

# ESA

ESA2016TK, ESA2028TK, ESA2040TK, ESA2050TK, ESA2070TK, ESA2080TK,  
ESA20100TK, ESA3040TK, ESA3050TK, ESA3070TK, ESA3080TK  
ESA30100TK, ESA4040TK, ESA4050TK, ESA4070TK, ESA4080TK,  
ESA40100TK, ESA5050TK, ESA5070TK, ESA5080TK, and ESA50100TK

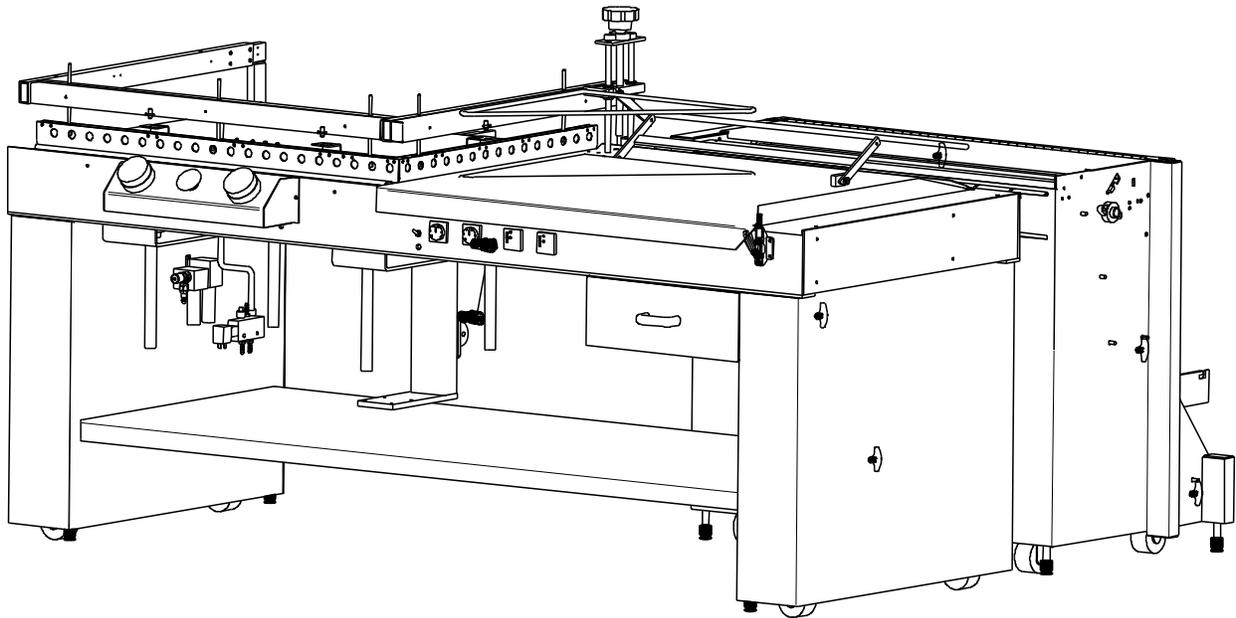
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## L-Sealers

## ESA Professional Series

# User Guide



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**EASTEY**<sup>®</sup>



# ESA

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ESA5070TK, ESA5080TK, and ESA50100TK

# L-Sealers ESA Professional Series

## User Guide

Revised 08/10/2020

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# Safety

Read this manual carefully and make it available to everyone connected with the supervision, maintenance, or operation of this machine. Additional copies are available on request ([Eastey.com/contact-us](http://Eastey.com/contact-us)).

The development of a good safety program that is rigidly enforced is absolutely imperative when involved in the operation of industrial equipment. Our machinery is well designed and includes extremely important safety features. Proper installation, safe operation, and regular maintenance and upkeep are of far greater importance than our design. Only properly-trained individuals following rigidly enforced safety rules, as recommended by ANSI and OSHA should be allowed to operate these machines.

Be very careful when operating, adjusting, or servicing this equipment. If in doubt, stop and obtain qualified help before proceeding.

## Safety Precautions

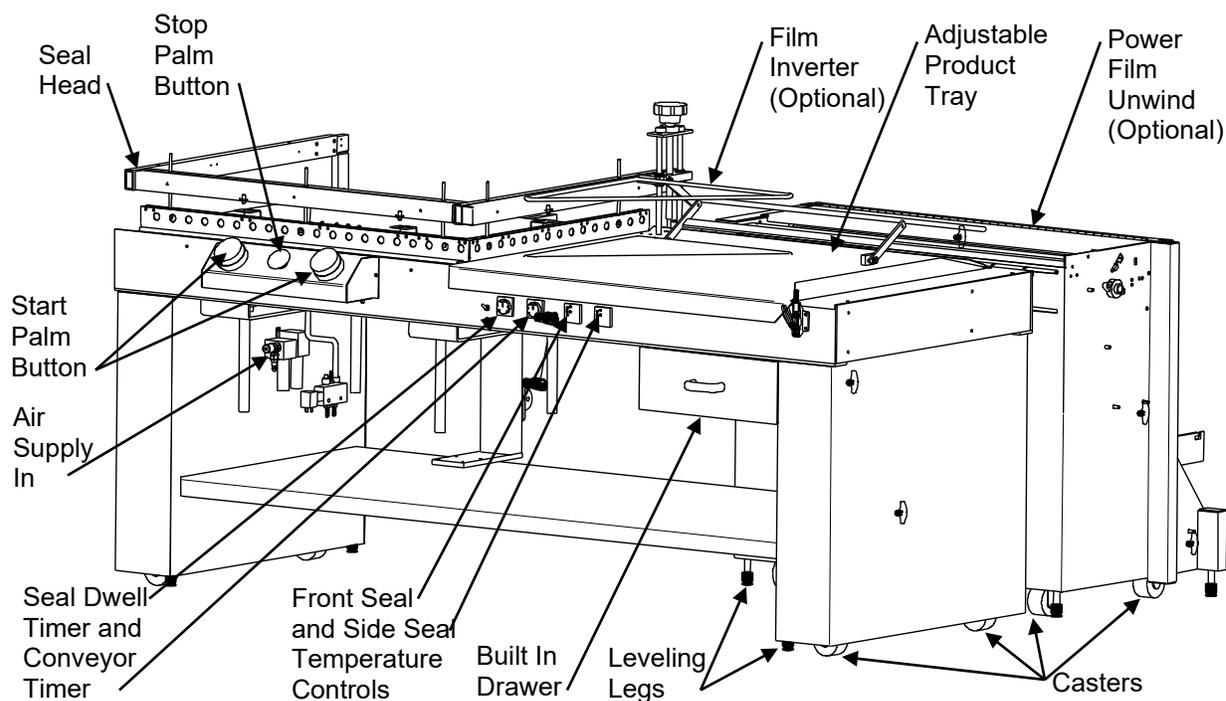
Before installing, operating or servicing this equipment, please read the following precautions carefully:

- Always disconnect electrical power before attempting maintenance for any electrical or moving parts. Do not place hands, head, or any part of the body inside the confines of the machine unless the mechanism is securely fastened and the electrical supply is shut off.
- Do not tamper with electrical wiring. Use only the specified power-supply cable. Use only licensed electricians to check or repair electrical wiring.
- In order to prevent damage to the machinery or injury to personnel, do not increase the factory settings on either the electrical or mechanical overload safety devices. Do not operate a machine if such modifications have been made.
- Keep hands away from moving conveyors and moving parts. Conveyor belts that have become worn or frayed can be hazardous and should be replaced promptly.
- Never operate this or any moving equipment without all covers and guards in place. The internal mechanism of most packaging machinery contains numerous shear, pinch, and in-running nip points, many of which are capable of causing severe injury and permanent disfiguration.
- To minimize the potential for personal injury, always be sure that the machine operators and others working on the machinery are properly trained in the correct usage of the equipment and properly instructed regarding the safety procedures for operation.

- Heat sealing arms and jaws on packaging machinery can become very hot after a period of use. Keep hands away while in operation and use caution if the machine has been running recently. If optional cutting blades have been installed, these can be very sharp. Exercise caution.
- Do not make any modifications to either the electrical circuitry or the mechanical assemblies of this machinery. Such modifications may introduce hazards that would not otherwise be associated with this machinery. Eastey will not be responsible for any consequences resulting from such unauthorized modification. Do not operate a machine if any modification has been made
- This equipment is designed for indoor operation in a typical clean, dry factory environment. Do not operate the machine in any extremely wet or oily environment that may exceed operating specifications.
- The use of certain types of plastic films in sealing and/or shrink-wrapping equipment may result in the release of hazardous fumes due to degradation of the film at high temperatures. Before using any plastic film in this equipment, the manufacturer or supplier of the film should be contacted for specific information concerning the potential release of hazardous fumes. Adequate ventilation should be provided at all times.
- Keep combustible materials away from this equipment. The equipment may be a source of ignition.
- Do not wear loose clothing such as ties, scarves, jewelry, etc. Long hair should be pulled back and/or covered while operating this machine.

# Introduction

## ESA Professional Series L-Sealers Overview



## Specifications

| Model Number | Seal Dimensions   |                 | Machine Dimensions |                  |                   | Standard Power |       |       | Net Weight          | Shipping Weight     |
|--------------|-------------------|-----------------|--------------------|------------------|-------------------|----------------|-------|-------|---------------------|---------------------|
|              | Front (F)         | Side (S)        | Width (A)          | Height (B)       | Length (C)        | Volts          | Amps  | Phase |                     |                     |
| ESA2016T(K)  | 16 in.<br>41 cm   | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 63 in.<br>160 cm  | 220/110        | 10/20 | 1     | 600 lbs.<br>272 kg. | 700 lbs.<br>317 kg  |
| ESA2028T(K)  | 28 in.<br>71 cm   | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 84 in.<br>213 cm  | 220/110        | 10/20 | 1     | 700 lbs.<br>317 kg  | 800 lbs.<br>362 kg  |
| ESA2040T(K)  | 40 in.<br>102 cm  | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 106 in.<br>269 cm | 220            | 15    | 1     | 800 lbs.<br>362 kg  | 900 lbs.<br>408 kg  |
| ESA2050T(K)  | 50 in.<br>127 cm  | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 126 in.<br>320 cm | 220            | 20    | 1     | 900 lbs.<br>408 kg  | 1000 lbs.<br>453 kg |
| ESA2070TK    | 70 in.<br>178 cm  | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 167 in.<br>424 cm | 220            | 25    | 1     | 1300 lbs.<br>589 kg | 1400 lbs.<br>635 kg |
| ESA2080TK    | 80 in.<br>203 cm  | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 187 in.<br>474 cm | 220            | 20    | 1     | 1500 lbs.<br>680 kg | 1600 lbs.<br>725 kg |
| ESA20100TK   | 100 in.<br>254 cm | 20 in.<br>51 cm | 34 in.<br>86 cm    | 44 in.<br>112 cm | 227 in.<br>577 cm | 220            | 20    | 1     | 1900 lbs.<br>861 kg | 2000 lbs.<br>907 kg |
| ESA3040T(K)  | 40 in.<br>102 cm  | 30 in.<br>76 cm | 43 in.<br>109 cm   | 44 in.<br>112 cm | 106 in.<br>269 cm | 220            | 20    | 1     | 1200 lbs.<br>544 kg | 1300 lbs.<br>591 kg |

| Model Number | Seal Dimensions   |                  | Machine Dimensions |                  |                   | Standard Power |      |       | Net                  | Shipping             |
|--------------|-------------------|------------------|--------------------|------------------|-------------------|----------------|------|-------|----------------------|----------------------|
|              | Front (F)         | Side (S)         | Width (A)          | Height (B)       | Length (C)        | Volts          | Amps | Phase | Weight               | Weight               |
| ESA3050T(K)  | 50 in.<br>127 cm  | 30 in.<br>76 cm  | 43 in.<br>109 cm   | 44 in.<br>112 cm | 126 in.<br>320 cm | 220            | 20   | 1     | 1300 lbs.<br>591 kg  | 1400 lbs.<br>637 kg  |
| ESA3070TK    | 70 in.<br>177 cm  | 30 in.<br>76 cm  | 43 in.<br>109 cm   | 44 in.<br>112 cm | 167 in.<br>424 cm | 220            | 25   | 1     | 1600 lbs.<br>728 kg  | 1700 lbs.<br>774 kg  |
| ESA3080TK    | 80 in.<br>203 cm  | 30 in.<br>76 cm  | 43 in.<br>109 cm   | 44 in.<br>112 cm | 187 in.<br>474 cm | 220            | 25   | 1     | 1800 lbs.<br>819 kg  | 1900 lbs.<br>861 kg  |
| ESA30100TK   | 100 in.<br>254 cm | 30 in.<br>76 cm  | 43 in.<br>109 cm   | 44 in.<br>112 cm | 227 in.<br>577 cm | 220            | 25   | 1     | 2100 lbs.<br>956 kg  | 2200 lbs.<br>997 kg  |
| ESA4040T(K)* | 40 in.<br>101 cm  | 40 in.<br>101 cm | 53 in.<br>135 cm   | 44 in.<br>112 cm | 106 in.<br>269 cm | 220            | 20   | 1     | 1700 lbs.<br>774 kg  | 1800 lbs.<br>819 kg  |
| ESA4050T(K)* | 50 in.<br>127 cm  | 40 in.<br>101 cm | 53 in.<br>135 cm   | 44 in.<br>112 cm | 126 in.<br>320 cm | 220            | 20   | 1     | 1900 lbs.<br>861 kg  | 2000 lbs.<br>907 kg  |
| ESA4070TK*   | 70 in.<br>177 cm  | 40 in.<br>101 cm | 53 in.<br>135 cm   | 44 in.<br>112 cm | 167 in.<br>424 cm | 220            | 25   | 1     | 2100 lbs.<br>956 kg  | 2200 lbs.<br>997 kg  |
| ESA4080TK*   | 80 in.<br>203 cm  | 40 in.<br>101 cm | 53 in.<br>135 cm   | 44 in.<br>112 cm | 187 in.<br>474 cm | 220            | 25   | 1     | 2300 lbs.<br>1043 kg | 2400 lbs.<br>1092 kg |
| ESA40100TK*  | 100 in.<br>254 cm | 40 in.<br>101 cm | 53 in.<br>135 cm   | 44 in.<br>112 cm | 227 in.<br>577 cm | 220            | 25   | 1     | 2600 lbs.<br>1179 kg | 2700 lbs.<br>1229 kg |
| ESA5050TK*   | 50 in.<br>127 cm  | 50 in.<br>127 cm | 63 in.<br>160 cm   | 44 in.<br>112 cm | 126 in.<br>320 cm | 220            | 20   | 1     | 1900 lbs.<br>861 kg  | 2000 lbs.<br>907 kg  |
| ESA5070TK*   | 70 in.<br>177 cm  | 50 in.<br>127 cm | 63 in.<br>160 cm   | 44 in.<br>112 cm | 167 in.<br>424 cm | 220            | 25   | 1     | 2100 lbs.<br>956 kg  | 2200 lbs.<br>997 kg  |
| ESA5080TK*   | 80 in.<br>203 cm  | 50 in.<br>127 cm | 63 in.<br>160 cm   | 44 in.<br>112 cm | 187 in.<br>474 cm | 220            | 25   | 1     | 2300 lbs.<br>1043 kg | 2400 lbs.<br>1092 kg |
| ESA50100TK*  | 100 in.<br>254 cm | 50 in.<br>127 cm | 63 in.<br>160 cm   | 44 in.<br>112 cm | 227 in.<br>577 cm | 220            | 25   | 1     | 2600 lbs.<br>1179 kg | 2700 lbs.<br>1229 kg |

**NOTE: All machines require 3.5 CFM, 60-80 PSI air connection.**

### Explanation of Model Numbers

- E = Manufactured by Easteey packaging division of Engage Technologies.
- SA = Semi-Automatic. ESA model Professional Series L-sealers incorporate a system that allows the operator to load the package on the product tray and move it into the sealing area, and then requires both hands on Start palm buttons to activate the seal head. Seal head construction assures uniform sealing pressure over the entire length of the seal bars to provide consistent sealing results.
- \_\_ = 20, 30, 40, or 50 — First two digits indicate length of sidebar or nominal maximum length of side seal in inches: 20, 30, 40, or 50-inch sidebars lengths are available.
- \_\_ or \_\_\_ = 16, 28, 40, 50, 70, 80, or 100 — Remaining two to three digits indicate length of front bar or nominal maximum length of front seal in inches: 16, 28, 40, 50, 70, 80, or 100-inch front bar lengths are available.
- T = Takeaway conveyor — Professional Series L-Sealers are typically equipped with a takeaway conveyor.  
M = Manual takeaway is an option.

- K = Knife — Indicates hot knife seal bar. For smaller units, where (K) is indicated in parentheses, the hot knife seal bar is an option and the unit can be ordered with or without it. For larger units, the hot knife seal bar is standard.
- V \_ = Voltage and Phase. V1 = 220V AC single Phase. All models are available configured for 220 VAC single phase. The smallest models (ESA2016T or ESA2016TK and ESA2028T or ESA2028TK) are also available configured for V0 = 110 VAC single phase. See the following table for available AC voltages. Only single phase is offered.

#### Voltage and Phase Designator Meaning

| Voltage / Phase Designator | Volts | Phase |
|----------------------------|-------|-------|
| V0                         | 110   | 1     |
| V1                         | 220   | 1     |

| Voltage / Phase Designator | Volts | Phase |
|----------------------------|-------|-------|
| V3                         | 380   | 1     |
| V5                         | 480   | 1     |

- For units indicated with an asterisk (\*), powered film unwind is included.

