Pattern-making Operation Manual

of

SC41X Computerized Control System
for Pattern-sewing Machine
(Touching Panel Type)

Version：2012-01

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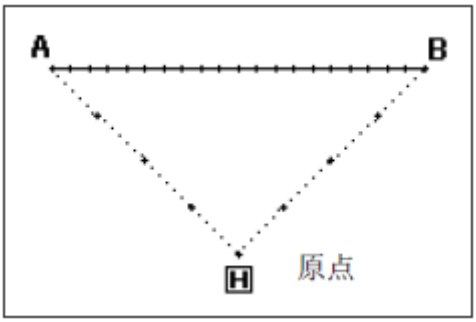
1 Make Pattern of Figure Material

1.1 Procedure of Making Pattern

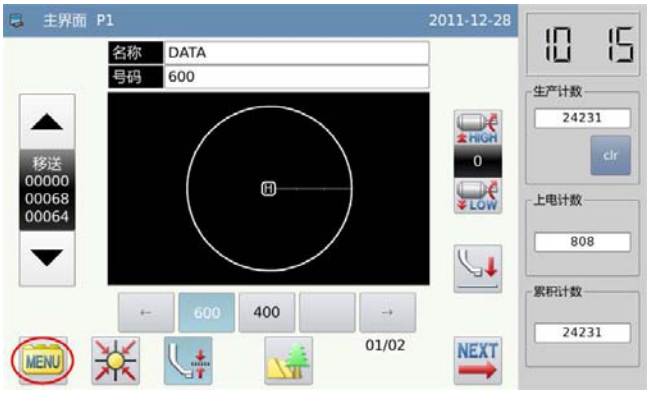
At here, we will introduce the pattern-making procedure for figure material and the shift of interfaces. And we will use the example to explain how to make the pattern in the following picture.



1、 Start Operation from Main Interface

Press

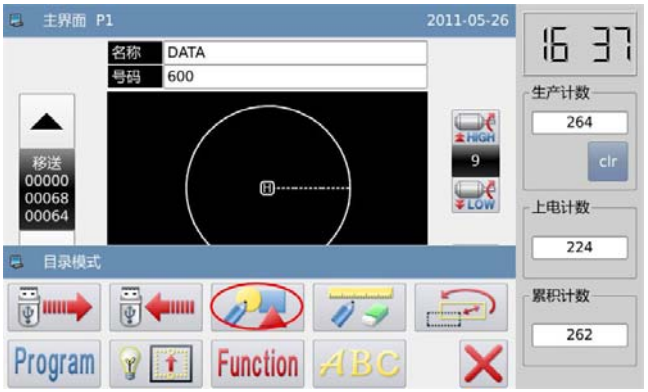
in Main Interface.



2、 Open the Interface of Multiple Menu

In the interface of multiple menu,

press .



3、 Display Interface of Input Mode

①┌ Re-input

If user needs replace the inputted material with the new material, he should press CLR, which is to clear the previous pattern-making material and remake the pattern.

If user needs continue making the pattern with the inputted material, please press C&R to continue.

② Selection of Pattern Format

「B」or「BA」is the format of pattern data.

[Note]B format is for the completed pattern file, which is recommended to be used. For the pattern file in BA format, some pattern modification and transforming functions are unavailable.

③ Set Speed

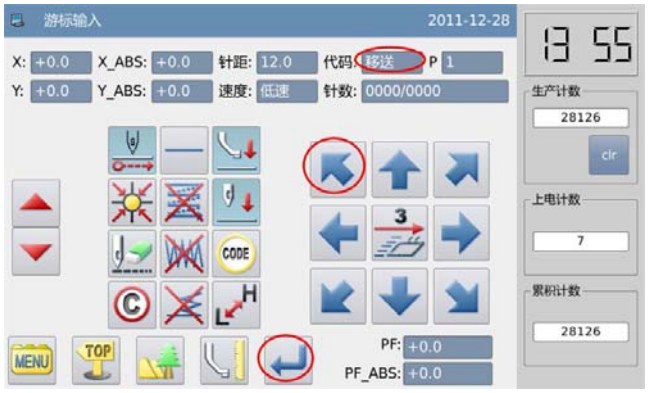
④ Set Stitch Interval

Use 0~9 or ↑~↓, user can input the stitch interval, whose range is at 0.1mm~12.7mm。

⑤ Confirm the Input

After setting the above parameters, please press ↵.

4、 Display Interface for Inputting Icon

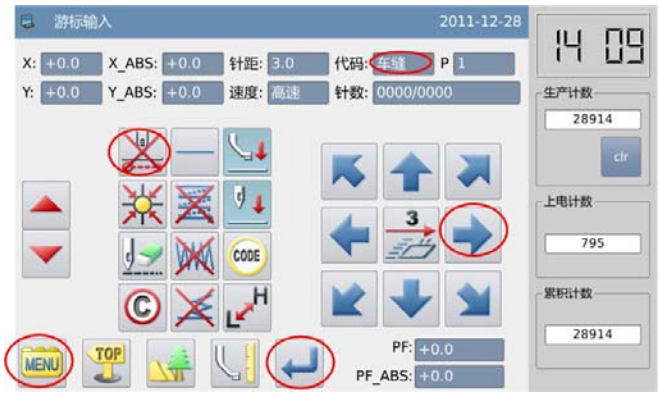


In default setting, the code is FEED when the interface is displayed

Hold to move start point A to the position below the needle. (When user presses direction key, the displacement of X/Y in the screen will be changed).

When the icon reaches to the destination, user needs press for confirmation. (The FEED operation is finished.)

[Note] Only when the needle is at the end of the pattern, can user input the new pattern. Therefore, after the step moving, if the needle is not at the end of the pattern, the direction keys will be locked. Only when user uses the stepping motion to move the needle to the end of the pattern, can the new pattern be inputted.



Then press to turn the code to SEW.

After that, hold to move the end point B to the position under the needle.

When the icon reaches to the destination, user needs press for confirmation. (The Linear Sewing from A to B is created)

Then press .

5、 Display the Catalogue Mode Window for Inputting Icon

Press

to generate the orders for returning to origin and ending the input.

[Note] The frame will be automatically returned to the origin, so please pay attention to the pause position of the needle.

6、 Press [Return to Origin] Key

Press .

7、 Select the method for saving

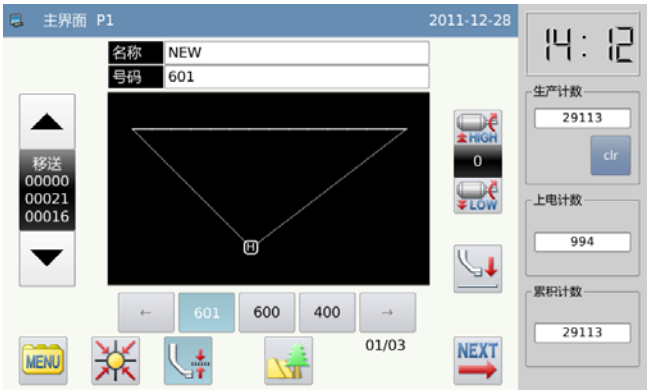
After selecting the save method, user needs press for confirmation.

(Here, we select “Save as New File”).

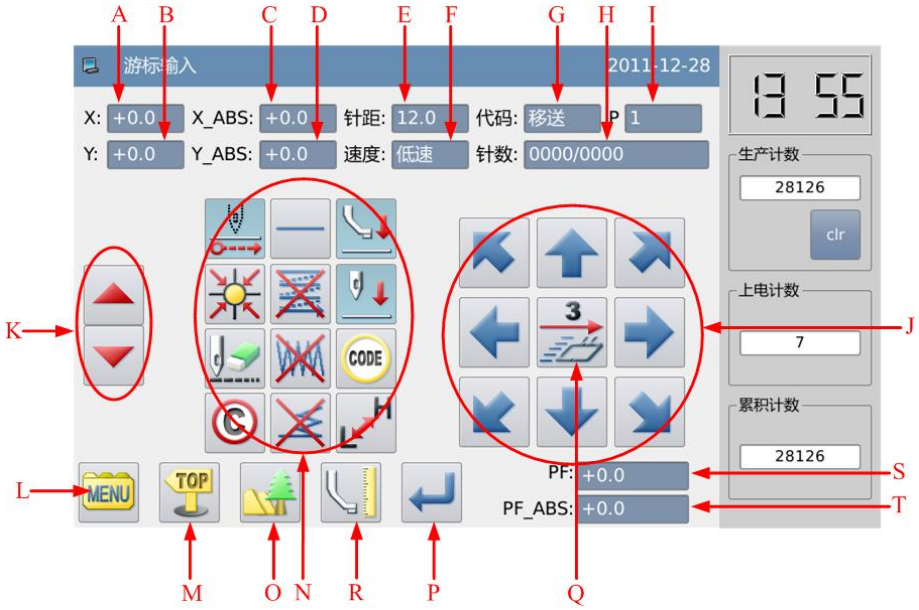
8、 Return to Main Interface

The system will return to the main interface, please check the inputted figure.

By then, the input is finished.



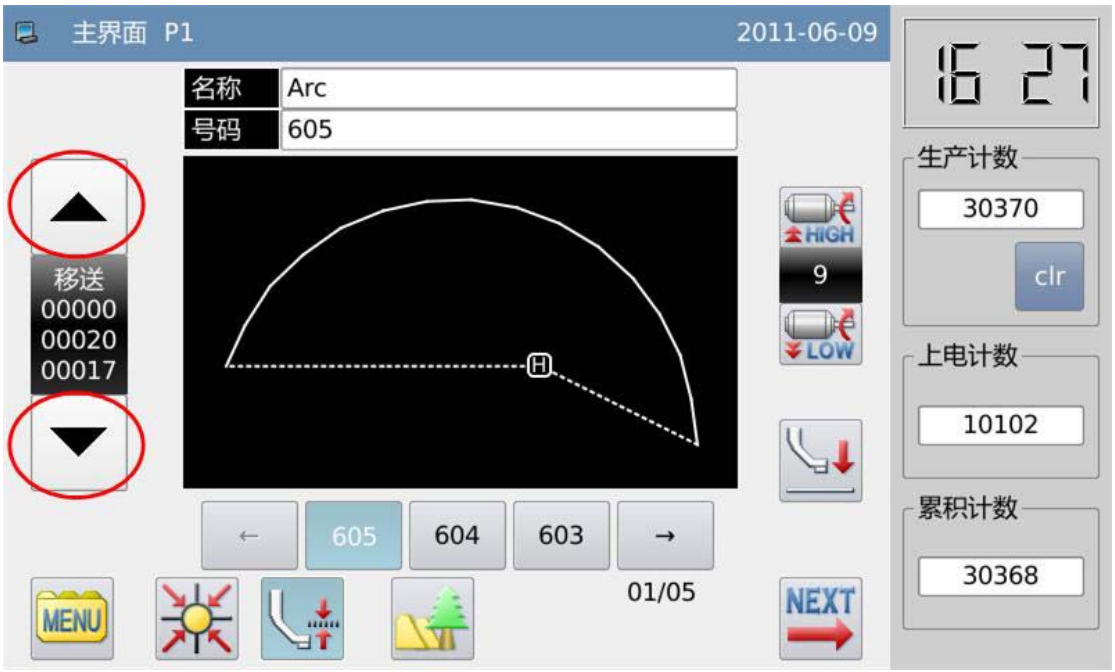
1.2 Additional Explanations on Icon Input Interface



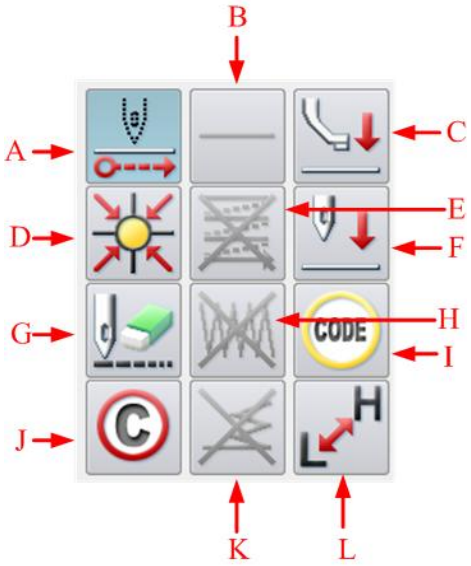
Function List：

No.	Function	Description
A	Y Relating Coordinate	The X value of the relating coordinate at current displacement
B	X Relating Coordinate	The Y value of the relating coordinate at current displacement
C	X Absolute Coordinate	Current X coordinate
D	Y Absolute Coordinate	Current Y coordinate
E	Stitch Interval	Display the set stitch interval. **[Note] The stitch interval for empty feeding is 12.0mm**
F	Speed	The speed of the current stitch
G	Code	The currently inputted code.
H	Stitch Number	The stitch number by the current position of needle/ Total stitch number of pattern

I	Shape Point Number	The number of the shape points inputted during the current edition
J	Direction Keys	Move the needle to each direction.
K	Step-moving Key	Set the forwards/backwards step-moving at the created pattern
L	Menu	Have access to menu mode
M	Quit	Return to previous interface
N	Pattern-making Input	Each pattern-making input function.
O	Pattern Preview	Check the outline of the pattern being made
P	Enter	Confirm the shape edited currently
Q	Frame-moving Speed	3：Normal Speed 2：Low Speed 1：Lower Speed
R	Set Thickness Fall of Fabrics	Set thickness fall of fabrics **[Note] this function is unavailable at E Type**
S	Display Thickness Fall of Fabrics	Display thickness fall value of fabrics at current needle position **[Note] this function is unavailable at E Type**
T	Display Height of Intermediate Presser	Display the height of the intermediate presser at current position **[Note] this function is unavailable at E Type**



1.2.1 Functions for Input

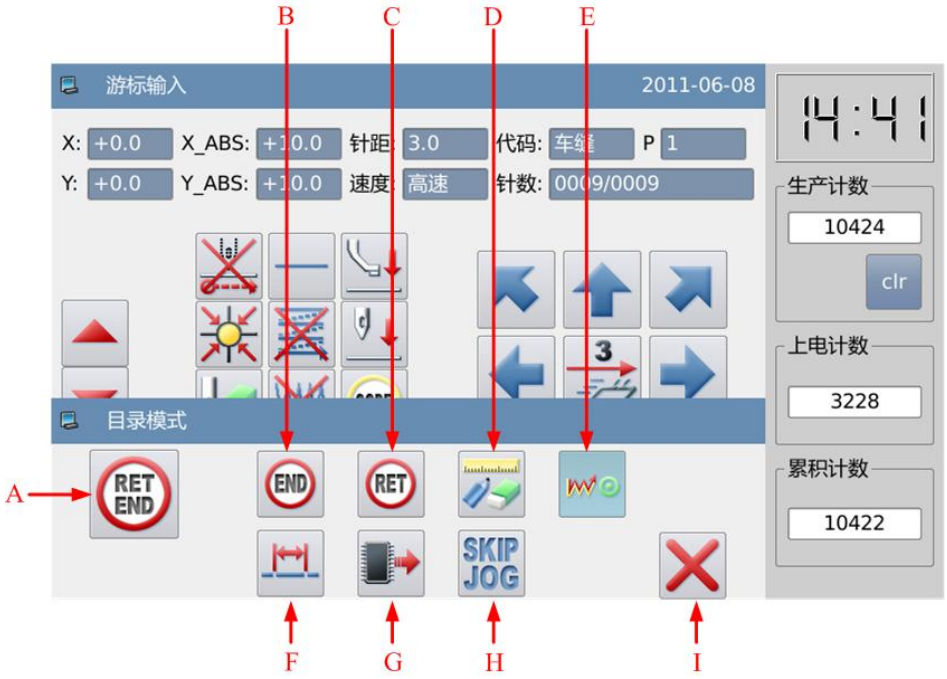


Functions List

No.	Function	Description
A	Feed Key	Set feed at current position. : Feed : No Feed
B	Set Input Method	Display the current basic input method (Spot Sewing, Linear Input, Polygon Input, Circle Input, Arc Input and Curve Input). Press this key to have access to the interface for setting the input method.
C	Movement of Intermediate Presser	Press it to move intermediate presser in the direction of arrow. : Press it to lift the presser : Press it to lower the presser
D	Return to Origin	Press it to return to origin.
E	Set Multi-sewing/ Off-side Sewing	Set the input method of multi-sewing or the off-side sewing at current (Including No Multi-sewing, Cocurrent Multi-sewing[Feed], Reverse Multi-sewing[Feed], Cocurrent Multi-sewing [Sewing], Reverse Multi-sewing [Sewing] and Off-side Sewing). Press this key to have access to the detailed interface for setting the multi-sewing/ off-side sewing.
F	Move Needle	Move the Needle : Lower the Needle : Lift the Needle
G	Cancel Previous	Press this key to cancel the last confirmed point and have the icon return

	Input	to the previous input point
H	Herringbone Sewing Input	Set herringbone sewing at present (user can also set not to use that sewing method in the parameter). Press this key to have access to the interface for setting the details of herringbone sewing.
I	Function Code Input	Press this key to have access to the interface for inputting function code.
J	Cancel	Press this key to cancel the last step that is not decided yet and return to the previous input.
K	Set Reverse Stitch Input	Set the current stitch as reverse stitch or not (no reverse stitch, reverse sewing stitch, multiple reverse sewing are available in the selection). Press this key to have access to the interface for setting the details of the reverse stitch.
L	Change Sewing Speed	Press this key to change the sewing speed in the order of (HIGH→MD2→MD1→LOW→HIGH…)

Interface of Icon Input in Catalogue Mode



Functions List:

No.	Function	Description
A	Return to Origin & End the Input.	Press this key to create the material for returning to origin and ending, so as to finish the figure input mode.
B	End	Press this key to create the data for ending, so as to finish the figure input mode
C	Return to Origin	Press this key to create the data for returning to origin.
D	Figure Modification	Press this key to have access to the modification mode.

E	Pattern-making Tracking	Set whether the frame tracks the action during the pattern-making ：Track ：Not Track
F	Change Stitch Interval	Press this key to have access to the interface for changing the stitch interval.
G	Load Pattern Data	Press this key to add the pattern data in the memory behind the shape being inputted.
H	Fast Moving	Press this key to have access to the interface for fast moving
I	ESC	Quit the Catalogue Mode

1.3 Basic Input

Basic Input Method：

Function	Keys	Descriptions
Linear Input		Input two points. Make linear sewing between the current position (the inputted one) and any input point.
Arc Input		Input three points. Make the arc sewing among the current position and other two input points.
Circle Input		Input three points. Make the circle sewing among the current position and other two input points.
Curve Input		Make the curve sewing connection among the current position and other input points. **[Note] At most, 2000 points can be inputted**
Polygon Input		Make the linear sewing connection among the current position and other input points. **[Note] At most, 2000 points can be inputted.**
Spot Sewing		Sew in the way of one point, one stitch
Function Code Input		Input function code in the figure that is finished inputting.

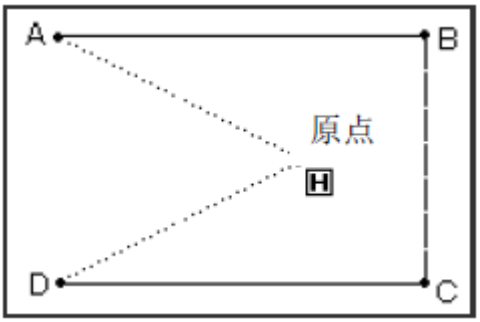
1.3.1 Linear Input

Operation Points:

- Select
- Input two points：Make linear sewing between the current position (the inputted

one) and any input point.

[Example]: How to make the pattern at below.



