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Thank you for your purchase. For your safety, please ensure reading this operating manual carefully before usage. This manual only applies to DDL-8000A automatic sewing machine. It does not include any instructions to any further upgrade.

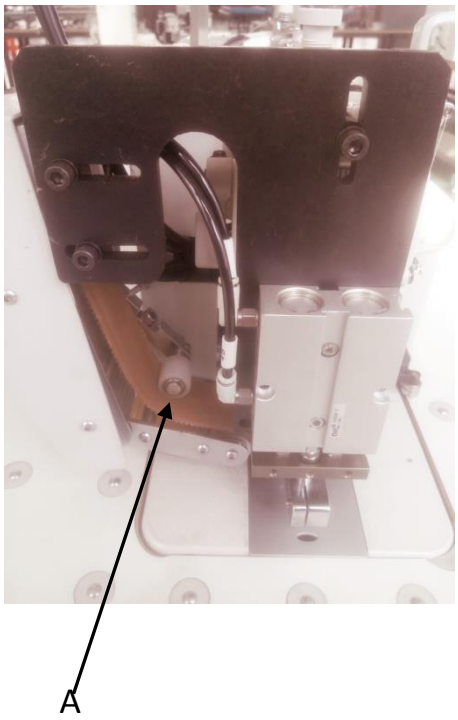
I. Product Specification

Power Voltage	Single Phase 200-240VAC
Frequency	50/60Hz
Work Environment	Temperature：5-35℃，Humidity：35—85%
Consumption Power	550VA
AirPressure	0.5MPa—0.75MPa
Application	Thin to medium thick materials
Maximum Sewing Speed	4000Sti/min
Maximum Cutting Speed	3000Sti/min
Needle Type	DB×1(#14) #9-18
Machine Oil Type	JUKI CORPORATION GENUINE OIL 7
Packing Weight	210 Kg
Packing Size	L×W×H=1270×880×1400mm

II. Safety Precautions

The installation of machinery must be operated by professionals.

(1) Power supply hub must have a PE line. Without a PE line or an unstable one would cause an electronic shock or malfunction.
(2) Before the machine is running, remove all items nearby the needle, knife, or surrounded to the machine, especially hands.
(3) Cut off the power before cleaning the machinery.
(4) Cut off the power before disassemble the modules or accessories.
(5) Wait at least 5 minutes of powering off before open the controller cover.
(6) Do not put your hands at the inside of conveyor belt (shown as position A in below picture) in case hurt the hands.



(7) Open the cover of the front start and emergency stop switch every month, check whether the screws of the cutter and side push mechanism are loose, tighten any, and clean up the excess chips.
(8) The default power supply voltage of the municipal power grid is 200-240VAC. If the actual voltage in any region is not in this range, it must be proposed when placing the order; otherwise, the machine damage and other losses caused by the different power supply voltage in different regions shall be borne by the demander itself.

III.Installation and Debugging

1. Boot Check

After opening the package of the auto jig machine, first check the overall condition and see if any collision damage. If yes, please contact with processing logistics to deal with the damage. Then check if any screw loose or part falls off due to transportation vibration, or the controller, display boxes, connecting line between the presence of looseor fall off. If any, tighten and recover in situ installation.

2. Electrical check and debug

A. Air circuit check

Connect the air source to the control air pressure filter entry at the electric machine left rear side. At the moment of opening the air valve, below status will incur.

- The machine knife components raise;
- Internal and external presser foot lift;
- Side push wheel and corner detecting wheel return;
- Lifter pin retract to sewing table hole;
- Push out value retract.

If any malfunction, please check the air supply and air circuits.

B. Air pressure adjustment

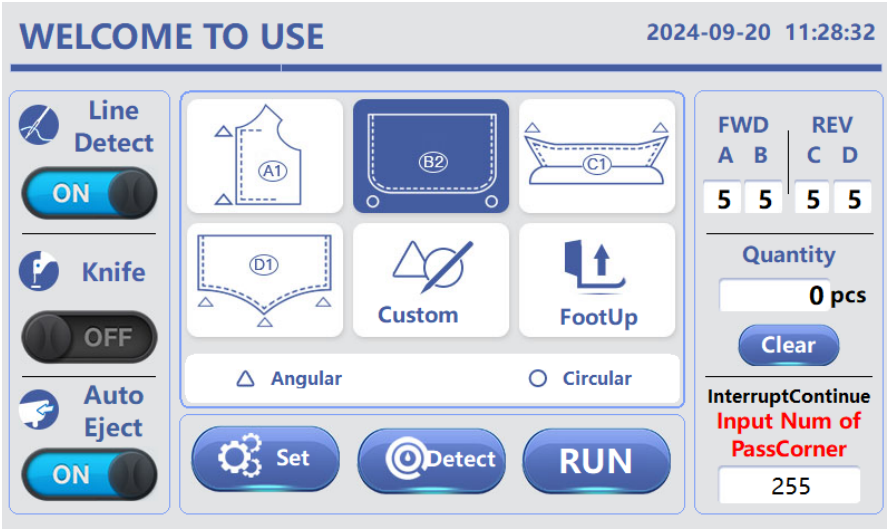
To adjust the filter pressure regulating valve, the pressure need to adjust to 0.45 MPa. Depending on material of jigs, the best pressure is to ensure jigs moving smoothly. Fluctuations of main gas pipe pressure would cause the system unstable.

Attention: The machine has been set up basically, so check first and adjust it if any malfunction.

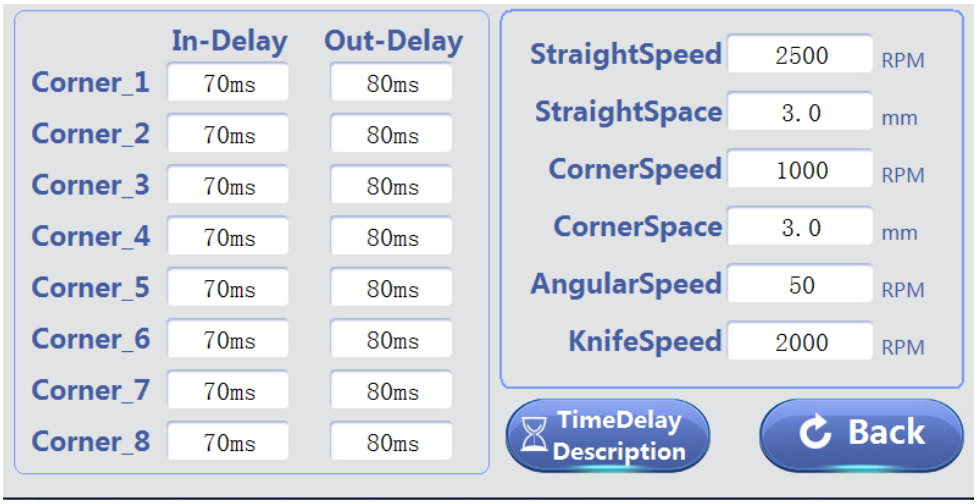
C. Power check

Plug the machine power into an electric socket with PE wire. Press the power switch "ON" button below the right side of the machine to switch ON. The display box and touch screen of the sewing machine show normal and no fault display. The touchscreen display is as follows:

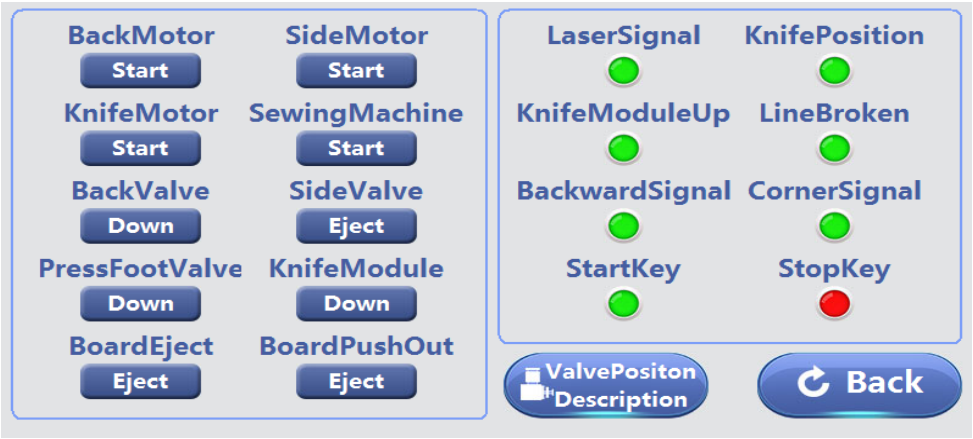
Select ‘English’ as the language to enter into the home page.



Click on the "Parameter Setting" button on the touch screen to enter the parameter settings page. Click the white bottom bars on the right side of "Straightspeed" and "Knife speed" respectively. As shown in the figure below, adjust the speed of the sewing machine and knife motor to the minimum. Press "return" button to return to the home page.



Select 'Detect' and the touchscreen display is as follows:



At this point, the left half is the actuator, you can click the button on the right respectively, and the corresponding mechanism will run or act. If not, check whether the lead is normal, whether there is stuck, etc. The right side is the signal detection, the sensor, induction switch, etc., change the position or state, the display will switch between red and green, if the switch is normal,

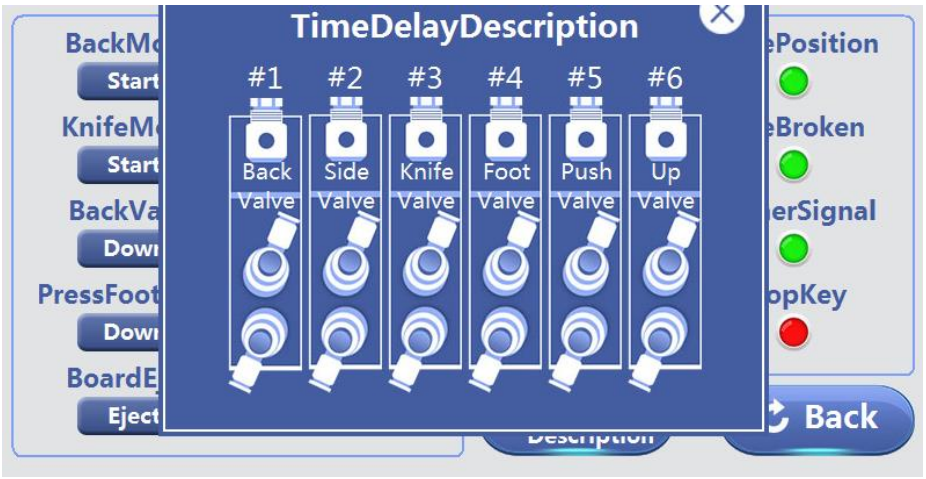
Without switching, check whether the lead is loose, etc. The inspection method of broken thread detection is to dial the thread picking spring with your hand and let it leave the copper sheet to see the change, as indicated by the arrow in the following figure:

Note: to prevent accidental damage caused by multiple function running at the same time, please don't turn on multiple function at the same time.Only turn on a single function each time. After checking one function, first turn it off and then open another function.

After some functions are selected, there will be a prompt, if click "cutter motor", the following prompt page will appear:

At this point, please press the prompts to check the relevant content, and then click "confirm".

