GREENBROZ

M+ TRIMMING SYSTEM

User Manual

GreenBroz.com

TABLE OF CONTENTS

SYSTEM WEIGHT | DIMENSIONS | POWER

DIMENSIONS:

- 229 cm L x 104 cm W x 208 cm H
  90" L x 41" W x 82" H) without tray
- 257 cm L x 104 cm W x 208 cm H
  (101" L x 41"W x 82" H) with tray

WEIGHT: 188.2 Kg (415 Lbs.)

SPEED: Variable Speed 0-20 RPM

POWER: 6 Amps, Voltage: 110 V, Hertz: 60Hz

Environmental Conditions:

- Do not operate in areas subject to explosion hazards or corrosive gas can be present
- Conform to UL508 (ISBN 0-7629-0404-6) machine safety for use in pollution degree 2 environment
- Relative humidity (10%-90%)
- 32°F-104°F (0°C-40°C)

The Industrial Control Panel is c UL US LISTED

M+ TRIMMING SYSTEM USE/SAFETY

The M+ Trimming System consists of a **Model M+ Trimmer** with upgraded Automatic Doors and a **Rise Conveyor** to feed it. The Trimmer's main purpose is to trim the outer leaves off of the cannabis flower, and the **Rise Conveyor**'s main purpose is to feed the **Trimmer** with minimal input from the operator. It is designed to decrease the amount of supervision by automating the loading process into the Trimmer and automating the trimming process. The **Trimmer** and **Rise Conveyor** are designed to be used with cannabis and hemp only – do not place any other products in these machines.

Be careful when operating these machines, although Safety Guards are in place there is still a chance for injury.

The Trimmer Lid is designed to keep all objects except for cannabis out of the trimming area. Do not operate the machine with the lid open. When the Trimmer Lid is open, make sure there is nothing that could bump the Lid and cause it to fall.

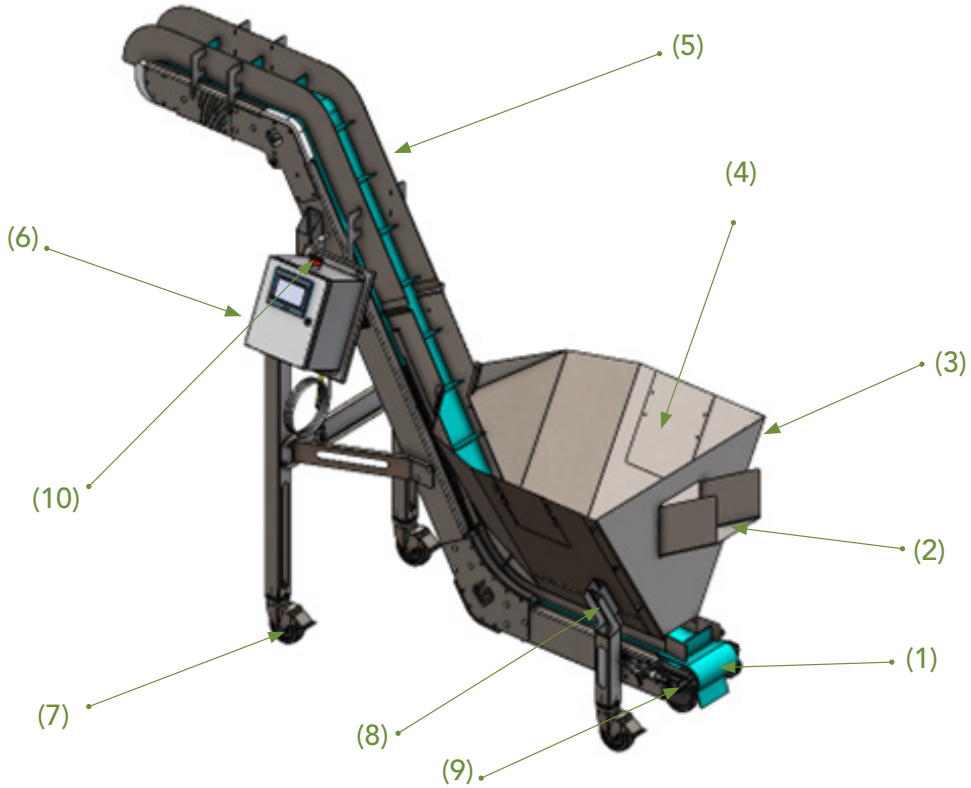
Keep hands clear of the Automatic Doors when they are opening or closing. When in automatic mode, the Doors will operate on their own and form pinch point as they open and close.

The Side Walls and Hopper of the **Rise Conveyor** are designed to keep all hands, jewelry, and any dangling objects clear of the belt. Do not operate the **Rise Conveyor** without these safeguards. The machine should never be turned on without the belt installed on the machine.

If any blockages or breakdown are to occur when operating the machine, stop the machine using the HMI if possible. If not possible, use the Emergency Stop to cut power to the machine. Before clearing the blockage, disconnect power from both machines (if the doors were in the open state, wait for the doors to close). Once power has been disconnected, investigate, clear the blockage, and resume operation.

PART 1: RISE CONVEYOR

MACHINE PARTS IDENTIFIER



1. **Conveyor Belt:** Food safe Belt with flights that gently catch and move along material.
2. **Flower Ramp**: Ramp that allows feeding of the Hopper directly from a **Model M**.
3. **Hopper:** Can be filled with flower or hemp and smoothly feeds the belt's flights.
4. **Hopper blank plate:** Can be replaced with ramps to feed the **Rise Conveyor** from the sides.
5. **Primary Walls:** Removable walls keep the product contained after exiting the Hopper.
6. **Control Box:** Removable for cleaning and houses the Touch Screen to run the machine.
7. **Casters:** Wheels that swivel and lock for stability and mobility.
8. **Hopper Cradle:** Holds the main body of the Hopper stably above the Belt.
9. **Toggle Clamps:** Allows the operator to quickly tension and release the Conveyor Belt.
10. **EMERGENCY STOP:** This instantly removes all power and halts the **Rise Conveyor**.

DIMENSIONS | WEIGHT | POWER

Approx. Dimensions: 87cm x 168cm x 209cm (34in x 66 in x 82in)
Weight: 91kg (200 lbs.)
Feed Rate: 0 to 1.36 kg/min (0-3 lbs/min)
Power: 110VAC, 60Hz 3A 330W (US)
Power: 220VAC, 50Hz 1.5A 330W (International)

Environmental Conditions:

- Do not operate in areas subject to explosion hazards or corrosive gas can be present
- Conform to UL508 (ISBN 0-7629-0404-6) machine safety for use in pollution degree 2 environment
- Relative humidity (10%-90%)
- 32°F-104°F (0°C-40°C)

UNPACKING & INSTALLATION

a. Ensure BOTH hooks are inside the Hopper Cradles as shown.

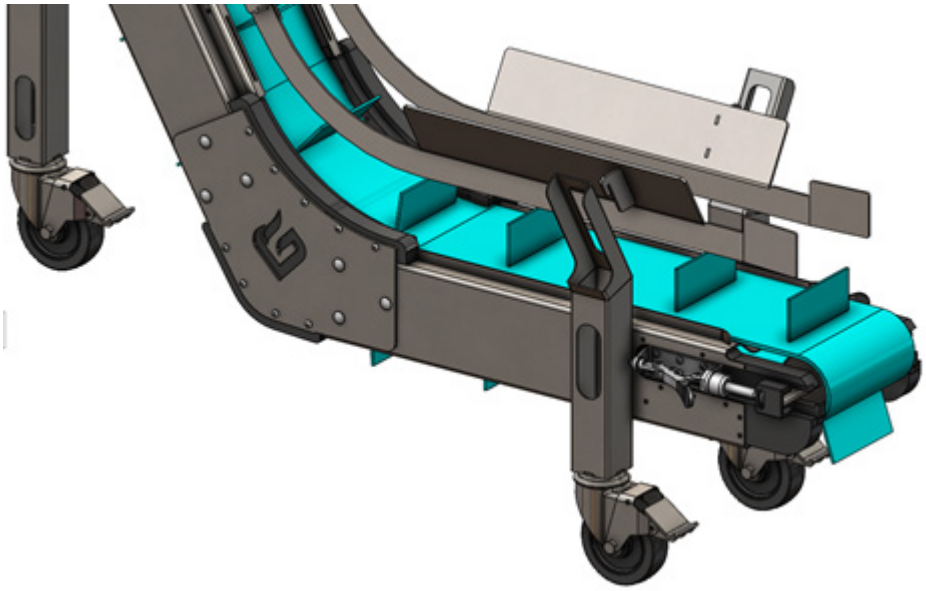
UNPACKING

All parts noted in this manual will be included with your machine. The **Conveyor** comes fully assembled.

1. Remove the **Rise Conveyor** from the shipping container and remove all plastic and tape.
2. Remove any additional packaging material from the machine.
3. Ensure the machine is on a level surface and that the wheels are in the locked position.
4. Ensure the Master Power Switch is in the off position and plug the cord into the machine.

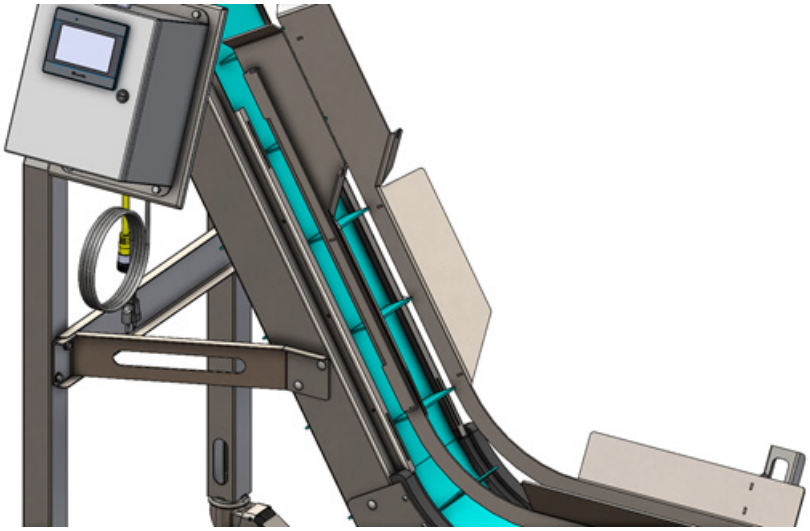
HOPPER INSTALLATION

1. Install the Lower Side Walls by first inserting the Hook Bracket into the lower cutout on the rear Hopper Cradle.



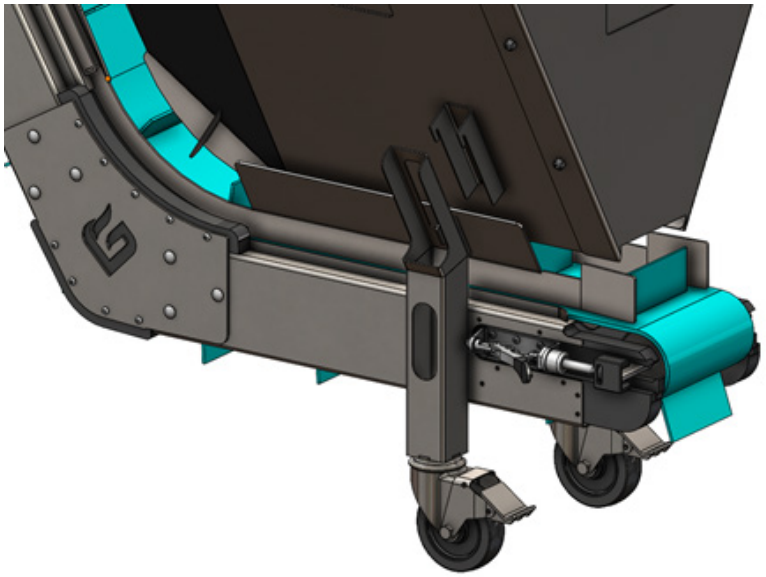
HOPPER INSTALLATION

2. Insert the two upper tabs into the slots above.

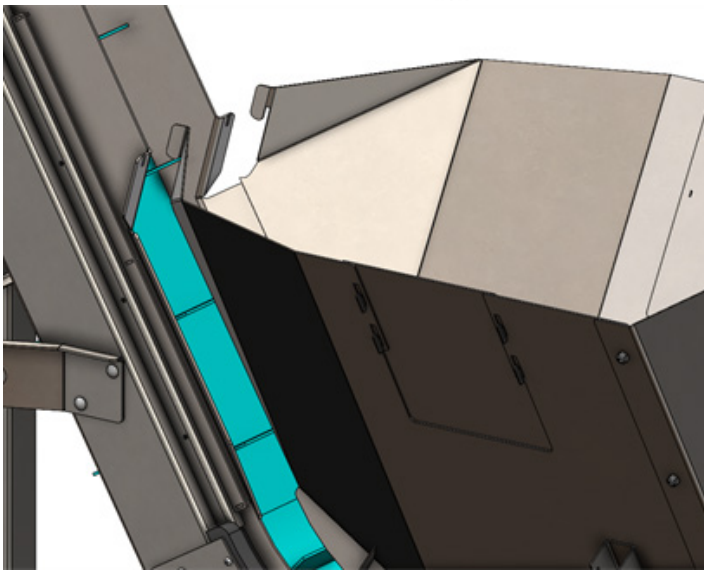


3. Repeat with opposite side Lower Side Wall.

4. Slide the Hopper Brackets into the two rear Hopper Cradles (Note: Make sure the Lower Side Wall Hook is outside of the Lower Side Wall).



