

No.	Parameter	Range	Unit	Default value
U191	Back Light Off Wait Time	1~9	1m	3m
U192	Back Light Adjustment	20~100		100
U193	Modify the Counter Value OFF: Permit ON: Forbid	0: Permit 1: Forbid		0
U194	Operation at Reaching set value of Counter OFF: Stop Sewing ON: Continue Sewing	OFF: Stop Sewing ON: Continue Sewing		0
U195	Voice Column	30~63		50
U200	Language 0: Chinese 1: English	0: Chinese 1: English		0
U201	Set Language at Power-on OFF: No ON: Yes	OFF: No ON: Yes		0
U212	Presser Down Order at Separating Valves 0: Same Time 1: Left then Right 2: Right then Left	0: Same Time 1: Left then Right 2: Right then Left		0
U213	Presser Up Order at Separating Valves 0: Same Time 1: Left then Right 2: Right then left	0: Same Time 1: Left then Right 2: Right then Left		0
U214	Reverse Presser OFF: Forbid ON: Enable	OFF: Forbid ON: Enable		1

8.3 Level 2 Parameters Setting

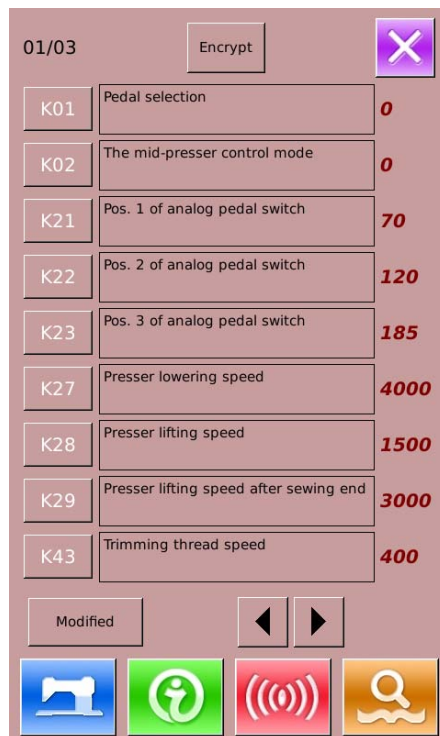
① Parameter Setting

At Mode Setting Level 3 Interface, press 

to have access to Level 2 Parameter Setting Interface (as shown in right picture). For the operation methods, please refer to descriptions at [8.2 Level 1 Parameters Setting](#).

When some parameters are changed, the system will display the “Modified” in the parameter setting interface.

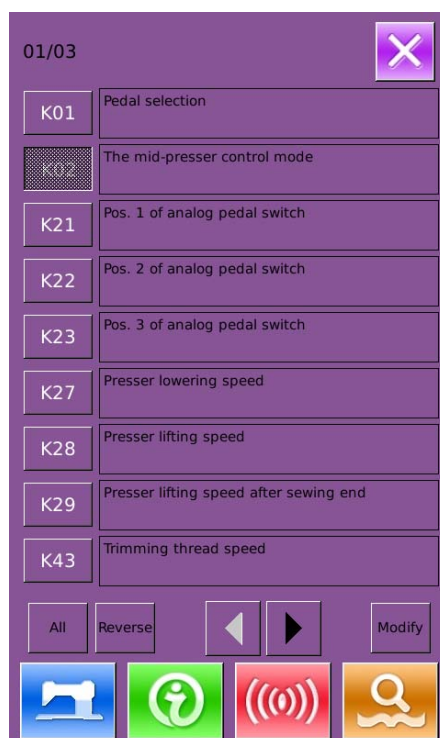
Press  to quit the setting interface



② Parameter Encryption

For the operations, please refer to the description within “[8.2 Level 1 Parameters Setting](#)”

Press  to quit parameter encryption interface

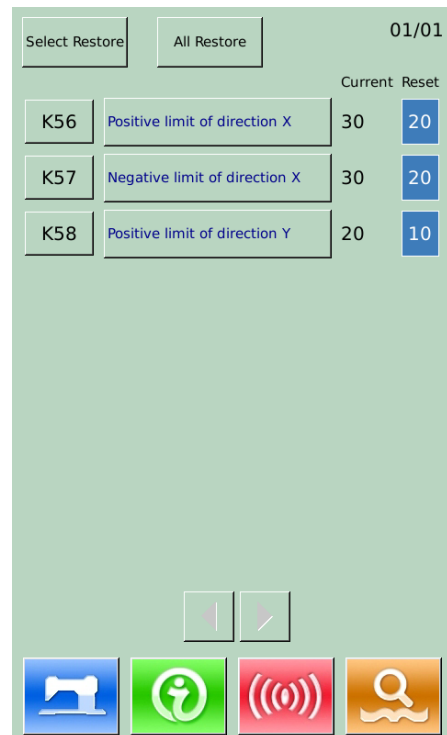


③ Check the changed parameters

When parameter is changed, the system will display “Modified” key at parameter setting interface

In the parameter setting interface, press **【 Modified 】** to check the changed parameters. User can also reset the parameters here.

For the specific operation, please refer to “7.2 Level 1 Parameter Setting”



④ 二级参数表

No.	Parameters	Range	Unit	Default
K01	Pedal Selection 0: Simulate 2: Double Pedals 3: Double Pedals, only the operation pedal can control machine	0: Simulate 2: Double Pedals 3: Double Pedals, only the operation pedal can control machine	1	0
K02	Presser Control 0: No Presser Control 2: Presser Controlled by Solenoid 3: Presser Controlled by Mechanism	0: No Presser Control 2: Presser Controlled by Solenoid 3: Presser Controlled by Mechanism		0
K21	Simulated Pedal Position 1	50~200	1	70
K22	Simulated Pedal Position 2	50~200	1	120
K23	Simulated Pedal Position 3	50~200	1	185
K27	Speed for Lowering Presser	100~4000pps	10pps	4000pps
K28	Speed for lifting Presser	100~4000pps	10pps	1500pps

No.	Parameters	Range	Unit	Default
K29	Speed for Lifting Presser at Sewing End	100~4000pps	10pps	3000pps
K43	Trimming Speed	300~700rpm	100rpm	400rpm
K44	Empty Feeding Control At Thread-trimming OFF: Ineffective ON: Effective	OFF: Ineffective ON: Effective	1	1
K45	Needle Guider Diagram at Controlling Empty Feeding	1.6~4.0mm	0.2mm	1.6mm
K56	Move Range +X Direction	0~50mm	1mm	20mm
K57	Move Range -X Direction	0~50mm	1mm	20mm
K58	Move Range + Y Direction	0~30mm	1mm	10mm
K59	Move Range -Y Direction	0~30mm	1mm	20mm
K64	Thread-stirring Method 0: By Solenoid 1: By Motor	0: By Solenoid 1: By Motor	1	1
K74	Selection of Solenoid/ Air-driven Presser AIR: Air-driven Presser MOTO: Motor Presser	AIR: Air-driven Presser MOTO: Motor Presser	1	1
K95	Trimming Angle	-10~10	1	0
K112	Stop Position Compensation	-10~10	1	0
K122	OC	-128~128	2	0
K123	OD	-128~128	2	0

No.	Parameters	Range	Unit	Default
K124	BD	-512~512	4	0
K135	Solenoid Junction Delay	-10~30	1	0
K137	Solenoid Thread-catching Angle Deviation	-150~150	1	0
K138	Solenoid Close Delay	-1~1	1	0
K140	Thread Tension Control Method 0: Electronic Method 1: Mechanical Method	0: Electronic Method 1: Mechanical Method	1	1
K141	Adjustment of Close Force at Branch Tension Solenoid	-20~20	1	0
K142	Adjustment of Holding Force at Branch Tension Solenoid	-40~40	1	0
K150	Head Safety Switch ON: Normal OFF: Forbid	ON: Normal OFF: Forbid		0
K200	Restore Default Settings			
K241	Type Setting Note: At changing the machine type, the system will re-add the basic patterns and delete the saved normal patterns Note 2 :Unable to see at JK 1906	0: Bar-tacking Machine 5: 1906 Machine 7: Button Sewing Machine		0

8.4 Counter Setting



Press  to have access to the Counter Setting Interface (as shown in right picture).

Procedure:

① Counter Selection

Select Sewing Counter or No.of Pcs Counter

② Set the Current Value and the Set Value of Counter

At the set type, press the “Current” or “Setting” to perform the relating operation.

③ Select Up Counter or Down Counter

At the selected type, please press “Up” and “Down” to perform the relating operations



Press  to quit counter setting interface



Press  to finish setting and quit.

Sewing UP Counter :

Every time the sewing of one shape is performed, the existing value is counted up 1. When the existing value is equal to the set value, the interface of counter exceed warning will be displayed. Press  to restore the existing value to 0

Sewing DOWN Counter :

Every time the sewing of one shape is performed, the existing value is counted down 1. When the existing value is reached to "0", the interface of counter exceed warning will be displayed. Press  to restore the existing value to the set value.

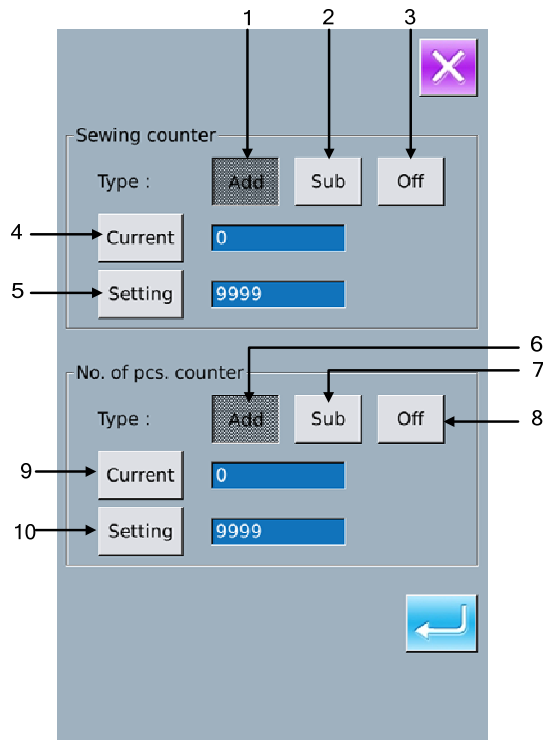
No of piece UP counter :

Every time a cyclic sewing or a continuous sewing is performed, the existing value is counted up 1. When the existing value is equal to the set value, the interface of counter exceed warning will be displayed.