#### Standard features

- Designed to seal most polyolefin, polyethylene, and PVC shrink films (Hot knife is required for PVC)
- All-welded main frame from ¼-inch cold-rolled steel
- Built in drawer for tools or spare parts
- Seal head casting equipped with head return air cylinder
- Stainless steel film clamps hold film in place while sealing
- Available with hot knife seal systems
- Hot knife seal systems available with mushroom (standard), pancake, or arrow inserts
- Pneumatic activation and sturdy seal head construction applies even pressure across seal-bars (All models require 3.5 CFM, 60-80 PSI air connection)
- Adjustable dwell time for better seal control
- Solid state temperature control adjustable for a variety of films
- Adjustable product tray accommodates wide variety of product sizes
- Takeaway conveyor can be raised or lowered to center the seal with the product
- Automatic takeaway conveyor (Manual takeaway is an option)
- Heavy duty film cradle allows for easy changeovers and adjustments

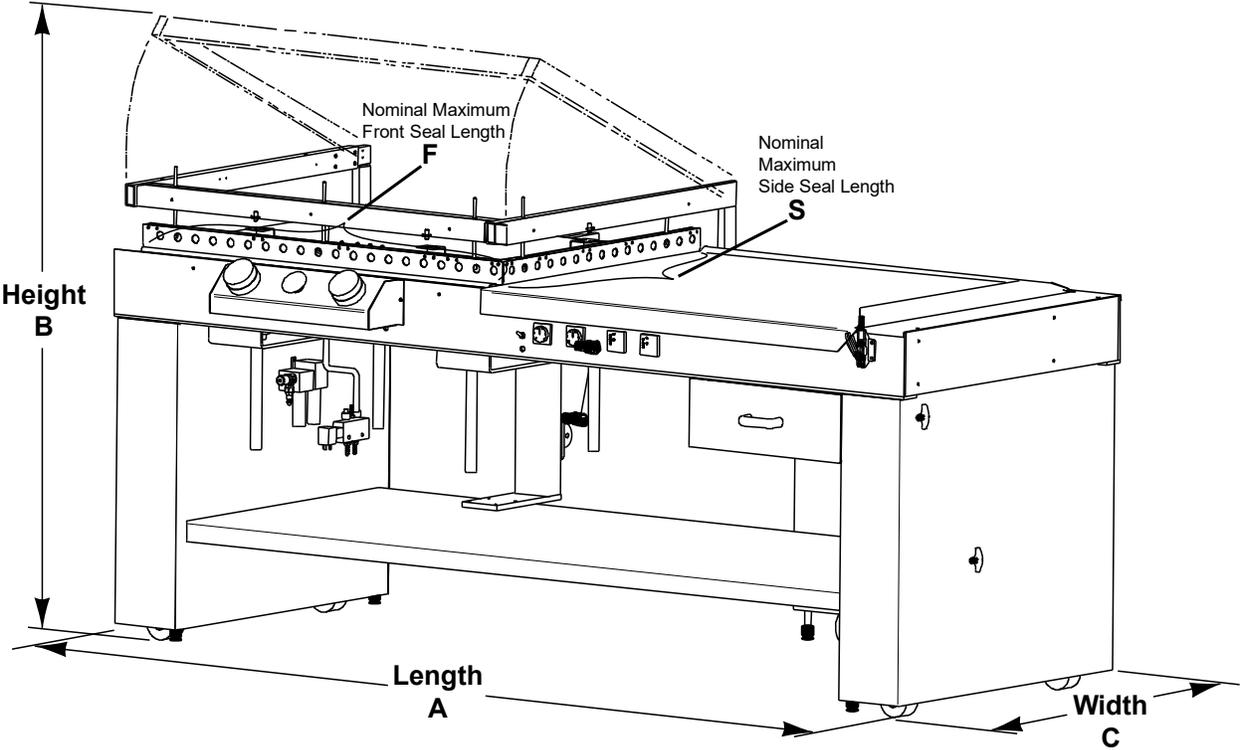
- Adjustable pin perforator provides air evacuation
- Side seal size from 20 in. to 50 in.; front seal size from 16 in. to 100 in.
- Maximum film width up to 44 inches
- Maximum film roll O.D. up to 12 inches; 10 inches with power unwind
- Custom two-part epoxy finish resists scratching
- Heavy duty casters for transportation within plant
- Available in 110V, 220V, or optional 480V
- Easy to use design requires minimal training and maintenance
- Made in the USA

### **Options**

- Power film unwind
- Film inverter
- Hot knife inserts
- Stainless steel and left-hand models available
- Lower conveyor (2" maximum)
- Custom product guides or product tray

# Machine Overall Dimensions

See Machine Dimensions in Specifications table for overall machine width, height, and length.



# Unpacking

Thoroughly inspect the equipment and packaging immediately on arrival.

Carefully remove the outer protective shipping wrapper. Inspect the machine for any damage that may have occurred during transit. If goods are received short or in damaged condition, it is important that you notify the carrier's driver before they leave your company and insist on a notation of the loss or damage across the bill of lading. Otherwise no claim can be enforced against the transportation company. Please note that a copy of this document is attached to the outside of every crate.

If concealed loss or damage is discovered, notify your carrier at once and request, **insist**, on an inspection. This is absolutely necessary. A concealed damage report must be made within ten (10) days of delivery of shipment.

Unless you do this, the carrier will not entertain any claim for loss or damage. The agent will make an inspection and grant a concealed damage notation. If you give the transportation company a clear receipt for the goods that have been damaged or lost in transit, you do so at your own risk and expense.

We are willing to assist you in every reasonable manner to help you collect claims for loss or damage. However, this willingness on Eastey's part does not make Eastey or its parent or related companies responsible for collections or claims or replacement of equipment damaged or lost in transit.

## Loading and Unloading Instructions

- The machine is fully crated on pallets and will require a forklift to unload.
- Use a forklift with adequate capacity to lift the machine from the pallet. (Forklift extensions may be required to repack equipment.)
- When lifting and moving the machine, take into consideration the entire machine weight, balance, and strength.
- Use shipping straps to restrain the L-Sealer securely so it will not shift in transit.

# Installation

Lift the machine up and off of the shipping pallet.

**CAUTION!** The ESA series L-sealer is heavy and will require a forklift, floor crane, or several people to move safely off the shipping pallet. Use proper equipment when lifting the L-sealer and ensure it is secure and will not shift while being moved off the shipping pallet.

Place the sealer in the desired location with the required electrical power source available. (See power requirements for the specific model in the Specifications table.) Make sure the electrical wiring is adequate to provide the required voltage. If the voltage provided is too low, the equipment will not operate correctly.

Selecting the proper location is one of the most important considerations for initial setup. When selecting the location, take into consideration the following factors.

1. Adequate power supply nearby?
2. Where is the sealer in relation to the power source? Source of air at required CFM flow and PSI pressure?
3. Where is the sealer in relation to the tunnel and any conveyor(s) necessary to move the wrapped product? (Alignment with packaging line.)
4. Convenience for the operator.

If there is any doubt, get qualified assistance with your initial installation.

## Location Requirements

When installing the L-sealer please be aware of the following considerations:

1. The surface on which it is located is flat and level.
2. Conveyor or packing table height.
3. Alignment with packaging line.

When the L-sealer is positioned in the operating location you will need access to:

1. Control panel switches: On/Off switch, dwell timer, conveyor timer.
2. Height and width adjustments.
3. Film unwinder.

For units equipped with a takeaway conveyor at the exit of the L-sealer, provision should be made for exiting packages. For example, a table or bin where packages that have been sealed will be placed until they can be picked up, or a conveyor that will move them to the tunnel.

If the L-sealer is part of a longer packaging line, take into consideration the table and conveyor height in relation to adjacent machinery.

The machine should be placed on a flat, level floor so that it does not rock or move. We recommend that the machine be securely locked in place when used.

Set up the L-sealer and move it to its location. The casters allow easy movement over smooth flat surfaces. If you need to lift the unit to move it, you will need to use a pallet jack, floor crane, or fork lift to move it to its location.

**CAUTION! If the L-sealer must be lifted for moving, use proper equipment when lifting and moving it to ensure it is secure and will not shift.**

When the L-sealer has been moved to its location, use the levers on the casters to lock the wheels to prevent rolling and keep the unit in place. A power cord (with optional electrical plug) should be installed by a licensed electrician.

**CAUTION! Before operating, ensure the following:**

- 1. All shipping ties are removed.**
- 2. All personnel are clear of the equipment.**
- 3. Electrician has stated that all electrical work is complete.**
- 4. Adjust all controls according to the settings sheet.**
- 5. Air line is connected to the regulator and verify power supply of 60-80 PSI, 3.5 CFM.**

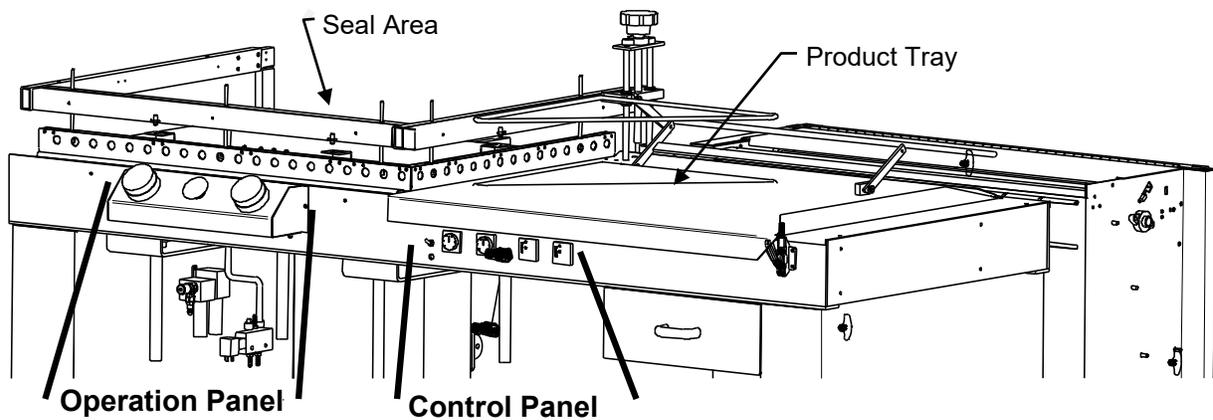
Refer to instructions in the Operation section for instructions to power up or shut down the machine.

# Operation

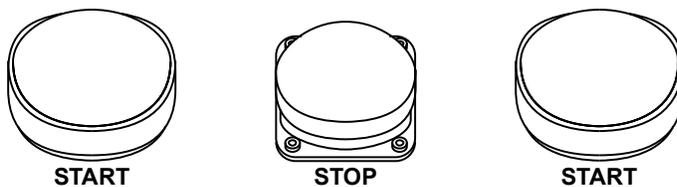
Controls for the L-sealer are located along the front of the machine in two groups:

- **Operation Panel** — The three palm buttons (two start buttons with one stop button in between) are grouped together in front of the seal area in the Operation Panel.
- **Control Panel** — The power on/off switch and controls for dwell and conveyor timer and sealer temperature controls are grouped together in the Control Panel under the product tray.

Controls in the Operation Panel and Control Panel are listed and explained below.



## Operation Panel

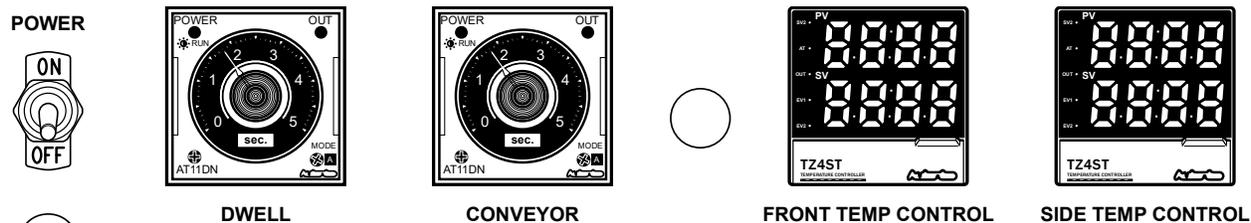


The Operation Panel is located on the machine frame in front of the seal area.

**Start** — There are two Start palm buttons. Both hands must be used to press both buttons simultaneously to perform the sealing operation.

**Stop** — The Stop palm button is located between the two Start palm buttons. If it is necessary to halt the sealing operation, push the Stop button with either hand.

## Control Panel



**Power** — Toggle switch to toggle L-Sealer power on or off.

**Dwell** — Timer setting for seal. (Duration of seal activation).

**Conveyor** — Timer setting for conveyor. (Length of time the conveyor will run for each item.)

**Front Temp Control** — Setting and current temperature display for front seal.

**Side Temp Control** — Setting and current temperature display for side seal.

**CAUTION!** When the power is turned on be aware of sealer hot surfaces and moving belts and rollers.

## Film Unwinder

### Product Tray

The product tray is the adjustable metal platform used to separate the film and to facilitate insertion of the product between the bottom and top layers of film.

The product tray is adjustable to achieve proper depth equal to the total width of the package, thereby allowing the product to be placed precisely at the center-fold of the film each time.

### Pin Perforator

The pin perforator is located between the lower idler rollers and is completely synchronized with the seal arm. It creates holes in the film (to allow air to escape during shrinking). The pin perforator is adjustable and must be properly placed in relation to the depth of the desired package. The positioning of the pin perforator should always be reviewed when changing the machine for a different size product or different size film. It is adjusted by the adjustment knob attached to the bottom of the film rack. The pin perforator is mounted inside the film rack of the machine to avoid dropping or damaging and so it is mounted out of the way.

## **Film Brake**

The film brake is positioned at the front end of the cradle rollers and creates a drag that maintains tension on the film as the film is dispensed. The operator should from time to time re-check the setting of the film brake for proper tension. The film brake's purpose is to reduce overruns or slack in the film.

## **Mounting Film**

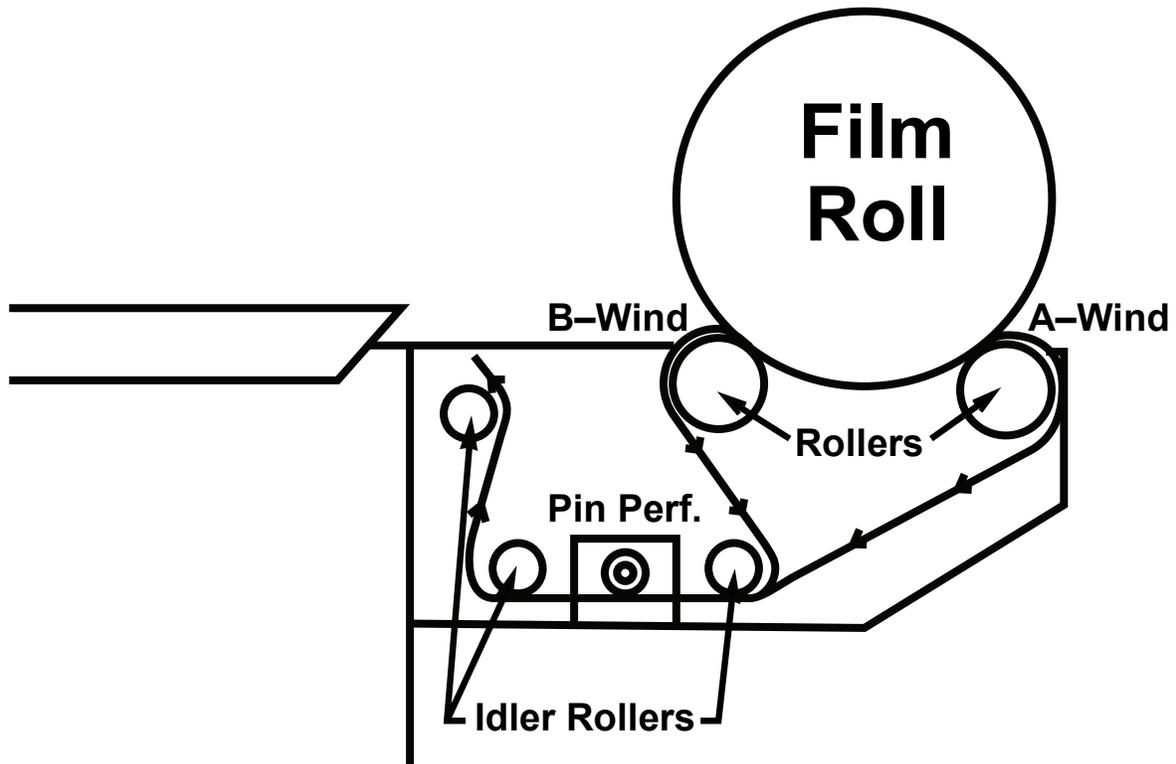
### **Standard Cradle-Mount (Unpowered) Film Unwinder**

Select the proper width of center-fold film for the product being packaged, taking into account the width and height of the package. With the package properly positioned within the film in the sealing area, allow sufficient film to overlap the sealing bars so that a seal can easily be made without possibility of openings due to insufficient film coverage.

Place the film roll on the rollers of the cradle-mount film unwinder. (See the illustration on the following page.) Place the center-fold away from the operator, to the back of the machine. Position the film roll on the rollers and tighten the upright bolts on the film rack collars to hold the film roll in position.

Decide whether the film is an A or B wind, and then thread it through and around the idler rollers and the pin perforator. (See the following illustration.) When threading the film, make sure to pull excess film through the rollers, across the product tray and into the sealing area to ensure sufficient film to begin. When you have threaded the film, separate the top film from the bottom and insert the product tray between the film top and bottom. Make sure that the center-fold of the film is at the back of the product tray. This allows the operator to insert product on the product tray between the top and bottom layers of film to prepare to move the product and film into the sealing area. Do not place product in the first few bags formed by the sealer: they will not have any perforation holes in them (because the sealer and pin perforator work together). Perforation is required to allow air to vacate when the product passes through the shrink tunnel.

### Standard Cradle-Mount (Unpowered) Film Unwinder



Begin inserting product into the film as soon as the film reaching the seal area has perforations in it. Place the product against the back of the film separator tray and then move product into the seal area. Be sure to leave the bag loose around the product when making the seal. This helps keep the seals from blowing out in the shrink tunnel. See Sequence of Operation, which follows, for more detailed instructions for operating the L-sealer.