Operation Instructions:

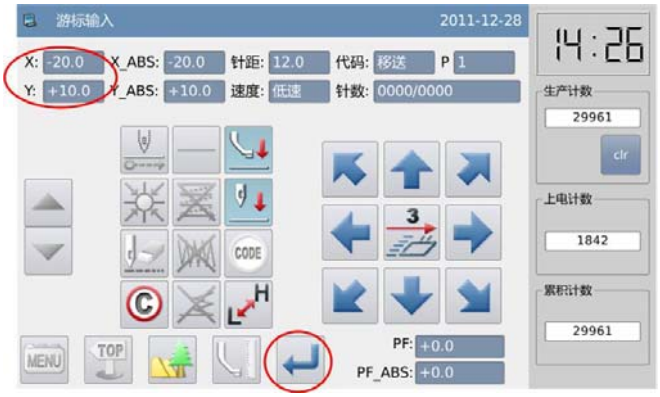
1、Input the Feed Data to Point A

① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is “Feed”. If not, please press to turn the code to “Feed”

③ Use direction key to move point A under the needle.

2、Set the Feed to Point A



① Check the displacement amount (Relating coordinate of X & Y)

[Example] X：-20.0，Y：+10.0

② Press to create the feed data to point A.

③ The displacement amount (Relating coordinate of X & Y) will be cleared.

X：+0.0，Y：+0.0

3、Input Sewing to Point B

① Code turns to Sewing Automatically.

② Use direction key to move point B under the needle.

③ Press to create the linear sewing date to point B

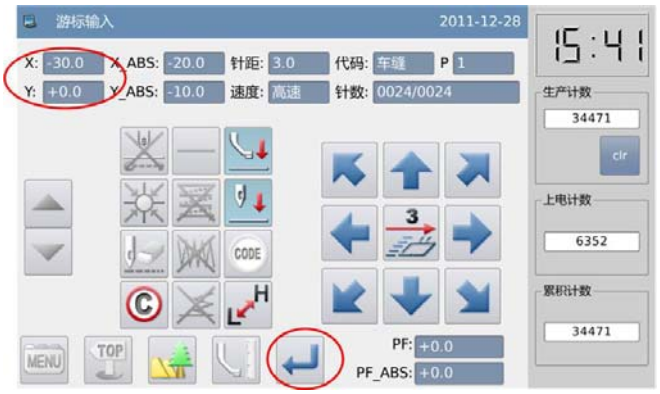
4、Input Sewing from Point C to Point D

① Use direction key to move point C under the needle.

②Press to create the linear sewing date to point C

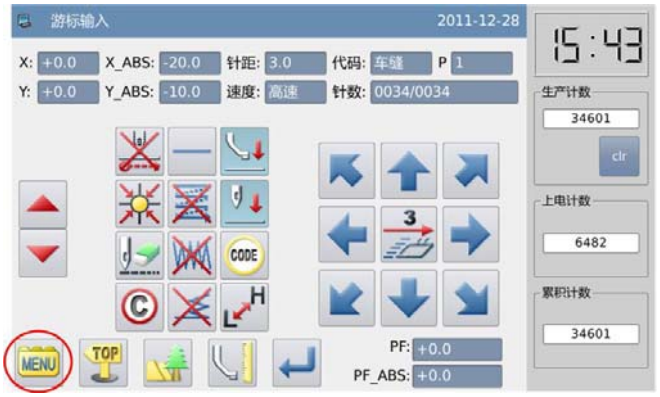
③Use direction key to move point D under the needle.

④Press to create the linear sewing date to point D



5、Set the Sewing to Point D

Press .



6、Input the Data for Returning to Origin and Ending

① Press to create the data for returning to origin and ending

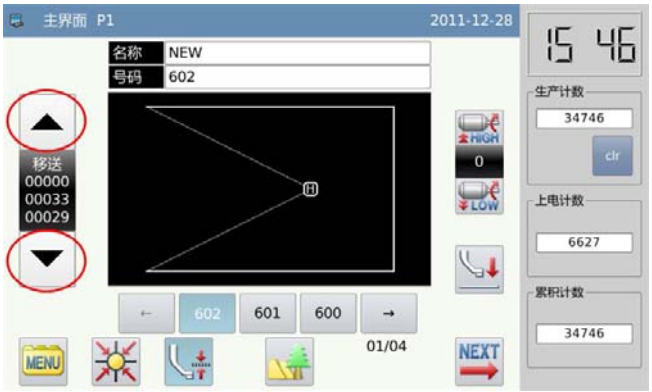
② The system will display “Please Press the Key for Returning to Origin”, then user needs press .

7、Save the Pattern Data

① After the method for saving is selected, please press .

② Return to main interface.

8、Check the Pattern Data



① Check the pattern data. User can use to check the action of the pattern

(if you are still inputting the pattern data and but the “Enter” is pressed, you will be able to test the pattern as well)

② For any modification, please refer to “Modification of Pattern File Data”.

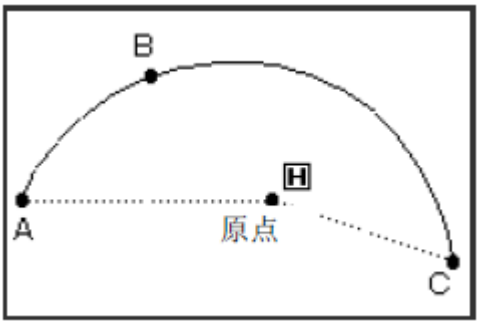
1.3.2 Arc Input

Operation Points:

- Select
- Input three points; make the arc sewing from the current position to other two

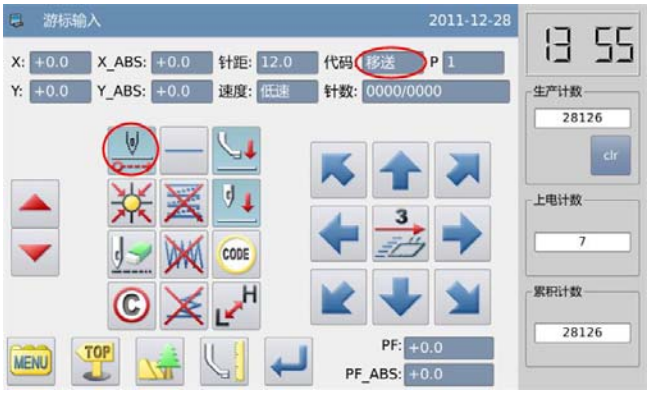
inputted points.

[Example]: How to make the pattern at below.



Operation Instructions:

1、Input the Feed Data to Point A

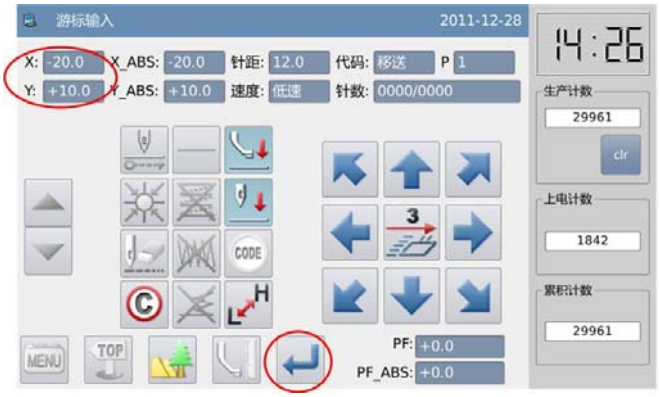


① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is “Feed”. If not, please press to turn the code to “Feed”

③ Use direction key to move point A under the needle.

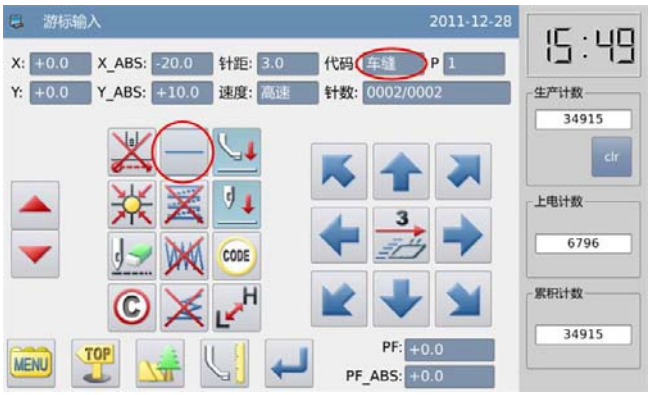
2、Set the Feed to Point A



① Check the displacement amount

② Press to create the feed data to point A.

3、Change the Input Method



① Clear the displacement amount.

② The code turns to sewing automatically.

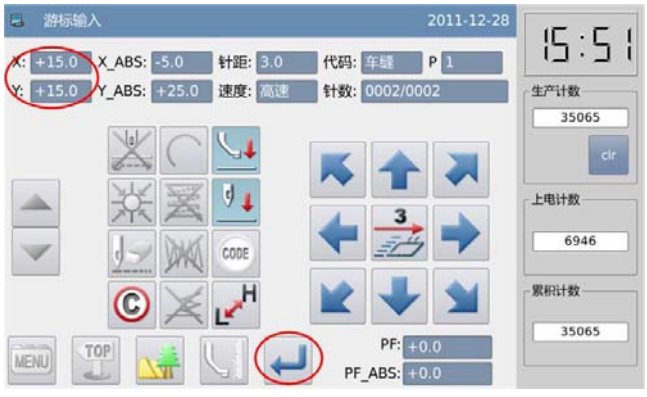
③ If the displayed figure is not the (at the position of in the right picture), please press to display the interface for setting the input method (The type of current sewing will be displayed on button)

4、Set as Arc Input

① Press and then for confirmation.

② Screen will return to the interface for icon input.

5、Sewing From Point B to Point C



①Use direction key to move point B under the needle.

② Check the displacement amount

③ Press to confirm point B

④Use direction key to move point C under the needle.

⑤ Press to confirm the arc input.

6、Create the Data of Arc Input

① The hint “Create Arc Data?” will be displayed on screen.

② Press to return to the interface for inputting point C

③ Press to create the sewing data of arc input.

7、Finish the Arc Input from Point A through Point B to Point C

Press .

8、 Input the Data for Returning to Origin and Ending

① Press to create the data for returning to origin and ending

② The system will display “Please Press the Key for Returning to Origin”, then user needs press .

9、Save the Pattern Data

① After the method for saving is selected, please press .

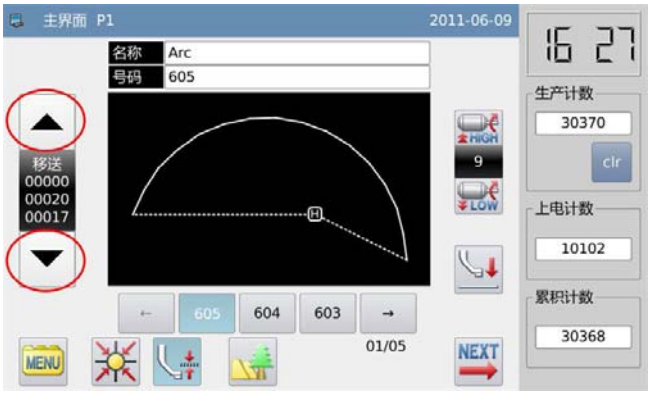
② Return to main interface.

10、Check the Pattern Data

① Check the pattern data. User can use to check the action of the pattern

(if you are still inputting the pattern data and but the "Enter" is pressed, you will be able to test the pattern as well)

② For any modification, please refer to "Modification of Pattern File Data".

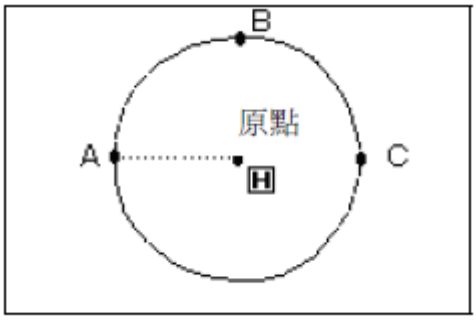


1.3.3 Circle Input

Operation Points:

- Select
- Input three points. Make the circle sewing passing the current position and other two inputted points.

[Example]: How to make the pattern at below.

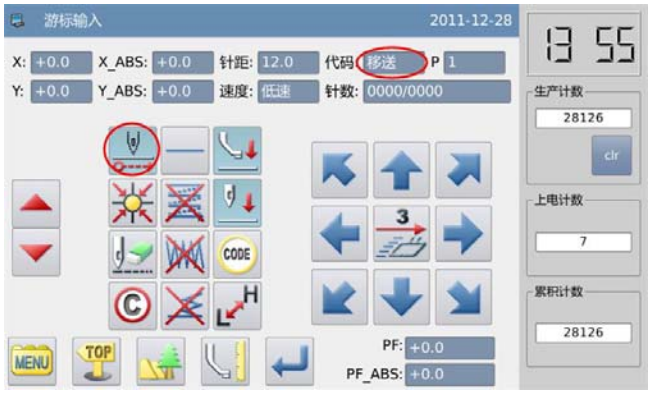


[Note] After the data for Circle Input is created, please pay attention to the frame, which

will move to start point of the sewing.

Operations Instructions:

1、Input the Feed Data to Point A

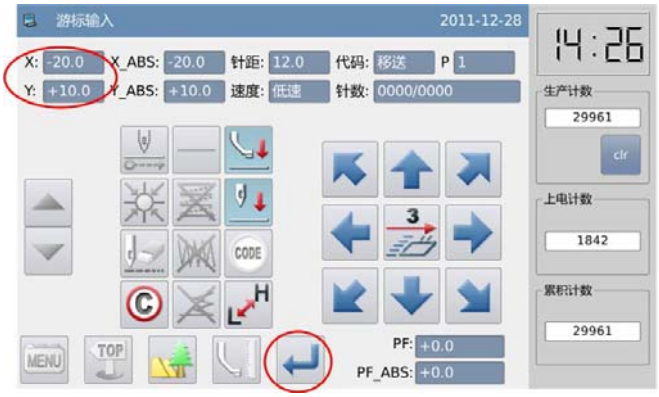


① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is “Feed”. If not, please press to turn the code to “Feed”

③ Use direction key to move point A under the needle.

2、Set the Feed to Point A

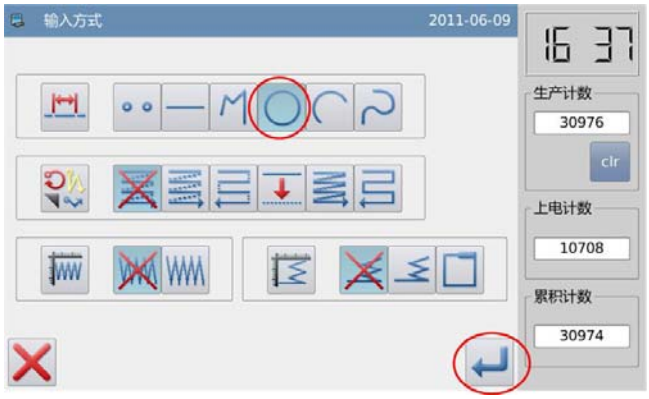


①Check the displacement amount

② Press to create the feed data to point A.

③ The code will turn to Sewing automatically. Set the sewing type as “Circle Input”.

3、Set as Circle Input



① Press and then for confirmation.

② Screen will return to the interface for icon input.

4、Sewing Through Point B to Point C

①Use direction key to move point B under the needle.

② Check the displacement amount

③ Press ↵ to confirm point B

④Use direction key to move point C under the needle.

⑤ Press ↵ to confirm point C and the circle input.

5、Create the Data of Circle Input

①The hint “Create Circle Data?” will be displayed on screen.

② Press ✕ to return to the interface for inputting point C

③ Press ↵ to create the sewing data of circle input.

6、Finish the Circle Input from Point A through Point B to Point C

Press MENU.

7、 Input the Data for Returning to Origin and Ending

① Press RET END to create the data for returning to origin and ending

② The system will display “Please Press the Key for Returning to Origin”, then user needs press .

8、Save the Pattern Data

① After the method for saving is selected, please press .

② Return to main interface.

9、Check the Pattern Data

① Check the pattern data. User can use to check the action of the pattern

(if you are still inputting the pattern data and but the “Enter” is pressed, you will be able to test the pattern as well)

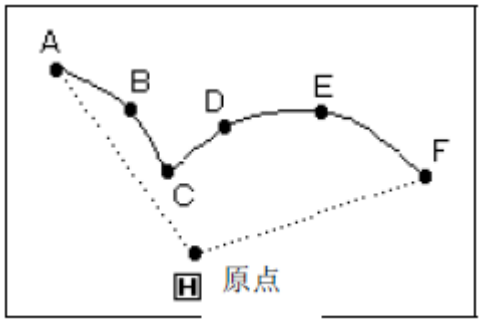
② For any modification, please refer to “Modification of Pattern File Data”.

1.3.4 Curve Input

Operation Points:

- Select
- Make the curve sewing from the current point through the inputted points
- With the angle point as dividing point of curve, user can continuously make several curve sewing.

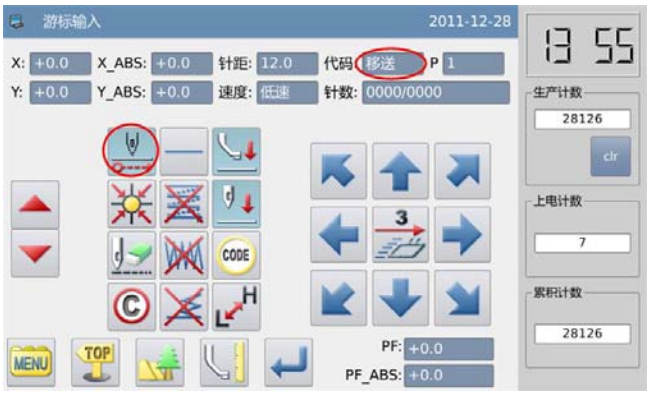
[Example]: How to make the pattern at below.



[Note] The point C in the above figure is the angle point of curve.

Operation Instructions:

1、Input the Feed Data to Point A



① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is “Feed”. If not, please press to turn the code to “Feed”

③ Use direction key to move point A under the needle.

2、Set the Feed to Point A

①Check the displacement amount

② Press to create the feed data to point A.

③ The code will turn to Sewing automatically. Set the sewing type as “Curve Input”.

3、Set as Curve Input

① Press and then for confirmation.

② Screen will return to the interface for icon input.

4、Set Point B

①Use direction key to move point B under the needle.

②Press to confirm point B

5、Set Point C

①Use direction key to move point C under the needle.

②Press to confirm point C

③ Press again to input the data of curve angle point (dividing point).

6、Set Dividing Point of Curve

①The hint “Create Curve Data?” will be displayed on screen.

② Press to return to the interface for inputting point C

③ Press to create the data of dividing point at this position.

7、Set Point D, Point E, Point F and Curve Input

① Return to the interface for inputting icon.

②Use direction key to move point D under the needle.

③ Press ↵ to confirm point D

④Use direction key to move point E under the needle.

⑤Press ↵ to confirm point E

⑥Use direction key to move point F under the needle.

⑦Press ↵ to confirm point F

⑧ After all the points are confirmed, please press ↵ again.

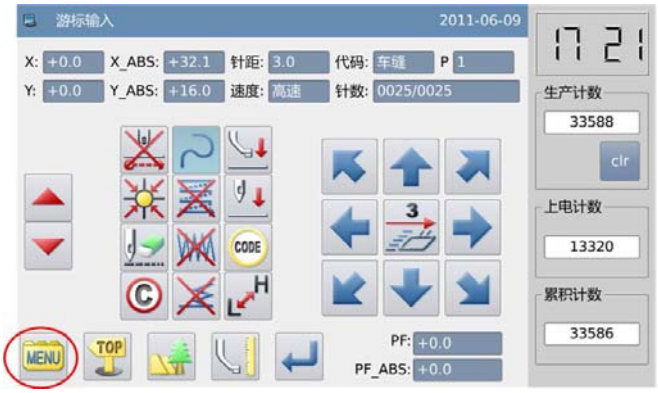
8、 Create the Data of Curve Input

①The hint “Create Curve Data?” will be displayed on screen.

② Press ✗ to return to the interface for inputting point F

③ Press ↵ to create the sewing data of curve input.

