



— QUALITY MADE IN THE USA —

OPERATING MANUAL  
**HS-1620 L BAR SEALER**



READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING EQUIPMENT

# TABLE OF CONTENTS



<b>Shipping &amp; Warranty .....</b>	<b>3</b>
<b>Electrical Requirements &amp; Setup .....</b>	<b>4</b>
Unpacking the System	
<b>Standard Features .....</b>	<b>5</b>
Machine Features & Specifications	
Air Venting	
Film Clamps	
Magnetic Hold Downs	
Machine Controls	
<b>Preliminary Setup &amp; Adjustments .....</b>	<b>7</b>
Threading the Film	
Adjusting the Sealing Platform	
<b>Operating Procedures .....</b>	<b>8</b>
Machine Controls	
Adjusting the Sealing Cycle	
Wrapping & Shrinking a Package	
<b>Recommended Cleaning &amp; Maintenance.....</b>	<b>11</b>
Cleaning the L Bar Sealer	
Checking the Seal Pads	
Replacing the Sealing Wires	
<b>Troubleshooting Guide .....</b>	<b>13</b>



## SHIPPING DAMAGE CLAIMS

Upon the arrival of your new machine, inspect the crate for any visible damage and then carefully uncrate or unpack the machine and inspect it for any visible damage or missing parts.

If any damage is found, it is your responsibility to contact the carrier and immediately file a claim. Heat Seal is not responsible for any damages to the machine incurred during the shipment once it leaves our facility in Cleveland, Ohio. If there are any missing parts, contact Heat Seal Customer Services immediately.

## HEAT SEAL LIMITED WARRANTY

Heat Seal will warrant its equipment against defective parts for a period of two (2) year from the shipment to your address unless specified otherwise.

Parts will be replaced by Heat Seal to your Authorized Distributor upon the receipt of the defective part at our factory at Cleveland, Ohio. Any related labor, service or expendable parts such as wires, sealing bars, cut-off rules, sealing pads, and belting material are not included.

Any part not manufactured by Heat Seal carries the manufacturer's warranty.

THE WARRANTY WILL BE VOIDED IF THE EQUIPMENT IS NOT INSTALLED BY A HEAT SEAL AUTHORIZED DISTRIBUTOR SERVICE TECHNICIAN. THE PURCHASER IS SOLELY RESPONSIBLE FOR THE SAFE INSTALLATION AND OPERATION OF THE EQUIPMENT. DAMAGE DUE TO MISUSE, MISAPPLICATION, OR MODIFICATIONS WILL NOT BE COVERED BY THIS WARRANTY.

## HEAT SEAL WARRANTY RETURN PROCEDURE

Have your service technician examine the application, the machine and the parts to determine if they can be covered by the above warranty.

Next have the technician call Heat Seal Customer Services (See back page for contact information) and request a Return Authorization number (RA#).

Place an order for the replacement part(s). On the order, refer to the RA number and model serial numbers (found on the nameplate on the machine).

Return the defective part or parts pre-paid to Heat Seal. The customer service department will examine the returned part or parts and issue a credit should the part be found defective.



INSTALLATION AND OPERATION OF THIS SYSTEM MUST BE IN COMPLIANCE WITH ALL APPLICABLE ELECTRICAL AND SAFETY STANDARDS. A QUALIFIED ELECTRICIAN MUST CHECK THE ELECTRICAL SUPPLY CIRCUIT TO INSURE CORRECT VOLTAGE AND CAPACITY. THE SYSTEM IS DESIGNED FOR INDUSTRIAL USE BY QUALIFIED PERSONNEL ONLY.

- A single, grounded 115 volt circuit with a minimum 15 amp capacity dedicated circuit is all that is required to operate the unit.