Press  to restore the existing value to 0

No of piece DOWN counter:

Every time a cyclic sewing or a continuous sewing is performed, the existing value is counted down 1. When the existing value is reached to "0", the interface of counter exceed warning will be displayed.



Press  to restore the existing value to the set value.

④ Turn Off Counter

At the selected counter type, press “Off” to turn off the counter.

8.4.1 Functions

No.	Function
1	Sewing Add Counter
2	Sewing Down Counter
3	Sewing Counter Off
4	Set Current Sewing Counter Value
5	Set the Setting Value of Sewing Counter
6	No.of Pcs Add Counter
7	No.of Pcs Down Counter
8	No.of Pcs Counter Off
9	Set Current No.of Pcs Counter Value
10	Set the Setting Value of No.of Pcs Counter

8.5 Change Sewing Mode

Press  to enter the interface of sewing type selection (as shown in the right figure).

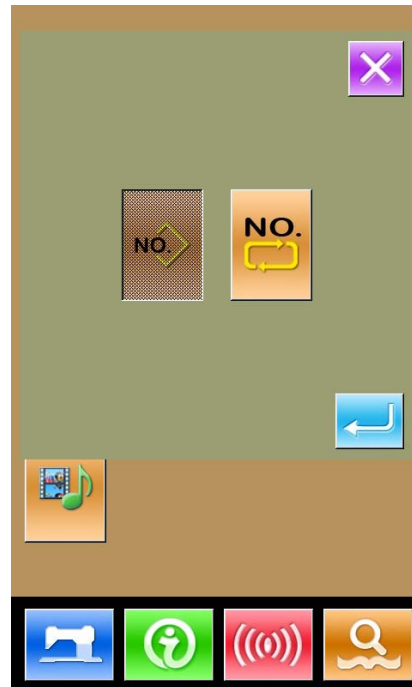
 : Normal Sewing

 : Cyclic Sewing

After confirming the sewing type, press .

to end the operation. Press , then the data input interface of the selected sewing type is displayed.

Press  to quit and the original sewing type remains.



8.6 Have Access to Pattern Edition

Press  to shift between the following two figures and enter the pattern edition mode (Please refer to section 5.1)

 : Sewing Mode

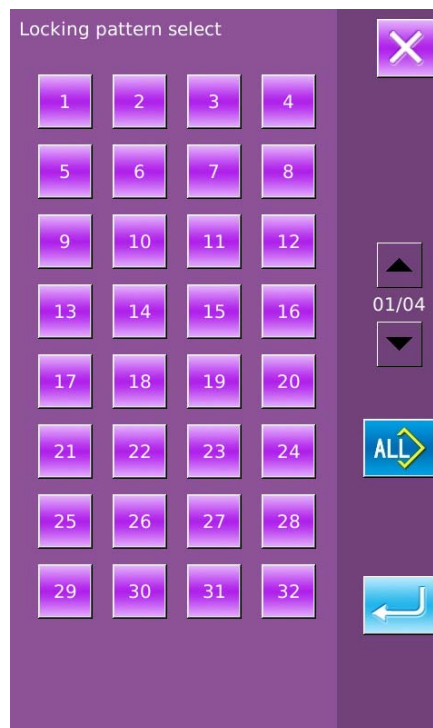
 : Edition Mode



8.7 Set Pattern Lock

In Setting Mode Level 1, press  to enter the interface for setting pattern lock, where the entire pattern number will be displayed. 32 pattern numbers are in each page. For locking a pattern, user only needs to press the pattern number. The selected pattern number will be displayed in dark.

Press  to save the setting. The selected patterns will be locked.



8.8 Initialization

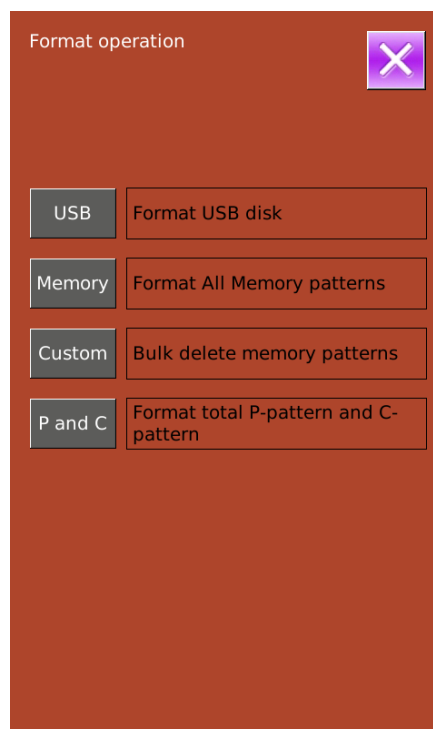
Press  to enter the interface for setting the keyboard lock.

In this interface, user can operate:

- U Disk Initialization
- Memory Initialization
- Customized Initialization
- P and C Pattern Initialization

Press the relating functions keys and enter the corresponding interface.

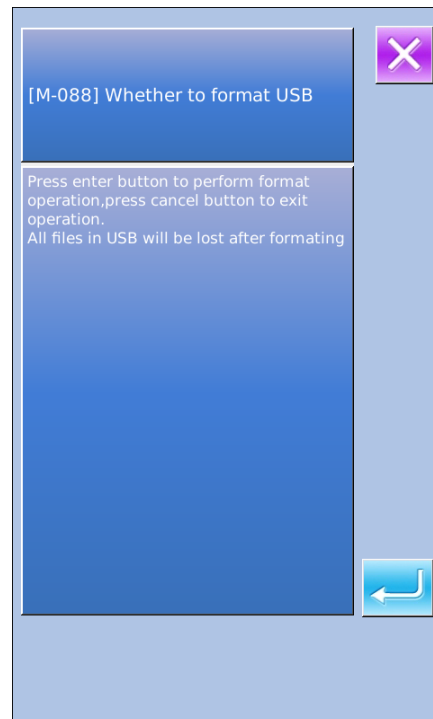
Press  to quit.



② Press “USB” to Initialize U Disk Files

Press  to initialize all the U disk files

Press  to quit U disk initialization



③ Press “Memory” to initialize memory patterns

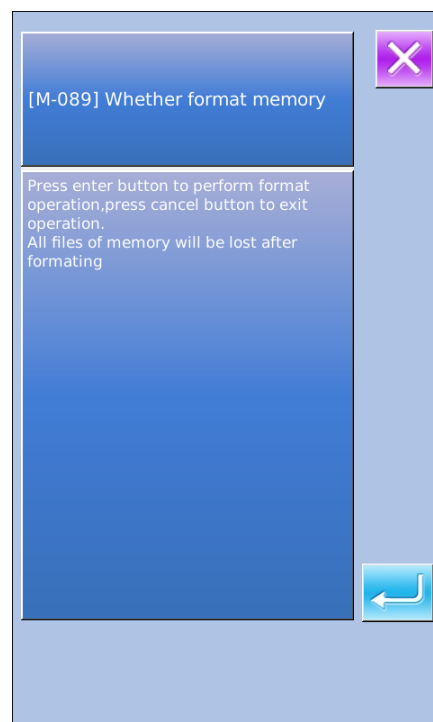
The following patterns can be initialized:

- Normal Pattern (Basic Patterns & User Patterns)
- Cyclic Sewing Pattern
- Registered P Pattern

Press  to initialize all the files in memory

Press  to quit

※Caution! This operation will delete all the patterns within the memory!



④ Press “Custom” to perform the batch deletion

In this interface, the system will display all the pattern files within the memory. Click the corresponding button to perform the batch deletion.

Operations at this function:

A. Use “Up Arrow”, “Down Arrow” to turn the page

B. Use the following three operations to select patterns

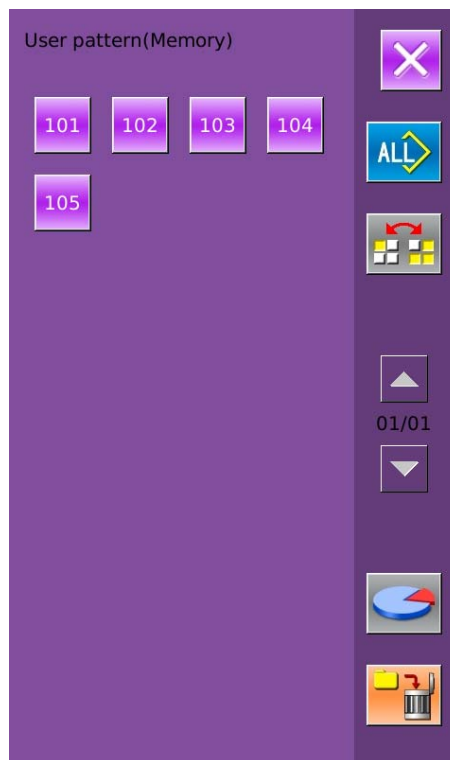
➤ Press  to select all the patterns

➤ Press  to select pattern in contrary way

➤ Input pattern number

C. Press  to delete the patterns in batch

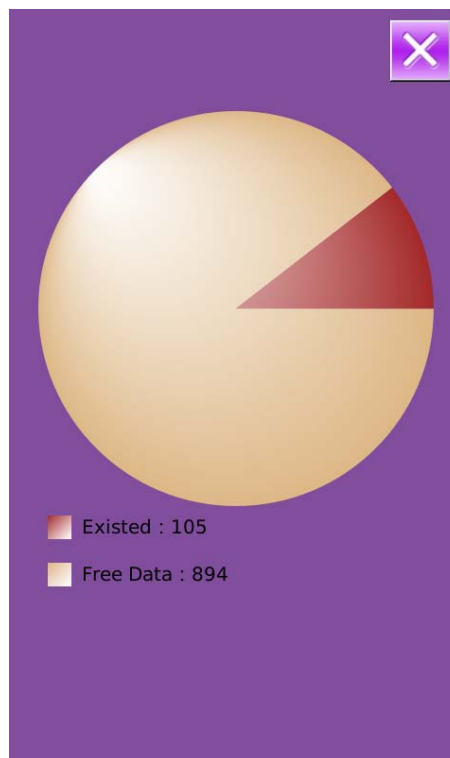
D. Press  to quit Initialization Interface



⑤ Under the Interface of Custom

Initialization, press  to display the free room of the memory and the number of patterns in each format.

