

Arnold Automation  
Saks Flat Bagger – Troubleshooting Checklist

Please refer to this document for quick information about common problems. For problems not discussed in this document, please refer to the Clamco 6800 User’s Manual.

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## I — HMI Locking

- 1) From the home screen, press “Enable Adjust” (bottom right tab of the screen).
- 2) Enter “PROGR” password and press OK to return to the home screen.
- 3) From the home screen, press “Utility” tab on the bottom tab of the screen.
- 4) Press “Block Format Parameters” and select “YES.”
- 5) Return to home screen.

## II — Film Loading

### Lateral placement of film roll on the film cradle

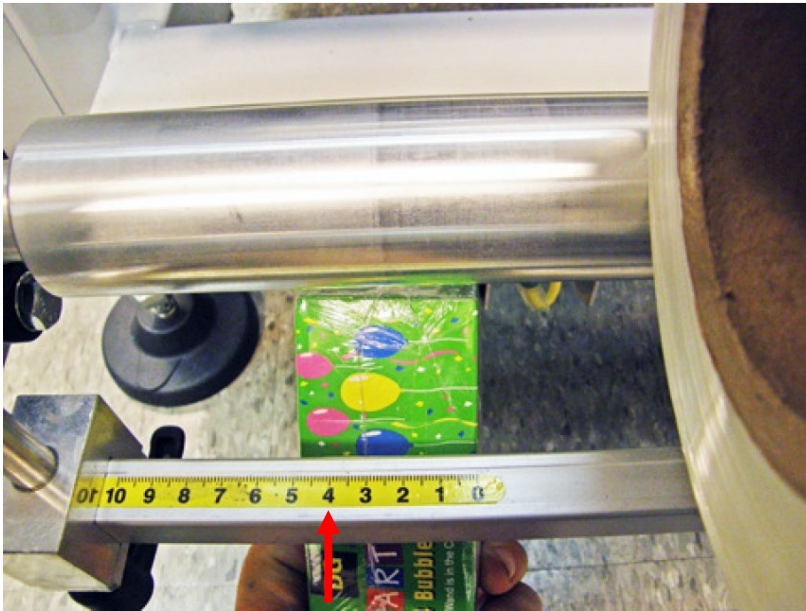


Figure 1. Film Cradle – Lateral Ruler.

- 1) Place the film roll on the cradle such that the left edge of the film aligns with roughly 4 cm along the lateral ruler.
  - a. If the left edge is at a position less than 4 cm (meaning the roll is further to the right), then film can begin tearing as it feeds over and under the film inverting plows downstream.
- 2) This lateral position should agree with the height position of the film centering rollers (Figure 2). If one changes, the other should change accordingly.
  - a. In other words, lateral position = height position
  - b. 4 cm is advised by OEM for 18” wide film

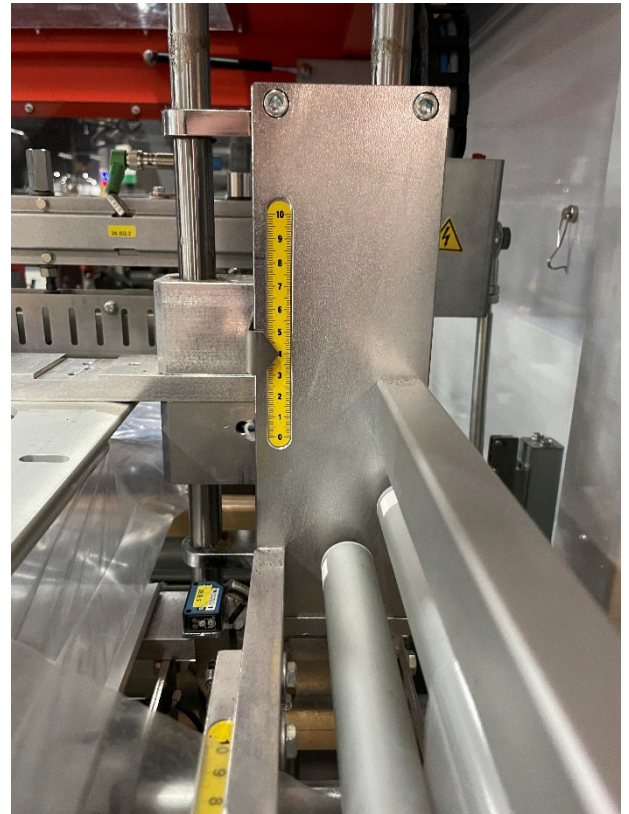


Figure 2. Film Centering Rollers – Height Ruler.

