

MOBIUS INFEEED & OUTFEED CONVEYOR



USER GUIDE



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NOTES:

This User Guide is a comprehensive manual covering the operation and maintenance of the Infeed and Outfeed Conveyor machines as of the date of publication. ETEROS TECHNOLOGIES reserves the right to make updates to the machine from time to time. In the event of an update, this User Guide will remain appropriate for the safe operation and maintenance of your unit. This User Guide, as well as any documentation supplied by component manufacturers, are to be considered the information package associated with this device. Every operator must read and understand the User Guide. The manual should be located within easy access for periodic review.

SAFETY

SAFETY INSTRUCTIONS

To ensure operator safety while in use, this device includes decaling, guarding, and other safety features. Operators are encouraged to use caution and best judgment when using equipment. Equipment should be serviced when required.

To avoid possible damage to the machine and risk of injury to the operator, consult with an ETEROS TECHNOLOGIES representative to answer any questions.

All operators must read and understand this User Guide and be trained in safe operation and use of the Infeed and Outfeed Conveyors. We recommend the owner of this equipment develop a standard operating procedure specific to each worksite to address any local hazards or other conditions not outlined in this User Guide. The conveyors must be inspected regularly for damage, component failure, and wear. Results of inspection activity should be documented.

ETEROS TECHNOLOGIES makes every effort to ensure the Infeed and Outfeed Conveyors are compliant with all current safety standards. It is the responsibility of the owner to ensure all municipal, provincial, state, county, territorial, and federal codes, regulations, and standards have been met in each working location.

Do not lend or rent your machine without providing the User Guide. A first-time operator should receive practical instruction before using the machine.

This machine is not to be used for any purpose other than those expressly stated in the User Guide, advertising literature, or other ETEROS TECHNOLOGIES written material pertaining to the conveyors.

DISCLAIMER

ETEROS TECHNOLOGIES recognizes that the Infeed and Outfeed Conveyors are purpose-built machines for processing cannabis by licensed producers. Please check all municipal, provincial/state, and federal laws and regulations before using the Infeed and Outfeed Conveyors. ETEROS TECHNOLOGIES does not promote or condone the use of processing equipment in any way that may be deemed illegal.

ETEROS TECHNOLOGIES recognizes that our equipment can be used for processing herbs, hops, flowers and many other products. It is not the responsibility of ETEROS TECHNOLOGIES to confirm alternative applications for our equipment.

WARNING LABELS



DANGER:

Indicates a hazardous situation that, if not avoided, will result in serious injury and / or death. This signal word is to be limited to the most extreme situations; typically for machine components that, for functional purposes, cannot be guarded.



WARNING:

Indicates a potentially hazardous situation that, if not avoided, could result in serious injury and / or death. It includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



CAUTION:

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

SERVICE & REPAIRS

Repairs may only be carried out by Eteros Technologies or a designated authorized agent (service technician).

Should the need arise, please notify us:

ETEROS TECHNOLOGIES
26 Industrial Ave.
Carleton Place, Ontario, Canada
K7C 3T2
www.eteros.com

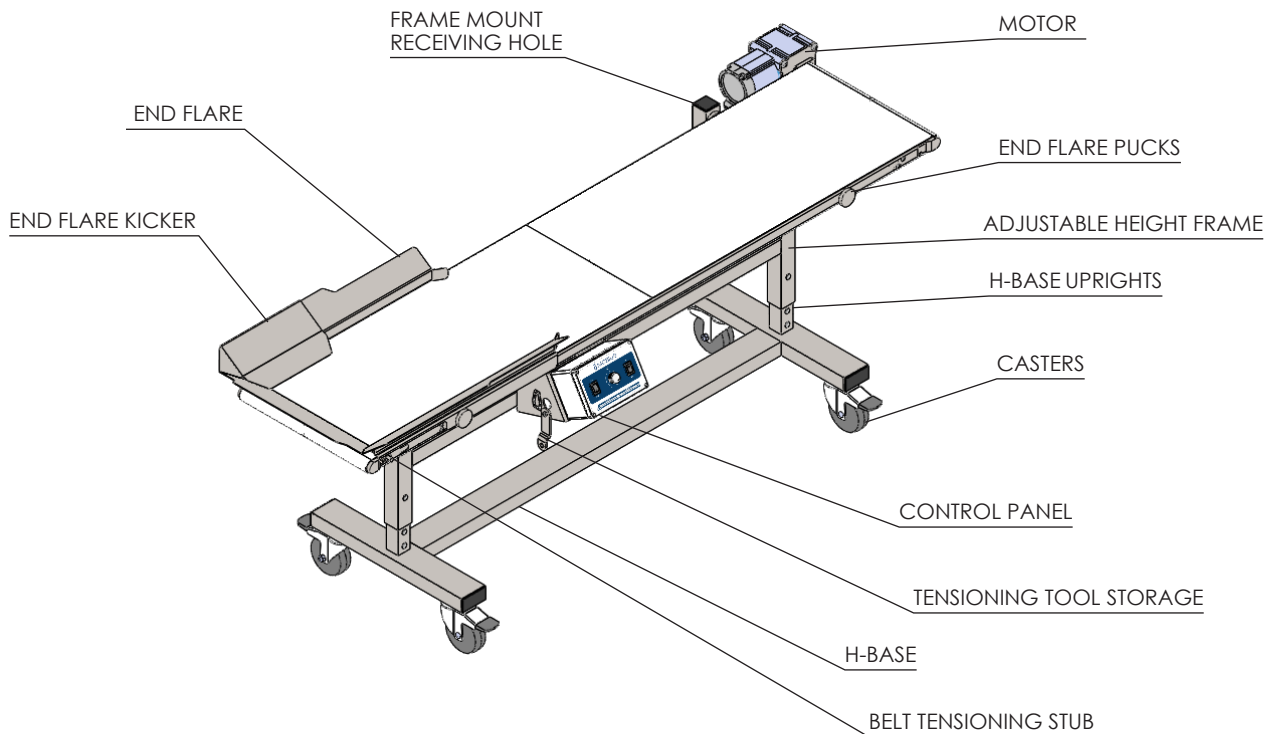
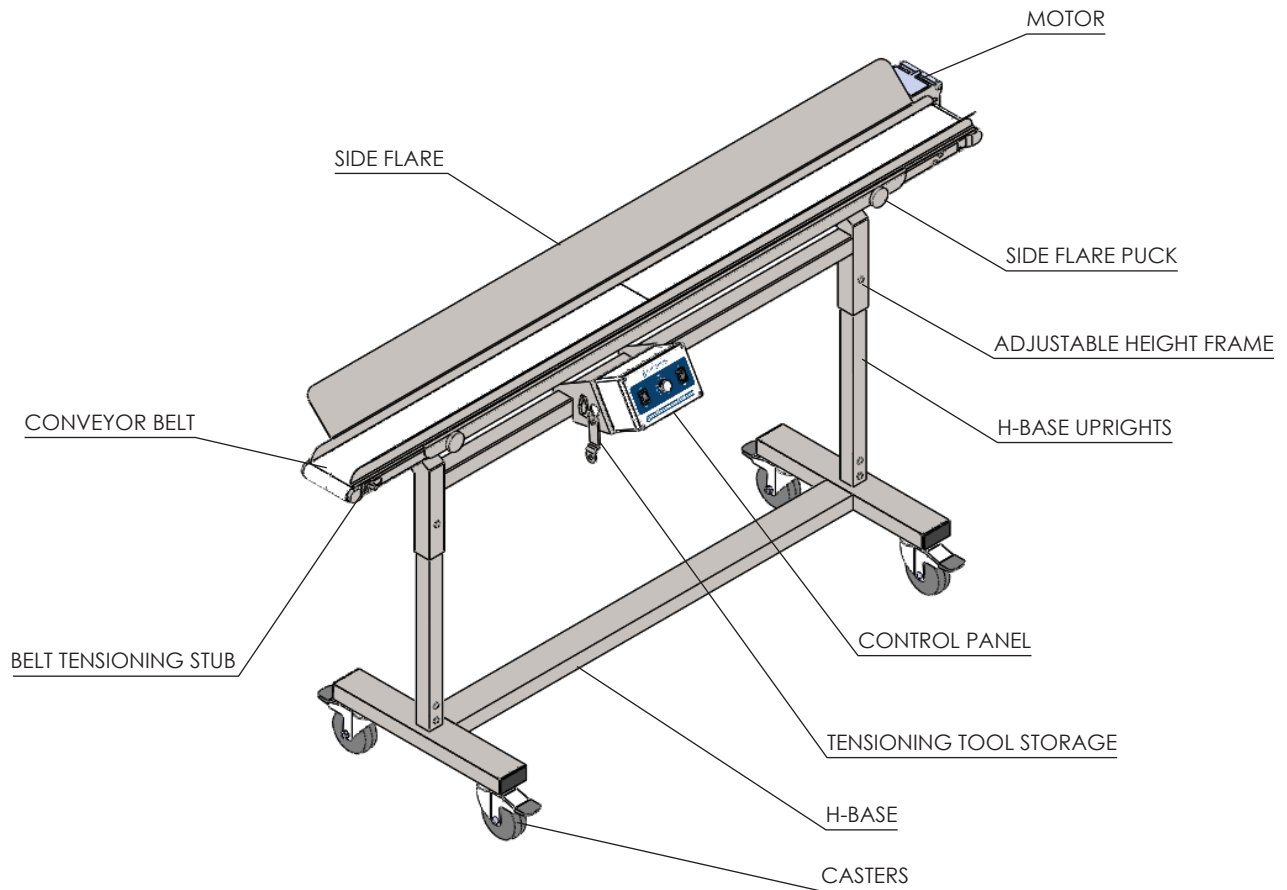
Improper interfacing, improper repair, or unauthorized modification could result in void warranty claims.

