OPERATION MANUAL









All specifications and information concerning products are subject to change without notice Edition 3,201711.01

Content

Foreword	3
Safety Precaution	3
1.Unpack and check	6
2.Installation	7
3.Part Name	8
4. Main Technical Parameter	9
5. Control part and its' function	-10
6. Basic operation(Manual, Programming, Equal divide, Memory, Auto cut)	-20
7. Cut stick adjustment	25
8. Cutting blade adjustment & replacement	26
9. Maintenance	28
10. Trouble shooting and how to deal with it	30
11. Wire Diagram	32







Foreword

Thank you for choosing paper cutter. Please read this manual carefully which can ensure correct operation. We rely on powerful technical force and many years experience to develop paper cutter. We carry out strict quality control from designing and developing to purchasing material and producing. It reflects fully the aim of "doing better and better, customers' satisfaction" in our company. Our products have its characteristics of beautiful figuration, high efficiency, easy operation and favorable price.

Safety Precaution

Your safety, as well as the safety of others, is important. Before your install or use the machine, ready and follow all the safety notices carefully in this chapter. In this instruction manual, and on the machine, you will find important safety notice related to the use of the product. Observe all the safety information provided. Read all of the instruction for further use. Also make sure you have been fully trained before operating.

Location: The machine must be placed on sturdy level floor surface.

Electrical Supply: Connect to the correct electrical supply according to the name card

Grounding: For the safe, make sure that the machine is grounded.

Overload: Do not connect many machines to one plug. Overload could result in fire, personal inquiry or death.

Cleaning: Power off the machine and pull up the plug before cleaning.







The following warnings are found on the equipment

	Warning! Before you install or use the electric paper cutter, read and follow all the safety notices carefully		Only trained adult allowed to operate the machine
	Must grounded! Connect the machine to the pointed power voltage, and make sure the socket is well grounded.	\otimes	Prohibited to cut metal, hard and fragile object. Unless it will damage the blade.
4	Opening the machine expose you to hazardous voltage, which and seriously hurt or kill you. There are no user serviceable parts inside. Refer to qualified service		Sharpen the blade each 3000cuts. Sharping blade can guarantee cut quality and extend machine life. $_{\rm o}$
\bigotimes	Unqualified person forbidden to repair, change, or add any part to the machine.		Only qualified service man can replace the blade. Stock and remove the blade in blade box.
	Sharpen blade. Do not touch it with your hand or fingers.		Before every work, please firstly check if the safety device works well.







NO.	Other cautions
1.	After power on, press RESET to initialize the machine
2.	During Auto cut security level reduces, pay more attention to operation.
3.	Regularly lubricate the running mechanical parts!
4.	Hold the base or lift screw to remove the machine. Failure to observe this caution could result in damage to the machine.
5.	Before every work or blade replacement, please firstly check if the safety device works well.
6.	Place or take the paper only when the blade and clamp stop at HOME/UP position.

Nodel					nnect the power to the
	220V±10% 🗌 A	C110V±10%			n't disassemble the lom: Connect the
Supply	50Hz	60Hz	Warning		a single phase socket.
Power	1200W	1300W			
	1600W	2300W	Machine Num	iber	
			Production D	Date	
I he pate investiga	nt product coun ited	tefeits must			







1、Unpack and check

After unpack, respect the machine accord to below list. If any managed or missed item, please contact the local distributor or our company.

1	Machine·····1	3	-	Operation manual		Guarantee certificate······1	
			(savec	l in T-screen)·····1			
2	Tool bag·····1	4	Knock	tooling·····1	6		
				2)	3).		

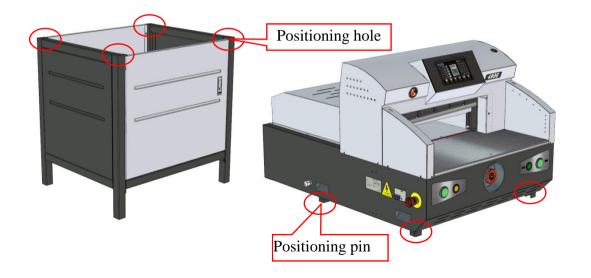
Reminding: Before you install or use the machine, read and follow the manual for better performance.

