Globaltek™ Equipment
Rotary Accumulation Tables

User's Manual

WARNING:	Read this User's Manual in its entirety before setting up or operating the accumulation table.

This manual covers the operation and maintenance of the following models of Globaltek's Rotary Accumulation Tables.

24 Inch Rotary Accumulation Tables: ROT-24EAN, ROT-24EAY, ROT-24EUN, ROT-24EUY, ROT-24OAN, ROT-24OAY, ROT-24OUN, ROT-24OUY.

36 Inch Rotary Accumulation Tables: ROT-36EAN, ROT-36EAY, ROT-36EUN, ROT-36EUY, ROT-36OAN, ROT-36OAY, ROT-36OUN, ROT-36OUY.

48 Inch Rotary Accumulation Tables: ROT-48EAN, ROT-48EAY, ROT-48EUN, ROT-48EUY, ROT-48OAN, ROT-48OAY, ROT-48OUN, ROT-48OUY.

60 Inch Rotary Accumulation Tables: ROT-60EAN, ROT-60EAY, ROT-60EUN, ROT-60EUY, ROT-60OAN, ROT-60OAY, ROT-60OUN, ROT-60OUY.

Video Tutorials	QR Code
Learn all about your new accumulation table by watching our on-line video tutorials. Our video tutorials show you everything from unpacking, operating, and adding accessories to your accumulation table. **Scan the QR code to view the video tutorials.**	

Globaltek™ Equipment

CAUTION: Read this manual in its entirety before attempting to set up or operate the accumulation table. Failure to do so could cause bodily harm and/or damage to the accumulation table.

While reading this User's Manual, you will sometimes see call out boxes or headings with the term Note, Caution, Warning, and Danger.

Notes, Cautions, Warnings, and Dangers notify the reader that incorrectly following instructions could damage the accumulation table or could cause bodily injury.

Preface:

This manual introduces you to the Globaltek™ Equipment's rotary accumulation tables. The manual will orient you to the many features and procedures that enable you to set up and operate the rotary accumulation tables.

CAUTION: If the accumulation table is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Globaltek™ Equipment on the Internet

For further information on documentation and support for your accumulation table or for information on other Globaltek™ Equipment products, please visit our web site: https://www.globaltekconveyors.com/.

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About GlobalTek™ Equipment

Established in 2006, Globaltek™ Equipment is a family owned and operated business. Our cutting-edge manufacturing facility and headquarters are located in Miami, Florida. We manufacture packaging conveying systems comprising conveyors, transporting and transfer systems, and accumulating tables.

All of our packaging systems are constructed of UL Certified and Made in the USA components. Our accumulation tables feature 304 stainless steel construction, as well as a made in USA Bodine motor with variable speed controller.

Contact Information:

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Safety Information:

Safety Symbols:

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The symbols do not by themselves eliminate any danger. The instructions and warnings they give are not substitutes for proper accident prevention measures.

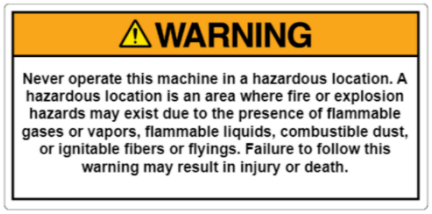
	**DANGER:** Failure to obey this safety warning WILL result in death or serious injury to yourself or others.
	**WARNING:** Failure to obey this safety warning CAN result in death or serious injury to yourself or others.
	**CAUTION:** Failure to obey this safety warning MAY result in personal injury to yourself or others or result in damage to the accumulation table.
	**NOTE:** Damage to the accumulation table may result if these instructions are not followed.

Globaltek® Equipment Safety Labels:

The safety label is located on the side of the accumulation table, under the motor controller. It is important to be aware of the meaning of these labels to ensure safe operation of the accumulation table.

WARNING: Read and understand all of the safety label descriptions in the table below before operating the accumulation table.

Description	Label
Wear Eye/Ear Protection: A reminder that operating the accumulation table may be harmful to the eyes and ears. Always wear eye protection when operating or when performing maintenance on the accumulation table. Proper ear protection is suggested when operating the equipment. Located on the side of the accumulation table, under the motor controller.	
Machine lockout: A reminder to turn off and lock out the electrical supply before servicing any components. Located on the side of the accumulation table, under the motor controller.	
General Warning: This area can only be accessed by a trained service technician. Located on the side of the accumulation table, under the motor controller.	
Crush Hazard: Keep hands clear while operating. A reminder that various manufacturing processes can present a crush hazard if hands or objects are near the rotating disk of the accumulation table. Located on the side of the accumulation table, under the motor controller.	
Risk of Electrical Shock: A reminder to unplug the accumulation table from the electrical outlet before cleaning or servicing. Located on the side of the accumulation table, under the motor controller.	

Pinch Hazard: Keep hands clear while operating. A reminder that movement of the rotating disk of the accumulation table can be a pinch hazard if hands or objects are placed in these locations. Located on the side of the accumulation table, under the motor controller.	
Shear Hazard: Keep hands clear while operating. A reminder that movement of the rotating disk of the accumulation table can be a shear hazard if hands or objects are placed in this location. Located on the side of the accumulation table, under the motor controller.	
Entanglement Hazard: Keep hands clear while operating. A reminder that movement of the rotating disk of the accumulation table could result in entanglement should hands or objects be placed in this location. Located on the side of the accumulation table, under the motor controller.	
Risk of Fire or Explosion: A warning to never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death. Located on the side of the accumulation table, under the motor controller.	

Electrical Safety

Hazardous Locations (Explosive Atmospheres):

Never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases, vapors, liquids, combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death.

WARNING: Never operate this machine in a hazardous location. A hazardous location is an area where fire or explosion hazards may exist due to the presence of flammable gases, vapors, liquids, combustible dust, or ignitable fibers or flyings. Failure to follow this warning may result in injury or death.

Electrical Requirements:

The input voltage to the speed controller on the accumulation table is 115 VAC ± 10%, 50/60 Hz. single phase electricity with a maximum continuous input current of 5.7 amps.

	AC Voltage	Phase	Current
USA	**115V**	**Single Phase Grounded**	**15A Service 5.7A**
Canada	**115V**	**Single Phase Grounded**	**15A Service 5.7A**

Main Disconnect:

The main disconnect is accomplished by disconnecting the AC power cord at the electrical outlet. Ensure that the power cord and electrical outlet are easily accessible.

WARNING: The main disconnect is accomplished by disconnecting the AC power cord at the electrical outlet. Ensure that the power cord and electrical outlet are easily accessible.

Grounding Instructions:

The accumulation table must be plugged into a properly installed outlet and grounded in accordance with all codes and ordinances. Never modify the plug in any way. Check with a qualified electrician if you think the outlet may not be properly grounded.

WARNING: The accumulation table must be plugged into a properly installed outlet and grounded in accordance with all codes and ordinances. Never modify the plug in any way. Check with a qualified electrician if you think the outlet may not be properly grounded.

Operational Safety:

DANGER:

- Do not use the accumulation table in the presence of flammable liquids, gases or vapors, combustible dust, or ignitable fibers or filings.
- This product is not designed for, nor intended for use in hazardous areas as defined by ATEX or the NEC (National Electric Code).

WARNING:

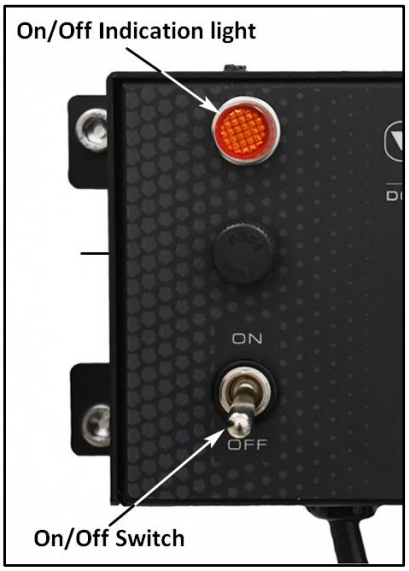
- Do not move the accumulation table without additional personnel or mechanical assistance.
- Never operate this machine without all safety guards and covers in their proper positions.
- All service must be performed by qualified original manufacturer's service personnel.
- Disconnect and lockout all electrical power and air sources prior to any service or maintenance work.
- Keep hands and foreign objects away from all moving parts and pinch points.
- Keep hands clear of all moving parts, in particular the rotating disk. Failure to do so could cause injury.
- Always wear OSHA approved eye/ear protection when operating this machine.
- Do not make any changes or modifications to this machine.
- This machine may start automatically or remotely at any time.
- Never stand or climb on the accumulation table - use only an OSHA approved stepladder.
- Machine design including controls and logic should not be changed or modified since it may result in injury or damage to the accumulation table.
- Do not operate the accumulation table if the power cord is cracked or broken.
- If the accumulation table shows signs of malfunction, turn off the electric power and unplug the power cord.

- Do not operate the accumulation table if there is obvious damage to the accumulation table.
- Dry location use only. Do not expose the accumulation table to rain, water, wet, or damp conditions or locations.
- Do not abuse the power cord. Never pull on the cord to disconnect from the electrical outlet. Keep cord away from heat, oil, and sharp edges.
- Be sure power switch is in “off” position when plugging in.
- If fluid splashes on the accumulation table, unplug the accumulation table immediately. Wipe the accumulation table with an absorbent cloth to prevent damage. The accumulation table must remain unplugged until it has been thoroughly dried.
- A reminder to turn off the electric power and unplug the power cord before cleaning or servicing, or when the accumulation table is not in use.
- Do not block the face panel of the speed control box. The power switch must always be easy to access. The power cord must always be easy to disconnect from the electrical outlet.
- When conveying hazardous chemicals and/or biological agents, take all suitable protective measures, such as wearing protective glasses and gloves resistant to the substances used. Follow local and/or national regulations for safe operation and maintenance of the system.
- Do not wear loose or baggy clothing when you operate the accumulation table. Remove anything that may cause injury, i.e. neck ties, jewelry, etc. Tie back long hair.
- Never operate the accumulation table without all safety guards and covers in their proper positions.

CAUTION:

- This product is not intended for use in washdown environments.

Lockout/Tagout Procedures:



The following guidelines are provided to establish a minimum requirement for the lockout of energy isolating devices whenever maintenance or service is performed on equipment and associated parts. It is further advised that an independent safety study be performed on the machinery, its installation, and Lockout/Tagout procedures.

1. Follow the safety procedures specified in the safety section of this manual, as well as the safety procedures specified throughout this manual.

2. Stop the equipment using the normal procedure of turning the On/Off switch to the Off position as explained on page 14 of this manual.

3. The equipment can be isolated from its electrical energy source by unplugging the main AC power cord from the electrical outlet and then enclosing the male plug of the AC power cord into an electrical plug cover such as the example shown in the picture to the right (not included). Once the male end of the plug cover is enclosed, a padlock can be utilized to lock the male plug into the plug cover, preventing its use.

Lifting Points on the Rotary Accumulation table

When lifting and carrying, it is recommended that at least two people carry the rotary accumulation table. Before lifting, ensure that the AC power cord of the accumulation table is unplugged, and the cord is organized in such a way as to not to become damaged during the movement of the accumulation table. Ensure all parts of the accumulation table are tightly fastened to ensure that these parts will not move when the accumulation table is lifted. Both carriers should stand on opposite sides of the accumulation table, placing their hands at the corners of the accumulation tables as is shown in the picture above.

Specifications:

Available Diameters	**24 inches / 36 inches / 48 inches / 60 inches**
Horse Power	**3/8 HP**
Speed	**0 – 8 RPM**
Max Weight Capacity	**800 pounds per square foot**
Belt Material	**Acetal (Delrin) tabletop plastic chain belt**
Floor to Disk Height	**Adjustable from 35 – 39 inches**
Disk Thickness	**1/8 inches (11 gauge)**
Guide Rail Height	**Adjustable from 0 - 5 inches**
Electrical Requirements	**115VAC ± 10%, 50/60 HZ, 5.7 Amp. Single Phase Electricity**

Electrical Requirements

Input Voltage and Current (from electrical outlet to the motor controller):

Input Voltage: 115 VAC ± 10%, 50/60 Hz. single phase.
Maximum Input Current (Continuous): 5.7 amps.

Input Voltage & Current	AC Voltage	Phase	Current
USA	**115V**	**Single Phase Grounded**	**15A Service 5.7A**
Canada	**115V**	**Single Phase Grounded**	**15A Service 5.7A**

Output Voltage and Current (from the motor controller to the motor):

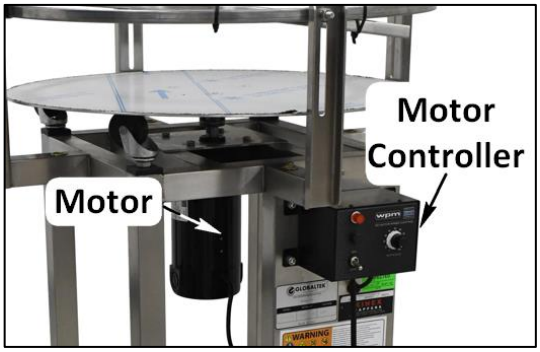
Output Voltage (from control box to the motor): 0 – 130 VDC.
Maximum Output Current (continuous): 2.8 amps DC.

The Parts of the Accumulation Table

The accumulation table is shown below. The guide rail, motor controller, height adjustable feet, legs, motor, and the guide rail mounting posts are indicated.

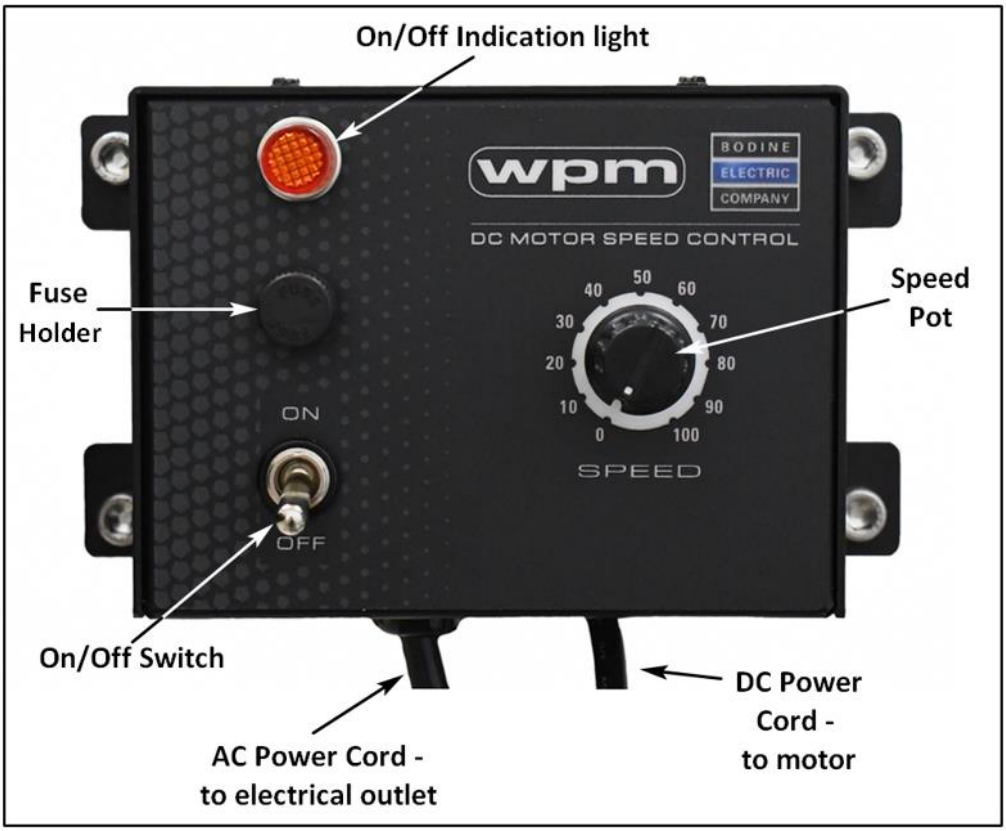
The Motor Control Box

The motor control box is located on the side of the accumulation table and is shown in the picture to the right.



The motor control box is manufactured by the Bodine Electric Company. It is their Model 0791 Filtered PWM DC basic speed control. For more information, including a downloadable user manuals, as well as downloadable schematics and drawings, you can visit the following link to their web site: https://www.bodine-electric.com/products/dc-controls/filtered-pwm-dc-basic-speed-control/0791/

A close up view of the motor control box is shown below, the On/Off indication light, the speed pot, the DC power cord, AC power cord, On/Off switch and the fuse holder are indicated.

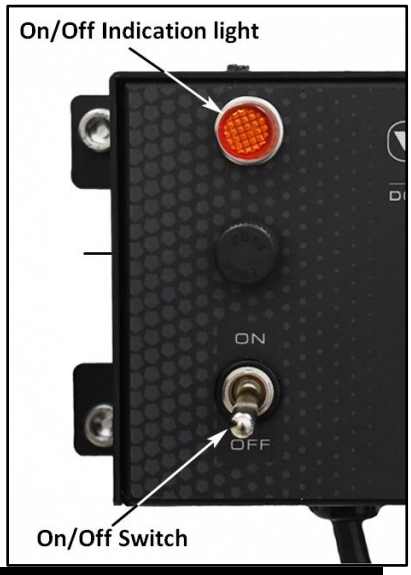


On/Off Switch

The On/Off switch is located at the bottom left corner of the control box and is shown in the picture to the right.

- To turn the power to the control box on, lift the toggle switch to the “ON” position.
- To turn the power to the control box off, lift the toggle switch to the “OFF” position.

Always confirm that the On/Off switch is in the off position before plugging the AC power cord into an electrical outlet.



NOTE: Confirm the that the On/Off switch is in “Off” position before plugging the power cord into an electrical outlet. Failure to do so could cause injury or damage to accumulation table.

On/Off Indication Light

The on/off indication light provides a visual signal that the control box is on. When the On/Off switch is turned to the on position, the On/Off indication light will illuminate.

The Speed Pot (Speed Control)

The speed pot, or speed control dial, is located on the right side of the control box and is shown in the picture below to the right.

There are numbers indicated around the speed control knob from 0 – 100 in increments of 10. These numbers can be viewed as percentages. For example, if the speed control dial is set to the the number 10, the disk will rotate at approximatley 10% of it its maximum speed. The maximum speed of the accumulation table is 8 RPM.

AC Power Cord

The rotary accumulation table is equipped with a 6 foot AC power cord that has a 3-prong plug with ground pin. The AC power cord is securely fastened to the bottom of the control box and cannot be removed.

Connecting the Power Cord to an Electrical Outlet:

The power cord is the mains disconnect for the rotary accumulation table. The power cord must be connected to an electrical outlet that provides 115 VAC ± 10%, 50/60 Hz. single phase electricity. Make sure that the outlet is overload protected and of sufficient amperage capacity (5.7 amps). If there is any doubt that the outlet box complies with this specification, have a qualified electrician inspect the outlet box.

	**CAUTION:**	The power cord must be connected to an electrical outlet that provides 115 VAC ± 10%, 50/60 Hz. single phase electricity. Make sure that the outlet is overload protected and of sufficient amperage capacity (5.7 amps). If there is any doubt that the outlet box complies with this specification, have a qualified electrician inspect the outlet box.

Grounding Instructions

The AC power cord must be plugged into a properly installed AC electrical outlet that is grounded in accordance with all codes and ordinances. Never modify the plug in any way. Check with a qualified electrician if you think the outlet may not be properly grounded.

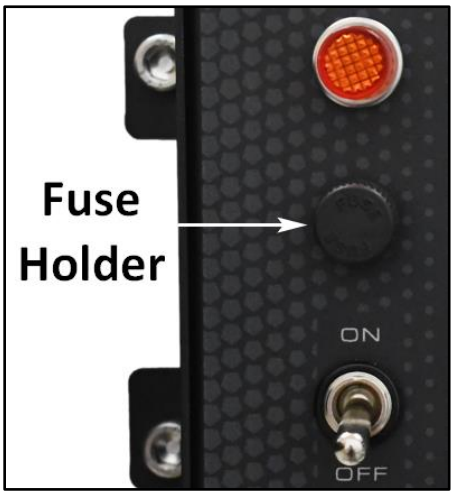
	**CAUTION:**	The AC power cord must be plugged into a properly installed AC electrical outlet that is grounded in accordance with all codes and ordinances. Never modify the plug in any way. Check with a qualified electrician if you think the outlet may not be properly grounded.

Fuse Holder:

The fuse box holder is located on the face of the control box and is shown in the picture to the right. The fuse holder contains the fuse.

The fuse is an 8 amp, 250 VAC, fast acting fuse.

The fuse protects the accumulation table from excessive electrical current. The fuse will blow when the accumulation table is supplied with too much voltage by mistake, or from a power surge. The fuse will also blow if there is a short created in the circuits of the accumulation table. The blown fuse will terminate the power supply to the accumulation table.



NOTE: For continued protection against risk of fire, replace the fuse with the same type of fuse having the same electrical rating, 8A, 250VAC.

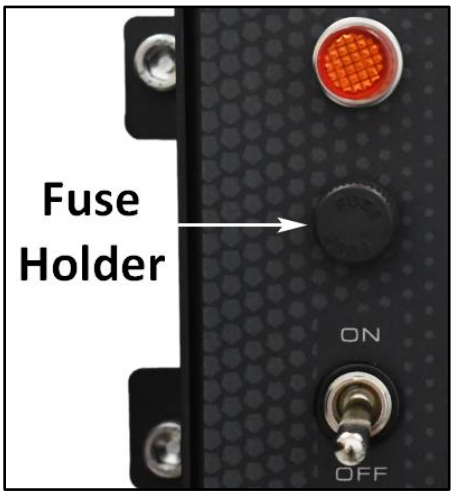
Replacing the Fuse

WARNING: Be sure to unplug the AC power cord from the electrical outlet prior to replacing the fuse. Failure to do so could cause injury.

1. Turn the power to the control box off following the instructions found on page 14 of this manual.

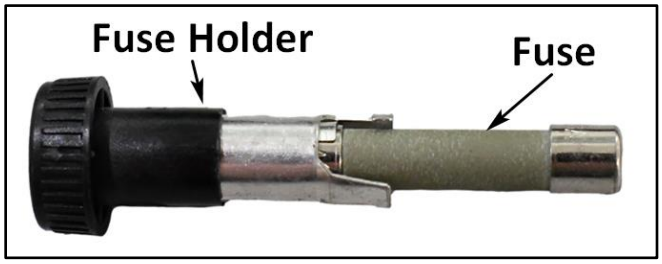
2. Unplug the AC power cord from the electrical outlet prior to replacing the fuse. Failure to do so could cause injury.

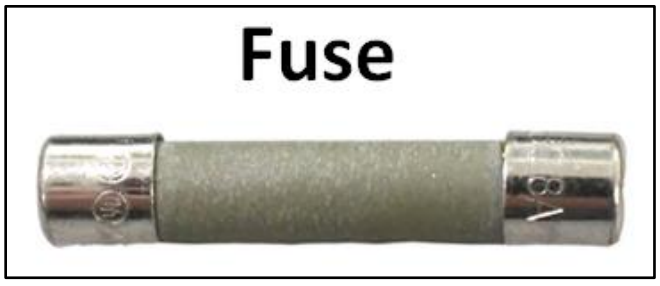
3. Remove the fuse holder from the control box by pushing the fuse holder in and then rotating the fuse holder counterclockwise until it releases.



4. Pull the fuse holder out of the control box. An image of the fuse holder with an attached fuse is shown to the right.

5. Remove the blown fuse from the fuse holder and insert a new fuse into the fuse holder. It does not matter which end of the fuse is inserted into the fuse holder. Be sure to replace the fuse with the same type of fuse with the same electrical rating, 8A, 250VAC.





NOTE: For continued protection against risk of fire, replace the fuses with the same type of fuses with the same electrical rating, 8A, 250VAC.

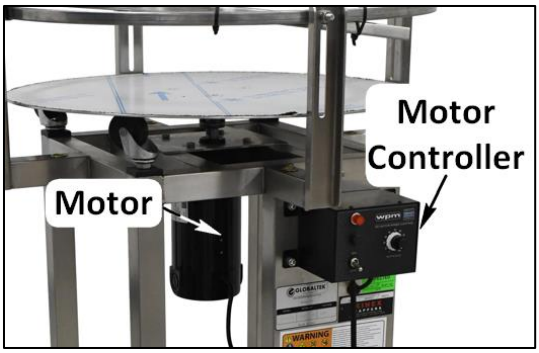
6. Gently slide the fuse holder with an inserted fuse back into the control box. You may need to rotate it slightly in order to be able to insert it fully. Once the fuse holder is fully inserted into the control box, press it in and rotate it clockwise to lock it in place.

7. Plug the power cord back into the electrical outlet.

8. Turn the On/Off switch to the On position to test.

If the new fuse blows shortly after it has been installed, there is a problem with the electrical system of the accumulation table and the machine will need to be serviced. Do not attempt to repair the accumulation table. Within the United States and Canada, call Globaltek™ Equipment at (305) 418-9632 to arrange for repair service.

The Motor



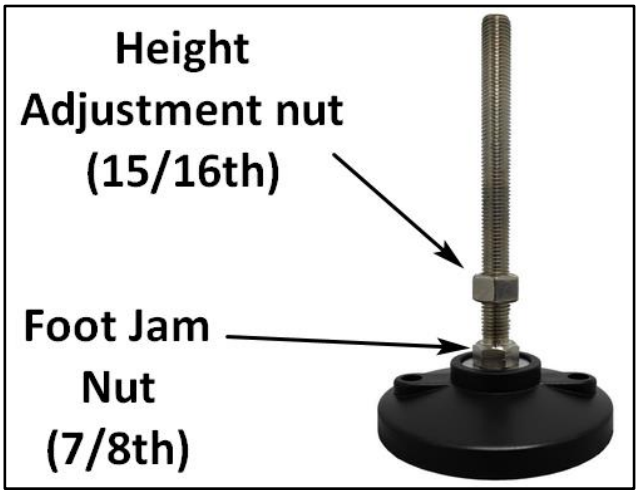
The motor is located under the rotating disk of the accumulation table and is shown in the picture to the right.

The motor is manufactured by the Bodine Electric Company. It is their model 5049 42A5-FX parallel shaft DC gearmotor. For more information, including a downloadable wiring diagram, as well as downloadable schematics and drawings, you can visit the following link to their web site: https://www.bodine-electric.com/products/dc-parallel-shaft-gearmotors/42a5-fx-parallel-shaft-dc-gearmotor/5049/

Adjusting your Accumulation Table

Height Adjustable Feet

An adjustable foot is shown to the right. The height adjustment nut and foot jam nut are indicated.

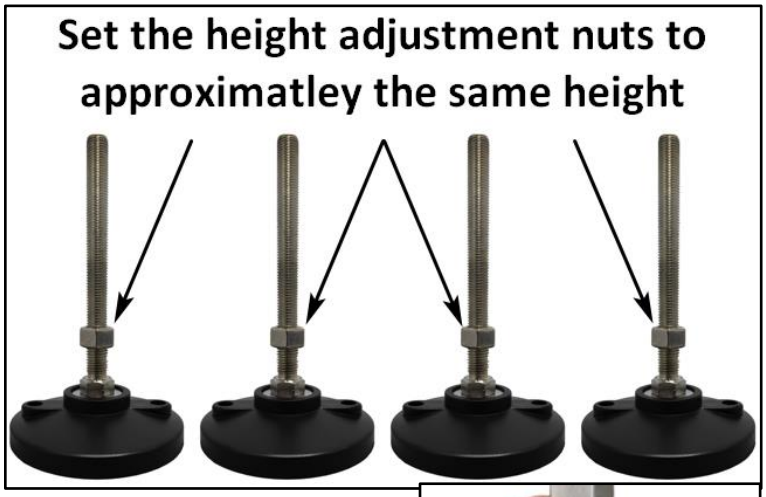


The height adjustment nut locks the foot in place once the desired height of the accumulation table is determined.

The foot jam nut is locked to the round foot. Rotating the foot jam nut rotates the foot. The foot jam nut provides an easy means of rotating the foot when raising, lowering, or leveling the accumulation table.

Installing the Feet onto the Legs of the Conveyor

Set the height adjustment nuts to approximately the same height on the threads of all four feet as is shown in the image to the right. Do not be concerned with determining the exact final height of the accumulation table at this time. Adjustments can be made later to adjust the final height of the accumulation table.

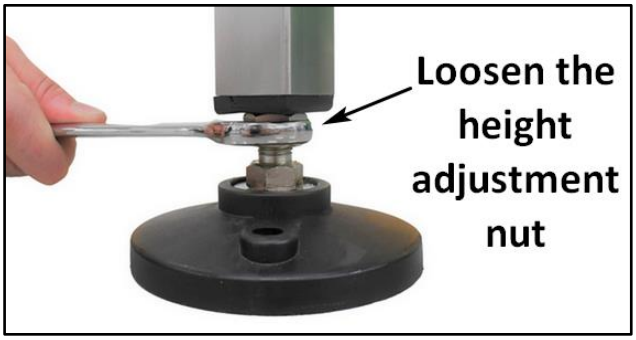


The adjustable feet are threaded into the legs of the accumulation table by hand as shown in the picture to the right. The height of the accumulation table is adjustable from 35 – 39 inches. The further you thread the feet into the legs of the accumulation table, the lower the height of the accumulation table will be.