Press  to return the upper interface.



8.9 Software Version Inquiry

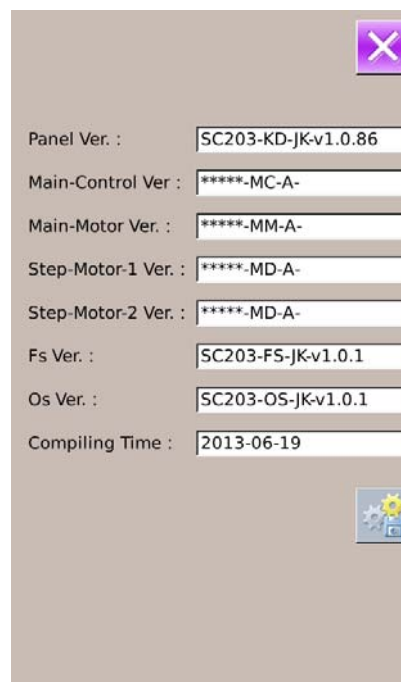
At Mode Setting Level 2 Interface, user



can press  to check the software version of system.



: Save the Current version information to the root directory of U disk.



8.10 Test Mode

At Mode Setting Level 2 Interface, user can



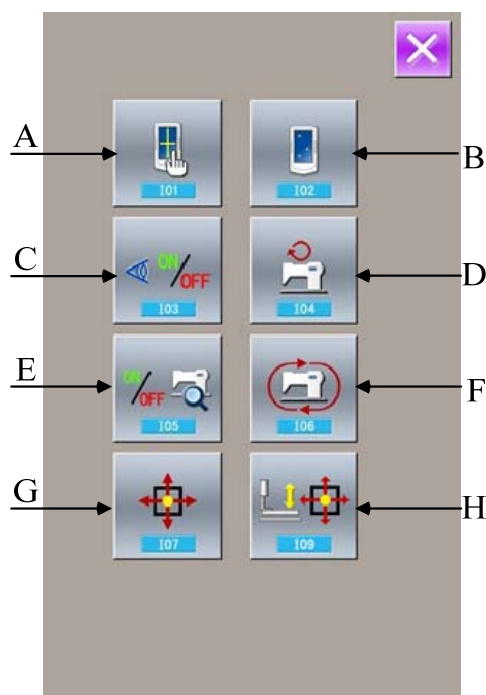
press  to have access to the Test Mode Interface (as shown in right picture)

The following is the list of each figure:

No.	Name
A	I01 Touching Panel Correction
B	I02 LCD Test
C	I03 Input Test
D	I04 Speed Test
E	I05 Output Test
F	I06 Continuous Running
G	I07 XY Motor Origin Test
H	I09 Presser/ Origin Sensor Test

Press  to quit the Test Mode interface

Attention: Only when the level 2 menu is displayed at Maintenance Interface (refer to section 6.2) and level 3 menu is displayed at Mode Interface (refer to section 8), can the items I & J be operated.



(1) Correction of Touching Panel

A、 In the interface of Mode Inspection,



Press (I01 Correction of Touch Panel). Then system will hint user 【 Enter Touching Panel Correction

Mode? 】 . Press  to enter the interface for Touch Panel Correction (as shown in right figure). Press  to quit the correction status.

B、 Because the corrections for five spots are needed, the user had better click the cross icon on the screen with tools like touching pen. After the correction, the system will tell user that this operation is successful or not.



※During the correction, please do perform the operation according to the positions of crosses. Otherwise, the touching panel will be unable to work normally after the correction.

(2) Inspection of LCD Display

In the interface of Mode Inspection, press



(I02 Inspection of LCD Display) to enter the interface of LCD Display Inspection (as shown in right figure). Check whether the LCD fades in that status.

Touch the panel to have the screen display in the cycle of “Blue — Black — Red — Green — White”.

Press  to quit the interface of LCD Display Inspection



(3) Input Signal Test Method

In the interface of Test Mode, press  (I03 Input Inspection) to enter the interface of input inspection interface (as shown in right). Users can confirm the input status of each switch and sensor.

ON: Turn On

OFF: Turn Off

01: Start Switch

02: Presser Switch

03: Analog Pedal

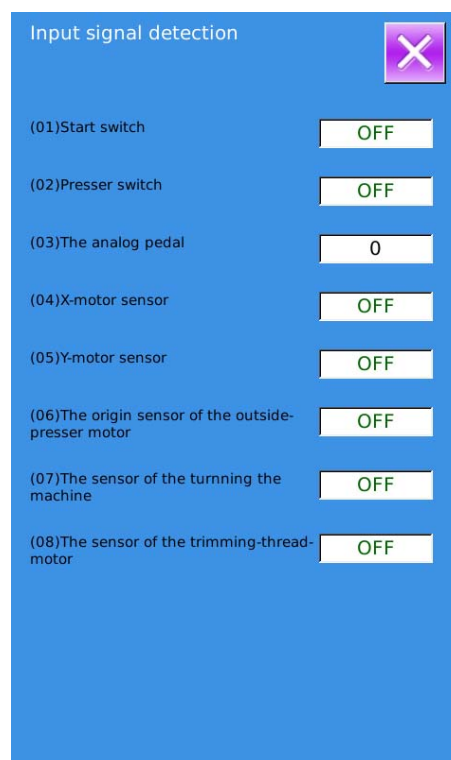
04: X Motor Sensor

05: Y Motor Sensor

06: Origin Sensor of Outside-presser Motor

07: Sensor of Head Reversion

08: Sensor of Thread-trimming Motor



(4) Speed Test

① Interface for Speed Test

In the interface of Mode Inspection, Press



(I04speed test) to enter the interface for Speed Test (as shown in right figure). The speed of main shaft motor can be tested in that interface.

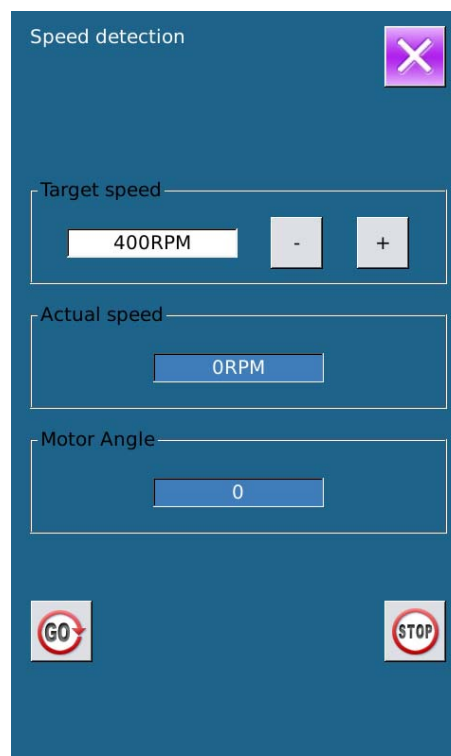
Press  to quit the interface for speed test.

② Speed Test Setting

Press “+” & “-” to set the speed of the main

shaft motor. Press , then the motor will run at the set speed. At this moment, the actual tested speed is displayed in the

interface.. Press  to stop the machine



(5) Output Inspection

In the interface of Mode Inspection, Press



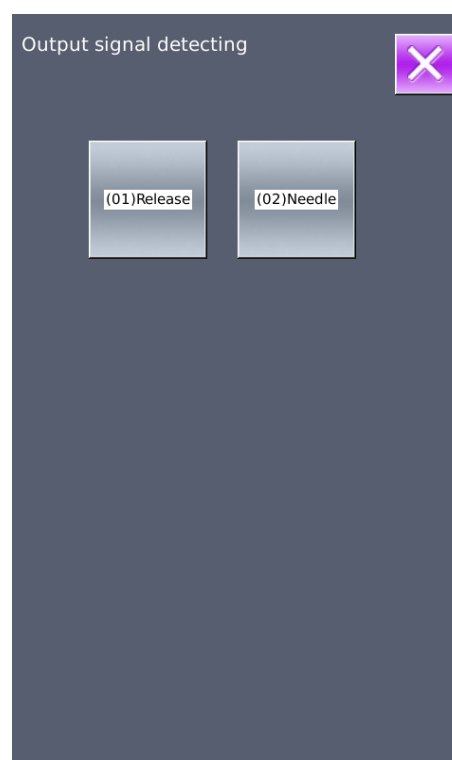
(I05 Output Inspection) to enter the interface of Output Inspection (as shown in the right figure). The following output status of the solenoid can be checked under that interface.

01: Thread-releasing Solenoid Test

02: Needle Thread Solenoid Test

- Press  to quit output inspection interface

※Attention: Sewing machine will perform relating actions.



(6) Continuous Running

① Display the interface for continuous running

In the interface of Mode Inspection, Press



(I06 continuous running) to enter the interface of continuous running (as shown in right figure).

A: Action interval

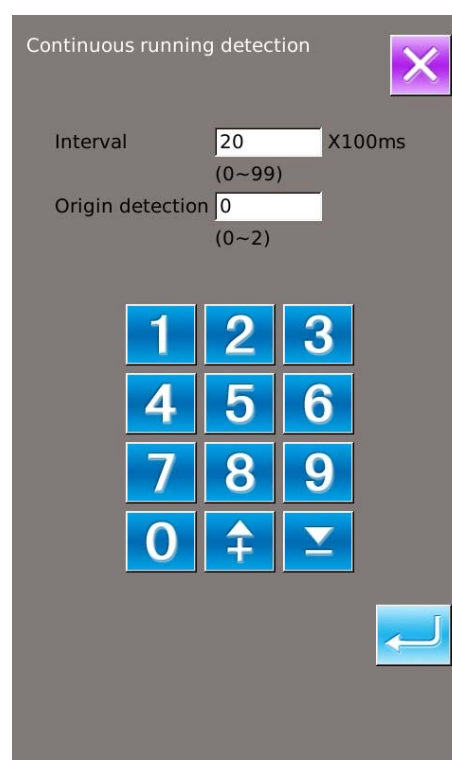
B: Origin Detection

Press  to quit that interface.

② Continuous running setting

Click the columns under the interface of Continuous Running to set the Action interval and Origin Detection. Set the value with the number keys.

