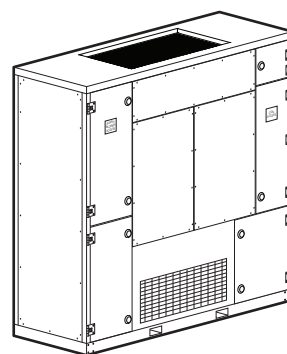


# Installation

## EcoBreeze™ Module

**ACEC101**  
**ACEC200**  
**ACEC201**





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This manual is available in English on the enclosed CD.

Dieses Handbuch ist in Deutsch auf der beiliegenden CD-ROM verfügbar.

Deze handleiding staat in het Nederlands op de bijgevoegde cd.

Este manual está disponible en español en el CD-ROM adjunto.

Ce manuel est disponible en français sur le CD-ROM ci-inclus.

Questo manuale è disponibile in italiano nel CD-ROM allegato.

Instrukcja Obsługi w języku polskim jest dostępna na CD.

O manual em Português está disponível no CD-ROM em anexo.

Данное руководство на русском языке имеется на прилагаемом компакт-диске.

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# General Information

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## Safety

Read and adhere to the following important safety considerations when working with this cooling unit.

### **⚠ DANGER**

#### **HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

Turn off all power supplying this equipment before working on the equipment. All electrical work must be performed by licensed electricians. Practice lockout/tagout procedures. Do not wear jewelry when working with electrical equipment.

**Failure to follow these instructions will result in death or serious injury.**

### **⚠ WARNING**

#### **HAZARD FROM MOVING PARTS**

Keep hands, clothing, and jewelry away from moving parts. Check the equipment for foreign objects before closing the doors and starting the equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

# Inspecting the Equipment

Inspect for missing components. All shipped loose components are identified by part number and description on the bill of lading. Ensure each item is present before accepting delivery of the unit.

**Filing a claim.** If damage has occurred, or if shipped loose parts are missing, report it immediately to the delivering carrier and note the problem on the receiving copy of the bill of lading. Failure to do so will result in replacement parts and repairs being billed to the customer.



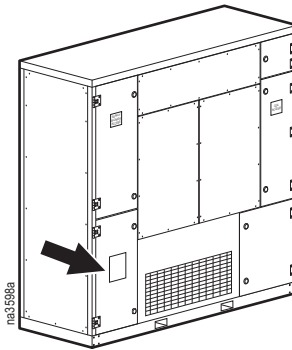
**Note:** In case of shipping damage, do not operate equipment. Keep all packaging for inspection by the shipping company and contact APC by Schneider Electric.

## Storing the equipment before installation

<b>⚠ WARNING</b>
<b>DAMAGE TO EQUIPMENT OR PERSONNEL</b>
If the Module must be stored temporarily, it must be placed on a flat and level surface to avoid damage.
<b>Failure to follow these instructions can result in death, serious injury, or equipment damage.</b>

# Model Identification

## Model identification label location

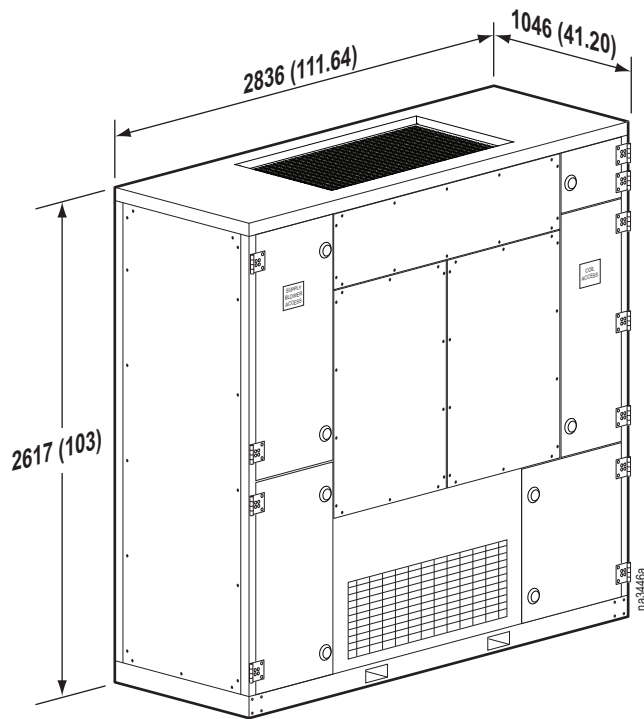


## Modules

<b>SKU</b>	<b>Description</b>
ACEC101	EcoBreeze Module 400/3/50
ACEC200	EcoBreeze Module 460-480/3/60
ACEC201	EcoBreeze Module 575-600/3/60



# Weights and Dimensions



Module	Weight
ACEC101, ACEC200, ACEC201	1225 kg (2,700 lb)

\* Dimensions are shown in millimeters, with inches in parentheses.

