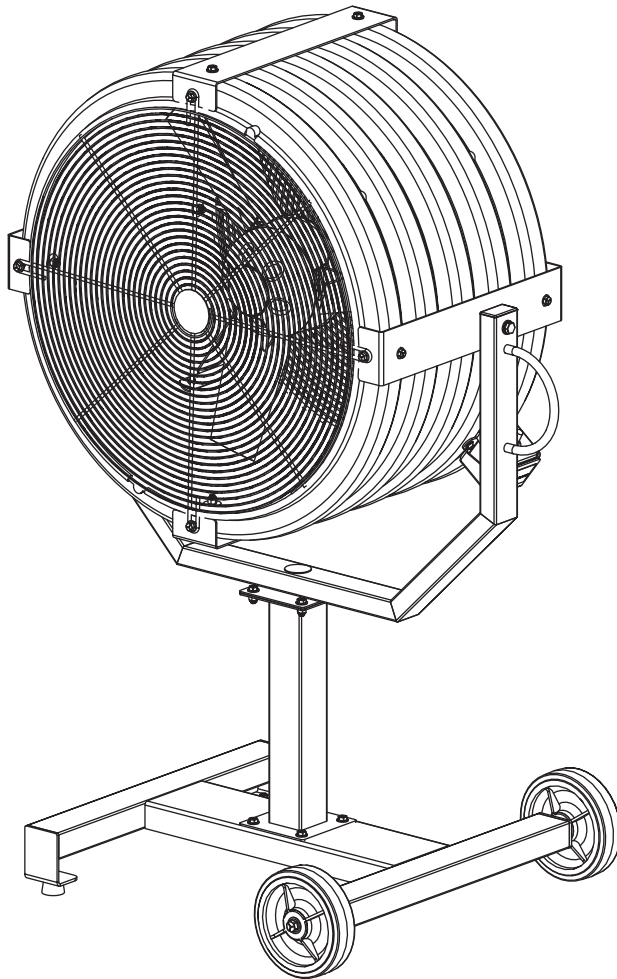




# INSTALLATION GUIDE

---

Yellow Jacket®



# PRE-INSTALLATION CHECKLIST

**Do you have the correct power circuit for the fan speed control?**

See page 1 for information on selecting the correct circuit/fuse for the fan speed control.

**Did a structural engineer approve the mounting structure?**

See page 6 for mounting information.

**If you ordered multiple fans, did you keep the parts for each fan together?**

**If you ordered the oscillator, did you review the installation guide included with the oscillator?**

# READ AND SAVE THESE INSTRUCTIONS



## WARNING AND CAUTION SYMBOL

Indicates a hazard with a medium level of risk that could result in injury or death or damage to property if not avoided.



## ELECTRICAL WARNING SYMBOL

Indicates an electrical hazard with a medium level of risk that could result in death or serious injury if not avoided.



Installation Guide  
Rev. AB  
04/26/2024

Original English Instructions

## Legal

Improper installation, delivery, or maintenance, including, but not limited to, any of the following actions by the customer or agent of the customer will constitute a breach of and will void all warranties:

- Failure to follow the required installation procedures specified in this Installation Guide and in all other documentation supplied with the fans and related equipment including documentation provided by the manufacturers of the individual fan and control components;
- Failure to follow all relevant codes and ordinances, including, but not limited to, the National Electrical Code (United States), applicable national and local electrical codes, and state and local building codes;
- Failure to follow electrical engineering industry standards regarding the approved method of installing solid-state electrical equipment having the characteristics of the fans, the fan controls, and their related components, even if such standards are not specifically referenced in any instructions or literature supplied by Big Ass Fans or provided by manufacturers.

All trademarks used herein are the properties of their respective owners. No part of this document may be reproduced or translated into a different language without the prior written consent of Big Ass Fans. The information contained in this document is subject to change without notice. For the most up-to-date information, see the online installation guide at [www.bigassfans.com](http://www.bigassfans.com)

[www.bigassfans.com/patents](http://www.bigassfans.com/patents) ▪ [www.bigassfans.com/product-warranties](http://www.bigassfans.com/product-warranties)

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING—TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

The fan must be installed with hardware that is marked to indicate suitability with this model. Other hardware cannot be substituted.

Electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards.

Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

Before servicing or cleaning unit, unplug the fan and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

**CAUTION:** The installation of a Big Ass Fan must be in accordance with the requirements specified in this installation manual and with any additional requirements set forth by the national electric code (NEC) and all local codes. Code compliance is ultimately YOUR responsibility!

**CAUTION:** Exercise caution and common sense when powering the fan. Do not connect the fan to a damaged or hazardous power source. Do not attempt to resolve electrical malfunctions or failures on your own. Contact Big Ass Fans if you have any questions regarding the use of this fan.

**CAUTION:** When service or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.

**WARNING:** Risk of fire, electric shock, or injury to persons during cleaning and user-maintenance! Disconnect the fan from the power supply before servicing.

**CAUTION:** Do not bend the blades when installing, adjusting, or cleaning the fan. Do not insert foreign objects between rotating fan blades.

**WARNING:** Stay alert, watch what you are doing, and use common sense when installing fans. Do not assemble fans if tired or under the influence of drugs, alcohol, or medication. A moment of inattention while installing fans may result in serious personal injury.

**CAUTION:** Do not operate fan with a damaged cord or plug. Return fan to an authorized service facility for examination or repair.

**CAUTION:** Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area where it will not be tripped over.

**WARNING:** Do NOT install the fan where it may come into direct contact with water unless the fan is labeled, "Suitable for use in wet locations."

# CONTENTS

<b>Introduction</b>	Safety Instructions.....	ii
	About this Fan.....	1
<b>Pre-Installation</b>	Parts and Hardware.....	2
	Fan Diagram.....	4
	Preparing the Work Site.....	5
	Mounting Overview.....	6
<b>Mounting Method: Portable Base</b>	1. Attach Wheels (to Portable Base).....	7
	2a. Attach Fan (to Portable Base).....	8
	2b. Attach Pedestal (to Portable Base).....	9
	3. Attach Second Pedestal (to Pedestal).....	10
	4. Attach Yoke (to Pedestal).....	11
<b>Mounting Structure: Wall</b>	1. Attach Supports (to Wall).....	12
	2. Secure Yoke (to Supports).....	13
<b>Mounting Structure: Column</b>	1. Prepare Angle Irons.....	14
	2. Attach Supports (to Column).....	15
	3. Secure Yoke (to Supports).....	17
	4. Secure Safety Cable.....	17
<b>Mounting Structure: I-Beam</b>	1. Attach Upper Yoke (to I-Beam).....	18
	2. Attach Extension Tube (to Upper Yoke).....	19
	3. Secure Safety Cable.....	19
	4a. Attach Lower Yoke Brackets (to Extension Tube, 3 ft or Shorter).....	20
	4b. Attach Lower Yoke Brackets (to Extension Tube, 4 ft or Longer).....	20
	5. Attach Beam Clamp.....	21
	6. Route Guy Wire Through Gripple®.....	21
	7. Install Remaining Guy Wires.....	22
	8. Attach Fan (to Lower Yoke).....	22
<b>Mounting Structure: Bar Joists</b>	1. Select Proper Angle Irons.....	23
	2. Pre-drill Angle Irons.....	24
	3. Fasten Angle Irons (if span is longer than 8 ft).....	24
	4a. Fasten Single Angle Irons to Roof Structure Mounting Points.....	25
	4b. Fasten Double Angle Irons to Roof Structure Mounting Points.....	25
	5. Attach Upper Yoke (to Angle Irons).....	26
	6. Attach Extension Tube (to Upper Yoke).....	27
	7. Secure Safety Cable.....	27
	8a. Attach Lower Yoke Brackets (to Extension Tube, 3 ft or Shorter).....	28
	8b. Attach Lower Yoke Brackets (to Extension Tube, 4 ft or Longer).....	28
	9. Attach Beam Clamp.....	29
	10. Route Guy Wire Through Gripple®.....	29
	11. Install Remaining Guy Wires.....	30
	12. Attach Fan (to Lower Yoke).....	30
<b>Mounting Structure: Wood or Metal Superstructure</b>	1. Attach Chain or Cable.....	31
	2. Secure Guy Wires.....	31

<b>Mounting Structure: Concrete</b>	1. Prepare Angle Iron Brackets.....	33
	2. Prepare Concrete Structure.....	33
	3. Attach Angle Iron Brackets (to Concrete).....	33
	4. Attach Chain or Cable.....	34
	5. Secure Guy Wires.....	34
<b>Positioning the Fan</b>	Setting the Fan's Position.....	35
<b>Electrical Installation</b>	Electrical Installation Safety.....	36
	Power Requirements.....	36
<b>Speed Control Operation</b>	Starting, Stopping, and Speed Control.....	37
<b>Remotely Mounted Speed Control (Optional)</b>	Remotely Mounted Speed Control Dimensions.....	38
	Installing the Remotely Mounted Speed Control.....	38
	Remotely Mounted Speed Control Wiring.....	39
<b>User Servicing</b>	Annual Preventive Maintenance.....	40
	General Troubleshooting.....	40
	Annual Maintenance Checklist.....	41
<b>Contact Us</b>	Contact Us.....	43

# ABOUT THIS FAN

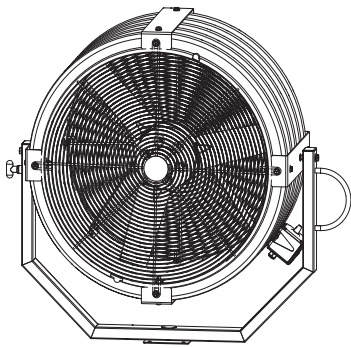
Yellow Jacket® is a durable, portable fan that incorporates all of the heavy-duty characteristics expected of a Big Ass Fan with the flexible mounting capabilities perfect for spaces requiring localized or additional air movement.

<b>Fan weight</b>	105 lb (47.6 kg)
<b>Portable base, wheels, &amp; pedestal</b>	37 lb (16.7 kg)
<b>Motor size</b>	0.5 hp (0.37 kW)
<b>Minimum required supply circuit size</b>	20 A @ 100–125 VAC, 1 $\Phi$ , 50/60 Hz 15 A @ 200–240 VAC, 1 $\Phi$ , 50/60 Hz
<b>Current</b>	7.6–9.8 A @ 100–125 VAC, 1 $\Phi$ , 50/60 Hz 5.0–5.6 A @ 200–240 VAC, 1 $\Phi$ , 50/60 Hz
<b>Max power</b>	553 W @ 100–125 VAC, 1 $\Phi$ , 50/60 Hz 531 W @ 200–240 VAC, 1 $\Phi$ , 50/60 Hz
<b>Max speed</b>	1300 RPM @ 100–125 VAC, 1 $\Phi$ , 50/60 Hz 1305 RPM @ 200–240 VAC, 1 $\Phi$ , 50/60 Hz
<b>Operational temperature range</b>	-40° F to 122° F (-40° C to 50° C)

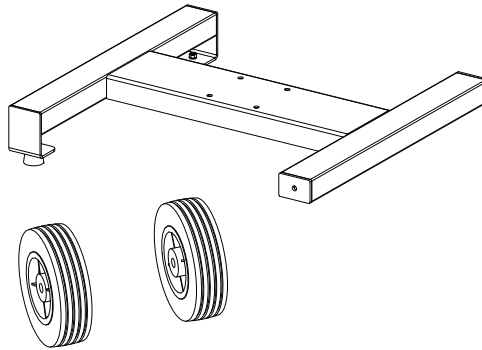
# PARTS AND HARDWARE

You will only receive the hardware that will be installed with your selected mounting method. If you are mounting the fan to a wall, column, metal or wood superstructure, or concrete ceiling, some hardware used to secure the fan is installer-supplied. Big Ass Fans cannot provide specific installation details because of the wide variability of mounting surfaces, conditions, and fastening methods. Consult a structural engineer to determine the required hardware. *Note: Drawings below are not to scale.*

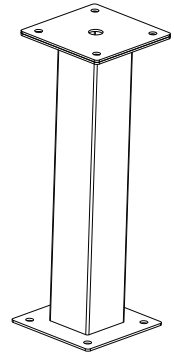
## Parts



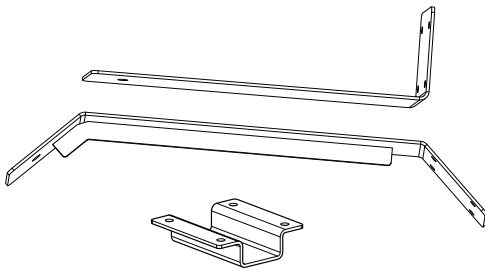
Fan Cage & Housing



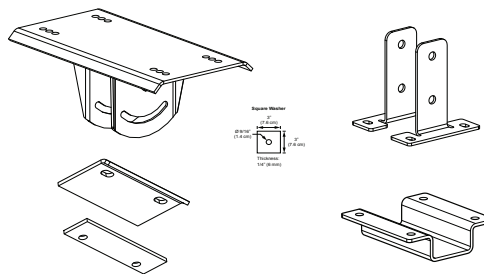
Portable Base with Wheels



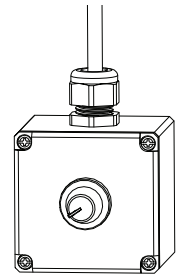
Pedestal<sup>1</sup>



Wall/Column Mount Supports  
& Yoke Attachment Brackets<sup>2</sup>



Yoke Mount<sup>3</sup>



Remotely Mounted  
Speed Control<sup>4</sup>

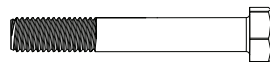
1. Optional. Pedestals are only included if ordered. Up to two (2) pedestals can be installed on Yellow Jacket.
2. Optional. Wall/Column mount parts and hardware are only included if ordered.
3. Optional. Yoke mount parts and hardware are only included if ordered. Square washers are only used if mounting the fan to angle irons.
4. Optional. The remotely mounted speed control and cable are only included if ordered.

## Hardware

Wheel  
Hardware



(2) 1/2-13 Hex Nut



(2) 1/2-13 x 3-1/2" Hex Bolt

Base  
Hardware



(8) 3/8" Flat Washer




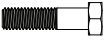








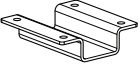
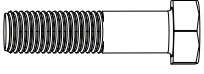
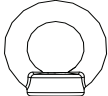


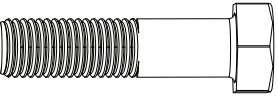
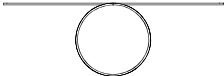



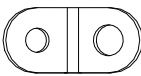
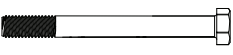
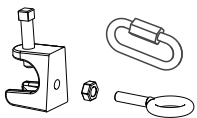

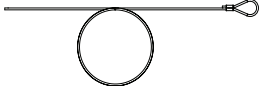





(4) 3/8-16 Nylock Nut



(4) 3/8-16 x 1" Hex Bolt



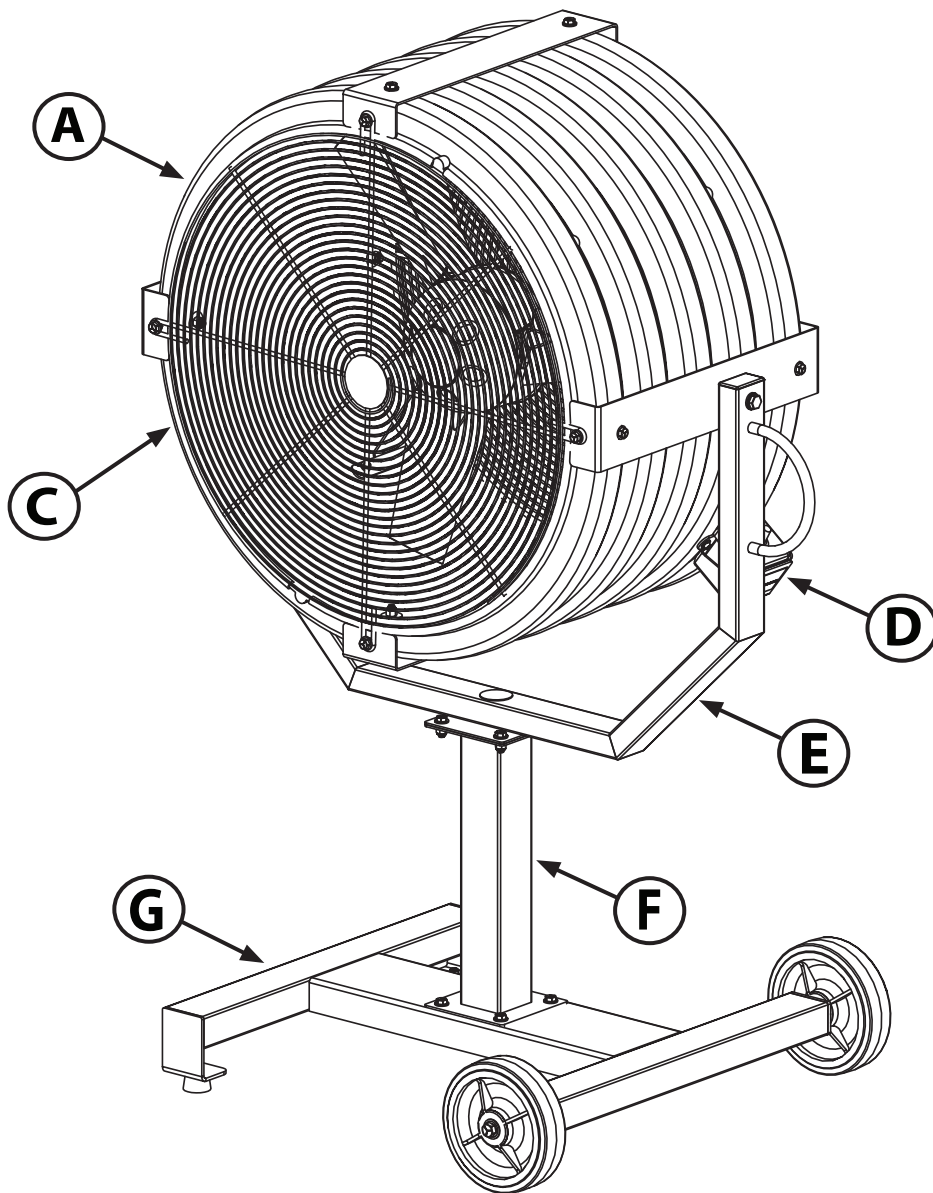
<b>Pedestal Hardware<sup>1</sup></b>							
	3/8" Flat Washer	3/8-16 Nylock Nut	3/8-16 x 1" Hex Bolt				
<b>Yoke Mount Hardware</b>							
	(4) 1/2-13 x 2" Hex Head Screw	(4) 3/8-16 x 1-1/4" Hex Head Screw	(4) 1/2-13 x 4-1/2" Hex Head Cap Screw	(4) 3/8-16 Nylock Nut	(8) 1/2-13 Nylock Nut	(8) 3/8" Flat Washer	(16) 1/2" Flat Washer
<b>Wall/Column Hardware</b>							
	(2) 3/4" Flat Washer	3/4-10 Nut	Yoke Attachment Bracket	3/4-10 x 3-1/2" Hex Bolt			
<b>Yoke Washer Assy Kit</b>							
	3/4" Eynut	Yoke Washer	3/4" Flat Washer	3/4-10 x 3" Hex Bolt			
<b>Safety Cable Hardware<sup>2</sup></b>							
	Safety Cable	(2) Gripple <sup>®</sup>	(2) Wire Rope Clip	Shackle			
<b>Guy Wire Hardware<sup>3</sup></b>							
	(4) Guy Wire Clip <sup>2</sup>	(2) 1/2-13 x 5" GR 8 Bolt <sup>2</sup>	(4) 1/4" Beam Clamp	(4) 1/4-20 x 1" Eyebolt			
							
	(4) Guy Wire	(4) Gripple <sup>®</sup>	(8) Wire Rope Clip	(4) Locking Carabiner			

- Quantities of the Pedestal Hardware vary depending on whether one or two pedestals will be attached.
- The safety cable components are included only if you are mounting the fan with the Yoke Mount or Wall/Column Mount. For Yoke Mount installations, the safety cable will have two looped ends. Gripples and wire rope clips are included with the Column Mount only. Shackles are included with the Yoke Mount only.
- Guy wires are designed to constrain the fan's lateral movement. Guy wire hardware is packed separately from the fan hardware. Big Ass Fans recommends using guy wires if the fan's extension tube is 4 ft or longer; therefore, guy wires are included in all fan packages with 4 ft or longer extension tubes. Big Ass Fans also recommends using guy wires if the fan is exposed to high winds or similar conditions, or if the fan is close to any building fixtures. If you are installing the fan in any of these conditions and guy wires were not included in your order, contact Customer Service.
- Used only with fans that are mounted from a 4 ft or longer extension tube. These parts are packed separately from the other guy wire hardware.