9、 Create the Data for Finishing the Curve Input



Press MENU.

10、Input the Data for Returning to Origin and Ending

① Press RET END to create the data for returning to origin and ending

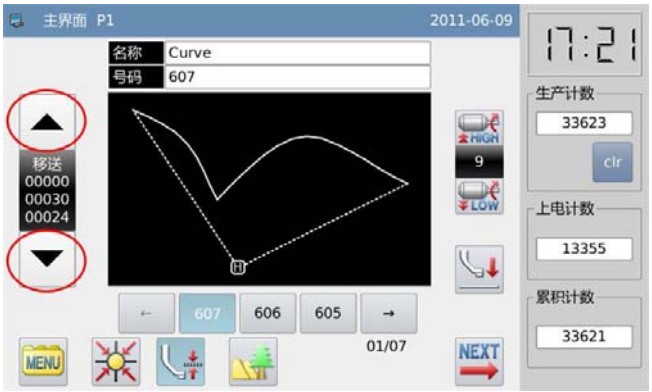
② The system will display "Please Press the Key for Returning to Origin", then user needs press .

11、Save the Pattern Data

① After the method for saving is selected, please press .

② Return to main interface.

12、Check the Pattern Data



① Check the pattern data. User can use to check the action of the pattern

(if you are still inputting the pattern data and but the "Enter" is pressed, you will be able to test the pattern as well)

② For any modification, please refer to "Modification of Pattern File Data".

[Note] At editing the free curve, in order to ensure the accuracy of the curve, user shall input the points as many as possible in the area with large curve rate.

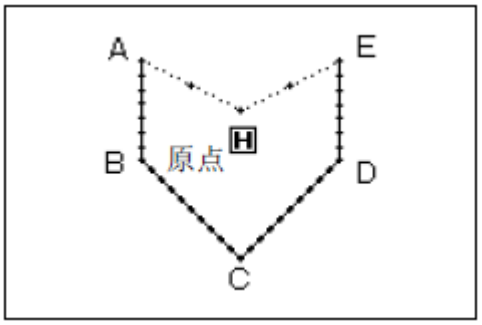
1.3.5 Polygon Input

Operation Points:

- Select
- Make the polygon sewing from the current point to the inputted points with

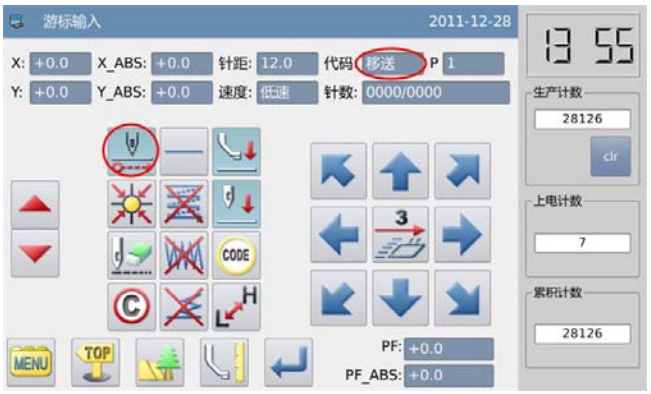
linear connection line

[Example]: How to make the pattern at below.



Operation Instructions:

1、Input the Feed Data to Point A

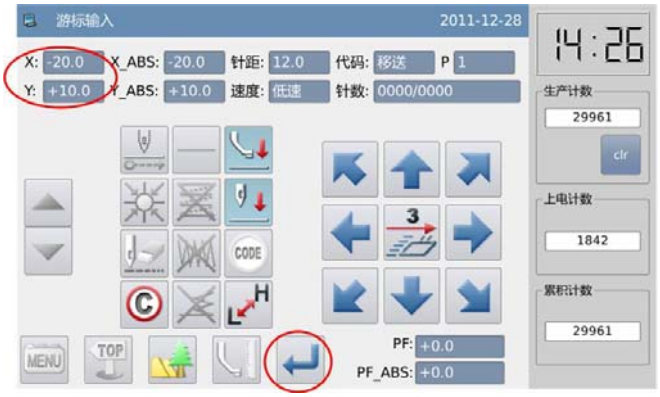


① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is “Feed”. If not, please press to turn the code to “Feed”

③ Use direction key to move point A under the needle.

2、Set the Feed to Point A



①Check the displacement amount

② Press to create the feed data to point A.

③ The code will turn to Sewing automatically. Set the sewing type as “Polygon Input”.

3、Set as Polygon Input

① Press and then for confirmation.

② Screen will return to the interface for icon input.

4、Set Point B, Point C, Point D and Point E

①Use direction key to move point B under the needle.

②Press to confirm point B

③Use direction key to move point C under the needle

④Press to confirm point C

⑤Use direction key to move point D under the needle

⑥Press to confirm point D。

⑦Use direction key to move point E under the needle

⑧Press to confirm point E

⑨ After all the points are confirmed, please press again.

5、Create the Data of Polygon Input

①The hint “Create Polygon Data?” will be displayed on screen.

② Press to return to the interface for inputting the last point

③ Press to create the sewing data of polygon input.

6、Create the Data for Finishing the Polygon Input

Press .

7、 Input the Data for Returning to Origin and Ending

① Press to create the data for returning to origin and ending

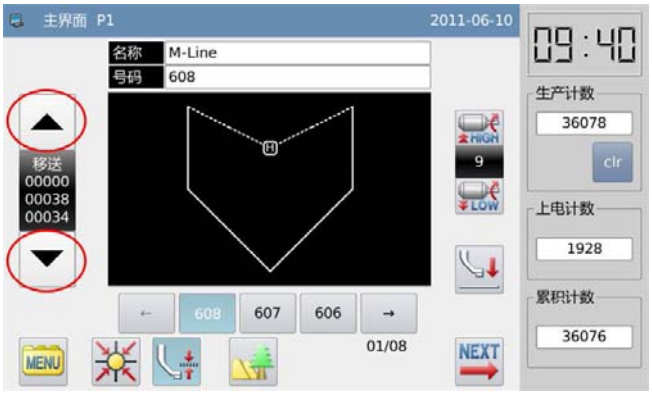
② The system will display “Please Press the Key for Returning to Origin”, then user needs press .

8、Save the Pattern Data

① After the method for saving is selected, please press .

② Return to main interface.

9、Check the Pattern Data



① Check the pattern data. User can use to check the action of the pattern

(if you are still inputting the pattern data and but the "Enter" is pressed, you will be able to test the pattern as well)

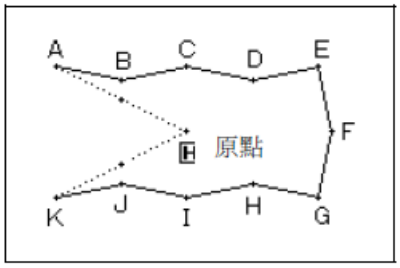
② For any modification, please refer to "Modification of Pattern File Data".

1.3.6 Point Sewing Input

Operation Point:

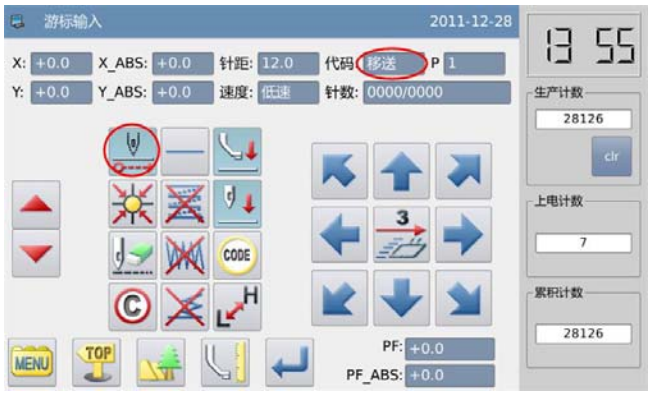
- Select
- Input in the way of one stitch at one point, the stitch interval should be within 12.7mm.

[Example]: How to make the pattern at below.



Operation Instructions:

1、Input the Feed Data to Point A

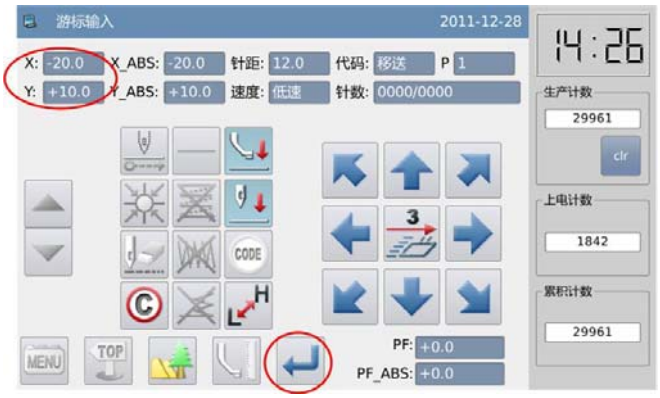


① Press and then to have access to Input Mode interface. After user set the conditions, the system will display the icon input interface (please refer to[1.1 Procedure of Making Pattern]

② Check if the code is "Feed". If not, please press to turn the code to "Feed"

③ Use direction key to move point A under the needle.

2、Set the Feed to Point A

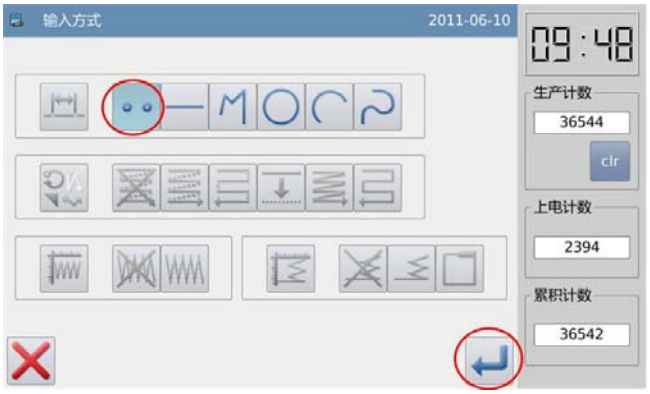


①Check the displacement amount

② Press ↵ to create the feed data to point A.

③ The code will turn to Sewing automatically. Set the sewing type as ”Point Sewing Input”

3、Set as Point Sewing Input



① Press and then ↵ for confirmation.

② Screen will return to the interface for icon input.

4、Set Point B~Point K

①Use direction key to move point B under the needle.

[Note] The distance between point shall be within 12.7mm

②Press ↵ to confirm point B

③Use direction key to move point C under the needle.

④Press ↵ to confirm point C

⑤ Set point D~ point K with the method at above.

5、Create the Data for Finishing the Point Sewing Input

Press

.

6、Input the Data for Returning to Origin and Ending

① Press

to create the data for returning to origin and ending

② The system will display “Please Press the Key for Returning to Origin”, then user needs press
.

7、Save the Pattern Data

① After the method for saving is selected, please press
.

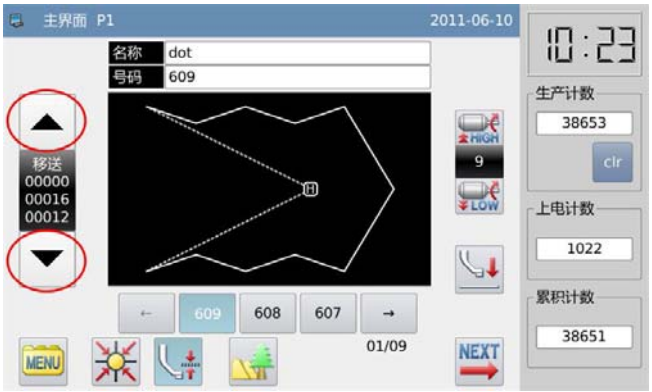
② Return to main interface.

8、Check the Pattern Data

① Check the pattern data. User can use
to check the action of the pattern

(if you are still inputting the pattern data and but the “Enter” is pressed, you will be able to test the pattern as well)

② For any modification, please refer to “Modification of Pattern File Data”.



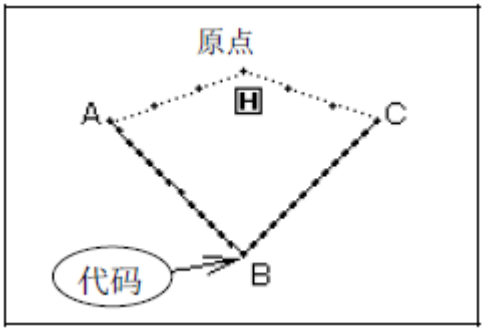
1.3.7 Function Code Input

Operation Points:

- Select

- Please check the function list and select the functions within it for inputting

[Example] How to make the pattern at below: Make the linear sewing between point A and point B, as well as point B and point C and add the data of "Up Stop" on point B



[Note] The function code can only be inputted at the end of the figure, instead of being inserted in the middle of the figure. User can insert the function code in the modification mode.

Operation Instruction:

1、 Input the Linear Sewing from Point A to Point B

As described in [1.3.1 Linear Input], user needs finish the data of linear sewing from point A to point B

2、 Add Code Setting Data (Up Stop)

Press

① Press

② Press for confirmation

③ The screen will return to the interface for inputting the icon

3、 Input the Linear Sewing from Point B to Point C

As described in [1.3.1 Linear Input], user needs finish the data of linear sewing from point B to point C.

4、 Input the Data for Returning to Origin and Ending

Input “Return to origin and End” to finish the operation.

Function Code List：

Function Code	Display	Function Code	Display
Thread-trimming	TRIM	**Sub-origin**	2HP
Up Stop	USTP	**Down Stop**	DSTP
Jump Stitch	BAT	**Function**	FUN1-7
Empty Feeding Speed	FEDS0-9	**Fabric Thickness**	ATUM1-3
Restart	ASRT0-9	**Board Weight**	HEVI1-3
Reverse Presser	RERF		

Description of Inputting the Extension Code：

1、 Have Access to the Interface for Inputting the Extension Code

Press 延伸 and then ↵ for confirmation.

2、 Set the Extension Code

In the interface for setting the extension code, user can set Feeding Speed, Fabric Thickness, Restart and Board Weight by inputting the value via the number keys and press ↵ for confirmation.

1.4 Application Input

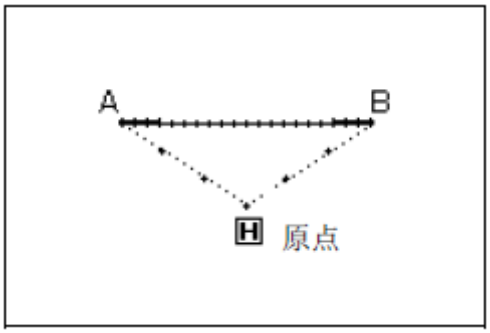
The system can do the reverse stitch sewing, multi-sewing, off-side sewing and herringbone sewing, combines these input methods with the basic input patterns and make the simple pattern of figures.

Functions	Figure
Reverse Stitch	: Reverse Stitch Sewing : Multiple Reverse Stitch
Multi-sewing	: Cocurrent Multi-sewing (Feed Type) : Cocurrent Multi-sewing（Sewing Type） : Reverse Multi-sewing (Feed Type) : Reverse Multi-sewing（Sewing Type）
Off-side Sewing	
Herringbone Sewing	

[Note]: These application input method can not be used at inputting the Point Sewing

1.4.1 Input of Reverse Stitch Sewing (Reverse Stitch at Forward and Backward)

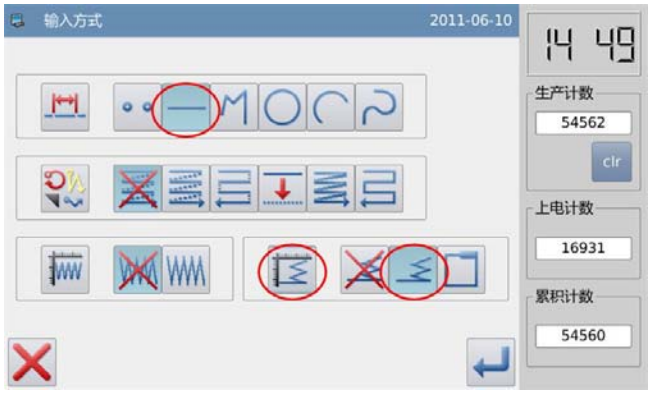
[Example]: How to make the pattern at below: 3 N-shaped reverse stitches should be added before and after the linear input.



Operation Instruction:

1、 Setting of Input Method

① According to the method of Linear Input, user can have access to the interface for setting the input method after confirming the feed from origin to point A.

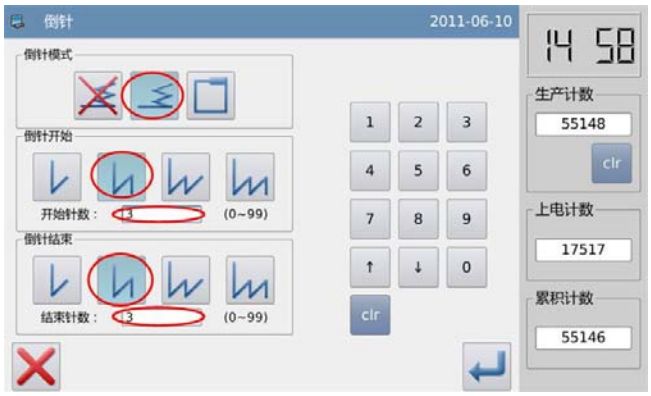


② Press .

③ Then press .

④ Finally press .

2、 Detailed Setting of Reverse Stitch



① Set the details in this interface. User needs select (Reverse Stitch Sewing) at first.

② Press (N-shaped Reverse Stitch) and then click “Start Stitch Number” and set the number at 3.

③ Press （(N-shaped Reverse Stitch) and then click “End Stitch Number” and set the number at 3.

Press to confirm the setting.

④ The screen will return to the interface for setting the input method.

⑤Press to confirm the setting.

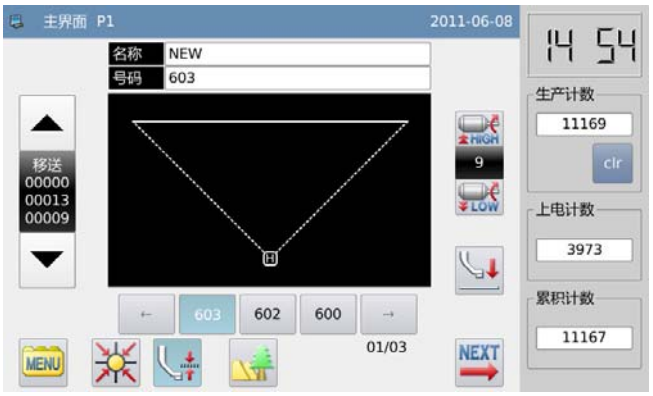
⑥The screen will return to the interface for inputting the icon.

⑦ Set point B in the way of linear input. The linear sewing will be created

⑧ Press RET END to finish it.

3、 Check the Pattern Data

The data of reserve stitch sewing is generated.



Descriptions of Reserve Stitch Method：

(V-shaped)： Single-row reverse stitch will be generated.

(N-shaped)：Double-row reverse stitch will be generated.

(M-shaped)：Triple-row reverse stitch will be generated.

(W-shaped)：Quadruple-row reverse stitch will be generated.

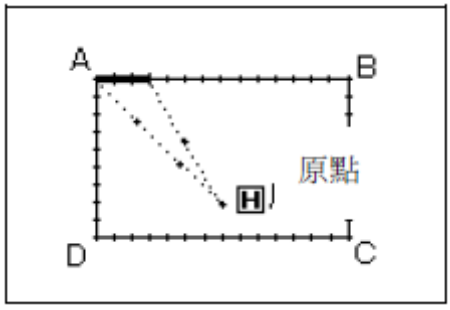
Set the Number of Reverse Stitch：

Click the frame of “Start Stitch Number” or “End Stitch Number” to activate it. At this moment, user can input the value with the number keys.

[Note] User can also press the “Reserve Stitch Setting” in the interface for inputting icon, so as to activate the interface for setting details of reverse stitch directly.

