



缝纫机系列

Sewing machine series

使用说明书

Operation Manual

ASF-B01

高速自动门襟锁眼缝纫机

High-speed automatic sewing machine for placket buttonholing



上海威士机械有限公司

HANGHAI WEISHI MACHINERY CO.,LTD.

Preface

This manual is written for technical service staffs and operating personnel.

In the Operation Manual for sewing machine preservers in the garment factory and the sewing operators, we have made a thorough explanation on how to use this sewing machine. So in this Service Manual, we will make some explanations on particular and relevant functions, the adjustment methods for compiling, the phenomenon resulted from changes in value and other various functions.

In addition to this manual, please refer to other Operation Manuals and parts list when preserving and repairing this machine.




For a safe operation

Before adjusting the sewing machine, the automatic machine and the appending devices (hereinafter called the machine), the operator should read the machine’s “Important Safety Instructions” carefully and fully understand it. The "Important Safety Instructions" in this Service Manual explains some items which are not included in the machinery specification you bought.







Besides, in order to make you fully understand this Service Manual and the warning signs stickup in the machine body, the warning signs are used separately according to the following descriptions.

You should fully understand and consciously comply with its contents.

■ Descriptions about the dangerous level

 Danger	he dangerous parts which could cause death or serious injury by the third person's misoperation and the privies couldn't avoid when operating and maintaining the machine.
 Warning	The potential parts which could cause death or serious injury by the third person's misoperation and the privies couldn't avoid when operating and maintaining the machine.
 Caution	The parts which could cause moderate or minor injury by the third person's misoperation and the privies couldn't avoid when operating and maintaining the machine.

■ Descriptions about the indications of the warning patterns

Warning patterns		Moving Parts, be cautious of the industrial accident	Indication Sign		Belt Drive, be cautious of the industrial accident
		High Voltage Parts, be cautious of electric shock.			Indicate the correct direction of rotation
		High Temperature Parts, be cautious of scalding accident.			Indicate the earth wire should be earthed.

Important Safety Instructions

- * Accident: Refers to the physical and property damage.
- * Cut off the power: Refers to turning off the power switch and pulling out the power plug from the socket.



Danger

To prevent the electric shock, when it is necessary to open the electrical cabinet, please cut off the power first and open the electrical cabinet after at least 5 minutes.



Caution

Basic

- 1.To prevent human injury, please read and understand this Service Manual before operating. Besides, in order to use this Service Manual easily at any time, please keep it properly.
 - 2.To prevent accident caused by accidental starting, please cut off the power before making any adjustment. When it has to operate with the power on, please do not step on the pedal or press the start button. When leaving the machine, it is necessary to cut off the power.
 - 3.To prevent human injury, please verify whether the connecting terminal, cable and other thins are damaged, loosen and so on after making adjustments.
- Some items in these Important Safety Instructions may not apply to the machine you bought.

Education

To prevent human injury when adjusting the operation, the person who is responsible should be taught about the latest information and safety knowledge, and be trained to operate according to this Service Manual and the Operation Manual.

Warning Signs

1. To prevent the accidents caused by lacking of safety devices, before operating please verify that the safety devices have been installed in the assigned position.
2. To prevent human injury, please assemble the safety devices to their original positions and verify whether or not they could function normally after disassembling them.
3. To prevent human injury, the warning signs should be stickup to machines that can be seen obviously. If the sign is stained or fell off, please replace a new one immediately.

Usage, Transformation

- 1.To prevent human injury, do not operate exceeding the machine's using range or the usage specified in the Operation Manual. Our company shall not bear any responsibility for accidents caused by such operation.
2. To prevent human injury, do not transform the machine. Our company shall not bear any responsibility for the accidents caused by the transformation.

Adjustment of Air-pressure equipment

- 1.To prevent accidents caused by accidental start, when using air cylinder and other air-pressure components to make adjustment, please cut off the air supply and drain the internal compressed air first.
- 2.To prevent accidents caused by faulty action, please verify whether or not there is water in cylinder and air tube.



Caution

Move

- 1.To prevent human injury, please adopt the safest method to move the machine according to its weight.
- 2.To prevent human injury, when lifting or moving, please adopt sufficient safety precautions to prevent accidental drop and turnover.
- 3.We have made a thorough explanation about the installation in the Operation Manual, please read carefully and understand fully before operating.

Box opening

- 1.To prevent human injury, please follow the order starting from the top while unpacking. With the wooden-box package, please be careful not to be punctured by nails. Please pull nails down from the board.
- 2.To prevent human injury, please first confirm the center of the gravity position and then take out the machine carefully.

Installat

Machine table, table legs

1. To prevent human injury, be sure to use the authentic machine table and table legs. When you have to use the unauthentic components, please make sure the machine table and table legs are able to bear the machine weight and the reaction under operation.
2. To prevent human injury, casters installing on the table legs should be with full strength and locking device which can help to lock the machine during operation, maintenance, examination and repair.

(II) Cable, wiring

- 1.To prevent the electric shock, leakage and fire accidents, do not exert too much force to the cable. Moreover, as the cable is placed near belts or rotating parts a distance more than 30mm should be left.
2. To prevent the electric shock, leakage and fire accidents, bifurcate wiring should be avoided.
3. To prevent the electric shock, leakage and fire accidents, please firmly fix connectors. In addition, please hold the pulling wire when unplugging connectors.

(III) Ground connection

1. To avoid accidents caused by the electric leakage or the insulation and voltage resistance, please ask the people with electrical expertise to install power plugs. Besides, the power plugs must be connected to a grounded electrical outlet.
2. To prevent accidents caused by the electric leakage, please ground the wires.

(IV) Motor

In order to avoid accidents caused by the motor burning, please be sure to use the rated motors as prescribed.

Before

1. To prevent human injury, please confirm that there is no damage, detachment or looseness on the connector and cable before turning on the power.
2. To prevent human injury, don't put hands to the operated parts. Besides, make sure the rotation direction of the belt pulleys is in accordance with the arrow mark.
3. Using the table legs with casters, please lock the casters to avoid accidents resulting from sudden start. If there is any regulator, please adjust the table legs with it and fix them well.

During

1. To avoid the accidents of getting entangled in the machine, please note that don't let fingers, hair, and clothes get close to the rotating parts of the belt pulley, manual flywheel and motor and don't put items on it too during operation.
2. To prevent personal injury, and when the power is switched on or the machine is on operation, do not put your fingers close to the needle, and do not put your fingers into the take-up-lever hood.
3. Sewing machine operates at a high speed. In order to prevent injury, the operator must not be allowed to get close to the looper, deconcentrator, needle bar, rotating shuttle, cloth cutting knife and other activities. In addition, when replacing the thread, please turns off the power, and confirm that the sewing machine and the motor is completely stopped before replacing.
4. To prevent personal injury, when removing the machine from the table, or reinstalling it to the original position, please be careful and do not clip your finger.
5. If the machine uses a servo motor, when the machine stops, the motor will not produce sound. In order to prevent the accident caused by a sudden launch, please note not to forget to cut off the power.
6. To prevent the fire accident caused by excessive heating, do not obstruct the cooling port in the motor power supply box.

Oil

1. Please add pure JUKI machine oil to the specific position and paint pure JUKI grease to the specific position.
2. To prevent inflammation and abscesses, when the oil adheres to the eyes and body, please wash it out immediately.
3. To prevent diarrhea and vomiting, if you drank the machine oil by mistake, please go to see the doctor immediately.

Repair and Maintenance

1. In order to prevent the accident caused by unskilled operation, be sure to let technicians who are familiar with machine's repair and maintenance repair and make adjustments in accordance with instructions. In addition, when replacing components, please use the authentic components from our company. Our company shall not bear any responsibilities for the accidents caused by improper repair and adjustment and the using of the non authentic components

2. In order to prevent the accident as a result of unskilled operations, as well as accidents caused by electric shock, be sure to have an electrical expertise or authorizes the technician in our company or in the agent shop to repair and maintain (including wiring).
3. In order to prevent accidents caused by the sudden launch, before repairing and maintaining the machine with cylinders or high pressure air, please make sure the air supply tube is disassembled and the residual air is released.
4. In order to prevent personal injury, after repairing and replacing components, be sure that screws and nuts are not loose.
5. Please clean the machine regularly during the application period. In order to prevent the accident as a result of a sudden start, please turn off the power and confirm that the sewing machine and the motor are completely stopped before cleaning.
6. To carry out repair and maintenance, inspection and repair, be sure that power is turned off, the sewing machine and the motor are completely stopped before operating. (Please note that when the power is turned off the clutch motor will continue rotating a certain amount of time because of the inertia).
7. To prevent personal injury, if the machine is still not operating properly after repairing, please stop the operation immediately, and contact the company or agency shop and authorize a technician to repair.
8. To prevent personal injury, if the fuse is blown, please turn off the power. If it is not because of the blown fuse, please replace a new fuse with the same specifications.
9. To prevent fire accidents of motors, please clean the fan ventage and check around the configuration regularly.

Situation

1. To prevent the accident caused by wrong actions, please use the machine in the environment without the effect of the high-frequency welding machine and other source of strong noise (electromagnetic waves).
2. To prevent the accident caused by wrong actions; please do not use sewing machines if the voltage exceeds the rated voltage $\pm 10\%$.
3. To prevent the accident caused by wrong actions; make sure that the pressure is in specification before using cylinder or other high pressure devices.
4. To operate the sewing machine safely, make sure to use it in following environment conditions.
Environment temperature when running: $5^{\circ}\text{C} \text{--} 35^{\circ}\text{C}$
Relative humidity when running: $35\% \text{--} 85\%$
5. To prevent the accidents caused by electrical components damage and misleading action, please stop operating, and disconnect the power plug when thundering.
6. To protect the operation environment, please observe the relevant laws of corresponding nations. Please wear the protective equipment stated in the law to deal with the noise issue.
7. Please dispose the product, package and the used grease properly in accordance with national laws and regulations.

■ Safe use precautions about ASF-B01



Danger

- 1、 To prevent electric shock, during the power supply importing period, do not touch the components in the electrical cabinet when the motor electrical cabinet is open.
2. After the change the pattern, make sure that the needle drop point. In case the presser foot beyond the design range, the sewing needle will hit the presser foot, needle failures occur. Also make sure that the presser foot is set and install the presser foot to the

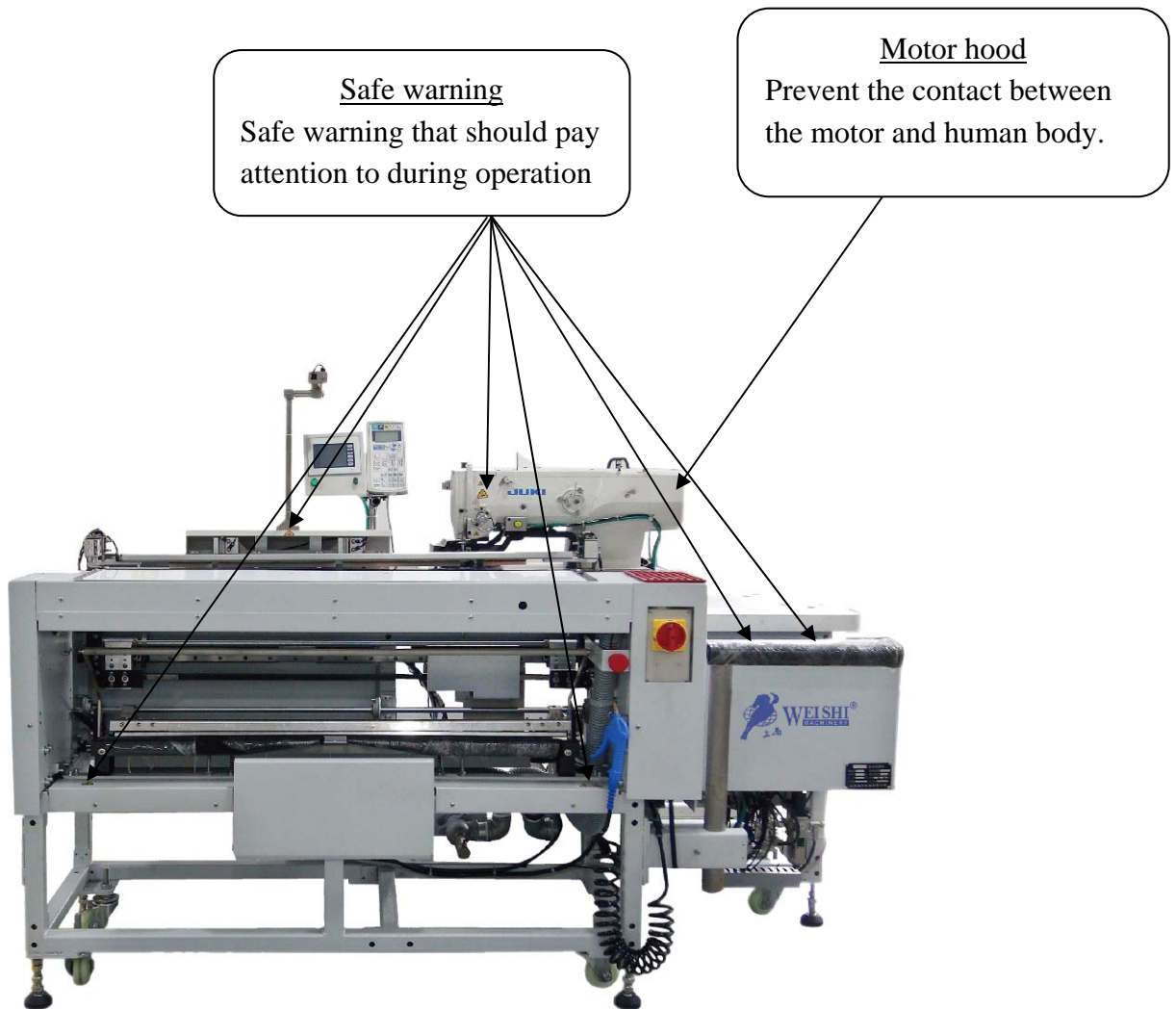


Caution

- 1、 When power is on, but no display on the operation screen, please cut off the power and verify the supply voltage and the power source specification.
2. The presser foot may automatically drop down in the condition that the power is off but the ready button and the presser foot switch is on, so please absolutely do not put fingers in when the presser foot descends so as to avoid accidents.

