



# INSTALLATION GUIDE

### Yellow Jacket® Oscillator



For help, call 1-877-BIG-FANS or visit www.bigassfans.com

### 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.



**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.

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### **IMPORTANT SAFETY INSTRUCTIONS**

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

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: To reduce the risk of electric shock, do not expose to water or rain.

WARNING: Do not prevent the oscillator from rotating when in operation!

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# **PORTABLE BASE OSCILLATOR INSTALLATION**

The following instructions are for installing the Oscillator accessory on a Yellow Jacket<sup>®</sup> fan that is mounted to a portable base. Consult the complete Yellow Jacket Installation Guide for all other aspects of fan installation, operation, and safety information.

MARNING: Disconnect the fan from power before installation!

MARNING: Do not prevent the oscillator from rotating when in operation!

### Parts and hardware

The parts and hardware listed below are intended for the oscillator option on a Yellow Jacket with a portable base mount. For a complete list of fan components, see the Yellow Jacket Installation Guide. If you are missing any parts or hardware required for installation, contact Customer Service. *Note: The illustrations below are not to scale*.





Oscillator Assembly

Speed Control Cover

Handle



(8) 3/8-16 x 3/4" Hex Head Cap Screw



Cord Grip Connector



(3) Yellow Wire Nut

### Installation

If you are installing the oscillator on a previously assembled fan with a portable base and one (1) pedestal, first remove the (4) bolts, (8) washers, (4) nuts, and fan yoke assembly from the pedestal. Discard the used hardware.

If you are installing the oscillator on a previously assembled fan with a portable base and two (2) pedestals, first remove the (4) bolts, (8) washers, (4) nuts, and fan yoke assembly from the upper pedestal. Discard the used hardware. Next, remove the (4) bolts, (8) washers, and (4) nuts (Pedestal Hardware) and the upper pedestal from the lower pedestal. Set the Pedestal Hardware aside. You will use it to reattach the upper pedestal and handle to the lower pedestal.

### 1. Assemble portable base

In the complete Yellow Jacket Installation Guide, follow the steps under "Mounting Method: Portable Base" to secure the wheels and pedestal. If you are installing two pedestals, do not attach the second pedestal yet.



Attach Wheels (to Portable Base)



Attach Pedestal (to Portable Base)

### 2. Attach handle and second pedestal

### ATTENTION

Up to two pedestals can be installed. If you are not installing a second pedestal, skip this step and proceed to step 3a.

After securing the wheels and first pedestal to the portable base, attach the handle and second pedestal with the Pedestal Hardware. Ensure the handle is on the same side as the wheels. *Note: The Pedestal Hardware listed below is included with the fan. If you are installing the oscillator on a previously assembled fan with two pedestals, this is the Pedestal Hardware you removed and saved before step 1.* 

#### Proceed to step 3b.

#### **Pedestal Hardware:**

a. (4) 3/8"-16 x 1" Hex Head Cap Screw b. (8) 3/8" Washer

c. (4) 3/8"-16 Nylock Nut



### 3a. Install handle and oscillator assembly (one pedestal)

### ATTENTION

If you are installing two pedestals, skip this step and proceed to step 3b.

After securing the wheels and pedestal to the portable base, attach the handle and oscillator assembly to the top of the pedestal. The inner portion of the oscillator enclosure has (4) weld nuts to which the bolts should attach. Ensure the oscillator motor is oriented as shown and that the handle is on the same side as the wheels.

#### Proceed to step 4.

#### Lower Oscillator Hardware:

a. (4) 3/8-16 x 3/4" Hex Head Cap Screw b. (4) 3/8" Washer



### 3b. Install oscillator assembly (two pedestals)

### ATTENTION

### If you are not installing two pedestals, skip this step and proceed to step 4.

After securing the handle and second pedestal to the first pedestal, attach the oscillator assembly to the top of the second pedestal. The inner portion of the oscillator enclosure has (4) weld nuts to which the bolts should attach. Ensure the oscillator motor is oriented.

