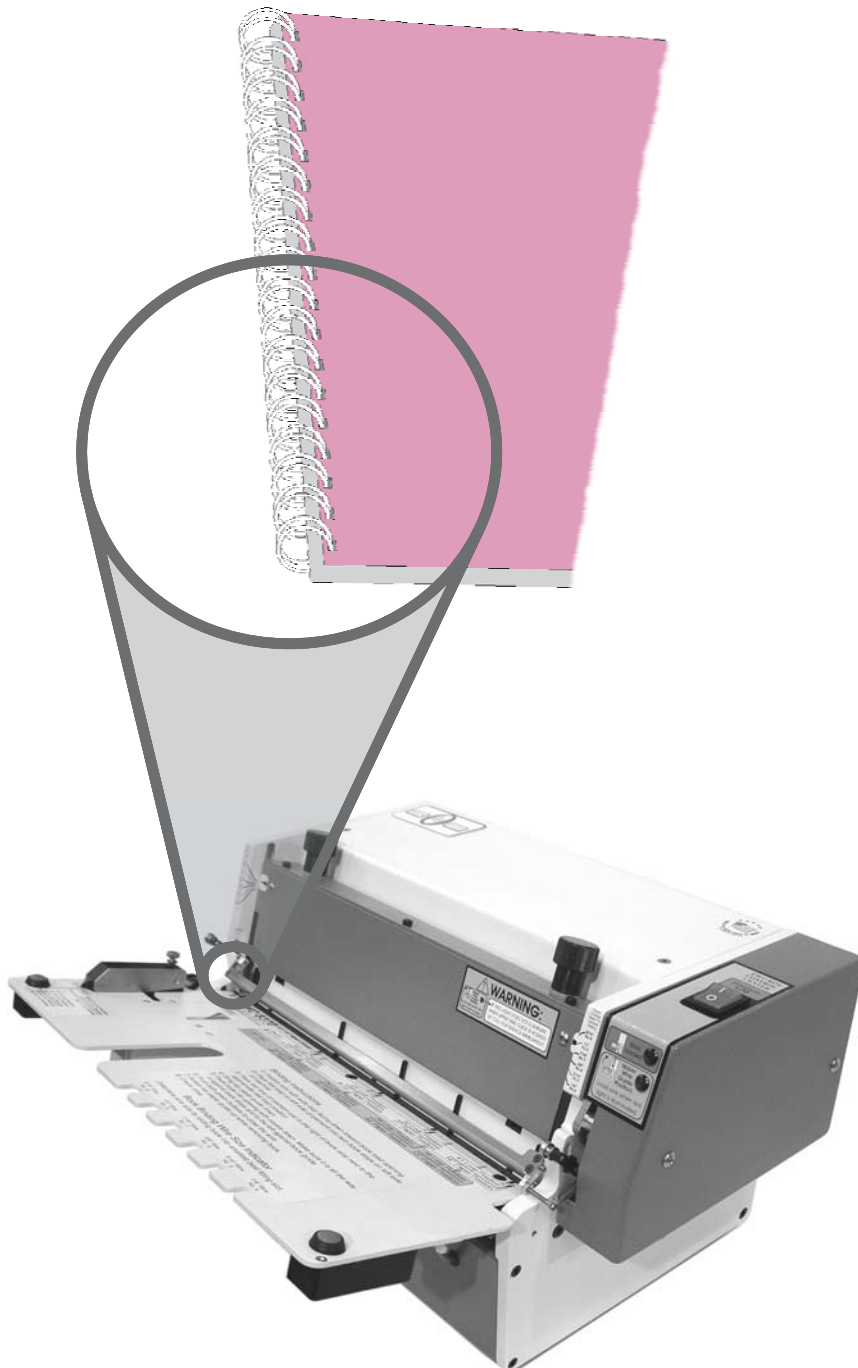


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EWC-8370 Electric Wire Closer

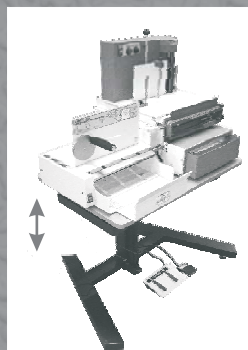
INSTRUCTION BOOK FOR THE EWC-8370, HD-8370, HC-8318

HD-8370 Semi Automatic Wire Inserter/Closer

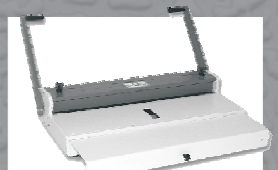


HC-8318 Semi Automatic Wire Inserter/Closer

AND INTRODUCTION TO OTHER HD BINDING MODULES AND ACCESSORIES



RTT-42 Table



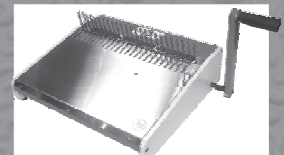
HC-8024 for WIRE



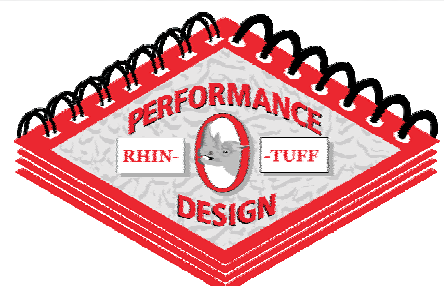
HD-4170 for COIL



HD-8000 for WIRE



HD-4470 for COMB



Number Of Holes Chart For Standard Book Length

	Sheet Size								
	5-1/2"	A6	A5	8-1/2"	9"	11"	A4	13"	14"
3-1 <small>ROUND & SQUARE</small>	16	17	24	25	26	32	34	38	41

Wire Size Selector Chart

		Pages <small>(20 lb Paper)</small>	Thick <small>(Inches)</small>
Wire Size	1/4"	46	.184
	5/16"	62	.248
	3/8"	78	.312
	7/16"	93	.372
	1 / 2"	109	109
	9/16"	125	125
	5/8"	140	140
	3/4"	156	156
	7/8"	187	187
	1"	218	218
	1-1/4"	250	250

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**This manual contains very important safety information
and must be read!**

Insert-A-Bind EWC-8370, HD-8370, and HC-8318 Operators Manual Issue May 2007

The EWC-8370: Our reliable EZ-Step inserter and closer is now available in a safe, button operated, electric machine, the EWC-8370. Adjustable for varying sizes of 3-1 pitch 1/4" to 9/16" (6mm-14mm), the EWC-8370 can become a module and be mounted to your OD or HD vertical punch (Except the HD-7500) with an optional kit.

The HD-8370 Insert-A-Bind wire inserter/closer mounts to all vertical punches except the HD-7500. It inserts and closes in one EZ-Step, eliminating manual insertion of wire into documents. The HD-8370 is easily adjustable for varying sizes of 3-1 pitch 1/4" to 9/16" (6mm-14mm) wire.

The HC-8318 is an 18 inch wire closer that **binds calendars with hangers. Wire hangers can be bound into the calendar as the wire is closed!** At last, a small, affordable, easy to operate wire closing machine for short runs and yearly calendar applications. The HC-8318 binds documents up to 18 inches in length using 1/4" through 9/16" standard 3-1 pitch wire.



There are helpful accessories and modules to benefit your binding station. Please visit us at www.RHIN-O-TUFF.com to see the complete line of punching and binding equipment.

RTT-42 Rhin-O-Tuff Table

Our new electric binding equipment table adjusts from 25" to 44" (63cm-112cm) in seconds for sitting or standing while punching and binding. The table is 42" (107cm) wide, 23" (58cm) deep and has a 200 pound (90kg) capacity.



HD-4170 Coil Inserter

The HD-4170 "Rhin-O-Roll" Coil Inserter Module has 12" dual powered adjustable roller for easier more accurate coil insertion. It has gauges for book thickness and coil sizing. The HD-4170 can be used as a stand-alone production coil inserter or it can be attached on to any OD or HD Series vertical punch (except the HD-7500). All pitches and diameters can be inserted using it. The HD 4170 comes with crimper pliers and a holder.



