

the phoenix™
4400-DHP

OPERATING MANUAL



Please read this manual carefully before operating!

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1. Introduction

Thank you for choosing the Phoenix 4400-DHP laminator. It has been designed and manufactured to provide years of continuous service. Please read this manual thoroughly before operating. Please inspect the box and the laminator for shipping damage. Damage should be brought to the attention of the delivering carrier immediately.

We reserve the right to make changes to this publication and to the products described in it without notice. The details given in this manual are based on the most recent information available to us. They may be subject to change in the future. We retain the right to make changes to the construction or the design of our products without accepting any responsibility for modifying earlier versions.

WARNING! Any unauthorized changes or modifications to this unit without our prior written approval will void the user's warranty and will transfer health and safety obligations to the end user.



CAUTION! Please pay attention to all passages with these symbols. This information is vital to preventing user injury and/or damage to the unit. Failure to follow this information could void the user's warranties and transfer all safety obligations to the user.

2. Important Safety Instructions

In this operating manual, you will find important safety messages regarding the product. Read these instructions carefully, failure to comply with the following safety procedures could result in serious injury.


WARNING Do not attempt to service or repair the laminator. Only authorized maintenance and service technicians should make repairs.




WARNING Do not connect the laminator to an electrical supply or attempt to operate the laminator until you have completely read these instructions. Maintain these instructions in a convenient location for future reference.

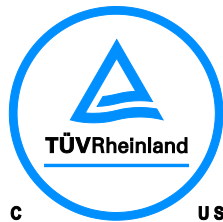
WARNING To guard against injury, the following safety precautions must be observed in the installation and use of the laminator

WARNING **Ensure the safety shield is in place before operating the Laminator. Operating without the safety shield can cause serious injury**

3. Installation Safeguards

- Shipping damage should be brought to the immediate attention of the delivering carrier.
- Avoid locating the laminator near sources of heat or cold. Avoid locating the laminator in the direct path of forced, heated or cooled air.
- The receptacle must be located near the equipment and easily accessible.
-  Connect the power cord provided with the laminator to a suitably grounded outlet only. This machine must have reliable earth ground wire to ensure the safety of the machine during operations.

- Contact an electrician should the power cord provided with the laminator not match the receptacles at your location.
-  Ensure that the voltages of the power supply you are using match the rated working voltages before operations. Do not use incorrect power supply.
-  Do not use damaged wires or sockets. If abnormal conditions occur, switch off the power supply first.
-  Only a licensed electrician should install wiring and outlet for the laminator.
- Do not defeat, disable, or remove electrical and mechanical safety equipment such as interlocks, shields and guards.



NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's cTUVus safety certification.

4. General Safeguards



- Keep hands, long hair, loose clothing, and articles such as neckties away from rollers to avoid entanglement and entrapment. The rollers have pinch points that can trap body parts or clothing and cause serious injury.
- Do not use the machine for purposes other than lamination, otherwise damages to the machine or accidents may occur.
- Keep out of reach of children.
- Keep flammable and wet objects away from the machine.
- Do not use flammable sprays or materials when cleaning the machine.
- Do not leave the machine unattended during operations.
- Do not put burrs, sharp blades or rigid materials in between the two rubber rollers.
- Do not attempt to laminate items that exceed total recommended material thickness of the unit.
- Do not place foreign object inside the machine.
- Do not cut adhesive films directly on the surface of the rollers to avoid damaging the rubber coating.
- Shut down the machine after laminating to avoid misusing this machine by others.
- Turn off the power switch and unplug the power cord before moving the machine.
- Note the locations of foot wheels while moving or operating this machine to avoid injuries to your feet.



- Disconnect from the power supply before repair or maintenance.



- Disconnect from the power supply when the machine is not in use for a long time.
- When the machine lies idle for a long period of time, raise the top rubber roller to avoid the damage to the rubber surface.
- Perform only the routine maintenance procedures referred to in these instructions.

5. Operating Conditions

- Environment requirements :
 - Ambient temperature: 50° F - 104° F
 - Humidity : 30%—80% ; ideal humidity : 55%
- Due to the static on film rolls, you should try to keep the environment clean.
- Provide enough space around machine to ensure the safe and effective operation. The minimum area covered is 8 ft. x 10 ft.
- Do not directly cut the films on the surfaces of the rubber rollers to avoid damages to the rollers.
- Do not put burrs, sharp knives or extra thick and hard materials in between the rollers. Do not leave objects like tools, rulers, knives, etc. on the working panels or the side cabinets to avoid there being rolled into the machine accidentally and damaging the rollers.
- For repairs and replacements, please contact your local distributor. Unauthorized repairs and dismantling will affect future maintenances of the machines.



***Warning: Do not keep the machine in direct sunshine or near it.
Do not keep the machine in dusty areas or places with strong vibrations.***

6. Operating Precautions

- The following objects should not be subject to lamination:
 - Volatile substances or any thermal-sensitive substances (e.g. Vinyl chloride).
 - Valuable, unique and unrecoverable objects.
 - Objects subject to change of color and nature attributable to heat (e.g. thermal sensitive paper, crayons etc.).
- Improper operation may lead to lamination failure, therefore, when using this laminator, one must choose the correct relations between the machine speed, laminating film thickness, and the material to be laminated. The guiding principles of lamination are:
 - The thicker the laminating film and material to be laminated, the slower the machine speed.
 - Conversely, the thinner the laminating film and material to be laminated, the higher the speed.
- For best results, try similar material to find the suitable temperature and speed relationship before performing lamination on final product.
- Never leave the operating machine unattended.



Caution: Safety Shield and Feed Tray must be in their proper position for operation.

7. Packing List

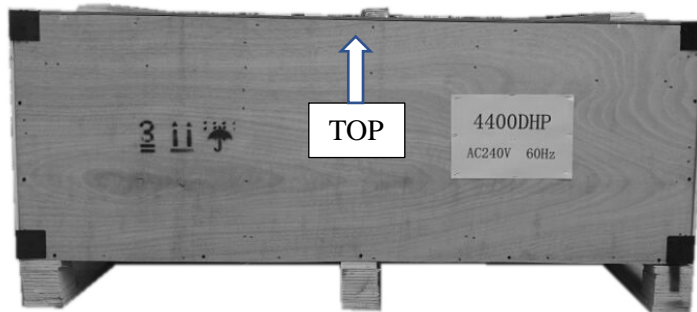
Remove all parts from shipping create and boxes. Inspect parts and the machine carefully. Any missing parts should be reported to the shipper upon receipt of shipment.

