

MAX PRO 18[©]

Operator Manual Model 1174-02



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PREFIX

The **MAX™ PRO 18**® Continuous Bagging System, redesigned from the ground up for increased productivity and easier operation. The **MAX™ PRO 18**® is an effective solution for manually bagging product, dramatically reducing packaging costs and improving package quality. The **MAX™ PRO 18**® platform features an integrated ZT610 Zebra pivoting printhead.

Print Method	Thermal Transfer, directly onto surface of bag
Print Speeds	14 ips at 203 dpi 12 ips at 300 dpi
Print Resolution	203, 300 dpi
Print Width (max.)	4.09" (104 mm)

Your Sharp **MAX™ PRO 18**® is the result of extensive research and field testing with the following features:

- Advanced diagnostics monitor individual machine components, notifying technicians of any potential problems and allowing replacement parts to be ordered before a failure occurs.
- Networkable HMI responds like a smartphone: faster and more intuitive, with easy to understand icons.
- Pass-through size now adjustable via the HMI, with no tools required.
- Simplified bag threading system allows even novice operators to load new bags easily.
- Sharp **MAX™ PRO 18**® accommodates 18" wide bags with an 8" pass-through depth.
- Save job settings and label designs in HMI for easy access.
- Incorporating Zebra thermal printers permits direct printing onto the package for bar codes, graphics, and alphanumeric fonts.
- Movable printing head sets to precise positions, eliminating queuing and reducing material cost and scrap.
- Decrease thermal ribbon usage as much as 90% with reduced spacing between impressions, printing with alternative registrations, and adjusting impression placement to maximize ribbon usage.
- HMI, printer, and PLC can be networked, so they can be accessed at any time from almost anywhere.
- Use remote label printing, production reporting, and SCADA (supervisory control and data acquisition) control.
- New design utilizes fewer components, decreasing downtime and increasing ease of maintenance.
- Improved error reporting pinpoints problems for hassle free troubleshooting.
- The color touchscreen display provides troubleshooting guidance with exploded view drawings, manufacturer and part numbers, and .html help files with hyper links to explain any term.
- Off-the-shelf, nonproprietary parts can be purchased at most MRO stores.

The materials used were selected for maximum durability and optimum performance. Every unit is thoroughly inspected and tested prior to shipment.

GENERAL INFORMATION

ABOUT THIS MANUAL

This manual has been prepared for your use in operating model 1174-02 of the Sharp **MAX™ PRO 18**[®] Continuous Bagging System. Images and instructions may differ slightly for older models, but basic function is the same. Included in the manual are helpful facts on operating and basic troubleshooting information.

It is important that you familiarize yourself with the product as much as possible before operating or troubleshooting.

Make sure you read through the *EQUIPMENT SAFETY FEATURES* and *INTRODUCTION* sections of this manual before operating this machine.

- Upon receipt, unpack and inspect the unit for damages that may have occurred during shipment. Sharp Packaging is not in any way responsible for any damages that occur during transport. If you receive damaged equipment, it is your responsibility to make a claim with the transporter.
- Read instructions carefully. 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.
- The instructions and data in this manual are vital to the proper installation and operation of this equipment. In order to avoid delays due to faulty installation and operation of the machine, please see that these instructions are read by the persons who will install or operate or maintain the machine.
- The **WARNING** instructions issued on this manual are not meant to cover all possible 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 persons 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 which can produce bodily injury and/or property damage. Contact Sharp Packaging about any problems or conditions you do not fully understand.

DEFINITION OF TERMS



Throughout this manual, you will find the following safety notices with this accompanying symbol.

This symbol signifies important safety issues regarding the operation and maintenance of the Sharp **MAX™ PRO 18**[®].



CAUTION

GENERAL CAUTION: Indicates information important to the proper operation of the equipment, failure to observe may result in damage to the equipment and minor bodily injury.



WARNING

GENERAL WARNING: Indicates information important to the proper operation of the equipment. Failure to observe warning may result in damage to the equipment and severe bodily injury or death.

SAFETY RULES & PROCEDURES

The machine requires regular, periodic maintenance to ensure reliable service. No maintenance should be performed unless the safety precautions for maintenance are thoroughly understood.

- 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.
- Always ensure that all mechanical motion has stopped and allow any heated components to cool down before removing any machine parts.
- Keep the area surrounding the machine free from debris. Spent film/bags should not be allowed to accumulate around bagger.

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

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.

EMERGENCY STOP (E-STOP) BUTTON

An Emergency Stop (Red) Button is part of HMI/PC Box. The E-Stop immediately stops the machine when pressed by de-energizing power to the PLC outputs, motors, and motor drives.

FIRE PREVENTION

Keep a fire extinguisher near the machine. Keep machine away from any sparks, flames and flammable materials. Unplug the machine before maintaining or cleaning. All electrical components must be in good condition and clean.

Electrical fires can occur if any wires are scratched, corroded, color-faded, lost their insulation or have damaged wire ends. These should be changed immediately.

Any exposed electrical components should never come into contact with the ground-connector and any other electrically conductive objects such as tools.

It is extremely important to follow all of the safety guidelines and warning detailed inside the Sharp Operator Manual before removing any guards or servicing the machine.

EQUIPMENT SAFETY FEATURES

MACHINE GUARDS

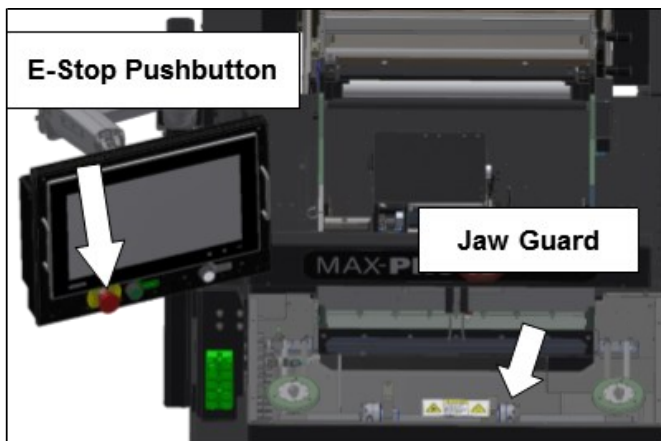
The Sharp **MAX™ PRO 18**[®] is equipped with guards covering the heated sealing area and the underside of the Head Assembly. **DO NOT** operate the **MAX™ PRO 18**[®] with these or any other guards removed.

The Top Lexan[®] Guard sits on top of the Jaw Guard. The shape allows for loading of product into the bags. Sharp Packaging recommends the **MAX™ PRO 18**[®] be equipped with the optional Dual Palm Buttons to start the cycle to ensure the operator's hands are clear of the Sealing and Pressure Bars when the machine is cycled.

DO NOT operate the unit with this feature removed.

An Emergency-Stop Button is located on the Control Panel, which immediately stops the machine when pressed by de-energizing power to the Master Control Relay, PLC outputs, motor, motor drive and air valves.

OBSTRUCTION SENSING JAW



The Sealing Assembly is equipped with Obstruction Sensing Sensors, which can detect an obstruction in the Sealing Area. If the Jaw Sensors detect an object preventing the Jaw from closing, the Sensors de-energize and place the machine into a fault condition.

A message appears in the display informing the Operator of the Jaw Fault, allowing the Operator to clear the Sealing Area and reset the bagging cycle.



WARNING!

The Sharp **MAX™ PRO 18**[®] is equipped with Jaw Obstruction Detection Sensors. The sensors are not designed, nor intended, to be safety sensors.

EQUIPMENT SAFETY FEATURES

SAFETY LABELS

Side Crush And Burn Hazard



This label is placed onto the Sharp **MAX™ PRO 18**[®] wherever a removable shield, or panel, guards the heated sealing area. Always disconnect electrical power from the machine prior to removing any guards and/or panels.

Entanglement Hazard, Rotating Parts



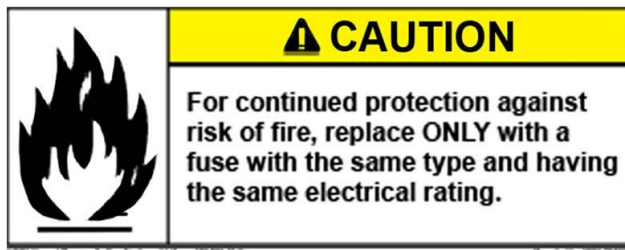
This label is placed where there is the potential of your hands, long hair, jewelry, etc., becoming entangled between two rotating parts. Be sure to secure loose items before approaching and operating the machine.

Moving Parts Can Crush And Cut (Pinch Point)



This label on the Sharp **MAX™ PRO 18**[®] is placed where there is potential of injury due to pinch points or moving parts. Make certain electrical power is disconnected before removing any guards and/or panels.

Risk Of Fire



The following label is located in the proximity of a fused circuit. Be certain to replace blown fuses **ONLY** with fuses with the same electrical rating. Always disconnect electrical power before removing any guards and/or panels and servicing the Sharp **MAX™ PRO 18**[®].

Risk Of Electric Shock



This label is located on the Sharp **MAX™ PRO 18**[®] wherever a removable shield, or panel, guards electrical components. Always disconnect electrical power from machine prior to removing any guards and/or panels with this label.

SPECIFICATIONS

PACKAGING SPECIFICATIONS

	BAG WIDTH	BAG LENGTH	FILM GAUGE
MINIMUM	2" (5 cm)	3.5" (8.89 cm)	1 mil (25 microns)
MAXIMUM	18" (45.72 cm)	40" (101.6 cm)	4 mil (100 microns)

MACHINE SPECIFICATIONS

WIDTH	HEIGHT	DEPTH	WEIGHT	POWER	RATE	OPERATING TEMP	HUMIDITY RANGE
41.5" (105.4 cm)	43.5" (110.4 cm)	71.75" (182.2 cm)	710 lbs. (322.05 kg)	110VAC, 15A	50 BPM ¹	32° - 140° F	10% - 90% RH, Non- Condensing

¹Material, gauge and size of package, along with weight and size of product will cause rate to vary.

TECHNICAL ASSISTANCE

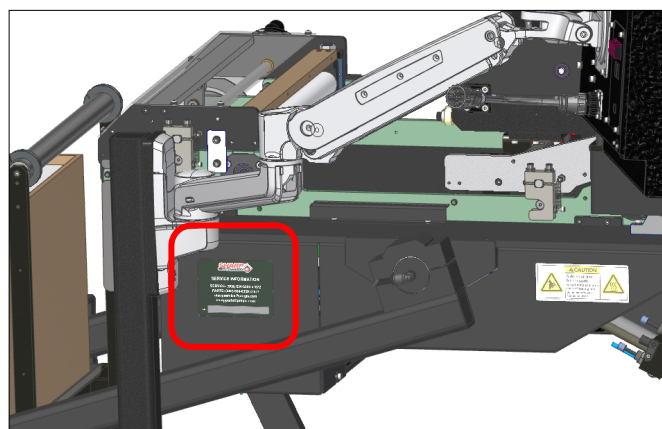
Assistance with your Sharp **MAX™ PRO 18®** can be obtained by contacting Sharp Packaging Systems Technical Service Hotline by phone or e-mail. To help serve you better, Sharp Packaging requests that you provide the serial number of bagger and a brief description of the problem.

Phone: +1 (262) 246-8815 (ext. 1572)

E-mail: sharpservice@pregis.com

SERVICE INFORMATION DECAL

The serial number can be found on the Service Information Decal located on the side of the bagger.





SERVICE INFORMATION

SERVICE: (800) 634-6359 x1572
PARTS: (800) 634-6359 x1571
service@sharppackaging.com
parts@sharppackaging.com

S/N: **MAX18-19L-1174-02-XXX**

In the above example:

MAX18 - Type of bagger.

19L - The year and month bagger was built.

1174-02 - Model Number of bagger.

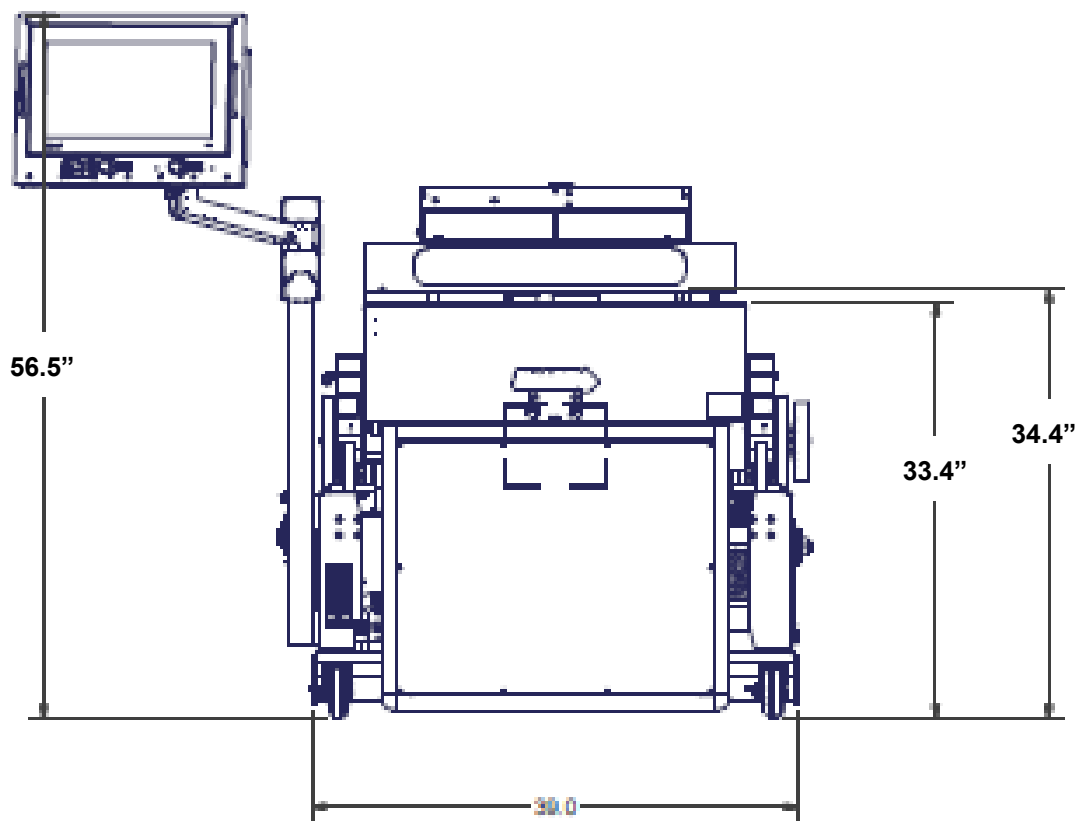
XXX - The number of bagger.

MACHINE DIMENSIONS

FRONT VIEW

Bagger dimensions viewed from front.

Measurements are in inches.

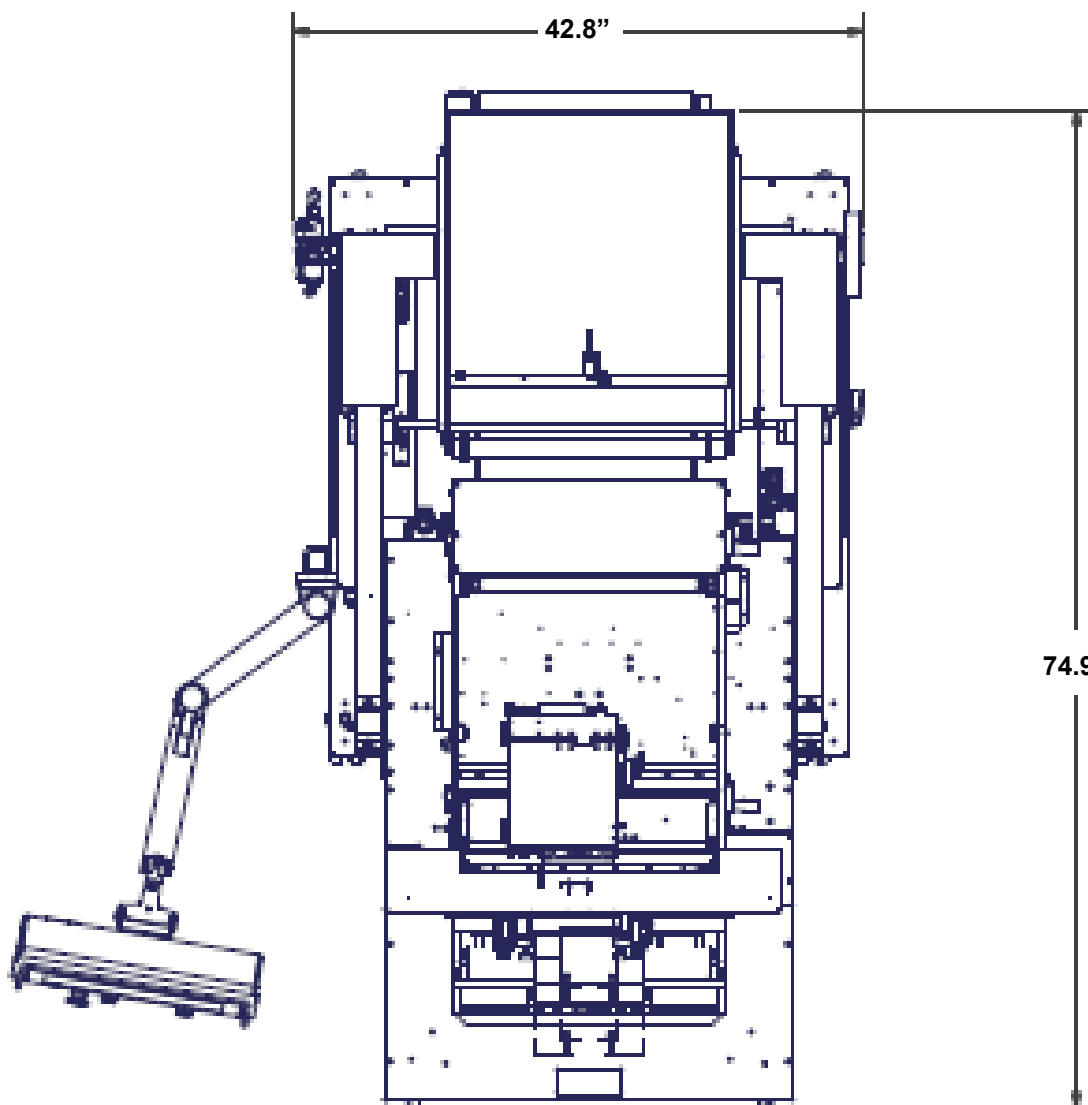


MACHINE DIMENSIONS

TOP VIEW

Bagger dimensions viewed from top.

Measurements are in inches.

