

**READ ALL PRECAUTIONS &
INSTRUCTIONS CAREFULLY
BEFORE OPERATING CUTTER**

**Setup
Instruction
Operation
Maintenance**

**Industrial Series
30” Cutter
“Finish Line”**

**Operation
Manual**

AUGUST 2012

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Glossary Of Symbols

Part

1.  Hand Crush/Force from Above Lab35
2.  Attention/General Danger Lab52
3.  Arm Entanglement Lab51
4.  Cutting of Fingers or Hand/Straight Blade Lab54
5.  Hand Entanglement/Chain Drive Lab36
6.  International/Hot Warning Lab100
7.  Electrical Hazard Lab 43
8.  International Ground Lab79

1.0 INTRODUCTION

The High Speed-30 (“Finish Line”) Cutter is designed to provide a quality cutter 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.

Option: Laminator & Cutter Link available upon request.

To assure the best performance from your new cutter, please follow the safety, installation, operation, and maintenance instructions in this manual. Read the manual before using the cutter. 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 cutter and to assure you of our commitment to your satisfaction with our products.

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

Dealer Where Purchased _____

Installation Date _____ Serial # _____

(Located left rear housing by power cord)



Ledco, Inc. 4265 North Main Street Hemlock, NY 14466
Fax: 585-367-2978 Phone: 585-367-2392
Web: www.ledcoinc.com E-mail: service@ledcoinc.com

1.1 FEATURES & BENEFITS

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

- **Variable Speed** The cutter operates at any speed up to 250 fpm (actual output may vary depending on number of cuts per min.).
- **Levers to open & close feed rollers** The levers hold the rolls open while you thread and straighten the web.
- **Feed table with easily adjustable guides** The feed table supports the web during threading and the guides adjust side to side with a single screw and have adjustments for precise web travel.
- **Total electrical operation** The unit is very convenient, only requiring an 115V, 15 amp outlet or depending on model, 208V-240V single phase, 50/60 cycle, 13amp outlet.
- **Active mode variables displayed** The touch screen control panel displays all current mode settings before, during and after operation (except during adjustment of a particular function).
- **Speed adjustment during operation** The speed is automatically adjusted by the dancer bar during operation.
- **Nose, tail, and length adjustment during operation** The nose, tail, and length may be adjusted during operation without stopping. You merely have to touch the + or – icon and the machine will immediately adjust itself .01 inches or .2 millimeters per push. You may also adjust it by touching the current adjustment and a keypad will appear. Then key in the preferred adjustment and press the ENTER icon. The adjustment will immediately take effect.
- **Cutting blades are interchangeable** If the blades should ever become dull, they can simply be rotated top to bottom for a new cutting edge.



1.2 OPTION

- **Laminator & Cutter Link** Allows the 30” laminator and cutter to be mechanically joined for improved alignment and stability.

1.3 SPECIFICATIONS

Maximum web width	30"	635mm
Speed	0-250 FPM	0-76 MPM
Maximum cutting thickness	up to 50mil	up to 1.27mm
Dimensions	59L 42H 34W	1500mm L 1070mm H 864mm W
Shipping Dimensions	71L 53H 43W	1804mm L 1347mm H 1093mm W
Weight/Shipping weight	500/640 Lbs.	182 Kg
Electrical	110-120 VAC 50/60 HZ 15 AMP 208-240VAC 50/60 HZ 6AMP	
Electrical connector	NEMA 5--15R	Consult Dealer

1.4 PRINCIPLES OF OPERATION

FEED MODE (Feed): This is used when you want something cut to a specified length (also known as sheeting).

- Set the length and speed.
- Start the machine. The feed rolls push the web to the prescribed distance and stop.
- The blade activates and shears the web.
- The cutter will go through multiples of this cycle until told to stop.

REGISTRATION MODE (Reg): This is used when you would like to have something trimmed before or after a sensed edge front (nose) and or rear (tail).

