# OPERATING INSTRUCTIONS EASY-LAW II ROLL LAWINGTOR



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# IMPORTANT SAFETY MESSAGES AND ELECTRICAL SAFEGUARDS

For your protection, do not connect the laminator to electrical power or attempt to operate it until you have read these instructions completely. Keep these instructions in a convenient location for future reference. This instruction manual and labels affixed to the laminator are important safety messages. Read these messages carefully.

### **For Your Safety**

- > Save these Operating Instructions for later use.
- ➤ Keep hands, long hair, clothing, and other loose articles, such as jewelry and ties, away from laminator's moving parts.
- ➤ Do not touch the heat shoes while the laminator power is turned on. Allow shoes to cool completely before touching.
- > Do not use the laminator for other than its intended purpose.
- ➤ Place the laminator on a stable cart, stand, or table. A laminator placed on an unstable surface may fall, causing serious bodily injury or damage to the unit.
- Move the laminator with caution. Quick stops, excessive force, or uneven floor surfaces may cause the laminator and cart to overturn.
- ➤ Do not insert items or objects other than recommended laminating material. Do not store liquids or flammable material near laminator that may spill or cause electrical shock or fire damage.
- The laminator should be operated only from the type of power source indicated in these Operating Instructions and on the data plate located on the rear panel of the laminator.
- ➤ The three-pronged grounding plug is a safety feature and will fit only into a grounding-type power outlet. If you are unable to insert the

plug into an outlet, contact a qualified electrician to have a suitable outlet installed.

- ➤ Do not leave the laminator power on overnight. Unplug the laminator at the end of the day.
- ➤ Unplug the laminator before moving it or when it is not in use for an extended period of time as a precaution against the possibility of an internal malfunction that could create a fire hazard.

Do not operate the laminator with a damaged power supply cord or plug, or after it malfunctions or has been damaged in any manner.

- ➤ Keep the power cord away from hot or wet surfaces.
- ➤ Do not overload electrical outlets beyond their capacity, as this can result in fire or electrical shock. This unit is rated at 15 amps and should be the only item plugged into a 20 amp branch circuit.
- ➤ Adjust only those controls that are specified in these Operating Instructions.
- ➤ Do not attempt to service or repair the laminator yourself. Unplug the laminator from the electrical outlet and contact an authorized service representative under any of the following conditions:
  - When the power supply cord or plug is damaged or frayed.
  - If liquid has been spilled into the laminator or it has been exposed to water.
  - If the laminator has been subjected to excessive jarring through being dropped or bumped.
  - If the laminator does not operate normally when following the operating instructions.
  - KEEP THE LAMINATOR OUT OF REACH OF CHILDREN.

### INTRODUCTION

Congratulations on your purchase of the Easy-Lam II Roll Laminator. This unit is designed to provide years of trouble-free service.

The Easy-Lam II will accept rolls of laminating film up to 27" wide in both 1.5 and 3 mil thicknesses. Paper and card stock up to 1/16" (1.6mm) thick may be laminated without adjusting the feed rollers.

The Easy-Lam II will accept 5 mil film if the machine was purchased with the 5 mil switch only!

Your Easy-Lam II is preset at the factory for most applications, so any adjustments should be minor. A thermometer provides continual indication of the heat shoe temperature, which may be adjusted as needed.

### **SPECIFICATIONS**

Plastic Width Up to 27" (68.6cm)

Plastic Thickness 1.5 mil and 3 mil (37 and 75 micron).

5 mil (125 micron) with 5 mil option switch

only.

Maximum Roll Length 1.5 mil – 1,000 feet (304.8 meters)

3 mil – 500 feet (152.4 meters) 5 mil – 250 feet (76.2 meters)

Speed 5 feet per minute (1.64m/minute)

Net Weight 91 lbs (41 kg)

Power Requirements 120VAC, 60Hz, 1840 watts (UL),

220VAC available

### **INITIAL SETUP**

### **Unpacking**

Before unpacking the unit, inspect the shipping container for signs of damage. Notify the carrier and your dealer immediately if any damage is noted.



**CAUTION!** The laminator weighs approximately 91 lbs. Use two people when removing the laminator from the shipping container.

**NOTE!** We recommend saving the packaging in case you have to return the unit.

### **Components**

Figure 1 shows the location of the major components and controls of the Easy-Lam II. You should become familiar with these before operating the laminator.