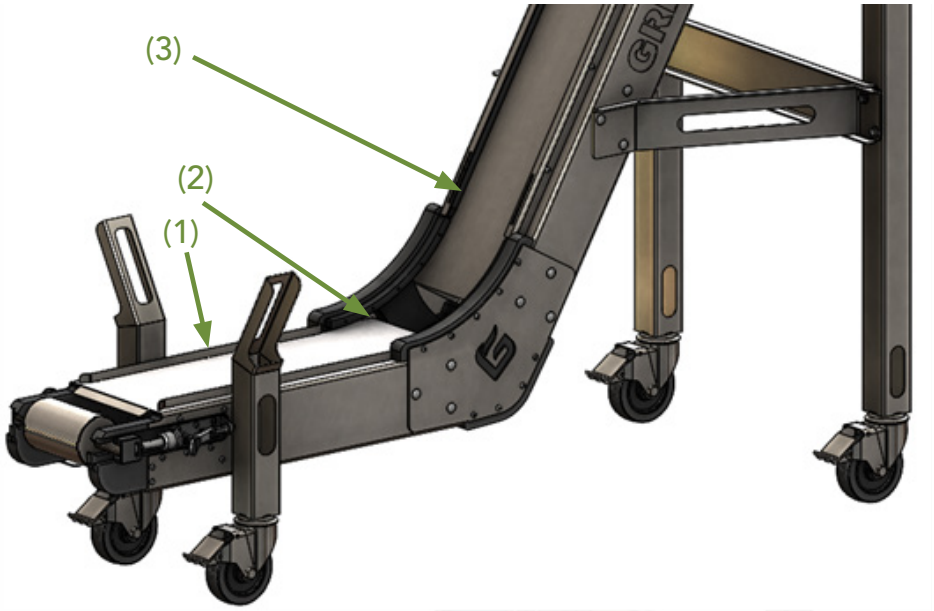
5. Insert the two upper Hopper Hooks into the slots provided in the Lower Side Walls.

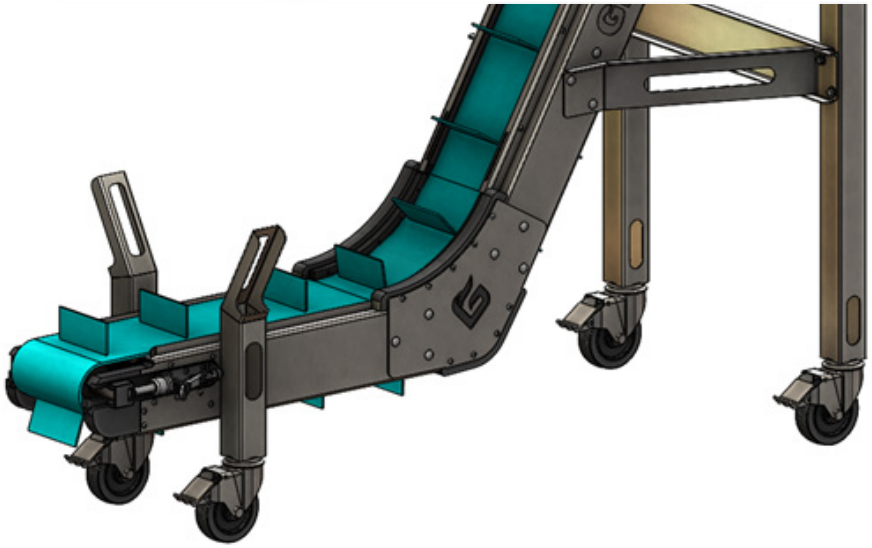


BELT INSTALLATION

When removing or installing the belt, do not pull on the belt. Pulling backwards on the belt can cause the chain to loosen and fall off or misalign.

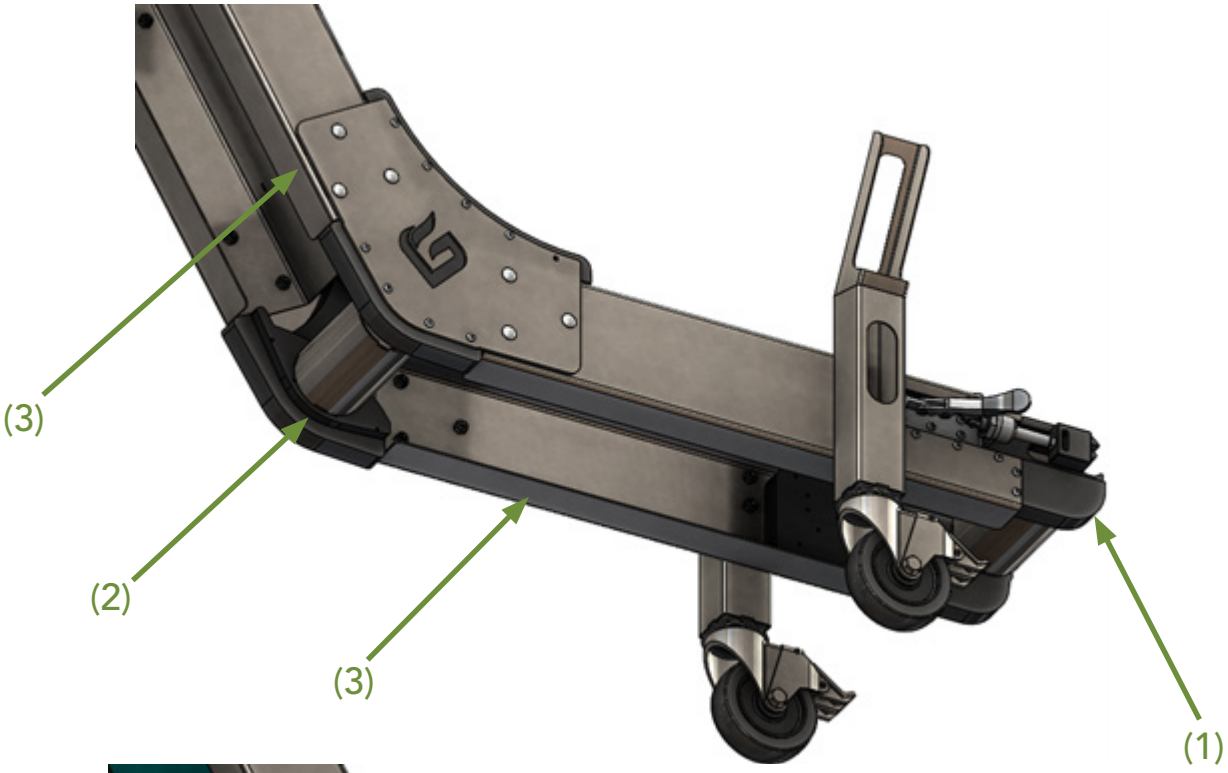
1. Weave the belt through the top section of the machine.
   a. Start by running the Belt between the Secondary Walls (1), underneath the First Guides (2), and under the Shake Guards (3).
   b. Continue pulling the Belt up to the top of the machine. **Tip:** The Belt may slide back down. Use the Drive Gears (shown in step three) to hold the belt in place.
   c. This can be done with or without the Hopper installed.

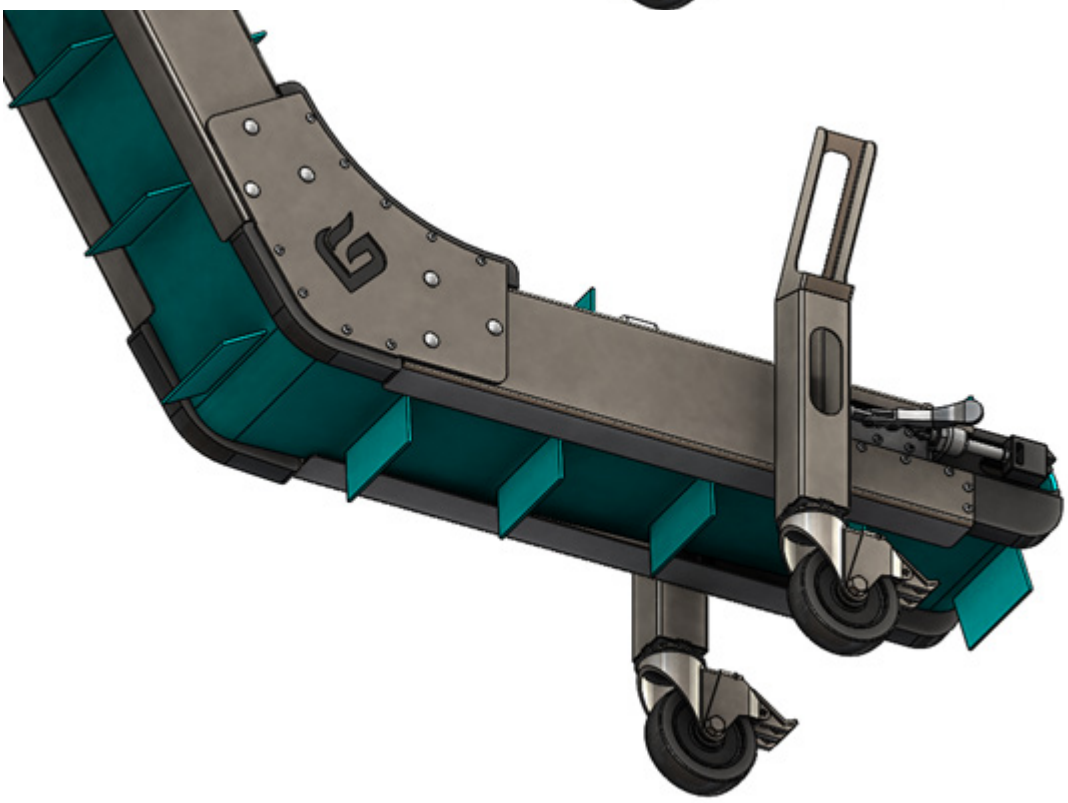




2. With one end of the Belt held at the top of the machine, take the other end and start weaving it through the bottom sections of the machine.

   a. Take the end of the Belt and run it through the rear Toggle Guides (1) and on top of the Bottom Guides (2). Make sure to keep the Belt inside of the Flanges of the frame (3).

