

# GT254-ZD

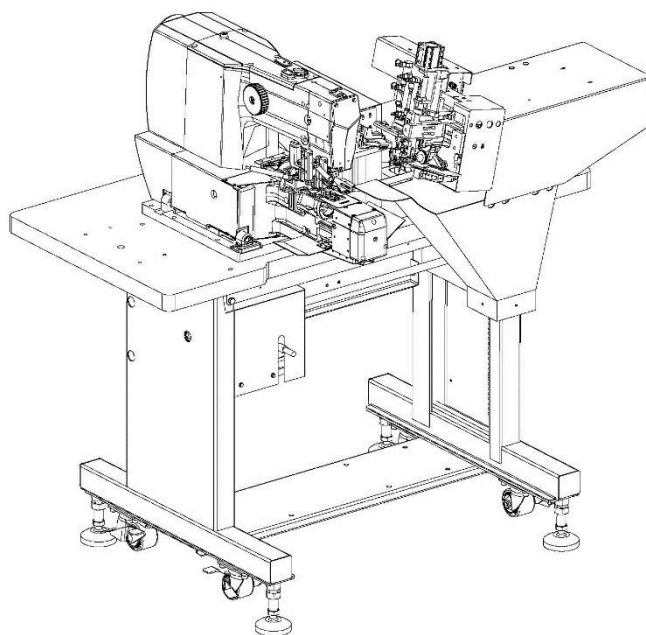
使用说明书  
INSTRUCTION MANUAL

# TYPICAL

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双针钉襻机

Double needle belt loop sewing machine





# SAFETY INSTRUCTIONS

## [1] Safety indications and their meanings

This instruction manual and the indications and symbols that are used on the machine itself are provided in order to ensure safe operation of this machine and to prevent accidents and injury to yourself or other people.


The meanings of these indications and symbols are given below.

### Indications

 <b>DANGER</b>	The instructions which follow this term indicate situations where failure to follow the instructions will result in death or serious injury.
 <b>CAUTION</b>	The instructions which follow this term indicate situations where failure to follow the instructions could cause injury when using the machine or physical damage to equipment and surroundings.

### Symbols




..... This symbol (  ) indicates something that you should be careful of. The picture inside the triangle indicates the nature of the caution that must be taken.  
(For example, the symbol at left means "beware of injury".)



..... This symbol (  ) indicates something that you must not do.



..... This symbol (  ) indicates something that you must do. The picture inside the circle indicates the nature of the thing that must be done.  
(For example, the symbol at left means "you must make the ground connection".)

## [2] Notes on safety

### DANGER



Wait at least 5 minutes after turning off the power switch and disconnecting the power cord from the wall outlet before opening the cover of the control box. Touching areas where high voltages are present can result in severe injury.

### CAUTION

#### Environmental requirements



Use the sewing machine in an area which is free from sources of strong electrical noise such as electrical line noise or static electric noise. Sources of strong electrical noise may cause problems with correct operation.



Any fluctuations in the power supply voltage should be within  $\pm 10\%$  of the rated voltage for the machine. Voltage fluctuations which are greater than this may cause problems with correct operation.



The power supply capacity should be greater than the requirements for the sewing machine's power consumption. Insufficient power supply capacity may cause problems with correct operation.



The pneumatic delivery capability should be greater than the requirements for the sewing machine's total air consumption. Insufficient pneumatic delivery capability may cause problems with correct operation.



The ambient temperature should be within the range of 5°C to 35°C during use. Temperatures which are lower or higher than this may cause problems with correct operation.



The relative humidity should be within the range of 45% to 85% during use, and no dew formation should occur in any devices. Excessively dry or humid environments and dew formation may cause problems with correct operation.



In the event of an electrical storm, turn off the power and disconnect the power cord from the wall outlet. Lightning may cause problems with correct operation.

#### Installation



Machine installation should only be carried out by a qualified technician.



Contact your Brother dealer or a qualified electrician for any electrical work that may need to be done.



The sewing machine weighs approximately 160 kg. Use equipment such as a crane or hoist when installing the machine head and adjusting the height of the table. If you try to lift the machine head yourself, it may cause injuries such as back injury.



Do not connect the power cord until installation is complete. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.



Hold the machine head with both hands when tilting it back or returning it to its original position. In addition, do not subject the machine head to extra force while it is tilted back. If this is not observed, the machine head may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.



Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.



All cords should be secured at least 25 mm away from any moving parts. Furthermore, do not excessively bend the cords or secure them too firmly with staples, otherwise there is the danger that fire or electric shocks could occur.



Install the safety covers to the machine head and motor.



If using a work table which has casters, the casters should be secured in such a way so that they cannot move.



Use a table with a height of 84 cm or less. If the table is too high, the machine head may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.












Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result.



Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting. Keep the oil out of the reach of children.

## CAUTION










### Sewing

-  This sewing machine should only be used by operators who have received the necessary training in safe use beforehand.
-  The sewing machine should not be used for any applications other than sewing.
-  Be sure to wear protective goggles when using the machine.  
If goggles are not worn, there is the danger that if a needle breaks, parts of the broken needle may enter your eyes and injury may result.
-  Turn off the power switch at the following times. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.
  - When threading the needle
  - When replacing the bobbin and needle
  - When not using the machine and when leaving the machine unattended
-  If using a work table which has casters, the casters should be secured in such a way so that they cannot move.
-  Attach all safety devices before using the sewing machine. If the machine is used without these devices attached, injury may result.
-  Do not touch any of the moving parts or press any objects against the machine while sewing, as this may result in personal injury or damage to the machine.
-  If an error occurs in machine operation, or if abnormal noises or smells are noticed, immediately turn off the power switch. Then contact your nearest Brother dealer or a qualified technician.
-  If the machine develops a problem, contact your nearest Brother dealer or a qualified technician.

### Cleaning

-  Turn off the power switch before carrying out cleaning. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.
-  Be sure to wear protective goggles and gloves when handling the lubricating oil and grease, so that they do not get into your eyes or onto your skin. If the oil and grease get into your eyes or onto your skin, inflammation can result.  
Furthermore, do not drink or eat the lubricating oil or grease. They may cause diarrhea or vomiting.  
Keep the oil out of the reach of children.

