operation panel analysis

trimmer

Press foot

Half-reverse presser foot lift

Automatic trigger

Mode selection

Front reinforcement sew

Up and down needle stop osition

End reinforcement sew

Electronic thread clamp

Reinforcement sewing pattern

Press foot height

dense sew

Toggle key

count

speed

set

Stitch length

Electroni c locks

operation panel analysis

Double-click this key to enter the advanced setting interface

Digital display area; click the number to modify the corresponding value: as shown in the figure: in free stitching, the corresponding stitches of front reinforcement A, B and rear reinforcement C, D

Note:
1. When speed and stitch length display, presser foot height are clicked, the following horizontal line will be effective after debugging.
2. The icon light on on main interface indicates that the function is on. When it is off and icon is gray. As shown

front reinforcement off

front reinforcement B

front reinforcement A B for 1 time

front reinforcement A B for 2 times

Description of fixed stitch interface

Current fixed stitch mode number
The number represents the number of fixed stitches working group

Number of stitches in the current edit section

The stitch length of the current editing section

"4" represents the total number of fixed stitches. If clicked, the total number of segments can be selected. Currently 15 segments can be selected.
"1" stands for the current paragraph edit of fixed stitch.
As shown in the figure, it represents the data of the first segment of 4 fixed stitches.

1、When changing fixed stitches, the current fixed stitches must be reversed and finish thread trimming , then start next required fixed stitches.
2、Click the number below the total segments can modify the number of fixed stitches. And click the number under the corresponding icon can modify the corresponding value.
3、 Light the automatic trigger icon in the fixed stitch sewing mode, the sewing will automatically finish each segment and stop, and step on to continue the next segment sewing, and perform automatic trimmer after the last segment finish.
Cancel the automatic trigger function (the icon becomes darker), it will sew each segment in an endless loop until the thread trimming is reversed(Stop and trimmer at random segment)
4、Click the switch button to find the ABCD P interface, set the number of front and back reinforcement stitches and other functions, and then click the switch button to find the fixed stitch sewing editing interface.
5、The fixed stitch mode number is currently 10 working groups, and each group can achieve 15 segments. The users can set the corresponding function group according to requirement. Click the number below to switch (current fixed stitch mode number is the default segment number).

A process requirements, 5-stage sewing, the first and fifth sections are 2mm stitch length and 8 stitches, the second and fourth sections are 2.5mm stitch length and 5 stitches. The third section is 3.0mm stitch length and 7 stitches

Process B, 5-stage sewing, the first and fifth sections are 3mm stitch length with 5 stitches, the second and fourth sections 3.5mm stitch length with 4 stitches, and the third section 4mm stitch length with 5 stitches.

As shown in figure: fixed stitch sewing process
Just set A as P1 fixed stitch mode (No. 1 fixed stitch mode), set the total number of segments to 5, the first and fifth sections are 2mm stitch length and 8 stitches, the second and fourth sections are 2.5mm stitch length and 5 stitches. The third section is 3.0mm stitch length and 7 stitches.
Just set B as P2 fixed stitch mode (No. 2 fixed stitch mode), 5-stage sewing, the first and fifth sections are 3mm stitch length with 5 stitches, the second and fourth sections 3.5mm stitch length with 4 stitches, and the third section 4mm stitch length with 5 stitches.
When users do this process, they only thing is to choose P1 or P2. By analogy, there is no need to repeatedly set fixed stitches, which improves sewing efficiency.

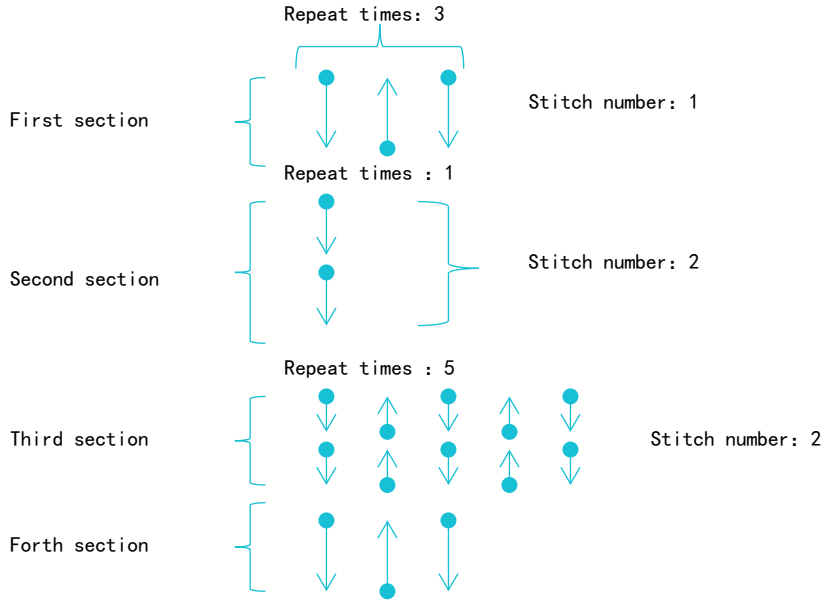
Pattern free sewing interface

1、When changing patterns, the current pattern must finish by trimming , them start next desired pattern.

2Click the number below the total number of segments can modify the number of patterns. Similarly, click the number under the corresponding icon to modify the corresponding value. (Note: The number of repetitions can only be an odd number, and it is needle repetition, non-segment repetition)

3、If the stitch number of the edit section is 0, the current edit section and the following sections will be canceled. For example, the number of stitches in the third paragraph (edit section) is 0, and stitches in both the first and second have number; then the pattern No. 3 only performs the sewing in the first and second paragraphs.