# FAN DIAGRAM

The diagram below shows a Yellow Jacket with one pedestal and portable base. If you ordered the Wall/Column mount, Yoke mount, Yoke Washer Assembly kit, or an extra pedestal, see the appropriate installation instructions.

- A. Protective Cage and Housing.** The steel cage and housing protect both the fan and users during operation.
- B. Fan Motor (not shown).** The fan motor powers the fan and controls the fan's speed, and is located on the backside of the fan.
- C. Position Locking Mechanism (not shown).** The locking mechanism secures the fan in the desired position.
- D. Fan Control.** Turns the fan on or off and controls fan speed.
- E. Yoke.** Supports the fan and includes handle for use when transporting fan.
- F. Pedestal.** Optional. Extends the fan to a higher position. Up to two (2) pedestals can be installed to heighten the fan.
- G. Portable Base.** Optional. Supports the yoke and fan. Wheels allow the fan to be easily transported around workspace.



*Note: Fan setup may differ from the illustration.*

# PREPARING THE WORK SITE

When surveying the work site, keep the following guidelines in mind.

## Mechanical Installation

- The Yellow Jacket weighs, at maximum, 105 lbs (48 kg). Practice proper lifting techniques when assembling the fan.
- If you ordered the oscillator, review the installation guide packaged with the oscillator before beginning installation.
- If mounting the fan to an I-beam, the I-beam must have at least 65" (165 cm) of clearance below.
- The fan installation area must be clear of obstructions such as lights, cables, sprinklers, or other building structure parts.
- Consult a structural engineer for installation methods not covered in this manual.
- If mounting the fan in the vicinity of an infrared/radiant heater, it is recommended that the fan be mounted outside of the clearances recommended by the manufacturer of the heater and at a height equal to or above the shielding on the heating element with the controller on the opposite side of the heater. If mounting the fan below the heater shielding, all fan elements must be outside of the clearances recommended by the heater manufacturer and the VFD must be remotely mounted. The installation manual for the specific model of heater will typically provide the minimum clearance to combustibles (MCC).

## Electrical Installation

- The installation of a Big Ass Fan must be in accordance with the National Electrical Code, ANSI/NFPA 70-2011, and all local codes.
- Refer to specifications on page 1 for appropriate circuit requirements.
- The fan may begin to operate upon connection to power source. Do not apply AC supply power to fan until it is fully assembled and in an acceptable upright position.

# MOUNTING OVERVIEW

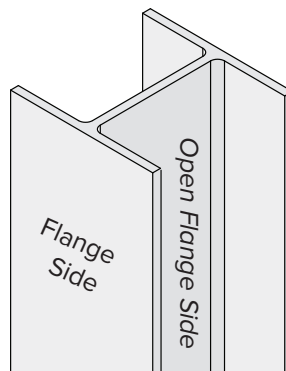
**⚠ CAUTION: It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures!**

Before mounting the fan, ensure you have the proper mounting equipment for your mounting location. Depending on your airflow needs and your building structure, the Yellow Jacket can be mounted using one of the following methods:

- **Portable Base.** The portable base allows Yellow Jacket mobility around a workspace to create airflow where it is needed most. Up to two pedestals can be installed to heighten the range of airflow.
- **Wall/Column.** Yellow Jacket can be mounted to a wall or column using the Wall/Column Mount. The column can be one of a variety of shapes, e.g., round, flanged, square.
- **I-Beam.** Yellow Jacket can be mounted to an I-beam using the Yoke Mount. *Note: If the distance between the I-beam and obstructions less than 65" (165 cm), the I-Beam Mount must be used. Contact Customer Service for details.*
- **Bar Joists.** Yellow Jacket can be mounted to bar joists using the Yoke Mount.
- **Metal or Wood Superstructure.** Yellow Jacket can be hung from a building structure using chains or cables of rated strength to support the weight of the fan.
- **Concrete.** Yellow Jacket can be hung from a concrete structure using the Yoke Washer Assembly Kit and installer-supplied hardware.

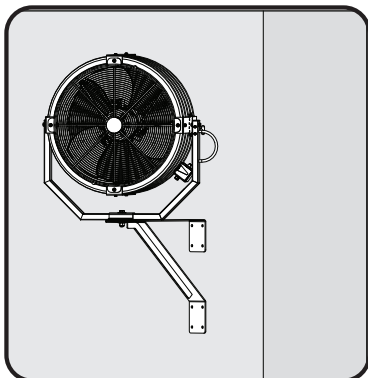
*Note: Consult a structural engineer to determine the required mounting hardware when mounting to a wall, column, metal or wood superstructure, or a concrete ceiling. The hardware must be of sufficient strength to safely support the fan. Big Ass Fans cannot provide specific installation details for these applications because of the wide range of mounting surfaces, conditions, and fastening methods.*

**Flanged Column**

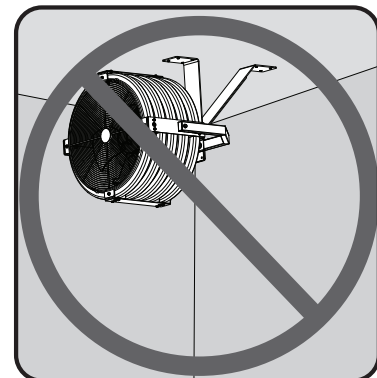


If hanging the fan using the Wall/Column Mount, the brackets must be positioned and mounted as shown below. Do not mount the fan in any other position or orientation without consulting a structural engineer.

**Correct Wall/Column Mount Orientation**



**Incorrect Wall/Column Mount Orientation**



# MOUNTING METHOD: PORTABLE BASE

**⚠ WARNING:** To reduce the risk of fire, electric shock, and injury to persons, the fan must be installed with the supplied mounting hardware. Other mounting hardware cannot be substituted.

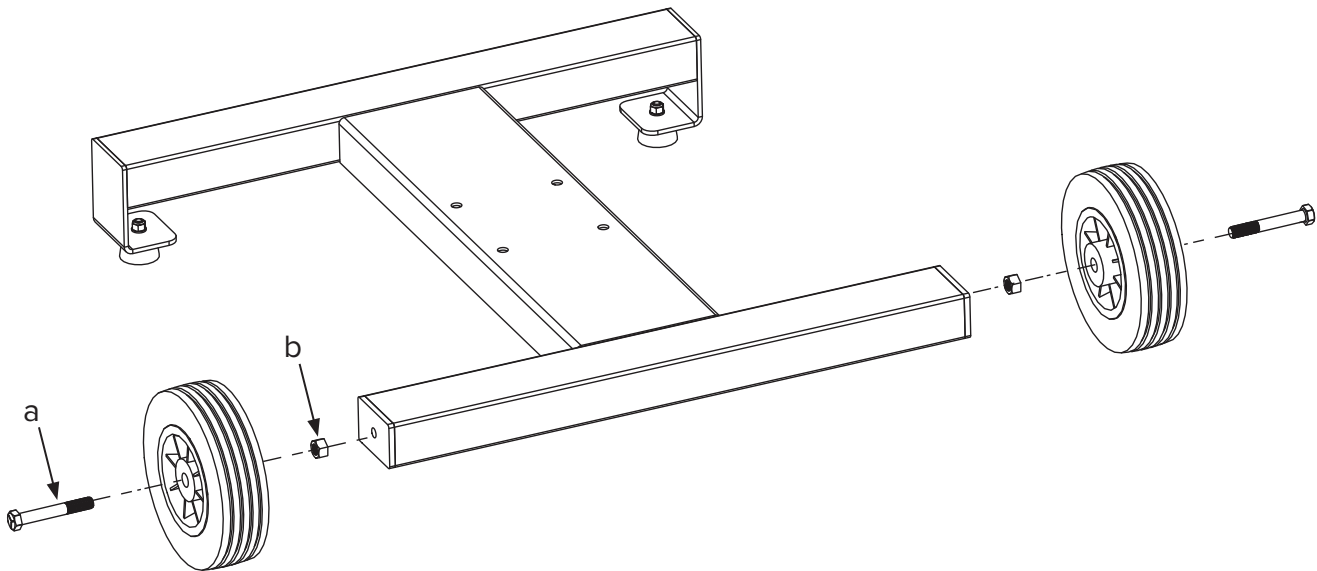
## 1. Attach wheels (to portable base)

To install the wheels, insert the screw through the center of the wheel. Thread the hex nut onto the screw approximately 1", and then insert the screw (attached to the wheel) into the hole on the fan base until it is tight. Screw the hex nut against the base, but do not overtighten. Repeat on the other wheel. Test the wheels to ensure they rotate freely.

### Wheel Hardware:

- a. (2) 1/2-13 x 3-1/2" Hex Head Cap Screw
- b. (2) 1/2"-13 Hex Nut

If you are mounting the fan directly to the portable base, continue to step 2. If you are installing pedestal(s), proceed to step 2b.



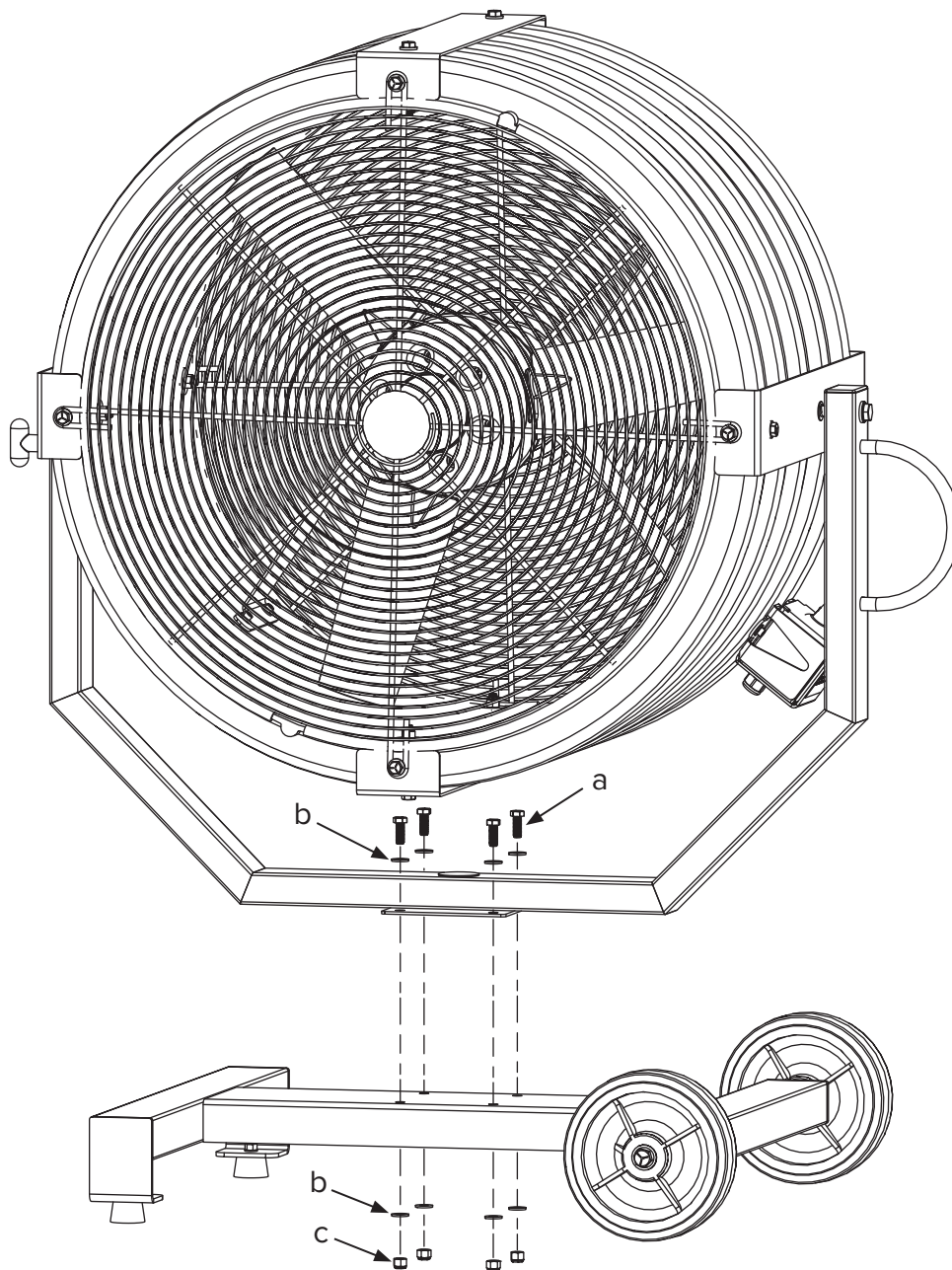
## 2a. Attach fan (to portable base)

Attach the fan to the portable base with the Base Hardware as shown. Position the yoke so that the handle is on the same side as the wheels.

Proceed to “Electrical Installation.”

### Base Hardware:

- a. (4) 3/8”-16 x 1” Bolt
- b. (8) 3/8” Washer
- c. (4) 3/8”-16 Nylock Nut



## 2b. Attach pedestal (to portable base)

### ATTENTION

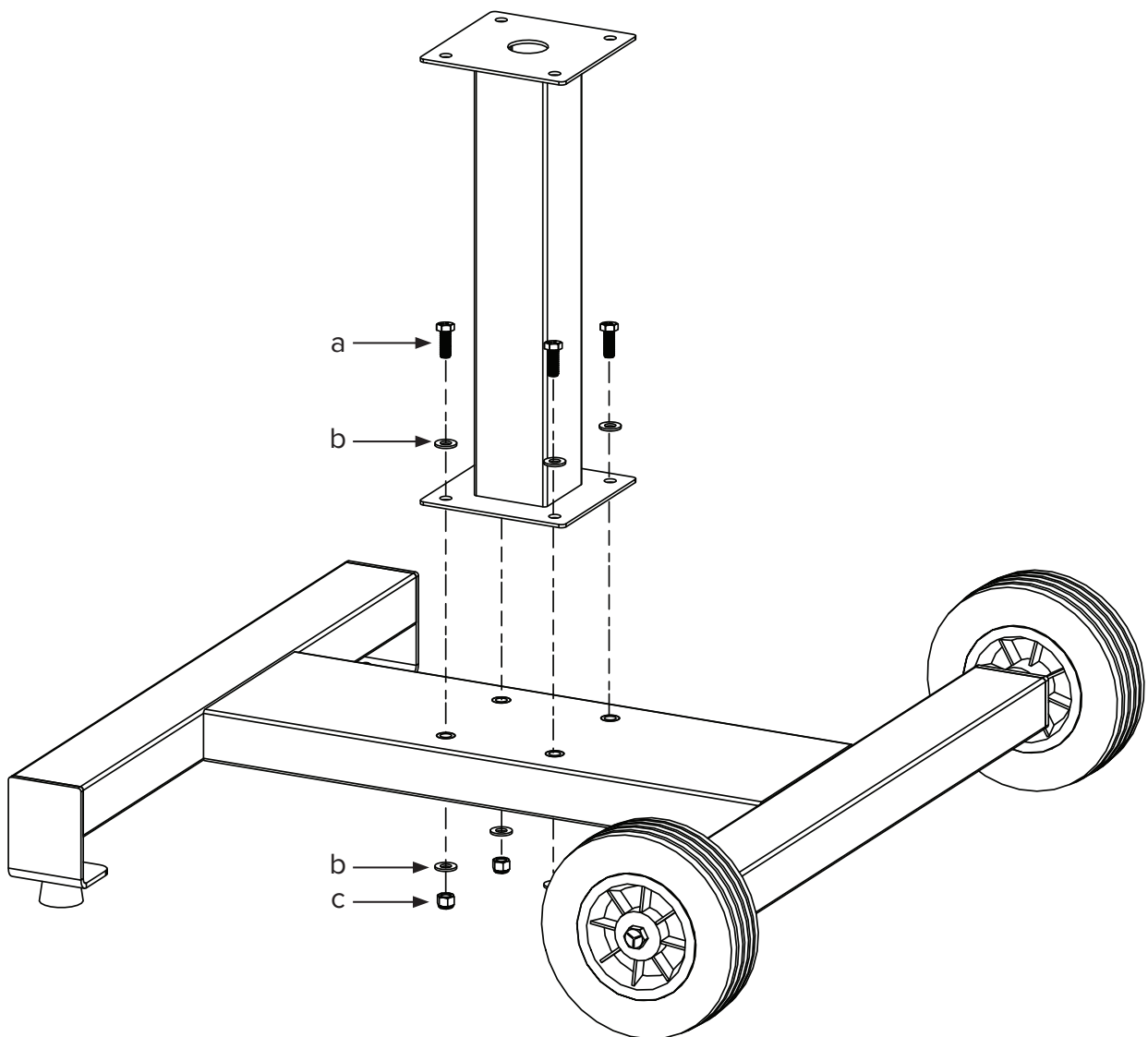
Pedestals are only included if ordered.

Attach the pedestal to the portable base with the Base Hardware.

Proceed to step 4 unless you purchased a second pedestal. If installing a second pedestal, continue to step 3.