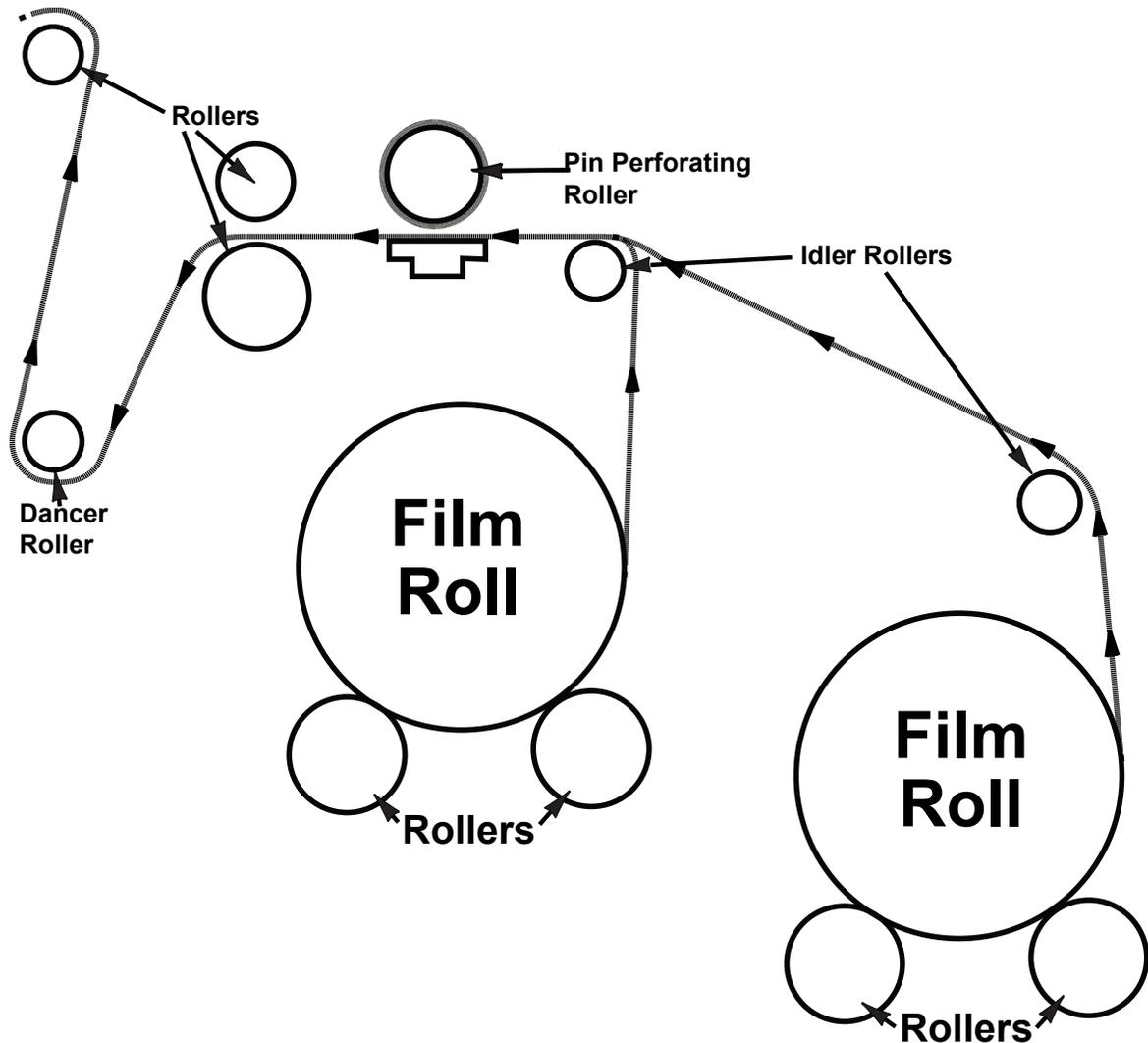
**Optional Powered Film Unwinder**

(With Double Film Rack for use with Inverting Head)

Use the following steps when using the optional Eastey power film unwinder and inverting plow. These steps must be taken to ensure proper tracking of the film.

1. Set the inverting head to desired opening one-half inch (1/2") taller than the package. See the illustration on the following page. The final roller and film separator rod should automatically adjust the film direction toward the center of the inverting plow. For example, if the package is six inches (6") high, the film should be directed three inches (3") above the loading tray coming off the power film unwind.
2. Invert film around the inverting head. Standing in front, facing the machine, move the loading tray out of the way. Pull film toward you, feeding it off the unwinder with the folded edge on the right. (Put the bottom layer of film under lower inverting plate. Put top layer of film on top of upper inverting plate.) With your right hand, push film between inverting head plate and loading tray as it enters the seal area.
3. Adjust takeaway conveyor height so that the seal is in the center of the package top to bottom. The objective is to use equal amounts of film for the top and bottom. If the package is six inches (6") high, the takeaway conveyor should be three inches (3") below the lower seal pads.

### Optional Powered Film Unwinder



### Sequence of Operation

1. Place the product on the product tray.
  - The product tray separates the film, allowing you to place the product between the upper and lower layers of film.
2. Move the product into the seal head area, pushing it to the left.
3. Move hands out of the seal head area and use both hands to press both Start palm buttons. Hold the Start palm buttons down as the seal is being made.
  - The air cylinders hold the seal head down for the amount of time required to make the seal (dwell time). The seal head will release. The dwell time is

- adjustable from one (1) to five (5) seconds and is indicated on the Dwell timer indicator, which is located closest to the Power switch under the product tray.
4. Once the seal is formed completely and the seal head automatically releases. The sealed product is removed by the takeaway conveyor, and the next Item can be moved into position for sealing.
    - The takeaway conveyor runs for the specified amount of time required to move the sealed product onward out of the sealing area. The amount of time the conveyor runs is adjustable from one (1) to five (5) seconds and is indicated on the Conveyor timer indicator, located next to the dwell timer indicator under the product tray.
    - Prepare the next item to be sealed, placing it on the product tray between upper and lower layers of film as the takeaway conveyor moves the sealed product away.

**NOTE: If there is too much tension on the film while the bag is being sealed, the seals will be more likely to be weak or blow out in the seal area while moving through the shrink tunnel.**

# Adjustments

## Element Pulse Switch Adjustment

The dwell time should not begin until the seal head is within one-quarter-inch ( $\frac{1}{4}$ " ) or less of the film to be sealed. Adjustment has been set correctly when sealing begins just as the seal bar comes into contact with the lower pads.

## Seal Head Position Adjustment

Seal heads have been factory adjusted for equal sealing pressure throughout the length of both the front and the side seal bars. If an adjustment is required, however, use the following procedure.

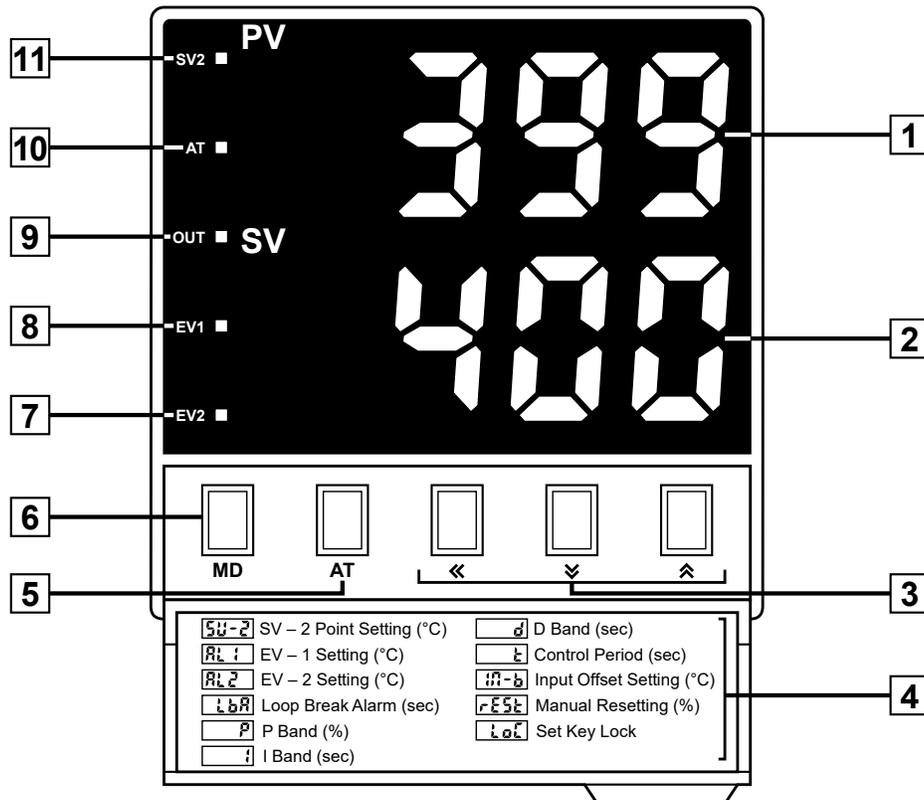
1. Disconnect the L-sealer power plug from the electrical power source.
2. Loosen seal head adjustment screws to reposition seal head.
3. Reposition seal head to correct alignment and position.
4. Re-tighten the mounting screws securely to retain the proper adjustment.

## Seal Pad Pressure Adjustment for Head Return Cylinder

Uniform pressure between the sealing elements and the sealing pads must always be maintained in order to obtain an even seal and to prevent heating-element hotspots and premature burnout. The adjustment should be checked periodically and should always be checked when sealing gaps occur.

1. Disconnect the sealer power plug from the electrical power source.
2. Supporting the seal head in the up position, loosen the four set screws for the head return cylinder. Gently lower the seal head to rest on the lower seal pads.
3. With the seal head resting on the lower pads, shim up the film clamps so that the inserts are resting on the lower pads. Make sure there are no air gaps, and then tighten the head casting bolts.
4. Adjust the seal head.
5. Go to the rear of the L-sealer. Make sure the head cylinder is straight from front to back. Pull the air cylinder bracket the full length of the air cylinder. Tighten the  $\frac{5}{16}$ -inch set screws.
6. Cycle the seal head up and down. Adjust set screws on head return cylinders for proper head speed and cushion.

## Temperature Controller



1. PV = Processing value (red in color).
2. SV = Setting value (green in color).
3. Back (⏪, shift display key), down (⏴), and up (⏵) keys.
4. Programming key access door — Open to access programming keys.
5. AT key: the mode key to execute Auto Tuning function.
6. MD key: the mode key to change items to be set, such as set value, etc.
7. EV2: Event 2 output signal lamp.
8. EV1: Event 1 output signal lamp.
9. OUT: Output signal lamp.
10. AT: Signal lamp flashes while unit is auto-tuning.
11. SV2: Signal lamp for SV2 set value.

## To Change the Set Value

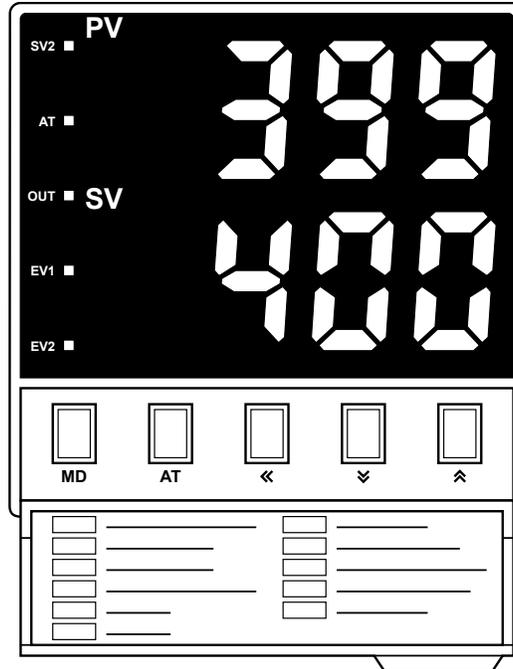
1. Press the left-arrow (◀) button and a digit will begin to flash. The flashing digit indicates the digit whose value can be changed by pressing the down- (▼) or up-arrow (▲) buttons.
2. If necessary, press the left- (◀) or right-arrow (▶) to shift to the place of the digit that needs to be changed. (The digit to the left or right will begin flashing.)
3. Press up (▲) or down (▼), as required to change the flashing digit to the required value.
4. Repeat instructions 2 and 3 above as necessary until all digits have been set to the required value, and then press the MD button. No digits will be flashing, the new value entered is applied.

## To Change the Set Value for Over Temperature

Over temperature is factory set to 500° F, but can be adjusted if required for your sealing application.

PV, the Process Value is the actual temperature reading at the sealing elements. PV and SV are mentioned in this procedure, but they are only displayed at the beginning of the procedure.

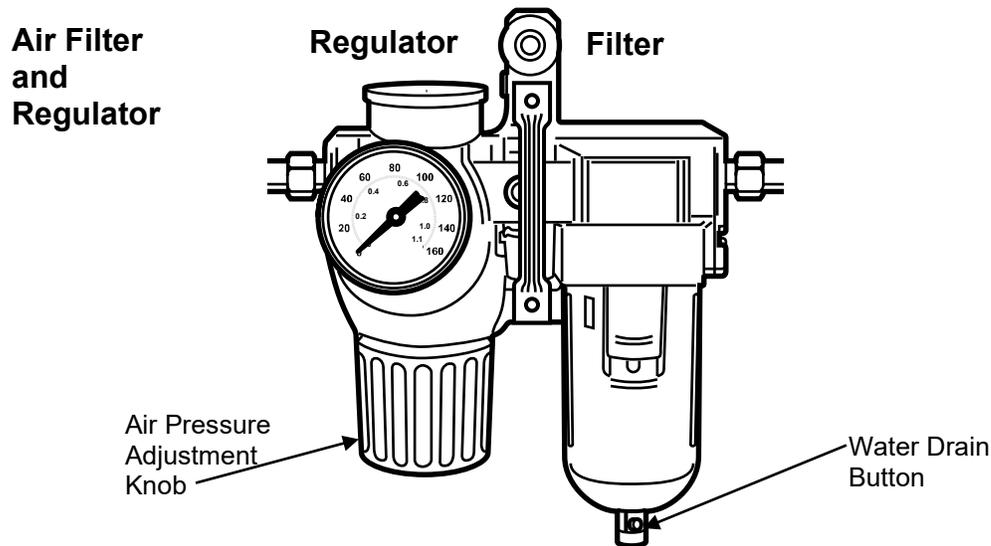
1. Press and hold the MD button until SV-2 is displayed.
2. Press the MD button (do not hold it down) repeatedly to scroll through the menu until LOC is displayed.
3. Press the left-arrow (◀) button. (ON will begin flashing.)
4. Press the down-arrow button (▼). (ON will turn to OFF and OFF will be flashing.)
5. Press the MD button. (OFF will stop flashing.)
6. Press MD again. (This will bring you back to SV-2.)
7. Press MD again until AL-1 is displayed.
8. AL-1 is set to 500°.



## Over Temperature Alarm Setting

1. Press and hold the MD button for approximately three (3) seconds.
  - IN-T is displayed.
2. Press and hold the MD button and up-arrow (<^>) buttons at the same time for three (3) seconds to activate the menu. Scroll to LOC and press the left-arrow (<<) button. On will begin flashing. Press the down-arrow (<v>) button. On will turn to Off and press the MD button until LOC appears, indicating that the Off setting is locked.
3. Press the MD button until EU-1 appears (Event 1). Below EU-1, AL-6 should appear. If not, use the up and down buttons to select AL-6.
4. Now return to LOC and change it to On.
5. Press and hold both the MD and up-arrow (<^>) buttons at the same time for three (3) seconds to access the other menu.
6. Scroll through the menu using just the MD button and turn LOC Off.
7. Scroll through the menu until AL-1 appears. This is your high alarm. The normal factory setting is 500°.
8. Return to LOC and change it to On.

## Air Regulator Adjustments



### Before Adjusting Air Regulator

1. Make the sure seal head is held open.
2. Hook up air supply.
3. Set the air pressure regulator to minimum 60 PSI for 35-inch seal bar or to 70 PSI for 50-inch and 70-inch seal bar. To adjust the regulator setting, pull down on the adjustment knob, and then turn the knob.
  - Turn the adjustment knob to the left to decrease pressure.
  - Turn the adjustment knob to the right to increase pressure.

**NOTE:** Pressure is set at 60 PSI or 70 PSI. Also watch for water in the bowl of the pneumatic filter. If water is present, drain it by pressing the water drain button at the bottom of the reservoir.

# Maintenance

The Eastey ESA Professional Series Semi-Automatic L-Sealer will provide many hours of maintenance-free operation. There are a few items that may require attention from time to time.

## Preventative Maintenance

### Daily Maintenance

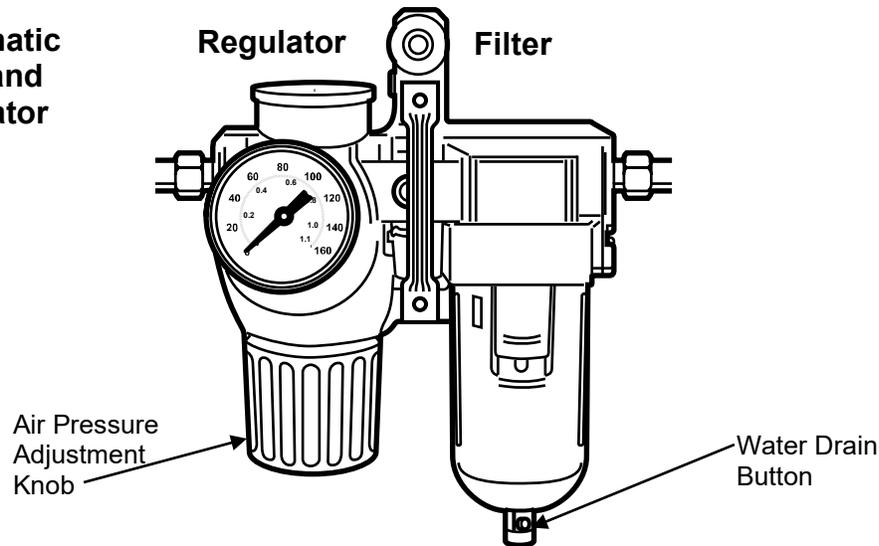
- On hot knife sealers, heat the seal bars up to temperature. (Be careful of the coatings on the bars and inserts.) Then, using a soft cloth, wipe the seal surfaces clean. Never use anything abrasive.

### Weekly or Monthly Maintenance

- Check the condition of the PTFE tape and the silicone sponge rubber in the lower seal bar. Replace as necessary.
- Check the seal head alignment and gap. Refer to the service adjustment section of this User Guide and make adjustments as needed.
- Check the conveyor drive belt condition. Replace it if necessary.
- Check the conveyor belt for nicks or tears. Check if belt is tracking and moving smoothly. Repair or replace as needed.
- Check that the conveyor lift jack moves the conveyor up and down smoothly. Lubricate and adjust as needed.
- Check the film rack rollers for excessive end play and so that they turn freely. Check that the film brake works. Adjust as needed.
- Check the condition of the power cord for wear. (Is it exposed to traffic?)
- Check the hot knife seal heads' ability to maintain the set temperature. If not, refer to maintenance instructions in this User Guide.
- Check for loose fasteners. Tighten as necessary.
- Check the condition of all warning and instruction labels. Replace as necessary.