Press  and step the pedal to start the continuous running. During the running, user can use the pause switch to stop machine or



he can stop machine by stepping the pedal or pressing pause switch at action end

(7) XY Motor Origin Sensor Test

At Test Mode Interface, user can press



(I07XY Motor Origin Test) to activate XY Motor/Origin Output Test Interface (as shown in right picture). If user turns on the machine without entering the Ready Status

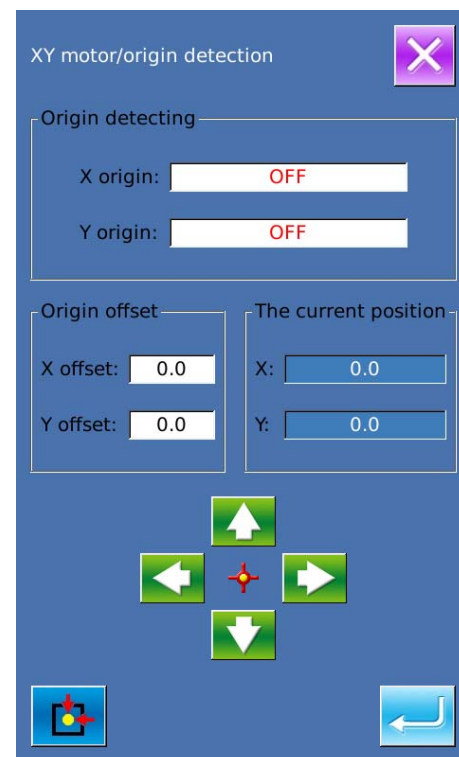
and pressing  to search the origin, user can directly press the direction keys to move the motor and display the On/Off statuses of Sensors at both XY sides. In this way, user can test the working condition of the XY Motor Driver and their sensors. If user enters the Ready Status after power-on or presses



to search origin, the user will have to

press  to search origin at each entry to the I07 mode in future so that he could use direction keys to move XY motors. This is the manual adjustment of the XY origin. The coordinates displayed at left is the deviation value of the origin, while the coordinates displayed at right is the current position of

presser frame. User can press  to set current position as the reference value of the origin.



(8) Presser Motor / Origin Sensor Detection

According to the status of the presser origin sensor, the position A displays the status (ON/OFF) of presser origin sensor; position B displays the status of trimming sensor.

By using  & , the user can drive the presser motor at each pulse

Additionally, pressing  is to drive presser motor to the position pointed at below, whose figure is displayed in dark.

A: Presser Sensor B: Trimming Sensor

C: Presser down Position

D: Thread-trimming Wait Position

E: Trimming Finish Position

F: Thread-stirring Position

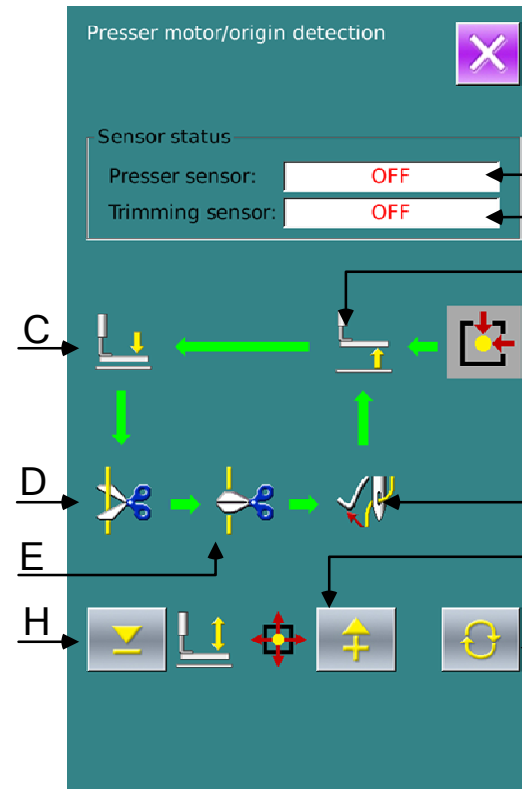
G: Presser Up Position

H: Forward one Step

J: Move to Next Position

I: Backward one Step

Note: Use Switch to search the origin of presser & thread-trimming motor, then this function will be effective.



8.11 Keyboard Lock

At Setting Mode Level 2 Interface, user can

press  to activate Keyboard Lock Setting Interface.

① Operation for Keyboard Lock



: Keyboard Unlocked



: Keyboard Locked

Select  and then  to finish the operation of locking keyboard. Press  to quit the keyboard lock operation.

② Display of Keyboard Lock Status

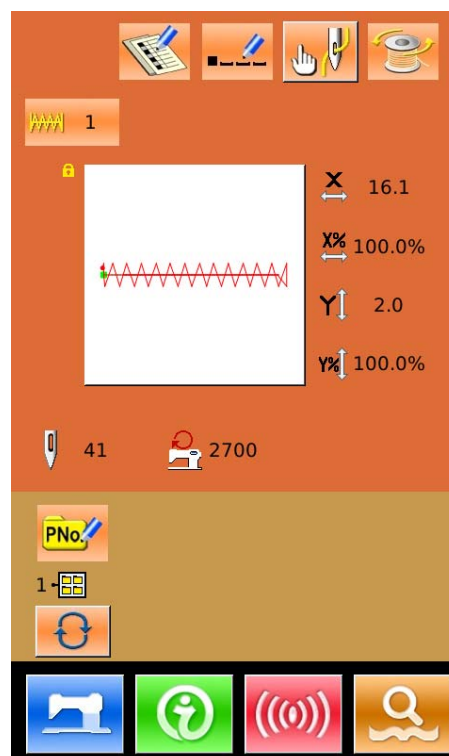
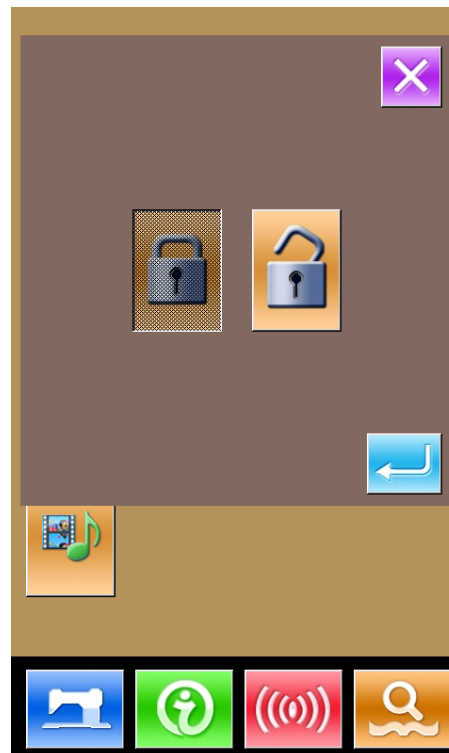
Close Parameter Setting Mode Interface, and have system return to Sewing Data Input Interface (as shown in right picture.), where

user can see a lock figure  under the pattern number. In the Keyboard Locked status, only the available figures can be displayed.

③ Range of Keyboard Lock

1、Interface of Normal Sewing Data Input:

- 1) Pattern Registration
 - 2) Pattern Naming
 - 3) Scale Rate Setting
 - 4) Max Speed Limitation
 - 5) P Pattern Registration
 - 6) Pattern Deletion
 - 7) Thread
 - 8) Pattern Select
- 2、Normal Sewing Interface:



- 1) Frame-moving
- 2) Counter Setting
- 3) Step Sewing
- 4) Return Origion
- 5) Speed Scrollbar
- 3、P Pattern Input Interface:
 - 1) P Pattern Edition
 - 2) P Pattern Copy
 - 3) P Pattern Naming
 - 4) Pattern Deletion
 - 5) Thread
- 4、P Pattern Sewing Interface:
 - 1) Counter Setting
 - 2) Return Origin
 - 3) Step Sewing
 - 4) Speed Scrollbar
- 5、C Pattern Data Input Interface:
 - 1) C Patten Registration
 - 2) C Pattern Copy
 - 3) C Pattern Naming
 - 4) C Pattern Edition
 - 5) Pattern Deletion
 - 6) Speed Scrollbar
 - 7) Return Origin
 - 8) Step Sewing
- 6、C Pattern Sewing Interface:
 - 1) Counter Setting
 - 2) Step Sewing
 - 3) Return Origin
 - 4) C Pattern Switch
- 7、Parameter Setting Mode:
 - 1) Level 1 Parameter
 - 2) Level 2 Parameter
 - 3) Counter edition
 - 4) Test Mode

8.12 Parameter Back-up

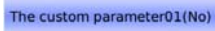


In setting mode level 3, press  to enter the interface of parameter back-up & restoration, as shown in right:

Clear: Clear all the customized parameters that are saved.

Save: Save current parameters

Restore: Restore the current parameters

① Click any key among 

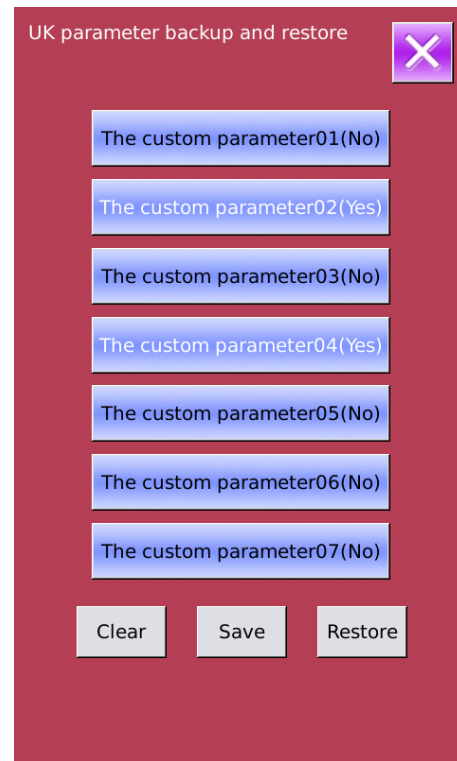
~  to set the position for saving the parameter. And then press 「Save」 to save that parameter.

② Check the content on 「Custom xx (On/Off)」. If 「On」 is displayed in bracket, that means this position has the user parameter,

for an example .

