

# **Service Bulletin**

Machinery Affected: BLADE™ Wood Processing System

Document: SB213

Title: Adding a Waste Conveyor Tracking Kit

Distribution: Customers, Upon Order



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Applicability	all manufactured before June 2015



### **Purpose and Scope**

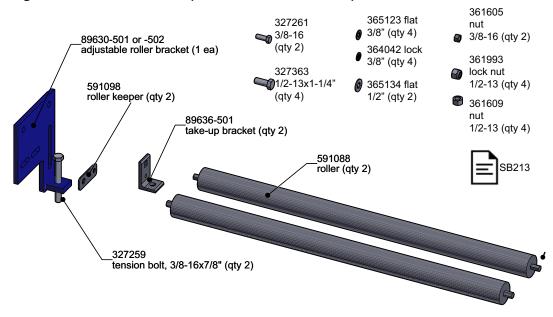
This document describes how to install and adjust the waste conveyor add-on kit that provides additional tracking capabilities for your waste conveyor belt. Waste conveyors manufactured after the applicability date on the title page are manufactured with this assembly already in place.

Note that this does not address how to tension the belt. That should be done using the tensioning assembly on the idle roller.

### **Overview**

The parts included in this kit are shown in Figure 1. Please ensure all parts are present before starting this procedure.

Figure 1: Parts in SB213KIT (also reference 89633-501)



Before beginning the procedure, gather the supplies listed in Table 1.



**Table 1: Customer-Supplied Items** 

4 Clamps	Wrench set
Welding equipment (optional)	Socket set
Lockout and tagout devices	Black marker

If you have any questions, call MiTek Machinery Division Customer Service at 800-523-3380.

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### **Procedure**



### **Electrical Lockout/Tagout Procedures**

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

## When Working on a Machine Outside the Machine's Main Electrical Enclosure

Before performing maintenance on any machine with electrical power, lockout/tagout the machine properly. When working on a machine outside of the machine's main electrical enclosure, not including work on the electrical transmission line to the machine, follow your company's approved lockout/tagout procedures which should include, but are not limited to the steps here.

- 1. Engage an E-stop on the machine.
- 2. Turn the disconnect switch handle on the machine's main electrical enclosure to the "off" position. See Figure 2.

	<b>∴</b> WARNING
	ELECTROCUTION HAZARD.
4	When the disconnect switch is off, there is still live power within the disconnect switch's enclosure.  Always turn off power at the building's power source to the equipment before opening this electrical enclosure!

3. Attach a lock and tag that meets OSHA requirements for lockout/tagout.



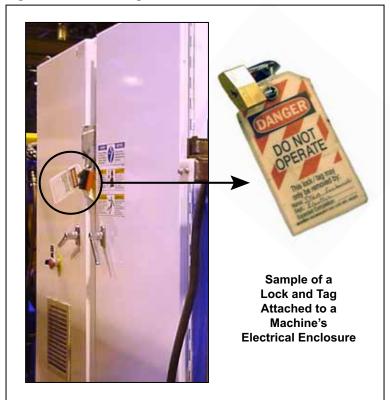


Figure 2: Lockout/Tagout on the Main Electrical Enclosure

### **Pneumatic System Lockout/Tagout Procedure**

	. WARNING
	MOVING PARTS CAN CRUSH AND CUT.
· L	Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.
	Turn off the air switch before performing any maintenance on the equipment.

### **WARNING** <u>^</u> HIGH PRESSURE HAZARD. Bleed pneumatic lines before performing any maintenance on the pneumatic system.

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### **Assembling the Parts**

1. Loosen the belt by pulling in the roller at the Idle End of the conveyor. See Figure 3.

Figure 3: Loosen the Tension Bolts

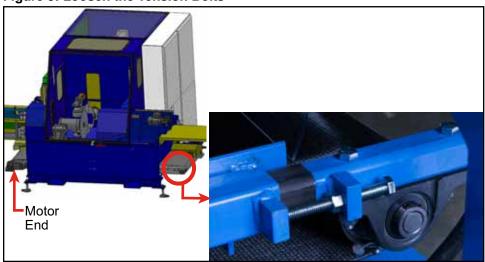


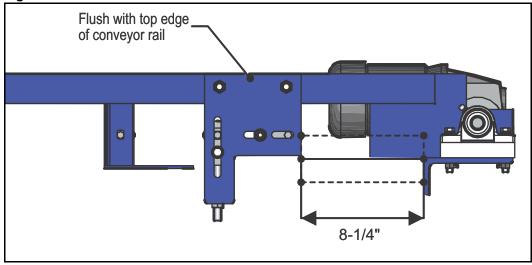




Figure 1 for parts and part numbers.

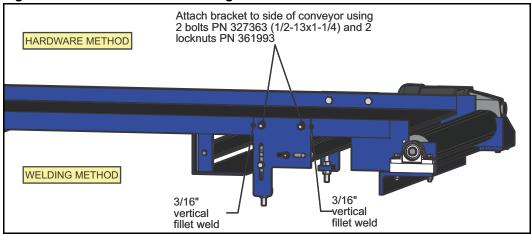
- 2. Attach the brackets with these steps:
  - Clamp both brackets in position (one on each side) according to Figure 4. Be sure the L-shaped bracket points toward the closest conveyor end.

