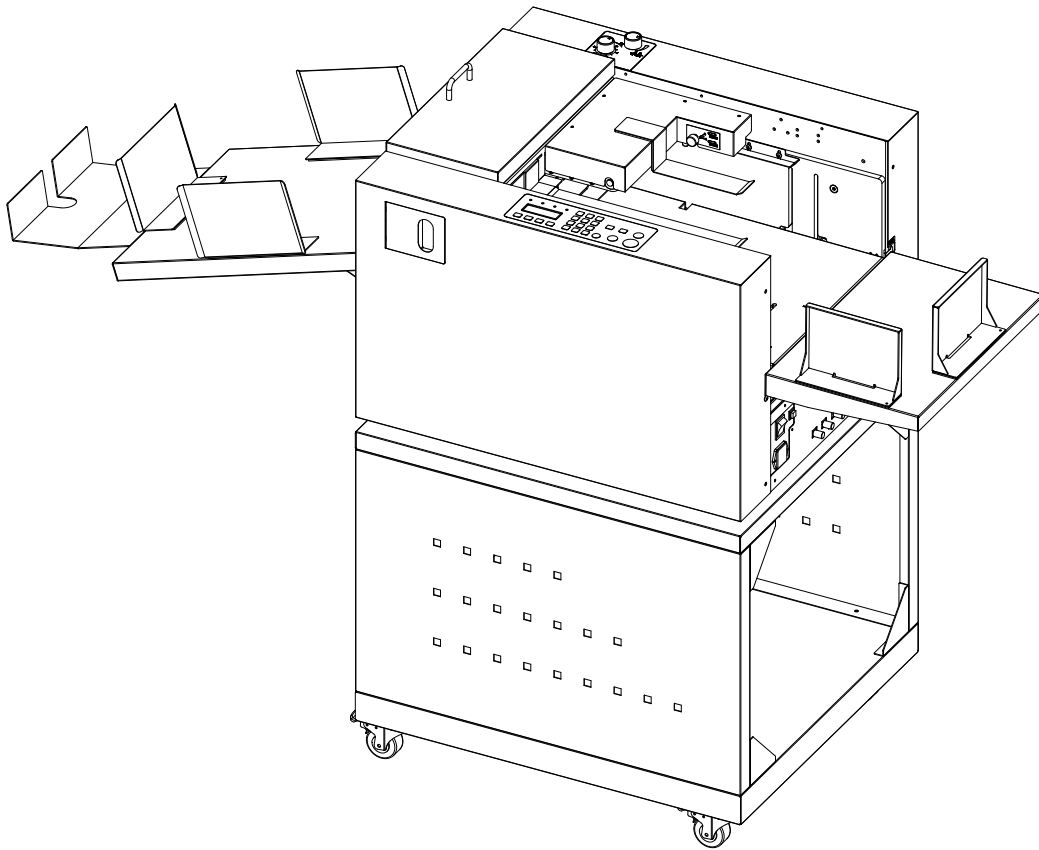


SF-20 digital creasing machine

Manual



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Chapter one INTRODUCTION

1.1 summarize

Thank you for choosing our products. In order to ensure you can use this product in correct way, please read the manual carefully, pay attention to every details of the operation. it will help you on production and improve your skills.

Our company has years of experience R&D team focusing on Precision mechanical design, electrical control, optical design etc. Benefit from advanced processing equipment and unique production process we make the qualified components and machines.

The AUTO CREASER SF-20 is a product developed by us based on our technological superiority and production capacity. The processing position is digital control with creasing and perforating two functions in one. The working width is 330mm, paper thickness 70-350g, max. Paper working length 650mm, Max. 32 creasing times on one paper. Especially with crimped paper anti-jamming patent technology, long paper processing very little skew, 300 grams of coated paper dotted line suppression (also can be coated paper) and other performance industry leading. Multi-functional design and a wide range of paper, more stable mechanical properties of the support, hope this machine will makes your work perfect and help you a lot.

1.2 machine specification

Machine length	1560mm
Machine width	560mm
Machine height	480mm
Machine (with box) height	1045mm
Creasing paper thickness	70g-350g/0.07-0.35mm
Perforation paper thickness	70g-200g/0.07-0.2mm
Input paper size	148x130mm ~ 330x660mm
Creasing speed	3500 pages/H
Min. Crease distance	1mm
Min. Distance from the edge	5mm
Creasing precision	±0.3mm
Creasing quantity on one paper	0 to 32 times
Count function	Positive and negative counting
Workgroup storage	30 group
Skew adjustment	±2mm
Indentation depth adjustment	Stepless adjustable
Feeding type	Suction feeding
Max.feeding paper	100 m m
Blowing volume regulation	Stepless adjustable
Paper separation regulation	Stepless adjustable
Transverse indentation tool	1.0mm
Voltage	220V/50HZ/200W
Machine weight	78kg (N.W.)
Stand box (L*W*H)	560x670x640mm (Option)

Chapter two safety

2.1 Environment

Temperature: 10°C to 35°C

Humidity: 30% to 70%

Altitude: below 1000m

There is no corrosiveness gas, flammable gas, oil mist and so on in room

2.2 Do's and Don'ts



Do-Read this manual and fully understand before the operation.



Do-Check the plug and machine voltage and frequency to your main supply, and that the socket has a correct working earth lead for this single insulated machine



Do-make sure all safety covers are in place. The top covers have an interlock switch which will disable the unit if removed.



