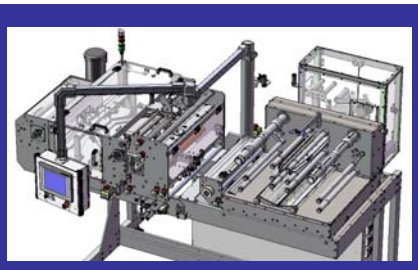

Easy Open and
Reclosable Systems for
Flexible Packaging

Sealstrip EASY RESEAL®

# Applicator Manual

## Installation • Operation • Maintenance

**Manufactured For:**
**Pepperidge Farms**

**Model Number:**
**APOLLO**

**Serial Number:**
**M2613 & M2614**


Sealstrip Corporation
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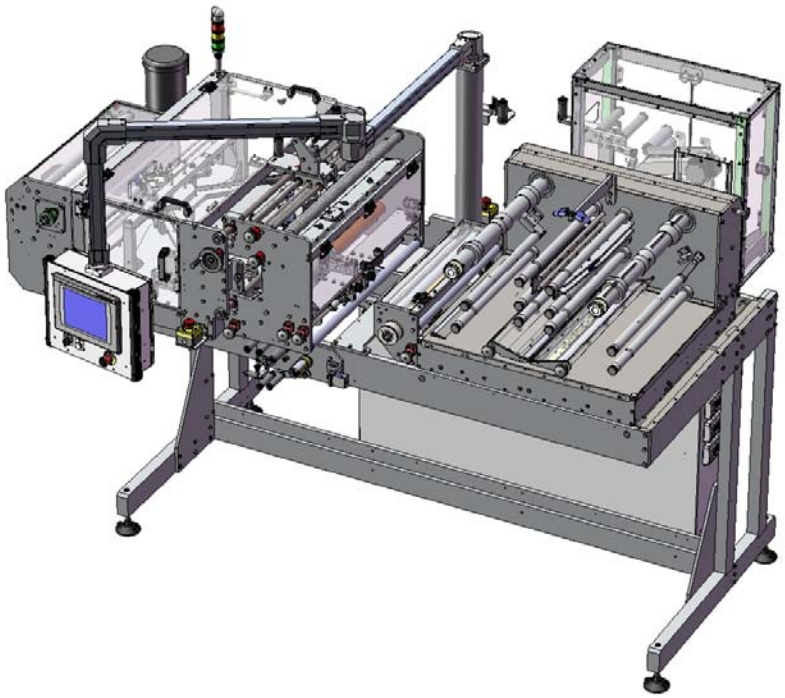
Making Packaging Easier . . . . . .

# INSTALLATION, OPERATION and MAINTENANCE MANUAL

## SEALSTRIP APOLLO APPLICATORS S/N M2613 & M2613



The machinery, film, and tape materials have been engineered for this specific product application. Changes to any or all of these materials can affect the performance of the consumer convenience feature.

***Please notify Sealstrip Corporation if you are planning changes to film materials.***

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*Making Packaging Easier . . . . . .*

Dear Customer:

Thank you for your purchase of a Sealstrip reclosable system by Sealstrip Corporation. This applicator has been designed specifically to fit your make and model wrapper.

Because the applicator is a pneumatic, electrical, and mechanical device, we recommend that it be installed by qualified personnel. Personnel should read the complete manual before installation and operation begins.

We hope that the Sealstrip reclosable system proves productive for you and we would appreciate your contacting us should any problems or questions arise.

HOW TO CONTACT US:
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Email: customerservice@sealstrip.com

*Thank you from all of us at Sealstrip Corporation.*

Sealstrip
EASY RESEAL®

Providing
• Easy Open
• Easy Reseal
• Tamper Evidence




Value-Added Feature
• Convenient
• Efficient
• Proven

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# INTRODUCTION

The Sealstrip system adds easy open, easy reseal, and tamper evident features to a package using pressure sensitive tape to form the Sealstrip resealable feature.

The Sealstrip applicator is an in-line resealable packaging system that is retrofitted to your existing machinery and operates at your current line speeds. The Sealstrip applicator slits the packaging film, forms a slot over which the Sealtape is applied, and folds the composite film structure into the Sealstrip feature.

The Sealstrip applicator is manufactured in the USA and designed to fit your new or existing wrapper. The applicator utilizes a smooth rotary design that provides high speed, efficiency, and durability.

The purpose of this manual is to inform the customer of use and maintenance procedures required to properly operate the Sealstrip applicator. In order to ensure the efficient performance of the applicator, all guidelines in this manual should be followed.

The performance of the applicator relies on several factors, including:

- Use of qualified film and genuine Sealstrip Sealtape
- Proper threading of the system
- Proper adjustment of controls
- Ongoing maintenance of applicator as recommended
- Environmental conditions

The above items are detailed in this manual. This manual should be read in its entirety by all operators prior to operation of the applicator.

Questions, comments or concerns should be addressed to:

**Sealstrip Corporation**
**103 Industrial Drive**
**Gilbertsville, PA 19525**

**Phone: (610) 367-6282**
**Toll Free: (888) 658-7997**
**Fax: (610) 367-7727**
**Web: www.sealstrip.com**

# TERMINOLOGY

**SEALSTRIP FEATURE:** Easy open, tamper evident reclosable feature formed by the Sealtape Applicator in the flexible packaging film. The Sealstrip feature is comprised of the folded flap with the slot, the resealable Sealtape, and the tamper-evident, easy open teartape or perforation.

**SEALTAPE:** An application engineered pressure sensitive resealable tape, which is applied onto the outside of the film in machine direction (MD), over the slot, to form the reclosable part of the Sealstrip feature. Sealtape is available in clear or printed widths .625 inch (15 mm) to 1.25 inch (32mm).

**TEARTAPE:** An application engineered narrow pressure sensitive tape that is used by the consumer to easily open a package.

**SEALTAPE APPLICATOR:** Retrofits to a parent wrapper and adds the Sealstrip feature to the packaging film. The applicator slits the packaging film, forms the slot, applies the Sealtape over the slot, folds the structure into the Sealstrip feature and delivers the converted film in a flat form to the parent wrapper.

**PARENT WRAPPER:** Machine to which the Sealstrip Applicator system is retrofitted.

**FOLDER:** The folder is a sub-system within the Sealstrip Applicator. The wedge shaped set of bars forms the fold that becomes the Sealstrip feature as incorporated into the packaging film.

**TAPE UNWIND MANDREL:** Hub device onto which the Sealtape roll is mounted onto for dispensing tape. The mandrel turns as the tape roll unwinds.

**NIP ROLLERS:** A sub-system of the Sealstrip Applicator consists of two mating rollers. One is a polished aluminum roller; the other is a driven rubber-coated roller. Film tension causes the aluminum roller to maintain nip pressure and improve film traction.

**FILM DANCER ROLLER:** On the Sealstrip Applicator, this roller moves with the pull or demand of film by the parent wrapper. The movement of the dancer roller activates the Sealstrip Applicator power feed system to deliver film. (There is also a tape dancer controlling the unwinding of the tape).

**SERRATED CUT-OFF KNIFE:** Used to initiate the easy open tear on laminated or other non-Polyethylene packaging films. A serrated cut-off knife is utilized to shape cut edge of the end seal area of the package, allowing the consumer to begin a tear in the package's film adjacent to the teartape. Once the tear is started, the teartape will guide the opening of the package.

**PERF/PERFORATION:** Used to provide Easy Open and tamper evidence on Polyethylene packaging film. Small linear cuts placed in the package film in machine direction above the Sealtape.

# TERMINOLOGY

**PERFORATOR:** A mechanical, and possibly pneumatic device, generally in the form of a wheel that when pressed against the packaging film and rotated creates intermittent cuts in the film. The distance between the cuts (called the tie), the cuts per inch, and the outside and inside diameters of the wheel are the variables that are used to describe a perforator.

**FEATURE FLAP GUIDE**: A device that guides the Sealstrip feature into the wrapper's seal jaws and cut-off knife in the desired position to achieve the desired package appearance.

**FILM BRAKE:** On Sealstrip Applicator units that have a complete dual film unwind, the brake mounts over the brake drum at end of the spindle/holder and serves to increase or decrease the tension via a dancer arm, and controls the force needed to unwind the film or tape from the roll. The brake has an (externally) adjustable mechanism, to allow proper dancer function. When properly adjusted, the brake allows the film to smoothly unwind without the roll overplaying and leaving the film or tape loose.

**SPLICE TABLE**: A device that aids in the splicing of film. The splice table is a flat section, usually on the "Unwind" carriage, that provides a "work surface" to assist in preparing the trailing, and leading film end for splicing.

**AUTO SPLICER:** A mechanical, and possibly pneumatic device, that automatically detects the end of film (from the film currently being consumed) and attaches the (previously prepared) leading edge of the "reserve" roll .

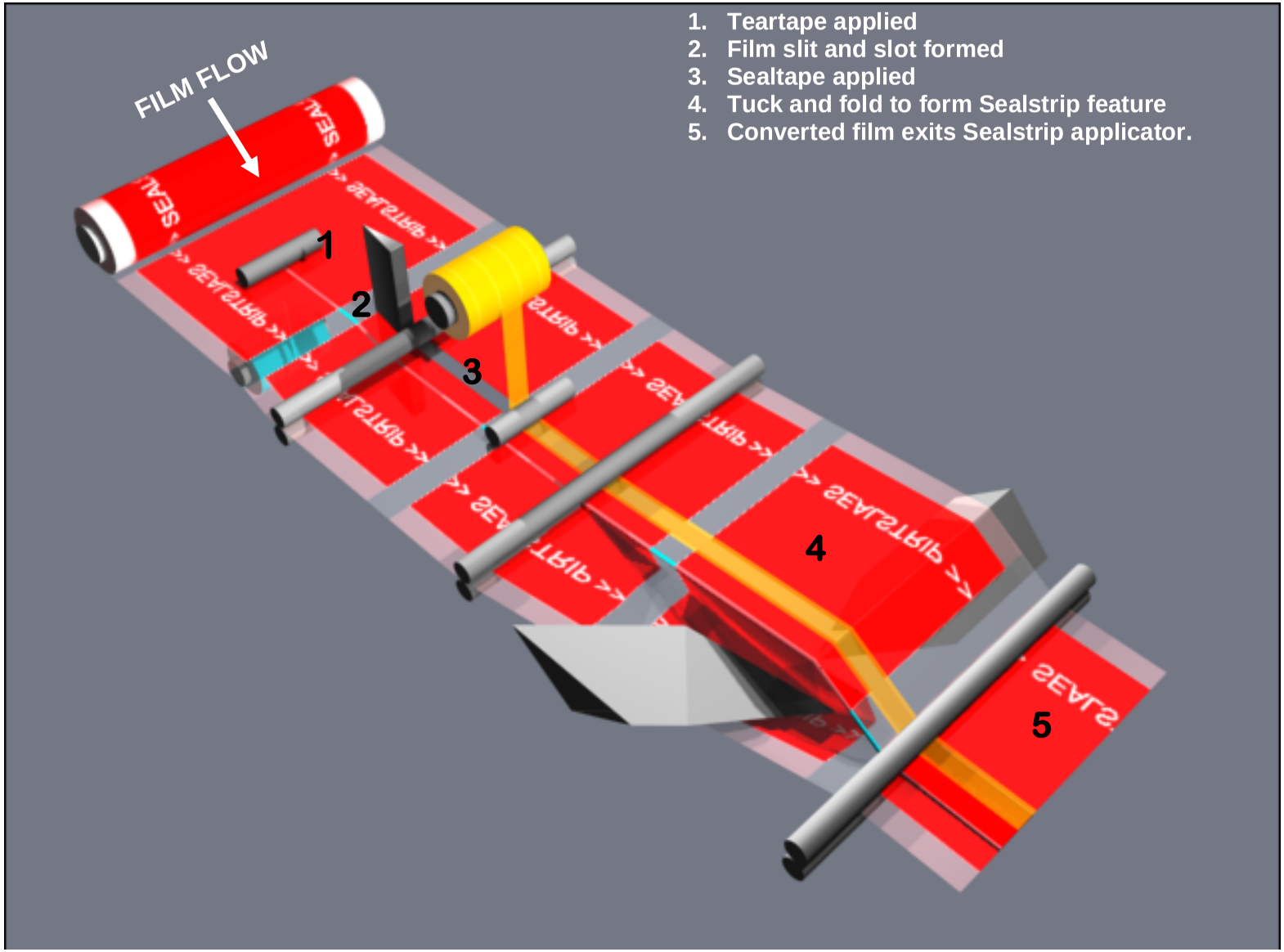
# A WORD OF CAUTION


This symbol indicates caution is advised.
Watch for it throughout this manual.

**Review these instructions before operating the Sealstrip Applicator**.

- Follow Plant Safety Rules & Guidelines
- Never reach into any part of a moving machine.
- Pin perforators are sharp. Exercise caution when handling (maintenance function).
- Keep fingers, tools, and foreign matter away from the nip/pinch rollers. This is a potentially dangerous area.
- Be sure all personnel are clear of the Applicator before starting it.
- Do not allow personnel who are not familiar with all safety factors to work around the Applicator.
- Do not wear ties, loose clothing, or any other items that may become entangled in the Applicator.

# SEALSTRIP FEATURE FORMATION PROCESS



# HOW TO HANDLE THE SEALTAPE MATERIAL

## Material Packaging

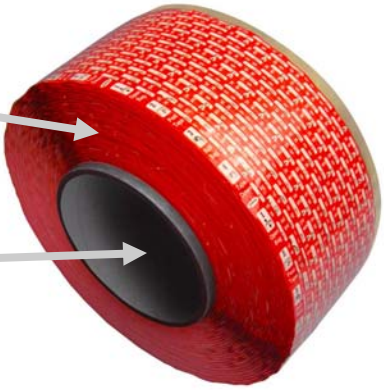
1. Sealstrip has provided special packaging designed for the Sealtape material.
2. Each roll is individually bagged and packaged in a core-suspending box.
3. A lot number appears on the inside of each core and on the exterior of the box.
4. Use caution when opening the box. Do not cut deeply into the carton; this can cause damage to the tape.

## Material Handling

1. All rolls of tape are spool wound to provide long length rolls for continuous supply.
2. The sides of the roll are fragile. Never touch the sides of the tape roll.
3. Handle the tape roll product by the core only.
4. DO NOT handle roll by tape. Lift and store with the core always supporting the tape weight.
5. DO NOT lay tape rolls on machinery or other surfaces. The roll can become contaminated with debris.
6. Store partial rolls of material in the original bag and box provided by Sealstrip.


**DO NOT touch the sides of the tape roll. They are fragile and may become damaged.**

**Handle Sealtape material rolls by the core only.**



## Material Storage

1. Tape roll edges can be damaged with improper handling.
2. Store tape in original packaging (bag and box) until needed.
3. Boxes of tape should be stored according to the directional label on the box.
4. Store below 80° Fahrenheit (27° Celsius)
5. Do not expose tape to water or moisture.
6. With proper storage, a shelf-life of approximately one year can be attained.

# INSTALLATION

Sealstrip machinery is pneumatic, electrical, and mechanical. Personnel installing the equipment should be trained in these three areas.

Standard Sealstrip machinery functions best in dry, moderate temperature conditions. Exposing machinery to excessive moisture, humidity, heat or cold should be done only if the machinery was ordered with exposure to these conditions specified.

All safety measures that should be taken when installing equipment are not fully detailed here, as only qualified and trained personnel should install this equipment and the requisite safety procedures that are common to installation of any equipment are applicable.

Please contact Sealstrip Corporation if you have any questions, concerns or difficulty with the installation of your Sealtape Applicator.

## What's Included in The Box

Sealtape Applicator for retrofit onto a wrapper
Installation and Operating Manual
Sample roll of Sealtape material for start-up purposes
Sample roll of Teartape material for start-up purposes
Spare parts (Included ): See spare parts list (separate document)

## Preparing the Wrapper

Schedule downtime.
Disconnect power to the wrapper.
Have product and film available for start-up.

# RETROFITTING

Retrofitting of a Sealtape Applicator is to be done by a Sealstrip technician. Below is a list of the required mechanical and electrical:

The shipping crate needs to be moved close to the install site. A Forklift (long-fork) will be required to move the applicator into place and remove it from the shipping crate. Sealstrip personnel need to be present to uncrate and move the applicator into place. Once the Sealtape Applicator is correctly placed by Sealstrip personnel it will need to be attached to the floor.

The Sealtape Applicator requires a 480VAC, 3phase, 10amp power service. Power can be routed to the applicator via flexible conduit so it can be “roughed in” before the applicator is installed in place.

The Sealtape Applicator requires a minimum of 75PSI of air pressure. The air input is located on the same side of the applicator as the electrical box.

# ELECTRICAL INTERLOCKS

The Sealtape Applicator provides electrical interfaces to the parent wrapper for control signals, machine status and reciprocal E-stop monitoring. The multi-conductor cables [WIC1] and [WIC2] contain all wires for the electrical interlocks (refer to electrical schematics). The applicator safety circuit and run status interlocks are required as a minimum. The interlocks function as follows:

## Applicator to Parent Wrapper

**Safety circuit status (dual channel, normally open, dry contact):**
This required interlock indicates the status of the Sealtape Applicator e-stop and guard safety circuits. The interlock is hardwired and opens when an e-stop is pressed or when a guard is opened while running. This interlock should be tied into the parent wrapper emergency stop circuit.

**Run status (normally open, dry contact):**
This required interlock indicates the run status of the Sealtape Applicator. The interlock is PLC controlled and closes when the Sealtape Applicator is running and ready to pull film. This interlock is used to prevent the wrapper from running until the Sealtape Applicator is ready.

**Stop status (normally closed, dry contact):**
This optional interlock indicates the stop status of the Sealtape Applicator. The interlock is PLC controlled and opens for 100ms when the Sealtape Applicator is placed in Stop mode either manually or automatically. This interlock is used to stop the parent wrapper when the Sealtape Applicator is not running.

**Machine Stop status (normally open, dry contact):**
This optional interlock indicates the reset status of the Sealtape Applicator. The interlock is hardwired via the AC drive motor contactors and is open when an applicator master reset is required. This interlock can be used in conjunction with the Stop signal to prevent the wrapper from running until the Sealtape Applicator has been reset.

**Splice made signal (normally open, dry contact):**
This optional interlock serves a dual purpose depending on whether the Sealtape Applicator has manual splice or automatic splice capabilities:
Manual Splice—indicates that a splice was made at the Sealtape Applicator. The in ter-lock switches state for 500ms after the splice reaches a predetermined position in the Sealtape Applicator and the "*Splice Made"* pushbutton on the Operator Interface was pressed. This interlock is used to initiate any automatic splice handling functions of the wrapper.
Automatic Splice—when the Sealtape Applicator is set to slow down while making a splice, the interlock closes when the Applicator slows down and remains closed until the Applicator goes back to full speed. This interlock is used to command the wrapper to slow down to a matching speed until the splice is complete.

**End of Teartape signal (normally open, dry contact):**
This optional interlock indicates that the metalized tape has been sensed near the end of the tape roll. The interlock is PLC controlled and closes when the metalized strip is sensed. This interlock is used to signal that upcoming product may have metalized tape in the teartape and will need to be rejected.

# ELECTRICAL INTERLOCKS

**End of Sealtape signal (normally open, dry contact):**

This optional interlock indicates that the metalized tape has been sensed near the end of the tape roll. The interlock is PLC controlled and closes when the metalized strip is sensed. This interlock is used to signal that upcoming product may have metalized tape in the sealtape and will need to be rejected.

**Operating mode, Run or Bypass (normally open, dry contact):**

This optional interlock indicates the operating mode of the Sealtape Applicator. The interlock is maintained closed when the applicator mode switch is in the Bypass position. This interlock is used to allow the parent wrapper to be run when the Sealtape Applicator is bypassed and stopped.

(see Modes of Operation—Bypass Mode for detailed functional description)

## Parent Wrapper to Sealtape Applicator

**E-stop status (dual channel, normally closed, dry contact):**

This optional interlock monitors the status of the parent wrapper e-stop pushbuttons or safety circuit. The interlock should open when the wrapper is in an e-stop state. A wrapper e-stop condition will also e-stop the Sealtape Applicator.

# OPERATION

## (All models)

**Startup - selector switch in the Run position**

On power-up, the Operator Interface will go through its initialization sequence and then display the Operator screen. A master reset is required on startup and this is performed by pressing the "*Reset"* pushbutton on the front of the Operator Interface enclosure. This enables air and power for the applicator motors and actuators. The pushbutton illuminates green when the applicator has been successfully reset. If the applicator does not reset, check the following:

- All applicator emergency stops are released
- All doors and guards are closed tightly
- Main air supply valve is On (SUP)
- Main air supply pressure is not low

**Startup - selector switch in the Bypass position**

On power-up, the Operator Interface will go through its initialization sequence and then display the Bypass screen. Placing the selector switch in the Run position will display the Operator screen.

**Stop Mode**

The Sealtape Applicator is placed in Stop mode on power-up. Drive roller and valve actuator control is disabled and the Sealtape Applicator run and stop signals to the parent wrapper switch state (see Electrical Interlocks section). The guard doors can be opened without triggering an alarm. Several other conditions will place the applicator in Stop mode:

- Pressing the Operator Interface *"Stop"* pushbutton while running
- Active machine stop alarm while running
- Active run stop alarm while running

**Bypass Mode**

Bypass mode assumes that the Sealstrip feature is not required and the parent wrapper's unwind will be utilized. When the parent wrapper unwind is to be used, the Sealtape Applicator must be placed in Bypass mode. This disables all Sealtape Applicator control functions and forces a run signal to the parent wrapper (see Electrical Interlocks section). When in Bypass mode, the Sealtape Applicator can be powered down and the parent wrapper will still be permitted to run.

Procedure:

1. Place the mode switch in the Bypass position
2. The Operator Interface will display the Bypass screen

**Thread Mode**

Thread mode facilitates threading of film and Sealtape through the machine. The perforators and slitter remain disengaged from the film and the outer V-bar remains in the open position. The Sealtape assist motor is enabled and the drive roller will run at a fixed, preset speed when the "*Hold-To-Jog"* pushbutton is pressed on the Operator Interface. The Operator Interface also contains controls for raising or lowering the inner V-bar and selecting the direction of rotation for the drive roller. The guard doors can be opened without triggering an alarm. Film roll threading varies depending on whether the applicator has manual splice or automatic splice capabilities (see the corresponding Film Path diagrams).

# OPERATION

## (All models)

**Sealtape Mode Controlled Stop**

The Sealtape Applicator can perform a controlled stop when the machine is placed in Stop mode while running Sealtape mode. Some wrappers will continue to pull a short amount of film before they come to a complete stop. If the Sealtape Applicator controls were disabled immediately, this would cause a loss of the feature on the length of film that continued to move through the Applicator. It could also cause the dancer arm to raise against its upper limit stop and potentially break the film. A controlled stop is time based and allows all film motion through the applicator to come to a complete stop before drive roller control is disabled. The controlled stop delay for the drive roller is enabled or disabled by personnel with access to the Operator Interface Service screens (see Operator Interface section). The delay for the valve actuators is automatic and requires no user input.

**Sealtape Mode Nip Roller Control**

The power feed and tensioner nip rollers engage immediately when Sealtape mode is run. The nip rollers will automatically retract if film has not moved through the Sealtape Applicator for a predetermined time. This is to prevent wearing of flat spots on the neoprene rollers they make contact with. The nip rollers will automatically re-engage when film begins to move through the applicator.

# OPERATION

## (Manual Splicer models)

**Sealtape Mode**

Sealtape mode applies the Sealstrip feature to the film before it enters the parent wrapper. Multiple feature setups can be stored as recipes for quick recall for different products. **Sealtape mode cannot be run until a recipe is in position and an in-use mandrel is selected** (refer to Operator Interface section).

Procedure (assumes film has already been threaded through the applicator):

1. Select Sealtape as the operating mode
2. Skip to step 8 if a recipe is already in position
3. Go to the Recipe Select screen
4. Select and "*Load"* the recipe for the product being run
5. Press the "*Move to Recipe"* pushbutton.
6. Wait for the axes to move into their positions and all motion has stopped. A message display on the screen will indicate whether the axes are moving or in position.
7. Set all manual adjustment knobs to the settings recorded for the recipe
8. Select the in-use mandrel. The green stacklight will flash to indicate the applicator is ready to run
9. Press the "*Run"* pushbutton on the Operator Interface
10. The Operator Interface will display the Sealtape Run screen

The slitter engages and the V-bar closes while perforator control is recipe driven. The drive roller and Sealtape assist motor controls are enabled and the green stacklight illuminates solid indicating the applicator is running. The film unwind carriage contains (2) low film roll sensors and (1) end of film sensor. The low film sensors are used to sound a warning when the in-use mandrel film roll is getting low. The end of film sensor triggers an alarm and places the applicator in Stop mode when the film roll runs out and film is not present in front of the sensor.

**Pass Splice Sequence**

In some cases, a film splice may get caught up in the folding bars as it passes through the Sealtape Applicator causing the splice to tear open or the film to break. The Sealtape Applicator can automatically reduce the pressure applied the V-bar to allow it to "float" as the splice passes through the folding bars. Manual splicer models require the operator to initiate this sequence. This function can be disabled by personnel with access to the Operator Interface Service screens (see Operator Interface section).

Procedure:

1. Make the film splice
2. Press the *"Splice Made"* pushbutton on the Operator screen or Sealtape Run screen (press a second time to cancel)
3. As the splice nears the folding bars the outer V-bar pressure will be reduced
4. When the splice exits the folding bars the outer V-bar pressure will return to its normal pressure

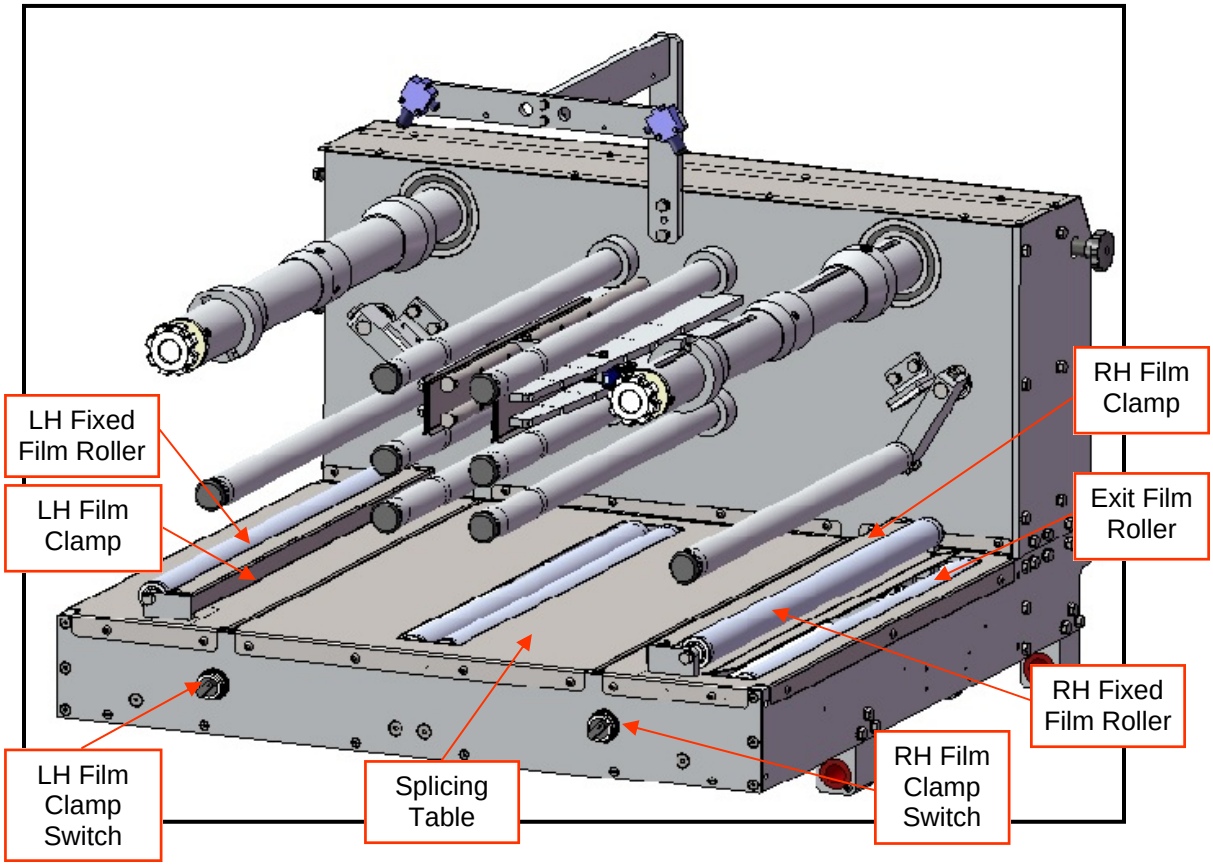
# OPERATION

## (Manual Splicer models)

**Film Splicing (Right Hand Machine Shown)**

The splice table has been designed to aid in the splicing of film. The table is manual and will not automatically create a splice. The table is contained within the film path and provides a flat working space to perform a splice. This procedure assumes that the end of the film has not passed by the center of the splice table. If this has occurred, some of the splice table features will be non-functional.

1. With the machine stopped, load the new film roll as described in Film Roll Loading and Threading procedure through all the appropriate rollers and under its Film Clamp. Pull enough film to overlap the tail of the film that has run out.
2. Activate the Film Clamp (by activating the Film Clamp Switch) for the new film roll to secure the film to the splice table.
3. Bring the tail of the film that has run out back over and lay it on top of the new film and line up the registration marks.
4. Using a sharp knife slice through both layers of film. There is a “gap” in the splicing table to guide the knife blade.
5. Cut a piece of the splicing tape (length should cover entire width of film), and equally cover both ends of the two pieces of film, creating a “Butt” splice.
6. De-activate the appropriate Film Clamp.
7. Take up the excess slack in the film by rewinding the film mandrel
8. The film is now ready to use.
9. Machine is now ready to run.



# OPERATION

## (Automatic Splicer models)

**Sealtape Mode**
Sealtape mode applies the Sealstrip feature to the film before it enters the parent wrapper. Multiple feature setups can be stored as recipes for quick recall for different products. **Sealtape mode cannot be run until a recipe is in position and an in-use mandrel is selected** (refer to Operator Interface section).

Procedure (assumes film has already been threaded through the applicator):

1. Select Sealtape as the operating mode
2. Skip to step 8 if a recipe is already in position
3. Go to the Recipe Select screen
4. Select and "*Load"* the recipe for the product being run
5. Press the "*Move to Recipe"* pushbutton.
6. Wait for the axes to move into their positions and all motion has stopped. A message display on the screen will indicate whether the axes are moving or in position.
7. Set all manual adjustment knobs to the settings recorded for the recipe
8. go to the Unwind Setup screen and prepare the not-in-use roll for a splice
9. Select the in-use mandrel. The green stacklight will flash to indicate the applicator is ready to run
10. Press the "*Run"* pushbutton on the Operator Interface
11. The Operator Interface will display the Sealtape Run screen

The slitter engages and the V-bar closes while perforator control is recipe driven. The drive roller and Sealtape assist motor controls are enabled and the green stacklight illuminates solid indicating the applicator is running. The film unwind carriage contains (2) end of film sensors, 1 for each unwind. When the in-use film roll runs out and film is not present in front of the sensor, the automatic splice sequence begins. If the not-in-use mandrel has not been prepared for a splice when the in-use roll runs out, an alarm is triggered and the applicator will be placed in Stop mode.

**Pass Splice Sequence**
In some cases, a film splice may get caught up in the folding bars as it passes through the Sealtape Applicator causing the splice to tear open or the film to break. The Sealtape Applicator can automatically reduce the pressure applied the V-bar to allow it to "float" as the splice passes through the folding bars. This sequence is automatically initiated on automatic splicer models and can be disabled by personnel with access to the Operator Interface Service screens (see Operator Interface section).

Procedure:

1. As the splice nears the folding bars, the outer V-bar pressure will be reduced
2. When the splice exits the folding bars, the outer V-bar pressure will return to its normal pressure

# OPERATION

## (Automatic Splicer models)

**Automatic Splicing**
Automatic splices can be made on both registered and unregistered films. The film type and the associated splice parameters are recipe driven and are defined by personnel with access to the Operator Interface Service screens (see Operator Interface section).

**Splice Sequence (registered)**
When the in-use mandrel runs out and the end-of-film sensor no longer sees film, the sequence begins counting registration eye marks. When the count has reached the "Skip ## Pkgs" parameter, the sequence begins to monitor distance travelled. When the distance travelled equals the "Offset ### mm" distance, the two Sealbars fire simultaneously to adhere the prepared film end onto the trailing edge of the in-use film. After the splice is made, the in-use mandrel selection will automatically switch from the old roll to the new roll. The vacuum for the new in-use mandrel is shut off and the exit roller for the not-in-use mandrel is retracted. A new roll of film can now be loaded and prepared for the next splice.

- The recipe "Skip ## Pkgs" parameter is adjusted to shorten or lengthen the tail by package length
- The recipe "Offset ### mm" parameter is adjusted to fine tune registration mark alignment

**Splice Sequence (unregistered)**
When the in-use mandrel runs out and the end-of-film sensor no longer sees film, the sequence begins to monitor distance travelled. When the distance travelled equals the calculated distance based on the "Tail Length xxx mm" parameter, the two Sealbars fire simultaneously to adhere the prepared film end onto the trailing edge of the in-use film. After the splice is made, the in-use mandrel selection will automatically switch from the old roll to the new roll. The vacuum for the new in-use mandrel is shut off and the exit roller for the not-in-use mandrel is retracted. A new roll of film can now be loaded and prepared for the next splice.

- The recipe "Tail Length ## mm" parameter is adjusted to shorten or lengthen the tail

Splices can be made at full machine speed or at a slow speed. By default, the applicator is set to make full speed splices. If splices are being missed or pull apart at higher machine speeds, the applicator can be set to make slow speed splices by personnel with access to the Operator Interface Service screens (see Operator Interface section).

**Splice (full speed)**
The sequences function as defined above without slowing down or stopping the machine speed

**Splice (slow speed)**
The sequences function as defined above except that the drive roller will slow down to a preset speed of 30ft/min until the splice is completed. During a "Slow Speed" splice, the drive roller speed is no longer being driven by the dancer position. When the splice is complete, the power drive roller will switch back to dancer position control.

**Warning: If slow speed splicing is to be utilized, it is imperative that the Splice Made Signal interlock is terminated at the wrapper (see Electrical Interlocks). This interlock is used to command the wrapper to slow down to a matching speed until the splice is complete. Failing to speed match the wrapper will result in the applicator dancer arm raising up against the upper limit stop and breaking the film.**

# OPERATION

## (Automatic Splicer models)

### Stop Mode Automatic Splicer Film Preparation

This procedure assumes film has already been threaded through the machine and a film roll has been loaded onto the not-in-use mandrel.

1. From the Operator screen, go to the Unwind Setup screen
2. Thread the not-in-use film down to the splicing table
3. Raise the splice guard and feed the film through to the splice exit roller.
4. Press the *"Prep Positions"* pushbutton for the appropriate mandrel. The sealbar will pivot up and the vacuum will turn on
2. Position the prepared film end so the front edge of the registration marks are along the front edge of the nylon vacuum plate. The splicing tape should be on top of the film and not down against the vacuum bar
3. Verify that the film is securely held by the vacuum and remove the backing from the splice tape
4. Lower both splice guards. The splice exit rollers cannot move to their run positions with the guards in the up position
5. Press the *"Run Positions"* pushbutton on the Operator Interface for the not-in-use mandrel. The sealbar will pivot down and then the splice exit roller will extend to its run position
6. Press the *"Run Positions"* pushbutton on the Operator Interface for the in-use mandrel. The splice exit roller will extend to its run position
7. Press the "In Use" pushbutton for the mandrel in use
8. Setup is complete

Setup can be canceled at any time by pressing the *"Cancel Setup"* pushbutton for the corresponding mandrel. Doing so will shutoff the vacuum, pivot the sealbar down and retract the splice exit roller.