## Access Door Operation

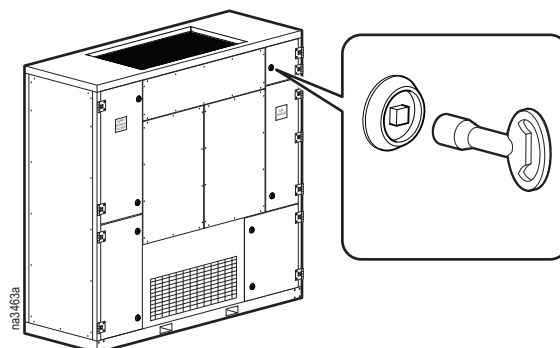
Module access doors and panels have latches that open with a Module access door latch tool.

**⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK.**

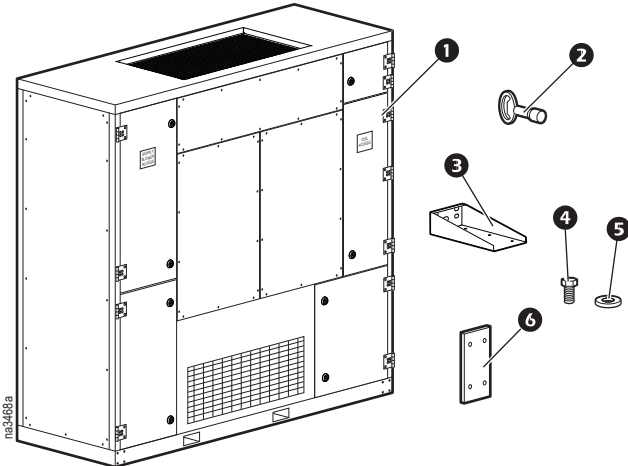
To avoid possible personal injury or death, the access door locking mechanism must be re-engaged after access to a compartment for inspection or service requirements.