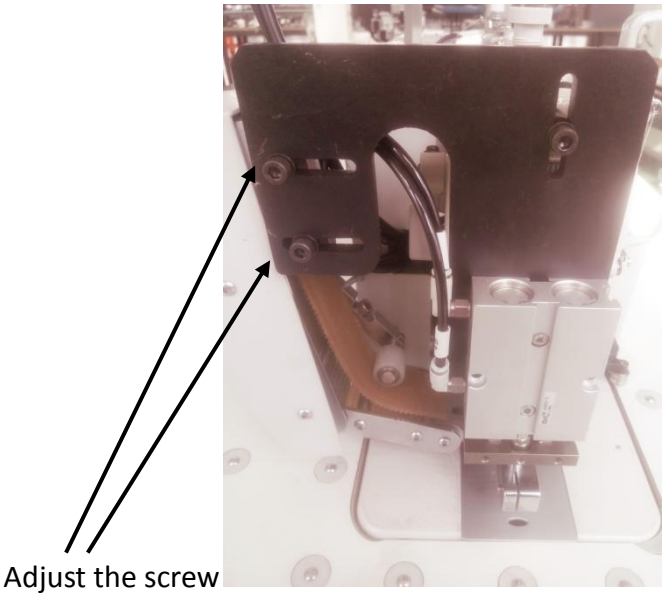
Click on the "valve position description" button to enter the following page:



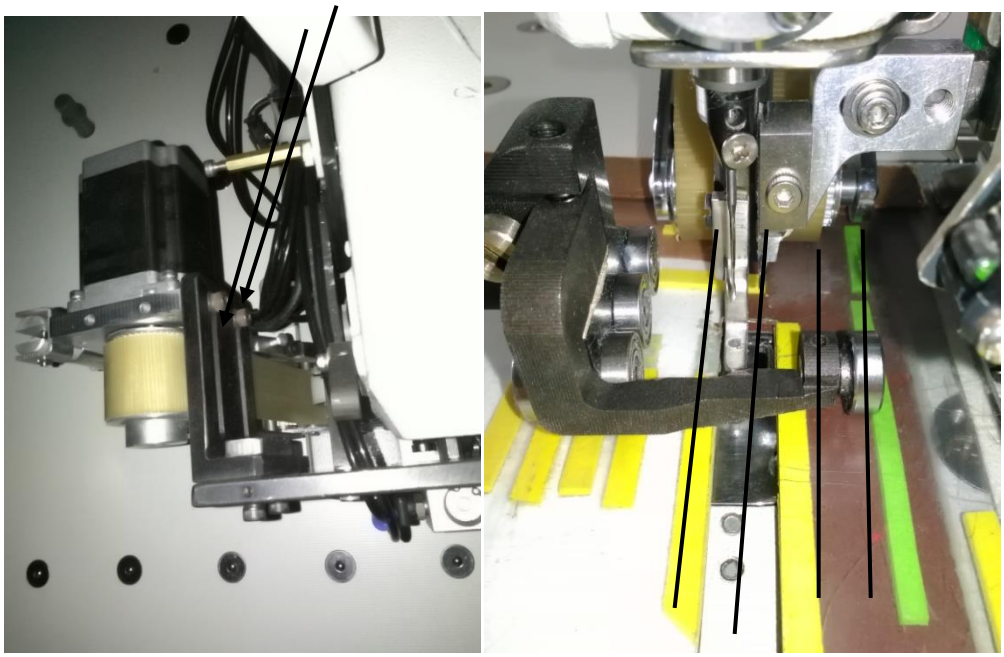
Indicated below is the position of the valve on the side of the control box under the sewing table.

D. Checking and adjustment of the back puller

Put the jig under the needle plate. Then put down the back puller, and push with hands. It should be not tight or loose, and the whole process can drive the synchronous belt simultaneously. If it is tight or loose, loosen the screw shown as the following figure and move the back puller assembly to the appropriate position.



If the synchronous belt is not parallel to the template, loosen the screw that is shown below and swing the puller component to the left and right until parallel, then tighten the screw. Then check if the pressure of the tugboatpuller is suitable. If not, then adjust use the above method. At the same time, when the synchronous belt is under pressure, check whether the two sides of the guide slot are symmetric. If not, the puller mechanism can be moved and adjusted to the appropriate position.



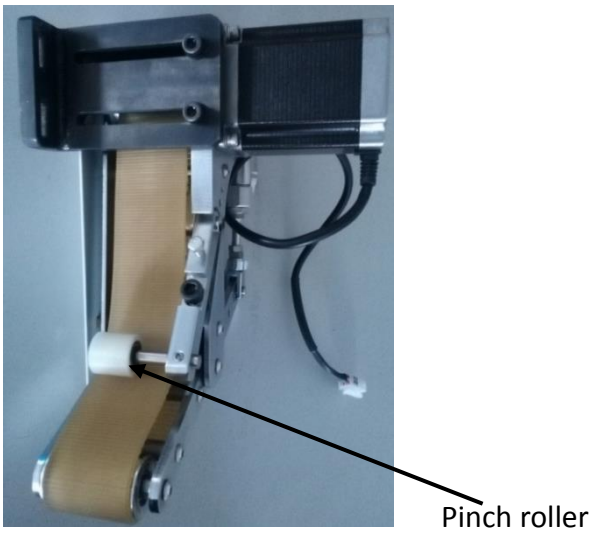
E. Side puller check and adjustment

Lift the back puller and extend the side puller, also using the hand push. The normal condition is that the whole process is neither tight nor loose, and the side push synchronization wheel can drive at the same time without slipping. If loose (not too much), stick medical tape onto the lower edge of the jig to widen the edge size, until meet the requirements. If too loose, check whether the jig size is in line with the requirements. Change the jig if it does not conform. During actual operation, if the back puller is lowered after the jig rotates only a small angle, then the reason may be that corner detect switch is too close and near threshold. In this case, lower the switch a bit, around 2-3mm. Or move to the left, and try again until normal.

F. Synchronous belt pinch roller adjustment

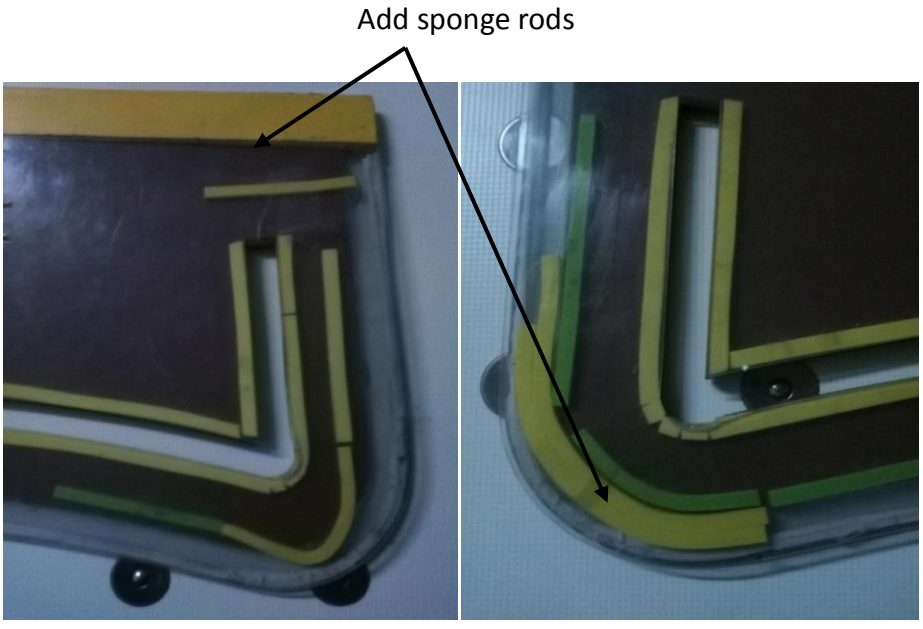
If during operation, a synchronous belt leaves and deviates the synchronous wheel,

the pinch roller shown in the figure below can be adjusted. Move the pinch roller to the left if the synchronous belt move leftward shown as below condition. On the contrary, move to the right and no-load running for a period of time.



G. Template pressure check

Note: In order to ensure the sewing stitch is consistent, it must ensure that the back puller puts the same pressure on jig in the whole process. Same for the side puller. Otherwise it will affect the stitch consistency. If the stitch is different, especially in the beginning and the corner of the position, the back puller is pressed on the edge of the jig, the pressure is not enough. So paste sponge rodsto the jig to add thickness, as shown in the following illustration.



If the side thrust is inconsistent, the medical adhesive tape can be used to paste around the underside of the jig.

H. Corner detect switch check

Continuously pushing forward the jig to the rounded corner, corner detection wheel will automatically scroll left along the jig, and corner detect switch will shine.Corner detection wheel would go back when the jig spins through the corner and its back edge becomes perpendicular to sewing table. Check whether the corner detectswitch indicator light will be off. If yes, then it is normal. Shown as figure below.

Corner Detect Switch

I. Determine the endpoint signal

Clip white paper in the jig. Push the jig from the beginning to the end of the last edge of the jig, wherethe last stitch locates.At this time, the photoelectric switch emits red light on the jig.It is where the reflective paper should stick. In order to avoid the jig offset and not detected, photosensitive paper is better with a long shape (width greater than 5mm). As shown below.

Photosensitive paper

Sensitivity adjustment

Clip a piece of white paper or cloth within the jig and swing at the beginning of the jig, leaving it with a maximum range of movement. Push the jig until the end of last one side edge position. Notice that the red indicator lights on the photoelectric switch cannot be bright, the green indicator can be on or off, the red indicator light should turn on when the jig moves to the end edge of thereflective paper. During the process if the red light turns on, the sensitivity is too high. To adjust,use an appropriate small knob screw adjusting MIN – MAX knob, slightly rotate counterclockwise as shown in the graph until it meets the requirements. Do not apply much force, otherwise it will damage the adjusting knob.

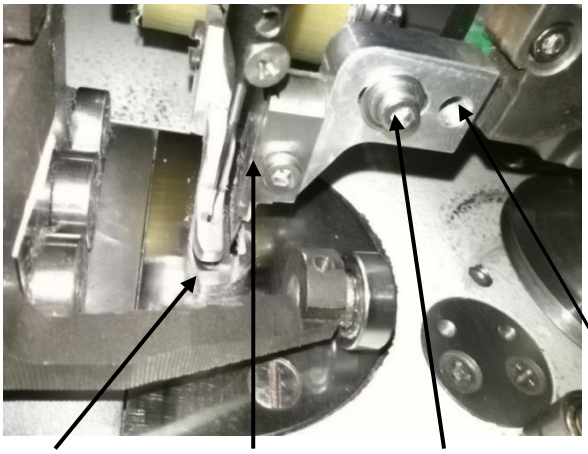
Note: two knobs, which a small knob of D-L points set to L, cannot change position.

Sensitivity adjusting knob

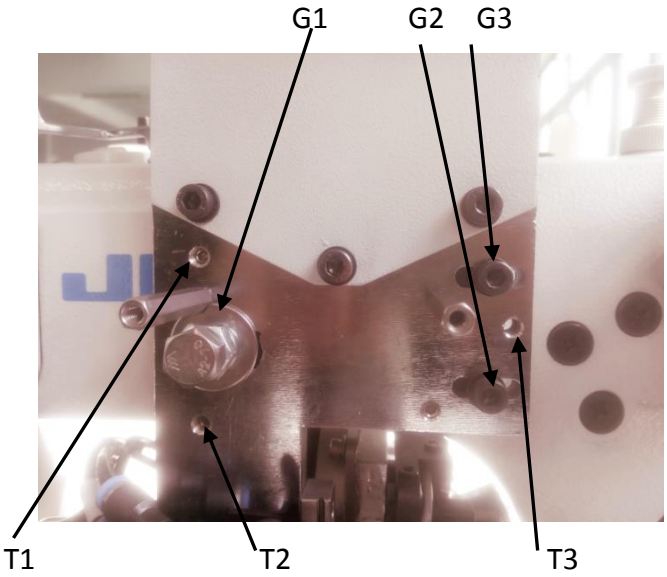
J. the installation and inspection of cutting knives

Cut off the power supply and open the front cover with the start and emergency stop switch. Shut off the gas source to release the gas within the cylinder. Then the cutting knife components fall. Spin the eccentric gyration cutting knife motor with the hand to adjust the upper knife to the lowest position, where the upper knife and the edge of the bottom knife on the needle plate coincide. Check whether the two edge fit

closely without adding pressure, as below graph.



If the knife do not have a good grip, loosen the set screw, press softly from the right side of the knife to the left side and then tighten the screw. If there is a slight gap at the front side while the back side fits, adjust clearance adjustment screw until it fits. If there is a gap on the back side while the front side fits, adjust the adjustment screw on the rear panel. Slightly loosen the fastening screw at the side that need to adjust, as shown below of G1, and then tighten the screws T1, T2, as shown in the figure.