### Run Mode Automatic Splicer Film Preparation

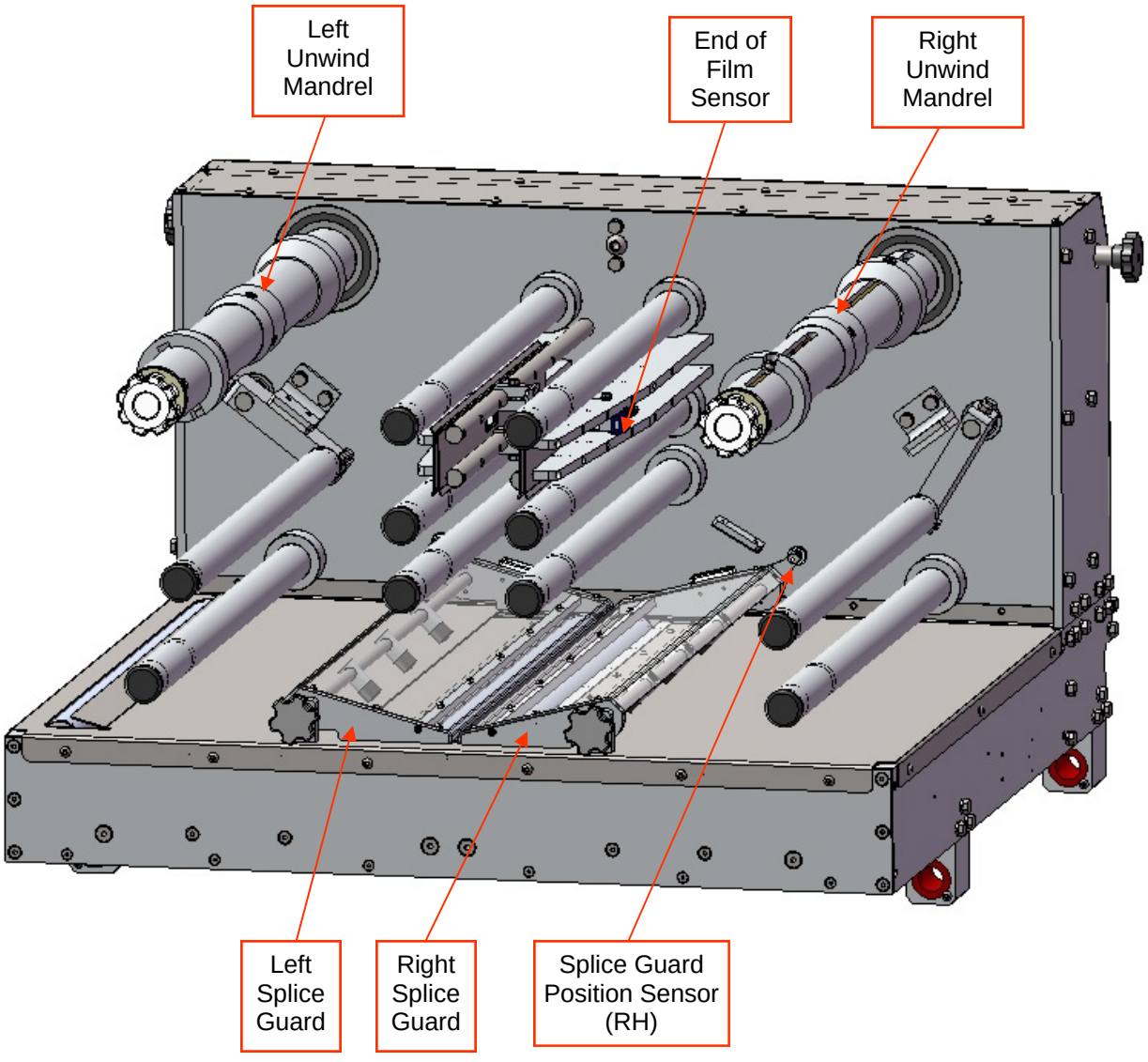
This procedure assumes an automatic splice has successfully completed and film is moving through the applicator.

1. Load a new roll onto the not-in-use mandrel
2. From the Run Sealtape screen, go to the Unwind Setup screen
3. Thread the not-in-use film down to the splicing table
4. Raise the splice guard and feed the film through to the splice exit roller.
5. Press the *"Prep Positions"* pushbutton for the not-in-use mandrel. The sealbar will pivot up and the vacuum will turn on
2. Position the prepared film end so the front edge of the registration marks are along the front edge of the nylon vacuum plate. The splicing tape should be on top of the film and not down against the vacuum bar
3. Verify the film is securely held by the vacuum and remove the backing from the splice tape
4. Lower the splice guard. The splice exit roller cannot move to its run position with the guard in the up position
5. Press the *"Run Positions"* pushbutton on the Operator Interface for the not-in-use mandrel. The sealbar will pivot down and then the splice exit roller will extend to its run position
6. Setup is complete

# OPERATION

## (Automatic Splicer models)

**Right Hand Film Flow Machine Shown**

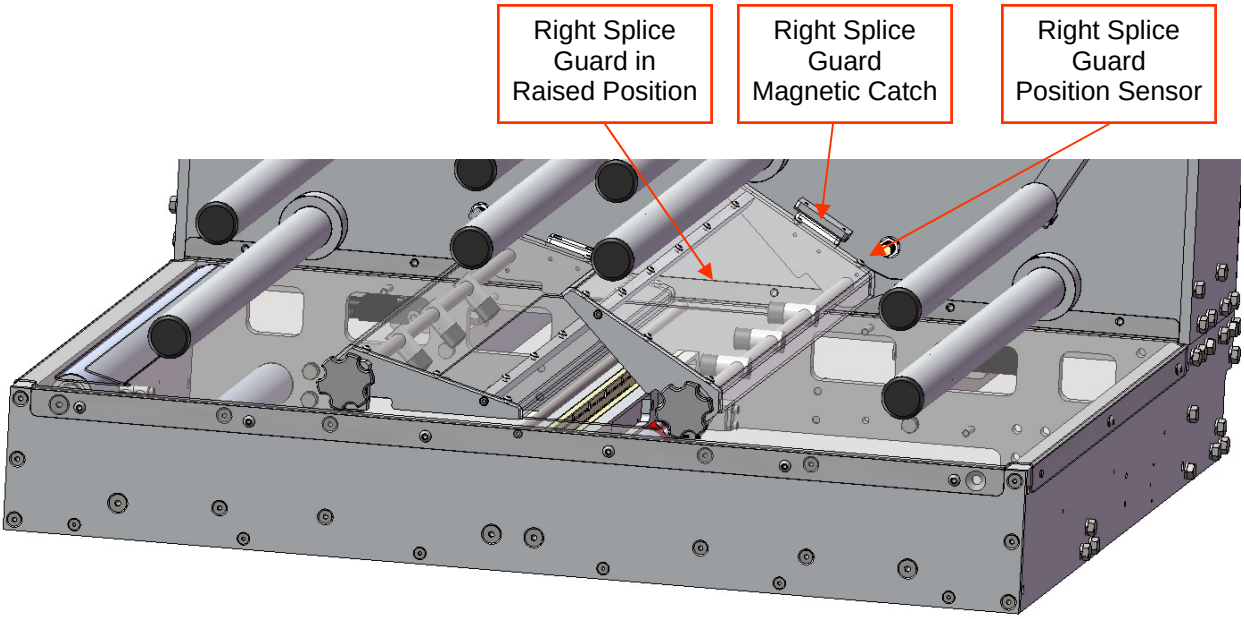


# OPERATION

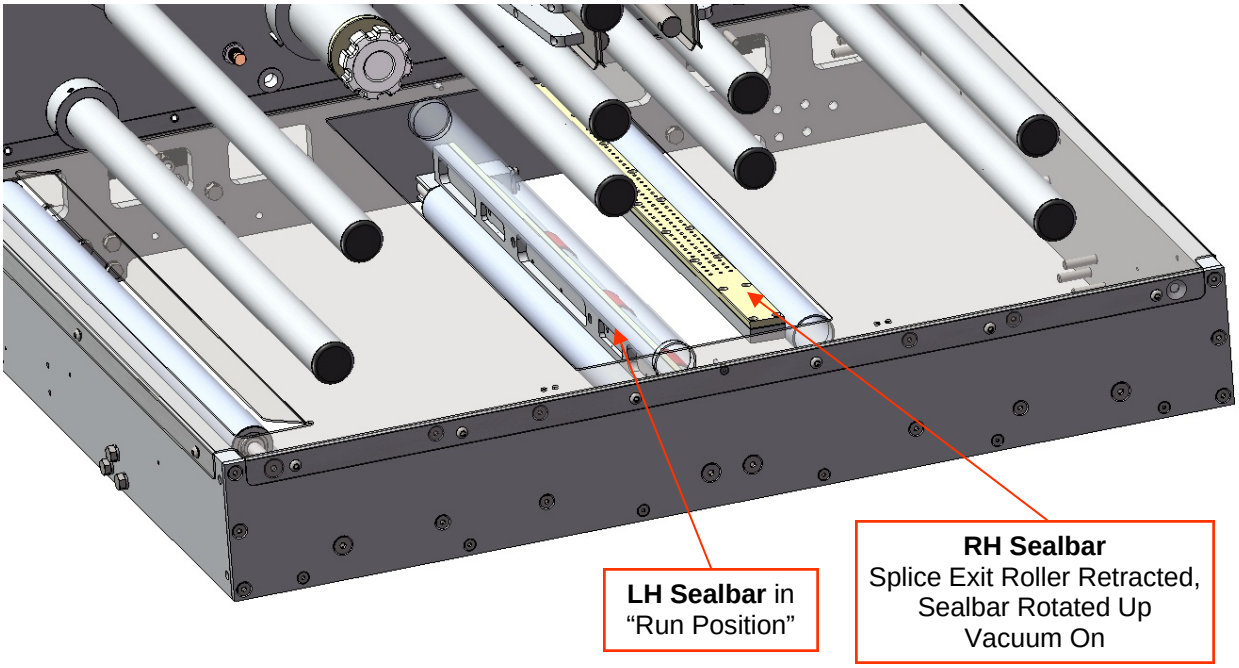
## (Automatic Splicer models)

**Right Hand Film Flow Machine Shown (Some components not shown for clarity)**

**Automatic Splice Preparation — Opening Splice Guard**




**Automatic Splice Preparation — RH Sealbar at "Prep Position" (Guards not shown for clarity)**

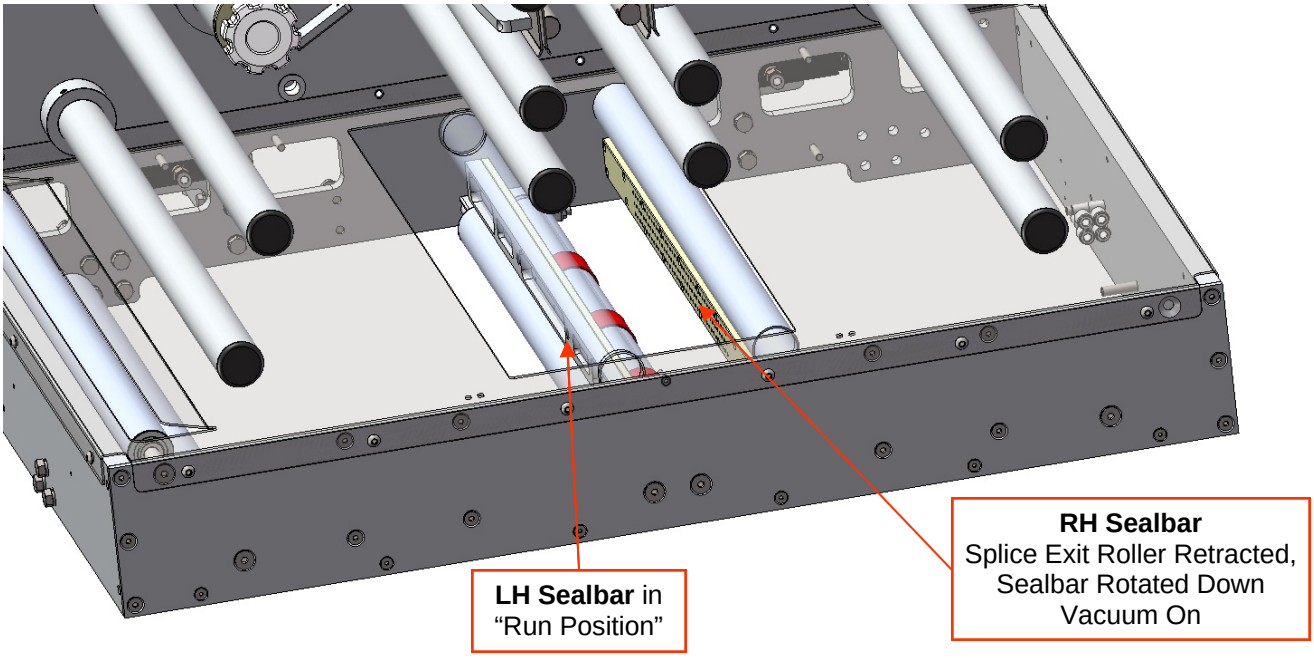


# OPERATION

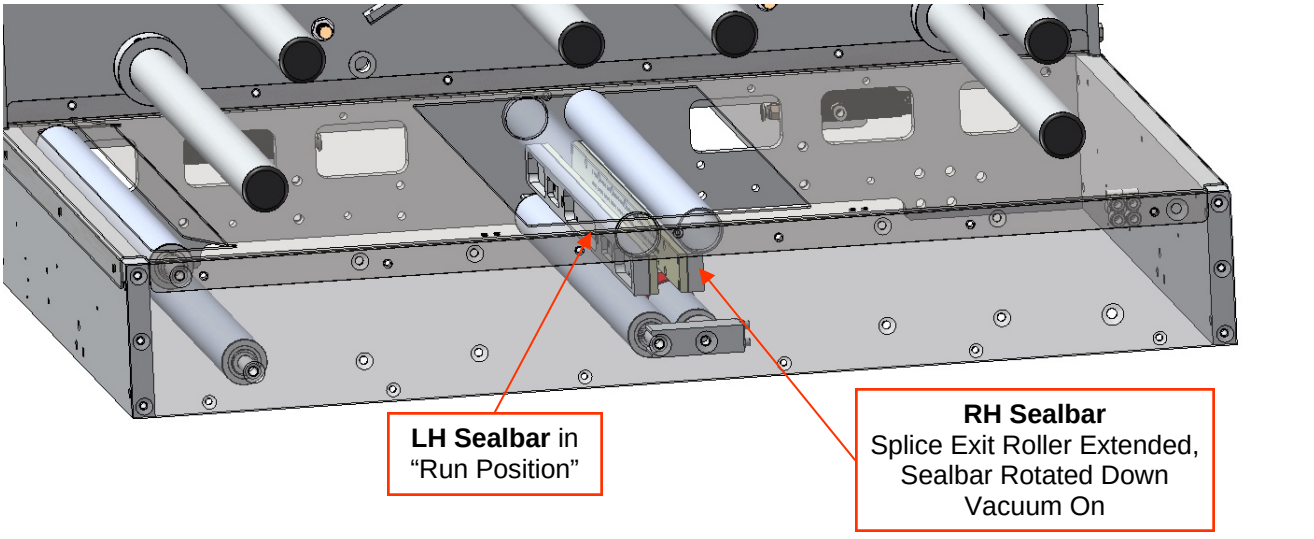
## (Automatic Splicer models)

**Right Hand Film Flow Machine Shown (Some components not shown for clarity)**

**Automatic Splice Preparation — RH Sealbar "Run Position (1)" (guards not shown for clarity)**




**Automatic Splice Preparation — RH Sealbar "Run Position (final)" (guards not shown for clarity)**



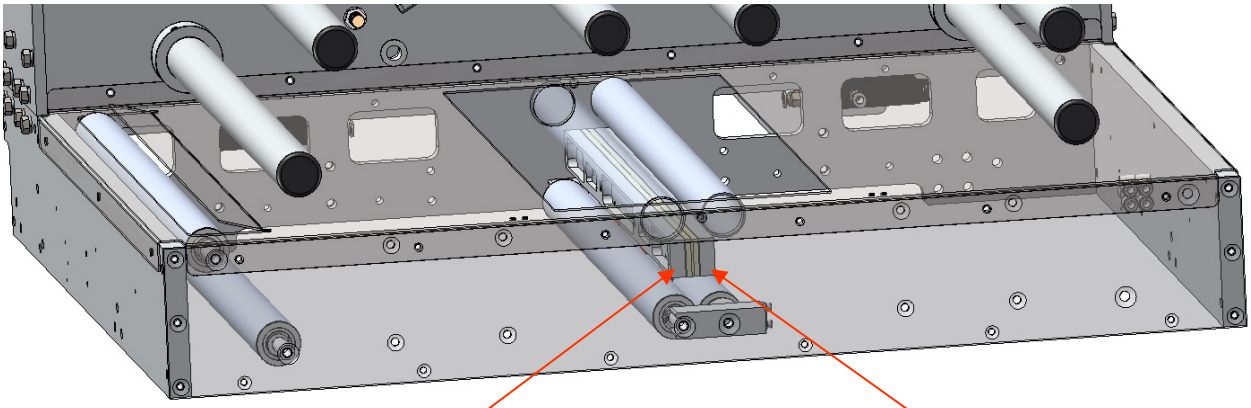
# OPERATION

## (Automatic Splicer models)

**Right Hand Film Flow Machine Shown (Some components not shown for clarity)**

**Automatic Splice Preparation — Sealbar momentary positions during splice**

**(guards not shown for clarity)**

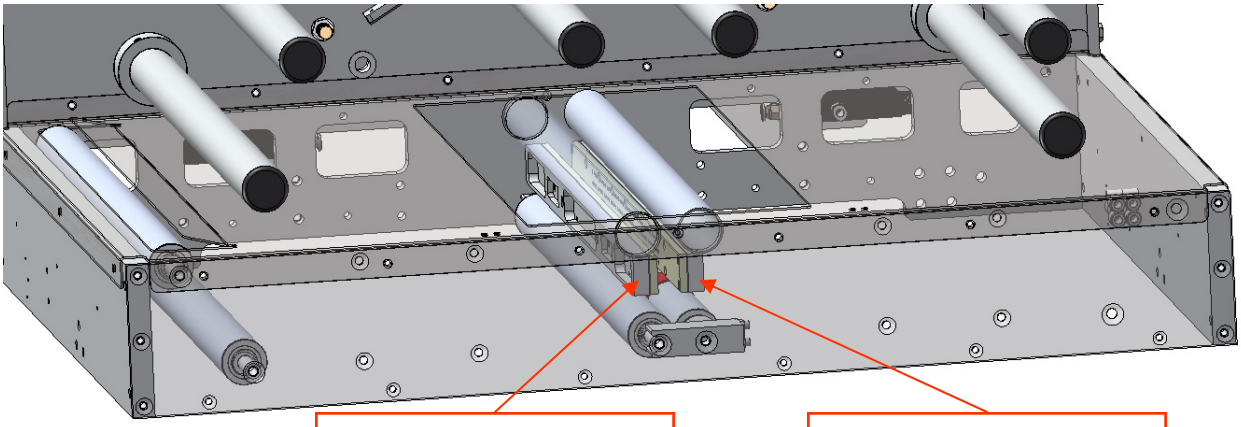


**LH Sealbar**
Splice Exit Roller Extended,
Sealbar Rotated Down
Sealbar Extended
Vacuum Off

**RH Sealbar**
Splice Exit Roller Extended,
Sealbar Rotated Down
Sealbar Extended
Vacuum Off

**Automatic Splice Preparation — Splice complete — Sealbars at "Run Position"**

**(guards not shown for clarity)**

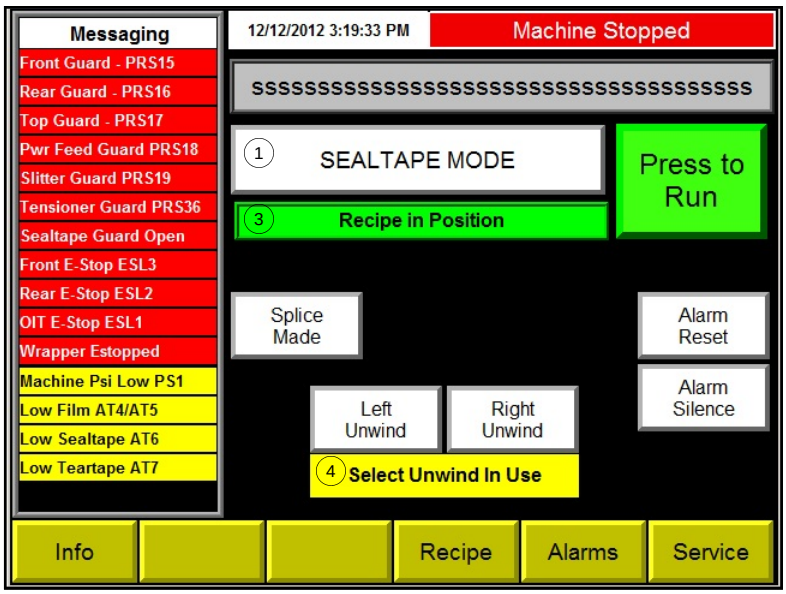


**LH Sealbar**
Splice Exit Roller Extended,
Sealbar Rotated Down
Sealbar Retracted
Vacuum Off

**RH Sealbar**
Splice Exit Roller Extended,
Sealbar Rotated Down
Sealbar Retracted
Vacuum Off

# OPERATOR INTERFACE

## Operator (Manual Splicer models)




The Operator screen is the first screen viewed on power up when the mode switch is in the Run position.

**Screen Access Pushbuttons**

Info - goes to the Information screen
Recipe - goes to the Recipe Select screen
Alarms - goes to the Alarm Setpoints screen
Service - goes to the Service screen (password protected)

**Control Pushbuttons**

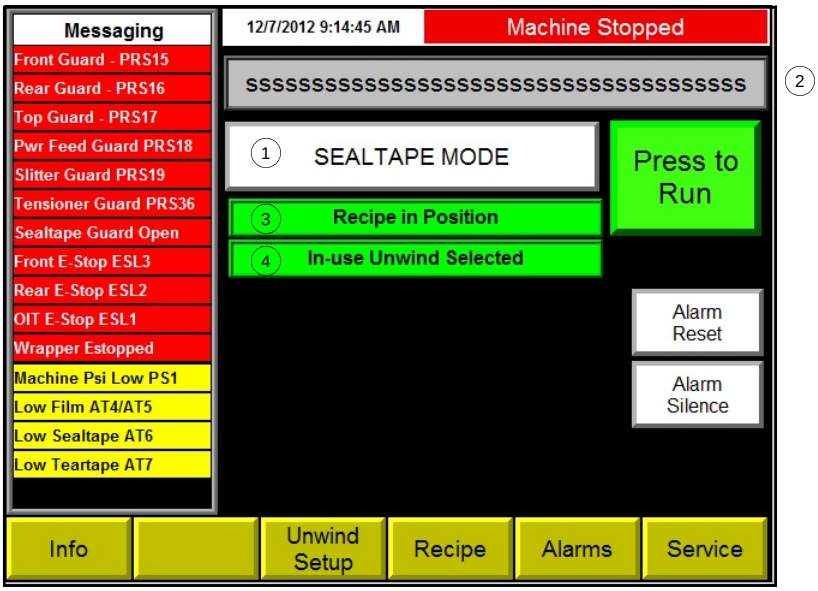
Operating Mode (1) - selects the operating mode (press to scroll through options)
Press to Run - runs the selected operating mode
Splice Made - when selected, enables the automatic Pass Splice Sequence and triggering of the splice made signal to the parent wrapper. Press again to cancel
Left Unwind-selects the left unwind as the in-use mandrel
Right Unwind - selects the right unwind as the in-use mandrel
Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

**Data Displays**

Recipe in Use (2) - displays the recipe name which is currently loaded and active
Axes Position Indicator (3)
Recipe not in Position - axes are not in their recipe positions
Moving to Recipe - axes are moving to their recipe positions
Recipe in Position - axes are in their recipe positions
Unwind Selection Prompt (4) - active when an in-use mandrel has not been selected
Messaging - indicates the status of the applicator safety devices as well as the parent wrapper e-stop status when this electrical interlock is being used. Important warnings will also display when they are active. Each message contains the device tag number for quick reference

# OPERATOR INTERFACE

## Operator (Automatic Splicer models)




The Operator screen is the first screen viewed on power up when the mode switch is in the Run position.

**Screen Access Pushbuttons**

Info - goes to the Information screen
Unwind Setup - goes to the Stop Mode Unwind Setup screen
Recipe - goes to the Recipe Select screen
Alarms - goes to the Alarm Setpoints screen
Service - goes to the Service screen (password protected)

**Control Pushbuttons**

Operating Mode (1) - selects the operating mode (press to scroll through options)
Press to Run - runs the selected operating mode
Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

**Data Displays**

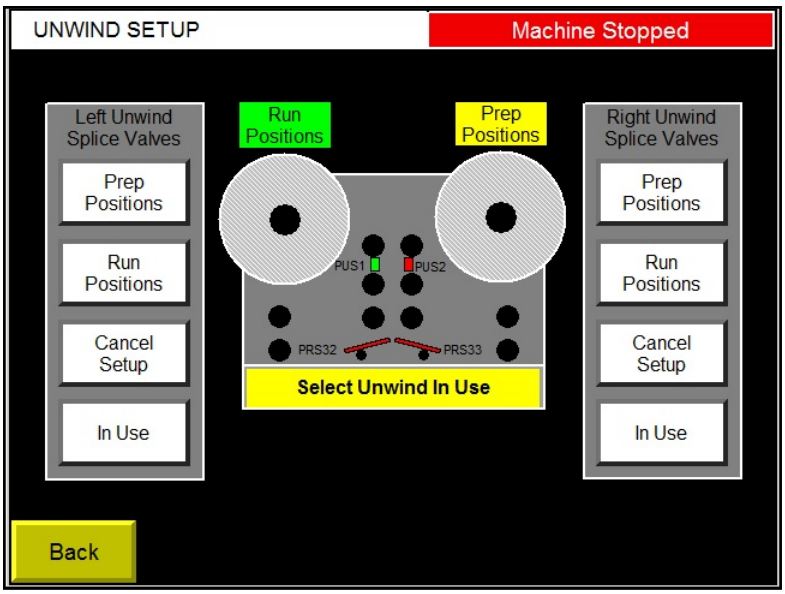
Recipe in Use (2) - displays the recipe name which is currently loaded and active
Axes Position Indicator (3)
- Recipe not in Position - axes are not in their recipe positions
- Moving to Recipe - axes are moving to their recipe positions
- Recipe in Position - axes are in their recipe positions

Unwind Selection Indicator (4)
- Select Unwind In Use - unwind not selected
- In-use Unwind Selected - unwind selected

Messaging - indicates the status of the applicator safety devices as well as the parent wrapper e-stop status when this electrical interlock is being used. Important warnings will also display when they are active. Each message contains the device tag number for quick reference

# OPERATOR INTERFACE

## Stop Mode Unwind Setup (Automatic Splicer models)




This screen is accessed from the Operator screen. It provides controls for unwind setup and selection.

**Screen Access Pushbuttons**

Back - returns to the Operator screen

**Control Pushbuttons**

Unwind Splice Valves

Prep Positions - moves the corresponding unwind devices to their preparation positions

Run Positions - moves the corresponding unwind devices to their run positions

Cancel Setup - cancels the corresponding unwind setup

In Use - selects the corresponding unwind as the in-use unwind

**Data Displays**

Unwind Device Position

(Blank) - the corresponding unwind devices are in their static positions

Prep Positions - indicates the corresponding unwind devices are in their preparation positions

Run Positions - indicates the corresponding unwind devices are in their run positions

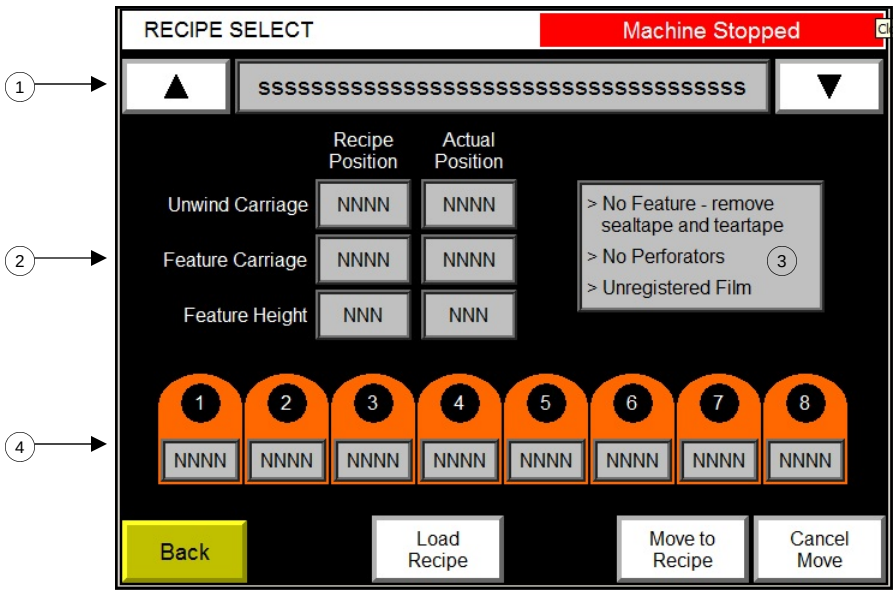
Unwind Selection Indicator

Select Unwind In Use - unwind not selected

In-use Unwind Selected - unwind selected

# OPERATOR INTERFACE

## Recipe Select (all models)




This screen is used for recipe selection. After selecting a recipe using the *"Up"* and *"Down"* arrow pushbuttons, the recipe must be loaded for it to become the active recipe. Loading a recipe will also update the data displays with the values stored for that recipe.

**Screen Access Pushbuttons**

Back—returns to the Operator screen

**Control Pushbuttons**

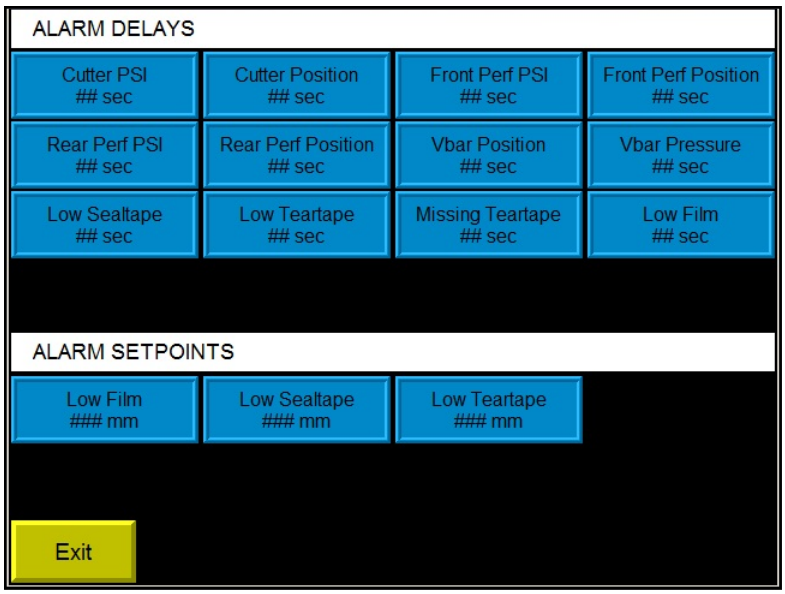
Up Arrow - scrolls up through the recipe list
Down Arrow - scrolls down through the recipe list
Load Recipe - loads the selected recipe parameters into the controller
Move to Recipe - moves the axes to their loaded recipe positions
Cancel Move - cancels the move to recipe

**Data Displays**

Recipe Name (1)
Axes Positions (2) - displays the axis positions stored for the loaded recipe and their actual positions
Parameters (3) - displays the setup parameters for the loaded recipe
Manual Adjustment Knob Settings (4) - displays the adjustment knob position settings for the loaded recipe. The knob number corresponds with the number indicated on the labels on the side of the machine.

# OPERATOR INTERFACE

## Alarms (all models)




This screen is used for adjusting alarm setpoints.

**Screen Access Pushbuttons**

Exit—returns to the Operator screen

**Data Entries**

**Alarm Delays**

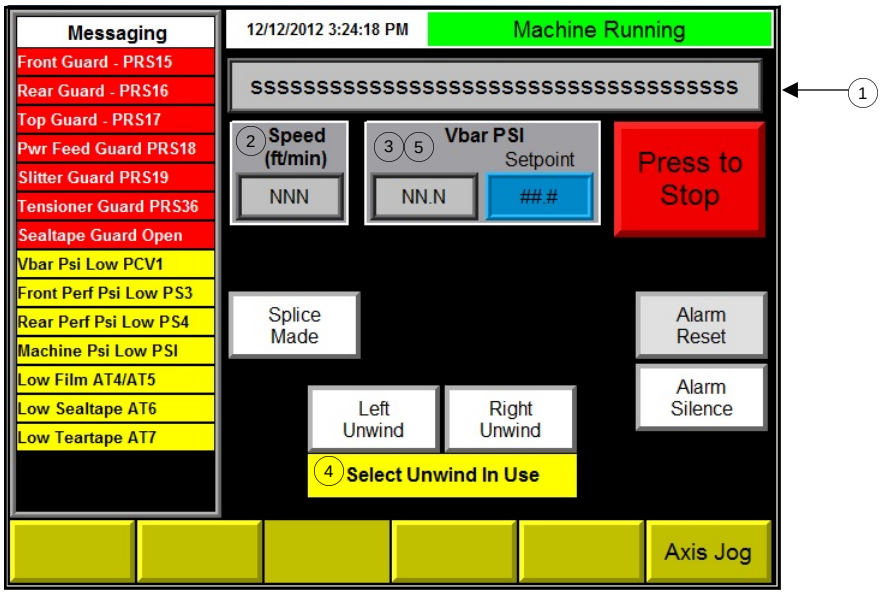
Cutter PSI - delay before a low cutter pressure triggers a warning
Cutter Position - delay before a cutter position error triggers an alarm
Front Perf PSI - delay before a low front perforator pressure triggers a warning
Front Perf Position - delay before a front perforator position error triggers an alarm
Rear Perf PSI - delay before a low rear perforator pressure triggers a warning
Rear Perf Position - delay before a rear perforator position error triggers an alarm
Vbar Position - delay before a v-bar position error triggers an alarm
Vbar PSI - delay before a low v-bar pressure triggers a warning
Low Sealtape - delay before a low tape condition triggers a warning
Low Teartape - delay before a low tape condition triggers a warning
Missing Teartape - delay before a missing teartape condition triggers an alarm
Low Film - delay before a low film condition triggers a warning (does not apply to automatic splicer models)

**Alarm Setpoints**

Low Film - film thickness remaining on the core which triggers a warning (does not apply to automatic splicer models)
Low Sealtape - tape thickness remaining on the core which triggers a warning
Low Teartape - tape thickness remaining on the core which triggers a warning

# OPERATOR INTERFACE

## Sealtape Run (Manual Splicer models)




This screen displays while running Sealtape Mode.

**Screen Access Pushbuttons**

Axis Jog - goes to the Axis Jog screen

**Control Pushbuttons**

Press to Stop - places the applicator in Stop mode and returns to the Operator screen
Splice Made - when selected, enables the automatic Pass Splice Sequence and triggering of the splice made signal to the parent wrapper. Press again to cancel
Left Unwind-selects the left unwind as the in-use mandrel
Right Unwind - selects the right unwind as the in-use mandrel
Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

**Data Displays**

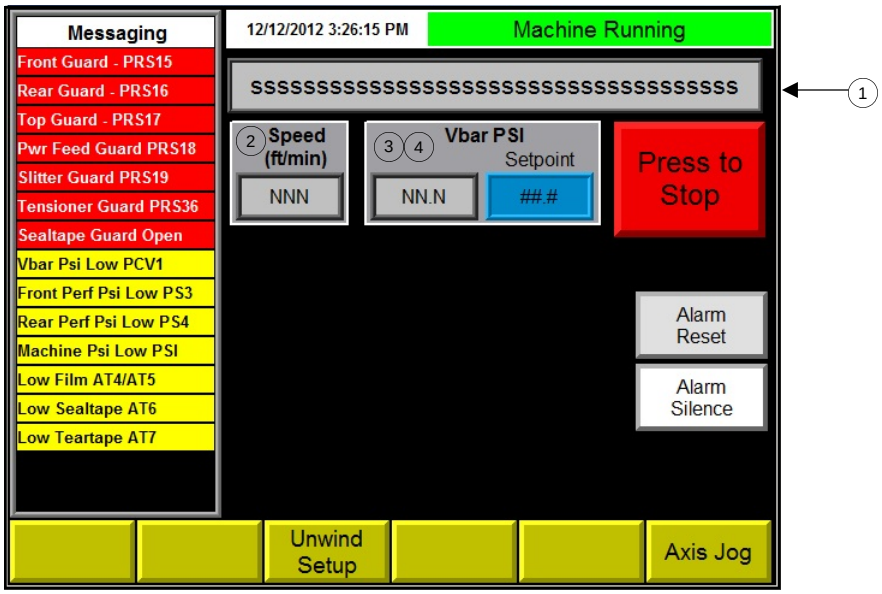
Recipe in Use (1) - displays the recipe name which is currently loaded and active
Speed (2) - displays the film speed through the applicator
Vbar PSI (3) - displays the pressure being applied to the v-bar
Unwind Selection Prompt (4) - active when an in-use mandrel has not been selected
Messaging - indicates the status of the applicator guard devices. Important warnings will also display when they are active. Each message contains the device tag number for quick reference

**Data Entries**

Vbar PSI Setpoint (5) - v-bar pressure control setpoint

# OPERATOR INTERFACE

## Sealtape Run (Automatic Splicer models)




This screen displays while running Sealtape Mode.

**Screen Access Pushbuttons**

Unwind Setup - goes to the Run Mode Unwind Setup screen
Axis Jog - goes to the Axis Jog screen

**Control Pushbuttons**

Press to Stop - places the applicator in Stop mode and returns to the Operator screen
Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

**Data Displays**

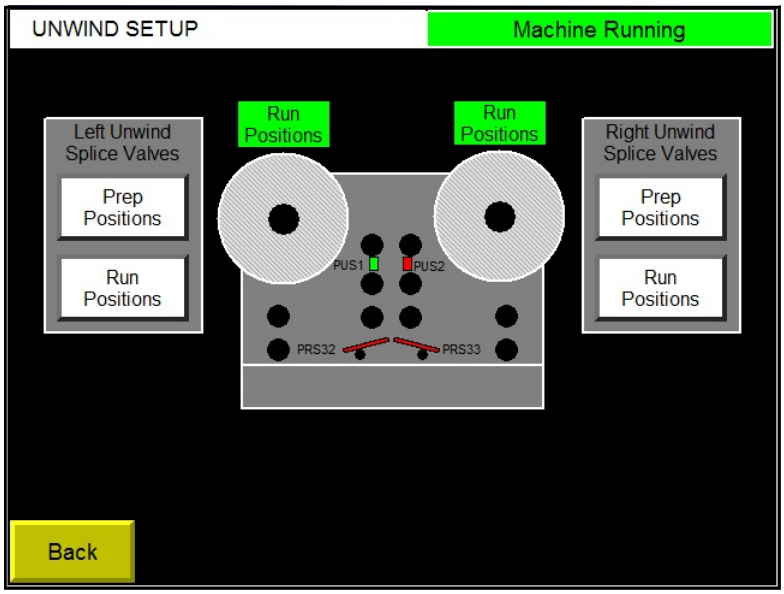
Recipe in Use (1) - displays the recipe name which is currently loaded and active
Speed (2) - displays the film speed through the applicator
Vbar PSI (3) - displays the pressure being applied to the v-bar
Messaging - indicates the status of the applicator guard devices. Important warnings will also display when they are active. Each message contains the device tag number for quick reference.

