

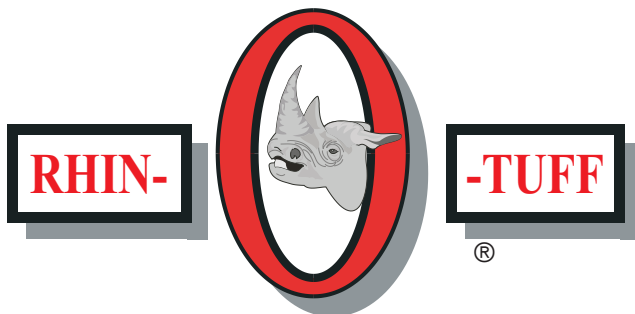
Rhin-O-Tuff Onyx OD4012 1 1/2" Electric Punch

Instruction Manual

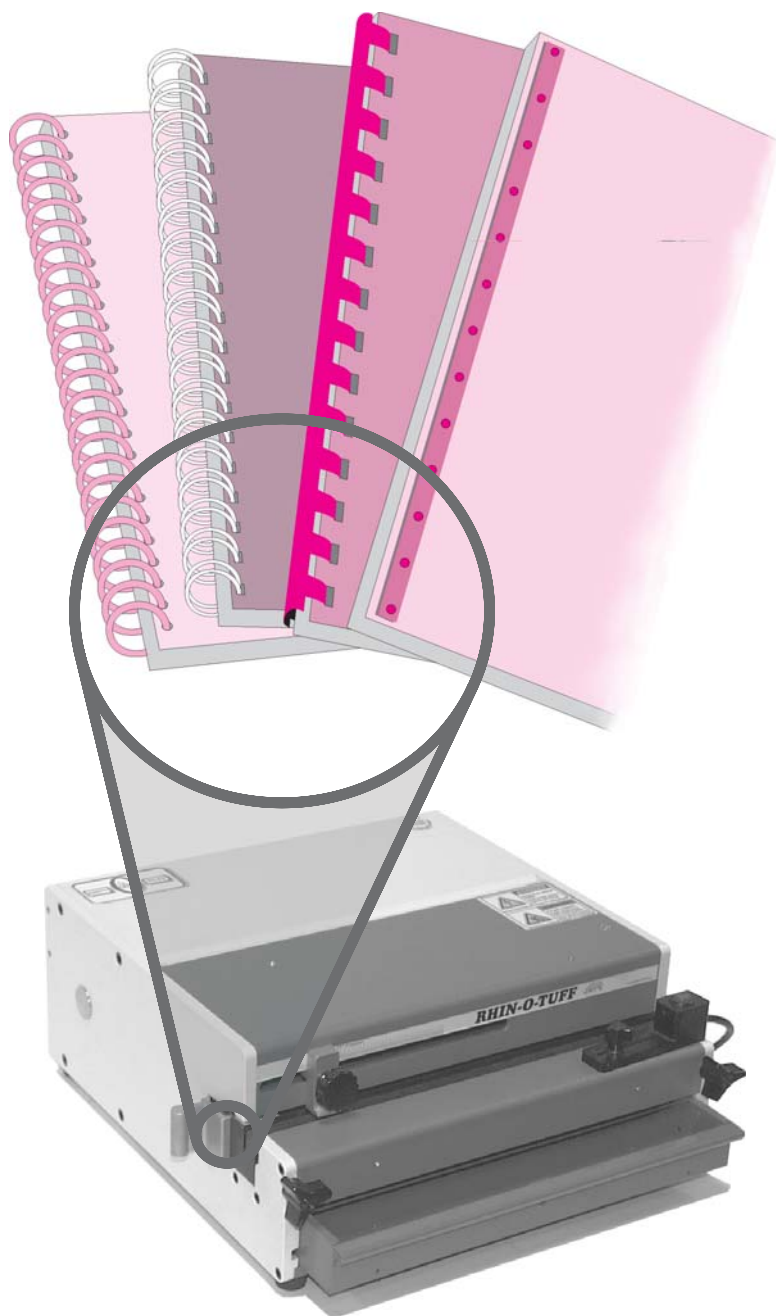


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**OD 4012
SHOWN WITH THE OPTIONAL
PALM SWITCH**

INSTRUCTION BOOK

FOR THE OD 4012

**AND INTRODUCTION TO THE
OD 4012 BINDING MODULES**



HD 4270



OD 4300



HD 4470



HD 4171



HD 8370



PAL 14



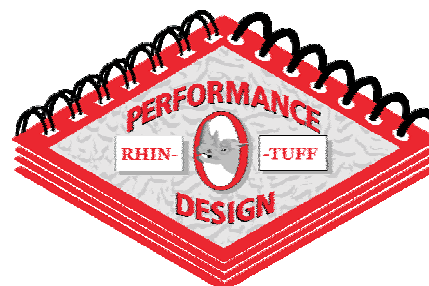
HD 4170



PAL 14



**EASILY REMOVEABLE
DIES FOR YOUR BINDING NEEDS**



Number Of Holes Chart For Standard Book Length

		Sheet Size								
		5-1/2"	A6	A5	8-1/2"	9"	11"	A4	13"	14"
Punch Pattern	2-1 ROUND & SQUARE	10	11	16	16	17	21	23	26	27
	3-1 ROUND & SQUARE	16	17	24	25	26	32	34	38	41
	4-1	22	23	33	34	36	44	46	52	56
	4-1 (.248)	22	23	33	34	36	44	47	52	56
	4-1 (.2475)	22	23	33	34	36	44	47	52	56
	5mm	28	29	42	43	45	55	59	66	71
	COMB	9	10	14	15	16	19	20	23	24
	6MM	23	24	35	36	38	46	49	55	59
	Velo	5	5	8	8	9	11	11	13	14

