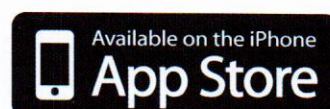


BT 300 X 200 / PROGRAMING / ENGLISH

GLOBAL

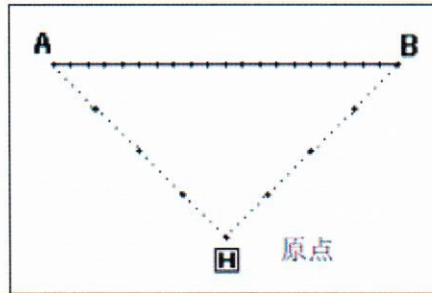
Our experience. Your success



1 Make Pattern with Figure Material

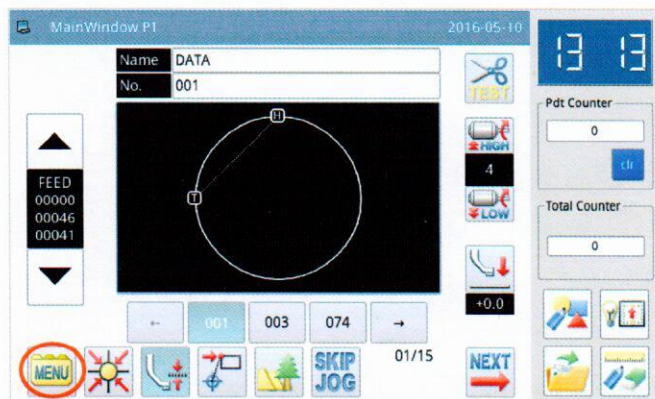
1.1 Procedure of Making Pattern

First, we will introduce the pattern-making procedure with figure material and the shift of interfaces. As an example, we will explain how to make the following pattern.




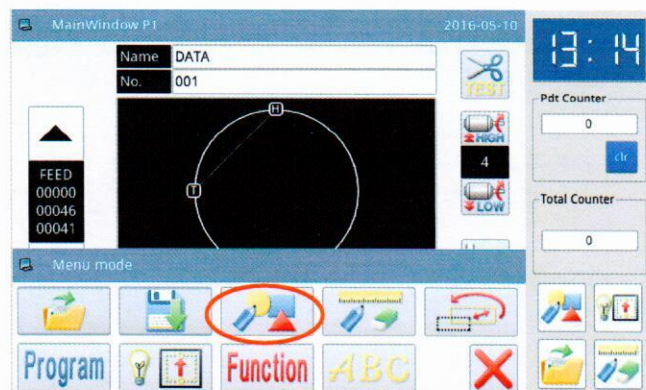
1. Start Operation from Main Interface

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 new material,

please press  to clear the previous pattern-making material and remake the pattern.

If user continues making the pattern with the inputted material,

please press  to continue.


② Set Speed



□ Set Stitch Interval

Via 0 ~ 9 or ↑ ~ ↓, user can input the stitch interval, ranging between 0.1mm~12.7mm.

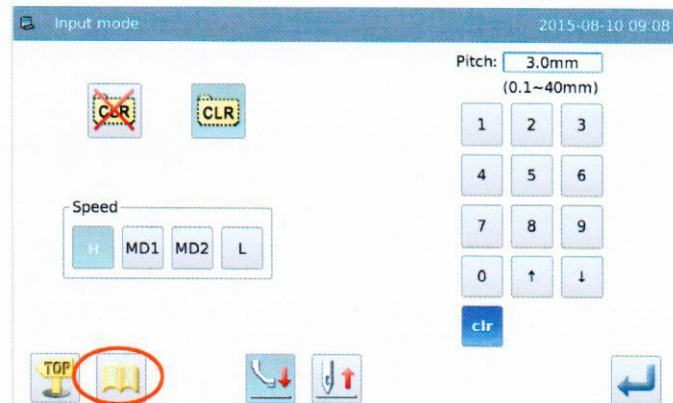
□ Confirm the Input

After setting the above parameters, please press .

⑤ Modify the Set Parameters





This function is newly added in the pattern making, modifying and shifting interfaces, with which all related parameters can display together to be set by the user easily.



4. Display Cursor Inputting Interface


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


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


When A reaches its destination, press  for confirmation. (The operation for the movement to Point A is finished.)

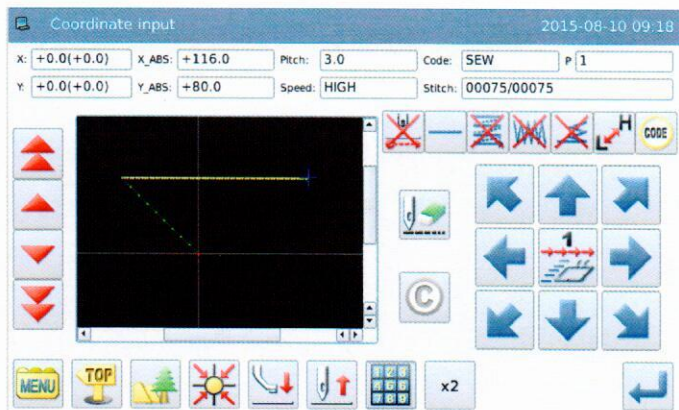
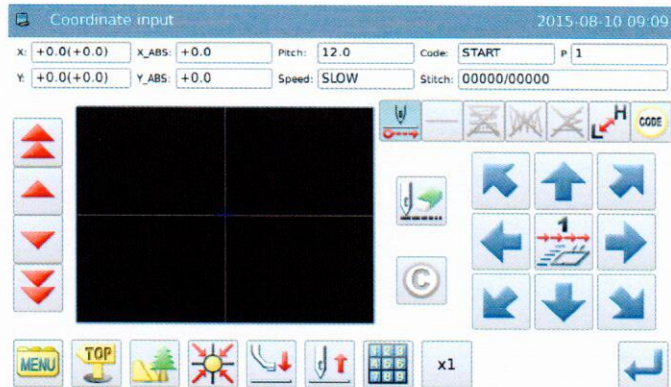
[Note] Only when the needle is at the end of the pattern, can user input a new pattern. Therefore, after the backward or forward inching movement, if the needle is not at the end of the pattern, the direction keys will be locked. Only when user uses the inching mode to move the needle to the end of the 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 B reaches its destination, press  for confirmation. (The linear stitching operation from A to B is created)

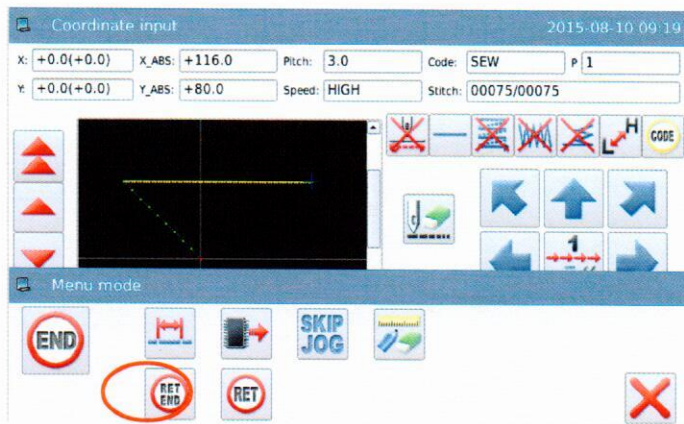
Then press .



5. Display the Catalogue Mode Window for Cursor Inputting

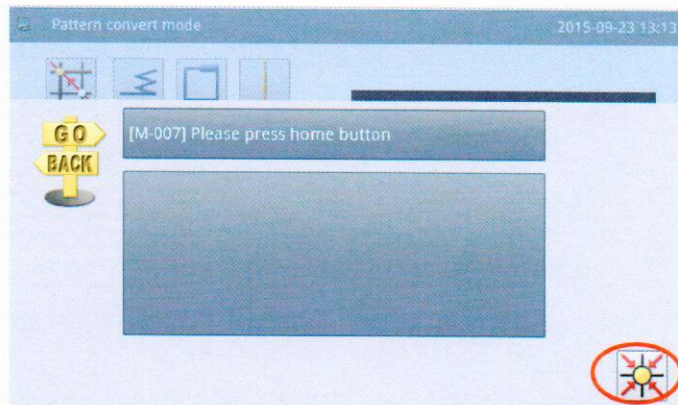
Press  to generate the data for returning to origin and ending the input.

[Note] The frame will automatically return to the origin, so please pay attention to the pausing position of the needle.




6. Press [Return to Origin] Key

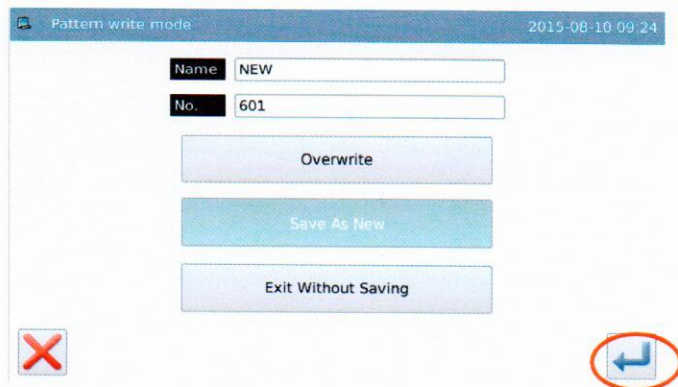
Press .

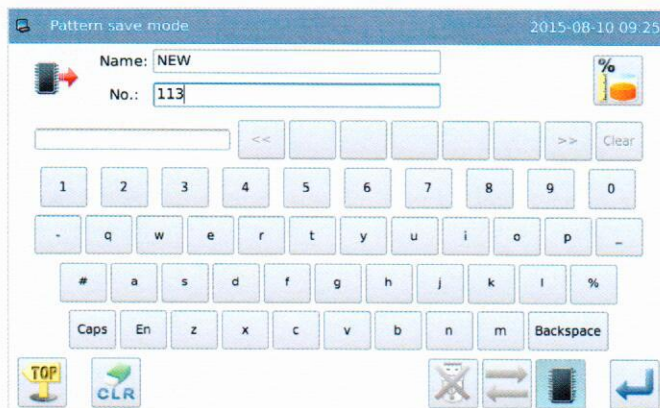


7. Select the Saving Method

After selecting the saving method, press  for confirmation.

(Here, we select "Saved as New File").

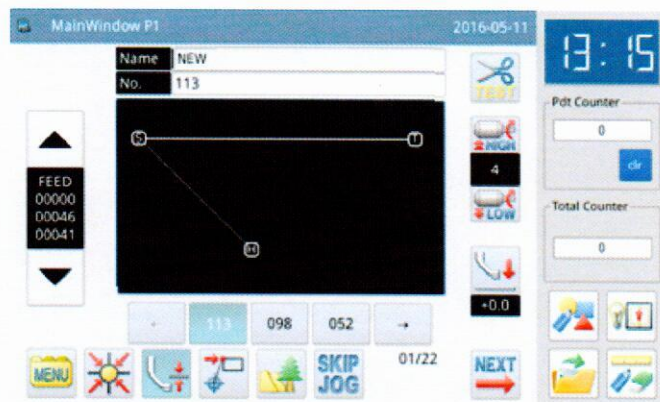




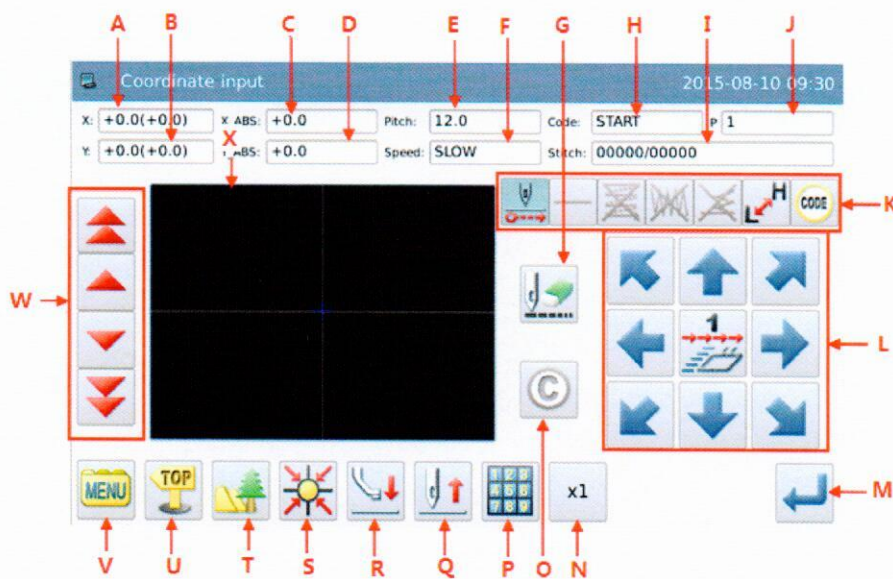
8. Return to Main Interface

After returning to the main interface, please check the inputted figure.



By then, the input is finished.



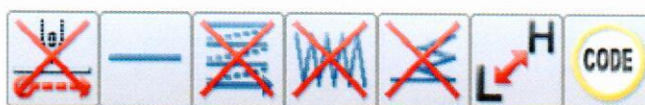
1.2 Additional Explanations on Cursor Inputting Interface



Function List:

No.	Function	Description
A	X Relative Coordinate	The X value of the relative coordinate at current displacement
B	Y Relative Coordinate	The Y value of the relative coordinate at current displacement
C	X Absolute Coordinate	The X value of the current coordinate
D	Y Absolute Coordinate	The Y value of the current coordinate
E	Stitch Interval	The set stitch interval. [Note] The stitch interval for empty feeding is 12.0mm
F	Speed	The speed of the current stitch
G	Cancel the last input	Cancel the last inputted point and return to the previous set point
H	Code	The currently inputted code.
I	Stitch Number	The stitch number by the current needle position / Total stitch number of the pattern
J	Shape Point Number	The number of the shape points inputted during the current edition
K	Pattern-making Input	Each pattern-making input function
L	Direction Keys	Move the needle to each direction.
M	Confirmation Key	Confirm the currently edited pattern
N	Scale up	Enlarge the display interface
O	Cancel (Back to the previous step)	Press to cancel the input not confirmed yet and return to the previous input
P	Coordinates Input	Input the exact coordinates
Q	Needle Positin Setup	Make the needle go up or down
R	Intermediate Presser Foot Up	Lift the Intermediate presser foot
S	Back to Origin	Press to move the needle back to origin
T	Pattern Preview	Check the outline of the pattern being made
U	Quit	Return to previous interface
V	Menu	Access to menu mode
W	Inching Movement	 : make inching movement forwards/backwards on created patterns  : make rapid inching movement forwards/backwards on created patterns
X	Display the Pattern	Display the pattern made

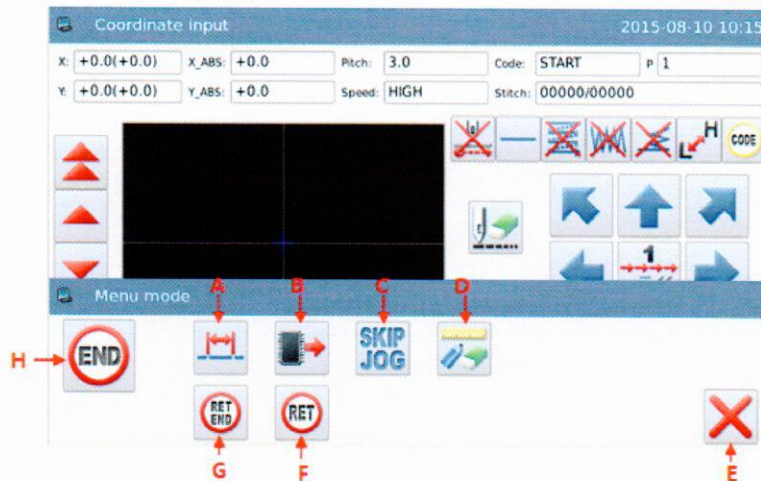
Pattern-making Input Functions



Function List

Key	Function	Description
	Feed Key	<p>Set the feed mode of the current input:</p> <p>: Feed</p> <p>: No Feed</p>
	Input Method Setup	Indicate the basic input method currently used (point sewing, linear input, polygon input, circle input, arc input, curve input, etc.) and press to enter the setup menu of the inputting method.
	Multi-sewing/ Off-side Sewing Setup	Indicate the status of multi-sewing or 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) and press to enter the setup menu of the detailed multi-sewing/off-side sewing parameters.
	Herringbone Sewing Input Setup	Indicate the status of the herringbone sewing input at current (Including no herringbone sewing and herringbone sewing, etc.) and press to enter the setup menu of the detailed herringbone sewing parameters.
	Backstitch Input Setup	Indicate the status of backstitch input at current (Including no backstitch, backstitch sewing, multiple backstitch, etc.) and press to enter the setup menu of the detailed backstitch parameters.
	Change Sewing Speed	Press to change the set sewing speed in the order of (HIGH→MD2→MD1→LOW→HIGH···).
	Function Code Input	Press to enter the function code setup interface.

Cursor Inputting Interface in Catalogue Mode







Function List:

No.	Function	Description
A	Change Stitch Interval	Press to enter the interface for changing the stitch interval.
B	Load Pattern Data	Press to add the pattern data stored in the memory behind the shape being inputted.
C	Fast Moving	Press to enter the interface for fast moving setup
D	Figure Modification	Press to enter the modification mode.
E	ESC	Quit the Catalogue Mode
F	Return to Origin	Press to create the data for returning to origin.
G	Return to Origin & End the Input	Press to create the material for returning to origin and ending, so as to finish the figure input mode.
H	End the Input	Press to create the data for ending, so as to finish the figure input 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 inputted point.
Arc Input	⤿	Input three points. Make arc sewing among the current position and other two inputted points.
Circle Input	◯	Input three points. Make circle sewing among the current position and other two inputted points.

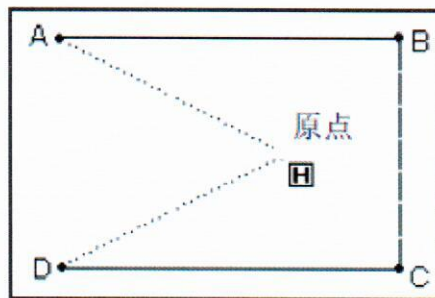
Curve Input		Make curve sewing among the current position and other inputted points. [Note] At most, 2000 points can be inputted
Polygon Input		Make linear sewing among the current position and other inputted points to form a polygon shape. [Note] At most, 2000 points can be inputted.
Point Sewing		Sew in the way of one stitch for one point
Function Code Input		Input function code in the inputted figure.

1.3.1 Linear Input

Operation Points:



- Select 
- Input two points: Make linear sewing between the current position (the inputted one) and any inputted point.

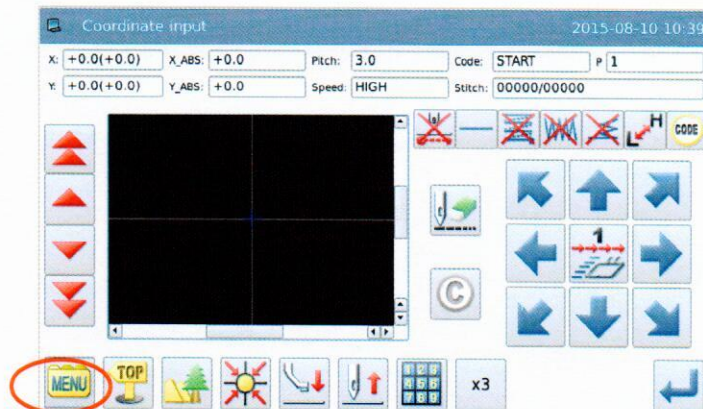
[Example]: How to make the pattern below.




Operation Instructions:

1、Input the Feed Data to Point A

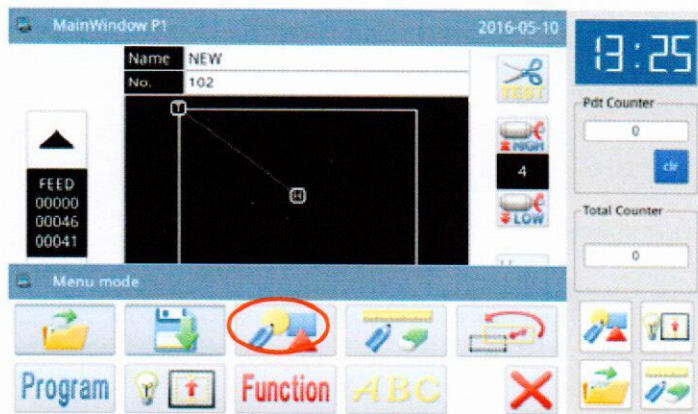
Press  and then  to enter Input Mode interface. After setting up the conditions, the screen will shift to the cursor input interface (please refer to [1.1 Procedure of Making Pattern]).



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

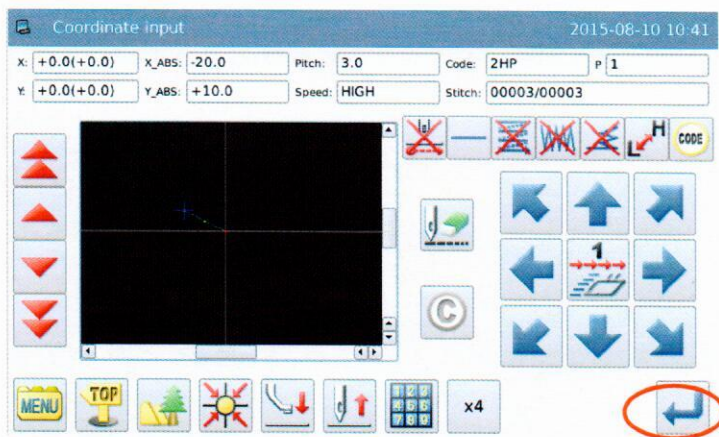
① Check the displacement amount (Relative coordinates of X & Y).

[Example] X: -20.0, Y: +10.0

② Press  to create the feed data to point A.

③ The displacement amount (Relative coordinates of X & Y) will be cleared.


X: +0.0, Y: +0.0

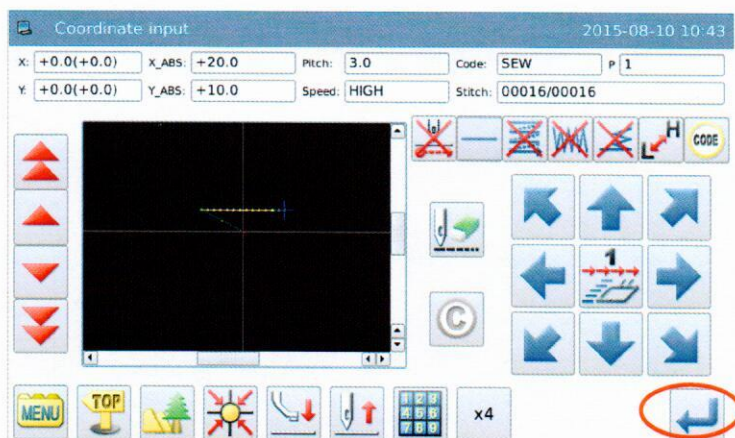


3、 Input Sewing to Point B

① Code turns to Sewing Automatically.


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

③ Press  to create the linear sewing data to point B.




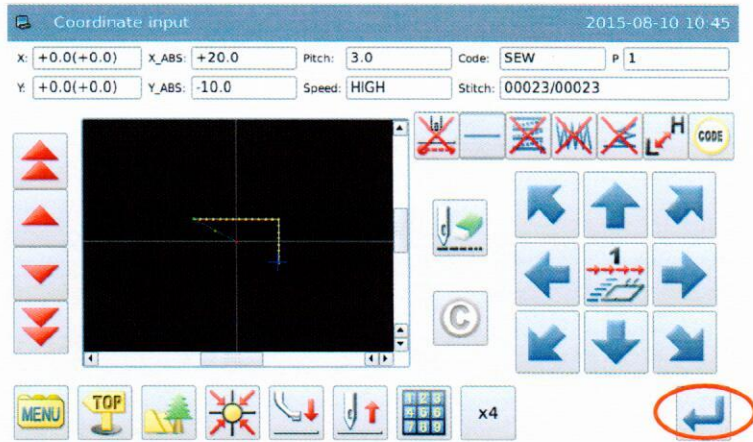
4、 Input Sewing from Point C to Point D

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

② Press  to create the linear sewing data to point C.

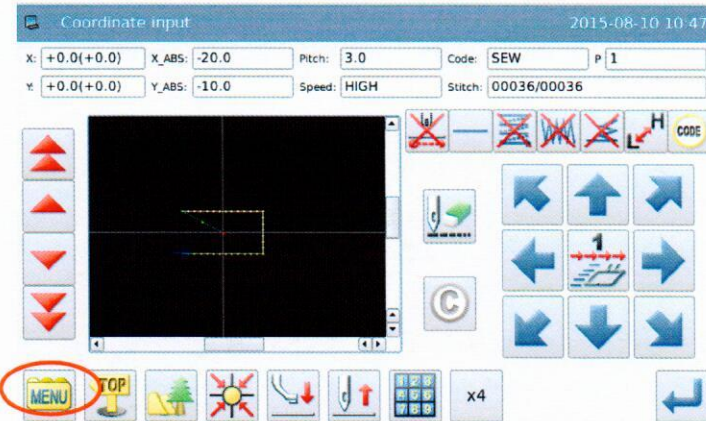
③ Use direction keys to move point D under the needle.

④ Press  to create the linear sewing data to point D.




5、 Set the Sewing to Point D

Press .

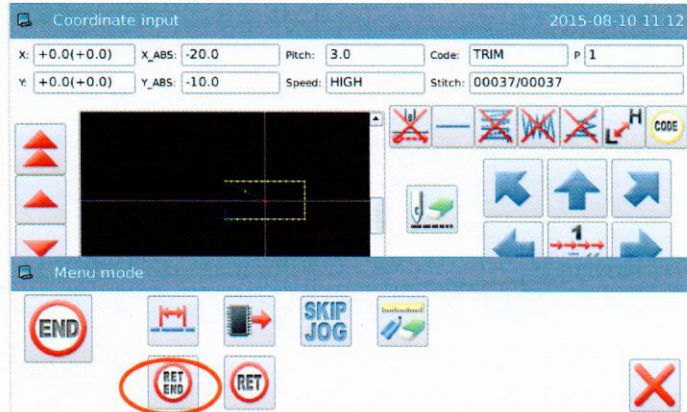


6、 Input the Data for Returning to Origin and Ending


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

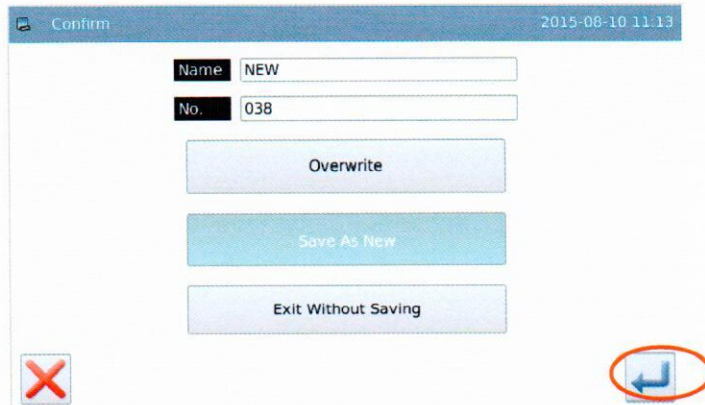
② The screen will display the message “Please Press the Key for Returning to Origin”. Then

press .





7、 Save the Pattern Data

- ① After selecting the saving method, please press .
- ② Return to main interface.



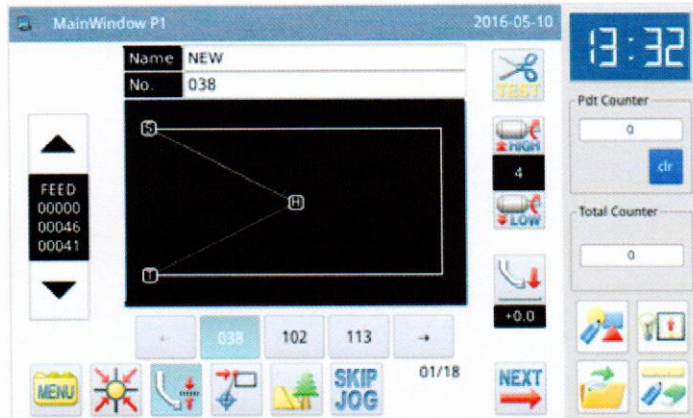
8、 Check the Pattern Data

- ① Check the pattern data.

User can use   to check the action of the pattern.


(If you are still inputting the pattern data, to press “Enter” can also enable the user to make the same test).

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

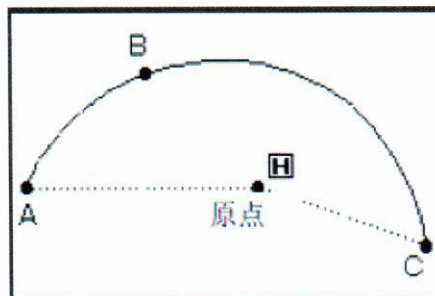


1.3.2 Arc Input

Operation Points:

- Select 
- Input three points; make arc sewing from the current positioned points.

[Example]: How to make the pattern below.



Operation Instructions:

1、Input the Feed Data to Point A

A


① Press  and then



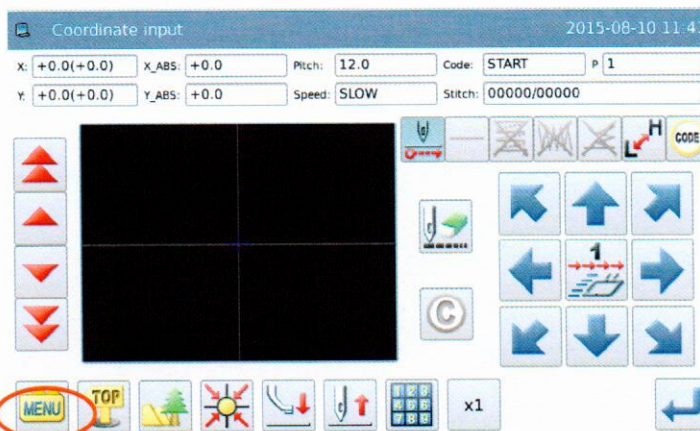
to enter Input Mode

interface. After setting up the conditions, the screen will shift to the cursor 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.




3、Change the Input Method

① Clear the displacement amount.

② The code turns to sewing automatically.

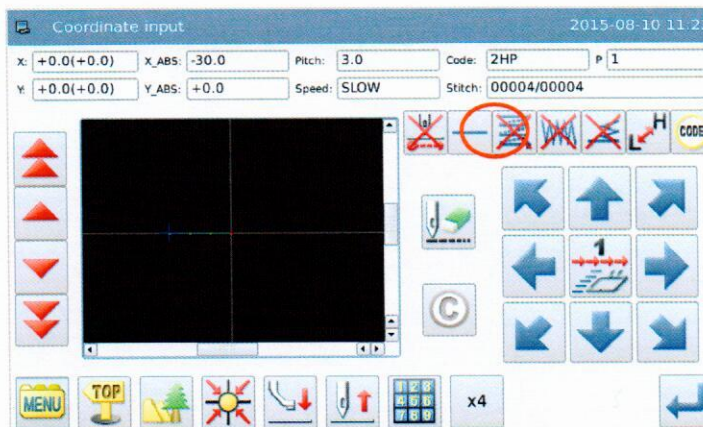
③ If the displayed icon is not





(at the position of  in the right picture), please press

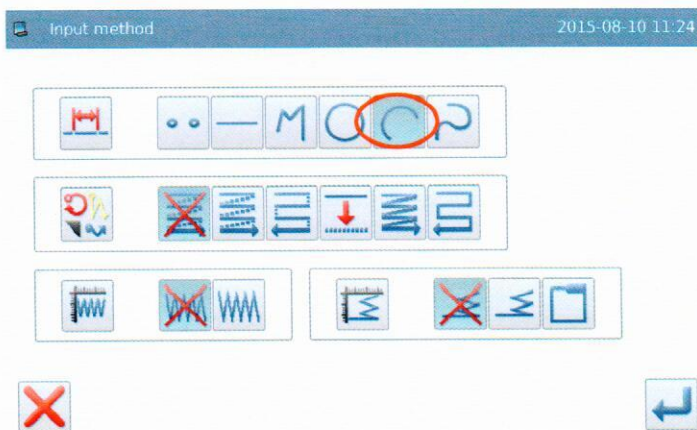


to display the interface for setting the input method (the type of current sewing will be displayed on this key).





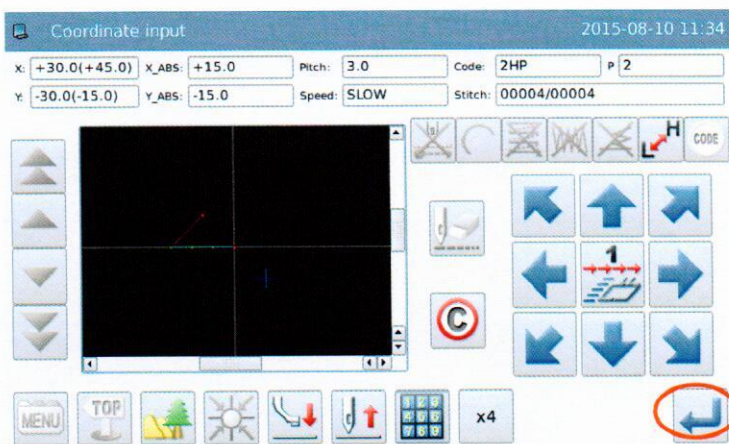
4、 Set as Arc Input

- ① Press  and then  for confirmation.
- ② Screen will return to cursor inputting interface.





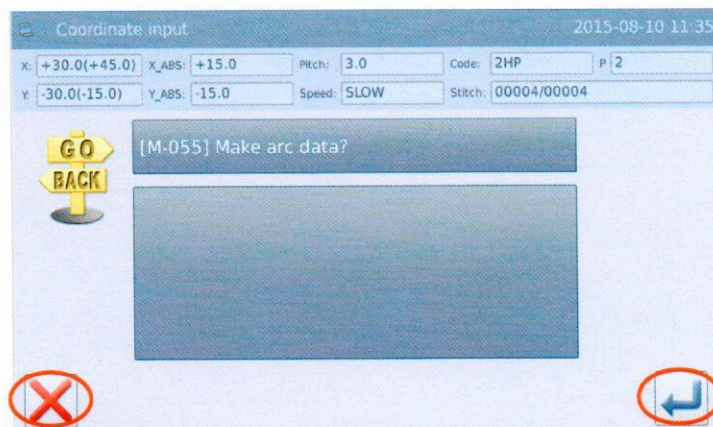
5、 Set Sewing From Point B to Point C

- ① Use direction key to move point B under the needle.
- ② Check the displacement amount
- ③ Press  to confirm point B
- ④ Use direction key to move point C under the needle.
- ⑤ Press  to confirm the arc input.



