# 2.0 SPECIFICATIONS

Standard Power Supply: 230V, 20 amp, 2 wire service plus ground

50/60 Hz, single phase

U.S. & Canadian versions equipped with a NEMA 6-20P

Attachment plug requires a 6-20R receptacle

Operating Power: Domestic model: 230 (+6, -10%) VAC, 16 amp, 60 Hz

European model: 230 (+6, -10%) VAC, 16 amp, 50 Hz British model: 240 (+6, -10%) VAC, 16 amp, 50 Hz

Australian model: 240 (+6, -10%) VAC, 16 amp, 50 Hz

Dimensions: 36 1/4 inches (92 cm) Wide (with handle)

15 3/16 inches (38.5 cm) High 18 9/16 inches (47.1 cm) Deep

Net Weight: 117 Pounds (53.06 kg)

Max Product Width: 27 inches (68.58 cm)

Max Product Thickness: 1/16" (2mm)

Film Capacity: Maximum Thickness & Length

1.5 mil (40 micron) x 500 ft. (152m) 3.0 mil (75 micron) x 250 ft. (76m) 5.0 mil (127 micron) x 200 ft. (61m) 10.0 mil (254 micron) x 100 ft. (30m)

Maximum Width: 27 inches

Film Roll Winding: Poly-In

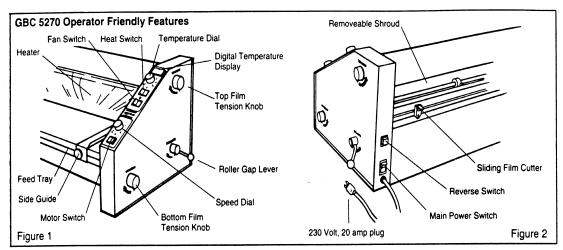
Core Diameter: 1 inch (2.54cm)

Warm-up time: 10-15 minutes

Temperature Range:  $200^{\circ} (94^{\circ}C) - 350^{\circ}F (176^{\circ}C)$ 

Maximum Film Speed: 15 FPM (1.5 mil film)

Plug type: NE 6-20P



#### SET-UI

- 1. Inspect your GBC5270 for shipping damage. Damage should be brought to the immediate attention of the delivering carrier.
- 2. Place the GBC5270 on a sturdy, flat surface that is approximately 30" high for comfortable operation in a standing position. Make sure all four rubber support feet are resting squarely on the surface. If you do not have a suitable stand ask your GBC representative about the specially designed GBC5270 cabinet.
- 3. Install "Roller Gap Lever" onto right side of laminator. Insert hole on handle onto rod protruding from the side of laminator. Line up small allen wrench screw on side of handle (not large allen wrench screw at end of handle) with flat side of rod. Use allen wrench to tighten screw into position.
- 4. Locate the laminator in a clear work area with adequate space at the rear to allow the film web to freely exit. To reduce the possibility of film accumulating and jamming the laminator the finished web of lamination must be allowed to drop down toward the floor after exiting the laminator.
- Do not locate the laminator in the direct path of a cooling fan, air conditioner or similar draft.
- 6. The U.S. and Canadian GBC5270 is equipped with a 230 volt, 20 amp., NEMA 6-20P attachment plug (See figure 9). A NEMA 6-20R receptacle must be provided for connection to an electrical supply. Do not attempt to operate this laminator on a 115 volt line.

# SERVICE

- Do not attempt to service or repair the laminator yourself. If service is required, contact your local GBC service representative or call 1 (800) 477-3444.
- Unplug the laminator from the electrical outlet and contact an authorized GBC service representative under the following conditions:
- If the power supply cord is damaged or frayed.
- If liquid has been spilled into the laminator.
- If the laminator has been exposed to rain or water.
- If the laminator has been subject to excessive shock through being dropped or bumped.
- If the laminator does not operate normally when following the operating instructions.
- Adjust only those controls that are specified in the operating instructions.

# LOADING AND THREADING LAMINATING FILM

The GBC5270 laminator is designed to run two film rolls of the same length and width. Never operate the system with only a single film roll or two rolls of

different widths. This would result in substantial adhesive transfer to the rollers, thus requiring extensive clean-up and possibly film wrapping around the rollers.