HD-4470 Comb opener

The HD-4470 comb opener will bind books up to 2" (51mm) thick and 14" (Euro 13") wide. The opener has an adjustable ring opener control for exact book placement.



HD-8000 Wire closer

The wire closer is capable of binding Books up to 1-1/4" (31.8mm) thick. It closes wire sizes from 3/16" to 1-1/2" any pitch. It has an adjustable closing bar for different size wires. Each end can be adjusted independently to obtain a perfect close.



HC-8024 Wire Closer

The HC-8024 provides you with an affordable wire closer for binding up to 24" documents doing the job of machines that cost hundreds of dollars more. The HC-8024 offers fast, accurate, wide application closing. It comes complete with an adjustable table for the support of extra long documents.



Table of Contents

Read the entire operators manual before setting the machines adjustments for your first binding job. The **hint** paragraphs are helpful tips if you should run into problems with a certain portion of setup or binding a book.

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Warranty Registration Card Information: Please fill this out immediately and mail in. **Product registration is important to establish trouble free warranty repair** of any of your Rhin-O-Tuff equipment. Please fill out and mail in the card provided with your machine or register on-line at www.RHIN-O-TUFF.com ; then select Support, then Warranty. For repair, service, supplies, or any other help, contact your dealer.

Important Safety Notice!



Make sure you read this section very carefully! Learn to recognize this **Safety Alert Symbol**. The EWC-8370 has been designed to provide a very high level of protection to an operator. Follow the guidelines below while installing, operating and maintaining your machine.



- Plug the EWC-8370 into an outlet that provides a 15-amp service (16-amp for European installation) that is protected at the customer's circuit box (EWC-8370 only).



- Always replace fuses or circuit breakers with the correct amperage and type.



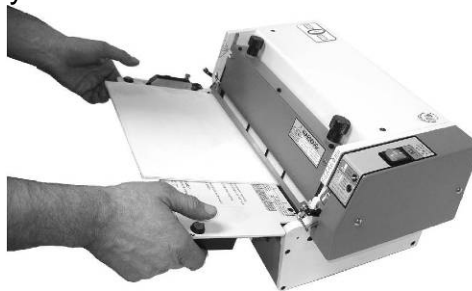
- If the machine cycles erratically turn off and unplug, call dealer immediately for service.



- Never bypass safety devices!

Special EWC-8370 Note:

This manual covers the HD-8370, EWC-8370, and the HC-8318 wire closers. When this manual refers to the Upper Position of the closing bar, the EWC-8370 is in the normal up position at rest. Then referring to pulling the handle or closing wire, the EWC-8370 is operated with the two green buttons, one on each side of the table. Both buttons must be pressed at the same time for the machine to cycle.



1) Installation:

Locate a clear work area 24" wide X 30" deep. The work area must be a solid and firm cabinet or a heavy duty table with a flat level surface.

EWC-8370:



The EWC-8370 requires an outlet within 5 feet that provides a 15-amp service (16-amp European) which is protected at the customer's circuit box. **Never attempt to move the EWC-8370 with one person! Always move your EWC-8370 with two people, one on each end.** To mount your EWC-8370 to an OD or HD vertical punch (except HD-7500) will require an optional mounting kit. Contact your dealer for the kit that fits your punch model and follow the instructions inside the kit. The EWC-8370 comes as a stand-alone machine and is ready to operate after setup.

HC-8318:

Attach the closing handle with the zinc colored screw, washer, and nut (with the two wrenches provided) with the nut on the back side of the handle and the Closing Bar in the UP position. The HC-8318 is ready to operate after setup.

HD-8370:

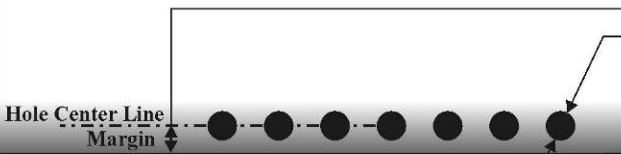



Attach the closing handle with the zinc colored screw, washer, and nut (with the two wrenches provided) with the nut on the back side of the handle and the Closing Bar in the UP position. The HD-8370 can be operated in the stand-alone or mounted to an OD or HD vertical punch (except HD-7500) as a module. To mount your HD-8370 to an OD or HD vertical punch will require an optional mounting kit. Contact your dealer for the kit that fits your punch model and follow the instructions inside the kit.

2) Machine Specifications:

The maximum book length is 14" (356MM) (HC-8318 up to 18", Euro A3) down to a minimum of 5-1/2", Euro A6. Book stops are placed at the 5-1/2", Euro A6, 8-1/2", Euro A5, 11", Euro A4 & 14", and Euro 13" positions. The book stop positions are placed at the most common book lengths, although any size book can be bound from 14" (18" HC-8318) down to 5-1/2". See chapter 3) Punching Requirements, for exact hole specifications.

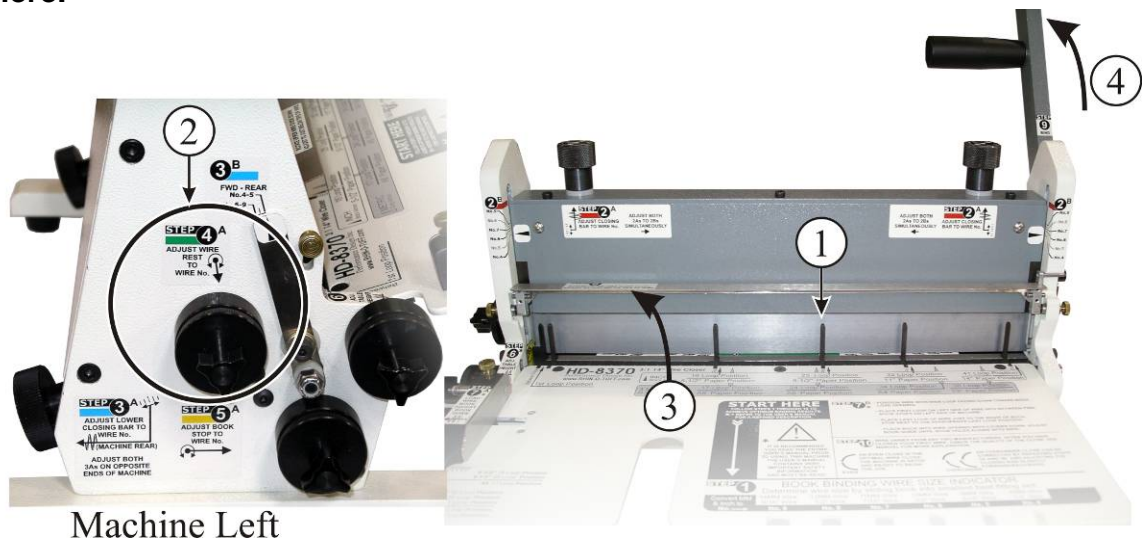
3) Punching Requirements: The correct punch hole patterns must to be used in order to provide a clear path for the wire as it is closed into the book. All 3 machines require a 3-1 pitch hole pattern, which measures 3 holes to every inch.

Hint: The size and placement on the sheet is also important. If the size of the hole is smaller, or if the placement of the hole is not in the correct position, the wire may have a problem closing into the holes of the book. The following sizes are standards and are manufactured by Performance Design Inc. for the Rhin-O-Tuff line of paper punch machines.

Pattern & Spacing	Punch Pattern Not To Scale	Hole Size & Margin
3:1-.3333"		Hole Size Margin 11/64" Dia. .168"
3:1 Thumb		3/4" Dia. 11/64" Dia. .168"
3:1-.3333"		5/32" Sq. .179"
3:1 Thumb		3/4" Dia. 5/32" Sq. .179"

The size of hole for all 3 machines should be 11/64" (.172) round (or larger) or 5/32" (.156) square. The Margin or Backspace for is .168" for round and .179" for square holes.

