

HD-4170 Rhin-O-Roll Coiler Operator's Training Manual



Issue "1" 03/05

PDI Part # 941000

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

HD-4170 Operator's Training Manual

Issue "0" 01/04

The HD-4170 Rhin-O-Roll Coiler will greatly increase productivity. An in-depth look at the set up procedures necessary to achieve maximum results follows.

The HD-4170 Rhin-O-Roll Coiler can attach to the HD-6500, HD-7000, or HD-7700 Performance Design Inc. punches and can also stand alone. This manual discusses all of the necessary steps to use and care for your machine.

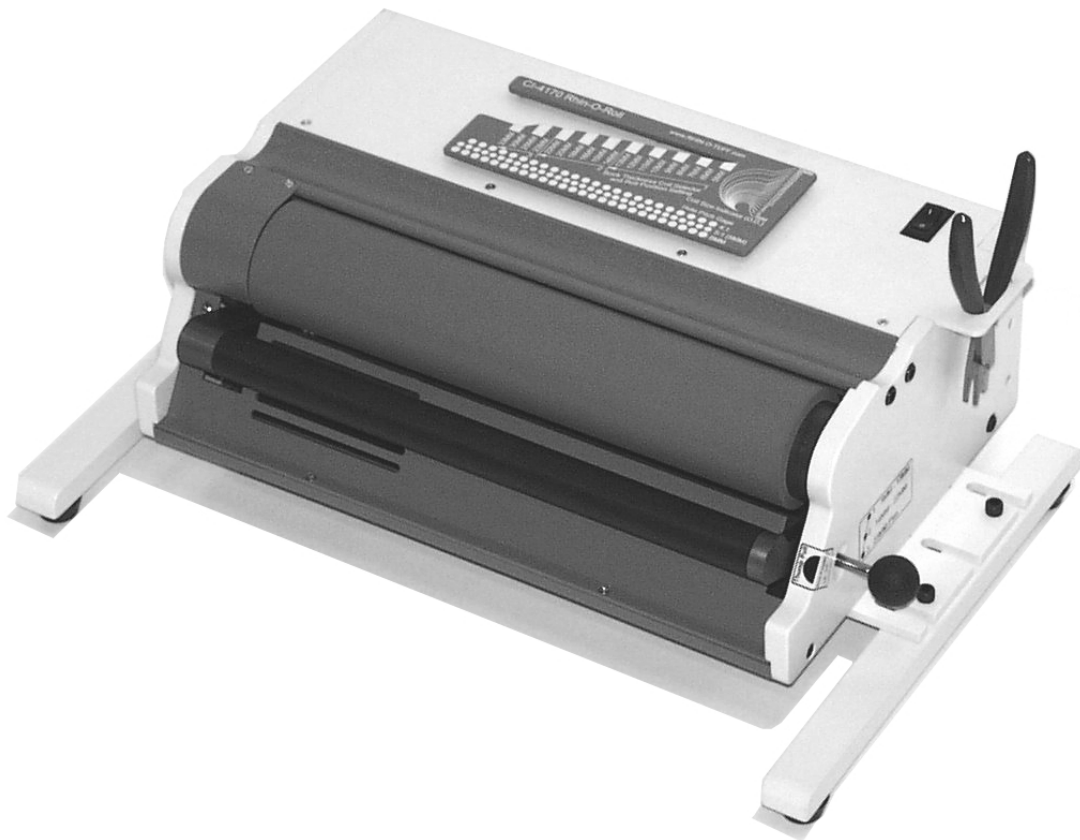


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Important Safety Notice!



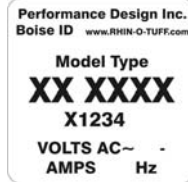
Make sure you read this section very carefully! Learn to recognize this **Safety Alert Symbol**. The HD-4170 Rhin-O-Roll Coiler has been designed to provide a very high level of protection to an operator. Follow the guidelines below while installing, operating and maintaining your machine. Read this manual and keep and file this manual for future use.