**Data Entries**

Vbar PSI Setpoint (4) - v-bar pressure control setpoint

# OPERATOR INTERFACE

## Run Mode Unwind Setup (Automatic Splicer models)




This screen is accessed from the Sealtape Run screen. It provides controls for unwind setup.

**Screen Access Pushbuttons**

Back - returns to the Sealtape Run screen

**Control Pushbuttons**

Unwind Splice Valves

Prep Positions - moves the corresponding unwind devices to their preparation positions

Run Positions - moves the corresponding unwind devices to their run positions

**Data Displays**

Unwind Device Position

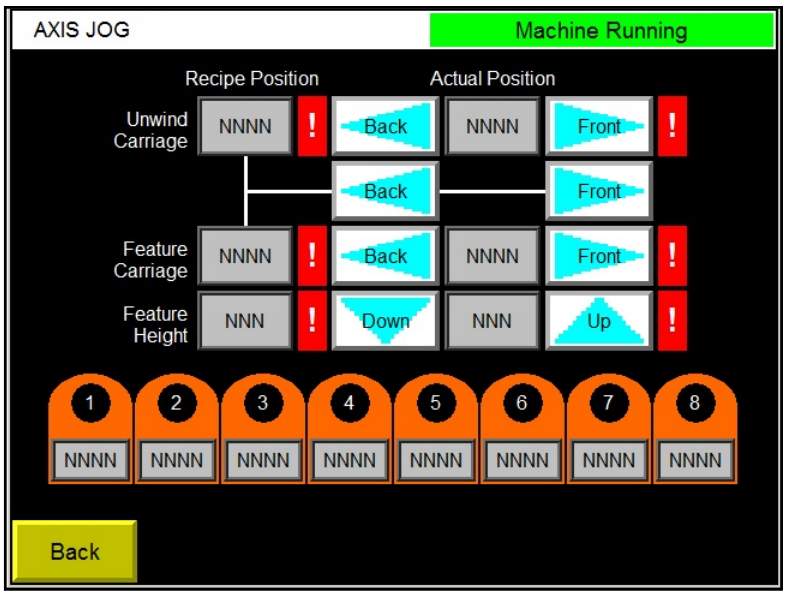
(Blank) - the corresponding unwind devices are in their static positions

Prep Positions - indicates the corresponding unwind devices are in their preparation positions

Run Positions - indicates the corresponding unwind devices are in their run positions

# OPERATOR INTERFACE

## Axis Jog (all models)




This screen is only accessible from the Sealtape Run screen. It allows the axes positions to be adjusted while running.

**Screen Access Pushbuttons**

Back—returns to the Sealtape Run screen

**Control Pushbuttons**

Axis Movement

Unwind Carriage Jog Back - moves the unwind carriage towards the back of the applicator

Unwind Carriage Jog Front - moves the unwind carriage towards the operator side of the applicator

Common Carriage Jog Back - moves both carriages towards the back of the applicator

Common Carriage Jog Front - moves both carriages towards the operator side of the applicator

Feature Carriage Jog Back - moves the feature carriage towards the back of the applicator

Feature Carriage Jog Front - moves the feature carriage towards the operator side of the applicator

Feature Height Jog Down - lowers the inner V-bar

Feature Height Jog Up - raises the inner V-bar

**Data Displays**

Axes Positions - displays the axis positions stored for the loaded recipe and their actual positions

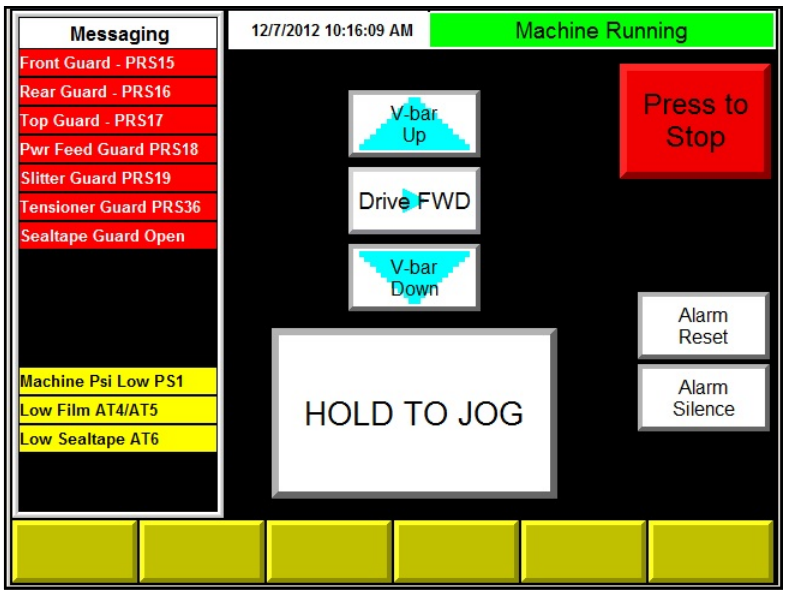
Adjust Knob Settings - displays the adjustment knob position settings for the loaded recipe. The knob number corresponds with the number indicated on the labels on the side of the machine

**Graphic Displays**

! Indicates that the axis is at the limit of its travel in the direction indicated on the *"Jog"* pushbutton

# OPERATOR INTERFACE

## Thread Run (all models)




This screen displays while running Thread mode.

**Control Pushbuttons**

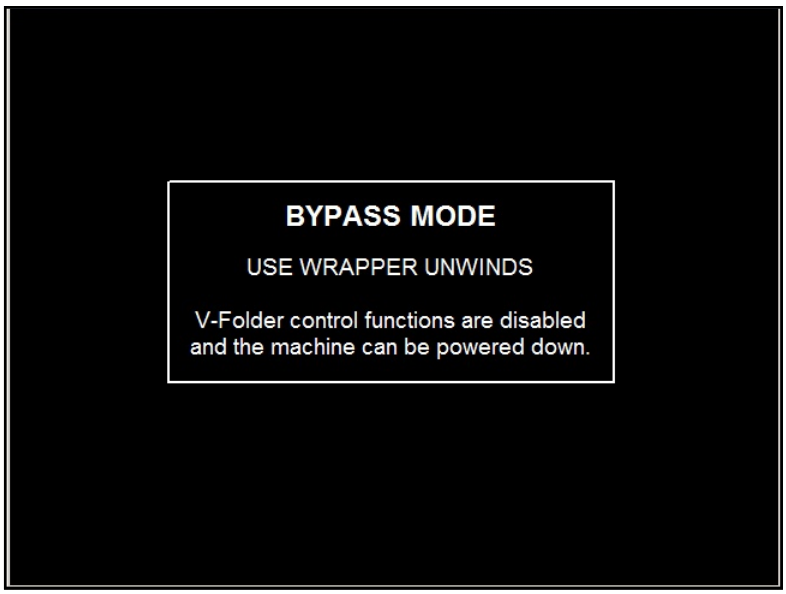
Press to Stop- places the machine in Stop mode and returns to the Operator screen
V-bar Up - raises the inner V-bar (hold to run)
V-bar Down - lowers the inner V-bar (hold to run)
Drive Direction - selects the drive roller direction of rotation (press to toggle between FWD and REV)
Hold To Jog - runs the drive roller at a fixed, preset speed (hold to run)
Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

**Data Displays**

Messaging - indicates the status of the applicator guard devices. Important warnings will also display when they are active. Each message contains the device tag number for quick reference

# OPERATOR INTERFACE

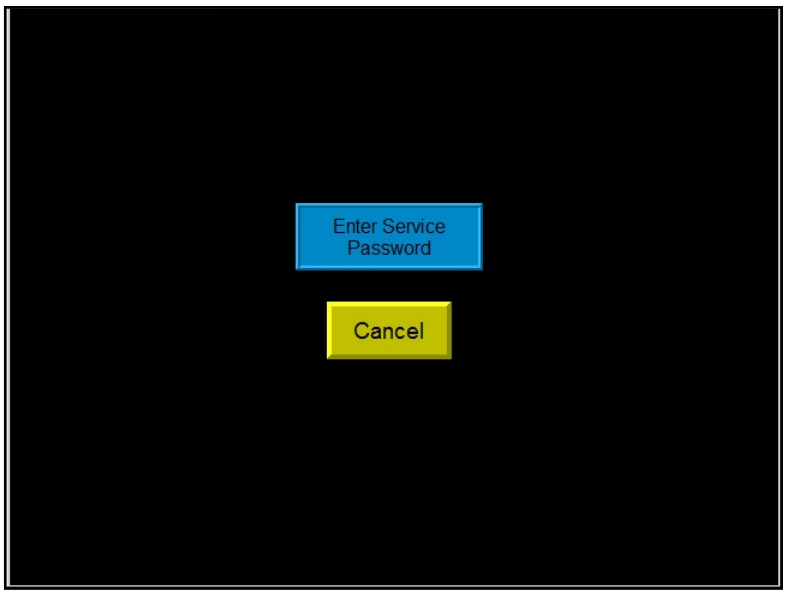
## Bypass (all models)




This screen displays when the mode switch is placed in the Bypass position.

# OPERATOR INTERFACE

## Service Password Entry (all models)




This screen appears first when the Service screen access button is pressed on the Operator screen. Access to the Service screens is password protected.

**Screen Access Pushbuttons**

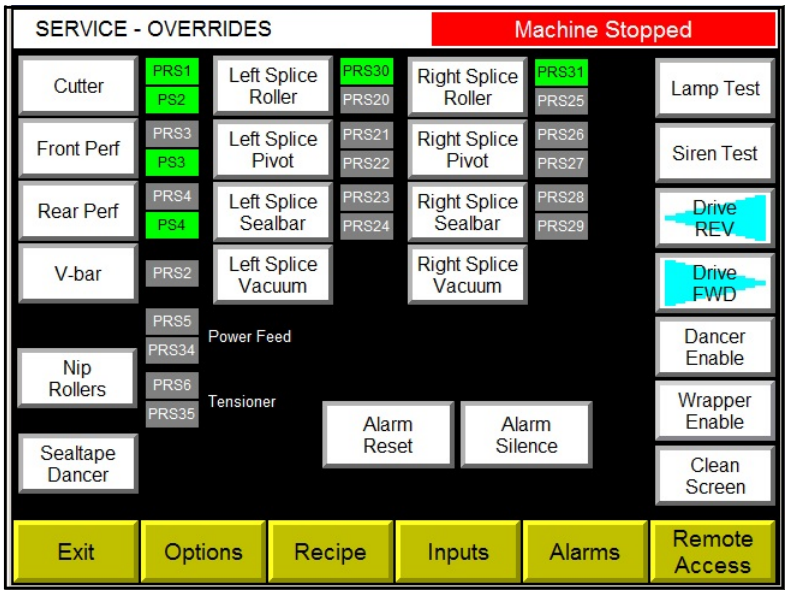
Cancel - returns to the Operator screen

**Data Entries**

Enter Service Password - entry of the service screen password

# OPERATOR INTERFACE

## Service - Main (all models)




Entering the Main Service screen places the Sealtape Applicator in Service mode. When in Service mode, all automatic functions of the applicator motors and actuators are disabled. This screen contains manual overrides for turning devices on and off for testing purposes. The automatic splicer device overrides will not be available on Sealtape Applicators with manual splice capabilities. When an override is on, the pushbutton turns green and input monitors provide feedback status of the device sensors. The input monitors contain the device tag number for quick reference. Any overrides which are left on when exiting Service mode will be automatically reset to off.

**Screen Access Pushbuttons**

Exit - returns to the Operator screen
Options - goes to the Option Setup screen
Recipe - goes to the Recipe Store screen
Inputs - goes to the Input Monitors screen
Alarms - goes to the Alarm History screen
Remote Access - goes to the Wireless Access screen

**Control Pushbuttons**

Manual and Automatic Splicer Overrides
Cutter - extends the cutter
Front Perf - extends the front perforator wheel
Rear Perf - extends the rear perforator wheel
V-bar - closes the outer v-bar
Nip Rollers - engages the power feed and tensioner nip rollers
Sealtape Dancer - enables air to the sealtape dancer regulator
Lamp Test - push-to-test of the stacklight lamps
Siren Test - push-to-test of the alarm siren
Drive Rev - runs the drive roller at a fixed speed in the reverse direction
Drive Fwd - runs the drive roller at a fixed speed in the forward direction
Dancer Enable - enables the drive roller dancer control
Wrapper Enable - enables running of the parent wrapper without the applicator in Run mode
Clean Screen - goes to a screen which does not contain any controls to facilitate cleaning of the Operator Interface screen

# OPERATOR INTERFACE

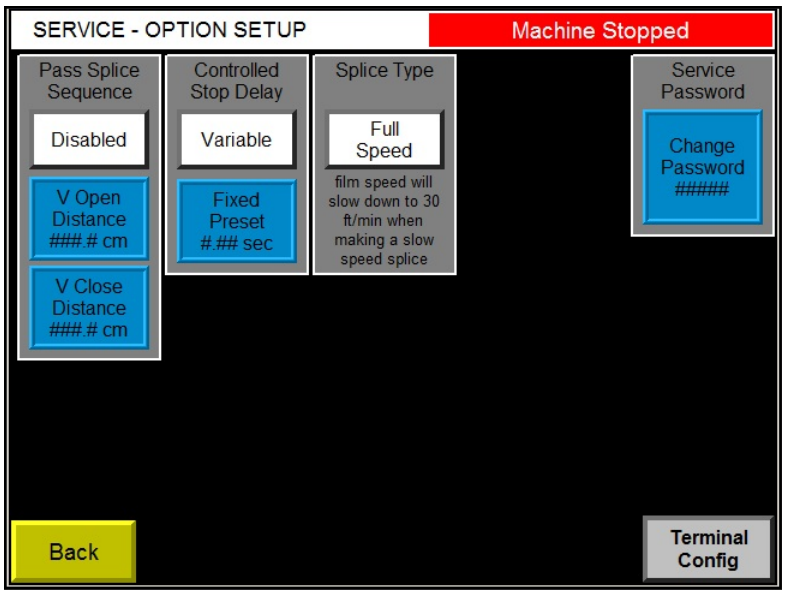
## Service - Main (all models)

Alarm Reset - resets an active alarm. The pushbutton flashes when a reset is required
Alarm Silence - silences the alarm siren for a preset amount of time

Automatic Splicer Overrides
- Left Splice Roller - extends the left unwind splice exit roller
- Left Splice Pivot - pivots the left unwind sealbar up
- Left Splice Sealbar - extends the left unwind vacuum plate
- Left Splice Vacuum - turns on the left unwind vacuum
- Right Splice Roller - extends the right unwind splice exit roller
- Right Splice Pivot - pivots the right unwind sealbar up
- Right Splice Sealbar - extends the right unwind vacuum plate
- Right Splice Vacuum - turns on the right unwind vacuum

# OPERATOR INTERFACE

## Service - Option Setup (all models)




**Screen Access Pushbuttons**

Back - returns to the Main Service screen

Terminal Config - accesses the Operator Terminal configuration menus

**Control Pushbuttons**

Pass Splice Sequence - enables or disables execution of the Pass Splice sequence defined in the Operation section of this manual

Controlled Stop Delay - selects the time base for the controlled stop function defined in the Operation section of this manual (press to scroll through options)

- Off - turns the controlled stop function off
- Fixed - selects the fixed time preset entered on this screen
- Variable - selects a variable time preset based on machine speed

Splice Type - selects the automatic splice type (selector not available on manual splicer models)

- Full Speed - applicator will not slow down when making a splice
- Slow Speed - applicator will slow down to 30ft/min when making a splice

**Data Entries**

Pass Splice V Open Distance - distance travelled after a splice is made at which pressure to the v-bar is reduced

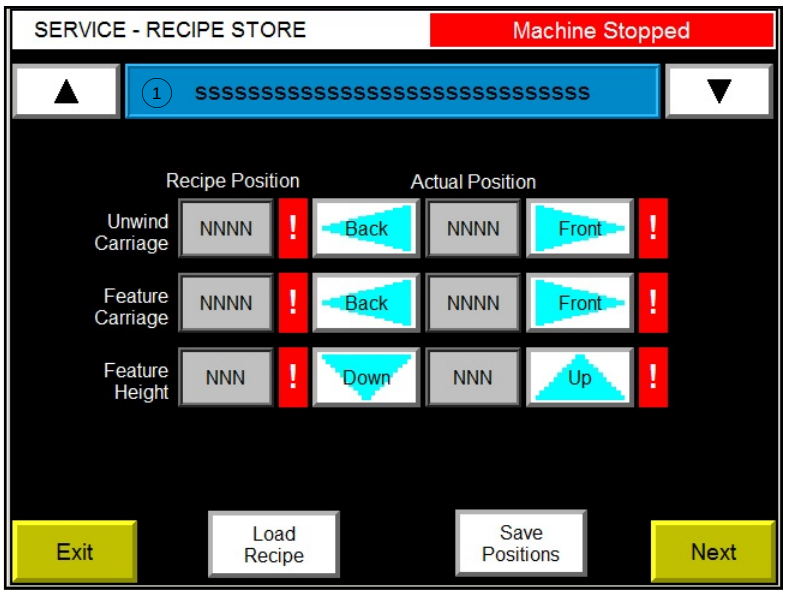
Pass Splice V Close Distance - distance travelled after a splice is made at which pressure to the v-bar is returned to its normal operating pressure

Controlled Stop Fixed Timer Preset - time delay used for a fixed time base controlled stop

Service Password - for entry of a new, 5-digit, service password

# OPERATOR INTERFACE

## Service - Recipe Store (all models)




This screen is used in conjunction with the next Recipe screen for storing of recipe parameters. After selecting a recipe using the up and down arrow buttons, the recipe must be loaded for it to become the active recipe. Loading a recipe will also update the data displays with the values stored for that recipe.

**Warning: Failing to load the desired recipe before performing a Save will result in overwriting the previously loaded recipe**

**Screen Access Pushbuttons**

Exit - returns to the Main Service screen
Next - goes to the next Recipe screen

**Control Pushbuttons**

Up Arrow - scrolls up through the recipe list
Down Arrow - scrolls down through the recipe list
Load Recipe - loads the selected recipe parameters into the controller
Save Positions - saves the actual axis positions to the loaded recipe
Axis Movement
Unwind Carriage Jog Back - moves the unwind carriage towards the back of the applicator
Unwind Carriage Jog Front - moves the unwind carriage towards the operator side of the applicator
Feature Carriage Jog Back - moves the feature carriage towards the back of the applicator
Feature Carriage Jog Front - moves the feature carriage towards the operator side of the applicator
Feature Height Jog Down - lowers the inner V-bar
Feature Height Jog Up - raises the inner V-bar

**Data Entries**

Recipe Name (1) - for entry of a recipe name (30 characters max)

**Data Displays**

Axis Positions - displays the axis positions stored for the loaded recipe and their actual positions

# OPERATOR INTERFACE

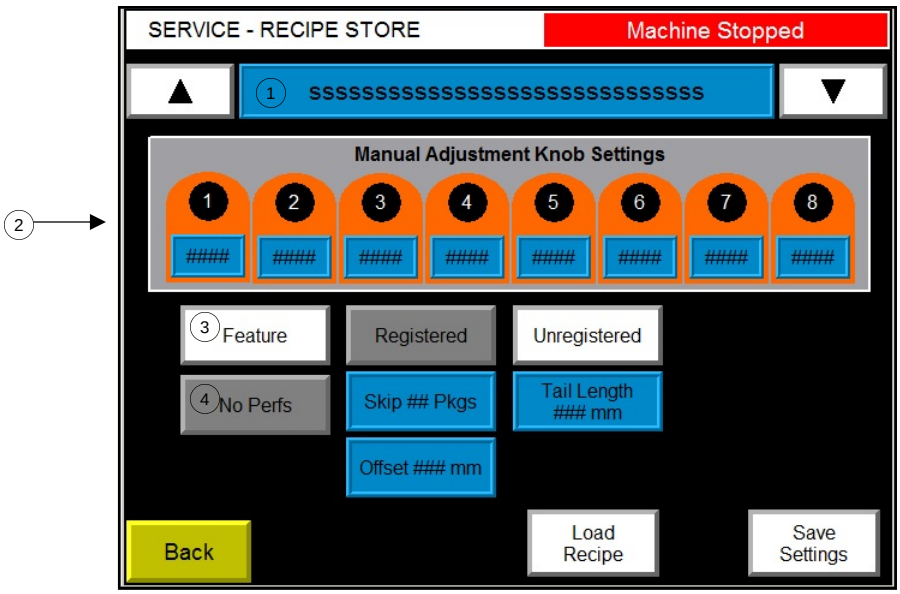
## Service - Recipe Store (all models)

**Graphic Displays**


Indicates that the axis is at the limit of its travel in the direction indicated on the *"Jog"* pushbutton.

# OPERATOR INTERFACE

## Service - Recipe Store (all models)




This screen is used in conjunction with the previous Recipe screen for storing of recipe parameters. After selecting a recipe using the up and down arrow buttons, the recipe must be loaded for it to become the active recipe. Loading a recipe will also update the data entries with the values stored for that recipe.

**Warning: Failing to load the desired recipe before doing a Save will result in overwriting the previously loaded recipe.**

**Screen Access Pushbuttons**

Back - returns to the previous Recipe screen

**Control Pushbuttons**

Up Arrow - scrolls up through the recipe list
Down Arrow - scrolls down through the recipe list
Load Recipe - loads the selected recipe parameters into the controller
Save Settings - saves the settings made on this screen to the loaded recipe. This does not save the axis positions. Saving axis positions is performed on the previous Recipe screen.
Feature selection (3) - selects whether the feature is to be applied to the film or not (press to toggle between Feature and No Feature)
Perforator selection (4) - selects the perforation requirements (press to scroll through options)
- No Perfs - no perforations will be made
- Front Perf - front perforation will be made
- Rear Perf - rear perforation will be made
- Both Perfs - both front and rear perforations will be made

Registered - selects the film type as registered
Unregistered - selects the film type as unregistered

**Data Entries**

Recipe Name (1) - for entry of a recipe name (30 characters max)
Adjust Knob Settings (2) - for entry of the adjustment knob position settings. The knob number corresponds to the number indicated on the labels on the side of the machine.
Pkgs to skip - number of packages to skip before monitoring the offset distance when an automatic splice is made. This entry is only available when the film type selection is Registered

# OPERATOR INTERFACE

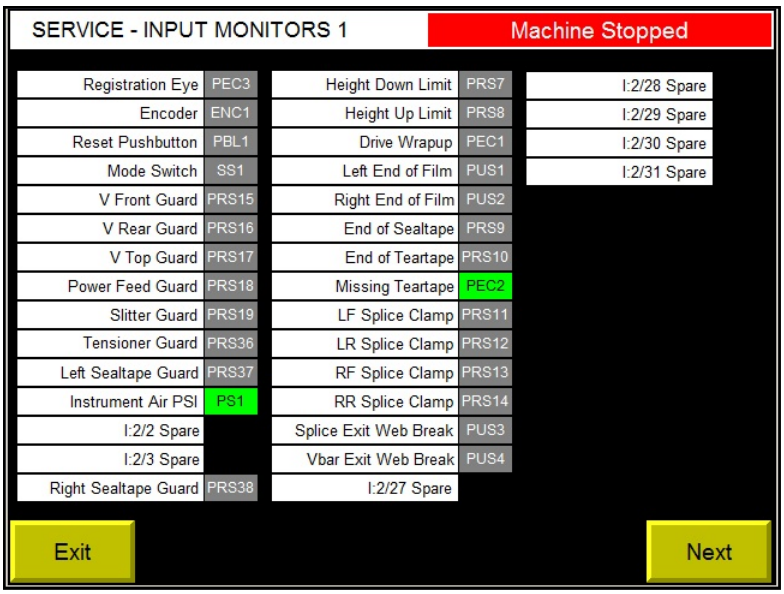
## Service - Recipe Store (all models)

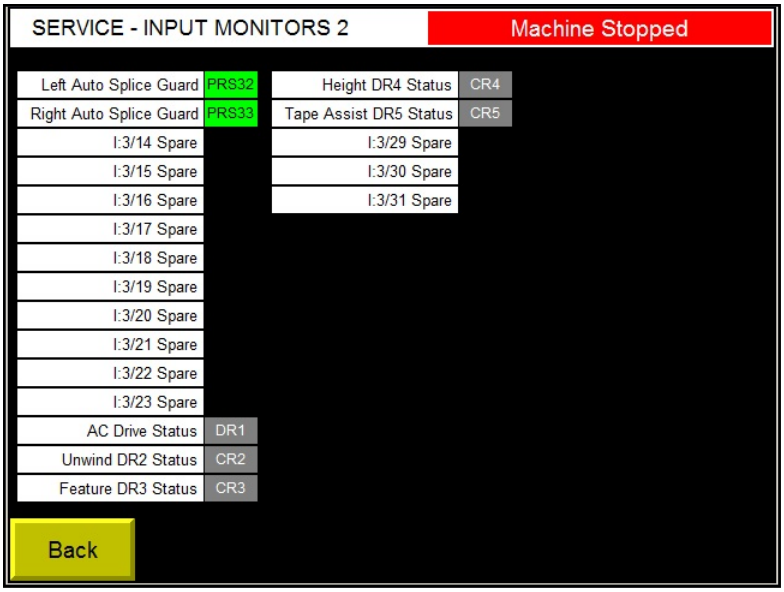
Offset - distance to wait after the package skip before making a splice. This entry is only available when the film type selection is Registered

Tail Length - the desired tail length when an automatic splice is made. This entry is only available when the film type selection is Unregistered

# OPERATOR INTERFACE

## Service - Inputs (all models)



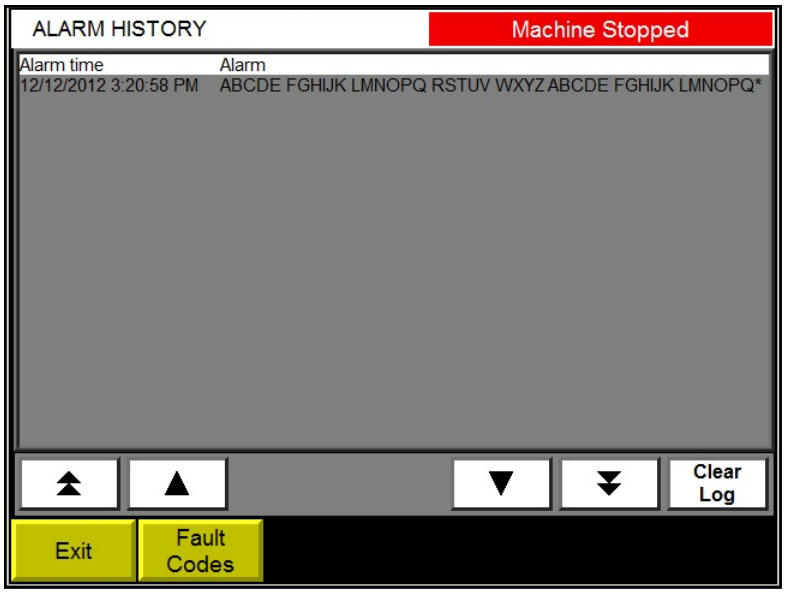

These screens provide feedback status of the applicator device sensors. The device listing will vary depending on whether the Sealtape Applicator has manual splice or automatic splice capabilities. The input monitors contain the device tag number for quick reference.

**Screen Access Pushbuttons**

Exit - returns to the Main Service screen
Next - goes to the next Inputs screen
Back - returns to the previous Inputs screen

# OPERATOR INTERFACE

## Service - Alarm History (all models)



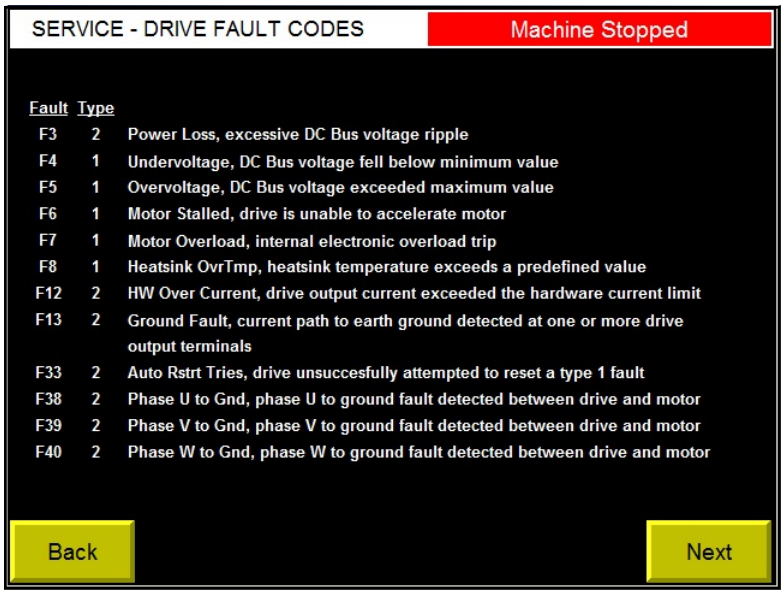

**Screen Access Pushbuttons**

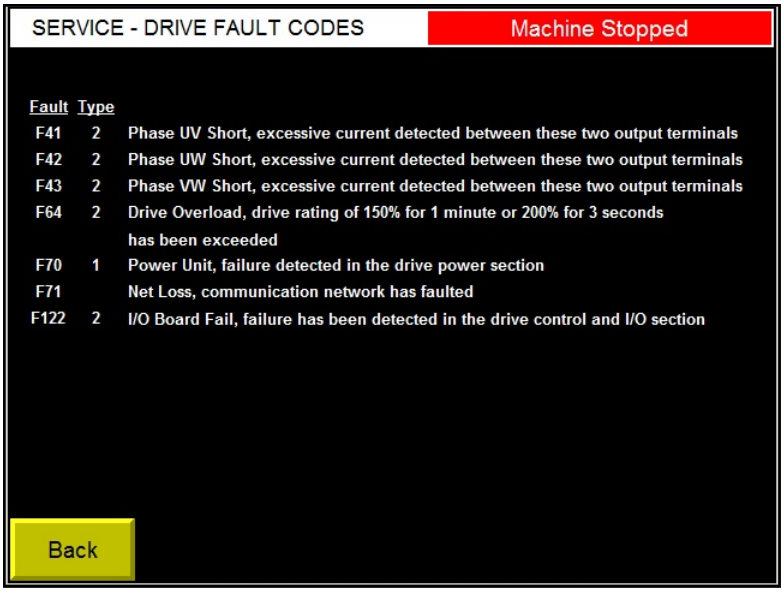
Exit - returns to the Main Service screen

Fault Codes - goes to Drive Fault Codes screen

# OPERATOR INTERFACE

## Service - Fault Codes (all models)



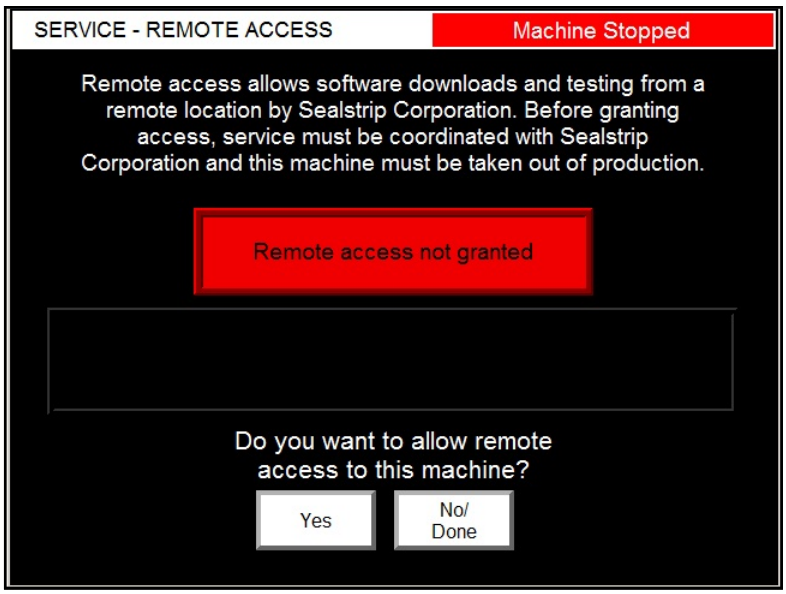

These screens are provided as a reference to aid in identifying the cause of an AC Drive fault. On an AC Drive fault, the alarm banner message will contain the fault code number. Type 1 faults are resettable while type 2 faults are non-resettable and may require drive or motor repair.

**Screen Access Pushbuttons**

Back - returns to the Alarm History screen
Next - goes to the next Fault Codes screen
Back - returns to the previous Fault Codes screen

# OPERATOR INTERFACE

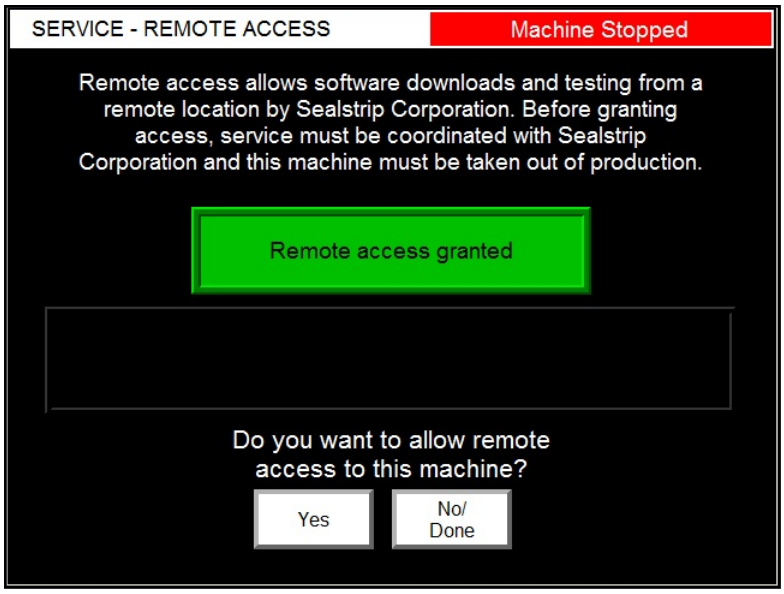
## Service - Wireless Access (all models)




This screen is used when it is necessary for Sealstrip personnel to remotely access the Sealtape Applicator for testing and/or modification of the control programs. Remote access must be coordinated with Sealstrip Corporation and the applicator must be taken out of production before granting access.

Procedure (assumes access has been coordinated with Sealstrip Corporation and the applicator is out of production):

1. Press the *"Yes"* pushbutton to grant access
2. After access has been granted, the screen will indicate that access has been granted
3. Access can still be canceled at this point by pressing *"No/Done"*

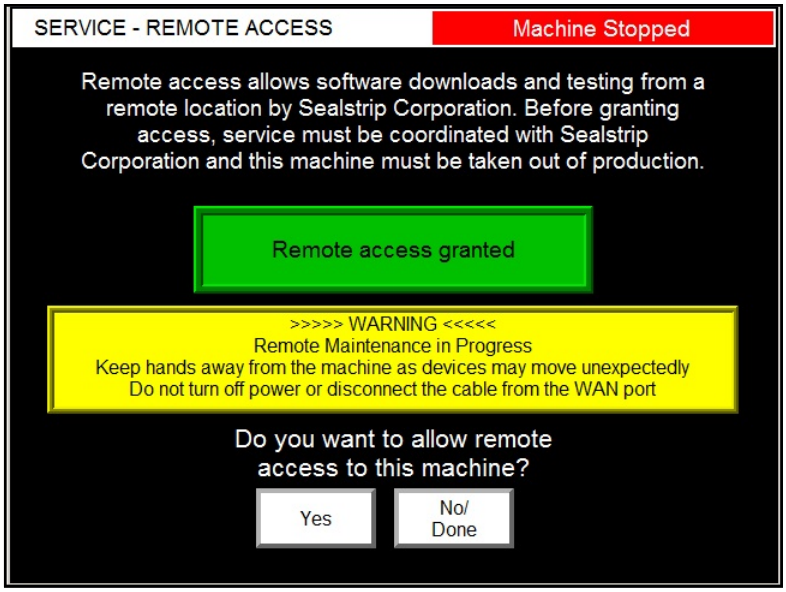


# OPERATOR INTERFACE

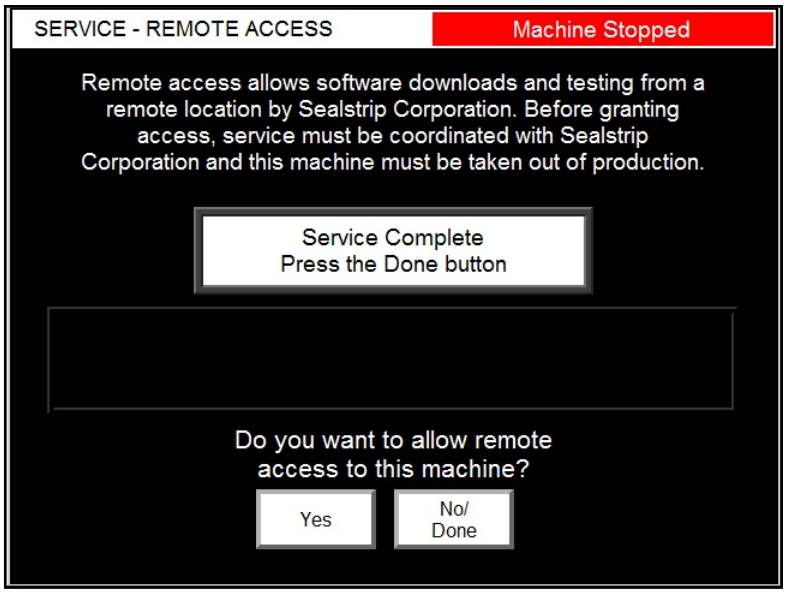
## Service - Wireless Access (all models)

4. Once Sealstrip has taken control of the applicator the screen will display as shown below. Pushbutton controls are now disabled and access cannot be canceled by plant personnel.

