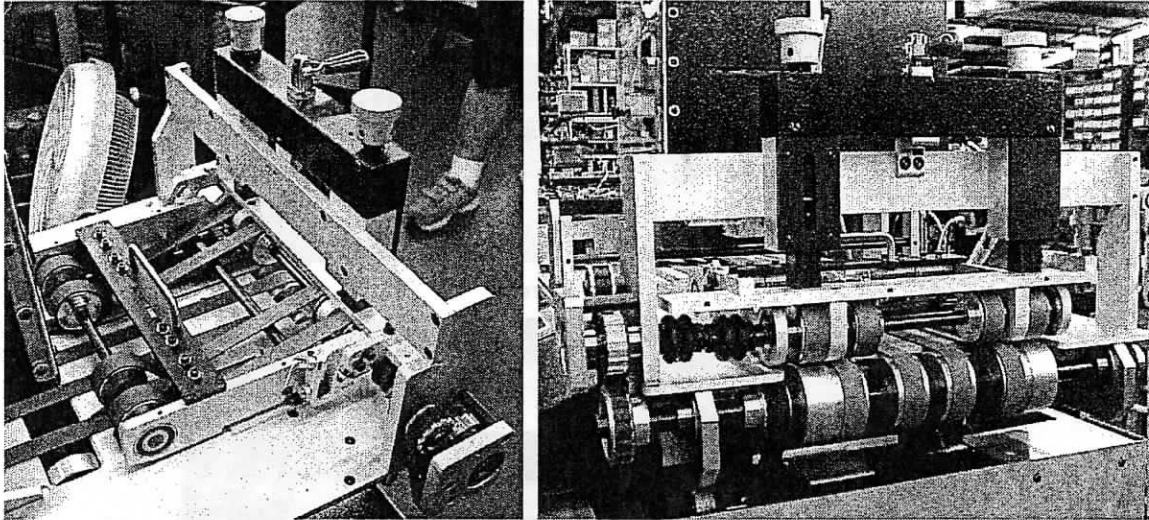


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SUBJECT: KR535 TABBER UPPER BELT INSTALLATION AND SETUP PROCEDURE			



KR535 Upper Belt Assembly

Installation Procedure

Note: The upper belt assembly is a precision mechanism and should be installed according to the installation and setup procedure. The quality of tab folds and placement are directly affected by the quality of installation and setup.

1. **Disconnect the power supply.** Remove the current upper belt assembly by first loosening the timing belt. The take-up idler is on an eccentric stud and must be loosened and rotated to relieve the belt tension.
2. Remove the four ¼-20 cap screws that secure the upper belt assembly to the tabletop.
3. Adjust the tabletop toward the back of the machine. Remove the control panel (see **Figure 1**) by removing the 10-32 flat head screws from the tabletop and ¼-20 button heads from the front of the control panel. Set the control panel to the left on the cabinet top leaving the wires connected.
4. Bolt the supplied gusset to the existing hole location (see **Figure 1**) and spot a threaded hole into the frame to mount the gusset. Drill through with a number 7(.201) drill and thread with a ¼-20 tap.

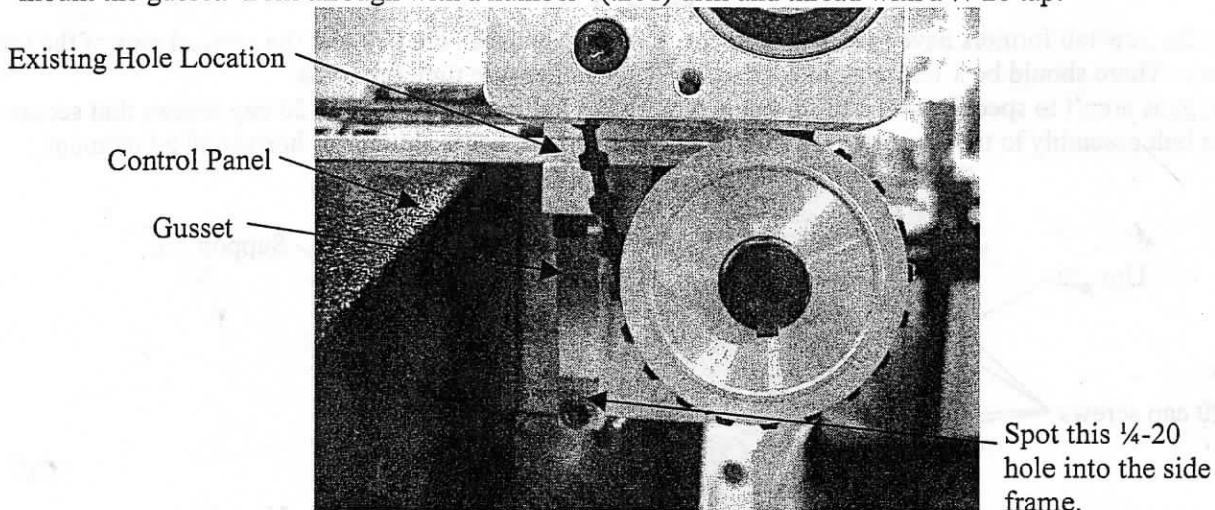


Figure 1

5. Mount the control panel back into place.
6. Remove the tab formers and replace with the new tab formers. (see **Figure 2**)
7. Thread the timing belt around the timing pulleys before bolting the new assembly to the tabletop with the four ¼-20 cap screws previously removed. Make sure the pulleys are in line with each other for proper belt tracking.