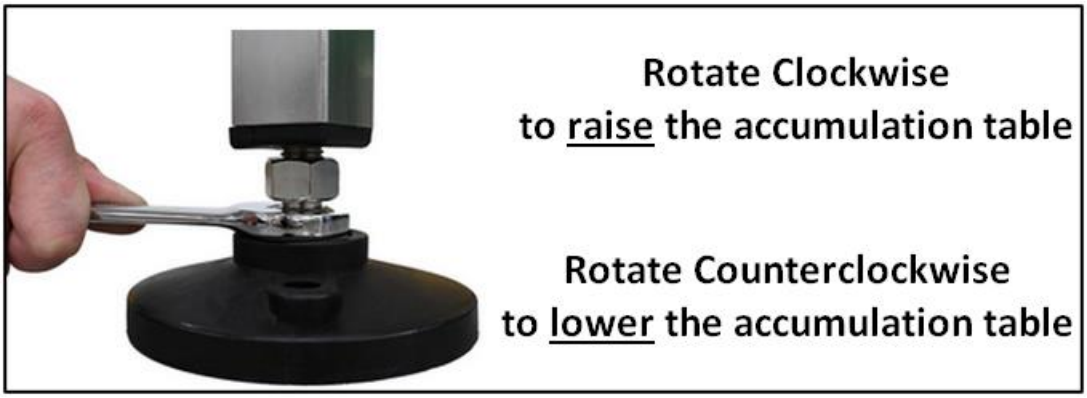
Thread the adjustable foot into the leg until the height adjustable nut contacts the leg of the accumulation table. Leave the nut only snug for now.

Raising and Lowering the Accumulation Table

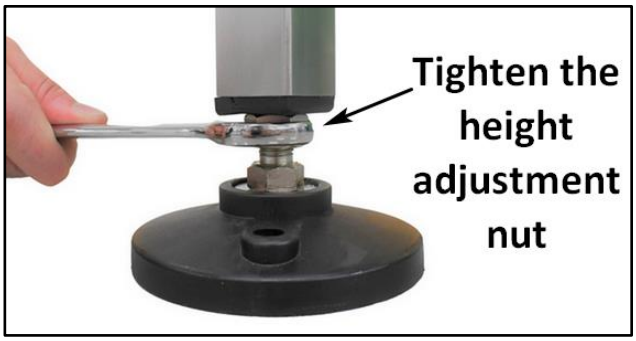
To raise, lower or level the accumulation table, first loosen the height adjustment nut with a 15/16thth wrench as is shown in the image to the right.



With the height adjustment nut loose, rotate the foot jam nut with a 7/8th wrench. To raise the accumulation table, rotate the foot jam nut clockwise. To lower the accumulation table, rotate the foot jam nut counterclockwise.

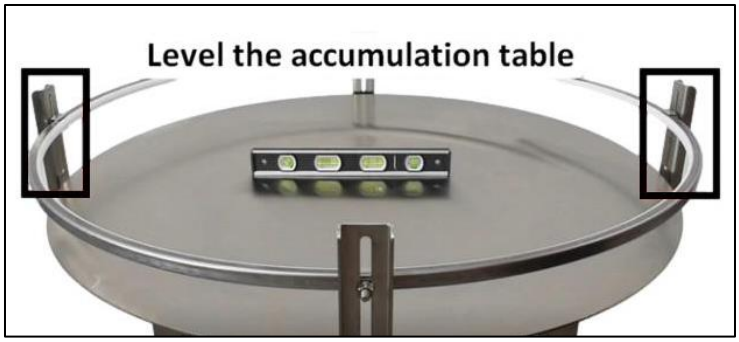


When the accumulation table is at the desired height, tighten the height adjustment nut against the leg of the accumulation table with a 15/16th wrench.

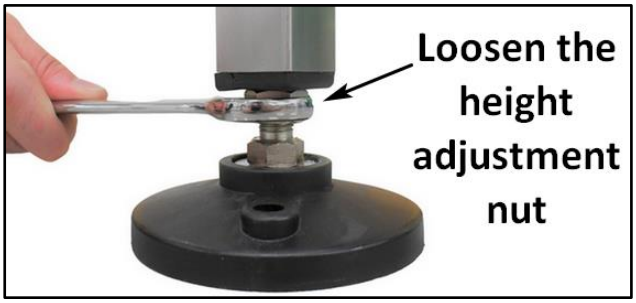


Leveling the Accumulation Table

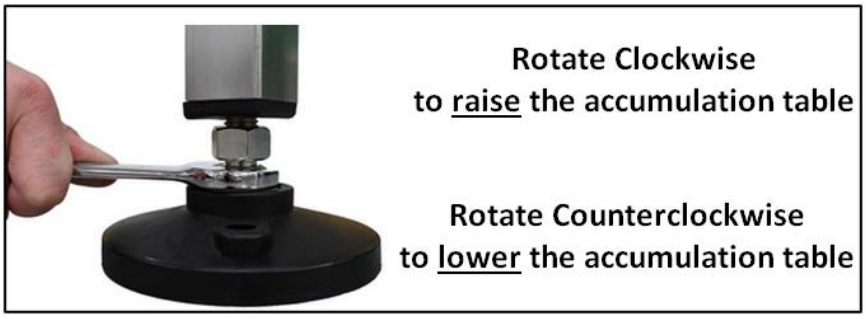
To level the accumulation table, place a level on the line between the two mounting posts boxed in black, then do the same between the other two. Assess the level to get a sense for which legs need to be adjusted.



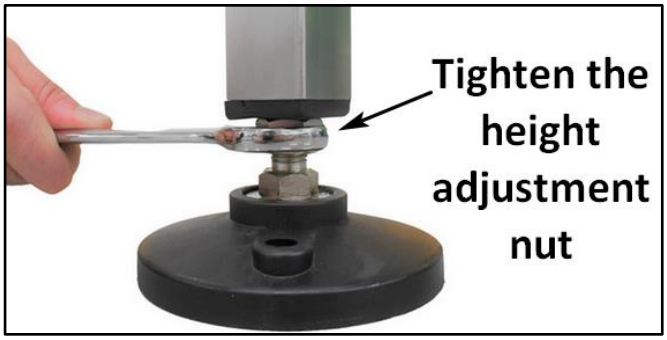
If adjustments are required, loosen the height adjustment nuts on the feet of the accumulation table with a 15/16th wrench.



With the height adjustment nut loose, rotate the foot jam nut with a 7/8th wrench. To raise the accumulation table, rotate the foot jam nut clockwise. To lower the accumulation table, rotate the foot jam nut counterclockwise.

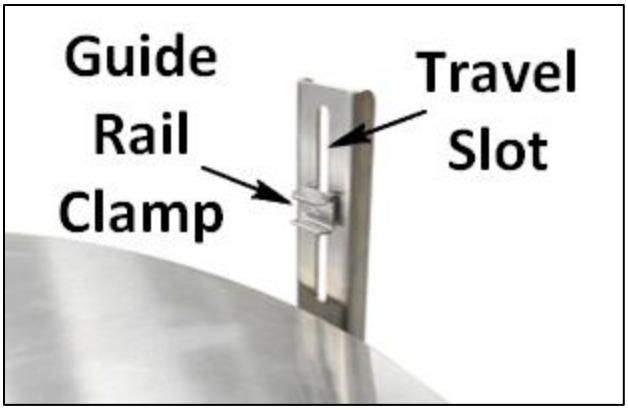


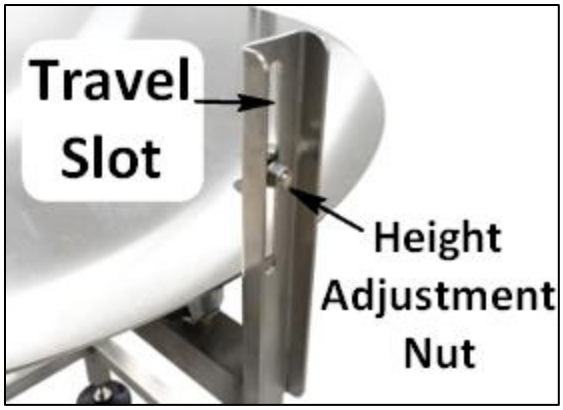
When the accumulation table is level, tighten the height adjustment nut against the leg of the accumulation table with a 15/16th wrench.



The Guide Rail Mounting Posts

The accumulation table features 4 guide rail mounting posts.

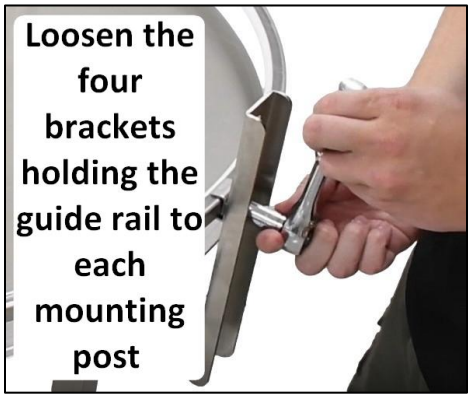




The guide rail mounting posts mount the guide rails to the table. The travel slot and height adjustment nut allow the guide rails to move up or down to accommodate containers of different heights.

Adjusting the Height of the Guide Rail

To adjust the height of the guide rail, loosen, but do not remove, the nuts on the back of the four mounting posts. This will allow the clamps holding the guide rail to move up and down in the travel slot.



Raise or lower the guide rail to the desired height and then tighten the nuts once more to lock the height of the guide rail in place.

Cutting Guide Rails

Depending on how you will be setting up your accumulation table, and the machinery you will be installing along the accumulation table, it is frequently necessary to cut guide rials. The guide rails are constructed of stainless steel and UHMW plastic. A hacksaw designed to cut metal is a good choice to cut guide rails.

The Accumulation Table Disc

The rotating disc designated in the picture below is responsible for carrying the containers in your packaging line.

By default, the accumulation table disc rotates clockwise.

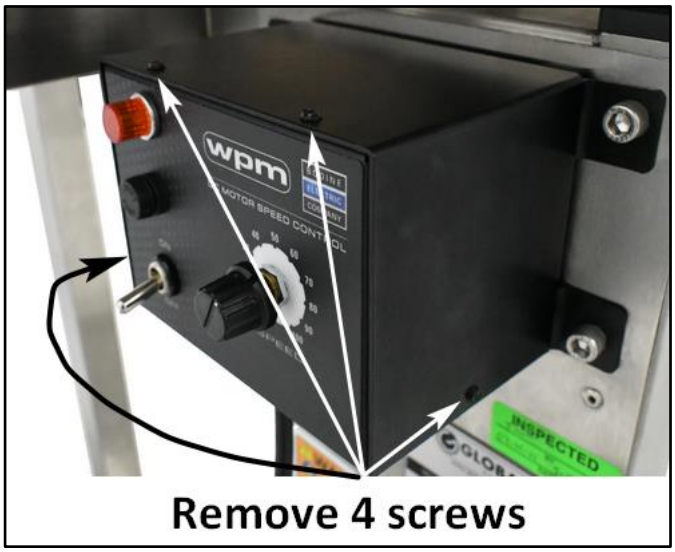
Reversing the Rotation of the Accumulation Table

By default, your Globaltek accumulation table rotates clockwise. However, some applications may require you to reverse its direction. This can be done by following the instructions below.

1. Unplug your accumulation table from its power source.

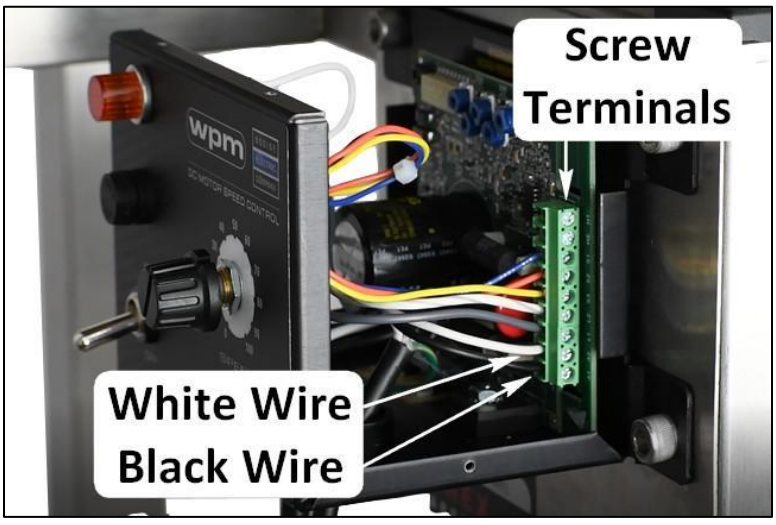
WARNING:	Be sure to unplug the AC power cord from the electrical outlet prior to reversing the rotation of the accumulation table. Failure to do so could cause injury.

2. Remove the cover of the motor controller using a 3/16-inch socket wrench to remove the four screws indicated in the picture to the right.



3. Removing the motor controller cover exposes the wiring within the motor. To reverse the direction of the accumulation table, we need to swap the black and white wires indicated in the picture to the right.

   The black and white wires are located in the bottom two screw terminals. The black wire is in the bottom screw terminal with the white wire just above it.

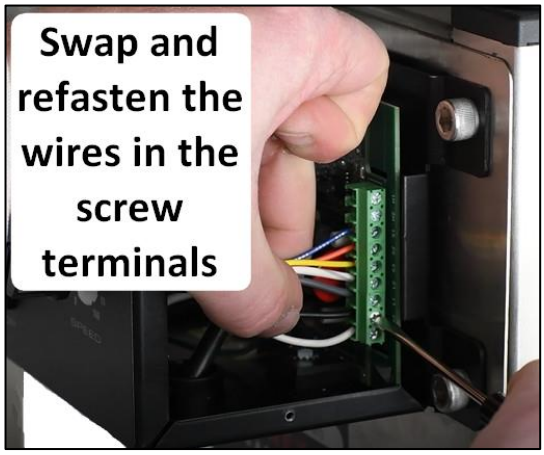


4. To switch the wires, loosen the screw terminals holding the white and black wires with a small flathead screwdriver, as shown in the picture to the right.

5. Remove the white and black wires from the terminals. If the tiny copper strands at the ends of the wires are disorganized, gently twist the strands together to preserve their proper function and to allow them to be more easily reinserted into the terminals as described in step 6.


After gently twisting the tiny copper strands, the end of the wire is now organized so it can easily be reinserted into the wire terminal in step 6

6. Swap the wires. Insert the white wire into the bottom terminal. Insert the black wire into the terminal above. Tighten the screw terminals to fasten the wires in place.



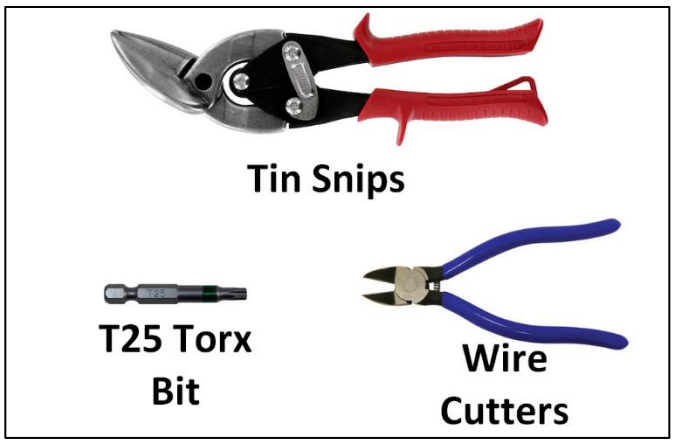
7. Place the cover back onto the motor controller. Using a 3/16-inch socket wrench, tighten the four screws indicated in the picture to the right.

8. Plug in your accumulation table and then turn it on. The disc's rotation should now be in the counter-clockwise direction.

Unpacking the Accumulation Table

1. The tools shown in the image to the right are required to unpack the accumulation table.

   Tin snips
   T25 Torx Bit Screwdriver
   Wire cutters

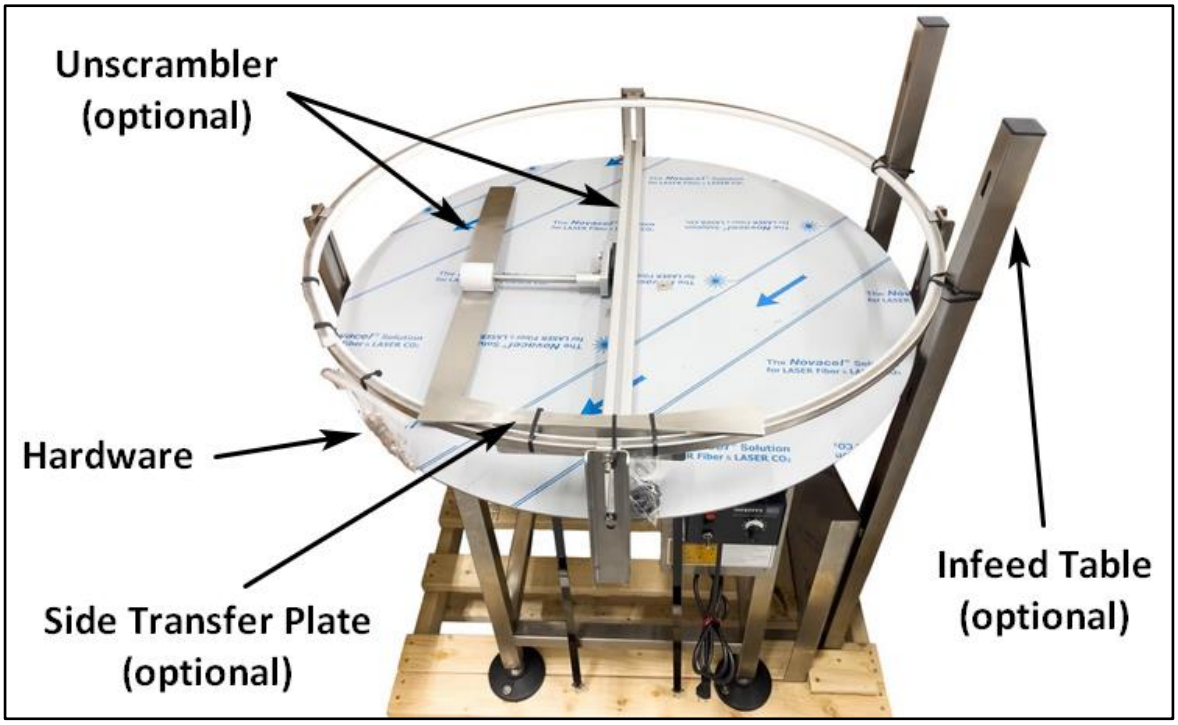


2. The accumulation table will arrive in a crate as shown in the picture below and to the right. A T25 torx bit is included within the packing slip at the top of the crate. Open the packing slip to remove the T25 torx bit. The packing slip with enclosed T25 torx bit is shown in the image to the right.

3. The top and sides of the crate are fastened by T25 torx screws. Remove the top and sides of the crate by removing the T25 torx screws that fasten it together.

4. The contents of the crate are now exposed. Common optional accessories, such as an unscrambler, side transfer plate, and infeed table are strapped to the accumulation table as shown in the image below. A bag of hardware is strapped to the guide rail.

   Remove the accessories and hardware strapped to the accumulation table with wire cutters. Place them off to the side for later assembly.



5. Cut and remove the metal straps that attach the accumulation table to the pallet.

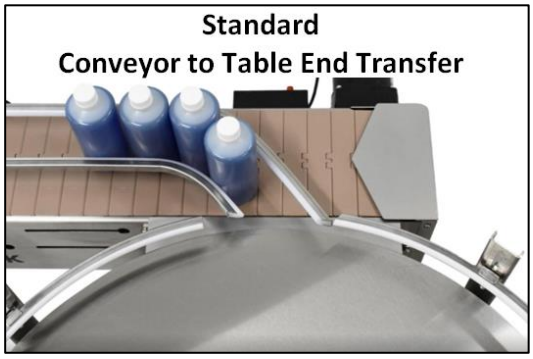
6. The feet of the accumulation table are connected to the pallet with T25 Torx screws. Remove the T25 torx screws and then remove the pallet from under the accumulation table.

7. Remove the table from the pallet and place it in the area you will use it.

Conveyor and Accumulation Table Transfers

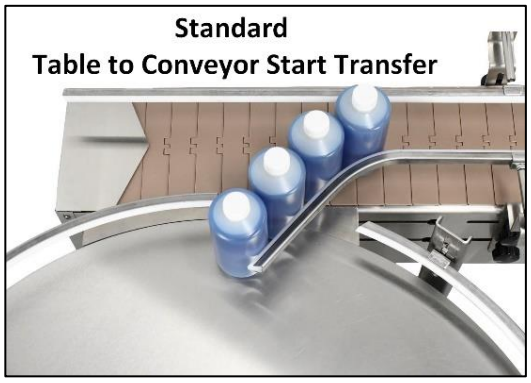
Accumulation tables are rarely used in isolation; instead, they are typically used in conjunction with conveyors to collect or send off containers in a packaging line. We will now explain how to set your rotary table up to work in combination with a Globaltek conveyor.

Determining your Transfer Type
The transfer between your table and conveyor can take four different forms depending on the table's purpose and the optional parts you have ordered.



- If you want to collect bottles at the end of your conveyor and *didn't* order an adjustable gate system, you should assemble a **conveyor to table end transfer- standard type (see page 30).**

- If you want to collect bottles at the end of your conveyor and *did* order an adjustable gate system, you should assemble a **conveyor to table end transfer- adjustable gate transfer system type (see page 41).**



- If you want to feed bottles onto the start of your conveyor and *didn't* order an adjustable gate system, you should assemble a **table to conveyor start transfer- standard type (see page 51).**

If you want to feed bottles onto the start of your conveyor and *did* order an adjustable gate system, you should assemble a **table to conveyor start transfer- adjustable gate transfer system type (see page 61).**

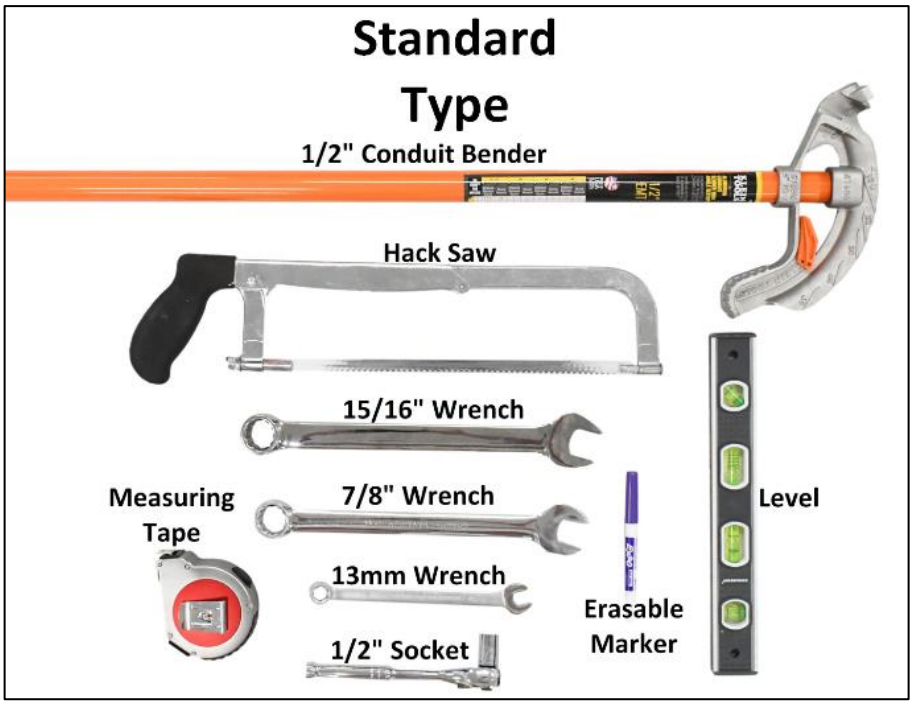
Conveyor to Table End Transfer – Standard Type

The standard conveyor to table end transfer setup involves bending the guide rails that came with your conveyor so that they guide your containers over the transfer plate and onto the accumulation table.

Once it's set up, a standard conveyor to table end transfer will look like the image below:

Tools Required

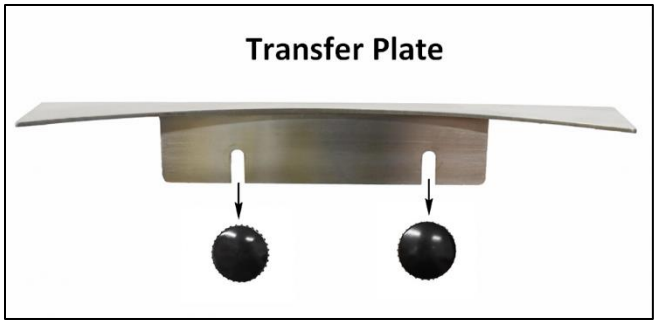
To set up your conveyor to table transfer, the following tools will be needed:



You can find a conduit bender at your local hardware store.

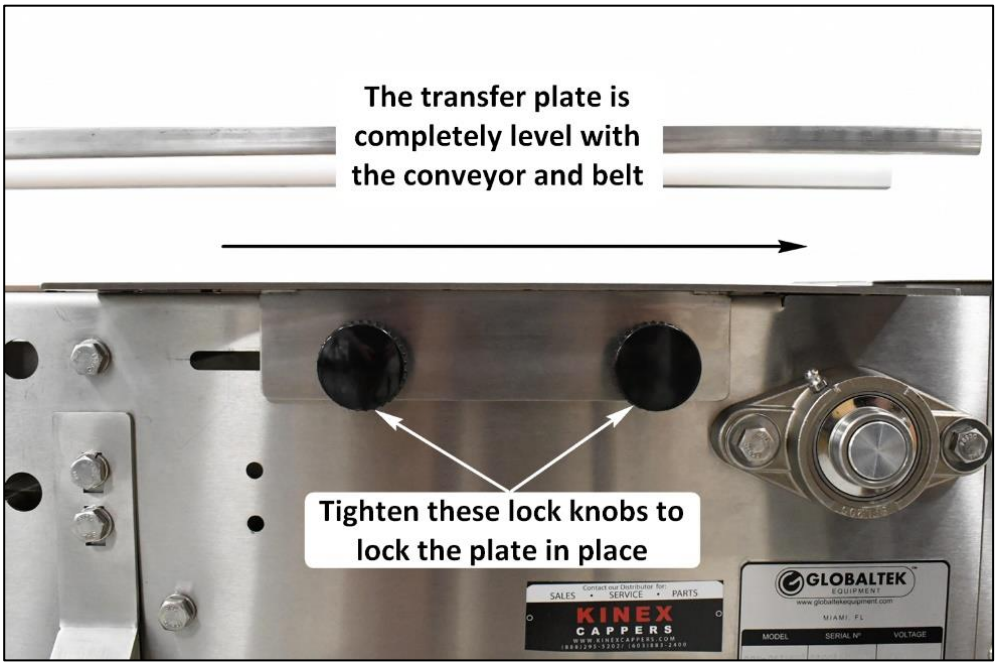
Mounting the Transfer Plate

The transfer plate and lock knobs are shown below. The lock knobs are attached to carriage bolts with round heads that can be inserted into the round openings on the mounting slots on the conveyor. The transfer plate features two arches that rest on the carriage bolts to hold the plate in place.



1. Slide the knobs and carriage bolts into the slot at the end of your conveyor, then rest the arches of the transfer plate on the bolts, as seen in the picture below.

2. Tighten the knobs to lock the transfer plate in place, verifying that the plate is completely level and even with the conveyor.

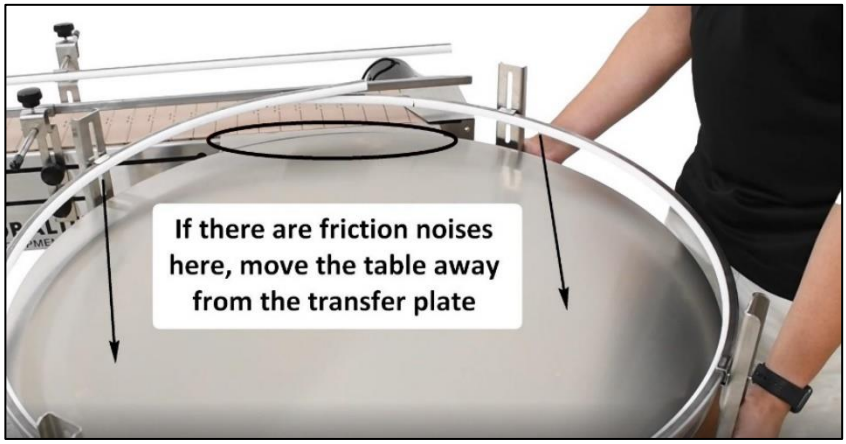


Mounting the Accumulation Table

3. Move your accumulation table so that the round edge of the rotating disc is resting against the curve of the transfer plate, as shown in the image below.

The intersecting point of the circular guide rail, designated in the oval above, should land above the transfer plate.

4. At this point, you may need to make adjustments to the table height to ensure that it is completely level to or slightly below the transfer plate. For instructions regarding height adjustment, see page 21.



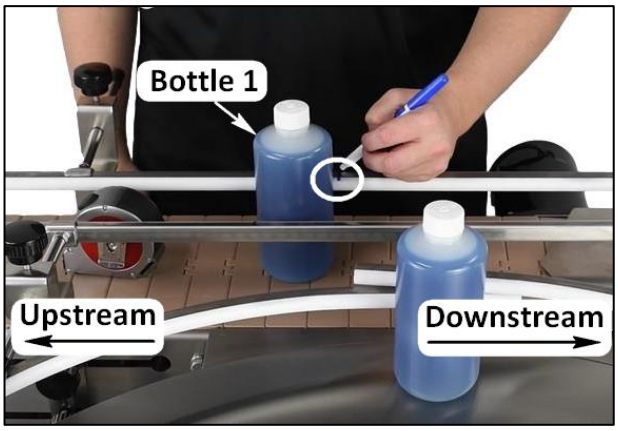
5. Temporarily plug your accumulation table into a power source and turn it on. You should not hear any grinding or scratching noises as the disk rotates. If you do hear scratching or grinding noises, this is likely because the rotating disk is rubbing against the transfer plate. If this occurs, slide the accumulation table away from the transfer plate slightly until the noise stops.

