



SERVICE BULLETIN

Document ID:

SB243

Title:

Replacing LASM Clamping Jaw Mount

Affected machinery: BLADE Wood Processing System

Distribution: Customers upon order

MiTek Machinery Division
301 Fountain Lakes Industrial Drive
St. Charles, MO 63301
Phone: 800-523-3380
Fax: 636-328-9218
www.mitek-us.com

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Part # and Rev.	SB243
Print Date	23 April 2021
Effectivity	All Frames
Revision Date	
Revised By	
Orig. Release Date	5 March 2021
Created By	A. McIntire
Approved By	R. Tucker



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Graphics may be unclear and could create an unsafe condition if this recommendation is not followed.

Purpose and Scope

This service bulletin instructs how to remove and replace the LASM clamping jaw mount used in the equipment referenced on the title page. For information on replacing the entire LASM assembly see SB234.

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 SB243KIT

Quantity	Description	Part #
4	1/2" washers	008-5-0520
1	Clamping jaw mount	89142
1	Lumber ram shim	89149
1	Clamping jaw mount shoulder bolt	328250
1	Round shim	365823
1	Wave spring	370006
1	Bronze bearing	417009
1	Service bulletin document	SB243

If you have any questions, call MiTek Machinery Division Customer Service at 1-800-523-3380.



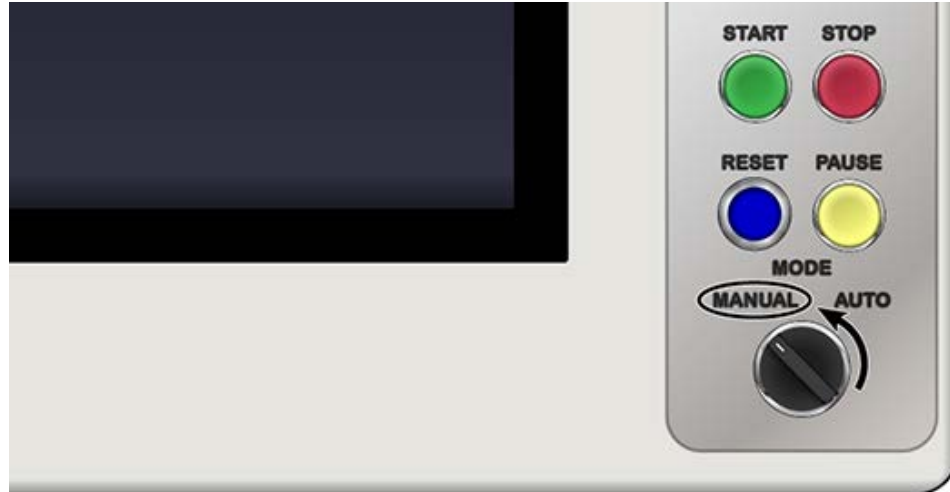
Supplies Needed

- Hex key set
- 13 mm wrench
- Torque wrench
- 6' straight edge

Prepping the Saw

1. Turn the Auto/Manual Mode switch on the main control panel to **MANUAL**.

Figure 1



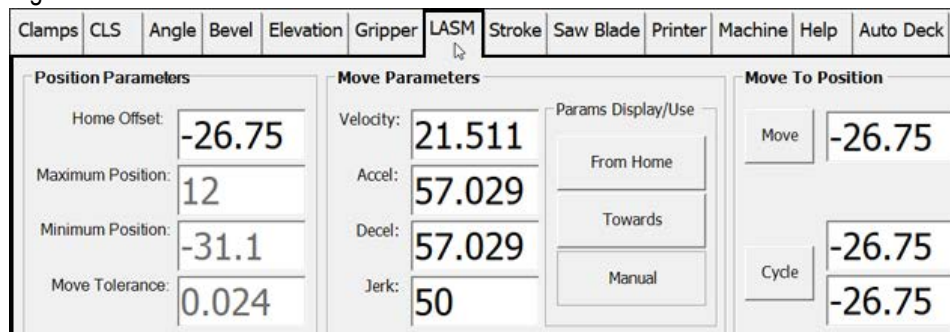
2. Select the **Diagnostics** tab, and then select **Detailed Diagnostics**.