Save the package and plastic bag for further use. Plastic bags must be keep out of reach of children.

2. Installation

2.1 Ensure the floor is stable and flat surface capable of supporting the weight of the machine.

2.2 Install the machine, then lift the four positioning pins aimed to the four positioning holes above the machine.

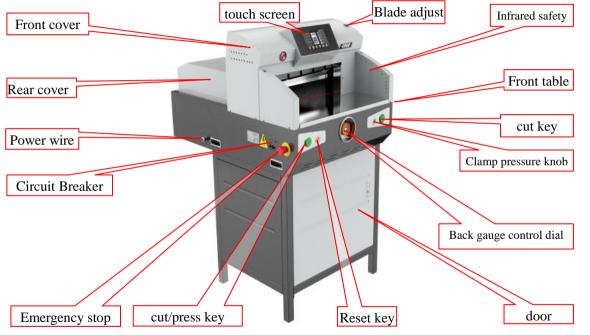








3.Part Name: Before use the machine, make sure you know it well.









4. Technical Parameter:

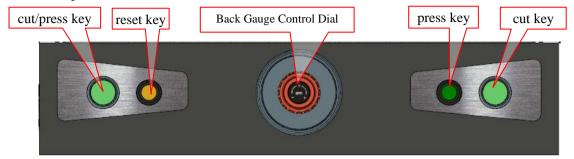
Model	4608	4908	520	Note
Max cut size(mm)	460*490	490*490	520*520	
Max cut height(mm)	80	80	80	
Min cut size(mm)	30	30	30	
Back gauge accuracy(mm)	±0.1	±0.1	±0.1	
Cut accuracy (mm)	±0.4	±0.4	±0.4	
Float ball table	\checkmark	\checkmark	\checkmark	
Press	Electrical	Electrical	Electrical	
Cut	Electrical	Electrical	Electrical	
Display	7 inch touch screen	7 inch touch screen	10.2inch touch screen	
Programs	\checkmark	\checkmark	\checkmark	
Arithmetic	\checkmark	\checkmark	\checkmark	
motor/apaad	V8.2: 3m/m	V8.2: 3m/m	V8.2: 3m/m	parameter set: speed1=3m/m
motor/speed	V9.2: 7m/m	V9.2: 7m/m	V9.2: 7m/m	speed2=7m/m
Power cupply/concumption	220V(110V)±10%	220V(110V)±10%	220V(110V)±10%	
Power supply/consumption	50Hz(60Hz)800W	50Hz(60Hz)800W	50Hz(60Hz)1300W	
Machine size(mm)	1020×780×1325	1020×780×1325	1050×810×1325	
Machine weight(Kg)	about170	about175	about 190	