③ Select the button with parameters, press 「Restore」 to reload the corresponding parameter values

④ Press 「Clear」 to delete all the saved parameters



8.13 Button-stitching Function Setting

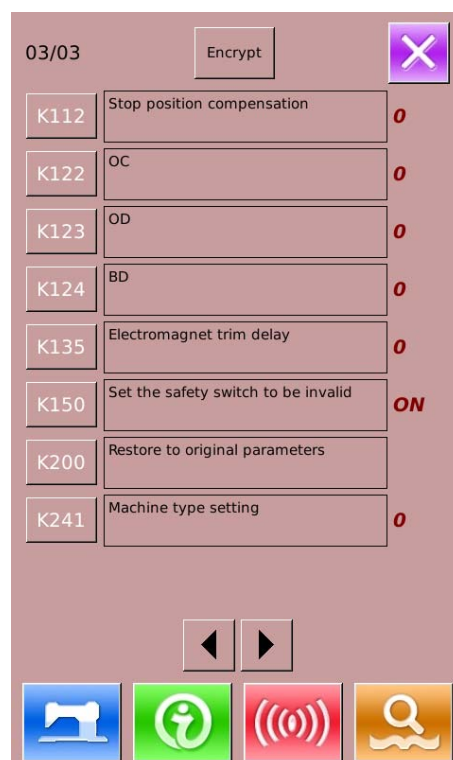
① Parameter Setting Operation

At Setting mode Level 3 Interface, user can



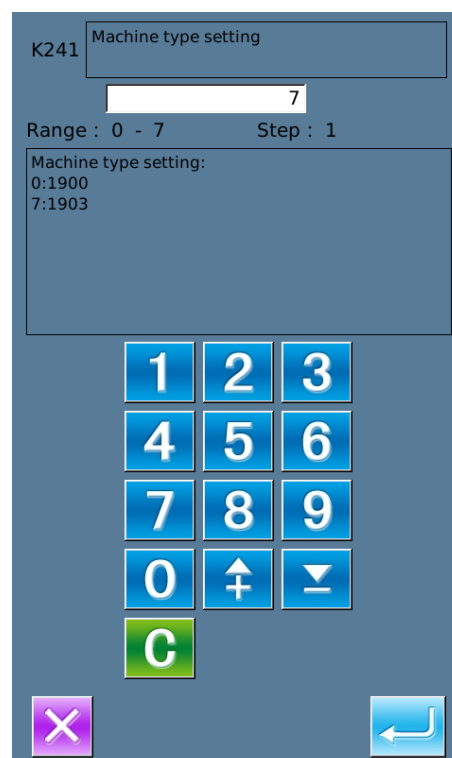
press to have access to Level 2

Parameter Setting Interface (as shown in right figure). For the operating methods, please refer to the descriptions in Level 1 or 2 Parameter Setting. Press Key K138 to activate the next interface



Press  to finish the selection.

Note: When the model is changed, the system will clear the entire saved pattern and reload the pattern for the newly selected model. Therefore, users have to pay attention to backing up patterns before changing the model.



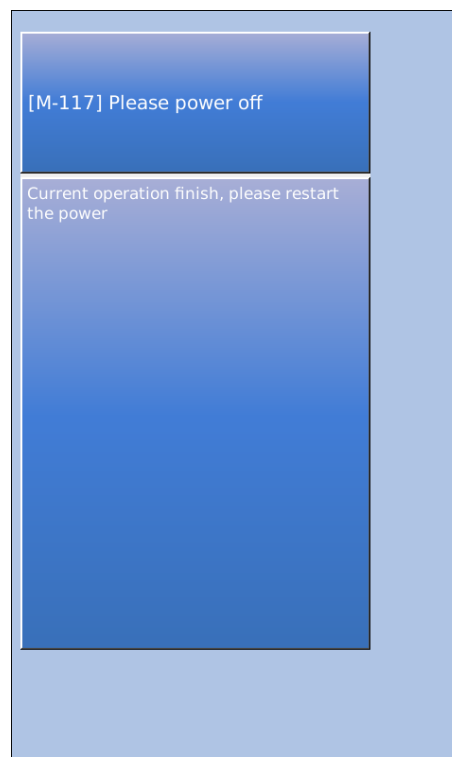
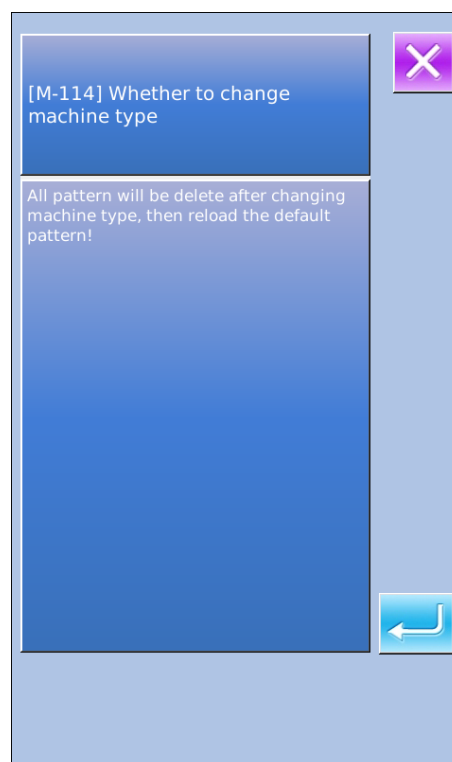
At this moment, the Hint Interface will be displayed, as shown in right picture. Pressing



is to cancel the settings, while pressing

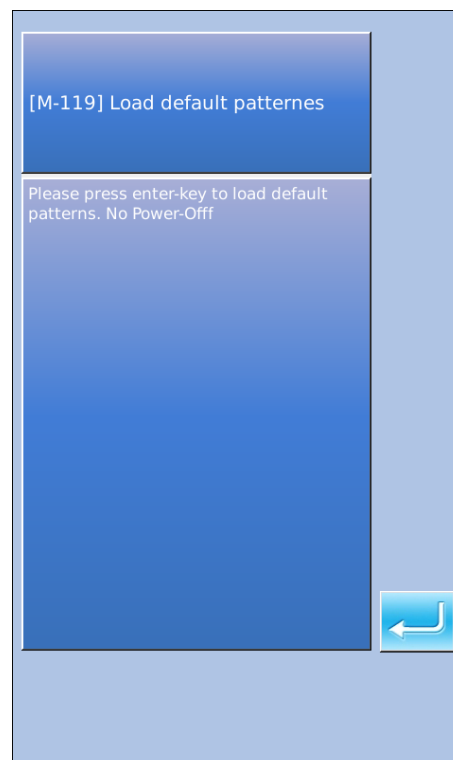


is to confirm clearance of the existed patterns in the old model.



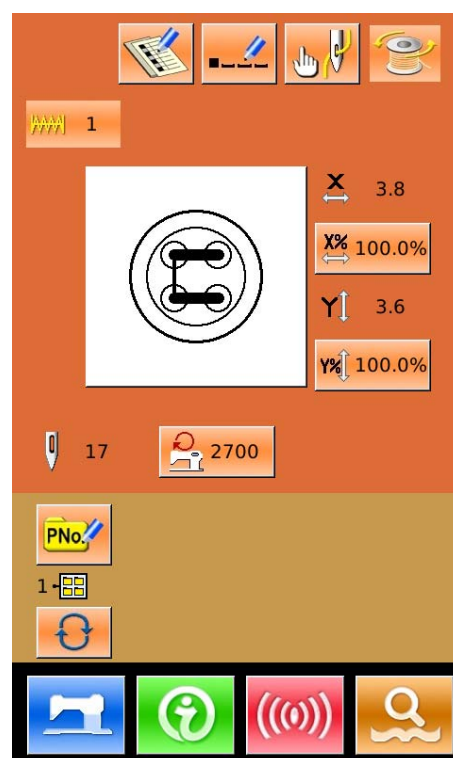
Re-power the machine. The hint interface for reloading patterns of new model will be displayed, as shown in the right picture. The

user only needs to press .



When loading the basic patterns for the new model successfully, the system will activate the Main Interface of Pattern N, as the right picture shows.

Button-sewing function is set successfully!



8.14 Pattern Edition Parameter Setting

At Setting Mode Level 3 Interface, user can



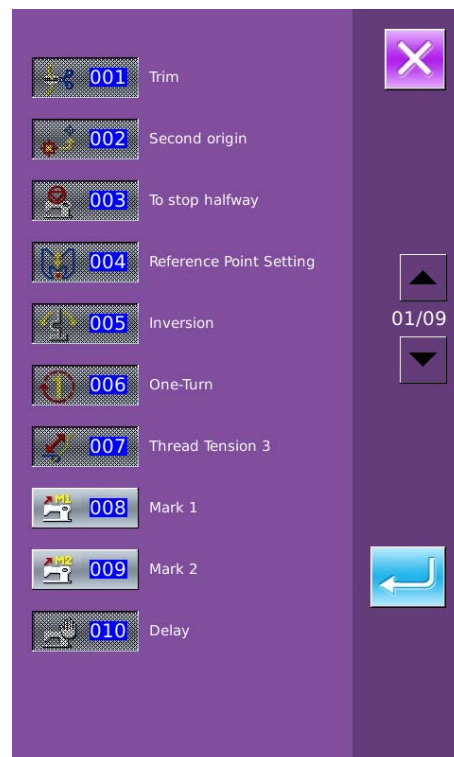
press to activate the Interface for

Setting Pattern Edition Parameters.

The figures of the available functions are displayed in dark, while the figures of the unavailable functions are displayed with highlight.

