

Thank you for choosing this kind of Hydraulic Paper Cutting Machine which series are produced by our company. We will provide the perfect quality of this machine and the best service after sale. The series of Hydraulic Paper Cutting Machine is designed and developed through summarized experience from domestic and abroad asset. It is intergraded mechanical, electric and hydraulic system. The structure of design is of being precise, firm and durable. The part of circuitry adopts the high accumulate circuit for controlled. It improves the part of safe controlled and cutting precision. The product is easy to operate, on the safe side, efficient, fashion and cheaper price. It is applicable to middle and small printing company and office. It is the optimal cutting equipment for office.

Warning: this machine is allowed to cut printed paper or books or soft leathers only. It is forbidden to cut any metal sheets or other hard objects do harm to the machine quality with this machine.



Children must not operate this machine.



Do not reach beneath the blade



Do not extract or transport the blade without protection



Do not cut hard material or materias which may splinter!

Please read this manual carefully first in order to realize and use the machine. It will help you improve the work efficiency, bring into play the function of the machine, get the best effect of cutting, make for maintain of machine, prolong the service life of the machine.



Chapter one Safe notes

To avoid occurrence of any unexpected accidents or injury, please observe relevant standards. Only one professional operator is allowed to operate this machine(no children or non-professional persons are allowed to operate this machine).

Please follow the safety precautions here under while operating and servicing the machine.

■ **Open the box for checkout**

Open the machine packing ,check the machine and spare parts first. If damage or not all, please contact with seller.

■ **Riding position**

The weight of this machine is about 350kg(480HP) ,450kg(670HP).Please put it balanced and in a clean place.

■ **Electric power**

Please connect the power right according to instruction, the electric power must be steady AC220V/50HZ,4KW. If the voltage is much higher or lower, the machine will not work normally.

■ **Surcharge**

Don't connect many electric products at one socket. It is dangerous and easy to cause fire or electric shock.

■ **Cleanness**

Please turn off the electric power when you clean and maintain the machine.



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Chapter One

Main technical data

Main technical data

Model \ Specification	480HC	670HC
Cutting width(mm)	480	670
Max. cutting length (mm)	480	480
Min. cutting length(mm)	30	30
Max. cutting thickness(mm)	60	80
Cutting speed	28times/min	28times/min
Display control	Digital-display, numerical-control pushing paper	Digital-display, numerical-control pushing paper
Motor power	220V/50HZ/1.5KW	220V/50HZ/2.2KW
Measurement(H*D*W)(mm)	1260×950×820	1260×1150×990
Net weight(kg)	350	450

Model \ Specification	480HP	670HP
Cutting width(mm)	480	670
Max. cutting length (mm)	480	480
Min. cutting length(mm)	30	30
Max. cutting thickness(mm)	60	80
Cutting speed	28times/min	28times/min
Display control	Liquid crystal, Program-control pushing paper	Liquid crystal, Program-control pushing paper
Motor power	220V/50HZ/1.5KW	220V/50HZ/2.2KW
Measurement(H*D*W)(mm)	1260×950×820	1260×1150×990
Net weight(kg)	350	450

Note

The above data information is just for reference. If there is any fluctuation, please confirm it with actual products.



Chapter Two

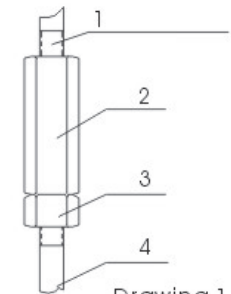
Equipment Adjustment

- 1.Parallel adjustment between paper press and operation table
- 2.Knife edge depth adjustment
- 3.Adjustment of parallel between knife edge and operation table
- 4.Paper pressing pressure adjustment
- 5.Trouble shooting for hydraulic system

Equipment Adjustment

1.Parallel adjustment between paper press and operation table

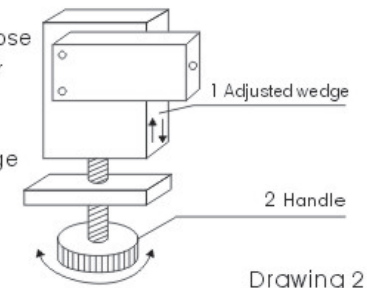
The paper press and operation table have been adjusted to parallel at assembly and workshop delivery. If it is found that they are not in parallel during operation, adjust either of two pulling rods on the two sides of paper press according to Drawing 1. Loosen screw 3 first, then rotate screw 3 clockwise and counter clockwise. Tighten screw 3 after levelness is reached.



