SERVICE BULLETIN

Document ID:

SB264

Title:

Verifying Push Bar Operation

Affected machinery: RailRider Pro® floor truss press, Finish Roller press (gen 1 only)

Distribution: All customers with affected frames of affected machinery

Applies to: All machines with a specific-style of push bar. Customers will be identified during this project, and the kit will be sent to those customers only.

CAUTION:
MiTek recommends printing this document in high resolution using color ink. Many of the graphics may be unclear and may create an unsafe condition if this recommendation is not followed.

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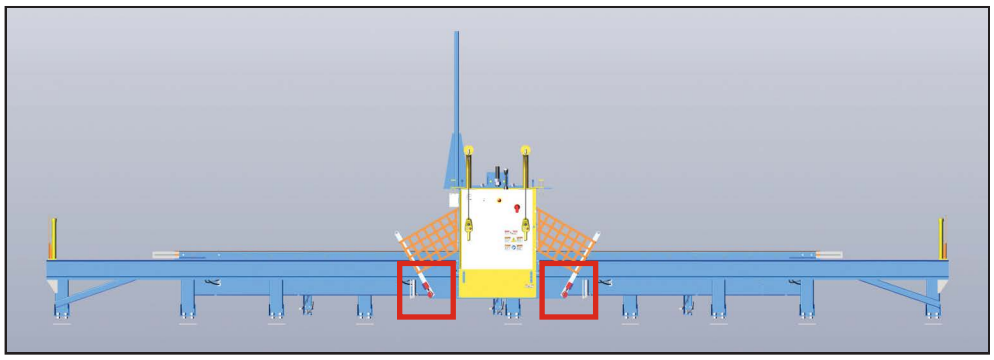
Purpose and Scope

This service bulletin instructs how to inspect and replace critical screws in the push bar assembly on the equipment referenced on the title page. This procedure MUST be completed at your earliest convenience.

Overview

	⚠ WARNING
	**Do not operate this equipment until 24 hours after this procedure has been completed!**

Figure 1: Location of Screws on Operator End



Parts Included

The parts included in this kit are shown in Table 1. Ensure all parts and supplies are present before starting the procedure. For questions, call 1-800-523-3380.

Table 1: Parts in SB264KIT

Qty.	Description	Part #	Use w/Screw
1	T25 bit, 6-lobe (smaller *Torx*® bit)	354002	E
1	T40, L-key, 6-lobe, for holding opposite side	354010	B, F
1	7/32” bit, 3/8” drive, hex	354027	A, D, G
1	T40 bit, 6-lobe (larger *Torx* bit)	814129	C
2	3/8-16x1-1/2” screws	354003	
2	*Loctite*® 243 thread adhesive	621004	All
1	Service bulletin document	SB264	

Additional Supplies Needed

- Torque wrench/driver

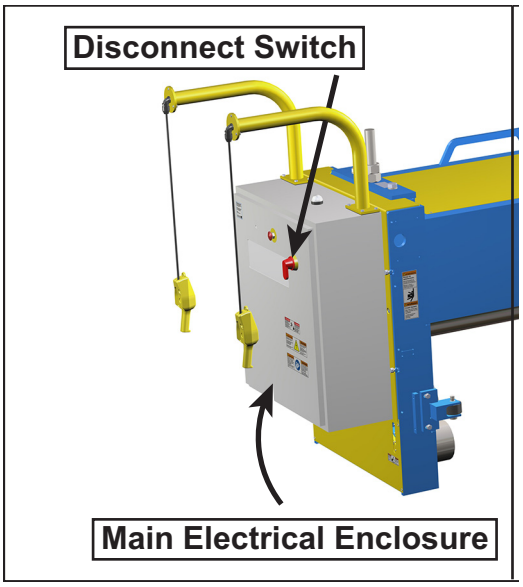
Procedure

Electrical Lockout/Tagout Procedure

	**⚠ WARNING** **ELECTROCUTION HAZARD.** **All electrical work must be performed by a qualified electrician.** **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.** **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.**

1. Engage an E-stop on the machine.
2. Turn the disconnect switch handle to the Off position. See Figure 2 for example shown on RailRider Pro press.
3. Attach a lock and tag that meet OSHA requirements for lockout/tagout to the electrical service entry panel.

