



## CBT LW INSTALLATION GUIDE 25, 50, 100 & 200





# MENU

**i**  
This is an interactive PDF. Click on an icon tile and navigate to a chapter of interest.



Legal & Safety



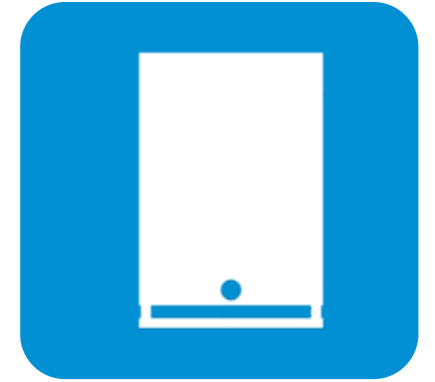
Notes



Inspection



Bowl & Frame



Weigh Scale



Inlet Hopper



Control Panel



Dust Evac



Pump Station



Powder Feeder



Pictograms

Users can advance or go back single pages by using quick navigation links shown below, right.

Users can navigate to the Menu by clicking on the Menu icon shown below, left.





# LEGAL & SAFETY

This manual contains technical information regarding Bayer SeedGrowth™ Equipment. Please read and understand these instructions completely before proceeding to install and operate the equipment. Bayer reserves the right to change specifications, models, components, or materials at any time without notice. For additional equipment information contact us at 1.800.634.6738. Please have this manual available when contacting Bayer.

Always use caution and common sense when working with any chemical. Read the product label and SDS carefully and follow their instructions exactly as described.

Optimal operating conditions for this piece of equipment requires an ambient temperature 32° F to +104° F (0° C to +40° C), relative humidity less than 90% (minimum condensation). Make necessary provisions to protect this piece of equipment against excessive dust, particles containing iron, moisture and against corrosive and explosive gases.

Our technical information is based on extensive testing and is, to the best of our current knowledge, true and accurate but given without warranty as the conditions of use and storage are beyond our control. Variables, such as humidity, temperature, change in seed size or variety and viscosity of chemical products can all affect the accuracy of the chemical application and seed coverage. To ensure the desired application rate and optimum seed coverage, check the calibration periodically throughout the day, and make adjustments as needed.

Any person who is involved in the installation or periodic maintenance of this equipment should be suitably skilled or instructed and supervised using a safe system of work. Isolate the treater before removing guards for maintenance.





# EXPOSURE CONTROL

Always use caution and common sense when working with chemicals. Read the product label and SDS carefully and follow their instructions exactly as described. The following Personal Protective Equipment (PPE) recommendations and best practices help promote safe use in seed treatment.



Note: Exposure Control signs and labels conform to the requirements of ANSI Z535.4 or ISO 3864.



### Wear protective clothing

Wear disposable or reusable coveralls with long sleeves.



### Hand protection required

Wear chemical-resistant gloves.



### Wear rubber boots

Wear chemical resistant rubber boots.



### Labels

Label recommendations and directions for handling must be followed, including treatment procedure (use of sticker) as well as the safety requirements.



### Treatment products

Keep products in a locked room that has been approved for crop protection products.



### Wear a mask

Wear respiratory protection.



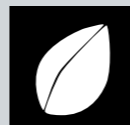
### Eye protection required

Wear protective eyewear.



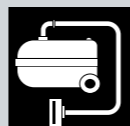
### Calibration

Seed treatment equipment must be checked and calibrated regularly to ensure accurate and safe application.



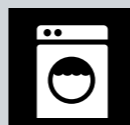
### Clean seed

Use well cleaned seed to avoid creation of polluted dust that will contaminate the machine, treating facility, workers, farmers and the environment during sowing.



### Cleaning

Use a vacuum to clean machines. Avoid using compressed air for cleaning.



### Laundry

Wash soiled reusable clothing separately. Workers must take a shower after each shift.



### Empty containers

Non-returnable empty containers must be triple rinsed before they can be disposed. For others the recommendation of the producer must be followed.



### Spillage

Spillage must be avoided; it must be thoroughly cleaned up to avoid contaminating the environment and waterways.



### Maintenance

Keep machinery clean between treating sessions.





# REFERENCE SYMBOLS

Symbols and signal words are used to identify the level of hazard and help avoid personal injury.



Note: Safety signs and labels conform to the requirements of ANSI Z535.4 or ISO 3864.



### Shock Hazard

Alerts that dangerous voltage may be present.



### Warning

Alerts that a hazard may cause serious injury or death.



### Caution

Alerts that a hazard may cause minor or moderate injury.



### Hand crush - moving parts

Alerts crushing is possible.



### Pinch point

Keep hands away from pinch points.



### Rotating shaft

Do not wear loose clothing around turning parts.



### Disconnect

Disconnect to de-energize before opening.



### Use guards

Keep guards in place. Do not remove during operation.



### Lifting

Requires two people to safely lift an item.



### Lift points

Requires the use of proper rigging and lifting techniques based on the lift plan.



### Center of gravity

Indicates the center of gravity of the machine to help assist when rigging and lifting.



### Tools

Required tools for installation and maintenance.



### Parts

Required parts for installation and maintenance.



### Tip

Calls attention to special information.



### Note

Emphasizes general information worthy of attention.



### Example

Provides a problem or exercise that illustrates a method or principle.

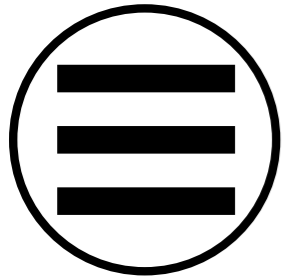




# PICTOGRAMS

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Each Signifier displayed here is specific to this User Manual.



Menu



Previous



Advance



Inspection



Check



Pump Station



Powder Feeder



Bowl & Frame



Weigh Scale



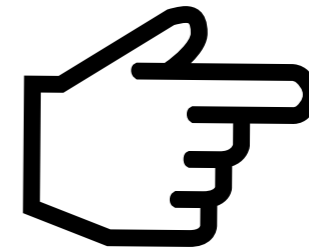
Inlet Hopper



Control Panel



Dust Evac



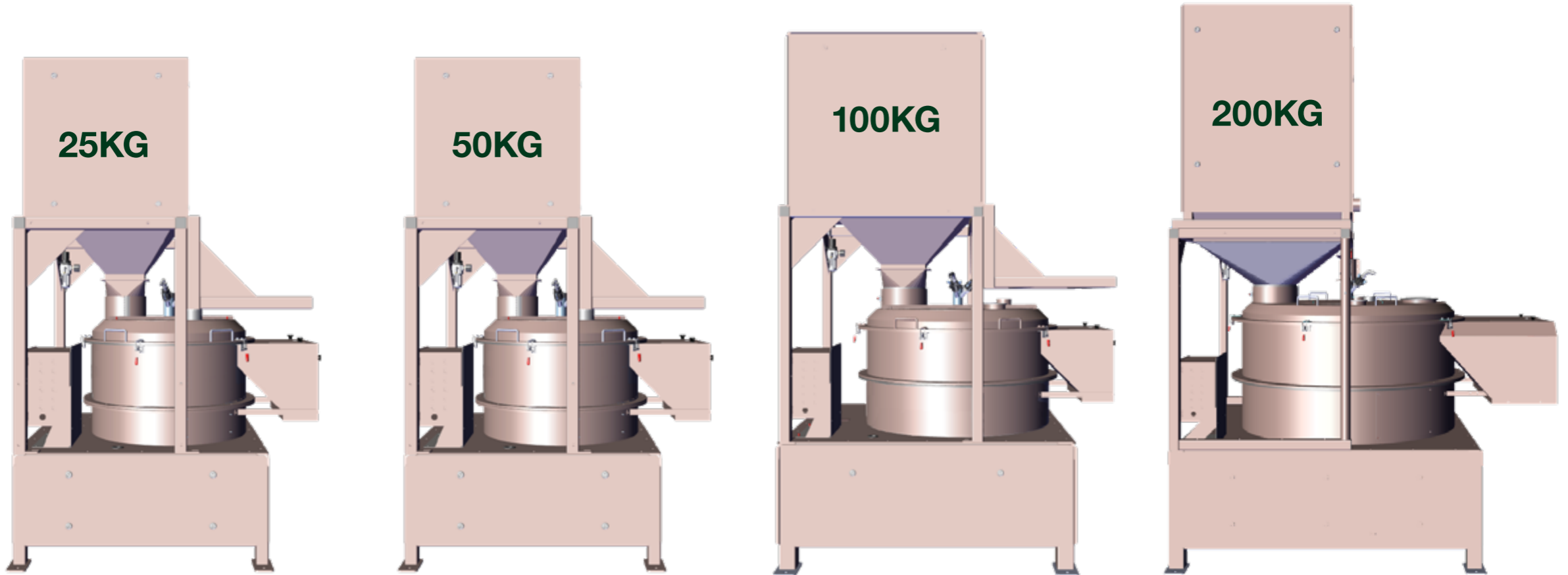
Cursor Hand





# EXPLANATORY NOTES

**CBT LW TREATER ONLY, NO OPTIONS, REF.**



## EXPLANATORY NOTES

### CBT25 TREATER ONLY

Dry Weight: 1350 lb.

Rated Capacity: 25 kg

Overall Width: 45.00 in.

Overall Length: 51.58 in.

Height: 81.74 in.

### CBT50 TREATER ONLY

Dry Weight: 1375 lb.

Rated Capacity: 50 kg

Overall Width: 45.00 in.

Overall Length: 51.58 in.

Height: 81.74 in.

### CBT100 TREATER ONLY

Dry Weight: 2390.6 lb.

Rated Capacity: 100 kg

Overall Width: 51.00 in.

Overall Length: 63.08 in.

Height: 97.49 in.

### CBT200 TREATER ONLY

Dry Weight: 3270 lb.

Rated Capacity: 200 kg

Overall Width: 63.170 in.

Overall Length: 79.67 in.

Height: 116.87 in.

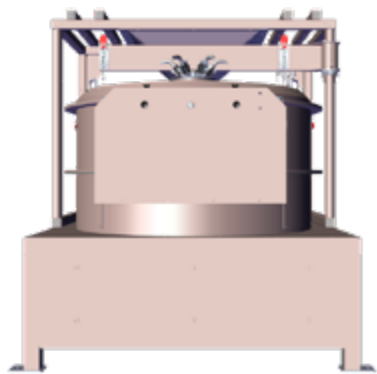




# INSPECTION

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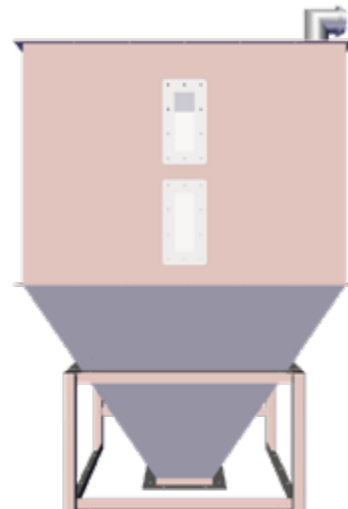
Several basic requirements are necessary to ensure proper equipment installation. Read through and understand this manual.



Bowl & Frame Assembly



Weigh Scale & Frame Assy.



Inlet Hopper Assembly



Control Panel



Parts Kit



20L Pump Station

## Cursory Inspection

The following CBT LW System components ship separately:

- Bowl & Frame Assembly (1)
- Weigh Scale & Frame Assembly (1)
- Inlet Hopper Assembly (1) - CBT200 only
- Control Panel & Parts Kit (1)
- 20L LW Pump Station & Parts Kit (up to 8)

Remove all crating and packaging from around each component.

- Check for damage that may have occurred during shipping **PRIOR** to removing components off of their respective shipping pallet.
- **Report any damage IMMEDIATELY!**







# BOWL & FRAME



## Required installation tools

- Forklift/ material handling device
- 3/4" Socket Head Wrench (1)
- 17mm & 15mm Wrenches
- 10mm Wrench (1)

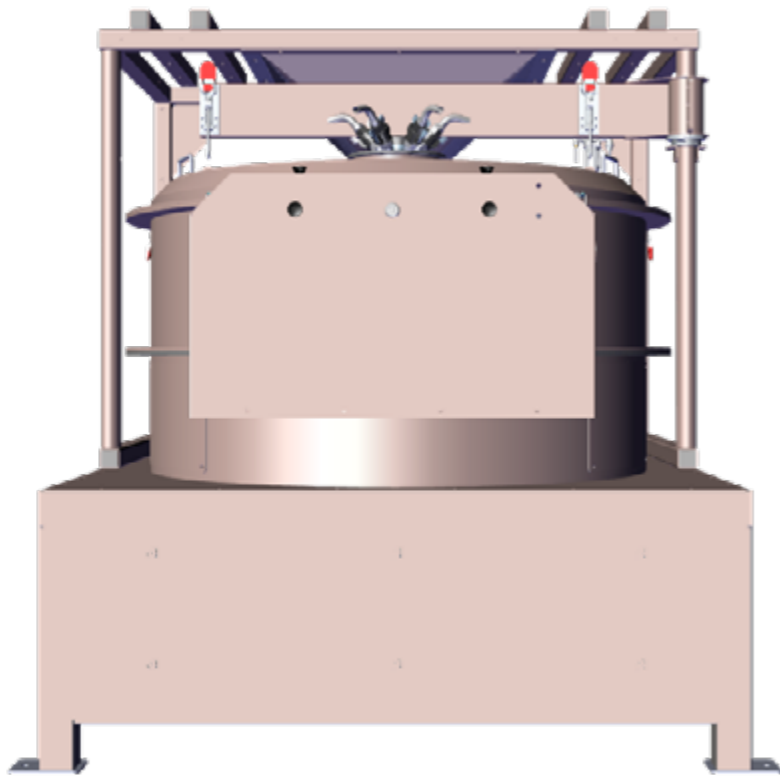


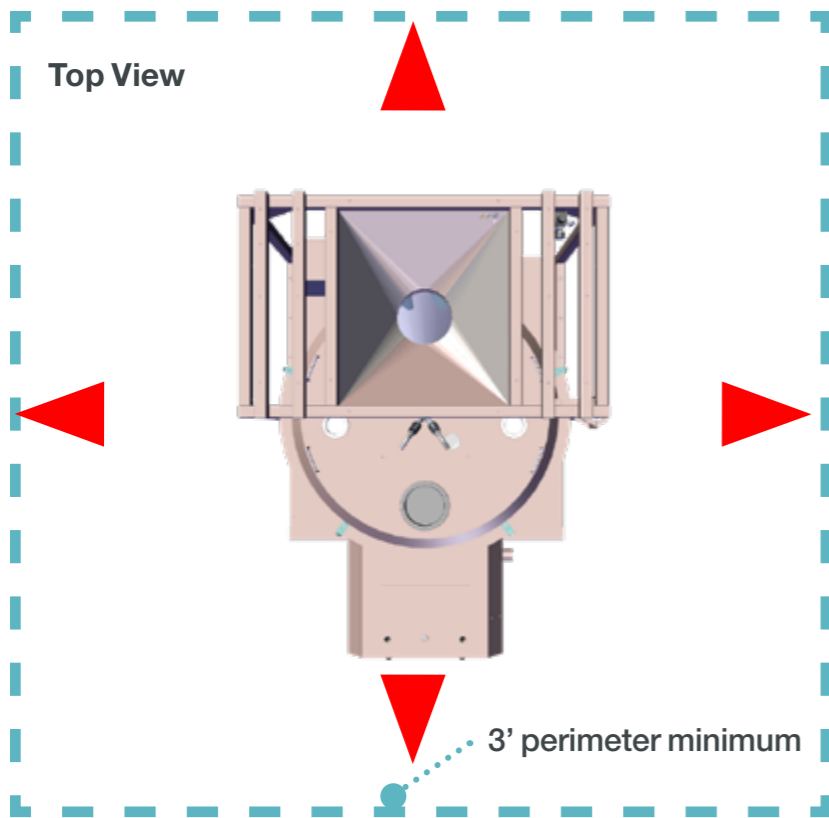
## Bowl & Frame Assembly

### Remove crating from pallet.

- Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the Bowl & Frame Assembly on the pallet.
- Use proper rigging and lifting techniques to ensure safety during installation.
- Remove the Bowl & Frame Assembly and Spare Parts Kit from the pallet.

Continued ➞





### Placement Surface

The recommended location for all components of the treating system should be on one single floor.

- Locate the bowl & frame on a solid, flat vibration-free surface.
- Fasten the bowl & frame to the floor with anchors.

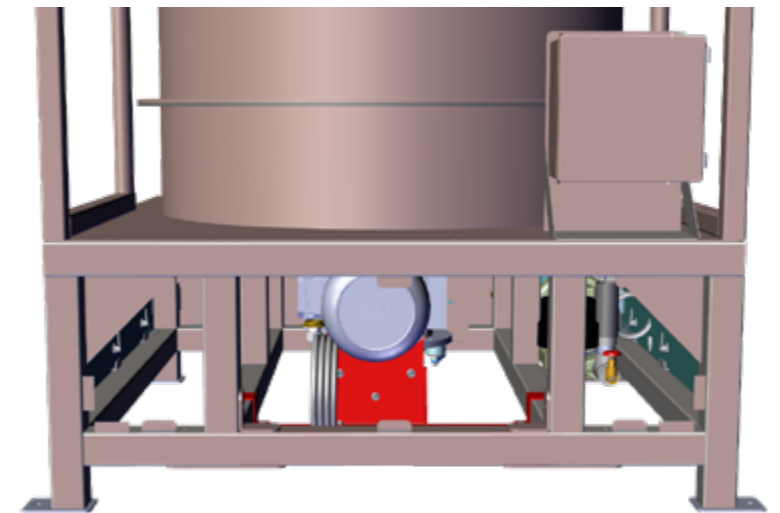
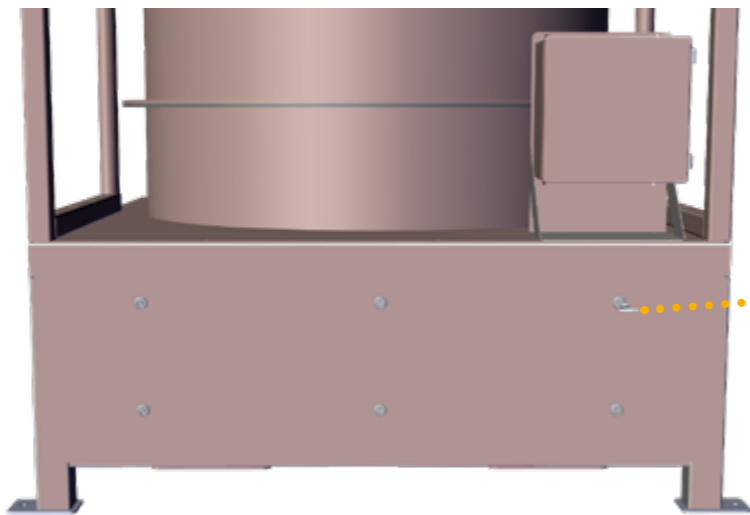
### Plan accordingly!

- Allow access to the machine from all sides for the purpose of adjustments, maintenance and clean-up.
- Maintain a minimum three foot perimeter, as shown left.