Drawing 1

2.Knife Edge Depth Adjustment

The knife edge depth is controlled with micro-motion switch. When a new knife blade is loaded or the blade is to be reground, height of close power supply must be adjusted after installation reference for drawing 2. Turn handle to change the height of adjusted wedge. Adjust knife edge to lowest position clockwise. Adjust knife edge to upper position anticlockwise.



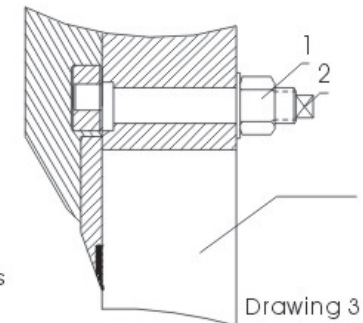
Drawing 2

Note

When a new knife is being changed, you must turn the handle clockwise, and adjust the width difference between the old knives. Then gradually adjust the cap downward to the extent that one piece of paper can be cut apart.

3.Adjustment of Parallel between Knife Edge and Operation Table

The parallel between knife edge and operation table is adjusted with the eccentric axis on the machine frame back left side, see drawing 3. To make the adjustment, loosen locking. Screw 1 on the eccentric axis first, rotate eccentric axis 2 to make



Drawing 3

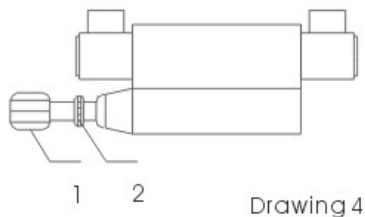
fine adjustment.

After the screw is locked, place one piece of paper on each of the two sides of operation table for trial cutting until both pieces can be cut apart. Tighten the screw and the knife edge must be in parallel with knife strip.

4. Paper Pressing Pressure Adjustment

Since different materials are cut, the pressing pressures shall be different. Therefore, adjustment shall be made according to drawing 4.

1) To adjust the paper pressing pressure, loosen the locking screw 2 first and adjust the pressure by turning adjustment handle 1. The pressure increases with clockwise turning and decreases with counter clockwise turning. The ideal pressure is 4 Mpa. Then tighten the locking screw 2.



Drawing 4

Note

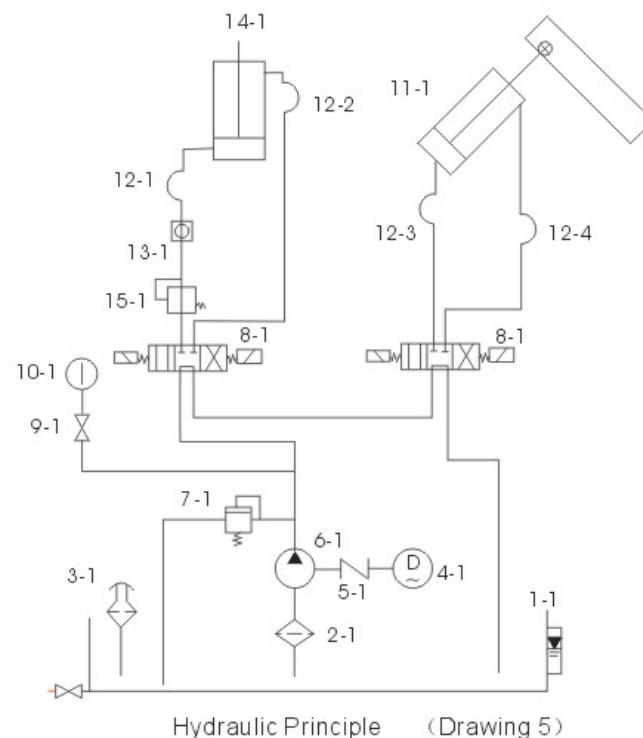
The paper pressing pressure shall be minimized under the precondition that no influence is given to cutting performance, which is advantageous to the operation lifetime and safety of machine.

