

Product instruction manual
OmniFlow 380

MATRIX[®]

OMNI-FLOW



The OmniFlow has been designed to be user friendly, however we strongly recommend you take a few minutes to read through this manual to ensure correct operation.

Keep this manual safe for future reference.

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Chapter 1 Instructions

1.1 Preface

This manual only applies to Omni-Flow 380. Before using the machine, please read the instruction manual carefully first. Please keep the manual properly so that consulting it at any time in the future. Any question while operating please contact our technicians.

1.2 Technical parameters

Items	Omni-Flow 380	
	Omni-Flow 380 only	+Working storage +SF3000+33TN
Max. feed (width*length)	380*650mm	330*450mm
Min. feed (width*length)	125*210mm	210*297mm
Max. output (width*length)		330*225mm
Min. output (width*length)		210*148.5mm
Paper thickness	100g-350g/0.1-0.35mm	70g-100g/0.07-0.1mm
Paper waviness	Less than 5mm	Less than 5mm
Max. speed (For A4)	8400 sheets per hour	1300 books per hour (3 A4 sheets saddle stitching)
Trimming capacity	/	25 sheets (25 sheets of 70gsm copy paper and one 128gsm coated paper)
Trimming waste		0 or 2~20mm, manually adjust to 40mm.
Stitch and trim accuracy		±0.5mm
Loading capacity	200mm	200mm
Power supply	AC 220V	AC 220V
Power		1700W
Feeding type	Top suction in the middle	Top suction in the middle
Blowing adjustment	Easy adjust	Easy adjust
Suction adjustment	Easy adjust	Easy adjust
Feeding speed	Adjustable	Adjustable
Machine weight	73kg	

Notes: The machine is under upgrading, information in this manual can be changed without notification.

Chapter 2 Safety

2.1 Environment

Temperature: 10°C to 35°C

Humidity: 30% to 70%

Altitude: Below elevation 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 contact the local maintenance center before you are about to move the machine.



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 Vivid Laminating authorized engineer.



Don't touch any running parts while running.



Don't shut down the machine while running.



Don't put heavy matter on machine or shock it.

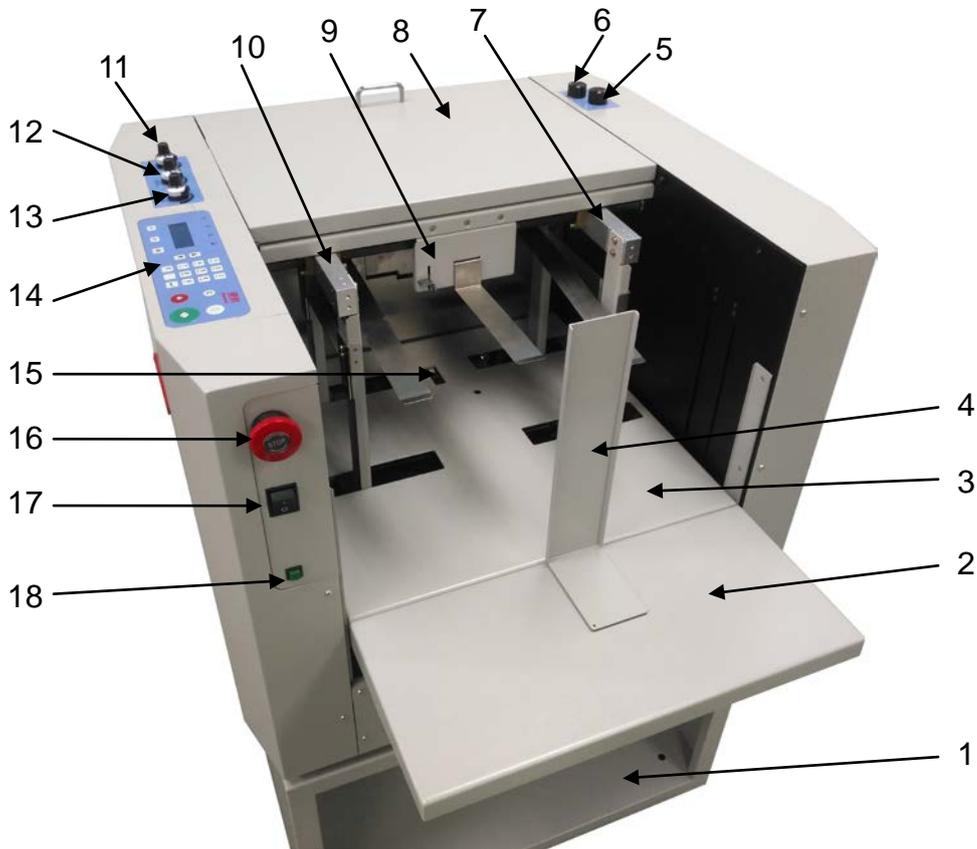


Be careful of any metal or flammable thing in internal machine, or it may cause fire or electronic shock. If it happens, first shut down the power, disconnect the cord, and then contact the technician.

If machine becomes heat, smoke, or smelly, shut down at once, disconnecting the cord, and contact the maintenance staff.

Chapter 3 Main parts

3.1 General view



No.	Name	Description
1	Carbinet (Optional)	Support the machine.
2	Feeding extension table	Hold longer sheets.
3	Feeding table	Hold sheets.
4	Back stop guide	Protect the sheets from being blown backward.
5	Segregator adjust knob	Adjust the gap between the segregator finger and feeder belt according to the paper thickness.
6	Blowing gate adjust knob	Adjust the blowing air according to the paper thickness.
7	Right side guide	Hold the paper on the table.
8	Top cover	For security.
9	Upper limit assembly	Adjust the distance between the top sheet and the feeder belt.
10	Left side guide	Hold the paper on the table.
11	Blower strength adjust knob	Adjust the blower according to the paper thickness.
12	Suction power adjust knob	Adjust the suction according to the paper thickness. Turn clockwise to increase the suction power.

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13	Speed adjust knob	Turn clockwise to increase the speed.
14	Key panel	Input or control.
15	Paper detect sensor	Detect the paper on the feeding table.
16	Emergency switch	Emergency stop the machine.
17	Power switch	Turn on/off the machine.
18	Feeding table release button	1. When the feeding table gets stuck at the top, press this button together with the stop button to release the feeding table. 2. When the feeding table gets stuck at the bottom, press the button together with the start button to release the feeding table.

