

CP375B Auto Creaser Operation Manual



Revision: <u>21/01/22</u>

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1. Safety Rules

The machine has many safety features which make it a safe to operate. Regardless of your experience, safety instructions must be read carefully, completely understood, and applied to your daily work habits. If you do not understand or are confused by certain safety instructions presented in this manual, discuss them with your supervisor. Machine setup, cleanup, and maintenance operation will vary. Therefore, it is essential all employees to practice safe work habits. SAFE WORK HABITS PREVENT INJURIES. The main rule to follow is to ALWAYS make sure the main drive is STOPPED and LOCKEDOUT when performing setup, cleanup, adjustment and maintenance operations. The safety precautions in this manual provide guidelines for the protection and for that of

fellow workers.

1.1 Precautions

Before any maintenance is performed on the machine, switch off all sources of electrical; do not operate the equipment when panels and safety covers are not in place. Failure to observe this warning could result in personal injury.

1.2 Avoid Accidents

Most accidents are caused by the failure of some individual to follow simple and fundamental safety rules and precautions. For this reason, most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs. With any machinery, a careful and trained operator is the best insurance against an accident.

1.3 Safety Issues & General Safety Rules

DO	DO NOT
1. Read and understand this manual	1. Do not attempt to operate or service the
before attempting to operate or	machine without reading and understanding
service the machine.	this manual.
2. Be familiar with the machine safety	2. Do not remove the safety devices.
rules and practices.	
3. Warn others of an intended action that	3. Do not clean or lubricate moving parts of a
may endanger them.	machine that is running.
4. Perform lubrication and oiling of the	4. Do not unauthorized persons to operate the
machine only when power is off.	machinery.
5. Verify that all guards are installed	5. Do not place tools on a machine that is
before operating the machine.	running.
6. When working on electrical	6. Do not reach into the machine to make

equipment, power must be shut off to	adjustments while it is running.
all circuits before any work is	
attempted. Individual switches must	
be opened and the equipment circuits	
tested to make sure there is no power.	
7. Be sure all operators are aware of all	7. Do not allow horseplay in the work area
areas and operations that require	
extra safety measures.	

1.4 AC Supply

- 1.4.1 Voltage steady state voltage: 0.9 to 1.1 of nominal voltage.
- 1.4.2 Frequency 099 to 1.01 of nominal frequency continuously; 0.98 to 1.02 for short time.
- 1.4.3 Harmonics distortion not exceeding 10% of the total r.m.s. voltage between live conductors for the sum of the 2nd through to the 5th harmonic.
- 1.4.4 Voltage Interruption Supply interrupted or at zero voltage for not more than 3ms at any random time in the supply cycle with more than 1 s between successive interruptions.
- 1.4.5 Voltage dips not exceeding 20% of the peak voltage of the supply for more than one cycle with more than 1 s between successive dips.

1.5 General Physical Environments

- 1.5.1 The minimum requirement for all electrical equipment is correct operation between air temperature of $+5^{\circ}$ C and $+35^{\circ}$ C.
- 1.5.2 Electrical equipment is capable of operating correctly when the relative humidity does not exceeding 50% at a maximum temperature of +45° C.
- 1.5.3 Electrical equipment is capable of operating correctly at altitude up to 1000m.
- 1.5.4 Electrical equipment is designed to withstand to protect against the effects of transportation, and storage temperature within a range of -25 $^{\circ}$ C to +55 $^{\circ}$ C and for short periods not exceeding 24 hours at up to +70 $^{\circ}$ C.
- 1.5.5 Avoid exposing to vibration environment.
- 1.5.6 Avoid exposing to direct sunlight or heat rays.
- 1.5.7 Have to connect to the factory grounding system correctly.
- 1.5.8 Away from electric magnetic interference source sites, such welding, discharge machine.