**Failure to follow these instructions will result in death or serious injury.**



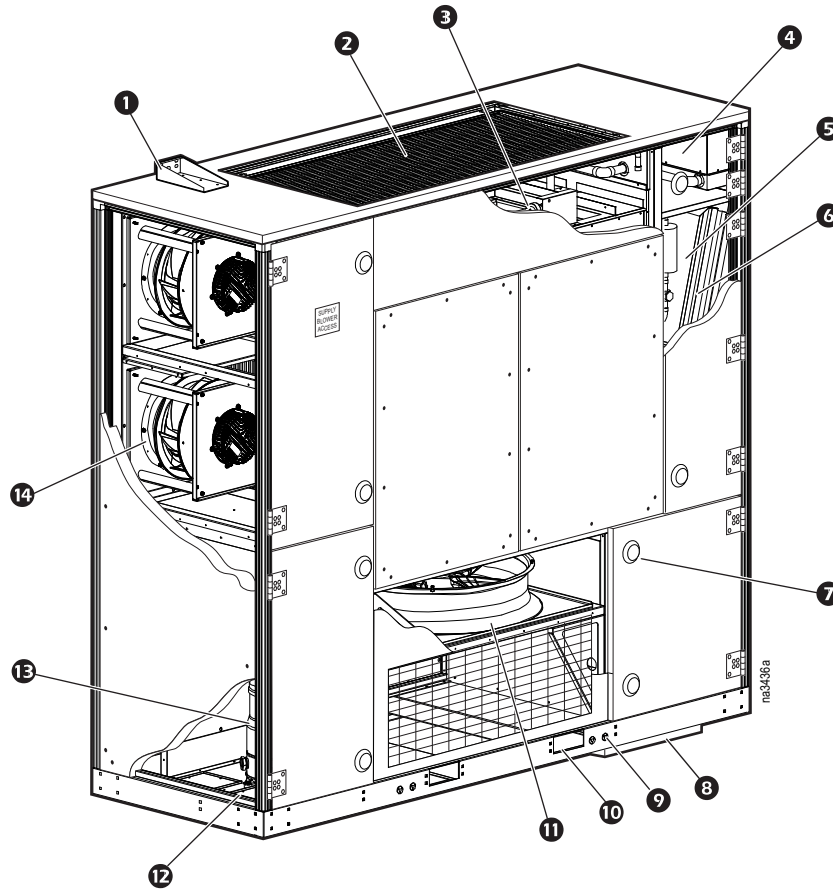
# Component Identification

## Inventory



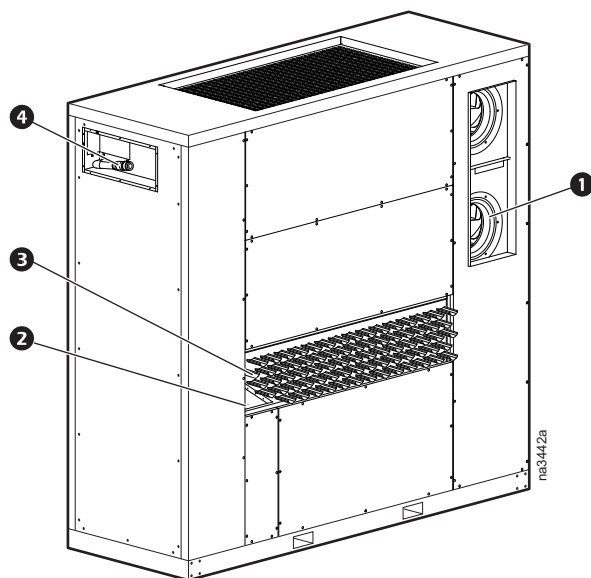
Item	Description	Quantity
1	EcoBreeze Module assembly	1
2	Module access door latch tool	2
3	Upper anchor bracket	1
4	1/2 in -13 hex cap bolt x 1-1/2 in, grade 5	14
5	1/2 in flat washer	14
6	Lower anchor bracket	2

## Module — front



Item	Description	Quantity	Item	Description	Quantity
1	Upper support bracket	1	8	Module supply air drop-down box	1
2	Condenser coil	1	9	Lower support bracket mount	2
3	Water spray nozzles	2	10	Forklift pocket	1
4	Module water supply quick disconnect	1	11	Outdoor air fan	1
5	Air filter	4	12	CANbus expansion bus and module power connections	1
6	Evaporator coil	1	13	Compressor	1
7	Door latch	8	14	Indoor air fans	2

## Module — rear



Item	Description
------	-------------

- |   |                               |
|---|-------------------------------|
| ① | Indoor air fans               |
| ② | Condensate return             |
| ③ | Water collector               |
| ④ | Module water supply connector |

# Prepare for Installation

---

## Lifting and moving

### ⚠ WARNING

#### DAMAGE TO EQUIPMENT OR PERSONNEL

- Before lifting the EcoBreeze Module, ensure the lifting equipment is adequately sized for the load.
- Lift the EcoBreeze Module only from the provided forklift pockets.
- Check for overhead obstructions such as power cables.
- Maintain a minimum safe distance while equipment is lifted.
- Control access of personnel at lift site.
- There are no attachment points provided at the top of the EcoBreeze Module. Attempts to lift the Module from any point other than the provided forklift pockets may result in damage to the equipment.

**Failure to follow these instructions can result in death, serious injury, or equipment damage.**

The recommended tools for lifting and moving the equipment includes the following:

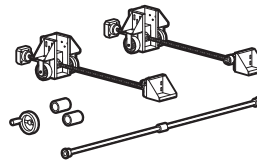
Fork lift



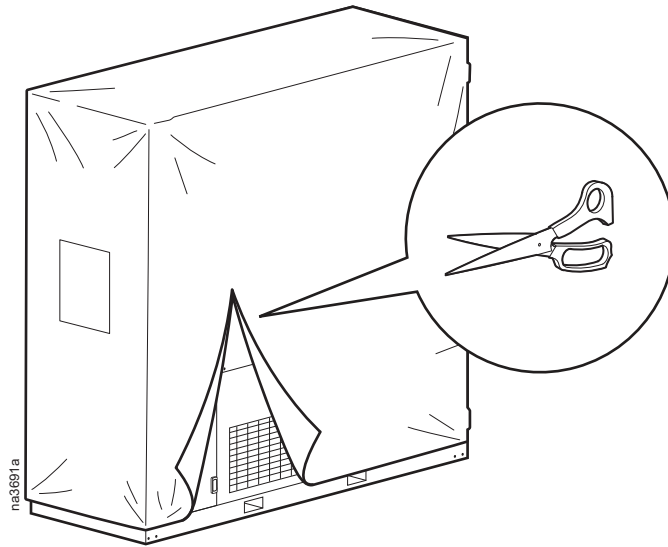
Rolling hydraulic dolly



Screw jack assembly



## Unwrap the Module



### **CAUTION**

#### **DAMAGE TO EQUIPMENT**

When removing protective plastic wrap be careful to cut only the plastic and not damage the exterior of the equipment.