3.1 Inside

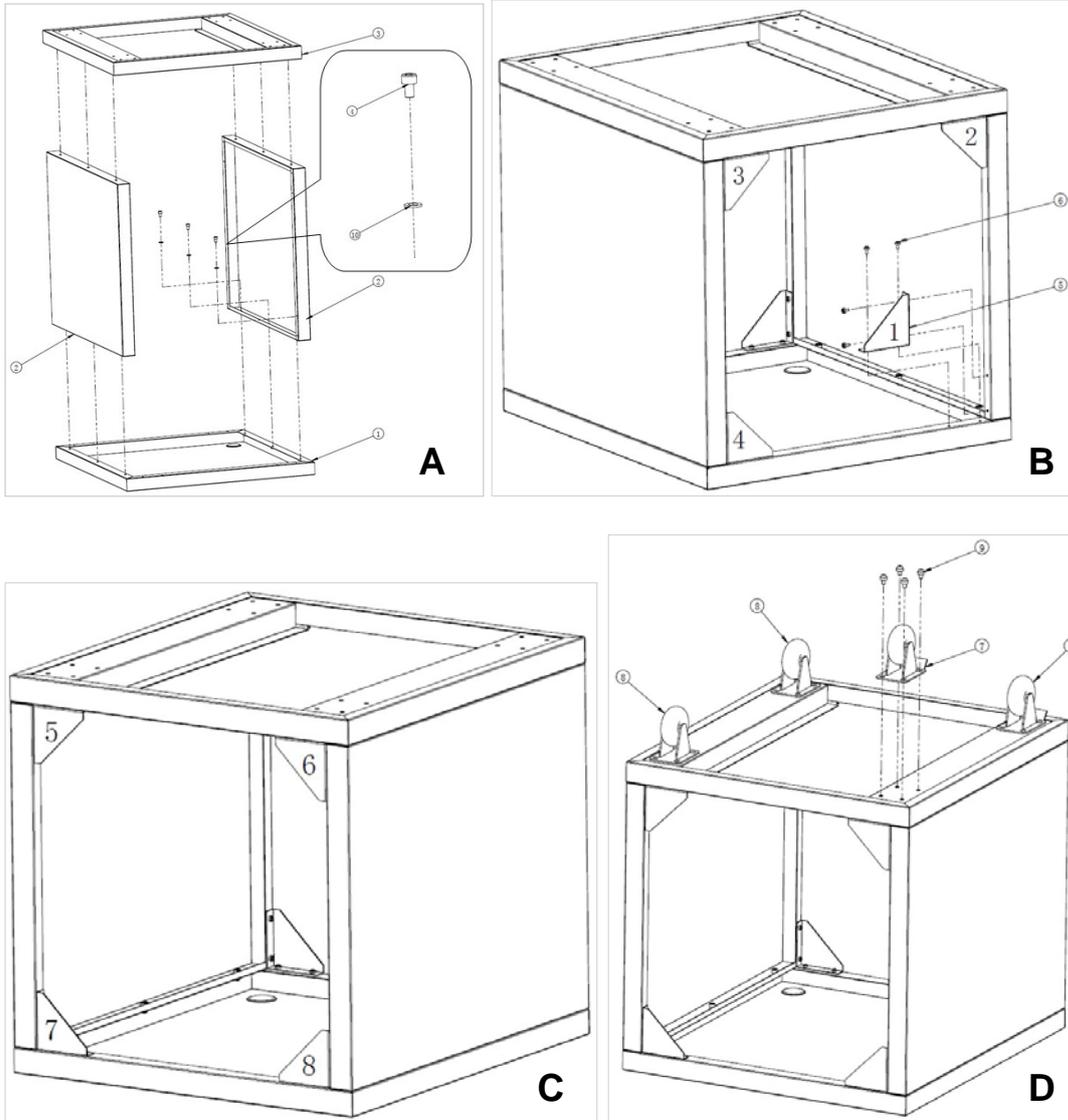


No.	Name	Description
1	Feeder belt	Feeding paper.
2	Suction assist fan	Help to grab the both sides angles of paper when feeding.
3	Top ultrasonic sensor (Optional)	Detect the multiple feed.
4	Exit sensor	Detect and count the passing paper.
5	Bottom ultrasonic sensor (Optional)	Detect the multiple feed.
6	Suction assist fan	Help to grab the both sides angles of paper when feeding.
7	Top safety cover	For protection.

Chapter 4 Installation

4.1 Carbinet installation (Optional)

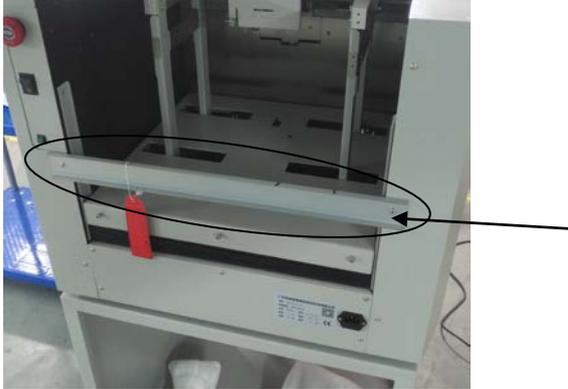
Install the parts by following steps A,B,C and D.



No.	Name	Qty	No.	Name	Qty
①	Top bottom plate	1	⑥	Cross pan head shoulder screw M3X6	32
②	Front side plate	2	⑦	Castors with lock	2
③	Bottom plate assembly	1	⑧	Castor	2
④	Hexagon socket head cap screw M5X8	12	⑨	Cross pan head shoulder screw M6X10	16
⑤	Triangular stiffening plate	8	⑩	Spacer Φ 5	12

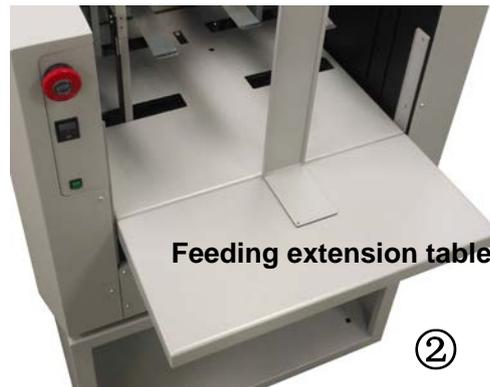
4.2 Remove the extra parts

As shown in the following picture, we need to remove the bar with the label on it. This is used to protect the feeding table during transportation.



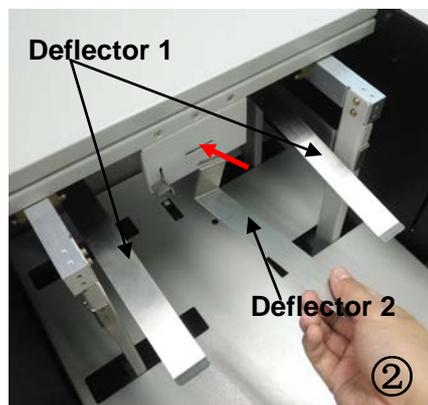
4.3 Feeding extension table installation

As shown in picture ① and ②, there are three screws for the extension table. Remember to tighten up the screws after you hang the extension table on.