### Maintenance and inspection

-  Maintenance and inspection of the sewing machine should only be carried out by a qualified technician.
-  Ask your Brother dealer or a qualified electrician to carry out any maintenance and inspection of the electrical system.
-  Turn off the power switch and disconnect the power cord before carrying out the following operations. If the foot switch is depressed by mistake, the sewing machine might start operating and injury could result.
  - Inspection, adjustment and maintenance
  - Replacing consumable parts such as the rotary hook
-  Disconnect the air hoses from the air supply and wait for the needle on the pressure gauge to drop to "0" before carrying out inspection, adjustment and repair of any parts which use the pneumatic equipment.
-  Hold the machine head with both hands when tilting it back or returning it to its original position.  
In addition, do not subject the machine head to extra force while it is tilted back. If this is not observed, the machine head may become unbalanced and fall down, and serious injury or damage to the sewing machine may result.
-  If the power switch and air need to be left on when carrying out some adjustment, be extremely careful to observe all safety precautions.
-  Use only the proper replacement parts as specified.
-  If any safety devices have been removed, be absolutely sure to re-install them to their original positions and check that they operate correctly before using the machine.
-  Any problems in machine operation which result from unauthorized modifications to the machine will not be covered by the warranty.

### [3] Warning labels

The following warning labels appear on the sewing machine.

Please follow the instructions on the labels at all times when using the machine. If the labels have been removed or are difficult to read, please contact your nearest dealer.

1

	<b>⚠ 危険</b>		<b>⚠ 危険</b>	
	高電圧部分にふれて、大けがをすることがある。電源を切り、5分たってからカバーをはずすこと。		触摸高压电部分，会导致受伤。在切断电源5分钟后，再开启盖罩。	
<b>⚠ DANGER</b>	<b>⚠ GEFAHR</b>	<b>⚠ DANGER</b>	<b>⚠ PELIGRO</b>	
Hazardous voltage will cause injury. Turn off main switch and wait 5minutes before opening this cover.	Hochspannung verletzungsgefahr! Bitte schalten sie den haupschalter aus und warten sie 5 minuten, bevor sie diese abdeckung öffnen.	Un voltage non adapte provoque des blessures. Eteindre l'interrupteur et attendre 5 minutes avant d'ouvrir le capot.	Un voltaje inadecuado puede provocar las heridas. Apagar el interruptor principal y esperar 5 minutos antes de abrir esta cubierta.	

2

	<b>⚠ 注意</b>
	触摸运动部分，易造成受伤。所以在装上安全保护装置后，再进行缝纫操作。在切断电源后，进行穿线，更换梭芯，机针和做清扫，调整工作。
<b>⚠ CAUTION</b>	
Moving parts may cause injury. Operate with safety devices. Turn off main switch before threading, changing bobbin and needle, cleaning etc.	

3 Be careful to avoid getting hands caught in sliding parts.

4 Be sure to connect the ground. If the ground connection is not secure, you run a high risk of receiving a serious electric shock, and problems with correct operation may also occur.

5 Direction of operation

Safety devices:

Devices such as eye guard, finger guard, thread take-up cover, motor cover, X motor cover, tension release solenoid cover, inside cover, outside cover, middle cover, fixed cover and rear cover

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# 1. Names of Major Parts



① The nose section

⑤ Start switch

⑨ Electric cabinet

② Touch screen

⑥ Solenoid valve

③ The control panel

⑦ Bench lifting wrench

④ Waste tank

⑧ The power switch

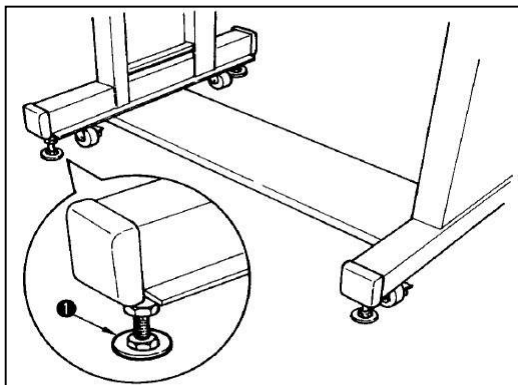
## 2. Specifications :

model	254D-H
Maximum sewing speed	2,700 rpm( Sewing pitch 3.4mm )
Shuttle hook	Vertical semi-rotating rotary hook, with oil cartridge filled with oil through the oil core
Needle	DP×17#19#-#21
Line specification range	cotton#30-#50 filament yarn #30-#50
Stitch change	Selection by operation panel
Bar-tacking pattern memory	9 patterns as standard capacity
Stitch adjustment method	Input by operation panel
Bar-tacking width	1.0mm-3.5mm
Bar-tacking length	5.0mm-22.0mm
Work clamp height	21mm ( From the plane of the needle plate to the bottom of the presser foot)
Feeding mode	Continuous feed (pulse motor drive)
Drive mode of sewing machine	Sewing machine DD and AC servo motor (550W)
Stitch length adjustment method	Manual needle adjustment / rotary hook pulse motor drive (unit: 0.01mm)
Belt width	7-20mm
Bar-tacking belt length	45.0-75mm
Weight	245kg
Power supply	AC220V
Air pressure	0.5 Mpa 1.8L/min

### 3. Installation method

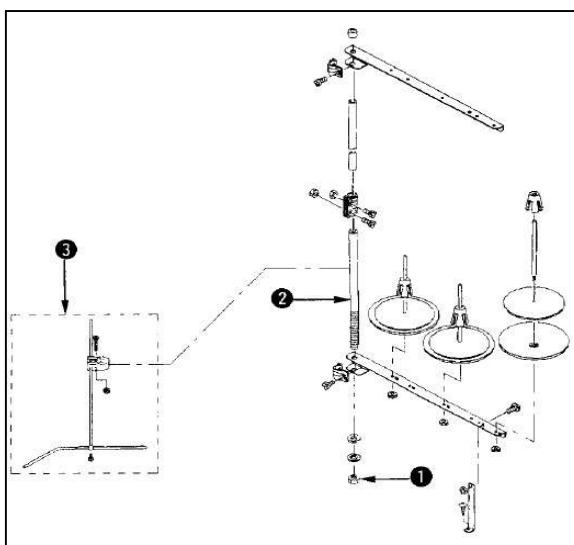
 **Dangerous:** Please carry the sewing machine by at least 2 persons.

#### 3-1. Frame fixed



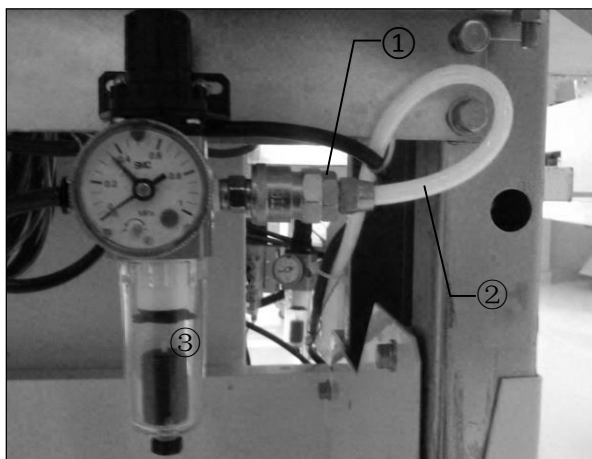
- 1) Adjust the fixing studs ① of the rack feet so that the four fixing studs support the rack against the floor until the four trolleys slightly touch the ground.