### CBT200 Only - Bowl Motor Shipping Support Bracket

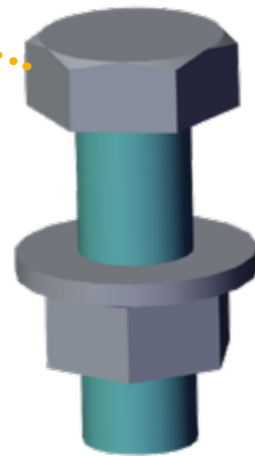
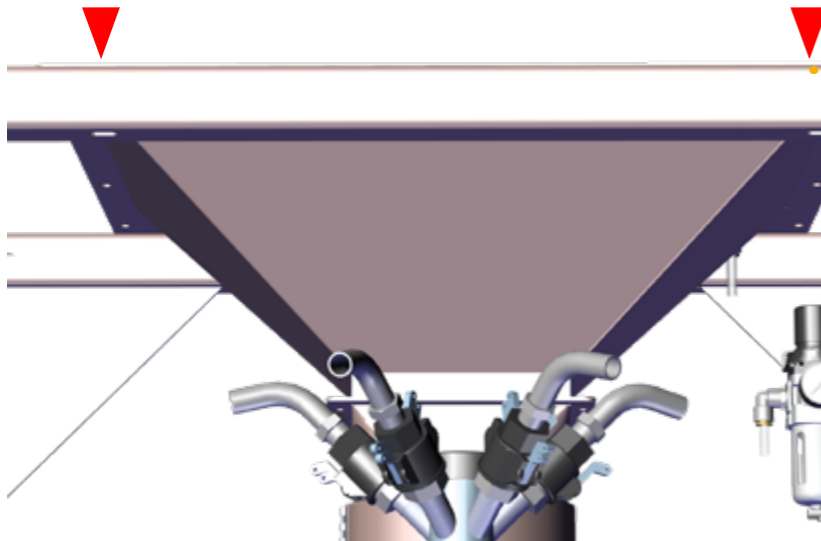
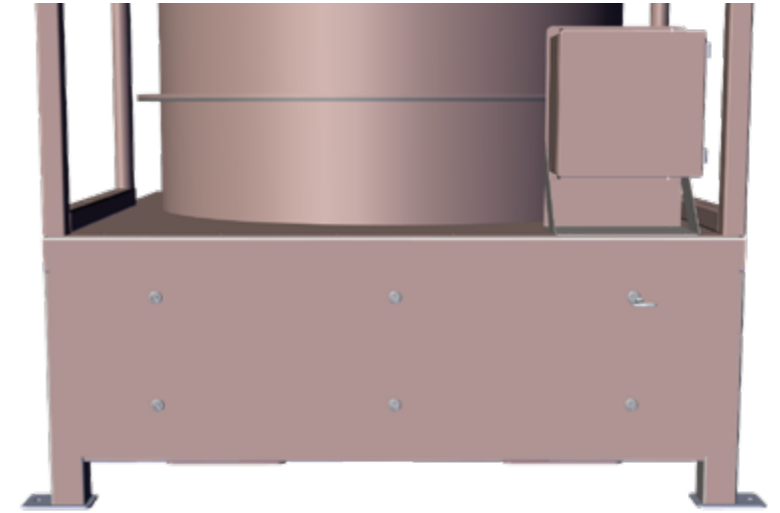
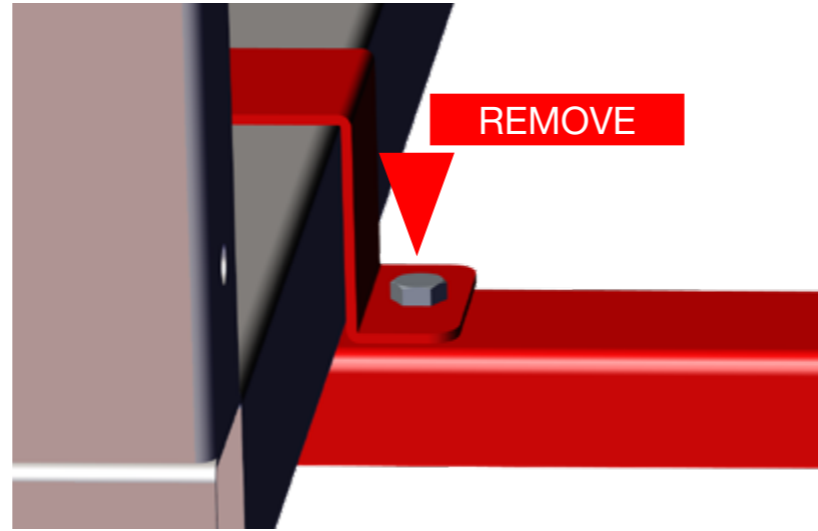
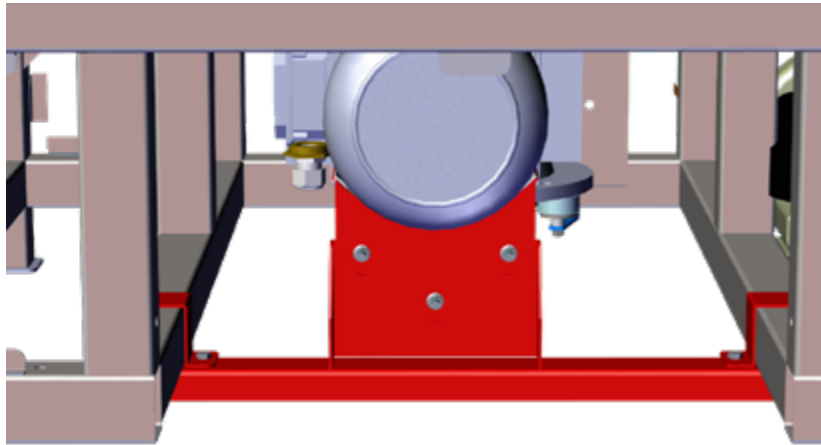
**Step 1:** Use the quarter turn key to remove the back guard panel from the backside of the Bowl & Frame Assembly, as shown below.

Continued ➔



**Step 2:** Use 17mm & 15mm wrenches to remove the bolts and the red shipping support bracket under the bowl motor, as shown below.

**Step 3:** Replace the guard panel and use the quarter turn key to lock the guard panel in place.



**Step 4:** By hand, remove 8 sets of M10 hardware (bolts, nuts, washers) from the transition and scale support frame as shipped connected to the Bowl & Frame Assembly.

- Set the hardware sets aside - they are required in the next section to connect the Weigh Scaled Assembly on top of the Bowl & Frame Assembly.

**This completes the Bowl & Frame Installation section.**





# WEIGH SCALE & FRAME



## Required installation tools

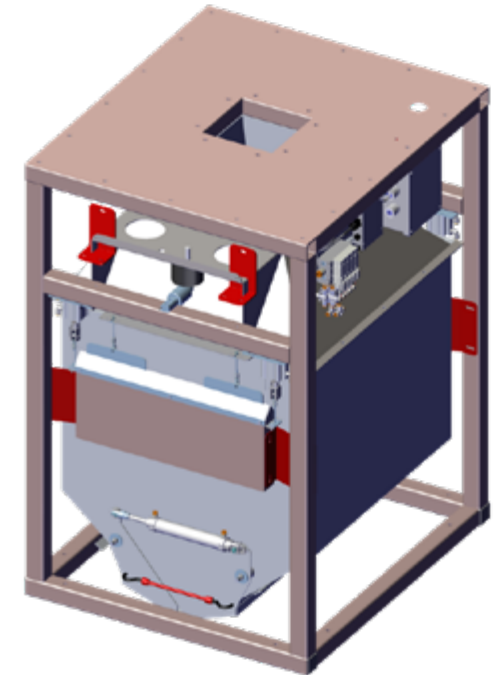
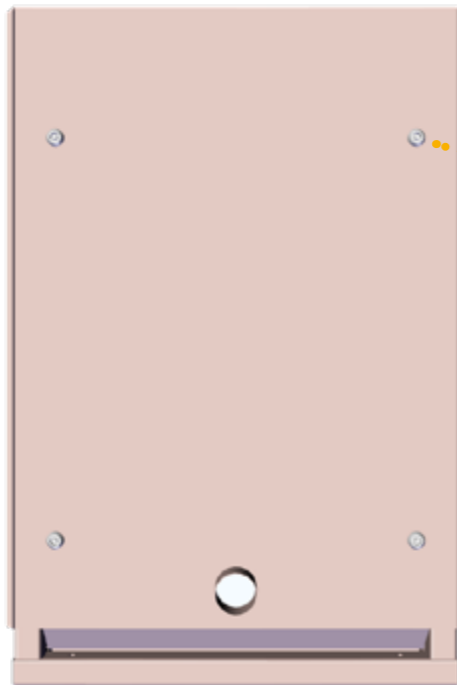
- Forklift/ material handling device
- 3/4" Socket Head Wrench (1)
- 10mm Wrench (2)

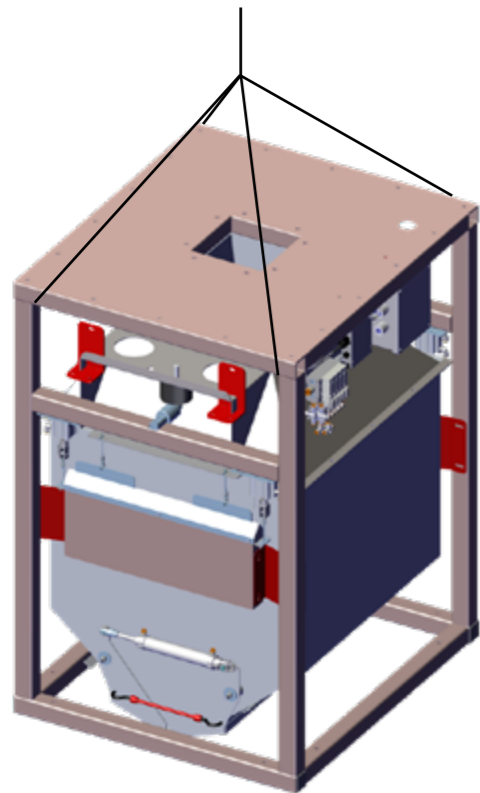


## Weigh Scale & Frame Assembly

**Step 1:** Use the quarter turn key to remove all four guard panels from the Weigh Scale & Frame Assembly while it is still attached to the pallet, as shown below.

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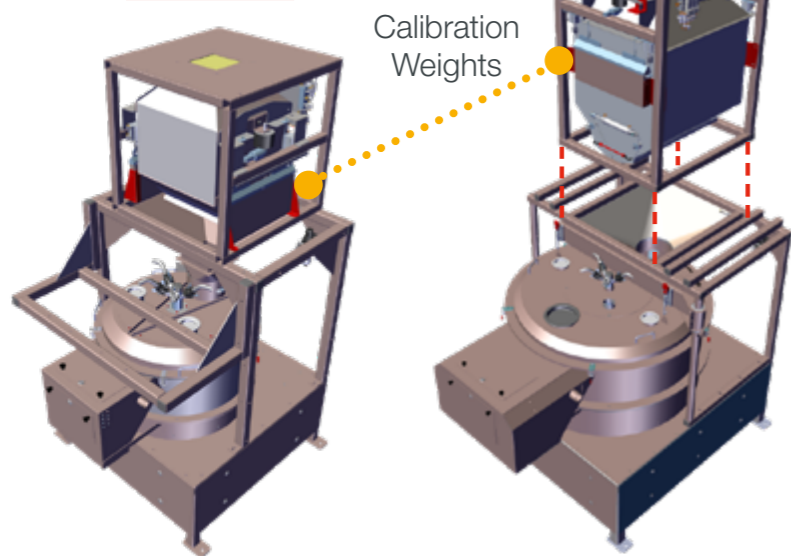


**Step 2: Remove crating from pallet.**

- Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the Weigh Scale & Frame Assembly on the pallet.
- Use proper rigging and lifting techniques to ensure safety during installation.
- Remove the Weigh Scale & Frame Assembly from the pallet.
- Set the Weigh Scale & Frame Assembly on top of the Bowl & Frame Assembly scale support frame, as shown left.

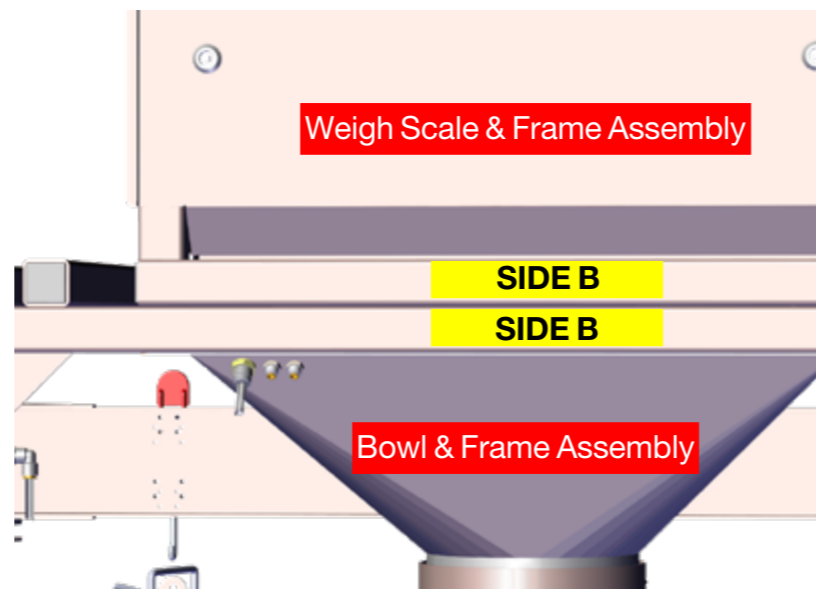


**Orientation**



Weigh Scale orientation:  
CBT25/50/100, ref.

Weigh Scale orientation:  
CBT200, ref.

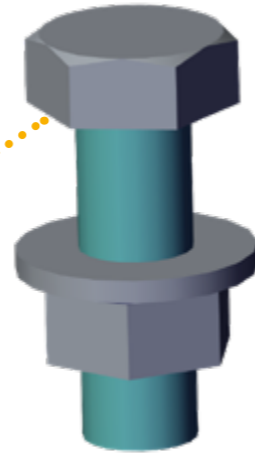
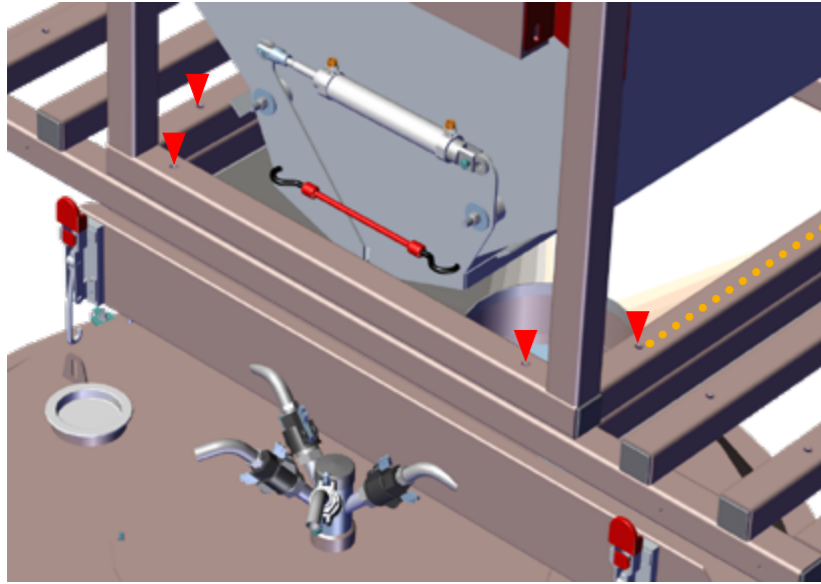


**Step 3: Set the Weigh Scale & Frame Assembly on top of the Bowl & Frame Assembly scale support frame, as shown left.**

- Note the orientation of the Weigh Scale Calibration Weight position of the CBT25, 50 and 100 compared to that of the CBT200!
- Ensure the Weigh Scale & Frame Assembly and Bowl & Frame Assembly scale support frames are aligned correctly: **SIDE B to SIDE B**.
- Bowl & Frame Assembly sticker matches the scale support frame sticker on the Bowl & Frame Assembly, as shown left.

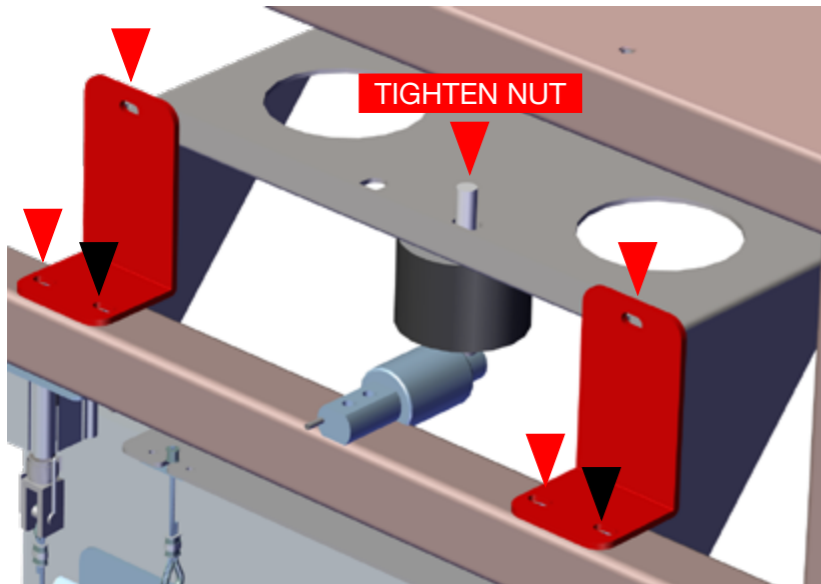
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#### Step 4: Align the frame holes.

- Fasten the Weigh Scale & Frame Assembly to the Bowl & Frame Assembly scale support frame with the M10 hardware (previously removed bolts, nuts, washers from the transition support frame, page 8) in the following order:
- Bolt+flat washer+[weigh scale frame+support frame]+flat washer+lock-washer+nut.
- Use a 10mm Wrench to securely tighten hardware in place.



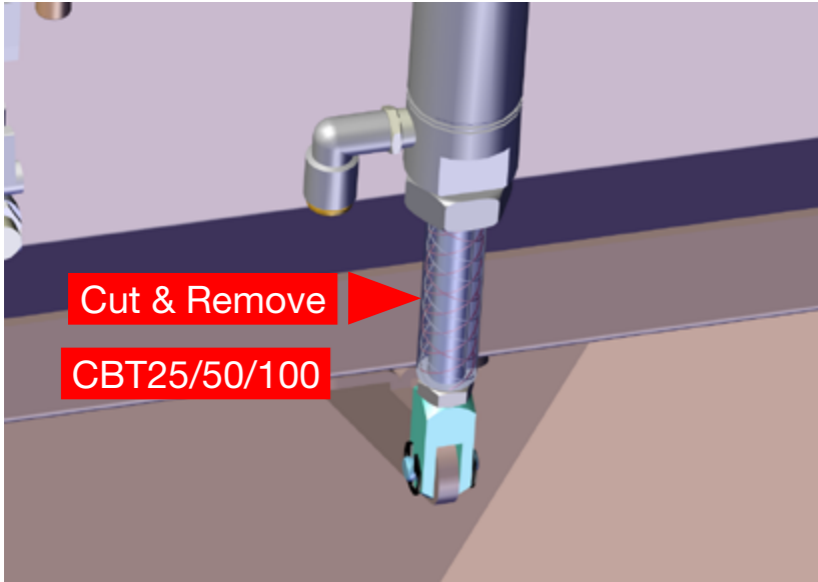
#### Load Cell Shipping Brackets - Both Sides of the Scale

Use 10mm wrench to remove the red load cell shipping brackets on **BOTH** sides of the weigh scale.

- The weigh scale will lower on top of each rubber stop.
- Use a 3/4" socket & ratchet to tighten down the nut in the middle of both rubber stops to hold the weigh scale in place.

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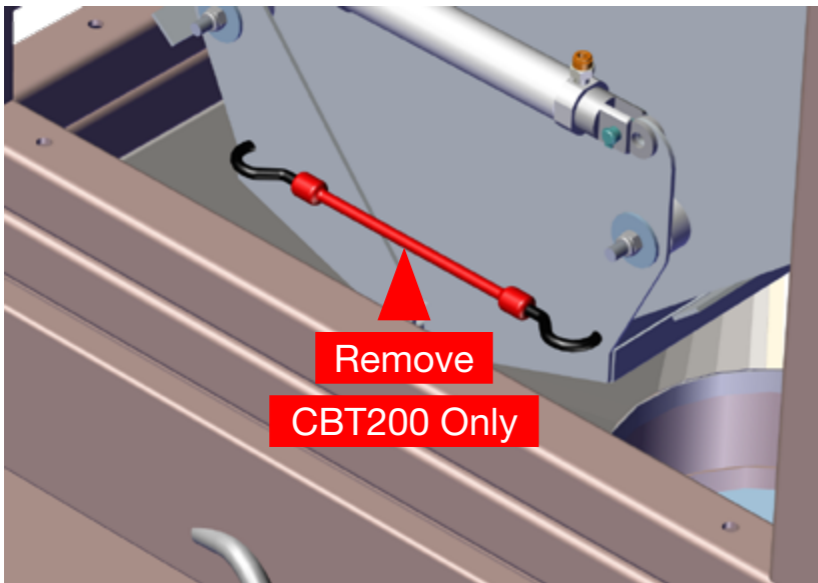




### CBT25/50/100 Weigh Scale Hopper Cylinder Shipping Stop Kit

Remove the hopper cylinder shipping stop kit.

- Cut the wire tag and the vinyl tubing around the hopper air cylinder.