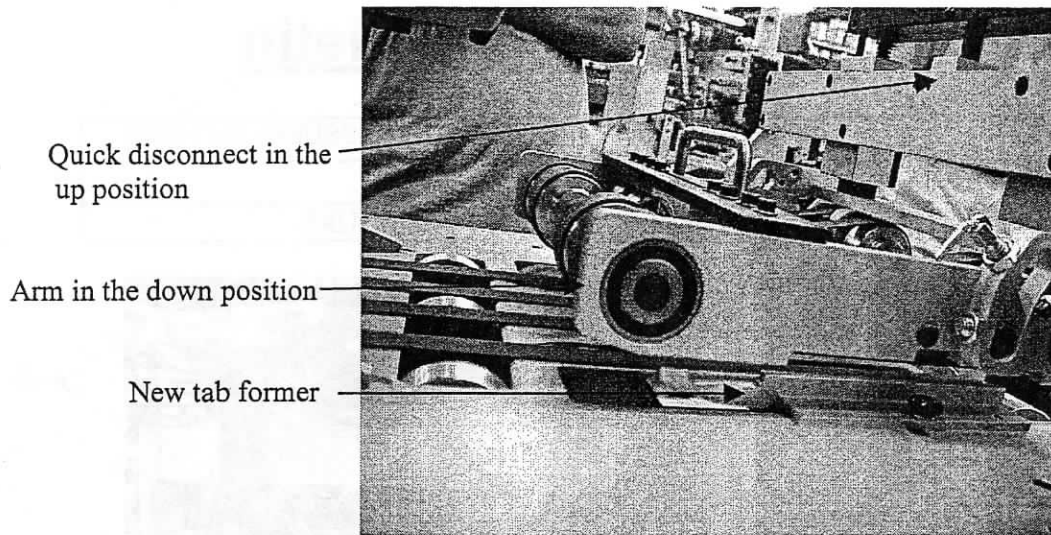


Figure 2

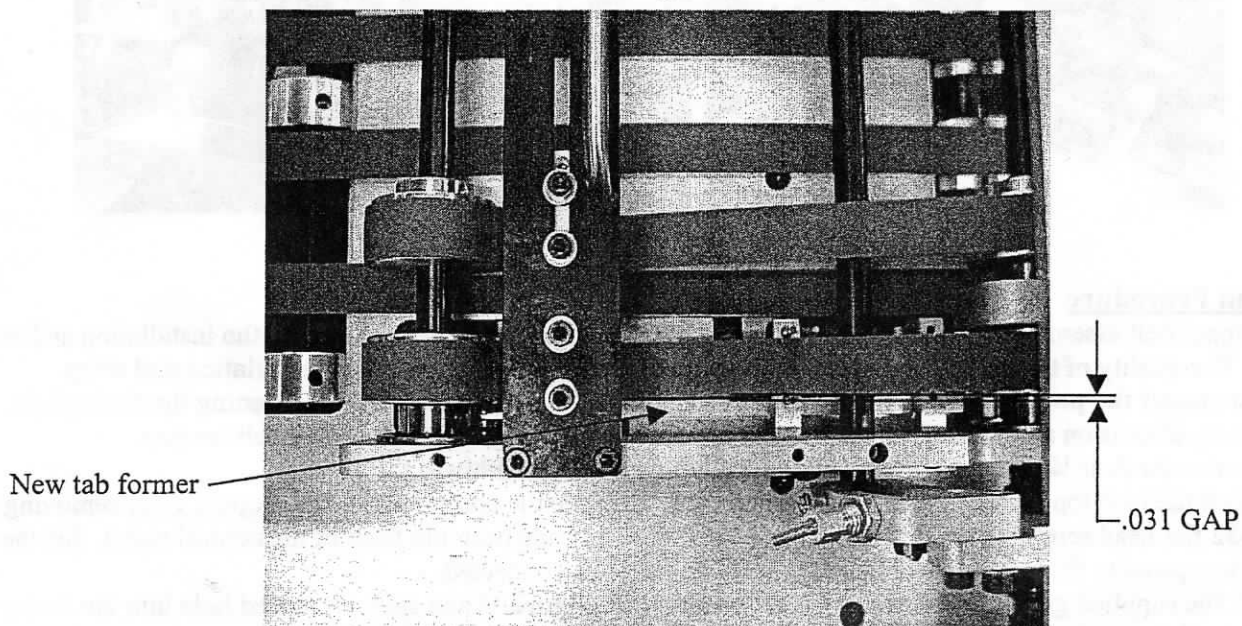


Figure 3

8. After the new tab formers have been installed check the gap between the belt and the vertical part of the tab former. There should be a 1/32 gap on both sides. This will ensure tight tab folds.
9. If the gaps aren't to specification adjustment is required. First loosen the four 1/4-20 cap screws that secure the upper belt assembly to the uprights (see Figure 4). The support bar is slotted for horizontal adjustment.