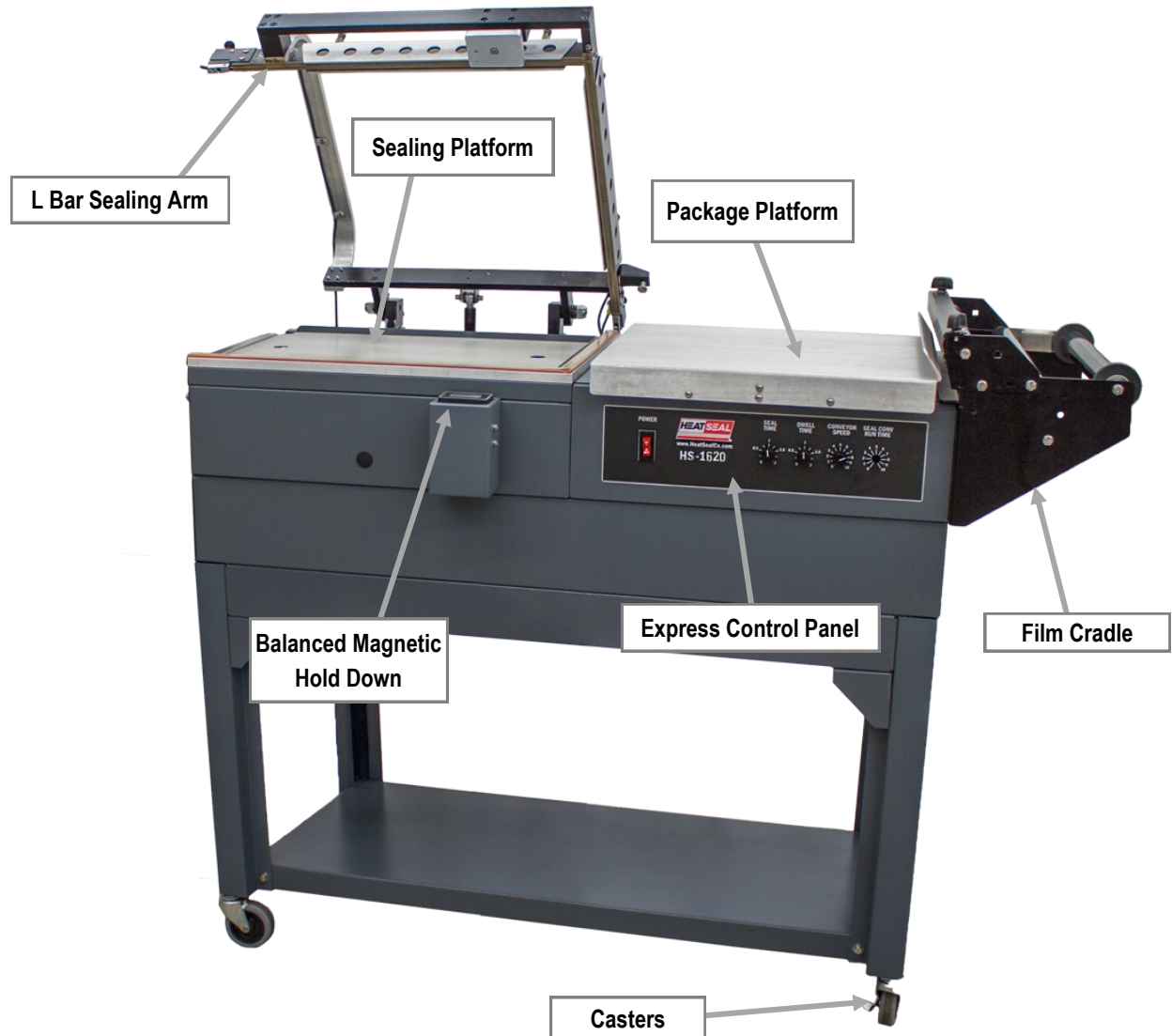
## UNPACKING THE SYSTEM

- Once the system has been unpackaged, check the system for any damage or missing parts. For your convenience, a wiring diagram is packaged with your unit. Heat Seal is not responsible for damage once the equipment has left our factory. Report any damage to your distributor and the shipping company. If there are missing parts, contact your distributor immediately.
- The system is equipped with casters for easy movement when necessary.
- Extra Non-Stick tape is shipped with each L Bar Sealer. This tape prevents film build up on the sealing wire and will assist in providing better seals with most films.
- On the back of the operating console is the main system power cord.