- Always replace fuses with the correct amperage and type (PDI P/N 007072 115VAC or 001659 230VAC);

- ✓ 115VAC use; 1ea. FUSE,3 AMP AGC ¼” X 1 ¼”
- ✓ 230VAC use; 2ea. FUSE,1.5 AMP GMA M5 X 20MM

Refer to the serial number label on the rear of the machine to determine the voltage of your machine.



Serial Number Label Example.



- If the machine runs erratically or if either wheel stops turning while the machine is on, unplug the HD-4170 and call your dealer immediately for service.



- Never attempt to service your machine unless you are a qualified Technician. There are no user serviceable parts inside the HD-4170 Rhin-O-Roll Coiler, **NEVER REMOVE COVER** doing so may result in personal injury!!!



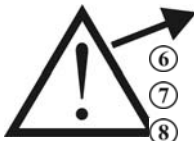
- Never operate the HD-4170 Rhin-O-Roll Coiler if the provided power cord does not fit your outlet. Power cord shall be certified for the country where the machine will be installed.

Overview of the HD-4170 Rhin-O-Roll;

See Illustration 2.0 on next page.

The HD-4170 has many useful features to increase your coil binding productivity.

- ① - **Adjustable Lower Roller:** The Adjustable Lower Roller supports the lower side of the coil while binding. The Adjustable Lower Roller is also referred to as “Roll” in item 4 in “Book Thickness Coil Selector and Roll Position Setting”.
- ② - **Upper Roller:** The soft Upper Roller grabs the coil and spins it into the book quickly and effectively.
- ③ - **Doc-U-Form Book Former:** allows you to form your book to allow for quick starting and binding of large books. See Chapter 3 for further explanation and use of this feature.
- ④ - **Book Thickness Coil Selector and Roll Position Setting:** This multi-use feature allows you to slide your uncoiled book into its thickness gauge and suggests the appropriate coil size to use for that job. As well as giving you the suggested Lower Roll position setting, it provides the answers to sizes and pitch of stray coils and punched sheets. See Chapter 3 for further explanation and use of this feature.
- ⑤ - **Power Switch:** This switch turns the HD-4170 on and off. Pushing on the **I** symbol side of the switch turns the machine **ON**, the **O** turns the machine **OFF**. On 230VAC models this is on the rear of the machine. It is recommended you turn the machine off when not in use. **In case of any emergency use the power cord as the main power Cutoff!!!**
- ⑥ - **Crimping Pliers:** Used for cutting and crimping coil ends.
- ⑦ - **Crimping Pliers Holder:** A convenient place to store your pliers.
- ⑧ - **Roll Position Setting:** Shows the current location of the Adjustable Lower Roller. See Chapter 3 for further explanation and settings of this feature. The “Thumb Pull” image shows the intended location of your thumb while pulling on the Adjustment Knob with your index and middle fingers to change settings of the Lower Roller.
- ⑨ - **Adjustment Knob:** Pull and move up or down to change the position of the Adjustable Lower Roller.
- ⑩ - **Fuse Holder:** Not shown, located on rear of machine. Always replace fuses with the correct amperage and type (PDI P/N 007072 115VAC or 001659 230VAC);
 - ✓ 115VAC use; 1ea. FUSE,3 AMP AGC ¼” X 1 ¼”
 - ✓ 230VAC use; 2ea. FUSE,1.5 AMP GMA M5 X 20MM



