



Instruction Book for HD4470 Comb Opener



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Safety Alert Symbols

- ◆ Make sure you read this section very carefully! Learn to recognize these **Safety Alert Symbols**. The HD4470 has been designed to provide a high level of protection to an operator. Follow the guidelines below while installing, operating and maintaining your machine.



CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. It may also be used without the safety alert symbol as an alternative to "Notice".



WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.



Trip Hazard



Electric Shock



Cutting Hazard



Two Person Lift



Crushing Hazard



Hint or Suggestion

Safe Operating Guidelines

- ◆ Always keep this instruction manual with the machine for reference to safe operating guidelines and correct operation of the machine.
- ◆ Follow all recommended workplace procedures for repetitive activities.

Placing your machine in the proper location:

- ◆ Place the machine on a hard level surface. Ensure the placement of machine allows for ergonomic work flow (separate locations for unpunched books and a punched books).

HD4470 Setup:

The HD4470 comes with the handle detached from the machine. To attach the handle, orientate the handle-grip pointing away from the machine on either the left or right hand side of the machine. Slide handle onto shaft and align hole in handle with the hole in the shaft. Insert bolt through handle and shaft. Place washer on bolt and thread nut onto bolt. Use two 3/8" wrenches to tighten nut until it is tight against the washer. The handle may be attached to either side of the machine to suit operator needs. When the handle is attached or changed from either location make sure to retighten the handle bolt securely to ensure proper operation of the handle.



Tighten so that the two halves of the handle clamp down onto the shaft.

The HD4470 can be placed on the top of most punches with the use of an optional mounting kit. Contact your dealer for details.



Determine Comb Size

Use the table below to help determine the comb size for the book thickness. You may insert more or less sheets for each size based on covers, application, and individual preferences.

Comb Diameter		Book Thickness		Number of Sheets	
Inch	mm	Inch	mm	20lb	80gsm
3/16	4.8	1/8	3.2	30	
1/4	6.4	3/16	4.8	45	
5/16	7.9	1/4	6.4	65	
3/8	9.5	5/16	7.9	80	
7/16	11.1	3/8	9.5	95	
1/2	12.7	7/16	11.1	110	
9/16	14.3	1/2	12.7	125	
5/8	15.9	9/16	14.3	140	
3/4	19	5/8	15.9	160	
7/8	22.2	3/4	19	190	
1	25.4	7/8	22.2	220	
1-1/8	28.6	1	25.4	250	

Place Comb on Machine

Orientate the comb so the machine pulls the comb fingers open with the tips of the fingers pointing up and ready to place paper over them. See photo below.

Place the comb behind the rake and align the comb fingers so they pass between the rake fingers. Do not place any comb fingers to the left side of the left most rake finger. Each comb finger must have a corresponding pulling finger to the left of the comb finger. See photos below.

Set the comb as far down on the machine and as close to the rake as possible.

Comb Finger



Rake

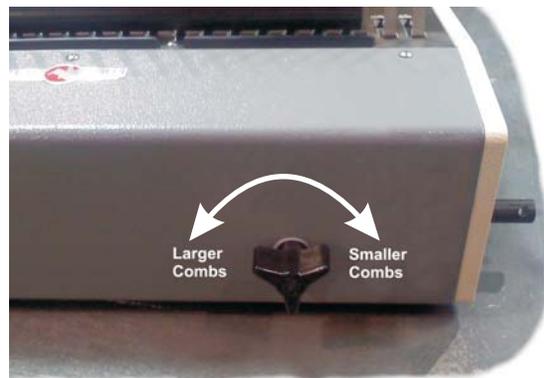
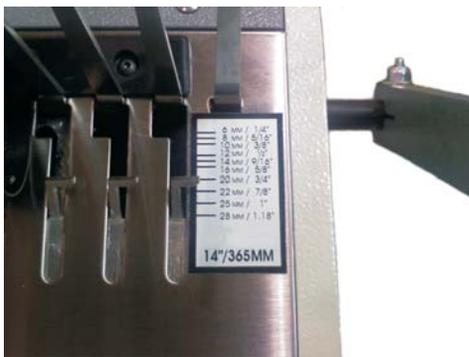


Setting the Comb Stop

The comb stop knob is located on the back side of the machine. This knob will allow you to set a stop for the handle. This allows for repeated positioning of the machines pulling hooks. The pulling fingers pull the comb fingers open.

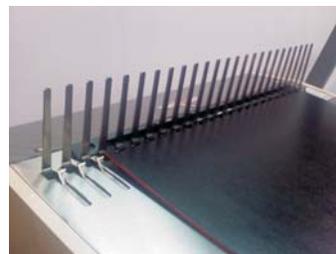
Slowly pull the handle down and stop when the last pulling finger points at the size comb you have determined you are going to be using. Turn the comb stop knob, on the back of the machine, clockwise until the handle just moves. Recheck that the pulling finger is still pointing at the comb size you will be using. You may decide to change this position later to better suit placing paper on the comb fingers.

Rotate the comb stop knob counter clockwise for larger combs and clockwise for smaller combs.



Binding a Book

Place handle in the full back position. Load comb onto machine and slowly pull handle until it stops as set earlier. Begin placing your front cover, face down, onto the comb fingers. Add the pages of your book in small quantities and finish with your back cover. Slowly return the handle to the back position. Lift your finished book off the rake of the machine.



Troubleshooting

Issue: The handle stops before moving the pulling fingers to the position you want.

Solution: The comb stop has been set for a smaller size comb. Rotate the comb stop knob counter clockwise for larger combs.

Issue: The pulling fingers will not retract back to the starting position.

Solution: The comb stop has been set for too large of a comb size. Rotate the comb stop knob clockwise.

Issue: The pulling fingers run into the comb fingers.

Solution: Make sure that the comb is all the way down on the machine and that the comb is not overly warped or bent. Do not force handle down as this may damage the pulling fingers. Apply downward pressure on the comb as you pull the handle.



IMPORTANT

Be sure to fill out and return your Product
Warranty Registration Card or Register online
at:
www.Rhin-O-Tuff.com/warranty_registration.asp