**Warning! Do not work on or around the Sealtape Applicator while remote maintenance is in progress. The applicator may start or stop and devices may move unexpectedly. If it is necessary for plant personnel interaction during maintenance, they will be given instructions to do so by Sealstrip personnel.**

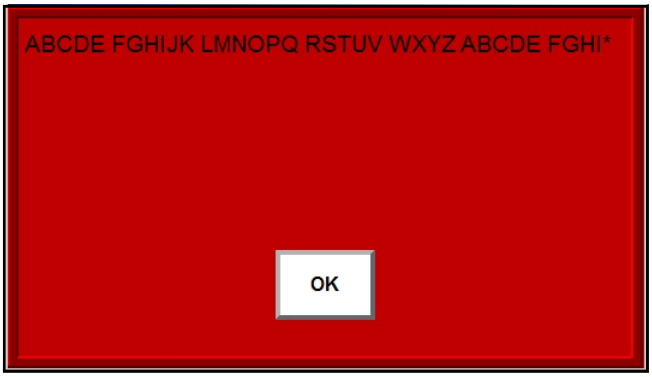



5. After remote maintenance is completed the screen will display as shown below. Pushbutton controls are now enabled and the applicator can be returned to normal operation by pressing the *"No/Done"* pushbutton.



# OPERATOR INTERFACE

## Alarm Banner (all models)




The Alarm Banner appears on the Operator Interface when an alarm or warning is triggered. The active alarm or warning will display on the screen. Alarms which stop the Sealtape Applicator will display on a red background. Alarms and warnings that do not stop the Sealtape Applicator will display on a yellow background. Pressing the *"OK"* pushbutton only closes the alarm banner. It does not clear or reset the alarm.

**Control Pushbuttons**

OK—closes the alarm banner

**Data Displays**

Active alarm or warning—see the Alarms section starting on the next page of this manual for alarms and warnings

# APPLICATOR ALARMS

## MACHINE STOP ALARMS

Machine Stop alarms will place the Sealtape Applicator in Stop mode and remove power from the machine motors and actuators. The alarm will display with a red background on the Operator Interface, the red stacklight will light solid and the “Reset” pushbutton on the front of the Operator Interface enclosure will go out. Pressing the “Reset” pushbutton resets the machine.

| Monitoring Dependence | Alarm | Cause | Action/s |
|---|---|---|---|
| All modes | Operator Terminal Emergency Stop Pressed | Applicator operator terminal Estop pushbutton pressed | Release emergency stop |
| All modes | Front Emergency Stop Pressed | Applicator front Estop pushbutton pressed | Release emergency stop |
| All modes | Rear Emergency Stop Pressed | Applicator rear Estop pushbutton pressed | Release emergency stop |
| All modes when wrapper e-stop interlock connected | Wrapper Estopped | Wrapper in a e-stop state | Reset wrapper |
| Sealtape Mode | V-Section Front Guard Open | Applicator front guard opened while running | Close the guard |
| Sealtape Mode | V-Section Rear Guard Open | Applicator rear guard opened while running | Close the guard |
| Sealtape Mode | V-Section Top-Guard Open | Applicator top guard opened while running | Close the guard |
| Sealtape Mode | Power Feed Guard Open | Applicator power feed guard opened while running | Close the guard |
| Sealtape Mode | Slitter Guard Open | Applicator slitter guard opened while running | Close the guard |
| Sealtape Mode | Tensioner Guard Open | Applicator tensioner guard opened while running | Close the guard |
| Sealtape Mode (auto splicer models) | Left Splice Guard Open | Applicator left unwind auto splicer guard opened while running | Close the guard |
| Sealtape Mode (auto splicer models) | Right Splice Guard Open | Applicator right unwind auto splicer guard opened while running | Close the guard |

# APPLICATOR ALARMS

## MACHINE STOP ALARMS

| Monitoring Dependence | Alarm | Cause | Action/s |
|---|---|---|---|
| Sealtape Mode | Sealtape Guard Open | Applicator sealtape unwind left or right guard door opened while running | Close the guard/s |

# APPLICATOR ALARMS

## RUN STOP ALARMS

Run Stop alarms will place the Sealtape Applicator in Stop mode. Power for the machine motors and actuators is not removed. The alarm will display with a red background on the Operator Interface, the alarm siren will sound and the red stacklight will flash. Pressing the *"Alarm Reset"* pushbutton on the Operator Interface resets the alarm.

| Monitoring Dependence | Alarm | Possible Cause/s | Action/s |
|---|---|---|---|
| Sealtape Mode<br>Thread Mode | Drive Roller Wrapup | • Film has wrapped around the drive roller while running<br>• Sensor sensitivity out of adjustment<br>• Defective sensor | • Clear film from drive roller<br>• Adjust sensor sensitivity as necessary<br>• Check sensor functionality |
| Sealtape Mode<br>Thread Mode<br>Service Mode | AC Drive Fault: Code Fxxx | • Power roller drive fault | • Have maintenance personnel check the drive |
| When running the unwind carriage motor | Unwind Carriage Drive Fault | • Blown fuse<br>• Defective cable<br>• Drive fault | • Replace fuse if necessary<br>• Check motor cable for shorted or open circuits<br>• Have maintenance personnel check the drive |
| When running the feature carriage motor | Feature Carriage Drive Fault | • Blown fuse<br>• Defective cable<br>• Drive fault | • Replace fuse if necessary<br>• Check motor cable for shorted or open circuits<br>• Have maintenance personnel check the drive |
| When running the feature height motor | Feature Height Drive Fault | • Blown fuse<br>• Defective cable<br>• Drive fault | • Replace fuse if necessary<br>• Check motor cable for shorted or open circuits<br>• Have maintenance personnel check the drive |
| When running the tape assist motor | Tape Assist Drive Fault | • Blown fuse<br>• Defective cable<br>• Drive fault | • Replace fuse if necessary<br>• Check motor cable for shorted or open circuits<br>• Have maintenance personnel check the drive |
| Sealtape Mode<br>Thread Mode | End of Teartape Roll | • Tape roll ran out while running<br>• Defective sensor | • Load new tape roll<br>• Check sensor functionality |
| Sealtape Mode | Missing Teartape | • Teartape sensor did not detect tape while running<br>• Sensor position not correct<br>• Defective sensor | • Check that teartape is threaded in front of the sensor<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |

# APPLICATOR ALARMS

## RUN STOP ALARMS

| Monitoring Dependence | Alarm | Possible Cause/s | Action/s |
|---|---|---|---|
| Sealtape Mode<br>Thread Mode | End of Sealtape Roll | • Tape roll ran out while running<br>• Defective sensor | • Load new tape roll<br>• Check sensor functionality |
| Sealtape Mode (auto splicer models) | End of Film Roll | • Film not sensed in the not-in-use unwind film path when the in-use roll ran out while running<br>• Sensor position not correct<br>• Defective sensor | • Thread the not-in-use unwind film<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode (manual splicer models) | End of Film Roll | • Film roll ran out while running<br>• Sensor sensitivity out of adjustment<br>• Sensor position not correct<br>• Defective sensor | • Load new film roll<br>• Adjust sensor sensitivity as necessary<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode | Slitter Position Error | • Slitter did not extend while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinder and for sufficient air pressure<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode | Front Perforator Position Error | • Perforator did not extend while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinder and for sufficient air pressure<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode | Rear Perforator Position Error | • Perforator did not extend while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinder and for sufficient air pressure<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode | Outer Vbar Position Error | • Vbar did not close while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinder and for sufficient air pressure<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |

# APPLICATOR ALARMS

## RUN STOP ALARMS

| Monitoring Dependence | Alarm | Possible Cause/s | Action/s |
|---|---|---|---|
| Sealtape Mode | Tension Roller Nip Position Error | • Nip roller did not close while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinders and for sufficient air pressure<br>• Check sensor positions and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode | Drive Roller Nip Position Error | • Nip roller did not close while running<br>• Sensor position not correct<br>• Defective sensor | • Check for binding at the air cylinders and for sufficient air pressure<br>• Check sensor positions and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode (auto splicer models) | Splicer web break | • The automatic splice was not successful<br>• Sensor position not correct<br>• Defective sensor | • Check splicer device functionality<br>• Verify the backing was removed from the double sided splice tape<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode (auto splicer models) | Vbar web break | • The splice pulled apart as it passed through the folding bars<br>• Sensor position not correct<br>• Defective sensor | • Enable the Pass Splice sequence<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode Thread Mode (manual splicer models) | Manual Splice Clamp Engaged | • Splice clamp for the in-use unwind was engaged while running<br>• Sensor position not correct<br>• Defective sensor | • Release splice clamp<br>• Check sensor position and adjust as necessary<br>• Check sensor functionality |
| Sealtape Mode (auto splicer models) | V-folder Dancer Position Alarm - wrapper speed too fast | • Dancer arm raised too high while making a slow speed splice | • Decrease the wrapper speed to match the applicator's speed when making a splice |
| Sealtape Mode (auto splicer models) | V-folder Dancer Position Alarm - wrapper speed too slow | • Dancer arm dropped too low while making a slow speed splice | • Increase the wrapper speed to match the applicator's speed when making a splice |

# APPLICATOR ALARMS

## WARNINGS

Warnings do not stop the Sealtape Applicator. They are intended to alert the operator to a condition that requires attention. The warning will display with a yellow background on the Operator Interface, the alarm siren will slow pulse and the red stacklight will flash. Pressing the *"Alarm Reset "* pushbutton on the Operator Interface resets the alarm but not the alarm condition. As long as the condition exists, the alarm siren and stacklight will remain active and a warning message will display along the left side of the screen. Once the condition is cleared, the alarm siren and stacklight will turn off and the warning message will clear.

| Monitoring Dependence | Warning | Possible Cause/s | Action/s |
|---|---|---|---|
| All Modes | Machine Air Pressure Low | • Plant air pressure low<br>• Supply valve is off<br>• Pressure switch setpoint set too high<br>• Defective pressure switch | • Verify plant air supply pressure<br>• Verify supply valve is on (SUP)<br>• Check pressure switch setpoint and adjust as necessary<br>• Check pressure switch functionality |
| Sealtape Mode | Slitter Air Pressure Low | • Slitter regulator set too low<br>• Pressure switch setpoint set too high<br>• Defective pressure switch<br>• Defective slitter valve | • Adjust slitter regulator to increase pressure<br>• Check pressure switch setpoint and adjust as necessary<br>• Check pressure switch functionality<br>• Check valve functionality |
| Sealtape Mode | Front Perforator Air Pressure Low | • Front perforator regulator set too low<br>• Pressure switch setpoint set too high<br>• Defective pressure switch<br>• Defective slitter valve | • Adjust perforator regulator to increase pressure<br>• Check pressure switch trip setting and adjust as necessary<br>• Check pressure switch functionality<br>• Check valve functionality |
| Sealtape Mode | Rear Perforator Air Pressure Low | • Rear perforator regulator set too low<br>• Pressure switch setpoint set too high<br>• Defective pressure switch<br>• Defective slitter valve | • Adjust perforator regulator to increase pressure<br>• Check pressure switch trip setting and adjust as necessary<br>• Check pressure switch functionality<br>• Check valve functionality |
| Sealtape Mode | Outer Vbar Pressure Low | • Defective E/P transducer<br>• Defective Vbar valve | • Check transducer functionality<br>• Check valve functionality |
| Sealtape Mode Thread Mode | Low Sealtape Roll | • Roll has unwound to its low tape diameter setpoint<br>• Defective sensor | • Warning will self-clear when the roll is replaced<br>• Check sensor functionality |

# APPLICATOR ALARMS

## WARNINGS

| Monitoring Dependence | Warning | Possible Cause/s | Action/s |
|---|---|---|---|
| Sealtape Mode<br>Thread Mode | Low Teartape Roll | • Roll has unwound to its low tape diameter setpoint<br>• Defective sensor | • Warning will self-clear when the roll is replaced<br>• Check sensor functionality |
| Sealtape Mode<br>Thread Mode<br>(manual splicer models) | Low Film Roll | • The in-use mandrel has unwound to its low film diameter setpoint<br>• Defective sensor | • Warning will self-clear when the roll is replaced<br>• Check sensor functionality |

# CONTROL SYSTEM COMPONENTS

## Alarm Siren

The alarm siren is part of the stacklight tower and functions as follows (see also Applicator Alarms section):

- Steady On - active Run Stop alarm
- Slow Pulsing - active Warning
- Fast Pulsing - automatic splice completed

## Stacklight

The stacklight is located on the V-section guard frame and functions as follows (see also Applicator Alarms section):

- Green (steady on)
  - applicator is running Sealtape mode
- Green (flashing)
  - applicator is ready to run
  - remote access in progress
- Yellow (steady on)
  - applicator is in a maintenance or setup mode
- Yellow (flashing)
  - moving to recipe positions
  - Remote access in progress
- Red (steady on)
  - active machine stop alarm
- Red (flashing)
  - active run stop alarm
  - active warning
  - remote access in progress

# CONTROL SYSTEM COMPONENTS

## Pneumatics

The Sealtape Applicator uses compressed air to control many components of the system. The air manifold on the control box side of the Sealtape Applicator regulates, enables, and organizes all the air connections. The following is a list of components that make up the air system and their purpose.

**Air Shut Off**: Used to shut off or apply air to the Sealtape Applicator (this switch can be locked for lock out tag out maintenance purposes)

**Main Regulator/Filter**: The main regulator adjusts the pressure of the air system. This should be set at 75 PSI. The filter is in a canister below the regulator and should be cleaned and checked periodically for dirt.

**Instrument Air Pressure Switch**: Monitors the instrument air supply pressure to the Sealtape Applicator for a low pressure condition. The switch has an adjustable trip point and is typically set for 85 PSI.

**Dump Solenoid Valve**: The dump solenoid valve is activated by the guard doors and the E-stop systems to release all air trapped in the system for safety.

**Solenoid Manifold Block**: The solenoid manifold block houses all solenoid valves that actuate the pneumatic controlled devices. When the solenoid is activated a red light appears on the valve body. Each solenoid valve contains a regulator and pressure adjustment screw. These regulators are factory set and should not be adjusted.

**Front Perforator Regulator**: Used to regulate the pressure to the front perforator cutter wheel. This needs periodic adjustment to insure a proper perforation of the film as the blade wears.

**Front Perforator Air Pressure Switch**: Monitors the air supply pressure to the front perforator cutter wheel for a low pressure condition. The pressure switch has an adjustable trip point and is typically set for 13 PSI.

**Rear Perforator Regulator**: Used to regulate the pressure to the rear perforator cutter wheel. This needs periodic adjustment to insure a proper perforation of the film as the blade wears.

**Rear Perforator Air Pressure Switch**: Monitors the air supply pressure to the rear perforator cutter wheel for a low pressure condition. The pressure switch has an adjustable trip point and is typically set for 13 PSI.

**Film Slitter Regulator**: Used to regulate the pressure to the slitter wheel. This needs periodic adjustment to insure a complete cut of the film as the blade wears.

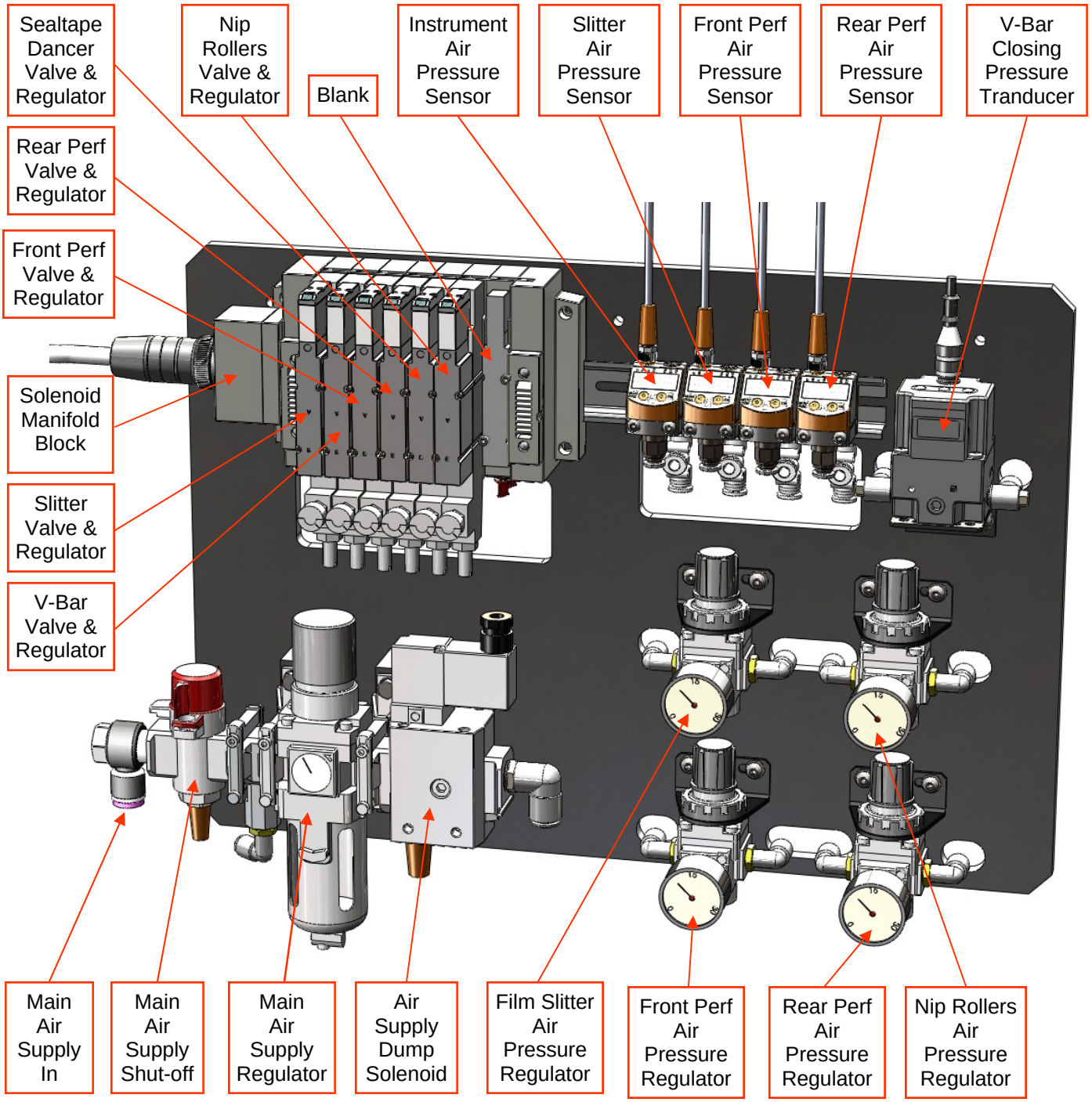
**Film Slitter Air Pressure Switch**: Monitors the air supply pressure to the slitter wheel for a low pressure condition. The pressure switch has an adjustable trip point and is typically set for 13 PSI.

**Pivot V-bar Cylinder Regulator**: Used to regulate the pressure to the V-section nose cylinder. This typically does not need to be adjusted

**Film Splice Cylinder Regulator**: Used to regulate the pressure to the film clamp cylinders. This typically does not need to be adjusted

# CONTROL SYSTEM COMPONENTS

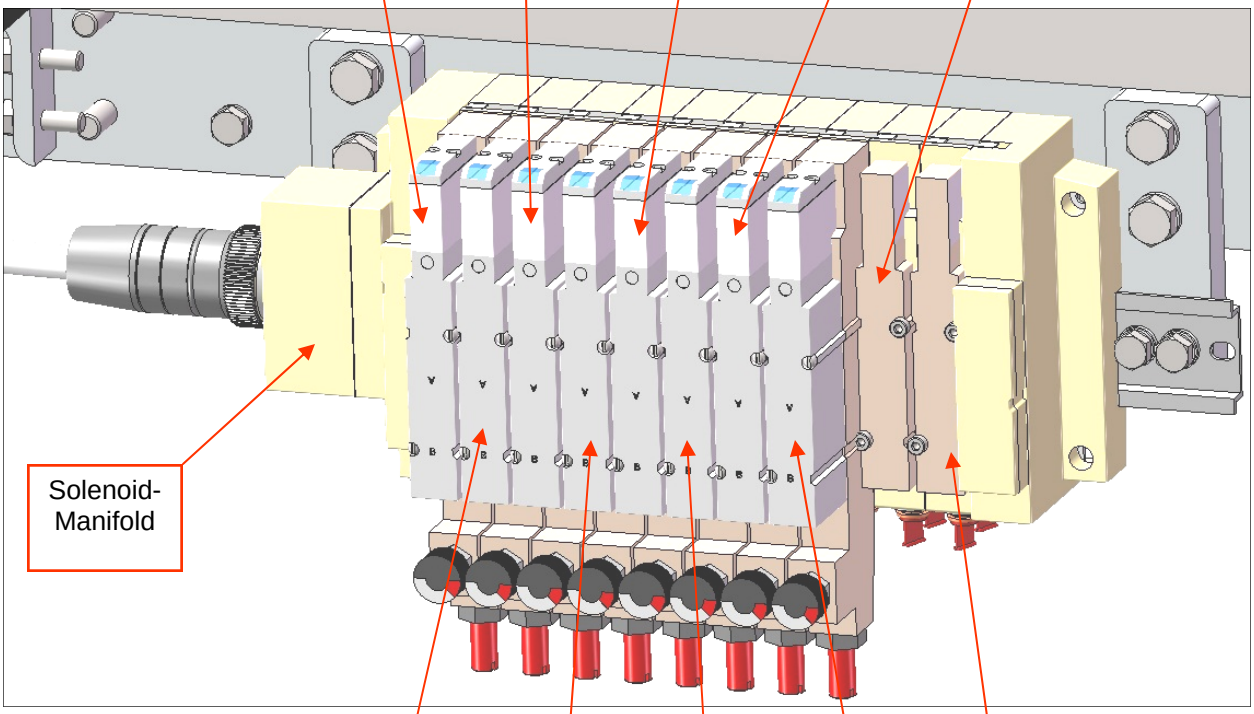
## Pneumatics (Automatic & Manual Splicer models)



# CONTROL SYSTEM COMPONENTS

## Pneumatics (Automatic Splicer models)

Vacuum Autosplicer Functions



# FILM / FEATURE DELIVERY SYSTEM

## Film Roll Loading and Threading

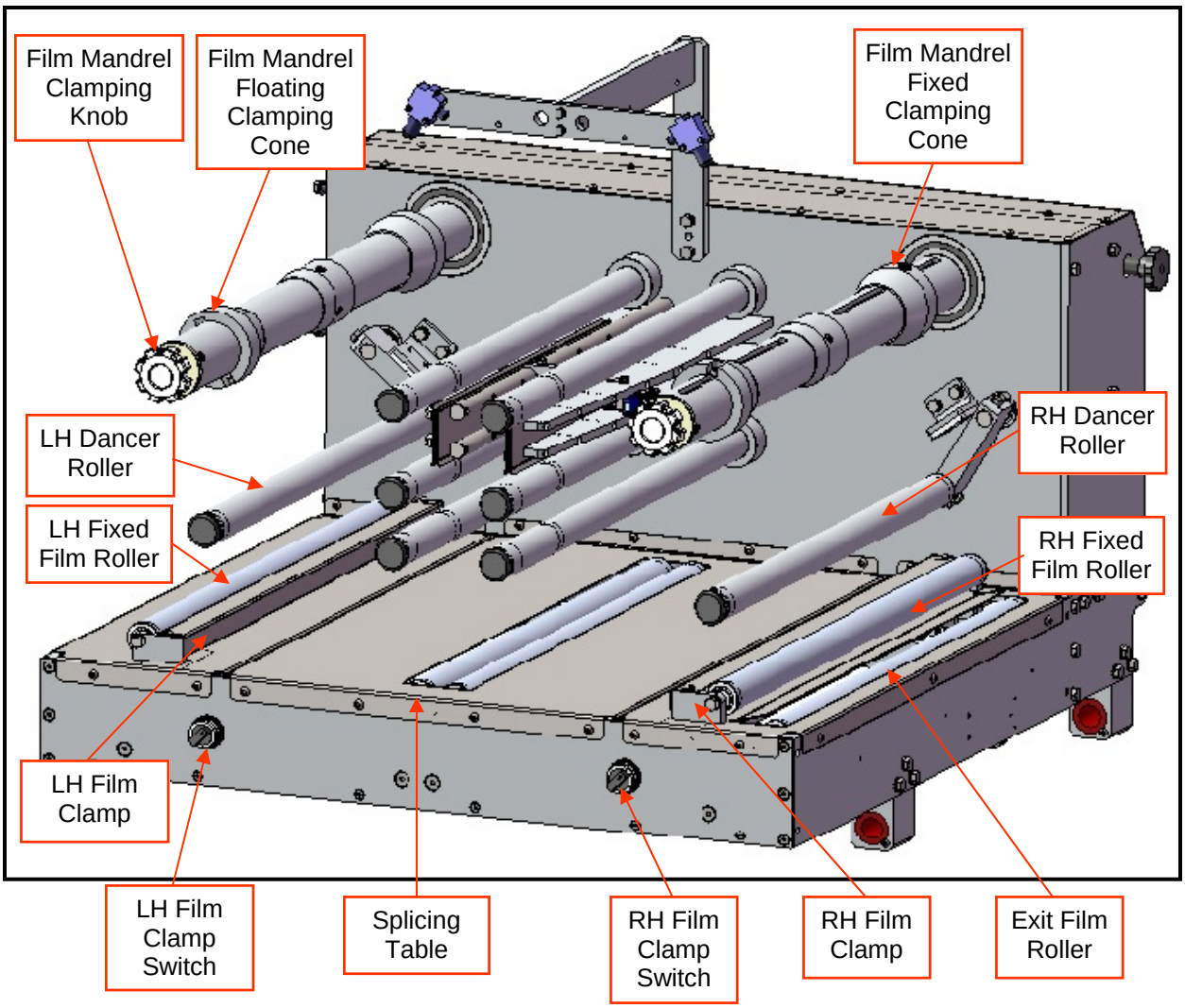
Procedure:

1. Select Thread as the operating mode and press the *"Run"* pushbutton on the Operator Interface. The perforators and cutter remain disengaged from the film and the outer V-bar remains in the open position.
2. Loosen the Film Mandrel Clamping Knob to disengage the Film Mandrel Floating Clamping Cone
3. Rotate Film Mandrel Floating Clamping Cone to align slot in cone with pin and slide cone off mandrel
4. Place the film roll onto the film mandrel and slide towards rear of unit to engage Film Mandrel Fixed Clamping Cone
5. Replace Film Mandrel Floating Clamping Cone on Film Mandrel and rotate to engage cone pocketed slot with pin
6. Tighten Film Mandrel Clamping Knob to secure film roll in position
7. Begin threading the film through the unwind section according to the unwind film path diagram. The unwind film path is unique depending on whether the applicator has manual or automatic splice capabilities (see the corresponding unwind film path diagrams). Continue threading to the Film Tension System
8. Thread film through Film Tension System. Once the film is nipped by the tension roller, the film will be harder to pull
9. Pull the film up through the Slitter/Diverter Assembly by feeding film around the Anvil Roller and up to the Diverter Bars. Continue to follow the Film Threading Diagram path by bringing the film up over the Plasma Coated Roller (this roller utilizes one-way bearings and will not allow the roller to rotate backwards) and under the Tape Applicator Wheel (red roller)
10. Pull film over the Plasma Coated Roller, under the Transition Roller, to the Decent Roller, continuing along the film path to under the V-Section Entry Roller.
11. Pull several additional feet of film, to aid with threading, through the V-Section Folding Bars
12. Thread the film between the upper and lower Folding Bars, so that you have several feet of film protruding, to pull the film horizontally over the Powered Nip Drive Entry Roller
13. Follow the film and tape flow diagram to thread through the Powered Nip Roller Section. **Note: Make sure that the film is under the stationary nip guard bar. If the film is threaded over the guard; the film can slip when the nip drive roller is activated**
14. Once you have threaded film through the nipped roller, the dancer can be threaded as per the Film Threading Diagram
15. Continue threading the film through the lower section of the Converter's Dancer Arm Rollers
16. Once you have film exiting the Film Dancer Assembly. The drive roller can be operated at a fixed, low speed by utilizing the "*Hold-to-Run"* pushbutton on the Operator Interface.
17. Continue threading film through to the wrapper
18. Apply Sealtape (see Sealtape Loading and Threading)
19. Apply Teartape (see Teartape Loading and Threading)
20. Once threading is complete, press the *"Stop"* pushbutton on the Operator Interface