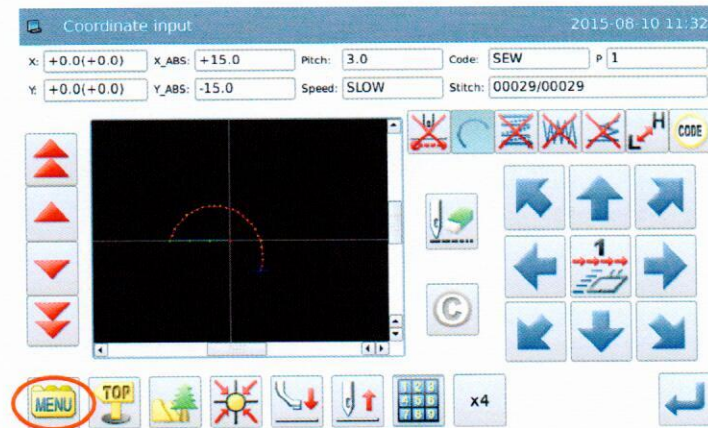
6、 Create the Data of Arc Input

- ① The message "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

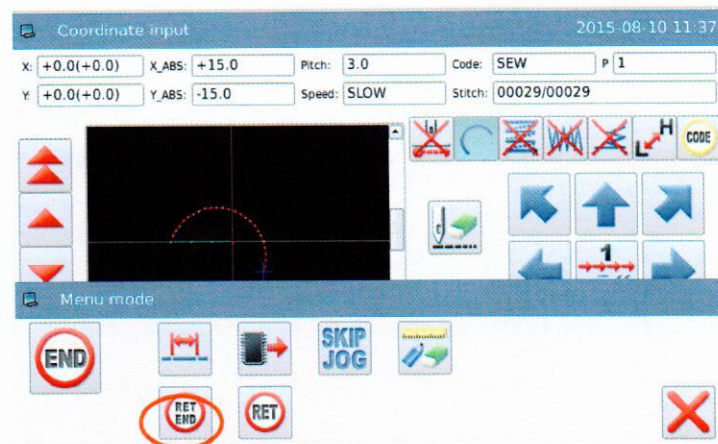
Press  .




8、 Input the Data for Returning to Origin and Ending

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

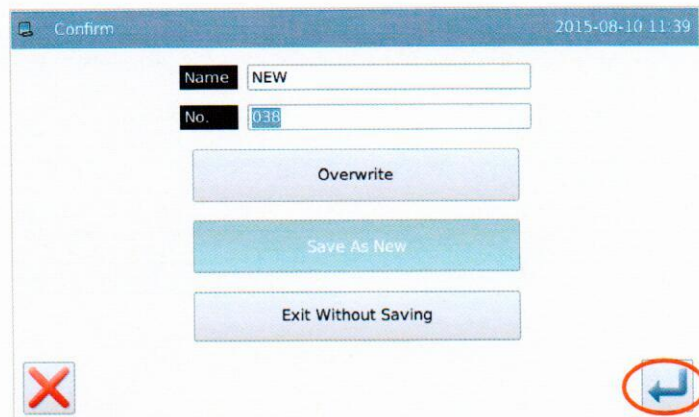
② The screen will display the message “Please Press the Key for Returning to Origin”. Then press .



9、 Save the Pattern Data

① After selecting the saving method, please press .

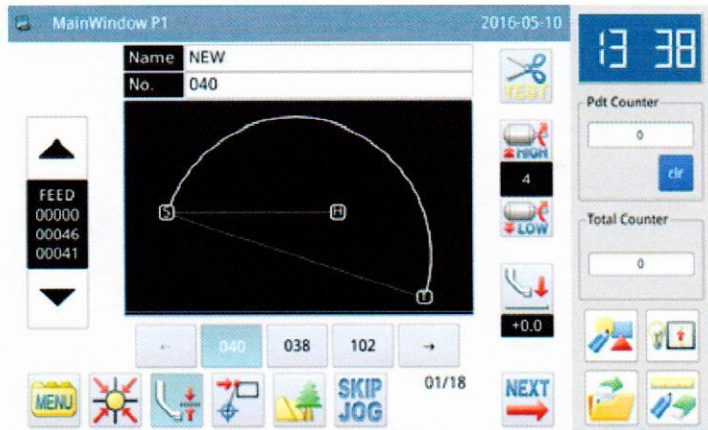
② Return to main interface.



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, to press “Enter” can also enable the user to make the same test).

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

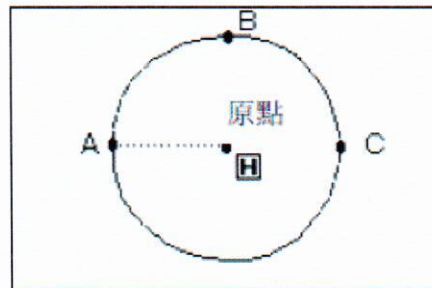


1.3.3 Circle Input

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 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

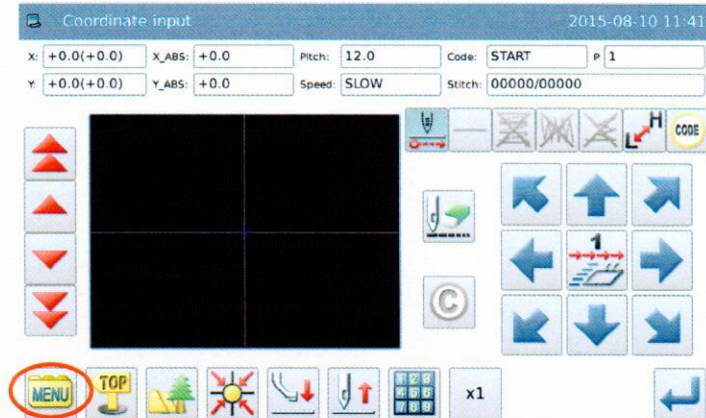
① Press  and then

 to enter Input Mode interface. After setting up the conditions, the screen will shift to the cursor inputting 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.

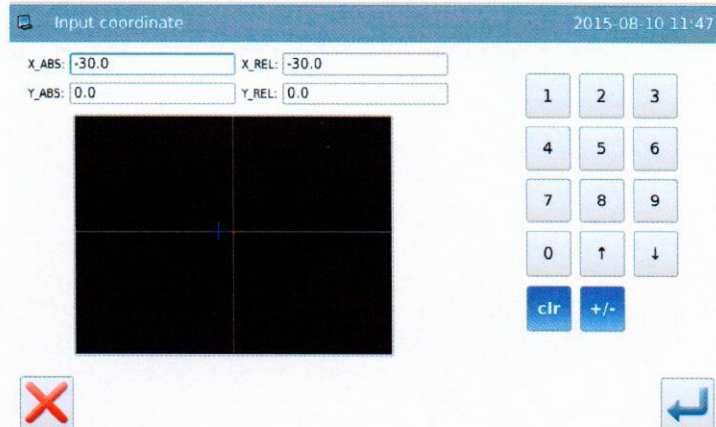


2、 Set the Feed to Point A

① Check the displacement amount.

② Press  to create the feed data to point A.

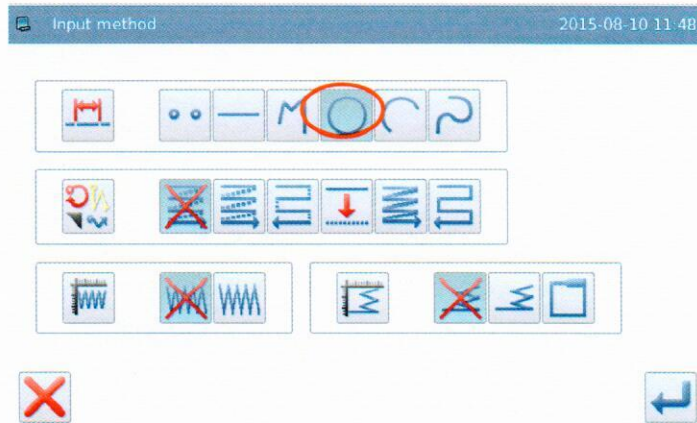
③ The code will turn to “Sewing” automatically. Set the sewing type as  “Circle Input”.





3、 Set as Circle Input

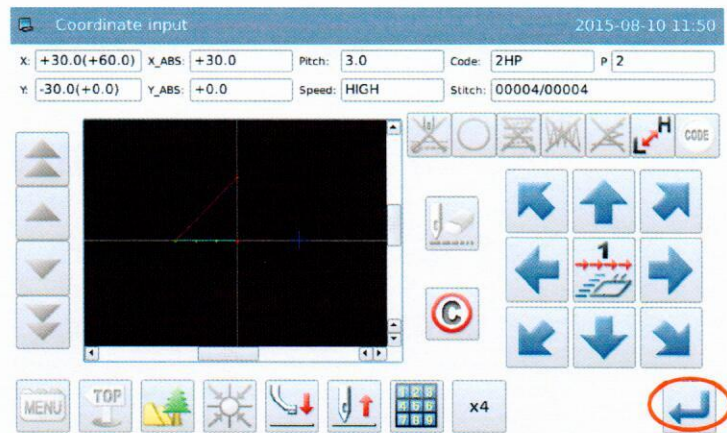
① Press  and then  for confirmation.

② Screen will return to cursor inputting interface.





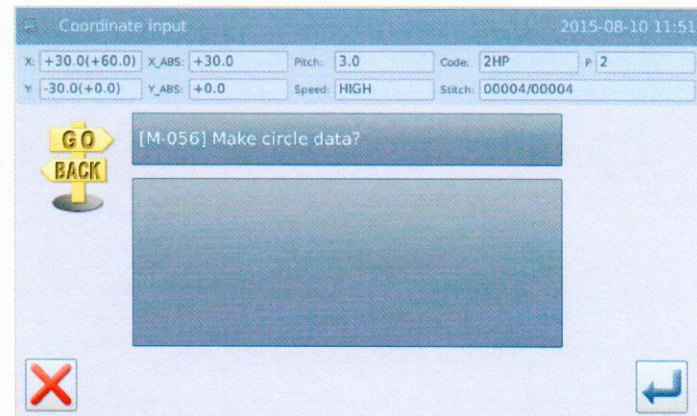
4、 Set Sewing Through Point B to Point C

- ① Use direction keys to move point B under the needle.
- ② Check the displacement amount.
- ③ Press  to confirm point B.
- ④ Use direction keys to move point C under the needle.
- ⑤ Press  to confirm point C and the circle input.



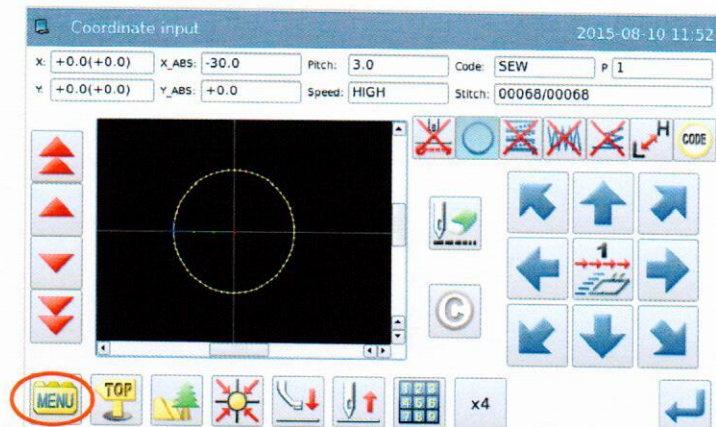
5、 Create the Data of Circle Input

- ① The message “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 .

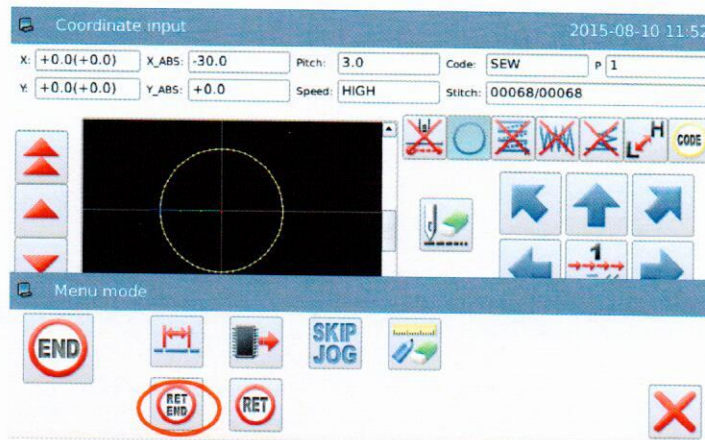


7、 Input the Data for Returning to Origin and Ending


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

② The screen will display "Please Press the Key for Returning to Origin". Then

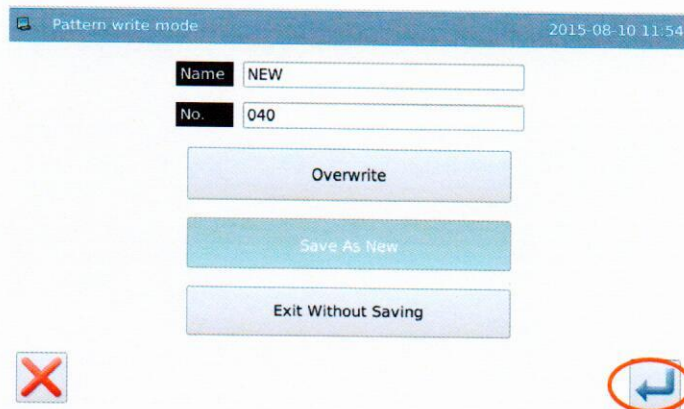
press .



8、 Save the Pattern Data



① After selecting the saving method, please press .

② Return to main interface.

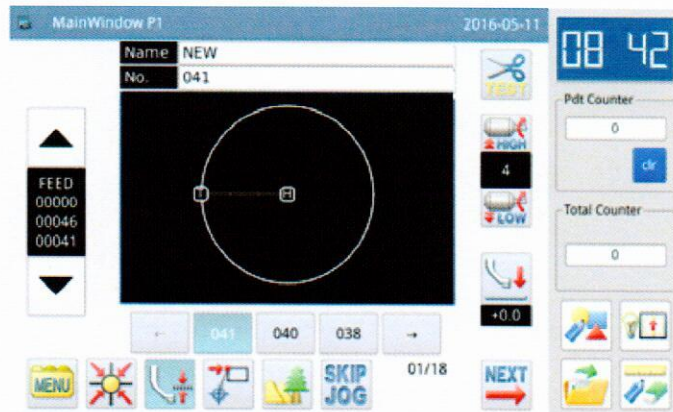


9、 Check the Pattern Data

① Check the pattern data. User


can use   to check the action of the pattern. (If you are still inputting the pattern data, to press “Enter” can enable the user to make the same test).

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

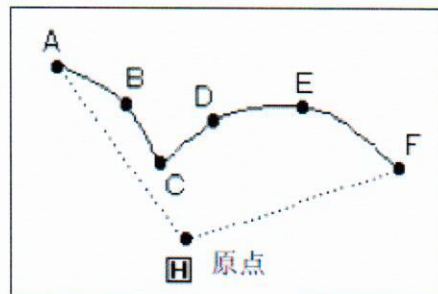


1.3.4 Curve Input

Operation Points:

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

[Example]: How to make the pattern below.




[Note] Point C in the above figure is the corner point of curve.

Operation Instructions:


1、Input the Feed Data to Point A

A

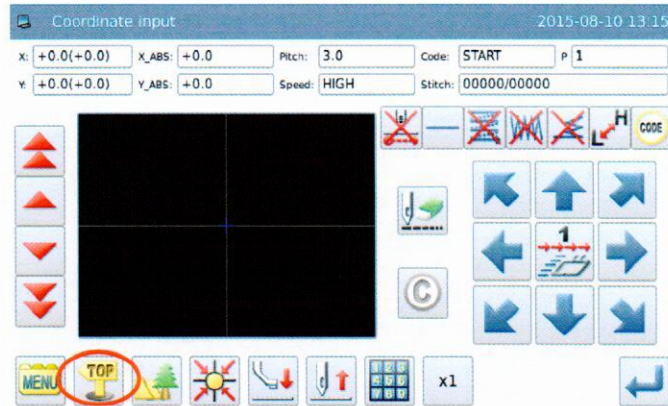
① Press  and then

 to enter Input Mode interface. After setting up the conditions, the screen will shift to the cursor 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.

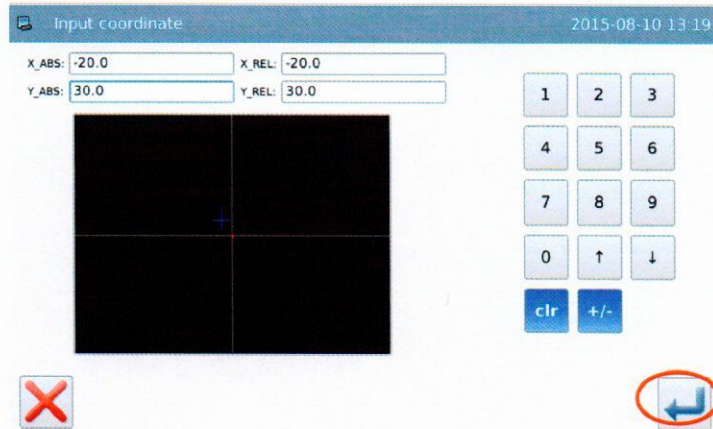


2、Set the Feed to Point A



① Check the displacement amount.

② Press  to create the feed data to point A.

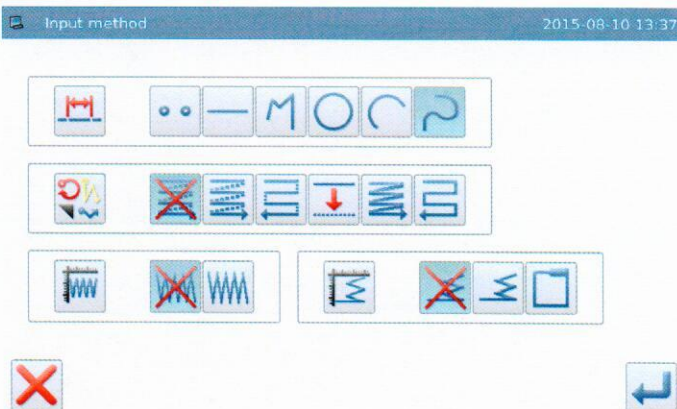
③ The code will turn to “Sewing” automatically. Set the sewing type as  “Curve Input”.



3、Set as Curve Input


① Press  and then  for confirmation.

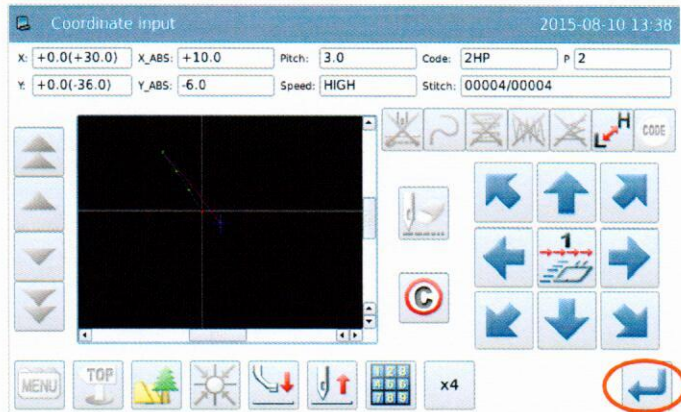
② Screen will return to cursor inputting interface.



4、 Set Point B


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


② Press  to confirm point B.

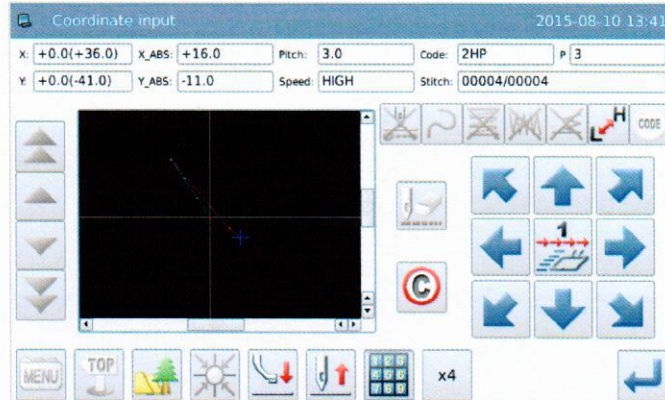


5、 Set Point C

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


② Press  to confirm point C.


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

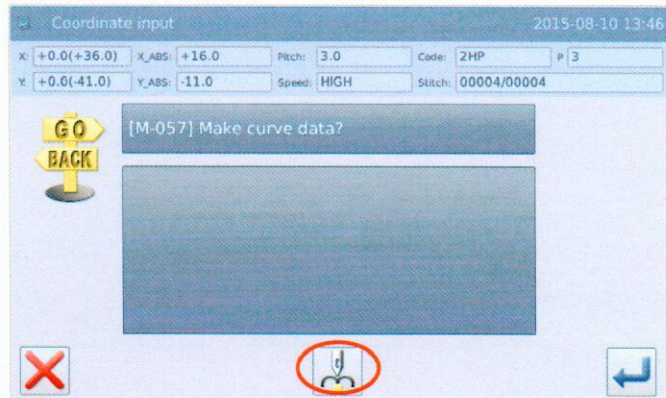


6、 Set Dividing Point of Curve





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

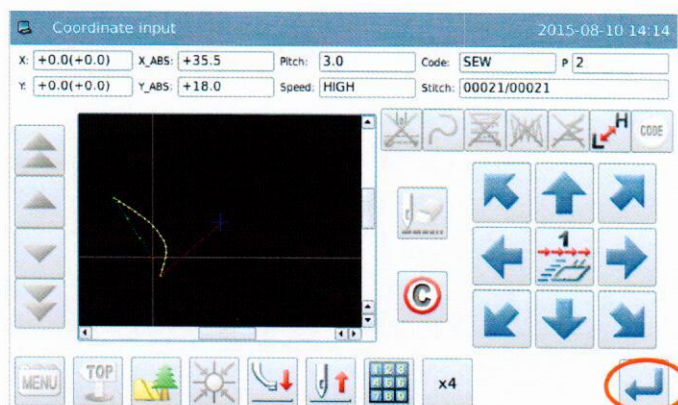
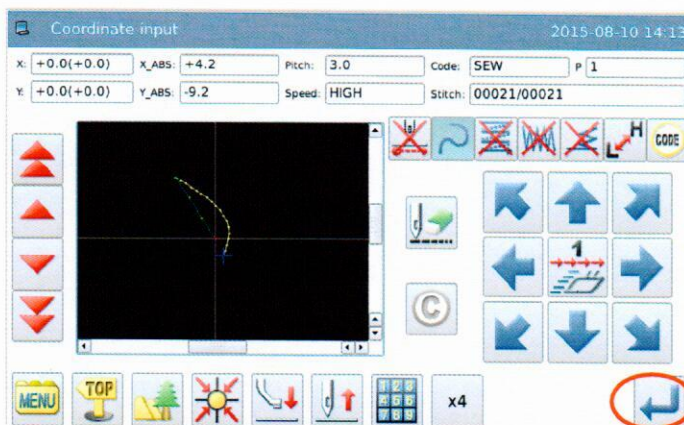
② Press  to return to the interface for inputting point C.

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





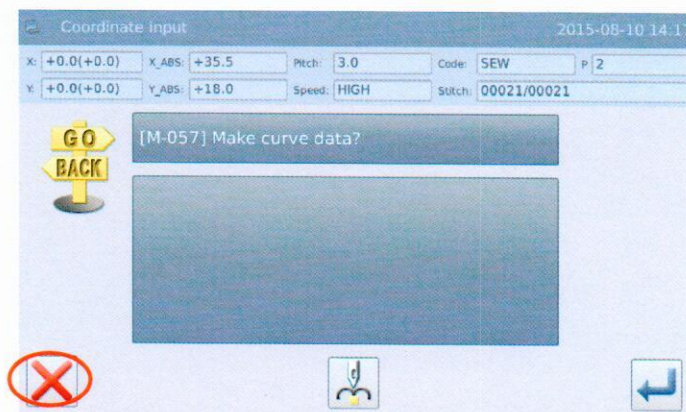
7. Set Point D, Point E, Point F and Curve Input

- ① Return to cursor inputting interface.
- ② Use direction keys to move point D under the needle.
- ③ Press  to confirm point D.
- ④ Use direction keys to move point E under the needle.
- ⑤ Press  to confirm point E.
- ⑥ Use direction keys to move point F under the needle.
- ⑦ Press  to confirm point F.
- ⑧ After all the points are confirmed, please press  again.



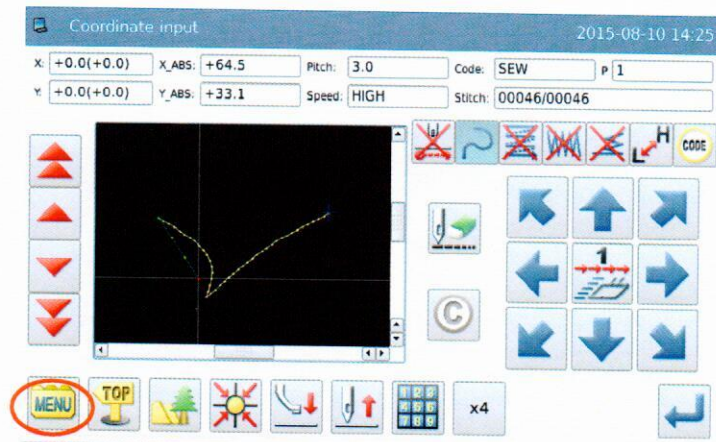
8. Create the Data of Curve Input

- ① The message "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 .

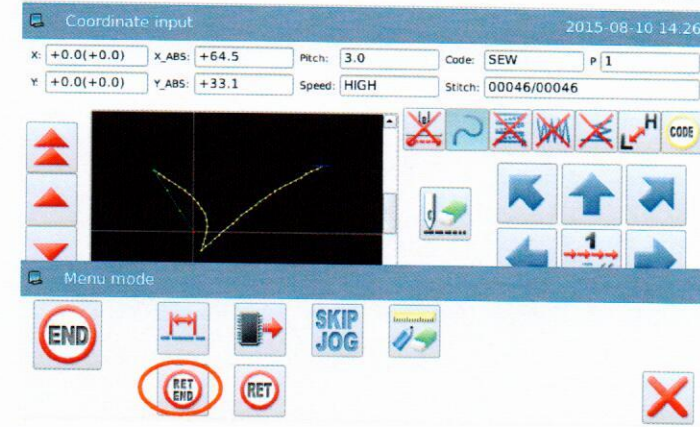


10. Input the Data for Returning to Origin and Ending


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

② The screen will display the message “Please Press the Key for Returning to Origin”. Then

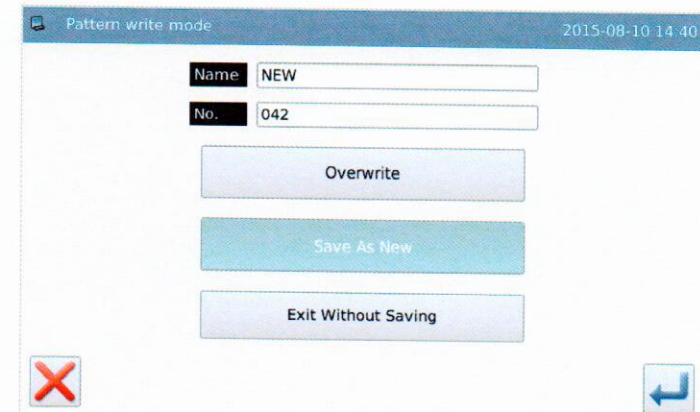
press .





11. Save the Pattern Data

① After selecting the saving method, please press .

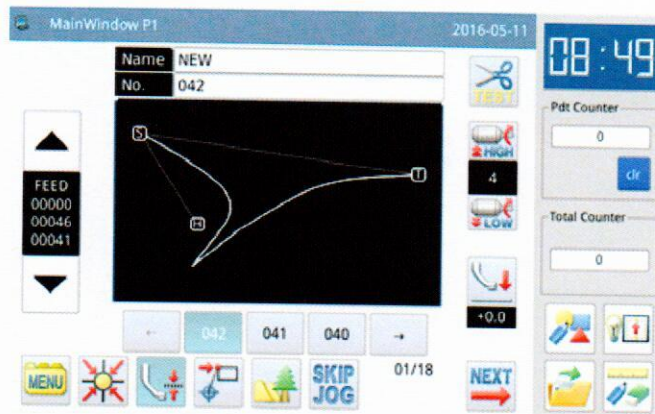
② Return to main interface.



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, to press "Enter" can also enable the user to make the same test).


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



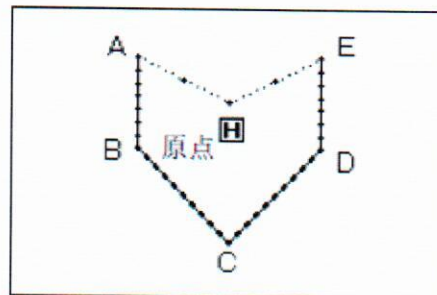
[Note] When editing the free curve, in order to ensure the accuracy of the curve, user shall input as many points as possible in the area of high curvature.

1.3.5 Polygon Input

Operation Points:

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


[Example]: How to make the pattern below.




Operation Instructions:

1、 Input the Feed Data to Point A

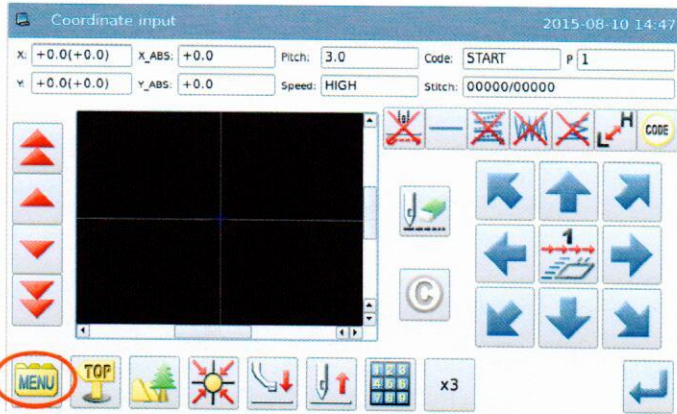
① Press  and then

 to enter Input Mode interface. After setting up the conditions, the screen will shift to the cursor 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.

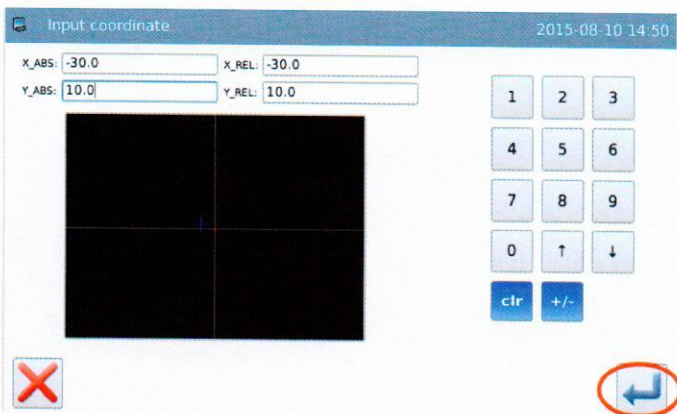


2、 Set the Feed to Point A



① Check the displacement amount.

② Press  to create the feed data to point A.

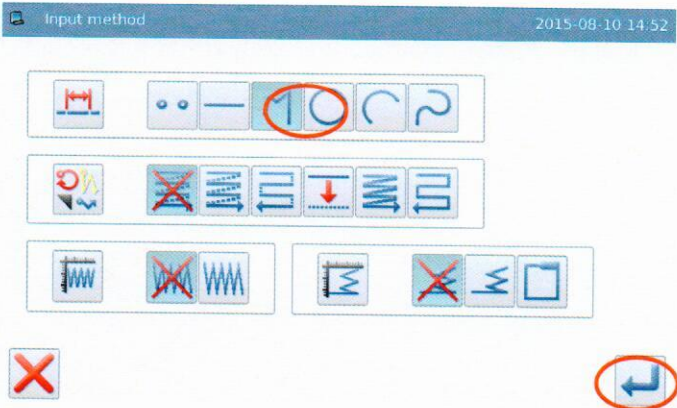
③ The code will turn to “Sewing” automatically. Set the sewing type as  “Polygon Input”.



3、 Set as Polygon Input


① Press  and then  for confirmation.

② Screen will return to cursor inputting interface.




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

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

② Press  to confirm point B.


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


④ Press  to confirm point C.

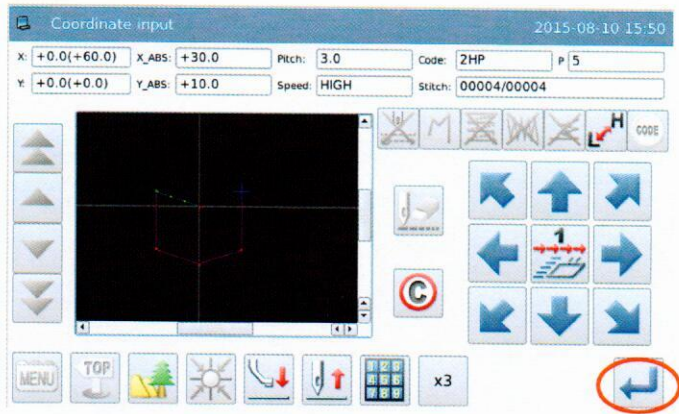
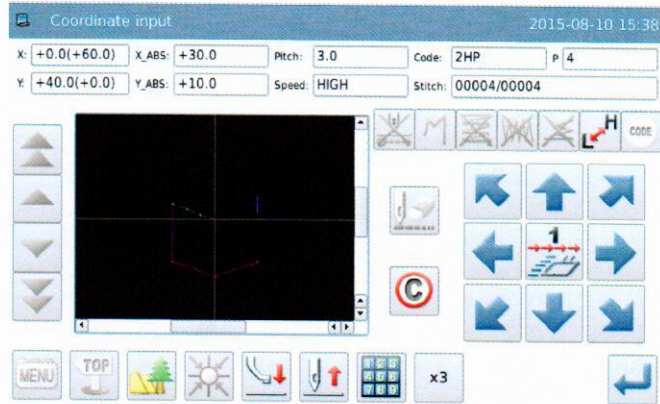
⑤ Use direction keys to move point D under the needle.

⑥ Press  to confirm point D.

⑦ Use direction keys to move point E under the needle.


⑧ Press  to confirm point E.


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

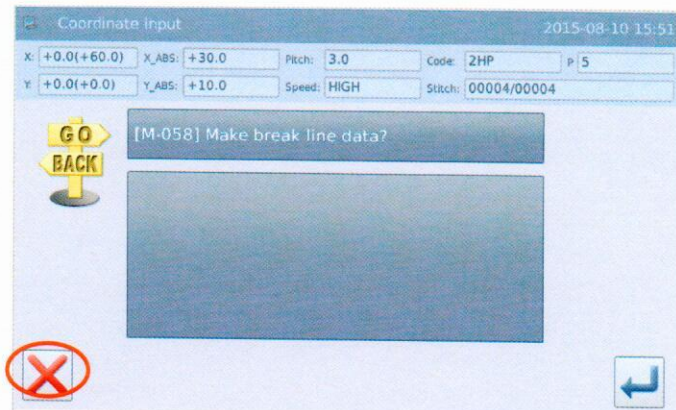


5. Create the Data of Polygon Input

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

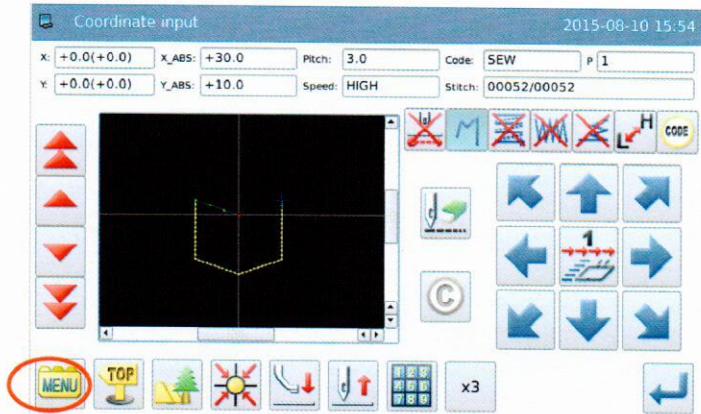
② Press  to return to the interface for inputting the last point.

③ Press  to create the sewing data of polygon input.