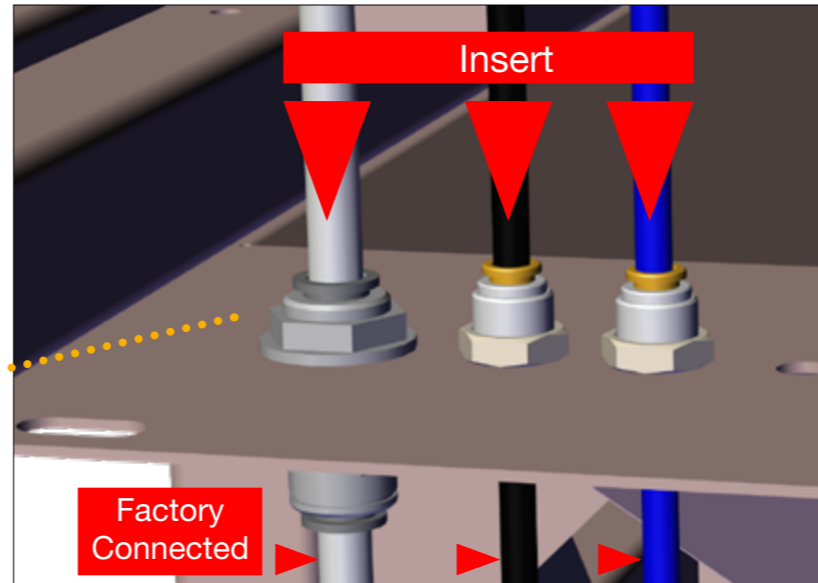
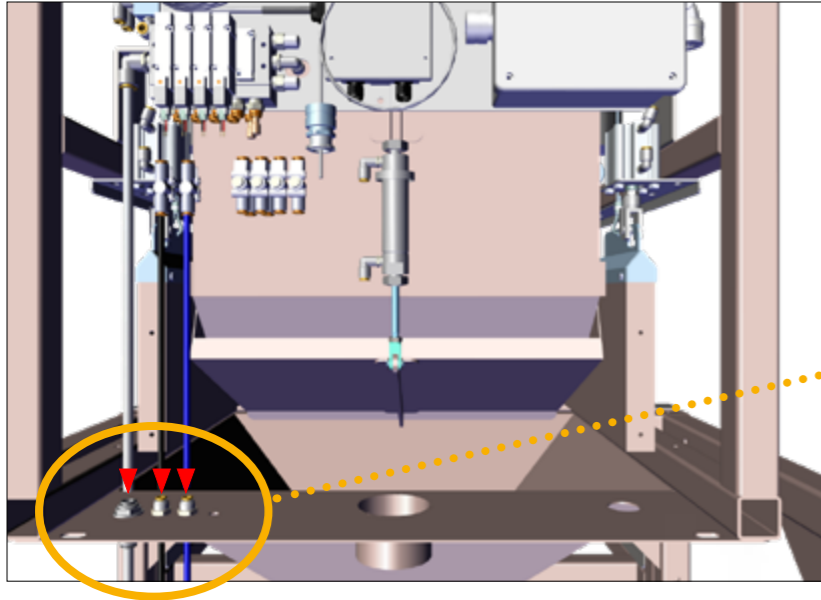


### CBT200 Weigh Scale Hopper Discharge Door Bungee

Remove the red hopper discharge door bungee cord.

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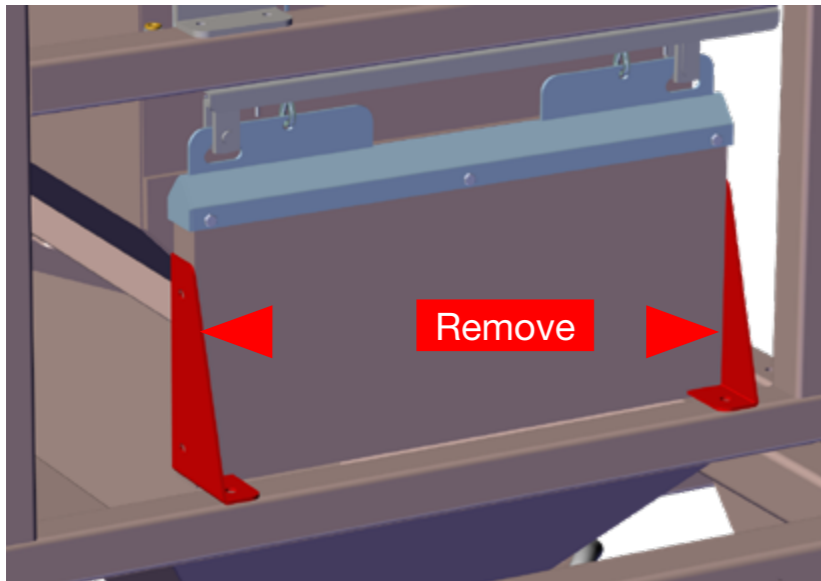


### Weigh Scale Air Lines

**Step 1:** From the factory **WHITE**, **BLACK** and **BLUE** air line tubes will be hanging inside the weigh scale frame.

**Step 2:** Insert each tube into the press lock fitting inside the transition (top side), in the order as shown left. Each tube needs to correspond with the color that is already connected to the underside (outside) of the transition from the factory as follows:

**WHITE** to **WHITE**  
**BLACK** to **BLACK**  
**BLUE** to **BLUE**



### Calibration Shipping Brackets

Use a 10mm wrench to remove both **RED** calibration shipping brackets from both Calibration Weights (both sides of the Weigh Scale).

This completes the Weigh Scale & Frame Installation section.







# CBT200 INLET HOPPER

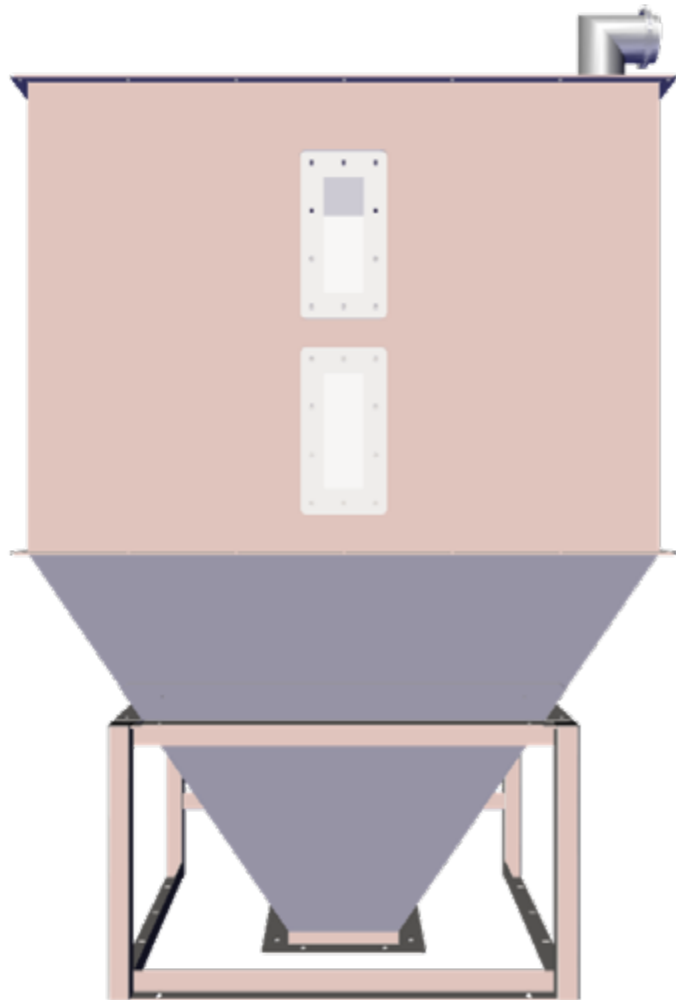


## Required installation tools

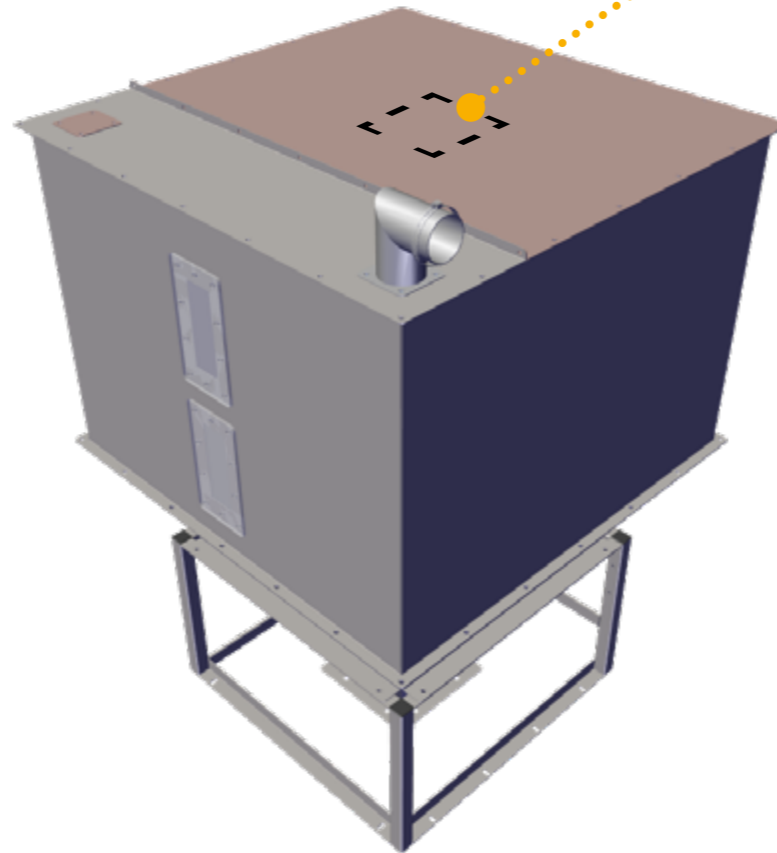
- Forklift/ material handling device
- 3/4" Socket Head Wrench (1)
- Metal Cutting Device



Tip: recommend cutting a seed inlet hole into the top of the inlet hopper prior to installing it on top of the weigh scale per Customers' discretion on size and placement.



Field Cut Inlet Hole



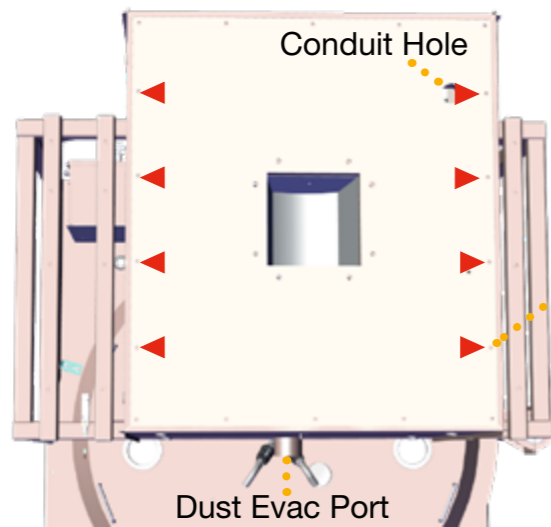
## CBT200 Inlet Hopper Assembly

Remove crating from pallet.

- Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the Inlet Hopper Assembly on the pallet.
- Use proper rigging and lifting techniques to ensure safety during installation.
- Remove the Inlet Hopper Assembly from the pallet.

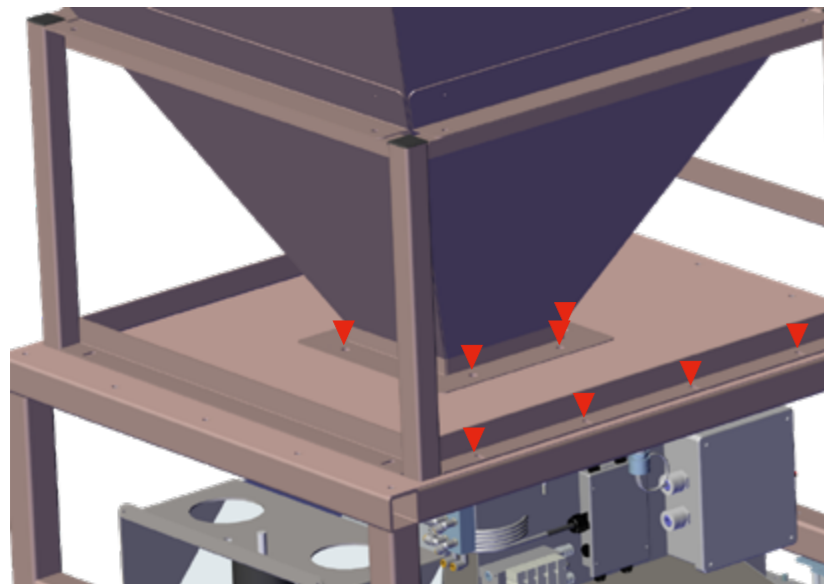
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**Step 2:** Use a 3/4" wrench to remove the factory installed 1/2" bolt and washers from on top of the Weigh Scale Assembly, eight (8) sets total.

- Set the hardware sets aside - they are used to connect the Inlet Hopper Assembly to the Weigh Scale Assembly in the next Step 3 below.



**Step 3:** Orient the Inlet Hopper Assembly Windows towards the **FRONT** (discharge) of the machine, as shown left.

- Set the Inlet Hopper Assembly on top of the Weigh Scale Assembly, as shown left.
- Align the bolt holes of the Inlet Hopper Assembly side rails with the bolt holes on top of the Weigh Scale Assembly.

**Step 4:** Use the removed hardware (Step 2 above) eight sets of 1/2" bolt and washers to connect the Inlet Hopper Assembly to the Weigh Scale Assembly.

- Use the hardware shipped with the Inlet Hopper Assembly to connect the center flange to the Weigh Scale Assembly.
- Securely tighten all hardware in place with a 3/4" wrench.

**This completes the CBT200 Inlet Hopper Installation section.**





# CONTROL PANEL



## Required installation tools

- Forklift/ material handling device
- 3/4" Socket Head Wrench (1)



Warning: ensure a licensed electrician wires the system following National electrical codes for the area. Refer to wiring diagrams provided inside the control panel.



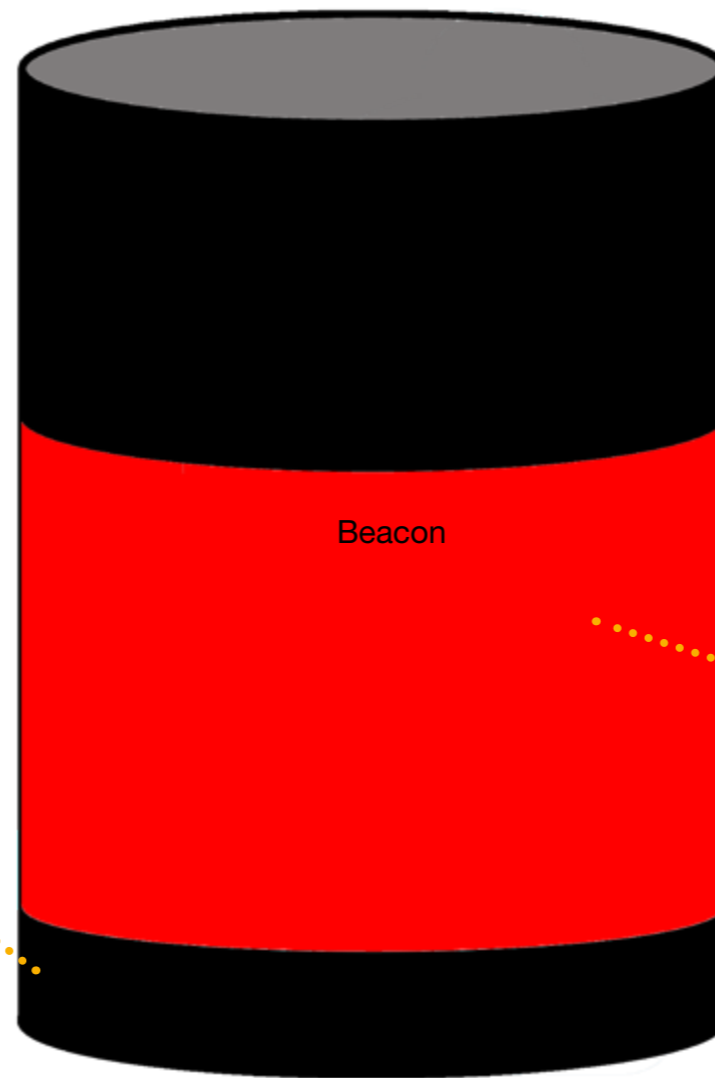
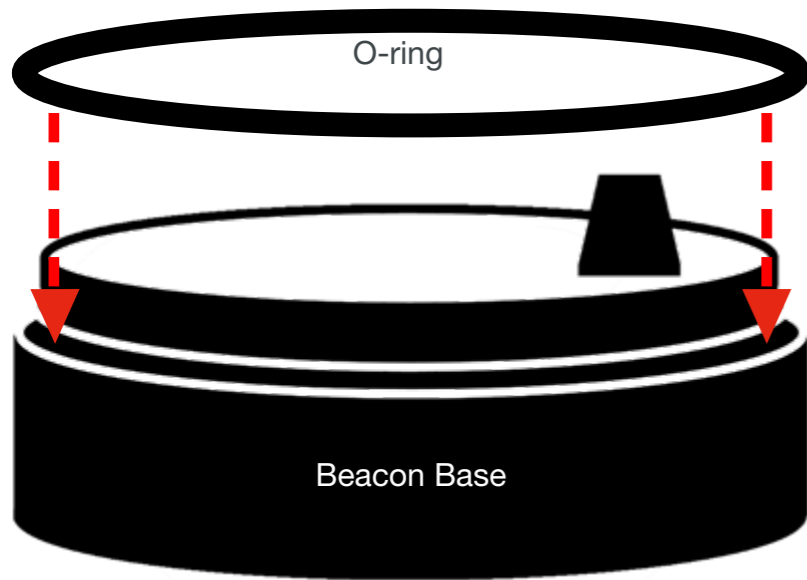
## Control Panel

### Caution - Tip Hazard! Remove crating from pallet.

- Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the Control Panel on the pallet.
- Use proper rigging and lifting techniques to ensure safety during installation.
- Remove the Control Panel from the pallet.
- Fasten the Control Panel to the floor with anchors.
- Land power to the Control Panel according to the wiring diagram inside the control panel.

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### Warning Beacon

The warning beacon ships inside the control panel.

- Open the panel door and remove the beacon.

**Step 1:** Remove the O-ring from inside the beacon.

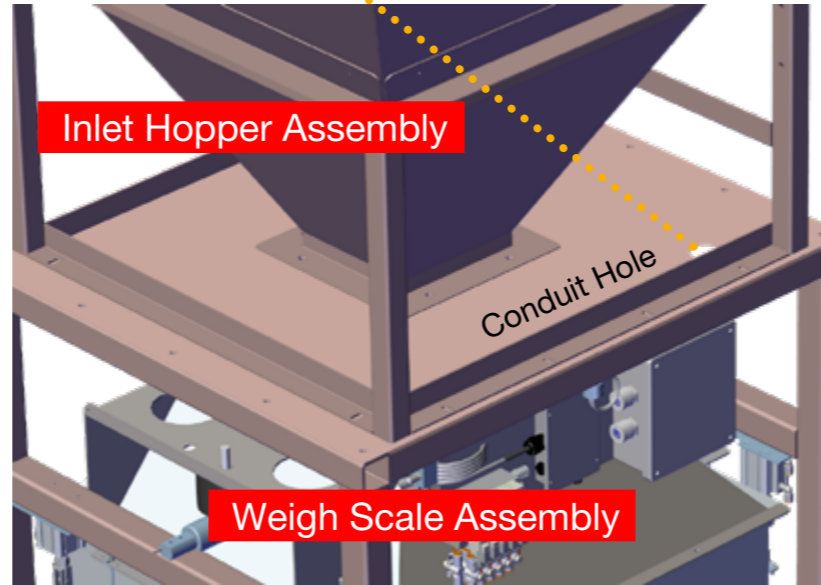
- Place it on top of the beacon base that is already connected to the top of the control panel.

**Step 2:** Place the beacon on top of the O-ring / base, press down and twist to lock in place.

- The warning beacon flashes and beeps whenever an alarm exists as a notification mechanism.