GENERAL SAFETY PRECAUTIONS

1. READ and become familiar with the entire User Guide. LEARN the equipment applications, limitations, and possible hazards.
2. DO NOT USE THE DEVICE IN A DANGEROUS ENVIRONMENT or damp or wet locations. Never expose the control panel directly to rain or water. Keep the work area well illuminated.
3. DO NOT use the device in the presence of flammable liquids or gases.
4. KEEP WORK AREA CLEAN. Cluttered areas and workspaces invite accidents.
5. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
6. POWER DOWN AND DISCONNECT EQUIPMENT before washing or servicing and when changing accessories.
7. CHECK FOR DAMAGED PARTS PRIOR TO OPERATION. The equipment should be inspected prior to use to ensure proper operation when performing its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. Any damaged part including guards should be properly repaired or replaced.
8. ALWAYS WEAR EYE PROTECTION.

INITIAL SETUP

GET TO KNOW YOUR CONVEYORS



WHAT'S IN THE CRATE

YOUR INFEED CONVEYOR COMES WITH THE FOLLOWING ITEMS:

- 1 x CONVEYOR H-BASE
- 2 x CONVEYOR UPRIGHTS
- 2 x THROUGH SUPPORT BARS
- 2 x FRAME MOUNT CAPS
- 2 x THROUGH STOPS
- 1 x VERTICAL SLIDER ASSEMBLY
- 1 x CONVEYOR BELT
- 1 x CONTROL PANEL
- 1 x MOTOR
- 2 x SIDE FLARE
- 2 x 2" HEX BOLTS
- 4 x 1-5/8" HEX BOLTS
- 4 x 1" BUTTON HEAD CAP SCREWS
- 6 x 5/16" HEX NUTS
- 6 x 5/16" WASHERS
- 1 x INFEED GUIDE PLATE
- 1 x TENSIONING HANDLE

YOUR OUTFEED CONVEYOR COMES WITH THE FOLLOWING ITEMS:

- 1 x CONVEYOR H-BASE
- 2 x CONVEYOR UPRIGHTS
- 2 x THROUGH SUPPORT BARS
- 2 x FRAME MOUNT CAPS
- 2 x THROUGH STOPS
- 1 x VERTICAL SLIDER ASSEMBLY
- 1 x CONVEYOR BELT
- 1 x CONTROL BOX
- 1 x MOTOR
- 1 x SIDE PANEL ASSEMBLY
- 1 x DEFLECTOR PLATE
- 2 x 2" HEX BOLTS
- 4 x 1-5/8" HEX BOLTS
- 4 x 1" BUTTON HEAD CAP SCREWS
- 6 x 5/16" HEX NUTS
- 6 x 5/16" WASHERS
- 1 x TENSIONING HANDLE

INITIAL ASSEMBLY & INSPECTION

THE SETUP PROCESS IS NEARLY IDENTICAL FOR BOTH THE INFEED AND OUTFEED CONVEYORS

1. Inspect the crate and crate contents to ensure no damage occurred during shipping.
2. Remove components from the crate.
3. Using 4 x 1-5/8" HEX BOLTS, 4 x 5/16" HEX NUTS, and 4 x 5/16" WASHERS, attach H-BASE UPRIGHTS to H-BASE. The head of the bolts should sit within the hexagonal cutouts on the H-BASE UPRIGHTS. Ensure that both pieces are installed facing the same direction.
4. Using 2 x 2" HEX BOLTS, 2 x 5/16" HEX NUTS and 2 x 5/16" WASHERS, attach ADJUSTABLE HEIGHT FRAME to H-BASE UPRIGHTS. The ADJUSTABLE HEIGHT FRAME can be installed at the desired height. To function best with the Mobius M108S Trimmer, it is recommended that the ADJUSTABLE HEIGHT FRAME on the INFEED CONVEYOR be installed at the bottom hole.
5. Remove 2 x 1" BUTTON HEAD CAP SCREWS from the TROUGH SUPPORT BARS, and slide the entire CONVEYOR BELT with TROUGH SUPPORT BARS into the ADJUSTABLE HEIGHT FRAME. Align the holes on the TROUGH SUPPORT BARS with the holes in the frame, and fasten using previously removed 2 x 1" BUTTON HEAD CAP SCREWS. NOTE: Ensure that the motor is on the same side as the BUTTON HEAD CAP SCREWS, otherwise belt removal will be difficult.
6. Mount CONTROL PANEL and ADJUSTABLE HEIGHT FRAME, and place TENSIONING TOOL in the tool storage cutout.
7. Install 2 x SIDE FLARES (INFEED CONVEYOR) or the END FLARES (OUTFEED CONVEYOR) by setting them on the SIDE FLARE PUCKS and TROUGH STOPS. Ensure that the SIDE FLARES are bent outward, away from the conveyor belt. If the OUTFEED CONVEYOR is oriented 90 degrees to the trimmer, place the END FLARE KICKER on the END FLARE directly below the trimmer outfeed to direct product to the middle of the conveyor belt. Once initial assembly is complete, inspect the conveyors to confirm that they are ready to operate:
 - Confirm the power cord is in good condition
 - Ensure the belt is properly aligned on the rollers on each end
 - Ensure the belt is properly tensioned
 - Ensure all fasteners are tight and that there is no wobble in the frame

