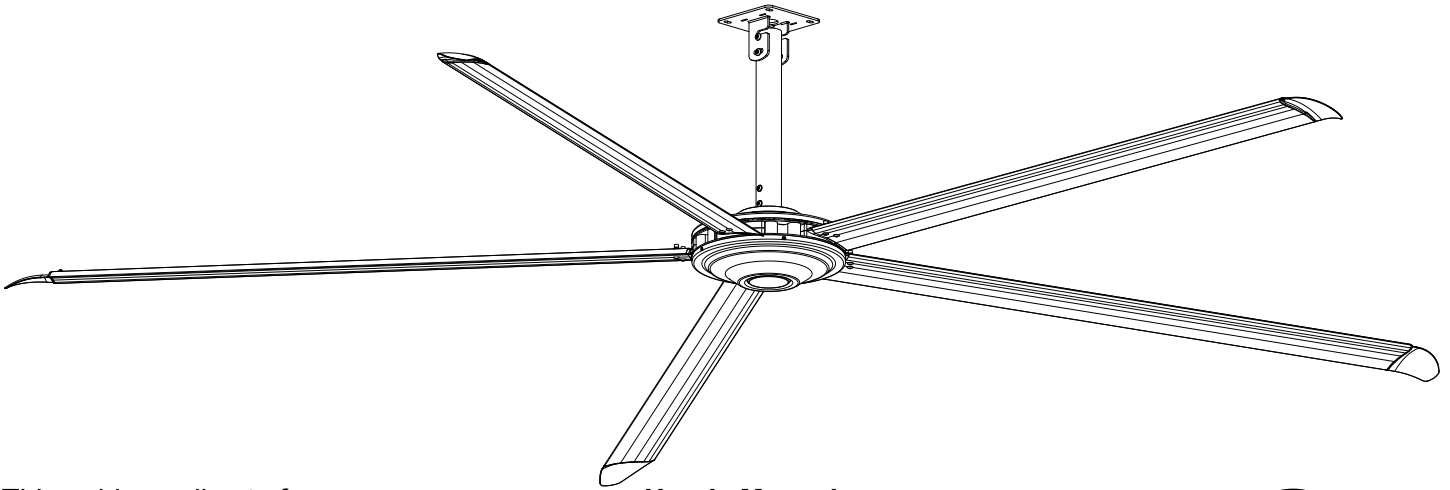


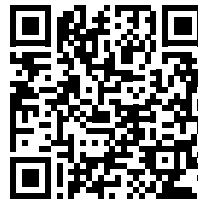


Commercial HVLS Fans



This guide applies to fans manufactured beginning January 2023 with the serial number C61619503 and higher.

User's Manual



Scan the QR code or [click here for the User's Manual.](#)



E506041

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⚠ WARNING

Do not install, operate or service this product unless you have read and understand the Safety Practices, Warnings, and Installation and Operating Instructions contained in this guide and User's Manual 6023693. Failure to do so could result in death or serious injury.

Quick Installation Guide

Part No. 6024113B

Technical Service (972) 466-0707

For complete installation details including optional guy wire mounting and fire control system information, operating instructions, maintenance and parts list please see User's Manual 6023693 at library.4frontes.com/dock/6023693B.pdf.

INTRODUCTION

Welcome and thank you for choosing this C-CLASS commercial fan from 4Front Engineered Solutions.

This guide contains basic information that you need to safely install and operate your fan. Please read and keep this quick installation guide before using your new fan. For more information, please consult our website at www.epicfans.com.

SAFETY SIGNAL WORDS

You may find safety signal words such as DANGER, WARNING, CAUTION or NOTICE throughout this guide. Their use is explained below:

▲ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
▲ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
▲ CAUTION	Indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury.
NOTICE	Notice is used to address practices not related to personal injury.

SAFETY PRACTICES

▲ WARNING

Read and save these instructions. Read these safety practices before installing, operating or servicing the fan. Failure to follow these safety practices could result in death or serious injury.

