recommended angles of the fan and chains. Hang fan.
- Attach each chain end to structure using (1) quick link
- Secure by fully closing each quick link by rotating the barrel as shown in **Step 17**



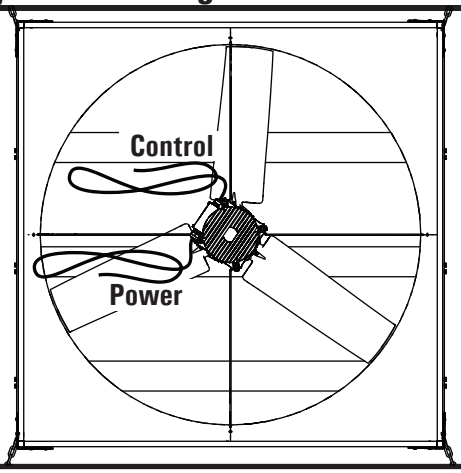


20

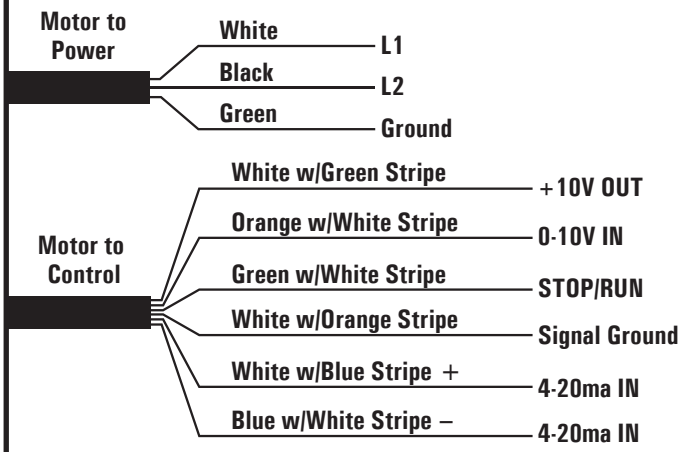
DISCONNECT POWER
BEFORE INSTALLING OR SERVICING.

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

Identify cords coming from motor

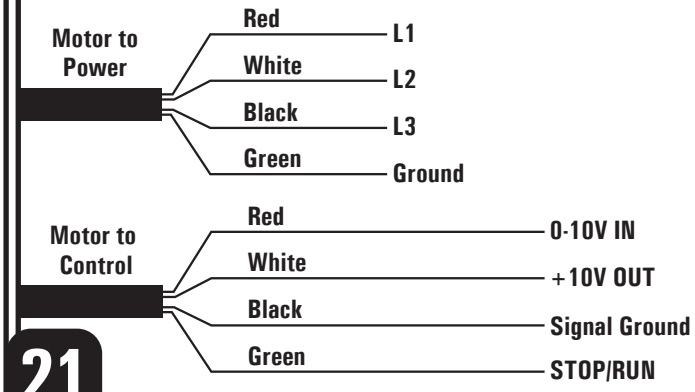


Single Phase Wired for 190-240v



- Use the two 4-20ma IN wires for analog current speed control.
  - Leave 4-20ma wires disconnected if not used, (less than 5.6ma is OFF).

Three Phase Wired for 190-240v / 380-460v

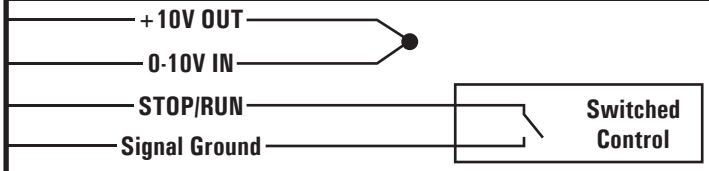


General Wiring Instructions:

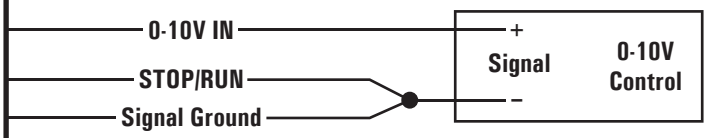
- Wiring should only be performed by a trained electrician to prevent injury or death.
- Install manual disconnect switch inside building adjacent to fan.
- Route wire to motor with drip loop and secure. Drip loop will drain accumulated moisture away from the motor.
- Use four conductor 26AWG (or heavier), shielded, dual twisted pair, signal wire with drain wire from J&D control to Permanent Magnet fan.