- 4) **Setup Guide, STEP 1 through STEP 10;** The HD-8370 has a setup guide intended to make binding easy for new and experienced users. Simply follow steps 1 thru 10 for the perfect bind. These steps are labeled on the machine in a simplified format. It is recommended that the first time you use the machine to follow both the manual and labeled steps on the machine. Numbers/letters and colors are used to link together same-function or adjust-this to-that relativity. For instance if you are at 2A, look for 2B on the machine. Both 2A and 2Bs are colored the same to make their location easy to find. In 2A and 2B's case there are two sets as noted on the label. If it's not noted do not look for a second set. **Before continuing, reset machine to be consistent with the manual, start with the Book Stops (1) in the FORWARD most position. Unlock the STEP 4 center winged knob (2), turn the outer knob until the Book Stops are FORWARD, re-lock the center knob. Place Upper Wire Guide (3) in UP Position with the Closing Handle (4) in the Back Position, shown here.**



STEP 1, Determine the correct wire size for a book: See figure 1.

Determine the correct wire size by placing the book to be bound including covers into the best fitting slot located on the book table. If the book seems too tight in the slot, always use the next larger size wire. Once you have determined which slot fits the book best, note the Wire Number, for example Wire No.4 , for will be used in this manual.

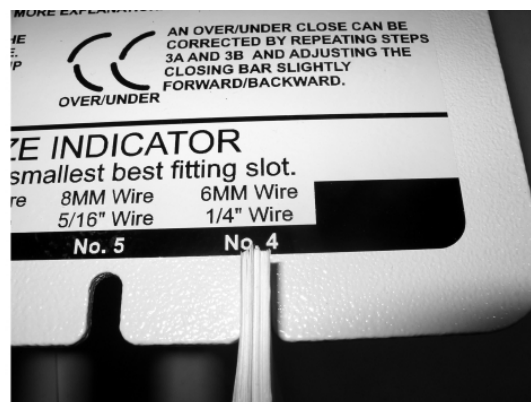


Fig. 1

You can also use the table below to determine the correct wire size for the book thickness. Covers are not included in the number of sheets column. This setup guide uses Wire No. to setup the entire machine. Once you have determined the Wire No. keep it in mind for the rest of the setup.

Wire Diameter			Book Thickness		Number of sheets	
Inch	mm	No.	Inch	mm	20lb	80gsm
1/4	6	4	3/16	4.8	45	
5/16	8	5	1/4	6.4	65	
3/8	10	6	5/16	7.9	80	
7/16	11	7	3/8	9.5	95	
1/2	12	8	7/16	11.1	110	
9/16	14	9	1/2	12.7	125	

STEP 2A & 2B RED, Adjust Closing Bar: See Figure 2, next page.

With the closing handle in the BACK position (EWC-8370 in its normal up position), adjust the Closing Bar by turning BOTH Adjustment Knobs simultaneously to the wire number determined in STEP 1 to Both labels 2B. The Closing Bar Adjustment Knobs have a UP/DOWN turning Indicator as well as a Position Line. The Position Lines are visual aids to help maintain parallelism between the Closing Bar and the lower closing bar. Simply turn the Closing Bar Knobs simultaneously keeping the Position Lines in sync. Wire varies from any two manufacturers and in rare cases you may need to lower or raise only one end of the Closing Bar for a consistent close from end to end. Adjust the upper closing bar to setting No. 4 as shown in Figure 2 next page.

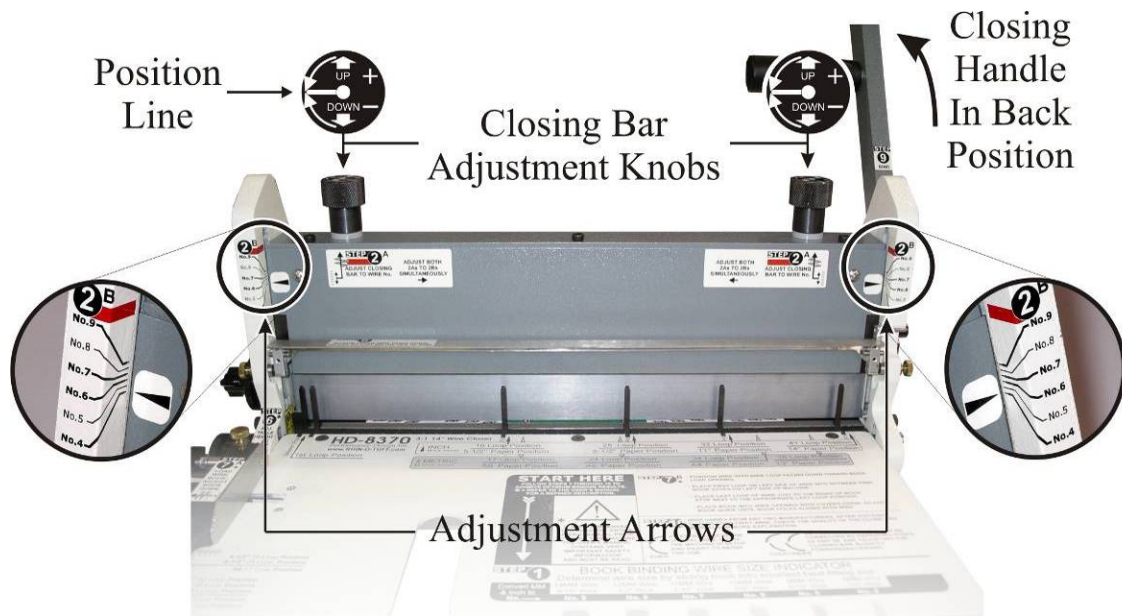


Fig. 2

STEP 3A & 3B BLUE, Adjust Lower Closing Bar: See Figure 3.

Locate Both Step 3A decals on both sides of the machine in Fig. 3 balloon (1). Adjust the Closing Lower Bar Knobs located behind the machine to the Wire No. 4 Position of the 3B (2) decals. This is the recommended start point of No.4 and 5 wires. Further adjustments may be required here, but for now follow the steps in order.

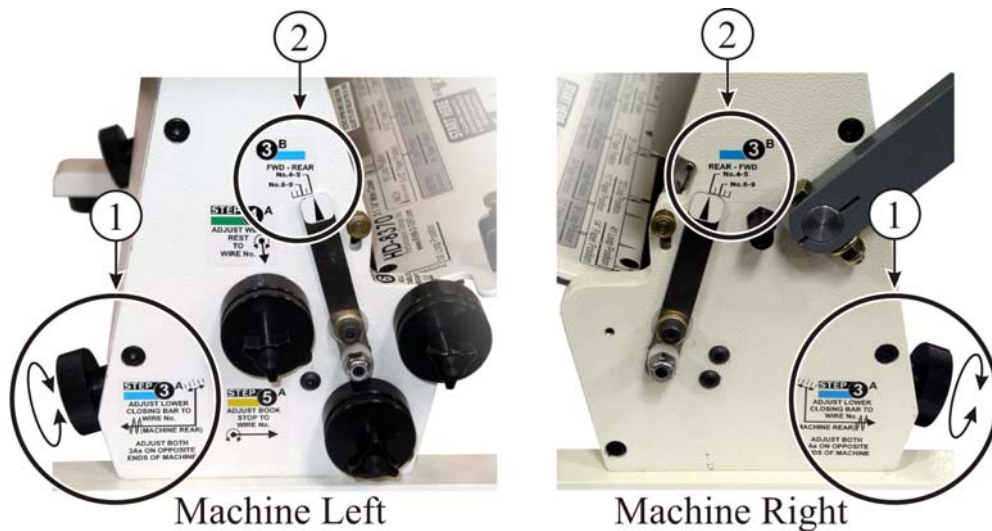


Fig. 3

STEP 4 GREEN, Adjust Wire Rest: See Figure 4.

