

# ***Rhin-O-Tuff Onyx HD7700H 14" Open-Ended Horizontal Electric Punch***

Instruction Manual



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# Instruction Book for HD Punch Machines



# HD7700, HD7000 & HD7500H

## Setup & Operator Manual

Issue 5 February 2012  
Performance Design LLC.

These electric punches have been designed to punch most any job that may pass through your bindery or office. No matter what type of binding you need to carry out, these punches can handle the job. Maximum punching length for the HD7700, HD7000 is 14" (356mm) and the HD7500H is 24" (610mm). The HD7700, HD7000 and the HD7500H utilize quick-change die handles to secure the die assembly.



HD7700



HD7000



HD7500H

## HD6500 Contents S/N: \_\_\_\_\_

- |                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Punch (1)            | <input type="checkbox"/> Chip Drawer (1)    |
| <input type="checkbox"/> Power Cord (1)       | <input type="checkbox"/> Foot Pedal (1)     |
| <input type="checkbox"/> Oil (1)              | <input type="checkbox"/> Brush (1)          |
| <input type="checkbox"/> Instruction Book (1) | <input type="checkbox"/> Reversing Tool (1) |
| <input type="checkbox"/> Die Bolt Kit (1)     |                                             |
| a) 5/16 allen wrench (1)                      |                                             |
| b) 3/8 - 16 X 1 Socket Head Screw (2)         |                                             |

Inspected by: \_\_\_\_\_

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## HD7000/HD7100 Contents S/N: \_\_\_\_\_

- |                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Punch (1)            | <input type="checkbox"/> Chip Drawer (1)    |
| <input type="checkbox"/> Power Cord (1)       | <input type="checkbox"/> Foot Pedal (1)     |
| <input type="checkbox"/> Oil (1)              | <input type="checkbox"/> Brush (1)          |
| <input type="checkbox"/> Instruction Book (1) | <input type="checkbox"/> Reversing Tool (1) |

Inspected by: \_\_\_\_\_

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## HD7700(H)/HD7650/HD7000 Plus/HD6700 Contents S/N: \_\_\_\_\_

- |                                                         |                                          |
|---------------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Punch (1)                      | <input type="checkbox"/> Chip Drawer (1) |
| <input type="checkbox"/> Power Cord (1)                 | <input type="checkbox"/> Foot Pedal (1)  |
| <input type="checkbox"/> Oil (1)                        | <input type="checkbox"/> Brush (1)       |
| <input type="checkbox"/> Instruction Book (1)           | <input type="checkbox"/> Palm Switch (1) |
| <input type="checkbox"/> Tee Handle Reversing Tool (1)  | (Palm Switch not included with           |
| <input type="checkbox"/> Die Bolt Kit (1) (HD6700 Only) | HD7700H, HD7650, HD7000 Plus             |
| a) 5/16 allen wrench (1)                                | or HD6700)                               |
| b) 3/8 - 16 X 1 Socket Head Screw (2)                   |                                          |

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## HD7500H Contents S/N: \_\_\_\_\_

- |                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| <input type="checkbox"/> Punch (1)            | <input type="checkbox"/> Chip Drawer (1)    |
| <input type="checkbox"/> Power Cord (1)       | <input type="checkbox"/> Foot Pedal (1)     |
| <input type="checkbox"/> Oil (1)              | <input type="checkbox"/> Brush (1)          |
| <input type="checkbox"/> Instruction Book (1) | <input type="checkbox"/> Reversing Tool (2) |

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# Safety Alert Symbols

- ◆ Make sure you read this section very carefully! Learn to recognize these **Safety Alert Symbols**. The HD7700/H, HD7650, HD7000, HD6500, HD7100, HD7000 Plus, HD6700 & HD7500/H have 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

Hint

## Safe Operating Guidelines

- ◆ Always keep this instruction manual with the machine for reference to safe operating guidelines and correct operation of the machine.
- ◆ The HD7700/H, HD7650, HD7000, HD7000 Plus, HD6500, HD7100, HD6700 & HD7500/H need to be plugged into a wall outlet that provides a 15-amp, 120 volt service (16-amp, 220 volt for European installations) and is protected by a fuse or circuit breaker at the main electrical panel.
- ◆ Always replace any fuse with the same type and amperage fuse as indicated on the machine.
- ◆ If machine cycles on its own, turn off power switch, unplug machine from the wall outlet and call your dealer immediately for service.



- ◆ Turn power switch off before maintaining or changing die assembly.
- ◆ Use of appropriate hand protection should be utilized to avoid injury from handling of materials.
- ◆ Follow all recommended workplace procedures for repetitive activities.



