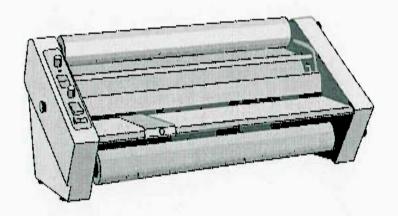
# BIENFANG MASTERPIECE MULTISEAL 252

# **Instruction Manual**



# **OWNERS MANUAL**

Masterpiece® MultiSeal® 252 Roller Laminator Operation and Service





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#### ONE-YEAR LIMITED WARRANTY

Hunt Corporation warrants to the original consumer purchaser that each new Bienfang® equipment product which proves defective in materials or workmanship within the applicable warranty period will be repaired or, at our option, replaced without charge upon its return, postpaid, as outlined below. The applicable warranty shall be one year from date of purchase. "Original consumer purchaser" means the person who first purchased the product covered by this warranty other than for purposes of resale.

Hunt's liability for breach of any warranty express or implied shall be limited to the repair or replacement, at Hunt's option, of the defective item. Hunt shall not be liable for damages, including but not limited to incidental or consequential damages, arising out of or in connection with the use or performance of any Bienfang product.

To get performance under this warranty, contact Hunt's Technical Support (1-888-240-6021) for assistance or to obtain a Return Authorization. If it is to be returned, pack the product securely to prevent damage in transit and send the product postpaid or freight prepaid, with a description of the defect or malfunction and proof of the date of purchase to: Hunt Corporation, Warranty Department, 2301 Speedball Road, Statesville, NC 28677, Attn: RA Number. Hunt is not responsible for damages from mishandling and abuse in transit, in which case a claim should be filed with the carrier.

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

Warranty Department, Hunt Corporation • 2301 Speedball Road • Statesville, NC 28677 • Phope: 888-240-6021



## IMPORTANT SAFEGUARDS

Please 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 sink, etc.)
- 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 a bookcase or cabinet, 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 panel.
- 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.
- Clean unit only as recommended in its instruction manual.

- The power supply cord should be unplugged from the wall outlet when the laminator is not going to be used for a long period of time.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through any openings.

#### SAVE THESE INSTRUCTIONS

#### IMPORTANT INFORMATION

Save Your Carton. Hunt Corporation ships Bienfang® MultiSeal® Laminators in special cartons which protect them from damage. Please store you cartons in case your laminator should ever require servicing.

Do not lift your faminator out of the box by the upper supply shaft. This could cause damage. Grasp laminator by its side panels to remove. The tear-off bar located in the back of the machine is sharp! Do not lift the machine out of the box by this bar.

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 Bienfang Technical Service at 1-888-240-6021.



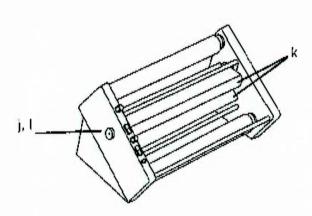
<sup>\*</sup>Use by minors only with adult supervision.

### IDENTIFICATION OF CONTROLS

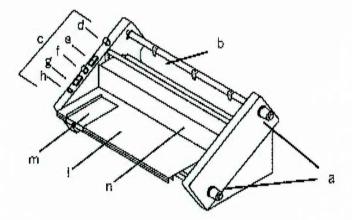
The MultiSeal® 252 Laminator – with Variable Speed and Reverse – is a reliable, easy-to-use, professional laminator designed to laminate a variety of materials using 25° laminating film. It is capable of continuous lamination from 1 to 10 feet per minute. If a "wrap-around" occurs, you may reverse it by holding down the switch.

Tension Adjusting Knobs (a) are conveniently located on the right side panel for easy access. The spring-loaded Supply Shafts (b) are shown in place. The Control Panel (c) is located on the left. Temperature Control Knob (d) sets the temperature of both heaters at the same time; it is color-coded to indicate the operating ranges for 1.5 (purple range) and 3 (blue range) mil laminating films. The Heat Switch (e) turns the heat on and off. The Speed Control Knob (f) is also color-coded to indicate operating ranges for 1.5 and 3 mil laminating films. The Motor Drive

Switch (g) is a three-position switch (Run-Off-Reverse). The Heater Light (h) glows while the laminator is warming up and goes out when it has reached the desired operating temperature. A Thermometer Access Port (i) on the left side panel allows for easy temperature readings using the Thermometer (j) provided. The machine incorporates Coated Heat Shoes (k) to minimize friction. The Feed Tray (I) and Paper Guide (m) provide for a smooth and durable paper path into the machine and the Safety Guard (n) protects hands from the hot heater surfaces. The color-coded controls make it easy to understand the proper operating ranges for both popular 1.5 mil and heavy-duty 3 mil laminating films.



