

FALP-2



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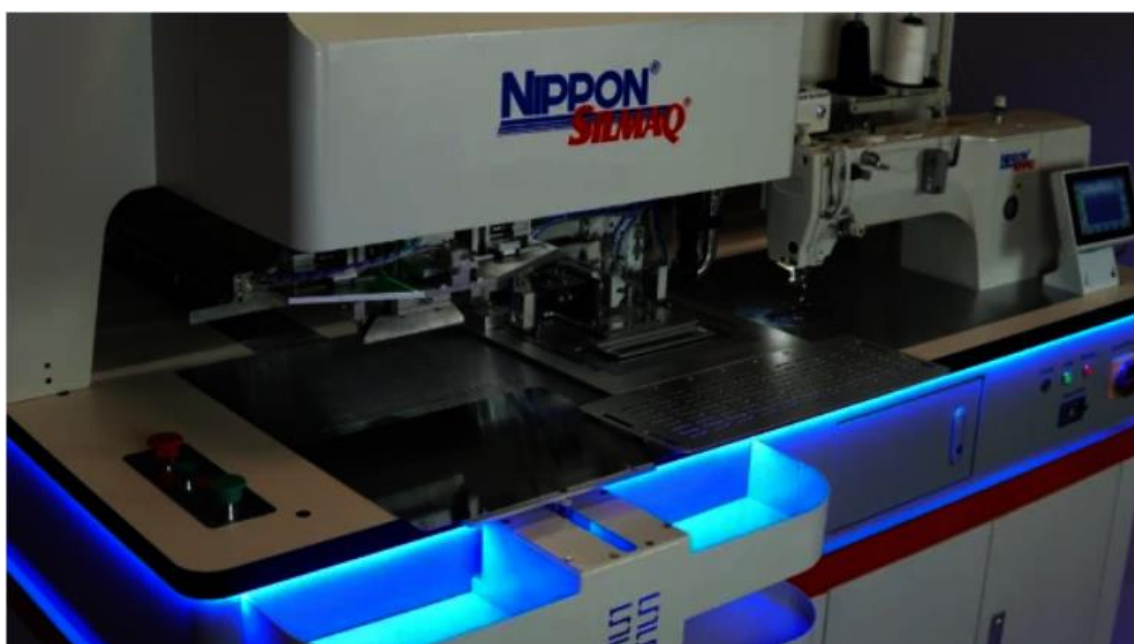
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ESPECIFICAÇÕES

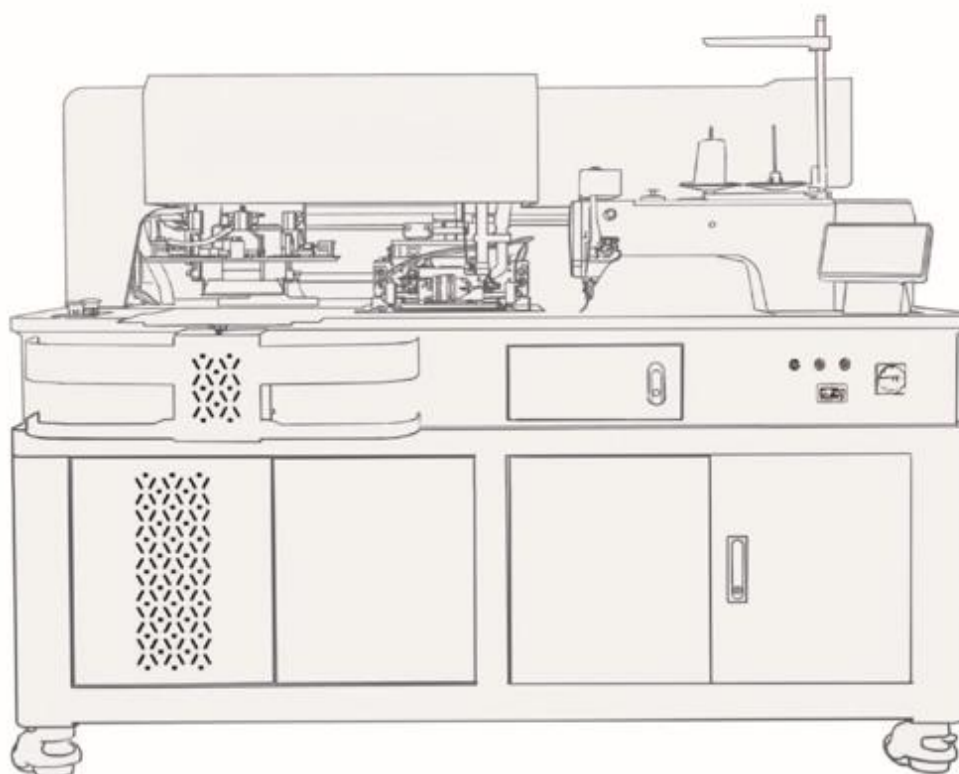
Ponto	Fixo 301	Bitola Padrão	12mm
Laser	100 W	Tipo de Lançadeira	Grande
Categoria de Tecidos	Gerais	Tipo de Transporte	Automático
Motor Velocidade	Servo Motor 3000 rpm	Lubrificação	Automática
N° de Agulhas Tipo	1 DPx17	Tipo da Base	Plana
N° de Linhas	2	Regulagem costura	Painel
Guia para vivo simples/duplo	Sim	Regulagem Tamanho do Ponto	Painel
Opções de Comprimento do Bolso	120 a 180 mm (dependendo do gabarito)	Dispositivos	Acompanha calcador para vivo simples e vivo duplo + aplicador de zíper
Tamanho da máquina	1,8 x 1,30 x 1,60 m (Comp. X Larg. X Alt.)	Levantador Calcador	28 mm
Regulagem largura do bolso	Até 1,8 cm	Tamanho do Ponto	0,05mm – 12,7mm

EXEMPLOS DE POSSÍVEIS APLICAÇÕES

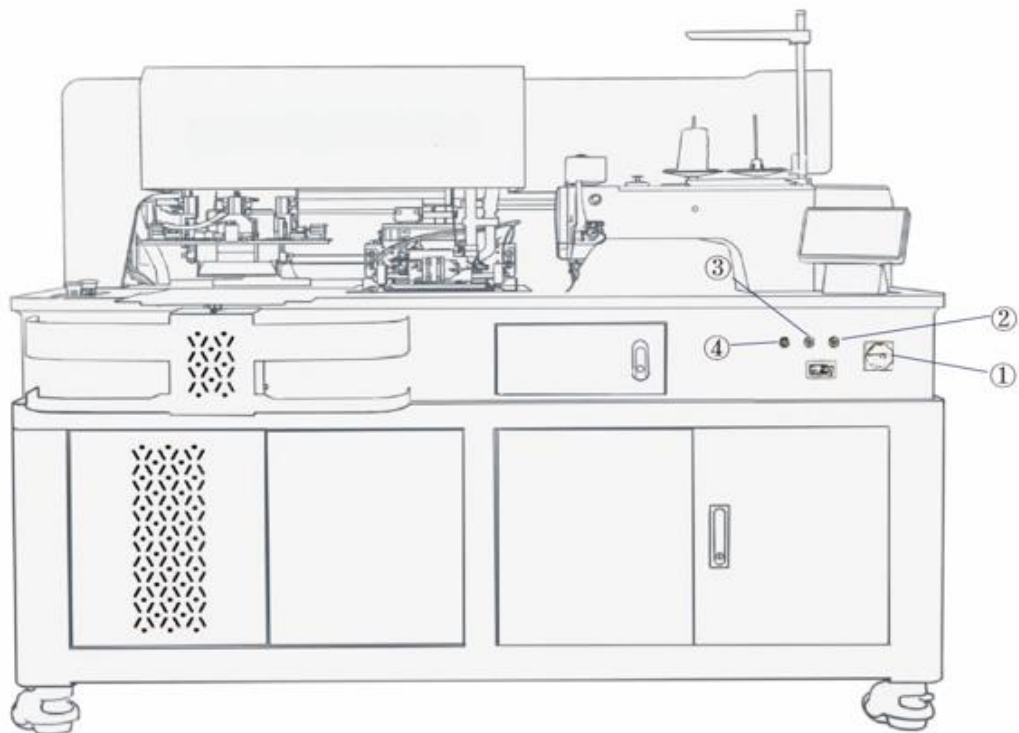


Bag opening machine

Electronic control system instructions

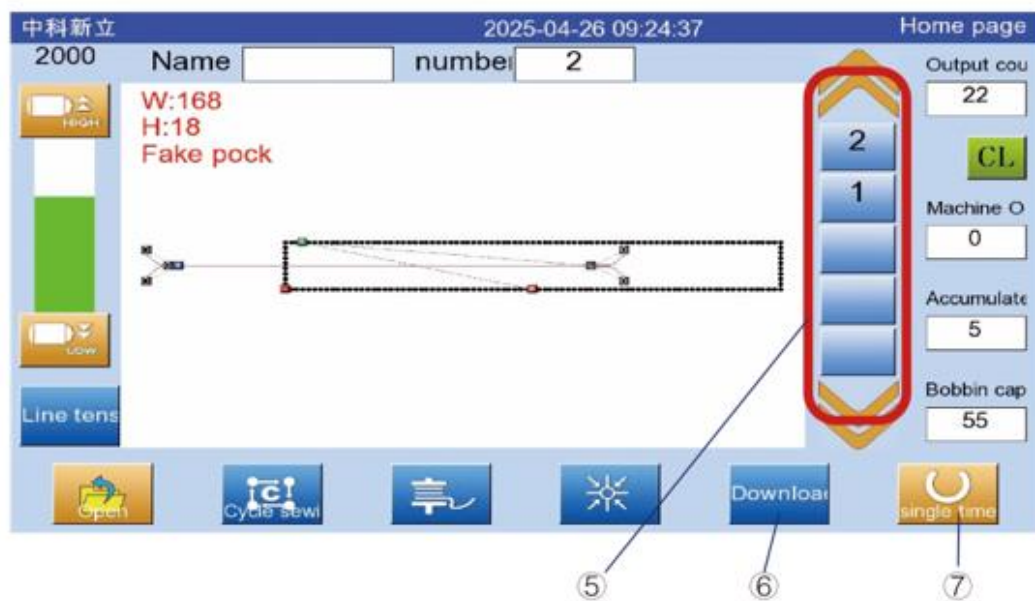


Please read this instruction manual before using the machine. Please keep this instruction manual in a place where it is easy to refer to.



1 boot instructions:

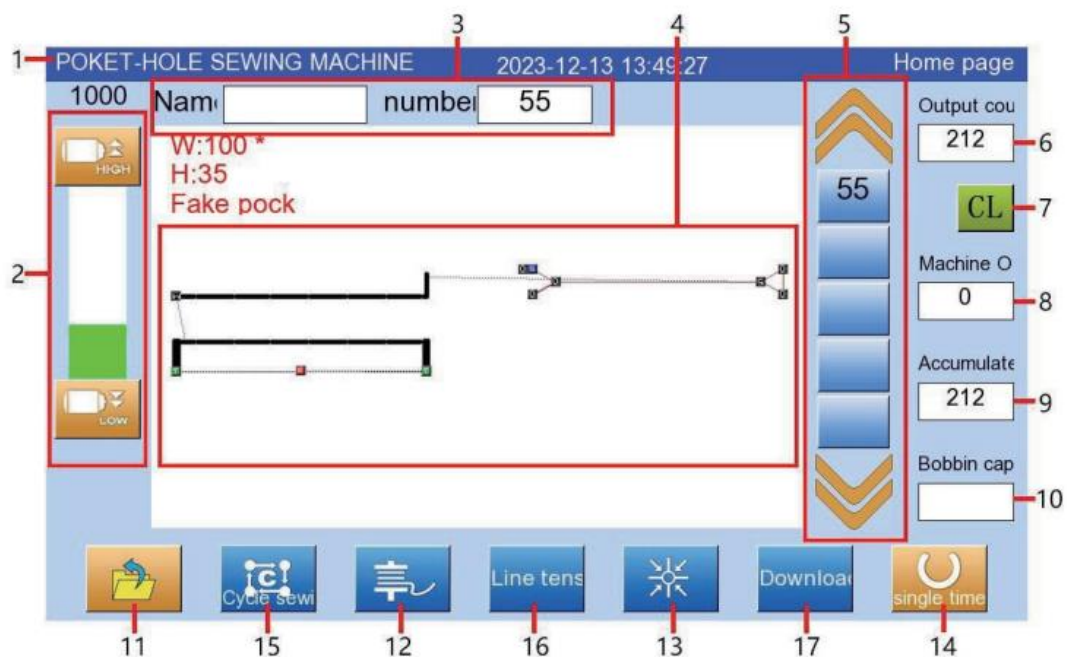
Turn on the power ① → Boot ③ → Turn on the fan ④ → Choose pattern ⑤ → Download pattern ⑥ → Sewing interface ⑦



2 Interface description

2-1 Main interface description

The touch screen operation panel adopts the industry's advanced touch operation technology. The clear interface and simple control bring innovative changes to users' daily use. Users can touch the screen with their fingers to complete corresponding operations. Users should be careful not to touch the screen with sharp objects during use, so as not to cause permanent damage to the screen and affect the use. The following is a description of the main control interface:



1. Title

Display device manufacturer information, time and current interface name.

2. Governor

The speed is incremented/decremented by 100.

3. Tricks

Current pattern name and number.

4. Pattern display area

Display the size of the current pattern in the upper right corner of the pattern diagram.

5. Pattern selection area

Change the page to select the desired pattern.

6. Processing counter

Display the current number of pieces and enter the piece counter setting screen.

7. Clear key

Clear current piece count.

8. Power-on counter

Count from the current power on, press the button to enter the workpiece counter setting screen.

9. Cumulative counter

Display the total number of pieces and total number of pieces prompts.

10. Bottom line count

Enter the bottom thread counter setting screen.

11. Menu

Function list: 〈Udisk pattern〉 〈System pattern〉 <New pattern> <Modify pattern> <Pattern conversion>

<Parameter Management> <Equipment Detection> <Auxiliary Functions>

12. Winding

Click to enter the winding interface and press the folding start switch to wind the wire.

13. Return to origin

Mechanical reset

14. Confirm sewing key

Enter the sewing processing interface.

15. Pattern loop

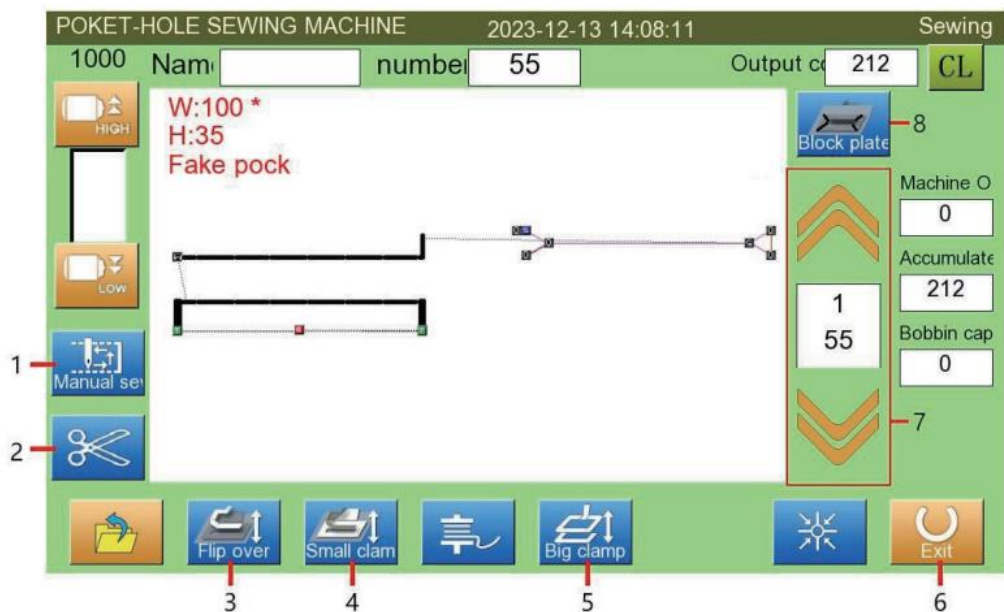
Patterns can be combined for cycle sewing.

16. Line tens

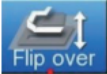
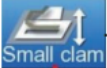
Adjust line tens.

17. Download Download patterns

2-2 Processing interface description



Most of the buttons in this interface are the same as those in the main control interface. Now we only explain the different parts:

1.  — Manual sewing key is used to start the machine head to start sewing operation;
2.  — Scissor key is used for manual thread trimming and testing whether the scissors are normal;
3.  — Flap used for fixation during sewing;
4.  — Small pressure plate is used to manually lift and lower the small pressure plate.;
5.  — Large pressure plate is used to manually lift and lower the large pressure plate.;
6.  — Return key is used to exit the processing page;
7.  — Jog key is used to move the needle point forward and backward.;
8.  — Baffle is used to position the fabric when folding to form folded edges.;

3 Instructions

3-1 Adjust zero position

Before powering on the machine, make sure that the gas source and power supply are connected, and then turn on the power switch. After the power-on self-test is completed, the screen enters the main control interface.

3-1-1 Needle position adjustment on spindle

(1): Press the [Function Menu] key to enter the main menu, press

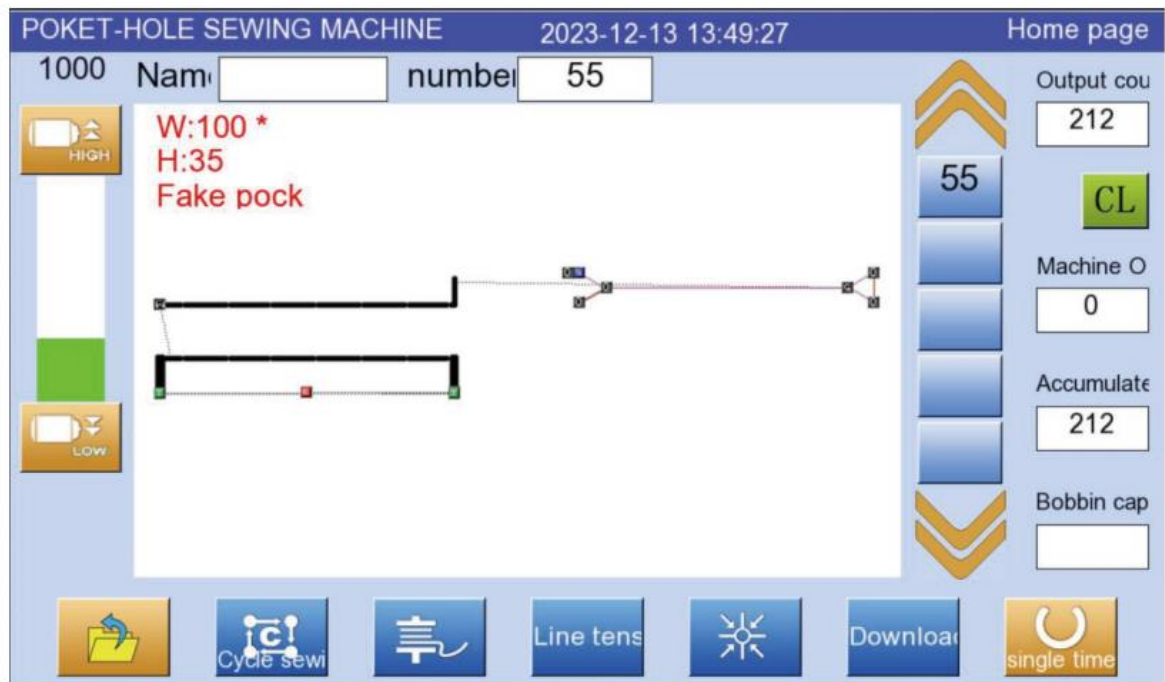


Enter the [Signal Detection] interface, set the needle position on the machine head, turn the handwheel clockwise to turn the needle bar to the desired height, and press  You can complete the needle position setting shown in Figure 1.6 below.

