READ ALL PRECAUTIONS & INSTRUCTIONS CAREFULLY BEFORE OPERATING LAMINATOR

> Setup Instruction Operation Maintenance

44" POUCH LAMINATOR

Operation Manual

December 2000

TABLE OF CONTENTS	Page No.
1.0 INTRODUCTION	2
1.1 Features and benefits	3
1.3 Specifications	4
1.4 Principles of operation	5
1.5 Warranty	6
2.0 UNPACKING AND INVENTORY	8
3.0 SAFETY PRECAUTIONS	10
4.0 SETUP & OPERATION 4.1 Warm up to operating temperature	12
4.2 Durafilm Pouch Laminating	12
4.3 Durafilm Mounting & Laminating	13
4.4 Durafilm Mounting	14
5.0 MAINTENANCE	15
5.1 Monthly Service Schedule	15
5.1.2 Rubber Roll Cleaning	15

1.0 INTRODUCTION

The 44" Pouch Laminator, when used in conjunction with Graphic Durafilm mounting boards and pouches is designed to provide a guality lamination using a wide range of papers and materials. Common applications include but are not limited to: maps, digital imaging, packaging, posters, menus, instructional aids, signs, presentation materials, photographs, copies (B&W or color), prints, flyers, promotional sheets, and many other items.

To assure the best performance from your new laminator, please follow the safety, installation, operation, and maintenance instructions in this manual. Read the manual before using the laminator. Keep the manual with the machine and periodically review the instructions. This manual also contains the warranty. Additional copies are available from the manufacturer.

We take this opportunity to thank you for selecting a LEDCO Pouch laminator and to assure you of our commitment to your satisfaction with our products.

As you unpack your new laminator, please complete the following information. Always have this information ready when calling.

Dealer Where Purchased

InstallationDate Serial#

GWJ Company 2117 Weeping Willow Lane Hacienda Heights, CA 91745 Phone: 626-336-1134 or 800-336-1138 (US only) Fax: 626-336-2409

1.1 FEATURES & BENEFITS

Your new pouch laminator has several standard features that set it apart from other models

- Variable Heat Control The heat may be adjusted by the turn of a knob from 200 to 400 degrees Fahrenheit.
- <u>Rubber Roll Adjustment from 0 to 1 ¹/2</u>" The roll height adjustment graduations are 0, 1/16, 1/8, 3/16, 1/4, 3/8, 1/2, 5/8, 3/4, 1, 11/4, 11/2.

1.3 SPECIFICATIONS

	US	Europe
Maximum laminating width	44"	1117mm
Speed	1 FPM	.3 MPM
Maximum laminating thickness	up to $1\frac{1}{2}$ "	up to 38mm
Dimensions	66L 16H 19W	1677mm L 406mm H 483mm W
Shipping Dimensions	72L 24H 26W	1829mm L 609mm H 660mm W
Weight/Shipping weight	130/200 Lbs.	59/91 Kg
Power Supply Requirements		
110-125V Model	110V 15 amp 50/60Hz	
208-240V Model	220V single phase 15amp 50/60Hz	220V single phase 15amp 50/60Hz
Supply connector	125V NEMA 5-15R	Consult Dealer
	250V NEMA L6-20R	

1.4 PRINCIPLES OF OPERATION

<u>Durafilm Pouch Laminating</u> Two sheets of film are put together with thermal adhesive facing each other and sealed at one edge forming a pouch. An item to be laminated is placed between these two sheets of film. The pouch with the item to be laminated is placed on a sled and slid into the pouch laminator. The pouch laminator has one set of rolls. The bottom roll is cold and driven. The top roll is heated and idles. When the sled with pouch intact is slid into the laminator, the top and bottom rubber rolls come in contact. The bottom roll pulls the sled through and the top roll heats the pouch and activates the thermal adhesive. The film's adhesive is pressed into the ink and fibers on the surface of the item being laminated.

<u>Durafilm Mounting & Laminating</u> One sheet of laminating film is sealed to the lead edge of a mounting board. The thermal adhesive on the board and the thermal adhesive on the film, face each other. An item to be mounted and laminated is placed between the film and the board. When the board is slid into the laminator, the top and bottom rubber rolls come in contact with the mounting board. The bottom roll pulls the board through and the top roll heats the film. The film's adhesive and the board's adhesive are pressed into the ink and fibers on the surface of the item being mounted.

<u>Durafilm Mounting – Only</u> The mounting board has a thermal adhesive on one side. An item to be mounted is placed on the thermal adhesive side of the mounting board. A release liner sheet with silicon coating on one side is placed over the surface of the item and covering the entire board (with the silicon surface facing item and board to prevent adhesive from the mounting board transferring to the top heated laminating roll). When the board is slid into the laminator, the top and bottom rubber rolls come in contact with the mounting board. The bottom roll pulls the board through and the top roll heats the item to be mounted and the mounting board. The board's adhesive activates and is pressed into the ink and fibers of the item being mounted.