Safety Device

The machineries and safety devices recorded here are made under the domestic specifications; the devices may be different according to different sale places and different specifications.



The eye shield and the presser feet guard have been omitted in some parts of the book, therefore we pre-inform you that, in actual use, you should never remove the safety device!

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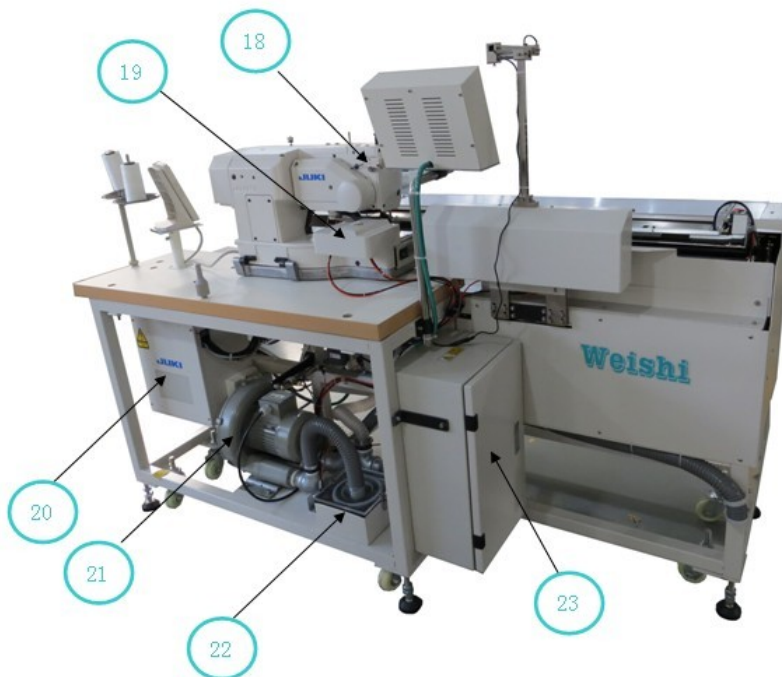
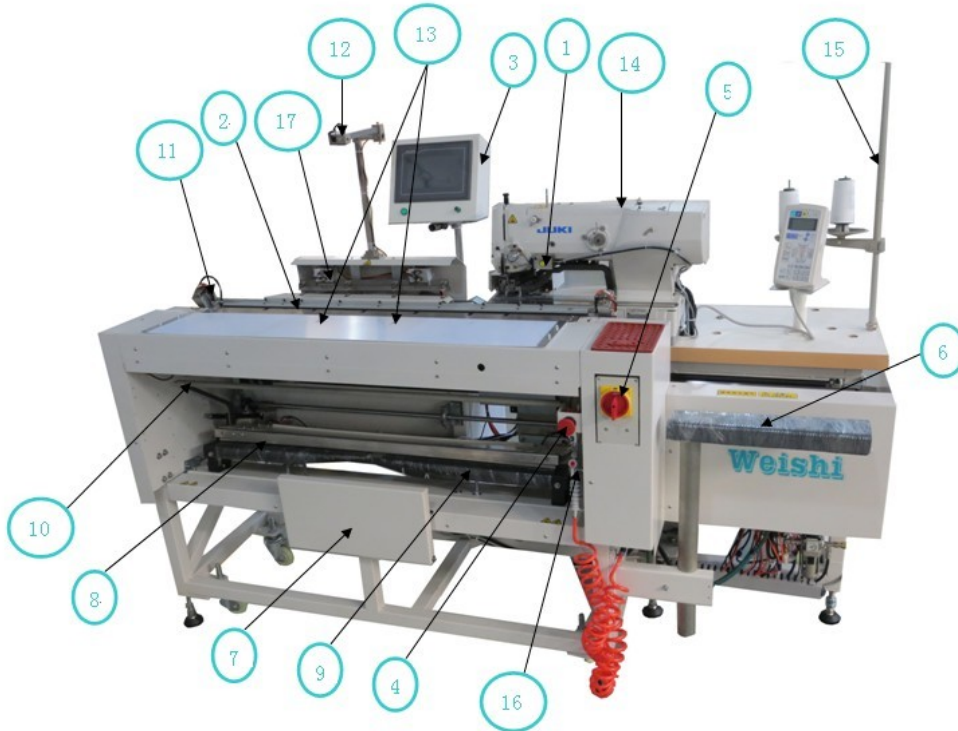
One. Specification parameters

Sequence	Item	Basic parameters
1	Maxium sewing speed (needle/min)	4200/generally 3600
2	Buttonhole length/mm	≤25
3	Cutter dimension/mm(inch)	6.4-19.1 (1/4-3/4)
4	Lifting height of presser foot/mm	≤14
5	Needle/mm	DP×5 [#] 11J- [#] 14J
6	Thread	11.8tex~7.4tex×3 (50s~80s/3) Z-twisted cotton thread or chemical fiber thread
7	Buttonhole/mm	Arbitrarily set; total length ≤610
8	Spacing between buttonhole and sewing material edge/mm	10-21
9	Maxium conveying distance of sewing material/mm	≤610
10	Upper end spacing/mm	≤140
11	Width of sewing material /mm	220-420
12	Length of sewing material /mm	480-880
13	Conveying direction of sewing material	Right(for men's wear)/ Left(for women's wear)
14	Button sewing shape	30 pieces
15	Storage quantity of automatic process program	20 pieces
16	Setting range of buttonhole sewing	2-20 pieces
17	Rated voltage/v	220
18	Operating air pressure/Mpa	0.5
19	Machine dimension/mm	1910L×850W×920H
20	Machine weight/Kg	300Kg

※ Maximum sewing speed can be decreased according to sewing conditions.

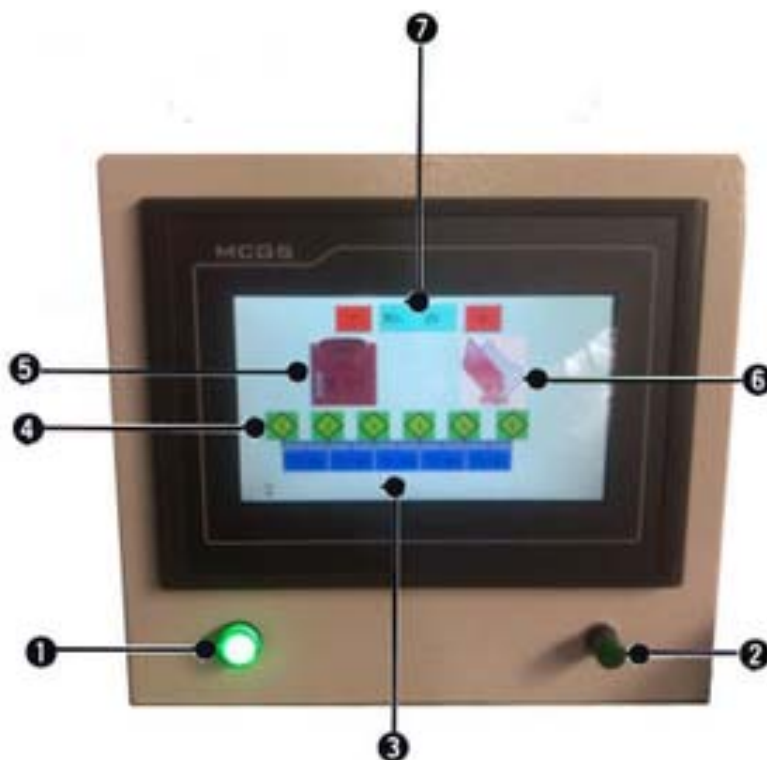
Two. Name of each part

1. Name of main engine



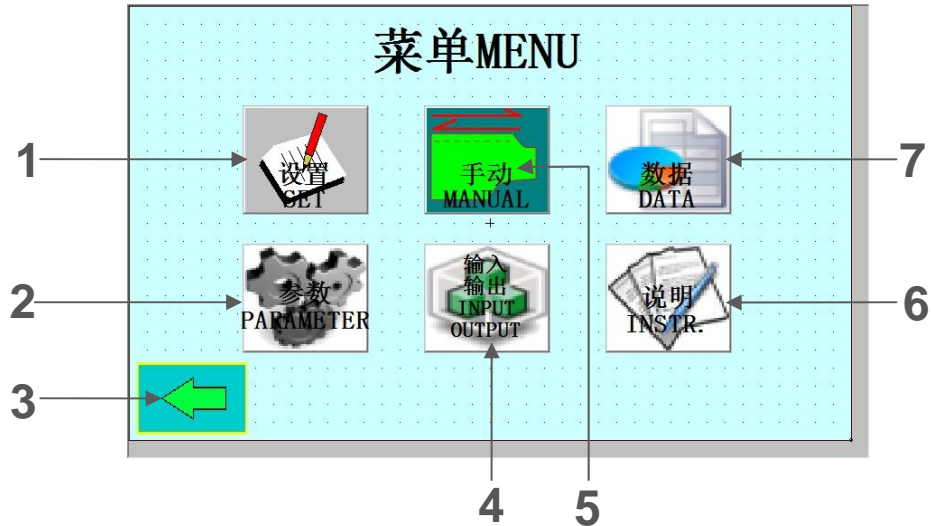
1. Sewing machine head
2. Conveying board presetting section
3. Operating panel
4. Emergency stop switch
5. Power switch
6. Material rack
13. Fabric testing switch
14. Cancel button
15. Thread stand
16. Air spray gun
17. Pause switch
18. Machine head pause switch
7. Knee switch
8. Material unloading section
9. Material receiving section
10. Material ramming section
11. Section for feeding and transmission
12. Laser light
19. Machine head pressing mechanism
20. Machine head electrical box
21. Draught fan
22. Filter box
23. Electrical box for motion control

2. Name and introduction of operation and control panel



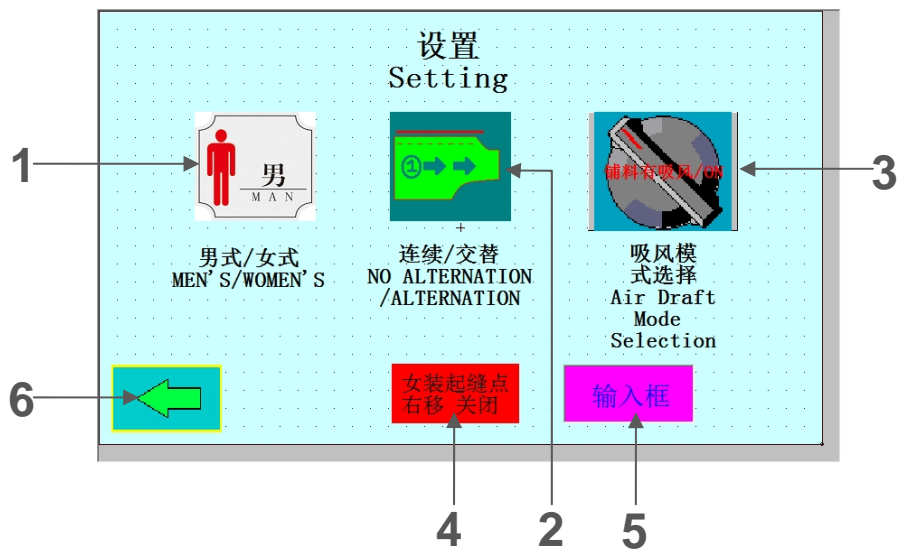
	Button/ display	Content
①	Indicator light for system settings	The green light shines under the editing mode, while it lights normally during the working mode.
②	Servo zero button	Pressing this button, the machine will enter the working state.
③	Buttonhole spacing	Show the distance between two buttonholes in current procedure.
④	Buttonhole quantity	Show the buttonhole quantity stored in current buttonhole parameter procedure.
⑤	Buttonhole parameter	Click this button to set buttonhole spacing and quantity.
⑥	Menu	Click this button and respectively set the manual, count(1、2、3/N)、 the parameter、 the Input/ output and the instruction by pressing the corresponding button.
⑦	Procedure storage	Set and store 20 groups of different buttonhole parameters.