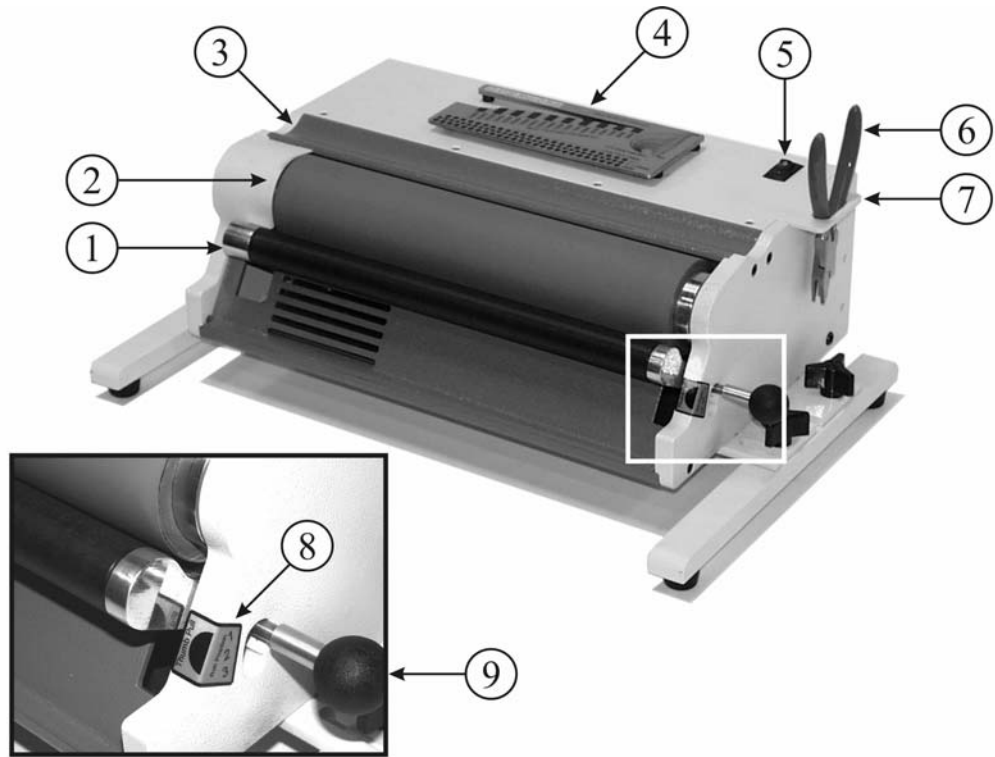


Illustration **2.0**

Detailed Use of the HD-4170 Rhin-O-Roll;

- **Doc-U-Form Book Former.** See Illustration 3.0. The Doc-U-Form Book Former ① shapes the binding end ② of your book ③ so that insertion and starting of the coil ④ is simple to do. Gently jog your book onto the Book Former until formed. Then start the coil into the first 5 holes or more by spinning it in by hand.

