DryLam School & Office Laminator

Model 27STA (27"120V)

Instruction Manual



Revised 1/20/14, 1/28/14, 2/18/14, 3/4/14, 3/13/15 Brian Jennett

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27STA SPECIFICATIONS

Item	27STA (120V)
Feed Table Width	27"
Height	15”
Width (overall)	34”
Depth (with feed tray installed)	20"
Net weight	66 lbs.
Shipping weight	88 lbs.
Width of Lamination	27"
Electrical	120VAC 60 Hz 1400W

IMPORTANT INFORMATION

• Read all the safety and operating instructions before connecting or using this unit.
• Retain this notice and the owner’s manual for future reference.

• Adhere to all warnings and operating instructions.

• Do not use this unit near water (e.g. near a bathtub, etc.)

• The wearing of ties or jewelry while operating a laminator may be hazardous to the operator.

• Warning: Do not touch Hot Surfaces such as heat shoes and heat rollers.

• Do not install optional slitter kit if Heat shoes are hot.

• This unit should be installed so that its location or position does not interfere with its proper ventilation. For example, it should not be situated on a bed, sofa, rug or similar surface that may block the ventilation openings; or placed in a built-in installation, such as bookcase or cabinet or against the wall, that may impede the flow of air through its ventilation openings.

• This unit should be situated away from heat sources such as radiators, heat registers, stoves, etc.

• This unit should only be connected to a power supply outlet of the voltage, amperage and Frequency marked on its serial tag.

• For 120 volt machines the socket outlet shall be installed near the equipment and be easily accessible.
•For 240 volt machines a readily accessible disconnect device shall be incorporated in the building installation wiring.

• The power supply cord should be routed so that it is not likely to be walked upon or pinched, especially near the plug, convenience receptacles, or where the cord exits from the unit.

• Unplug the machine during any machine repairs.

• Clean unit only as recommended in this instruction manual.

• Make sure to remove the Feed Table before reversing the machine!

• Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through any openings.

• Caution: The Cutter blade is extremely sharp. Please handle carefully and dispose of properly.

Save Your Carton! DryLam ships laminators in a special carton which protect them from damage. Please store your carton in case your laminator should ever require servicing.

Remove the laminator from its box by grasping the housings and pulling up. Do not use rollers or shafts as handles- this could cause damage.

The power supply cord should be unplugged from the wall outlet when it is to be unused for a long period of time.

This manual is provided as an **Operator's Manual** and covers most situations you will encounter while using your laminator. It is not a Technical Service manual. For technical assistance beyond what this manual provides, contact the DryLam Tech-Line at the email

address and phone number below.

DryLam is a product line of
DryLam, LLC

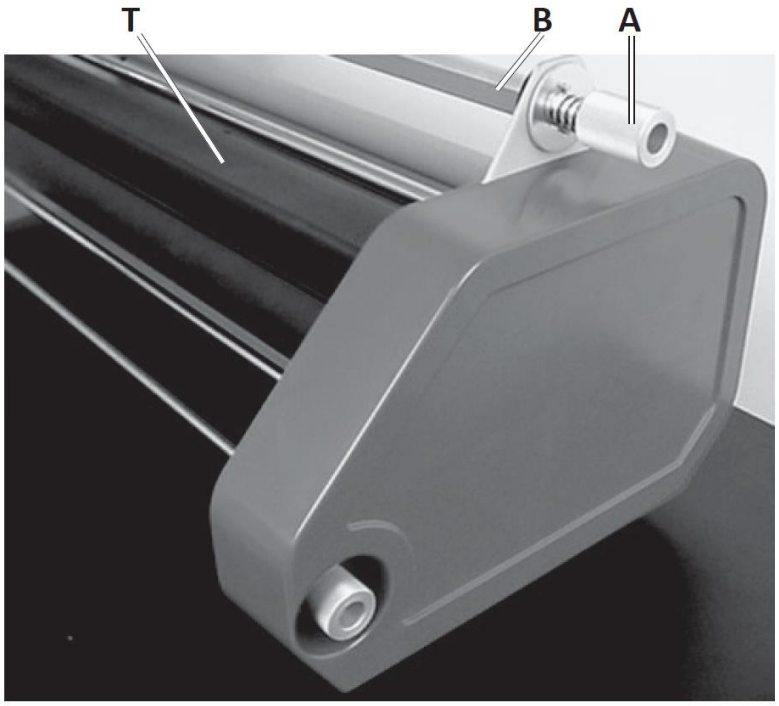
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Notes