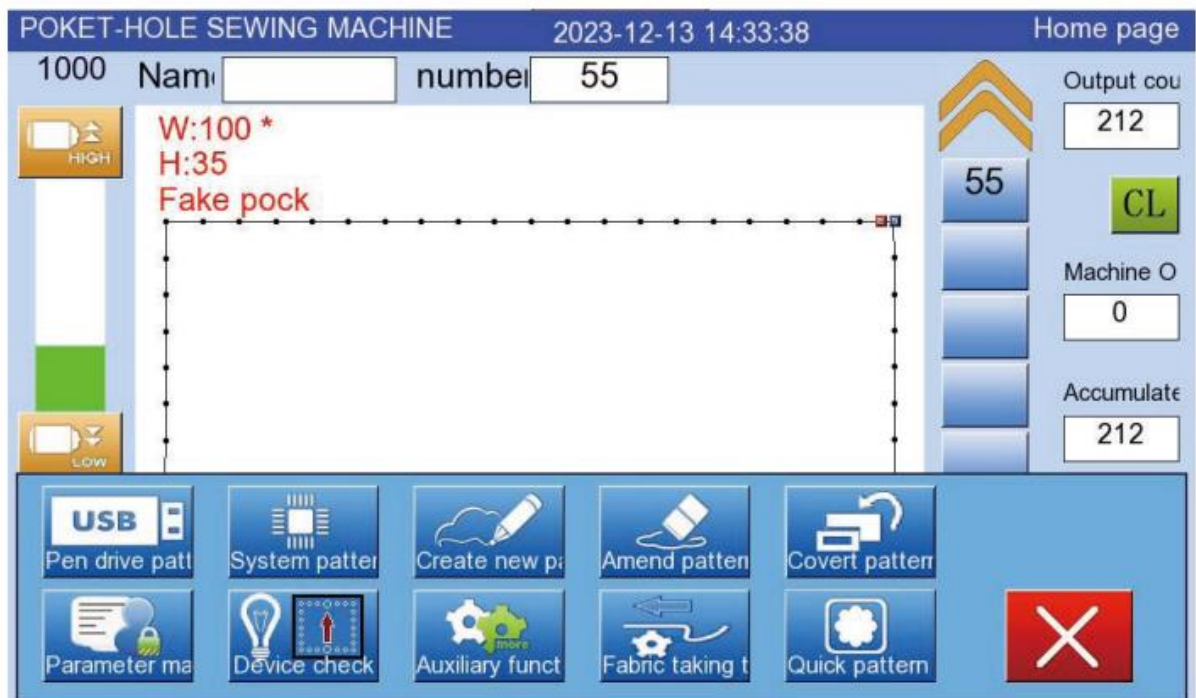


3-2 Main function menu

After booting, enter this interface;



In this interface, touch  Press the button to expand the function button list (as shown below:).



Select from them to enter the corresponding functions::



<U disk pattern>: Edit U disk pattern.



<System patterns> :Edit patterns in the system.



<Create a new pattern>: Immediately create a pattern.



<Modify pattern>: Edit the current pattern.



<Parameter Management>: System parameter items.



<Equipment detection>: Used to detect whether various equipment and signals are correct or not.



<Auxiliary functions>: System upgrade, time setting, usage period and other functions.



<Pick-up test>: Used to set the relevant position of the pick-up motor.

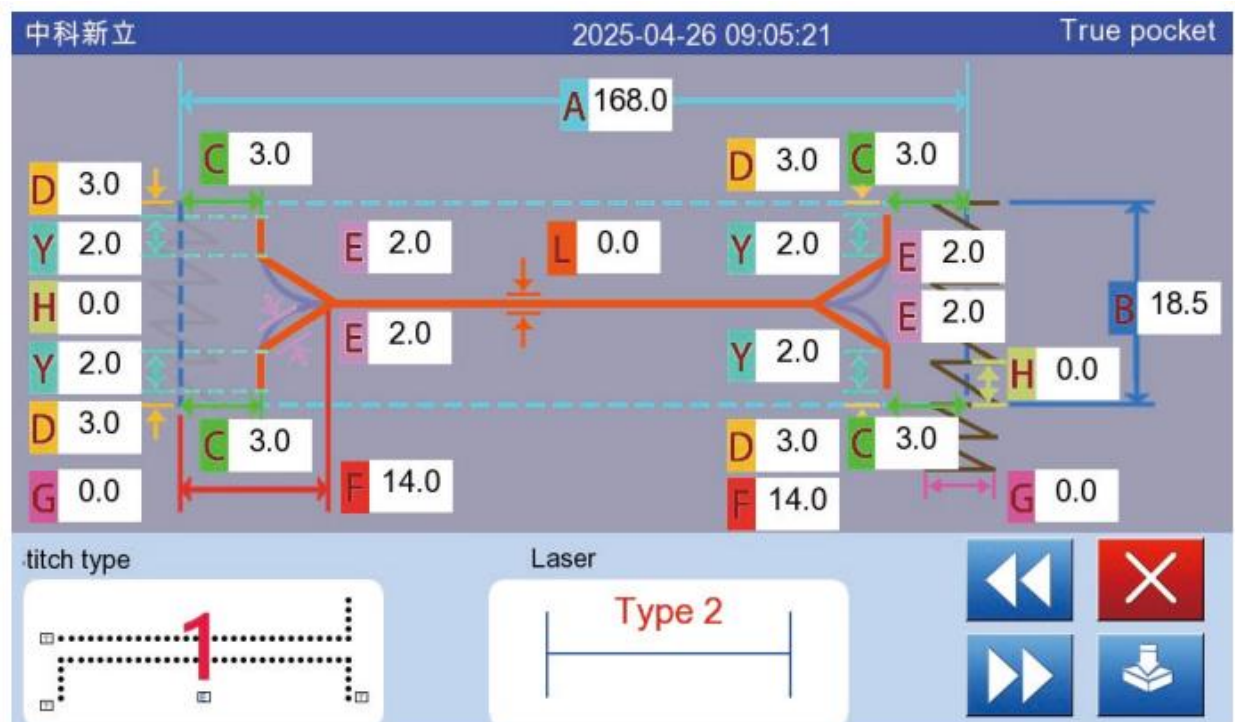


<Data Patterning>: Used to quickly generate patterns [Pocket Data Patterning].

3-3 Data layout

Real pocket: Sewn in two times Fake pocket: Sewn in one time
Crescent pocket: Side pocket Laser: Single laser related parameter settings





A: Stitch length of real and fake pockets

B: Stitch width of real and fake pockets

C: Distance from laser point cutting to left and right stitches (0 is the critical point; the distance increases with larger numbers and decreases with smaller numbers)

D: Distance from laser point cutting to upper and lower stitches (0 is the critical point; the distance increases with larger numbers and decreases with smaller numbers)

E: Adjustment of laser cutting arc measurement (0 is a straight line)

F: Length of the laser triangle

(When the F value equals the C value, the triangle disappears)

G: Buttonhole width (0 means no width; typically set to 0 together with the H value when buttonholes are not needed)

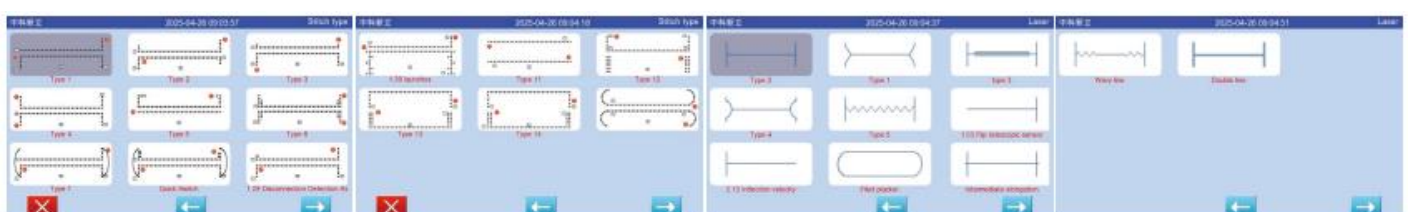
H: Buttonhole density (0 means no density; typically set to 0 together with the G value when buttonholes are not needed)

Y: Distance from the laser point cutting starting point to the inflection point of the triangular diagonal line (0 is a straight line; if the sum of the upper and lower Y values is greater than the B value, there will be no triangle)

L: Position of the laser line cutting centerline (0 is centered; positive numbers cut upward, negative numbers cut downward)

Note:

Stitch types and laser types are selected separately, and the desired pattern or stitch direction can be chosen according to actual production needs.



The direction of the bartack can be changed, and it can be selected to be stitched from top to bottom or from bottom to top. The stitch pitch refers to the size of the stitch pitch for overlocking and stitching (excluding the bartack). The stitch pitches at both ends of the laser and the middle stitch pitch control the cutting density of the two sides and from the triangle to the starting point of the triangle, respectively. The numerical value affects the density of the cutting.

Bartack	<input checked="" type="button" value="DOWN"/>	UP	Stitch	2.0	Laser stitch 1	2.0	◀◀ ✖ ▶▶ 📖
			or staggered stitches	0	Laser stitch 2	3.0	
			t Start Needle Count	0	repeat End Pin Count	0	

The bartack offset can control the position when stitching the bartack. Increasing the left J value causes outward offset, while decreasing it causes inward offset. The adjustment of the right K value is similar – the larger the absolute value of the negative number, the more it moves inward. Front reinforcement refers to the backstitch at the starting point, which can be adjusted between 0 and 9 stitches. Rear reinforcement means stitching extra stitches at the end or no reinforcement.

ir delivery	<input checked="" type="button" value="yes"/>	no	reinforce	3	reinforce	0	◀◀ ✖ ▶▶ 📖
h number			0	on the actual pocket	2		
deviation left	J	-0.5	ght	K	-0.5	ches before flipping	

The upper-left, upper-right, lower-right, and lower-left offsets of the bartack can independently adjust the vertical offset position of the bartack.

left knot offset	0	left knot offset	0	◀◀ ✖ ▶▶ 📖
right knot offset	0	right knot offset	0	
reinforce of zigzag	0	reinforce of zigzag	0	

The size of the stitching finger opening can be adjusted by offsetting the left, right, upper, and lower sides. Negative values move toward the center, making the finger opening smaller, while positive values make the finger opening larger.

left offset	0	Right offset	0	Laser cutting speed	1500	◀◀ ✖ ▶▶ 📖
upper offset	0	lower offset	0	upper accelerate needle	5	
fix needle	0	stitch number 2	0	laser minimum speed	500	

The laser cutting speed is based on the minimum laser speed. A smaller value of the laser cutting speed indicates stronger laser penetration, and two parameters need to be adjusted simultaneously during adjustment. Laser reinforcement allows selecting one or two laser cuts. The height and width of the laser herringbone refer to the control parameters for the width and height of the wave line. The bartack speed is typically set at 1600. For the "down jacket" option, selecting "yes" will first sew a circle of thread, then perform laser cutting, material folding, and sewing when making down jackets. In the down jacket mode, a single frame line means sewing one circle of thread first, while a double frame line means directly sewing two circles.

Laser height	6.0	Slot width	1.2	of baffle plate	2.5	   
Laser width	10.0	Laser enhance	no	litch velocity	1200	
down jacket	no	Down jacket type	Type 1	Type 2		

ardown left offset	5.0	lerdown up offset	5.0	   
rdown right offset	5.0	lown down offset	5.0	
ortcut parameters	8.0			

The left/right and up/down positions of the presser foot can also be adjusted via corresponding parameters, with a default value of 0.

Presser foot up	0	Presser foot down	0	   
Presser foot left	0	Presser foot right	0	

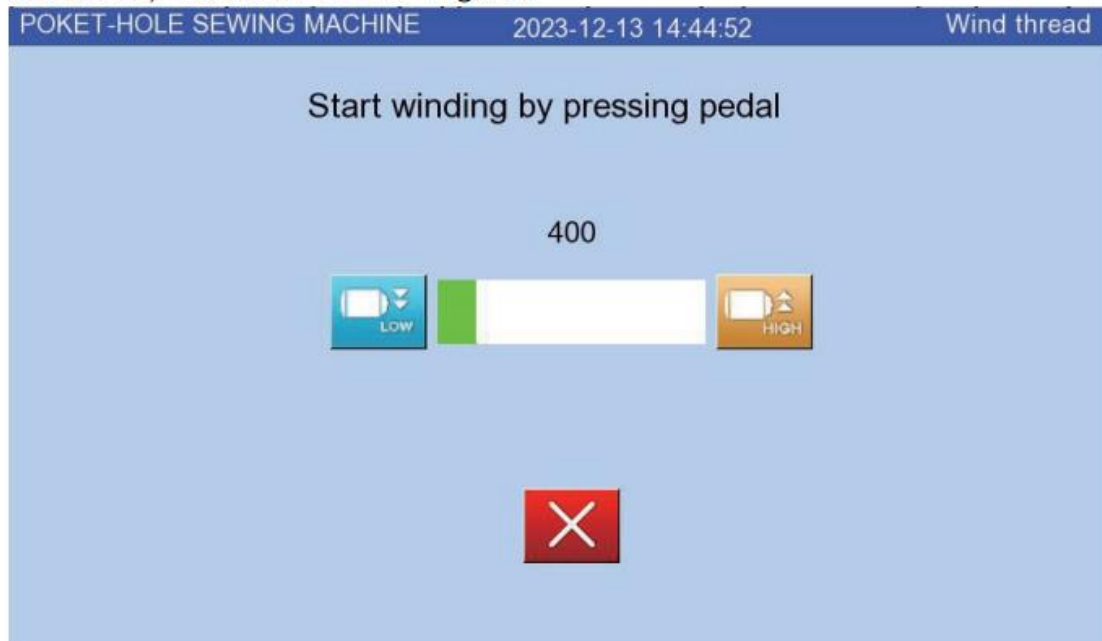
3-4 Sewing data setting

3-4-1 aximum speed limit setting

In the main control interface and sewing processing interface, you can press  or  Can be adjusted up or down. However, the maximum speed limit value is the value set by the system parameters.

3-4-2 bottom line counter

This count is an estimate of the number of times a lock cylinder can be sewn. The total number of bottom threads can be set according to the actual working situation, as shown in the figure:



During the sewing process, the current bobbin thread number is subtracted by one for each piece of sewing. When the final bobbin thread number is 0, "E046 The remaining bobbin thread length is not enough, please change the bobbin" will be reported. If the total number of bobbin threads is set to zero, the bobbin thread will be turned off. counting function. Since the bobbin number is an estimate and is related to the bobbin winding length, the remaining bobbin thread is not exactly the same every time.

4 Equipment detection and parameter setting

From the main menu touch  button to enter the main menu interface as follows:



< Electromagnet detection >: Test each electromagnet solenoid valve.



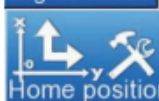
< Stepper Test >: Test stepper motors and stepper drives.



< Servo Test >: Test the spindle motor (servo).



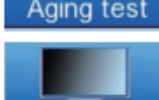
< Signal detection >: Test the switch signals of each sensor



< Origin adjustment >: Set mechanical origin



< Test >: Only aged tractors, prohibited from use



< Screen off settings >: Display backlight settings.

Only some functions are explained below.

4-1 Sensor/switch signal detection

touch  Press the key to enter the input signal detection interface to display the sensor signal and switch signal..



1. When the respective sensors sense, there are changes in L/H, ON/OFF, and 0/1. Note that the light on the sensor indicates that the power supply is normal, but it does not mean that the signal is normal. Only when the corresponding position changes can the test be normal.
2. For push button switches, there are two types: normally open and normally closed, inching and self-locking. Pay attention to the distinction.
3. When the spindle rotates normally, the spindle code will increase and decrease cyclically from 0 to 4320 (some models). When the spindle rotates once, the needle position will change from on to off.
4. For wire breakage detection, the pulling force of the jumping spring may be variable if the pulling wire changes.
5. After pressing the reset button, enter the signal detection interface and all sensing states are as shown in the picture above.

4-2 Electromagnet detection

press  Test each solenoid valve.

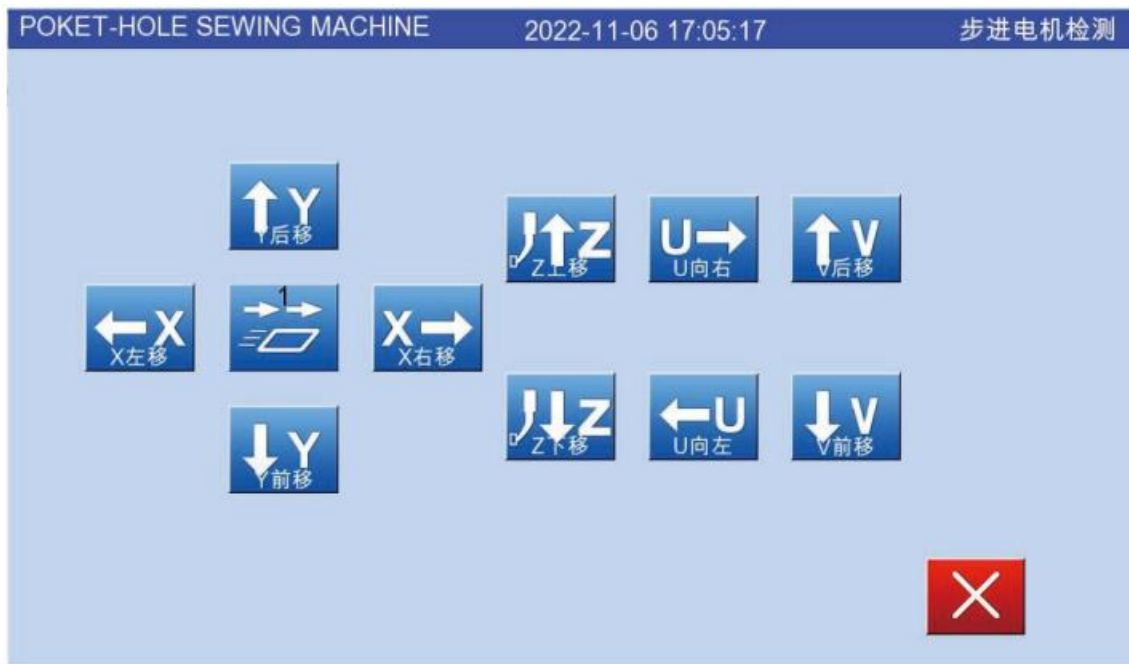
中科新立		2025-04-27 09:20:09			Cylinder check	
Big frameJ1	Left/Right cutt	Laser switch	presser up/dow	Small cyliderJ3		
Alignment plate	Left/Right cutt	Laser UP/Down	presser in/out	Alignment plate		
Flip UP/Down	Front/Rear cutt	Tray UP/Down	tobe up/dw 3	Fabric bracket	Laser 1	Stepping mot
Flip Out/Back	Front/Rear fold	Tray clamp 1	Suction	Front/Rear cutt	Laser 2	Trimmer
Small clamp	UP/DOWN 1	Tray UP/Down	Flip UP/Down 2	Front/Rear fold	Laser 3	Release thread
Small clamp UP	UP/DOWN 2	Tray clamp 2	Flip OUT/BACK	Fabric bracket	Laser 4	Thread wiper
Small clamp OU	SPARE J15	Fix tray	Flip2	Fabric bracket		

Notice:

1. During inspection, pay attention to the action relationship between each machine to avoid irreparable problems.
2. The electromagnet cannot be opened for a long time and should be closed promptly after the test is completed to prevent the electromagnet from getting hot and burning out.
3. If there is no response in the test, check whether the fuse connection and the solenoid valve/electromagnet are normal.

4-3 step test

press  Test stepper motors and stepper drives.



5 Accessibility settings

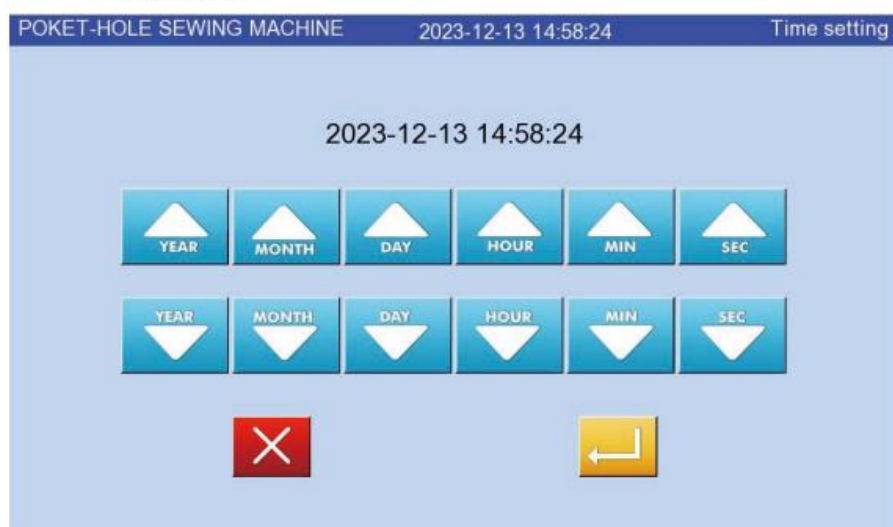
Touch on the main control interface  button to enter the main menu interface as follows:



In this interface, you can select the operating language, set the time, upgrade the screen program, initialize the machine, view version information, and set up installment payments, etc. Here is a brief description of this:

5-1 Time setting

Click  key to enter the following interface:



When your screen is used for a long time and the battery power is low, or the battery (CR2032) is replaced, the screen displays The displayed date will be incorrect, and you need to make a date correction through the above   button to set the date time  save and exit.