6. Finish the Polygon Input

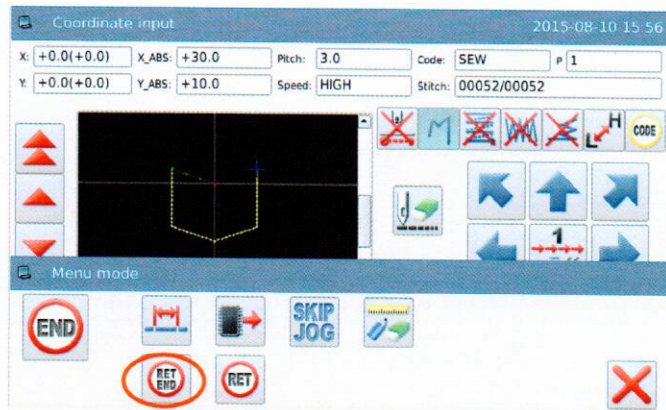
Press .




7. Input the Data for Returning to Origin and Ending

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

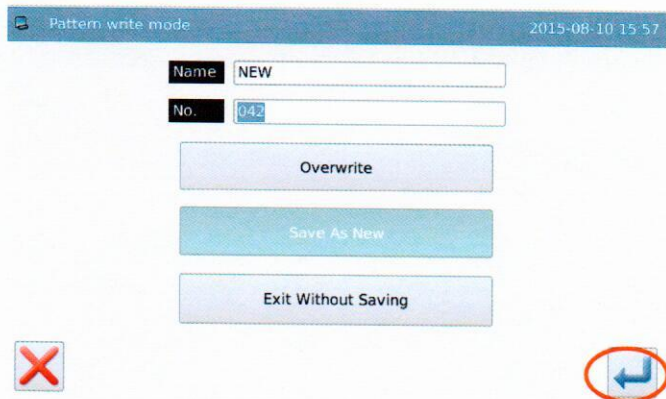
② The screen will display "Please Press the Key for Returning to Origin". Then press .



8. Save the Pattern Data



① After selecting the saving method, please press .

② Return to main interface.

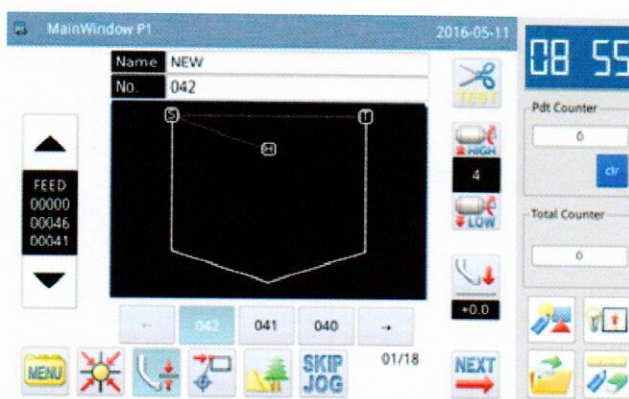


9. Check the Pattern Data

① Check the pattern data. User


can use   to check the action of the pattern. (If you are still inputting the pattern data, to press “Enter” can enable the user to make the same test).

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

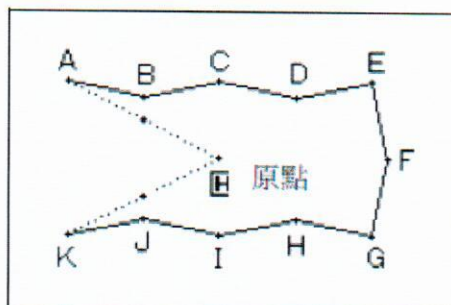


1.3.6 Point sewing Input

Operation Points:



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


[Example]: How to make the pattern below.



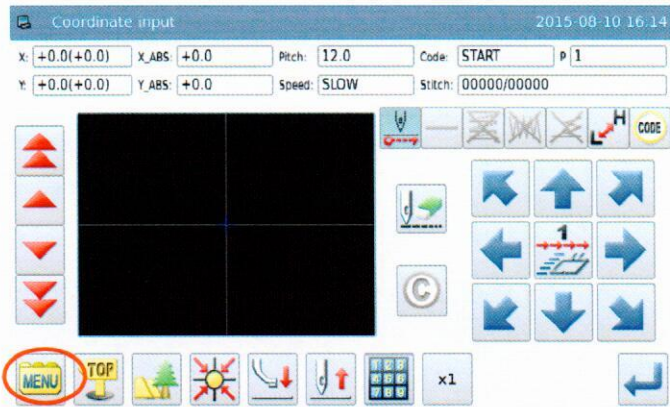
Operation Instructions:

1、Input the Feed Data to Point A

① Press  and then  to enter Input Mode interface. After setting up the conditions, the screen will shift to the cursor 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 keys to move point A under the needle.

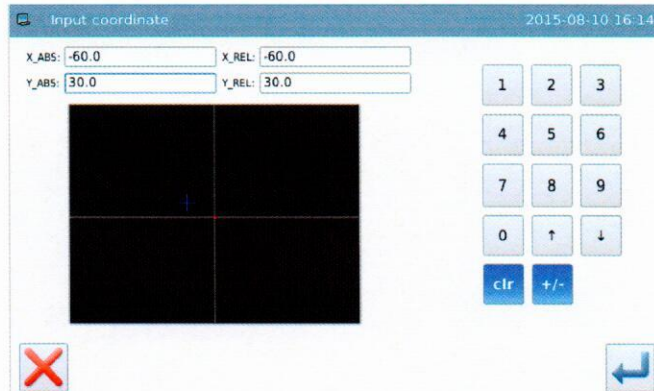


2、Set the Feed to Point A



① Check the displacement amount.

② Press  to create the feed data to point A.

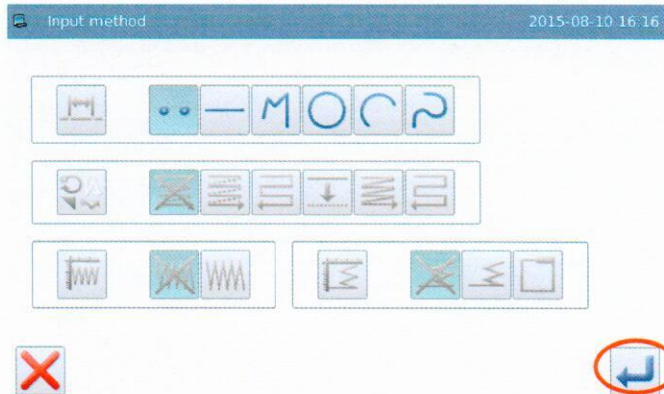
③ The code will turn to “Sewing” automatically. Set the sewing type as  “Point Sewing Input”.



3、Set as Point Sewing Input

① Press  and then  for confirmation.

② Screen will return to cursor inputting interface.




4、Set Point B~Point K

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

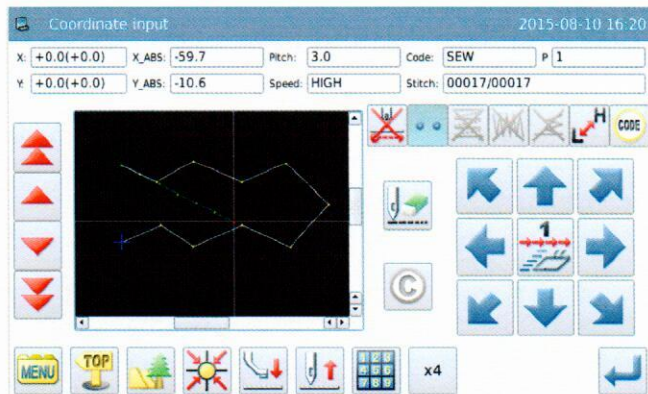
[Note] The distance between points shall be within 12.7mm.

② Press  to confirm point B.

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

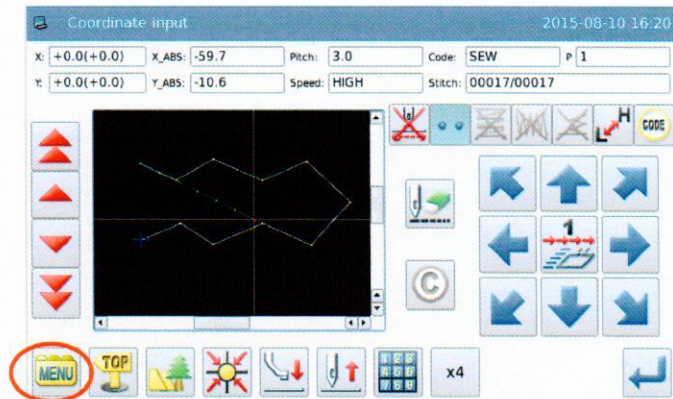
④ Press  to confirm point C.

⑤ Set point D ~ point K with the same method.




5、Create the Data for Finishing the Point Sewing Input


Press .

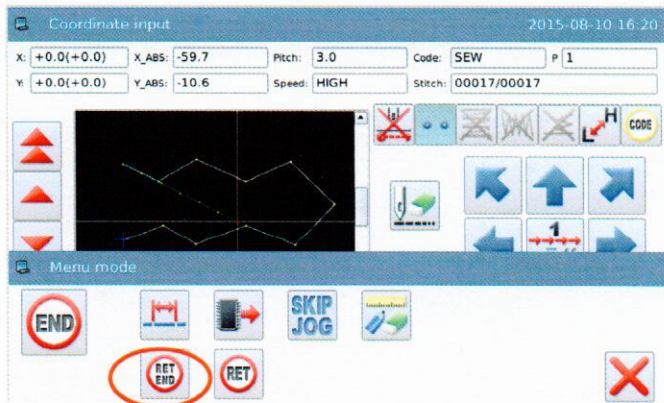


6、Input the Data for Returning to Origin and Ending


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

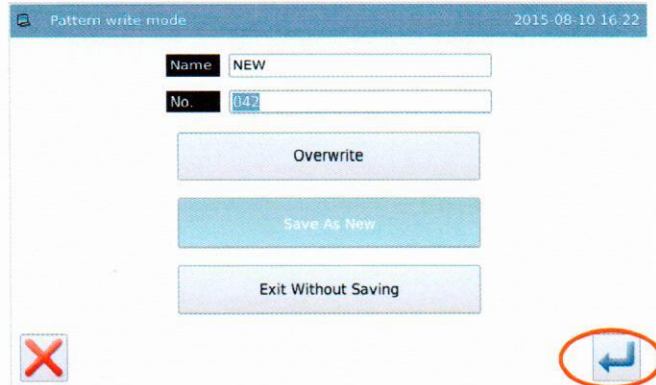
② The screen will display “Please Press the Key for Returning to

Origin”. Then press .





7、 Save the Pattern Data

- ① After selecting the saving method, please press .
- ② Return to main interface.




8、 Check the Pattern Data

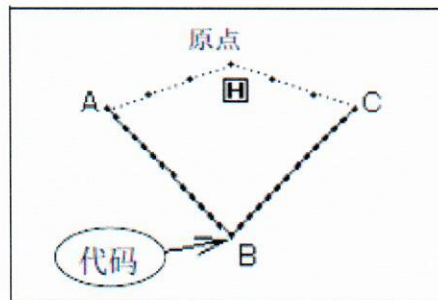
- ① Check the pattern data. User can use   to check the action of the pattern. (If you are still inputting the pattern data, to press “Enter” can also enable the user to make the same test.)
- ② For any modification, please refer to “Pattern File Data Modification”.



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 below: Make the linear sewing from point A to point B, as well as point B to 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 Instructions:


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

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

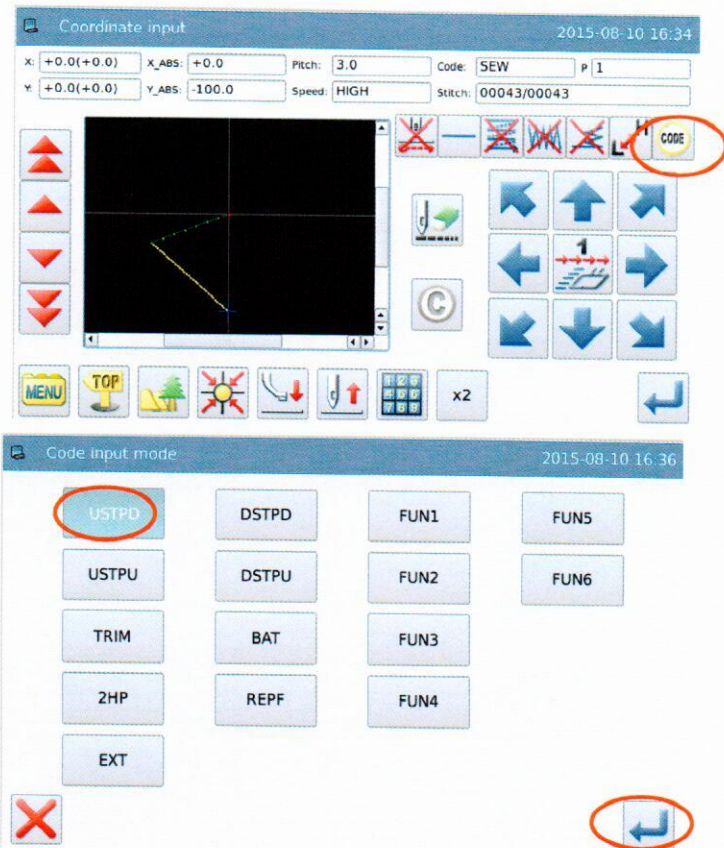
2、 Add Code Setting Data (Up Stop)

Press .

① Press .

② Press  for confirmation.

③ The screen will return to cursor inputting interface.

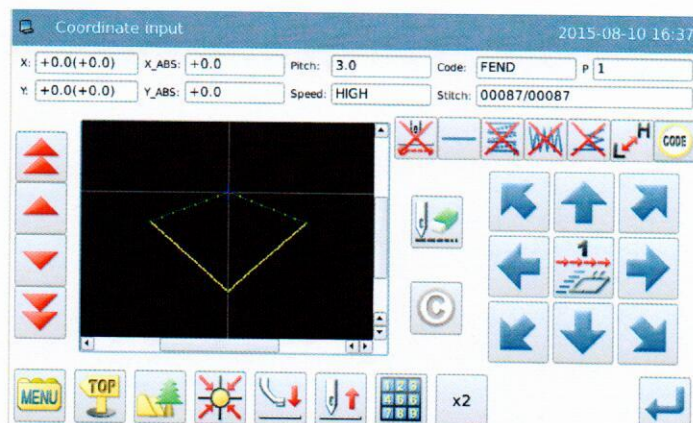


3、 Input the Linear Sewing from Point B to Point C

As described in [1.3.1 Linear Input], user needs to 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.




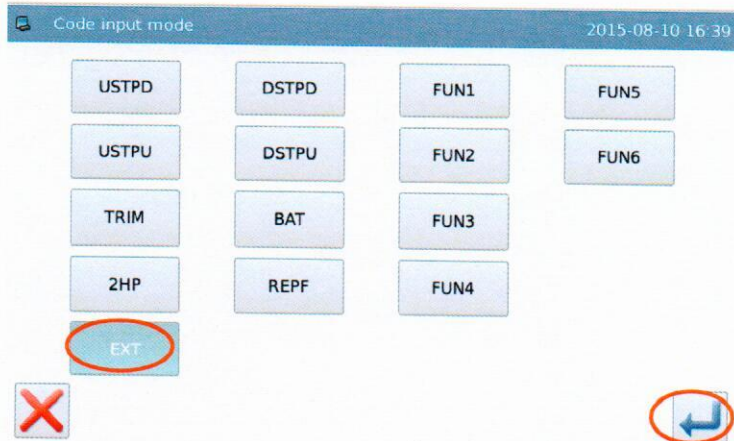
Function Code List:

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:

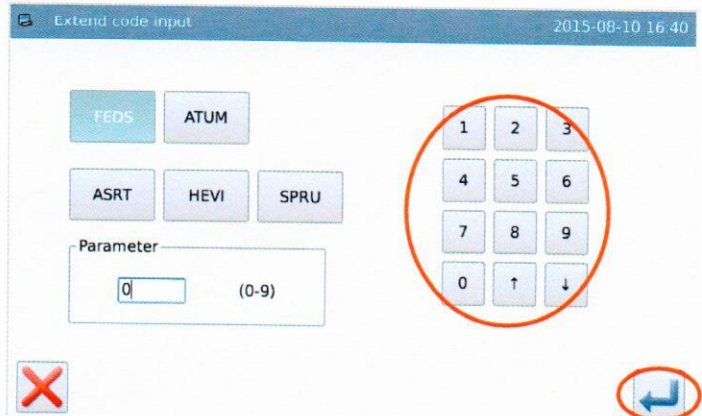
1、 Enter the Interface for Inputting the “Extension” Code

Press **EXT** 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

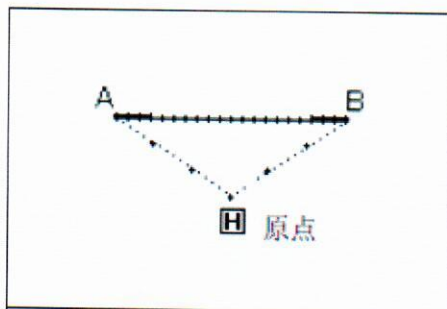
The system can do the backstitch sewing, multi-sewing, off-side sewing and herringbone sewing, combines these input methods with the basic input patterns and make the simple pattern of figures.

Functions	Figure
Backstitch	 : Backstitch Sewing  : Multiple Backstitch
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 methods can not be used at inputting the Point Sewing.

1.4.1 Input of Backstitch Sewing (Backstitches at the Start and the End)

[Example]: How to make the pattern below: 3 N-shaped backstitches should be added at the start and end of the linear input.





Operation Instructions:

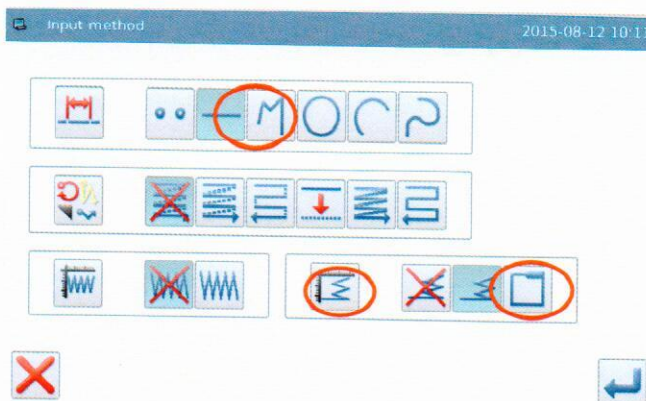
1. Setting of Input Method

① According to the method of Linear Input, user can enter 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 Backstitch

□ Set the details in this interface. Select  interface. Select  (Backstitch Sewing) at first.

□ Press  (N-shaped Backstitch) and then click "Start Stitch Number" and set the number at 3.

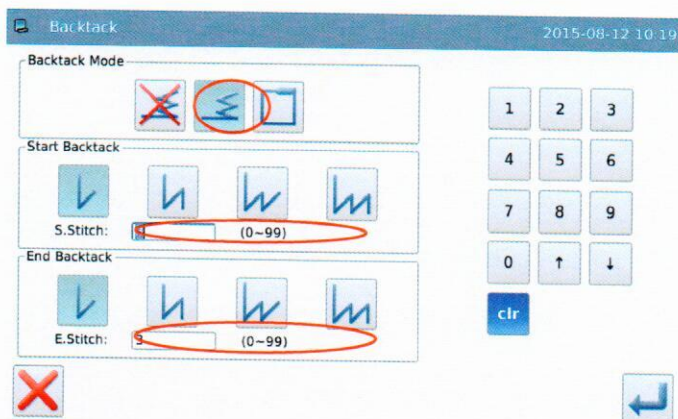
□ Press  (N-shaped Backstitch) and then click "End Stitch Number" and set the number at 3. Press  to confirm the setting.

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

⑤ Press  to confirm the setting.

⑥ The screen will return to cursor inputting interface.

⑦ Set point B in the way of

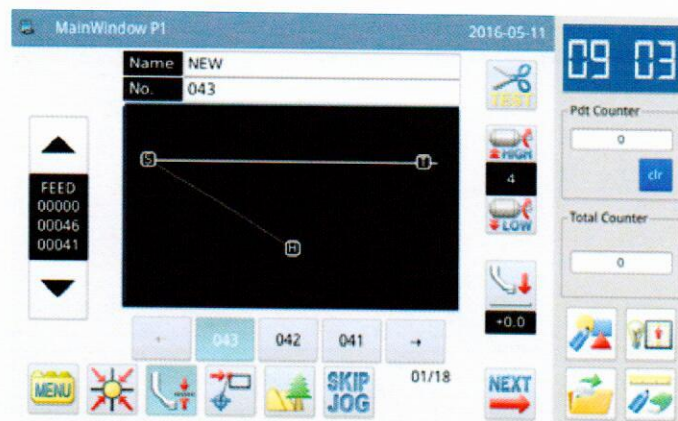


linear input to create the linear sewing.





- ⑧ Press  to finish it.

3. Check the Pattern Data

The data of backstitch sewing is generated.



Descriptions of Backstitch Modes:

-  (V-shaped): Single-row Backstitch will be generated.
-  (N-shaped): Double-row Backstitch will be generated.
-  (M-shaped): Triple-row Backstitch will be generated.
-  (W-shaped): Quadruple-row Backstitch will be generated.

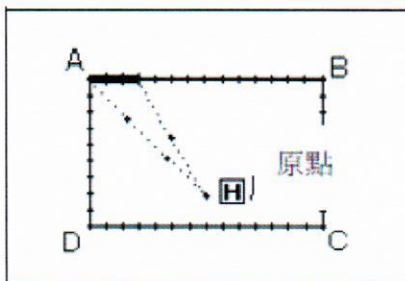
Set the Number of Backstitch:

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 “Backstitch Setting” in cursor inputting interface, so as to activate the interface for setting details of Backstitch directly.

1.4.2 Input of Backstitch Sewing (Multiple Backstitches)

[Example] How to make the pattern below: Input the rectangle with Polygon Input and add multiple backstitches at the end (Times for Overlapping: 1; Number of Overlapped Stitches: 3).




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


Operation Instructions:

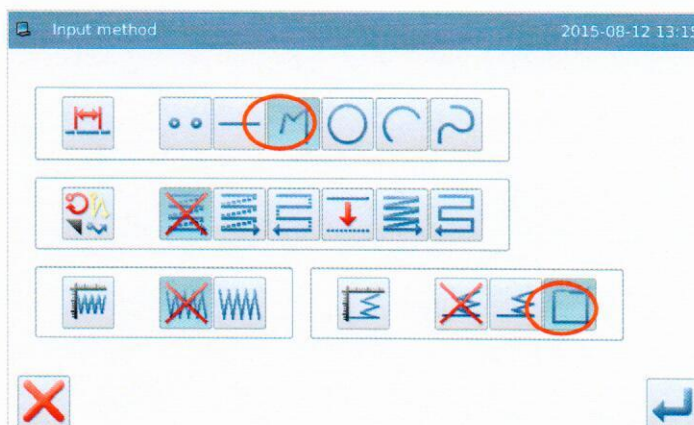
1. Setting of Input Method

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

② Press .


③ Then press .


□ Finally press .




2. Detailed Setting of Backstitch


① In this interface, user can set the detailed content. First,

select  (Multiple Backstitch), then select the

times for overlapping as  and set the number of overlapped stitch at 3.

② Press  to confirm these settings

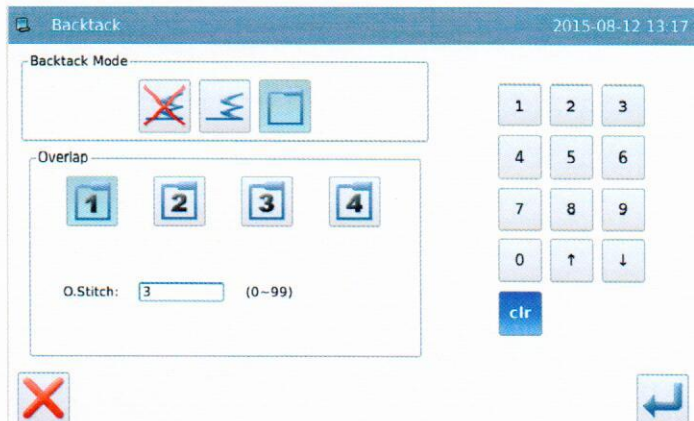
③ System will return to the interface for setting the input method.

④ Press  for confirmation.

⑤ System will return to cursor inputting interface.

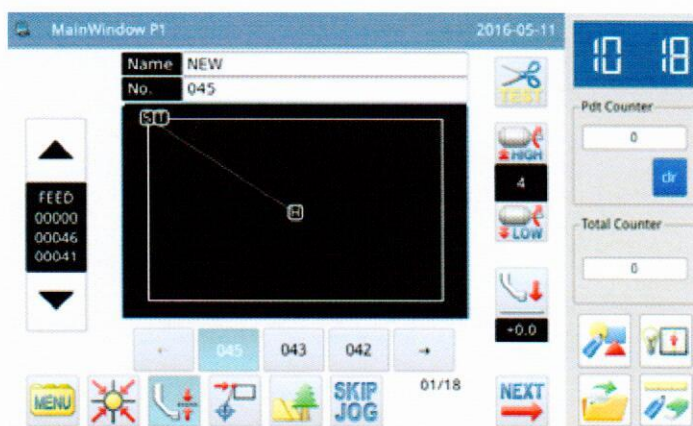
⑥ Follow the method of Polygon Input to confirm the point B, C, D and A. After that, the polygon sewing will be created.

⑦ Press  to finish it.



3. Check the Pattern Data

The data of rectangle sewing with backstitch data is generated.



Times for Overlapping:


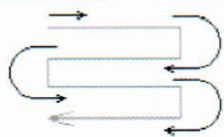
- 1** : Overlap once
- 2** : Overlap twice
- 3** : Overlap three times
- 4** : Overlap four times

Setting Number of Overlapped Stitches:

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

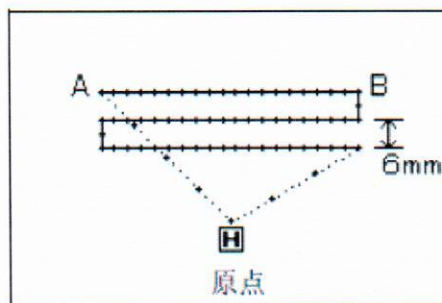
1.4.3 Multi-sewing Input

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 (Reentry Multi-sewing)	Feed			The sewing in the back and forth manner, with Feed as the Connection.

	Sewing			The sewing in the back and forth manner, with Sewing as the Connection.
--	--------	---	--	---




[Note] As for the figures used in the above chart, the dash line means Feed, while the full line means Sewing.

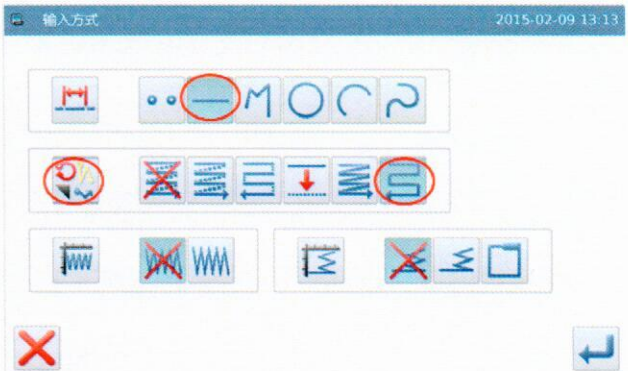
[Example] How to make the pattern below: Make the linear reverse multi-sewing (Distance: 6mm, Times: 3, Direction: Right)





Operation Instructions:


1. Setting of Input Method

- User can enter the interface for setting the input method after confirming the feed from origin to point A according to the method of Linear Input.
- Press .
- Then press .
- Finally press .



2. Detailed Setting of Reverse Multi-sewing

① First, select  (back and forth multi-sewing) and  (Right), and then set the distance at 6.0, times at 3.

② Press  to confirm the settings

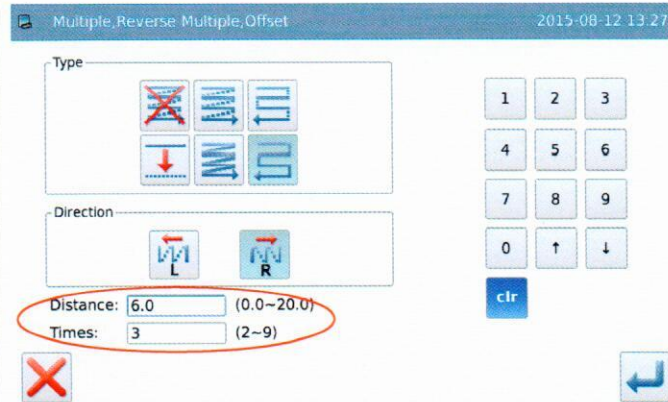
③ System will return to the interface for setting the input method.

④ Press  for confirmation.

⑤ System will return to cursor inputting interface.

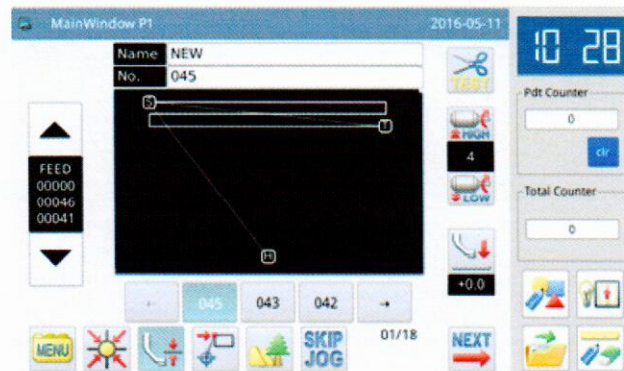
⑥ Follow the method of linear input to confirm point B, and then the linear sewing will be created

⑦ Press  to finish it.





3. Check the Pattern Data

The data of linear sewing with reverse multi-sewing data 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.

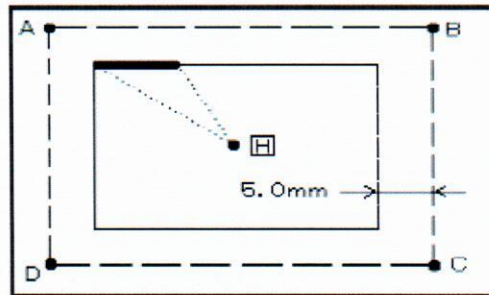
Setting of Times:


The times for 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 cursor inputting interface, use can press “Multi-sewing”, “Back-and-Forth Multi-sewing” and “Off-side Sewing” to activate the interface for setting the details respectively.

1.4.4 Off-side Sewing Input (With Multiple Backstitches)

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





( The bold line is the multiple backstitches)
 (-----: The dash line is the input line at making the pattern)

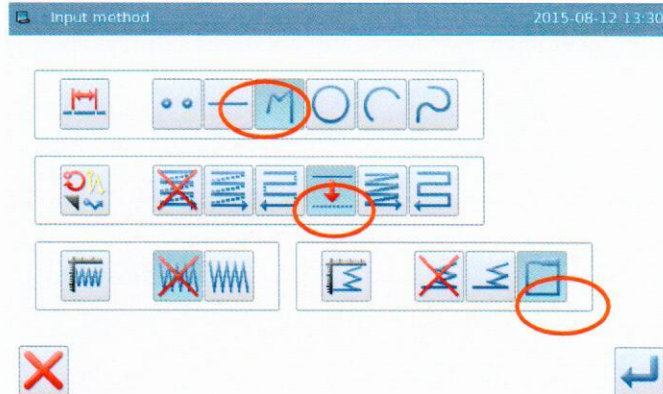
Operation Instructions:


1、Setting of Input Method


① User can enter the interface for setting the input method after confirming the feed from origin H to point A according to the method of Polygon Input.

② Firstly, press .

③ Secondly, press .





④ Thirdly, press .

□ Finally, press .

2. Detailed Setting of Off-side Sewing

① Set the details of the off-side sewing in this

interface. First, select 

and ; then set the distance at 5.0 (the distance range of the off-side sewing is 0 ~ 20mm, changed by 0.1mm at a time).

② Press  for confirmation.


3. Detailed Setting of Backstitch


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


press .

4. Detailed Setting of Multiple Backstitches

① Set the details in this

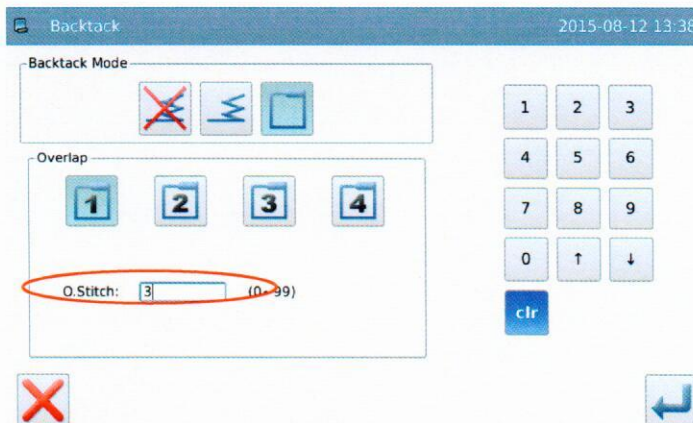
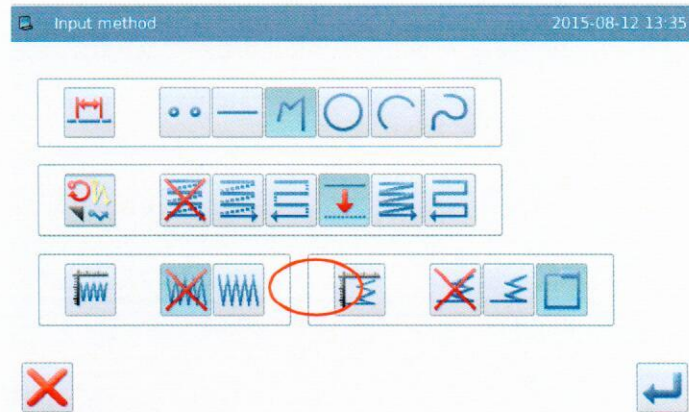
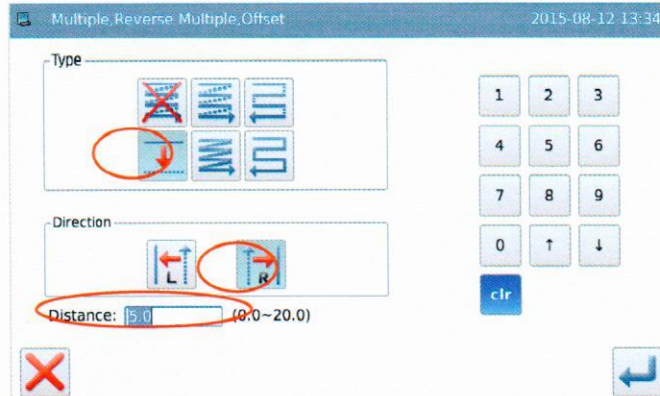
interface. First, select  (Multiple Backstitches);

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.

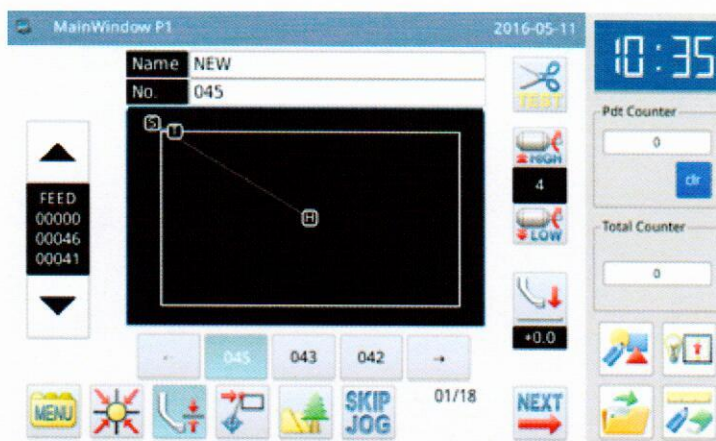


- ⑤ System will return to cursor inputting interface.
- ⑥ Follow the method of Polygon Input to confirm the point B, C, D and A. After that, the polygon sewing will be created.