## Placing your machine in the proper location:

- ◆ Before lifting machine, turn power off and remove the power cord from the wall outlet. The machine is very heavy! Never attempt to lift the machine by yourself. Two people will be needed to lift the machine.
- ◆ Place the machine on a hard level surface, place the foot pedal on the floor in front of the machine. Ensure the placement of machine allows for ergonomic work flow (separate locations for un-punched books and a punched books).
- ◆ Connect the foot-pedal cord into the foot-pedal receptacle on the back of the machine, do not attempt to connect foot-pedal into anything other than the foot-pedal receptacle.
- ◆ **HD7700** comes with a palm-switch that can be used instead of the foot-pedal. Decide which device you want to use to activate the machine and connect that device into the foot-pedal receptacle on the back of the machine.
- ◆ **Optional** paper activated switches are available for these punches. These switches replace the foot-pedal or palm switch and plug into the foot-pedal receptacle on the back of the machine.



## Providing power to the machine:

- ◆ **Power cord shall be certified for the country where the machine will be installed.** Plug one end of the power cord into the power cord receptacle on the back of the machine. The other end goes into the wall outlet.



## Die Installation:

- ◆ **HD7700/H, HD7650, HD7100, HD7000, HD7000 Plus & HD7500/H: Diagram 1. Make sure the machine is turned off before installing the die.**
- ◆ Make sure there is no paper dust or paper chips in the machine die slot before installing the die.
- ◆ Install the die by sliding it into the opening located on the right hand side of the machine. Make sure the punch pin retainer slides into the slot on the back side of the opening.
- ◆ Rotate both quick-change die handles to the lock position. The machine will not operate unless the handles are in the locked position.

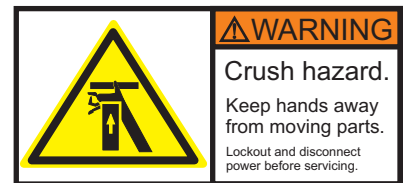
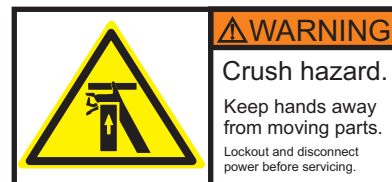


Diagram 1. (Image of HD7000)

- ◆ **HD6500 and HD6700:** Diagram 2. **Make sure the machine is turned off before installing the die.**



- ◆ Make sure there is no paper dust or paper chips in the machine die slot before installing the die.
- ◆ Remove the chip drawer before installing the die assembly.
- ◆ Install the die by sliding it into the opening on the right hand side of the machine. Make sure the punch pin retainer slides into the slot on the back side of the opening.
- ◆ Using two 5/16"-18 socket head cap screws provided with the machine along with the hex key, secure the die assembly in the punch by threading the screws through the holes in the punch and turning them clockwise until tight.
- ◆ Replace the chip drawer.



Diagram 2. (Image of HD6500)

## **Comb Die Backspace (Margin) Adjustment**

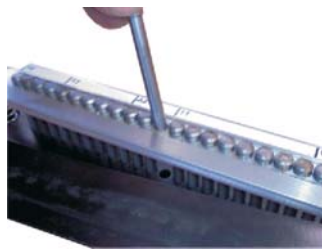
- ◆ The comb die assemblies for the HD7700/H, HD7650, HD7100, HD6500, HD7000, HD7000 Plus, HD6700 and HD7500/H have a four position adjustable backspace. The positions are changed by pushing the adjustor bar to the left for deeper settings (commonly used for average to thicker sized books) and pulling the adjustor bar to the right for shallower settings (commonly used for thinner sized books).

## Removing Punch Pins

- ❶ Turn machine power off and remove die assembly from the machine.
- ❷ On the opposite side of the die assembly from the handle, push down on the pin retainer. Pull the pin capture away from the pin retainer to expose the punch pins.



- ❸ Remove the desired punch pin or pins.



- ❹ Replace the pin capture by pressing down on the pin retainer and placing the pin capture back into place.
- ❺ Install die assembly into machine as described earlier and turn machine power back on.

## Die Maintenance

- ◆ Die maintenance should be performed with the die removed from the machine. To perform the die maintenance, remove the die assembly from the machine (see die installation section). Apply enough oil to lightly coat each pin.
- ◆ Remove any excess oil with a disposable cloth. After oiling, always punch some scrap paper to remove excess oil.