5-2 language selection

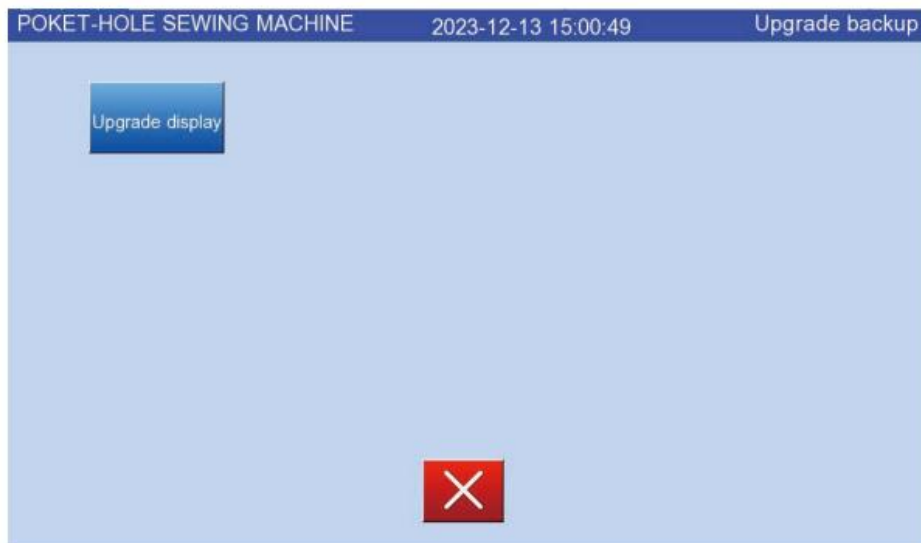
Click  key to enter the following interface:



In this interface, you can select the operating language of the screen. Currently, only Chinese and English are supported. If this is displayed  icon, it means that every time you turn on the computer, you will be asked whether to switch the operating language. If you do not want to display this question, just press this icon to change to  This state is enough.

5-3 Upgrade backup

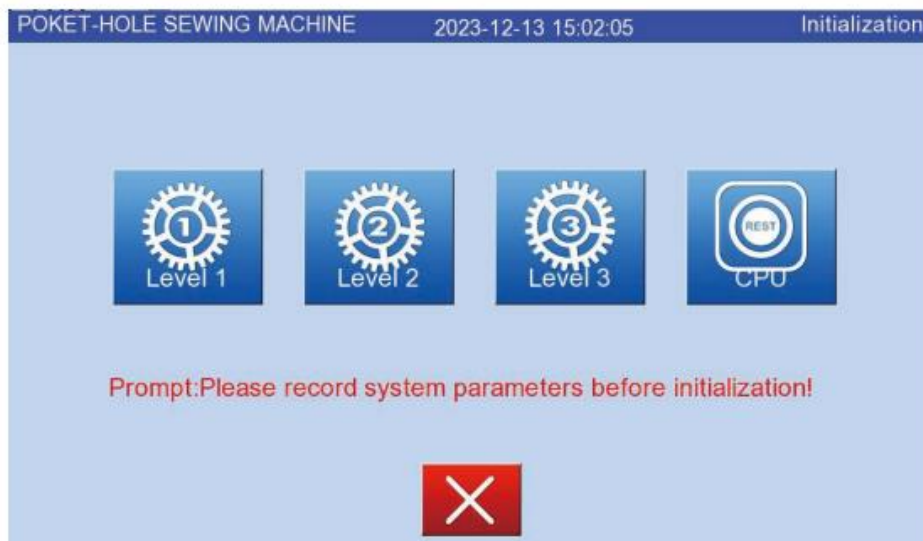
Click  button to enter the following interface:



When you plug the USB flash drive into the touch screen USB socket, click  button, the system will upgrade your touch screen program to the version number you need. After the upgrade is completed, you will be prompted to turn off the computer and unplug the USB flash drive, and then turn it on again to use the new version. 。

5-4 Restore settings

Click  button to enter the following interface:



- 1: After the new installation of the machine is completed, an initialization action needs to be performed before starting debugging. When the parameters of the machine are increased or decreased, And when there are obviously incorrect timing actions during use, the equipment needs to be initialized;
- 2: When initializing, proceed from right to left, that is, starting from the controller, then level three, level two, and level one;
- 3: After the initialization is completed, you need to shut down the computer

once. For example: press  button, the following interface will be displayed:



After entering your password, click  button, the screen will display: "E1013 controller initialization successful", which means the initialization of the controller is completed. Also initialize the third-level, second-level, and first-level parameters, and then shut down; if the initialization is not successful, prompt, the communication between the screen and the motherboard may have been disconnected, so you need to shut down and restart the computer before initializing it.

5-5 Installment setting interface

In the setting interface, press , enter the following interface:

Note: Please proofread the date and time on the screen before setting up installment payment.

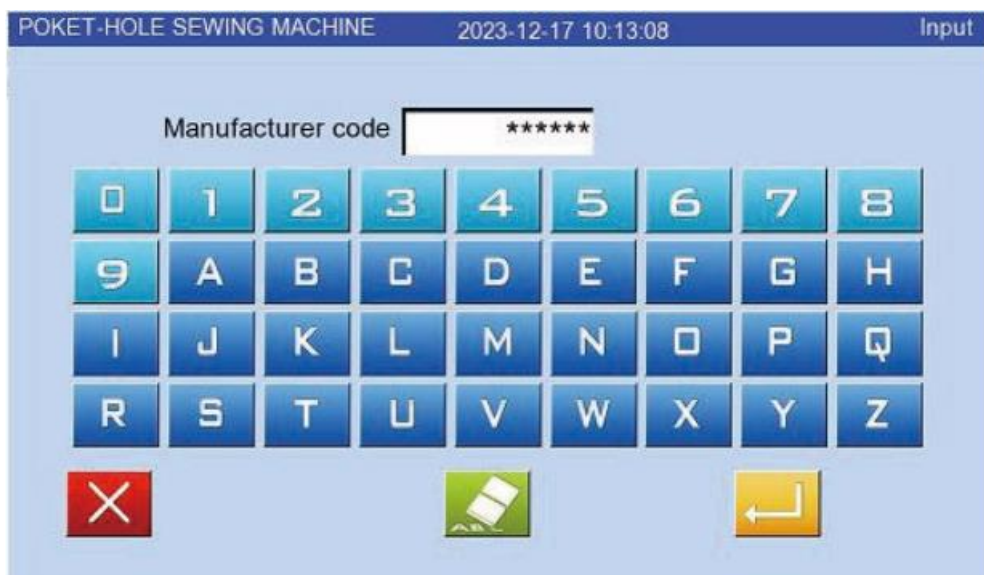
POKET-HOLE SEWING MACHINE				2023-12-13 15:04:30				Input	
Manufacturer code									
0	1	2	3	4	5	6	7	8	
9	A	B	C	D	E	F	G	H	
I	J	K	L	M	N	O	P	Q	
R	S	T	U	V	W	X	Y	Z	
									

Enter the correct manufacturer number to enter the installment setting interface,

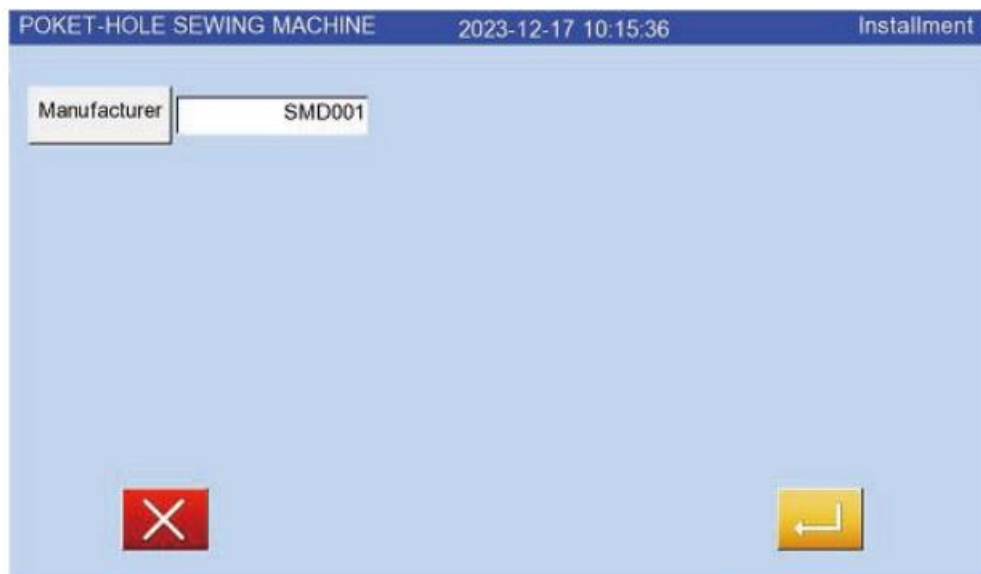
press  button:



according to  button to enter the next interface:



In this interface, enter the password and press  button:



In this interface, enter the password and press  button:



Press  button, enter the following interface:

POKET-HOLE SEWING MACHINE
2023-12-13 15:04:30
Input

Manufacturer code

0	1	2	3	4	5	6	7	8
9	A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	Y	Z

After entering the manufacturer number, press button:

分期支付
2022-08-12 23:30:16

厂家编号

板号

Click  Set the version number, that is, the machine number

POKET-HOLE SEWING MACHINE 2023-12-17 10:18:39 Input

Board number

0	1	2	3	4	5	6	7	8
9	A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	Y	Z

After entering the board number, press  button,

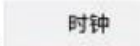
POKET-HOLE SEWING MACHINE 2023-12-17 10:19:02 Installment

Manufacturer

Machine number



Click  clock button to set the start time of the installment.

分期付款 2022-08-13 13:09:42

厂家编号	*****
板号	SMD001
时钟	2022-08-13 13:09
超级密码	

✕
↩

Then click 超级密码 button to set a super password. This password can unlock all usage rights of installment payment.

POKET-HOLE SEWING MACHINE 2023-12-17 10:20:20 Input password

Password
 Confirm password

0	1	2	3	4	5	6	7	8
9	A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	Y	Z

✕
📄
↩

In this interface, press ↩ button,

POKET-HOLE SEWING MACHINE 2023-12-17 10:21:05 Installment

Manufacturer Installment 1

Machine number

Clock

Ultra password

according to  button to enter the following page:

POKET-HOLE SEWING MACHINE 2023-12-17 10:21:26 Date

2023 12						
日	一	二	三	四	五	六
Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

After selecting the date to be set, press  button:

Enter the password. This is the password for the first period. Remember it and press

 button,

POKET-HOLE SEWING MACHINE		2023-12-17 10:22:07		Installment	
Manufacturer	*****	Installment 1	2023-12-18		
Machine number	001	Installment 2			
Clock	2023-12-17 10:19				
Ultra password	*****				
					

In the same way, you can set installments 2, 3... A total of ten installments can be set..

POKET-HOLE SEWING MACHINE		2023-12-17 12:54:52		Installment	
Manufacturer	*****	Installment 1	2023-12-18		
Machine number	001	Installment 2	2024-1-19		
Clock	2023-12-17 12:54:00				
Ultra password	*****				
					

In this way, the installment payment is successfully set up..

Appendix 1: Parameter default values

Item do Parâmetro	Função e Descrição	Faixa de Ajuste Opções	Valor Inicial (Padrão)
1.01	top speed	400 ~ 3200	2300
1.02	1st stitch speed	100 ~ 2000	200
1.03	2nd stitch speed	200 ~ 2500	300
1.04	3rd stitch speed	300 ~ 3000	400
1.05	Whether to trim the thread after emergency stop	1 allow, 0 prohibit	Don't cut
1.06	Needle stop position on spindle	0 ~ 4319	4000
1.07	Return the secondary origin path		Return the same way
1.08	Alternate parameters		850
1.09	Alternate parameters		200
1.10	Thread trimming switch	0 off, 1 on	on
1.11	Needle bar lifting angle	-120--120	0
1.12	Alternate parameters		170
1.13	Return to zero speed	1 ~ 4	3
1.14	Retrieval speed	1 ~ 18	10
1.15	Playing speed	1 ~ 5	3
1.16	Delay before press telescopic closing		60
1.17	Air pressure detection switch	0 off 1 on	detection
1.18	Air pressure detection switch polarity		constant
1.19	Automatic thread addition and trimming during empty feeding	0 no 1 yes	Don't add
1.20	Folding knife sensor switch		Detection
1.21	Press material lifting function switch		closure
1.22	Spindle optocoupler type		high speed
1.23	Emergency stop switch polarity	0 constant 1 Negate	Negate
1.24	Whether to detect the pallet sensor when taking the mold		Do not detect
1.25	loose wire switch		open
1.26	Z-axis speed	50---2000	80
1.27	Automatic thread trimming at the end of sewing	0 no, 1 add	do not add
1.28	Alternate parameters		6
1.29	Disconnection detection switch	0 off 1 open	open
1.30	operation counts		twice
1.31	Winding speed	1300-2500	1350
1.32	Whether to calibrate the spindle when inching	0 Not test, 1 test	no test
1.33	Suction switch		open
1.34	Disconnection detection frequency	1-45	35
1.35	Circulation board switch		open
1.36	Alternate parameters		0
1.37	Disconnection detection polarity		constant
1.38	Laser cutting speed		1680
1.39	Y reverse feeding synchronization verification	-100-100	0
1.40	X reverse feeding synchronization verification	-100-100	0
1.41	Y forward feeding synchronization verification	-100-100	0
1.42	X forward feeding synchronization verification	-100-100	0

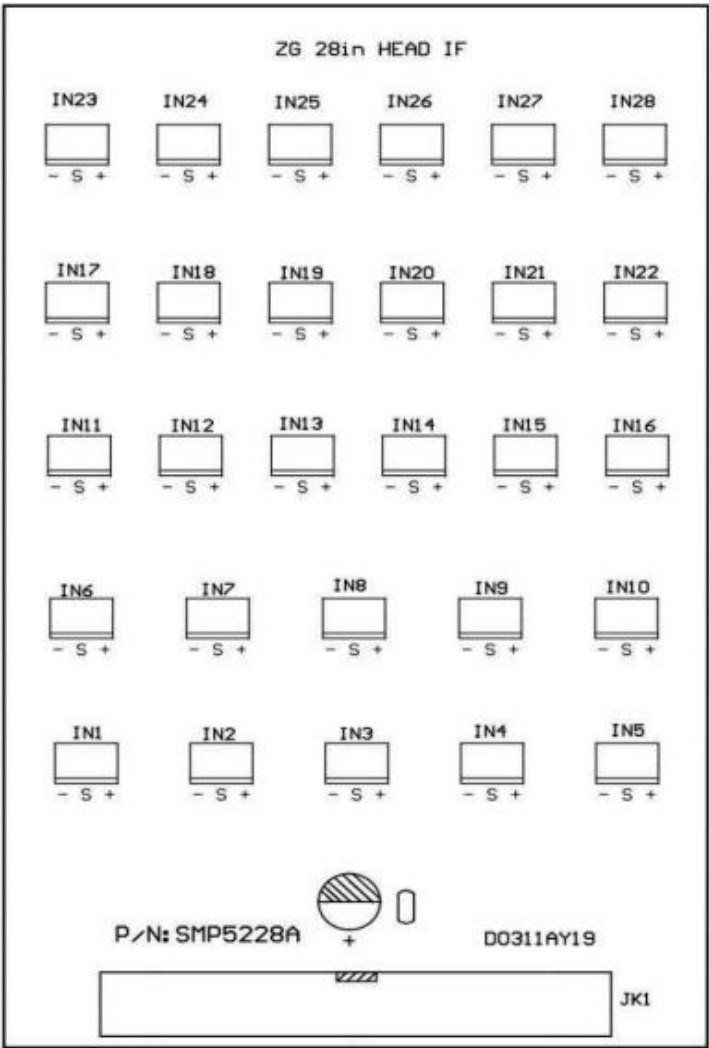
2.01	X origin		0
2.02	Y origin		0
2.03	Trim opening angle	1000-----3000	110
2.04	Loose thread opening angle	2000-----4096	280
2.05	Clamp electromagnet PWM	10-----700	175
2.06	Large pressure plate electromagnet PWM	10-----700	350
2.07	Medium presser foot electromagnet PWM	10-----700	350
2.08	Pressure plate 2 electromagnet PWM	10-----700	350
2.09	x sensor polarity	0 constant, 1 Negate	constant
2.10	Y sensor polarity	0 constant-1 Negate	constant
2.11	Laser point time		100
2.12	Clamp opening angle	0-----1000	100
2.13	turning point speed		1500
2.14	Alternate parameters	0-----4	1
2.15	speed limit	400-----2700	2500
2.16	Alternate parameters	-300-----300	100
2.17	Turning method		Telescopic
2.18	Alternate parameters	0-----2000	0
2.19	Laser air feed speed		45
2.20	Maximum height of intermediate presser foot	30-----200	160
2.21	Medium presser foot motor sensor polarity	0 constant 1 Negate	constant
2.22	Alternate parameters	0constant 1negate	constant
2.23	Support board in place detection switch		Open
2.24	Alternate parameters		lay down
2.25	Alternate parameters	0 constant 1 negate	Negate
2.26	Horizontal sewing range	500-10000	8000
2.27	Longitudinal sewing range	400-10000	6500
2.28	Alternate parameters	0-350	300
2.29	Loose thread 0 Clamp thread 1		1
2.30	How long does it take for the laser head to lower to turn on the laser?		200
2.31	How long does it take for the laser to start moving?	-300---300	10
2.32	How long should the pressing plate be pressed down for cutting when taking out materials?		80
2.33	How long does it take for the laser to lift after the ironing is completed?	500---1500	10
2.34	Trim solenoid PWM		560
2.35	Loose Wire Solenoid PWM		175
2.36	Alternate parameters		Negate
2.37	How long does it take for the laser head to be raised?	0---250	100
2.38	Opening time of front and rear knives when descending	0-1000	200
2.39	Left and right knife opening time	0-1000	260
2.40	Left and right knife lowering opening time	0-1000	200
2.41	Left and right knife opening time	0-1000	260
2.42	Alternate parameters	0-1000	0
2.43	Left and right knife retraction time	0-1000	260
2.44	Left and right knife lifting time		260

2.45	Front and rear knife retraction time	0-20000	260
2.46	Front and rear knife lifting time		260
2.47	Overall hem rising time		260
2.48	flap opening time	0-1000	200
2.49	Flip plate pressing time		200
2.50	Pallet fixed opening time		260
2.51	Pallet 2 closing time		200
2.52	Pallet lifting time 2		350
2.53	U-axis movement time		80
2.54	Small pressure plate retraction time		100
2.55	Tray 2 opening time		300
2.56	Tray 1 closing time		200
2.57	Pallet lifting time 1		300
2.58	Enter the pattern modification interface XY delay time		1000
2.59	Bag type selection		fake bag
2.60	How long does it take for the large pressure plate to return after being pressed down?		300
2.61	flip switch		Open
2.62	Flip switch when modifying patterns		Open
2.63	Retrieval and return method		ordinary
2.64	Z first falling pulse		0
2.65	Z second falling pulse		0
3.01	Trimming speed	200-----500	250
3.02	Processing/testing switch	0 processing, 1 Test machine	processing
3.03	Delay before platen moves to the right	0-----60	100
3.04	There is a delay before the small plate is pressed and transferred to the laser point.		250
3.05	How long should the large pressure plate be lifted and pressed after sewing?	0---250	50
3.06	Positioning shutter opening time		100
3.07	Alternate parameters	0 Don't lift, 1 lift	lift
3.08	Folding switch		Open
3.09	Support board J32 function switch		open
3.10	Delay before closing of pressing material lifting		60
3.11	V-axis takes pallet position	10-----500	30310
3.12	U-axis feeding pallet position	0-----1000	80
3.13	Alternate parameters	0-----9000	2500
3.14	Alternate parameters		545
3.15	X Motor transmission ratio		384.0
3.16	Y Motor transmission ratio		320.0
3.17	V-axis extension position		30310
3.18	U-axis takes the pallet position		32384
3.19	Medium presser foot motor type		0
3.20	Safe distance waiting for V-axis retraction		5000
3.21	500 pulse width	100-----950	500
3.22	1000 pulse width	100-----950	520
3.23	1500 pulse width	100-----950	540
3.24	2000 pulse width	100-----950	560