Common Wiring Options

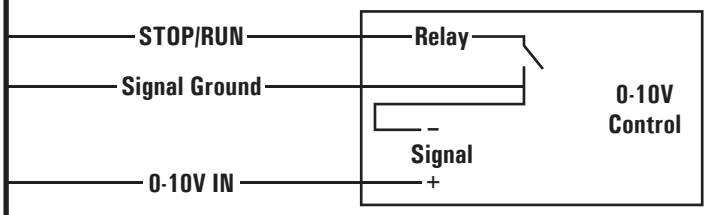
On/Off - No Speed Control (Fan Will Run at Full Speed)



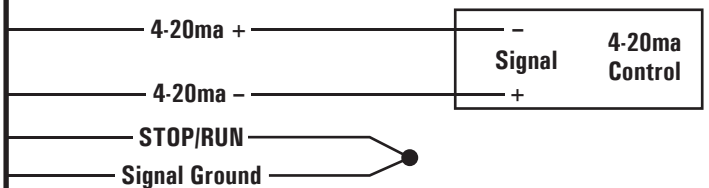
0-10V Speed Control Only



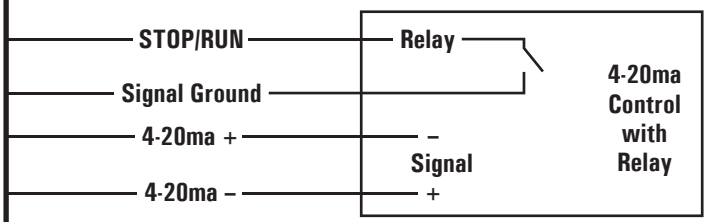
0-10V Speed Control and On/Off Relay



4-20ma Speed Control Only



4-20ma Speed Control and On/Off Relay

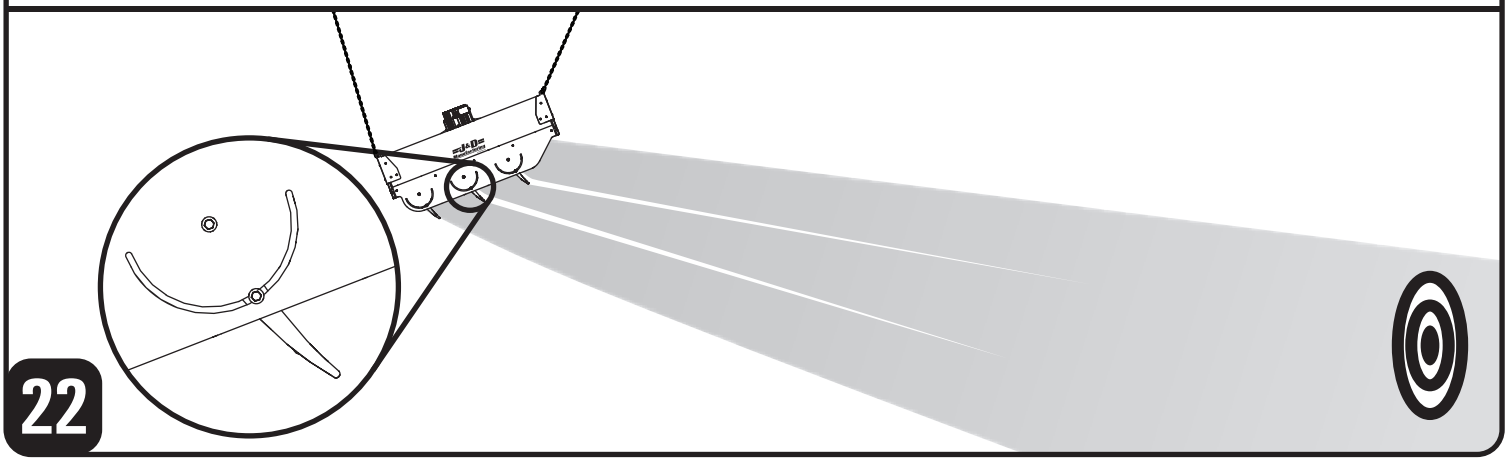


If installing the 3 Louver AirBlaster proceed to Step 22.