2. Specifications

Specification	Description
Feeder system	Auto Upper Suction
Feeder capacity	3.94" / 100mm
Minimum size	1.77" x 3.54" / 45X90mm
Maximum size	14.57" x 39.37" / 370X1000mm
Paper stocks	70-450gsm
Minimum crease distance	0.04" / 1mm
Minimum crease from lead margin	0.04" / 1mm
Speed (one crease on A4 paper)	10,000 sheets / hr
Accuracy	±0.008" / ±0.2mm
Quantity of crease in one pass	32
Counter	Yes
Skew adjustment	±0.008" / ±0.2mm
Crease depth adjustment	Stepless Regulation
Blow adjustment	Stepless Regulation
Paper separator adjustment	Stepless Regulation
Feeding tray	31.5" / 800mm
Eject stacker	35.43" / 900mm
Power	115V 50/60Hz
Consumption	500W
Dimensions (H x W x D)	20.47" x 50.39" x 24.41"
	520 x 1280 x 620mm
Weight	176.4 lbs / 80Kg



CP375B

Paper Creasing Machine 115V 50/60Hz 500W S/N:375B.000.111

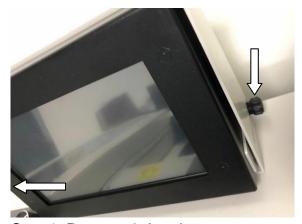


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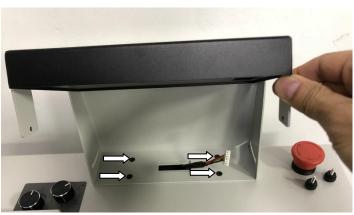
Note: A dedicated AC power line is required.

3. Installation

3.1 Install the touchpad.



Step 1: Remove 2 thumb screws.



Step 2: Use 4 screws to fix the touchpad base on the rear cover of the machine.

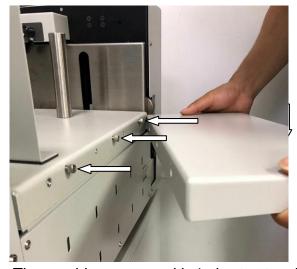


Step 3: Plug the cable to the touchpad.



Step 4: Put 2 thumb screws back and screw up.

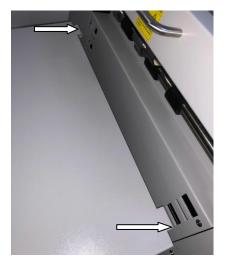
3.2 Use 3 screws to fix the extension table to the loading table.





The machine comes with 1 short extension table and 1 long one.

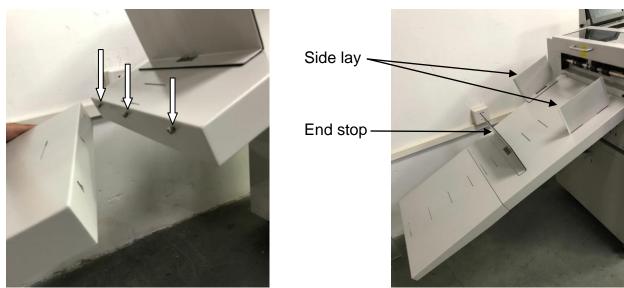
3.3 Install the stacker.





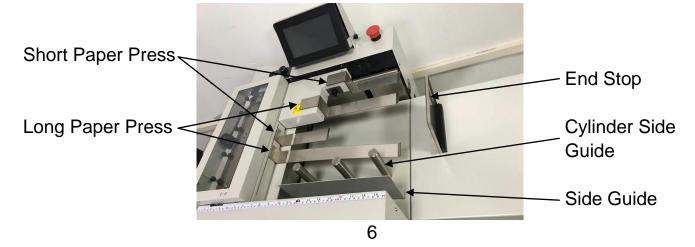
Step 1: Insert 2 hooks of the stacker into 2 holes. Step 2: Choose a proper angle then insert the supporting bar.

3.4 Extension stacker, Side lays & End stop.



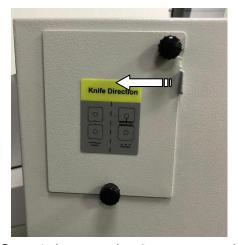
Use 3 screws to fix the extension stacker to the stacker. The extension stacker, the side lays and the end stop should be adjusted according to the ejecting situation.