**Failure to follow these instructions can result in equipment damage.**

## Ensure circuit breaker is switched off

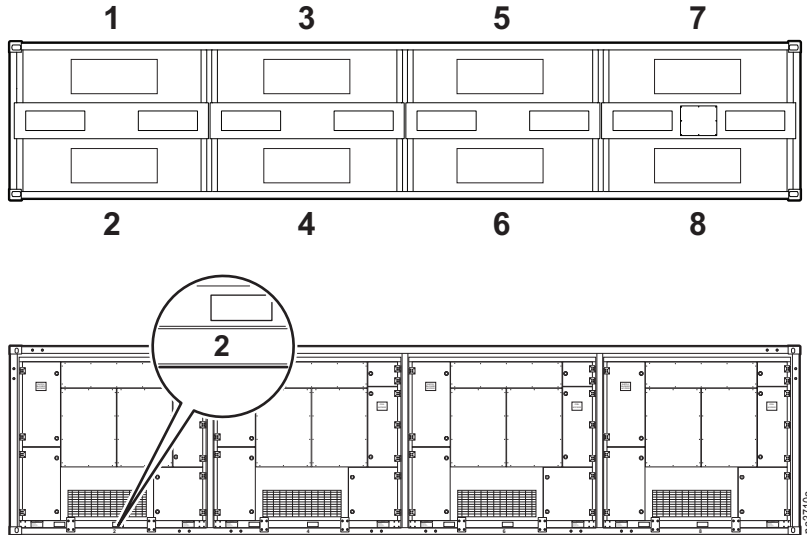
**⚠ DANGER**

**HAZARD OF ELECTRIC SHOCK**

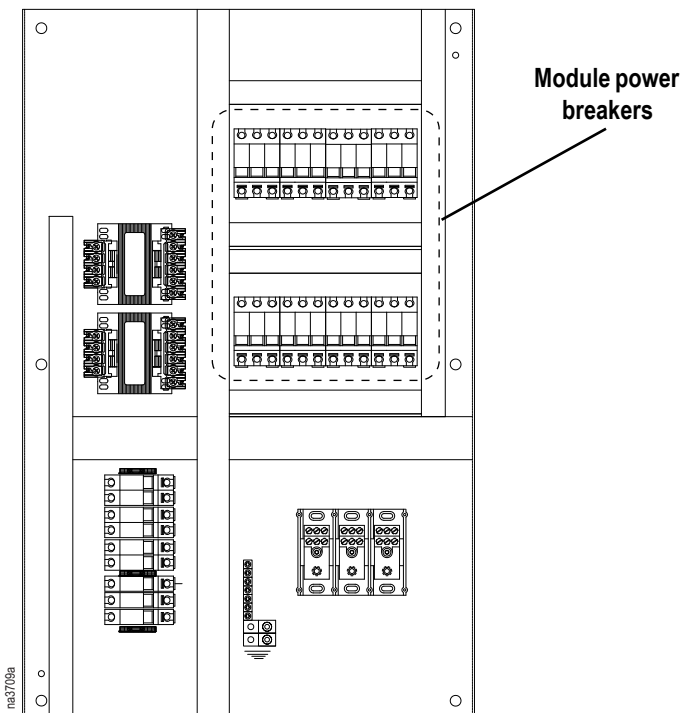
Before beginning Module installation, ensure that the circuit breaker for that position on the Frame is turned off.

**Failure to follow these instructions will result in death or serious injury.**

1. Identify the Module bay location. Each bay on the EcoBreeze Frame is numbered on the bottom rail.



2. Open the power distribution panel on the EcoBreeze Frame and ensure that the power breaker for the designated Module position is switched off.



## CAUTION

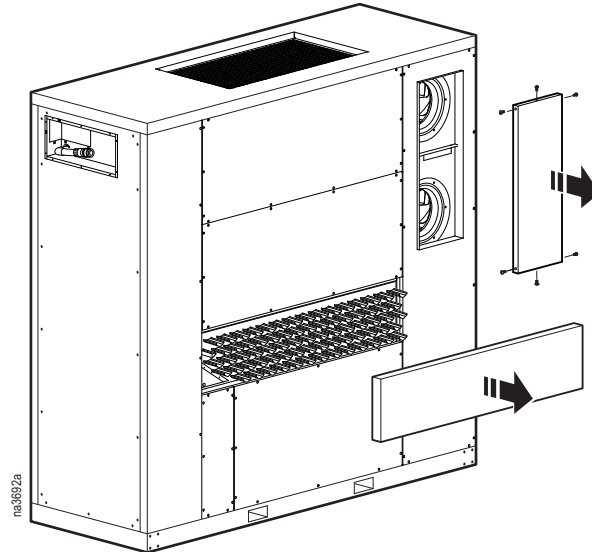
### DAMAGE TO EQUIPMENT

Do not install the equipment during rain, snow, or other inclement weather.