Main machine crate			
Description	Specification	Remarks	Quantity
Stand side frames		for stand	2
Stand cross members		for stand	3
Unwind/rewind shaft		for machine	2
Left bracket for unwind/rewind shaft		inside accessories box	1
Right bracket for unwind/rewind shaft		inside accessories box	1
Zippy knife		inside accessories box	1
Hex wrench	4mm, 5mm, 6mm		each one
Hex screw	M8×80	for stand	12
Flat washer	8mm	for stand	12
Spring washer	8mm	for stand	12
Hex screw	M5×12	Unwind/rewind brackets	8
Flat washer	5mm	Unwind/rewind brackets	8
Spring washer	5mm	Unwind/rewind brackets	8

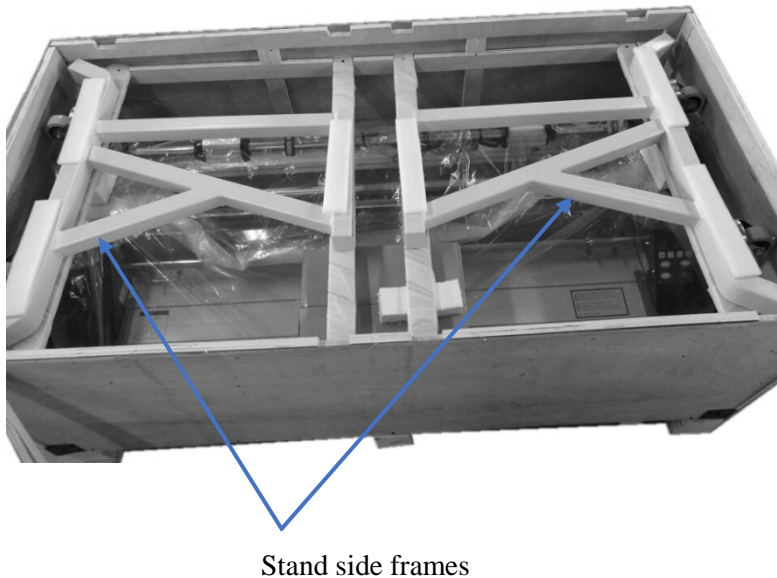
8. Installation

NOTE: Remove all parts from shipping crate and boxes. Inspect parts and the machine carefully. Any missing parts should be reported to the shipper upon receipt of shipment.

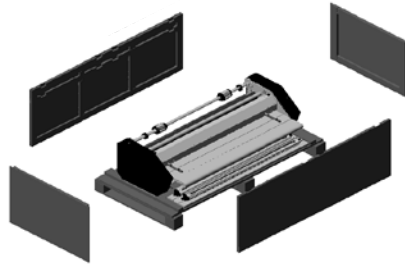
8a. Remove the top lid of the crate.



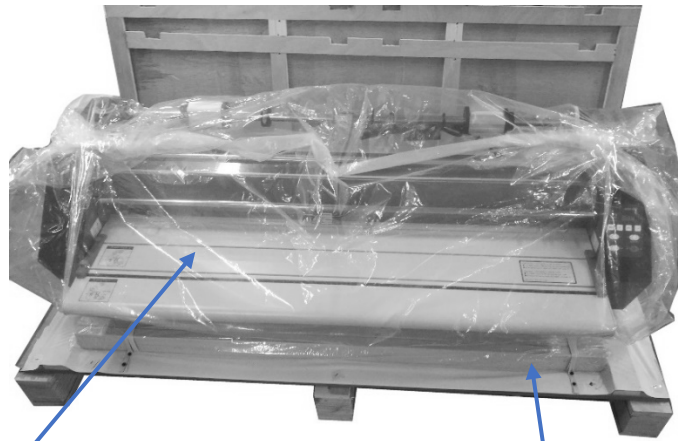
8b. Remove the stand side frames and set aside.



8c. Remove the side panels of the crate



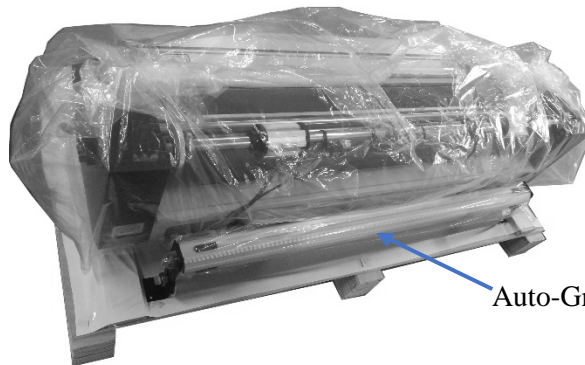
8d. Remove plastic cover, operating manual, safety shield, feed tray and stand cross members.



Plastic cover, feed tray, safety shield
and Operator's Manual

Stand Cross Members

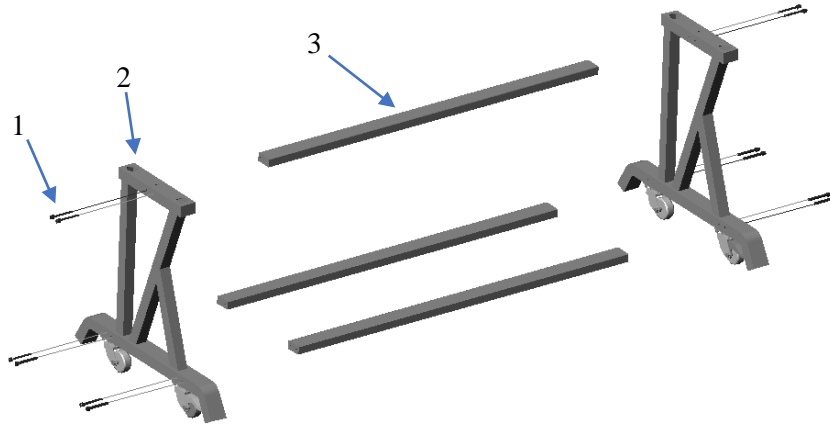
8e. Remove the Auto-Grip supply shafts.



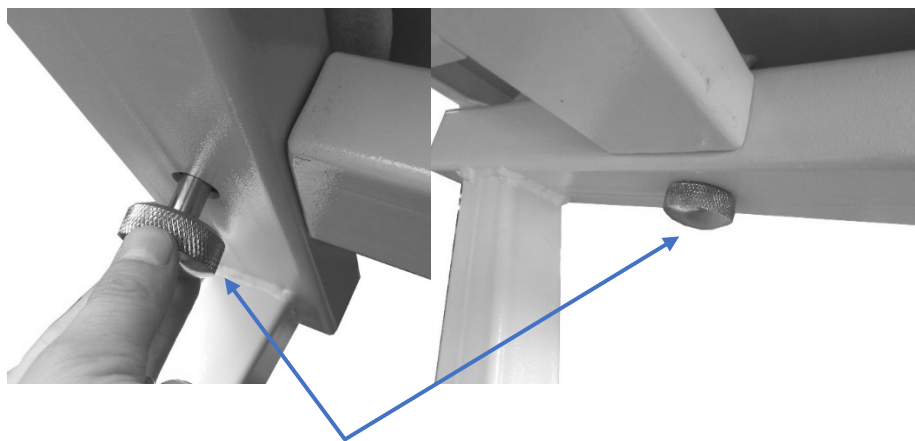
Auto-Grip supply shafts

8f. Using the side frames set aside earlier, assemble the stand with the cross members. Refer to the Packing List, Section 7, for the proper hardware.

1. Fastening bolts
2. Side frames
3. Cross members



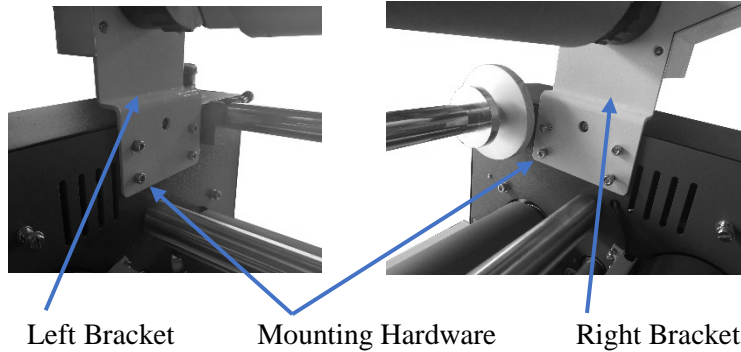
8g. Lift the machine off the skid and set it on the assembled stand, securing it with the locking thumbscrews on both side frames. The locking castors go to the front. Refer to the Packing List, Section 7, for the proper hardware.



