Pregis Sharp™
Lynx 18 Bagging Machine

Operator Manual

Model 1203 – Original Instructions

February 2026

Pregis

Property of Pregis LLC

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ACC – Services Contact

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Document History				
Document Rev Number	**Date**	**Author Initials**	**Approver Initials**	**Description**
Rev A	1/30	NTT	ARG	Initial Product Release
Rev 0	2/26		DFG	Initial Publication

Languages of Operation Disclaimer

It is illegal to operate this machine in an EU member state if this (or any other related) manual is not written in that State's language. If a translated version is needed, contact Pregis to order the manual.

The original version of this manual is in English and denoted "Original Printed in English" in the bottom left corner. All translated versions are denoted "Translation of Original Instructions" in the same location.

Table of Contents

1 Introduction

Thank you for purchasing the Pregis Sharp™ Lynx 18 Bagging Machine. Please read all instructions before unpacking upon receipt, starting assembly, starting operation, or conducting any maintenance tasks. The instructions and data in this manual are vital to the proper operation of this equipment. To avoid delays due to faulty installation and operation of the machine, please see that individuals who will install, operate, or maintain the machine read all instructions carefully.

The WARNING instructions in this manual are not meant to cover all conditions and situations that may occur. It must be understood that common sense, caution, and carefulness are factors that cannot be built into all machines. These factors must be supplied by the person installing, maintaining, or operating the machine. Failure to install, maintain, and/or operate the equipment according to the manufacturer's instructions may result in conditions that can cause bodily injury and/or property damage. Contact Pregis about any problems or conditions you do not fully understand.

This manual has been prepared to help you operate the Pregis Lynx 18 Bagging Machine. It includes helpful facts on operation, maintenance, and basic troubleshooting. It is important that you familiarize yourself with the product as much as possible before assembling, operating, or troubleshooting. Make sure you read the Safety Information section of this manual before operating this machine.

The components used to make the Lynx 18 Bagging Machine were selected for maximum durability and optimum performance. Every unit is thoroughly inspected and evaluated prior to shipment.

1.1 Upon Receipt

Unpack and inspect the unit for damage that may have occurred during shipment. Pregis is not in any way responsible for any damage that occurs during transport. If you receive damaged equipment, it is your responsibility to file a claim with the transporter. Follow the Uncrating Instructions attached to the crate. If no instructions are attached, they are available from Pregis Customer Support. After uncrating, ensure all fasteners (e.g., nuts, bolts, and screws) are tightened, as they can come loose during shipping.

1.2 Machine Operation and Placement

Place the machine in a dedicated space on a smooth, rigid, vibration-free, and level surface in a well-ventilated area.

There must be enough clearance around the Lynx 18 Bagging Machine for every access panel to open fully. Ensure there is ample space for packaging material and ribbon material roll changes. There must be sufficient space for a worker to operate the equipment and comply with all relevant worker safety regulations. Be familiar with the controls and proper use of the unit. Do not operate the machine when tired, ill, or under the influence of alcohol, drugs, or medication. To avoid delays due to faulty installation or operation, please ensure that the individuals who will install, operate, or maintain the machine read all instructions carefully.

1.3 Power Requirements

Power: 110-120 VAC, 50/60 Hz, 15 Amps

Power Plug: Y-Style, Twin End 3-prong

Lynx 18 Bagging Machine must be properly grounded for safe operation.

1.4 Technical Assistance

All publicly available manuals are available at: www.pregis.com/contact-us/service-support/

Before calling Pregis Service or Parts, be sure to have the serial number of the Lynx 18 Bagging Machine. The serial number can be found on the inside of the control panel. Assistance with the Pregis Sharp™ Lynx 18 Bagging Machine can be obtained by contacting Pregis Sharp at:

Pregis US

Service: +1 (262) 246-8815 (ext. 1572)
E-Mail: sharpservice@pregis.com
Parts: +1 (262) 246-8815 (ext. 1571)
Fax: (262) 820-0373
E-Mail: sharpparts@pregis.com.

Pregis International BV

Service: 00800 888 888 44

The Lynx 18 Bagging Machine incorporates a Zebra ZT610/ZT620 Color Touch Printer. Refer to the manual by Zebra for any information that is not included in this manual.

The Lynx incorporates a conveyor(s) by HFA. Refer to the manual by HFA for any information that is not included in this manual.

1.5 Storage & End of Service

If the machine is not used for a considerable amount of time, it should be stored in a cool, dry, low humidity location with a dust cover over the entire machine, and in a location that does not put the machine in danger of direct contact with adjacent moving machines or equipment.

If the machine or parts of the machine must be permanently put out of service, lawlaws,d directives in force at the time of the dismantling hamuste strictly observed and complied with. In any case, check which materials can be recycled. These must be sent to an appropriate waste collecting company.

2 Safety Information

The safety information is presented as a guideline that should be followed by all personnel. Anyone operating or maintaining the equipment should read and follow safety information in this manual, without exception.

Operation, cleaning, or maintenance should not be performed unless safety precautions are thoroughly understood. The machine requires regular, periodic maintenance to ensure reliable service. No maintenance should be performed unless the safety precautions for maintenance are thoroughly understood.

- Always follow lockout/tagout procedures.
- Follow all instructions in this manual for safe operation.
- Follow all company and industry standard safety policies regarding this kind of machinery that may exceed those listed in this manual.
- Keep all safety features, guards, interlocks, and sensors in good working order.
- Keep the area surrounding the machine free from debris. Spent film/bags should not be allowed to accumulate around machine.
- Follow all company and industry standards with the use and wearing of Personal Protective Equipment. "PPE"

2.1 Safety Labels

	WARNING: LOCK OUT – TAG OUT BEFORE WORKING ON EQUIPMENT -Utilize lockout/tagout procedures before servicing.
	WARNING: UNSPECIFIED DANGER -Risk of injury or harm present. -Utilize lockout/tagout procedures before servicing.
	WARNING: ELECTRICAL SHOCK HAZARD -Utilize lockout/tagout procedures before servicing.
	WARNING: CRUSH HAZARD -Crush hazard points are located near the sealing jaws. -Utilize lockout/tagout procedures before servicing.
	WARNING: HOT OR BURN HAZARD -Area near heated sealers is extremely hot. -Allow machine to cool for at least 1 hour. -Protective gloves may be required. -Utilize lockout/tagout procedures before servicing.
	WARNING: ENTANGLEMENT HAZARD -Keep hands, hair, and jewelry away from rotating parts. -Secure all loose items before operating. -Utilize lockout/tagout procedures before servicing.
	WARNING: PINCH/MOVING PARTS HAZARD -Risk of injury from pinch points and moving parts. -Utilize lockout/tagout procedures before servicing.

2.1 Fire Prevention

Always keep a fire extinguisher near the machine.

The Pregis Lynx 18 is not suitable for use in explosive atmospheres. Keep the machine away from sparks, flames, and flammable materials.

Unplug the machine before cleaning or performing maintenance.

Keep all electrical components clean and in good condition.

Immediately replace any scratched, corroded, or damaged wires, including those with faded insulation or damaged ends, as these can cause electrical fires.

2.2 Electrical Precautions

Keep liquids away from the machine to prevent spills that could cause a short circuit. If a liquid spills onto the machine, immediately turn off the power. After cleaning the liquid, evaluate all electrical components to ensure they are working correctly.

Always keep wires and connections clean and dry. Keep your body, tools, and other conductive objects away from any exposed electrical components.

The Pregis Lynx 18 operates at 120V 15 AMP. All personnel must follow the lockout/tagout procedure before performing any maintenance or servicing.

The Pregis Lynx 18 is equipped with a Y-Style, Twin End 3-prong plug. This plug must be connected to an outlet that is professionally installed and grounded according to all local codes and ordinances. Do not modify the plug. In the event of a malfunction, grounding provides a path of least resistance to reduce the risk of electric shock.

If you are unsure whether your outlets are properly grounded, or if your electrical supply does not meet these specifications, have a qualified electrician or your local electrical utility company inspect and correct any issues. Double grounding is recommended for added protection.

2.3 Burn Precautions

The machine's sealers operate at elevated temperatures and can cause severe burns, even after the power has been turned off. Allow sealers to cool down or use the appropriate Personal Protective Equipment (PPE) when performing tasks near these components.

2.4 Equipment Safety Features and Safe Operation

The safety information presented in this manual is a guideline that all personnel, without exception, must follow. Everyone who operates or maintains this equipment must read and follow all the information in this manual.

Do not disable or remove safety devices designed for this machine. All Operators should be familiar with their own Labor Protection Guidelines. Hands, arms, hair, and clothing should not be near any moving or heating parts of the machine. Do not turn the machine ON if any of the machine’s components have been removed or modified.

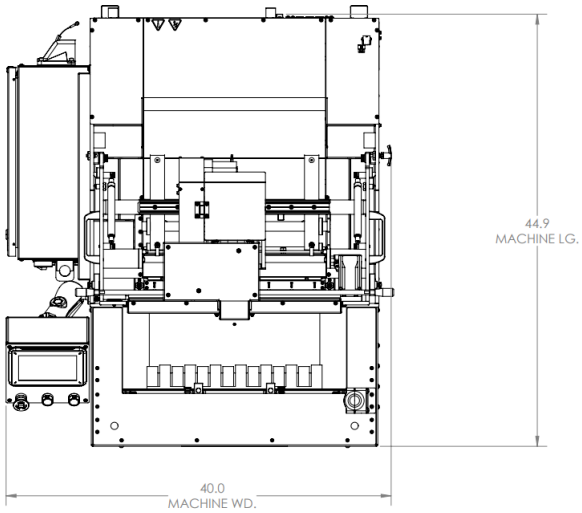
A red Emergency Stop (E-stop) button is located on the front of the machine. Pressing it will immediately stop the machine by de-energizing the PLC outputs, motors, and motor drives.

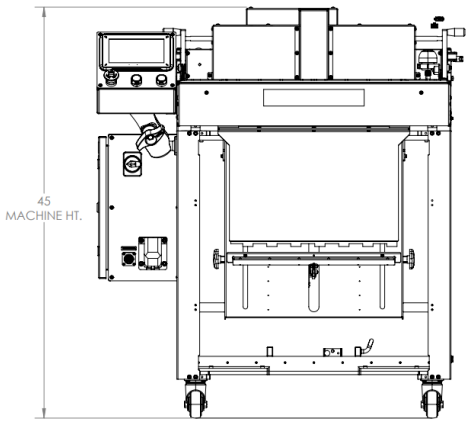
3 Lynx 18 Equipment Size, Layout, and Factory Settings

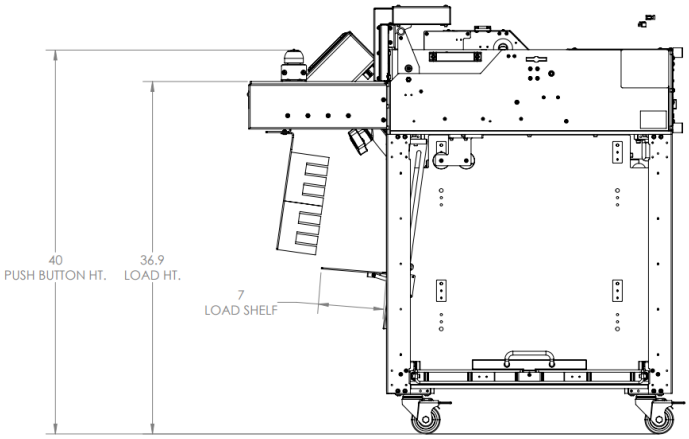
3.1 Assembled Dimensions

Weight = 140 lbs.

All measurements are in inches

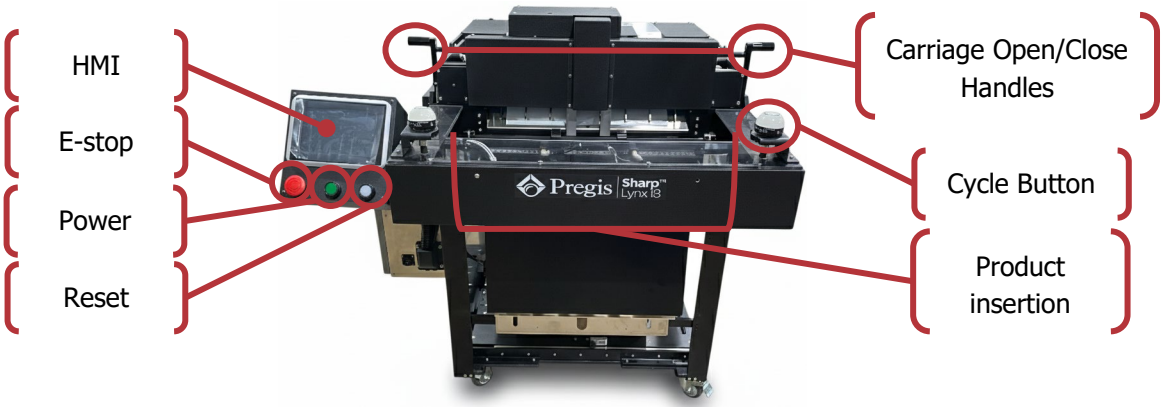






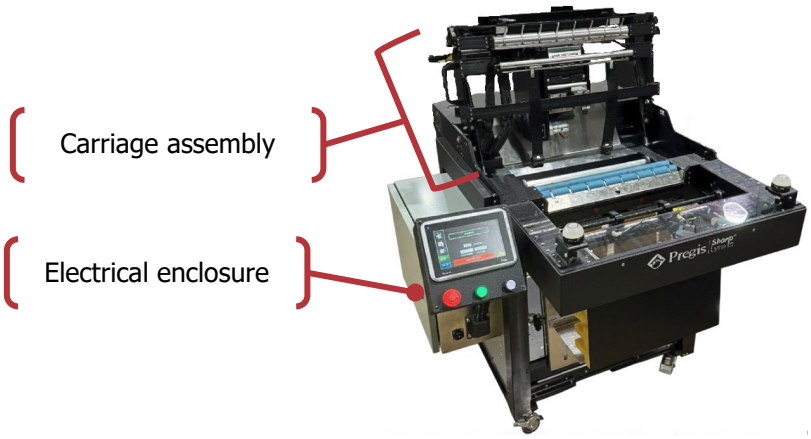
3.2 Layout

Lynx Front View



Lynx Rear View

Carriage Open View



3.3 Factory Settings

Default Value Range Value of Each Setting

Page 1		
PLC	latest from factory	
HMI	latest from factory	
Bag Length	6.000-24.000	in
Bag Width	6.00-18.00	in
Seal Offset	2.00-3.00	in
Bag Drop Time	0.00-2.00	s
Passthrough Position	2.25-9.00	in
Bag Feed Jaw Position	2.00-9.00	in
Seal Temperature	220.00-390.00	F
Seal Dwell	0.00-1.00	s
Label Length	1.00-15.00	in
Label Offset	4.00-20.00	in

Page 2		
Reverse Distance	1.00-2.00	in
Blower Duration	0.00-60.00	s
Load Plate Up Position	400-500	steps
Bag Width Offset	-5	in
Clamp Close Position	340	deg
Bag Length Offset	2.938	in
Second Reverse Time	30-60	min
Bag Hold Torque	100-250	

Page 3		
Periodic Feed Time	0 or 30-60	min
Periodic Feed Distance	-1.5	in
Inspection Delay	conveyor dependent	s
Inspection Dwell	conveyor dependent	s

Page 4 - Advanced Settings		
Conveyor Dwell	conveyor dependent	s
Conveyor Delay	conveyor dependent	s
Bag Drop Position	1.00-1.50	in
Barcode Fault Count	1-5	
Barcode Scan Offset	0.5	in
Barcode Scan Distance	7	in
Print Speed	6.00-10.00	in/s

Options	
Printer Enable	On
Ignore Temperature	Off
Blower While Feeding	Off
Two Hand Control	On
Separate Before Seal	Off
Dry Cycle	Off
Auto Mode	Off
Outbound Mailers	On

Documentation Of Initial Machine Settings

Use this section to document all the initial machine settings as installed.