Coil Size Selector Chart

		Pages (20 lb Paper)	Thick (Inches)
Coil Size	6mm	31	.124
	8mm	46	.184
	10mm	70	.280
	11mm	78	.312
	12mm	86	.344
	13mm	94	.376
	14mm	109	.436
	16mm	.125	.500
	18mm	140	.560
	20mm	156	.624
	22mm	171	.684
	25mm	195	.780
	30mm	250	1.000
	33mm	265	1.060

Wire Size Selector Chart

		Pages (20 lb Paper)	Thick (Inches)
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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Boise, Idaho 83716 USA
1-800-390-5782
PDI@PDIBIND.COM

OD 4012 Setup & Operator Manual

**Issue Dec, 2004
Performance Design Inc.**

The Office Duty (OD 4012) electric punch has been designed to punch most any job that may pass through your office. No matter what type of binding you need to carry out, the OD 4012 can punch the job. It will punch up to 25 sheets of 20lb (80gsm) copy paper at one time while maintaining perfect alignment. The maximum punching length is 11" or A4 European format. Any sheet smaller can be punched for the minimum size.

There are several optional attachments (modules) for the OD 4012 that will transform the punch into a mechanical binding station.

These are:

PAL-14 Piks-A-Lift

This module offers flexibility enough to handle index tabs, clear covers, over-sized covers and paper sizes from 8.5" X 5.5" (140mm X 140mm) up to 8.5" X 14" (355mm x 355mm), both in landscape and portrait. Easy to set up and operate. Pick any amount of sheets for punching.



HD 4270 Wire closer

The wire closer is capable of binding books up to 1-1/8" (28.6mm) thick. It uses wire sizes from 3/16" to 1-1/4". It has an adjustable closing bar for the different size wires. Each end can be adjusted independently to obtain a perfect close.



OD 4300 Coil Inserter

Plastic Spiral inserter will bind books up to 1-1/8" (28.6mm) thick using coil diameter up to 1-1/4" (30mm). The unit attaches to the right side of the punch using two wing nuts for easy installation.



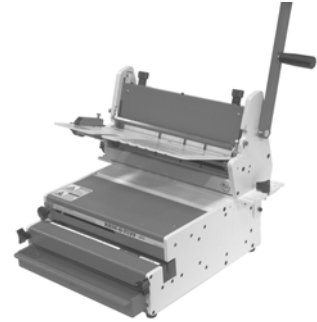
HD 4470 Comb opener

The comb opener will bind books up to 2" (51mm) thick. The opener has an adjustable ring opener control for exact book placement.



HD 8370 Wire Closer

The manual wire closer inserts the wire into the document while closing the wire. The HC 8370 makes wire closing **fast and easy**. As simple as ABC, (A) Insert the wire into the closer. (B) Place the document on the closer table. (C) Pull the handle. Your document is now finished in seconds. Binding books from 5½" to 14" (140mm to 356mm) in width and from ¼" through 9/16" (6mm through 14mm) thickness, the HC-8370 closes the standard 3-1 pitch wire.



HD 4170 Coil Inserter

The HD 4170 "Rhin-O-Roll" Coil Inserter Module has 12" dual powered adjustable rollers 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 any OD or HD Series punch (except the HD7500 and horizontals). All pitches and diameters can be inserted using it. The HD 4170 comes with a crimper pliers holder and pliers.



KK 4171 Coil Crimper

Shown is the KK 4171 E, the Electric version of the crimper, the manual is the KK 4171 M. Uses paper sizes 2½" up to 14" (63mm to 356mm) including tabs without changing crimpers. Easily crimps coil sizes from ¼" up to ¾" (6mm to 18mm).



All of the above modules can be ordered when ordering the OD 4012 punch or individual units can be ordered at a later date. Each unit can be installed in a matter of minutes. It only takes a few minutes to detach any one of the modules to install any other one. All these modules work with our full line of vertical punches.

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OD 4012 PUNCH

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1) Important Safety Notice!

Make sure you read this section very carefully! Learn to recognize this **Safety Alert Symbol**.



The OD 4012 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 machine into an outlet that provides a 15-amp service (16 amp for European installation) that is protected at the customers' circuit box.
- ◆ If machine cycles on its own, call dealer immediately for service.
- ◆ Never bypass top cover switch.
- ◆ Turn power switch off before removing a die.

2) Placing your machine in the proper location:



Before lifting machine, turn power off. Remove plug from electrical supply for your personnel safety. The machine is very heavy! Never attempt to lift machine by yourself. It needs two people to lift machine. ***It should be lifted at each side of the back end***

and each side of the front end. Do not lift machine by the chip drawer!

Place the machine on a hard level surface placing the foot pedal on the floor in front of the machine. Set aside some room for the books that have to be punched and also some room for the books that had already been punched.

3) 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 back of the machine. The other end goes into the wall outlet.

Install the foot pedal plug into the receptacle, which is located on the left side of the rear of the machine. The optional Versa Switch or Palm Switch can be plugged into the same receptacle if this option is to be used. Only one option can be used at a time.