1.4.2 Input of Reverse Stitch Sewing (Multiple Reverse Stitch)

[Example] How to make the pattern at below: Input the rectangle with Polygon Input and add multiple reverse stitch at ending part (Times for Overlapping: 1; Number of Overlapped Stitch: 3).



[Note]: Only in the close figures made by the “Polygon Input”, “Circle Input” and “Curve Input” can user create the multiple reverse stitch. The multiple reverse stitches are unavailable at the figures surrounded by “Linear Input”, so are they in the several figures surrounded by the “Polygon Input” or “Curve Input” for several times. And in one figure, there is only one part that has the multiple reverse stitches.

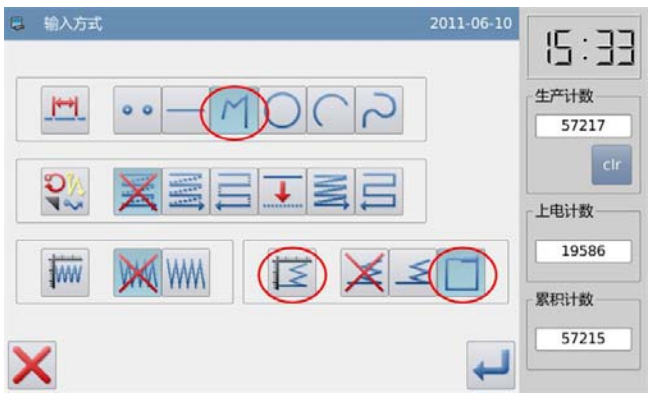
Operation Instructions:

1、 Setting of Input Method

① According to the method of Polygon Input, user can have access to the interface for setting the input method after confirming the feed from origin to point A.

② Press .

③ Then press .



④ Finally press .

2、 Detailed Setting of Reverse Stitch

① In this interface, user can set the detailed content. Firstly, select (Multiple Reverse Stitch), then select and set the number of overlapped stitch at 3.

② Press to confirm these settings

③ System will return to the interface for setting the input method.

④ Press for confirmation

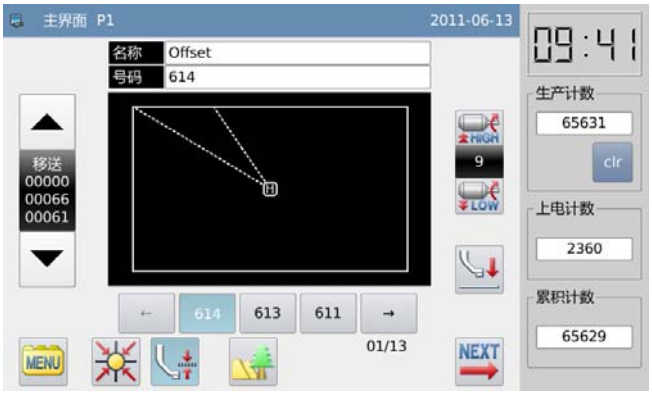
⑤System will return to the interface for inputting the icon.

⑥ Follow the method of Polygon Input to confirm the point B, C, D and A. after that, the polygon sewing will be created.

⑦ Press RET END to finish it.

3、 Check the Pattern Data

The data of rectangle sewing with reserve stitch sewing is generated.



Time of Overlapping：

：Overlap for once

：Overlap for twice

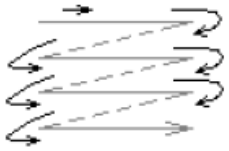
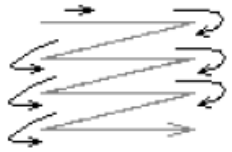
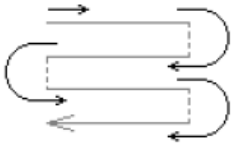
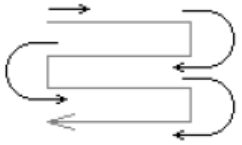
：Overlap for three times

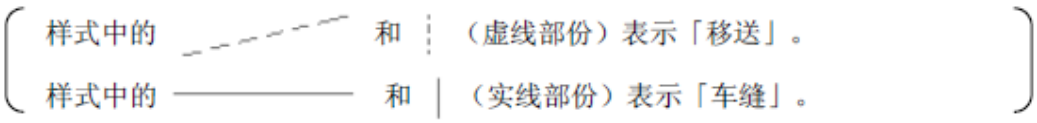
：Overlap for four times

Setting of Overlapped Stitch：

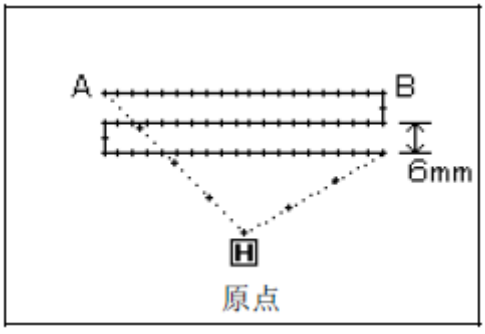
User can input it with the number keys directly, range: 0~99.

1.4.3 Multi-sewing Input

Types	Connection	Button	Sewing Style	Description
Cocurrent Multi-sewing (Multi-sewing)	Feed			The sewing at fixed direction with Feed as the Connection.
	Sewing			The sewing at fixed direction with Sewing as the Connection.
Reverse Multi-sewing (Retrieval Multi-sewing)	Feed			The sewing in retrieval, with Feed as the Connection.
	Sewing			The sewing in retrieval, with Sewing as the Connection.

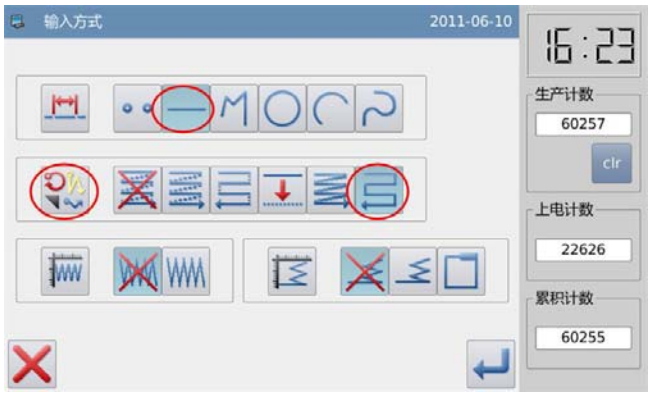


[Note] How to make the pattern at below: Make the linear reverse multi-sewing (Distance: 6mm, Times: Three times, Direction: Right)



Operation Instruction:

1、 Setting of Input Method



① According to the method of Linear Input, user can have access to the interface for setting the input method after confirming the feed from origin to point A.

② Press .

③ Then press .

④ Finally press .

2、 Detailed Setting of Reverse Multi-sewing

① Set the details in this interface. Firstly, select (retrieval multi-sewing) and (Right), then set the distance at 6.0, times at 3.

② Press to confirm the settings

③System will return to the interface for setting the input method.

④Press for confirmation

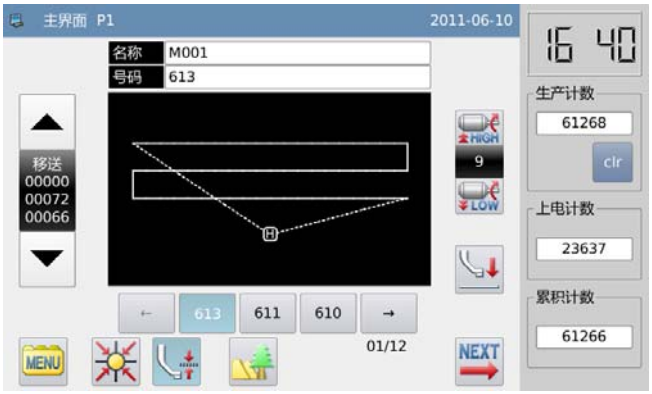
⑤System will return to the interface for inputting the icon.

⑥ Follow the method of linear input to confirm point B, after that the linear sewing will be created

⑦ Press to finish it.

3、 Check the Pattern Data

The data of linear sewing with reserve multi-sewing is generated.



Setting of Direction：

If the multi-sewing is needed at the left of the inputted sewing, please press (Left).

If the multi-sewing is needed at the right of the inputted sewing, please press (Right).

Setting of Distance：

It is the distance between each two multi-sewing lines, whose range is 0.0mm ~ 20.0mm. Click “Distance” to activate the input frame, where users can input the value with number keys.

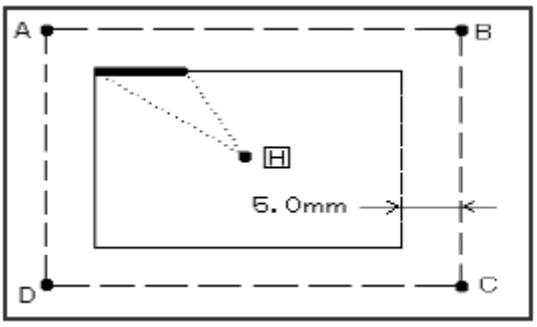
Setting of Times：

The times of multi-sewing can be set among 2~9. Click “Times” to activate the input frame, where users can input the value with number keys.

[Note] In the interface for inputting the icon, use can press “Multi-sewing, Retrieval Multi-sewing and Off-side Line Setting” to activate the interface for setting the details of multi-sewing, retrieval multi-sewing and off-side line.

1.4.4 Off-side Sewing Input (With Multiple Reverse Stitch)

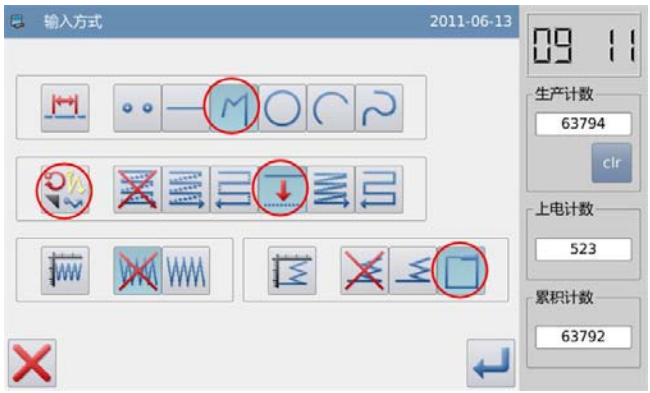
[Example] How to make the pattern at below: Use polygon input to make the off-side sewing and add multiple reverse stitches (Distance of Off-side Sewing: 5mm, Direction: Right, Times of Overlapping: 1, Number of Overlapped Stitch: 3)



(▬ The thickened part is the multiple reverse stitches)
(- - - - - - -: The spot line is the input line at making the pattern)

Operation Instruction:

1、Setting of Input Method



①According to the method of Polygon Input, user can have access to the interface for setting the input method after confirming the feed from origin H to point A.

② Firstly, press .

③ Secondly, press .

④ Thirdly, press .

⑤ Finally, press .

2、 Detailed Setting of Off-side Sewing

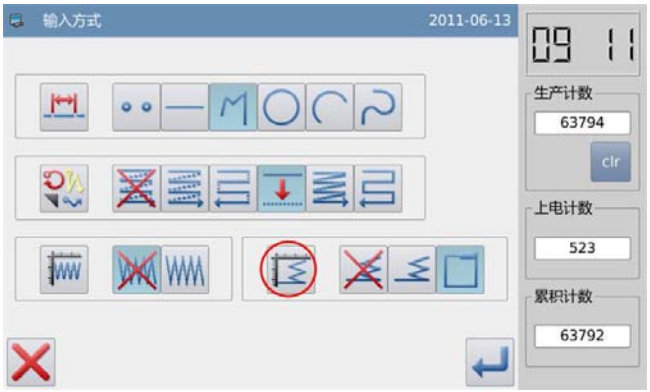
① Set the details of the off-side sewing in this interface. Firstly, select and , then set the distance at 5.0(For off-side sewing, the range of the distance is 0 ~ 20mm, 0.1mm as a changing step).

② Press for confirmation.

3、 Detailed Setting of Reverse Stitch

The system will return to the interface for setting the input method.

Then user needs press .



4、 Detailed Setting of Multiple Reveres Stitch

① Set the details in this interface. Firstly, select (Multiple reverse stitch) and then select and set the number of overlapped stitch at 3。

② Press to confirm these settings.

③System will return to the interface for setting the input method.。

④ Press for confirmation.

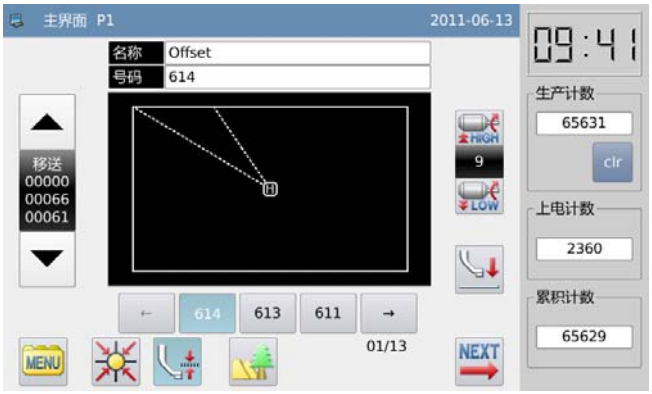
⑤ System will return to the interface for inputting the icon。

⑥Follow the method of Polygon Input to confirm the point B, C, D and A. after that, the polygon sewing will be created.

⑦Press to finish it.

5、 Check the Pattern Data

The data of off-side sewing with multiple reserve stitches is generated.



Setting of Direction:

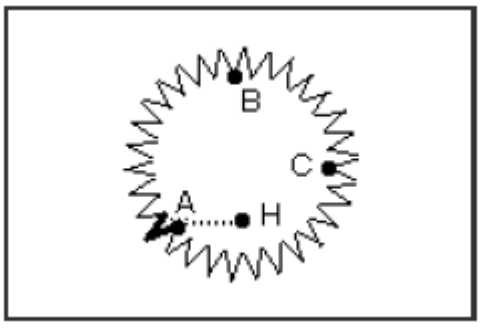
If the deviation is needed at the left of the inputted sewing, please press (Left)。

If the deviation is needed at the right of the inputted sewing, please press (Right)

[Note] In the interface for inputting the icon, use can press "Multi-sewing, Retrieval Multi-sewing and Off-side Line Setting" to activate the interface for setting the details of multi-sewing, retrieval multi-sewing and off-side line.

1.4.4 Herringbone Sewing Input (with Multiple Reverse Stitches)

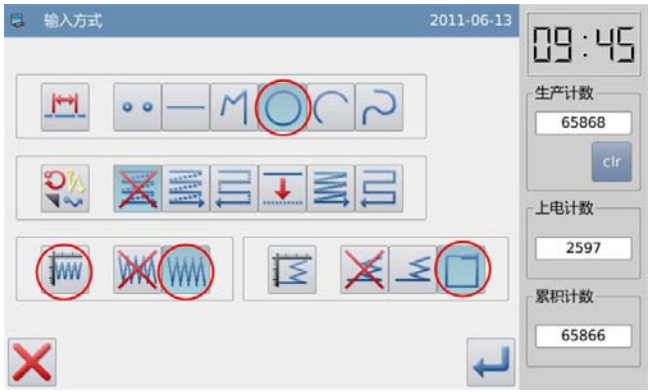
[Example] How to make the pattern at below: Use the circle input to make the herringbone sewing and add multiple reverse stitches (The width of the herringbone sewing: 5.0mm, Stitch Interval: 3.0mm, Direction: Left, Times of Overlapping: 1, Number of Overlapped Stitch: 3)



The thickened part is the multiple reverse stitches

Operation Instruction:

1、Setting of Input Method



①According to the method of Linear Input, user can have access to the interface for setting the input method after confirming the feed from origin H to point A.

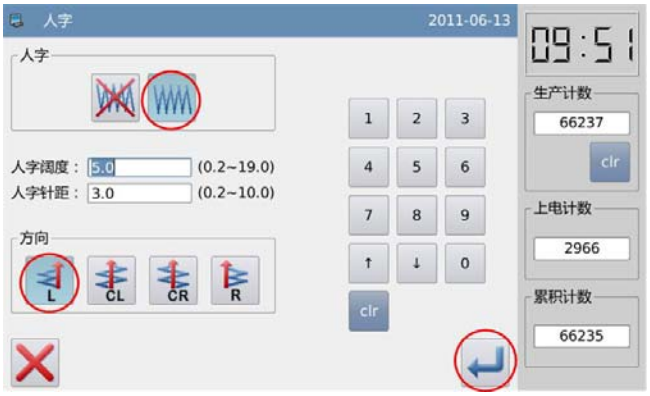
② Firstly, press .

③ Secondly, press

④ Thirdly, press

⑤ Finally, press .

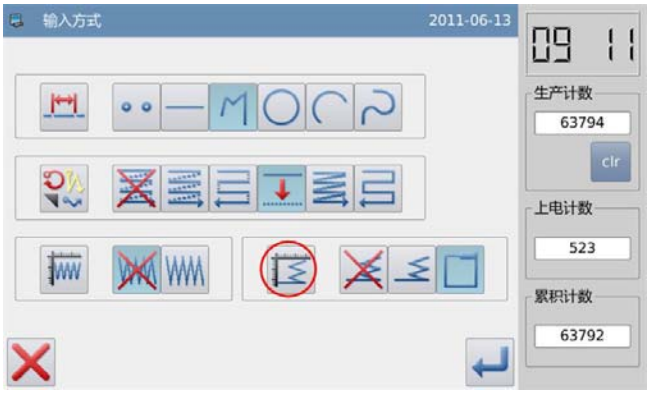
2、 Detailed Setting of Herringbone Sewing



① Set the details of herringbone sewing in this interface. Firstly, select . Then set the width of herringbone sewing at 5.0, interval at 3.0. Finally, select .

②Press to confirm these settings.

3、 Detailed Setting of Reverse Stitch



System will return to the interface for setting the input method. Press .

4、 Detailed Setting of Multiple Reveres Stitch

①Set the details in this interface. Firstly, select (Multiple reverse stitches) and then select and set the number of overlapped stitch at 3.

②Press to confirm these settings.

③ System will return to the interface for setting the input method.

④ Press for confirmation.

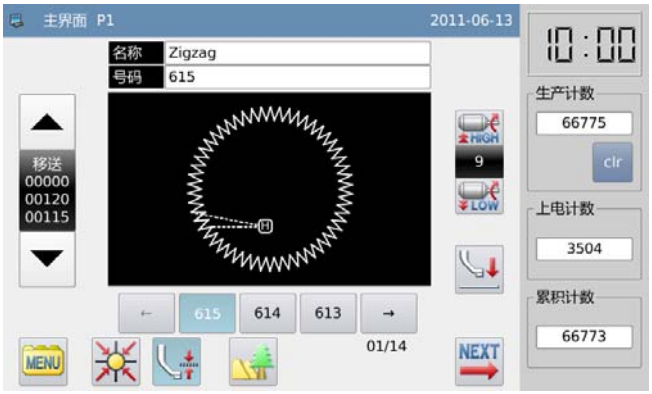
⑤ System will return to the interface for inputting the icon.

⑥ Follow the method of Circle Input to confirm the point B & C. after that, the circle sewing will be created.

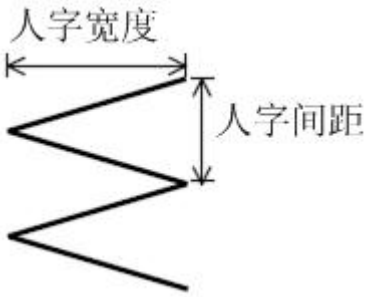
⑦Press to finish it.

5、 Check the Pattern Data

The data of circle herringbone sewing with multiple reserve stitches is generated



Descriptions of Width and Stitch Interval in Herringbone Sewing：



Click “Width” or “Interval” to activate the input frame, where users can input the value with number keys.