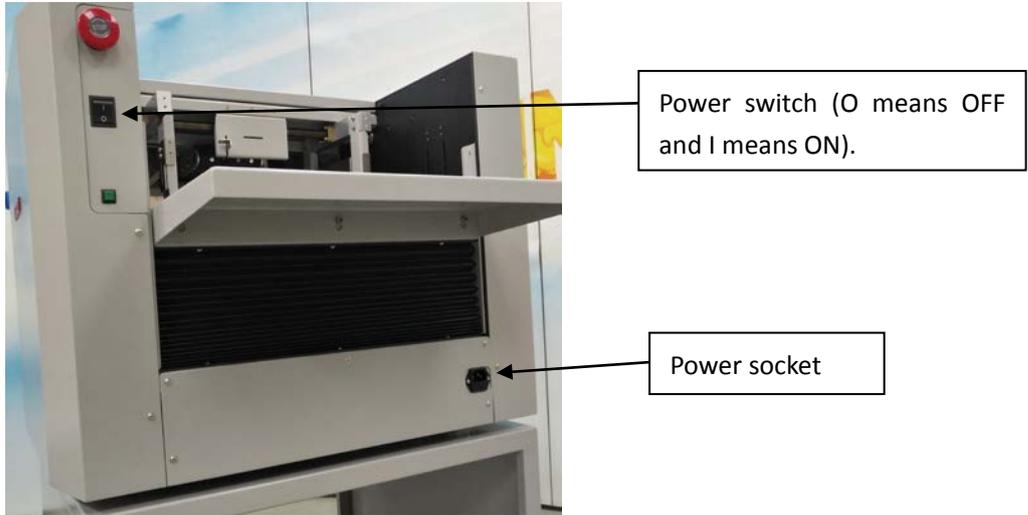
4.4 Paper deflectors

As shown in the following pictures, the deflector 1 need to be 10mm away from the side edge of paper.



4.5 Power socket and switch

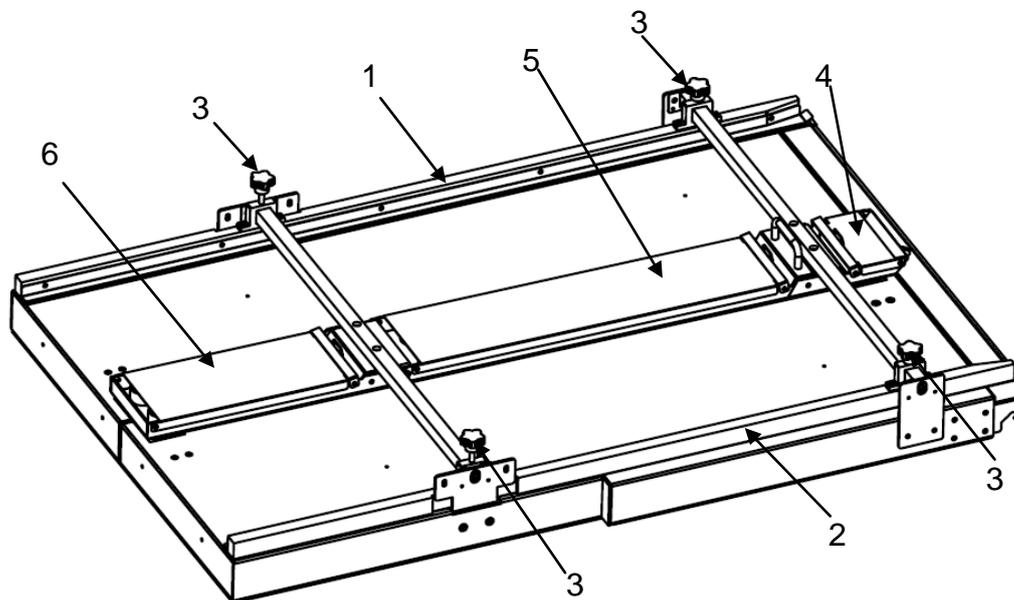
As shown in the following picture, the power socket and switch are in different sides.



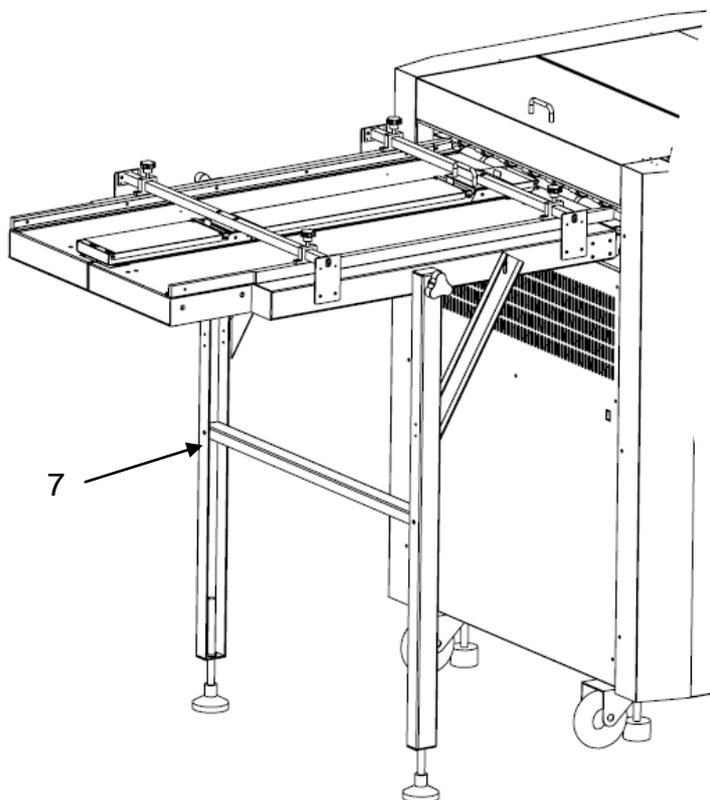
	<p>Power socket: AC 220V/50HZ. May cause the product unable to use or the product fatal damage or the injury human body for voltage not in the standard rang.</p>
	<p>There are two 5*20/6A,250V fuses in side. One is spare.</p>
	<p>Power cord It can carry above 10A current. 1. Do not unplug the power cord during operation. It may cause electrical damaged or mechanical stuck. 2. Unplug the power cord during maintaining or installing parts.</p>
	<p>Grounding mark Do not remove or touch by hand during power-on. Bad grounding can hurt people.</p>

4.6 Omni-Flow 380+Transfer station (Optional)

Transfer station:



Transfer station installation:

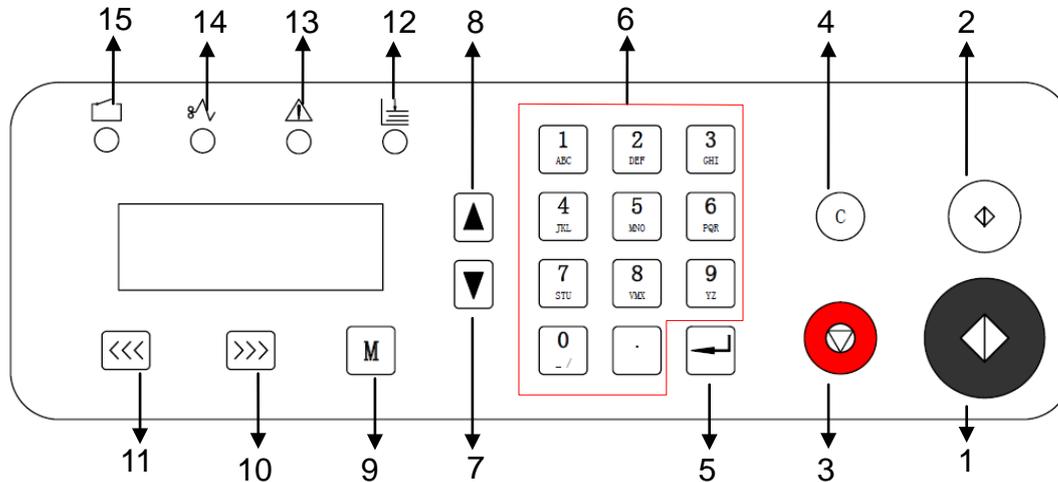


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No.	Name	Description
1	Left side guide	Hold the sheets and make the sheet straight automatically. The side guide should be 3 ~4mm away from the sheet side edge in order to let the sheet go through smoothly.
2	Right side guide	Hold the sheets and make the sheet straight automatically. The side guide should be 3 ~4mm away from the sheet side edge in order to let the sheet go through smoothly.
3	Side guide fix screws	Use to tighten the side guides.
4	Ball holding bracket	Place steel balls.
5	Ball holding bracket	Place steel balls. And if the paper is wide and thin, we can take out some balls in order to decrease the skew adjusting force. It will help the feeding.
6	Ball holding bracket	Place steel balls. And if the paper is wide and thin, we can take out some balls in order to decrease the skew adjusting force. It will help the feeding.
7	Table supporting bracket (Optional)	Support the table.

Chapter 5 Operation

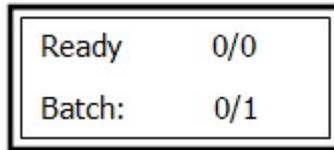
5.1 Key panel



No.	Name	Description
1	Start	Run the machine.
2	Test	It's used to adjust the two machines lined up. Use the button to run one sheet and then it will stop at the exit. Then you can adjust the connecting machine to make it on the line.
3	Stop	Stop the machine.
4	Clear	Clear the input.
5	Confirm/Enter	Confirm the input.
6	Number	Input the values.
7	Page down	It can be used to drive the side in standby mode.
8	Page up	It can be used to drive the side in standby mode.
9	Mode	Select different modes.
10	Backward	It can be used to drive the jam paper out.
11	Forward	It can be used to drive the jam paper out.
12	No paper indicator	The indicator will be illumined if no paper on the table.
13	Error indicator	The indicator will be illumined if errors happen.
14	Jam indicator	The indicator will be illumined if paper jam inside.
15	Top cover indicator	The indicator will be illumined if top cover opened.

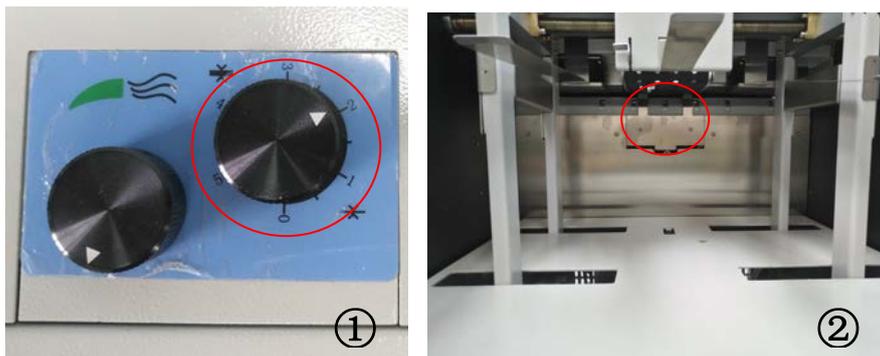
5.2 Standby

As for the “Ready 0/0”, the left 0 means quantity of the paper being run and the right 0 means the preset quantity of paper. When the being run quantity reach the preset quantity, the machine will stop automatically. In standby interface, we can use number keys for quantity preset and “C” button to clear the quantity. The largest input is 999.

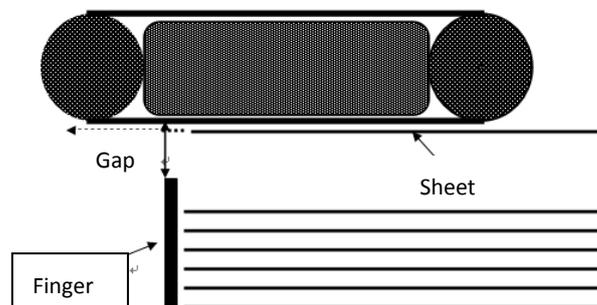


5.3 Hardware setting

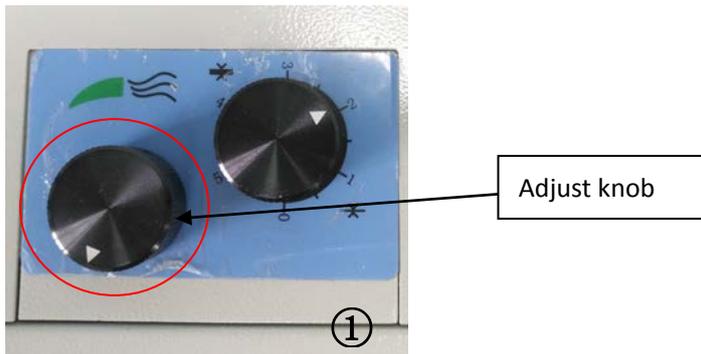
5.3.1 Segregator finger adjusting knob



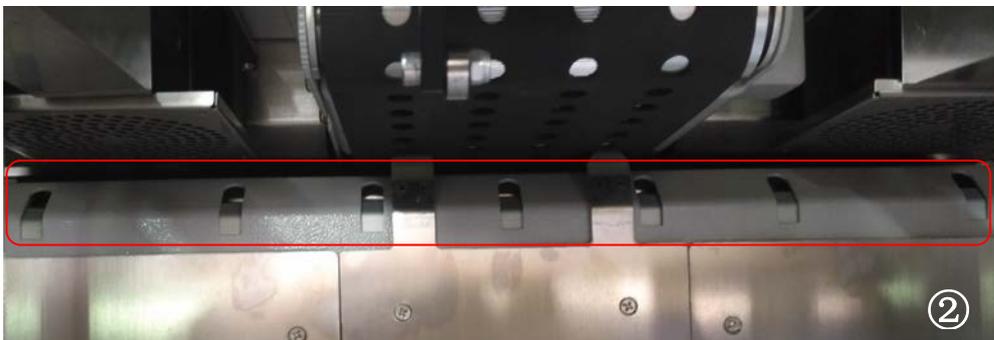
As shown in the following figures. Turn the knob anticlockwise can increase the gap while clockwise decrease the gap. When the sheets double fed, we need to decrease the gap. When the sheets get stuck at the entrance, we should increase the gap.



5.3.2 Blowing adjusting knob

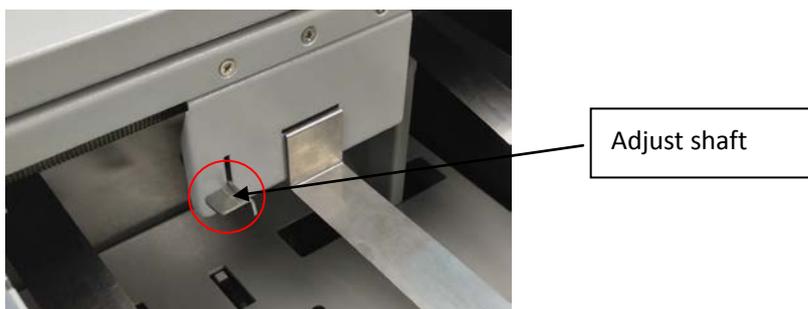


Turn the knob clockwise can weaken the blowing. When we run smaller and thinner sheets, we can try weakening the blowing to make it fed smoothly and stably.