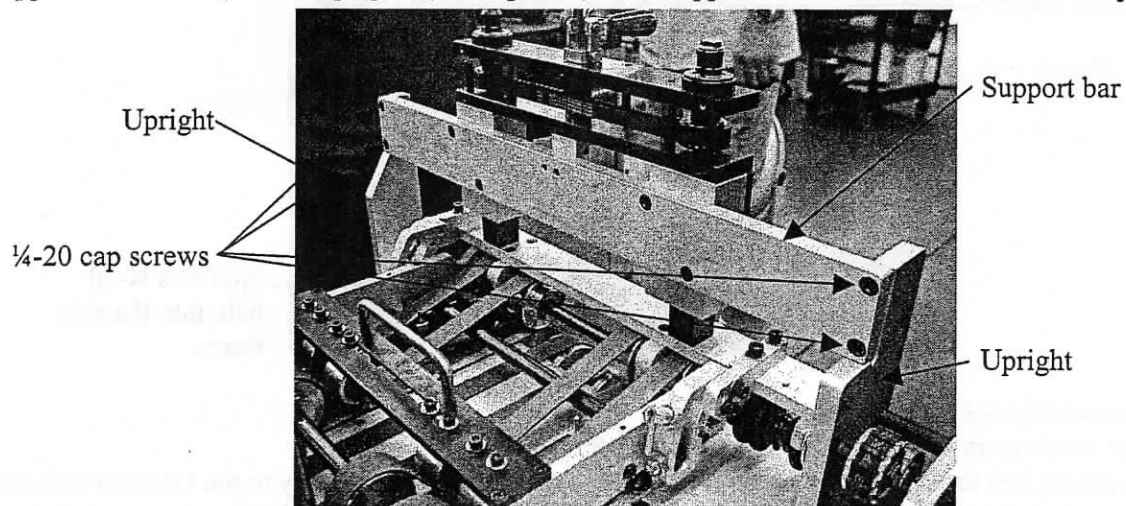


Figure 4

10. After loosening the four screws slide the assembly to create a $1/32$ gap between the belt and former on both sides.
11. If further adjustment is still required, loosen the set screws securing the hub bearings to the upper belt roller shaft (see Figure 5). Loosen the two inside drive roller set screws and slide the rollers toward each other.

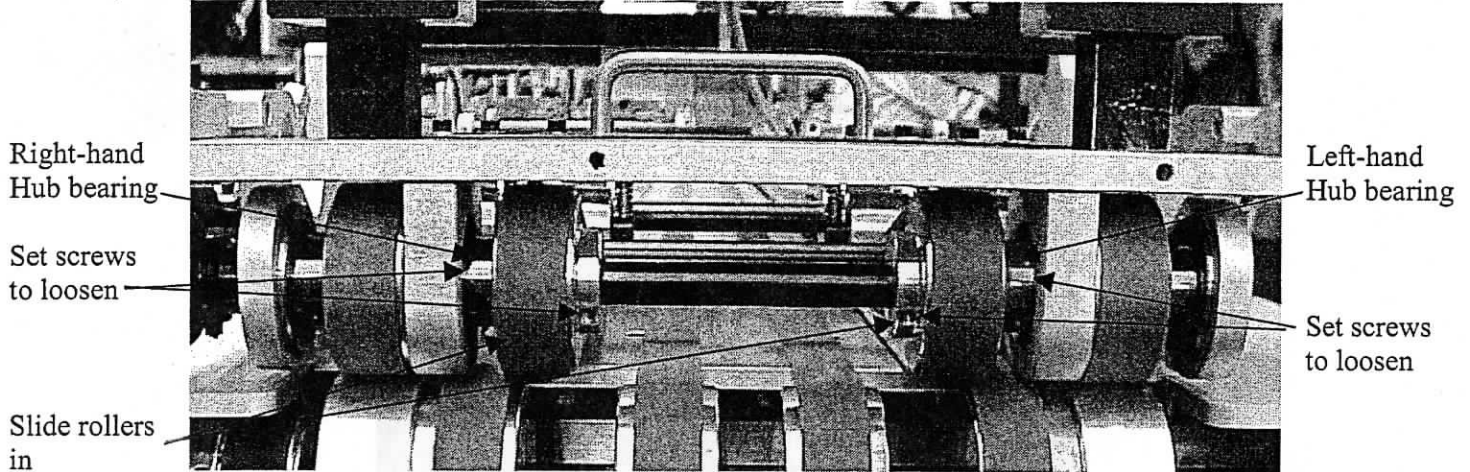


Figure 5

12. Now the assembly can be moved from side to side a small amount. Typically the assembly will need to be moved toward the left-hand hub bearing. After the adjustment has been made line up the belt rollers and tighten the set screws in the hub bearings and rollers. Test run the machine to make sure the rollers are in line and the belts are tracking.
13. Install the interlock switch by gluing the switch in on the left-hand side of the machine (see Figure 6) with a suitable permanent machine glue.