# FILM / FEATURE DELIVERY SYSTEM

## Film Unwind Carriage System Overview (Manual Splicer models)

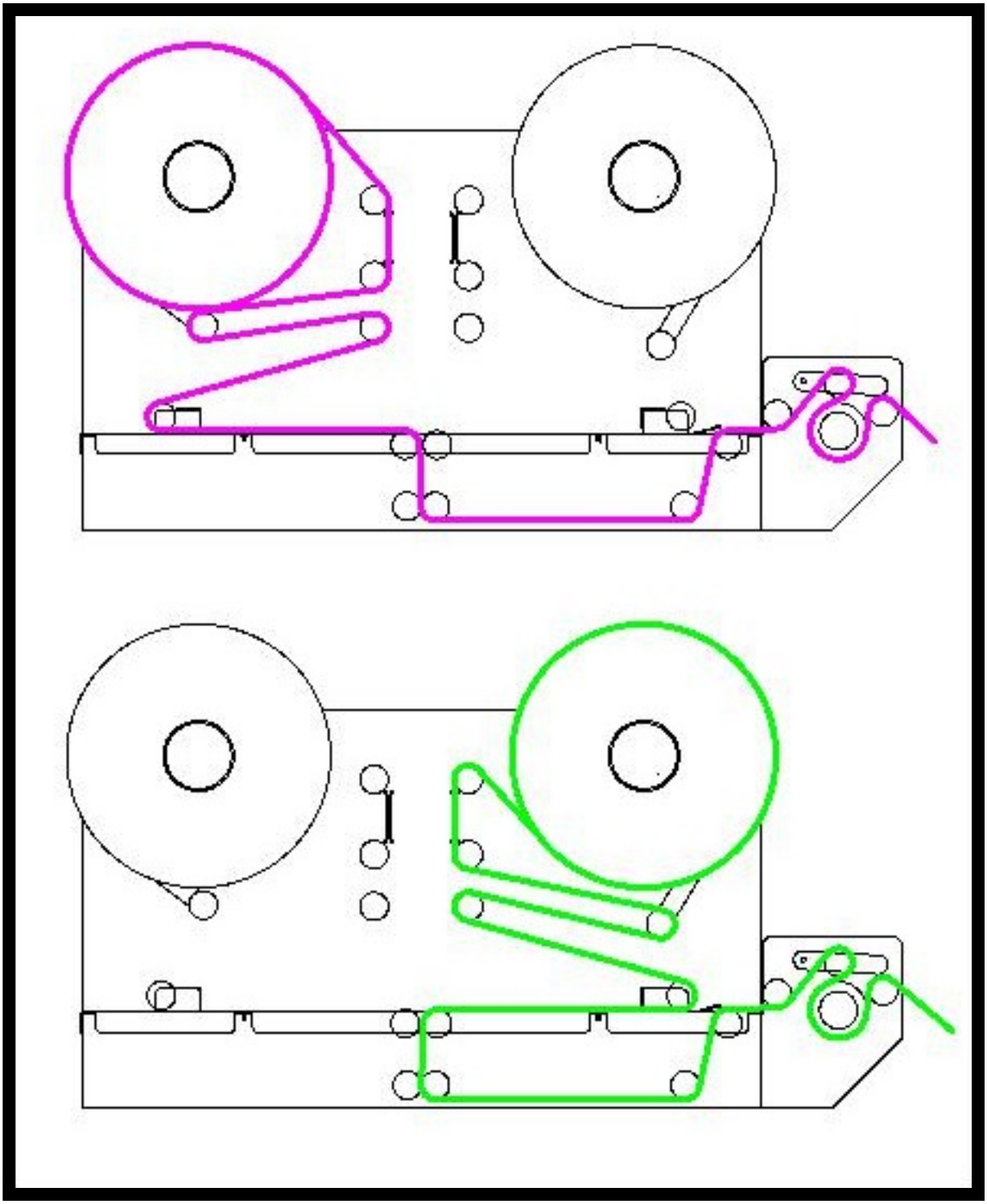
**Right Hand Film Flow Machine Shown**



# FILM / FEATURE DELIVERY SYSTEM

## Unwind Film Path (Manual Splicer model — RH machine)

Left Mandrel

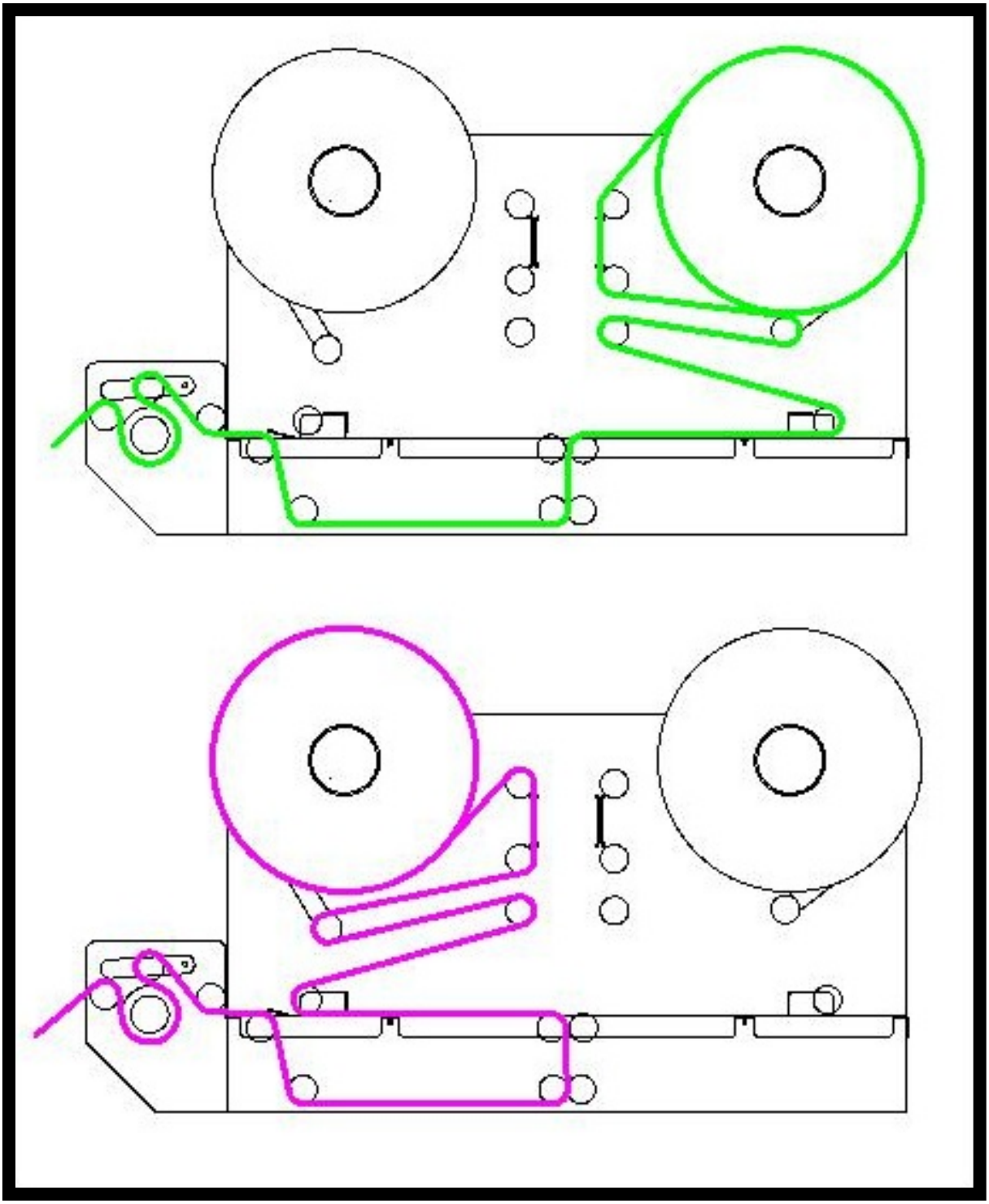


Right Mandrel

# FILM / FEATURE DELIVERY SYSTEM

## Unwind Film Path (Manual Splicer model — LH machine)

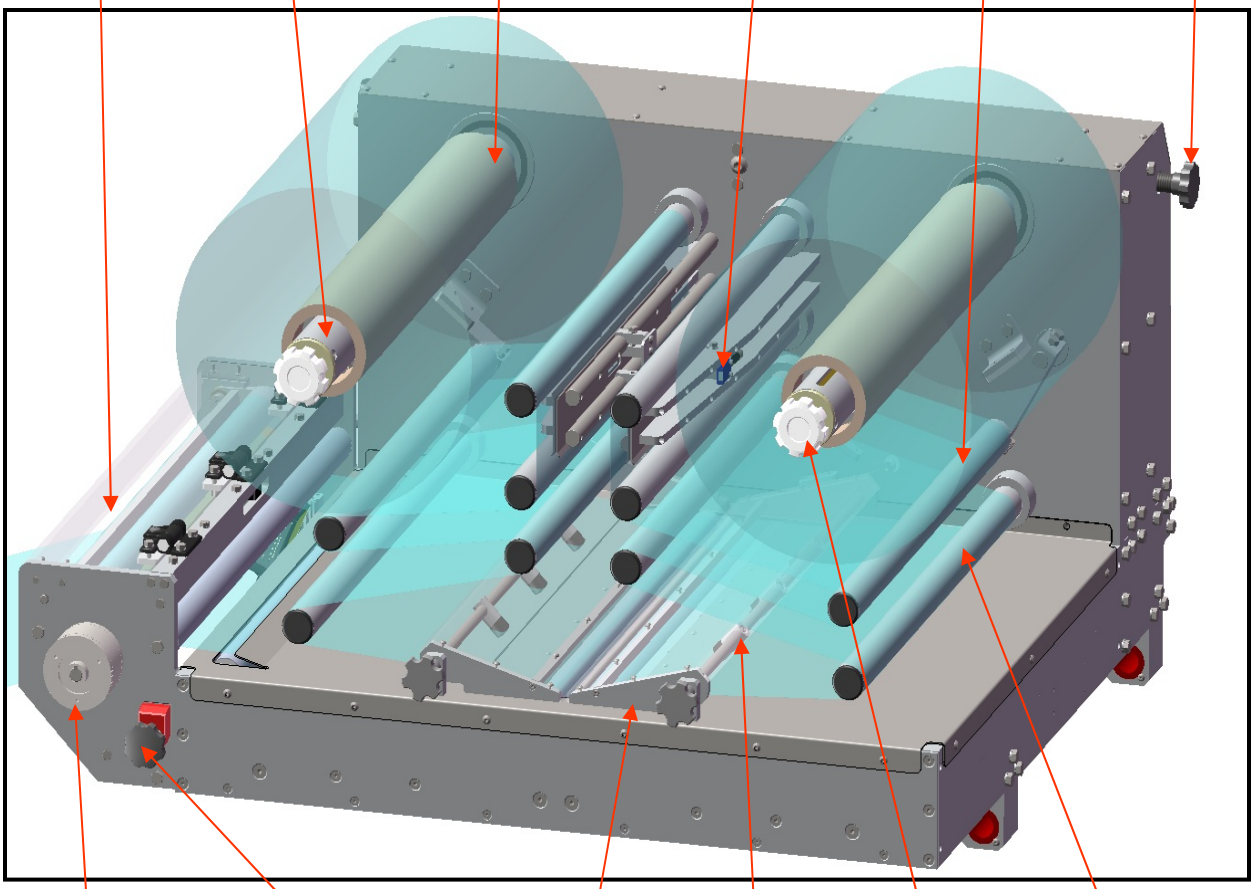
Right Mandrel



Left Mandrel

# FILM / FEATURE DELIVERY SYSTEM

## Film Unwind Carriage System Overview (Automatic Splicer models)

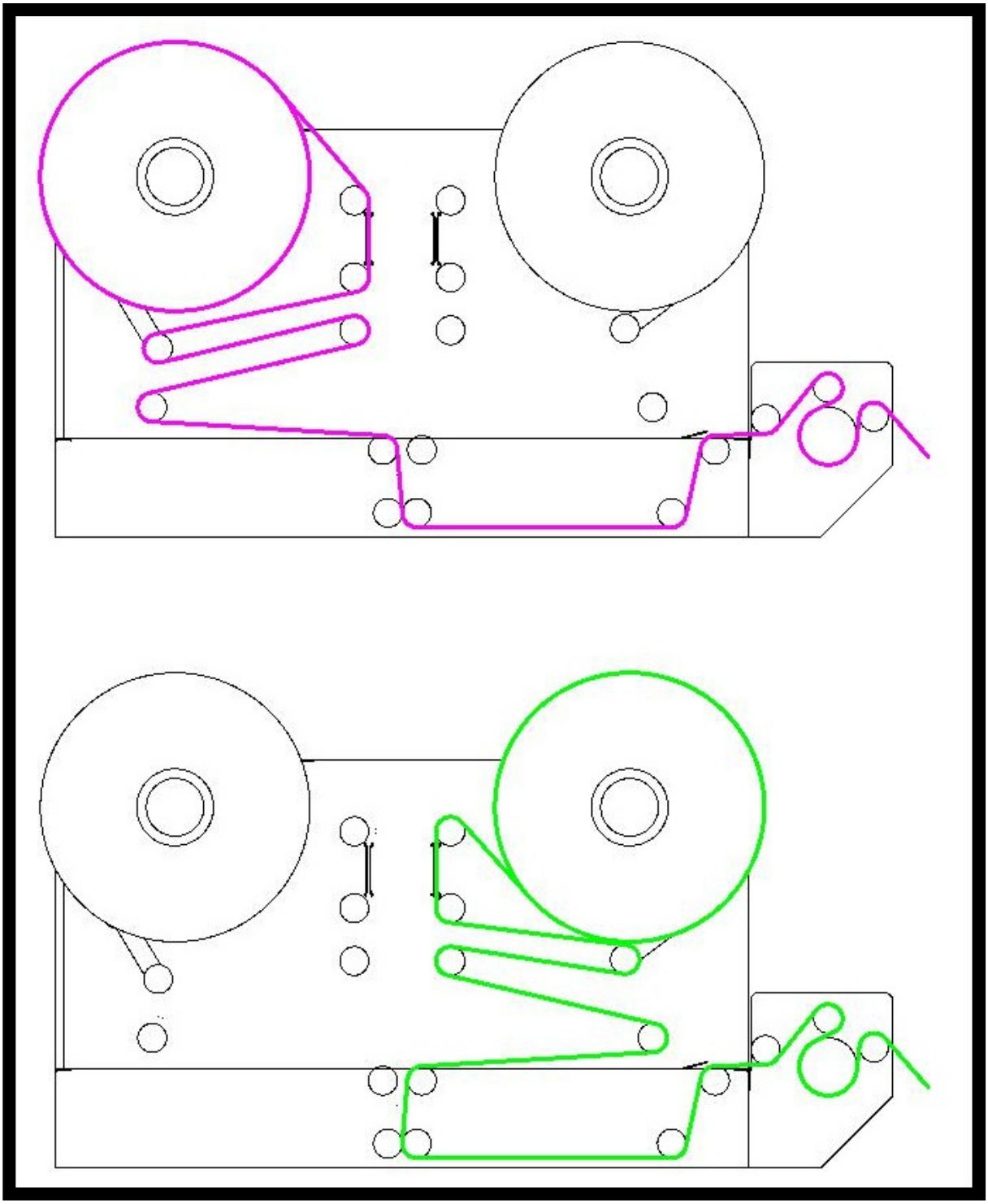



(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

## Unwind Film Path (Automatic Splicer model — RH machine)

Left Mandrel

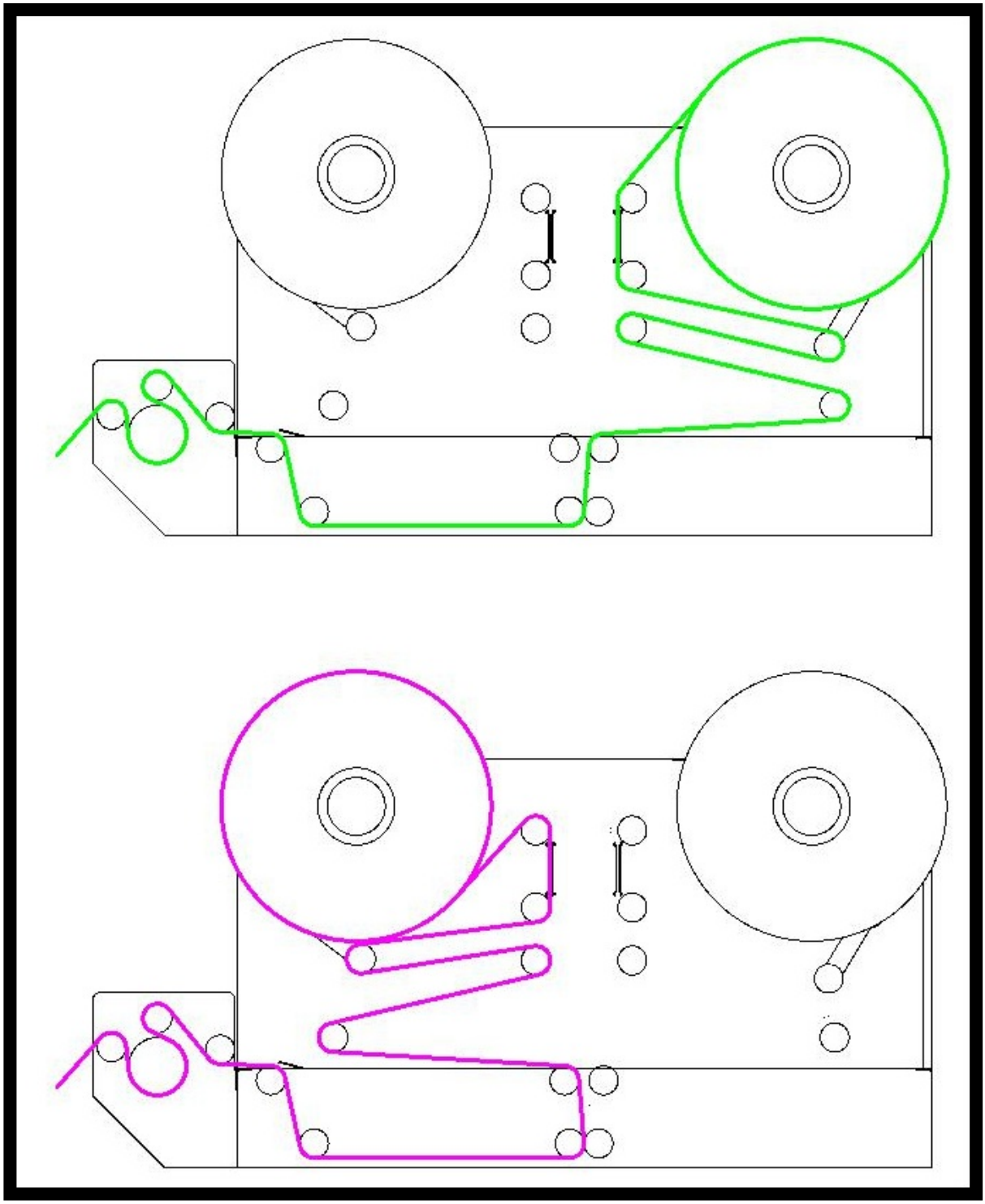


Right Mandrel

# FILM / FEATURE DELIVERY SYSTEM

## Unwind Film Path (Automatic Splicer model — LH machine)

Right Mandrel



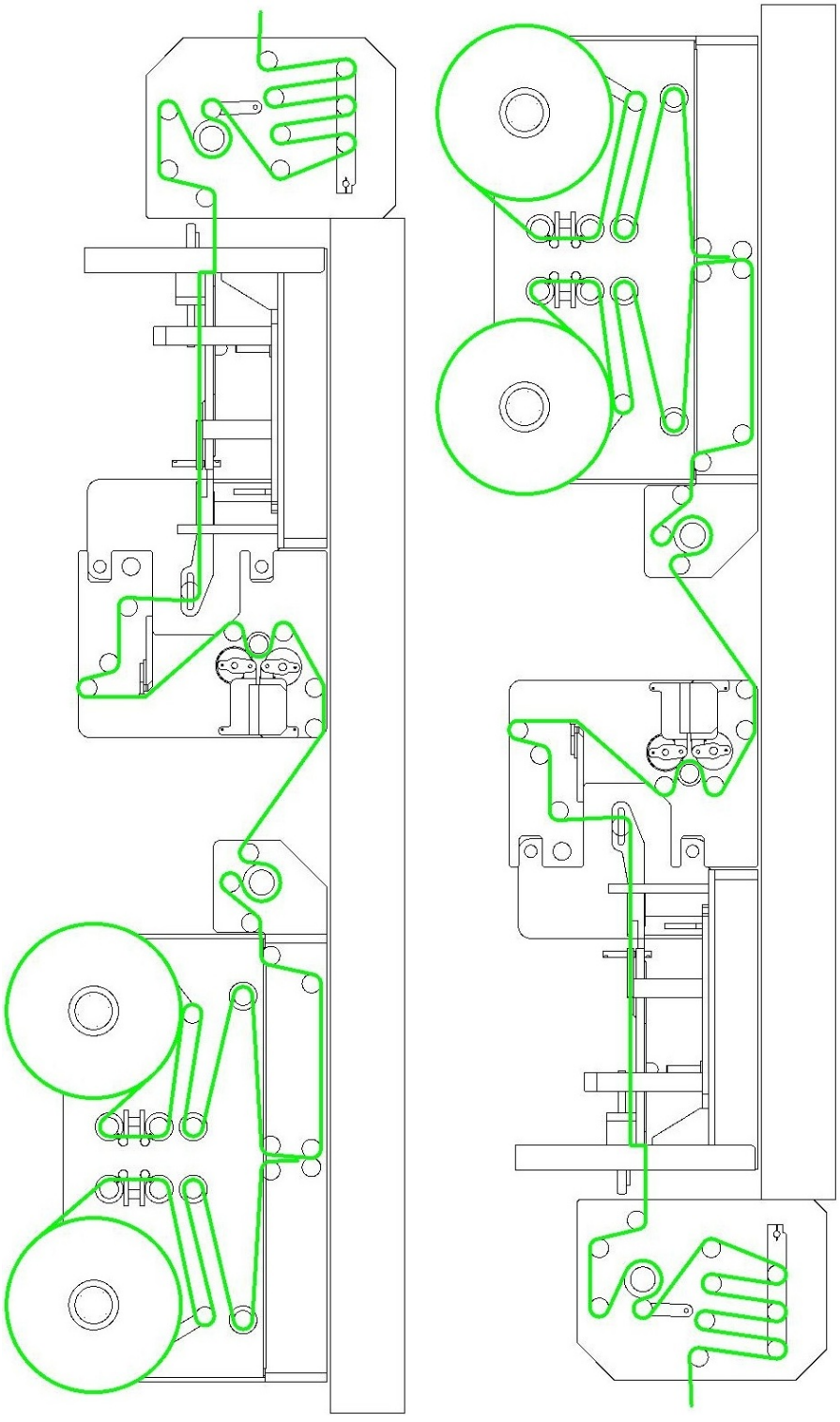
Left Mandrel

# FILM / FEATURE DELIVERY SYSTEM

## Film and Tape Flow Diagram (Automatic & Manual Splicer models)

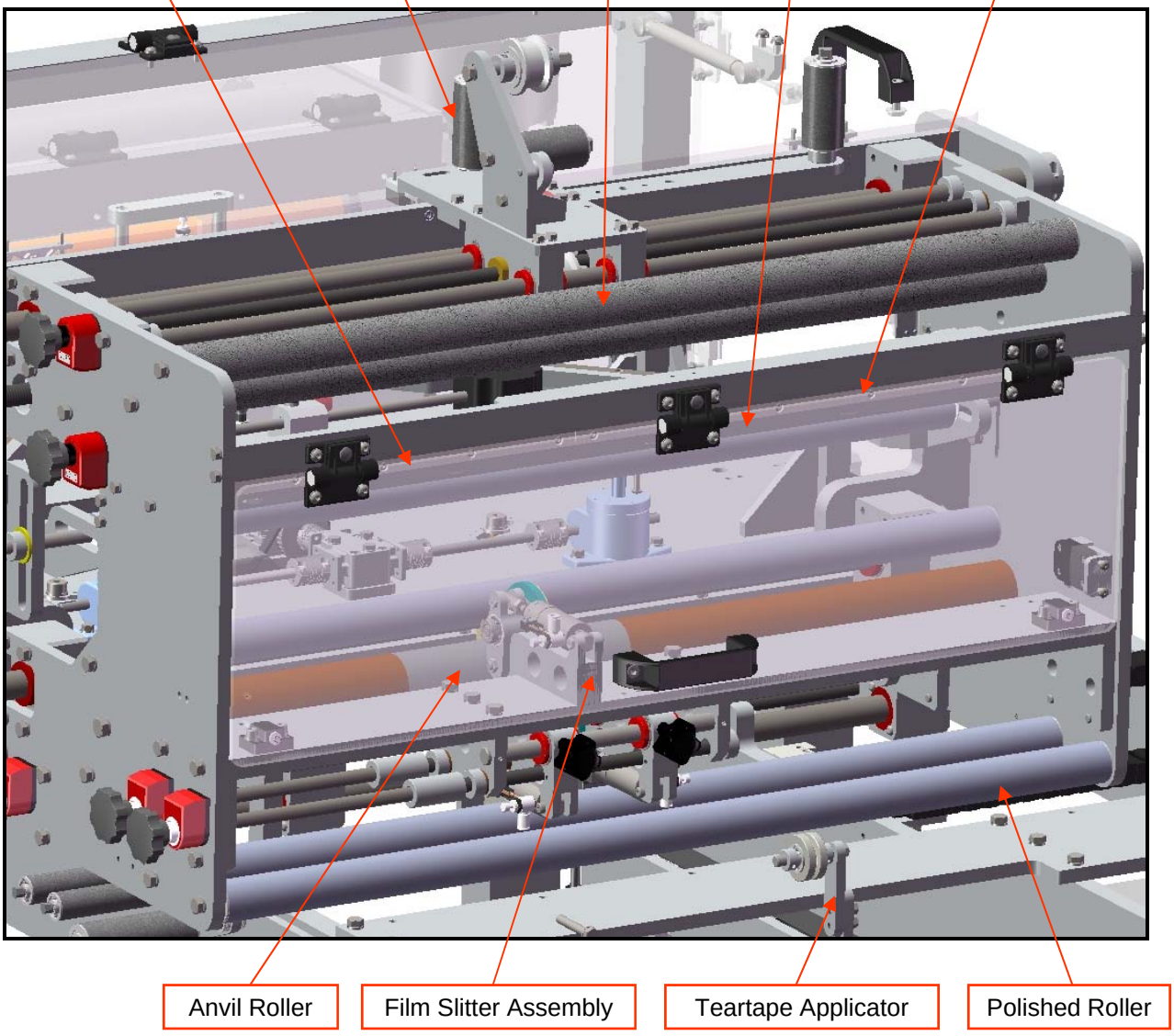
Right Hand Machine

Left Hand Machine



# FILM / FEATURE DELIVERY SYSTEM

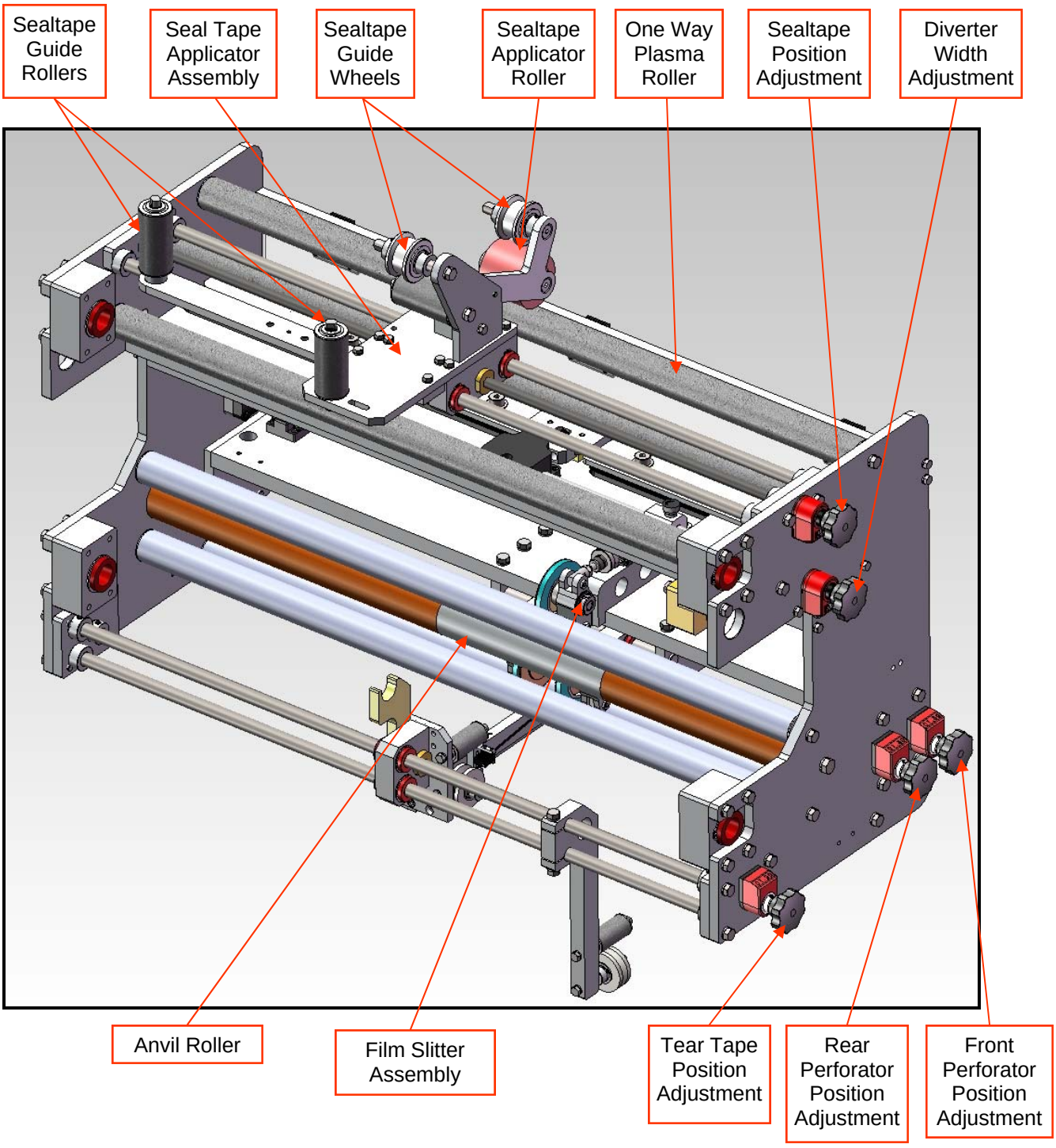
## Film Slitter/Diverter Assembly Overview




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

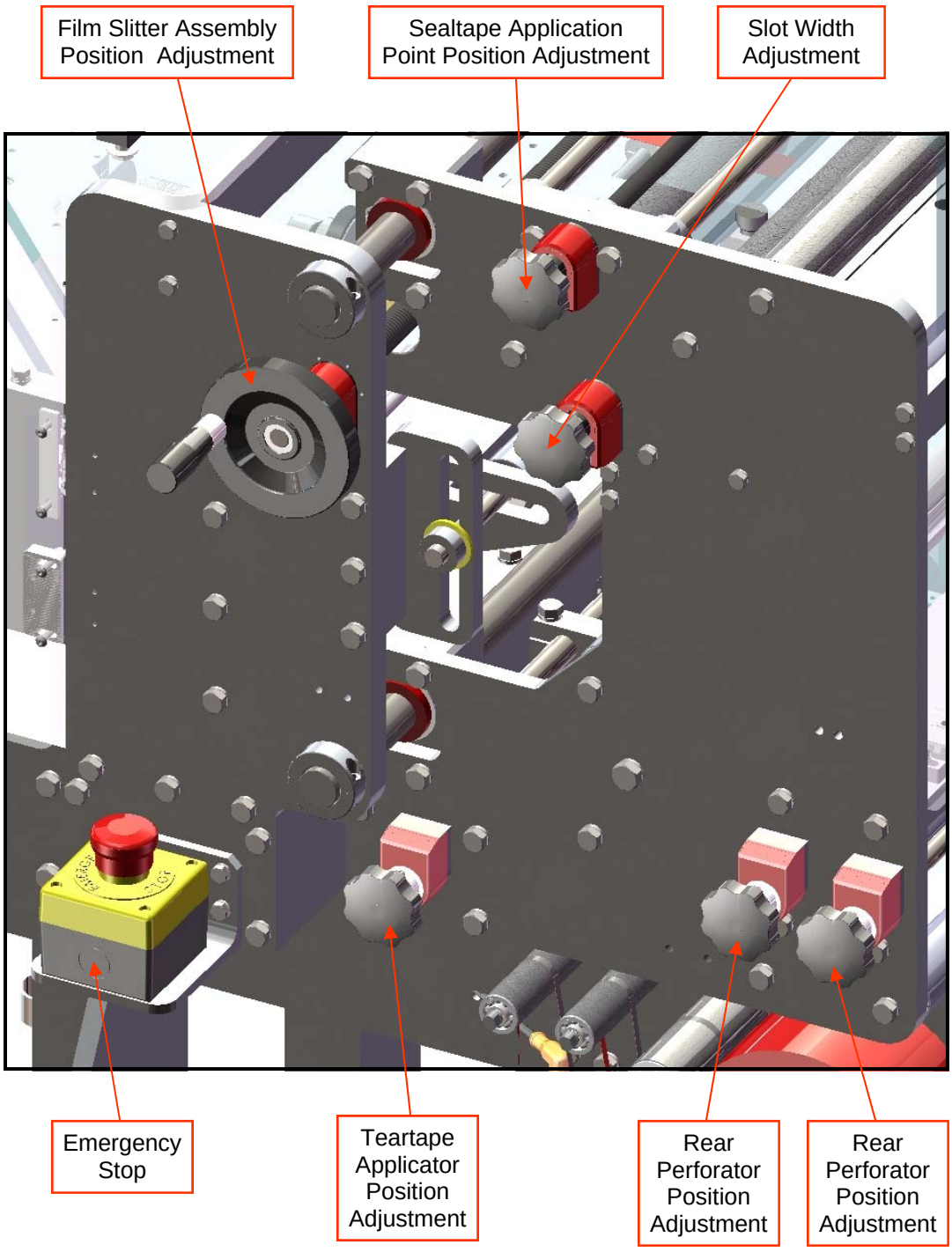
## Film Slitter/Diverter Assembly Overview (cont.)




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

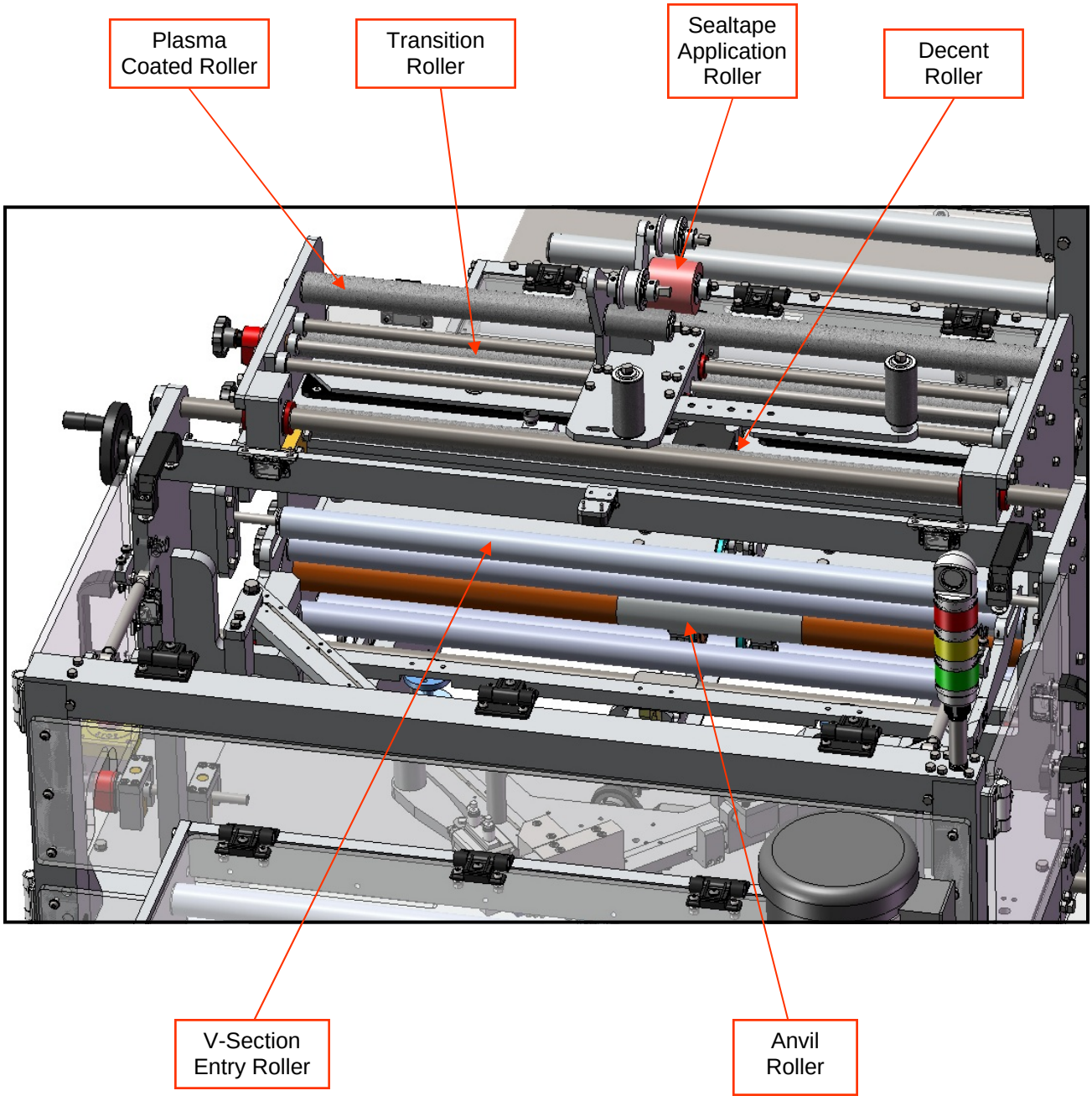
## Film Slitter/Diverter Assembly Adjustments Overview




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

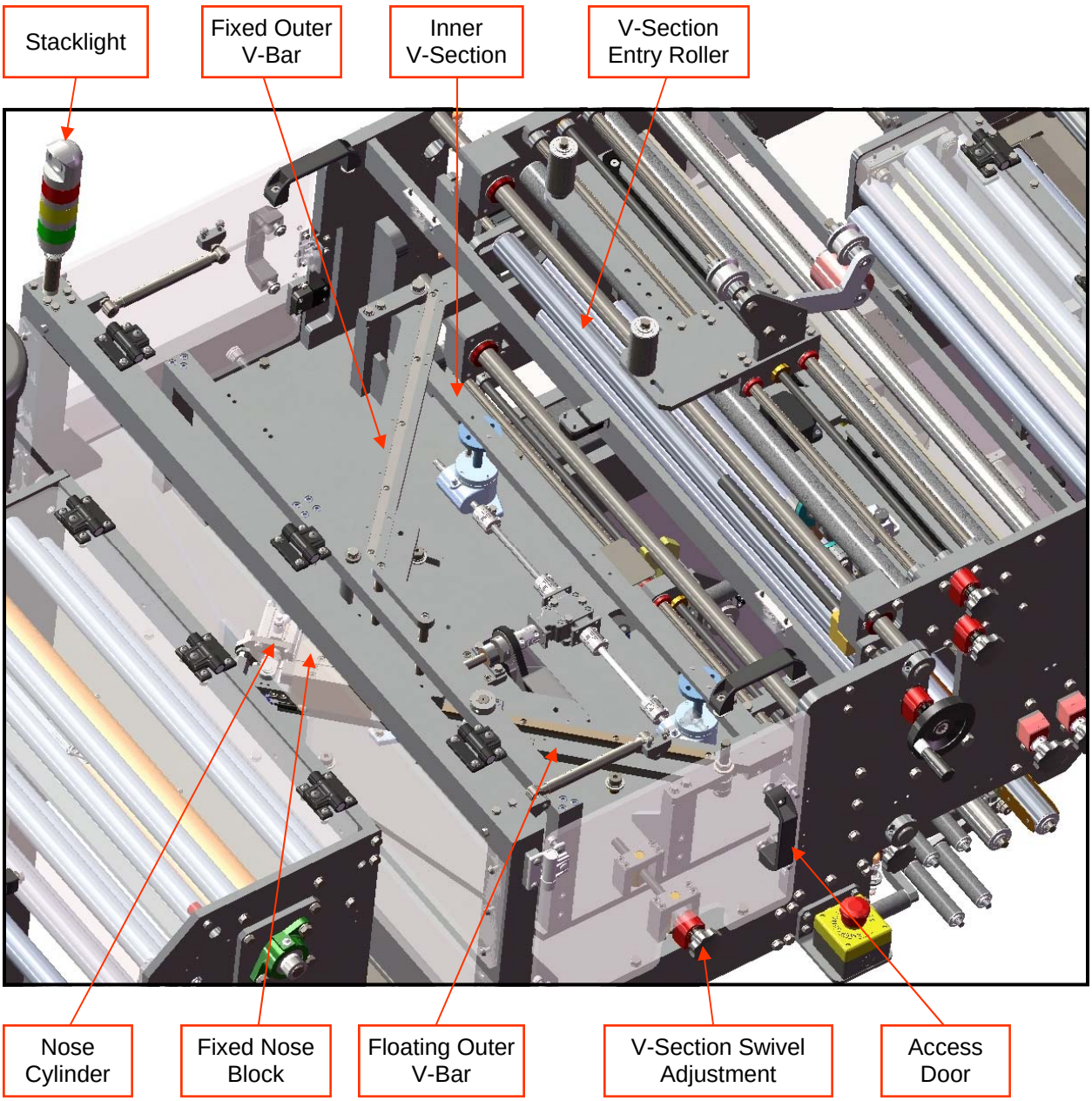
## Film Slitter/Diverter & V-Section Roller Overview