Name of Installer

Date of Installation

Page 1		
PLC		
HMI		
Bag Length		in
Bag Width		in
Seal Offset		in
Bag Drop Time		s
Passthrough Position		in
Bag Feed Jaw Position		in
Seal Temperature		F
Seal Dwell		s
Label Length		in
Label Offset		in

Page 2		
Reverse Distance		in
Blower Duration		s
Load Plate Up Position		steps
Bag Width Offset		in
Clamp Close Position		deg
Bag Length Offset		in
Second Reverse Time		min
Bag Hold Torque		

Page 3		
Periodic Feed Time		min
Periodic Feed Distance		in
Inspection Delay		s
Inspection Dwell		s

Page 4 - Advanced Settings		
Conveyor Dwell		s
Conveyor Delay		s
Bag Drop Position		in
Barcode Fault Count		
Barcode Scan Offset		in
Barcode Scan Distance		in
Print Speed		in/s

Options	
Printer Enable	
Ignore Temperature	
Blower While Feeding	
Two Hand Control	
Separate Before Seal	
Dry Cycle	
Auto Mode	
Outbound Mailers	

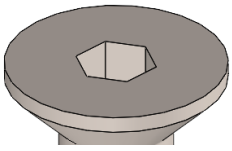
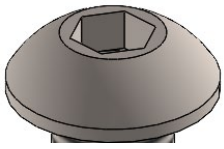
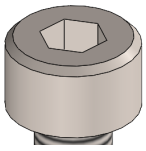
3.4 Bag Film Specifications

	Bag Width	Bag Length	Film Gauge
Minimum	2in. (5 cm)	4in. (10 cm)	1 mil (25 microns)
Maximum	18in. (45.7 cm)	24in. (61 cm)	4 mil (100 microns)

3.5 Environmental Operating Requirements

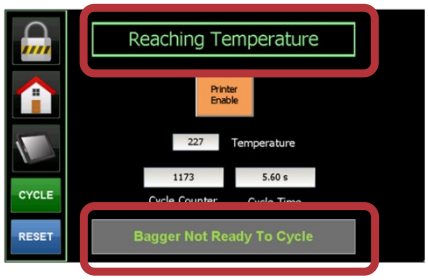
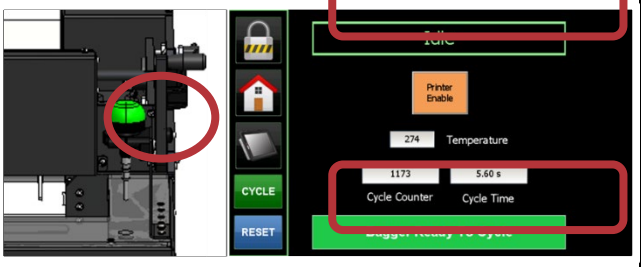
Operating Temperature	Humidity Range
40° - 120° F (4.4° - 49° C)	10% - 90%RH, Non-Condensing

3.6 Screw and Bolt Head Types

Types of Fasteners used in the Lynx 18 Bagger		
 • Flat Head Cap Screw or FHCS	 • Button Head Cap Screw or BHCS • Is also commonly known as a Rounded Head Cap Screw or RHCS.	 • Socket Head Cap Screw or SHCS • Head type is also used on shoulder bolts.
 • Socket set screw cup point or SSSCP		

4 Lynx Controls

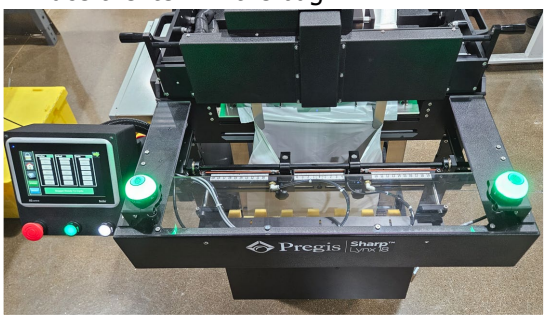
4.1 Start-Up

<table>
<tr><th colspan="2">Turning on the Lynx</th></tr>
<tr><td>1. Determine if power is on.
• If power is not on, locate the control panel. Turn on the Lynx by rotating the power switch clockwise to the On position.
 
</td><td>2. Disengage the red E-stop by twisting clockwise.
  </td></tr>
<tr><td>3. Press the green “Power” button. Wait for loading to complete.
  </td><td>4. Press the white “Reset” button.
  </td></tr>
<tr><td>5. Wait for the seal bar to warm up to the set temperature (~5 minutes). The upper message bar in the HMI will read “Reaching Temperature,” while the indicator box will state “Bagger Not Ready To Cycle”. *
 
</td><td>6. When the seal bar is up to temperature, upper message bar will read “Idle”, the indicator box will read “Bagger Ready To Cycle” and the cycle button will be illuminated green.
 
</td></tr>
<tr><td colspan="2">7. The Lynx is now ready for operation. If there are errors, see the troubleshooting section of this document or the Operations Manual.</td></tr>
</table>

4.2 Security

Security
• When machine is powered ON, the HMI can be locked or unlocked using the "Keys" or "Padlock" buttons on top left corner of screen. • When the machine is locked, a numeric keypad will be automatically displayed. Enter the appropriate user and password.         **For Operator:** Functions are limited to operator level of security. User: Operator Password: 8815 **For Maintenance:** Unlocks all functions of service and settings screens. User: Maintenance Password: 74277

4.3 Operation

Operating the Lynx	
1. At idle, the cycle buttons will be green. • There will not be a bag present. • Press the cycle buttons to begin cycle. • 	2. Scan the item. • The cycle buttons will turn yellow. • The bag will advance. • The label will be printed on the bag. • The bag will be opened and prepped for item. insertion. 
3. A properly loaded product rests on the loading shelf and is not in the way of the pressure bar. 	4. The cycle button(s) will turn green. • Place the item in the bag 

5. Press the cycle button(s).
- The bag will be sealed.
- The sealed bag will drop on the conveyor.
- The cycle is complete.

Improper loading examples

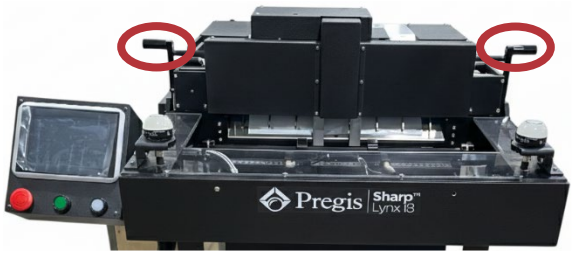
Product is hanging above the load plate.

Products are too large/tall and will prevent the pressure bar from sealing the bag film.

Load plate is contacting the deflator.

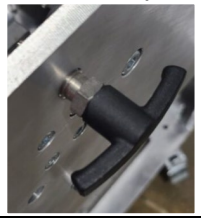
4.4 Film Carriage

Opening the film carriage allows for the cleaning of the print head and threading the bag film.



1. To open, push the handles away from the operator and lift.
   - The film carriage can be held in place at 45deg using the ball and detent block or locked into place at 90deg using the T-handle.

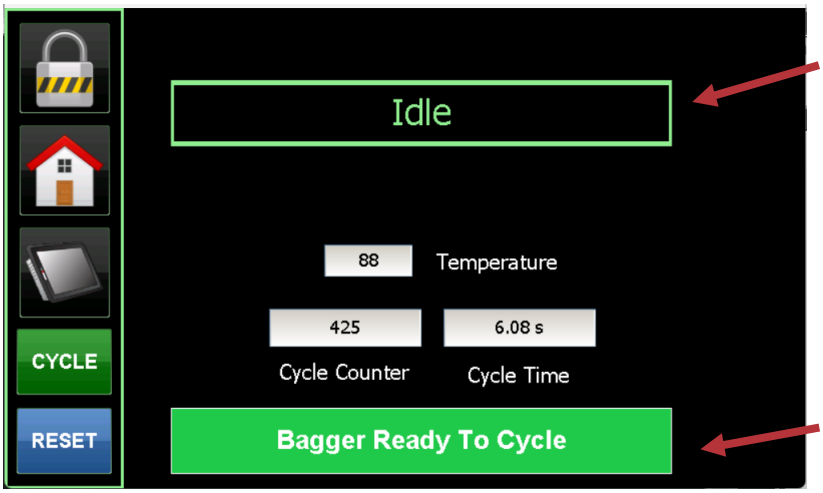
2. To close from:
   - 45deg, push down.
   - 90deg, pull out T-handle and push down.



3. When the carriage is down, lock carriage in place by pulling towards the operator on both handles. Ensure both sides are locked in place.

4.5 Screens

Dashboard Screen



Equipment Status:
States the status of the equipment.

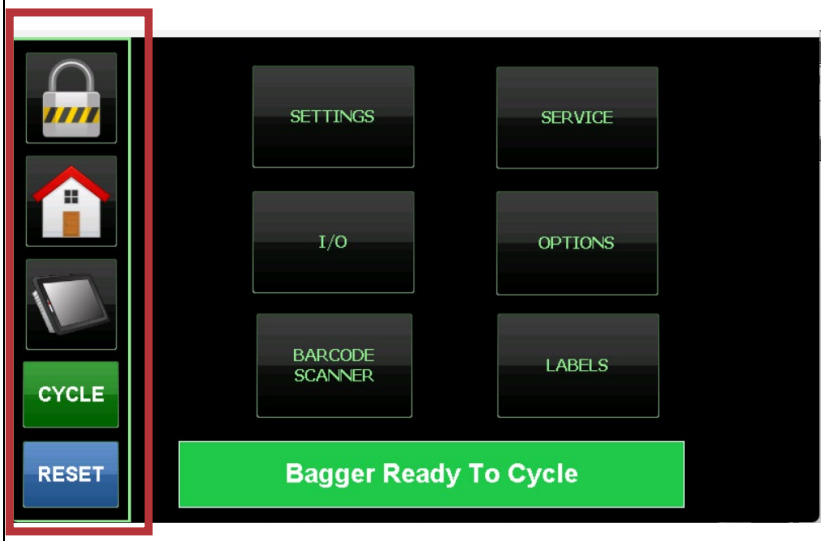
Temperature:
States the current temperature of the seal bar.

Cycle Counter:
States the number of cycles since last reset.

Cycle Time:
Average cycle time since last reset.

Operational Status:
Indicates if the equipment is ready for normal operation.

Maintenance Screen



Lock:
Locks or unlocks equipment.

Home:
Main menu for machine settings. (shown left)

Dashboard:
The operator uses primary screens.

Cycle:
If "Ready To Cycle" message displayed, the button will initiate one bagger cycle.

Reset:
Clears faults once the fault condition has been cleared.

- If running in "Filler" or "Auto modes" the button will stop further automatic cycles from running.

Lock

The key icon indicates that the equipment is locked. Press the keys icon to unlock the equipment.

The lock icon indicates that the equipment is unlocked. Press the lock icon to lock the equipment.

Settings Screen

PLC and HMI: Software version numbers

Back: Navigate to previous menu.

Bag Length:

- Usable inside bag length as measured from the bottom of the bag to the seal.
- The typical setting is 0.5in. less than the outside bag length.
- When using Pregis bag film, enter the length shown on the box or roll label.

Bag Width:

Useable inside bag width.

Bag Drop Time:

The time for the bag to drop before the next bag is fed out.

Seal Offset:

The offset distance moves the seal point down from the nominal (zero offset) position. At zero offset, the seal is approximately 0.5in. below the perforation.

Passthrough Position:

The current distance that the pressure jaw is from sealing area.

Bag Feed Jaw Position:

The distance between the pressure bar and the stripper plate when the jaw is opened. Range = 1.0 to 9in.

Seal Temperature:

The seal bar sealing temperature during operation.

Feed Speed:

This setting adjusts forward web speed in in./sec. Range= 4 to 30 in/sec.

Seal Dwell:

The amount of time, in seconds, that heat is applied through the seal bars during the sealing process. Settings will change with bag film gauge and material type.

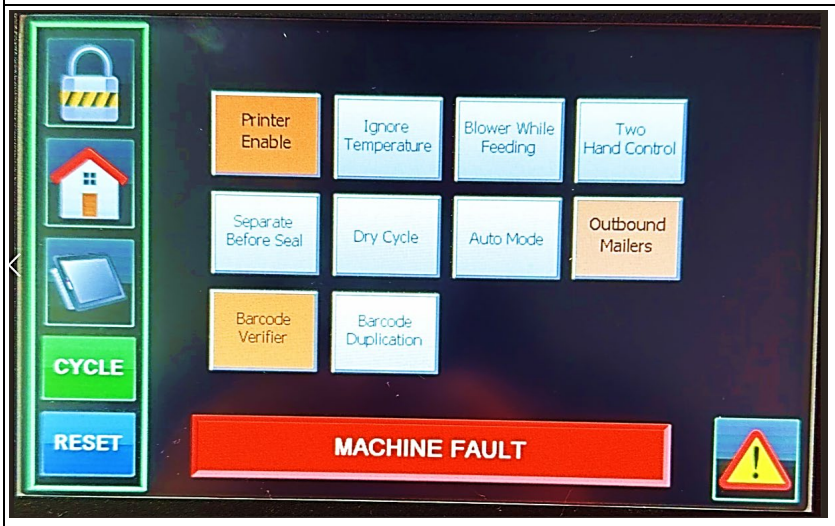
Label Length:

The distance the web will feed during the print cycle. This setting is approximately 0.75in. longer than the length of the label.

Label Offset:

The starting position of the label on the bag. Range= 0 to 10.00in.

Options Screen



Printer Enable:
Enables printer during normal use.

Ignore Temperature:
Allows machine use without reaching operating temperature.

Blower While Feeding:
Runs blower fan while bag is feeding.

Two Hand Control:
Enables the mandatory use of both palm buttons for normal operation.

Separate Before Seal:
Separate the perforation before sealing the bag.

Dry Cycle:
Enables the machine to run without bag film.

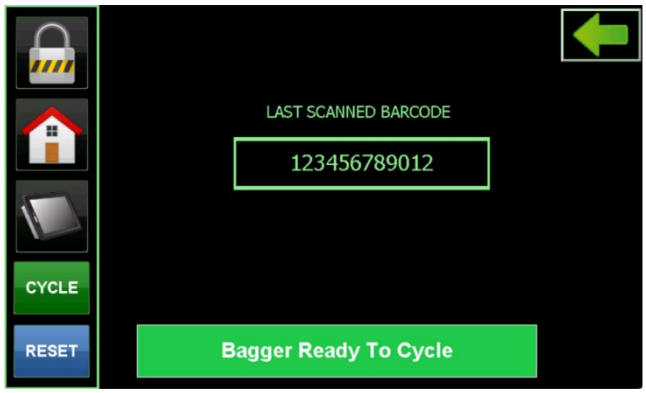
Auto Mode:
Enables the machine to run continuously without having to initiate the next cycle.

Outboard Mailers:
This toggles between outbound/inbound mailers.

Barcode Verifier:

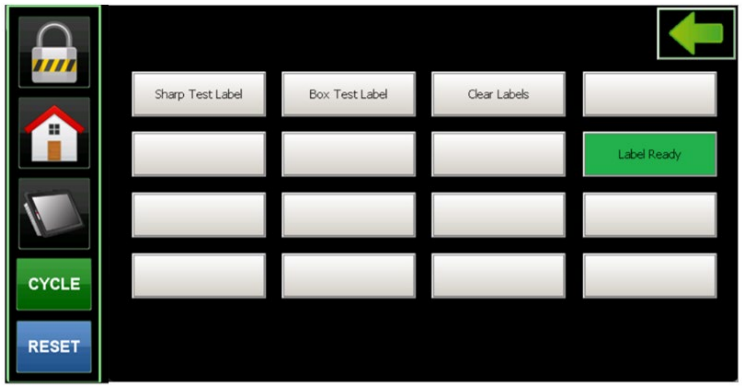
Bar Code Duplication:

Barcode Scanner Screen



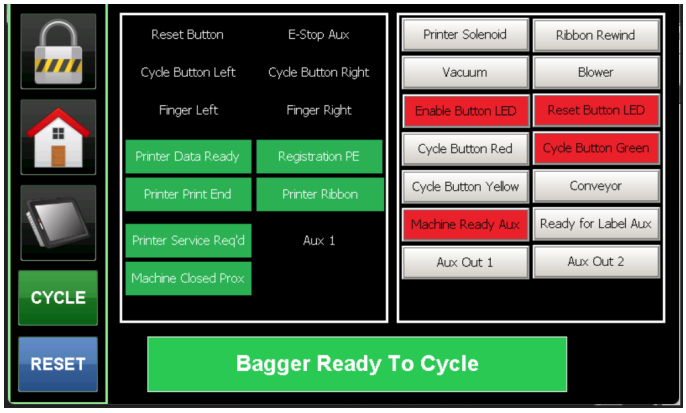
Displays the last scanned barcode.

Labels Screen



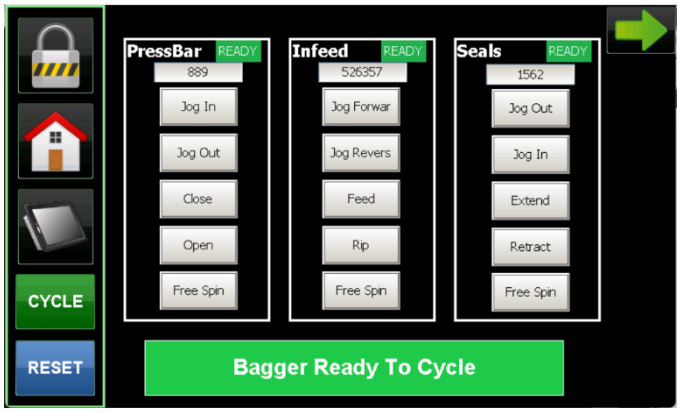
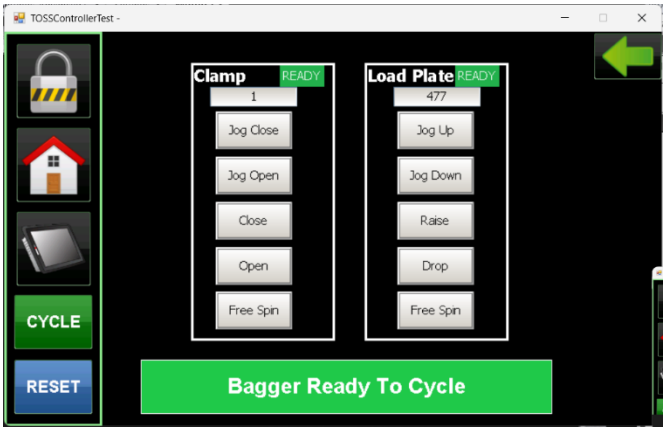
Displays Labels that are downloaded and can be selected to print. These are pre-loaded labels for testing and troubleshooting.

I/O Screen



This interface enables monitoring of dataflow through the Lynx.

Service Screen

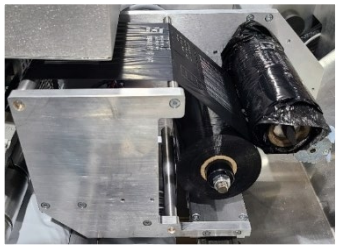
Screen 1 	These screens enable control of specific features of the Lynx.
Screen 2 	These screens enable control of specific features of the Lynx.

4.6 Daily Pre & Post Operating Tasks

The table below is a summary of the Daily Pre-shift and Post-shift operating tasks. For a detailed explanation of each entry, see further below.