#### 3-2. Installation of wire rack device



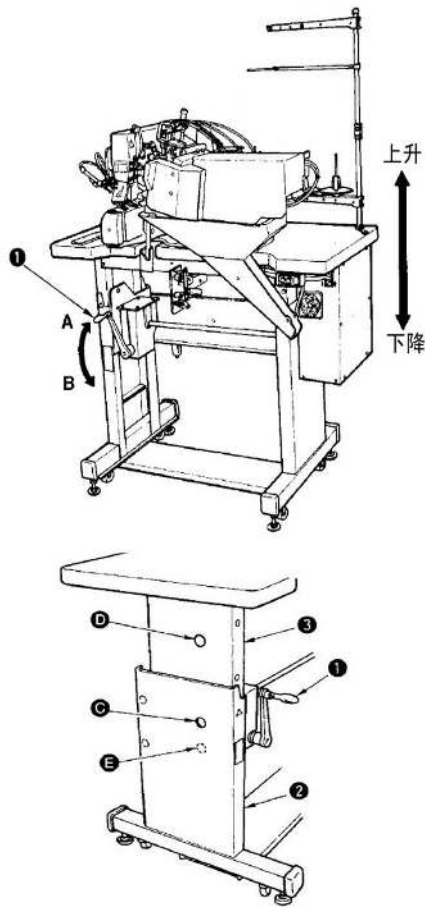
- 1) Assemble the thread stand and insert it into the hole on the upper right of the bedplate.
- 2) In order to stabilize the thread stand, tighten up the set screw ①.
- 3) Install the manual threading crank assembly ③ onto the thread stand.
- 4) When the ceiling wiring is feasible, insert the power cord into the thread stand rod ②.

#### 3-3. Adjust the air



- 1) Connect the gas pipe ② with a diameter of 10mm to the quick connector ① securely, and then insert the quick connector ① into the air filter connector ③.
- 2) The air may be discharged after the quick connector ③ is unplugged.

### 3-4. Adjust the height of sewing machine stand



1) As shown in the label on the left side of the handle, rotating the rack's up/down handle ① in clockwise direction A will raise the rack, and rotating the handle in counterclockwise direction B will lower the rack.

2) The lowermost position of the rack height is where hole C of the lower foot ② and hole D of the upper foot ③ are aligned, while the uppermost position is where hole C of the lower foot ② and hole D of the upper foot ③ are aligned.

**Note:** The rack height at the time of shipment is at the lowermost position. When using the machine for the first time, make sure to lift the rack. Do not rotate the handle when the rack is at its lowermost or uppermost position.

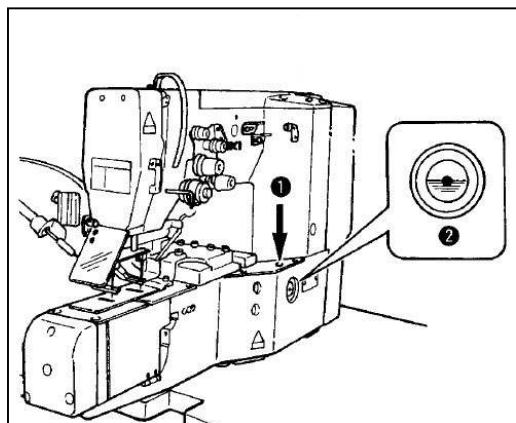
## 4. Preparation before sewing



### Attention

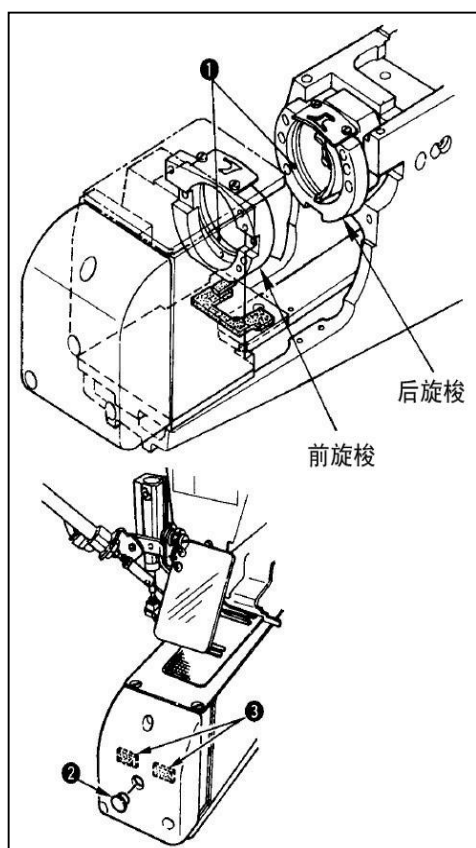
In order to prevent accidents caused by accidental startup, please turn off the power before operation

### 4-1. Oil window



- 1) Fill the oil via the filler ① at the machine head until the level reaches the red mark at the center the oil meter ②.

### 4-2. Add oil to shuttle rail



Back rotary hook

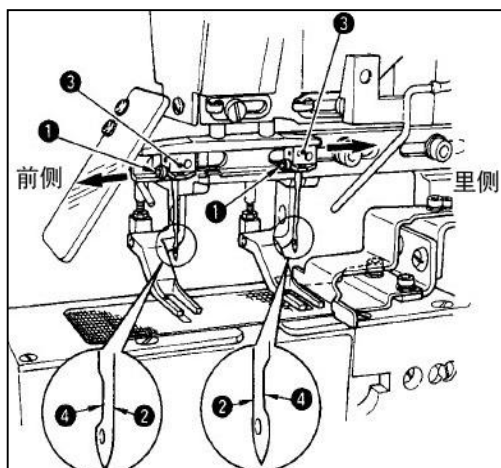
- 1) Apply a few drops of oil into the rotary hook slider ①.

Front rotary hook

- 2) Apply a few drops of oil into the rotary hook slider ①.

- 3) Remove the rubber plug ② and add proper amount of oil to the oil pad ③ of the rotary hook table.

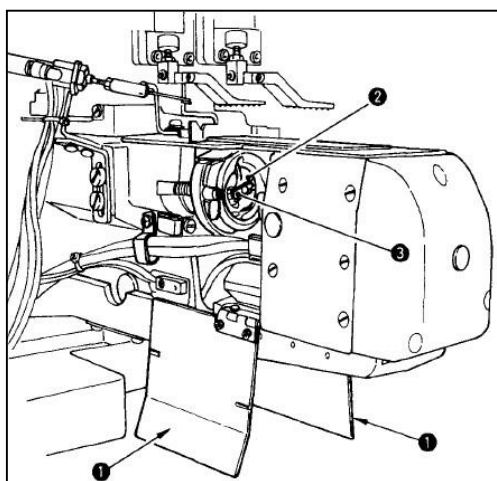
### 4-3. Installation method of machine needle



- 1) Loosen the set screw ①.
- 2) Push the needle ② into the hole of the needle table ③, then turn the recess ④ of the needle ② to turn the front needle to the front side and the back needle to the back side (see the figure on the left).
- 3) Tighten up the set screw ①.