3.6 Paper press & guides.



The side guides should be on proper position to hold the paper stack. The paper press is used to hold the paper on the top to avoid feeding failure as the top paper is flowing up by the blow flow. To get a smooth feeding, the blow flow, separator gap and stack height should be adjusted in cooperation.

3.7 Installation of Blade





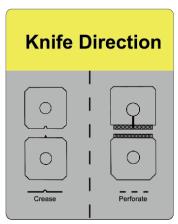
Step 1: Loosen the 2 screws on the blade gate and turn the blade to left to open it.



Step 2: Push the lever of the blade lock to right.



Step 3 :Push the blade all the way into the machine.



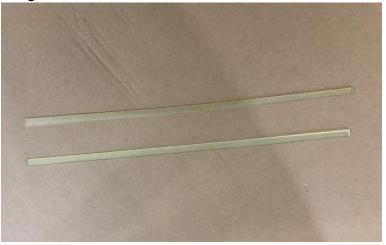
The installation direction refers to the label on the blade gate or on the blade.

4. Accessories

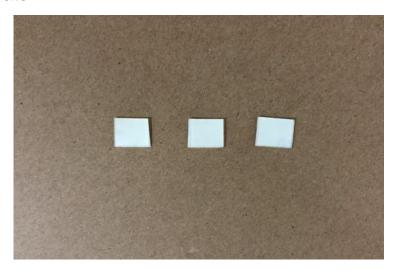
4.1 Tools.



4.2 Pad for perforating blade.



4.3 Separator Plate.

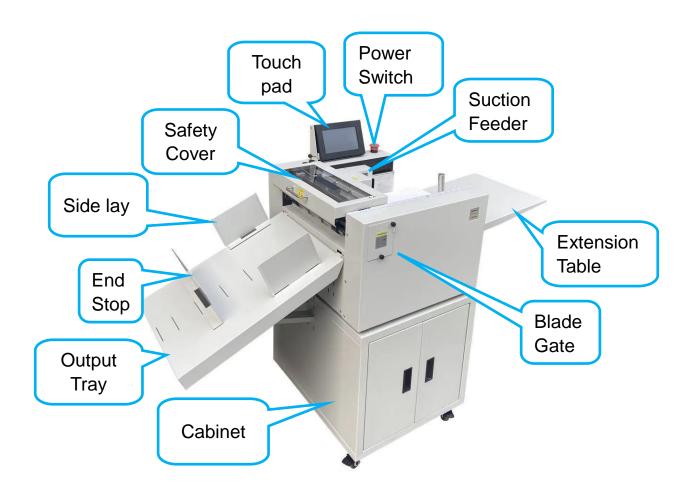


4.4 Spring for elevator.



4.5 Operation Manual.

5. Key Components



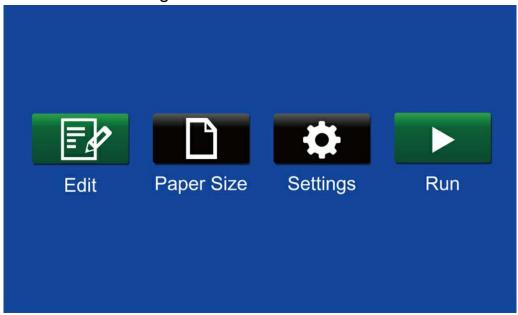


 Notice: Press the table reset button to seset the table when the screen is showing lift motor error referring to the above item 13.10.

6. Start-up

6.1 While Machine is Off

- 6.1.1 Switch main power clockwise to on "I".
- 6.1.3 Main screen is showing.



7. Paper size settings

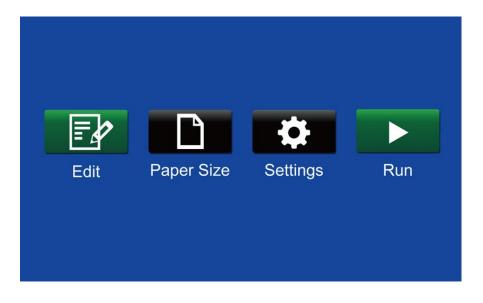
7.1 It helps the system to calculate the working parameter. Make sure the paper size is set properly before editing crease data or processing another size paper.