Do-disconnect the power before clean the inner side



Do-unplug the cord if you won't use the machine for a long
While



Don't-install the machine on an unstable ground



Don't-operating with wet hand,especially plug or unplug the cord.



Don't-wear long hair,loose fitting clothes or put your fingers into the creasing unit nip,while the operation..



Don't-place any receptacles with any liquid on any surface of machine.



Don't-put other pieces,especially tiny pieces on loading table.



Don't-alter or uninstall the machine,unless by authorized engineer



Don't-touch any running parts while running

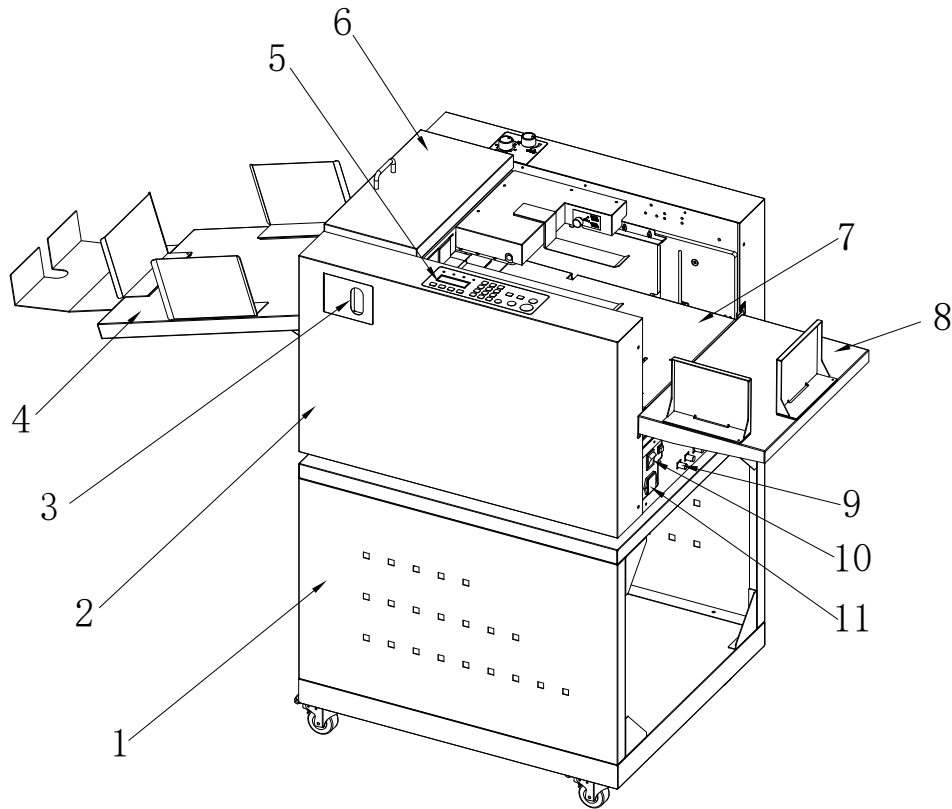


Don't-shut down the machine while running

If the machine become heat,smoke,or smelly,shutdown at once,disconnect the core,and contact the maintenacnce staff.

Chapter three Main parts

3.1 Indentation machine diagram

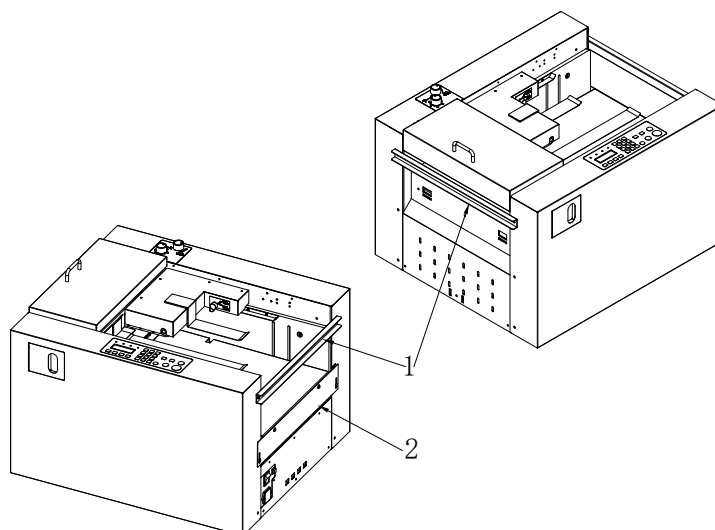


NO.	parts	Description
1	Stand box	SF-20 can put on the stand box
2	SF-20 creasing	Paper feeding and creasing
3	Blade change	To change the blade easily
4	Paper collect	Receiving the paper after crease
5	Control panel	Input the data
6	Upper cover	Isolated operating unit
7	Feeding desk	Make paper ready for feeding
8	Extend feeding desk	Will be needed when paper is long
9	Extra blade box	To keep the non using creasing/perforation blade
10	Power switch	ON/OFF