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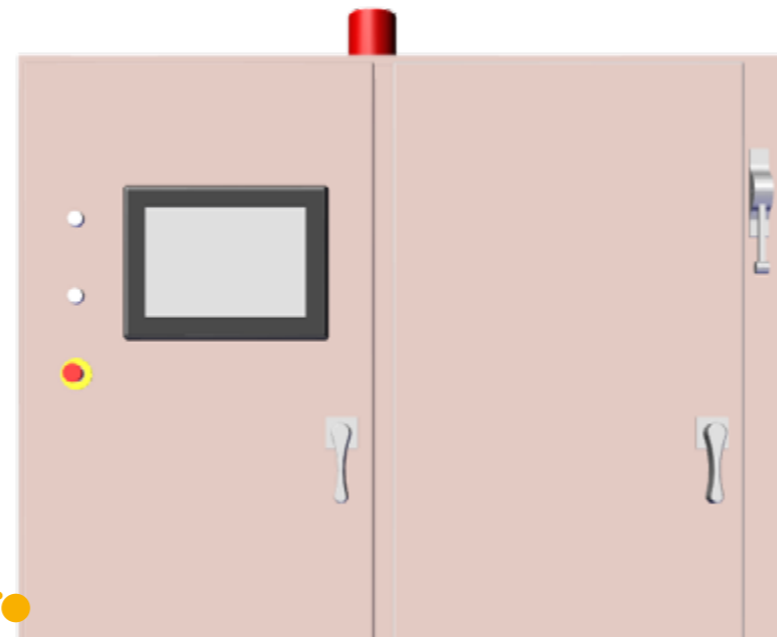
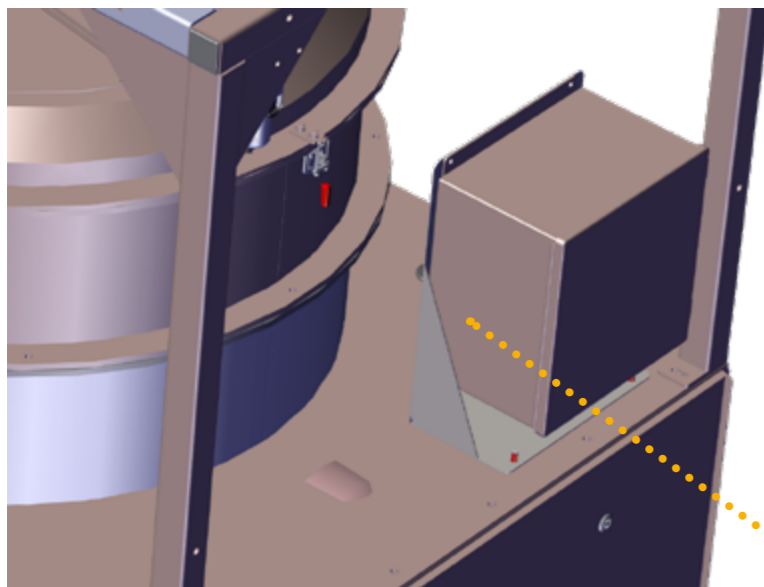




### Weigh Scale Solenoids

Land the conduit marked: **SOLENOIDS** from out of the top of the Weigh Scale Assembly in a box (CBT200 only) to the Control Panel).

- Refer to wiring diagrams provided (located inside the Control Panel door).



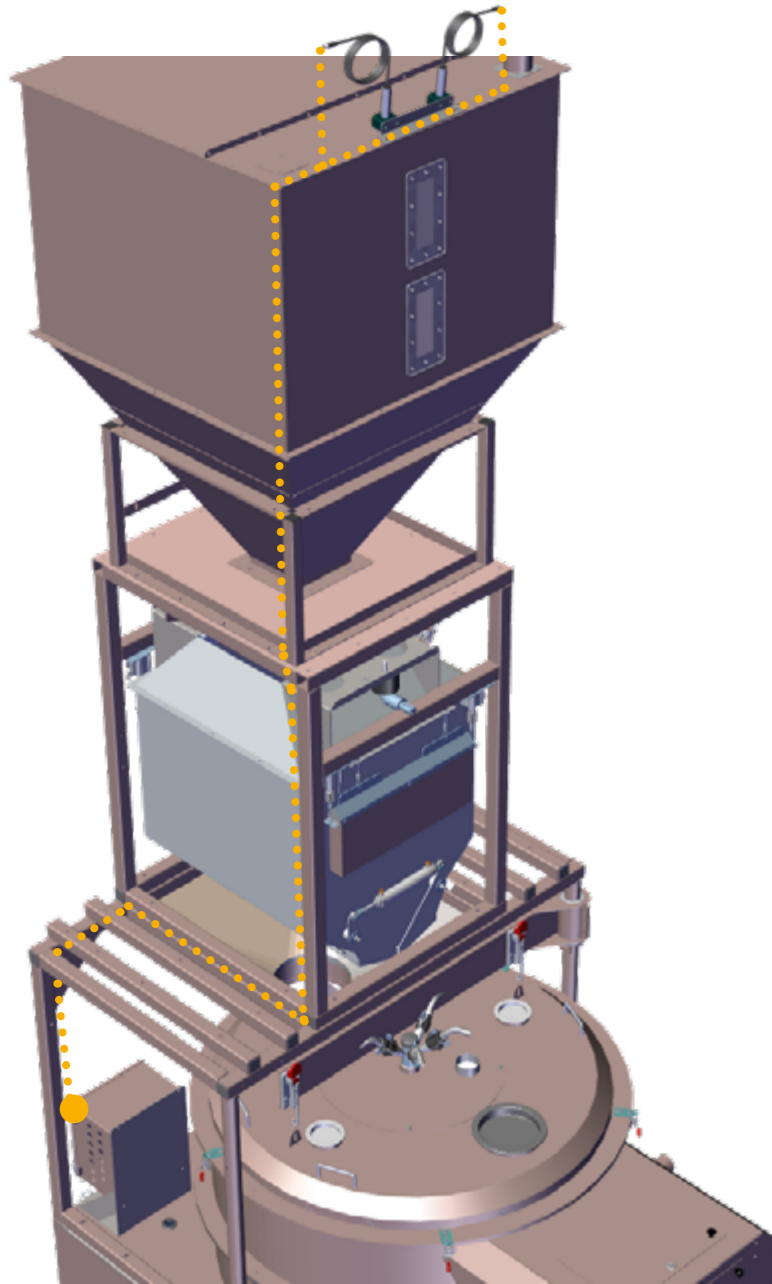
### Bowl Junction Box

Land the bowl junction box conduit (connected from factory and located next to the bowl) to the Control Panel.

- Refer to wiring diagrams provided (located inside the Control Panel door).

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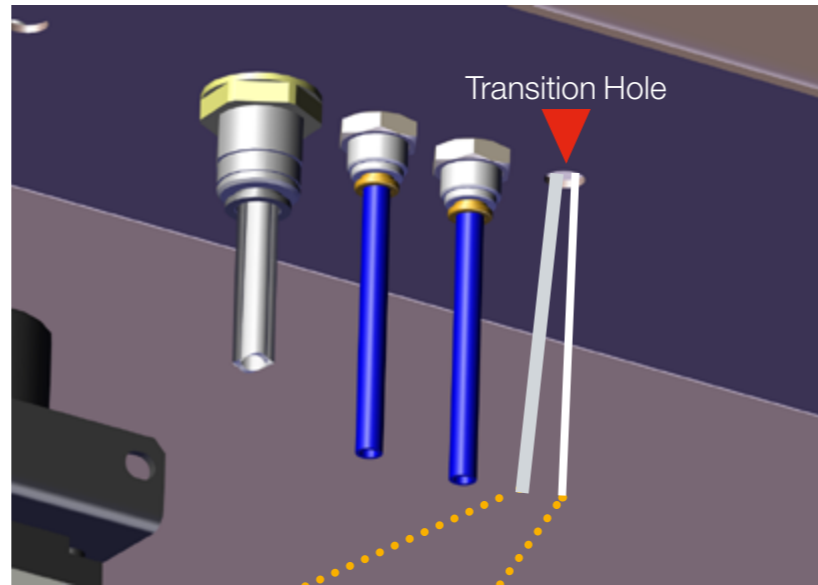
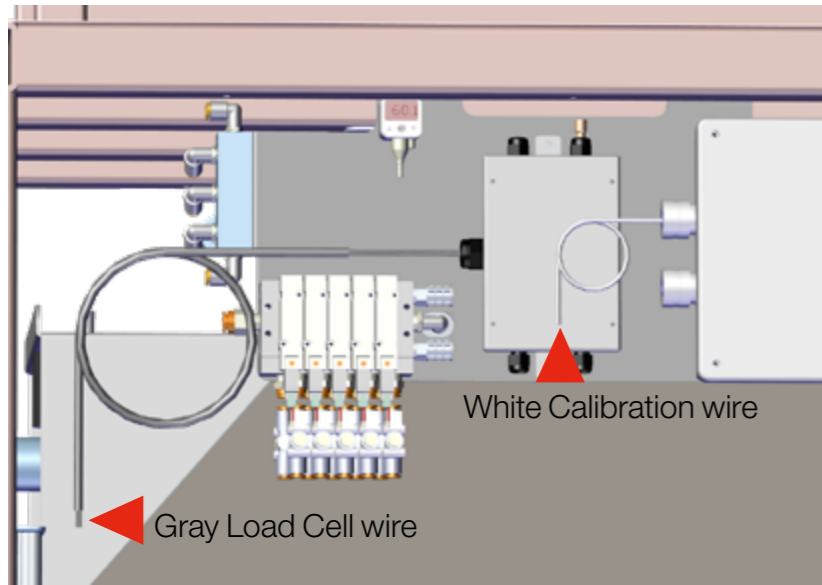
### Inlet Hopper HI/LO Signal Cables

The HI/LO sensor kit is installed on the Inlet Hopper Assembly from the factory, as shown left.

- Land the sensor cable leads inside the bowl junction box.
- Refer to wiring diagrams provided (located inside the control panel door).
- Use zip ties to fasten cables to the Weigh Scale Assembly and frame.

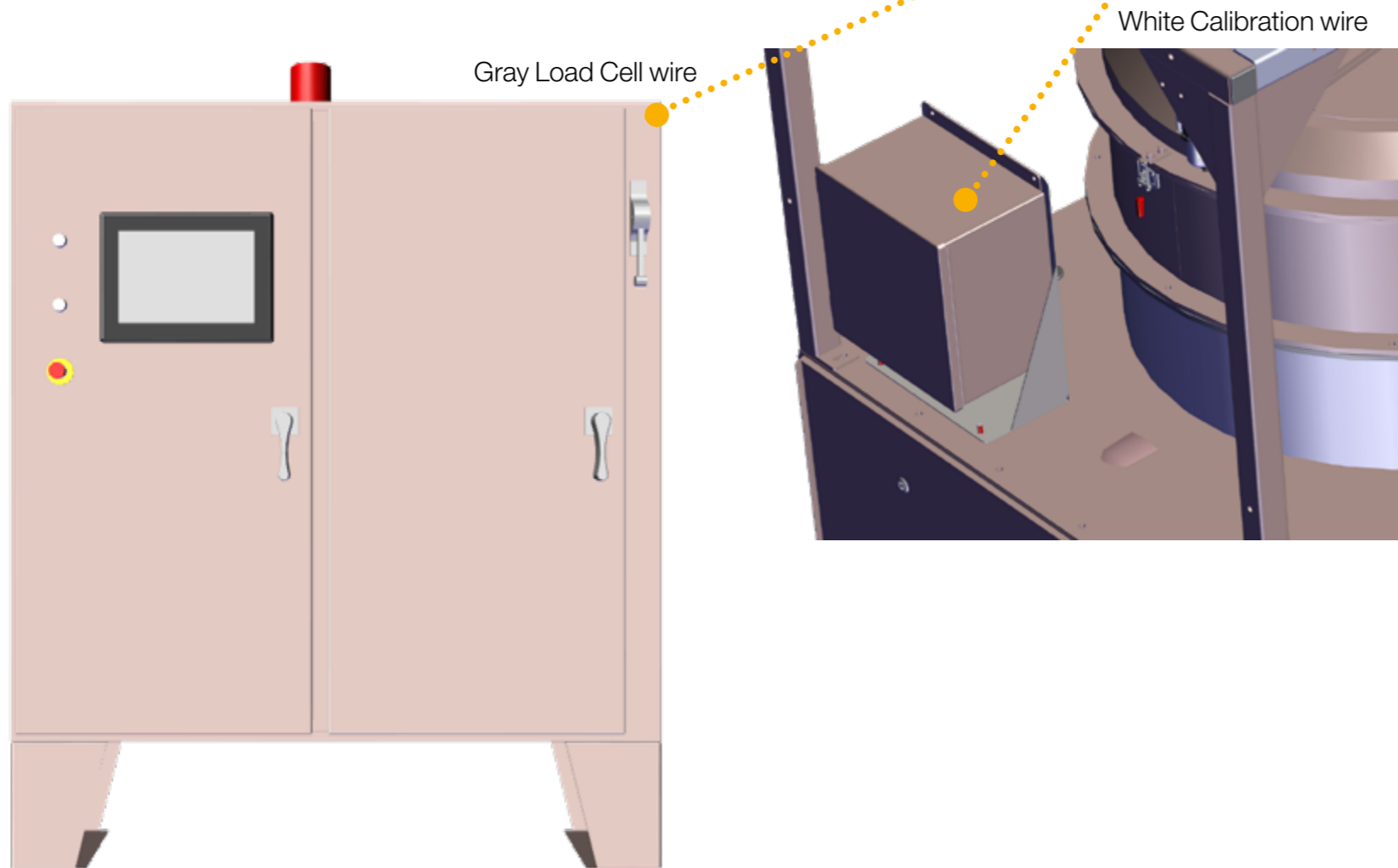
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## Weigh Scale Load Cell & Calibration Wires

**Step 1:** From the Weigh Scale Assembly, insert the gray load cell wire and the white calibration weights wire down through the pre-drilled hole in the transition.



**Step 2:** Land the gray load cell wire to the control panel and the white calibration wire to the bowl junction box.

- Refer to wiring diagrams provided (located inside the control panel door).

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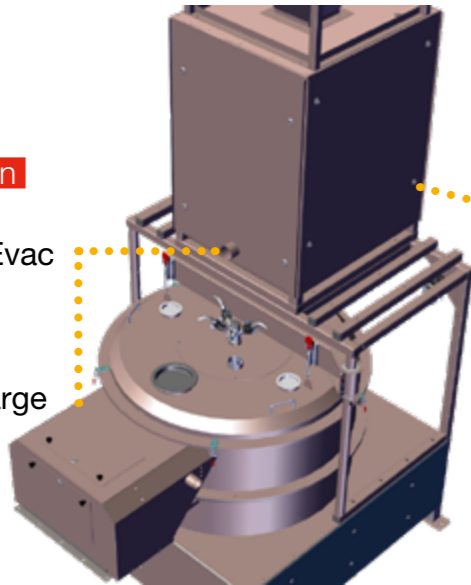




### Orientation

Dust Evac

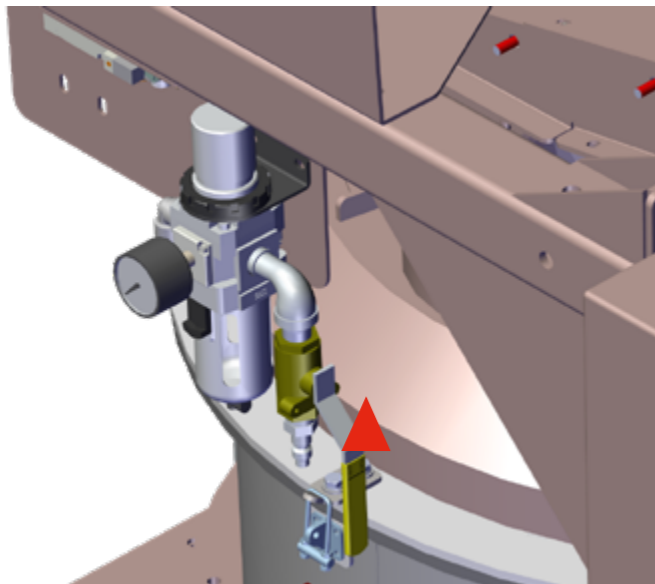
Discharge



### Weigh Scale Guards

Replace all four (4) Weigh Scale Assembly guard panels.

- Use the quarter turn key to lock the guard panels in place.
- **CBT200 only:** orient the guard panel with the dust evacuation port **OUT** towards the **FRONT** (discharge) side of the Bowl & Frame Assembly, as shown left.



### Compressed Air

Connect shop air to the filter regulator assembly on the scale support frame.

- Optimum compressed air supply must be guaranteed.
- Only filtered, dry compressed air may be connected.
- The working pressure range requirement is 1 cfm @ 80psi.

This completes the Control Panel Installation section.





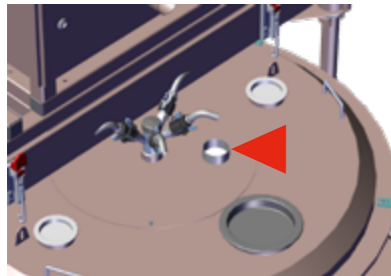


# DUST EVACUATION

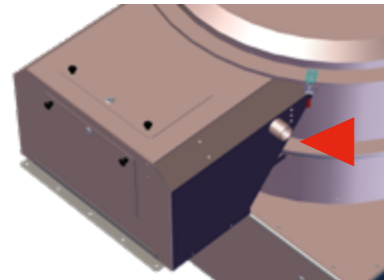


## Required installation tools

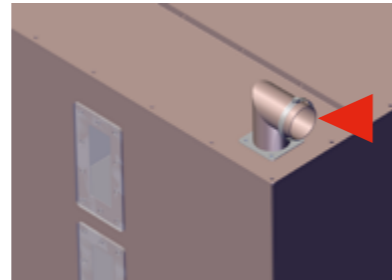
- Slotted Screwdriver



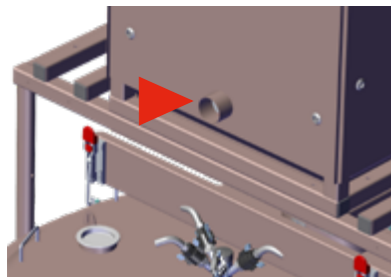
Bowl Cover



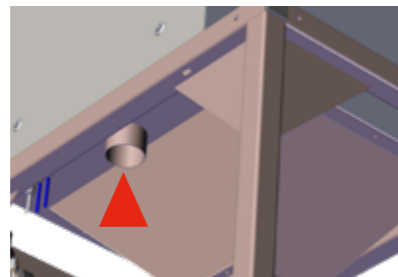
Discharge Cover



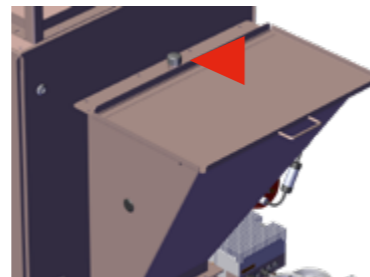
Inlet Hopper Assembly



CBT200 Weigh Scale



CBT25/50/100 Transition



Powder Hopper Lid

## Integrated Aspiration System

**Only clean and dust-free seed should be used in the treating process.**

- An exhaust unit supplied by the customer must be connected to a central aspiration system.
- Recommended aspiration: 500-600cfm.

## The CBT has several dust evacuation ports

- On top of the bowl cover
- On the side of the discharge cover
- On top of the inlet hopper
- On the front side of the weigh scale frame
- On the bottom of the transition
- On the lid of the optional powder feeder hopper.

**This completes the Dust Evacuation Installation section.**





# 20L PUMP STATION



## Required installation tools

- Material handling device
- 3/4" Socket Head Wrench (1)
- 7/16" Socket Head Wrench (2)
- Slotted Screwdriver (1)
- 1/2" Crescent Wrench (1)
- Level (1)



## 20L LW Pump Station Plumbing Connections

Pump stations are crated individually.