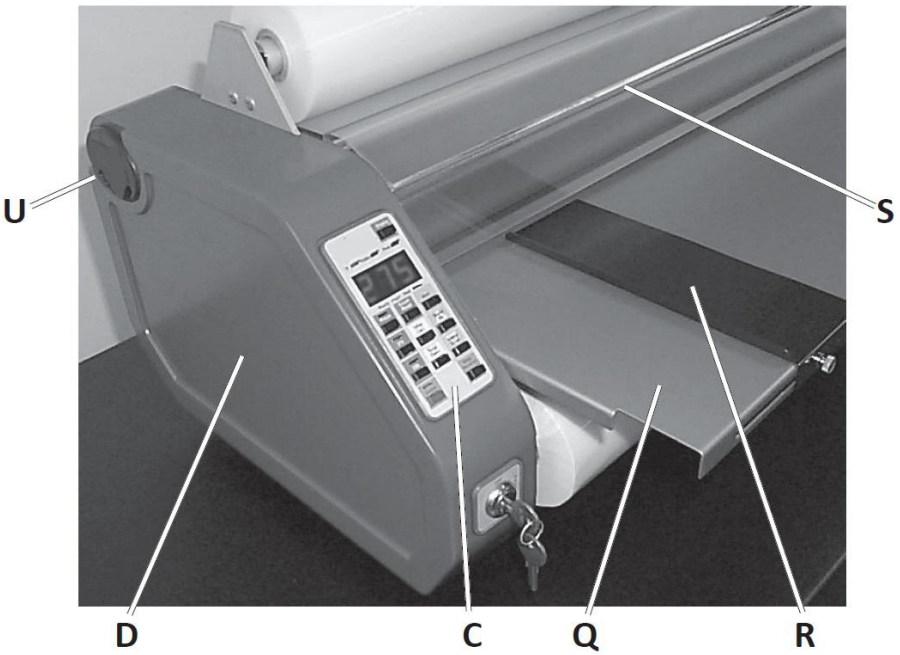
RECORD SERIAL NUMBER HERE (LOCATED ON REAR PANEL OF MACHINE):

INTRODUCTION

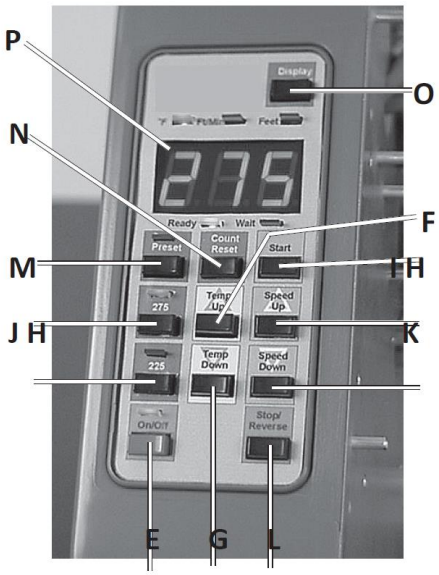
The DryLam 27STA Laminator, with variable speed and reverse is a reliable, easy-to-use professional laminator designed to laminate a variety of materials using 25"or 27" laminating film. The 27STA is capable of lamination from 1 to 9 feet per minute and can be reversed by the push of a button.



Tension Adjusting Knobs **(A)** are conveniently located on the Supply Mandrels **(B)** on the right side panel for easy access. A Control Panel **(C)** is located on the Left Housing **(D)**, and is equipped with a Power Button **(E)** to turn the machine on, Temperature Up **(F)** and Temperature Down **(G)** buttons, two Preset buttons **(H),** a Motor Start button **(I)** to start the motor turning, Speed Up **(J)** and Speed Down **(K)** buttons to adjust the speed as necessary, a Motor Stop/Reverse button **(L)**, a User Preset button **(M)** to save your own settings, and a Count Reset button **(N)** which resets the usage counter. The Display button **(O)** toggles the Display **(P)** between 3 settings. The Feed Tray **(Q)** and Feed Guide **(R)** provide a smooth, durable paper path and the Heat Guard **(S)** protects



hands from hot surfaces inside. Teflon coated Heat Shoes **(T)** minimize friction. The Cutter **(U)** cuts and trims your laminated documents and the Key switch **(V)** prevents unauthorized usage by preventing the motor from running.





UNPACKING AND SETUP

Remove the laminator from its box by grasping the housings and pulling up. Do not use rollers or shafts as handles- this could cause damage. Choose a location for the laminator that is clean, well-lighted and draft free. Make sure it is not in the path of any fans, room air conditioners, or positioned too close to the wall. The laminator comes fully assembled. All you have to do is load the film onto the supply mandrels, thread the film through the machine, and install the feed table.

INFORMATION ABOUT LAMINATING FILM

Laminating film is made up of two layers: a glossy layer which gives the lamination its strength, clarity and rigidity, and a dull or matte side which is heat activated and serves as the “glue” to bond the film to the product being laminated. Once heated, small amounts of the “glue” side can stick to the heat shoes and rollers and must be periodically cleaned from the laminator.