#### Proceed to step 4.

#### Lower Oscillator Hardware:

- a. (4) 3/8-16 x 3/4" Hex Head Cap Screw b. (4) 3/8" Washer



### 4. Install fan yoke

Secure the fan yoke to the oscillator bracket. Position the yoke so that the yoke handle is on the same side as the oscillator motor.

### **Upper Oscillator Hardware:**

a. (4) 3/8-16 x 3/4" Hex Head Cap Screw b. (4) 3/8" Washer Yoke а Handle b Yoke Handle

**One Pedestal** 

**Two Pedestals** 

### 5. Adjust angle of oscillation (optional)

The oscillator arm is preset to oscillate a full 60 degrees; however, the angle of oscillation can be adjusted and set to  $45^{\circ}$ ,  $60^{\circ}$ , or  $90^{\circ}$ . The innermost hole is  $90^{\circ}$ , the middle hole is  $60^{\circ}$ , and the outermost hole is  $45^{\circ}$ .

To adjust the angle of oscillation, remove the oscillator enclosure cover by unscrewing the (8) screws. Remove the lock nut from the bottom of the crank rod, adjust the rod end, and then reinstall the nut.

### 6. Remove original speed control cover

### MARNING: Disconnect the fan from power before replacing the cover!

Remove the original cover from the speed control by unscrewing the (4) cover fasteners. Disconnect the wiring to the speed control knob, and then remove the speed knob from the original cover and set it aside.

On the fan, disconnect all wiring  $\underline{except}$  the yellow, purple, and gray leads to the motor (if present). Remove the 1/2" hole seal from the bottom of the control box.





### 7. Install new speed control cover and complete wiring

### MARNING: Disconnect the fan from power!

Install the speed control knob on the new speed control cover. Make sure the knob is turned all the way counterclockwise and that the line is pointing to the OFF position. *Note: If the speed knob will not line up properly, loosen the square brass barrel in the speed knob shaft, adjust the knob, and then reinstall. If the position is still inaccurate, repeat this process until it is corrected.* 

Route and secure the oscillator power cord to the new cord grip connector on the speed control box. Verify the cords will have enough slack to accommodate for oscillating motion.

Complete all wiring connections as shown in the wiring diagram on page 5. Install the new speed control cover on the junction box with the (4) screws.



Note: Wiring and power cord are not shown in the illustration above.

### Wiring the oscillator

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), ANSI/NFPA 70-2011, and all local codes. Code compliance is ultimately YOUR responsibility!



# **COLUMN/YOKE MOUNT OSCILLATOR INSTALLATION**

The following instructions are for installing the Oscillator accessory on a Yellow Jacket<sup>®</sup> fan that is mounted to a wall, column, or I-beam. Consult the complete Yellow Jacket Installation Guide for all other aspects of fan installation, operation, and safety information.

MARNING: Do not prevent the oscillator from rotating when in operation!

A WARNING: The safety cable is an important part of the fan installation and must be installed correctly!



1. The Speed Control Cover kit includes two pre-installed oscillator switch wires.

The safety cable is only installed on fans mounted to columns or the Yoke 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.

Note: Two feet of 16 GA wire in the following colors is also provided: black, orange, red, white, green with yellow tracer, and pink.

Note: The Column Mount hardware includes an additional bolt, nut, and two washers. This hardware is not needed for oscillator installation.

# **INSTALLING THE OSCILLATOR**

If you are installing the oscillator on a previously assembled fan, remove the (4) bolts, (8) washers, (4) nuts, and fan yoke assembly from the wall/column supports or yoke mount.

### 1. Install wall/column supports or yokes

In the complete Yellow Jacket<sup>®</sup> Installation Guide, follow the steps to install the wall supports, column supports, or the upper yoke, extension tube, and lower yoke brackets.

### 2. Modify original speed control

Remove the speed knob from the original cover and set it aside. Disconnect all wiring <u>except</u> the yellow, purple, and gray leads to the motor (if present). Remove the power cord and original cord grip connector from the back of the box, and then install the provided nylon conduit fitting.



### 3. Install oscillator assembly

Attach the oscillator assembly to the wall/column supports or lower yoke as shown. The inner portion of the oscillator enclosure has (4) weld nuts to which the bolts should attach. Ensure the oscillator motor is oriented.