2) No adjustment is generally needed for cutting pressure. If system pressure exceeds nominal pressure, the machine is likely to be damaged. The knife shall be ground timely if paper can not be cut apart (nominal pressure is 8 Mpa).

3) Under the precondition that no influence is given on cutting performance and precision, the pressure of hydraulic system shall be minimized in order to extend the machine operation lifetime and safeguard the machine safety.

5. Trouble Shooting for Hydraulic System

- 1) The system gives big noise after machine start-up
 - a. Oil is not sufficient, please refill 30# hydraulic oil.
 - b. Oil circuit filter is blocked, please clean the filter.
- 2) Pressure is not sufficient
 - a. Check if there is any leakage at each connection point of hydraulic control system.
 - B. Electrical motor is abnormal, or the voltage does not comply with operation specification.





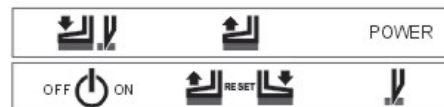
Chapter Three

Basic Operation and Adjustment

1. Basic operation
2. Basic adjustment

Basic Operation

1. Picture of faceplate



- | | | | | |
|--|---|--|---|----------------------------|
| | + | | = | One-way press paper |
| | + | | = | Press paper before cutting |
| | + | | = | Press paper jack return |
| | | | = | Reset |
- Drawing 6

Please carefully review the afore-mentioned instruction in this manual before operation.

2. Machine Start-Up

- Insert the power plug into AC220V/50HZ 4KW socket.
- Turn electrical protection switch to position 'On' and turn on power supply switch. Indication appears on display window. When knife indication light turns on first, it means the electrical power is properly connected.

3. Paper Pushing

480HC/670HC Paper Pushing instruction

- Push paper or book to be cut to the left side trimming with the gauge strip.
- Push buttons or , the paper pusher will advance or retreat to required paper cutting position. The displayed dimension digits shall be identical to the gauge graduation dimension.
- Press numeric button to input the numeric. Then press button and the paper pusher will move to the required cutting dimension automatically. The digitally displayed dimension shall be identical to the gauge graduation dimension.

480HP/670HP Paper Pushing instruction

■ Manual mode

1. Manual mode is in a priority. As long as pressing manual knob, the machine must be operated in manual mode, show No matter what state it is before pressing manual knob.

Press paper jack **▶** will move in the direction of arrow after turning manual knob clockwise. Press paper jack move forward with 0.1 metre distance in one-time pressing. And it will turn to high speed if keep pressing knob.

Press paper jack **◀** will move in the direction of arrow after turning manual knob anticlockwise. Press paper jack move forward with 0.1 metre distance in one-time pressing. And it will turn to high speed if keep pressing knob.

2. Press **⊗** to get into **Ⓜ** manual mode. Press **C** to clear and set cutting size. Then press **ENTER** get into numerical-controlled pushing paper mode. When paper pusher move to position of setting size, press **EXEC** to choose pushing book mode.

■ Automatic mode

Press **Ⓜ** to get into **A** automatic mode with selected. The screen appears seven clear data when press **SET**. Select M1 first clear data, then press **C** To clear and Set cutting size. After that, press **ENTER** to make cursor move to second clear data to enter cutting size and so forth until the seventh. Press **ENTER** after finishing setting size. Then paper pusher move to the position of first setting size automatically. Press **EXEC** to select pushing books mode.