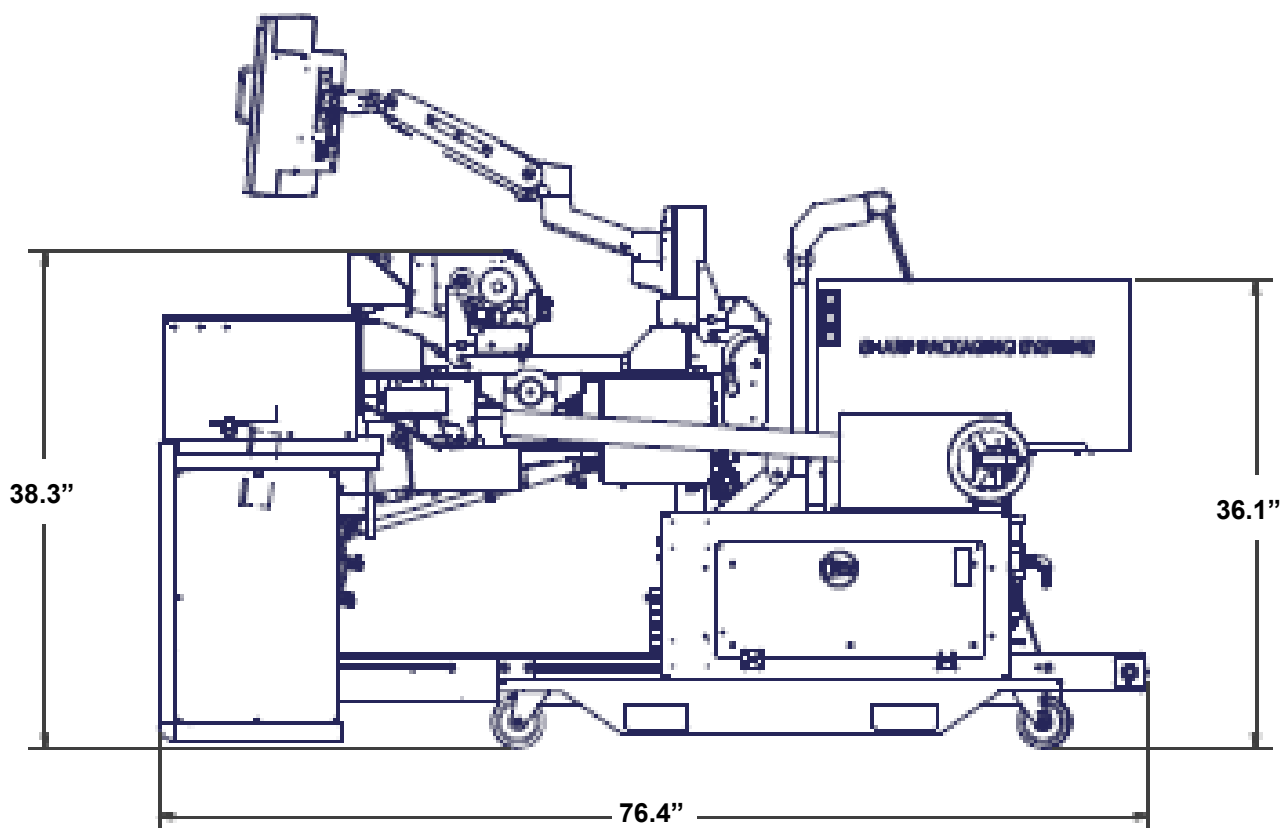


MACHINE DIMENSIONS

SIDE VIEW

Bagger dimensions viewed from side.

Measurements are in inches.



SHARP EZ-BAGS[®] & RIBBON

The Sharp **MAX™ PRO 18**[®] is designed to use a wide variety of bag sized and materials. Sharp EZ-Bags[®] are recommended for optimum operating performance, efficiency and safety. System performance specifications are based on utilizing consistent, high quality, pre-opened bags. Any bag used must meet Sharp Packaging Systems' manufacturing tolerances. The following list shows some of the Sharp EZ-Bags[®] films available through Sharp Packaging Systems, Inc.:

E-Z Bags[®]

- General Purpose
- Xtreme Poly (XP)
- Ultra
- HD Mailer
- Sharp Packaging High Density (SPHD)
- Polypropylene
- Sharp's Military Specification Film
- Gamma Patient
- Sharp's Metalized Barrier Film
- Electric Static Discharge (ESD)
- Modified Atmospheric Packaging (MAP)
- Sharp's Non-Scratch Film
- E-Z Stat™ (Anti-Static)
- Vapor Corrosive Inhibitor (VCI)

Contact Sharp Customer Service at +1 (262) 246-8815 to order Sharp EZ-Bags[®] and for information regarding film and bag specifications.

THERMAL TRANSFER RIBBON

The Sharp **MAX™ PRO 18**[®] uses thermal transfer ribbon to print various information onto the bags as they pass through the machine. The following is a list of ribbon that is available through Sharp Packaging Systems.:

- Standard Direct Wax Ribbon
- Premium Was Resin Ribbon.

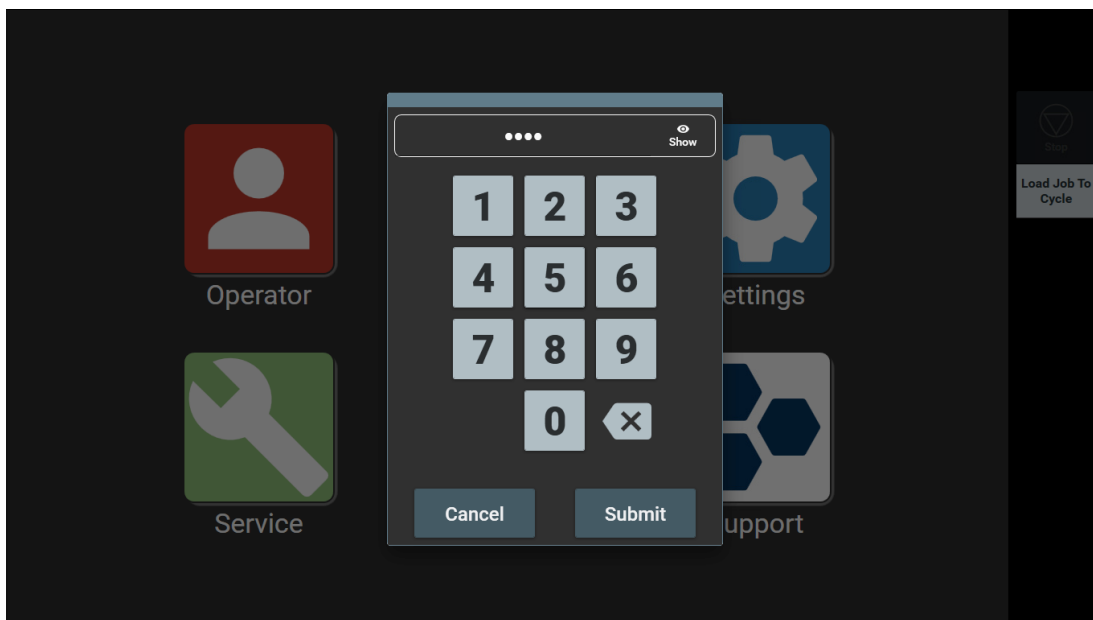
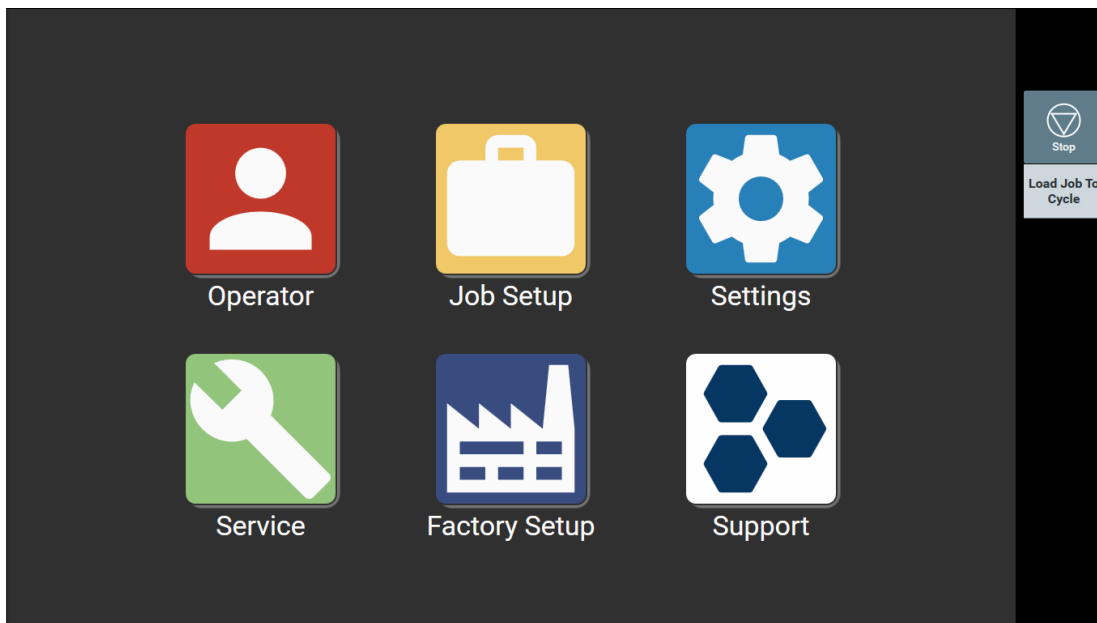
Contact Sharp Customer Service at +1 (262) 246-8815 to order ribbon.

SECURITY

The 'Technician', 'Field Service', and 'Manufacturing' icons are password protected. Pressing any of these three icons will prompt user to type in a password.

The 'Operator' and 'Support' icons are not password protected.

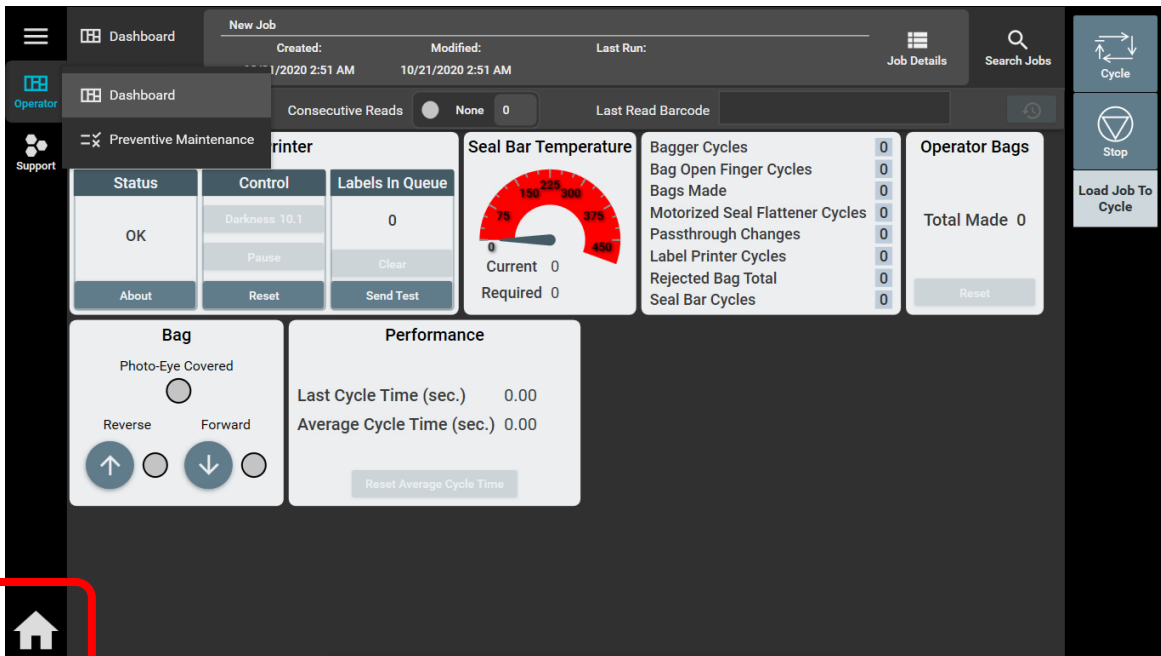
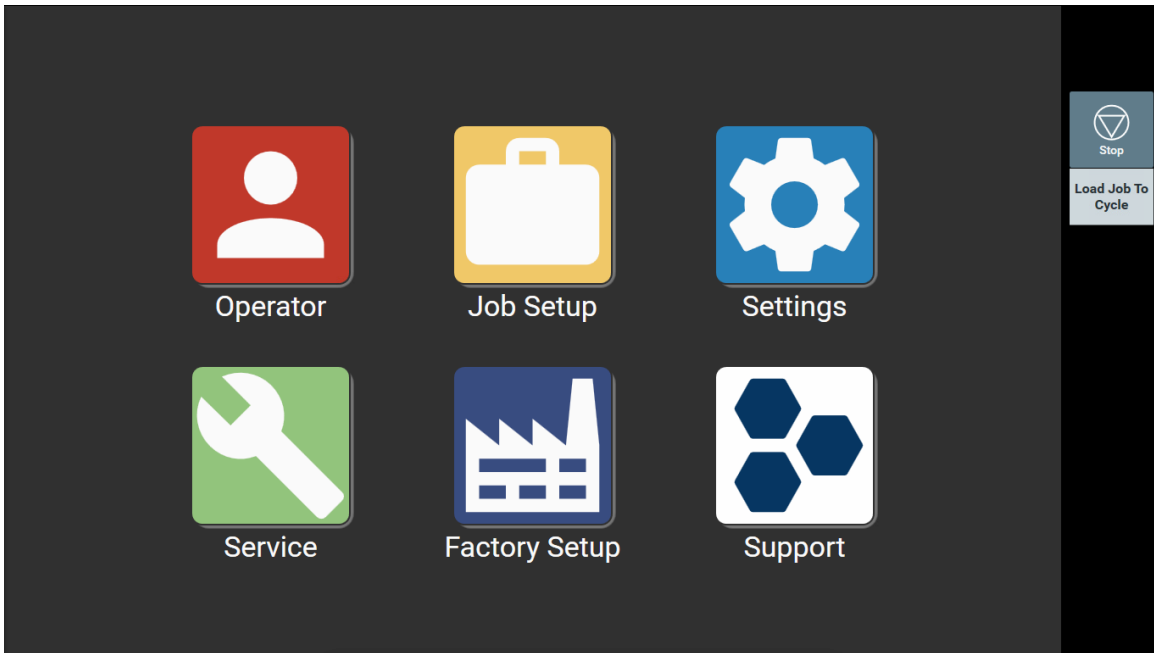
NOTE: See Supervisor or Manager for correct password for each icon.



SCREEN NAVIGATION

HOME SCREEN

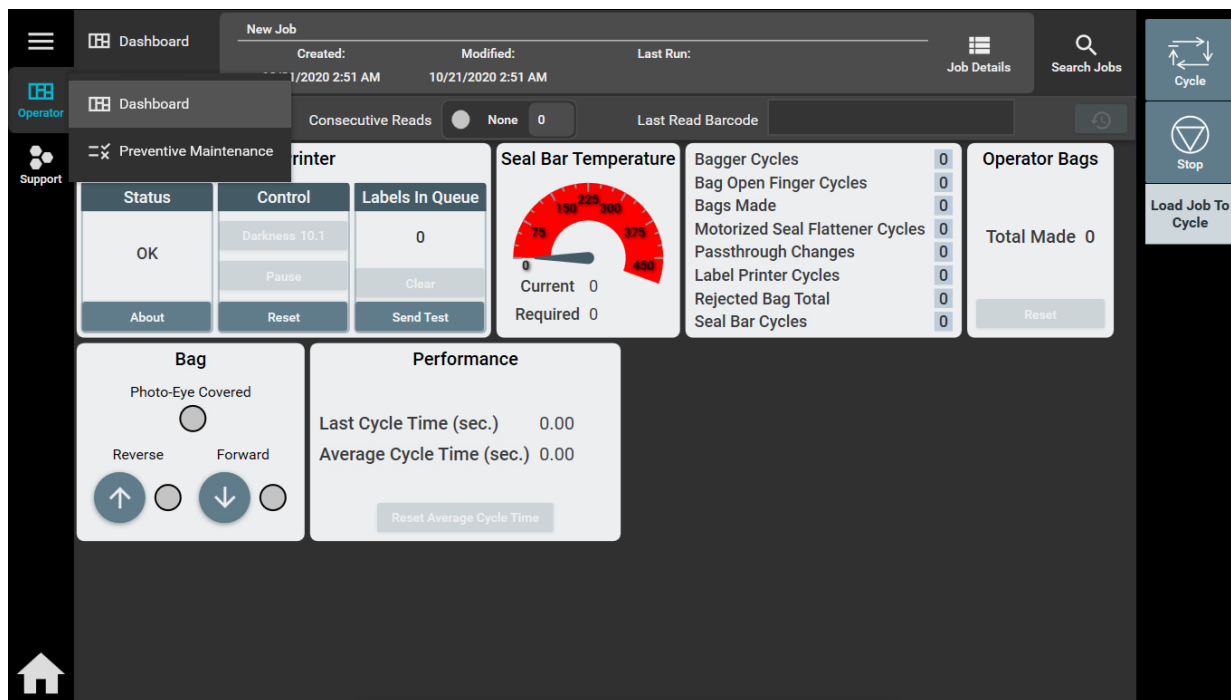
This screen appears at machine start-up and by pressing the home button on bottom left corner of screen. Pressing any of the 5 large buttons on this screen, opens new screen.



SCREEN NAVIGATION

OPERATOR BUTTON

Pressing the **Operator Button** from the Home Screen opens the **Operator Dashboard** Screen. This screen allows Operator to monitor bagger function. Access to this screen is not password protected.



JOB DETAILS

Pressing the Job Detail button opens a pop-up window with bag dimensions and bag feed speed.

SEARCH JOBS

Opens a window that lists all jobs saved in bagger. Green light indicates which job is currently loaded.

LABEL PRINTER

Status: Reported status from Zebra Label Printer. Pressing About button shows details of the printer.

Control: Pause button pauses printer. Only works if you are Service/Factory User.

Darkness: Allows user to change darkness of print. Only works if you are a Service/Factory User.

Reset: Resets internal printer faults (e.g.. Printhead errors)

Labels in Queue: Clear button clears out all labels from printer.

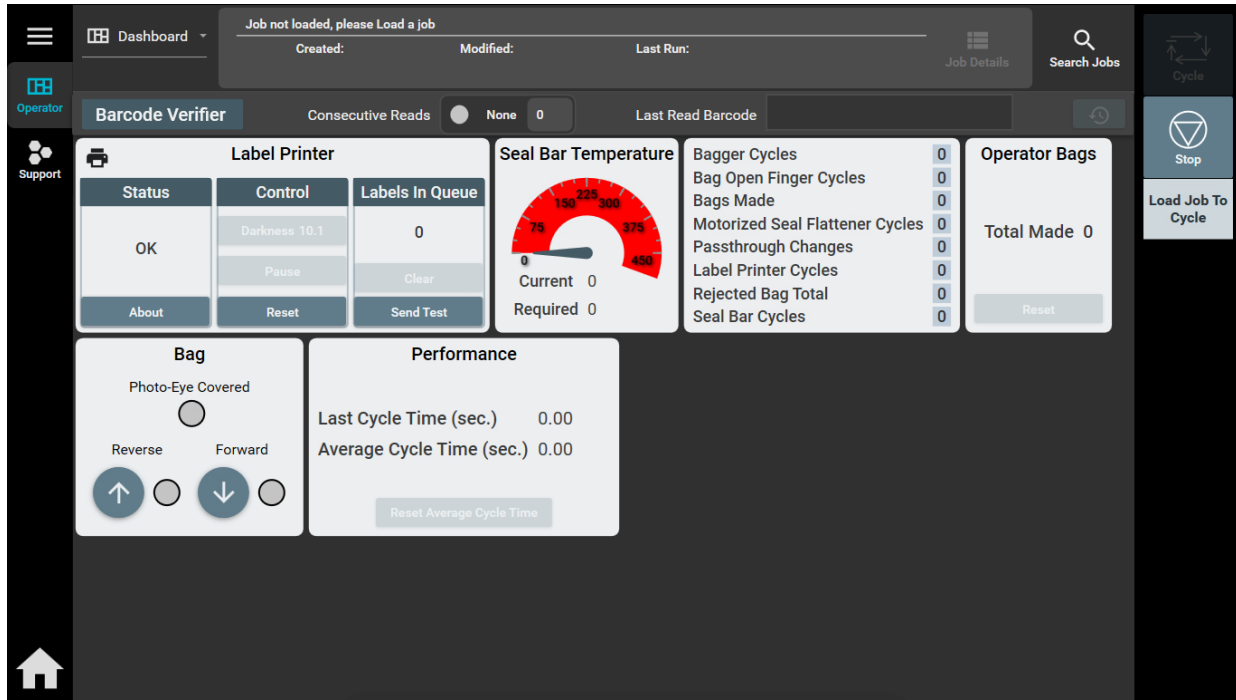
Send Test: Sends 1 test label to printer.

BAG

Photo-eye Covered: When Lit bag is over Photo-eye.

Reverse and Forward: Buttons jog film.

SCREEN NAVIGATION



OPERATOR DASHBOARD - CONTINUED

PERFORMANCE

Last Cycle Time: Displays the actual time of last completed cycle, in seconds.

Average Cycle Time: The average cycle time all cycles, in seconds.

Reset Average Cycle Time: Reset or clears the average cycle time.

SEAL BAR TEMPERATURE

Current: The current temperature of Seal Bar.

Required: The temperature of Seal Bar per settings in loaded job.