OPERATIONS

GENERAL OPERATION

INSTALLING AND TENSIONING THE CONVEYOR BELT

1. Slide the conveyor belt onto the metal body from the side of the machine.
2. Ensure the groove on the underside of the belt is positioned in the slots of the rollers at each end.
3. Using the TENSIONING TOOL, turn the BELT TENSIONING STUB clockwise until the belt is tensioned. When the belt is adequately tensioned, the BELT TENSIONING STUB will provide significant resistance against further turning. DO NOT TENSION THE BELT PAST THIS POINT. DO NOT USE A POWER TOOL TO TENSION THE BELT. **PERMANENT DAMAGE WILL RESULT.**

HEIGHT ADJUSTMENT

Both the Infeed and Outfeed conveyors are designed to accommodate 6" of height adjustment. The height of each conveyor can be set at 1" increments. To adjust the height of either conveyor:

1. Remove the nut and washer from each H-BASE UPRIGHT, to ADJUSTABLE HEIGHT FRAME connection.
2. Remove the hex bolt from each ADJUSTABLE HEIGHT FRAME.
3. With the help of another person, slide the ADJUSTABLE HEIGHT FRAME to the desired height by aligning the holes with the H-BASE UPRIGHTS.
4. Reinstall the hex bolt through the VERTICAL SLIDE ASSEMBLY and H-BASE UPRIGHTS.
5. Reinstall the nuts and washers.

CONTROL PANEL ADJUSTMENT

For ease of use with other Mobius equipment, the orientation of the control panel can be reversed so that it can be accessed from either side of the equipment. To switch the control panel:

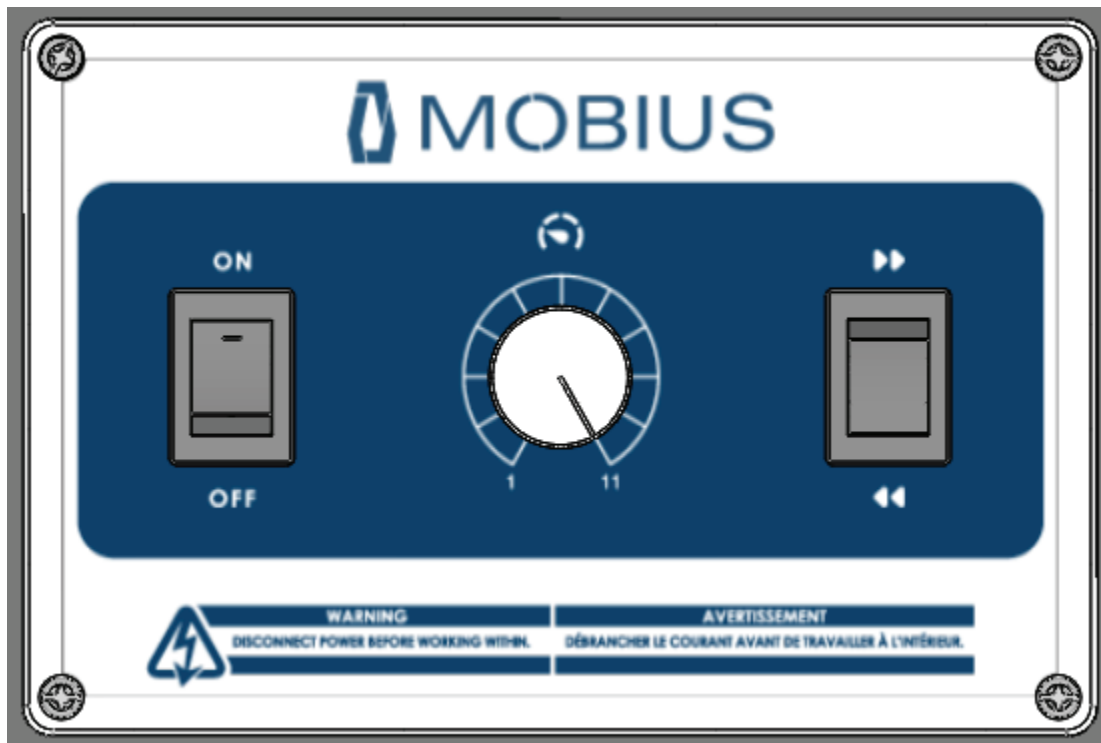
1. Lift the CONTROL PANEL off the ADJUSTABLE HEIGHT FRAME. No tools or fastener removal is required.
2. Rotate the CONTROL PANEL so that it is facing the other side of the equipment, and place it down on the ADJUSTABLE HEIGHT FRAME.

CONTROL PANEL OVERVIEW

LEFT: ON/OFF: turns the conveyor on or off. In the on position, the conveyor will immediately begin running at the set speed and direction. In the off position, no power is delivered to the machine.

MIDDLE: SPEED CONTROL: rotate the knob clockwise to increase the belt speed, and rotate the knob counterclockwise to reduce belt speed.

RIGHT: DIRECTION CONTROL: flipping the direction switch will flip the travel direction of the belt.



MACHINE START UP SEQUENCE

1. Plug the power cord into a 110V outlet.
2. Ensure belt is tensioned.
3. Ensure side panels are installed.
4. Flip the power switch to the ON position.
5. Flip the direction switch to set the conveyor to the correct travel direction.
6. Turn the speed adjustment knob clockwise to increase the belt speed, or counterclockwise to reduce the belt speed.

CLEANING & MAINTENANCE

CLEANING THE CONVEYORS

Eteros conveyors are washdown rated and feature easily removable conveyors belts.

To clean each conveyor, proceed as follows:

1. Flip the power switch to the OFF position and disconnect the power cord.
2. Remove side panels by simply lifting them off the conveyor.
3. Using the TENSIONING TOOL, while standing at the end of the conveyor, turn the BELT TENSIONING STUB away from where the operator is standing. Continue turning until the BELT TENSIONING STUB bottoms out. A clear increase in turning resistance will be felt at this point. DO NOT FORCE THE BELT TENSION ADJUSTER PAST THE BOTTOMING OUT POINT. DO NOT USE ANY POWER TOOLS TO TURN THE STUB. DOING SO WILL RESULT IN PERMANENT DAMAGE.
4. Grip the belt at each side, and slide it sideways off the metal body of the conveyor.
5. Spray down or soak the belt in diluted degreaser for 5 - 10 minutes. If necessary, use a cloth or soft-bristled brush to remove stubborn soils. Rinse thoroughly (pressure washer ok) with warm or hot water (maximum 55°C/130°F) and allow to dry. Apply a sanitizer if necessary as part of your sanitation SOP.
6. Spritz metal body and frame with degreaser, allowing time for the degreaser to sit on surfaces and penetrate any soils. Use a cloth to remove any stubborn soils. Rinse thoroughly (pressure washer ok) with warm or hot water (maximum 55°C/130°F) and allow to dry. Take care to wash the underside of the conveyor where internal components are housed.
7. Avoid pressure washing the CONTROL PANEL. Use a damp cloth with warm water to remove any residue or buildup on the buttons and dial.
8. Reinstall the belt on to the machine.

PREVENTATIVE MAINTENANCE

Eteros recommends removing the side panels and belt to clean the machine daily as outlined in the CLEANING THE CONVEYORS section of this user guide. The side panels are designed to prevent plant matter from accumulating in unwanted areas if installed correctly, but some material may still enter these areas. Regularly inspect the machine to ensure unintended dirt buildup is not occurring.