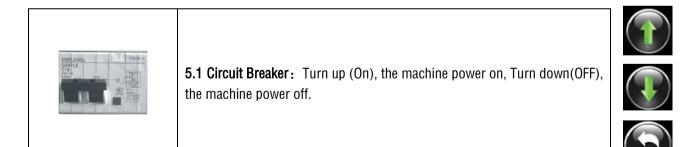






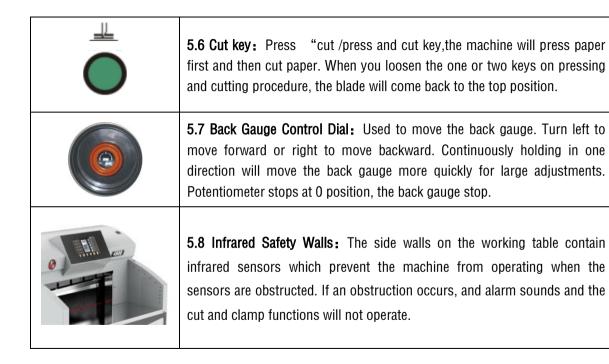
5. Control parts & its' function







e to the second s	5.2 Emergency stop: Turn Emergency Stop clockwise, power on. Press down this button when emergency happens to shut the power to protect the machine and operator $_{\circ}$ Note: This button only used under emergency situation, not ON/OFF switch.	- 11 -
	5.3 Cut / press key: The public key of cut & press should be used with cut key or press key to realize cutting and pressing.	
RESET	5.4 Reset key: This button resets the Blade and Back Gauge to the default position. When the machine is initially turned ON, the Reset button must be pressed before the blade will cycle.	
	5.5 Press key: Press "the public key of cut &press and press key, the clamp pressure paper. When loose the one or two keys, it stop pressing.	









5.9 Setting up and Functions

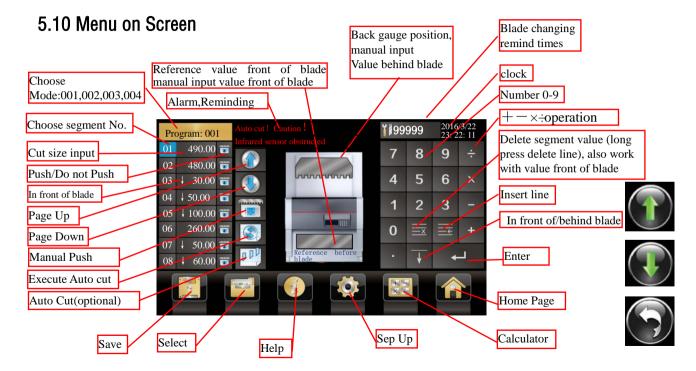
Turn on power, on the screen shows as below, Touch Reset enter the home page, the machine finds home position and stops, if the blade or clamp is not at home position, the machine runs resetting.



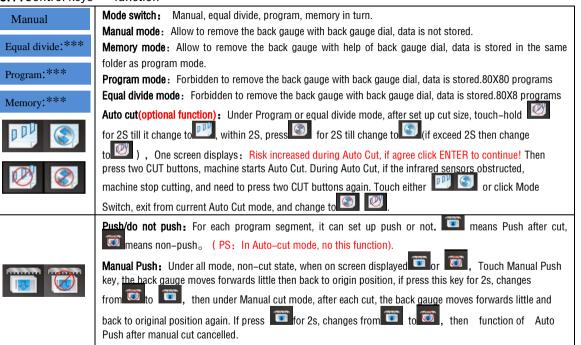








5.11Control keys' function





Press **SAVE** enter secondary menu. Save programs and memory data into folder No.1-80 save Equal divide data into folder for equal divide No.1-80. Press **SELET** key to select needed cut size which already saved in the folder. (see right Pic.) PS: Saving will cover the existed data. Under manual cut mode. the Save key is void.





Press SELECT enter secondary menu, select common Standard size, or with help of Save key to call the saved cut size by operator self.



Press to escape current menu $_{\circ}$ (see

right Pic.) Under manual cut mode, the Select key is void.











Press **HELP** key enter help interface, to browse information concerning Help, About, Count value and Contact us,



press to escape. (See right Pic.)





Press **SET UP** enter the set up interface,

Browse, choose and set up Language,

Self-diagnose, Size unit, Parameters,

Date, Lightness of screen, and so on for

setup information. Press to escape.

(See right Pic.)

















Press **PARAMETER** enter the menu shown as right, set up or adjust the parameters with the up and down arrow. Press enter next page, press **b** back to previous menu.