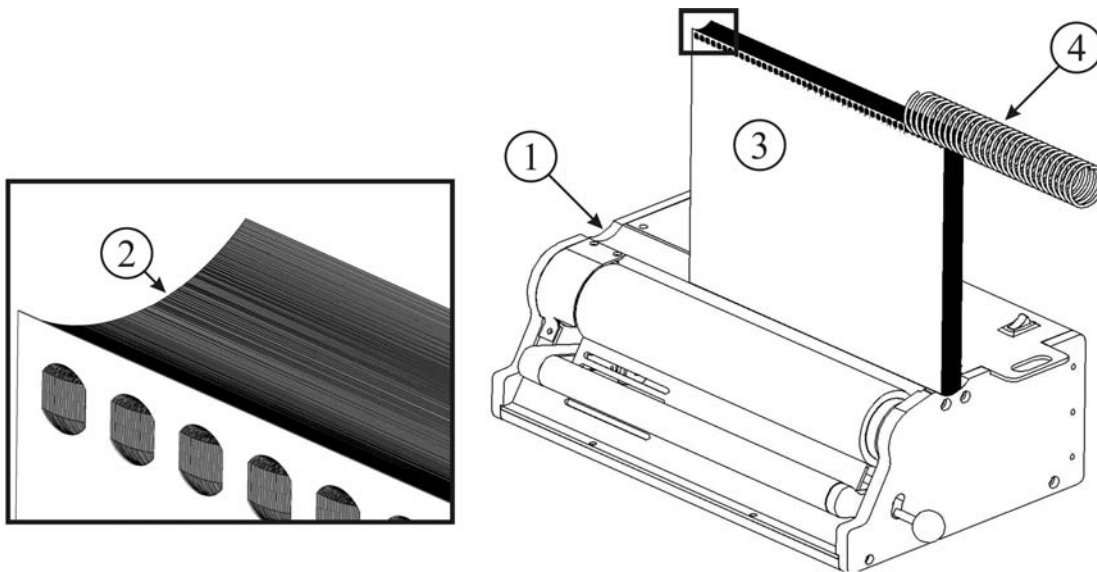


Illustration 3.0

- **Book Thickness Coil Selector and Roll Position Setting.** See illustration 3.1 on next page. On top of the HD-4170 is the Book Thickness Coil Selector and Roll Position Setting feature. It's simple to use. You gently slide your book ① from left to right into the Book Thickness Coil Selector slot. When you feel the book slightly wedge into the slot stop sliding the book and read both the recommended coil size selection number ② (16MM shown) and the recommended Roll Position Setting number ③ (position 2, middle position shown). These are only recommendations and you may find other combinations that suit your personal binding style. Other features available are the Coil Size Indicator (O.D.) ④ and the paper Hole Pitch Gage ⑤. With the Coil Size Indicator ④. Use the coil size indicator when the size of the coil is unknown. Simply align the end / outside diameter (O.D.) to the indicator and read your coil size. Use the Hole Pitch Gage in the same manor to determine what pitch the paper has been punched with.

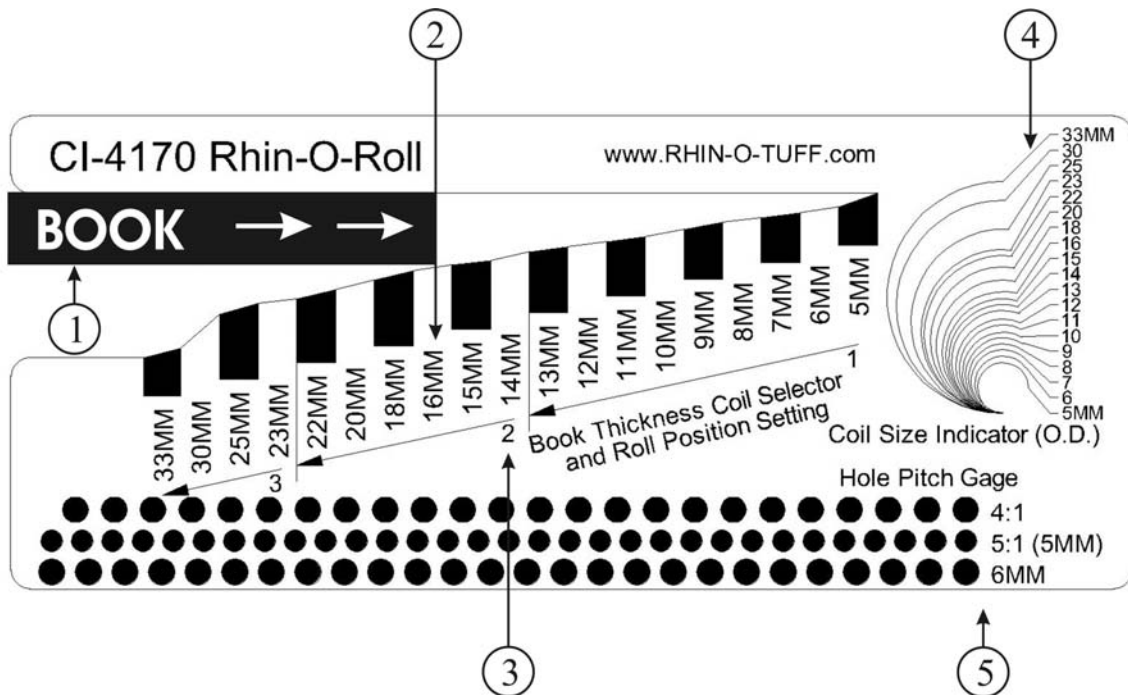


Illustration **3.1**

CHAPTER **4**

Placing the HD-4170 in the proper location & Binding Styles;

Locate a clear work area with a outlet within 5 feet that provides a 15-amp service (16-amp European) which is protected at the customer's circuit box. The work area must be a solid, firm cabinet or a heavy duty table with a flat level surface. Power cord shall be certified for the country where the machine will be installed.