# STANDARD FEATURES



## MACHINE FEATURES



## MACHINE SPECIFICATIONS

Film Capacity	20" Wide
L Bar Sealing Area	16" W, 20" L
Overall Dimensions	49" L, 23" W, 49" H
Working Height	35" From Floor
Power Requirement	115V, 15A
Weight	185 lbs.

# STANDARD FEATURES



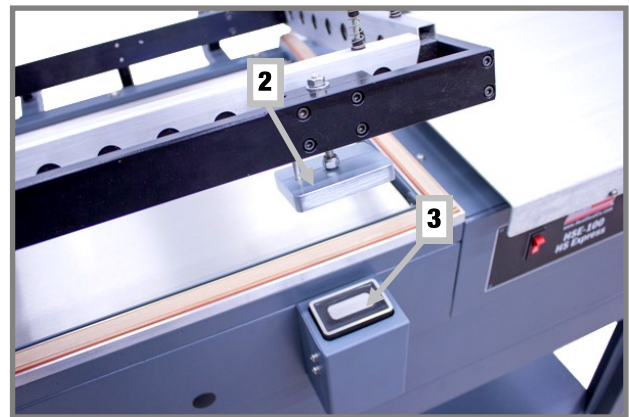
## AIR VENTING

- Air venting the film is required for most shrink applications. The L Sealer is equipped with a standard perforating roller for venting the film.
- The perforating roller (1) is used to make a series of small holes continuously as the film is being drawn from the roll during normal packaging operation, and is located in the film cradle before the loading platform.



## BALANCED MAGNETIC HOLD DOWN

- A magnet plate (2) on the front of the sealing arm and a magnet (3) on the front of the sealing area are used to insure an even, consistent seal along the sealing pad. The position of the magnets have been engineered to apply the maximum seal pressure, and provide a clean seal every time.
- The SEAL TIME control determines how long the magnet will hold down when proper seal has been made.



## FILM CLAMPS

Some films will require film clamps to insure a good seal. The clamps are located on the front and side sealing bars and are spring loaded and set at the factory.

## MACHINE CONTROLS

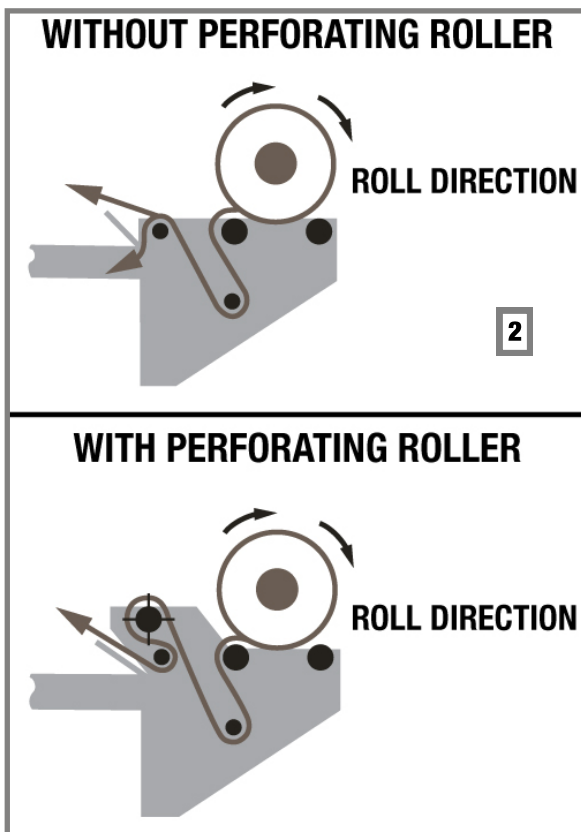
This single control panel (4) is for the operation of the complete system. It controls all functions for power, sealing time and how frequently the conveyor moves packages out of the sealing area. It is essential that these functions be properly controlled to provide for the satisfactory performance of the system.