3.25	2500 pulse width	100-----950	580
3.26	3000 pulse width	100-----950	600
3.27	safe location X		-749
3.28	safe location Y	100-----950	527
3.29	Picking position X		20520
3.30	Picking position Y		0
3.31	Receiving position X	100-----950	0
3.32	Receiving position Y	100-----950	0
3.33	U-axis moving speed to the right		9
3.34	V-axis extension and retraction speed		9
3.35	J31 Function switch		Open
3.36	Accelerate the number of stitches		1
3.37	Pattern center point X offset		288.6
3.38	Pattern center point Y offset		-0.2
3.39	Laser center point X offset		54.5
3.40	Laser center point Y offset		0
3.41	ADC detection switch		closure
3.42	ADC reference value		0
3.43	How long does it take to press the large platen down to press down the Z axis?		0
3.44	How long does it take for the small pressing plate to close and the large pressing plate to press down?		200
3.45	ADC detection alarm switch		OFF

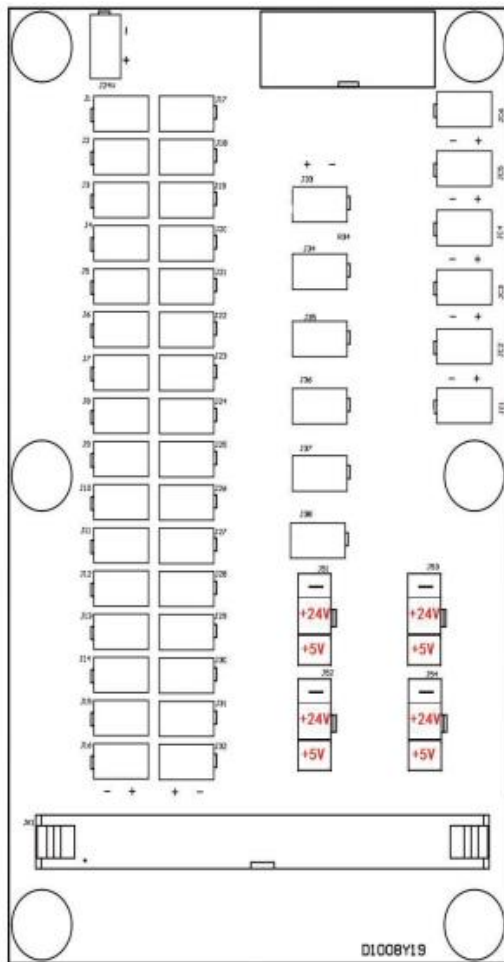
Appendix 2 Input and output wiring table:

Input signal table



Signal name	Socket number	Socket specifications	State after returning to zero
X origin	IN1	1*3P	on
Y origin	IN2	1*3P	off
	IN3	1*3P	NC
Sewing start	IN4	1*3P	off
Disconnection detection	IN5	1*3P	off
Air pressure detection	IN6	1*3P	off
V axis signal	IN7	1*3P	off
Sewing emergency stop	IN8	1*3P	off
Under the pressure plate	IN9	1*3P	on
	IN10	1*3P	NC
Folding starts	IN11	1*3P	off
U-axis signal	IN12	1*3P	off
Pallet in place	IN13	1*3P	off
Lift and lower 2 times	IN14	1*3P	off
Lift 2 up	IN15	1*3P	on
pressure plate	IN16	1*3P	off
Send mold button	IN17	1*3P	off
Clamping button	IN18	1*3P	off
Lift 1 up	IN19	1*3P	on
Under Tob	IN20	1*3P	
Emergency stop for folding materials	IN21	1*3P	on
Tobzuo	IN22	1*3P	NC

Lift and lower 1 time	IN23	1*3P	off
On the front and back knives	IN24	1*3P	on
Before and after the knife	IN25	1*3P	off
On the left and right knives	IN26	1*3P	on
Right and left knife	IN27	1*3P	off
Tob right	IN28	1*3P	
	mother board	JK2	
	mother board	JK2	
	mother board	J6	4P
	mother board	J6	5
	mother board	J6	6
		J6	3



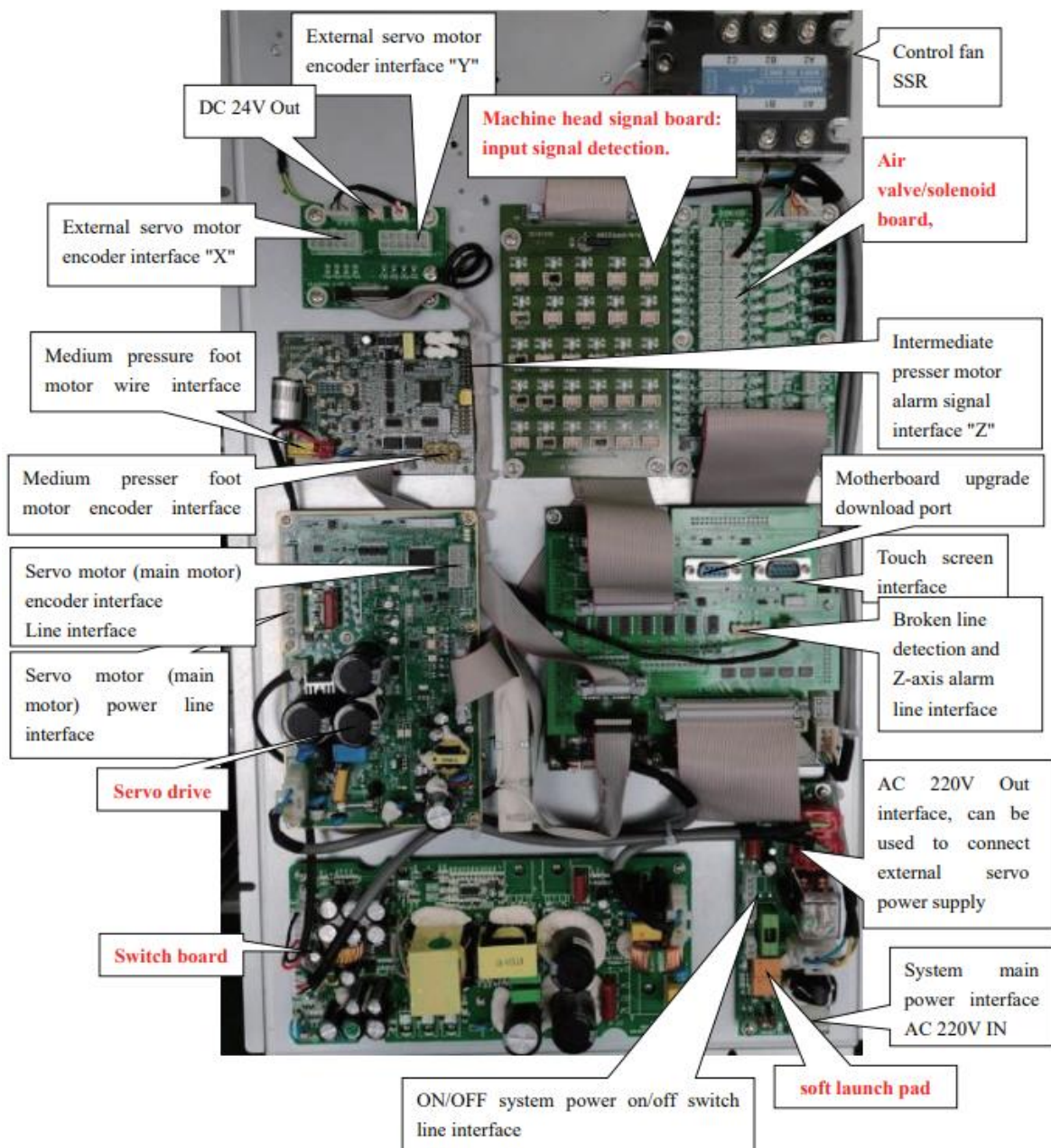
Output signal table

Signal name	Socket number	State after returning to zero
Large pressure plate	J1	off
Positioning baffle	J2	off
Turnover and lift	J3	off
flip telescopic	J4	off
small tablets	J5	off
Small board lifting	J6	off
NC	J7	on
Small board telescopic	J8	off
Left and right knife up and down	J9	off
Left and right folding knives	J10	off
Knife up and down front and back	J11	off
Folding knife front and rear	J12	off
Lift and lift 1	J13	off
Lift and lift 2	J14	off
NC	J15	
laser switch	J16	off
laser lift	J17	off
Pallet lifting 1	J18	off
Pallet 1	J19	off

Pallet lifting 2	J20	off
Pallet 2	J21	off
Pallet fixing	J22	off
Press material lifting	J23	
Press material telescopic	J24	
Tob	J25	off
Suction	J26	
NC	J27	
NC	J28	
NC	J29	
NC	J30	

Positioning baffle 2	J31	
Tob Lift 2	J32	(Use this air valve when using a lift)
NC	J33	
NC	J34	
Tob lift 1	J35	
About Tob	J36	
NC	J37	
NC	J38	
NC	JC1	off
NC	JC2	off
Trimming	JC3	off
Loose line	JC4	off
NC	JC5	
NC	JC6	off

Appendix 3 Electronic control configuration diagram



Appendix 4 Alarm code table

<item number="03" value="E003 The telescopic board is not retracted in place " />

<item number="06" value="E006 Please select a pattern " />

<item number="07" value="E007 The expiration date has expired, please contact the manufacturer! " />

<item number="08" value="E008 The spindle is overloaded, please shut down the machine " />

<item number="09" value="E009 The spindle does not move to the specified position " />

<item number="10" value="E010 Out of sewing range 1" />
<item number="11" value="E011 Please press the confirm button " />
<item number="12" value="E012 The system is locked, please check the emergency stop switch " />
<item number="13" value="E013 System is unlocked " />
<item number="14" value="E014 X-axis zero return failed " />
<item number="15" value="E015 Y axis zero return failed " />
<item number="16" value="E016 Z axis zero return failed " />
<item number="17" value="E017 U-axis zero return failed " />
<item number="18" value="E018 The number of stitches is enough, we need to finish it first " />
<item number="19" value="E019 Emergency stop switch is stuck " />
<item number="20" value="E020 The current operation has not ended yet " />
<item number="21" value="E021 Extra long single-step stitch length " />
<item number="22" value="E022 Overall mobile operation not confirmed " />
<item number="23" value="E023 Invalid operation " />
<item number="24" value="E024 The press frame has not been put down. Please check the system parameters for the number of press frames. " />
<item number="25" value="E025 Thread trimming is disabled " />
<item number="26" value="E026 The lifting motor does not turn to the right position " />
<item number="27" value="E027 Spindle encoder failure " />
<item number="28" value="E028 Execute first and then test " />
<item number="29" value="E029 The number of consecutive seam jumps exceeds the limit " />
<item number="30" value="E030 Operation canceled, exiting " />
<item number="31" value="E031 Return to zero failed " />
<item number="32" value="E032 Length and width cannot be zero at the same time " />
<item number="33" value="E033 Please do not press the launchpad " />
<item number="34" value="E034 Tricks don't exist " />
<item number="35" value="E035 The number of stitches in the pattern exceeds the standard " />
<item number="36" value="E036 Returning to zero position, please wait...." />

<item number="37" value="E037 Beyond sewing range 2" />

<item number="38" value="E038 Alarm when the bottom thread runs out, press the bottom thread transfer key or cancel key " />

<item number="39" value="E039 There are too few needle points and the save is invalid. " />

<item number="41" value="E041 Processing, please wait..." />

<item number="42" value="E042 The data format on the USB disk does not meet the requirements of this system " />

<item number="43" value="E043 Reading USB flash drive, please wait...." />

<item number="44" value="E044 Air pressure is too low or no air " />

<item number="45" value="E045 The output has reached the set value and will be counted again " />

<item number="49" value="E049 U-axis zero return failed " />

<item number="50" value="E050 V-axis zero return failed " />

<item number="51" value="E051 W-axis zero return failed " />

<item number="54" value="E054 V-axis origin cannot be detected " />

<item number="57" value="E057 The large pressure plate is not lifted or the sensor cannot detect it. Please check the sensor. " />

<item number="61" value="E061 X-axis failure, please shut down and check " />

<item number="62" value="E062 Y-axis failure, please shut down and check " />

<item number="64" value="E064 The large pressure plate is not put down or cannot be detected by the sensor. " />

<item number="65" value="E065 The folding emergency stop is in progress. Please check the folding emergency stop button. " />

<item number="68" value="E068 The pressure plate is not in the zero return position. Move the pressure frame position after shutting down the machine. " />

<item number="78" value="E078 Folding material in emergency stop " />

<item number="80" value="E080 The pressure plate is not at the origin position. Return to zero before starting again. " />

<item number="96" value="E096 Please press the return to zero button first " />

<item number="97" value="E097 Z(presser foot lift) axis failure, please shut down and check. " />

<item number="98" value="E098 The V-axis is not at the origin, please shut down and check. " />

<item number="100" value="E100 Threading in progress, press the Enter key after threading.。 " />

<item number="102" value="E102 Please press OK button when finished " />

<item number="113" value="E113 The intermediate presser foot (Z axis) is not raised to the upper sensing position " />

<item number="116" value="E116 Please confirm that the upper shaft is at the needle stop position before returning to zero. " />

<item number="133" value="E133 Cannot sense on the pressure plate " />

<item number="208" value="E208 The material retrieval is in emergency stop. Please pay attention or shut down when resetting. " />

<item number="401" value="E401 The sensor on the pressure plate does not sense " />

<item number="402" value="E402 The sensor under the pressure plate does not sense " />

<item number="403" value="E403 Lift 1 is not detected when it reaches the upper position. " />

<item number="404" value="E404 Lifting and lowering 1 time to reach the position but not detected " />

<item number="405" value="E405 Lift 2 is not detected when it reaches the upper position. " />

<item number="406" value="E406 Lifting and lowering 2 times to reach the position but not detected " />

<item number="407" value="E407 The small pressure plate is not put down " />

<item number="408" value="E408 The flap is not put down " />

<item number="409" value="E409 The big pressure plate is not put down " />

<item number="410" value="E410 The small pressure plate is not lifted " />

<item number="411" value="E411 The front and rear knives are not in place " />

<item number="412" value="E412 The front and rear blades are not in place " />

<item number="413" value="E413 The left and right knives are not in place " />

<item number="414" value="E414 The left and right knives are not in place " />

<item number="415" value="E415 Do not hold down the start button for a long time " />

<item number="416" value="E416 Do not hold down the clamp button " />

<item number="417" value="E417 Do not press and hold the mold feed button " />

<item number="418" value="E418 Top right position is not detected " />

<item number="419" value="E419 The support is in place but not detected. " />

<item number="420" value="E420 Top left position is not detected " />
<item number="421" value="E421 Please finish inching the laser data " />
<item number="422" value="E422 Flip and lift without retracting " />
<item number="423" value="E423 The pressing material is turned over but not retracted" />
<item number="424" value="E424 If the ADC value of the large platen is abnormal, please check. "
/>
<item number="720" value="E720 Please check V-axis or sensor " />
<item number="1000" value="E1000 Are you sure you want to delete the selected pattern?? " />
<item number="1001" value="E1001 Are you sure you want to delete the selected system pattern??
" />
<item number="1002" value="E1002 Are you sure you want to delete the selected U disk pattern??
" />
<item number="1003" value="E1003 deleted! " />
<item number="1004" value="E1004 Save completed! " />
<item number="1005" value="E1005 Saving, please wait..." />
<item number="1006" value="E1006 Deleting, please wait..." />
<item number="1010" value="E1010 First-level parameter initialization successful! " />
<item number="1011" value="E1011 Secondary parameter initialization successful! " />
<item number="1012" value="E1012 Level three parameters initialized successfully! " />
<item number="1013" value="E1013 Controller initialization successful! " />
<item number="1014" value="E1014 First-level parameters saved successfully! " />
<item number="1015" value="E1015 Secondary parameters saved successfully! " />
<item number="1016" value="E1016 Level 3 parameters saved successfully! " />
<item number="1020" value="E1020 Pattern saved successfully! " />
<item number="1021" value="E1021 Pattern saving failed! " />
<item number="1022" value="E1022 The second origin point of the pattern is saved successfully! "
/>
<item number="1023" value="E1023 Whether to exit the board? " />
<item number="1024" value="E1024 Whether to exit pattern editing? " />

<item number="1025" value="E1025 There was pattern data that was not saved before the last shutdown. Do you want to save it?? " />

<item number="1030" value="E1030 Transferring files, please wait..." />

<item number="1031" value="E1031 Calculating, please wait..." />

<item number="1032" value="E1032 Calculation completed " />

<item number="1033" value="E1033 Transfer completed " />

<item number="1050" value="E1050 old password " />

<item number="1051" value="E1051 New Password " />

<item number="1052" value="E1052 Confirm the new password " />

<item number="1053" value="E1053 Password reset complete " />

<item number="1054" value="E1054 wrong password " />

<item number="1055" value="E1055 The new password entered twice is not the same " />

<item number="1056" value="E1056 password can not be blank " />

<item number="1057" value="E1057 The new password is the same as the old password " />

<item number="1058" value="E1058 Whether to exit pattern conversion? " />

<item number="1060" value="E1060 Disconnection or disconnection detection frequency does not match " />

<item number="1061" value="E1061 Bottom line or bottom line detection frequency does not match " />

<item number="1070" value="E1070 Some solenoid valves do not meet current exit requirements " />

<item number="1080" value="E1080 Use period modified successfully " />

<item number="1081" value="E1081 Installment payment is set, but the time cannot be set " />

<item number="1100" value="E1100 Incorrect selection location. " />

<item number="1101" value="E1101 Logo set successfully! " />

<item number="1102" value="E1102 Failed to set logo! " />

<item number="1103" value="E1103 Are you sure to upgrade the touch screen system?? " />

<item number="1104" value="E1104 No upgrade file found, please confirm that the upgrade file exists on the USB flash drive. " />

<item number="1200" value="E1200 There are %d days left before the license expires, please contact the manufacturer for payment. " />

<item number="1201" value="E1201 Please turn off the power and turn it on again " />

<item number="1300" value="E1300 Upgrading, please wait..." />

<item number="1301" value="E1301 Upgrade completed, please power off and then on again " />

<item number="1302" value="E1302 Upgrade failed, please check the upgrade file " />

<item number="1303" value="E1303 Please turn off the power first and then on again " />

<item number="1304" value="E1304 Please turn off the power first and then on again to complete the screen calibration. " />

<item number="1305" value="E1305 Please insert the USB flash drive containing the logo image file first. " />

<item number="1306" value="E1306 BMP image file not found in USB flash drive, please confirm " />

<item number="1307" value="E1307 Program backup completed..." />

<item number="1308" value="E1308 Program recovery is complete, please turn off the power first and then\npower on again " />

<item number="1309" value="E1309 Parameter backup completed..." />

<item number="1310" value="E1310 Parameter recovery completed " />

<item number="1311" value="E1311 Backup file not found, please check " />

<item number="1312" value="E1312 Capacitive screen, no correction required " />

<item number="1313" value="E1313 Calibration failed " />

<item number="1314" value="E1314 Backup failed " />

6 wind the bobbin thread

As shown in Figure A, click the origin button, then click the bottom line button to enter the winding interface, take out the bobbin and put it on the winding post (Figure 1), and put it on the winding post.

The bottom thread passes through the wire mouth and the wire clamp in turn (Figure 2). →
Winding the bobbin counterclockwise for several times (Figure 3) → Put down the lock (Figure 4) →
and take off a few stitches to prevent winding (Figure 5). → Start the device (Figure 6) →

Winding completed Click (Figure B) to exit the winding program.→ Load the bobbin and pull out the thread end (Figure 7) → Install the wire hole (Figure 8) → of the thread end piercing lock shell into the equipment (Figure 9) to finish winding the bobbin thread.