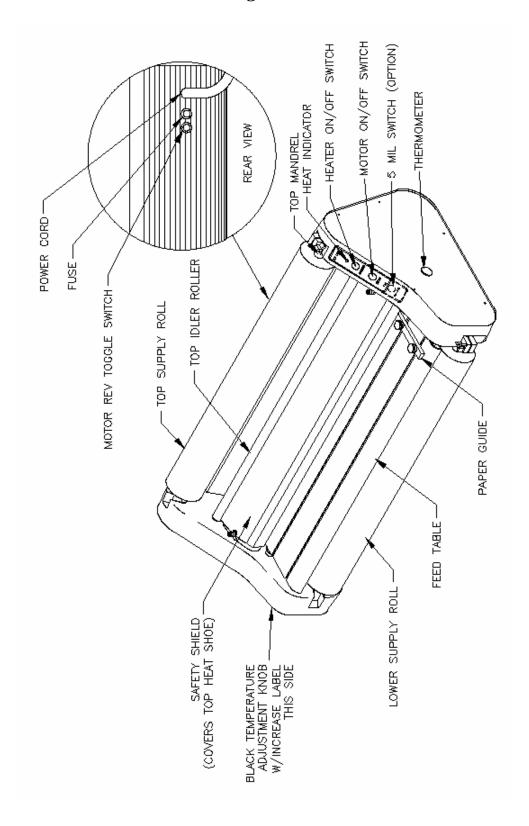
### **Motor Switch**

This switch provides power to the motor. If the switch is pressed to the "on" position, the rollers move the plastic film and laminating material through the unit.

### **Reverse Switch**

This toggle switch is found on the back of the machine. When this switch is pressed to the "REV" (upper) position, and the motor switch is on, the rollers move in the reverse direction. This is useful for clearing film from the rollers.

Figure 1



### **Heater Switch**

This switch turns power on and off to the top and bottom heat shoe. (Switch will light up in the "on" position).

### **Heat Indicator Light**

This light goes on when the heat switch is first turned on and then remains on until the heat shoe reaches the operating temperature. After that point, the light will go on and off periodically as the thermostat cycles.

### **Loading Laminating Film onto Mandrels**

Slide film with a one-inch core onto the mandrel as in Figure 2. Note that one mandrel is labeled TOP and the other BOTT (for bottom). They are not interchangeable.

- ➤ When sliding roll of film onto mandrel, you must push the core gripper to the flat position. When core gripper is inside the core, the core gripper spring will cause the core gripper to grab the film so the tension adjustment knob will tighten the tension on the film.
- ➤ Make sure film is aligned from left to right on top and bottom mandrels when loading film. See Figure 2a.

Figure 2

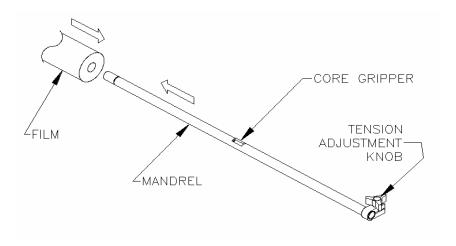
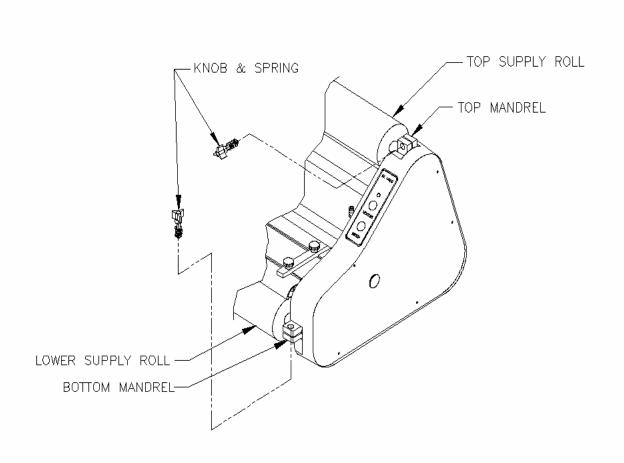


Figure 2a

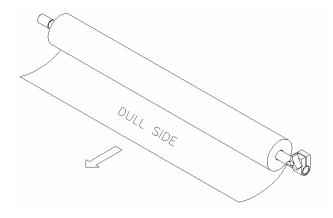


### **Threading Laminating Film**

These instructions apply to poly-in film rolls (shiny side out, dull side in).