#### Base Hardware:

- a. (4) 3/8"-16 x 1" Bolt
- b. (8) 3/8" Washer
- c. (4) 3/8"-16 Nylock Nut



### 3. Attach second pedestal (to pedestal)

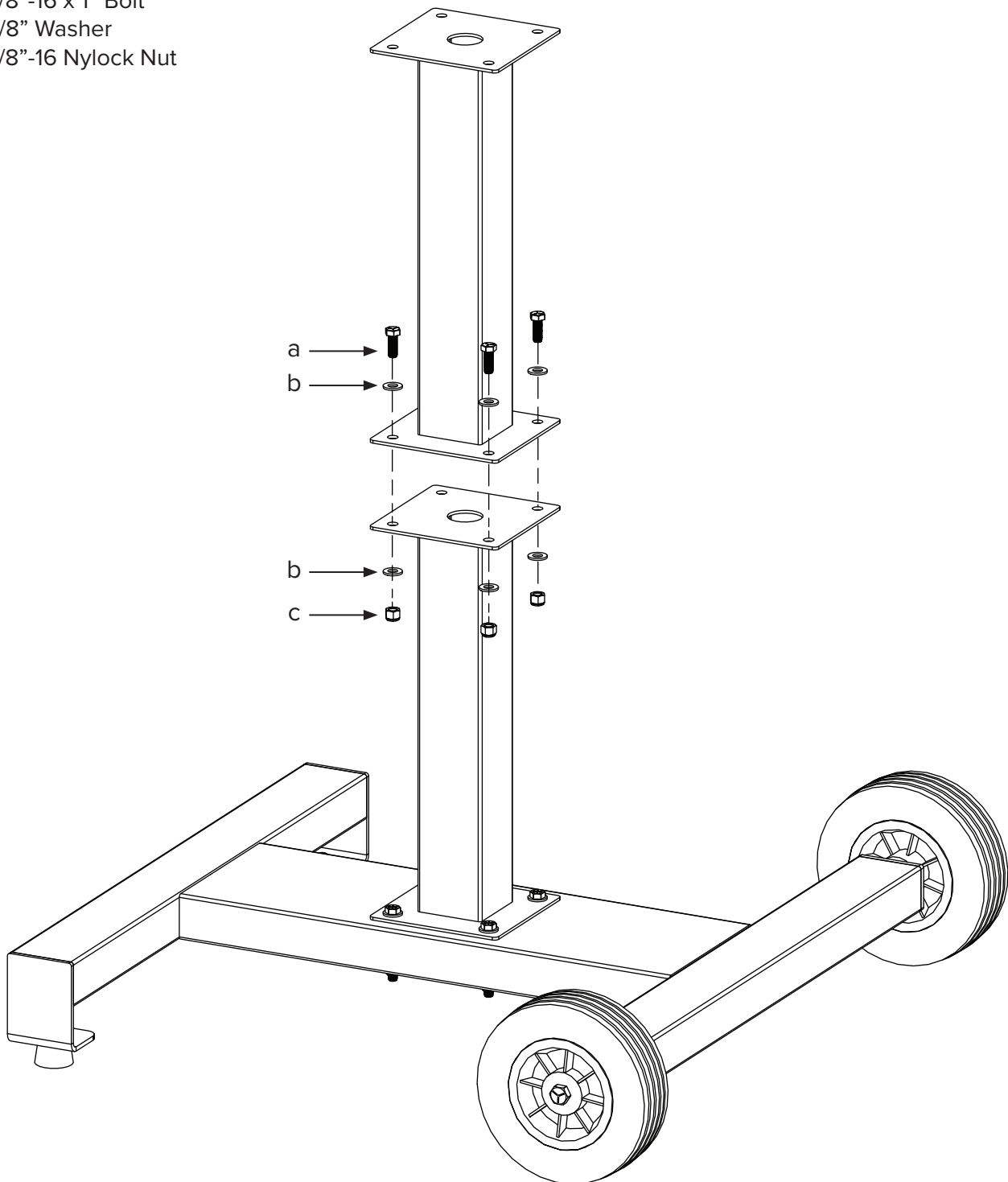
#### ATTENTION

Up to two (2) pedestals can be installed. A second pedestal is only included if ordered. If you did not order a second pedestal, continue to step 4.

After securing the first pedestal to the portable base, attach the pedestal with the Pedestal Hardware.

#### Pedestal Hardware:

- a. (4) 3/8"-16 x 1" Bolt
- b. (8) 3/8" Washer
- c. (4) 3/8"-16 Nylock Nut





## 4. Attach yoke (to pedestal)

### ATTENTION

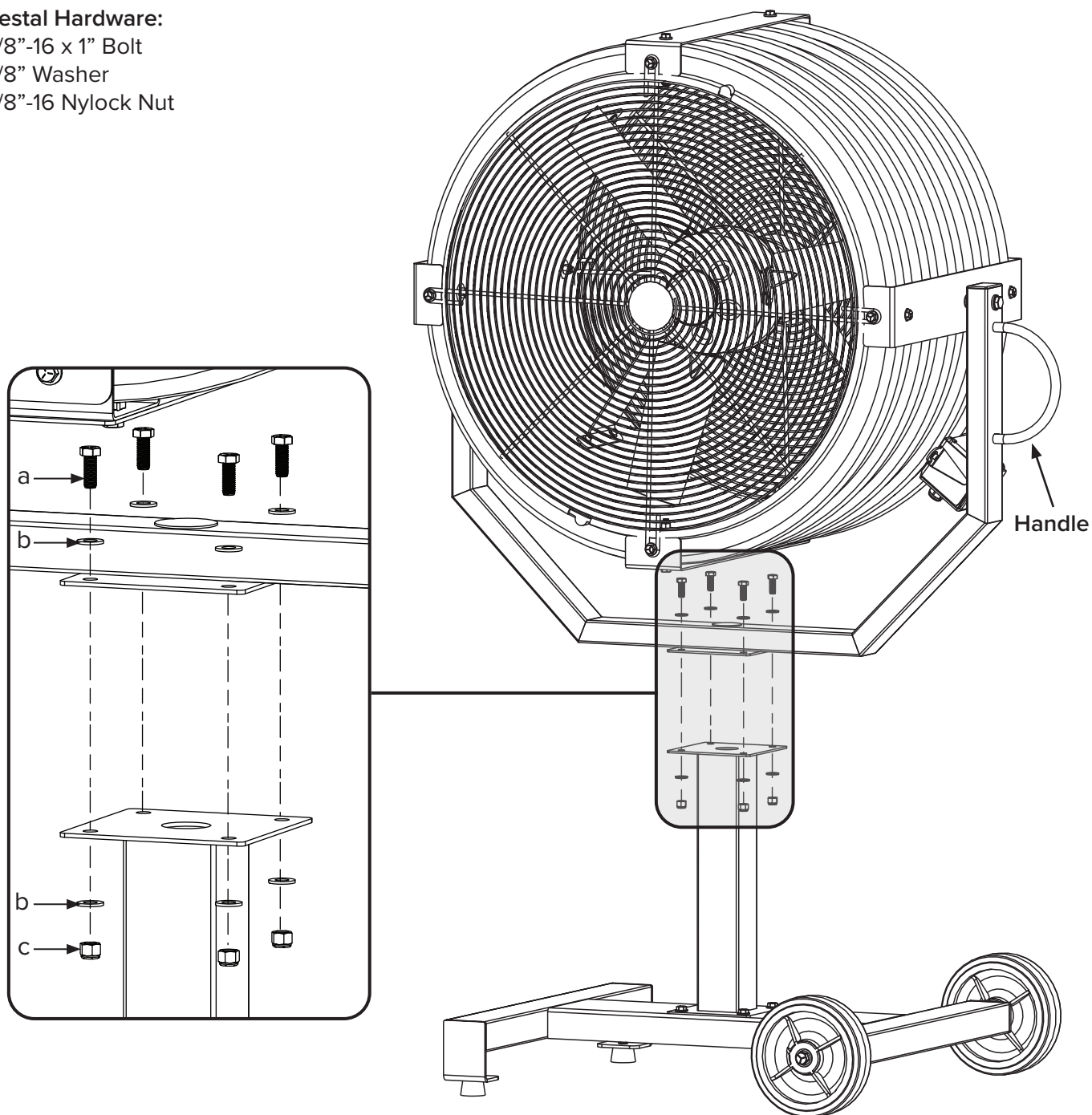
Ensure the position locking pin is secured prior to attaching the yoke to the pedestal.

Attach the fan yoke to the pedestal with the Pedestal Hardware. Position the yoke so that the handle is on the same side as the wheels.

Proceed to “Electrical Installation.”

#### Pedestal Hardware:

- a. 3/8”-16 x 1” Bolt
- b. 3/8” Washer
- c. 3/8”-16 Nylock Nut



# MOUNTING STRUCTURE: WALL

- ⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.
- ⚠ CAUTION:** It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!
- ⚠ CAUTION:** Do not install the Wall/Column Mount from a ceiling or any other building structure that is not a wall or a column. Consult a structural engineer for mounting conditions that are not covered in this installation manual!
- ⚠** The safety cable must be installed if mounting the fan to a wall.

Yellow Jacket<sup>®</sup> can be mounted to a wall surface that is free of foreign objects that may interfere with the fan. The following instructions are merely a recommendation for mounting the Yellow Jacket on a wall. Consult a structural engineer to determine the best method for mounting your fan.

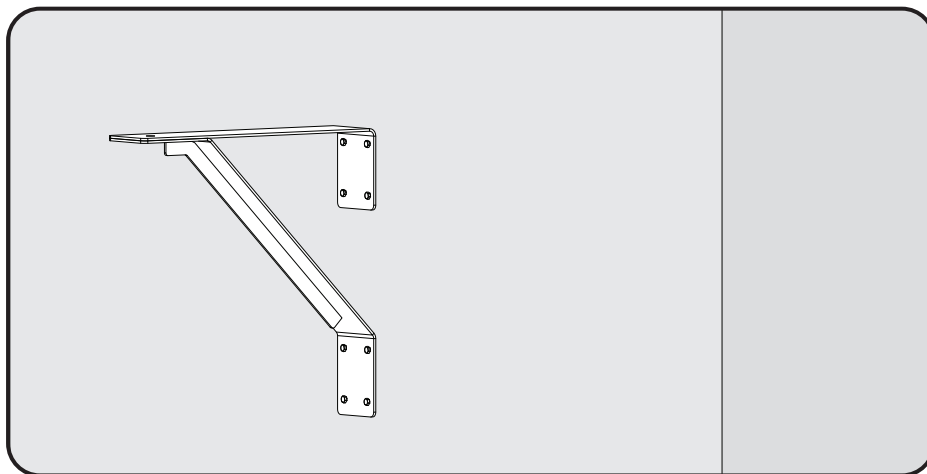
## 1. Attach supports (to wall)

### ATTENTION

Consult a structural engineer to determine the required hardware, which should be of sufficient strength and quantity to support the weight of the fan and its method of attachment. It is the installer's responsibility to verify the adequacy of the wall and mounting hardware.

Select a mounting location that is free of foreign objects that may obstruct airflow. Attach the supports to a flat wall surface using installer-supplied hardware, orienting the supports as shown below.

*Note: All hardware used to mount the supports is installer-supplied. Big Ass Fans cannot provide specific installation details because of the wide variability of mounting surfaces, conditions, and fastening methods. Consult a structural engineer to determine the required hardware.*



- ⚠** Attach the supports in the orientation shown above. Do not mount the supports vertically!

## 2. Secure yoke (to supports)

### ATTENTION

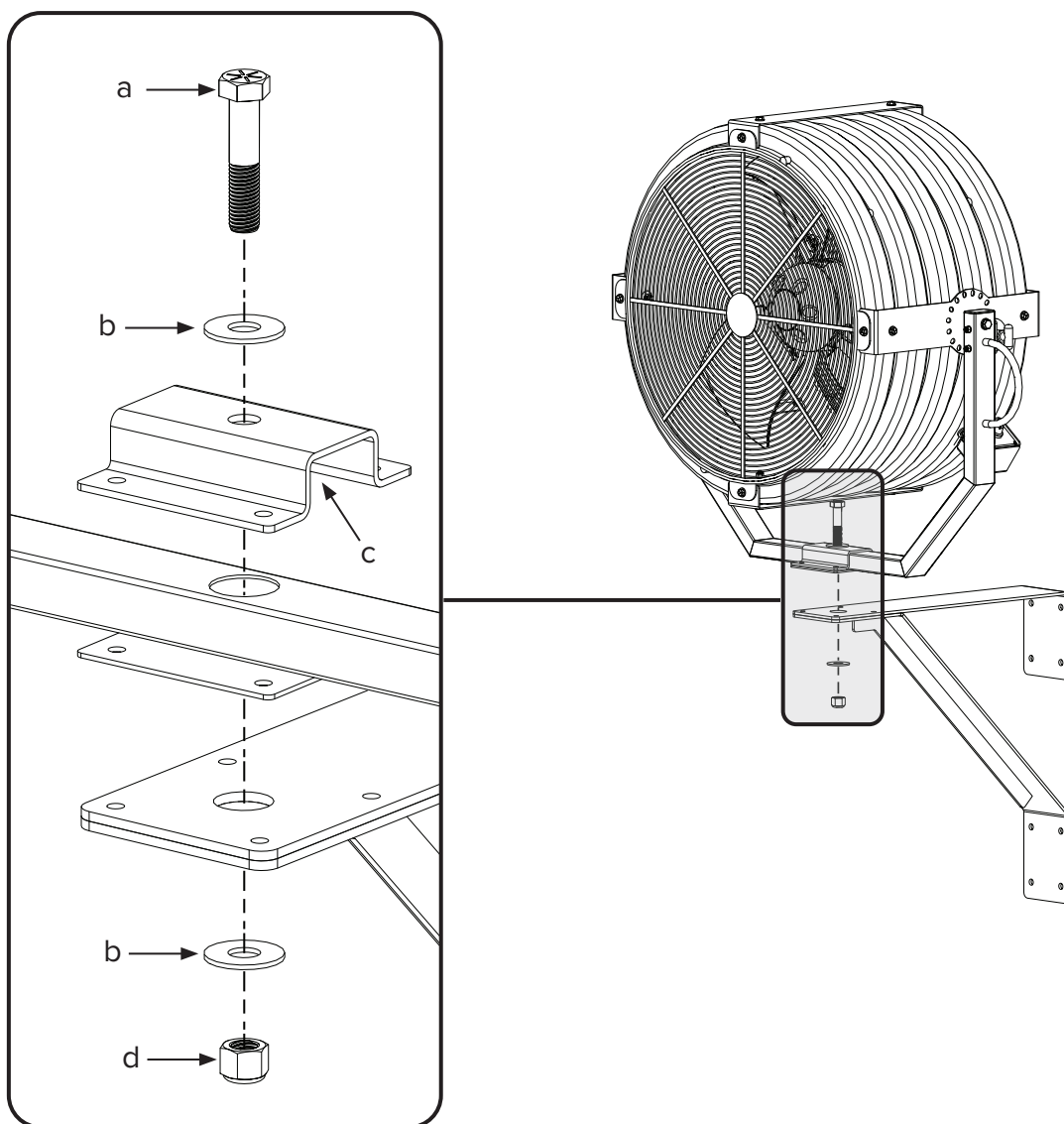
Ensure the position locking pin is secured prior to attaching the fan yoke to the supports.

Secure the fan yoke to the supports with the Wall/Column Mount Hardware. Tighten the nuts.

Proceed to “Electrical Installation.”

#### Wall/Column Mount Hardware:

- a. (1) 3/4-10 x 3-1/2” Hex Bolt
- b. (2) 3/4” Flat Washer
- c. (1) Yoke Attachment Bracket
- d. (1) 3/4-10 Nut



# MOUNTING STRUCTURE: COLUMN

**⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.

**⚠ CAUTION:** It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!

**⚠** The safety cable must be installed if mounting the fan to a column.

Yellow Jacket® can be mounted to a column that is part of the existing building structure. The following instructions are merely a recommendation for mounting the Yellow Jacket on a column. Consult a structural engineer to determine the best method for mounting your fan.

## 1. Prepare angle irons

*Note: All hardware (including angle irons) used to secure the wall/column mount supports is installer-supplied. Big Ass Fans cannot provide specific installation details because of the wide variability of mounting surfaces, conditions, and fastening methods. Consult a structural engineer to determine the required hardware.*

Cut each angle iron to the appropriate length using the width of the column, round or flanged (flange or open-flange side), as a reference.

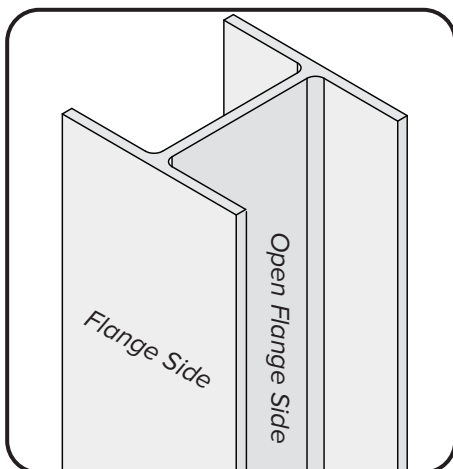
Drill a  $\varnothing 9/16$ " hole on each end of the angle iron  $3/4$ " (1.9 cm) from the edge of the column. Refer to the table and illustration below. Repeat the above process on all angle irons.

### Angle Iron Requirements

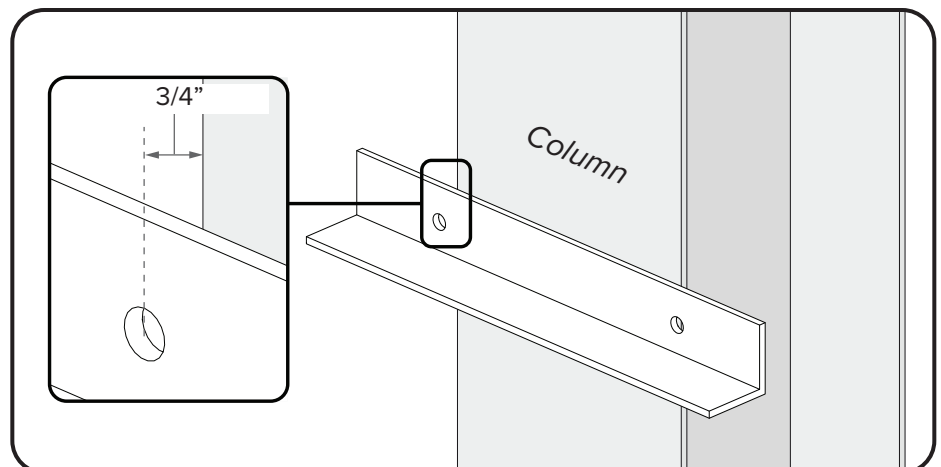
Column mounting application	Minimum angle iron dimensions (W x H x T)	Number of angle irons needed
Flanged Column (Flange Side)*	2.5" x 2.5" x 0.25" (6.4 cm x 6.4 cm x 0.64 cm)	4
Flanged Column (Open Flange Side)*	2.5" x 2.5" x 0.25" (6.4 cm x 6.4 cm x 0.64 cm)	8
Round Column	2.5" x 2.5" x 0.25" (6.4 cm x 6.4 cm x 0.64 cm)	2

\*Refer to the diagram below.

Flanged Column Diagram



Angle Iron Diagram



*Note: Exact installation may differ from the illustration.*

## 2. Attach supports (to column)

**⚠ CAUTION: It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!**

**⚠ CAUTION: The column on which the fan will be mounted must be verified as sufficient to support the weight of the fan.**

Secure the wall/column supports to the column with the installer-supplied hardware listed below. Refer to the appropriate illustration on the following page for your column mounting application.

*Note: All hardware used to secure the wall/column mount supports is installer-supplied. Big Ass Fans cannot provide specific installation details because of the wide variability of mounting surfaces, conditions, and fastening methods. Consult a structural engineer to determine the required hardware. The table below provides a general description of the hardware recommended for suggested column mounting applications.*

Tighten the hardware to a torque sufficient to support the weight of the fan, being careful not to deform the column.

*Note: The torque of the hardware depends on the grade of hardware and size of the fastener. The torque of the nuts on the U-bolt is the responsibility of the installer, as this will vary by U-bolt size.*

### Recommended Mounting Hardware

Column mounting application	Required hardware
Flanged Column (Flange Side)*	(4) 1/2" All-thread (8) Grade 5 1/2" Washer (8) Grade 5 1/2-13 Nylock Nut
Flanged Column (Open Flange Side)*	(8) 1/2" All-thread (32) Grade 5 1/2" Washer (24) Grade 5 1/2-13 Nylock Nut (8) 1/2-13 x 1-1/2" Grade 5 Bolt
Round Column**	(2) U-bolt (4) Washer (4) Nylock Nut

\*Refer to the Flanged Column Diagram on the previous page.