Edit the parameters according to your

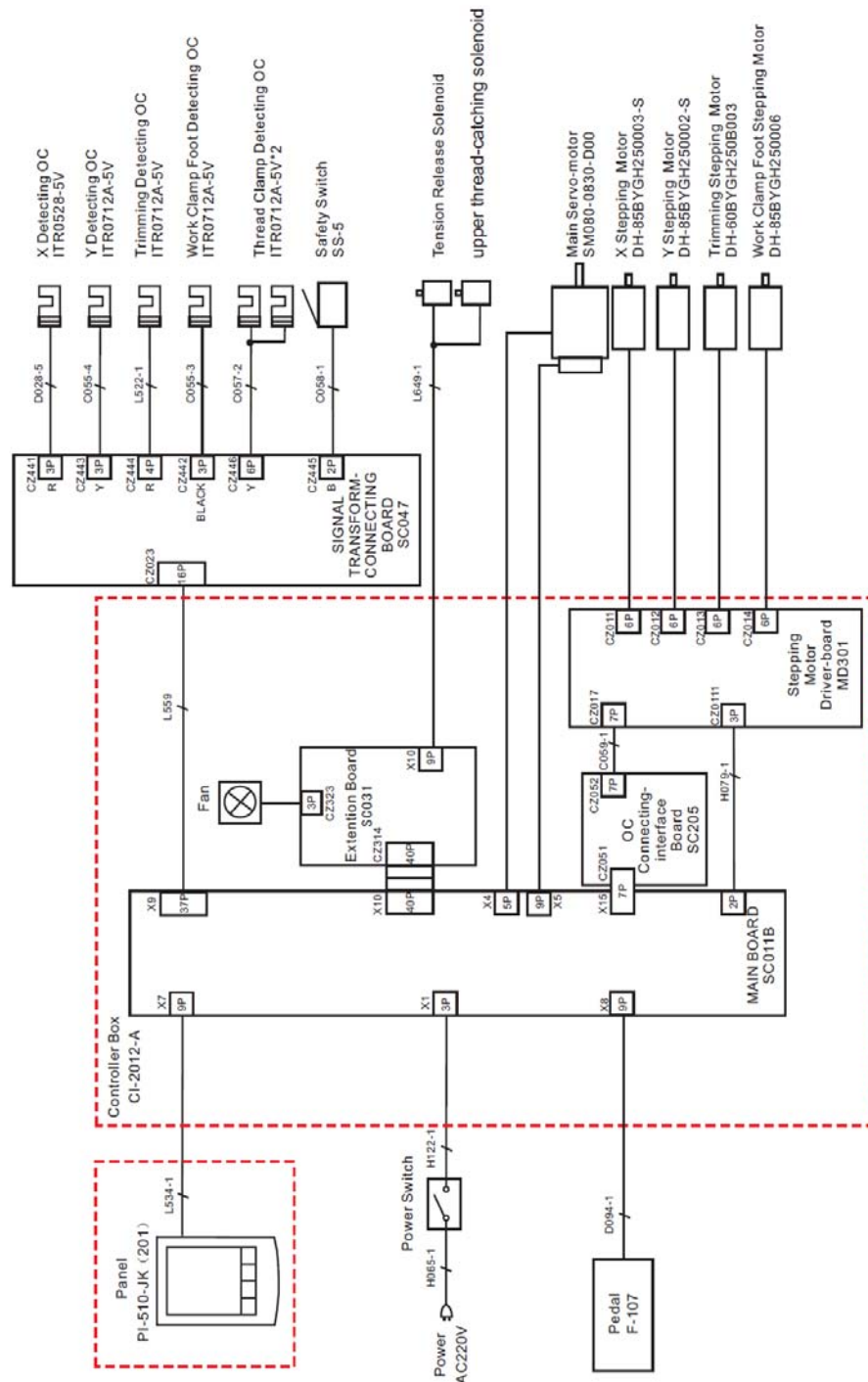
needs, press  to finish the setting.◦



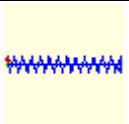
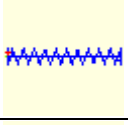
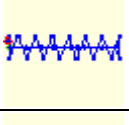
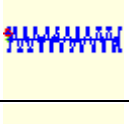
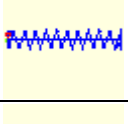
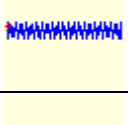
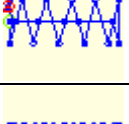
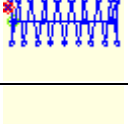
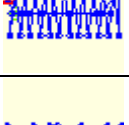
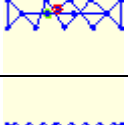
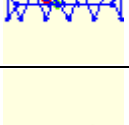
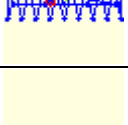
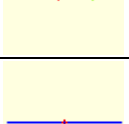
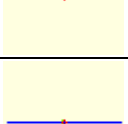
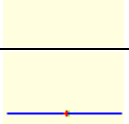
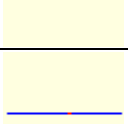
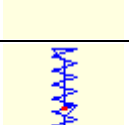
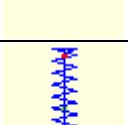
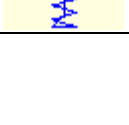
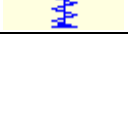
9 Controller System Principle

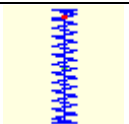
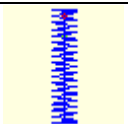
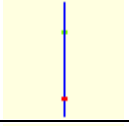
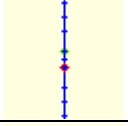
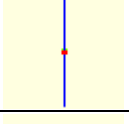
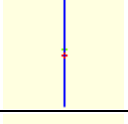
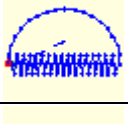
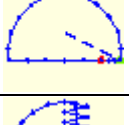
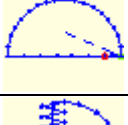
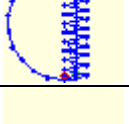
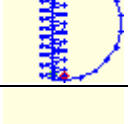
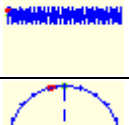
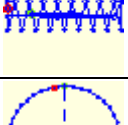
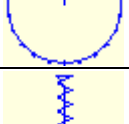
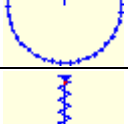
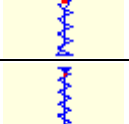
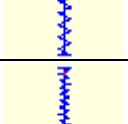
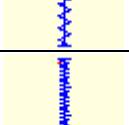
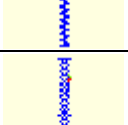
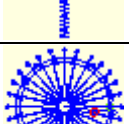
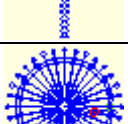
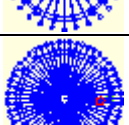
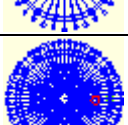
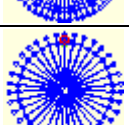
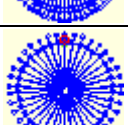
9.1 Structure of Control System

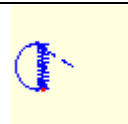
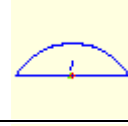
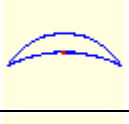
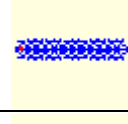
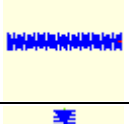
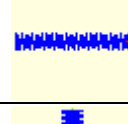
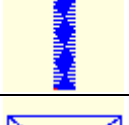
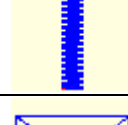
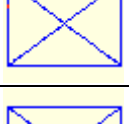
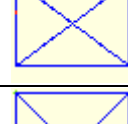
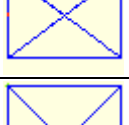
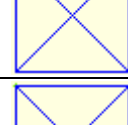
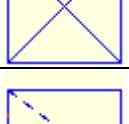
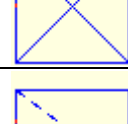
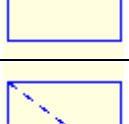
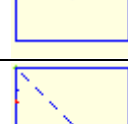
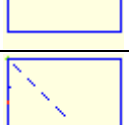
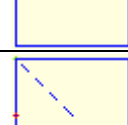
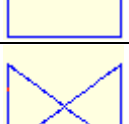
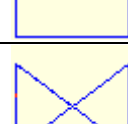
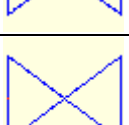
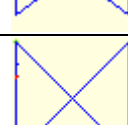
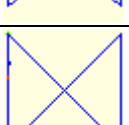
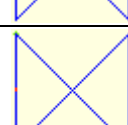
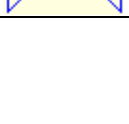
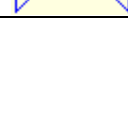
9.1.1 Diagram of Control System

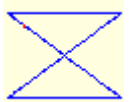
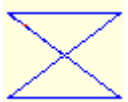
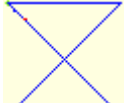
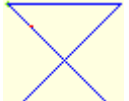
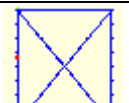
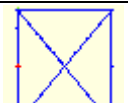
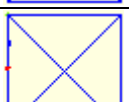


9.2 List of Patterns in Controller

NO	Patterns	Stitch Number	Length × Width (mm)	NO.	Pattern	Stitch Number	Length × Width (mm)
1		41	16.1×2	2		41	10.2×2
3		41	16×2.4	4		41	24×3
5		27	10.1×2	6		27	16×2.4
7		35	10.1×2	8		35	16×2.4
9		55	24×3	10		63	24×3
11		20	6.1×2.4	12		27	6.2×2.4
13		35	6.1×2.4	14		14	8×2
15		20	8×2	16		27	8×2
17		20	10×0	18		27	10×0
19		27	25.2×0	20		35	24.8×0
21		40	25.2×0	22		43	35×0
23		27	4×20	24		35	4×20

25		41	4×20	26		55	4×20
27		17	0×20	28		20	0×10
29		20	0×20	30		27	0×20
31		51	10.1×7	32		62	12.1×7
33		23	10.2×6	34		30	12×6
35		47	7×10	36		47	7×10
37		89	24×3	38		27	8×2
39		25	11.8×12	40		45	12×12
41		28	2.4×20	42		38	2.4×25
43		38	2.4×25	44		57	2.4×30
45		75	2.4×30	46		41	2.4×30
47		89	8×8	48		98	8×8
49		147	8×8	50		163	8×8
51		110	7.9×7.9	52		120	7.9×7.9

53		130	7.9×7.9	54		51	12.4×10.2
55		50	12.4×10.2	56		52	21×6
57		57	21×6	58		102	19×3
59		115	40×5	60		115	40×5
61		93	5×30	62		109	5×30
63		108	40×30	64		80	40×30
65		64	40×30	66		96	30×30
67		76	30×30	68		60	30×30
69		52	40×30	70		40	40×30
71		32	40×30	72		44	30×30
73		36	30×30	74		28	30×30
75		60	40×30	76		48	40×30
77		36	40×30	78		56	30×30
79		44	30×30	80		36	30×30

81		67	40×30	82		51	40×30
83		39	40×30	84		55	30×30
85		35	30×30	86		42	30×30
87		32	30.1×30	88		26	30×30
89		74	20×24	90		54	20×24
91		65	20×20	92		49	20×20
93		39	20×20	94		63	25×20
95		51	25×20	96		45	25×20
97		42	25×20	98		33	25×20
99		27	25×20	100		88	30×25