3. Menu interface



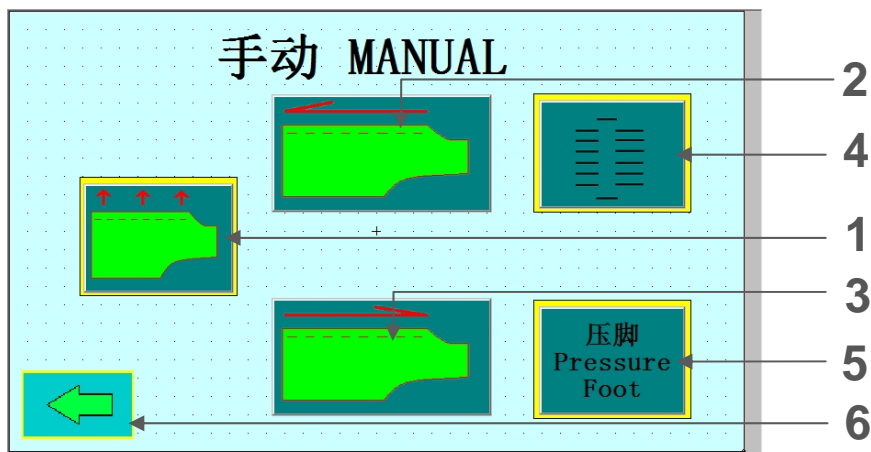
	Button/display	Content
①	Mode setting	Set the working type and mode.
②	Parameter setting	Adjust the following speed of the transportation rack until it moves synchronously with the machine head. Before entering this interface, please input password and recognition.
③	Back	Return to the previous menu.
④	Input/output	Monitor the input/ output state of the controller.
⑤	Manual	This function is used for system debugging, testing and manual operation.
⑥	Instruction	Please refer to the operation manual for details.
⑦	Data	Set and display the capacity and work load of the spindle.

4. Setting interface



	Button/display	Content
①	Working type	(1) Men's shirt: The buttonholing order for the front fly on the left starts from the shirt neckhole. (2) Women's shirt: The buttonholing order for the front fly on the right starts from the lower hem.
②	Working mode	(1)Continual sewing: Finish buttonholing automatically by each piece itself (2)Interval sewing: (Interval stacked mode for front piece on left and right) When the previous piece is responsible for automatic buttonholing, the next piece only has to finish material receiving and stacking. In this cycle, the exact stacking between left and right front piece can be ensured.
③	Air draft mode	Material spreading with suction / ON Material spreading without suction / OFF
④	Move the first sewing point to right	Move the first sewing point of the women's wear to right/ ON Move the first sewing point of the women's wear to right/ OFF
⑤	Input box	While opening the function of moving the first sewing point of the women's wear to right, please also move the size input box to right. (Apply this on the condition that the distance between the first buttonholing position on the front fly of the women's wear and the front fly end is too short, which may lead to the buttonholing deviation for the clamping claws are unable to grasp the top placket fabrics)
⑥	Back	Return to the previous menu

5. Manual interface



	Button/ display	Content
①	Feeding button on the platform	Pressing this button, the transporting platform will feed fabric forward. (The cloth should cover up detection sensors on the platform)
②	Button for moving feeding fabrics to left	Pressing this button, the cloth clamping & feeding frame will feed fabric towards the left.
③	Button for moving feeding fabrics to right	Pressing this button, the cloth clamping & feeding frame will feed fabric towards the right.
④	Button for sewing	Pressing this button, the sewing machine will finish a buttonholing act.
⑤	Presser foot button	Pressing this button, the sewing machine will press down or lift the presser foot.
⑥	Back	Return to the previous menu

Three. Matters requiring attention during



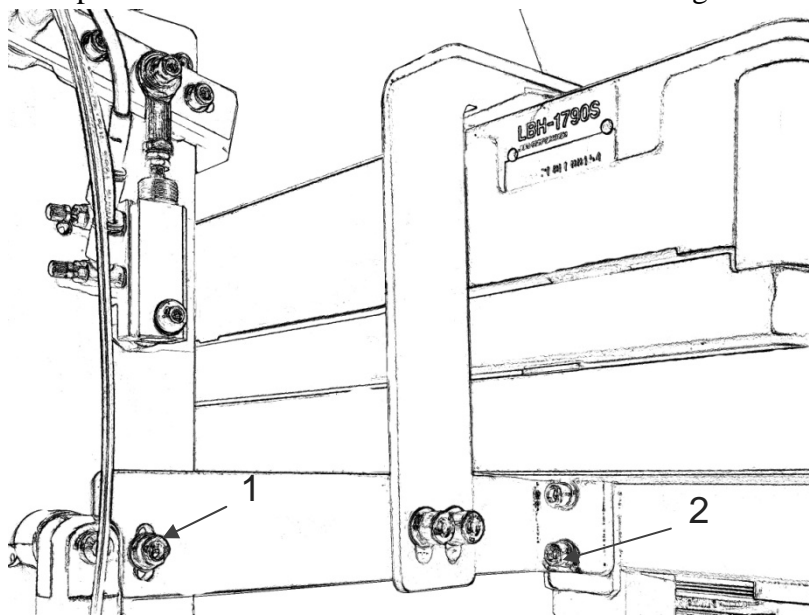
Danger ↗

To avoid mechanical errors and injuries, please confirm the following items.

1. Before first use of the machine, please clean it up. Please clean up the smudginess and dust in the handling process and then start refueling.
2. Power range of the machine is AC 200V~240V.
3. If the voltage specification is different, please don't use the sewing machine.
4. Before usage, please adjust the air pressure to 0.5 MPa.
5. Please clean the air filter and feeding plate monthly.

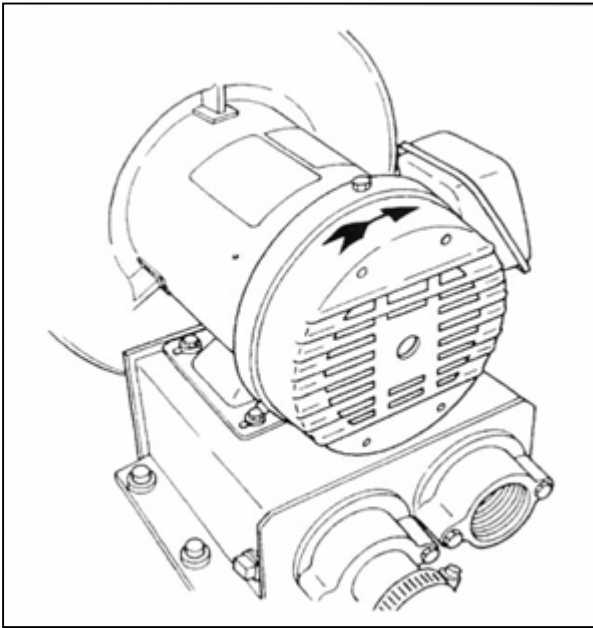
1. Disassembly for the fixed plate of the machine head

Please remove the fixed plate of the machine head installed on the sewing machine.



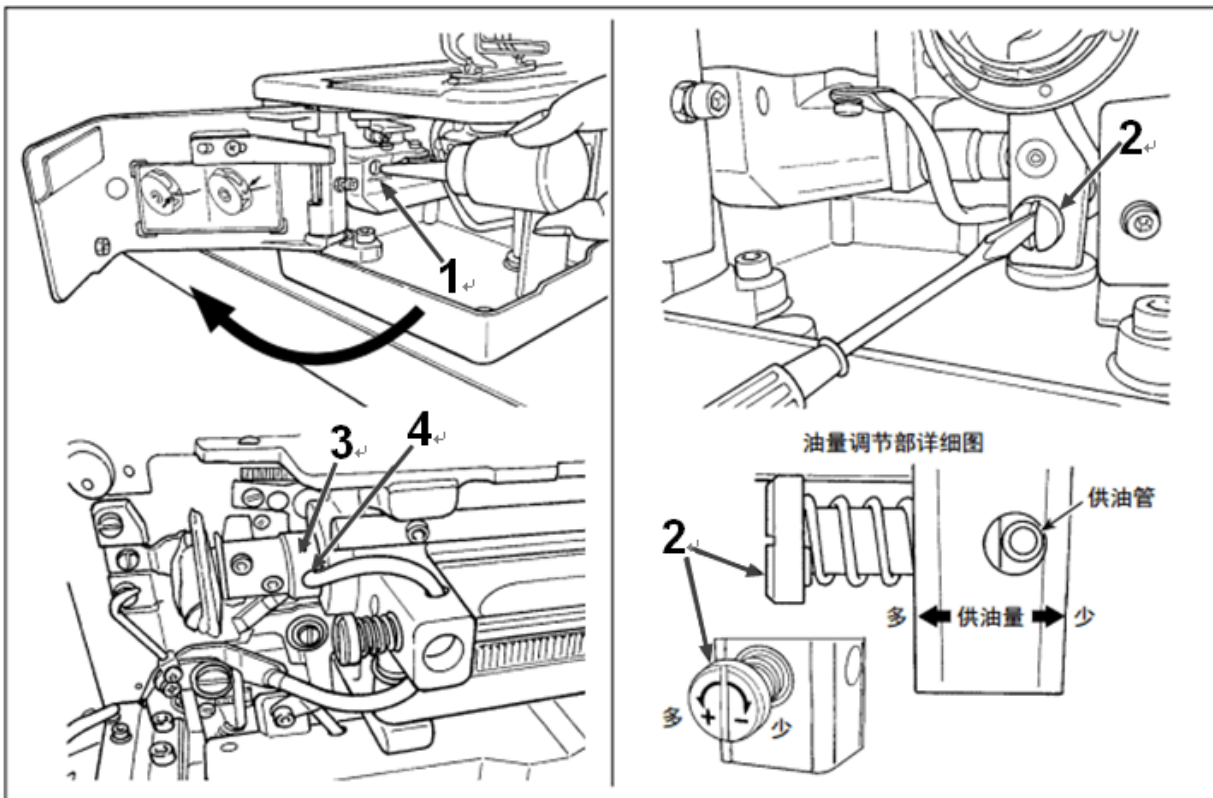
Before connecting electricity and air, please remove 3 hexagon socket screws on ① & ② and then take down the fixed plate of the machine head.

2. Power connection



1. Please confirm whether the power voltage range is under the range of AC200V~240V.
2. Reconfirm whether the power switch is in the OFF position, and then connect the power wire to the power supply.
3. Turn on power (ON) and make sure whether the motor rotates.

3. Oil adding



1. Refueling oil to the oil filling tank

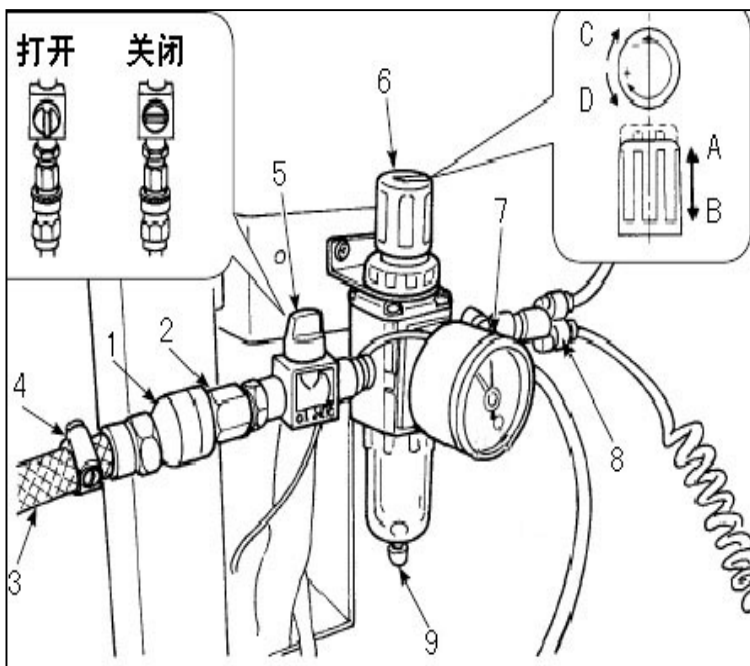
- ◆ Add oil to New Defrix Oil No.1 until it reaches position ① marked MAX.

2. Oil amount adjustment in rotating shuttles

- ◆ Adjust oil amount by using the oil adjusting screw ②.
- ◆ While regulating oil amount of the rotating shuttles, screwing up the oil adjusting screw ② will decrease oil amount.
- ◆ Before using new sewing machines or the sewing machine which isn't used for a long time, please take down the bobbin case, add 2 or 3 drops of machine oil to the rotating disc of the rotation shuttle, and add several drops of machine oil to the oil filling port ④ on the front metal part of the lower shaft infiltrate into the felts inside.

4. Pressure adjustment

Air inflow adjustment



Air hose connection:

1. Connect the pipe joint ① with plug ②. At this time, roll sealing tapes on the screw part.
2. Insert the air hose ③ into the pipe joint ①, and then clamp it with hose straps ④. (Air hose should be suitable for pipe joints)

Valve opening and closing

Open and close valve ⑤, please rotate it to the stop position. (90 degrees)

Supply pressure regulation

1. Air pressure for use is 0.5 Mpa .
2. Please open valve ⑤ slowly.
3. Pulling regulator knob ⑥ in A direction, the supply pressure will be changed by rotating this knob. Please turn the rotary knob in C direction (+) or in D direction (-) and regulate the black hand of the pressure gage ⑦ to till it points to 0.5MPa position. After regulation, make knob ⑥ descend in B direction and then lock it.

ATTENTION: After opening valve ⑤, the partial mechanism for air supply may start operating so please be careful.