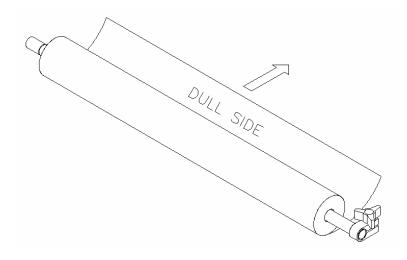
1. For the top supply roll, place the mandrel ends into the slots on the top of the laminator. If you are facing the front of the laminator, the film should unwind toward you from the bottom of the roll as in Figure 3.

Figure 3



- 2. Pull 6"-12" of film from the top roll. Pass the film under the idler bar and safety shield, and over the heat shoes. Make sure the shiny side of the film is against the shoes. See Figure 5 and 6.
- 3. For the bottom supply roll, remove the feed table. Place the mandrel ends into position in the lower mandrel holder slots. If you are facing the front of the laminator, the film should unwind away from you from the bottom of the rollers as shown in Figure 4.

Figure 4



4. Pull 6"-12" of film from the bottom roll. Pass it under the lower idler bar. You can "drop-down" the lower idler bar to give you more clearance. After doing so, return the idler bar to its upper position for

<u>running the machine</u>. If the idler bar is not in the upper position, you will not be able to properly adjust roll film tension. Drape the film from the bottom roll over the film from the top roll. (Use a piece of tape to hold film in place). See Figure 5 and 6.



**NOTE:** The shiny side of the film must always go against the heat shoes.

**CAUTION!** The heat shoes reach a temperature of up to 350°F. Do not touch the surface of the heat shoes.

Figure 5

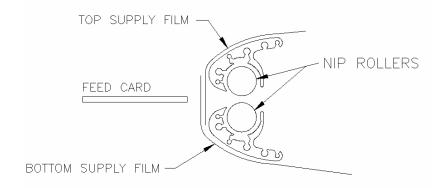
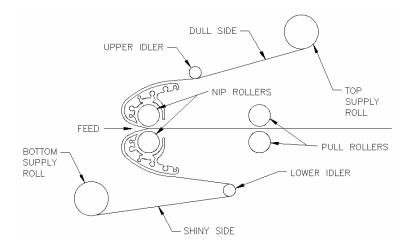


Figure 6



- 5. Turn the motor switch to the "on" position to start the rollers.
- 6. Push a piece of thin letter-sized cardboard against the film so that it is centered between the two heat shoes. Push the cardboard and film into the nip rollers. See Figure 5.
- 7. When the feed card has completely exited the Pull Rollers at the rear of the laminator, turn the motor switch off. Make sure both webs of film have cleared the pull rollers and have not wrapped around the rollers.
- 8. Replace the feed table.
- 9. If you are ready to laminate, the green heat switch should be in the "on" position and the red heat indicator should have gone off.
- 10. If you are changing film while the machine is hot, please refer to the video.

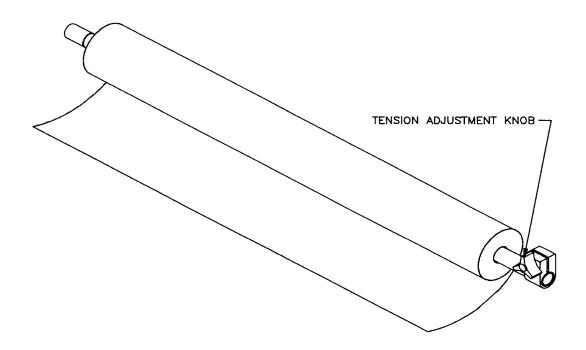
### **Adjusting Mandrel/Film Tension**

Each type of laminating film has different characteristics and may require laminator adjustment. The tension should be set so that the film moves over the heat shoes without wrinkles as the film enters the laminator. Best results are obtained if tension adjustments are made while the unit is at operating temperature. If any adjustments are required, use the following procedure:

- 1. Switch the heaters on. Wait 30-35 minutes for the heat shoes to reach operating temperature. The heat indicator will turn off when the set temperature is reached. You can check the temperature by reading the thermometer located on the right side of the laminator.
- 2. When the unit is first turned on, it will need to sit 30-35 minutes for nip rollers to reach proper laminating temperature.
- 3. Press the motor switch to the "on" position.
- 4. Locate the knob on the right side of the top supply mandrel. See Figure 7. Turn the knob to adjust the tension (clockwise to increase,

counterclockwise to decrease) until the film passes over the top heat shoe without wrinkles and the web between the laminating and pull rollers is tight. *Note: This adjustment should require only a slight turn. If increased too much, you may stall the drive motor.* 

Figure 7



5. If necessary, locate the knob on the right side of the bottom supply mandrel and adjust the tension as in Step 3 above.