### Film threading

See Figure 3 for threading diagram (diagram is also inside film door on machine).

Also see [Arnold Academy video](#) for demonstration of film loading (strongly recommended).

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- 1) Lift up on the lever that locks film between black rubber nip roller and drive roller. See Figure 4.
- 2) When the film roll is placed on the cradle, ensure that the open side of film is on the right side of the roll.
- 3) If film unwinds counterclockwise (solid black arrows in Figure 3), then feed film under Roller 0.
- 4) If film unwinds clockwise (dotted black arrows in Figure 3), then feed film over Roller 0.
- 5) After Roller 0, follow the red path shown in Figure 3 to complete threading the film around the rollers.
- 6) After the rollers, the film must be pulled through the inverting plows and threaded through the drive mechanism. It is advised to check the [Arnold Academy training video](#) for these steps.

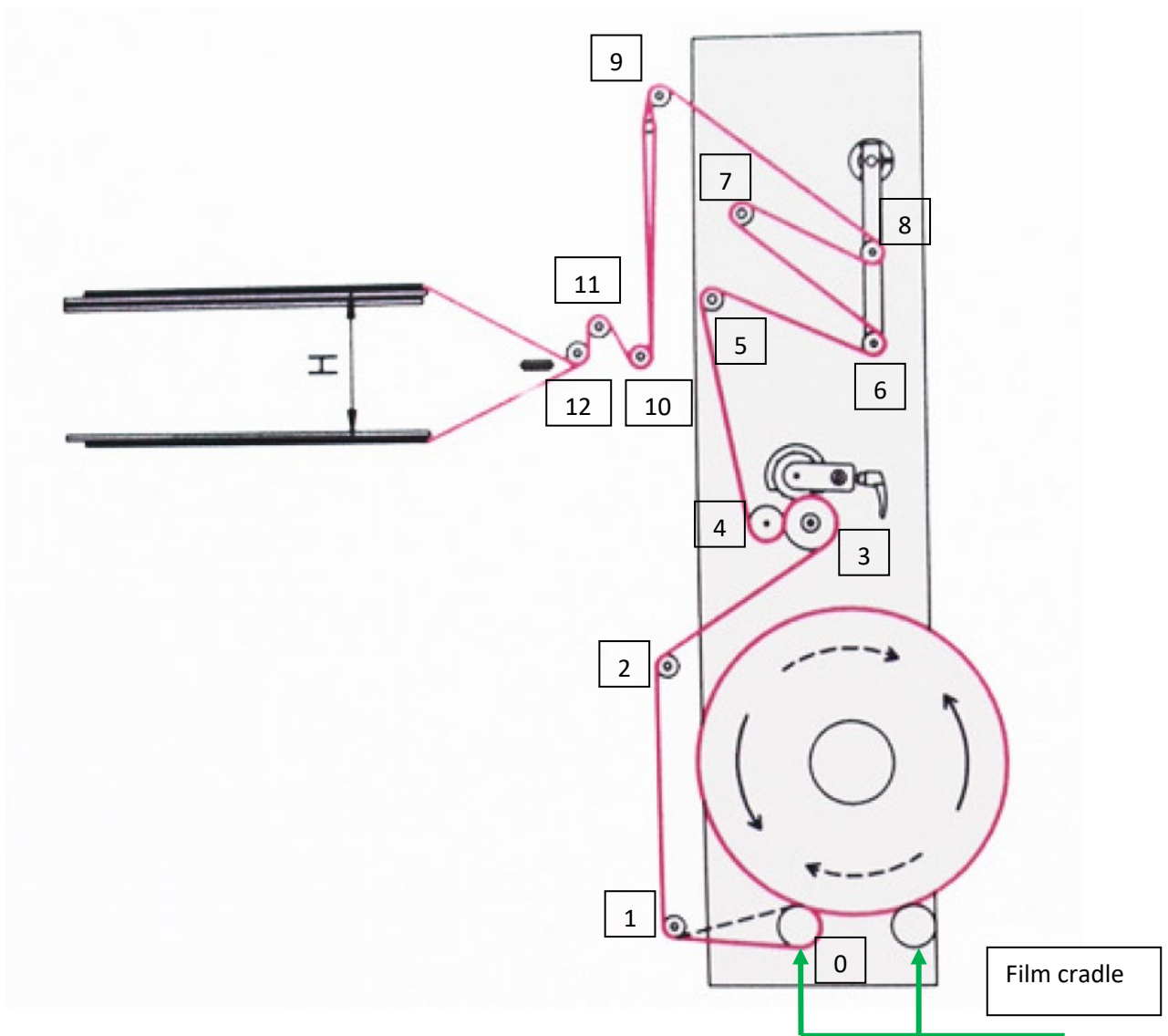


Figure 3. Film Threading Diagram



Figure 4. Film locking lever.

### III — Common Faults & Responses

These faults are common and will be encountered during normal operation, therefore these faults should be addressed by operators.

Fault	Explanation/Response
Welder Problem	Obstruction detected in side sealer. Open machine door and check side sealer for obstruction (typically garment edge).
Bar Safety	Product detected under sealing bar during seal attempt. Likely due to small garment falling between conveyors or garments that are folded too tall getting stuck under the inverter plow. Repeated bar safeties may require a power cycle.