- Set the front edge (nose) to trim either before or after the sensed edge.
- Set the rear edge (tail) to trim either before or after the sensed edge.
- Load your substrates laminated in transparent to semitransparent web, with a small gap between each sheet.
- Start the machine. The feed rolls push the material forward until the fiber optic sensor senses the nose. Upon sensing the nose, they move the prescribed distance and stop.
- The blade activates and shears the web.
- The feed rollers start and push the web forward until the fiber optic sensor senses the tail edge. Upon sensing the tail, they move the prescribed distance and stop.
- The blade activates and shears the web.
- It goes through multiples of this cycle until told to stop.

REGISTRATION FEED MODE (Reg / Feed): This is used when you would like to have something trimmed before or after a sensed edge front (nose) and cut to a specified length.

- Set the front edge (nose) to trim either before or after the sensed edge.
- Set the length.
- Load your substrates laminated in transparent to semitransparent web, with a small gap between each sheet.
- Start the machine. The feed rolls push the material forward until the fiber optic sensor senses the nose. Upon sensing the nose, they move the prescribed distance and stop.
- The blade activates and shears the web.
- The feed rolls start and push the web to your prescribed distance and stop.
- The blade activates and shears the web.
- The cutter will go through multiples of this cycle until told to stop.

DOUBLE SHEET MODE (Double Sheet): This is used when you would like to have multiple sheets laminated together trimmed before and or after a sensed edge front (nose) and the last sheet trimmed before and or after a sensed edge rear (tail).

1.5 WARRANTY

This cutter 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 cutter 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, blade sharpening, 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 speed, length, 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 cutter 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. Notice of the defect should be submitted in writing or by phone to Ledco before any steps are taken to repair or return the machine. Phone: 800-937-9293 OR 585-367-2392 Fax: 585-367-2978

ALWAYS TRANSPORT UNITS IN SUITABLE ENCLOSURES TO PREVENT DAMAGE

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 and form 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 cutter 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 cutter 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: 800-937-9293 OR 585-367-2392

Fax: 585-367-2978

Email: service@ledcoinc.com

2.0 UNPACKING AND INVENTORY

The cutter 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 be reported and a claim 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. Units shall be transported in a suitable crate to prevent further damage.**

FREIGHT, EXPRESS, or TRUCK DELIVERY: 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** in all cases.
2. Hold damaged goods with container and packing for inspection by examining agent. Ledco will arrange inspection for prepaid freight and the customer should arrange inspection for collect freight.
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 on prepaid freight only. 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 a 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 PRECAUTIONS

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 cutter 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 without all guards, housings, safety shields, stop switches or other safety devices in place and fully operational.



3. 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.
4. Never operate this machine if it is not working properly or if you notice any abnormality in its performance.
5. Never tamper with, rewire, or bypass any control or safety device on this machine.
6. Never attempt to clean feed rollers while the power is on.



7. Never remove the machine housing or attempt any kind of maintenance without disconnecting power to the unit.
8. Always be sure all persons are clear of the machine before pushing the start button, especially when multiple operators or observers are present.
9. 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.
10. Always keep your hands clear of any moving parts or blades except when the power is off and you intend to adjust the cutter or change the blade.

11. Because casters 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.

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.

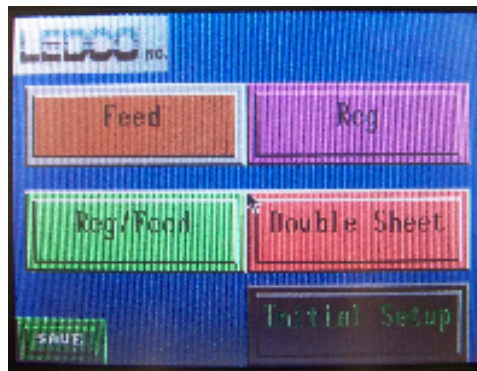
IMPORTANT: Where a language barrier or insufficient schooling would prevent a person from reading and understanding these safety precautions, you should either translate this information or have it read or interpreted to the person, and get assurance that it is understood.