Summary of Lynx Daily Tasks		
Personnel	**Task(s)**	**Time (mins)**
Operator: Pre-Shift	Check Lynx HMI for errors and address accordingly.	0.2
	Check if the packaging material is fed correctly and is not significantly torn.	0.5
	Check that the printer ribbon is fed correctly and not torn.	0.2
	Check that the bag film tension weights are in the correct position.	0.2
	Check that the film carriage is correctly locked in place.	0.2
	Dust photo-eye with compressed air.	0.5

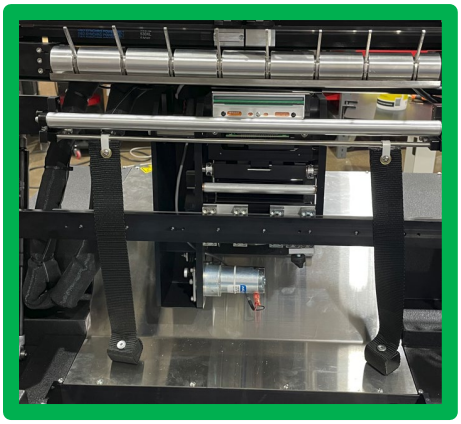
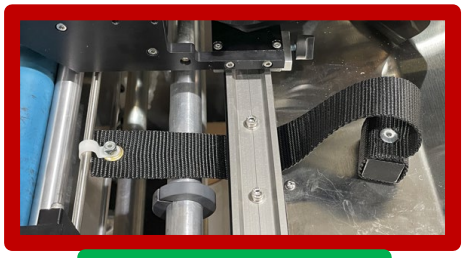
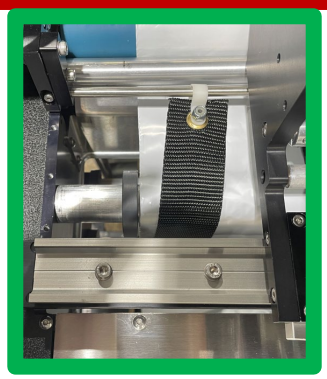
Maintenance: Pre-Shift	Inspect every seal for integrity concerns. Shake a heavier pouched product to check seal integrity. (5x)	5
Operator: Post-Shift	Wait for the last cycle to finish.	
	Clear the packaged product from the conveyor if necessary.	0.5
	Press E-stop or turn off machine.	0.5

Details of Operator Pre-Shift Tasks		
Item(s)	**Task(s)**	**Image(s)**
Power & E-Stop	• Disengage the red E-stop by twisting clockwise. • Turn on by pressing the green "Power" button. • Reset the machine by pressing the white "Reset" button. • Check Lynx HMI for errors and address accordingly.	
Packaging Material	• Inspect the bag film and make sure the film is fed through the rollers correctly and that there are no tears that would prevent normal operation in the film. ○ Web threading diagram is located on the sides of the machine. • If large tear is present, remove bag and re-thread the bag film.	
Printer Ribbon	• Inspect ribbon is fed through the printer assembly correctly and that the material edges are not torn. ○ Web threading diagram is located on the printer cover. • If small tear is present, manually pull material through until tear is in rewind shaft. • If large tear is present, re-threading the film may be necessary.	
Photo-Eye	• Clean any dust with compressed air.	

<table>
<tr>
<td>Bag Film Weights</td>
<td>

- Check that the bag film tension weights are in the correct position.
  - They must not be in front of the printer head.
  - They must be hanging behind the upper static bag film tension bar.

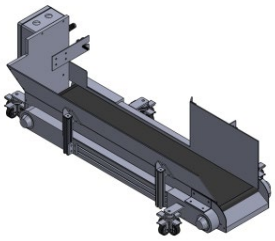
</td>
<td>




</td>
</tr>
<tr>
<td>Film Carriage Alignment</td>
<td>

- Ensure film carriage is correctly locked in place.

</td>
<td>
The left side is not locked, and the right side is locked. The improper locking causes the cross bar, and entire film carriage to be out of alignment. Only operate the Lynx with both sides properly locked.

</td>
</tr>
</table>

Details of Operator Post-Shift Tasks		
Item(s)	**Task(s)**	**Image(s)**
Lynx HMI	• Wait for the last cycle to finish. • Clear printer queue if necessary.	
Conveyor	• Ensure that the last package has had enough time to flow off the conveyor.	
Power and E-Stop	• Press E-stop and turn off the Lynx by rotating the OFF switch located on the control panel.	 

5 Lynx Materials and Material Changes

Recommended Bag Film Material

- Pregis Poly Lite® Automated Poly Mailers are recommended for optimum operating performance, efficiency, and safety.

- Features of the Poly Lite® Automated Poly Mailers include:
  - Eco-Approved Rating: How2Recycle® certified as Store Drop Off Recyclable, with a minimum of 30% recycled content, with up to 50% available
  - Customizable Options: Custom sizes, film blends, and distinctive features available to fit unique needs
  - High Efficiency: Designed for maximum efficiency with Pregis Sharp™ Automated Bagging Systems
  - Enhanced Durability: In-house blown and converted bag film ensures products are protected during transit with quality guaranteed
  - Special Features: Return strips, vent holes, tear strips, and more available to suit your specific needs

- Any bag film used in the Lynx 18 Bagging Machine must meet Pregis standards.

Recommended Thermal Transfer Ribbon

- The Lynx 18 Bagging Machine uses thermal transfer ribbon to print various information onto the bag film.

- There are two ribbons available through Pregis:
  - Standard Direct Wax Ribbon
  - Premium Wax Resin Ribbon

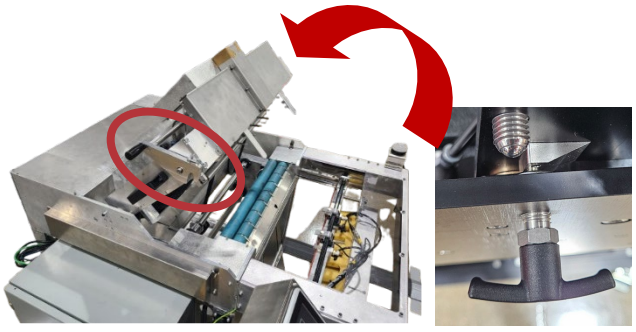
- Any thermal transfer Ribbon used in the Lynx 18 Bagging Machine must meet Pregis standards.

Contact Pregis Customer Service at +1 800-634-6359 to order materials or to request more information.

5.1 Loading Bag Film

Loading a New Box of Packaging Material

1. Raise the cradle and lock into intermediate opening (90°) location and lock into place using the t-handle.



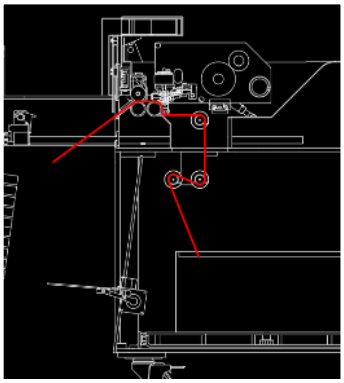
2. Slide open the box tray and open box centering blocks.

3. Place a new box of bag films on the box tray and push the box centering blocks inwards to clamp the box in place. Slide the box tray back into the machine.

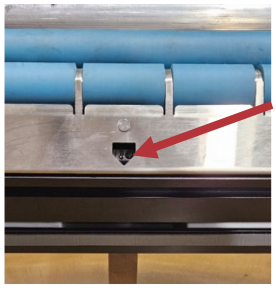
When loading film, ensure the "bag open" side of the film is facing away from the operator (facing right in photo).

4. Feed bag film through bag unwind rollers according to threading diagram.

While standing at the front of the machine, reach through and pull the bag film until edge drapes over the drive rollers and covers the photo-eye.

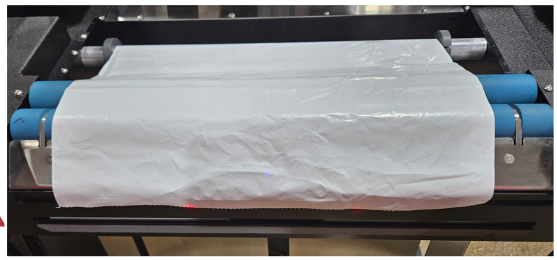


5. The location of the leading edge of the bag film is important. The bag film must cover the photo-eye but not cover the sealing bar. Expect approximately 1in. of bag film take-up when closing the print carriage assembly, there will be less for paper bags.



Must cover

Must not cover

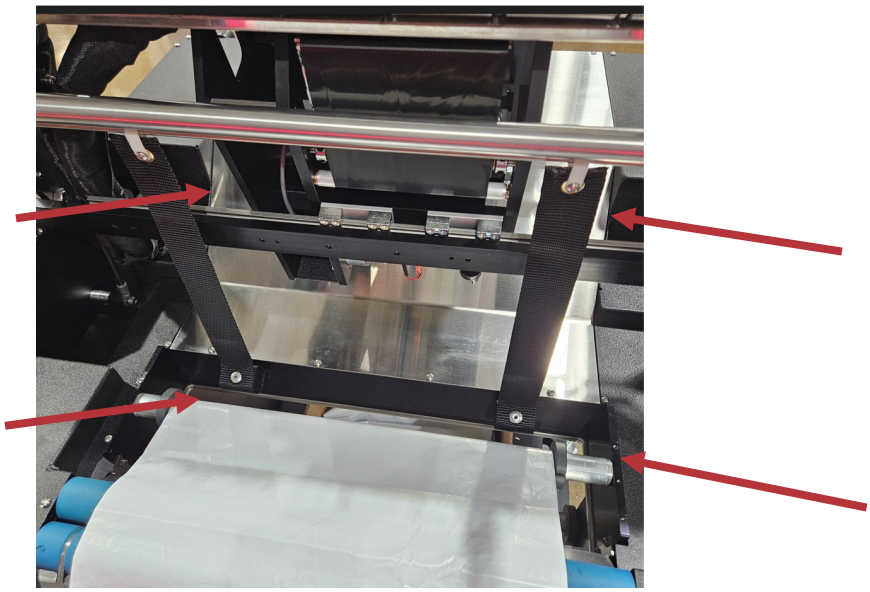


Note that the "bag open" side of the bag film must be facing the operator at this point.

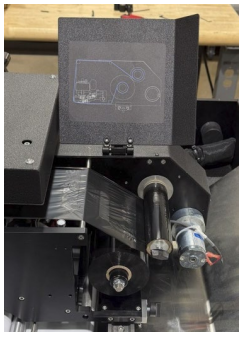
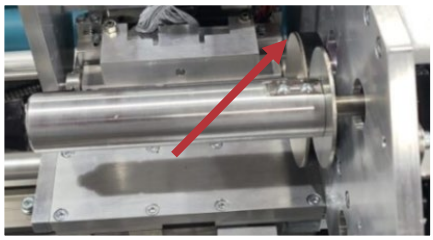
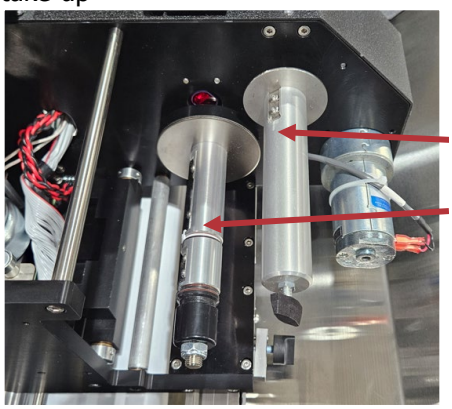
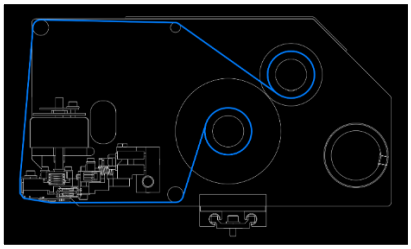
6. Spread the weight straps out so they are in line with the edges of the bag film and drape them over the film. Do not position the weight straps in the center or in line with the printer area. Ensure the weight straps are in contact with the bag film and the weights are hanging down below the back plate when closing the printer carriag.

Ensure the bag guides are in the correct position. Their location does not have to change unless the bag film width has changed. The guides should be within 1/8in of the edge of the bag film but not touching the bag film.

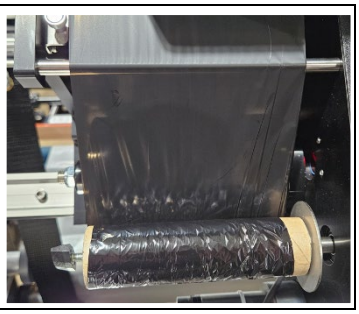
Release the t-handle lock and lower the cradle into its closed position. Rotate the side cradle clamps to lock closed.



5.2 Loading Printer Ribbon

<table>
<tr><th colspan="2">Loading a New Printer Ribbon</th></tr>
<tr><td>1. Open the printer cover.
  </td><td>2. Cut the web and slide both the empty new ribbon spool and the full used spool off their respective hubs.
  </td></tr>
<tr><td>3. Visually inspect that both hub flanges are aligned. Call maintenance if they are not.
  </td><td>4. Slide a new full ribbon spool onto the unwind hub and a new empty spool on the take-up hub.
 
 
Used ribbon spool
New ribbon spool</td></tr>
<tr><td>5. Raise the printer carriage and lock in place using the T-handle. Thread the ribbon as shown below.
• Ensure the ribbon wound counterclockwise around the take-up spool and that the film is tight on the spool.
  </td><td>6. Disengage the t-handle, close the printer carriage and lock into place.</td></tr>
</table>

7. Manually spin the take-up spool to pull the film through the printer, enabling it to flatten out. Spin the take-up spool until the film is smooth over the last roller, as shown.

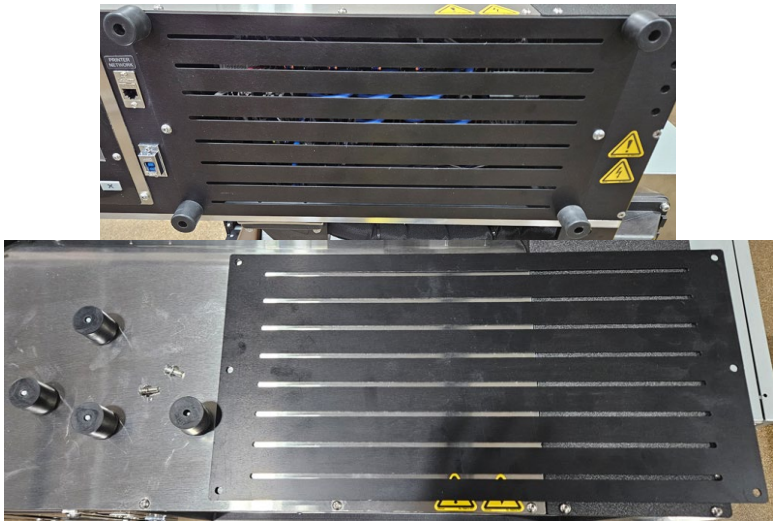


Close the printer cover.

6 Lynx Guards – Location & Removal

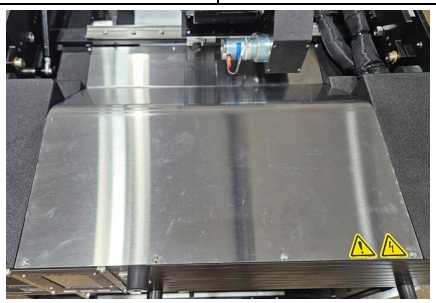
Cover Plate

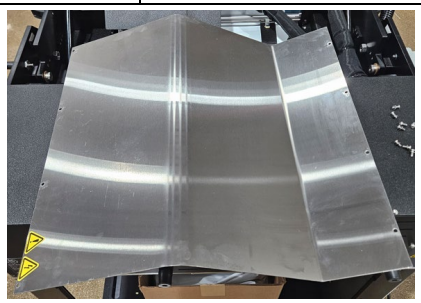
Summary			
Time: 2 min	**Tools**: 3mm hex key 4mm hex key	**Note:**	**Fastener:** 4 SHCS M5-0.8 x 20MM with flat washers 2 BHCS M5-0.8 x 12mm with flat washers



Back Guard

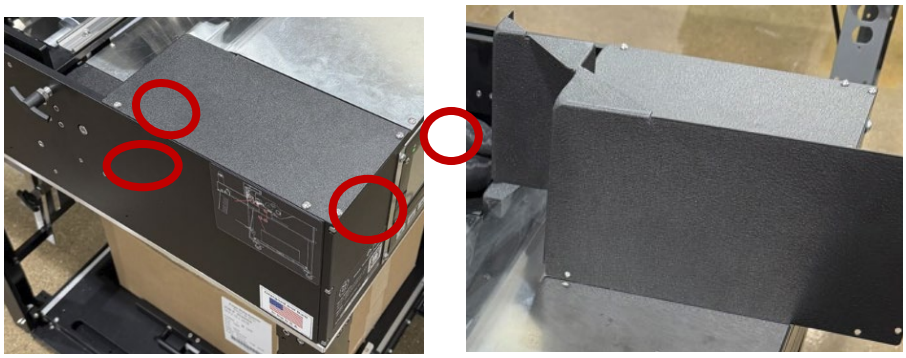
Summary			
Time: 3 min	**Tools**: 2.5mm hex key	**Note:** Open carriage to 90deg for access to the inner four screws.	**Fastener:** 8x BHCS M4-0.7 x 10MM with flat washers