Condensate discharge

1. Before use, please discharge the condensate water in the regulator. (Discharging condensed water by pressing button ⑨ slowly)
2. Moisture may bring bad influence to the air control system, so please take notice.
3. If the air pressure is too low, the regulator will make the pressure gage send abnormal signals.

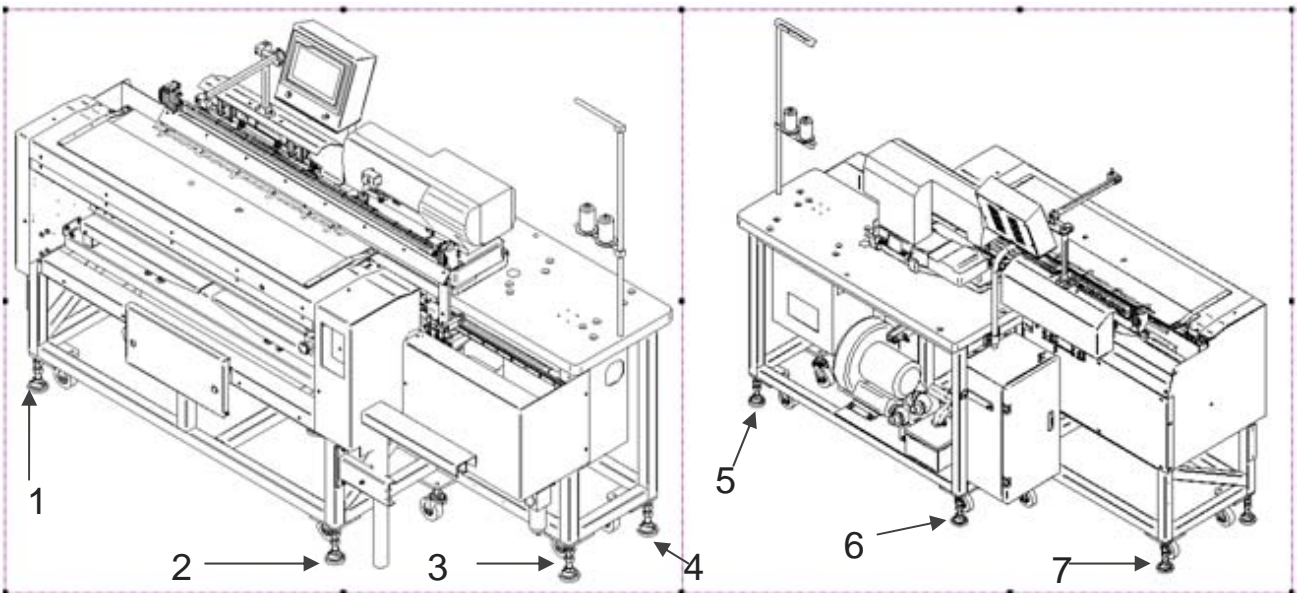
Four. Machine adjustment



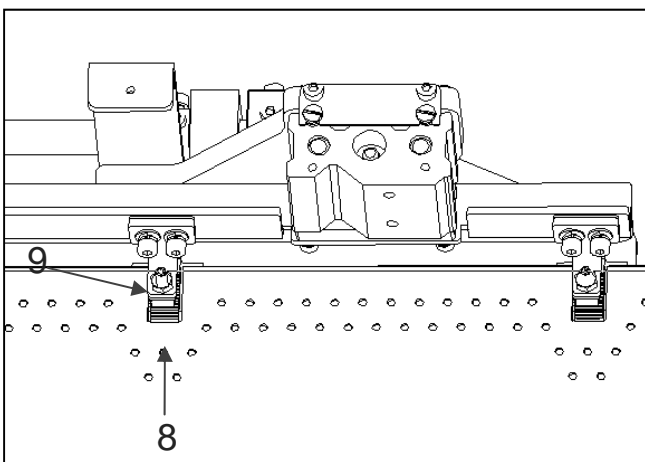
Caution

Due to energized operation, please don't touch switches except for necessary ones so as to avoid accidents caused by misoperations.

1. Horizontal adjustment of the machine head



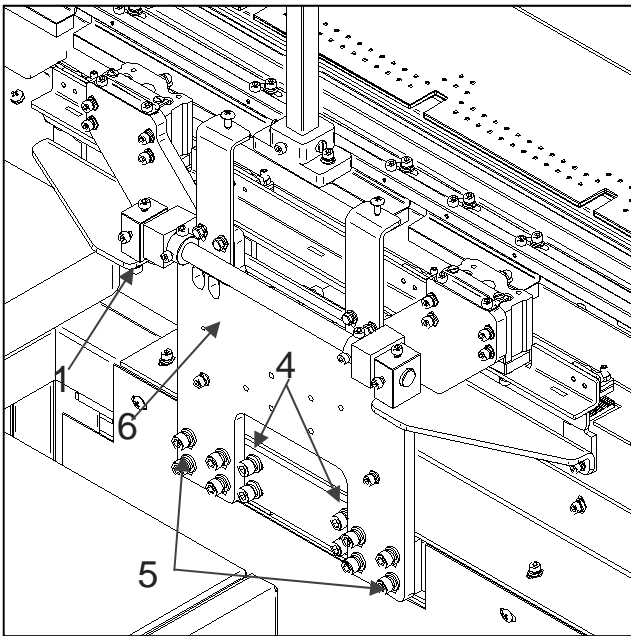
Turn anchor adjusting bolts ①~⑦ around the machine to make them evenly touch ground and next rotate all foundation bolts clockwise about 1 ring to make trundles suspend in the air .



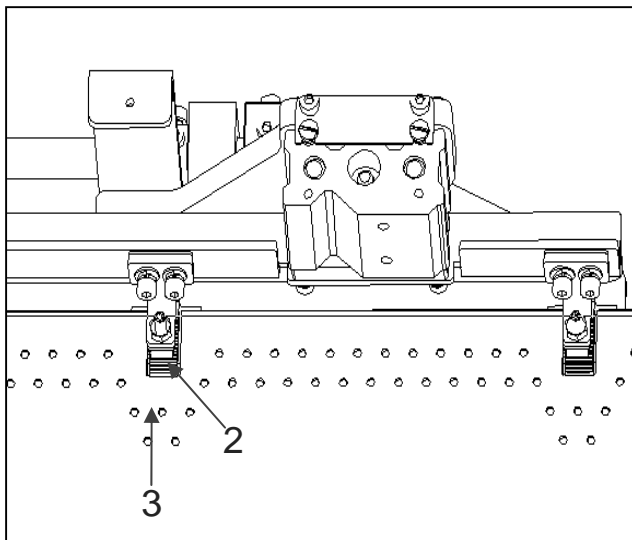
Manually pull out the transporting plate ⑧ and adjust the foundation bolt ② to make the pressing mechanism claw ⑨ locate in the middle of the transporting plate gap.

2. Material-pressing mechanism adjustment

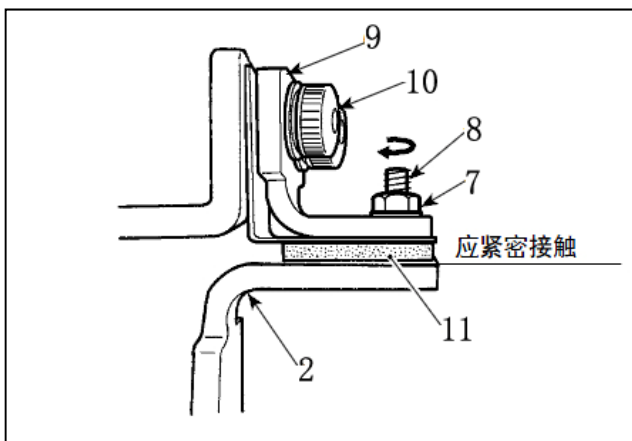
(1) Location adjustment of the material-pressing mechanism



Adjust 2 bolts ① until the pressing mechanism claw ② and the upper plane of the transporting plate ③ are under level condition. Regulate 8 bolts ⑤, adjust the pressing mechanism ⑥ up and down to make the upper plane of the pressing mechanism claw ② be lower about 0.1~0.3mm than the transporting plate ③.



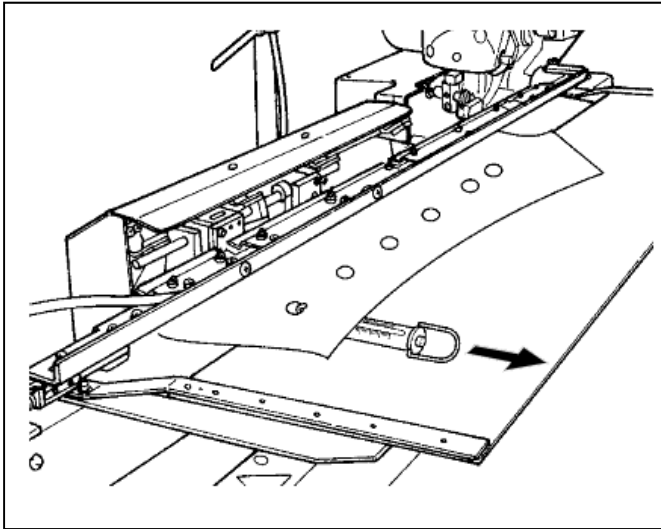
Adjust 4 bolts ④, move the pressing mechanism ⑥ left and right to make the pressing mechanism claw ② locate in the middle of the transporting plate ③ gap.



Loosen the clamp nut ⑦, adjust bolt ⑧ and then make the upper claw ⑨ and lower claw ② of the pressing mechanism be parallel.

Regulate 2 bolts ⑩ to make the upper claw of the pressing mechanism ⑨ upper rubber strip ⑪ and the lower claw of the pressing mechanism contact closely.

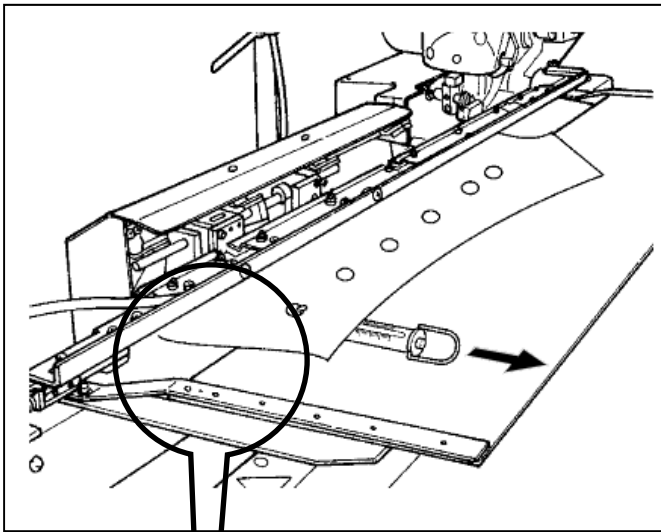
(2) Pressure adjustment of the material- pressing mechanism



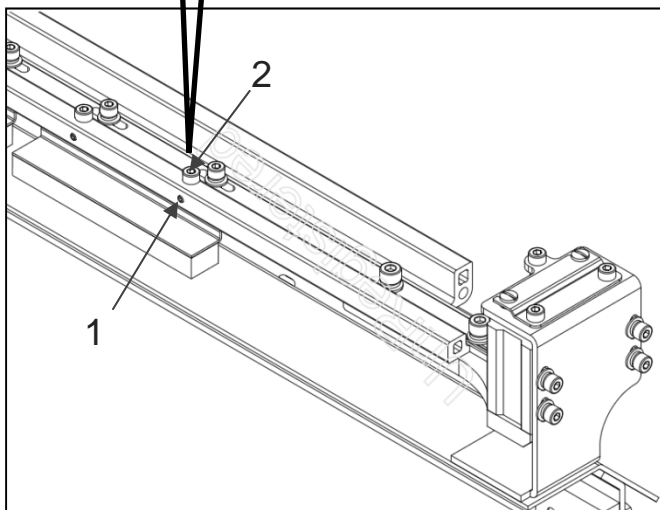
After manually feed fabric to the pressing mechanism to be pressed down, hook the garment piece in the presser foot position with a spring scale and then pull the garment piece to check whether the pressure is uniform or not. (Standard value is 700g~1500g)

Please refer to the location adjustment of the material-pressing mechanism to regulate pressure.

3. Adjustment of the transmission part for material feeding

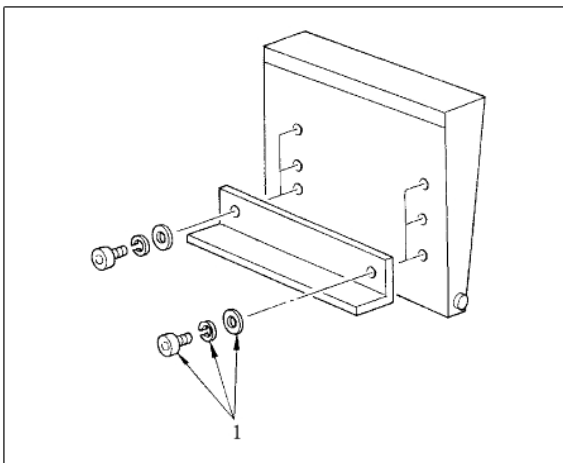


After manually feed fabric to the pressing mechanism to be pressed down, hook the garment piece in the presser foot position with a spring scale and then pull the garment piece to check whether the pressure is uniform or not.(Standard value is 700g~1500g)



While regulating pressure, release the clamp screw ① on the front frame of the material-pressing rack and adjust bolt ② position to make the rubber strip ③ pressure achieve the standard value.