(Change will be effective only after restart the machine)



No.	Menu	Value range	Default	No.	Menu	Value range	Default
1	Pushing precision correction	±200		6	Pressing time	1.0—10s	6.5s
2	Pushing zero-position correction	±5mm		7	Cutting Line Delay Time	1—3min	1min
3	Paper Pushing Max Size	450–920mm		8	Blade Changing Warning Times	2500–10000	3000
4	Paper Pushing Min Size	20–50mm	30mm	9	Motor of back gauge	servespeed1 /2	1
5	Cutting Time	1.0—10s	6.5s	10	paper pressure set	1—8	8
				11	blade position compensation	1—9	2









6.Basic Operation

6.1 Mode: Manual Cut (No programmable) ,Click and select:

6.1.1 Manually move the Back Gauge: Turn the control dial in clockwise, the back gauge moves backward from slow to fast: turn the control dial in anti-clockwise, the back gauge moves forward from slow to fast.

6.1.2Enter cut data: In manual mode, click Size Behind Blade, Reference Front of Blade, input the cut size, then two



hands press the cut buttons to begin your job.

Size behind blade: Distance between front edge of the back gauge and blade, also the current position of the back gauge.

Manual

Reference front blade : Distance that the back gauge moves

For example: In manual mode, now the value is 480, if want the back gauge move forward 100mm, there are two ways,

- 1. Click input field Size behind blade, inpu3,8,0 one by one, then size behind confirmed. $_{\circ}$
- 2、 Click input field Size Front blade, input 1,0,0 one by one, then size front confirmed.

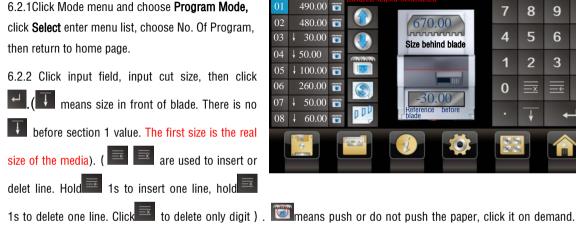
Remark: 1. In non-manual mode, it can't input data. On the screen displays current position of the back gauge.

2. Size front blade is just for reference, input the number, click enter to confirm , the back gauge moves forward accordingly. After every cut, this size clears to zero (select to clear size behind blade) .









6.2 Mode: Programming (Memory cut)







gauge back to Section 01 cut value position wait for next cut circle.

2. Press ENTER to modify the value in each section or choose the section no. get the back gauge move.

Finish size input, two hands press CUT, the machine work from first cut to the last one in order. Finish cut, the back





- 1. Click **SELET** to choose one Program then return home page.
- 2.In O1section input 480.00, then click
- 4. In 03section input 250.00, then click
- 3. In O2section input 400.00, then click
 5. Click 01, the cursor stop at 01 section.

6. Press two CUT buttons to start cutting.

In front of blade programming For example: paper size 485×400, after cut size80×400; 150×400; 250×400, do as below

1. Click SELET to choose one Program then return home page.

2.In 01section input 480.00, then click

4 In O3section input 🜙 150.00, then click 📰

- 6. Press two **CUT** button to start cutting.
- 3. In 02section input \downarrow 80.00, then click
 - 5. Click 01, and the cursor stops at 01 section.

PS: In each segment, set up combination of value in front of blade and behind blade. If the date exceeds, such reminding appears: Oversized input. Correct please!

6.3 Equal divide : Click **MODE** and choose **DIVIDE**, click **SELECT** to choose Program No then return to the home page. In the section No.01 input the size of media, in 02 section input \downarrow +cut size, press two **CUT** buttons, the back gauge removes for setup size after each cut. After finish cutting, the back gauge return to No.01 value position.







Example1: In section 01 input 480, section02input \downarrow 80, press two **CUT** buttons, first cut is 480, follow by each cut size(in front of blade) of 80, max 5 repeat cut cycle.

Example2: Paper size 485×400, cut to strip in size 45×400, between to cut 3mmbleed, do as follow

- 1. Click **SELET** to choose one Program then return home page.
- 2. In section01 input 480.00; 3. In section 02 input ↓ 45.00;
- 4. In section input \downarrow 3.00; 5. Press two **CUT** buttons

First cut480, follow by 45,3,45,3,45,3...until finishes. Then the back gauge return to first cut value position wait for next job.