- **Pneumatic Filter:** Periodically drain any water accumulation in the filter and regulator. Press the button on the bottom of the filter and hold to drain out all water that has accumulated in the filter bowl.

### Pneumatic Filter and Regulator



## Silicone Rubber Pad Replacement

Occasionally it will be necessary to replace the silicone rubber sealing pads. Seal pads are designed with a channel to make them easy to install and replace. Seal pads should be replaced if the following symptoms are observed.

- Gaps in the seal
- Weak seals
- Improper film cutoff
- Excessive sealing pressure required

To replace a silicone rubber or felt pad, pull the old pad out of the channel and replace with the new silicone rubber, pressing it into place in the channel.

**NOTE:** Some silicone rubber pads come covered in talcum powder. If so, clean the pads with a mild solvent.

## Changing Hot Knife Inserts and Cutting Rules

1. Disconnect the L-sealer power plug from the electrical power source.

**CAUTION!** Always be aware of the cutting edges while replacing the knife edges. Handle the knife blades carefully.

2. Remove the #10-32 screws holding the inner side film clamp and remove the #10-32 screws holding the outer front film clamp.

**NOTE:** One #10-32 screw is behind the aluminum arm casting. This does not need to be removed. Push the product tray in all the way. Swing the film clamp down and to the right over the product tray, then pull it out and rest the film clamp on the product tray.

3. Remove the #8-32 flat head screw on both side-seal and front-seal bars.
4. Remove the insert and cutting rule, both at the same time.
5. Place the replacement cutting rules into the new inserts, both at the same time, ensuring that the beveled edge is in the corner.
6. Push the beveled edges together.

**NOTE:** The inside beveled edges of the cutting rule need to come together. The outsides do not. Be sure the cutting rules are touching.

7. Install the #8-32 flat head screws, but do not tighten them at this point.
8. Heat the seal bar up to the set point.
9. Adjust insert and cutting rule if they separate at the corner.
10. Tighten the #8-32 flat head screws while the seal bars are hot.
11. Turn off heat and allow the sealer to cool down, and then reinstall film clamps.

## Takeaway Conveyor Maintenance and Replacement

From time to time it will be necessary to disassemble the conveyor when it requires an adjustment for a different product size or if worn parts need to be replaced or for general maintenance. Instructions provided in this user guide are very general. If these generalized instructions do not address your specific conveyor issue, contact a certified representative of Eastey or contact Eastey directly ([Eastey.com/contact-us](http://Eastey.com/contact-us)).

### Replacing the Takeaway Conveyor Motor

**NOTE:** This procedure requires an Allen or hex wrench, and a 7/16-inch box-end wrench.

1. Disconnect the L-sealer power plug from the electrical power source.
2. Disconnect wires # 14 and # 16 from inside the panel and pull them out. Note the color of wires and where they are connected.

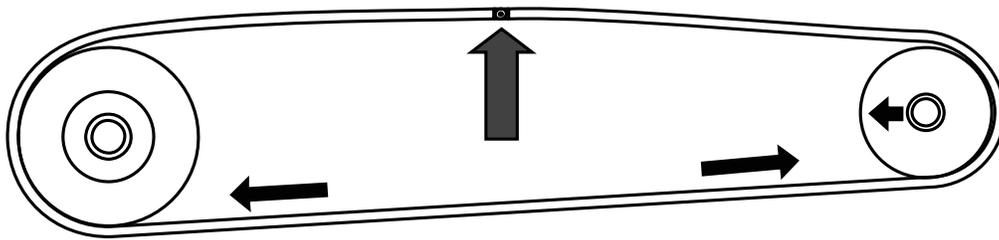
**NOTE:** Wiring color connections to the conveyor motor.

- Red and yellow are together and capped.
- Brown, purple, and orange are together and capped.
- Black is connected to black for power.
- White is connected to white for power.
- Green is connected to green to ground or motor ground.

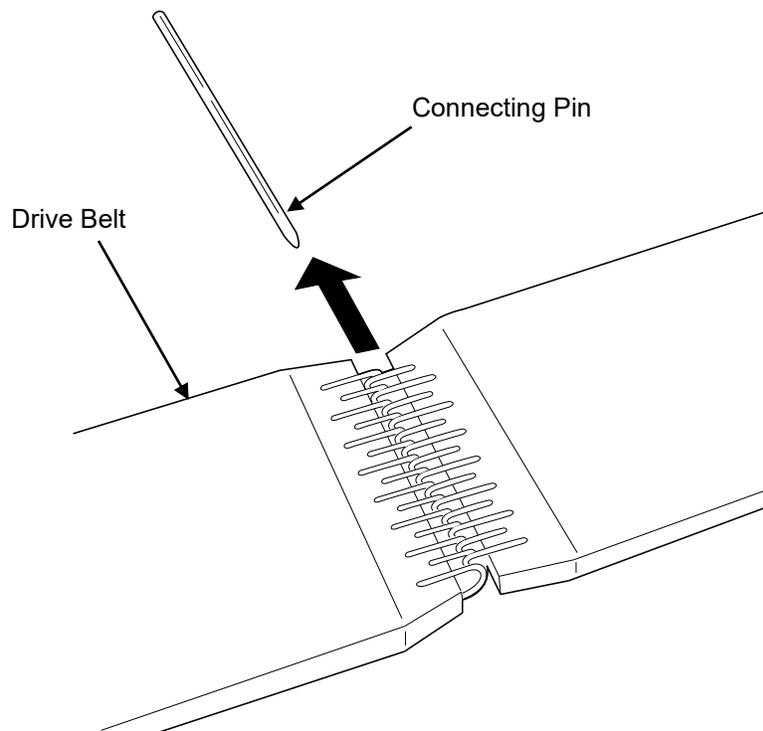
3. Loosen the 1/4-20 drive roller adjustment bolts and remove the timing belt. Remove the timing pulley from the motor (requires an Allen or hex wrench).
4. Remove the three 1/4-20 bolts. These hold the motor in place. As the last bolt is removed, hold onto the motor so it does not fall. (Bolt removal requires 7/16-inch box end wrench.)
5. Place the new conveyor motor in place of the conveyor motor removed, and install the 1/4-20 bolts.
6. Re-install the timing pulley. Make sure it is not rubbing against the conveyor frame, and then tighten both set screws.
7. Reinstall the timing belt. Tighten the 1/4-20 drive roller adjustment bolts. Reconnect the power wires #14 and # 16. Refer to the wiring color connections note on the preceding page to complete motor wiring connections.
8. Refer to the instructions for Tracking the Takeaway Conveyor Belt that follow.

## Replacing the Takeaway Conveyor Belt

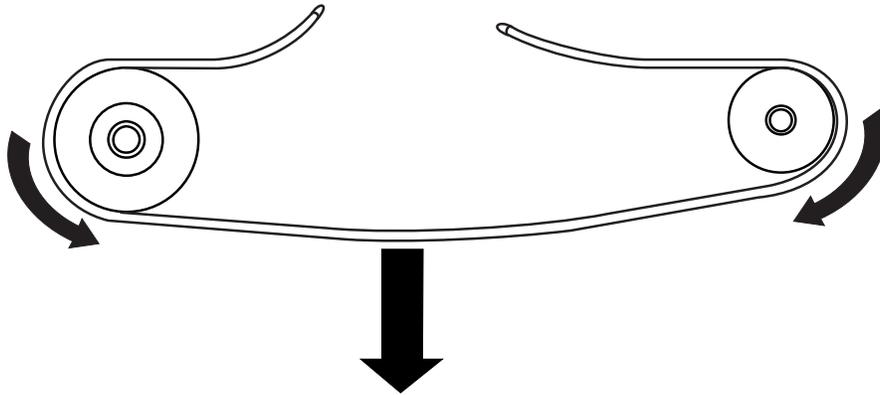
1. Disconnect the L-sealer power plug from the electrical power source.
2. Loosen the idler roller to release tension until the belt is loose.
3. Turn the conveyor belt to move the belt splice to the center of the conveyor.



4. With the belt loose, remove the connecting pin that holds the belt together.

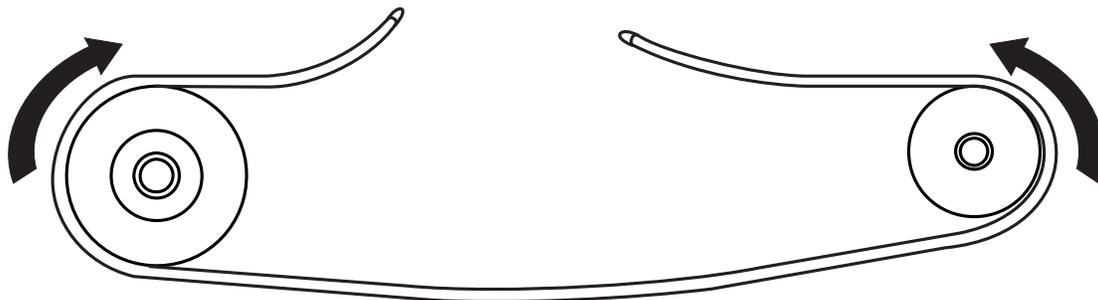


5. Take the belt off the conveyor rollers.

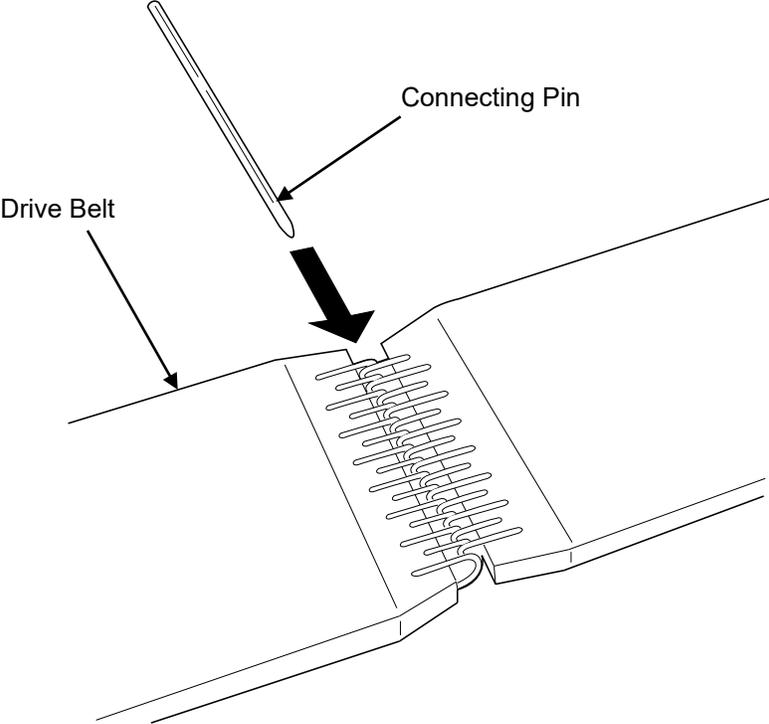


**NOTE:** At this point, you have completed the procedure for removing the belt. Instructions from here on explain how to install the new belt or reinstall the belt if still usable. If the conveyor support plate requires replacement, replace it before installing or reinstalling the belt.

6. Install the replacement belt around the drive and idler pulleys.



7. While the belt is still loose, start connecting the ends by lining up the edges of the belt. From the side of the belt, replace the connecting pin.

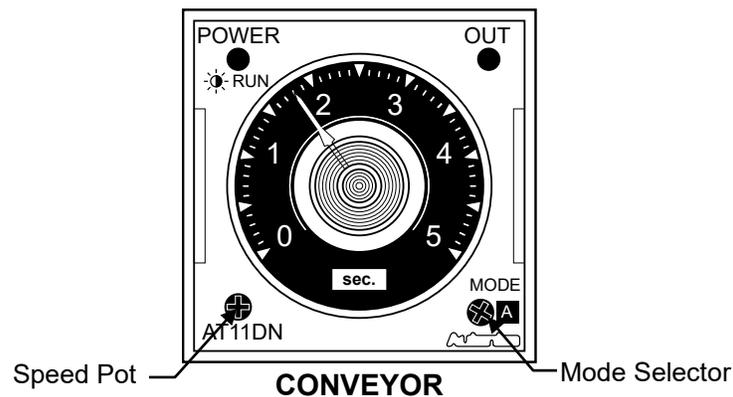


- 8. Re-tension the conveyor belt as required. Refer to the instructions for Tracking the Conveyor Belt that follow.

## Tracking the Takeaway Conveyor Belt

From time to time or whenever the takeaway conveyor belt has been replaced, it will be necessary to track or align the belt so that it stays in place on the rollers while moving and delivering the product. The procedure is simple, but can be time-consuming.

1. Identify the drive roller and the idler roller. The drive roller is the larger roller. The idler is smaller and has a crown (rounded surface that is higher at the middle and tapers outward to give the idler a slight “barrel” shape).
2. Place the belt on the rollers in the center and tighten each adjustment screw as evenly as possible.
3. Adjust the speed potentiometer on the conveyor timer (adjustment screw for speed pot is at lower left; see illustration below) to increase the conveyor speed.

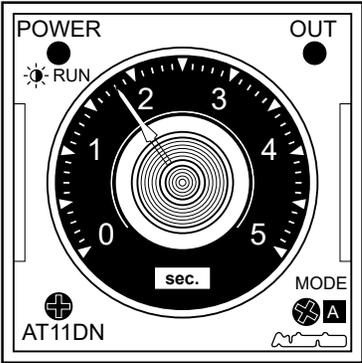


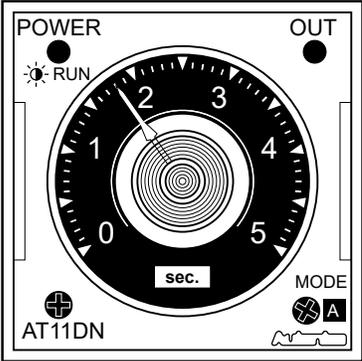
4. Start the conveyor and observe the belt.
5. If the belt stays centered on the rollers during operation, no further adjustment is required. If the belt begins to pull towards the front or back, adjust it by turning the left-hand adjustment screw only. Turn the adjustment screw no more than one quarter turn at a time — attempting to make larger adjustments will only prolong the adjustment effort. Return the conveyor to normal operating speed when finished.

## Rollers

Make sure rollers stay clean and grease free. If you should have to clean the rollers, simply wipe them down with a clean lint free cloth. If a more thorough cleaning is necessary wipe the rollers down with a mild detergent and water and let dry. **Never use harsh or abrasive cleaners or chemical agents when cleaning the rollers.**

# Troubleshooting

| Problem  | Solution  |
|--|---|
| <p>No Element Heat</p>   | <ul style="list-style-type: none"> <li>• Check to be sure sealer is plugged in and electrical power is present at the outlet.</li> <li>• Is the display for temperature on? If not, check main fuses.</li> <li>• Is the Out light on when the SV is lower than the PV setting? The temperature controller will read Open.</li> <li>• Is the green light on the solid state relay on when the Out light on the temperature controller is on?</li> </ul>  |
| <p>Conveyor Does Not Run</p>  <p style="text-align: center;"><b>CONVEYOR</b></p> | <ul style="list-style-type: none"> <li>• With the seal head up the light in the left hand corner of the temperature timer stays lit all the time. <ul style="list-style-type: none"> <li>- If the light is on, bring the seal head down. The light should start flashing.</li> </ul> </li> <li>• Is the timer in "A" mode? <ul style="list-style-type: none"> <li>- Mode selector is to the lower right corner of the dial.</li> </ul> </li> <li>• Inside the conveyor speed dial, is the setting between 0 and 5? <ul style="list-style-type: none"> <li>- Timer speed pot adjustment is to the lower left corner of the dial.</li> </ul> </li> <li>• At the bottom of the speed dial, is "sec" displayed? <ul style="list-style-type: none"> <li>- Units of time selected is displayed at center near the bottom of the dial.</li> </ul> </li> <li>• Is the limit switch on the back of the machine being fully actuated (pressed in)? <ul style="list-style-type: none"> <li>- Press the limit switch in by hand, and then let it go.</li> </ul> </li> </ul> |

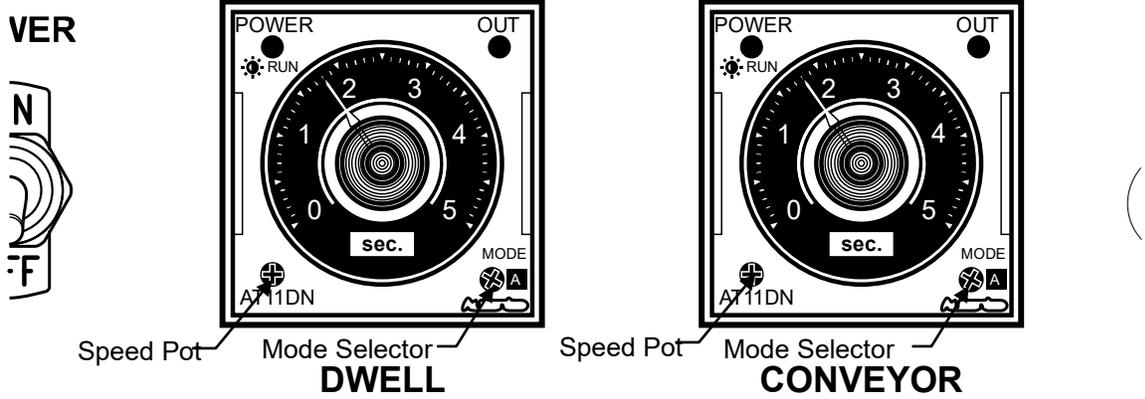
| Problem   | Solution   |
|---|--|
| <p>Sealing head will not stay down, but sealer operates normally otherwise.</p>  <p style="text-align: center;"><b>DWELL</b></p> | <ul style="list-style-type: none"> <li>• Is timer working properly? <ul style="list-style-type: none"> <li>- The timer is identical to the timer used for the Conveyor. See items to check on the conveyor timer for Conveyor Does Not Run troubleshooting on previous page.</li> <li>- Do the limit switches work properly when operated by hand?</li> </ul> </li> </ul>  |
| <p>Weak or Poor Seals</p>   | <ul style="list-style-type: none"> <li>• Is there proper air pressure and volume? 3.5 CFM, 60–80 PSI air supply is required.</li> <li>• Improper setting of temperature film cutoff controller. (Heat set too low.)</li> <li>• Improper operating technique. (See Sequence of Operation on page 22.)</li> <li>• Check the sealing heating element to see if it needs cleaning.</li> <li>• If the silicone-rubber seal pad is wavy, replace it. (See instructions on page 30.)</li> <li>• Seal pad pressure is incorrect. (See page 24.)</li> <li>• Hold-down pressure is uneven or incorrect.</li> </ul> |