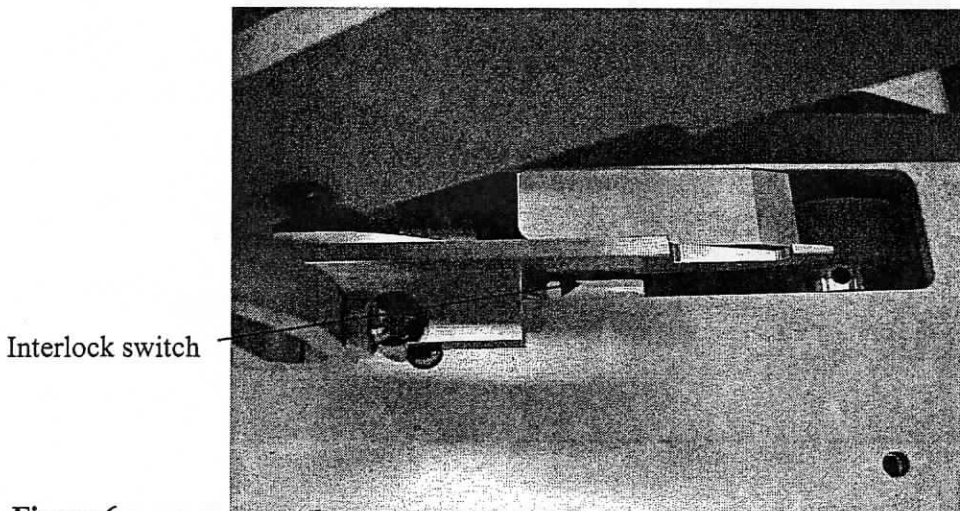


Figure 6

14. A qualified electrician must install the interlock switch into the KR535 electrical control box. **Disconnect the power supply.** Remove the jumper between terminals 25 and 26 (see Figure 7).

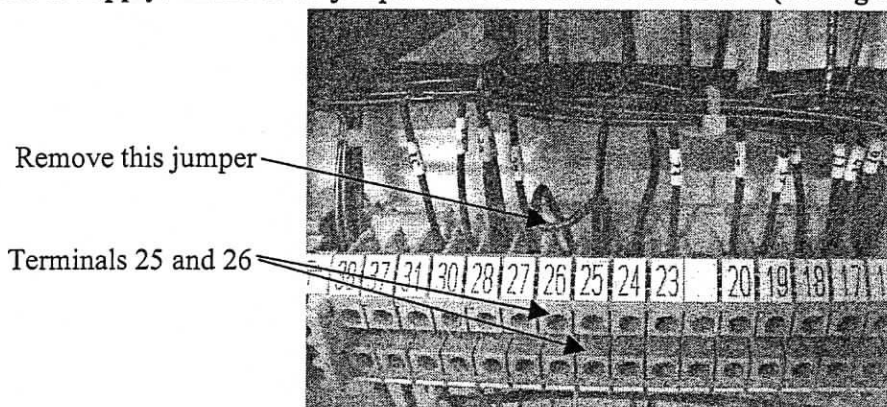


Figure 7

15. Wire the interlock plug into the terminals 25 and 26 (see **Figure 8**). Either wire can be wired to either terminal. Route the interlock plug through the top slot in the back of the electrical control box.