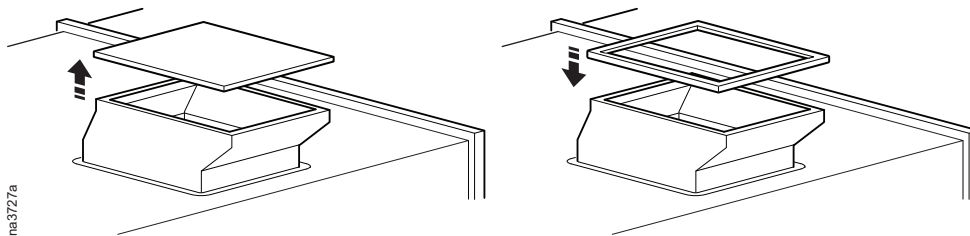
**Failure to follow these instructions can result in equipment damage.**

### Prepare the Frame

1. Remove the protective covers from the water trough and return air plenum.



2. Remove the protective cover on the supply air transition



3. Place new 8 mm x 19 mm (5/16 in x 3/4in) closed-cell neoprene gasket tape (supplied by others) with pressure sensitive adhesive on top of the supply air transition.



# Install the Module

## Place the Module on the service platform

### CAUTION

#### HEAVY LOAD

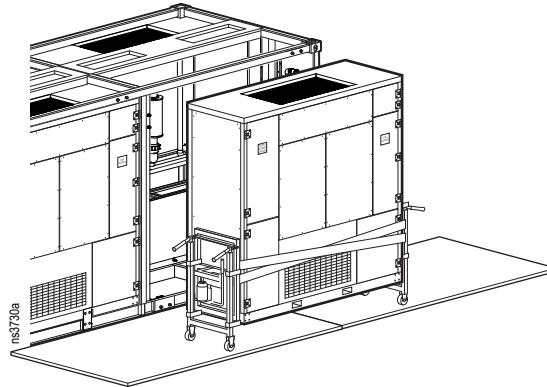
- Ensure the lifting equipment has an adequate capacity for the load.
- All lifting of the EcoBreeze Module is to be from the provided forklift pockets or with rolling hydraulic jacks under each end of the module as detailed in this manual.
- Maintain a minimum safe distance while equipment is lifted.
- Check for overhead obstructions such as power cables.
- If the Module must be stored temporarily, it must be placed on a flat and level surface in order to avoid damage.
- Control access of personnel at lift site.

**Failure to follow these instructions can result in equipment damage.**



**Note:** To provide a suitable working surface position two 9.5 to 19 mm (3/8 to 3/4 in) thick sheets of plywood on the service platform end-to-end in front of the open bay.

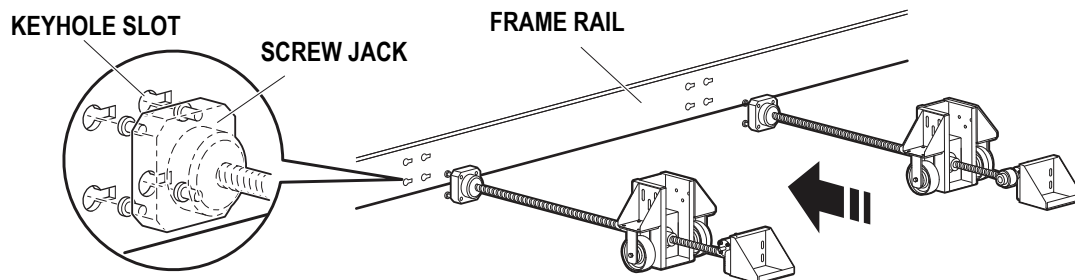
1. Position the Module on the service platform in front of the open bay. Support each end with a rolling hydraulic lift dolly.