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

## V-Section Assembly Overview



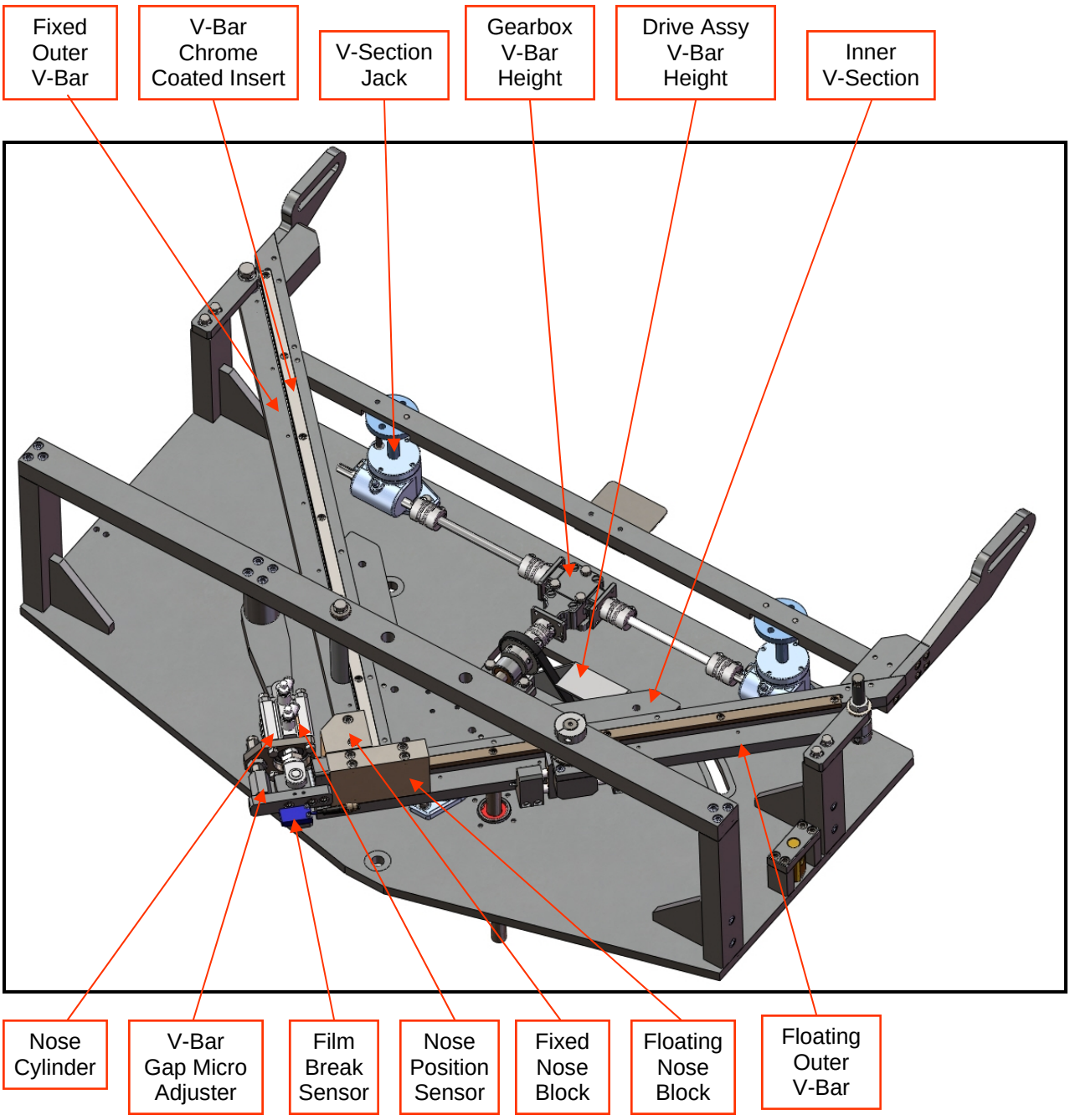

Top Access Door Removed for Clarity

(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

## V-Section Assembly Overview (Cont)

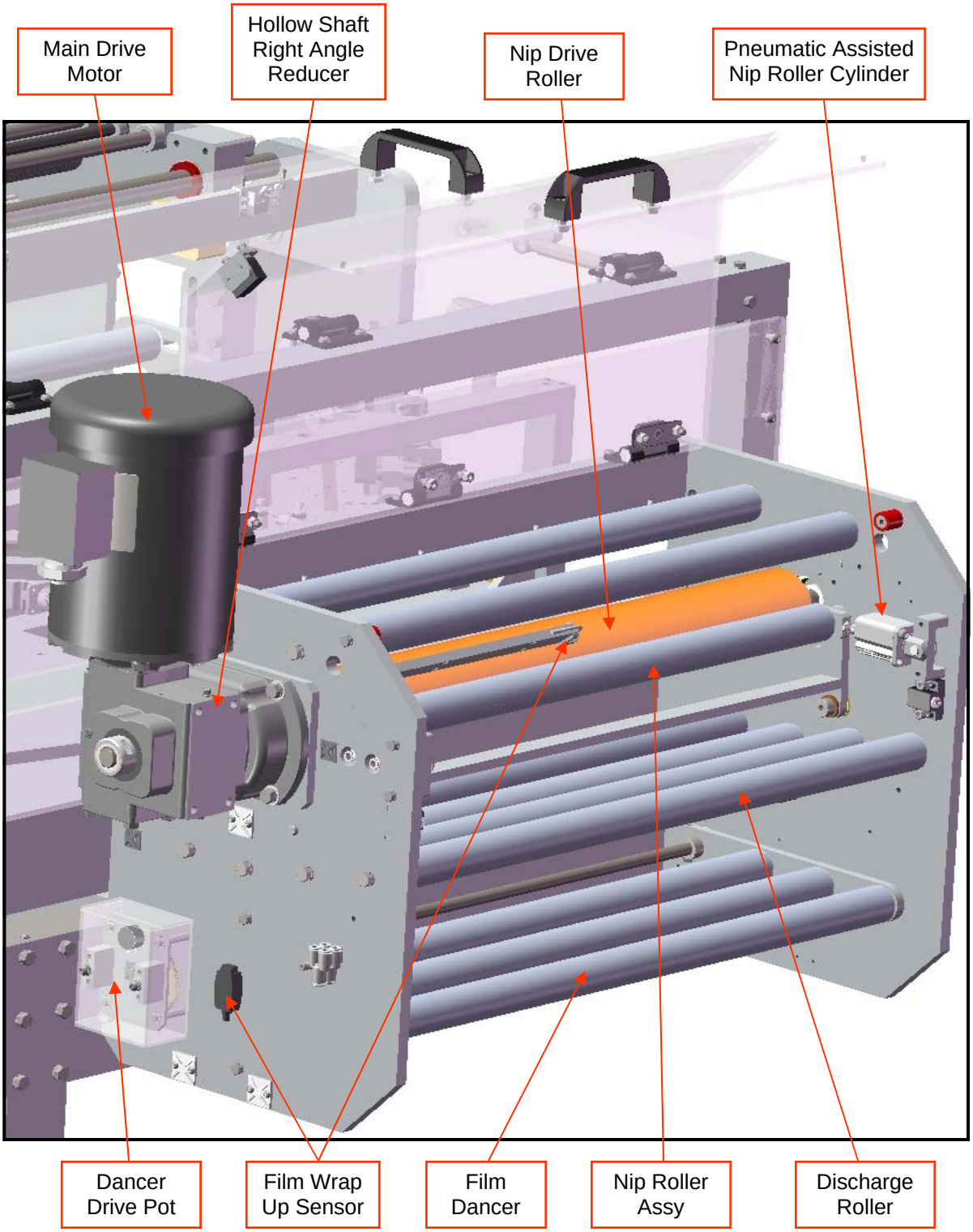
## Nose Detail




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

## Powered Nip Drive Assembly Overview




(Left Hand - Right-to-Left Film Flow applicator shown)

# FILM / FEATURE DELIVERY SYSTEM

## Teartape Loading and Threading

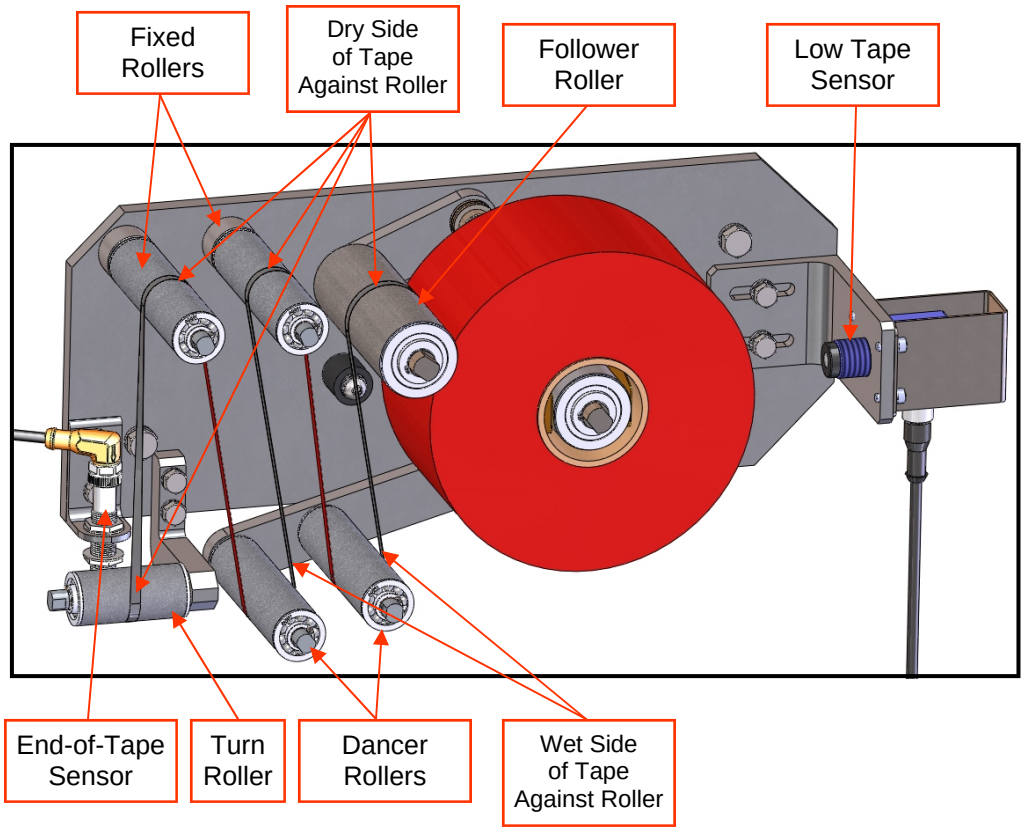
1. Mount the Teartape roll on the tape mandrel. Thread the tape around the Follower Roller, be sure that the **non-adhesive** *(Dry)* side against the surface of the roller (see below).
2. Next, thread the Teartape according to the Teartape Film Flow by wrapping the tape around the "serpentine" path of the dancer rollers and the fixed rollers (alternating roller contact between the **adhesive** (*Wet*) side (Dancer Rollers) and the *Dry* side (Fixed Rollers) without twisting the tape (see below)**.**

   **Note:** There is one additional roller when threading tape on the right side unwind (see below).
3. Next, thread the Teartape under the "V" Guide Roller (twist the Teartape so that *Dry* side is in contact with the roller — failure to comply shall cause excessive adhesive build-up on the roller) and follow tape treading procedure for Teartape Applicator (refer "Tear Tape Path "diagram).
4. Continue threading the Teartape according to the Teartape Tape Path diagram by wrapping the **non-adhesive** side around the next "V" roller.
5. Continue threading the Teartape, adding a twist whenever the tape changes direction according to the Teartape Tape Path diagram

   **Note: Whenever threading either Teartape or Sealtape around rollers, only metal rollers with textured coating, shall have the "Wet" (adhesive) side of the tape in contact with the roller.**

**DO NOT TOUCH THE SIDES OF THE TEARTAPE ROLL.**

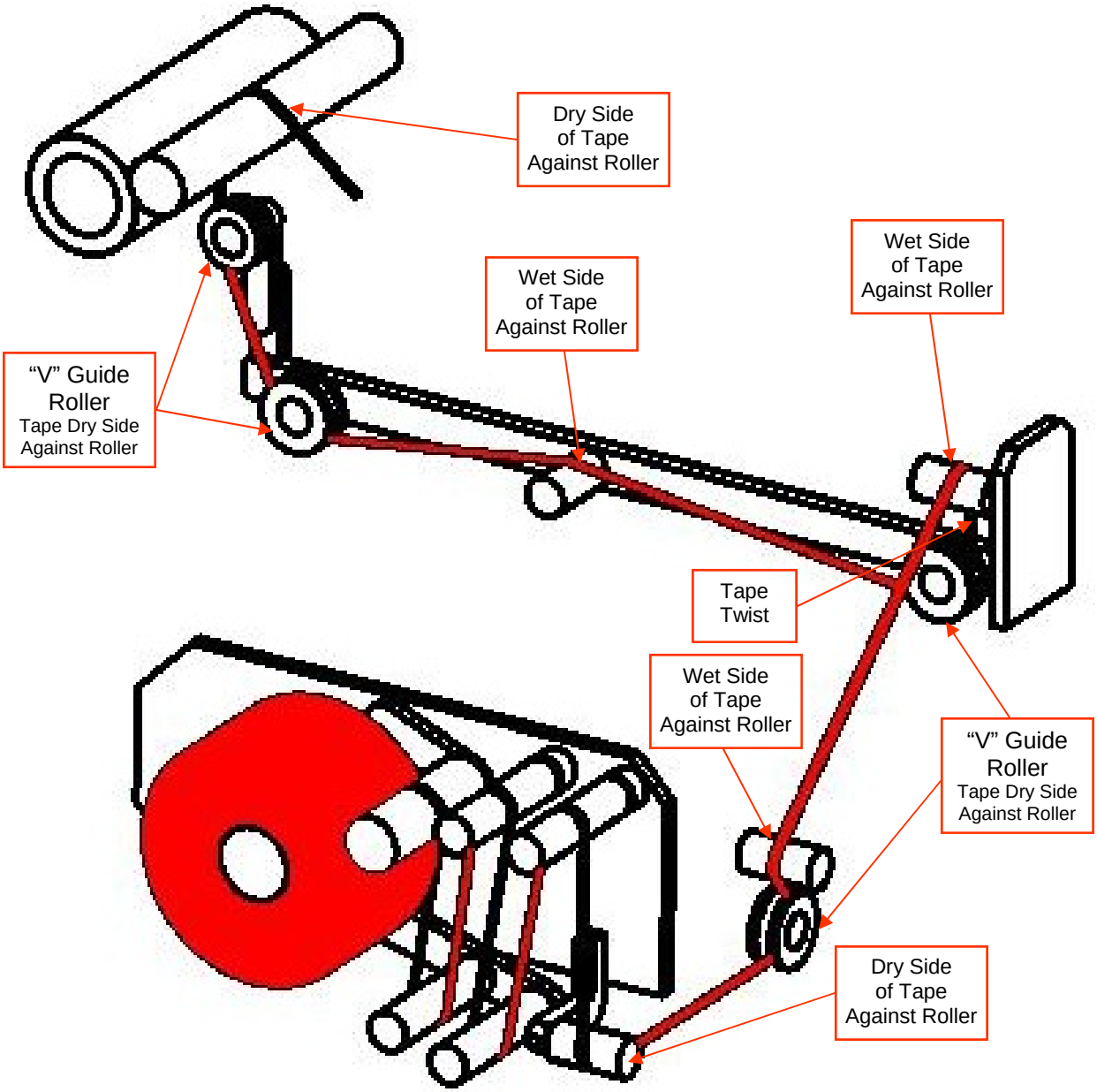
Teartape Unwind—Left Hand Machine



# FILM / FEATURE DELIVERY SYSTEM

## Teartape Loading and Threading (cont.)

Teartape Threading Diagrams (Left Hand Film Flow — LH machine)

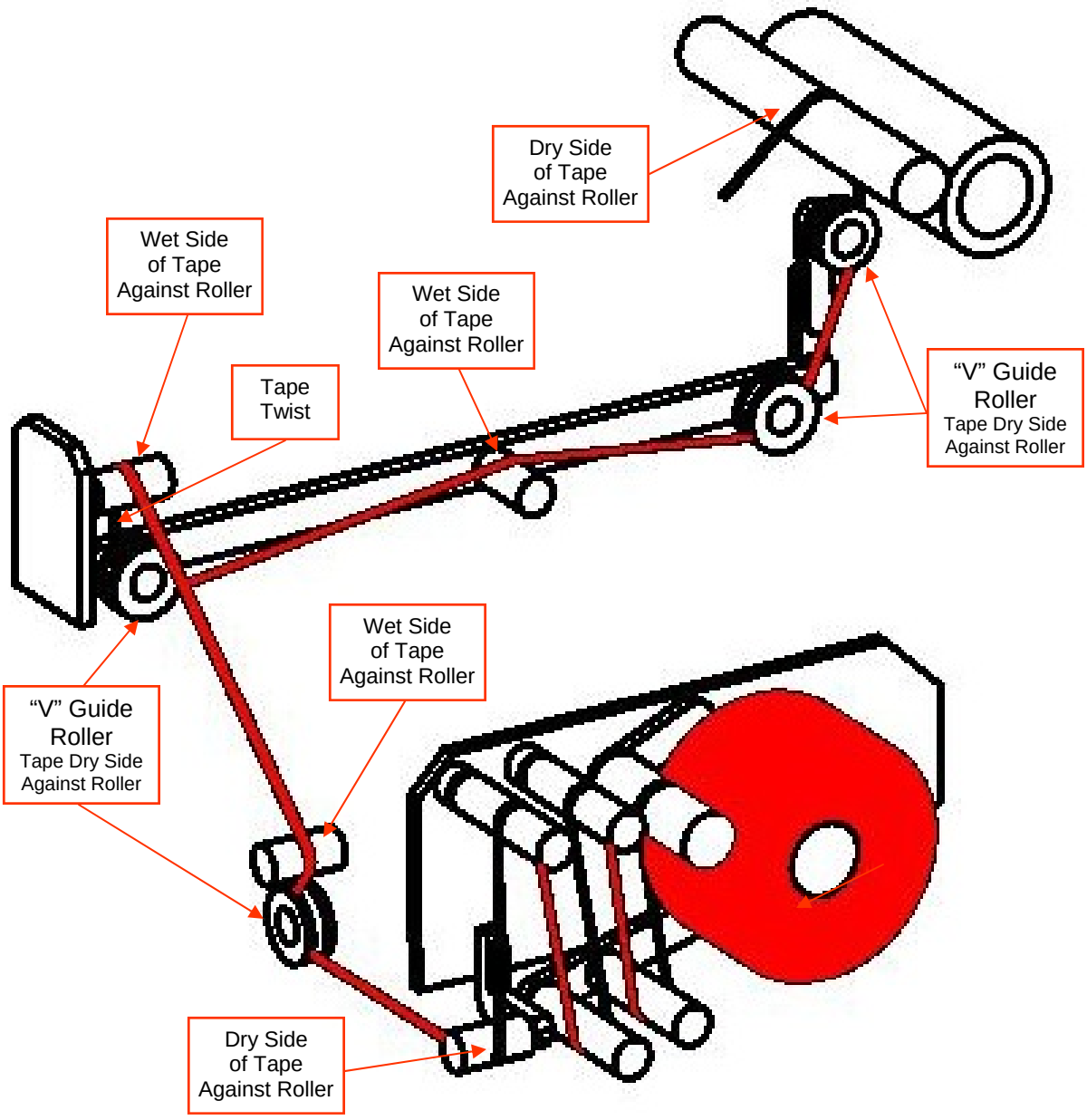



TEARTAPE TAPE PATH — LH machine

# FILM / FEATURE DELIVERY SYSTEM

## Teartape Loading and Threading (cont.)

Teartape Threading Diagrams (Right Hand Film Flow - RH machine)



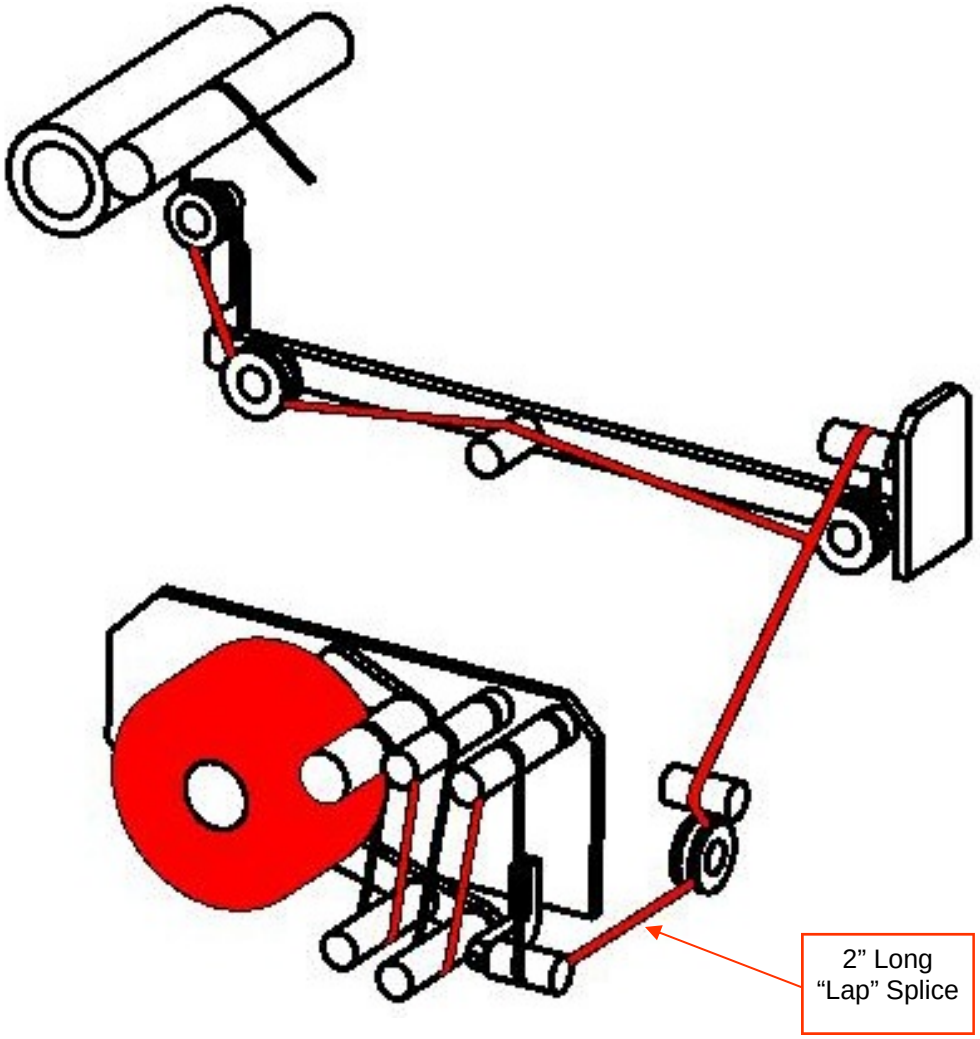

TEARTAPE TAPE PATH — RH machine

# FILM / FEATURE DELIVERY SYSTEM

## Teartape Splicing

1. Cut the Teartape at a convenient location after the Low Tape Sensor is “flagged”. Make sure to remove the section of Teartape, containing the metalized tape (used to flag the Low Tape Sensor).
2. Remove the empty core.
3. Load a new tape roll onto mandrel.
4. Thread the the Teartape through the Teartape Unwind according to the Teartape Loading and Threading procedure.
5. Splice the new tape onto the “old” tape using a “lap” (Wet side to Dry side) splice approximately 2” long.
6. Acknowledge the fault on the Operator Interface.
7. Run the wrapper and remove package with splice.

Teartape Splicing Diagrams (Left Hand Film Flow Shown for Clarity)



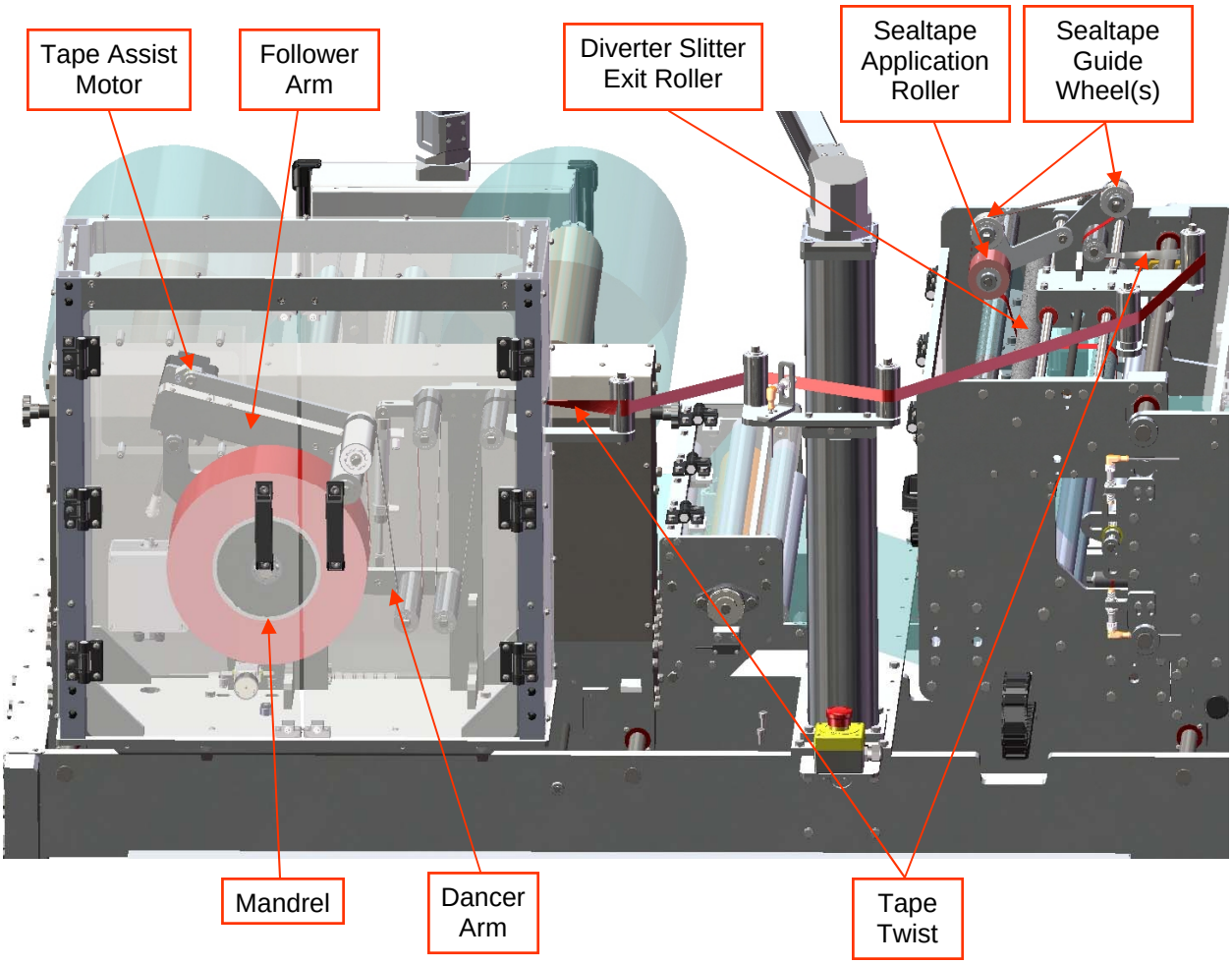
# FILM / FEATURE DELIVERY SYSTEM

## Sealtape Loading and Threading

1. Select Thread as the operating mode and press the *"Run"* pushbutton on the Operator Interface. This enables the tape assist motor which will run at a variable speed based on the dancer arm position.
2. Rotate the Sealtape applicator follower arm upward.
3. Load Sealtape onto mandrel according to diagram.
4. Lower the follower arm to rest on the Sealtape roll.
5. Slowly lift the dancer arm until the tape assist motor begins to run and pull 12" of the Sealtape.
6. Release dancer arm and continue to thread tape according to Sealtape Tape Flow diagram.
7. Once you reach the Sealtape Application Roller delivery roller make sure that the non-adhesive side of the tape is facing upward.
8. Lift the Sealtape Roller assembly and apply the Sealtape to the film pressing against the Diverter/ Slitter Exit Roller.
9. Gently lower the Sealtape Roller Assembly onto the Sealtape and make sure the non-adhesive side of the tape is wrapped under the Sealtape guide wheel.
10. Once threading is complete, press the *"Stop"* pushbutton on the Operator Interface

**NOTE:** Pay close attention to the threading of the adhesive area of the Sealtape on the correct rollers.

**DO NOT TOUCH THE SIDES OF THE SEALTAPE ROLL.**

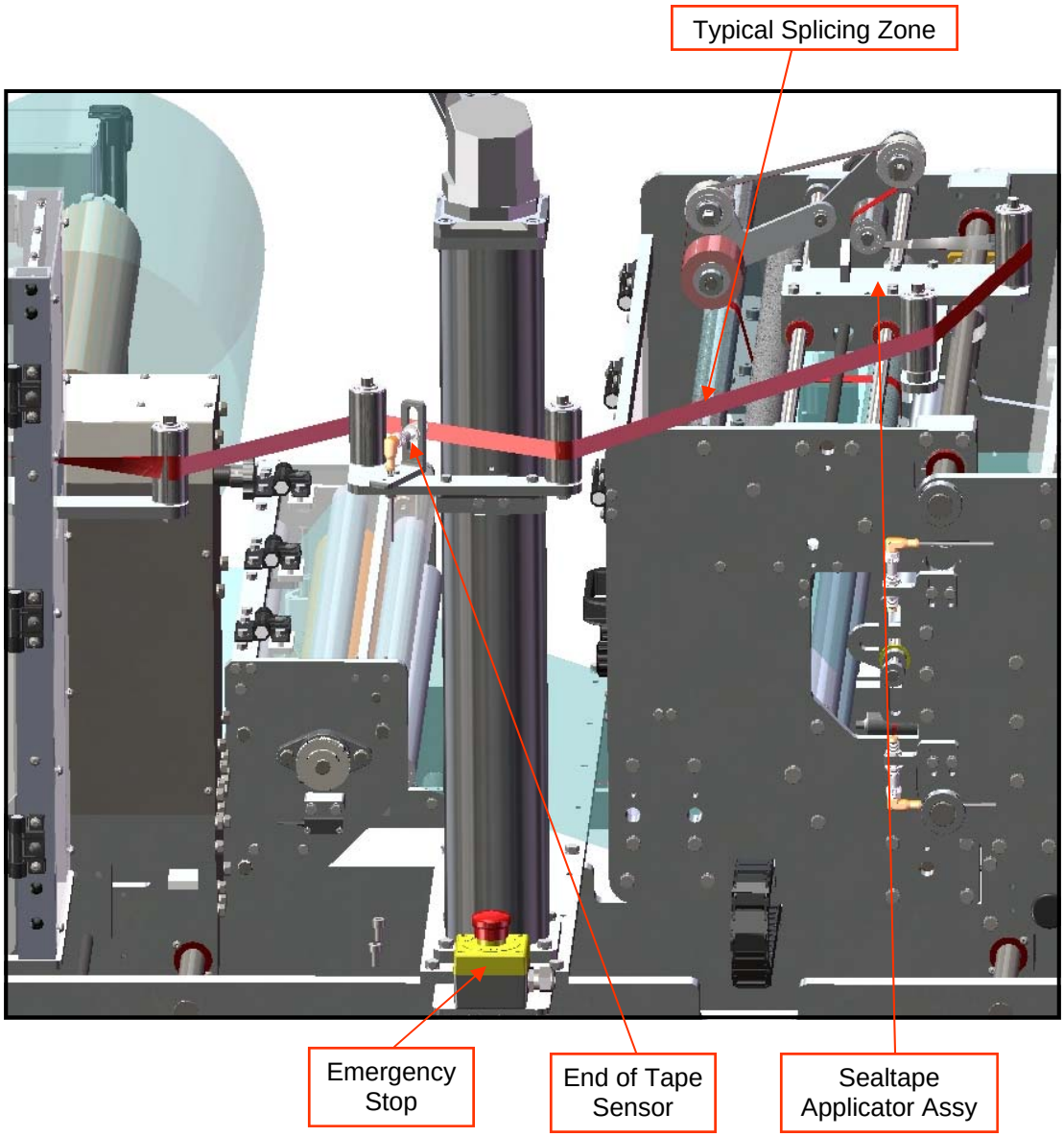



**NOTE**: Red indicates *Dry* side of Sealtape. Black indicated *Wet* side of Sealtape.

# FILM / FEATURE DELIVERY SYSTEM

## Sealtape Splicing

1. Cut Sealtape and “park” on convenient surface. Make sure to remove section of Sealtape containing the metalized “splicing” taped (used to “flag” the End of Film Sensor).
2. Lift follower roller upward.
3. Remove empty core.
4. Load new tape roll onto mandrel.
5. Lower follower roller to rest on tape roll.
6. Thread the Sealtape and overlap previous end by 2”, placing the NEW end over the OLD end.
7. Mark this area of the tape with a permanent ink marker.
8. Acknowledge the fault on the Operator Interface.
9. Run the wrapper and remove package with splice.

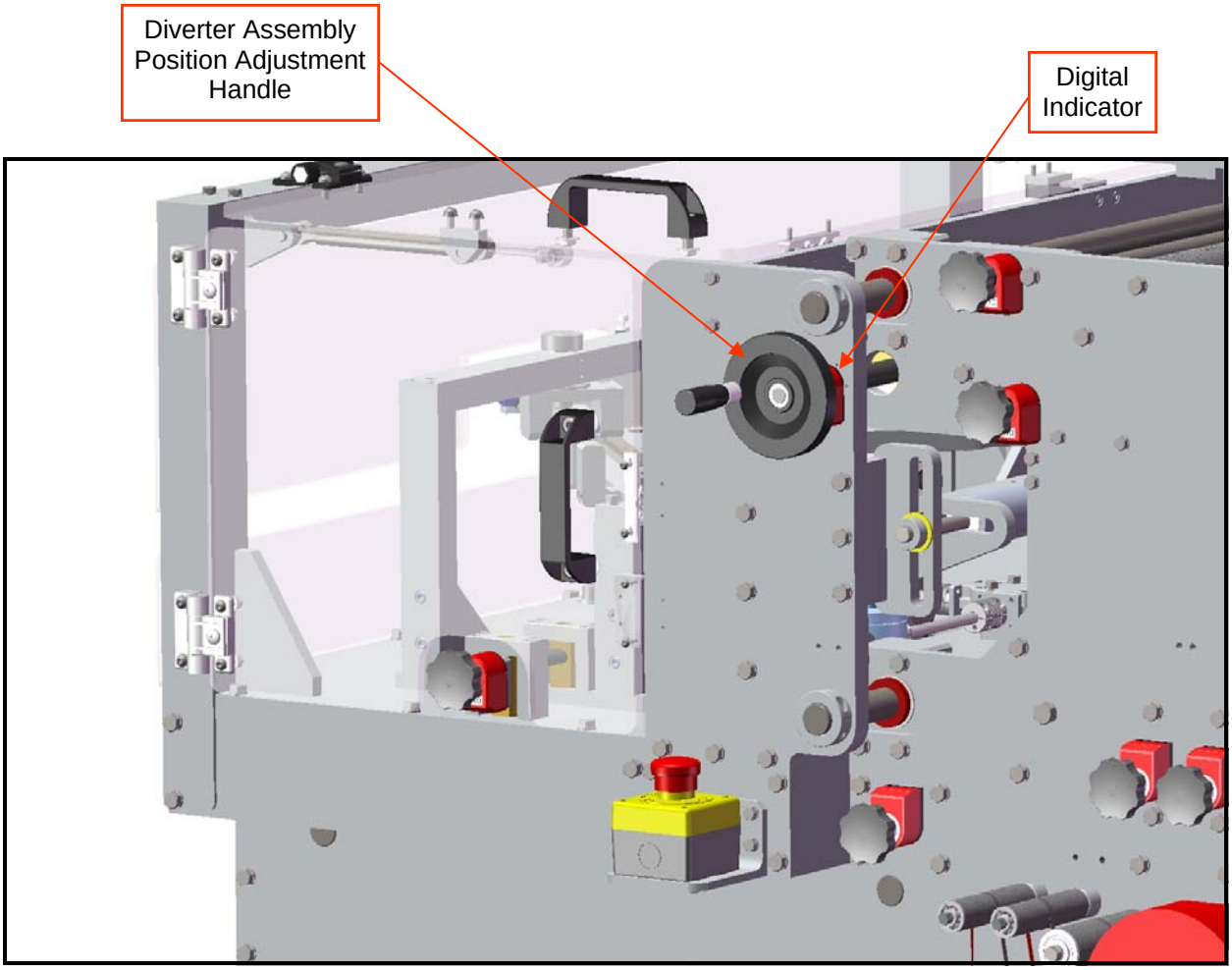


# ADJUSTMENTS

## Diverter Position Adjustment

- The Diverter Assembly Position Adjustment positions the Slot, Sealtape, Teartape, and Perforation in unison across the film web
- Position the Diverter Assembly to place the feature in the desired location on the film web.
- There is a total operating range of 5”; allowing the slot to be positioned <2” either side of the feature.
- The Diverter Assembly Position Adjustment Handle is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.

(Note: The diverter Assembly will move separately and/or in unison with the V-Section)



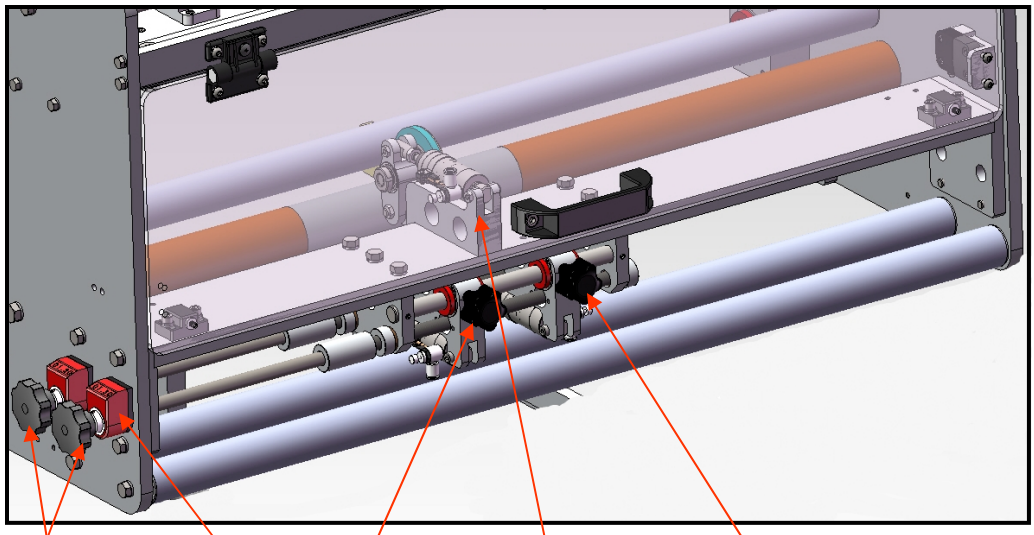

**Note: Film should be moving through the Sealtape Applicator during all adjustments.**

# ADJUSTMENTS

## Slitter Blade and Perforator Position Adjustment

- To adjust the position of the Slitter Blade/Perforator Assembly, turn the Slitter Adjustment Knob to move the assembly perpendicular to the direction of film travel. The Slitter Blade/Perforator Position Adjustment Handle is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.
  **NOTE:** Slitter blade position is preset at assembly, and should never need adjustment.

- To adjust the position of the Perforating Assemblies: Loosen the appropriate locking nut, then turn the Perforator Adjusting Knob until the desired position has been achieved. Retighten the locking nut.
- The Slitter Blade is a crush-cutter that is applied to the film to produce a perforation. The amount of force applied to the crush cutter is varied via the Film Slitter Air Pressure Regulator. This regulator is adjusted to 18 PSI for a new cutter and adjusted in 1 to 2 PSI increments so that the minimum amount of pressure is applied to create a good perforation in the film. To adjust, first make sure the slitter solenoid is activated, then pull the regulator knob up and rotate the knob to increase or decrease air pressure. A digital air pressure gauge is located on the rear of the pneumatics plate.
- The Perforator is a crush-cutter that is applied to the film to produce a perforation. The amount of force applied to the crush cutter is varied via the Perforator Air Pressure Regulator. This regulator is adjusted to 18 PSI for a new cutter and adjusted in 1 to 2 PSI increments so that the minimum amount of pressure is applied to create a good perforation in the film. To adjust, first make sure the perforator solenoid is activated, then pull the regulator knob up and rotate the knob to increase or decrease air pressure. A digital air pressure gauge is located on the rear of the pneumatics plate.

