Hunter INDUSTRIAL

TITAN

INSTALLATION MANUAL

CONTENTS

BEFORE YOU BEGIN

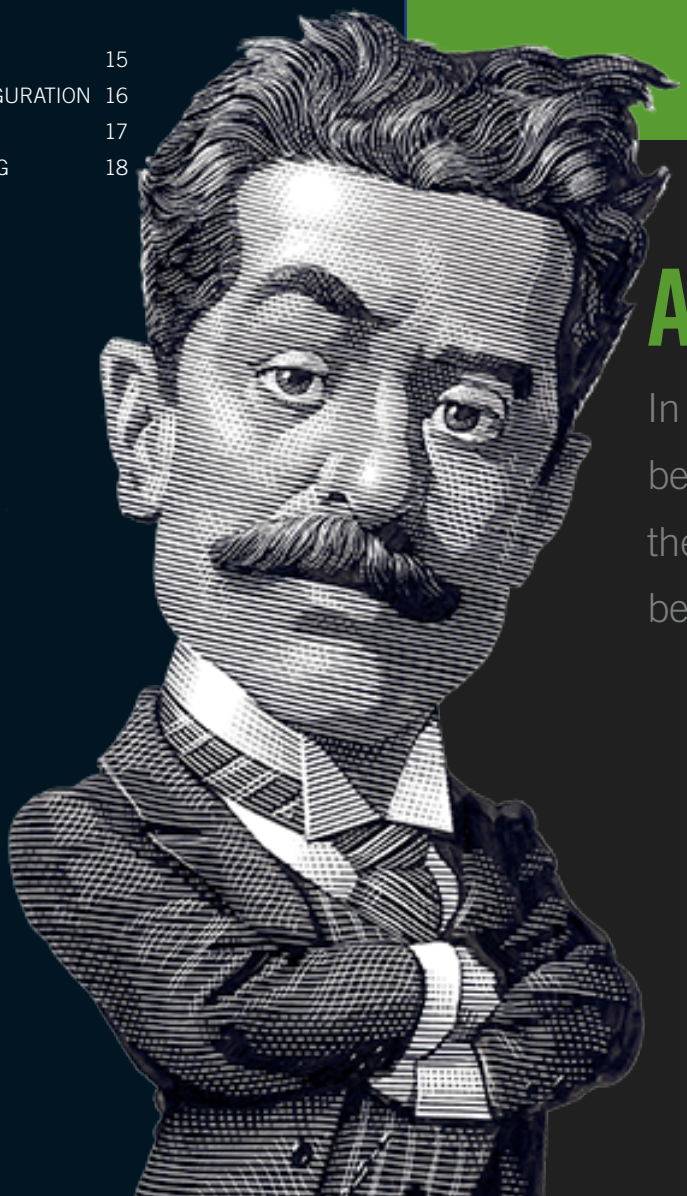
INSTALLATION

REFERENCE

1886

LEGACY

The Hunter legacy is not only about quality—it's about longevity. We invented the ceiling fan. We build fans that last, fans that are designed as fans. We design our fans while considering each person in the process—from the installer to the owner.



AUTHENTICITY

In a world full of impersonators, be an original. We invented the ceiling fan, and we stand behind our products.

Hunter INDUSTRIAL

SAFETY & PRECAUTIONS

READ THE ENTIRE MANUAL BEFORE OPERATING THE FAN

Read and understand this manual before installing or operating a fan unit. Installation, adjustment, repair, or maintenance must be performed by qualified personnel.

Follow all safety practices and instructions during the installation, operation, and servicing of the fan. Failure to apply these safety practices could result in death or serious injury. If you do not understand the instructions, please call our Technical Department at 1-844-593-FANS (3267) for guidance.

This unit is for professional use only and is not required to comply with EN 61000-3-2:2006.

Professional installation practice requires following local utility company guidelines for connecting to AC mains.

Conforms to UL STD 507 and Certified to CSA STD C22.2 No. 113

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Intertek
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All fan controls and incoming power should be installed only by qualified technicians familiar with the requirements of the National Electrical Code and local codes. Failure to follow these guidelines will void the manufacturer's warranty. All electrical controls are configured at the factory and are ready to use. No user adjustments are available. Follow the included installation instructions when installing this device to ensure proper operation. Do not make any changes to any part of the fan without first consulting Hunter Industrial Fan. Installation is to be in accordance with the National Electrical Code, ANSI/NFPA 70-1999 and local codes.

To reduce the risk of personal injury, do not bend the blade brackets when installing the brackets, balancing the blades, or cleaning the fan. Do not insert foreign objects in between rotating fan blades.

WARNING!	Be aware of electric shock hazard, explosion, or arc flash

The user is responsible for compliance with all international and National Electrical Code requirements with respect to grounding of all equipment. Many of the parts of this unit operate at line voltage. **DO NOT TOUCH** any live conductors. Install all covers before applying power or starting and stopping the unit. To reduce the risk of electric shock or injury, use this unit only in the manner intended by the manufacturer. If you have questions, call our Technical Department at 1-844-593-FANS (3267).

Before installing, servicing or cleaning the unit, switch power off at the service panel and lock the service disconnecting means to prevent power from being switch on accidentally. When the service disconnect means cannot be locked, securely fasten a prominent warning sign, such as a tag to the service panel. To reduce a prominent the risk of electrick shock or injury, use this unit only in the manner intended by the manufactured. if you have any questions, call our Technical Department at 1-844-593-FANS (3267).

DAMAGED EQUIPMENT

Do not operate or install any fans or fan accessories that appear to be damaged. **Failure to follow this instruction can result in death, serious injury, or equipment damage.**

SERVICE

If the fan does not operate properly using the procedures in this manual, remove all power to the unit and contact our Technical Department for further assistance at 1-844-593-FANS (3267). **Keep all body parts clear of moving parts at all times. All electrical troubleshooting and repair must be done by a qualified technician and meet all applicable codes.**

SAFETY & PRECAUTIONS

KEY RETENTION SYSTEM COMPONENTS

Our fans are engineered with safety features that prevent pieces of the fan from falling in the unlikely event of a catastrophic failure. Install the retention cable on EVERY fan. The retention cable, if installed per Hunter Industrial Fan specifications, will provide comprehensive protection of people, equipment, and property in the unlikely event of mounting system failure.