MACHINE COUNTERS

Informational display of counters and cycles of bagger.

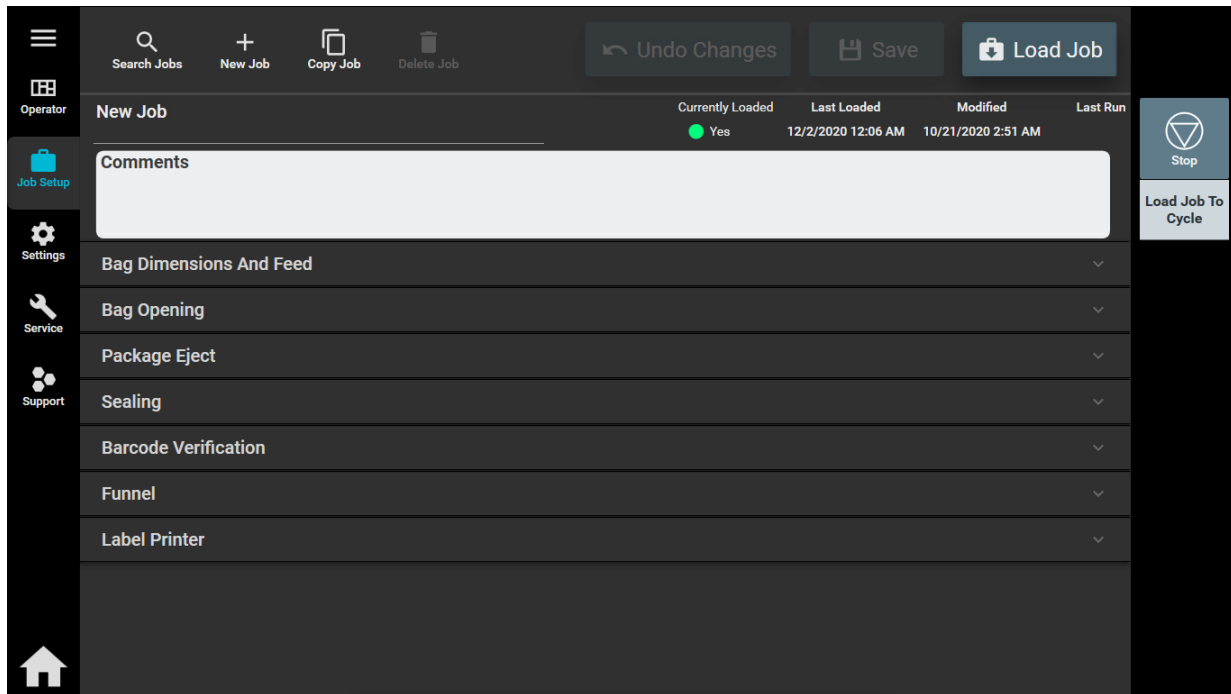
OPERATOR BAGS

Operator Resettable bag counter.

SCREEN NAVIGATION

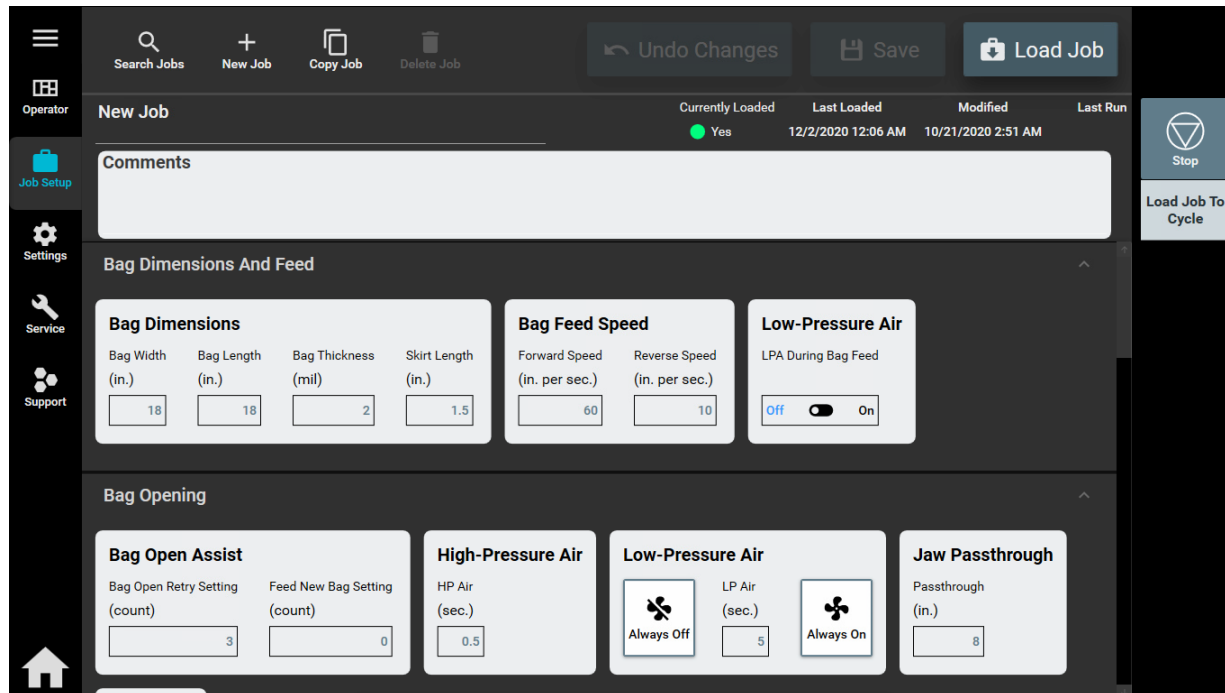
TECHNICIAN BUTTON

Pressing the **Technician Button** from the Home Screen opens the **Job Setup** Screen. This screen allows a User to configure Bag Dimensions and Feed Speed, Bag Opening, Package Eject, Pressure Bar and Seal Bar, Auxiliary Input/output and Printer. Access to this screen is password protected.



SCREEN NAVIGATION

JOB SETUP SCREEN - BAG DIMENSIONS AND FEED SPEED



Any changes made to this screen requires operator to press 'Load Job' button.

BAG DIMENSIONS

Length: This refers to the usable area inside the bag. This is measured from the bottom of the bag to the seal. The typical setting is .5 to 1.5 inches less than the measured overall bag length.

Skirt Length: The distance from the bottom of the bag to the start of the seal.

Width: The width of the loaded bag.

Thickness: The thickness of bag material.

BAG FEED SPEED

Forward: Adjusts the forward web speed in inches per second.

Reverse: Adjusts the reverse web speed in inches per second.

BAG OPENING

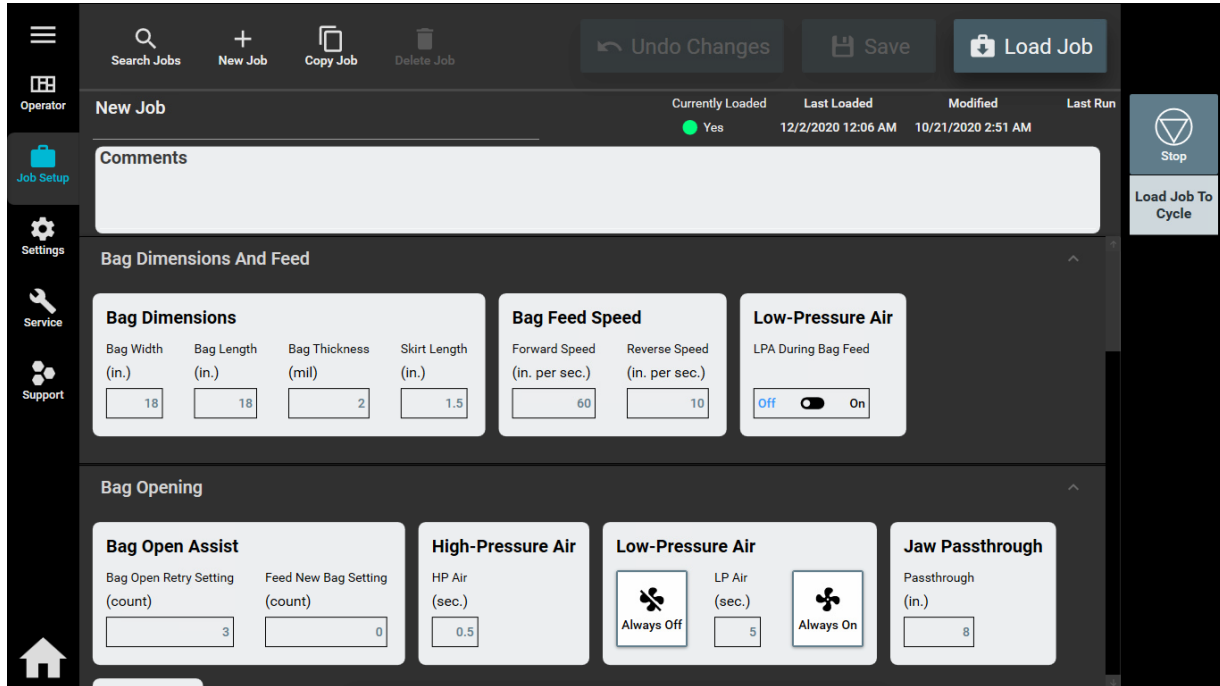
Bag Opening Retry Count: Display the number of attempts Bag Opening Fingers try open bag before feeding new bag out.

LPA

LPA During Bag Feed: Toggle switch to have LPA ON or OFF while bag feeding out. This helps open the bag.

SCREEN NAVIGATION

JOB SETUP SCREEN - BAG OPENING



Any changes made to this screen requires operator to press '**Load Job**' button.

JAW PASS-THRU

Pass-Thru: Sets Pass-thru, will change (move) once job is loaded.

LOW PRESSURE AIR - Press box in middle to set timeout for LPA at end of cycle to hold bag open.

Always OFF: Always OFF

Always ON: Always ON

HIGH PRESSURE AIR

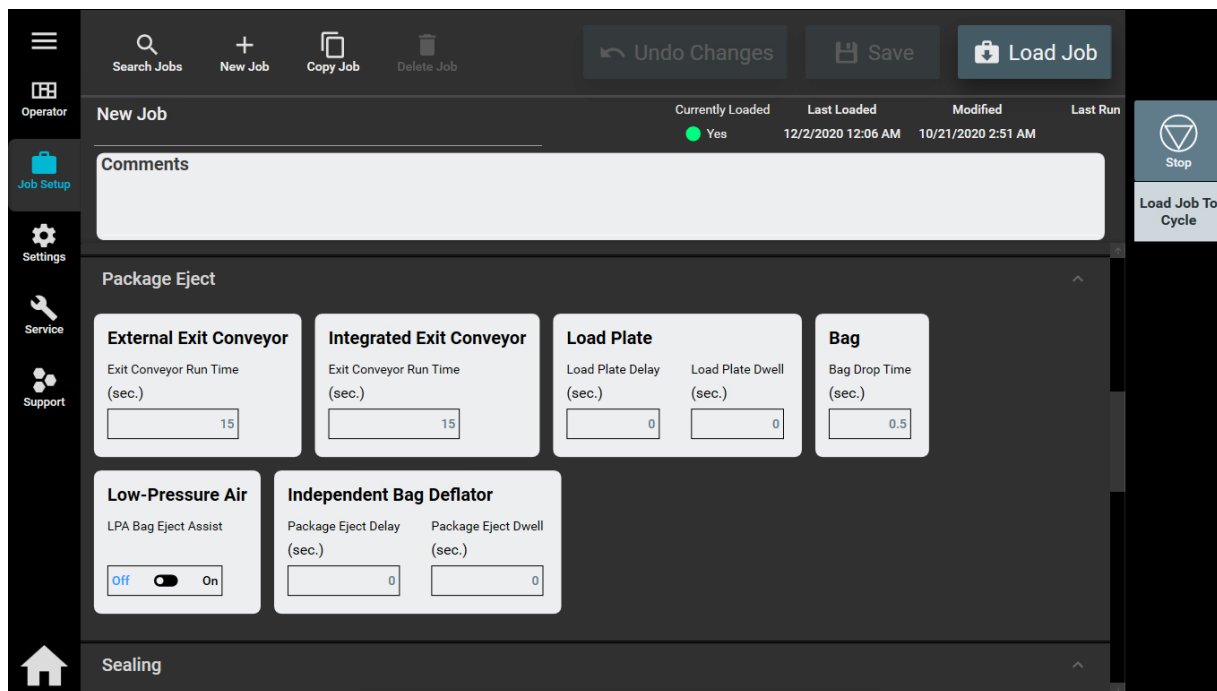
HP Air Dwell: Sets the length of time, in seconds, the High Pressure Air blasts.

VACUUM

Vacuum Dwell: Sets the length of time, in seconds, that Vacuum creates suction.

SCREEN NAVIGATION

JOB SETUP SCREEN - PACKAGE EJECT



Any changes made to this screen requires operator to press '**Load Job**' button.

BAG

Bag Drop Time: Time for bag to drop before feeding new bag out.

LPA

LPA Bag Eject Assist: Toggle switch turns LPA ON or OFF to assist the ejection of sealed bag.

INTEGRATED EXIT CONVEYOR

Runtime: Timeout for Integrated Exit Conveyor, starts when package starts to fall.

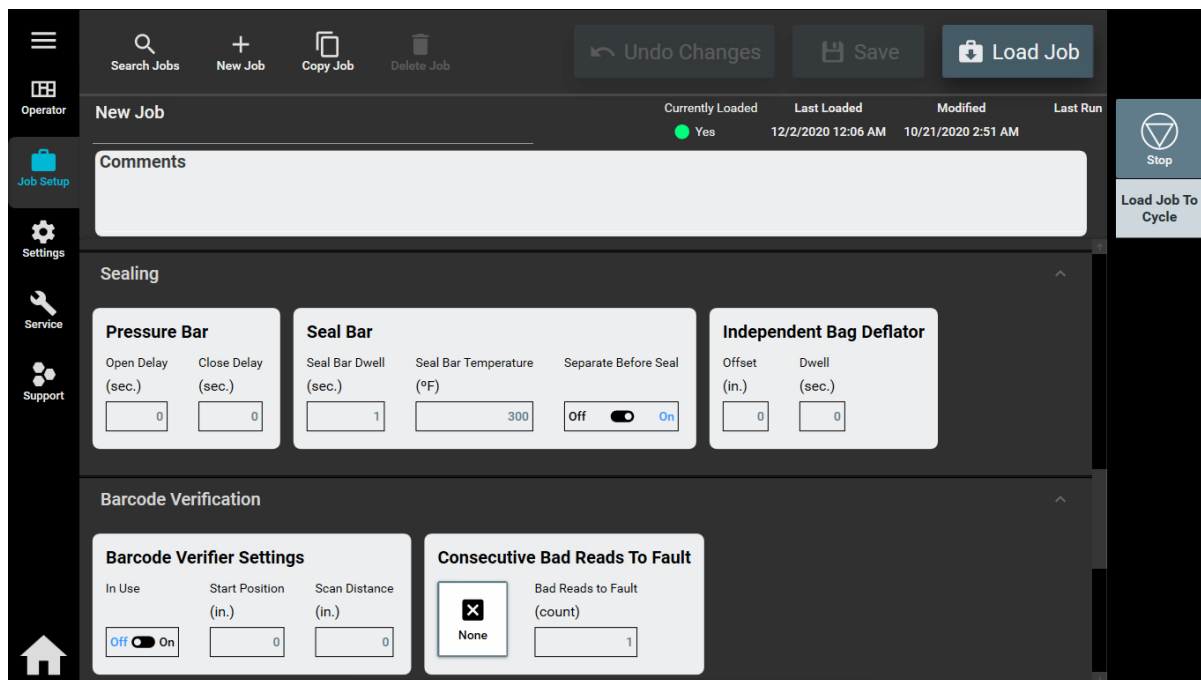
LOAD PLATE

Load Plate Dwell: Timeout for load plate in discharge position.

Load Plate Delay: Starts when bag starts to fall.

SCREEN NAVIGATION

JOB SETUP SCREEN - PRESSURE BAR AND SEAL BAR



Any changes made to this screen requires operator to press '**Load Job**' button.

PRESSURE BAR

Open Delay: Adjusts the delay, in seconds, that occurs prior to opening the Pressure Bar.

Close Delay: Adjusts the delay, in seconds, that occurs prior to closing the Pressure Bar.

SEAL BAR

Dwell: The amount of time the heated seal bar will remain in contact with the film. High quality seals are accomplished through proper seal time settings. These settings will vary with the film gauge and material.

Temperature: Sets the desired temperature of seal bar.

Separate Before Seal - Toggle switch that turns ON/OFF a feature that, prior to sealing the bag, will reverse the web when the pressure bar is closed in order to disconnect the bag from the next bag.

SCREEN NAVIGATION

JOB SETUP SCREEN - AUXILIARY INPUT/OUTPUT



Any changes made to this screen requires operator to press 'Load Job' or 'Save & Load' button.

INPUT

Not Configured: No configuration.

Bagger Inhibit: Will not allow bagger to cycle until input held low. Warning appears when this is active.

OUTPUT 1

Not Configured: No configuration.

Printer Data Ready: Output active when Printer is ready for a new label.

Waiting For Printer: Machine is cycling and film is backed up and ready to print but printer needs label.

Cycle Complete: Cycle done.

Bag Made: Bag is dropping.

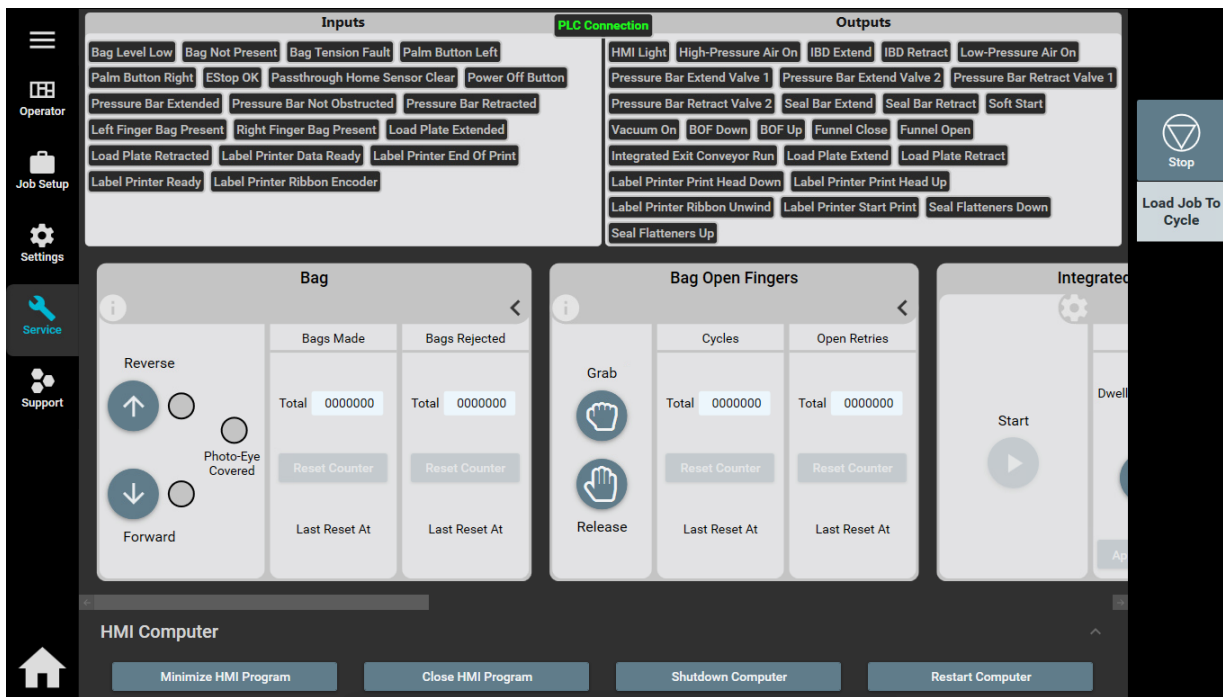
Bag Made + Label Required: Bag is dropping AND printer needs a label.

Bags Low: Bags low sensor is active.