**Problem**

Seal Heads Stay Engaged When They Should Release

**Solution**

Operation of Timers



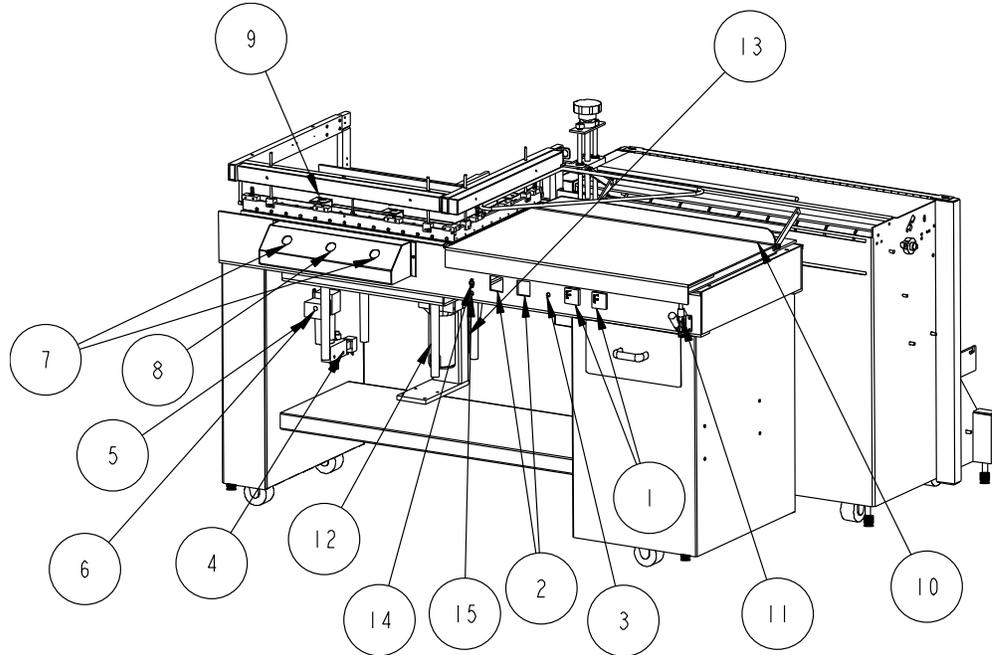
- Each of the speed control timers for the dwell and conveyor have an adjustable pot in the lower-left corner and a mode selector in the lower-right corner. (See the illustration above.) Use a small screwdriver to turn pots either direction.
  - Turning the pot on the lower-left, you will see the numbers change inside the dial. Keep turning it until you adjust to 5 seconds. While turning this pot you will see the sec turn to min, hour, and 10hr. Factory setting is 5 seconds.
  - Turning the selector at the lower-right, you see the modes change. Keep turning until you return to mode A, which is the factory setting. Turning these two pots cleans the wipers inside the timer.
- When bringing the seal down, a light on the top left should come on and the light on the top right should flash. If this is not happening, switch the conveyor timer and the dwell timer. If the timer starts working, replace the timer.

| Problem                           | Solution  |
|-----------------------------------|---|
| Excessive Film Drag               | <ul style="list-style-type: none"> <li>• Check for proper film threading. (See Film Winding diagram on page 20 or 22.)</li> <li>• Loosen film roll brake. (See Film Winding diagram on page 20 or 22.)</li> <li>• Tighten film roll brake.</li> </ul> |
| Excessive Film Winding or “Spill” | <ul style="list-style-type: none"> <li>• Tighten film roll brake.</li> </ul>  |

| <b>Problem</b>   | <b>Solution</b>  |
|------------------|--|
| Charring of Film | <ul style="list-style-type: none"><li data-bbox="716 275 1393 382">• Improper setting of temperature film cutoff controller. (Too much heat.) Adjust temperature down.</li></ul> |

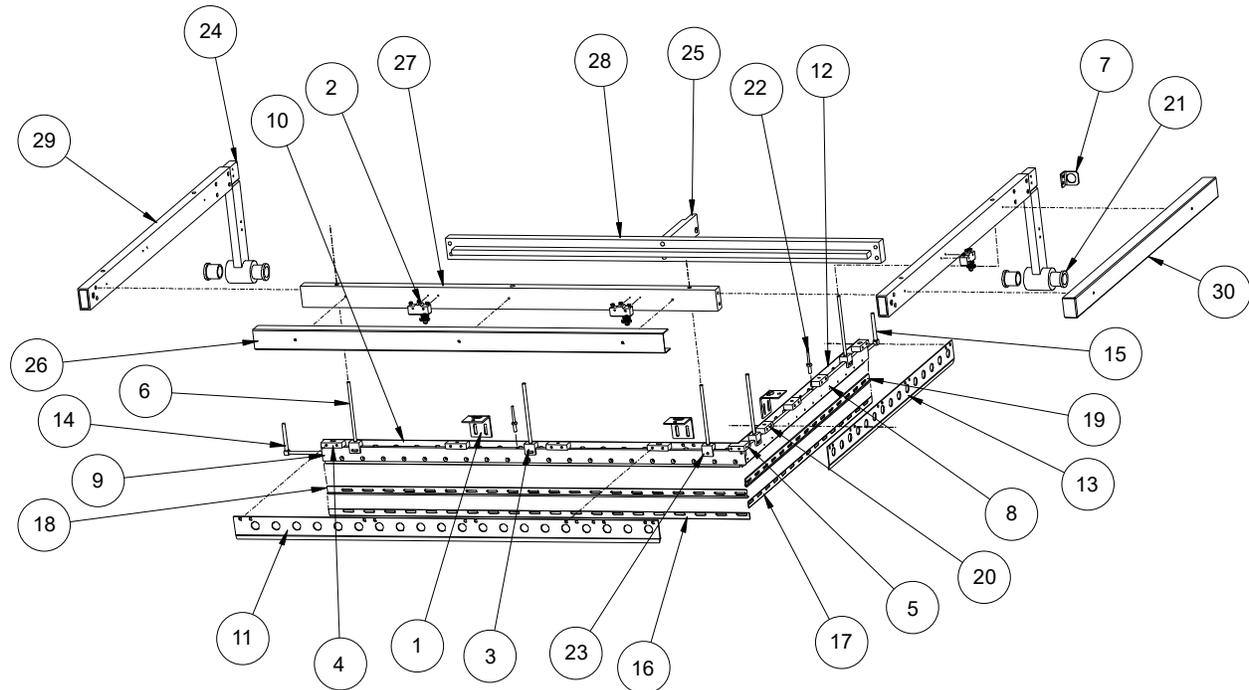
# Parts List

## ESA2028-TKV1-SP82



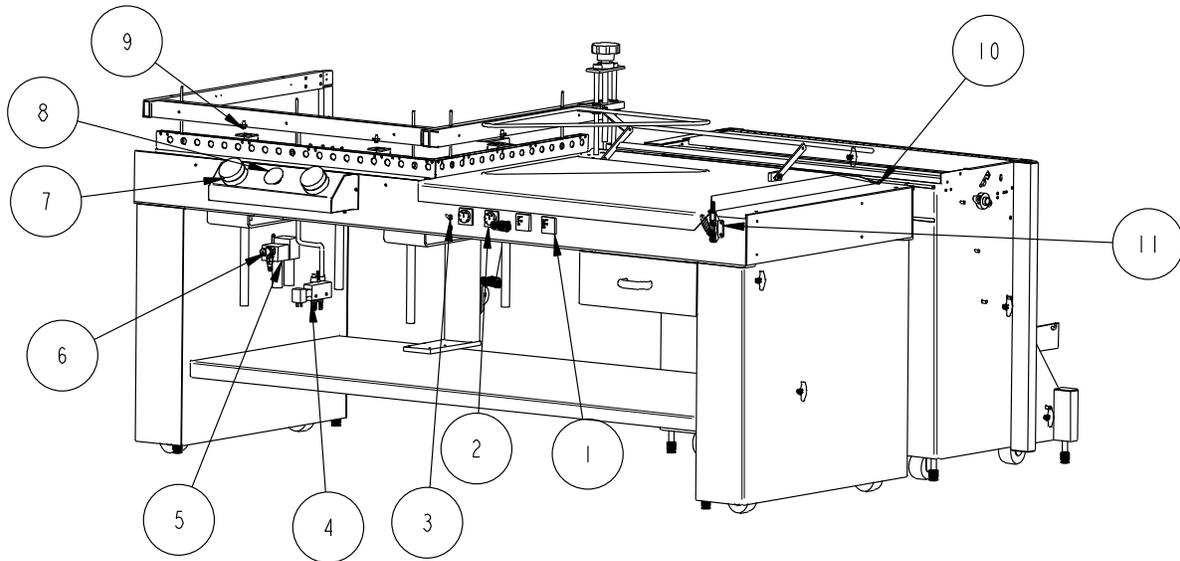
| ITEM | PART NO. | DESCRIPTION                  | Q'TY |
|------|----------|------------------------------|------|
| 1    | EAST0490 | TEMPERATURE CONTROLLER       | 2    |
| 2    | EAST1030 | DWELL TIMER 220V             | 2    |
| 3    | ETC00309 | ON/OFF SWITCH                | 1    |
| 4    | EP000517 | AIR VALVE                    | 1    |
| 5    | ESC00515 | AIR FILTER/REGULATOR         | 1    |
| 6    | 5003034  | FTG – SLOW START VALVE       | 1    |
| 7    | EP000550 | PALM BUTTON START            | 2    |
| 8    | ESC00604 | PALM BUTTON STOP             | 1    |
| 9    | EAST0029 | LIMIT SWITCH                 | 3    |
| 10   | EP000592 | LATCH                        | 1    |
| 11   | EP000545 | CLAMP STRAIGHT LINE          | 1    |
| 12   | ETC00185 | MOTOR CONVEYOR DRIVE         | 1    |
| 13   | EP000601 | AIR CYLINDER 3 × 5           | 1    |
| 14   | EAST0035 | SWITCH POLY NORMAL           | 1    |
| 15   | EP000558 | SWITCH TOGGLE, SPST MOVEMENT | 1    |

## ESA2028-TKV1-SP82 Seal Frame Assembly Components

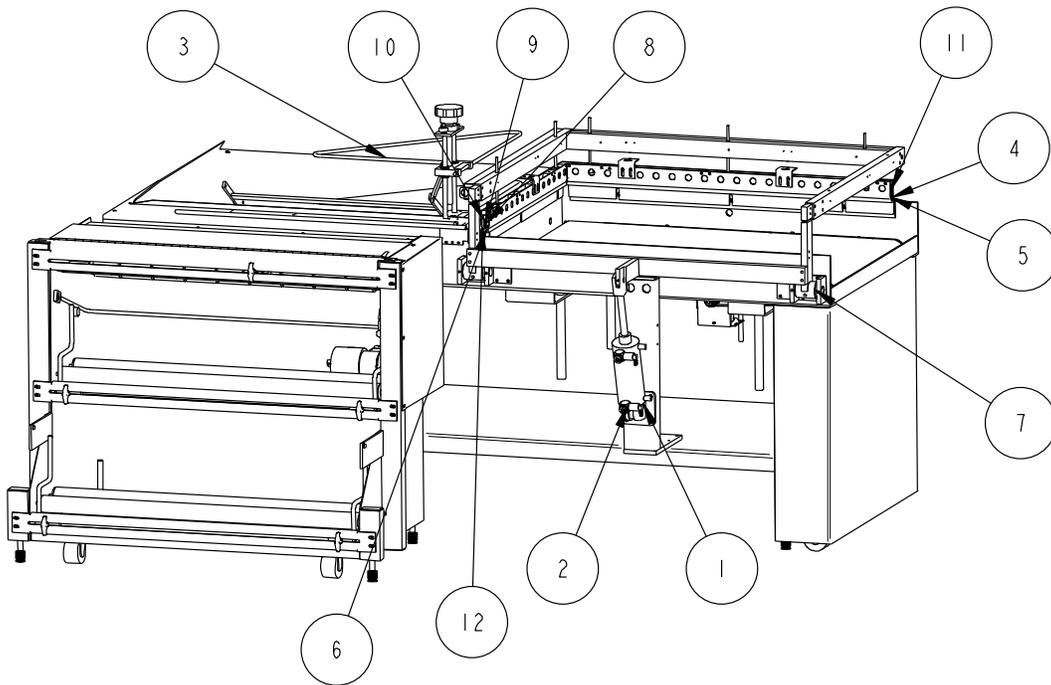


| ITEM | PART NO.  | DESCRIPTION                            | Q'TY |
|------|-----------|--|------|
| 1    | BM000057  | FAB – HEAD SAFETY BRACKET              | 3    |
| 2    | EAST0029  | SWITCH LIMIT (MICRO)                   | 3    |
| 3    | EAST0511  | MACH – HOT KNIFE SADDLE                | 3    |
| 4    | EAST0514  | MACH – HOT KNIFE SPACER BLK            | 3    |
| 5    | EAST0515  | MACH – HOT KNIFE CORNER SPACER         | 1    |
| 6    | EAST0560  | MACH – HOT KNIFE THRD RD 5/16 × 6 INCH | 4    |
| 7    | EAST0597  | HOT KNIFE CONDUIT BRACKET              | 1    |
| 8    | EAST0516  | HOT KNIFE SEAL BAR SIDE 20-INCH        | 1    |
| 9    | EAST0549  | HOT KNIFE SEAL BAR FRONT 28-INCH       | 1    |
| 10   | EAST0552  | H.K. SAFETY SHIELD FRONT INNER 28-INCH | 1    |
| 11   | EAST0553  | H.K. SAFETY SHIELD FRONT OUTER 28-INCH | 1    |
| 12   | EAST0522  | H.K. SAFETY SHIELD SIDE INNER 20-INCH  | 1    |
| 13   | EAST0523  | H.K.SAFETY SHIELD SIDE OUTER 20-INCH   | 1    |
| 14   | EASTt0555 | FIREROD CART 220V 28 INCHES LONG       | 1    |
| 15   | EAST0496  | FIREROD CART 220V 20 INCHES LONG       | 1    |

| ITEM | PART NO. | DESCRIPTION                                   | Q'TY |
|------|----------|---|------|
| 16   | EAST0817 | HOT KNIFE CUTTING RULE FRONT 28 INCH          | 1    |
| 17   | EAST0815 | HOT KNIFE CUTTING RULE SIDE 20 INCH           | 1    |
| 18   | EAST0920 | HOT KNIFE MUSHROOM INSERT FRONT 28 INCH       | 1    |
| 19   | EAST0918 | HOT KNIFE MUSHROOM INSERT SIDE 20 INCH        | 1    |
| 20   | EP000095 | MACH – HOT KNIFE SPACER BLACK WITH HOLE       | 3    |
| 21   | EP000504 | BUSHING – FLANGE 1 INCH O.D. × 1-1/4 INCH × 1 | 4    |
| 22   | EP000535 | THERMOCOUPLE HOT KNIFE                        | 2    |
| 23   | ESC00037 | MACH – HOT KNIFE SADDLE CENTER                | 1    |
| 24   | SA000130 | W/F – HEAD FRAME, BRACKET                     | 2    |
| 25   | SA000131 | MACH – HEAD AIR CYLINDER ARM                  | 1    |
| 26   | SA028005 | FAB – HOT KNIFE WIRE GUARD FRONT 28 INCH      | 1    |
| 27   | SA028050 | MACH – HOT KNIFE CROSS OVER BAR 28 INCH       | 1    |
| 28   | SA028054 | W/F – REAR CROSS OVER BAR 28 INCH             | 1    |
| 29   | SA200001 | W/F – SEAL HEAD SIDE ARM 20 INCH              | 2    |
| 30   | SA200005 | FAB – HOT KNIFE WIRE GUARD SIDE 20 INCH       | 1    |

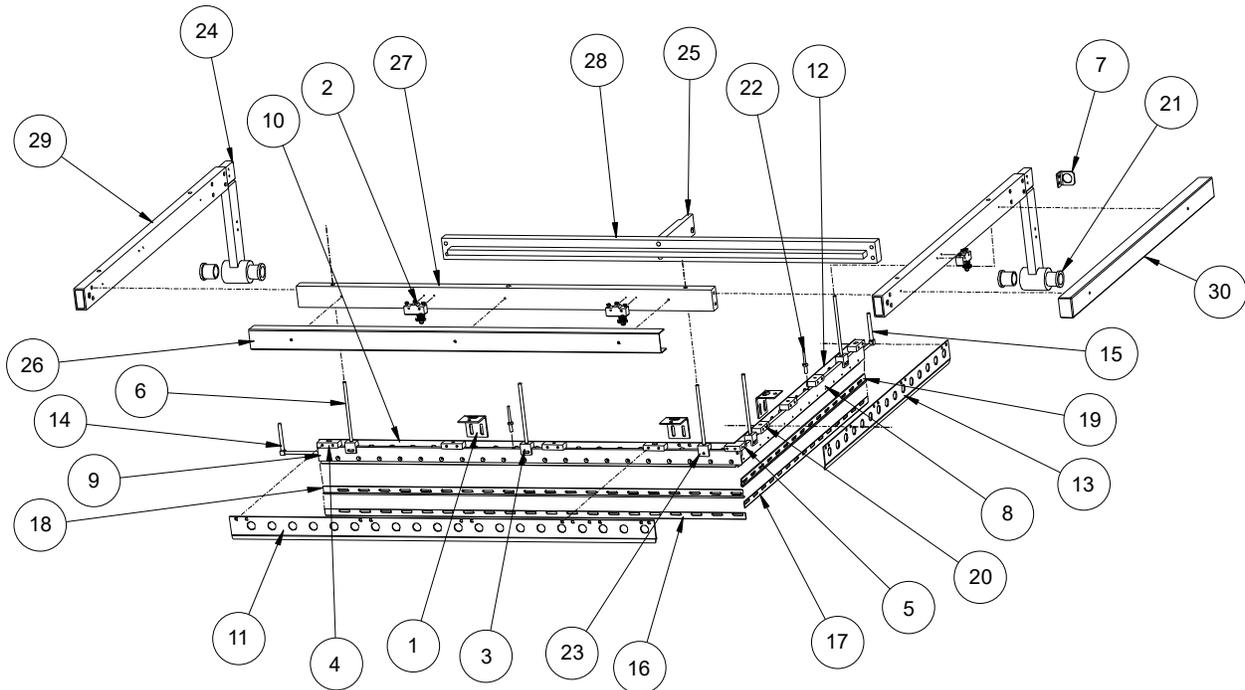
**ESA3040-TKV1-IT24** (Part 1 of 2)

| ITEM | PART NO. | DESCRIPTION            | Q'TY |
|------|----------|------------------------|------|
| 1    | EAST0494 | TEMPERATURE CONTROLLER | 2    |
| 2    | EAST1030 | DWELL TIMER 220V       | 2    |
| 3    | ETC00309 | ON/OFF SWITCH          | 1    |
| 4    | EP000517 | AIR VALVE              | 1    |
| 5    | ESC00515 | AIR FILTER/REGULATOR   | 1    |
| 6    | 5003034  | FTG – SLOW START VALVE | 1    |
| 7    | EP000550 | PALM BUTTON START      | 2    |
| 8    | ESC00604 | PALM BUTTON STOP       | 1    |
| 9    | EAST0029 | LIMIT SWITCH           | 1    |
| 10   | EP000592 | LATCH                  | 1    |
| 11   | EP000545 | CLAMP STRAIGHT LINE    | 1    |