CAUTION!	The fan should never be run without a properly installed retention cable, which is supplied with every fan along with all required hardware. If the retention cable is not installed, the warranty will be voided.

MARK THE FLOOR TO ALERT PERSONNEL

When mounting a fan in an area where materials may be elevated into its path, we recommend marking or painting the floor with a large crosshatched circle to alert personnel of the overhead location of fans.

WEIGHT CONSIDERATIONS

We recommend that a building structure be capable of holding approximately twice the stated hanging weight of the fan.

The hanging weight of a 24' fan with a standard 4' downrod is 212 lbs., the maximum hanging weight of a 24' fan with a 10' downrod is 232 lbs.

If there is any uncertainty in the strength of the building structure, a professional structural engineer should perform a thorough evaluation of the building prior to purchasing the fans. Hunter Industrial Fan provides guidelines for mounting fans; however, it is the sole responsibility of the building owner and installer to ensure the safety of the mounting system, that the building structure is sound, and that the installation complies with all federal, state, and local codes.

CHECK FEDERAL, STATE, AND LOCAL CODES

Code compliance is the responsibility of the installer.

Check all relevant codes to make sure that all product certifications, product listings, and building regulations are met.

WINDY CONDITIONS

Fans should not be operated or installed in locations where it is frequently windy.

FAN PLACEMENT

SPRINKLER SYSTEMS AND FAN PLACEMENT

In any installation where fire sprinklers are in place, the fan should not interfere with their correct operation. Fans should be located fewer than 3 feet below a sprinkler and placed central to each sprinkler quadrant. Our industrial control panel can be connected to a fire relay system, which, in an emergency, will stop fans in case of fire.

Prior to installing fans, review all codes applicable to sprinkler systems and fans to ensure code compliance and refer to NFPA 13 Standard from the National Fire Prevention Association.

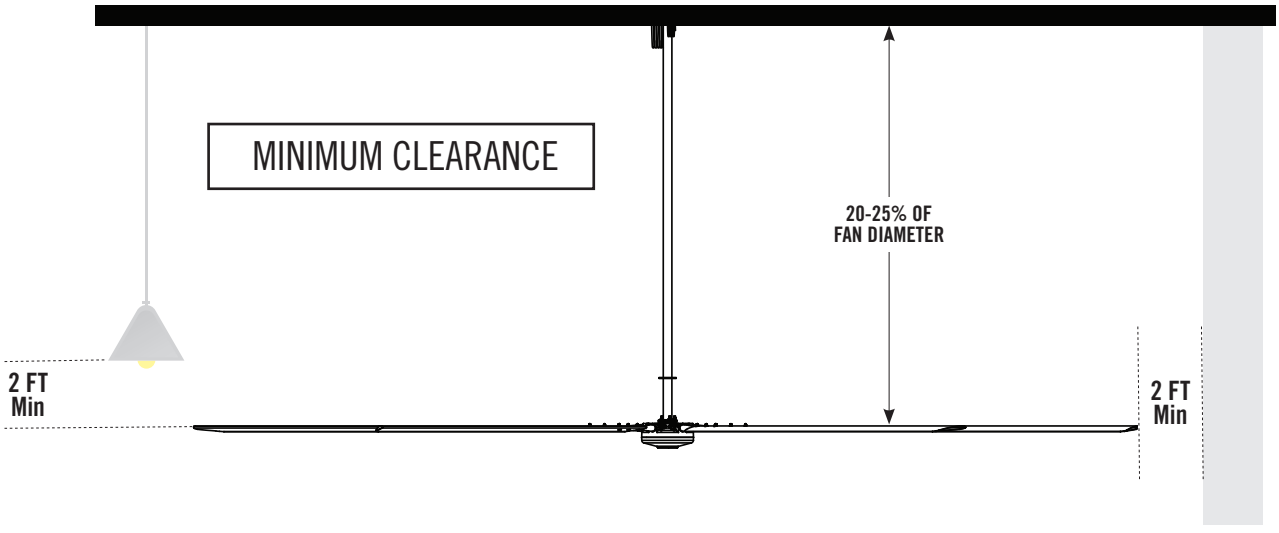
Please call our Technical Department for guidance at 1-844-593-FANS (3267). However, it is your sole responsibility to see that the installation is completed to code and that it is correct.

OTHER INFORMATION ON PLACEMENT AND SPACING

If possible, avoid mounting fans directly below lights or skylights to avoid any strobe effect caused by moving airfoils. Note, a large fan, 20 to 24 feet in diameter, performs best at 20 to 30 feet above the floor, but acceptable performance has been demonstrated as low as 10 feet and as high as 50 feet.

If the building has a mezzanine, fans should be mounted so a person cannot reach a fan in any way from the upper level/ deck. Make certain that fans are positioned so that the airfoil tips are at least 3 feet away from any area where a person may be able to extend outward to reach them.

Fans should not be located directly beneath any air discharge. This includes air conditioning units and evaporative coolers. Such equipment can be used effectively in conjunction with HVLS fans, but the discharge must be located outside of the swept area of the fan.



MAINTENANCE

GUY WIRE CHECK

Checking a fan's guy wires for tension and inspecting for frayed sections could prevent a problem before it occurs. Fan owners should confirm that the guy wires are not wrapped around any sharp edges. We recommend attaching guy wires to the building with provided clamps to prevent fraying. Turnbuckles should be checked to ensure tightness. If they are loose, the guy wire cables need to be re-tensioned.