4) Die Installation: Diagram 1

Make sure the machine is turned off before installing die. Make sure there is no paper dust in the machine die slot before installing the die. Install the **die (1)** by sliding it into the opening of the machine located on the left-hand side of the machine. Make sure the **punch pin retainer and pin capture slides into the slot (2)** of the pusher bar. Using the two **fluted knobs (3)** provided with the machine, tighten each knob turning them clockwise until tight. Be sure the knobs are pulled toward the front of the machine so that the die does not interfere with the **knobs threads (4)**.

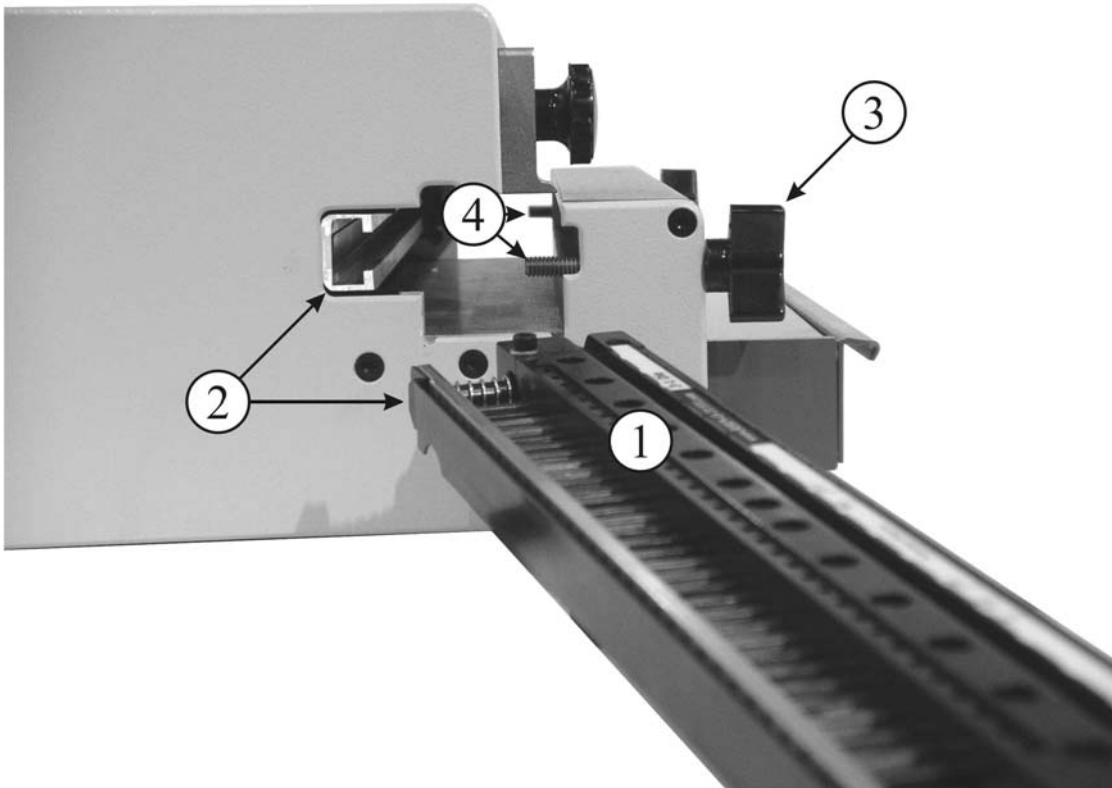


Diagram 1

♦ **To Remove A Punch Pin From The Die: Diagram 2**

Make sure the machine is turned off before removing the die. To remove a punch pin from the die, remove both **fluted knobs (1)** and slide the die to the left and remove. Orient die so **pin retainer (2)** is facing up. Remove **top pin capture (3)** by pushing down first, and then pulling away from bottom pin retainer to expose punch pins. If your die has the new **pin pull label (4)** simply pull the desired **pin (5)** to fit your job. Replace the pin retainer and reinstall the die using die installation procedure.