SPECIFICATIONS

Wet / Dry Capable	Yes
Construction	304 Stainless Steel and Delrin
Belt Material	Fully-encased Polyurethane (matte white)
Speed Adjustments	1-11
Belt Length	71"
Belt Width	5" (Infeed), 16"(Outfeed)
Motor	1/10 HP
Power Requirements	110 V, 15 A
Tools	1/2" wrench, 5/16" Allan key
Fits through 32" door?	Yes
Length	73" (Infeed) 79" (Outfeed)
Height	37" (Infeed) 26" (Outfeed)
Width	16" (Infeed) 23.5" (Outfeed)
Weight	110 lbs (Infeed) 126 lbs (Outfeed)

HOW TO

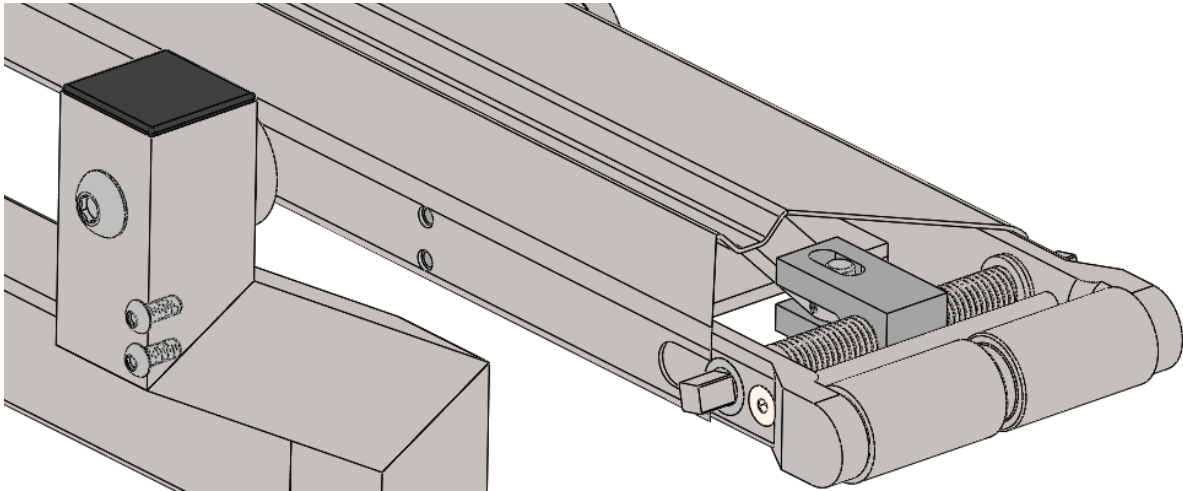
INFEEED CONVEYOR

BEARING REPLACEMENT

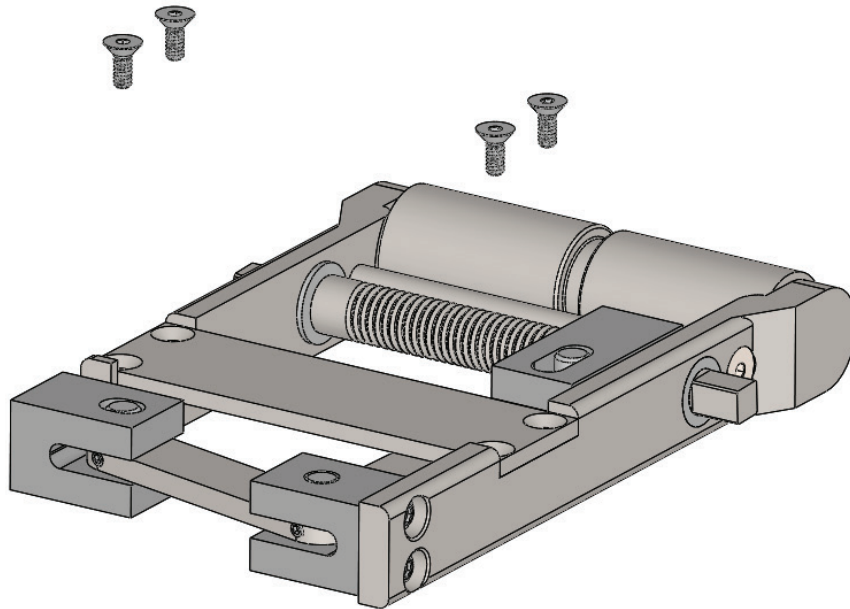
Should the need arise to replace the bearings in either your infeed or outfeed conveyor, the process is straightforward and involves little more than removing some screws. Follow along with the steps below and you'll have your conveyor back up and running in no time!

TO REPLACE BEARINGS ON THE TENSIONING SIDE OF YOUR INFEEED CONVEYOR:

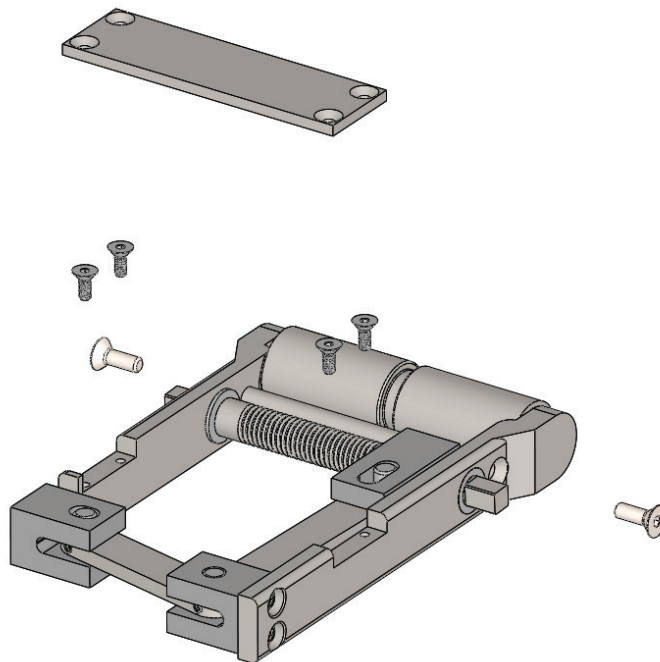
1. Start by removing the side flares.
2. Use the conveyor tensioning tool to remove tension from the belt, then slide the belt off and set aside.
3. Using a $9/64$ " Allen key, undo the two screws that secure the tensioning assembly to the body of the conveyor.