AIRFOIL CLEANING

Depending on the commercial application of the fan, there can be quite a bit of dust or other particulates that cling to the fan's airfoils. We recommend fan owners keep airfoils clean by having a maintenance person or skilled trade professional–who has experience using a lift–wipe the fan airfoils with a rag or sponge using hot water or regular cleaning solutions. Please do not use chlorine or any chemicals containing chlorine.

RETENTION SYSTEM CHECK

Each fan is installed with a retention system. The retention cable is attached to the motor and wraps around the building structure. The safety cable is an important part of the safety system and protects users from a catastrophic event. It is critical for fan owners to ensure that it is intact and properly secured.

REPLACEMENT PARTS

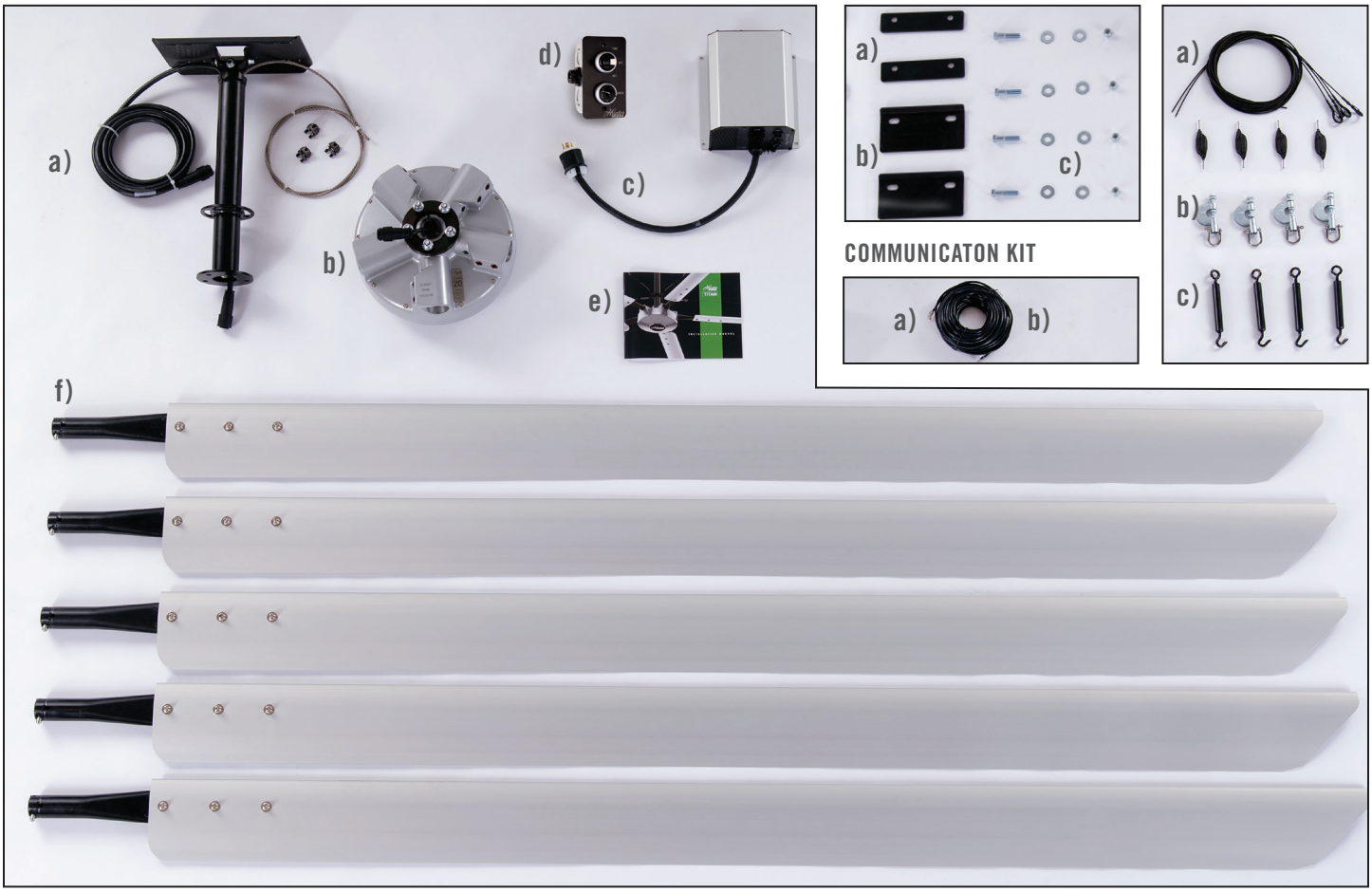
Please call our **Technical Department at 1- 844-593-FANS (3267).**

IN THE BOX

FAN COMPONENTS

MOUNTING HARDWARE KIT

GUY WIRE KIT



COMMUNICATON KIT

FAN COMPONENTS

a) (1) Downrod
b) (1) Motor & (5) Motor Nuts
c) (1) ICP (industrial Control Panel)
d) (1) Standard Control
e) (1) Installation Manual
f) (5) Blades

MOUNTING HARDWARE KIT

a) (2) Shims
b) (2) Clamps
c) (4) Bolts, Washers, Nuts

GUY WIRE KIT

a) (1) Gripple kit
b) (4) Beam Clamps
c) (4) Turnbuckles

COMMUNICATION KIT

a) (1) 100 ft Terminated Cat5 Cable
b) (2) RJ45 Connectors

BEFORE YOU BEGIN

TOOLS NEEDED

- [ ] Metric Ratcheting Wrench Set
- [ ] Metric (Deep & Short) Socket and Ratchet Se t
- [ ] Metric Allen Wrench Set
- [ ] Metric Allen Socket Set
- [ ] Tape Measure
- [ ] Magnetic Level
- [ ] Torque Wrench
- [ ] Wire Rope Cutters
- [ ] Phillips and Flat Head Screwdrivers
- [ ] #10 to #14 AWG Strippers
- [ ] Multimeter
- [ ] Cat5 Termination Tools (optional)

A

Secure bracket and downrod to lift and raise to I-beam.