4.0 SETUP, POWER UP, OPERATION, POWER DOWN

This section explains, in short, how to setup and run your new cutter. The individual controls and settings will be more thoroughly explained in 4.1.

1. Remove all packing straps, rubber bands, tape, and plastic ties from the machine.
2. ***Always*** position equipment so that there is **easy access to the main power switch or circuit breaker**.
3. Prepare web for trimming.
 - When cutting directly from the laminator, first run about 6 feet or 2 meters of material through the laminator.
 - When cutting material previously processed, make sure the web path is unobstructed and the material runs freely.
 - Rewound material should be taken from a driven unwind.
 - Shorter lengths can be placed in a box and pulled to the cutter from the top.
 - Any drag on the web can adversely affect accuracy.
4. Place cutter at least 1 1/2 feet or 1/2 meter behind laminator when using thin films (1 – 7 mil). If using thicker films (5 – 20 mil), place cutter up to 4 feet or 1 1/4 meters. This will allow the film to cool. Then center and square the cutter to the laminator as close as possible. Spacer bars are available for quick and easy setup. When using spacer bars, there is a rigid link established between the cutter and the laminator. The spacer bars automatically square and center the cutter behind the laminator.
5. Thread the web under front dancer bar (loop control bar).
 - Place the web on top of feed table and push under safety shield at rear of feed table until it stops.
 - Then raise feed rollers by lifting the small levers located at the rear of the machine.
 - Push the web through until it can be seen coming out of the rear of the machine and then pull it from behind until tight.

- Move the web side to side until it is squarely running through the cutter and close the rollers.
6. Adjust side guides to web width. Leave just a slight clearance on each side as not to bind and still allow the web to flow freely through the cutter.
 7. **TO POWER UP CUTTER:** Plug the machine into proper outlet:
 110-120 VAC 50/60HZ 15AMP
 208-240VAC 50/60HZ 6AMP
 8. Check both Emergency Stop Buttons, they should be in up position. If buttons are depressed, turn them clockwise slightly until they pop up. Insert key into power switch and turn to on "I" position, *this is the main power disconnect*. Depress green/on exit table button.



9. When you look at the initial screen on the touch screen interface, the MODE icons are shown above (Feed, Reg, Reg/Feed, Double Sheet and (password protected) Initial Setup).
10. You may adjust the settings for your first job by touching the MODE icon on the touch screen once. Below is the Feed MODE screen.



To adjust the settings, touch the icon or the framed value you would like to adjust. Key in the value and touch ENTER on the sub screen.

11. When you are satisfied with the current settings, you may either reset to 0 or key in a beginning count (the quantity or count icon is the framed box in the upper left corner) by touching the count value icon and keying in the value. Touch **ENTER**, then touch the **SAVE** icon. This will save the current program settings in case you lose power or turn the machine off.

- **CAUTION: IF YOU TURN THE MACHINE OFF WITHOUT THE CURRENT PROGRAM BEING SAVED IT WILL REVERT BACK TO THE LAST SAVED PROGRAM.**

12. POWER DOWN: MAIN POWER DISCONNECT KEY

Turn main power disconnect key to off “O” position. The Emergency Stop Buttons should be depressed **ONLY IN EMERGENCY SITUATIONS** to deactivate cutter.

4.1 CONTROLS & SETTING PARAMETERS

This section will explain, in depth, the use and settings for proper operation of the cutter.

4.1.1 SIDE GUIDES

Each side guide has an easily accessible, single knurled plastic adjusting screw. The guides slide from side to side and easily lock in place. Adjust side guides to web width leaving just a slight clearance (approximately 1/32" or 1mm on each side). This will allow the web to be accurately guided through the machine.

4.1.2 MODE SETTING

Feed (Feed Mode): This is used to cut to a specified length (also known as sheeting).

1. Set the length.
2. Start the machine. The feed rolls push the web to the prescribed distance and stop.
3. The blade activates and shears the web.
4. Then it goes through multiples of this cycle until told to stop.