### **Setting Heat Shoe Temperature**

The laminator temperature should be adjusted according to the film thickness and the item being laminated. See recommended temperature settings from your film supplier. Keep in mind that different brands of laminating film may require different temperatures.

- 1. Turn the heater switch on.
- 2. Use the thermostat adjustment knob (black knob) on the left side of the laminator to adjust the temperature of the heat shoes.

- 3. Turn the knob clockwise to increase and counterclockwise to decrease the temperature. If reducing the temperature, wait several minutes for the heat to drop to the desired operating temperature. When increasing temperature, the indicator lamp will come on as the laminator is heating up and go off when it reaches the set temperature. (Wait 10 minutes between each adjustment before using the laminator. This will let the heat stabilize).
- 4. Check the thermometer to see if the desired temperature has been reached. You may have to make a few minor adjustments before optimum temperature is set. Most laminating film laminates within a given temperature range so an exact temperature reading is not necessary.

### **Laminating**

- 1. When the motor is first turned on, allow 6" of film to clear heat shoes for best laminating results.
- 2. Be sure the heaters have been turned on and are at the proper temperature.



**CAUTION!** Do not allow the temperature to exceed 350°F as this could cause the laminating film to melt on the heat shoes.

- 3. Adjust the paper guide on the feed table so that the right edge of the item will enter the laminator at the desired position.
- 4. Press the motor switch to the "on" position. The film will begin moving through the laminator.
- 5. When you begin laminating after the film has been sitting on the heat shoes for a while, you should let about 6" of the film run through the machine before you insert an item to be laminated.
- 6. After clear laminating film exits the pull rollers at the rear of the machine, you may slide the first item to be laminated into the laminator with the right edge along the paper guide.

**NOTE:** You may want to run a test lamination first, as any item that passes between the heat shoes will be laminated and cannot be recovered until it exits the rear of the laminator.

- 7. Additional items may be fed in sequence, keeping enough distance between sheets for trimming.
- 8. After the last item has exited the pull rollers, turn the motor switch off.
- 9. Use the zippy cutter to cut across the film to remove the laminated items from the unit.
- 10. The Easy-Lam II has mounting capability up to 3/16". Please refer to the video for instructions.
- 11. The 5 mil option switch is a factory installed option which gives the user the capability of laminating 5 mil laminate.

### **Troubleshooting**

The following guide will assist you with most problems that may be encountered when laminating.

**PROBLEM:** Laminator is inoperative. Motor does not run and the

indicator lights are out.

**ACTION:** Unit may be unplugged.

Ensure that your circuit breaker has not tripped.

Fuse may have blown. Replace the fuse (in back next to

the power cord) with 15amp BUSS (MDA-15).

**PROBLEM:** Laminating film and item being laminated move through

the laminator erratically.

**ACTION:** Check the thickness of item to be laminated. Maximum

thickness is 1/16" (1.6mm).

Clean heat shoes of residual adhesive. Refer to the MAINTENANCE section for cleaning instructions.

**PROBLEM:** Plastic is not bonding to the item or to itself at the edges.

**ACTION:** Make sure heat shoes and rollers are at the proper

operating temperature and have had time to warm up.

**PROBLEM:** Wrinkles appear on the laminated items running parallel

with the outside edges.

**ACTION:** Increase roller tension on top and/or bottom supply rolls.

Reduce heat shoe temperature.

Clean heat shoes of residual adhesive. See

MAINTENANCE section for cleaning instructions.

**PROBLEM:** Blistering of the film appears over the item or along the

edge.

**ACTION:** Reduce the temperature on the heat shoes. If the red heat

indicator light remains on after this adjustment is made, disconnect the power supply and contact your dealer.

Clean laminating rollers. See MAINTENANCE section

for cleaning instructions.

**PROBLEM:** Laminated material curls after leaving pull rollers.

**ACTION:** Adjust tension. If laminated item curls upwards, reduce

top roller tension. If item curls downward, reduce

bottom roller tension.

Clean heat shoes of residual adhesive as this may cause

"drag" on one side. Refer to MAINTENANCE section

for cleaning instructions.

### **Maintenance**

This section contains instructions for cleaning and maintaining your laminator. These procedures should be performed at regular intervals to help ensure the trouble-free operation of your laminator.

### **Cleaning the Heat Shoes and Laminator Rollers**

The Heat Shoes and Laminating Rollers should be cleaned of any residual adhesive whenever the film does not pass smoothly over their surfaces.

