MiTek®
Machinery Division

Service Bulletin

Machinery Affected:	***Robbins™ SuperTorque™* No-Rail Press and *Super-Torque* Track Gantry Press**
Document:	**SB192**
Title:	**Adjusting the Bumper Flag**
Applies To:	**All**
Distribution:	**Customers, All**

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Applicability	All

Purpose and Scope

It has been brought to our attention that the current bumper flag sometimes causes the light bar sensor to fault during normal operating conditions. The fault is caused by the flag partially covering the sensor which allows the beam to be broken by slight movement of the flag during normal use. This document explains how to trim the flag back to give the light bar sensor beam an unobstructed path.

Procedure

Electrical Lockout/Tagout Procedures

	⚠ WARNING
	**ELECTROCUTION HAZARD!** **Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.** **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.

	⚠ WARNING
	**ELECTROCUTION HAZARD.** **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.

Pneumatic System Lockout/Tagout Procedure

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

	⚠ WARNING
	**HIGH PRESSURE HAZARD.** **Bleed pneumatic lines before performing any maintenance on the pneumatic system.**

Modifying Flags

This procedure removes the portion of the flag that is blocking the sensor opening.

1. Cut out the template supplied with this SB and verify the dimensions.
2. Tape the template onto existing flag. Edges of template and flag should be aligned.
3. With flag still on machine, verify that the area to be cut off accomplishes the goal of making the flag completely clear of the sensor's path.
4. Mark on the flag where the cut should be made, according to the template. See Figure 1.
5. Cut off the unneeded portion of the flag.
6. Debur the cut edge and ensure that sensors beam is unobstructed as shown in Figure 2.
7. Ensure Transmitter and Receiver are properly aligned.
8. Repeat on all flags, excluding the platform.
9. Measure the distance from the middle of the light sensor to the closest edge of the flag.
10. Compare this measurement to the template provided with this SB.

    If too much was cut off the flag and it is now too far from the sensor, shim the pivot arm so the flag is pushed closer to the sensor.
11. Adjust the light bars so the light beam sensors are perfectly aligned.

Figure 1: Mark Area to Cut Off

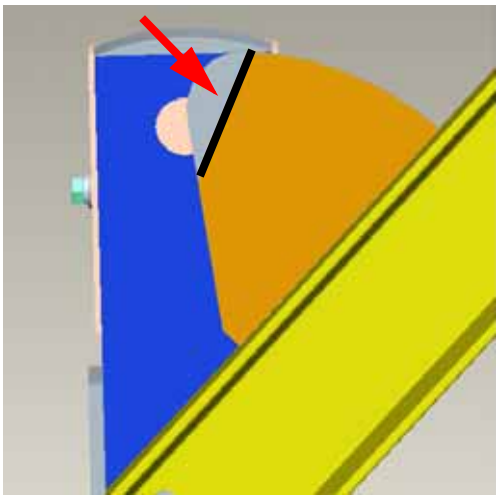
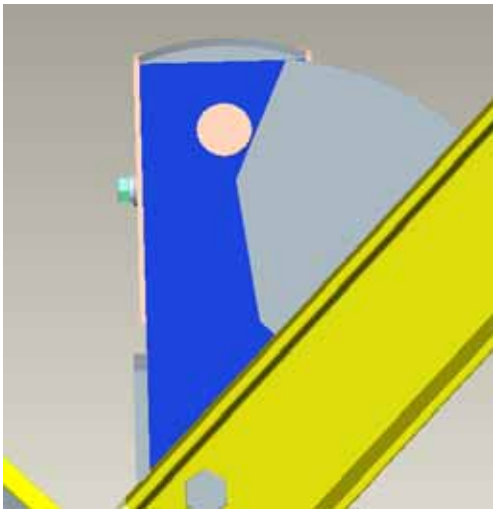


Figure 2: Flag After Cutting



Testing the Bumper and Flag Locations

	⚠ WARNING
	**CRUSH OR CUT HAZARD!** **Test the operation of the light bars and bumpers before operating the gantry.**

1. Start and stop the gantry head several times to ensure the flags are no longer blocking the sensor.
2. Place a large, heavy, freestanding object (such as a trash can) in the path of the right, operator-side bumper, but at least 10 ft away from the bumper.
3. Start the gantry head moving toward the obstruction.The gantry head should stop immediately after the bumper touches the obstruction.
4. If any of the light bars or bumpers fail this test, refer to the *Correcting a Failed Test* section to repair the problem.
5. If a retracted bumper fails to stop the motion of the gantry head IMMEDIATELY, check the location of the flag in relation to the light bar sensors and make necessary adjustments.

Testing the Light Bars

To perform this test, you will need two (2) pieces of lumber connected in the shape of a T so that the T will independently stand upside down to look like ⊥.

	⚠ WARNING
	**Never stand directly in front of the gantry head!** **If the gantry head fails to stop when expected, serious injury or death may occur.**

1. Remove any lockout/tagout devices and ensure the disconnect handle is in the ON position.
2. While the gantry head is sitting still, place the wooden T so it interrupts the beam between the right light bar set.
3. Place the wooden T on the table so the T is upside down and it is freestanding. Locate it to the right and at least 10 ft away from the gantry head.
4. Start the gantry head moving toward the wooden T.

5. Allow the gantry head to reach the wooden T. The motion of the machine should stop immediately.
6. Ensure the wooden T is continuing to block the light bar beam. If necessary, move the wooden T so it remains in the light bar detection zone.
7. Verify that the machine will **not** continue to move forward while the wooden T is in its detection zone.
8. Repeat this test in the other direction.
9. If any of the light bars fail this test, they may need to be re-aligned.

END OF SERVICE BULLETIN