If installing the 4 Louver AirBlaster skip to Step 26.

3 Louver Adjustment:

- Identify your target area and desired velocity
- Using hand tools loosen louver bolts enough to enable louvers to be adjusted to the desired angles.
- Provide power to ONLY THIS fan and measure wind speed at target area.
- Remove power from fan and wait until the prop has stopped spinning
- If further adjustment of louvers is needed, then adjust louver/s and retest, repeating process until desired velocity has been met.
- Once louvers are done being adjusted, using hand tools, tighten all 12 louver bolts to lock in louver angles (do not over tighten).



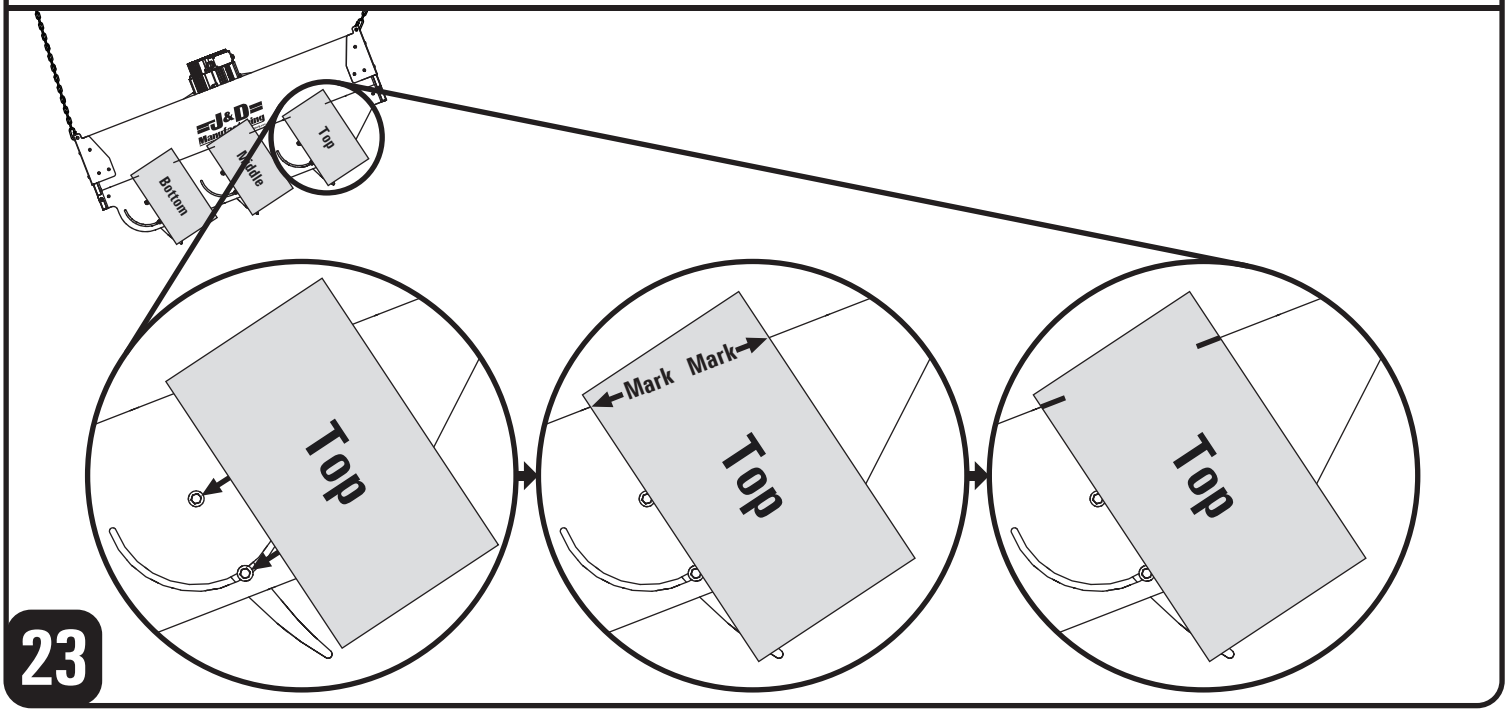
22

Creating 3 Louver Angles Templates:

Items needed

- (3) Pieces of Cardboard Roughly 12”x24”
- (1) Marker/Pen/Pencil

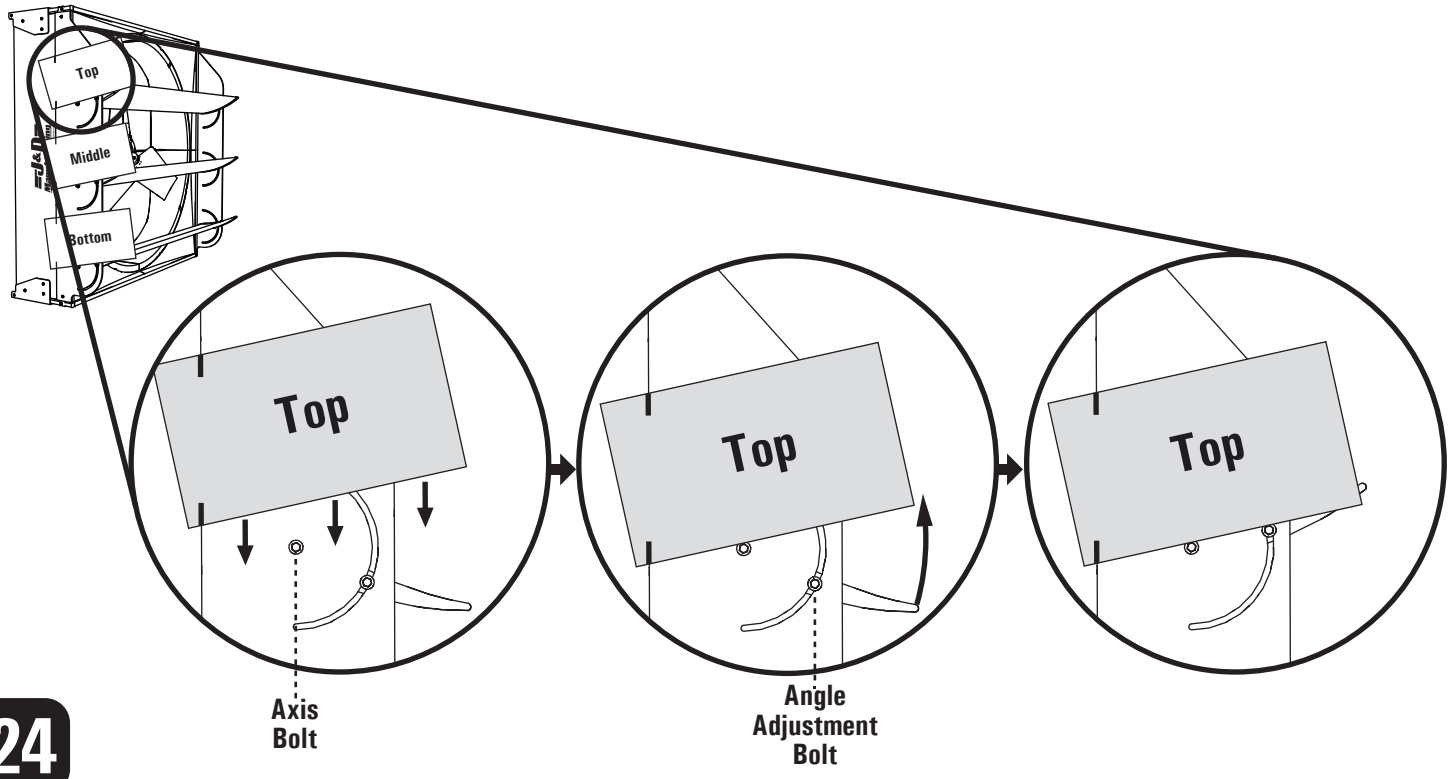
- Identify each piece of cardboard with the louver it will be measuring i.e. Top, Middle, Bottom
- Rest the edge of cardboard on the bolt heads for the corresponding louver as shown below
- Mark both edges of cardboard where it crossed the edge of the louver guide as shown below
- Repeat the process for the other two louvers