**Step 1:** Remove crating materials from around the pump station.

**Step 2:** Remove poly wrap from around the pump station.

Continued ➞

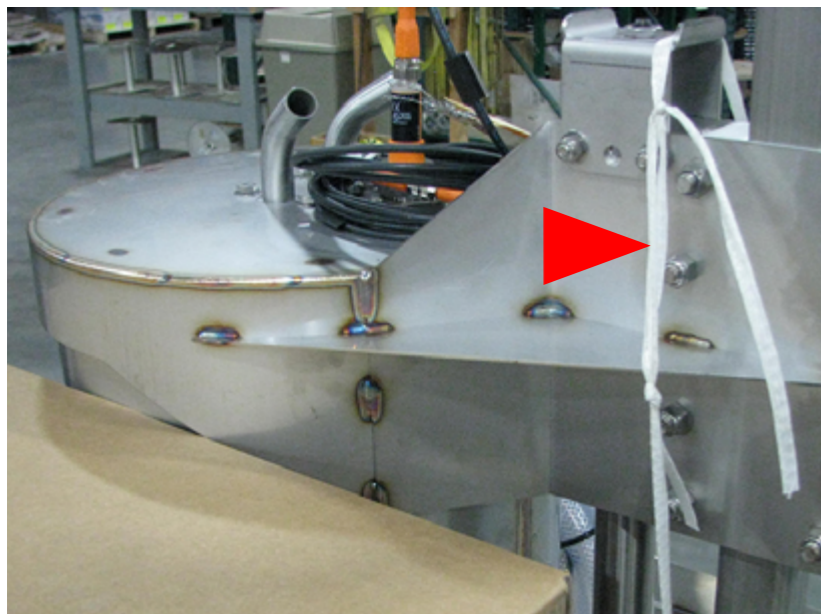




Caution! Wear proper personal protective equipment when removing banding: gloves and safety glasses.



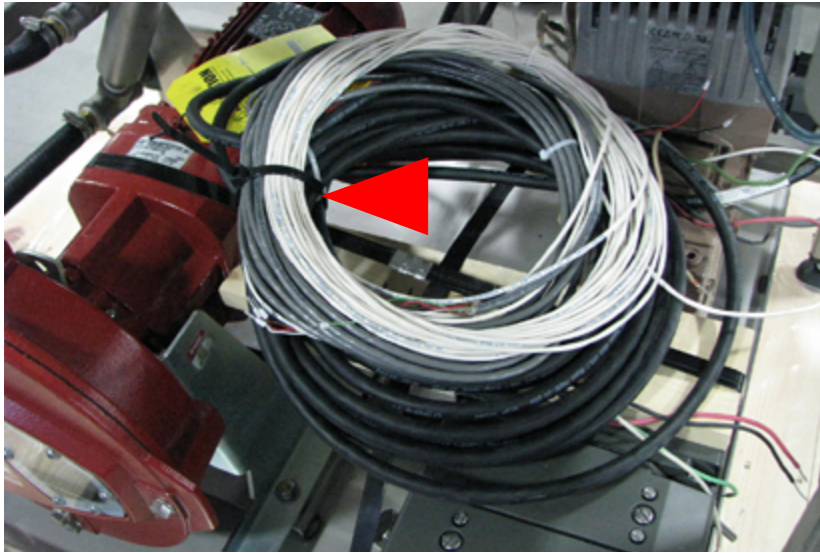
**Step 3:** Cut banding around the parts box and tubing roll.



**Step 4:** Cut band around the riser arm holding the cover down on the supply tank.

Continued ➞





**Step 5:** Cut the zip tie holding the pump cables to the pump.



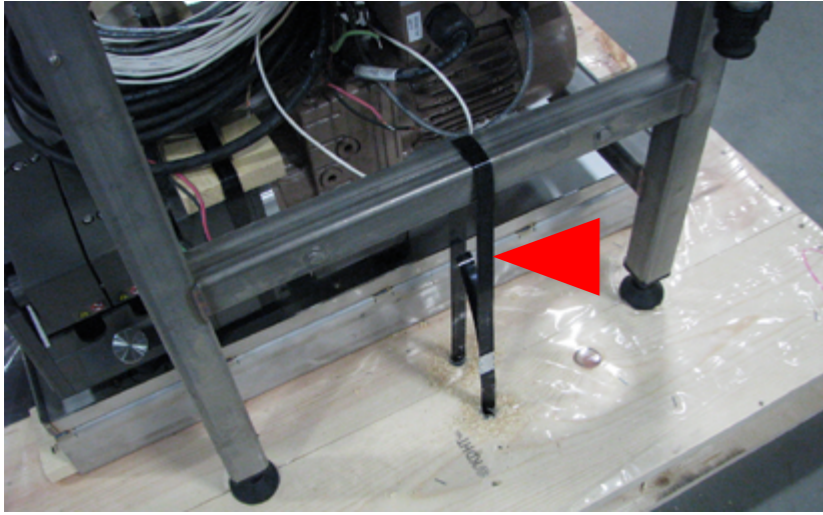
**Step 6:** Cut the zip tie holding the scale cable to the pump stand.



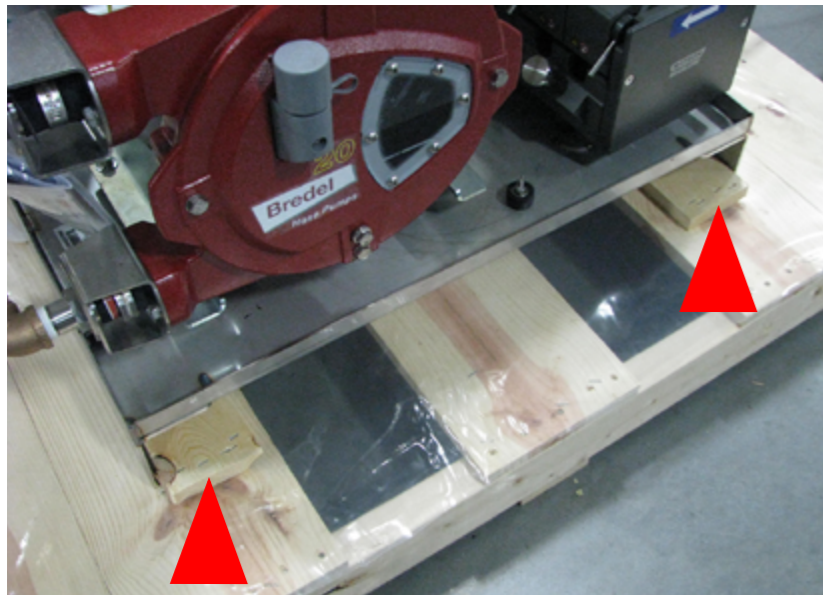
**Step 7:** Cut bands and remove wood slats holding the pumps on the pump shelf.

Continued ➔





**Step 8:** Cut bands holding the pump frame onto the pallet (both sides).



**Step 9:** Remove both slats holding the pump shelf onto the pallet.

Continued ➞



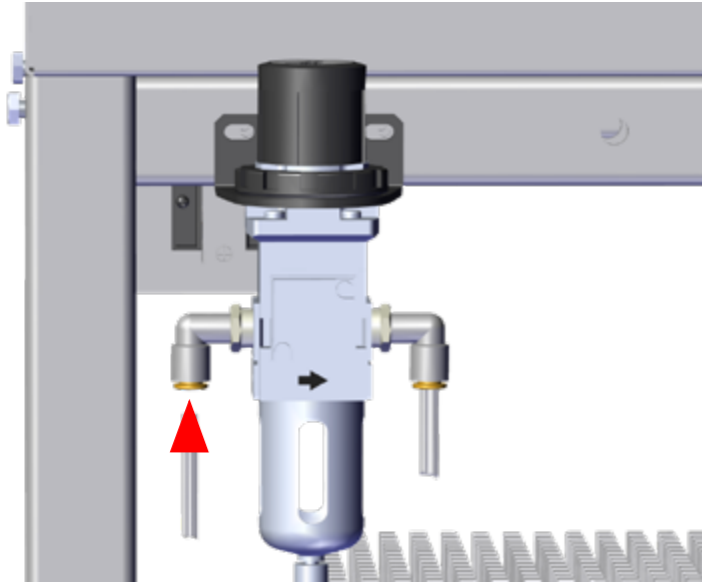


**Step 10:** Use proper rigging and lifting techniques to ensure safety during installation.

- The 20L scale & frame assembly ❶ is separate from the pump shelf ❷.
- Remove each pump station from the pallet, including the parts kit (boxed).
- Place each pump station in close proximity to the treater.
- Number each pump station 1-8.

Continued ➡





**Step 11:** Insert a 1/4" airline tube into the press lock fitting on the filter regulator assembly (backside of each pump station) from customer air supply.

- The working pressure range requirement is 1cfm @ 80psi.
- Set the filter regulator to 30psi.

Continued ➡

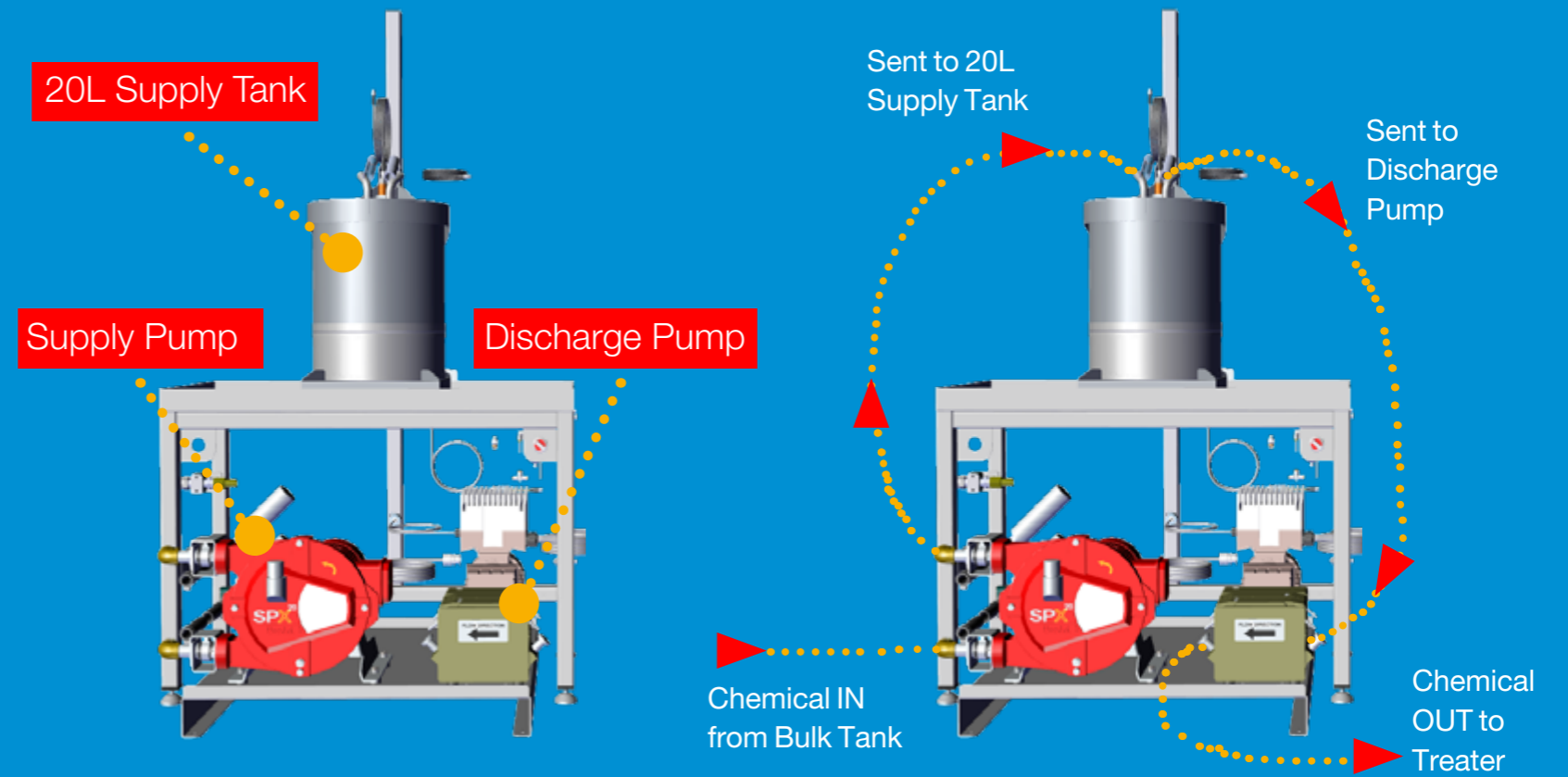
### 20L LW Pump Station

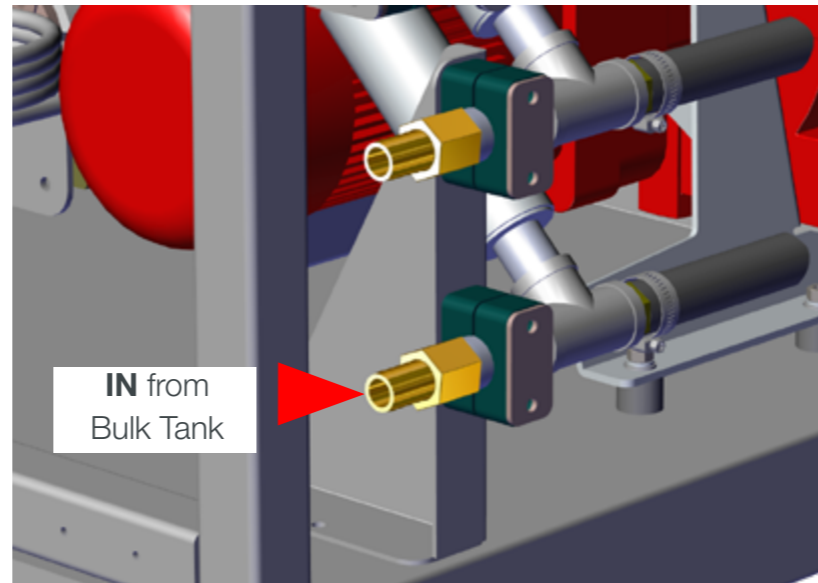
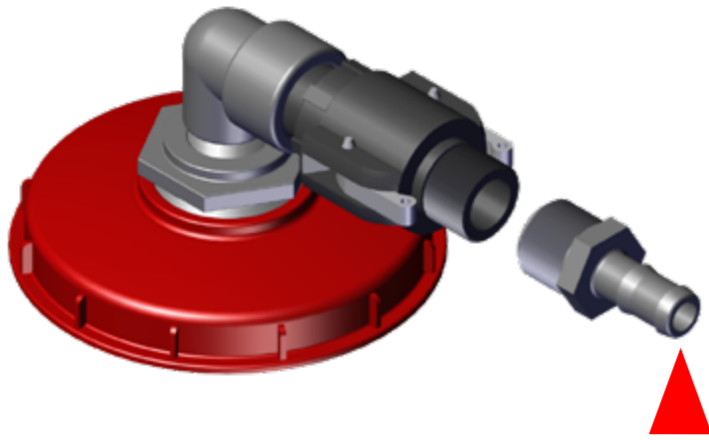
#### Supply Pump

The supply pump draws chemical product from a work or bulk tank and transfers it to the pump station 20L supply tank.

#### Discharge Pump

The discharge pump draws chemical product out of the 20L supply tank and delivers it to the treater chemical inlet.



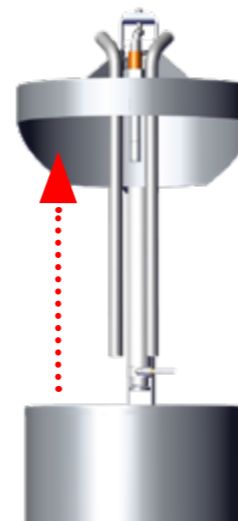
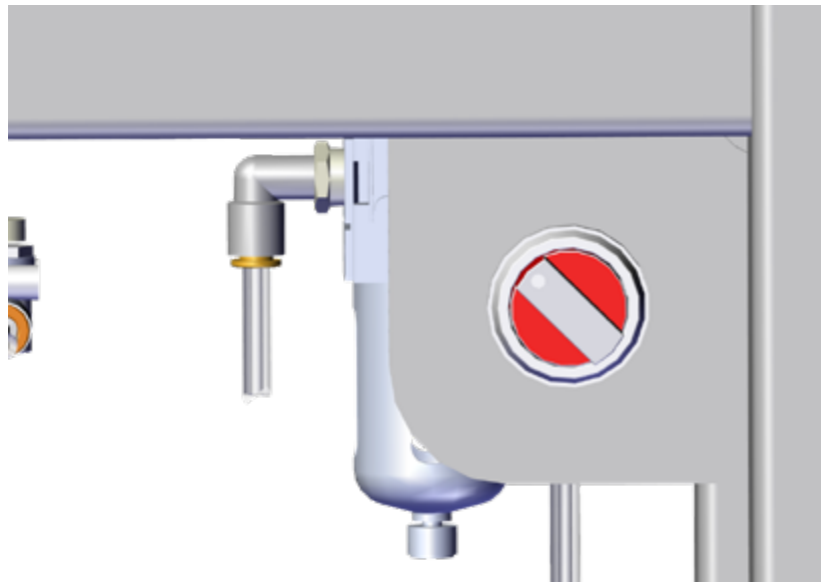


**Step 12:** Connect one end of 3/4" clear vinyl tubing with #8 hose clamp to a bulk chemical tank 3/4" fitting.

- Tighten hose clamp in place with a screwdriver.

**Step 13:** Cut to fit and connect the other end of 3/4" tubing and a #8 hose clamp to the **Supply Pump** lower supply pump 3/4" brass hose barb fitting.

- Tighten hose clamp in place with a screwdriver.



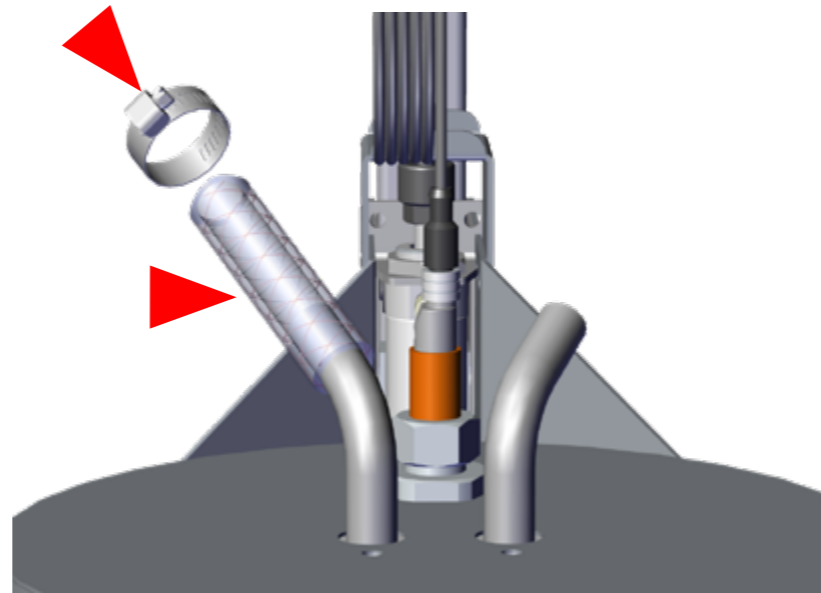
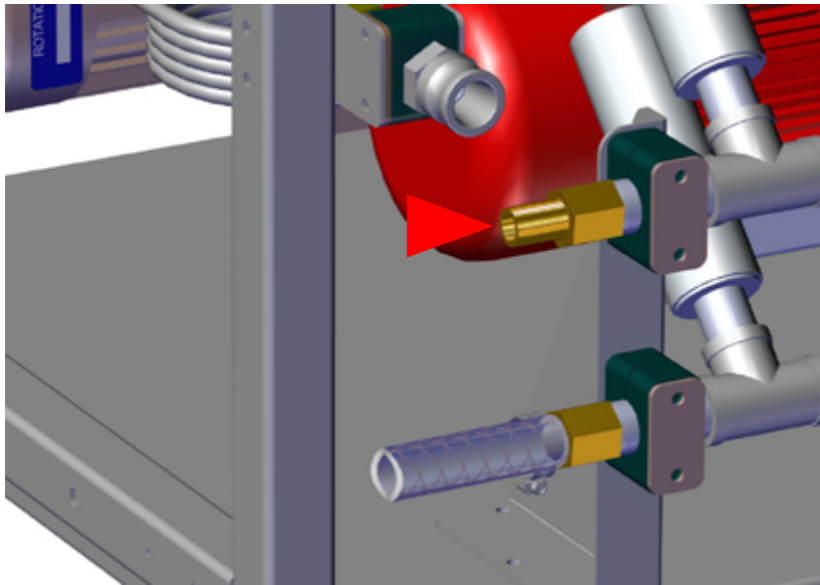
**Step 14:** Turn the operation switch (located on the front of the scale frame) **UP** to raise the cover off of the 20L supply tank.