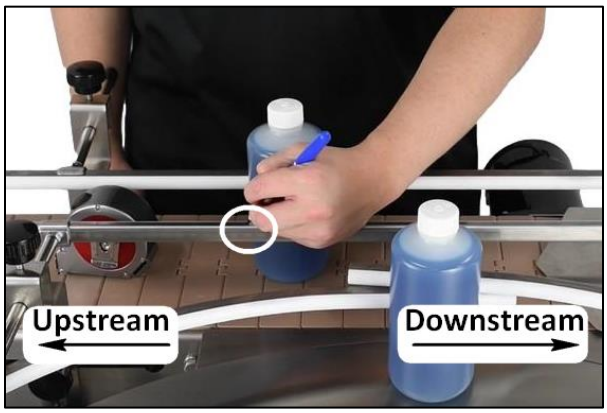
Marking and Modifying the Guide Rails

The conveyor and accumulation table are shown to the right. The transfer plate is installed, but the guide rails would interfere with any container passing over it. We will need to modify the guide rails to assist in the transfer process.

6. Place a container at the approximate spot in the conveyor track where you would like your curve to begin. We will call our container “bottle 1”.

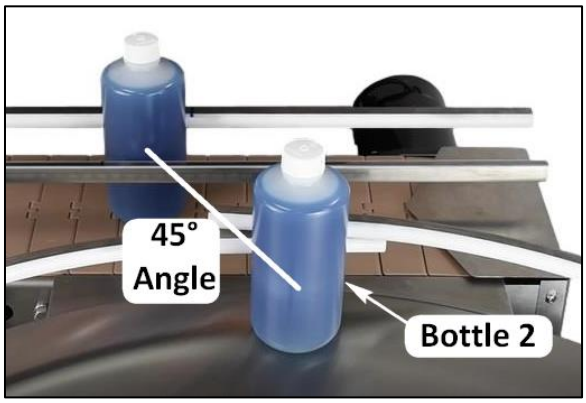
   The conveyor guide rail furthest from the accumulation table should be marked on the downstream side of bottle 1, as shown in the picture to the right.



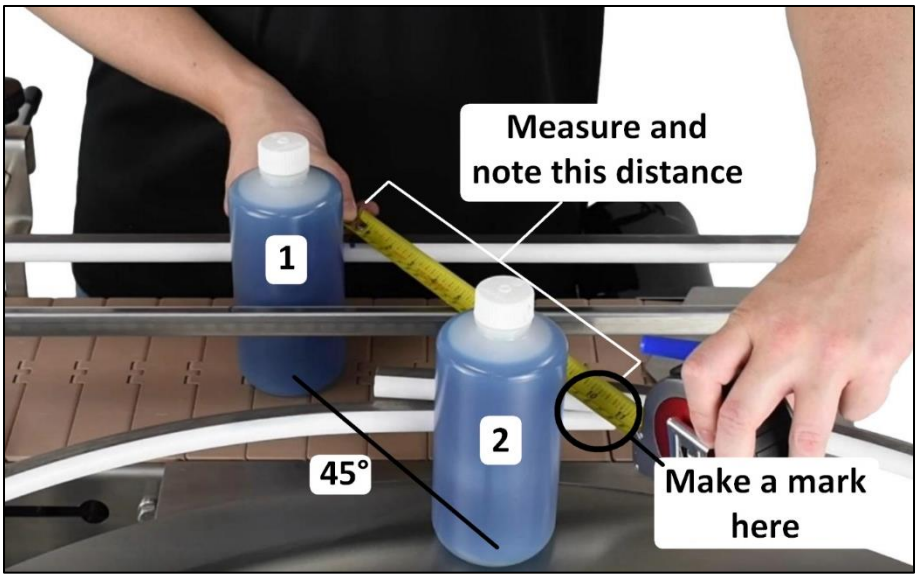


The conveyor guide rail closer to the accumulation table should be marked on the upstream side of bottle 1, as shown in the picture to the left.

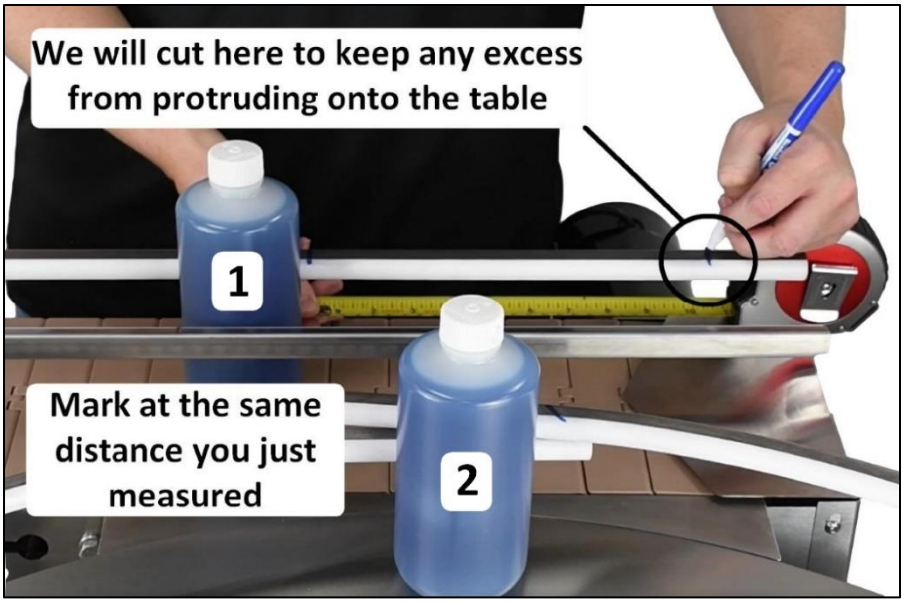
Next, place another container on the accumulation table, at about a 45-degree angle from the previously placed container. This container can be seen in the images above and the angle is shown in the image to the right. We will call our container “bottle 2”.



7. Use a measuring tape stretched from bottle 1 to bottle 2 to mark a new point downstream of bottle 2, as shown in the picture below. Measure the distance between the mark you just made and the mark on the conveyor guide rail furthest from the accumulation table.



8. Using the measurement obtained in step 7, measure that distance from the mark you made on the guide rail further from the accumulation table, as shown in the picture below. We will cut at this mark to remove any excess, so the bent guide rail does not protrude too far into the accumulation table.

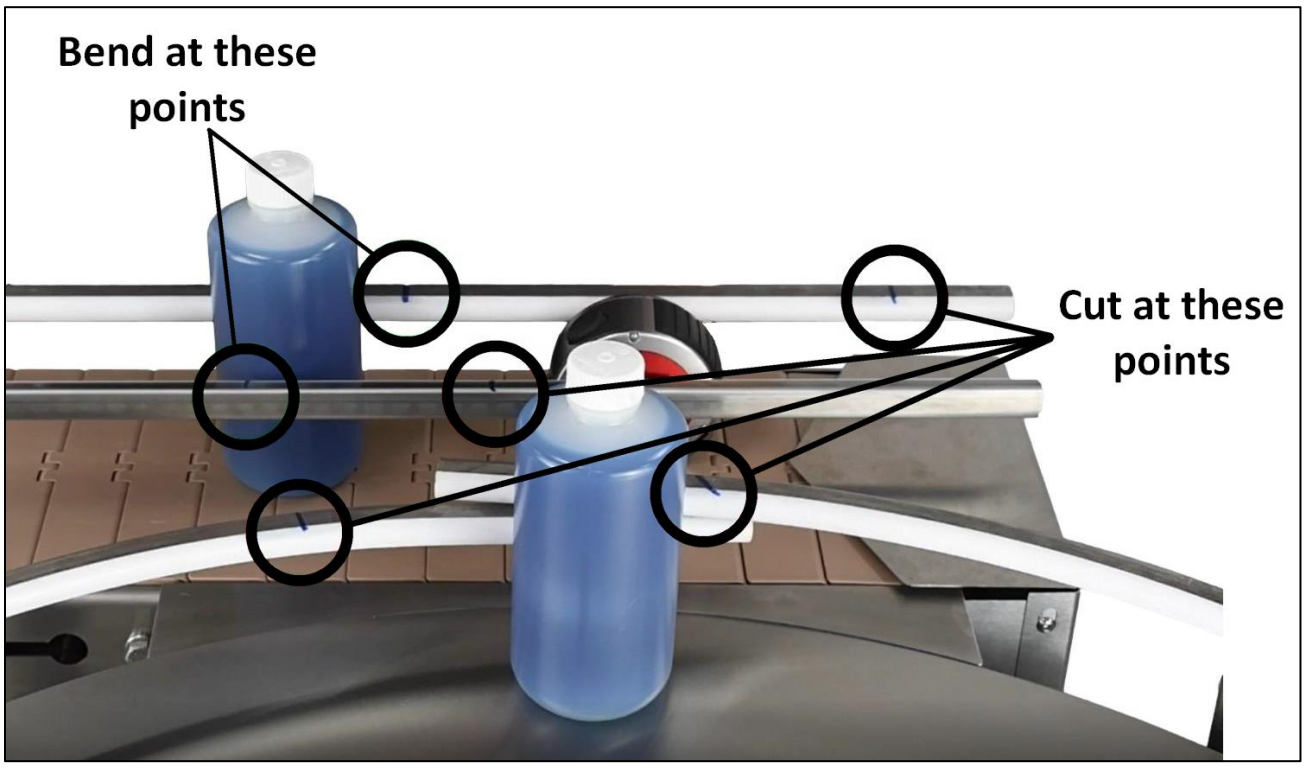


9. Move bottle 1 so that it is upstream and next to bottle 2. Make a mark on the table guide rail slightly upstream of it, shown in the picture to the right. This two-container system is just a guideline, not a rule. For example, if you will also be using the conveyor and accumulation table to transport larger containers, you may consider making the opening in your table guide rail larger.

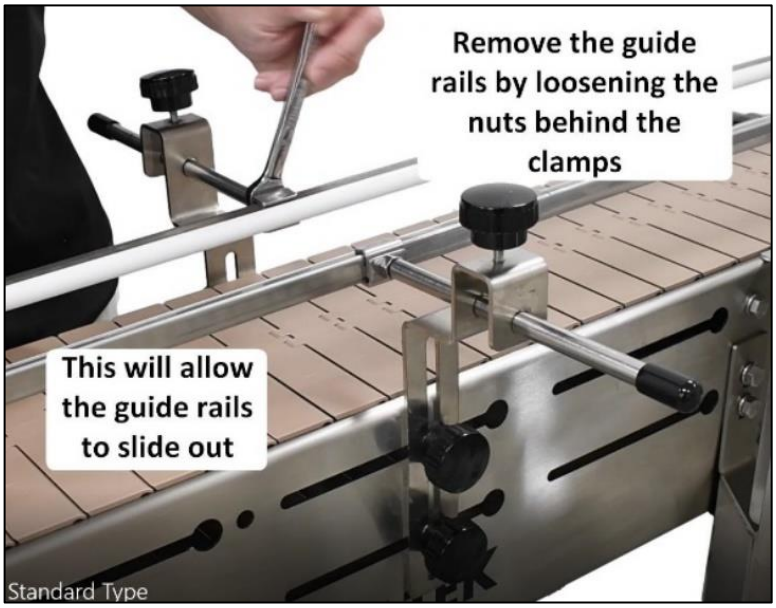
10. Move bottle 1 back to its previous location on the conveyor. Next, measure at a 45° angle from the mark on the conveyor guide rail closest to the accumulation table you made in step 6, to the accumulation table guide rail. This is the distance the conveyor guide rail closet to the accumulation will need to span. Measuring at a 45° angle will ensure that the two conveyor guide rails will run parallel to each other after they are cut.

11. Use this measurement to make a new mark further downstream on the conveyor guide rail closest to the accumulation table, as shown in the picture to the right. This is where we will make another cut, once more removing any excess guide rail that would protrude into the table after the bend.

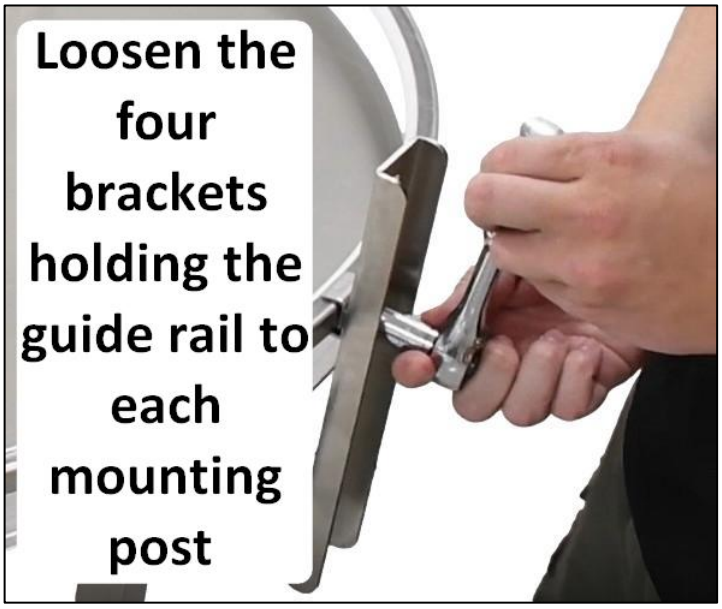
See the marks made in the diagram below. We will now cut and bend the conveyor guide rails using these marks for reference.



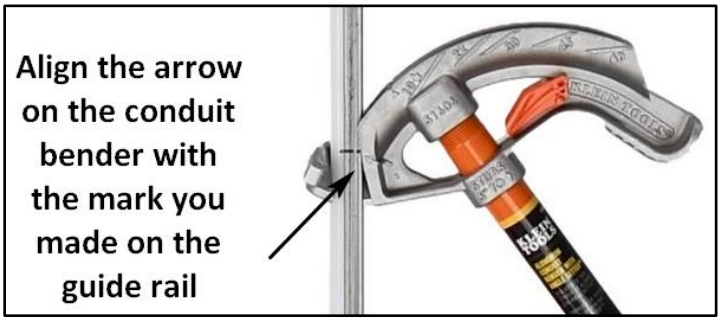
12. Remove the guide rails from the conveyor using a ½ inch wrench to loosen the nuts behind the guide rail clamps on the guide rail mounting brackets, shown in the picture to the right. When the brackets are loose, remove the guide rails for modification.



13. Remove the guide rail from the accumulation table using a ½ inch socket wrench to loosen the nuts on the back side of the guide rail mounting posts, shown in the picture to the right.



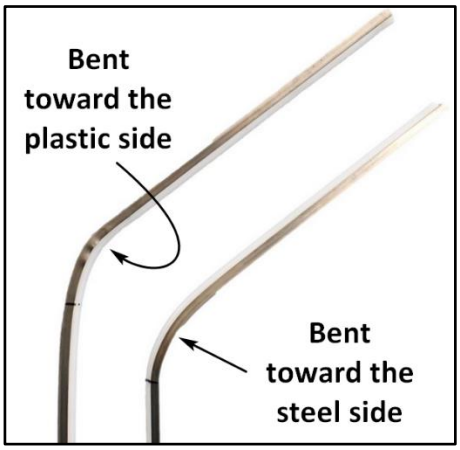
14. Shown below is a conduit bender. Conduit benders typically include a mark or arrow that indicates where the bend will start (shown in the picture below and to the left). Align the arrow on the conduit bender with the mark you made on the conveyor guide rails as shown in the image below and to the right.



15. Conduit benders include lines that represent common angles. They also include a step so you can push down with your foot to provide more leverage during the bending process.

Bend the guide rail as shown in the image to the right. Bend the guide rail a little past the 45° indication mark, as the bend will naturally want to bounce back a bit when you release the conduit bender from the guide rail.

Note that one guide rail will need to be bent toward the plastic side while the other guide rail will need to be bent toward the metal side as shown in the image to the right.



16. Cut the guide rails you marked on pages 34-36 to the appropriate lengths using a hacksaw. Cut using clean and precise strokes along your marks.

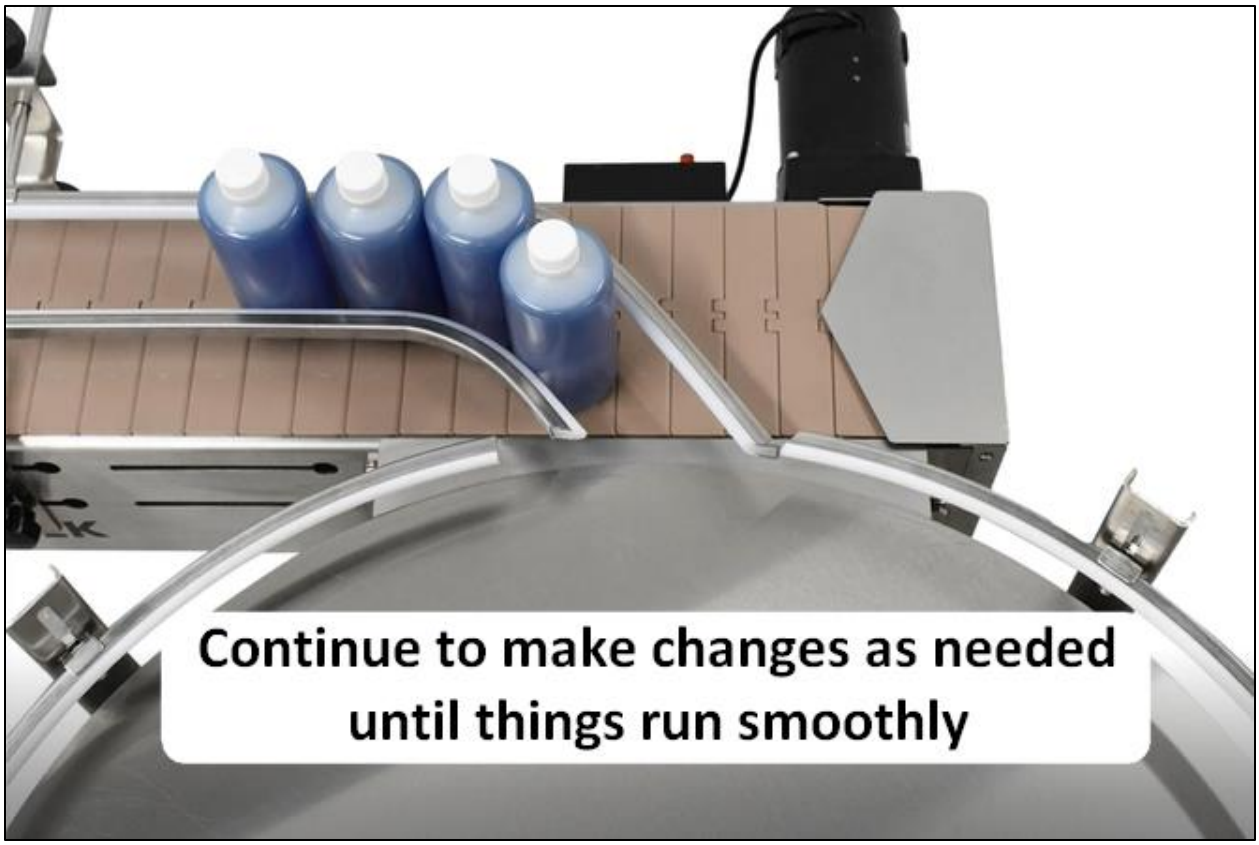
17. Reinstall the modified guide rails along the conveyor and accumulation table, then Adjust the width and height of the conveyor guide rails to properly fit your container.

To adjust the height of the guide rails, loosen the two mounting knobs that fasten the guide rail bracket to the conveyor, as shown in the image to the right. Raise or lower the guide rail to the desired height, usually just a little less than half of the height of the bottle, and then tighten the lock knobs to lock the height of the guide rail into place.

To adjust the width of the guide rails, loosen the black knobs at the tops of the guide rail mounting brackets as shown in the image to the right. This will allow the guide rails to slide in and out. Retighten the lock knobs to lock the width of the rails in place.

Final Set Up

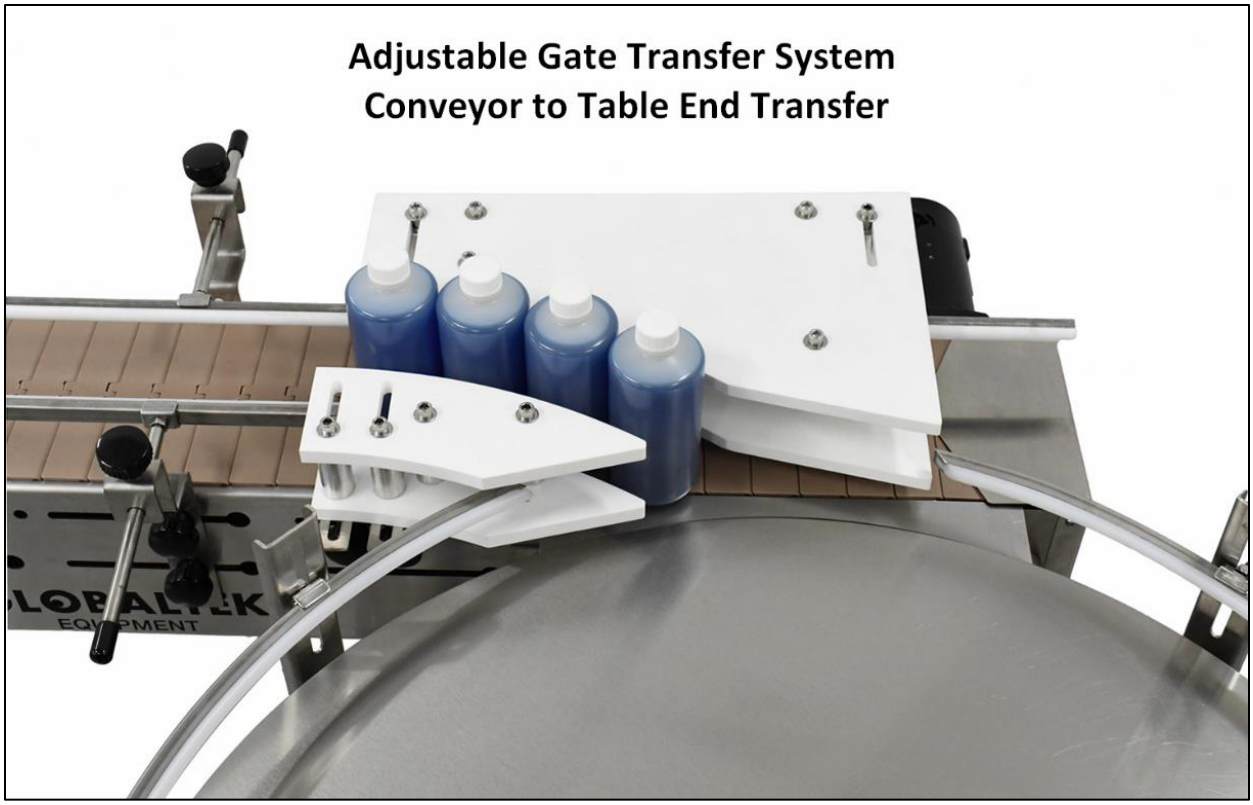
18. Your final setup should look something like this, with the guide rails smoothly and easily guiding bottles over the transfer plate and onto the accumulation table.



Conveyor to Table End Transfer – Adjustable Gate Transfer System Type

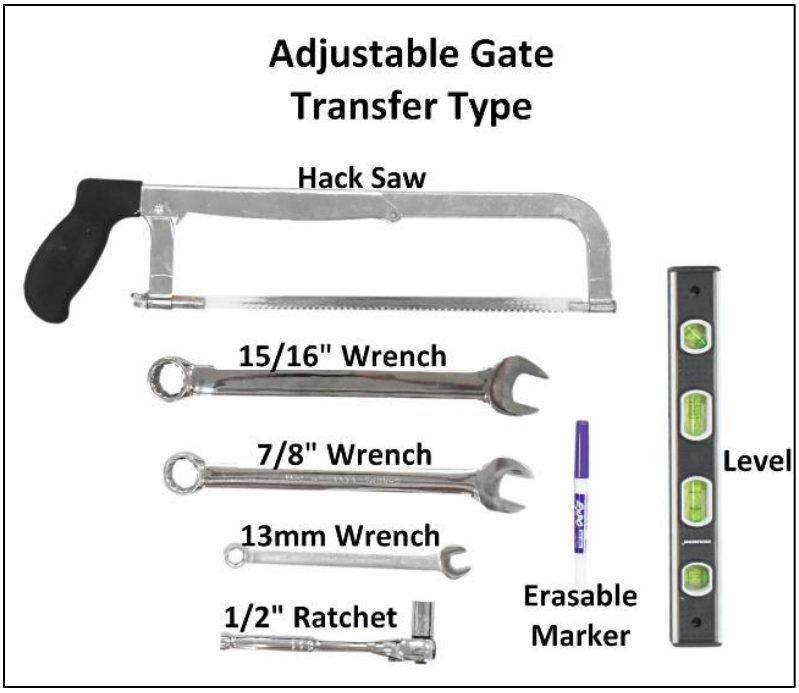
The adjustable gate transfer system included in your order, shown in the picture below, is designed to easily funnel your containers over the transfer plate and onto the accumulation table.

Once it's set up, an adjustable gate transfer system conveyor to table end transfer will look something like the image below:



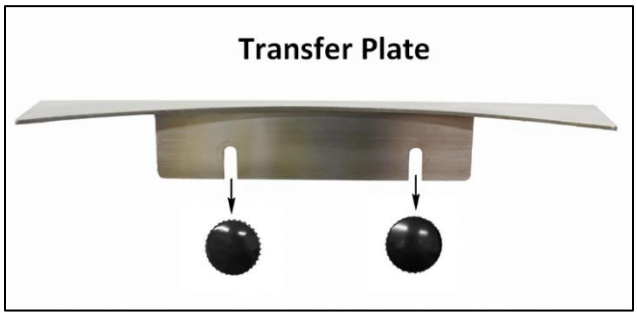
Tools Required

To set up your conveyor to table transfer, the following tools will be needed:



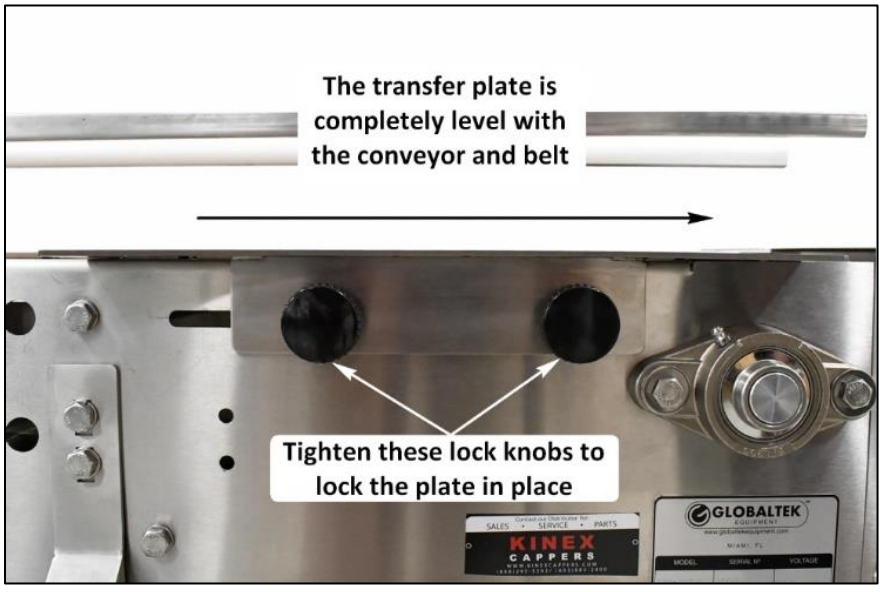
Mounting the Transfer Plate

The transfer plate and lock knobs are shown below. The lock knobs are attached to carriage bolts that can be inserted into the mounting slots on the conveyor. The transfer plate features two arches that rest on the carriage bolts to hold the plate in place.



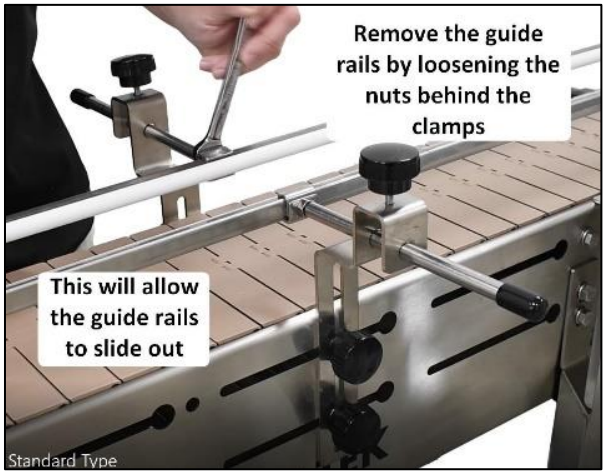
1. Slide the knobs and carriage bolts into the slot at end of your conveyor, then rest the arches of the transfer plate on the bolts, as seen in the picture below.

2. Tighten the knobs to lock the transfer plate in place, verifying that the plate is completely level and even with the conveyor.



Installing the Adjustable Gate Transfer System

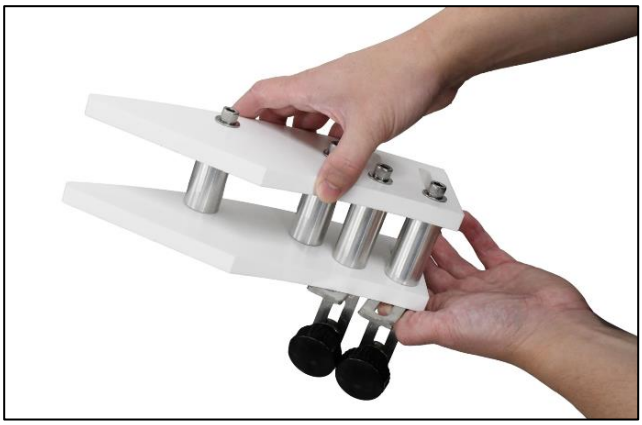
3. The guide rails on the conveyor will get in the way of our adjustable gate installation. Temporarily remove them by loosening the nuts behind the guide rail clamps and sliding the rails out from the clamps.