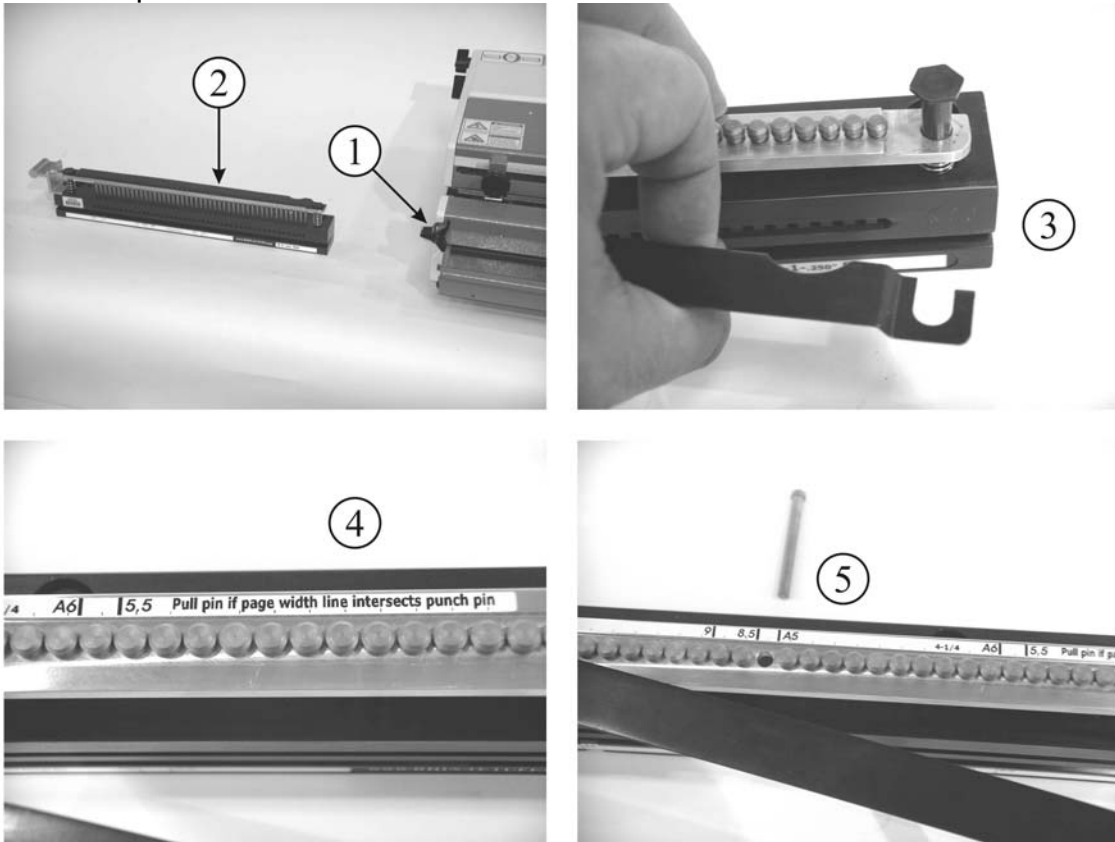


Diagram 2

♦ **Die Maintenance: Diagram 3**

Make sure the machine is turned off before removing a die. To maintain the die remove from machine. Then using the oil provided with the machine, lightly squeeze oil over the **oil slot (1)** that runs the entire length of the die. Application of too much oil can run onto the paper being punched. **After oiling, always punch scrap paper to remove excess oil.**

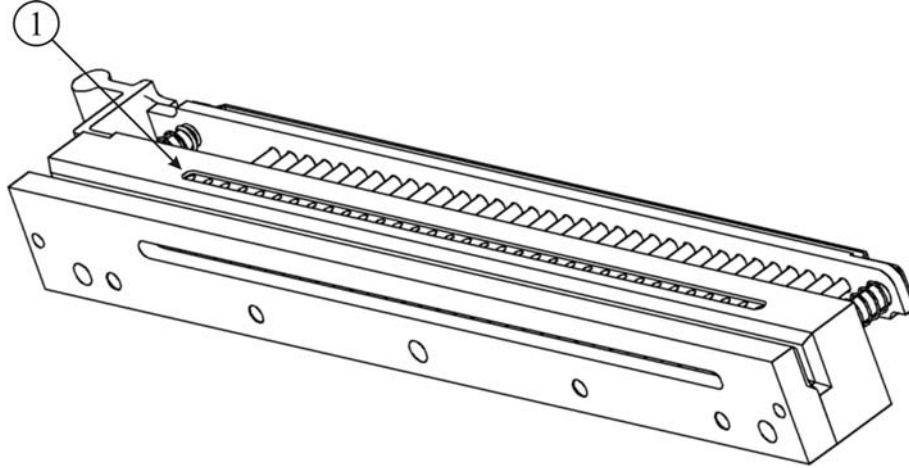


Diagram 3

5) Setting The Paper Stop/Guides: Diagram 4

The **paper stop/guide (1)** is located on the top hinged cover. By loosening the **knob (2)** counterclockwise, the guide can be adjusted to the left or the right so the holes can be centered within the paper being punched. For 11" sheets, the right-hand portion of the guide can be set at **the 11" mark (3)** on the die.. **When using different length sheets, the paper guide will have to be moved to a different position.**

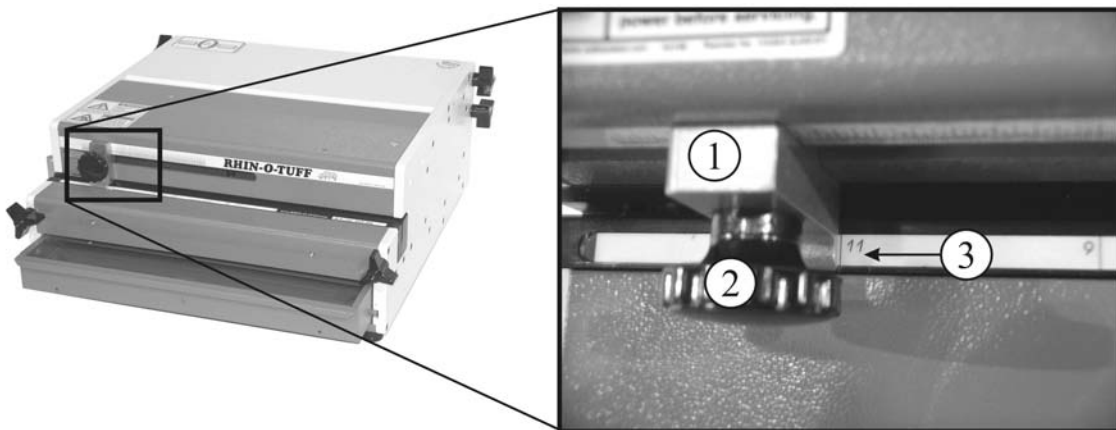
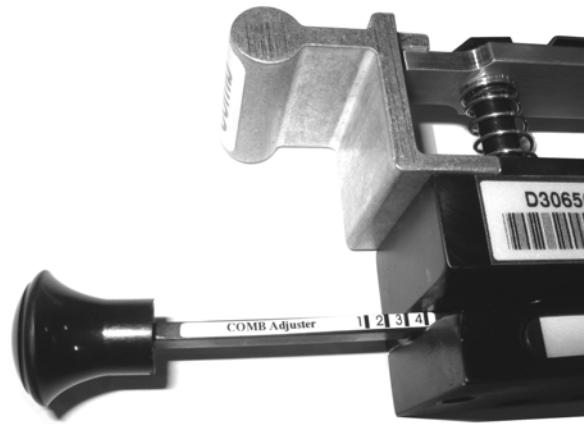