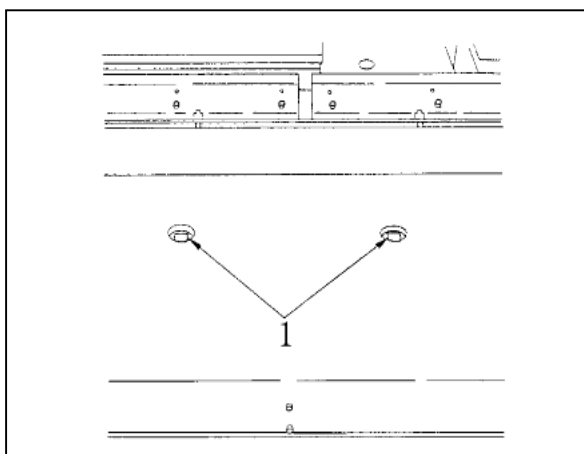
4. Knee switch adjustment



Adjustment on this height can be divided into 3 stages(Set to the middle position when it is in factory).

During adjustment please unscrew bolts ① on the back of the 2 knee switches and then fix them on a convenient height.

5. Fabric testing switch



◆ This switch can prevent error start when there is no cloth.

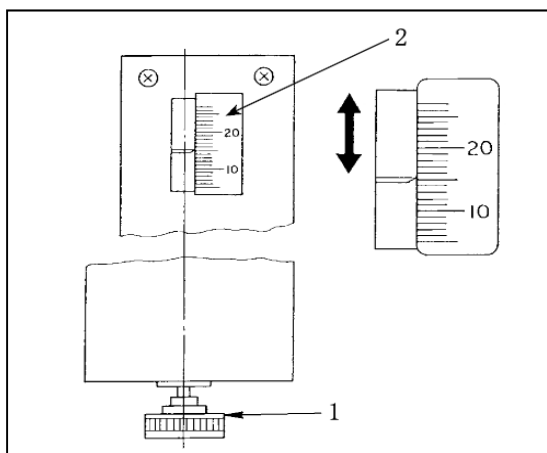
◆ Either of the 2 detection switches ① is able to control start.

◆ Please be careful not to put hands or other things other than sewing fabric on the detection switch ① .

◆ When sewing black or light-absorbing cloth, the detection switch may become invalid. If so,

please cover with a tape that can be detected.

6. Preset handle adjustment



◆ Sewing width adjustment

Insert the regulating handle ① into the hole and adjust to the set scale with a scaleplate.

7. Machine head adjustment

For machine head adjustment, please refer to LBH-1790 operation manual and service manual.

Five. Operation

1. Operation and running

(1) Sewing machine operation

- ◆ Turn on power and choose the sewing pattern.
- ◆ Enter the sewing state.

After pressing the ready button on the operating board of the machine head, LCD backlight changes from blue to green which means sewing can be started.

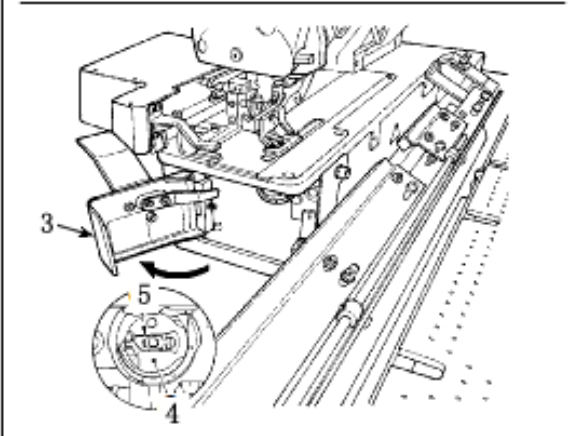
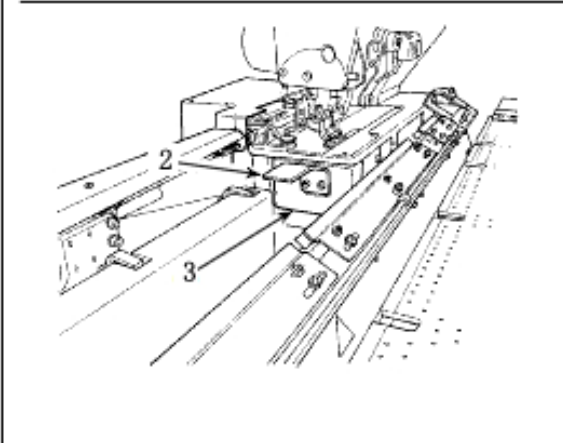
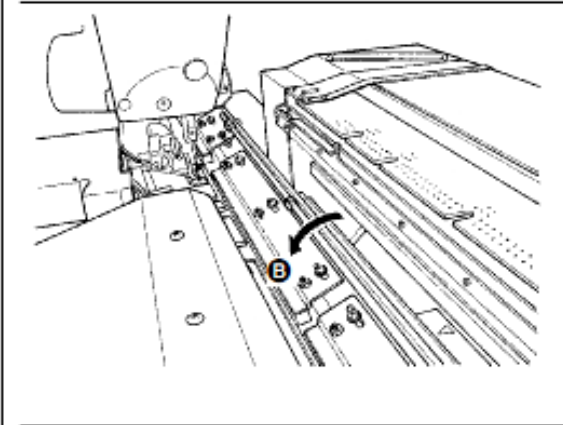
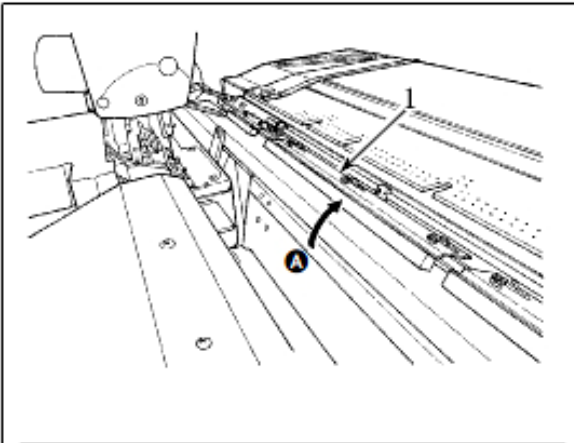
- ◆ When the motion control system turns into automatic sewing state, please place sewing cloth well and then press the knee switch to start automatic sewing.
- ◆ Specific operations about settings of sewing machine parameters, operation and running, repair and maintenance please refer to the operation manual of the sewing machine LHB-1790.

(2) Automatic running operation

Finishing parameter settings of buttonholing and machine system, enter sewing state and the buttonholing machine must also enter working state.

Specific operations:

- 1) Spread cloth on the platform and ensure that the cloth cover the platform optoelectronic switch.
- 2) Relying on laser light and ruler to adjust placket position.
- 3) Keep resisting the knee switch with your knee and then turn on suction to suck and adjust cloth.
- 4) After cloth modification, loosen your knee and the transporting platform will transport placket forward.
- 5) Sending the transporting platform to the sewing area, the plate moves backwards when the clamp catches cloth.
- 6) Automatically start sewing and begin buttonholing work.
- 7) Buttonholing should be in accordance with the number and interval of buttonholing.
- 8) Complete material receiving after buttonholing.

(3) Bobbin case in and out of the machine

◆ Upon the setting of the bottom line counter, next sewing can not be started if the bobbin runs out under automatic state. At this time, the feeding frame ① will fall in the A direction so bobbin can be replaced conveniently. If the sewing bottom line uses up, please replace bobbin when the feeding frame is in ② state.

◆ Hold handle ② and open the rotation hook cover ③.

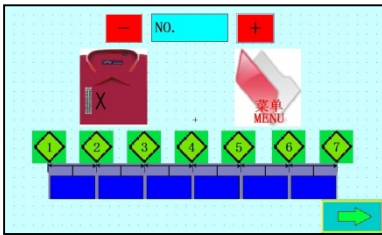
◆ Pull the bobbin case ④ handle ⑤ and then take out bobbin case.

◆ While putting in the bobbin case, please fully insert into the rotation hook shaft and then close handles ②.

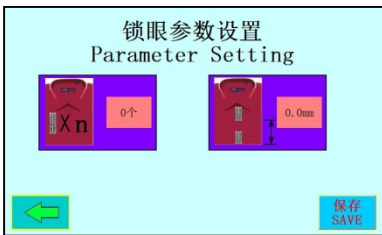
◆ Turn off the rotation hook cover ③.

2. Functions and settings of the operation system

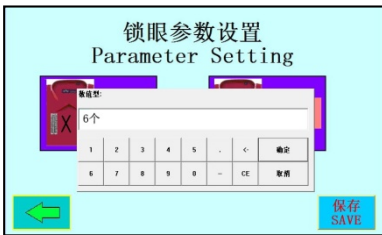
(1) Parameter setting for equally spaced buttonholes



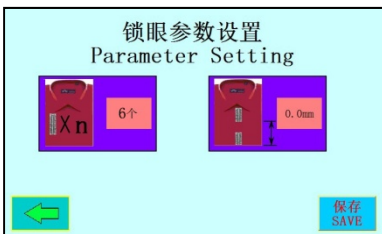
◆ Clicking the shirt icon, enter the interface for setting buttonholing quantity.



◆ Click the icon for setting buttonholing quantity and then enter the parameter setting interface.



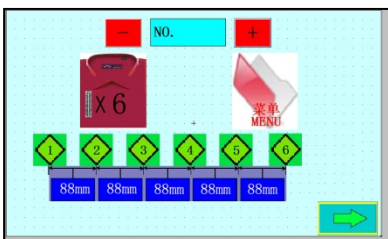
◆ Click the input box to input the buttonholing quantity and then press OK button.



◆ Click the input box for buttonholing interval to enter the interval input interface.

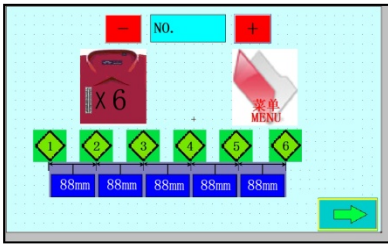


◆ Click the input box to input buttonholing interval value and next press OK and save button.



◆ After finishing the buttonholing parameter setting, back to the main interface.

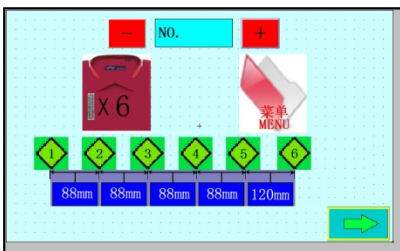
(2) Parameter setting for unequally spaced buttonholes



- ◆ Click on the interval value you want to modify and open the input box.

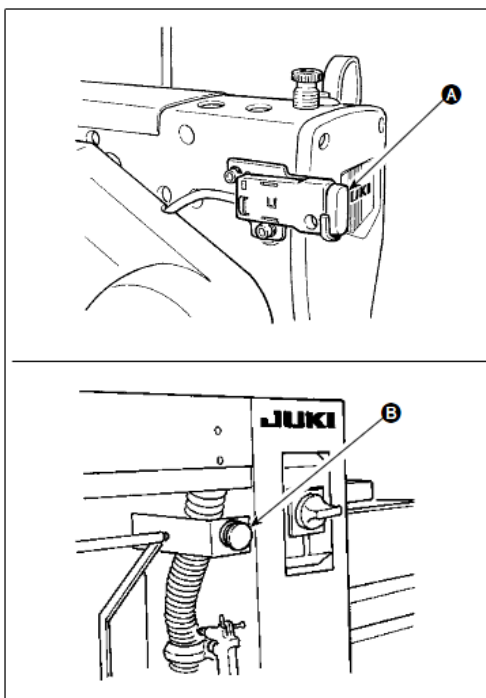


- ◆ Input the new number value you want and press save button after confirmation.

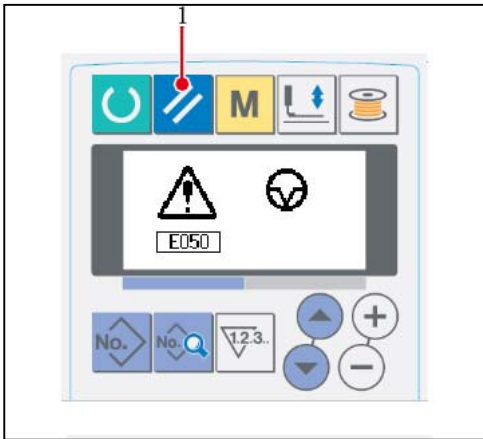


- ◆ After finishing the buttonholing parameter setting, return to the main interface.