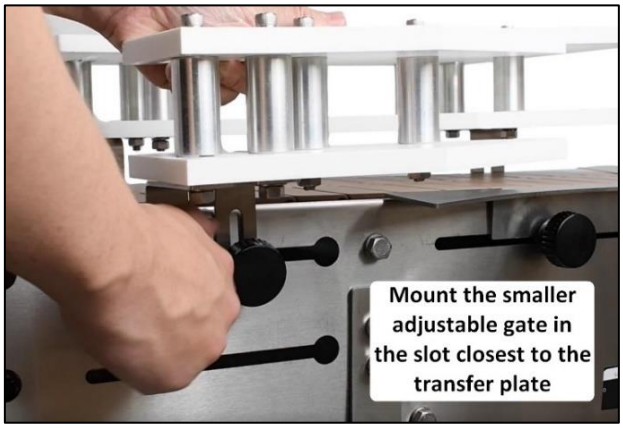


4. The larger half of the adjustable transfer gate is shown below. It should be mounted on the side of the conveyor opposite the transfer plate. To mount it to the conveyor, insert the bracket knobs into the mounting slots of the conveyor, as shown in the picture below.

Tighten the bracket knobs to lock this half of the adjustable gate in place. We will adjust the gate later, so don't worry about its exact placement for now.

5. The smaller half of the adjustable transfer gate is shown below and to the left. It is mounted on the same side of the conveyor as the transfer plate. To mount it to the conveyor, insert the bracket knobs into the conveyor mounting slot closest to, and just upstream of, the transfer plate, as shown in the picture below and to the right.





Tighten the bracket knobs to lock this half of the adjustable gate in place. We will adjust the gate later, so don't worry about its exact placement for now.

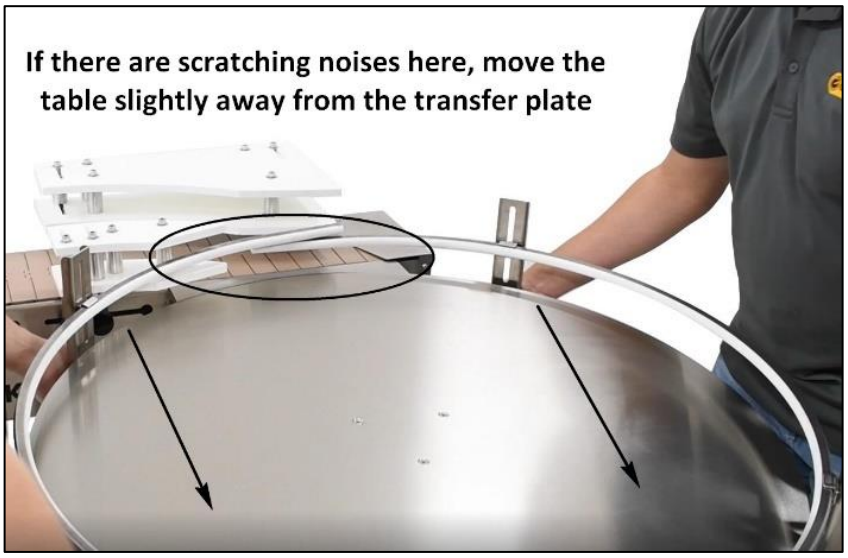
Mounting the Accumulation Table

6. Move your accumulation table so that the round edge of the table is resting against the curve of the transfer plate, as shown in the image below.

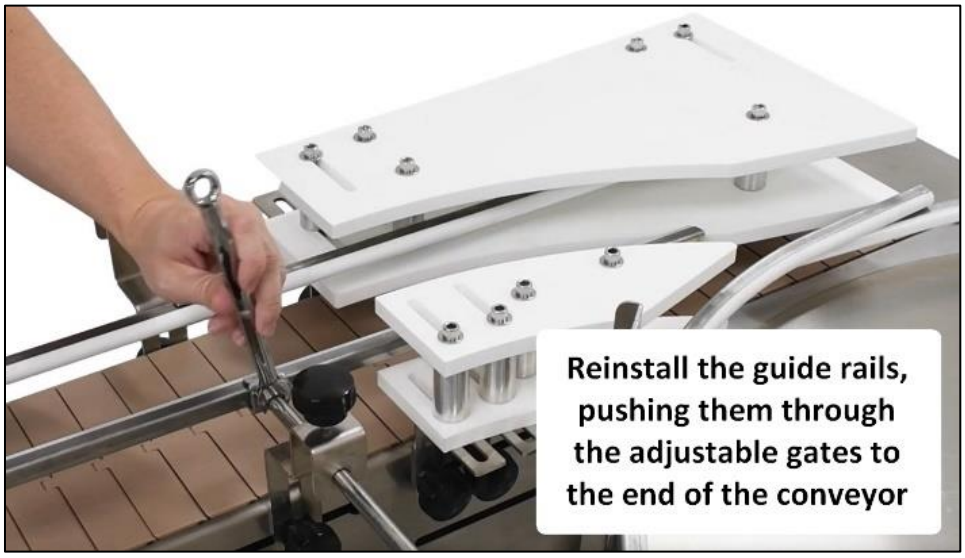
The intersecting point of the circular guide rail, designated in the oval above, should land above the transfer plate. We will later be cutting the accumulation table guide rail here, so it is important to cut the ends of the guide rail, so the guide rail stays in one piece.

7. At this point, you may need to make small adjustments to the table height to ensure that it is completely level to or slightly below the transfer plate. For instructions regarding height adjustment, see page 21.

8. Temporarily plug your accumulation table into a power source and turn it on. You should not hear any grinding or scratching noises as the disk rotates. If you do hear scratching or grinding noises, this is likely because the rotating disk is rubbing against the transfer plate. If this occurs, slide the accumulation table away from the transfer plate slightly until the noise stops.

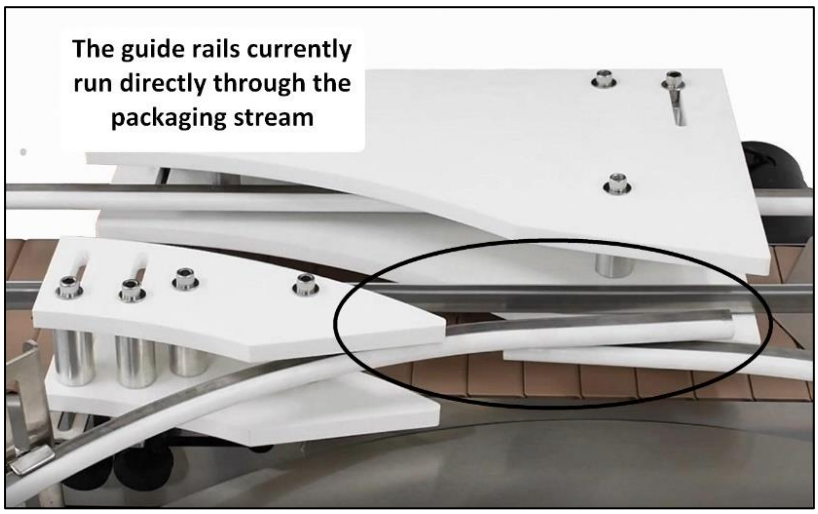


9. Reinstall the conveyor guide rails on your conveyor, inserting them through the brackets and the adjustable gates as shown in the picture below.

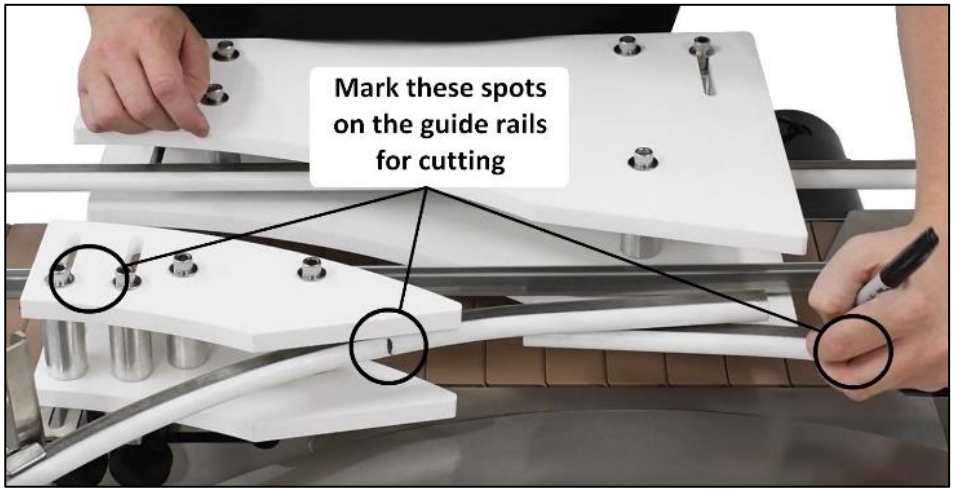


Marking and Modifying the Guide Rails

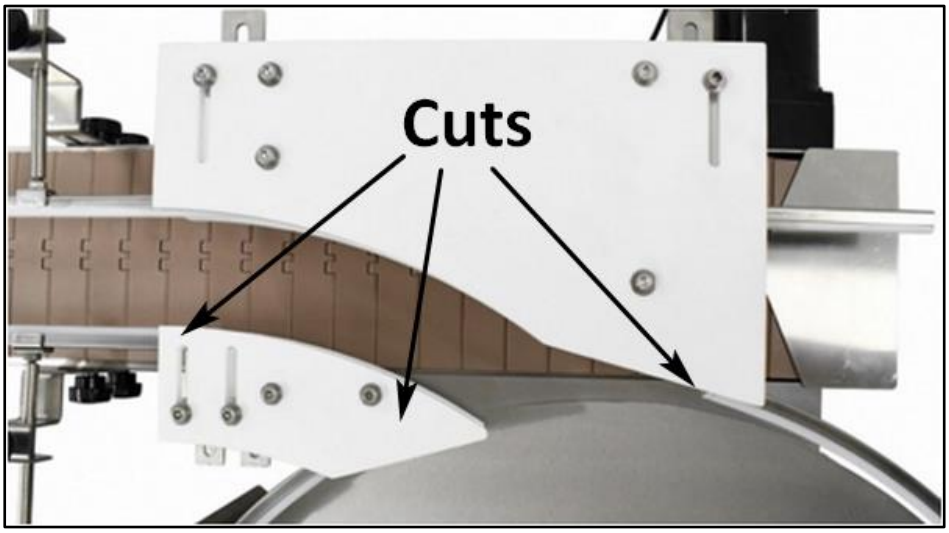
The conveyor and accumulation table are shown to the right. The transfer plate and adjustable gate are installed, but the guide rails would interfere with any container passing through them. We will need to cut the guide rails to allow the transfer process.



10. Mark the conveyor and accumulation table guide rails at the locations indicated by the circles in the picture to the right. These are the points at which we will cut the conveyor and accumulation table guide rails to open the stream.



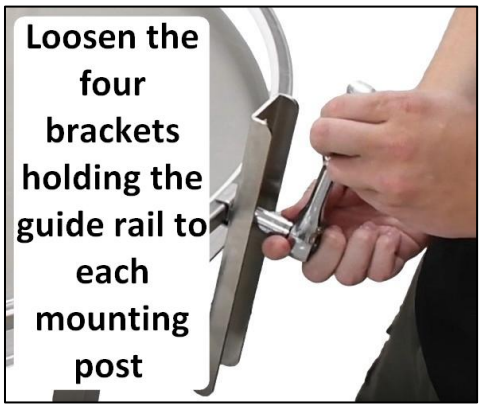
The picture to the right shows the locations of the cuts after the conveyor and accumulation table guide rails have been cut and then reinstalled.



Steps 11-17 will provide detailed instructions of how to go about this process.

11. Only the conveyor guide rail closest to the accumulation table needs to be cut. Remove this guide rail from the conveyor once more using a ½ inch wrench to loosen the nut behind the guide rail clamp on the guide rail mounting bracket, shown in the picture to the right. Slide the guide rail out.

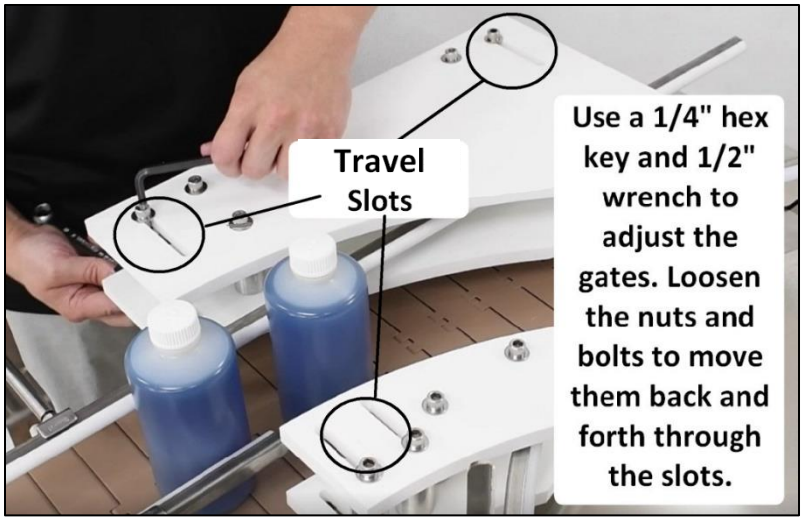
12. Remove the guide rail from the accumulation table using a ½ inch socket to loosen the nuts on the back side of the guide rail mounting posts, shown in the picture to the right.



13. Cut the guide rails you marked on page 47 to the appropriate lengths using a metal-cutting hacksaw. Cut using clean and precise strokes along your marks.

14. Reinstall your guide rails one more time, lining up the new gaps in the rails with the packaging stream, as shown in the picture to the right.

15. Adjust the width of the opening between the gates to fit the bottle. If the gates need to be moved closer together, or brought further apart, loosen the ¼ inch hex screws in the travel slots designated in the images below. With the screws loose, the gates can slide in and out along the travel slots. Adjust the width of the gates so the bottle can flow freely between the gates and then tighten the hex screws once more to lock the gates in place.



16. Adjust the width and height of the conveyor guide rails to properly fit your container.

To adjust the height of the conveyor guide rails, loosen the two mounting knobs that fasten the guide rail bracket to the conveyor, as shown in the image to the right. Raise or lower the guide rail to the desired height, usually just a little less than half of the height of the bottle, and then tighten the lock knobs to lock the height of the guide rail into place.

To adjust the width of the guide rails, loosen the black knobs at the tops of the guide rail mounting brackets as shown in the image to the right. This will allow the guide rails to slide in and out. Retighten the lock knobs to lock the width of the rails in place.

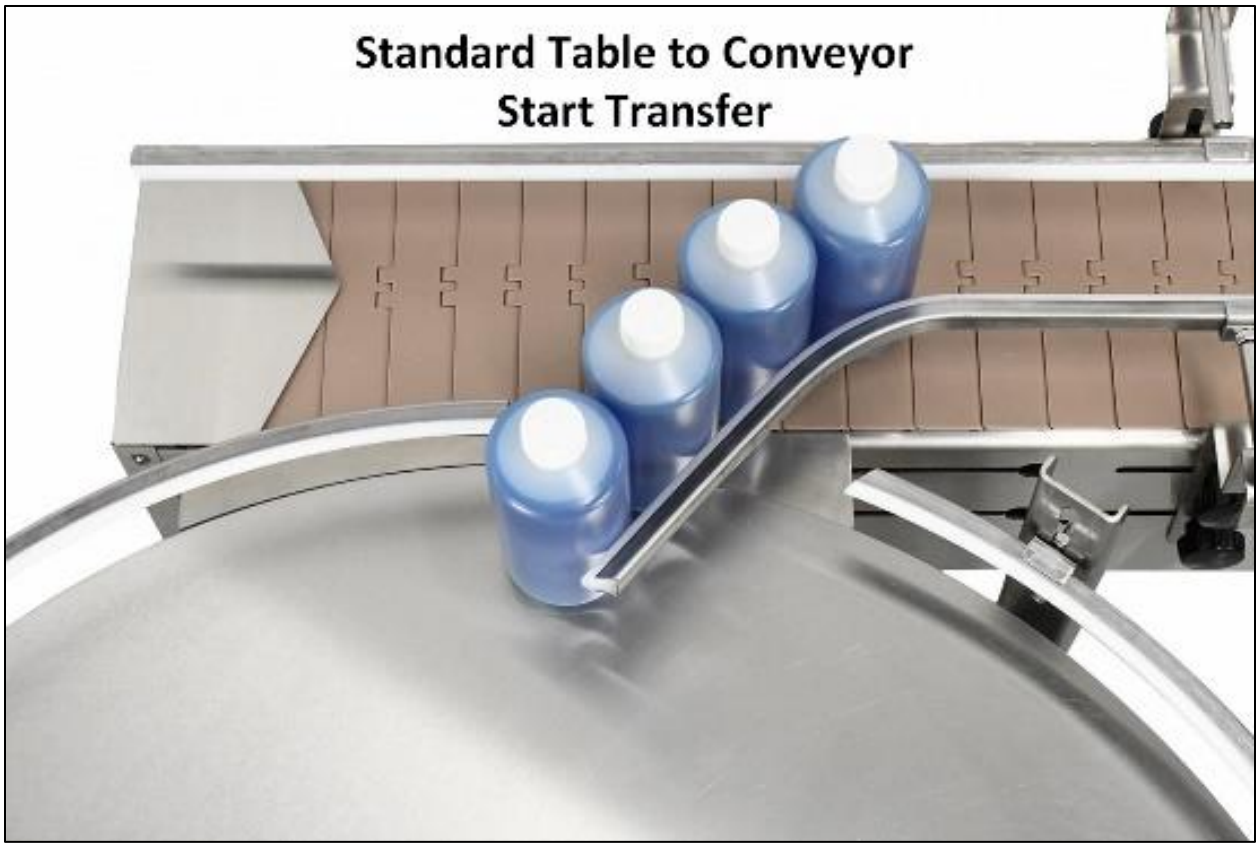
Final Setup

17. Your final setup should look something like this, with the adjustable transfer gate system smoothly and easily guiding bottles over the transfer plate and onto the accumulation table.

Table to Conveyor Start Transfer – Standard Type

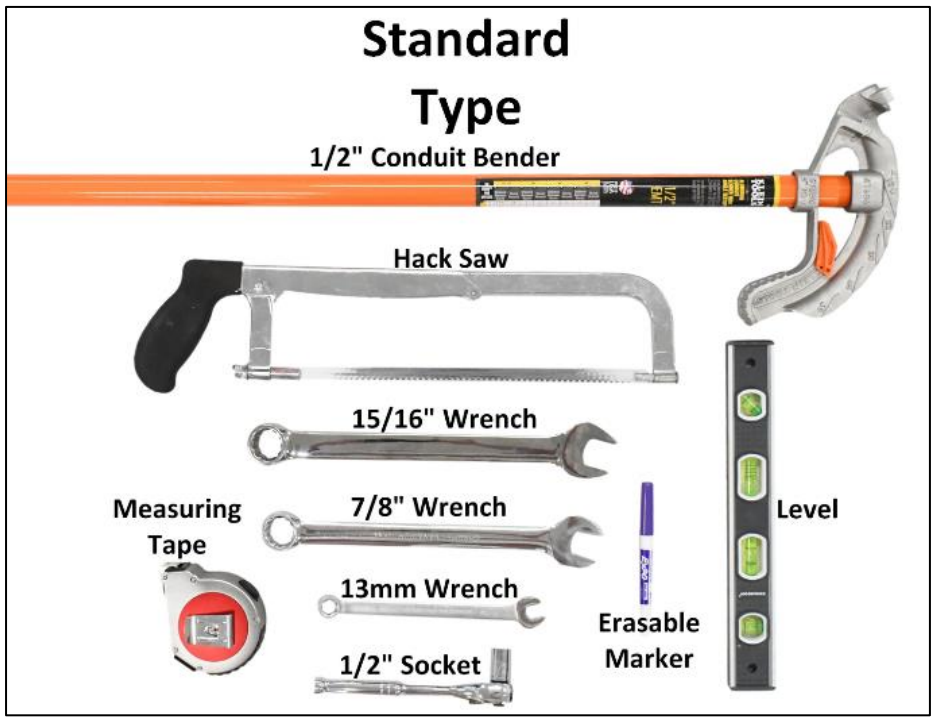
The standard conveyor to table start transfer setup involves bending the guide rails that came with your conveyor so that they guide your containers off the accumulation table, over the transfer plate and onto the conveyor.

Once it's set up, a standard table to conveyor start transfer will look something like the image below:



Tools Required

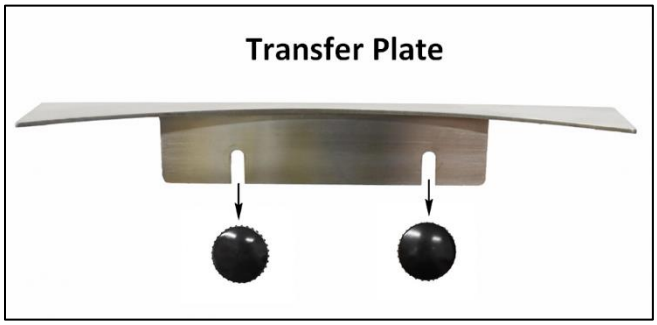
To set up your table to conveyor transfer, the following tools will be needed:

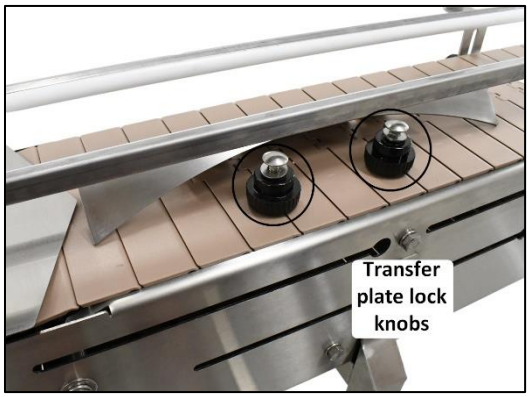


Ensure that your hack saw can handle cutting metal. You can find a conduit bender at your local hardware store.

Mounting the Transfer Plate

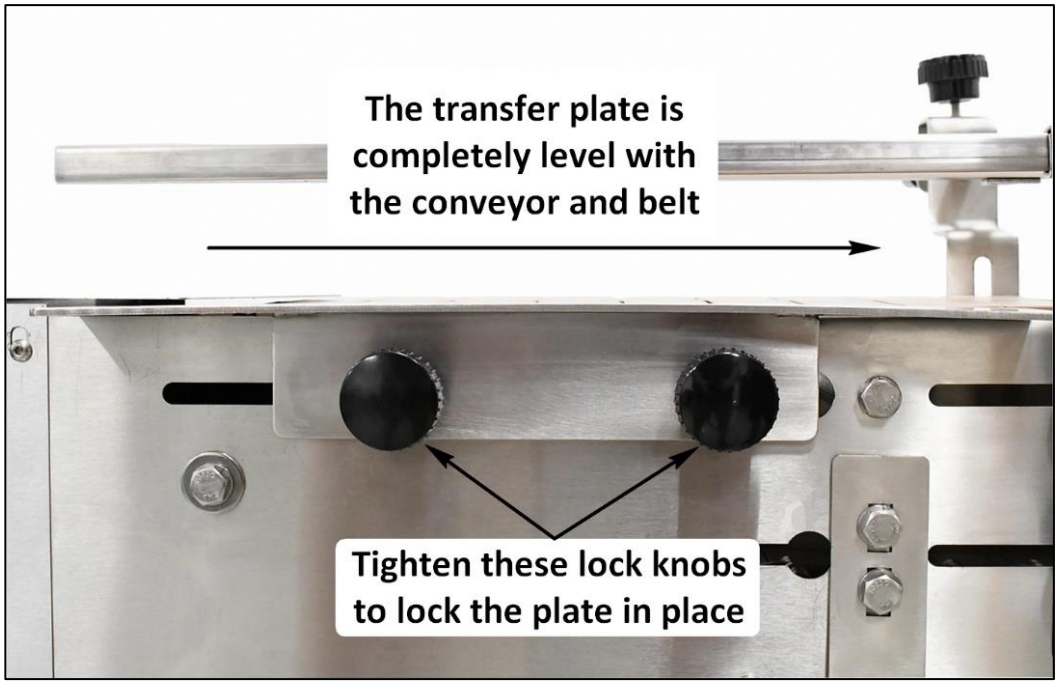
The transfer plate and lock knobs are shown below. The lock knobs are attached to carriage bolts that can be inserted into the mounting slots on the conveyor. The transfer plate features two arches that rest on the carriage bolts to hold the plate in place.





1. Slide the knobs and carriage bolts into the slot at the start of your conveyor, then rest the arches of the transfer plate on the bolts, as seen in the picture below.

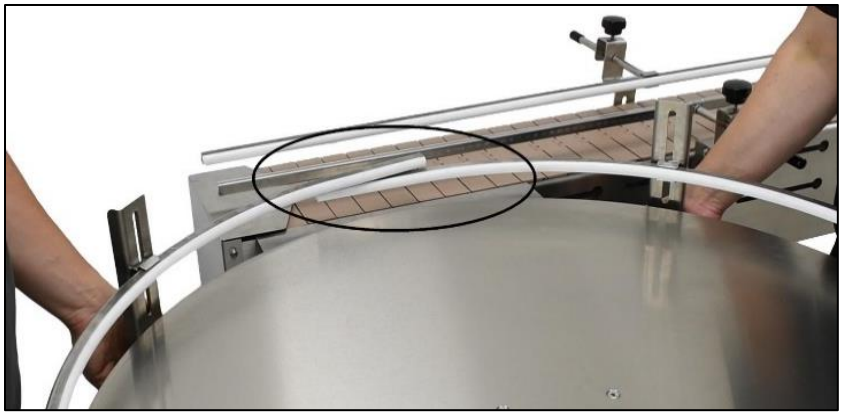
2. Tighten the knobs to lock the transfer plate in place, verifying that the plate is completely level and even with the conveyor.



Mounting the Accumulation Table

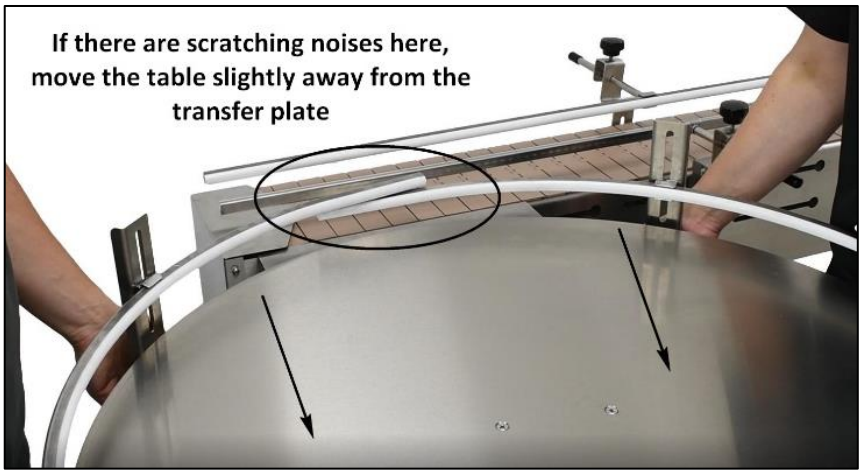
3. Move your accumulation table so that the round edge of the table is resting against the curve of the transfer plate, as shown in the image below.

   The intersecting point of the circular guide rail, designated in the oval above, should land above the transfer plate.



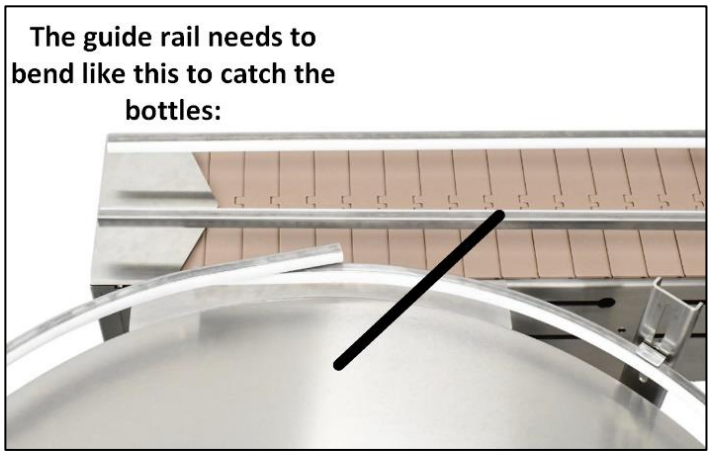
4. At this point, you may need to make fine adjustments to the table height to ensure that it is completely level to or slightly above the transfer plate. For instructions regarding height adjustment, see page 21.

5. Temporarily plug your accumulation table into a power source and turn it on. You should not hear any grinding or scratching noises as the disk rotates. If you do hear scratching or grinding noises, this is likely because the rotating disk is rubbing against the transfer plate. If this occurs, slide the accumulation table away from the transfer plate slightly until the noise stops.



Marking and Modifying the Guide Rails

The conveyor and accumulation table are shown to the right. The transfer plate is installed, but the guide rails would interfere with any container passing over it. We will need to modify the guide rails to assist in the transfer process.