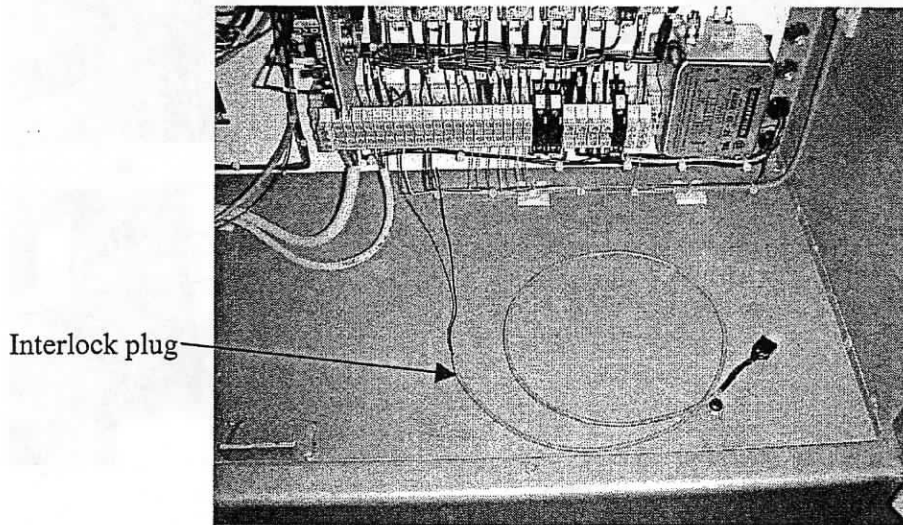


Figure 8

16. Route the wire from the interlock switch away from the tabletop belts and use a wire tie to secure the wire to the motor support bar (see **Figure 9**). Plug the interlock switch in the interlock plug.

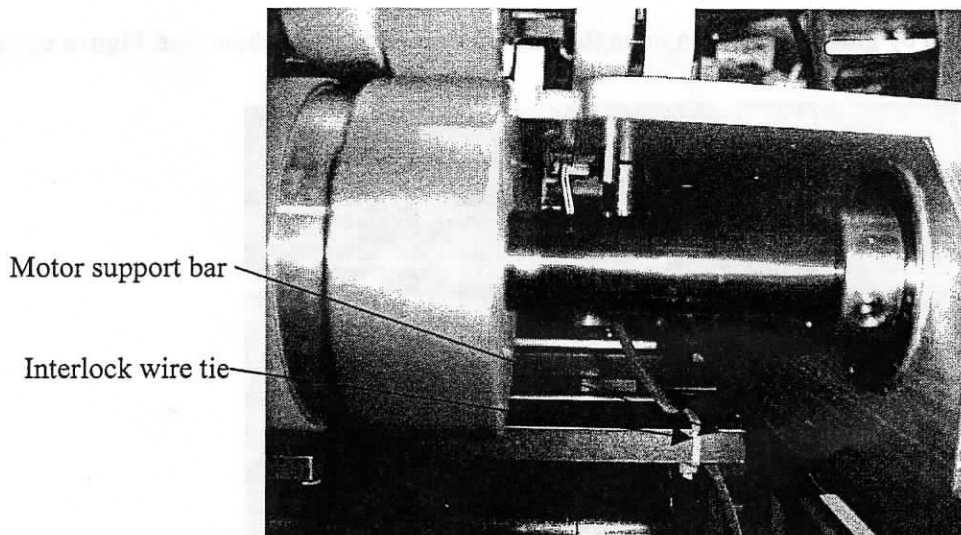


Figure 9

17. Test the interlock switch by turning the power on and starting the belts. While the belts are running open the upper belt assembly. The belts should stop and the control panel display should say "Stop Circuit Open". To restart the belts lower the upper belt assembly and press the start button.