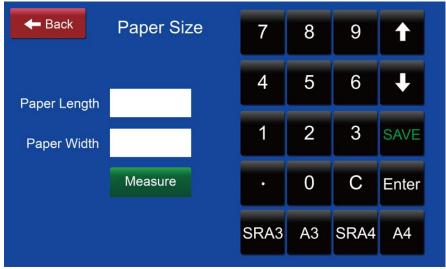
Tip on the blank box then enter the figures from the keypad. The range of the figure is from 0.0-999.9. Press to set into memory.

7.2. Auto measurement of paper length: Press , the machine will be running slowly then ass a paper without crease. When the paper ejects, the actual paper length will be showing on the box. Press to set into memory. Press

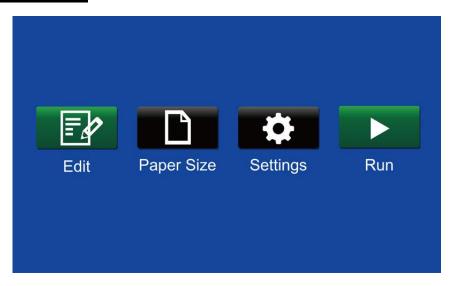
again will end the current measuring.

7.3. Standard paper SRA3, A3. SRA4, A4 can be chosen directly by press this 4 individually. Press to set into memory.





8. Edit crease data

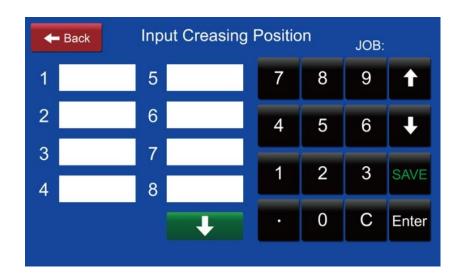




8.1. Manual input: Press then press or to choose the job No..

Tip on the blank box then enter the crease position from the keypad. The

measurement is from the feeding edge to the creasing position. Press to set the whole job data into memory. 32 position data can be processed in one pass once.



8.1.1 Open a define job: Access the manual input interface then press



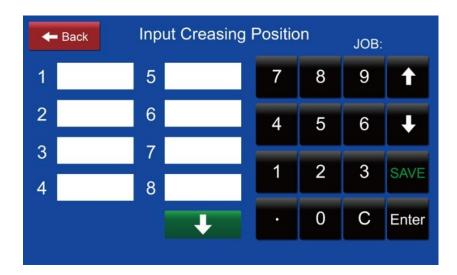
to choose the job No.. Press to recall the defined crease data to show

on the screen. The data can be modified here. Press to set the whole job data into memory.

8.2. Cover crease: Press then tip on the blank box then enter the figures referring to the below illustration.

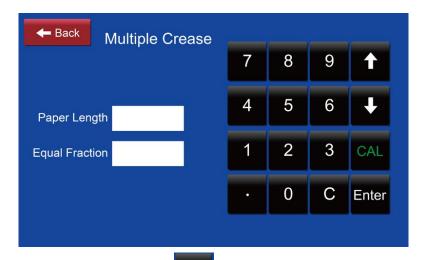


to transfer the settings to crease data. After finishing settings then press

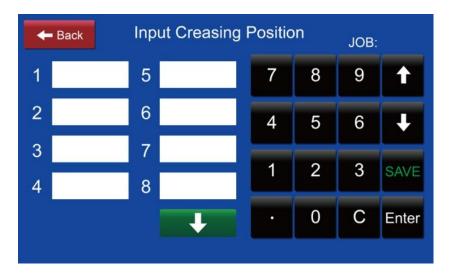


to choose the job No..Press to set the whole job data Press into memory.

8.3. Multiple crease: Press then tip on the blank box then enter the paper length and the equal fraction.

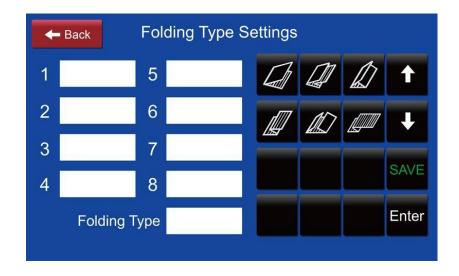


After finishing settings then press to transfer the settings to crease data.