Locking thumb screws

NOTE: The machine is heavy; use caution and good lifting practices when moving the machine to the stand.

8h. Install the right and left side PSA supply/rewind shaft brackets making sure the rewind shaft is facing forward. Refer to the Packing List, Section 7, for the proper hardware.



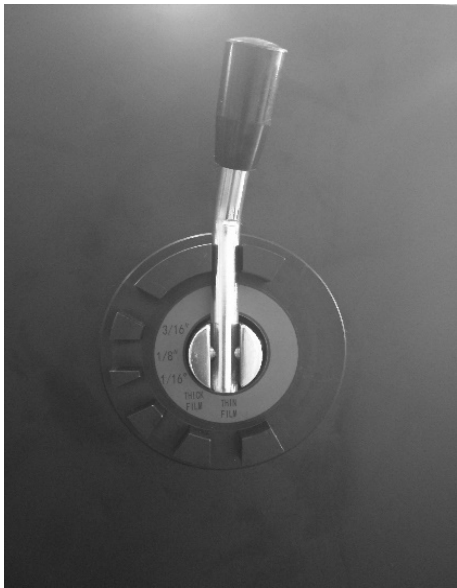
9. System Components



- | | |
|---|--|
| 1. Left PSA supply/rewind shaft bracket | 12. PSA release liner rewind brake knob |
| 2. PSA supply/rewind shaft locking cradles | 13. PSA film supply shaft brake knob (not shown) |
| 3. PSA release liner rewind shaft w/tube | 14. Control panel |
| 4. PSA film supply shaft | 15. Safety shield |
| 5. Top thermal film supply shaft w/brake disc | 16. Right side cabinet |
| 6. Left side cabinet | 17. Bottom thermal film supply w/brake disc |
| 7. Feed table | 18. Left side laminator stand |
| 8. Left side laminator stand | 19. Foot pedal |
| 9. Casters | 20. Power cord |
| 10. Right PSA supply/rewind shaft bracket | |

10. Roller Pressure/Gap Handle

1. The roller gap adjustment handle is located on the right-side cover of the laminator and is used to adjust the roller gap and pressure.
2. There are four gap positions:
 - a. One fully open, all the way at the top.
 - b. Four mounting gap settings; 1/4" (6mm), 3/16" (5mm), 1/8" (3mm) and 1/16" (1.5mm).
3. There are two pressure settings; Thick Film (5 and 10 mil), and Thin Film (1.5 and 3 mil).



Caution! When not in use, set the Gap handle to the fully open position

11. Emergency Stop Switch

The Emergency Stop Switch is located at the rear of the left side cabinet. When depressed it will stop all functions of the unit. To reset, twist in the direction of the arrows.



12. Thermal Film Shafts

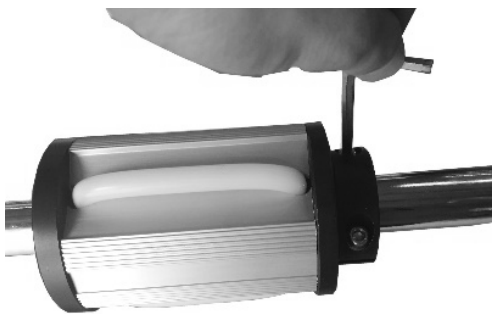
12a. 2 1/4" Core Adaptors

The 2 1/4" Core Adaptors for thermal films can be positioned on the shaft, according to the film width, by loosening the set screws and sliding to the desired position. When using these adaptors, make sure the points are facing the opposite direction of the shaft rotation.



12b. 3" Core Adaptors

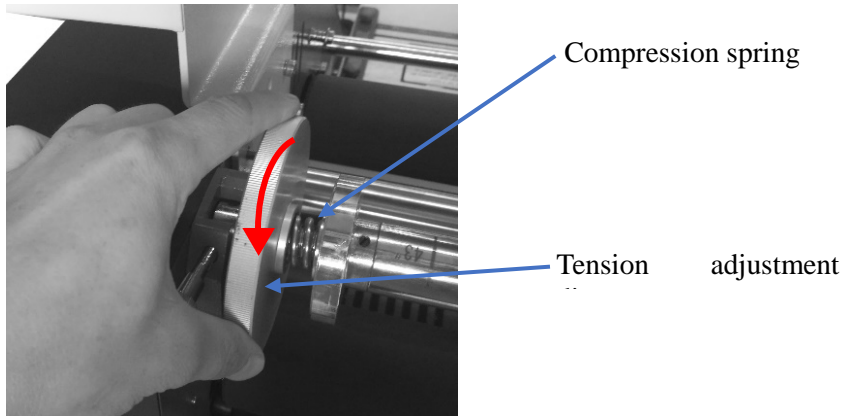
The 3" Core Auto-Grip Adaptors for thermal films can be positioned on the shaft, according to the film width, by loosening the set screws and sliding to the desired position. These adaptors have a locking collar and should be placed on the outside of the film roll whenever possible.



12c. Thermal Film Shaft Brake Assemblies

To remove wrinkles in the film web, tighten the brake adjustment knobs on each film supply shaft.

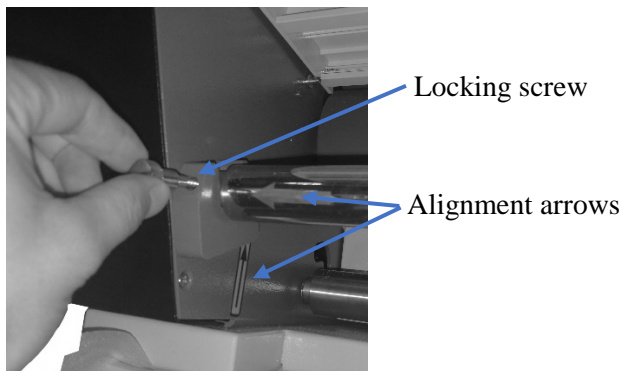
- i. Rotating the disc to compress the spring will increase brake tension, see the red arrow.
- ii. Rotating the disc in the opposite direction decreases brake tension.



Note: Do not overly tighten the brake tension. Apply only enough tension to the film web to smoothen out wrinkleless before they enter the laminating nip point.

12d. Support Cradles and Alignment Arrows

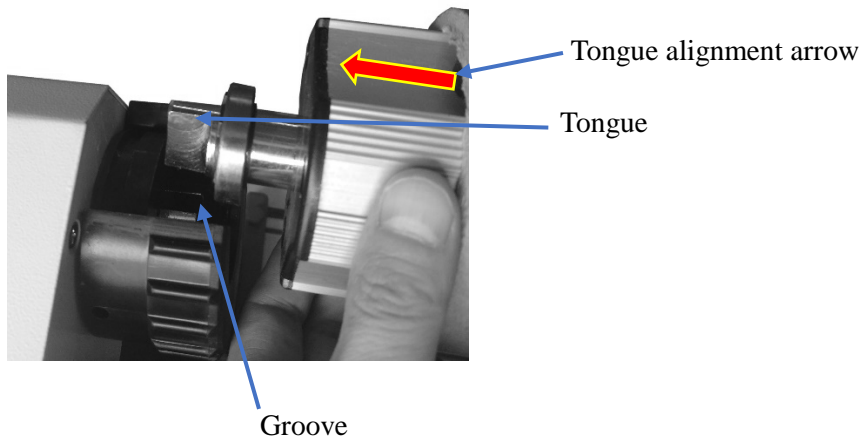
The thermal film supply shafts have locking screws and alignment arrows indicating which way they are to be loaded on the machine. Always insert the shaft with the arrows aligned on the shaft and the side frame; tighten the screw to hold the shaft in place.