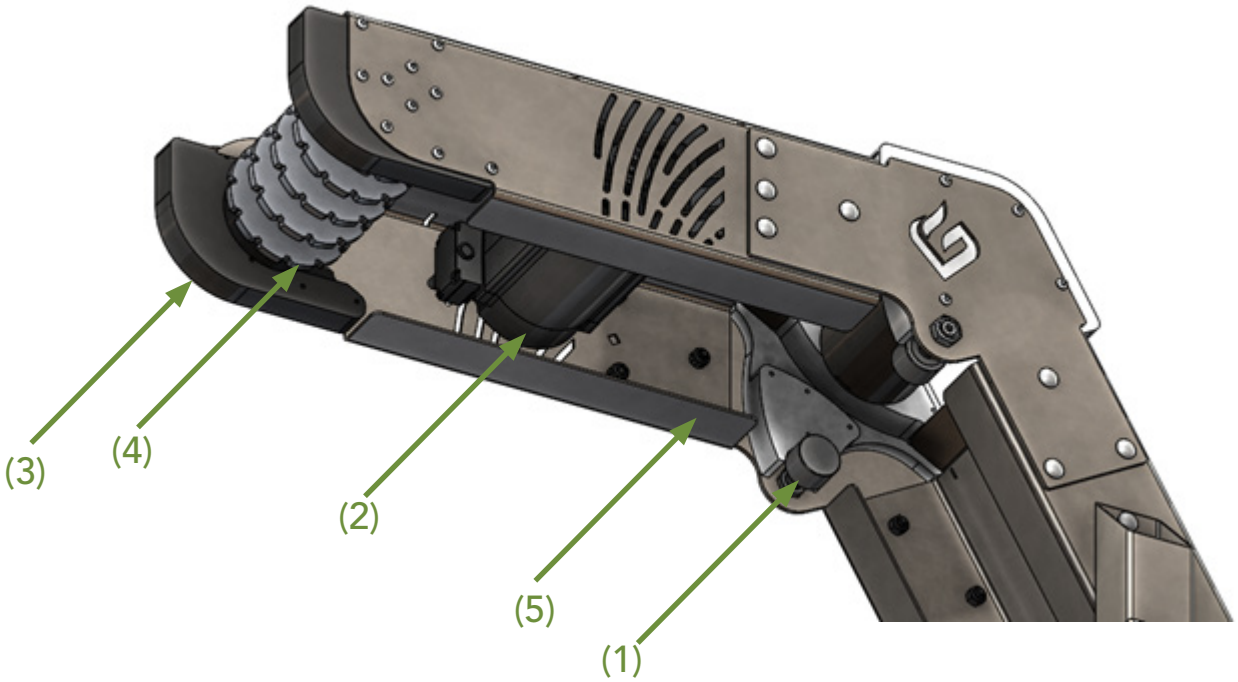


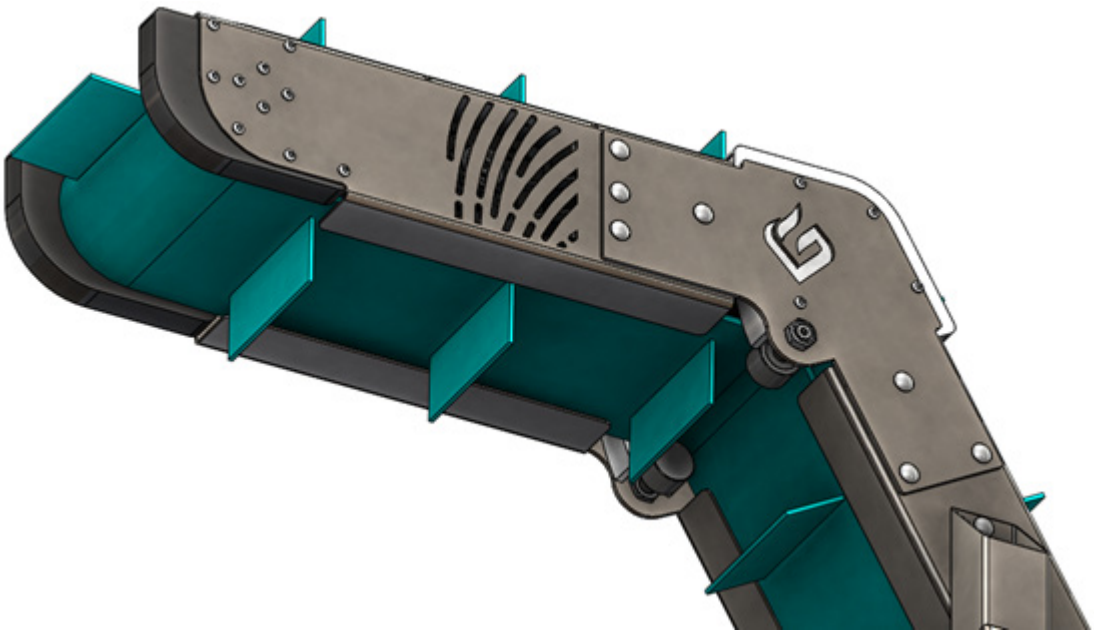


BELT INSTALLATION

3. Next, you must continue pulling the Belt through the bottom of the machine and up to meet the other side of the Belt.

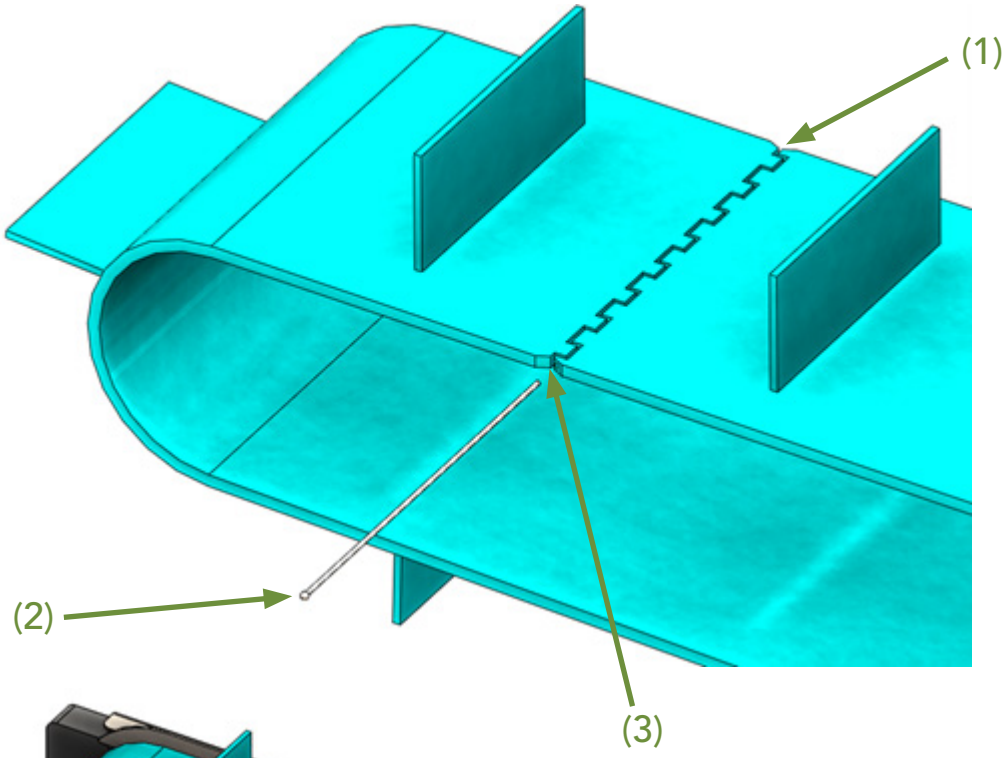
   a. The Belt will go above the Small Rollers (1), below the Motor (2), in between the Top Chain Guards (3), and around the Drive Gears (4). Again, make sure to keep the Belt above the Flanges of the frame (5).

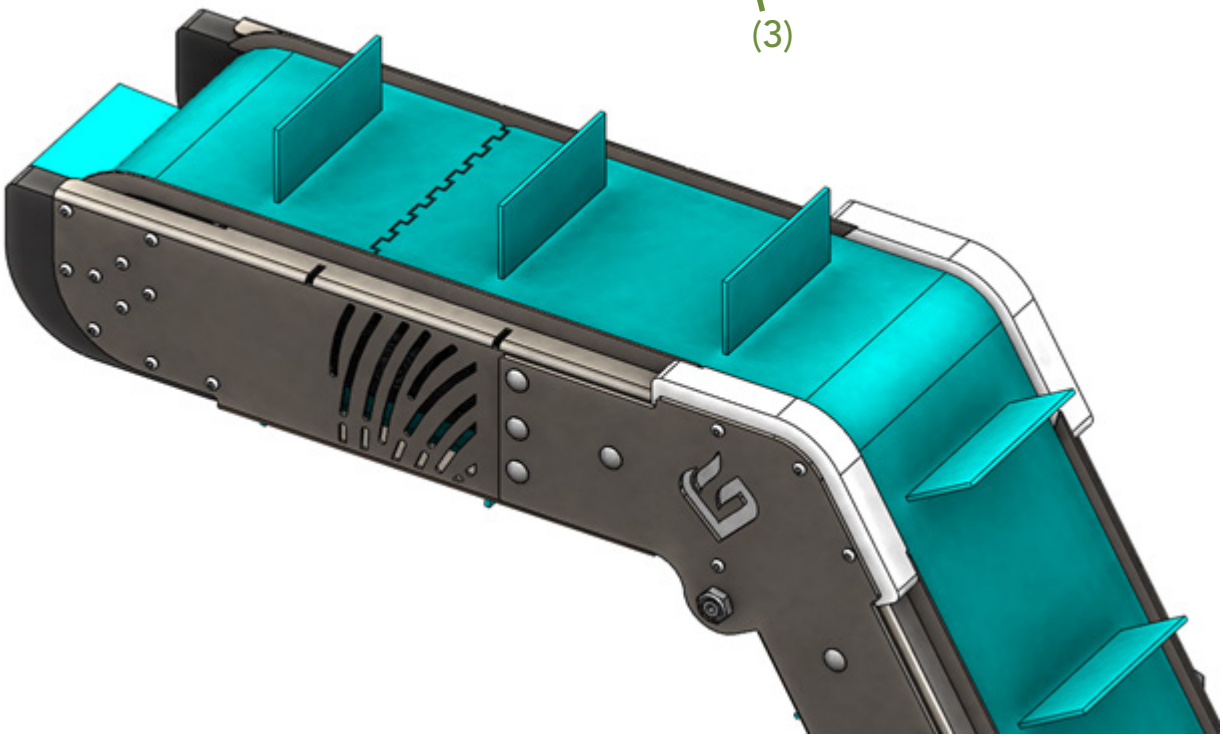




BELT INSTALLATION

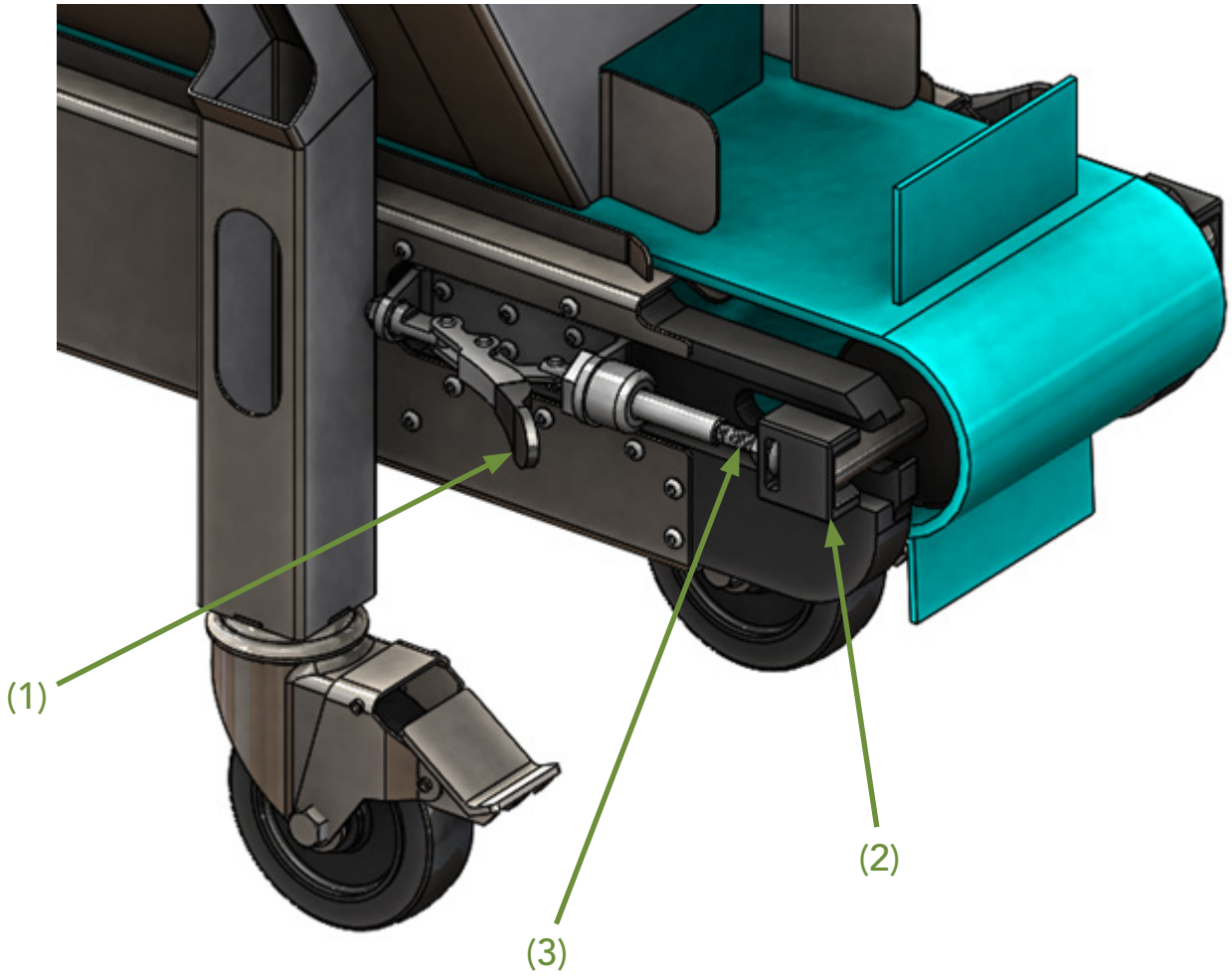
4. Lastly, use the provided Stainless Steel Pin to lock the two ends of the Belt together.
   a. Intertwine the interlocking laces at the two ends of the Belt (1). Then, slide the Locking Pin (2) through the penetrations (3) in each of the Laces.
   b. It is critical that the Pin is pushed all the way through and all Laces are secured properly.
   c. The orientation of the Pin is not critical. It can be put into either side of the Belt.





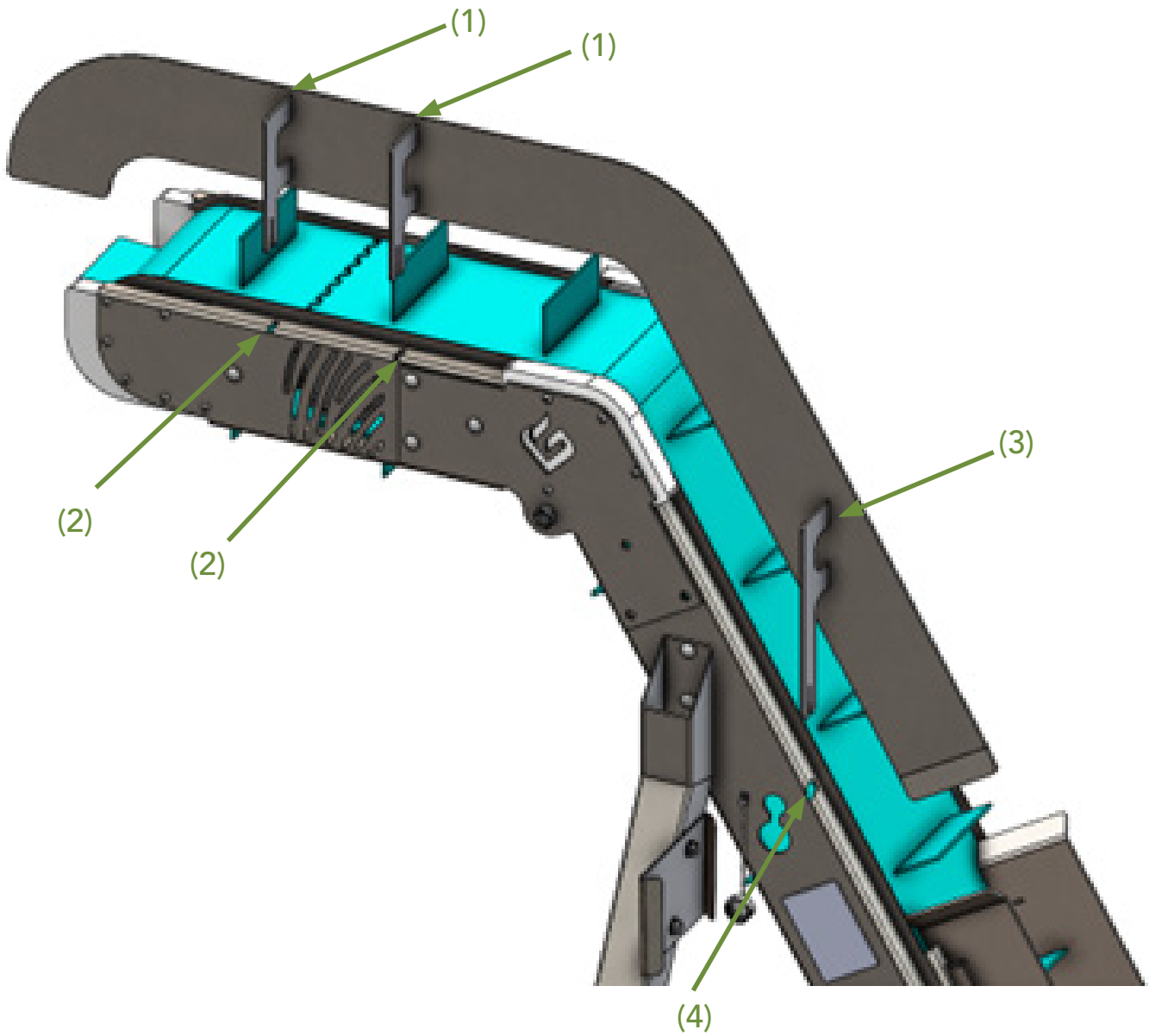
BELT TENSIONING

1. The Belt must be tensioned before running the machine and de-tensioned for removal.
   a. The Toggle Camps (1) can extend and retract to tension the Belt. By spinning the Toggle Bearing (2) attached to the tensioning Bolt (3), the Belt can be finely adjusted.
   b. A new Belt should have theTensioning Screws fully threaded into the Toggle Clamp. This gives the Belt plenty of tension (DO NOT OVER TIGHTEN - shown extended for clarification).