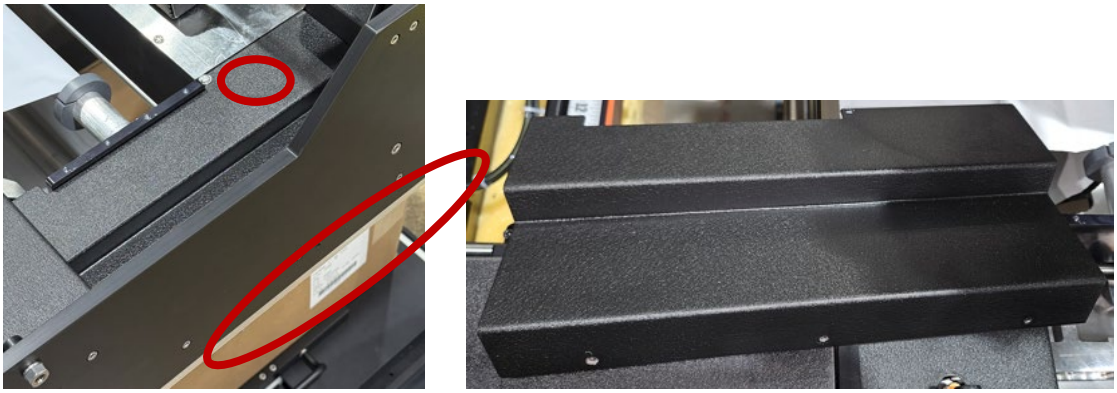
Right Back Guard

Summary			
Time: 3 min	**Tools**: 2.5mm hex key 3mm hex key	**Note:**	**Fastener:** 4x BHCS M4-0.7 x 10MM with flat washers 2x SHCS M4-0.7 x 10mm



Right Mid Guard

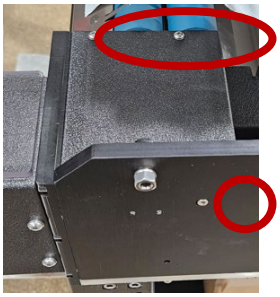
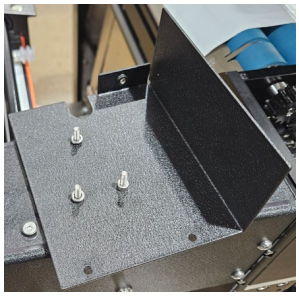
Summary			
Time: 2 min	**Tools**: 2.5mm hex key 3mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 1x BHCS M4-0.7 x 10MM with flat washers 3x SHCS M4-0.7 x 10mm



Right Roller Gear Guard

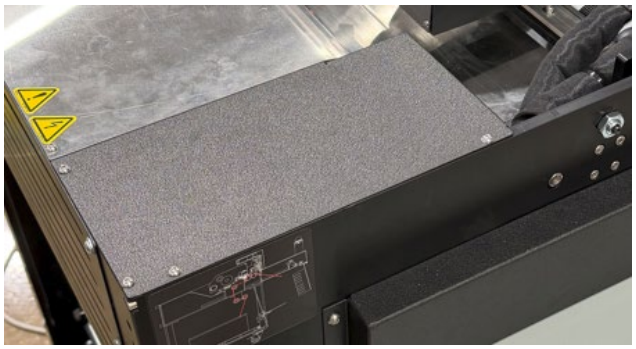
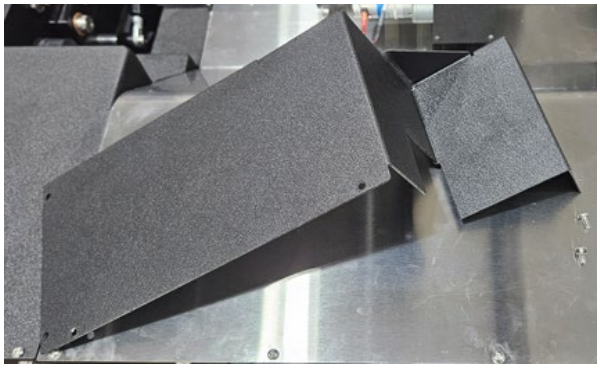
Summary			
Time: 2 min	**Tools**: 2.5mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 2x BHCS M4-0.7 x 10MM with flat washers

	3mm hex key		1x SHCS M4-0.7 x 10mm

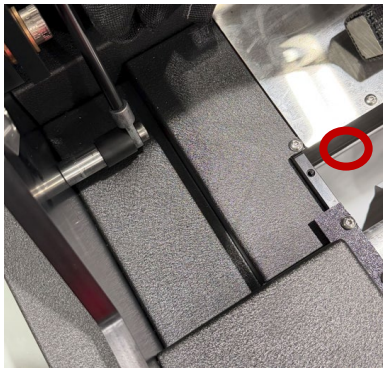
Left Back Guard

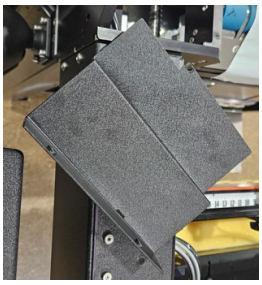
Summary			
Time: 2 min	**Tools**: 2.5mm hex key	**Note:** Pressing down on the center of the back guard may be necessary for removal clearance.	**Fastener:** 4x BHCS M4-0.7 x 10MM with flat washers

Left Mid Guard

Summary			
Time: 2 min	**Tools**: 2.5mm hex key 3mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 1x BHCS M4-0.7 x 10MM with flat washers 2x SHCS M4-0.7 x 10mm

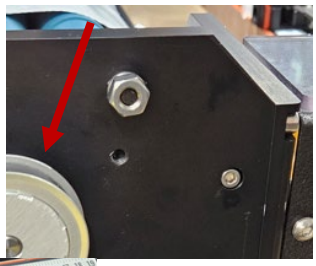
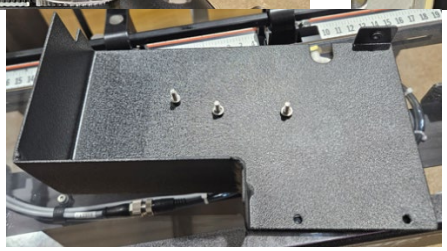




Left two screws under belt guard.

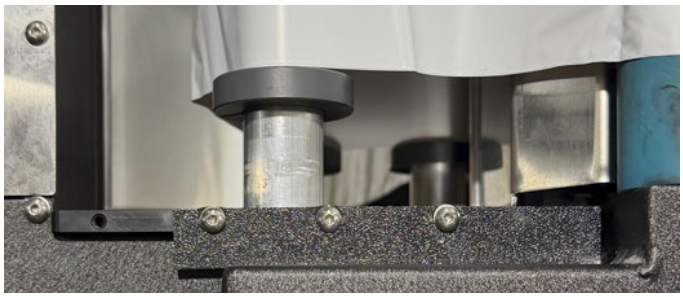
Left Roller Gear Guard

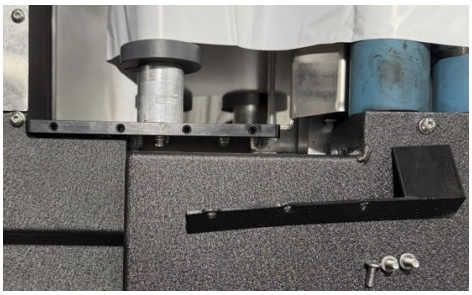
Summary			
Time: 2 min	**Tools**: 2.5mm hex key 3mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 2x BHCS M4-0.7 x 10MM with flat washers 1x SHCS M4-0.7 x 10mm

Left Micro Guard

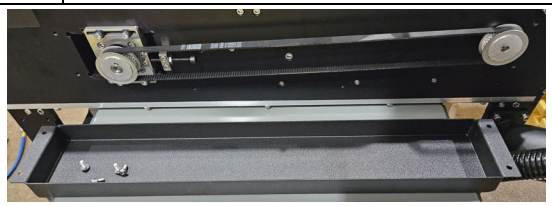
Summary			
Time: 2 min	**Tools**: 2.5mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 3x BHCS M4-0.7 x 10MM with flat washers





Belt Guard

Summary			
Time: 2 min	**Tools**: 3mm hex key	**Note:**	**Fastener:** 4x BHCS M5-0.8 x 12MM with flat washers

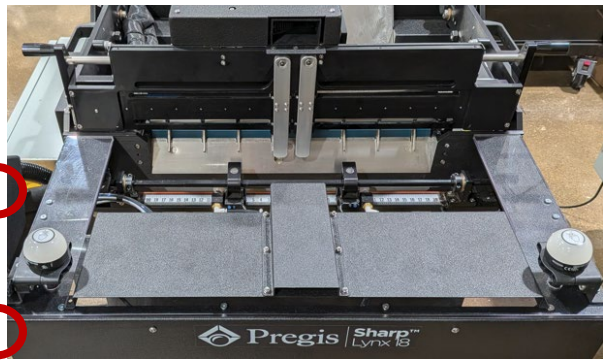


Heater Block Guard

Summary			
Time: 3 min	**Tools**: 2.5mm hex key	**Note:** Open carriage to 90deg for access.	**Fastener:** 4x BHCS M4-0.7 x 10MM with flat washers

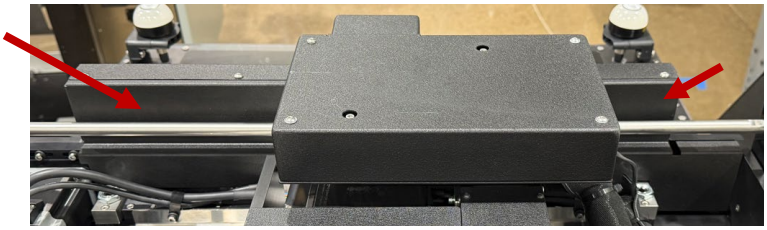
Seal Flattener Front Guard

Summary			
Time: 2 min	**Tools**: 2.5mm hex key	**Note:**	**Fastener:** 6x BHCS M4-0.7 x 10MM with flat washers



Seal Flattener Rear Guard

Summary			
Time: 2 min	**Tools**: 2.5mm hex key	**Note:**	**Fastener:** 4x BHCS M4-0.7 x 10MM with flat washers



7 Lynx Cleaning and Maintenance

Monthly, twice a year, and yearly cleaning and maintenance are essential to ensure the safe, efficient, and long-lasting operation of the Lynx. These tasks are designed to:

1. Prevent mechanical failures caused by debris buildup or worn components.
2. Maintain consistent performance by ensuring all parts function as intended.
3. Extend the machine's lifespan through regular care and early detection of issues.
4. Ensure operator safety by reducing the risk of malfunctions or accidents.

All safety warnings outlined in the Safety Information are relevant to all the Inspection, Cleaning, and Maintenance tasks listed in this section.

7.1 Inspection and Cleaning Schedule Checklist

Sub Assembly Number	Sub Assembly Name	Part Number	Part Name	Cleaning, Inspection, or Lubrication	Safety Label	Task(s)	Time (mins)	Interval	Page
	All		All	Cleaning		**Clean:** Use compressed air to remove all dust. Dust removal frequency must be doubled when using paper bags.	5	Monthly	42
	All		All	Inspection		**Inspection:** Inspect all fasteners to make sure there are no protruding fastener heads, exposed gaps between the bolt head and the surface, or surface galling that may indicate a loose fastener.	10	Monthly	42
	All		All	Inspection		**Inspection:** Inspect all guards for integrity concerns or excessive wear	1	Monthly	42
	All		All	Inspection		**Inspection:** Inspect for unsecured or abraded wires or cables or loose connections.	10	Monthly	42
3052803	Bag Deflator	1073105	Foam Bag Deflator	Inspection		**Inspection**: Check the foam to ensure it is not torn and properly adhered to the back plate.	1	Monthly	42
	Bag Film Roller Feed Assembly		Sensor in guide plate	Cleaning		**Clean**: Use compressed air to remove dust and debris.	3	Monthly	44

	Bag Film Roller Feed Assembly	1070754, 1071516	Film Feed and Printer Platen Rollers	Cleaning		Clean: Use Spray 9 brand cleaner to clean the entire surface of each roller (2x).	1	Bi-Weekly	44
	Bag Film Roller Feed Assembly	1071493	Belt	Inspection		Inspection: Check the belt for irregular wear or missing teeth.	1	Monthly	44
	Bag Film Roller Feed Assembly	1070754, 1071516	Film Feed and Printer Platen Rollers	Inspection		Inspection: Visually inspect each roller for irregular wear, cracks, or missing material.	1	Bi-Weekly	44
	Bag Film Roller Feed Assembly	1071490	Gears	Lubrication		Lubricate: Apply MolyKote 41 to all the teeth of the gears.	2	Monthly	44
3052651	Bag Open Finger Assembly	1050805	Sensor	Cleaning		Clean: Use compressed air to remove dust and debris off the entire apparatus, focusing on the sensors (2x), with compressed air.	0.5	Monthly	46
3052651	Bag Open Finger Assembly	1071634	Vacuum Cup	Cleaning		Clean: Use isopropyl alcohol and lint-free cloth to clean the vacuum cups (2x).	2	Monthly	46
3052651	Bag Open Finger Assembly	1073275	Guard	Inspection		Inspection: Check the clear Lexan pressure guard for irregular wear or cracks.			46
3052651	Bag Open Finger Assembly	1073189	Vacuum Pump - electrical	Inspection		Inspection: Check the electrical connections at the vacuum pump (2x).			46
3052651	Bag Open Finger Assembly	1073275	Finger rubber	Inspection		Inspection: Check the rubber for any missing material or irregular wear.			46
3052651	Bag Open Finger Assembly	1071634	Vacuum Cup	Inspection		Inspection: Check the vacuum cups. Look for irregular wear or tears.	0.5	Monthly	46
3052651	Bag Open Finger Assembly	1071634	Vacuum Cup	Inspection		Inspection: Check the vacuum power of each cup, ensuring that each suction cup provides an equal amount of suction (2x).	1	Monthly	46

3052645	Box Centering Assembly	1073042	Drawer Slides	Cleaning		Clean: Use compressed air to remove dust and debris	0.5	Monthly	49
3052645	Box Centering Assembly	1069134, 1069135	Rack and Pinion	Cleaning		Clean: Use compressed air to remove dust and debris.	0.5	Monthly	49
3052645	Box Centering Assembly	1069134, 1069135	Rack and Pinion	Inspection		Inspection: Open and close the drawer multiple times and feel for wear, binding, or improper alignment on either side.			49
3052645	Box Centering Assembly	1073042	Drawer Slides	Inspection		Inspection: Open and close the drawer multiple times and feel for wear, binding, or improper alignment on either side.	0.5	Monthly	49
3052605	Cart Frame Assembly	1071392	Castors	Inspection		Inspection: Engauge and disengage every brake (4x) and confirm it functions correctly.	2	Monthly	49
3052654	Electrical Assembly	3052654	Electrical Assembly	Inspection		Clean: Use compressed air to remove dust and debris	2	Monthly	57,61
	Pressure Bar Assembly	1060069	Front Housing Rubber	Cleaning		Clean: Use isopropyl alcohol to clean any adhesive buildup off the rubber.	1	Monthly	51
	Pressure Bar Assembly	1071730	Touch Sensor	Inspection		Inspection: Check that the cables are tight.	0.5	Monthly	51
	Pressure Bar Assembly	1071730	Touch Sensor	Inspection		Inspection: Check the operation of the buttons in I/O settings.	0.5	Monthly	51
	Pressure Bar Assembly	1073275	Pressure Bar Rubber and Teflon	Inspection		Inspection: Visually inspect the rubber and Teflon on the pressure bar to ensure it is adhered correctly, not loose, and not worn.	0.5	Monthly	51
	Pressure Bar Assembly	1060069	Front Housing Rubber	Inspection		Inspection: Visually inspect the rubber on the front housing to ensure it is adhered correctly,	0.5	Monthly	51

						not loose, not worn, or blocking the seal bar.			
	Pressure Bar Assembly		Gears and Racks	Lubrication		Lubricate: Use MolyKote 41 to lubricate all the gears and racks.	5	Monthly	51
	Pressure Bar Assembly		Bearings and Rails	Lubrication		Lubricate: Use white lithium grease to lubricate the rails and bearings.	5	Monthly	51
3052784	Pressure Bar Guard	1072173	Guard	Inspection		Inspection: Check the Lexan guards for breaks or cracks.	0.5	Monthly	
3052648	Printer Carriage Assembly	1071517	Guide Fingers	Cleaning		Clean: Use isopropyl alcohol to clean the guide fingers to remove adhesive residue.	1	Monthly	55
3052648	Printer Carriage Assembly	1071625	Pinch roller	Cleaning		Clean: Use isopropyl alcohol to clean the pinch roller to remove adhesive residue.	1	Monthly	55
3052648	Printer Carriage Assembly	1071517	Guide Fingers	Inspection		Inspection: Visually inspect and feel each guide finger to make sure it is not lost or showing signs of excessive wear where it meets the pinch roller.	0.5	Monthly	55
3052648	Printer Carriage Assembly	1022177	Printer Carriage Locking Cam	Inspection		Inspection: Visually inspect the cam for irregular wear or damage (2x).	0.5	Bi-annual	55
3052648	Printer Carriage Assembly	1071517	Guide Fingers	Inspection		Inspection: Visually inspect the set of guide fingers to make sure they are all equally and evenly aligned with each other.	0.5	Monthly	55
3052655	Printer Control Box Assembly		General	Cleaning		Clean: Use compressed air to remove dust and debris.	1	Monthly	56
3052655	Printer Control Box Assembly	1030625	On/Off Switch	Inspection		Inspection: Check that the On/Off Switch is in the "On" position.	1	Monthly	56
3052649	Printhead 203 DPI Assembly	3052652	Print head	Cleaning		Clean: Use isopropyl alcohol and a lint-free cloth to clean the print head.	3	Daily	54

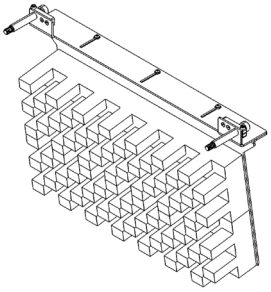
3052650	Seal Flattener Assembly	1069159, 1071611	Front Bearings and Rails	Lubrication		Lubricate: Apply a thin coat of white lithium grease to the rails. Move the bearing along the entire rail multiple times, working the grease into the bearings. Reapply and repeat at least 2x.	5	Monthly	58
3052650	Seal Flattener Assembly	1069159, 1071606	Rear Bearings and Rail	Lubrication		Lubricate: Apply a thin coat of white lithium grease to the rails. Move the bearing along the entire rail multiple times, working the grease into the bearings. Reapply and repeat at least 2x.	5	Monthly	58
	Sealing Bar Assembly	1071710	Seal bar	Cleaning		Clean: Use the Teflon Wand to clean the seal bar.	5	Monthly	60
	Sealing Bar Assembly	1071710	Seal bar	Inspection		Inspection: Visually inspect the ceramic coating for debris or chips.	1	Monthly	60
	Sealing Bar Assembly		All gears and racks	Lubrication		Lubricate: Use MolyKote 41 to lubricate all the gears and racks.	5	Monthly	60

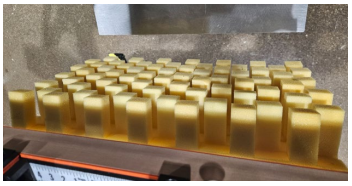
7.2 Lynx Required Inspection, Cleaning, and Maintenance Tasks

General – All

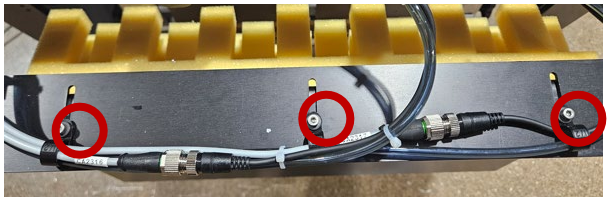
Cleaning & Inspection
Inspection: Inspect for unsecured or abraded wires or cables or loose connections.
Inspection: Inspect all fasteners to make sure there are no protruding fastener heads, exposed gaps between the bolt head and the surface, or surface galling that may indicate a loose fastener.
Inspection: Inspect all guards for integrity concerns or excessive wear
Clean: Use compressed air to remove all dust. Dust removal frequency must be doubled when using paper bags.