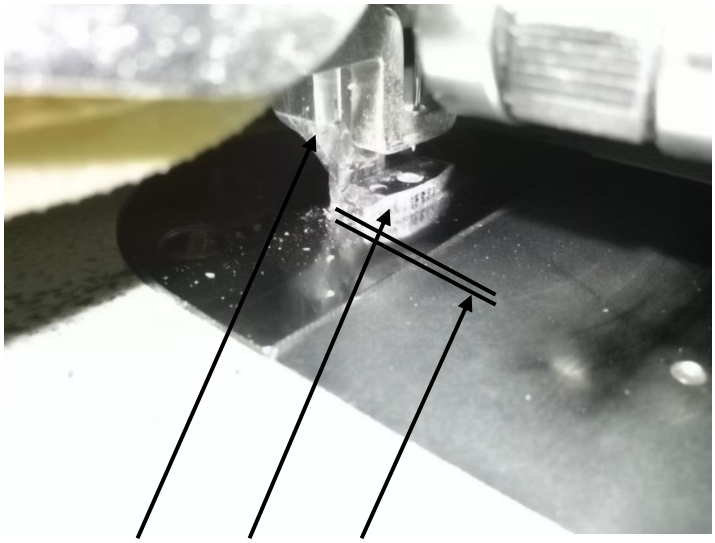


After adjustment, tighten the tightening nut of the adjusting screw. Pull in thread with the hand, in between the upper and bottom knives. Spin the eccentric gyration cutting knife motor with the hand and make it move up and down on the knife.

Adjustment is done when the knife can simply cut off the thread with front, mid and end parts of the edge.

Check whether the frontside point of the knife has a gap of 0.2-0.5mm with the front

end of the bottom knife hole. As shown below.

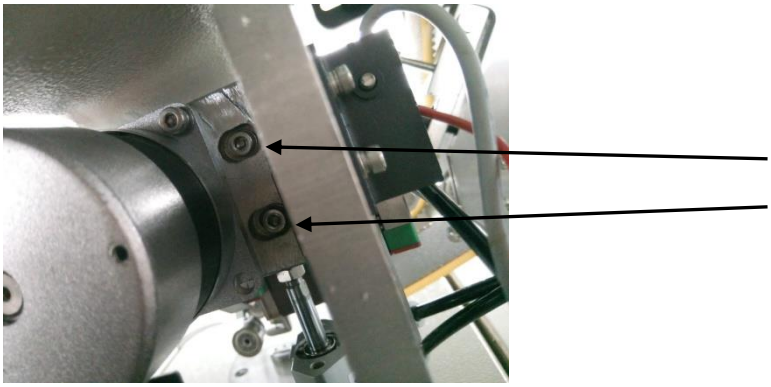


Upper knife Bottomknife 0.2-0.5mm （rear view）

If it is not, then need to adjust.

Method 1. Adjust J, as shown T2, T3 in the graph, and ensure the side push wheel and the sewing table parallel.

Method 2. Install the screw through two cutter guide rail shown as below, adjust the angle of cutter components until meet the criteria, and then tighten the two screws. As shown below.



K. Adjust internal pressure foot

The height of the inner pressure foot should be adjusted according to the material thickness. When the internal pressure feet are lowered, keep a distance with the cloth.

L. Adjust out pressure foot

When the out pressure foot is down, there is a slight pressure on the jig. The good state is that moving the jig back and forth is easy, and the left and right bearings should

have rolling. If too much pressure, it would affect the drag and bow thrust movement. At this point, adjust the small pressure regulating valve 4A shown as below, near the valve on the side of control box that is below sewing table. Reduce or increase the gas pressure until suitable.

M. other cylinder pressure adjustment

As shown in the following diagram, from left to right is 1AB- 6AB.

Speed control valve's up is A, down is B:

1AB: up/down control of the back puller. 1A: clockwise turn is slow down the down speed of back puller, anticlockwise turn is speed up. 1B: clockwise turn is slow down the up speed, anticlockwise is speed up.

2AB: eject and back control of side puller and corner detect valve, this is parallel use for two valves. 2A: clockwise turn is slow down the eject speed, anticlockwise is speedup. 2B: clockwise is slow down the back speed, anticlockwise is speed up. The corner detect valve's ejection is not only using the spring force, also use valve air pressure, can use the reducing valve 2A to reduce the pressure, clockwise is increase pressure, anticlockwise is reduce. Ensure the pressure is not too much, don't cause a impact or pressure to template.

Miniature pressure relief valve

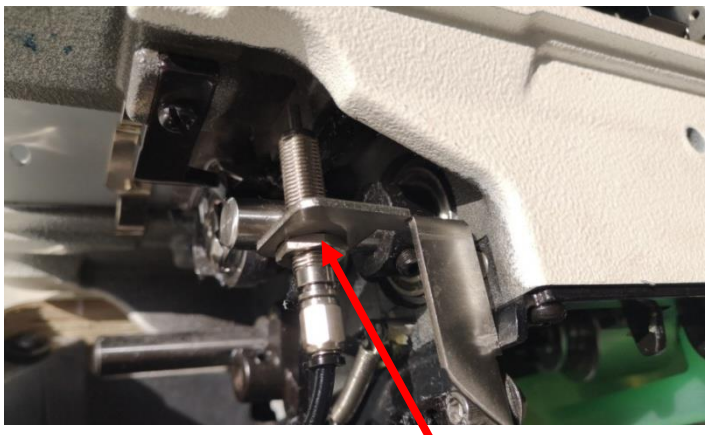
3AB: up/down control of knife module valve. 3A: clockwise is slow down the down speed, anticlockwise is speed up. 3B: clockwise is slow down the up speed, anticlockwise is speed up..

4AB: up/down control of inner/outside presser foot. 4A: clockwise is slow down the down speed, anticlockwise is speed up. 4B: clockwise is slow down the up speed, anticlockwise is speed up. Outside foot presser's pressure is modify by reducing valve 4A, clockwise is increase pressure, anticlockwiseis reduce.

5AB: push out valve. 5A: clockwise is slow down the push out speed, anticlockwise is speed up. 5B: clockwise is slow down the pushrod back speed, anticlockwise is speed up.

6AB: template jack up valve. 6A: clockwise is slow down the speed of jacking up template, anticlockwise is speed up.

After push up, lift rod should eject 3.2- 3.8mm, less or more than the height, should push the sewing backward and adjust the screw shown as blow graph, move the air valve up or down, until meet the requirement then fasten the screw. Ensure the lift rod is in the middle of the hole, to avoid collision.

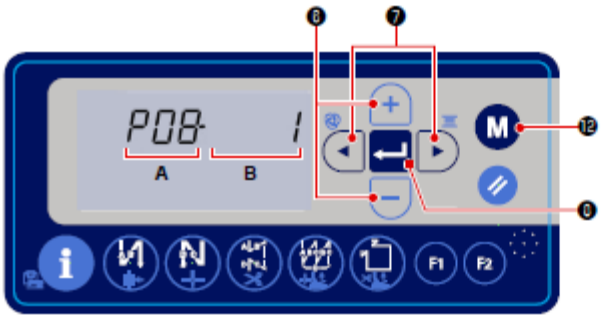


fasten screw

N：Sewing head setting:

(A)、The operating parameters of the sewing machine can be changed through the head operating panel. The internal parameters of the AUTO JIG machine have been properly modified according to the needs. In general, do not restore the factory parameters, otherwise it will change the set parameters and cause the normal operation. If factory parameters must be restored, please press the following reset: Under ordinary sewing state, long press "M" for 3 seconds to enter the "Function Setting" mode:

The set value of the function setting can be changed.



1) The function setting screen is displayed by keeping M ⓬ held pressed for three seconds in the normal sewing state.

A indicates the function setting number.
B indicates the set value for that function setting number.

2) Press ◄ ► ❼ to flash function setting No. **A** on and off. In this state, press + − ❽ to select the function setting number you want to set.
(The figure shows the function setting No. P08, that is used for setting the number stitches to be sewn using the soft-start function.)

3) Press ◄ ► ❼ to flash setting No. **B** on and off. In this state, change the set value by pressing + − ❽.

4) Press ↵ ❽ to determine the set value.

5) Press M ⓬ to return the sewing machine to the normal sewing state.

In the case of changing the set value for other function setting number, repeat the steps of procedure 2), 3) and 4). Then, finally carry out step of procedure 5).

6) The function setting items are classified into two different levels; user level and service level.
In the case of displaying the function setting items that are classified to the service level, turn the power ON while keeping M ⓬ held pressed.

1、P01- Maximum sewing speed: the default value is 3000, changed to 4000

2、P04- Start reverse stitching speed: the default value is 1900, changed to 1300

3、 P05- End reverse stitching speed: the default value is 1900, changed to 1300

4、P18- start reverse seam solenoid valve ON timing correction: the default value is 123, changed to 0

5、P19- Solenoid valve OFF timing correction: the default value is 130, changed to 0

6、P25- end reverse seam solenoid valve ON timing correction: the default value is 123, changed to 0

7、P26- the solenoid valve to end the reverse seam OFF timing correction: the default value is 130, changed to 0

Adjust the upper stop needle position: The sewing machine automatically lifts the presser foot and observes whether the needle tip exceeds the lower plane of the presser foot. Make sure it is a little lower. If it exceeds too much, it needs to be set.

When the power is off, press the "M" key switch and switch ON the power (ON) at the same time to enter the "Service Level" mode.

Adjust to: P72- The adjustment mode of stopping Angle over the needle: the default value is " -0", rotate the nose handwheel slightly, observe the position of the needle tip to an appropriate position (data shows that around 16 is preferred), and then press "↵" on the nose panel. Power off and restart. Check whether the automatic thread cutting is normal at the end of each sewing. If the thread can't be cut well each time, repeat the setting and return the position of the needle to a point. Or the stop position is not accurate, it is necessary to fine-tune the cutting line structure and adjust the cutting time.

（B）、Panel Function Setting

1、choose free sewing mode,

2、front and rear reinforcement function setting: Set to pass：

3、wire cutting function setting: according to the need to set. Generally choose effective, that is, display scissors pattern.

4、Soft start function Settings: select effective.

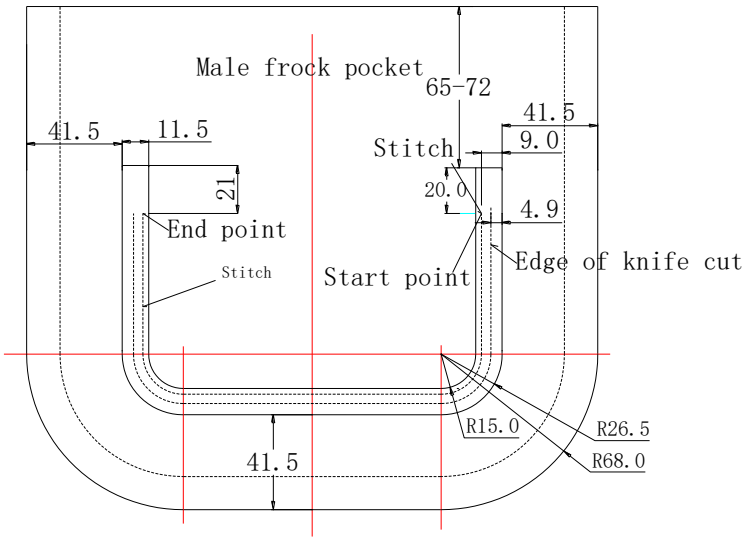
5、The needle position is selected as the down needle position when the machine stops midway.

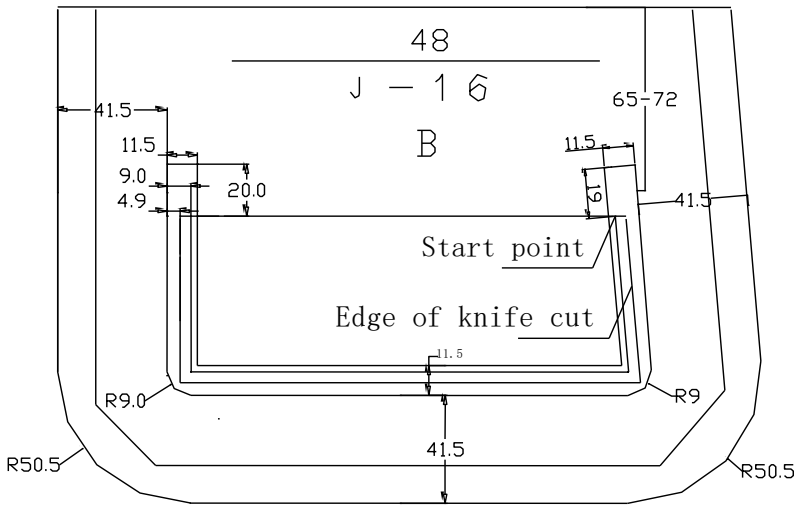
6、the selection of lifting foot: automatic lifting after cutting line.