Product Safety Sensor Intervention	Product detected under seal bar after full product length detected, but before seal bar attempts a seal. May indicate product has gotten stuck.
Film Finishing	Absence of film on roll detected. Unload previous leftover film and load new roll.

### IV — Faults Requiring Maintenance Attention

#### Inverter Error

- 1) Indicates an issue with one of the machine's inverters.
- 2) From the home screen, press "View Data" on the bottom tab of the screen.
- 3) Scroll down and press "Inverter Cosmos."

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- 4) Click through the (6) inverter tabs at the bottom. As you press each tab, the name of the inverter category will appear.
  - a. For example, Inv. 6 is the “SEALING BAR.”
- 5) Check the status of each inverter to see which inverter shows the “IN ERROR” status.
- 6) Check the Class 1 diagnostic.
  - a. For example, a sealing bar diagnostic may show “OVERCURRENT.”
- 7) Once the inverter and issue have been identified, check for jams around the machine.
  - a. For example, an overcurrent sealing bar area would indicate to check around the sealing bar for obstructions/jams that are inhibiting that motor from driving the sealing bar.

## V — Common Problems/Solutions (No Fault Messages)

### Film tearing at the corner of the inverting plow

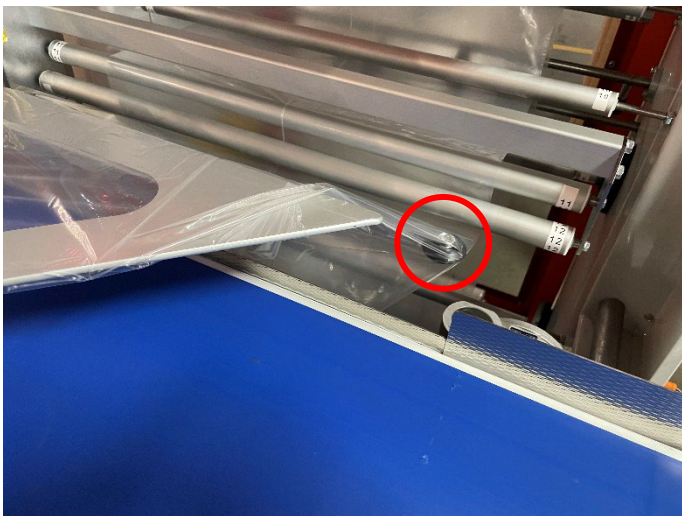


Figure 5. Film tearing at corner of top inverting plow.