The GBC5270 uses "poly-in" film. This means that the film is wound with the adhesive (polyethylene) on the inner surface of the web.

Always change the top and bottom film supply rolls at the same time. Near the end of every roll of GBC film is a label that says "Warning - End of Roll". When you see this label appear on either the top or bottom roll, finish laminating the item presently in the laminator and immediately replace both rolls of film.



WARNING: OBSERVE THE FOLLOWING PROCEDURES TO REDUCE THE RISK OF EXPOSURE TO HOT SURFACES AND IN-RUNNING NIP POINTS.

## LOAD THE TOP FILM ROLL

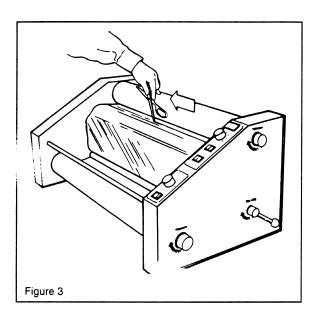
- 1. Switch main power switch (located on rear of laminator) to the off "0" position.
- 2. Remove the feed tray by lifting with two hands.
- Loosen film supply shaft tension by turning upper and lower film tension knobs counter clockwise until supply shafts rotate freely.
- 4. Turn "Roller Gap Lever" clockwise to the "Gap" position.
- 5. Use a pair of scissors or other sharp object to carefully cut the top film web between the roll of film and the top heater Also cut the bottom web of film between the film roll and the heater at this time. (See figure 3) CAUTION: DO NOT PUNCTURE THE LAMINATING ROLLERS DURING THIS PROCEDURE.
- 6. Stand on the right side of the laminator to remove unwanted film from the laminator. Turn the power on "1" then use your right hand to gently pull the film out the rear of the machine. Now turn the system off "0" again.
- 7. Remove the film supply shaft from the laminator by lifting the shaft up and out of the film shaft driver.
- 8. Slide the old film roll off the metal shaft. Slide a new roll of film on the shaft making sure the film unwinds the same direction as the old film. (See figure 5) Center the new roll on the shaft by sliding the roll until it presses against the metal collar. If the new film is a different width than the preceding film follow step # 9 to adjust the position of the collar. Otherwise, proceed to load the bottom film roll in the same manner.
- 9. To adjust the position of the collar on both shafts use the allen wrench to loosen the allen screw. Turn it counter-clockwise until the collar slides on the shaft. Place the new roll of film on the shaft and center visually. Move the collar over until it presses against the roll of film. Screw the allen screw down into the nearest hole. (Holes are drilled into the shaft to align 27", 25", 18" and 12" standard film widths.) If necessary, slightly reposition the roll of film on the shaft to screw down the collar into the nearest hole.

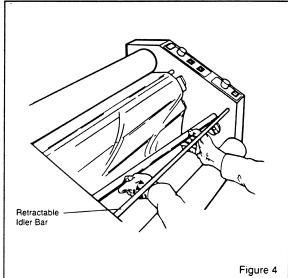
# LOAD THE BOTTOM FILM ROLL

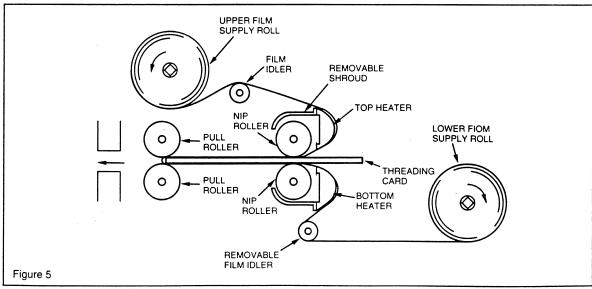
- Remove the bottom idler bar by pressing the left end against the side panel and pulling the right end forward. (See figure 4)
- 2. Remove the bottom roll shaft in the same way you removed the top roll shaft.
- 3. Remove the old roll of film from the shaft. Place a new roll of film on the shaft making sure that the film unwinds the same direction as the old roll (See figure 5). Center the new roll on the shaft. Reposition the collar on the shaft if necessary by following procedure # 9 above.
- 4. Place the bottom loaded film supply shaft back into the laminator.