JOB SETUP SCREEN - AUXILIARY INPUT/OUTPUT-CONT.

SCREEN NAVIGATION

Any changes made to this screen requires operator to press 'Load Job' or 'Save & Load' button.



OUTPUT 2

Not Configured: No configuration.

Printer Data Ready: Output active when Printer is ready for a new label.

Waiting For Printer: Machine is cycling and film is backed up and ready to print but printer needs label.

Cycle Complete: Cycle done.

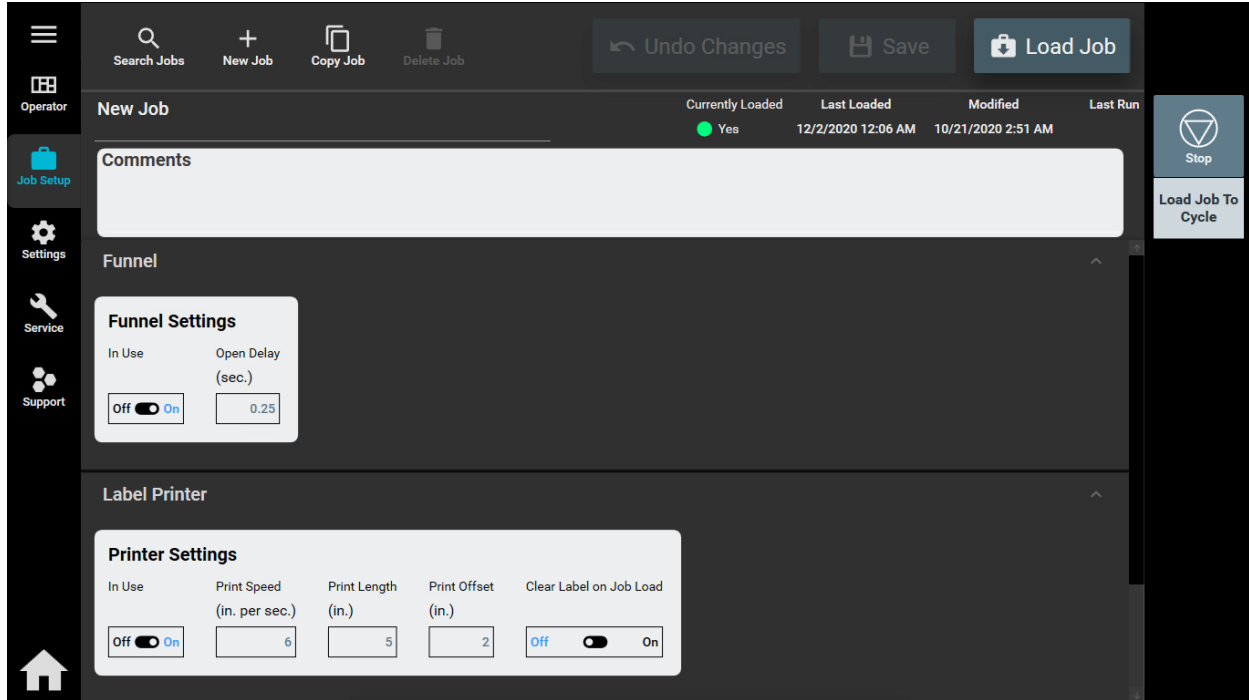
Bag Made: Bag is dropping.

Bag Made + Label Required: Bag is dropping AND printer needs a label.

Bags Low: Bags low sensor is active.

SCREEN NAVIGATION

JOB SETUP SCREEN - PRINTER



Any changes made to this screen requires operator to press 'Load Job' or 'Save & Load' button.

PRINTER SETTINGS

Speed: This numeric setting determines the web feed speed during the print cycle. It is adjustable from 2.00 to 12.00 Inches/Sec. This setting should be set to the same value that resides in the Printer.

Length: This numeric setting determines the distance the web will feed during the print cycle. This should be set to smallest value that will produce the desired label. This setting is approximately 3/4 of inch longer than the length of the label.

Offset: This numeric setting determines the starting position of the printed label. This can be used to adjust the label position on the bag. It is adjustable from 0 to 10.00.

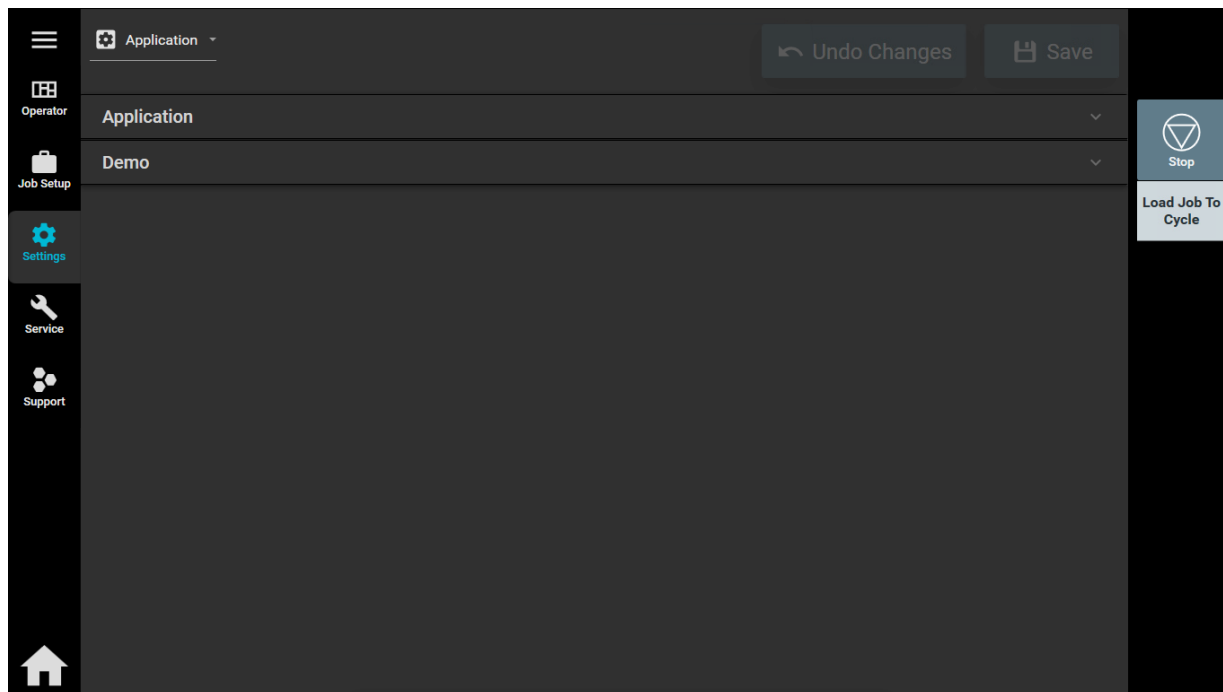
Clear Label On Job Load: If ON, loading this job will clear out the label queue on the printer.

In Use: Printer is active in this job. If set to OFF, printer will not print.

SCREEN NAVIGATION

APPLICATION SCREEN

Pressing the **Settings Button** icon on Left Menu Bar (When in password protected screen) will open the **Applications Settings** page.



Any changes made to this screen requires operator to press '**Load Job**' or '**Save & Load**' button.

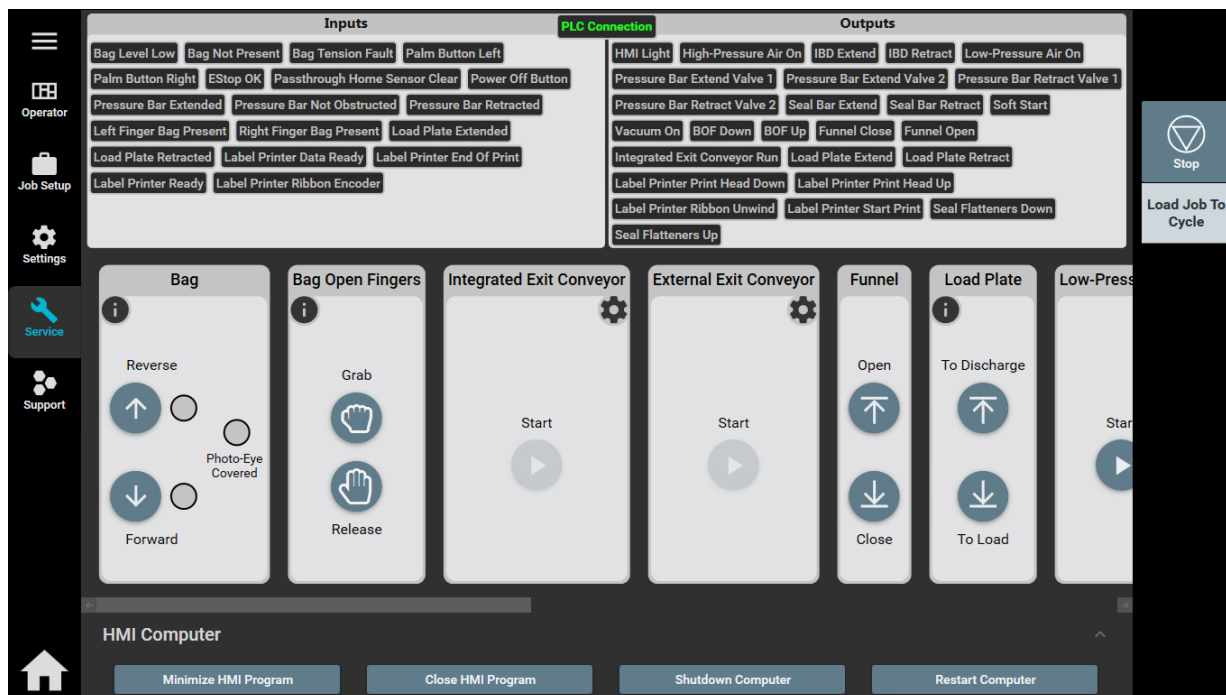
Application - This allows a User to select HMI Language and to activate Demo Mode.

Demo Mode - When demo mode is active, the controller automatically sends a test label to the printer on every cycle.

SCREEN NAVIGATION

FIELD SERVICE BUTTON

Pressing the **FIELD SERVICE** button from the Home Screen opens the **Service** Screen. This screen displays the Inputs and Outputs that are active (Highlighted Green) on PLC. This screen allows a User to manually trigger Bag Position, Bag Open Fingers, Integrated Exit Conveyor, Load Plate, Low-Pressure Air, High-Pressure Air, Pass-Thru, Pressure Bar, Printer, Seal Bar, Seal Flatteners and Vacuum. Access to this screen is password protected.



HMI COMPUTER

Minimize HMI Program: This button will minimize the HMI program, but leaves Operating System open.

Close HMI Program: This button closes the HMI program.

Shutdown Computer: Closes the HMI program and shuts down the PC.

Restart Computer: Closes the HMI program and restarts the PC.

SCREEN NAVIGATION

SERVICE SCREEN - BAG



BAG

Photo-Eye Covered: Green light indicates the Photo-eye detects bag.

Reverse: Pressing Reverse button will reverse the web as long as button is pressed.

Forward: Pressing Forward button will advance the web as long as button is pressed.

BAGS MADE

Total: Displays the total number of completed bags since last reset.

BAGS REJECTED

Total: The total number of bags that have been rejected since last reset.

Reset Counters: Pressing Reset will clear the Total Bags Made or Bags Rejected totals.

SCREEN NAVIGATION

SERVICE SCREEN - BAG OPEN FINGERS



FINGERS

Grab: Activates the Bag Open Fingers. Fingers will Rotate down.

Release: Fingers will Rotate up to release the bag.

CYCLES

Total: The total number of cycle the Bag Open Fingers have completed since last reset.

OPEN RETRIES

Total: The total number of times the Bag Open Fingers have attempted to open fed bag.

Reset Counters: Pressing Reset will clear the Cycles or Open Retries.

SCREEN NAVIGATION

SERVICE SCREEN - INTEGRATED EXIT CONVEYOR.



Start: Pressing this button will turn the Conveyor ON. Press button again to stop.

JOG DWELL

Dwell: Time that conveyor will run.

Jog Sec.: Press and hold to run exit conveyor until released. This will change the Dwell.

Apply To Settings: Time that jog was pressed can be set to job dwell setting. Job saves automatically, but is not loaded.

PULSE DWELL

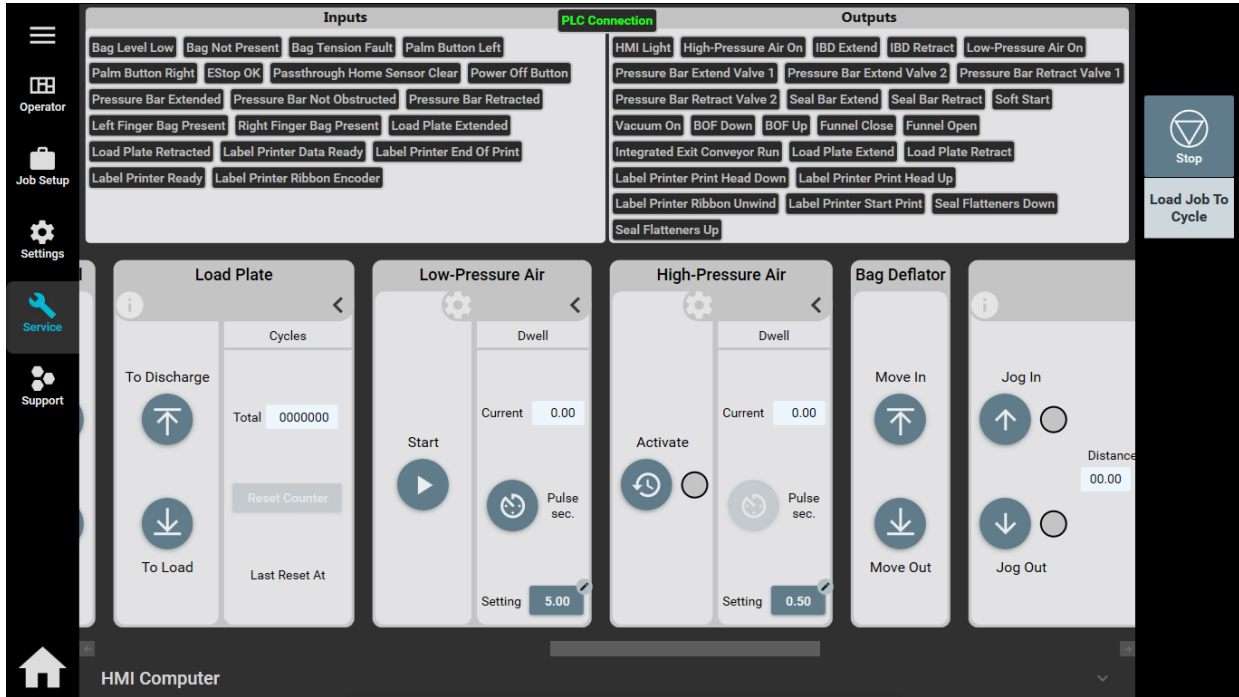
Current: Press to run conveyor at job setting.

Pulse Sec: Press to run conveyor at job setting.

Setting: Time for conveyor to run when Pulse Sec. is pushed. Changing this setting will save to job, but not load the job.

SCREEN NAVIGATION

SERVICE SCREEN - LOAD PLATE



To Discharge: Moves the Load Plate to the 'Discharge' position.

To Load: Moves the Load Plate to the 'Load' Position.

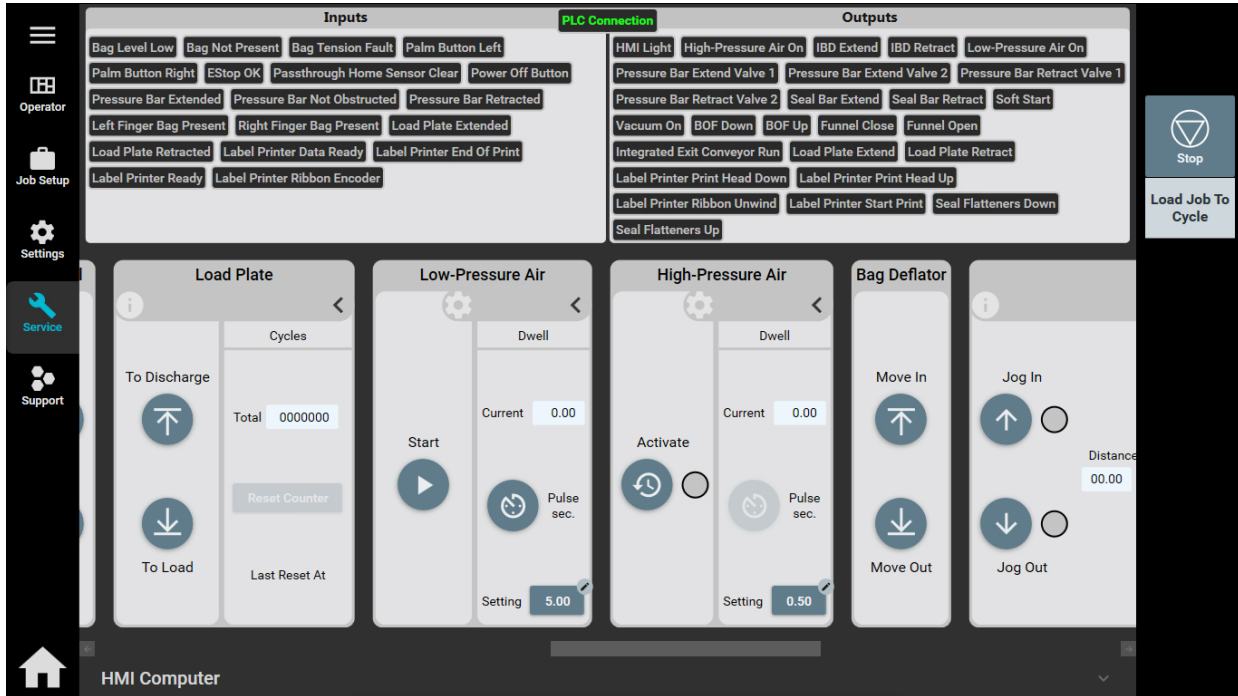
CYCLES

Total: Displays the total number of complete Load Plate cycles since last reset.

Reset Counter: Reset the Cycle Total Counter.

SCREEN NAVIGATION

SERVICE SCREEN - LOW/HIGH PRESSURE AIR



LOW PRESSURE AIR

Start: Pressing this button turns Low Pressure Air ON. Press again to turn OFF.

Dwell: The amount of time the Low Pressure Air will be ON according to setting in loaded job.

Current: The actual setting of Low Pressure Air blast.

Pulse Sec.: Runs Low Pressure Air for job setting dwell.

HIGH PRESSURE AIR

Activate: Turn on the High Pressure Air as long as button is pushed.

Current: The amount of time the High Pressure Air will be ON according to setting in loaded job.

Setting: The actual setting of High Pressure Air blast.

Pulse Sec.: Runs High Pressure Air for job setting dwell.

SCREEN NAVIGATION

SERVICE SCREEN - PASS-THRU



Distance: The current Pass-thru distance.

Jog IN: Moves Jaw inward as long as button is pushed or until it reaches Face Plate.

Jog OUT: Moves Jaw outward as long as button is pushed or until it reaches end of travel.

MANUAL POSITION

Current: The actual width of Jaw.

Move To In.: Moves Jaw to width set in job settings.

Setting: Active job setting for Pass-thru.