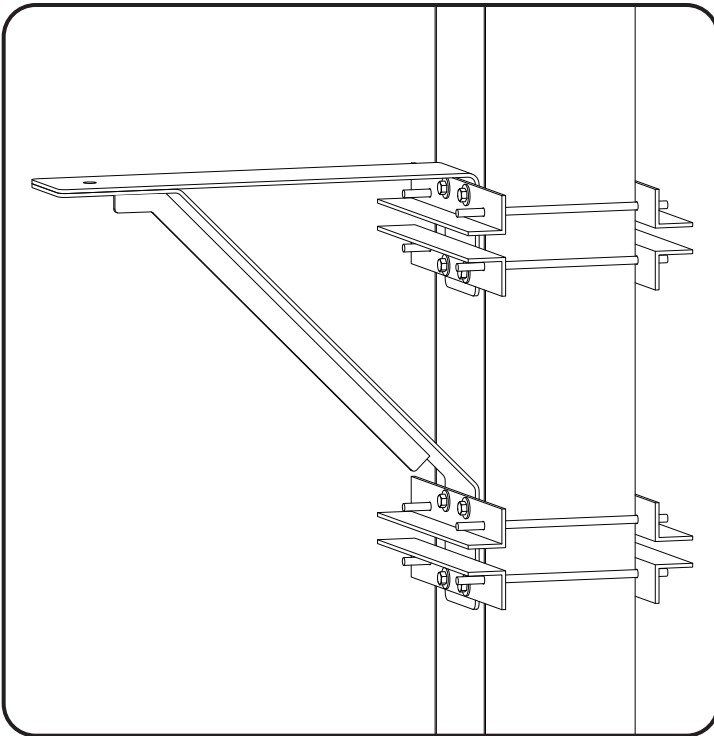
\*\*Hardware sizes for round column applications is the responsibility of the installer.

## ATTENTION

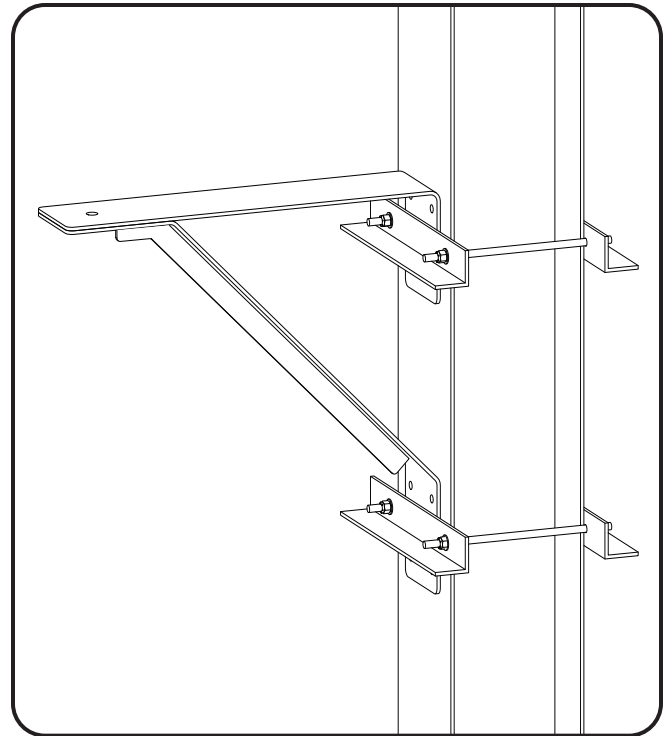
Attach the supports in the orientation shown in this installation guide. Do not mount the supports vertically!

- ⚠ **CAUTION:** It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!
- ⚠ **CAUTION:** The column on which the fan will be mounted must be verified as sufficient to support the weight of the fan.

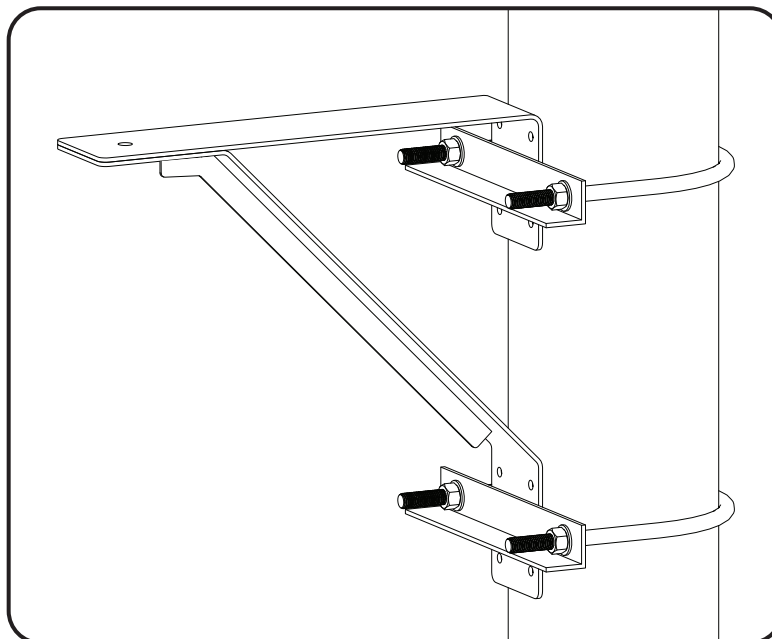
Open-Flange Side Installation



Flange Side Installation



Round Column Installation



### 3. Secure yoke (to supports)

#### ATTENTION

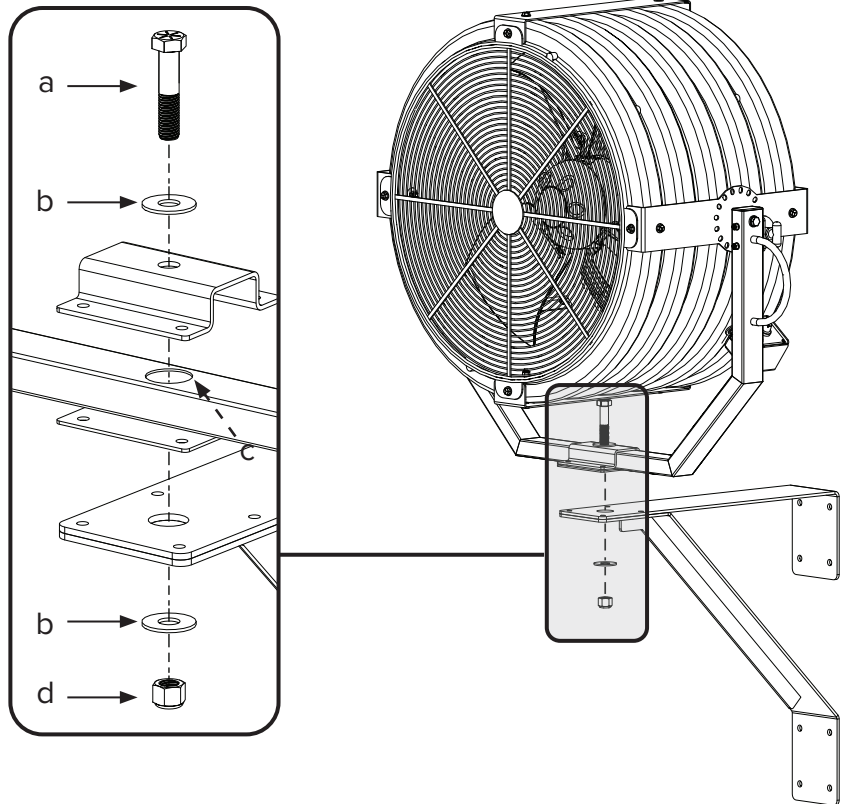
Ensure the position locking pin is secured prior to attaching the fan yoke to the supports.

Attach the fan yoke to the supports with the Wall/Column Mount Hardware. Tighten the nuts.

After installation, the fan must be inspected to verify it is sufficiently secured to the column. Depending on the size and surface of the column, the fan may be more prone to rotate if subjected to a lateral force.

#### Wall/Column Mount Hardware:

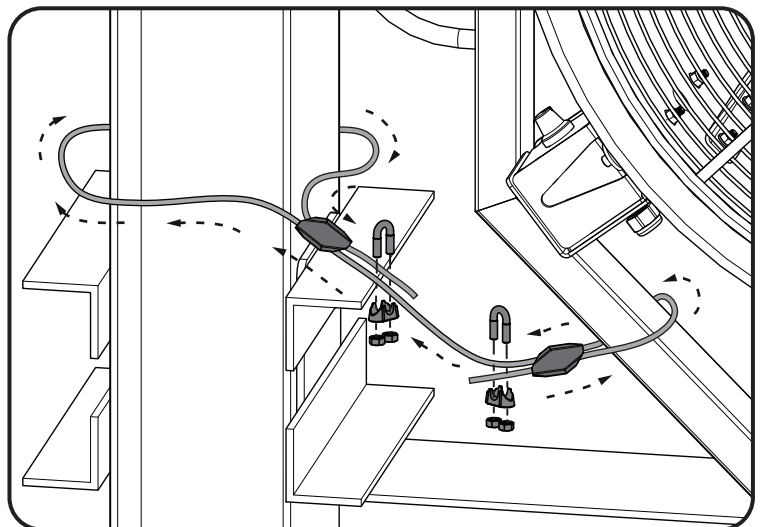
- a. (1) 3/4-10 x 3-1/2" Hex Bolt
- b. (2) 3/4" Flat Washer
- c. (1) Yoke Attachment Bracket
- d. (1) 3/4-10 Nut



### 4. Secure safety cable

**⚠ WARNING: The safety cable is a crucial part of the fan and must be installed correctly. If you have any questions, call Customer Service.**

- Route one end of the safety cable through a Gripple®, and then loop the cable around the fan yoke and back through the Gripple.
- Route the cable through the second Gripple, around the column, and then back through the second Gripple.
- Pull the loose ends of the cable through the Gripples until the cable is drawn tightly around the column and fan yoke.
- Secure the loose ends of the cable with the two (2) wire rope clips and torque to **4.5 ft-lb (6.1 N-m)**.



*Note: To back the safety cable out of the Gripple, insert a 1/16" (1.5 mm) Allen wrench into the small hole on the Gripple.*

Proceed to "Electrical Installation."

# MOUNTING STRUCTURE: I-BEAM

**⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.

**⚠ CAUTION:** Do not fasten the I-Beam mount to vertical I-beams, i.e., I-beams serving as columns.

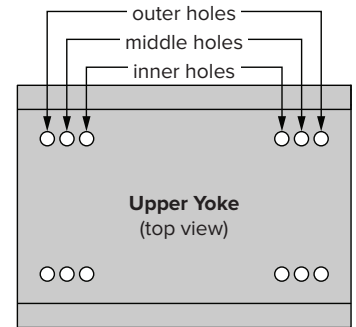
Depending on the size of your I-beam, the Yoke Mount kit comes with either a small or large upper yoke.

## 1. Attach upper yoke (to I-beam)

Measure the flange width of the I-beam. Consult the tables and diagram below. Select the upper yoke mounting holes that match the flange width of the I-beam. Secure the upper yoke to the I-beam with the Yoke Hardware. Tighten the bolts to **40 ft·lb (54.2 N·m)**.

### Upper Yoke Hardware:

- (4) 1/2-13 x 2" Bolt
- (8) 1/2" Flat Washer
- (4) 1/2-13 Nylock Nut
- (2) Beam Clamp
- (2) Spacer



### Small Upper Yoke

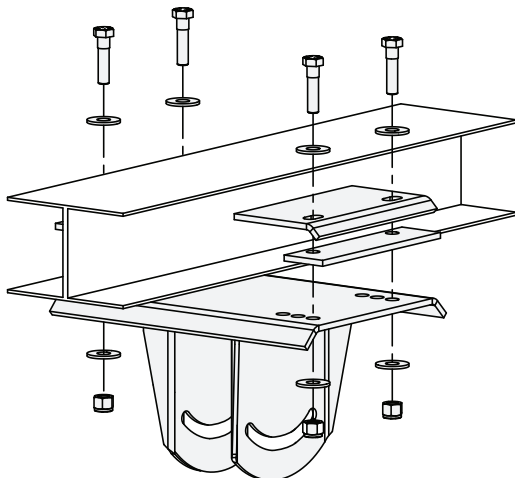
13-3/4" (349 mm) x 10" (258 mm)

I-beam flange width	Upper yoke mounting holes
5" (127 mm) to 6-5/8" (168 mm)	Inner holes
> 6-5/8" (168 mm) to 8-1/4" (210 mm)	Middle holes
> 8-1/4" (210 mm) to 9-7/8" (250 mm)	Outer holes

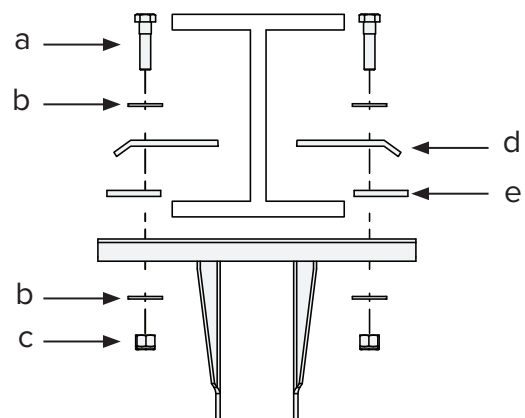
### Large Upper Yoke

18-1/2" (470 mm) x 10" (258 mm)

I-beam flange width	Upper yoke mounting holes
9-7/8" (250 mm) to 11-3/8" (289 mm)	Inner holes
> 11-3/8" (289 mm) to 13" (330 mm)	Middle holes
> 13" (330 mm) to 14-5/8" (371 mm)	Outer holes



### Side View



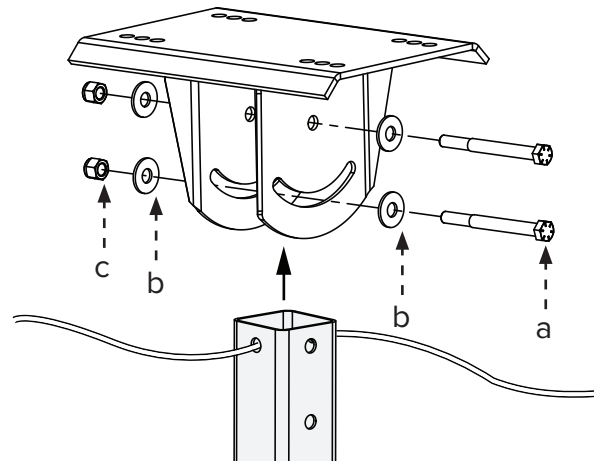


## 2. Attach extension tube (to upper yoke)

Fasten the extension tube to the upper yoke with the Extension Tube Hardware. Before tightening the bolts, allow the extension tube to hang freely and balance itself. Tighten the bolts to **40 ft·lb (54.2 N·m)**.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 4-1/2" Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



## 3. Secure safety cable

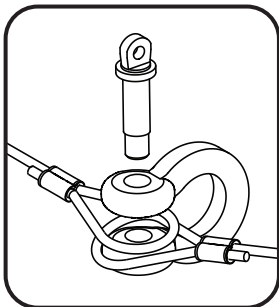
**⚠ WARNING:** The safety cable is a crucial part of the fan and must be installed correctly. If you have any questions, please contact Big Ass Fans Customer Service.

### ATTENTION

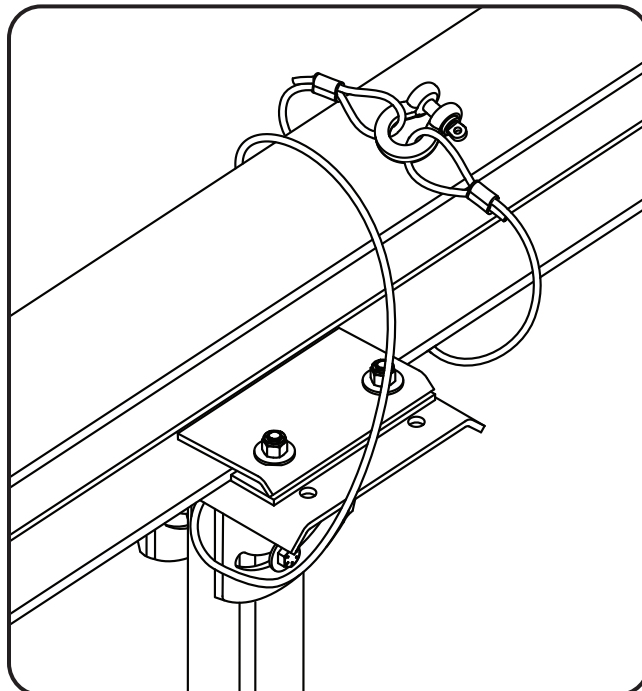
The safety cable is already attached to the extension tube.

Secure the safety cable by wrapping it around the I-beam and connecting the looped ends with the shackle. The cable must be drawn tightly around the I-beam, leaving as little slack as possible. If possible, the shackle should be on the topside of the I-beam. Securely tighten the shackle.

Shackle



I-Beam



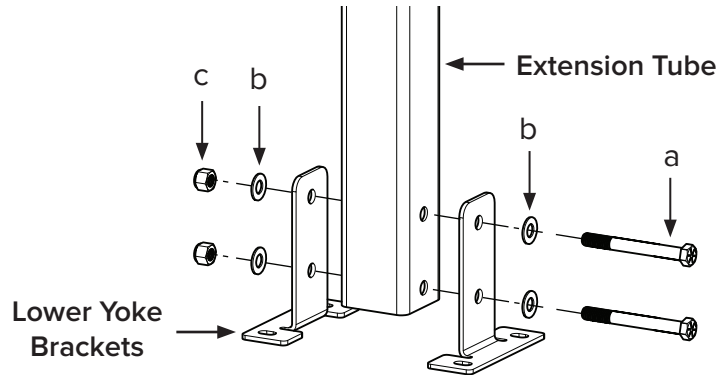
## 4a. Attach lower yoke brackets (to extension tube, 3 ft or shorter)

Secure the lower yoke brackets to the lower portion of the extension tube with the remaining Extension Tube Hardware. Tighten the bolts until snug, but do not fully tighten.

Proceed to step 8.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 4-1/2" GR 8 Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



## 4b. Attach lower yoke brackets (to extension tube, 4 ft or longer)

### ATTENTION

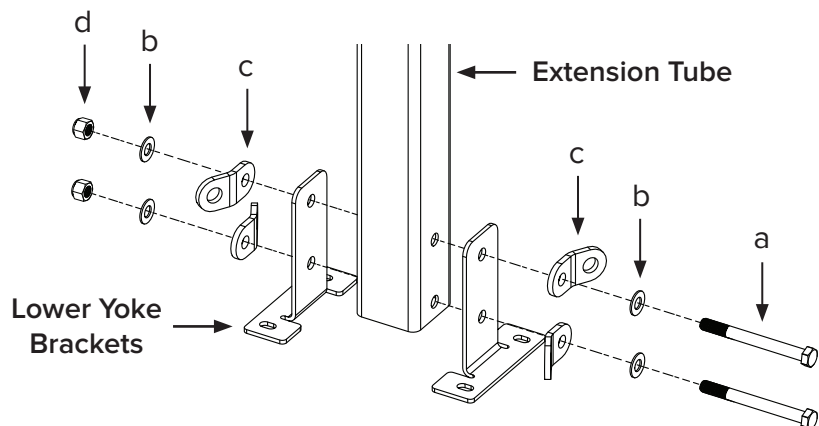
Use the 5" bolts that are packed with the guy wire clips in place of the 4-1/2" bolts included with the fan hardware.

Secure the lower yoke brackets to the lower portion of the extension tube with the remaining Extension Tube Hardware, the 5" bolts, and the guy wire clips. Orient the guy wire clips. Tighten the bolts until snug, but do not fully tighten.