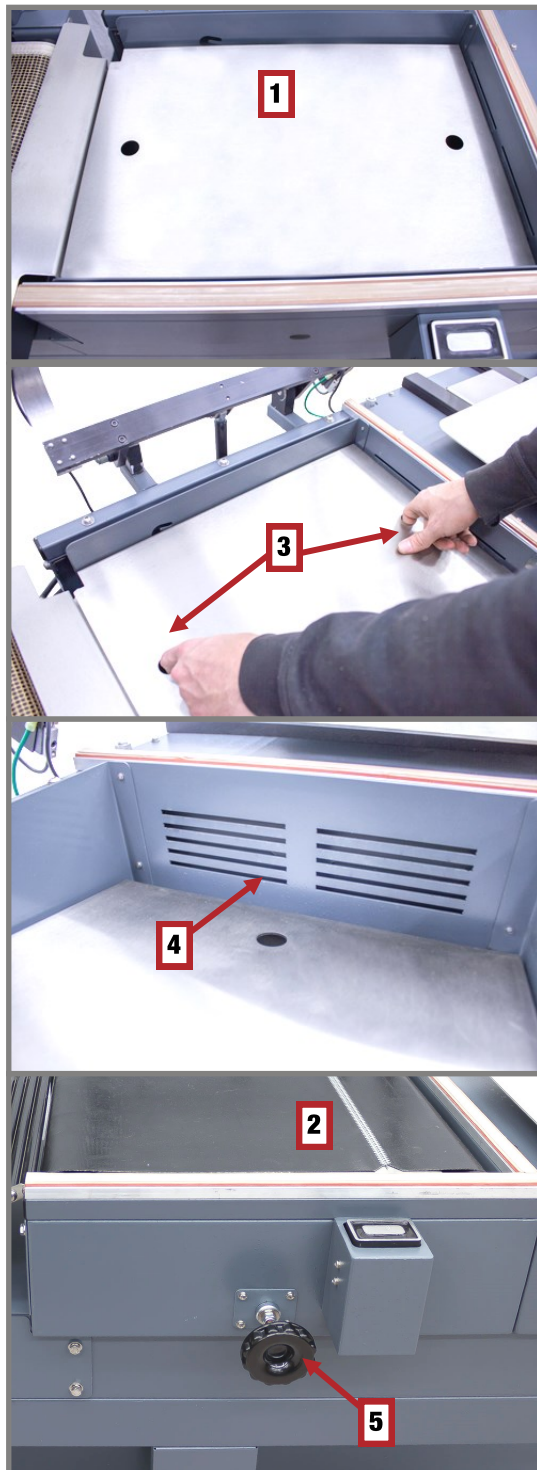
These settings are detailed on the following pages, please refer to this information to make the appropriate settings for your production needs.



## THREADING THE FILM

- Place a roll of center folded film on the rollers with the open side of the film toward the operator (1). The cradle is adjustable to accommodate various size packages with the same width of film up to 17 inches wide. Thread the film as shown in the threading diagram on the machine below (2).
- Place the product to be wrapped in the lower corner of the sealing area (3), then loosen the knobs (4) under the film cradle and position the cradle so that the folded edge of the film is even with the back of the package to be wrapped (5).
- Re-tighten the knobs (4).
- If the correct width of center folded film is being used, this position will provide a minimum of 2 inches of film for trimming across the front of the sealing area (6).
- This is a general starting position and adjustments can be made to provide for adequate film around the package for shrinking and conservative use of your film.





## ADJUSTING THE SEALING PLATFORM

To insure a neat looking finished package, the sealing platform (1) can be adjusted so the seal made by the L Bar will be at the center of the vertical (profile) dimension of the package to be sealed. The system is available with two styles of sealing platforms: static or Silicone Fabric seal conveyor (2).