B

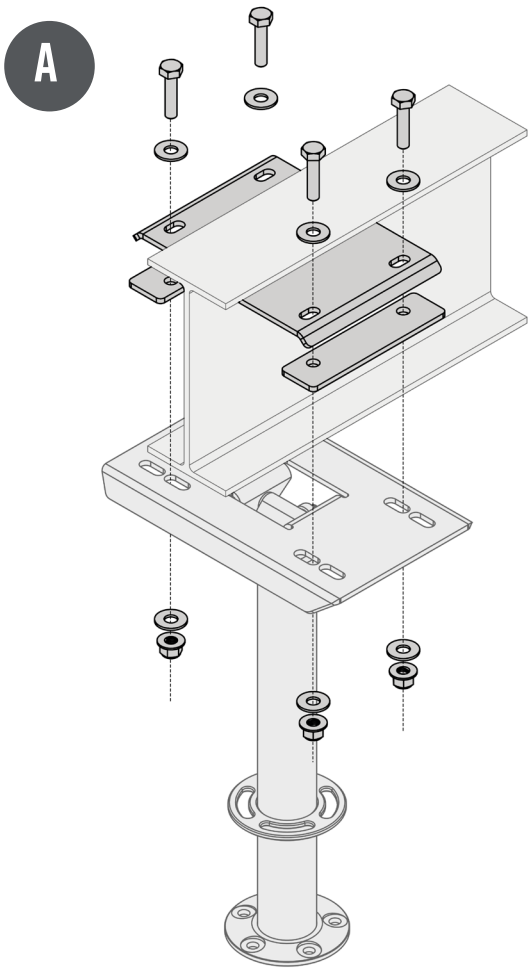
Assemble the mount with shims and clamps on bracket. Hook the clamp on one side of the I-beam and tighten hardware until the mount is snug but can still be moved.

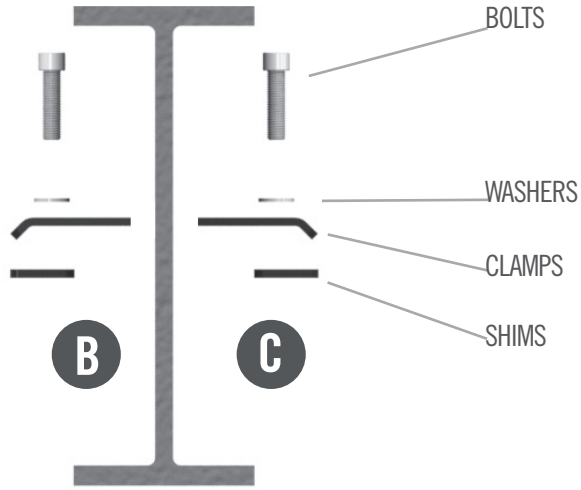
C

Assemble the opposing shim and clamp on to the I-beam and hand tighten.

D

Center the mount under the I-beam. Ensure the clamps have maximum engagement on both sides and tighten hardware.





WARNING: Support Directly From Building Structure

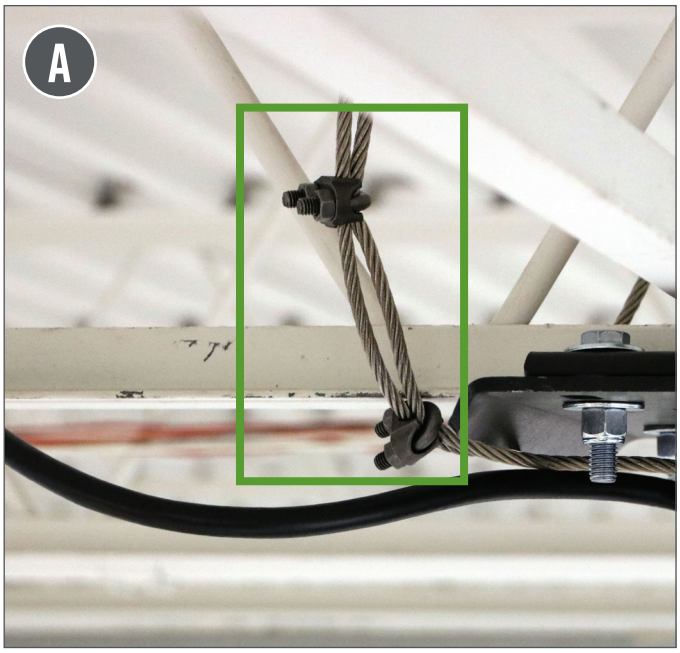
2 RETENTION SYSTEM

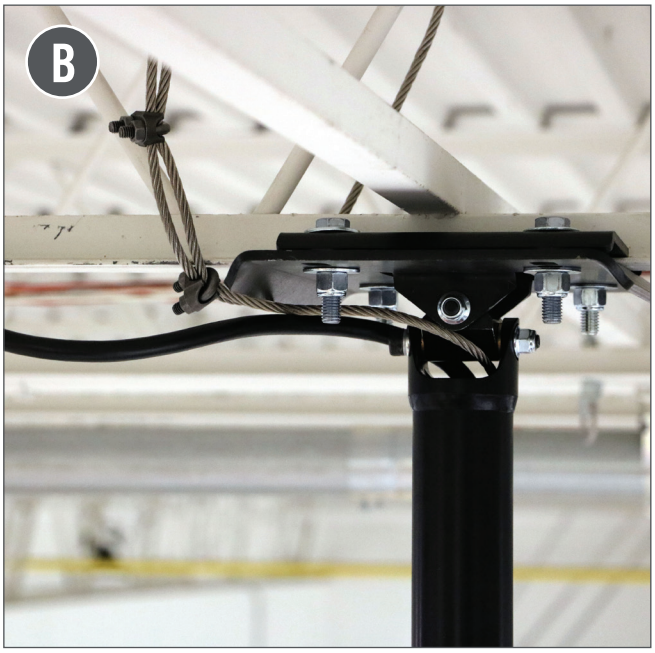
A

Wrap retention cable around beam or building structure.