Setup Procedure

1. Remove the adjustment knob on the right-hand adjustment plate side. (see **Figure 10**).

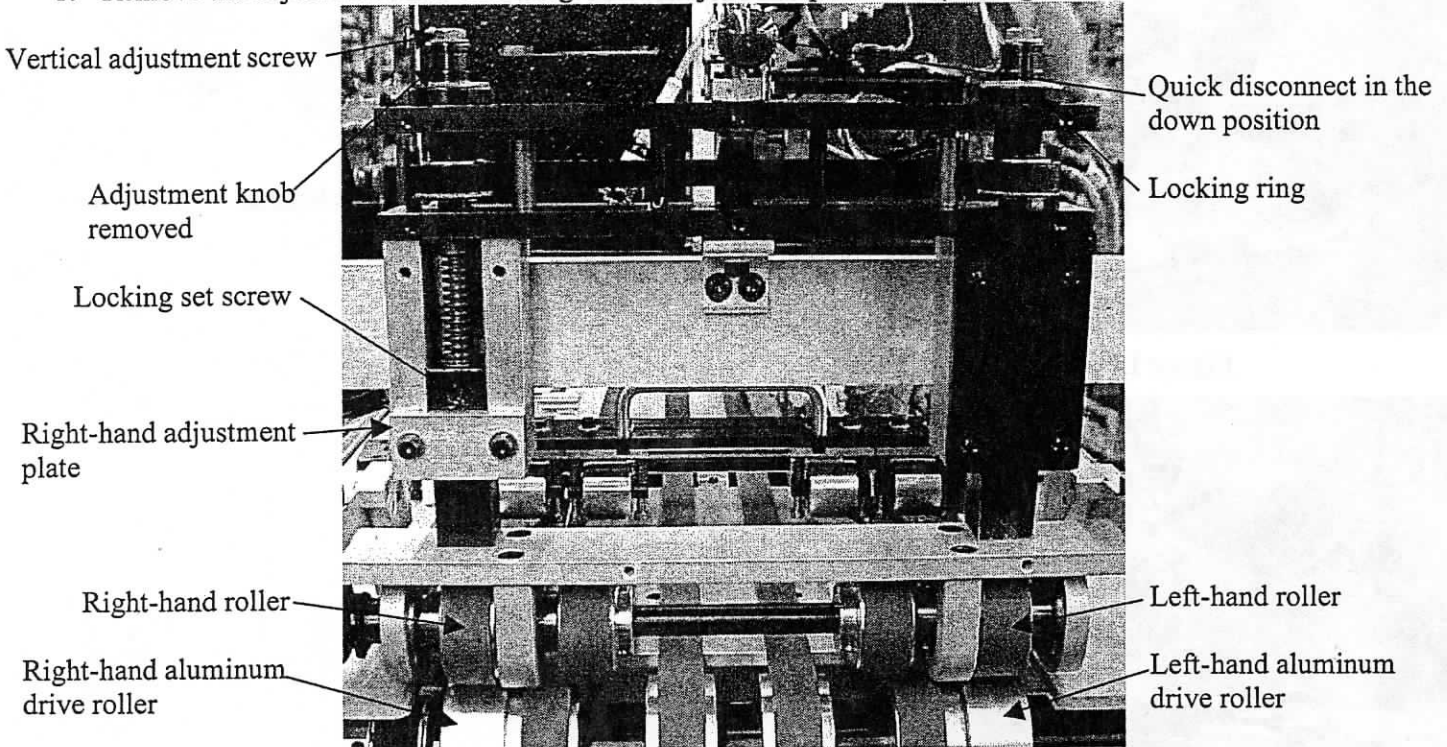


Figure 10

2. Open the upper belt assembly and lock in the up position (see **Figure 13**) by seating the L-handle plunger down in the slot (see **Figure 11**). To release the arm pull the L-handle plunger back and turn.
3. Cut a 1"x 4" piece of 20 lb. typing paper to use as a feeler gage. Lay the paper down on the left-hand aluminum drive roller (see **Figure 10**). With the quick disconnect locked in the down position (see **Figure 10**) and the locking ring loose, adjust the left-hand roller down until it touches the paper. Enough tension should be on the paper to hold the paper snug but will still allow the paper to be pulled out without moving the belts.
4. Lift the quick disconnect and lay the paper on the right-hand aluminum roller and lower the quick disconnect.
5. Test the tension on the paper. The tension should be adjusted to be as close as possible on both sides. To adjust the tension on the paper, loosen the locking set screw (see **Figure 10**). The set screw has a brass plug between it and the adjusting screw to prevent damage to the adjustment screw threads. The locking set screw allows the roller to be adjusted by turning the vertical adjustment screw (see **Figure 10**).
6. With the quick disconnect in the down position turn the vertical adjustment screw clockwise to raise the roller and counter-clockwise to lower the roller. Check the tension on the paper often. Open and close the quick disconnect between each check. The adjustment should be minimal due to factory presets. Note: If the arm assembly is not in the up position (see step 2) during adjustment the tension will not be set correctly.
7. After the tension is even on both sides tighten the locking set screw (see **Figure 10**). Replace the adjustment knob previously removed in step 1. Remove the right-hand adjustment plate and replace with the provided plate.

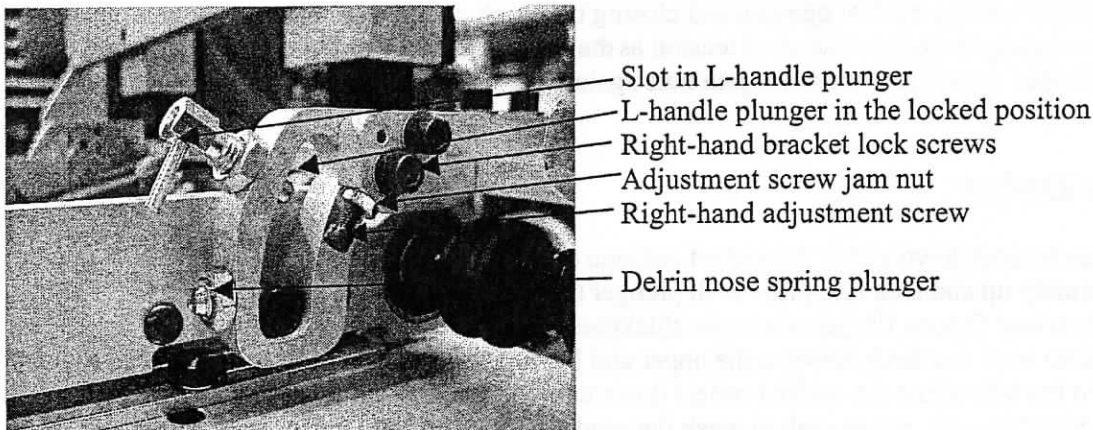
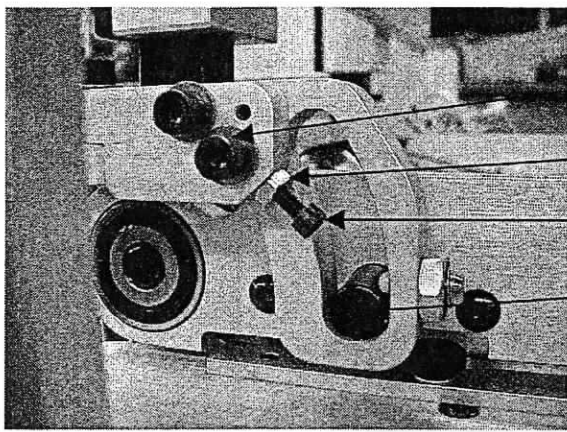
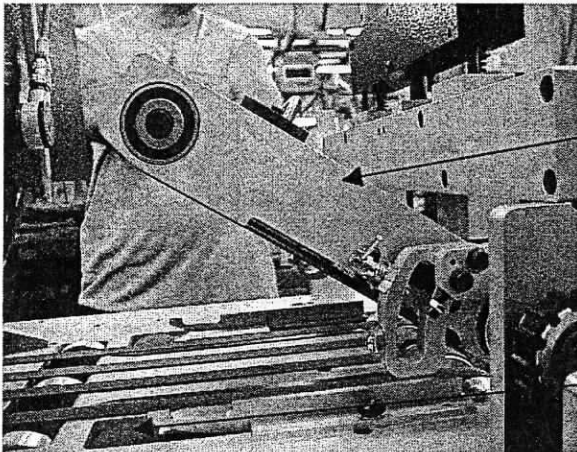