MultiSeal® 252 Side View, Left



MultiSeal® 252 Side View, Right



# GENERAL INSTRUCTIONS

#### 1. UNPACKING AND ASSEMBLY

Remove the laminator from its box by grasping the side panels 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 lit and draft-free. Make sure it is not in the path of any fans, room air conditioners, etc.

The laminator comes partially assembled. All you do is load the film onto the Supply Shafts, thread the film as shown on the machine and attach the Feed Tray.

# 2. INFORMATION ABOUT BIENFANG® ROLLER LAMINATING FILM

Bienfang® Roller Film is made up of two materials: a polyester film which gives the lamination its strength, clarity and rigidity, and a heat-activated adhesive coating, which serves as the "glue" to bond the film to the product being laminated. Bienfang® Roller Laminating Film is available in a variety of different lengths, widths and thicknesses. The MultiSeal Laminator is designed to use Bienfang® Roller Film 1.5 mil to 3 mil thick wound on a 1" core. See Page 7 for the size and thick nesses available.

#### 3. OPERATING

#### a. Loading Film

Unpack the upper and lower 1" diameter Supply Shafts; the upper and lower shafts are different - the word "TOP" or "BOTTOM" is stamped on the shaft. The end of each shaft is also different; the "spring-loaded" end fits in the bracket on the left side of the laminator, the "slotted end" fits into the Tension Disk on the right side.

Slide the film roll onto the shaft as shown in Figure I, leaving equal lengths of shaft sticking out

of each end; the film roll will slide over the core locks which will keep the roll from turning on the shaft.

Load the shaft on the laminator by setting the spring-loaded end of the shaft into the bracket on the left side then, pressing it in to depress the spring, allow the right (slotted) end of the shaft to engage in the disk on the right side.

#### b. Threading the Film

Make sure the machine is plugged in and all switches are "OFF". Remove the Feed Tray and the Safety Guard. Thread the film following the yellow threading guide arrows on the side of the laminator. Pull the film around the idler rollers as shown. Make sure the adhesive side (dull coating) faces AWAY from the heater surfaces.

Position the threading board (save threading board for reuse) as shown in Figure 3. If you don't have a threading board, a stiff sheet of paper or light-weight cardboard can be used to guide the film into the laminator.

Turn the power on and set the drive to "RUN". Set the speed by turning the Speed Control Knob on the Control Panel all the way counterclockwise so the motor will turn as slowly as possible. Slowly turn the Speed Control Knob clockwise until the rollers are barely turning and gently push the threading board and film in between the heat shows. The film will be pulled through the laminator's two sets of rollers until it comes out the back of the machine.

Slide the top and bottom film rolls from side-toside on the shafts so that the film is perfectly aligned top and bottom. (NOTE: overlap will cause the film to deposit residue on the heat shoes and rollers so this procedure is critical). Replace the Feed Tray and Safety Guard.

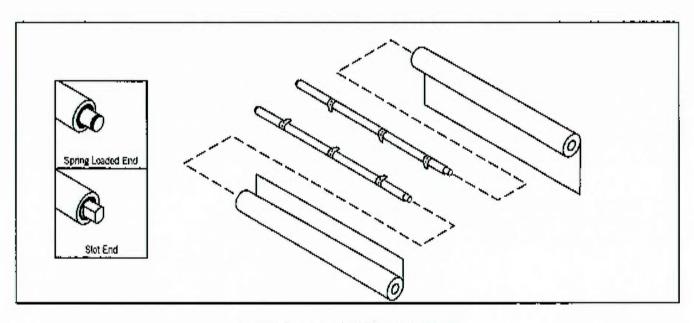


Figure 1— Loading Film onto Shaft

#### c. Heat Adjustment

Turn the power switch to "ON" and allow about 15 minutes for the shoes to reach laminating temperature (280-310°F). The heater temperatures are controlled by the dial on the Control Panel. For 1.5 mil films, set the temperature within the purple range. For 3 mil films, turn the temperature down to the blue range.