**ESA3040-TKV1-IT24** (Part 2 of 2)

| ITEM | PART NO. | DESCRIPTION              | Q'TY |
|------|----------|--------------------------|------|
| 1    | EP000601 | AIR CYLINDER 3 × 5       | 1    |
| 2    | SA000504 | FLOW CONTROL             | 2    |
| 3    | EINVT124 | INVERTER ROD 24"         | 2    |
| 4    | EAST0616 | HOT KNIFE SEAL BAR FRONT | 1    |
| 5    | EAST0818 | CUTTING RULE FRONT 40"   | 1    |
| 6    | EAST0209 | SPONGE RUBBER            | 1    |
| 7    | EP000504 | BUSHING BRONZE 1"        | 4    |
| 8    | EAST0615 | SEAL BAR SIDE 30"        | 1    |
| 9    | EAST0819 | CUTTING RULE SIDE 30"    | 1    |
| 10   | EAST0630 | FIREROD CART 30"         | 1    |
| 11   | EAST0629 | FIREROD CART 40"         | 1    |
| 12   | EAST0200 | PTFE TAPE 3 MIL          | 1    |

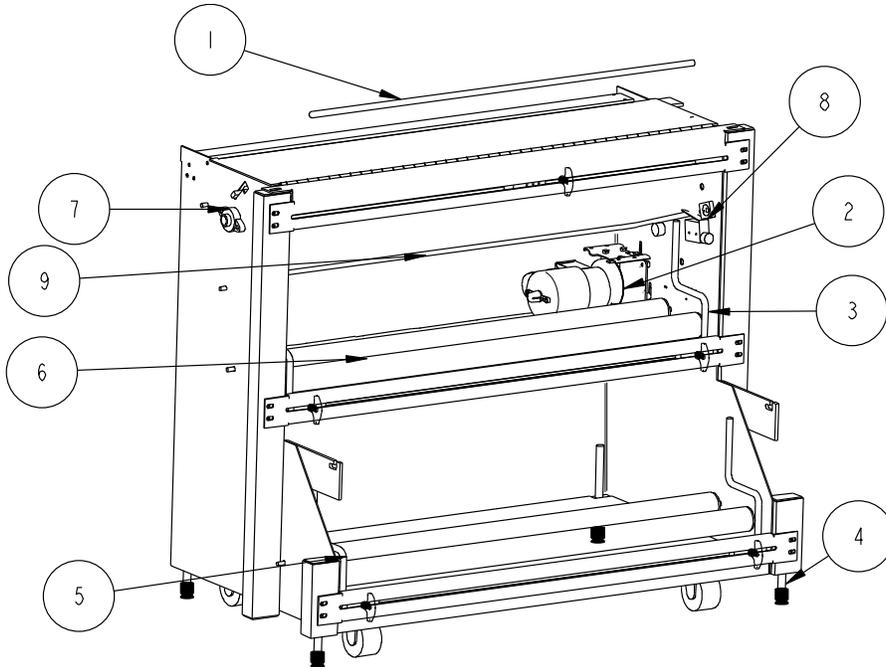
## ESA2028-TKV1-IT24 Seal Frame Assembly Components



| ITEM | PART NO. | DESCRIPTION                                  | Q'TY |
|------|----------|--|------|
| 1    | BM000057 | FAB – HEAD SAFETY BRACKET                    | 3    |
| 2    | EAST0029 | SWITCH LIMIT (MICRO)                         | 3    |
| 3    | EAST0511 | MACH – HOT KNIFE SADDLE                      | 4    |
| 4    | EAST0514 | MACH – HOT KNIFE SPACER BLACK                | 3    |
| 5    | EAST0515 | MACH – HOT KNIFE CORNER SPACER               | 1    |
| 6    | EAST0560 | MACH – HOT KNIFE THIRD RD 5/16 INCH × 6 INCH | 5    |
| 7    | EAST0597 | HOT KNIFE CONDUIT BRACKET                    | 1    |
| 8    | EAST0615 | HOT KNIFE SEAL BAR SIDE 30 INCH              | 1    |
| 9    | EAST0616 | HOT KNIFE SEAL BAR FRONT 40 INCH             | 1    |
| 10   | EAST0622 | H.K. SAFETY SHIELD FRONT INNER 40 INCH       | 1    |
| 11   | EAST0623 | H.K. SAFETY SHIELD FRONT OUTER 40 INCH       | 1    |
| 12   | EAST0624 | H.K. SAFETY SHIELD SIDE INNER 30 INCH        | 1    |
| 13   | EAST0625 | H.K. SAFETY SHIELD SIDE OUTER 30 INCH        | 1    |
| 14   | EAST0629 | FIREROD CART 220V 40 INCHES LONG             | 1    |
| 15   | EAST0630 | FIREROD CART 220V 30 INCHES LONG             | 1    |

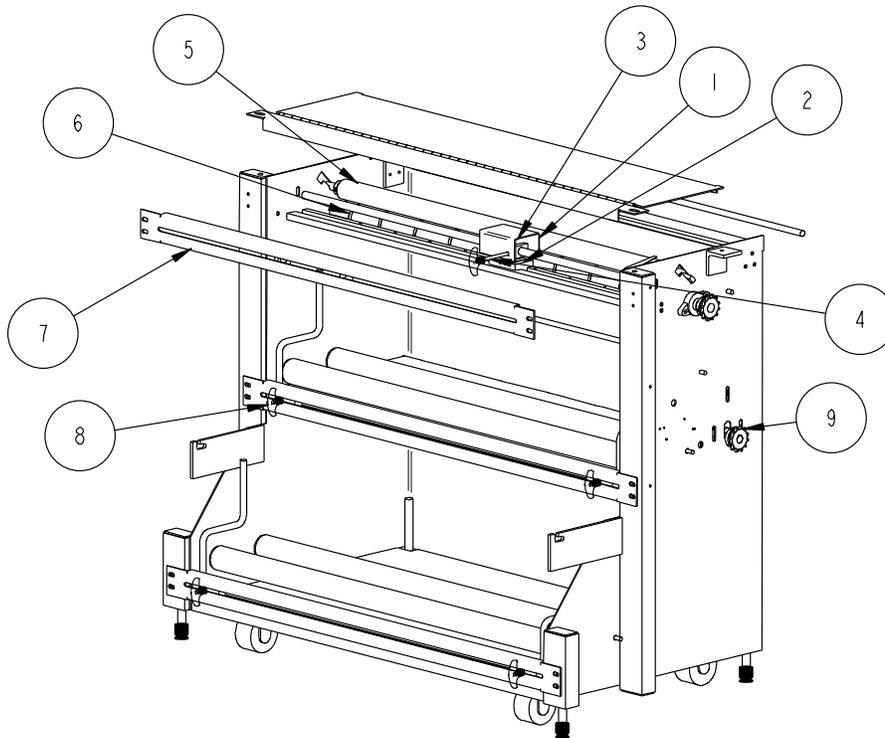
| ITEM | PART NO. | DESCRIPTION                              | Q'TY |
|------|----------|--|------|
| 16   | EAST0818 | HOT KNIFE CUTTING RULE FRONT 40 INCH     | 1    |
| 17   | EAST0819 | HOT KNIFE CUTTING RULE SIDE 30 INCH      | 1    |
| 18   | EAST0916 | HOT KNIFE MUSHROOM INSERT FRONT 40 INCH  | 1    |
| 19   | EAST0917 | HOT KNIFE MUSHROOM INSERT SIDE 30 INCH   | 1    |
| 20   | EP000095 | MACH – HOT KNIFE SPACER BLACK WITH HOLE  | 5    |
| 21   | EP000504 | BUSHING FLANGE 1 INCH O.D. × 1-1/4 × 1   | 4    |
| 22   | EP000535 | THERMOCOUPLE HOT KNIFE                   | 2    |
| 23   | ESC00037 | MACH – HOT KNIFE SADDLE CENTER           | 1    |
| 24   | SA000130 | W/F – HEAD FRAME, BRACKET                | 2    |
| 25   | SA000131 | MACH – HEAD AIR CYLINDER ARM             | 1    |
| 26   | SA040005 | FAB – HOT KNIFE WIRE GUARD FRONT 40 INCH | 1    |
| 27   | SA040050 | MACH – HOT KNIFE CROSS OVER BAR 40 INCH  | 1    |
| 28   | SA040054 | W/F – REAR CROSS OVER BAR 40 INCH        | 1    |
| 29   | SA300001 | W/F – SEAL HEAD SIDE ARM 30 INCH         | 2    |
| 30   | SA300005 | FAB – HOT KNIFE WIRE GUARD SIDE 30 INCH  | 1    |

## 28" Powered Film Unwinder (Part 1 of 2)



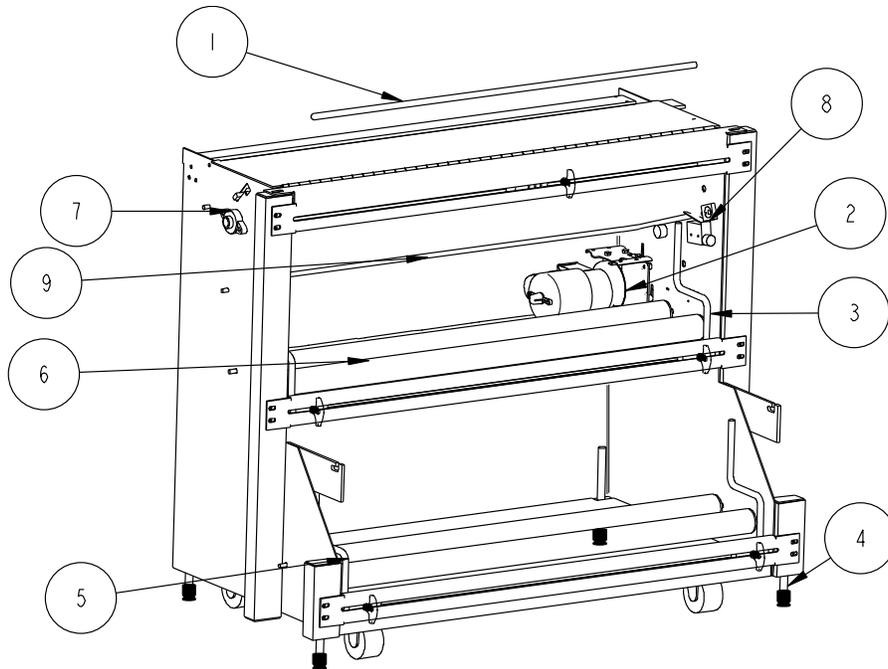
| ITEM | PART NO. | DESCRIPTION               | Q'TY |
|------|----------|---------------------------|------|
| 1    | I0000033 | INVERTER SEPARATER ROD    | 1    |
| 2    | EAST0063 | GEAR MOTOR                | 1    |
| 3    | EP000017 | FILM GUIDE RIGHT          | 2    |
| 4    | SUBA0105 | LEVELING FOOT ASSEMBLY    | 1    |
| 5    | EP000016 | FILM GUIDE LEFT           | 2    |
| 6    | EAST0382 | FILM RACK ROLLER, LARGE   | 4    |
| 7    | ETC00308 | BEARING 5/8" FLANGED BALL | 2    |
| 8    | EP000561 | SWITCH – LIMIT PFU        | 2    |
| 9    | EP000011 | DANCER BAR TUBE 35"       | 1    |

## 28" Powered Film Unwinder (Part 2 of 2)



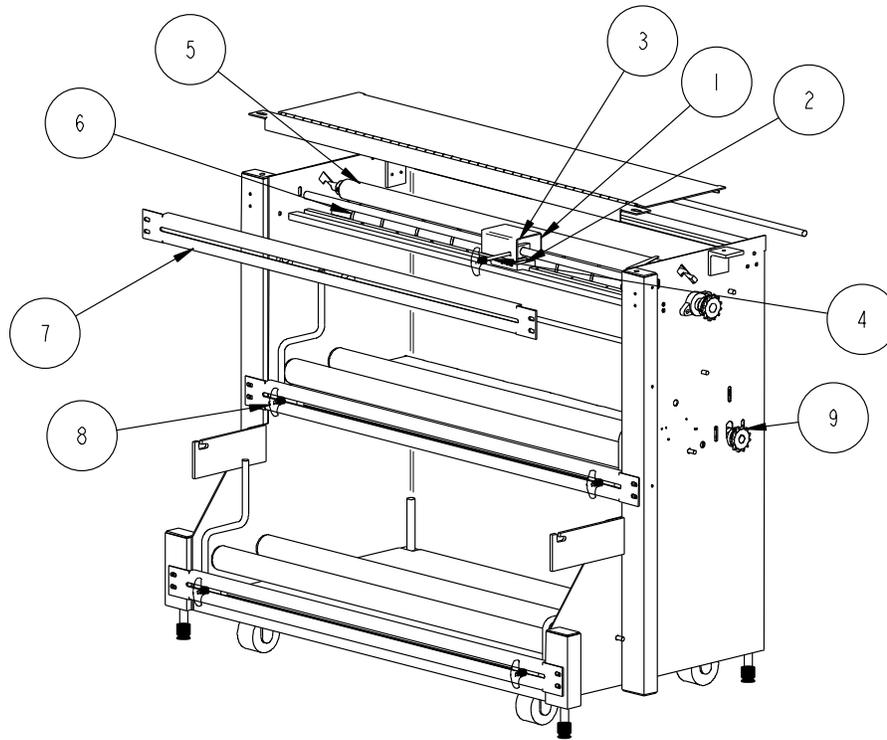
| ITEM | PART NO. | DESCRIPTION              | Q'TY |
|------|----------|--------------------------|------|
| 1    | EP000205 | PIN PERFORATOR ROD       | 3    |
| 2    | EAST0368 | PIN PERFORATOR LOWER PAD | 3    |
| 3    | EAST0366 | PIN PERFORATOR WHEEL     | 3    |
| 4    | EP000543 | STUD FILM UNWIND         | 3    |
| 5    | EP000005 | PINCH ROLLER TUBE        | 1    |
| 6    | EP000001 | RUBBER DRIVE ROLLER      | 1    |
| 7    | EP000208 | FILM BACK GUIDE HOLDER   | 1    |
| 8    | ETC00210 | KNOB                     | 7    |
| 9    | ETC00301 | SPROCKET DRIVE           | 2    |

## 36" Powered Film Unwinder (Part 1 of 2)



| ITEM | PART NO. | DESCRIPTION               | Q'TY |
|------|----------|---------------------------|------|
| 1    | I0000034 | INVERTER SEPARATER ROD    | 1    |
| 2    | EAST0063 | GEAR MOTOR                | 1    |
| 3    | EP000017 | FILM GUIDE RIGHT          | 2    |
| 4    | SUBA0105 | LEVELING FOOT ASSEMBLY    | 1    |
| 5    | EP000016 | FILM GUIDE LEFT           | 2    |
| 6    | EAST4006 | FILM RACK ROLLER, LARGE   | 4    |
| 7    | ETC00308 | BEARING 5/8" FLANGED BALL | 2    |
| 8    | EP000561 | SWITCH - LIMIT PFU        | 2    |
| 9    | EAST4012 | DANCER BAR TUBE 35"       | 1    |

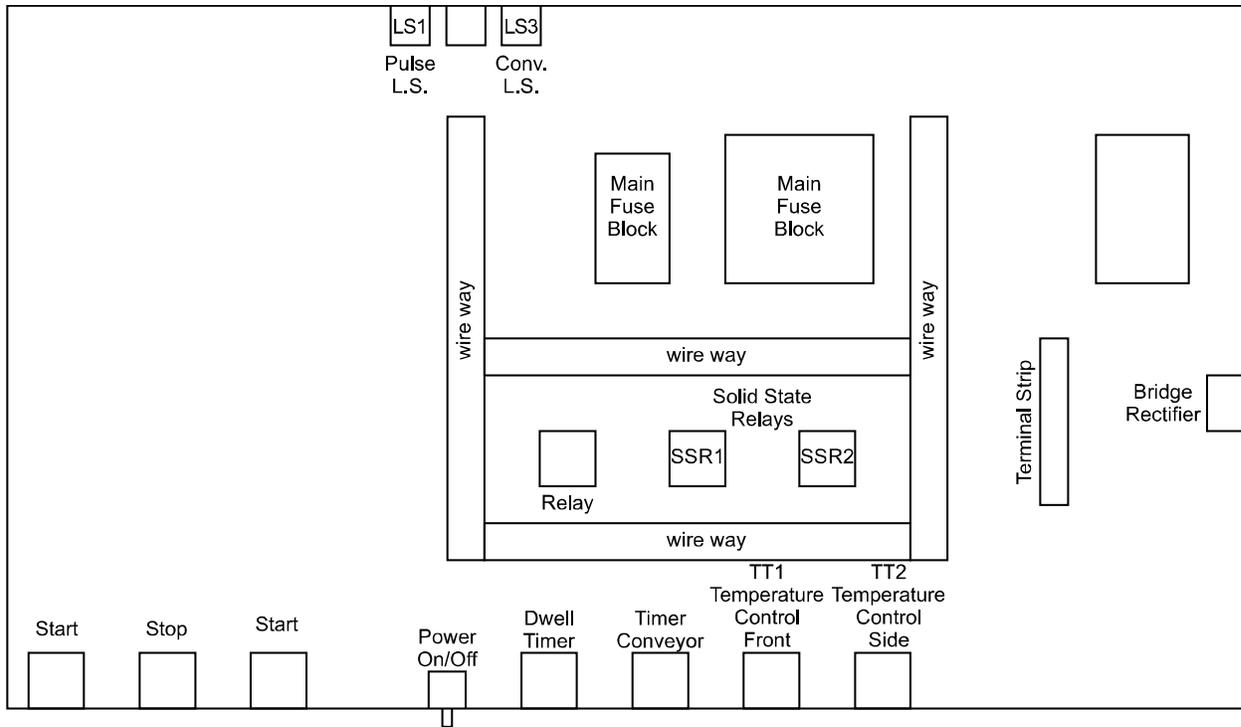
## 36" Powered Film Unwinder (Part 2 of 2)