Figure 2



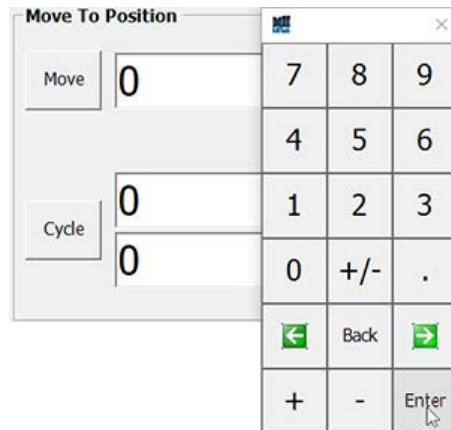
3. Select the **LASM** tab in the Diagnostics window.

Figure 3



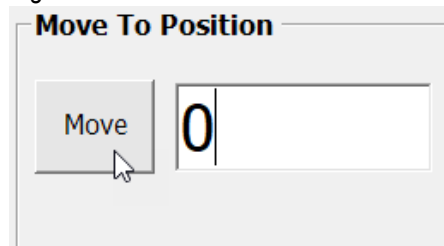
4. Enter 0 into the **Move to Position** field and select **Enter**.

Figure 4



5. Select the **Move** button.

Figure 5



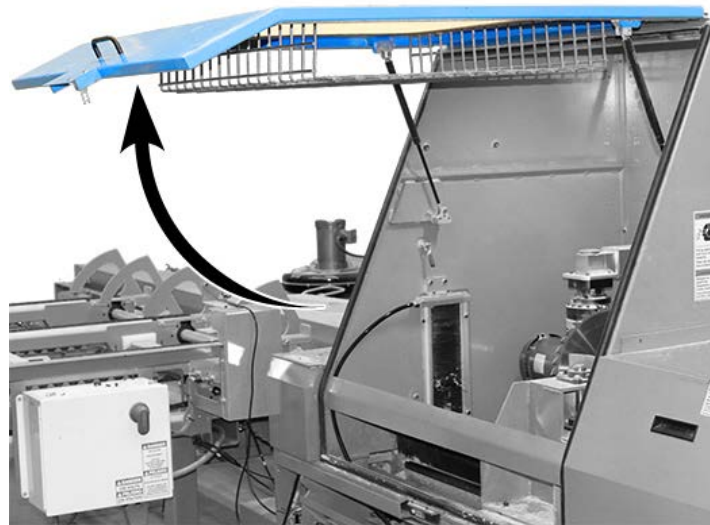
6. Verify the LASM is centered in the saw chamber. To increase the available workspace, rotate the bevel 180 degrees and raise the elevation of the blade.

Figure 6



- Open the saw chamber door.



Figure 7



Safety Procedures

The following safety procedures must be followed.

Electrical Lockout/Tagout Procedure

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

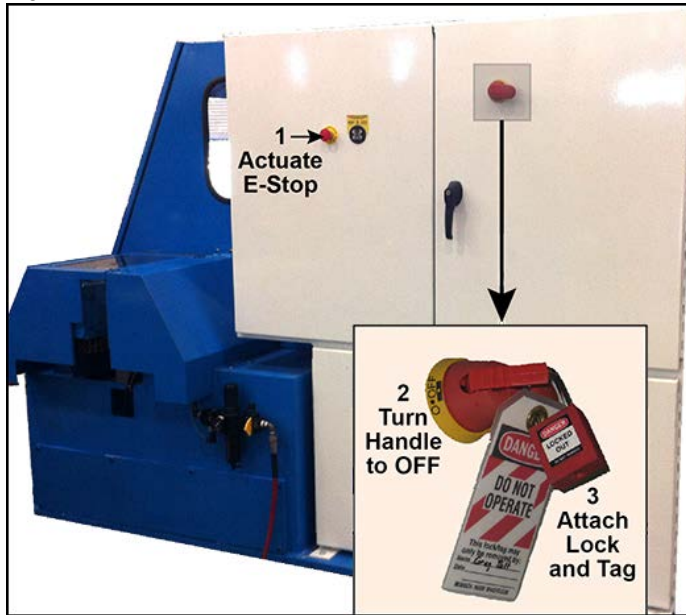
Working on a Machine Outside the Machine’s Main Electrical Enclosure



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.

- Engage an E-stop on the machine.
- Turn the disconnect switch handle to the Off position. See Figure 2.