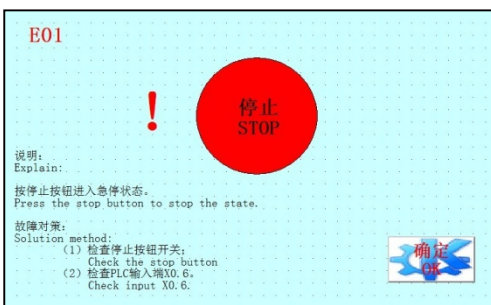
(3) Emergency stop



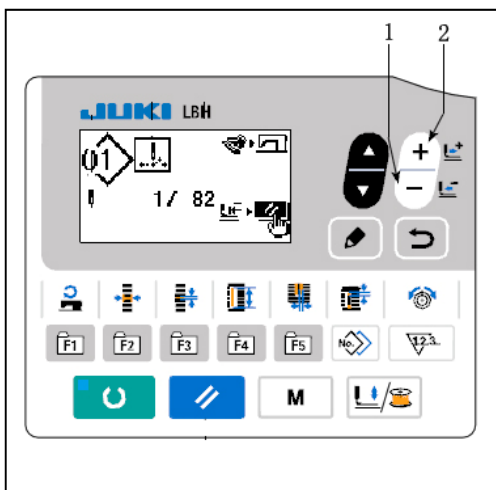
- ◆ If there is an emergency during sewing process, press the stop button (A) or emergency stop button (B) of the machine head and the sewing machine will stop working then. After that, the abnormal screen notifying that the pause switch was pressed.



- ◆ Press the reset key on the machine head to relieve the abnormality.



- ◆ Simultaneously press the OK button on the movement control screen.

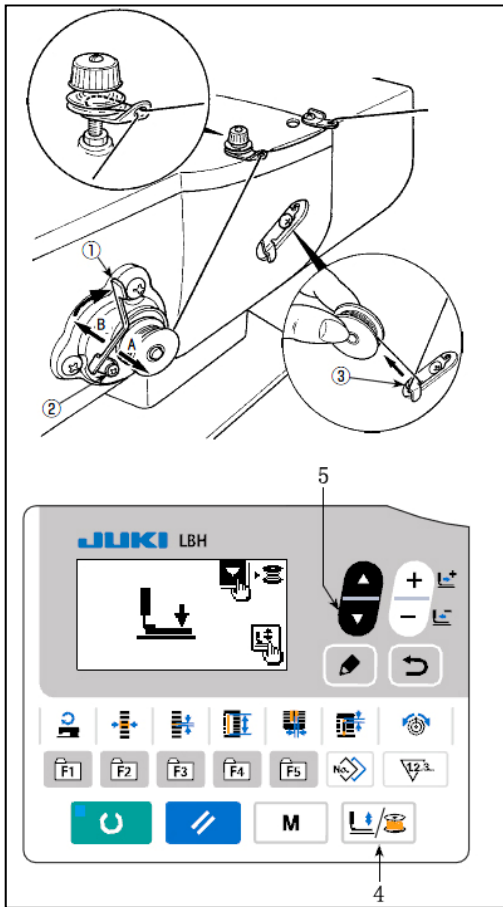


◆ **Return needling manipulation**

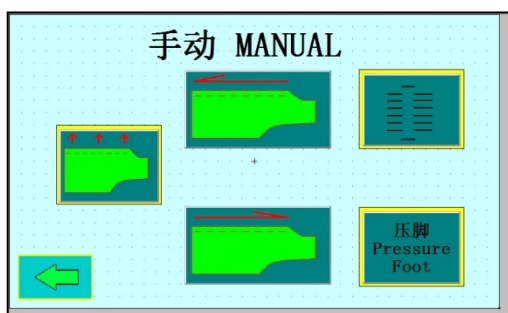
Press the back key ① and the presser foot will return stitch by stitch. Reversely, pressing the forward key ②, the presser foot will go ahead.

- ◆ Completing the needling manipulation, you can press the knee switch to restart sewing.

(4) Bobbin winding operation



- ◆ Press the presser foot bobbin winding key ④ in input state and then press item select key ⑤.

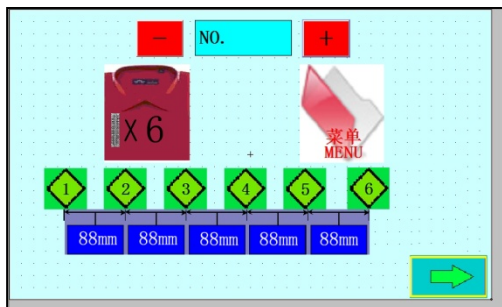


- ◆ Press down the sewing button on the control panel to start bobbin winding. The coiling operating rod ① will be relieved after finishing the specific amount of bobbin winding. Press the sewing button again and the sewing machine will stop rotation. Take off the bobbin and then cut sewing thread with the tangent fixed plate ③.

- ◆ Press the presser foot winding button to back to the normal mode ④.

(5) Counter operation

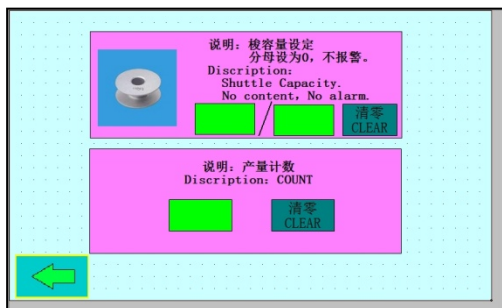
You can either use the machine head counter or the counter setting on the control panel to count. If you select the counter setting on the control panel, please first turn off the machine head counter function.



◆ Click the menu interface to enter the data setting interface.

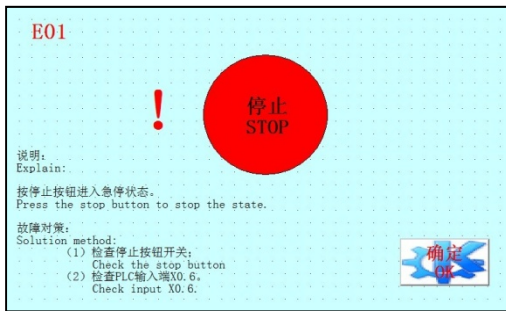


◆ Click on the data interface and enter the data setting box.

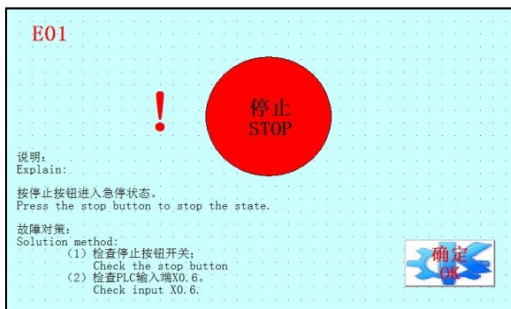


◆ Click the data input box and input the bobbin counter value.

◆ After inputting the bobbin counter value, press the back button to return to the main interface.

(6) Recover the machine head factory settings

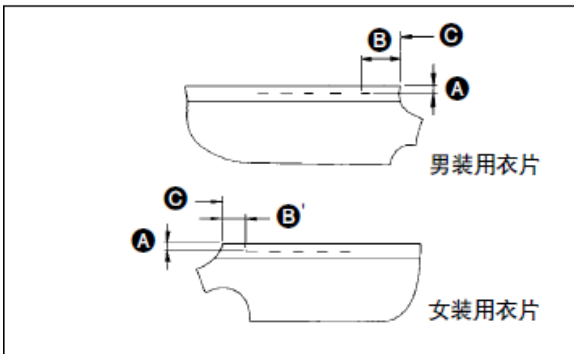
◆ Under the deenergized state of the machine head, press the emergency stop switch on the rack. And continuously click the upper left corner and the lower left blank, after which a “Restore factory setting” button will appear on the upper right corner of the interface.



◆ Click the “restore the factory setting” and charge the machine head. At this time, the machine head has already restored the factory setting.

- ◆ Call out the data U002 from the storage switch 1 of the machine head and set the value to be 13.9.
- ◆ Call out the data K001 from the storage switch 2 of the machine head and then set the pedal type to be “signal pedal” mode (with back tread); (Or set the pedal type to be “PK57” and pull the second plucking number sign switch near the “USB” interface to right)

(7) Regulate the sewing width

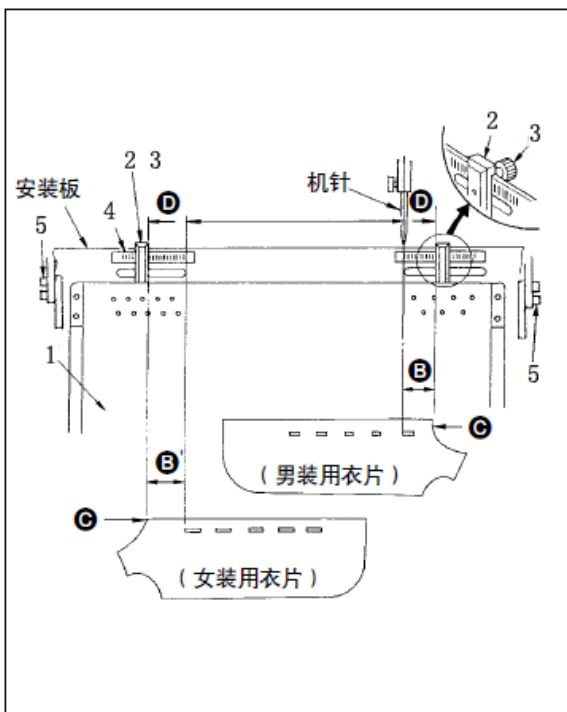
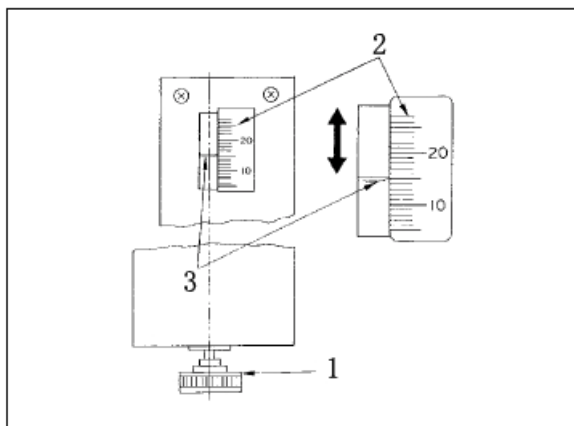


◆ From the cross border to the buttonholing (the size ① shows in the picture) from the cloth top end to the first buttonhole. (as shown in the picture ②、③)

◆ ① Size adjustment

◆ Turn the handle ① clockwise, ① size will become smaller; but if you rotate the handle ① counterclockwise, ① size will become larger. Moreover, turning a circle is 1mm.

◆ If ① size and scale value are different, loosen the set screw ⑤ to readjust the positions on both sides.



◆ Loosen the screw ③ on the scale plate ② of the transporting plate ① and then fix it after moving to the setting part of the scale ④.

◆ Aligning the cloth upper end ③ with the inner side of the indicator ④ to determine the cloth position. (For women's dress, please refer to the indicator and scale on the left side to carry out the same adjustment.)

Six. Information list on the alarm scrolling bar

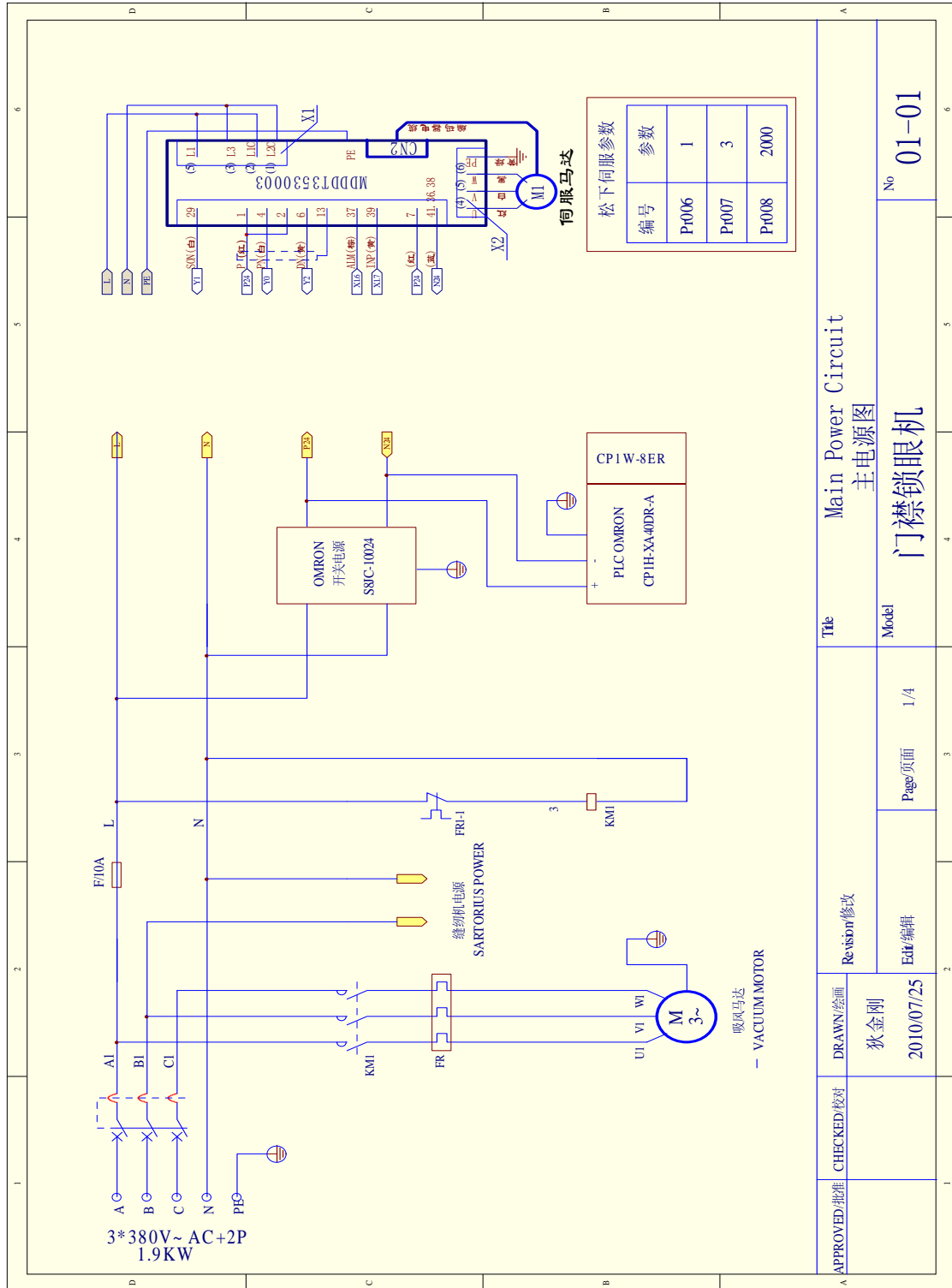
Sequence	Failure code	Failure information & phenomenon	Failure treatment method
1	E01	Alarm stop	(1) Check the stop button switch (2) Check the PLC input end x0.6 (3) Check 24V DC switch power.
2	E02	Total length of the buttonholing interval is too long	If the buttonholing interval sum set namely the total length is more than 610mm which exceeds the system range, please return to reduce the buttonholing interval setting.
3	E03	Bobbin allowance is too less	Set a reasonable bobbin allowance; If the bobbin allowance is less than the buttonholing number of each garment, the system will send an alarm to remind users. Customer need to replace it with a new bobbin and reset or lessen the molecular data to continue work. When the denominator (bobbin capacity) is set to be 0, the system won't count the bobbin workload and also won't give alarms about the bobbin allowance.
4	E04	Failure in the initialized position of the feeding platform	(1) The magnet switch on the feeding platform initialized position doesn't light or is normally on. (2) The feeding platform can't be able to reach to the designated place. (3)Check the magnetic valve and cylinder of the feeding platform. (4)Check power. (5)Check the PLC input end X0.10. (6)Check the PLC output end Y10. (7)Check the 24V DC switch power.
5	E05	Failure in the middle position of the feeding platform	(1) The magnet switch on the feeding platform middle position doesn't light or is normally on. (2) Feeding platform fails to return. (3)Check the magnetic valve and cylinder of the feeding platform. (4)Check power. (5)Check the PLC input end X0.11. (6)Check the PLC output end Y10.