- Raising the cover ensures adequate length of tubing will be allocated for installation.
- **Do not connect tubing with cover in the DOWN position!**

Continued ➡





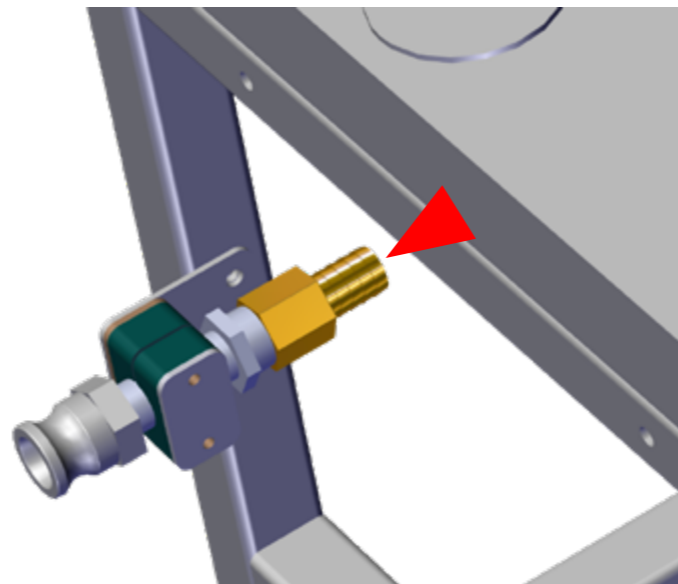
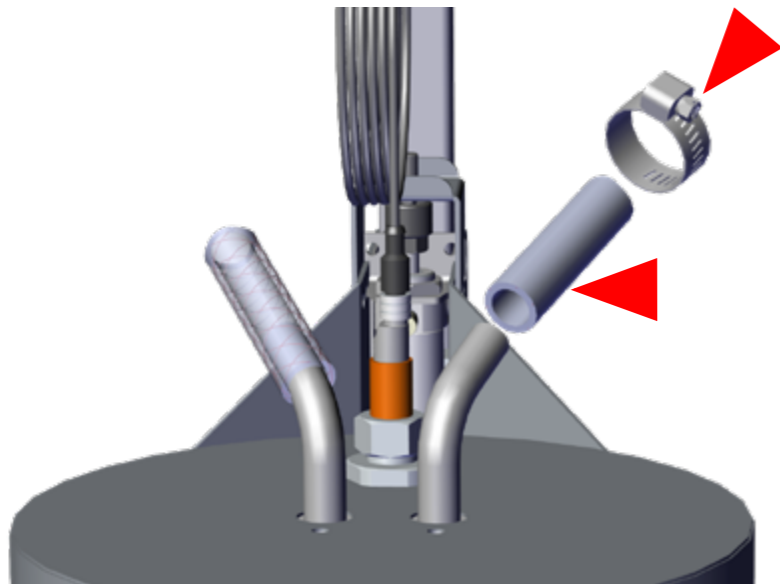


**Step 15:** Connect one end of 3/4" vinyl tubing with a #8 hose clamp to the upper supply pump 3/4" brass hose barb.

- Tighten hose clamp in place with a screwdriver.

**Step 16:** Cut to fit and connect the other end of 3/4" tubing with a #8 hose clamp onto the inlet tube (**LEFT SIDE**) on top of the supply tank cover.

- Tighten hose clamp in place with a screwdriver.



**Step 17:** Connect one end of 3/4" vinyl tubing with #8 hose clamp onto the discharge tube (**RIGHT SIDE**) on top of the supply tank cover.

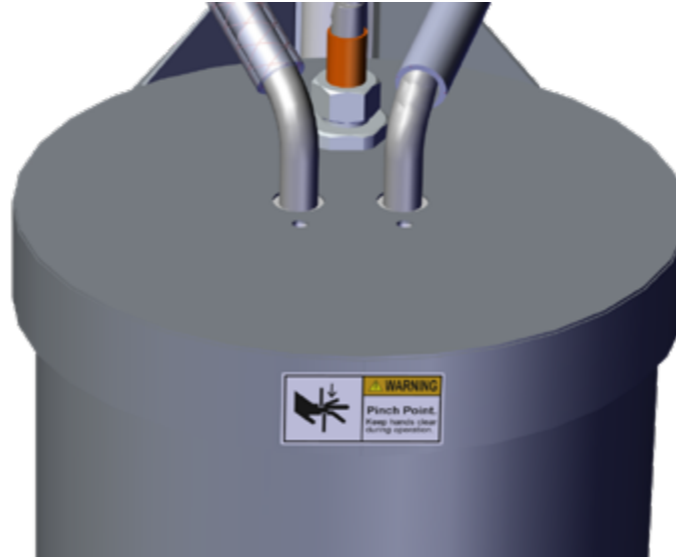
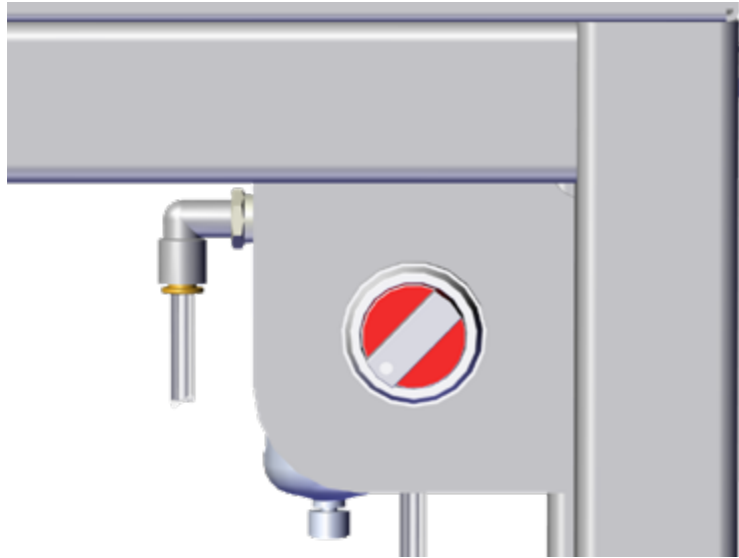
- Tighten hose clamp in place with a screwdriver.

**Step 18:** Cut to fit and connect the other end of 3/4" tubing with #8 hose clamp onto the flow equalizer 3/4" brass hose barb connected to the backside of the pump station frame.

- Tighten hose clamp in place with a screwdriver.

Continued ➞





**Step 19:** Turn the operation switch **DOWN** to lower the cover onto the 20L supply tank.

- Heed the warning label - pinch point, watch your hands!

**Step 20:** Lift the four (4) levers to open the discharge pump head and remove the cover.

- Place the Pump Element Assembly on the internal rollers and over the two pins on each side, as shown below.

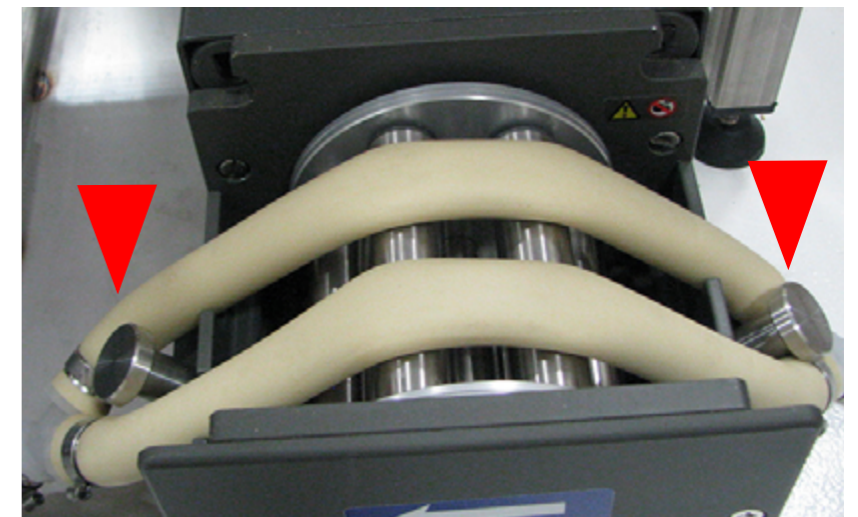
Continued ➔



Lift four levers

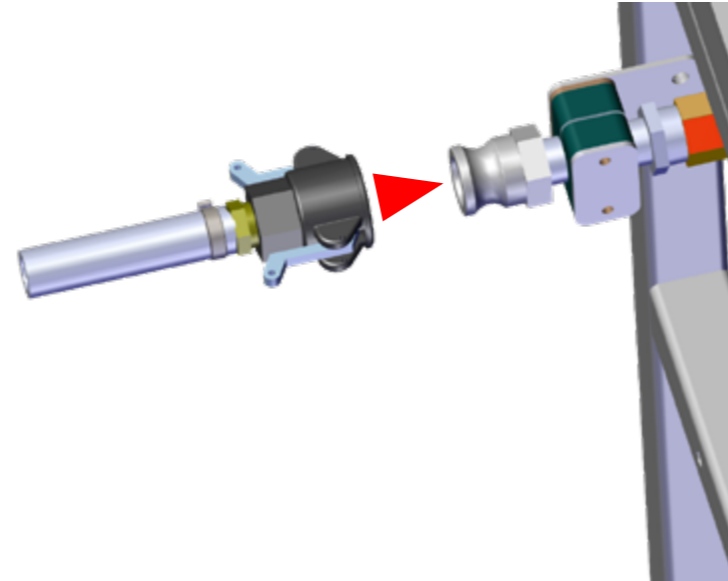


Remove cover



Place element assembly on rollers; connect over side pins

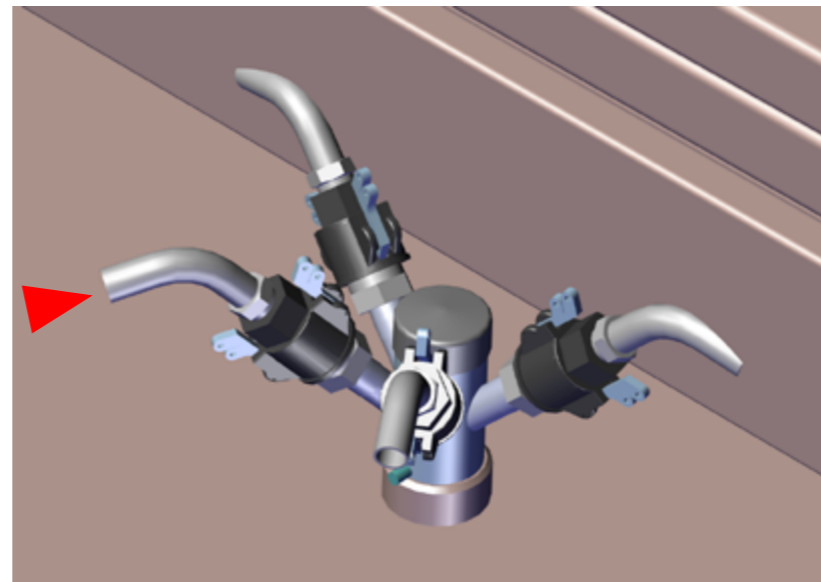
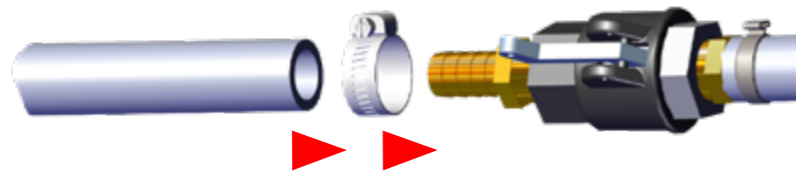




**Step 21:** Replace the pump head cover.

- Push the four (4) levers down to close the pump head on the Pump Element Assembly.

**Step 22:** Connect the Pump Element Assembly **INLET END FEMALE COUPLER** to the flow equalizer male coupler on the backside of pump station.



**Step 23:** Connect one end of 3/4" vinyl tubing with a #8 hose clamp to the Pump Element Assembly **OUTLET END 3/4"** brass hose barb.

- Tighten hose clamp in place with a screwdriver.

**Step 24:** Cut to fit and connect the other end of 3/4" tubing with a #8 hose clamp onto the Treater chemical inlet assembly tube on top of the treater Bowl Cover.

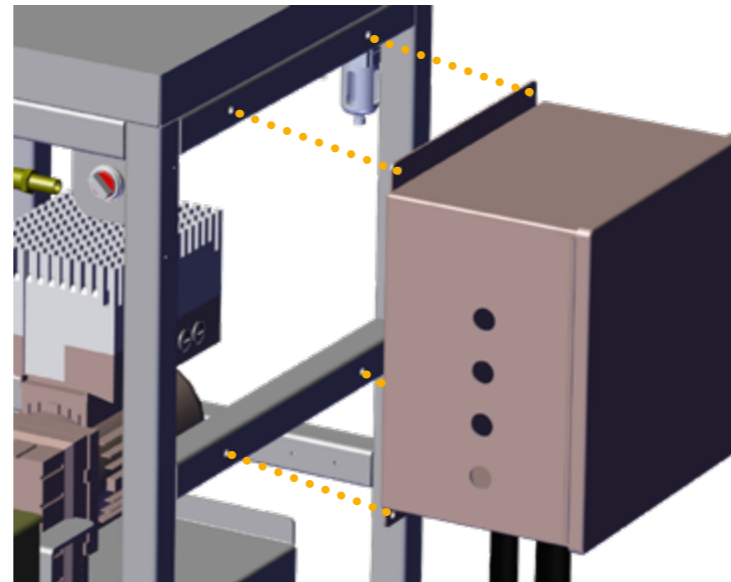
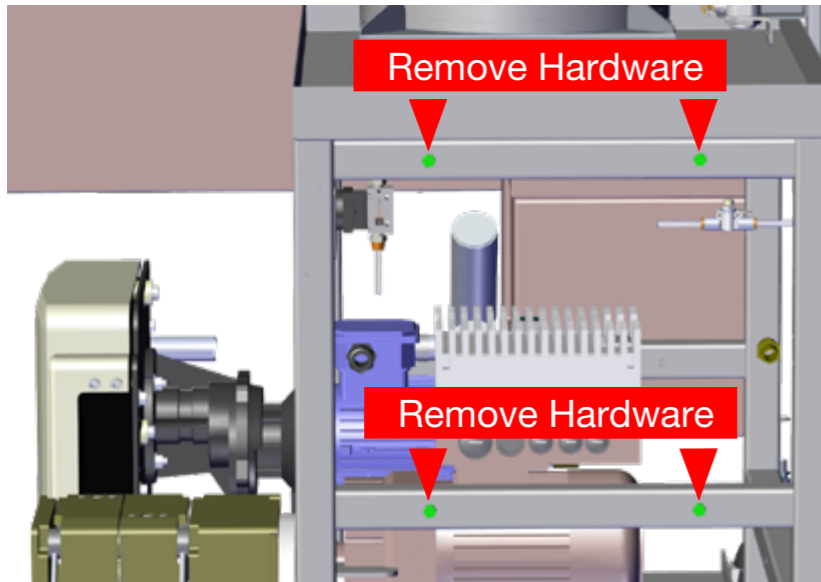
- Tighten hose clamp in place with a screwdriver.

Continued ➡





Warning: ensure a licensed electrician wires the system following National electrical codes for the area. Refer to wiring diagrams provided inside the control panel.



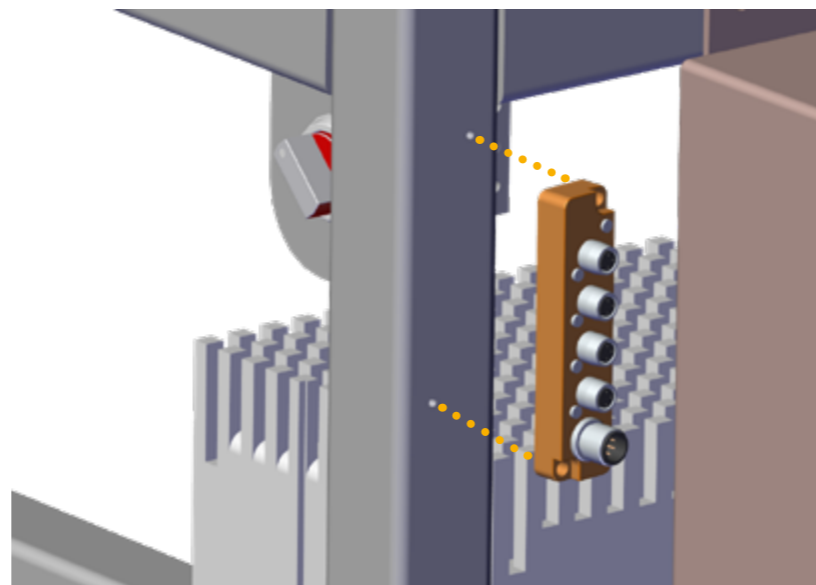
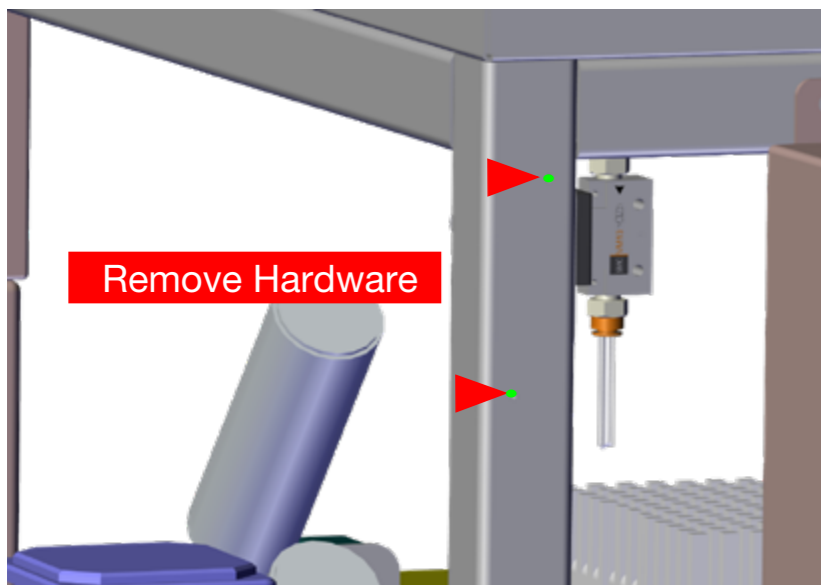
## 20L LW Pump Station Electrical Connections

### Step 1: Remove the J-box from packaging.

On the right hand side of the **Pump Station #1**, use a 7/16" Socket Head Wrench to remove the four sets of hardware (1/4-20 x02" bolts + wiz nut) from the pre-drilled holes on the frame and set them aside.

Align the J-box with the pre-drilled holes on the frame and fasten in place with the previously removed hardware.

- Use a 7/16" Socket Head Wrench to securely tighten.
- Repeat for J-box #2 on Pump Station #5.



### Step 2: Remove the Pico block from packaging.

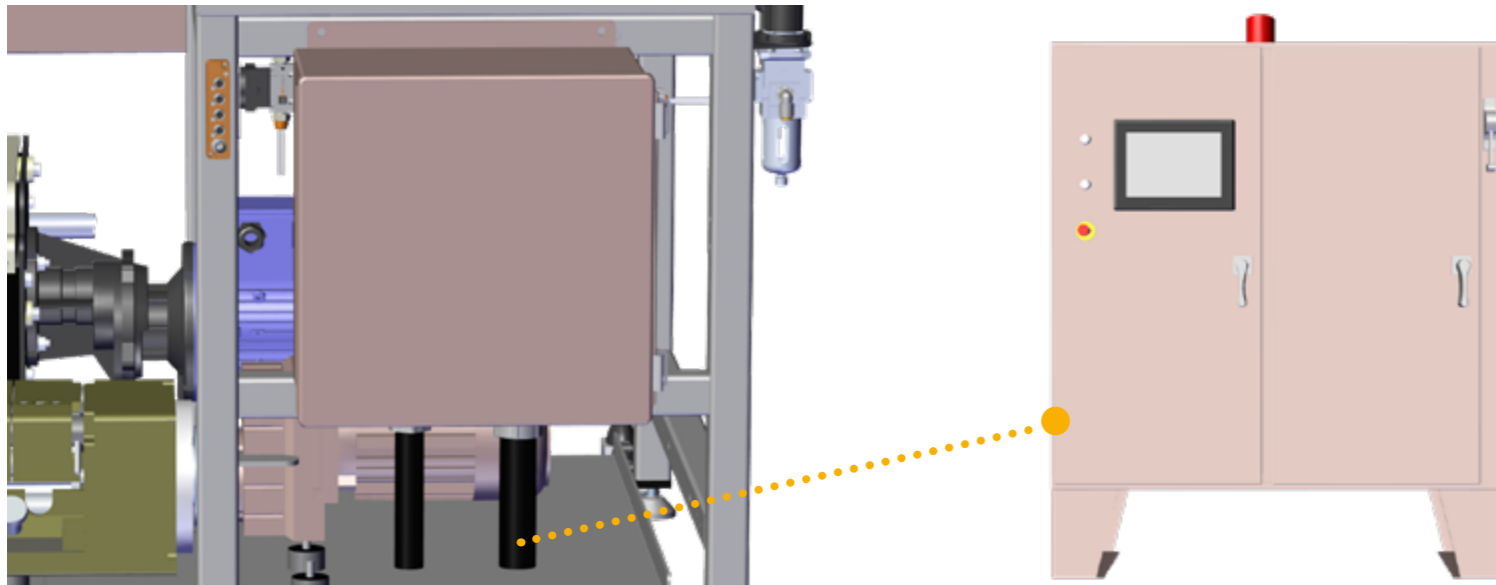
• On **Pump Station #5** use a Slotted Screwdriver to remove the two slotted pan head screws and lock washers from the frame and set aside.