Figure 8: Disconnect Switch



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

Pneumatic or Hydraulic System Lockout/Tagout Procedure

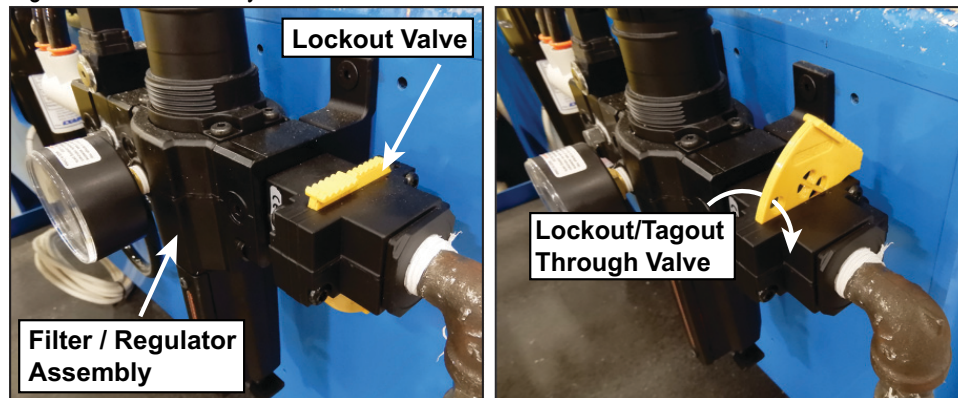
	 WARNING
	<p>HIGH PRESSURE HAZARD.</p> <p>Bleed pneumatic lines before performing any maintenance on the system.</p> <p>Working on pressurized lines may cause injury.</p>




Before performing maintenance on any machine with pneumatic or hydraulic power, lockout/tagout the machine properly.

1. Lockout/tagout the electrical power as described in this document.
2. Turn off or close the system’s air shut-off valve and attach a lock and tag. See Figure 2.

Figure 9: Pneumatic System Shut-Off Valve

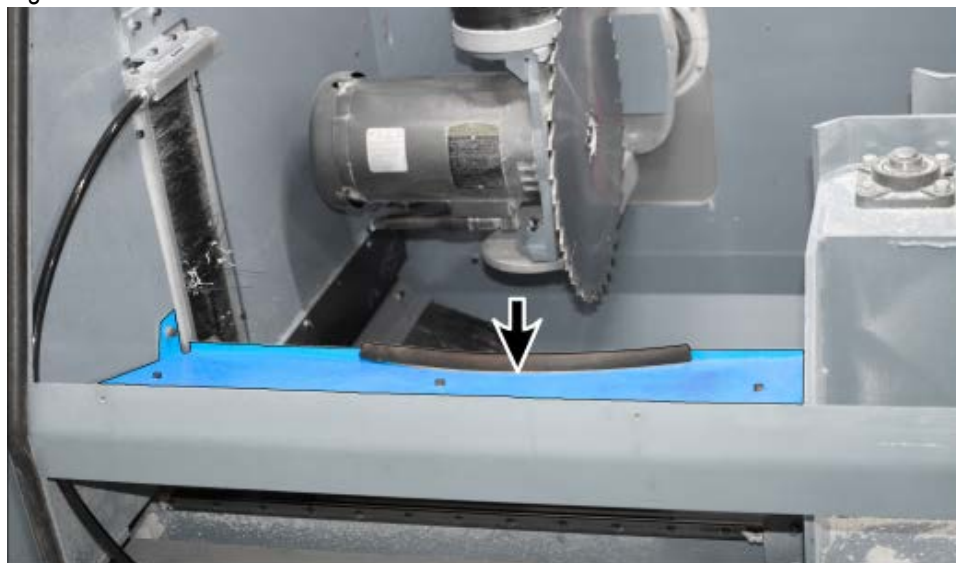


Replace LASM Clamping Jaw Mount

	⚠ WARNING
	<p>MOVING PARTS CAN CRUSH AND CUT.</p> <p>Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.</p>

