## Electrical Digital control and Program control Paper Cutter

# **Operation Manual**

■ 4606K ■ 4606R ■ 4606S ■ 4606M ■ 4806K ■ 4806R ■ 4908S ■ 4908M









Please read this manual carefully before operating this machine.

## **Foreword**

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 ,fashionable and cheaper price. It is applicable to middle and small printing company and office. It is the optimal cutting equipment for office



Warning: This kind 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 machinequality with this kind 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 materials which may splinter.



Must use socket with ground wire connected.

(Note) Please read this manual carefully first in order to realize and use this kind machine. It will help you improve the work efficiency, bring into play the function of the machine, prolong the service life of the machine.

## **Safety Cautions**

According to relevant standards, to avoid accident and accidental injury, only professional operators are allowed to use this machine (children or non-professional operators are forbidden to operate). When you use or maintain these machines, please pay high attention to safety cautions below:



Riding position

The weight of this kind machine is about 380-480kgs. Please put it balanced and in a clean place.



Power

Please connect with the power source correctly in accordance with the specification. The power source should be steady AC 220V/110V±10%/.50Hz/60Hz. 1.7~4.0KW, and the achine will run irregularly if the voltage is too high or too low. We suggest you use alternating current (AC) power source with steady voltage to improve your working efficiency.



Ground connection

For safety you should use electric supply socket with ground wire connected



Surcharge

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



Maintenance

Before you clean or maintain the machines, you must cut the electric source and pull out the electric supply socket.



Waterproof

Prevent water or other liquid flow into inner machine.



Children or non-professional person must not operate this machine.

Do not reach beneath the blade.

Do not reach cut.

Do not cut hard material or materials which may splinter.



Must use socket with ground wire connected.



Air safety switch, non-professional person is not allowed to open. It is much dangerous.



Under normal usage, add right amount lubricating oil to transmission parts and screw mandrel to ensure the machine running properly.



Emergency stop which is used in emergency situation should be pressed after dealing with emergency. Then press the RESET button to get into functional mode.



Test to running the machine with one piece 80g sm paper. If the paper can't be cut completely, please fine adjust the spin blade depth(adjustable depth range 5mm) It can be set and adjusted as picture shows for numerical-control series. If for the program-control series, it can be set and adjusted on the control panel.

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## Chapter I Safety cautions before installation

## 1. Open the machine and check

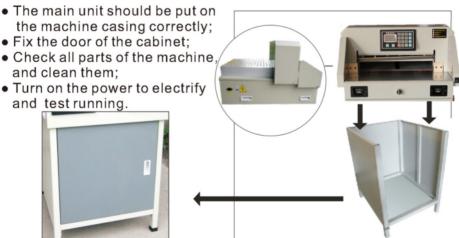
When you open the package of the machine, firstly you should check the machine and relevant accessories. Please contact the seller or our company if there is any damage or shortage.

Main unit 1 set	<ul><li>Machine chassis 1 set</li></ul>	Specification 1 pc
Tooling 1 set	Rubber under chassis	4 pcs Certificate 1 pc
Stick 1 pc	Screw stem 2 pcs	Warranty Maintenance 1 pc

#### 2. Settlement of the machine

- Open the wooden crate, take out the machine casing and discharge four M8 screws on the base plate of the main machine;
- The machine casing needs to assembly, and the screws should be fixed firmly;





#### 3 Environmental Conditions

- The machine should be placed in clean working environment, keep away from direct sunlight and wind;
- Temperature of the operating environment: 10-30℃, cannot higher than 32℃;
- Humidity level of the operating environment: 50-80%;
- Working power source of the machine: 220V±10%; 50HZ; 2KW;
- · Connect the ground wire correctly.

#### 4. Special suggestions

- Remember only one professional operator is allowed to work on the machine:
- When you cut you should operate buttons by both of your hands;
- Please don't disassemble the safety covering;
- When you put your hands or other things into the cutting area, you
  must cut the power first;
- When you change knife blades, you should firmly comply with the blade changing instruction;
- You are not allowed to re-equip the inner construction and circuit of the machine by yourself.

#### 5. Operating figure

Turn on the power, open air switch and rotate the emergency stop to make machine get into power-up state. Then press RESET button, the paper pusher gets running. Proper operation is like this: Stand in the middle front of the machine, face to machine, control the buttons with your left and right fingers, shown in the picture.