Diagram 4

Only Comb dies have an adjustable backstop. To change the position of the hole placement (margin) to the back edge of the sheet, first install the die into the OD

4012. Pull on the black handle, which is part of the die. There are four placement positions. Choose the position best suited for your job. **Pull the handle towards the left for the larger combs and push it in to the right for the smaller combs.** The exact position will be left up to the operator's preference.



6) Punching Paper:

Position the paper that needs to be punched either to the left, right or on top of the machine. This is up to the individual operator. Remove 20 to 25 sheets (20lb bond copy paper, 80gsm) from the pile and slide it down vertically into the opening of the die (when punching acetate and heavier stock, punch less sheets). When the paper is fully down, 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 side of the sheets before pressing the foot pedal or pressing the palm switch. After punching the sheets, place the paper on the punched pile making sure the sheets remain in exact order.

7) Removing Paper Waste: Diagram 5

The paper waste is removed by pulling the **paper waste drawer (1)** up and toward you. The drawer is located conveniently in the front of the punch. Look through the clear cover while punching and empty prior to filling up and spilling into machine. When reinstalling the chip drawer back into, line up the **locating pin (2)** on the drawer with the **slot on the machine (3)**.

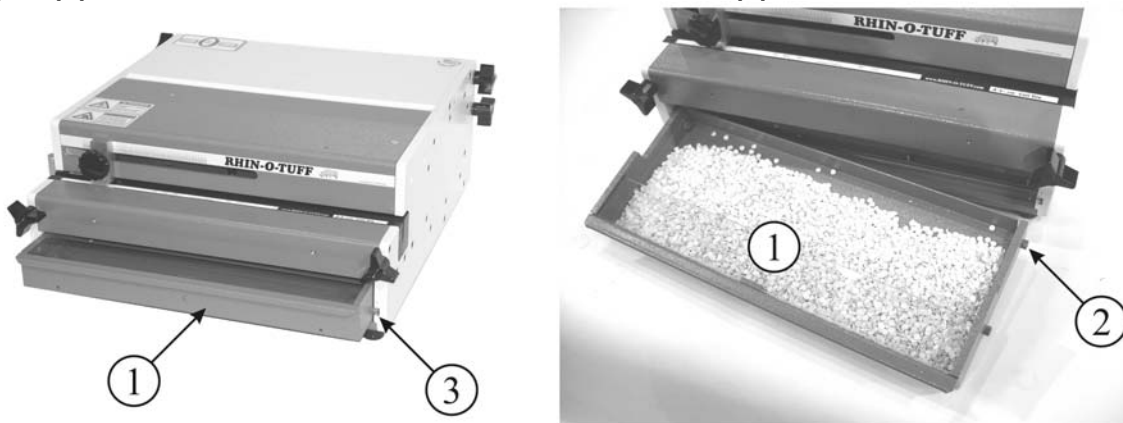


Diagram 5

8) Paper Jam: (Reverse knob) Diagram 6

The OD 4012 uses a circuit board for controlling its cycle and has the ability to automatically reverse the punch pins to their starting position if too much acetate or paper was inserted. There are times when punching too much acetate, the punch pins may not reverse all the way out. Use this procedure described below for manually reversing machine.

When a paper jam occurs, the circuit breaker protecting the motor may have to be reset. This is normal and allows for maximum protection for the punch motor. To reset the circuit breaker, turn the power switch off then back on. Cycle the machine. If the machine is still jammed follow the procedure below. Never attempt to cycle machine with die partially installed in the machine.



- ◆ Remove Die from machine and cycle machine. If you are unable to remove the die or cycle the machine, continue to the next step.
- ◆ Unplug machine from power.
- ◆ Remove **silver safety plug (1)** from machine.
- ◆ Push in the **reverse knob (2)** (that came separately with your machine). Align with slot in motor shaft.
- ◆ If the punch stalled before pins were completely through the paper, turn the reverse knob **counter-clockwise (3)** to reverse punch pins out of paper.
- ◆ If the punch stalled with the pins all the way through the paper and on its return stroke, turn the reverse knob clockwise to continue the punch pins to their starting position.
- ◆ **Remove reverse knob**, plug machine back in.
- ◆ Press the foot pedal to see if the machine operates. If yes, replace the silver safety cap and continue punching the job. If the machine does not function, see the troubleshooting section of this manual.