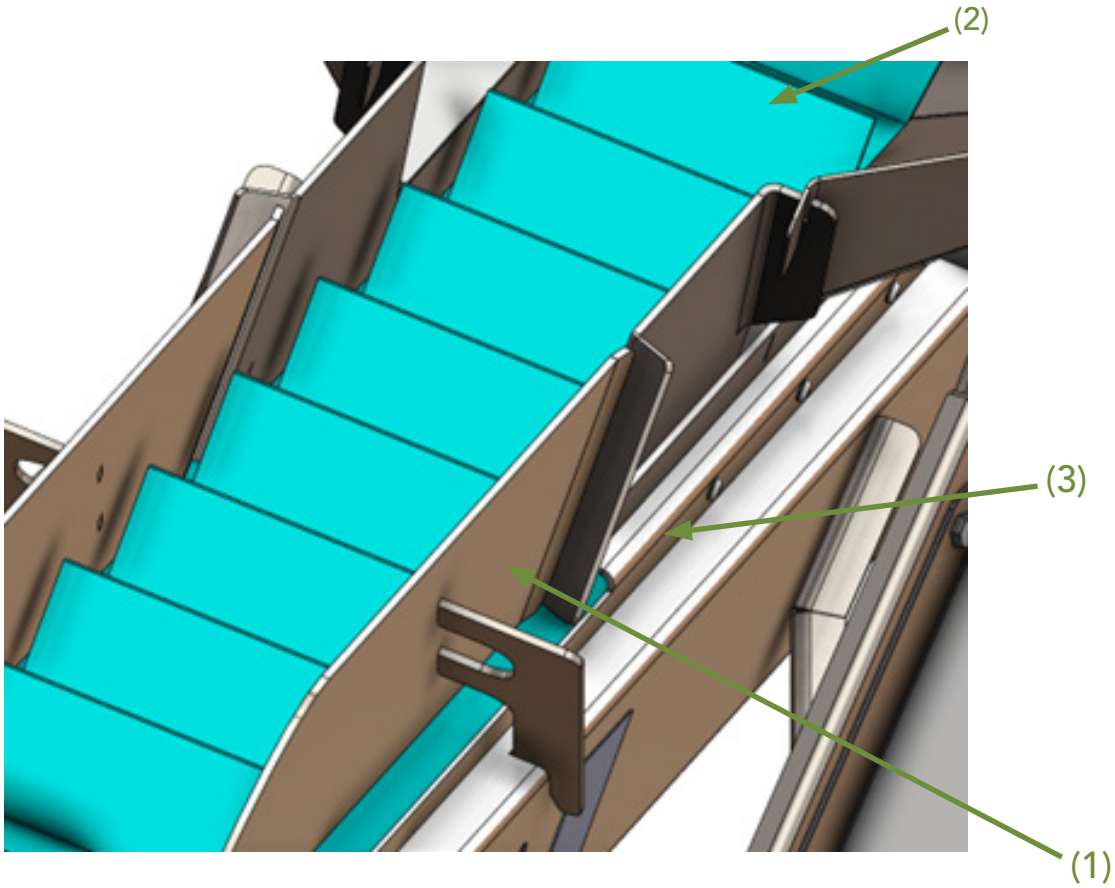


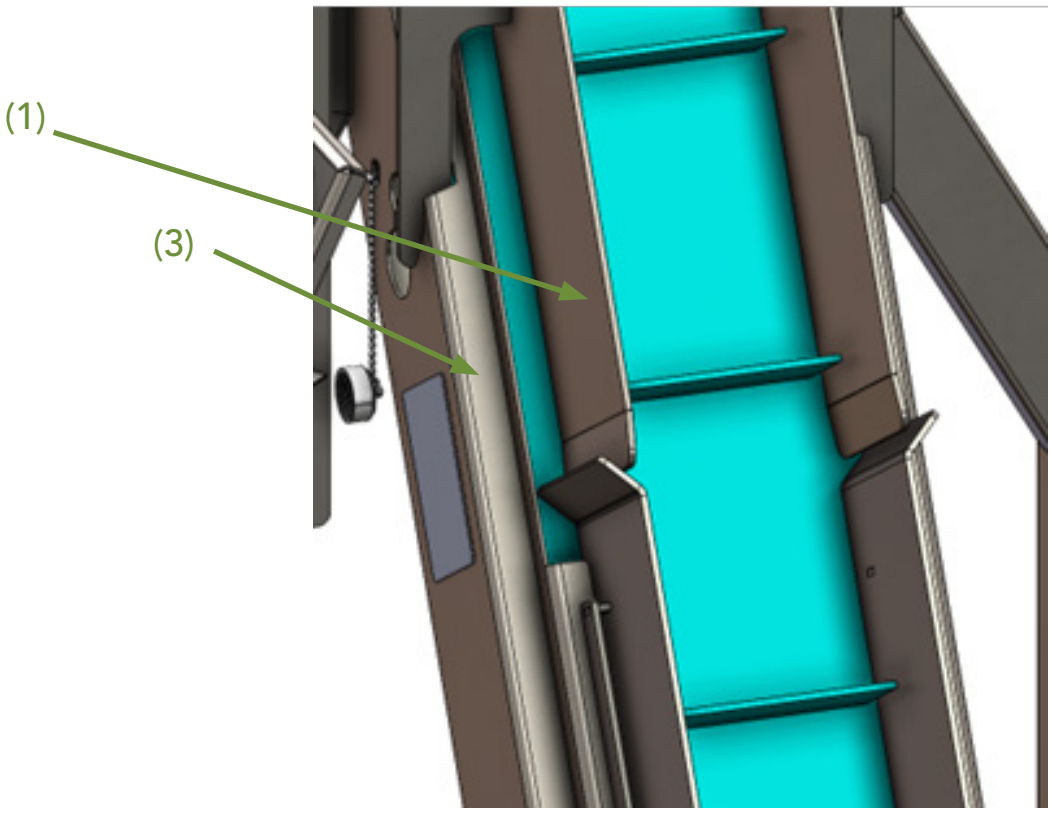
PRIMARY WALL INSTALLATION

1. The Primary Walls easily slide directly into the slots on the Main Frame of the **Rise Conveyor**.
   a. The short F-Brackets (1) slide into the top primary slots (2), and the long F-Bracket (3) slides into the bottom primary slot (4), as shown.
   b. The F-brackets should be facing away from the machine.



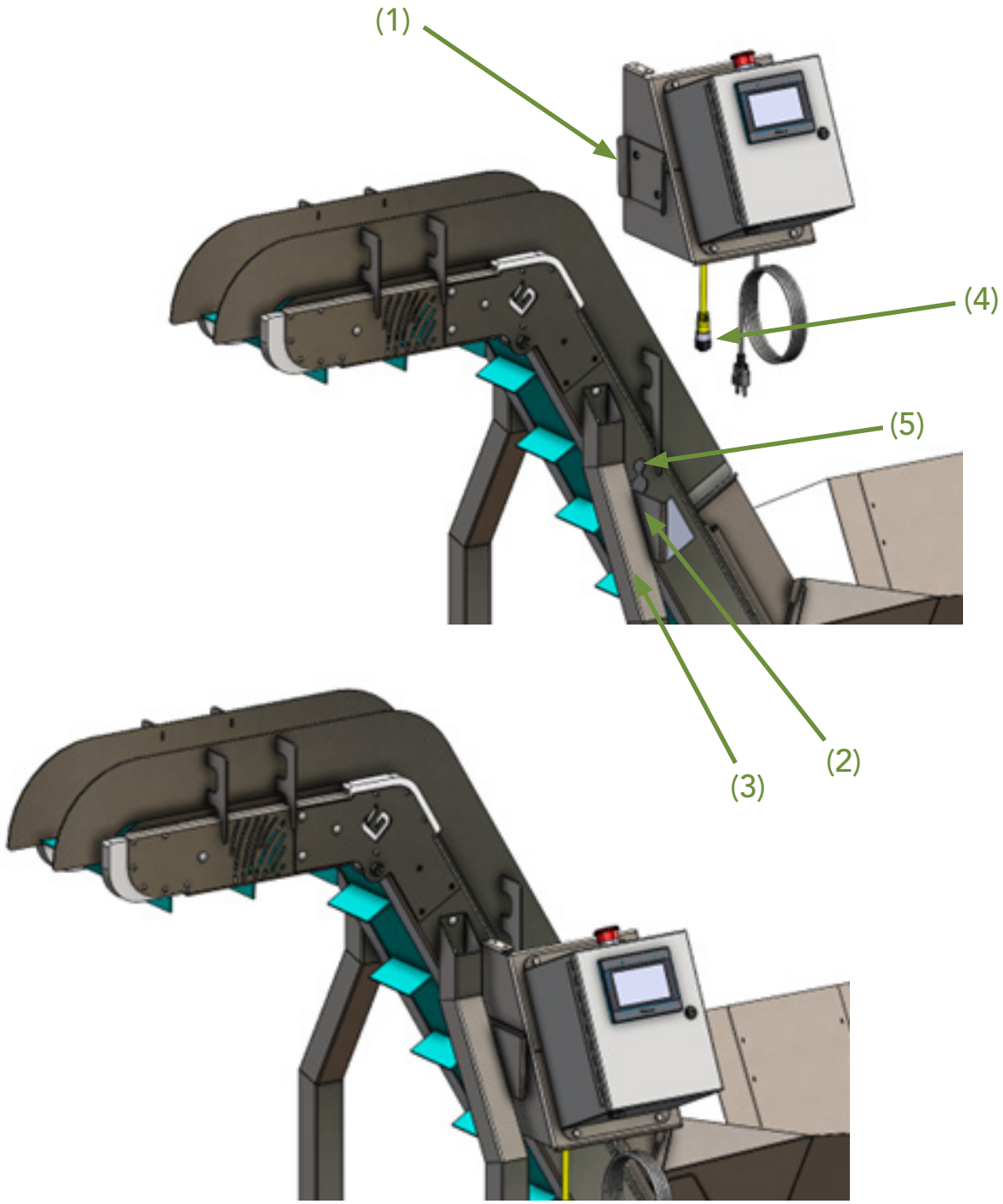
2. The Primary Walls (1) should be pushed all the way down flush with the Belt (2)





CONTROL BOX INSTALLATION

1. The Control Box is required to power the Motor and allow the operator full control of the machine.
   a. The Control Box Bracket (1) slides directly into the Side Mount Bracket (2) that is attached to the left leg of the **Rise Conveyor** (3).
   b. The yellow Four-Prong Connection (4) screws into the machine's Electrical Supply (5).
   c. The Third Connection on the back of the Control Box is for the Foot Pedal Control.



OPERATION | SHUT DOWN

PRE-START IP

- Attach the Hopper to the Main Body (refer to the hopper installation guide on pages 6-7
- Install the belt and fully secure the interlocking laces of the belt.
    - It is critical that the Locking Pin has been fully inserted and the Belt Loops secured.
- Extend the Toggle Clamps to tension the Belt.
    - These allow the Belt to be tensioned and are adaptable for any stretching during the belt's use. A new Belt should have the screws fully threaded into the Toggle Clamp. This is plenty of tension when the Toggle Clamps are extended fully and equally.
    - If the Drive Gears at the top of the machine are slipping, try extending the bolts in the Toggle Clamps to further tighten the Belt. DO NOT OVER TIGHTEN.
- Attach the Primary Walls onto the Main Body.
    - There should be little to no gaps between the bottom of these walls and the Belt.

POWERING AND OPERATION

- To begin using your new **Rise Conveyor**, plug the power cord into your wall outlet and allow about 15 seconds for the Touch Screen to completely start up.
    - If the Control Box does not immediately power up upon plugging it into the Wall, the Emergency Stop may be activated. Rotate the Emergency Stop clockwise to release it and give power back to the machine.

Start Up Screen:

- The first screen you will encounter is the screensaver.
  - Touch the screen anywhere to get to the home page. From this page you can get to the machine controls (start feeding button), view the run time of the machine (settings button), or find GreenBroz contact information (help button).

Start Feeding Screen:

- From here, you can choose from two different run settings: Continuous Feed Control or Foot Pedal Control. The Speed Control slide bar at the bottom can adjust the speed of the feed of the **Rise Conveyor** from 0 to 2.5 kg. (5 lbs.) per minute.
  - Continuous Feed Control: This mode is for nonstop feeding of material. Feeding will begin after selecting the "ON" button.
  - Foot Pedal Control: This mode is for increased operator control. With the provided Foot Pedal, you can start and stop feeding at will. Plug in the Foot Pedal to the open connection on the back of the Control Box and select the Foot Pedal control button. You do NOT need to select "ON" for this mode, it will show a red light next to "OFF" until the foot pedal is compressed.

SHUT DOWN

- To shut down the machine, select "OFF" from the "Start Feeding" page (if in Foot Pedal mode, just release the Pedal) and then hit the Emergency Stop Button. From here you can unplug the machine from the wall.
    - It is recommended that before shutting the machine down completely that the interlocking laces of the belt ends are fully visible and accessible for easy belt removal.