B

Secure remaining cable to itself with cable clamps. Coil excess cable and secure.





3 MOTOR ASSEMBLY

A

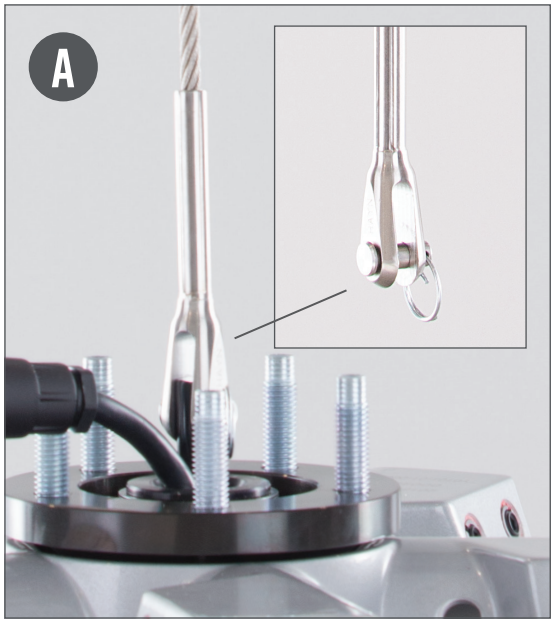
Insert clevis pin into retention rod and secure with clip provided.

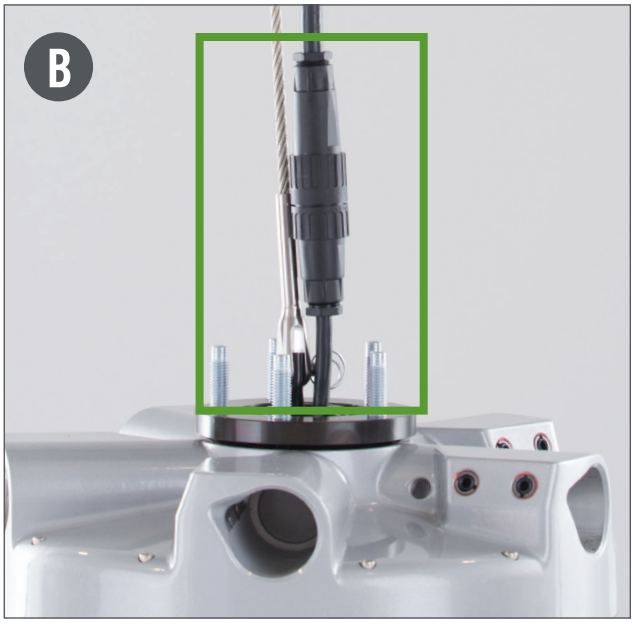
B

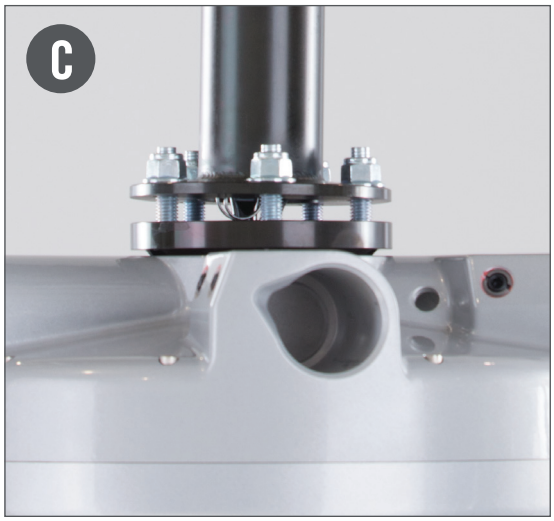
Join the two connectors and twist, making sure they lock together.

C

Lift motor assembly (see tip) while pushing cables into downrod. Feed the press studs through downrod flange. Avoid pinching cable between motor flange and downrod flange and secure with nylon lock nuts. Pull excess wire and cable through top of downrod.







TIP

Use packaging to transport motor onto lift equipment. Raise lift to install motor to downrod.

4 CONTROL PANEL

WARNING!

Before completing the mechanical installation, ensure breaker is off and all Lockout/Tagout procedures are in place. The electrical receptacle for the panel should be installed prior to panel installation. For a chart of receptacles, refer to page 15.

If the retention cable is not installed, the warranty will be voided.

A

Position panel with plug connectors facing down. Mount control panel with fasteners, one in each corner of the panel.

B

Connect VFD cable from fan to control panel. Twist connector to lock in place. Secure excess cable to ceiling or beam.

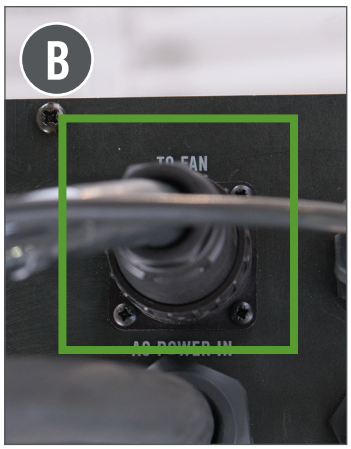
C

Connect the communication cable to one of the comm terminals and run down to user touchscreen location.

D

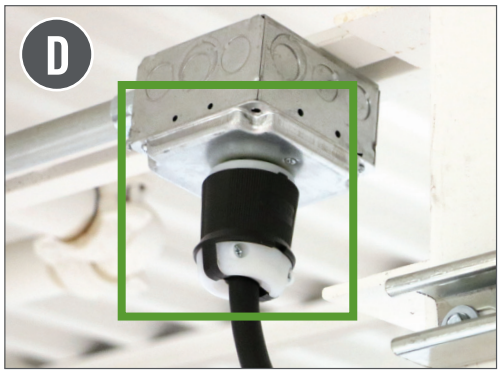
Connect electrical plug to panel. Twist connector to lock into place.