11	Power socket	For system power
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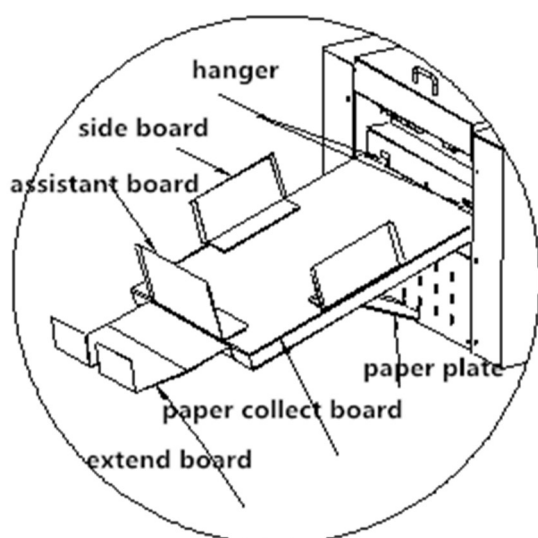
Chapter four machine installation

4.1 Demolition of guard



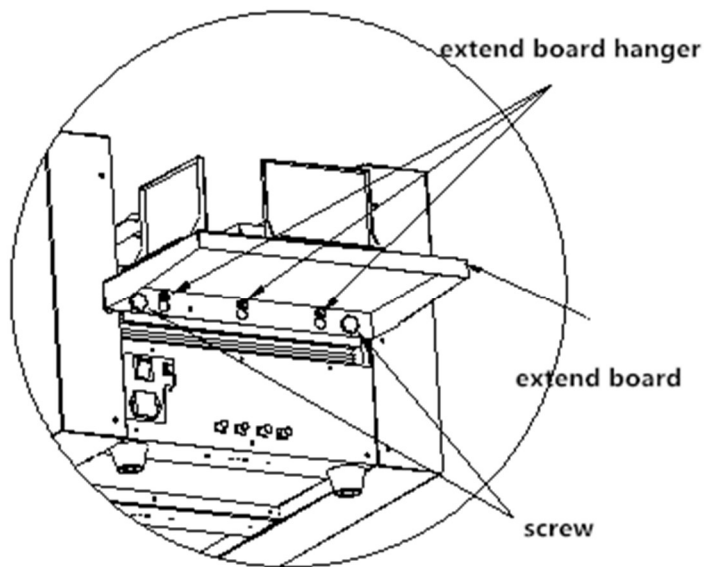
1. Un pack it , install the parts as per above illustration Withdrawing the cover marked 1 and tight the screw,withdrawing the cover marked 2,tight screw the left and right.The two handle screws on the lifting plate are set aside for use.

4.2 paper output parts installation



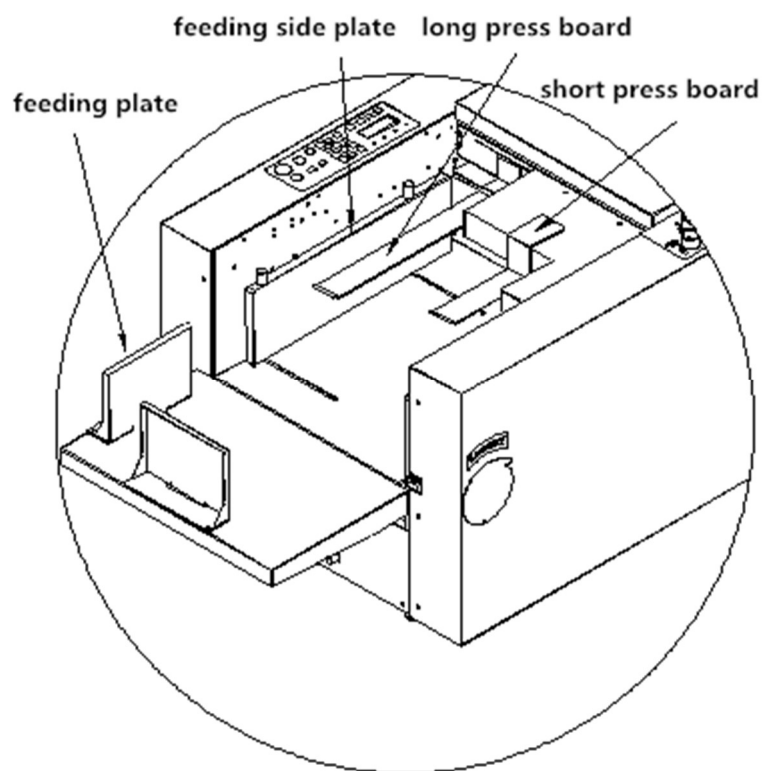
Install the paper collect board in to the two hangers, make sure paper plate lock in to the machine, put the other parts correct same as the photo.make sure all install well before using the machine.