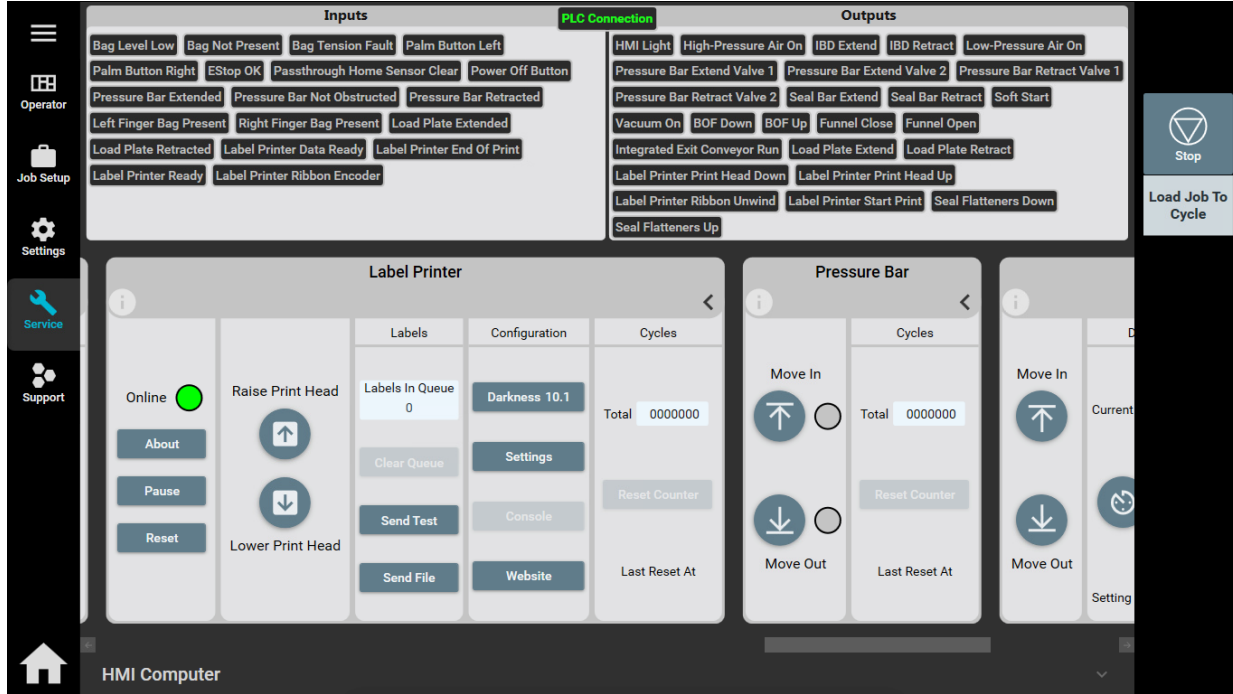
POSITION CHANGES

Total: Displays the total number of changes to Pass-thru since last reset.

Reset Counters:

SCREEN NAVIGATION

SERVICE SCREEN - PRESSURE BAR



Move IN: Pressing this button will retract or close the Pressure Bar. Pressure Bar will remain closed until Move OUT is pushed.

Move OUT: Pressing this button will extend or open the Pressure Bar.

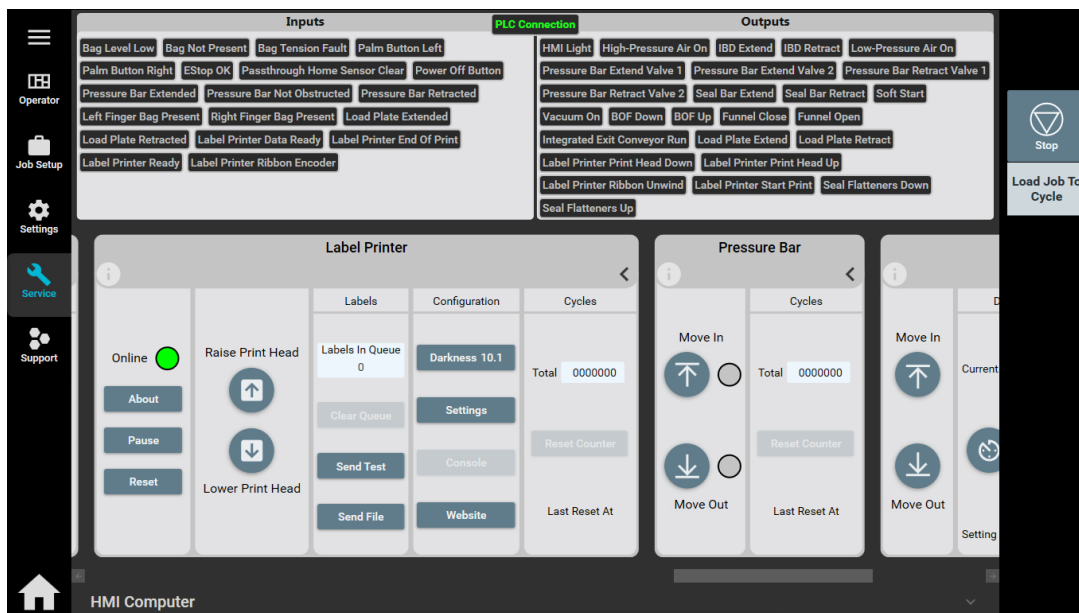
CYCLES

Total: Total number of Cycles the Pressure Jaw has completed since last reset.

Reset Counter: Resets the Total Cycles Counter.

SCREEN NAVIGATION

SERVICE SCREEN - PRINTER



Online: When lit, printer is on and ready for label.

Pause: The Pause key temporarily suspends printing. Pressing the key again will return the printer to normal operation.

Reset: Clears printer faults.

Raise Printhead: Press to raise Printhead.

Lower Printhead: Lowers the Printhead against film. Remains in place until Raise Printhead is pressed.

LABELS

Labels In Queue: The number of labels loaded into printer.

Clear Queue: Clears the Queue of loaded labels.

Send Test: Sends one Test Label to printer for a test print.

Send File: Opens a Select Label File Dialog Box. User can navigate to stored labels on computer to load into Job.

CONFIGURATION - Expert use only!

Darkness: Allows user to change darkness setting.

Settings: Exposes all available printer settings - expert use only!

Console: Expert use only! - console to printer to type in JSON and SGD commands manually.

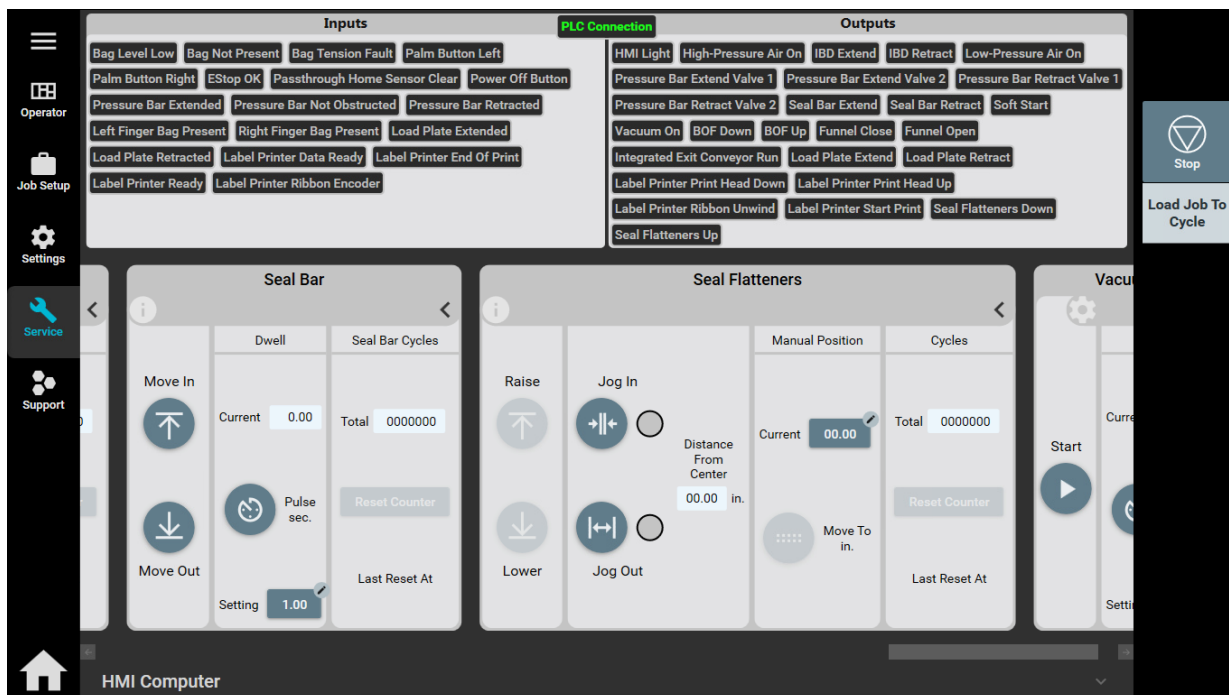
Website: Minimizes HMI and opens browser to local Zebra printer website.

CYCLES

Total: Display total cycles of printer since last reset.

SCREEN NAVIGATION

SERVICE SCREEN - SEAL BAR



Move IN: Pressing button will retract Seal Bar.

Move OUT: Pressing button will extend Seal Bar. Seal Bar will remain out until Move IN button is pressed.

CYCLE

Current: Displays the length of time Seal Bar is active.

Pulse Sec.: Cycles the Seal Bar. There must be a time set in job settings or Current or Seal Bar will not move.

Setting: Displays the Job Setting for temperature.

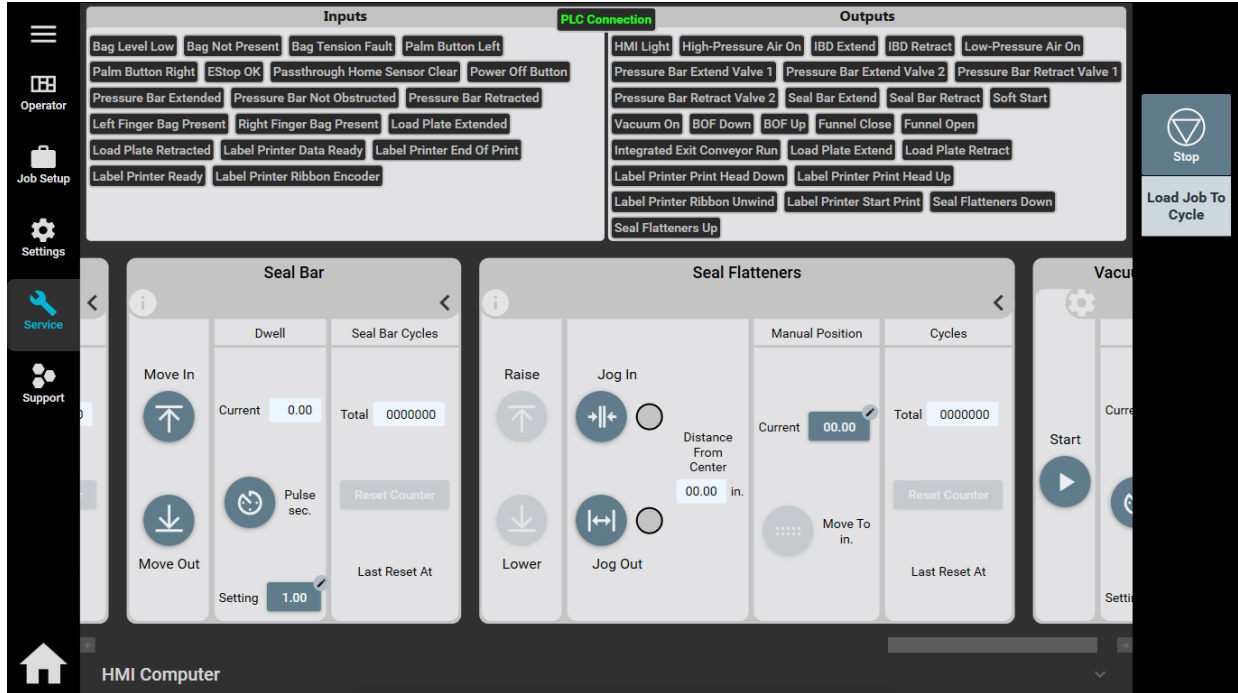
SEAL BAR CYCLES

Total: Number of completed Seal Bar Cycles since last reset.

Reset Counter: Resets the Seal Bar Cycles Counter.

SCREEN NAVIGATION

SERVICE SCREEN - SEAL FLATTENERS



Raise: Pressing button raised the Seal Flattener Fingers.

Lower: Pressing button lowers the Seal Flattener Fingers.

DISTANCE FROM CENTER

The distance that fingers are from the center of sealing area.

Jog IN: Moves fingers IN as long as button is pressed or until fingers reach center.

Jog OUT: Moves fingers OUT as long as button is pressed or until fingers are completely out.

MANUAL POSITION

Current: This setting determines the IN setting for the fingers.

Move To In.: This button moves the fingers to the Current Setting. If Current Setting is zero, fingers will move to center of sealing area.

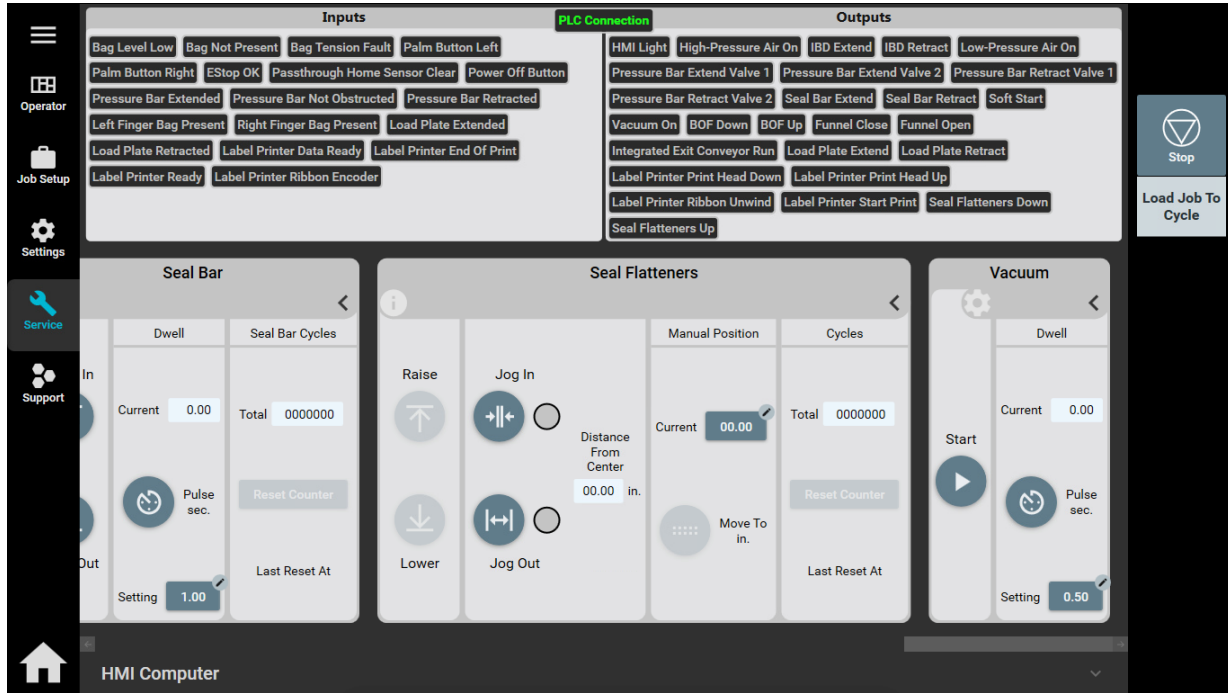
CYCLES

Totals: The number of completed Seal Flattener Cycles since the last reset.

Reset Counter: Resets the total cycles counter.

SCREEN NAVIGATION

SERVICE SCREEN - VACUUM



Start: Turns on Vacuum. Vacuum will stay on until button is pressed again.

DWELL

Current: The actual setting of the Vacuum ON.

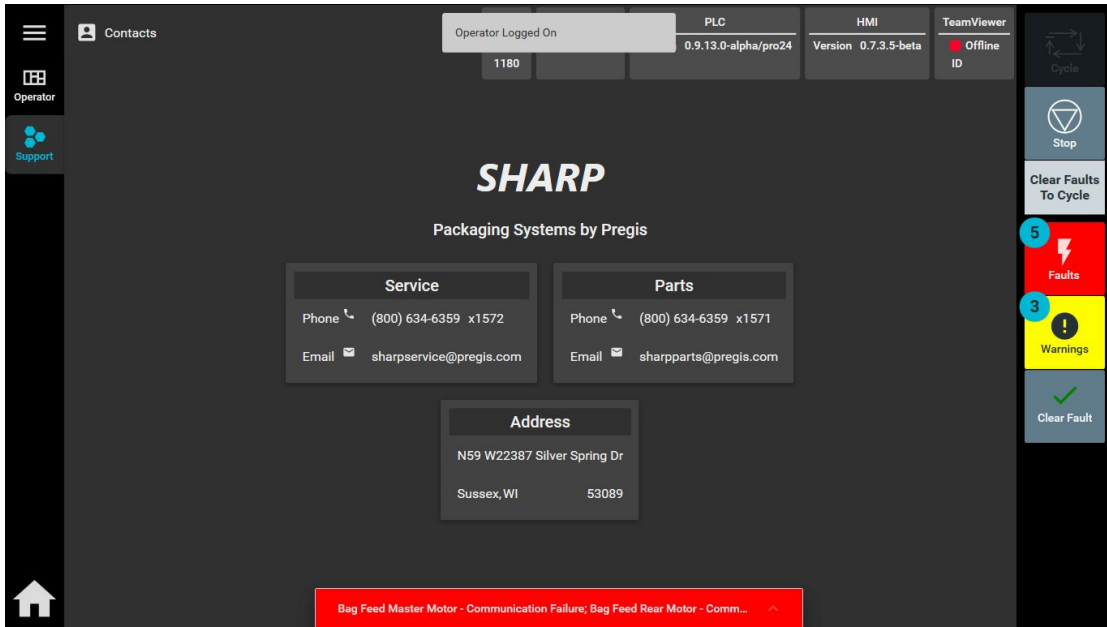
Pulse Sec.: Pressing the button will turn Vacuum ON for length of Dwell Setting.

Setting: The actual length of Vacuum on when button is pushed.

SCREEN NAVIGATION

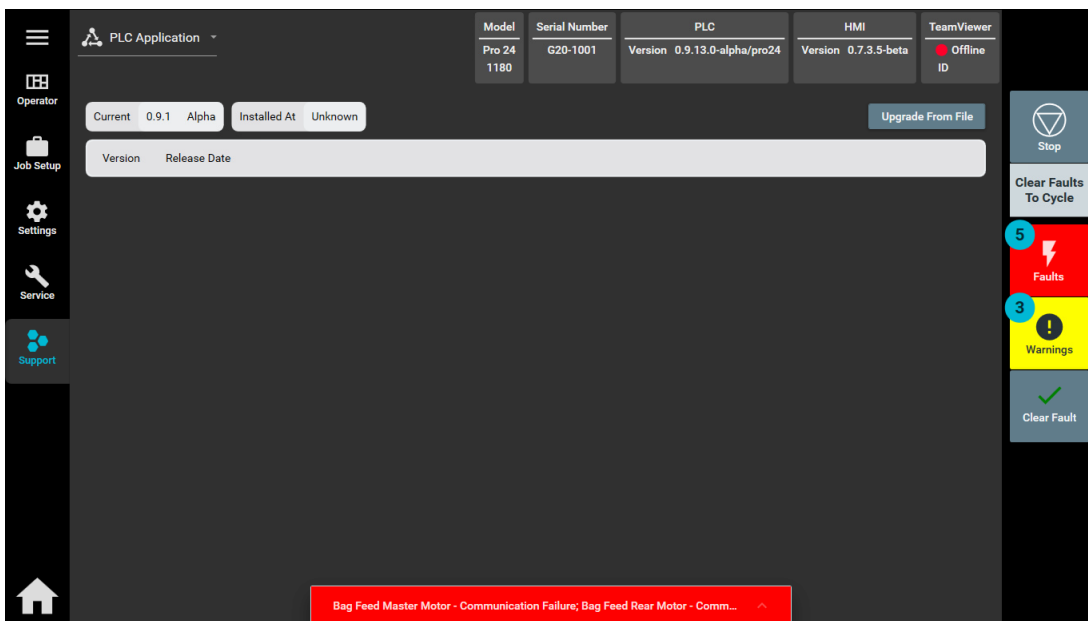
SUPPORT SCREEN

SUPPORT CONTACT - Provides the contact information for Sharp Service and Sharp Parts. Also provides Sharp Packaging Systems mailing address.



SOFTWARE VERSIONS - Displays current Software.