Proceed to step 5.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 5" GR 8 Bolt
- b. (4) 1/2" Flat Washer
- c. (4) Guy Wire Clip
- d. (2) 1/2-13 Nylock Nut



## 5. Attach beam clamp

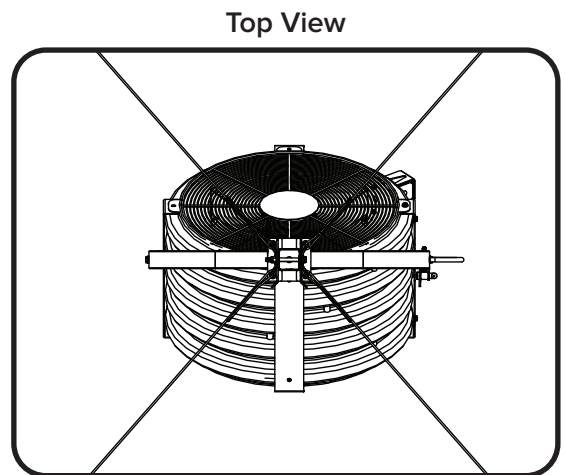
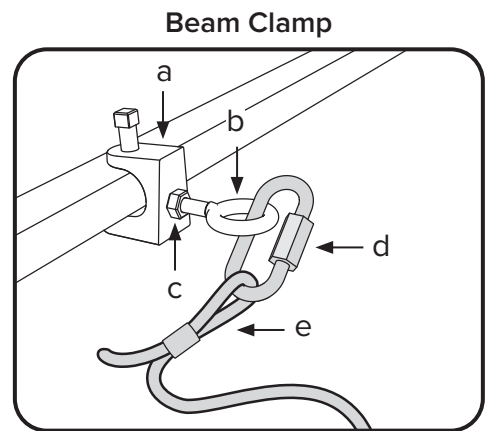
Attach the beam clamp to the I-beam. *The guy wire should be at a 30°–45° angle from the roof to the Yellow Jacket® extension tube.* Place the beam clamp accordingly. Fully tighten the set screw to secure the clamp.

Fasten the small eyebolt and nut onto the beam clamp. The nut will be on the outside of the beam clamp.

Loop the crimped end of the guy wire into the locking carabiner and secure to the eyebolt. Securely tighten the carabiner.

### Guy Wire Hardware:

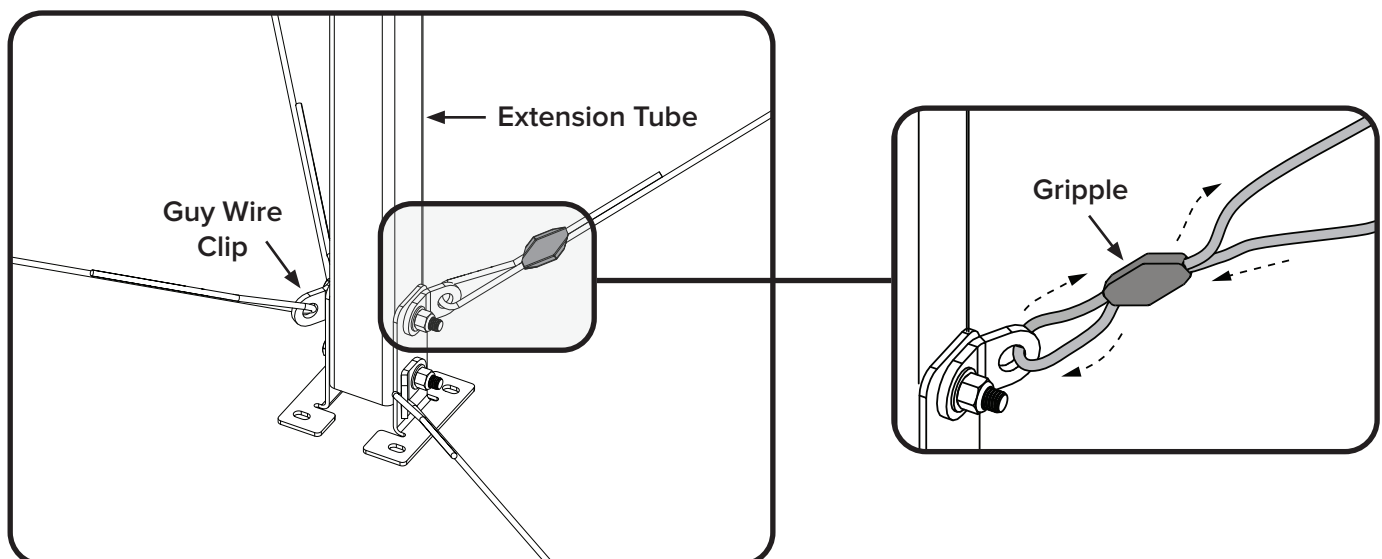
- a. (4) 1/4" Beam Clamp
- b. (4) 1/4-20 x 1" Eyebolt
- c. (4) 1/4-20 Hex Nut
- d. (4) Locking Carabiner
- e. (4) Guy Wire



## 6. Route guy wire through Gripple®

Route the guy wire through the Gripple, the guy wire clip at the bottom of the extension tube, and back through the Gripple. Do not tighten the Gripple until the remaining guy wires have been installed.

*Note: To back the guy wire out of the Gripple, insert a 1/16 (1.5 mm) Allen wrench into the small hole on the Gripple.*



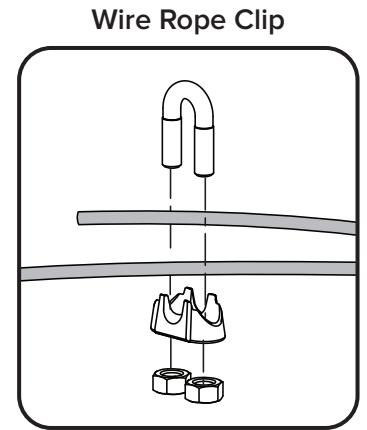
## 7. Install remaining guy wires

**⚠ CAUTION: Over-tightening the guy wires could throw the fan off balance.**

Repeat steps 5–6 to install the three remaining guy wires.

Evenly cinch all four guy wires into place using the Gripples®. The guy wires should be taut and evenly spaced around the extension tube.

Once all of the guy wires are taut, secure their loose ends with the wire rope clips and torque to **4.5 ft·lb (6.1 N·m)**. *Ensure all electrical cords/cables are unobstructed by the guy wire system.*



## 8. Attach fan (to lower yoke)

**⚠ CAUTION: Ensure the position locking pin is secured prior to attaching the fan to the lower yoke attachment bracket!**

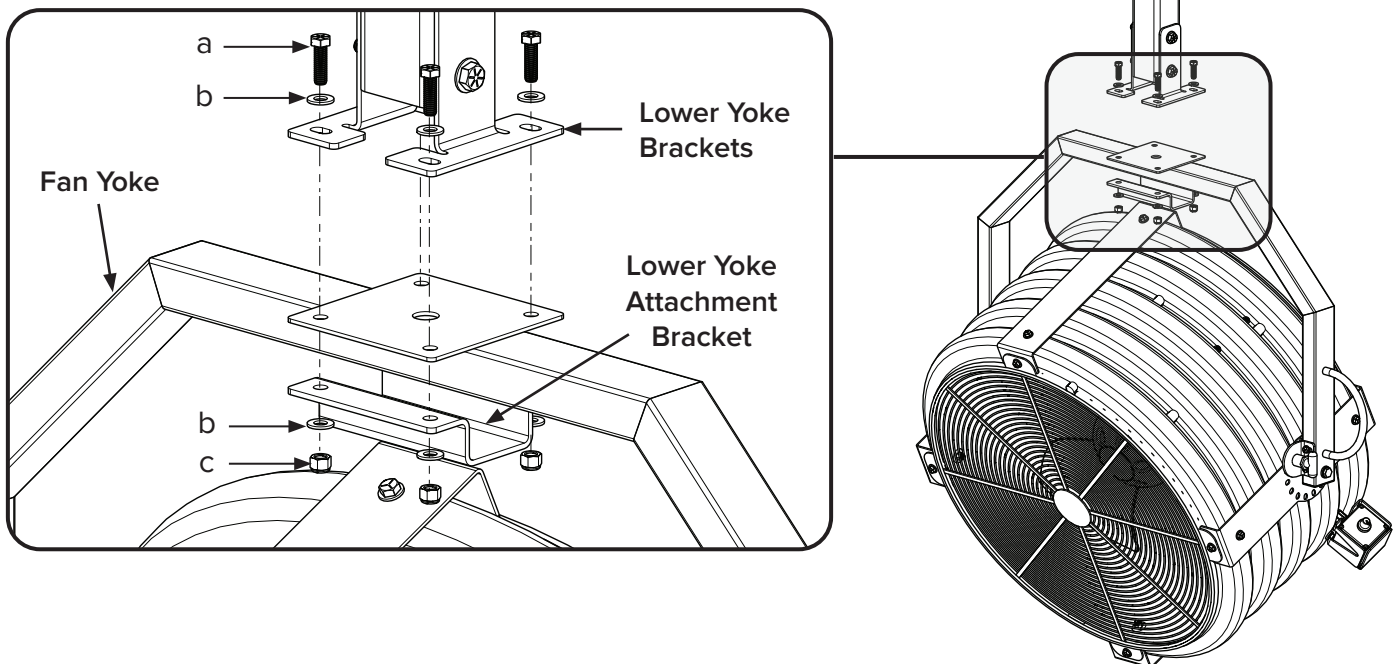
Secure the fan yoke to the lower yoke brackets with the lower yoke attachment bracket and Lower Yoke Hardware as shown below. Fully tighten the bolts to **40 ft·lb (54.2 N·m)**. Allow the fan to hang and balance itself, and then fully tighten the Extension Tube Hardware (securing the lower yoke brackets) to **40 ft·lb (54.2 N·m)**.

*Note: Guy wires and Guy Wire Hardware (if used) are not shown in the illustration below. The procedure for attaching the fan to the lower yoke is the same with or without guy wires installed.*

Proceed to “Electrical Installation.”

### Lower Yoke Hardware:

- (4) 3/8-16 x 1-1/4” GR 8 Bolt
- (8) 3/8” Flat Washer
- (4) 3/8-16 Nylock Nut



# MOUNTING STRUCTURE: BAR JOISTS

**⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.

**⚠ CAUTION:** Unsupported angle iron spans should not exceed 12 ft (3.7 m).

Depending on the angle iron span, the Yoke Mount kit comes with either a small or large upper yoke. Angle irons and angle iron hardware are not included with the Yoke Mount kit.

## ATTENTION

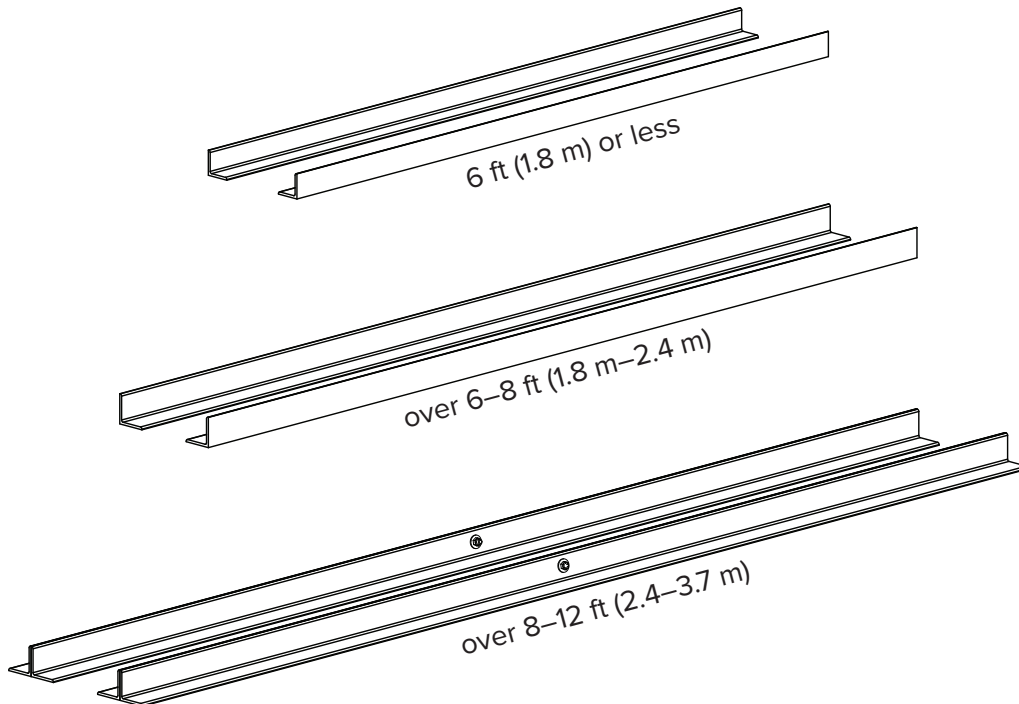
**Never use beam clips when mounting the fan to angle irons! Beam clips are only intended for I-beam installations.**

Angle iron span (between mounting points)	Minimum angle iron dimensions (W x H x T)	Number of angle irons needed
6 ft (1.8 m) or less	2.5" x 2.5" x 0.25" (6.4 cm x 6.4 cm x 0.6 cm)	2
over 6–8 ft (1.8–2.4 m)	3" x 3" x 0.25" (7.6 cm x 7.6 cm x 0.6 cm)	2
over 8–12 ft (2.4–3.7 m)	3" x 3" x 0.25" (7.6 cm x 7.6 cm x 0.6 cm)	4*

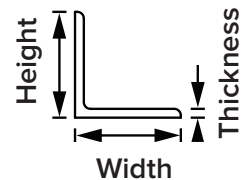
\*2 pairs of angle irons. Pairs should be placed back to back and fastened in center (see step 2).

## 1. Select proper angle irons

Follow the table below when selecting angle irons for fan installation.



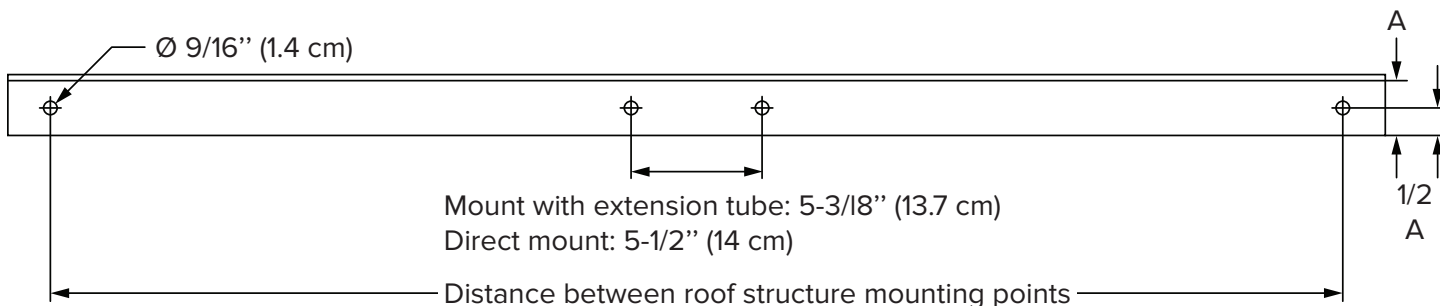
**Angle Iron Side View**  
(see table for dimensions)



## 2. Pre-drill angle irons

Drill two  $\varnothing 9/16$ " (1.4 cm) holes exactly  $5\text{-}3/8$ " (13.7 cm) apart in the centers of two angle irons. If the motor frame will be mounted directly to the angle irons, drill two  $\varnothing 9/16$ " (1.4 cm) holes exactly  $5\text{-}1/2$ " (14 cm) apart in the centers of two angle irons.

Measure the distance between the mounting points of the roof structure that the angle irons will span. Measure the same distance on the angle irons, and then drill two  $\varnothing 9/16$ " (1.4 cm) holes through the ends of the angle irons. If the span is 8 ft (2.4 m) or less, drill holes in the two angle irons. If the span is greater than 8 ft (2.4 m), drill holes in four angle irons.



## 3. Fasten angle irons (if span is longer than 8 ft)

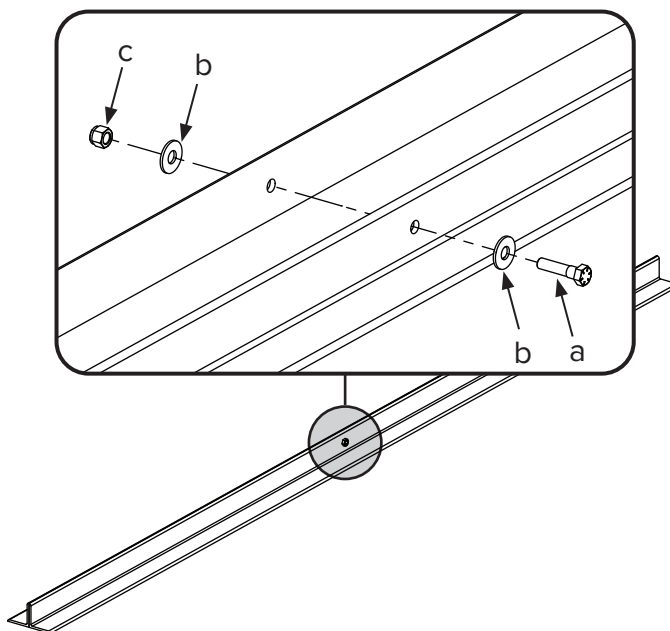
### ATTENTION

If the angle iron span is 8 ft (2.4 m) or less, proceed to step 4a on the following page.

If the angle iron span is greater than 8 ft (2.4 m), it is necessary to use double angle irons (total of four). Locate the center of the angle iron length. Drill a  $\varnothing 9/16$ " (1.4 cm) hole through the centers of the vertical walls of four angle irons. Place two drilled angle irons back-to-back. Fasten the angle irons together with installer-supplied Grade 8 hardware. Align the angle irons to each other and tighten the bolts to **40 ft·lb (54.2 N·m)**. Repeat this step for the remaining two angle irons.

### Installer-Supplied Grade 8 Hardware:

- (2)  $1/2\text{-}13$  Bolt
- (4)  $1/2$ " Flat Washer
- (2)  $1/2$ " Nut



Side view

## 4a. Fasten single angle irons to roof structure mounting points

### ATTENTION

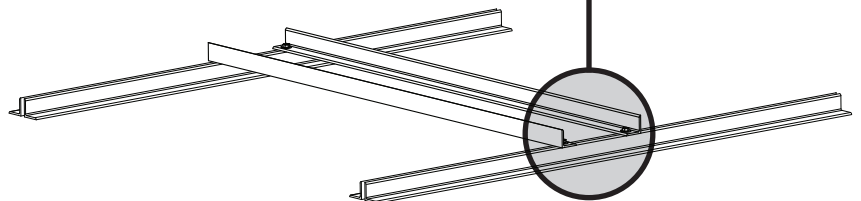
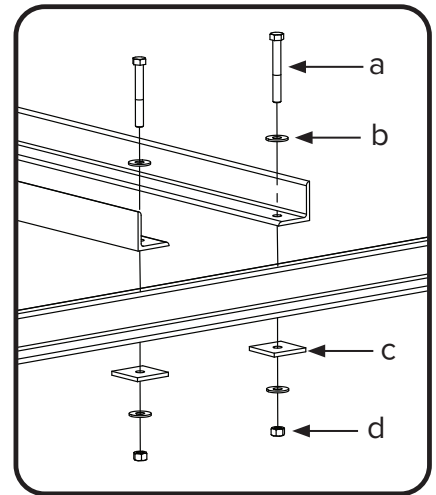
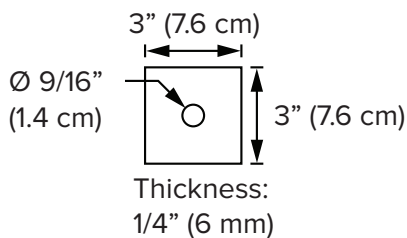
If installation requires double angle irons (span is greater than 8 ft), proceed to step 4b.