7. The power switch shown in the following figure of the flat seam machine is always placed in the "ON":

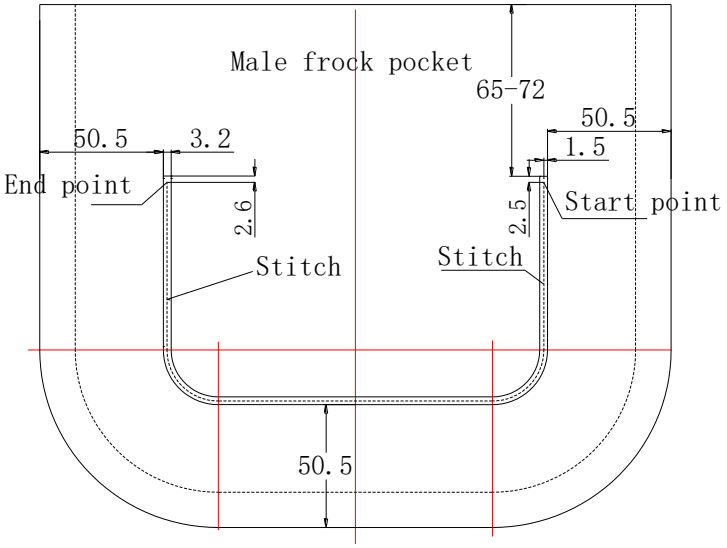
O: attention of making jig

Any type of jig with knife, must ensure this size blow, the distance between guideway and outer boundary is 41.5mm, width of guideway is 11.5mm, the thickness of jig is 1.5mm. By the way, start and stop point of guideway only consider the size of bottom knife, doesn't consider the size of cloth, it depends on the actual requirements.





Any type of jig without knife(diameter of guidepost is Φ3mm, must ensure these size blow, the distance between guideway and outer boundary is 50.5mm, the width of guideway is 3.2mm, thickness of jig is 1.5mm.



The necessary work before any jig using: enter the self detection page, put in the jig, let knife module down, turn the knife to bottom, push jig forward by hand. Check whether jig rub with knife, especially in the corner, ensure the backside knife doesn't rub with jig(better with distance 0.5mm), then let side puller eject, start the side motor, pull the jig to the end, better doesn't rub with jig. Otherwise, modify the top layer of jig. After that, enter parameter page, set the knife speed to minimum, test running with knife, prepare to press emergency stop button anytime, to avoid hurt people by knife broken.

When using jig without knife, suggest take down the upper knife and bottom knife, also set the knife function to OFF on the home page, otherwise it will cause the damage of knife and hurt people. Change the knife needle plate to circular hole needle plate, take down the inner and outside presser foot, change the 360d° presser foot or other suitable presser foot, modify the height to make sure jig can move smoothly and also be

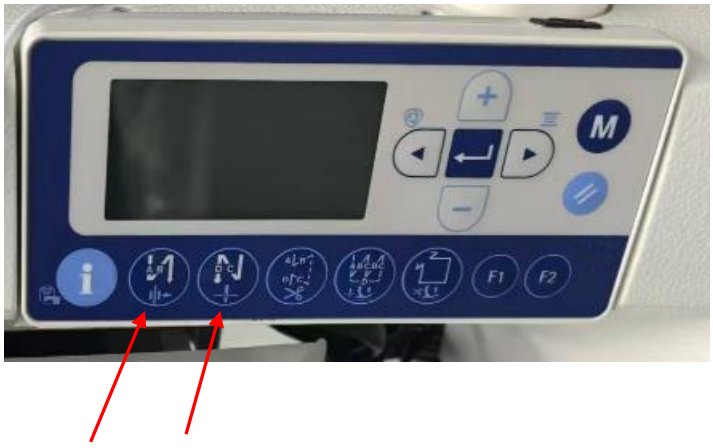
keep down.

IV. Operation

1. Home page setup

Home page Settings: After entering the home page, select the appropriate pattern according to the shape of the template, and set the corresponding parameters in the "Parameter Settings" page, return to the home page, on the home page, select ON / OFF, ON, ON / OFF, ON has this function, OFF does not have this function. In addition, when the front and rear reinforcement joints are selected, the corresponding box of A, B, C and D of the screen can be filled with the corresponding number of needles. When the value is all "0", there is no reinforcement joint.

In addition, it must be noted to close the front and rear reinforcement sewing selection switch on the flat sewing machine panel, and the arrow below indicates the switch:



Push down the green button of the start switch, at the front side of the bottom of the sewing machine head. The auto jig machine will immediately begin to run. The red button is for emergency switch. After pushing down this button, the auto jig machine will stop running immediately.

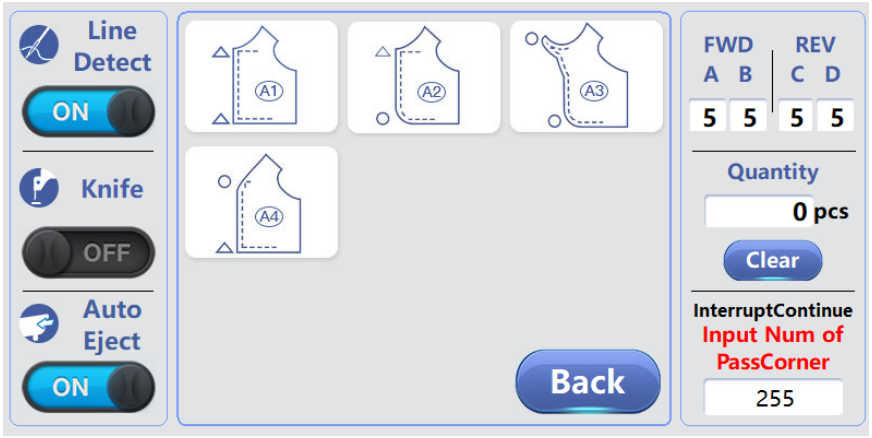
2. The home page is as follows.

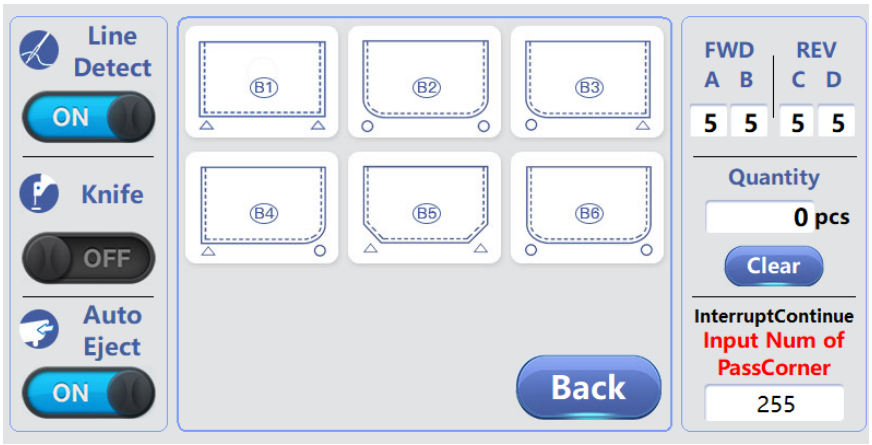
Each time when press presser foot up button on the main page, the inner presser foot will automatically lift 60S then put it down. But whenever the sewing begins, the inner presser foot will be lowered automatically.

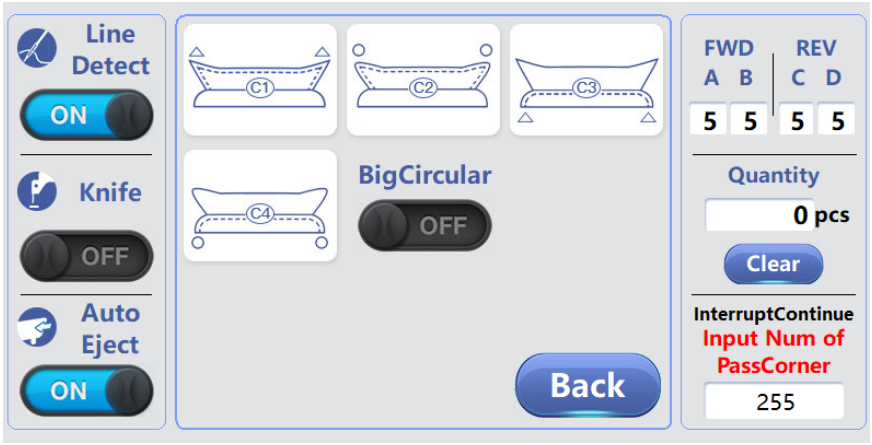
The "Run" switch on the home page clicks to clear the line break and emergency

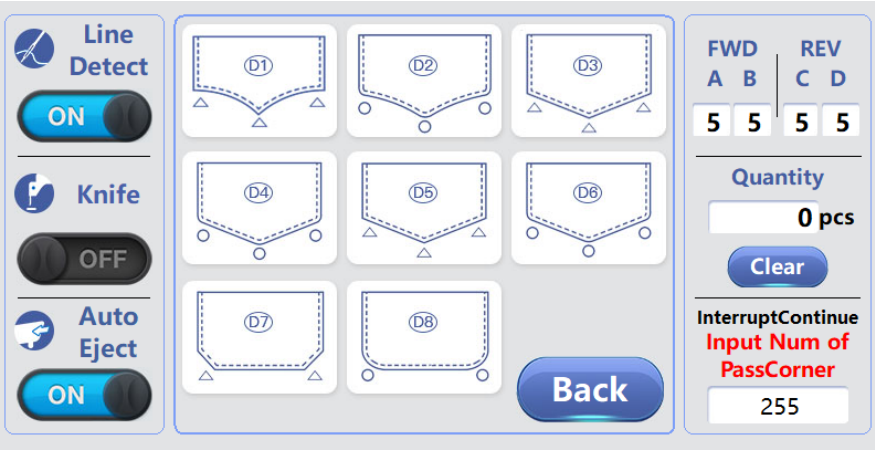
stop alarm page, and can be run directly.

The five patterns displayed in the upper middle are major items of template shape. After each pattern is clicked, the lower layer has further refined patterns, from left to right as shown below:



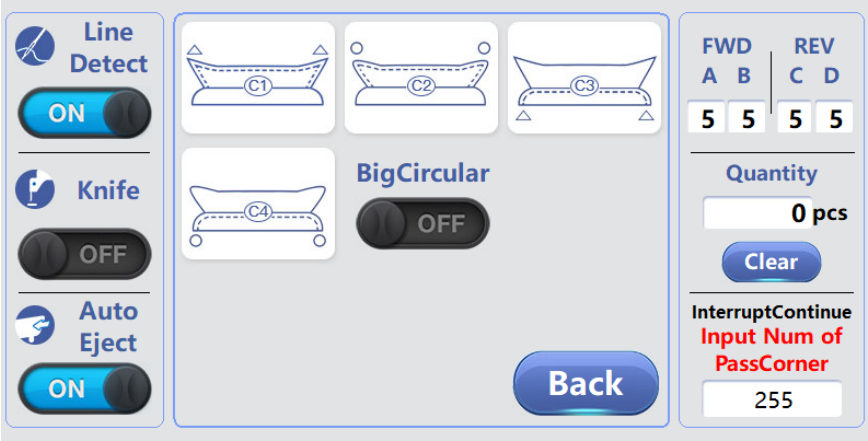






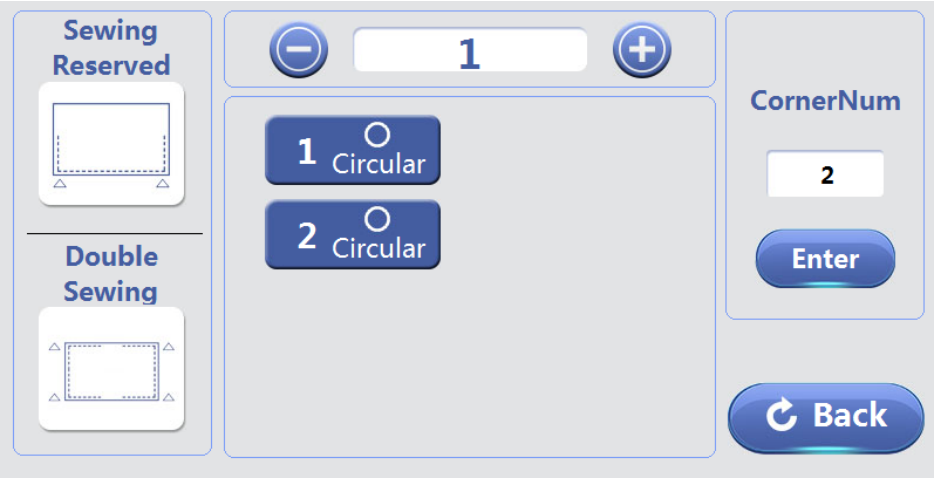
There is a "Sewing Reserved" key in the upper left corner, which deals with a special process: Sometimes leave a period of no sewing but cut in the start and end, (otherwise knife will stab cloth to cut properly, after a long time can cause cutter body position change and abnormal trimming). therefore, when " Sewing Reserved " is selected, according to the main page's selected model will cut at first, sewing when reach the first sensitive point set, began to cut and sewing at the same time, until the second photosensitive point, the machine reinforce sewing then stop, but other actions still running, continue to cut the remaining edge of the cloth and after detect the third sensitive point, the machine whole stop.