23

Transferring 3 Louver Angles:

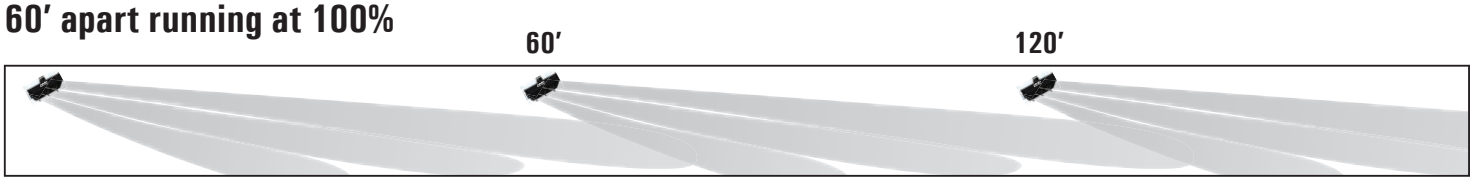
- When assembling the next AirBlaster when you reach **Step 10** apply the louver templates created in the previous step as shown below
  - Using the corresponding louver template align the markings with the edge of the louver guide
  - Keeping the markings aligned with the louver guide edge slide the cardboard until its edge is resting on the louver axis bolt head as shown below
  - Tilt louver up or down until the angle adjustment bolt rests against the edge of the cardboard as shown below
  - Check marking alignment and adjust as necessary then, using hand tools, tighten all 4 louver bolts to lock in louver angle (do not over tighten).
  - Repeat the process for the other two louvers



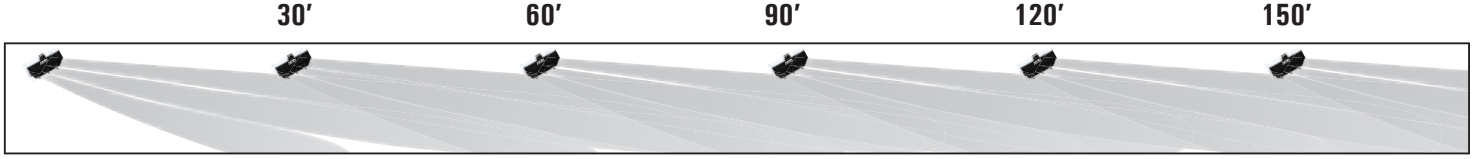
24

3 Louver Uni-Directional Recommended Spacing:

60' apart running at 100%



30' apart running at 50% will provide the near equivalent amount of air movement as the 60' spacing running at 100% while using only 1/4th the energy.