**Figure 4: Bracket Position** 



- Determine if you will weld the brackets on or use the hardware provided.
- c) Attach the brackets to the conveyor frame using the method you have chosen and referring to Figure 5.
  - FOR HARDWARE METHOD: Figure 6 and Figure 7 show the hardware used and the order to install it. The idle side and the drive side both connect exactly the same way.
  - FOR WELDING METHOD: Use 3/16" fillet weld in the location shown in Figure 5.

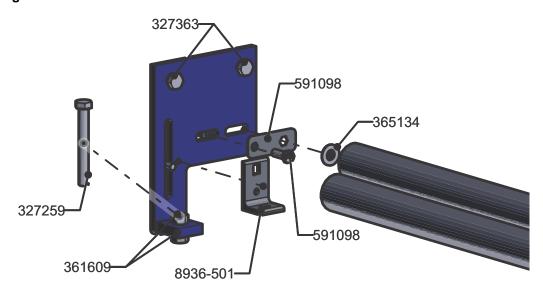
Figure 5: Two Methods for Attaching Bracket to Frame





361993 365123 364042 361605

Figure 7: Hardware on Back Side of Bracket



SB213 Original Instructions



- 3. Connect the 2 new rollers to the bracket on both sides of the conveyor. Before beginning this step, note the following items.
  - The vertical location of the hardware in the vertical should must be adjusted so the rollers are level and at the approximate dimension shown in Figure 8. This will be checked later in the procedure when testing the belt tracking.
  - Position the rollers above or below the belt, as shown in Figure 8.

Figure 8: New Path for Conveyor Belt

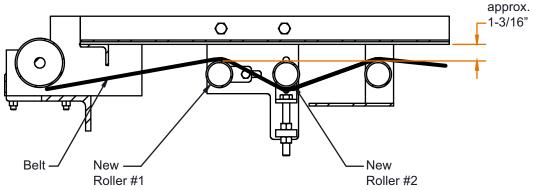
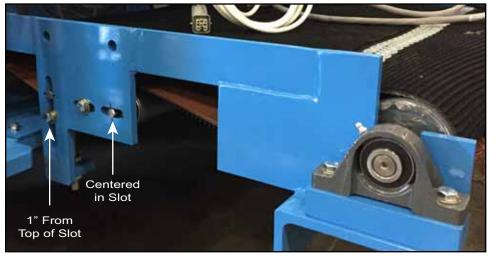


Figure 9: Starting Point for New Rollers



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#### **Adjusting the Belt Tension**

Tighten the roller on the idle end. Start with the take-up bolt at approximately 2-1/2" as shown in Figure 10. Adjust as needed so the belt runs smoothly.

Motor End

Figure 10: Adjust the Take-Up Bolt on Non-Drive Side

### **Adjusting the Belt Tracking**

The belt will not track perfectly the first time. Some minor adjustments are needed at this point. The key to perfect tracking is to make each adjustment very small and to remain patient as it may require more than one roller to be adjusted. Expect several adjustment cycles before the belt tracks perfectly.



- 1. After tensioning the belt, test the tracking:
  - a) Remove lockout/tagout devices and power up the saw.
  - b) Run the conveyor and watch how the belt tracks.
- 2. If the belt walks toward one side, adjust it as described here.

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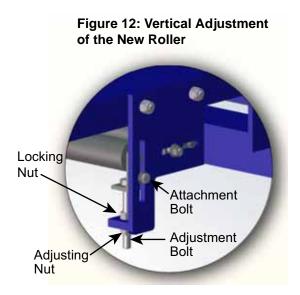


**Figure 11: Adjustments Overview** 

#### ADJUSTMENT A (See Figure 11):



- 1. Adjust the angle of the *Side-to-Side Tracking* roller shown in Figure 11: Move the non-drive side toward the rear idler roller and move the drive side toward the Drive Roller.
- If the Side-to-Side adjustment is not enough or you need to fine tune, adjust the *Up/Down Tensioner* shown in Figure 12. Move the non-drive side down slightly. Do not adjust this roller too much or it will be in a bind and damage the roller. If more adjustment is needed, you can slightly adjust the drive side up.
  - a) Turn the Adjusting Nut so the entire assembly raises or lowers as needed.



- b) Tighten the Locking Nut so it is snug against the bracket.
- c) Tighten the Attachment Bolt.





#### **ADJUSTMENT B** (See Figure 11):

Do the same steps as done in *Adjustment A*, but move the components in the opposite directions.

#### YOU ARE DONE WHEN:

The belt should stay approximately centered on the conveyor bed. Some minor back and forth motion is normal, but it should never rub the side of the conveyor bed frame.



Continue to test the tracking and repeat Adjustments A and B as needed.

#### **END OF SERVICE BULLETIN**

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