Although frequent adjustment is not required for most production applications, the adjustable platforms permit quick change over for products with different profiles and provides positive locking for stability under loads.

To change platform positions:

### STATIC PLATFORM AND ROLLER TRAY

The platform position is easily changed by inserting fingers in holes (3) and after lifting slightly, slide platform to the left (towards the tunnel), releasing projections from the notched brackets (4) in the right side of the sealing area.

With the platform held towards the left (tunnel side), raise or lower the platform to the desired height. Then insert the projections in the right side notches first, and slide the platform as far forward right as possible.

### SEAL CONVEYOR

The knob in the front center of the sealing area (5) adjusts the conveyor to any desired height. Clockwise will raise the conveyor, counterclockwise will lower the conveyor.





USE CAUTION WHEN CHECKING THE SEALING CYCLE AS SOME SURFACES ARE HOT. THE CYCLE FOR THE SEALER CAN ALSO BE CHECKED WITH THE POWER OFF.

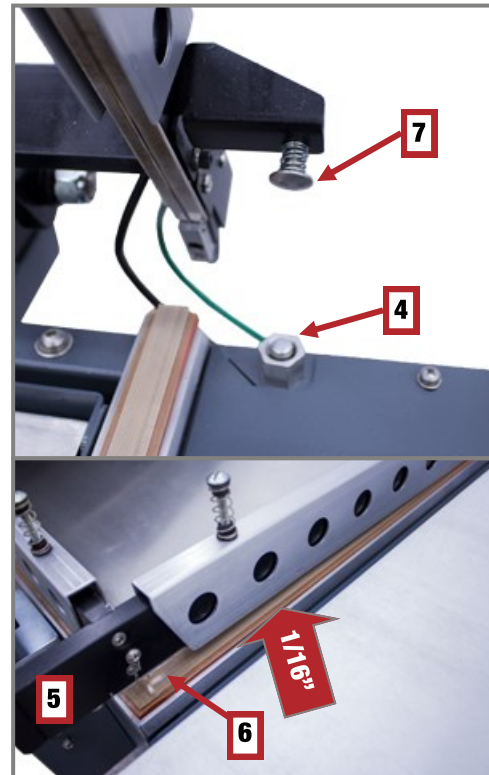
## MACHINE CONTROLS

- There is one controller for the operation of your machine. The Express Control Panel will control Seal Time, Dwell Time, and Conveyor Speed. It will also control Seal Conveyor Run Time if the HS-1620 is equipped with a Seal Conveyor.
- It is essential that related functions be properly controlled to provide the sequence necessary for the satisfactory performance of the L Sealer and Shrink Tunnel. These control settings should be made before operating this equipment.