On the collar and triad collar seam page, in the figure below "bigCircular", refers to the individual collar Angle is big arc shape, at this point, need to choose the function, click on the box, make it displayed as "ON", press the "return" box return to the main page, and in the template in and out of the corner reflective paper, through photoelectric sensor to detect Angle, can sew big Angle of the template.



This feature works with various templates. Specific operation: after selecting the template pattern on the main page, press the custom key to enter the custom page, click " Sewing Reserved " to turn it into inverse color display, and return to the main page, press the normal operation, but the template must also be pasted three sensitive point in the appropriate position according to the

requirements.

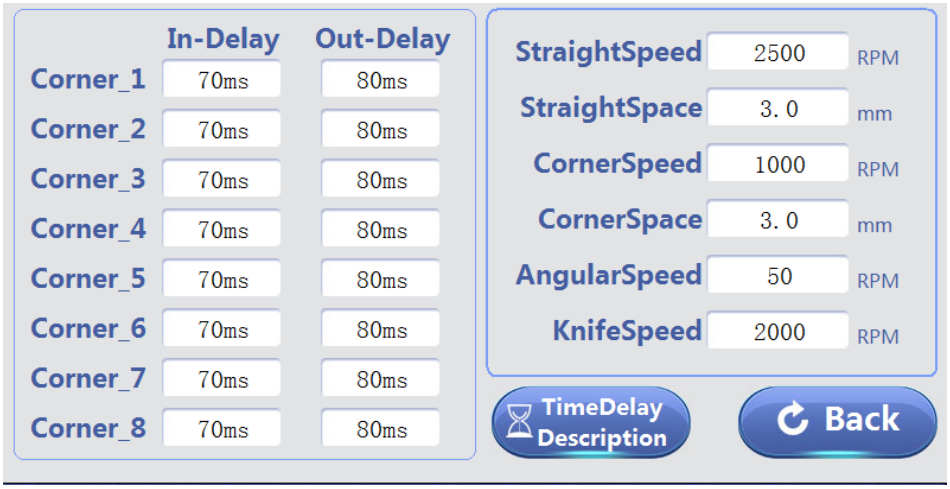


The "Double Sewing" key in the upper left corner is a special process: sometimes the front and back requirements to leave a section without sewing. Therefore, when the "before and after seam reserved" key selection for "ON", the main page selection mode cut a first, to set the photosensitive point, start cutting at the same time, until the end of the second point, the machine stop after the reinforcement seam, but other action still continue to run, cutting knife continue to cut the remaining cloth, until detected the third last point, the machine all stop. This function is applicable to the various templates. Specific operation: after selecting the template pattern in the main page, press the custom key, enter the custom page, select the "front and rear seam reserved" key as "ON", return to the main page, press the normal operation, but the template must be posted in the appropriate position in advance.

Lower left corner of the "double sewing", refers to a template can sew two products of the same shape, click into dark, press the "return" back to the main page, can sew double spell template, namely a template can sew two of the same products, the end of the first product automatically complete cutting and empty go to the beginning of the next product automatically continue to sew until complete the whole process.

3. Setup of corner time delay

Before running, click Parameter Setup button to enter the parameter setting page and set the following parameters.



The speed of the straight stitch is the operating speed of the sewing machine, which can reach up to 4000RPM. But it needs to be set properly according to the different jig and ensure the steadiness of the jigs. The cutting speed is better to be 300 to 500RPM lower than the sewing machine's speed. It depends on the quality of the cutting cloth.

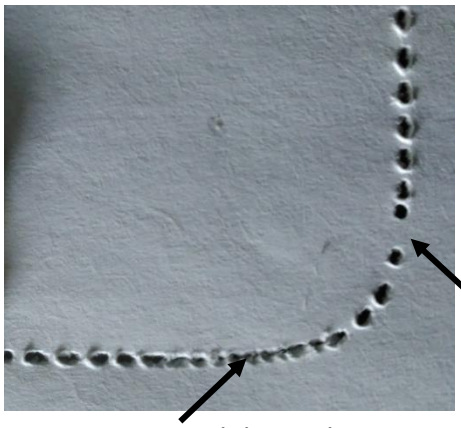
To set up the left side of the corner time delay parameter, every corner has a Corner In, Corner Out delay set. For each jig corner, respectively set up the delay execution speed of the circular or angular seam after the corner angle signal is detected. The first corner always starts from the right side of the jig, as the jig always runs counterclockwise. Click the Delay Settings box, as shown below.

Extra corner parameters do not have to be set up and will not affect the execution of the program.

The parameters of corner time delay directly affect the quality of sewing stitches. Following setup method is suggested.

Clipped a piece of thick paper in the jig and use the default delay setup to run the machine. See if the stitches are even. If before the rounded corners appear below condition in the figure A, then the delay time for Corner In is too short because the

machine performs corner speed in advance. So increase the delay time of Corner In depending on the size of the jump stitch, until it is ideal. Conversely, the opposite is done.



B：corner out delay is short　A：corner in delay is short

If the above condition B appears after the round corner, then it means Corner Out delay time is too short because the machine still performs the straight speed at a round section. So increase the delay time of Corner Out depending on the size of the jump stitch, until it is ideal. Conversely, the opposite is done.

If it's hard to achieve the desired stitch, move round corner detection approach switch to the right or move the metal detection strip to the left, in order to let the proximity switch detect the enter and delay of the jig to the corner in advance. This helps lengthen the delay time and makes adjustment easier.

Metal detection strip　　corner detect switch

Below are two possible situations appear if adjusting corner in and out time delay still cannot solve.

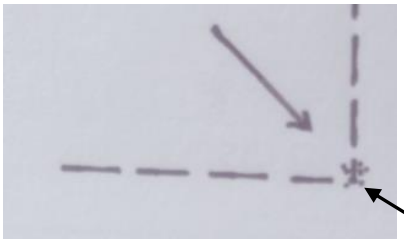


figure 3.1

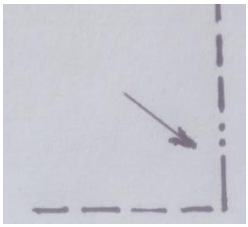


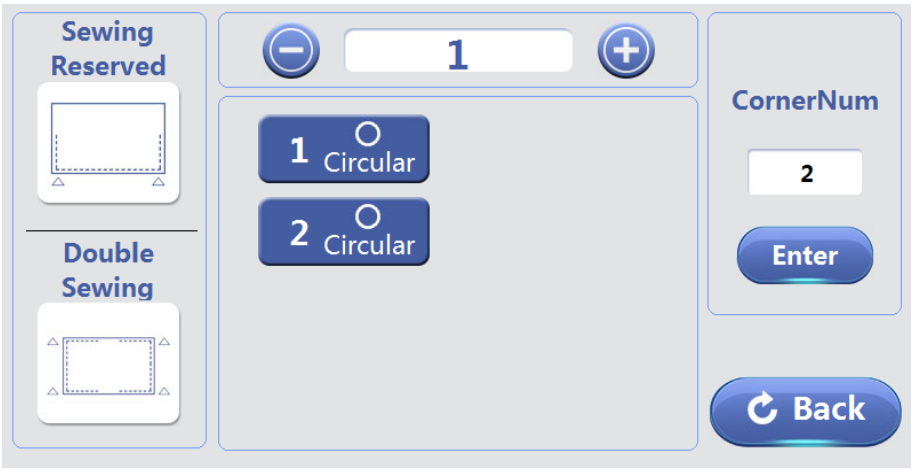
figure 3.2

If the situation shown in figure 3.1 appears, there is due to no turn at the corner. Move the metal detection strip of the corner detect switch to the left, until the operation is normal.

If the situation shown in figure 3.2 appears, then it is caused by early turn to the corner. Move the metal detection strip of the corner detect switch to the right, until the operation is normal.

Each pattern corresponds to a jig. After debugging proper time delay parameters and the parameters such as the speed, the setup is automatically saved. Next time when using this jig, just select the same pattern, all parameters such as delay or the speed is not necessary to reset and will automatically be obtained. In order to prevent the error program due to replacement of jig, it is recommended to number each jig that with different parameters and shapes.

Click the custom buttonto enter a Custom Settings page. It provides users with 10 kinds of independent user set corner numbers of Angular or Circular and sequences. After setup completed, press the Confirm button. Then the jig machine can operate as setup. The delay setting method of each Corner In and Corner Out is the same. Following graph for reference.

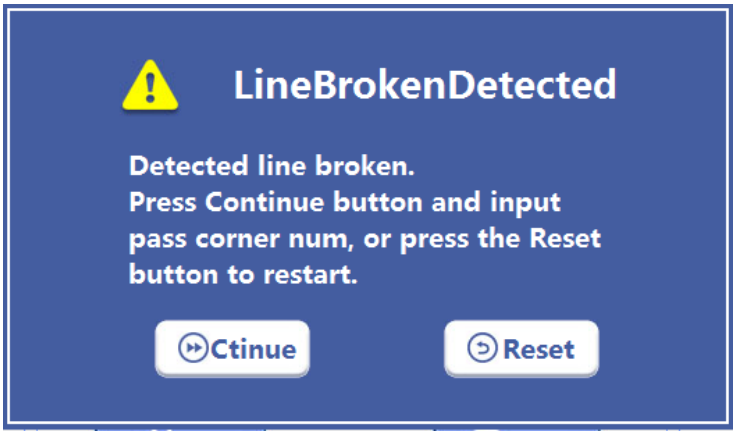


You can customize the shape of less than 10 templates, press the upper row of "+", add or adjust the set number of template set shape, "-" the opposite. Click on the right

side of the "corner number" under the white box, enter the number of the corner, the left box will appear the same number of small box, click on each small box, there will be "round" "right" swap, according to the actual template each corner shape set, press the confirmation key is saved, press the "return" key back to the home page. The le delay can memory the 10 template parameters.

4. Use of line broken detection function

The machine has the function of breaking line detection. After several needles stitches, the machine will start testing, and any unthreaded or broken line will stop the machine and trigger the alarm. The screen display is as follows.



Select the options you want to use. After selecting the continuous stitches and input the number of the corners pass already, press the start button to continue to sew the unfinished part.

If you press the Stop button, the following display will appear. Follow the instruction as the line is broken.

For convenience to debug, the thread test on the touch screen can be selected as "OFF". Then the machine can operate normally without threading.