READ AND FOLLOW THE OPERATING INSTRUCTIONS IN THE USER'S MANUAL BEFORE OPERATING THE FAN. *If you do not understand the instructions, ask your supervisor to teach you how to use the fan.*

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

Support directly from building structure.

▲ DANGER

To reduce the risk of fire, electric shock and injury to persons, HVLS fan motor assemblies must be installed with the blade assemblies that are marked on their cartons to indicate the suitability with this model. Other blade assemblies cannot be substituted.

If you do not understand the instructions, ask your supervisor to explain them to you or call your authorized local distributor.

▲ CAUTION

To reduce the risk of injury to persons, install fan so that the blade is at least 3.05m (10') above the floor.

INSTALLATION AND OPERATION

Installation of the equipment must comply with local and national electrical codes and must be in accordance with ANSI/NFPA 70 clauses 400.7 and 400.8.

Do not use this commercial fan until you have received proper training. Improper use could result in property damage, bodily injury and/or death. Read and follow the complete OPERATING INSTRUCTIONS in the user's manual before use. If you do not understand the instructions, ask your supervisor to explain them to you or call your local distributor.

DO NOT USE THE FAN IF IT APPEARS DAMAGED OR DOES NOT OPERATE PROPERLY. Inform your supervisor immediately.

Do not operate the fan until all personnel, building structure and movable equipment are clear of all moving parts. Install guards as required.

Do not install the fan unit onto a structure of insufficient strength. Consult a professional engineer or registered architect. Improper installation of the fan could result in death or serious injury.

For fans that will be subjected to high cross winds (open bay doors or air conditioning diffuser ducts) the fan must be at least one fan diameter (as measured from the end of the winglet) from open bays or A/C ducts mounted below the blade plane or there must be at least one fan diameter (as measured from the end of the winglet) for A/C ducts mounted at or above the blade plane.

MAINTENANCE AND SERVICE:

▲ DANGER

Before service, inspection, or cleaning make certain that the power is disconnected and properly locked off.

If the fan does not operate properly using the procedures in this manual, BE CERTAIN TO REMOVE POWER FROM THE UNIT AND LOCK-OUT THE DISCONNECT ON THE POWER CIRCUIT. Call your local distributor for service.

Keep your body clear of moving parts at all times.

All electrical troubleshooting and repair must be done by a qualified technician and meet all applicable codes.

OWNER'S RESPONSIBILITIES

The owner's responsibilities include the following:

The owner should recognize the inherent danger of the interface between the commercial fan and shop worker. The owner should, therefore, train and instruct operators in the safe use of the commercial fan.

Nameplates, cautions, instructions and posted warnings shall not be obscured from the view of operating or maintenance personnel for whom such

warnings are intended. Warnings which are worn or non-legible should be replaced.

Manufacturer's recommended periodic maintenance and inspection procedures in effect at date of shipment shall be followed, and written records of the performance of these procedures should be kept.