Locate Step 4 decal only on the left side of the machine (1). Adjust the Step 4 Knob by unlocking the center winged knob then turn the outside dial so that the Wire Rest (2) aligns with the appropriate Wire Number on decal 4B shown in Fig.4 (3). Lock the center winged knob.

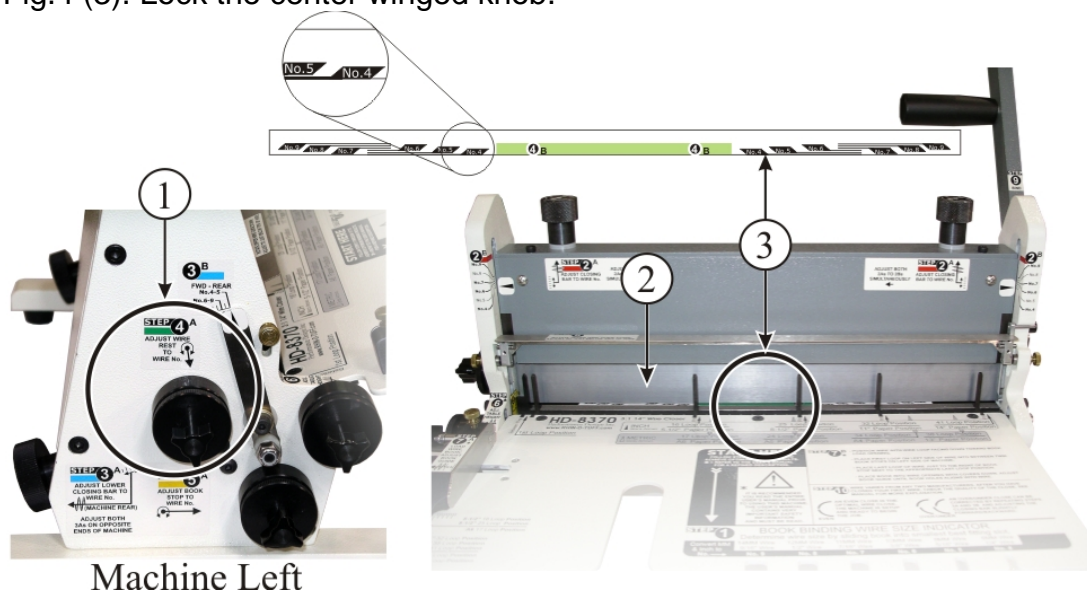


Fig. 4

STEP 5A & 5B YELLOW, Adjust Book Stop: See Figure 5.

Locate the Book Stop Adjustment Knob 5A (1) only on the left side of the machine. Unlock the center winged knob and turn the outside dial until the Book Stops (2) and Book Stop Indicator Pin (3) align with No.4 on the Adjustment Decal 5B (4). Lock the center winged knob.

***Hint:** If the holes are not punched in the standard position relative to the edge of the book (.168" for round, .179 for square), the book stop adjustment knob may have to be moved from the normal setting.*

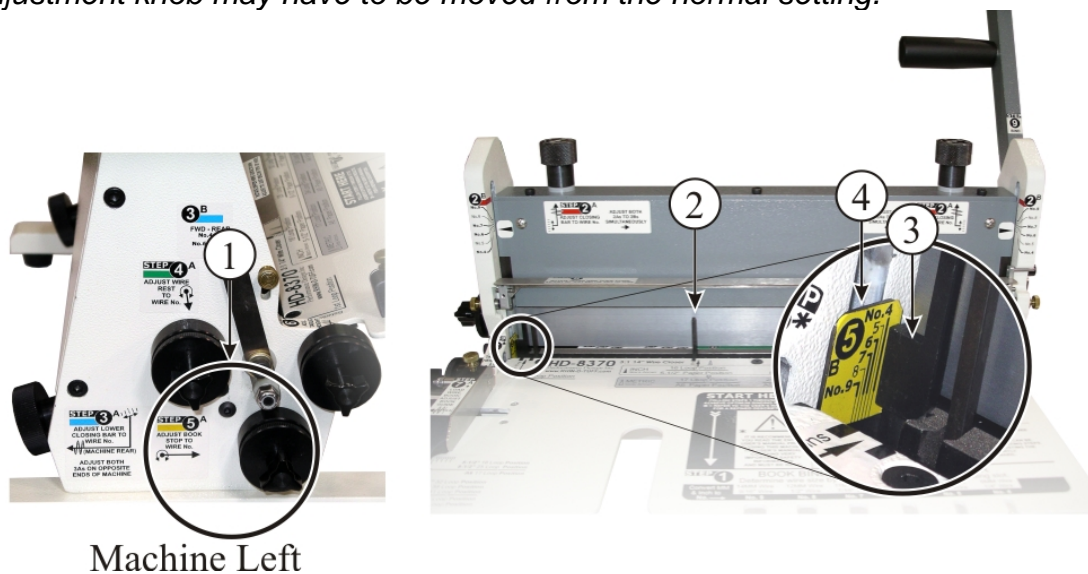


Fig. 5

STEP 6, Load Wire: See Figure 6a.

Place a piece of wire to be closed into the book load area with the wide loop facing down (1).

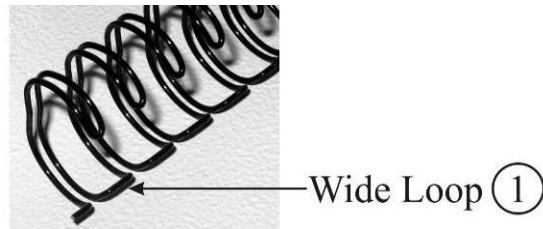


Fig. 6a

See Figure 6b. Place the first loop on the left side of the wire in-between the twin book stops on the left side of the machine. Place the last loop of wire just to the right of the book stop next to the appropriate last loop position. Magnets will hold the wire in place; lightly press the entire length of the wire down against the bottom closing bar.

Hint: Any wire length from 14" (18" for the HC-8318) down to 5-1/2" can be used. If you are using a nonstandard length, place the first loop on the left side of the wire into the twin book stop position as you would normally do and let the end loop fall freely into the closing tool. The only time you may run into a problem with nonstandard lengths is if the wire is manufactured under or over pitch by a substantial amount.

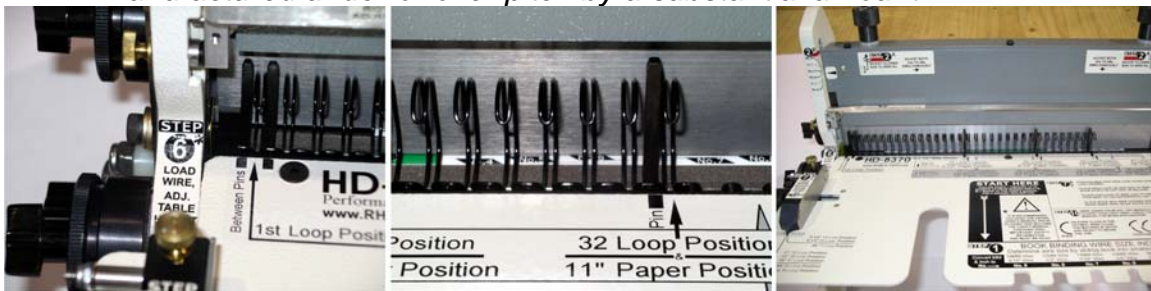


Fig. 6b

(Blank)

STEP 6, Adjust Table Height: See Figure 6c.

Locate the table height adjustment knob (1) only on the left side of the machine, unlock center winged knob and turn the outside dial until the wide loops of wire are slightly below table's edge. As shown in Figure 6c Cross Section. Lock the center winged knob.