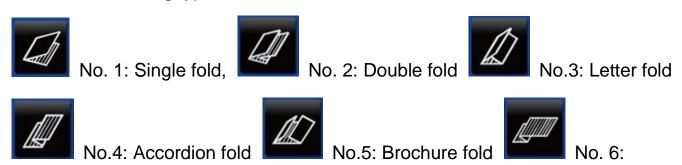


Press or to choose the job No..Press to set the whole job data into memory.

8.4. Standard folding: Press then choose one standard folding type.

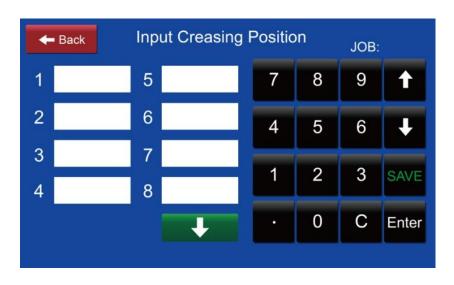


Six standard folding types are available as shown below.



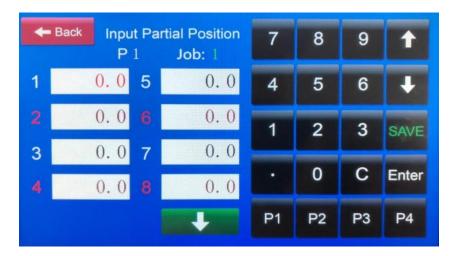
Irregular accordion fold

After choosing one standard folding type, press to transfer the settings to crease data.



Press or to choose the job No..Press to set the whole job data into memory.

8.5. Partial blade: Press to get into the partial blade setting interface.



press or to choose the job No.. There are 4 job memories available.

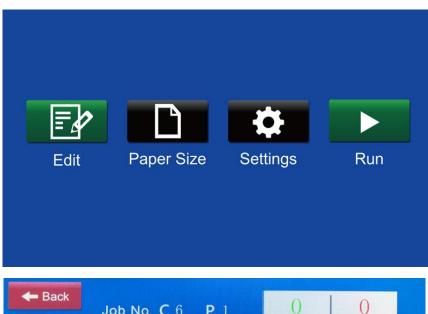
Press P1 P2 P3 P4 to choose the partial blade port.

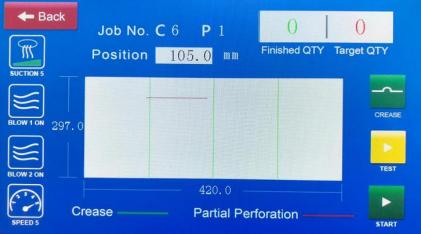


Tip on the blank box then enter the partial position from the keypad. The measurement is from the start position to the end position in feeding direction.

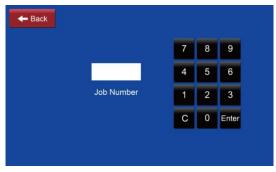
32 position data can be set for each port in one pass once. Press to set the whole job data into memory.

9. Run a Job





- 9.1 Press to get into the running job interface.
- 9.2 Tip on the Job No. figure. The keypad will pop up. Enter the job no. from the keypad then press to active the job.



9.3 Tip on the target QTY box. Enter the desired processing quantity of sheets then

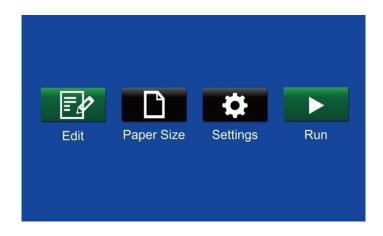
press Enter

I. If target QTY is set 0, the machine will feed sheets continuously.



- 9.4 Press to choose the running speed. 5 ranges are available. One click is one degree circularly.
- 9.5 is showing blowing fan status. Press the icon to switch on/off the blowing fan according to the requirement.
- 9.6 Press to choose the suction strength. 5 ranges are available. One click is one degree circularly.
- 9.7 is showing that the machine is in normal creasing mode. If to process thick papers or make perforation job, press the icon to switch the machine to perf./thick mode
- 9.8 Press and the machine will process one pass to check if the machine can run the job properly Press to end the current processing.
 9.9 Tip on the finished QTY box to reset the counter of the finished quantity of sheets. If the counter is full, press the counter will reset automatically.
- 9.10 Press to start processing the current job. Press to end the current processing.