Upgrade From File: Allows for mapping to saved HMI program file used to upgrade program.



MACHINE PLACEMENT

ELECTRICAL PRECAUTIONS



WARNING

Do not operate the machine in or around standing water. Failure to observe the warning may result in damage to the equipment and/or severe bodily injury.

Ensure no liquids are near the machine to eliminate the possibility of spilling onto any electrical components and creating a short circuit.

Should a liquid spill onto the machine, turn off the power immediately, unplug the power cable and once having cleaned the liquid, have a qualified technician inspect and test all the electrical components to ensure they are functioning properly. To avoid short-circuiting, keep all wires and connections clean and keep your body, hand-held tools and any other electrically conductive objects away from any exposed electrical components.

Ensure the electrical cabinet is always closed, unless needed for maintenance. Always ensure that the ground wire is firmly connected with the ground before starting the machine. Use double grounding for added protections. After installation, check electrical connections before starting the machine.



WARNING

Failure to have properly grounded outlet may cause damage to equipment or severe bodily injury.

GROUNDING INSTRUCTIONS

Improper connection of the equipment grounding conductor can result in a risk of electrical shock. Check with a qualified electrician or service person if you are in doubt as to whether your machine outlets are properly grounded.

This machine must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electrical shock by providing a path of least resistance for electrical current. This machine is equipped with a cord having an equipment-grounding conductor for a 3 prong grounding plug. The plug must be connected into an outlet that is properly installed

and grounded in the accordance with all local codes and ordinances. Do not modify the plug provided with the machine.

If your electrical supply does not meet the above specifications, or if you are unsure your building has an effective ground, have a qualified electrician or your local electrical utility company check the ground and correct any problems.

STORAGE

If the machine will not be used for a considerable amount of time, it should be stored in the original shipping crate, in a temperature controlled environment to protect it from damage.

MACHINE PLACEMENT

Your Sharp Bagger has been shipped to you well crated in order to prevent any damage to the machine. It is important that you follow the Uncrating Instructions attached to crate.

After being uncrated, place the Sharp **MAX™ PRO 18®** bagger in well ventilated area, on a rigid and vibration free surface. Before continuing with the installation of the machine, ensure all nuts, bolts and screws are tightened as they can come loose during shipping.

The Sharp **MAX™ PRO 18®** should be placed in a dedicated space that has a smooth level surface with access to 100 PSI of clean, dry compressed air, and 115 VAC, 50/60 Hz, 20 Amp properly grounded electrical outlet.

Locate the machine so there is adequate access to the side for loading bag film.

Make sure unit is located at a comfortable height for operation and product loading. See [Height Adjustment](#) (page 3-3).

The unit is equipped with two swivel locking casters for easy maneuverability. Lock the casters after placing machine in desired location.

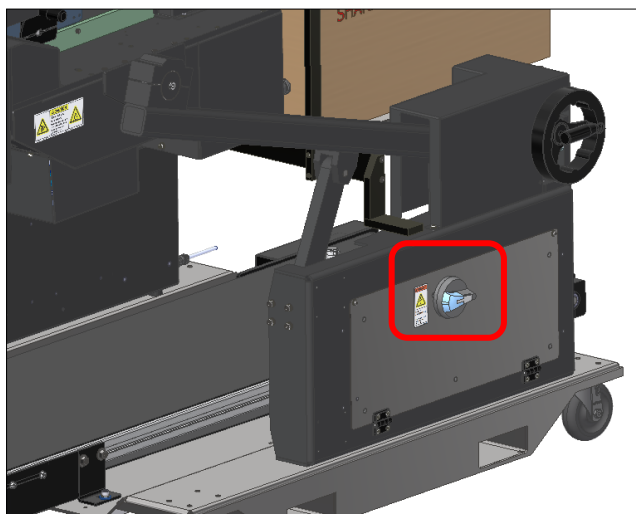
MACHINE PLACEMENT

POWER CONNECTION

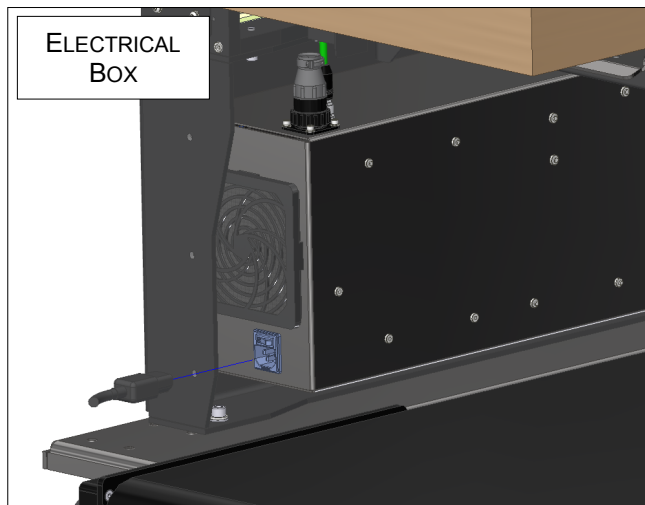
The Sharp **MAX™ PRO 18**[®] is equipped with a 3-prong electrical cord for standard, properly grounded, 115 VAC, 50/60 Hz, 10 Amp (minimum) service.

The **MAX™ PRO 18**[®] requires two power cords. One is for the bagger and the other is for the Printer.

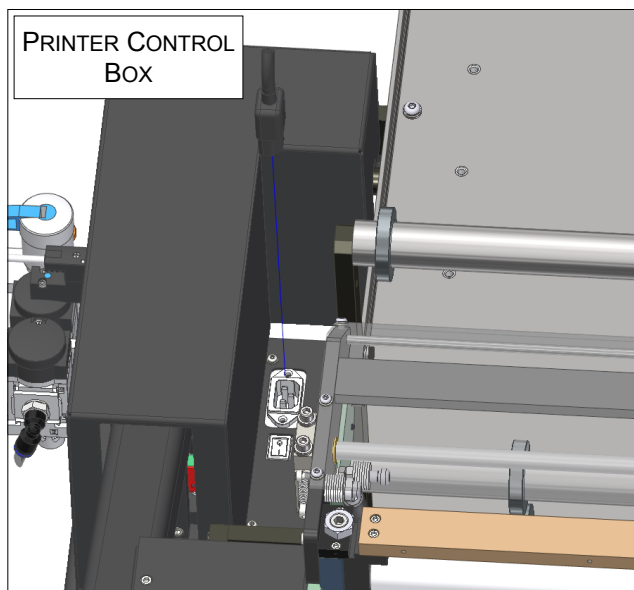
1. Before plugging the cord into the back of the machine, ensure that Main Power Switch is in the OFF position.



2. Plug Male End of Power Cord into properly grounded wall outlet or electrical drop.
3. Insert Female End of Power Cord into the Power Entry Module on back of Electrical Box. The box is in the Frame Assembly.



4. Turn the switch on the Power Entry Module to ON position.
5. Plug the Male End of second Power Cord into a properly grounded wall outlet or electrical drop.
6. Insert the Female end into Power Entry Module on top of the Printer Control Box. The box is in the Frame Assembly, opposite the Electrical Box.



7. Turn the switch to the ON position.

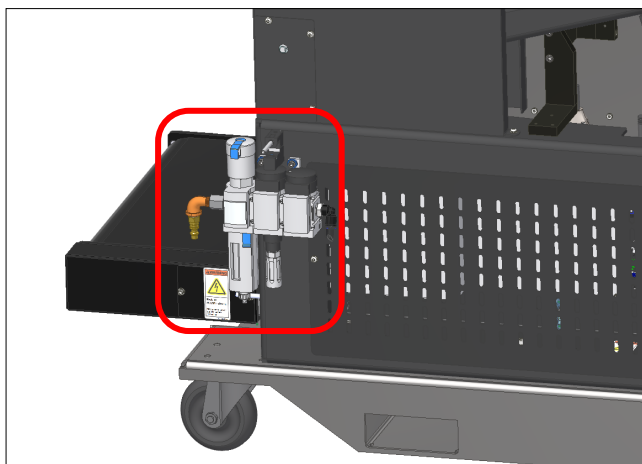
MACHINE ADJUSTMENTS

AIR SUPPLY

The Sharp **MAX™ PRO 18**[®] has a filter/regulator equipped with a male end 1/4" nominal flow NPT air quick disconnect plug. The machine requires 100 PSI (regulated to 80 PSI) of non-lubricated clean dry air at 5 SCFM. Connect the air supply line to the machine using a MIL-C-4109E or equivalent disconnect coupling.

NOTE: Do not use a lubricator or lubricated air on the machine. Damage to valves and cylinders will occur.

1. Connect Air Hose to Regulator.

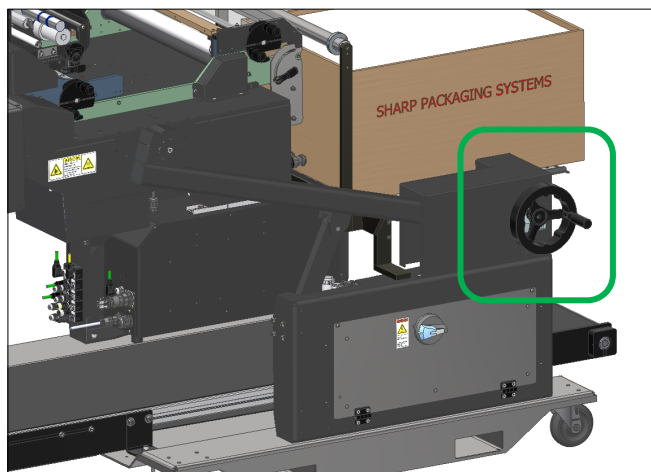


2. Unlock Cap on Regulator
3. Adjust to 80 PSI.
4. Lock Cap on Regulator.

HEIGHT ADJUSTMENT

Machine height can be adjusted to allow manual loading at a convenient height.

1. Release the Handle on the Adjustment Wheel.
2. Turn the handle on the side of the bagger to adjust the height up or down to the desired position.



3. Return the handle to original position.

HEAD ROTATION

Rotating the Head Assembly allows for easier access the bottom of bagger.

⚠ WARNING!

Always remove air and electrical power from the MAX Pro 18™ prior to performing any service on the machine.

⚠ WARNING!

Never make adjustments while machine is ON or operating as this may cause damage to the machine and could result in severe bodily injury or even death.

NOTE: Make sure the cables and hoses are not binding and are free from obstructions when Head Assembly is being rotated.

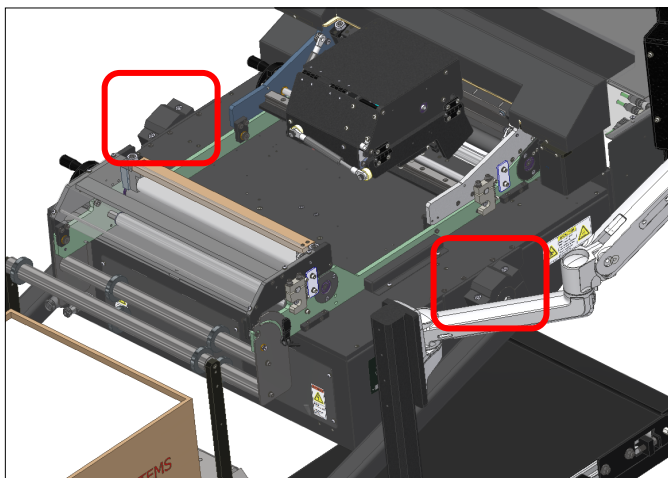
MACHINE ADJUSTMENTS

HEAD ROTATION - CONTINUED

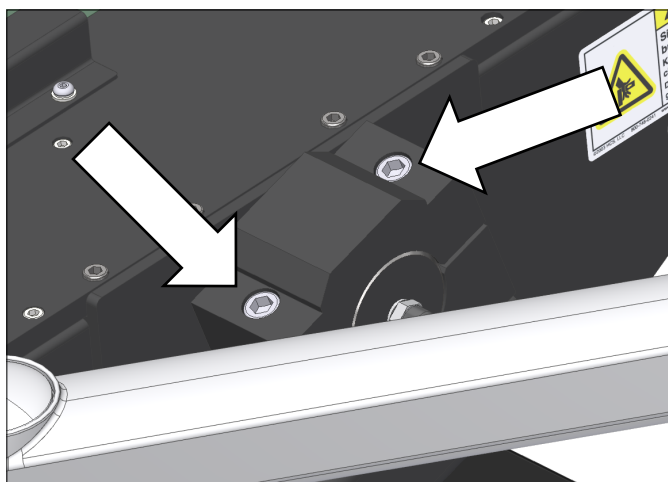
WARNING!

Machine Head must be held in place when loosening rotations adjustment bolts. Head may rotate when bolts are loosened and could cause damage to the machine and/or bodily injury.

1. Loosen the Rotating Clamp Screws.



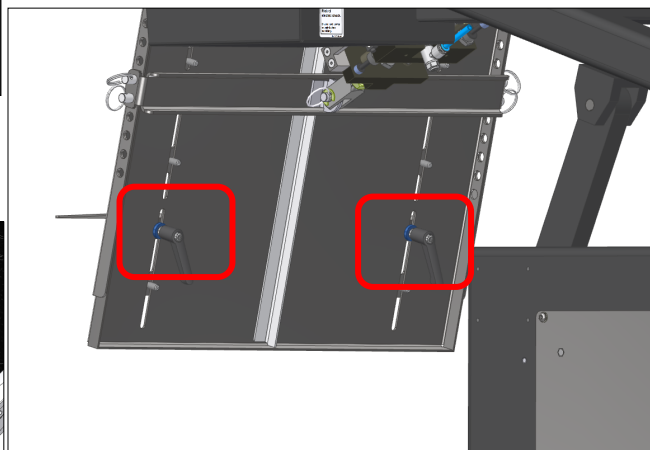
2. Pivot the machine to the desired angle.
3. Tighten the Rotating Clamp Screws.



LOAD SHELF

The Load Shelf can be moved up or down to accommodate different sized bags.

1. Loosen the Locking Handles on back of Load Plate.



2. Move Load Shelf to desired location.
3. Tighten the Locking Handles.

LOAD PLATE

The Load Plate can also be moved up or down to accommodate longer bags.

1. Loosen the Load Shelf Locking Handles.
2. Remove the Ring Pins, move plate to desired



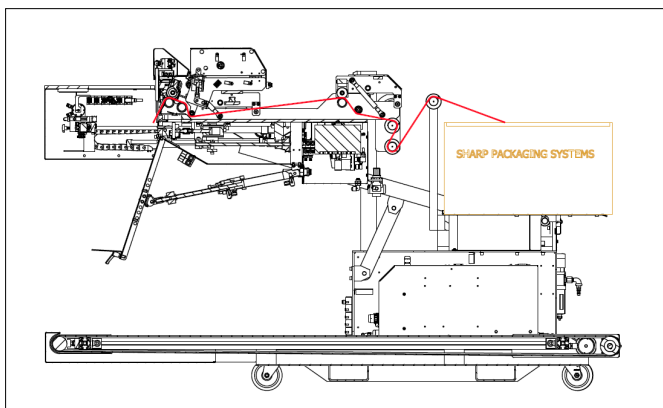
- location and replace pins.
3. Tighten Locking Handles.

LOADING BAG FILM

A decal showing the film threading path through the machine is located on the Frame Cover.

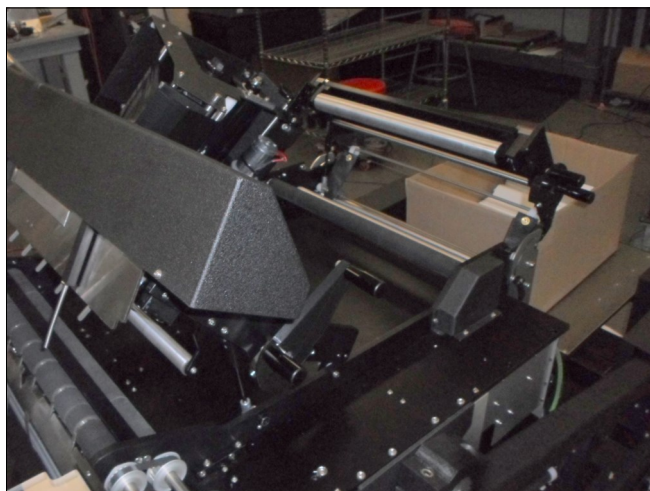
⚠ WARNING!

Use extreme caution when feeding bags into machine; electrical voltage and possible pinch points are present.



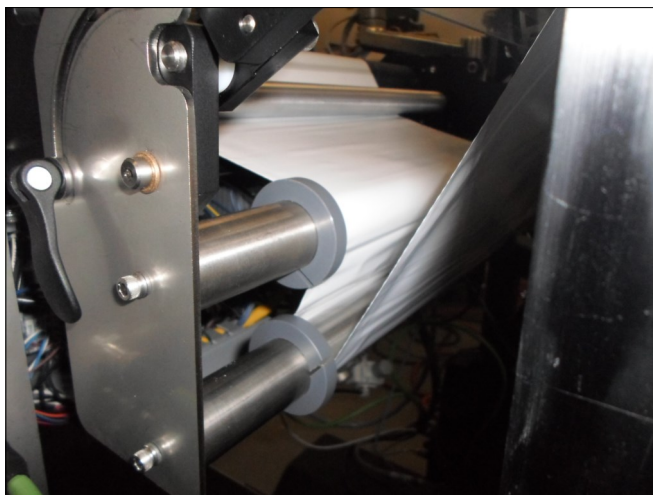
NOTE: At this point, in most cases, you would center the bags to the Drive Roller. Place box of bags behind the bagger so the perforation of the first bag opens toward you when standing behind box.

1. Raise the Cradle, Printhead Cradle, and Unwind Cradle by rotating the Latches and open the Cradles.



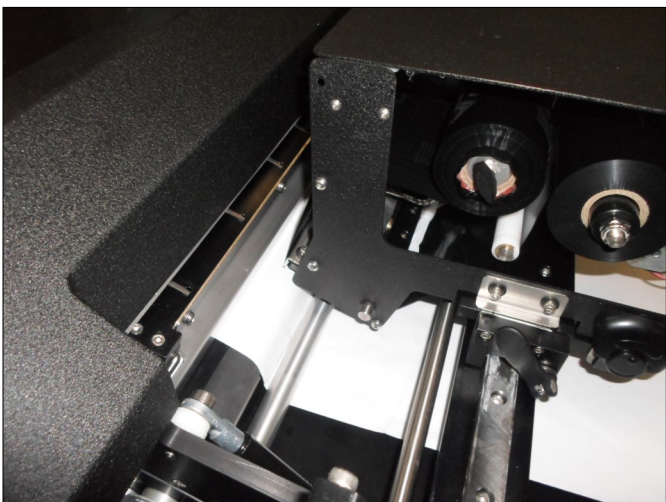
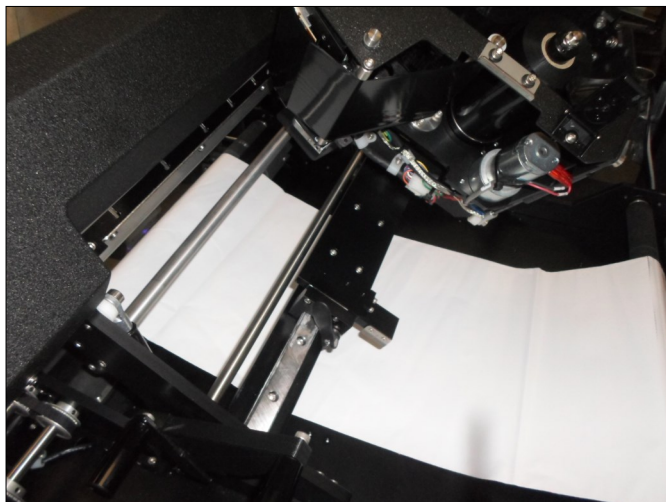
2. While standing at the right side of the machine, feed film over Drag Tube of Box Tray.

3. Then under-over Unwind Drag Tubes, then under Idler Roller, finally over the Unwind Drive Roller. Close Unwind Cradle Latch. Position Weight Straps over Box Tray Drag Tube.