Laminating film is available in a variety of different lengths, qualities, widths and thicknesses. The DryLam 27STA Laminator is designed to use 1.5 mil (#150), and 3 mil (#300), thick films.

OPERATING

Control Panel

The control panel is located on the left side of the laminator. This panel is used to control the various machine functions listed below.

Display **(O,P)**

The display will show the 3 different parameters of the machine- temperature, speed, and usage counter. The default display mode is usage counter. If the machine is not yet up to temperature, the machine will display the set point temperature. When the machine reaches the set point temperature, the usage counter will be displayed and the “READY” LED will light. If the speed is adjusted, the machine will momentarily display the speed and then quickly return to usage counter mode. The "Display" button allows you to toggle between any of the 3 settings for the display.

Power **(E)**

The "On/Off" button turns the machine on.

Heat **(F,G)**

The temperature controls are the "Temp Up" and "Temp Down" buttons (yellow blocks). These buttons are used to adjust the temperature currently displayed. The temperature displayed is the temperature set point. This is the temperature that the machine will reach and hold. The temperature can be increased or decreased in 1° increments by pressing and releasing the up or down button. To rapidly increase or decrease the temperature, press and hold the button. When the machine reaches the set point temperature, the Ready light (green) will illuminate, and a two second beep will sound. If a significant change in the set point temperature occurs, the Wait light (red) illuminates until the laminator reaches the new set point temperature. At this time the Ready light will illuminate again. Note: depending on room conditions and desired set point, it will take between 20 and 30 minutes for the ready indicator to come on.

Standard Presets **(H)**

The Laminator is equipped with 2 factory presets. The buttons are labeled 275 and 225. These buttons will set both a speed and temperature that being (275°F and 3 Feet per minute) and (225°F and 3 feet per minute). If one of the presets is engaged, its corresponding LED will be illuminated.

Motor **(I,J,K,L)**

The motor controls are the 4 buttons on the right side of the control panel. The "Start" button will start the motor which will run at the current speed setting. The "Speed Up" and "Speed Down" buttons will adjust the speed setting. Pressing and releasing the button once will increment the speed by 0.1 ft/min (0.1 meters/min). To rapidly increase or decrease the speed, press and hold the corresponding button. To stop the motor, press and release the "Stop/Reverse" button. To reverse the machine, press and hold the "Stop/Reverse" button. The motor will remain in reverse as long as the button is depressed.

User Preset **(M)**

The Laminator is equipped with a user defined "Preset" button. This button can be used to save a speed and temperature setting that you have defined. With the machine's speed and temperature set to your preferred settings, press and hold the "Preset" button until the beeper sounds and the preset light comes on. To recall this setting at a later time, press and release the "Preset" button.

Usage Counter **(N)**

The Laminator is equipped with a usage counter that will indicate the feet (meters) of film used. This counter will appear on the display whenever the feet indicator light is on. This

counter can be reset to zero by pressing the "Count Reset" button once the display is showing the usage counter.

ADDITIONAL FEATURES

Key switch

The key switch (located just below the control panel) locks out the motor, allowing the machine to remain heated; yet, preventing unauthorized usage when in the locked position.

Hand Held Cutter

If additional cutters or cutter blades are needed, they may be obtained from DryLam.



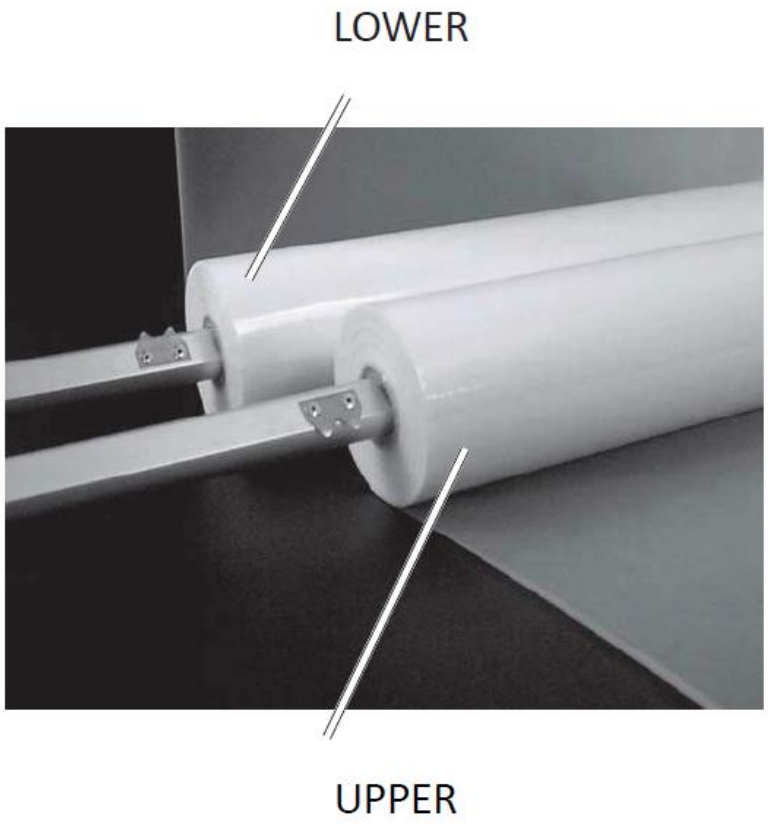
The hand held cutter blade can be replaced by removing the small screw on the back of the cutter, then removing the cutter back. **Caution: The cutter blade is extremely sharp. Please handle carefully and dispose of properly.** Remove and discard the old blade. Re-install cutter back and screw. **Caution: Do not over tighten screw.**