13. PSA Film Supply and Rewind Shafts

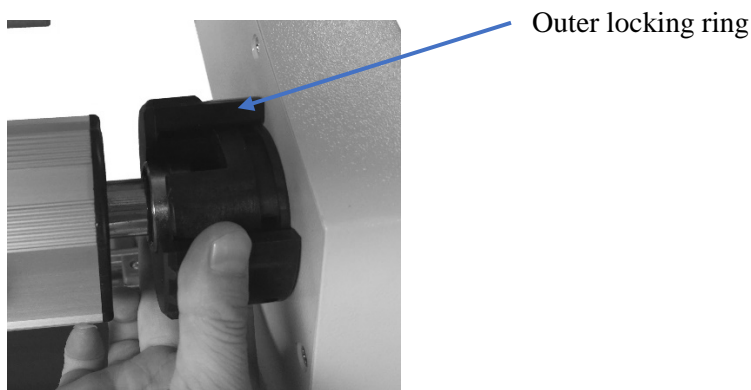
13a. Drive Side Alignment

The pressure sensitive (PSA) supply and rewind shafts have tongue and groove drive sides. Align the tongue of the shaft with the groove in the cradle. Alignment arrows on the shafts indicate the position of the tongue.



13b. Support Cradle Locking Rings

After the shafts have installed, rotate the outer locking ring of the cradle to lock the shafts in place.

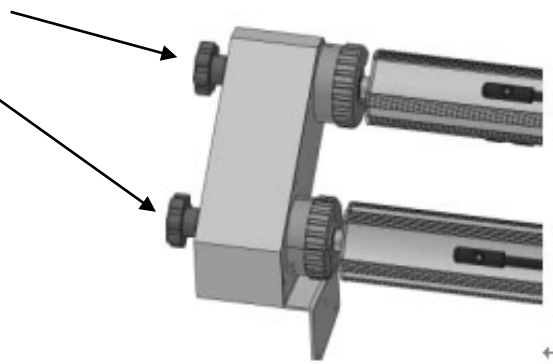


13c. PSA Supply Shaft Brake Assemblies

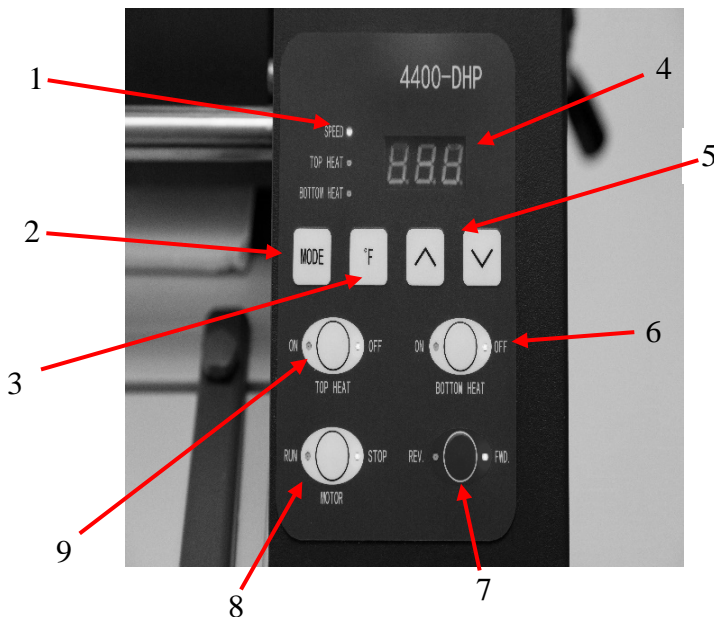
Adjust the brake tension on the unwind and rewind shafts as needed. Do not over-tension either shaft as this may cause the release liner to be pulled into the rollers or induce curl in the finished product.

Release liner brake adjustment knob

PSA film brake adjustment knob



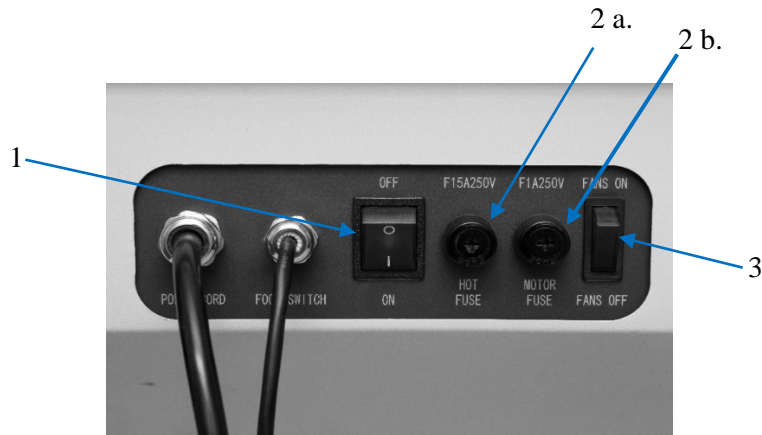
14. Control Panel



1. MODE Indicator LEDs: Speed, Top Heat & Bottom Heat
2. MODE Selector
3. Temperature Actual
4. Temp & Speed Setting Display
5. Speed & Heat UP/DOWN Adjustment
6. Bottom Heat ON/OFF
7. Motor REV/FWD
8. Motor RUN/STOP
9. Top Heat ON/OFF

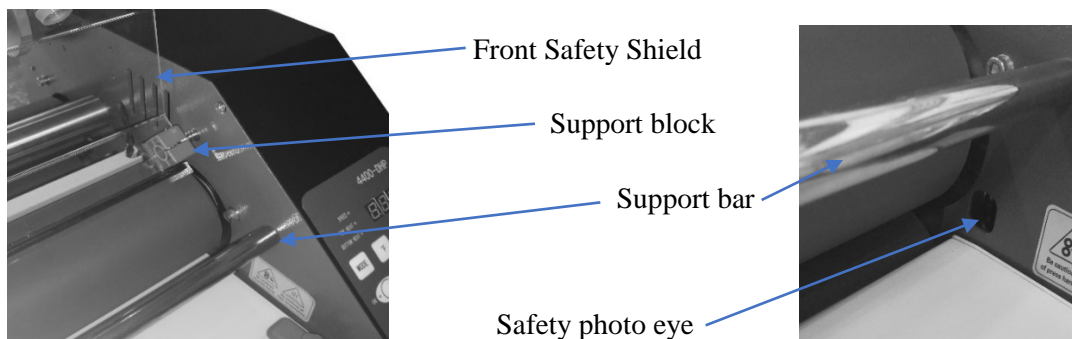
15. Rear Power Panel

1. Main power ON/OFF switch
2. Safety fuses are located on the Rear Power Panel.
 - a. Hot Fuse - protects the heaters
 - b. Motor fuse - protects the drive motor
- NOTE: Be sure to replace blown fuses with the proper rated
3. Cooling Fans switch