Figure 11



- Left-hand bracket lock screws
- Adjustment screw jam nut
- Left-hand adjustment screw
- Shaft seated firmly against the bottom of the bracket

Figure 12



- Arm locked in the up position
- Urethane bottom roller (operator side)

Figure 13

8. Lower the upper belt arm into the down position (see **Figure 2**). Loosen the two ¼-20 bracket lock screws (see **Figure 11 and 12**) on both right-hand and left-hand bracket lock screws.
9. Loosen the adjustment screw jam nuts (see **Figure 11 and 12**). The right-hand and left-hand adjustment screws adjust the tension on the front rollers by pushing up on the bracket lock screws which lift the arm assembly. The adjustment screw shouldn't be turned unless all four bracket lock screws are loose. The adjustment screw also secures the brackets to ensure no movement in the down direction during operation.
10. Open the quick disconnect to the up position (see **Figure 2**). Loosen the left-hand and right-hand adjustment screws to allow the arm to fall below horizontal. This will allow the front rollers to touch before the back rollers as the quick disconnect is lowered.
11. Lay the paper feeler gage on the urethane operator side bottom roller (see **Figure 13**). Lower the quick disconnect and lock in the down position. Turn the right-hand adjustment screw clockwise while sliding the paper feeler gage until the same amount of tension is acquired as the back rollers. Adjust the left-hand roller in the same manner. Make sure that the shaft is seated firmly to the bracket on both sides (see **Figure 12**) when checking the tension.
12. Check both sides for proper tension by first opening and closing the quick disconnect. After both sides have been checked to have approximately the same amount of tension as the back rollers tighten the bracket lock screws (see **Figure 11 and 12**). Tighten the adjustment screw jam nuts against the bracket to prevent the adjustment screw from moving.

Upper Belt Adjustment for Product

1. Make sure quick release lever is down and in the locked position (see **Figure 10**).
2. Pull the upper belt assembly up and lock into place with plunger (see **Figure 13**).
3. Adjust the outfeed rollers (see **Figure 10**) just above the thickness of the product to be run.
4. While moving the product back and forth between the upper and lower outfeed rollers (adjust the roller to be used for applying pressure to the tab) adjust the outfeed rollers down until there is a slight drag on the product (just enough to drive the product through, not enough to mash the product). Set your adjustment knob by turning the locking ring (see **Figure 10**) tight against the bottom plate.



WARNING: If excessive pressure is applied between the upper and lower back rollers the belt may not track and ride off the edge of the roller and break.

5. After the height has been set release the plunger holding the upper belt assembly. Make sure that the hold down shaft has seated against the brackets and Delrin® ball plungers on both sides (see **Figure 12**).
6. Test run to make sure the tab is folded tight around the edge of the product.