LOADING FILM

Unpack the upper and lower supply mandrels. The upper and lower mandrels are different. The word “TOP” is stamped on the shaft of the upper mandrel and the word “LOW” is stamped on the shaft of the lower mandrel. The ends of each mandrel are also different. The “hanger” end fits in the bracket on the left side of the laminator. The “slot end” fits into the tensioner on the right side.

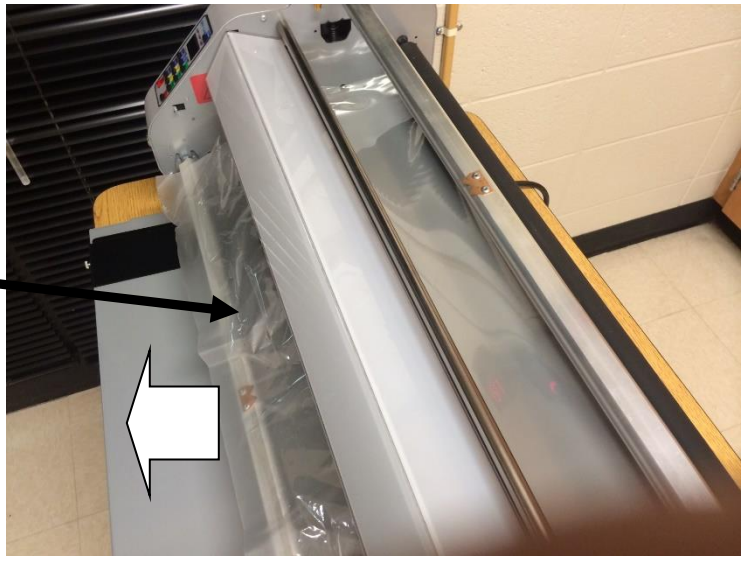
Slide the film roll onto the mandrel by rotating the mandrel in the opposite direction of the gripper points, leaving equal lengths of mandrel sticking out of each end. The film roll will slide over the gripper, which will keep the roll from turning on the shaft.

Load the mandrel on the laminator by inserting the slot end of the mandrel into the tensioner on the right side and then lowering the hanger end into the bracket on the left side.



THREADING PROCEDURE

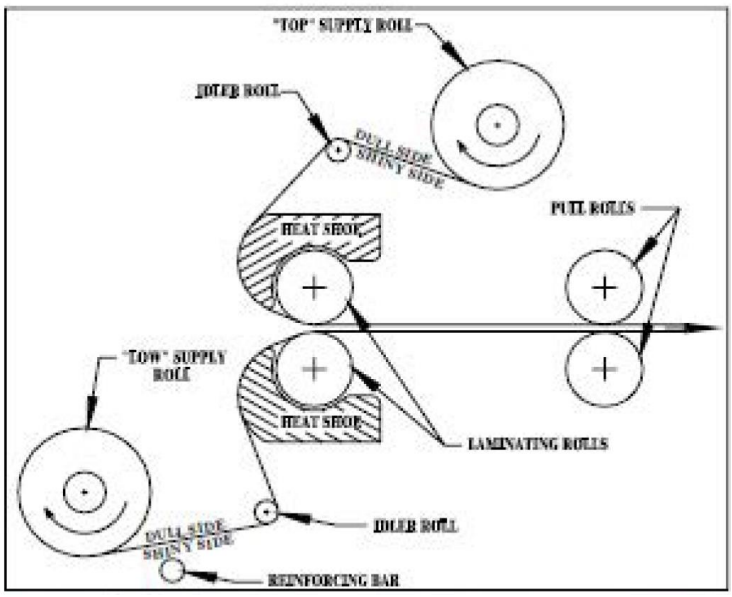
Your laminator was tested at the factory. The film that was used for testing may still be in the laminator. If so, remove the test film by removing the feed tray and the heat guard and reversing the film back out the front of the laminator. To do so, hold the STOP/REVERSE button down. The motor will reverse and the film piece will exit the front.