# THREAD FILM THROUGH THE LAMINATOR

- 1. Unwind approximately two feet of film from the loaded bottom roll of film and rest the loose film on top of the heat shoes. Place the removable bottom idler bar back into position. At this time, verify that the dull side of the film is facing you and the shiny side is against the heaters.
- 2. Place the top loaded film supply shaft back into the laminator and unwind approximately 18" of film. Pull the film over the top idler bar then rest it on the top and bottom heaters. Now your top and bottom film should be overlapped on the heaters.
- Verify that the Roller Gap Lever is in the "gap" position and the slitters are in the "inactive" position. Also, verify that the rolls are horizontally aligned on the shafe.







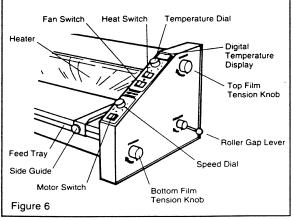
- Insert the edge of the threading card (packed with each roll of Nap Lam film)
  against the film and push it between the laminating (front) rollers. Continue
  to push until it is through the pull (rear) rollers.
- 5. Now turn the Roller Gap Lever to the "engage" position
- 6. Turn power switch on "1". Set speed adjustment to slow and turn motor on slowly to pull the card and film completely through the laminator. Check to make sure that both webs of film have passed through the pull rollers. Also double-check the alignment of film at this time and make adjustments if pagessary.
- 7. Replace the feed table.

## **OPERATING PROCEDURE**

- 1. Plug the GBC5270 into a 230 Volt, 20 Amp outlet (NEMA 6-20R).
- 2. Turn on the "Power" switch found on the rear of the laminator ("1" position).
- 3. Turn on the "Heat" switch found on the front control panel.
- 4. Reference the Speed/Temperature chart on page 8 to determine the proper temperature for your application. (This chart is also conveniently printed on the left side panel of your laminator.) Set the temperature dial to the proper temperature.
- 5. Wait 8 to 10 minutes for the system to reach and stabilize at the desired temperature. The system will initially heat-up past the "set" temperature then fluctuate below your desired temperature several times until it stabilizes near your set temperature. Once stabilized, the system will continue to fluctuate slightly from the set temperature.

The digital LED readout accurately displays the laminator's temperature.

- 6. Push on the "Fan" switch.
- 7. Move the "Roller Gap Lever" to the "engage" position.
- 8. Set the "Feed Tray Guide" or use the guide lines on the feed tray to help you align the material to be laminated.
- Slide the item(s) to be laminated forward on the "Feed Tray" until it reaches the laminating rollers, and then release it.
- Stop the laminator after the material has completely exited the rear of the laminator. Turn off the fans.
- 11. Cut off the item from the web by using the film cutter. Depress the handle on the cutter while sliding it across the laminator.
- When you are finished laminating for the day, turn off the main power switch ("0" position).



#### FILM ROLL TENSION ADJUSTMENT

Film roll tension should be adjusted whenever a new size or gauge of film is loaded on the laminator. Proper film roll tension will allow the supply rolls to unwind easily. Too little tension will cause wrinkles in the finished lamination, too much tension will cause the film to stretch.

Unequal tension between the top and bottom rolls will result in curled lamination if the product curls up there is greater tension on the top roll; a downward curl indicates greater tension on the bottom roll. As a general rule, thicker films require more tension than thinner films.

To adjust tension, use the knurled Tension Control Knobs on the right side panel (See figure 1) Turn clockwise to increase tension; counter-clockwise to decrease tension.

Tension should be adjusted when the laminator is heated and running. Proper tension is indicated when there are no wrinkles observed in the film after it passes over the nose of the heater. (However, you can expect wrinkling as the film passes over the flat surface of the heater.) Always check the finished product to evaluate your film tension settings.

#### FILM SIDE SLITTERS



WARNING: EMPLOY SPECIAL CARE WHEN MOVING OR CHANGING THESE SHARP CUTTING BLADES.

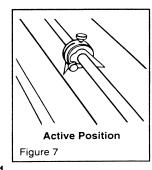
Your GBC5270 features two film side slitters, designed to reduce your film trimming after lamination. (Additional trimmers can be purchased and installed by your local GBC Service Technician. In the U.S. and Canada call (800) 477-3444.) These "patent pending" slitters automatically trim excess film from the laminated item as it exits the laminator.