• Align the pico block with the pre-drilled holes on the frame and fasten in place with the previously removed hardware.

- Use a Slotted Screwdriver to securely tighten.

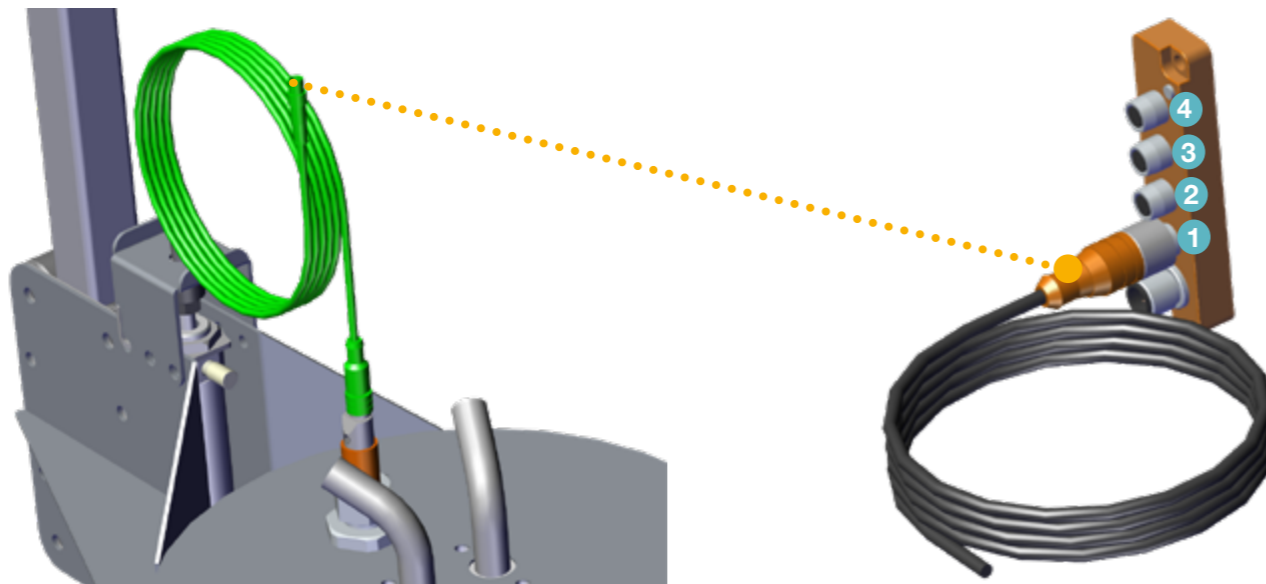
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**Step 3:** Land both pump station J-box conduit to the control panel.

- Refer to wiring diagrams provided (located inside the control panel door).



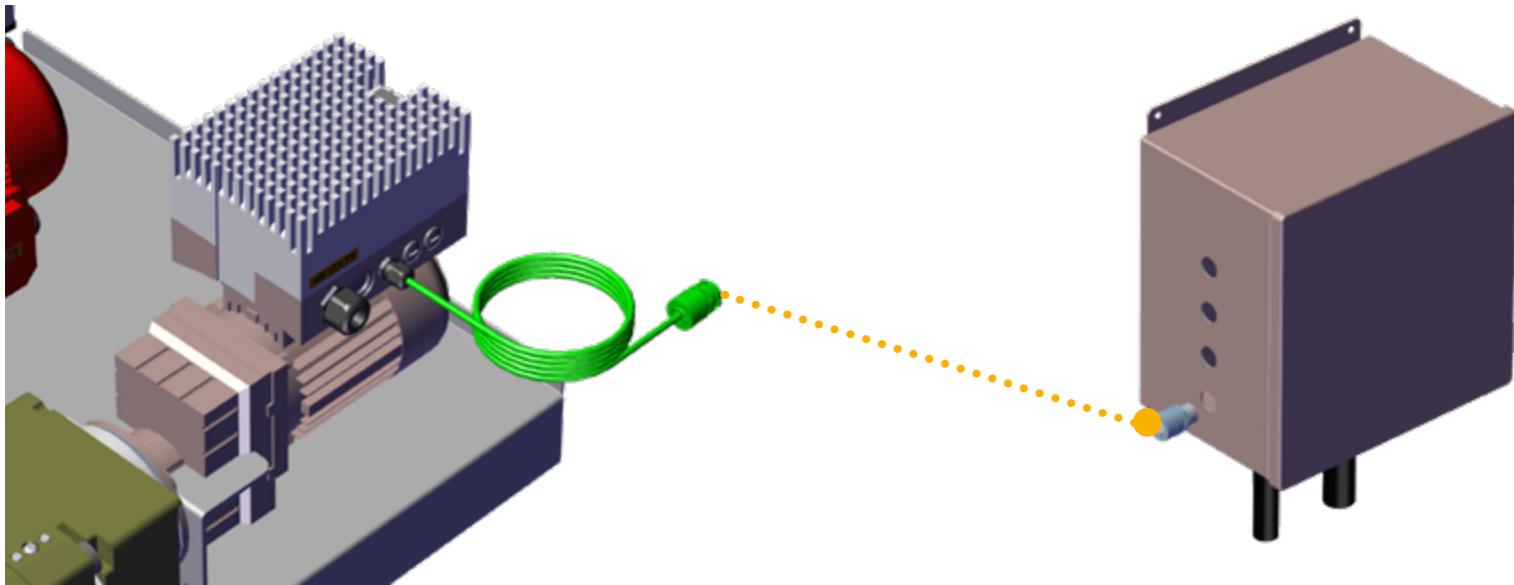
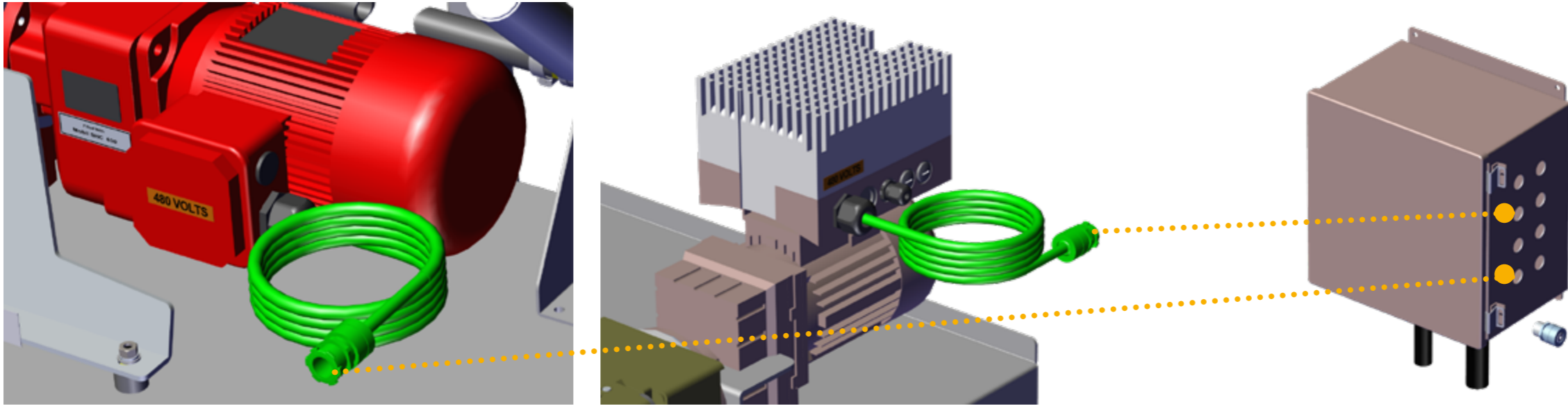
**Step 4:** Connect each tank sensor cable (1-4 located on top of the supply tank cover as shown below) to the 4-port pico block.

- Start with the bottom port (1-4).
- Repeat for the second group of four (4) pump stations (5-8).

Continued ➞



**Step 5:** Connect each supply & discharge pump motor lead to the pump station J-box right side (blue connectors installed by electrician).



**Step 6:** Connect each gray discharge pump VFD FWD/REV cable to the pump station J-box left side (white connectors installed by electrician).

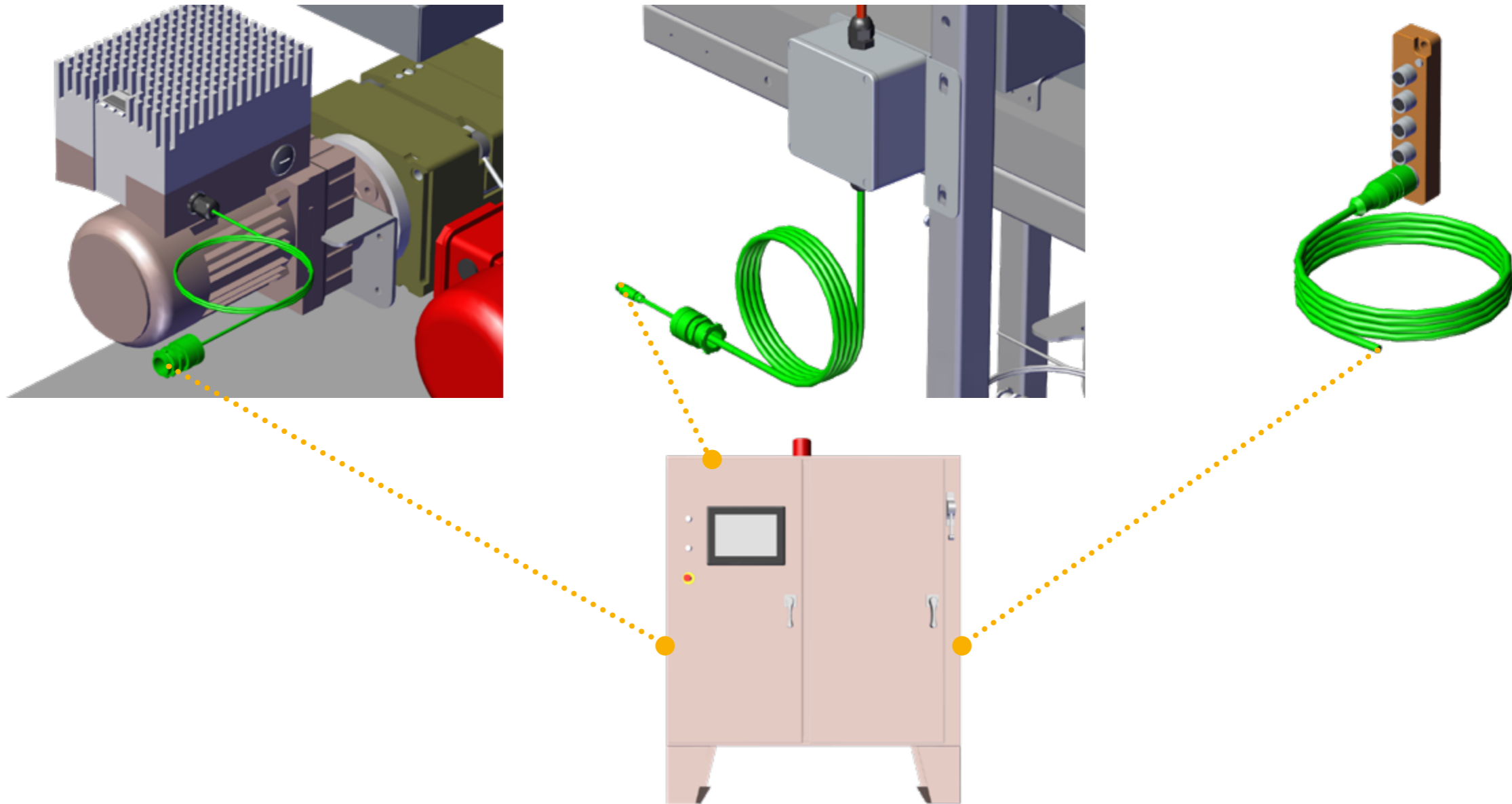
Continued ➡



**Step 7: Land each of the following low voltage cable leads to the control panel:**

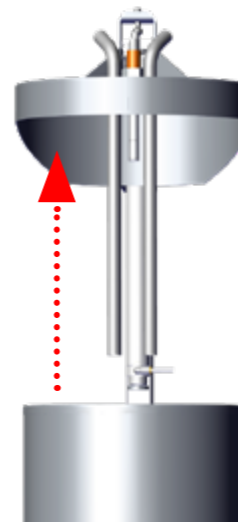
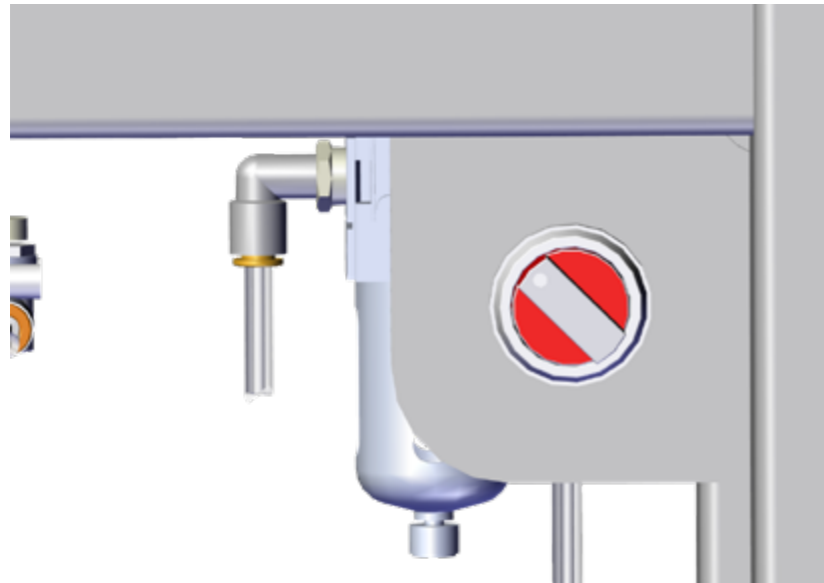
- (1-8) white discharge pump speed command cables
- (1-8) gray load cell cables (from the load cell junction box on the backside of each pump station)
- Both 20 meter home-run cable leads (from the bottom of each pico block).
- Refer to wiring diagrams provided (located inside the control panel door).

Continued ➡





Note: pump weigh scales are very susceptible to wind and can cause scale readout to fluctuate +/- 10g. Recommend enclosing the pump station with some type of material to create a wind block. On the control panel HMI graphic display, weight fluctuations will display +/- 10g difference on the pump station graphic, LT1-8.

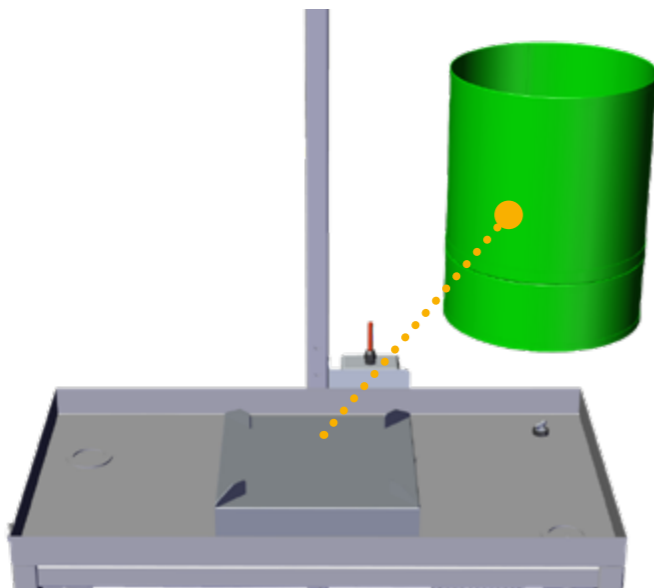


## 20L LW Pump Station Scale Calibration

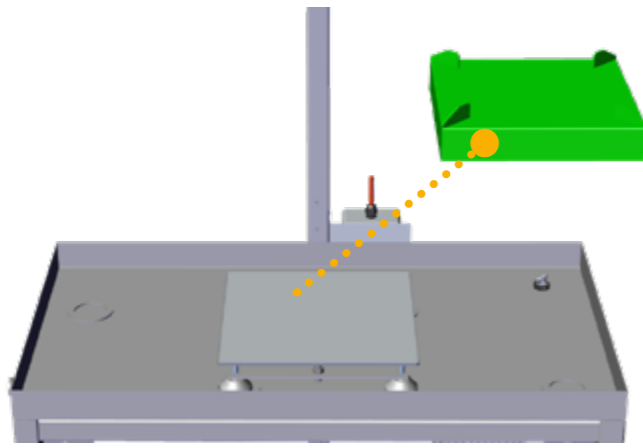
**Step 1:** Turn the operation switch **UP** to raise the cover.

**Step 2:** Remove the supply tank from the scale cover.

Continued ➔





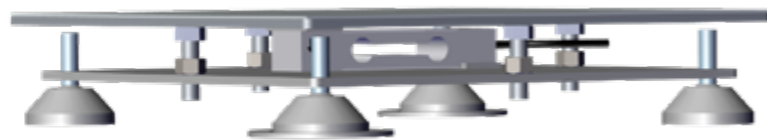


**Step 3:** Remove the scale cover from the scale top plate.

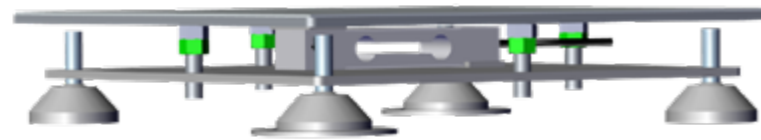
**Step 4:** Adjust the scale top plate for use.

- Use a 1/2" crescent wrench to thread the four nuts on the four bolts up to the bottom of the bolt head.
- Then screw down the four bolt heads to the bottom of each nut.
- Use a level to ensure the scale top plate is level.
- Adjust by hand (UP or DOWN) the four (4) feet for flatness of the scale.