EMERGENCY STOP

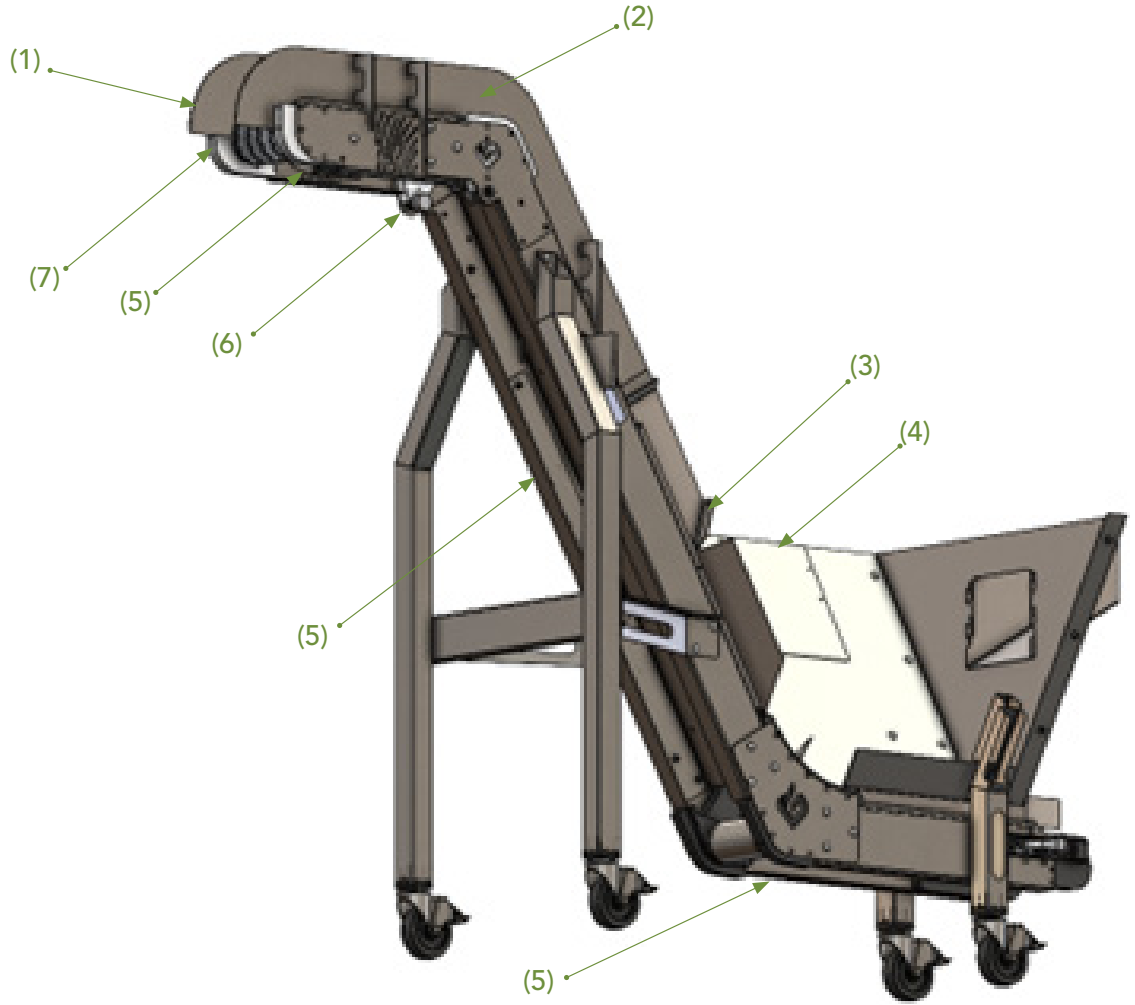
- AT ANY TIME, THE EMERGENCY STOP CAN BE PRESSED AND ALL POWER WILL BE REMOVED FROM ALL COMPONENTS.
    - The Emergency Stop Button will have to be slightly turned clockwise to be released and give power back to any part of the machine or Touch Screen.
- The **Rise Conveyo**r should be running smoothly and with very minimal mechanical noises. The Belt should not be dragging against or colliding with the Hopper, Plastic Guides, or any of the Flanges or components on the underside of the machine.
- If at any time the machine begins to not function properly, like loud or unusual mechanical sounds or if there are possible electrical issues, the first thing the operator should do is hit the Emergency Stop and unplug the machine. Some examples of the issues that could arise would be
    - The Belt is not moving, this could be from Gears slipping on the Conveyor Belt, mechanical drive chain issues, motor ceasing, or the motor not receiving power.
    - The Belt has not been properly installed on the machine and is causing gear slipping or Motor ceasing.
    - The Hopper and Belt are colliding at the base where the Belt enters the Hopper, this would be from improper installation of the Belt or Hopper.

CLEANING AND SANITIZATION

It is recommended that all stainless-steel components be cleaned with 99% Isopropyl Alcohol. All plastic components should be cleaned with soap and water. Both the **Trimmer** and **Rise Conveyor** are built with an IP 66 rating meaning they can be pressure washed with high pressure (using a 12.5 mm nozzle, 100 kPa at distance of 3 m). Before pressure washing the machines, make sure to remove both Control Boxes and cap any connections.

There are surfaces on the frame and components of the **Rise Conveyor** that should be paid special attention to because they come in direct contact with your product or the product side of the Belt whenever the machine is in use. These surfaces include but are not limited to: the internal side of the Primary Walls (1), the internal side of the Secondary Walls (2), the Lower Primary Walls (3), the internals of the Hopper (4), Shake Guards (not shown – see page 8, referenced as #3), the Frames Flanges (5), the Small Rollers (6) avoid getting any liquids or debris inside the Bearings), and the inside of the Chain Guards (7). Isopropyl alcohol is acceptable to use on the stainless steel surfaces only. Soap and water is to be used on any plastic components. Please refer to the material data sheets for more detailed information on acceptable cleaning products, handling, and the storage of these materials.

The Belt is a thermoplastic elastomer manufactured by Midwest Industrial Rubber, Inc. Please see reference 1 at the end of this user manual for specific information regarding cleaning and sanitizing your Rise Conveyor's Belt.



TROUBLESHOOTING

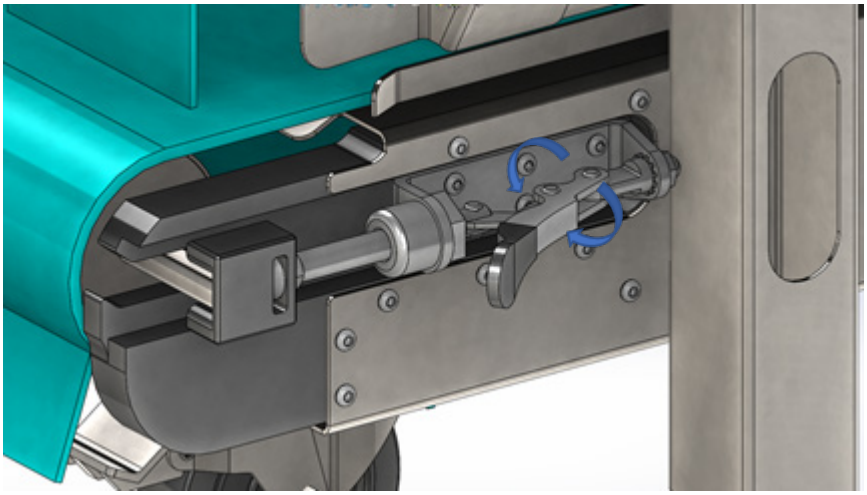
Issue: No Power

Once you have plugged the machine into the appropriate voltage wall outlet, there are two possible reasons why the machine may not be receiving power:

1. Ensure the Emergency Stop is not enabled. Lightly turn the E-Stop clockwise. If this was the issue, then the Touch Screen will immediately power up.
2. Check the fuses in the Control Box to make sure they have not blown. If they have, they will need to be replaced.

Issue: Stuck Toggle Clamps

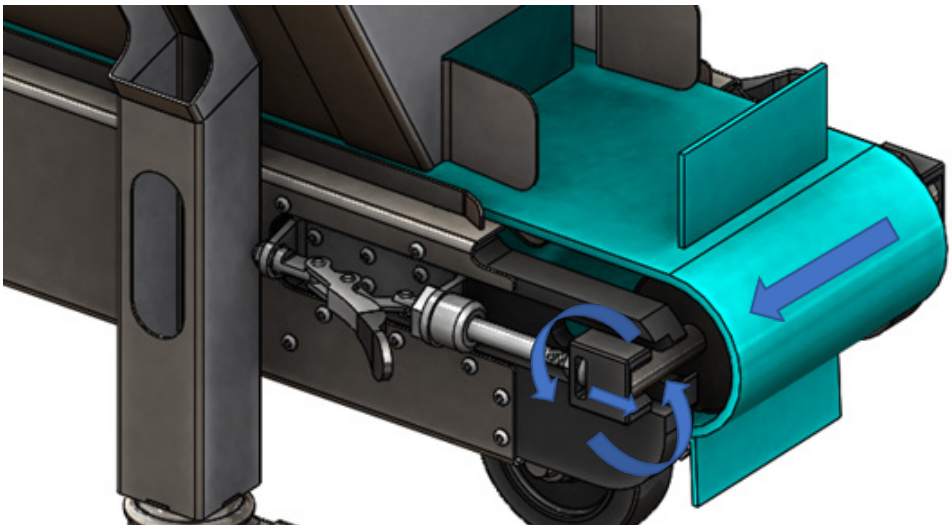
If the Toggle Clamps have become stuck or locked up, just slightly rotate the mechanisms either way along the extending axis and they will release.



Issue: Belt Walking

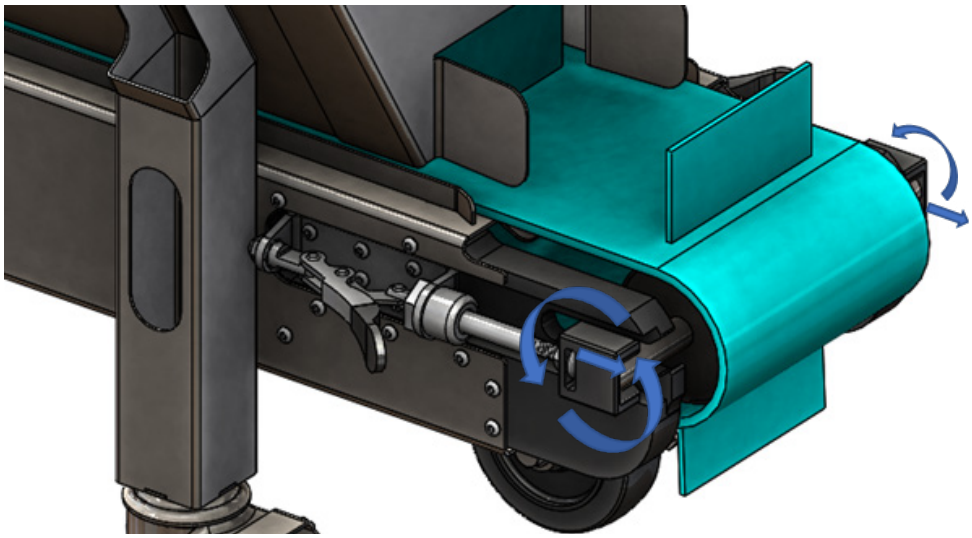
If the operator finds that the Belt is excessively walking in one direction (i.e. riding up on the white UHMW guides, excessive wear, etc.), the operator must stop the machine and extend the one Toggle Clamp that is on the side that the excessive walk is occurring. It is recommended to only do one rotation of the Toggle Bearing at a time and restart the machine to remedy the walking issue. The below example shows a Belt walking to the left and how to adjust using the Toggle Bearing.

TROUBLESHOOTING



Issue: Belt Slipping

If the Drive Gears are slipping on the Belt, stop the machine immediately and check to make sure the Belt has been fully installed and tensioned with the Toggle Clamps. If the slipping is still occurring, extend the Toggle Bolts one full rotation at a time, then retry starting the machine. It is critical that the user extend the Toggle Clamps equally, or unnecessary wear may occur.



Any other issues, comments, or complaints can be submitted to service@greenboz.com.

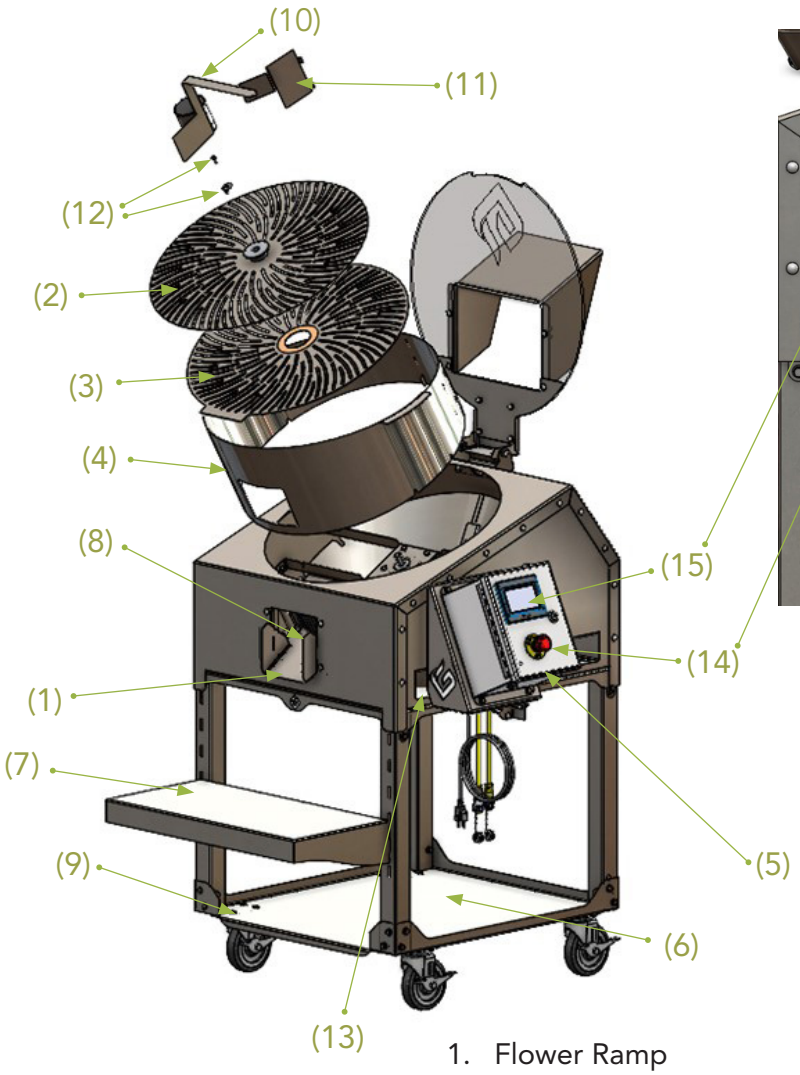
PART 2: M+ TRIMMER

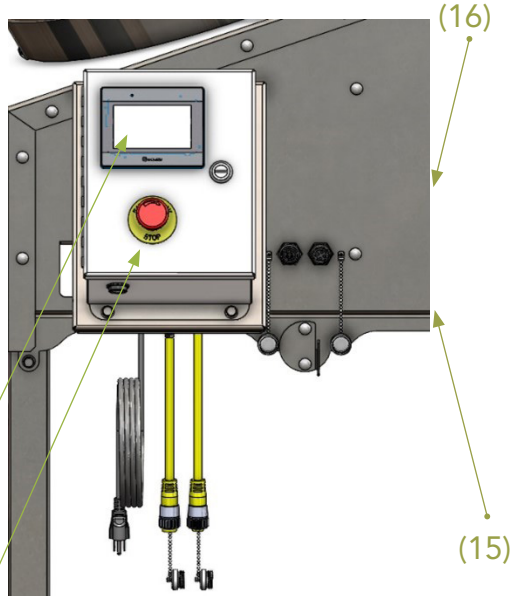
DIMENSIONS I WEIGHT I POWER

DIMENSIONS:
79 cm L x 99 cm W x 132 cm H (31" L x 39" W x 52" H) without tray
107 cm L x 99 cm W x 132 cm H (42" L x 39" W x 52" H) with tray
WEIGHT: 86.18 Kg (190 Lbs)
SPEED: Variable Speed 0-20 RPM
POWER: Amperage: 1.3 Amps, Voltage: 110 V, Hertz: 60Hz