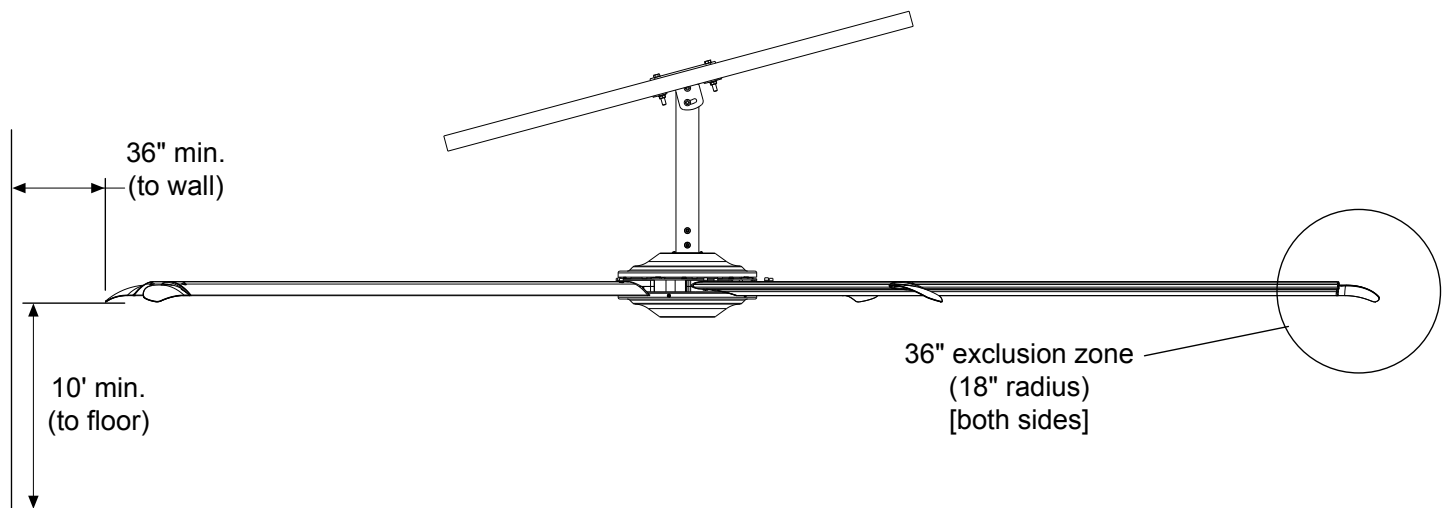
Commercial fans that are structurally damaged or have experienced impacts from external sources, shall be removed from service, inspected by the manufacturer's authorized representative, and repaired as needed before being placed back in service.

The owner shall see that all nameplates and caution and instruction markings or labels are in place and that the appropriate operating and maintenance manuals are provided to users.

Modifications or alterations of commercial fans shall be made only with written permission of the original manufacturer.

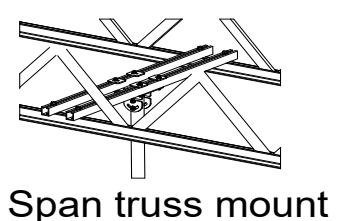
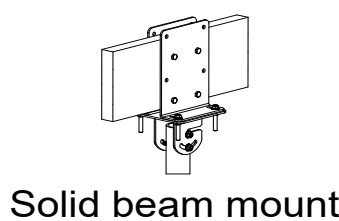
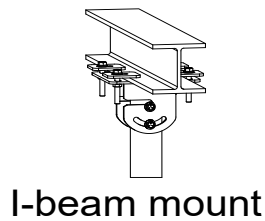
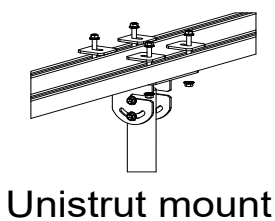
ACCESS INSTALLATION SITE