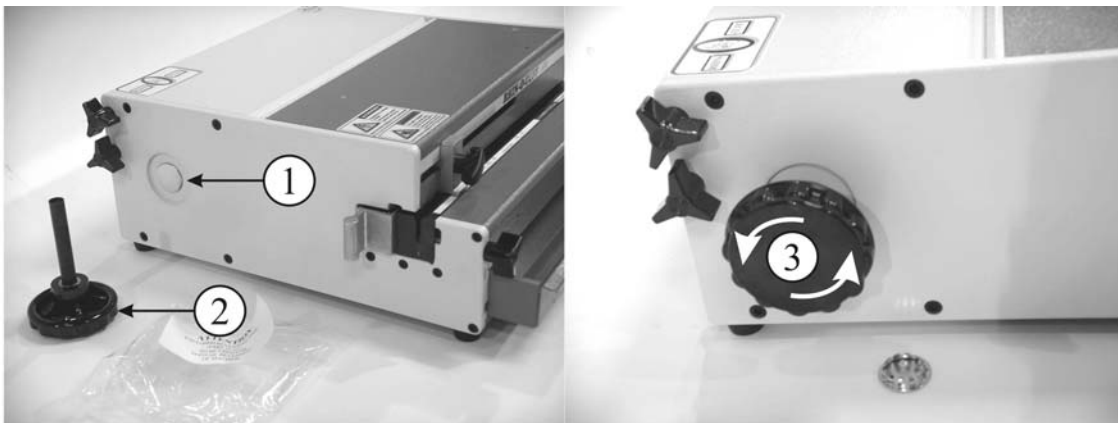


Diagram 6

9) Attaching The Versa Switch To The OD 4012: Diagram 7

The Versa Switch replaces the foot pedal and paper stop/guide. By pushing the paper against this switch, it positions the paper in the correct location so the holes are centered in the sheet and also activates the punch. The Versa Switch is accessory #072180 for both 115VAC and 230VAC models.



- ◆ **Unplug the main power cord from the OD 4012 punch.**
- ◆ Remove the foot pedal plug from the rear or the OD 4012 punch.
- ◆ Install the versa switch plug into the same receptacle that the foot pedal plug was removed from. The Versa Switch cannot be used at the same time as the foot pedal or Palm Switch covered in the next chapter.
- ◆ Open the top cover of the OD 4012.
- ◆ Remove the existing paper stop/guide from the front cover of the OD 4012 by unscrewing the knob from the nut inside the cover.
- ◆ The Versa Switch comes fully assembled. The **Knob (1)** will have to be removed from the assembly. Also, the **BROWN and BLUE (2) wires** attached to the versa switch will have to be removed. Please note where these wires were originally attached to the Versa Switch for re-assembly.
- ◆ Place the **Switch (3)** inside the **Front Cover (4)** and the **Paper Stop (5)** through the slot in the cover. Use the **Knob (1)** to attach the assembly back to the original configuration.
- ◆ Reattach the wires to the same terminals of the switch.
- ◆ Close and secure the front cover and replace the power cord.

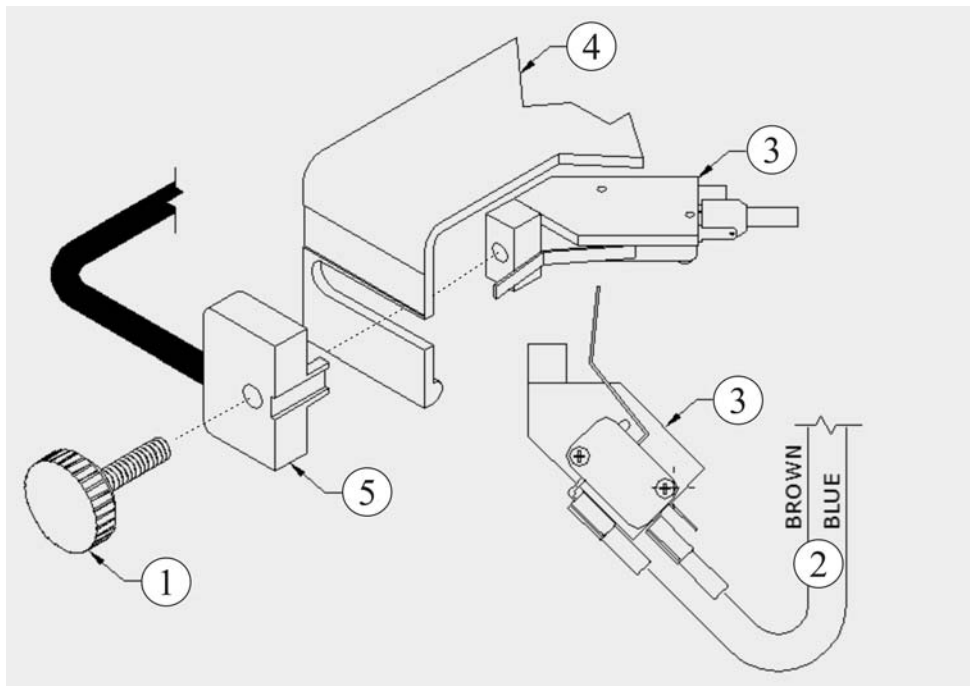


Diagram 7

10) Attaching the Palm Switch to OD 4012: Diagram 8

The Palm Switch accessory #077770 replaces the foot pedal.

- ◆ Unplug the main power cord from the OD 4012 punch.
- ◆ Remove the foot pedal plug from the rear of the OD 4012 punch.
- ◆ Install the Palm Switch plug into the same **receptacle (1)** that the foot pedal plug was removed from. The Palm Switch cannot be used at the same time as the Foot Pedal or Versa Switch described in the previous chapter.
- ◆ Attach the **Palm Switch Body (2)** to the top of the OD 4012 **as shown (3)**.
- ◆ **Adjust (4)** the Palm Switch so that it is comfortable to insert paper, jog, and punch at the same time. Reattach the power cord.