CAUTION: DO NOT CONNECT POWER UNTIL MECHANICAL INSTALLATION IS COMPLETE.



TIP

For detailed E-Stop (Fire Relay) wiring, see Page 17



NOTE

Twist Lock will act as a disconnect.

Do not use extension cord with fan
Do not remove covers while power is on
Do not use improper voltage source

5 STANDARD CONTROL

A

Remove cover to access mounting holes.

B

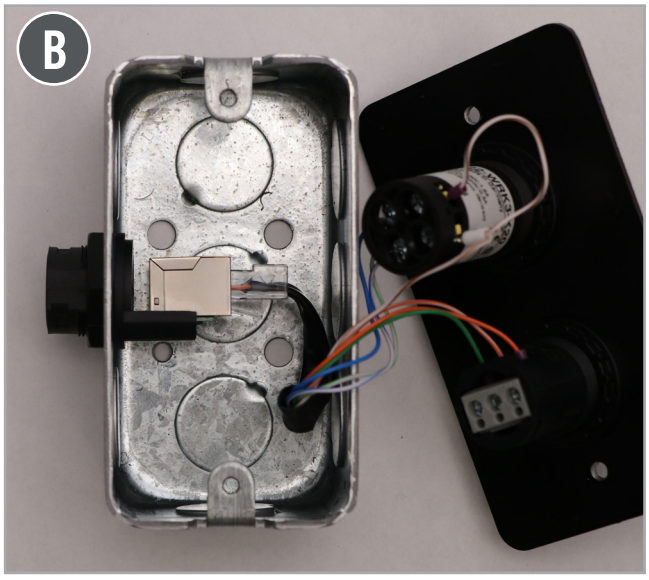
Mount contol box using mount holes in back of the box.

C

Once the control box has been mounted, reattach cover.

D

Plug in RJ45 cable from control panel to side of control box.



6 GUY WIRES

A
Attach beam clamps to structure. Clip guywire end to beam clamp.

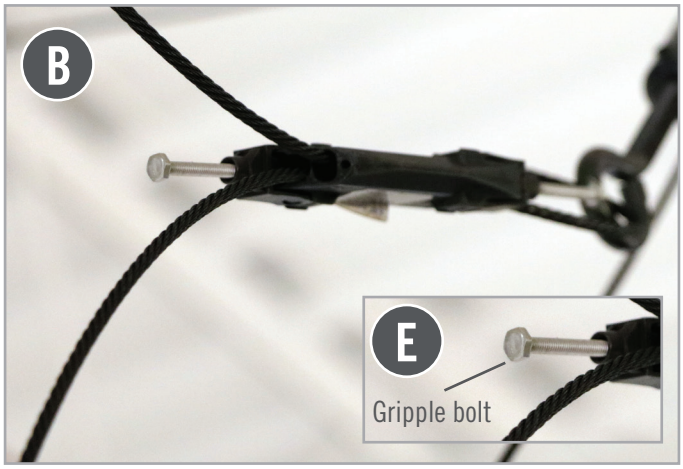
B
Feed wire through gripple into closed turnbuckle end and back through gripple.

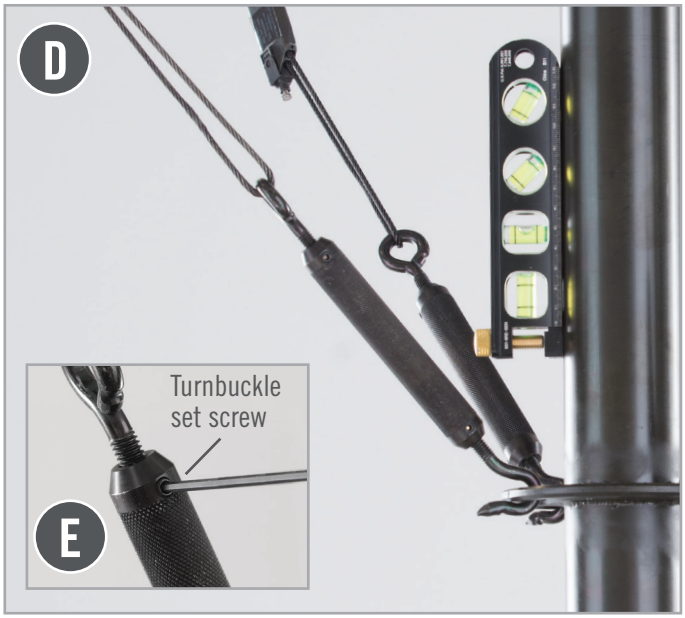
C
Hook turnbuckle to guy wire disc. Feed guy wires through disc to hold in place during turnbuckle installation.

D
Place level against the downrod and tighten the turnbuckles by hand in a crisscross pattern, periodically checking to make sure fan is level.

E
Tighten bolts on gripples. Tighten set screws on turnbuckles.

ATTACH GUY WIRE TO BUILDING STRUCTURE WHILE MAINTAINING A 45-DEGREE ANGLE BETWEEN THE CEILING AND THE GUY WIRE. DO NOT WRAP GUY WIRES AROUND THE BUILDING STRUCTURE.





7 BLADES

A

Line up the pin on the post with the opening on the blade holder and insert until pin clicks into place.

B

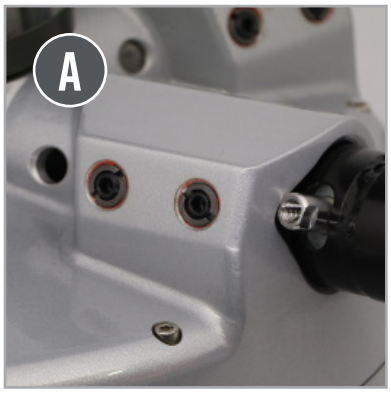
Using the supplied 10mm wrench, install and tighten the patch bolt until it fully seats against the pin.