Bag Deflator Assembly #3052803

Item No.	Part No.	Description	QTY	Visual
1	3052803	Bag Deflator Assembly	1	 

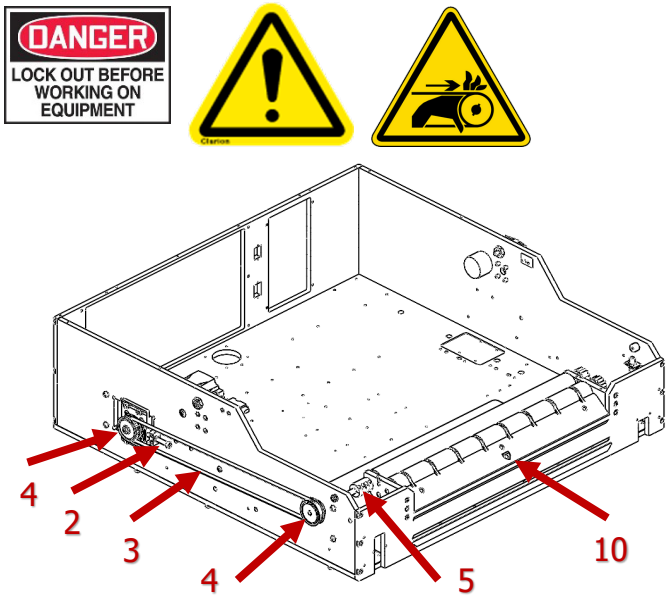
Cleaning & Inspection		
Foam Bag Deflator #1073105		
Task: Foam inspection	**Frequency:** Monthly	**Duration:** 1 min
1. Press the E-stop and manually move the pressure bar into the open position.	2. **Inspection:** Check the foam to ensure it is not torn and properly adhered to the back plate. 	

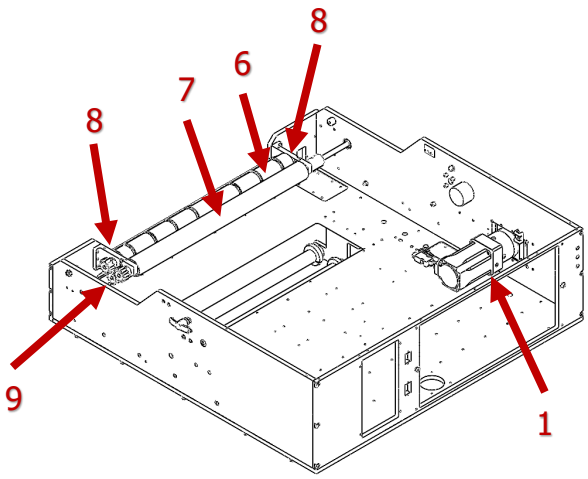
Maintenance		
Foam Bag Deflator #1073105		
Task: Replace or re-adhere current foam	**Tools:** 3M adhesive spray, 3mm hex key, Scraper, Isopropyl alcohol, Paper towel	**Time:** 5 min
1. Press the E-stop and remove 3x M4-0.7x10 SHCS and washer the bag deflator. Place on work bench. Tool: 3mm hex key	2. Remove foam and adhesive residue with a scraper and isopropyl alcohol from any parts of the back plate that need to be re-adhered to the foam.	

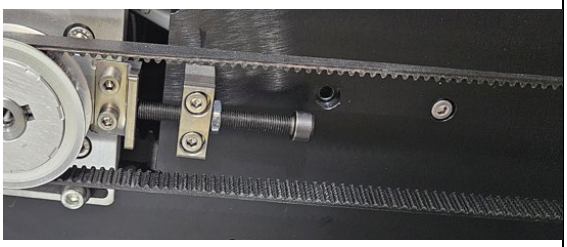
	 If replacing the entire foam deflator, remove all old foam and residue.
3. Follow the instructions on the 3M spray adhesive to adhere the foam to the backplate. Tool: 3M adhesive spray	4. Reassemble

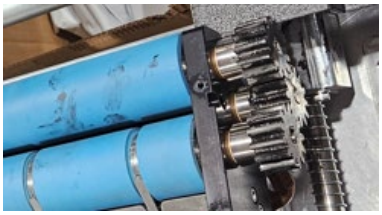
Bag Film Roller Feed Assembly

Visual Breakdown			
Item No.	**Part No.**	**Description**	**QTY**
1	1030536	Motor	1
2	1071494	Belt Tension Screw	1
3	1071493	Roller Drive Belt	1
4	1071491, 1071492	Pulley	2
5	1071495	Coupling	1
6	1070754	Feed Roller	1
7	1070753	Platen Roller	1
8	1071668,1071667	Bearing Plate	2
9	1071490	Gears	3
10	1051214	Bag Film Proximity Sensor	1



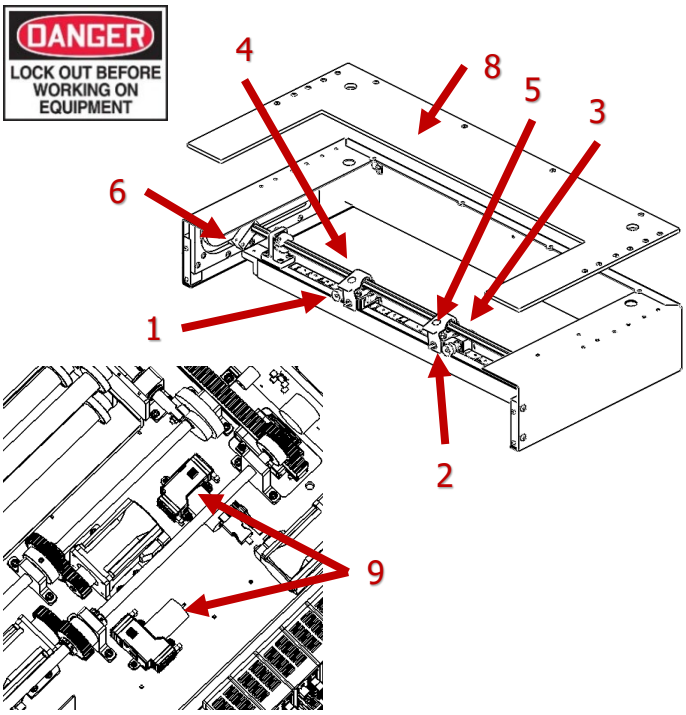


Cleaning & Inspection		
Roller Drive Belt #1071493		
Task: Check the belt for wear and tension	**Frequency**: Monthly	**Duration**: 3 min
1. Follow lockout/tagout procedures and remove the belt guard.	2. **Inspection**: Check the belt for irregular wear or missing teeth. 	
Rollers #1070754, #1070753		
Task: Clean the rollers	**Frequency**: Bi-Weekly	**Duration**: 2 min
1. Press E-stop and open print carriage to 90deg.	2. **Clean:** Use Spray 9 brand cleaner to clean the entire surface of each roller (2x). 	
3. **Inspection:** Visually inspect each roller for irregular wear, cracks, or missing material.		
Bag Proximity Sensor #1051214		

Task: Clean the proximity sensor	**Frequency**: Monthly	**Duration**: 0.5 min
1. **Clean:** Use compressed air to remove dust and debris. 		
Roller Gears #1071490		
Task: Lubricate	**Frequency**: Monthly	**Duration**: 2 min
1. Follow lockout/tagout procedures and remove the right roller gear guard.	2. **Lubricate:** Apply MolyKote 41 to all the teeth of the gears. • Remove all excess MolyKote prior to reassembly 	

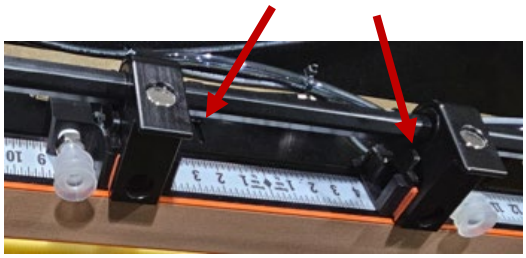
Bag Open Finger Assembly #3052651

Item NO.	Part NO.	Description	QTY	Visual
1	1071634	Vacuum Cup	2	
2	1073275	Finger Rubber	2	
3	1071511	Hex Shaft	1	
4	1050805	Vacuum Fitting	2	
5	1071633	Magnet	2	
6	1071482	Finger Cam	1	
7	1051154	Cables		

8	3052680	Guard	1	
9	1073189	Vacuum motor	2	

Inspection

Sensors #1050805

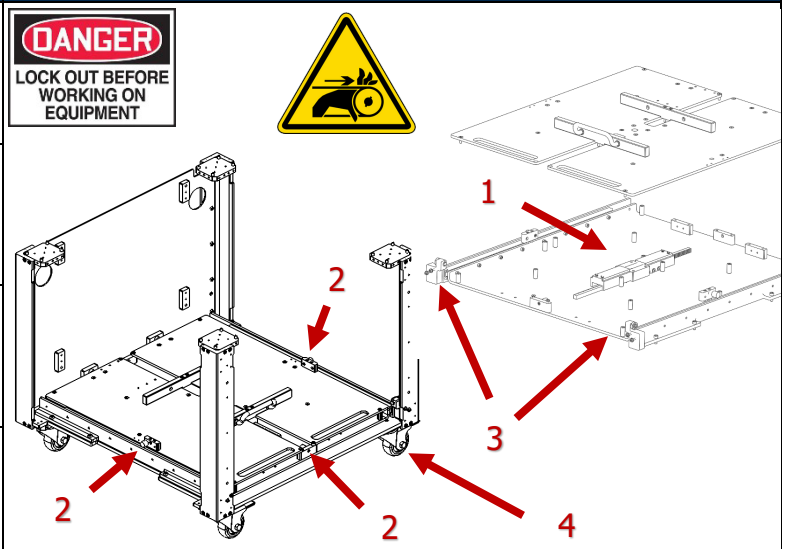
Task: Clean the sensors.	**Frequency**: Monthly	**Duration**: 0.5 min
1. Press the E-stop and manually move the bag open finger carriage towards the body of the Lynx to allow access to the top of the pressure bar.	2. **Clean:** Use compressed air to remove dust and debris off the entire apparatus, focusing on the sensors (2x), with compressed air. 	

Vacuum Cup #1071634

Task: Clean and inspect the vacuum cups.	**Frequency**: Monthly	**Duration**: 2 min
1. Press the E-stop and manually move the bag open finger carriage towards the body of the Lynx to allow access to the top of the pressure bar.	2. **Clean:** Use isopropyl alcohol and a lint-free cloth to clean the vacuum cups (2x).	

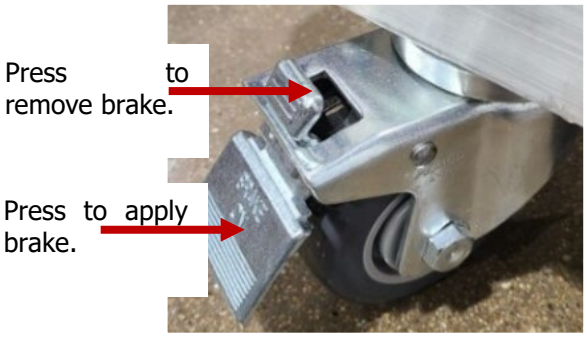
	
3. **Inspection:** Check the vacuum cups. Look for irregular wear or tear.	4. Disengage the E-Stop and prepare the Lynx for operation. On the HMI, navigate to the I/O Screen and select the "Vacuum" button. 
5. **Inspection:** Check the vacuum power of each cup, ensuring that each suction cup provides an equal amount of suction (2x). If they are different, there may be a vacuum leak, or a vacuum cup, or a vacuum motor may need to be replaced.	
Maintenance	
Vacuum Cup #1071634	
Task: Replace	**Tools:** **Duration**: 1 min
1. Follow lockout/tagout procedures and manually move the bag open finger carriage towards the body of the Lynx to allow access to the top of the pressure bar.	2. Remove the damaged vacuum cup by manually pulling it off its mount. 
3. Reassemble	

Cart Frame #3052605 / Box Centering #3052645 Assemblies

Item No.	Part No.	Description	QTY	Visual
1	1069134, 1069135	Rack and Pinion	1	
2	1071393	Rubber Bumper	3	
3	1073042	Drawer Slides	2	
4	1071392	Castor Wheels	4	

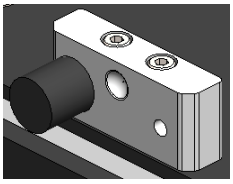
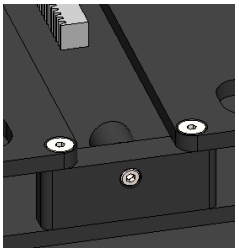
Cleaning & Inspection

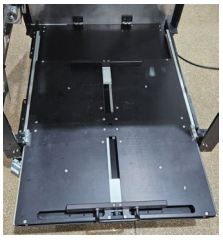
Castor Wheels #1071392

Task: Inspect function of brakes	**Frequency:** Monthly	**Duration:** 2 min
1. **Inspection**: Engauge and disengage every brake (4x) and confirm it functions correctly.  • If either the application or removal of any brake fails, replace the castor.		

Rubber Bumper #1071393

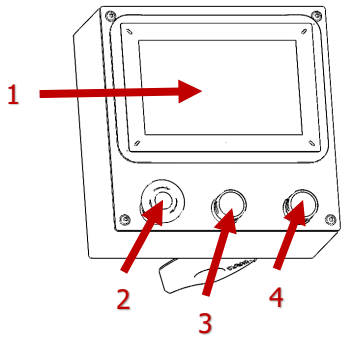
Task: Inspect the rubber stops.	**Frequency:** Bi-Annual	**Duration**: 0.5 min
1. **Inspection:** Visually inspect the rubber stops for unusual wear or missing material (3x).	2. Replace, as necessary.	

Drawer Slides #1073042		
Task: Clean and inspect drawer slides for proper operation	**Frequency**: Monthly	**Duration**: 0.5 min
1. **Clean:** Use compressed air to remove dust and debris. 	2. **Inspection:** Open and close the drawer multiple times and feel for wear, binding, or improper alignment on either side.  • If wear, binding, or improper alignment is felt, determine if it is the rack and pinon or the drawer slide. If it's determined to be a drawer slide, adjust or replace it.	

Rack #1069134 / Pinion #1069135		
Task: Clean and inspect for wear and proper alignment.	**Frequency:** Monthly	**Duration:** 1 min
1. **Clean:** Use compressed air to remove dust and debris. 	2. **Inspection**: Open and close the drawer multiple times and feel for wear, binding, or improper alignment on either side.  • If wear or improper alignment is felt, determine if it is the rack and pinon or the drawer slide. If it's determined to be the rack or pinion adjust or replace it.	