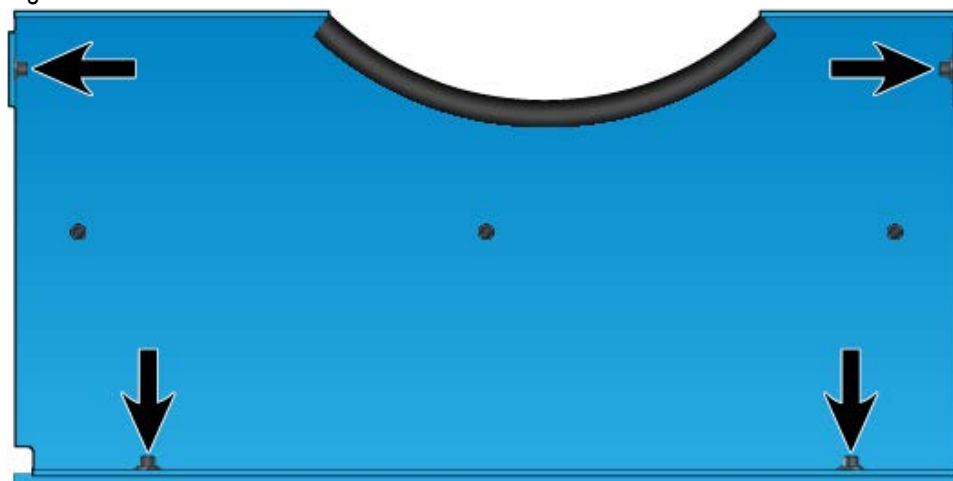
1. At the open saw chamber door, locate the top LASM guard.

Figure 10



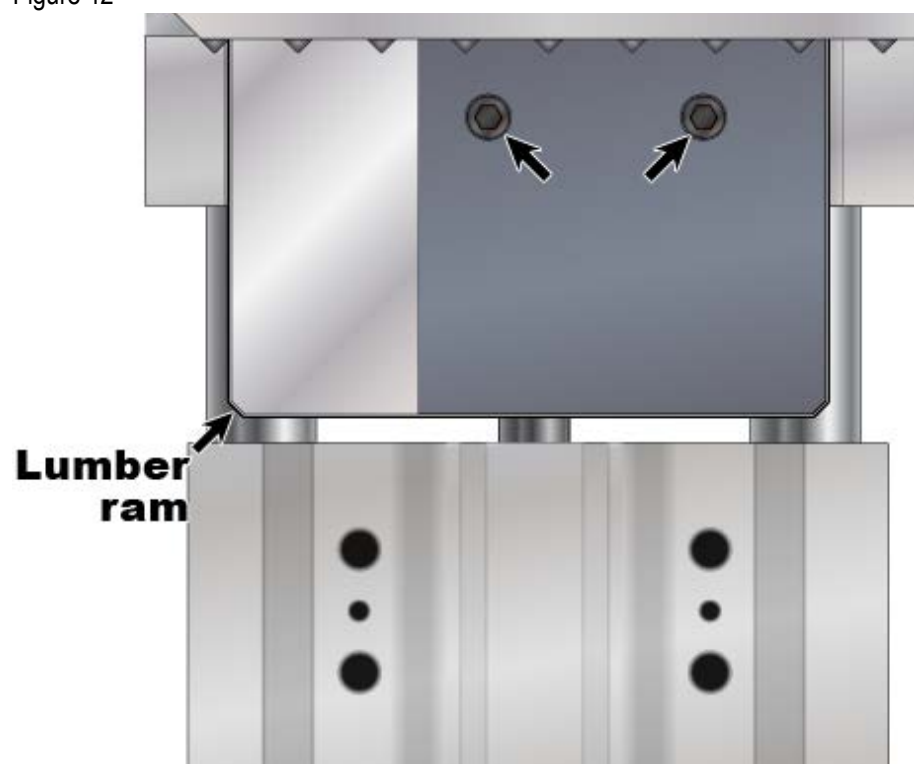
2. Remove the four 3/16" socket head cap bolts securing the top LASM guard. Note that the two front bolts are shorter than the two side bolts.