10. Settings



10.1 Press settings then enter the password: 9966 to get into the settings interface.



10.2 User mode: Press to choose the metric or inch unit. Press

to choose English or Chinese language. Press to set back light. The range of the backlight setting is from 0 to 100.

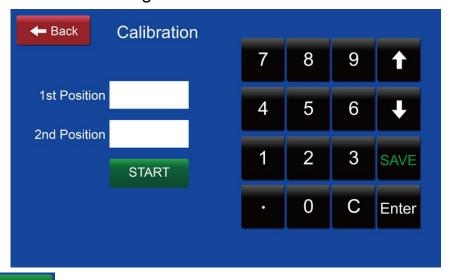


10.3 Press

tutulutu

Calibration

to get into the measurement calibration.

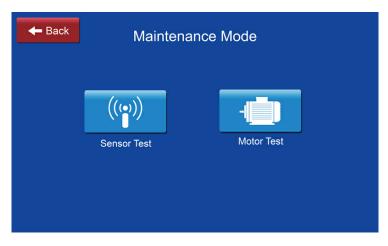


Press then pass one A3 paper. Measure the two position and enter

the actual measurement in the related boxes. Press to set into the memory.

Press again will end the current running.

10.4 Maintenance mode: in this mode, the sensor can be checked their status and the motors can be tested.

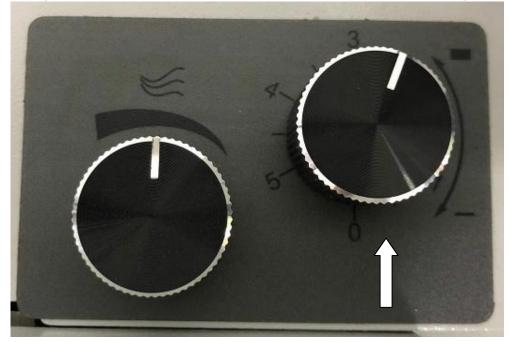


10.5 System settings: these settings are factory parameter setting. Usually users do not need to care about these settings.

11. Adjustment

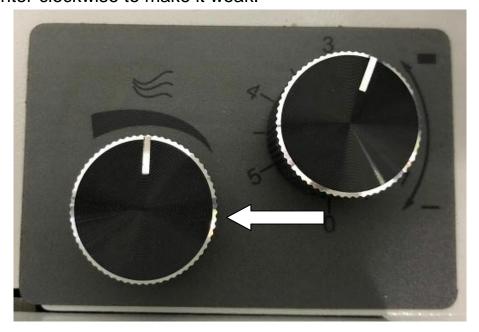
11.1 Separator Gap

11.1.1 Turn the knob to correct double feed or feed failure. Turn clockwise to make the separator gap small and turn counter-clockwise to make it large.



11.2 Blow Flow

11.2.1 Turn the knob so that the air gate change. Depend on paper type and feeding situation to adjust blow flow. Turn clockwise to make the blow flow strong and turn counter-clockwise to make it weak.



11.3 Stack Height Sensor

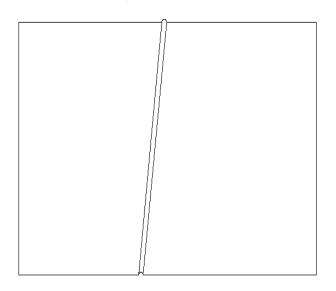
11.3.1 Depend on paper type and feeding situation to adjust it. Turn clockwise to make stack go higher and turn counter-clockwise to make stack go lower.