- Press  to finish it.


5. Check the Pattern Data

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



Setting of Direction:

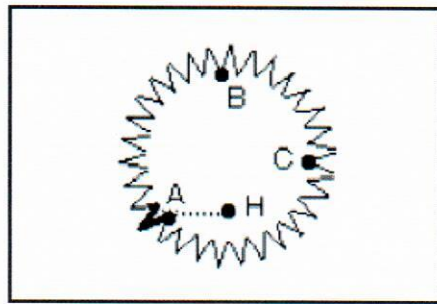
If the deviation is needed at the left of the inputted sewing, please press  (Left).

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

[Note] In cursor inputting interface, user can press “Multi-sewing”, “Back-and-Forth Multi-sewing” and “Off-side Sewing” to activate the interface for setting the details respectively.

1.4.5 Herringbone Sewing Input (with Multiple Backstitches)

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





The bold line is the multiple backstitches


Operation Instructions:


1、 Setting of Input Method

① User can enter the interface for setting the input method after confirming the feed from origin H to point A according to the method of Linear Input.

② Firstly, press .


③ Secondly, press .

④ Thirdly, press .

□ Finally, press .

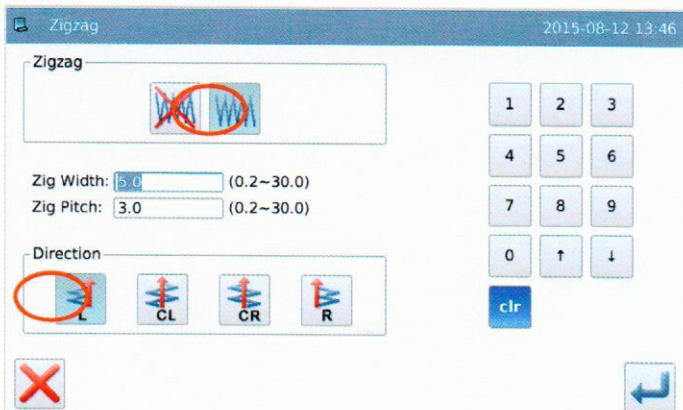
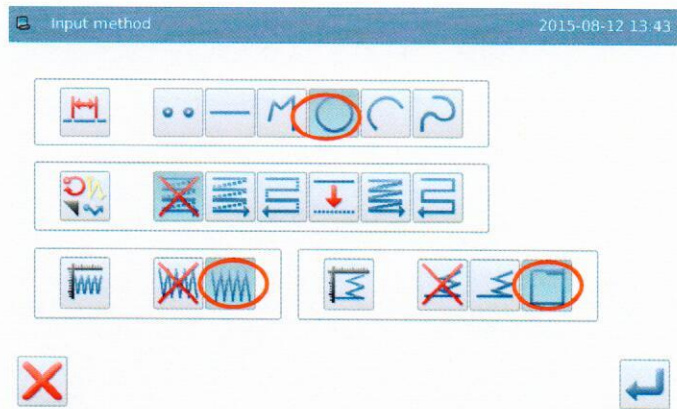
2、 Detailed Setting of Herringbone Sewing

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

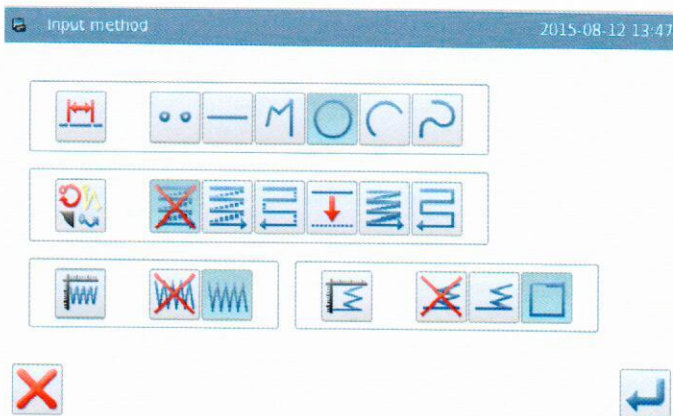


② Press  to confirm these settings.





3. Detailed Setting of Backstitch

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



4. Detailed Setting of Multiple Backstitches

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

② Press  to confirm these settings.

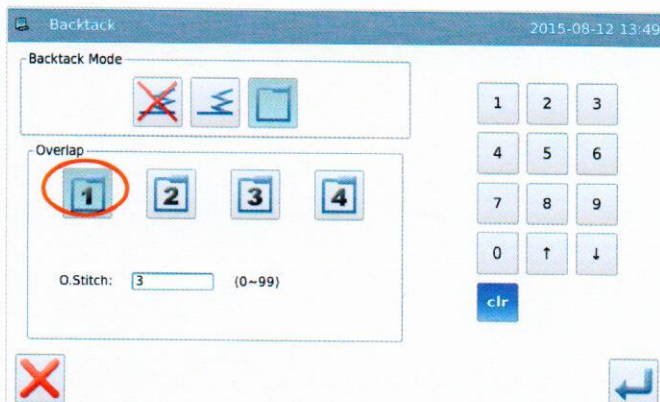
③ System will return to the interface for setting the input method.

④ Press  for confirmation.

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

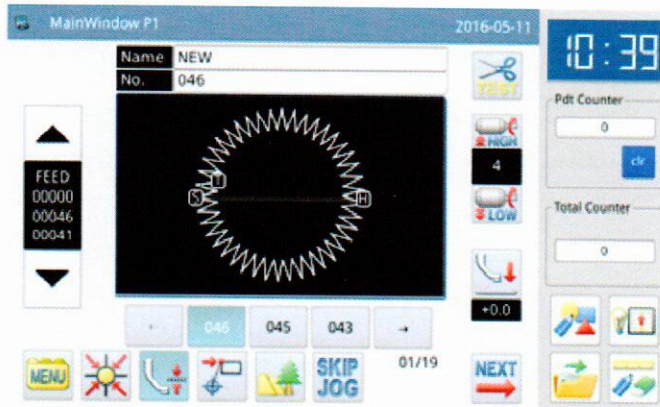
⑥ Follow the method of Circle Input to confirm the points B & C. After that, the circle sewing will be created.

 Press  to finish it.

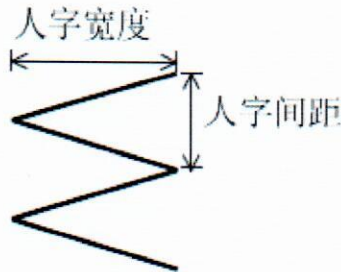


5. Check the Pattern Data

The data of circle herringbone sewing with multiple backstitches 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:

-  **L** : Make herringbone sewing at the left of the axis
-  **CL** : Use the axis as center; make the herringbone sewing to left side
-  **CR** : Use the axis as center; make the herringbone sewing to right side
-  **R** : Make herringbone sewing at the right of the axis

[Note]: In cursor inputting interface, user can press “Herringbone Sewing” 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	Backstitch	Multiple

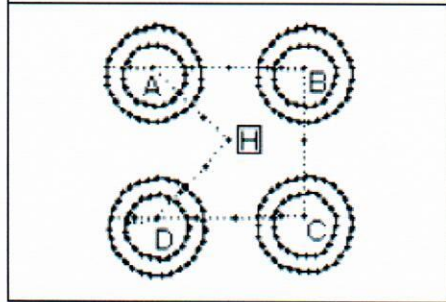
					Backstitches
Linear Input	•				
		•			
			•		
				•	
					•
	•		•		
	•			•	
	•		•	•	
		•	•		
		•		•	
		•	•	•	
			•	•	
Arc Input	•				
		•			
			•		
				•	
					•
	•		•		
	•			•	
	•		•	•	
		•	•		
		•		•	
		•	•	•	
			•	•	
Circle Input	•				
		•			
			•		
				•	
					•
	•		•		
	•			•	
	•		•	•	
	•		•		•
		•	•		
		•		•	
		•	•	•	
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 below: Load the pattern data of double circle  that has been made and combine them with “Feed”.

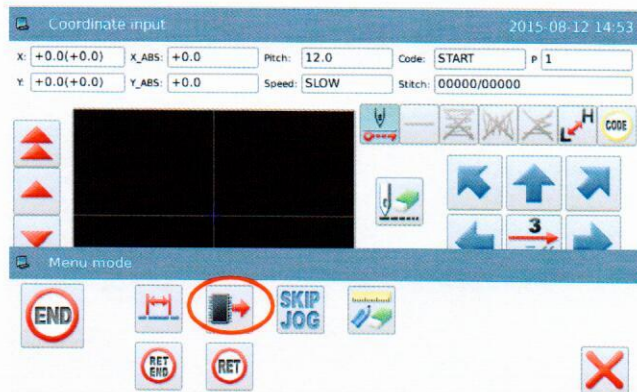


Operation Instructions:

1、 Input the Feed from Origin to Point A


2、 Display the Interface for Loading





- ① Press  in cursor inputting interface.
- ② In the catalogue mode interface, press .

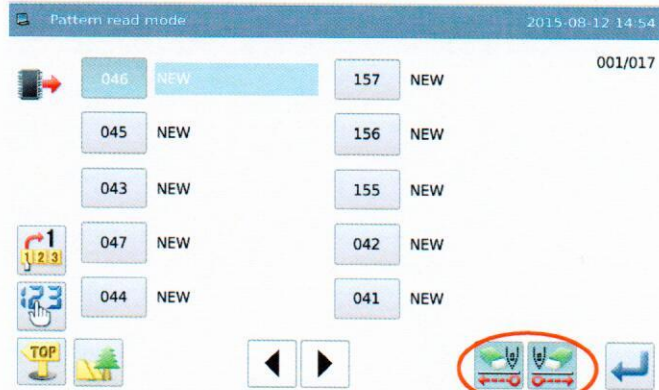


3、 Select the Pattern Number

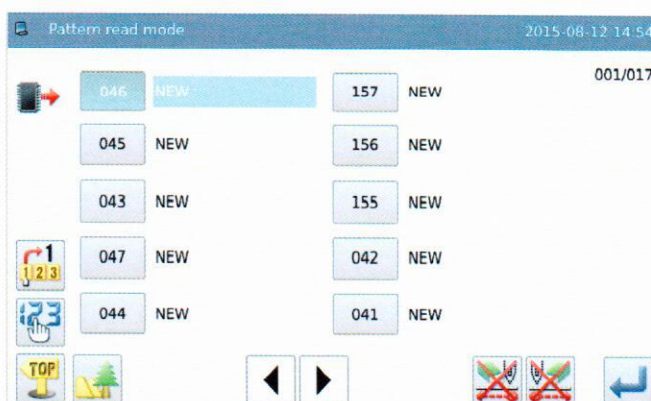
Click the number of pattern for

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 remaining B, C and D one by one. And combine them to make the pattern.


1.7 Input Thickness Fall of Fabric in Sewing

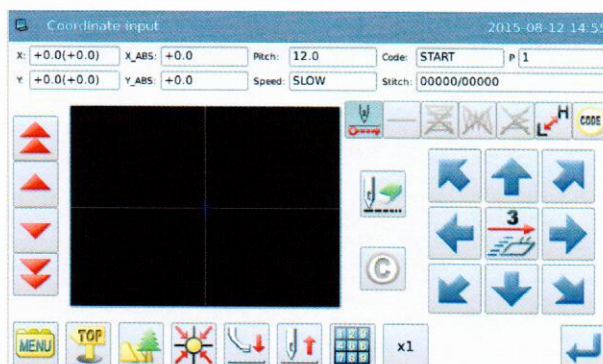
In sewing, user can change the height of the intermediate presser foot to handle the thickness fall of fabric. When the thickness fall of fabric is large, user can change the height of intermediate presser to prevent the jump stitch and thread-breakage.

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

Operation Instructions:



1. Change the Height of Intermediate Presser Foot in the Interface of cursor Input

Press  in the right interface




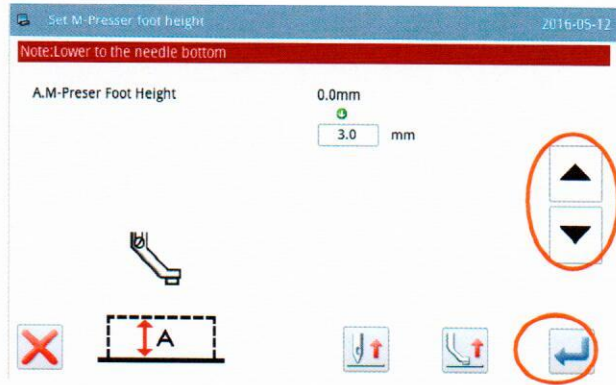
2. Input the Thickness Fall of Fabric In Sewing

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

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

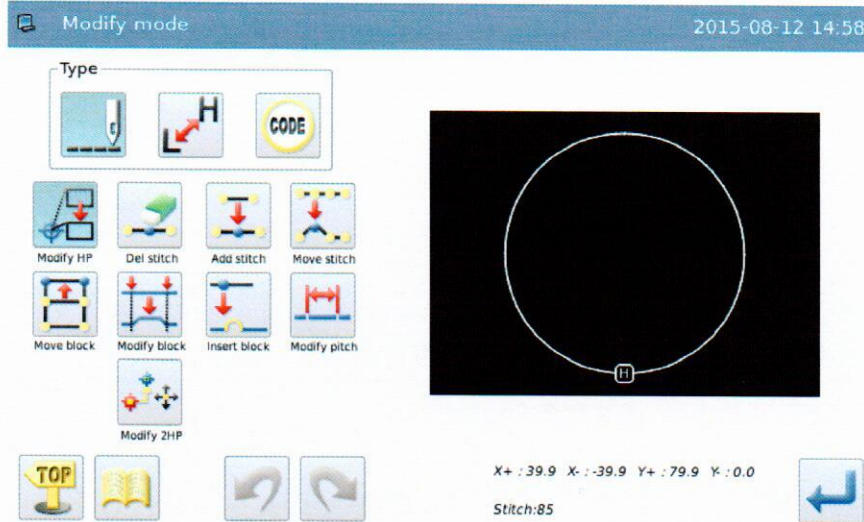
the value.

After the value is set, press  to save it.
















2 Pattern File Data Modification

The Interface of Modification Mode





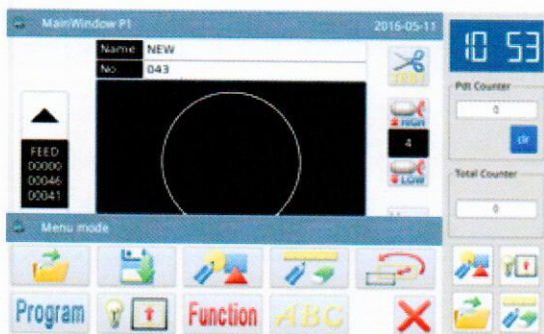
2.1 Main Functions in Modification Mode



Function	Button	Content	Description	
Sewing	Change Start Sewing Point		Move the start sewing point to other location.	
	Delete Stitch		Delete the appointed stitch	The appointed stitch All the stitches behind the appointed position
	Insert Stitch		Insert one stitch at the appointed position	Add a new stitch Add a same stitch
	Change Stitch Position		Change the position by one stitch.	<Figure position after change > Not change. Follow the movement
	Move Section		Move the data within the appointed section.	<Data ahead and behind > change: <input type="checkbox"/> long distance <input type="checkbox"/> Short distance

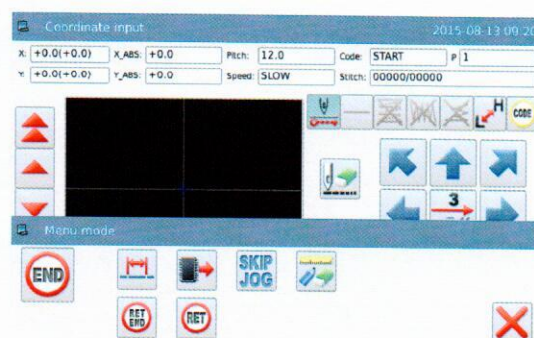
				 Add new stitch
Change Section		Between 2 appointed points, change the data of line, polygon, arc, curve, herringbone sewing and feed		—
Insert Section		Add pattern data after the appointed position		—
Change Stitch Interval		Change the stitch interval within the appointed section	 N  ALL	The appointed section All the stitches behind the appointed position
Change Sewing Speed		Change the speed within the appointed section	 H/L  ALL	The appointed section All the stitches behind the appointed position
Change Code		Insert or delete code data at the appointed position.	 CODE  Insert Code  Delete Code	

2.2 Method to Enter Modification Mode



1) Press  in standard interface and press  to enter modification mode.

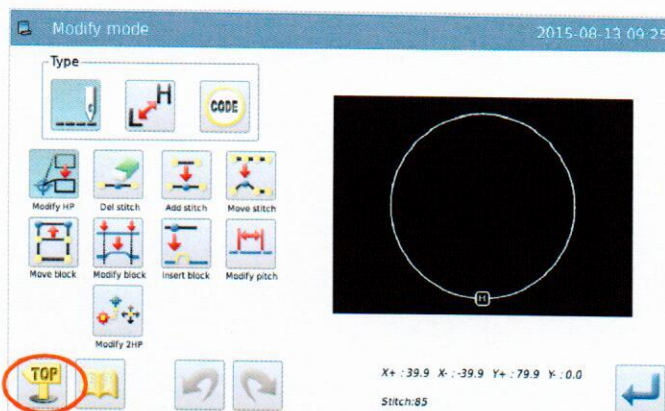


(2) Press  at cursor input interface under input mode, and then press  to enter modification mode.



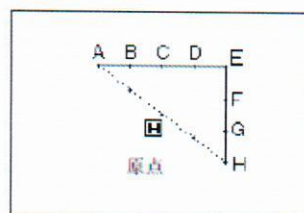
2.3 Method for Ending Modification Mode

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

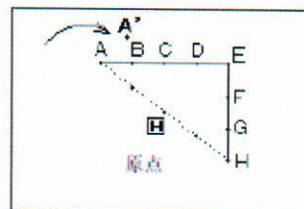


2.4 Method for Feeding to Origin after Modification

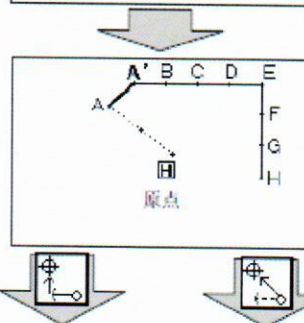
[Example] Add one stitch at position A' in the original figure at the right side:



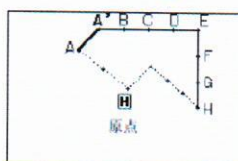
Add stitch at position A' in right figure



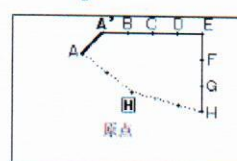
After user added stitch at A', the positions of point B ~ point H will change correspondingly. Of course, the route for feeding back to origin from H point will also change. User can select the way with the following buttons.



Note: As for the feed of the last sewing to origin before the modification, if it contains the code data, the feed after the code will change as well.




(保留移送回原点的路线方式)




(取代移送回原点的路线方式)


2.5 Confirmation of Pattern Modification



In input mode, modification mode and data transformation mode, press  to display the preview of the modified pattern. Especially when the data is being modified (transformed) in modification (transformation) mode, user can easily change (transform) the pattern data by effectively making use of the preview of the modified pattern.


[Example]: After entering modification (transformation) mode, user can check the pattern before and after the confirmation with the preview function.

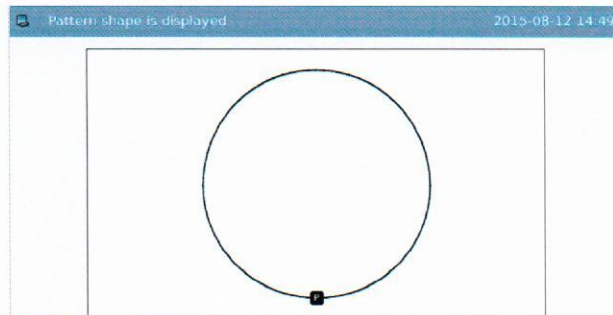
① Move Start Sewing Point

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


: Origin (Available at all the preview windows)

: Original Start Sewing Position. 

: Start Sewing Position after modification (Current position after moving with direction keys).

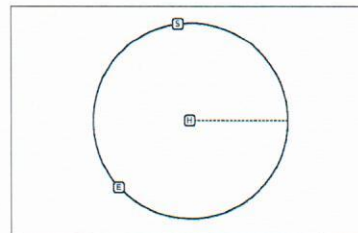


② Delete Stitch

: Origin (Available at all the preview windows)

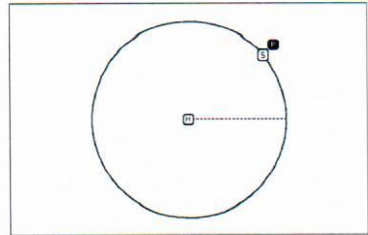
: Start position for deleting stitches

: End position for deleting stitches



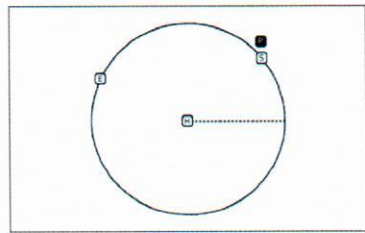
③ Change Needle Position/ Add Stitch

- 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 with direction keys).



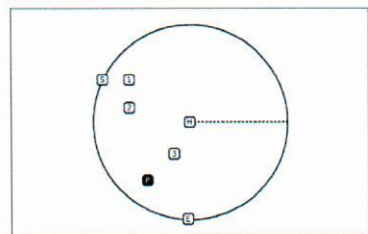
④ Section Move

- 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 moving section (Current position after moving with direction keys).



⑤ Section 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

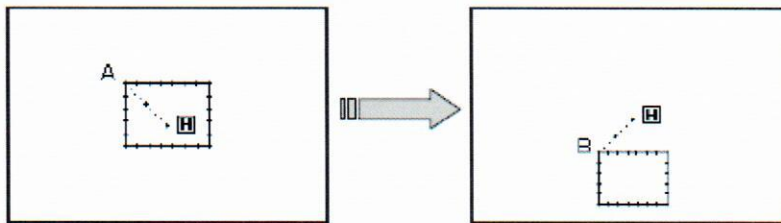
input

P: Current position after moving

with direction keys.



2.6 Change Start Sewing Point

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



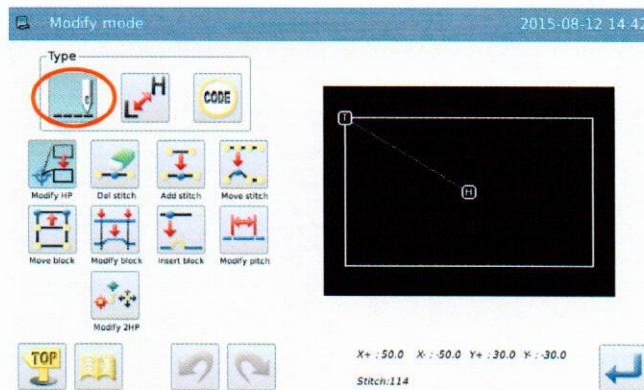
① Select to Change Start Sewing Point

▶ Enter modification mode (refer to section 2.2).


▶ Press  and then press 

▶ Press  for confirmation.

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





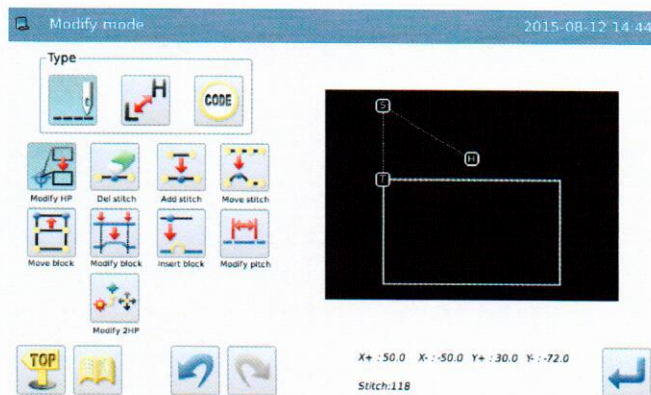
② Move Start Sewing Point/ Confirmation

- ▶ Use direction keys to move the needle to point B.
- ▶ Press  for confirmation (The start sewing point is modified).



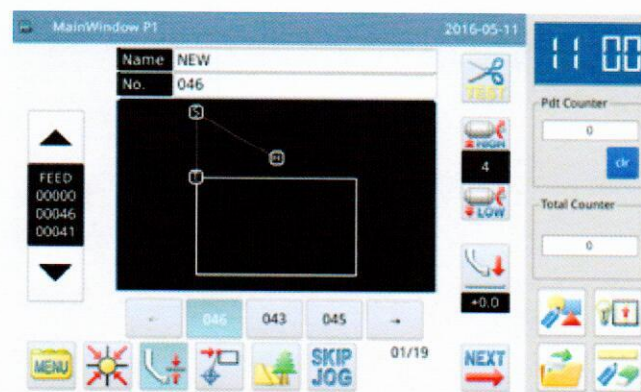
③ Confirm the Modified Data

- ▶ 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.)



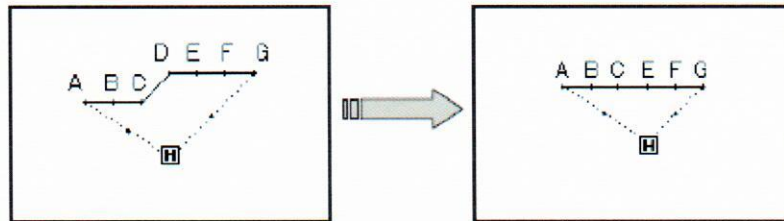
④ Check the Modified Pattern in Standard Interface

- ▶ 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.

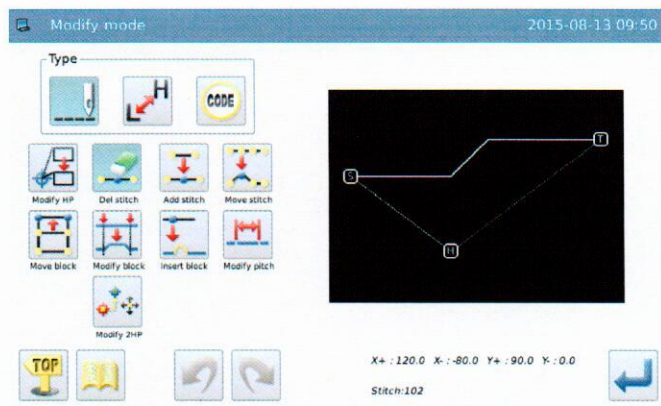


① Select Stitch Deletion

▶ Enter modification mode (Refer to section 2.2).

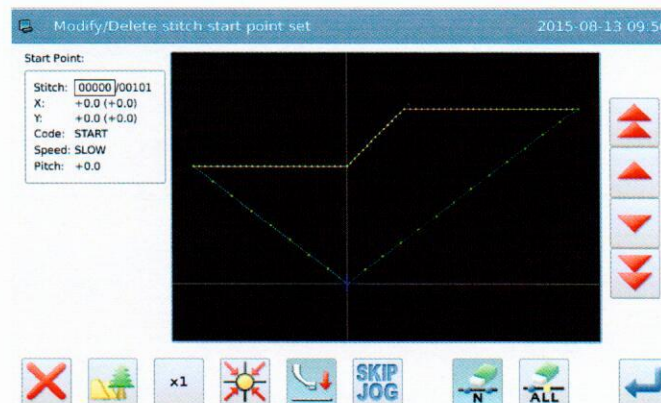
▶ Press and then press .

▶ Then press for confirmation.



② Delete Stitches at Appointed Location

▶ Press to select the stitch at appointed position for deletion.






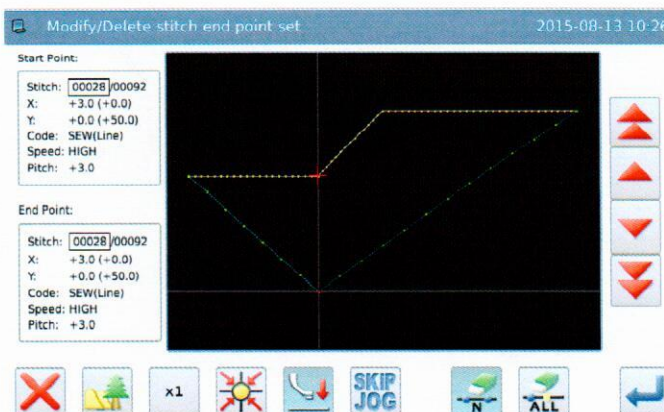
③ Appoint the Start Position for Deletion

▶ Press and to select the start position for deletion.


▶ Press to confirm that position.

④ Appoint 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.

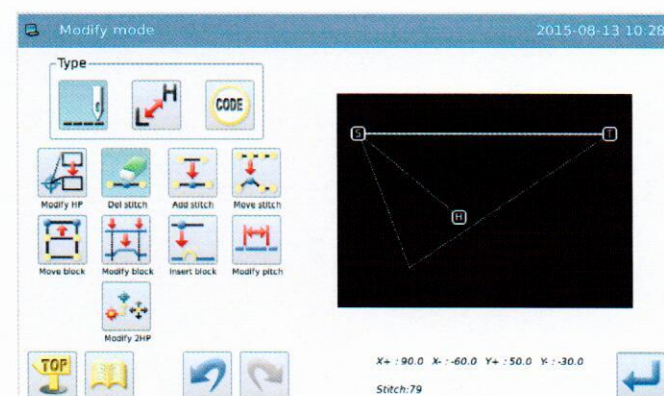


⑥ Confirm the Pattern after Stitch Deletion

- ▶ Finish Modification Mode.

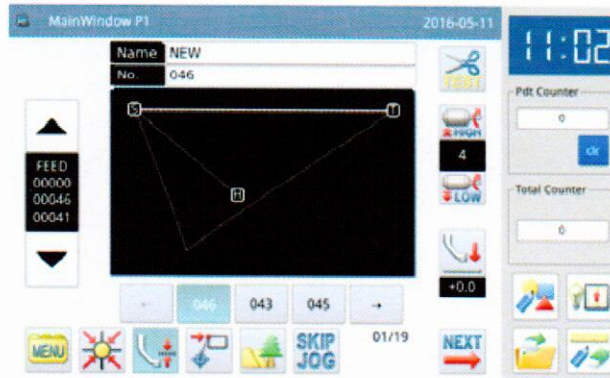
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data is saved.

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



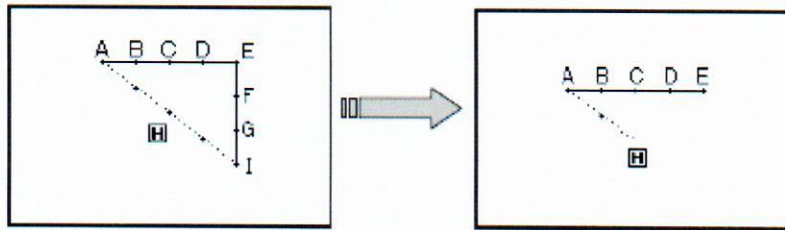
⑦ **Check the Modified Pattern in Standard Interface**

- ▶ The appointed stitches have been deleted.






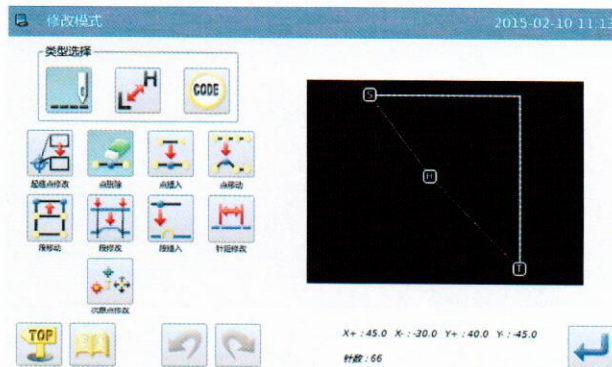
2.8 Delete Stitch (Delete all stitches behind the appointed position)

[Example]: Delete all stitches behind point E.







① **Select Stitch Deletion**


- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Then press  for confirmation.





② Delete Stitches at Appointed Location

- ▶ Press  to select the stitch.
- ▶ Press  and  to select the end position for deletion.
- ▶ Press  to confirm those positions.

□ Confirm the Position for Deletion

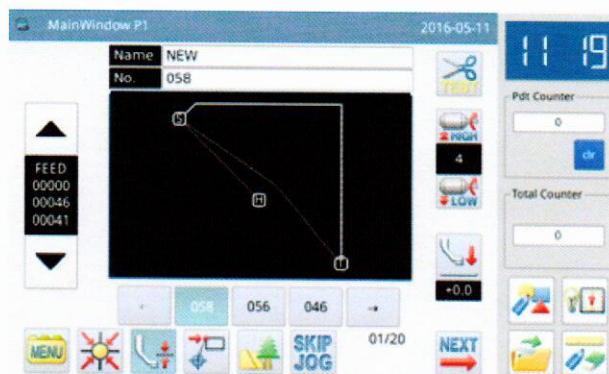
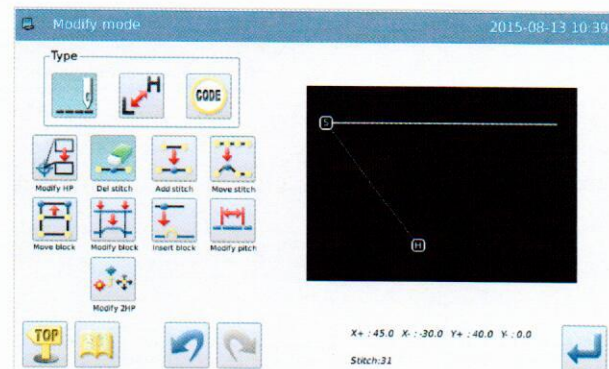
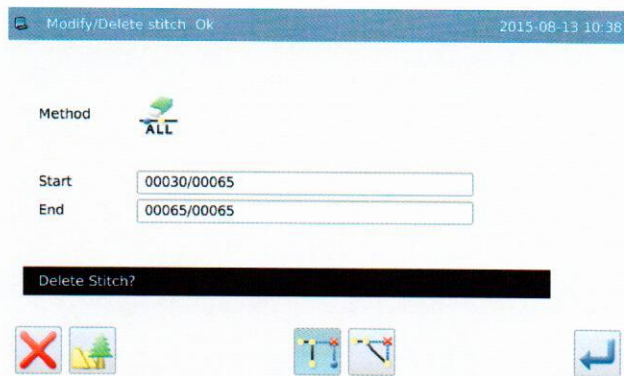
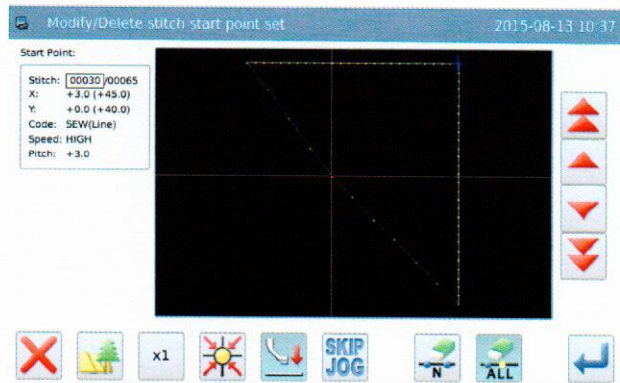
- ▶ Press  to confirm the stitches for deletion.