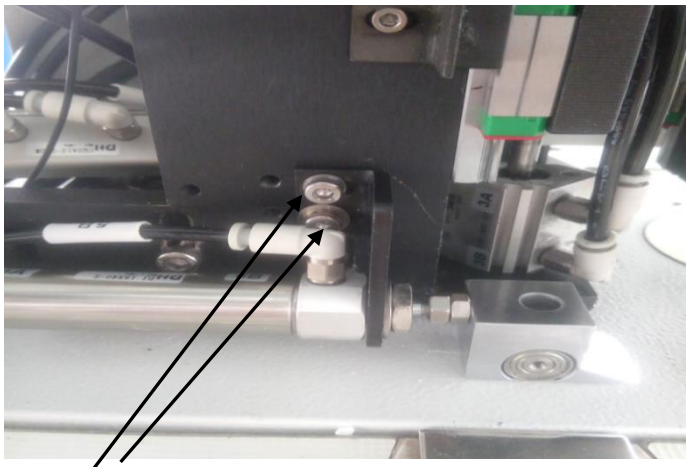
5. Key points of stitches improvement

After the straight seam speed is more than a certain speed, the stitching maybe creased, and the suggestion is that the stitch size can be small and the crease will improve a lot.

The corners of the template bend are not flat, can raise the internal pressure a little, and modify the corner in time delay to be appropriate, the stitch will have a great improvement.

6. Pushing mechanism adjustment

When the machine sewing various size of different jigs, some jigs may not be easily push out. In that case, adjust the rear panel mounting holes of 10 mm on the left and right side. The premise is not to influence the normal operation of the jig.Also the L shape pedestal can move left and right to adjust distance.



adjustment screw

V. Fault type, code and debug

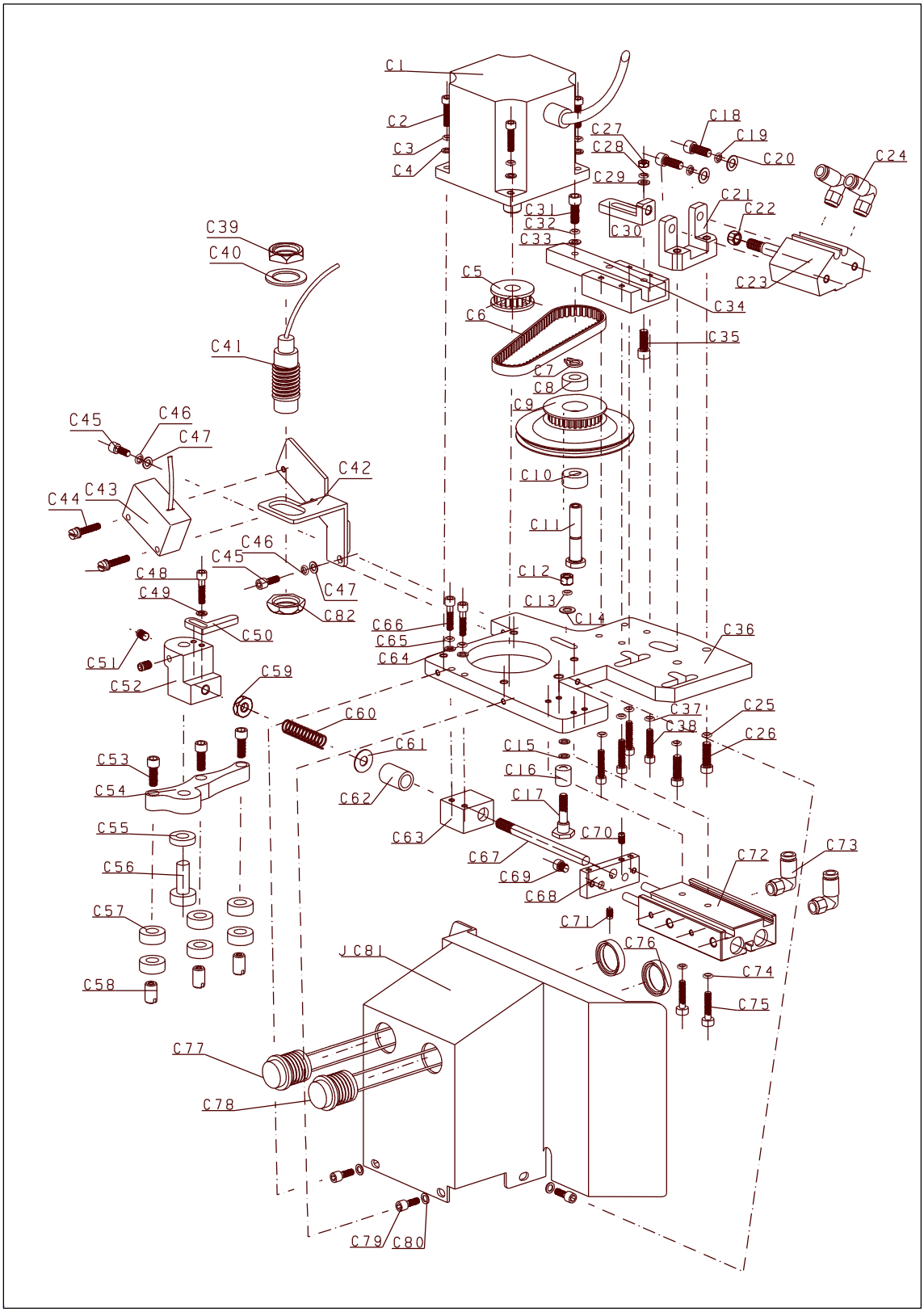
The machine is equipped with automatic alarm and a simple prompt processing method would be shown on the screen.

After the alarm, it is necessary to restart the machine to recover. If the alarm still exists after following the preliminary troubleshooting instruction, please contact the local dealer or manufacturer.

ErrorType	ErrorName	Comment
E01	OverVoltage	Over voltage Error, please check the power supply and reset.
E02	LackVoltage	Low voltage Error, please check the power supply and reset.
E03	Sewing Machine do not run	Sewing machine error, please check the connector and reset.
E04	No Index signal	Please check the encoder and reset.
E05	No AB signal	Please check the encoder and reset.
E06	Side Motor over current	Please check whether the side motor is blocked or overcurrent.
E07	Side Motor blocked	Please check the side motor and reset.

E08	Back Motor over current	Please check whether the back motor is blocked or overcurrent.
E09	Back Motor blocked	Please check the back motor and reset.
E10	EEPROM error	EEPROM error, please contact the dealer.
E11	Knife Motor over current	Please check whether the knife motor is blocked or overcurrent.
E12	Knife Motor blocked	Please check whether the knife motor is blocked or overcurrent.
E13	Module position error	Please check whether the Knife Module and FootPressor are up , and shut down the power to restart.
E14	Knife Module position error	Please check whether the Knife Module is down, and shut down the power to restart.
E15	Knife position error	Please check whether the Knife Sensor is normal, and shut down the power to restart.
E16	Lack of AirPressure	Please check whether the AirPressure is 0.45MPa, and shut down the power to restart.
E17	StopKey	Please check whether the stop key is always close, and shut down the power to restart.
E18	StartKey	Please check whether the start key is always close, and shut down the power to restart.
E19	Reinforce pin num error	The reinforce pin number is different between Touch screen and sewing machine.

Parts Manual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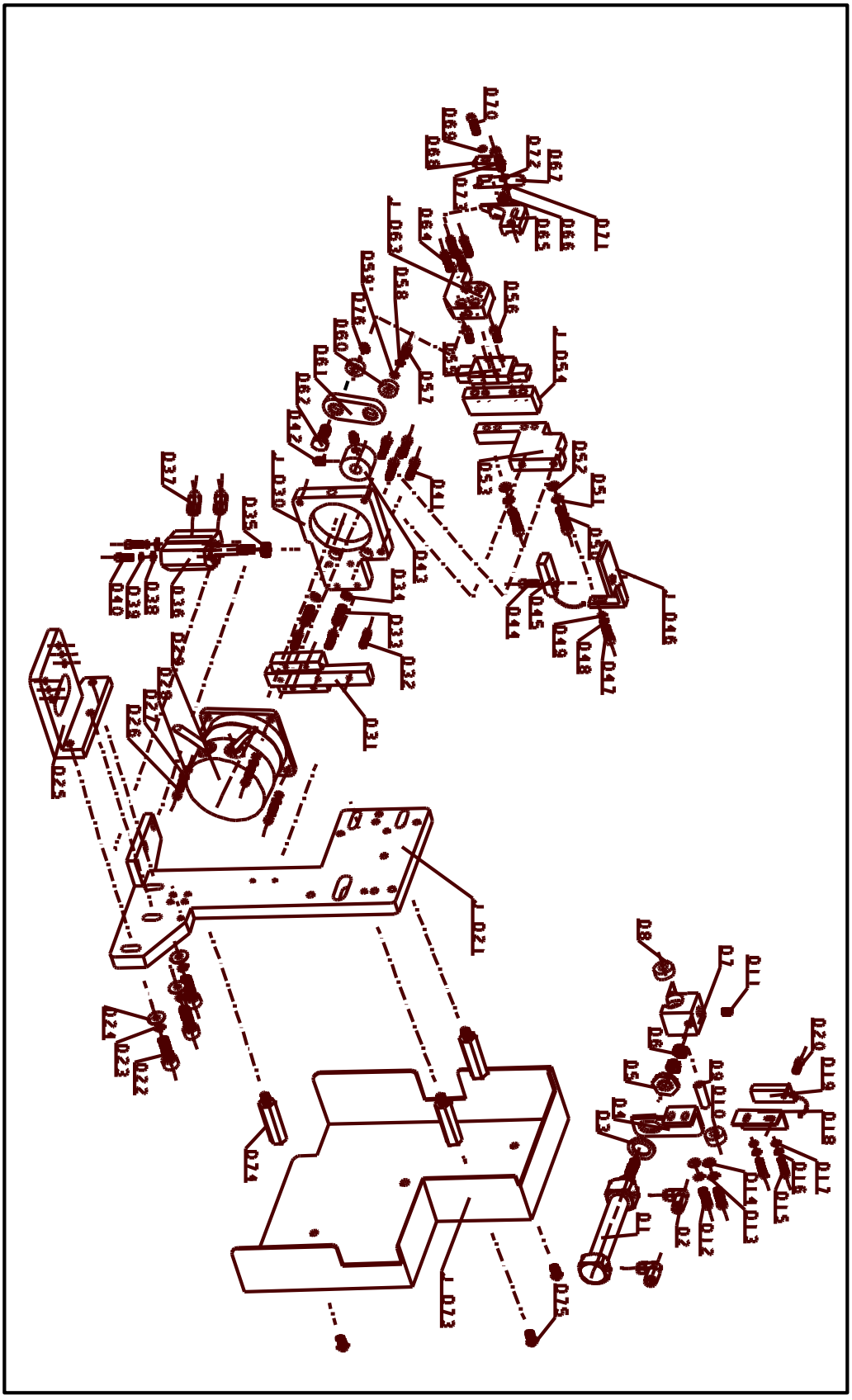
No.	PartNo.	PartName	No.	PartNo.	PartName
1	C01	Step Motor	30	C30	Cylinder connecting rod
2	C02	M4×14 socket head cap screw	31	C31	M3×10soket head cap screw
3	C03	Φ4Spring gasket	32	C32	Φ3Spring gasket
4	C04	Φ4Flat gasket	33	C33	Φ3Flat gasket
5	C05	Synchronizing wheel	34	C34	12mmlead rail
6	C06	Synchronous belt	35	C35	M3×14soket head cap screw
7	C07	Spring Collar	36	C36	Side push assembly plate
8	C08	Bearing	37	C37	Φ3Spring gasket
9	C09	Synchronizing wheel	38	C38	M3×10soket head cap screw
10	C10	Bearing	39	C39	M12nut
11	C11	Shaft	40	C40	Φ12 Flat gasket
12	C12	M4 nut	41	C41	Proximity switch
13	C13	Φ4Spring gasket	42	C42	Switch mounting plate
14	C14	Φ4Flat gasket	43	C43	Photoelectric switch
15	C15	Φ4Flat gasket	44	C44	M3×14Triple combination screw
16	C16	Bearing	45	C45	M3×5 socket head cap screw
17	C17	Pressing wheel shaft	46	C46	Φ3Spring gasket
18	C18	M4×10 socket head cap screw	47	C47	Φ3Flat gasket
19	C19	Φ4Spring gasket	48	C48	M3×8 socket head cap screw
20	C20	Φ4Flat gasket	49	C49	Φ3Flat gasket
21	C21	Side push cylinder mounting seat	50	C50	Corner inducer
22	C22	M5Nut	51	C51	M4×5set screw
23	C23	Cylinder	52	C52	Corner test assembly
24	C24	Gas connector	53	C53	M3×6 socket head cap screw
25	C25	Φ4Spring gasket	54	C54	Rotation testing wheel mounting plate
26	C26	M4×16soket head cap screw	55	C55	Bearing
27	C27	M3Nut	56	C56	Rotation test component wheel shaft
28	C28	Φ3Spring gasket	57	C57	Bearing
29	C29	Φ3Flat gasket	58	C58	Bearing shaft