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THREADING PROCEDURE (cont'd)

Remove the feed tray and the heat guard. Thread the film as shown in the figure on the right. Pull the film around the idler rollers as shown. Do not mistake the reinforcing bar for the idler roller. Make sure the glossy and dull sides of the film are as indicated in the diagram. Position the threading board provided.



Turn power on by pressing the ON/OFF button. Turn the key switch to on (the horizontal position).

Start the motor by pressing the "Start" button, and reduce the speed to 1 foot/min. Push the threading board and film in between the heat shoes. The internal rollers will pull the film through the heat shoes until it comes out between the rollers at the back of the laminator. **NOTE: Keep fingers away from the rollers at the rear of the laminator!**



Check the film overlap. Slide the top and bottom film rolls from side to side on the mandrels so that the film is perfectly aligned (overlapped) top and bottom (Note: poor overlap will cause the film to deposit residue on the heat shoes and rollers, so this procedure is critical). Replace feed tray and heat guard.



LAMINATING

Only after the machine is loaded with film (see “Loading Film: 1" Mandrel”) and properly threaded (see “Threading the Film), is it ready to laminate. If the machine has not been threaded properly damage to the machine or operator may occur. Ensure that the laminator has reached the preset temperature. This will be indicated by the ready light being illuminated. Place document on the feed table and align with the feed guide to assure straight and even lamination. Start the motor with the "Start" button and adjust the speed as necessary.



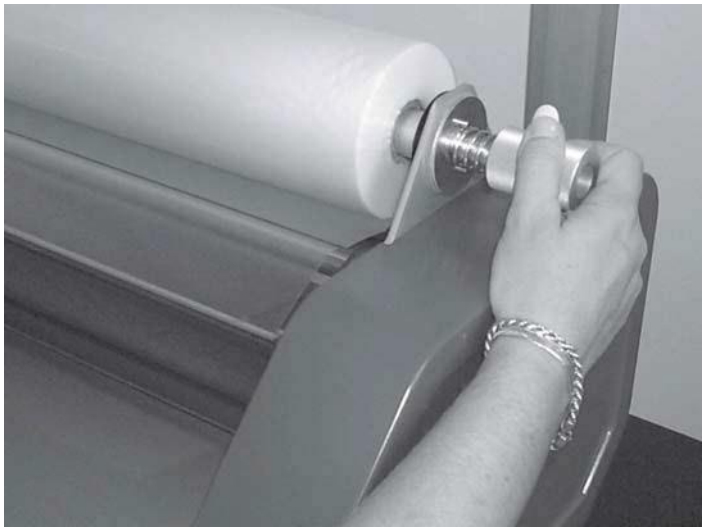
If necessary, adjust the supply roll tension (see E. Supply Roll Tension Adjustment). With both hands, guide the document into the throat of the laminator. While the document is pulled into the laminating rollers, keep document flat on the feed table while applying a slight back pressure. As the document exits the rear rollers, allow 3" to 6" of film to clear the rollers at the end of your document and turn the motor switch to stop. Using the hand held cutter, hold tension on the laminated document and slice through the film to release the document. Multiple documents can be run successively if desired and cut at a later time.



TENSION ADJUSTMENT

Top and bottom supply rolls should always have about the same tension. By turning the top roll with one hand, and the bottom roll with the other hand, it can be determined if one of the rolls is tighter than the other.

Note: Too much tension can destroy film, documents, and damage the machine.



Always adjust the tension to the minimum amount required. Do this by loosening the tension knobs until there is no tension on the film. With the machine threaded and at operating temperature, turn the motor switch to forward and adjust the speed to the desired operating speed. Tighten the adjusting knobs only until the wrinkles in the film (as they cross the heat shoes) are removed.

Note: As the diameter of the film roll decreases, tension should be reduced.

To increase tension, turn the adjusting knob clockwise. To decrease tension, turn the knob counterclockwise. If the tension is not equal top and bottom, the laminated product will curl. If the material curls up as it comes out of the machine, the top roll is probably tighter than the bottom. If it curls down, the bottom roll is probably tighter.

Note: Make sure the black disks are flat against the side panel. They should be rotating, both top and bottom, while film is feeding.

MAINTAINING THE DRYLAM LAMINATOR

Care and Cleaning

In the normal course of operating the DryLam Laminator, dirt and adhesive will accumulate on the heat shoes and rubber rollers (Laminating produces static electricity which attracts airborne dust and dirt). Regular inspection and cleaning will assure that this does not become a problem.



Never use hard, sharp, or abrasive items to clean the heat shoes. The shoes are coated with a non-stick surface that could easily be damaged. Likewise, do not use sharp metallic objects or steel wool to clean the rubber rollers. Any scratches, indentations, or marks left on the rollers will appear on the laminated product.

To clean the shoes and rollers, use DryLam's Cleaning Kit (product code CLKIT). If a cleaning kit is not readily available, rubbing (Isopropyl) alcohol and a quality cloth will do an adequate job.