1



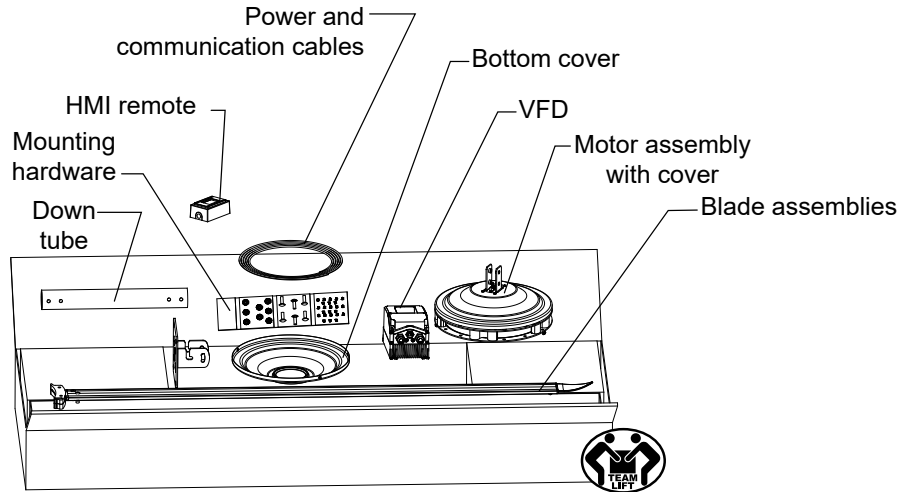
TYPICAL INSTALLATION TYPES

2



UNBOX AND INVENTORY

3



HARDWARE AND REQUIRED TOOLS

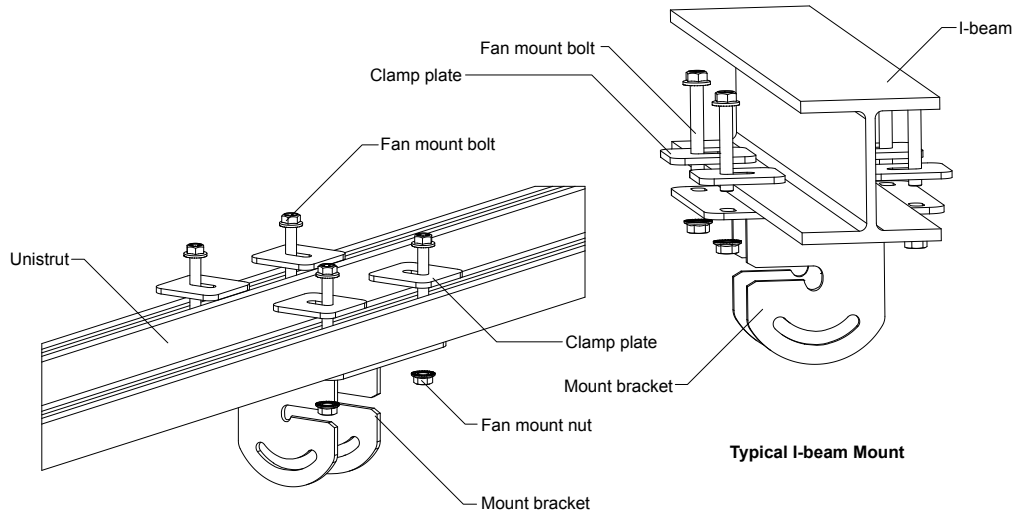
4

PACKING KIT	REQUIRED TOOLS
1. Fan Box	Wrenches: 9/16
a. 5 Blades	Sockets: 1/2, 9/16
b. Motor Assembly with cover	Spirit level, short
c. HMI remote control	Torque wrench: 15-60 ft-lbs (For use with sockets)
d. Variable Frequency Drive	Tape measure
e. Down tube	T-15 Torx (included)
f. Communication cable (single fan control only)	T-40 Torx (included)
g. Mounting hardware	Phillips screwdriver.
h. Motor power cable	

INSTALL FAN MOUNT

5

1-578 x 1-5/8 gauge strut channel is acceptable for alternate installation scenarios.



Typical Unistrut Mount

*Torque 3/8 fasteners to 28 ft-lbs.

INSTALL DOWN TUBE CABLES

6

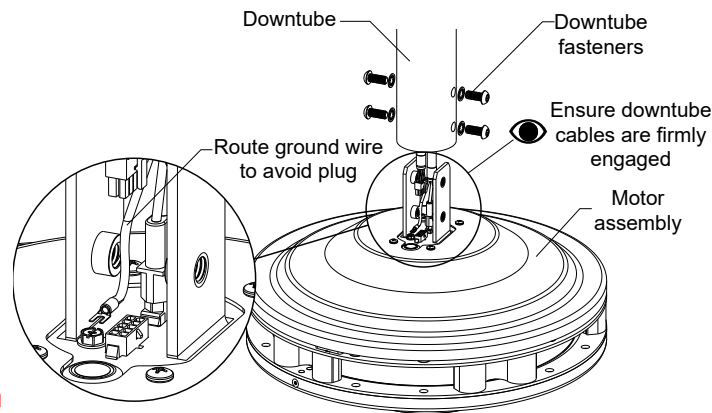
NOTICE

Failure to properly connect the downtube cables can lead to operating issues.