Figure 11



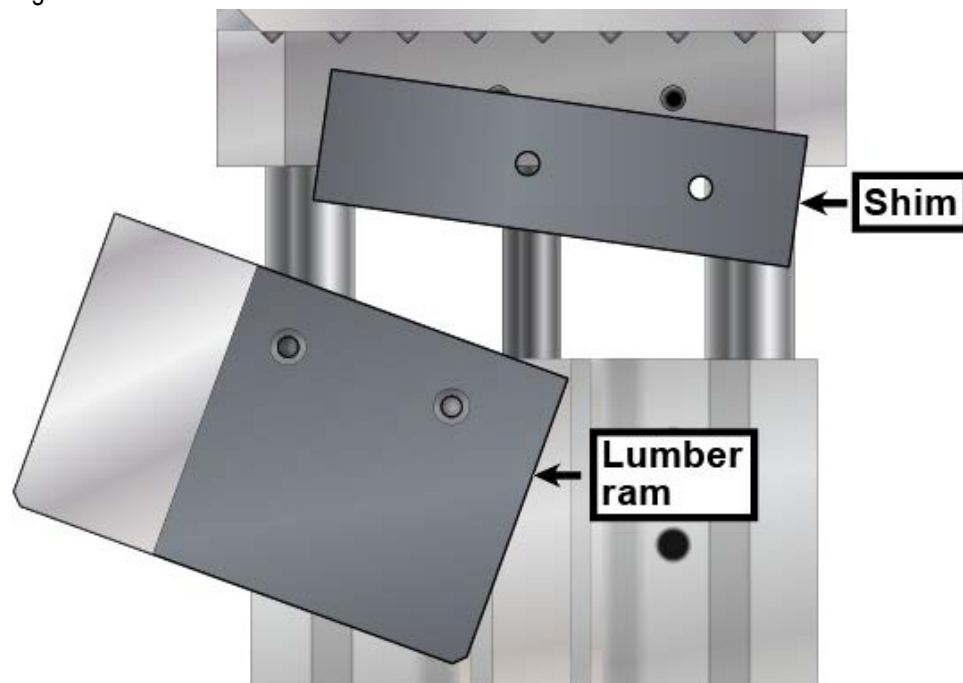
3. Remove the two 3/16" socket head cap bolts securing the lumber ram.

Figure 12



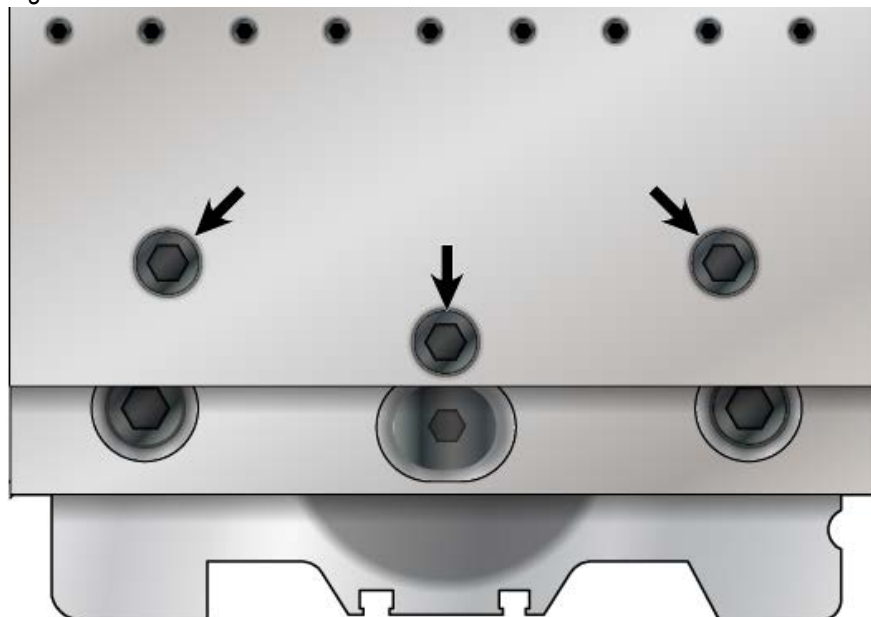
4. Remove the lumber ram and any shim(s) that may be present under the lumber ram. Save the shims for reassembly.

Figure 13



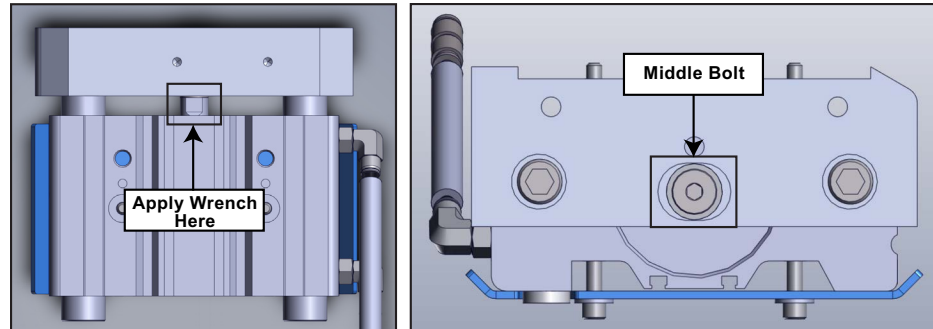
5. Remove the three 5/16" socket head cap bolts securing the clamping jaw to the LASM cylinder. Retain the clamping jaw and bolts for reassembly.