#### d. Tension Adjustment

Top and bottom Supply rolls should have about the same tension. By checking the Visual Tension Indicators on the brake assemblies it can easily be determined if one of the rolls is tighter than the other.

To increase tension, turn the Adjusting Knob clockwise. To set the tension for 1.5 mil films, start with the Tension Knob flush with the end of the shaft and increase by 1/4 turn increments clockwise until wrinkles disappear. For 3 mil films, start with the end of the Tension Knob aligned with the Indicator Line on the shaft (turn until the Indicator Line appears on the shaft.) Have as little tension as possible to eliminate wrinkles; too much tension will cause film to curl and cause excess pull on the motor.



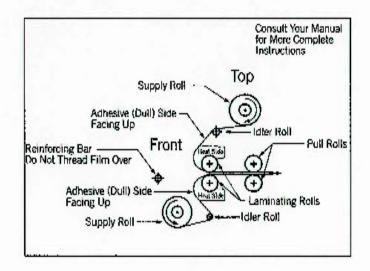
## GENERAL INSTRUCTIONS - CON'T.

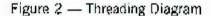
#### e. Proper Settings

After loading and threading the film, run a few feet to check the settings of speed, temperature and tension. Depending upon the type of film and materials being laminated, you will need to "balance" these settings for optimum adhesion, clarity and smoothness. In general, use the color-coding and the following table.

If the film comes out cloudy (or not adhered), slow the speed and/or raise the temperature. If the film comes out very wavy, lower the temperature. If wrinkles appear on the laminated materials, check the tension adjustment. If wrinkles appear in the "edge seal" only, check the roller pressure. Note that thick paper and most boards will not seal right to the edge without some degree of wrinkles in the edge of the film. For this reason, we recommend trimming the film flush to the edge of thick pieces. See the Troubleshooting Chart, Page10 for more information.

THICKNESS	ТЕМР.	SPEED	TENSION
1.5 mil	High	Mid	Flush
	280-310°F	5-7 fpm	(light)
	Low	Low	At Line
3 mil	260-257°	4 fpm	(medium)





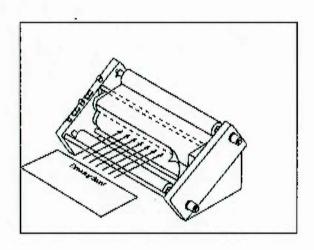


Figure 3 - Using the Threading Board



## MAINTAINING THE MULTISEAL® LAMINATOR

#### A. CARE AND CLEANING

In the normal course of operating the MultiSeal 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 be easily 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 Bienfang® UnStik™ and a clean, lint-free cloth. If a cleaning kit is not readily available, rubbing (isopropyl) alcohol will do an adequate job.

#### **B. ROUTINE MAINTENANCE**

#### Removing a "Wrap-Around"\*

The laminator is equipped with an "Anti-Wrap-Around" feature. If a "wrap-around" occurs and is not severe, simply use the reverse feature of the MultiSeal and back the film out. Make sure to remove the Feed Table before reversing the machine.

In the unlikely event of an extreme "wrap-around" (i.e. when laminating film has wrapped around the rubber rollers several times) follow this procedure:

Shut the machine off and unplug. MultiSeal Laminators have one screw on the right end of each laminating and pull roller. Loosen all four set screws on the ends of the laminating and pull rollers. Cut the plastic, grab the loose end and pull. The rollers will rotate freely on the roll shafts and the "wraparound" will easily unwrap. Make sure there is no adhesive on rollers or heat shoes prior to

re-threading. This can also cause "wrap-around" problems. Tighten all the set screws and re-thread the film.

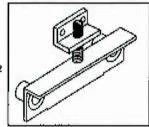
#### **Tightening Drive Sprocket Set Screws**

If the rollers do not turn normally with the motor, check that the set screws are properly tightened. The pulley and timing chain are located behind the right side panel of the machine. Remove the side panel and locate the set screws at the base of each pulley. These set screws should be tightened on the flat surface of the shaft.