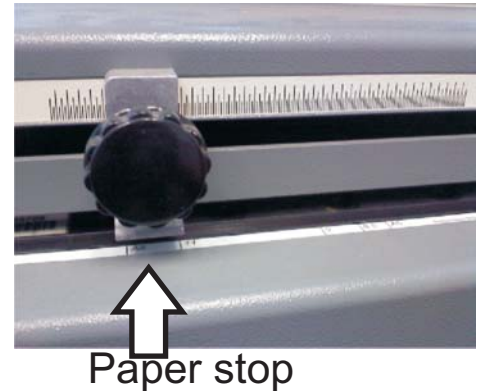
Saturate a small section of a cloth with oil and using that portion of the cloth, wipe the punch pins to apply a light coating of oil.



# Setting the paper stop:

## ◆ HD7500, HD7650, HD7100, HD7000, HD7000 Plus, HD6500 and HD6700 -

Locate the paper stop on the front cover of the machine. Loosen the knob counterclockwise, so that the guide can be adjusted to the left or the right. Move the paper stop until the desired position is reached and tighten the knob clockwise until tight to lock the paper stop in place. Repeat this procedure until the punch pattern is centered on the paper.



The HD7650, HD7100, HD7000, HD7000 Plus, HD6700 and HD6500 punch machines allow for viewing of common sized paper position markings on the die assemblies. Aligning the paper stop with these marks will result in the punch pattern being centered on the paper and need only small adjustments if at all.

## ◆ HD7700/H -

The HD7700/H utilizes a “lift and move” feature that combines with a fine adjustment knob located on the left side of the machine. To adjust the paper stop, lift up on the small knob of the paper stop and slide to the left or the right. Move the paper stop until the desired position is reached and let the paper stop back down. Minor adjustments of the paper stop can now be made by turning the knob on the left side of the HD7700/H to move the paper stop left or right until the punch pattern is centered on the paper.



The HD7700/H has markings for common sized paper and punch patterns. Lift and move the paper stop to the paper size you are punching and align the pointer of the paper stop with the pattern you are punching in the paper. Set the paper stop down and utilize the knob on the left side to finalize the setting.

The paper stop will now be correctly positioned to center the punch pattern on the paper.

## Punching Paper:

- ◆ Select an appropriate number of sheets to be punched and slide the sheets down vertically (Horizontally for the HD7700H and HD7500H) into the opening of the die assembly. When the paper is fully inserted, slide it to the left so it comes in contact with the paper stop. Make sure all the edges of the sheets are flush by tapping the top and the right hand sides of the sheets before activating the punch. Note: Acetate and vinyl covers will require reducing the number of sheets being punched. It is recommended that only 2-3 sheets of 6 mil acetate be punched during any single cycle of the machine. Attempts to punch more than the recommended amount may lead to an incomplete punch or stall of the machine. Repeated attempts to punch more than the recommended amount may also lead to machine damage.



If a paper activated switch is being used, tap the sheets flush before sliding the paper to the paper stop.

## Removing Paper Waste:

- ◆ The paper waste drawer is located conveniently on the front of the punch. The paper waste drawer is removed by lifting up on the front and pulling out away from the machine. This drawer should be checked frequently while punching and emptied as necessary.

## Paper Jam:

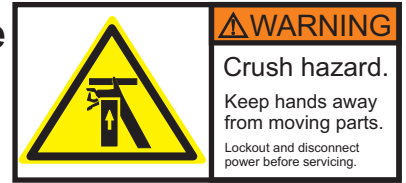
- ◆ The HD7700/H, HD7650, HD7100, HD7000, HD7000 Plus, HD6500, HD6700 and HD7500/H punches use a circuit board for controlling the punch cycle, this circuit board also has the ability to automatically reverse the punch pins to their starting position in the event of a paper jam. This condition could happen if too much material has been attempted to be punched at one time. If this condition occurs, the machine will attempt to reset itself back to its home position. If the punch does not reset itself back to its home position, the punch can be reversed manually.

- ◆ **Turn the machine power switch off and remove some or all of the material in the punch.**



It is easier to remove one or two sheets at a time from the backside of the material in the punch, top side for the HD7700H and HD7500H.

◆ **HD7000, HD7100 and HD6500 Manual Reverse** utilizes a reversing tool supplied with the punch.  
**Turn the machine power switch off and unplug the power cord from the wall outlet.**



Remove the paper waste drawer and locate the silver plug in the front panel of the machine. Remove the silver plug by prying it out gently with a small flat tool. Insert the end of the reversing tool into the open hole and engage the tool with the end of the motor shaft. Rotate the tool clockwise 5-10 revolutions, until the punch pins have been retracted back to their starting position. Remove all of the material from the punch.