DURAFILM is a trademark of Graphic Laminating. DURAFILM MOUNTING BOARDS are constructed of 3/16" foam board with a heatactivated adhesive on the laminating side of the board. The laminating film on the Mounting /Laminating pouch is available in Gloss, Satin, Matte, and Crystal. For guaranteed best results following our mounting instructions, we recommend using only DURAFILM MOUNTING BOARDS, DURAFILM MOUNTING & LAMINATING POUCHES, DURAFILM POUCHES and SLEDS. Heat seal irons and glue sticks are also available at www.ledcolaminator.com.

This pouch laminator is guaranteed against defects in material and workmanship for a period of two years after date of shipment. Defective parts will be replaced without cost within the warranty period, provided the laminator has not been abused, altered, or operated contrary to instructions. Ledco, Inc. shall not be liable for any alterations or repairs except those made with its written consent.

This obligation under warranty shall not extend to the following:

- The adjustment or replacement of parts which are the normal responsibility of the owner. For example, rubber rolls, scratched or chipped paint, loose fasteners (screws, nuts, etc.), or other items that show wear under normal use; i.e. "normal wear parts".
- Normal operating adjustments to heat, thickness, etc.
- Parts that are not manufactured by Ledco, Inc. If the individual manufacturer warrants these items, their warranty is, in turn, passed on to the original purchaser of the laminator. Ledco, Inc. does not incur any obligation or liability as a result of the warranties, which are the sole responsibility of the appropriate individual manufacturer.

Any pouch laminator that proves defective during the warranty period may be returned to Ledco, Inc. unless it is decided that the necessary repairs can be made during a service call. <u>Notice of the defect should be</u> <u>submitted in writing or by phone to Ledco before any steps are taken to</u> <u>repair or return the machine. Phone: 585-367-2392 Fax: 585-367-2978</u>

If the machine is returned, the following should accompany it.

- Customer name, address, and phone number
- Written particulars regarding the malfunction
- Date of installation
- Serial number of the machine.
- RA number on outside of box

RETURNS MUST HAVE A RETURN AUTHORIZATION NUMBER ON THE OUTSIDE OF THE SHIPPING CONTAINER. Send all returned equipment freight PREPAID to: Ledco, Inc., 4265 North Main Street, Hemlock, NY 14466

If your machine needs servicing after the warranty has expired, please contact your dealer. Ledco, Inc. does offer technical support if your dealer is unable to assist.

This warranty is expressly in lieu of all other warranties expressed or implied. This includes the warranties of Merchantability and Fitness For Use and of all other obligation or liabilities of Ledco, Inc. Ledco neither assumes nor authorizes any other person to assume it for any other obligation or liability in connection with the sale of this laminator except as provided for above.

Further, this warranty will not apply to any machine or part thereof which has been damaged as result of an accident or as a result of abuse, misuse, or neglect of the machine. The warranty is also void if the pouch laminator has been altered or repaired by any other than an authorized repair facility or dealer. If you have any questions about this warranty, contact Ledco. Phone: 585-367-2392

Fax: 585-367-2978 Email: www.ledco@ledcoinc.com

2.0 UNPACKING AND INVENTORY

The laminator arrives fully assembled. Upon arrival, inspect the unit immediately and thoroughly using the packing list that accompanies the shipment. Please follow these steps to correct any problem with your shipment. Ledco, Inc. cannot accept any responsibility for damage or loss unless you notify us within ten days of receipt of shipment and follow these procedures:

BREAKAGE OR DAMAGE: It is imperative that any shipping damage is reported and a claim is filed with the delivering carrier immediately upon receipt of damaged shipment. The procedure for reporting damage depends on the method of shipment. Please note damage on bill of lading.

<u>FREIGHT, EXPRESS, or TRUCK DELIVERY:</u> According to the contract terms and conditions of the carrier, the responsibility of the shipper ends at the time and place of shipment. The carrier then assumes full responsibility for the shipment.

- 1. Notify Ledco IMMEDIATELY.
- 2. Hold damaged goods with container and packing for inspection by the examining agent. Ledco will arrange the inspection.
- 3. DO NOT RETURN ANY GOODS TO LEDCO PRIOR TO AUTHORIZATION BY LEDCO.

4. Submit a copy of the inspector's report to Ledco. Ledco will file the claim with the carrier. Ledco will replace your machinery if necessary. You will be credited for the damaged machinery when the claim is processed.