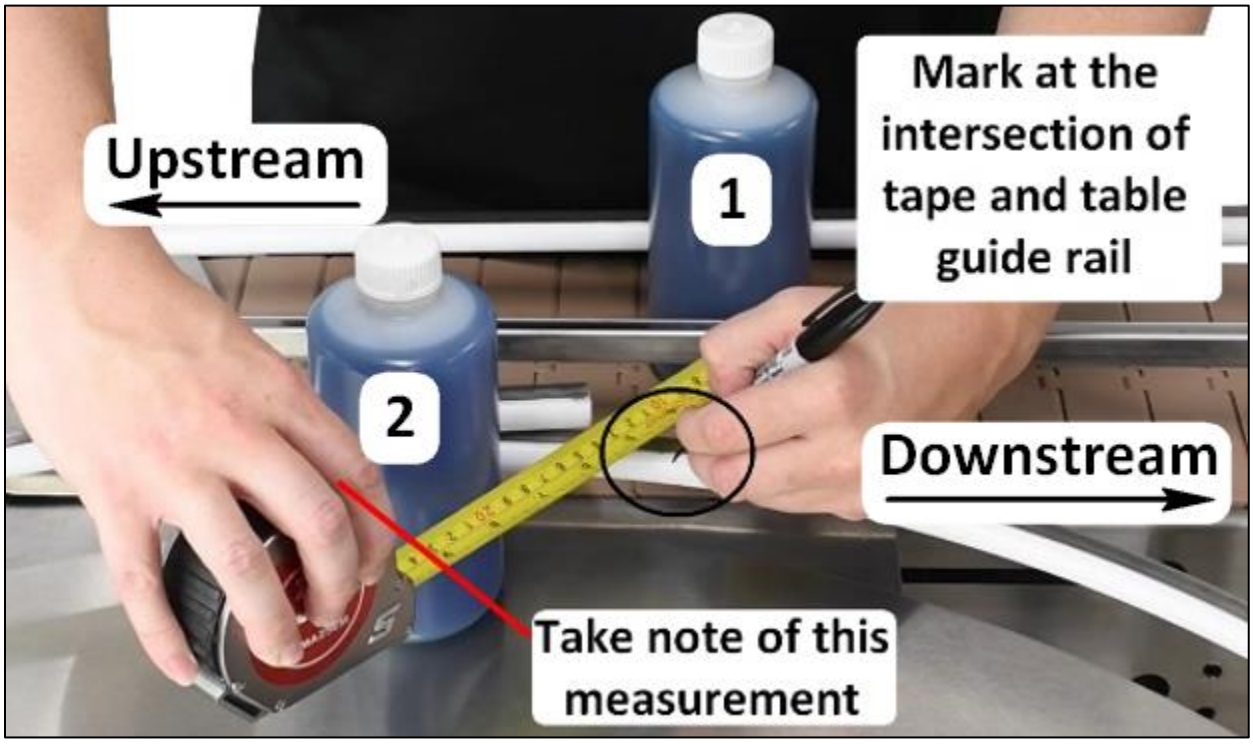


6. Place two containers on the conveyor and accumulation table, at approximately the start and end of where you would like your bend. The angle between them should be about 45°. We will call our container on the conveyor “bottle 1” and our container on the table “bottle 2”.

   Make a mark downstream of bottle 1 on the guide rail closest to the table, as shown in the picture to the right.

7. Extend a measuring tape from the mark you just made on the conveyor guide rail closest to the accumulation table in step 6, to the downstream end of bottle 2, as shown in the image below. Make another mark at the point where the downstream side of the measuring tape intersects with the accumulation table guide rail, indicated by the circle in the image below. We will cut the accumulation table guide rail at this point.

   In addition, take note of the distance from the mark you made on the conveyor guide rail closest to the accumulation table in step 6, to the opposite end of bottle 2, as indicated by the line in the image below (for instance, the distance in the picture below is 10 inches).



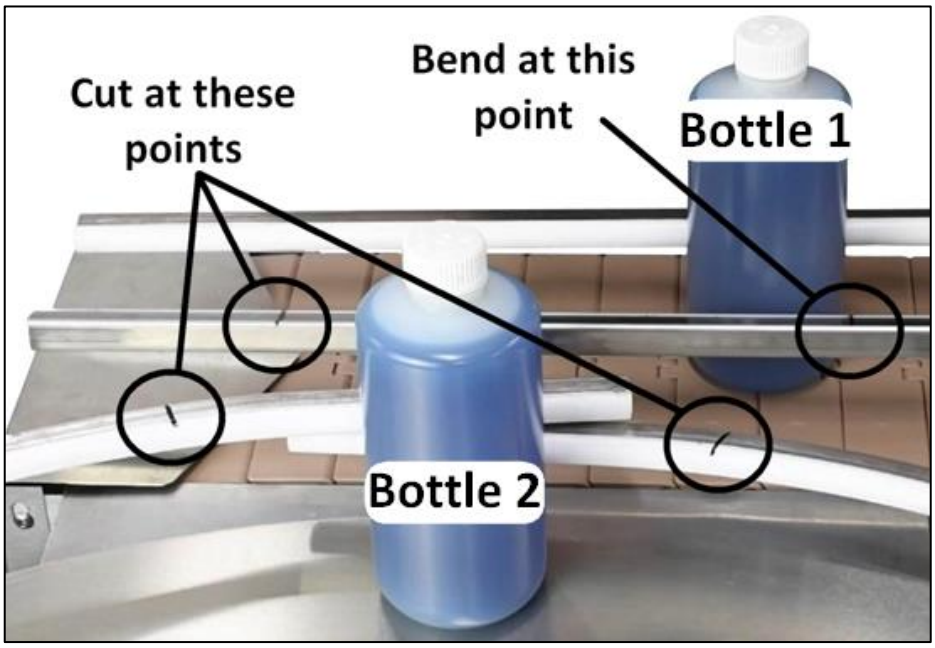
8. Extend a tape measure upstream from the mark you made on the conveyor guide rail in step 6, by the distance you noted in step 7, in our example, 10 inches. Make a new mark on the conveyor guide rail at this point as indicated by the circle in the image to the right. It is here we will be cutting off any excess guide rail, so our bent conveyor guide rail doesn't protrude too far into the accumulation table.

9. To complete the opening in the table guide rail we need to mark upstream of bottle 2. The location of this mark does not need to be precise, but we recommend marking a little less than a full container's width away from bottle 2, as indicated by the circle in the image to the right.

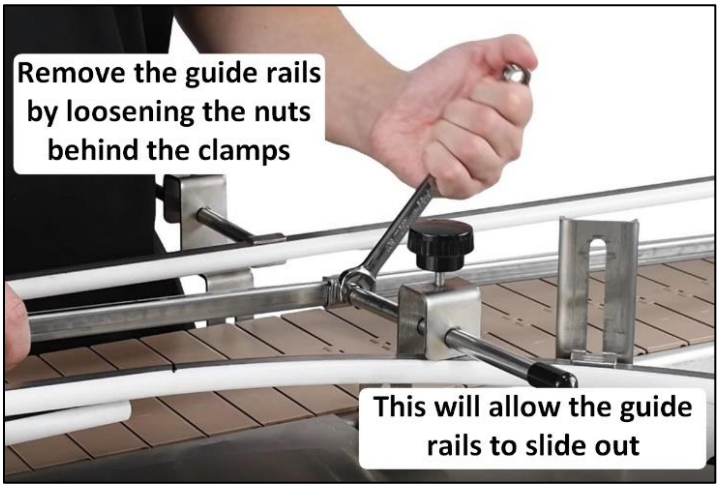
Now that the marks have been made, the guide rails can be modified accordingly.

We will be making one bend, and cutting the guide rails in three places, as indicated in the image to the right.

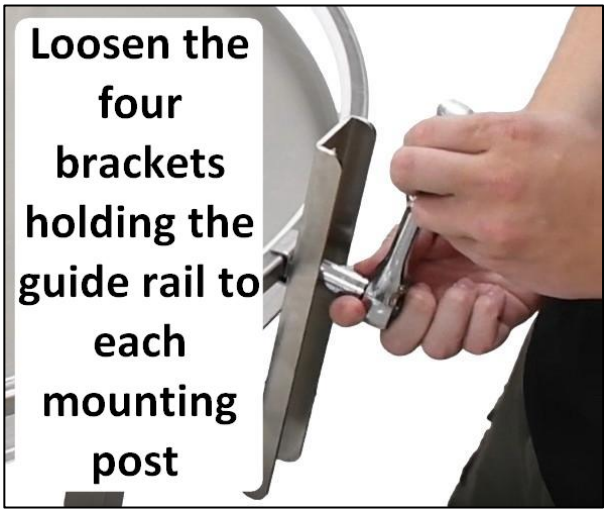
We will perform these modifications in steps 10 – 14 on the following pages.



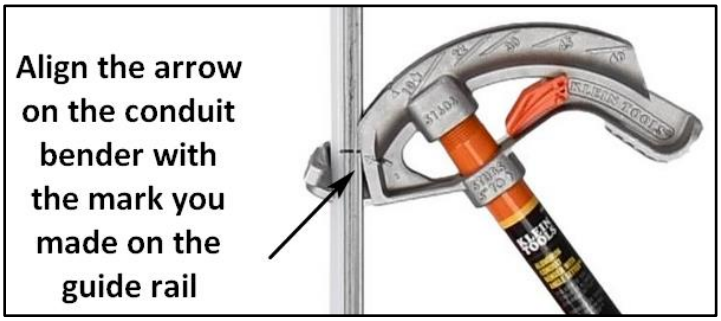
10. Only the conveyor guide rail closest to the accumulation table needs to be modified. Remove this guide rail from the conveyor using a ½ inch wrench to loosen the nut behind the guide rail clamp on the guide rail mounting bracket, shown in the picture to the right. When the bracket is loose, remove the guide rail for modification.



11. Remove the guide rail from the accumulation table using a ½ inch socket to loosen the nuts on the back side of the guide rail mounting posts, shown in the picture to the right.

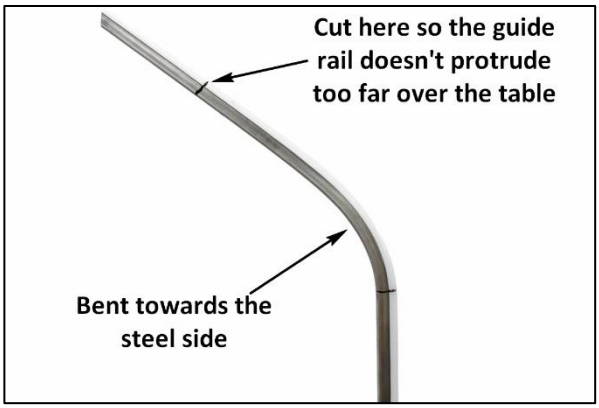


12. Shown below is a conduit bender. Conduit benders typically include a mark or arrow that indicates where the bend will start (shown in the picture below and to the left). Align the arrow on the conduit bender with the mark you made on the guide rail as shown in the image below and to the right.



Conduit benders include lines that represent common angles. They also include a step so you can push down with your foot to provide more leverage during the bending process.

Note that the guide rail should be bent towards the steel side, as the softer plastic side should be catching the bottles.

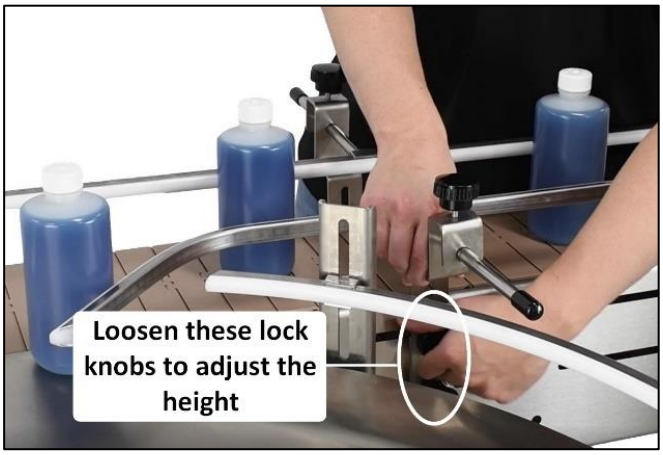


Bend the guide rail as shown in the image to the right. Flex the guide rail a little past the 45° indication mark, as the bend will naturally want to bounce back a bit when you release the conduit bender from the guide rail.

13. Using a hack saw, cut the conveyor guide rail and accumulation table guide rail at the locations you marked in steps 7 through 9. Cut using clean and precise strokes along your marks.

14. Reinstall the guide rails along the conveyor and accumulation table. Adjust the width and height of the conveyor guide rails to properly fit your container.

To adjust the height of the conveyor guide rails, loosen the two mounting knobs that fasten the guide rail bracket to the conveyor, as shown in the image to the right. Raise or lower the guide rail to the desired height, usually just a little less than half of the height of the bottle, and then tighten the lock knobs to lock the height of the guide rail into place.



To adjust the width of the guide rails, loosen the black knobs at the tops of the guide rail mounting brackets as shown in the image to the right. This will allow the guide rails to slide in and out. Retighten the lock knobs to lock the width of the rails in place.

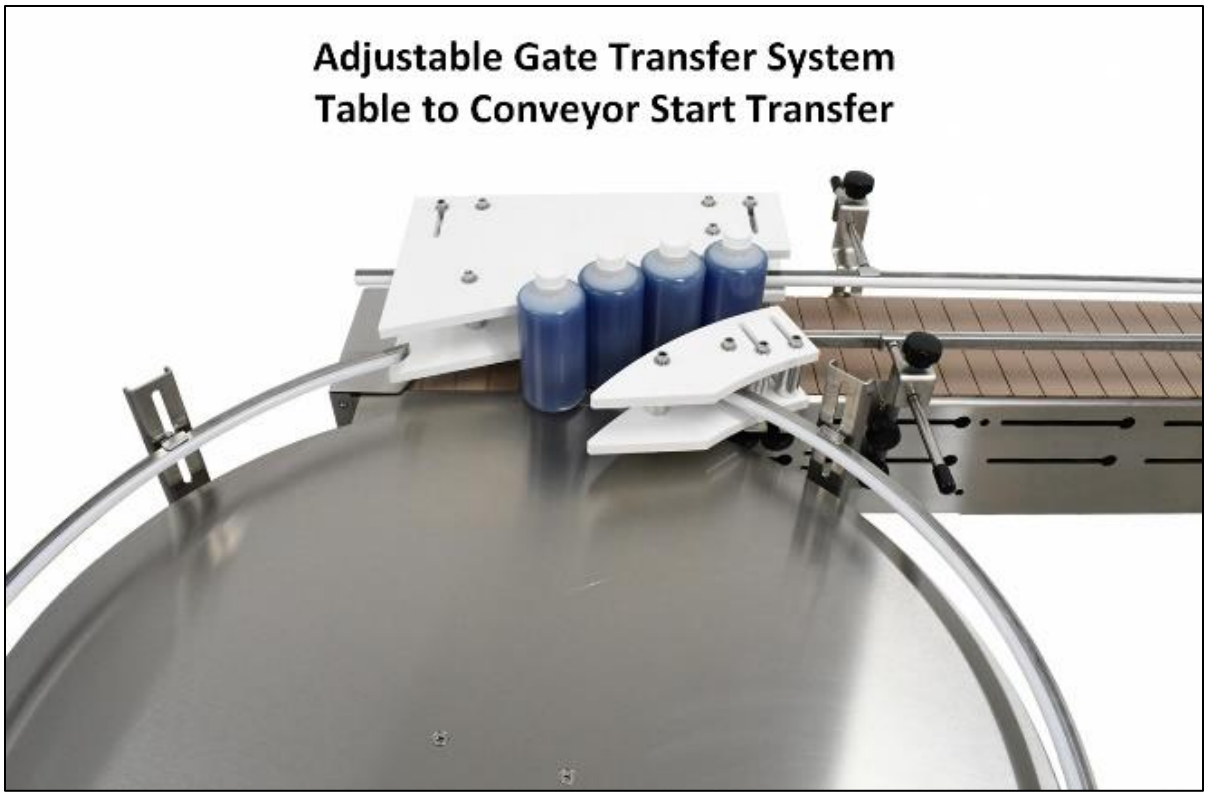
Final Set Up

15. Your final setup should look something like this, with the guide rails smoothly and easily guiding bottles over the transfer plate and onto the accumulation table.

Table to Conveyor Start Transfer – Adjustable Gate Transfer System Type

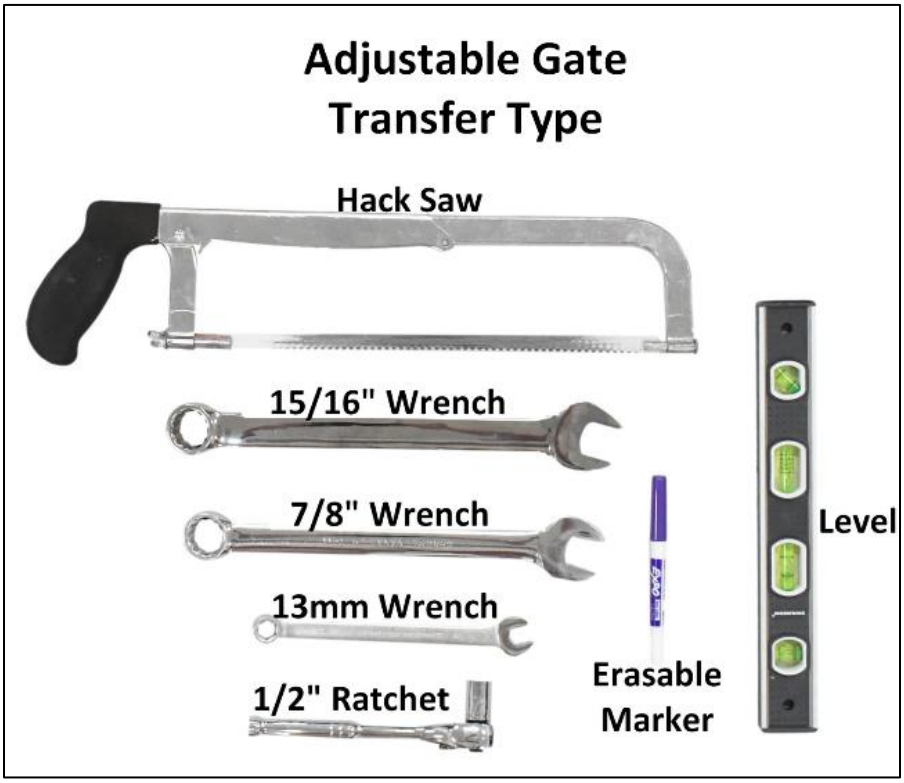
The adjustable gate transfer system, shown in the picture below, is designed to easily guide your containers from the accumulation table, over the transfer plate, and onto the conveyor.

Once it's set up, an adjustable gate transfer system table to conveyor start transfer will look something like the image below:



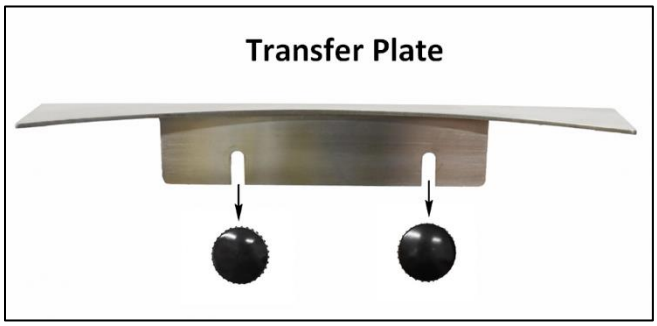
Tools Required

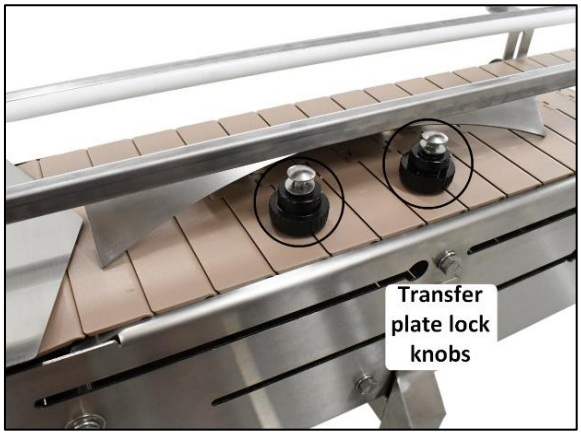
To set up your table to conveyor transfer, the following tools will be needed:



Mounting the Transfer Plate

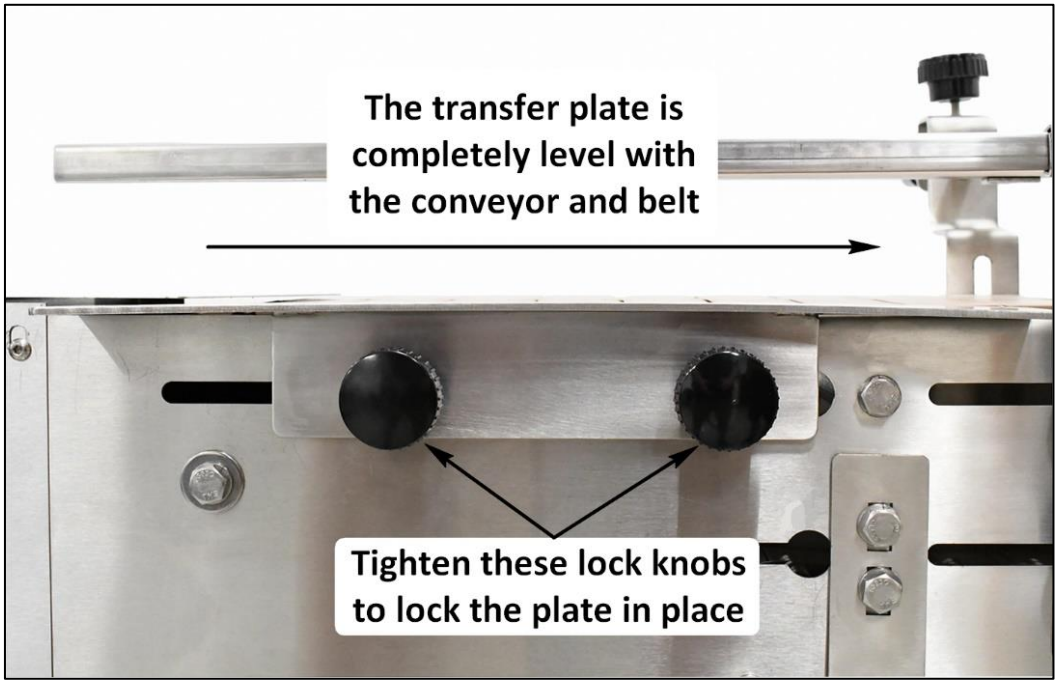
The transfer plate and lock knobs are shown below. The lock knobs are attached to carriage bolts that can be inserted into the mounting slots on the conveyor. The transfer plate features two arches that rest on the carriage bolts to hold the plate in place.





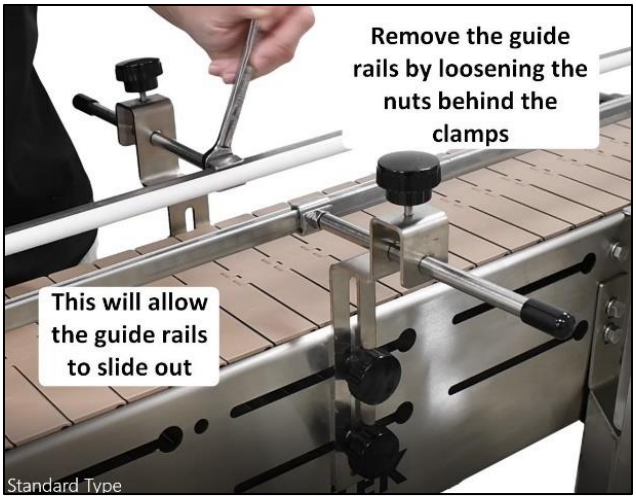
1. Slide the knobs and carriage bolts into the slot at the start of your conveyor, then rest the arches of the transfer plate on the bolts, as seen in the picture below.

2. Tighten the knobs to lock the transfer plate in place, verifying that the plate is completely level and even with the conveyor.



Installing the Adjustable Gate Transfer System

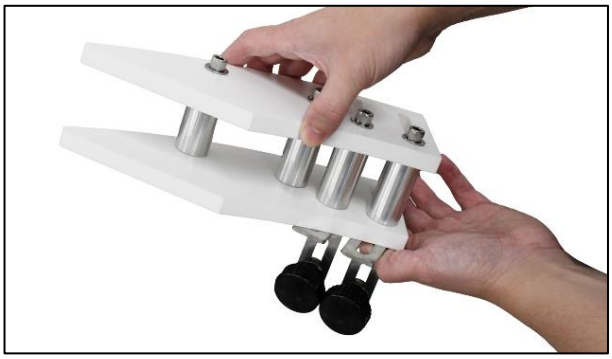
3. The guide rails on the conveyor will get in the way of our adjustable gate installation. Temporarily remove them by loosening the nuts behind the guide rail clamps and sliding the guide rails out from the clamps.



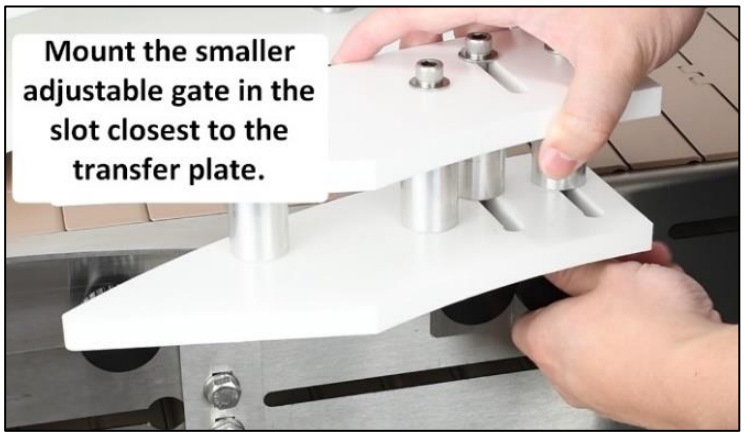
4. The larger half of the adjustable transfer gate is shown below. To mount it to the conveyor, insert the bracket knobs into the mounting slots on the opposite side of the conveyor to the transfer plate, as shown below.

Tighten the bracket knobs to lock this half of the adjustable gate in place. We will adjust the gate later, so don't worry about its exact placement for now.

5. The smaller half of the adjustable transfer gate is shown to the right. To mount it to the conveyor, insert the bracket knobs into the mounting slot closest to the transfer plate, as shown in the picture below and to the right.



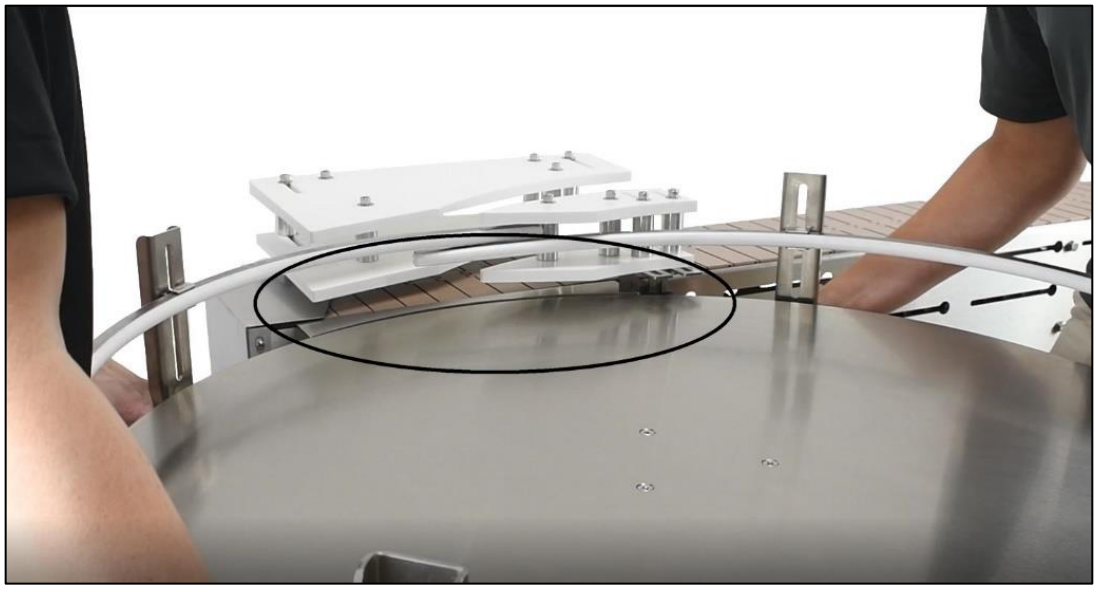
Tighten the bracket knobs to lock this half of the adjustable gate in place. We will adjust the gate later, so don't worry about its exact placement for now.