The Industrial Control Panel is c UL US LISTED

MACHINE PARTS IDENTIFIER





1. Flower Ramp
2. Top Blade
3. Bottom Blade
4. Removable Barrel
5. Removable Control Box
6. Trim Collection Bin Location
7. Reversible Tray / Flower Collector
8. Auto Door
9. Stainless Steel Stand
10. Lower Flower Fin
11. Upper Flower Fin
12. Hub Key + Hub Screw
13. Wedge Bracket
14. Emergency Stop
15. Touch Screen

UNPACKING & OPERATION

There are a few things to do prior to using your machine for the first time. All parts noted in this manual will be included with your machine, unless otherwise noted.

Prior to your first use, you'll need to gather the following materials:

- Oil. A sample of our resin clear oil can be found in the user manual pack
- Isopropyl alcohol
- Box cutter or razor blade
- Microfiber cloth

OPERATION

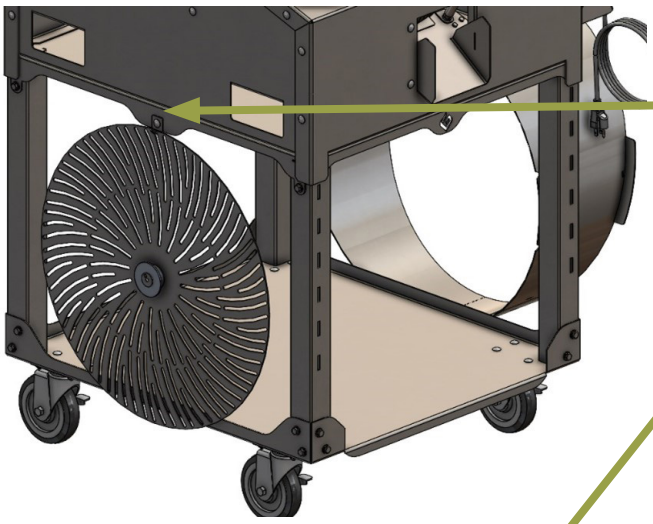
We recommend reviewing all of the disclosures and following all of the instructions to ensure safety and optimal processing. Prior to use, ensure that the machine placement is sound.

Note: this is operation in manual mode. The instructions on this page pertain to running **Model M** without **Rise Conveyor**. The instructions on how to operate complete system are included in later chapters of this manual.

1. Open the Lid and place the material to be processed into the Cutting Chamber. Close Lid when completed.
2. Plug machine into electric outlet, release E Stop, tap Screen, tap 'start trimming', use slider to select desired speed, select forward, press start. You may use the count up method by simply pressing start, or you can input a desired time and press start.
3. You may view the amount of trimmed material being removed by inspecting the Trim Bin below the **Trimmer**.
4. As material is processing, you will see a decrease in volume in the Cutting Chamber, and material will be visibly more trim.
5. Occasionally check for any stems caught between the Blades. If stems are caught, tap REVERSE and wait for 2/3 of a rotation in order to release material, then tap FORWARD.
6. When processing is complete, place the container below the Flower Door, and tap the DOOR button to open the Door while the machine is still running and release your trimmed material. Toggle between forward and reverse to get the last bit out.
7. Finally press the DOOR button once again to close the Doors. NOTE: Keep hands away from doors when opening and closing.
8. Repeat until your harvest is complete.

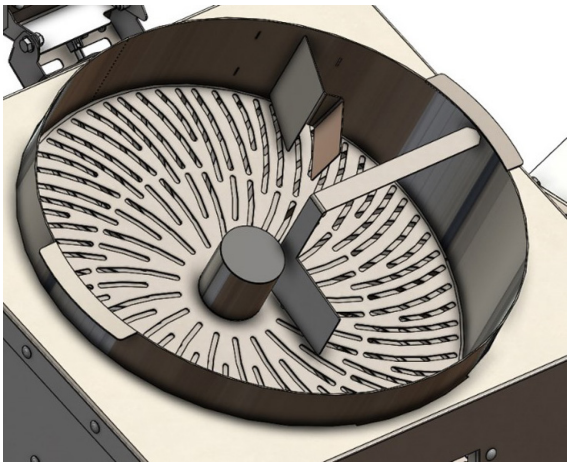
CLOSE-UPS | SHUT DOWN | CLEANING

CLOSE UPS

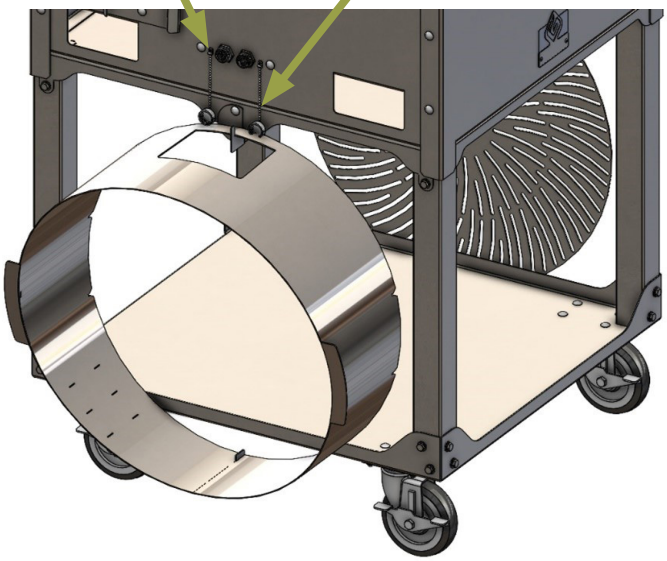


Convenient hooks on both sides for Blade and Terrel Storage

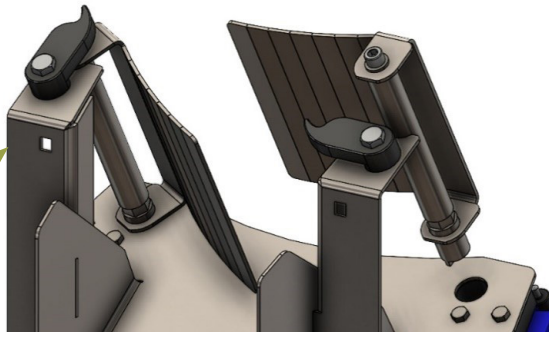
Upper and Lower Fin Assembly



Cap Connectors when you pressure wash.



Auto Door



SHUT DOWN PROCEDURE

Unplug machine from electrical outlet. Note: Keep hands away from Doors when turning off power to machine. Doors will automatically close when power is disconnected.

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CLEANING PROCEDURE

It is recommended that all stainless-steel components be cleaned with 99% Isopropyl Alcohol. All plastic components should be cleaned with soap and water. Both the **Trimmer** and **Rise Conveyor** are built with an IP 66 rating meaning they can be pressure washed with high pressure (using a 12.5 mm nozzle, 100 kPa at distance of 3 m). Before pressure washing the machines, make sure to remove both control boxes and cap any connections.

1. Unplug the machine.
2. Remove Lid.
3. Remove both Fins.
4. Remove Hub Screw and Hub Key.
5. Remove Top Blade.
6. Remove Bottom Blade.
7. Remove Barrel.
8. Remove Both Doors
9. Wipe down all surfaces with alcohol and lint free cloth.

*** If you are going to pressure wash your machine, remove the Control Box, and cap power connections.

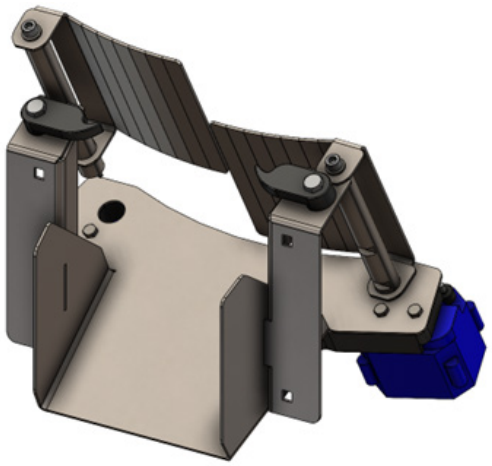
SCAN QR Code
to see the
How To Clean Your **Model M** video

DOOR REMOVAL/CALIBRATION

The new Auto Doors are controllable from the HMI of your **Model M Trimmer**; however you may be required to remove the Doors for cleaning or service.

Note: Door removal and install can only be performed when the Doors are in the CLOSED position.

DOOR REMOVAL



1. Unplug the machine.
2. Open Lid.
3. Remove Upper and Lower Fin.
4. Remove Hub Screw and Key (thumb tightened).
5. Remove Top Blade.
6. Remove Bottom Blade.
7. Remove Barrel.
8. Locate the PlasticSwivel Door Locators at the top of the Door. Turn each outward away from the center of the machine.
9. Pull up on each Door to disengage it from the Motor.

DOOR INSTALL

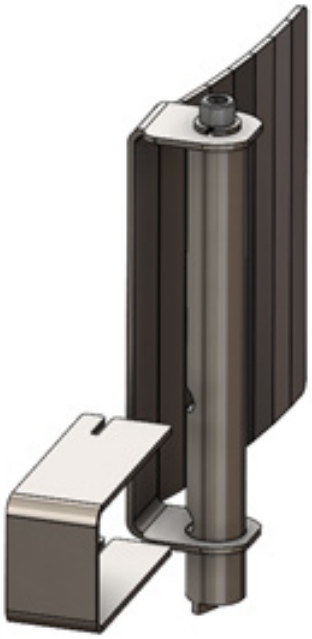
1. Insert the Door into the Door Motor Mount hole. Make sure the groove on the bottom of the Door Drive Shaft is engaged with the Motor by giving the Door a light twist. You should feel the Motor resisting the motion.
2. Repeat on the other side with the other Door.
3. Rotate both Plastic Swivel Door Locators inward toward the Doors to lock them in place.

DOOR INDEXING

When you receive your **M+ Trimmer** your Doors will be correctly calibrated. While it is unlikely, the doors may slip over time which will require them to be recalibrated. Perform the following steps to recalibrate the indexing of the Doors.

1. Remove both Doors from your machine and place them on a work surface.

2. Holding onto the Door firmly, use the 3/16" Allen wrench provided in your Starter Pack to loosen the bolt holding the Door to the Drive Shaft so that it can freely spin. (Note: you do not have to remove the bolt all the way)



3. Retrieve the Door Indexing Jig provided in your Starter Pack. Slip the jig between the Door and Drive Shaft aligning the jig with the notches cut into the Drive Shaft.

4. Once the jig is fully seated between the Door and Drive Shaft you can use the 3/16" Allen wrench to tighten the bolt on top.

5. Re-install the Door(s), Barrel, and Blades and continue trimming!

   Note: each Door and Drive Shaft is unique, do not switch the shafts or doors - however the Door Indexing Jig works on both sides.

PRODUCT PREP AND TROUBLESHOOTING

PRODUCT PREP

1. Remove water / fan leaves.
2. Remove flowers from the stems, just as you would for hand-trimming.
   Tip: Cut stem close to flower.
3. Hang drying your flowers keeps them in the best shape for trimming. Laying buds out to dry tends to press the leaves against the bud, making them harder to remove.
4. Stems should snap and leaves should be crispy and brittle so they break off, (not bend) when you run your finger down the bud.

*We recommend lowering the humidity on the last day of the drying cycle in order to crisp them leaves while keeping the bud spongy and moist.

TROUBLESHOOTING

ISSUE: Touchscreen is blank. (No 24VDC Available)

- ✓ Ensure power is available.
  - ✓ 110VAC 60Hz for US Version
  - ✓ 220VAC 50Hz for UK Version
- ✓ Check Fuse F1 (110V/220V to 24VDC Power Supply) on Safety Card.
- ✓ Check Fuse F3 (24VDC Power Supply Output) on Safety Card.
  - ✓ (2) Spare Fuses are attached to inside of Door.