It is highly recommended to use DryLam's Maintenance Kit (product code 01300) after cleaning.

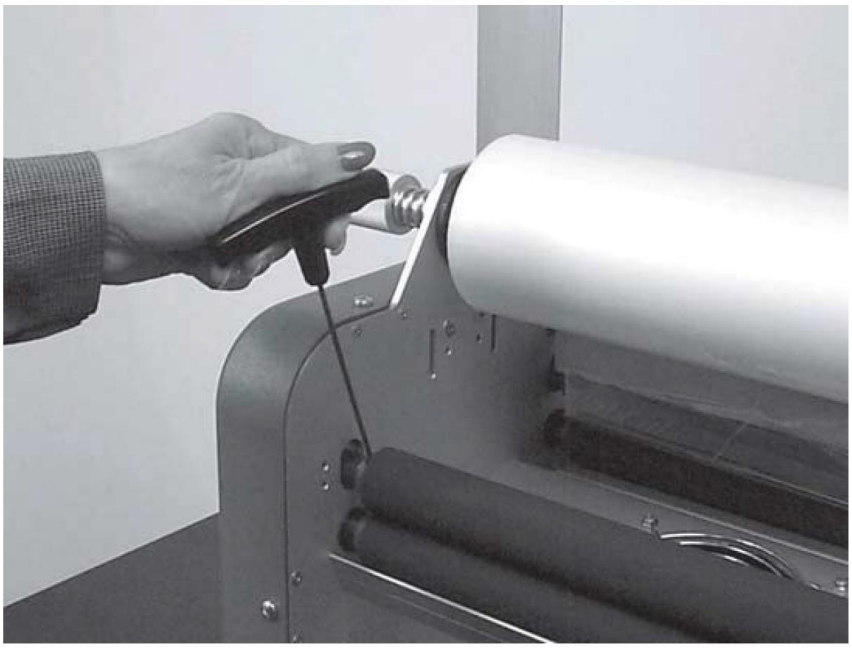
TROUBLESHOOTING GUIDE

General Troubleshooting Guide*	INCREASE HEAT	DECREASE HEAT	WORN, DIRTY OR DAMAGED ROLLERS	INCREASE TENSION ON SUPPLY ROLLS	DIRTY HEAT SHOES	MOIST OR COATED PRODUCT	DECREASE TENSION ON SUPPLY ROLLS	REDUCE SPEED	CHECK SET SCREWS	CHECK THREADING DIAGRAM	INCREASE ROLLER PRESSURE
Wrinkles on film (side to side)		●	●	●							●
Wrinkles on film (lengthways)		●			●		●				
Plastic not bonding	●							●			●
Bubbles or Blisters		●	●			●					
Rollers not turning									●		
Impressions on product			●								
Squeaking sounds							●		●	●	
Film narrowing on shoes							●			●	
Film wrinkling on shoes	●			●							
Continuous blemish			●		●	●					
Cloudy film	●										
"Orange Peel" finish		●									
Roller slips or jogs									●		
Film sticks to rollers			●							●	
Film sticks to shoes					●					●	
Film won't stay aligned										●	
No seal on edges	●			●				●			●
Poor seal- one side only						●					●

** When using this chart, try only one solution at a time, then test it before trying another.*

REMOVING A "WRAP-AROUND"

A "wrap-around" occurs if the film exiting the rear rollers curls around one of them causing the laminate to wind around the roller.



If the wrap-around is not severe, simply use the reverse feature and back the film out. **Make sure to remove the Feed Table before reversing the machine!**

For extreme wrap-arounds (i.e. when film and/or product have wrapped around the rubber rollers several times) follow this procedure:

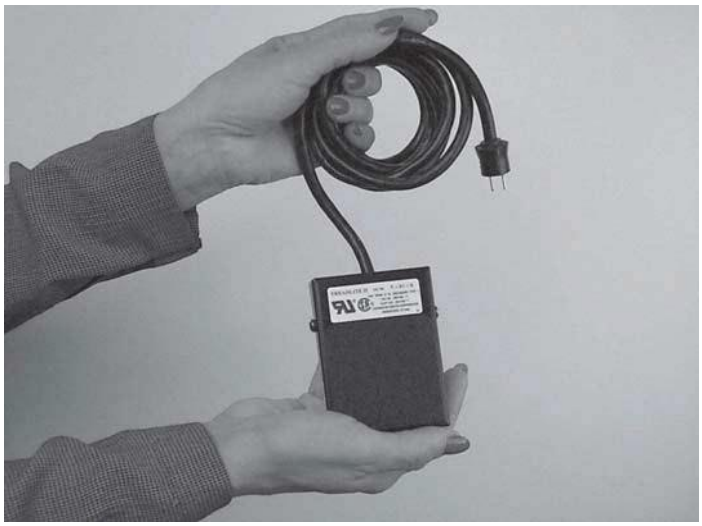
Shut the machine off! DryLam Laminators have 3/32" set screws at both ends of each laminating and pull roller. Loosen all four set screws on the pull rollers. Cut the plastic between the laminating and pull rollers, grab the loose end and pull. The rollers will rotate freely on the roll shafts and the "wrap- around" will easily unwrap. Tighten all the set screws and rethread the film.