SHORTAGE:

- 1. Check the packing list notations. The apparent shortage may have been marked as an international short-shipped (back-ordered) item.
- 2. Examine the container and packing material, particularly for smaller items.
- 3. Make certain that unauthorized personnel prior to complete unpacking did not remove the item and inventory.
- 4. Call us and send immediate written notification of the shortage.

INCORRECT SHIPMENT:

- 1. If the material you receive does not correspond with your order, notify Ledco immediately. Include the order number and item(s).
- 2. Hold item(s) until return instructions are received.

RETURNS: DO NOT RETURN DAMAGED OR INCORRECT ITEMS UNTIL YOU HAVE RECEIVED SHIPPING INSTRUCTIONS AND AN AUTHORIZATION NUMBER FROM LEDCO.

3.0 SAFETY PRECAUTION

DO NOT OPERATE THIS MACHINE UNTIL YOU READ AND FULLY UNDERSTAND THE FOLLOWING SAFETY PRECAUTIONS.

- 1. Never operate this machine without reminding yourself that a laminator is a potentially dangerous tool. If misused, used carelessly, or used without observing the rules of safe operation, very serious injury can result.
- 2. Never operate this machine unless you have been fully trained and have received and fully understood all operating instructions. Make sure you know how the machine works and how it is controlled.
- 3. Never operate this machine without all guards, housings, safety shields, stop switches or other safety devices in place and fully operational.
- 4. Never use this laminator for other than its intended use.
- 5. Never immerse your laminator in whole or part in any water or other liquids.

- 6. Never enclose your laminator while in use as to interfere with its proper ventilation.
- 7. Never operate the laminator with a damaged cord, plug, or after the laminator has been dropped or damaged in any manner.
- 8. Never operate this machine if it is not working properly or if you notice any abnormality in its performance.
- 9. Never tamper with, rewire, or bypass any control or safety device on this machine.
- 10. Never attempt to clean feed rollers while the power is on.
- 11. Never remove the machine housing or attempt any kind of maintenance without disconnecting power to the unit.
- 12. Always be sure all persons are clear of the machine before pushing the start button, especially when multiple operators or observers are present.
- 13. Never wear loose clothing, ties, jewelry or any item, which could get caught in the rollers or machinery when operating the machine. Operators with long hair must put their hair up before running the machine.
- 14. Always keep your hands clear of any moving parts except when the power is off and you intend to adjust the laminator.
- 15. Always unplug the laminator when it is not to be used for a long period.
- 16. Because castors raise the center of gravity and increase the risk of tipping, use a minimum of two people to move the machine. Move slowly, and avoid any obstructions.
- 17. Always connect to the proper power supply of the voltage, amperage, and frequency. The laminator comes with a grounded plug. To reduce the risk of electrical shock, this plug is intended to fit only a grounded outlet of proper amperage, and in only one way. If it does not fit in the outlet, contact a qualified electrician. Do not modify the plug in anyway.
- 18. If the supply cord is damaged it must be replaced by a special cord available from the manufacturer or servicing agent.

NOTICE TO EMPLOYER: A copy of these safety precautions must be given to all operators, set-up personnel, maintenance people, and supervisors of this machine. A copy should also be hung on the machine readily accessible and visible to the operator. Additional copies are available upon request.

IMPORTANT: Where a language barrier or insufficient schooling would prevent a person from reading and understanding these safety precautions, you should either translate this information or have it read or interpreted to the person, and get assurance that it is understood.

4.0 SETUP & OPERATION

This section explains in detail the setup and operation of your pouch laminator.

4.1 WARM UP TO OPERATING TEMPERATURE

- 1. Remove machine from shipping container and place in work area.
- 2. Plug the machine into proper outlet.
- 3. 110v standard 44"
 110v 15amp
 NEMA 5-15R

 220v standard 44"
 220v 15amp
 NEMA L6-20R
- 4. Turn on main power switch.
- 5. Set roll height adjusting knob to desired thickness of material to laminate.

- 6. Set to recommended temperature of 350 degrees.
- 7. Wait 35-45 minutes for machine to warm up to operating temperature.

4.2 DURAFILM POUCH LAMINATING

You will need a proper sized mounting sled (flat board used to carry pouch through laminator while keeping it flat and smooth), and the proper sized pouch.