④ Confirm the Pattern after Stitch Deletion

- ▶ 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.)

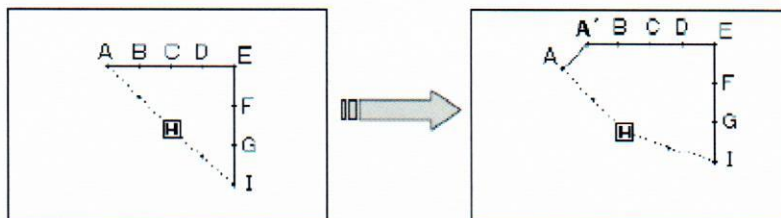
□ Check the Modified Pattern in Standard Interface

- ▶ The appointed stitches have been deleted.






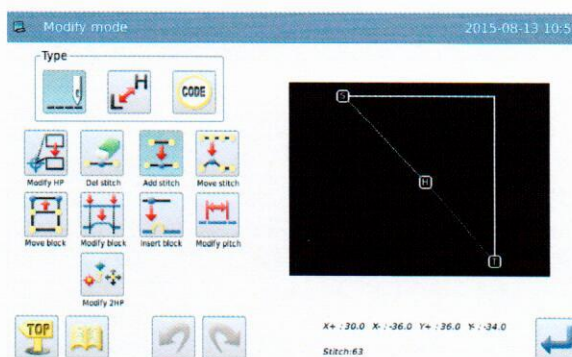
2.9 Insert Stitch (Add One Stitch)

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






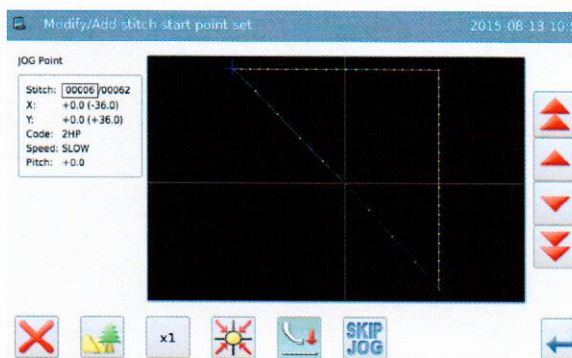
① Select Stitch Insertion

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Press  for confirmation.





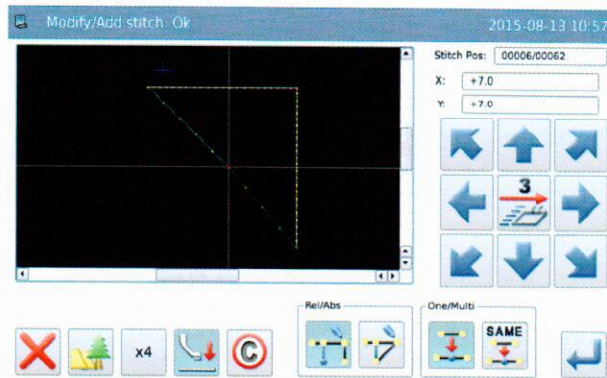
② Appoint the Position to Add Stitch

- ▶ Press  and  to move needle to point A.
- ▶ Press  to confirm the position for adding stitch




③ Set the Method for Adding Stitch


- ▶ Press , and then use direction key to move needle to A'.
- ▶ Press  for confirmation. (One stitch will be added)

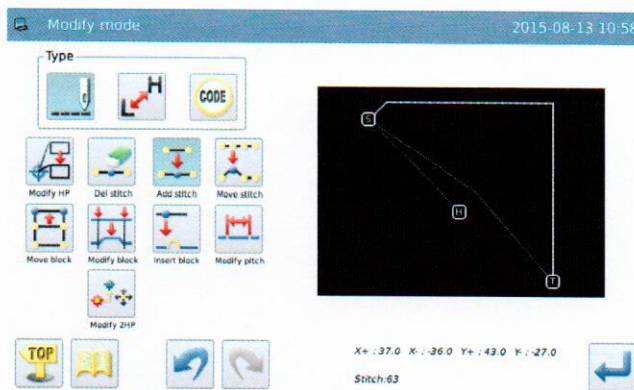


④ Confirm the Pattern after One Stitch is Added

- ▶ Finish Modification Mode.

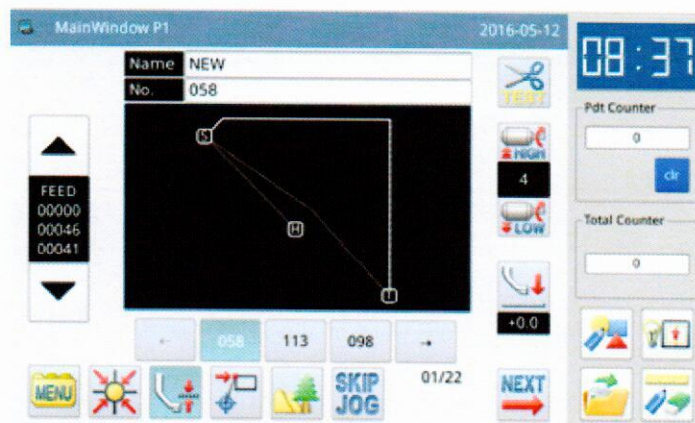
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data is

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



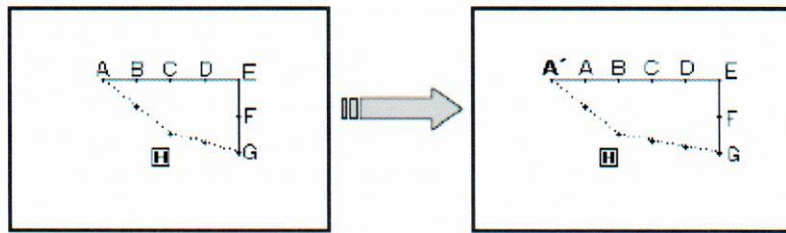
⑤ Check the Modified Pattern in Standard Interface

- ▶ One stitch has been added.



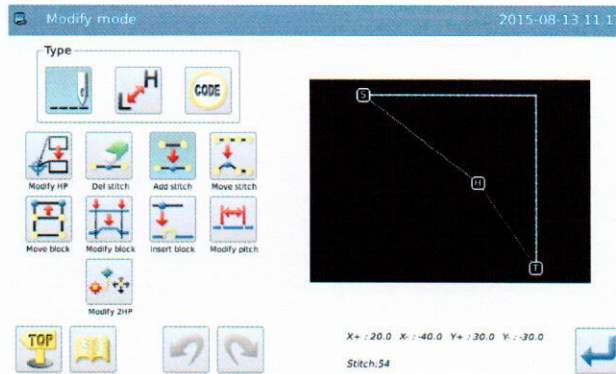
2.10 Insert Stitch (Add One Same Stitch)

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



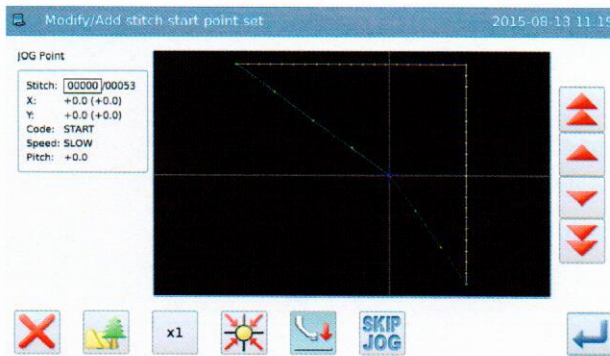
① Select Stitch Insertion

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press and then press .
- ▶ Press for confirmation.



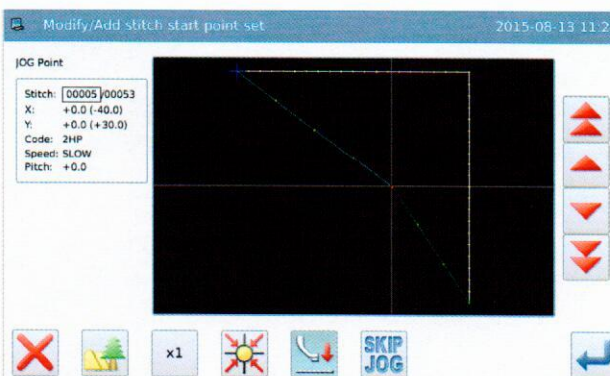
② Appoint the Position for Adding Stitch

- ▶ 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).

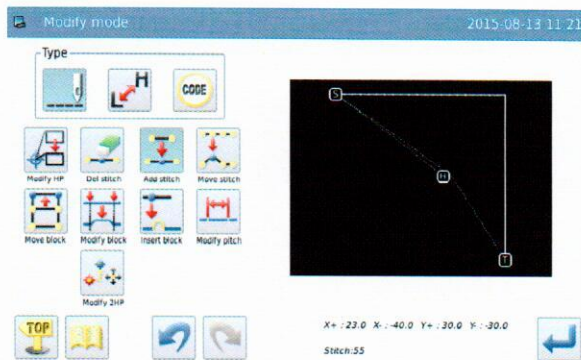


④ Confirm the Pattern after One Same Stitch Is Added

► 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.)



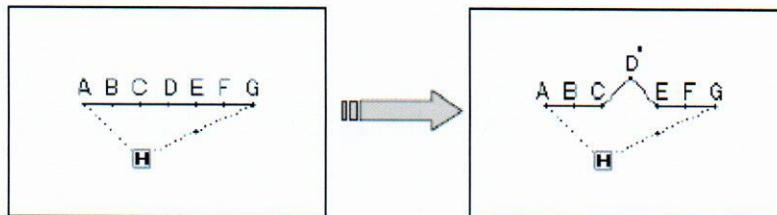
⑤ Check the Modified Pattern in Standard Interface

► One same stitch has been added.



2.11 Change Stitch Position (Other Positions Remain the Same)

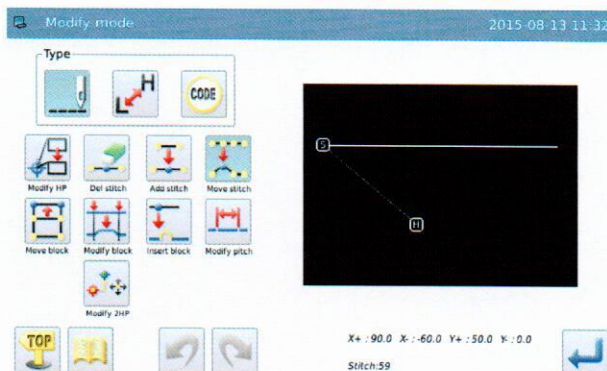
[Example]: Move Point D from D to D'.




① Select “Change Stitch Position”




► Enter modification mode (Refer to section 2.2).

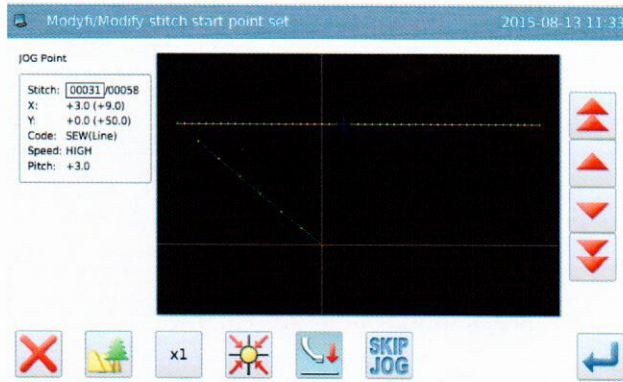
► Press  and then press



- ▶ Press  for confirmation.



② Appoint the Stitch Position for Changing

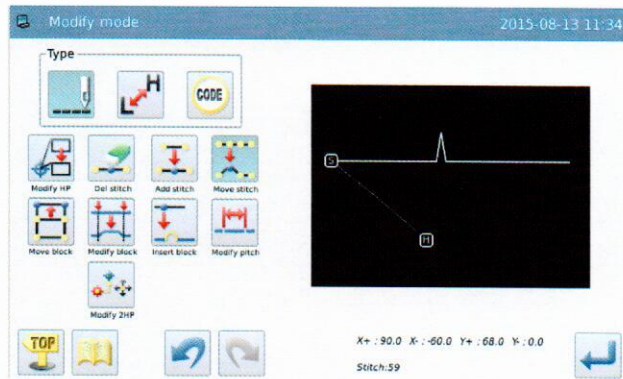
- ▶ Press  and  to move stitch to Point D.
- ▶ Press  for confirmation.



③ Confirm the Modified Pattern

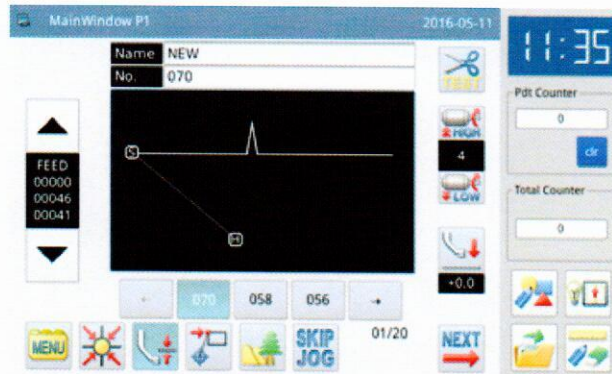
- ▶ Finish Modification Mode.

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.)



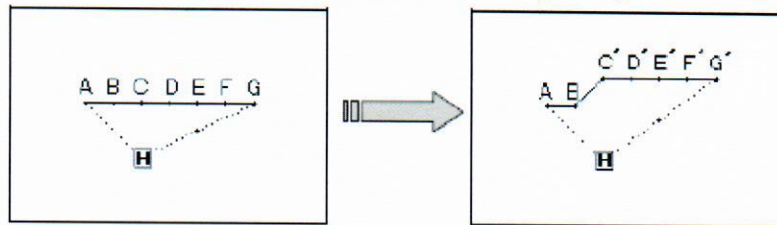
④ Check the Modified Pattern in Standard Interface

- ▶ The stitch position has been changed.



2.12 Change Stitch Position (Other Positions behind Follow the Change).

[Example]: Move Point C, the positions of D, E, F and G change along with the Point C'.



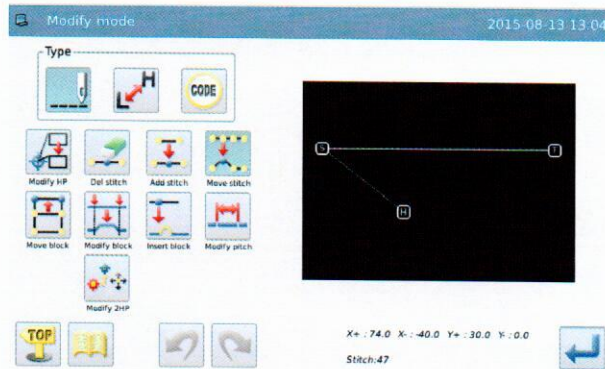
① Select “Change Stitch Position”

▶ Enter modification mode (Refer to section 2.2).



▶ Press  and then press



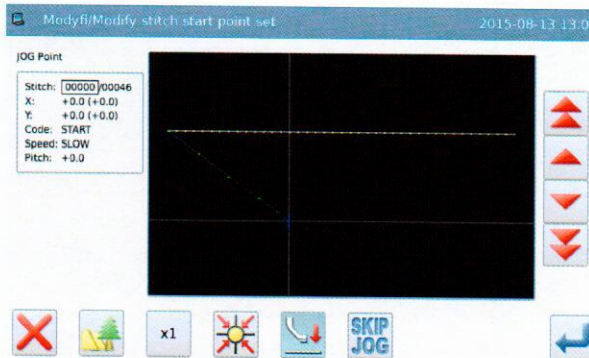
▶ Press  for confirmation.





② Appoint the Stitch Position for Changing

▶ Press  and  to move stitch to Point C.

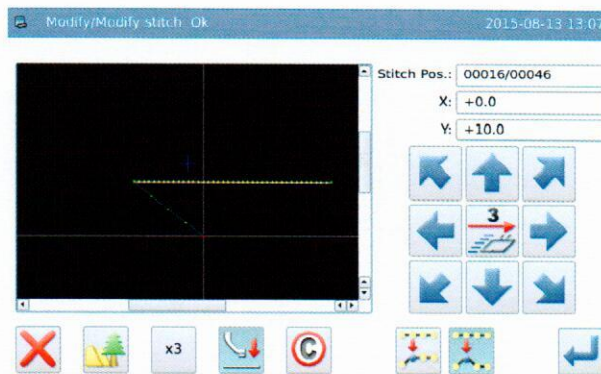
▶ Press  for confirmation.





③ Set the Method and Amount for Changing

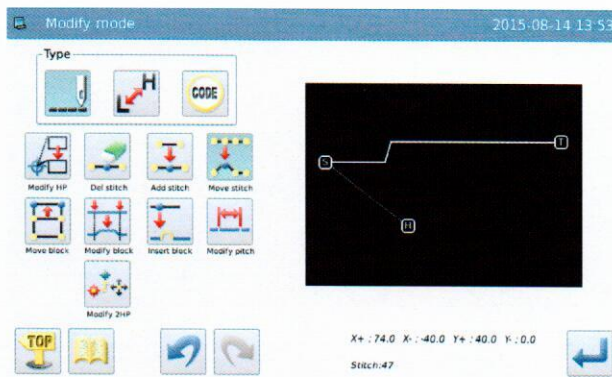
- ▶ Press , and then use direction keys to move needle to point C'.
- ▶ Press  for confirmation (Stitch position is changed).

Note: Max Stitch Length is 12.7mm.



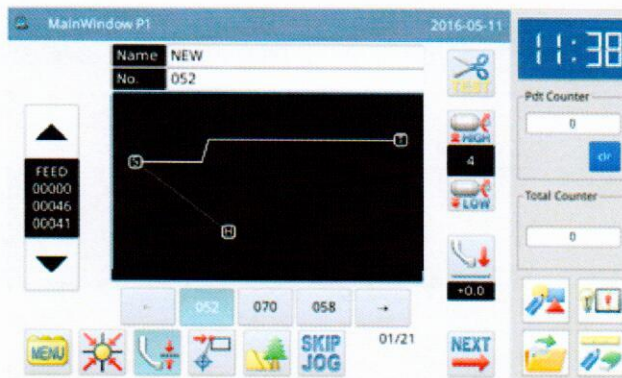
④ Confirm the Pattern after Change

- ▶ 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.)



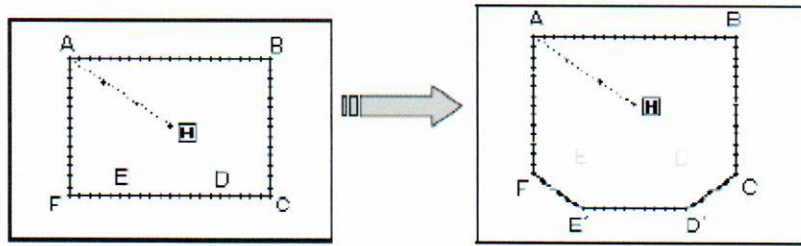
⑤ Check the Modified Pattern in Standard Interface

- ▶ The positions of stitches have been changed.



2.13 Move Section (Stitches ahead and behind change smoothly)

[Example]: Move the line between Point D' and Point E' to the position between Point D' to Point E'. At this same time, the pattern data ahead of Point D' and behind Point E' will change smoothly.



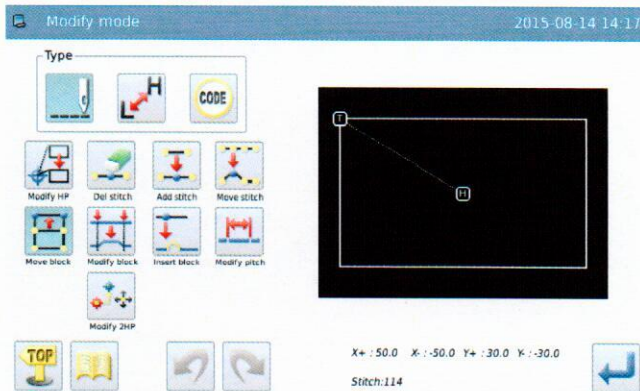
(1) Stitches ahead and behind change smoothly (in the manner of Long Distance)

① Select Section Move

▶ Enter modification mode (Refer to section 2.2).

▶ Press , and then press

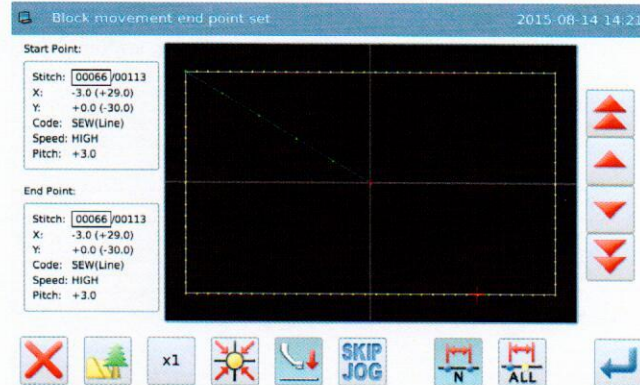
▶ Press for confirmation.



② Select the Start Point of the Section Move

▶ Press and to move needle to Point D.

▶ Press for confirmation.

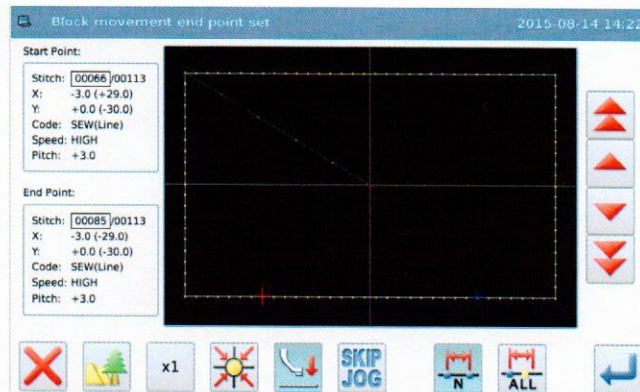


③ Select the End Point of the Section Move

▶ Press and to move needle to Point E.

▶ Press for confirmation.

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



④ Set Moving Method and Stitch Interval

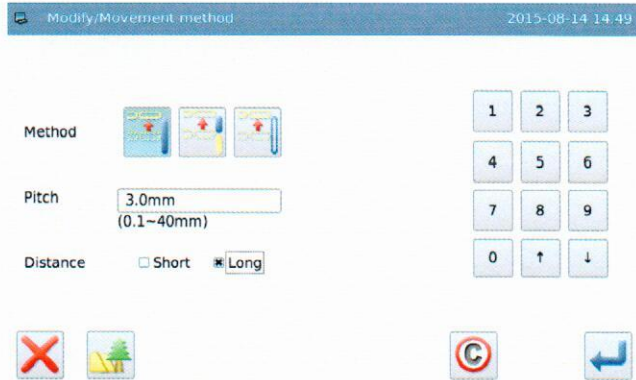
► Moving Method: Press



► Use number keys to set stitch interval.


► Select Long Distance.

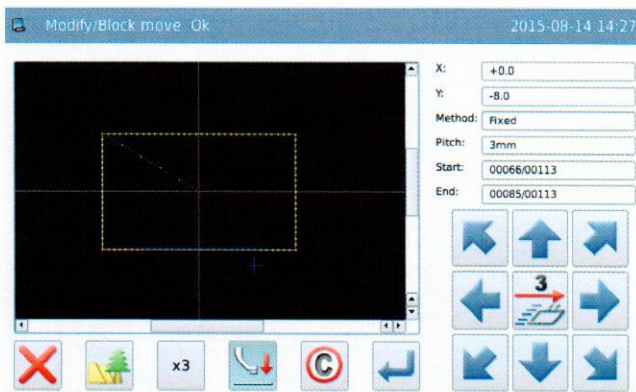
► Press  for confirmation.



⑤ Set Moving Amount


► Use direction keys to move needle to Point D'.


► Press  for confirmation (Section is moved)

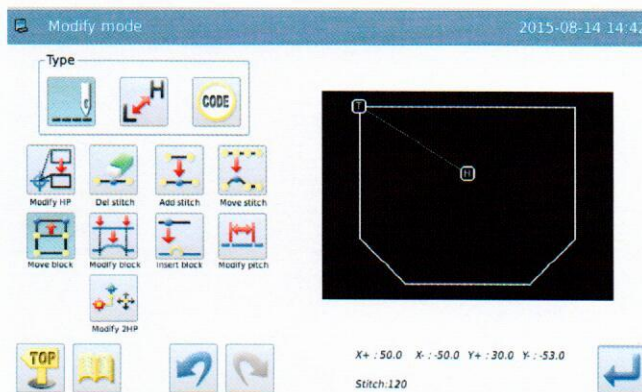


⑥ Confirm the Pattern after Change

► 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.)

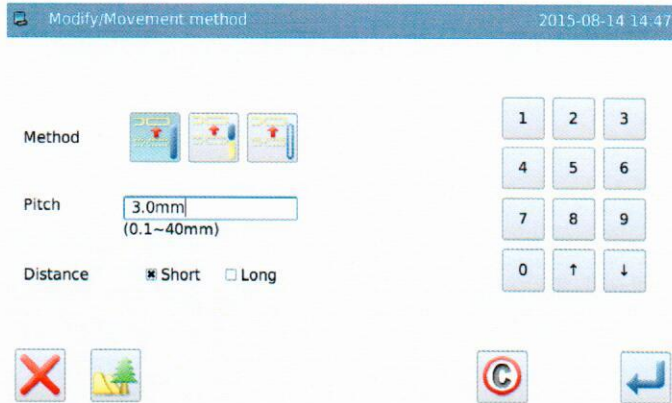


(2) Stitches ahead and behind change smoothly (in the manner of Short Distance)



Steps ①, ②, ③ are the same with those of Long Distance.

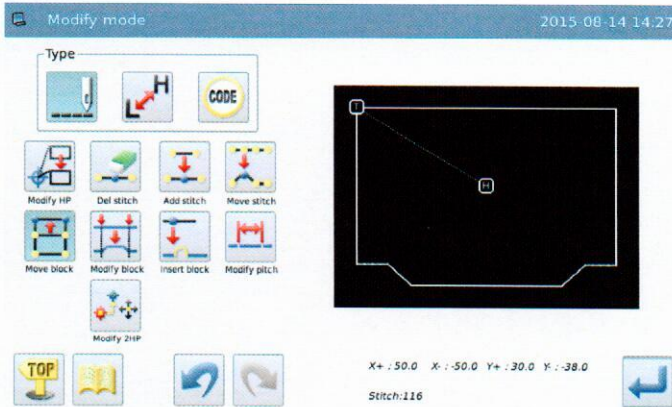
④ Set Moving Method and Stitch Interval

- ▶ Moving Method: Press 
- ▶ Use number keys to set stitch interval.
- ▶ Select Short Distance.
- ▶ Press  for confirmation.



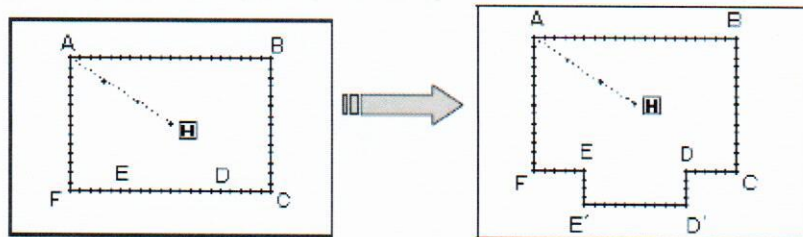
⑤ Confirm the Pattern after Change

- ▶ 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.)





2.14 Move Section (Add new stitches ahead and behind)

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

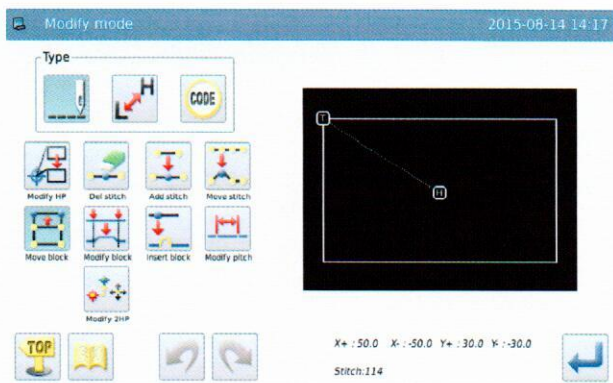


① Select Section Move



▶ Enter modification mode
(Refer to section 2.2)


▶ Press  and then
press .

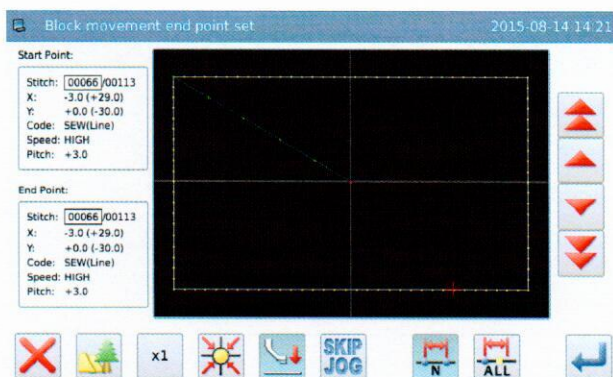
▶ Press  for
confirmation.





② Select the Start Point of the Section Move

▶ Press  and  to
move the needle to Point
D.

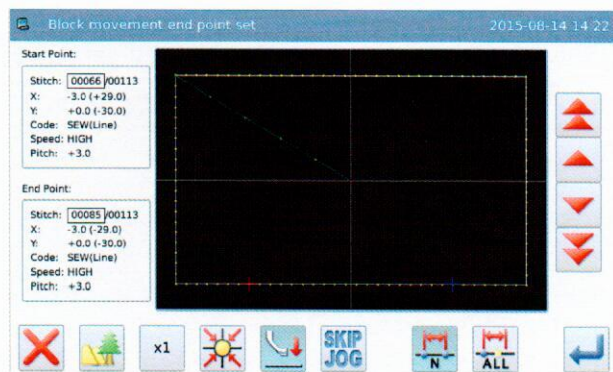
▶ Press  for
confirmation.



③ Select the End Point of the Section Move

▶ Press  and  to
move the needle to Point
E.

▶ Press  for
confirmation.




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

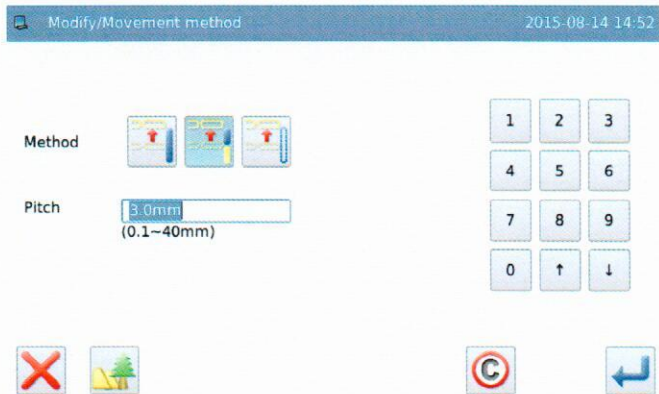
④ Set Moving Method and Stitch Interval

▶ Moving Method: Press




▶ Use number keys to set stitch interval.

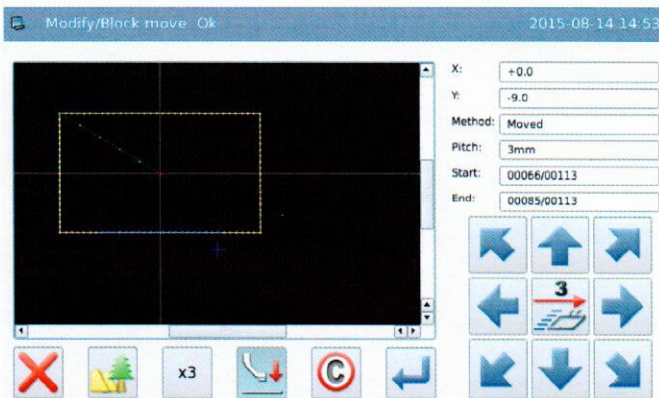
▶ Press  for confirmation.



⑤ Set Moving Amount



▶ Use direction keys to move needle to Point D'.

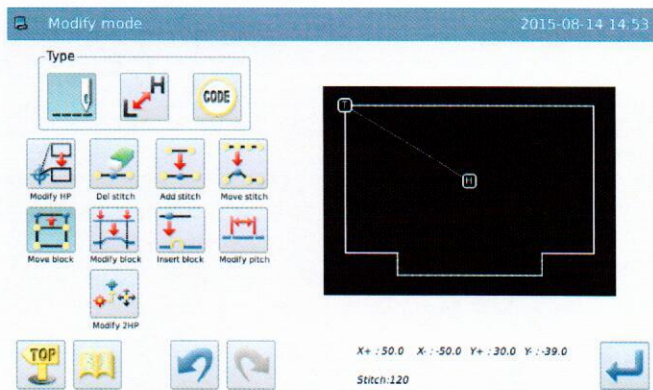
▶ Press  for confirmation (Section is moved)



⑥ Confirm the Pattern after Change

▶ 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.)



2.15 Change Moving Method



① Select Section Move


▶ Enter 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 the needle to Point D.

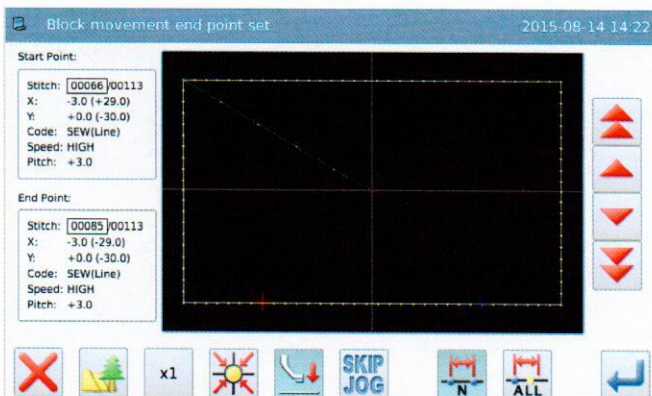
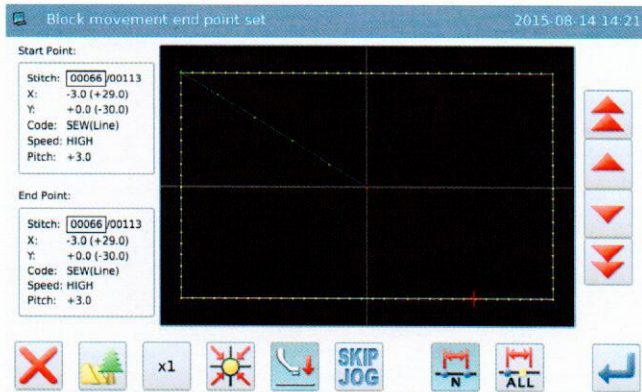
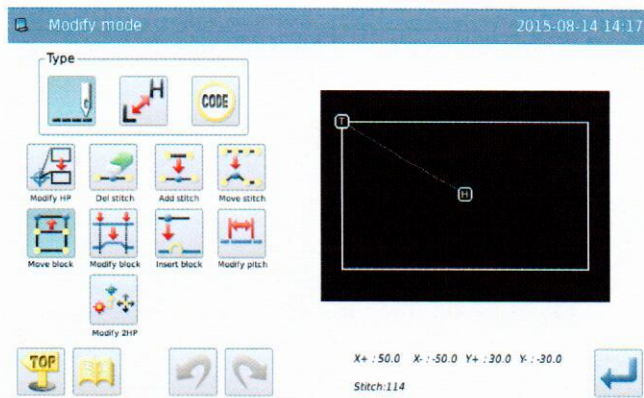
▶ Press  for confirmation.