Figure 14



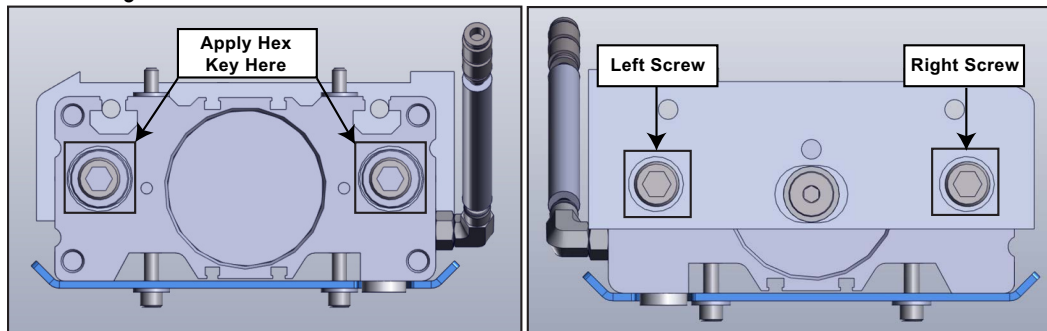
6. To remove the clamping jaw mount, follow these steps.
 - a) Using the 13 mm wrench to hold the center rod in place on the opposite side, remove the center bolt.

Figure 15



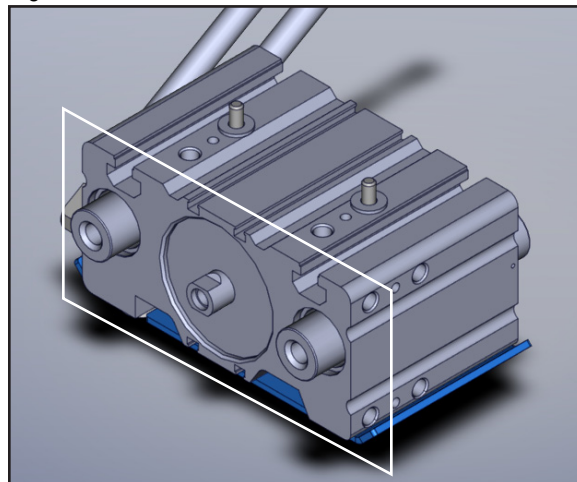
- b) Using a hex key to hold the left and right guide rods in place on the opposite side, remove the left and right bolts.

Figure 16



- c) Remove the clamping jaw mount from the cylinder. The old clamping jaw mount may be discarded.
7. Clean the area around the cylinder assembly to remove any potential dust or dirt.

Figure 17



8. To install the new clamping jaw mount, follow these steps.
 - a) Retract the left and right guide rods as far as possible in the direction shown in Figure 18 (see red arrows).
 - b) Align the new clamping jaw mount with the guide rods.
 - c) Using a hex key to keep the retracted left and right guide rods in place (see Figure 16), insert and tighten the left and right bolts.
 - d) Insert the new clamping jaw mount shoulder bolt paired with all required parts. The various parts must be placed in order on either side of the clamping jaw mount as shown in Figure 18. Note that the round shim is designed to fit against the shoulder bolt flange and will protrude slightly outside the clamping jaw mount. (see Figure 19).