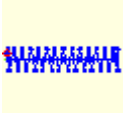
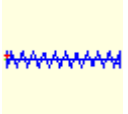
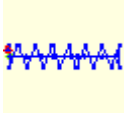
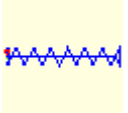
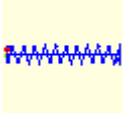
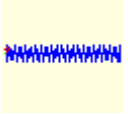
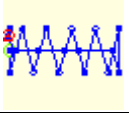
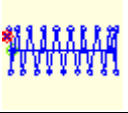
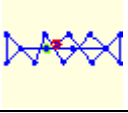
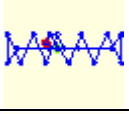
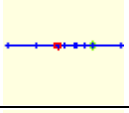
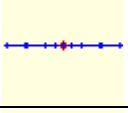
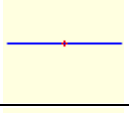
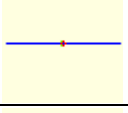
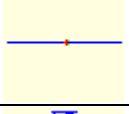
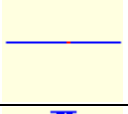
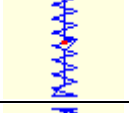
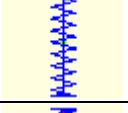
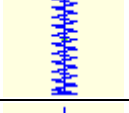
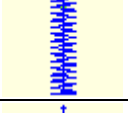
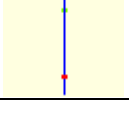
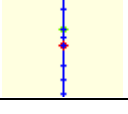
9.3 List of Patterns for Button-sewing in Controller

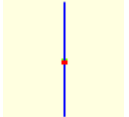
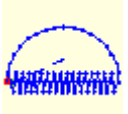
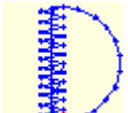
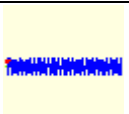
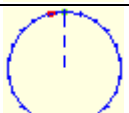
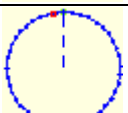
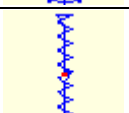
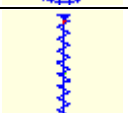
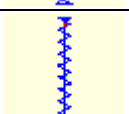
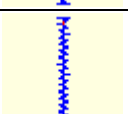
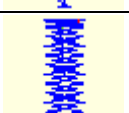
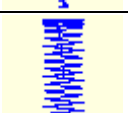
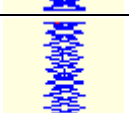
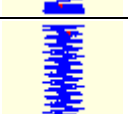
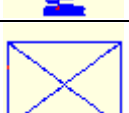
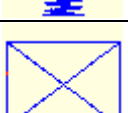
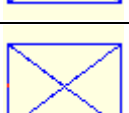
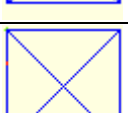
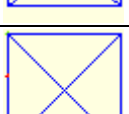
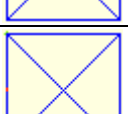
No.	Pattern	Thread Number	Standard Sewing Length X(mm)	Standard Sewing Length Y(mm)	No.	Pattern	Thread Number	Standard Sewing Length X(mm)	Standard Sewing Length Y(mm)
1-34		6-6	3.4	3.4	18-44		6	3.4	0
2-35		8-8			19-45		8		
3		10-10			20		10		

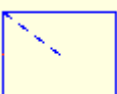
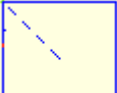
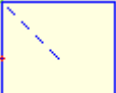
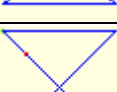
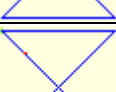
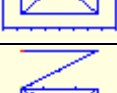
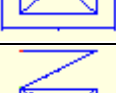
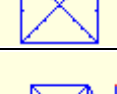
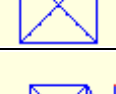
No.	Pattern	Thread Number	Standard Sewing Length X(mm)	Standard Sewing Length Y(mm)	No.	Pattern	Thread Number	Standard Sewing Length X(mm)	Standard Sewing Length Y(mm)
4		12-12			21		12		
5-36		6-6			22		16		
6-37		8-8			23-46		6	0	3.4
7		10-10			24		10		
8		12-12			25		12		
9-38		6-6			26-47		6-6	3.4	3.4
10-39		8-8			27		10-10		
11		10-10			28-48		6-6		
12-40		6-6			29		10-10		
13-41		8-8			30-49		5-5-5	3.0	2.5
14		10-10			31		8-8-8		
15-42		6-6			32-50		5-5-5		
16-43		8-8			33		8-8-8		
17		10-10							

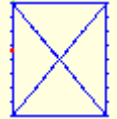
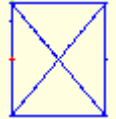
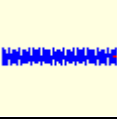
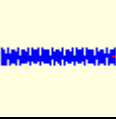
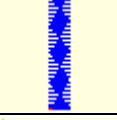
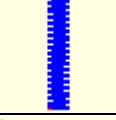
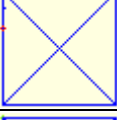
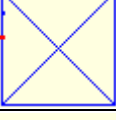
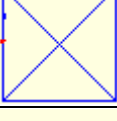
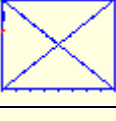
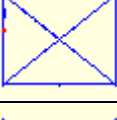
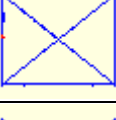
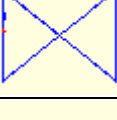
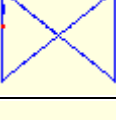
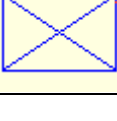
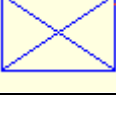
9.4 List of Patterns for Doubling in Controller

NO.	Patterns	Stitch Number	Length × Width (mm)	NO.	Patterns	Stitch Number	Length × Width (mm)
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1		41	16.1×2	2		41	10.2×2
3		41	16×2.4	4		41	24×3
5		27	10.1×2	6		27	16×2.4
7		35	10.1×2	8		35	16×2.4
9		55	24×3	10		63	24×3
11		20	6.1×2.4	12		27	6.2×2.4
13		35	6.1×2.4	14		14	8×2
15		20	8×2	16		27	8×2
17		20	10×0	18		27	10×0
19		27	25.2×0	20		35	24.8×0
21		40	25.2×0	22		43	35×0
23		27	4×20	24		35	4×20
25		41	4×20	26		55	4×20
27		17	0×20	28		20	0×10

29		20	0×20	30		27	0×20
31		51	10.1×7	32		62	12.1×7
33		23	10.2×6	34		30	12×6
35		47	7×10	36		47	7×10
37		89	24×3	38		27	8×2
39		25	11.8×12	40		45	12×12
41		28	2.4×20	42		38	2.4×25
43		38	2.4×25	44		57	2.4×30
45		141	10×30	46		122	10×30
47		97	10×30	48		109	10.1×30
49		122	10.1×30	50		265	10×30
51		108	40×30	52		80	40×30
53		64	40×30	54		96	30×30
55		76	30×30	56		60	30×30

57		52	40×30	58		40	40×30
59		32	40×30	60		44	30×30
61		36	30×30	62		28	30×30
63		60	40×30	64		48	40×30
65		36	40×30	66		56	30×30
67		44	30×30	68		36	30×30
69		67	40×30	70		51	40×30
71		39	40×30	72		55	30×30
73		43	30×30	74		35	30×30
75		42	30×30	76		32	30.1×30
77		26	30×30	78		103	30×25
79		82	30×25	80		64	30×25
81		80	20×30	82		60	20×30
83		80	30×20	84		60	30×20

85		74	20×24	86		54	20×24
87		115	40×5	88		115	40×5
89		93	5×30	90		109	5×30
91		65	20×20	92		49	20×20
93		39	20×20	94		63	25×20
95		51	25×20	96		45	25×20
97		42	25×20	98		33	25×20
99		111	60×40	100		91	60×40

9.5 List of Warning

Code	Name	Release Method
E-001	Pedal is not at the middle position.	Check whether pedal is stepped at entering the Ready Sewing Interface
E-002	Machine is in emergency stop	Press  to enter the Status of frame-moving at stop or press Reset Switch to trim thread and restart or return to origin.
E-003	Tilt of Machine Head Error	Press Enter. Machine can not run at status of head tilt. Please return to the normal position. The technician can use the short connect block to short the 2P blue plug on SC047A board.
E-004	Main voltage is too low (300V)	Turn off Machine
E-005	Main voltage is too high (300V)	Self-recovery
E-007	IPM over-voltage or over current	Turn off Machine
E-008	Voltage of assistant device (24V) is	Turn off Machine

Code	Name	Release Method
	too high	
E-009	Voltage of assistant device (24V) is too low	Turn off power. Please re-power the machine after a while. Meanwhile, user also has to ensure no short circuit at solenoids connecting X11 port.
E-010	Valve (fan) problem	Turn off Machine
E-013	Encoder error or unconnected	Turn off power and check the connection at X5 port.
E-014	Motor running abnormal	Turn off Machine. Check the signal from motor encoder
E-015	Exceeds sewing area	Press Reset switch, and confirm the figure and X/Y scale rate. Activating Condition: Software Pattern Error
E-016	Needle bar upper position abnormal	Press  . The wrong stop position of main motor may be caused by the main shaft driver or the manual rotation. Turn the wheel to return the needle bar to the upper position.
E-017	Thread breakage detection error	Press 
E-018	Knife position abnormal	Turn off power. Check the connecting condition of CZ024 on head signal board. If that is ok, please check trimming coupler.
E-019	Emergency switch is not at the right position	Self-recovery
E-020	Stepping software version error	Turn off machine. Make sure the used stepping board and the board program are correct
E-021	Machine is in emergency stop (Free)	Press Reset
E-022	Machine is in emergency stop (Ready)	Press Reset
E-023	Thread-catching position error	Turn off Machine
E-024	Wrong connection between operation panel and sewing machine	Turn off Machine
E-025	X origin detection abnormal	Turn off power. Check the connecting condition of X9 port (on control box) and CZ021 port (on head signal board).
E-026	Y origin detection abnormal	Turn off power. Check the connecting condition of X9 port (on control box) and CZ022 port (on head signal board).
E-027	Presser origin detection abnormal	Turn off power. Check the connecting condition of X9 port (on control box) and CZ025 port (on head signal board).
E-028	Thread-catching origin detection abnormal	Turn off Machine
E-029	Intermediate presser origin detection	Turn off Machine