**NOTE:** The surface of the Heat Shoes is Teflon-coated and must only be cleaned using a soft cloth. The Heat Shoes can easily be damaged by sharp or abrasive objects.

- 1. Unplug the unit.
- 2. Allow the Heat Shoes to cool.
- 3. Remove the Feed Table.
- 4. Cut the plastic film at the top and bottom mandrels.
- 5. Turn the Motor Switch on and pull the film out of the back of the machine.
- 6. Turn the Motor Switch off.
- 7. Use a soft cloth or a teflon scrub pad moistened with alcohol to remove any residue from the Teflon surface of the Heat Shoes and Laminating Rollers.
- 8. Allow the Heat Shoes and Laminating Rollers to dry before rethreading the film.

### **Removing Wrap-arounds**

When laminating with thinner gauges of films, there is the possibility of the film wrapping around the Pull Rollers. Refer to Cleaning the Heat Shoes and Laminating Rollers in order to remove a wrap-around. If the film cannot be pulled out of the back of the machine, leave the motor switch on and use the reverse switch on the back of the machine to reverse the rollers so the film can be pulled up and out the front of the machine.



**CAUTION!** The Heat Shoes are hot! Please use caution when cleaning the rollers or Heat Shoes or when removing wrap-arounds.

### **Warranty**

Your laminator is warranted to be free of defects in material and workmanship for a period of one year from the original purchase date. In the event of a defect in material or workmanship, the manufacturer or its authorized dealer will repair or replace (at their option) the laminator. This warranty does not cover rollers that have been damaged due to improper usage. The manufacturer makes no other warranty stated or implied except as stated above.

### **Return Policy**

If your laminator is not operating properly, first review the Operating Instructions and Troubleshooting Guide. If the malfunction cannot be corrected, contact your local dealer for instructions. Be sure to have your machine serial number and date of purchase handy. If the laminator must be returned to the dealer, **proper packaging and freight charges are your responsibility.** Shipping damages as a result of improper packaging are not covered under the terms of this warranty.

### PARTS LIST AND ILLUSTRATIONS

This section contains reference drawings and parts list to assist you when ordering parts for your laminator. The drawings show only those parts that may be replaced by the dealer.

| <u>Item</u> | Part No. | <b>Description</b>              | <b>Quantity</b> |
|-------------|----------|---------------------------------|-----------------|
| 1           | 10091    | C-CLIP, 15/16" DIA              | 4               |
| 2           | 10092    | BUSHING, 5/8 x 3/4 x 11/4       | 8               |
| 3           | 10093    | KNOB, 1/4-20 x 11/4 LONG        | 2               |
| 4           | 10095    | CAP, END                        | 4               |
| 5           | 10096    | SPRING, BRAKE ADJUSTMENT        | 2               |
| 6           | 10033    | SWITCH, GREEN, ROUND            | 2               |
| 7           | 10100    | HUB, BRAKE, MANDREL             | 2               |
| 8           | 10101    | MANDREL, SUPPLY, TOP            | 1               |
| 9           | 10102    | GRIPPER, CORE, MANDREL          | 2               |
| 10          | 10103    | TABLE, FEED, EASY-LAM II        | 1               |
| 11          | 10104    | SHIELD, SAFETY, EASY-LAM II     | 1               |
| 12          | 10105    | HOLDER, GLASS, HEAT SHIELD      | 1               |
| 13          | 10106    | BAR, TIE, EASY-LAM II           | 2               |
| 14          | 10108    | COVER, REAR, EASY-LAM II        | 1               |
| 15          | 10110    | SHOE, HEAT, EASY-LAM II         | 2               |
| 16          | 10111    | GLASS, HEAT SHIELD, EASY-LAM II | 1               |
| 17          | 10343    | COVER, ROLLER, EASY-LAM II, NEW | 1               |
| 18          | 10113    | HOLDER, ROLLER BUSHING          | 4               |
| 19          | 10114    | ROD, IDLER, TOP EASY-LAM II     | 1               |
| 20          | 10115    | ROD, IDLER, BOTTOM EASY-LAM II  | 1               |
| 21          | 10116    | SUPPORT, FRONT, FEED TABLE      | 1               |
| 22          | 10117    | SUPPORT, REAR, FEED TABLE       | 2               |
| 23          | 10118    | MOUNT, HEAT SHOE EASY-LAM II    | 8               |
| 24          | 10119    | TUBING, ROLLER, IDLER           | 2               |
| 25          | 10120    | ROLLER, TOP, FRONT              | 1               |
| 26          | 10121    | ROLLER, BOTTOM, FRONT           | 1               |
| 27          | 10129    | ROLLER, TOP, BACK, EPDM         | 1               |
| 28          | 10130    | ROLLER, BOTTOM, BACK            | 1               |
| 29          | 10125    | AXLE, GRIPPER                   | 2               |
| 30          | 10126    | HOLDER, BOTTOM, ROLLER BUSH     | 4               |
| 31          | 10128    | MANDREL, SUPPLY, BOTTOM         | 1               |
| 32          | 10085    | MOTOR, EASY-LAM II, 80MM        | 1               |
| 33          | 1395     | CORD, POWER 14-3                | 1               |
| 34          | 541      | TERMINAL BLOCK, 6 STATION       | 1               |
| 35          | 1172     | FUSE HOLDER, HTB-34I            | 1               |
| 36          | 1170     | FEET, RUBBER, LARGE             | 4               |