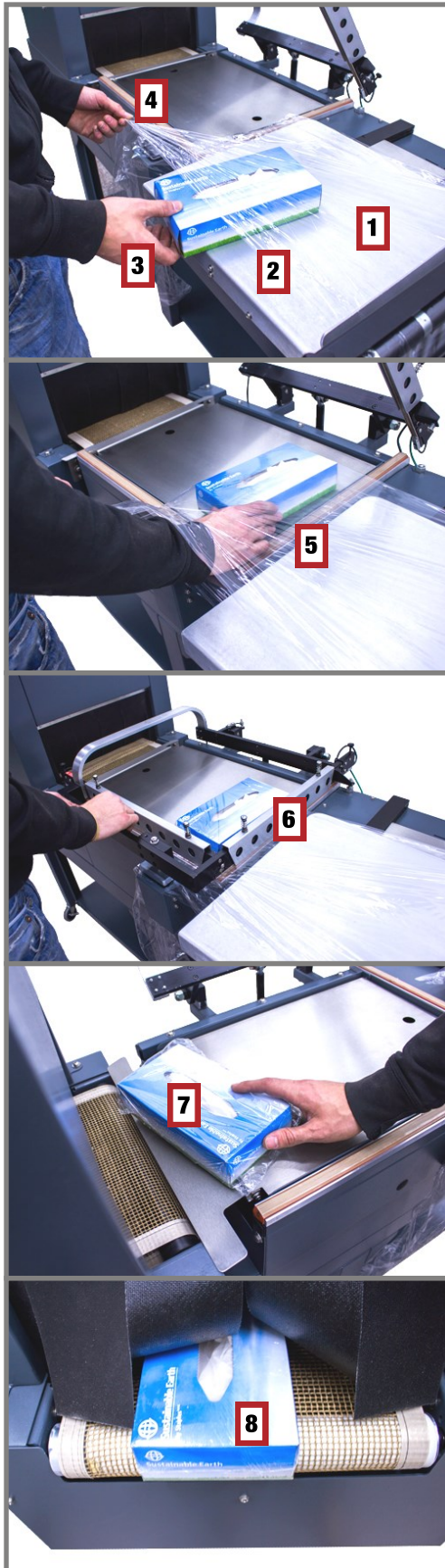


## ADJUSTING OF THE SEALING CYCLE

- Located at the back of the sealing area is an adjustment screw type actuator and button (4) which starts the sealing cycle as the sealing arm is brought into sealing position. This is a function adjusted at the factory but if adjustment is necessary, proceed with the following steps:
  1. The timed impulse must start when the seal arm (5) is approximately 1/16 of an inch (or the thickness of a quarter) above the sealing pad (6).
  2. Bring the arm down slowly toward the sealing position, the wires will begin heating, or the magnet will engage when the sealing process has begun.
  3. If the arm is too high from the sealing pad (over 1/16 of an inch), adjust the screw (7) away from the Microswitch (4).
  4. If the arm reaches the sealing position without actuating the sealing cycle, adjust the screw closer to the microswitch to actuate at 1/16 of an inch above the sealing pad.



# OPERATING & SHRINK PROCEDURE



There are three steps in creating the package on the shrink wrapping system: wrap, seal and shrink.

## WRAPPING

The operator places the product to be wrapped on the package platform (1) inserting it between the center fold film (2). Holding the product firmly with the right hand (3) and the corner of the film with the other hand (4), move the product onto the sealing area.

## SEALING

The package is placed in the lower right corner of the sealing area (5), allowing for sufficient film margin on the side and front of the package (about 2 inches) for adequate shrink. The sealing arm is lowered into position (6) which actuates the sealing cycle. The two open sides of the film are sealed completing a bag around the product and leaving the end of the film sealed, ready for the next package.

## SHRINKING

If a shrink tunnel is next in your sealing system, the sealed package in the loose film (7) is manually moved out of the sealing area and onto the shrink tunnel belt. If equipped with a sealing conveyor, the package will automatically be taken into the shrink tunnel. The package is conveyed through the shrink tunnel and recirculating, heated air shrinks the film, creating a clear, tight package (8).



## RECOMMENDED CLEANING

### L BAR SEALER

SEALING WIRES	Clean daily. Use a soft, brass wire brush.
SEALING PADS	Clean daily. Wipe clean with a cloth and then spray silicone to help keep clean.
PRODUCT TRAY	Wipe down daily.
PTA CONVEYOR	Clean periodically. Remove to clean underneath.