No.	PartNo.	PartName
59	C59	M5Nut
60	C60	Spring
61	C61	Φ5Flat gasket
62	C62	Linear bearing
63	C63	Bearing mounting seat
64	C64	Φ3Spring gasket
65	C65	Φ3Flat gasket
66	C66	M3×16soket head cap screw
67	C67	Template limit sliding rod
68	C68	Cylinder slide bar gauge plate
69	C69	M4×5soket head cap screw
70	C70	M3×4set screw

No.	PartNo.	PartName
71	C71	M3×4 set screw
72	C72	Cylinder
73	C73	Gas connector
74	C74	Φ3Spring gasket
75	C75	M3×16soket head cap screw
76	C76	M16Fastening ring
77	C77	Green button switch
78	C78	Red button switch
79	C79	M3×6soket head cap screw
80	C80	Φ3Flat gasket
81	JC81	Shield
82		



No.	PartNo.	PartName
1	D01	Cylinder
2	D02	Gas connector
3	D03	Φ8Shim
4	D04	Side push cylinder mounting bracket
5	D05	M8nut
6	D06	M5nut
7	D07	Lateral thrust block
8	D08	Bearing
9	D09	Shaft
10	D10	Bearing
11	D11	M4×5Set screw
12	D12	M4×10 socket head cap screw
13	D13	Φ4 Spring gasket
14	D14	Φ4 Flat gasket
15	D15	M4×10soket head cap screw
16	D16	Φ4Spring gasket
17	D17	Φ4Flat gasket
18	D18	Proximity switch mounting plate
19	D19	Proximity switch
20	D20	M3×8soket head cap screw
21	JD21	Side push cutter mounting plate
22	D22	M5×20soket head cap screw
23	D23	Φ5Spring gasket
24	D24	Φ5Flat gasket
25	D25	Adjusting plate

No.	PartNo.	PartName
26	D26	M4×14socket head cap screw
27	D27	Φ4Spring gasket
28	D28	Φ4Flat gasket
29	D29	DC electric machinery
30	JD30	Cutter motor mounting plate
31	D31	9mmlead rail
32	D32	M3×12soket head cap screw
33	D33	M4×12socket head cap screw
34	D34	Φ4Spring gasket
35	D35	M5nut
36	D36	Cylinder
37	D37	Gas connector
38	D38	Φ4 Flat gasket
39	D39	Φ4Spring gasket
40	D40	M4×10socket head cap screw
41	D41	M3×10soket head cap screw
42	D42	M4×4 Set screw
43	D43	Eccentric gear
44	D44	M3×8 socket head cap screw
45	D45	Proximity switch
46	JD46	Proximity switch mounting plate
47	D47	M4×8 socket head cap screw
48	D48	Φ4Spring gasket
49	D49	Φ4 Flat gasket
50	D50	M4×20 socket head cap screw

No.	PartNo.	PartName
51	D51	Φ4Spring gasket
52	D52	Φ4Flat gasket
53	D53	Cutter guide rail mounting plate
54	JD54	Slideway cushion high board
55	D55	9mmSlideway slider
56	D56	M3×10socket head cap screw
57	D57	M3×6socket head cap screw
58	D58	Φ3Spring gasket
59	D59	Φ3Flat gasket
60	D60	Bearing
61	D61	Connecting rod
62	D62	Couplet shaft
63	JD63	Blade mounting plate
64	D64	M3×12socket head cap screw
65	D65	Cutter seat

No.	PartNo.	PartName
66	D66	M5×4set screw
67	D67	Top blade
68	D68	Blade pressing plate
69	D69	Φ3Flat gasket
70	D70	M3×12socket head cap screw
71	D71	Φ4Flat gasket
72	D72	Φ4Spring gasket
73	D73	M4×12socket head cap screw
74	JD73	Rear shield
75	D74	Six angle supporting column
76	D75	M4×6Large cross recessed pan head screws
77	D76	Φ6Rand
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79		
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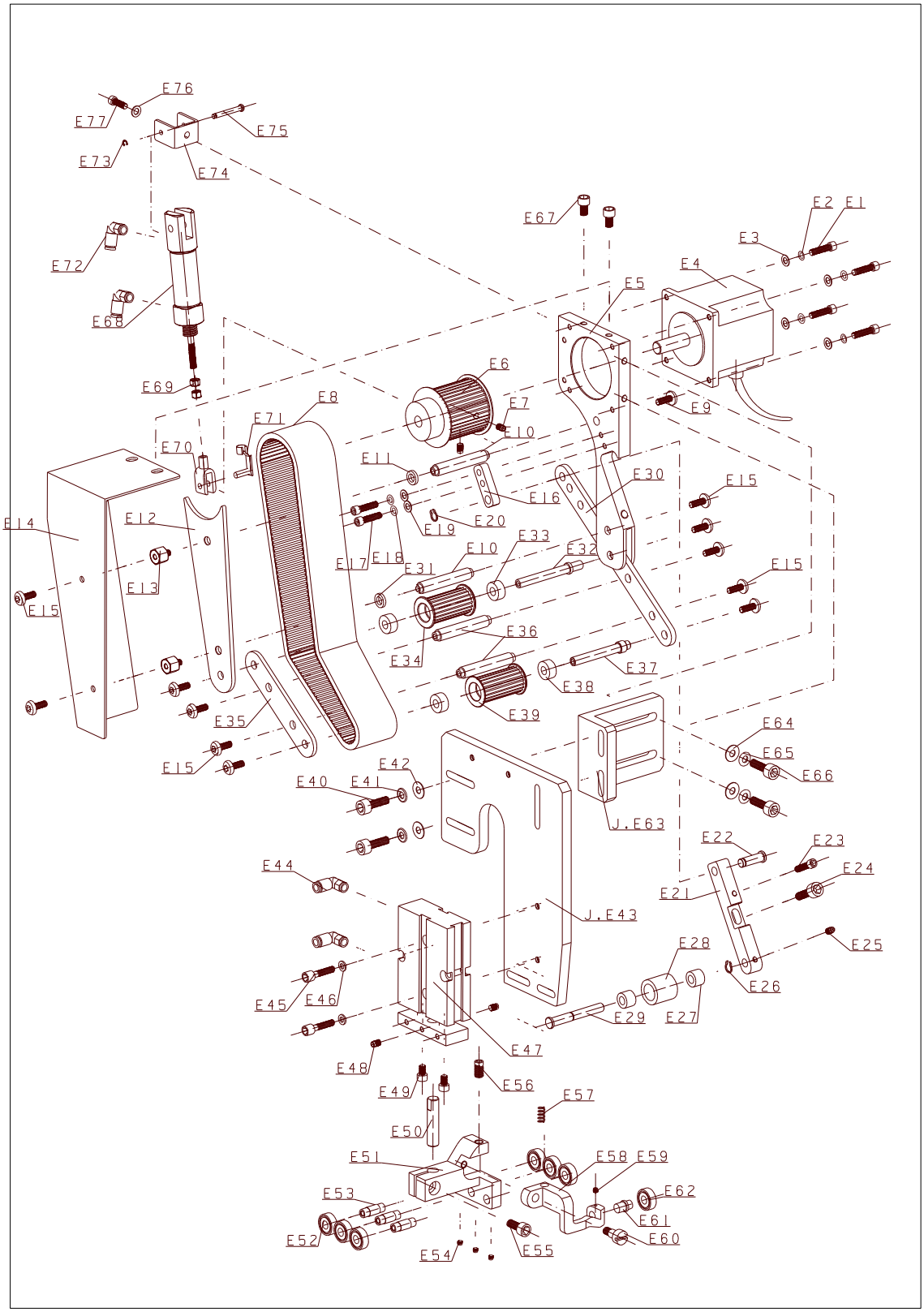
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No.	PartNo.	PartName
1	E01	M4×16soket head cap screw
2	E02	Φ4Spring gasket
3	E03	Φ4 Flat gasket
4	E04	Stepper motor
5	E05	Stepper motor
6	E06	Motor synchronizing wheel
7	E07	M4×5set screw
8	E08	Synchronous belt
9	E09	M4×16Oblate hex head socket screws
10	E10	Supporting shaft
11	E11	Clout
12	E12	Connection strap
13	E13	M4×7.5Hexagonal prism
14	E14	Shield
15	E15	M4×6 Oblate hex head socket screws
16	E16	Rotating support plate
17	E17	M4×12socket head cap screw
18	E18	Φ4 Spring gasket
19	E19	Φ4 Flat gasket
20	E20	Rand
21	E21	Tension plate
22	E22	Pivot pin
23	E23	M4×30External hex head screws
24	E24	M5×20socket head cap screw
25	E25	M4×5 Set screw
26	E26	Rand
27	E27	Bearing
28	E28	Nylon roller

No.	PartNo.	PartName
29	E29	Tension Shaft
30	E30	Connection bar
31	E31	Grommet
32	E32	Shaft
33	E33	Bearing
34	E34	Synchronizing wheel
35	E35	Connection bar
36	E36	Shaft
37	E37	Shaft
38	E38	Bearing
39	E39	Synchronizing wheel
40	E40	M5×25socket head cap screw
41	E41	Φ5Spring gasket
42	E42	Φ5 Flat gasket
43	JE43	End face mounting plate
44	E44	Gas connector
45	E45	M4×25soket head cap screw
46	E46	Φ4Spring gasket
47	E47	Cylinder
48	E48	M4×5 set screw
49	E49	M5×10soket head cap screw
50	E50	Shaft
51	E51	Out presser foot bearer plate
52	E52	Bearing
53	E53	Shaft
54	E54	M3×4 set screw
55	E55	M5×14socket head cap screw
56	E56	M6×6 Set screw

No.	PartNo.	PartName
57	E57	Spring
58	E58	Inner presser foot bearing support plate
59	E59	M3×4Set screw
60	E60	Shaft
61	E61	Shaft
62	E62	Bearing
63	JE63	Connecting plate
64	E64	Φ5 Flat gasket
65	E65	Φ5 Spring gasket
66	E66	M5×20socket head cap screw
67	E67	M5×6socket head cap screw
68	E68	Cylinder