16. Safety Shield and Safety Photo Eye

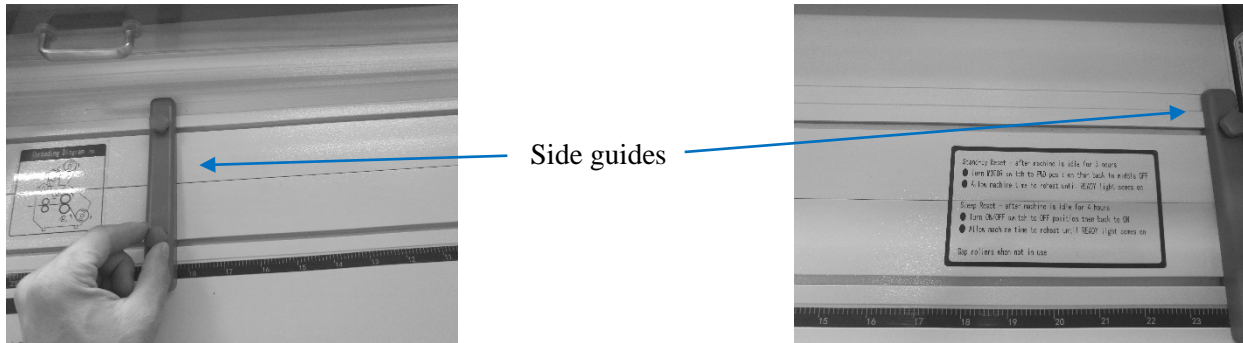
1. Insert left side with spring pin into support block of the shield.
2. Insert right side with spring pin into support block of the shield
3. Lower safety shield onto side support bar.
4. When mounting, remove the shield.
5. The safety photo eye, located just before the heat rollers, will protect the operator from becoming entrapped in the rollers. If the eye becomes blocked, the motor will shut off stopping the rollers. To reset the motor, remove the blockage and press MOTOR.
6. Use the foot pedal to laminate and mount boards.



Warning: Ensure the safety shield is in place before operating the laminator. Operating without the safety shield can cause serious injury.

17. Feed Table with Side Guides

1. The feed table has displays that inform the operator on how to web up thermal and PSA films as well as describing Stand-By and SLEEP functions.
2. To install; rotate the safety shield to full upright position.
3. Insert feed table onto back two positioning pins on both side frames.
4. Lower feed table onto the front side support pins on both side frames.
5. To remove; reverse the steps above.
6. To help feed the media straight, adjust the side guides to proper position and width.

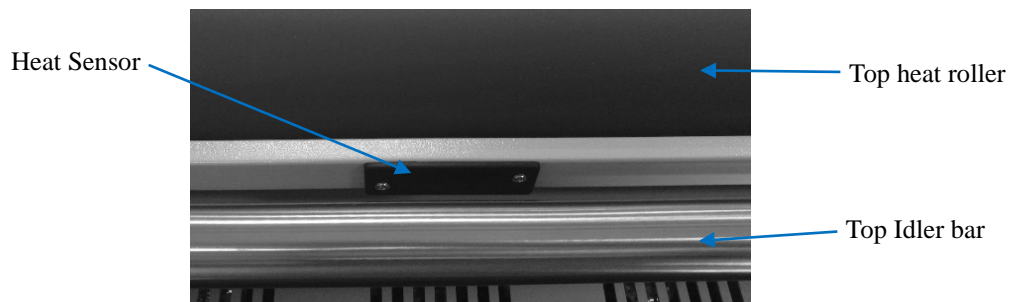


18. Standby and Auto Sleep Function

1. If the motor has been idle for Three (3) hours without running, the machine will go into STAND BY mode. The temperature drops to 176° F and the ready light flashes.
 - a. To resume operation, press the MOTOR switch twice.
 - b. Allow machine to reheat to proper temperature.
2. If the motor has been idle for 4 hours without running, the machine will go into SLEEP mode, and the heaters are turned off.
 - a. To resume operation, turn the ON/OFF switch to OFF position, then back to ON. Select the heat mode and select your desired temperature.

19. Heat Sensor Safety Feature

1. Should a heat sensor be blocked, the motor and heater will stop.
2. The LED panel will show an Error code.
 - a. **E03** top heat sensor blocked.
 - b. **E06** bottom heat sensor blocked.
3. Clear away any paper or film between the sensor and the roller on the top or bottom roller.



4. To reset the sensor, turn the main ON/OFF switch to OFF, then back to ON
 - a. You should hear one beep indicating the sensor has been cleared.

20. Operation

1. Plug power cord into a proper receptacle.
 - Connect the power cord provided with the laminator to a suitably grounded outlet only.
 - Contact an electrician should the power cord provided with the laminator not match the receptacles at your location.
 - Ensure that the voltages of the power supply you are using match the rated working voltages before operations. Do not use incorrect power supply.
2. Turn the main ON/Off switch on the front control panel to the ON position, the LED display control panel will illuminate.
3. The LEDs on the control panel will illuminate.
4. Select the desired mode by pressing MODE.
 - a. The SPEED, TOP HEAT and BOTTOM HEAT LEDS will illuminate as you toggle through the MODE button indicating which one to choose.
 - b. When in the desired mode, use the up/down keys, Δ ∇ to reach the desired speed and temperatures.
 - c. The settings you have chosen will be displayed in the LED panel.
5. Press the 'F' key to display actual temperature of the heat rollers when those modes are selected.

6. Suggested speed and heat settings:

Material	Film Gauge	High Temp Film		Low Temp Film	
		Settings			
	mil	Temp (F)	Speed	Temp (F)	Speed
Copy paper Newspaper Tissue paper	1.5	290	7	248	8
	3	270	5	239	6
	5	250	3	230	5
	10	240	2	221	3
Construction paper Posters	1.5	295	7	248	6
	3	275	5	239	5
	5	250	2	230	3
	10	240	2	221	2
Index cards File folders Poster board	1.5	300	6	248	5
	3	275	4	239	4
	5	250	2	230	2
	10	240	1	221	2

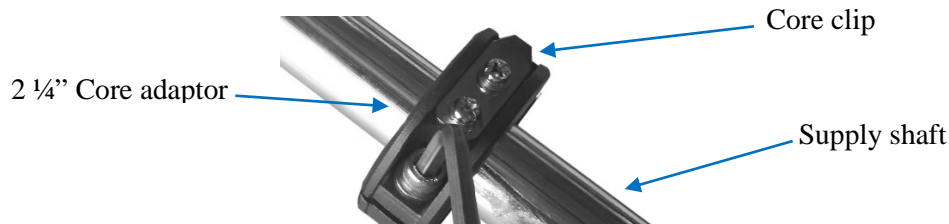
NOTE:

- Suggested settings are starting points only and should be adjusted according to quality of output achieved.
- Excess heat may damage the printed image or cause waves. Insufficient heat may result in poor adhesion.
- Thinner stocks can be run faster while thicker stocks or heavy ink coverage should be run slower.
- Some stocks and ink-sets cannot be effectively laminated with thermal films. Compatibility testing is recommended before laminating long runs.