Note: For safety considerations, the above actions must be carried out after the machine is powered off.

### 4-4. Removal of bobbin box



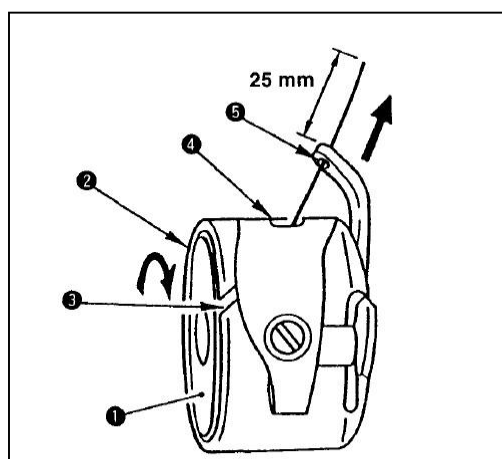
- 1) Press and hold the red pause button on the operation panel, and the whole set of outer rotary hook will move outward, widening the distance between the two bobbins.
- 2) Open the rotary hook cover ①. (left and right)
- 3) Pick up the gripper head ③ of the bobbin case ② and take it out. The bobbin won't fall off when you pick up the head.
- 4) Push the bobbin shaft hard to mount the bobbin case,

then close the gripper head ③ and the rotary hook cover ①.

- 5) The operation orders for the front side and the back side are identical.

Note: All the above actions for replacing the bobbin case must be carried out after the machine is connected to the power supply, otherwise the spacing between the two bobbins will be too small to complete the operation.

### 4-5. The method of putting the bobbin

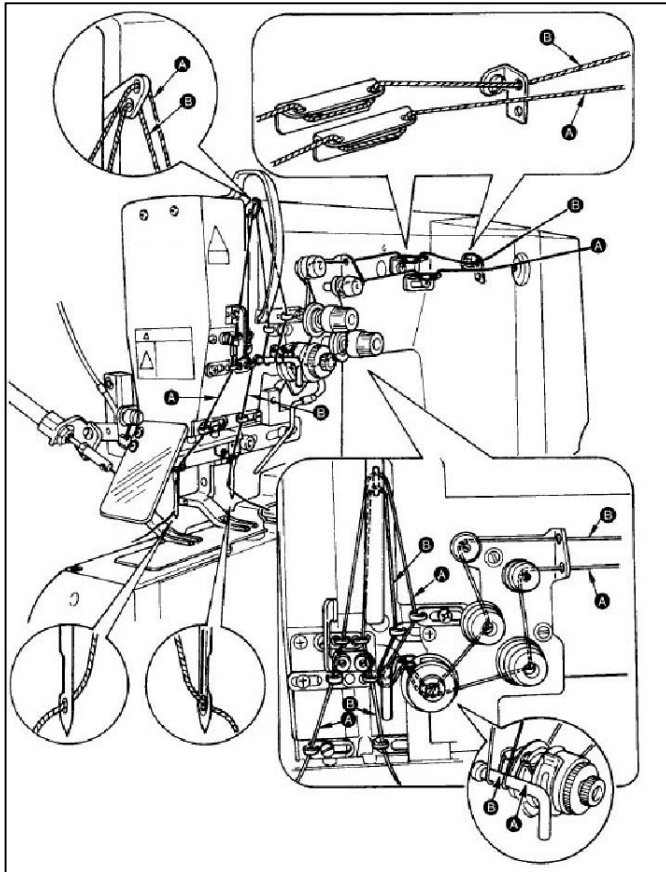


- 1) In order to wind the thread to the left, hold the bobbin ①, and then put it into the bobbin case.
- 2) Pass the thread through the threading hole ③ of the bobbin case ②, and then draw the thread. When the thread passes

through the threading hole ④ under the thread tension spring, draw the thread again, the bobbin case ① will rotate in the direction of the arrow.

3) Pass the thread through the thread hole ⑤ and draw the thread from thread hole ⑤ by 25mm.

#### 4-6. The threading method of the upper thread

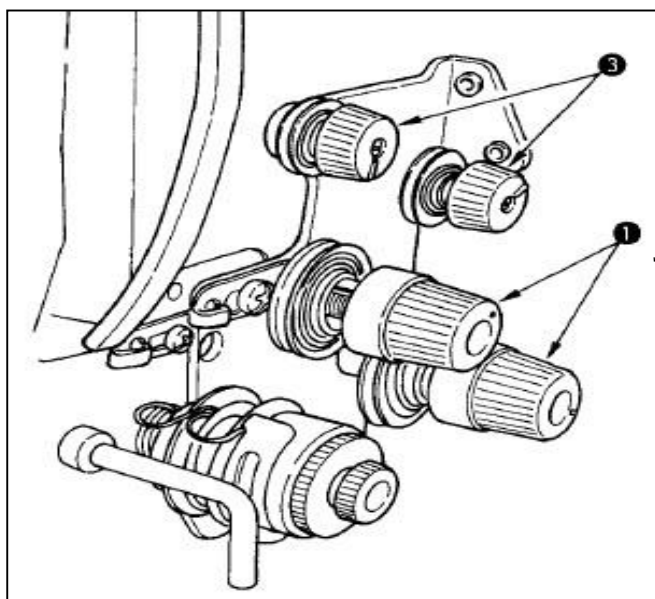


Complete the threading of upper thread according to the two lines of A and B as shown in the figure.