Pattern diagram



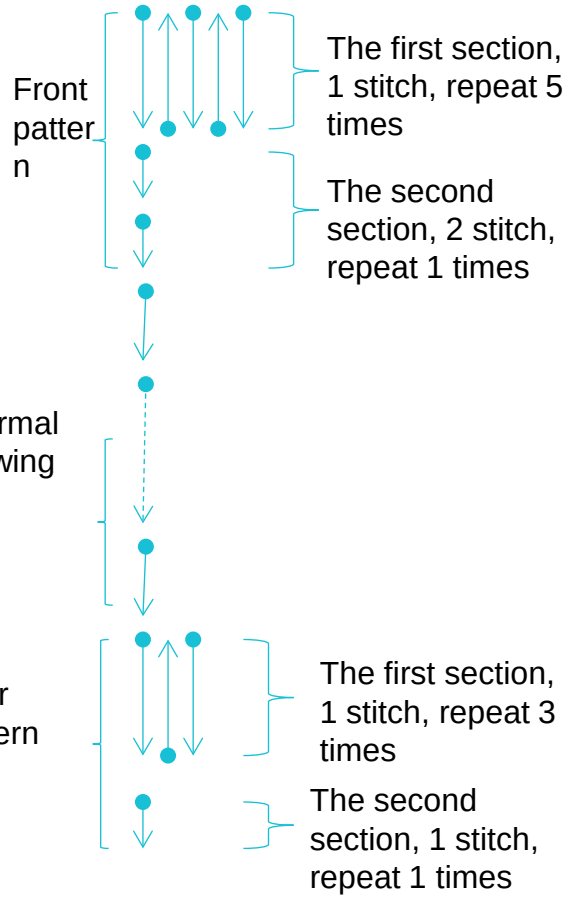
Description of reinforcement pattern

reinforcement pattern No

8th pattern	Stitch number	Stitch length	repeat
一	1	4.0	5
二	1	2.5	1
三	0	0.0	1
四	0	0.0	1
五	0	0.0	1
六	0	0.0	1
七	0	0.0	1
八	0	0.0	1
九	0	0.0	1
十	0	0.0	1

SECTION NO

reinforcement pattern diagram



1、Click the icon of reinforcement to enter the interface

A	B	C	D
N	8	N	8

N8 under AB indicates the 8th pattern of front reinforcement, and similarly N8 under CD indicates the 8th pattern of rear reinforcement. The system has 9 built-ain front and rear reinforcement patterns. (Click the number after N to enter the number, the number represents the number of the front and rear reinforcement.)

As shown in the figure: it first performs the front reinforcement pattern No. 8 , and then make the free stitching. When reverse trimmer, then make rear reinforcement pattern No. 8 then trimmer.

2、Entry of the reinforcement pattern editing interface (left)

Click N under A to enter the front reinforcement pattern editing interface

Click N under C to enter the editing interface of rear reinforcement pattern.

The number of segments, stitches, pitch, and repeat times can be set separately (Note: The repeat times can only be an odd number)

3、When changing patterns, must finish the current pattern by trimmer, then start the next desired pattern can be sewn.

4、If the stitch number of the edit section is 0, the current edit section and the following sections will be canceled. For example, the number of stitches in the third paragraph (edit section) is 0, and stitches in both the first and second have number; then the pattern No. 8 only performs the sewing in the first and second paragraphs.

User parameter setting interface-1 parameter entry, saving, modification

Back to the main interface key

Click to enter the next page of parameter settings

Click to return to the previous page

1、User parameter entry:

If you press the setting key, the user setting interface will be displayed.
If you click the corresponding column, you can enter the corresponding secondary parameter setting interface.
Back key: Click to return to the previous parameter interface
Home button: Click to return to the main interface

2、 Second-level ueparameter debugging instructions:
parameter reset, save, latch and function selection
Click Reset: the factory default value will be restored. If there is a lock in front of the parameter, it will be restored to the latched value.
Click Save: save the current parameter value.
Click Lock: Saving the current parameter value cannot be restored, and a lock icon will appear in front of the parameter item.

Indication icon, indicating the current parameter (Note: when saving, click this icon before the parameter item ,then it can be saved effectively)

Indicates that the current parameter is locked and cannot be recovered

Function on

Function off

3、Parameter value modification: Click the number box to enter the value modification interface, enter the value, and click OK. Modifay the value. Click Cancel to cancel the modification. Click Delete to delete the last entered number; click OK if no number is entered and the original parameters are not changed.

2000

User parameter setting interface-2 automatic positioning, head switch setting

1、Automatically find the positioning setting at startup: In the user parameter interface, click the spindle motor setting to enter the internal secondary parameters. Click the switch behind the corresponding function item parameter to turn the function on or off.

2、Machine head switch (jog switch) setting: In the user parameter interface, the machine head switch is set to enter the internal secondary parameters. Set the corresponding function of each switch: 0 off, 1 half-stitch, 2 one-stitch, 3 continuous half-stitch, 4 continuous one-stitch, 5, reverse stitching when sewing or stopping halfway, 6 dense stitch .

Note:
1. Compensation stitch pitch is set in the reverse step stitch pitch setting in advanced parameters. For the corresponding content, please refer to the description of stitch length setting in advanced parameters.
2: At present, the head switch is divided into two button switches (A, B) and four button switches (A, B, C, D).

User parameter setting interface-3 condense sewing

condense sewing diagram

1、Press and hold the ke the main interface to enter the condense sewing setting, or enter the secondary seam setting secondary list on the user parameter interface to set the corresponding parameters

2、condense sewing setting
Click on the condense sewing icon (the start seam icon becomes dark, the end seam icon becomes gray),
Set the parameters of the number of stitches, pitch, speed and direction of the initial dense seam.
Click the end condense icon (icon becomes dark, the start seal icon becomes gray),
Set the number of stitches and the direction of pitch speed direction to terminate the condense sewing.

3、After confirming the parameter change, click Save below to save the parameter.
Return to the main interface, click condense sewing, to switch off condense sewing function, open the seam close seam function, open the stop seam close function, open the seam close seam function and stop the seam close seam function.