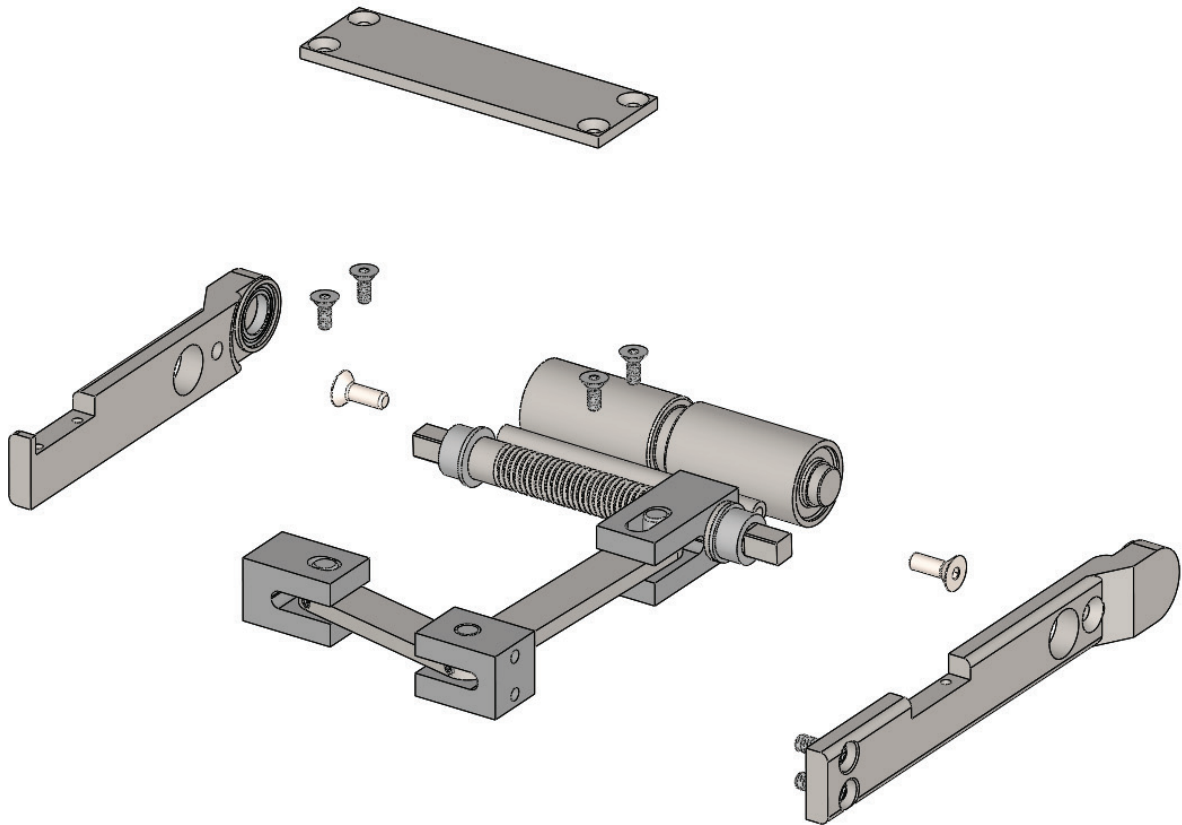
4. With the screws removed, grab onto the roller and slide the whole assembly right out of the conveyor. You may need to wiggle the assembly a little bit as you are pulling it out.
5. Set the tensioning assembly upside down on a table or workbench.
6. Using a $5/32$ hex key, remove the 4 screws securing the plate to the two side arms.



7. Using a 9/64 hex key, remove the flathead screw from the round bar that spans across the tensioning assembly on the side with the problematic bearing.



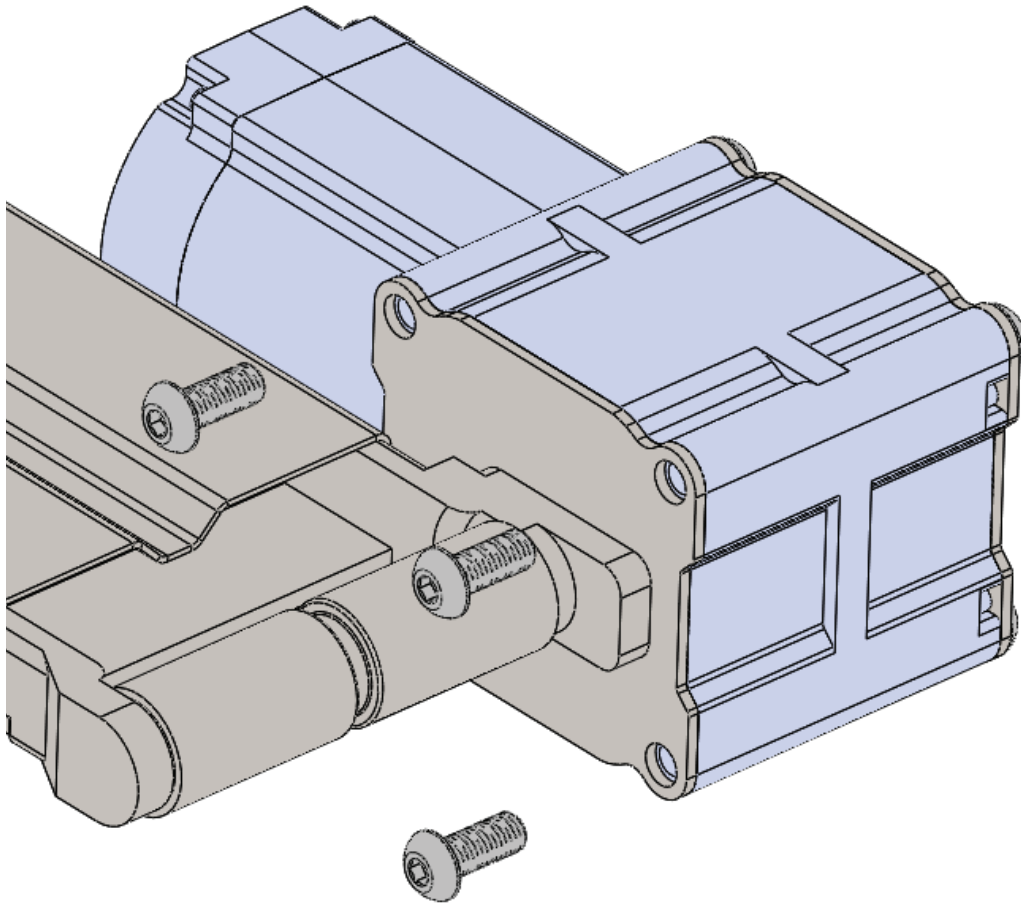
8. With the plate removed, separate the side arm with the problematic bearing. Remove the bearing, and install your new bearing in the bore. Then, reinstall the plate you removed in the previous step. NOTE: if the problematic bearing is in the arm on the right (pictured below), there are two additional screws that need to be removed.