Figure 18

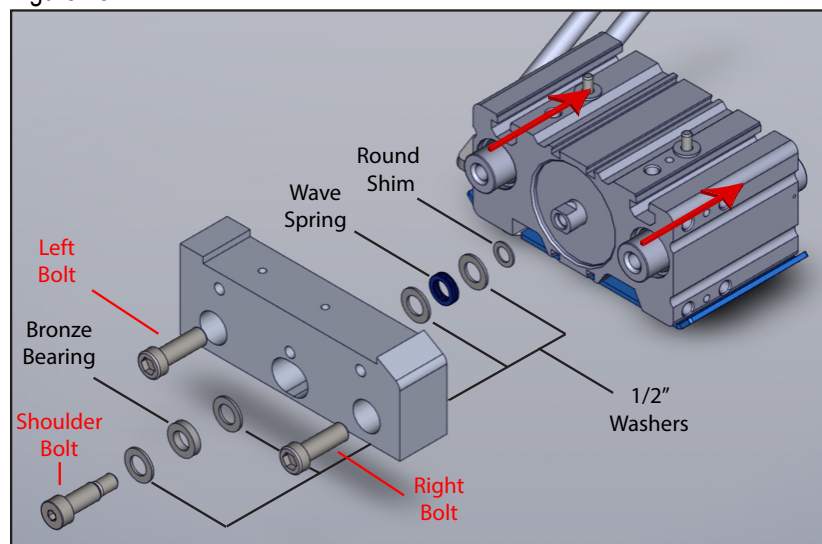
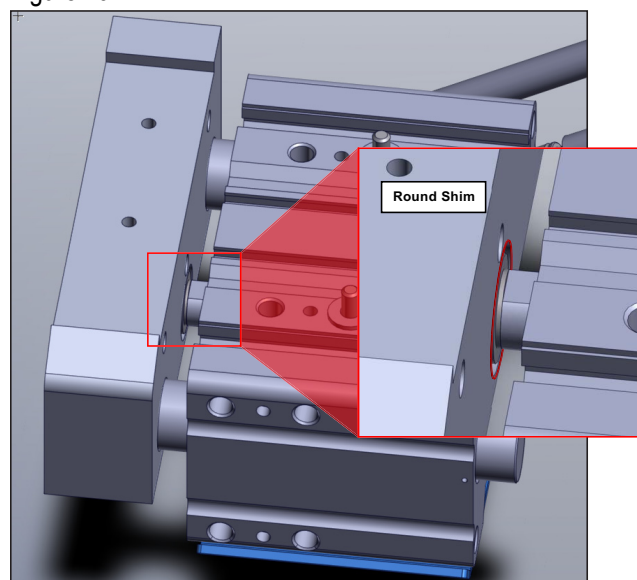
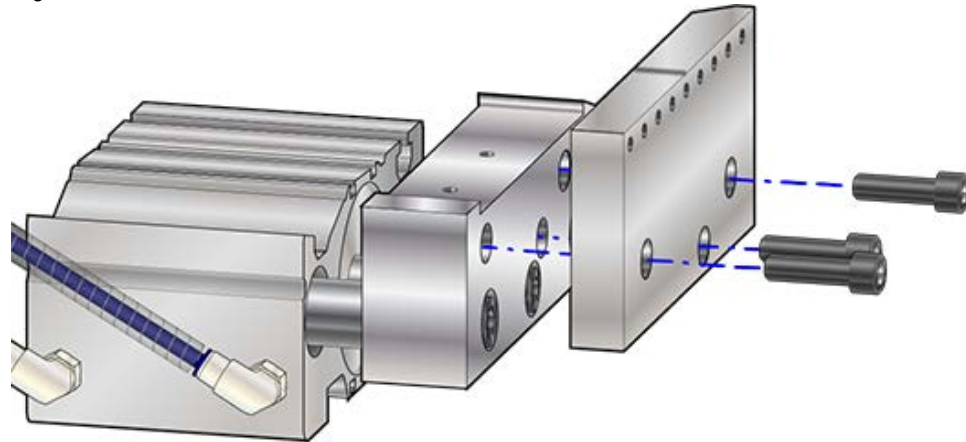