1. Route the motor power cable through the down tube.
2. With the tube located next to the motor assembly, install the cable connection to the top of the motor assembly.

Use the support materials in the shipping package to support the motor assembly and prevent damage.

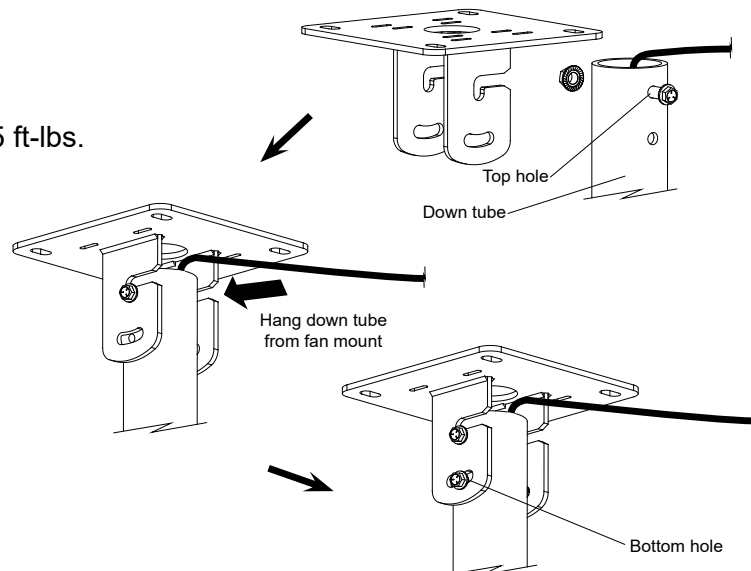
3. Slide the down tube over the motor assembly bracket and ensure the cable is not pinched.
4. Install the Torx fasteners and tighten them firmly.



HANG MOTOR

7

1. Install the fastener loosely in the top hole of the down tube.
2. Check to make sure the motor power cable is free of binding or pinching.
3. Hang the motor assembly, using the fastener as a hanger, into the j-bracket.
4. Route the cables as required.
5. Install the bottom fastener.
6. Ensure it is plumb.
7. Tighten and torque the fasteners to 25 ft-lbs.



INSTALL THE CONTROLLER BOX

8

⚠ DANGER

Before doing any electrical work, make certain the power is disconnected and properly tagged out and locked out. All electrical work must be done by a qualified technician and meet all applicable codes. USE EXTREME CAUTION. Touching wires could result in electrical shock, death or serious injury.

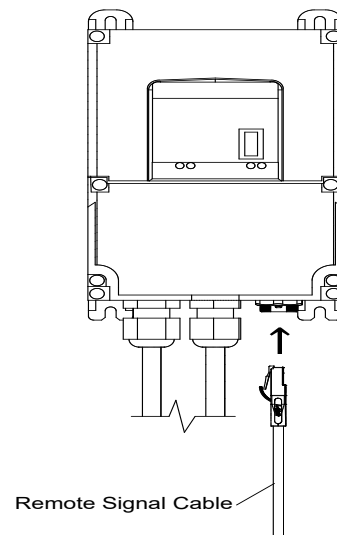
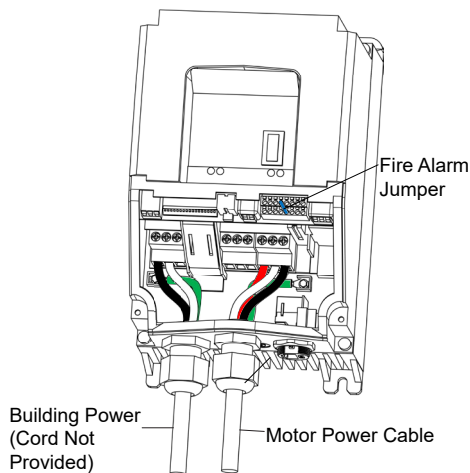
On 120V fan, never allow more than 130 volts incoming power to be connected to the controller box. Damage to the fan and serious personal injury or death may result.