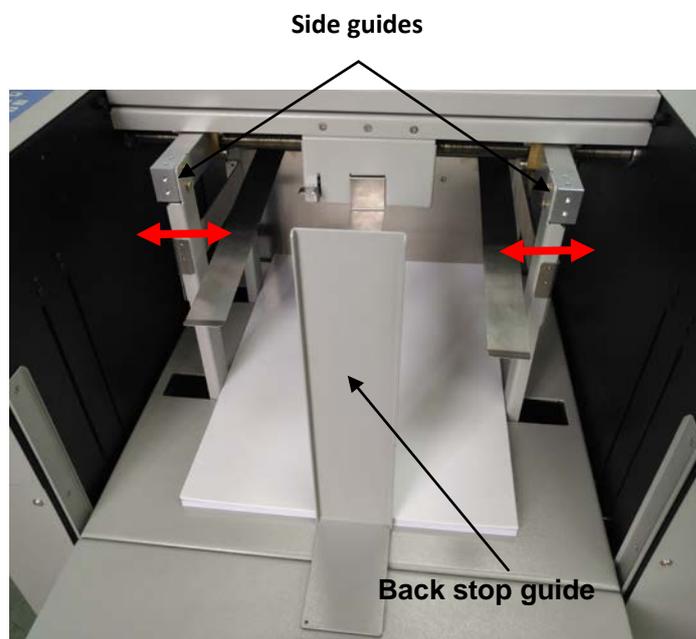
5.3.3 Upper limit height adjustment for feeding table

Turn the shaft upward the table will rise higher. If the sheets get stuck when feeding, we can turn the shaft downward a little.



5.3.4 Side guides setting

In standby mode, we can use the page up/down button to move the side guides according to the width of sheets. Make sure the sheets can move smoothly in the feeding direction. Usually, about 0.5mm wider than the sheet width will be ok.



5.3.5 Suction assisting fan setting

Loosen the screws in the red circle area and move the fans to the sheet side edge. Then lock the screws.



5.3.6 Suction adjustment

As shown in the following picture, turn the knob clockwise to increase the suction. We can try increasing the suction for thicker and wider sheets while decrease the suction for thinner sheets.



5.3.7 Blower adjustment

As shown in the following picture, turn the knob clockwise to increase the blowing. We can try increasing the blowing for thicker and wider sheets while decrease the blowing for thinner sheets.



5.3.8 Positioning for connection of machines

Press the test button to feed one sheet. Then the sheet will stop at the exit. As shown in the following picture. Then we can adjust the connected machine to the correct position.



5.4 Set Batch

Press “M” to enter Set Batch interface. We can set the batch quantity. Shown in the following pictures. After confirming, it will enter the standby interface. Then we can set the sheet quantity for each batch. For example, we set 3 batches and 2 sheets for each batch on the machine. And then the machine will stop when it finishes running 3 batches and 2 sheets for each batch.



Notes: When the sheet quantity is less than the setting, the machine will stop. Then after we place more sheets on the table, it will continue the last job.

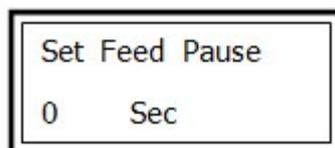
5.5 Set Batch Pause

Press “M” to enter the set batch pause interface. In this interface, we can set the batch delay time. It can be set from 1s to 99s.



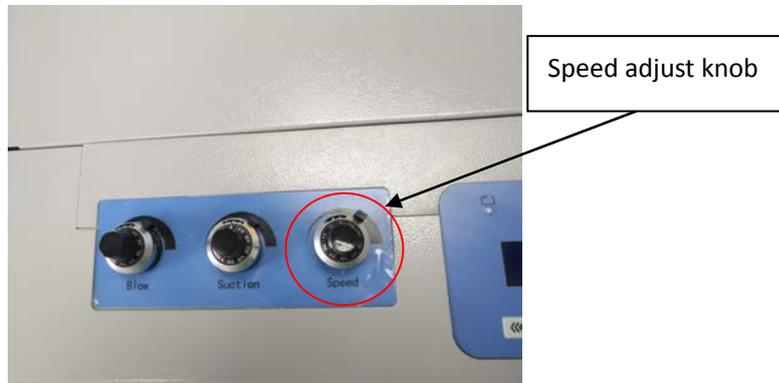
5.6 Set Feed Pause

Press “M” to enter the interface. We can set the delay time between each sheet fed into the machine. It can be set from 0 to 9s.



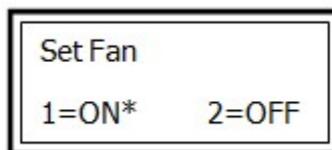
5.7 Check Speed

Press “M” to enter the interface. Then press the green start button. It will show the current running speed. We can use the speed adjusting knob to change the speed. Press red stop button can stop the test. Then press the stop button again to enter the standby interface.



5.8 Set Fan

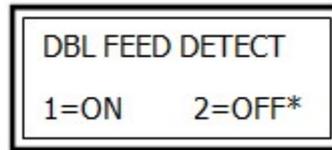
Press “M” to enter the interface. “1” is to open the suction fans and “2” is to close the suction assisting fan.



Notes: These two fans are used when we run the thicker and larger sheets. It can make these sheets feed more smoothly.

5.9 DBL feed detect (Optional)

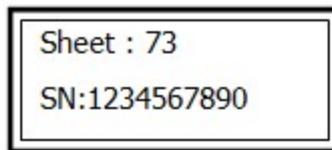
Press “M” to enter the interface. We can select to open or close the double feed detecting function.



Notes: The double feed detecting sensors are optional. If there are no double feed detecting sensors on the machine but the double feed detect is on, it will come up the error message.

5.10 Machine Information

Press “M” to enter the interface. The SHEET means the total sheet count and the SN means the serial number of the machine. This information is used for warranty service.

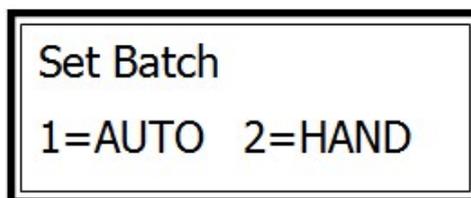


5.11 Aeolus38+Register+Stich folder (Optional)

Aeolus38 can be connected to stitch folder through Register. It has communicating port for the stitch folder.

5.11.1 Set batch

Press M to enter the batch setting interface. Then press 1 or 2 to select automatically or manually batch set.



5.11.2 Manually batch set

Press 2 to select manually batch set. **Copi:2** means the quantity of books is 2. That is to say it includes 2 batches. **Pa:4** means each batch having 4 pieces of paper.