Descriptions of Herringbone Sewing Direction：

：Make herringbone sewing at the left of the axis

：Use the axis as center; make the herringbone sewing to left side

：Use the axis as center; make the herringbone sewing to right side

：Make herringbone sewing at the right of the axis

[Note]: In the interface for inputting the icon, use can press “Herringbone Sewing Setting” to activate the interface for setting the details of herringbone sewing.

1.5 Combination of Input Methods

Basic Input	Application Input				
	Multi-sewing	Off-side sewing	Herringbone Sewing	Reverse Stitch	Multiple Reverse Stitch
Linear Input	●				
		●			
			●		
				●	
					●
	●		●		
	●			●	
	●		●	●	
		●	●		
		●		●	
		●	●	●	
			●	●	

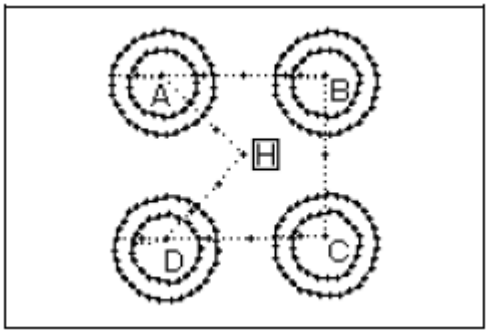
Basic Input	Application Input				
	Multi-sewing	Off-side sewing	Herringbone Sewing	Reverse Stitch	Multiple Reverse Stitch
Arc Input	●				
		●			
			●		
				●	
					●
	●		●		
	●			●	
	●		●	●	
		●	●		
		●		●	
		●	●	●	
			●	●	
Circle Input	●				
		●			
			●		
				●	
					●
	●		●		
	●			●	
	●				●
	●		●	●	
	●		●		●
		●	●		
		●		●	
		●			●
Circle Input		●	●	●	
		●	●		●
			●	●	
			●		●
Curve Input	●				
		●			
			●		
				●	
					●
	●		●		
	●			●	
	●				●
	●		●	●	
	●		●		●
		●	●		
		●		●	

		●			●
		●	●	●	
		●	●		●
			●	●	
			●		●
Polygon Input	●				
		●			
			●		
				●	
					●
	●		●		
	●			●	
	●				●
	●		●	●	
	●		●		●
		●	●		
		●		●	
		●			●
		●	●	●	
		●	●		●
			●	●	
			●		●
Point Sewing Input	Can’t be used along with the application input				

1.6 Load the Saved Patterns

In the pattern-making input, user can load the pattern data saved in the memory and insert it into the pattern being inputted, so as to form another new pattern data. And user can also set whether to clear the feed at the start point and end point.

[Example]How to make the pattern at below: Load the pattern data of double circle that has been made and combine them with the feed.



Operation Instruction:

1、Input the Feed from Origin to Point A

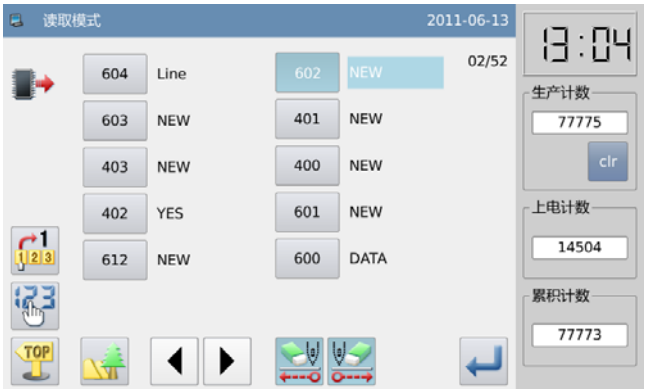
2、Display the Pattern for Loading

① Press MENU in the interface for inputting icon.

② In the catalogue mode interface, press .

3、 Select the Pattern Number

Click the number of pattern for loading and then press .



: Cancel the feed from origin to start sewing point

: Cancel the feed from end sewing point to origin.

: Keep the feed from origin to start sewing point

: Keep the feed from end sewing point to origin.

[Note]The frame will move along with the loaded pattern data automatically, so please pay attention to the stop position of the needle.

4、 Load the B, C and D one by one. And combine them to make the pattern.

1.7 Input Thickness Fall of Fabric in Sewing

In sewing, user can change the height of the intermediate presser to handle the thickness fall of fabric. When the thickness fall of fabric is large, user can change the height of intermediate presser to prevent the jumping stitch and thread-breakage.

[Note] This function is unavailable in the E Type machine

Operation Instruction:

1、Change the Height of Intermediate Presser in the Interface of Icon Input

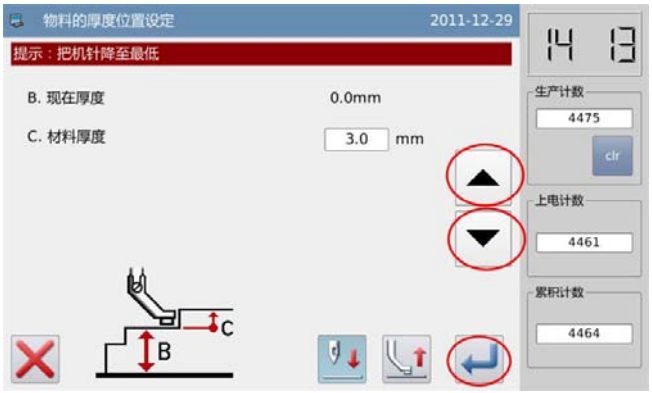
Press in the right interface.

2、Input the Thickness Fall of Fabric In Sewing

When the intermediate presser is at the down position, user can input the thickness fall of fabric

Press (or) to change the value of fall and the intermediate presser will move along with change of value

After the value is set, user needs press to save it



2Modification of Pattern File Data

2.1Main Functions in Modification Mode

Function		Button	Content	Description
Sewing	Change Start Sewing Point		Move the start sewing point to other location.	—
	Delete Stitch		Delete the pointed stitch	The pointed stitch All the stitches behind the pointed position
	Insert Stitch		Insert one stitch at pointed position	Add a new stitch Add a same stitch
	Change Stitch Position		Change the position of one stitch.	<Figure position after change > Not change. Follow the movement
	Move Section		Move the data within the pointed section.	<Data at ahead and at behind > change Add new stitch
	Change Section		Between 2 pointed spots, change the data of line, polygon, arc, curve, herringbone sewing and feed	—
	Change Stitch Interval		Change the stitch interval within the pointed section	The pointed section All the stitches behind the pointed position
Change Sewing Speed			Change the speed in the pointed section	The pointed section All the stitches behind the pointed position

Change Code		Insert or delete code in the pointed location.	Insert Code Delete Code

2.2 Method for Activating Modification Mode

（1）Press in standard interface and press to have access to modification mode.

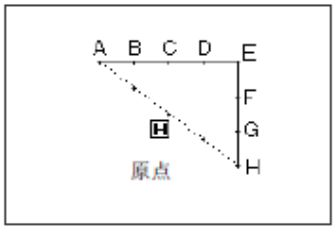
（2）Press at icon input interface under input mode, then press to have access to modification mode.

2.3 Method for Ending Modification Mode

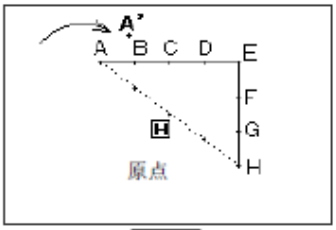
After the modification is confirmed, press to end it and quit the modification mode. (Pressing is to withdraw the last modification and to return to previous point).

2.4Method for Feeding to Origin after Modification

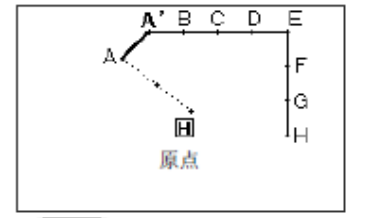
[Example] add one stitch at position A' in the right figure:

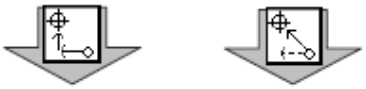


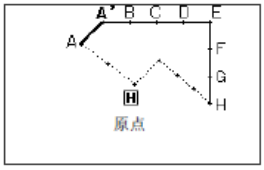
Add stitch at position A' in right figure



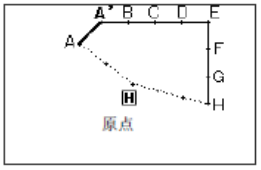
After user added stitch at A', the positions of point B ~ point H will be changed correspondingly. Of course, the route for feeding back to origin from H point will be changed. User can select the way with the following buttons







（保留移送回原点的路线方式）



（取代移送回原点的路线方式）

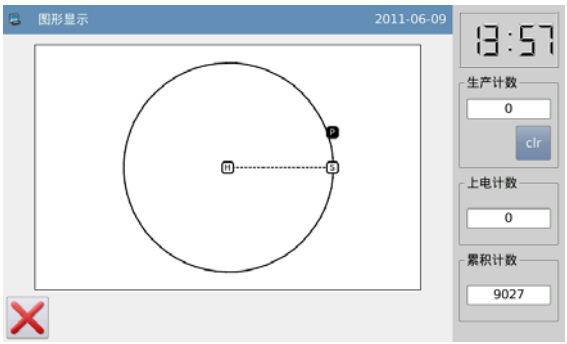
Note: In the feed of the last sewing to origin before the modification, if it contains the code data, the feed after the code will be changed as well.

2.5Confirmation of Figure Modification

In input mode, modification mode and data transfer mode, pressing will have the system to display the preview of the modified pattern. Especially in modification (transfer) mode, when the data is modified or transferred, user can easily change or transfer the figure data by effectively making use of the preview of the modified pattern.

[Example]: After having access to modification (transfer) mode, user can see the pattern after the confirmation with the preview function.

① Move Start Sewing Point



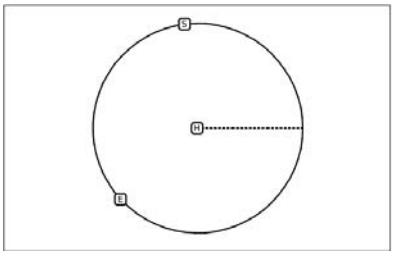
: Close the preview interface and return to previous interface (Available at all the preview windows)

H: Origin (Available at all the preview windows)

S: Original Start Sewing Position.

P: Start Sewing Position after modification (Position moved with direction keys).

②Delete Stitch

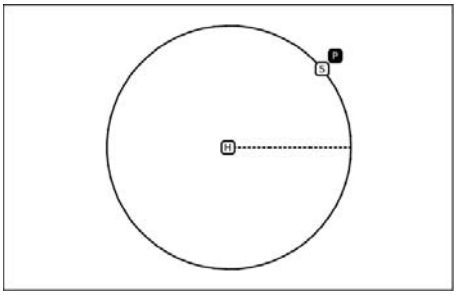


H: Origin (Available at all the preview windows)

S: Start position for deleting stitches

E: End position for deleting stitches.

③ Change Needle Position/ Add Stitch

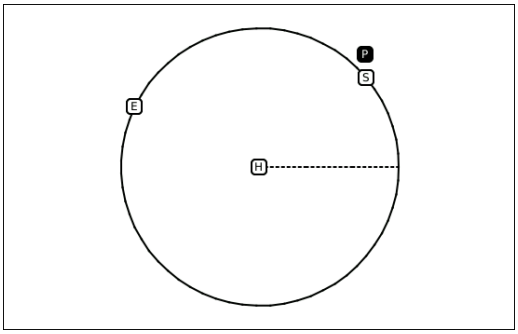


H: Origin (Available at all the preview windows)

S: Original needle position/ standard position for adding stitch

P: The modified needle position/ position for adding stitch (Current position after moving).

④ Section Move



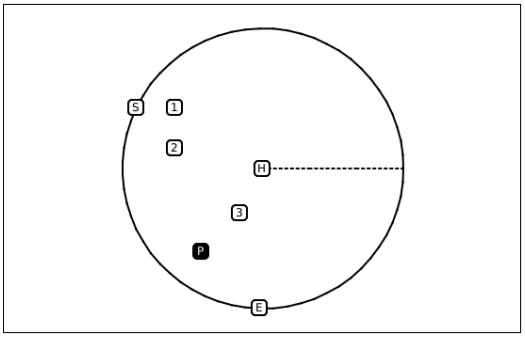
H: Origin (Available at all the preview windows)

S: Start position for moving section.

E: End position for moving section.

P: The modified position after section move (Current position after moving).

⑤Section Modification



H: Origin (Available at all the preview windows)

S: Start position for section modification

E: End Position for section modification

1: Passing point 1 in polygon input

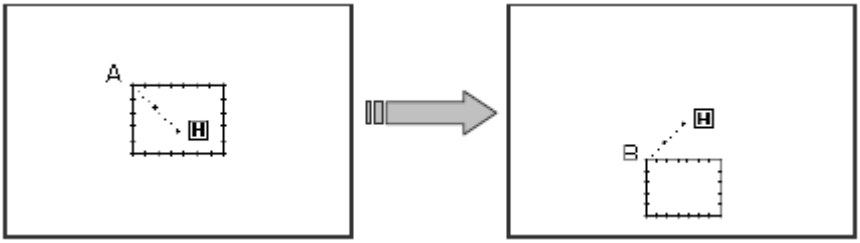
2: Passing point 2 in polygon input

3: Passing point 3 in polygon input

P: Current position after moving.

2.6Change Start Sewing Point

[Example]: Change the start sewing point from point A to point B



①Select the Start Sewing Point for Modification

► Have access to modification mode (refer to section 2.2).

► Press then press 。

► Press for confirmation.

Attention: the frame will move to the current start sewing point, so user has to pay attention to the stop position of needle

②Move Start Sewing Point/ Confirmation

► Use direction keys to move the needle to point B

► Press for confirmation (The start sewing point is modified)

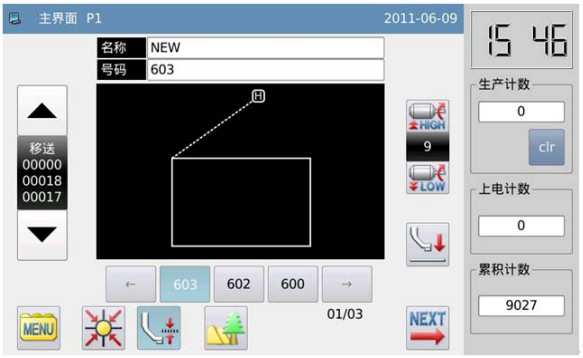
③ Confirmation of the Modified Data

► Finish modification mode.

Press to return to the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

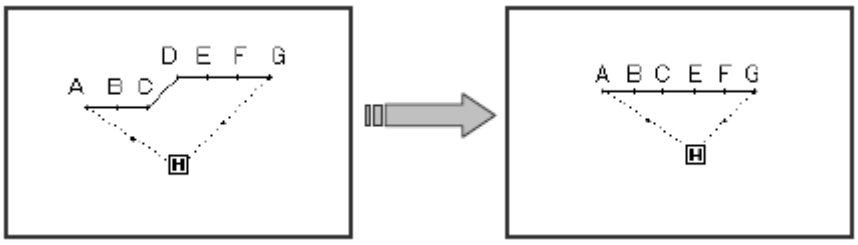
④ Confirm the Modified Figure in Standard Interface

► The start sewing point has been changed.



2.7 Delete Stitch (Delete the stitch at pointed location)

[Example]: Delete the stitch data from point C to point D.



①Select Stitch Deletion

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Then press for confirmation

②Delete Stitches at Pointed Location

► Press to select the stitch at pointed position for deletion.

③Point the Start Position for Deletion

► Press and to select the start position for deletion.

► Press to confirm that position

④ Point the End Position for Deletion

► Press and to select the end position for deletion.

► Press to confirm that position.

⑤ Confirm the Position for Deletion

► Press to confirm the stitches for deletion.

⑥ Confirm the Figure after Stitch Deletion

► Finish Modification Mode

Press

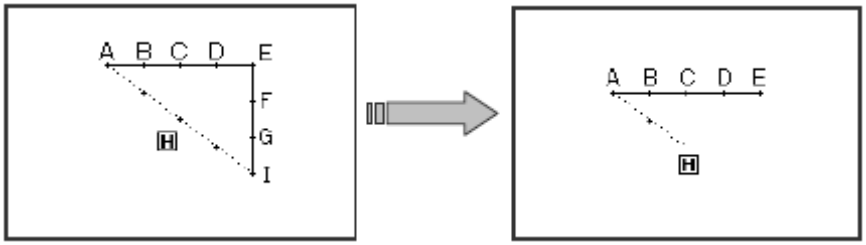
to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

⑦ Confirm the Modified Pattern in Standard Interface

► The pointed stitches are deleted.

2.8 Delete Stitch (Delete entire stitches behind the pointed position)

[Example]: Delete the entire stitches behind point E.



① Select Stitch Deletion

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Then press for confirmation

② Delete Stitches at Pointed Location

► Press ALL to select the stitch

► Press and to select the end position for deletion.

► Press to confirm those positions.

③Confirm the Position for Deletion

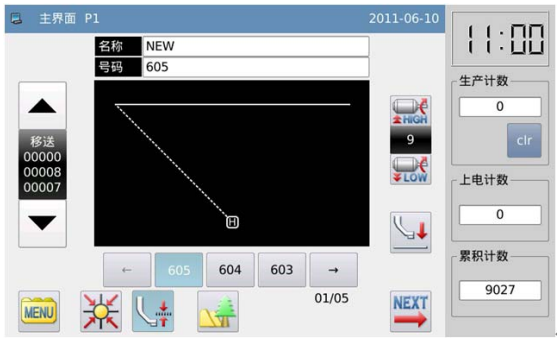
► Press to confirm the stitches for deletion.

④Confirm the Figure after Stitch Deletion

► Finish Modification Mode

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

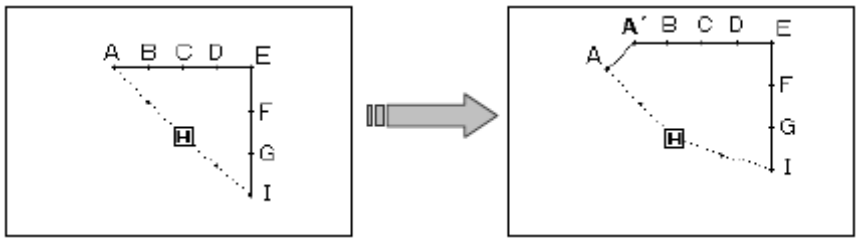
⑤Confirm the Modified Pattern in Standard Interface



► The pointed stitches are deleted.

2.9Insert Stitch (Add One Stitch)

[Example]: Add Stitch A' at point A with needed interval (Max Stitch Interval: 12.7mm [from A to A']).



① Select Stitch Insertion

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.

②Point the Position for Adding Stitch

► Press and to move needle to point A.

► Press to confirm the position for adding stitch

③Set the Method for Adding Stitch

► Press , then use direction key to move needle to A'

► Press for confirmation. (One stitch will be added)

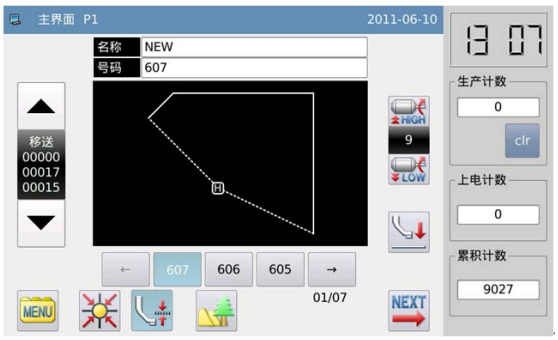
④ Confirm the Figure after One Stitch is Added

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

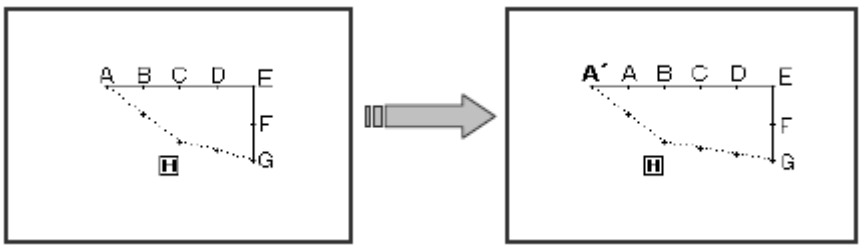
⑤ Confirm the Modified Pattern in Standard Interface

► One stitch is added.