Figure 2: Disconnect Switch on RailRider Pro



Securing the Push Bar

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

To remove the tamper-proof screws in this procedure, use the appropriate bit/key in this kit as indicated in Table 1.

The bit/key should be discarded or stored in a secure location when this procedure is complete to prevent further tampering.

NOTE: Thread adhesive requires 24 hours to dry before using the machine!

1. With power locked out as previously described, inspect the screws labeled in Figure 3 on the OPERATOR end of BOTH push bars.
   a) If any are found loose, remove (using bit indicated in Table 1).
   b) Apply a few drops of the supplied thread adhesive to the threads that will be engaged. Be sure not to get it on the smooth bearing areas for B and C.
   c) Tighten according to the torque specs shown.

When tightening B & C, use the T40 L-key to hold one while tightening the other with the T40 bit.

Figure 3: Tighten These Screws on Both Push Bars, OPERATOR end

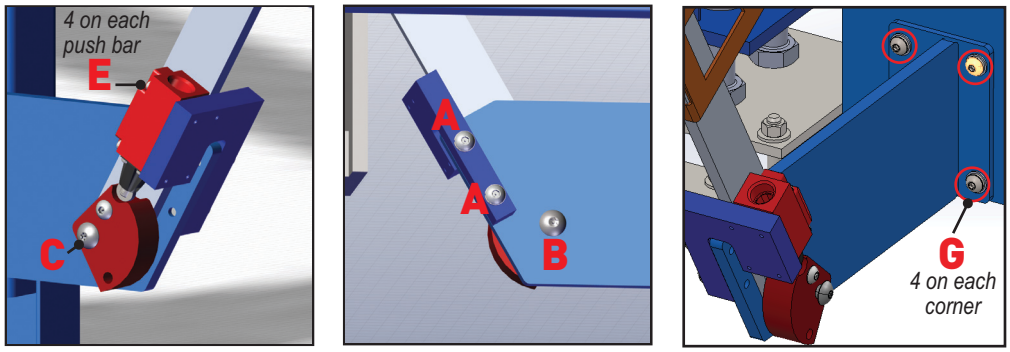


Table 2: Torque Specs for Figure 3

Screw	Torque Setting
A, B, C, G	236 in-lb
E	32 in-lb

2. Inspect the screws labeled in Figure 4 on the MOTOR end of BOTH push bars.
   a) If any are found loose, remove (using bit indicated in Table 1).
   b) Apply a few drops of the supplied thread adhesive to the threads that will be engaged. Be sure not to get it on the smooth bearing areas for C.
   c) Tighten according to the torque specs shown in Table 3.

When tightening C & F, use the T40 L-key to hold one while tightening the other with the T40 bit.

Figure 4: Tighten These Screws on Both Push Bars, MOTOR End

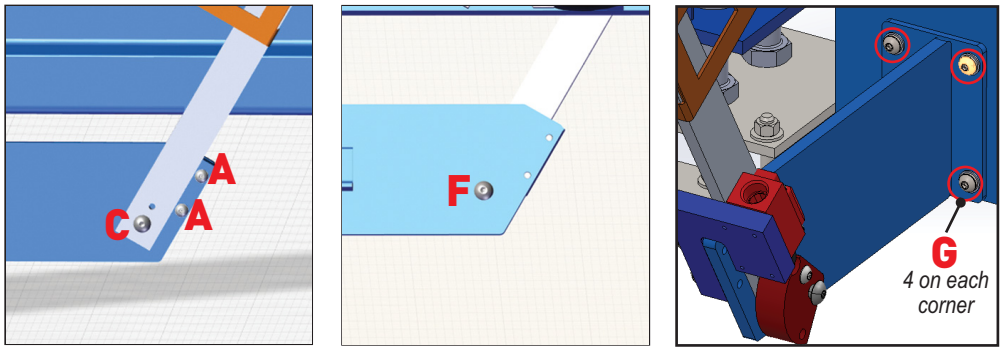
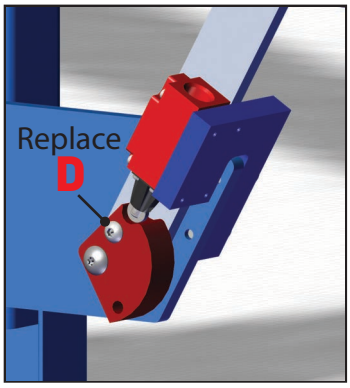