11.4 Creasing skew

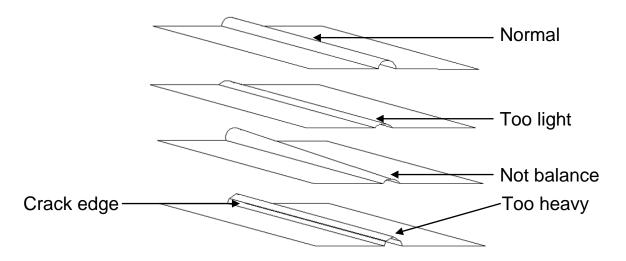
11.4.1 Turn the knob to adjust the feeding angle as shown in the illustration so that the crease or perforation skew is be corrected.

11.5 Creasing Depth





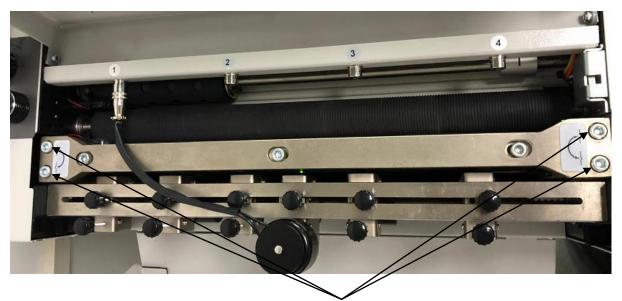
11.5.1 Creasing depth is important to crease quality. It depends on the gap between upper die and lower die. Creasing depth should be adjusted according to paper thickness.



11.5.2 To adjust the creasing depth, open the top cover and 7 Allen screws on the bar.

The 3 screws in the middle of the bar are factory setting. Do not adjust them. The 4screws on both sides for depth adjustment.

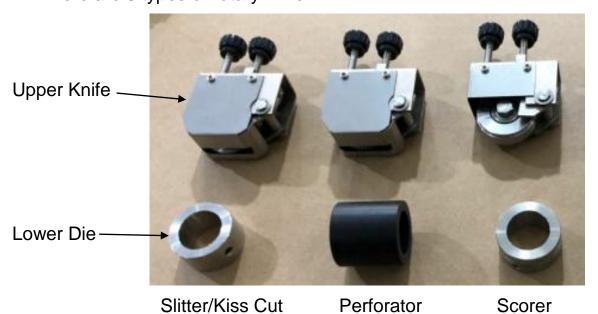
Depend on paper type and feeding situation to adjust it. Turn clockwise to get a deeper crease and turn counter-clockwise to get a shallower crease.



4 Creasing depth adjusting screws

12. Cross Knives(Optional)

12.1 Rotary Knife There are 3 types of rotary knife

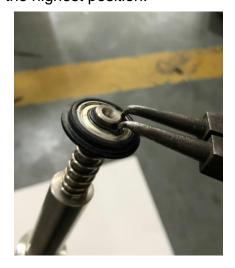




12.1.1 Install lower dies.

Step 1: Adjust the depth of all ejecting rollers to the highest position.

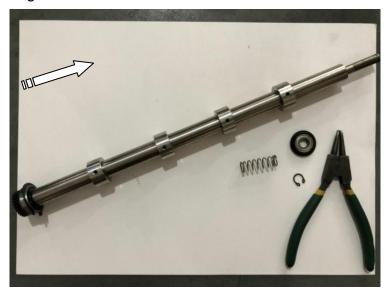




Step 2: Push the ejecting shaft rightward.

Take the left side of the ejecting shaft first then the right side.

Step 3: Use a pliers to remove the circlip then take away the bearing.



Step 4: Use Allen key 2.0 to install lower dies into the ejecting shaft and arrange them in a proper sequence referring to upper knife.



Step 5: Fix the upper knives in the desired position on the bar. Put the ejecting shaft back to the machine. Move the lower dies to proper position to match the relevant upper knives then screw up them. For ejecting sheets smoothly, the ejecting rollers should be arranged in proper position. For convenient adjustment, the grub screws of lower dies should be in a line.

12.2 Partial Blade





The installation procedure of partial blades is the same as above rotary knives. Make sure the partial blade is plugged to a relevant socket and set it properly in the software before operation.

 Warning! Be careful when opening the safety cover. The machine must disconnect with the main power supply before installation job.