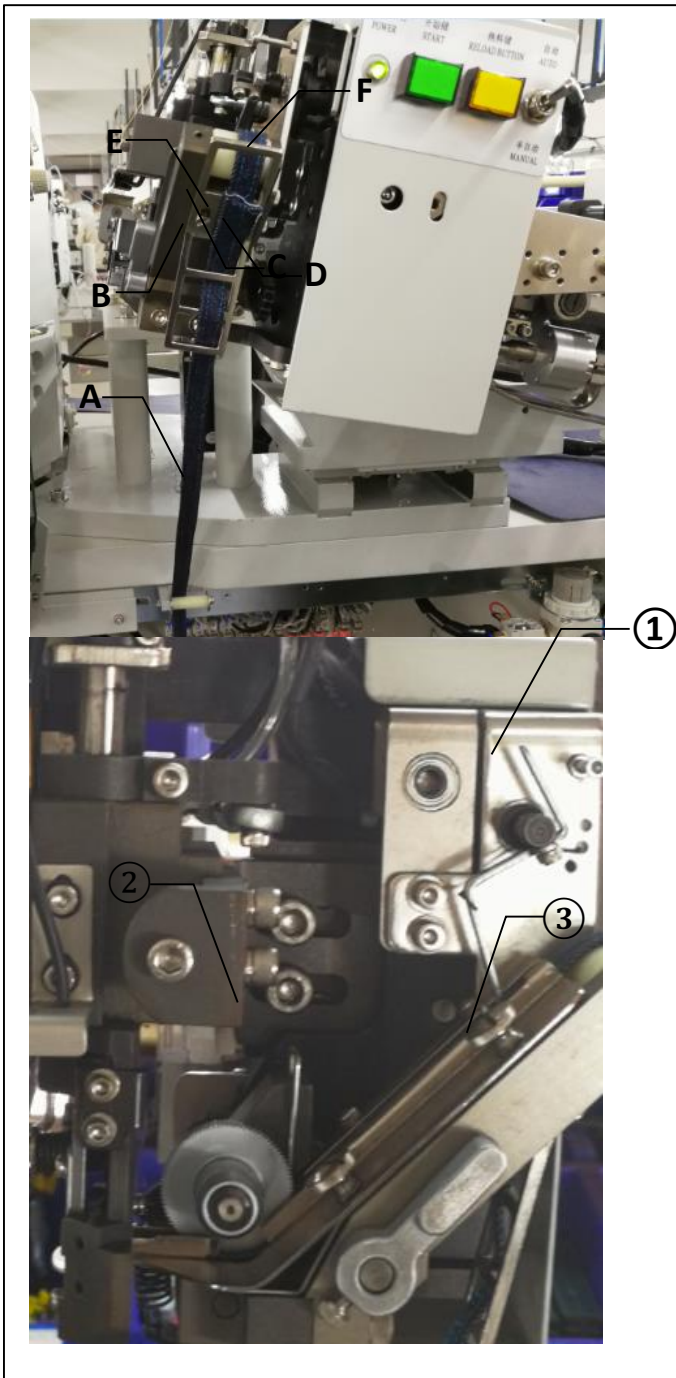
1) Adjusting the upper thread tension:  
Turn the thread tension pulley ① to the right to increase the upper thread tension, and turn it to the left to decrease the tension.

2) Adjusting the lower thread tension  
Turn the thread tension screw ② to the right to increase the lower thread tension, and turn it to the left to decrease the tension.

3) Adjusting the thread retention length  
Turn the first tension pulley ③ to the right to reduce the thread retention length of the needle tip, and turn it to the left to increase the retention length.



#### 4-7. The threading method of the belt ring



1) Insert the belt loop according to the sequence in which it is guided, specifically A, B, C, D, E and F.

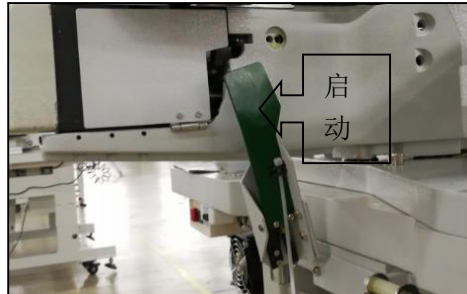
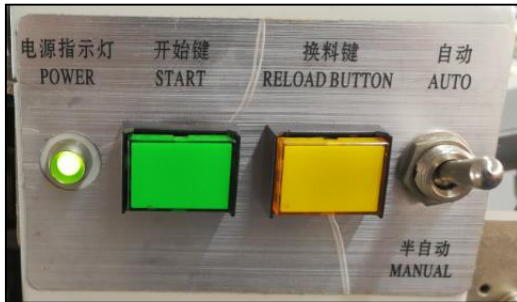
2) Pass the belt loops through the clamp adjusting hemmer ①.

3) Press the feed wheel wrench ②, insert the belt loops inside and feed them under the feed pulley gear ③.

4) Turn the feed pulley gear ③ to send the belt loops to the knife position.

## 5. Operation of sewing machine

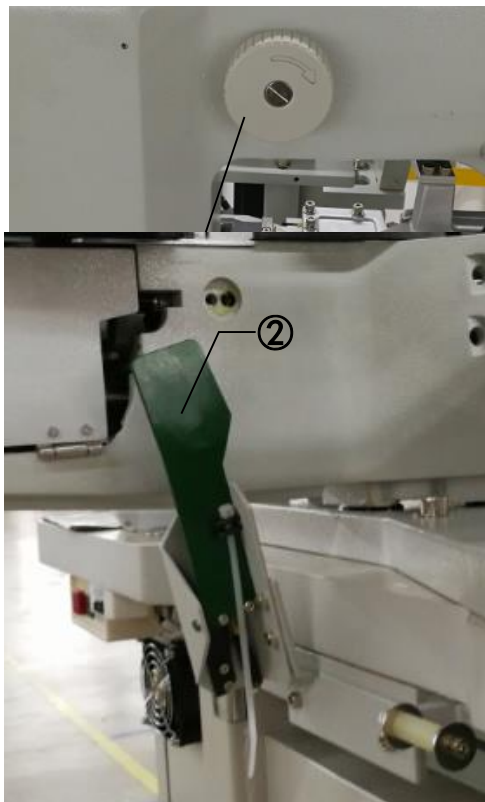
### 5-1. Switch instruction of operation panel



Name	Function	Action
Power indicator	Work indicator light	Light up under the normal working state of the machine.
Start button	Startup of the feeding	mechanism Single-step feeding in manual mode; and continuous feeding in automatic mode.
Switching button	Switching	In case of abnormal feeding, press this button to readjust the feeding.
Auto/semi-auto	Single-step and continuous mode	Single-step actions for up position of the toggle switch and continuous actions for down position.
Start switch	On-line, sewing, Feeding and supplementary sewing	Connecting in off-line state; single-step sewing in manual mode; Supplementary sewing in thread break state; normal feeding in auto mode.
Knife	1 cut / 2 cuts	1 action by the knife when the toggle switch is at up

changeover switch		position; 2 actions by the knife when the toggle switch is at down position.
Single-step/semi -auto	Manual and auto switching	Switching of manual and auto modes.

## 5-2. Basic operation of sewing machine



1) Before the "On-line" operation, check if the needle bar is at the needle up stop position. Press in and turn the pulley ① to adjust the up and down position of the needle. If the needle is not at the stop position, the error code [E110] will be displayed during the on-line operation or startup. In this occasion, press in and turn the pulley ① to adjust the needle position to the stop position, and the error code will be removed.