■ Step mode

Press **Ⓜ** to get into **S** step mode. Press **C** to clear and set cutting size. Press **ENTER**, cursor will point to the area of setting. Press **C** to clear and set step size. Then press **ENTER**, paper pusher will move to amount size of setting automatically. Press **EXEC** to select push book mode.

4. Cutting

- Get ready for cutting after cutting dimension is properly adjusted.
- LED turn red after pressing reset button. Then the light for indicating knife position is on.
- Operation of one-way press paper do as drawing 6
- Follow drawing 6 before Cutting
- If it is found that the last piece of paper is not cut apart, please adjust according to the method of 'Cutting Knife Adjustment'.

Note It is impossible to perform cutting if there is any unexpected items entering into electrical safety eye control zone.

Basic Adjustment

1. Dimension Calibration Adjustment

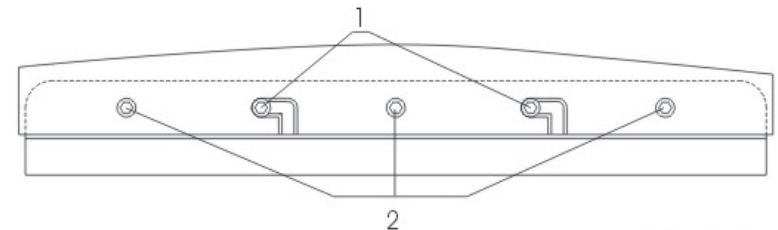
- Dimension the electrical power
- Check if there is any unexpected item locking the driving screw.
- Remove front cover and check if stepping motor, synchronized belt wheel and synchronized belt are properly fixed.
- Adjust the limiting support strip on the screw nut. The strip can be moved forward and backward until the digitally displayed dimension is identical to the gauge dimension. Then tighten locking screw..

2. Knife Blade Replacement

Note It is impossible to cut paper with a blunt knife. And a knife will also easily get blunt when it frequently cuts thick paper piles or cardboard. If it is found that the cutting quality and precision are not identical to the set standard, the knife blade must be replaced. Keeping a stand by knife blade in hand will help with a smooth operation. When you have to replace knife edge, you must operate correctly according to the procedures set forth in 'Knife Blade Replacement Instruction'.

- Loosen and remove screw 1 and turn in the two knife disassembly screw rods clockwise in sequence, and tighten and lock the rods.
- Remove the locking screw 2 on knife frame.
- Firmly grasp knife disassembly screw rods and remove the knife blade in knife notch direction as shown in drawing 7. Wear a pair of gloves for operation and wrap the knife edge with a piece of cloth to avoid any cut injury.

Note Extreme care shall be taken to handle the knife blade exchange to avoid any injury.



Drawing 7

3. Knife Template Adjustment

- Knife template can be used for eight times.
- The knife strip shall be adjusted or replaced if excessively deep knife scratch is found on the template.
- The template can be removed with a screw driver. It shall be installed into the cutting table in a leveled way when it has to be installed back. Position the template until it touches the left side and push in the front cover again.

Note

When a knife template is replaced, the knife blade itself shall be adjusted properly. If the knife blade is engaged too deep, the blade will not only damage the template, but also intensify blade wearing.