NOTICE

Ensure proper connection of the motor power cable. Do not alter factory-supplied cables. Failure to properly connect the cable can lead to operating issues.

The maximum length of the cable between the VFD controller box and the motor is 150 linear feet. When extending the power cable, you must use Shielded SO cord. Do not run the motor cables in the same conduit as the input voltage. Do not run the motor cables in the same conduit as other motor cables.

1. Fasten the VFD to the building so the box is secure against movement.
2. Route the motor power cable from the fan mounting location to the VFD, and connect it.
3. Connect the remote signal cable to the VFD, and route it to the touch screen remote location.

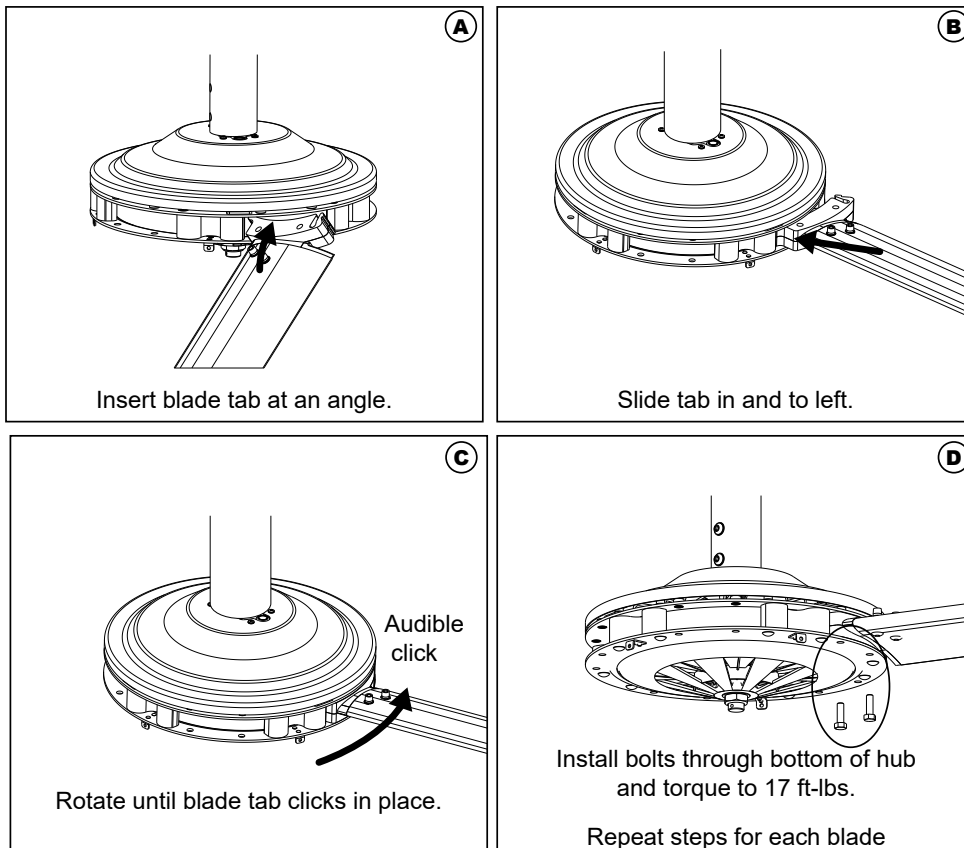


INSTALL BLADES

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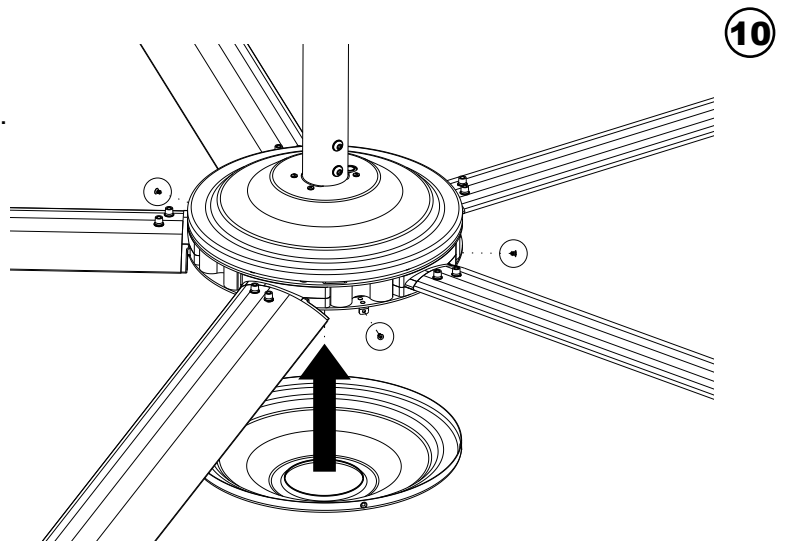
⚠ DANGER

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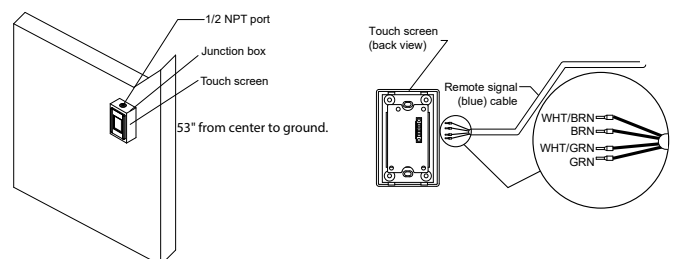
INSTALL BOTTOM COVER

1. Align cover.
2. Install the fasteners using the tools provided.



INSTALL REMOTE

1. Mount the touch screen remote to the factory-supplied junction box as close to the fan assembly as possible. A direct line of sight is preferred, and the height should be 53" to the center from the floor.
2. Route the remote signal cable from the VFD box through the hole in the factory-supplied junction box.