Fasten the angle irons to the roof structure mounting points at each end with installer-supplied Grade 8 hardware. **Do not tighten the angle iron hardware until the fan has been mounted to the angle irons.** *Note: Big Ass Fans recommends orienting the angle irons so that the horizontal legs are facing each other. Refer to the illustration.*

#### Install-Supplied Grade 8 Hardware:

- a. (4) 1/2-13 Bolt
- b. (8) 1/2" Flat Washer
- c. (4) 3" Square Washer (BAF-supplied)
- d. (4) 1/2" Nut

#### Square Washer



## 4b. Fasten double angle irons to roof structure mounting points

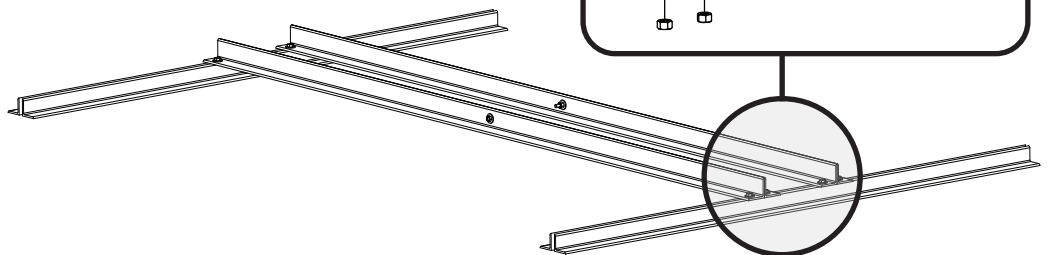
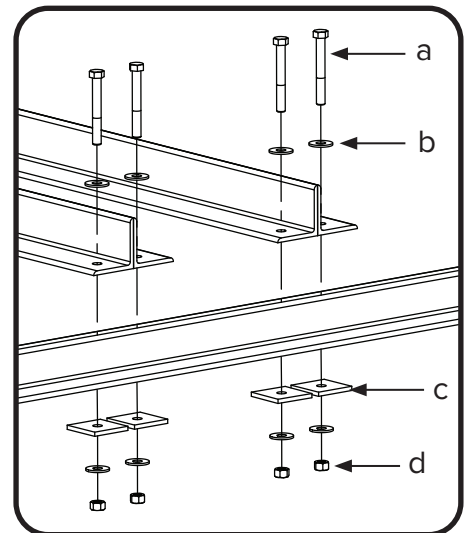
### ATTENTION

If installation requires double angle irons (span is greater than 8 ft), proceed to step 4b.

Fasten the angle irons to the roof structure mounting points at each end with installer-supplied Grade 8 hardware. **Do not tighten the angle iron hardware until the fan has been mounted to the angle irons.**

#### Installer-Supplied Grade 8 Hardware:

- a. (8) 1/2-13 Bolt
- b. (16) 1/2" Flat Washer
- c. (8) 3" Square Washer (BAF-supplied)
- d. (8) 1/2" Nut



## 5. Attach upper yoke (to angle irons)

**⚠ CAUTION:** Beam clips and spacers are never used when mounting the fan to angle irons!

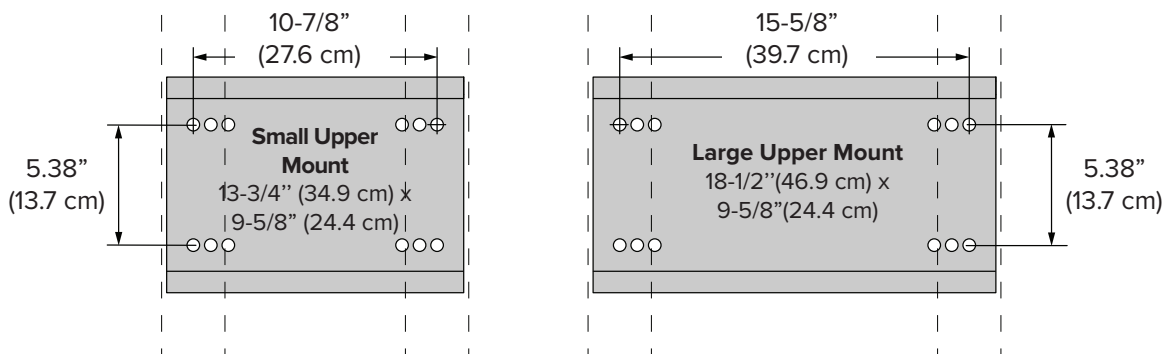
### ATTENTION

The angle irons should be aligned with the outermost holes in the upper yoke.

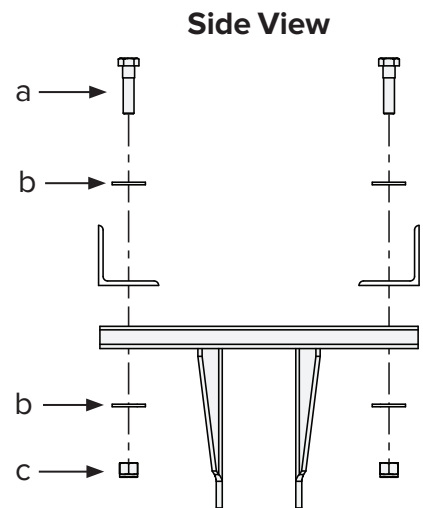
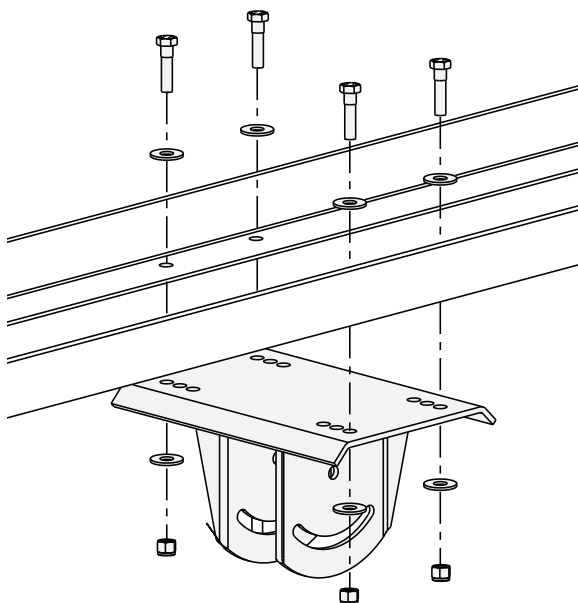
Secure the upper yoke directly to the angle irons with the Upper Yoke Hardware. Consult the diagrams below for distances between the angle irons. Tighten the bolts to **40 ft·lb (54.2 N·m)**.

#### Upper Yoke Hardware:

- (4) 1/2-13 x 2" GR 8 Bolt
- (8) 1/2" Flat Washer
- (4) 1/2-13 Nylock Nut



Note: Dashed lines represent angle irons.



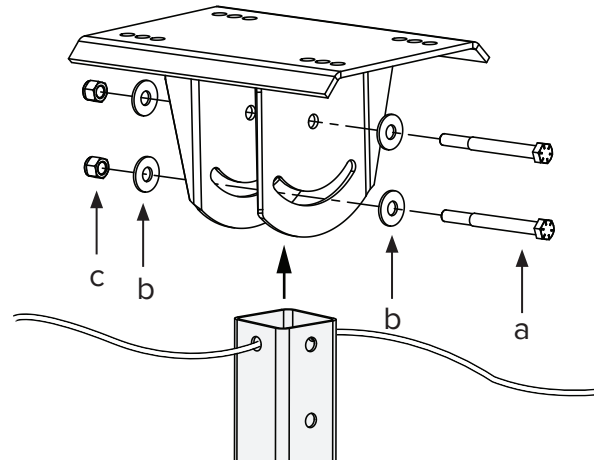


## 6. Attach extension tube (to upper yoke)

Fasten the extension tube to the upper yoke with the Extension Tube Hardware. Before tightening the bolts, allow the extension tube to hang freely and balance itself. Tighten the bolts to **40 ft·lb (54.2 N·m)**.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 4-1/2" Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



## 7. Secure safety cable

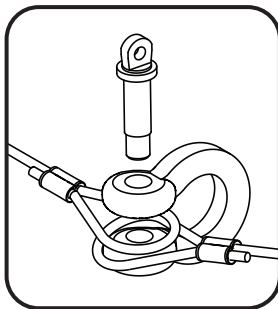
**⚠ WARNING:** The safety cable is a crucial part of the fan and must be installed correctly. If you have any questions, please contact Big Ass Fans Customer Service.

### ATTENTION

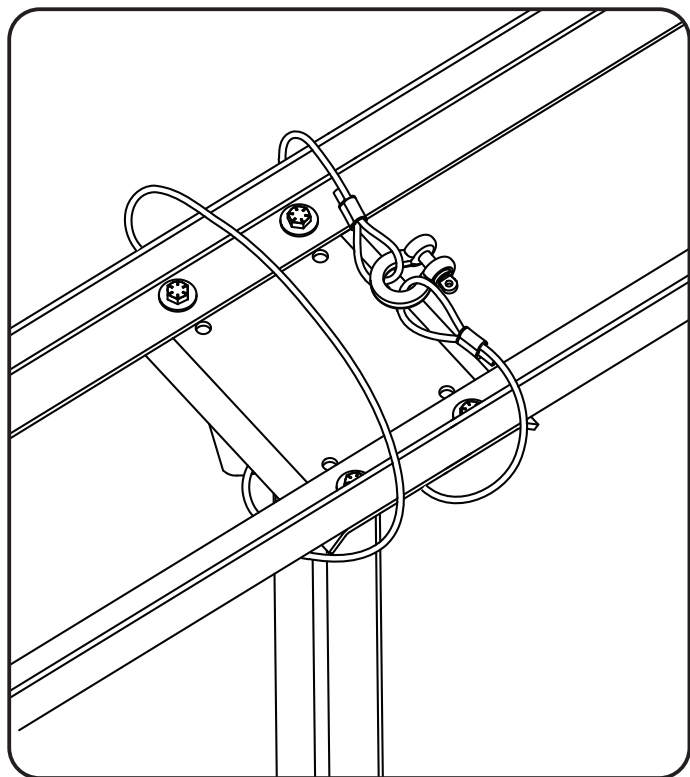
The safety cable is already attached to the extension tube.

Secure the safety cable by wrapping it around the angle irons and connecting the looped ends with the shackle as shown. The cable must be drawn tightly around the angle irons, leaving as little slack as possible. The shackle should be on the topside of the angle irons if possible. Securely tighten the shackle.

Shackle



Angle Irons



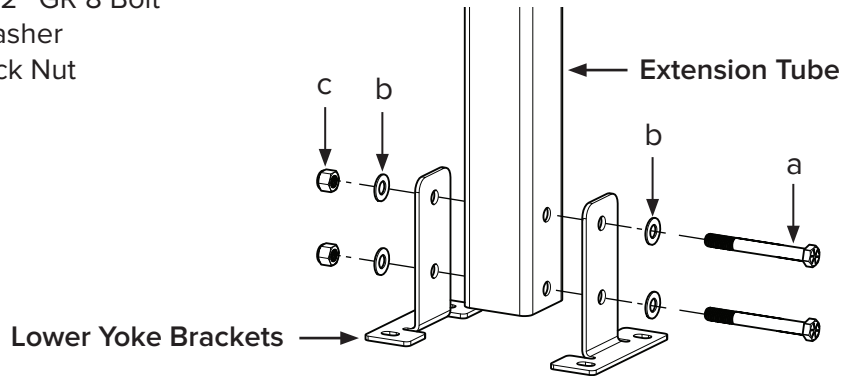
## 8a. Attach lower yoke brackets (to extension tube, 3 ft or shorter)

Secure the lower yoke brackets to the lower portion of the extension tube with the remaining Extension Tube Hardware. Tighten the bolts until snug, but do not fully tighten.

Proceed to step 12.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 4-1/2" GR 8 Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



## 8b. Attach lower yoke brackets (to extension tube, 4 ft or longer)

### ATTENTION

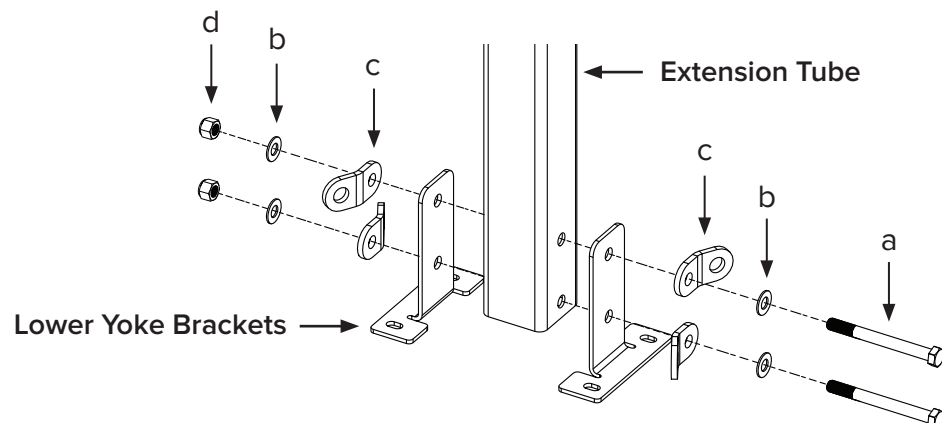
Use the 5" bolts that are packed with the guy wire clips in place of the 4-1/2" bolts included with the fan hardware.

Secure the lower yoke brackets to the lower portion of the extension tube with the remaining Extension Tube Hardware, the 5" bolts, and the guy wire clips. Orient the guy wire clips. Tighten the bolts until snug, but do not fully tighten.

Proceed to step 9.

### Extension Tube Hardware:

- a. (2) 1/2-13 x 5" GR 8 Bolt
- b. (4) 1/2" Flat Washer
- c. (4) Guy Wire Clip
- d. (2) 1/2-13 Nylock Nut



## 9. Attach beam clamp

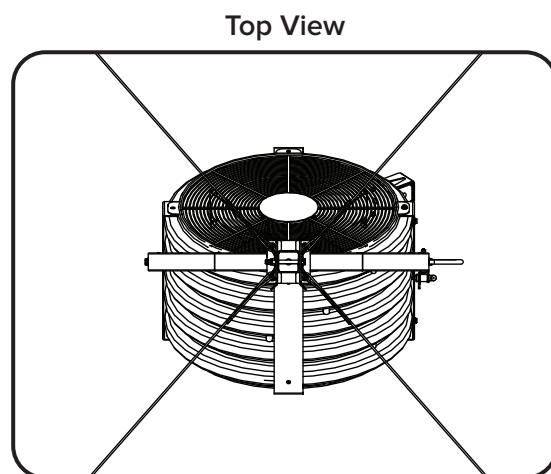
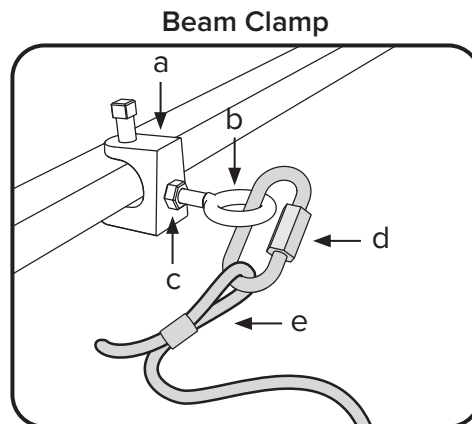
Attach the beam clamp to the mounting structure. *The guy wire should be at a 30°–45° angle from the roof to the extension tube.* Place the beam clamp accordingly. Fully tighten the set screw to secure the clamp.

Fasten the small eyebolt and nut onto the beam clamp. The nut will be on the outside of the beam clamp.

Loop the crimped end of the guy wire into the locking carabiner and secure to the eyebolt. Securely tighten the carabiner.

### Guy Wire Hardware:

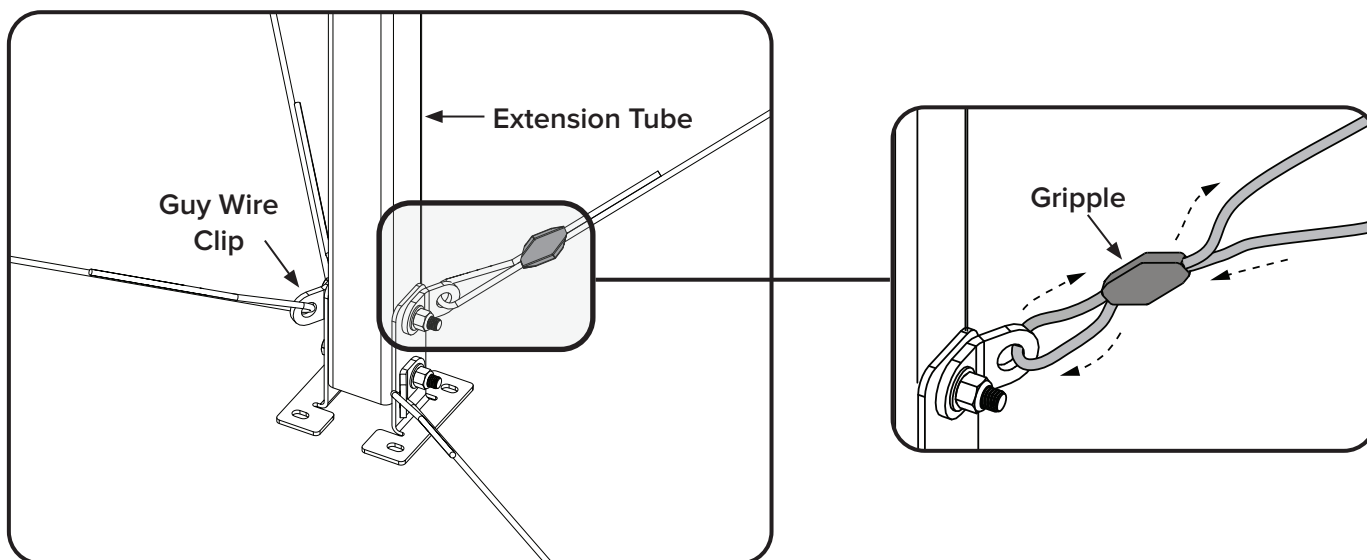
- a. (4) 1/4" Beam Clamp
- b. (4) 1/4-20 x 1" Eyebolt
- c. (4) 1/4-20 Hex Nut
- d. (4) Locking Carabiner
- e. (4) Guy Wire



## 10. Route guy wire through Gripper®

Route the guy wire through the Gripper, the guy wire clip at the bottom of the extension tube, and back through the Gripper. Do not tighten the Gripper until the remaining guy wires have been installed.

*Note: To back the guy wire out of the Gripper, insert a 1/16 (1.5 mm) Allen wrench into the small hole on the Gripper.*

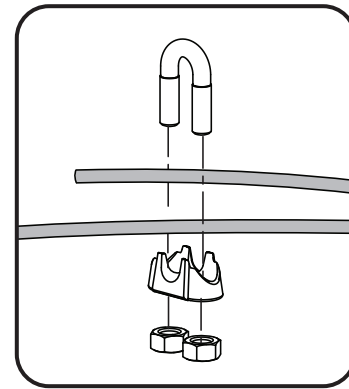


## 11. Install remaining guy wires

**⚠ CAUTION:** Over-tightening the guy wires could throw the fan off balance.

Repeat steps 9–10 to install the three remaining guy wires. Evenly cinch all four guy wires into place using the Gripples®. The guy wires should be taut and evenly spaced around the extension tube. Once all of the guy wires are taut, secure their loose ends with the wire rope clips and torque to **4.5 ft·lb (6.1 N·m)**. *Ensure all electrical cords/cables are unobstructed by the guy wire system.*

Wire Rope Clip



## 12. Attach fan (to lower yoke)

**⚠ CAUTION:** Ensure the position locking pin is secured prior to attaching the fan to the lower yoke attachment bracket!