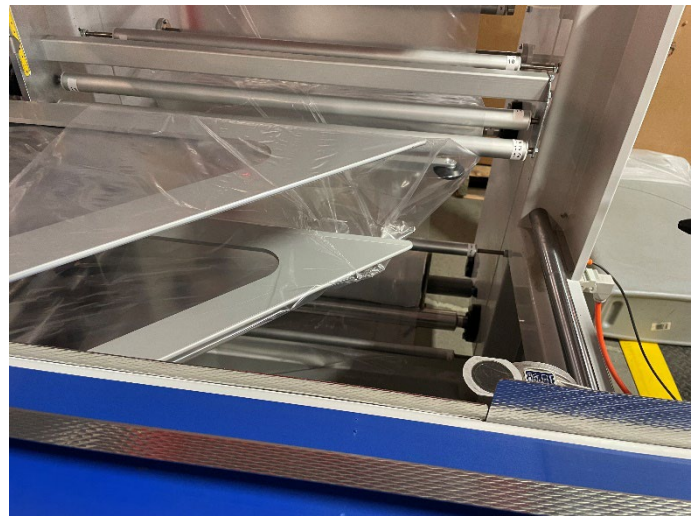


Figure 6. Film tearing at corner of bottom inverting plow.

- 1) This issue indicates that there is too much tension on the film at the corner of the plow.
- 2) Excess tension could be caused by misalignment between adjustable assemblies.
- 3) Film tearing typically indicates that the film roll is sitting too far to the right in the cradle.
- 4) Move the roll to the left of the cradle to reduce tension.
  - Refer to Figure 1 and Figure 2 for the two critical adjustment rulers related to film tension. Ensure that these two positions along their rulers are about equal ( $\geq 4$  cm recommended).
- 5) It is also worth checking that the idle film roller (red circle in Figure 5) is pulling tension out of the film around the inverter plow corner. This idle film roller is also on an adjustable ruler (see Figure 7 below).

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*Figure 7. Idler Film Roller Horizontal Ruler.*

*External conveyors not running*

- 1) The external conveyors (taking garments into and away from machine) sometimes may not start when pressing the machine start button.
  - a. This is almost always the case after recovering too quickly from an E-stop, as the conveyor VFDs do not have enough time to reset.
- 2) Power cycle the machine and the conveyors will operate normally.
- 3) To prevent this issue, ensure that enough time (at least 10 seconds) passes before resetting after an E-stop to allow the conveyor VFDs to reset.

*Film corners sticking between bags – far side*



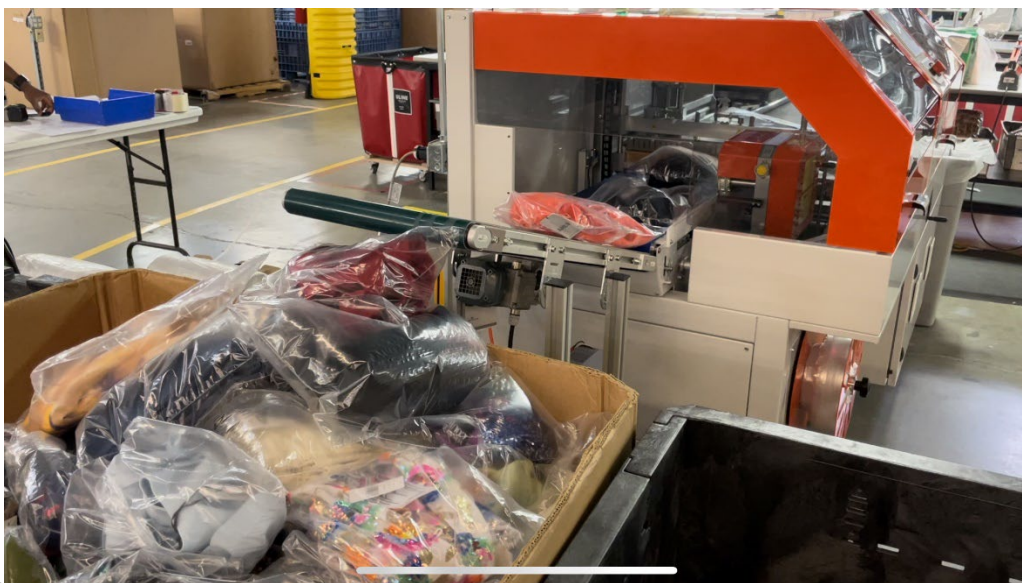
*Figure 8. Far side bag corners sticking together.*