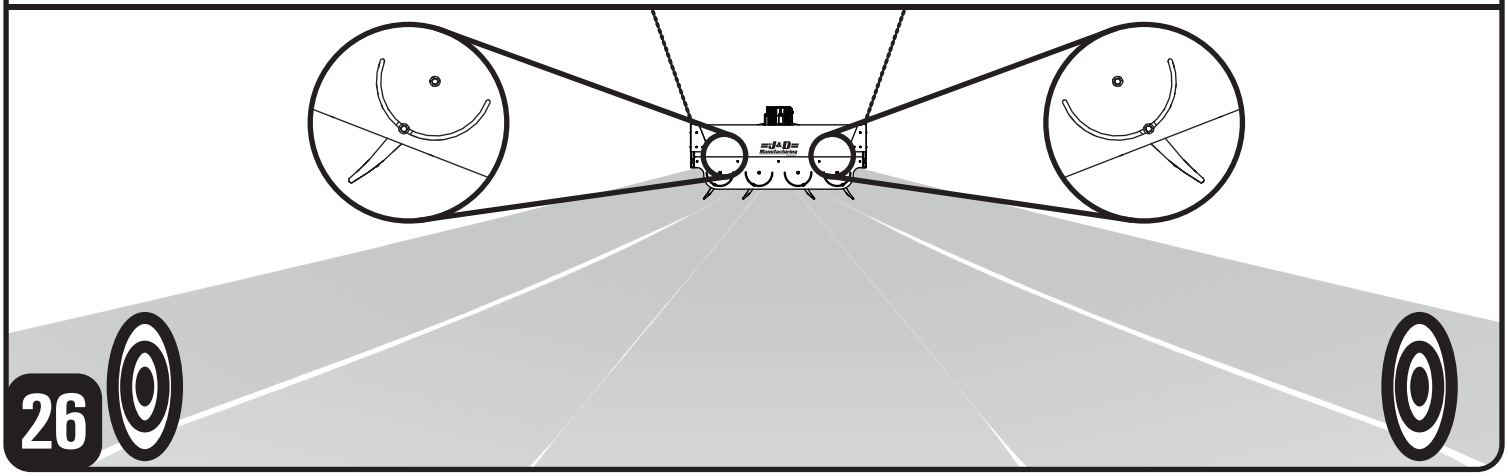


25

If installing the 3 Louver AirBlaster proceed to Maintenance Instructions after Step 29.

4 Louver Adjustment:

- Identify your target area and desired velocity
- Using hand tools loosen louver bolts enough to enable louvers to be adjusted to the desired angles.
- Provide power to ONLY THIS fan and measure wind speed at target area.
- Remove power from fan and wait until the prop has stopped spinning
- If further adjustment of louvers is needed, then adjust louver/s and retest, repeating process until desired velocity has been met.
- Once louvers are done being adjusted, using hand tools, tighten all 16 louver bolts to lock in louver angles (do not over tighten).