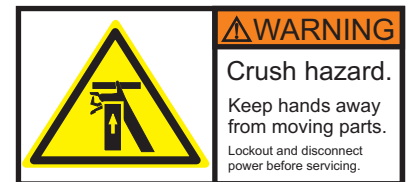


It is easier to remove one or two sheets at a time from the backside of the material in the punch.



Remove the reversing tool from the punch and replace the silver plug. Replace the paper waste drawer, plug the power cord back in to the wall outlet and turn the power switch on. Test cycle the machine by punching with no material in the punch, the machine will reset itself back to its home position. Reduce the amount of material being punched and continue working.

**HD7700/H, HD7650, HD7000 Plus and HD6700 Manual Reverse** utilizes a reversing tool supplied with the punch. **Turn the machine power switch off and unplug the power cord from the wall outlet.**



**Remove the silver plug from the left side panel of the machine.** Remove the silver plug by prying it out gently with a small flat tool. Insert the end of the reversing tool into the open hole and engage the tool with the end of the motor shaft. Rotate the tool counter-clockwise 5-10 revolutions, until the punch pins have been retracted back to the starting position. Remove all of the material from the punch.

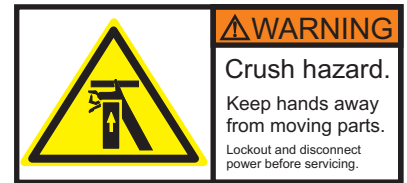


It is easier to remove one or two sheets at a time from the backside of the material in the punch.



Remove the reversing tool from the punch and replace the silver plug. Plug the power cord into the wall outlet and turn the power switch on. Test cycle the machine by punching with no material in the punch, the machine will reset itself back to its home position. Reduce the amount of material being punched and continue working.

- ◆ **HD7500/H Manual Reverse** utilizes two reversing tools supplied with the punch. **Turn the machine power switch off and unplug the power cord from the wall**



- ◆ **outlet.** Remove the paper waste drawer from the machine.
- ◆ **- HD7500H -** Remove the power cord and foot-pedal from the back of the machine. Rotate the machine onto its backside. **This machine is heavy and requires two people to move.**
- ◆ Remove the silver plugs from the panel of the machine by prying them out gently with a small flat tool. Insert the ends of both reversing tools into the open holes and engage the tools with the ends of the motor shafts. Rotate the tools at the same time, clockwise 5-10 revolutions, until the punch pins have been retracted back to the starting position. Remove all of the material from the punch.



It is easier to remove one or two sheets at a time from the topside of the material in the punch.

- ◆ Remove the reversing tools from the punch and replace the silver plugs.
- ◆ **- HD7500H -** Rotate the machine back onto its feet and plug the power cord and foot-pedal into the back of the machine.
- ◆ Plug the power cord into the wall outlet and turn the power switch on. Test cycle the machine by punching with no material in the punch, the machine will reset itself back to its home position. Reduce the amount of material being punched and continue working.

**Only qualified personnel should attempt to work on this equipment. There are no user serviceable parts inside of the machine.**



Your machine has been designed for years of trouble free operation. The following is a troubleshooting guide to help you through some of the problems that may be encountered.

### Troubleshooting

| Symptom                      | Possible Cause                                                                                                                                                        | Action                                                                                                                                                                                           |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Machine does not cycle       | 1) Machine is off<br>2) Machine is not plugged in<br>3) Foot-pedal is not plugged into machine<br>4) Die lock handle is not locked<br>5) Reversing tool is in machine | 1) Check power switch<br>2) Check both ends of power cord<br>3) Make sure foot-pedal cable is attached to machine.<br>4) Lock the die lock handle<br>5) Remove reversing tool and store properly |
| Die does not go into machine | 1) Pin retainer interference<br>2) Punch is stopped in mid cycle<br>3) Die lock handle is in lock position                                                            | 1) Make sure pin retainer enters slot in pusher-bar.<br>2) Restart machine by turning power off and back on<br>3) Move handle to unlock position                                                 |



The HD7700/H, HD7650, HD7100, HD7000, HD7000 Plus, HD6500, HD6700 and HD7500/H have been tested with a duty cycle of 25 cycles per minute with a 1 minute rest period after 2 minutes of run time. Operating outside of these limits could result in machine damage.

The HD7000, HD7100 and HD6500 have earned the UL Listing Mark. E179574.



## 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](http://www.Rhin-O-Tuff.com/warranty_registration.asp)