HAND Batch Set	
Copi : 2	Pa : 4

Notes: The **Copi** can be set from 0 to 999 and the **Pa** can be set from 1 to 25.

It can set 4 different quantity of books with different pages in total.

Copi : 2	Pa : 0	Copi : 2	Pa : 5
Copi : 0	Pa : 0	Copi : 0	Pa : 0

5.11.3 Auto batch set

AUTO Batch Set	
Sum : 100	Pa : 2

If we press 1 to select auto batch set, it will enter the following interface. **Sum:100** means the current set is 100 sheets in total. **Pa:2** means each batch including 2 sheets.

Auto batch setting steps:

Input the **Sum** and **Pa** and then confirm. In picture ①, we set 50 sheets in total and 2 sheets for each batch. Then it will have $50/2=25$ batches. But as for picture ②, it's different.

AUTO Batch Set ①	AUTO Batch Set ②
Sum : 50 Pa : 2	Sum : 50 Pa : 6

The rules for automatically process are as follows:

- 1) The calculate: **Sum div Pa= quotient and remainder.**
- 2) When remainder is 0, the batches and pages will be as the form.

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	Batches	Pages (Pa)
Copi 1	Quotient	Pa
Copi 2	0	0
Copi 3	0	0
Copi 4	0	0

For example, if we set sum=50 and Pa=10, the quotient is 5 and the remainder is 0. So the batches will be 5.

3) Sum is not divisible by Pa and Sum is less than Pa. It will do like the form.

	Batches	Pages (Pa)
Copi 1	1	Sum
Copi 2	0	0
Copi 3	0	0
Copi 4	0	0

For example, if we set **Sum** to 10 and Pa to 20, the pages (Pa) will automatically turn to 10.

4) Sum is not divisible by Pa. $1 < (\text{Sum} \div \text{Pa}) < 2$, the remainder is 1. It will do like the form.

	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 2	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2$
Copi 3	0	0	0
Copi 4	0	0	0

5) Sum is not divisible by Pa. $1 < (\text{Sum} \div \text{Pa}) < 2$, the remainder is 2. It will do like the form.

	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	1	$(\text{Pa} + 1) \div 2 + 1$	$\text{Pa} \div 2 + 1$
Copi 2	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 3	0	0	0
Copi 4	0	0	0

6) Sum is not divisible by Pa. $1 < (\text{Sum} \div \text{Pa}) < 2$, the remainder is equal or larger than 3. It will do like the form.

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	Batches	Pages (Pa)
Copi 1	1	Pa
Copi 2	1	Remainder
Copi 3	0	0
Copi 4	0	0

- 7) **Sum is not divisible by Pa. $2 < (\text{Sum} \div \text{Pa}) < 3$, the remainder is 1.** It will do like the form.

	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	1	Pa	Pa
Copi 2	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 3	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2$
Copi 4	0	0	0

- 8) **Sum is not divisible by Pa. $2 < (\text{Sum} \div \text{Pa}) < 3$, the remainder is 2.** It will do like the form.

	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	1	Pa	Pa
Copi 2	1	$(\text{Pa} + 1) \div 2 + 1$	$\text{Pa} \div 2 + 1$
Copi 3	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 4	0	0	0

- 9) **Sum is not divisible by Pa. $2 < (\text{Sum} \div \text{Pa}) < 3$, the remainder is equal or larger than 3.** It will do like the form.

	Batches	Pages (Pa)
Copi 1	1	Pa
Copi 2	1	Remainder
Copi 3	1	Pa
Copi 4	0	0

- 10) **Sum is not divisible by Pa. $(\text{Sum} \div \text{Pa}) > 3$, the remainder is 1.** It will do like the form.

	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	quotient - 2	Pa	Pa
Copi 2	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 3	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2$
Copi 4	1	Pa	Pa

11) Sum is not divisible by Pa. $(\text{Sum} \div \text{Pa}) > 3$, the remainder is 2. It will do like the form.

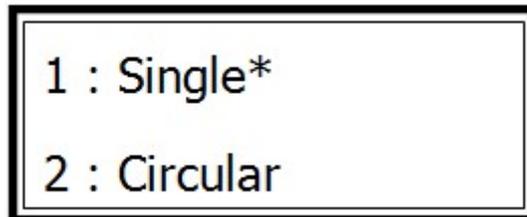
	Batches	Pages (Pa, and Pa is an odd number.)	Pages (Pa, and Pa is an event number.)
Copi 1	quotient - 2	Pa	Pa
Copi 2	1	$(\text{Pa} + 1) \div 2 + 1$	$\text{Pa} \div 2 + 1$
Copi 3	1	$(\text{Pa} + 1) \div 2$	$\text{Pa} \div 2 + 1$
Copi 4	1	Pa	Pa

12) Sum is not divisible by Pa. $(\text{Sum} \div \text{Pa}) > 3$, the remainder is equal or larger than 3. It will do like the form.

	Batches	Pages (Pa)
Copi 1	quotient - 1	Pa
Copi 2	1	Remainder
Copi 3	1	Pa
Copi 4	0	0

5.11.4 Set batch times

Press M to enter the interface. Press 1 to select single batch and 2 for circular. If we selected single, it will just run one batch. If we selected circular, it will run until no paper on the table.



5.12 Omni-Flow 380+Stitch folder+33TN (Optional)



5.12.1 Connection

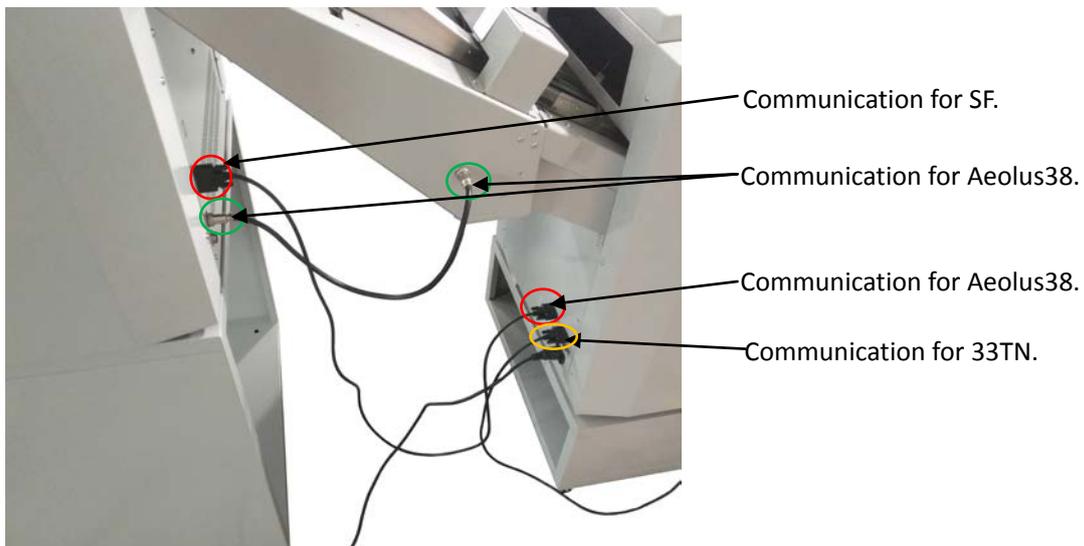
As shown in the pictures, there are screws and shafts for the connection. Remember to tighten up the screws after you have set to the correct position.