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- 1) If bag corners on the far side of the conveyor are sticking between bags, then it is likely due to variability in garment profiles passing through the machine.
  - a. Because the machine is set to handle up to a 4" tall folded garment, smaller (shorter height and width profile garments) will behave differently during sealing.
  - b. Smaller profile garments do not pull as much tension out of the film as the conveyor advances, and so the loose slack in film can re-weld during cooling and stick together.
  - c. Most of these stuck corners break when garments fall off the inclined takeaway conveyor into a gaylord.
- 2) There is a setting to control conveyor indexing. Indexing the conveyor after the sealer shrinks the gap between conveyors and minimizes the likelihood of small garments falling between the conveyors, but increases the occurrence of corners sticking together.

#### Film corners sticking together – near side



*Figure 9. Near side bag corners sticking together.*

- 1) If near side bag corners stick together, then the welder (side sealer) assembly can be adjusted laterally via a knurled knob on the front frame of the machine next to the scrap reel (Figure 10).
- 2) There is a ruler on the side sealer assembly's linear guide to track the adjustment position (Figure 11).
- 3) Turn the knob such that the side sealer assembly moves inward toward the back of the machine in a small increment.
- 4) Test running product through and observe if seals have improved.
- 5) Repeat process until side sealer is completely cutting corners.
- 6) The lateral infeed conveyor may also need to be adjusted toward the back of the machine via hand crank (Figure 12) if the side seal assembly moved too far inward. An indication of this is if near side garment edges are more frequently getting caught in the side sealer.
  - a. See Figure 13 for infeed conveyor linear guide ruler.



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Figure 10. Side sealer lateral adjustment knob.