Figure 19



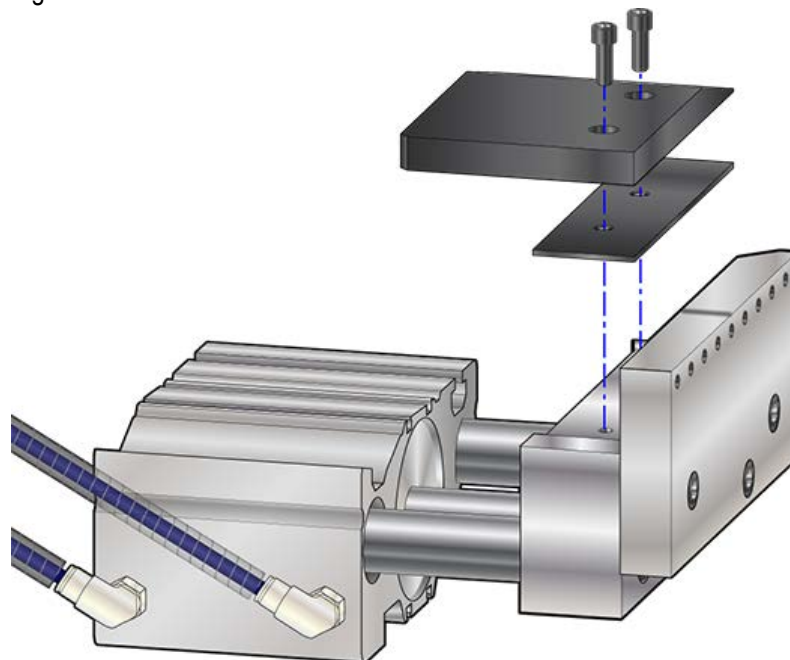
- e) Using a wrench to hold the center rod in place on the opposite side (see Figure 15), use a torque wrench to torque the shoulder bolt to 416 in-lbs.
9. Secure the clamping jaw to the new clamping jaw mount using the three 5/16" socket head cap bolts removed in step 5.

Figure 20



10. Using the shims, lumber ram and two 3/16" socket head cap bolts removed in step 4, install the shims and lumber ram to the new clamping jaw mount of the LASM cylinder. Ensure all shims are reinstalled before proceeding.

Figure 21

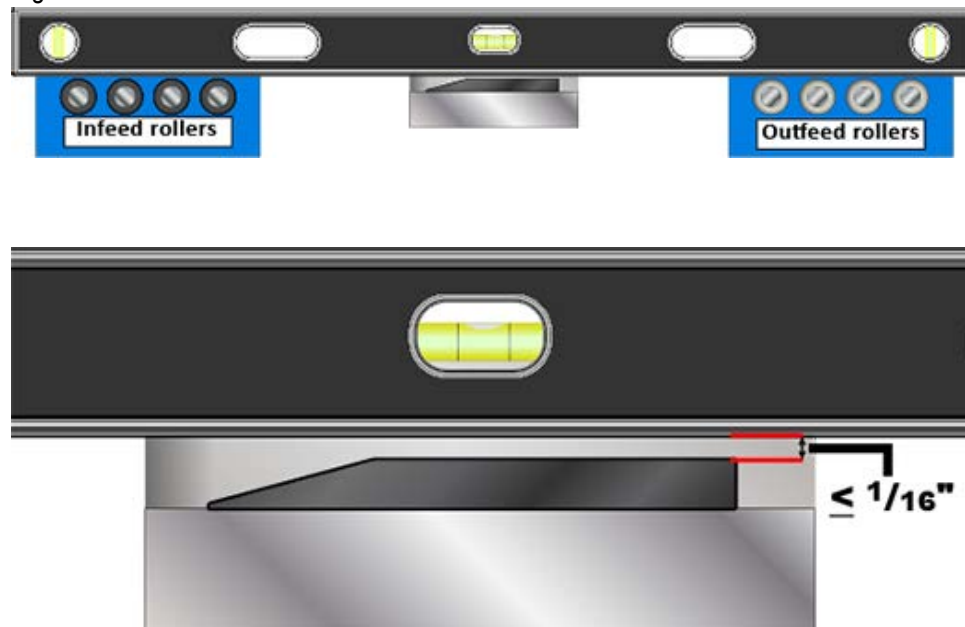


11. Reinstall the top LASM guard using the four 3/16" socket head cap bolts removed in step 2. Ensure the two longer bolts are installed on the sides of the guard.
12. Reset the E-stop.
13. Remove lockout/tagout devices.
14. Check lumber ram height. See *Checking Lumber Ram Height*.
15. Resume production. If you encounter any issues, please contact MiTek Machinery Division Customer Service at 800-523-3380.

Checking Lumber Ram Height

1. Check that the infeed and outfeed rollers move freely and remove any debris that may affect the test.
2. Place a 6' long straight edge so that one end rests on the infeed rollers and the other rests on the outfeed rollers.
3. The lumber ram should not touch the straight edge and should not be lower than 1/16" below the straight edge. If the lumber ram is touching the straight edge, remove a shim from under the lumber ram.

Figure 22



(Illustrations simplified for clarity.)

4. If the lumber ram is more than 1/16" below the straight edge, add the included lumber ram shim.

END OF SERVICE BULLETIN