ISSUE: Check Safety Displayed on Screen

- ✓ Check if Emergency Stop is depressed.
- ✓ Release Emergency Stop by rotating clockwise.
- ✓ "RISE" selected on main menu and **Rise Conveyor** not connected with ethernet cable.
  - ✓ De-Select RISE.
- ✓ Check Fuse F2 (110V/220V to Motor Driver) on Safety Card.
  - ✓ (2) Spare Fuses are attached to inside of door.
- ✓ Check IO cable is connected to Motor Driver.
- ✓ Check IO cable is connected to Touchscreen.
  - ✓ Connect IO cable to Motor Driver / Touchscreen

ISSUE: Start button does not work / Speed Control Percentage not displayed.

- ✓ Check Fuse F2 (110V/220V to Motor Driver) on Safety Card.
  - ✓ (2) Spare Fuses are attached to inside of Door.
- ✓ Check IO cable is connected to Motor Driver.
- ✓ Check IO cable is connected to Touchscreen.
  - ✓ Connect IO cable to Motor Driver / Touchscreen

TROUBLESHOOTING

ISSUE: Blade does not rotate when start button is pressed.

- ✓ Check Yellow 4 Pin Connector is connected to **Model M+** from Electrical Box.
  - ✓ Connect 4 Pin Connector.
- ✓ Countdown Completed.
  - ✓ Press RESET. Set desired Trim Time.
- ✓ Check if Welded Key is installed. (Shaft will turn while blade remains stationary)
  Install Welded Key and Hub Screw.
- ✓ Check Speed set above 0%.
  - ✓ Adjust speed.

ISSUE: Doors do not open or close. (No sound from motors)

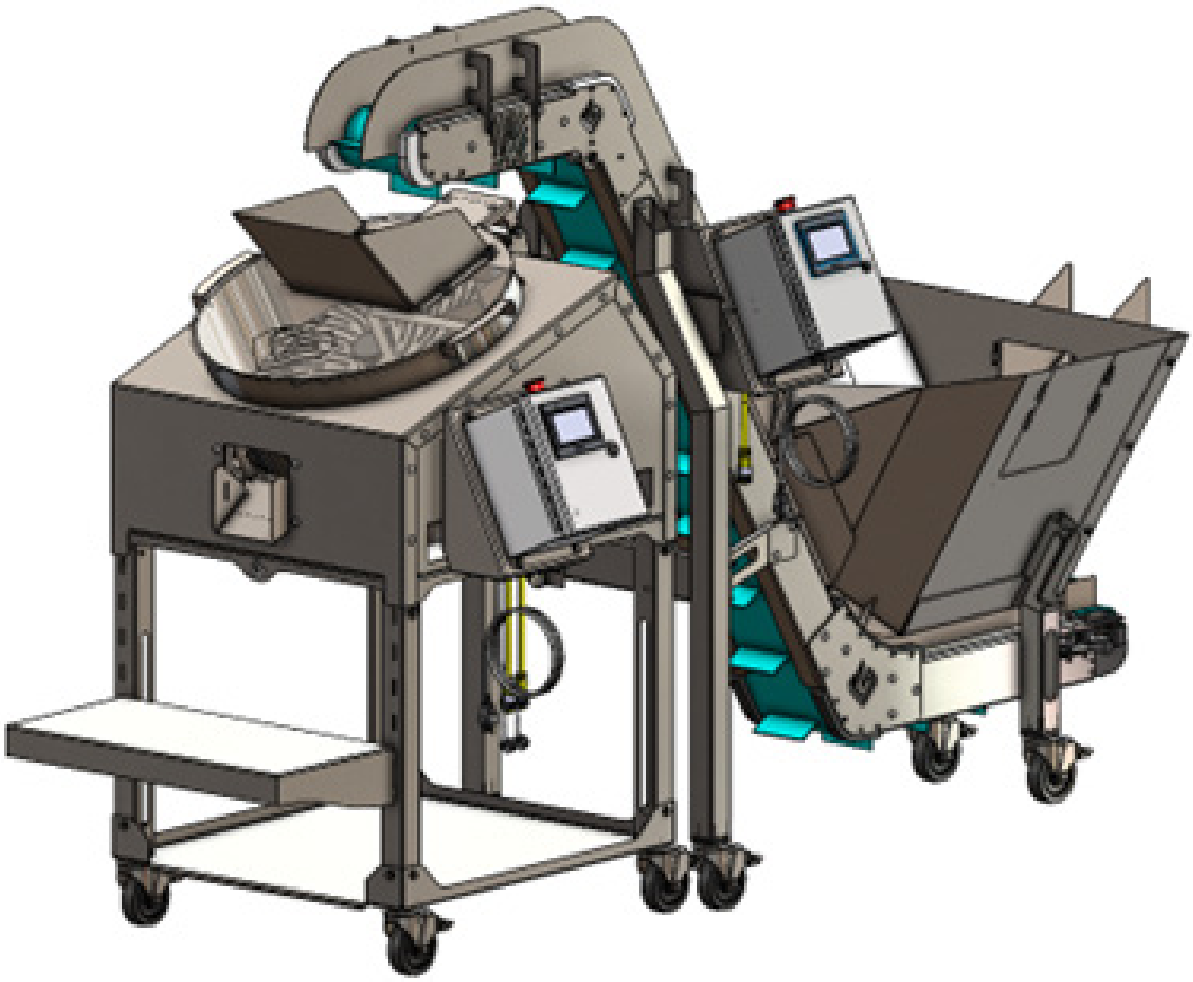
- ✓ Check Yellow 2 Pin Cable is connected to **Model M+** from Electrical Box.
- ✓ Connect Yellow 2 Pin Cable.
- ✓ Check Blue 2 Pin Connector inside of **Model M+** (You need to remove the blades and barrel to access this connector)
- ✓ Connect Blue 2 Pin Connector.

ISSUE: Rise Button deselects itself after pressing.

- ✓ Check **Rise Conveyor** is connected with ethernet cable.
  - ✓ Connect ethernet cable.
  - ✓ Check ethernet cable for damage.
- ✓ Check **Rise Conveyor** has power available.
  - ✓ 110VAC 60Hz for US Version
  - ✓ 220VAC 50Hz for UK Version

Any other issues, comments, or complaints can be submitted to **service@greenboz.com.**

PART 3: M+ TRIMMING SYSTEM



MAINTENANCE AND CLEANING

MAINTENANCE

In order to perform maintenance or clean the **Trimmer** and/or **Rise Conveyor**, make sure both machines are on level ground and have 4 feet of space surrounding the machine for you to service the machine. Additionally, lock all Casters to keep the machine from rolling and disconnect power from both machines (NOTE: be sure to keep hands away from the Doors on the **Trimmer** when disconnecting power – they will close when power is disconnected). The following inspections should be performed to keep the machines safe and in good working order:

Model M

ITEM	DESCRIPTION	INSPECTION FREQUENCY
Trimmer Lid	Open and close the Lid several times – Lid should open and close smoothly. If the Lid is cracked, replace the Lid.	Weekly
Top and Bottom Blades	Top and Bottom Blade should be removed to check for flatness. Both Blades should be flat and when sitting flush together, should not be able to slide more than a business card between them. If Blades don't sit flat, consult the blade massaging video on our website. When reinstalling, check fit of Hub on Motor Shaft – should be smooth and not bind. Be careful when handling the Blades as they are sharp.	Weekly
Teflon Ring	Teflon Ring should be checked for wear – replace when only half the Teflon Ring remains.	Daily
Doors	Remove both Doors and reinstall them (see door removal section below) – make sure there is no buildup of material in the Motor Drive Shaft Hole in the Motor Mount	Daily
Casters	Check Casters for damage, ensure they roll smoothly. If there is any damage to the Casters that prevent them from operating normally, replace them.	Weekly

MAINTENANCE

Rise Conveyor

ITEM	DESCRIPTION	INSPECTION FREQUENCY
Motor Wire	Ensure that the Belt hasn't been coming into contact with it. The Wire Cover should be clean and without cuts or defects. If the Wire has any type of imperfections, it must be repaired or replaced.	Daily
Small Rollers	They should spin freely and not come into contact with the White Plastic Guides that surround them – If they are not spinning freely, either the Guide or Roller must be adjusted as to have a gap or the small Roller must be replaced.	Daily
Toggle Bearings	These should be inspected to ensure they have not worn too far into the Bearing. There should be at least 1/8" gap between the seating of the Roller and the opening for the head of the Bolt. If there is less than 1/8", they need to be replaced.	Weekly
Chain Sprocket Mechanism	This should be inspected for looseness of the Chain or any obvious wear from the Sprocket's Teeth. The Bearings holding the Gears and larger Sprocket should also be inspected for smooth spinning or any visible wear. If there is wear on the Chain or Sprockets Teeth or if the Bearings are not smoothly spinning, they need to be replaced.	Weekly
Underside/Edges of conveyor belt	The small lips on the bottom of the Belt need to be inspected to ensure the gears have not worn them down or there is not significant rubbing somewhere on the machine. If the Gears are slipping on the Belt even when properly tensioned and there is noticeable wear on these lips, the Belt will need to be replaced.	Weekly

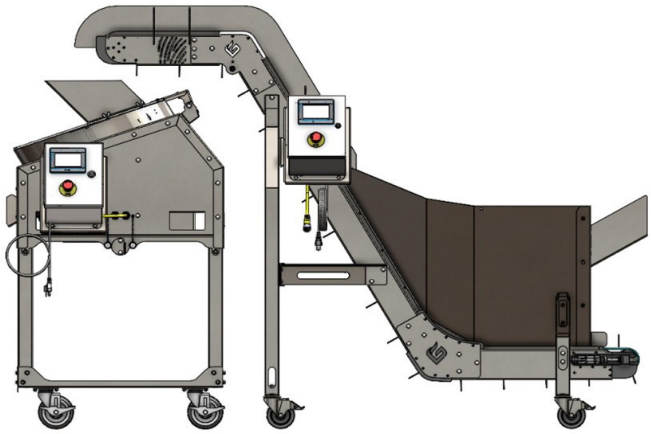
CLEANING

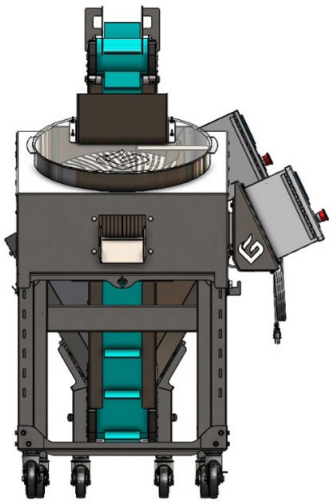
It is recommended that all stainless-steel components be cleaned with 99% Isopropyl Alcohol. All plastic components should be cleaned with soap and water. Both the **Trimmer** and **Rise Conveyor** are built with an IP 66 rating meaning they can be pressure washed with high pressure (using a 12.5 mm nozzle, 100 kPa at distance of 3 m). Before pressure washing the machines, make sure to remove both control boxes and cap any connections.

AUTOMATION
(USING THE MODEL M AND RISE CONVEYOR TOGETHER)

Both the **Model M+** and **Rise Conveyo**r can run in manual mode where they are controlled individually. However, there are automated features built into the controls of both machines that allow them to be linked together.

1. Wheel both machines into the position they will be running in. **The Rise Conveyor** should be centered on the **Model M+ Trimmer** and about 6 inches away from the back of the **Model M+ Trimmer.**





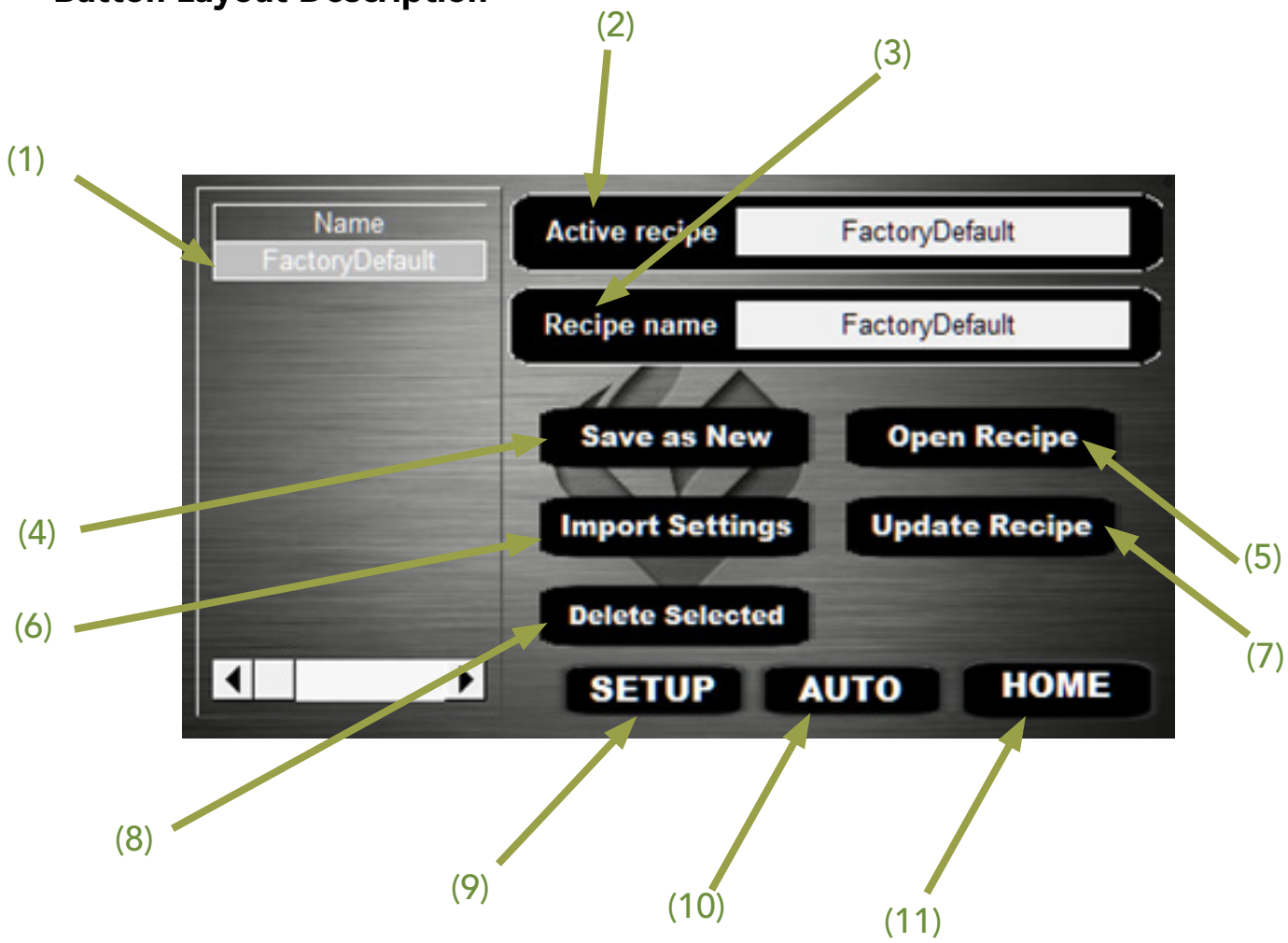
2. Connect the two machines together with the Ethernet cable that is provided in the starter pack. The ethernet cable connects the two Power Boxes together. Make sure both machines are off when plugging in the ethernet cable.
3. Once the Power Boxes are connected, the Model M+ Box will control both machines. The Rise Conveyor Box will simply display the current operation and a cycle count.