2.10 Insert Stitch (Add a Same Stitch)

[Example] Add the stitch at A' with the same stitch interval as Stitch A.

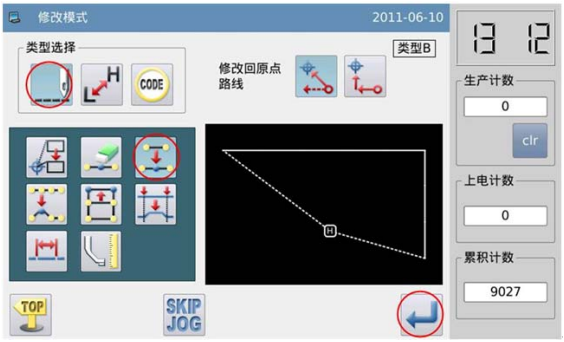


①Select Stitch Insertion

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.



② Point the Position for Adding Stitch

► Press and to move needle to point A.

► Press to confirm the position for adding stitch

③ Set the Method for Adding Stitch

► Press

。

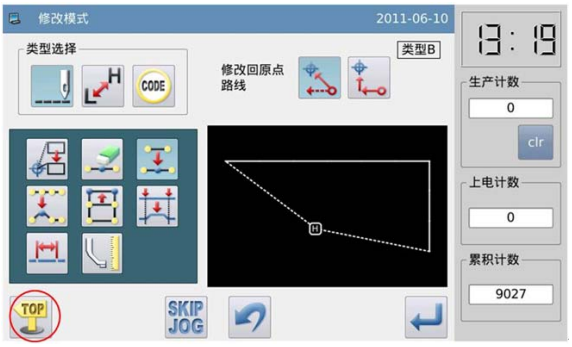
► Press for confirmation (One same stitch is added)

④ Confirm the Figure after One Same Stitch Is Added

► Finish Modification Mode

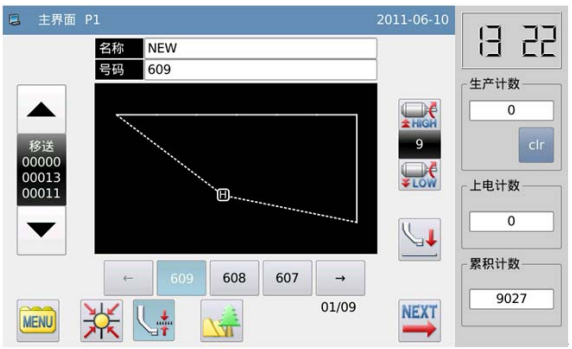
Press

to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).



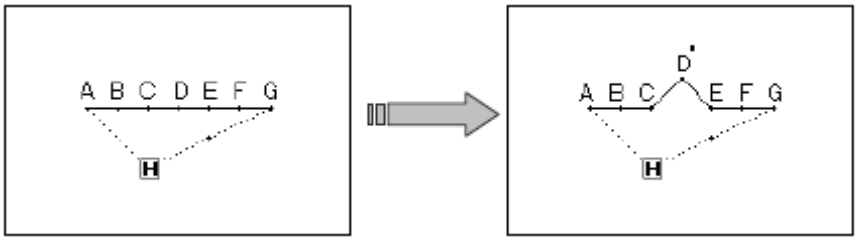
⑤ Confirm the Modified Pattern in Standard Interface

► A same stitch is added.



2.11 Change Stitch Position (Other Figures' Positions Remain after Change)

[Example]: Move D point from D to D'.

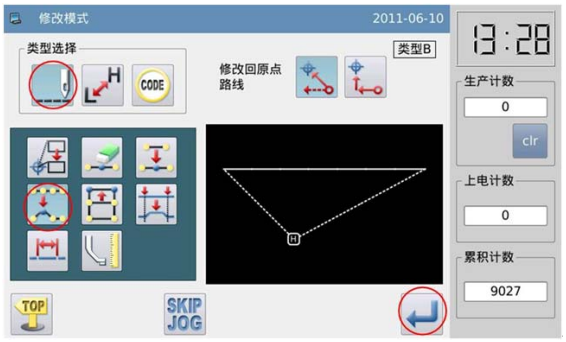


①Select "Change Stitch Position"

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.



② Point the Stitch Position for Changing

► Press and to move stitch to Point D.

► Press for confirmation.

③Set the Method and Amount for Changing

► Press , then use direction key to move needle to point D'.

► Press for confirmation. (Stitch position is changed)

Attention: Max Stitch Form is 12.7mm

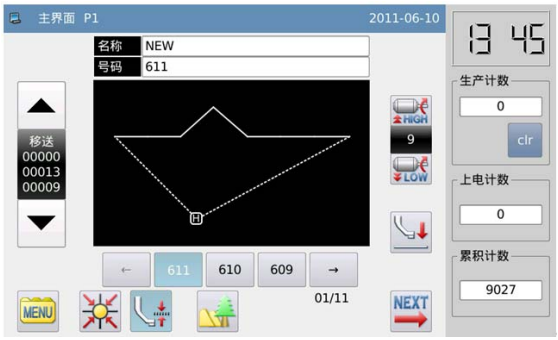
④ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

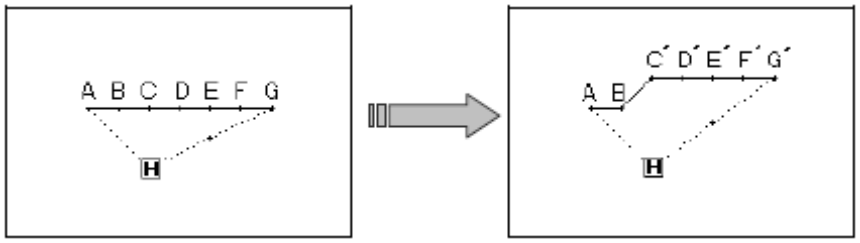
⑤ Confirm the Modified Pattern in Standard Interface

► The stitch position is changed.



2.12 Change Stitch Position (Other Figures' Positions Follow the Change).

[Example]: Move point C, the positions of D, E, F and G are changed along with the point C'.



① Select "Change Stitch Position"

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.

② Point the Stitch Position for Changing

► Press and to move stitch to Point C.

► Press for confirmation.

③ Set the Method and Amount for Changing

► Press , use direction keys to move needle to point C

► Press for confirmation (Stitch position is changed).

Attention: Max Stitch Form is 12.7mm

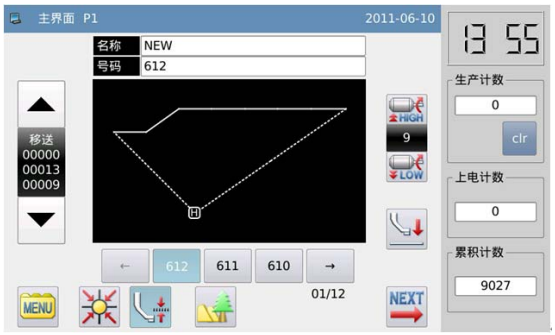
④ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

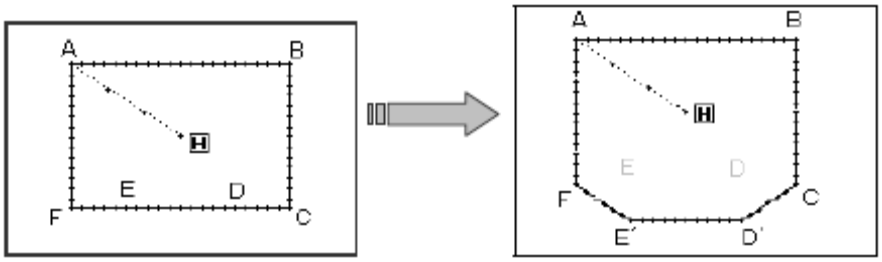
⑤ Confirm the Modified Pattern in Standard Interface

► The positions of stitches are changed.



2.13 Move Section (Change at stitches at ahead and behind without adding new ones)

[Example]: Move the line between point D and point E to the position between point D' to point E'. At this moment, the pattern data ahead of point D' and behind E' will be changed smoothly.



①Select Section Move

► Have access to modification mode (Refer to section 2.2)

► Press , and then press .

► Press for confirmation.

②Select the Start Point of the Section Move

► Press and to move needle to D.

► Press for confirmation.

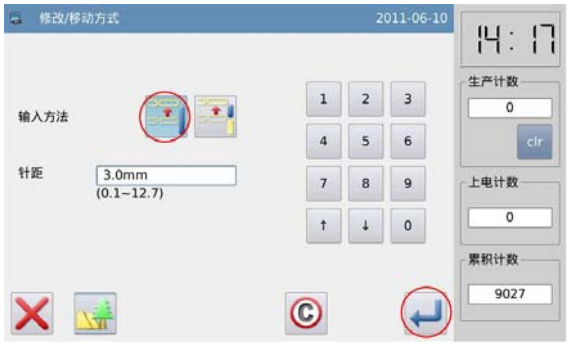
③ Select the End Point of the Section Move

► Press and to move needle to E.

► Press for confirmation.

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

④Set Moving Method and Stitch Interval



► Moving Method: Press .

► Use number key to set stitch interval.

► Press for confirmation.

⑤ Set Moving Amount

► Use direction key to move needle to D'

► Press for confirmation (Section is moved)

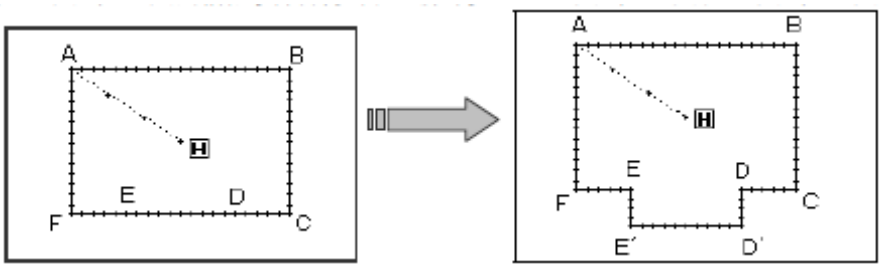
⑥ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.14 Move Section (Add new stitches at ahead and behind)

[Example]: Move the line between D and E to the position between D' and E'. New stitches should be added at ahead of D' and behind E' (the part from D to D' and the part from E to E').



① Select Section Move

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.

② Select the Start Point of the Section Move

► Press and to move needle to D.

► Press for confirmation.

③ Select the End Point of the Section Move

► Press and to move needle to E.

► Press for confirmation.

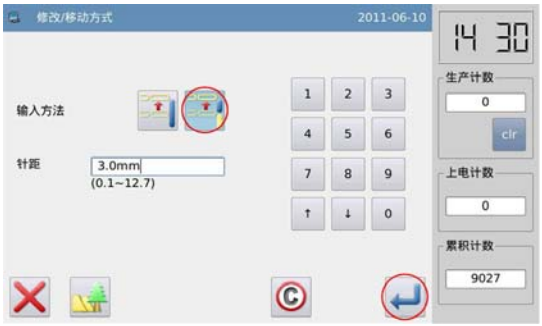
Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

④ Set Moving Method and Stitch Interval

► Moving Method, Press 。

► Use number keys to set stitch interval.

► Press for confirmation.



⑤Set Moving Amount

► Use direction key to move needle to D'

► Press for confirmation (Section is moved)

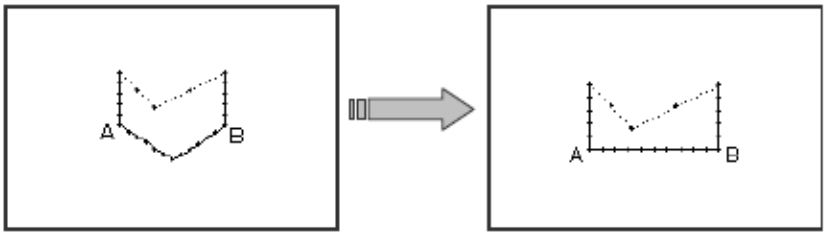
⑥ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.15 Change Section (Linear)

[Example]: Change the broken line between A and B to linear.



①Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation.

②Select the Method of Change

► Press .

► Press for confirmation.

③ Select the Start Point of the Section Change

► Press and to move needle to A.

► Press for confirmation.

④ Select the End Point of the Section Change

► Press and to move needle to B.

► Press for confirmation.

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

⑤Confirm the Generation of the New Pattern

► Press for confirmation.

⑥ Confirm the Figure after Change

► Finish Modification Mode

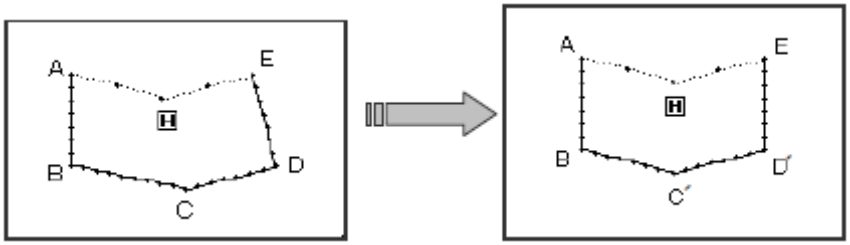
Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

Attention:

1. **When user selects Arc at "Change Section": The new arc will be changed from the original one if user provides the location of one point within the pointed area.**
2. **When user selects Linear at "Change Section": The modified linear between modified sections will form a line pattern.**
3. **If the section for modification contains the data set with code, that code-set data will be deleted.**

2.16 Change Section (Polygon, Arc and Curve)

[Example]: Change the pattern data between C and D to the pattern data from C' to D'


A
E
H
B
D
C
A
E
H
B
D
C

①Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press 。

► Press for confirmation

② Select the Method of Change

► Press .

► Press for confirmation.

③ Select the Start Point of the Section Change

► Press and to move needle to B.

► Press for confirmation.

④ Select the End Point of the Section Change

► Press and to move needle to E.

► Press for confirmation.

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

⑤Input the New Position

► Use direction key to move needle to point C'

► Press for confirmation.

⑥ Confirm Creating the Figure of Section Change

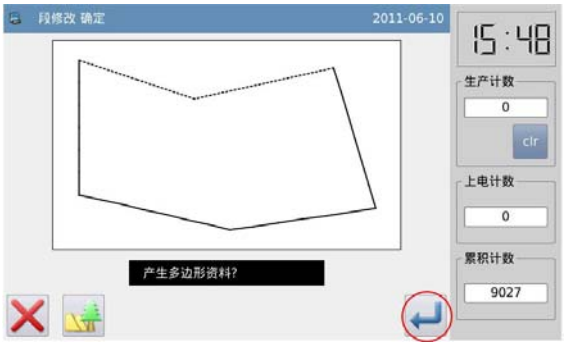
► Use direction key to move needle to point D'

► Press for confirmation.

► Press again.

⑦ Confirm the Generation of the New Pattern

► Press for confirmation.



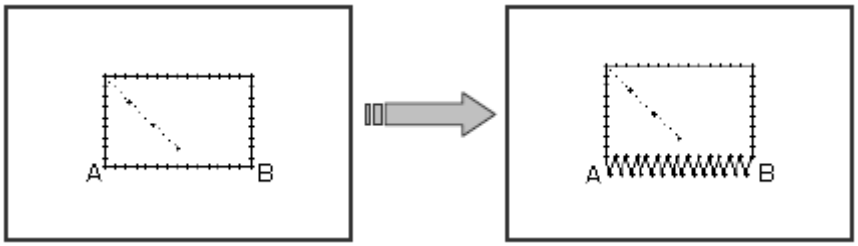
⑧ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.17 Change Section (Herringbone Sewing)

[Example]: In the following pattern, change the figure between A and B to the herringbone sewing



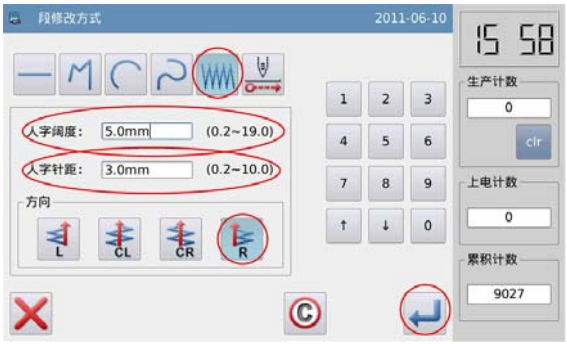
① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press 。

► Press for confirmation

② Select the Method of Change



► Press 。

► Set the width, stitch interval, swing direction respectively. Width at 5.0mm, stitch interval at 3.0mm, swing direction at Right (R).

► Press for confirmation

③ Select the Start Point of the Section Change

► Press and to move needle to A.

► Press for confirmation

④ Select the End Point of the Section Change

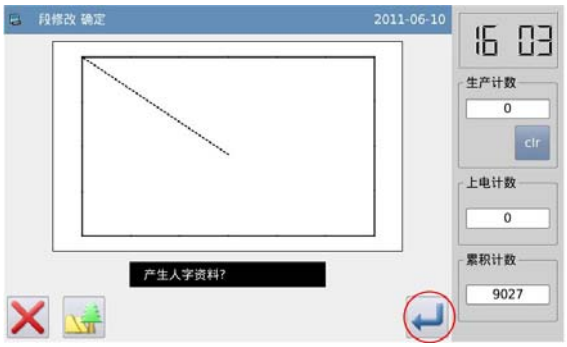
► Press and to move needle to B.

► Press for confirmation

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

⑤ Confirm the Generation of the New Pattern

► Press for confirmation



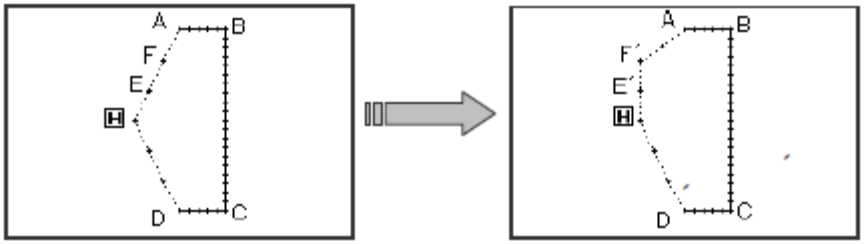
⑥ Confirm the Figure after Change

► Finish Modification Mode

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.18 Change Section (Feed)

[Example]: change the Point E and Point F to Point E' and Point F' respectively



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press .

► Press for confirmation

② Select the Method of Change

► Press 。

► Press for confirmation

③ Select the Start Point of the Section Change

► Press and to move needle to B.

► Press for confirmation

④ Select the End Point of the Section Change

► Press and to move needle to E.

► Press for confirmation

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

⑤ Input the New Position

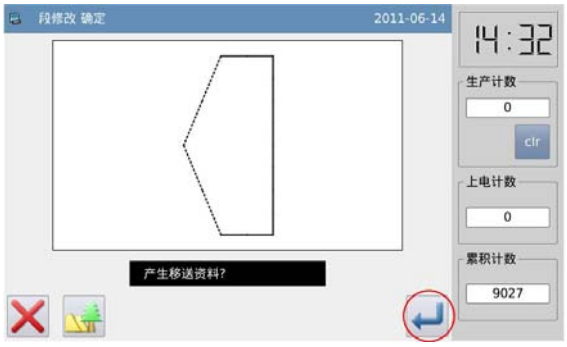
► Use direction key to move needle to point G.

► Press for confirmation

► Press again.