Mounting the Accumulation Table

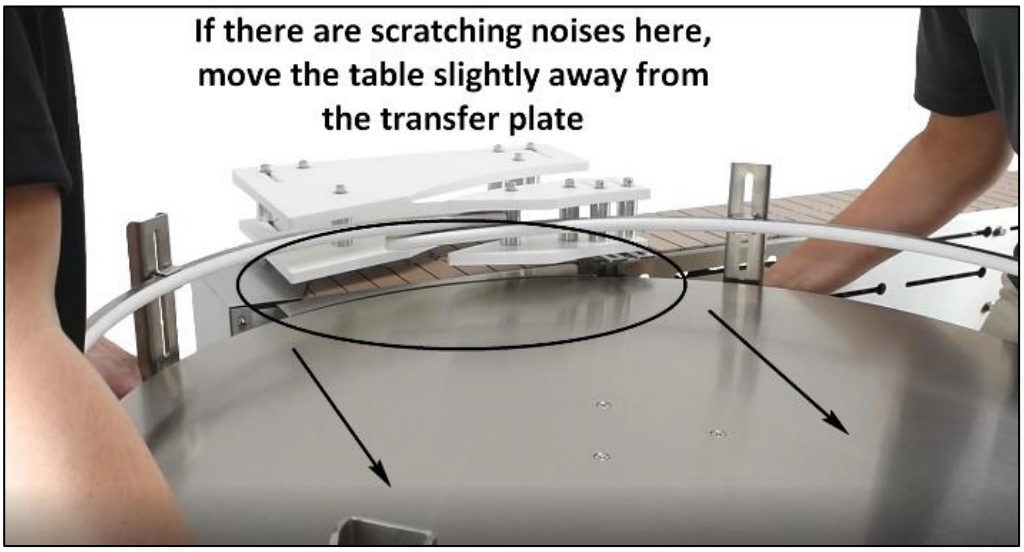
6. Move your accumulation table so that the round edge of the rotating disk is resting against the curve of the transfer plate, as shown in the image below.

   The intersecting point of the circular guide rail, designated by the oval, should land above the transfer plate.

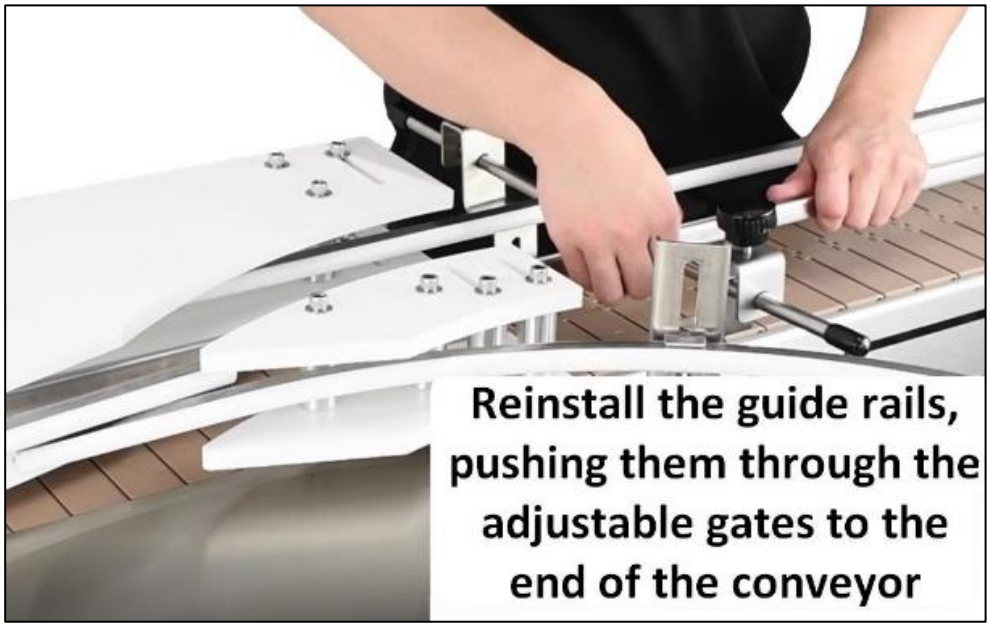


7. At this point, you may need to make fine adjustments to the table height to ensure that it is completely level to or slightly above the transfer plate. For instructions regarding height adjustment, see page 21.

8. Temporarily plug your accumulation table into a power source and turn it on. You should not hear any grinding or scratching noises as the disk rotates. If you do hear scratching or grinding noises, this is likely because the rotating disk is rubbing against the transfer plate. If this occurs, slide the accumulation table away from the transfer plate slightly until the noise stops.



9. Reinstall your guide rails on your conveyor, inserting them through the brackets and the adjustable gates as shown in the picture below.



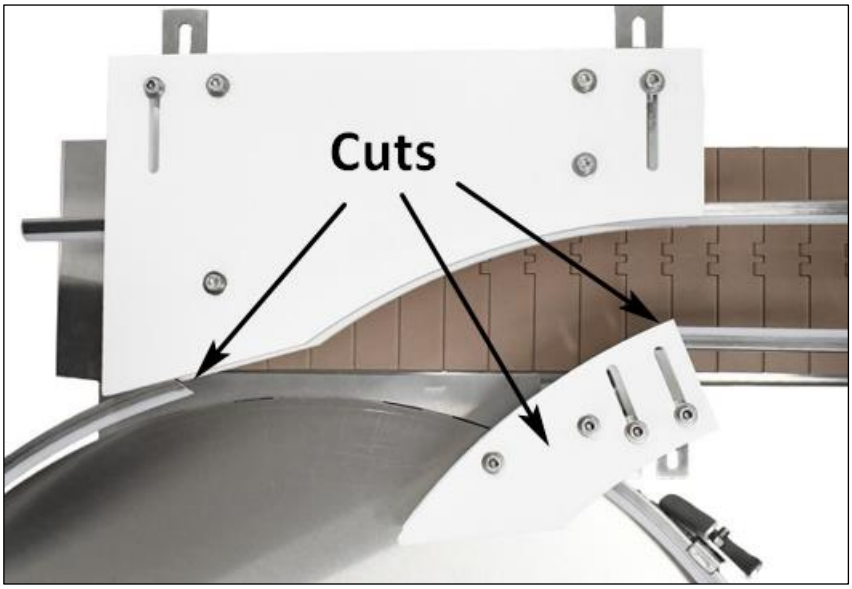
Marking and Modifying the Guide Rails

The conveyor and accumulation table are shown to the right. The transfer plate and adjustable gate are installed, but the guide rails would interfere with any container passing through them. We will need to cut the guide rails to assist in the transfer process.

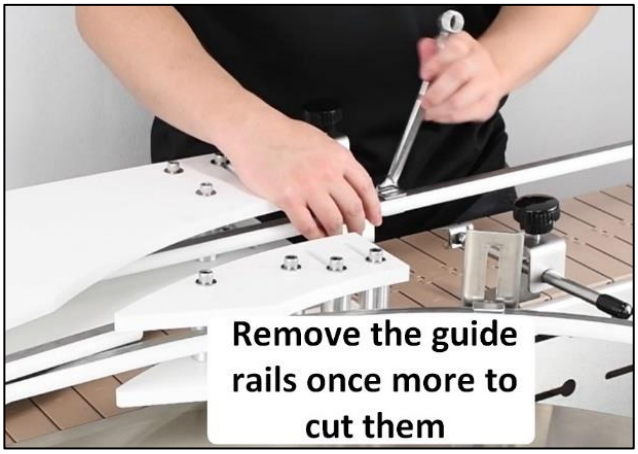
10. Mark the conveyor and accumulation table guide rails at the locations indicated by the circles in the picture to the right. These are the points at which we will cut the conveyor and accumulation table guide rails to open the stream.

The picture to the right shows the locations of the cuts after the conveyor and accumulation table guide rails have been cut and then reinstalled.

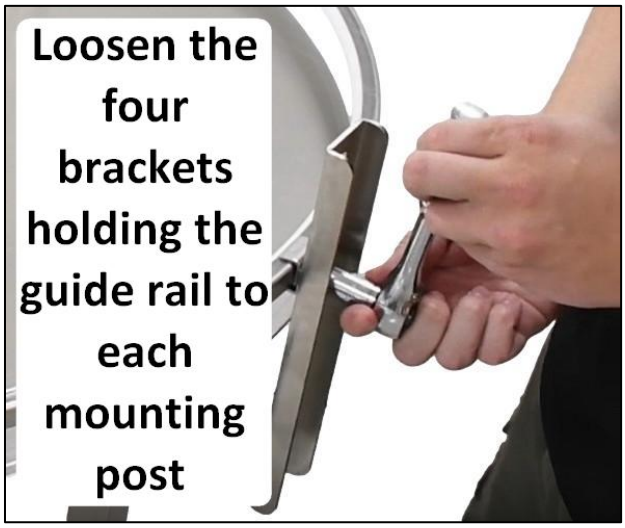
Steps 11-18 will provide detailed instructions of how to go about this process.



11. Only the conveyor guide rail closest to the accumulation table needs to be cut. Remove this guide rail from the conveyor using a ½ inch wrench to loosen the nut behind the guide rail clamp on the guide rail mounting bracket, shown in the picture to the right. When the bracket is loose, remove the guide rail.

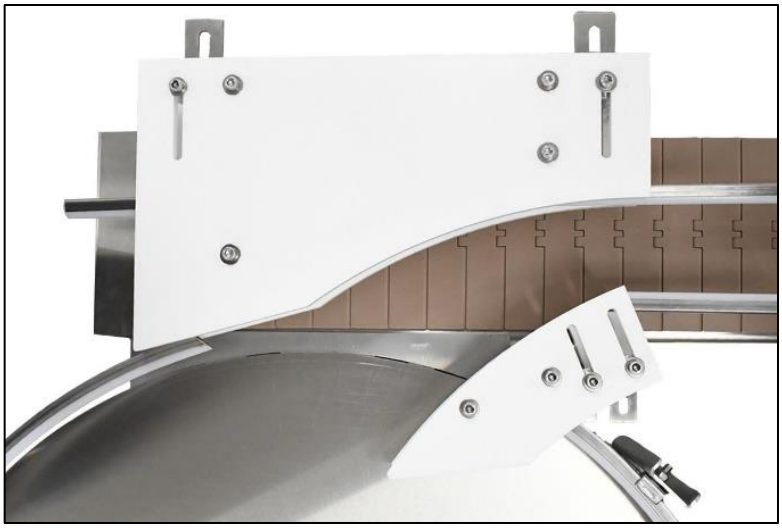


12. Remove the guide rail from the accumulation table using a ½ inch socket to loosen the nuts on the back side of the guide rail mounting posts, shown in the picture to the right.

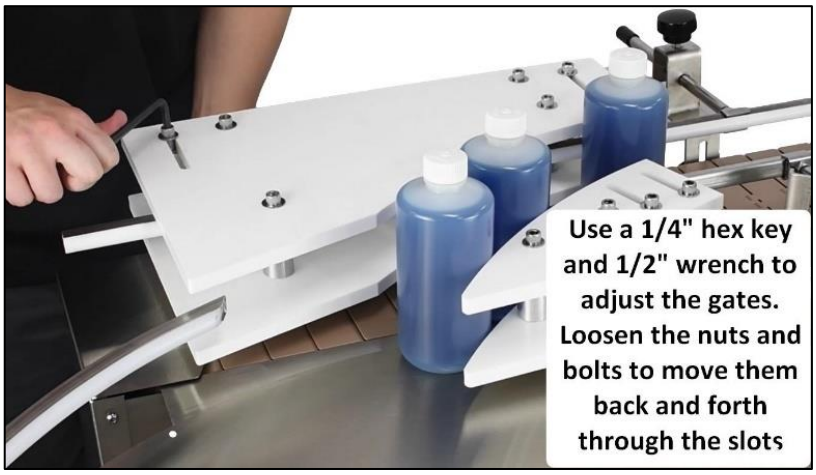


13. Cut the guide rails you marked in step 10 to the appropriate lengths using a metal-cutting hacksaw. Cut using clean and precise strokes along your marks.

14. Reinstall your guide rails one more time, lining up the newly cut end of the guide rail closer to the accumulation table with the smaller of the adjustable gates.



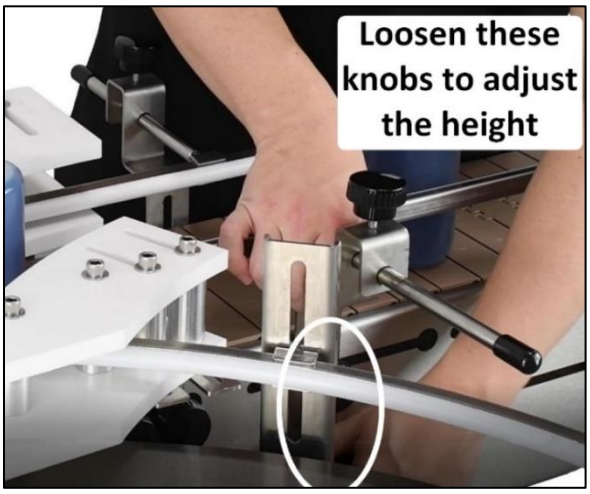
15. Adjust the width of the opening between the gates to fit the bottle. If the gates need to be moved closer together, or brought further apart, loosen the ¼ inch hex screw as shown in the images below. With the screw loose, the gates can slide in and out along the travel slots. Adjust the width of the gates so the bottle can flow freely between the gates and then tighten the hex screw to lock the gates in place.



16. The small gate needs to protrude into the rotating disk of the accumulation table so it can catch the bottles traveling along the outer edge of the rotating disk and guide them through the gates and onto the conveyor. Adjust the small gate so that it protrudes a little more than the bottle width into the rotating disk of the accumulation table.

17. Adjust the width and height of the conveyor guide rails to properly fit your container.

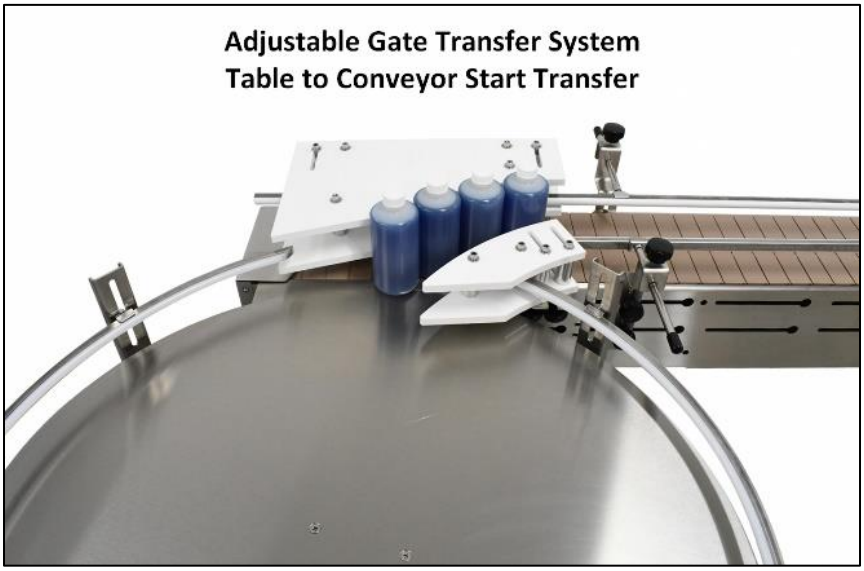
    To adjust the height of the guide rails, loosen the two mounting knobs that fasten the conveyor guide rail bracket to the conveyor, as shown in the image to the right. Raise or lower the guide rail to the desired height, usually just a little less than half of the height of the bottle, and then tighten the lock knobs to lock the height of the conveyor guide rail into place.



    To adjust the width of the guide rails, loosen the black knobs at the tops of the conveyor guide rail mounting brackets as shown in the image to the right. This will allow the guide rails to slide in and out. Retighten the lock knobs to lock the width of the guide rails in place.

Final Setup

18. Your final setup should look something like this, with the adjustable transfer gate system smoothly and easily guiding bottles over the transfer plate and onto the accumulation table.



Optional Equipment

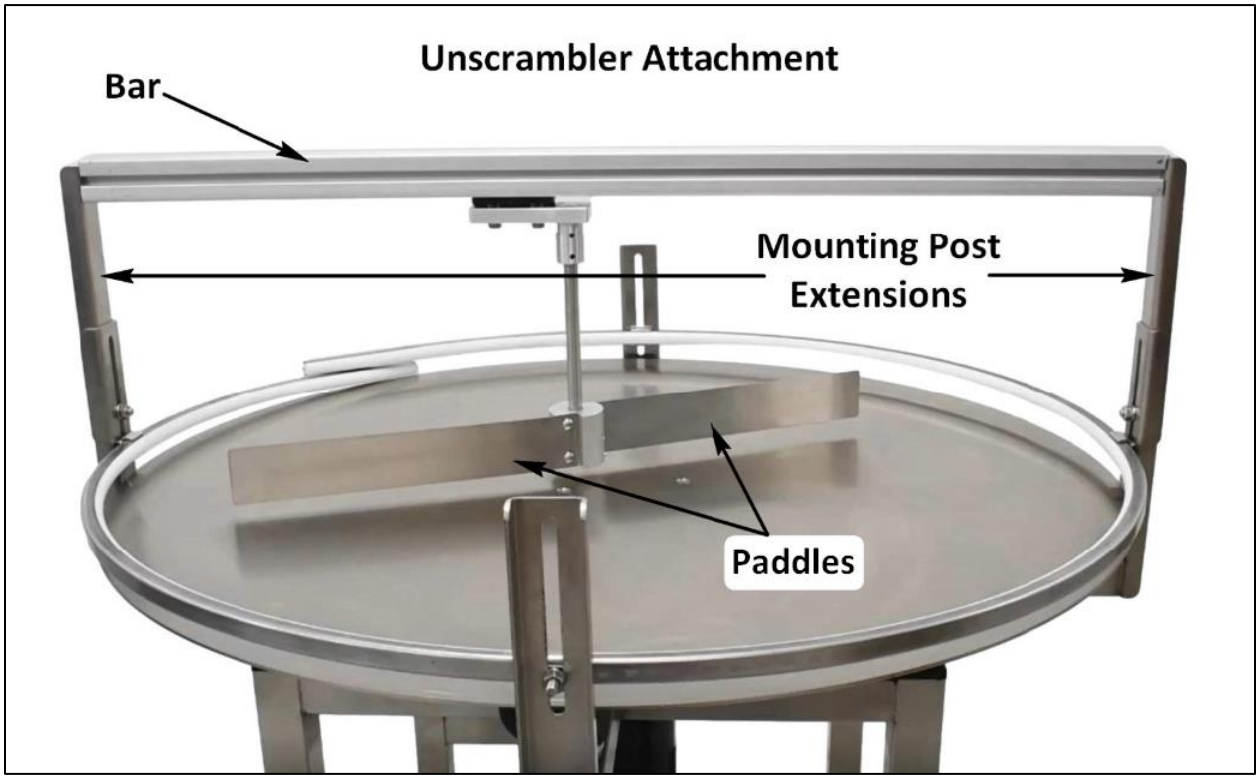
The Unscrambler Attachment

The unscrambler attachment is a pair of paddles that mounts to the center of your accumulation table and pushes your containers to the outer edge of the table. An unscrambler attachment is particularly useful if the containers on your table are disorganized or if there is a large number of them.

If you ordered an unscrambler attachment, it will come attached to your accumulation table. See page 27 for more information about unpacking your accumulation table and accessories.

Mounting your Unscrambler to your Table

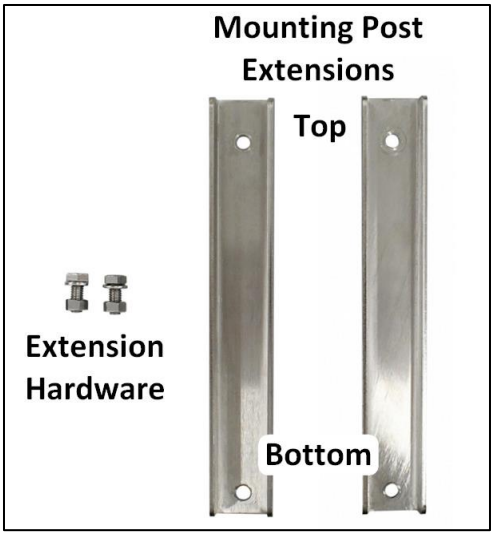
The unscrambler attachment is shown below. The unscrambler bar, paddles, and mounting post extensions are all designated.



Tools Needed

Shown below are the tools needed to mount your unscrambler attachment to your accumulation table.

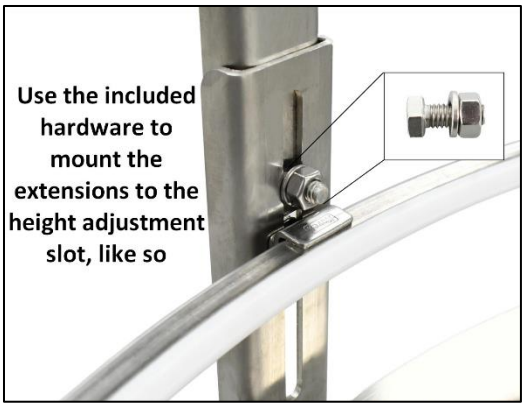
Installation



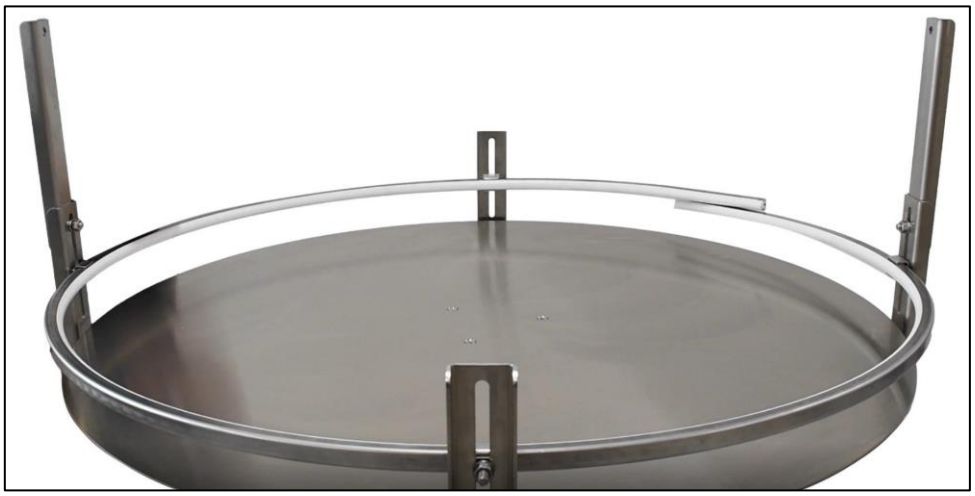
1. First, locate your mounting post extensions and the accompanying extension hardware. The extension hardware includes two sets of bolts, nuts, and washers that will hold the extensions in place.

   Note that the mounting post extensions are asymmetrical pieces; the holes in the bottom are closer to the end than the ones in the top of the extensions.

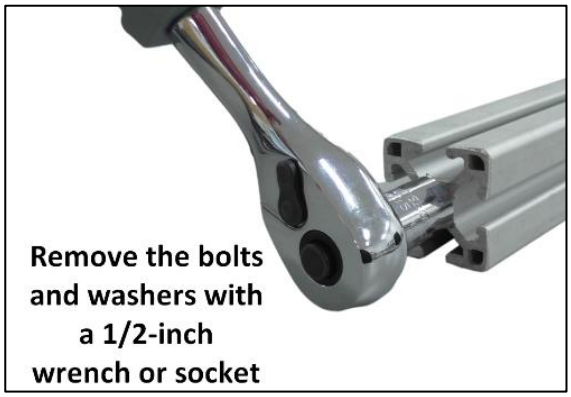
2. Mount the bottoms of your mounting post extensions, with the hole closer to the end, to the height adjustment slot in the mounting posts, as seen in the pictures to the right. Thread the bolt through the hole in the bottom of the extension and then through the height adjustment slot of the mounting post, fastening the washer and nut on the threads on the other side. Use a 1/2-inch socket and wrench to fasten these pieces in place, as shown in the picture above.



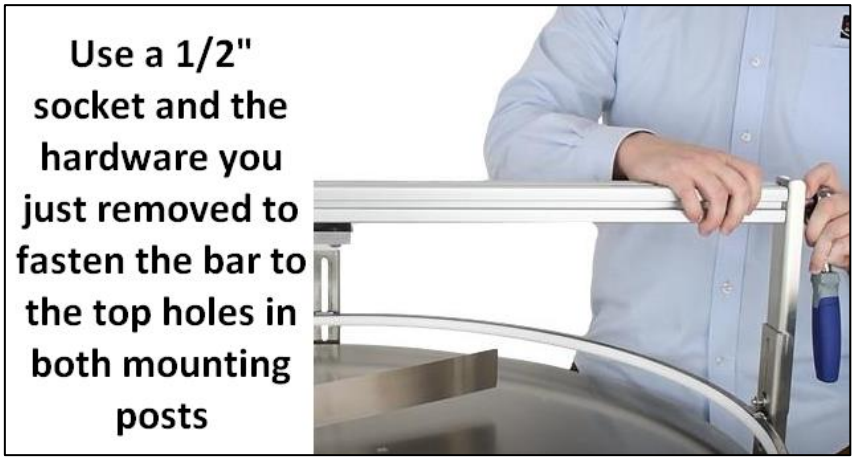
   Your extended mounting posts should end up looking like the picture below. Note that they share the height adjustment slot with the accumulation table guide rail, but they are mounted above the guide rail clamps.



3. The unscrambler bar comes with bolts and washers screwed into both ends, shown in the pictures below. Remove this hardware to prepare to mount the unscrambler.



4. Use the hardware you just removed to fasten the unscrambler bar to the holes in the tops of the mounting post extensions, as shown in the picture to the right. Once finished, the unscrambler bar should bridge the gap between the two mounting posts.



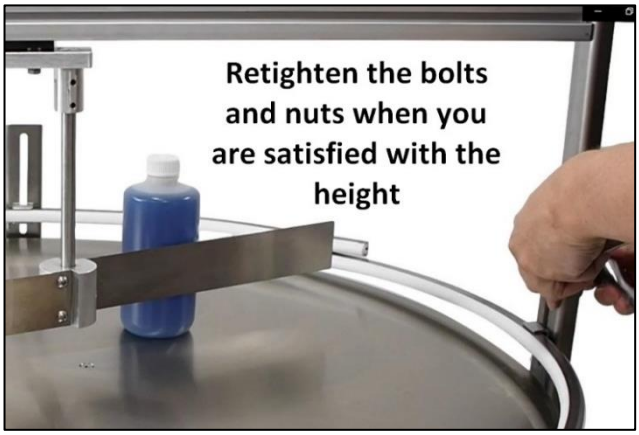
Below is a picture of your unscrambler once it has been installed.

Adjusting your Unscrambler

Depending on the size of your accumulation table and containers, you may need to adjust the positioning on your unscrambler.

Adjusting the Height of the Unscrambler

If your containers are particularly short or tall, the height of your unscrambler may need to be adjusted. Typically, we recommend setting the height of the unscrambler paddles so they support the center of gravity of the container, to prevent the containers from toppling.



To adjust the height, use a ½ inch wrench to loosen, but do not remove, the nuts and bolts that fasten the mounting post extensions to the mounting posts, as shown in the picture to the right.

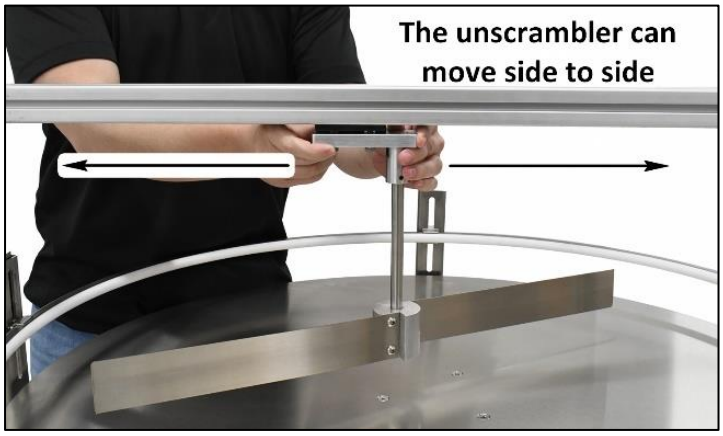
With your hardware loosened, the unscrambler can be raised and lowered by moving the extensions up or down in unison.

Center your unscrambler paddles at the approximate center of your container. Once satisfied with their position, and after ensuring that the unscrambler bar is level, retighten the hardware to fasten the unscrambler in place.

The unscrambler shares its height adjustment slot with the accumulation table guide rail, so the height of one is sometimes dependent on the other, as shown in the picture to the right.

Try to find a balance where the heights of the unscrambler and guide rail work together to keep the bottles on the accumulation table steady and upright.