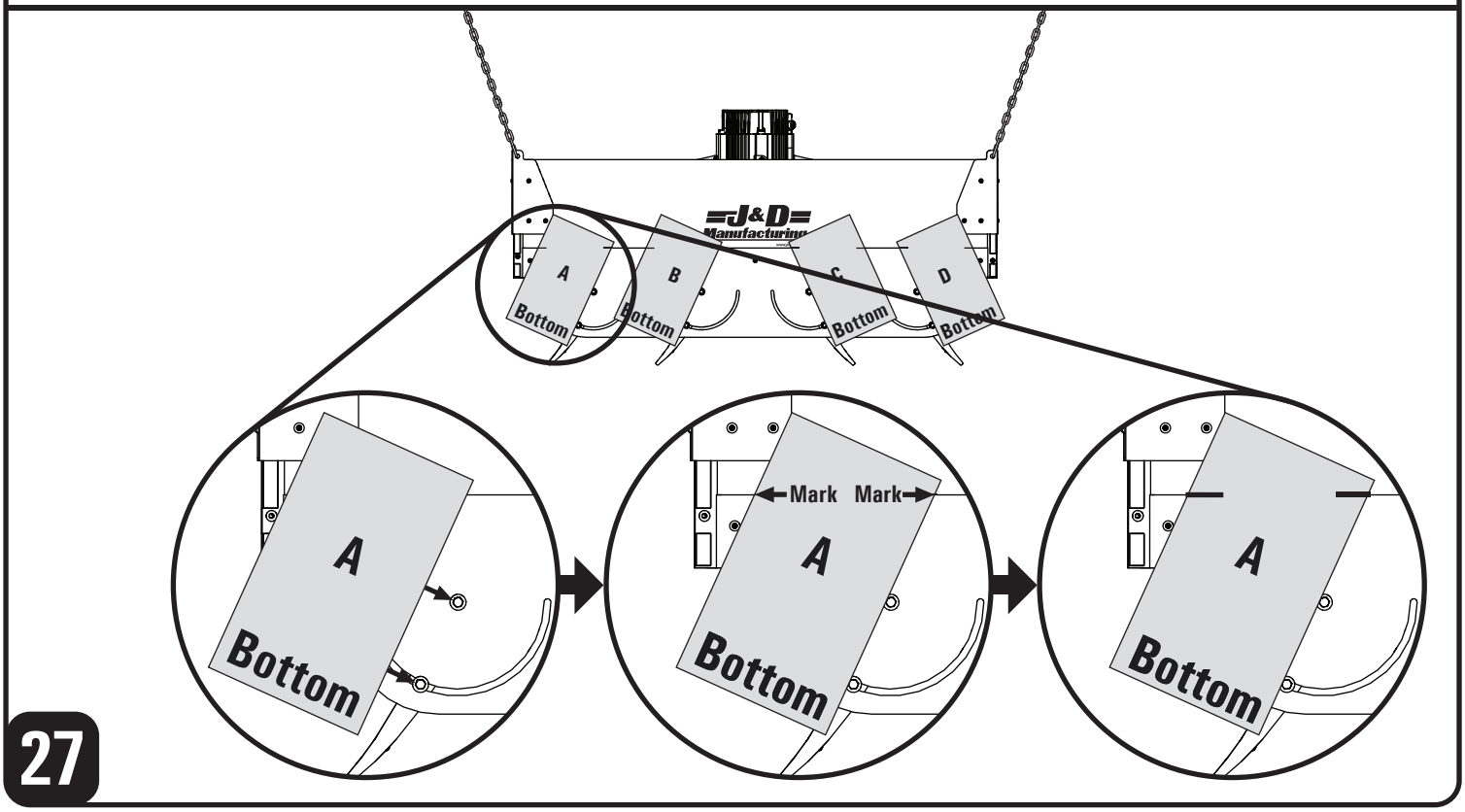
26

Creating 4 Louver Angles Templates:

Items needed

- (4) Pieces of Cardboard Roughly 12"x24"
- (1) Marker/Pen/Pencil

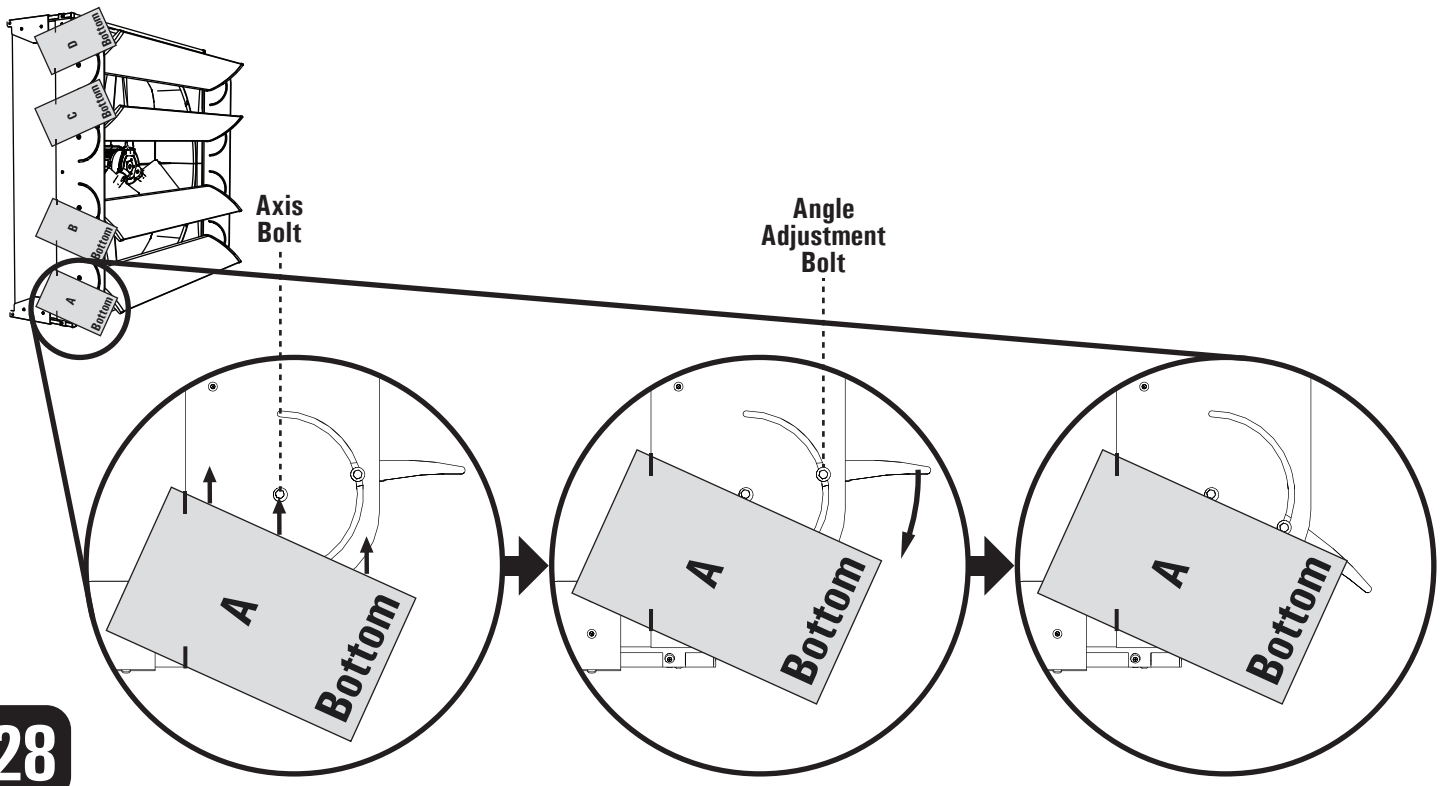
- Identify each piece of cardboard with the louver it will be measuring i.e. A, B, C, D
- Rest the edge of cardboard on the bolt heads for the corresponding louver as shown below
- Mark both edges of cardboard where it crossed the edge of the louver guide as shown below
- Repeat the process for the other three louvers