4.3 extension board for paper table Installation



1. Put the extend board to the hanger
- 2.get the screw (which unscrew on 4.1),screw them as show on the photo

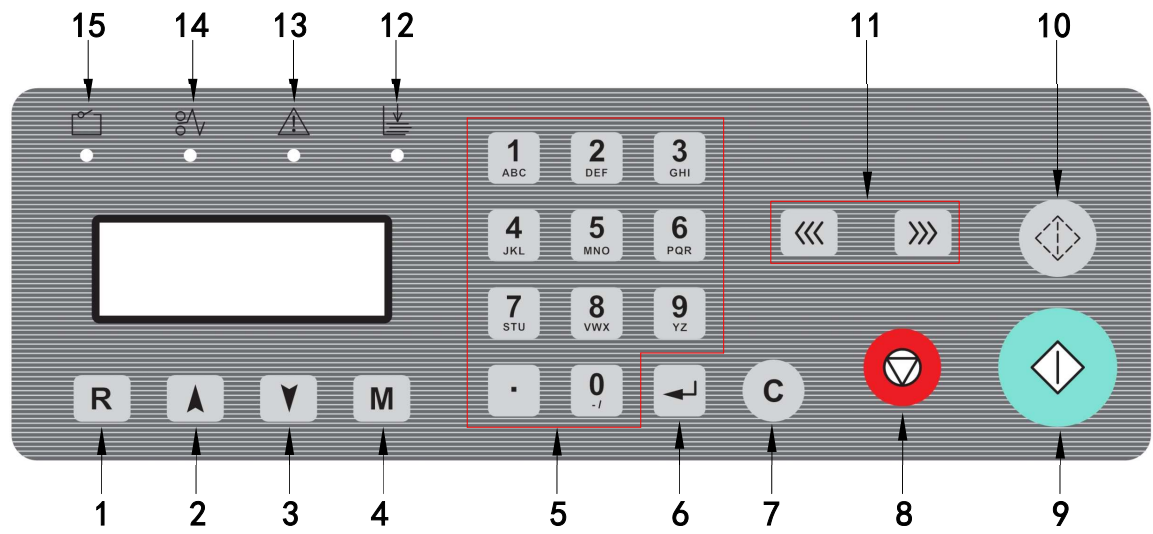
4.4 press board and feed board installation



Put the paper into the right place based on the paper size

Chapter five machine operation

5.1operation panel introduce



NO.	button	Description
1	RESET	Counter reset
2	SCROLL	Turn the page
3	MODE	Change the modes
4	SCREEN	Display information
5	NUMBERS	Input data
6	ENTER	After the data input, press it to confirm
7	CLEAR	Clear the data or clear the error display
8	STOP	Stop the machine
9	START	Run the machine
10	TEST	Machine will stop after one sheet
11	UNJAM FORWARD/ REVERSE BUTTON	When paper jams, press them to move rollers, so that the paper can be easily cleared.
12	INDICAT OR- NO PAPER	If the machine didn't find a paper in long time,it lit and return a error report 1(no paper or paper entrance jam)

13	INDICATOR- BLADE JAM	If the crease motor locks, it lightens and returns an error report 4 "CR Motor Error"
14	INDICATOR- PAPER JAMMED	If the paper is jammed inside the machine, it lightens and returns an error report 2 (Jam at infeed) or 3 (Jam at outfeed)
15	INDICATOR- SAFETY COVER	If the safety cover is not well setting, it lightens and returns an error report 1 (cover open)

5.2 Operation and function

5.2.1 Main operation:

Plug the machine, turn on the power, machine will do self-test, then jump to operation mode automatically.

Ver:1.2.4
S/N:123456789

Ready 0/0
[1]0.0 [2]0.0

Sheet:
Crease:

Ready 0/0
[1]10.0 [2] 20.0

[3]30.0 [4]40.0
[5]50.0 [6]60.0

Now the machine will remember the last setting data, in this condition, if press "start button" or "test button" it copy the last command.

When press the "Mode" button, it will jump to Crease data input, [1] will flash automatically, you can input data from 0-900, it accurate to one decimal place.

After it finished, press "enter" button. [1] stop flash and [2] start flash, and you do the same operating until finished total 32 data input or you press "enter" button when the data is "0" so it will jump to Home Screen. Press "start" or "test" button, machine will work automatically.

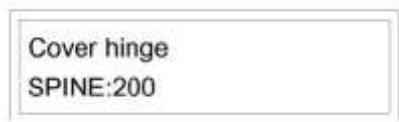
"0/0" indicate "pass paper quantity/setting paper quantity, when pass paper quantity reach to setting paper quantity, the machine



stop. Under ready mode, press "reset" button can input setting paper quantity, then press "enter" button. Double press "reset" button, it clears all data.

The Max. data is 900, when digit is 0 means haven't setting paper quantity.

Under ready mode, press "SCROLL- up" button, it will jump to quantity count
total working times: total counter of sheets
total creasing times: total counter of crease



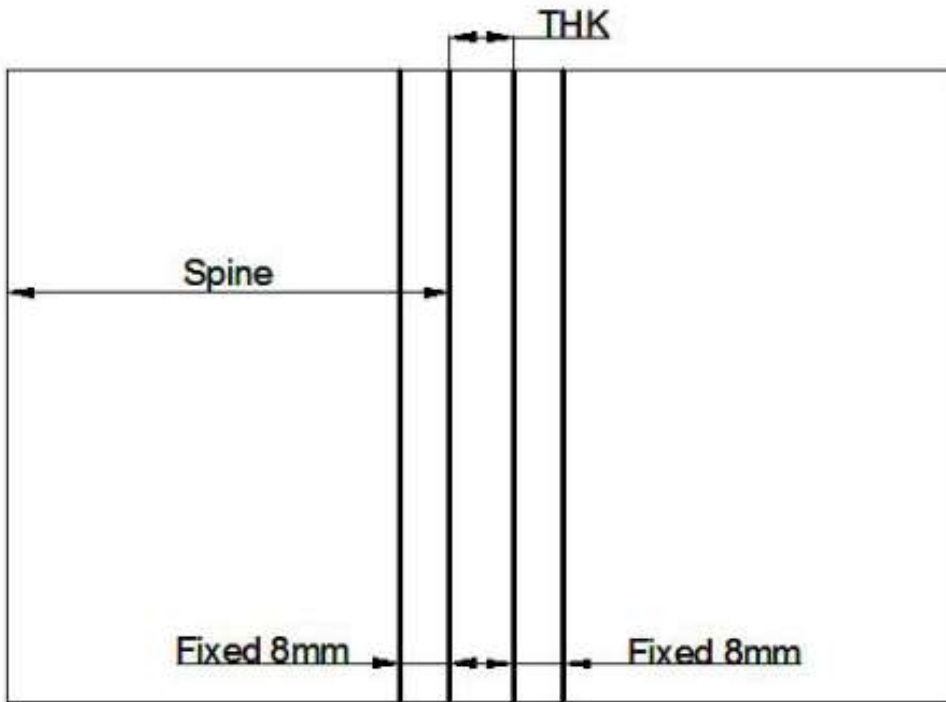
In count view, press "SCROLL-down" button
Ver: Software version