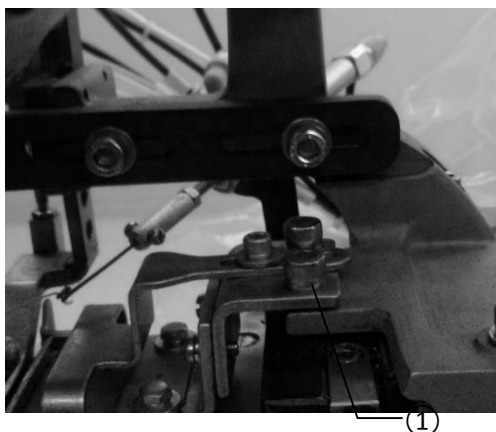
2) After connecting power supply and air supply (0.5Mpa or above), turn on the power switch and the program number (NO.) on the operation panel will flash, then press start switch ②. When the program number (NO.) is no longer flashing, the machine will be ready.

3) The feed fork must be loaded with the belt loop to be sewn. If there is no material on the feed fork or the belt loop is not rolled properly, prepare for belt feeding first.

4) Place the clothes to be sewn on the front of the presser foot of the machine head according to the sewing requirements, then touch the start switch ② at the lower part of the machine head with your right hand, the machine will automatically sew the belt loop.

## 5-3. Machine adjustment

(1) Adjust the presser foot back and forth



1) Loosen a set screw ① of the needle mounting seat, and move the needle mounting seat along the sliding chute according to the specific position adjusted by the outer rotary hook, to ensure that the needle is concentric with the needle plate hole.

2) After aligning the positions, tighten the set screw ①.

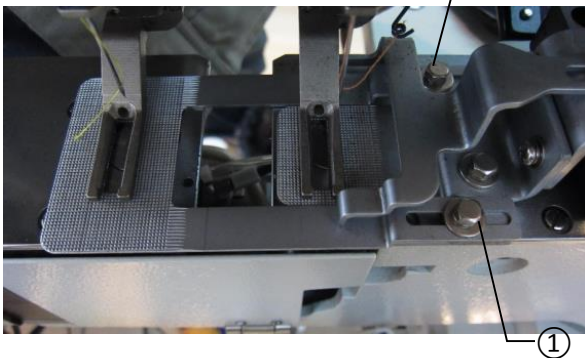
## (2) Needle front and back adjustment



1) Loosen two set bolts ① of the outer presser foot assembly, and move the outer presser mounting seat along the work clamp arm groove according to the specific position adjusted by the outer rotary, to ensure that the presser foot notch is concentric with the needle plate hole.

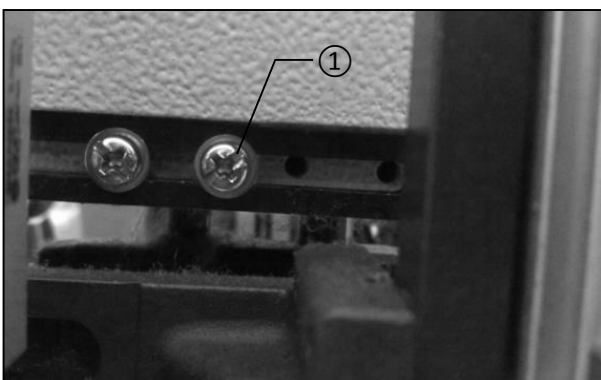
2) After aligning the positions, tighten the two set bolts ①.

## (3) Front feed plate adjustment



1) Loosen the two screws ① of the front feed plate, and align the notch of the front feed plate with that of the front presser foot according to the specific position adjusted by the front presser foot before tightening the two screws ①.

## (4) Wire-sweeping component adjustment

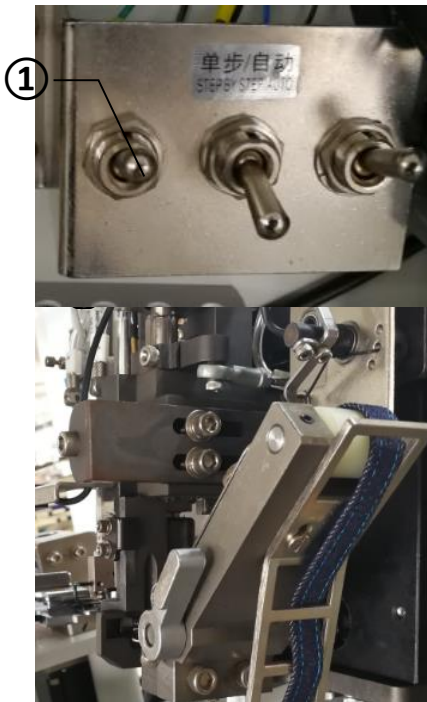


1) Loosen the two screws ① of the thread wiper mounting bracket, move the thread wiper mounting bracket along the head slot according to the specific position adjusted by the needle bar, and determine the position of the wiper hook and the needle.

2) After aligning the positions, tighten the two screws ①.

## 5-4. Cutter adjustment

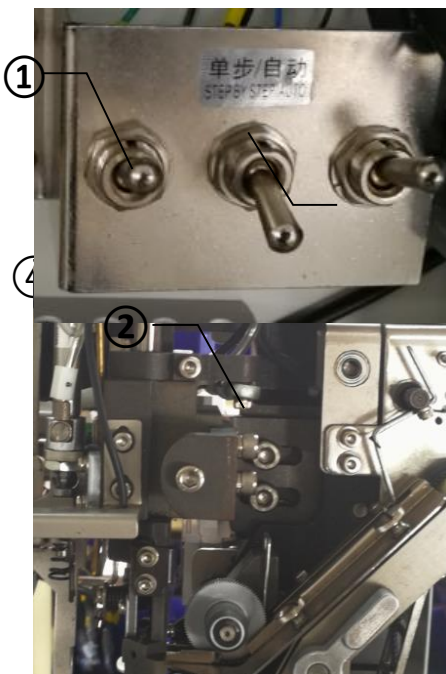
### (1) Straight cut adjustment



1) When the knife changeover switch ① is at up position, the belt loop knife makes 1 cutting action, i.e. the conventionally used I-shaped cut.

2) When the knife changeover switch is toggled up, loosen the clamp ring set bolt ② on the knife rotation cylinder rod. Adjust the blade on the knife to be perpendicular to the belt loop. Push the clamp ring against the end face of the cylinder, and then tighten the bolt ②.

### (2) Cross cutting adjustment



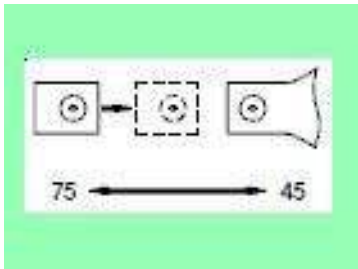
1) When the knife changeover switch ① is at the down position, the belt loop knife makes 2 cutting actions, i.e. the specially used cross-shaped cut.