Chapter Four

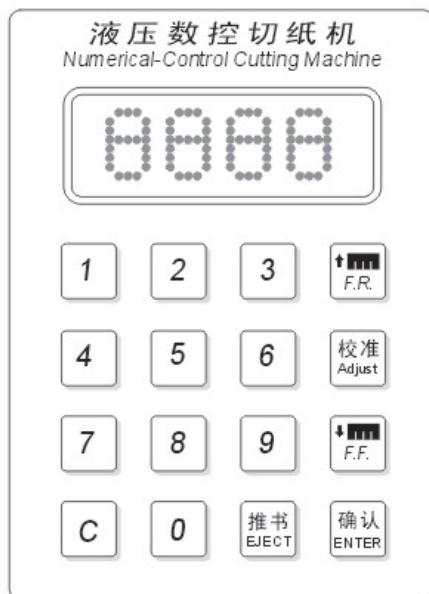
Basic Operation

1. Display buttons and panel
2. Paper pressing structure
3. Hydraulic system
4. Operation system

Instruction for assembly

1. Display buttons and panel

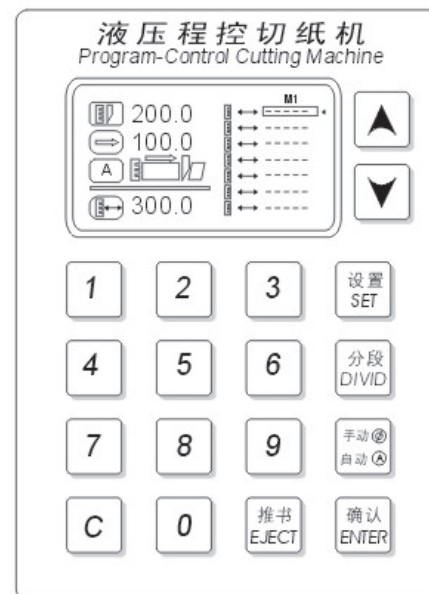
■ 480HC/670HC Button instructions



Drawing 8

NO	NAME	FUNCTION
1		Paper pusher fast return
2		Paper pusher fast forward
3		Adjust paper pusher reset button
4		Modify and clear size
5		Enter confirmation
6		Metric-inch interconversion
7		Eject paper or book

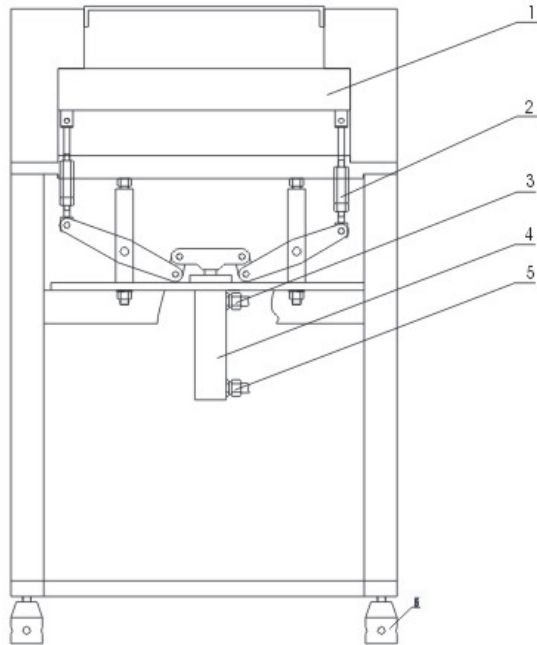
■ 480HP/670HP Button instructions



Drawing 9

NO	NAME	FUNCTION
1		Manual-automatic interconversion
2		Step setting in the automatic state
3		Set in the automatic state
4		Modify and clear size
5		Enter confirmation
6		Metric-inch interconversion
7		Eject paper or book after cutting