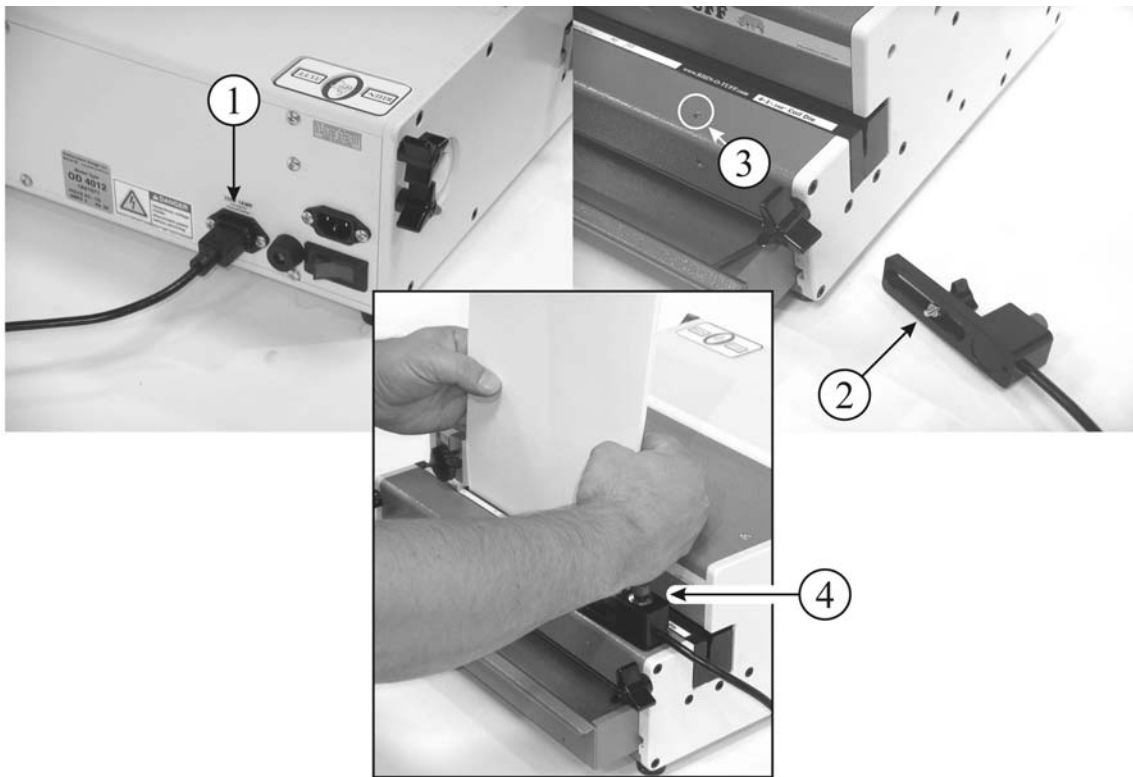


Diagram 8

11) Troubleshooting:



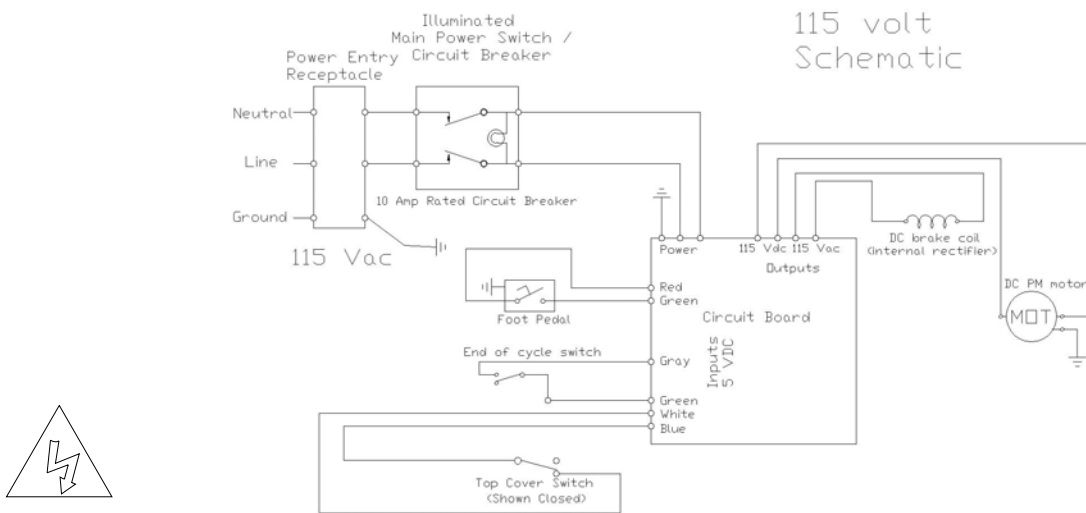
Only Qualified Personnel Should Attempt To Work On This Equipment.

The OD 4012 punch is a well-built, heavy duty punch and will give years of reliable service. Most of the problems are due to setup error. There is a circuit breaker located in the power switch at the rear of the punch that can be reset by the customer if it should trip by turning the switch off then back on. Below is a trouble shooting guide to help you through some of the problems that may be encountered.