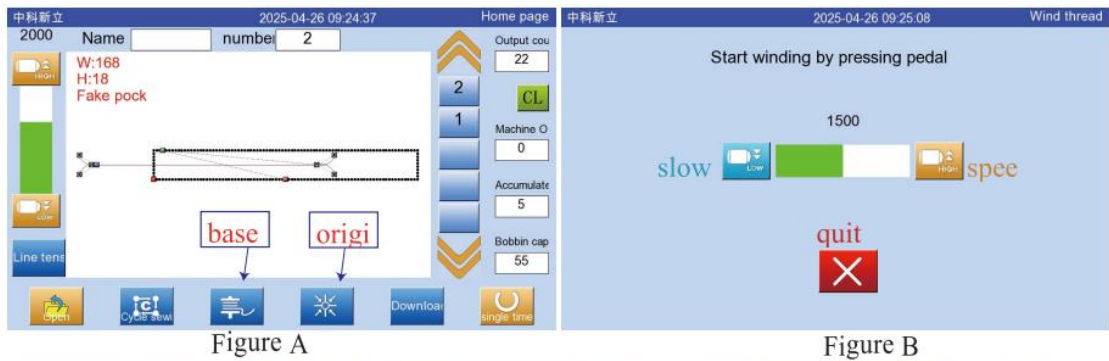


figure 1



Figure 2



Figure 3



Figure 4



Figure 5

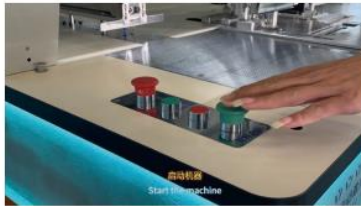


Figure 6



Figure 7



Figure 8



Figure 9

7 thread the needle

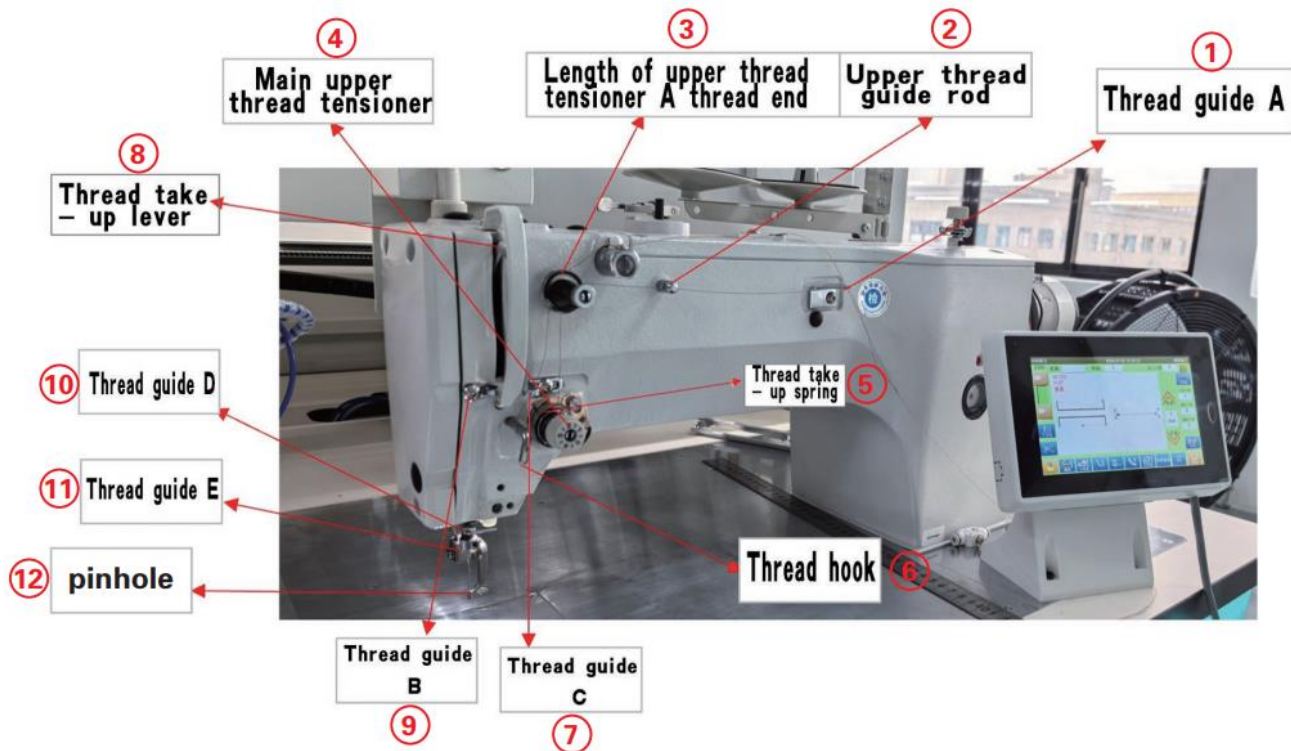
As shown in Figure 1, take out the upper thread to be replaced and put it on the bobbin. Then, as shown in Figure 2, thread it through the wire hole of the bobbin from the back, and then thread it through the thread guide A in turn. ①→ Top thread guide rod ②→ Face wire clamp A ③→ Top thread main thread clamp ④→ jumper reed ⑤→ Line crossing hook ⑥→ Wire feeder c ⑦→ Jumper bar ⑧→ Wire feeder B ⑨→ Wire feeder D ⑩→ Wire feeder E ⑪→ pinhole ⑫



figure 1



Figure 2



8 Air pressure value

Front and rear folding knives: 0.3 Mpa (the fabric is thick/hard and needs to be slightly adjusted)

Left and right folding knives: 0.3 Mpa (the fabric is thicker/stiffer and needs to be slightly increased)

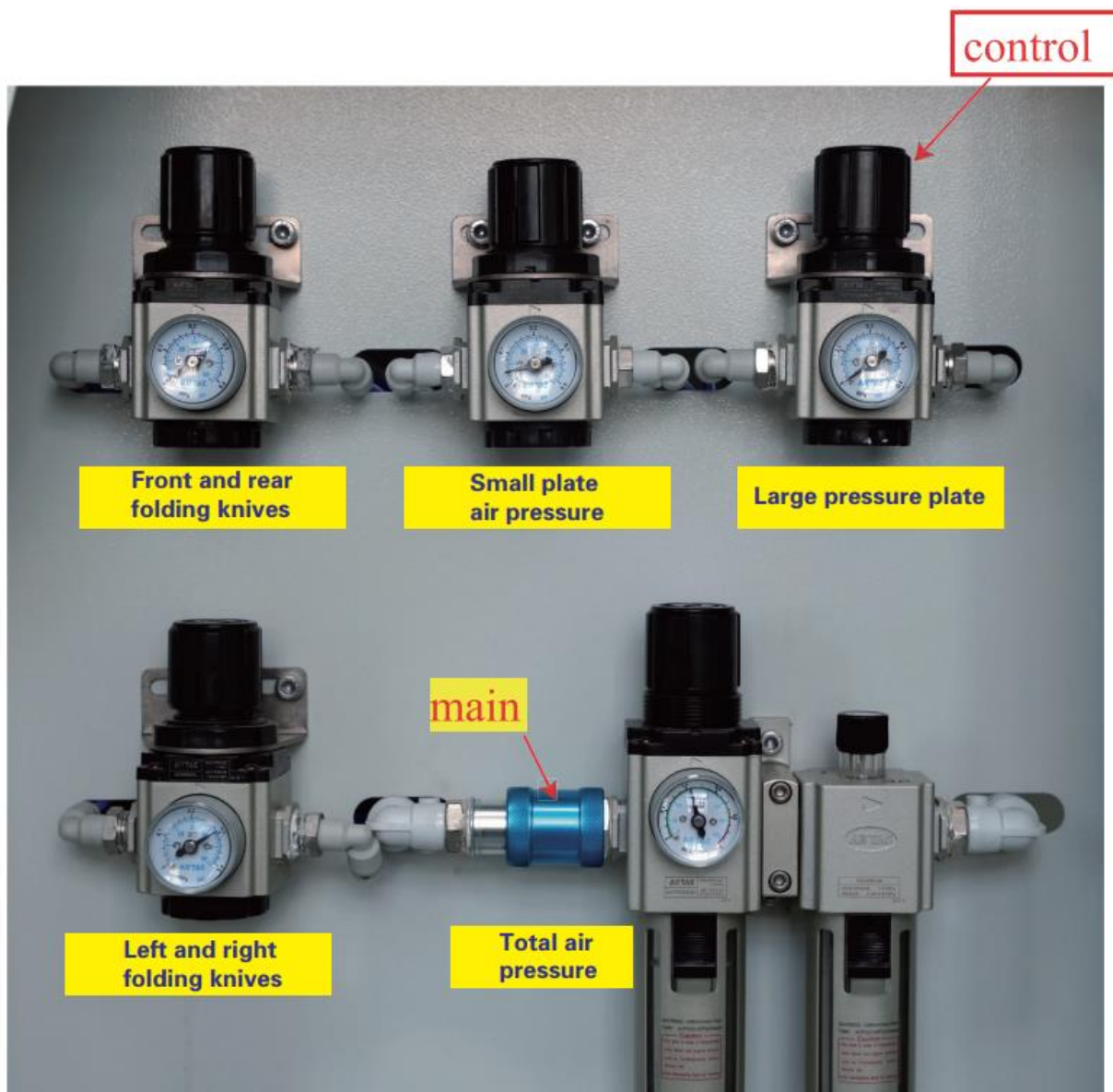
small board air pressure: 0.1~0.2 Mpa (slightly less than the air pressure of large platen)

Large pressure plate: 0.1~0.2 Mpa

Total air pressure: 0.4~0.7 Mpa (equipment below 0.4Mpa cannot work)

Cylinder master valve: on/off

Adjustment method of air pressure value: pull up the regulating valve and rotate it clockwise or counterclockwise to adjust the air pressure.



9 Power supply connection

The machine works entirely on power supply.

The cable is connected to a two-phase 220V-50Hz power socket;
Before installation, check the power of the grounding system
connected to the machine; The power supply reaches 2kW.



Figure 1

10 Pneumatic system connection

When the machine is connected to the external air pressure outlet, ensure sufficient air flow. can ensure that the actuator maintains a constant pressure of 0.7MPa(7 standard atmospheres),

Check that the pressure regulator "P" is adjusted to 0.7Mpa (Figure 2).



Figure 2

Installation attention

The machine must only be installed by professionals.

The manufacturer cannot be responsible for any property or personal loss caused by improper installation of the machine. These installation errors are mainly due to non-compliance with instructions and failure to meet the main connection requirements.

Note: If the machine is installed on a suspended surface, check whether the surface can bear the weight of the machine. There should be no inflammable or explosive materials or objects in the area where the machine is located. A space of 1 meter must be left around the machine to operate and maintain the machine. The machine must be placed on a hard and flat surface. Turn the nut of the anchor (Figure 3) to adjust the height.



Figure 3

11 Pedal connection

Find the link port of the foot switch at the position indicated by 1 on the left side of the equipment, insert the foot switch into the interface correctly, rotate ② clockwise to lock the link, and find the control line of the foot pedal on the motor motherboard, as shown in Figure 3, which is the factory default link mode. When the red line is connected to 3, the foot pedal controls the expansion and contraction of the blocking material. When the red line is connected to 4, the foot pedal controls the lifting and lowering of the small board, and the user can choose according to the actual production requirements.



figure 1



Figure 2

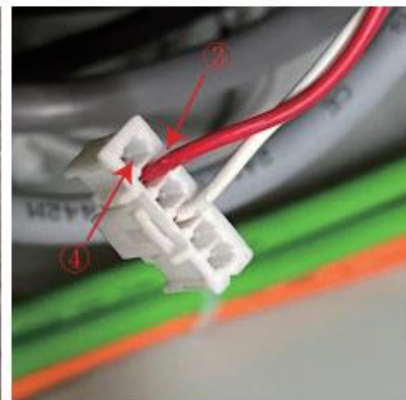


Figure 3

12 choices of language

As shown in the figure, in the control panel, click the folder option (Figure 4), click the auxiliary function shown in Figure 5, and then click the language selection (Figure 6) to select the preset required language in the system to complete the language setting.

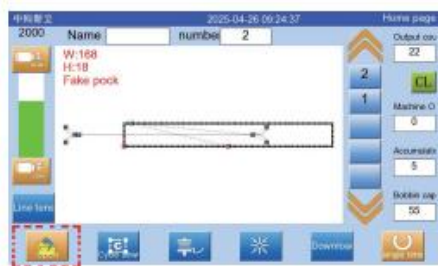


Figure 4



Figure 5



Figure 6



13 infrared rays

As shown in the figure, the fixing method of infrared ray is controlled by three fixing screws.

- ① Control the left and right direction of infrared rays;
- ② Control the front and back direction of infrared ray;
- ③ Control the infrared rotation direction.



14 Laser

The laser debugging method of Zhongke Xinli full-automatic laser bag opener includes the following specific steps:

1. Rear reflector adjustment: open the rear backboard of the fuselage, block it in front of the reflector with a PVC transparent plate (Figure 1), click the laser (Figure 2), if the burning position is not in the center of the small circle (Figure 3), adjust the slider from left to right, and tilt three positioning screws up and down (Figure 4) until the burning position is in the middle.



figure 1



Figure 2

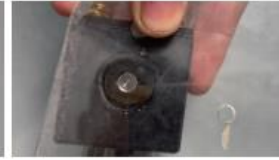


Figure 3



Figure 4

2. Adjustment of the front reflector: place the PVC plate in front of the front lens (Figure 5), click the laser (Figure 6), and adjust the three positioning screws behind the lens (Figure 7) to center the burning position when observing the deviation of the burning point.



Figure 5



Figure 6

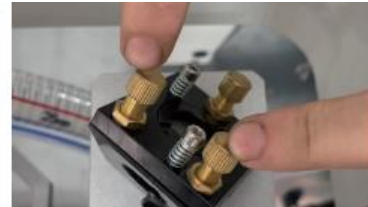


Figure 7

3. Debugging of the focusing cylinder bracket and the smoke exhaust hole of the machine: put the PVC board above the focusing cylinder bracket and the smoke exhaust hole of the machine in turn, and check the burning position. is centered.



4. Install the focusing cylinder: insert the top of the focusing cylinder into the upper sleeve without gaps, and lock the screws. Tape the bottom, and turn on the laser to see if the burning position is centered.



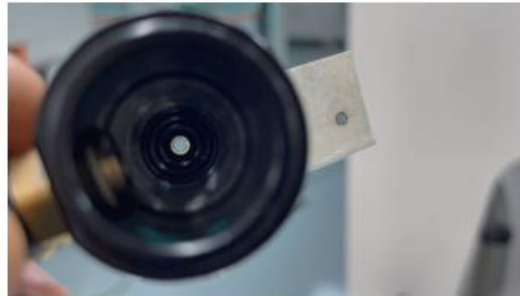
5. Install the focusing lens: screw the screw groove face down to the lens, install the lens with the concave surface facing up, tighten the other screw groove face up, and install it in the focusing cylinder clockwise, and stick adhesive tape below to observe the burning position.



6. Fine adjustment of smoke outlet: put cardboard on the smoke outlet, observe the edge of the burning hole, and adjust the positioning screw of the upper reflector if it is not smooth.



7. Install the laser cutter head: Stick the adhesive tape under the cutter head, click the laser and take it off, observe the burning hole from the inside, and repeat the above steps for fine adjustment if it is not centered.



8. Measurement and fixation:

As shown in Figure 1, the distance from the laser focusing lens to the table top is about 76.2 mm. If there is any deviation, the overall height of the lens can be adjusted through the condenser bracket Figure 2. The focusing lens belongs to the lens and needs to be disassembled and wiped every certain time. When installing, be sure to pay attention to the concave-convex surface of the lens, as shown in Figure 3, the convex surface is upward and the concave surface is downward.

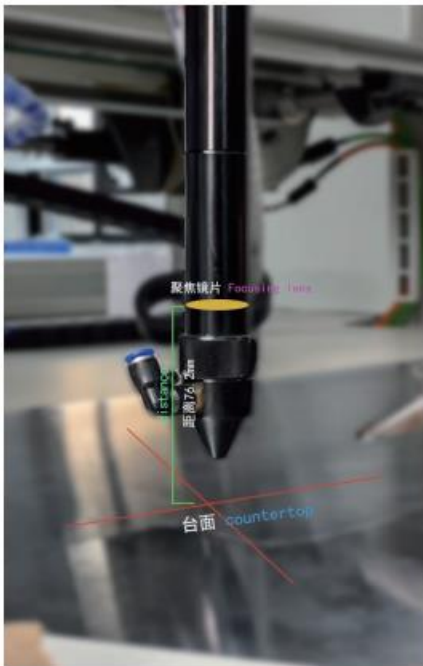


figure 1



Figure 2

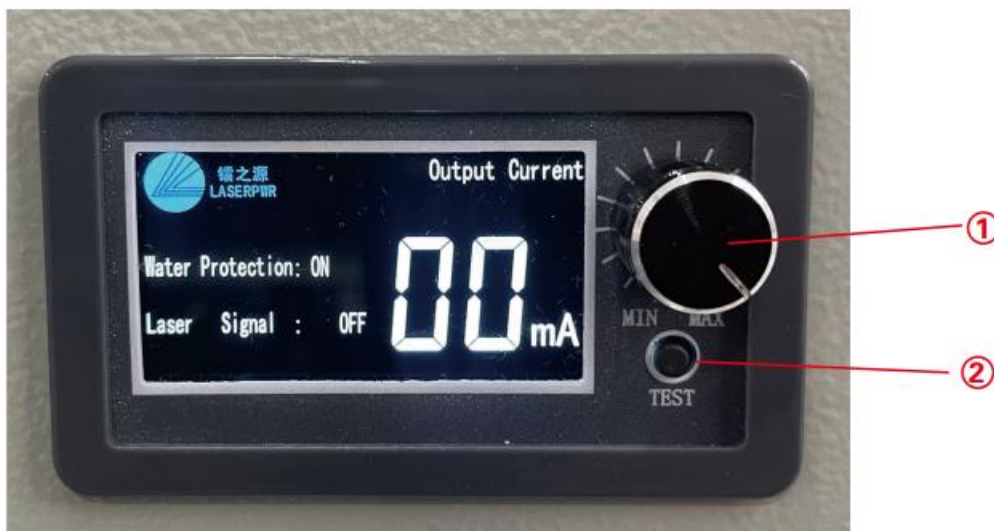


Figure 2

9. Installation of pipeline: Install the suction pipe and cooling pipe to complete laser debugging.



15 Laser parameter setting



① The current damper can adjust the magnitude of the laser current (the greater the current, the stronger the laser).

② Laser testing

When dealing with fabrics that are difficult to cut, we need to slow down the laser or increase the number of cutting passes. This requires making corresponding adjustments to the laser settings. Conversely, when dealing with fabrics that are easier to cut, the opposite approach can be taken. Let's take [specific fabric] as an example.

Adjust the stitch length: In the settings of the digital pattern-making, slightly reduce the value of the laser stitch length. (The smaller the laser stitch length, the denser the laser cutting will be.)

Bartack	DOWN	UP	Stitch	2.0	Laser stitch 1	2.0	←	→	✕	📖
			er staggered stitches	0	Laser stitch 2	3.0				
			t Start Needle Count	0	repeat End Pin Count	0				

If, after performing the above settings, the fabric is still difficult to cut through completely, we need to reduce the laser cutting speed to ensure the laser's dwell time. We just need to set the "Laser Intensify" option to "Yes".

Left offset	0	Right offset	0	Laser cutting speed	1500	←	→	✕	📖
Per offset	0	Down offset	0	ser accelerate needle	5				
fix needle	0	h number 2	0	aser minimum speed	500				

If, after the above setting operations, the fabric still cannot be cut through easily, we need to enable the laser enhancement function, that is, perform reciprocating cutting. We only need to set the laser enhancement option to "Yes".

Laser height	6.0	Slot width	1.2	of baffle plate	2.5	←	→	✕	📖
Laser width	10.0	Laser enhance	no	litch velocity	1200				
down jacket	no	Down jacket type	Type 1	Type 2					

16 Mold replacement

16-1 Die Replacement for Large Plate Block

1. Disassembly step

Click the "Lift Small Press Plate" button on the control panel. Using the corresponding Allen wrench, carefully unscrew the three fixing screws of the small pressure plate, and place the removed screws properly to avoid losing them.



Unscrew the four screws of the protective plate in turn, and gently take out the protective plate. At the same time, gently lift the spring tablets on both sides by hand and take out two blanking baffles respectively.



Find the four fixing screws of the small tablet below and unscrew them in sequence. Click "big tablet" on the control panel, lift the big board, and take out the small tablet from below, thus completing the disassembly of the big board module.



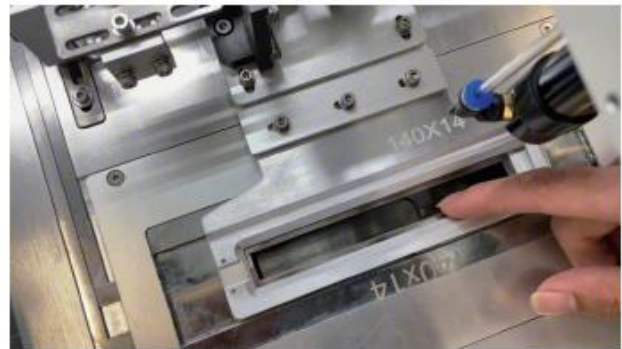
2.Installation Steps

Take out the mold to be replaced, accurately put the small tablet into the corresponding slot, and then tighten the four fixing screws in turn to ensure that the lower tablet is firmly installed.