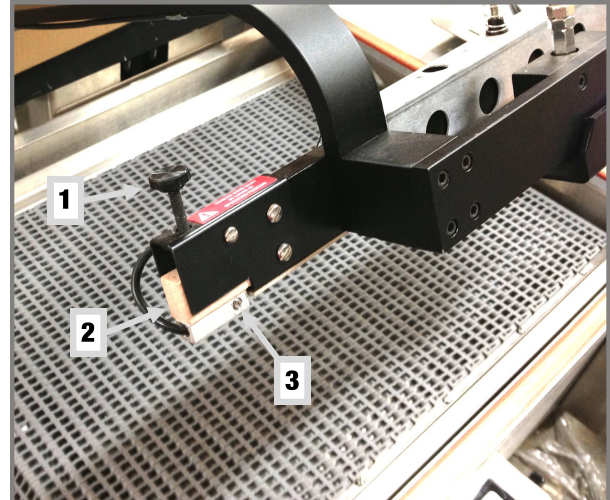
## CHECKING THE SEAL PADS

- The L Sealer seal pad will show wear from constant use and will need replaced when problems occur or it no longer provides a constant seal for your packages. See your Heat Seal Price List for replacement part information.

## SERVICING THE SEALING WIRES

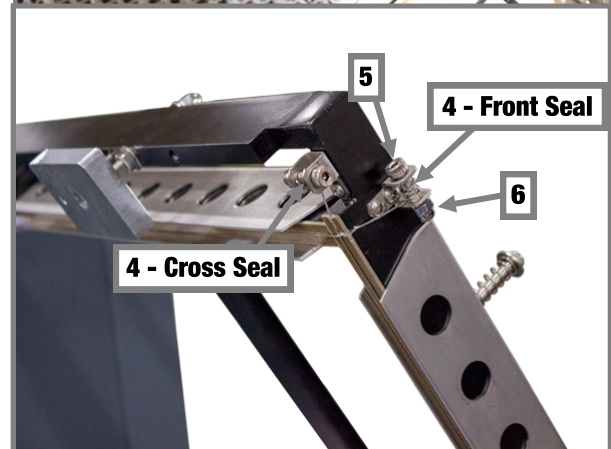
### TO REMOVE WIRES

- Tighten the knob (1) on the tension block (2) to relieve the sealing wire tension.
- Using a small screwdriver, loosen the screw (3) in the side of the tension block and pull out the sealing wire.
- Loosen the screw (5) at the other end where the wires cross and remove the sealing wire.



### TO REPLACE WIRES

- Insert the new wire in the tension block and re-tighten the screw.
- Then, insert the other end of the wire into the hole on the tensioning screw (4) leaving the wire loose.
- Use a 1/8" Allen Key on the screw head (5), and a 3/8" wrench on the lock nut (6) to tighten the wire. The wire will wind around the screw body until the ideal tension is met.



**COMPLETELY LOOSEN BOTH KNOBS ON THE TENSION BLOCKS BEFORE TESTING THE SEALER. IF THE WIRES ARE LOOSE WHEN COOL, FOLLOW THE REPLACEMENT STEPS ABOVE TO RETENSION WIRES.**

# TROUBLESHOOTING GUIDE



**PROBLEM:**      **FILM SPLITS ALONG CENTER FOLD**  
**SOLUTION:**      CHECK FOR DAMAGE TO FILM ROLL.  
MAKE SURE PRODUCT TRAY IS POSITIONED CORRECTLY

**PROBLEM:**      **FILM SPLITS AT HOLE PUNCH**  
**SOLUTION:**      CHECK HOLE PUNCH FOR PROPER ALIGNMENT.  
CHECK THE CONDITION OF THE PUNCHED HOLES.

**PROBLEM:**      **FILM SPLITS AT TOP OF PACKAGE**  
**SOLUTION:**      CHECK HOLE PUNCH FOR PROPER ALIGNMENT.  
CHECK THE CONDITION OF THE PUNCHED HOLES.  
MAKE SURE THE TUNNEL IS FUNCTIONING PROPERLY.  
SPEED UP THE TUNNEL CONVEYOR.  
DECREASE THE TUNNEL TEMPERATURE.  
ADJUST THE AIR FLOW.

**PROBLEM:**      **FILM SMOKES EXCESSIVELY**  
**SOLUTION:**      CHECK AND CLEAN WIRE AND WIRE INSULATION.  
CHECK AND CLEAN KNIFE BLADE.  
CHECK CONDITION OF SEALING PADS.  
CHECK CONDITION OF NON-STICK TAPE.  
CHECK FOR EVEN ARM AND MAGNET PRESSURE.  
CHECK THE MINIMUM SEALING TEMPERATURES.  
INCREASE THE SEALING TEMPERATURES.  
DECREASE THE DWELL TIME.