6.4 AUTO CUT: Under Program or Equal Divide mode, after set up cut size, touch-hold within 2s,

press of r 2s till change to (if exceed 2s then change to), One screen displays: Risk increased during Auto cut, if agree

slick 📰 to continue! Then press two CUT buttons, machine starts Auto Cut. During Auto Cut, if the infrared sensors obstructed,

machine stop cutting, and need to press two CUT buttons again. Touch either 🗾 🕥 or click Mode Switch, exit from current

Auto Cut mode, and change to 🔯 🖾. After finish all cutting, the back gauge returns to position of first cut wait for next job.

Remark: A. In Auto Cut mode, the back gauge does not work automatically. Keep Children and non-operator away from machine!

B. In Program, equal divide, Auto Cut mode, the back gauge control dial does not work.







6.5 Mode: Memory Memory:***

Memory cut is one type of Program Cut, only the programming step is different. The computer track the Manual Cut

process and save it to as Auto Cut program.

Step:6.5.1Click mode menu and choose:

, Click **SELET** to choose one Program then return home

page.

6.5.2 Remove the back gauge until the blade light aligns the cutting line on the paper.

Memory:***

Notice: Operation is same as Manual Cut. See also in P.20.

6.5.3 After cut, the computer saves the data casually, and the arrow removes to next line.

6.5.4 Repeat step6.5.2、6.5.3,until it finishes cutting.

6.5.5 Click SAVE, choose one program No. to save the data, saving finished, ESC, and automatically enter PROGRAM

model.



2. Data of Memory and Program mode stored in same directory menu.







7. Cut Stick rotation and replacement

7.1. When the cut stick is badly abraded and the paper is not cleanly, either rotate or replace it. The cut stick can be rotated or replaced to provide eight cutting surface.

7.2. Turn the circuit breaker and switch to **OFF**. Insert the Stick Removal Tool(in the tool bag) into the hole in the end of the Cut Stick and pull up, turn the cut stick to new side then insert the stick to the groove again. See Pic.1–3 as below.









(Pic 1) (Pic 2)

(Pic 3)

8. Blade Replacement and depth adjustment

8.1. Blade depth adjustment outsides of machine

If the Cutting Blade does not cut through the paper, the blade may need to be adjusted or the Cut Stick may need to be changed. The blade can be adjusted up to approximately 23mm (9inch). Insert the hex wrench in the blade adjustment hole and turn the screw clockwise. Rotate 45 degrees, or a Quarter turn, then check for proper cutting.

8.2. Blade depth adjustment inner machine

8.2.1 If the Cutting Blade does not cut through the paper, the blade may need to be adjusted or

the Cut Stick may need to be changed.

8.2.2 If the blade is not level after installation, it needs to adjust the three screws to make the blade level.

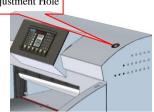
PS: The screws can be adjusted in range of 2–3mm. After adjustment, the Cutting Blade still does not cut through the paper, the blade may need to be changed.

 $8.2.3\ \text{How to adjust:}$ Stop the blade at middle position, unlock the fixing screws.

8.2.4Then stop the blade at bottom position, adjust the depth of blade down to the Cut Stick 0.3–0.5, turn the adjusting screw to make sure the blade at level. (Cut only one paper to test the level of blade, if the blade can cut through the paper, it means the blade at level). At the end tighten the fixing screws.

- PS: 1. Sharpen blade is dangerous, Caution! Only qualified technician to replace, store and remove the blade.
 - 2. Each 3000 cut, replace or sharpen the Blade, and rotate or replace the Cut Stick.











8.3. Blade Replacement

8.3.1 If the Cutting Blade does not cut through the paper, and does not cut nicely, the blade may be need to be replaced or sharpened. (Normally each 3000times of cut sharpen the blade one time, to make sure good performance).

 $8.3.2\ \text{Need}$ not to remove the up housing when replace the blade, do as follow,

A) Touch SETUP \rightarrow BLADE EXCHANGE (See P.18). Hold the Blade exchange key for 2s, remove the two fixing screws in the U channel.