***Hint:** The purpose of the book table is to support the book and guide the bottom covers or sheets of the book into the wire. Some fine adjustment may be necessary if some of the bottom covers or sheets are not located in the closed wire after the book has been bound. At eye level to the book table, move the book table as described above until you cannot see the wide loops above the table.*

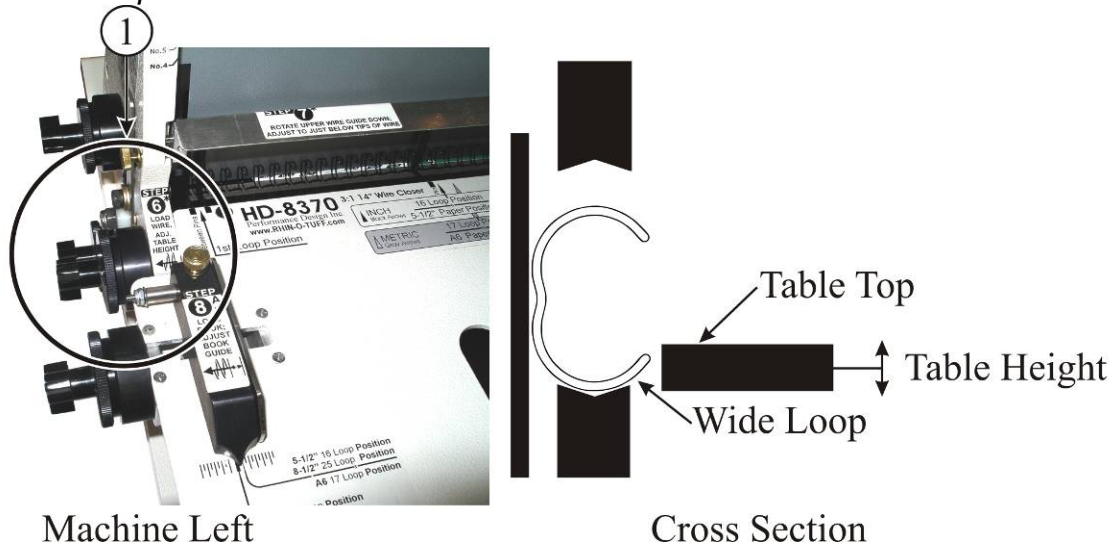


Fig. 6c

(Blank)

STEP 7, Upper Wire Guide: See Figure 7.

The Upper Wire Guide, when fully rotated down, (1) hides the narrow loops (2) of the wire, adjust until the narrow loops of the wire are hidden (3) with the Wire Guide in the down position. Loosen the pivots on both ends (4) (Black levers on the EWC-8370) and adjust the Upper Wire Guide (1) up or down until you have reached the desired results. Lightly retighten when adjusted. Both ends of the Upper Wire Guide will need to be adjusted evenly.

***Hint:** The purpose of the wire guide is to guide the sheets of the book under the narrow loops of the wire. Some fine adjustment may be necessary if some of the top sheets are not in the closed wire after the book has been bound. To set this adjustment, make sure the wire is in the loaded position with the Upper Wire Guide down, resting above the narrow loops of the wire. At eye level to the book table, move the upper wire guide as described above until you cannot see the narrow loops below the upper wire guide (The Upper Wire Guide on the EWC-8370 must be down before machine can operate). With all other adjustments set, lift up the upper wire guide by pulling it up away from the book table to expose the narrow loops of the wire. The narrow loops should line up with the center of the holes in the book. Move the book stop knob to bring the holes in the book to the correct position relative to the narrow loops of wire.*

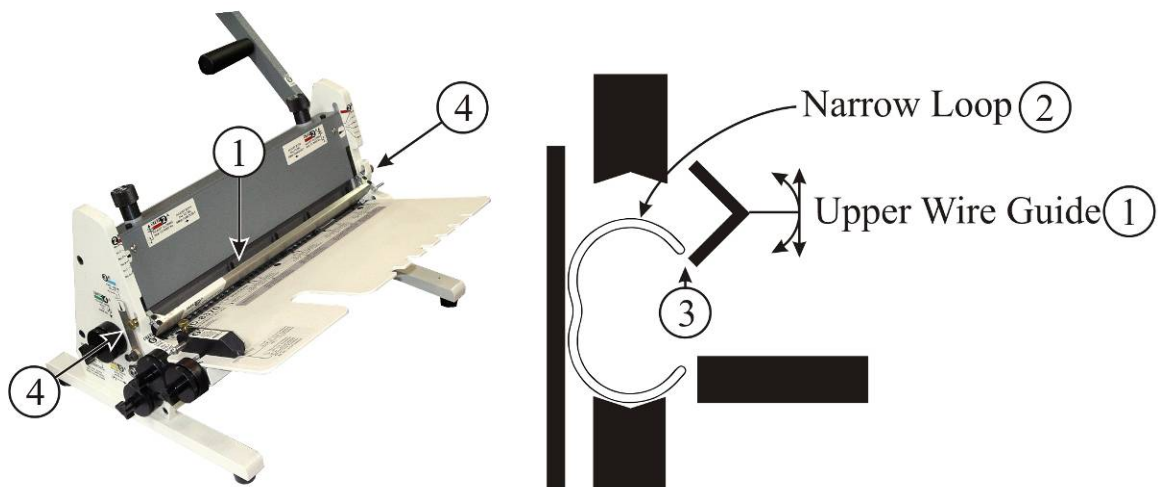


Fig. 7

STEP 8, Load Book:

Just prior to loading the book, the Rear inside Cover needs to be moved to the front of the book. This has three benefits. First, after binding, when you roll the rear cover back to its correct position, the rear cover hides the wire bind in the last page of the book making a professional presentation. Second, it allows for use of the Book Guide to compensate for overhanging covers described later. Third, having the thicker cover sheet directly adjacent to the bind prevents pages from falling out of a loose bind. Follow the three steps in Figure 8a to Roll the Rear Cover and position the Book on the Machine.