### Chapter II Brief instruction of the paper cutter

## 1. Parts description of the paper cutter 4605K/4606K/4806K



#### 2. Characteristics

- Designed with CE standard, front& back protection cover conform to safe system;
- Independent pressing and cutting paper design device
- Inclined cutting technology, cut paper completely with thick kind paper;
- Spin cutter with fine adjusting depth curve technology device
- Guideway and screw rod paper pushing design device
- Optical cutting line; infrared laser indicating line, high visible

## 2,4606R, 4806R, 4606S, 4908S Series paper cutting machine parts



#### 2-1. Characteristics

- Designed with CE standard, front& back protection cover conform to safe system;
- Independent pressing and cutting paper design device
- •Inclined cutting technology, cut paper completely with thick kind paper;
- •Spin cutter with fine adjusting depth curve technology device
- Guide way and screw rod paper pushing design device
- Intelligent control, LCD, optimization and updating program, adjustable pressing pressure, multi-term self-check function, malfunction code display function, automatic counting function, and with 99 programs, each program 7 steps(only for R series).
- Optical cutting line; infrared laser indicating line, high visible

## 3、 4606K、 4806K Series of technical parameters

specification	4606K	4806K	
Max. cutting width mm	460 480		
Min.cutting width mm	40		
Max cutting thickness mm	60		
Pressing mode	Automatic		
Pushing mode	Automatic		
Display mode	Digital		
Safety protection	infrared photoelectric protection		
power supply	1.2KW/220V/50Hz	1.4KW/220V/50Hz	
Machine measurement	935X620X1235mm	935X740X1235mm	
Net Weight	130 kg 150 kg		

## 4606R、4806R、4606M、4908M Series of technical parameters

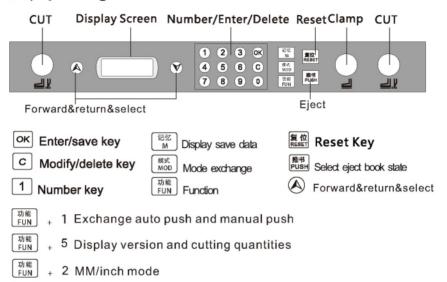
specification	4606R	4806R	
Max. cutting width mm	460	480	
Min.cutting width mm	40		
Max cutting thickness mm	60		
Pressing mode	Automatic		
Pushing mode	Automatic		
Display mode	LCD		
Safety protection	infrared photoelectric protection		
power supply	1.2KW/220V/50Hz		
Machine measurement	935X620X1235mm		
Net Weight	130 kg		

specification	4606M	4908M	
Max. cutting width mm)	460 490		
Min.cutting width mm	40		
Max cutting thickness mm	nickness mm 60		
Pressing mode	Automatic		
Pushing mode	program control		
Display mode	LCD/7-inch touch screen	LCD/7-inch touch screen	
Safety protection	infrared photoelectric protection		
power supply	AC 220V(110V)±10% (50Hz/60Hz)		
Machine measurement	680*920*1140mm	760*950*1250mm	
Net Weight	145kg	172kg	

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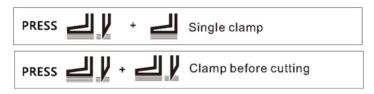
#### 4. Operating buttons and panel

## 4-1. Operating button and function instruction



Pressure of Paper pushing is to set to maximum pressure value. It is not necessary to adjust when using push + 🔊 🕜 is to set to push or not push. Press PUSH button to confirm. The books will be pushed automatically after cutting if displaying ON. The books will not pushed after cutting if display OFF.

RESET, there is a mistake operation when cutting with pressing two CUT buttons. Please release and keep the blade stopping there. Then press RESET. The blade and paper pushing to make it reset.



- 4.2 4606K/4806K Basic operation
- Before operating the machine, please remove the things on the machine and make clean.
- 2.Insert the power plug into AC220V/110V. 50Hz/ 60Hz. 1.2Kw socket
- 3.Turn the protective switch to ON position. Press Emergency stop and display screen shine and show digit. Indicative line light. The display screen show last digit, paper pushing enter automatic adjustment. Then the machine can work normally.