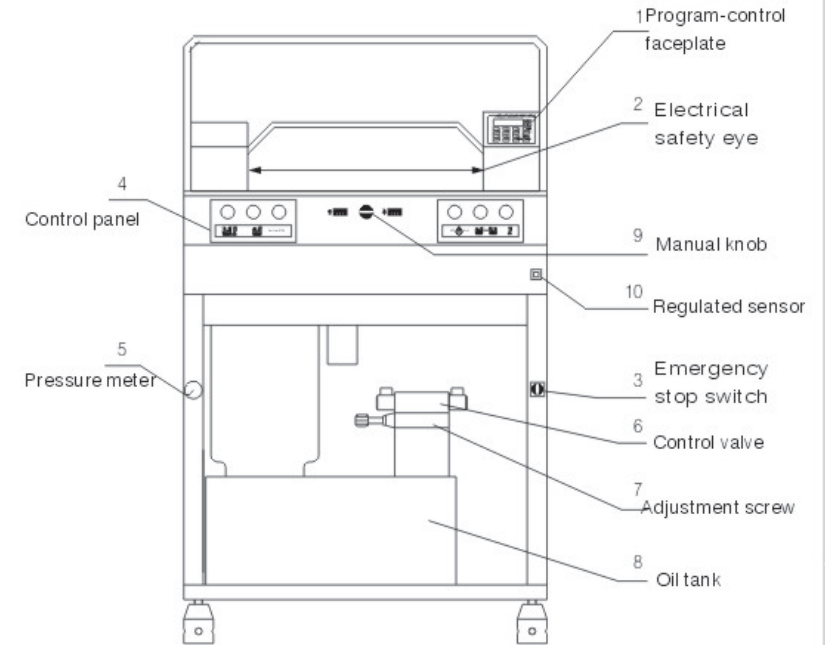
2. Paper pressing structure



Drawing 10

NO	NAME	FUNCTION
1	Paper press	For paper pressing
2	Adjustment screw	For adjusting the parallel between paper press and operation table. See drawing 1 for adjustment method.
3	Reset oil inlet	Pressure oil is filled in from this inlet when paper press is reset.
4	Paper press cylinder	Produce reciprocating motion by means of hydraulic oil.
5	Paper press oil inlet	Pressure oil is filled in from this inlet when paper press presses paper.
6	Machine leg adjustment	For adjusting machine parallel.

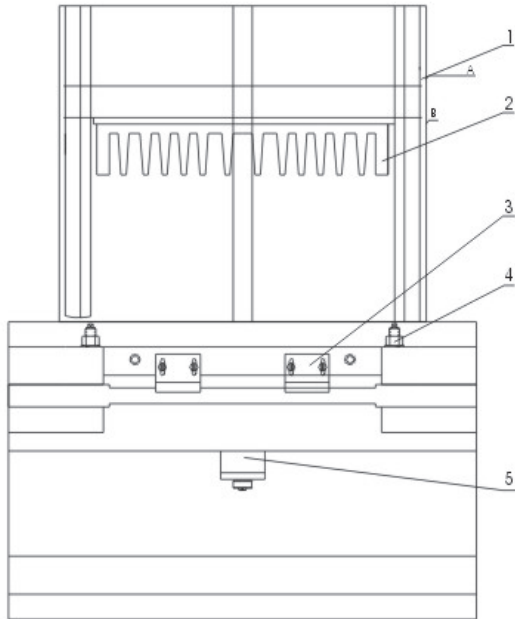
3. Hydraulic System



Drawing 11

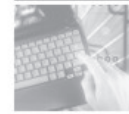
NO	NAME	FUNCTION
1	Program-control faceplate	Set and modify cutting dimension.
2	Electrical safety eye	Safety protection
3	Emergency stop switch	Electrical power switch
4	Control panel	Pushbutton panel for paper cutting operation
5	Pressure meter	Display oil pressing pressure
6	Control valve	Control oil cylinder reciprocating motion
7	Adjustment screw	Adjust paper pressing pressure
8	Oil tank	For filling hydraulic oil.
9	Manual knob	Manul push paper
10	Regulated sensor	Limit regulated sensor under blade shelf

4. Paper Pushing System



Drawing 12

NO	NAME	FUNCTION
1	Bearing fixing bracket	Fixing guiding bearing.
2	Paper pusher	Pushing paper.
3	Optical knife line	Lighting and displaying cutting position.
4	Adjusting eccentric axis	Adjusting knife edge in parallel to knife template. See drawing 3 for adjustment method.
5	Digitally controlled motor	Driving paper pusher.
6	Limit Sensor	Limit sensor on the press shelf
7	Limit sensor	Limit sensor on the blade shelf
8	Adjusted sensor	Limit adjusted sensor for paper pusher