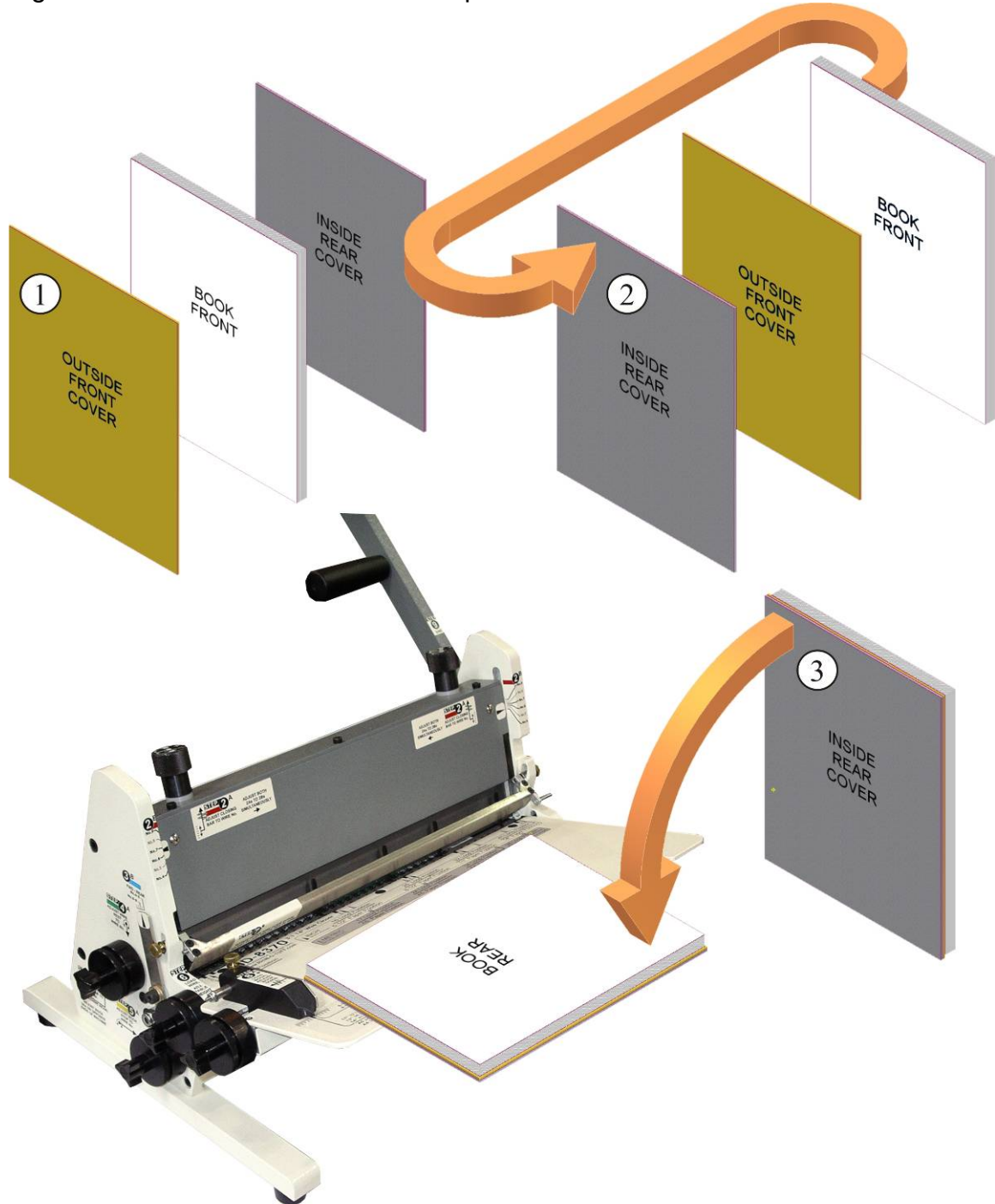


Fig. 8a

STEP 8, Adjust Book Guide:

Locate the book guide adjustment knob in Figure 8b item 1 only located on the left side of the machine. Unlock the center winged knob and turn the outside dial until the book guide indicator is in front of the book length to be bound. Fine tune while the Book is aligned to the Book Guide (2) and the punched holes align with the Wire (3). See Figure 8c. If overhanging covers are to be used (4), offset of book to cover can be obtained by loosening the overhanging cover guide knob (5) and offsetting the contents of book to cover with the Covers under the Overhanging Cover Guide (6). The alignment of the Cover Holes and Book Holes (7) to the wire will have to be done manually when using overhanging covers. Retighten when adjusted.

Hint: The book guide will have to be adjusted manually if the book is not a standard size or if overhanging covers are used. To do this, make sure all other adjustments are made and a wire is in its loaded position. Simply lift up the upper wire guide away from the book table and line the holes of the book laterally to the upper, narrow loops of the wire. Adjust book guide to edge of book.

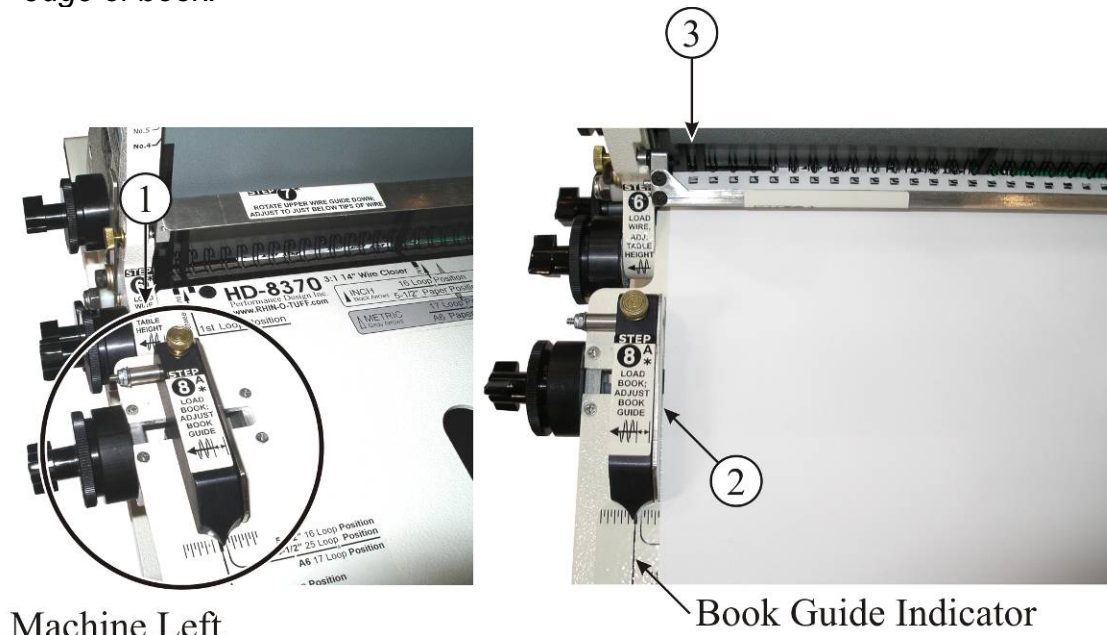


Fig. 8b

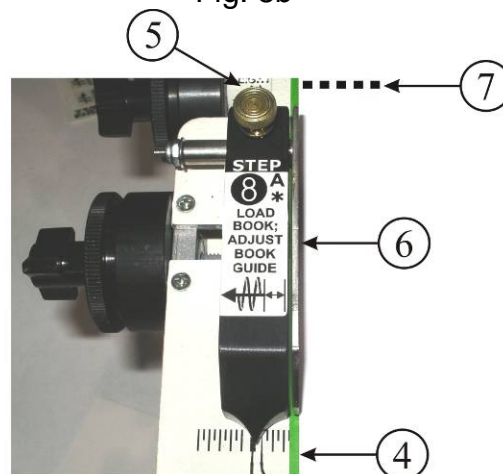


Fig. 8c

STEP 9, Bind: See Figure 9.

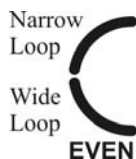
Bind (Close) the book (EWC-8370, Push buttons). Pull the Binding handle all the way forward and down then return to the upward and back position. Lift the Upper Wire Guide while removing the book then go to STEP 10.



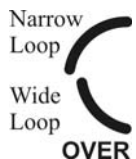
Fig. 9

STEP 10, Check the Bind:

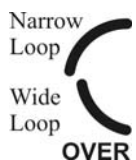
Wire varies from any two manufacturers, after you have closed your first wire, check the quality of the close. With the EWC-8370, reverse the correction direction, these levers move in the opposite direction.



Even Close: An Even Close is the optimal wire close. The machine is setup and ready to begin the job. Flip the book rear cover back to the back of the book (Notice this hides the bind).



Over Close: An Over Close can be corrected by repeating STEPS 3A and 3B and adjusting the lower closing bar towards the next higher wire No.. Then repeat setup STEPS 4 through 10.



Under Close: An Under Close can be corrected by repeating STEPS 3A and 3B and adjusting the lower closing bar slightly rearward. Then repeat setup STEPS 4 through 10.

Another diagram of a bad wire close;



Repeat STEP 3A and 3B thru STEP 10

5) Calendar Binding (HC-8318 only):

The HC 8318 Wire Inserter can bind books up to 18" (457MM) long or documents with a calendar hanger inserted into the two wire elements. When binding any continuous wire up to 18" long, use the prior instructions for *binding a book*. All setup instructions are the same for the 18" version except where listed below. Books will have to be punched with a thumb cut style die that have two loops missing where the thumb cut is placed. The pitch has to remain continuous from the first to the last hole.