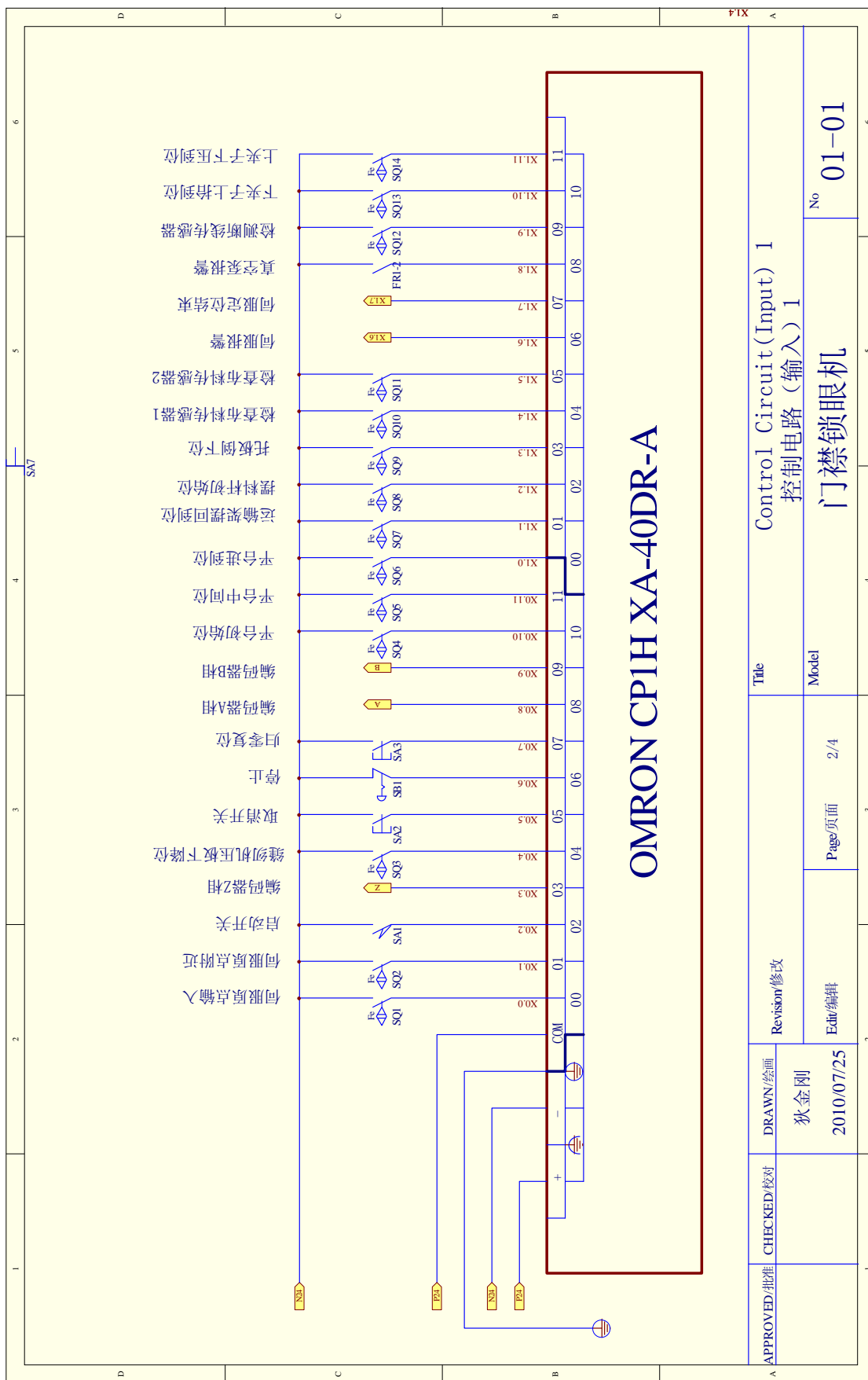
			(7)Check the 24V DC switch power.
6	E06	Failure in the extending position of the feeding platform	<p>Cause for failure of the extending position on the feeding platform</p> <p>(1) The magnet switch on the feeding platform middle position doesn't light or is normally on.</p> <p>(2) Feeding platform fails to extend.</p> <p>(3)Check the magnetic valve and cylinder of the feeding platform.</p> <p>(4)Check power.</p> <p>(5)Check the PLC input end X0.11.</p> <p>(6)Check the PLC output end Y10.</p> <p>(7)Check the 24V DC switch power.</p>
7	E07	Broken stitches	<p>(1) Check the stop button switch</p> <p>(2) Check the PLC input end x0.6</p> <p>(3) Check 24V DC switch power.</p> <p>Then, please take the following measures:</p> <p>(1)Confirm reset on the display panel of the sewing machine.</p> <p>(2)Restart threading for the sewing machine again.</p> <p>(3)Press the reset confirmation button on the system touch screen.</p>
8	E08	Alarm from the vacuum pump	<p>(1)Check the vacuum pump.</p> <p>(2)Check the thermorelay and reset by pressing the blue button.</p> <p>(3)Check the PLC input end X1.08.</p> <p>(4)Check 24V DC switch power.</p>
9	E09	Alarm from the servo motor	<p>Switch off the power reset.</p> <p>(1)Check whether there is alarm from the servo motor and get its specific alarming information.</p> <p>(2) Check the PLC input end X1.06.</p> <p>(3) Check 24V DC switch power.</p>
10	E10	Failure of the transporting rack backswing	<p>Switch off the power reset.</p> <p>(1) The magnet switch of the transporting rack doesn't light or is normally on.</p> <p>(2)Failure of the transporting rack backswing.</p> <p>(3)Check the magnetic valve and cylinder</p>

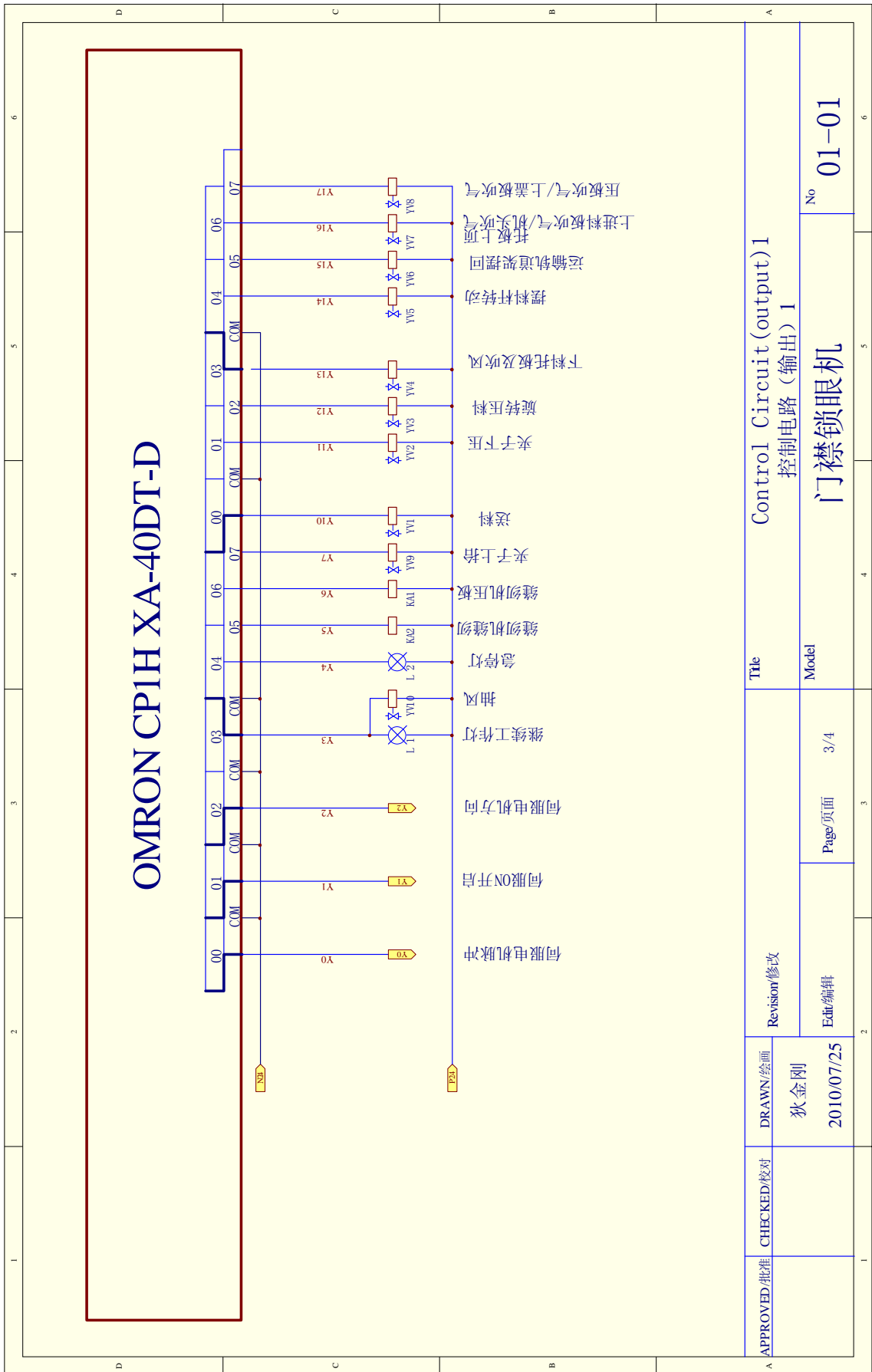
			of the transporting rack. (4)Check power. (5)Check the PLC input end X1.1. (6)Check the PLC output end Y15. (7)Check the 24V DC switch power.
11	E11	The reminder reminds that the sewing machine doesn't enter the working state	(1)The sewing machine enters the working state. (2)The sewing machine fails to uplift. (3)Check the PLC input end X0.04. (4)Check the 24V DC switch power.
12	E12	The upper clamp doesn't rise to its designated place	(1) Check power. (2) Check the PLC input end X1.10.
13	E13	The lower clamp doesn't decline to its designated place	(1) Check power. (2) Check the PLC input end X1.11.
14	E14	Detection sensor failure of the sewing machine presser foot	(1)Check whether the sewing machine presser foot is lifted up. (2) Check the PLC input end X0.04.
15	E15	Pressure alarm	(1)Check whether the main inlet pressure reaches 4 kilogram. (2) Check the PLC input end X1.02.
16	E16	Starting failure	(1)Check whether there are alarms from the sewing machine head. (2)Check the sewing machine's starter wiring 21、22、23、24 (3)Check the intermediate relay Y 5、Y 6 (4)Check the PLC input end X0.4.