Reg (Registration Mode): This is used to trim before or after a sensed edge front (nose) and / or rear (tail).

1. Set the front edge (nose) to trim either before or after the sensed edge.

2. Set the rear edge (tail) to trim either before or after the sensed edge.
3. Load your substrates laminated in transparent to semitransparent web, with a small gap between each sheet.
4. Start the machine. The feed rolls push the material forward until the fiber optic sensor senses the nose. Upon sensing the nose, they move the prescribed distance and stop.
5. The blade activates and shears the web.
6. The feed rollers start and push the web forward until the fiber optic sensor senses the tail edge. Upon sensing the tail, they move the prescribed distance and stop.
7. The blade activates and shears the web.
8. The cutter will go through multiples of this cycle until told to stop.

Reg / Feed (Registration Feed Mode): This is used to trim before or after a sensed edge front (nose) and cut to a specified length.

1. Set the front edge (nose) to trim either before or after the sensed edge.
2. Set the length.
3. Then load your substrates laminated in transparent to semitransparent web, with a small gap between each sheet.
4. Start the machine. The feed rolls push the material forward until the fiber optic sensor senses the nose. Upon sensing the nose, they move the prescribed distance and stop.
5. The blade activates and shears the web.
6. The feed rolls start and push the web to your prescribed distance and stop.
7. The blade activates and shears the web.
8. The cutter will go through multiples of this cycle until told to stop.

Double Sheet (Double Sheet Mode): This is used to trim before or after a sensed edge front (nose) and move a specified length, then trim before or after a sensed edge rear (tail).

1. Set the front edge (nose) to trim either before or after the sensed edge.
2. Set the length.
3. Set the rear edge (tail) to trim either before or after the sensed edge.
4. Then load your substrates laminated in transparent to semitransparent web, with a small gap between each sheet.
5. Start the machine. The feed rolls push the material forward until the fiber optic sensor senses the nose. Upon sensing the nose, they move the prescribed distance and stop.
6. The blade activates and shears the web.
7. The feed rolls start and push the web to your prescribed distance and then the fiber optic sensor senses the tail edge. Upon sensing the tail, they move the prescribed distance and stop.
8. The blade activates and shears the web.

9. The cutter will go through multiples of this cycle until told to stop.

Changing mode setting

1. Touch the **Main Menu** icon (located upper right hand corner of touch screen).
2. You will see displayed in window **Feed, Reg, Reg / Feed and Double Sheet**. Touch the required icon to select.

4.1.3 SPEED SETTING

The speed is automatically adjusted by the dancer bar or loop detector.

4.1.4 LENGTH SETTING

The length is only displayed and set during **Feed (FEED MODE)**, **Reg / Feed (REGISTRATION FEED MODE)** and **Double Sheet (DOUBLE SHEET MODE)**. The length is displayed on the upper middle screen just below the length legend. The length may be adjusted from 0-9999 inches or 0-9999 millimeters.

Changing Length while machine is stopped or running.

1. Touch the Length value below the Length legend.
2. A number pad will appear, key in your required Length on the number pad.
3. Touch the ENTER icon to accept.

To quickly increase the Length while machine is running.

1. Touch the + icon to the left just below the Length value. The Length will increase immediately by .01 inches or .2 mm on the next cut.

To quickly decrease the Length while machine is running.

1. Touch the – icon to the right just below the length value. The Length will decrease immediately by .01 inches or .2 mm on the next cut.

4.1.5 COUNT

1. The count is displayed in the upper left corner of the screen in the green value box. The count registers from 0-999999.

Adjusting the count

The count may be adjusted when the machine is stopped.

1. Touch the green framed value.
2. A number pad will appear.
3. On the number pad, key in 0 or your adjusted count.
4. Touch the ENTER icon to accept.

4.1.6 UNITS

The units may be displayed in inches (English) or millimeters (Metric). The unit of measure is displayed on the bottom left middle of the screen.