Binding a document with a calendar hanger: *The calendar hanger will always be placed in the center of the machine into the wire elements. The two wire elements will be placed to the left and the right of the hanger.*

- There is a label on the table specifying the placement of the hanger that is located at the centerline of the machine. On each side of the hanger label are single book stops. Place the left element so the loop on the extreme right side is placed on the right side of the book stop. Now place the right elements extreme left loop over the left side of the book stop.
- Place the hanger between both wire elements. Make sure hanger falls into slot on table.
- Rotate the Upper Wire Guide down. Magnets will hold the wire elements firmly in place while inserting calendar.
- Place the calendar into the opening with covers down. Make sure it is all the way in against book stops and to the left against the book guide.
- Pull the handle all the way down to close the wire.
- Place the handle to its full open position.
- Remove document and check close.

6) Glossary of Terms:

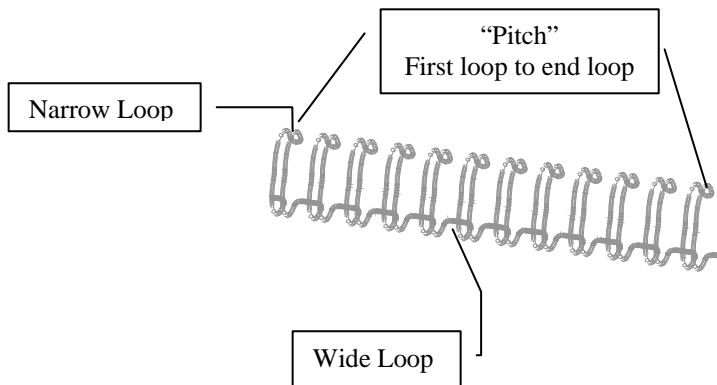


Fig. 11

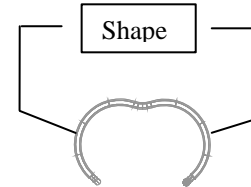


Fig. 12

➤ **Element / Wire**

References to the wire as a whole. I.e.: 32 loops

➤ **Narrow Loop**

The section of the element that is closed into the holes of the book. Faces up when loaded properly. One loop = 1 hole.

➤ **Wide Loop**

The part of the element that is loaded facing in the down position.

➤ **Pitch**

Measured from element to element or the number of elements in an inch.

➤ **Under / Over Pitch**

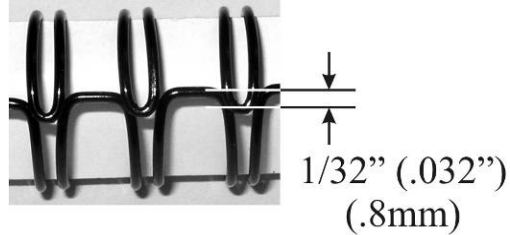
Measured from the first loop of any given wire length to the last loop. If the pitch is too far under, the wire will have to be stretched a slight amount over book stop when element is loaded. Wire should be slightly under pitch. If wire is over pitch adjust the Book Guide to center the book over the length of the wire.

➤ **Shape**

The shape of any given wire should resemble two half circles. If the wire looks like one half is smaller than the other, you may have problems closing the wire evenly (Cross-match).

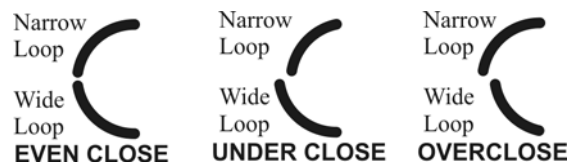
➤ **Close**

How near the narrow loop is to the wide loop when element is closed. Narrow loop should overlap wide loop by about 1/32" when closed.



➤ **Cross-match**

The evenness of the bind. Viewed from end.



Even Close: An even close is the most desirable type of bind.

Over Close: When the wide loops are closed under the narrow loops, the covers may slip out of the bind if not closed tight enough.

Under Close: When the narrow loops are closed under the wide loops, the wire forms a wedge, which will keep the covers in the wire from falling out. This is also a desirable bind. The wire still has to be closed tight enough with the closing bar adjustment knobs.

7) EWC-8370 Control Panel: See figure 13.

The **Power Switch I/O (1)** is located on top of the machine (On 230VAC models the power switch is on the back of the machine with the fuse. An indicator light is located in **position (1)** that indicates that the power is on or off).

The **Upper Wire Guide Position RED light (2)** indicates that the Upper Wire Guide is in the **UP position (3)**. The machine will not cycle if the **Red light is ON (2)**.



WARNING: If red light does not illuminate when upper wire guide is rotated up turn machine off and unplug, call for service immediately!

The **Book Loaded GREEN light (4)** indicates that the Upper Wire Guide is in the **DOWN position (5)** and a book is loaded. The machine is ready to operate.

Always power the machine off when not in use or if the machine is being moved.