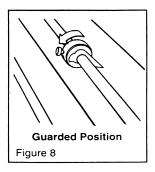
To set the position of your slitters, first set your feed tray side guide and run a piece of test material (same size as your production material), using your side guide for positioning. Stop the laminator when the material is midway between the two sets of rollers. Unscrew the top brass spring plunger until the slitter is able to slide left to right. (See figure 7) Slide the first slitter over until it is positioned 1/8" from the outside edge of the paper.

Pull out the top brass spring plunger while rotating the cutter head down into the laminating film. Release the plunger to lock the cutter into position. Fully screw the plunger clockwise to prevent the slitter from moving left to right.

Unscrew the second slitter's plunger and slide the slitter over to the opposite side of the paper, 1/8" from the edge. Pull the brass plunger while rotating the head down into position, then release the plunger. Screw plunger clockwise to lock into position. When not in use, pull out the brass plunger and rotate slitter into the inactive position. (See figure 8)

To install a new cutter blade (available from the GBC Technical Service Department), unscrew and remove the side thumb screw. Pull the plunger and carefully rotate the slitter housing up until the blade sticks straight up. Extract the blade and insert a new one. Return thumb screw to original position





# CARING FOR THE GBC5270



Warning: Observe the following procedure to reduce the exposure to hot surfaces and in-running nip points.

The GBC5270 requires minimal maintenance. The operator must periodically clean the "adhesive squeeze-out" from the edges of the laminating rollers. Adhesive builds up on these rollers when the edges of the film are not perfectly aligned.

Follow this simple procedure to clean the laminating rollers (It is most practical to perform this procedure when changing rolls of film.):

- 1. Remove top and bottom film from the laminator
- 2. Remove the shroud attached above the rear of the top heater by grasping the plate from under and lifting. No removal of fasteners is necessary. (See figure 2)



Warning: Allow laminator to cool below 100°F before touching the shroud. To quickly cool the laminator, turn motor and heater switches off then turn main power switch on "1" and fans on.

- 3. Warm the laminator up to 300°F. Fans should be off. Rotate Roller Gap Lever to the "Engage" position. Turn speed control to slowest setting. Push motor switch on to cause bottom roller to rotate. Stop motor when the area to be cleaned is in full view.
- Turn power off. Rub the adhesive off the rollers with a mildly abrasive pad such as a 3M Scotch Brite pad. Since the rollers are hot, touch them only with the pad.
- Turn motor on to advance the bottom roller Stop the motor to clean areas covered with adhesive. Repeat this procedure until rollers are clean.
- Cool down laminator to room temperature. Re-attach the shroud to the rear of the top roller by snapping it into place.

When the laminator will not be used for a period of time make sure all switches are off and the power cord is unplugged. Open the rollers to the "gap" position to prevent permanent flat sides on the rollers.

## TROUBLE SHOOTING GUIDE

Symptom	Possible Cause	Corrective Action		
Poor bonding between film and paper.	Operating speed is too slow for item.	Increase speed.		
-	Item is too thick to laminate.	Maximum thickness is 1/16" (2 mm).		
	Laminator is not warmed up.	Check that the LED display indicates the desired temperature.		
		Verify that heat switch is on.		
	Laminating film is improperly loaded.	Check that both film rolls are properly loaded and threaded.		
	Heat rollers are dirty.	Clean rollers.		
	Item to be laminated is dirty.	Clean item.		
Laminated item is curled.	Tension on top and bottom film rolls is not equal.	Adjust tension so that top and bottom film rolls are equal.		
	Film tension is too tight.	Loosen tension.		
Laminated item is wrinkled.	Too little film tension.	Increase tension.		
	Operating speed is too fast for item.	Decrease speed.		
	Temperature is set too high.	Decrease temperature.		
Excessive adhesive build-up on laminating rollers.	Edges of top and bottom film are not aligned.	Clean rollers and align film rolls.		
	Laminating film is improperly loaded with adhesive side contacting rollers.	Clean rollers and properly load film.		