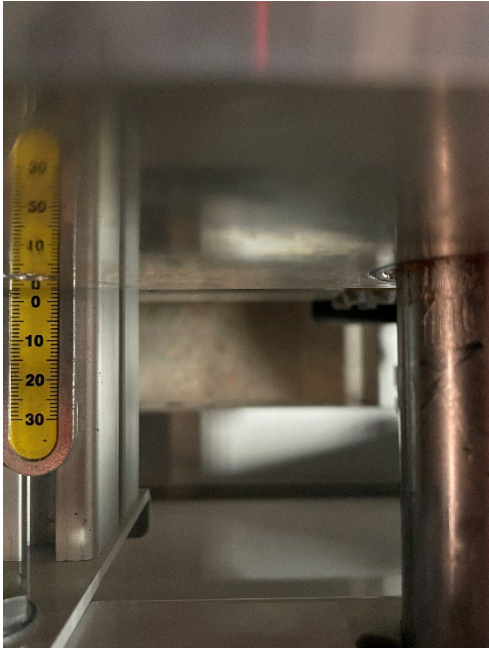
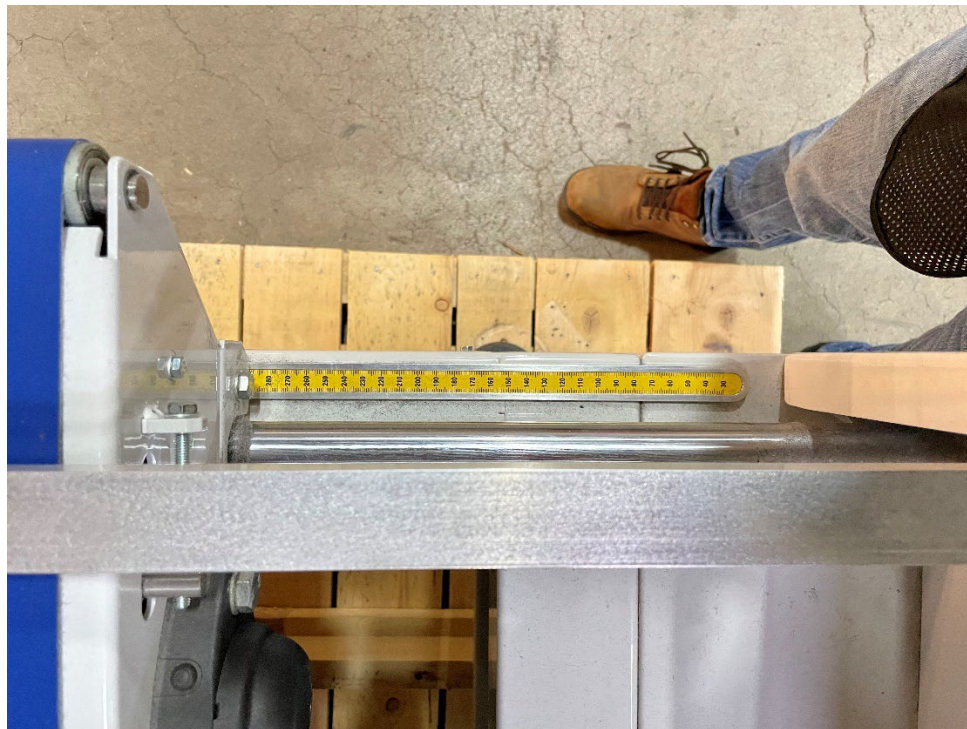


Figure 11. Side sealer assembly lateral ruler.

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*Figure 12. Hand crank for lateral infeed conveyor adjustment.*



*Figure 13. Infeed conveyor lateral adjustment ruler.*

## VI — Preventive Maintenance (PM)

In addition to the PM requirements called out in the Clamco 6800 User's Manual, please also note the following PM requirements & intervals:

### Seal bar safety rods

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- (1) Seal bar safety rods – clean & apply high temperature grease to both rods at least every (3) weeks
  - a. Keeping these rods clean and greased will help to reduce the occurrence of unnecessary bar safety issues (more likely when rods bind up).
  - b. See Figure 14 below for grease application point. Note that both the right rod and the left rod should be equally cleaned and greased at the same intervals.