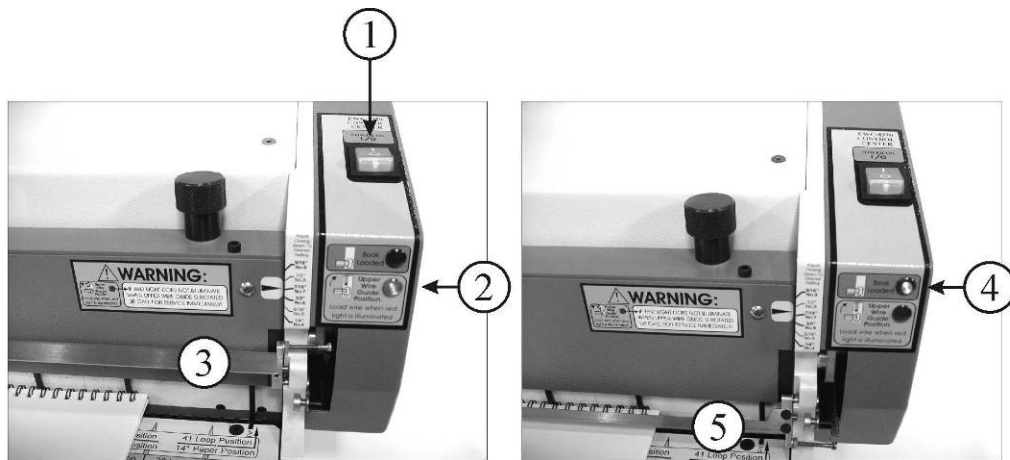
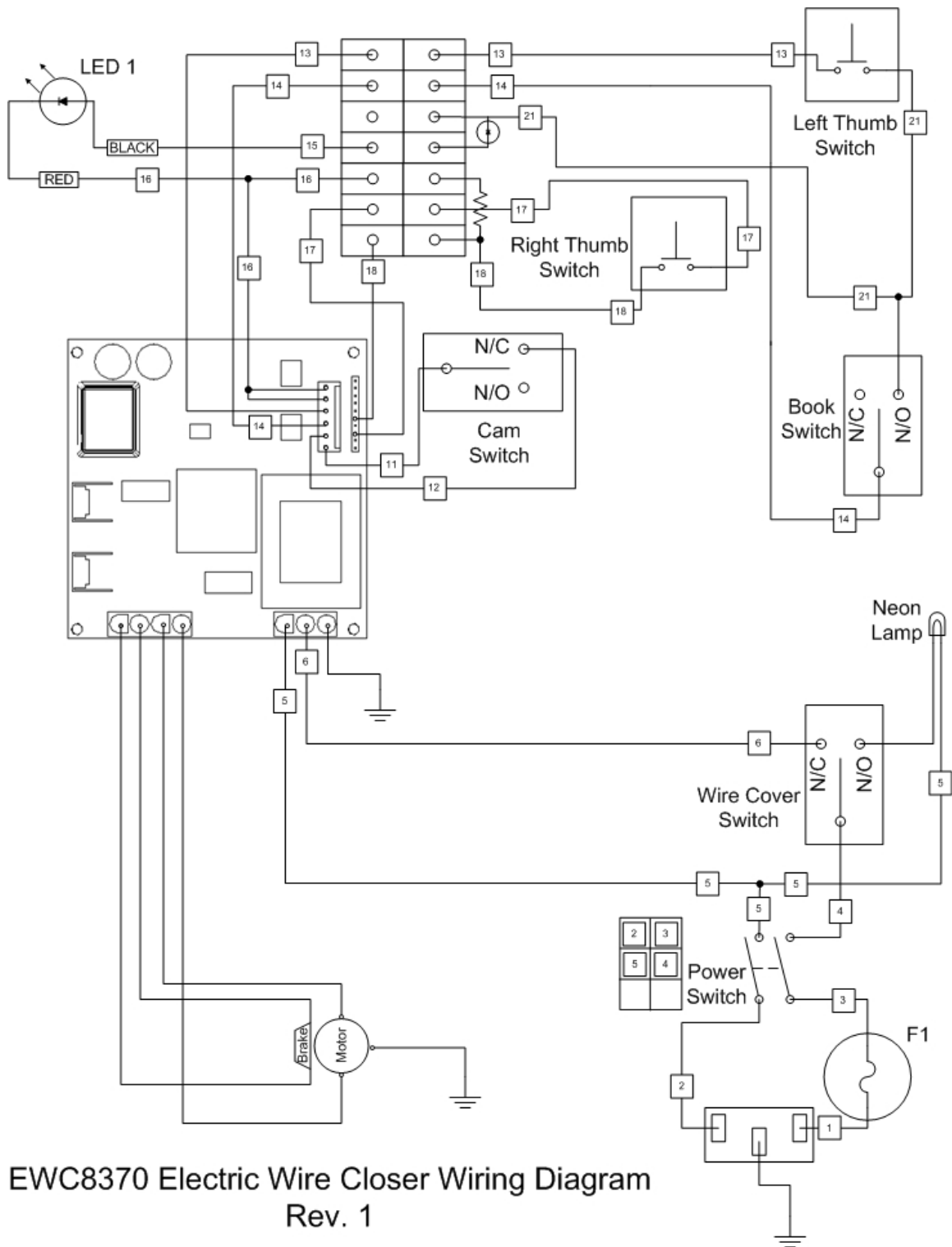
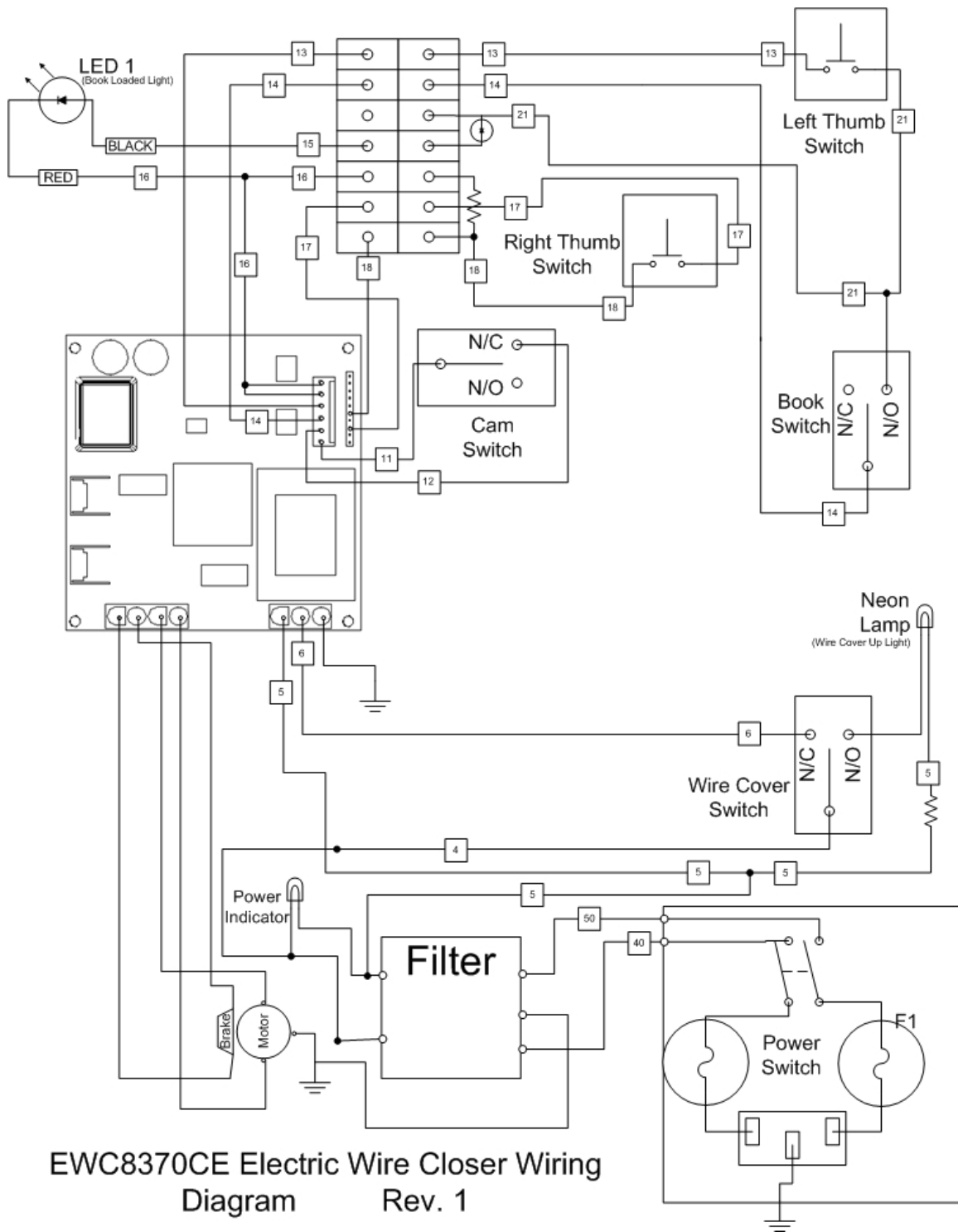


Fig 13



ONLY QUALIFIED PERSONEL SHOULD ATTEMPT TO WORK ON THIS EQUIPMENT.



230 VAC



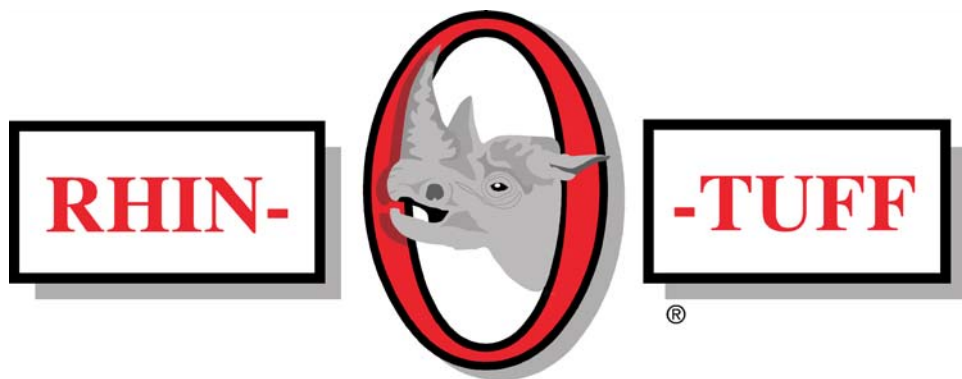
ONLY QUALIFIED PERSONEL SHOULD ATTEMPT TO WORK ON THIS EQUIPMENT.

IMPORTANT

Be sure to fill out and return your Product Warranty Registration Card inside. If you don't find one, please call us at 1-800-390-5782 or 1-208-384-8551.

You can also register this product online at www.RHIN-O-TUFF.com then select Support then Warranty Registration.

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