Seven. Electrical schematic diagrams

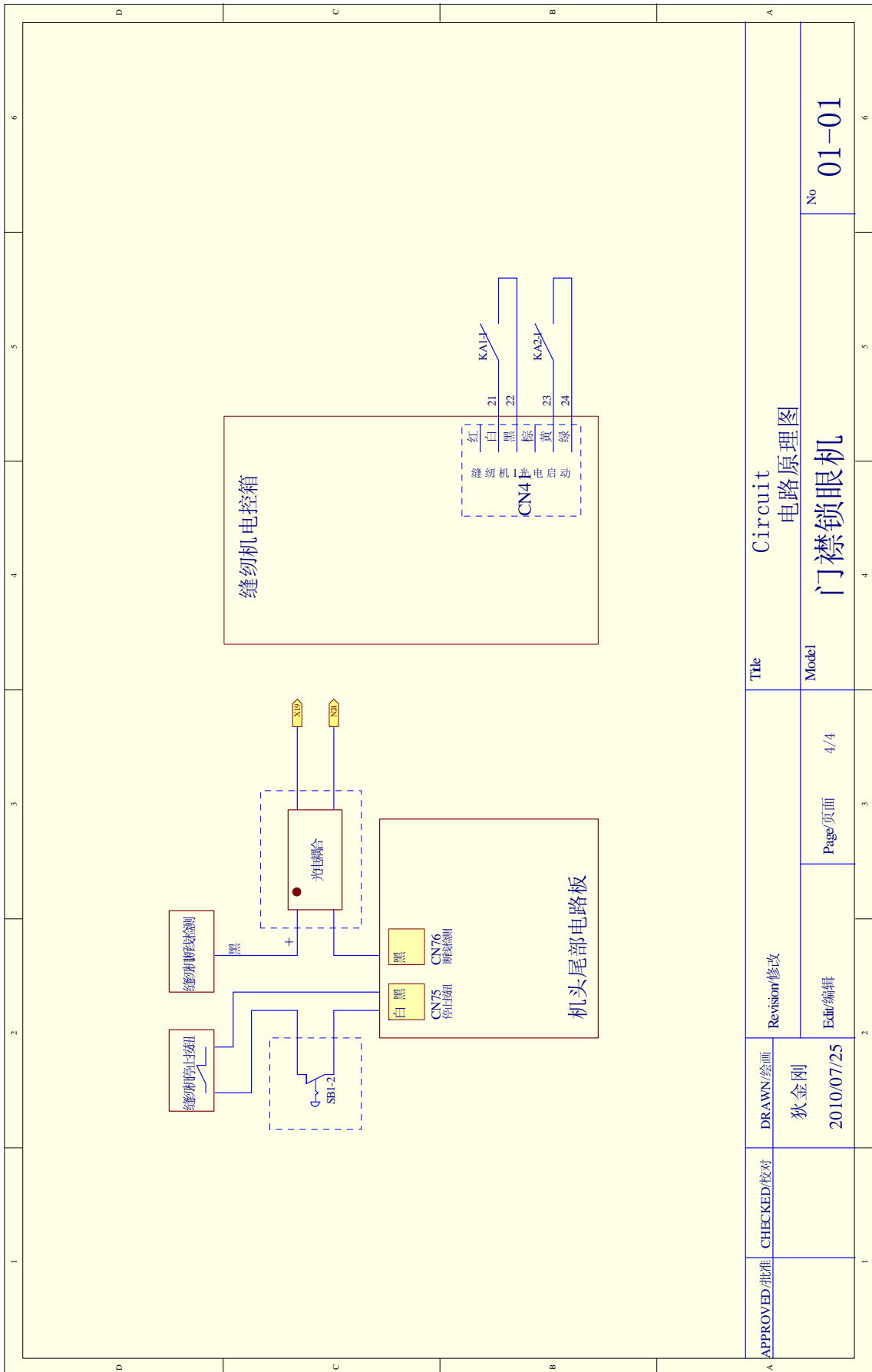
1. LBH-1790SS



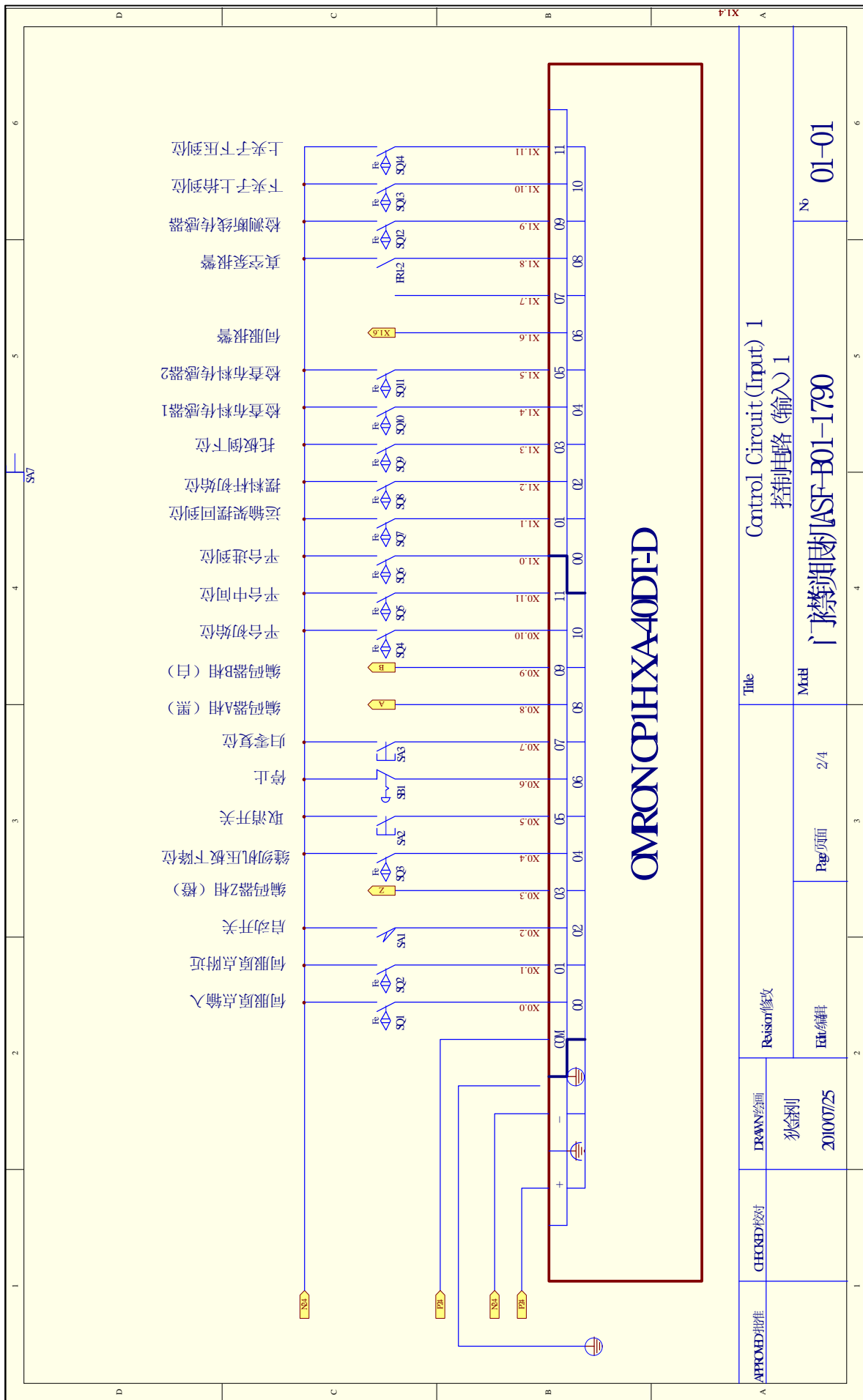




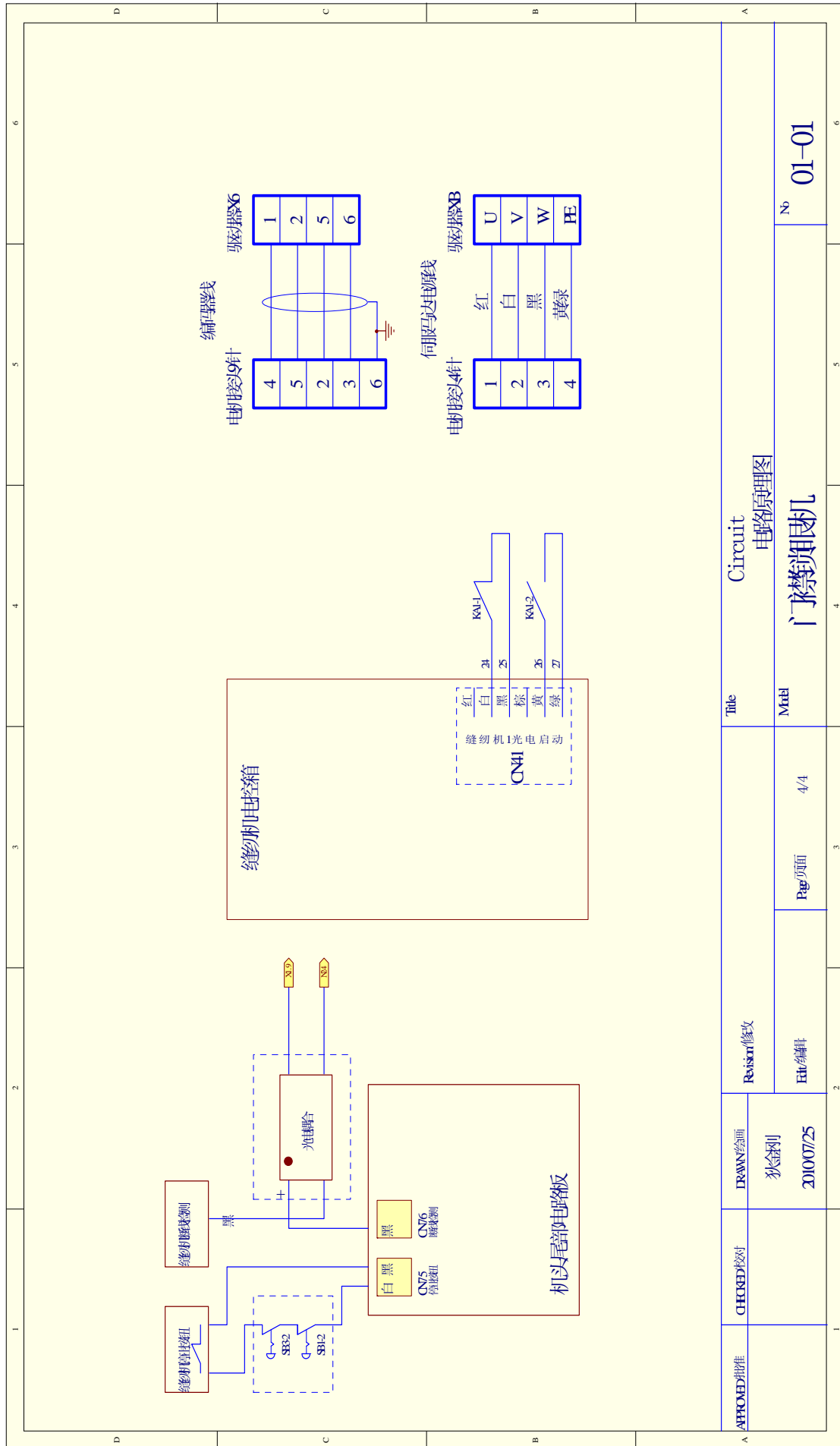
2. LHB-1790A



APPROVED/批准	CHECKED/校对	DRAWN/绘画	Revision/修改	Title
		狄金刚 2010/07/25	4/4	Circuit 电路原理图
			Page/页面	Model
			4/4	门襟锁眼机
				No
				01-01



	Control Circuit (Input) 1 控制电路 (输入) 1	Title	
APPROVED/批准	CHECKED/校对	DRAWN/制图	Revision/修改
		狄金利 201007/25	2/4
		Edit/编辑	Page/页面
		门禁锁具 ASF-B01-1790	
		Mch	2
			01-01



APPROVED/批准	CHECKED/校对	DRAWN/绘图	Revison/修改	Title	Circuit	
		狄念刚 20100725	Err/编辑	Motor	电路原理图	
			Page/页面	No		01-01
			4/4	门控电机		

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Packing List

Product Name	Unit	Amount	Product Model		Product ID	
	Set	1				
Packing No.	Shape and Size mm		Volume m3	Net Weight kg	Gross Weight kg	Note

No.	Name of Spare Parts and Wearing Parts	Unit	Amount	No.	Name of Accessories	Unit	Amount
1				6			
2				7			
3				8			
4				9			
5				10			

No.	Technical Document	Unit	Amount
1	Operation Instruction	copy	1
2	Product Certificate	copy	1

Inspector:

Packing Staff:

Packing Date:

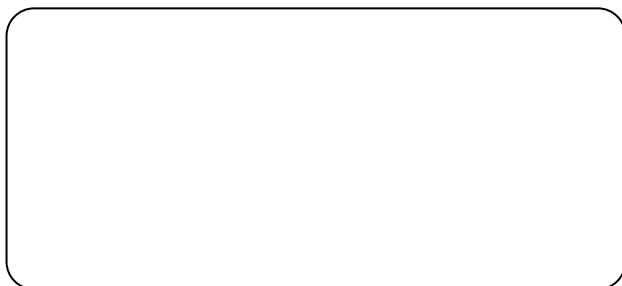


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※slight differences from the picture may be possible
due to improvements of model and appearance