LOADING BAG FILM

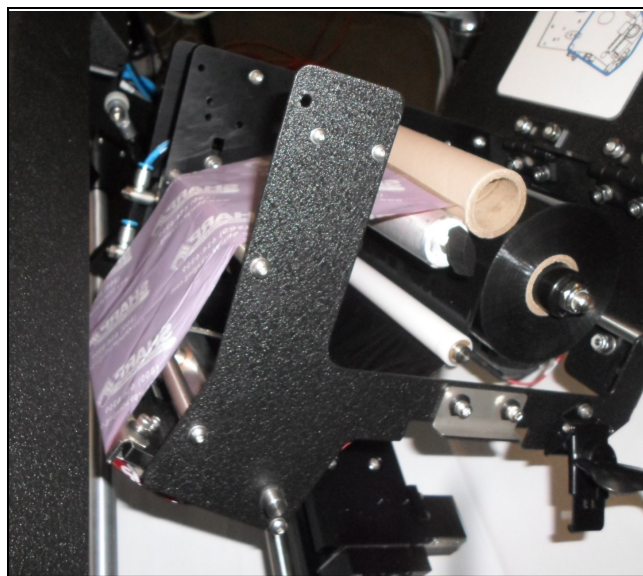
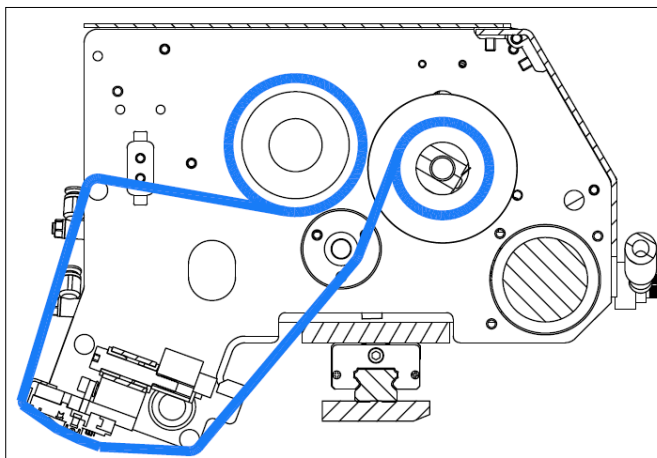
4. Pull the film Under the Printer Carriage until edge drapes over the Platen and Drive Rollers and down past the Front Finger Plate.



5. Lower and lock the Drive Roller Cradle Latch.

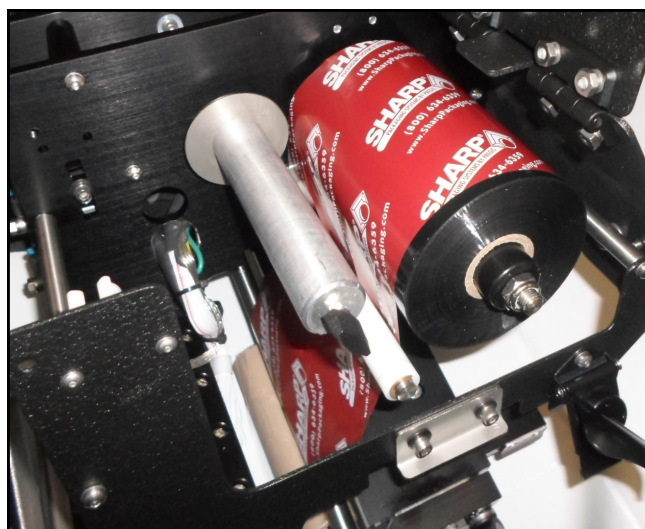
LOADING RIBBON

A decal showing the ribbon threading path is located on the inside of Carriage Cover.



1. Raise the Carriage Cradle and Open Carriage Cover.
2. Slide empty spool and used ribbon off of hubs.
3. Insert cardboard tube into carriage, let hang loose.
4. Place a new roll of ribbon onto the Ribbon Unwind hub.

6. Place empty cardboard roll onto Ribbon Rewind Hub.



5. Thread the ribbon under Ribbon Roller Sleeve, under Return Ribbon Shaft, around Printhead, then up and over Ribbon Return Shaft to Ribbon Rewind Hub.

7. Turn knob on Take-Up Spool counter-clockwise to ensure ribbon is tight.
8. Close the Printhead Cradle Cover.
9. Lower and lock the Carriage Cradle.

OPERATION

Before attempting to operate the machine, read all information under [Equipment Safety Features](#), page 1-2 and [Controls](#), page 3-1.

Load film material as illustrated in Web Threading Diagram on machine. See [Loading Bag Film](#), page 2-5.

1. Make sure machine is plugged into the properly grounded outlet. See [Power Connection](#), page 2-2. and connected to clean dry air regulated to 80 psi. See [Air Pressure Regulator Adjustment](#), page 2-3.
2. Release the E-Stop Button on bagger. Release E-Stop Buttons on any connected conveyors, if ap-



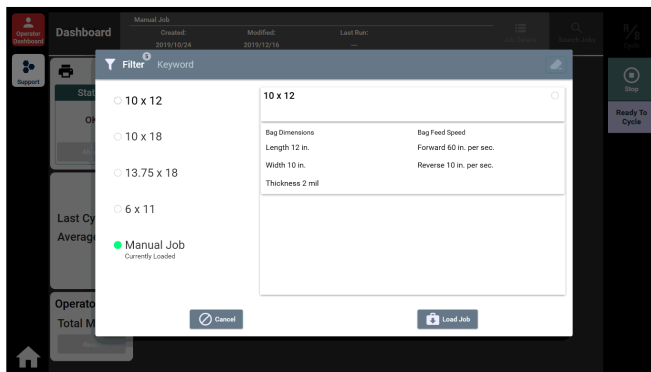
plicable.

3. Turn Main Power Switch to ON position.
4. Components on the Un-switched circuit will turn ON.
5. The PC will start to boot automatically. The HMI program will auto-load.
6. Push the green Power Pushbutton, this will turn on the entire bagger.

NOTE: The machine will display several faults and warnings when HMI program and Power Button have been pressed.

7. Press the Enable Bagger Button. This will establish communication and clear faults of Home Pressure Bar, Seal Flattener and Bag Feed.
8. The 'Seal Bar Not At Temperature' warning will remain until Seal Bar reaches loaded job temperature setting.

9. Press the 'Operator' button to open Operator Screen.
10. Press the 'Job Search' and select job to be loaded.



11. Press Load Job
12. Press Dual Palm Buttons or press Cycle on HMI Screen to feed bag.
13. Load product into bag.
14. Press Dual Palm Buttons or press Cycle on HMI Screen to seal bag and feed next one out.

NOTE: When HMI program is closed and Main Power Switch is turned OFF, the bagger cannot be turned back on until the UPS (Uninterruptible Power Supply) has cleared. This may take several minutes. This is completed when the red indicator light on HMI turns off.

NOTE: To stop the machine for any reason, press the Emergency Stop Button.

CLEANING

GENERAL CLEANING GUIDELINES

This machine requires regular, periodic cleaning to ensure reliable service. The Operator, with a minimum of training, can perform daily cleaning.

Regular cleaning is important for the proper operation and performance of the machine. During operation, there will be a normal build up of dirt, dust, and film residue on various parts of the machine.

Keep the areas directly adjacent to machine clean of debris as these can create safety hazards for the Operator and/or damage the machine.

No cleaning should be performed unless these safety precautions are thoroughly understood and are ad-

hered to without exception.

Inspect the machine to determine if there has been an accumulation of dust or other contaminations. Clean if necessary.

- ALWAYS SHUT-OFF & UNPLUG machine power cord AND dump air supply before cleaning or removing any guards.
- Never defeat any safety device or interlock on the machine.
- DO NOT use steel wool on machine surfaces. Particles of steel wool may break off and cause rusting or contaminate lubricated surfaces.
- DO NOT allow wrenches, fittings or other metallic objects to lie on machine surfaces during operation.
- DO NOT use chlorine, ammonia, alkalis, acids, or cleaning solutions that will damage metallic machine surfaces, cause corrosion, or contaminate containers.



WARNING

Disconnect electrical power cord AND air supply from the machine prior to performing any maintenance on machine. Unexpected machine startup can cause serious injury.



WARNING

Do not spray the electrical components of the machine with any liquid at any time. Liquids on electrical components can cause shorts, damaging the components and causing personal injury or death.



WARNING

Avoid hot surfaces. Do not service the machine until the heated surfaces have cooled after disconnecting power. Allow a minimum of one hour for the unit to cool down after electrical power has been disconnected.



WARNING

Do not attempt to clean the machine while it is running. Cleaning the machine while it is running can damage the machine and cause severe personal injury or death.

SEVERE DUTY APPLICATIONS

Some applications may require a more comprehensive maintenance procedure performed by a qualified Service Technician.

The applications, which may require the extra-ordinary maintenance, include, but are not limited to, extremely dusty or corrosive environments. Sharp Packaging recommends the use of a vacuum, compressed air or both to remove all foreign substances that may have accumulated on or inside the packaging machine.

It may be necessary to remove some or all of the guards and covers protecting the machine to access the areas in need of cleaning. Some disassembly of the sealer and film feed assemblies may also be necessary.

It is extremely important to follow all of the safety guidelines and warning detailed inside the Sharp Operator Manual before removing any guards or servicing the machine.

CLEANING / MAINTENANCE INTERVALS

DAILY CLEANING / MAINTENANCE

- Inspect the Bag Edge Present Sensor. Clean as needed. See [Bag Edge Present Sensor Cleaning Procedure](#), page 2-7.
- Inspect the Teflon[®] Tape on the Obstruction Sensing Jaw. Tape should be free from residue of film or ribbon. Replace as needed.
- Inspect all air lines and electrical wires for any sign of damage. Replace worn or damaged lines or wires.

WEEKLY CLEANING / MAINTENANCE

- Inspect the rubber Drive and Platen Rollers. Clean as needed. See [Drive and Platen Rollers Cleaning Procedure](#), page 2-8.
- Verify the Driver Roller Assembly moves freely with power removed.
- Inspect the aluminum Pinch Roller. Clean as needed. See [Pinch Roller Cleaning Procedure](#), page 2-8.
- Verify the Pinch Roller spins freely when latch is opened.
- Inspect the Seal Bar. Clean as needed. See [Seal Bar Cleaning Procedure](#), page 2-9.
- Inspect the rubber Unwind Drive Roller. Clean as needed. See [Unwind Drive Roller Cleaning Procedure](#), page 2-10.
- Verify the Unwind Driver Roller Assembly moves freely with power removed.
- Inspect the Unwind Pinch Roller. Clean as needed. See [Unwind Pinch Roller Cleaning Procedure](#), page 2-10.
- Verify the Pinch Roller spins freely when latch is opened.
- Inspect the Teflon[®] Tape that covers the Pressure Bar Anvil Rubber and replace if worn or damaged.

MONTHLY CLEANING / MAINTENANCE

- All of Weekly maintenance.

- Inspect the Air Filter for debris and replace as necessary.
- Inspect all external wiring for loose connections and wear. Tighten any loose connections and replace any worn cables.

SEMI - ANNUAL CLEANING / MAINTENANCE

- All of Weekly and Monthly maintenance.
- Inspect the Linear Guide Bearings located on the Pressure Bar Guide Shafts for wear and replace as needed.
- Inspect the Linear Guide Bearings located on the Sealer Assembly Guide Shafts for wear. Replace as necessary.

ANNUAL CLEANING / MAINTENANCE

- All of Weekly, Monthly, and Semi-Annual maintenance.
- Inspect entire machine for loose hardware.
- Inspect all air lines for any sign of wear or damage. Replace any lines that appear worn or damaged.
- Inspect all wires and cables for any sign of wear, damage, or loose connections. Tighten any loose connections and replace anything that appears worn or damaged.
- Inspect all Drive Belts for wear and proper tension. Replace any belts that appear to be worn or damaged.

CLEANING

BAG EDGE PRESENT SENSOR

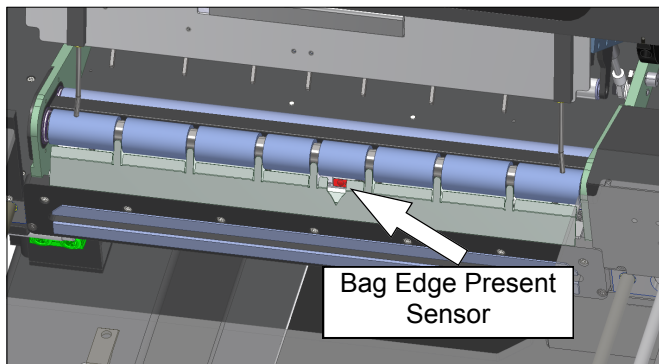
⚠ WARNING

DO NOT ATTEMPT TO CLEAN THE MACHINE WHILE IT IS RUNNING. CLEANING THE MACHINE WHILE IT IS RUNNING CAN DAMAGE THE MACHINE AND CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ WARNING!

FOLLOW INDUSTRY STANDARDS FOR THE HANDLING AND USE OF CHEMICALS. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

1. Remove Power from bagger.
2. Clean with a cotton swab if dirty. Do not use any solvents or cleaning solutions on the sensing portions of eye.



PRINTHEAD

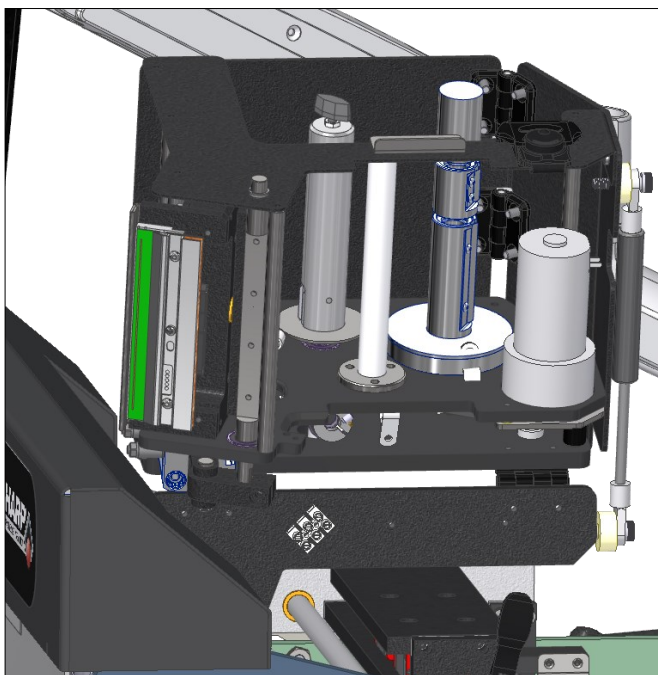
⚠ WARNING

DO NOT ATTEMPT TO CLEAN THE MACHINE WHILE IT IS RUNNING. CLEANING THE MACHINE WHILE IT IS RUNNING CAN DAMAGE THE MACHINE AND CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ WARNING!

FOLLOW INDUSTRY STANDARDS FOR THE HANDLING AND USE OF CHEMICALS. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

1. Turn the Printer Control Box OFF.
2. Open the Printer Carriage by releasing the Draw Latch on side of Printer Carriage.
3. Clean the Printhead thoroughly using a soft, lint-free cloth and 99.7% isopropyl alcohol.



4. Allow the solvent to evaporate.
5. Return power.

CLEANING

DRIVE & PLATEN ROLLERS

Regular cleaning of the Drive & Platen Rollers will keep the **Sharp MAX™ PRO 18** running at optimum performance.



WARNING

DISCONNECT ELECTRICAL POWER CORD AND AIR SUPPLY FROM THE MACHINE PRIOR TO PERFORMING ANY MAINTENANCE ON MACHINE. UNEXPECTED MACHINE STARTUP CAN CAUSE SERIOUS INJURY.



WARNING

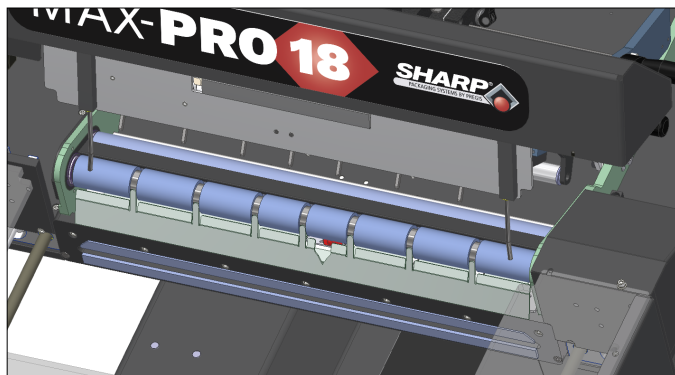
DO NOT ATTEMPT TO CLEAN THE MACHINE WHILE IT IS RUNNING. CLEANING THE MACHINE WHILE IT IS RUNNING CAN DAMAGE THE MACHINE AND CAUSE SEVERE PERSONAL INJURY OR DEATH.



WARNING!

FOLLOW INDUSTRY STANDARDS FOR THE HANDLING AND USE OF CHEMICALS. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

1. Remove power and air from bagger.
2. Release the Cradle Latch.
3. Moisten a lint-free cloth with Isopropyl Alcohol and rub back and forth along Drive Roller.



4. Rotate roller and repeat until roller is clean.
5. Repeat for Platen Roller.

6. When rollers are clean, close the Cradle Latch.
7. Return power and air to bagger.

PINCH ROLLER

After Cleaning the Drive Roller, clean the Pinch Roller in the Cradle Latch Assembly.

1. Open the Cradle Latch.
2. Pinch Roller is behind Front Air Knife Cover but can be accessed from below cover when Cradle is opened.



3. Moisten a lint-free cloth with Isopropyl Alcohol and rub back and forth on the Pinch Roller.
4. Rotate roller and repeat until roller is clean.
5. When roller is clean, close the Cradle Latch.

CLEANING

SEAL BAR

The Seal Bar needs extended to complete this procedure. In order to do this, the machine needs power and air. This will cause the Seal Bar to heat up.

- **NOTE: The machine must be at normal operating temperature for best results. Care must be taken to avoid scratching the surface of the Seal Bar. Use the supplied cleaning tool for best results. Remember to retract the Seal Bar when finished.**

6. NEVER use any metallic utensils on the surface of Seal Bar. Use the Cleaning Wand (Sharp P/N 704173-01) to remove any residue accumulated on the Seal Bar.
7. Press the Seal Bar Retracted Button to retract the Seal Bar.
8. Return to Main Menu.



CAUTION!

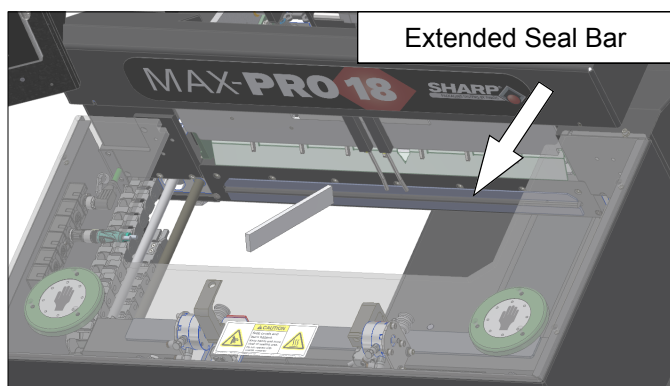
USE EXTREME CAUTION WHILE SERVICING THE MACHINE WHILE THE POWER IS APPLIED. UNEXPECTED MACHINE STARTUP CAN CAUSE SERIOUS INJURY!



WARNING!

NEVER USE ANY METALLIC MATERIALS ON COATED SURFACES! THE SEAL BAR HAS A COATED SURFACE WHICH CAN ONLY BE CLEANED USING APPROVED MATERIALS.

1. Power up the machine according and apply air to regulator.
2. Release the E-Stop Button and press the Green Power Button.
3. Allow Seal Bar to reach set temperature.
4. Access the Service Screen from the Main Screen. The Service Screen is passcode protected. See Supervisor to gain access.
5. Press the Extend Seal Bar Button to change the state of the Seal Bar.



CLEANING

UNWIND DRIVE ROLLER

Regular cleaning of the Unwind Drive & Pinch Rollers will keep the Sharp **MAX™ PRO 18** running at optimum performance.