Changing the unit of measure

1. Touch the English or Metric icon. The units will change immediately.

4.1.7 NOSE SETTING

The Nose setting is only displayed and set during **Reg (REGISTRATION MODE)**, **Reg / Feed (REGISTRATION FEED MODE)** or **Double Sheet (DOUBLE SHEET MODE)**. The Nose setting is displayed on the upper left screen below the Nose legend. The Nose setting may be adjusted from – 3.000 to +3.000 inches or –99.000 to +99.000 millimeters.

Changing the Nose setting while machine is stopped or running

1. Touch the framed Nose value below the Nose legend.
2. A number pad will appear.
3. On the number pad, key in the desired Nose length.
4. Touch the ENTER icon to accept.

To quickly increase the Nose setting while the machine is stopped or running

1. Touch the + icon to the left just below the Nose value. The Nose will increase immediately by .01 inches or .2 mm on the next cut.

To quickly decrease the Nose setting while the machine is stopped or running

1. Touch the – icon to the left just below the Nose value. The Nose will decrease immediately by .01 inches or .2 mm on the next cut.

4.1.8 TAIL SETTING

The Tail setting is only displayed and set during **Reg (REGISTRATION MODE)** or **Double Sheet (DOUBLE SHEET MODE)**. The Tail setting is displayed on the upper right screen below the Tail legend. The Tail setting may be adjusted from -3.000 to +3.000 inches or -99.000 to +99.000 millimeters.

Changing the Tail setting while machine is stopped or running

1. Touch the framed Tail value below the Tail legend.
2. A number pad will appear.
3. On the number pad, key in the desired Tail length.
4. Touch the ENTER icon to accept.

To quickly increase the Tail setting while the machine is stopped or running

1. Touch the + icon to the left just below the Tail value. The value will increase immediately by .01 inches or .2 mm on the next cut.

To quickly decrease the Tail setting while the machine is stopped or running

1. Touch the - icon to the left just below the Tail value. The Tail will decrease immediately by .01 inches or .2 mm on the next cut.

4.1.9 BATCH SETTING

The Batch icon is displayed on the lower left corner of the screen. The batch can be set from 0-99999. The Batch MODE may be used in conjunction with all the other modes. The Batch MODE may be set to stop or pause. When using pause between batches, the dwell is adjustable in milliseconds from 0-99999.

Changing the Batch setting

1. Touch the BATCH icon.
2. The screen will display No Dwell or Dwell ms (dwell in milliseconds), Batch Count, and Actual Count.
3. Touch the Batch count value below the Batch count icon.
4. A number pad will appear.
5. Key in the desired Batch on the number pad.
6. Touch the ENTER icon to accept.

Changing between stop and pause

1. When No Dwell is displayed, it will cut the Batch and then stop.
2. When Dwell ms is displayed, it will cut the Batch and then pause for the allotted dwell time and then start again to cut another Batch. The cutter will go through multiples of this cycle until told to stop.
3. To change between No Dwell and Dwell ms, touch the display where No Dwell and Dwell ms is displayed and the display will change between them.
4. To change the Dwell time, touch the number value below the legend Dwell ms.
5. A number pad will appear.
6. Key in the desired Dwell in milliseconds on the number pad.
7. Touch the ENTER icon to accept.

4.1.10 SAVING CURRENT SETTINGS

The save icon (present on all screens and located in the lower left corner) is used for saving the current cutter configuration. It is recommended to save the configuration after you change parameters on current jobs or before you power down the machine. If you do not save the parameters, when powered back up it will revert to the previously saved parameters, including the count.

Saving the current settings

1. Touch the SAVE icon.
2. The screen will display Saving Parameters Please Wait.
3. When the screen returns, the parameters have been saved.

4.2 THREADING THE CUTTER

1. Place cutter at least 1 1/2 feet or 1/2 meter behind laminator when using thin films (1 – 7 mil). If using thicker films (5 – 20 mil), place cutter up to 4 feet or 1 1/4 meters. This will allow the film to cool. Then center and square the cutter to the laminator as close as possible. Spacer bars are available for quick and easy setup. When using spacer bars, there is a rigid link established between the cutter and the laminator. The spacer bars automatically square and center the cutter behind the laminator.
2. Thread the web under front dancer bar (loop control bar).
 - Place the web on top of feed table and push under safety shield at rear of feed table until it stops.