Parameter Description
When the number of stitches is 0, close the start / stop dense seam mode
CW: counterclockwise CCW: clockwise

User parameter setting interface-4 reverse sewing setting

Long press or on the main interface to enter the reverse stitch setting, or enter the secondary list of reverse stitch setting in the user parameter interface to set the corresponding parameters

reverse sewing setting list

display	range	Initial value
Starting reverse sewing speed	200-3200	2000
End reverse sewing speed	200-3200	2000
Continuous backstitch motion mode selection	OFF/ON	ON
Whether to automatically execute the function during the fixed stitch sewing mode	OFF/ON	ON
Movement mode selection in reverse sewing	OFF/ON	ON
Selection of operation mode at the start point of back stitching	OFF/ON	ON

User parameter setting interface-5 counter setting

If you double-click on  in the main interface, the count is cleared

In the user parameter interface, enter the count setting secondary list to set the corresponding parameters

Display	range	Original set
Counter selection	0-2	1
Current counter value	0-9999	0
Counter set value	0-9999	9999
Sewing counter of thread cutting times	0-50	1

Parameter Description
1. Counter selection: 0-counter no wirk; 1-sewing up-counter (when the current value is showed by increasing, if the set value is the same, the counting screen is displayed.); 2-decrement-down sewing counter (The value starts to count down with the set value, and when it becomes 0, the count screen is displayed.)
2. The times of thread trimming in the sewing counter: We set the value 1 according to the times of thread trimming. As shown in the table above: The initial value is 1, indicating that the counter is incremented by 1-time thread trimming.

User parameter setting interface-6 thread loose/clamp function settings

In the user parameter interface, enter the count setting secondary list to set the corresponding parameters

Display	range	Original set
Thread tension strength setting	1-80	25
Thread tension function when presser foot lift	ON/OFF	OFF
wiping/ clamp force setting	0-11	6
Thread loose function switch	ON/OFF	ON
in knee-control way, the Presser foot height when the thread loose start	0-300	80

Parameter Description
Notes on setting wiping/ clamp force setting
1. Thread tension function when presser foot lift is turned on. (It requires that the thread release function switch is turned on.)
2. 0: off; 1: thread wipe function; 2-11: thread clamping function, the greater the value, the greater the action strength
3. The corresponding angle is set in the advanced parameter interface.
4. in knee-control way, the Presser foot height when the thread loose start
It means when the foot height come to the setting value, the thread loose function work.

User parameter setting-7 interface factory reste and screen lock settings

In the user parameter interface, enter the interface setting secondary list to set the corresponding parameters

display	range	Original
light	5-100	80
automatically locks time in main interface	0-900	60
Factory reset		
language	chinese/english	chinese

Parameter Description
Description of automatic lock on main interface: time calculated by seconds
Instructions for factory reset:
Click OK: restore factory settings (excluding latched parameters)
Click Cancel: Cancel the operation

, Click the blank space in the upper right corner, all parameters will refresh, including the latched parameters (positioning, model, origin, stitch length, etc. will not be restored)

Click OK: restore factory settings (restore the machine repairment parameters, excluding the latched parameters)
Click Cancel: Cancel the operation

Advanced parameter setting interface and performance debugging-1 Parameter interface entry, spindle motor origin and debugging of upper and lower stop positions

1-1 Advanced parameter interface entry

Double-click the switch button (blank) in free-stitch mode, enter the password: 2017, click confirm, then click again, then enter the advanced parameter setting interface

1-2 Debugging of spindle motor origin and needle position

Parameter Description

1. Zero point correction of spindle motor

Click Reset in the lower left corner, the motor will automatically stop after one revolution, and click Save. First point the indicator to this position. It needs to be reset when the production line is assembled or when the user replaces the motor, point control, panel, model, encoder, and advanced factory settings。

2、 Up and down positioning quick adjustment

Turn the handwheel, the value changes with the rotation, turn to the desired position, and the motor saves. Note: First point the indicator to this position. Long press can quickly enter the upper and lower stop needle debugging.

Spindle motor setting main parameter item table

Display	range	Original value
Spindle motor maximum speed limit	0-5000	3700
Spindle motor zero point correction		
Quick upper positioning adjustment		
Quick low positioning adjustment		
Manual reverse sewing speed limit	0-3200	0
After thread trimming, reverse and the function of lifting the needle	ON/OFF	OFF
After thread trimming, reverse the adjustment of the lift angle	10-50	40
Upper positioning value	0-359	100
Down positioning value	0-359	275
Low speed (positioning speed)	100-500	210
Parking intensity	1-45	16
Parking force after thread trimming	1-50	20
Up and down positioning distance value	15-359	175
Spindle motor rotation direction setting	ON/OFF	ON
Maximum current of spindle motor (A)	0-20	10
Spindle motor stall current (A)	0-20	10
Spindle motor normal current (A)	0-20	16
Spindle motor encoder type selection	ON/OFF	ON

Advanced parameter setting interface and performance debugging-2 Zero-point debugging and stitch length debugging of reverse stepping motor

2-1、Zero point debugging of reverse stitch stepping motor

图（一）

1、In the shutdown state, loosen the connecting screw between the crank and the stepper motor, enter the advanced parameter setting interface, and click the reverse stitch step setting to enter the corresponding secondary parameter.

2、Then click the indication icon at the zero point correction of the reverse sewing motor. At this time, the electric control will default to 0 stitches. Insert the Allen wrench into the connecting screw of crank and stepper motor and keep it. Then run the motor at low speed, move the wrench back and forth, find the needle is kept on the same pinhole, and lock the crank and stepper motor link screw when running

3、If there is a slight deviation in the operation, you can modify its parameter value for compensation optimization.

4、At the zero point of the stepper motor, the swing base and the four swing pieces are in a straight line at this time.

2-2、Compensation and debugging of each stitch length

图（二）

图（三）

1、Click on the secondary parameter interface to enter the reverse stitch step pitch setting in the advanced parameter interface, first adjust the normal stitch pitch to the corresponding stitch pitch value (input is an integer value), save, then the electronic control will default to Set the stitch length. Figure (2)

2、Then click the stitch pitch reference setting, enter the stitch pitch adjustment table, select the stitch pitch required to be adjusted, modify the corresponding value to keep, and run the measured stitch pitch to reach the desired value. (Note: When measuring, the electronic control must run at 200-500 rpm at a low speed, and take a 10-pin stroke to measure the error of ± 2mm). Figure (3)

3、Reverse stitch pitch, adjust the reverse in the figure (3) to keep the forward and reverse stitches in one needle hole (no need to measure the reverse stitch pitch, and must require more than 10 stitches to maintain alignment)

Note: The test stitch length requires paper slip resistance. The paper quality of each stitch length is the same. It is recommended to use four layers of A4 paper for debugging. Different crank values will vary.