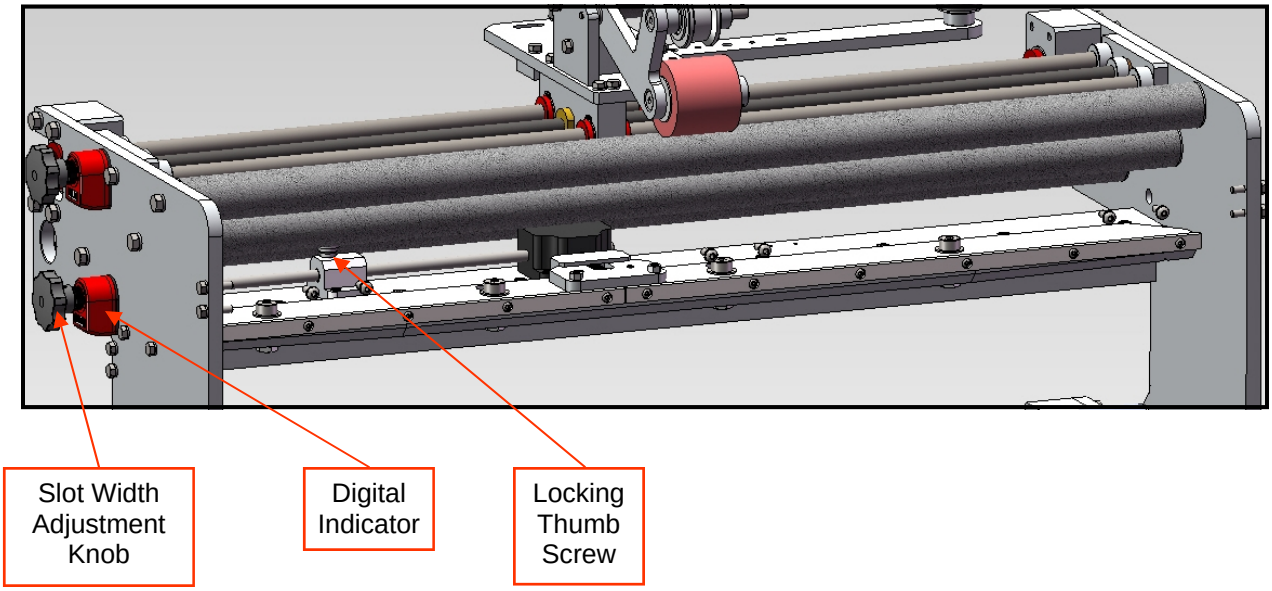



**Note: Film should be moving through the Sealtape Applicator during all adjustments.**

# ADJUSTMENTS

## Slot Width Adjustments

- Width of slot should be set to approximately ¼”  (+1/16 - 0)
- To adjust the slot width:
- Loosen the Locking Thumb Screw.
- Turn the Slot Width Adjustment Knob to achieve the proper position.  The Slot Width Adjustment Knob is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.
- Retighten the Locking Thumb Screw.

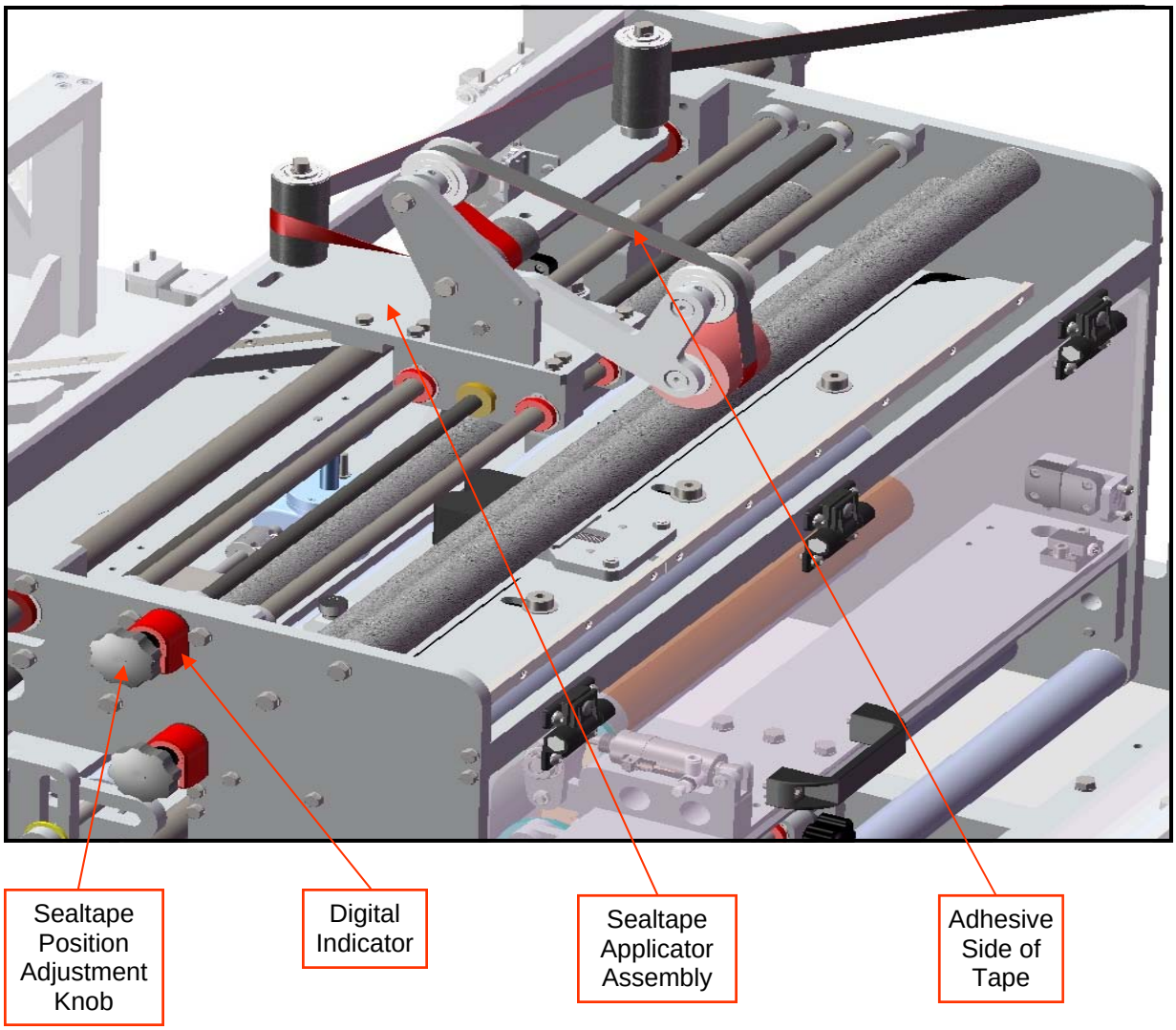



**Note: Film should be moving through the Sealtape Applicator during all adjustments.**

# ADJUSTMENTS

## Sealtape Position Adjustments

- The Sealtape Positioning should center the tape over the slot. Typical slot width is 1/4" (+/- 1/16")
- Turning the Sealtape Position Adjustment Knob, moves the Sealtape Applicator Assembly perpendicular to the film direction of flow
- Sealtape should be equal on either side of the slot
- The Sealtape Position Adjustment Knob is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.

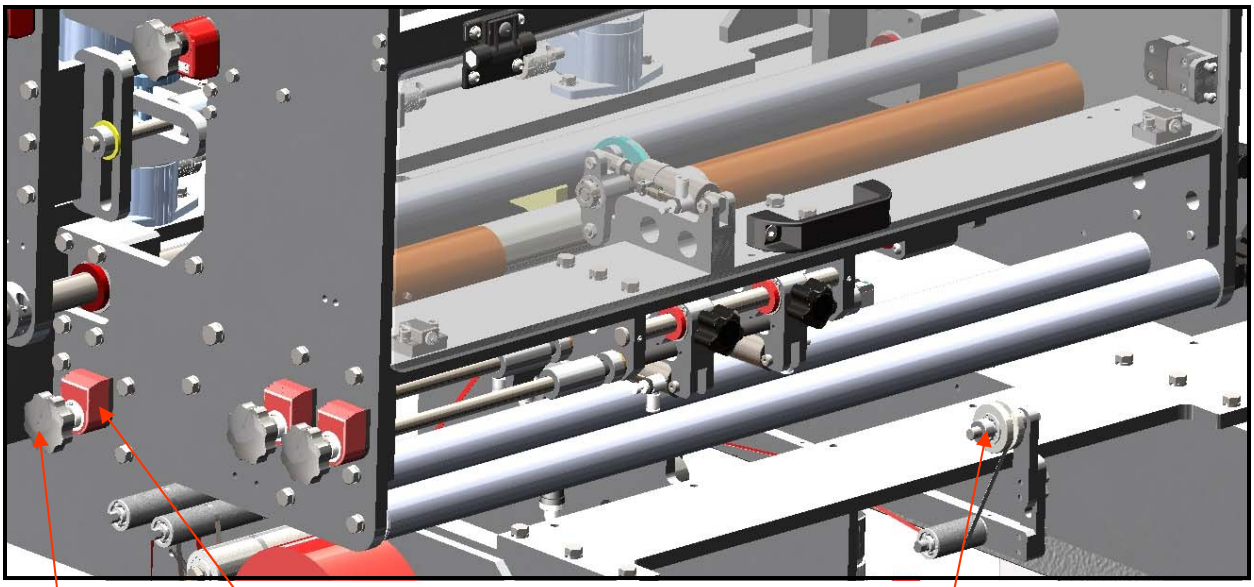



**Note: Film should be moving through the Sealtape Applicator during all adjustments.**

# ADJUSTMENTS

## Teartape Position Adjustment

- The Teartape Position should be at adjacent to the fold line of the feature. Exact location to be determined by the package recipe .
- Turning the Teartape Position Adjustment Knob, moves the Teartape Applicator Assembly perpendicular to the film direction of flow
- The Tealtape Position Adjustment Knob is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.




**Note: Film should be moving through the Sealtape Applicator during all adjustments.**

# ADJUSTMENTS

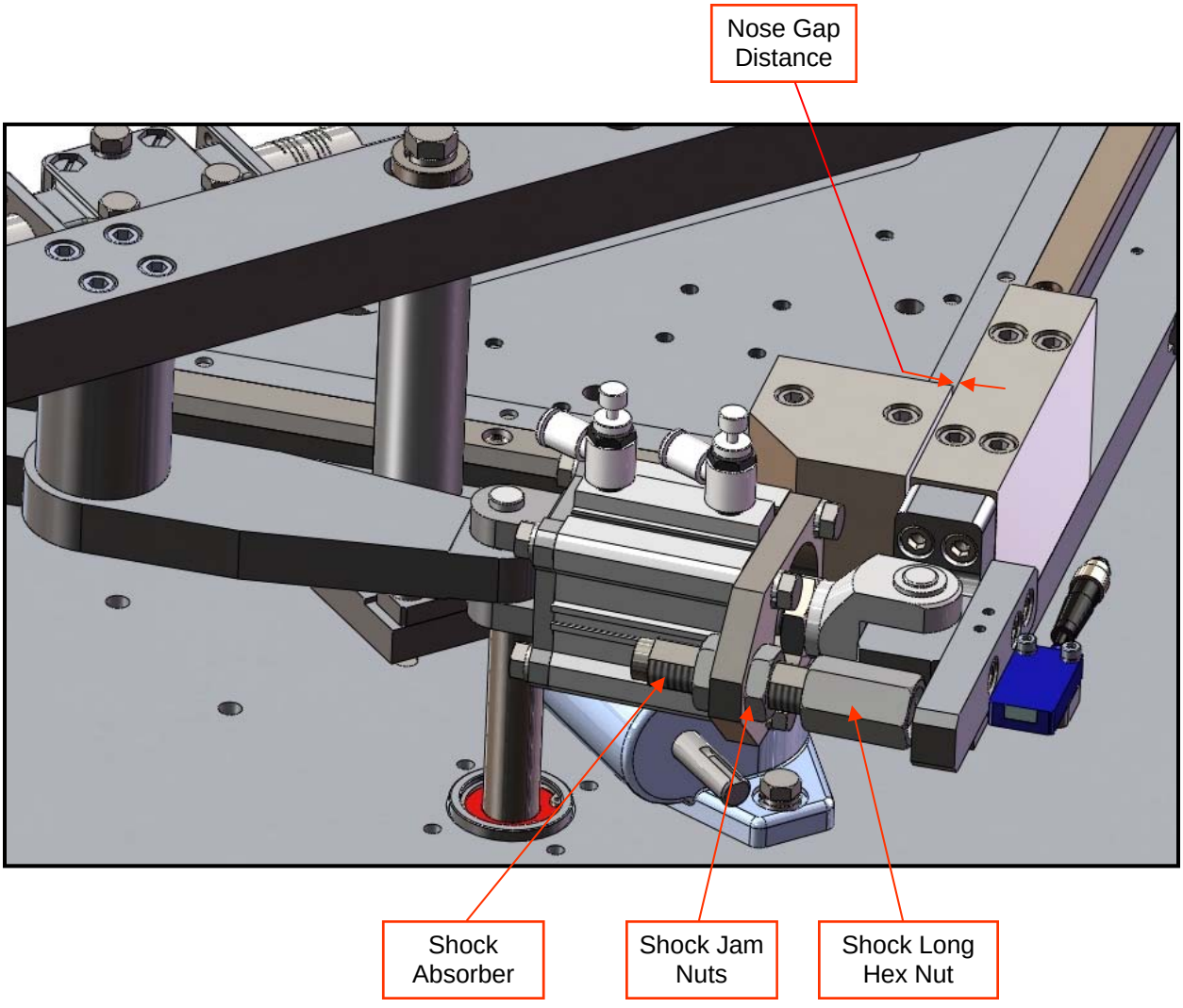
## V-Section Nose Gap Adjustment

- Adjust the “Shock Absorber” to achieve the desired gap when the cylinder is retracted.
- The ‘long” hex nut should be utilized to achieve the desired gap. Use the jam nuts to position the shock absorber, so that it is nearly fully compressed at the desired gap setting.

**Note**: Make sure that shock absorber is not “bottomed”. Premature failure may occur if shock is adjusted improperly.

- Typical Nose Gap Adjustment is 0.015” - 0.020”
- Secure jam nuts and “long” hex nut when proper adjustment has been achieved.

**Note:** Care must be taken when adjusting the folding bar nose gap. If the gap is too narrow the film will not flow properly and the film may tear. If the gap is too large the feature may not form properly.



# ADJUSTMENTS

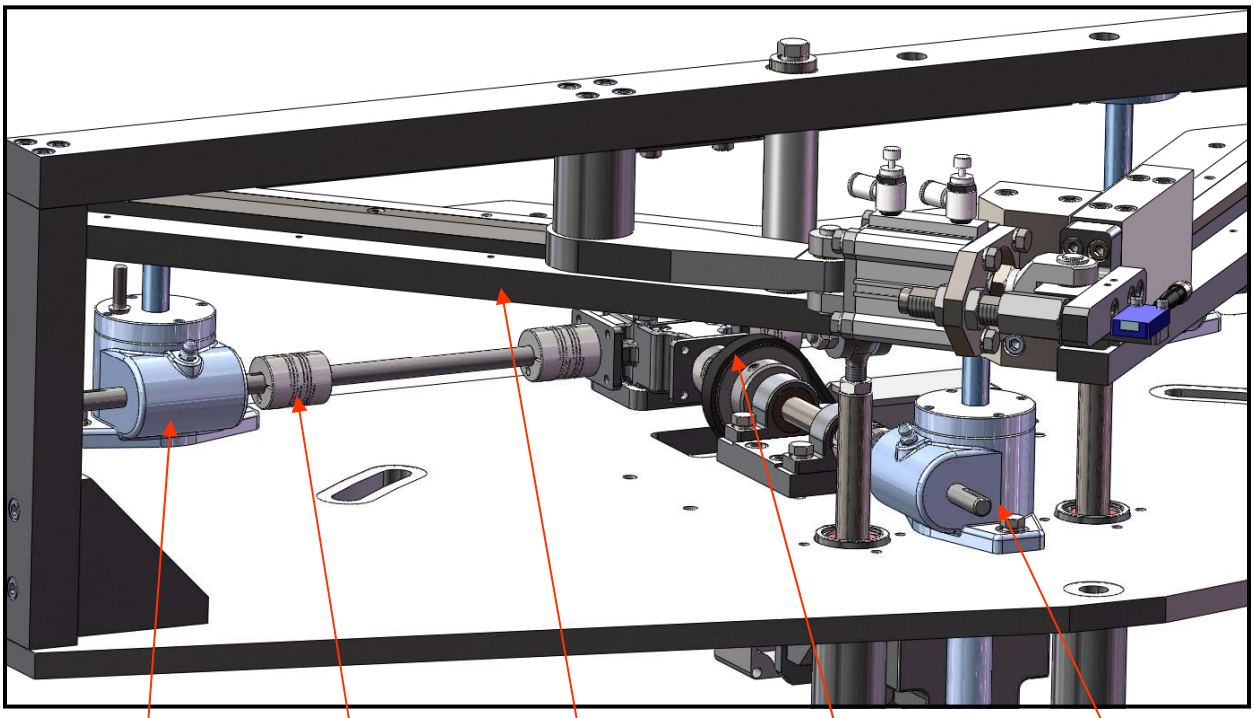
## V-Section (Feature) Height and Position Adjustment

### Height Adjustment

The V-Section/Feature height is factory set for each product, however the Feature Height can be increased or decreased while running by utilizing the Axis Jog screen on the Operator Interface. The adjustment, when activated, allows the user to manually operate the drive motor for the (3) jack assemblies supporting the V-Section. The new setting can be stored for future use by personnel with access to the Operator Terminal Service screens. Refer to the Operator Interface Section of the Manual for details.

### Position Adjustment

The V-Section/Feature horizontal position is factory set for each product, however the Feature Position can be re-positioned across the film web while running by utilizing the Axis Jog screen on the Operator Interface. The adjustment when activated allows the user to manually operate the drive motor to position the V-Section carriage. The new setting can be stored for future use by personnel with access to the Operator Terminal Service screens. Refer to the Operator Interface Section of the Manual for details.



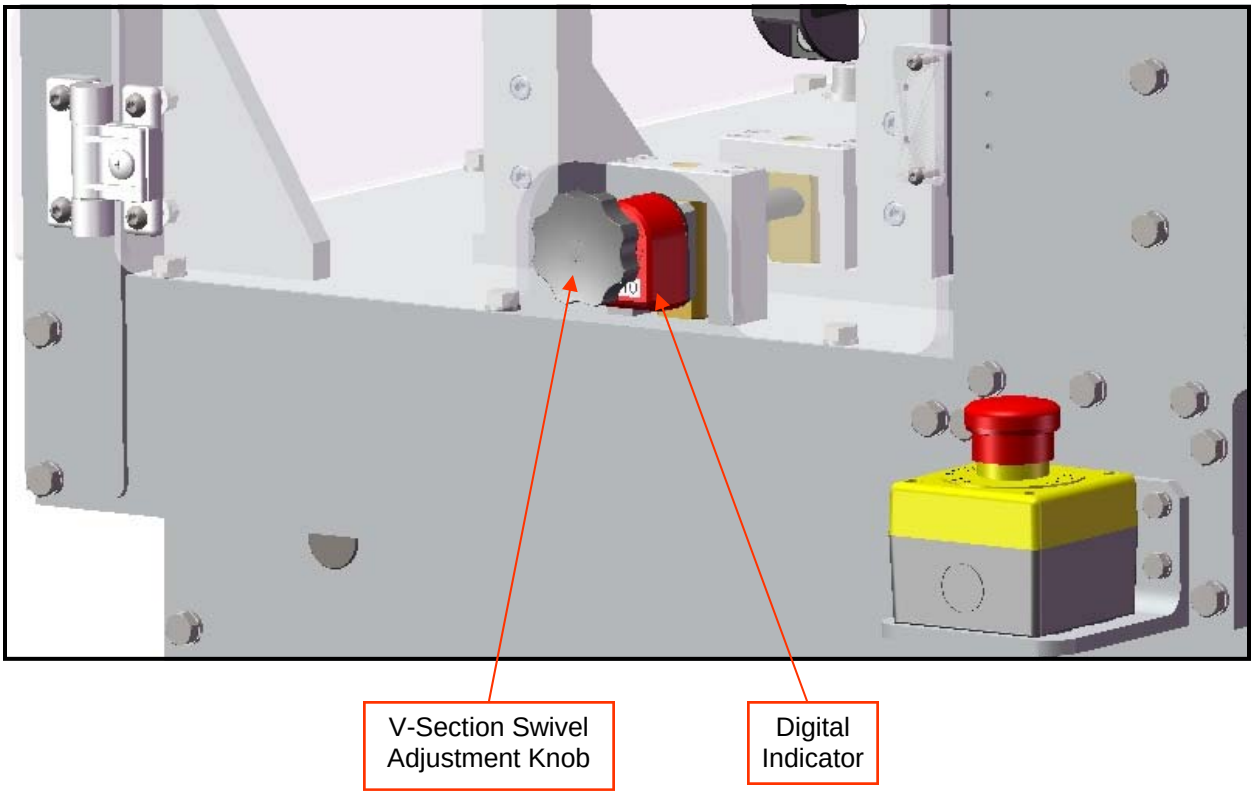
# ADJUSTMENTS

## V-Section Swivel Adjustment

The design of the Sealtape Applicator allows for the ability to rotate or swivel the entire V-Section of the converter.

- This feature is utilized to straighten the final appearance of the feature, by rotating the V-section to the film path.
- An indication of when the V-Section rotational adjustment is required, is the appearance of a twisting or spiral formation of the feature on the final package.
- To adjust the swivel: Turn the V-Section Swivel Adjustment Knob. CW swivels the V-Section "Nose" away from the operator. CCW swivels the V-Section "Nose" towards from the operator.
- The V-Section swivel is equipped with a digital indicator to allow for recording the setting on the Operator Interface on a per recipe basis.

*CAUTION: This adjustment should only be utilized by a highly trained technician, and is considered a pre-set factory calibration. It is recommended to consult with the factory prior to attempting to rotate or swivel the V-Section.*

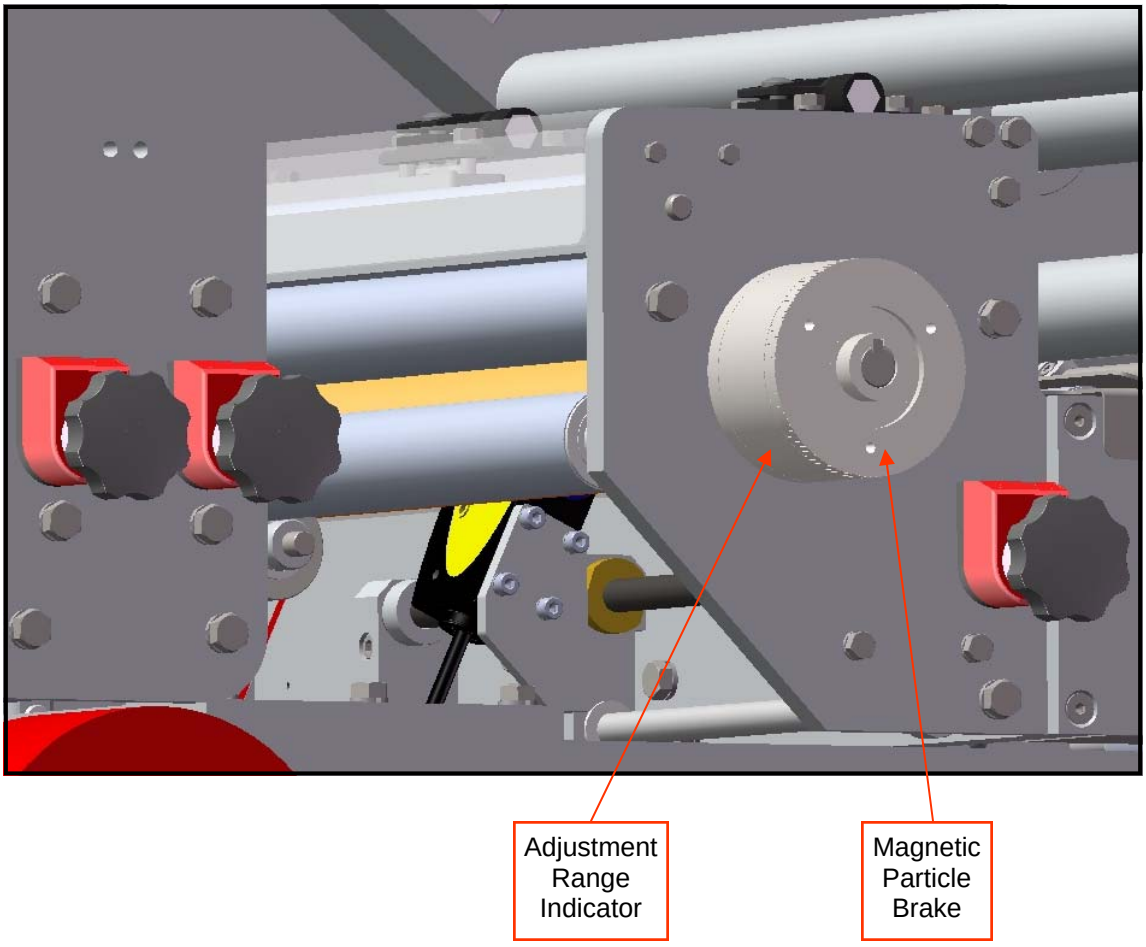


# ADJUSTMENTS

## Film Tension System Adjustment

Tension in the film system is applied via the Tension Brake. The Tension Brake is a magnetic particle brake that is attached to the brake nipped roller. In order for film to track smoothly through the Applicator, the minimum necessary tension should be used. MORE TENSION IS NOT BETTER. Lack of tension can cause: Miss-tracking, Wrinkles in fold, Slot width inconsistency. To adjust tension, the two screws are loosened around the perimeter and the outside knob is rotated. The higher the number pointed to on the brake scale, the higher the tension in the nipped roller. The brake value can vary greatly depending on the film being used. Too much tension can cause the film to break, while too little tension can cause the slot width to vary.

Adjustment to the film mandrel brake may also be necessary, in conjunction with a tension adjustment

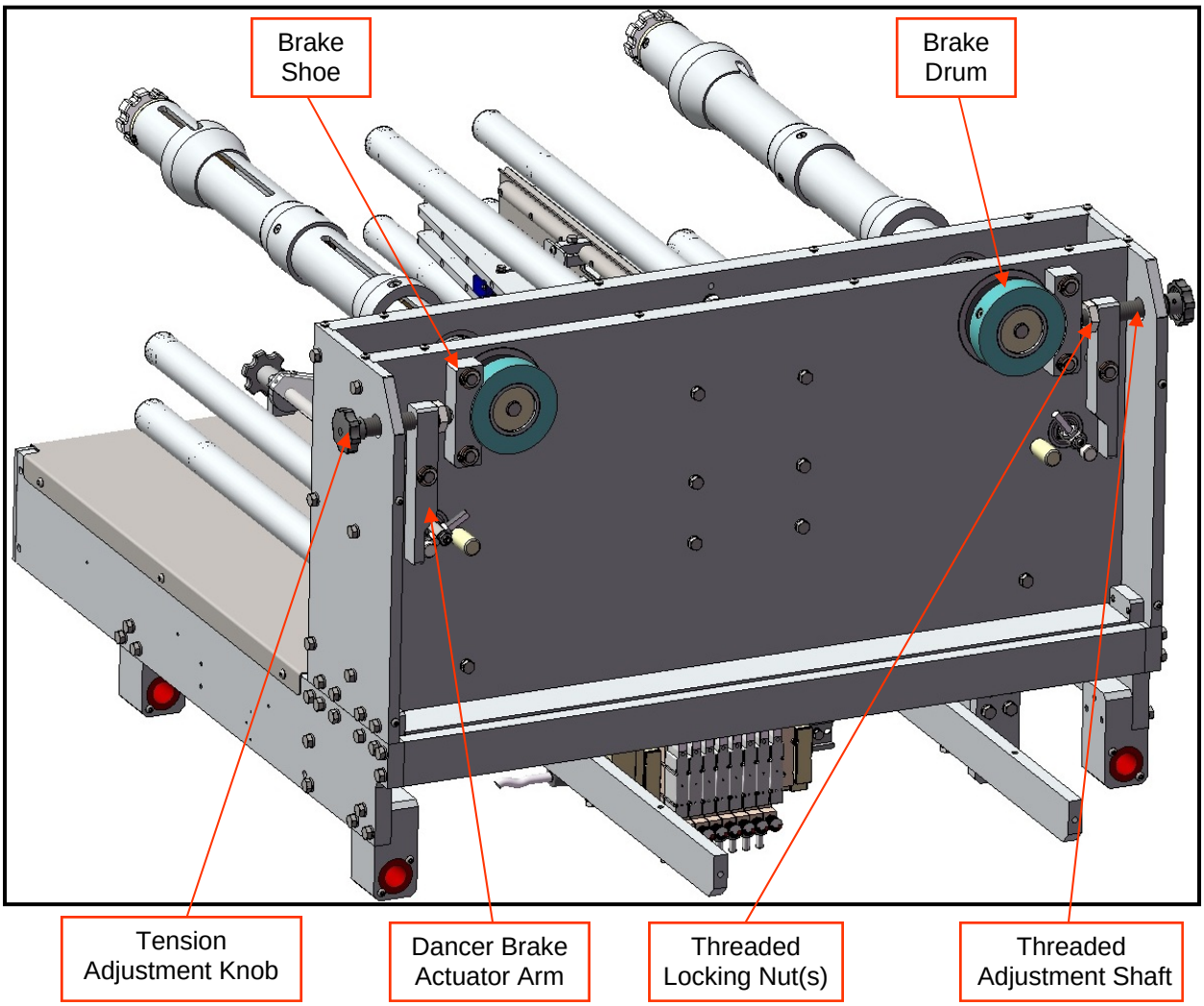


# ADJUSTMENTS

## Film Mandrel Brake Adjustment

The Film Mandrel employs a Dancer operated Brake system; the dancer operates a brake shoe that makes contact with the brake drum on the film mandrel. This serves to increase or decrease the braking tension force. The brake adjustment mechanism, contains a compression spring to assure that the brake shoe always is in contact with the brake drum. This assures smooth application of the braking force. The brake, when properly set-up, allows smooth control of the unwind without the film roll overplaying and leaving the film loose.

To Adjust the brake strap:
Remove Film Unwind Assembly/Brake Cover. Loosen the locking set screw, and tighten or loosen the nut. Secure set screw, and tighten locking nut. The dancer should not be completely vertical upon completion of the adjustment. It is recommended the dancer be 5° to 7° short of vertical for maximum



# ADJUSTMENTS

## Teartape Brake Strap Adjustment

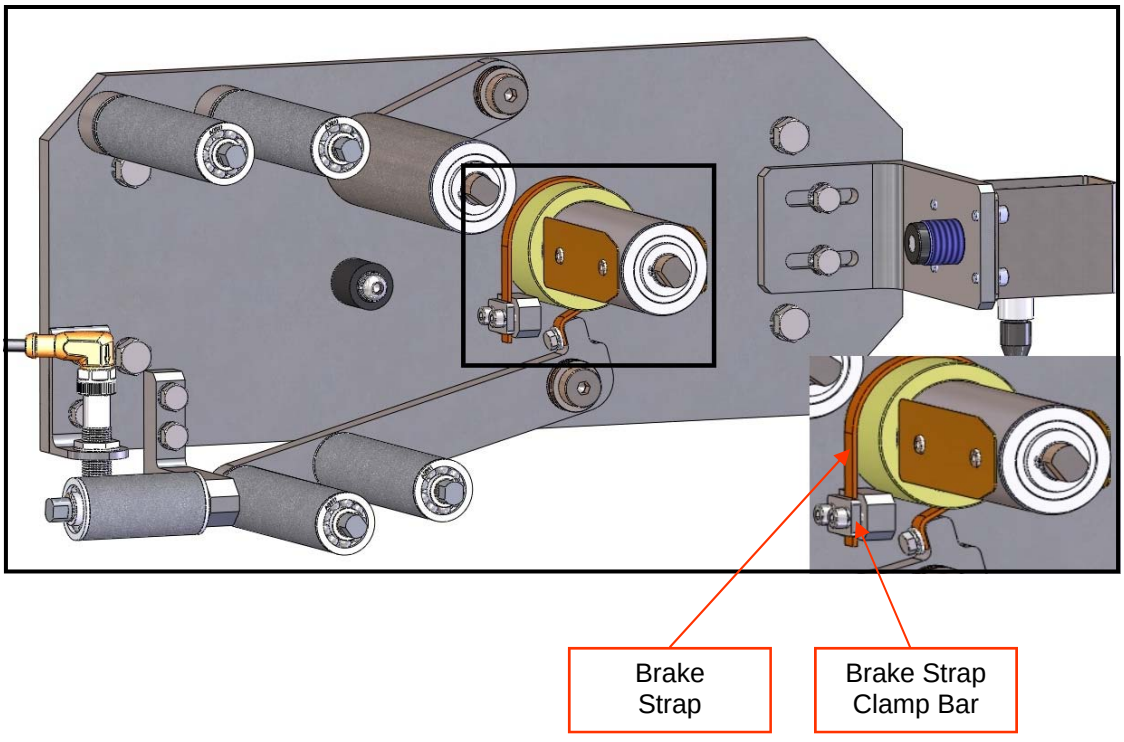
The function of the brake strap is to prevent over-running of the tape when the pull on the tape stops.

Viewing from the end of the tape mandrel, the location of the dancer roller is such that a light pull on the tape will advance the dancer roller and release the brake strap from the tape mandrel.

To shorten/lengthen the strap, loosen the two screws securing the *Brake Strap Clamp Bar* (shown in the photo below). Pull or push the strap to the length that allows the dancer to brake the core when it is in the up position but release easily when the dancer is depressed. Re-tighten the screws of the clamp cap.

To replace a broken or worn strap, remove the screw securing the fixed end through a hole in the end of the strap and also loosen the clamp cap as above. Use the spare brake strap from the spare parts kit and replace.

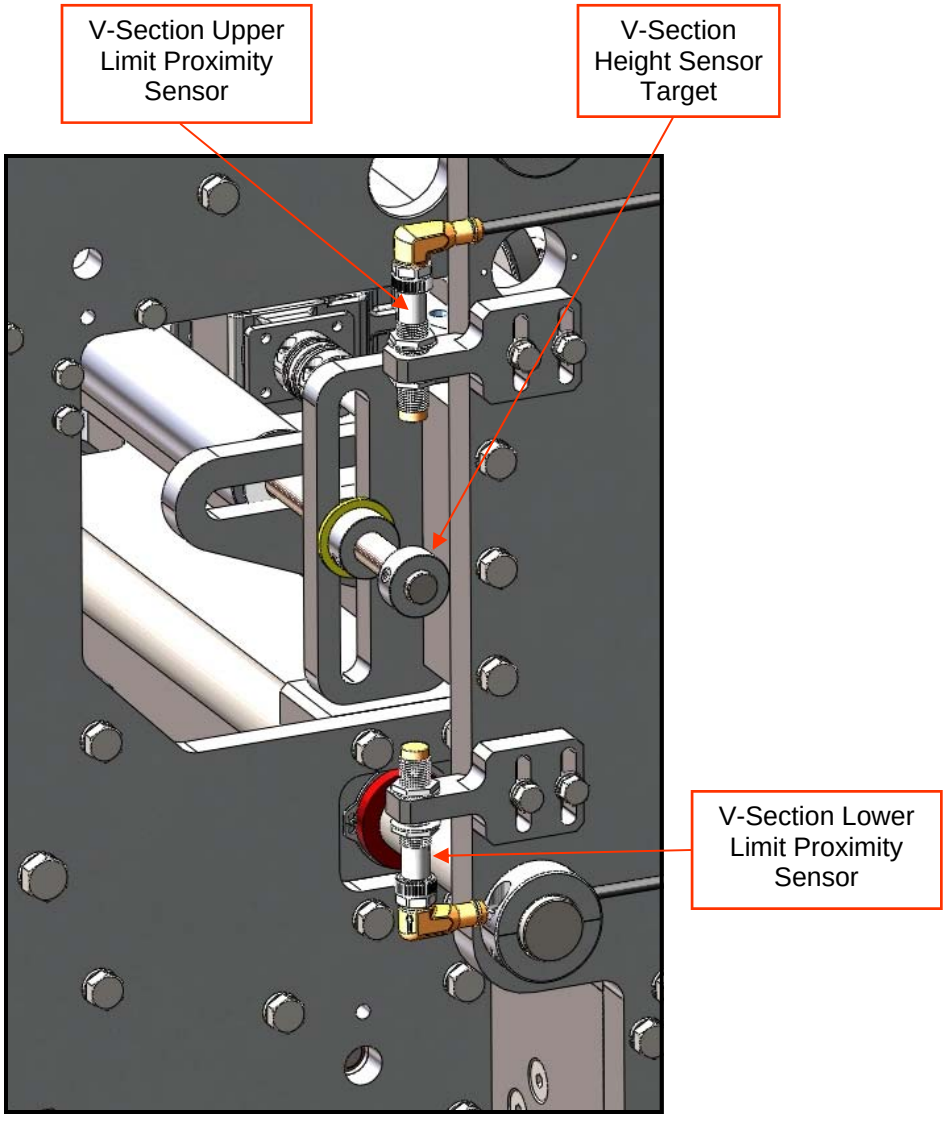
**Note:** Improper Brake Strap adjustment (too tight) may cause too much tension on the Tear-tape or cause the Teartape to "jump" while in production.
Too loose adjustment may cause the roll to "over spin" during machine stops



# SENSORS

## V-Section (Feature) Height Limit Sensors

The V-Section/Feature has two sensors that set the operational limits of the height of the V-Section of the Sealstrip Applicator. They are utilized to protect the equipment should there be a component failure or mis-adjustment of the V-Section height. The system contains both an upper and lower limit proximity sensor that are factory set.