- Then raise feed rollers by lifting the small levers located at the rear of the machine.



- Push the web through until it can be seen coming out of the rear of the machine and then pull it from behind until tight.
 - Move the web side to side until it is squarely running through the cutter and close the rollers.
3. Adjust side guides to web width. Leave just a slight clearance on each side as not to bind and still allow the web to flow freely through the cutter.

4.3 ADJUSTING THE FIBER OPTIC SENSOR

This section explains in detail the adjusting of the fiber optic sensor. Use this section when experiencing a variance or lack of nose and/or tail registration.

1. Remove front cover from the photoelectric switch.
2. Between the sheets to be cut off, there are clear or transparent gaps of plastic. Make sure the fiber optic sensors are lined up between one of these clear or transparent gaps.
3. With the machine powered up, place a small screwdriver in the screw slot located in the front of the photoelectric switch.



4. Turn the adjusting screw counter clockwise until you hear small clicking sounds and the little green light on the bottom and the top light are the only lights on.



5. Turn the screw slowly clockwise.
 - First, the second green light from the bottom will come on.
 - Second, the red light will come on.
 - Third, keep turning slowly and the top light will go out. Keep turning slowly and the last two green lights will come on and then stop.
6. The Sensor should be adjusted properly.
7. Replace the front cover on the switch and you are ready to go.

5.0 MAINTENANCE

This section explains the schedule and the maintenance in detail.

5.1 MONTHLY SERVICE SCHEDULE

5.1.1 BELT TENSIONING & DRIVE BELT THREADING DIAGRAM

Checking belt tension between cutoff and cutoff motor

1. Disconnect power to machine.
2. When facing the front of the machine, open the large access door on the right housing.
3. Pinch the belt between your thumb and forefinger and move side to side. The belt shouldn't be loose or too tight. It should be just tight enough not to sag.
4. If the tension seems good, close the access door. If it doesn't feel right, proceed to adjusting belt tension.

Adjusting belt tension

1. Using a 5/32" hex wrench, loosen the four motor mounting screws and slide motor until desired tension is attained.
2. Tighten the mounting screws.
3. Close the access door.