S/N: Serial Nr,
factory setting, it can not be overwritten unless main board is changed

5.2.2 Cover hinge: This is a mode specially for book cover make

Under ready mode double press "mode" button it will jump to Cover hinge, Spine:

the first spine line to the leading edge.
 THK: the thickness of the book, namely the spine width.



5.2.3 progressive crease:

User do not need edit different crease data or adjust the position on manual creasing machine.

On ready mode press three times "mode" button ,it will jump to progressive crease.it has two style:increase/decrease mode & flat back mode.users can press 1 or 2 to choose.

Increase qty : 0
Decrease qty : 0

increase/decrease model also has three progress type:

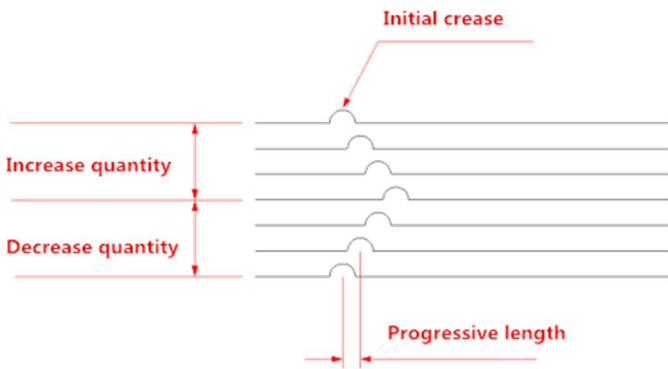
Initial position: 0
length : 0

(Increase&decrease) (increase)
 (decrease)

Ready

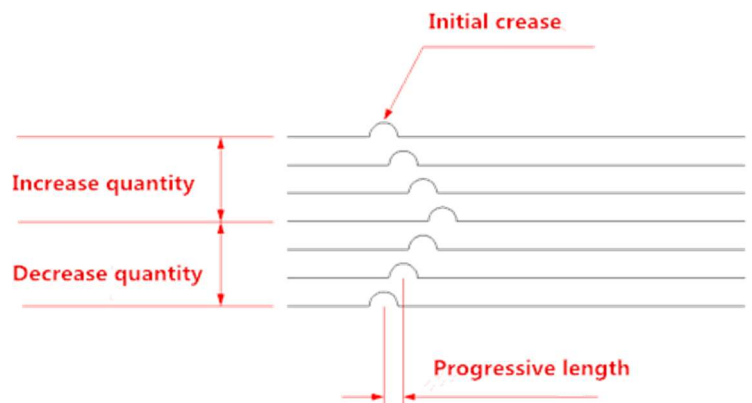
0/0

Progressive Inc/Dec ▼



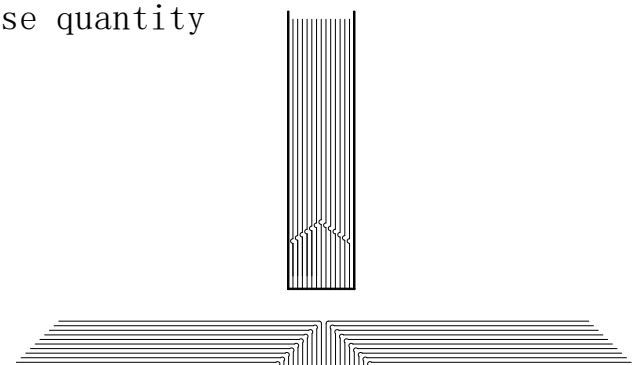
Initial position:the distance from the paper edge to the first crease position,press"enter".Progressive length:increase or decrease based on the Last data.press "enter" button.Increase qty:the increase of paper quantity. Decrease qty:the decrease of paper quantity.press "enter" button then it will jump to ready mode.we can use page scroll to check if the data is setin correct or not.after all is ok,we press "start" button to work.