Notes: The connections for 33TN and stitch folder is shown in the operation manual of 33TN.

5.12.2 Connect the wiring harness

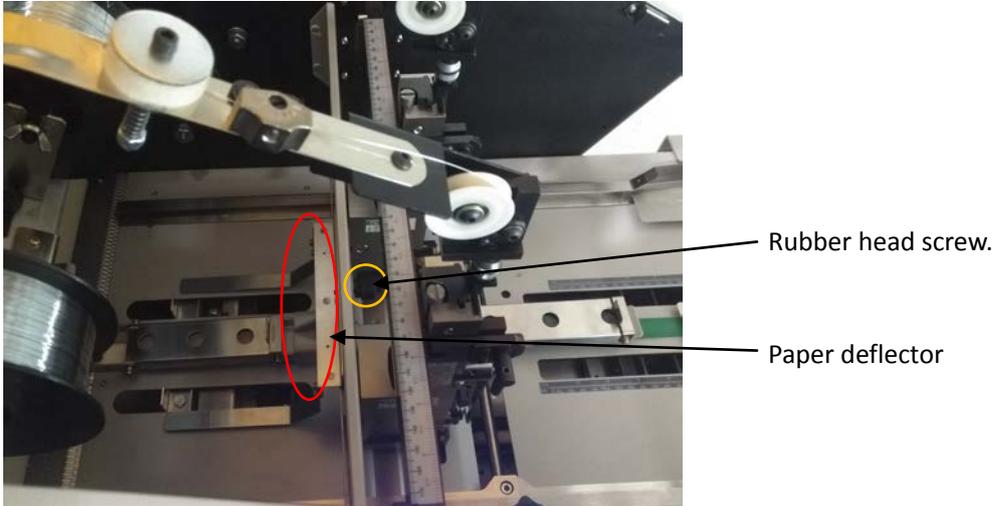
Connect the harness by following the pictures. Make sure the ports are well connected.



5.12.3 Stitch folder setting

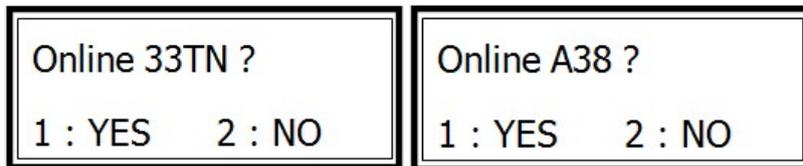
1) Set the paper deflector

As shown in the following picture, there is a rubber head screw to fix the paper deflector.



2) Connection select

As shown in the pictures, if the stitch folder was connected to the 33TN and Aeolus 38, it will come up the warning message for the confirmation of connecting to 33TN and Aeolus38.



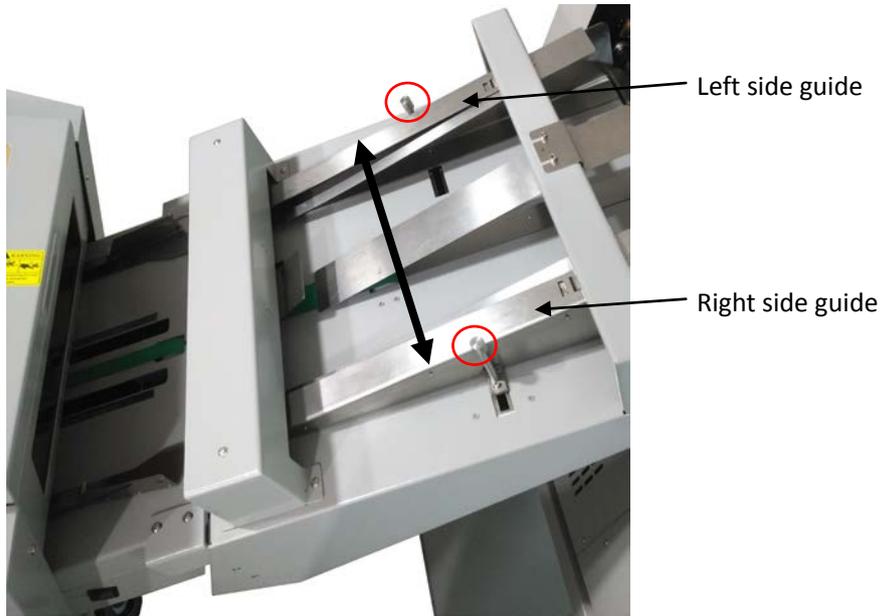
3) Adjust the stitch position

After finish the connection, we can press the test button on the stitch folder and feed one book manually to the stitch folder. Then adjust the big wheel on the stitch folder to make sure it will stitch on the middle length of the book. After that press the test button one more time to finish the job.



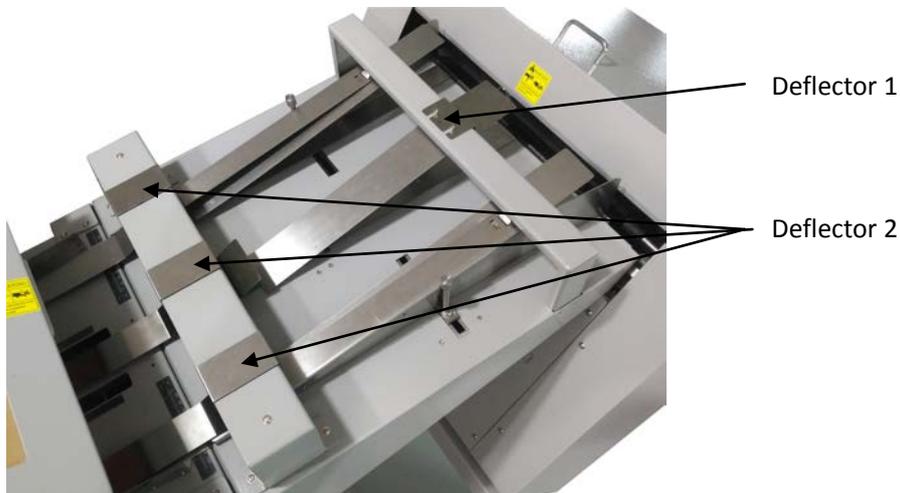
5.12.4 Side guides set on the Register

Loosen the two long screws on both sides, then adjust the side guides until they are 2mm away from the paper edge.



5.12.5 Paper deflector set on the Register

As shown in the pictures, set the paper deflectors like this. It will help the feeding of stitch folder.

