# MiTek **SERVICE BULLETIN**

## Document ID: **SB273**

# Title: **Replacing the Chain Tensioner**

Affected machinery: *RoofTracker III*™ Roller Press

Distribution: Customers upon order

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## **Purpose and Scope**

This service bulletin instructs how to retrofit an updated chain tensioner used in the equipment referenced on the title page.

## **Overview**

## **Parts Included**

The parts included in this kit are shown in Table 1. Please make sure all parts and supplies are present before starting the procedure.

Table	1:	Parts	in	SB273KIT
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Quantity	Description	Part #
2	High Strength Chain, 80, 1" Pitch	554022-86.00
2	Master Link Connection	554187
2	Retrofit Assembly Kit	67824-601
1	Service Bulletin Document	SB273

If you have any questions, call MiTek Automation Support at 1-800-523-3380.



## **Supplies Needed**

- Saw for metal
- Tape measure

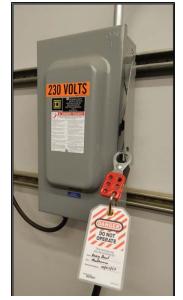
## **Procedure**

## **Electrical Lockout/Tagout Procedure**

	<u> </u>
	ELECTROCUTION HAZARD.
	All electrical work must be performed by a qualified electrician.
<u>_</u>	Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.
	If it is absolutely necessary to troubleshoot an energized machine, follow NFPA 70E for proper procedures and personal protective equipment.

- 1. Engage an E-stop on the machine.
- 2. Turn the machine's disconnect switch to the Off position. This is usually required to open the main electrical enclosure's door.
- Shut the power to the machine off at the machine's power source, which is usually an electrical service entry panel on the facility wall. One example of a locked-out power source panel is shown in Figure 1.
- 4. Attach a lock and tag that meet OSHA requirements for lockout/ tagout to the electrical service entry panel.
- 5. Open the door to the enclosure to which you need access. Using a multimeter, verify that the power is off.

Figure 1: Lockout/Tagout on the Power Source Panel





## **Removing the Previous Chain Tensioner**





MOVING PARTS CAN CRUSH AND CUT.

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Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.

WARNING

1. With power locked out as previously described, open the end guard on the *RoofTracker III*.

Figure 2: End Guard Bolts

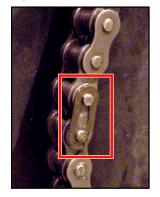


- 2. Remove the previous chain tensioner from the machine by undoing bolts circled in Figure 3.
  - Do not lose the topmost bolt, as it will be used later.

Figure 3: Bolts for Removal of Previous Tensioner

3. Remove the chain by removing the master link. Dispose of the chain.

Figure 4: Master Link Closeup



4. Use a saw to cut off the noted section of the machine frame.

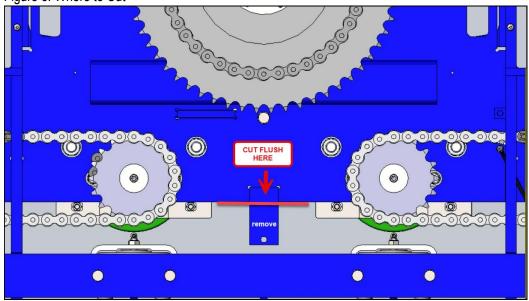
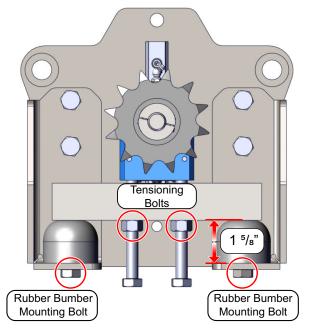


Figure 5: Where to Cut

#### **Installing the Tensioner Assembly**

- 1. Adjust the bumper mounting bolts so that the rubber bumpers are 1-5/8" in height.
- 2. Ensure the tensioning assembly is at its loosest (lowest) possible position by adjusting the two tensioning bolts.

Figure 6: Rubber Bumpers



- 3. Apply blue thread adhesive to the top bolt that was removed in Step 2 on page 4, and the bolts provided with this kit.
- 4. Follow the torque specifications in Figure 7 to install the new tensioner assembly onto the machine.

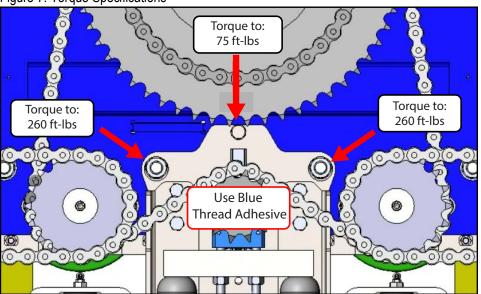
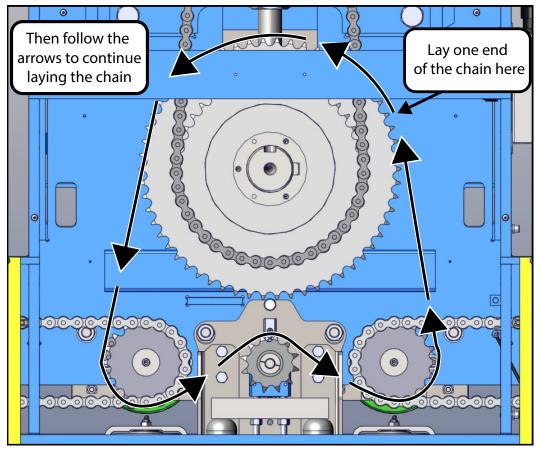


Figure 7: Torque Specifications

### **Re-Installing the Chain**

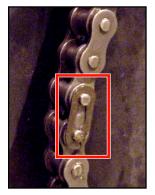
- 1. Place the chain, just offset from the midpoint, on top of the tensioner sprocket.
- 2. Then, wind the ends of the chain around the drive wheel sprockets, and rest each end on the main drive sprocket.

Figure 8: Laying the Chain



3. Install the master link to join the ends of the chain.

Figure 9: Master Link Closeup



- 4. Adjust the tensioning bolts so that the drive wheel chain play is approximately 1/2" (1/4" movement to both sides of center) with a maximum of 3/4" (3/8" movement to both sides of center).
- 5. Check the chain tensioning in three different sprocket rotations. Push the gantry with the brakes released or power up the gantry to rotate the sprocket.

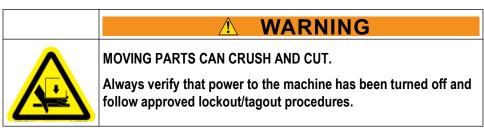
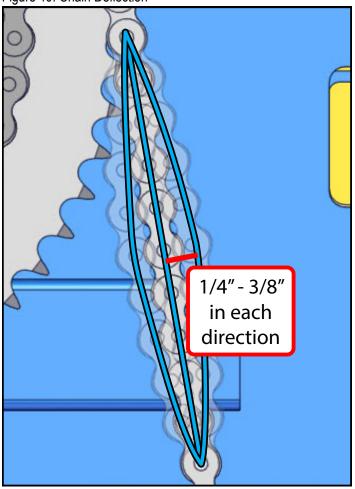


Figure 10: Chain Deflection



## Repeat

Repeat from Removing the Previous Chain Tensioner on page 4 through Re-Installing the Chain on page 7 for the other side of the *RoofTracker III* gantry head.

#### END OF SERVICE BULLETIN