Table 3: Torque Specs

Screw	Torque Setting
A, C, F, G	236 in-lb
D	143 in-lb

Figure 5: Replace Screw D in 2 Places on OPERATOR End



3. Return to the OPERATOR end and replace screw **D** on BOTH push bars while referring to Figure 5.
   a) Remove both screws labeled D (using bit indicated in Table 1).
   b) Locate the new screws supplied in this kit and apply a few drops of the supplied thread adhesive to the threads that will be engaged.
   c) Tighten according to the torque spec shown in Table 3.
4. Allow 24 hours for thread adhesive to cure before testing/using machine.

	⚠ WARNING
	**You MUST test the push bar AFTER waiting 24 hours for the thread adhesive to dry. Do not use the equipment for production until it has been tested.**

Perform Safety Test

Select the safety test below for your machine and perform the test after the thread adhesive has dried for at least 24 hours. The *RailRider Pro*® test begins on page 7.

Finish Roller Safety Test

	⚠ WARNING
	**The operator must ensure that no other personnel are in the path of trusses during this test or able to touch the roller.** **If the roller fails to stop when expected, serious injury or death may occur.**

1. After giving the thread adhesive at least 24 hours to dry, remove the lockout/tagout device on the Finish Roller press that you are testing.
2. Ensure no trusses will enter or exit the Finish Roller during this test which means performing a lockout/tagout on the stand-alone conveyors or press feeding the Finish Roller.
3. Turn on the Finish Roller and stand in front of it where you can reach the push bar.
4. Press the push bar away from you.

As the push bar moves, the limit switch will go to a open state causing the internal roller to stop rotating and the machine enters an E-stop status.

5. Push the Forward button. The roller should NOT move.
6. Push the Reverse button. The roller should NOT move.
7. Repeat the previous steps for the push bar on the opposite side.
8. Do not operate the machine if any step in this test failed.

RailRider Pro Safety Test

	⚠ WARNING
	**Never stand directly in front of gantry head when it is moving!** **Operators must ensure no other personnel are in the path of the gantry head before operating gantry head!** **If the gantry head fails to stop when expected, serious injury or death may occur.**

1. After giving the thread adhesive at least 24 hours to dry, remove the lockout/tagout device on the RailRider Pro press that you are testing.
2. Test that the push bar stops the gantry head:
   a) Move the gantry to the middle of the table line. There must be at least 10 ft of table space on both sides of the gantry head.
   b) Place a heavy object on the table, on either side of the gantry head, approximately 8 ft away from the push bar.
      - The object height must be higher than the push bar.
      - The object weight must be at least 100 lb.
   c) Move the gantry head toward the object on the table. Do not let go of the button when the push bar strikes the object.

   As the push bar moves, the limit switch will go to a open state causing the gantry to stop in an E-stop status. The stopping distance should be less than 10 in.

3. Test the electrical connections:
   a) After performing the test in step 2, do NOT reset the push bar.
   b) Attempt to move the gantry head in the direction of the actuated push bar.
   c) The gantry head should NOT move.
   d) Attempt to move the gantry head in the opposite direction.
   e) The gantry head should move in the opposite direction.
   f) If the gantry head reacted as it should, continue. If the gantry head did not react as it should, check electrical connections and refer to the equipment manual for troubleshooting assistance.
4. Repeat this entire test, starting on page 7, for the push bar on the opposite side with the gantry head moving in the opposite direction than the test just performed.
5. Do not operate the machine if any step in this test failed.

END OF SERVICE BULLETIN