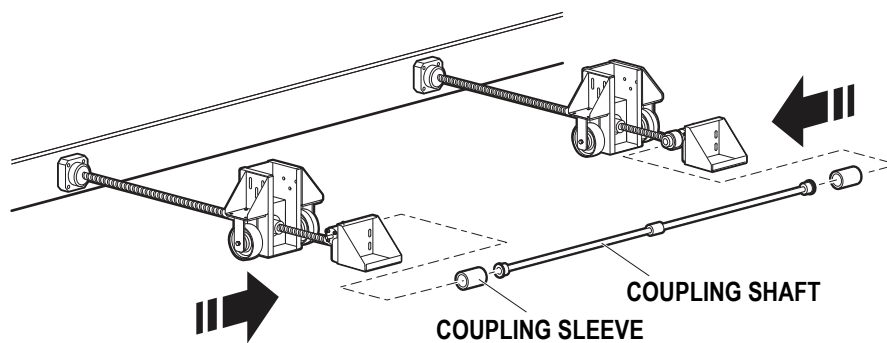
2. Use the rolling hydraulic lift dollies to position the Module approximately 50 mm (2 in) into the empty bay on the EcoBreeze Frame.

## Install the Module screw jack

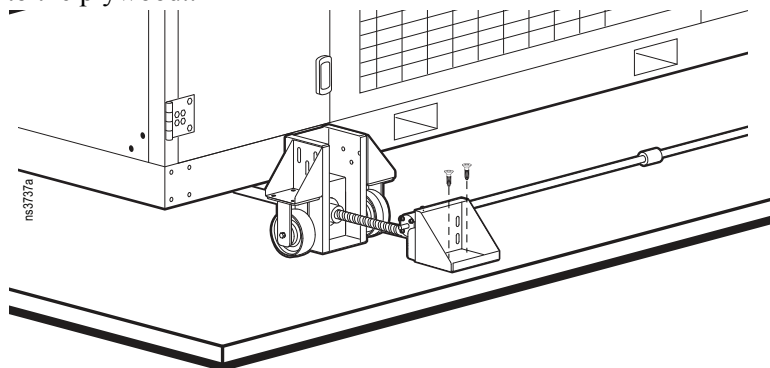
1. Attach the lower screwjack bracket to the keyhole openings on the bottom rail of the EcoBreeze Frame at each end of the desired Module bay on the Frame.



2. Using the coupling sleeves install the transmission shaft .

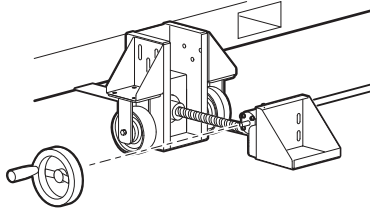


3. Attach each upper screw jack bracket to the Module with three 1/2 in - 13 x 1 1/2 in hex cap, grade 5 bolts.
4. Adjust the wheel height to level the screw shaft.
  - a. Attach each screw jack upper bracket to the Module using three bolts.
  - b. Adjust the height of the wheels on the screw jack casters so the wheels are placed firmly against the service platform. Securely tighten all fasteners.
  - c. Install two #10 wood screws on the bottom of the screw jack transmission bracket to secure it to the plywood..



- d. Use the adjustment slots on the screw jack transmission bracket to level the screw shaft.

5. Attach the provided hand crank or a power drill to the drive stud on the transmission on either end of the screw jack.