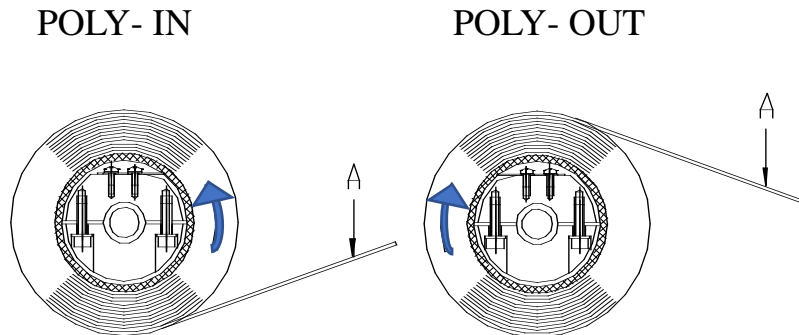
Warning: Ensure the safety shield is in place before operating the Laminator. Operating without the safety shield can cause serious injury.

21. Loading Film rolls

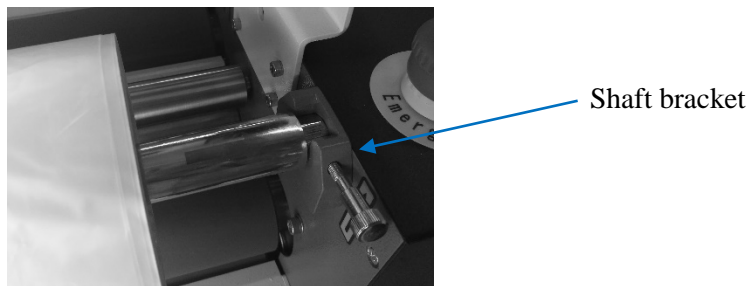
1. Determine whether your film is on 2 ¼" or 3" diameter cores
2. Select to use the 2 ¼" 3" core adaptor for your film
 - a. Two - 2 ¼" core adaptors slid onto each supply shaft.



3. Determine whether your film is POLY-IN or POLY-OUT style
 - a. Side "A" has the adhesive (Poly).

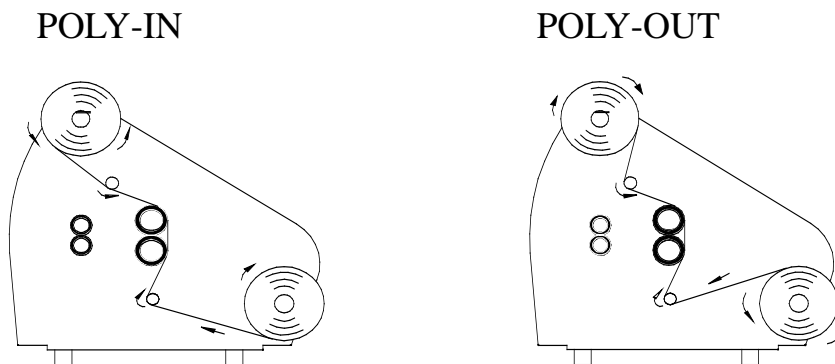


4. Place the supply shafts onto the shaft brackets with the arrows on the shaft matching the arrows on the left side frames.



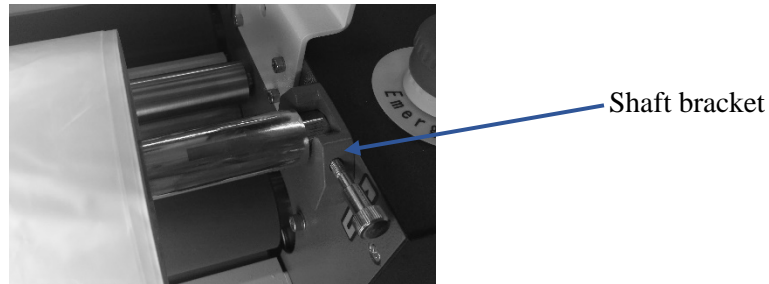
5. Remove each supply shaft, while aligning the arrow on the shaft with the arrow on the machine side frame, slide the film roll onto the shafts with the film web coming off the bottom or the top of the roll depending on the poly direction of the film.
 - a. POLY-IN film comes off the BOTTOM of the roll
 - b. POLY-OUT film comes off the TOP of the roll.

Note: Twisting the roll of film in the direction of the core clip, will help slide the roll onto the core adaptors.

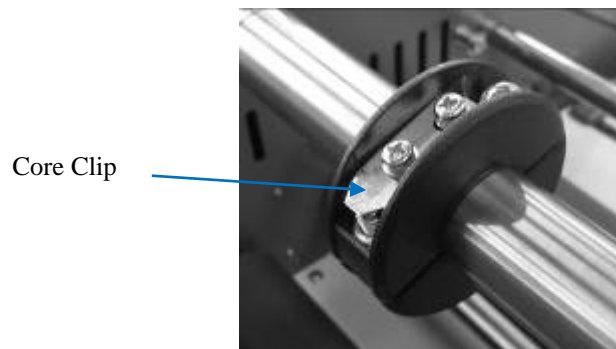


22. Using 2 1/4" Film core adaptors

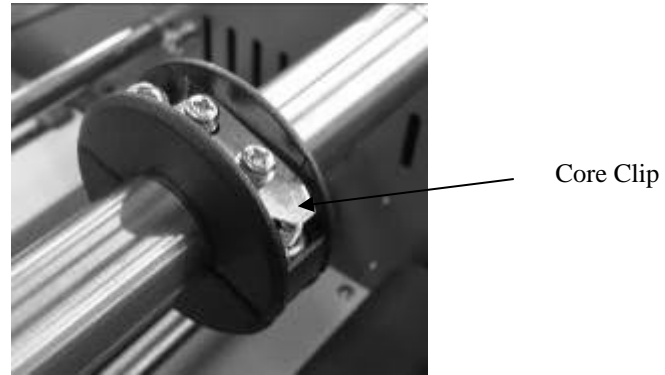
1. Place the supply shafts onto the shaft brackets with the arrows on the shaft matching the arrows on the left side frame.



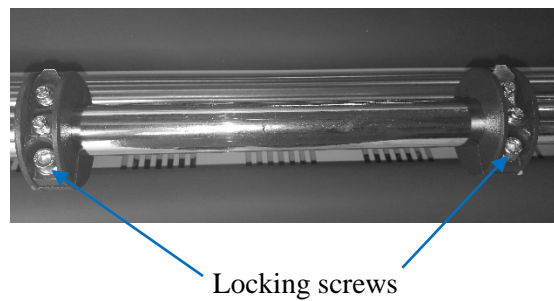
2. If using POLY-IN film:
 - a. Select Four (4) 2 1/4" core adaptors
 - b. Slide two (2) core adaptors onto the top shaft with the core clips pointing toward the front of the machine when the clips are on top and the shaft is in place.
 - c. Slide Two (2) core adaptors onto the bottom shaft with the core clips pointing toward the Rear of the machine when the clips are on TOP and the shaft is in place.