Troubleshooting

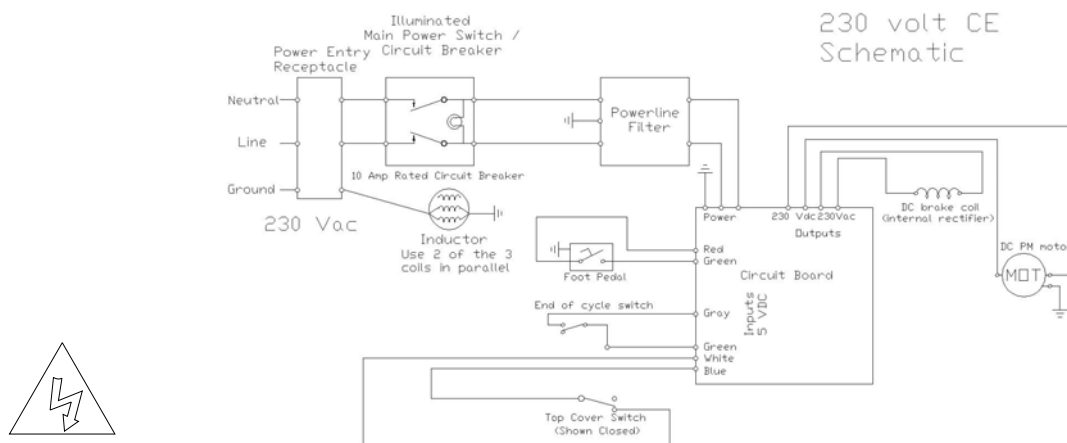
Symptom	Possible Cause	Action
Machine does not cycle.	1) Machine is off. 2) Machine not plugged in. 3) Foot pedal, palm switch, or versa switch not plugged into machine. 4) Top Cover is open. 5) Circuit Breaker Tripped.	1) Check power switch. 2) Check both ends of power cord. 3) Make sure foot pedal cable, palm switch, or versa switch is attached to machine. 4) Close top cover. 5) Check circuit breaker switch. Switch power switch OFF then ON.
Die does not go into machine.	1) Pin retainer interference. 2) Punch stopped in mid cycle. 3) Pins not installed properly. 4) Die locking knobs interfere with die insertion.	1) Make sure pin retainer enters slot in pusher bar. (See diagram 1) 2) Check circuit breaker and restart machine. 3) Make sure that all the pins are flush against pin retainer. 4) Pull die locking knobs out until they stop and clear the die.

12) OD 4012 Electrical Schematic: 115 volt AC



ELECTRICAL SHOCK HAZARD!

230 volt AC




ELECTRICAL SHOCK HAZARD!

13) Die list:

This is a list of the most common dies manufactured by Performance Design.

Special dies are available. Ask your dealer for more information.

P. D. I. Die Part Numbers & Replacement Pin Set Part Numbers 04130A Request	Pattern & Spacing 3 Hole-4.25"	Punch Pattern Not To Scale 	Hole Size Margin	
			5/16" Dia.	.313"
74121A K4121	2:1-.500"		1/4" Dia.	.250"
74131A K4131	3:1-.3333"		11/64" Dia.	.168"
74141A K4141	4:1-.250"		11/64" Dia.	.188"
74155A	4:1-.248"		3/16" Dia.	.188"
74444A	4:1-.2475" OVAL		5/32" Wide (4.0mm) 3/16" Dia. (4.0mm)	.188"
74151A K4151	5mm-.1969"		9/64" Dia.	.160"
04153A	5:1-.200"		9/64" Dia.	.160"
74066A K4066	6mm-.2362"		11/64" Dia.	.188"
04100A K4100	Velobind-1" TM GBC & 4-PRONG		1/8" Dia.	.125"
74131T	3:1 Thumb		3/4" Dia. 11/64" Dia.	.168"
04235A K4235	Comb-.5625" (9/16") Adjustable		5/16" Wide 1/8" Tall	.245" To .156"
74226A K4226	2:1-.500"		1/4" Wide 1/8" Tall	.188"
74221A K4221	2:1-.500"		1/4" Sq.	.250"
74231A K4231	3:1-.3333"		5/32" Sq.	.179"
74231T	3:1 Thumb		3/4" Dia. 5/32" Sq.	.179"

For The Current & Complete List of Dies, Visit www.RHIN-O-TUFF.com

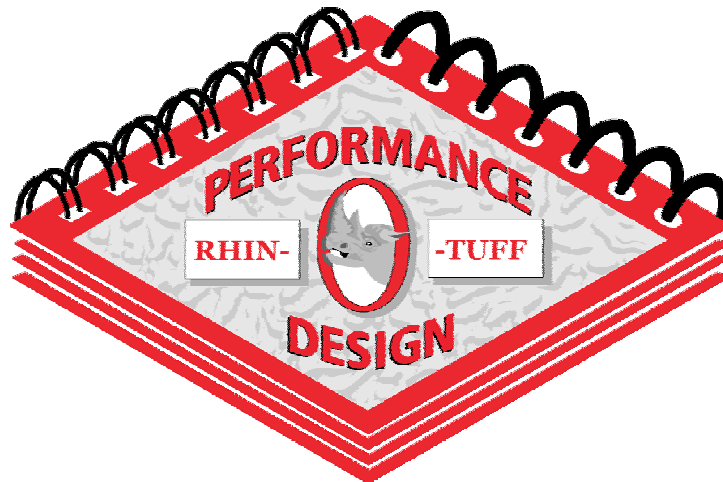
IMPORTANT

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 1-208-384-8581.

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