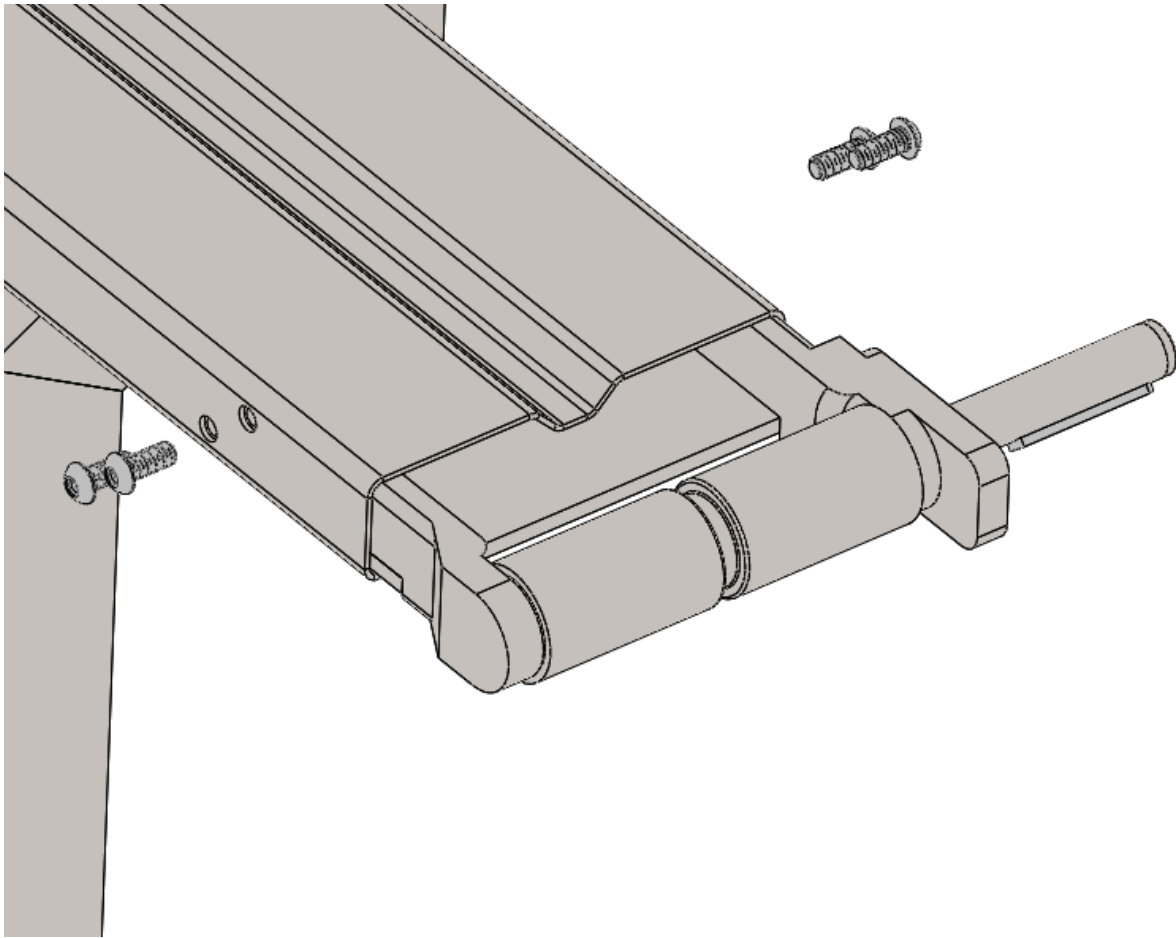
9. Slide the tensioning assembly back into the conveyor body, and secure it with the 2 screws that were removed earlier.
10. Finish your replacement by reinstalling the belt and side panels.

TO REPLACE BEARINGS ON THE MOTOR SIDE OF YOUR INFEEED CONVEYOR:

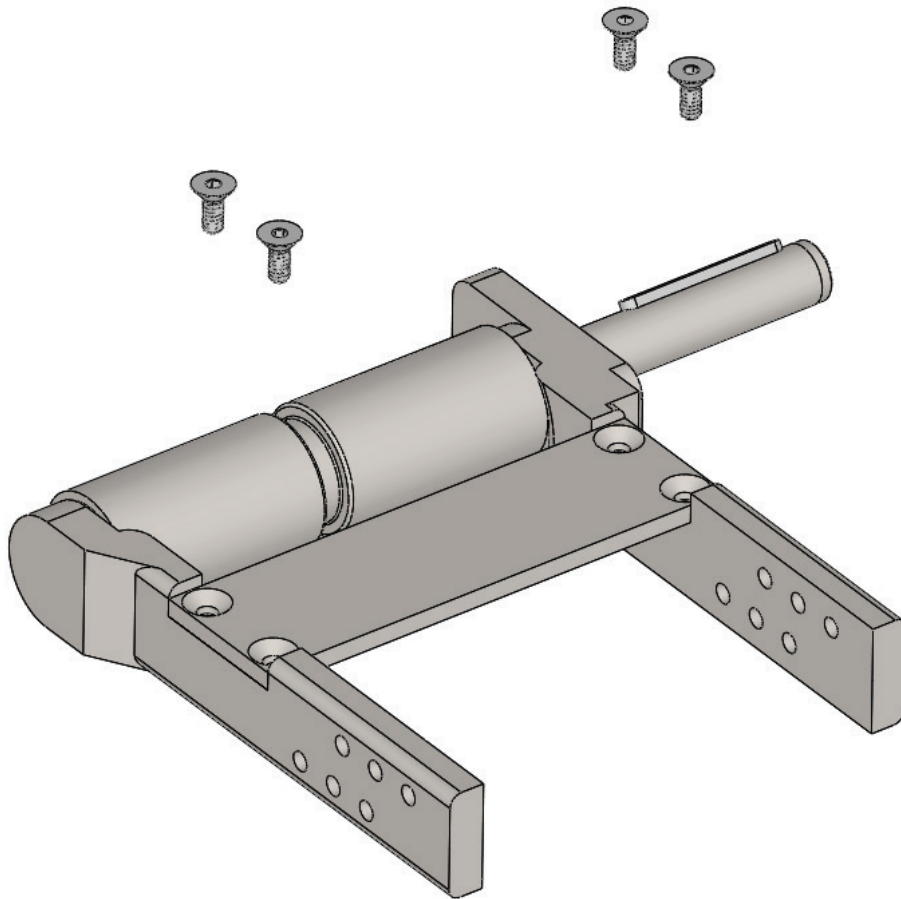
1. Remove the side panels and belt as per steps 1 and 2 of the previous section.
2. Remove the 4 bolts securing the motor to the conveyor using a 6mm hex key, then slide the entire motor off the drive shaft and set aside.



3. Using a 9/64 hex key, remove the 4 bolts securing the motor assembly to the conveyor body. Set these aside in a safe place.



4. Grab the roller and slide the entire motor assembly out of the conveyor body. You may have to wiggle the assembly back and forth slightly as you pull it out.
5. Set the assembly upside down on a table or workbench.
6. Using a 5/32 hex key, remove the 4 screws securing the plate to the two side arms.



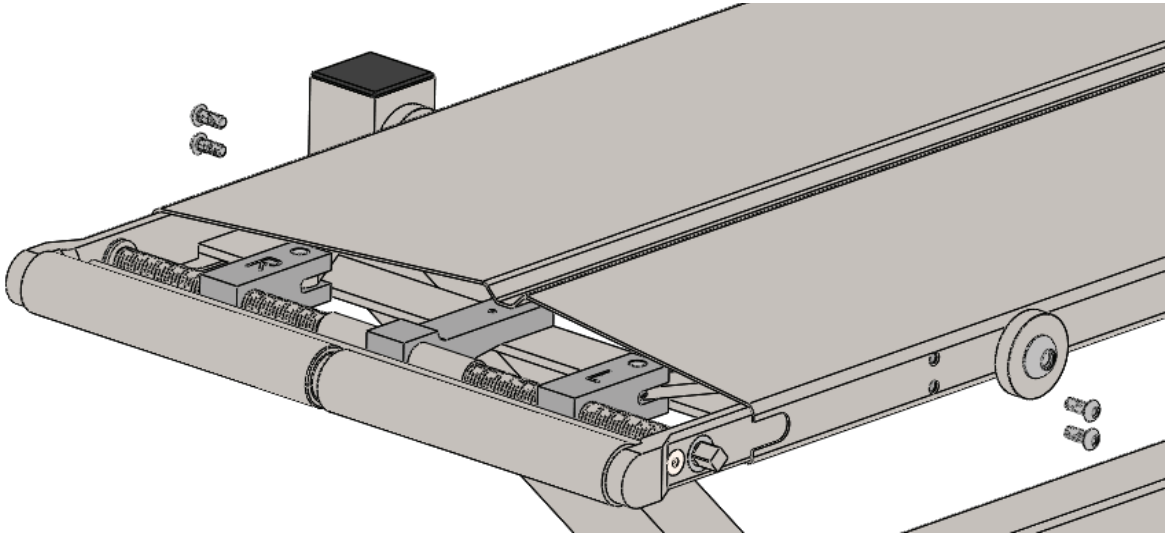
7. With the plate removed, separate the arm with the problematic bearing. Remove the old bearing, and replace it with your new one. Then reinstall the plate you removed in the previous step.
8. Slide the motor assembly back into the conveyor body, and secure it with the 4 screws that were removed earlier. Note that there are 3 sets of holes on the side arms. We recommend that you install the screws through the middle set of holes.
9. Re-install the motor by sliding it onto the drive shaft. Ensure that the motor is in the orientation as shown, and that the keyway bore on the motor aligns with the key in the shaft. Secure the motor with the 4 bolts removed earlier.
10. Finish your replacement by reinstalling the belt and side panels.