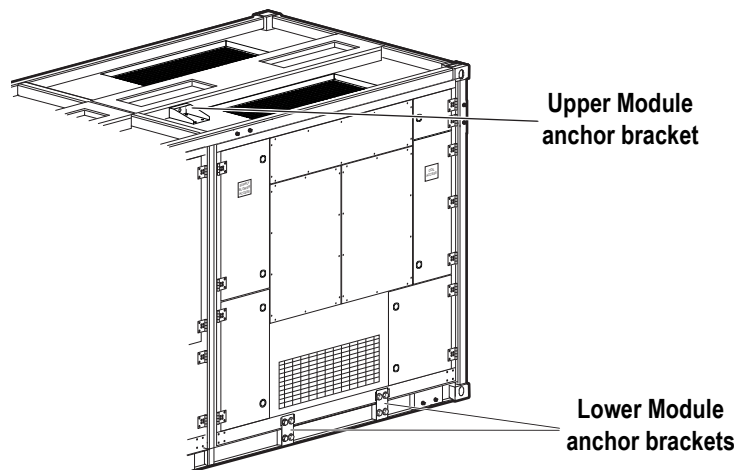


## Position the Module into the Frame

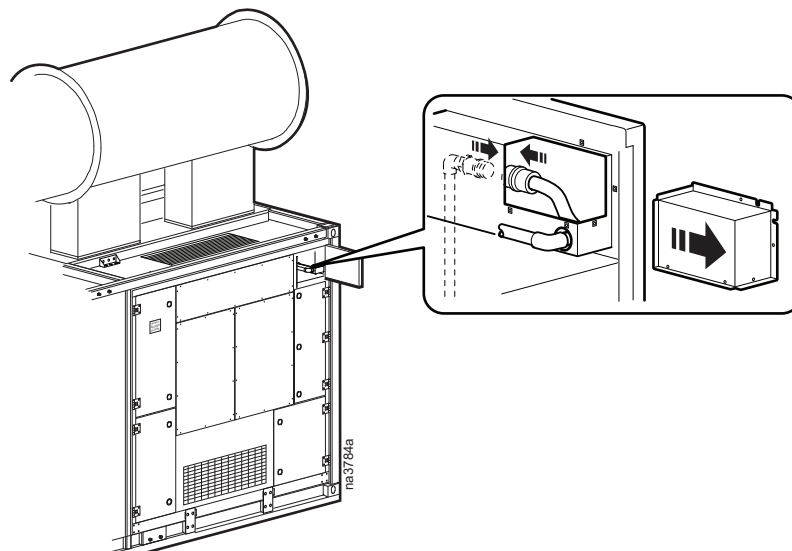
1. Ensure that the back of the Module is supported by the Frame and the front of the Module is supported by the screw jack.
2. Remove the rolling hydraulic lift dollies.

<b>⚠ WARNING</b>
<b>HEAVY EQUIPMENT</b>
With the rolling hydraulic lifts removed, the weight of the module is supported by the Frame at the back and the screw jack wheels at the front. Before removing the lifts, confirm that the weight of the Module will be properly supported.
<b>Failure to follow these instructions can result in equipment damage and hazard to personnel.</b>

1. Operate the screw jack to push the Module the rest of way into the bay on the EcoBreeze Frame.
2. Remove the three bolts attaching the screw jack to the Module and the two wood screws holding the screw jack transmission bracket to the plywood. Remove the screw jack from the keyhole openings on the bottom rail of the Frame.
3. Install upper and lower Module anchor brackets.



4. Open upper right access door and connect the Module water supply line



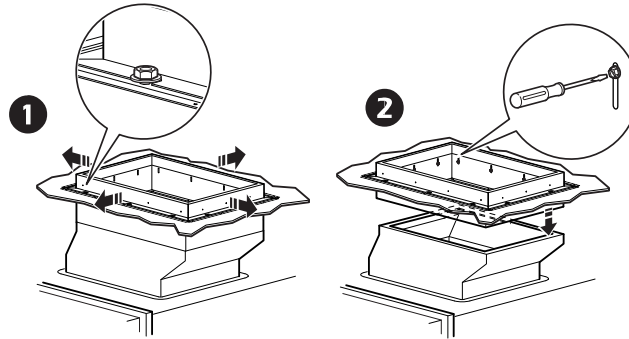
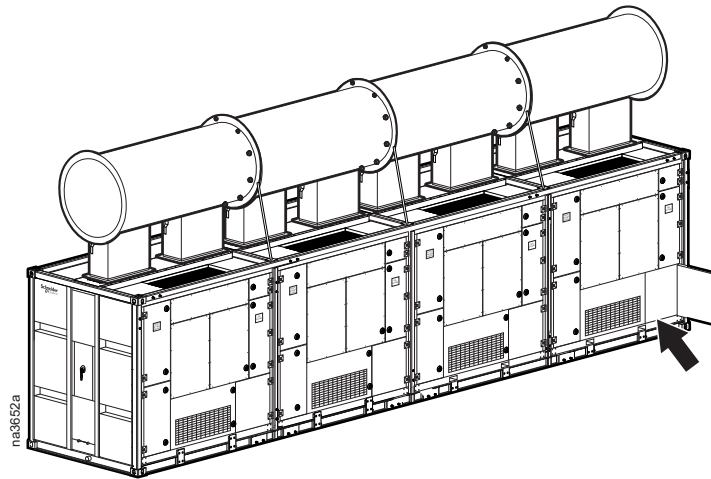
## Lower the drop-down box

1. Open the lower right door of the Module.
2. Loosen the ❶ horizontal and ❷ vertical adjustment screws securing the Module supply air drop-down box.
3. Lower and adjust the drop-down box making a seal onto the neoprene gasket on the supply duct transition.



**Note:** The drop-down box adjusts horizontally and vertically to allow proper alignment with the supply duct transition.