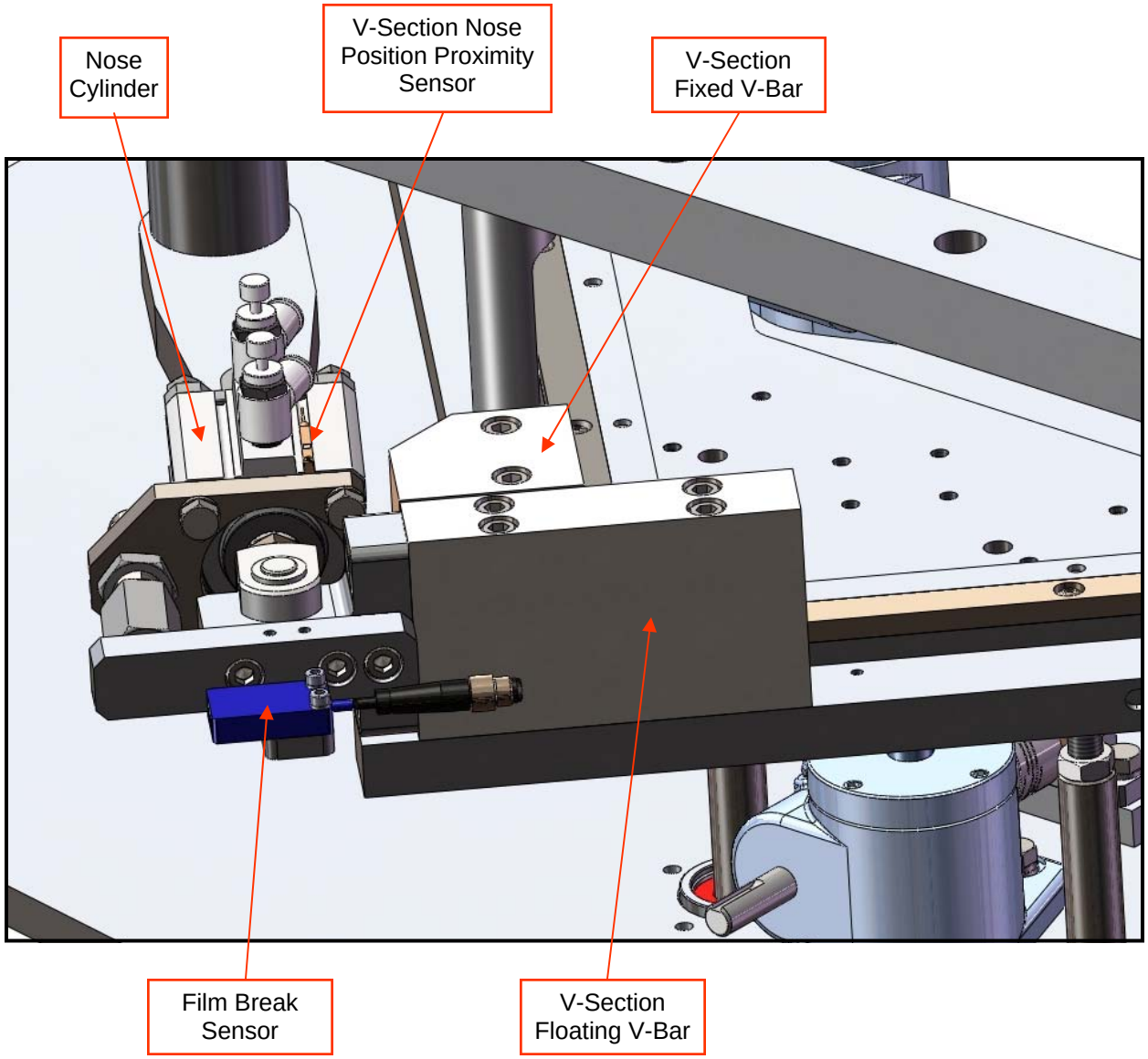


# SENSORS

## V-Section Nose Position Sensor

The V-Section contains a nose position proximity sensor and an ultrasonic Web Break sensor. The position sensor is for verification that the nose is closed when running and creating a feature. The film break sensor detects presence of film and will trigger an alarm if a splice breaks as it goes through the folding bars and film is no longer detected. The sensor positions have been factory set and should not be adjusted.

Film Break sensor LED Indicators
Green — ON when film ***NOT*** detected.
Amber — ON when film ***IS*** detected.

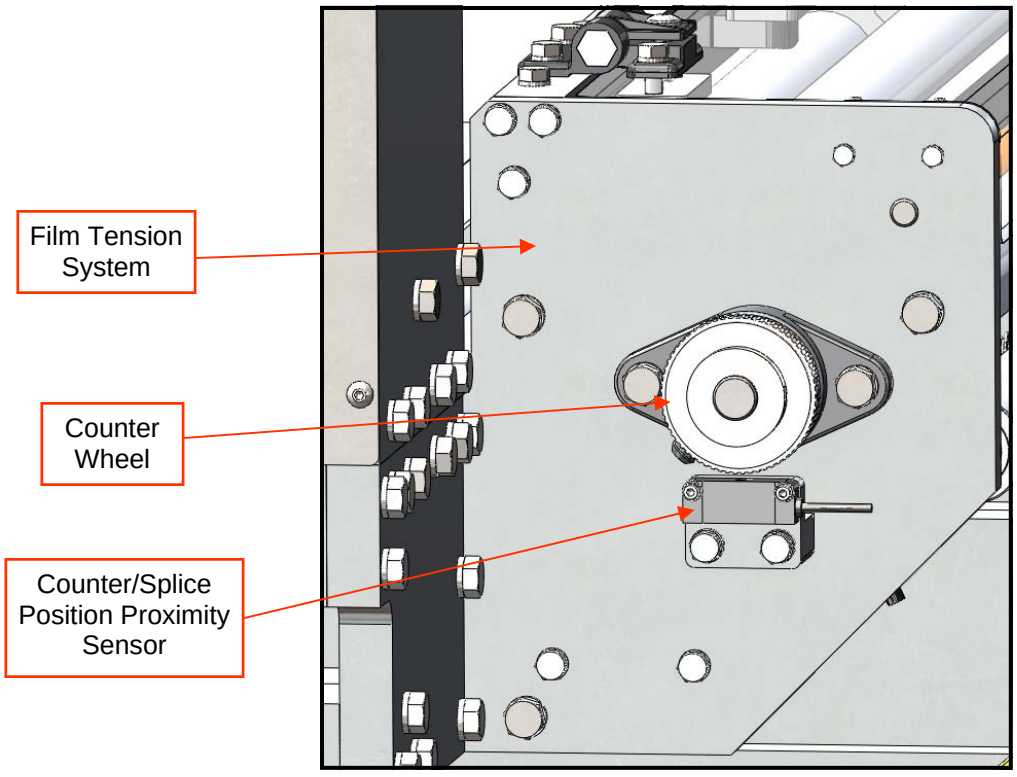


# SENSORS

## Counter/Splice Position Sensor

The Sealstrip Applicator is equipped with a Counter System to determine the position of the splice within the film path. The range of the proximity sensor is factory set. This sensor in conjunction with input from the operator via the Operator Interface, serves 2 purposes:

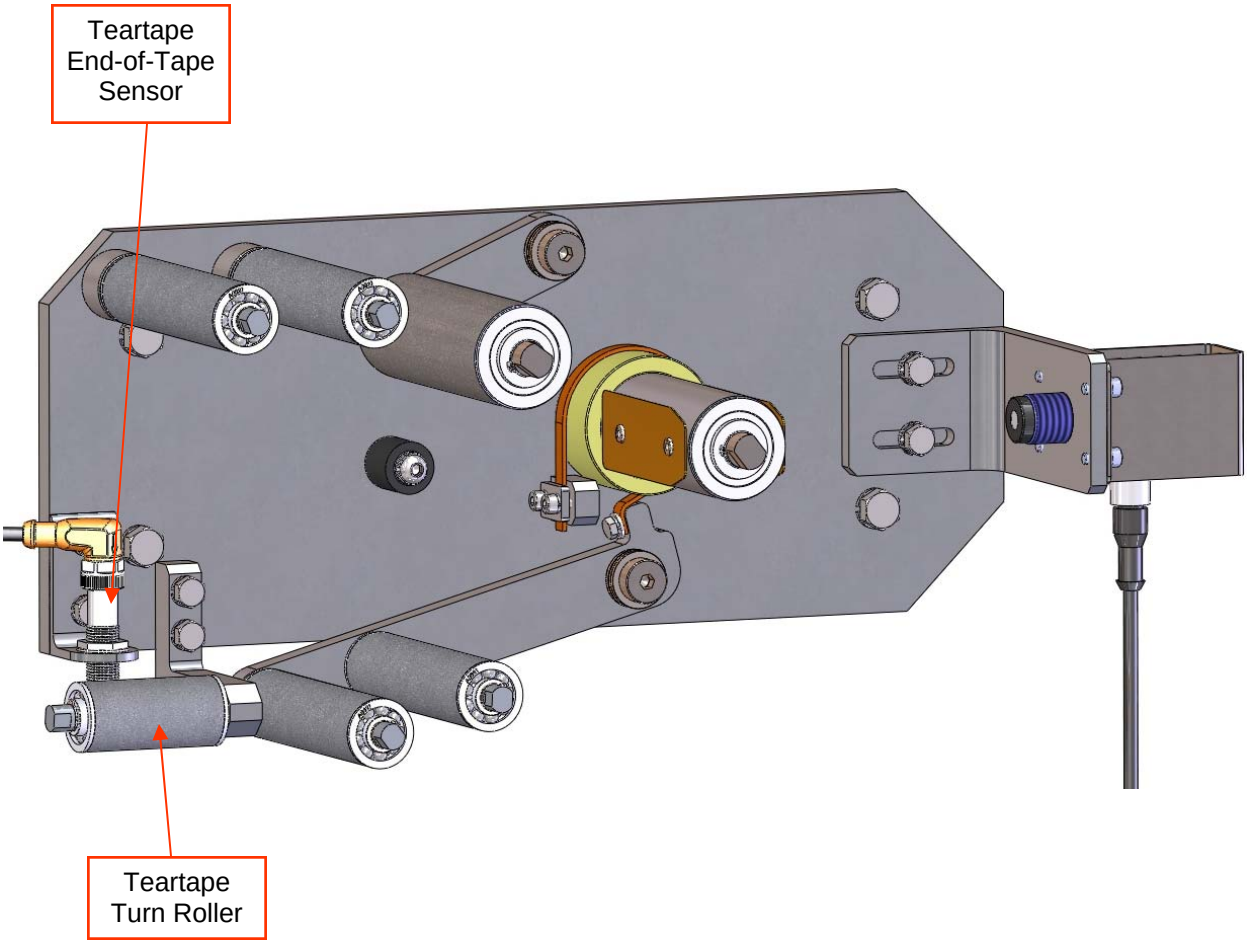
1. Triggering of a “Splice Made” signal to the parent wrapper when the splice has reached a predetermined position in the film path. This signal is used to initiate any automatic splice handling functions of the wrapper. After an operator has made a splice in the film he/she must push the SPLICE MADE button on the Operator Interface screen to activate this function.
2. Performs the “Pass Splice” sequence which determines the correct time to open and close the V-Section Nose to allow the film splice to pass. After an operator has made a splice in the film he/she must push the SPLICE MADE button on the Operator Interface screen to activate the sequence. The sequence allows the splice to pass through the V-Section without separating or jamming within the nose gap or V-bars. The “Pass Splice” control function can be enabled or disabled by personnel with access to the Operator Interface Service screens.



# SENSORS

## Teartape End-of-Tape Sensor

The Sealstrip Applicator is equipped with a Teartape End-of-Tape Sensor to sense when the roll of Teartape has reached the end. The rolls of Teartape are provided with an embedded metalized film strip, approximately 50 feet from the end of the roll. This metalized strip is sensed by the End-of-Tape sensor, which sends a signal to the control system to stop the converter before the roll ends. This allows the operator to splice the tape without the need to thread the tape through the system, thus reduce downtime for tape roll changes. The range of the sensor is factory set, typically 1-2mm from the Teartape.



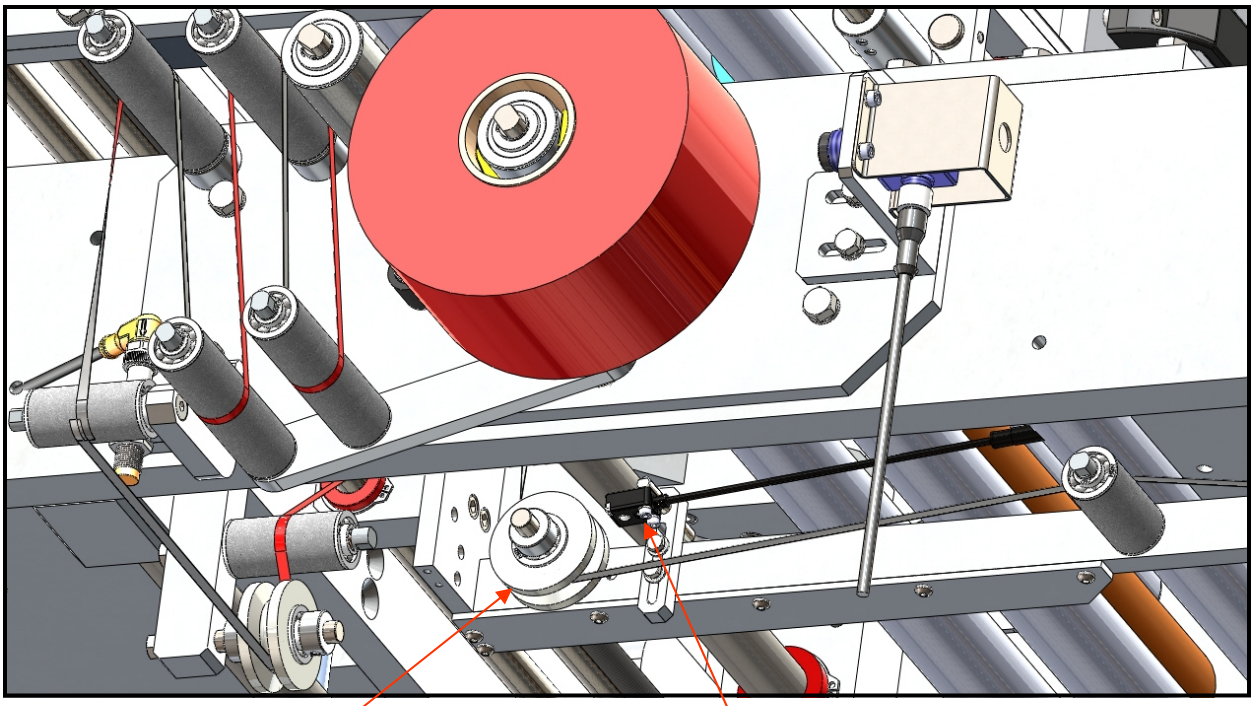
# SENSORS

## Teartape Missing-Tape Sensor

The Sealstrip Applicator is equipped with a Missing-Tape Sensor to sense presence of tape. The system provides feedback to the control system to initiate a Run Stop Alarm.
To adjust the Missing-Tape Sensor sensitivity:

1. Press and hold the adjustment pushbutton until the green LED flashes rapidly, indicating the sensor is at its maximum gain
2. Press the pushbutton briefly (click) to reduce the gain in single increments. This can be repeated up to 7 times until the lowest setting is reached.

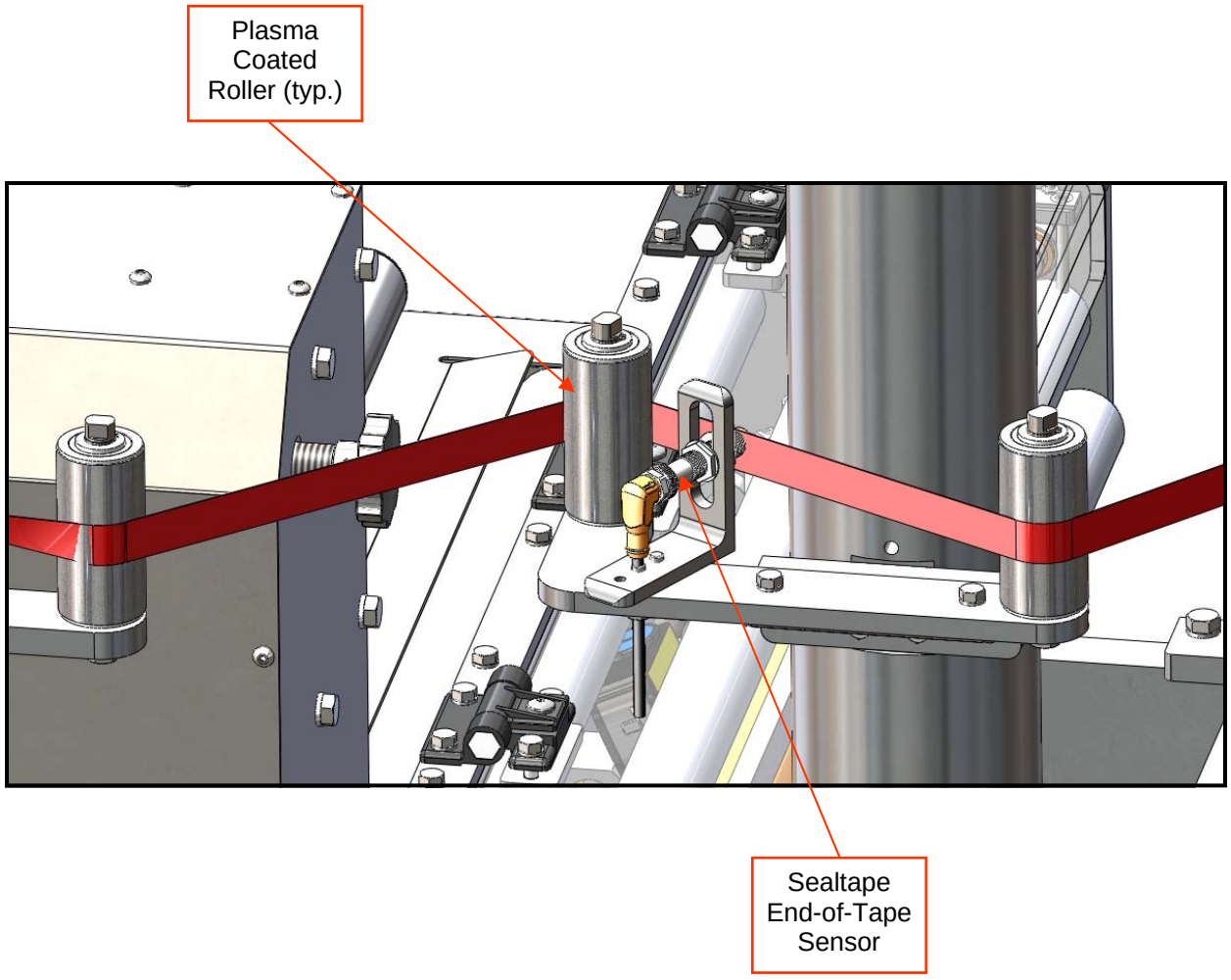
LED Indicators
Green ON steady: Power ON
Green 5 rapid flashes: maximum gain
Green single flash: pushbutton “click” registered, gain reduced by one increment
Yellow ON steady: light sensed
Yellow/Green alternating: minimum gain (can not reduce further)



# SENSORS

## Sealtape End-of-Tape Sensor

The Sealstrip Applicator is equipped with a Sealtape End-of-Tape Sensor to sense when the roll of Sealtape has reached the end. The rolls of Sealtape are provided with an embedded metalized film strip, approximately 50 feet from the end of the roll. This metalized strip is sensed by the End-of-Tape sensor, which sends a signal to the control system to stop the converter before the roll ends. This allows the operator to splice the tape without the need to thread the tape through the system, thus reduce downtime for tape roll changes. The range of the sensor are factory set, typically 1-2mm from the Sealtape.



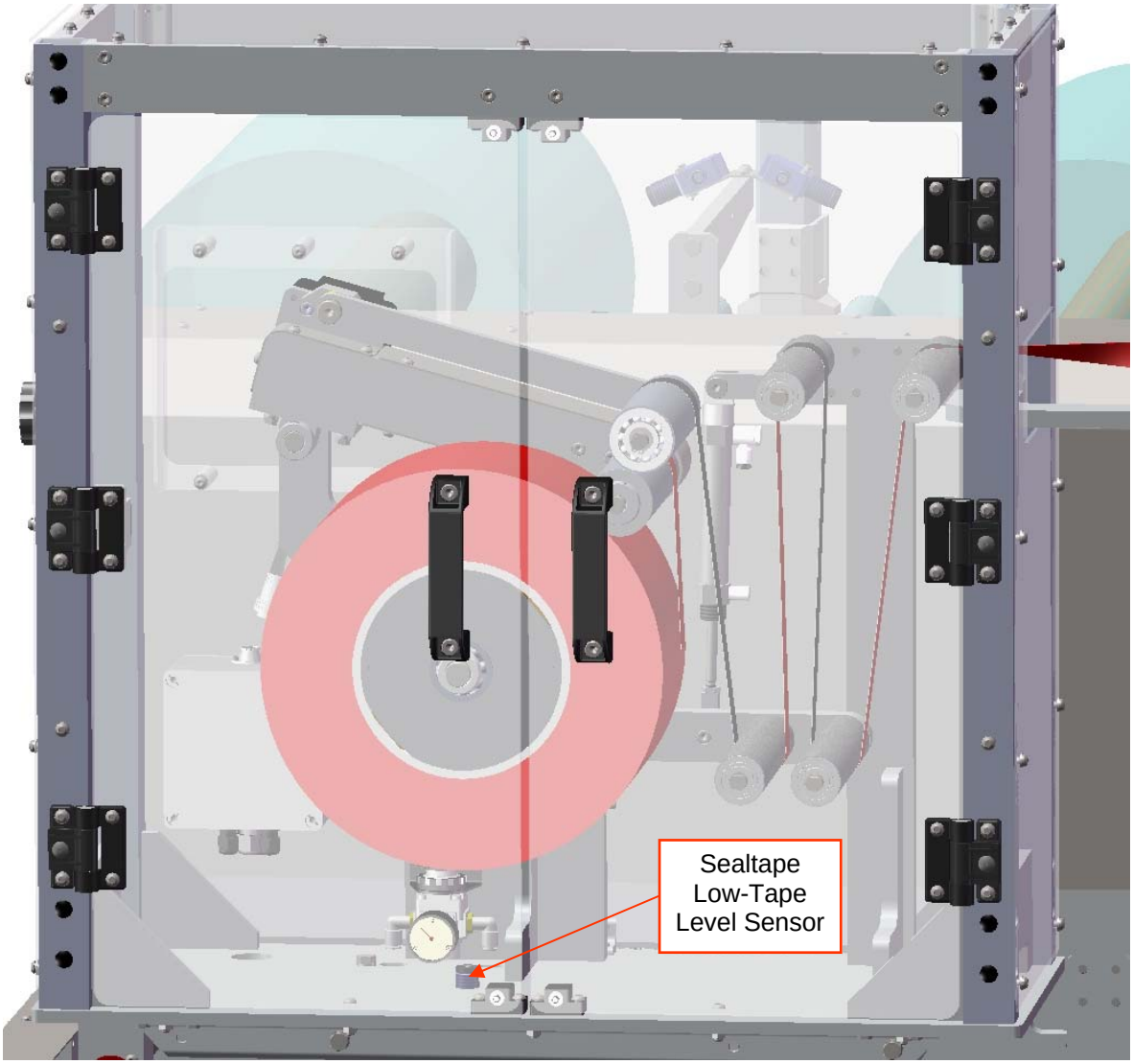
# SENSORS

## Sealtape Low-Tape Level Sensor

The Sealstrip Applicator is equipped with a Sealtape Low-Tape Sensor to sense when the roll of tape has neared the end. The system provides feedback to the control system to initiate a warning when the tape roll level is insufficient for prolonged operation.

To adjust the low tape level trip point:

Access the Alarms screen on the Operator terminal and enter a new low sealtape alarm setpoint (mm). This value corresponds to the tape thickness remaining on the core which will initiate a warning.



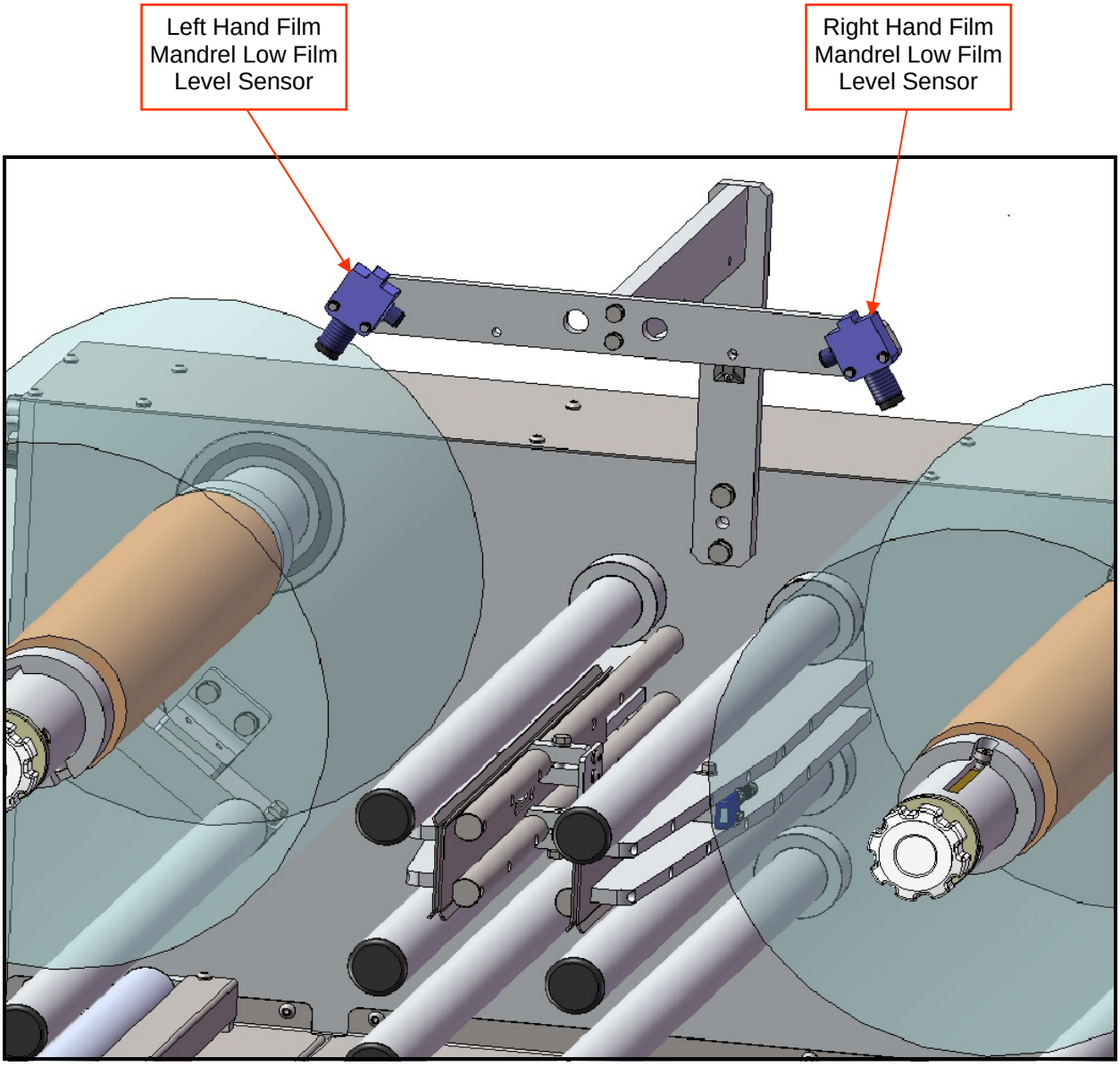
# SENSORS

## Low Film Roll Level Sensors (manual splicer models)

The Sealstrip Applicator is equipped with film Low Level Sensors to sense when the roll of film has neared the end. The system provides feedback to the control system to initiate a warning when the film roll level is insufficient for prolonged operation.

To adjust the low film level trip point:

Access the Alarms screen on the Operator terminal and enter a new low film alarm setpoint (mm). This value corresponds to the film thickness remaining on the core which will initiate a warning.



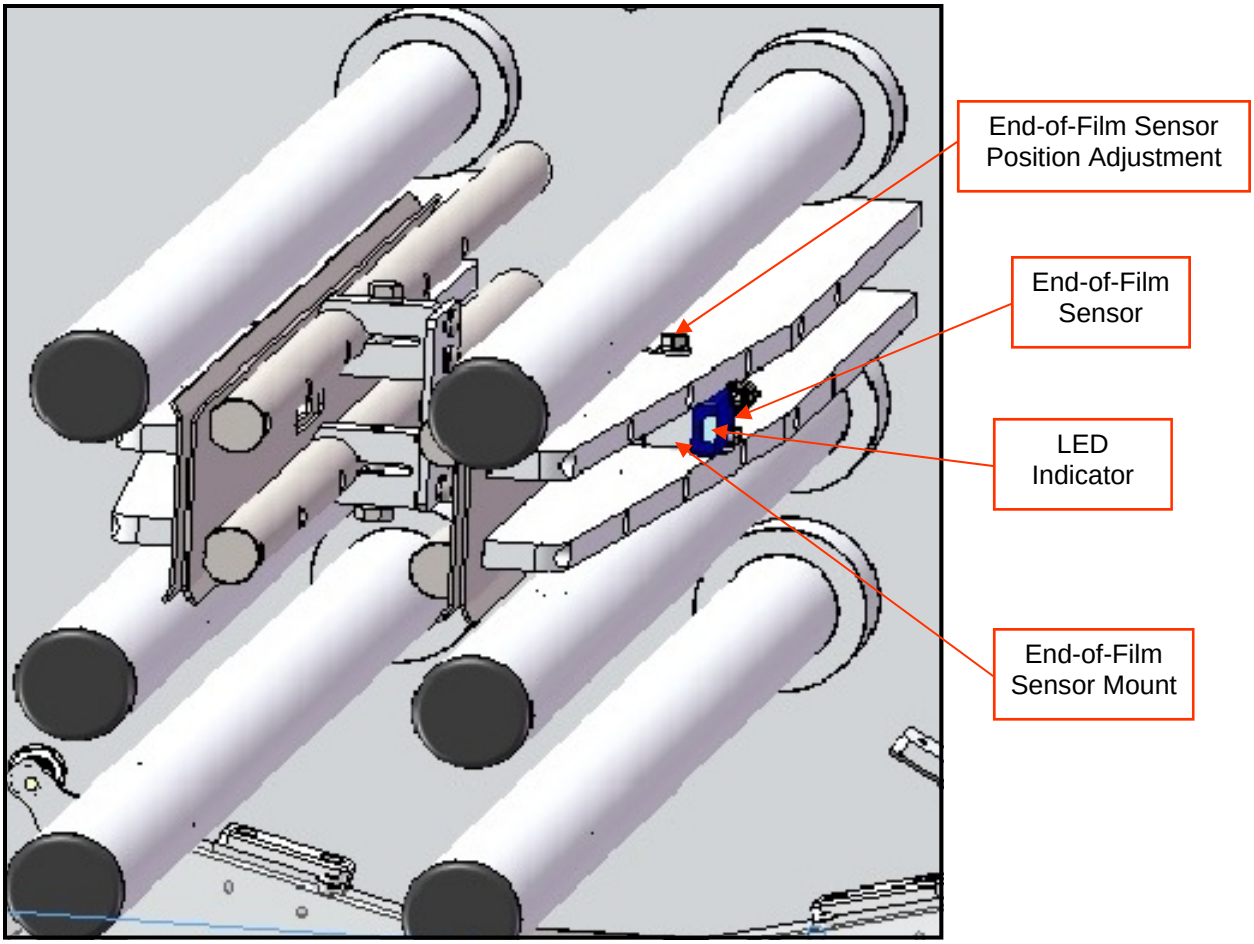
# SENSORS

## End-of-Film Sensors (auto splicer models)

### End-of-Film Sensor

The Sealstrip Applicator is equipped with two ultrasonic End-of-Film sensors which detect the presence of film in the film path. The system provides feedback to the control system to initiate an automatic splice. The sensor positions have been factory set and should not be adjusted.

LED Indicators
Green — ON when film ***NOT*** detected.
Amber — ON when film ***IS*** detected.



# CLEANING

**DO NOT use sharp implements that can scratch or cut any surface.**

**• THIS APPLICATOR IS NOT WASH-DOWN •**

The Applicator utilizes Delrin bearings that do not require lubrication.

Bearings should **NOT** be lubricated.

There are many components on this Applicator that will be damaged if they get wet. The electrical parts are **NOT** wash down grade.

The applicator's aluminum parts are clear anodized. All components and hardware are rust-free; however, the Applicator is **NOT WASH DOWN.**

This Applicator is not handling product, but it is handling film, which then is in contact with the product. Cleaning is very important to product safety and quality.

**CLEANING SUPPLIES REQUIRED:**

Clean, soft cloths

Isopropyl alcohol

Sanitizer

**RECOMMENDED CLEANING SCHEDULE**

Depending on plant conditions, applicator cleaning should coincide with the wrapping machinery cleaning schedule. The applicator should be cleaned at least once per week.

# CLEANING

## A. CLEANING

Turn off the control power.

Clear the Applicator of tape and film.

Wipe down the Applicator rollers and frames with clean, damp cloths to remove dust, dirt and contaminants.

Check **all** rollers for film build-up and tape residue. Clean with Isopropyl Alcohol as necessary.

## B. SANITATION

Use a clean cloth saturated with sanitizer to wipe all of the plasma coated rollers.

Allow the sanitizer to air dry.

## C. INSPECTION

Inspect all parts of the Applicator for remaining dirt.

# MAINTENANCE

## DAILY MAINTENANCE

Monitor perforator quality in the film and finished packages at least 3 to 4 times per shift. When film slot cut has a jagged edge the blade holder activating force may need to be replaced

## MONTHLY MAINTENANCE

Apply light lubricant to threads of jack screws and acme thread of adjusters.

Check bearings for wear.

# TROUBLESHOOTING

| Problem | Possible Cause/s | Action/s |
|---|---|---|
| Sealtape pulls open before filling on the machine, or as it is being filled. Weak Sealstrip feature | • Slot width not correct | • Adjust the slot width |
| | • Sealtape is not threaded correctly | • Check sealtape threading |
| | • Sealtape is not being applied in the correct position | • Verify sealtape application is centered over the slot in the film |
| | • Too much tension in the film as it enters the wrapper forming box | • Check for miss-threading<br>• Verify all rollers are free spinning |
| | • Adhesive build up on tape rollers or folding bars | • Clean as necessary |
| Wrinkles above the Sealtape in the fold | • Incorrect film tension through the applicator | • Check film tension and adjust as necessary |
| | • V-section nose gap out of adjustment | • Adjust the nose gap |
| Sealtape won't hold track over the slot in the film | • Sealtape is not threaded correctly | • Check sealtape threading |
| | • Film not holding track through the applicator | • Check film tension and adjust as necessary |
| The slot has wrinkled edges | • Cutter worn or dull | • Replace cutter |
| Film has wrinkles in the folding area | • Not enough film tension through the applicator | • Adjust the brake tensioner<br>• Adjust the film mandrel brake |
| | • Film not threaded correctly | • Check film threading |
| | • Adhesive build up on the folding bars | • Clean as necessary |
| | • Poorly wound film roll | • Change to a different lot and/or film roll |
| | • V-section nose gap out of adjustment | • Adjust the nose gap |

# TROUBLESHOOTING

| Problem | Possible Cause/s | Action/s |
|---|---|---|
| Film is tearing or has odd creases in it | • Adhesive build up on the folding bars | • Clean as necessary |
| | • Folding bar inserts are nicked or burred | • Repair or replace the inserts |
| | • V-section nose gap out of adjustment | • Adjust the nose gap |
| | • Incorrect film tension through the applicator | • Verify all rollers are free spinning<br>• Verify film threading<br>• Verify the powered unwind is operating properly |
| Film is miss-tracking | • Incorrect film tension through the applicator | • Check film tension and adjust as necessary |
| | • Cutter worn or dull | • Replace cutter |

# WARRANTY

The Sealstrip Applicator has a one-year warranty on all parts and labor, excluding the perforator wheel. Please contact Sealstrip with your machine's serial number to determine if your Sealstrip Applicator is under warranty.

# TECHNICAL SUPPORT

**A. MANUAL**

Read TROUBLE-SHOOTING section of manual.

Review procedure for adjustments.

**B. TELEPHONE SUPPORT**

Sealstrip Corporation hours are 8:30 a.m. to 5:00 p.m. Eastern Time. If you need support during other hours, call the number below and an emergency number will be provided on the recording.

2. Please call and request "customer" service .

**Phone: 610-367-6282 ext. 200**

**Toll Free: 888-658-7997**

**Fax: 610-367-7727**

**Email: customerservice@sealstrip.com**