Chapter Five

Lubrication and Maintenance

1. Lubricate
2. Maintain
3. Circuit chart

Lubrication and maintenance

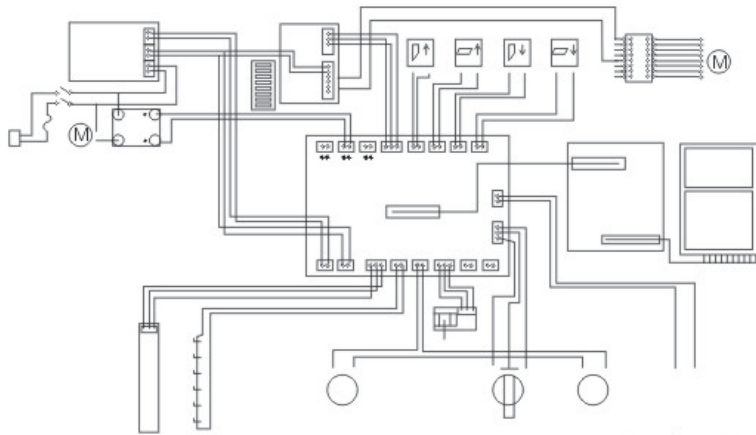
1. Lubricate

The machine should be lubricated every three months. Draw out the cover plank, check and clean, tightly solid spare parts combine to drive parts. Please avoid carefully dropping the lubricant on the appliances circuit and the electronics component.

2. Maintain

- The non-dinking die prohibition places on the machine when you are working; in order to avoid the rigidity enters under the knife to damages the cutter. The well-known dinking die to be supposed to avoid the belt book nail entering the cutting area in order to avoid damaging the knife.
- After working, please clean the machine, wax the cutter and shut the power.

3. Circuit Chart



Drawing 13

Schematic diagram of hydraulic paper cutter



Chapter Six

Error and Correction

Error and correction

APPEARANCE	CORRECTION
No action	<ul style="list-style-type: none"> ■ Check the power ■ Check the plug ■ Check the voltage
Shaking	<ul style="list-style-type: none"> ■ Check the position ■ Check the mechanical ■ Check the hydraulic system
Screen blank or irrecoznizable	<ul style="list-style-type: none"> ■ Check the main control panel ■ Check the drive and motor
Cutting not clear or not in place	<ul style="list-style-type: none"> ■ Check the paper sending system ■ Check synchronous wheel,belt,and screw mandrel ■ Check the blade setting
Alarm for displaying 'E-1' or foreign object	<ul style="list-style-type: none"> ■ Check the flash ■ Check the control panel
Alarm for displaying 'E-2'	<ul style="list-style-type: none"> ■ Check limit sensor on the blade shelf ■ Check the control
Alarm for displaying 'E-3'	<ul style="list-style-type: none"> ■ Check limit sensor under the blade shelf ■ Check the control panel
Alarm for displaying 'E-4'	<ul style="list-style-type: none"> ■ Check limit sensor on the press shelf ■ Check the control panel
Alarm for displaying 'E-6'	<ul style="list-style-type: none"> ■ Check limit adjusted sensor behind paper pusher ■ Check the control panel

Note

All other problem please contacts the sales. Do not dismantle the machine!



Chapter Seven

Repair Warranty

Repair warranty

1. The product has passed strict quality inspection. Warranty period is one year. Within warranty period, our company is responsible for repairing the product failure under normal operation for free. Please inform our service agents within one month after purchase in order to create the warranty file.
2. Service scope:
Supply the service of offer machine fixing, adjustment, operation instruction, periodical maintenance and failure treatment under normal operation. Supply to exchange the damage spare parts under the normal operation, the warranty period for the motor and the circuit is one year, the knife and the blade are the expendable goods and will not be included in the service scope.
3. For repair, please contact local agents.
4. Warranty is not performed under following cases. Customers will be charged for the repair.
 - Damage caused by customer's incorrect use and maintenance;
 - Damage caused by non-professional maintainers' repair and handling;
 - Without invoice in validity period, or certificate of guarantee of repair, replacement and refund;
 - Don't inform the service agents within one month after purchase.

Our company reserves the final interpretation right of above terms.