4. Tighten the adjustment screws.

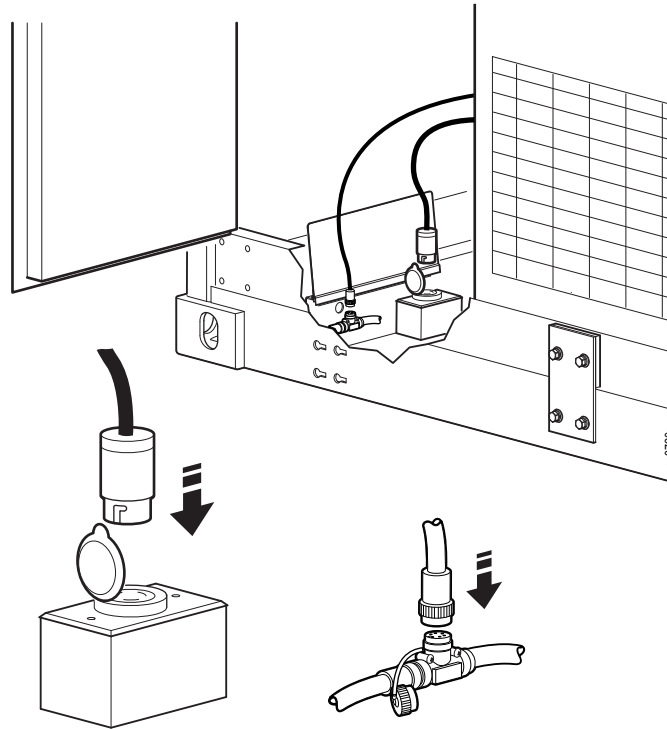


5. Locate the metal foil sealing tape and insulation strips packed in the ship-loose kit.
6. Apply metal foil sealing tape to all seams in the air drop-down box and ductwork.
7. Remove the backing from the insulation and apply the insulation around the air transition ducts.
8. Slide open the damper on the supply air transition and use a 1/4 x 3 inch snap pin to secure it in place.

## Make the power and communication connections

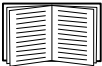
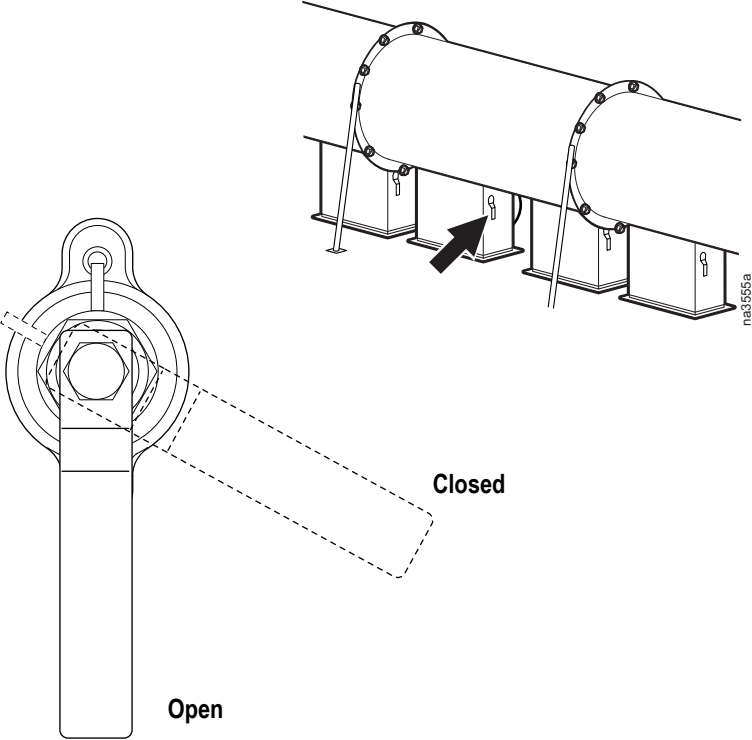
Access the power and communication connection points on the Frame:

1. Opening the lower left door on the Module.
2. Lift open the access door on the floor.
3. Plug the power cord into the power receptacle.
4. Connect the bus communication cable from the Module.
5. Close the access panel and lock the Module access door.



# Prepare Module for Startup

Turn the handle on the return air transition to open the return air damper.



Refer to the EcoBreeze Operation & Maintenance manual for the Module startup procedures.

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  - **www.apc.com** (Corporate Headquarters)  
Connect to localized APC Web sites for specific countries, each of which provides customer support information.
  - **www.apc.com/support/**  
Global support searching APC Knowledge Base and using e-support.
- Contact the APC Customer Support Center by telephone or e-mail.
  - Local, country-specific centers: go to **www.apc.com/support/contact** for contact information.

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