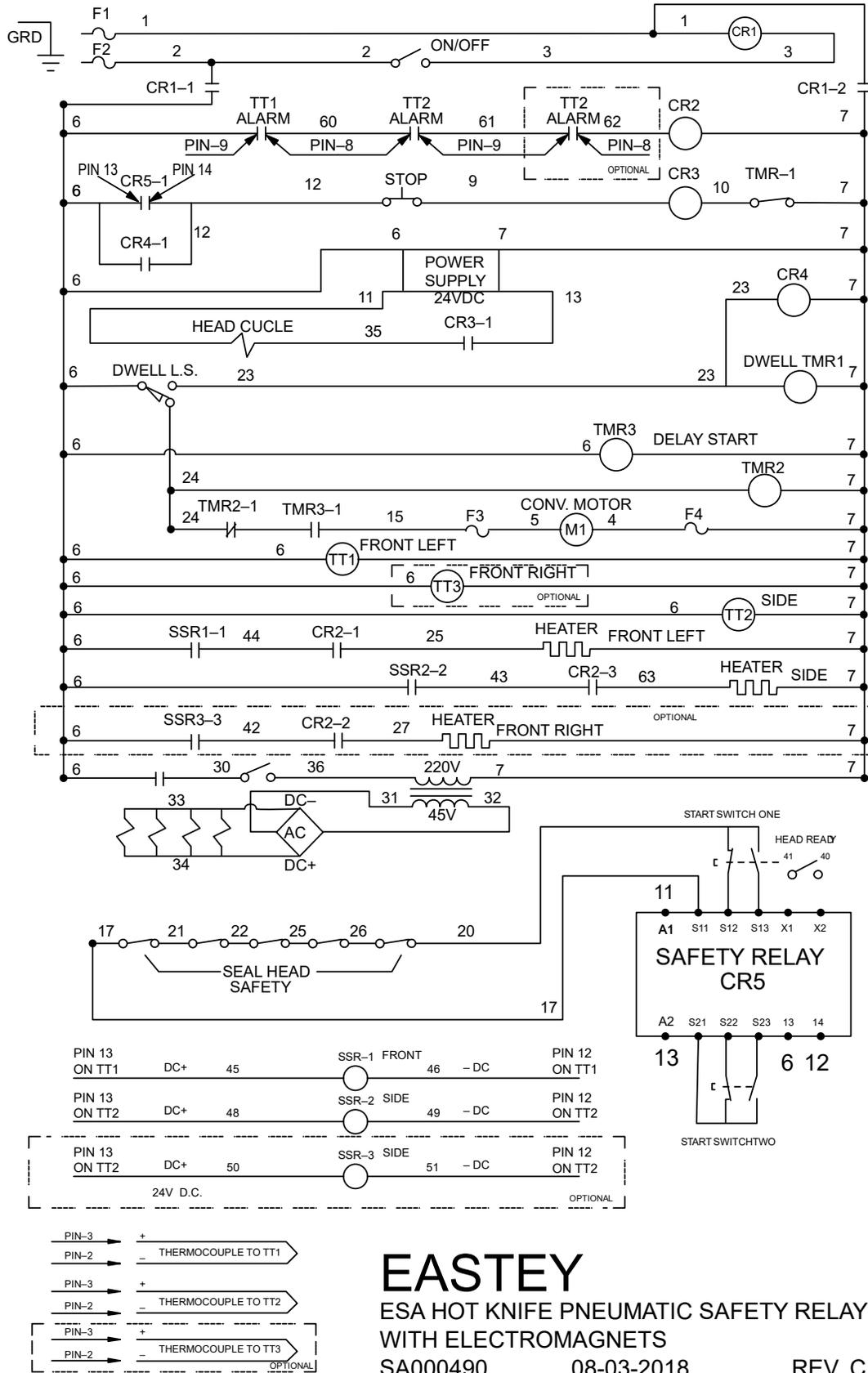
| ITEM | PART NO. | DESCRIPTION              | Q'TY |
|------|----------|--------------------------|------|
| 1    | EP000205 | PIN PERFORATOR ROD       | 3    |
| 2    | EAST0368 | PIN PERFORATOR LOWER PAD | 3    |
| 3    | EAST0366 | PIN PERFORATOR WHEEL     | 3    |
| 4    | EP000543 | STUD FILM UNWIND         | 3    |
| 5    | EAST4013 | PINCH ROLLER TUBE        | 1    |
| 6    | EP340001 | RUBBER DRIVE ROLLER      | 1    |
| 7    | EAST4004 | FILM BACK GUIDE HOLDER   | 2    |
| 8    | ETC00210 | KNOB                     | 7    |
| 9    | ETC00301 | SPROCKET DRIVE           | 2    |

# Appendix A: Electrical Schematics

## Panel Layout

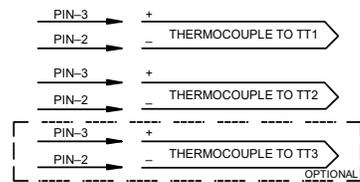
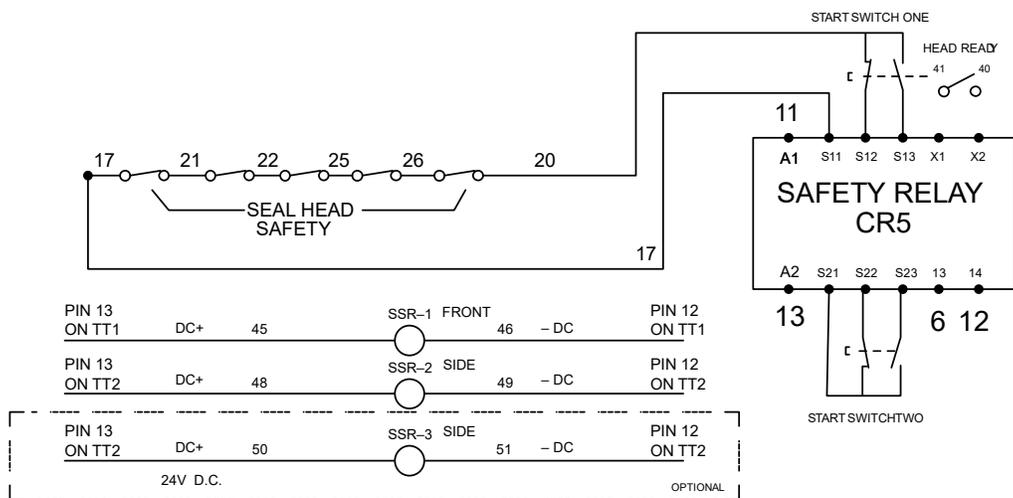
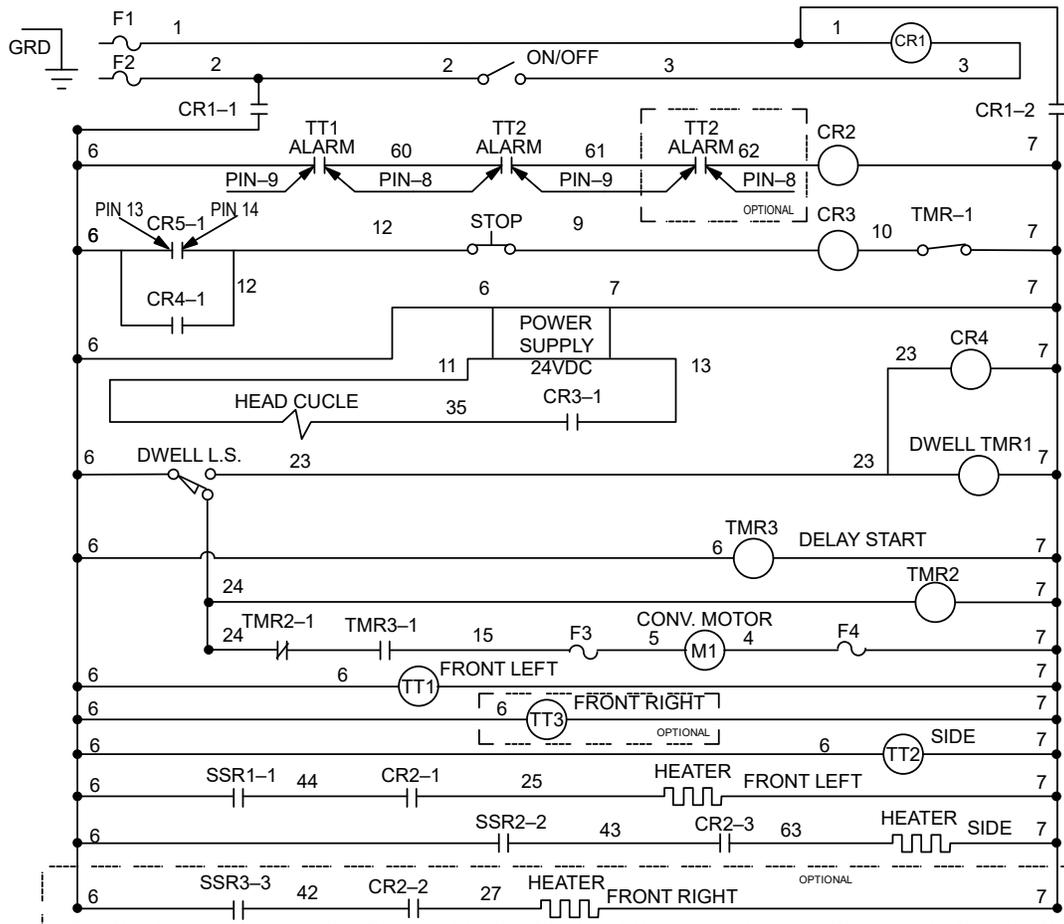


# Electrical Schematic — ESA With Magnets



**EASTEY**  
 ESA HOT KNIFE PNEUMATIC SAFETY RELAY  
 WITH ELECTROMAGNETS  
 SA000490 08-03-2018 REV. C

# Electrical Schematic — ESA No Magnets



## EASTEY

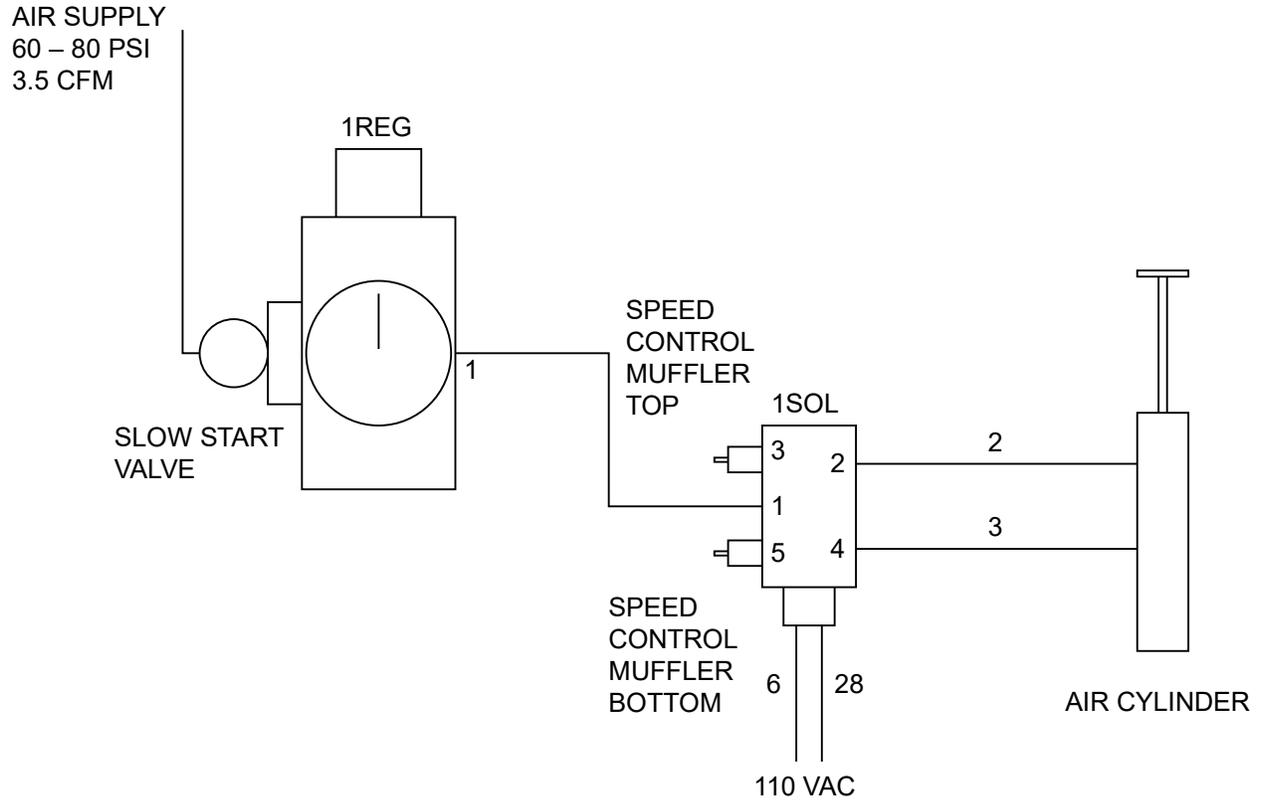
ESA HOT KNIFE PNEUMATIC SAFETY RELAY WITH NO MAGNETS

SA000490

08-03-2018

REV. C

# Appendix B: Air Diagram



# Appendix C: Temperature Setting Specifications for Shrink-Wrap Plastics

## Mushroom Insert

|                           |   |  |
|---------------------------|---|--|
| PVC (Poly-Vinyl Chloride) | Temperature settings:<br>Pad type:<br>Dwell Time: | 325° F front bar; 325° F side bar<br>Felt<br>Approximately 1 second            |
| Polyolefin                | Temperature settings:<br>Pad type:<br>Dwell Time: | 335° F front bar; 335° F side bar<br>Sponge rubber<br>Approximately 1 second   |
| Polyethylene              | Temperature settings:<br>Pad type:<br>Dwell Time: | 360° F front bar; 360° F side bar<br>Sponge rubber<br>Approximately 1.5 second |