③ Select the End Point of the Section Move

▶ Press  and  to move the needle to Point E.

▶ Press  for confirmation.

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



④ Set Moving Method and Stitch Interval

► Moving Method: Press




► Select Trimming or Non-trimming



► Press  for confirmation.



⑤ Set Moving Amount

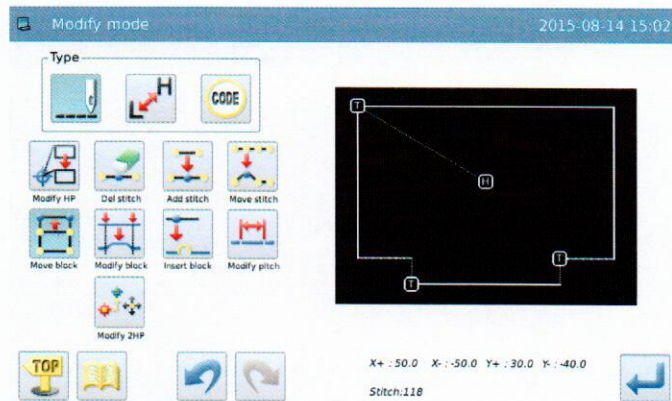
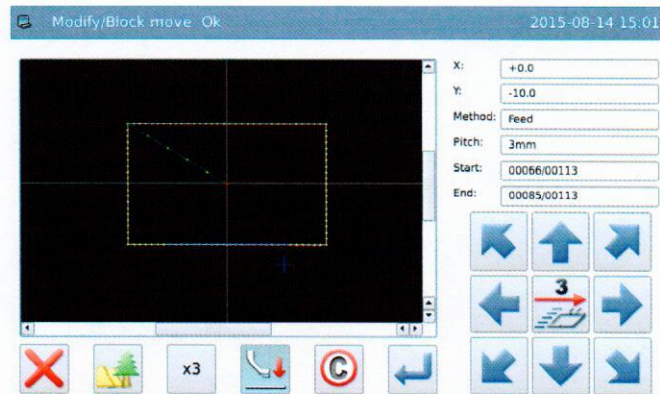
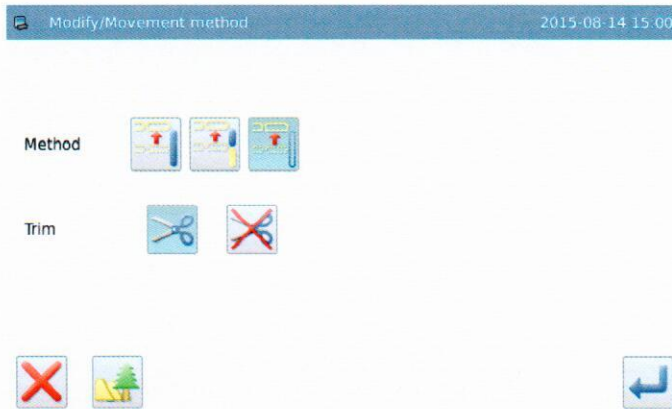
► Use direction keys to move needle to Point D'.

► Press  for confirmation (Section is moved).

⑥ Confirm the Pattern after Change

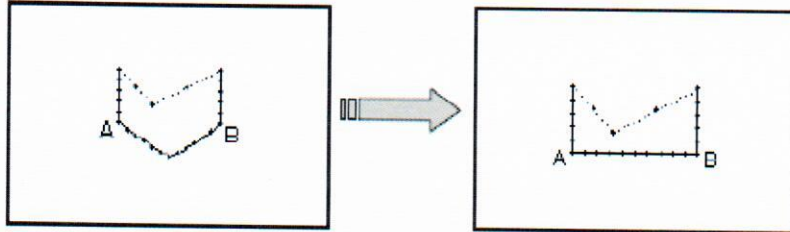
► Finish Modification Mode.

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.)



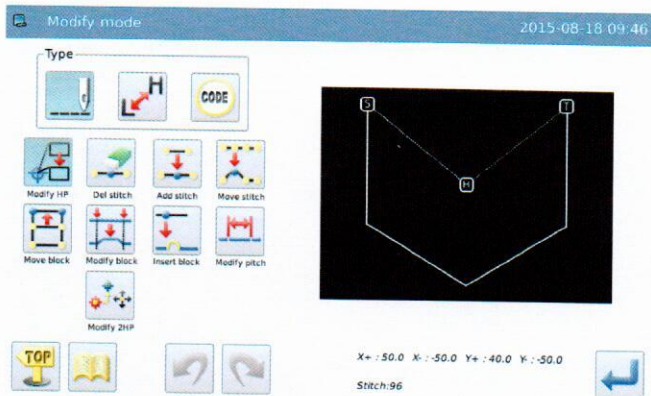
2.16 Change Section (Linear)

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



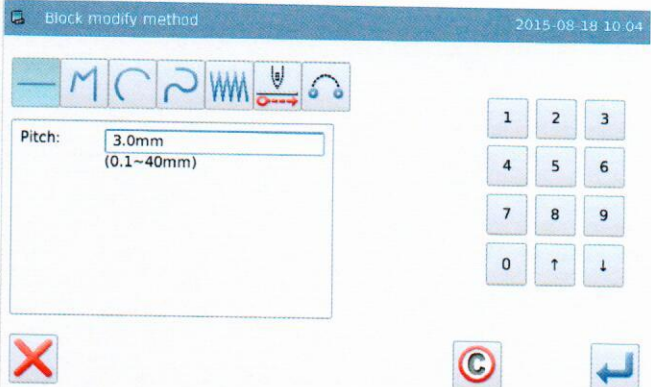
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press and then press .
- ▶ Press for confirmation.



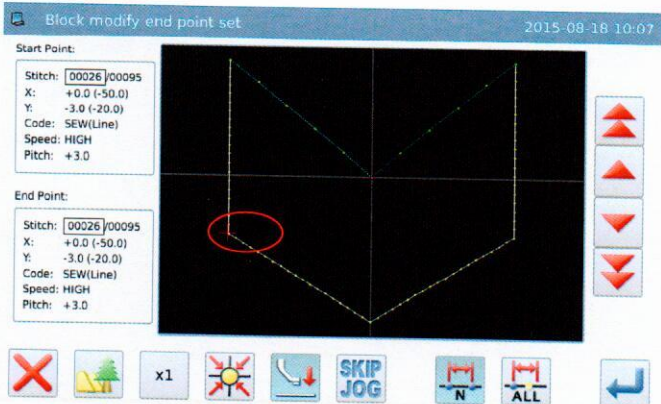
② Select the Method of Change

- ▶ Press .
- ▶ Press for confirmation.





③ Select the Start Point of the Section Change

- ▶ Press and to move needle to Point A.
- ▶ Press for confirmation.



④ Select the End Point of the Section Change

▶ Press  and  to move needle to Point B.

▶ Press  for confirmation.


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


⑤ Confirm the Generation of the New Pattern

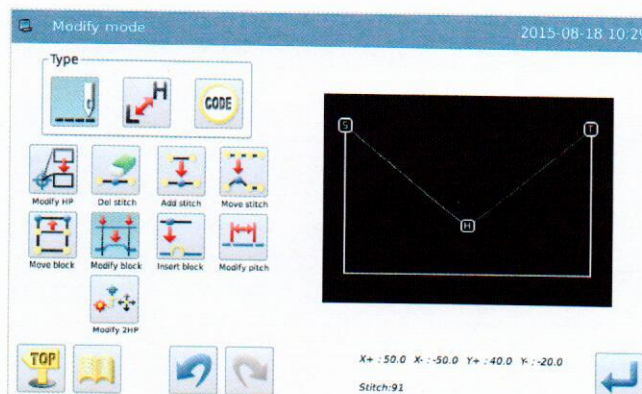
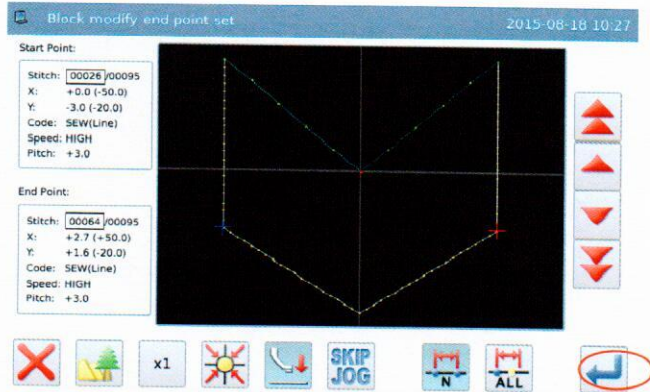
▶ Press  for confirmation.

⑥ Confirm the Pattern after Change

▶ 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.)

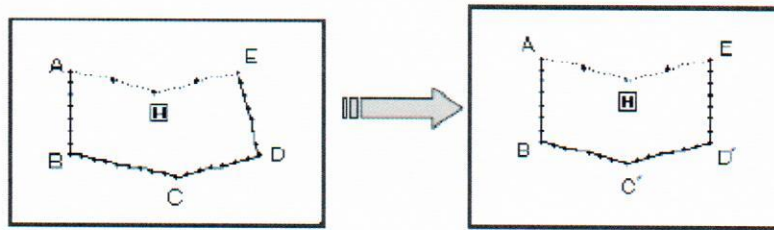


Notes:

1. When user selects Arc at “Change Section”: The new arc will be generated through one point within the appointed section.
2. When user selects Linear at “Change Section”: The modified section will form a linear pattern.
3. If the section for modification carries Code data, that Code data will be deleted.

2.17 Change Section (Polygon, Arc and Curve)

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



① Select Section Change

▶ Enter modification mode (Refer to section 2.2).

▶ Press and then press .

▶ Press for confirmation

② Select the Method of Change

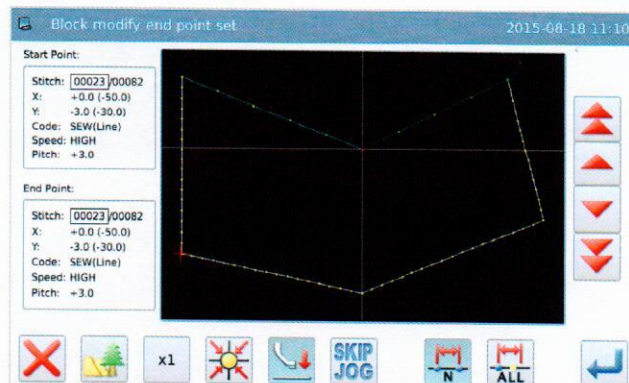
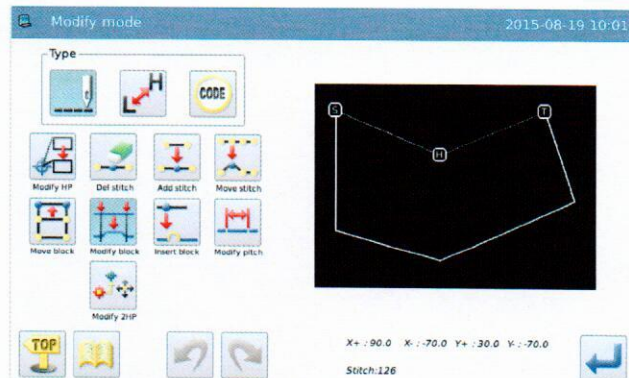
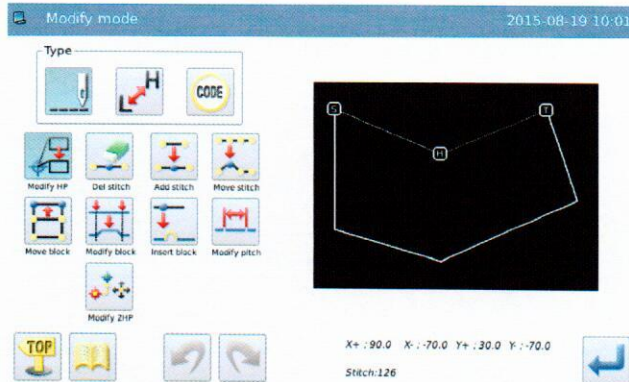
▶ Press .

▶ Press for confirmation.



③ Select the Start Point of the Section Change

▶ Press and to move the needle to B.

▶ Press for confirmation.

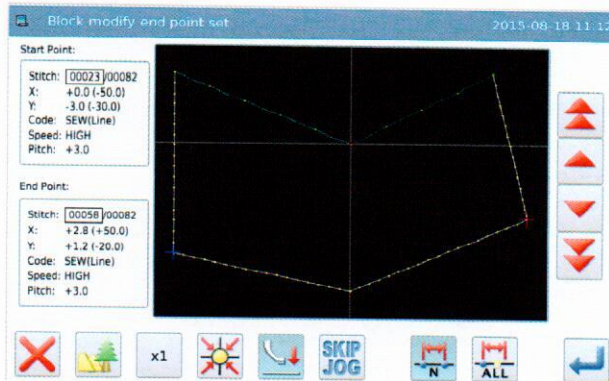


④ Select the End Point of the Section Change

▶ Press  and  to move the needle to E.

▶ Press  for confirmation.

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



⑤ Input the New Position

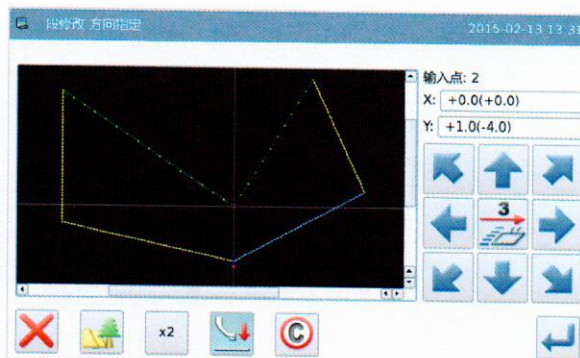
▶ Use direction keys to move the needle to C'.

▶ Press  for confirmation.

⑥ Confirm to Create the Pattern after Section Change


▶ Use direction keys to move the needle to D'.


▶ Press  for confirmation.

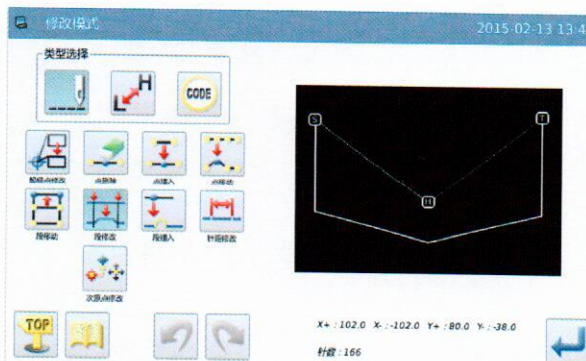


⑧ Confirm the Pattern after Change

▶ Finish Modification Mode.

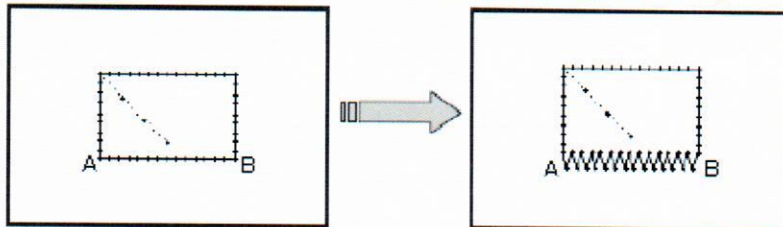
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data is

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






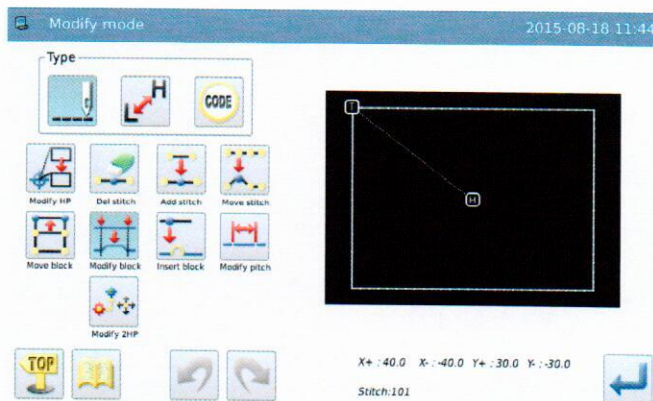
2.18 Change Section (Herringbone Sewing)

[Example]: Change the pattern data between A and B to the herringbone sewing





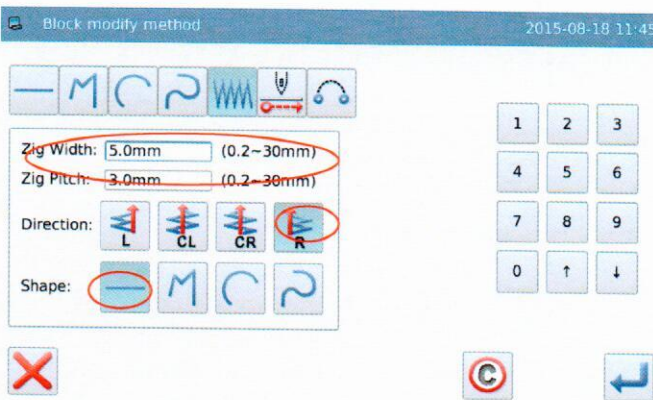
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Press  for confirmation






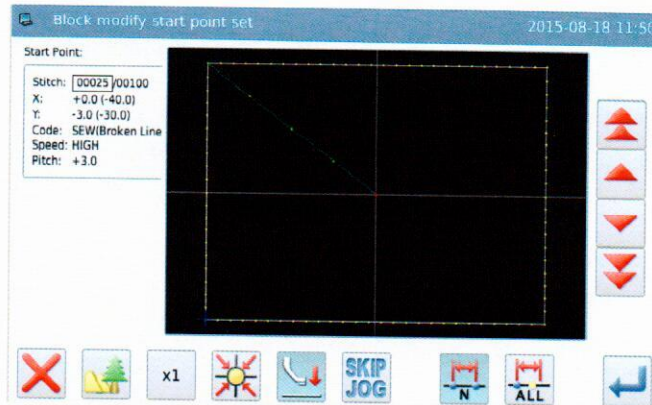
② Select the Method of Change

- ▶ 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.






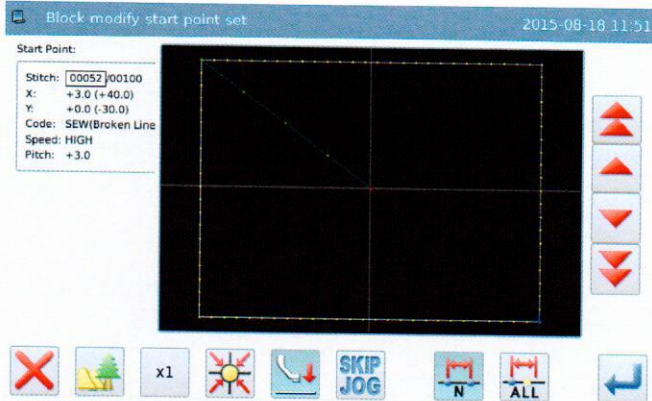
③ Select the Start Point of the Section Change

- ▶ Press  and  to move the needle to A.
- ▶ Press  for confirmation.




④ Select the End Point of the Section Change

- ▶ Press  and  to move the needle to B.
- ▶ Press  for confirmation.





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

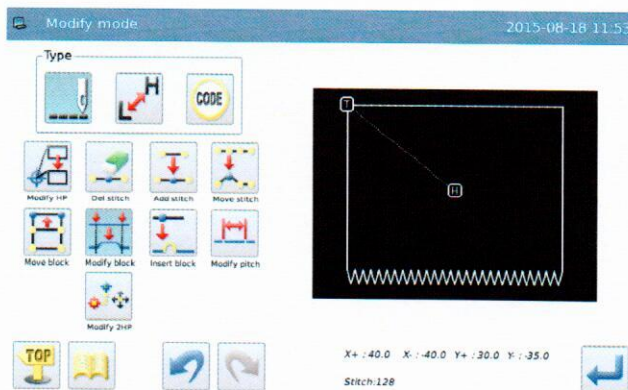
⑤ Confirm the Generation of the New Pattern

- ▶ Press  for confirmation.

⑥ **Confirm the Pattern after Change**

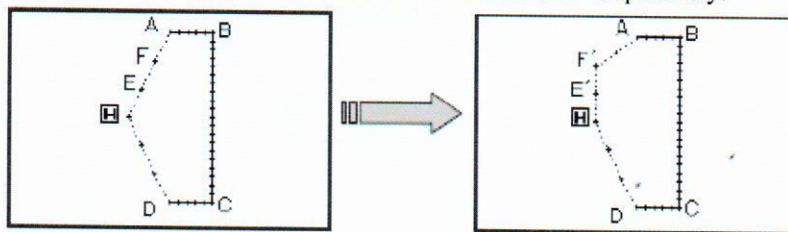
▶ Finish Modification Mode.

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.)





2.19 Change Section (Feed)

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

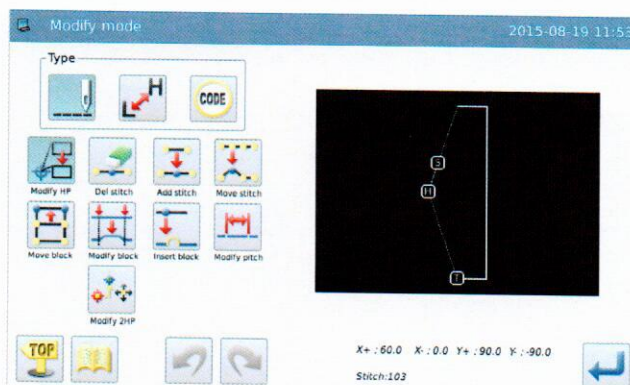


① **Select Section Change**



▶ Enter modification mode (Refer to section 2.2).

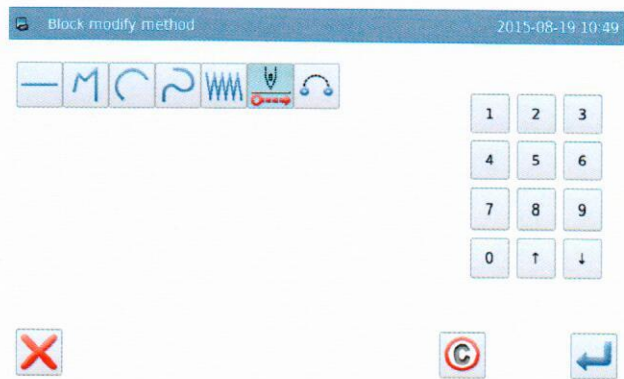
▶ Press  and then press .

▶ Press  for confirmation






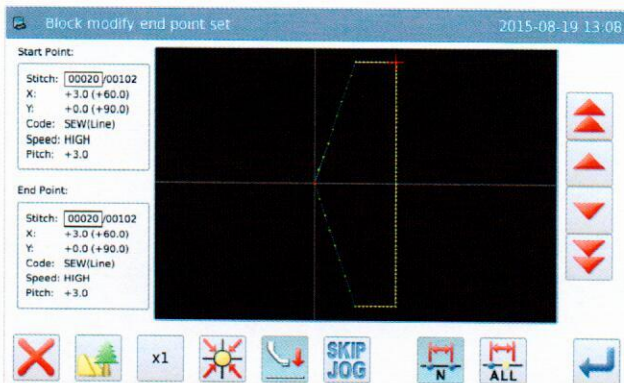
② Select the Method of Change

- ▶ Press .
- ▶ Press  for confirmation.






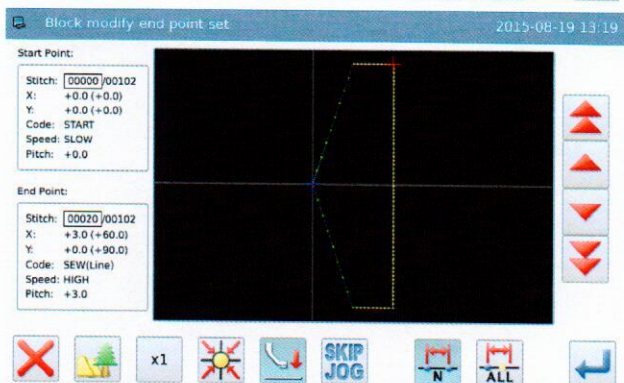
③ Select the Start Point of the Section Change

- ▶ Press  and  to move the needle to B.
- ▶ Press  for confirmation.





④ Select the End Point of the Section Change

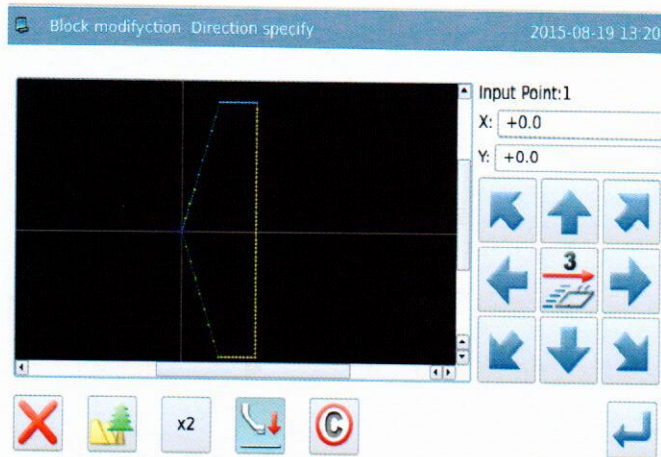
- ▶ Press  and  to move the needle to E.
- ▶ Press  for confirmation.




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

⑤ **Input the New Position**

- ▶ Use direction keys to move the needle to G.
- ▶ Press  for confirmation.
- ▶ Press  again.





⑥ **Confirm the Generation of the New Pattern**

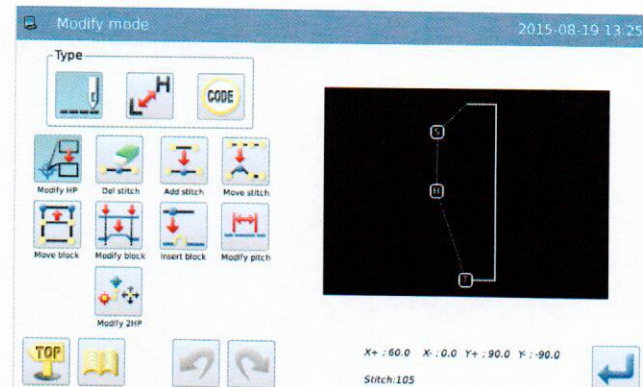
- ▶ Press  for confirmation.

⑦ **Confirm the Pattern after Change**

- ▶ 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.)




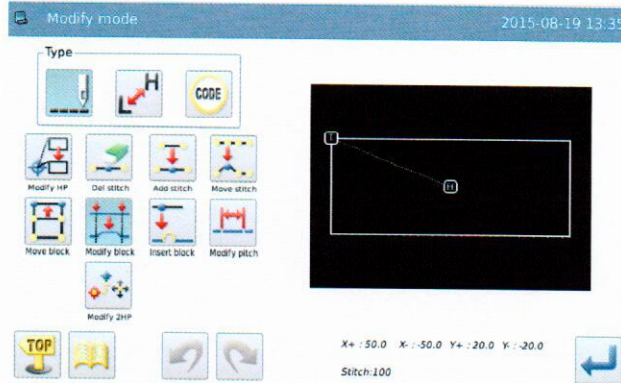
2.20 Change Section (Jump Sewing)

① Select Section Change

▶ Enter modification mode (Refer to section 2.2).

▶ Press  and then press .

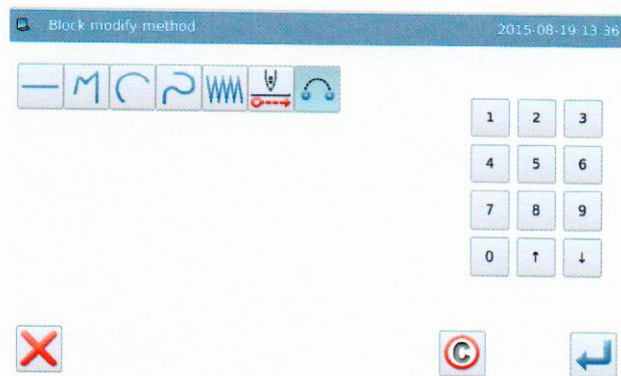
▶ Press  for confirmation.






② Select the Method of Change




▶ Press .

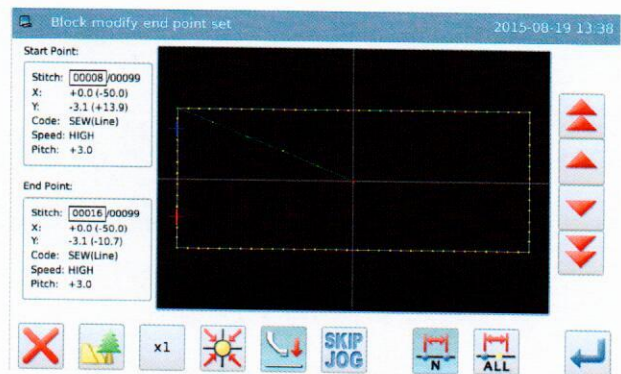
▶ Press  for confirmation.



③ Select the Start Point and the End Point of the Section Change


▶ Press  and  to move the needle to the Start Point and Press  for confirmation.


▶ Press  and  to move the needle to the End Point and Press  for confirmation.

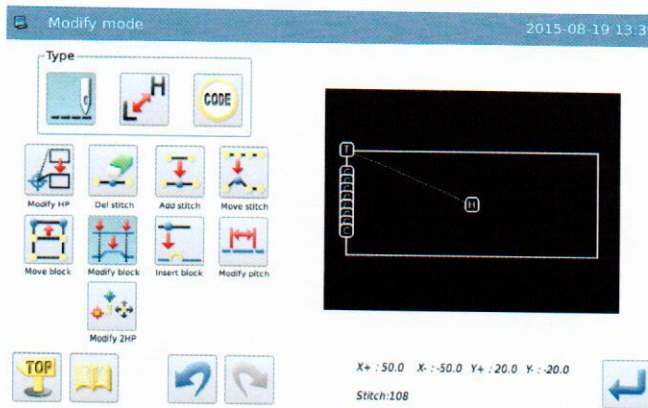


④ Confirm the Pattern after Change

► 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.)



2.21 Change Section (Insert Section)



① Select Section Change

► Enter modification mode (Refer to section 2.2).

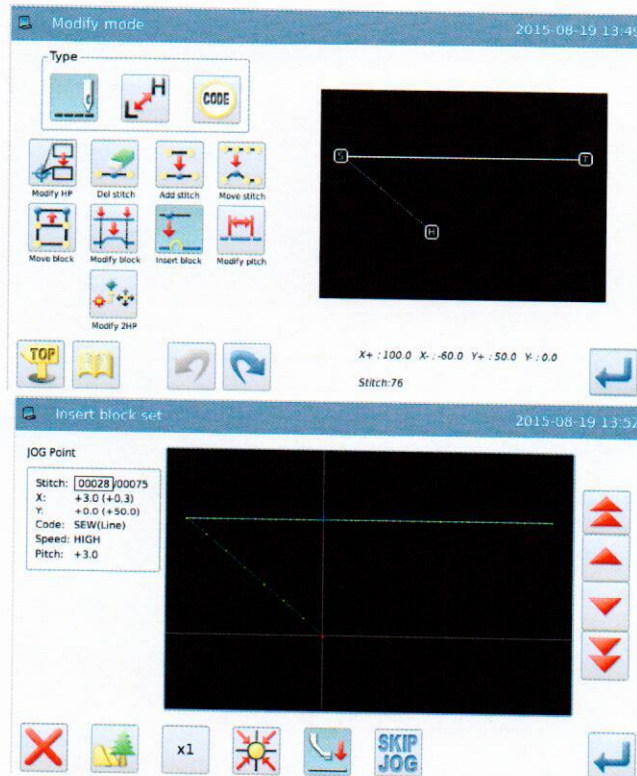
► Press  and then press .

► Press  for confirmation.




② Select the Position for Insertion



► Press  and  to move the needle to the modified position.

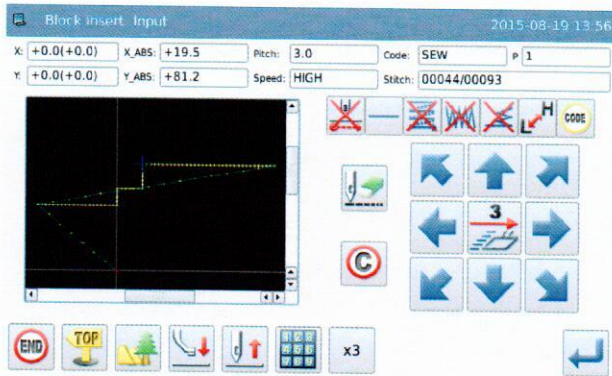
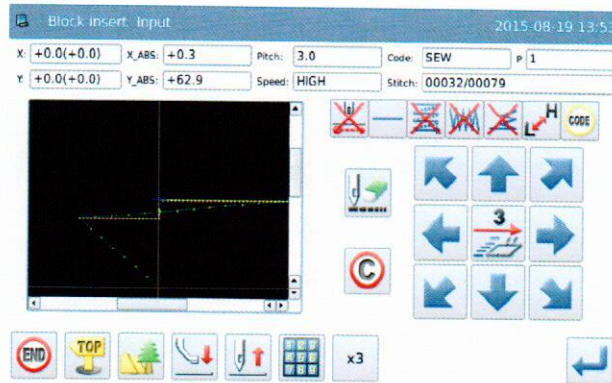
► Press  for confirmation.



③ Select the Start Point of the Section Change



- ▶ Press  and  to move the needle to the Start Point.
- ▶ Press  for confirmation.

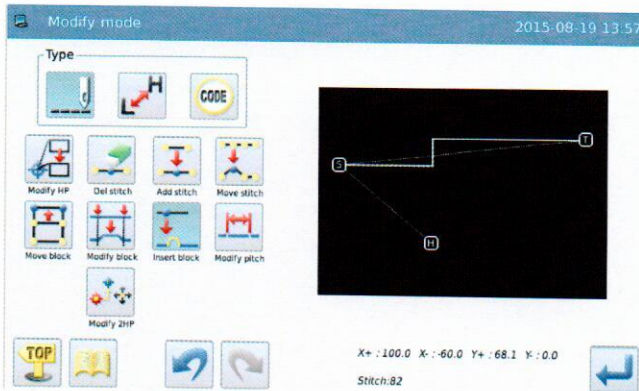
Note: the operation method to insert section is the same as pattern-making and many sections can be inserted continuously. Here, press  to return to the needle position selection interface, and press  to finish the insertion.



④ Confirm the Pattern after Change

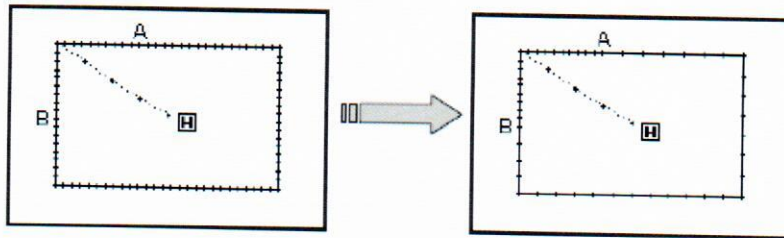
- ▶ Finish Modification Mode.

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.)