C

Use a torque wrench to tighten the two set screws to 20 ft. lbs (240 in. lbs.) Alternate between the two set screws two to three times to ensure proper torque.

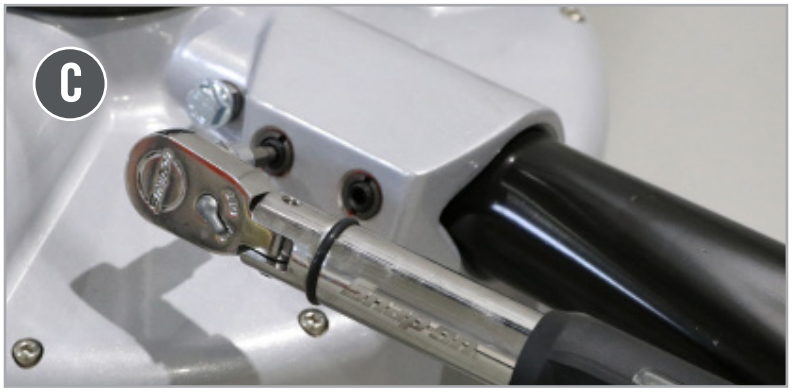
D

Repeat steps A-C for each of the four remaining blades.



NOTE

The blade end is marked with a number to signify which size fan it goes with. Make sure you match the correct blade size with the correct motor size.



ELECTRICAL

Electrical Plug Requirements

Voltage	Phase	Plug (included)	Receptacle
200-240V	Single	HBL2321	L6-20R
200-240V	Three	HBL2421	L15-20R
380-480V	Three	HBL2431	L16-20R

HBL2321

HBL2421

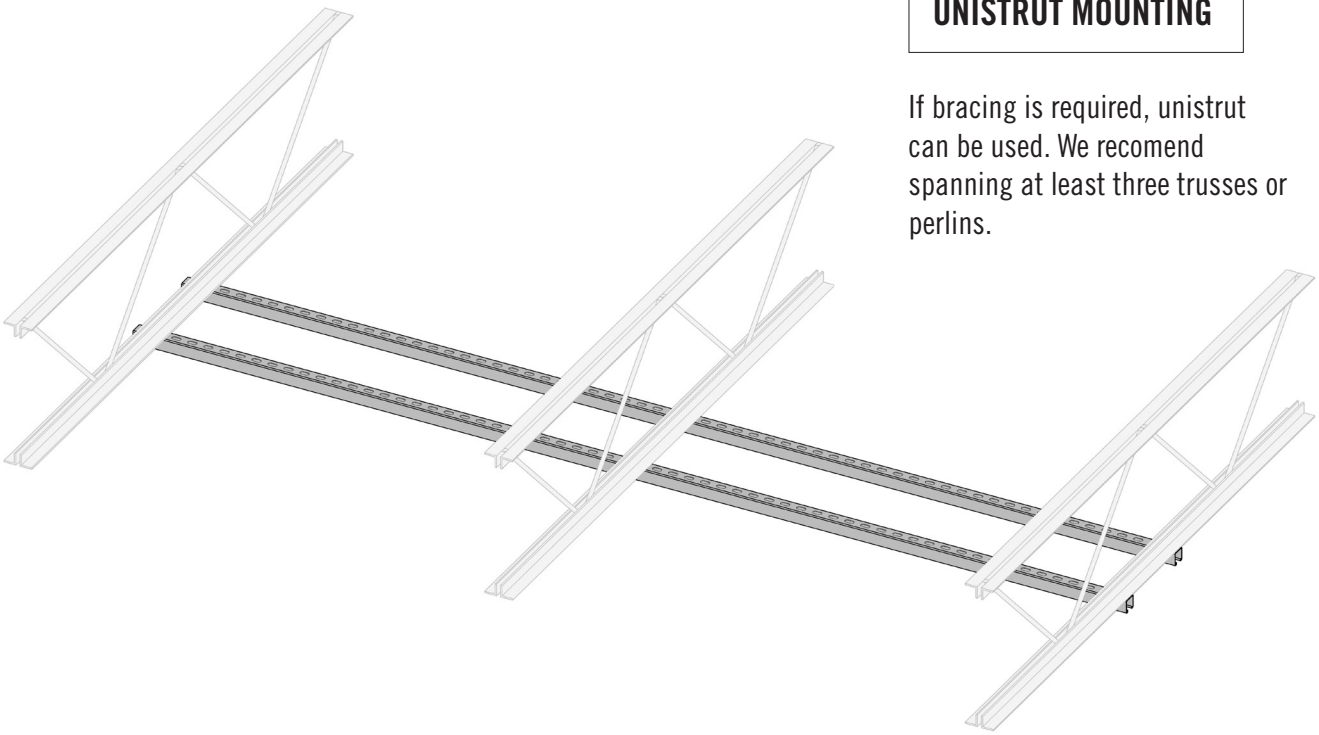
HBL2431

Do not use extension cord with fan.
Do not remove covers while power is on.
Do not use improper voltage source.