Parameter Description

Can adjust the compensation of 1-8mm positive and negative stitch length (heavy stitch length)

As the value increases, the stitch length becomes larger; as the value decreases, the stitch length becomes smaller。

Advanced parameter setting interface and performance debugging-3 positive, reverse stitching, reinforcement; machine head button compensation stitch setting; reverse stitching step stitch setting secondary table

3-1、 positive, reverse stitching, reinforcement

图（一）

1. Click the advanced parameter interface to enter the secondary parameter interface of reverse stitch step pitch setting, adjust the positive stitch pitch compensation and reverse stitch pitch compensation to modify effects of all stitches (different from the stitch pitch reference setting , it is a unified compensation).
2. When the stitch lengths of the forward and reverse stitches are the same, adjust the stitching compensation of the reinforced stitching to modify the reinforcement effect.

3-2、Machine head button compensation stitch setting

图（二）

图（三）

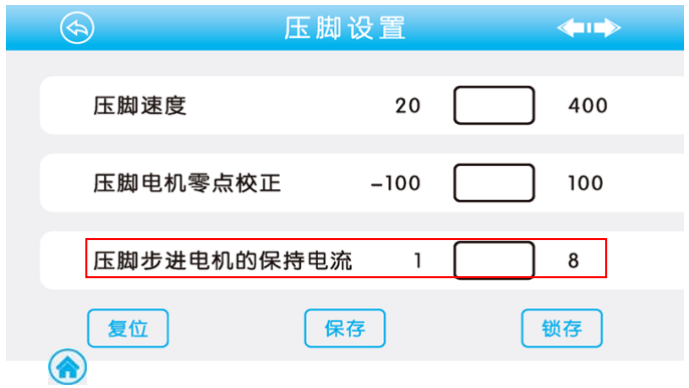
1. The user can set the needle stitch length of each machine head button and the manual dense stitch length in the secondary parameters of reverse stitch step pitch setting.
2. When the machine head switch is set to the needle compensation function, and the button needle compensation pitch is set to the corresponding needle pitch, the needle compensation will be performed according to the set value, and the needle stitch length 0 indicates that the needle main interface will perform needle compensation. As show in Figure (2)

3-3、Reverse stitching step pitch setting secondary table

display	range	Original
Zero point correction of reverse stitch motor	-500 ~ 500	0
Normal stitch length	0-5.0	3.0
Needle stitch length reference value setting		
Positive stitch length compensation	-50 ~ 50	0
Backstitch stitch length compensation	-50 ~ 50	0
Reinforcement stitching compensation	0-200	167
Retaining current of reverse stitch stepping motor	1-8	6
Maximum current of reverse sewing stepper motor	1-12	12
Manual dense stitch length	0-5.0	2.0
stitch length of manual button A	0-5.0	3.0
stitch length of manual button B	0-5.0	3.0
stitch length of manual button C	0-5.0	3.0
stitch length of manual button D	0-5.0	3.0
Maximum stitch length limit	0-8.0	5.0
High-speed positive stitch length compensation	-50 ~ 50	15
High-speed reverse stitch length compensation	-50 ~ 50	30

Advanced parameter setting interface and performance debugging-4 double stepping press foot lift and stepper motor effect setting

5-1、Effect setting of stepping motor for lifting foot



Note: measure the height of the presser foot: In the test mode, the single output test can be simulated. The advanced parameter setting interface and performance debugging-7 are explained.

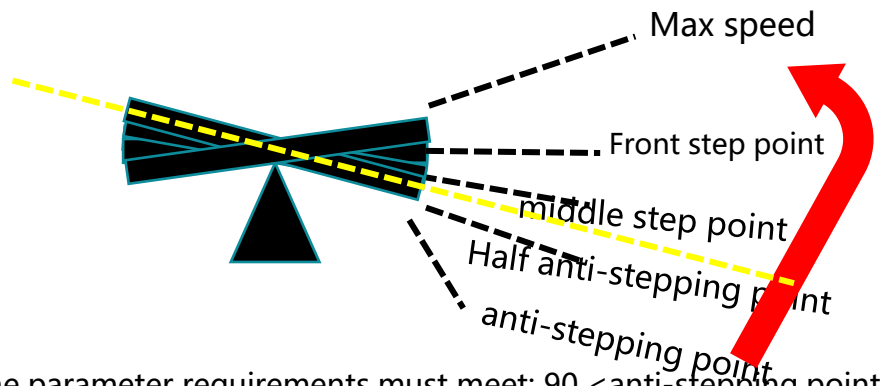
1. The user debugs the stepper motor of the presser foot, the running speed of the stepper motor when setting the presser foot in the advanced parameter

2. Set the height of the presser foot and the stroke of the knee presser foot

Note: When setting the height of the presser foot, pay attention to the amount of mechanical stroke to avoid the step out of the phenomenon caused by the digital adjustment too high

Advanced parameter setting interface and performance debugging-5 pedal parameter setting

Display	range	Original
Acceleration curve adjustment (%)	10-100	80
Pedal front reverse step voltage	30-1000	520
Pedal middle reverse step voltage	30-1000	420
Pedal half reverse step voltage	30-1000	270
Pedal reverse voltage	30-1000	130
Half reverse step delay time	10-900	100



The adjustment of the parameter value increases in the direction of the arrow

When the foot pedal is not depressed, the AD value should be between the mid-stepping point and the semi-reverse stepping point

Parameter Description
Acceleration curve adjustment (%): speed controller climbing slope setting: the greater the slope value, the slower the speed; the smaller the slope value, the slower the speed
Half reverse step delay time: unit millisecond

The parameter requirements must meet: 90 <anti-stepping point <semi-reverse stepping point <AD value when the foot pedal is not stepped <mid-stepping point <front stepping point <900
Specific steps: First check the foot pedal AD value (advanced parameters-status information-speed controller AD value) should be between 90-900
The front pedal is not sensitive: decrease the value of the front pedal point and the middle pedal point at the same time
Semi-reverse step is not sensitivity: reduce the half-reverse step delay time
Anti-stepping is not sensitive: increase both the half-stepping point value and the counter-stepping point value

Advanced parameter setting interface and performance debugging-6 safety switch settings, test mode, status information

7-1、Safety switch setting

display	range	original
Head protection switch detection	0-2	1
Low oil level protection detection	OFF/ON	OFF
Input high voltage protection value setting	850-1023	880
Presser foot solenoid protection time	1-60	2
trimmer protection switch	OFF/ON	OFF

Note: 1. When the head protection switch (overturn protection) alarms, click the alarm interface to temporarily cancel the protection.
2. The protection time of the presser foot loose is the same parameter as the protection time of the presser foot solenoid.