2) When the knife changeover switch is toggled down, loosen the clamp ring set bolt ② on the knife rotation cylinder rod. Rotate the knife in counterclockwise direction until a required angle between the knife and belt loop is obtained. Push the clamp ring against the end face of the cylinder, and then tighten the bolt ②. Note: When adjusting the cross-cutting angle of the rotary knife, it must be adjusted according to the belt loop width. Otherwise, the cross angle will be asymmetrical. It must be adjusted as follows.

3) When adjusting the asymmetrical cross-cutting angle, loosen the two bolts ③ of the mounting bracket of the belt loop feeding device. The rotation center of the knife and the center of the belt loop width must be aligned. The left end bolt ④ of the mounting bracket must be adjusted slowly. After the two center positions are aligned, tighten the two bolts.

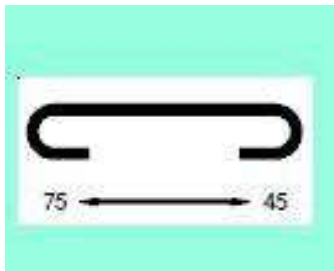
## 5-5 Belt ring length adjustment





### (1) External hook adjustment



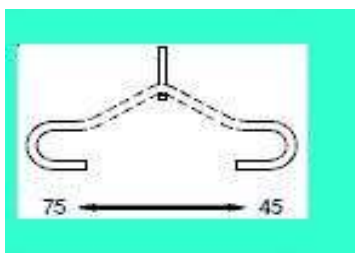
1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. Find the central position and size of the outer and inner rotary hooks as indicated in the left figure, which can be adjusted within the scope of 45-75 mm for conventional models. Press  and  to adjust the spacing.





### (2) Transfer device adjustment



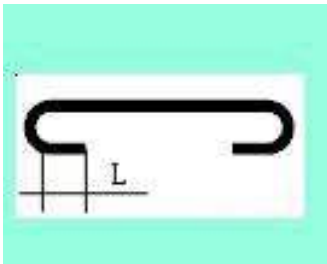
1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. Find the length dimension of rotating mechanism as indicated in the left figure, which can be adjusted within the scope of 45-75 mm for conventional models. Press  and  to adjust the spacing.



### (3) Elastic adjustment of belt ring





1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. Find the tightness of belt loop as indicated in the left figure, which can be adjusted within the scope of 0-7 mm. When the parameter is adjusted to 0, the elastic device will stop working. Each digit added to the adjustment means the actual length will be increased by 2 mm. Press  and  to adjust the tightness of the belt loop.



(4) Adjust the length of the bend end of the belt loop



1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. Find the length of bending side of belt loop as indicated in the left figure, which can be adjusted within the scope of 0-7 mm. When the parameter is adjusted to 0, the standard length of the bending end of the belt loop will be 12mm. Each digit added to the adjustment

means the actual length will be increased by 2mm. Press  and  to adjust the tightness of the belt loop.




P001	P002	P003	P004	P005
75.00mm 75.00mm	75.00mm 75.00mm	75.00mm 75.00mm	75.00mm 75.00mm	75.00mm 75.00mm

1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. A set of P001, P002, P003, P004, P005 and related values will be displayed in

the middle of the touch screen. These values indicate the data saved by the customer for setting the specifications and sizes of belt loop sewing. The use can simply click these values to automatically adjust the specifications and sizes originally set by the customer.

(5) Quality inspection and adjustment of belt band

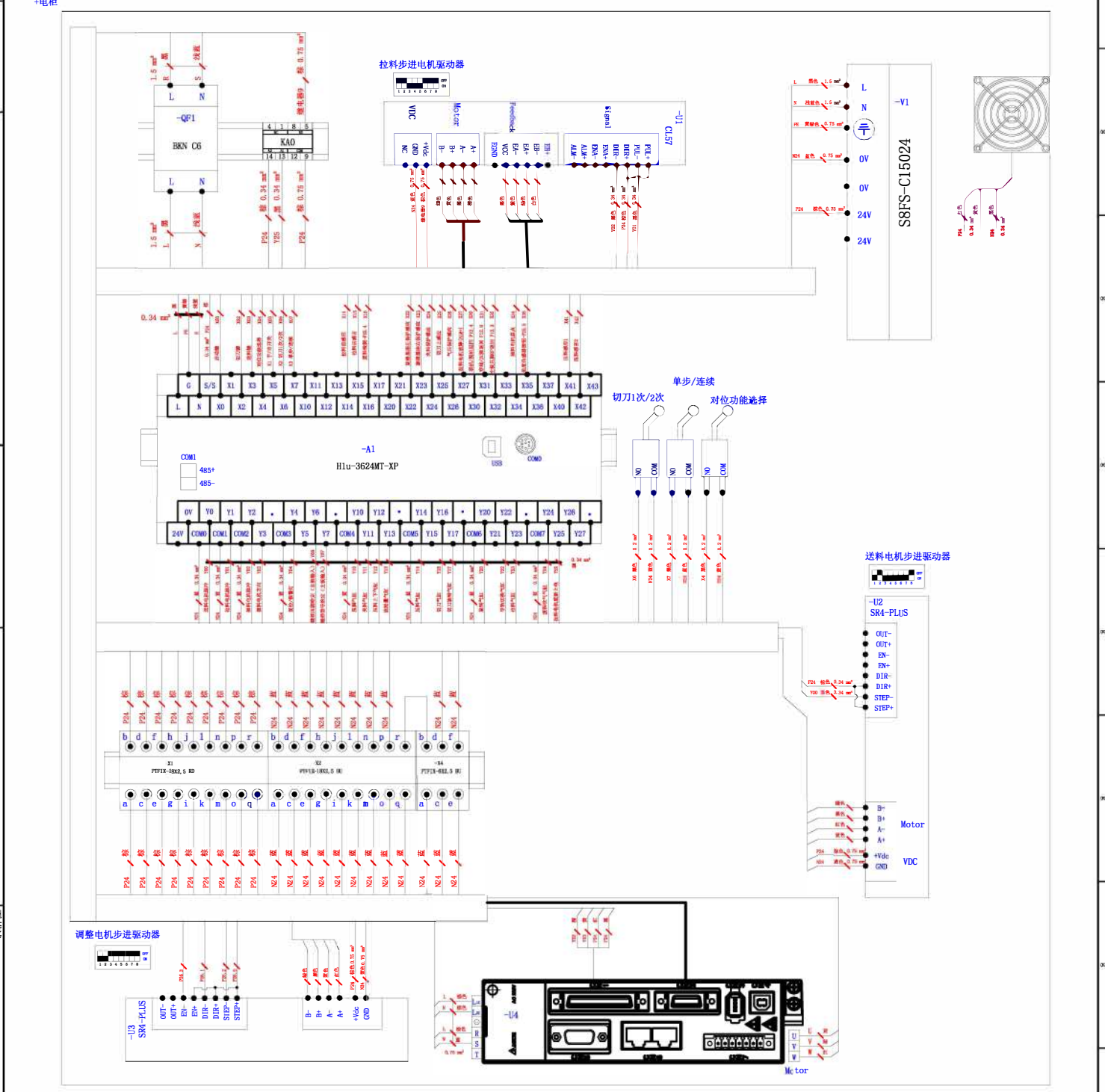
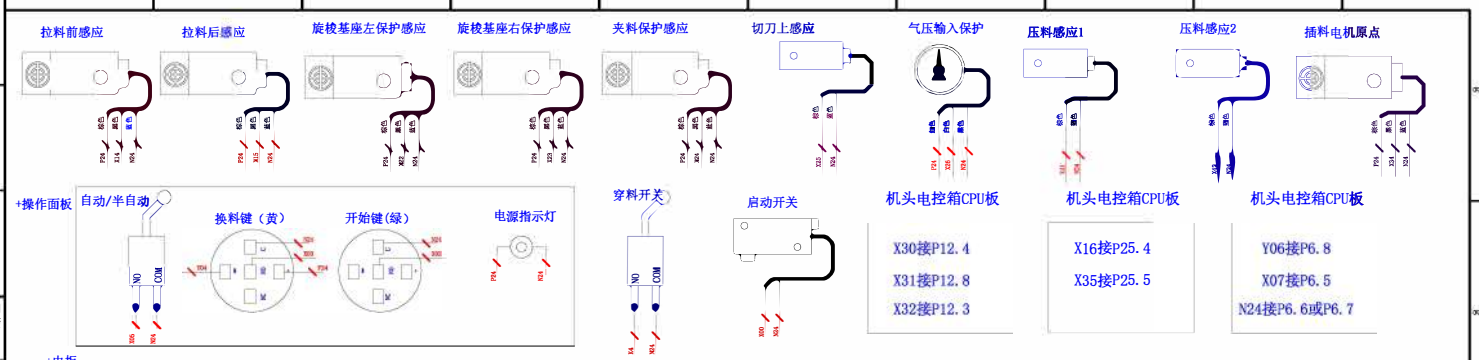