B) Two hands press CUT, stop the blade at middle position, screw the blade exchange tool to the screw holes which on the U channel. Press RESET, the blade back to the home/up position.

C) Remove other screws, take out the blade with blade exchange tool, after sharpening install it back or just replace new one. Finished exchange, press **RESET** 2s to clear the date.



8.3.3 Refer to the qualified technician for service of sharpening.

8.3.4 Follow the opposite steps to install the blade back.



9. Daily Maintenance

The only maintenance required by the operator is to perform what is described in this section. Perform only the routine maintenance procedures referred to in these instructions.

9.1 Cleaning the Paper Cutter

1. Must power off the machine after work.

2. At the end of the day or project, clean up all waste and extra scraps off the working table.

- 3. Check if there is any oil leak
- 4. If the machine does not work for long time, polish it with wax.

9.2 Lubricate the machine

- 1. Every half month, apply lube to the lubrication section.
- 2. Apply lube to the machine frame and clamp slide slot.(lubricate oil)
- 3. Lubricate every axis of rotation (Engine oil) .
- 4. Be careful don't drop the oil onto wire board or electric components.







10. Trouble shooting and how to deal with it.

If trouble shooting alarms deal with it as instruction at blow:

Alarming	Description	Cause and how to deal with it
Cutting time out	Half cut cycle(blade moves from home position to bottom, or from bottom to home position) is about 2s,if it is over 2s, this alarming appears and the blade stops.	 A. No electric to Hydraulic pump motor. Possible cause: motor damaged, wiring between motor to main board fault, wiring of SSR fault, PCB fault. Please check all the parts in order. B. Blade solenoid does not work. Possible cause: solenoid damaged, valve element blocked, wiring fault or PCB fault. Please check all the parts in order.
Pressing time out	Half clamp cycle(clamp moves from home position to bottom, or from bottom to home position) is about 1s,if it is over 2s, this alarming appears and the clamp stops	 A. No electric to Hydraulic pump motor. Possible cause: motor damaged, wiring between motor to main board fault, wiring of SSR fault, PCB fault. Please check all the parts in order. B. Clamp solenoid does not work. Possible cause: solenoid damaged, valve element blocked, wiring fault or PCB fault. Please check all the parts in order.



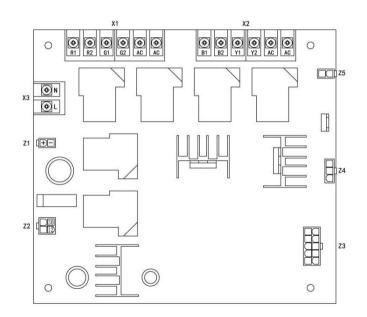
Alarming	Description	Cause and how to deal with it	- 3
Pushing zero–position signal error	After turn on, the back gauge reset. But if after too much time, the Zero position sensors is still active (in other words, the back gauge keeps in the sensor detection range) In such case, this alarming appears, and the clamp motor stops.	 A. Before turn on, the back gauge motor stop in the zero-position sensor detection range, and during the resetting, the motor does not run. Possible cause: motor damaged, wiring of motor fault, motor controller fault, or wiring between motor and controller fault, or PCB elements fault. Check all these parts in order. B. During resetting, the back gauge moves forwards about 2mm and stops. Possible cause: zero-position fault, magnetic strip drops out and stops nearby the sensor, or wiring of sensor fault, or PCB elements fault. Check all these parts in order. C. During resetting, the back gauge moves backwards to the wall, clash for 2s, and stops. The possible cause: controller fault, wiring between motor controller and PCB fault or PCB elements fault. Check all these parts in order. 	