7-2、Test mode setting

周期	测试速度（测试速度为0时不执行当前周期	运行时间（0.1s）	停止时间（0.1s）	电机运行方向	运行总时间（m）（时间为0时无限制）
1	2000	20	20	CCW	0
2					
3					
4					
5					

Parameter Description
1. Test mode switch, which can open and close the running-in test
2. Single test of output function:
Click to simulate the test tangent running stroke
Click to test the output of the presser foot function
3. In the test mode setting, you can set the running speed, time, direction, etc. according to your deamnds.

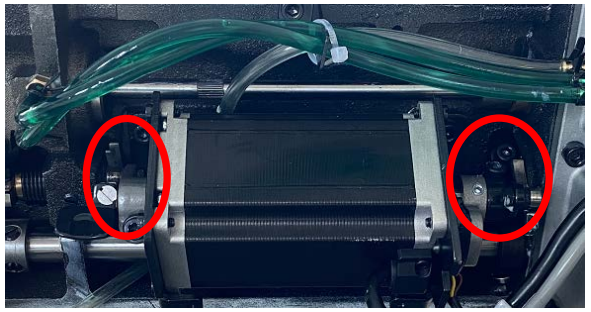
7-3、Status information query

Parameter Description
Service personnel and mechanics can query the operating status of various accessories and electronic controls in the status information.
Click the version number: you can view the electronic control version number, the vice electronic control version number, the display board version number, the stepper drive version number

Advanced parameter setting interface and performance debugging-7 double stepping thread trimming stepper motor, thread trimming effect setting

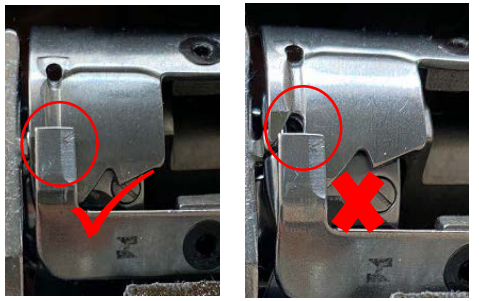
4-1、Thread trimming stepper motor settings

。First loosen the mechanical parts at both ends of the thread trimming stepper motor. start machine and let stepper motor to find the origin and lock it automatically Note: The mechanical at both ends must maintain a certain gap.

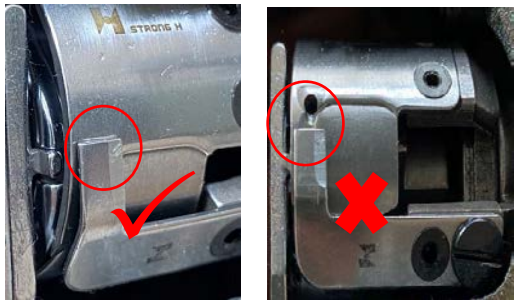


2、The user debugs the thread trimming stepper motor and sets the thread trimming distance in the advanced thread trimming parameter settings.

3、value of the first trimmer distance so that the first feed stroke covers the bottom of the U-shaped 1MM of the blade, as shown below



4、Adjust the value of the second trimmer distance so that the second feed stroke covers the cutter round hole 1MM, as shown in the figure below



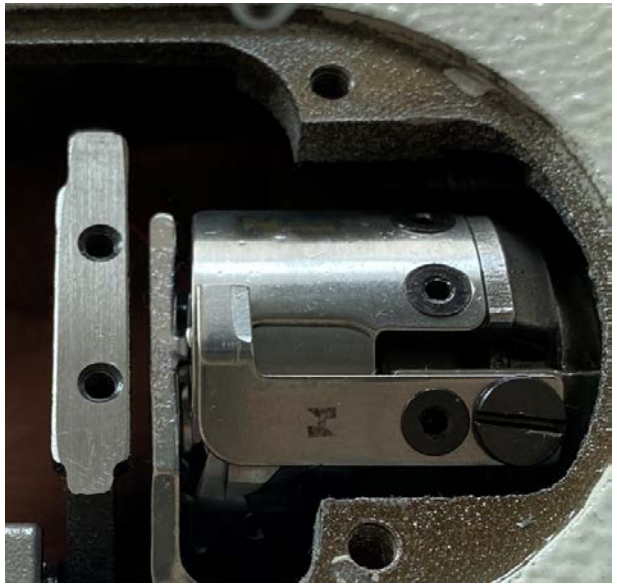
Note: The thread trimming stroke is simulated. In the test mode, a single output test can be used for simulation test. There are instructions in the advanced parameter setting interface and performance debugging-7.