1) Click the  icon below on the normal working interface of the touch screen, and then click the  icon. After that, click the  icon below, the icon on the left will be displayed at the

upper position of the touch screen. The right middle value is the normal thickness dimension of the belt loop, the right upper value corresponds to the value adjusted by the "Max. Value", and the right lower value corresponds to the value adjusted by the "Min. Value". This parameter adjustment is set according to the thickness quality of the actual belt loop. If it exceeds the set maximum value or minimum value, the waste material detected will be cut off and normal belt loop will be loaded.

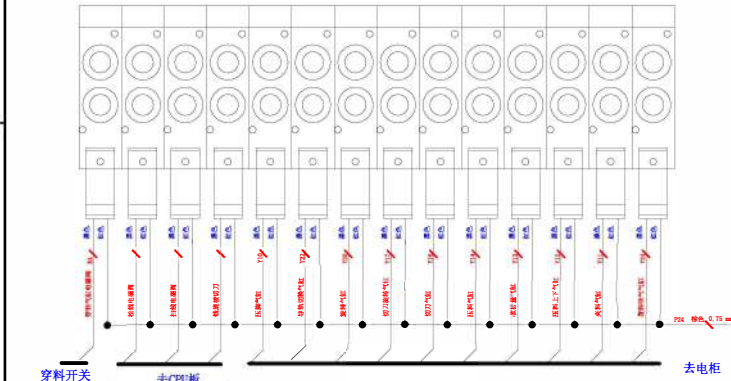
**6. Error code :(first confirm that the cylinder and air pressure are normal, then query this table)**

The error code	Fault display	The cause of the problem	Failure to solve
E-01	Long flashing once	Online fault	Check the X30 inductor for connection wire and inductor.
E-02	Two long flashes	Foot OP pressure failure	Check the X32 inductor for connection wire and inductor.
E-03	Three long flashes	Clamping protection failure	Check the X24 inductor for connection wire and inductor.
E-04	Four long flashes	Shuttle protection switch malfunction	Check the X22 or X23 inductor for wiring and inductor.
E-05	Long bright flash	Barometric failure	Check the X26 inductor for connection wire and inductor.
E-07	Seven long flashes	Sensor failure before drawing	Check the X14 inductor for connection wire and inductor.
E-08	8 long flashes	Sensor failure after drawing	Check the X15 inductor for connection wire and inductor.
E-09	Nine long flashes	Sensor failure before insertion	Check the X20 inductor for connection wire and inductor.
E-10	Ten long flashes	Sensor failure after insertion	Check the X21 inductor for connection wire and inductor.
E-11	Long flashes 11 times	Cutter sensor malfunction	Check the X25 inductor for connection wire and inductor.
E-12	12 long flashes	Sensor failure before feeding	Check the X33 inductor for connection wire and inductor.
E-13	13 long flashes	Sensor failure after feeding	Check the X34 inductor for the connection wire and the inductor.
E-16	16 long flashes	Drawing motor failure	Press the cutter key to reload the motor.



错误代码: (首先需要确认气缸及气压正常情况下, 再查询此表)

代码编号	故障显示	故障原因	故障处理
E-01	长亮闪 1	联机信号故障	检查X30感应器对应连接线及感应器
E-02	长亮闪 2	压脚OP感应故障	检查X32感应器对应连接线及感应器
E-03	长亮闪 3	夹料保护故障	检查X24感应器对应连接线及感应器
E-04	长亮闪 4	旋梭保护开关故障	检查X22或X23感应器对应连接线及感应器
E-05	长亮不闪	气压低故障	检查X26感应器对应连接线及感应器
E-07	长亮闪 7	拉料前感应故障	检查X14感应器对应连接线及感应器
E-08	长亮闪 8	拉料后感应故障	检查X15感应器对应连接线及感应器
E-09	长亮闪 9	插料前感应故障	检查X20感应器对应连接线及感应器
E-10	长亮闪 10	插料后感应故障	检查X21感应器对应连接线及感应器
E-11	长亮闪 11	切刀感应器故障	检查X25感应器对应连接线及感应器
E-12	长亮闪 12	送料前感应故障	检查X33感应器对应连接线及感应器
E-13	长亮闪 13	送料后感应故障	检查X34感应器对应连接线及感应器
E-16	长亮闪 16	拉料电机故障	按切刀键给重新拉料电机上电



**TYPICAL**