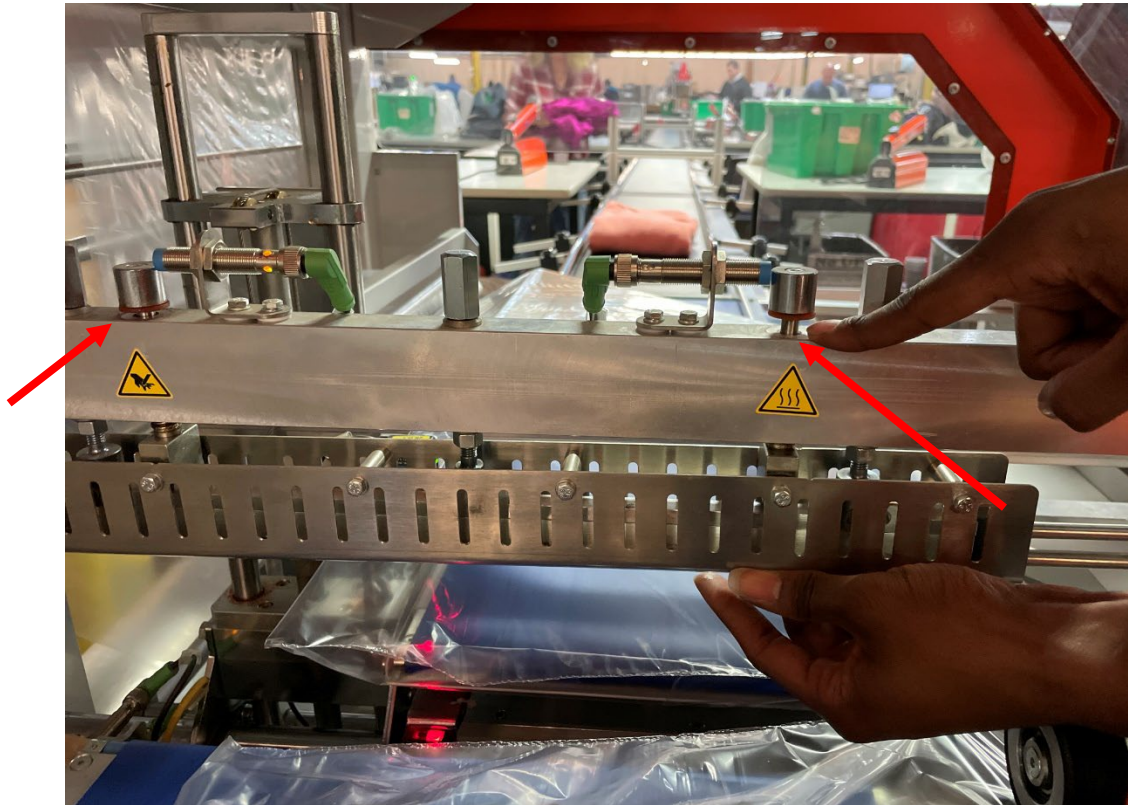


Figure 14. Sealing bar cleaning and grease application location.

#### Shafts requiring monthly grease application

- (1) Indexing conveyor shaft (the outfeed conveyor downstream of seal bar)
  - a. Apply grease at least once per month.
  - b. See Figure 15 below.
- (2) Vertical seal bar shaft
  - a. Apply grease at least once per month.
  - b. See Figure 16 below.
- (3) Seal bar connecting rods
  - a. Apply grease to pivot shafts at least once per month.
  - b. See Figure 17 below.
- (4) Infeed conveyor linear guide shaft
  - a. Apply grease to shaft at least once per month.
  - b. See Figure 18 below.

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Figure 15. Indexing conveyor shaft requiring monthly grease application.



Figure 16. Vertical seal bar shaft requiring monthly grease application.



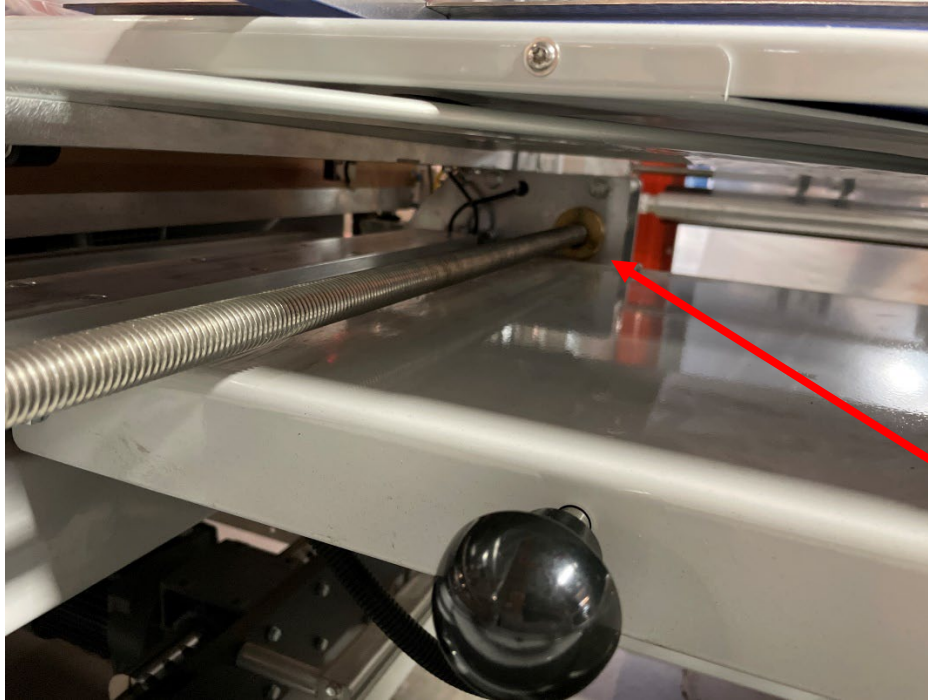
Figure 17. Connecting rod shafts requiring monthly grease application.