### Upper Oscillator Hardware:



Wall/Column Supports

Yoke Mount

### 4. Install fan yoke

Secure the fan yoke to the oscillator bracket. Refer to the appropriate illustration for the mounting method used.

### Lower Oscillator Hardware:

a. (4) 3/8-16 x 1" Hex Head Cap Screw b. (4) 3/8" Washer





**Column Mount** 





### Yoke Mount

### 5. Install junction box

### ATTENTION

#### Big Ass Fans does not supply the cable needed to install the oscillator On/Off switch.

- 1. Remove the cover from the junction box, and then secure the junction box to the fan brace with the Junction Box Hardware. Note: Install the junction box on the yoke side of the fan closest to the supports.
- 2. Route and install the provided corrugated conduit and enclosed wiring from the junction box to the speed control junction box (on the fan). Press the conduit into the connectors.
- 3. Route the oscillator cord to the junction box and secure it to the designated connector. Note: It is critical that the fan orientation and angle is set before routing the cord.
- 4. Install the cord grip connector and power cord (previously removed from original speed control) in the open 1/2" connector hole on the junction box.
- 5. Strip 5" of outer jacket off of the remote speed control cables. Install the cables in the (2) cord grip connectors for the Speed Knob and the On/Off Switch.

#### Junction Box Hardware:

Cover

а

a. (2) 8-18 x 1/2" Hex Head Self-drilling Screw

# MMMM

### (Remote Speed Control)



### 6. Adjust angle of oscillation (optional)

The oscillator arm is preset to oscillate a full 60 degrees; however, the angle of oscillation can be adjusted and set to 45°, 60°, or 90°. The innermost hole is 90°, the middle hole is 60°, and the outermost hole is 45°.

To adjust the angle of oscillation, remove the oscillator enclosure cover by unscrewing the (8) screws. Remove the lock nut from the bottom of the crank rod, adjust the rod end, and then reinstall the nut.



### 7. Install remote speed control

- 1. On the remote speed control, remove the cover and install it on the fan speed control. The original speed control on the fan can be discarded.
- 2. On the remote speed control, install the new cover (with knob). Make sure the knob is pointing to the OFF position. *Note: If the speed knob does not line up properly, loosen the square brass barrel in the speed knob shaft, and then reinstall. If the position is still inaccurate, repeat this process until it is corrected.*
- 3. Mount the remote speed control box to a suitable wall or column no more than 30 ft from the fan. Make sure the (2) connector holes are facing the ceiling.
- 4. Route and secure the speed control and oscillator switch cables to the new cord grip connectors on the remote speed control box
- 5. Verify the cord will have enough slack to accommodate oscillating motion. *Note: The Oscillator Remote Speed Control kit is provided with 15 ft of cable; however, the control can be mounted up to 30 ft from the location of the fan using customer-supplied cable.*
- 6. Complete all wiring connections as shown in the wiring diagram on page 12.

### 8. Install safety cable

- A WARNING: The safety cable is a crucial part of the fan and must be installed correctly. If you have any questions, call Customer Service.
- A CAUTION: Ensure there is enough slack in the safety cable to accommodate for the oscillating motion!

### **Column Mount**

Route one end of the safety cable through a Gripple<sup>®</sup>, and then loop the cable around the column and back through the Gripple as shown. Route the cable through the second Gripple, around the fan yoke, and then back through the second Gripple as shown.

Note: Ensure the safety cable is secured to the column above the Column Mount brackets. Ensure the cable is secured to the fan yoke in the location shown below. If the cable is secured too high on the fan yoke, it may slide down the yoke during operation.

Pull the loose ends of the cable through the Gripples until the cable is drawn tightly around the column and fan yoke. Test the fan to ensure there will be enough slack in the safety cable to accommodate for the oscillating motion. 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)**.





### Yoke Mount

Wrap the safety cable around the mounting structure, and then secure it with the shackle as shown below. Test the fan to ensure there will be enough slack in the safety cable to accommodate for the oscillating motion.



### Wiring the oscillator

▲ 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), ANSI/NFPA 70-2011, and all local codes. Code compliance is ultimately YOUR responsibility!







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