HOW TO

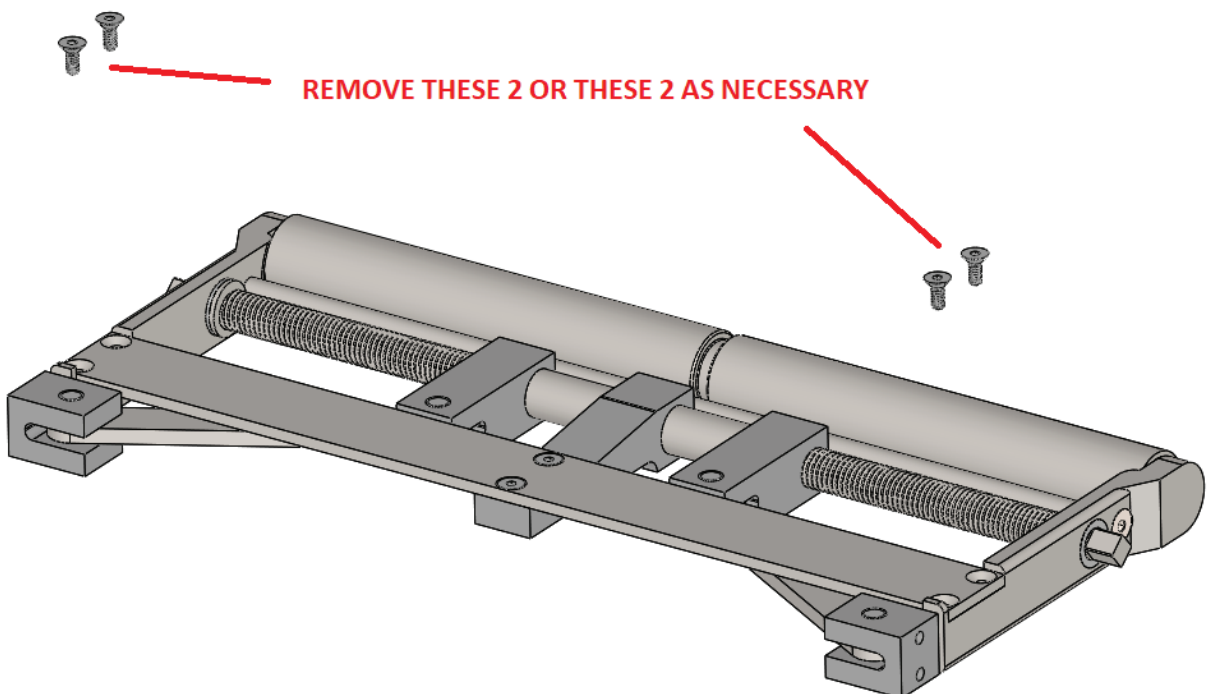
OUTFEED CONVEYOR

TO REPLACE BEARINGS ON THE TENSIONING SIDE OF YOUR OUTFEED CONVEYOR:

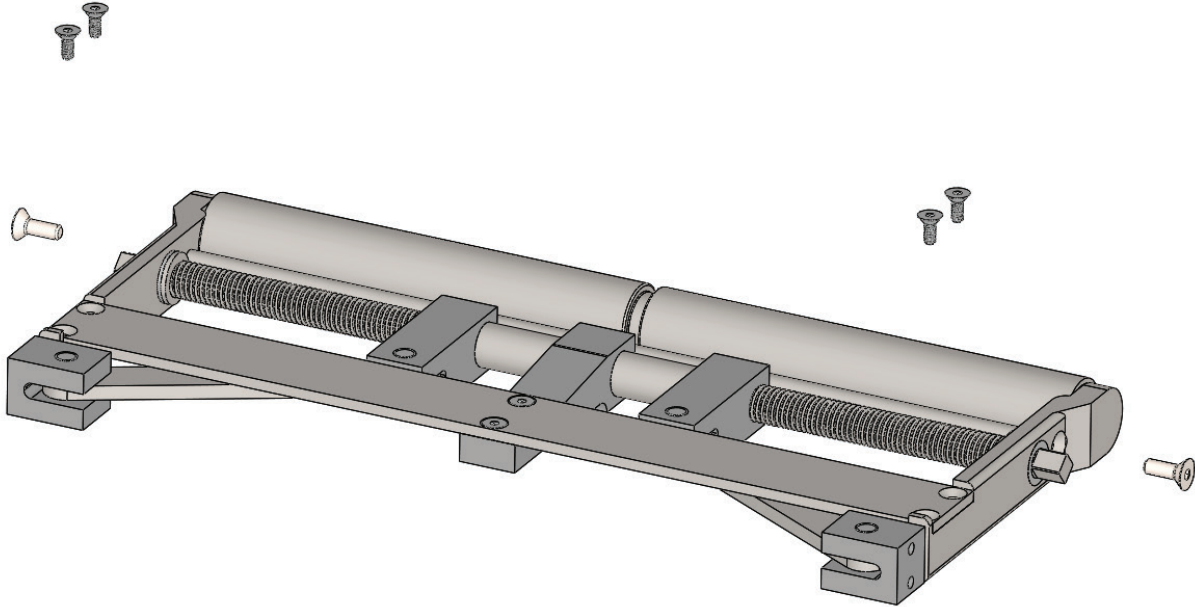
1. Remove the side panels as previously outlined.
2. Remove the 4 bolts securing the tensioning assembly to the conveyor body using a 9/64 hex key.



3. With the screws removed, grab onto the roller and slide the whole assembly right out of the conveyor.
4. Set the tensioning assembly upside down on a table or workbench.
5. Using a 5/32 hex key, remove only the screws securing the side arm with the problematic bearing to the plate.



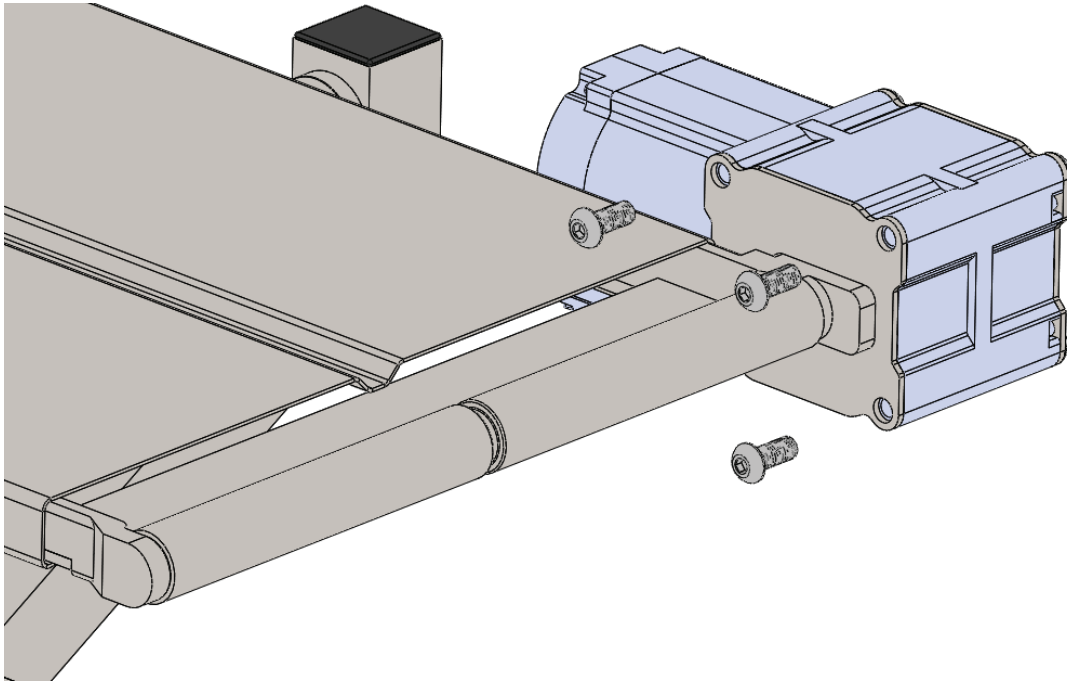
- Using a 9/64 hex key, remove the flathead screw from the round bar that spans across the tensioning assembly on the side with the problematic bearing.