**PROBLEM:**      **FILM BUILDUP ON SEALING WIRE**  
**SOLUTION:**      CHECK AND CLEAN WIRE, WIRE INSULATION OR KNIFE BLADES.  
CHECK THE CONDITION OF THE SEALING PADS.  
CHECK THE NON-STICK TAPE.  
CHECK FOR EVEN ARM AND MAGNET PRESSURE.  
CHECK THE MINIMUM SEALING TEMPERATURES.  
INCREASE THE SEALING TEMPERATURES.  
CHANGE THE NON-STICK TAPE.

**PROBLEM:**      **CROWS FEET**  
**SOLUTION:**      SLOW DOWN TUNNEL CONVEYOR.  
INCREASE THE TUNNEL CHAMBER TEMPERATURE.

**PROBLEM:**      **FISH EYES**  
**SOLUTION:**      MAKE SURE TUNNEL IS FUNCTIONING PROPERLY.  
SLOW DOWN TUNNEL CONVEYOR.  
USE LESS FILM AROUND THE PACKAGE.  
INCREASE THE TUNNEL TEMPERATURE.

# TROUBLESHOOTING GUIDE



**PROBLEM: ANGEL HAIR**

**SOLUTION:** CHECK AND CLEAN WIRE, WIRE INSULATION OR KNIFE BLADES.  
CHECK CONDITION OF SEALING PADS AND NON-STICK TAPE.  
CHECK FOR EVEN ARM AND MAGNET PRESSURE.  
CHECK THE MINIMUM SEALING TEMPERATURES.  
CHECK THE SEAL CYCLE IS COMPLETE.  
MAKE SURE THE MAGNETS RELEASE AT THE SAME TIME.  
CHECK THE CONDITION OF THE AIR RELEASE HOLES.  
INCREASE THE SEALING TEMPERATURES.  
CHANGE THE NON-STICK TAPE.

**PROBLEM: DOG EARS**

**SOLUTION:** USE LESS FILM AROUND THE PACKAGE.  
SLOW DOWN THE TUNNEL CONVEYOR.  
CHECK THE CONDITION OF THE AIR RELEASE HOLES.  
INCREASE THE TUNNEL TEMPERATURE.

**PROBLEM: BURN HOLES (HOT SPOTS)**

**SOLUTION:** CHECK THE CONDITION OF THE AIR RELEASE HOLES.  
SPEED UP THE TUNNEL CONVEYOR.  
DECREASE THE TUNNEL CHAMBER TEMPERATURE.

**PROBLEM: ERRATIC SHRINK**

**SOLUTION:** MAKE SURE THE TUNNEL IS FUNCTIONING PROPERLY.  
SLOW DOWN TUNNEL CONVEYOR.  
ADJUST THE TUNNEL AIR FLOW.  
INCREASE TUNNEL CHAMBER TEMPERATURE.

**PROBLEM: SEVERE BALLOONING**

**SOLUTION:** INCREASE THE TUNNEL TEMPERATURE  
CHECK CONDITION OF AIR HOLES.

**PROBLEM: OFF-CENTERED SEAL**

**SOLUTION:** ADJUST THE PACKAGE PLATFORM.  
LOOSEN THE KNOBS ON THE TENSION BLOCKS.

**PROBLEM: FILM CAN'T SEPARATE, STATIC OR FILM COLLAPSES PACKAGE**

**SOLUTION:** CALL YOUR FILM SUPPLIER.

- ANY OF THE PRECEDING TROUBLESHOOTING PROCEDURES DO NOT WORK, PLEASE CALL YOUR LOCAL HEAT SEAL DISTRIBUTOR SERVICE FOR FURTHER ASSISTANCE.