Checking belt tension between stepper motor and rubber rollers

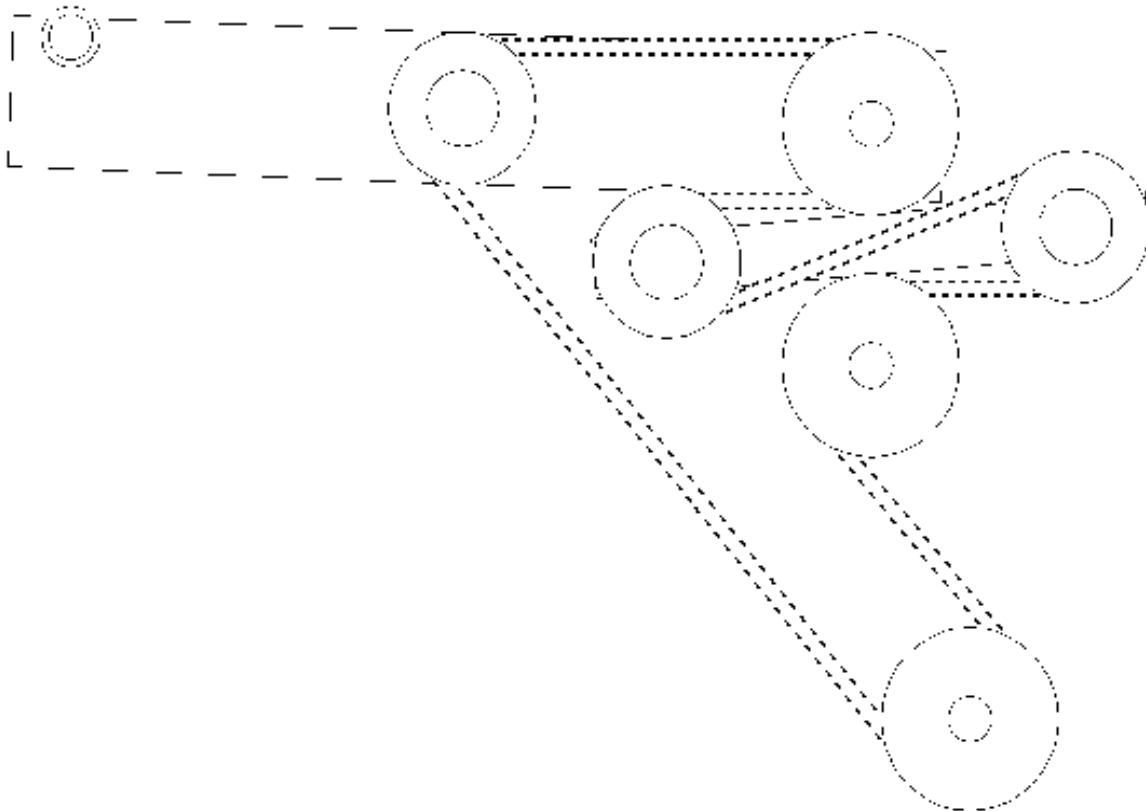
1. Disconnect power to machine.

2. When facing the front of the machine, open the large access door on the left housing.
3. To remove any slack in the belt trapped in between the rest of the pulleys, pinch together the belt above the motor pulley while lifting and lowering the top rubber roll-lifting lever in the back of the machine.
4. On the longest stretch pinch the belt between your thumb and forefinger and move side to side. For accuracy this belt should be just a little tight.
5. If the tension seems good, close the access door. If it doesn't feel right, proceed to adjusting belt tension.

Adjusting belt tension

1. Using a 5/32" hex wrench, loosen the four motor mounting screws and let the weight of the motor tighten the belt until desired tension is attained.
2. Tighten the mounting screws.
3. Close the access door.

DRIVE BELT THREADING DIAGRAM



Checking belt tension in exit table

1. Disconnect power to machine.
2. Remove the four screws from the top of the exit table control box.
3. With your forefinger apply pressure to the top of the belt. The belt shouldn't be loose or too tight. It should be just tight enough not to sag.
4. If the tension seems good, replace the top of the exit table. If it doesn't feel right, proceed to adjusting belt tension.

Adjusting belt tension

1. Using a 5/32" hex wrench, loosen the two control box mounting screws (to access one of the screws you will have to turn the large pulley until the access hole drilled through the pulley lines up with the mounting screw). Then push the control box towards the machine until desired tension is attained.
2. Tighten the mounting screws.
3. Replace the top of the exit table.

5.1.2 CLEANING RUBBER ROLLS

1. Disconnect power to machine.
2. Lift the top safety hood up from behind and set it down on the exit table.
3. Clean the rubber rollers with a mildly abrasive cleaning pad such as white Scotch Brite (Trademark of 3M) pad which may be purchased in the household section of your grocery store (the green pads are too abrasive). Use "COOL CLEAN" to clean the rollers (available through your local LEDCO dealer). Rub firmly but do not scrub the rollers vigorously as this might mar the surface. Do not use sharp metal objects or steel wool as these will also mar the rollers.
4. Start on left side, with the damp rag in left hand, place rag on rubber roll across four or five rubber roll segments at a time, turn the roll with your right hand for several revolutions. Do this progressively down the roll till past halfway and switch hands and finish the rest off the roll.
5. Return top safety hood to closed position.

6.0 STORAGE

1. A dust cover is recommended when equipment is not in operation. All controls should be in the "off" position.
2. Avoid extreme temperatures. Store in office/factory environment.