2.22 Change Stitch Interval (Stitches in appointed sections)

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

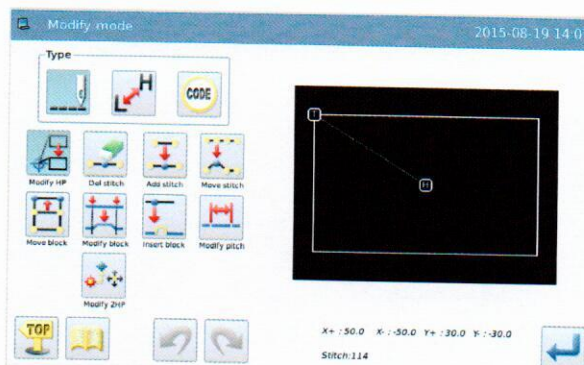


① Select Section Change

▶ Enter modification mode (Refer to section 2.2).

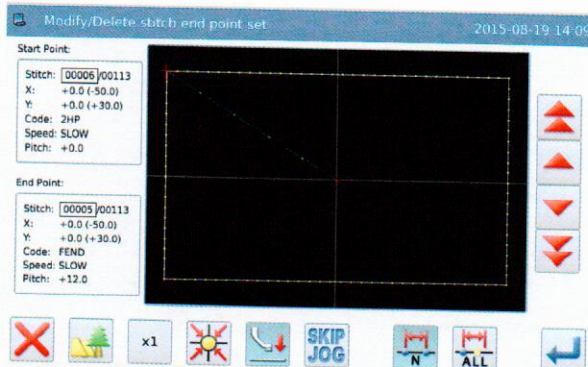
▶ Press and then press .

Press for confirmation.



② Select the Method of Change

▶ Press .



③ Select the Start Point of the Section Change

▶ Press and to move needle to A.

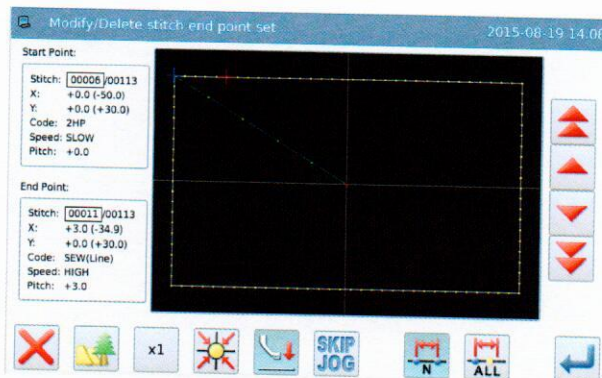
▶ Press for confirmation.

④ Select the End Point of the Section Change

▶ Press and to move needle to B.


▶ Press for confirmation.

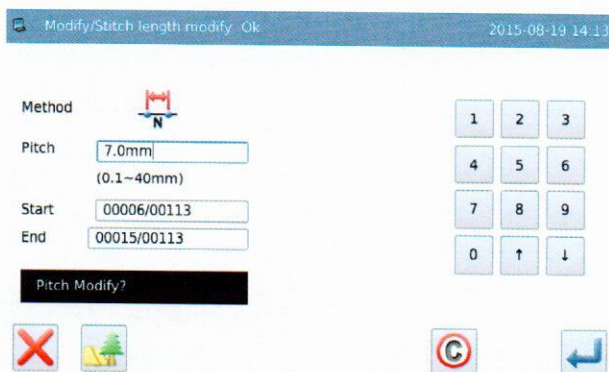
Note: when the end point is confirmed,



the frame will automatically return to the start position. So pay attention to the stop position of the needle.


⑤ Set the Stitch Interval


- ▶ Set stitch interval with number keys.
- ▶ Press  for confirmation.

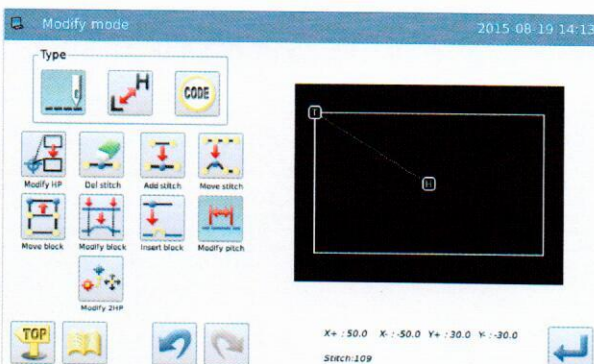


□ Confirm the Figure after Change

- ▶ Finish Modification Mode.

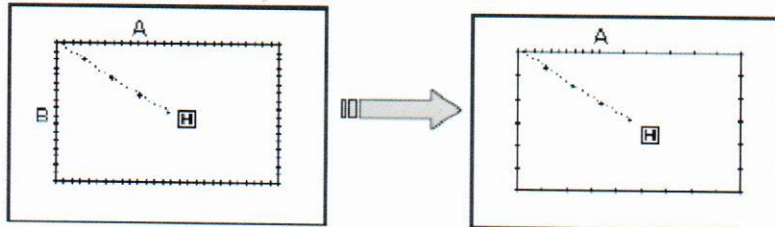
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data

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






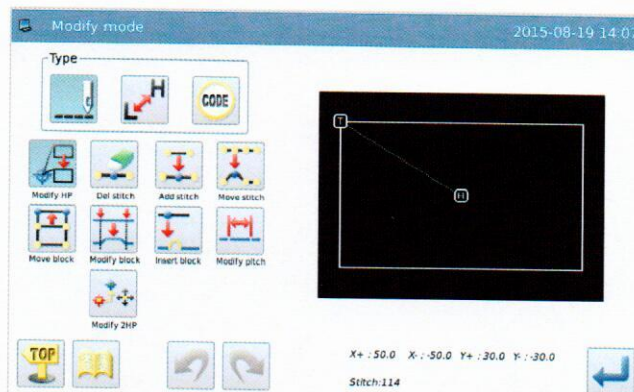
2.23 Change Stitch Interval (All stitches after the appointed position)

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



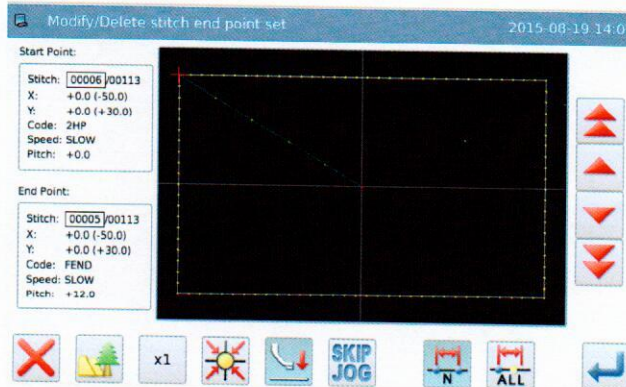
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Press  for confirmation.






② Select the Method of Change

- ▶ Press  ALL.




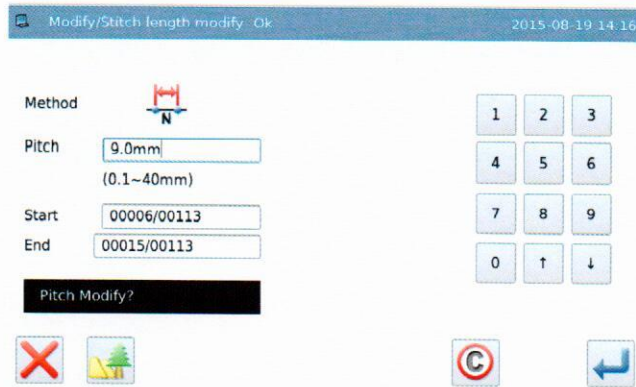
③ Select the Start Point of the Section Change

- ▶ Press  and  to move the needle to A.
- ▶ Press  for confirmation.

④ Set the Stitch Interval


Set stitch interval with number keys


Press  for confirmation.

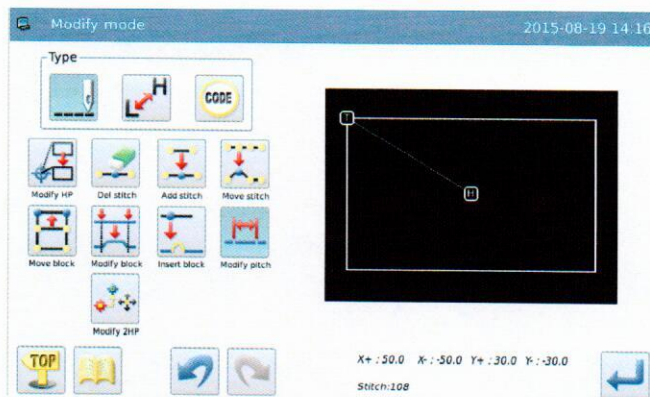


⑤ Confirm the Pattern after Change

► Finish Modification Mode.

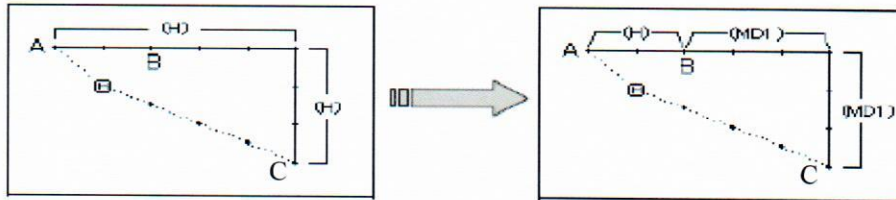
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data is saved.

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






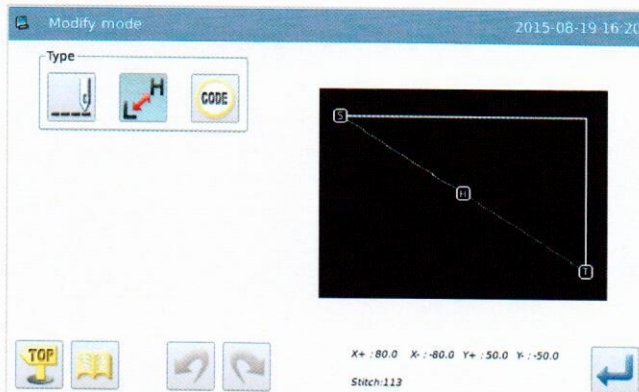
2.24 Change Sewing Speed (Stitches in the appointed section)

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



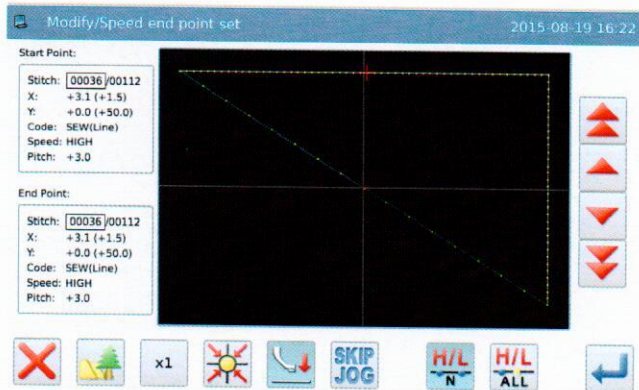
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Press  for confirmation.






② Select the Method of Change




- ▶ Press .

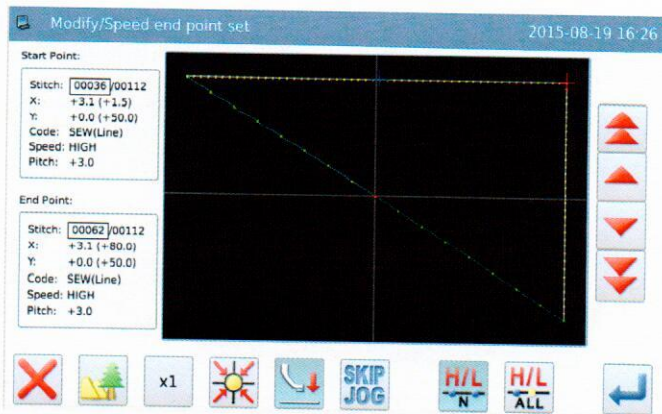


③ Select the Start Point of the Section Change

- ▶ Press  and  to move the needle to B.
- ▶ Press  for confirmation.


④ Select the End Point of the Section Change

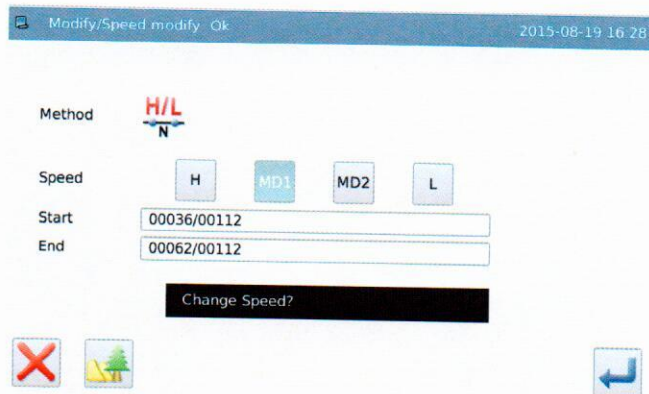
- ▶ Press  and  to move the needle to C.
- ▶ Press  for confirmation.



⑤ Set Speed


Set the speed.


Press  for confirmation

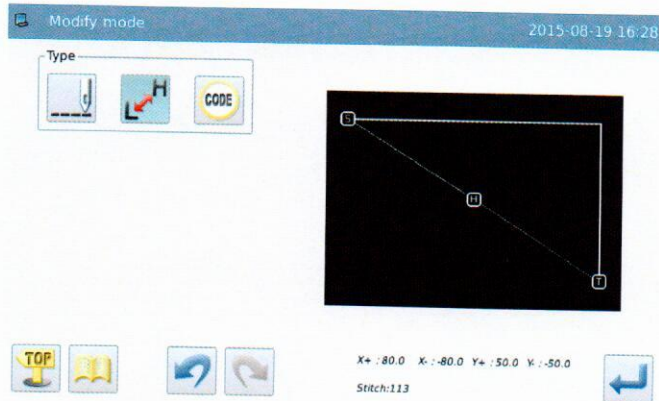


⑥ Confirm the Pattern after Change

- ▶ Finish Modification Mode.

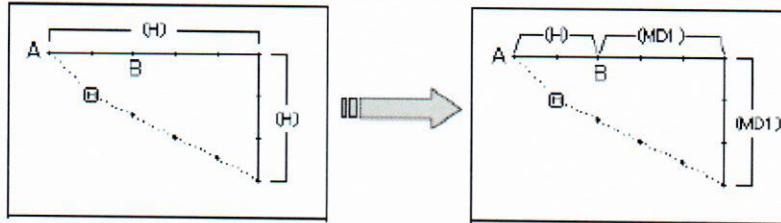
Press  to return to the interface for saving the modified data. The system will return to standard interface after the data

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



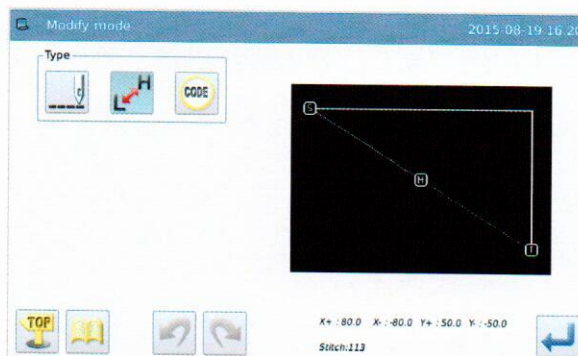
2.25 Change Sewing Speed (All stitches after the appointed position)

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



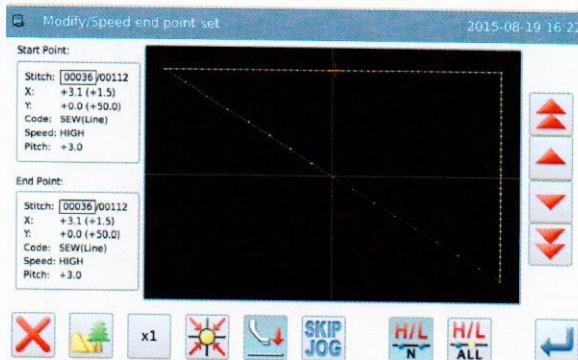
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2)
- ▶ Press **L** ^H.
- ▶ Press **↩** for confirmation.



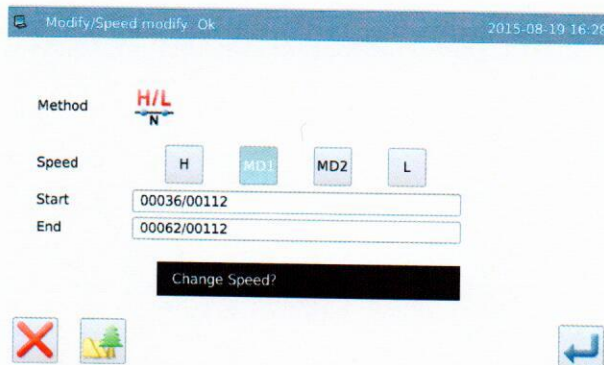
② Select the Method of Change

- ▶ Press **H/L** ^{ALL}.



③ Select the Start Point of the Section Change

- ▶ Press **▲** and **▼** to move the needle to B.
- ▶ Press **↩** for confirmation.





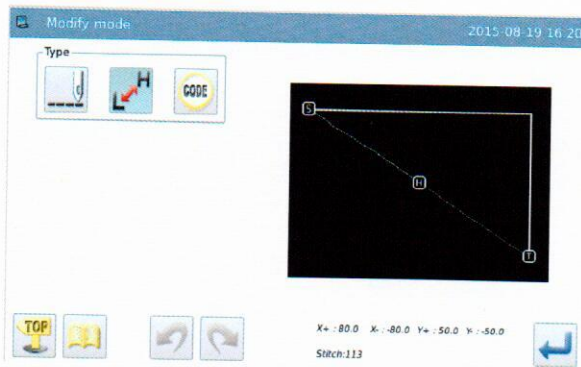
④ Set Speed

- Set the speed
- Press **↩** for confirmation.

⑤ **Confirm the Pattern after Change**

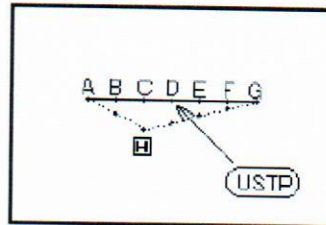
▶ **Finish Modification Mode.**

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.)






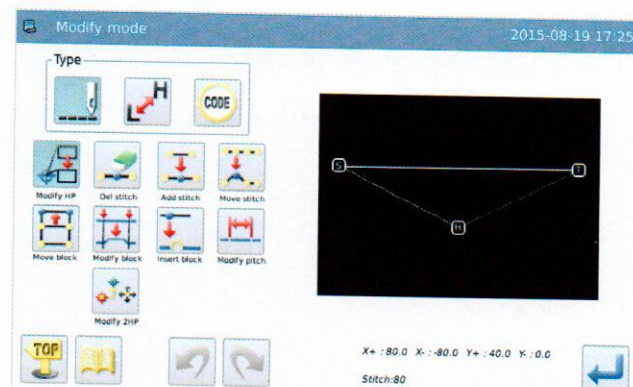
2.26 Change Code (Insert Code)

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






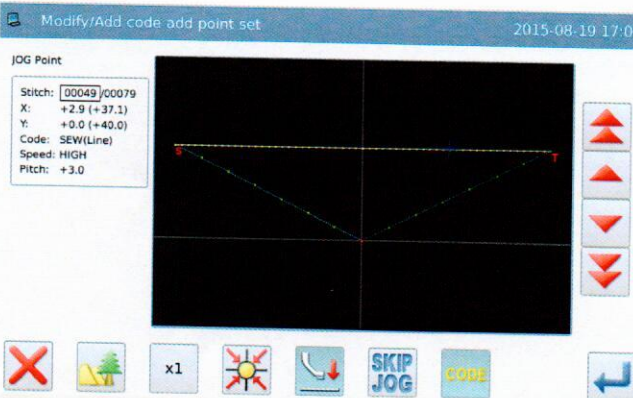
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press  and then press .
- ▶ Press  for confirmation

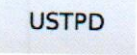



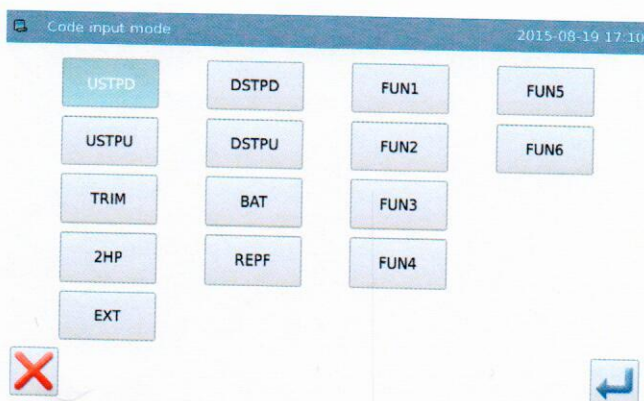
② Select the Position for Inserting Code

- ▶ Press  and  to move the needle to D.
- ▶ Press  for confirmation.




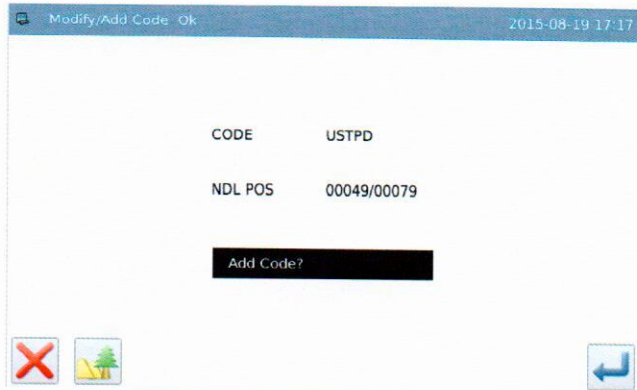
③ Select the Code for Insertion

- Press .
- Press  for confirmation.





④ Confirm the Insertion

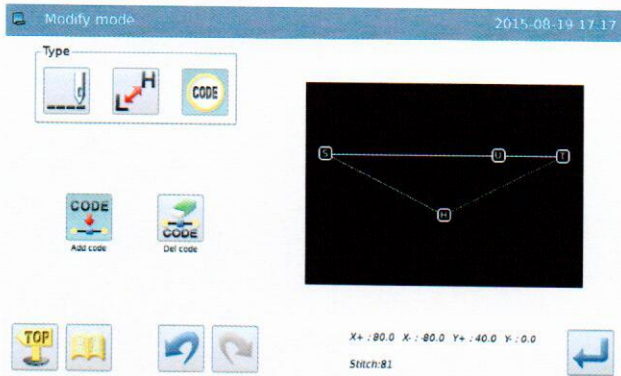
Press  for confirmation.



⑤ Confirm the Pattern after Change

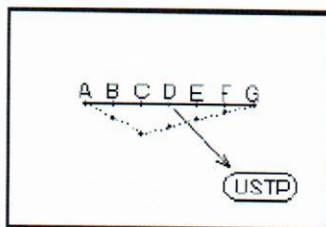
► Finish Modification Mode.

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.)



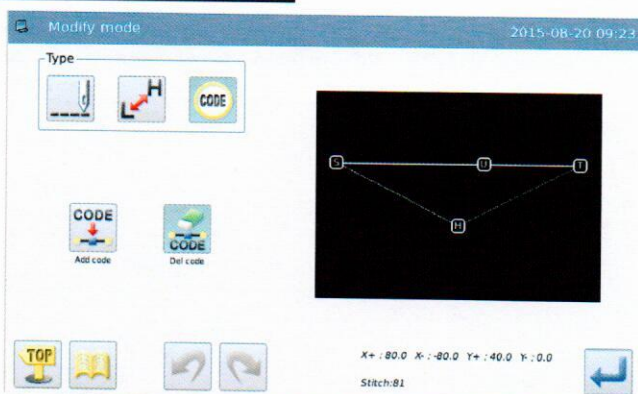
2.27 Change Code (Delete Code)

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



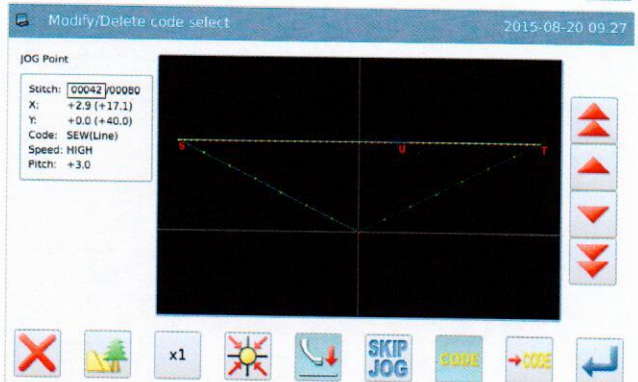
① Select Section Change

- ▶ Enter modification mode (Refer to section 2.2).
- ▶ Press and press .
- ▶ Press for confirmation.



② Select the Position for Deleting Code

- ▶ Press and to move the needle to Point D.
- ▶ Press for confirmation.



③ Confirm the Deletion

Press for confirmation.





CODE USTPD
 NDL POS 00043/00080

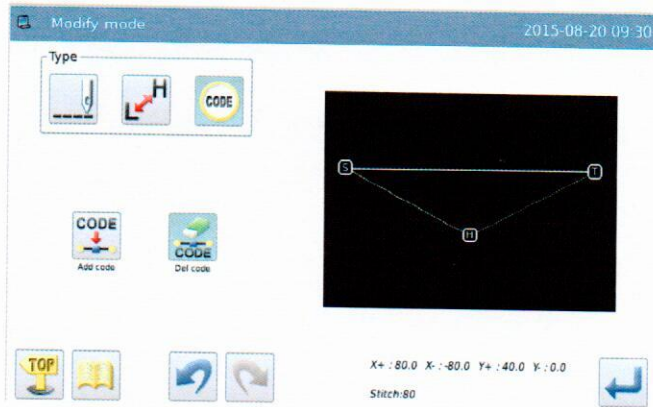
Delete Code?



④ Confirm the Figure after Change

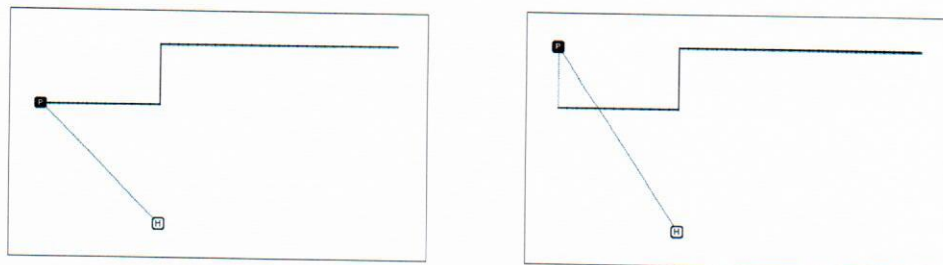
▶ Finish Modification Mode.

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.)



2.28 Change Origin (Sub-origin)

[Example]: change the position of Origin P as follows.



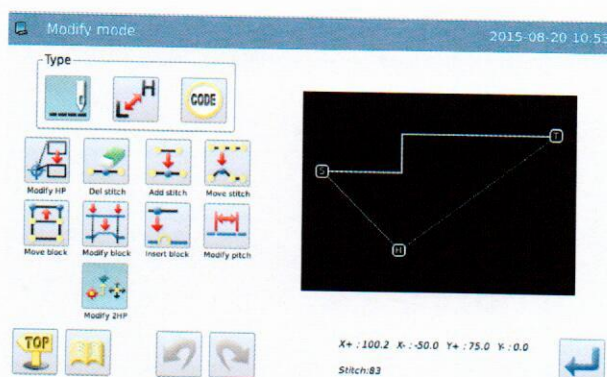
① Select Sub-origin Change

▶ Enter modification mode
(Refer to section 2.2)

▶ Press and then press



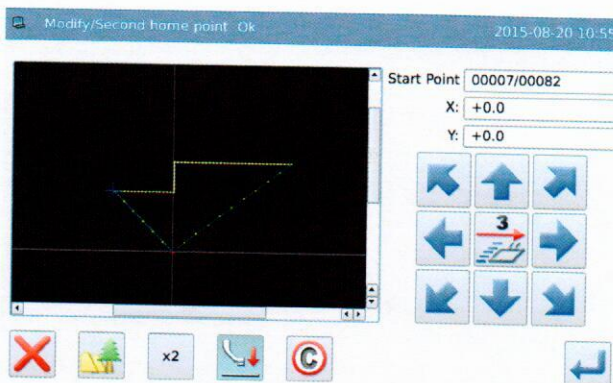
▶ Press for confirmation.



② Set the Position of Origin

▶ Use & to move Point A under the needle (The start position for the changing)

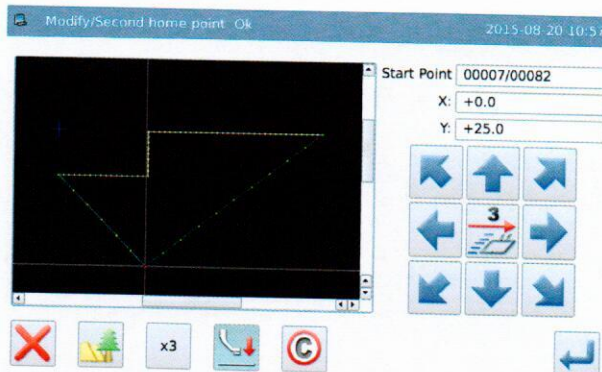
▶ Press to confirm the position.




③ Set the Position of Sub-origin

▶ Use & to move the origin under the needle (The end position for the change).

▶ Press to confirm the position.

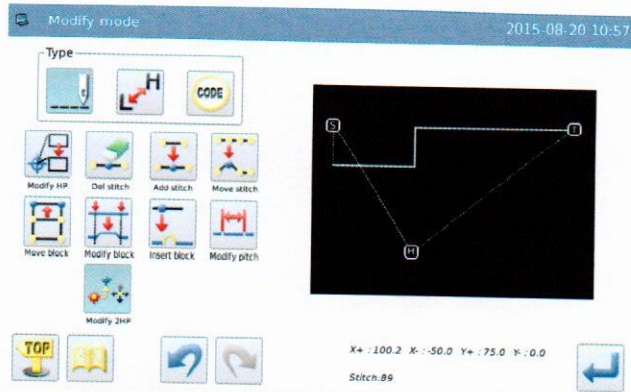


□ **Finish the Change of Origin**

▶ Press  and then press



▶ Press  for confirmation.





3 Pattern File Data Transformation

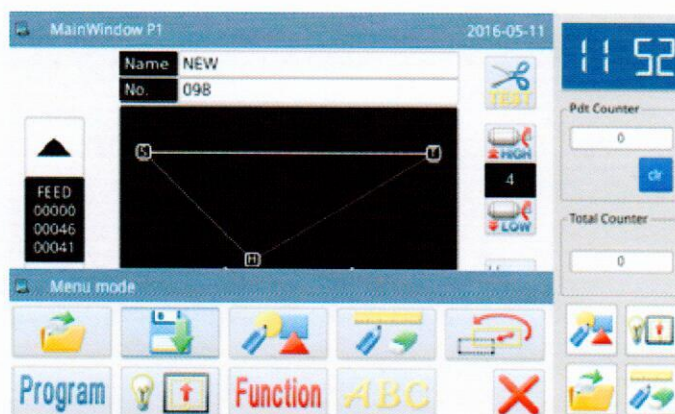
3.1 Main Functions of Pattern Transformation

Function	Button	Content	Detailed Setting				
Origin Correction		Change the position of origin in the existing pattern.	—				
Backstitch Transformation		Add new Backstitch and correct the existing Backstitch	Backstitch Sewing Multi-sewing (Only available at close shape)				
Overlap-sewing Transformation		Set up multi-sewing on the chosen pattern					
Contraction Sewing Transformation		Make contraction sewing to strengthen the start and the end of stitches	For the entire pattern; For a chosen sewing section.				
Herringbone Sewing Transformation		Add new herringbone sewing and correct the existing herringbone sewing.	—				
Scale Mode		Use a point as the basis to scale up/down the pattern in X/Y direction with the fixed stitch number or the fixed stitch interval.	<p><Base Point></p> Set by User Center of Pattern Origin <table border="1" style="float: right; margin-left: 20px;"> <tr> <td></td> <td>Fixed Stitch Number</td> </tr> <tr> <td></td> <td>Fixed Stitch Interval</td> </tr> </table>		Fixed Stitch Number		Fixed Stitch Interval
	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.	<p><Method></p> Delete the Original Pattern Keep the Original Pattern				
Rotation Mode		Rotate according to a random center.	<p><Base Point></p> Set by User Center of Pattern Origin				
Off-side Transformation		Change the existing off-side pattern on distance and direction	—				

Multi-sewing Transformation		Change the existing multi-sewing pattern on distance, times and direction	—
Reproduction		Reproduce the chosen pattern.	—
Reverse Direction		Make reverse sewing at a pattern section.	—
Add Figure		As for the pattern converted from non-standard format (made up of point sewing entirely), make multi-sewing, reverse sewing and zigzag sewing, and remove the stitch interval restriction (such restriction can be removed after adding figure)	Smooth Pointed


3.2 Method for Entering Transformation Mode


- ▶ Press  and then press  to enter the transfer mode

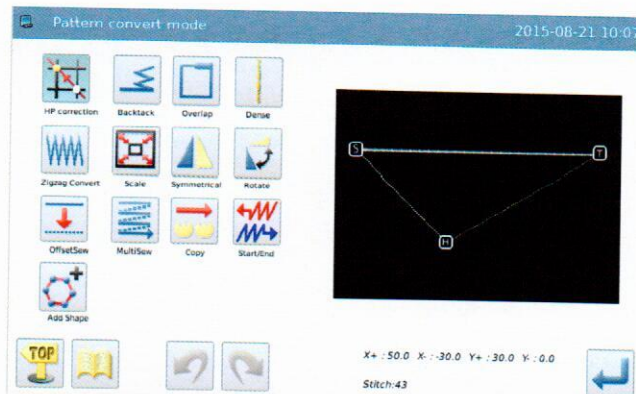


3.3 Method for Ending Transformation Mode

After confirming the modifications,


press  to end the operation and quit the transformation mode.


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

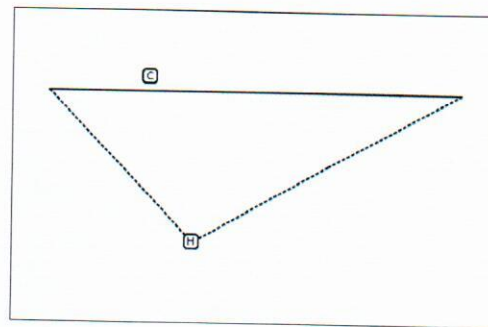


3.4 Confirmation of the Modified Pattern

- Scale up/down and rotation

: Origin (Available at all the preview windows)

: Base Point at Transformation



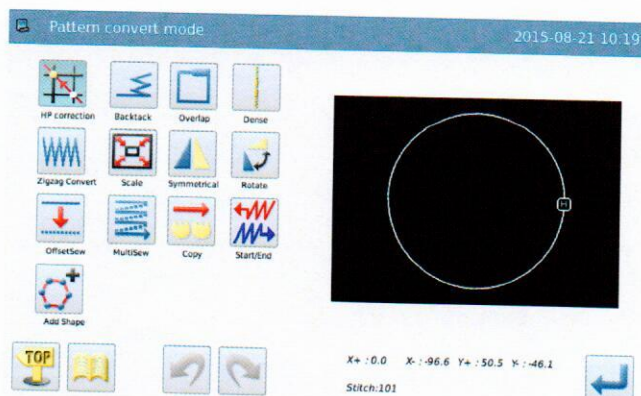
3.5 Origin Correction

① Enter the Origin Correction Mode



- ▶ Enter pattern transformation mode.