| <u>Item</u> | Part No. | <b>Description</b>               | <b>Quantity</b> |
|-------------|----------|----------------------------------|-----------------|
| 37          | 1182     | FUSE, 15AMP, MDA-15              | 1               |
| 38          | 1242     | HEATER, TUBULAR, EASY-LAM II     | 4               |
| 39          | 10415    | RELAY, SOLID STATE, 25 AMP       | 1               |
| 40          | 10358    | SPROCKET, MOTOR, EASY-LAM II     | 1               |
| 41          | 2801     | SPROCKET, 22T, STEEL             | 1               |
| 42          | 10371    | SPROCKET, 25B21, .625 BORE       | 1               |
| 44          | 10232    | SWITCH, MOTOR REVERSE,           | 1               |
|             |          | EASY-LAM II                      |                 |
| 45          | 10282    | COVER, SIDE, LEFT, EASY-LAM II   | 1               |
| 46          | 10315    | COVER, SIDE, RIGHT, EASY-LAM II  | 1               |
| 47          | 10303    | SUPPORT, SIDE, LEFT-MOLD         | 1               |
| 48          | 10304    | SUPPORT, SIDE, RIGHT-MOLD        | 1               |
| 49          | 10318    | LABEL, EASY-LAM II               | 1               |
| 50          | 10319    | BRIDGE, ROLLER, EASY-LAM II      | 1               |
| 51          | 8107     | ALUM ROD, THERMOSTAT             | 1               |
| 52          | 4369     | LABEL, INCREASE                  | 1               |
| 53          | 134      | TEST SHEET, ROLL LAMS            | 1               |
| 54          | 1270     | LABEL, "CAUTION HOT"             | 1               |
| 55          | 1294     | LABEL, LOADING INSTRUCTIONS      | 1               |
| 56          | 1319     | LIGHT, INDICATOR, RED 120V       | 1               |
| 57          | 10324    | CHAIN, ROLLER DRIVE, EASY-LAM II | 1               |
| 58          | 524      | STRAIN, RELIEF BUSHING LGE       | 1               |
| 59          | 555      | THERMOMETER, ROLL LAM            | 1               |
| 60          | 560      | THERMOSTAT, HTU-428 (EZ)         | 1               |
| 61          | 573      | THERMOSTAT, MOUNT                | 1               |
| 62          | ZIPCUT   | ZIPPY CUTTER, STOCK #K353        | 1               |
| 63          | 1263     | KNOB                             | 2               |
| 64          | 557      | KNOB, THERMOSTAT                 | 1               |
| 65          | 10322    | GUIDE, FEED TABLE, EASY-LAM II   | 1               |
| 66          | 10323    | NUT, LOCKING, FEED TABLE         | 2               |
| 67          | 10325    | BLOCK, IDLER SPROCKET            | 1               |
| 69          | 10327    | SET SCREW, MODIFIED, EASY-LAM II | 4               |
| 70          | 10815    | SPROCKET, IDLER, MIGHTYLAM       | 1               |
| 71          | 10333    | BUSHING, SUPPLY MANDREL          | 2               |
| 72          | 10337    | SPRING, ROLLER, EASY-LAM II      | 4               |
| 73          | 10340    | SCREW, 4-40 x 5/16 BHCS          | 5               |
| 75          | 10349    | RECTIFIER, EASY-LAM II           | 1               |
| 76          | 10350    | BOLT, SHOULDER, 1/4 x 1/2        | 1               |