Figure 18. Infeed conveyor linear shaft requiring monthly grease application.

Infeed conveyor screw monthly grease application

- (1) The infeed conveyor lead screw-nut assembly
  - a. Apply grease at least once per month.
  - b. See Figure 19 below.



*Figure 19. Infeed conveyor lead screw-nut assembly grease application.*

Film centering roller retaining ring monthly inspection

- (1) The retaining rings on the ends of the film rollers
  - a. Visually inspect film roller retaining rings monthly to ensure that the rollers are not moving axially.
    - i. This will affect film tracking and potential tearing.
  - b. See Figure 20 below.

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Figure 20. Retaining ring monthly visual inspection.

Biweekly side sealer inspection, blowoff & photo eye wipe down

- (1) Biweekly side sealer inspection
  - a. Remove orange covers and visually inspect timing belts, check for debris
  - b. Air blowoff and debris (plastic, dust, etc.) as needed
  - c. Wipe down photo eye lens
    - i. This photo eye drives the “welder problem” fault, therefore it is critical that the sensor can clearly detect obstacles to prevent side seal jams
- (2) See Figure 21 & Figure 22 below.

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Figure 21. Side sealer biweekly inspection.

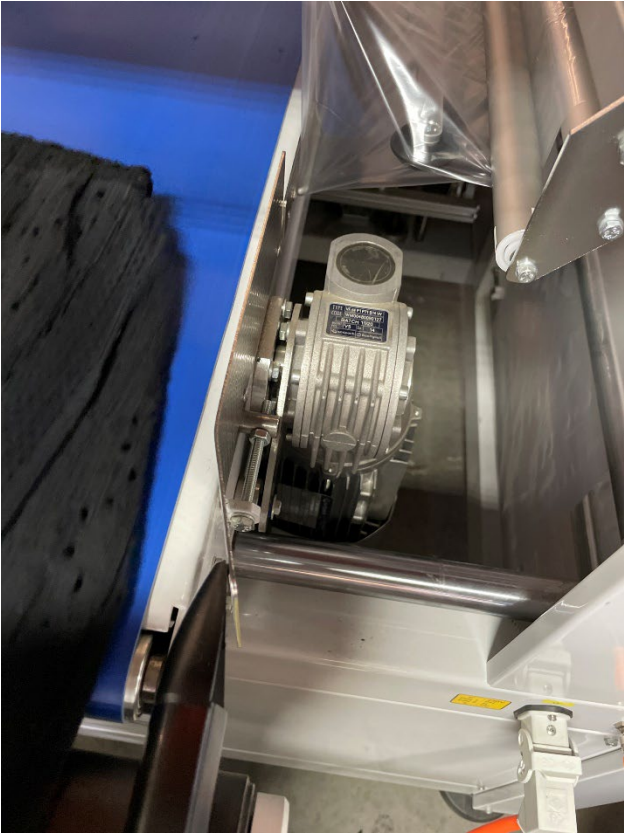


Figure 22. Side sealer photo eye biweekly inspection.

Annual infeed motor bearing inspection

- (1) Every 1-2 years, dismount, disassemble and check gearmotor bearing for wear
- (2) Replace as needed to avoid damage to gearmotor
  - a. Visible clicking will be heard if bearing must be replaced.
- (3) See Figure 23 below.

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*Figure 23. Annual infeed motor bearing inspection.*