27

Transferring 4 Louver Angles:

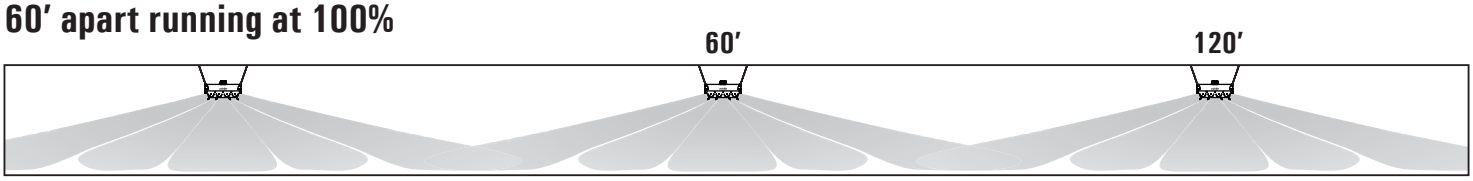
- When assembling the next AirBlaster when you reach **Step 16** apply the louver templates created in the previous step as shown below
  - Using the corresponding louver template align the markings with the edge of the louver guide
  - Keeping the markings aligned with the louver guide edge slide the cardboard until its edge is resting on the louver axis bolt head as shown below
  - Tilt louver up or down until the angle adjustment bolt rests against the edge of the cardboard as shown below
  - Check marking alignment and adjust as necessary then, using hand tools, tighten all 4 louver bolts to lock in louver angle (do not over tighten).
  - Repeat the process for the other two louvers



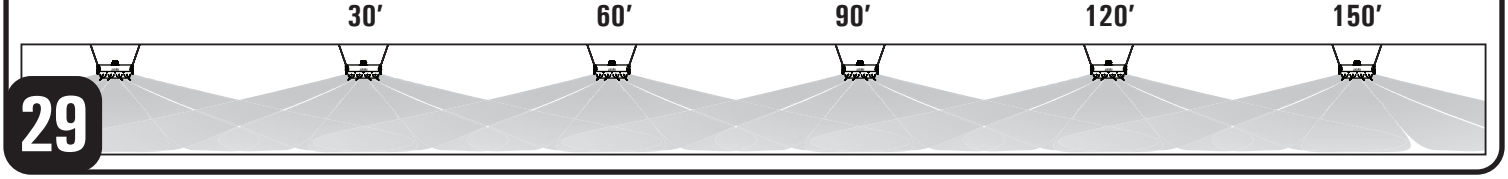
28

4 Louver Bi-Directional Recommended Spacing:

60' apart running at 100%



30' apart running at 50% will provide the near equivalent amount of air movement as the 60' spacing running at 100% while using only 1/4th the energy.



29

Maintenance Instructions:

- Disconnect power before cleaning or maintaining your fan in order to prevent serious injury or death.
- Service and repair of fan should only be completed by a qualified technician.
- For maximum efficiency and fan life, keep the following free from dirt and dust: blades, louvers, and motor.
- The totally enclosed air over motor has sealed ball bearings and does not require additional oil.