# **CLEARING A FILM JAM (WRAP-UP)**



WARNING: OBSERVE THE FOLLOWING PROCEDURE TO REDUCE THE RISK OF EXPOSURE TO HOT SURFACES AND IN-RUNNING NIP POINTS

The GBC 5270 is designed to eliminate film wrapping around the back pull rollers. It may occur if the film is loaded improperly with the adhesive side contacting the rollers, or if the film exit path in the rear is blocked. To clear a jam:

- (1) Immediately stop the laminator by switching the motor switch to the off position, and set the speed control to 1 3 feet per minute.
- (2) With the motor switch off, depress and hold down the reverse switch while firmly pulling film out the rear of the laminator. Continue pulling the film until it unwinds completely from the rollers.
- (3) Release the reverse switch and turn the motor switch on. Run the laminator forward until all wrinkled film exits the rear.
- NOTE: If film is wrapped around the pull rollers and does not extend out the rear of the laminator remove the top film supply roll and feed table, and pull the film towards the front of the laminator while pushing in the reverse switch. Avoid contact with the heaters.

# **OPERATING HINTS**

- Always run a sample to test for proper performance. Preferably test with the same weight and type of paper as the actual documents to be laminated.
- Do not force material between the rollers. The GBC5270 will laminate material up to 1/16" (1.50 mm) thick with laminating film as thick as 10 mil (.254 mm) thick on both sides.
- Never stop the system with a document in process (unless hazardous conditions exist). If the laminator is stopped, the rollers will impress a permanent mark across the laminated surface.
- If a document cannot be laminated because of its unusual surface finish, it
  may be encapsulated. That is, leave at least a 1/8" (3.18mm) film border
  surrounding it.
- Always leave rollers in "gap" position when laminator is not in use for an extended period of time to prevent flattening of rollers.

# **SPECIFICATIONS**

Operating Speed: Variable from 0 to 15 ft. (3m) per minute

Dimensions:

Width Height Depth 36 1/2" (92 1 cm) 15 1/2" (39.4 cm) 18 7 8" (47.9 cm)

117 lbs.

Weight:
Power Requirement:
Voltage:

Voltage: Amps: Wattage: 230V AC. Hz 60 16

3.4 Kw

Maximum Laminating Capabilities Thickness - 1/16" (2mm) Width - 27" (69cm) Length - 500

Three Fans: 95-112 CFM @ 50-60 Hz

# LAMINATING FILM SPECIFICATIONS

Maximum Thickness and Lengths

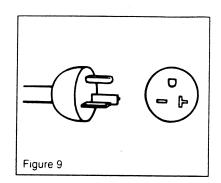
1.5 mil (40 micron) x 500 ft (152 m) 3.0 mil (75 micron) x 250 ft (76 m) 5.0 mil (127 micron) x 200 ft (61 m) 10.0 mil (254 micron) x 100 ft (30 m)

Maximum Width: 27"

Core Diameter

1 inch (2.54 cm)

Film Roll Winding Poly-In



# GBC5270 SPEED/TEMPERATURE GUIDE

Nap Lam I Film Gauge:	1.5 mil.		3 mil.	5 mil.		10 mil.		
Materials	Temp. (F)	Speed f.p.m.	Temp. (F)	Speed f.p.m.	Temp. (F)	Speed f.p.m.	Temp. (F)	Speed f.p.m.
Newspaper Copier Paper Magazine Stock	300 - 325	8-15	275 - 300	7.5-10	250 - 275	3-5	200 - 225	3-5
Construction Paper Posters	300 - 325	8-15	275 - 300	7.5-10	250 - 275	3-5	200 - 225	3-5
Index Cards File Folders	315 - 325	8-15	285 - 300	7.5-10	260 - 275	3-5	210 - 225	3-5
Nap Lam II Film Gauge:	1.5 mil.		3 mil.		5 mil.		10 mil.	
Materials	Temp. (F)	Speed f.p.m.						
Newspaper Copier Paper Magazine Stock	250-265	5 - 8	250-265	3-5	225 - 250	3-5	200 - 225	3 - 5
magazine Stock								
Construction Paper Posters	250-265	5-8	250-265	3-5	225 - 250	3-5	200 - 225	3-5