4.Press numbers button to enter cut size. Assuming 285mm is current size. At first, press numbers 2850, then press OK. The paper pushing will push to 285.0 position automatically. Display shows 285.0:

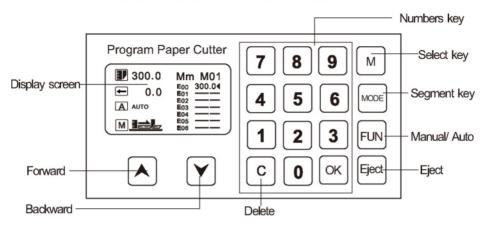


5. Put away paper stacks or books in the cutting area to keep level with front left guide.

6.Make cut after confirming cut size. Press two CUT button at the same time. Then the paper clamp come down before the blade . After clamping the paper tighten, the blade will come down. When there is a mistake, release two CUT button immediately. The blade and paper clamp will stop immediately. Then press RESET button. Make a cut again after confirming cut size and paper stacks right until finishing.

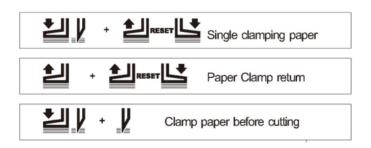


### 5, 4606R, 4806R, 4908S, 4606S Operating patiehinstruction



### 4-1 Operating buttons and function instruction





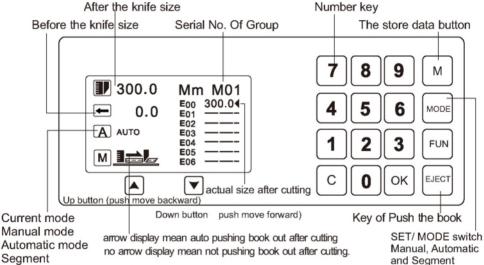
#### 5-1 4606k/4806k Operating instruction

- 1)Start up Machine
- 1.Before operating the machine, please remove the things on the machine and make clean.
- 2.Insert the power plug into AC220V/110V. 50Hz/ 60Hz. 1.2Kw socket



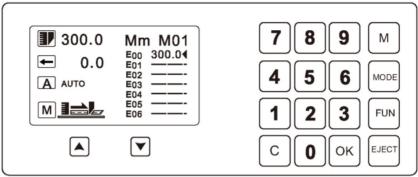


3.Turn the protective switch to ON position. Press Emergency stop and display screen shine and show digit. Indicative line light. The display screen show last digit, paper pushing enter automatic adjustment. Then the machine can work normally.



- Please switch to segment mode.
  - ${\Bbb M}$  Press M key to be out storage data. Single press M key without loosing , you can modify and select groups in M area from 0-96 with entering number in M area or switching steps up and down until the cursor shine.
  - Press FUN to switch to manual, automatic, segment. If the present mode in automatic or segment, you can press up and down to get into manual mode. You can modify data after pressing C.Press Ok after entering the modify mode to save the data and exit the modification.
  - The pusher push automatically after press reset button and release immediately. If press reset button in 2 seconds, the pusher will be reset automatically.
  - Segment, press MOD button to switch segment mode.

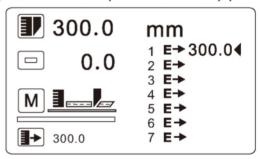
## 1-3、 4606R、4806R、4606S、4908S Series of operation instructions



- 1 There are three modes in program-control paper cutter. Assuming 285mm is present cut size. We make 285mm as the example to push the paper respectively.
- 1. Manual Mode

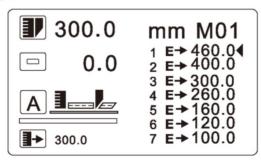
If present mode is not in the manual mode, press MOD to switch to manual mode. There are two ways to input data in manual mode. One is to press up button  $\blacktriangle$  and  $\blacktriangledown$  down button to get 285mm. This way is too much slow to get. Don't advise to use this way. Another way is to press C to delete present data and input 2850 and press. Then the pusher will move to the position of set size. And press two CUT button at the same time to finish cutting. If don't want to cut at this moment, loose two hands immediately to make it stop cutting. Press 🛂 🏖 with two hands, the blade and clamp will return to the top position

Press M, when the cursor is in the condition of mm, mm can be convert to inch.



#### 2 Automatic mode

1If present mode is not in the automatic mode, please press MOD to switch to automatic mode. See following picture:



2	Put the books o	r papers right to cu	t, then make	the books	or books lear	n to the le	eft front
	guide.						
3	Make it cut after	confirming the cut	size. Press to	wo CUT bu	utton at the sa	ame time	to finish
	and the same of Court and	Laine Theory the average	- I		-111 5 4		N 4 - I

cutting of first set size. Then the pusher will move to the position of next set size. Make a cut after the pusher is to stop moving. After finishing 7 cuts, the pusher will go back to the

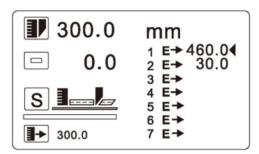
first set size automatically.