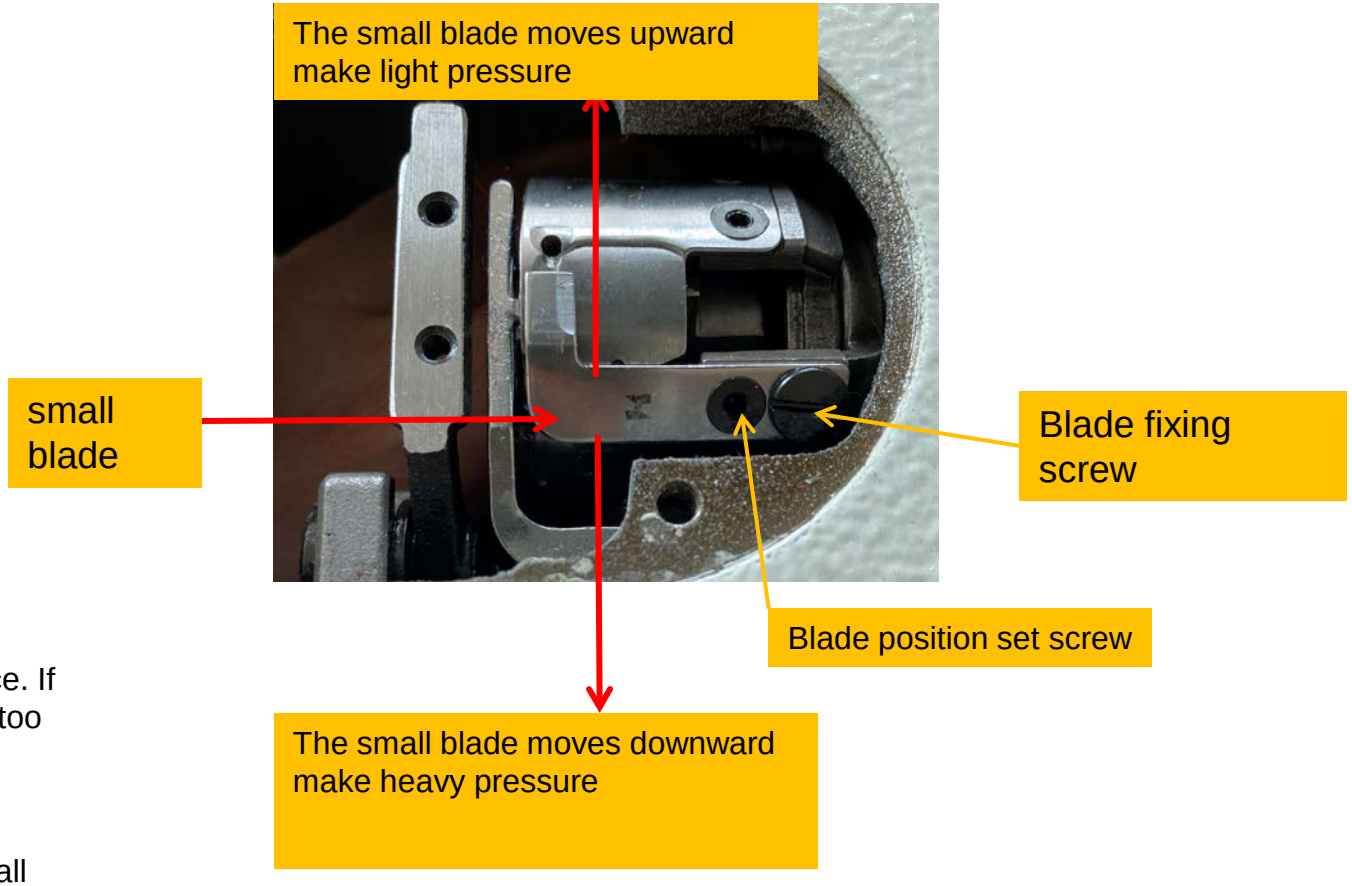
4-2、Thread trimming effect setting

1、The user debugs the thread trimming stepper motor, and sets the running speed of the thread trimming stepper motor in the advanced parameters of thread trimming

2、In the advanced parameter setting of thread trimming, set the feed angle of the thread trimming stepper motor (feeding timing). When the first feed angle is at the lowest selection lever (the hook is as shown in the figure below), the feed will start. No trimmer(you can view the degree of position in the positioning settings) Note: The second feed angle will affect the length of the thread.

Thread cutter blade pressure adjustment

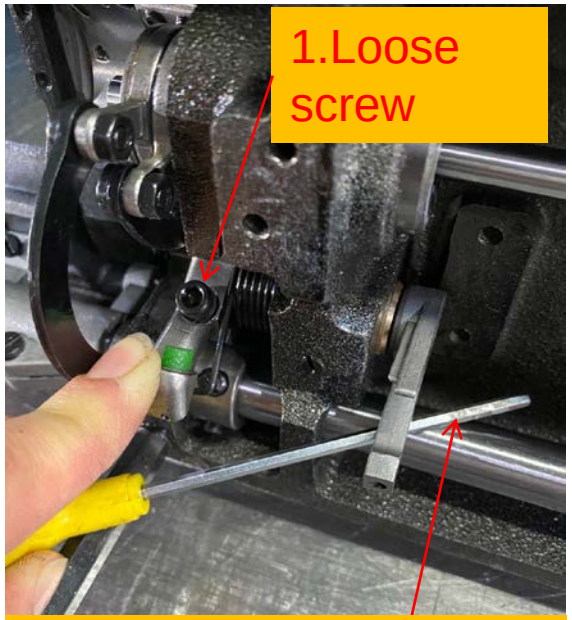




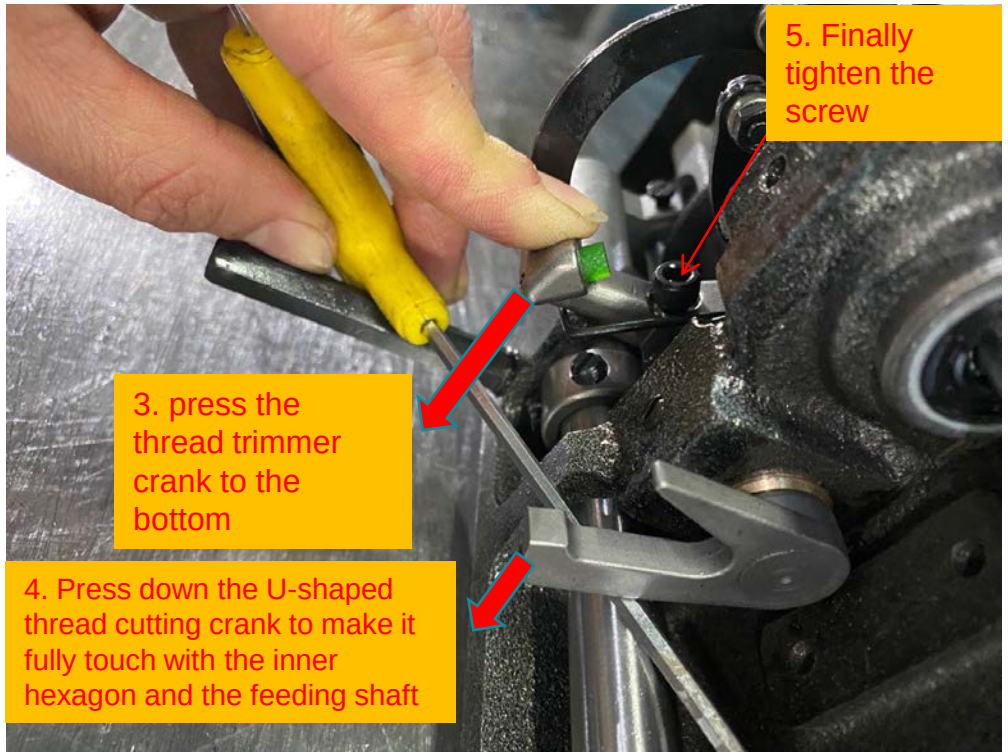
Manually push the blade to touch, and it is normal to a slight resistance. If the resistance is too small, it will cause no cutting. If the resistance is too large, it will cause the blade wear easily.