13. Feeders (Optional)

There are 3 types of feeder are available for the machine. Min feeding paper size(width *

length):

Standard: 140*160mm

Middle: 90*90mm Small: 45*90mm



14. Pad & Knife for Perforating Blade

14.1 Replace pad for the perforating blade



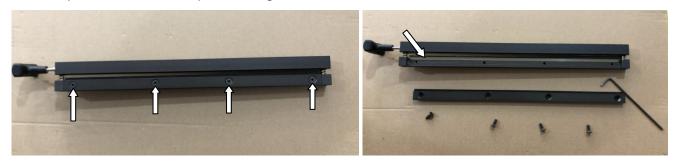


Use 2 screwdriver to the screws on both two sides of the blade.



Remove the used pad from the lower die and clean out the adhesive glue in the groove. Put a new pad into the groove and reassemble it.

14.2 Replace knife for the perforating blade



Remove 4 screws then take away the pressing bar. Remove the used knife and put a new knife into the groove. Reassemble it.

15. Trouble Shooting

15.1 Crease motor error/Jamming the blade

- 15.1.1 Feed too many papers in one pass.
- 15.1.2 Set the blade too low.
- 15.1.3 Run the thicker paper than the blade are set for



Solution:

- 1. Carefully use the scroll buttons to move the rollers and pull the paper out, find the every reason and solve it accordingly.
- 2. If above doesn't work, please uninstall the unit, and test the machine from the beginning.



15.2 Paper jam

- 15.2.1 The paper is too thin (under spec, the paper will crumple).
- 15.2.2 There is some waste present in the pass path of the machine.
- 15.2.4 There is too much ambient light shining on the IR sensor (especially direct sunlight or neon light which will send fake paper jam signal).
- 15.2.5 The lead edge of the paper is being damaged by the paper separator.

Solution:

Use the scroll icon to control the roller manually to drive the jammed paper out of mechanical system. do not pull hard on the paper, or you may damage the in-feed

rollers!



15.3 Double Feed

- 15.3.1 The separator gap is too large.
- 15.3.2 The blow flow is too strong.

Solution: Turn their knobs to get a proper adjustment.

15.4 Bubbling in laminated stock

15.4.1 This occurs if you try to crease laminated paper. The curve of the crease will not adhere to the film

Solution: Make a shallower crease or use a better film.

15.5 Paper wrapped around the perforating wheels

15.5.1This occurs if the card is too thin/ has no body and will get hooked on the perforating teeth and wrap around the disc.

Solution: keep the paper within the spec..

15.6. Wear on the rollers

Solution:

1. Replacement.

15.7 Feed skew

Solution:

- 1. Check if the paper is out of specification or not guided properly. Set the side guides and paper press properly.
- 2. Turn the feed angle knob to adjust it.

15.8 Coating on the rollers

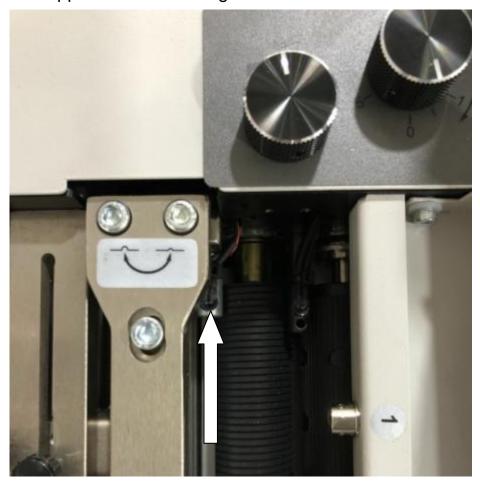
15.8.1 The rollers will accumulate the coat from the passing paper and this will reduce the friction significantly and cause sliding.

Solution:

1. Clean out with water or alcohol.

15.9 Measurement is not accurate Solution:

1. Clean out the upper & lower feeding sensors.



2. Calibrate the measurement in the system according to the above item 10.3.

15.10 Lift motor error



1. The table does not go down

Solution:

Switch off the machine. Press the table reset button and hold then switch on the machine. Release the table reset button when the table is going down.

2. The table does not go up when pressing



Solution:



Switch off the machine. Press the table reset button and hold then press



Release the table reset button when the table is going up.