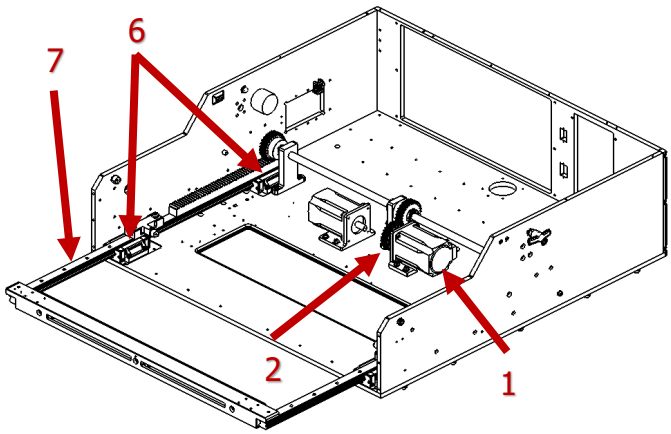
HMI Assembly#3052656

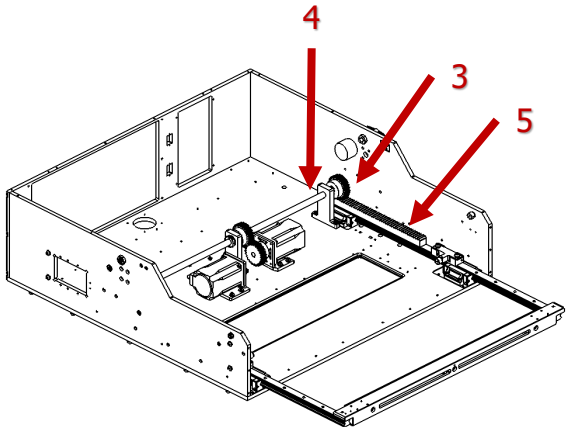
Item NO.	Part NO.	Description	QTY	Visual
1	1070757	HMI Screen	1	  
2	1047795	Red E-stop button	1	
3	1047192	Green Power Button	1	
4	1050444	White Reset Button	1	

Cleaning & Inspection		
E-Stop Button #1047795		
Task: Ensure the E-stop functions properly.	**Frequency:** Monthly	**Duration**: 0.5 min
1. **Inspection**: With power on, press the E-stop button. The light within the green reset button should turn off. • If it does not, the e-stop needs to be replaced.	2. **Inspection**: Twist to reset the E-stop. The green light in the reset button should turn on. • If it does not, the e-stop needs to be replaced.	
Green "Power" Button #1047192 / White "Reset" Button # 1050444		
Task: Ensure the green power and the white reset button function properly	**Frequency:** Monthly	**Duration**: 0.5 min
1. **Inspection:** With power on, press either button. The lights within either button should turn on and off. • If the light does not turn on, verify electrical connection. Button replacement may be necessary.		

Pressure Bar Drive Assembly

Visual Breakdown			
Item No.	**Part No.**	**Description**	**QTY**
1	1070750	Motor	1
2	1071487	Gear - Motor	1
3	1071486	Gear - Shaft	3
4	1071483	Shaft Bearing	3
5	1071459	Rack	2
6	1071460	Linear Bearings	4
7	1071461	Rails	2





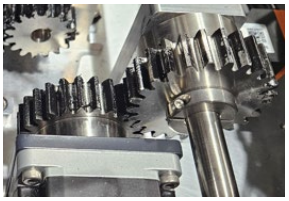
Cleaning & Inspection

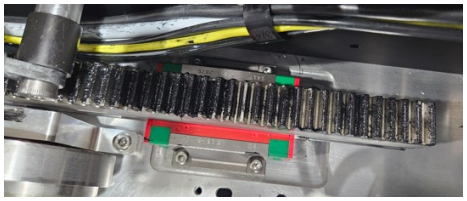
Lubrication of Gears, Racks, Bearings and Rails

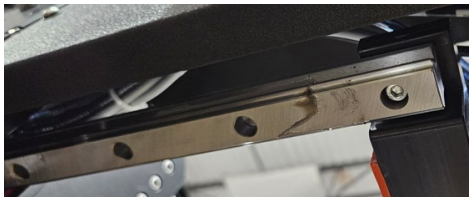
Task: Lubrication	**Frequency**: Monthly	**Duration**: 5 min
1. Follow lockout/tagout procedures and remove the back, right back & mid and left back & mid guards.	2. **Lubricate:** Use MolyKote 41 to lubricate all the gears and racks. Every tooth should have a fresh, light coat on it. Move the pressure bar in and out several times and remove excess before reassembly.	

3. **Lubricate:** Use white lithium grease to lubricate the rails and bearings.

The entire length of the rails should have a light coat on them. Ensure that the ample grease enters the 4x bearings. Move the pressure bar in and out several times and remove excess before reassembly.



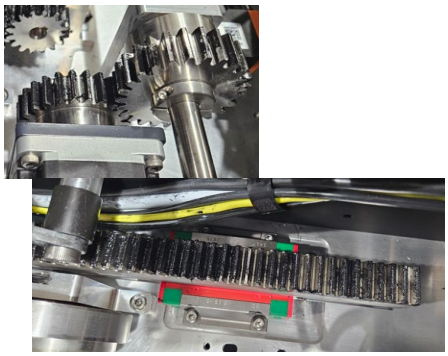


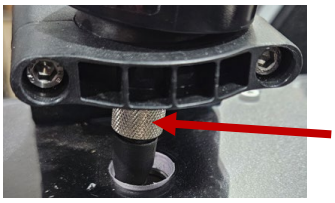


Pressure Bar Rubber #1073275 / Front Housing Rubber #1060069

Task: Check the integrity of the rubber	**Frequency**: Monthly	**Duration**: 0.5 min
1. Press the E-stop and manually move the bag open finger carriage towards the body of the Lynx to allow access to the rubber.	1. **Inspection:** Visually inspect the rubber and Teflon on the pressure bar to ensure they are adhered correctly, not loose, and not worn.	

	
4. **Clean:** Use isopropyl alcohol to clean any adhesive buildup off the rubber. 	4. **Inspection:** Visually inspect the rubber on the front housing to ensure it is adhered correctly, not loose, not worn, or blocking the seal bar. 

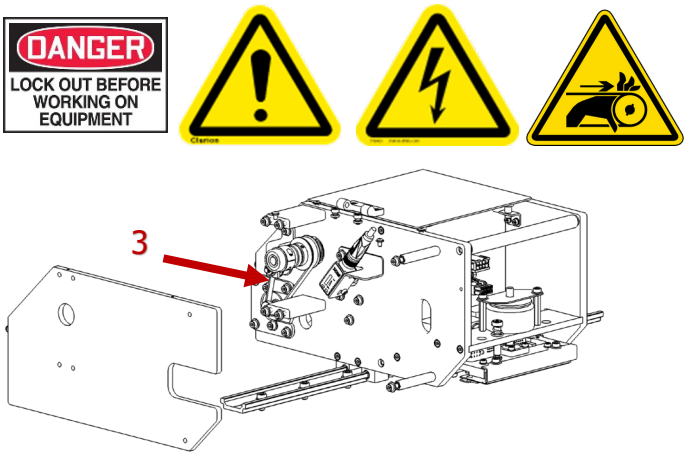
Motor Gear #1071487 / Shaft Gear #1071486 / Racks #1071459		
Task: Inspect teeth and gear security	**Frequency**: Bi-Annual	**Duration**: 3 min
1. Follow lockout/tagout procedures and remove the back, right back & mid and left back & mid guards.	2. **Inspection:** Visually inspect all of the teeth on the motor gear, the shaft gears (3x), and the racks (2x) for irregular wear or missing teeth. • Manually move the pressure bar in and out for visual inspection. 	

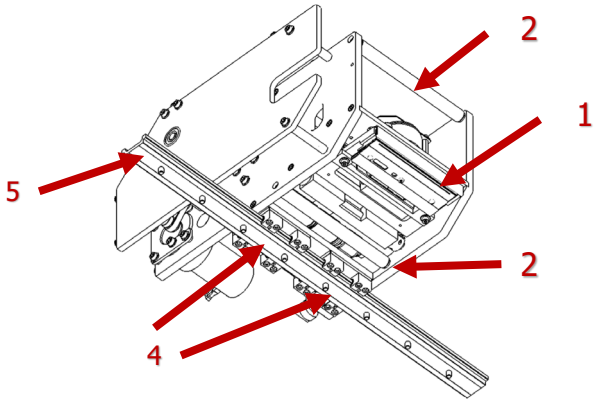
Touch Sensor #1071730		
Task: Inspect the touch sensors	**Frequency**: Monthly	**Duration**: 1 min
1. **Inspection:** Check that the cables are tight.  	2. **Inspection**: Check the operation of the buttons on the HMI I/O settings screen.	

Printhead 203 DPI Assembly #3052649

Item No.	Part No.	Description	Qty
1	3052652	Print Head	1
2	1071619	Ribbon Rollers	2
3	1022168	Printer Belt	1
4	1071545, 1071544	Bearings	2
5	1071546	Rail	1

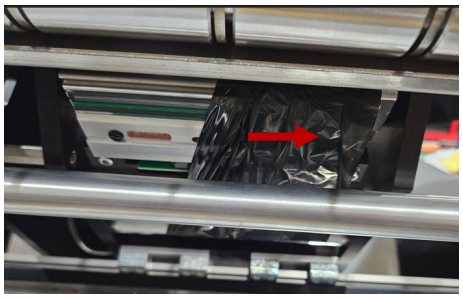
Visual

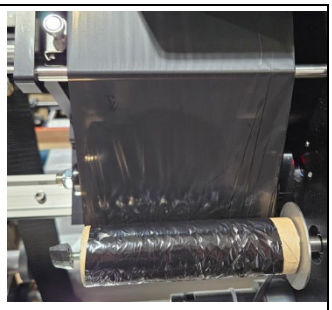




Cleaning & Inspection

Print Head #3052652

Task: Clean Print Head	**Frequency:** Daily	**Duration:** 3 min
1. Press E-stop and open print carriage to 90deg.	2. Move, shift or pull print ribbon out of the way to access the print head. 	

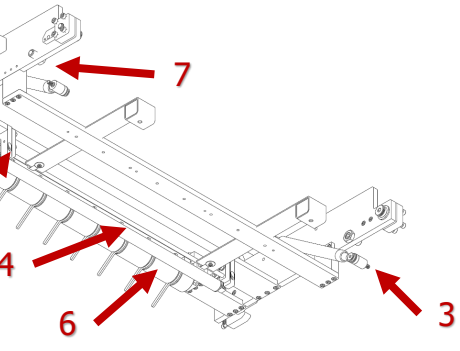
3. **Clean:** Use isopropyl alcohol and a lint-free cloth to clean the print head. 	4. Let print head dry, then manually rotate the take up wheel until the printer ribbon is smooth over all the ribbon rollers. 
5. When closing the print carriage, ensure the film weights are in their correct location. (not in front of the print head, and in contact with the bag film.)	

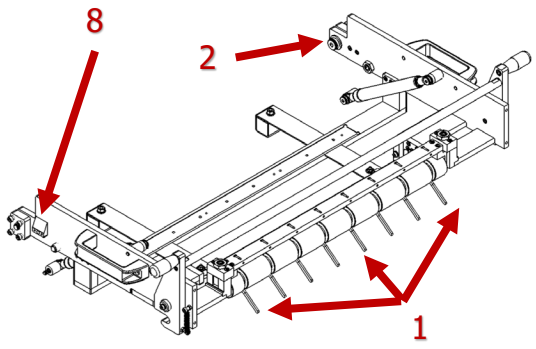
Printhead Assembly		
Task: Remove dust, check print head pressure bolts, and check roller bearings	**Frequency:** Bi-annually	**Duration:** 5
1. Follow lockout/tagout procedures and open printer cover.	2. **Clean:** Use compressed air to remove dust and debris.	

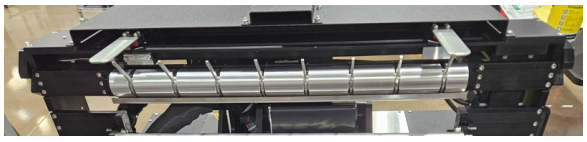
Printer Carriage Assembly #3052648

Item NO.	Part NO.	Description	QTY	Item NO.	Part NO.	Description	QTY
1	1071517	Guide Fingers	8	5	1071551	Idler Roller Spring	2
2	1071557	Gas Spring	2	6	1071625	Finger Pinch Roller	1
3	1071549	Hinge Bolt	2	7	1071554	Ball Plunger	2
4	1050329	Platten Pinch Roller	1	8	1071518	T-Handle Detent Block	2

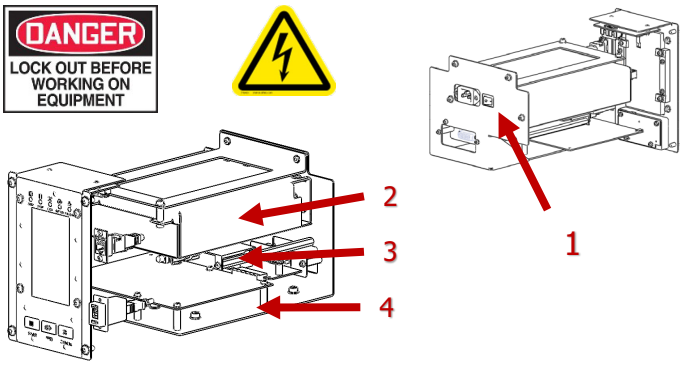
Visual

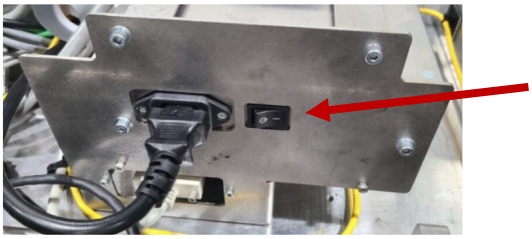


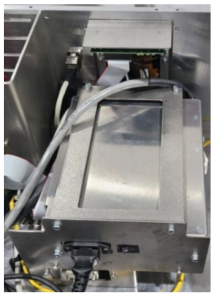


Cleaning & Inspection		
Finger Pinch Roller #1071625 / Guide Fingers #1071517		
Task: Clean, inspect, and adjust the rollers and guide fingers	**Frequency:** Monthly	**Duration:** 3 min
1. Follow lockout/tagout procedures and open printer carriage to 90deg.	2. **Clean:** Use isopropyl alcohol to clean the pinch roller and guide fingers to remove adhesive residue. **Inspection:** Visually inspect the roller & guide finger contact surfaces for excessive or irregular wear. 	

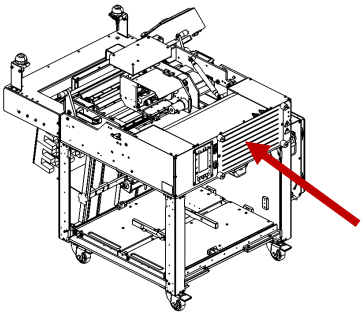
Printer Control Box Assembly #3052655

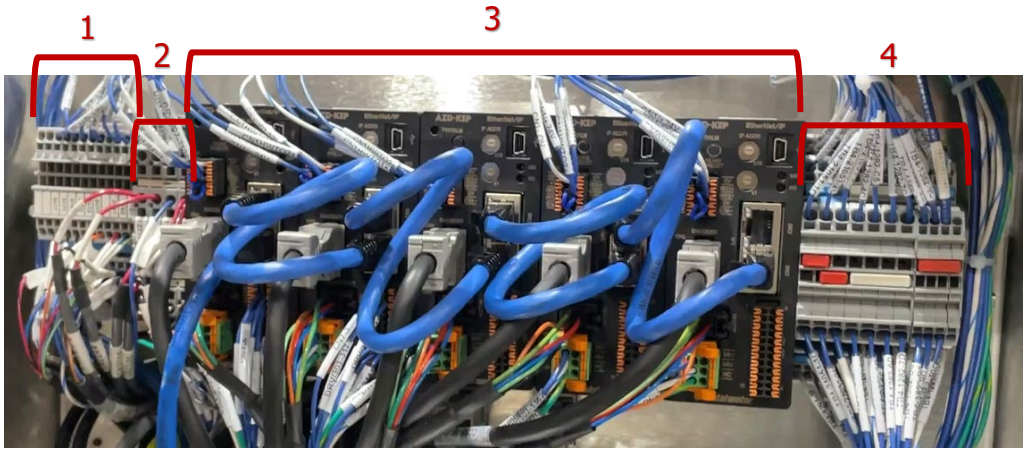
Item NO.	Part NO.	Description	QTY	Visual
1	1030625	Printer On-Off switch	1	
2	1030626	Printer Power Supply	1	
3	1030627	Printer Network Card	1	
4	1030625	Printer Motherboard	1	

Cleaning & Inspection		
Printer On/Off Switch #1030625		
Task: Ensure the printer switch is on.	**Frequency:** Monthly	**Duration:** 1 min
1. Follow lockout/tagout procedures and remove the back and right rear guard.	3. **Inspection:** Check that the On/Off Switch is in the "On" position. 	
Printer Control Area		
Task: Remove dust and debris.	**Frequency:** Monthly	**Duration:** 1 min

1. Follow lockout/tagout procedures and remove the back and right rear guard.	2. **Clean:** Use compressed air to remove dust and debris. 

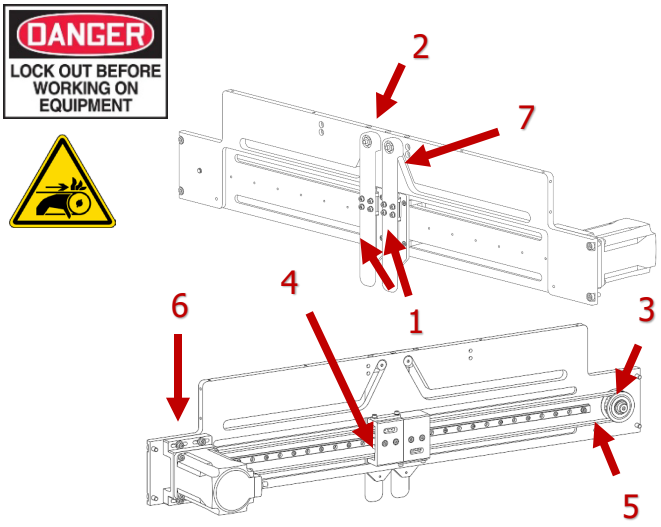
Rear Electrical Assembly #3052654

Item No.	Part No.	Description	
1	1071700	Sensor Terminals (TB3)	 
2	1036709	Output Relay (Actuators)	
3	1072115	Stepper Motor Drives	
4	1071690, 1071671	Stepper Drive Power Terminals (TB4)	

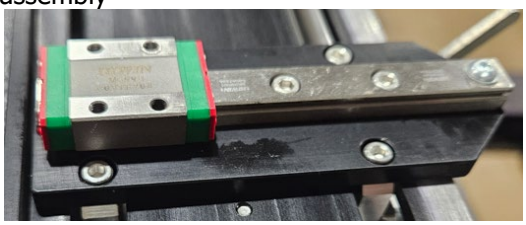
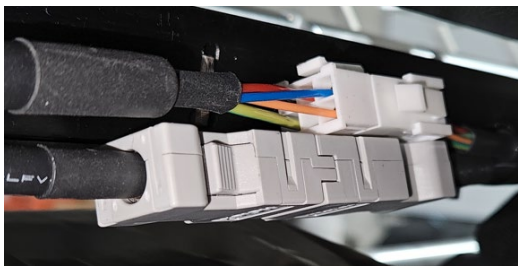
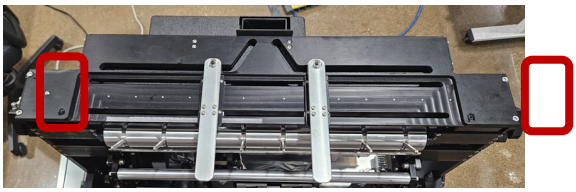
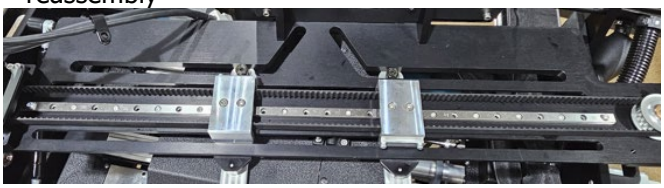


Cleaning & Inspection		
Rear Electrical Assembly #3052654		
Task: Remove dust	**Frequency:** Monthly	**Duration:** 1 min
1. Follow lockout/tagout procedures and remove rear cover plate.	2. **Clean:** Use compressed air to clear any dust or debris. 	