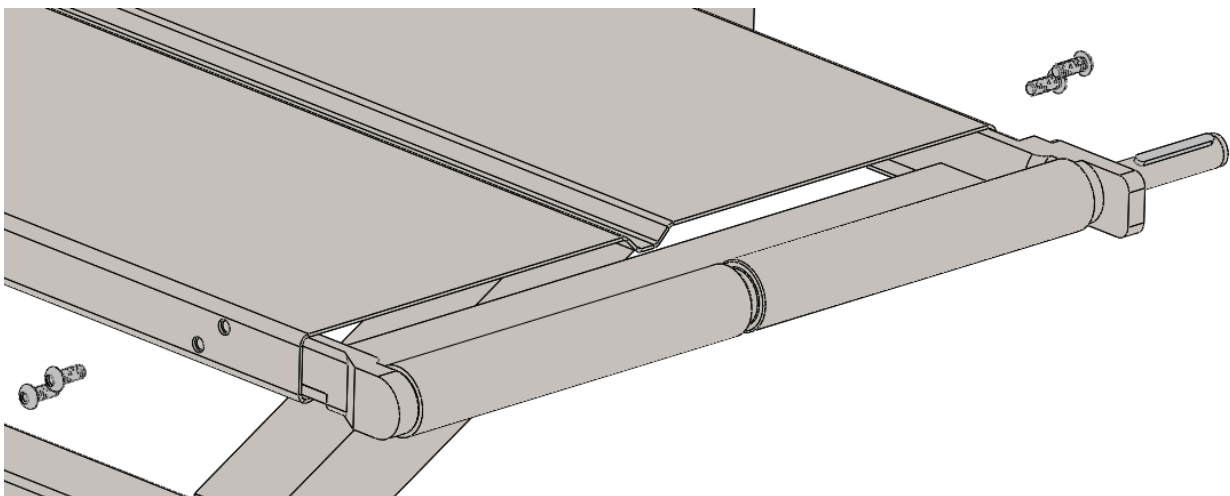
- At this point, the side arm should freely separate from the assembly. Replace the bearing in this arm, and proceed.
- Align the screw holes on the bottom of the arm with the replacement bearing with the holes on the metal plate, and re-install the 2 screws removed earlier. Ensure that the tensioning shaft is inserted through the clearance hole on the arm, and that the roller is inserted into the new bearing.
- Align the round metal bar with the screw hole on the replacement bearing arm, and re-install the screw removed in step 6.
- With the tensioning shaft, round bar, and roller all secured between the two arms, the tensioning assembly is ready to be re-installed into the conveyor body.
- Ensure the screw holes on the plastic blocks are facing outward (aligned with the screw holes on the conveyor body) and slide the assembly into the opening until the screw holes are aligned. Secure with the fasteners removed in step 2.
- Check that the tensioning assembly is functioning properly by rotating the tensioning shaft using the conveyor tensioning tool. If the turning is smooth without hiccups, the assembly is working properly.
- Re-install the belt and side panels.

TO REPLACE BEARINGS ON THE MOTOR SIDE OF YOUR OUTFEED CONVEYOR:

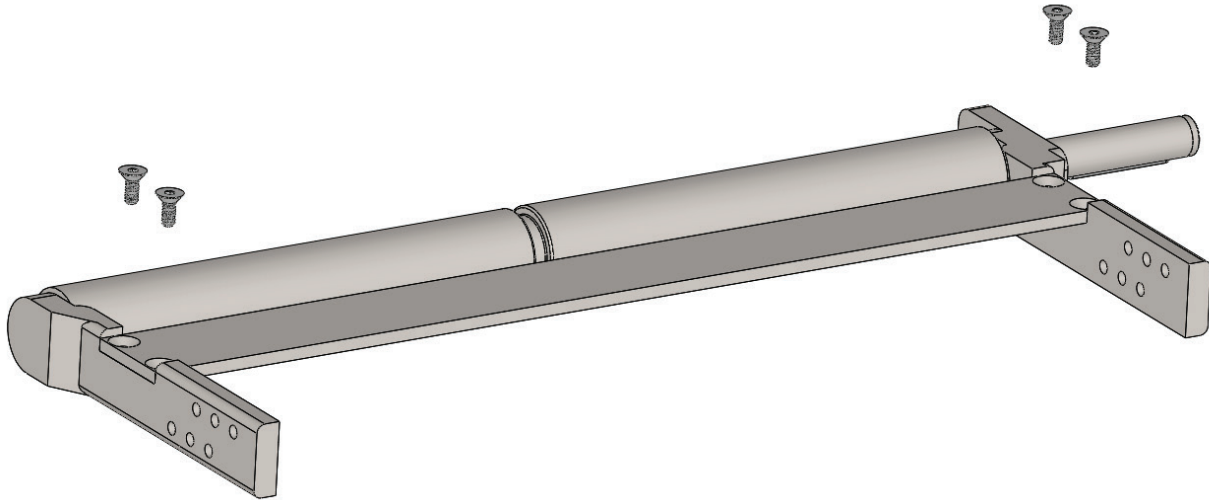
1. Remove the belt and side panels.
2. Remove the 4 bolts securing the motor to the conveyor using a 6mm hex key, then slide the entire motor off the drive shaft and set aside.



3. Using a 9/64 hex key, remove the 4 bolts securing the motor assembly to the conveyor body. Set these aside in a safe place.



4. Grab the roller and slide the entire motor assembly out of the conveyor body. You may have to wiggle the assembly back and forth slightly as you pull it out.
5. Set the assembly upside down on a table or workbench.
6. Using a 5/32 hex key, remove the 4 screws securing the plate to the two side arms.



7. With the plate removed, separate the side arm with the problematic bearing, and install your replacement bearing, then reinstall the plate you removed in the previous step. Ensure that the roller is inserted into the new bearing.
8. Slide the motor assembly back into the conveyor body, and secure it with the 4 screws that were removed earlier. Note that there are 3 sets of holes on the side arms. We recommend that you install the screws through the middle set of holes.
9. Re-install the motor by sliding it onto the drive shaft. Ensure that the motor is in the orientation as shown, and that the keyway bore on the motor aligns with the key in the shaft. Secure the motor with the 4 bolts removed earlier.
10. Finish your replacement by reinstalling the belt and side panels.