4 Hit M when the cursor stop at M01. Press ▲ ▼ to going switch data from 0 to 96. Then press OK to show all the set group count needed.

## 3. Segment mode

When present mode is not segment. Please press MOD to switch to segment mode. See following picture:



- 1) Press C, show a size set state, then put cut size. Press OK to get next cut size and the cursor move to next.(First cut size is whole size of paper, second cut size is segment size, each out is same size).
- 2) Put the books or papers right to cut, then make the books or books lean to the left front auide.
- 3) Start to cut after confirming the size. Press two CUT button to finish cutting. The pusher will move forward with uniform pushing paper automatically. Then uniform cutting, every cut is with same size.

#### photoelectric protecțion Status



When the hand and books are put in the working area, The blade and clamp won't work. Any button is valid.

F----I

Pressing up limit sensor fault

F----2

Pressing code wheel sensor fault

F----3

Cutting optocoupler sensor fault

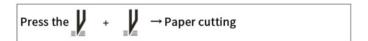
F----4

Pushing back limit sensor fault

F----5

#### 1-3 4606M, 4908M Series operation button and function explanation







## 2-2. Performance characteristics

- ◆ CE standard design, front and rear safety protection design, in line with product safety requirements;
- Heavy casting structure design, to ensure smooth operation of the machine, durable;
- ◆ Independent paper pressing, paper cutting structure design device;
- ◆ Oblique cutting patent technology, light cutting, suitable for cutting;
- Technical device for trimming depth of cutter;
   Cutting position indicating line identification, infrared laser indicating line, clear and clear:

#### 1-4、4606M/4908M Basic operation of paper cutting machine

- Before starting the preparation work, check whether there are other items on the machine, tidy up clean;
- Plug the power plug into the socket of AC220V;
- ◆ Turn the electrical protection switch to "ON" position, and the cutting line of the knife light is bright, indicating that it enters the normal working state;
- ◆ Push into the cut paper or book, placed on the left side and the ruler level;
- Rotate push paper hand wheel, adjust to the size of the need to cut, the book and push paper baffle against the flat;



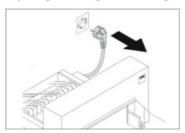
- ◆ Press the cutting button with both hands, and the paper press starts to press the paper automatically. If any size problem is found, release the cutting button with both hands and press the ☐☐ RESET button. The cutter and the paper press will return automatically.
- After adjustment, if it is confirmed that cutting is needed, continue to press the cutting button with both hands until the cutting is completed;
- Repeat the above steps to continue cutting;

#### 3 Basic Adjustment

3-3-1 Size ajusting

If the cut size is not same as show size, please turn off the machine. Then turn on the machine and press the reset button. If the problem is not solved by above operation. Please do more as following operation.

Cut off the power, remove the back plate which is under pusher. Then check whether there is any things blocking in the driving screw rod.





Check whether stepping motor is normal, removie front cover plate, check whether synchronous pulley and synchronous belt is fixed normally.

Adjust the support chip in the nut, move it forwards and backwards until the show size is matching with cut size. Then tighten the screw.





#### 3-3-2 Cutting Blade Adjustment

First of all, fine adjust the cutting blade depth( adjust depth range about 5mm)or change

the side of cutting stick.



If the last paper still can not be cut completely after fine adjustment the cutting blade depth. Adjust the balanced screw of cutting blade depth once more. Unscrew the screws of two side from upper cover. Then remove the upper cover.



Disassemble 7 retaining M6 screws on the blade carrier which fixed blade. Adjust the depth of blade to make the paper cut completely until the blade cuts into the cutting

stick about 0.3-0.5 mm;

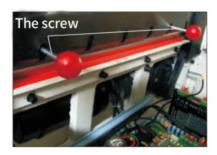


Tighten up the fasten screws on blade carrier. Cover up and make it fasten. Choose one piece of paper to have a trial cut. If it can not be cut completely, you can re-adjust according to the above processes.