Diagrammatic drawing:
Increase-Decrease



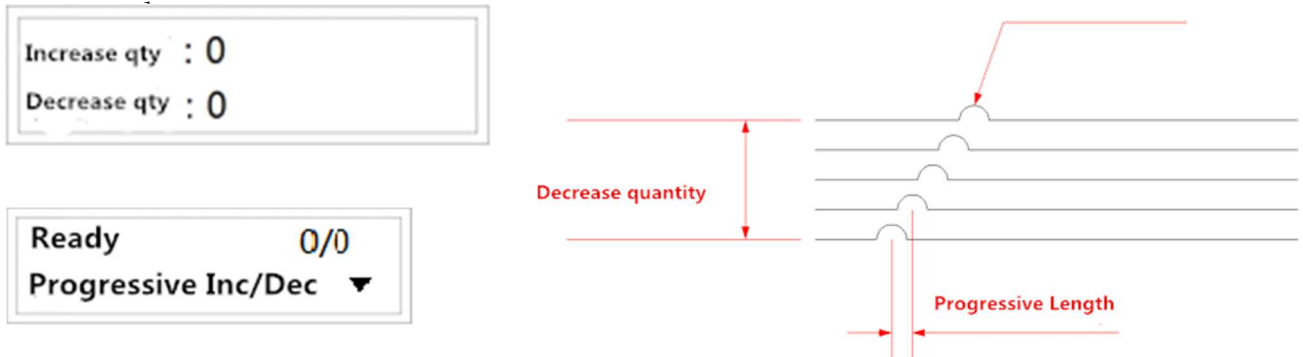
Increase progressive crease: Input the data of increase paper quantity and input “0” on the decrease quantity

Diagrammatic drawing:



Decrease progressive crease: input the data of decrease paper quantity and input “0” on the increase quantity

Diagrammatic drawing:



Progressive Increase/Decrease was widely used on perfect binding range.

Even the thick binding book can easily open

Flat back :

1st Crease: initial crease on the first paper.

back crease: second crease on the first paper.

Press enter button it jump to;

space length: value increase according to the

above crease data automatically

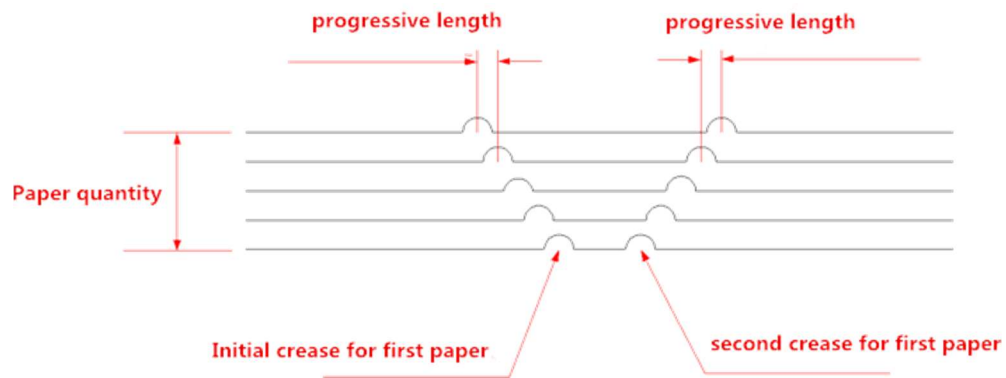
paper quantity:the crease paper quantity.

Press enter button; it jump to ready mode

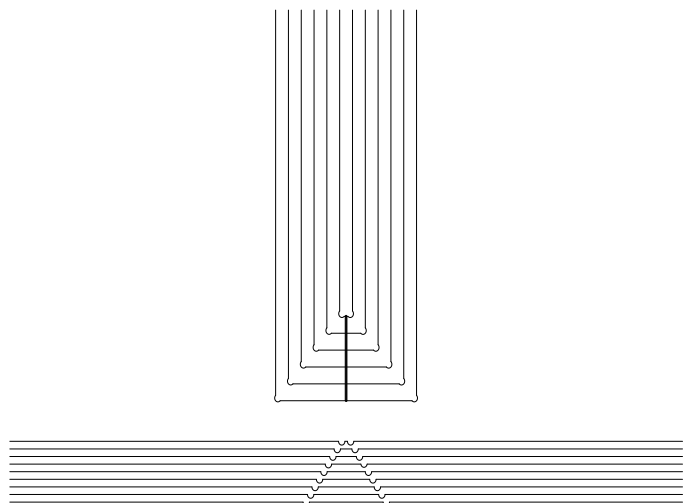
and we see as the left photo shows,

If everything ok,we start work.

progressive(flat back) drawing:



flat back model crease
was widely used on wire
stitching binding. it is
suitable to flat back
perfect binding



1st Crease : 0
back crease: 0

space length : 0
paper quantity : 0

5.2.4 Recall job and save job:

Frequently used crease data can be saved and recalled, so that user don't have to input data each time. The system at most saves 30 jobs.

Recall Job Code:1

On the ready mode, press four times "M" button, you can input 1-30 digit to recall the job

Save Job Code:1

On the ready mode, press five times "M" button, you can input 1-30 digits to save job. it will return a success after it saved. (remark: data will be sweep away if you save another data in same place)

Save Job Success

5.2.5 Speed:

Speed 1=Low 2=High*

On the ready mode, press six times "M" button to choose the speed 1 or 2 press "enter" to confirmed

5.2.6 Recalibrate: If the Crease line gap is stretched or shirinked, the crease tolerance will be accumulated as crease line increased. For a quick calibrate, we operate on Recalibrate mode.

Recalibrate
Length: 420

Insert the Paper...

Input the real distance between two crease
0

Input the real length of the paper as following (say 420mm) press "enter", machine runs automatically double times. It will jump to "input the correct crease length" (this is very important, Measure the distance to the nearest decimal point) press enter.

It will shows OK or failure.

If failure, the problem maybe the paper length is not suitable or test crease ength and real length too much different.