Placing your HD-4170 Rhin-O-Roll Coiler in the proper location will also depend on your binding technique. If your binding technique is to punch and stack the entire job before coiling, then positioning the HD-4170 away from your punch for more work area may be the best setup as well as leaving the HD-4170 on its stand-alone feet as supplied. However if your technique is to punch and coil a single book at one time and repeat until the job is complete then mounting the HD-4170 Coiler directly onto your HD-6500, HD-7000, or HD-7700 punch may be the best setup for you. Please see Chapter 5 for instructions to mount your HD-4170 Coiler or skip to Chapter 6 for Binding.

CHAPTER 4

Mounting the HD-4170 onto the HD-6500, HD-7000 or HD-7700;

See Illustration 5.0.

Your HD-4170 Coiler came in the stand-alone configuration. In order to attach the HD-4170 Coiler you need to remove the feet. Inside the HD-4170 shipping box is a knob kit with tools. Locate the small Allen wrench ① and remove both feet ② from each side of the HD-4170 Coiler. Do not remove the Interface Plate that mounts directly to the HD-4170 Coiler bottom side. Store the feet, screws and Allen wrench for future use. Locate the Interface Blocks, screws, Allen wrenches, and 3-winged knobs ③ provided inside the shipping box. These will be required in the next step.

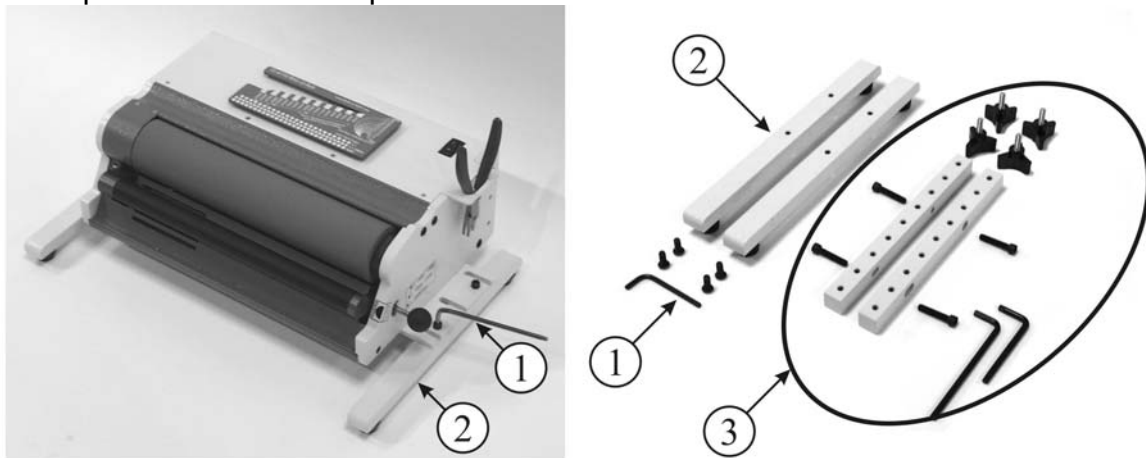


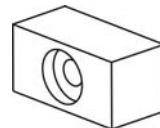
Illustration 5.0

HD-6500 and HD-7000 Instructions;
See Illustration 5.1 on next page.
Locate the two top-most and rear-most screws on the side of your HD-6500/7000. Inserting the short end of the Allen wrench into the screw head, remove the two screws.

HD-7700 Instructions;
See Illustration 5.2 on next page.
Locate the two top-most and forward-most screws on the side of your HD-7700. Inserting the short end of the Allen wrench into the screw head, remove the two screws.

Both HD-6500/7000 and HD-7700 Instructions cont...

Store the two screws removed from the punch. Locate one of the Interface Blocks and orient it against the two now-available holes. Orient the block so that the interface block oval hole ① is forward and the counter bores face out. To the right is an example of a counter bore. Use the longer ¼"-20 socket head screws provided to secure the block to the machine with the short end of the Allen wrench. Tighten the rear screw first then the forward screw. Repeat this step on the other side of your punch with the other block.