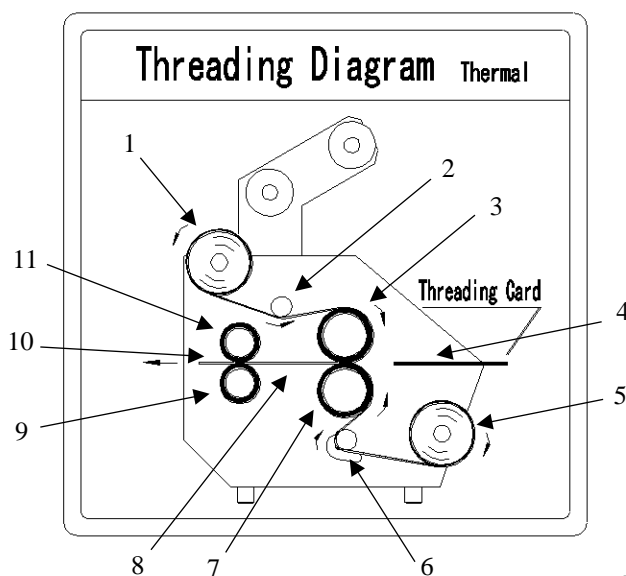
3. If using POLY-OUT film
 - a. Select Four (4) 2 1/4" core adaptors
 - b. Slide Two (2) core adaptors onto the TOP shaft with the core clips pointing toward the REAR of the machine when the clips are on TOP and the shafts are in place.
 - c. Slide Two (2) core adaptors onto the BOTTOM shaft with the core clips pointing toward the FRONT of the machine when the clips are on TOP and the shafts are in place.



4. Position each core adaptor 50 mm (2 inches) inside the edge of the film roll width as noted on the supply shaft.
5. Tighten the two (2) core adaptor screws on each core adaptor.

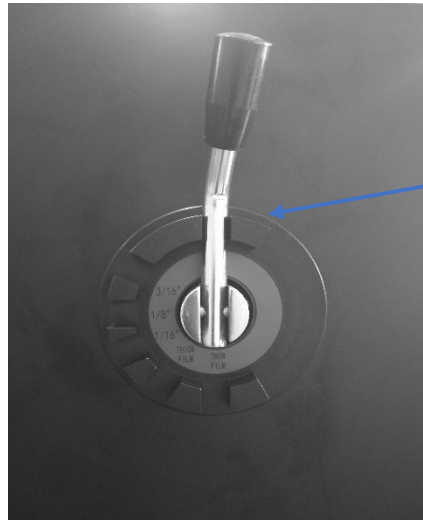


23. Threading Thermal Film



1. Upper Film Roll
2. Top Idler Bar
3. Top Heat Roller
4. Feed Table
5. Lower Film Roll
6. Bottom Idler Bar in 'J' channel
7. Bottom Heat Roller
8. Cooling Deck
9. Bottom Pull Roller
10. Exit Tray
11. Top Pull Roller

1. Raise the gap adjustment handle to the up 1/4" (Open) position.



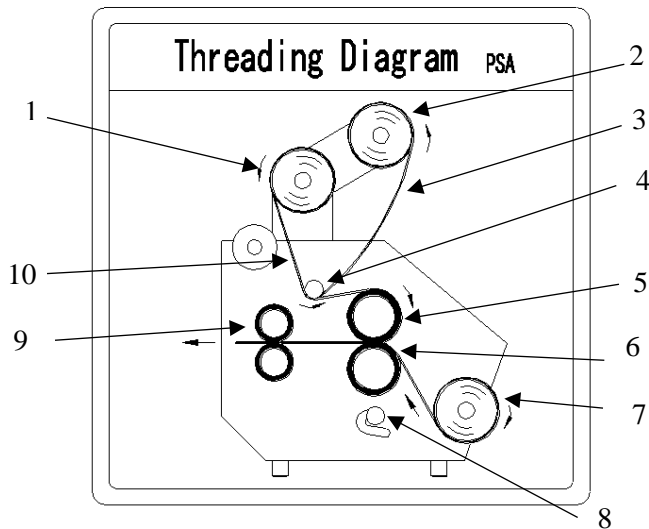
Gap adjustment handle in the 1/4" (Open) position

2. Pull the top film web under the top idler bar and drape over the two heat rollers.
3. Pull the bottom film web under the bottom idler bar, then up over the two rollers sticking it to the top film web.
4. Return the bottom idler bar to the up position in the idler bar in the 'J' channel.
5. Return the feed table into position.
6. Return the safety shield into position.
7. Push the two film webs between the front rollers using a treading card or thin cardboard.
8. Return the gap adjustment handle down to the LAMINATE position.
9. Press MOTOR on the control panel or use the foot pedal to advance the film web through the front rollers and between the rear pull rollers, until the threading card can be cut from the web at the rear of the machine. Press MOTOR again to stop the rollers or release the foot pedal.
10. Refer to Section 12 if you need to adjust the brake tension due to wrinkles in the output.

Hint: If the machine is hot, you may slide a piece of poster through the rollers that is large enough so that the leading edge is sticking out of the pull rollers in the back and the trailing edge can be adhered to the top roll of film. Bring the bottom roll of film up and tac it to the top piece of film. Close the rollers with the gap handle and advance the film web through the machine.

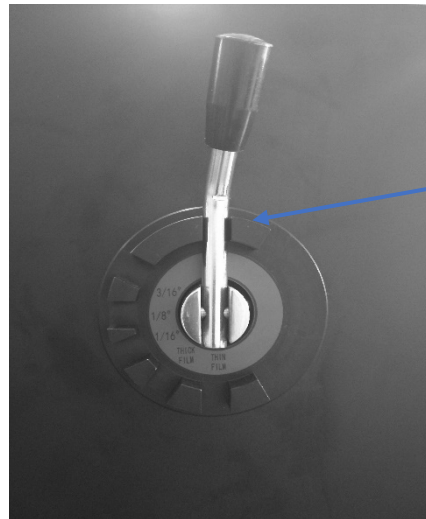
Note: The film should be smooth and taught to the surface of the heat roller. If the film is not tight enough, adjust the brake tension on both top and bottom film rolls.

24. Threading Pressure Sensitive (PSA) Film



1. PSA film supply
2. PSA release liner rewind
3. Release liner
4. Top idler bar
5. Top Roller
6. Bottom roller
7. Bottom substrate: can be Printed media, mount adhesive or Kraft paper, (use the bottom thermal film supply shaft)
8. Bottom idler bar
9. Pull rollers
10. PSA film

1. Raise the gap adjustment handle to the 1/4" (Open) position.



Gap adjustment handle
in the OPEN position

2. Put the roll of over laminate on the PSA supply shaft.
3. Pull the top film web under the top idler bar and bring it up to the release liner rewind shaft.
4. Attach the film with liner to the rewind tube with a piece of masking tape.
5. Separate the film from the liner and drape the film over the top roller.
6. Thread the bottom roll of printed media or Kraft paper behind the bottom idler bar and bring it up to the bottom roller. If using mounting adhesive DO NOT go behind the bottom idler bar, (as shown above).
7. Push the bottom roll of substrate through the rollers, flatten against the roller and tape to the back deck.

8. Pull the top roll of film down and attach it to the bottom substrate.
9. Return the gap adjustment handle down to the LAMINATE position.
10. Replace the feed table.
11. Replace the safety shield.
12. Use the motor switch on the control panel or the foot pedal to advance the film web through the rollers; remove the tape the bottom substrate.
13. Refer to Section 13 if you need to adjust the brake tension due to wrinkles in the output.