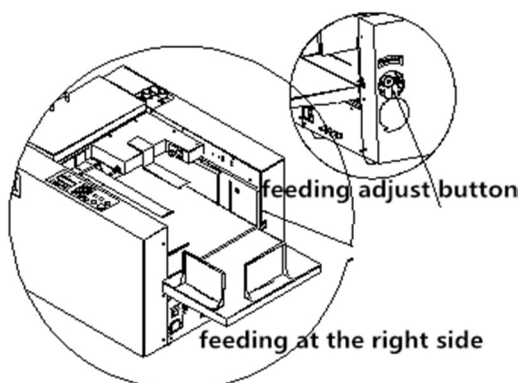
(1)
Failure
Length:

(2)

5.3 hardware setting

5.3.1 skew adjustment

If it is found t he crease is skewed (not vertical to the paper side), you need to adj ust the feeding angle to get a satisfied performance .

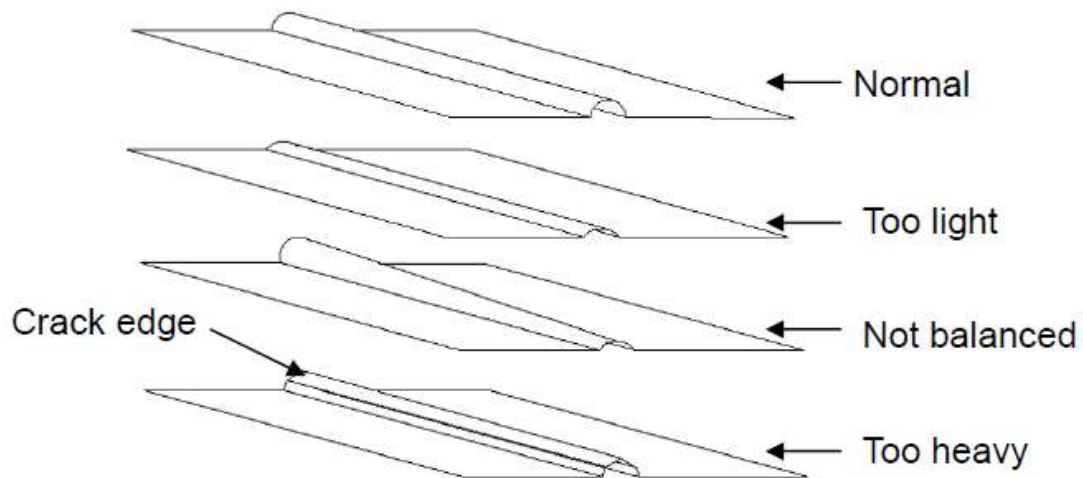


Fixed side guide is the hardware where we adjust the skew. As per, above picture, the guide is fixed by 5 screws, rear one is through a slot hole. We can loosen the screw, and move the side guide a bit, so that the feeding direction is micro adjusted to compensate the skew issues.

5.3.2 Crease depth

Crease depth is important to crease quality. It just depends on the gap between male die and female die. Depth should be adjusted according to the paper thickness. Low Depth will perform a not clear crease. but a high Depth may cause cracking, cause system take it as a double feed.

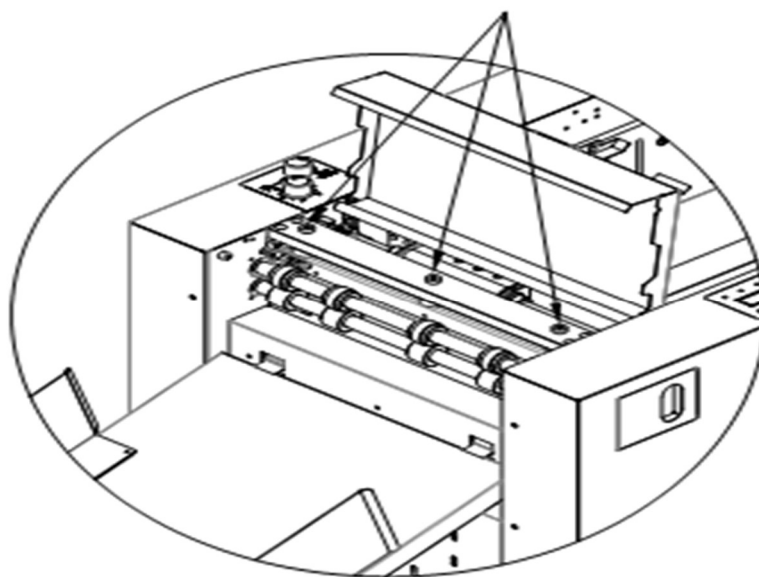
The adjustment is also needed if the crease depth are not balance on both sides.



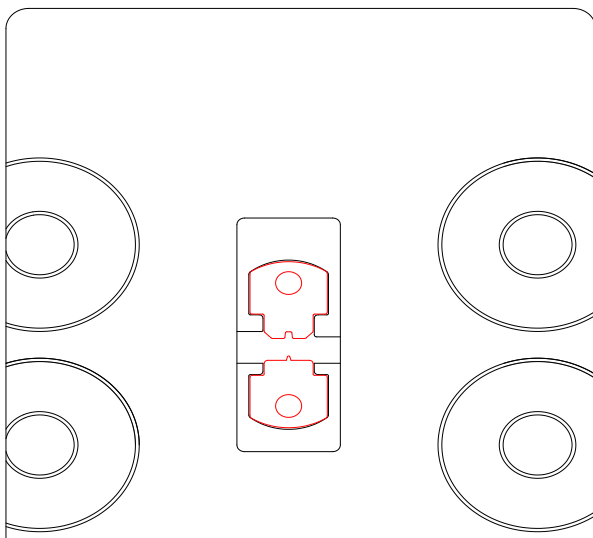
To adjust the Depth:

Open the safety cover and you will see following picture

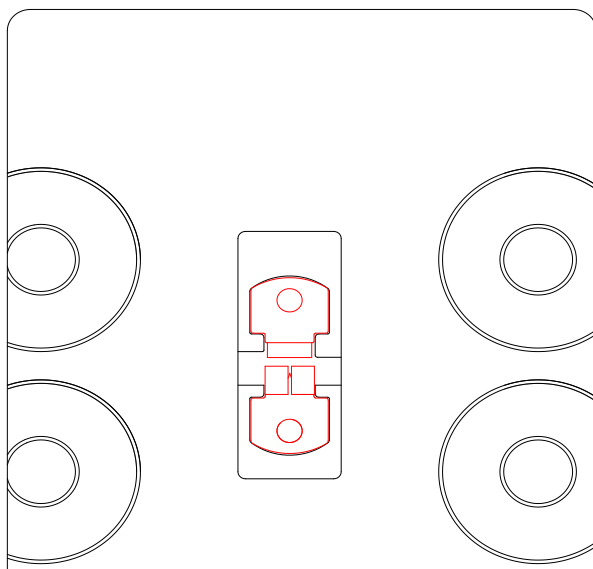
Find 3 screws on both side, turn the Allen screw according to the label beside to make the crease line deeper or light



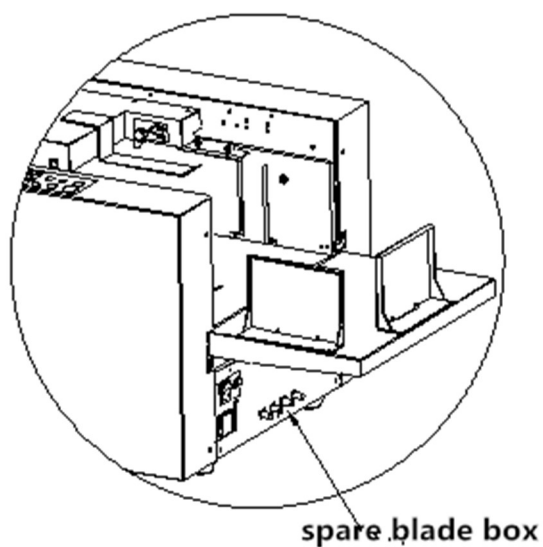
5.4 OPTIONAL PARTS



Crease tool install: open the safety cover, put the two crease blade same as the photo shows.



Perforating tool install: open the safety cover, put the two crease blade same as the photo shows.



In the photo which marked red is the tool box

6. Chapter six TROUBLE SHOOTING

6.1. Crease cracking or Motor error (error code on display-4)

This occurs:

- 1)feeding too much paper one time
- 2)the upper blade is set too low
- 3)If the card is too thick (over 400gsm)

Solutions:

- 1.Be careful to use the direction button of the wrong cue interface, and use hand assist to remove the paper
- 2.Choose right paper, set Adjust the depth, according to 6.3.2
- 3.contact with engineer

6.2 Paper jam (error code on display-2 -3)

This occurs:

- A. paper too thin (the paper will crumple)
- B. if there is some waste present in the paper path.
- C. if there is too much ambient light shining on the IR sensor
(especially
direct sunlight or neon light which will send fake paper jam signal)
- D. the papers are curled or the blade is set too low

Solution:Press the button as below photo and take away the paper from the machine



6.3. Bubbling in laminated stock

This occurs if you try to crease laminated stock ,the curve of the crease will not adhere to the film

Solution: make a less deep crease or use a better film.

6.4. Not a deep crease

This occurs :

-1)If the card is too thick

Solution: The paper is out of standard spec, then you have to customize crease dies, with deeper female die.

-2)the upper blade is set too high

Solution: Adjust the depth, according to 6.3.2

6.5. Need more wider crease

Solutions:crease two times and the distance between two crease line less than 0.5mm,so two crease superposition into one,it become wider

6.6. Infeed skew

Check if the paper is square,

No-Solution: Use standard paper or adjust the side guide to get a satisfied performance.

Yes- Solution: Adjust the fix side guide according to 6.3.1

6.7.there is paper coating on the roller

The roller will accumulate the layers of the paper to be processed. These residues may cause friction to decrease, resulting in skidding.

Solutions:Wash the roller with alcohol

Chapter seven Maintenance

Maintenance is essential to the machine, and necessary maintenance can extend the life of the machine and improve mechanical efficiency. Maintenance work mainly includes two aspects: user maintenance and technical maintenance.

User maintenance

When the machine is used for a long time, dust or scraps of paper will accumulate between the mechanical parts and adversely affect the use of the machine. So operators should regularly clean the paper scraps and dust inside the machine. For example, each production of 15000-20000 pieces of maintenance. The rubber roller and the screen are regularly cleaned with alcohol, and we should pay attention to the working environment of the machine, ensuring the environment is dry and clean, and there is no direct light.

Technical maintenance

It is also important to carry out technical maintenance on a regular basis. It is mainly carried out by technical personnel, including regular inspection of the loss of parts, replacement of damaged parts and lubricant.