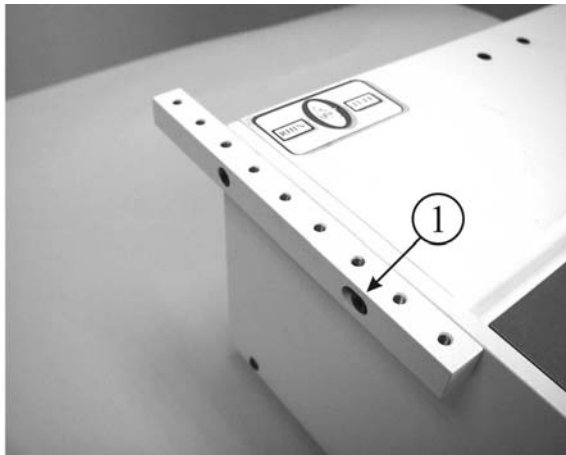


Illustration **5.1**

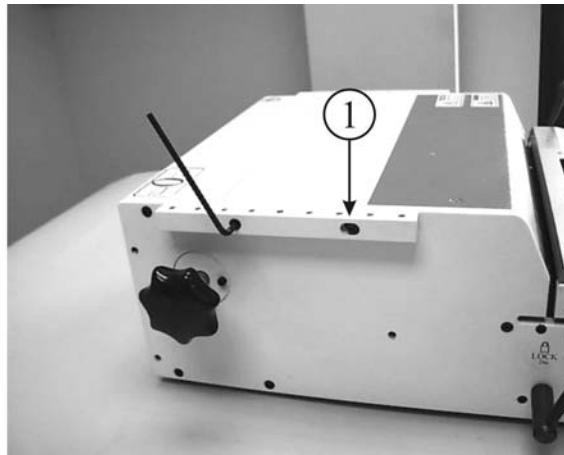


Illustration **5.2**

CHAPTER **6**

Binding and Crimping;

See Illustration 6.0.

Binding is as simple as ① ② ③ with the HD-4170 Rhin-O-Roll. Form, Start Coil, and Bind. Doc-U-Form Book forming and lower Roll position is covered in Chapter 2. To bind, firmly grab the book from the Start Coil position (described in Chapter 3) with both hands at each end of the book up near the binding edge. Without shifting the form of your book, pick the book up and roll it into binding position between the top on lower roller ③. Gently push the started coils against both top and lower roller. The top roller will grab the coil and spin it into your book. It may not be necessary to use the Book Former ① with smaller (5MM-12MM) books. With practice, 50MM specialty binding can be done.

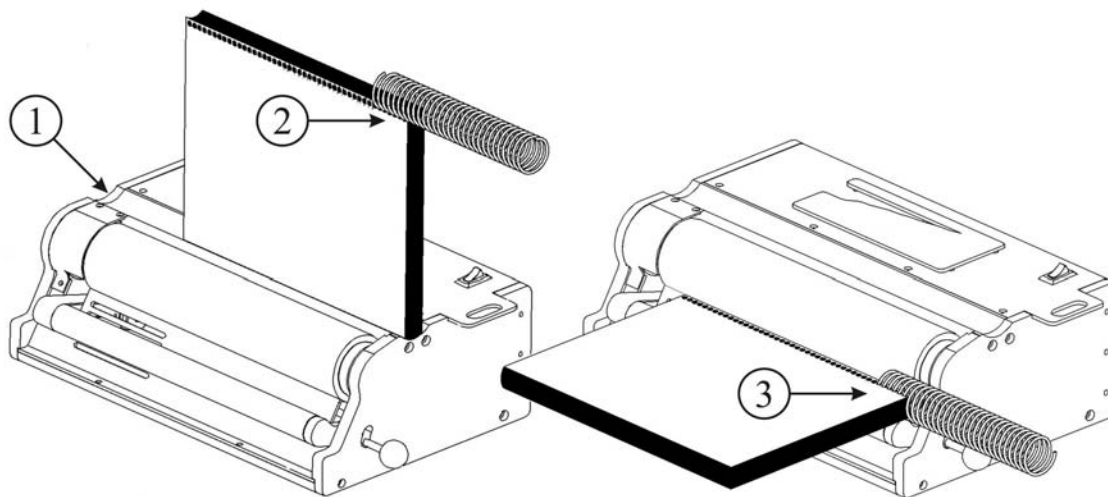


Illustration **6.0**

See Illustration 6.1.