Pouch size	Sled size
18.5" x 24.5"	21" x 28"
25" x 37"	27" x 40"
37" x 49"	40" x 52"

results when following our pouch laminating instructions, we recommend using only DURAFILM POUCHES and SLEDS; to order, please visit www.ledcolaminator.com

When ready to laminate, please follow these easy steps:

- 1. Turn on your machine by pressing the ON SWITCH.
- 2. Set to recommended temperature of 350 degrees.
- 3. Allow the machine to heat for approximately 35-45 minutes.
- 4. Check sled to make sure there are no foreign particles on the surface.
- 5. Lay your sled on flat surface with foam side up.
- 6. Lay your pouch on the sled with sealed edge of pouch toward the front of the sled.
- 7. Make sure the pouch has the thin side up as indicated by the UP STICKER.
- 8. Pull back top layer of pouch and insert item to be laminated. Make sure item is centered in pouch.
- 9. Insert sealed end of pouch under Hold-down Flap on front of sled making sure at least $\frac{1}{2}$ " is under flap. Square pouch on sled.
- 10. SET MACHINE GAP OPENING TO ¹/₄" by pulling out Gap Knob on right side of machine and turning to the proper setting (Pull out to set and then push in to hold).
- 11. Insert pouch and sled into laminator making sure they are square to laminating rolls.
- 12. Remove sled as soon as it exits laminator. BE CAREFUL NOT TO TOUCH POUCH UNTIL IT IS COOL.

4.3 DURAFILM MOUNTING & LAMINATING POUCHES

MOUNTING BOARDS are constructed of 3/16" foam board with a heatactivated adhesive on the laminating side of the board. The laminating film on the Mounting /Laminating pouch is available in Gloss, Satin, Matte, and Crystal. For guaranteed best results following our mounting laminating instructions, we recommend using only DURAFILM MOUNTING LAMINATING POUCHES; to order, please visit www.ledcolaminator.com

When ready to laminate & mount, please follow these easy steps:

- 1. Turn on your machine by pressing the ON SWITCH.
- 2. Set to recommended temperature of 350 degrees.
- 3. Allow the machine to heat for approximately 35-45 minutes.
- 4. Check item to be mounted and laminated to make sure there are no foreign particles on the surface.
- 5. Place laminating pouch on flat surface and insert item to be mounted and laminated between the film and board. Make sure item is square to edges of board.
- 6. SET MACHINE GAP OPENING TO THE THICKNESS OF THE MOUNTING BOARD (example 3/16" board = 3/16" gap) by pulling out Gap Knob on right side of machine and turning to the proper setting (Pull out to set and then push in to hold).
- 7. Insert board into laminator (sealed edge FIRST) making sure the film is flat on the item.
- 8. The board will be laminated at a speed of one foot per minute.
- 9. Remove board from laminator as soon as it is ejected from machine.
- 10. Lay on flat surface until cool to touch.

4.4 DURAFILM MOUNTING

DURAFILM is a trademark of Graphic Laminating. DURAFILM MOUNTING BOARDS are constructed of 3/16" foam board with a heatactivated adhesive on the laminating side of the board. For guaranteed best results following our mounting instructions, we recommend using only DURAFILM MOUNTING BOARDS. Heat seal irons and glue sticks are also available at GRAPHIC LAMINATING; to order, please visit www.ledcolaminator.com When ready to mount, please follow these easy steps:

- 1. Turn on your machine by pressing the ON SWITCH.
- 2. Set to recommended temperature of 350 degrees.
- 3. Allow the machine to heat for approximately 35-45 minutes.
- 4. Check item to be mounted and mounting board to make sure there are no foreign particles on the surface.
- 5. Place mounting board on flat surface and place item to be mounted on the adhesive side of board. Make sure item is square to edges of board.
- 6. Tack item to board using a heat seal iron or glue stick. Tack only the front two corners of the item.
- 7. SET MACHINE GAP OPENING TO THE THICKNESS OF THE MOUNTING BOARD (example 3/16" board = 3/16" gap) by pulling out Gap Knob on right side of machine and turning to the proper setting (Pull out to set and then push in to hold).
- 8. Place release sheet over entire surface (silicon side down). This prevents adhesive from adhering to the rubber roll.
- 9. Insert board into laminator (tacked edge FIRST).
- 10. The item will be mounted at a speed of one foot per minute.
- 11. Remove board from laminator as soon as it is ejected from machine.
- 12. Lay on flat surface until cool to touch.

5.0 MAINTENANCE

This section explains the schedule and the maintenance in detail.

5.1 MONTHLY SERVICE SCHEDULE

5.1.2 CLEANING RUBBER ROLLS

- 1. Disconnect power to machine.
- 2. Lift the top front cover up.
- 3. Use a clean rag and spray the rag until damp with a cleaning solution (we recommend an all purpose cleaner & degreaser manufactured by Finger Lakes Chemical, Inc. named ENVIRONMENTALLY CONSCIOUS SAFER STUFF SAFER THAN SOLVENTS; to order, please visit www.ledcolaminator.com).
- 4. Return top front cover to closed position.