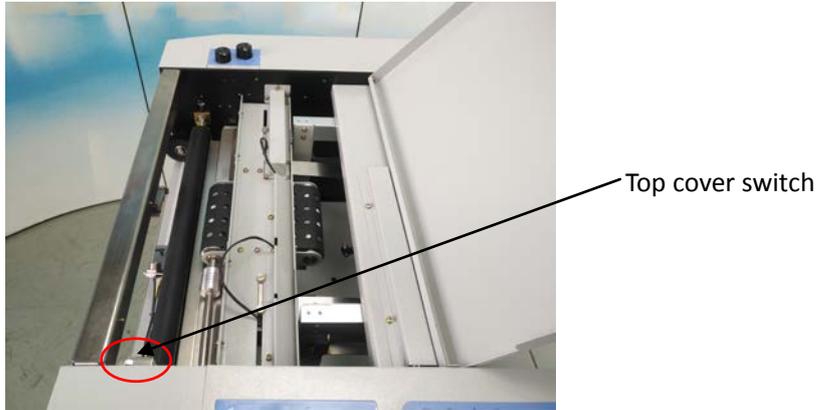


Notes: Make sure deflector2 will not stuck the movable side guide on the stitch folder.

Chapter 6 Trouble shooting

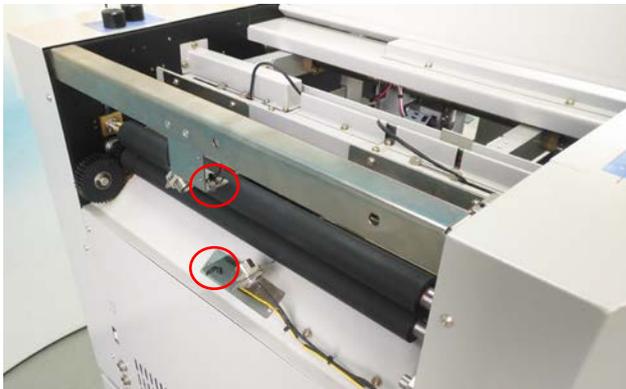
6.1 C-1 top cover open

As shown in the picture, it will come up C-1 warning if the switch was not pressed down by the top cover.



6.2 Feed jam

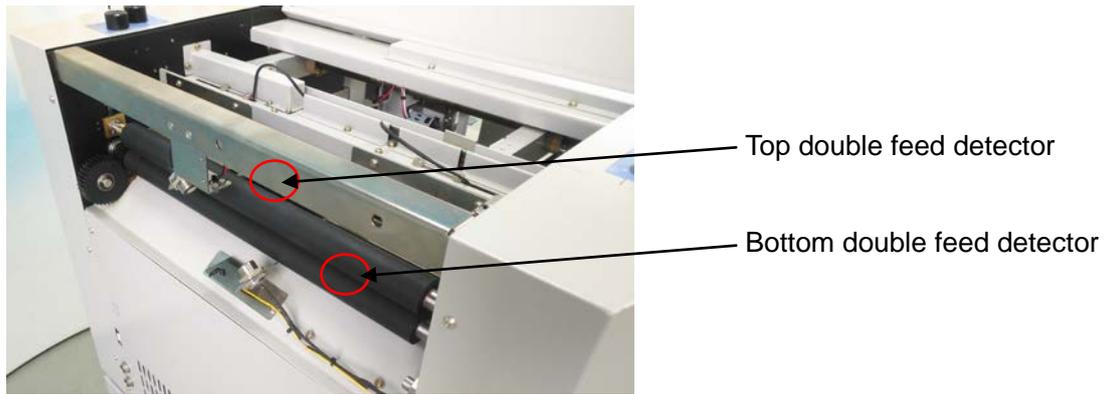
As shown in the picture, if the sensor was covered by paper dust or the top and bottom sensors not toward to each other, it will come up feed jam error. So it needs regular cleaning.



6.3 Double feed

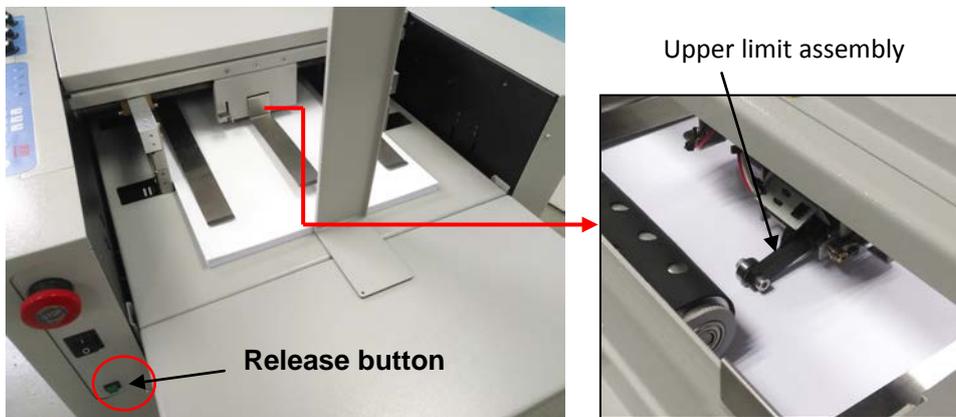
(1) No double feed detectors mounted on the machine but select double detect on. It will come up C-6.

(2) Do feed double sheets. In this situation, we can adjust the segregator to decrease the feeding gap and increase the blowing.

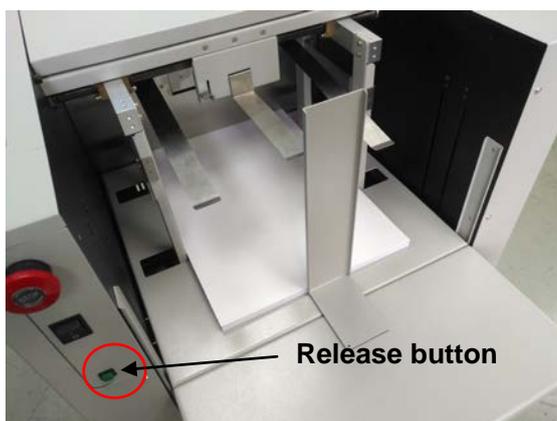


6.4 E-1 elevator error

- 1) When the feeding table get stuck on the top, press the release and stop button at the same time to fix it. And the upper limit assembly should not be adjusted too high.



- 2) When the feeding table get stuck on the bottom, press the release and start button at the same time to fix it.



Chapter 7 Maintenance

Regularly maintenance is very important for the machine. Especially for the transfer rollers and sensors. Unplug the power cord before any maintenance.

7.1 Clean sensors

As shown in the pictures, there are some detect sensors on the machine.



7.2 Clean rollers

Clean the dust on the surface of rollers regularly. It will help the feeding a lot.



Transfer rollers

Warranty & Incorrect Use

IMPORTANT INFORMATION

Your Matrix Laminator should reach you in perfect condition and is guaranteed for 1 Year from date of purchase covering defective parts and general wear and tear; this does not cover film jams, misfeeds or other operator related errors, which would be chargeable.

Your Matrix Laminator rollers are covered against manufacturing defects, the warranty does not cover against any damages caused by operator misuse.

Your warranty will be void if the System has been modified by a third party not approved by the manufacturer (Vivid Laminating Technologies) to carry out such alterations.

This product is marked with a crossed out wheellie bin symbol to alert customers to the fact that it must not be disposed of with general/household waste streams. It should be separated from other waste and sent to approved treatment facilities for safe recycling or disposal as otherwise it may cause harm to human health and the environment. For more information please contact your local authority or the retailer where the product was purchased.

E&O.E

Original Instructions

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