Seal Flattener Assembly #3052650

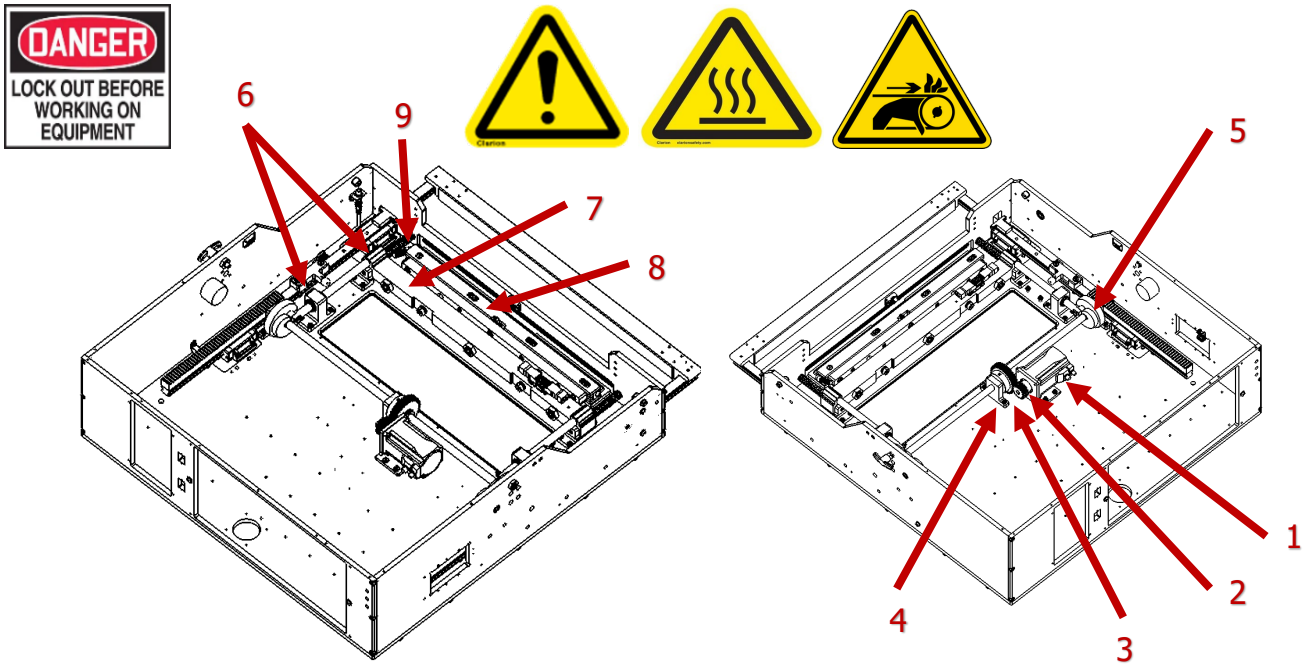
Item NO.	Part NO.	Description	QTY	Visual
1	1071614, 1071605	Seal Flattener & Guard	2	
2	1071482	Cam	2	
3	1071607	Bearing	1	
4	1071615	Clamp	2	
5	1071610	Belt	1	
6	1071403	Motor Mount	1	
7	1071611	Rails	2	

Cleaning & Inspection		
Seal Flattener Bearing and Rail Lubrication		
Task: Lubricate the front and rear seal flattener bearings and rails	**Frequency:** Bi-Annually	**Duration:** 10 min
1. Follow lockout/tagout procedures, open printer carriage to 90deg, and remove seal flattener front guard.	2. Remove the 4x M3-0.5x6 SHCS and 10mm nut that hold the seal flattener (1071614) and bearing together (2x). Set the seal flattener aside. Tool: 2.5mm hex key 10mm socket	

	
3. **Lubricate:** Apply a thin coat of white lithium grease to the rails. Move the bearing along the entire rail multiple times, working the grease into the bearings. Reapply and repeat at least 2x. • Remove all excess white lithium grease prior to reassembly  • Front Bearing #1069159 and Front Rail #1071611	4. Reinstall front seal flatteners.
5. Disconnect the motor wire connectors behind the bag blower inflator. 	6. Remove one M4-0.7x10 SHCS and washer from the wire mounts closest to the drive motor on the back side of the seal flattener assembly. Note wire mount orientation. Tool: 3mm hex key 
7. Remove the 4x M8-0.8x12 SHCS that hold the seal flattener front plate (1071618) in place. Carefully shift the front plate backwards and rest it on the printer carriage body. Tool: 3mm hex key 	8. **Lubricate:** Apply a thin coat of white lithium grease to the rails. Move the bearing along the entire rail multiple times, working the grease into the bearings. Reapply and repeat at least 2x. • Remove all excess white lithium grease prior to reassembly  • Rear Bearing #1069159 and Rear Rail #1071606

Sealing Bar Assembly

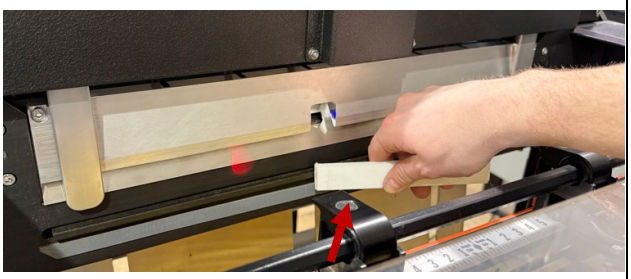
Visual Breakdown			
Item No.	**Part No.**	**Description**	**QTY**
1	1070750	Motor	1
2	1071489	Gear – Motor	1
3	1071488	Gear – Shaft	1
4	1071483	Shaft Bearings	3
5	1071665	Cam Profile	2
6	1071462	Linear Bearings	4
7	1071706	Spring Mount Bar	1
8	1071710	Seal Bar	1
9	1070978	Heater Cartridge	1

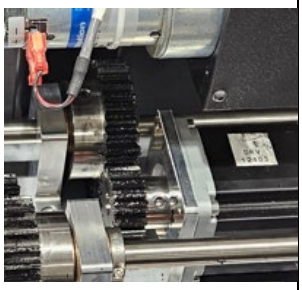


Cleaning & Inspection		
Seal Bar #1071710		
Task: Clean the seal bar with the Teflon Wand (1047122).	**Frequency**: Monthly	**Duration**: 3 min

WARNING: HOT OR BURN HAZARD

Seal bar is extremely hot. Proper PPE is required.

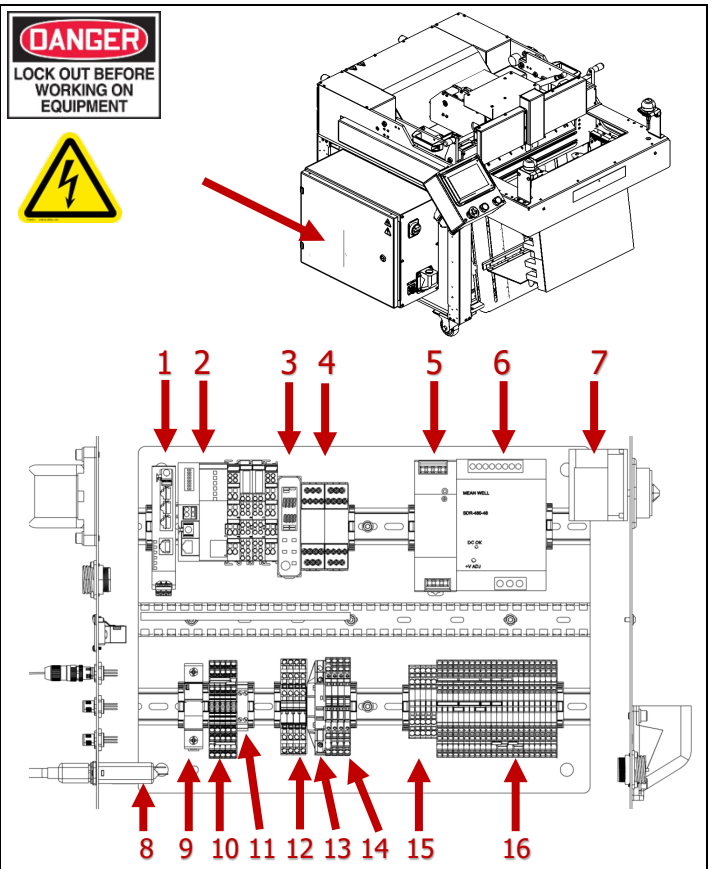
1. With the Lynx seal bar at operating temperature, navigate to the "service" screen, under "Seals", select "extend". • This will force the seal bar to protrude. 	**Clean**: Use the Teflon Wand to clean the seal bar.  Note: Never use any metallic materials on coated surfaces. The seal bar has a ceramic coated surface which can only be cleaned using approved materials.
Inspection: Visually inspect the ceramic coated surface for debris or chips.	

Lubrication of Gears		
Task: Lubrication	**Frequency**: Monthly	**Duration**: 5 min
1. Follow lockout/tagout procedures and remove the back, right back & mid and left back & mid guards.	2. **Lubricate:** Use MolyKote 41 to lubricate all the gears and racks. Every tooth should have a fresh, light coat on it. Move the pressure bar in and out several times and remove excess before reassembly. 	

Side Electrical Assembly #3052759

Item NO.	Part NO.	Description	Visual
1	1072097	Ethernet Hub	
2	1071717	Remote I/O Rack	
3	1071674	Temperature Controller	
4	1072095	Safety Relay (main and aux)	
5	1071670	24v power supply	
6	1022123	48v power supply	
7	1071732	Main Power Disconnect	
8	1071503	Power Entry Module	

9	1072103	Main Fuse
10	1072104	Power Distribution Block (TB1)
11	1072107	Thermocouple Terminals (TB-THC)
12	1036709	Hand-shake relays
13	1074148	Seal Bar SSR
14	1072091	Fuse Terminal
15	1071704	Ground Terminals
16	1071671	Main Terminal Block TB2



Cleaning & Inspection

Side Electrical Assembly #3052759

Task: Remove dust	**Frequency:** Monthly	**Duration:** 1 min

1. Follow lockout/tagout procedures and open the electrical enclosure.

2. **Clean:** Use compressed air to clear any dust or debris.

8 Lynx Troubleshooting

8.1 Fault Codes (red errors)

Category	Error Text	Cause	Fix	Page
Bag film, Photo Eye, & Bag Finger Faults	NO BAG OVER EYE	-No film in machine. -Photo-eye was not covered by the bag.	-Verify that bag is positioned over the photo eye. -Check photo eye function via I/O Settings. -Clean the photo eye lens.	28
	REVERSE FAULT	The bag failed to clear the photo-eye during a rip or reverse movement.	-Clean the photo-eye. -Check that the photo-eye is functioning in the I/O Screen. -Ensure the bag is not slipping during the feed process. -Increase "Reverse Distance" in the advanced settings 2 HMI screen.	19
	FAILED TO OPEN BAG FAULT	Bag open sensor failed to detect the bag during finger engagement.	-Verify the finger sensors are operating correctly on the I/O screen. -Verify the pressure bar pass through position distance is properly set for the bag size. (Improper= Fingers let go due to distance). -Verify the bag open fingers are properly adjusted along the width for the bag size. (Improper= Fingers let go due to width) -Check finger - bag engagement. Determine if fingers may have too much or not enough material to properly engage.	46
	MAILER REGISTRATION TIMEOUT	Bag edge photo-eye failed to detect new bag edge.	Ensure the bag is not stuck, bunched, or has not reversed past the nip rollers.	28
	MAILERS LOW FAULT	Bag supply is running low.	Load new bags.	28
	OPEN BAG WAS REMOVED	A verified open bag no longer registers with the bag open sensor.	Verify the Load Shelf properly supports the bag during filling. An improperly supported bag may shift or slip off the shelf and pull the bag away from the fingers.	**Error! Bookmark not defined.**
Printer Carriage	MACHINE OPEN FAULT	Printer carriage closed proximity sensor not activated.	-The proximity sensor requires ferrous metal to activate. -Verify proximity sensor function in I/O Settings. -Verify that the proximity sensor is at the correct height to detect the closed printer carriage.	55

Clamp Faults	CLAMP CLOSE TIMEOUT	Clamp did not reach a close position in the allotted time.	-Verify there is no product in the way of the pressure bar and that it can fully close. -Determine if the fault only occurs with product in the bag. If so, the bag deflator may need adjusting. -Check the cam drive assembly, pressure bar assembly, and seal bar assembly for binding or added load.	44 51 60
	CLAMP OPEN TIMEOUT	Clamp did not reach an open position in the allotted time.	Check the cam drive assembly for binding.	44 51 60
Pressure Bar	PRESSURE BAR OBSTRUCTION FAULT	An obstruction prevented the pressure bar from completing its cycle.	-Verify there is no product in the way of the pressure bar and that it can fully close. -Determine if the fault only occurs with product in the bag. If so, the bag deflator may need adjusting. -Check the pressure bar assembly for binding. -Verify that the electrical and vacuum lines have enough slack for normal operation.	51
	PRESSURE BAR OPEN TIMEOUT	Pressure bar failed to complete its open cycle.	-Check the pressure bar assembly for binding. -Verify that the electrical and vacuum lines have enough slack for normal operation.	
	PRESSURE BAR CLOSE TIMEOUT	Pressure bar failed to complete its close cycle.	-Verify there is no product in the way of the pressure bar and that it can fully close. -Determine if the fault only occurs with product in the bag. If so, the bag deflator may need adjusting. -Check the pressure bar assembly for binding. -Verify that the electrical and vacuum lines have enough slack for normal operation.	
Seal Bar	HIGH TEMP FAULT	Seal bar temperature is higher than the allowed threshold away from the temperature setpoint.	-Do not operate. Wait for temperature to decrease to an acceptable range before resuming operation. -If fault continues, check operation of thermocouple and temperature controller.	60
	LOW TEMP FAULT	Seal bar temperature is lower than the allowed threshold away from the temperature setpoint.	-Do not operate. Wait for temperature to increase to an acceptable range before resuming operation. -If fault continues, check operation of thermocouple and temperature controller.	