Adjustment method:
At the same time, loose the small blade positioning screw and the small blade fixing screw, push upward to make the blade pressure light, push downward to make the blade pressure heavy, adjust the appropriate pressure, and lock the positioning screw and the fixing screw.

Thread trimming U-shaped crank installation standard



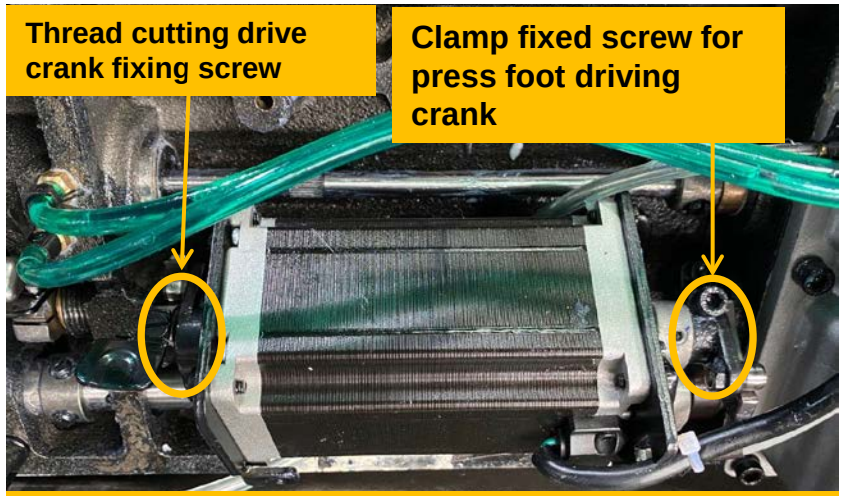
P one



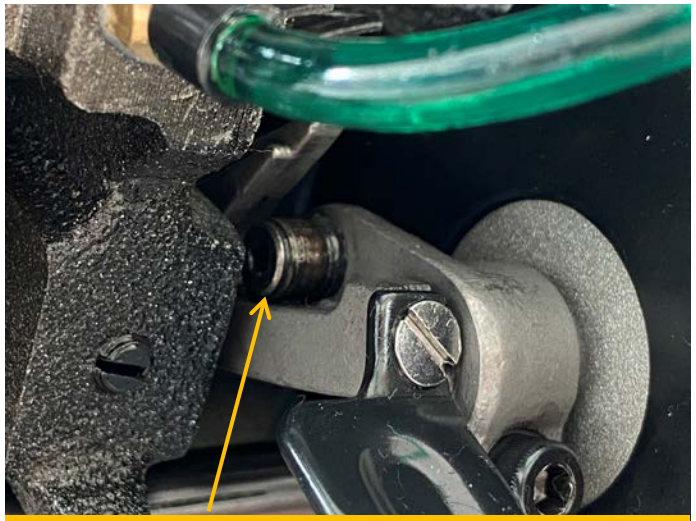
P two

1. Relax the thread trimmer crank
2. Put into 2.5MM internal hexagon and contact with feeding shaft
3. Press the thread trimmer crank down to the bottom
4. Press down the U-shaped thread cutting crank to make it fully touch with the inner hexagon and the feeding shaft
5. Finally tighten the screws
6. After installation, press down the thread trimmer crank to the minimum, and the gap between the U-shaped thread trimmer crank and the feed shaft should be 2.5MM.

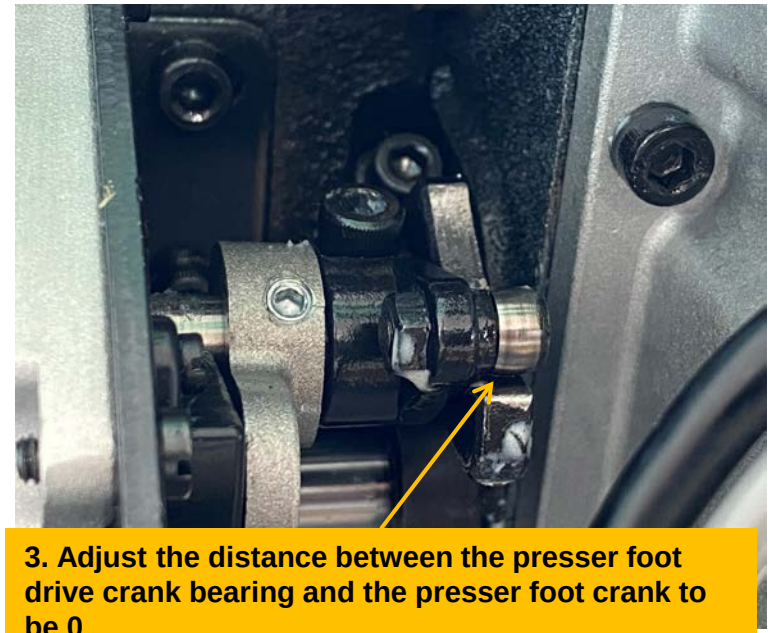
The first trimming drive crank, the first presser foot drive crank installation and positioning



1、Loosen the crank fixing screws at both ends of the thread trimming step motor first, and power on the machine to find the origin and lock it.
Note: Cranks at both ends are required to maintain a certain distance.