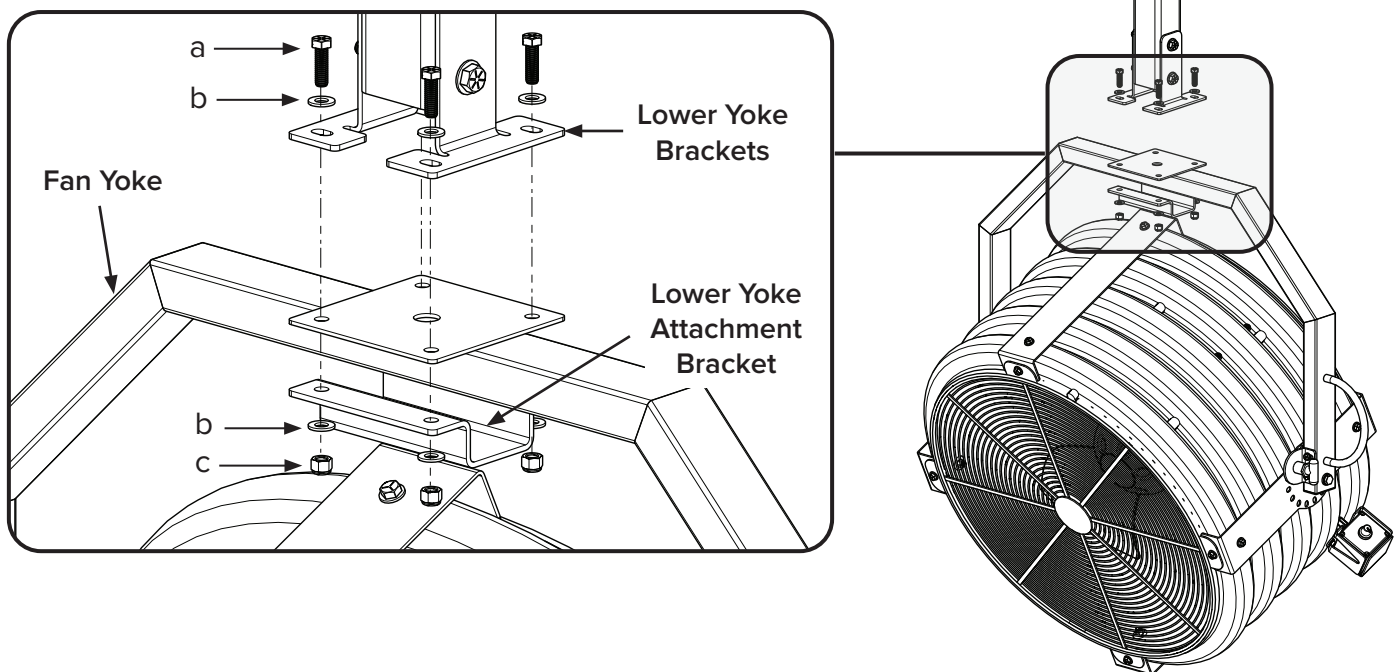
Secure the fan yoke to the lower yoke brackets with the lower yoke attachment bracket and Lower Yoke Hardware as shown below. Fully tighten the bolts to **40 ft·lb (54.2 N·m)**. Allow the fan to hang and balance itself, and then fully tighten the Extension Tube Hardware (securing the lower yoke brackets) to **40 ft·lb (54.2 N·m)**.

*Note: Guy wires and Guy Wire Hardware (if used) are not shown in the illustration below. The procedure for attaching the fan to the lower yoke is the same with or without guy wires installed.*

Proceed to “Electrical Installation.”

### Lower Yoke Hardware:

- (4) 3/8-16 x 1-1/4” GR 8 Bolt
- (8) 3/8” Flat Washer
- (4) 3/8-16 Nylock Nut



# MOUNTING STRUCTURE: WOOD OR METAL SUPERSTRUCTURE

**⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.

**⚠ CAUTION:** It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!

Yellow Jacket can be hung from the existing building structure using a chain or cable of rated strength to support the weight of the fan (approximately 105 lbs [47.6 kg]). The following instructions are merely a recommendation for hanging the Yellow Jacket from the building structure. Consult a structural engineer to determine the best method for mounting your fan. If mounting the fan to a concrete ceiling, see “Mounting Structure: Concrete.”

## 1. Attach chain or cable

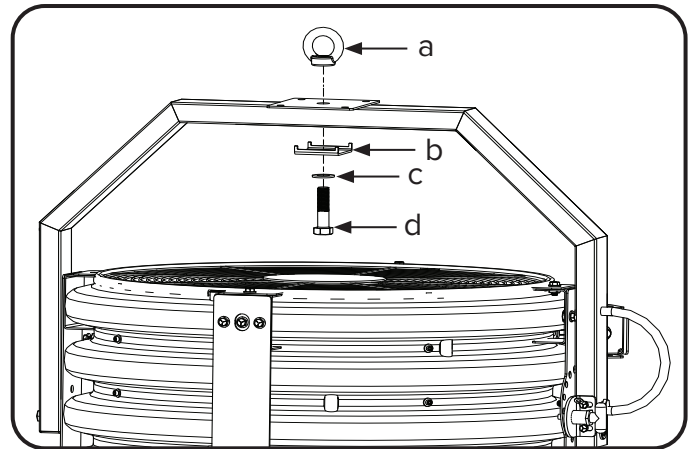
### ATTENTION

Special consideration must be given to any external air influences such as HVAC discharge units, exhaust fans, open doors, other fans, etc.

Install the eyenut on the fan yoke with the Yoke Washer Assembly Kit as shown. Secure the chain or cable to the eyenut, and then secure the other end to the building structure. The chain or cable must be capable of supporting the weight of the fan (105 lbs [47.6 kg]).

#### Yoke Washer Assembly Kit:

- a. (1) 3/4" Eyenut
- b. (1) Inverted Yoke Washer
- c. (1) 3/4" Washer
- d. (1) 3/4-10 x 3" Bolt



## 2. Secure guy wires

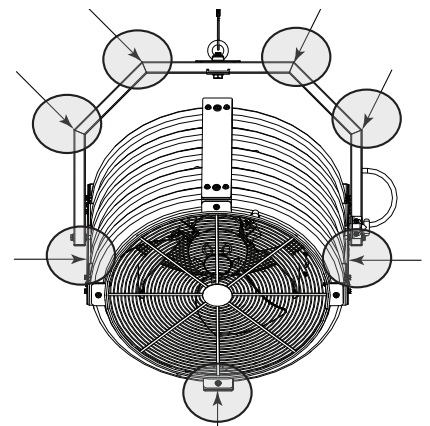
### ATTENTION

At least two guy wires must be used to prevent the fan from rotating or moving during operation!

Secure the fan's position by attaching guy wires to the fan yoke. The diagram on the right shows typical guy wire attachment points.

*Note: Guy wires are only included if purchased.*

Proceed to “Electrical Installation.”



# MOUNTING STRUCTURE: CONCRETE

**⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of attachment. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.

**⚠ CAUTION:** It is your responsibility to comply with all local and national codes and regulations regarding mounting procedures and installation height!

## ATTENTION

The following instructions are merely a recommendation for hanging the Yellow Jacket® from the building structure. You must consult a structural engineer to determine the best method for mounting your fan. Big Ass Fans is not responsible for installing the fan in concrete or to a flat surface. Consult a structural engineer to determine if the flat surface is suitable for mounting the fan.

Yellow Jacket can be hung from a concrete ceiling using the Yoke Washer Assembly Kit.

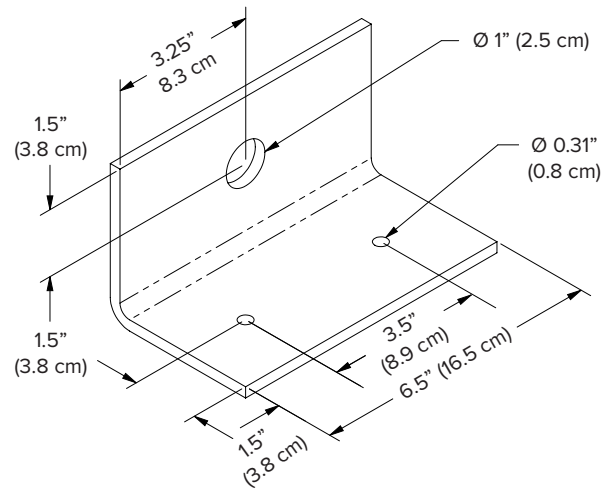
Adhere to the below recommendations and guidelines when mounting Yellow Jacket to concrete.

- Big Ass Fans does not supply angle irons or anchor bolts. Select mounting hardware that is of sufficient strength to support the weight of the fan. Big Ass Fans recommends using 1/4" Dia. Hilti Kwik Bolt 3 Mechanical Anchors with a minimum embedment depth of 1-1/8".
- Avoid placing the anchors near concrete edges. Refer to the anchor manufacturer's specifications for strength reduction guidelines near edges.
- Ensure anchor spacing satisfies the anchor manufacturer's specifications. If there are existing anchors in close proximity to the new anchors, ensure that the spacing requirements of the existing anchors are satisfied.
- If anchoring the fan to reinforced concrete beams, verify the location and depth of the reinforcing steel by using a non-destructive testing method, such as using the HILTI Ferrodetecter, to avoid damaging the steel.
- If anchoring the fan to a concrete slab through fluted metal decking, check the anchor manufacturer's specifications for anchor placement limitations. Flute spacing may require a longer angle iron bracket to span across the flute spacing. Do not connect all the anchors to one flute. A minimum of two flutes must be used.
- Verify that the concrete is at least the minimum thickness required by the anchor manufacturer.
- Avoid installing the fan in locations with the following characteristics: Exposed reinforcing steel; spalling or chipping; cracks; or discoloration of concrete (i.e., rust stains) or efflorescence. Also avoid locations that have a hollow sounding response if tapped lightly with a hammer.

# 1. Prepare angle iron brackets

All hardware, including angle irons, is installer-supplied. Select mounting hardware that is of sufficient strength to support the weight of the fan. Big Ass Fans recommends using (4) 1/4" Dia. Hilti Kwik Bolt 3 Mechanical Anchor with a minimum embedment depth of 1-1/8" to secure the angle iron to the concrete; however, you must consult a structural engineer to determine the best method of attachment.

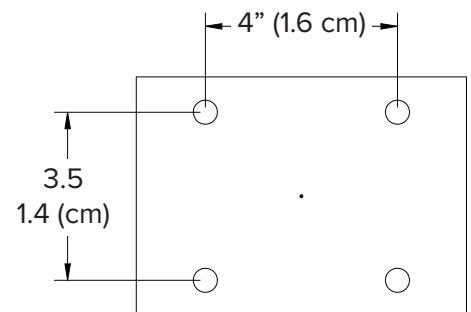
Cut two 3.5" (89 mm) x 3.5" (89 mm) x 0.25" (6.4 mm) angle iron pieces to 6.5" (165 mm) in length. In the center of one flange of the bracket, drill a  $\text{Ø}1"$  (25.4 mm) hole. On the opposite flange, drill two  $\text{Ø}0.31"$  (7.8 mm) holes exactly 1.5" (38 mm) from the edges. Repeat this on the other angle iron bracket.



# 2. Prepare concrete structure

**⚠ CAUTION:** Before drilling, ensure the concrete structure adheres to the guidelines listed on the previous page! Consult a structural engineer to determine the best method for mounting your fan.

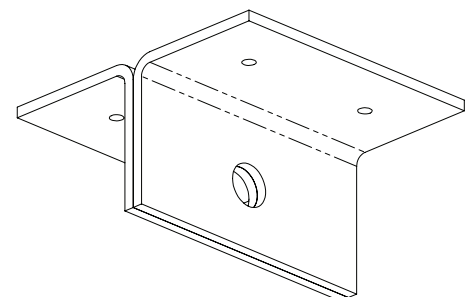
Drill four mounting holes in the concrete structure according to the anchor manufacturer's specifications. Ensure the brackets are aligned before drilling.



# 3. Attach angle iron brackets (to concrete)

Big Ass Fans does not supply anchor bolts. Select mounting hardware that is of sufficient strength to support the weight of the fan. Big Ass Fans recommends using (4) 1/4" Dia. Hilti Kwik Bolt 3 Mechanical Anchors with a minimum embedment depth of 1-1/8"; however, you must consult a structural engineer to determine the best method of attachment.

Align the angle iron brackets so that the center holes are concentric. Attach the angle iron brackets to the structure with the recommended anchors or anchors of equal strength.



## 4. Attach chain or cable

⚠ Ensure the position locking pin is secured prior to attaching the yoke to the chain or cable.

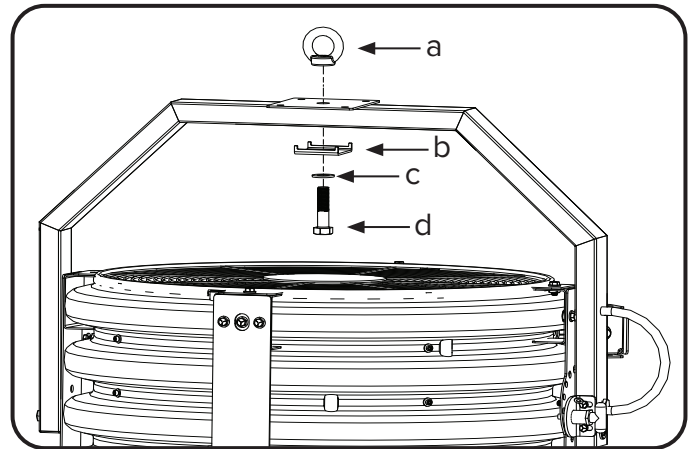
### ATTENTION

Special consideration must be given to external air influences such as HVAC discharge units, exhaust fans, open doors, other fans, etc.

Install the eyenut on the fan yoke with the Yoke Washer Assembly Kit. Secure the chain or cable to the eyenut, and then secure the other end to the angle iron brackets. The chain or cable must be capable of supporting the weight of the fan (105 lbs [47.6 kg]).

#### Yoke Washer Assembly Kit:

- a. (1) 3/4" Eyenut
- b. (1) Inverted Yoke Washer
- c. (1) 3/4" Washer
- d. (1) 3/4-10 x 3" Bolt



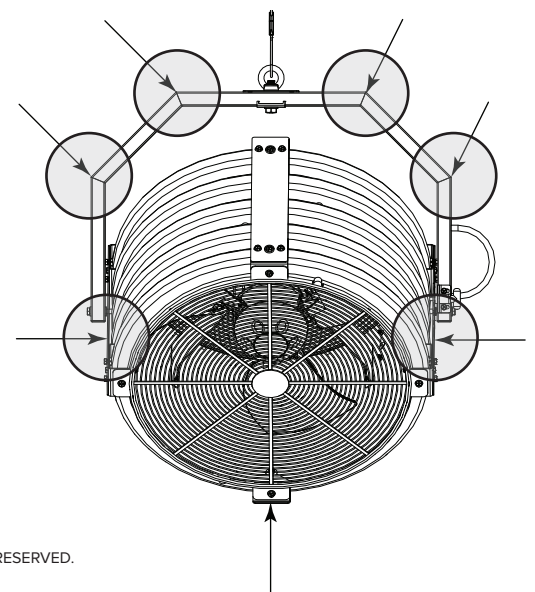
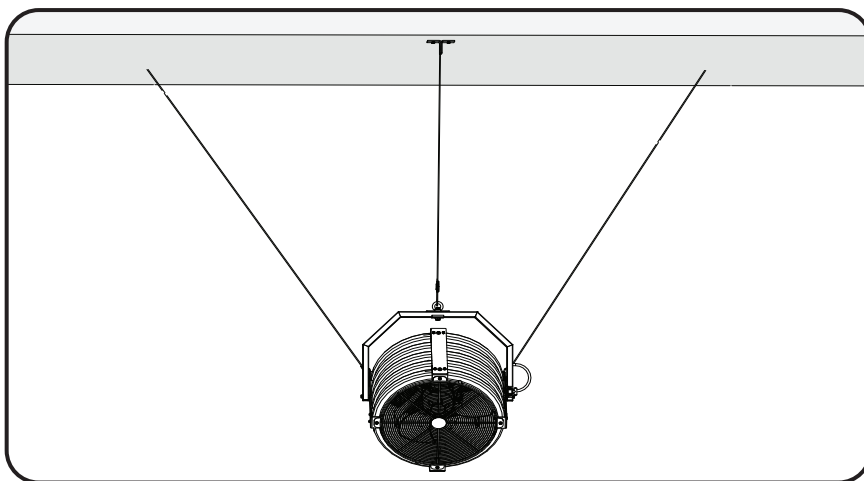
## 5. Secure guy wires

### ATTENTION

At least two guy wires must be used to prevent the fan from rotating or moving during operation!

*Big Ass Fans does not supply attachment hardware. Select hardware that is of sufficient strength to support the weight of the fan. Big Ass Fans recommends using 1/4" Dia. Hilti Kwik Bolt 3 Mechanical Anchors with a minimum embedment depth of 1-1/8" and an eyenut for each guy wire.*

Using the recommended hardware, secure the fan's position by attaching guy wires to the fan yoke as shown. The diagram on the right shows typical guy wire attachment points. *Note: Guy wires are only included if purchased.*



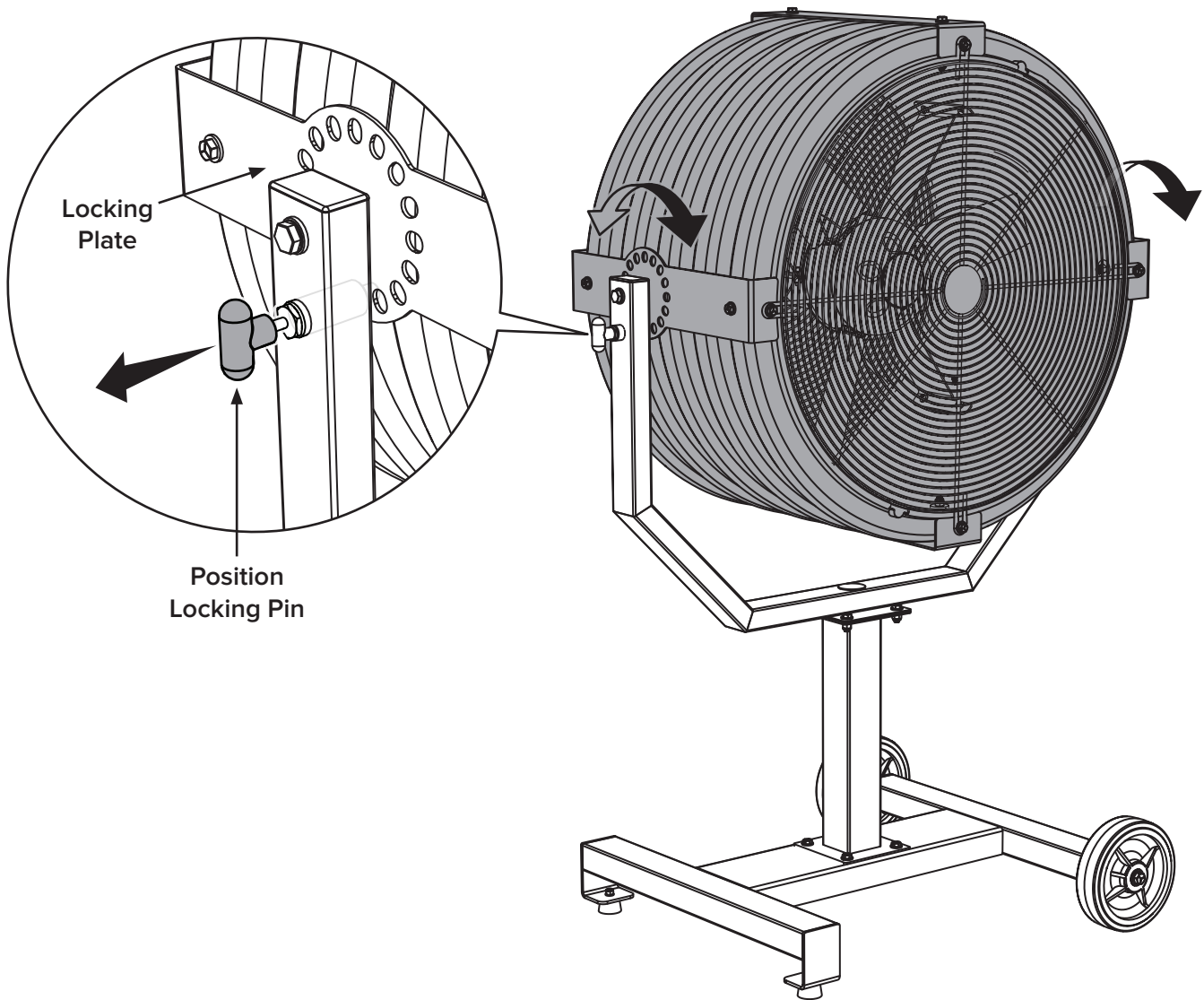


# POSITIONING THE FAN

**⚠ CAUTION:** When setting the position, be careful not to pinch hands or fingers between the fan yoke and housing!

Yellow Jacket can effectively control the direction of airflow by setting the position of the fan cage and housing.