Alarming	Description	Cause and how to deal with it	- 31
Pushing zero-position signal error	After turn on, the back gauge reset. But if after too much time, the Zero position sensors do not detect any signal. In such case, this alarming appears, and the clamp motor stops.	 A. Before turn on, the back gauge motor stop in the zero-position sensor detection range, and during the resetting, the motor does not run. Possible cause: motor damaged, wiring of motor fault, motor controller fault, or wiring between motor and controller fault, or PCB elements fault. Check all these parts in order. B. During resetting, the back gauge moves backwards about 2mm and stops. Possible cause: zero-position fault, magnetic strip drops out and stops nearby the sensor, or wiring of sensor fault, or PCB elements fault. Check all these parts in order. C. During resetting, the back gauge moves forwards to the wall, clash for 2s, and stops. The possible cause: controller fault, wiring between motor controller and PCB fault or PCB elements fault. Check all these parts in order. 	

Alarming	Description		Cause and how to deal with it	- 32
Light curtain activated	During Cutting and clamping, if the infrared sensors are obstructed, the blade and clamp stop. This alarming appears.	А. В.	During clamping or cutting, foreign matter enter the infrared sensor detect range. During clamping or cutting, though there is no foreign mater, but the sensors are dirty, sensitivity drops, or sensors damaged, or there is strong light disturb. Clean the sensor, remove obstruction.	
Blade lock activated	During cutting, the hook on the blade holder hooks on the blade lock. The travel switch opens and this alarming appears.	А. В.	The blade lock hooked by hook, press RESET two times, the blade holder goes up automatically. The power of electric magnet is not enough, and the hook is not open.	

11. Explanation to wire connection

1. Power Board





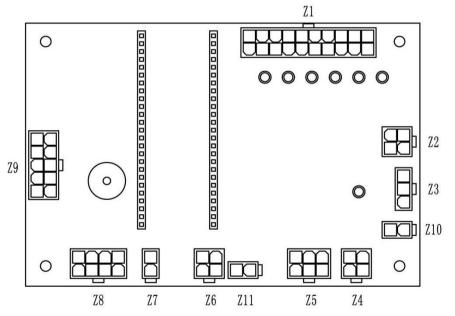




	E	XPLANATION TO CONNECTO	RS ON POWER BOARD	
NO.	Name	Diagram	Explanation	
Z1	driver power	12	1 driver +, 2 driver + $_{\circ}$	
Z2	transformer output	1234	1 、3 transformer output12v 2 、4 transformer output30V $_{\circ}$	
Z3	power\main board10holes wire	12345 678910	One to one with main board	
Z4	blade lock	123	1 is for zero line for blade lock,2 is for signal of blade lock , 3 is for power of blade lock	Ţ
Z5	Short circuit of blade lock		$1 \$ 2 is for the L line of solenoid of blade lock.	5

NO.	Name	Diagram	Explanation	- 3
X1	cut motor wire terminal	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	D.C cut motor: R1 to cut motor+, R2 to cut motor-, G1 to rectifier+, G2 to rectifier-, AC to rectifier AC (no different) 。 A.C. cut motor: R1、R2to main winding two ends of cut motor, G1、G2to secondary winding two ends of cut motor, AC one to one parallel connect to G1,G2 (note the motor rotation direction)	
X2	press motor wire terminal	B1 B2 Y1 Y2 YI Y2	B1 to push motor+, B2 to push motor-, Y1 to rectifier+, Y2 to rectifier-, AC to rectifier AC (no different) $_{\rm o}$	
Х3	power input wire terminal		L to circuit breaker L , $$ N to circuit breaker N_{\circ}	