OPTIONS

Footswitch
Slitter Kit

FOOTSWITCH

A footswitch (item #802054) may be obtained from an Authorized DryLam Dealer.



Plug the footswitch into the plug on the rear of the machine. Motor operation is now started and stopped by depressing the footswitch.

SLITTER KIT

A slitter kit (item #202005 for 25" kit or item # 202000 for 27" kit) may be obtained from an Authorized DryLam dealer.



Before installation please check contents of your kit. Unplug the laminator prior to installation. **Caution: Do not install kit if Heat shoes are hot!**

1) Molded on the back of the Mounting Bracket are two pins. These pins fit into the rivet heads. **(See Figure 1)** Hold the Mounting Bracket in place with the pins in the rivet heads. Mounting bracket holes will be lined up with the side panel holes. Secure with screws provided. Repeat on other side.

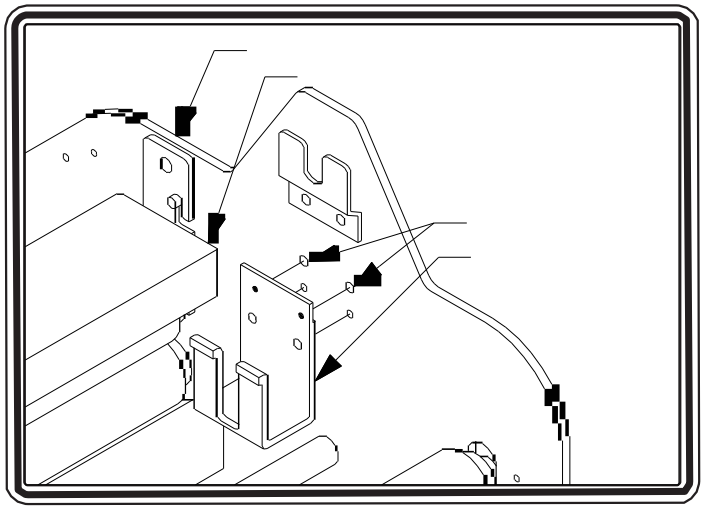


FIGURE 1

2) Take the thumb screws and screw one into each of the slitter bar locking blocks and slitter assemblies. Do not tighten the thumb screws - only start them at this point.

3) Take the slitter bar and slide on one locking block, both slitters, and then the other locking

block. Be sure the thumb screws are all on top, and both slitter edges are facing the front of the laminator. **(See Figure 2)** Adjust slitters to cut where you wish and tighten the thumb screws. Remove protective coating from slitter blades.