4. To start using the M+ system, touch both screens to turn on the HMI.
5. The Home screen has 4 buttons:
    a. Recipe: takes you to the recipe list screen
    b. Help: gives you information about contacting our Service Department
    c. Settings: gives you access to the driver settings and allows use of classic mode
    d. Start Trimming: takes you to the run screen

SCAN QR Code
to see the
How To Operate M+ System

RECIPE CREATION/STORAGE

Button Layout Description



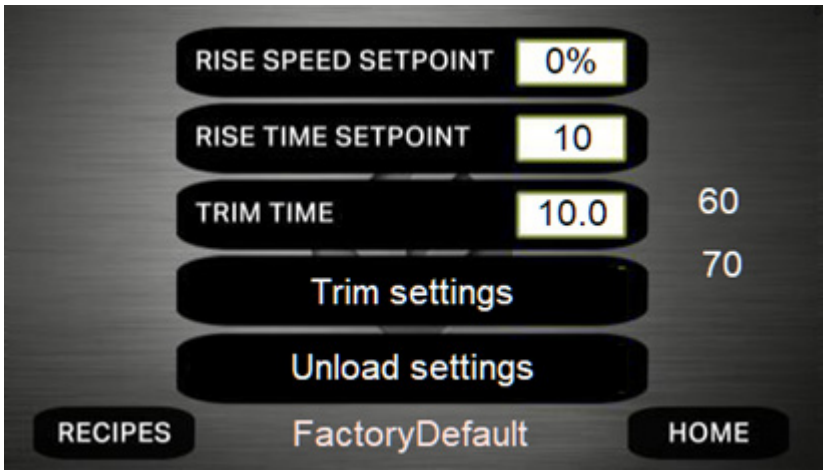
1. List of recipes
2. Displays current recipe selection
3. Displays the name of whatever recipe is selected
4. Saves a new file using an existing file as a template
5. Makes recipe active
6. Saves current recipe settings to local memory
7. Writes recipe settings to current recipe
8. Deletes the selected recipe (not the active recipe)
9. Takes you to the setup page to make changes to the recipe
10. Takes you to the Auto Run page so you can run the recipe
11. Takes you to the Home Page

RECIPE CREATION/STORAGE

Create New Recipe

1. Pressing the Recipe Button will take you to the recipe creation screen.

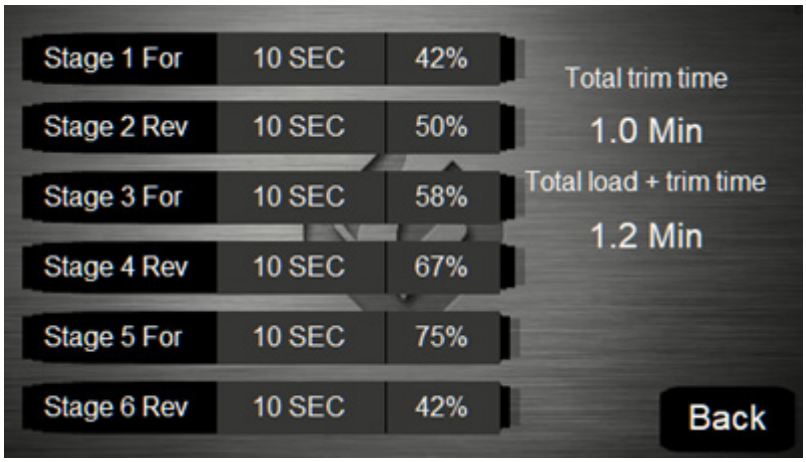
2. Here you can create, edit, and switch between saved recipes. First, we'll walk through creating a new recipe. Press 'Save as New' to create a new recipe that we will edit.
3. Next, change the name of the new recipe to make sure it doesn't get confused with the Factory Default Recipe that comes as a default. Tap the text box to the right of the Recipe Name to edit the name, then press enter.
4. Next press Open Recipe, this should make the Active Recipe field match the Recipe Name field.
5. Now we will go through programming the new recipe. Tap the 'Setup' button to take you to the next screen.



6. This screen will allow you to program every part of the cycle individually. Rise Speed setpoint (1-100%) controls how fast the **Rise Conveyor** runs at.

RECIPE CREATION/STORAGE

7. Rise Time Setpoint (1-999 sec) controls how long the **Rise Conveyor** will feed the trimmer.
8. Trim Time Setpoint (1-999 sec) controls how long the trimmer runs.
9. Pressing the 'Trim Settings' button will allow you to customize your trimmer's operation.



10. The Trim Settings page allows you to program the trim time into three forward and three reverse sequences. Note: reverse sequences help to dislodge any trapped stems between the blades. Your total trim time and total load time are displayed to the side of this page. You can also set your Trimmer Speed (1-100%) for each sequence from this page.
11. Press the 'Unload Settings' button to adjust your unload cycle's length and blade direction.

RECIPE CREATION/STORAGE

12. The unload settings control how long the machine runs with the Auto Door open. You can control how many times the Bade rotates back and forth, at what speed the Blade rotates, and the duration of each cycle. Depending on how long it takes for your product to exit the trimming area, you can increase or decrease your unloading time. The standard unload cycle is set to switch between forward and reverse twice – be sure to input your desired time and speed for each direction.
13. Now that all the changes to the recipe have been completed, press the 'Recipes' button to get back to the Recipe Creation page.
14. On the Recipe Creation page, make sure you press 'Update Recipe'; otherwise, you risk losing all the settings changes you made previously.
15. You can create as many recipes as you want on this page, and switching between them is straightforward. First, select the recipe on the list you would like to run and tap 'Open Recipe' to make the recipe active.
16. And finally, to delete a recipe simply select the recipe you want to delete and tap 'Delete'.
17. Press 'Home' to return to the home screen.

Help

1. The Help screen displays GreenBroz' contact info and operating hours.

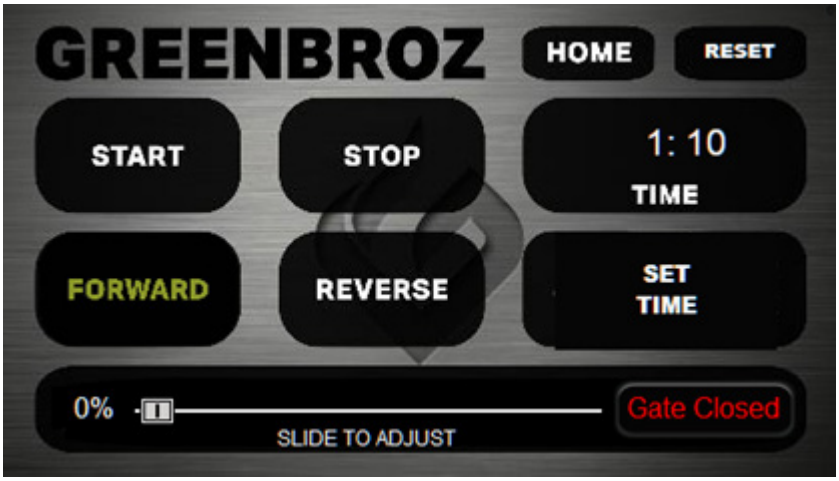
2. Press 'Home' to return to the home screen.

RECIPE CREATION/STORAGE

Settings

1. This screen will allow you to change the driver settings and machine run time, and cycle numbers.

2. The 'Classic Mode' button will take you to the classic manual screen for machine operation.

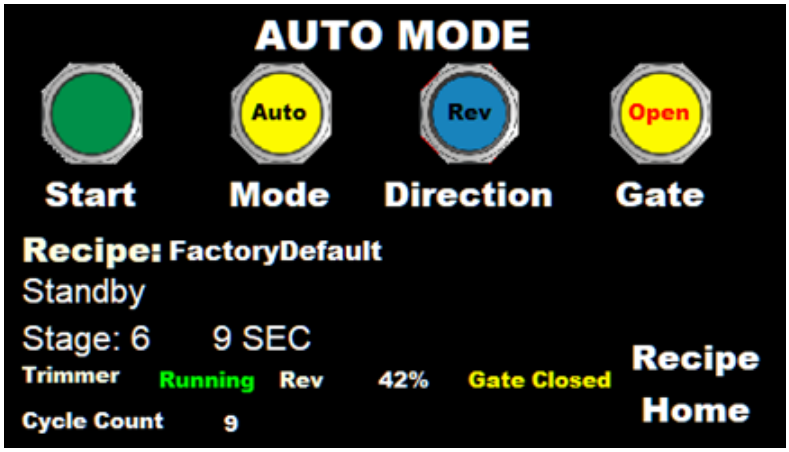


3. This screen is the classic run screen and allows you to run the **Trimmer** in manual mode. This screen does not control the **Rise Conveyor** in any way.

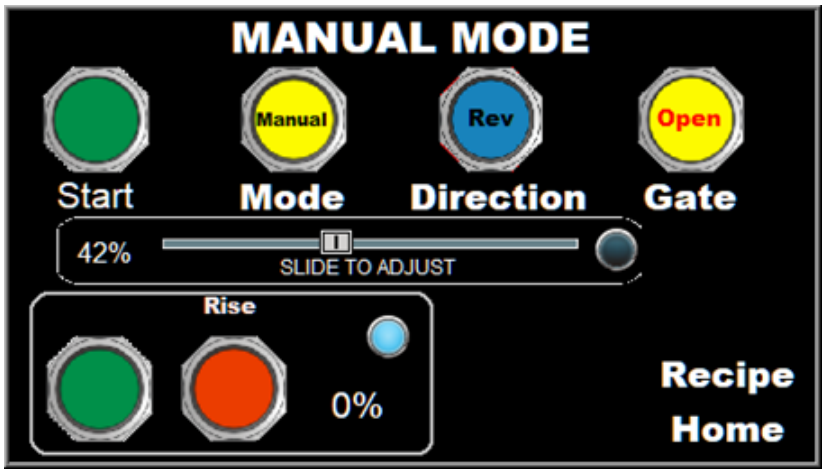
RECIPE CREATION/STORAGE

Start Trimming

1. The Start Trimming Button will take you to the Trimmer Control Screen that will allow you to run the machines together.



2. Before running the **Model M+** in Auto Mode, make sure you have the correct recipe selected.
3. To start running the **Trimmer** in Auto Mode, simply press start. During the cycle, information about what trimming stage is active, the direction, the speed, and the door position is displayed below the run buttons on this screen.
4. When the Rise Conveyor Hopper is empty, and you want to stop the cycle, simply press 'Stop' and the cycle will stop after the **Trimmer** empties.
5. You can also switch between Auto Mode and Manual Mode on this screen. Tap the 'Auto' button, and you will see the display change to allow you complete manual control over both machines.



6. From this page or the Auto Mode page you can go to the Recipe creation screen or the Home screen by tapping 'Recipe' or 'Home'.

WARRANTY REGISTRATION

GO TO GREENBROZ.COM TO REGISTER.

Click on the product registration page to register GreenBroz products. You must register within 30 days of product receipt date to activate your warranty.

UNLESS SUBPOENAED, ALL INFORMATION OBTAINED BY GREENBROZ INC. WILL BE KEPT PRIVATE AND SECURE. GREENBROZ INC. WILL NOT SHARE OR DISTRIBUTE YOUR INFORMATION WITHOUT CONSENT.

LIMITED WARRANTY

Products covered: This limited warranty is limited to GreenBroz, Inc. Dry Trimmer products manufactured by GreenBroz, Inc. (the "products") and provides that such product is free from defects in material and workmanship.

Length of warranty: The length of this warranty shall be 36 months from the product receipt date.

To Qualify for this warranty: The product must be purchased from GreenBroz, Inc., or a dealer authorized by GreenBroz, Inc., to sell the products. This warranty only applies to the first retail purchaser and is not transferable to subsequent owners.

What GreenBroz will repair or replace under warranty: GreenBroz, Inc. will repair or replace, at its option, any part that is proved to be defective in material or workmanship under normal use during the applicable warranty period. Warranty repairs and replacements will be made without charge for parts or labor. Anything replaced under warranty becomes the property of GreenBroz, Inc. All parts replaced under warranty will be considered as part of the original product and any warranty on those parts will expire coincidently with the original product warranty. This limited warranty does not cover normal wear and tear including, but not limited to trim blades, brush assembly, sweeper bar, hub assembly, tabletop tray, forward-reverse switch, blade tension screw.

To obtain Warranty Service: Contact GreenBroz, Inc. for a return authorization and instructions for warranty.

Exclusions: 1. Any damage or deterioration resulting from neglect of periodic maintenance as specified in any product owner's manual or any improper repair or maintenance; 2. Neglect, unauthorized alteration, modifications, misuse, incorporation of use of unsuitable attachments or parts; 3. Damage caused by dirt, pressure or steam cleaning the product, salt water, corrosion, rust, varnish, abrasives, and moisture; or 4. Any product that has ever been declared a total loss or sold for salvage by a financial institution or insurer.; 5. Damage caused by an independent third party that is not the registered owner.

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