To adjust the position of the fan, pull the position locking pin from the locking plate, tilt the fan to the desired position, and then reinsert the pin into the appropriate notch on the locking plate. *Note: The position locking pin can be secured in the disengaged position by rotating it 90° when retracted; however, do not operate the fan with the position locking pin disengaged.*



*Note: Fan setup may differ from the illustration.*

# ELECTRICAL INSTALLATION

**WARNING:** To reduce the risk of electric shock, wiring should be performed by a qualified electrician! Incorrect assembly can cause electric shock or damage the motor and the controller! Hazard of electrical shock!

**WARNING:** The installation and usage of a Big Ass Fan must be in accordance with the requirements specified in this installation manual and with any additional requirements set forth by the national electric code (NEC) and all local codes. Code compliance is ultimately YOUR responsibility! Failure to comply with these codes could result in personal injury or property damage.

**WARNING:** Exercise caution and common sense when powering the fan. Do not connect the fan to a damaged or hazardous power source. Do not attempt to resolve electrical malfunctions or failures on your own. Contact Big Ass Fans if you have any questions regarding the electrical installation of this fan.

**WARNING:** Do not operate this fan from an ungrounded receptacle or use any device on the power cord that can defeat proper earth ground such as a plug adapter.

**CAUTION:** Do not operate the fan with a damaged power cord or plug. Return fan to authorized service facility for examination or repair.

**CAUTION:** Do not run power cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Place cord away from traffic area and where it will not be tripped over.

**ATTENTION:** If installing the fan in the United States, the fan must be installed per the following National Fire Protection Association (NFPA) guidelines:

- The fan must be centered approximately between four adjacent sprinklers.
- The vertical distance from the fan to the sprinkler deflector must be at least 3 ft (91.4 cm).

## Power requirements

Motor hp (kW)	0.5 (0.37)
Minimum required supply circuit size	20 A @ 100–125 V, 1 $\Phi$ 15 A @ 200–240 V, 1 $\Phi$
Current	7.6–9.8 A @ 100–125 VAC, 1 $\Phi$ 5.0–5.6 A @ 200–240 VAC, 1 $\Phi$

# FAN SPEED CONTROL OPERATION

**⚠ CAUTION:** The fan may begin to operate upon connection to power source. Do not plug in the fan until it is fully assembled and in an acceptable upright position.

## Starting, stopping, and speed control

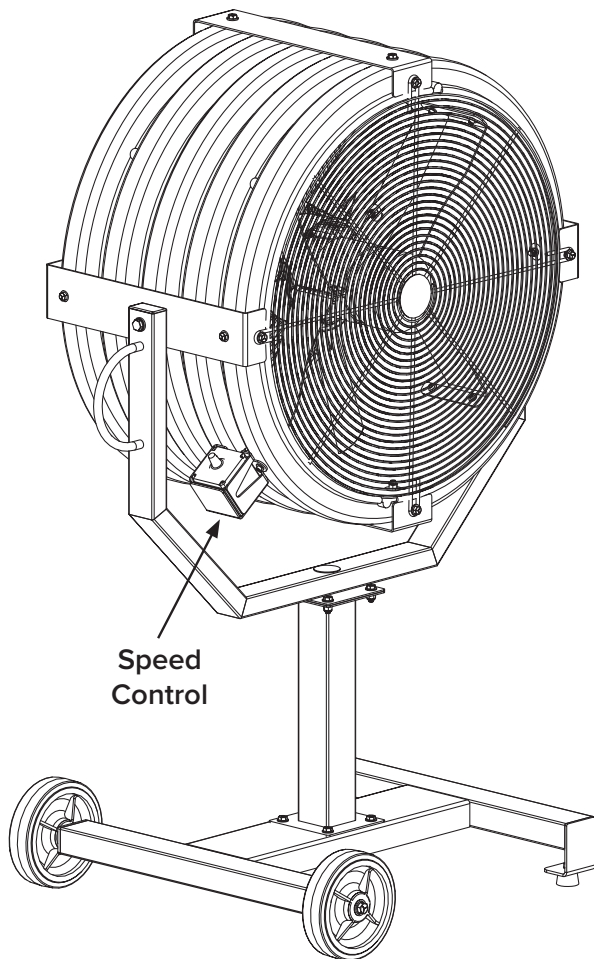
### ATTENTION

Ensure the position locking pin is secure in the locking plate prior to fan operation.

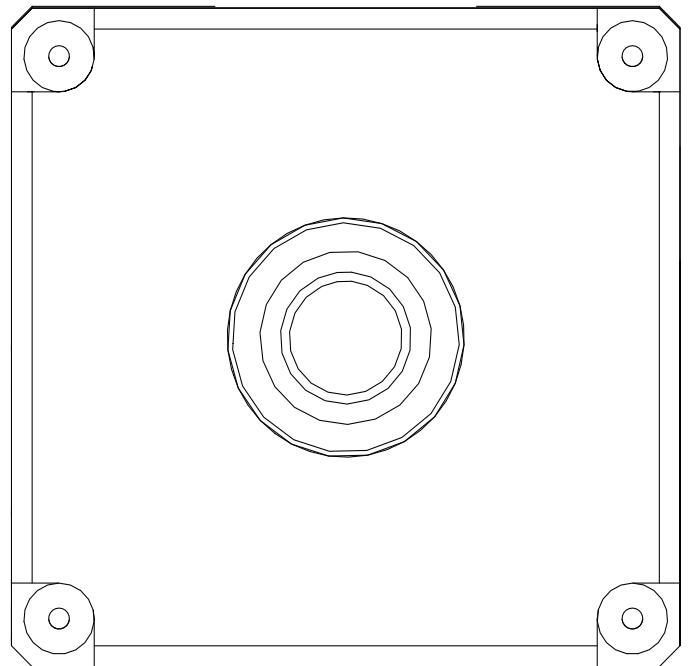
The speed control knob is located on the side of the fan, and turns the fan on/off and controls fan speed. *Note: If you purchased the remotely mounted speed control, see Remotely Mounted Speed Control on the following page for installation instructions before operating the fan. Both the fan-mounted speed control and remotely mounted speed control are operated the same.*

**To start the fan,** turn the speed control knob to position 1. **To stop the fan,** turn the knob to the OFF position. *Note: There is a 10 second delay after starting or stopping the fan.*

**To adjust fan speed,** rotate the knob to the desired speed setting (1 to 10).



Speed Control



*Note: Fan setup may differ from the illustration.*

# REMOTELY MOUNTED SPEED CONTROL

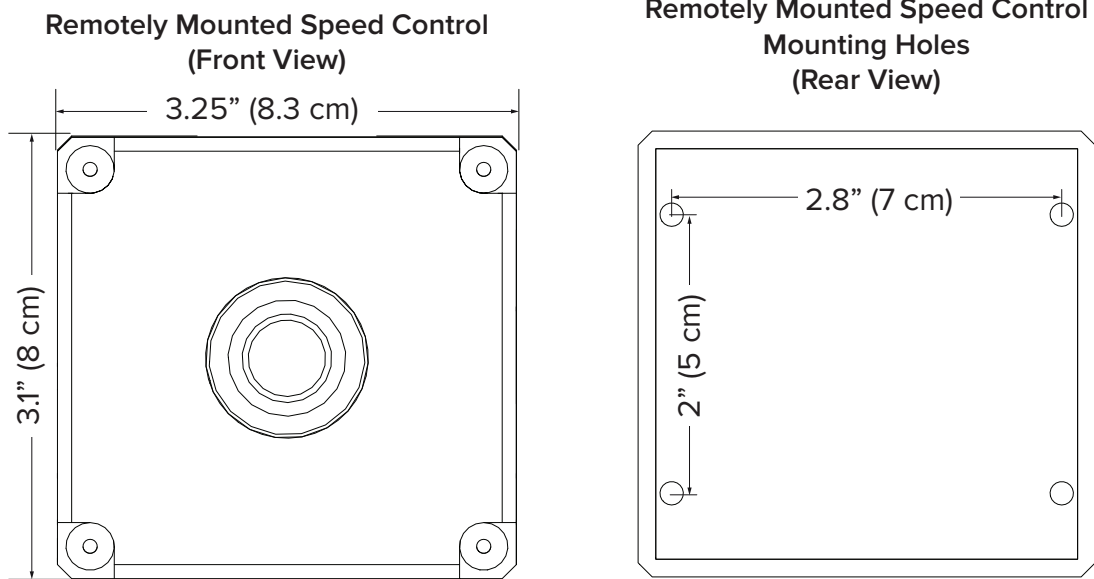
**⚠ WARNING: Disconnect power to the fan prior to wiring the remotely mounted speed control.**

The remotely mounted speed control is an optional accessory used to operate a fan that is mounted in an inaccessible location. Fifteen (15) feet of cable is provided with the remotely mounted speed control; however, the control can be mounted up to 50 ft from the location of the fan using installer-supplied cable.

For operating instructions, see *Fan Speed Control Operation* on the previous page.

## Remotely mounted speed control dimensions

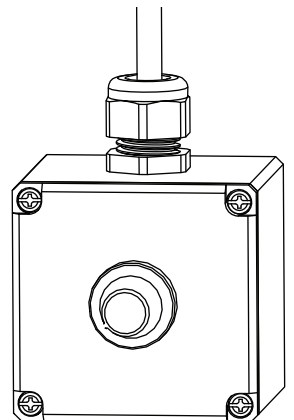
*Note: Drawings below are not to scale.*



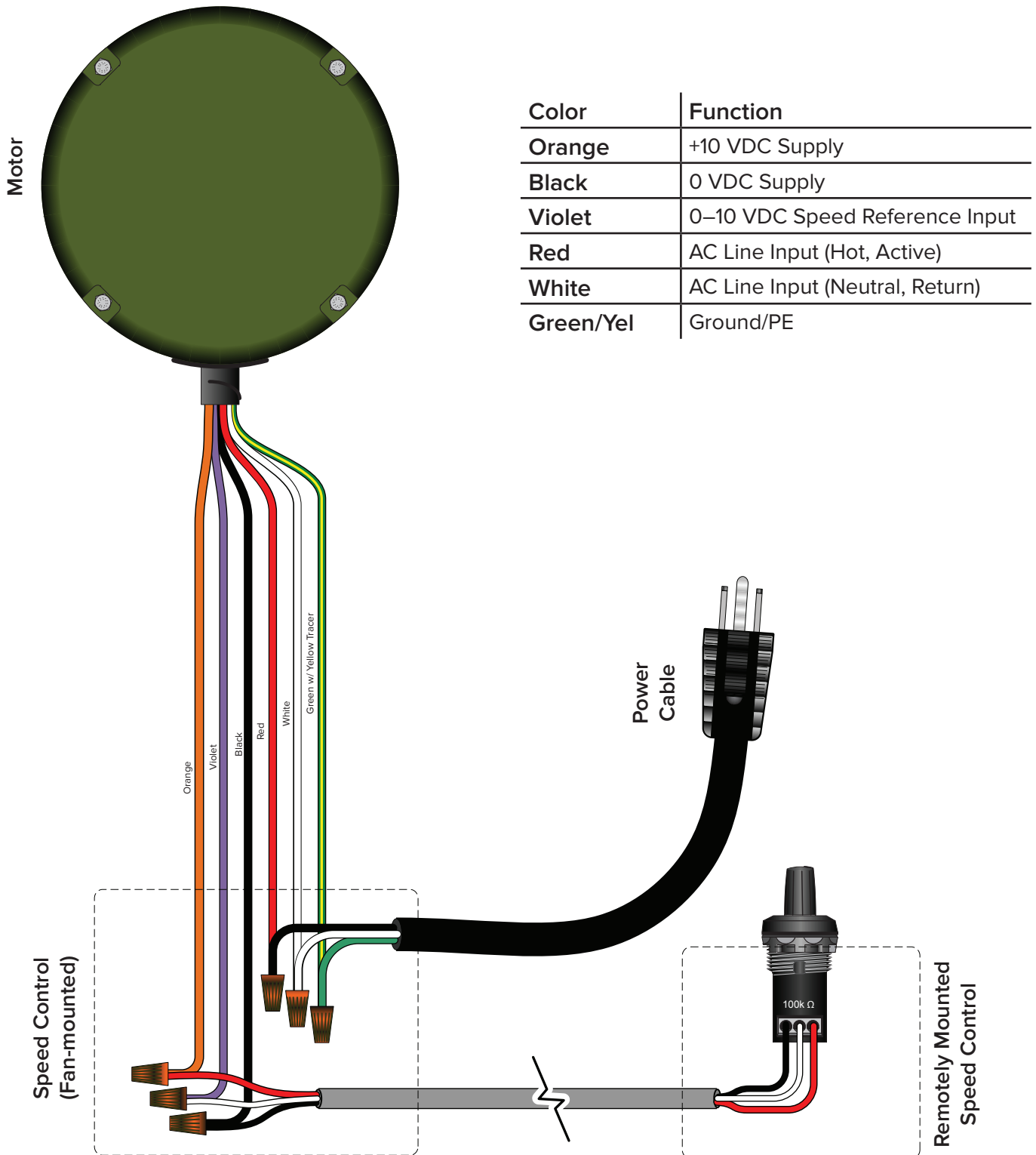
## Installing the remotely mounted speed control

Ensure power is disconnected from the fan prior to installing the remotely mounted speed control. *Note: For convenience, wiring should be performed when mounting the fan.*

1. Mount the remotely mounted speed control on a wall or column using the four (4) provided mounting screws. Select a mounting location that is 50 ft or less from the fan and from which the fan is visible. The mounting location should also be readily accessible, free from vibration, and an adequate distance from foreign objects or moving equipment. Remove the four (4) screws on the front, and then remove the cover. *Save the cover, which will be switched with the cover on the remotely mounted speed control.*
2. On the fan speed control (located on fan), remove the four (4) screws retaining the cover (with knob). *Set aside the cover (with knob), which will be attached to the remotely mounted speed control.*
3. Remove the rubber grommet from the back of the fan speed control box (located on the fan) to expose an empty knockout. Wire the loose end of the provided cable (attached to remotely mounted fan control) to the fan-mounted fan speed control through the empty knockout. Refer to the wiring diagram on the following page.
4. Replace the cover with the flat cover previously attached to the remotely mounted speed control. Test fan operation. See *Fan Speed Control Operation* on the previous page for operating instructions.



# Remotely mounted speed control wiring



# USER SERVICING

Please take a few moments each year to perform the following preventive maintenance inspection on your fan to ensure its safe and efficient operation. If you have any questions, please contact Customer Service.

**⚠ WARNING: Risk of fire, electric shock, or injury to persons during cleaning and user maintenance! Disconnect the appliance from the power supply before servicing.**

**⚠ WARNING: When service or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.**

## Annual preventive maintenance

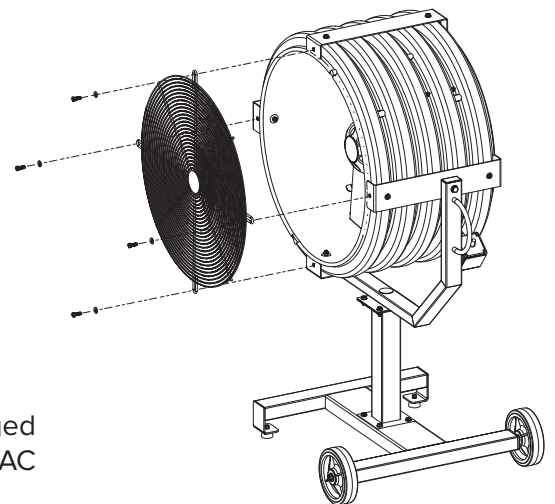
The following are to be performed annually (see “Annual Maintenance Checklist”):

- Check the fan bolts and nuts to make sure they are tight and show no wear.
- Verify all bolts on the fan cage, fan base, and mount are tight and secure.
- Check the power cord and plug for damage. Ensure it is tightly attached with no fraying.
- Check safety cable and mounting system.
- Check guy wires (if installed) for fraying or damage.

Ask about Big Ass Fans preventive maintenance service package by calling Customer Service.

## Additional considerations

- Verify proper fan rotation. The fan should be turning counterclockwise when viewed from the front.
- To clean the fan blades and fan cage, remove the four bolts securing the cage to the housing as shown below. Wipe the blades, motor, and motor housing with a soft cloth. If desired, use a gentle cleaner or degreasing agent to polish the blades.
- Check the condition of the rubber bumper feet for abnormal wear or damage. Replace if necessary. Contact Customer Service.
- Special attention should be paid to wall/column, I-beam, angle iron, and concrete mounting applications to ensure the mounting surfaces and all fan components are still in good working order and do not show signs of damage. Perform this check every six months.



## General troubleshooting

If the fan will not start:

- Make sure that all wires are securely connected and the fan is plugged into a 100–125 VAC grounded outlet rated for 20 A or a 200–240 VAC grounded outlet rated for 15 A.
- Make sure the speed control knob is in an ON position.
- Verify that supply power is adequate and functional.
- Verify there are no obstructions in the fan assembly or blades.
- Contact Customer Service.

# ANNUAL MAINTENANCE CHECKLIST

**Fan Model:**

**Fan Model:**

**Fan Model:**

**Serial #:**

**Serial #:**

**Serial #:**

**Location:**

**Location:**

**Location:**

Date	Initials

Date	Initials

Date	Initials





# CONTACT US

Talk to a Big Ass Fan Expert. Call us at one of the numbers below or visit [www.bigassfans.com](http://www.bigassfans.com)



## Customer Service

### United States

2348 Innovation Drive  
Lexington, KY 40511  
USA  
877-244-3267  
Outside the U.S.  
(+1 859-233-1271)  
[bigassfans.com](http://bigassfans.com)

### Canada

2180 Winston Park Drive  
Oakville, Ontario L6H 5W1  
Canada  
1 844-924-4277  
[bigassfans.com/ca](http://bigassfans.com/ca)

### Australia

35 French Street  
Eagle Farm, Brisbane  
QLD 4009  
Australia  
+61 1300 244 277  
[bigassfans.com/au](http://bigassfans.com/au)

### Singapore

50 Ubi Crescent  
#01-01 Ubi TechPark  
Singapore 408568  
+65 6709 8500  
[bigassfans.com/sg](http://bigassfans.com/sg)

### Mexico

CEBSA (Corporación Eléctrica  
del Bravo SA de CV)  
Avenida Ind. Rio San Juan  
Lote 3-A Parque Industrial del Norte  
Reynosa, Tamps C.P. 88736  
+52 1 899 925 6398  
<http://cebsainc.com/>

### All Other Geographies

+1 859-410-6286  
[bigassfans.com](http://bigassfans.com)



## Manufacturing and Warranty

You are responsible for providing and paying for shipping when returning a product to Big Ass Fans for the purpose of recycling under the WEEE directive.

### Manufacturer



2348 Innovation Drive  
Lexington, KY 40511  
USA

### Warranty and WEEE Returns

2201 Jaggie Fox Way  
Lexington, KY 40511  
USA

### Manufacturing Site

2251 Innovation Drive  
Lexington, KY 40511  
USA







002259-01

Rev. AB

04/26/2024



**BIG ASS FANS<sup>®</sup>**

2251 Innovation Drive, Lexington, KY 40511  
**1 (877) BIG-FANS | WWW.BIGASSFANS.COM**