⑥ Confirm the Generation of the New Pattern

► Press for confirmation



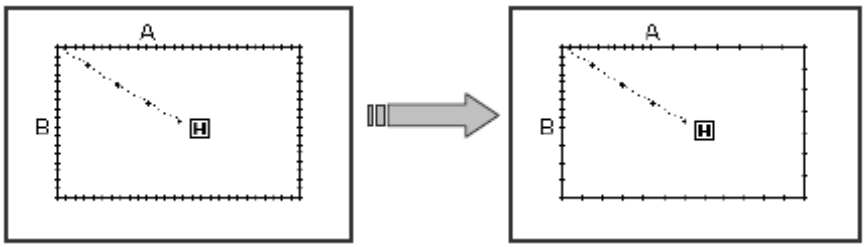
⑦ Confirm the Figure after Change

► Finish Modification Mode

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.19 Change Stitch Interval (Stitches in the pointed section)

[Example]: Change the stitch interval from the point A to the point B (3.0mm→7.0mm).



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press . Press for confirmation.

②Select the Method of Change

► Press 。

③Select the Start Point of the Section Change

► Press and to move needle to A.

► Press for confirmation.

④Select the End Point of the Section Change

► Press and to move needle to B.

► Press for confirmation.

Attention: When the end point is confirmed, the outer frame will automatically return to the initial position. So pay attention to the stop position of needle.

⑤Set the Stitch Interval

► Set stitch interval with number keys

► Press for confirmation.

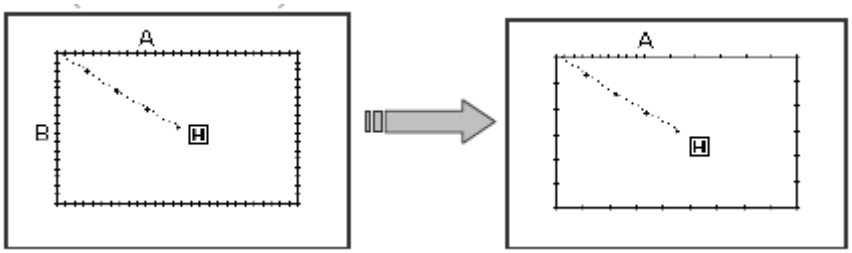
⑥Confirm the Figure after Change

► Finish Modification Mode。

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.20 Change Stitch Interval (All stitches after the pointed position)

[Example] Change the stitch interval of the entire stitches after point A (3.0mm→9.0mm)



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press

► Press for confirmation.

②Select the Method of Change

► Press ALL 。

③Select the Start Point of the Section Change

► Press and to move needle to A.

► Press for confirmation.

④ Set the Stitch Interval

► Set stitch interval with number keys

Press for confirmation.

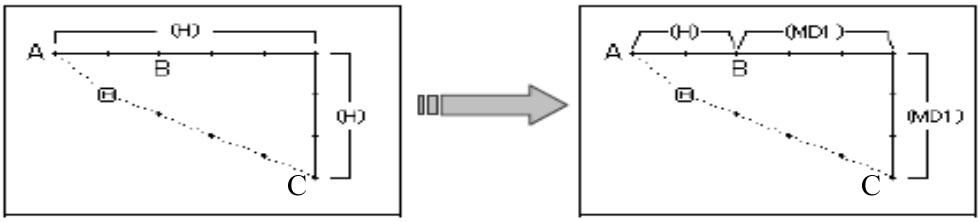
⑤Confirm the Figure after Change

► Finish Modification Mode。

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.21Change Sewing Speed (Stitches in the pointed section)

[Example]: Change the speed in the section between Point B and Point C from H to MD1.



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press and then press 。

► Press for confirmation.

②Select the Method of Change

► Press 。

③Select the Start Point of the Section Change

► Press and to move needle to B.

► Press for confirmation.

④Select the End Point of the Section Change

► Press and to move needle to C.

► Press for confirmation.

⑤Set Speed

► Set the speed

► Press for confirmation.

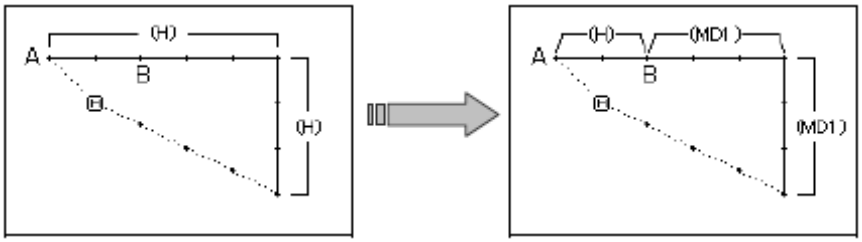
⑥Confirm the Figure after Change

► Finish Modification Mode。

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.22 Change Sewing Speed (All stitches after the pointed position)

[Example]: Change the speed of the stitches after Point B from H to MD1.



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press H .

► Press for confirmation.

②Select the Method of Change

► Press H/L ALL .

③Select the Start Point of the Section Change

► Press and to move needle to B.

► Press for confirmation.

④ Set Speed

► Set the speed

► Press for confirmation.

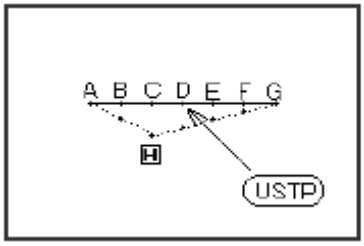
⑤Confirm the Figure after Change

► Finish Modification Mode。

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.23 Change Code (Insert Code)

[Example]: Insert code “Up Stop” (USTP) to point D.



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press CODE and then press CODE。

► Press for confirmation.

②Select the Position for Inserting Code

► Press and to move needle to D.

► Press for confirmation.

③ Select the Code for Insertion

► Press 上暂停。

► Press for confirmation.

④Confirm the Insertion

► Press for confirmation.

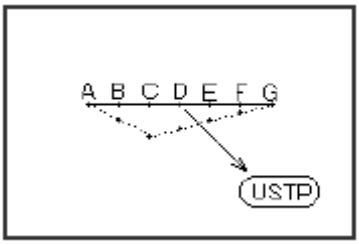
⑤Confirm the Figure after Change

► Finish Modification Mode。

Press TOP to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.24 Change Code (Delete Code)

[Example]: Delete code “Up Stop” (USTP) to point D.



① Select Section Change

► Have access to modification mode (Refer to section 2.2)

► Press CODE and press CODE。

► Press ↵ for confirmation.

② Select the Position for Deleting Code

► Press ▲ and ▼ to move needle to D.

► Press ↵ for confirmation.

③ Confirm the Deletion

► Press ↵ for confirmation.

④Confirm the Figure after Change

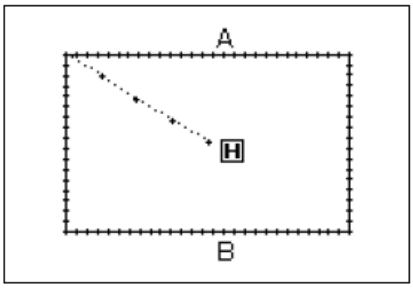
► Finish Modification Mode。

Press to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

2.25 Change Thickness Fall of Sewing Fabric

[Example]: For the sewing from point A to point B, intermediate presser is lifted for 1.6mm. (The thickness of the sewing fabric is set at 3.0mm for the pattern)

[Note] This function is unavailable at E type machine



①Select "Change Intermediate Presser Height"

► Have access to modification mode (Refer to section 2.2)

►Press and then press

► Press for confirmation.

②Set the Start Point for Changing Data

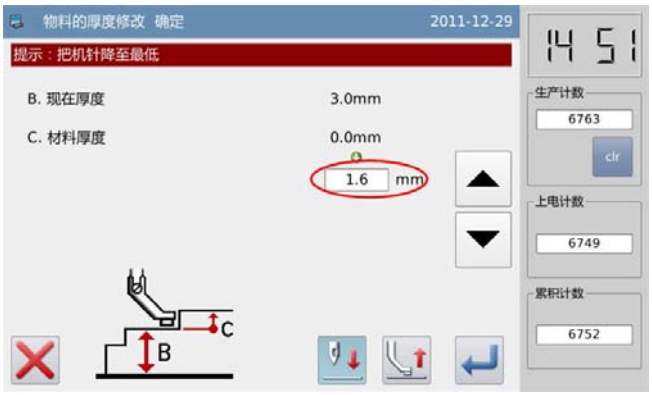
►Use & to move needle to point A (The start position for the changing)

►Press to confirm the position.

③Set Lift Amount

►Use direction keys to set the “Fabric Thickness Fall” set at 1.6

► Press for confirmation.



④Finish the Change at Point A

►Press and then press .

► Press for confirmation.

⑤Set the End Point for Changing Data

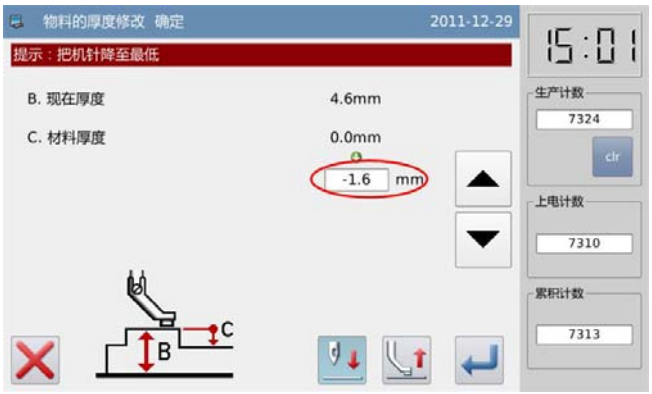
► Use & to move needle to point B (The start position for the changing)

► Press to confirm the position.

⑥Set Lift Amount

► Use direction keys to set the “Fabric Thickness Fall” set at -1.6

► Press for confirmation.



⑦Finish the Changing at Point B

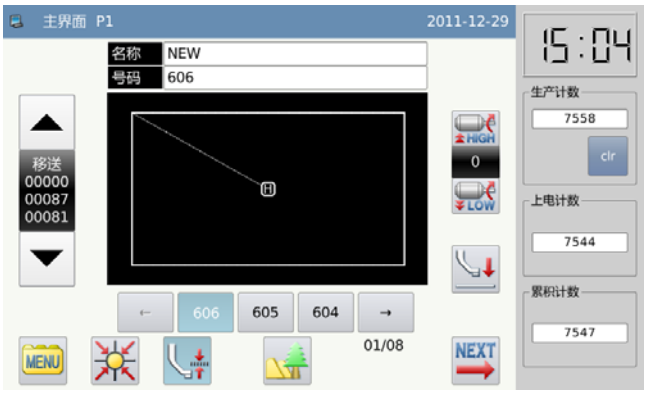
►Finish Modification Mode。

Press

to return the interface for saving the modified data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

⑧Standard Interface

►The height of intermediate presser is changed. (Use the step-moving keys to test the action of the intermediate presser).



3 Pattern File Data Transfer

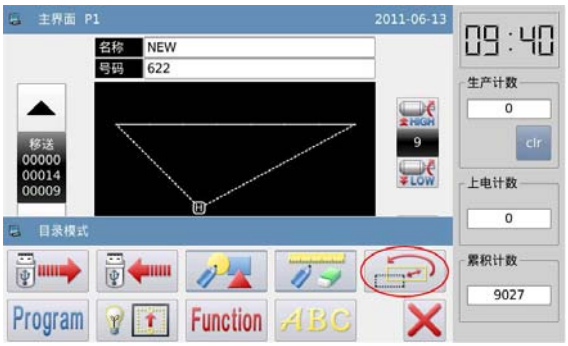
3.1 Main Function of Pattern Transfer

Function	Button	Content	Detailed Setting	
Origin Correction		Change the position of origin in the existing pattern.	—	
Reverse Stitch Transfer		Add new reverse stitch and change the existing reverse stitch	Reverse Stitch Sewing Multi-sewing (Only available at close shape)	
Herringbone Sewing Transfer		Add new herringbone sewing and change the existing herringbone sewing.	—	
Scale Mode		Use a point as the basis to scale up/down the pattern in X/ Y direction with fixed stitch number or the fixed stitch interval.	<Base Point> Pointed by User Center of Pattern Origin	Fixed Stitch Number Fixed Stitch Interval
Mirror Mode		Copy the existing pattern in X/Y or XY direction. User can select whether to keep the original pattern.	<Method> Delete the Original Pattern Keep the Original Pattern	
Rotation Mode		Rotate according to the random center.	<Base Point> Pointed by User Center of Pattern Origin	
Off-side Transfer		Transfer the existing off-side pattern on distance and direction	—	
Multi-sewing Transfer		Transfer the existing multi-sewing pattern on distance and direction	—	

3.2 Method for Having Access to Transfer Mode

► Press

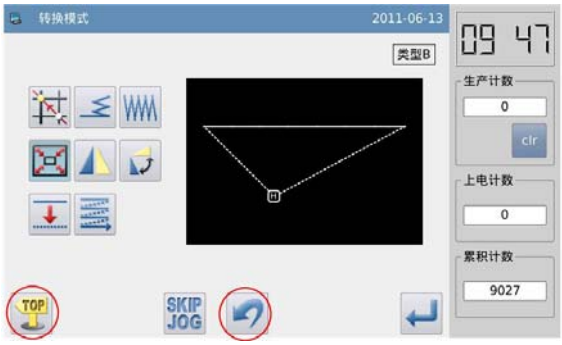
and then press to have access to the transfer mode



3.3 Method for Ending Transfer Mode

After confirming the modifications, user can press

to end the operation and quit the transfer mode. (Pressing is to withdraw the last modification and to return to previous point).

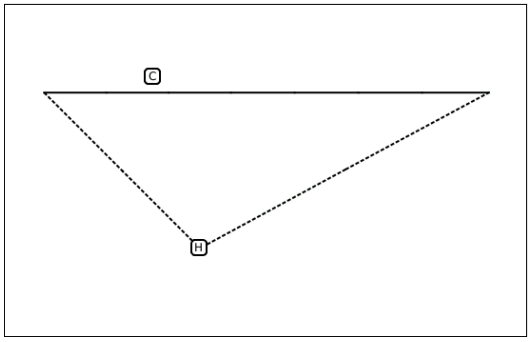


3.4 Confirmation of the Modified Pattern

■ Scale up/down and rotation

Ⓗ: Origin (Available at all the preview windows)

Ⓒ: Base Point at Transfer



3.5 Origin Correction

①Have Access to the Origin Correction Mode

► Have access to pattern transfer mode.

► Press 。

► Press for confirmation

②Set Origin Correction Value

► Press 。

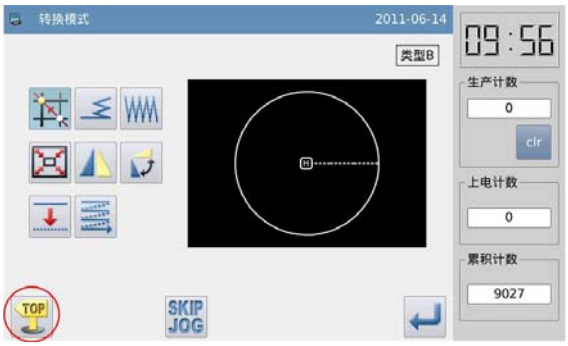
► Use direction keys to move needle to the position needing correction.

► Press for confirmation

③Confirm the Figure after Change

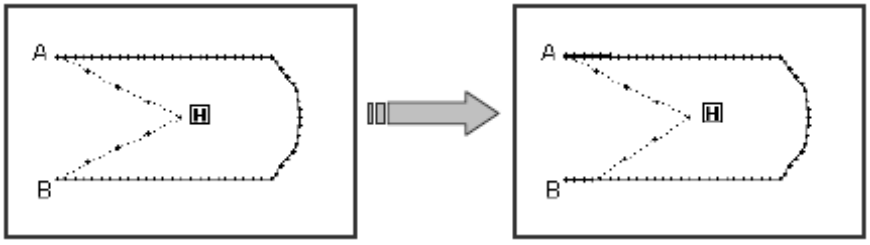
► Finish the transfer mode

Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).



3.6 Reverse Stitch Sewing (Reverse Stitch at Forward and Backward)

[Example]: Transfer (add) reverse stitch sewing data at start point (A) and end point (B).

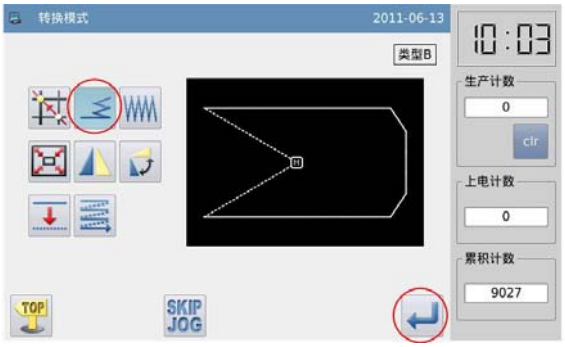


①Have Access to Reverse Stitch Transfer Mode

► Have access to pattern transfer mode

► Press 。

► Press for confirmation



②Set the Position for Transferring the Reverse Stitch

► Move stitch to the random position between point A and point B (the section for reverse stitch transfer).

► Press for confirmation

③Select Reverse Stitch Sewing

► Press .

④Detailed Setting of Reverse Stitch Sewing

► Set the details in the right interface

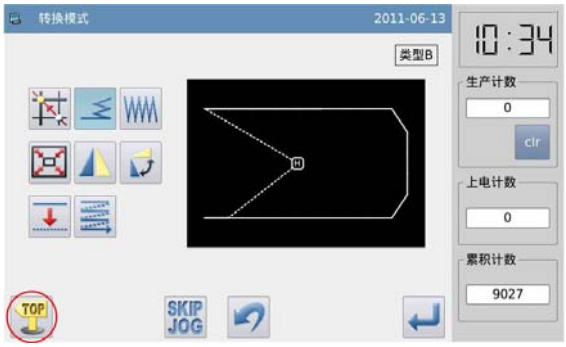
(Firstly, select [Reverse Stitch Sewing]; secondly, select [N-shaped Reverse Stitch] as for the start part, number at 5; thirdly, select [M-shaped Reverse Stitch] for the end part, number at 3.

► Press for confirmation

⑤Confirm the Figure after Change

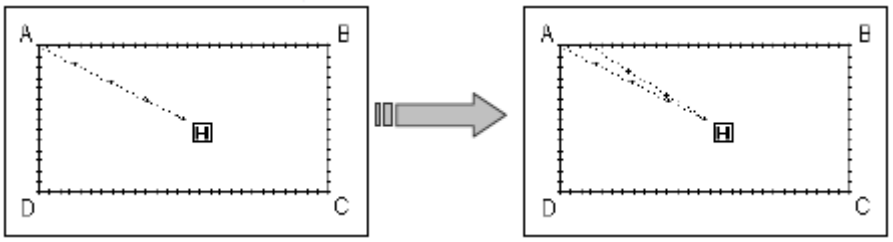
► Finish Transfer Mode。

Press TOP to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).



3.7 Reverse Stitch Sewing (Multiple Reverse Sewing)

[Example]: Transfer (Insert) multiple reverse sewing data (A-B-C-D-A is the polygon input).

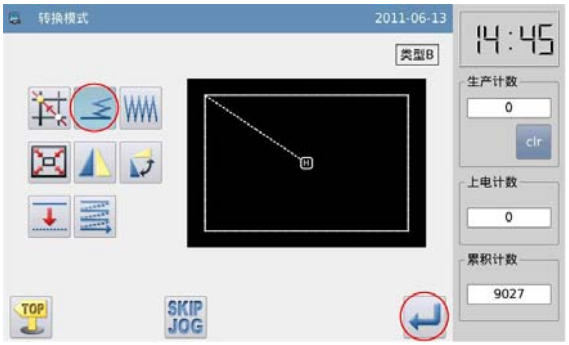


① Have Access to Reverse Stitch Transfer Mode

► Have access to pattern transfer mode

► Press 。

► Press for confirmation



②Set the Position for Transferring Reverse Stitches

► Move needle to the position for transferring the reverse stitch.