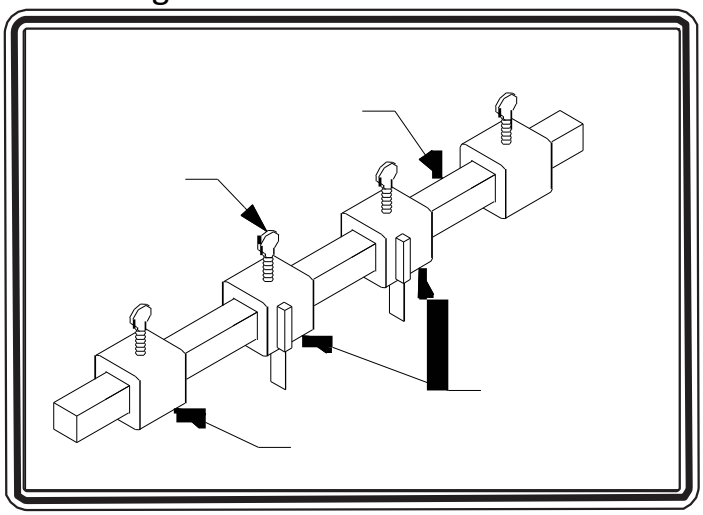
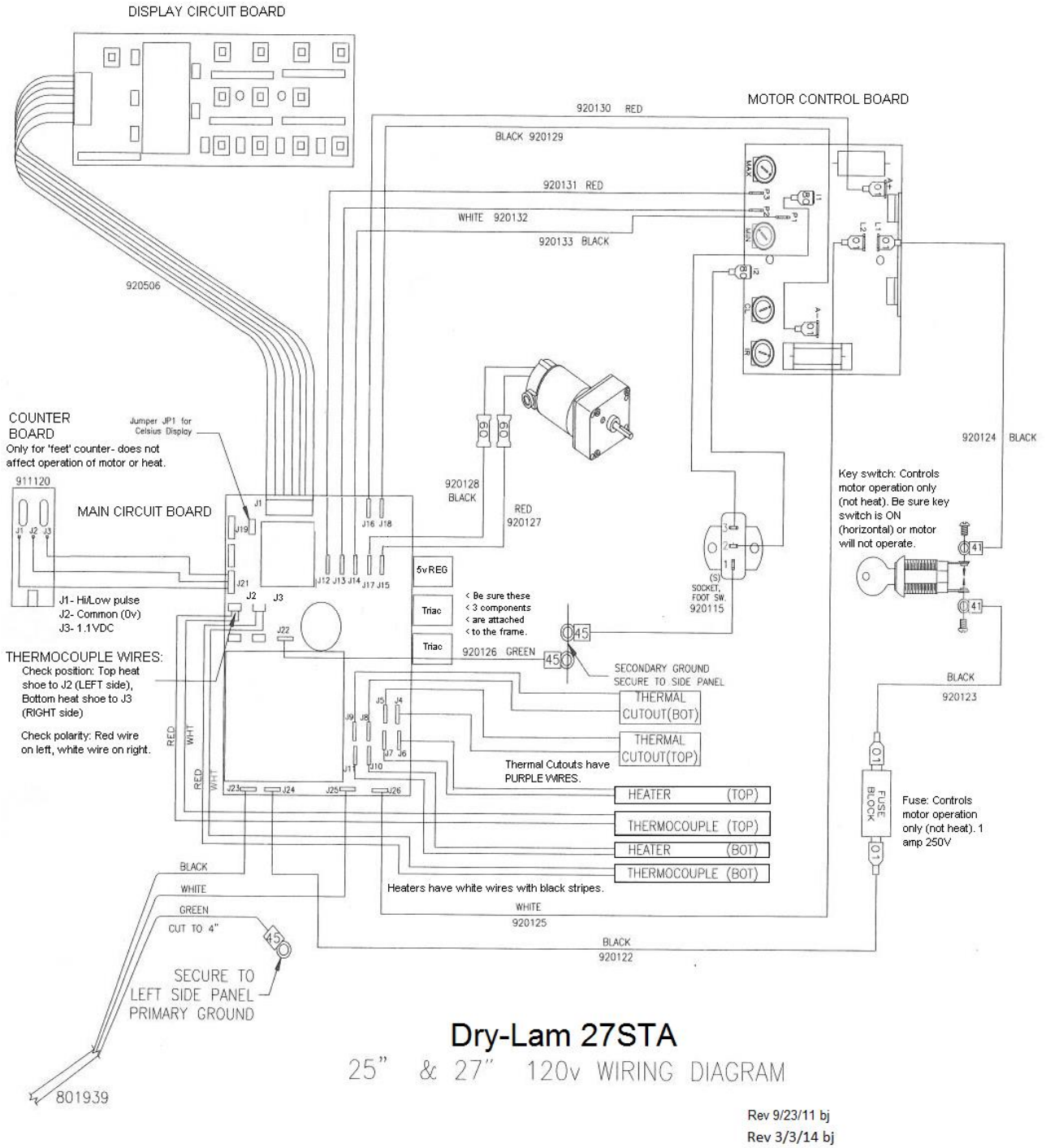


FIGURE 2

4) Drop slitter into the mounting brackets and press slitters through laminating film. Once slitter bar is in place, slide each locking block out until it contacts the mounting brackets, tighten the thumb screws.

NOTE: When pressing the slitters through the laminating film, try cutting a slot in the film with a utility knife first.

WIRING DIAGRAM



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EQUIPMENT WARRANTY

We warrant to the original purchaser the equipment manufactured by us to be free from defects in material and workmanship under normal use and service. Our obligation under this warranty shall be limited to the repair of any part or parts which may thus prove defective under normal use and service within one year from the date of shipment and which our examination shall disclose to our satisfaction to be thus defective. **When necessary, purchaser shall properly pack (in the original carton/packing material or with that assigned by DryLam) and return the unit to the nearest DryLam Service Center, freight and insurance prepaid.** THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF THE MERCHANTABILITY AND FITNESS FOR USE AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS MACHINE OR ANY PART THEREOF WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, ALTERATION, ABUSE OR MISUSE. WE MAKE NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES OR PARTS NOT SUPPLIED BY US. THE TERM "ORIGINAL PURCHASER" AS USED IN THIS WARRANTY, SHALL BE DEEMED TO MEAN THE PERSON OR COMPANY WHO FIRST PUTS THE DRYLAM EQUIPMENT INTO SERVICE. THIS WARRANTY SHALL APPLY ONLY WITHIN THE BOUNDARIES OF THE CONTINENTAL UNITED STATES.

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Shawnee, KS

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