WARNING

DISCONNECT ELECTRICAL POWER CORD AND AIR SUPPLY FROM THE MACHINE PRIOR TO PERFORMING ANY MAINTENANCE ON MACHINE. UNEXPECTED MACHINE STARTUP CAN CAUSE SERIOUS INJURY.



WARNING

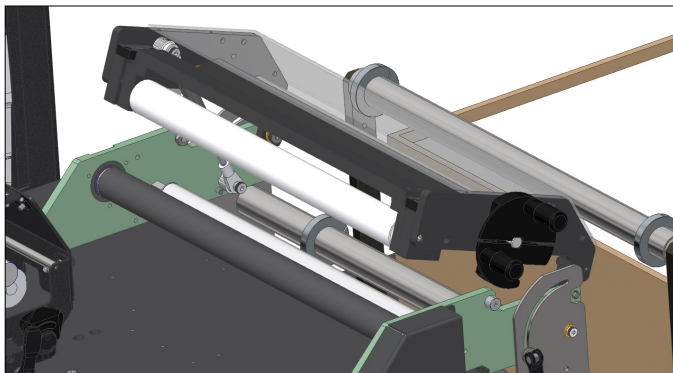
DO NOT ATTEMPT TO CLEAN THE MACHINE WHILE IT IS RUNNING. CLEANING THE MACHINE WHILE IT IS RUNNING CAN DAMAGE THE MACHINE AND CAUSE SEVERE PERSONAL INJURY OR DEATH.



WARNING!

FOLLOW INDUSTRY STANDARDS FOR THE HANDLING AND USE OF CHEMICALS. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT

1. Remove power and air from bagger.
2. Release the Unwind Cradle Latch.
3. Moisten a lint-free cloth with Isopropyl Alcohol and rub back and forth along Unwind Drive Roller.

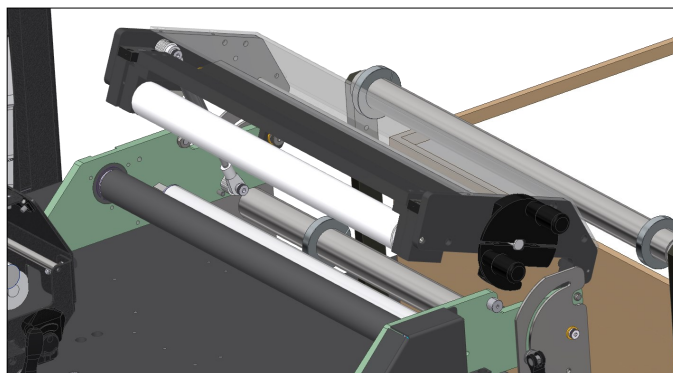


4. Rotate roller and repeat until roller is clean.

PINCH ROLLER

After Cleaning the Unwind Drive Roller, clean the Unwind Pinch Roller in the Latch Assembly.

1. Open the Cradle Latch.



2. Moisten a lint-free cloth with Isopropyl Alcohol and rub back and forth on the Pinch Roller.
3. Rotate roller and repeat until roller is clean.
4. When roller is clean, close the Cradle Latch.
5. Return Power to machine.

BAGGER FAULTS

Fault	Cause	Possible Solution (S)
Pressure Bar Obstruction	The Pressure Bar attempted to close, but was blocked by an obstruction.	This is usually a part that did not drop past the Pressure Bar. Increase the Filler Drop Timer setting.
Reverse Fault	The bag film did not separate during reversing.	Check bag length in job
No Bag Covering The Eye	There is no film in the machine or the film is not being detected by the Bag Edge Photo-Eye.	Press the Job Button once and the bagger will jog the web for 10 seconds until the Photo-Eye is covered by film.
Pressure Bar Failed to Open	The commanded motion did not complete before the fault time expired.	See Cylinder Motion Fault.
Pressure Bar Failed to Close	The commanded motion did not complete before the fault time expired.	See Cylinder Motion Fault.
Seal Bar Temperature Sensor Failure	Seal Bar temperature sensor is reporting as missing or broken wire	A qualified service person should test the Thermocouple and its associated circuits.
Safe Power Off	E-Stop Button was pressed or E-Stop is released but the Green Power Button has not been pressed.	Release the E-Stop, press the Green Power Button, and the Bagger Enabled button.
E-Stop tripped or Power not Reset	E-Stop Button was pressed or E-Stop is released but the Green Power Button has not been pressed.	Release the E-Stop, press the Green Power Button, and the Bagger Enabled button.
Seal Bar Thermal Runaway - Not Heating	Seal Bar not heating up at all, or not as quickly as expected.	A qualified service person should test the Thermocouple and its associated circuits.
Seal Bar Thermal Runaway - Overshoot	Seal Bar not cooling as quickly as expected, or temperature is much higher than expected	A qualified service person should test the Thermocouple and its associated circuits.
Out Of Bags	The bagger detected that the web is broken or the bagger is out of bags.	Splice the broken web or replace the empty roll/box.
Opened Bag Was Removed	A bag was opened and verified as open by the Bag Open Sensor. The opened bag was physically removed or came off the Bag Opened Sensor before the Filler could finish delivering its product.	Check that the Funnel door is pinning the opened bag to the Pressure Bar. Verify that the bag is properly supported by the Load Shelf as it is being filled. It may be that as the bag is being filled, it shifts or slips off the shelf and pulls the bag away from the Funnel.

BAGGER FAULTS

Fault	Cause	Possible Solution (S)
Bag Failed To Open	The Bag Opened Sensor failed to make as the Bag Open Fingers were attempting to open the bag.	This fault is usually the result of a problem with the Pressure Bar Pass-thru Adjustment or Bag Open Fingers Adjustment. Also check that the Sensor operates correctly.
Communication Fail - I/O Master to Controller	Communications between Controller and I/O master have been interrupted.	Verify cables are connected and tightened properly.
Communication Fail - I/O Master to I/O Node	Communications between I/O Master and expected I/O node have been interrupted	Verify cables are connected and tightened properly.
Master I/O Communication Failure		
Controller Disconnected	The controller is disconnected.	Connect the controller.
Palm Button Configuration Error	Machine is configured for a single palm button, but second palm button seen active.	Select Dual Palm Buttons in the Factory Setup\Cycle Button.
Package Eject Guard Removed	Package Eject Sensor failed to read guard.	<ol style="list-style-type: none"> 1. Mount the Package Eject Guard. 2. Adjust Sensor.

BAGGER/PRINTER WARNINGS

Fault	Cause	Possible Solution (S)
Seal Bar not at Temperature - Bagger inhibited from cycling	Seal Bar is not at the required temperature for sealing.	Bagger will not cycle until required temperature has been reached.
Low Pressure Air Timed Out	Low Pressure Air Timed Out	No intervention required by operator.
Recovery Mode Active	Attempting to open the bag again.	No action is required.
Recovery Mode Feeding New Bag	The bagger is feeding out a replacement bag. It could not open the original bag.	No action is required.
Bag Is Filled	A bag has been filled and sealed in Filler Mode.	No action is required.
Bag Level Low	Bag are getting low in box.	Prepare to replace bags soon.
Demo Mode Is Active	Bagger's demo mode is active.	Disable demo mode in Settings\Demo to turn off this warning.
Factory Test Mode Is Active	Bagger is running in Test Mode.	Turn Factory Test OFF in Factory Setup\Factory Test.
Machine Not Tested	Bagger life cycle count is not over 1,000 cycles .	Bagger has to run continuously for 1,000 cycles without a fault to clear.
Printer Not Ready	Waiting for printer to begin bagging.	Load label into printer.
Printer Ribbon Low	Printer ribbon is nearly at minimum usage.	Prepare to replace ribbon.
Waiting For Printer	Waiting for the printer to print before finishing the bagging cycle.	Load label into printer.
Printer Ribbon	Ribbon not moving during print	Verify ribbon is installed correctly.

PRINTER FAULTS

All printer functions are internally monitored. When a problem (Fault) or a potential problem (Warning) is detected, a corresponding message will appear in the display. Fault messages receive the highest display priority. If more than one fault is detected the display will cycle between messages.

NOTE: To return to normal operation following a fault, the fault must be corrected and then press the 'Reset' key from Service Screen\Printer must be pressed to clear the condition.

Display Message	Description	Possible Solution (s)
Ribbon Out	In thermal transfer mode: <ul style="list-style-type: none"> Ribbon is not loaded Ribbon is loaded incorrectly The ribbon sensor is not detecting ribbon. 	Load ribbon correctly. See Load Printer Ribbon on page 2-4.
Head Identification Failed	Printhead is not a Zebra™ Certified Product.	Install a genuine Zebra™ printhead.
Head Element Out	A printhead element is no longer working.	If the location of the failed element affects printing, replace the printhead.
Replace Printhead	The printhead is nearing the end of its life and should be replaced.	Replace the printhead.
Head Maintenance Needed	The printhead needs to be cleaned.	Clean the printhead. See Cleaning the Printhead on page 2-7.
Head Under Temp / Head Thermistor Fault The printer shows one of these messages or cycles between them.	The printhead Data or Power Cable are not properly connected. The printhead has a faulty Thermistor.	Connect cables. Replace the printhead.
Out of Memory Storing XXX	There is not enough memory to perform the function specified.	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. Ensure that the data is not directed to a device that is not installed or is unavailable.

PRINTER TROUBLESHOOTING

Barcode Does Not Scan		
Issue	Possible Cause	Possible Solution (s)
The barcode printed on label does not scan.	The barcode is not within specifications because the printer is set at an incorrect darkness level.	<ol style="list-style-type: none"> 1. Print a test label. 2. If necessary, manually adjust the darkness or print speed settings.
	There is not enough blank space around the barcode.	Leave at least 1/8 in. (3.2mm) between the barcode and other printed areas on the label and between the barcode and the edge of the label.
Poor Print Quality		
Issue	Possible Cause	Possible Solution (s)
Smudge marks on labels	The Media or ribbon is not designed for high-speed operation.	Replace supplies with those recommended for high-speed operation.
Poor results with thick labels	The print line is not at an optimal position for your media.	Adjust the print line for thick media.
Print Consistently Too Light or Too Dark		
Issue	Possible Cause	Possible Solution (s)
Printing is too light or too dark over the entire label	The Printer is set at an incorrect darkness level.	For optimal print quality, set the darkness to the lowest possible setting for your application.
	Incorrect printhead pressure.	Set the printhead pressure to the minimum needed for good print quality.
Printing is too light or too dark on one side of the label	Uneven printhead pressure.	Set the printhead pressure to the minimum needed for good print quality.
General print quality issues	The printer is set at an incorrect print speed or darkness level. Keep in mind that the printer settings may be affected by the driver or software being used.	<ol style="list-style-type: none"> 1. Clean the printhead and platen roller. 2. For optimal print quality, set the darkness to the lowest possible setting for your application. 3. Set the printhead pressure to the minimum needed for good print quality.

PRINTER TROUBLESHOOTING

Angled Gray Lines on Blank Labels		
Issue	Possible Cause	Possible Solution (s)
Fine, angular gray lines on blank labels	Wrinkled ribbon.	Verify the ribbon is loaded properly, smooth out ribbon.
Missing Print		
Issue	Possible Cause	Possible Solution (s)
Long tracks of missing print on several labels	Print element damaged.	Call for service.
	Wrinkled ribbon.	Verify the ribbon is loaded properly, smooth out ribbon.

WARRANTY
SHARP PACKAGING SYSTEMS ("SHARP")
STANDARD TERMS AND CONDITIONS FOR PACKAGING MACHINERY

By placing an order, Buyer agrees to the following terms and conditions:

1. **TERMS OF PAYMENT:** Cash in lawful U.S. currency payable as follows: For base machinery w/o automatic in-feed devices, (2/3) of net price with the order and the final (1/3) of net price within thirty (30) days after shipment. For all custom systems and systems with automatic in-feed devices, (50%) of net price with the order, (40%) of net price prior to shipment and (10%) of net price within thirty (30) days after shipment. In addition to any other remedy of Sharp hereunder, if the final payment is not received by Sharp within thirty (30) days after shipment, Buyer shall pay interest thereafter at the rate of eight-
een (18) percent per year or the maximum rate permitted by law, whichever is less.
2. **SHIPMENT:** All prices are f.o.b. Sharp's plant in Sussex, Wisconsin. Method and route of shipment are at Sharp's discretion and freight is prepaid and added to Buyer's invoice unless Buyer supplies to Sharp explicit written instructions as to method and route of shipment in which case freight is billed collect. All shipments are insured at Buyer's expense and made at Buyer's risk.
3. **DELIVERY:** Shipping promises are made in good faith. Shipping dates appearing on acknowledgments or orders, or given Buyer in any other manner, are approximate. When Buyer delays in supplying information necessary to proceed with the order, the date of shipment may be extended accordingly and determined by the conditions of Sharp's factory at the time specifications are completed. Sharp shall not be liable for any failure or delay of delivery or performance of this order due to causes beyond its reasonable control. The existence of such causes of delay shall extend the time for delivery or performance of this order by the period of time lost for such reasons unless Sharp and Buyer shall have otherwise expressly agreed in writing.
4. **QUOTATIONS AND PRICES:** Sharp's written quotations of prices automatically expire thirty (30) calendar days from the date issued and are subject to change or to termination by notice within the period. Clerical errors are subject to correction.
5. **TITLE: RIGHTS RESERVED UNTIL PAYMENT:** Until payment of the entire purchase price of the machine purchased: (a) ownership title shall remain in Sharp; (b) Buyer shall not sell, pledge, mortgage or otherwise encumber the machine or permit the machine to be encumbered, shall not remove the machine from its premises, shall protect and keep insured the machine at Buyer's expense (with proceeds payable to Sharp as its interest appears) against injury, loss or destruction, and shall execute and file such Financing Statement as to the property under the Uniform Commercial Code as Sharp shall reasonably request. No injury, loss or destruction of the machine after delivery to Buyer shall release Buyer from its obligation to pay Sharp the entire purchase price. Upon receipt by Sharp of payment of the entire purchase price for the machine, title shall automatically vest in Buyer and Sharp will execute releases or other documents as Buyer may request to confirm that fact.
6. **DEFAULT:** On cancellation of the order by Buyer or default by Buyer in any payment of the price or in the performance of any terms or conditions imposed on Buyer herein, Sharp, without notice, may (a) take immediate possession of the machine as Sharp's own individual and sole property, free and clear of any claim by Buyer, and retain any and all payments made as liquidated damages for Sharp's lost profits, any use of the machine by Buyer, any depreciation of the machine, and any expense to Sharp of taking possession of the machine; or (b) take immediate possession of the machine and sell the machine, without notice, in which case the proceeds of sale shall be applied on the unpaid balance of the price and expenses to Sharp of taking possession, storage and resale. If the proceeds of the resale do not equal the portion of the price remaining unpaid and the expenses to Sharp of taking possession, storage and resale, Buyer agrees to promptly pay to Sharp any deficiency. Buyer hereby irrevocably grants to Sharp, or Sharp's agents or servants, the right to enter at any time, with or without force, any premises in which the machine may be located, and the right to examine or take possession of the machine. Buyer waives any right of action, which might accrue by reason of the entry, or the taking of possession of the machine.
7. **TAXES:** Sharp's prices do not include sale, use, excise or similar taxes or charges now or hereafter imposed. The amount of any such taxes or charges shall be paid by Buyer, or in lieu thereof, Buyer shall provide Sharp with a tax exemption certificate acceptable to the taxing authorities.
8. **LIMITED WARRANTY:** Sharp warrants to the original Buyer only that each new machine will be free from defects in material and workmanship, when properly maintained and under normal use and service, subject to the terms of this warranty. Buyer's sole and exclusive remedy under this warranty shall be limited to repair or replacement, at Sharp's option, of any defective part of the machine which is returned, transportation prepaid, to Sharp's authorized service center within the warranty period. The warranty starts on the date the machine is delivered to the original Buyer and expires one (1) year for parts, and ninety (90) days for labor, after that date. Buyer, at Sharp's request, shall provide documents establishing the delivery date. Exclusions: This warranty shall not apply to: (a) any machine subjected to misuse, abuse, or accident; (b) damage in transit or from external sources; (c) overloading of machine capacity; (d) failures which are due to a lack of proper maintenance or care as prescribed in the operating and maintenance instructions; (e) normal wear and tear or relatively minor adjustments; (f) replacement of consumable items (including, but not limited to, heating elements, silicon pads and Teflon cloth/tape); (g) repairs or alterations performed by any organization other than Sharp or Sharp's authorized service centers and (h) parts, accessories, or other items manufactured by others which are in any way used and/or installed in or on the machine; such machine components may be covered under their own manufacturer's warranties. **THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SHALL CONSTITUTE THE SOLE REMEDY OF BUYER AND THE SOLE LIABILITY OF SHARP, WHETHER IN CONTRACT, TORT OR STRICT LIABILITY. IN NO EVENT SHALL SHARP BE LIABLE FOR ANY LOSS PROFITS OR OTHER INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING OUT OF, RELATED TO, OR CONNECTED WITH THE FURNISHING, PERFORMANCE, USE OF OR INABILITY TO USE THE MACHINE, EVEN IF SHARP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM AGAINST BUYER BY ANY OTHER PARTY.** Buyer shall give written notice to Sharp of any alleged failure or refusal of Sharp to repair or replace as promised by this warranty within fifteen (15) days after Buyer learns of the alleged failure or refusal. If Buyer fails to do so, this warranty shall be void as to the alleged failure or refusal. No action for breach of this warranty shall be commenced more than one year after the cause of action accrues. No modification of this warranty or waiver of its terms shall be binding on Sharp unless approved in writing by an authorized corporate officer of Sharp. This warranty is the entire warranty given by Sharp on the machine and supersedes any prior statements or representations.
9. **INDEMNIFICATION:** Buyer agrees to indemnify and hold Sharp harmless from all claims, demands, losses, damages, costs and expenses, including legal fees, arising out of: (a) any machine subjected to misuse, abuse, or accident; (b) damage in transit or from external sources; (c) overloading of machine capacity; (d) failures which are due to a lack of proper maintenance or care as prescribed in the operating and maintenance instructions; (e) normal wear and tear or relatively minor adjustments; (f) replacement of consumable items (including, but not limited to, heating elements, silicon pads and Teflon cloth/tape); (g) repairs or alterations performed by any organization other than Sharp or Sharp's authorized service centers and (h) parts, accessories, or other items manufactured by others which are in any way used and/or installed in or on the machine.
10. **COLLECTION:** If Sharp commences any action against buyer to collect any amount due from Buyer to Sharp in connection with the order, Buyer shall pay Sharp's costs of collection, including reasonable attorneys' fees, whether incurred before or after judgment.
11. **GENERAL:** The "Agreement" means only the provisions of these Standard Terms and Conditions. Acceptance of Buyer's order is expressly made conditional on Buyer's assent to these Standard Terms and Conditions. The Agreement states the entire agreement of the parties concerning the order. The Agreement supersedes all prior agreements, communications, and representations between Buyer and Sharp concerning the order, including any provisions in any order or other form initiated by Buyer which are not expressly accepted by Sharp in writing. The Agreement may not be modified or amended except by written agreement of Sharp signed by an authorized corporate officer of Sharp. Sharp's remedies under the Agreement shall be cumulative. Sharp's election of one remedy shall not preclude pursuit of other remedies. Sharp's waiver of any right shall not prevent Sharp from exercising that right subsequently. Any notice to Buyer shall be deemed given when (a) mailed to Buyer by first class mail at its last known address, or (b) transmitted to Buyer by facsimile at its last known facsimile number, or (c) received by Buyer, whichever is first. If any part of the Agreement is invalid, the rest of the Agreement shall remain in effect.
12. **GOVERNING LAW AND FORUM:** The Agreement shall be interpreted under and governed by the laws of the United States and the State of Wisconsin. Any action arising out of, related to, or connected with the Agreement or machines sold under the Agreement shall be commenced only in the United States District Court for the Eastern District of Wisconsin or the Circuit Court for Waukesha County, Wisconsin. Buyer consents to personal jurisdiction and venue in such courts.
- 13.

Revised: November 27, 2006 Supersedes: July 19, 2006

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