Drop the big board, and put the two blanking baffles into the corresponding slots respectively.

Click "Fixed Material Baffle" on the control panel to check whether the opening and closing are smooth, and then click again to lift the small pressure plate. Put the protective plate into the corresponding slot and lock the four fixing screws in turn.

Click "Small Plate Lifting" on the control panel to lift the small pressure plate, put the small pressure plate on the corresponding slot, and pay attention to the center alignment of the edge of the inner frame of the small pressure plate with the corresponding material-fixing baffle as shown in the figure, and finally tighten the three fixing screws. Installation of the large plate module mold is completed.



16-2 Die Replacement of Folding Knife Block

1. Disassembly step

With the corresponding Allen wrench, unscrew the four fixing screws of the folding knife in turn and take off the four folding knives.



2.Installation Steps

Install four folding knives into corresponding positions respectively. The installation standard is that when the folding knife is closed, the peripheral edges should be in a straight line (Figure C). If the position is deviated, the specific position of the folding knife can be adjusted by the corresponding sliders of the folding knife (Figure A). Enter the "material taking test" to make the big board come under the folding knife, and the gap between the folding knife and the fixed material stopper should be

Depending on the actual fabric thickness (Figure B).

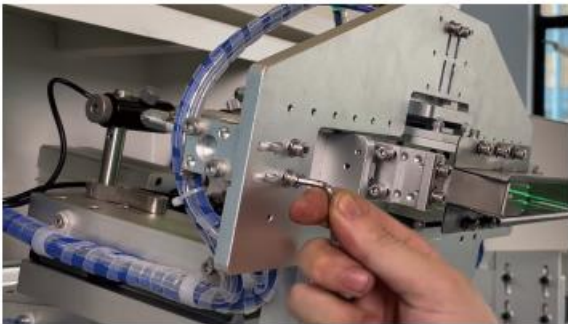


Figure A

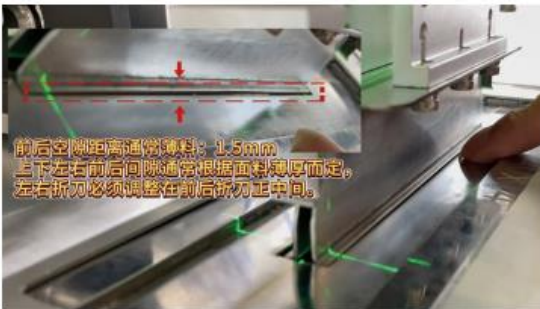


Figure B

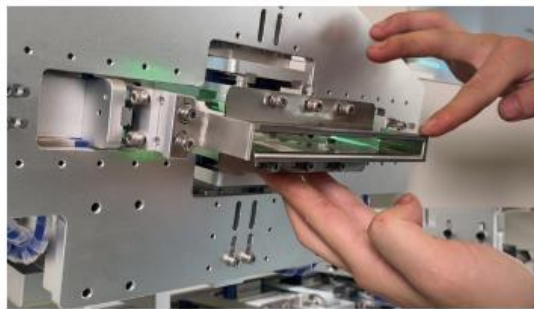


Figure C

The falling height of the folding knife depends on the thickness of the fabric (Figure D), and it can be adjusted by loosening the screw above the cylinder (Figure E). If it is necessary to adjust the lifting height of the four folding knives as a whole, it can be adjusted by adjusting the atmospheric lever (Figure F), and the folding knives can be installed.

After completion, wait for the material taking test to come to Step 18 (Figure G), and adjust the positioning light to the required position by combining with infrared adjustment.

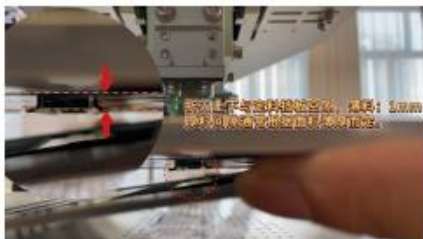


Figure D



Figure E



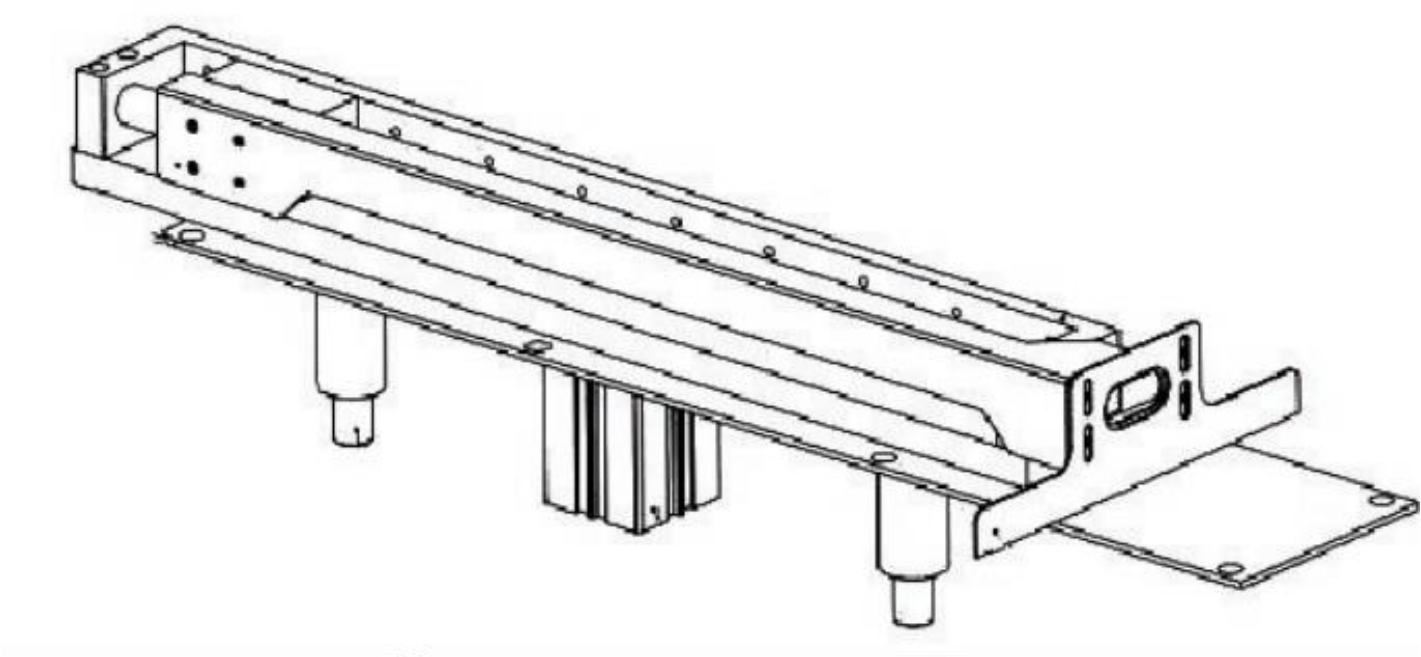
Figure F

According to the actual demand, the components are fine-tuned in combination with the control panel, and the relevant parameters of the opening are set.



Figure G

17 Retractable materials stop



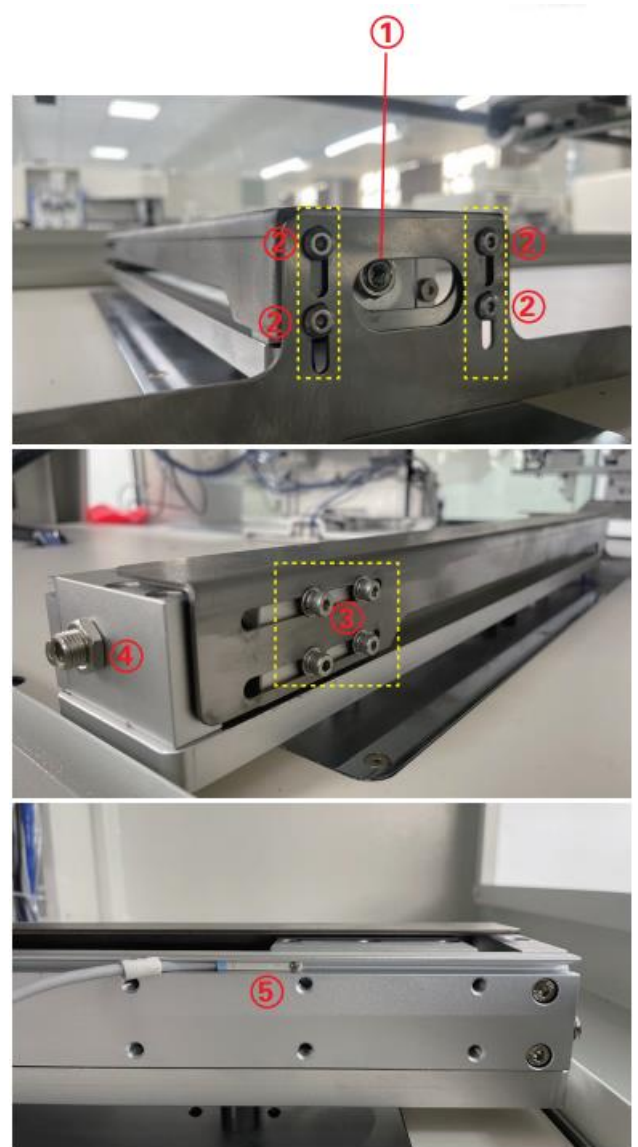
① Control the telescopic length, which is suitable for fine-tuning the front and rear distances.

② Control the inclination and drop of the material baffle.

③ Control the front and rear positions of the telescopic cylinder. When the length of ① fails to meet the production requirements, you can use these four screws to assist in adjusting the front and rear positions of the cylinder. Generally, it is rarely used for adjustment.

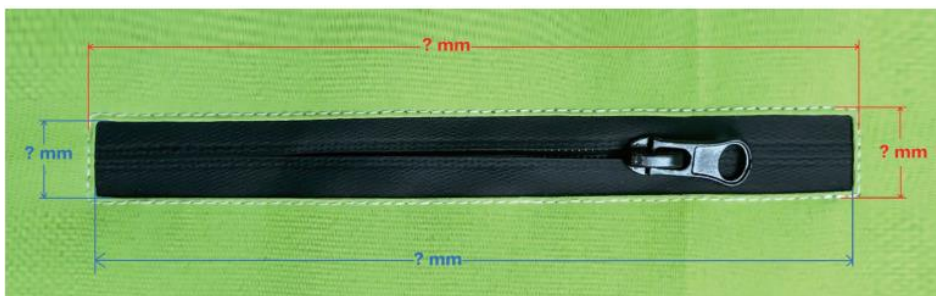
④ It is used for reinforcing the rear of the retractable material stop cylinder.

When the position of the cylinder in item ③ changes, the position of the sensor in item ⑤ should also be changed accordingly.



18 Customized Molds

Before customizing a mold, it is necessary to accurately measure the dimensions of the finished product's pocket, as shown in the figure below. Understanding the size of the rabbet (flange) will facilitate the determination of the dimensions for each part of the mold. Generally, the inner frame dimensions of the small pressure plate and small pressure piece are determined by the size of the stitching, while the size of the rabbet determines the inner frame dimensions of the material positioning baffle when closed, as well as the dimensions of the folding knives on all four sides (front, back, left, and right). Additionally, it is essential to specify the type of fabric (thick or thin) and its exact thickness in millimeters.



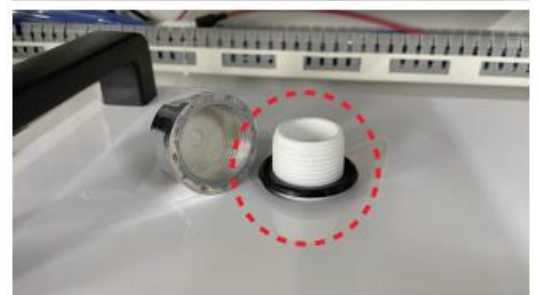
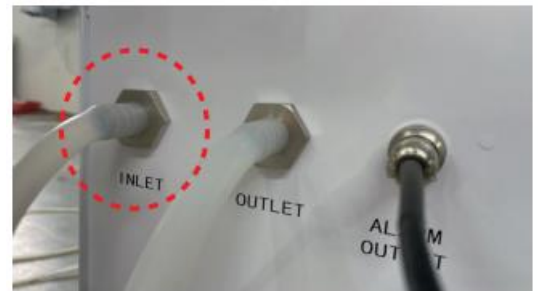
19 Replacement of the laser cooling liquid

When the ambient temperature is lower than 0°C, the laser cooling liquid needs to be replaced with antifreeze to prevent the laser tube from cracking due to the cold. The specific method is as follows:

19-1 When the machine is in the shutdown state, open the side door of the machine body, locate the INLET of the laser water tank, pull it out, and place the removed silicone tube into a water container.

19-2 Subsequently, turn on the main power supply of the machine. At this time, the water will flow into the container. Wait until the equipment emits a water shortage alarm sound, and then turn off the power switch. Put the silicone tube back in place and fix it with a cable tie.

19-3 Locate the water injection port on the top of the water tank, unscrew the lid, pour the cooling liquid into the water tank. The amount of addition is approximately 5 liters. After the liquid injection is completed, tighten the lid, and the replacement of the cooling liquid for the laser tube is finished.



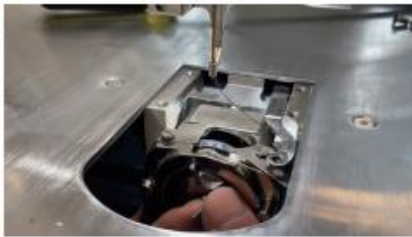
20 Shuttle adjustment

I. Preparations

Before adjusting the shuttle, please turn off the power supply of the equipment to ensure safe operation. Prepare necessary tools, such as screwdriver. Second, the adjustment steps

1. Disassembly: Remove the face cover to confirm the height of the needle bar. Then remove the four fixing screws of the needle plate, take off the needle plate, and then loosen the two fixing screws of the distributor.

Pull the splitter back and push it back, and then take off the shuttle shell. Drop the presser foot and take off the thread, and then remove the outer cover of the big bed and the shuttle.



2. Confirm the needle height and spacing: adjust the needle height so that the upper end of the needle threading hole is flush with the upper end of the horn, which is the lowest point of the needle bar. Confirm that the distance between the needle and the horn is 0.01-0.08mm.



3. Install the shuttle and confirm the hook position: install the shuttle and adjust the hook position of the shuttle so that the shuttle hook is 1 mm (1-1.5 mm is also acceptable) at the upper end of the needle threading hole.



4. Adjust the distance between the needle and the shuttle: loosen the fixed screw of the shuttle, adjust the eccentric screw with a flat screwdriver, and screw it to the right, so that the needle gauge between the shuttle and the shuttle becomes smaller; Turn it to the left, and the spacing becomes larger. Adjust the spacing to 0.01-0.08mm, and lock the fixing screws after adjustment.



5. Adjust the hook position of the machine needle before and after rotating the shuttle: loosen the fixing screw on the horn and adjust the hook position before and after swinging the shuttle, so that when the needle bar of the machine needle rises, the distance between the upper end of the machine needle hole and the upper end of the swinging shuttle is 1 mm. After adjustment, lock the horn screw and confirm the hook position repeatedly.



6. Installation parts: first install the swing arm outside the big bed and fasten the locks on both sides. Install the wire divider again, first push the wire divider backward, then push the needle forward after turning down, so that the triangular edge of the wire divider and the needle gauge of the machine are 1 mm (1-1.5 mm is acceptable), then lock the fixing screw and confirm whether it collides with other objects. Then install a big chopping block to ensure that the top column of the moving knife is consistent with the top column of the thread cutting pull rod, put it flat, and then put it back and lock the four fixing screws. Finally, cover the upper cover and replace the shuttle shell.



Third, matters needing attention

1. During the adjustment, the operation should be careful to avoid damaging the equipment parts.
2. After the adjustment is completed, it is necessary to check whether the components are installed firmly and the hook position is accurate again, and then turn on the power supply for commissioning after confirmation.

21 Alignment position

1. Preparation: Just after replacing the mold, prepare the needle position operation in combination with the sewin procedure.
2. Check the gap between presser foot and small pressure plate.

Start the machine, enter the sewing interface, click Fast Forward, find the first point after the laser passes through the big board and reaches the sewing position, click the presser foot button to make the presser foot fall, and observe whether there is a gap between the presser foot and the small platen to ensure that the presser foot does not touch the small platen.



In the same way, check the clearance between the presser foot and the small pressure plate at the second corner, the third corner and the fourth point in turn, as long as the needle does not touch the small pressure plate. Because the blanking baffle is open during sewing, it is necessary to ensure a gap.



3. Complete the operation of needle position: after all four points are checked correctly, click OK, lift the presser foot and click the reset button.
4. Sew the sample pocket and adjust the parameters: after the reset is completed, sew a sample pocket and adjust the relevant parameters of the data board according to the actual effect.

22 Pirate installation

22-1 Hardware installation

Click the flap button in the sewing interface to make the flap go to the closed position, install the bracket on the flap module, and ensure that the bead is centered on the small pressure plate. If there is any deviation, loosen the four fixing screws for fine adjustment, and then remove the middle presser foot.



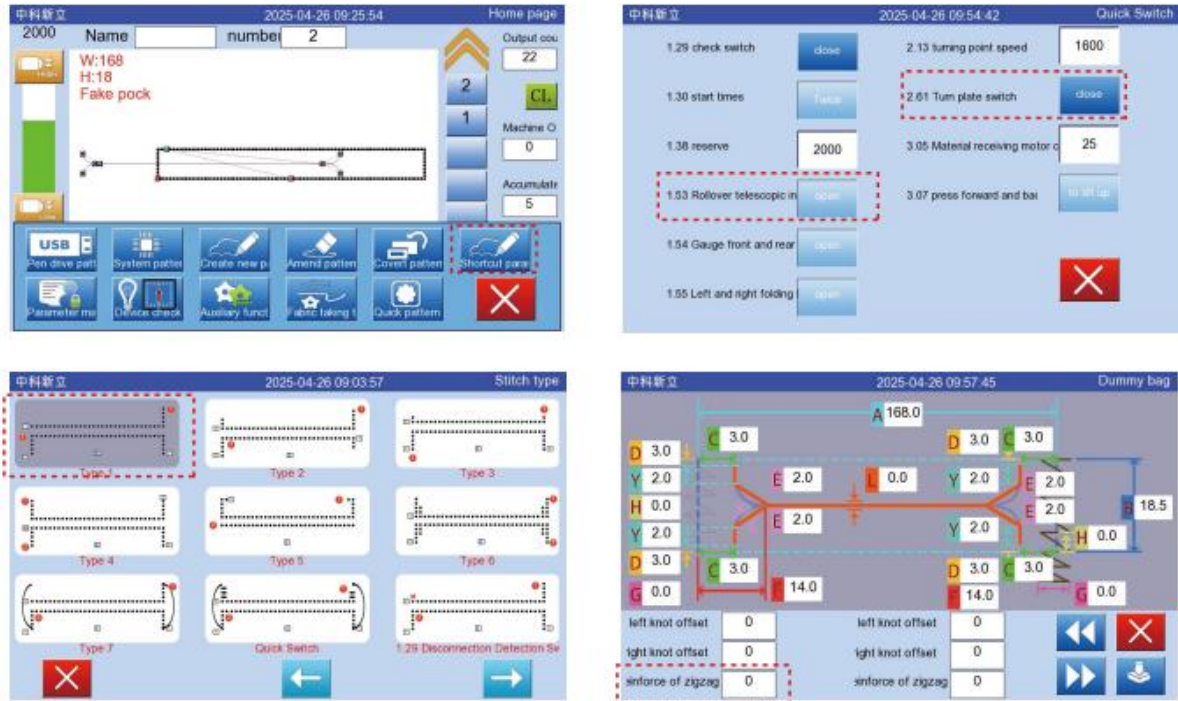
- Click the middle presser foot button on the control panel to drop the presser foot, unscrew

22-2 System Settings

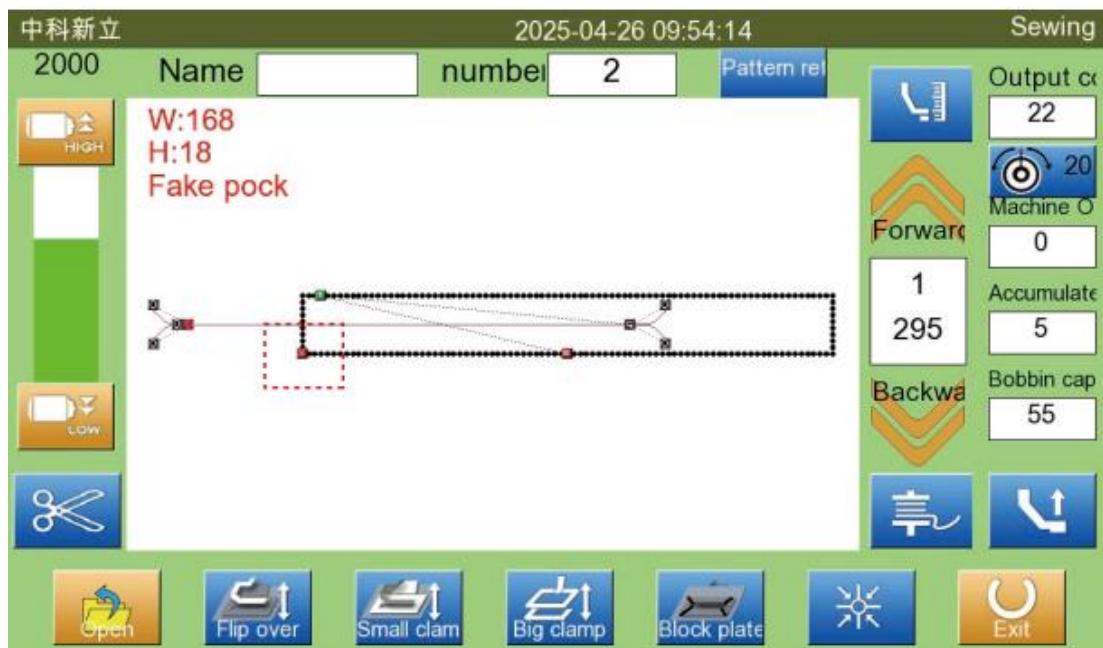
In the control panel, click menu options, parameter management, and three-level settings. The password defaults to 123456. Find the presser foot motor switch in item 19 in the options bar, close it, save it and exit.