Seal Flattener	SEAL FLATTENERS OPEN TIMEOUT	Seal Flatteners failed to complete their motion to extend.	-Verify there are no obstructions impeding the seal flatteners. -Verify the bag is centered during the cycle. -Verify the outside seal flattener positions are not wider than the bag width (bag width offset setting) -Check the belt, cam, and general mechanical assembly.	58
	SEAL FLATTENERS CLOSE TIMEOUT	Seal Flatteners did not complete their motion to retract.	-Verify there are no obstructions impeding the seal flatteners. -Check the belt, cam, and general mechanical assembly.	
Printer	BARCODE	-The print quality of the label is poor and cannot scan. -Only a barcode verifier can produce this fault.	-Clean the barcode scanner. -Verify the barcode scan distance and scan offset settings are correct in the advanced settings 3 screen.	54
	PRINTER RIBBON FAULT	Sensor failed to detect ribbon movement.	-Check printer ribbon for web breaks. -Clean the printer ribbon sensor. -Verify the ribbon motor turns by turning it on in the I/O screen. -Manually rotate the ribbon rewind shaft while monitoring the sensor display. The bars should increase and decrease as the surface of the shaft changes distances from the sensor. The sensor indication distance can be adjusted on the sensor using a screwdriver.	
Clamp Motor	CLAMP MOTOR DRIVE OVERHEAT	The temperature sensor reached the upper limit of operating temperature.	- Verify motor drive is physically hot. - Check if there is anything present that would prevent heat dissipation. - Note: this error can be triggered if ambient temperature is too high.	44 51 60
	CLAMP MOTOR EXCESSIVE POSDEV (POSITION DEVIATION)	The deviation between the command position and feedback position exceeded the value set in the "Excessive position deviation alarm" parameter in the motor shaft during current cycle.	-Verify there are no obstructions. -Verify there are no mechanical assembly problems, such as binding or extra drag/load on assembly.	
	CLAMP MOTOR OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify the motor is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered	

			if ambient temperature is too high.	
	CLAMP MOTOR NETWORK BUS ERROR	During operation, the host controller for the network converter showed a disconnection status.	Check the integrity of the connector and cables between the drive and the clamp motor.	
	CLAMP MOTOR OVERCURRENT	The motor, cable and driver output circuit is short-circuited.	Check the integrity of the connector and cables between the drive and the clamp motor.	
	CLAMP MOTOR OVERLOAD	Applied load exceeding the maximum torque of motor applied for the time exceeding the value set in the "Overload alarm" parameter.	-Verify there is no product in the way of the pressure bar and that it can fully close. -Determine if the fault only occurs with product in the bag. If so, the bag deflator may need adjusting. -Check the cam drive, pressure bar, and seal bar assemblies for binding or added load.	
	CLAMP MOTOR OVERSPEED	The feedback speed of the motor output shaft exceeded the specified value.	-Check the cam drive, pressure bar, and seal bar assemblies for binding or added load.	
	CLAMP MOTOR OVERVOLTAGE	The power supply voltage exceeded the allowable value.	-Check the cam drive, pressure bar, and seal bar assemblies for binding or added load. -Check power supply -Check the integrity of the connector and cables between the drive and the clamp motor.	
	CLAMP MOTOR SOFTWARE OVERTRAVEL	The motor position reached the set value of the software travel limit.	-Reset machine. If the problem persists, contact Service. -The motor may need to be "re-homed".	
	CLAMP MOTOR UNDERVOLTAGE	The power cut off momentarily or the voltage registered low.	-Check power supply -Check the integrity of the connector and cables between the drive and the clamp motor.	
Load Plate Motor	LOAD PLATE MOTOR DRIVE OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	- Verify motor drive is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	**Error! Bookmark not defined.**
	LOAD PLATE MOTOR EXCESSIVE POSDEV (POSITION DEVIATION)	The deviation between the command position and feedback position exceeded the value set in the "Excessive position deviation alarm" parameter in	-Verify there are no obstructions. -Verify there are no mechanical assembly problems, such as binding or extra drag/load on assembly.	

		the motor shaft during current on.		
	LOAD PLATE MOTOR NETWORK BUS ERROR	During operation, the host controller for the network converter showed a disconnection status.	Check the integrity of the connector and cables between the drive and the load plate motor.	
	LOAD PLATE MOTOR OVERCURRENT	The motor, cable and driver output circuit is short-circuited.	Check the integrity of the connector and cables between the drive and the load plate motor.	
	LOAD PLATE MOTOR OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify the motor is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	
	LOAD PLATE MOTOR OVERLOAD	A load exceeding the maximum torque of motor applied for the time exceeding the value set in the "Overload alarm" parameter.	-Check the load plate assembly for binding or added load.	
	LOAD PLATE MOTOR OVERSPEED	The feedback speed of the motor output shaft exceeded the specified value.	-Check the load plate assembly for binding or added load.	
	LOAD PLATE MOTOR OVERVOLTAGE	The power supply voltage exceeded the allowable value.	-Check the load plate assembly for binding or added load. -Check power supply -Check the integrity of the connector and cables between the drive and the load plate motor.	
	LOAD PLATE MOTOR SOFTWARE OVERTRAVEL	The motor position reached the set value of the software travel limit.	-Reset machine. If the problem persists, contact Service. -The motor may need to be "re-homed".	
	LOAD PLATE MOTOR UNDERVOLTAGE	The power cut off momentarily or the voltage became low.	-Check power supply -Check the integrity of the connector and cables between the drive and the load plate motor.	
Feed Motor	FEED MOTOR DRIVE OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify motor drive is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	44

	FEED MOTOR EXCESSIVE POSDEV (POSITION DEVIATION)	The deviation between the command position and feedback position exceeded the value set in the "Excessive position deviation alarm" parameter in the motor shaft during current on.	-Verify there are no obstructions. -Verify there are no mechanical assembly problems, such as binding or extra drag/load on assembly.	
	FEED MOTOR NETWORK BUS ERROR	During operation, the host controller for the network converter showed a disconnection status.	Check the integrity of the connector and cables between the drive and the feed motor.	
	FEED MOTOR OVERCURRENT	The motor, cable and driver output circuit is short-circuited.	Check the integrity of the connector and cables between the drive and the feed motor.	
	FEED MOTOR OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify the motor is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	
	FEED MOTOR OVERLOAD	A load exceeding the maximum torque of motor applied for the time exceeding the value set in the "Overload alarm" parameter.	-Check the integrity of the connector and cables between the drive and the feed motor. -Check feed roller assembly for obstructions or binding. -Check that the face plate is not contacting the feed roller.	
	FEED MOTOR OVERSPEED	The feedback speed of the motor output shaft exceeded the specified value.	-Check the feed drive assembly for binding or added load.	
	FEED MOTOR OVERVOLTAGE	The power supply voltage exceeded the allowable value.	-Check the feed drive assembly for binding or added load. -Check power supply -Check the integrity of the connector and cables between the drive and the load plate motor.	
	FEED MOTOR SOFTWARE OVERTRAVEL	The motor position reached the set value of the software travel limit.	-Reset machine. If the problem persists, contact Service. -The motor may need to be "re-homed".	
	FEED MOTOR UNDERVOLTAGE	The power cut off momentarily or the voltage became low.	-Check power supply -Check the integrity of the connector and cables between the drive and the feed motor.	
Pressure Bar	PRESSURE BAR MOTOR DRIVE OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify motor drive is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered	51

			if ambient temperature is too high.	
	PRESSURE BAR MOTOR EXCESSIVE POSDEV (POSITION DEVIATION)	The deviation between the command position and feedback position exceeded the value set in the "Excessive position deviation alarm" parameter in the motor shaft during current on.	-Verify there are no obstructions. -Verify there are no mechanical assembly problems, such as binding or extra drag/load on assembly.	
	PRESSURE BAR MOTOR DRIVE OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify the motor is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	
	PRESSURE BAR MOTOR NETWORK BUS ERROR	During operation, the host controller for the network converter showed a disconnection status.	Check the integrity of the connector and cables between the drive and the clamp motor.	
	PRESSURE BAR MOTOR OVERCURRENT	The motor, cable and driver output circuit is short-circuited.	Check the integrity of the connector and cables between the drive and the clamp motor.	
	PRESSURE BAR MOTOR OVERLOAD	A load exceeding the maximum torque of motor applied for the time exceeding the value set in the "Overload alarm" parameter.	-Verify there is no product in the way of the pressure bar and that it can fully close. -Determine if the fault only occurs with product in the bag. If so, the bag deflator may need adjusting. -Check the cam drive, pressure bar, and seal bar assemblies for binding or added load.	
	PRESSURE BAR MOTOR OVERSPEED	The feedback speed of the motor output shaft exceeded the specified value.	-Check the pressure bar assembly for binding or added load.	
	PRESSURE BAR MOTOR OVERVOLTAGE	The power supply voltage exceeded the allowable value.	-Check the pressure bar assembly for binding or added load. -Check power supply -Check the integrity of the connector and cables between the drive and the clamp motor.	
	PRESSURE BAR MOTOR SOFTWARE OVERTRAVEL	The motor position reached the set value of the software travel limit.	-Reset machine. If the problem persists, contact Service. -The motor may need to be "re-homed".	
	PRESSURE BAR MOTOR UNDERVOLTAGE	The power cut off momentarily or the voltage became low.	-Check power supply -Check the integrity of the connector and cables between	

			the drive and the pressure bar motor.	
Seal Flatteners	SEAL FLATTENERS MOTOR DRIVE OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify motor drive is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	58
	SEAL FLATTENERS MOTOR EXCESSIVE POSDEV (POSITION DEVIATION)	The deviation between the command position and feedback position exceeded the value set in the "Excessive position deviation alarm" parameter in the motor shaft during current on.	-Verify there are no obstructions. -Verify there are no mechanical assembly problems, such as binding or extra drag/load on assembly. -Verify the outside seal flattener positions are not wider than the bag width (bag width offset setting)	
	SEAL FLATTENERS MOTOR OVERHEAT	The detection temperature sensor reached the upper limit of operating temperature.	-Verify the motor is physically hot. -Check if there is anything present that would prevent heat dissipation. -Note: this error can be triggered if ambient temperature is too high.	
	SEAL FLATTENERS MOTOR NETWORK BUS ERROR	During operation, the host controller for the network converter showed a disconnection status.	Check the integrity of the connector and cables between the drive and the seal flattener motor.	
	SEAL FLATTENERS MOTOR OVERCURRENT	The motor, cable and driver output circuit is short-circuited.	Check the integrity of the connector and cables between the drive and the feed motor.	
	SEAL FLATTENERS MOTOR OVERLOAD	A load exceeding the maximum torque of motor applied for the time exceeding the value set in the "Overload alarm" parameter.	-Check the integrity of the connector and cables between the drive and the seal flattener motor. -Check seal flattener assembly for obstructions or binding.	
	SEAL FLATTENERS MOTOR OVERSPEED	The feedback speed of the motor output shaft exceeded the specified value.	-Check the seal flattener assembly for binding or added load.	
	SEAL FLATTENERS MOTOR OVERVOLTAGE	The power supply voltage exceeded the allowable value.	-Check the feed drive assembly for binding or added load. -Check power supply -Check the integrity of the connector and cables between the drive and the seal flattener motor.	

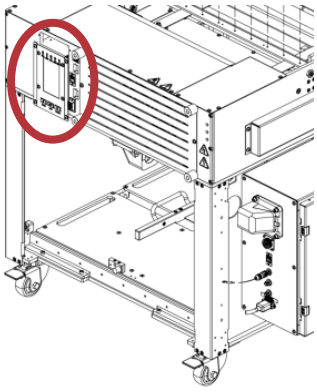
	SEAL FLATTENERS MOTOR SOFTWARE OVERTRAVEL	The motor position reached the set value of the software travel limit.	-Reset machine. If the problem persists, contact Service. -The motor may need to be "re-homed".	
	SEAL FLATTENERS MOTOR UNDERVOLTAGE	The power cut off momentarily or the voltage became low.	-Check power supply -Check the integrity of the connector and cables between the drive and the seal flattener motor.	

9 Lynx Printer – Use, Indicators, and Faults

9.1 Use

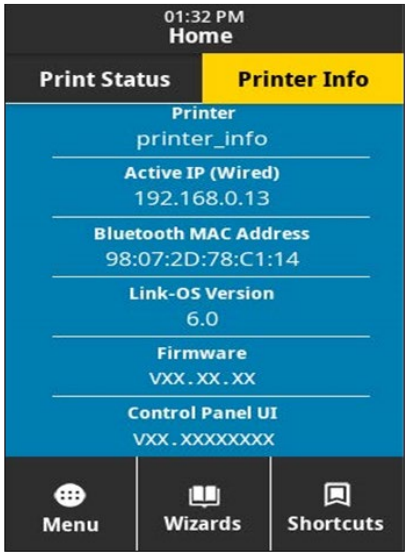
About the Printer

- The printer interface is located on the rear-right side of the Lynx
- The make and model of the printer is: Zebra - ZT610/ZT620 Color Touch
- A complete users guide can be found on Zebra's.



Home Screen

Left - Right



Home Screen Buttons

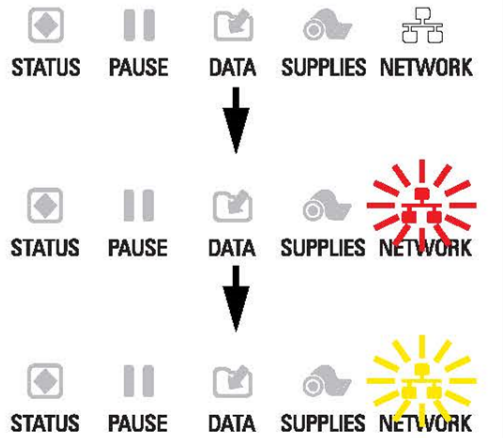
Menu - Allows a user to change the printer settings.

Wizards - Allows a user to change printer settings by going through the wizard prompts.

Shortcuts – User determined quick links.

For a complete user's guide, see the Zebra user's manual.

9.2 Indicator Lights

Printer Indicator Lights	
	• *STATUS light flashing red* The printer is unable to read the dpi setting of the printhead.
	• *NETWORK light off* No Ethernet link is available.
	• *NETWORK light steady green* A 100 Base link was found.
	• *NETWORK light steady yellow* A 10 Base link was found.
	• *NETWORK light steady red* An Ethernet error condition exists. The printer is not connected to your network.
	• *NETWORK light off* A radio was found during power-up. The printer is attempting to associat with the network. The light flashes red while the printer associates with th network. The light then flashes yellow while the printer is authenticating with the network.
	• *NETWORK light steady green* The radio is associated with your network and authenticated, and the WLAN signal is strong.
	• *NETWORK light flashing green* The radio is associated with your network and authenticated, but the WLAN signal is weak.
	• *NETWORK light steady red* A WLAN error condition exists. The printer is not connected to your network.

	• *STATUS light steady green (other lights steady yellow for 2 seconds during printer power-up)* The printer is ready.
	• PAUSE light steady yellow. The printer is paused.
	• *STATUS light steady red* • *SUPPLIES light steady red* The media supply is out. The printer needs attention and cannot continue without user intervention.
	• *STATUS light steady red* • *SUPPLIES light flashing red* The ribbon supply is out. The printer needs attention and cannot continue without user intervention.
	• *STATUS light steady yellow* • *SUPPLIES light flashing yellow* The printer is in Direct Thermal mode, which does not require ribbon; however, ribbon is installed in the printer.
	• *STATUS light steady red* • *PAUSE light steady yellow* The printhead is open. The printer needs attention and cannot continue without user intervention.
	• *STATUS light steady yellow* The printhead is over temperature.  The printhead may be hot and could cause severe burns. Allow the printhead to cool.
	• *STATUS light flashing yellow* This indicator light flashing indicates one of the following: **a.** The printhead is under temperature. **b.** The power supply is over temperature. **c.** The main logic board (MLB) is over temperature.
	• *STATUS light steady red* • *PAUSE light steady red* • *DATA light steady red* The printhead was replaced with one that is not a genuine Zebra ™ printhead. Install a genuine Zebra ™ printhead to continue.

9.3 Faults and Alerts

Display Message	Possible Causes	Recommended Solutions
Head Open Printhead is open. Close the printhead.	**1.** Printhead is open. **2.** Printhead Open Sensor faulty	**1.** Close the printhead completely. **2.** Call a service technician to replace the sensor.
Medial Out Media is out. Load additional media.	**1.** The media is not loaded or is loaded incorrectly. **2.** Misaligned media sensor. **3.** The printer is set for noncontinuous media, but continuous media is loaded.	**1.** Load media correctly. **2.** Check the position of the media sensor. **3.** Install the proper media type, or reset printer for the current media type **4.** Calibrated the printer.
Paper Jam Media jammed. Check the media.	**1.** There is an issue with the media in the media path	**1.** Check the media that is loaded incorrectly or stuck to components in the media path. **2.** Check if media is wrapped around the platen roller. Carefully remove any labels. If necessary, clean the platen roller to remove adhesive.
Ribbon Out Ribbon is out. Replace the ribbon.	In thermal transfer mode: **1.** Ribbon is not loaded. **2.** Ribbon is loaded incorrectly. **3.** The ribbons sensor does not detect ribbons. **4.** Media is blocking the ribbon sensor.	**1.** Load ribbon correctly. **2.** Calibrated the printer.
Ribbon In Ribbon was detected in Direct Thermal mode. Remove the ribbon.	**1.** Ribbon is loaded, but the printer is set for direct thermal mode.	**1.** Ribbon is not required with direct thermal media. If you are using direct thermal media, remove the ribbon. **2.** If the message persists with no ribbon in the printer, calibrate the printer. **3.** If you are using thermal transfer media, which requires ribbon, set the printer for thermal transfer move.
Head Identification Failed Printhead is not a Zebra™ certified product. Replace the printhead.	**1.** The printhead was replaced with one that is not a genuine Zebra printhead.	**1.** Install a genuine Zebra™ printhead.
Head Element Out A printhead element failed. The printhead may need to be replaced.	**1.** A printhead element is no longer working.	**1.** If the location of the failed element affects printing, replace the printhead.

Replace Printhead Replace the printhead.	**1.** The printhead is nearing the end of its life and should be replaced.	**1.** Replace the printhead.
Head Maintenance Needed Clean the printhead.	**1.** The printhead needs to be cleaned.	**1.** Clean the printhead and platen roller.
Head Over Temperature Printhead is too hot. All printing is halted.	**1.** The printhead is over temperature.	**1.** Allow the printer to cool. Printing automatically resumes when the printhead elements cool to an acceptable operating temperature. **2.** If this error persists, consider changing where the printer is located or using a slower print speed.
Head Under Temperature Printhead is too cold. All printing is halted. **Head Thermistor Fault** Faulty thermistor detected. Replace the printhead. The printer shows one of these messages or cycles between them.	**1.** The printhead data cable is not properly connected **2.** The printhead has a faulty thermistor.	**1.** Call a technician to hook up the printhead correctly.
Head Under Temperature Printhead is too cold. All printing is halted.	**1.** The printhead temperature is approaching its lower operating limit. **2.** The printhead data cable is not properly connected. **3.** The print head has a faulty thermistor.	**1.** Continue printing while printhead reaches the correct operating temperature. If the error remains, the environment may be too cold for proper printing. Relocate the printer to a warmer area. **2.** Call a service technician to hook up the printhead correctly. **3.** Call a service technician to hook up the printhead correctly.
Cutter Error A cutter error occurred. Restart the printer.	The cutter blade is sharp. Do not touch or rub the blade with your fingers. **1.** The cutter blasé is in the media path.	**1.** Turn off the printer power and unplug the printer. Inspect the cutter module for debris and clean as needed.
Out of Memory Storing XXX XXX not stored. Out of memory.	**1.** There is not enough memory to perform the function specified.	**1.** Free up some of the printer's memory by adjusting the label format or printer parameters. One way to free up memory is to adjust the print width to the actual width of the label instead of leaving the print width set to the default.

		2. Ensure that the data is not directed to a device that is not installed or is unavailable. **3.** If problem persists, call a service technician.