No.	PartNo.	PartName
69	E69	M5Nut
70	E70	Rod end joint
71	E71	Rod end joint pin buckle
72	E72	Gas connector
73	E73	Rand
74	E74	Cylinder fixed seat
75	E75	Shaft pin
76	E76	Φ4 Flat gasket
77	E77	M4×10Deep head screw
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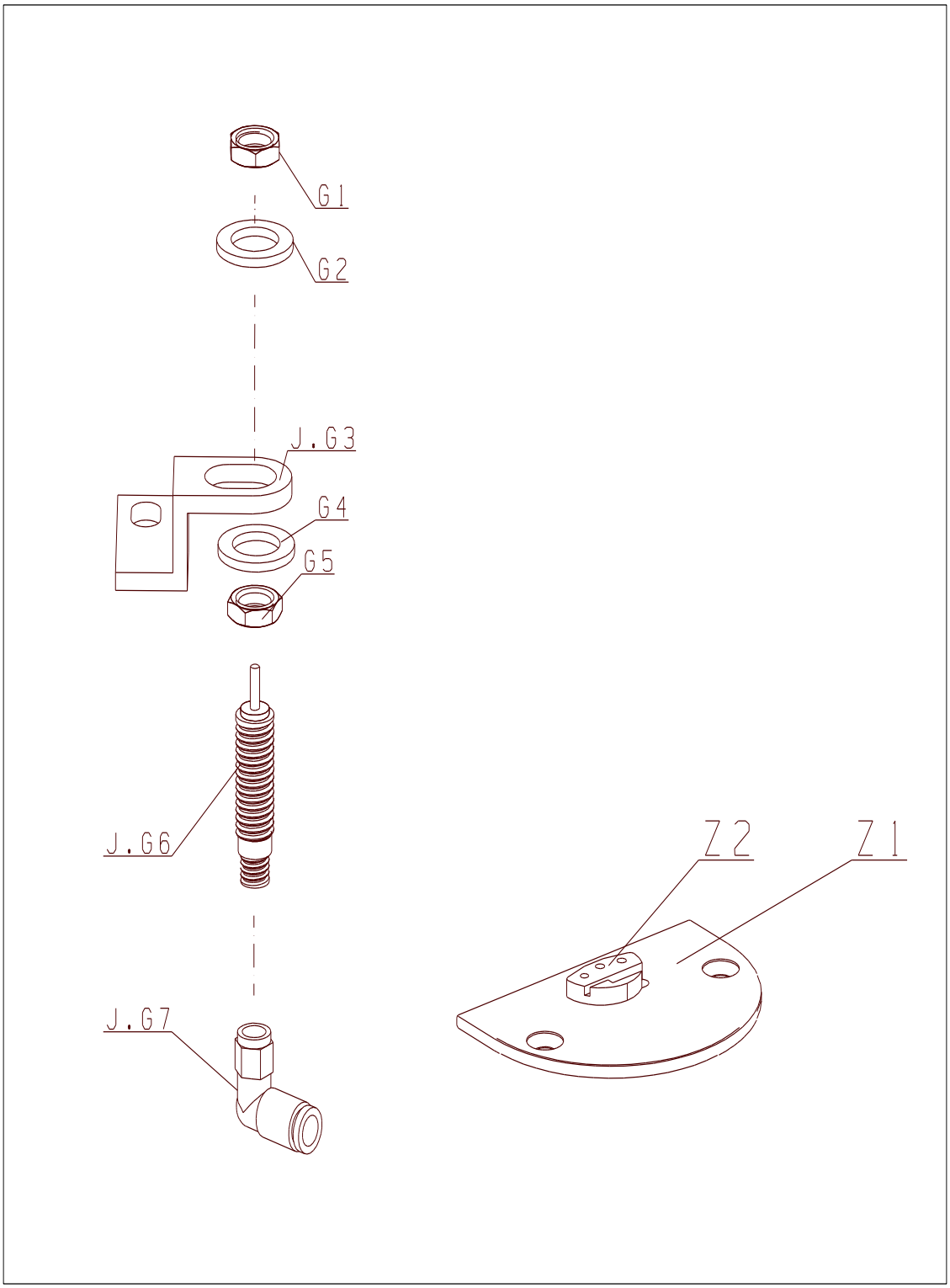
80		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G4
G5
J.G6
J.G7
Z2
Z1

No.	PartNo.	PartName
1	G1	M10Nut
2	G2	Φ10Flat gasket
3	JG3	Mounting plate
4	G4	Φ10Flat gasket
5	G5	M10Nut
6	JG6	Needle cylinder
7	JG7	Gas connector
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No.	PartNo.	PartName
1	Z1	Needle plate
2	Z2	Fixed cutter
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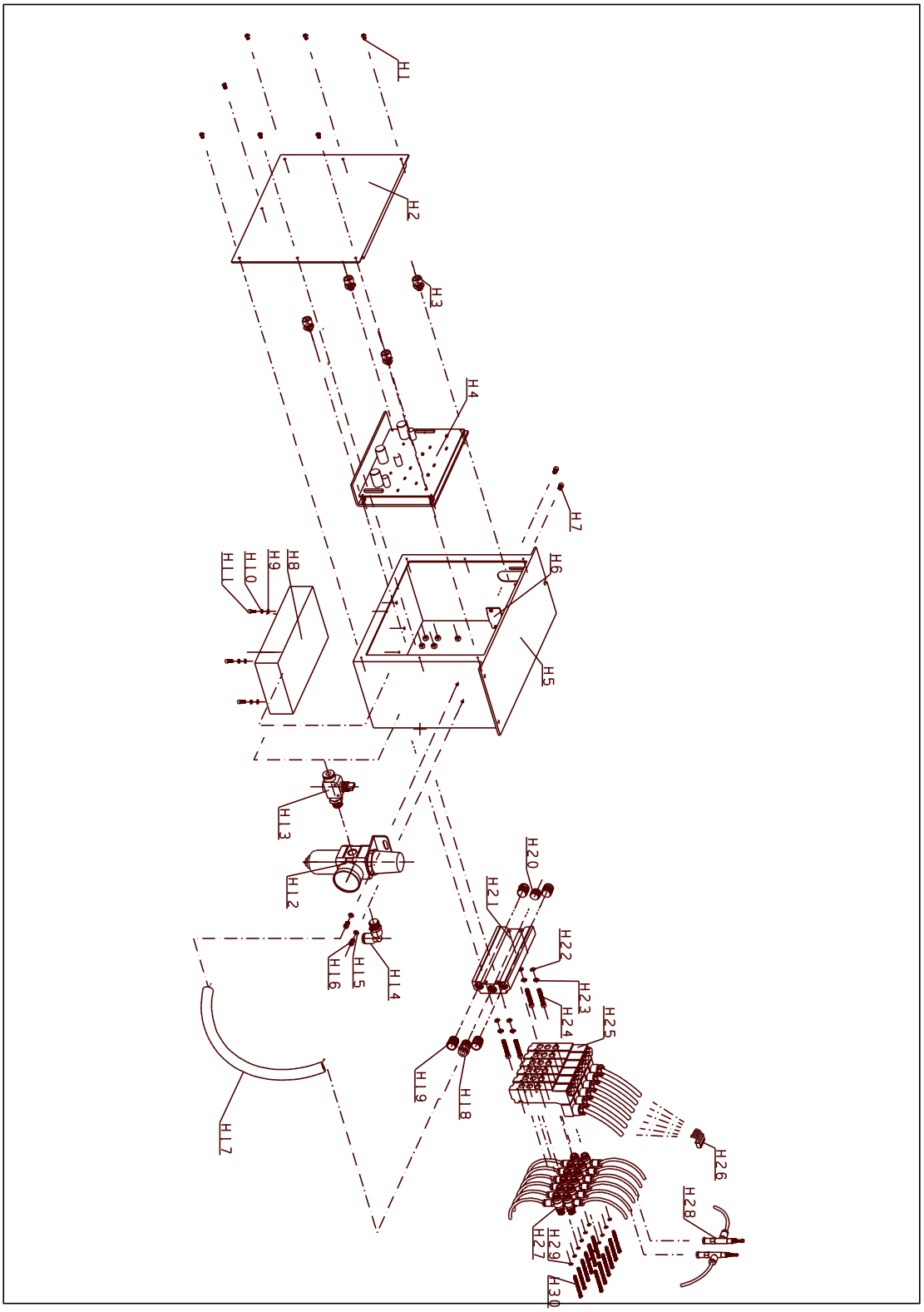
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No.	PartNo.	PartName
1	H01	M4×6Cup head cruciform slot screw
2	H02	Tank cover
3	H03	M4×6three combination cross grooves
4	H04	Control circuit board component
5	H05	Box
6	H06	Press plate
7	H07	M4×12Cross recessed pan head screws;
8	H08	Switching power supply module
9	H09	Φ4Flat gasket
10	H10	Φ4 Spring gasket
11	H11	M4×6soket head cap screw
12	H12	Decompression filtration valve assembly
13	H13	Gas switch
14	H14	Gas bending joint
15	H15	Φ4Flat gasket
16	H16	M4×10 socket head cap screw
17	H17	Gas pressure hose
18	H18	Gas connector
19	H19	Silencer
20	H20	Gas path plugging
21	H21	Solenoid valve connecting plate
22	H22	Φ4Flat gasket
23	H23	Φ4Spring gasket
24	H24	M4×25 socket head cap screw
25	H25	Solenoid valve
26	H26	Plug-in unit
27	H27	Speed regulating joint
28	H28	Miniature pressure relief valve
29	H29	Φ4 Flat gasket
30	H30	M3×30soket head cap screw

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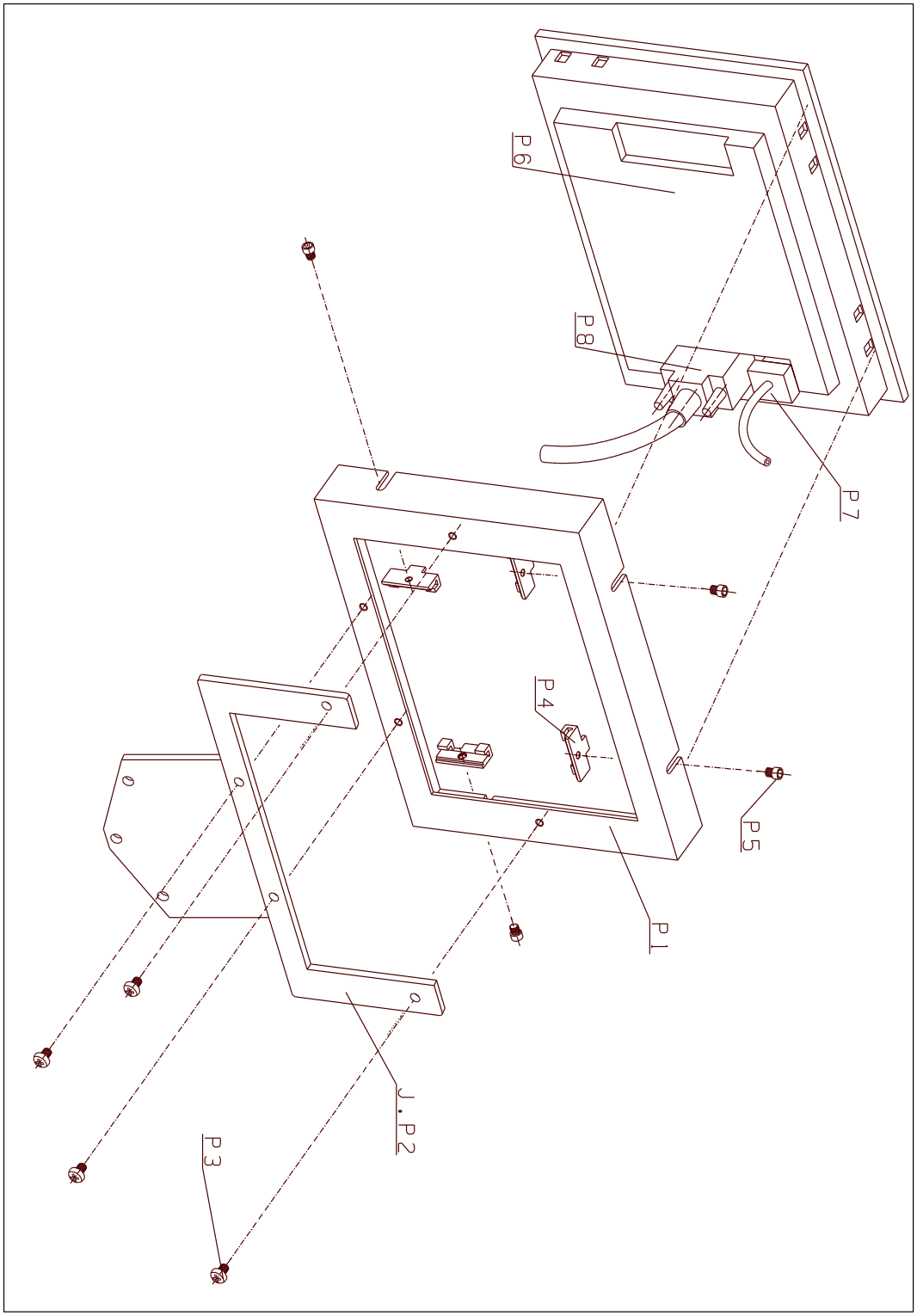
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No.	PartNo.	PartName
1	P01	Protective box
2	JP02	Touch-screen component mounting plate
3	P03	M4×8socket head cap screw
4	P04	Fixed pressure plate
5	P05	M4×6socket head cap screw
6	P06	Touch screen
7	P07	24VDCPower cord
8	P08	Communication line
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No.	PartNo.	PartName