- Click the menu option from the homepage, and then click the shortcut parameter to open the two flip options 53 and 61. Enter the data printing option, and select the No.1 stitch type for both the fake bag and the real bag and save it. If it is a real bag, enter the data typing again and change the number of fixed lip stitches to 0.



3. Function view: After setting, you can see the red logo of the function of returning the plate in the lower left corner of the schematic diagram after saving (the number of fixed lip needles for real bags needs to be adjusted to 0), so the installation and setting of the flap are completed, and the flap function can be used normally.



23 Material folding emergency stop start

First, the folding stop button

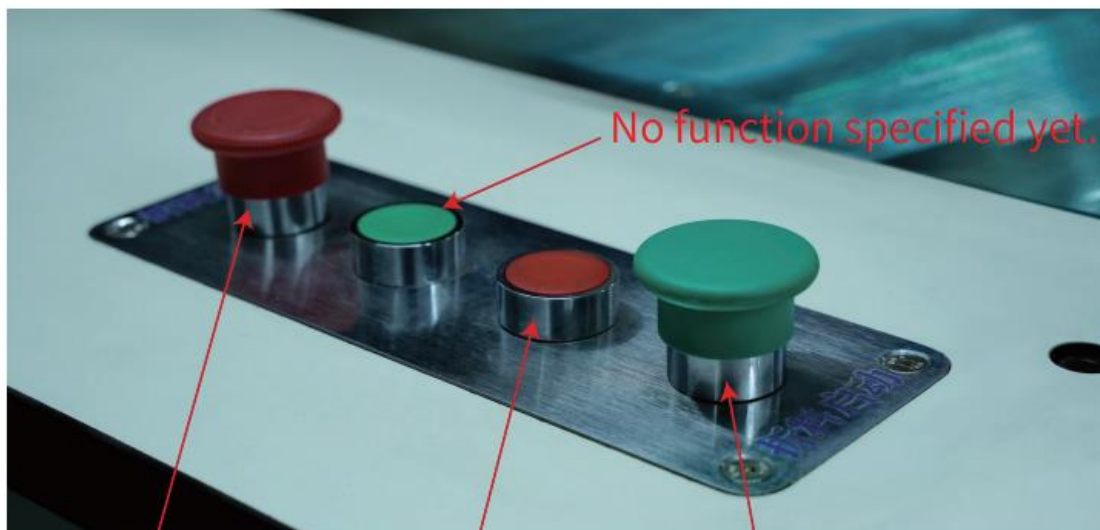
1.Function: In the folding process, if it is found that the folding material is not folded well or the laser cutting effect is not good, you can directly press the folding emergency stop button and the machine will stop working immediately.

2.Reset operation: after pressing the folding emergency stop button, it is necessary to rotate the emergency stop button clockwise to reset. After the emergency stop button is reset and lifted, the large pressure plate will automatically reset.

3. Follow-up operation: The cloth on the machine can only be taken out after the large pressure plate is automatically reset and returned to the origin, so as to continue the follow-up operation. Second, take the material test button

1. Forward key and back key: During the material taking test, the forward key and back key are used to control the material taking action, one controls the forward and the other controls the backward.

2.Folding start key (also with the function of picking forward): The folding start key can be used as the forward key in the picking test function, which has the same function as the forward key in the picking test.



Folding material
emergency stop

Retreat

Forward/Start

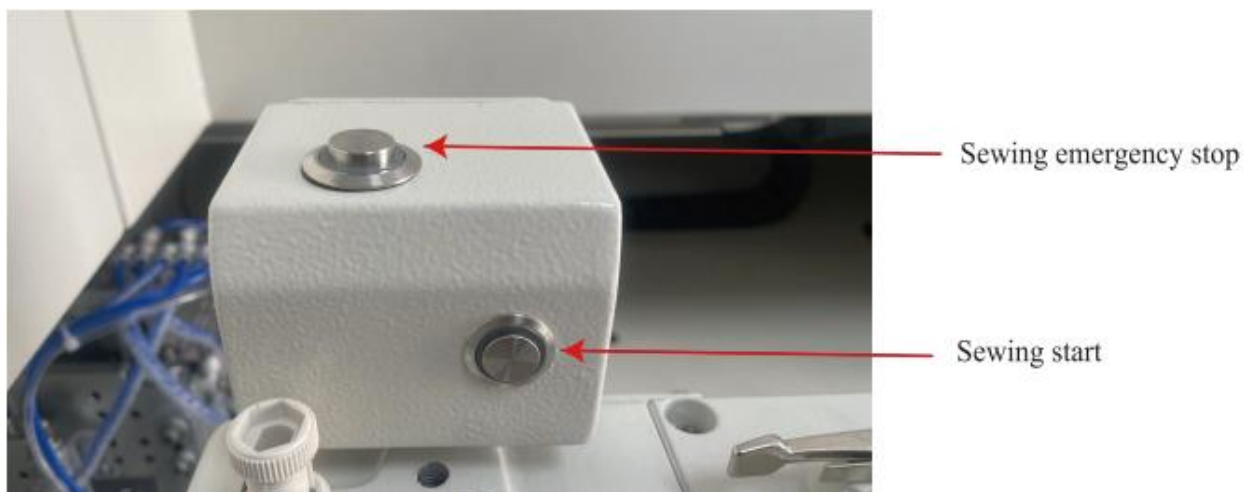
24 Sewing emergency stop start

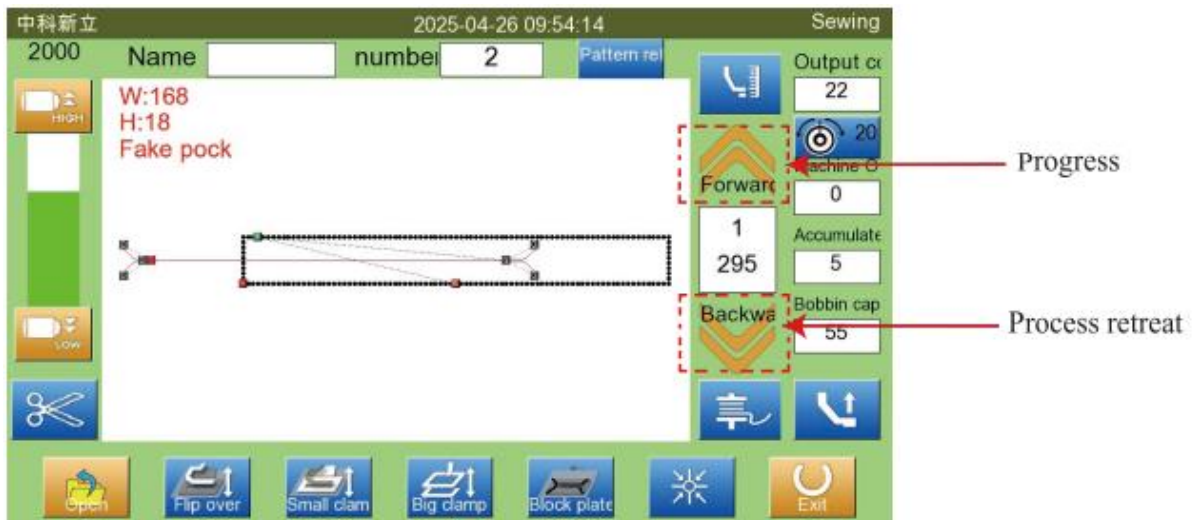
First, sew the emergency stop button

1. Function 1: Handling the situation of broken thread or no bottom thread: If you encounter the problem of broken thread or no bottom thread during sewing, press the sewing emergency stop button and the machine will stop running immediately. After that, operations such as threading and replacing the bottom thread can be completed.
2. Function 2: To deal with temporary emergencies: for example, if the fabric has been placed, the folding start button has been pressed, and laser cutting has started, but the zipper has not been placed properly (currently, the number of start times is set to one), you can press the sewing emergency stop button immediately after laser cutting to suspend the machine process.
3. Reset operation: after handling the corresponding problems (such as threading and adjusting materials, etc.), release the sewing emergency stop button. If the emergency stop is pressed due to the broken line, you need to select the "Back and Forward" option on the display screen to move the sewing position back to the original line of the broken line.

Second, sewing the start button

After finishing the above operations, press the sewing start button, and the machine will automatically continue sewing on the overlapping line; If the emergency stop is pressed due to a temporary situation, the large pressure plate will go to the next process and start working automatically after releasing the emergency stop button.





25 Solutions to Error Code E402

In the actual production process, it is common to encounter the switching between thin and thick fabrics. At this time, since the position of the lower sensor of the large pressing plate is exactly at the pressing position of the previous fabric, if it is not adjusted, the device will display an error code prompt of E402. In this case, we need to manually cancel the alarm.



Press the sewing emergency stop button to ensure the safety of the subsequent operations. Locate the square-head sensor on the left side of the large pressing plate. This sensor detects the falling position of the large plate. Use the corresponding flathead screwdriver to loosen the fixing screws of the sensor.



Move the sensor up or down to an appropriate position. At this time, the light of the sensor will turn on. Then, use a screwdriver to tighten the fixing screws of the sensor. After that, click the "Confirm" button on the control panel to cancel the alarm.

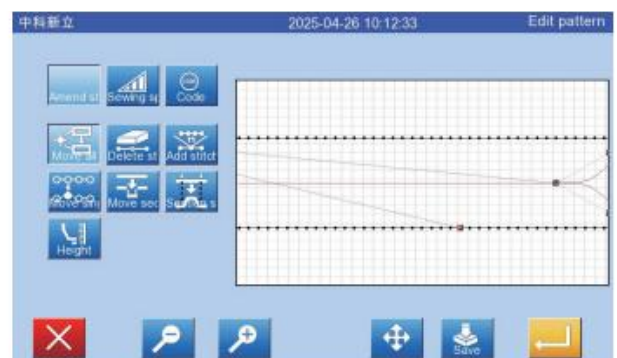
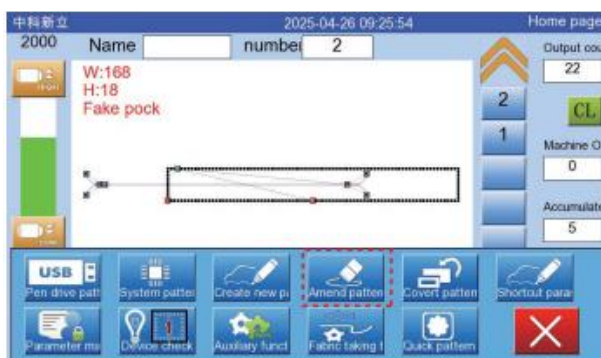


Release the sewing emergency stop button, press the start button again, and the device will resume the previous sewing operation to complete the sewing of the pocket.



26 Modify the pattern

Modifying patterns will be encountered in daily operations. In the face of special process requirements, patterns and lasers can be modified intuitively by modifying patterns, and operations such as overall movement, needle deletion, needle addition, point movement and area modification can be carried out according to actual production requirements.



27 Open screen

Modification

Open screen

Modification

Cut the designed picture into 1209x600 pixels with a resolution of 100dpi, and set the file format as bmp.

Store the file in a blank USB flash drive, plug it into the USB interface on the side of the display screen, and click it in turn on the control panel (as shown in the figure). When the file is saved successfully, pull out the USB flash drive, restart the device, and the screen opening screen will be modified.



Control panel name modification

Create a text document on a blank USB flash drive (Figure 1), open it, type in the application language in Figure 3 in turn, modify the text information marked in the wireframe, click Save, close the document, and change the file name and file suffix to "custom.xml". At this time, the file icon will become the shape shown in Figure 2. Insert the USB flash drive into the USB interface at the side of the display screen, and the system will automatically identify and modify the manufacturer name, and then pull out the USB flash drive.



Figure 1



Figure 2

```
<?xml version="1.0" encoding="utf-8"?>

<custom>
<app_name show="1" name="中科新立" pos="10,6,460,40" color="#ffffff" font_size="24" />
<title show="1" pos="730,6,1010,40" color="#ffffff" font_size="24" />
<time show="1" pos="470,10,720,40" color="#ffffff" font_size="24" />

</custom>
```

28 Care and maintenance

When replacing machine parts, maintaining or disassembling the machine, the power supply and air pressure source must be disconnected. Only professionals can perform the following operations.

1. motor cleaning

Disassemble the air pipe regularly and clean the motor with the air nozzle.

2. Needle plate cleaning

Loosen the screw (Figure A), then clean the needle board and restore it.

3. Rotary shuttle lubrication

Regularly check the lubricating oil level in the oil tank (Figure B) and top it up with white oil if necessary.

4. Belt tension

After six months of running-in, the X-axis and Y-axis synchronous belts need to be checked for tension, and the tension needs to be adjusted if it is slack.

In case of tooth jumping and mold collision.

5. Guide rail maintenance

After the equipment runs for three months, it is necessary to clean the linear hairs and black sludge around the guide rail and slider on the equipment with an air gun and a rag, and apply Mobil No.2 grease or grease with better performance again. In the process of use, the inspection and maintenance shall be carried out in a three-month cycle.

6. Screw fastening

All screws need to be checked and tightened after the equipment has been running for two months.

Solid, in case of looseness, affecting equipment production; Check the locking screws of all cylinder throttle valves to prevent the fastening screws from loosening and the cylinder speed from changing, which will affect the cooperation of the whole machine.

7. Wire wool cleaning

After the equipment runs for three months, it is necessary to control the electric cabinet, air suction components, air.

Clean the thread hairs in the fan and other positions to avoid blocking and affecting heat dissipation.

8. Table cleaning

Keep the countertop clean at any time, free of foreign objects and stagnant for a long time. It is necessary to wipe sewing machine oil on the countertop for maintenance.

9. Anti-freezing measures

In cold areas, when the room temperature is below 0 degrees Celsius, the laser tube needs to be replaced with antifreeze to prevent the laser tube from cracking due to cold freezing.