Continued ➡



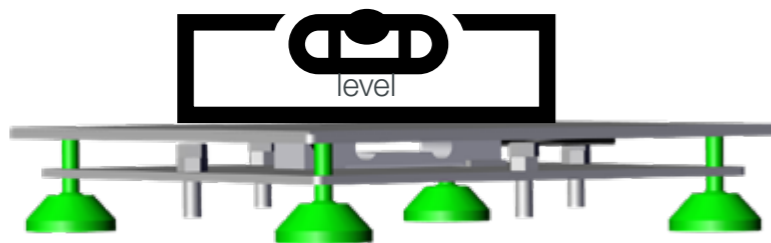
Scale Top Plate in Ship Mode (raised up off of the Load Cell)



Four (4) Nuts threaded UP to the Bolt Head

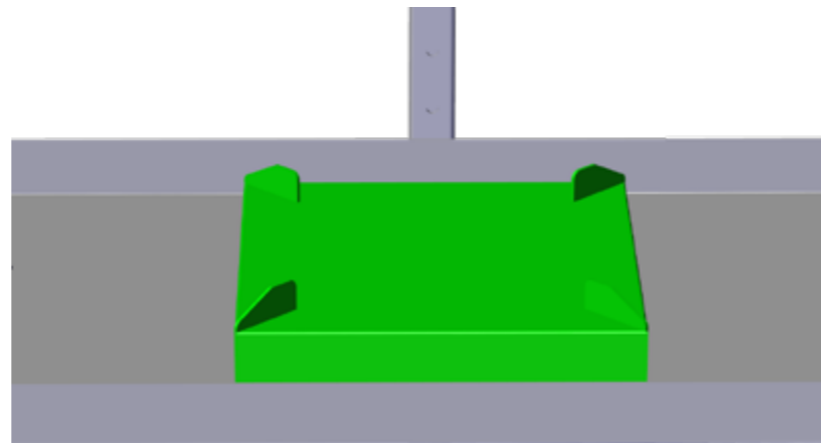
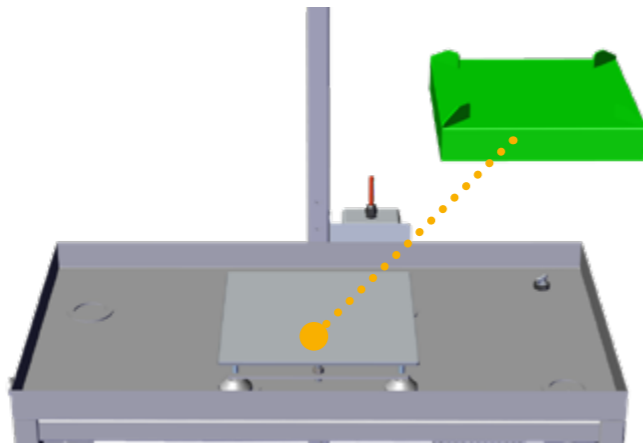


Hardware and Top Plate lowered on Load Cell

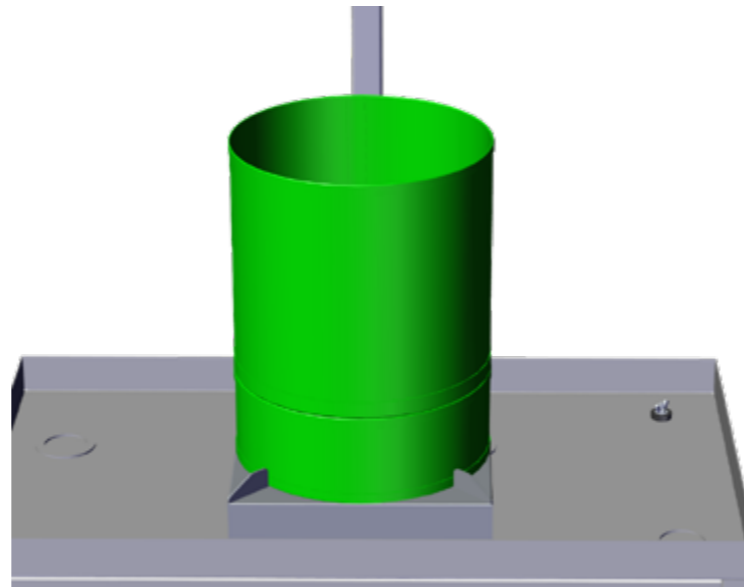
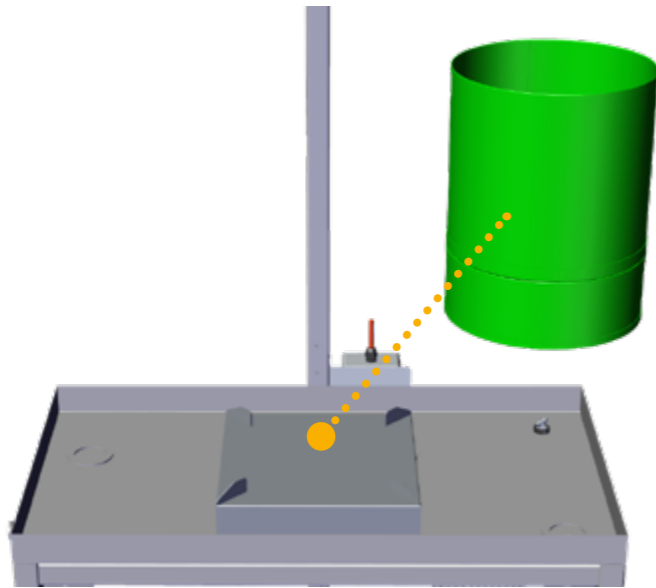


Adjust Feet and use level to level the Top Plate

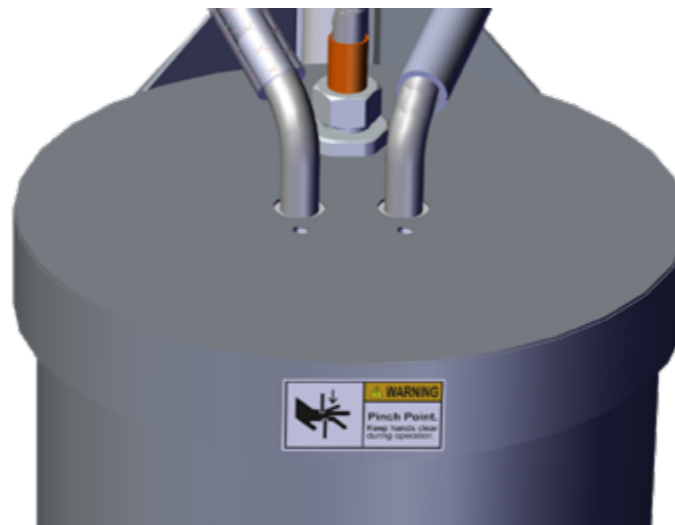
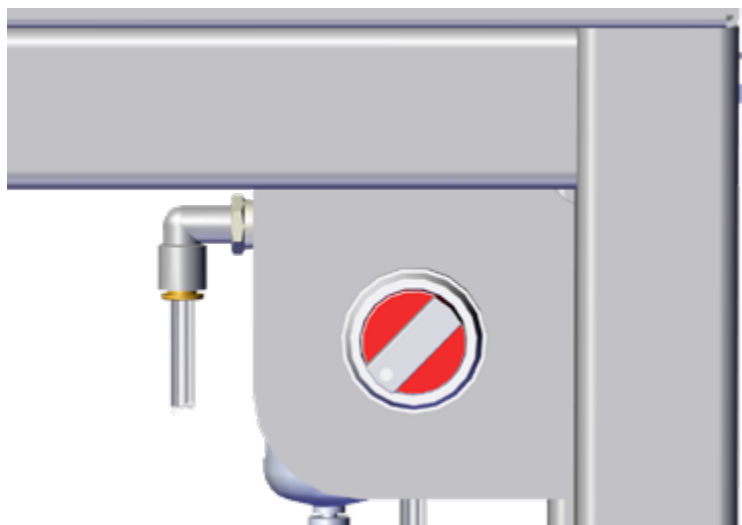




**Step 5:** Replace the scale cover on the scale top plate.



**Step 6:** Replace the supply tank on the scale cover.



**Step 7:** Turn the operation switch **DOWN** to lower the cover onto the 20L supply tank.

- Heed the warning label - pinch point, watch your hands!
- Repeat steps 1-7 for each pump station (1-8)

**This completes the Pump Station Installation section.**



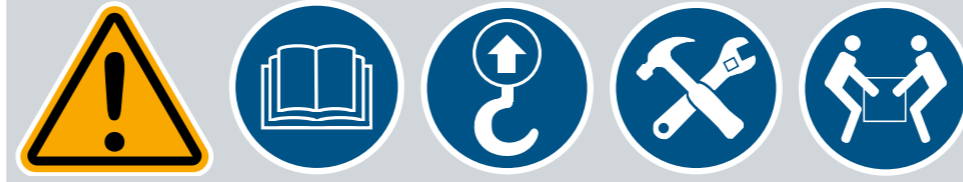


# POWDER FEEDER



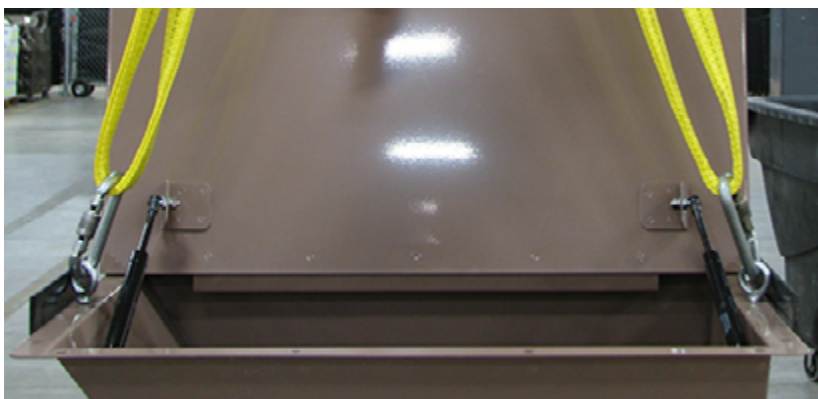
## Required installation tools

- Material handling device
- 3/4" Socket Head Wrench (1)
- 1/2" Socket Head Wrench (2)



## Optional Powder Feeders - CBT200

**Step 1:** Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the the Powder Feeder Assembly onto the shipping pallet.

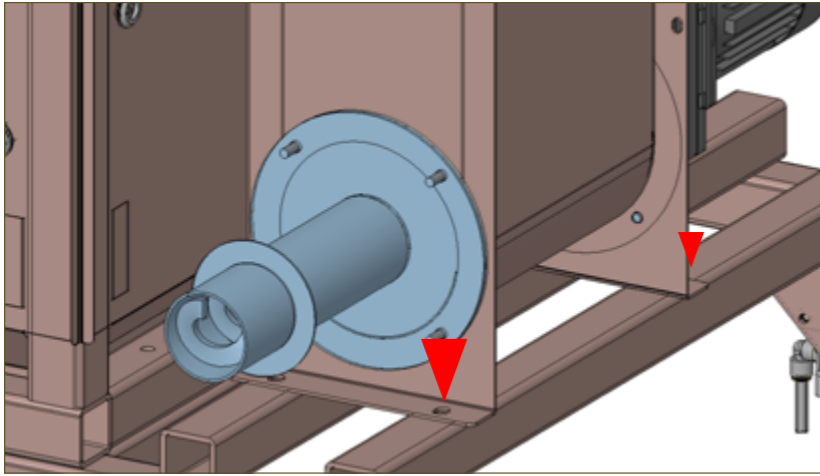


**Step 2:** Use proper rigging and lifting techniques to ensure safety when installing the Powder Feeder Assembly.

- Open the Powder Feeder Lid and connect rigging to each side (approximate dry weight: 70Kg)

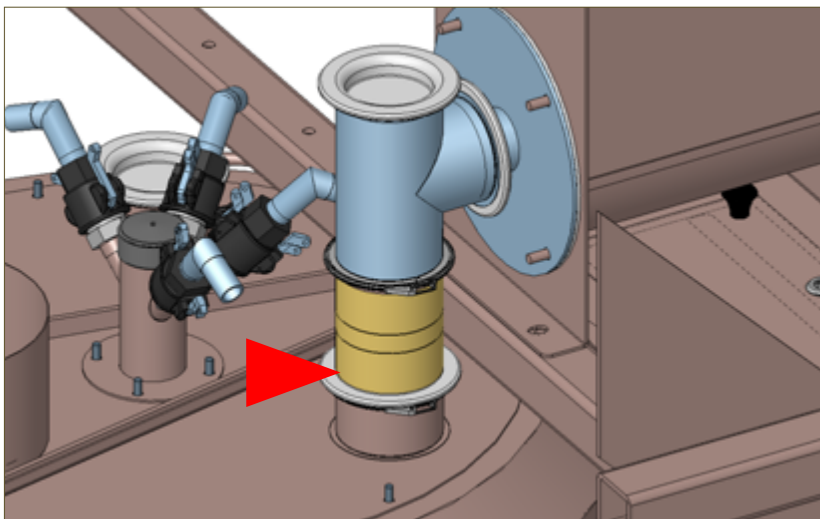
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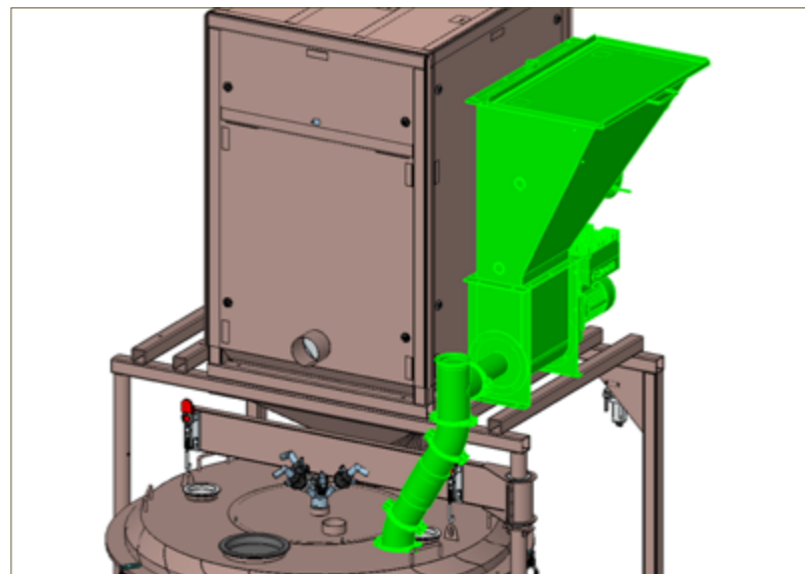


**Step 3:** Lift and set the Powder Feeder Assembly on the Scale Support Frame (Auger Tube faces OUT toward the Bowl).

- Align the four drilled holes on the Support Frame.
- Fasten in place with supplied hardware: four (4) 5/16-18 x 2.50 Hex Bolt, Washer and serrated Nut and 1/2" socket in this order:
  - bolt+flat washer+[frame]+Serrated nut.
- Tighten securely in place.



**Step 4:** Connect the Powder Tubing to the end of the Auger Tube and to the top of the Bowl Cover.



**Step 5:** Land each Powder Feeder White Signal Cable to the Main Control Panel.

- Refer to wiring diagrams provided (located inside the Main Control Panel door).
- Repeat steps 1-5 if secondary Powder Feeder is used

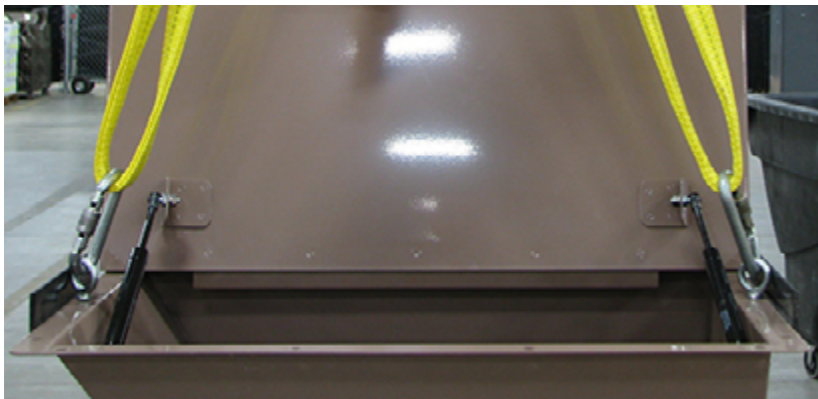
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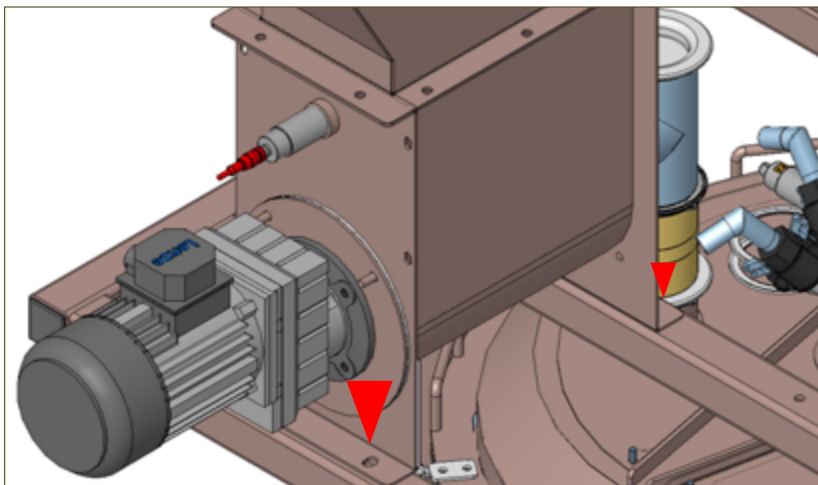
### Optional Powder Feeders - CBT25, 50 & 100

**Step 1:** Use a 3/4" socket head wrench to remove the 1/2" shipping bolts holding the Powder Feeder Assembly onto the shipping pallet.



**Step 2:** Use proper rigging and lifting techniques to ensure safety when installing the Powder Feeder Assembly.

- Open the Powder Feeder Lid and connect rigging to each side (approximate dry weight: 70Kg).

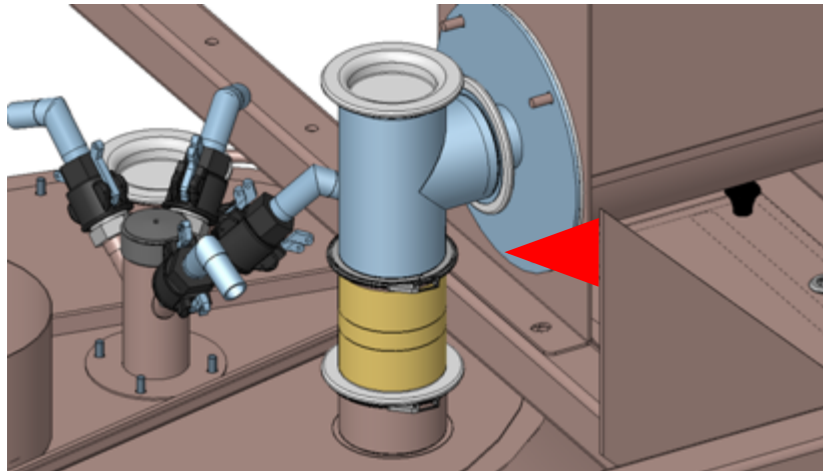


**Step 3:** Lift and set the Powder Feeder Assembly on the Powder Frame (Auger Tube faces IN toward the Scale).

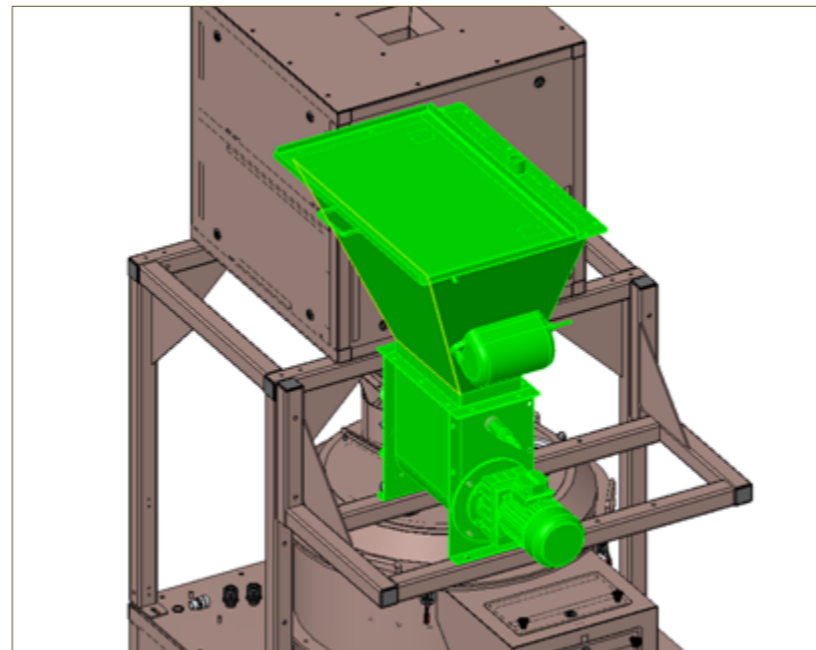
- Align the four drilled holes on the Support Frame.
- Fasten in place with supplied hardware: four (4) 5/16-18 x 2.50 Hex Bolt, Washer and serrated Nut and 1/2" socket in this order:
  - bolt+flat washer+[frame]+Serrated nut.
  - Tighten securely in place.

Continued ➞





**Step 4:** Connect the Powder Tubing to the end of the Auger Tube and to the top of the Bowl Cover.



CBT 25/50& 100 with Powder Feeder Assembly installed, ref.

**Step 5:** Land each Powder Feeder White Signal Cable to the Main Control Panel.

- Refer to wiring diagrams provided (located inside the Main Control Panel door).
- Repeat steps 1-5 if secondary Power Feeder is used

**This completes the Powder Feeder Section**





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