2.Explanation to connectors on main board



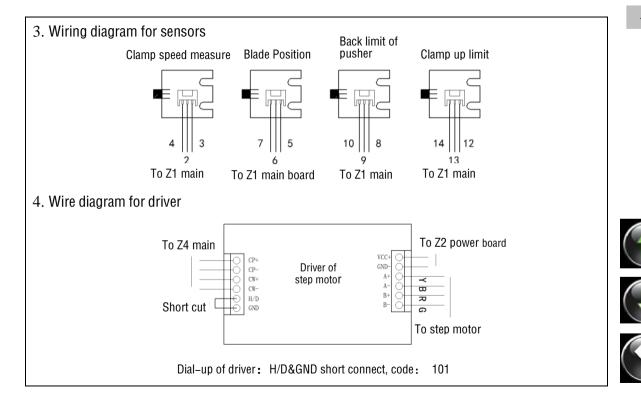




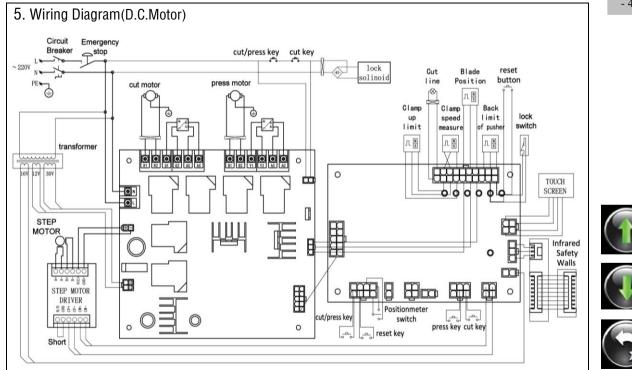


		Explanati	ion to connects on PCB	
NO.	Name	Diagram	Explanation	
Z1	20 holes wire	1020 919 818 717 616 515 414 313 212 111	 1,11 to blade light zero line, power line; 2,3,4 to speed measure sensor power, signal, zero line; 5,6,7 to blade Position sensor power, signal, zero line; 8,9,10 to back limit of pusher sensor power, signal, zero line; 12,13,14 to clamp up limit sensor power, signal, zero line; 15,16,17 to blade lock control power, signal, zero line; 18 is for standby; 19,20 to two ends of blade lock and reset switch. 	
Z2	Touch screen	12	1,2 to touch screen zero line and power	
LL	wire	34	3,4 to DIN、DO of touch screen	
Z3	infrared wall	123	1 to infrared sensors signal,2 to infrared sensors zero line 3 to infrared sensors power	\langle
Z4	4hole socket	12 34 (black)	1,2,3,4 are for standby	(
Z5	button socket	123	1,4 to two ends of cut button,2,5 to two ends of clamp button	
		400	3,6 are for standby	

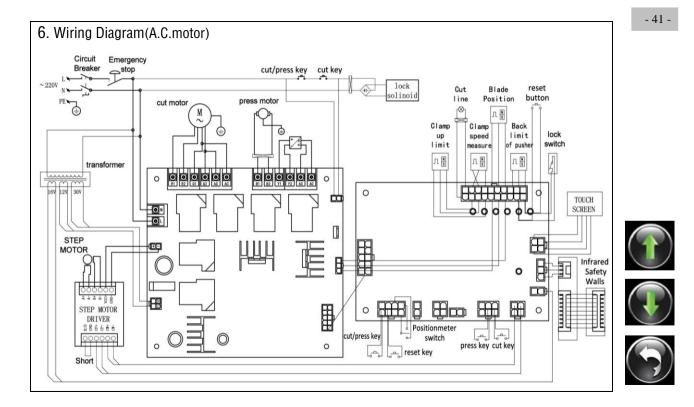
NO.	Name	Diagram	Explanation
Z6	Driver control	1234	1 to driver CW + , 2 to driver CP + 3 to driver CW – , 4 to driver CP –
Z7	2 hole socket	1 2 (black)	1,2 are for standby
Z8	8 holes button	1234 5678	 to common end of PUSH button, 5,6 to forward and reverse of PUSH button; 2 is for standby; 3,7 to two ends of RESET button; 4,8 to two ends of CUT/CLAMP button
Z9	10 holes wire	12345 678910	One to one with 10holes wire on power board
Z10	Power wire of PCB	12	1,2 to transformer 16V.
Z11	2 hole socket	12	1,2 are for standby $_{\circ}$



- 39 -



- 40 -



E N D







Reserved Page 1







Reserved Page 2