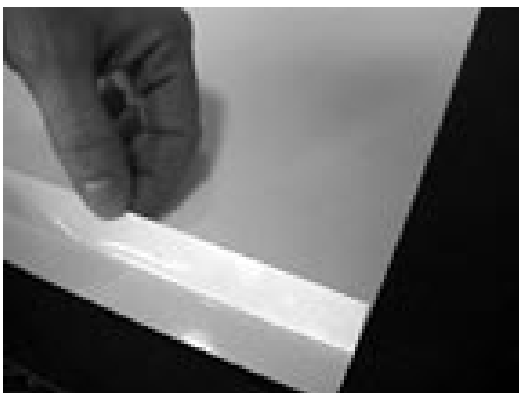
25. Mounting

25 a. Pre-coating mounting boards

- Load a roll of mounting adhesive on the top roller (see Loading upper shafts section 23).
- Insert leader board the same thickness as the boards to be coated and the width of the mounting adhesive, between the nip rollers and lower the top roller until it touches the board.
- Pull mounting adhesive down over the idler bar and over the front of the top nip roller and adhere to the leader board.
- Run leader board half way through the roller and stop.
- Insert mounting board to be coated and depress foot switch.
- After the last board, insert leader board to keep adhesive from contacting the rollers.

25b. Mounting print to a pre-coated mounting board

- Pull back and fold down 1" of the liner from the pre-coated mounting board
- Adhere leading edge of the print to the exposed adhesive on the board
- Insert leading 1" of the board into the nip rollers
- Lower the roller
- Lay print over top nip roller
- Hold release liner on board with one hand and apply pressure to print as it comes over the top roller.
- Depress the foot switch to run the board and print through the rollers



26. Troubleshooting

Problems	Causes	Solutions
Machine does not turn on	<ol style="list-style-type: none"> 1. No power supply 2. Main power switch is OFF 3. Blown motor fuse 4. Motor has failed 5. Machine is in Sleep mode 	<ol style="list-style-type: none"> 1. Plug in power cord 2. Move power switch to ON position 3. Replace fuse on rear panel 4. Change the electric motor 5. Rotate Reset switch on rear panel
Heaters do not come on	<ol style="list-style-type: none"> 1. Heat mode not selected 	<ol style="list-style-type: none"> 1. Select Top or Bottom Heat 2. Use the UP key to set the heat
Top and Bottom LEDs do come on solid	<ol style="list-style-type: none"> 1. Rollers not hot enough 2. Heaters are not turned on 	<ol style="list-style-type: none"> 1. Warm up time is 20-25 minutes 2. Select Mode for top or bottom heat and use the arrow UP/DOWN keys to select the desired heat setting
Poor film adhesion/cloudy prints	<ol style="list-style-type: none"> 1. Nip roller pressure to low 2. Operating too fast 	<ol style="list-style-type: none"> 1. Place gap handle in down position 2. Turn speed dial to slower speed
Bubbles in film around print	<ol style="list-style-type: none"> 1. Operating too slowly 	<ol style="list-style-type: none"> 1. Select SPEED mode, use the UP key to increase speed
Thermal film supply roll(s) gets loose during operation	<ol style="list-style-type: none"> 1. Not enough brake tension on the supply shaft(s) 	<ol style="list-style-type: none"> 1. Increase brake tension on supply roll(s)
Lamination output is curled	<ol style="list-style-type: none"> 1. Sheet is curled upward 2. Sheet is curled downward 	<ol style="list-style-type: none"> 1. Reduce top roll tension 2. Reduce bottom roll tension
LED display id flashing	Machine is in Standby Mode	Press MOTOR twice, allow machine to heat up (See section 15)
Power is ON but not lights	Machine is in Sleep Mode	Turn power switch OFF then ON, allow machine to heat up (See section 15)
PSA release liner being pulled into the rollers	Not enough brake tension	Turn the brake knob clockwise to increase the tension
PSA film being pulled up and rewound on the release liner rewind	<ol style="list-style-type: none"> 1. Too much brake tension on the rewind 2. Not enough tension on the film unwind 	<ol style="list-style-type: none"> 1. Release the brake tension on the rewind 2. Add brake tension on the unwind
An error code is displayed on the control panel	<p>Identify the code and correct if possible. If you cannot perform the correction, contact the Phoenix Authorized Repair Center, (see Sect 31).</p> <p>E01: top roller exceeded 356 F E02: top sensor faulty E03: top heat sensor blocked E04: bottom roller exceeded 356 F E05: bottom sensor faulty E06: bottom heat sensor blocked</p>	<p>E01: turn the top heat off and let the machine cool back down E02: contact the repair center E03: unblock the top sensor E04: turn the bottom heat off and let the machine cool back down E05: turn the heat off and let the machine cool back down E06: unblock the bottom heat sensor</p>

27. Specifications

Description	Phoenix 4400-DHP
Laminating Width	44"
Roller Diameter	3.5"
Roller Gap	1/4"
Temperature	90 - 302° F
Warmup Time	20 – 25 min.
Heating Method	Quartz tube
Laminating Speed	0.5 to 8 Ft/min
Film Unwinds	Top and bottom
PSA Film	Top unwind and rewind
Film Core Size	2-1/4" and 3"
Film Thickness	1.5 to 10 mil
Power Supply	240 v 15 Amp
Power Consumption	3100 W
Net Weight	401 lbs.
Dimensions	61" x 32" x 53"
Shipping Weight Machine	485 lbs.
Shipping Dimensions Machine	64" x 29" x 26"

28. Limited Warranty

The Manufacturer warrants to the original Consumer purchaser that each new PHOENIX Laminator which proves defective in materials or workmanship within the applicable warranty period will be repaired at our option or replaced without charge. The Applicable Warranty period for the New PHOENIX Laminators shall be one year on parts and three months on labor and rollers from date of purchase.

After three months and for up to one year after the date of purchase, the manufacturer will complete Warranty repair labor at no charge provided the labor is completed at one of our Authorized Locations. It is the responsibility of the original consumer purchaser to return the PHOENIX laminator to our Authorized Locations. For a list of Authorized Repair Locations, please contact your Dealer.

All Warranty Repairs must be approved in advance by Technical Service. If returning the PHOENIX for approved Warranty repairs, it is the consumer's responsibility to insure the machine is packaged in its original packing to minimize the chances of any shipping damage. Shipping damage is not covered under this Warranty and is a matter between the consumer and the freight company used to transport this back to the authorized repair center. If you need proper packaging, your Dealer can supply such packaging at a nominal cost.

This Warranty extend to and is enforceable by only the original consumer purchaser, and only for the period (during the applicable term), which the product remains in the possession of the original consumer purchaser.

"Original consumer purchaser" means the person who first purchased the product covered by this warranty. It does not apply if it is found that at any time the equipment has not been used for its intended purpose.

Any unauthorized changes or modifications to this unit without our prior written approval will void the user's Warranty.

The applicable warranty period for Demo Equipment shall vary, not exceeding the maximum warranty period stated herein. All Demo Equipment comes with a specific warranty, which will be stated at the time of purchase. If warranty period is not detailed in writing, there is no remaining warranty. Please ask your dealer or sales representative for details.

Used Equipment or non-Demo equipment is sold on an "AS IS" basis with No Warranty. For more information regarding this warranty, please contact your distributor.

The information contained in this document is subject to change without notice.

The Manufacturer assumes no responsibility for any errors that may appear in the Owner's Manual. Nor does it make expressed or implied warranty of any kind with regard to this material including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

The Manufacturer shall not be liable for incidental or consequential damages in connection with, or arising out of the furnishing, performance, or use of this document and the program material, which it describes.