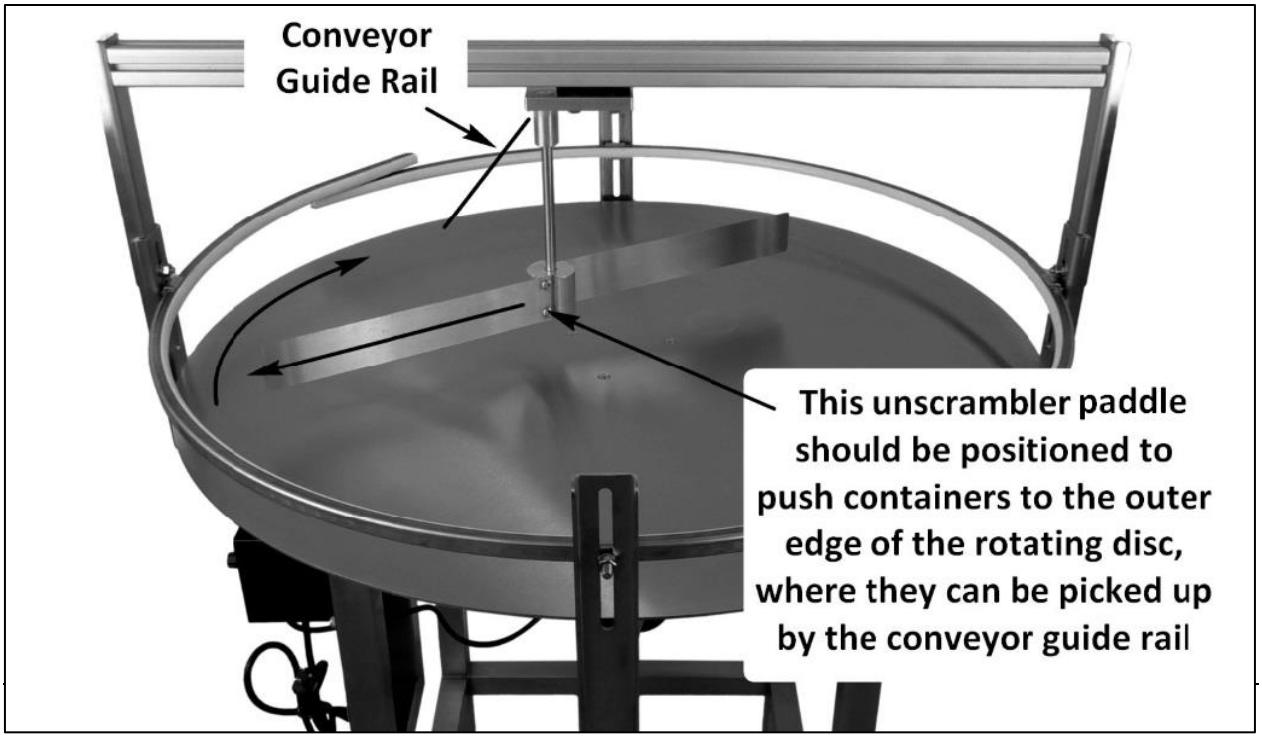
Adjusting the Horizontal Position of the Unscrambler



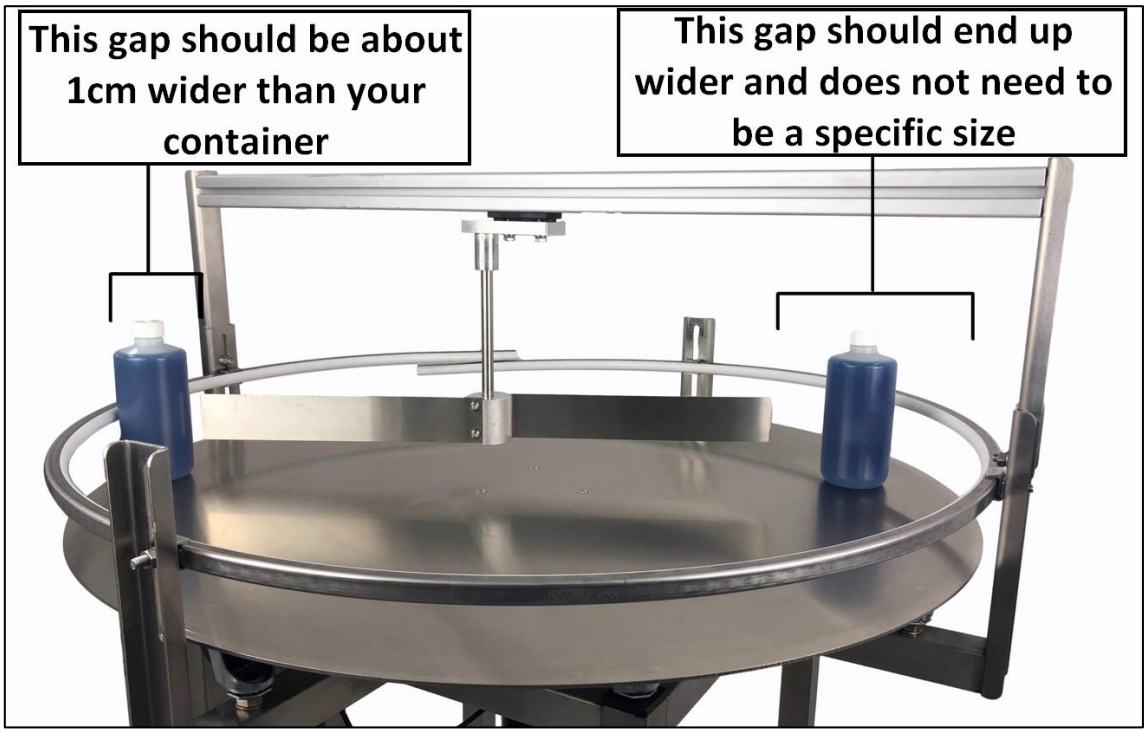
The paddles of the unscrambler are designed to direct containers to the outside of the rotating disk, where they can then be transferred to other packaging machinery such as conveyors. This process is represented by the picture to the right.

To adjust the horizontal positioning of the unscrambler, use a 7/16 ratchet to loosen the two bolts that fasten the paddles to the unscrambler bar, designated in the picture to the right. This will allow the unscrambler to slide left and right along the travel slot in the unscrambler bar.

The unscrambler should be positioned as shown in the image below. One of the paddles should be closer to accumulation table guide rail than the other, as designated. This is the paddle that will push the containers to the outer edge of the rotating disc, where they can be picked up by the conveyor guide rail.

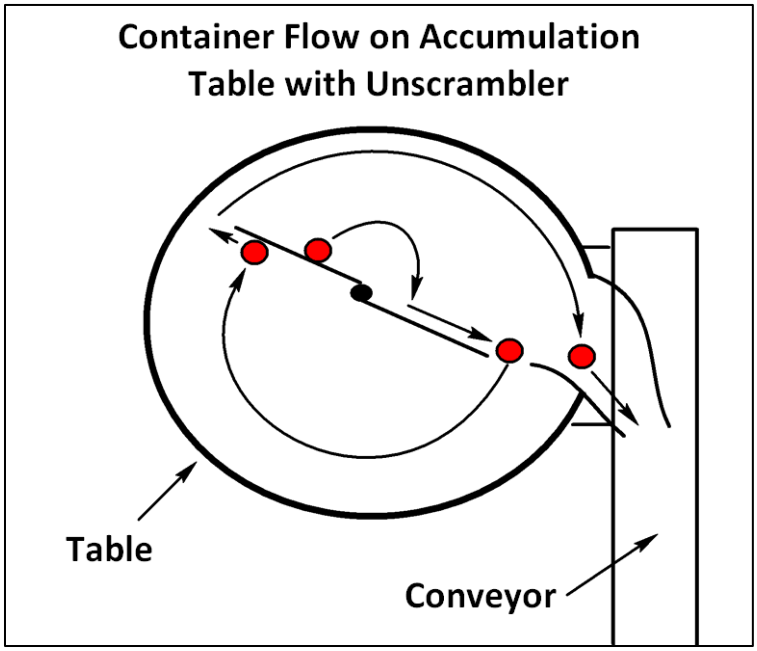


Finalize the unscrambler position by placing one of your containers between the accumulation table guide rail and your closer paddle, as shown in the picture below. Set the unscrambler paddle so it is about 1 cm away from this container. The gap on the other side of the unscrambler will naturally be much larger, and its specific width is not important.



Once you are satisfied with the position of your unscrambler, retighten the two bolts that fasten the unscrambler to the unscrambler bar to lock the horizontal position in place.

When your unscrambler is properly installed, bottles placed on your accumulation table should flow as shown in the diagram to the right:



When using the accumulation table with unscrambler, if you find that your bottles are getting stuck and not flowing smoothly around the table, it is likely you need to adjust the horizontal position of the unscrambler.

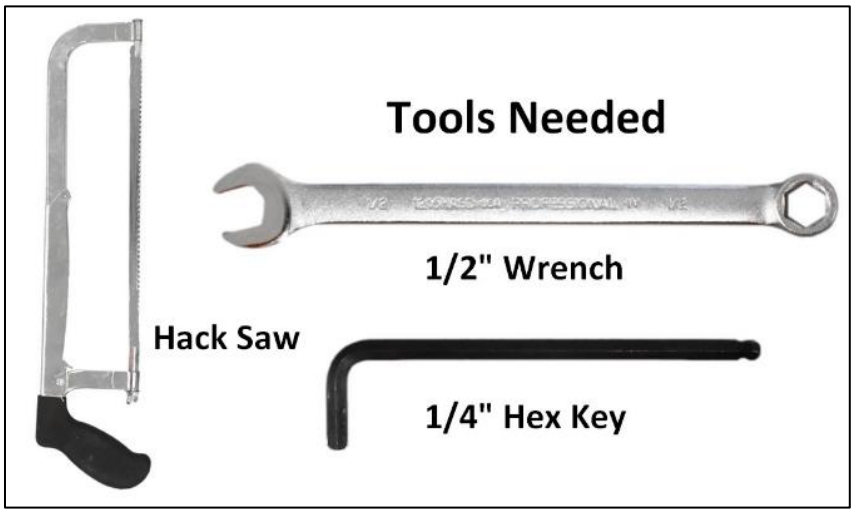
The In-Feed Table

The in-feed table is an optional attachment for your accumulation table. It serves as a place to quickly feed bottles onto an accumulation table or quickly remove bottles from an accumulation table.

This manual shows the assembly of a 3-foot accumulation table and in-feed table, but the same principles apply no matter the model of your components.

Tools Needed

Shown to the right are the tools required to install your in-feed table.



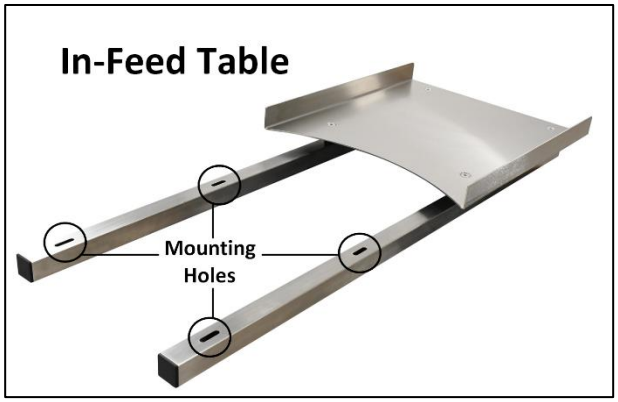
Installation

It is recommended to install your in-feed table after you have mounted your accumulation table to your conveyor following the instructions found in this manual.

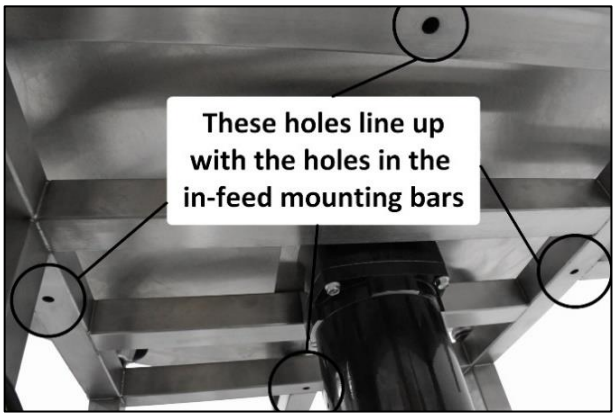
We recommend at least two team members are present for the in-feed table installation. Once it is installed, your in-feed table and packaging line will look like the picture to the right. We recommend mounting your in-feed table to the side of the accumulation table opposite the conveyor.

1. For the following installation, we recommend temporarily separating the accumulation table from the conveyor. It can be reconnected after the in-feed table has been installed.

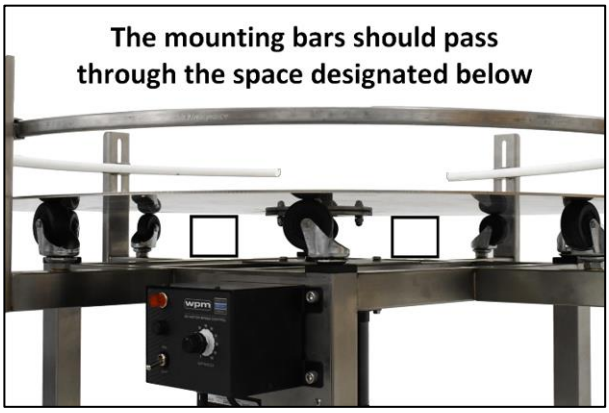
2. The in-feed table is shown standalone in the picture below and to the right. It has two long mounting bars.



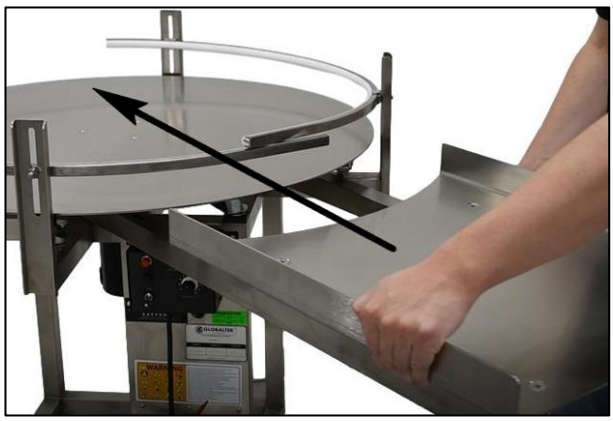
The four holes in the mounting bars, shown in the picture above and to the right, are designed to line up with the four holes in the frame of the accumulation table, shown in the to the right.



3. Have a team member carefully lift and insert the mounting bars of the in-feed table between the frame and rotating disc of the accumulation table, as shown in the picture to the right.

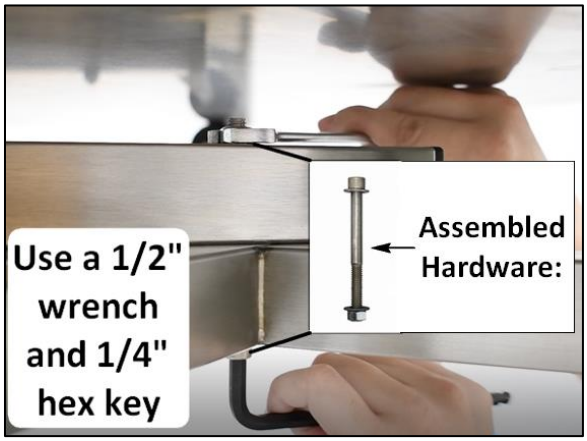


Be sure to mount the in-feed table to the side of the accumulation table opposite where the accumulation table connects to the conveyor.



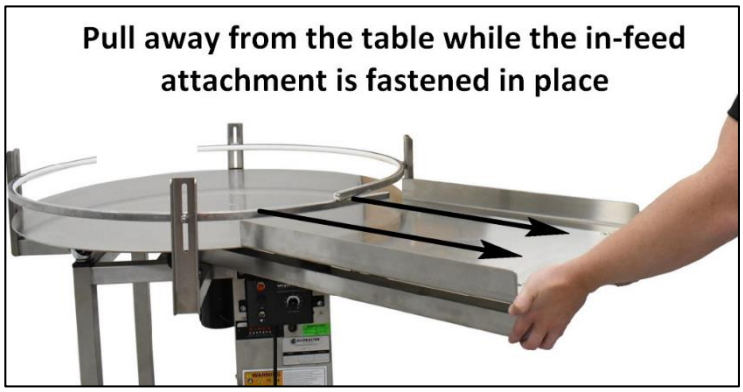
4. After the bars have been pushed in as far as possible, the team member should hold the table centered and leveled with the accumulation table, as shown in the picture to the right. If the tables are not held together carefully, they may scratch or rub together, or the in-feed table might slip out.

5. A second team member should get beneath the accumulation table to attach the in-feed table mounting bars to the accumulation table frame. This should be done using a ½ inch wrench, ¼ inch hex key, and the included hardware shown below and to the right. Do not tighten the hardware just yet.

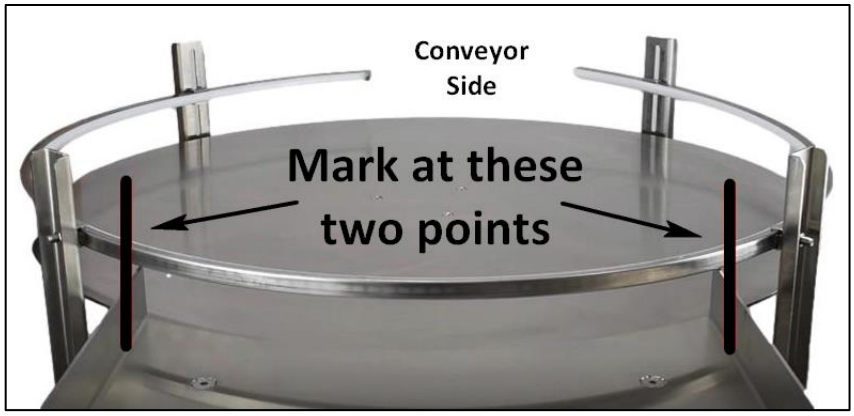


Repeat at each of the four mounting holes beneath the table.

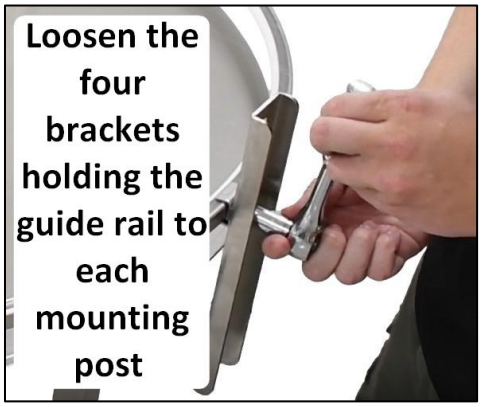
6. Before tightening the bolts under the table completely, have the team member holding the in-feed table pull it slightly away from the table frame, just enough so that the rotating disk will not grind against the edge of the in-feed table when it is rotating. Tighten the bolts to lock the in-feed table in place.



7. The in-feed table is now installed, but the accumulation table guide rail still separates it from the rotating disc. The accumulation table guide rail should be cut to the sides of the in-feed table as indicated in the picture to the right.



8. Remove the accumulation table guide rail by loosening the nuts mounting it to the guide rail mounting posts using a ½ inch socket, as shown in the image to the right.



9. Cut at the points on the guide rail you marked in step 4 using a metal-cutting hacksaw. Cut using clean and precise strokes along your marks.

   Because we already had a cut on the conveyor side of the accumulation table guide rail, it is worth noting that **the guide rail will now exist as two separate pieces,** as shown in the image below and to the right.

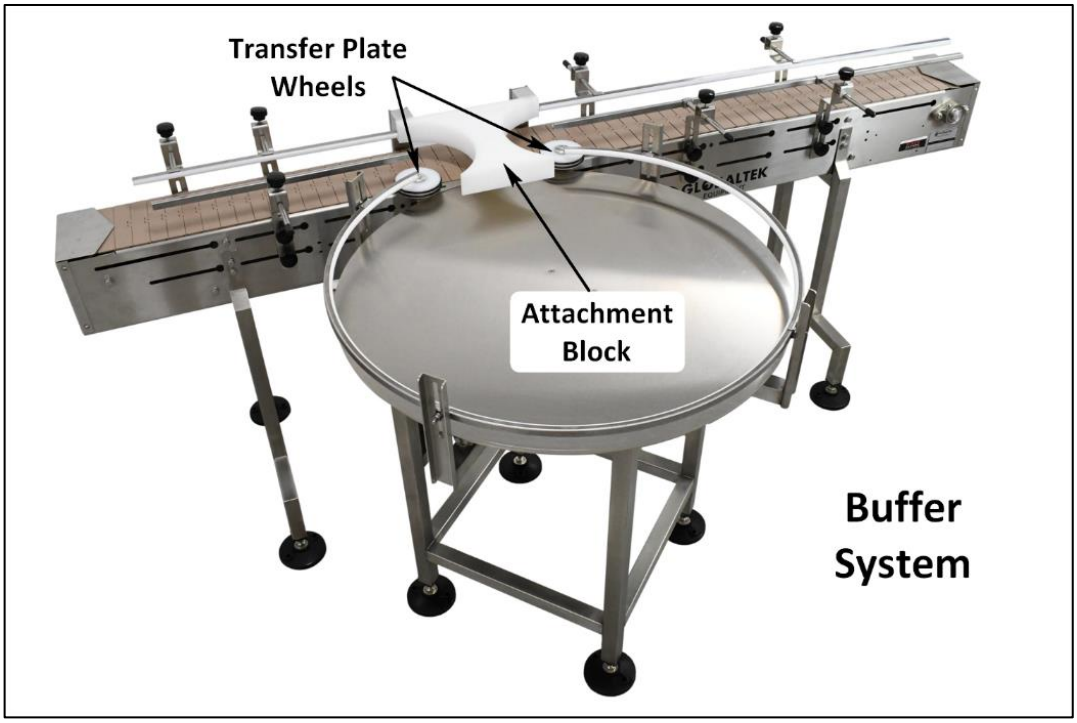
10. Reinstall your guide rail using a ½ inch socket to retighten the nuts in the guide rail mounting posts. Both halves of the guide rail should be mounted to two posts.

11. Your accumulation table can now be reinstalled in your conveyor system. Carefully lift your accumulation table and once more nest the curve of the rotating disc within the curve of the transfer plate, as shown in the picture to the right.

Your in-feed table is now properly installed. It can be used to easily push bottles onto and off of the rotating portion of the accumulation table.

The Buffer System

The buffer system is a transfer system that takes containers off of the conveyor, onto an accumulation table, and then back onto your conveyor. A buffer system essentially lengthens your packaging line, allowing your containers to spend more time between each step in your packaging process.

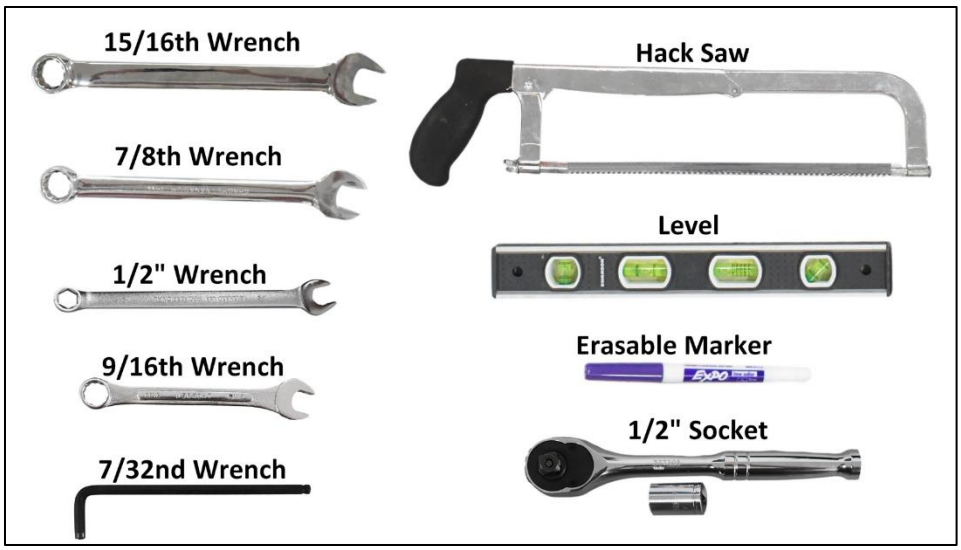


The buffer system is shown above. Its major components, the attachment block and the transfer plate wheels, will be customized to work with your containers, so don't worry if your buffer system looks slightly different than the one shown above.

This manual demonstrates this installation using an 8-foot conveyor and 3-foot table, but the same principles apply no matter the size of either machine.

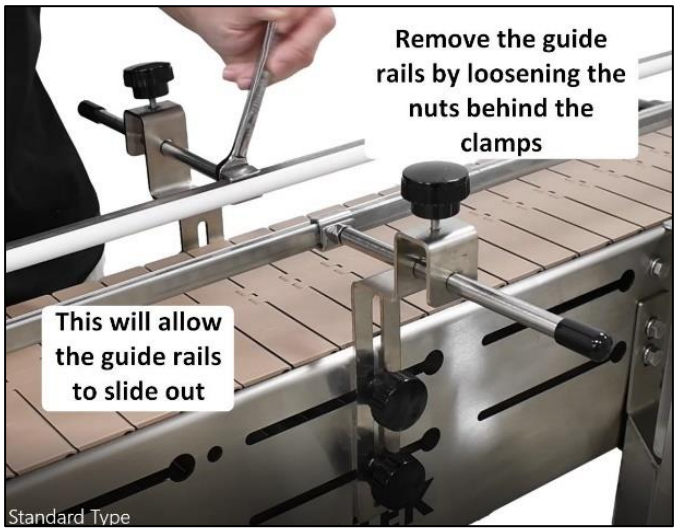
Tools Needed

Shown below are the tools required to install your in-feed table.



Removing the Guide Rails

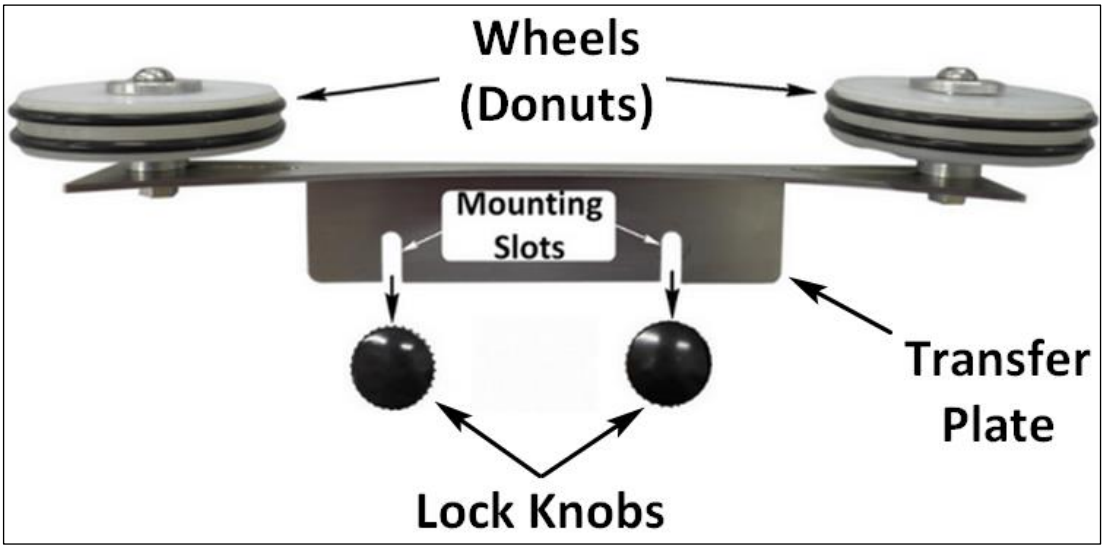
1. The guide rails on the conveyor will get in the way of our buffer system installation. Temporarily remove them by loosening the nuts behind the guide rail clamps and sliding the guide rails out from the clamps.



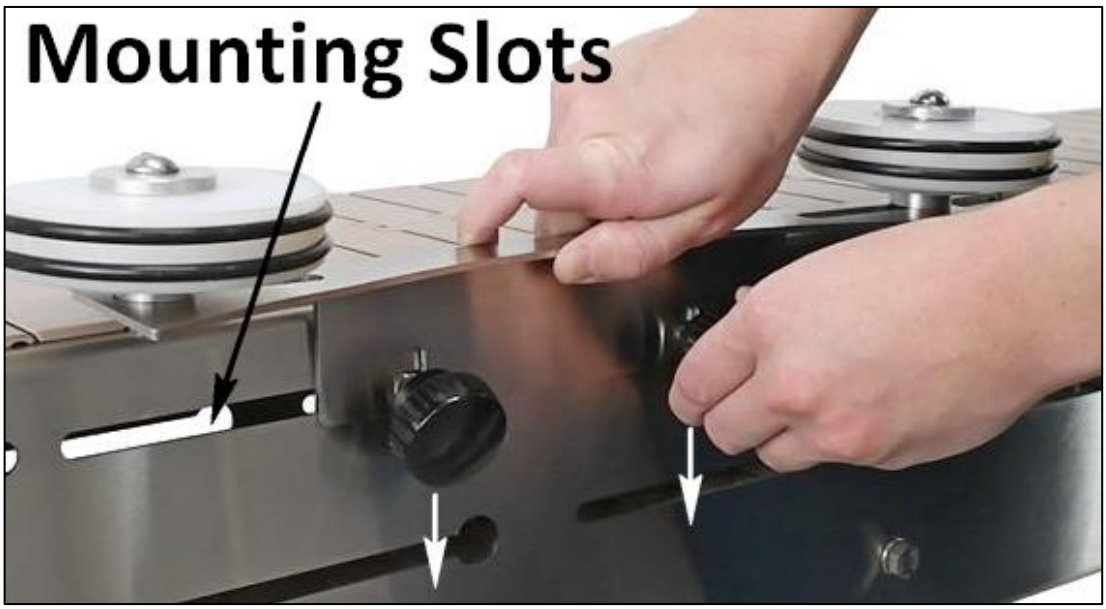
Mounting the Transfer Plate

The buffer system transfer plate, wheels and lock knobs are shown below. The lock knobs are attached to carriage bolts that can be inserted into the mounting slots on the conveyor. The transfer plate features two slots that rest on the carriage bolts to hold the plate in place.