Code	Name	Release Method
	abnormal	
E-030	Stepping driver communication abnormal	Turn off power. Re-power the machine after a while. Check the condition of communication cable, mother board and driving board.
E-031	Stepping motor over-current	Turn off power. Re-power the machine after a while.
E-032	Stepping driver power supply abnormal	Turn off Machine
E-034	Abnormal current	Turn off machine. Check the condition of the main motor driving circuit, encoder response signal and mechanical load in order
E-035	IPM frequent over-current 1	Turn off machine. Check the condition of the main motor driving circuit, encoder response signal and mechanical load in order
E-036	IPM frequent over-current 2	Turn off machine. Check the condition of the main motor driving circuit, encoder response signal and mechanical load in order
E-037	Motor blockage 1	Press 
E-038	Motor blockage 2	After the action order is sent to main motor, main motor has to response. Check the 6-line PWM wave of main motor driving circuit and response signal of encoder. At last, make sure the mechanism has no blockage.
E-039	Motor over speed	Turn off power and turn it on after a while
E-040	Stop over-current	Turn off Machine
E-041	Motor overload	Turn off Machine
E-042	Bus voltage abnormal	Press 
E-043	Thread-trimming motor origin abnormal	Press 
E-044	Head board EEPROM loading error	Press 
E-045	Component abnormal	Turn off Machine
E-046	CRC checking error	Turn off Machine
E-047	Data checking error	Turn off Machine
E-048	X checking error	Communication error between main control board and stepping board
E-049	Y checking error	Communication error between main control board and stepping board
E-050	MD1 stepping motor over-current	Turn off machine and check the stepping driving board and stepping motor
E-051	MD1 X direction not finish	Turn off machine. The main controller sends the new

Code	Name	Release Method
		action order before the stepping device finish the current order.
E-052	MD1 Y direction not finish	Turn off machine. The main controller sends the new action order before the stepping device finish the current order.
E-053	MD2 stepping motor over-current	Turn off machine and check the stepping driving board and stepping motor
E-054	MD2 X direction not finish	Turn off machine. The main controller sends the new action order before the stepping device finish the current order.
E-055	MD2 Y direction not finish	Turn off machine. The main controller sends the new action order before the stepping device finish the current order.
E-254	Undefined error	Press 

9.6 Hint List

No.	Name	Content
M-001	Can not find pattern data	Please reload or input from design software
M-002	Set value too large	Please input value within range
M-003	Set value too small	Please input value within range
M-004	Parameter save error	Press Enter to recover default setting
M-005	Communication error	Communication error between operation panel and control box
M-006	Fail to load letter sewing file	
M-007	Operation head not match to control box	Please check the model and the software version
M-008	Over Max stitch pitch	
M-009	Wrong password	Input again
M-010	Clock error	The hardware clock is down, please contact manufacturer for repair
M-011	Letter sewing pattern saved successfully	Enter the pattern selection interface and generate new letter sewing pattern
M-012	SRAM initialization	Clear all the data within SRAM, please turn off machine and restore the DIP switch
M-013	Turning off	
M-014	USB is pulled out	USB is pulled out
M-015	Can not find pattern in U disk	

M-016	At least input one letter	Periodical password has been set, can not change system time
M-017	No warning record	
M-018	Wrong user ID	Input again
M-019	Fail to confirm password	Input password again
M-020	Can not change system time	Periodical password has been set, can not change system time
M-021	Password file input error	
M-022	Password file load error	
M-023	Password save successful	
M-024	Clear all password failed	Can not delete password file
M-025	Fail to clear password	After clearance of password, the input of file has problem
M-026	Password file is deleted without authorization	Password file is deleted without authorization, please turn off machine
M-027	User ID file damaged	
M-028	Can not input blank	Input password again
M-029	Current password not match	Input current password again
M-030	New password not match	Input new password again
M-031	Enter touching panel correction mode	Are You Sure? Yes: enter No: X
M-032	Correction successful	Correction is successful, please restart machine
M-033	Correction failed	Please perform correction again
M-034	Clear warning record	Are You Sure? Yes: enter No: X
M-035	Periodical password is same to super password error	Input password again
M-036	Pattern data error	Current pattern data error, it will be replaced by default patterns
M-037	Pattern information file open failed	Restore to default pattern configuration
M-038	Memory full	Please delete the unused patterns
M-039	Cover the pattern	Are You Sure? Yes: enter No: X
M-040	P pattern open error	Pattern file has mistake, it will be deleted
M-041	C pattern open error	Pattern file has mistake, it will be deleted
M-042	Pattern is existed	Can not replace the pattern
M-043	Delete pattern data	Press Enter to delete; Press ESC to quit
M-044	Delete the selected pattern	Are You Sure? Yes: enter No: X
M-045	Pattern is used, can not delete	Please release the quotation at P or C pattern
M-046	Save at lease one pattern	Can not delete last pattern
M-047	Load default patterns	No pattern in memory, please load default patterns
M-048	No pattern in memory	Press Enter to load default patterns

M-049	Pattern number not exist	Please input again
M-050	P pattern not exist	Please create P pattern
M-051	Save software version successful	Software version is saved to the root directoty of U disk
M-052	Replace needle	Needle replacement set value is reached, please replace needle
M-053	Replace oil	Oil replacement set value is reached, please replace oil
M-054	Clean machine	Cleaning machine set value is reached, please clean machine
M-055	Clear needle replacement set value	Are You Sure? Yes: enter No: X
M-056	Clear oil replacement set value	Are You Sure? Yes: enter No: X
M-057	Clear cleaning time value	Are You Sure? Yes: enter No: X
M-058	Clear production control value	Are You Sure? Yes: enter No: X
M-059	Clear calculated running time	Are You Sure? Yes: enter No: X
M-060	Clear calculated sewing number?	Are You Sure? Yes: enter No: X
M-061	Clear calculated power-on time?	Are You Sure? Yes: enter No: X
M-062	Clear calculated sewing stitch number?	Are You Sure? Yes: enter No: X
M-063	Clear calculated over-current times?	Are You Sure? Yes: enter No: X
M-064	Clear calculated stop times?	Are You Sure? Yes: enter No: X
M-065	Edit new pattern?	Are You Sure? Yes: enter No: X
M-066	Return to sewing mode?	Are You Sure? Yes: enter No: X
M-067	Restore all the settings	Are You Sure? Yes: enter No: X
M-068	Restore the selected items	Are You Sure? Yes: enter No: X
M-069	Not select an item	Please select one or several parameters
M-070	Sewing counter reaches set value	Please pres Enter to cleat it
M-071	No.of pcs counter reaches set value	Please pres Enter to cleat it
M-072	Successful	Current operation is successful
M-073	Failed	Current operation is failed
M-074	Copy failed	Check the room of memory
M-075	Copy failed	Check whether the U disk is pulled out
M-076	File I/O error	File I/O error
M-077	Verification failed at updating main software	
M-078	Can not delete pattern data	The selected sewing data is in use
M-079	Perform parameter transfer	Are You Sure? Yes: enter No: X
M-080	Can not open changed pattern	Please confirm pattern file
M-081	Changed pattern format error	Please confirm pattern file
M-082	Changed pattern data is too long	Please confirm pattern file
M-083	Update successful	Update successful, please restart machine

M-084	Fail to open file	Fail to open file
M-085	Parameter restoration successful	Parameter restoration successful, please restart machine
M-086	Not select update item	Please select at least one item for update
M-087	Selected item for update is not existed	If the item has no update file, the system will cancel the selection. If user wants to update the rest, please confirm again
M-088	Initialize U disk	Press Enter to perform operation; Press ESC to quit. The initialization will delete all the files in U disk
M-089	Initialize memory	Press Enter to perform operation; Press ESC to quit. The initialization will delete all the files in memory
M-090	Low memory	
M-091	Fail to select the function	
M-092	Shape point repeated error	
M-093	Can not return	
M-094	Can not find next stitch sewing data	
M-095	Can not find previous stitch sewing data	
M-096	Pattern data is too big	
M-097	Calculation error	
M-098	Pattern-designing error	
M-099	Cannot find the pattern	
M-100	Over moving range	
M-101	Over sewing range	Make sure pattern within sewing range
M-102	Stitch number over range	Reduce stitch number
M-103	Pattern file error	
M-104	Confirm to change point	
M-105	Confirm to insert auto trimming code	
M-106	Delete new pattern?	Press Enter to confirm; Press ESC to quit
M-107	Delete elements?	Press Enter to confirm; Press ESC to quit
M-108	Confirm to perform?	Press Enter to confirm; Press ESC to quit
M-109	Delete mechanical control order?	Press Enter to confirm; Press ESC to quit
M-110	Delete needle entry point	Press Enter to confirm; Press ESC to quit
M-111	Are you sure to move presser?	Press Enter to confirm; Press ESC to quit
M-112	Delete shape point	Press Enter to confirm; Press ESC to quit
M-113	Warning: initialization will delete entire data in memory!	Press Enter to confirm; Press ESC to quit
M-114	Change model?	Press Enter to confirm; Press ESC to quit
M-115	Pattern is locked	Please unlock first

M-116	Can not modify basic pattern	
M-117	Turn off machine.	Current operation is finished, please restart machine
M-118	Can not modify counter	At modification, please turn off setting
M-119	Load basic pattern	Press ENTER to load basic pattern, don't turn off machine !
M-120	Restore to default setting?	Press Enter to confirm; Press ESC to quit
M-121	Clear entire custom parameters?	Are You Sure? Yes: enter No: X
M-122	Head board parameter error	Press ENTER to restore to default values
M-123	Pattern calculation error	
M-124	Delete all the P and C patterns	Press Enter to confirm; Press ESC to quit
M-125	Restore head board parameters?	Are You Sure? Yes: enter No: X
M-126	Over setting range	
M-127	Can not find customized pattern	This operation is only available for customized pattern. The basic pattern can not be outputted!
M-128	Outer presser is at upper position	Please lower the presser to perform the operation!
M-129	Can not perform right operation	
M-130	Can not find USB	Please insert U disk containing mp3 file
M-131	No video files in vid.avi	Please put vid.avi file into pdat directory in U disk and then enter the update interface to update video files

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