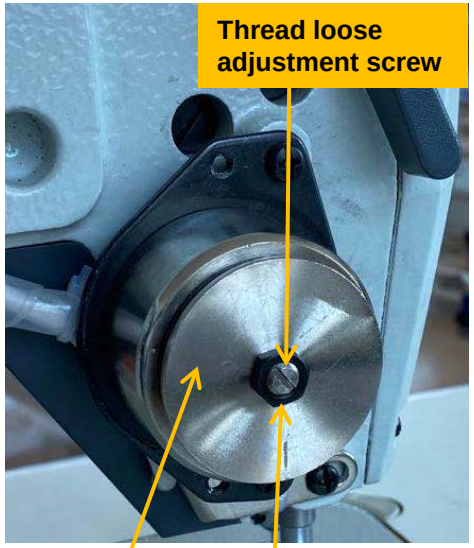
2. 。Adjust the distance between the thread cutting drive crank bearing and the U-shaped thread cutting crank to be 0.1MM, and tighten the crank screw.

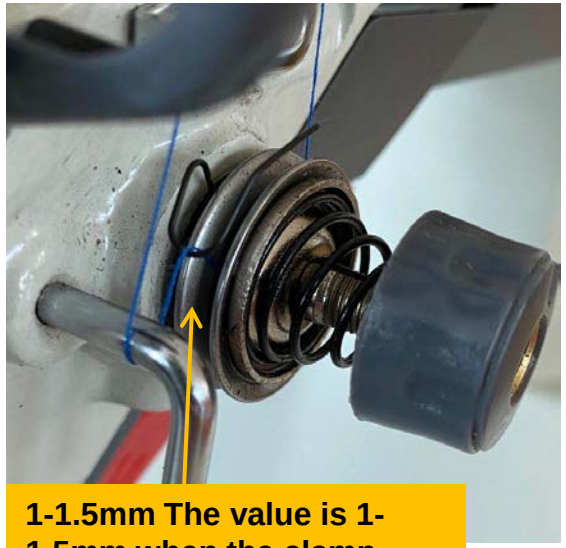


3. Adjust the distance between the presser foot drive crank bearing and the presser foot crank to be 0

4. When the crank of the second presser foot is manually depressed to the lowest, the presser foot has been raised to the highest, and the gap between the bottom of the crank and the right sleeve of the feed shaft is about 1MM.

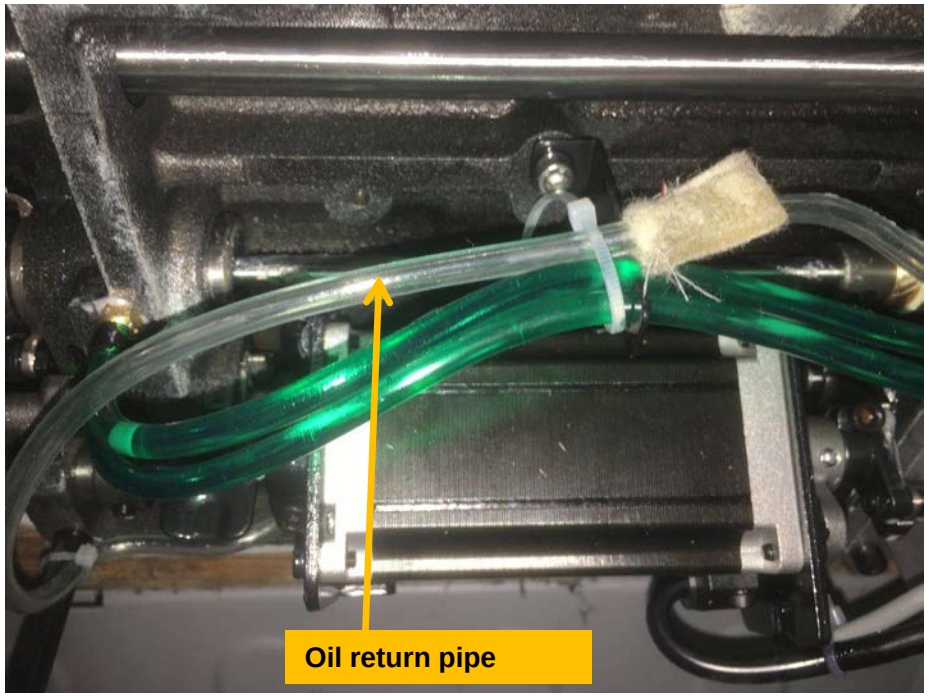
thread loose adjustment, hook oil adjustment





Adjustment of thread loose:
Loosen the fixing nut, and adjust the screw clockwise means amount is large, and adjust counterclockwise means loosening amount is small. The amount of thread tension release is value is 1-1.5MM.
Hook oil volume adjustment:
Clockwise is large and counterclockwise is small.

thread loose adjustment, hook oil adjustment



P one

P two

Loosen the fixing ties of the oil return pipe, fill the oil return pipe into the fixing groove of the oil pan and clamp, as shown in Figure 2

Troubleshoot

One: No thread trimming:
1. Check the operation panel and whether the thread trimming switch is turned on. (White on, gray off)
2. Check whether the first and second trimming distance is correct. (Refer to page 21, Stepping thread trimming effect setting)
3. Check whether the U-shaped thread trimming crank is installed correctly. (Refer to page 23)
4. Check whether the blade pressure is appropriate. (Refer to page 22)
Two: The reverse stitches do not overlap:
1. Check whether the reverse stepwise stepper motor is at the zero position (refer to page 16.17)
2. Re-adjust 2-5MM reverse stitch length (refer to page 16.17)
3: After the thread trimmer, the thread ends short, or thread out:
1. Check the first and second knife feed angles. (Refer to page 21)

diagram of electronic control error codes and electronic control ports

Electronic control error code

code	content
E01	High voltage error
E02	Low voltage error
E03	Abnormal communication between main CPU and panel CPU
E05	Poor connection of speed cpntrol
E07	abnormal Spindle motor rotates
E10	Solenoid overcurrent protection
E09、E11	Abnormal positioning signal
E14	Encoder signal abnormal
E15	**Spindle motor overcurrent error**
E17	Head turnover error
E20	Spindle motor rotates abnormally at startup
E80	The communication between the main CPU and the stepping drive CPU is abnormal
E82	Reverse stitch stepper motor overcurrent
E84	Abnormal Z signal of reverse step motor encoder
E85	Abnormal AB signal of reverse stepping motor encoder
E86	Reverse stitching stepper motor failed to start
E87	Reverse stitching stepper motor blocked

Schematic diagram of the electronic control port