Opening the Upper Belt Arm

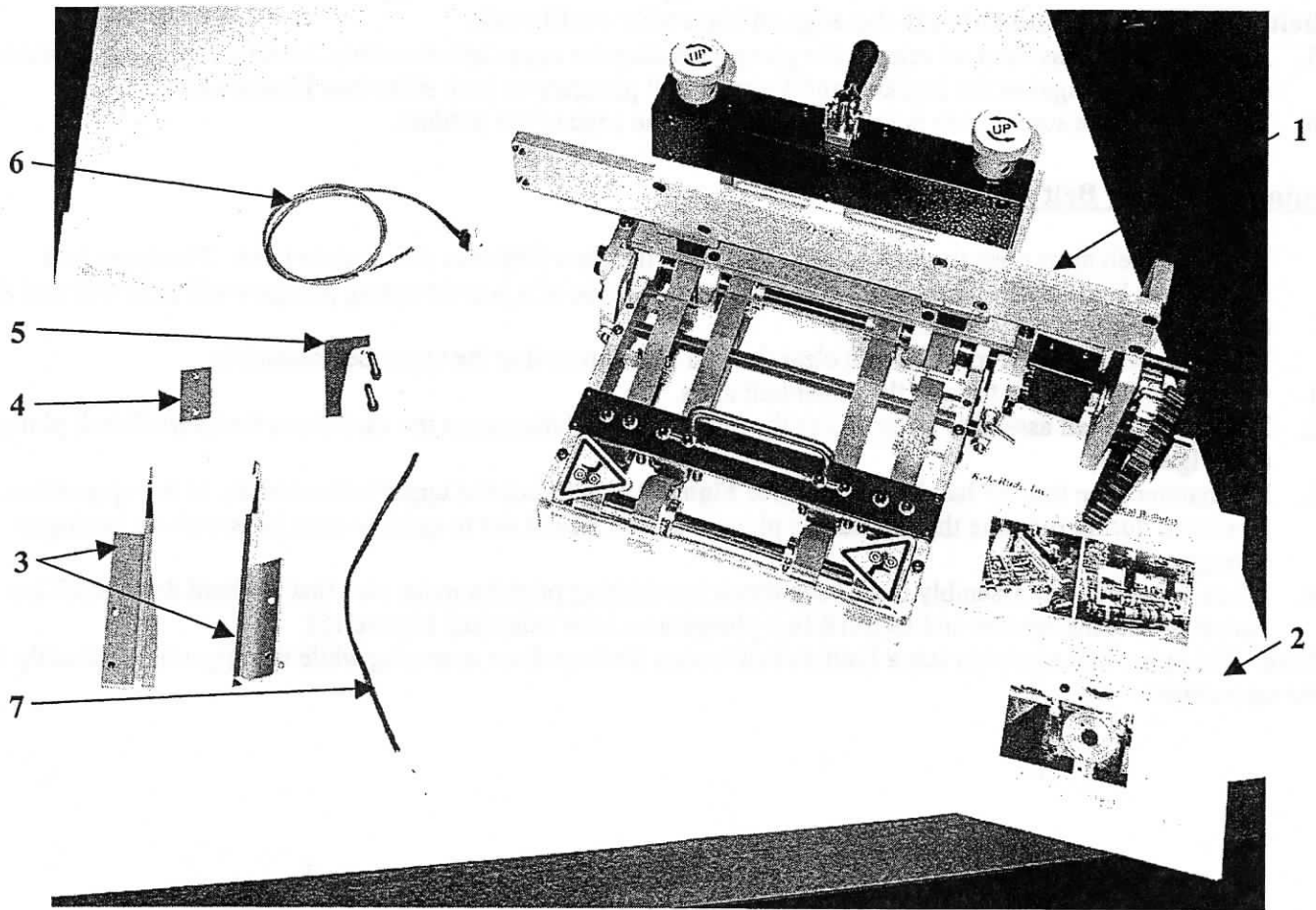
The upper belt arms open to ease cleaning tabs from the plow fold area and to clear jams. The upper belt assembly is held down with spring loaded plungers. In case of a jam the spring plungers will give way and allow the upper belt assembly to disengage.

If this happens stop the machine and clear the jam before resetting the upper belt assembly.

1. Open the quick release to raise the upper belt arms.
2. Lift the upper belt assembly by grabbing the pull handle and disengage the shaft from the Delrin® ball plungers (see **Figure 13**).
3. For maintenance the “L” handle plunger (see **Figure 11**) will lock the upper belt assembly in the up position. However, during run time the “L” handle plunger can be locked out to quickly clear jams without having to disengage the lock.
4. When the upper belt assembly is set back down into tabbing position make sure that the hold down shaft has seated against the bracket and Delrin® ball plungers on both sides (see **Figure 12**).

Note: The upper belt assembly has a limit switch to stop the base from operating while the upper belt assembly is in the up position.

Upper Belt Kit Part Check List



- 1. Upper Belt Assembly
- 2. Installation and Setup Procedure Technical Bulletin
- 3. Right-Hand and Left-Hand Tab Formers
- 4. Adjustment Plate
- 5. Tabletop Gusset and (2) ¼-20 Socket Head Cap Screws
- 6. Interlock Plug with Wire Ties
- 7. Interlock Switch

If parts are missing or damaged contact Kirk-Rudy, Inc. immediately at 770-427-4203 7:00am-4:30pm EST.