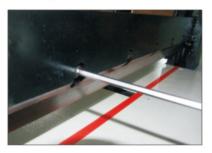
## 3-3-3Blade replacement (please follow the steps carefully)

- ◆ Open the upper cover;
- ◆ Loosen and remove the locking screws with openings on the tool holder, screw the two disassembly screws into the opening screw holes in a clockwise direction and fix and lock them;



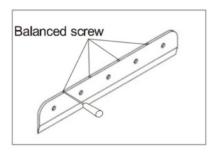


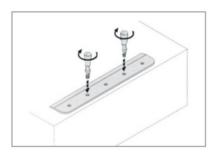
- Remove the other locking screws on the tool rest;
- ◆ Turn the two disassembly screws counterclockwise for half a circle and then take out the blade downward. Put the blade in the knife box with gloves or cloth to avoid scratches.





Be more careful when taking a new blade out. The blade cutter point must not be to the body. When you install the blade, you should screw up the screw stems. Set the blade on the blade carrier, use screw strip to fasten and fix up, then adjust according to cutting depth adjustment method;









Blade sharpening needs to be done in a professional factory, so that to ensure the quality.

Note: Dull blade can't cut paper correctly. Also, blade will

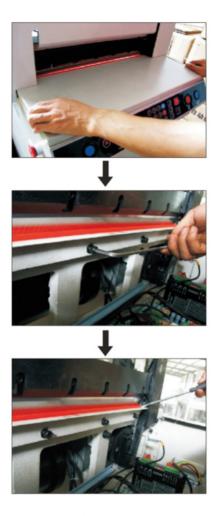
become dull if it always cuts thick paper or pasteboard. If cutting quality and accuracy can't meet required standard, the blade needs to be changed. Your work will go smoothly if you always have one replacement on hand. When you need to change blade, you must operate according to the steps of blade change instruction.

Note: To avoid any injury, you must be the most careful when you change the blade.

## 3-3-4 Cutting stick adjustment

One cutting stick can be used with 4 surfaces; and each surface can be cut in two times. One time can be cut many cuts.

When slash on the shim is too deep, you should adjust or change cutting stick; Knife shim can be took out by screw, and should be assembled onto the cutting desk flatly when it needs to be set back; Knife shim should lean to the left side, then re-push the front brace plate;



Note: when the blade is replaced, the blade itself must also be adjusted. If the blade eat too deep, not only "easy to damage the blade, but also make the blade accelerated wear.

## 四、Lubrication and maintenance

#### 4-1. lubrication

The machine should open the cover plate, check and clean, tighten the parts and lubricate the moving parts once a month. Please be careful to avoid lubricating oil on electrical circuits or electronic components when refueling.

To avoid breakdowns.







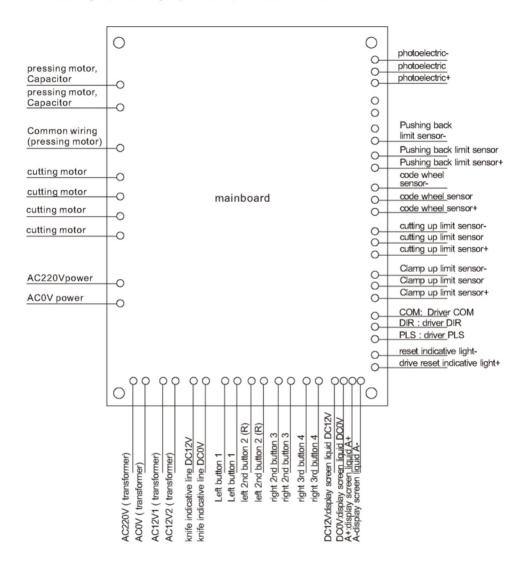


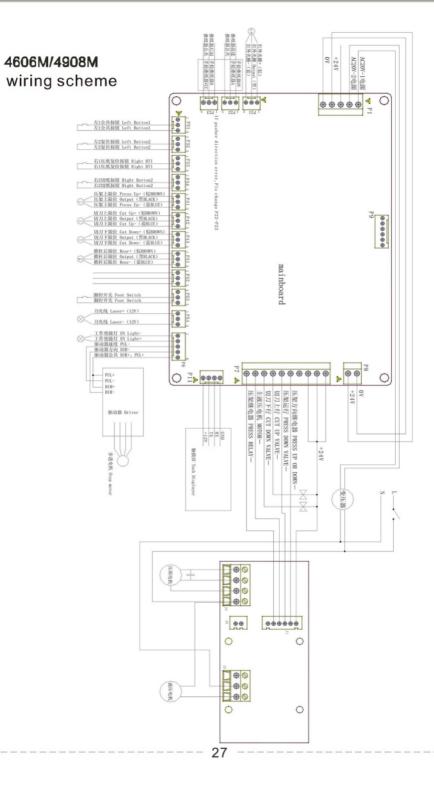
## 4-2 maintenance

- 1) When working, non-cutting objects are forbidden to be placed on the machine, so as to avoid hard objects entering under the knife and damaging the cutting knife. The bound books should avoid taking staples into the cutting area to avoid damaging the cutting knife.
- 2) After finishing the work every day, wipe the machine, remove sundries, wax the cutter for protection, and cut off the power supply.