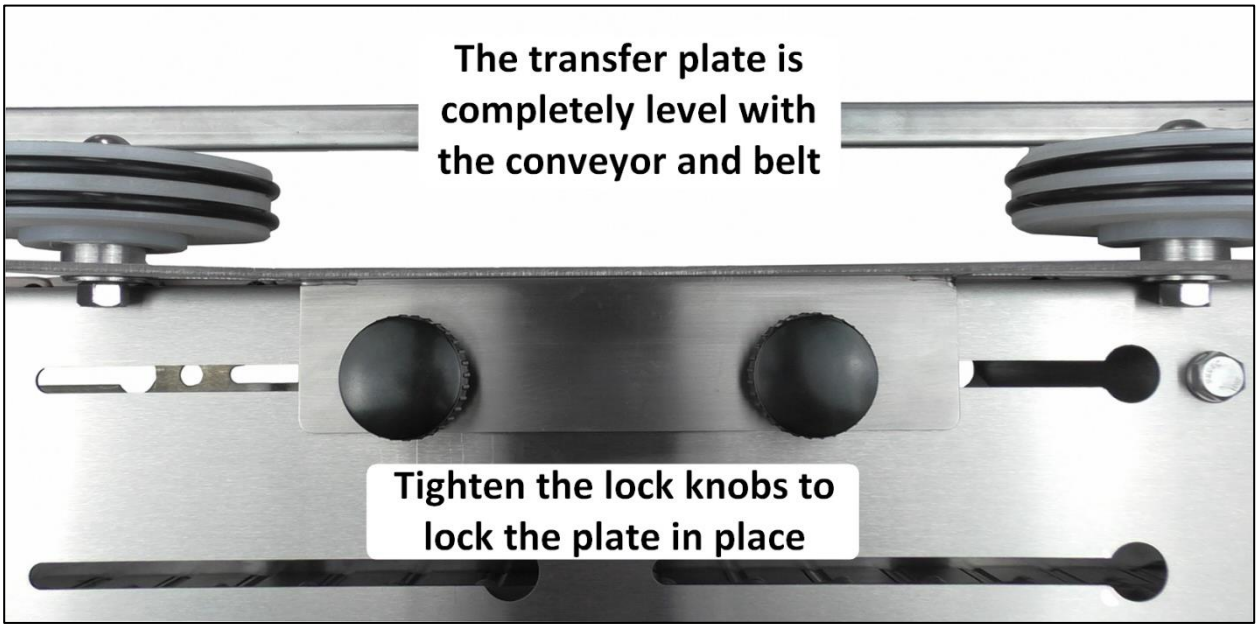
The transfer plate also features two wheels (also called donuts), round plastic spinning discs that guide bottles through the buffer system. Your donuts will be custom made for your application and may not look quite like the ones shown here.



2. Slide the knobs with included carriage bolts into the mounting slots on the sides of your conveyor, then rest the slots on the transfer plate onto the carriage bolts on the lock knobs as shown in the picture below.

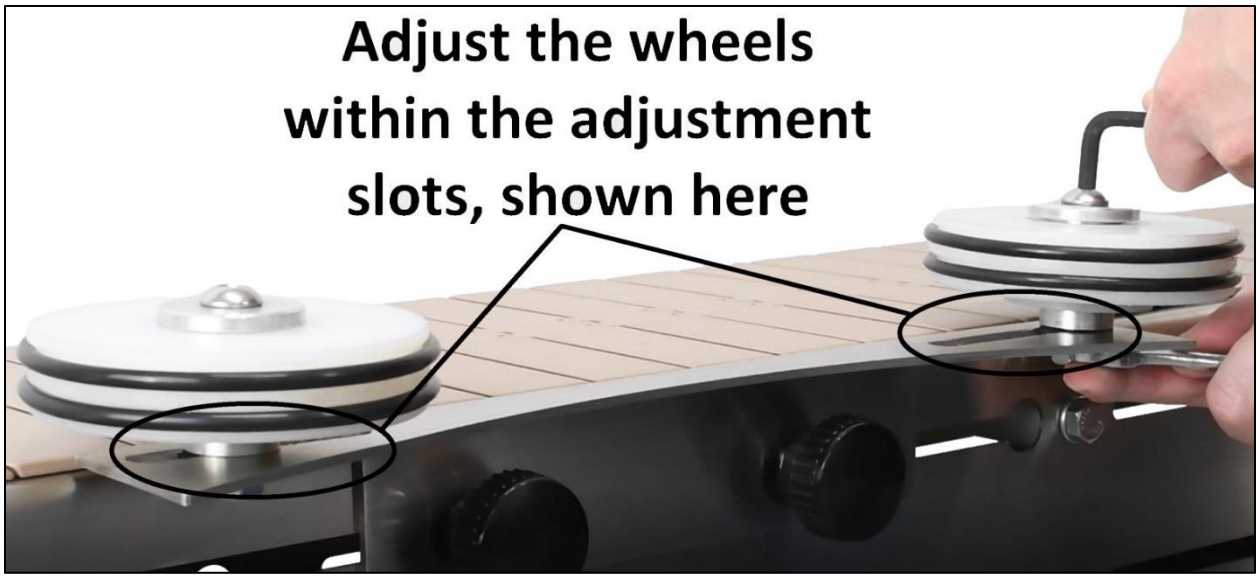


3. Tighten the lock knobs to fasten the transfer plate in place, verifying that the plate is completely level and even with the conveyor.

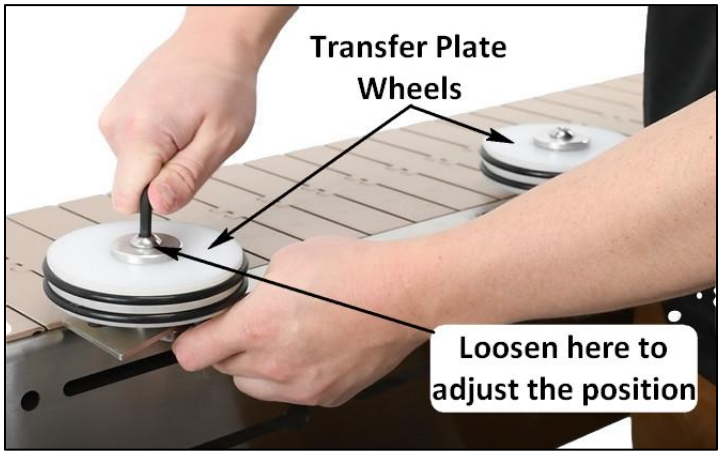


Adjusting the Transfer Plate Wheels

The wheels in the transfer plate are shown in the picture below. They help guide the containers onto and off of the accumulation table. The horizontal position of the wheels can be adjusted within small slots on either side of the transfer plate, indicated in the picture below.



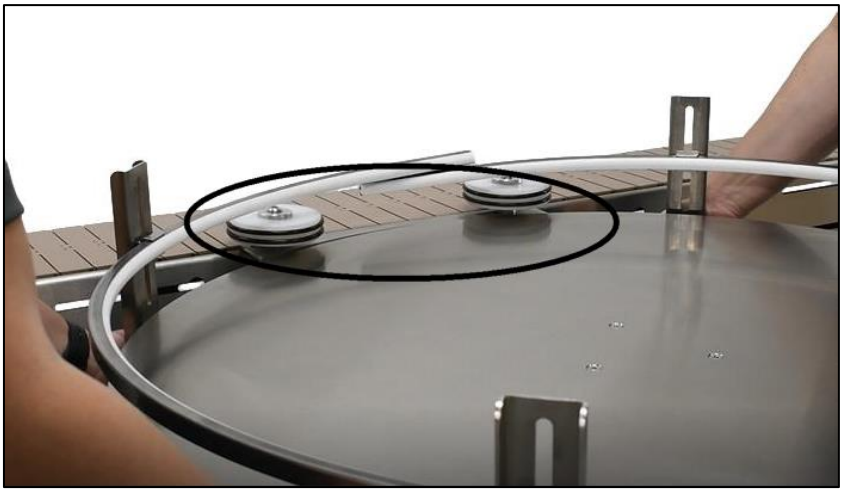
4. Adjust the position of the wheels by loosening the bolts holding them in the slots using a 7/32” hex key and a 9/16” wrench. For now, move the wheels as far outwards as possible. This can be adjusted later if necessary.



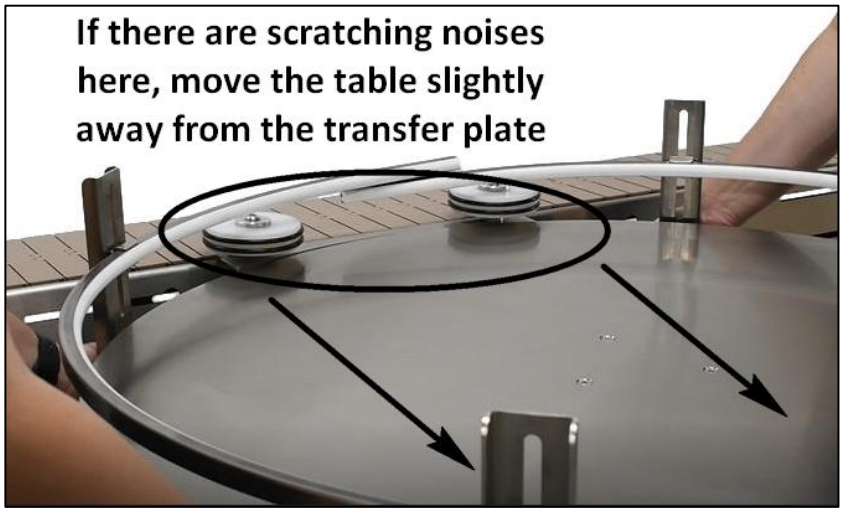
Mounting the Accumulation Table

5. Move your accumulation table so that the round edge of the table is resting against the curve of the transfer plate, as shown in the image to the right.

   The intersecting point of the circular accumulation table guide rail, designated by the oval in the picture, should land above the transfer plate.



6. At this point, you may need to make fine adjustments to the table height to ensure that it is completely level to the transfer plate. For instructions regarding height and level adjustment, see page 21.

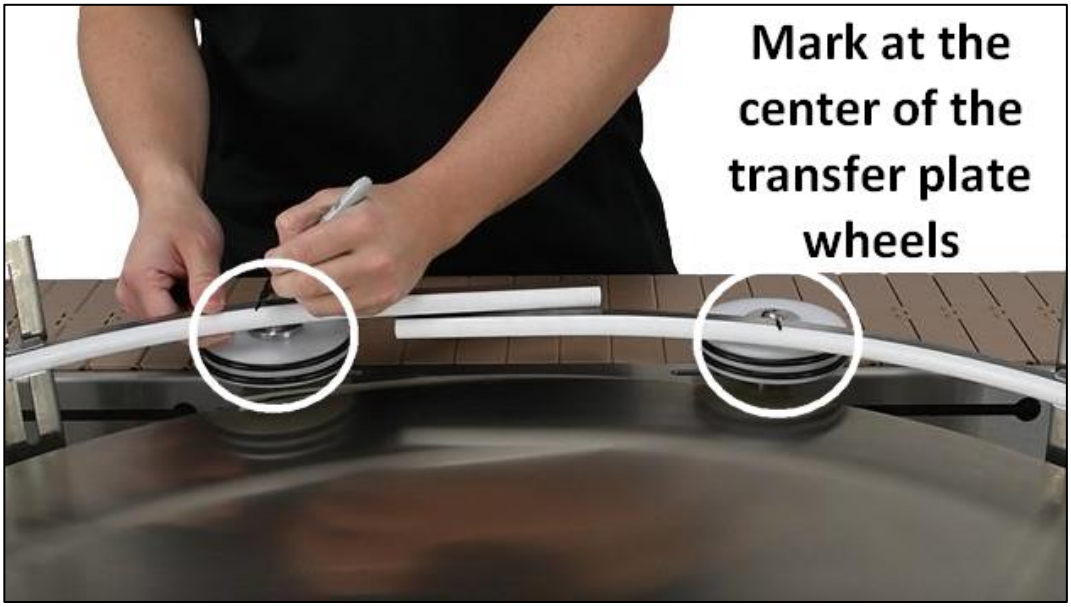


7. Temporarily plug your accumulation table into a power source and turn it on. You should not hear any grinding or scratching noises as the disk rotates. If you do hear scratching or grinding noises, this is likely because the rotating disk is rubbing against the transfer plate. If this occurs, slide the accumulation table away from the transfer plate slightly until the noise stops.

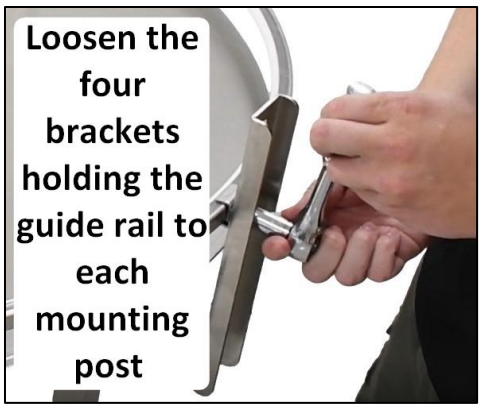
Marking and Modifying the Accumulation Table Guide Rail

The conveyor and accumulation table are shown to the right. The transfer plate is installed, but the guide rails would interfere with any container passing through them. We will need to cut the guide rails to assist in the transfer process.

8. We need to mark the locations on the accumulation table guide rail to cut. A good reference point to use is the center of the wheels (or donuts). Mark the guide rails at the center of the wheels as indicated in the picture below.



9. Remove the accumulation table guide rail from the accumulation table using a ½ inch socket wrench to loosen the nuts on the back side of the guide rail mounting posts, shown in the picture to the right.

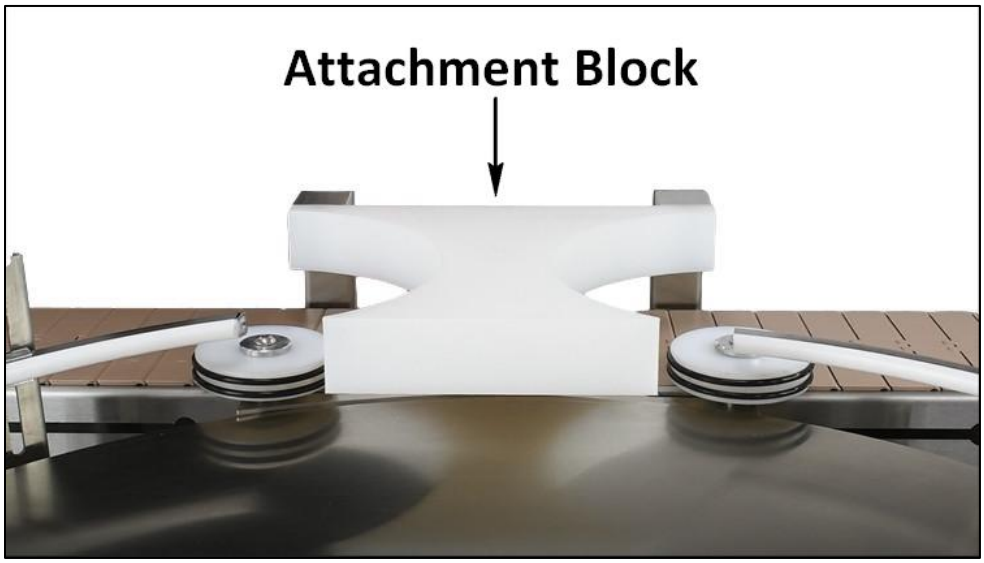


10. Using a hacksaw, cut the accumulation table guide rail at the marks you made in step 8.

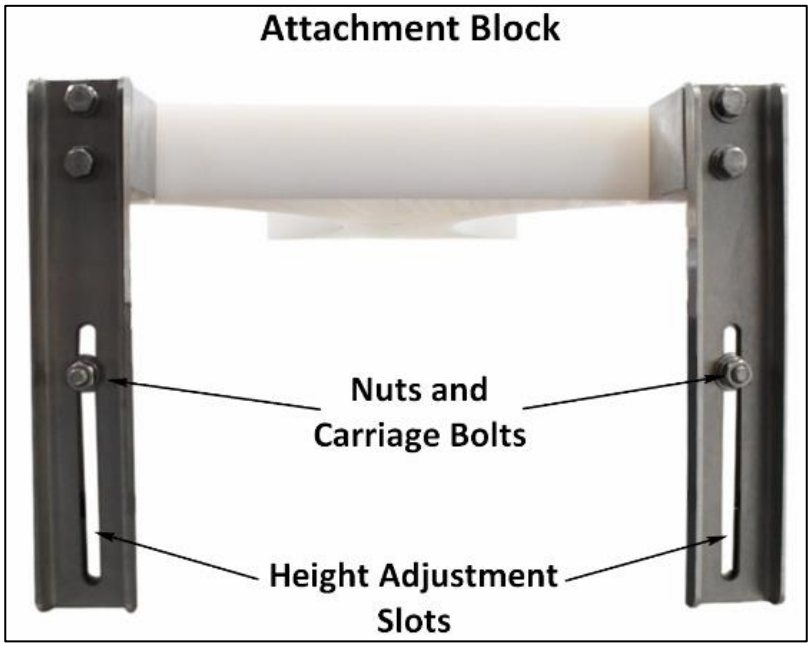
11. Reinstall the accumulation table guide rail, as shown in the picture to the right.

Installing the Attachment Block

The attachment block mounts to the conveyor as shown in the picture below. It is responsible for diverting containers off the conveyor and onto the accumulation table, and it also eventually sends them back to the conveyor.

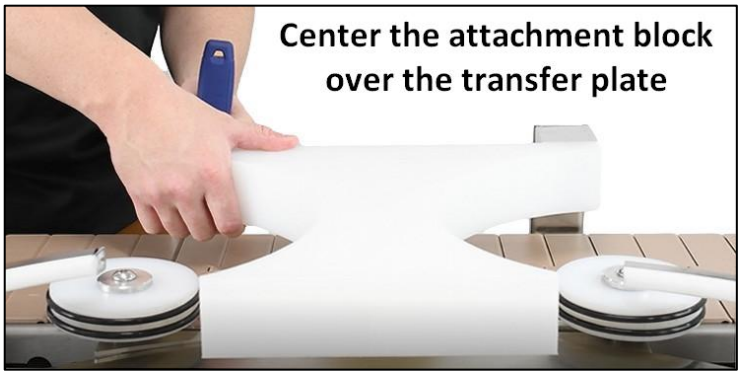


12. The attachment block mounting posts feature nuts attached to carriage bolts in the height adjustment slots, shown in the picture to the right.

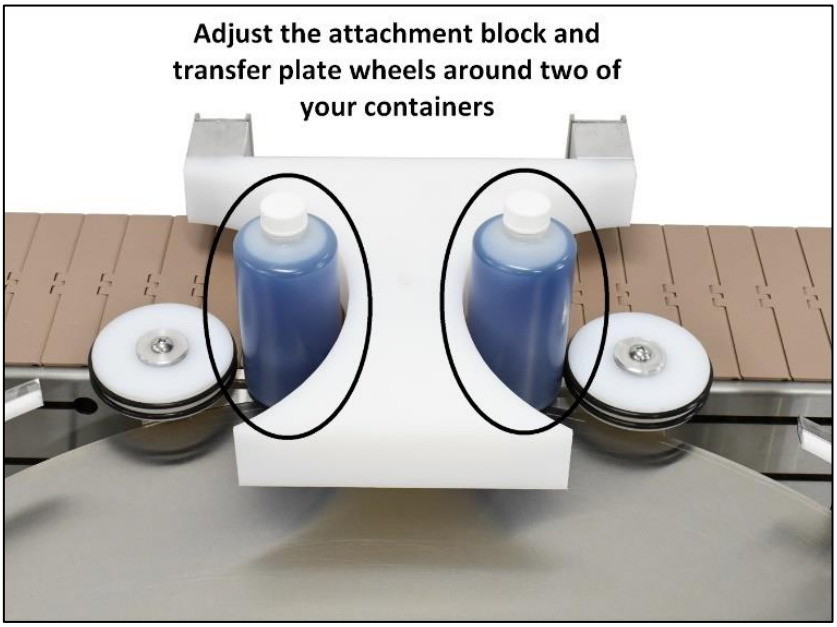


Mount these carriage bolts into the slots on the opposite side of the conveyor as your accumulation table, as shown in the picture to the right. Do not tighten the nuts at this time.

13. Center the attachment block above the transfer plate, as shown in the picture to the right. Fasten the block in place by tightening the mounting nuts in place with a ½ inch socket wrench.



14. It is now time to check the fit. Place two of your containers in the space between the attachment block and the wheels (donuts).



If the space between the wheel and attachment clock is too narrow, adjust the position of the wheels following the instructions found on page 86. The wheels should guide, but not block, the containers passing through the bend.

Check the height of the attachment block. The height of the attachment block should be set so that the block is supporting the mid-section of the bottle. Adjust the height of the attachment block by loosening the mounting nuts and then siding the attachment block up or down.

Marking and Modifying the Conveyor Guide Rails

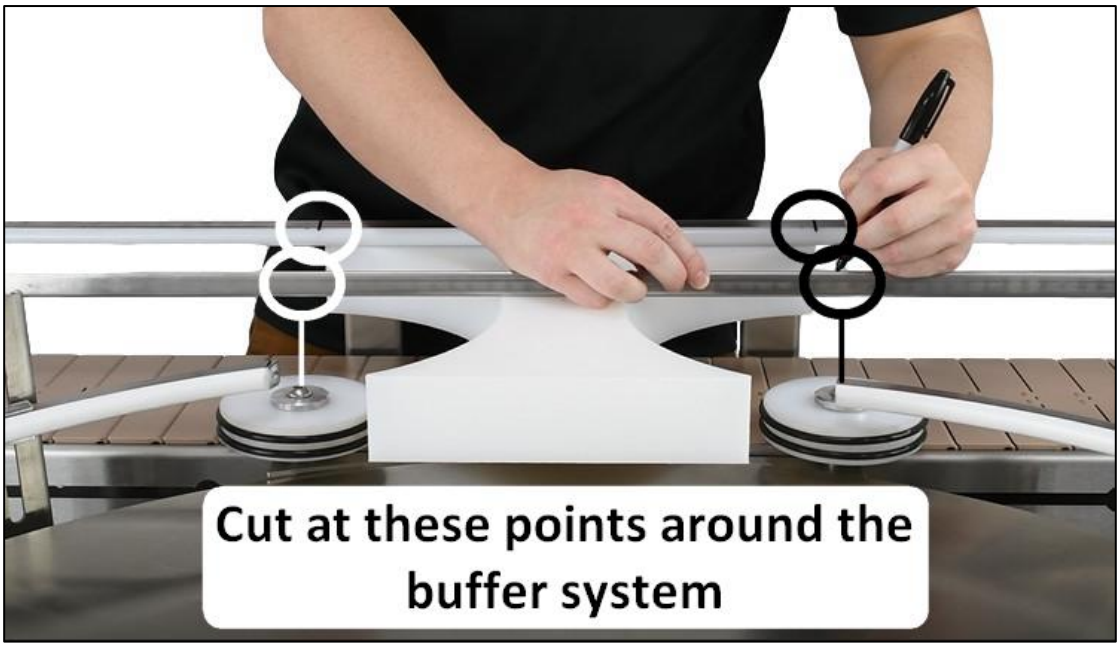
The guide rails we removed at the start of the buffer system installation process will need to be cut to fit the attachment block before they are reinstalled.

15. Lay your guide rails across your conveyor and on top of your attachment block as if you were reinstalling them, as shown in the picture to the right.

16. Mark at the spots designated in the picture below.

    On the conveyor guide rail closer to the accumulation table, mark right above the center of the transfer plate wheels.

    On the guide rail further from the accumulation table, mark on either edge of the attachment block.



17. Cut the conveyor guide rails at the marks made in step 16 using a metal-cutting hacksaw. Cut using clean and precise strokes along your marks.

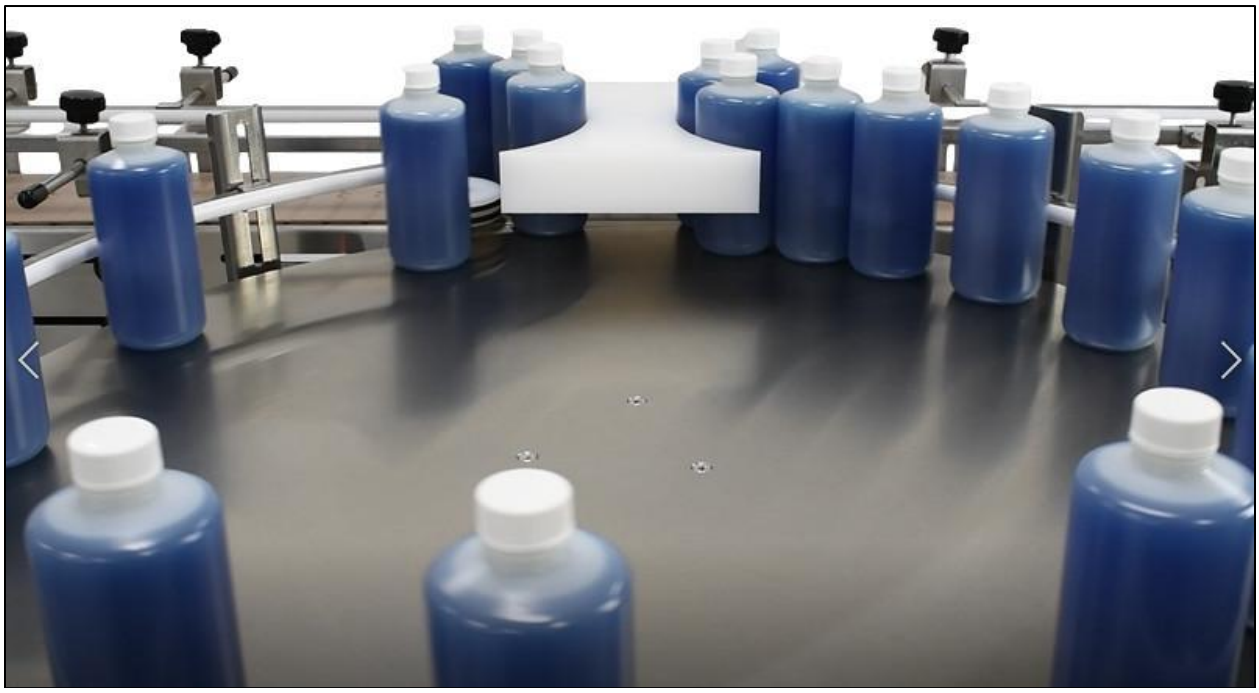
18. Reinstall your newly cut conveyor guide rails around the buffer system, as shown in the picture to the right.

To adjust the height of the guide rails, loosen the two mounting knobs that fasten the guide rail bracket to the conveyor, as shown in the image to the right. Raise or lower the guide rail to the desired height, usually just a little less than half of the height of the bottle, and then tighten the lock knobs to lock the height of the guide rail into place.

To adjust the width of the guide rails, loosen the black knobs at the tops of the guide rail mounting brackets as shown in the image to the right. This will allow the guide rails to slide in and out. Retighten the lock knobs to lock the width of the rails in place.

Final Setup

Your buffer system is now completely set up. When you turn the accumulation table and conveyor on, your containers should naturally flow down the conveyor, transfer onto the acccumulation table, travel around the rotating disc, then transfer back to the conveyor.



Troubleshooting:

Problem	Possible Cause	Solution
Motor won't run	1. Power off 2. Limit switch activated 3. Blown fuse	1. Restore power 2. Remove object and adjacent linkage 3. Replace Fuse
Motor runs intermittently	Loose wire connection	Check wires. Open control box using instructions on p. 24
Scraping noises when running	Disc too close to transfer plate	Move table slightly away from conveyor
Disc does not rotate	Speed control knob loose	Tighten knob

Maintenance Guidelines:

Keeping the accumulation table clean, and clear of accumulated debris, is essential to maintain proper operation of the accumulation table.

Cleaning Instructions

- Clean stainless-steel surfaces with a soft cloth and a mild detergent intended for use with stainless steel.
- Flush with clean water or wipe down with a clean wet cloth, and then wipe dry to avoid streaking and spotting.
- Chlorinated detergents and sanitizing agents will damage stainless steel unless thoroughly flushed or wiped away.

Strong solutions used during the washing or cleaning process should be checked before use to determine their pH levels. Any pH value below 4.5 or above 9.0 will damage the stainless steel and plastic parts of the accumulation table. If it is necessary to use a strong solution to clean the accumulation table or any of its components, all residues of the cleaning agent should be thoroughly removed by flushing or wiping down with a soft cloth.

To avoid risk of electric shock or fire, or damage to the accumulation table, never spray the motor, speed control or any of the electrical connections on the accumulation table with water or any other liquid.

WARNING: To avoid risk of electric shock or fire, or damage to the accumulation table, never spray the motor, speed control or any of the electrical connections on the accumulation table with water or any other liquid.

Do not spray water onto the flange bearing; this may cause damage to the accumulation table.

CAUTION: Do not spray water onto the flange bearing as this may cause damage to the accumulation table.

CAUTION: This product is not intended for use in washdown environments.

Contact Technical Support:

Globaltek™ Equipment
Attn: Repair Dept.
7354 NW 35th Street
Miami, FL 33122
USA
Telephone: (305) 418-9632 / (305) 418-9633

Warranty:

Globaltek® Equipment Inc., dba GlobalTek®, warrants all new machines against defects in material and workmanship from the manufacturer for a period of one (1) year from the date of purchase stated on the invoice.

The company will replace at no cost F.O.B. Miami, Florida, any part proving defective in materials or workmanship. Consumables and wear and tear items such as, but not limited to: Belts, Chains, Bearing, Wheels, Heating Elements, Mechanical Switches, Sealing Belts, Seals, Load cells, Blades, Fuses, etc., are not covered under warranty.

Defectiveness shall be verified by Globaltek® Equipment inspection and at the sole discretion of Globaltek® Equipment. Removal and installation expense shall be the responsibility of the purchaser. Globaltek® Equipment is liable solely for the furnishing of the defective part(s).

Globaltek® Equipment is not liable for consequential damages, such as loss of profit, delays or expenses incurred by failure of said part(s). Failure due to abuse, improper handling, installation, adjustments, operation and/or maintenance, as well as exposure to vibration, and/or exposure to the elements (including dust, sunlight, corrosion, high humidity conditions and temperature extremes) does not constitute failure due to materials or workmanship.

Globaltek® Equipment is not liable or responsible for repair, service, or installation charges, fees, or damages for correcting any defects.

During the applicable limited product warranty period, if a covered product is proven to be defective in workmanship or materials, Globaltek® Equipment will, at its option:

(1) replace or repair the defective component; or
(2) replace the product with a comparable product.