3. Wire the four leads of the remote control signal cable (6023484) to the orange connector of the touch screen remote control.



NOTICE

Do not over-torque the mounting screws. If you over-torque the mounting screws, it may cause damage to the screen.

It is the installer's responsibility to torque properly.

VERIFY OPERATION

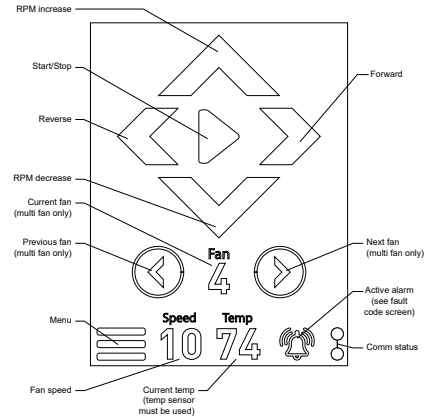
1. Operate the fan following the instructions under HMI Setup in the user's manual.
2. Check for proper rotation direction, stability, and noise level.

12

TROUBLESHOOTING

FAULT CODE DEFINITIONS

FAULT CODE	DEFINITION
8784	Continuous Overcurrent
8992	Short Circuit/Earth Leakage
9024	Short Circuit
9040	I ² *t Overload
9090	I*t Error Fault
12576	Mains Phase Fault
12816	DC Bus Overvoltage Fault
12832	DC Bus Undervoltage Trouble
16912	Overtemperature Fault
17024	Heat Sink Temperature Sensor Fault
17168	Moor Temperature Failure
25233	Maximum Allowed Trouble Codes Fault
29056	Motor Overcurrent Fault
30337	Memory Module not Present Fault
33185	Modbus Network Time-Out Fault
33533	Torque Limit Reached
66286	Motor Overspeed Fault
65289	Motor Phase Missing
65290	Motor Phase Failure Phase U
65291	Motor Phase Failure Phase V
65292	Motor Phase Failure Phase W
65337	Motor Overload
65366	Maximum Motor Frequency Reached



FAULT CODE SCREEN