Once you have coiled your book crimping is made easy with the crimping pliers provided. Orient your book with the coiled side toward you ① as shown, then on the right end of the book ① as shown, orient the pliers with the dot ② facing up. Open the pliers and grasp them around the first coil that exits the book ③. While keeping the pliers level with the book, snip the coil through. The pliers will finish the coil with a “L” shaped end ④ facing the book. This helps the coil from backing out of the book. Now you can flip the book over, keeping the coils toward you and repeat this same crimping technique to complete the book. Or you can keep the book stationary and flip the pliers over, move to the opposite end of the book and crimp the last coil that exits the book to complete the book.

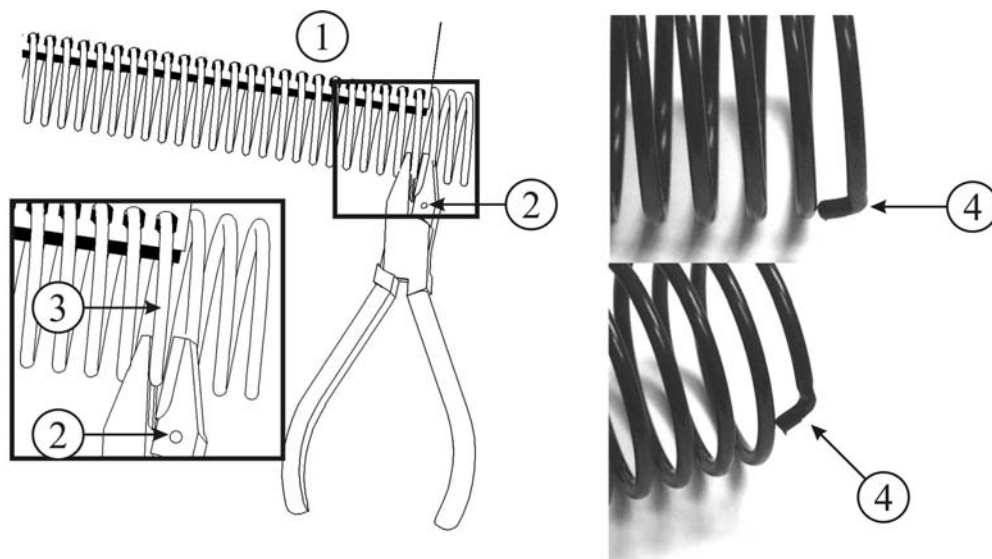


Illustration **6.1**

Your HD-4170 Rhin-O-Roll has an optional dual crimpier module that mounts on top of the coiler.

CHAPTER

7



Trouble Shooting;
Only qualified personnel should attempt to work on this equipment!

Most of the problems you may encounter are due to setup problems. There is one fuse on the 115VAC machine and two fuses on the 230VAC machine located on the rear of the HD-4170 Rhin-O-Roll Coiler that can be replaced by the customer. Below is a trouble shooting guide to help you through most of the problems that may be encountered.

Trouble Shooting

Symptom	Possible Cause	Action
Upper and Lower Rollers do not rotate.	1) Machine is off. Switch is in the "O" position. 2) Machine is not plugged in. 3) Blown fuse.	1) Place switch in the "I" position. 2) Check both ends of the power cord. 3) Check fuse. See Chapter 1 for fuse listing.
Coil tightens on the book.	1) Coil is too small for the book.	1) Check proper size of coil. See Chapter 3.
Coil stops before it is completely through the book.	1) The holes in the book are misaligned.	1) This is normal. Try moving the book around so the coil rotates in the holes

CHAPTER

8

Cleaning the HD-4170 Rhin-O-Tuff Coiler;

Caring for your HD-4170 Rhin-O-Roll is important for the proper function of the machine. The finished tan and gray body should be cleaned with a very light water dampened cloth. The upper and lower rollers should be cleaned with a rubber cleaner and rejuvenator dampened cloth while the machine has been turned off and cooled.

CHAPTER

9

Product Registration;

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 .