#### Adjusting the Roller Pressure

The roller pressure may need adjusting to accept thicker or thinner materials. If the need arises, the

following procedure should be followed: Remove left and right housings from the laminator. Locate the pressure adjustment screws (shown here). Adjusting those screws up or down increases or



decreases roller pressure. (Normal pressure setting is 5 threads above) Whenever an adjustment is made to one side, it must also be done to the other side so that both sides apply equal pressure. The only time this is not true is when you are correcting for unequal pressure.

#### Replacing Fuses

The motor used on the MultiSeal Laminator is fused and protected against overload. This means that if too great a strain is placed on the motor, causing it to overheat, it will blow the fuse. This is likely to occur only during a "wrap-around" or when trying to laminate materials that are too thick. In the unlikely event that this happens, follow this procedure:

Turn the Laminator Off and Unplug. Remove the wrap-around by following the instructions on this page, "Removing a Wrap Around". Replace the motor fuse located on the rear of the laminator.

\*For more information call Technical Service: 1-888-240-6021

# **GENERAL SPECIFICATIONS**

MULTISEAL® 252 (CAT. NO. 2292)					
Height	15"				
Width	33"				
Shipping Weight	63 lbs. /0 lbs.				
Motor Fuse	0.6 amp				
Input Fuse	15 amp				
Max. Speed	10 feet per minute				
Temperature Range	225°-325°F				
Max. Film Thickness	3 mil (.003)				
Max. Material Thickness	20 mil (.020) Railroad Board				
Width of Lamination	Up to 25"				
Electrical	120V AC, 60Hz 3-way grounded plug				
	120V AC, 60 Hz				

Gloss Finish — 1" Core/one roll per carton				
CATALOG NO.	SIZE	THICKNESS (mil)		
509R	12" x 500'	1.5		
515R	18" x 500'	1.5		
519R	25" x 250'	1.5		
521R	25" x 500'	1.5		
536R	18" x 250'	3		
542R	25" x 250'	3		

CATALOG NO.	SIZE	THICKNESS (mil)		
509R-2	12" x 500'	1.5		
515R-2	18" x 500'	1.5		
521R-2	25" x 500'	1.5		
		192		

Matte Finish — 1" Core/one roll per carton

523R 25" x 500' 1.5



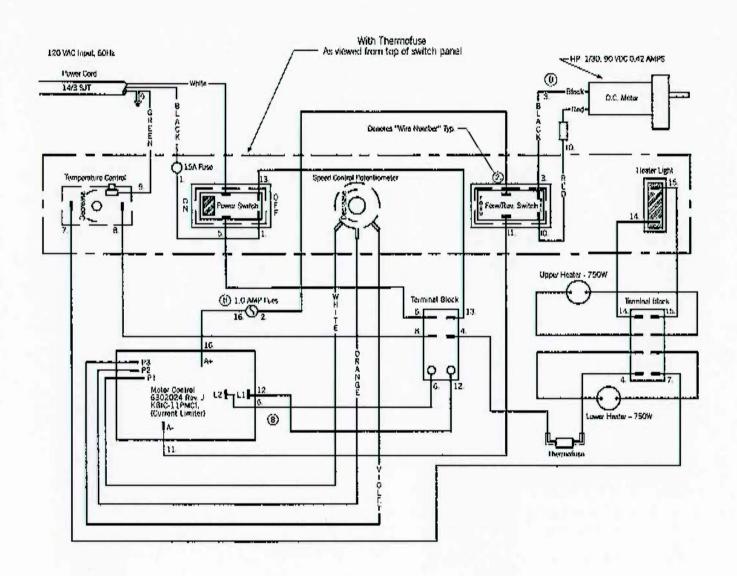
# TROUBLESHOOTING GUIDE

	Increase Heat	Decrease Heat	Worn, Dirty or Damaged Rollers	Increase Tension on Supply Rolls	Dirty Heat Shoes	Moist or Goated Product	Decrease Tension on Supply Rolls	Reduce Speed	Chack Set Screws	Check Threading Diagram	increase Roller Pressure
Wrinkles on film (side to side)		х	х	х							X
Wrinkles on film (lengthways)		х			Х		x				
Plastic not bonding	X							X			x
Bubbles or Blisters		х	x			x					10.72
Rollers not turning									х		
Impressions on product			х								
Squeaking sounds							x		x	х	
Fitm narrowing on shoes							x			х	
Fifm wrinkling on shoes	Х			x							
Continuous blemish			X		X	x					
Cloudy tilm	χ										
"Orange Peel" finish		х									
Roller Slips or Jogs									X		
Film sticks to collers										х	
Film sticks to stoos			×							х	
Film won't stay aligned										х	
No seal on edges	X			x				X			х
Poor seal - one side only						х					х

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



<sup>\*\*</sup> It is suggested that you check the sprocket set screws for tightness every 6 months. These sprockets are found inside the right side cover and they drive the rollers. If you have any questions contact Hunt Technical Service at 888-240-6021.





PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
5598014	Threading Board	3301029	Side Panel, Left
1115006	Thermomoter	5611194	Right Side Plate
*6302028/6299136	Temperature Control	5611197	Left Side Plate
1101037	Knob, Tomperature Control	5606043	Idler Roll
1302078	Power Switch w/Light	6001004	Cut-Off Assembly
6302024KIT	Speed Control, incl. PC Board,	6001001	Friction Stud/Tension
	Potentiometer & Connecting Harness	0002001	Sub-Assembly
1101036	Knob, Speed Control	6299044	Tension Adjustment Kit
1302079	Drive Switch	1107011	Friction Pressure Spring
1301061	Heating Light	3301012	Pressure Plate
3301031	Panel, Control Console	3301016	Friction Knob
2601092	Label, Control Panel	5901016	Friction Washer
1033007	Screw, Torx Head 10-24 x _	1033006	Trimmed Hex Head 10 32 x 1/2
1610038	10-24 Star Lock-Nut	1659026	
1308052	Input Fuse, Ceramic 15 amp	2102133	Nyton Washer
1308058	Motor fuse, Glass Body 0.6 amp		Film Deflector
1220008	Fuse Holder	5606042	Cross Support
2601060		1104057	Bushing, Nylon Split
6001006KIT	Label, Fuse Holder	1104062	Bearing (350)
6001000KIT	Supply Shaft, Upper	1203039	Terminal Block
	Supply Shaft, Lower	1203040	Terminal Block
56016045	Safety Guard	1661017	Rivet Retainer
5606046	Feed Tray	1675019	Rivet
5606044	Paper Guide	2102138	Bracket, Pressure
1101035	Knob, Paper Guide	3301014	Roll Holder
6203022	Thermal Cut-Off	5099027	Stud, Heater Shoe
2302091	Heater	028011	Spacer, Upper Heater Shoe
5612023	Heater Shoe, Upper	1004053	Screw, 10-32 x 1-3/4 Phillips pa
5612025	Heater Shoe, Lower		head, Nylock
1309024	Drive Motor, 110V	1051023	Screw, 10-32 x 1/4 hex socket
2102142	Motor Shroud		with brass tip
2102145	Cover, Motor Shroud	5606047	Bracket, Heater Shoe
2303032	Power Cord	006029	Screw, 6 32 x 3/4 Phillips
1106050	Strain Refief		Pan Head
1103020	Feet	025001	Roll Pin
5003018	Drivé Roll (Orange)	100372	Spacer, Lower Shoe
5003019	Pull Roll	1308059	Motor Control Board fuse
2004027	Roll Shaft, Upper		glass body 1 amp
2004028	Roll Shaft, Lower	*6302024KIT	Motor Control Board incl.
1659025	Spacer, Roller		1 amp and .6 amp fuses
1104061	Bearing (.750)	2009030	Dowel Pin
2102137	Bogey	2292KIT	Chain/Sprocket Conversion Kit
1107022	Compression Spring	1112029-1	Sprocket, 15 tooth
2701028	Screw, Pressure Adjusting	1112029-2	Sprocket, 16 tooth
3301030	Side Panel, Right	1112029-3	Sprocket, 19 tooth
3301030	Side Panel, Right	1112030	Chain, Sprocket
		1308058	Motor fuse ,6 amp



Runt Corporation Customer Service P.O. Box 5819 Statesville, NC 28687-5819

For orders: Phone: 800-USE-HUNT Phone: 800-873-4868 Phone: 704-872-9511

For questions or technical assistance: Yech Service: 888-240-6021 Tech Service Fax: 704-871-8671 Hrs: 8:00 a.m.-5:00 p.m. (EST) Hunt Corporation Canada 690 Gana Court Mississauga, Ontario Canada, L5S 1P2 Phone: 905-564-7717 Fax: 905-564-7079



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