# Appendix D: L-Sealer Size Estimating

## L-Sealer Center-Folded Film Size Estimating Table

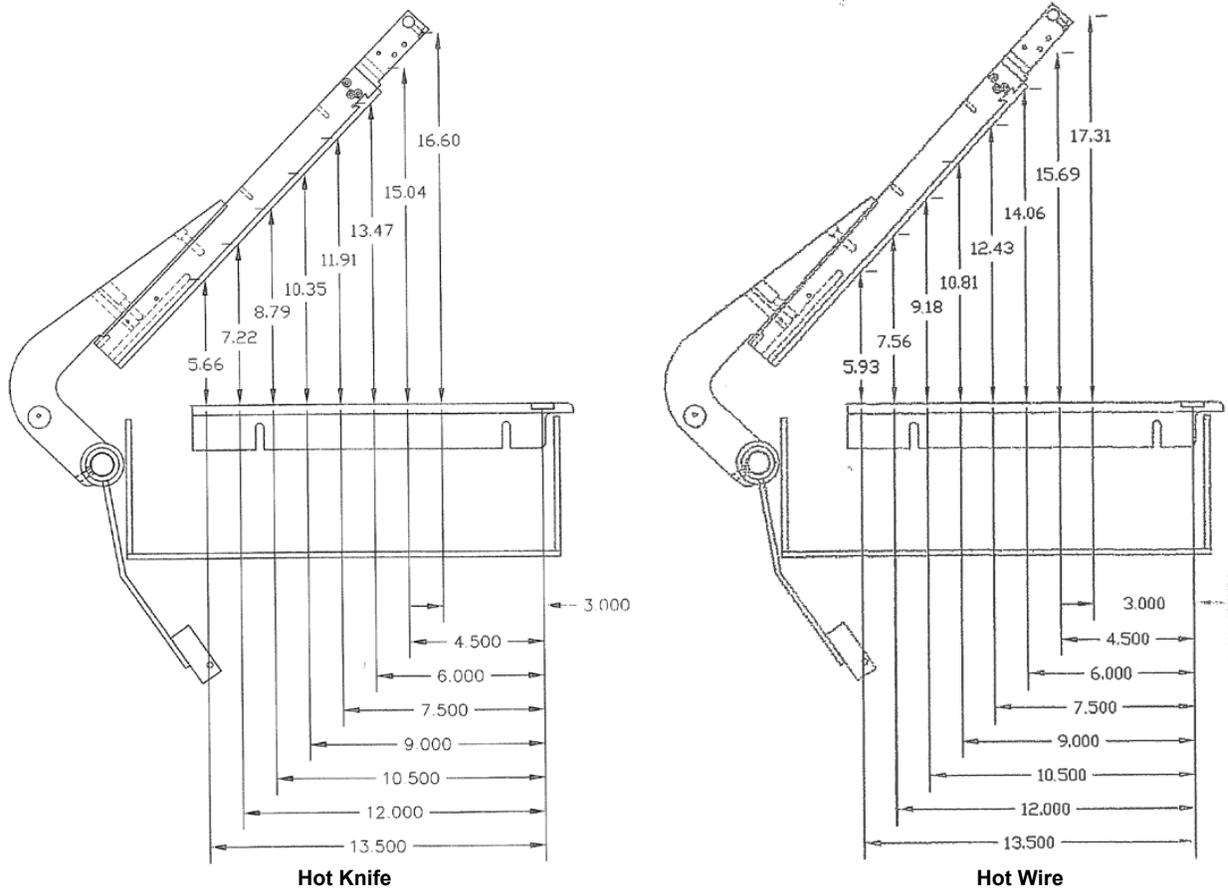
| Package Height | *** Roll Width Sizes |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                 |       |    |    |    |    |    |    |    |    |    |    | Maximum Film Widths: |       |    |  |  |
|----------------|----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------------|-------|----|----|----|----|----|----|----|----|----|----|----------------------|-------|----|--|--|
|                | 19                   | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | Econo L-Sealers | - 19" |    |    |    |    |    |    |    |    |    |    |                      |       |    |  |  |
| 8"             | Are Rounded          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                 |       |    |    |    |    |    |    |    |    |    |    | Econo L-Sealers      | - 19" |    |  |  |
| 7.5"           | Up To The Next       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                 |       |    |    |    |    |    |    |    |    |    |    | 20" Wide L-Sealers   | - 24" |    |  |  |
| 7"             | Inch Where           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                 |       |    |    |    |    |    |    |    |    |    |    | 30" Wide L-Sealers   | - 34" |    |  |  |
| 6.5"           | Necessary            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                 |       |    |    |    |    |    |    |    |    |    |    | 40" Wide L-Sealers   | - 44" |    |  |  |
| 6"             | 15                   | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31              | 32    | 33 | 34 |    |    |    |    |    |    |    |    |                      |       |    |  |  |
| 5.5"           | 15                   | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31              | 32    | 33 | 34 |    |    |    |    |    |    |    |    |                      |       |    |  |  |
| 5"             | 13                   | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29              | 30    | 31 | 32 | 33 | 34 |    |    |    |    |    |    |                      |       |    |  |  |
| 4.5"           | 12                   | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28              | 29    | 30 | 31 | 32 | 33 | 34 |    |    |    |    |    |                      |       |    |  |  |
| 4"             | 11                   | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27              | 28    | 29 | 30 | 31 | 32 | 33 | 34 |    |    |    |    |                      |       |    |  |  |
| 3.5"           | 10                   | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26              | 27    | 28 | 29 | 30 | 31 | 32 | 33 | 34 |    |    |    |                      |       |    |  |  |
| 3"             | 9                    | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25              | 26    | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |    |    |                      |       |    |  |  |
| 2.5"           | 8                    | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24              | 25    | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |    |                      |       |    |  |  |
| 2"             | 6                    | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22              | 23    | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34                   |       |    |  |  |
| 1.5"           | 6                    | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22              | 23    | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34                   |       |    |  |  |
| 1"             | 5                    | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21              | 22    | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33                   |       |    |  |  |
|                | 0                    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16              | 17    | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28                   | 29    | 30 |  |  |

To calculate estimated per-package cost for manual and semi-automatic L-sealers, use the following formulas.

- 1) Center-Folded film – width of roll of film =
- 2) Cutoff Film length – film going across front seal bar =
- 3) Film usage – to calculate the amount of film used per package =
- 4) Per package cost

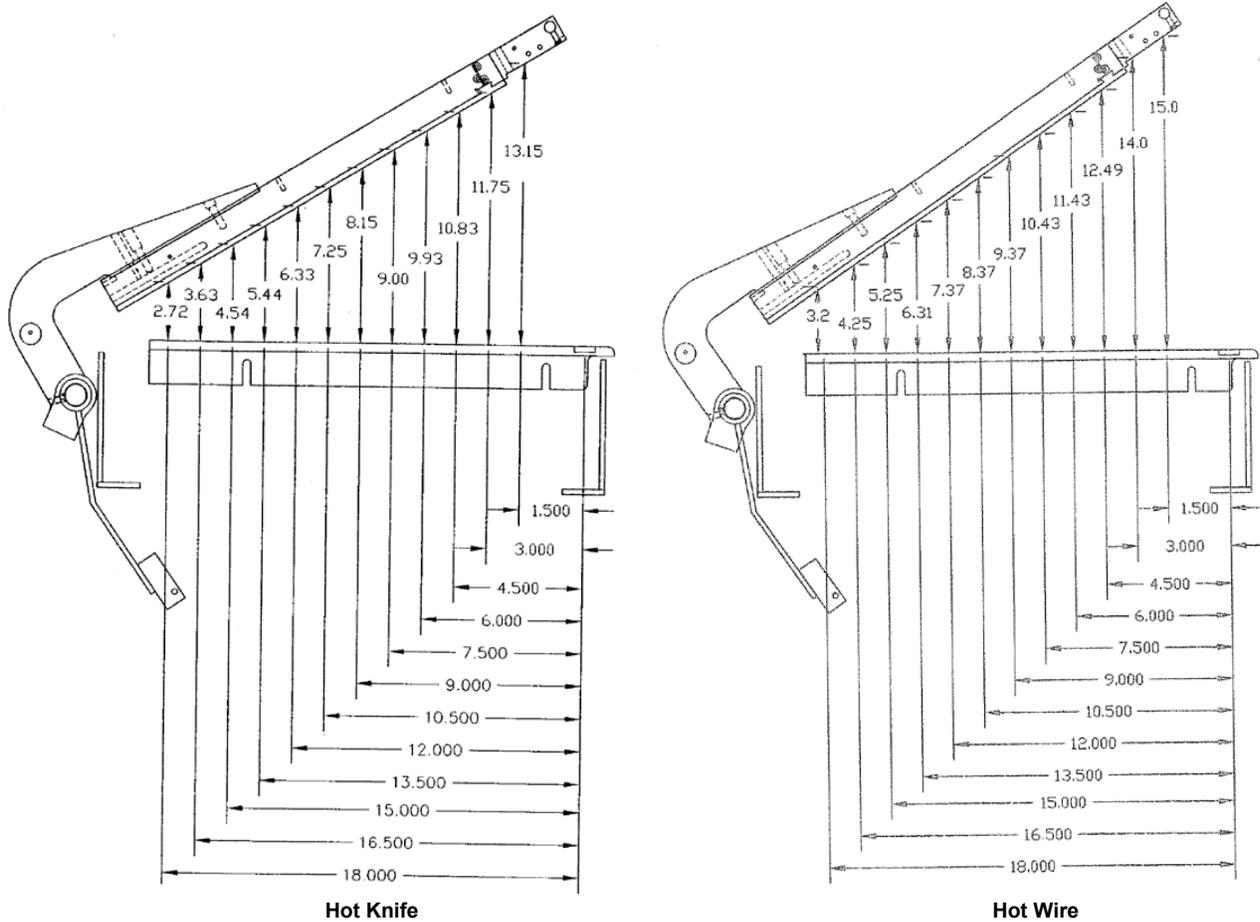
## 16-inch Side Seal Package Size Estimation

The following Eastey side seal bar size dimensions are provided to make sure your product will fit under the side seal bar. You will need to know your product height and width to use these figures effectively.



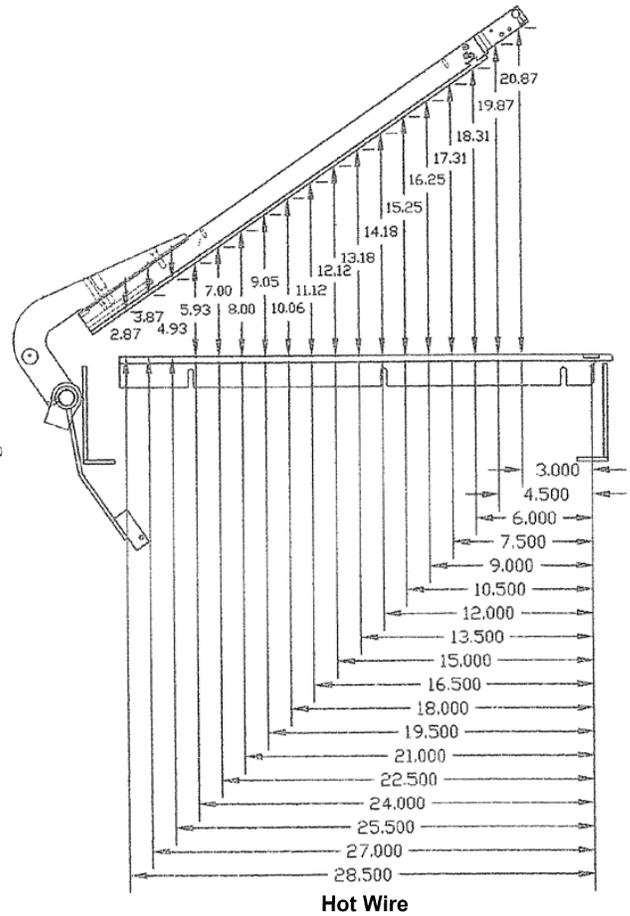
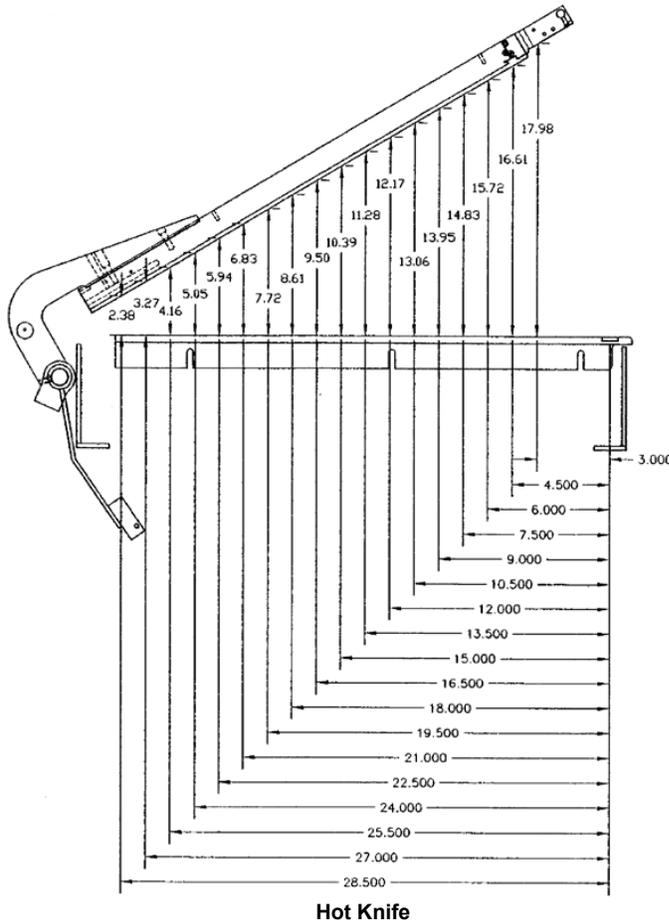
## 20-inch Side Seal Package Size Estimation

The following Eastey side seal bar size dimensions are provided to make sure your product will fit under the side seal bar. You will need to know your product height and width to use these figures effectively.



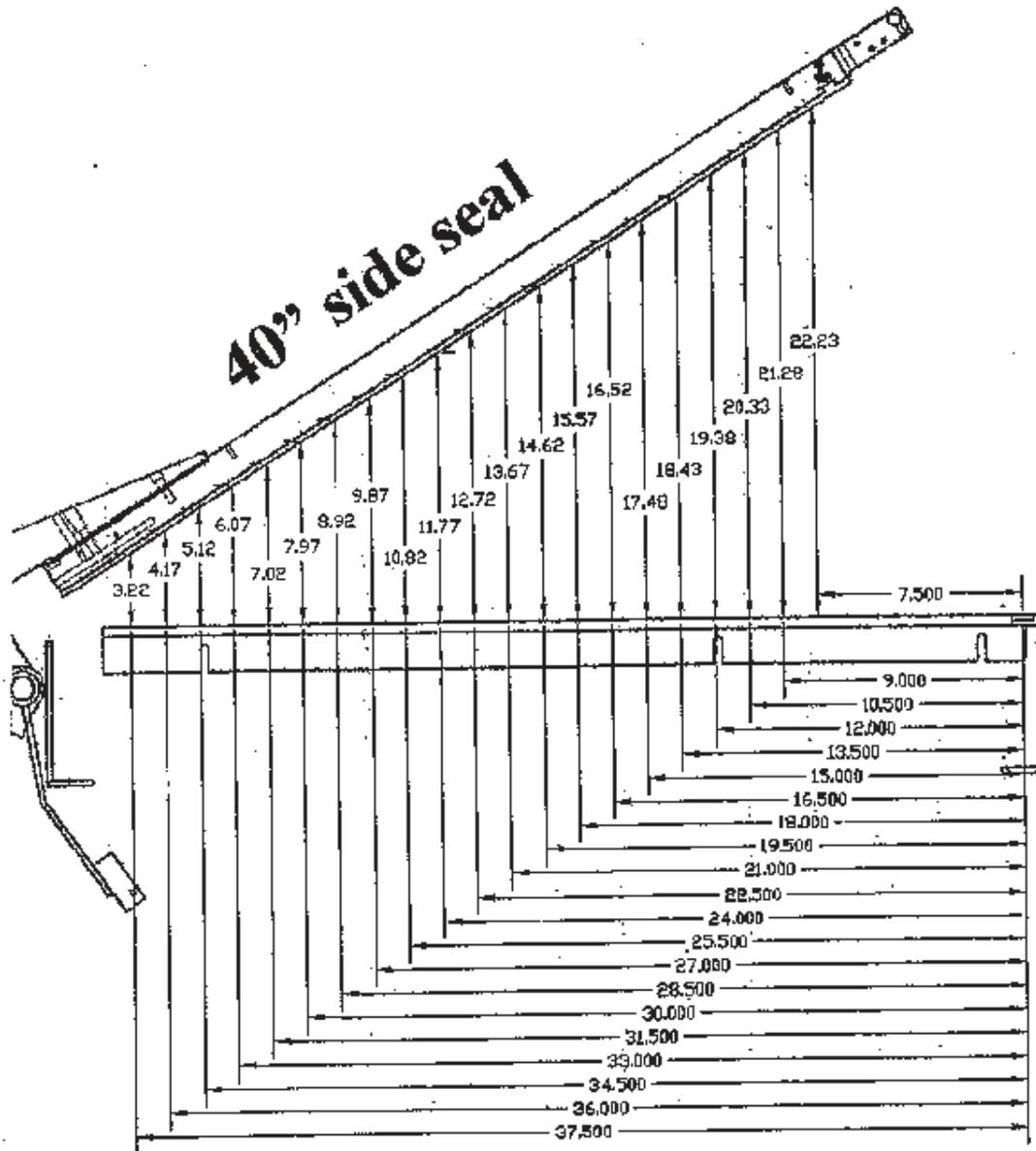
### 30-inch Side Seal Package Size Estimation

The following Eastey side seal bar size dimensions are provided to make sure your product will fit under the side seal bar. You will need to know your product height and width to use these figures effectively.



## 40-inch Side Seal Package Size Estimation

The following Eastey side seal bar size dimensions are provided to make sure your product will fit under the side seal bar. You will need to know your product height and width to use these figures effectively.



# Warranty Statement

## ESA Professional Series Semi-Automatic L-Sealers

### Warranty Statement

Eastey warrants that all of the products it ships will be in good working order and free from defects in material and workmanship for a period of one (1) year from the date of shipment by Eastey and will conform to the published specifications for that product. Spare parts that are manufactured in house by Eastey and bought out parts will be warranted for one (1) year.

### Warranty Period – Specific Items

|                  |                        |
|------------------|------------------------|
| Drive motor(s):  | 1 year                 |
| Gear reducer:    | 1 year                 |
| Termination Post | 30 days                |
| Conveyor Belt    | 30 days                |
| Hole Punches     | 30 days (ball and die) |
| Knurled Nut      | 30 days                |

The following parts are considered to be consumable items and not under warranty: fuses, ¼" × ¾" sponge rubber, copper heat sinks, 036 Nichrome wire, ¾" PTFE tape, and ½" PTFE tape.

All other parts: 1 year (Except for moving parts which are subject to normal wear, tear and replacement which are warranted to be free from defects in material and workmanship.)

### Sealing Quality

Sealing quality achieved in a given application is dependent on the installation, the material handling, and the maintenance provided. Eastey makes no warranty that the sealing quality achieved in an application will be the same as that achieved on a test piece in our demo facility.

### Shipping Policy

Customer pays all incoming shipping. If the item is defective and under warranty, Eastey pays return shipping charges for least costly method. If expedited shipping is desired, customer must furnish his shipping account and shipping fees will be charged to that account.

### Warranty Verification

If you conclude that a product may be defective and may be covered by warranty, obtain a Return Material Authorization number by calling our technical support number (toll free at 1-800-835-9344, or 763-428-4846 or Fax: 763-795-8867 or e-mail: info@eastey.com.). Once an RMA number has been obtained, return the defective item to Eastey. Eastey will analyze the product and, if found to be defective, we will, at our option, replace or repair the item. If the item is found to not be eligible for warranty, you

will be notified and may decide on disposition. Defective products will be replaced or repaired as promptly as possible.

**Warranty Eligibility**

The warranty provided by Eastey is only to the original buyer.

**Limited Warranty**

THE ABOVE WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

**Disclaimer of Damages**

REGARDLESS OF WHETHER ANY REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE, IN NO EVENT WILL EASTEY BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES, INCLUDING LOST PROFIT OR LOST OPPORTUNITIES OF ANY TYPE ARISING OUT OF THE USE OR INABILITY TO USE THESE PRODUCTS EVEN IF EASTEY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

# Customer Support

## Eastey Technical Service

For help setting up or operating the ESA Professional Series L-Sealer, please contact Eastey Technical Service at one of the numbers listed below.

|                 |  |
|-----------------|--|
| Toll-Free Phone | 800-835-9344   |
| Phone           | 763-428-4846   |
| Fax             | 763-795-8867   |
| E-mail          | <a href="mailto:info@eastey.com">info@eastey.com</a> |
| Web             | <a href="http://www.eastey.com">www.eastey.com</a>   |

Thank you again for your purchase of Eastey products. We are pleased to be a part of your packaging needs.



***EASTEY***®