MOUNTING CONFIGURATION

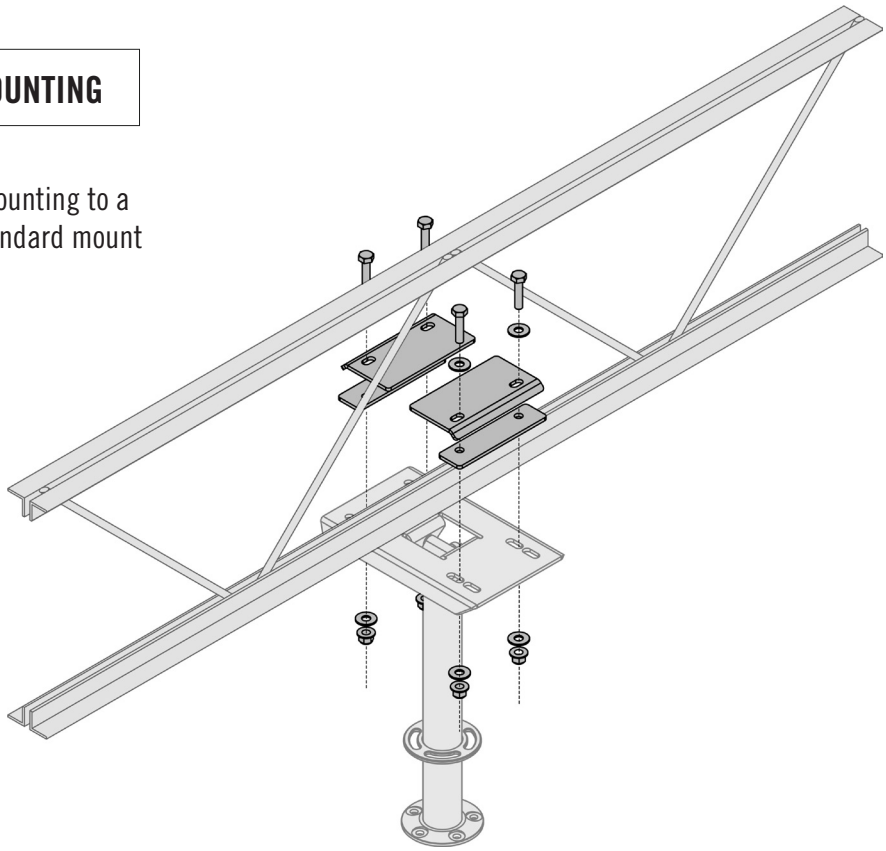
UNISTRUT MOUNTING

If bracing is required, unistrut can be used. We recomend spanning at least three trusses or perlins.



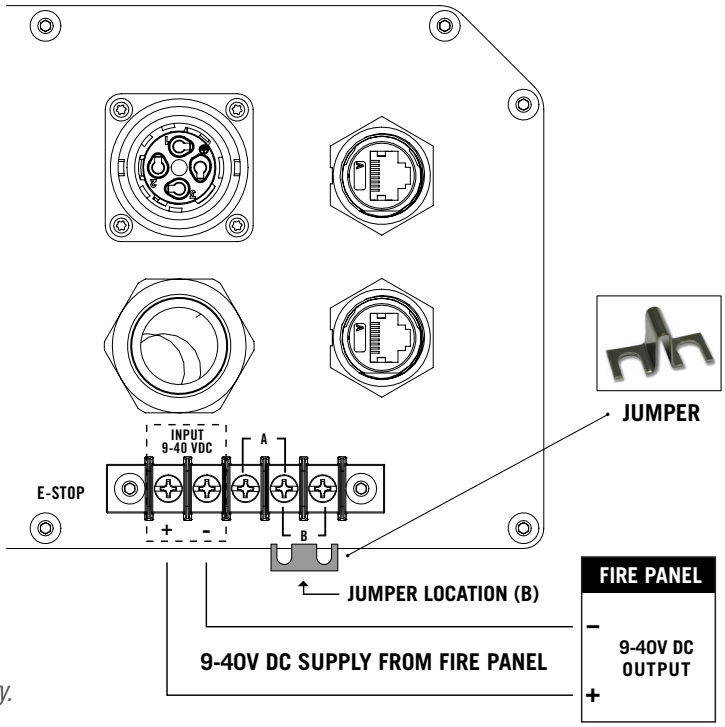
K-BAR MOUNTING

Example of mounting to a truss with standard mount hardware.



FIRE PANEL (FIELD WIRING)

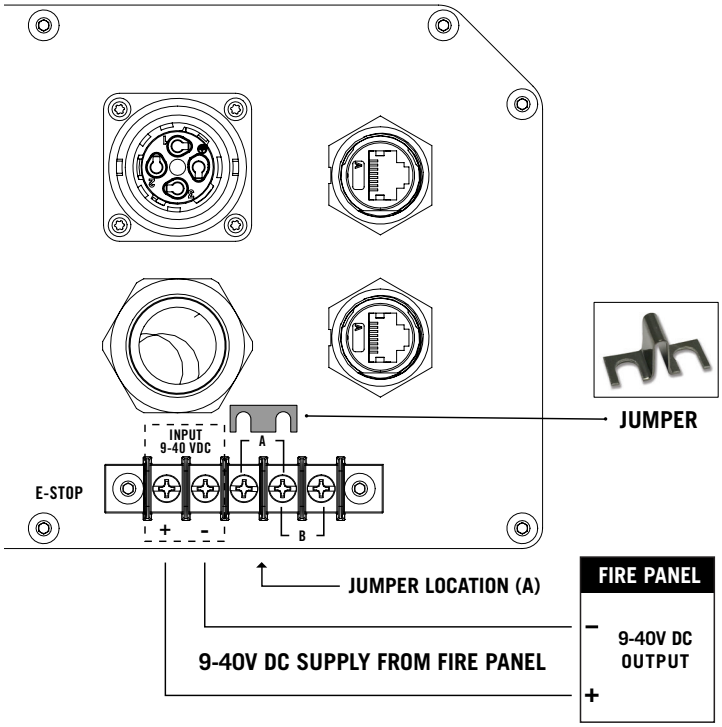
NORMALLY UNENERGIZED



NOTE

Jumper is set to "NORMALLY UNENERGIZED" setting from factory.

NORMALLY ENERGIZED



TROUBLESHOOTING

FAN WILL NOT START

Check to see if all plugs are securely connected.

Verify the touchscreen has power.

Confirm supply power is adequate and functional.

TOUCHSCREEN IS BLANK

Verify UI has power.

FAULT SCREEN ON UI?

For fault codes, please call our
Technical Department at 1-844-593-FANS (3267).

2434 ATRIUM WAY
NASHVILLE, TN 37214

1-844-591-FANS (3267)

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