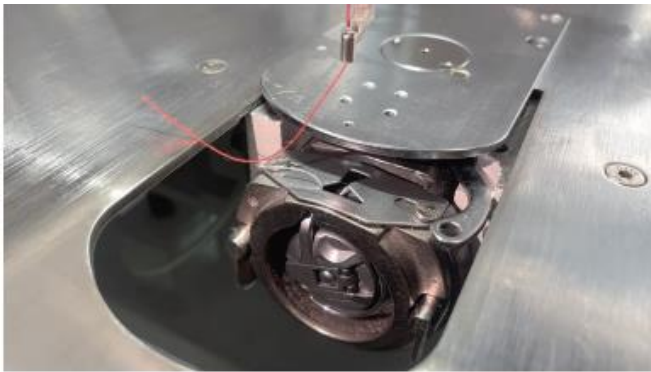


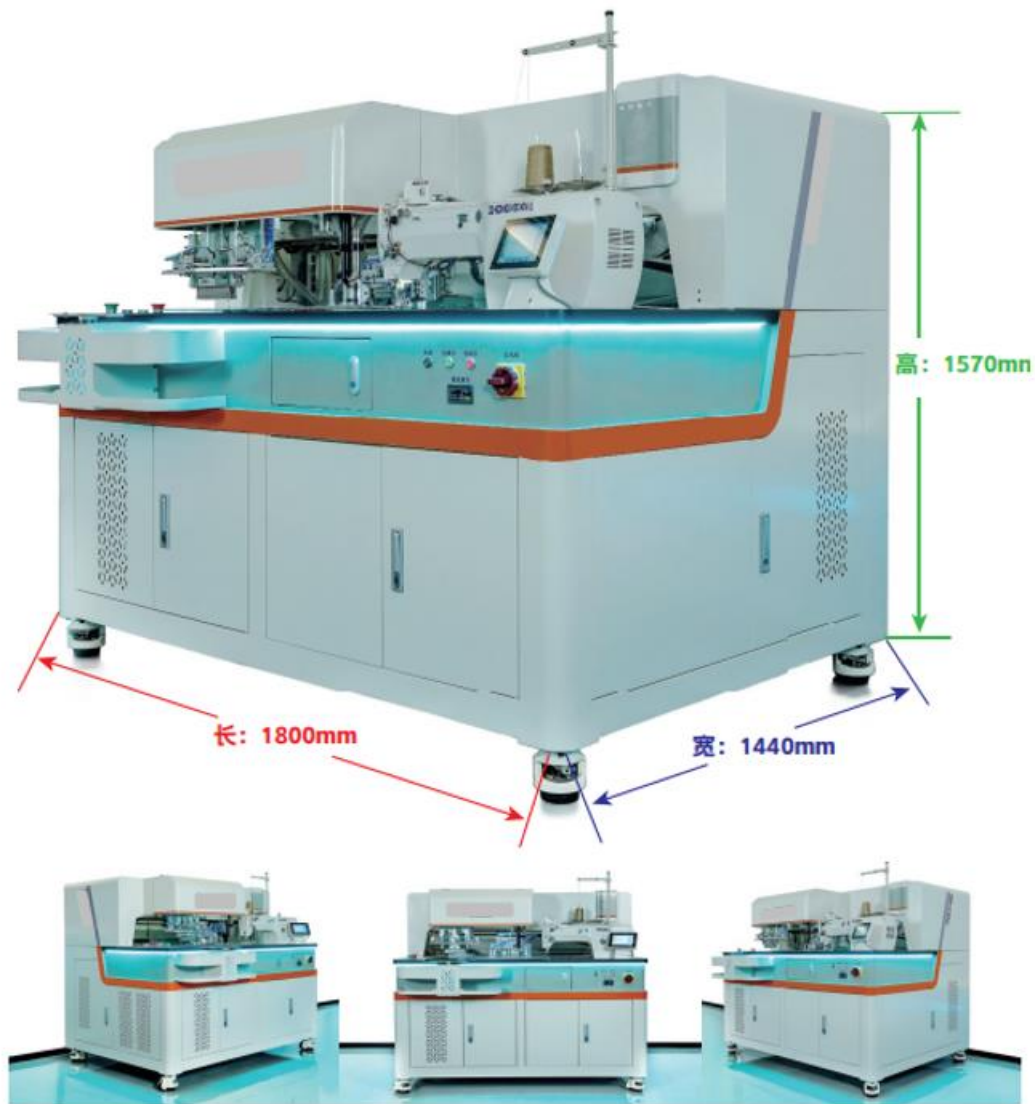
Figure A



Figure B

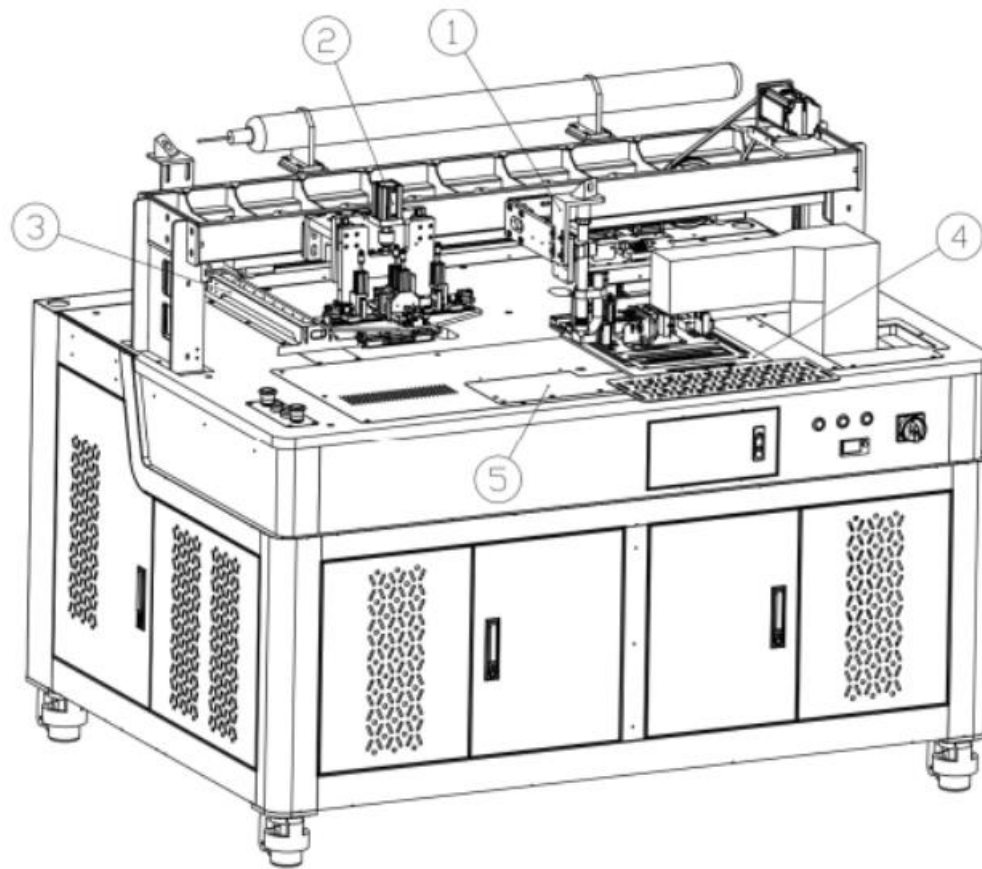
Outline and dimensional diagram

Automatic Laser Bag Opening Machine



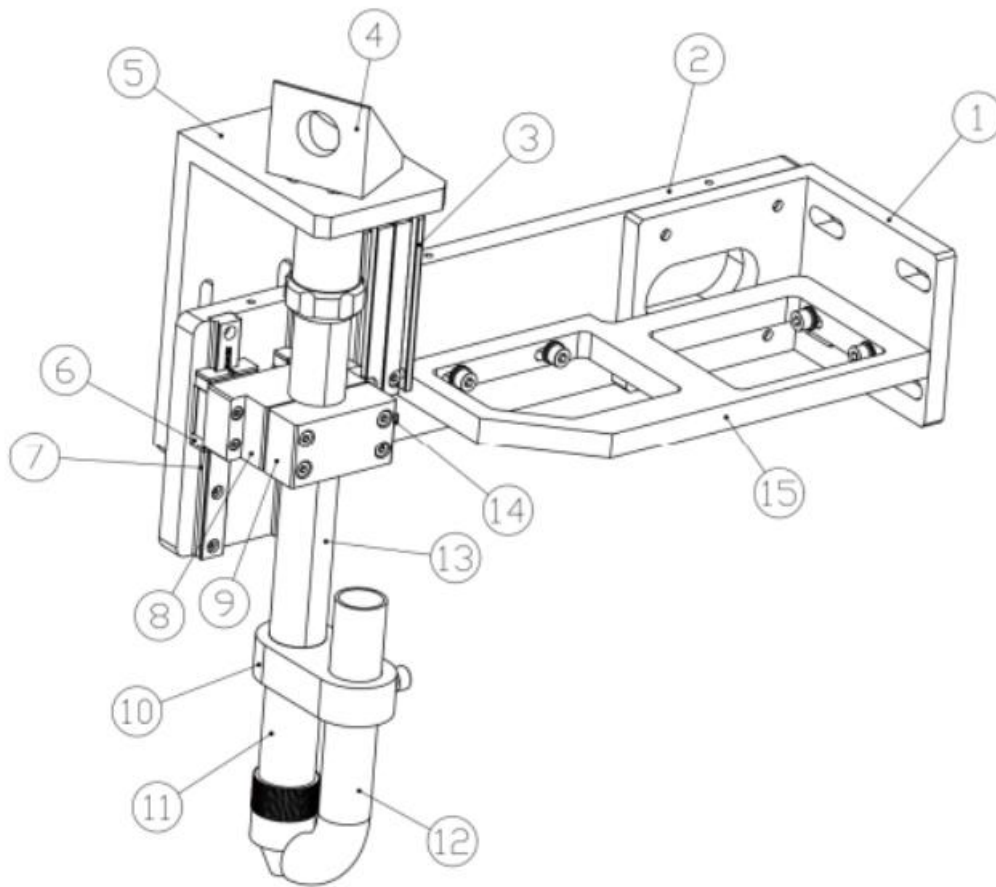
Schematic diagram of the final assembly position

Automatic Laser Bag Opening Machine components



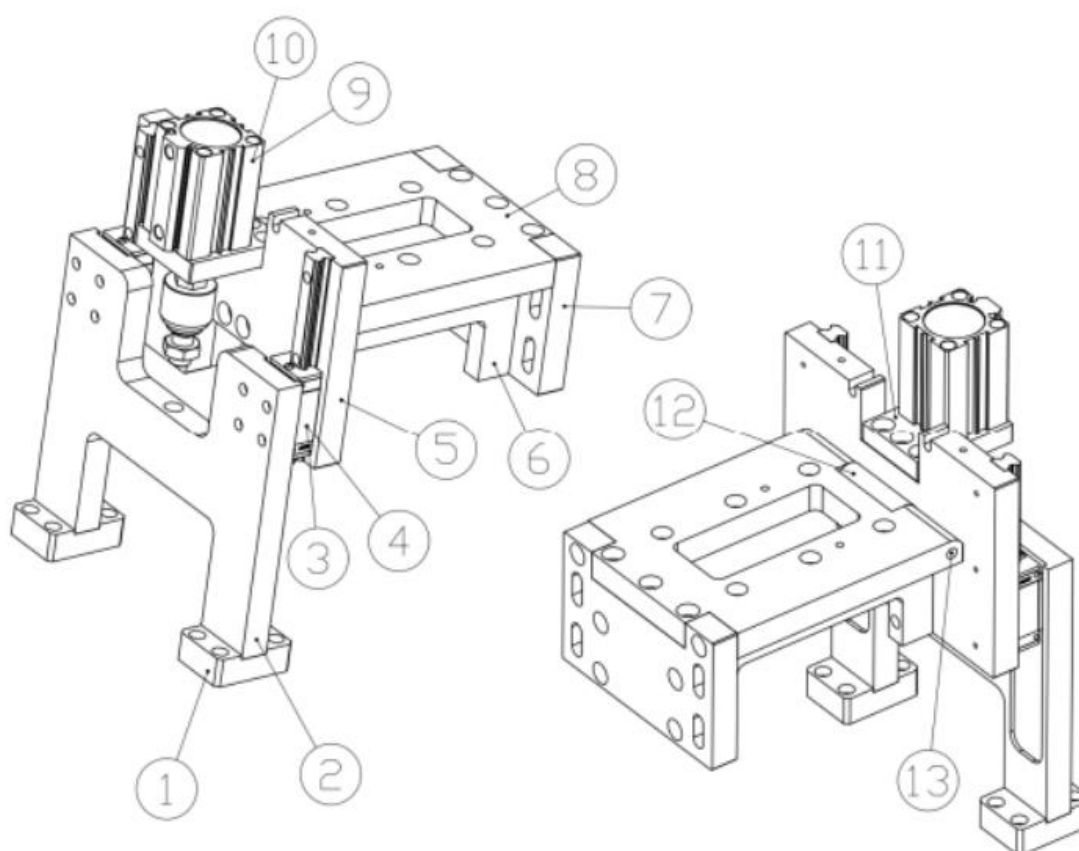
No.	Description	P
1	Laser components	3-4
2	Folding components	5-8
3	Cloth positioning component	9
4	Sewing components	10-13
5	Cloth support component	14-15

1. Laser component



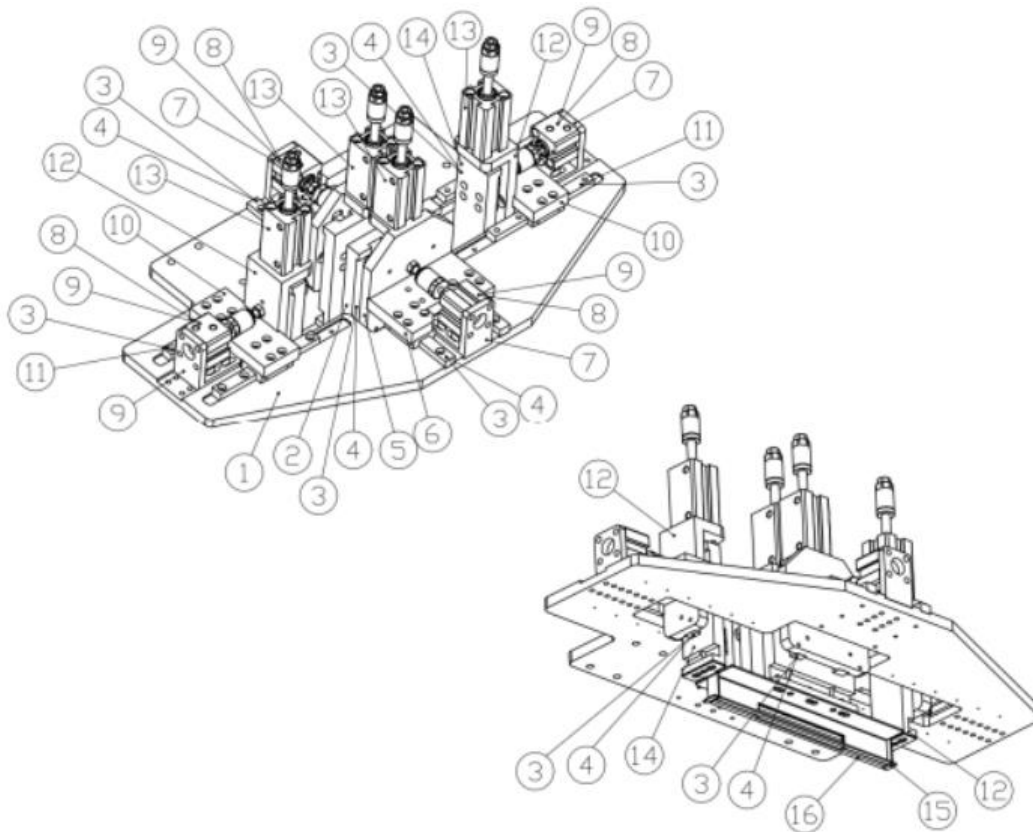
No.	Description	QTd.
1	Laser head installation bracket	1
2	Laser head fixed bottom plate	1
3	Cylinder	1
4	Eyepiece	1
5	Eyepiece support bracket	1
6	Slider	2
7	Lead rail	2
8	Laser head fixing seat	1
9	Laser head fixed seat pressure plate	1
10	Installation plate for connecting laser head to exhaust pipe	1
11	Laser head	1
12	Exhaust chimney	1
13	Laser extension tube	1
14	Laser head lifting connection plate	1
15	Laser head fixed base plate support bracket	1

2.Folding rack component



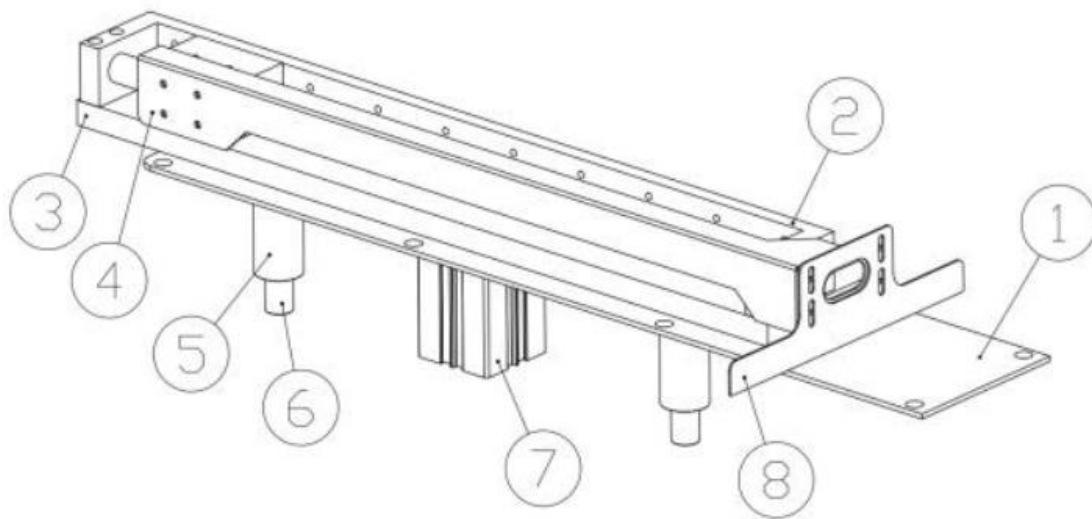
No.	Description	QTd.
1	Folding lifting connection bottom plate	1
2	Folding material connection reinforcement plate	1
3	Slider	2
4	Lead rail	2
5	Folding lifting bottom plate	1
6	Reinforcing ribs of the folding installation bracket	1
7	Folding installation bracket bottom plate	1
8	Folding installation bracket flat plate	1
9	Cylinder	1
10	Cylinder floating joint	1
11	Fixed plate for folding lifting cylinder	1
12	Rotating plate	1
13	Folding rotary plate connection optical axis	1

Folding main component



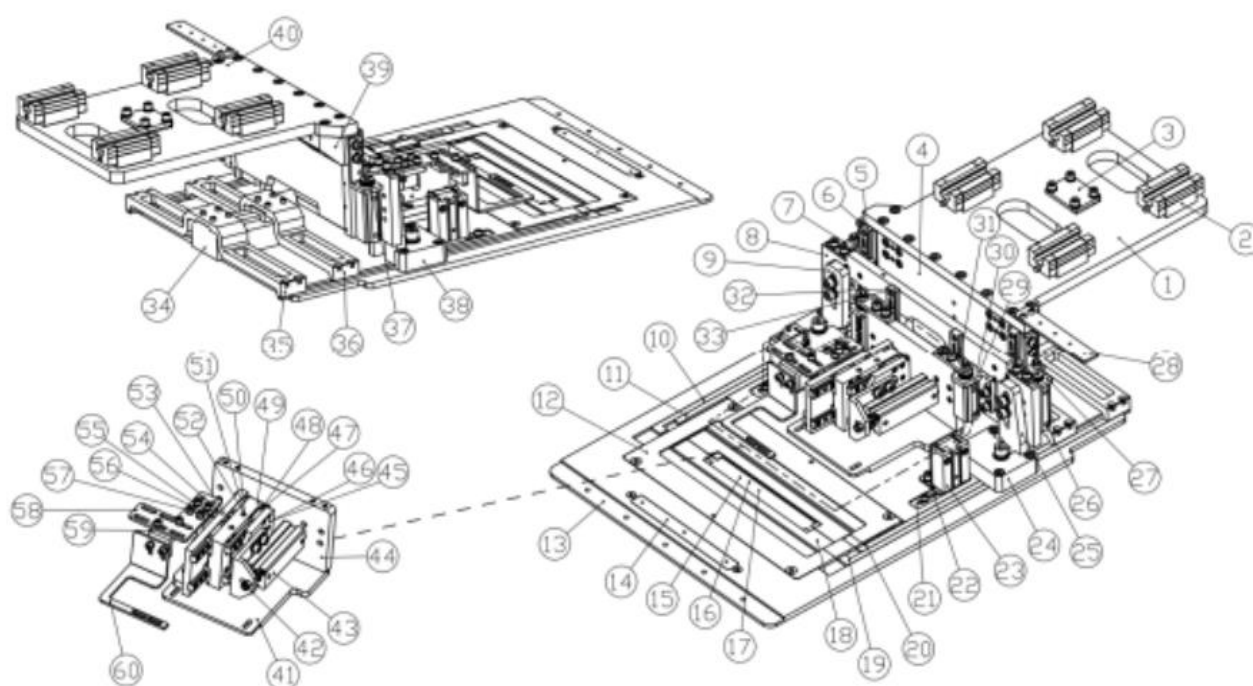
No.	Description	QTd.
1	Folding frame bottom plate	1
2	Adjustment plate for bending front or rear	2
3	Slider	14
4	Lead rail	10
5	Connecting plate for bending front or rear	2
6	Folding material moving slider fixing bracket front and rear	2
7	All sides adjustment seat	4
8	Cylinder	4
9	Cylinder floating joint	4
10	Folding material moving slider fixing bracket left and right	2
11	Lead rail	4
12	Connecting plate for bending left or right	2
13	Cylinder	4
14	All sides bending adjustment plates	2
15	Left and right bending stainless steel plates	2
16	Front and rear bending stainless steel plates	2

3. Cloth positioning component



No.	Description	QTd.
1	Cover plate of cloth positioning lifting device	1
2	Sliding table cylinder	1
3	Small cloth positioning lifting bottom plate	1
4	Cloth strip stopper	1
5	Linear bearings	2
6	Cloth strip stopper lifting optical axis	2
7	Cylinder	1
8	Adjusting plate for upward adjustment of cloth strip stopper	1

4.Sewing components



No.	Description	QTd.
1	Y-axis drag plate slider plate	1
2	Slider	4
3	Synchronous belt pressure plate	1
4	Sewing drag installation plate	1
5	Lead rail	2
6	Slider	4
7	Sewing lifting drag plate cylinder connection stainless steel plate	2
8	Sewing lifting drag plate slider lifting plate	1
9	External pressure plate connecting plate (left)	1
10	Rear pull rod (right)	1
11	Front pull rod (right)	1
12	Tongue cover plate	1
13	Large pressure frame panel	1
14	Manganese steel sheet front end fixing plate	1
15	Sand paper	1
16	Manganese steel plate clamp	1
17	Spring plate connection reinforcement plate	1
18	Tongue plate	1
19	Rear pull rod (left)	1

20	Front pull rod (left)	1
21	Guiding cylinder connecting plate	2
22	Fixing bracket for clamping cylinder	2
23	Cylinder	2
24	Large pressure frame connecting plate (left)	1
25	External pressure plate connecting plate (left)	1
26	Cylinder	2
27	Sewing lifting drag plate cylinder installation bracket (left)	1
28	Y-axis drag plate slider plate fixed air nozzle plate	1
29	Sewing center drag plate bottom plate (left)	1
30	Cylinder	2
31	Sewing center drag plate cylinder connecting plate	2
32	Lead rail	2
33	Slider	2
34	Sliding table cylinder	1
35	Sliding table connecting plate (long)	1
36	Sliding table connecting plate	1
37	Sewing lifting drag plate cylinder installation bracket (right)	1
38	Large pressure frame connecting plate (right)	1
39	Sewing drag installation plate reinforcement plate (right)	1
40	Sewing drag installation plate reinforcement plate (left)	1
41	Sewing center slide moving plate	1
42	Central pressure plate inlet and outlet cylinder connection seat	1
43	Cylinder	1
44	Sewing center drag plate slider lifting plate	1
45	Center pressure plate guide plate	1
46	Bearing	1
47	Lead rail	2
48	Slider	2
49	Center pressure plate moving seat plate	1
50	Center pressure plate lifting optical axis	2
51	Linear bearings	2
52	Center pressure plate lifting seat plate	1
53	Lead rail	2
54	Center pressure plate fixed seat plate	1
55	Copper sleeve	1
56	Center pressure plate guide shaft	1
57	Pressure plate clamp	1
58	Center pressure plate transition connecting plate	1

59	Center pressure plate transition connecting plate 2	1
60	Center pressure plate connection sheet metal sheet	1