► Press for confirmation

③Select the Multiple Reverse Stitch

► Press 。

④ Detailed Setting of Multiple Reverse Stitch

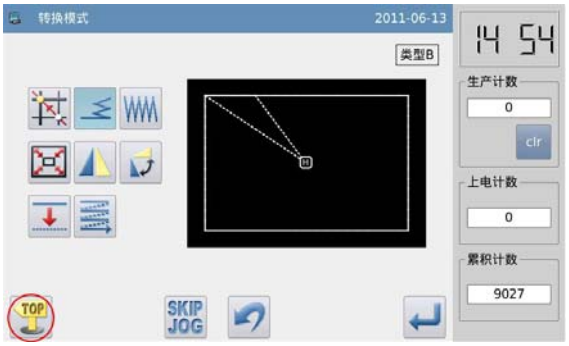
► Set the details in right interface. (Select [Multiple Reverse Stitch], and then select to set the repetition times, at last set the overlapped stitch number at 3).

► Press for confirmation

⑤Confirm the Figure after Change

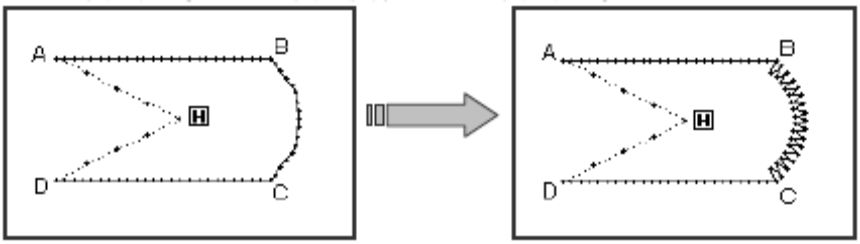
► Finish Transfer Mode。

Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).



3.8 Herringbone Sewing Transfer

[Example]: Transfer the arc from point B to point C to herringbone sewing/Insert herringbone sewing from point B to point C. (A～B: Linear, B～C: Arc, C～D: Linear)

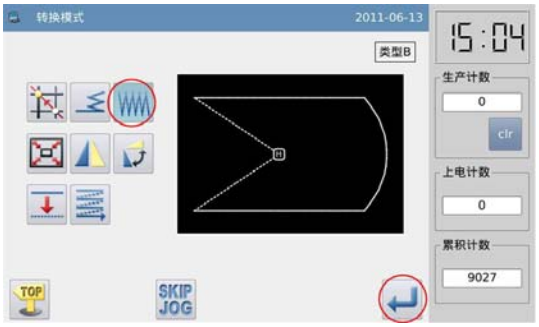


① Have Access to Reverse Stitch Transfer Mode

► Have access to pattern transfer mode

► Press .

► Press for confirmation



②Set the Position for Transferring Herringbone Sewing

► Move needle to the random position between point B and point C (Section needing herringbone sewing transfer)

► Press for confirmation

③Select Types of Herringbone Sewing

► Press

④Set Details of Herringbone Sewing

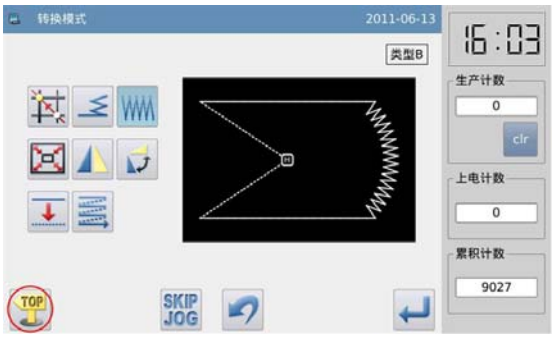
► Set the details in right window (Select , then set width at 5.0, stitch interval at 3.0, direction at)

► Press for confirmation

⑤Confirm the Figure after Change

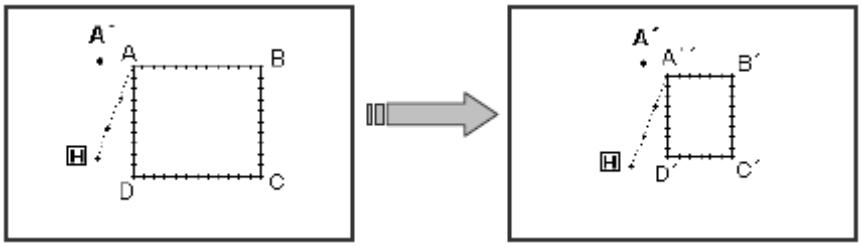
► Finish Transfer Mode。

Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

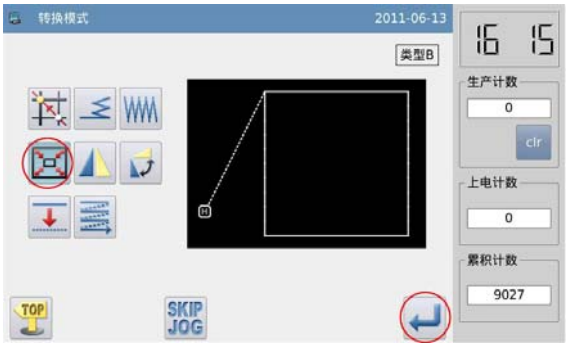


3.9 Scale Up/ Down

[Example]: Use point A' as the base point, scale down the fixed stitch interval (X：50%, Y：75%).



① Have Access to Reverse Stitch Transfer Mode



- ► Have access to pattern transfer mode
- ► Press 。
- ► Press for confirmation

②Set Method for Scaling Pattern

- ► Method

  ：Fixed Stitch Number

  ：Fixed Stitch Interval

  Press “Fixed Stitch Interval”.
- ► Use number keys or direction keys to set the scale rate in X and Y directions.
- ► Select Base Point

  ：Pointed by User

  ：Center of Pattern

  ：Origin

  Please press “Pointed by User”
- ► Press for confirmation

③Set the Position of Base Point

► Move needle to position A.

► Press ↵ for confirmation

Attention ： If user doesn't use the step-moving keys, he can also set the base point. At this moment, please press ↵ directly.

④ Set the Position of Base Point (Details)

► If the base point is not on the pattern, please use direction keys to move needle to A' (Base point position)

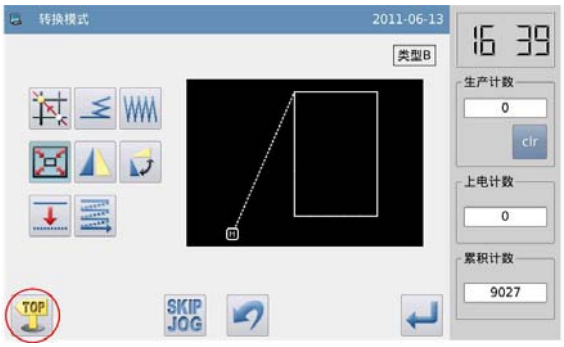
► Press ↵ for confirmation

Attention: If the base point is on the pattern, please press ↵ directly.

⑤Confirm the Scaling

► Press ↵ for confirmation

⑥Confirm the Figure after Change



► Finish Transfer Mode。

Press TOP to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing ↶ is to withdraw the last modification and to return to previous point).

Note 1: Scale up/ down the circle

No matter the scale rates in X and Y directions are same or not, the pattern after the transfer is still a circle.

Note 2：Scale up/down the retrieval multi-sewing and off-side sewing

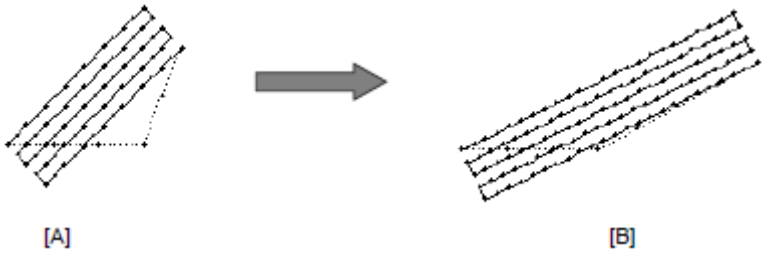
For scaling up/down the retrieval multi-sewing or the off-side sewing, the following

items can't be changed. (Especially for the scale up/down operation in off-side sewing, some functions will be unavailable.)

- **The "Distance" at retrieval multi-sewing can be scaled**
- **The "Distance" at off-side sewing can be scaled.**

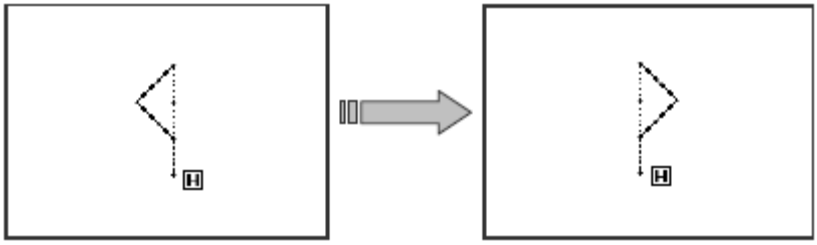
(For changing these data, please use the Transfer functions of retrieval multi-sewing or off-side sewing, instead of the Scale Up/Down function)

Example: The retrieval multi-sewing pattern A (distance at 3mm) is scaled up for 200% in X direction to become pattern B, whose distance is still 3mm.



3.10 Mirror

[Example]: Transfer the pattern in the left picture to the pattern in right picture.

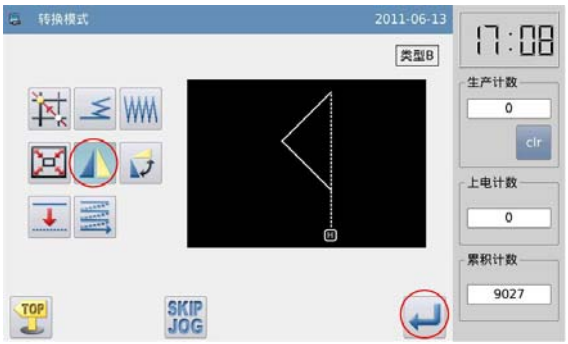


①Have Access to Mirror Mode

► Have access to pattern transfer mode

► Press 。

► Press for confirmation



②Set the Method of Mirror

► Original Figure

: Delete the original figure

: Keep the original figure

Press “Delete the original figure”.

► Mirror Direction

: In horizontal (X) direction.

: In vertical (Y) direction.

: In diagonal (XY) direction

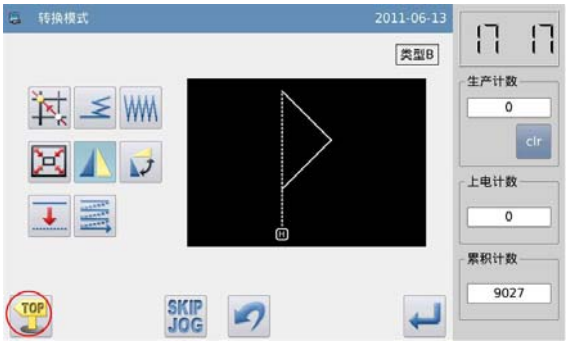
Press “In diagonal (XY) direction”

► Press for confirmation

③ Confirm the Figure after Change

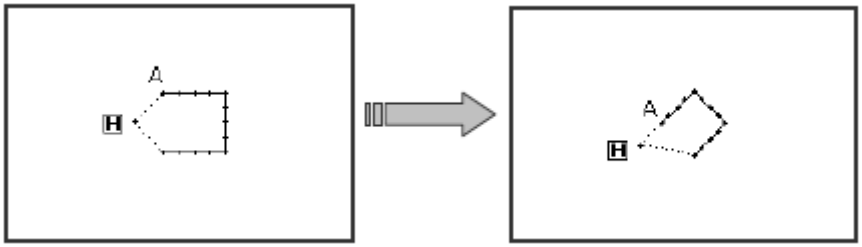
► Finish Transfer Mode。

Press TOP to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

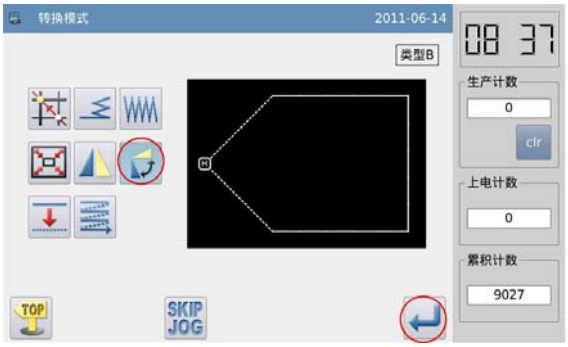


3.11 Rotation

[Example]: Rotate the pattern for 45 degrees in left with the point at the base point.



①Have Access to Rotation Mode



► Have access to pattern transfer mode

► Press

► Press for confirmation

②Set Method for Rotation

► Select Rotating Direction

: Left

: Right

Press “Left”.

► Set Rotating Angle

Use number keys. (Set 45.0 at here).

► Select the base point

: Pointed by User

: Center of Pattern

: Origin

Press “Pointed by User”

► Press for confirmation

③Set the Position of Base Point

► Move needle to point A.

► Press for confirmation

Attention : If user doesn’t use the step-moving keys, he can also set the base point. At this moment, please press directly.

④ Set the Position of Base Point (Detail)

► If the base point is not on the pattern, please use direction keys to move needle to A (Base point position)

► Press for confirmation

Attention: If the base point is on the pattern, please press directly.

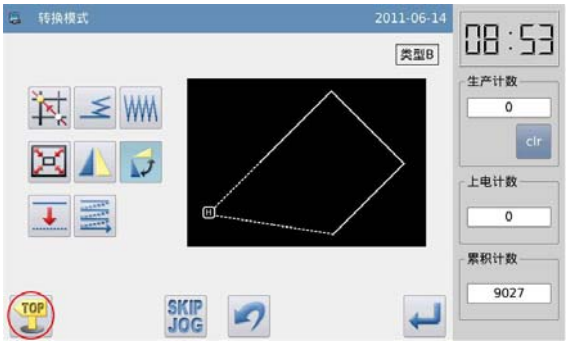
⑤ Confirm the Rotation

► Press for confirmation

⑥Confirm the Figure after Change

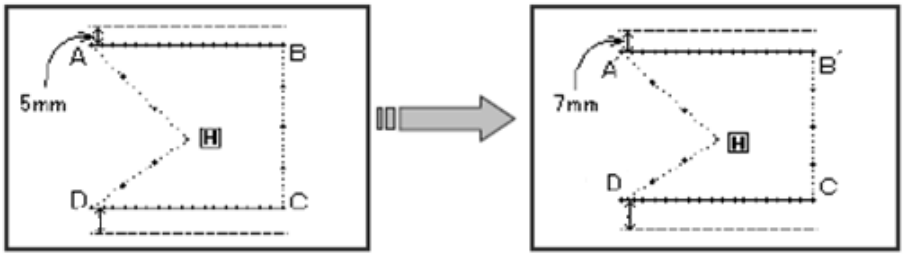
► Finish Transfer Mode。

Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).



3.12 Off-side Transfer

[Example]: Transfer the off-side sewing between A and B in left picture to the off-side sewing between A' and B' in right picture. (Distance of off-side sewing is changed from 5mm to 7mm)

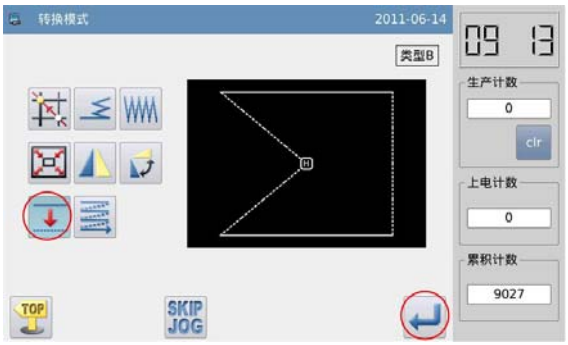


①Have Access to Off-side Transfer Mode

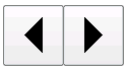
► Have access to pattern transfer mode

► Press 。

► Press for confirmation



② Select the Off-side Section for Transfer

► Press  to select it.

(The inputted numbers will be displayed in order)

► Press for confirmation

③ Set the Method for Off-side Transfer

► Off-side Direction. Press “Right”

：Left

：Right

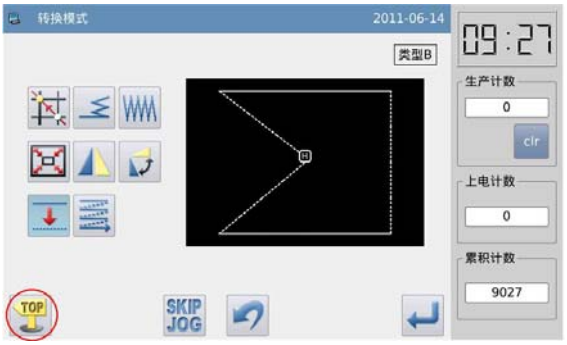
► Set deviation distance. (Set it at 7mm)

► Press for confirmation

④Confirm the Figure after Change

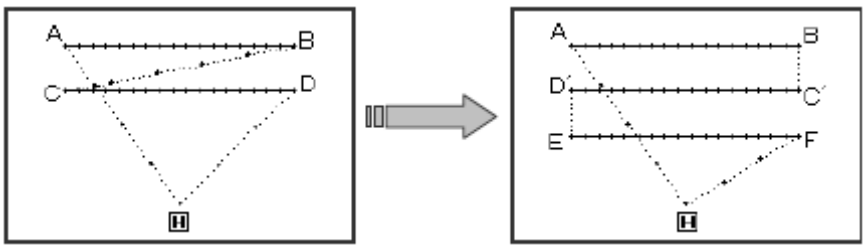
► Finish Transfer Mode。

Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved. (Pressing is to withdraw the last modification and to return to previous point).

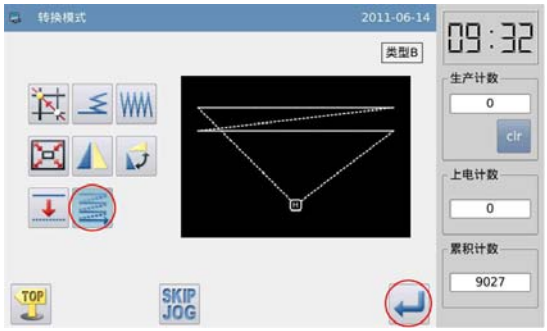


3.13 Retrieval Multi-sewing

[Example]: Transfer the twice multi-sewing (Feed) ABCD to the three-time retrieval multi-sewing (Feed) ABC’D’EF.



①Have Access to Retrieval Multi-sewing Mode



► Have access to pattern transfer mode

► Press .

► Press for confirmation

② Select the Multi-sewing Section for Transfer

► Press to select it.

(The inputted numbers will be displayed in order)

► Press for confirmation

③ Set the Method for Multi-sewing Transfer

► Select type of multi-sewing

: Cocurrent Multi-sewing (Feed)

: Reverse Multi-sewing (Feed)

: Cocurrent Multi-sewing (Sewing)

: Reverse Multi-sewing (Sewing)

Press “Reverse Multi-sewing (Feed)”

► Select Direction. Press “Right”

: Left

: Right

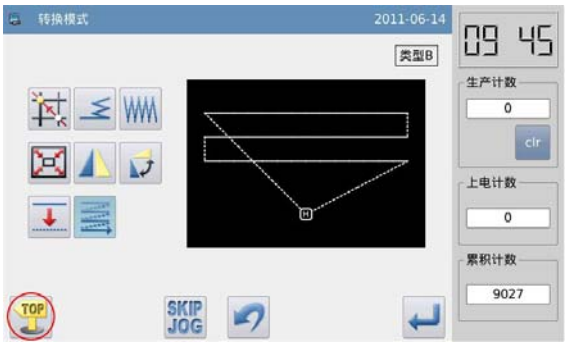
► Set deviation Distance at 5mm

► Set the Times at 3

► Press for confirmation

④Confirm the Figure after Change

► Finish Transfer Mode。



Press to return the interface for saving the transferred data. The system will return to standard interface after the data is saved.

(Pressing is to withdraw the last modification and to return to previous point).