#### 4-5 Wiring scheme

#### 4606K/R、4806K/R、4908S、4606S wiring scheme





## 5 Common error and elimination

## 4606K/R/S Paper Cutter Error list

Error	Phenomena	Elimination method
No power display	Indicative light don't shine	Check the power socket     Check main switch     Check the power wiring
Cutting blade can't come down completely	Cutting blade can't cut last paper completely	The blade wom out     Blade is fixed too high.Adjust depth of blade.The adjusting screw turn down and make the blade position decline.
The cutter is too low	The blade on the cutting stick is too deep.	Blade is fixed too low. Adjust depth of blade. The adjusting screw turn up and make the blade position lift.
The cutting knife is blunt.	Can't cut paper completely and cut powerlessly.	Sharpen the knife. (Go to professional knife factory)     Replace new blade.
DC motor carbon brush wear	Power on but the cutter don't work.	Check carbon brush from motor     Replace the motor
Irregular paper-cutting or too big difference	The cut paper has one side wide and the other side narrow, or has big deviation on dimensions	Loose firm screw, and use a ruler to adjust the angle between measuring scale and paper-pushing plate
The knife can't reset or works up and down continuously	The button is invalid. The blade works up and down without stopping	The sensor is displaced or damaged.     Circuit main panel is damaged

## 4606K/R、4806K/R、4908S、4606S Paper Cutter Error list

Error	Phenomena	Elimination method
Irregular paper-cutting or too big difference	The cut paper has one side wide and the other side narrow, or has big deviation on dimensions	Loose firm screw, and use a ruler to adjust the angle between measuring scale and paper-pushing plate
The knife can't reset or works up and down continuously	The button is invalid. The blade works up and down without stopping	The sensor is displaced or damaged.     Circuit main panel is damaged
LCD can't display	No power and buttons are invalid	1.Check power is normal or not     2.Check transformer is normal or not
LCD display or display wrong	Normal button of power. Source is invalid.	Check display board,mainboard , electronic circuit part
Digital-controlled circuit damaged	Paper-pushing part is not working	Check stepping motor, driver     Check whether main board is damaged.
Alarm for displaying 'F-1'	The button is invalid and cutting action stops	Check the flash Check the control panel
Alarm for displaying F-2	Cut normally, but clamp can't return the original position.	Check press up limit sensor Check the mainboard
Alarm for displaying F-3'	Cut normally, clamp is not coming down normally	Check code wheel sensor near pressing motor Check the mainboard
Alarm for displaying E-4'	cut normally, the cutting blade return original position abnormally	Check up limit sensor of blade carrier Check the mainboard
Alarm for displaying F-5'	Cut normally, but paper pusher can't limit and adjust.	Check pushing back limit adjust sensor Check the mainboard

## Repair warranty

1. The guarantee period of paper-cutting machine is one year. You should register in maintenance station within one month after you buy the machine, in order to establish maintenance file.

#### 2. Maintenance service scope:

Free installation adjustment operation training periodic maintenance, elimination of error in normal operation, and repair.

Freely change parts damaged in normal operation; maintain motor and circuit for one year; knife shim and blade belong to expendable supplies, so they are excluded from the maintenance scope.

3. Maintenance should be undertaken by the local sales agency.

4. We won't undertake the maintenance and accessories diversion fees caused by conditions below:

Damage caused by accident, wrong operation or intent disassembling.

Repaired by stations not authorized by our company, or use dependable materials and accessories not required by our company.

The customer doesn't register in the maintenance station within one month after he buys the machine.

The machine is damaged because of oil lack, oil in or water inflow.

# User Profiles- Warranty Card

User name:	
Tel:	
Post code:	
Distributor:	
Model:	

Distributor (stamp)



Please read this manual carefully before operating this machine.

• If there is any improvement on the product, please firmly comply with the definite object.