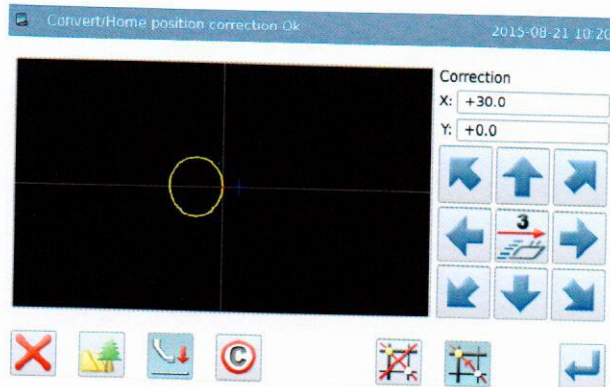
▶ Press .

▶ Press  for confirmation





② Set Origin Correction Value

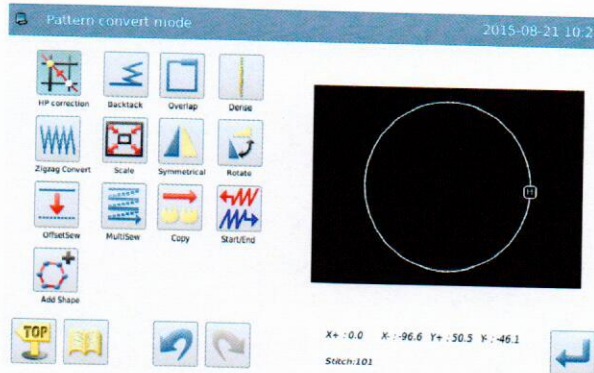
- ▶ Press .
- ▶ Use direction keys to move needle to the position needing correction.
- ▶ Press  for confirmation



③ Confirm the Pattern after Change

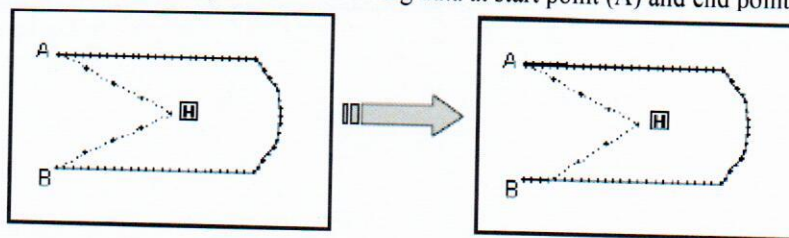
- ▶ Finish the transformation mode.

Press  to return to the interface for saving the transformed 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.)






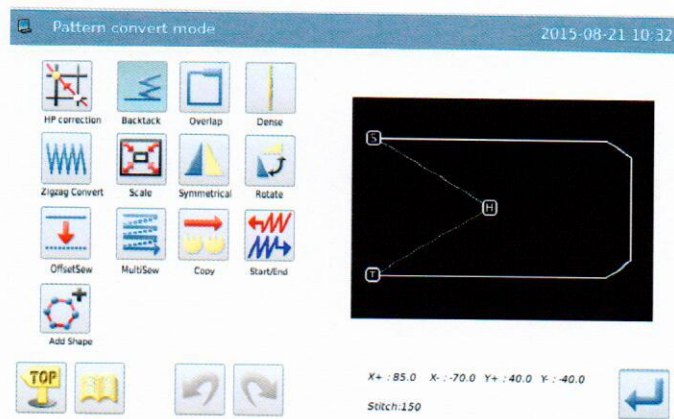
3.6 Backstitch Sewing (Backstitches at the Start and the End)

[Example]: Transform to (add) Backstitch sewing data at start point (A) and end point (B).




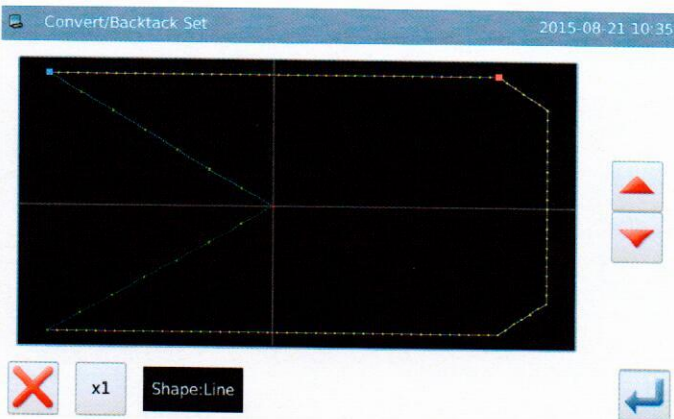
① Enter Backstitch Transformation Mode

- ▶ Enter  pattern transformation mode.
- ▶ Press .
- ▶ Press  for confirmation.




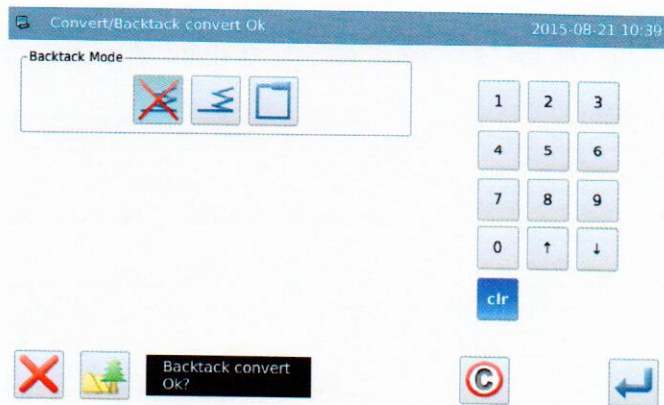
② Set the Position for the Backstitch Transformation

- ▶ Move stitch to a random position between Point A and Point B (the section for Backstitch Transformation).
- ▶ Press  for confirmation.






③ Select Backstitch Sewing

- ▶ Press .





④ Detailed Setting of Backstitch Sewing

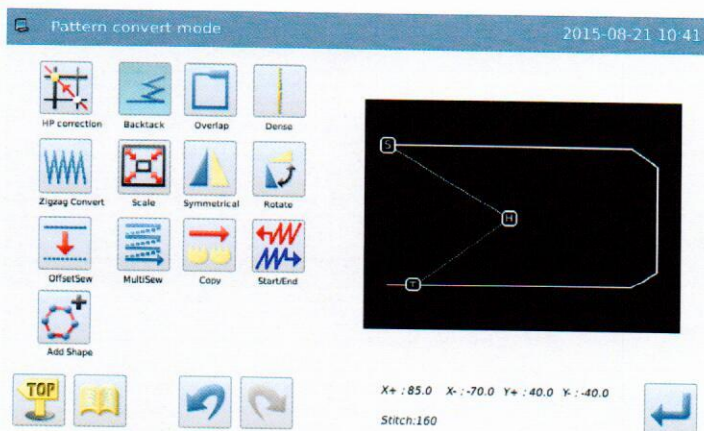
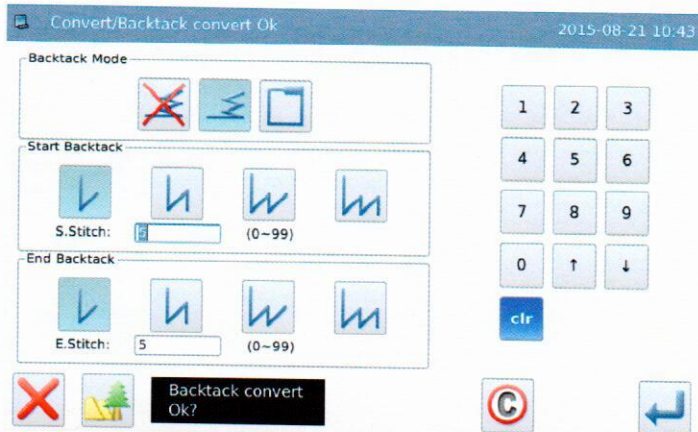
- ▶ Set the details in the right interface (Firstly, select  [Backstitch Sewing]; secondly, select  [N-shaped Backstitch] at the start, number at 5; thirdly, select  [M-shaped Backstitch] at the end, number at 3).

- ▶ Press  for confirmation.

⑤ Confirm the Pattern after Change

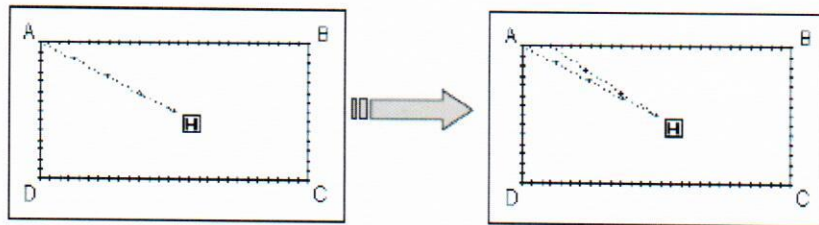
- ▶ Finish Transformation Mode

Press  to return to the interface for saving the transformed 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.)





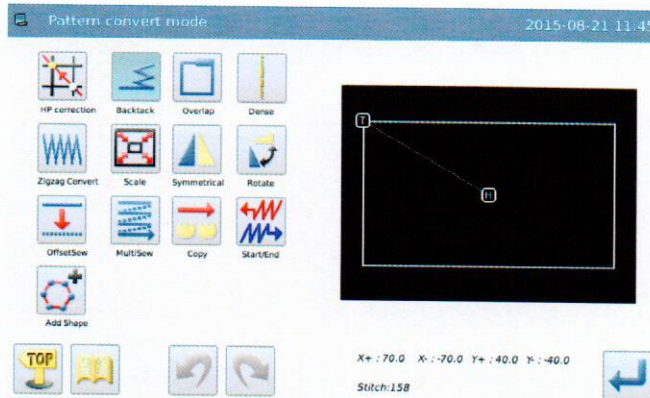
3.7 Backstitch Sewing (Multiple Backstitches)

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




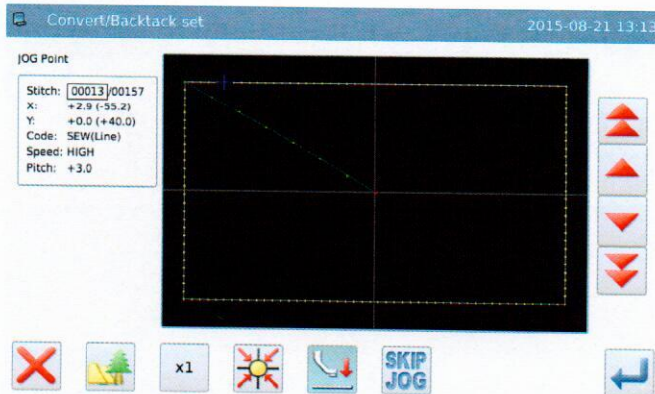
① **Enter Backstitch Transformation Mode**

- ▶ Enter pattern transformation mode
- ▶ Press  .
- ▶ Press  for confirmation



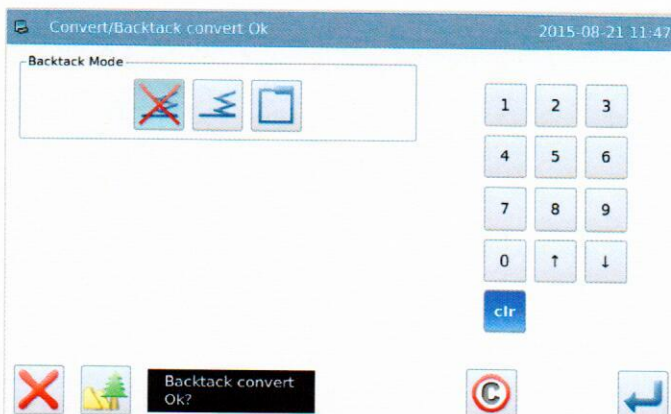
② **Set the Position for Backstitch Transformation**

- ▶ Move the needle to the position for transforming to Backstitch.
- ▶ Press  for confirmation.





③ Select the Multiple Backstitch

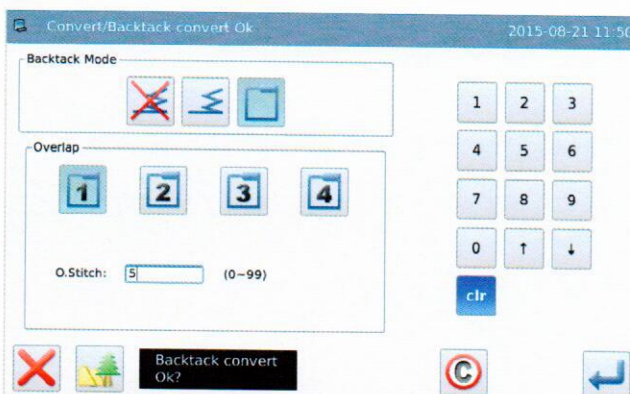
▶ Press .



④ Detailed Setting of Multiple Backstitches



▶ Set the details in right interface. (Select  [Multiple Backstitch], and then select  to set the repetition times, with the overlapped stitch number at 3).

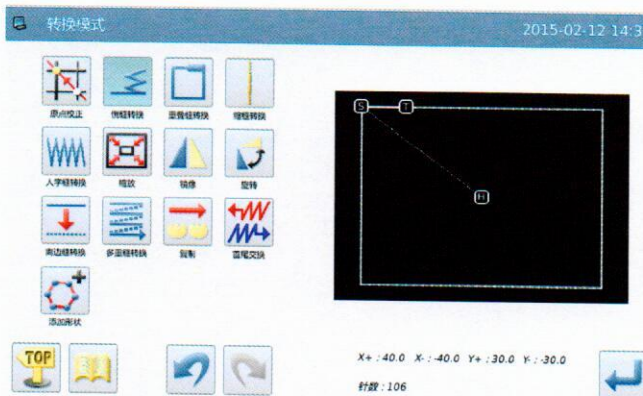
▶ Press  for confirmation.



⑤ Confirm the Pattern after Change

▶ Finish Transformation Mode.

Press  to return to the interface for saving the transformed 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.)




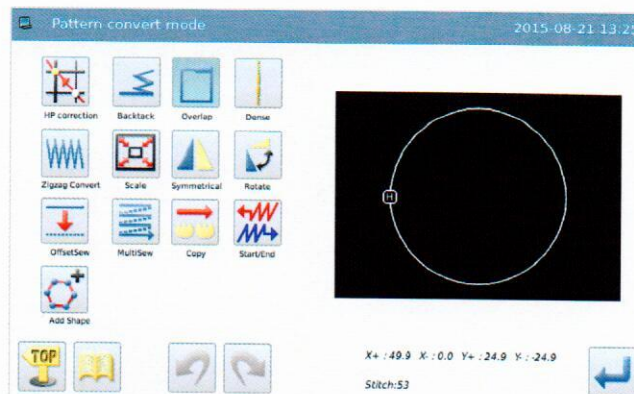
3.8 Overlap-sewing Transformation

① **Enter Overlap-sewing Transformation Mode**



▶ Enter Overlap-sewing transformation mode.

▶ Press .

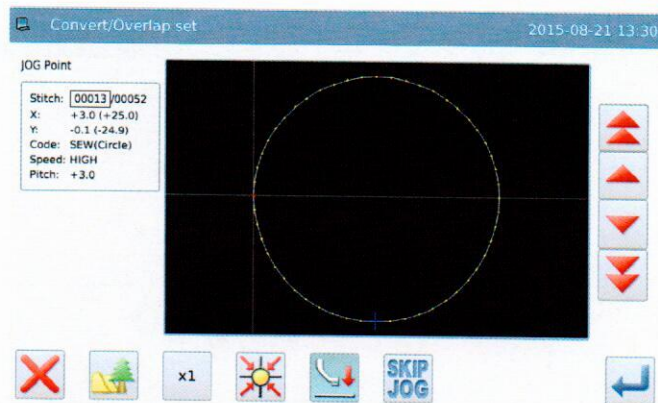
Press  for confirmation



② **Set the End Point for Overlap-sewing**

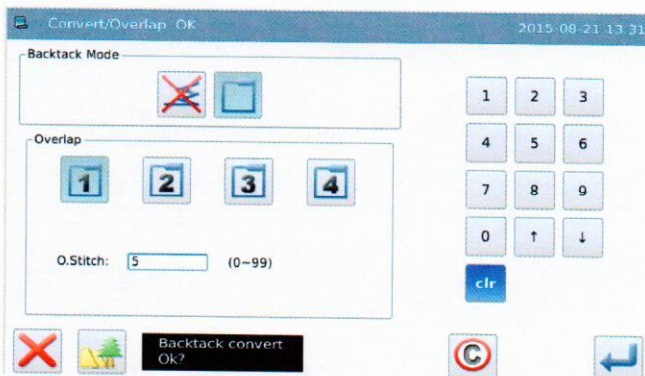
▶ Press  &  to move the needle to the end point of overlap-sewing.

▶ Press  for confirmation




③ **Select the Stitch Number of Overlap-sewing**


▶ Use the number keys to input the stitch number.

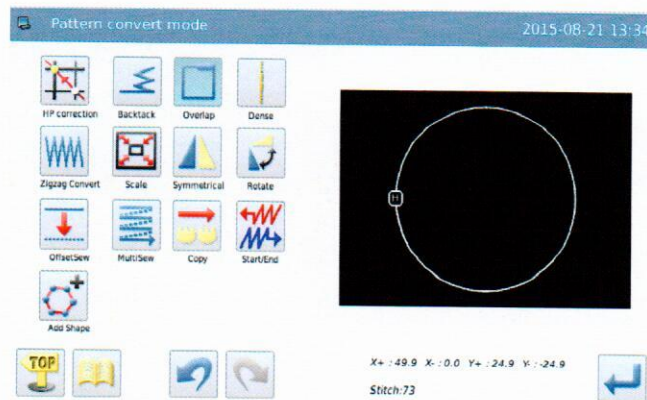


④ **Confirm the Pattern after Change**

▶ Finish Transformation Mode.



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

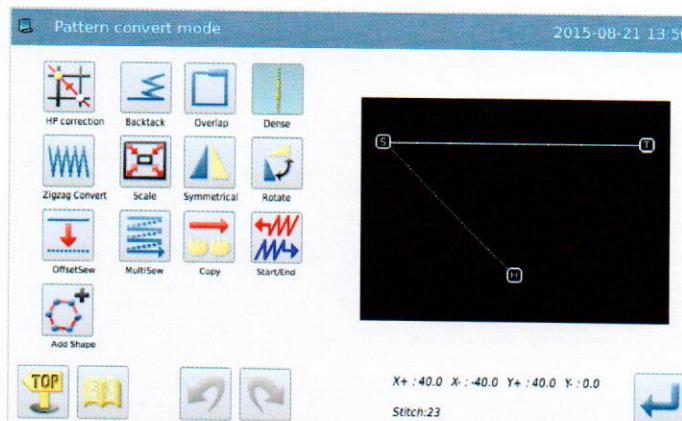
 is to withdraw the last modification and to return to previous point.)




3.9 Contraction Sewing Transformation

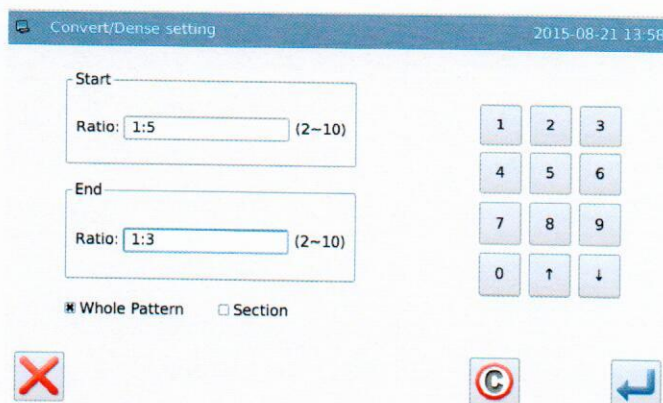
① Enter Contraction Sewing Transformation Mode

- ▶ Enter contraction sewing transformation mode
- ▶ Press  .
- ▶ Press  for confirmation





② Enter Multiple Sewing Transformation Mode

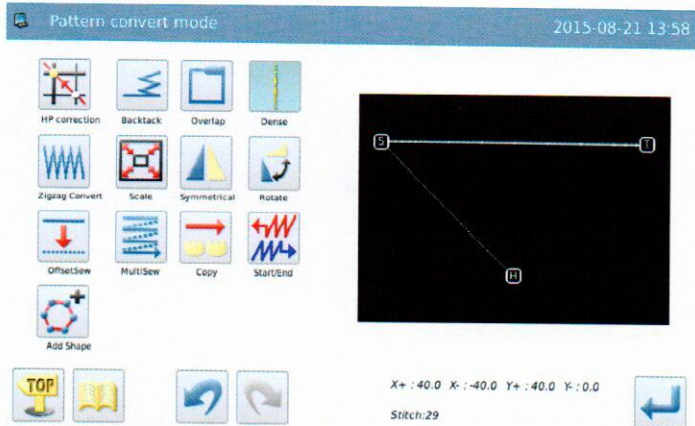
- ▶ Use number keys to set up the proportion at the start and the end of stitches.
- ▶ Press  for confirmation



③ Confirm the Pattern after Change

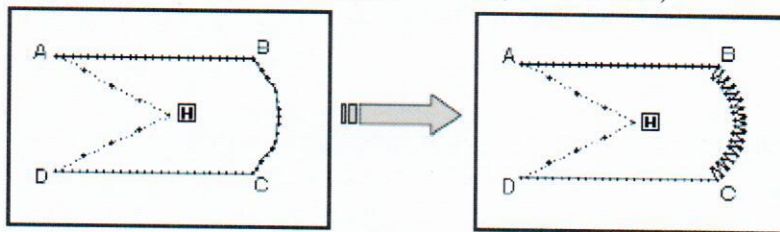
- ▶ Finish Transformation Mode.

Press  to return to the interface for saving the transformed 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.)





3.10 Herringbone Sewing Transformation

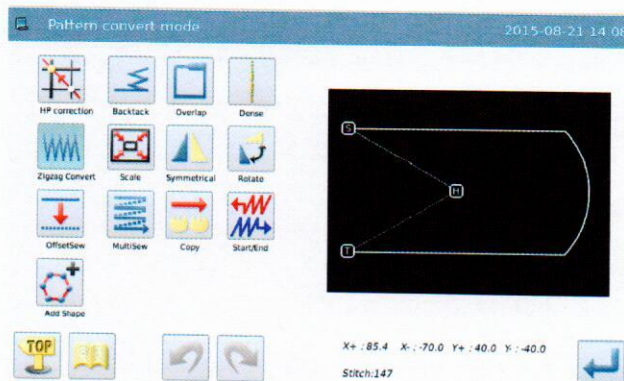
[Example]: Transform the arc from point B to point C to herringbone sewing/Insert herringbone sewing from point B to point C. (A~B: Linear, B~C: Arc, C~D: Linear)



① Enter Backstitch

Transformation Mode

- ▶ Enter pattern transformation mode.
- ▶ Press .
- ▶ Press  for confirmation

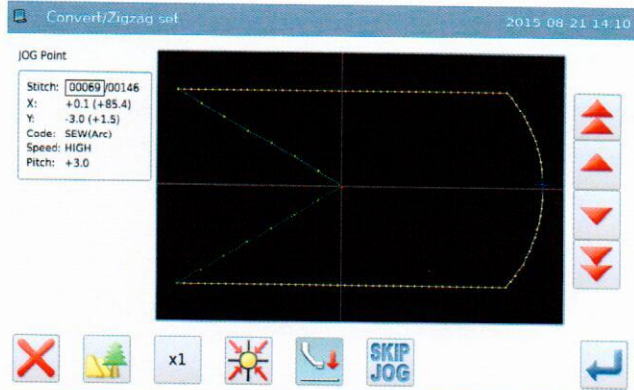


② Set the Position for Herringbone Sewing Transformation

- ▶ Move needle to a random position between point B and point C (Section needing herringbone sewing)

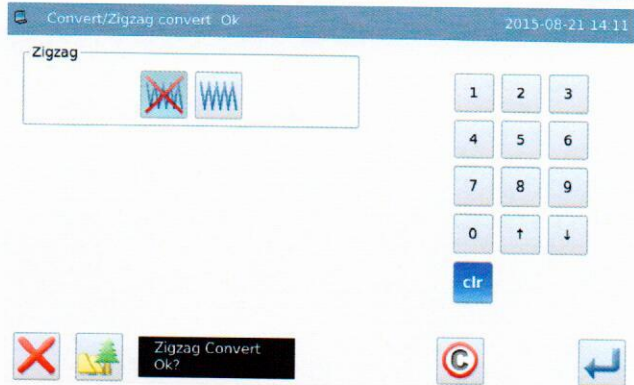
transformation).

- ▶ Press  for confirmation.





③ Select Herringbone Sewing Type

- ▶ Press .

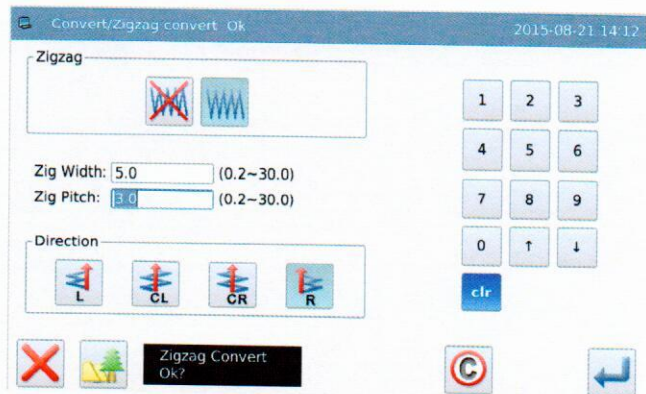


④ Set Details of Herringbone Sewing

- ▶ Set the details in right window


(Select , then set width at 5.0, stitch interval at 3.0, direction at ).


- ▶ Press  for confirmation.

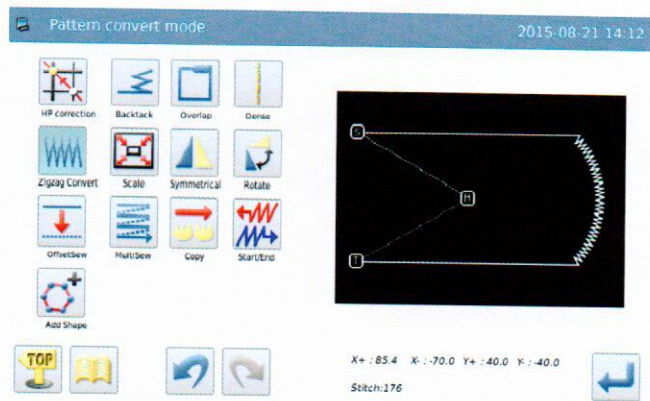


⑤ Confirm the Pattern after Change

- ▶ Finish Transformation Mode.

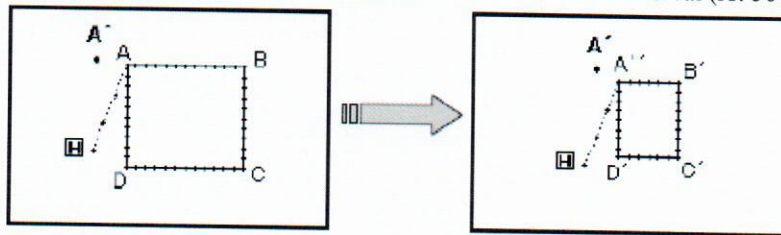
Press  to return to the interface for saving the transformed data. The system will return to standard interface after the data is saved.

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





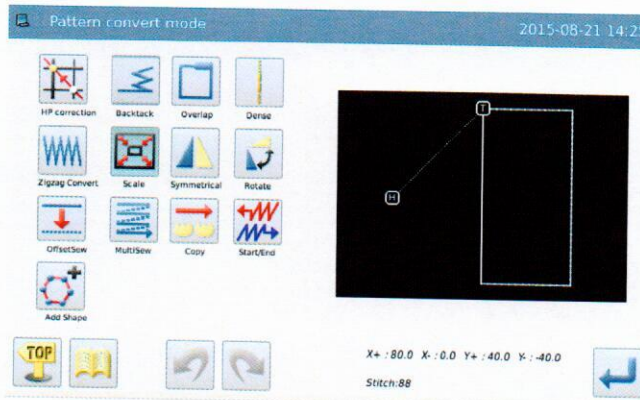
3.11 Scale Up/ Down

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



① Enter Backstitch Transformation Mode

- ▶ Enter pattern transformation mode
- ▶ Press 
- ▶ Press  for confirmation



② Set Method for Scaling Pattern

▶ Method



: Fixed Stitch

Number



: Fixed Stitch

Interval

Select “Fixed Stitch Interval” here.

- ▶ Use number keys or direction keys to set the scale rate in X and Y directions.

▶ Select Base Point



: Set by User



: Center of Pattern

(Note: as for the machines made by Huamei Co., not like those of other companies, the center of pattern is determined without considering the feed before sewing.)



: Origin

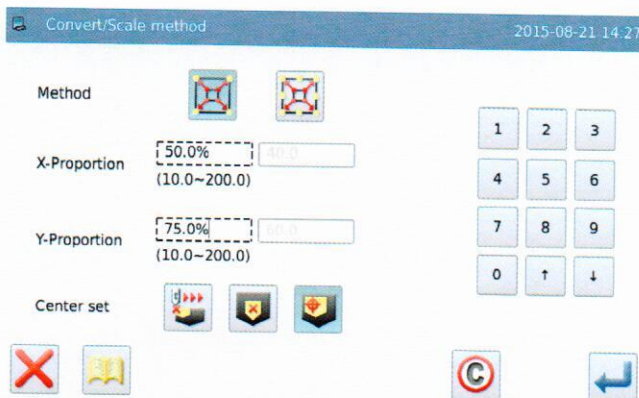
Please select “Pointed by User” Press for confirmation.


③ Set the Position of Base Point

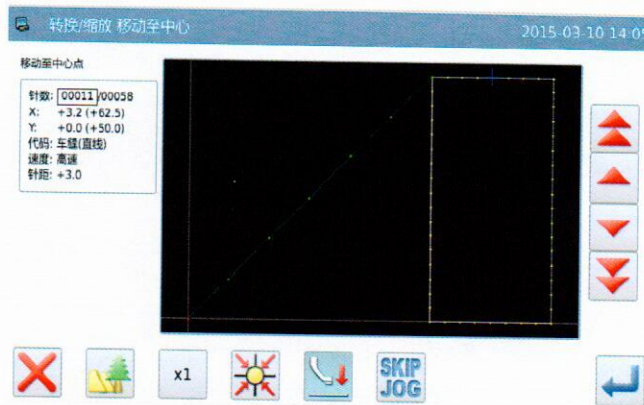
- ▶ Move needle to position A.

- ▶ Press for confirmation

Note: If user doesn't use the 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 the needle to A' (base point position).


► Press  for confirmation


Note: If the base point is on the pattern, please press

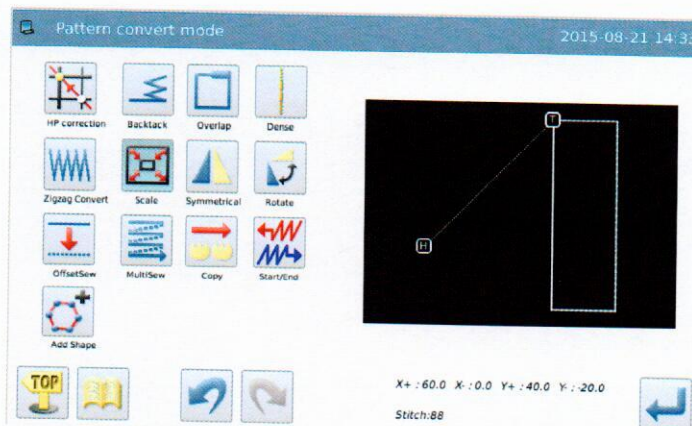
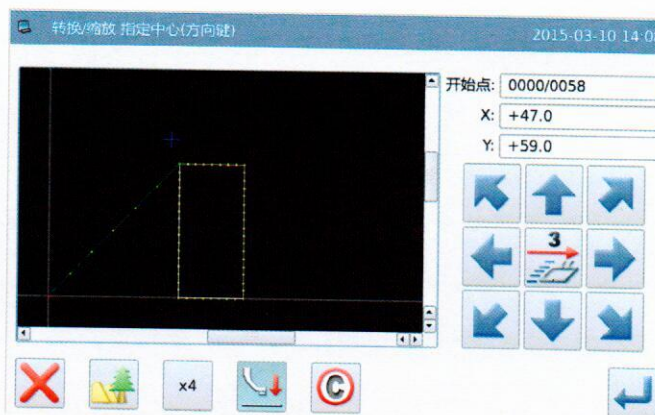
 directly.

⑤ Confirm the Pattern after Change

► Finish Transformation Mode.

Press  to return to the interface for saving the transformed 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

If the scale rates in X and Y directions are not the same, the pattern after the

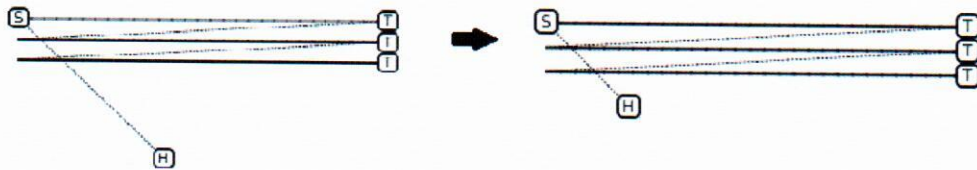
transformation will become an ellipse or an elliptic arc.

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

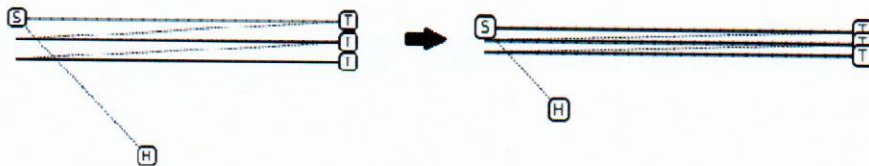
For scaling up/down the reentry multi-sewing or the off-side sewing, the following items can be changed and the shape after transformation can be controlled by setting up parameters (“Scaling Parameters of Multi-sewing”).

For example, the reentry multi-sewing pattern A (distance at 3mm) is scaled up for 200% in X direction and 200% in Y direction.

(1) Distance Changed:

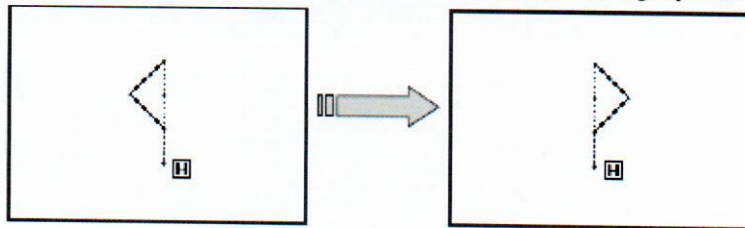


(2) Distance Changed





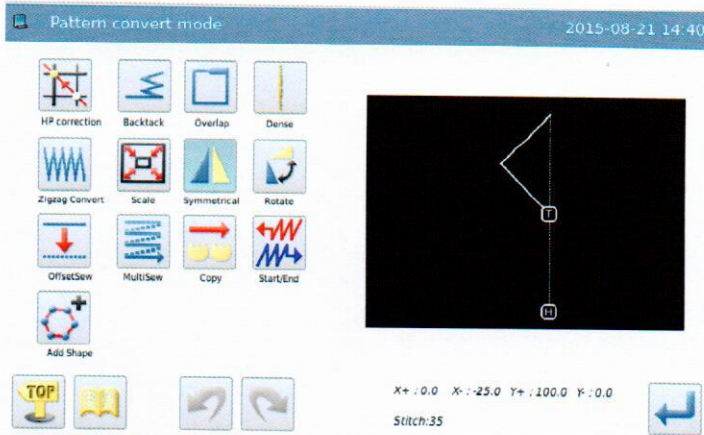
3.12 Mirror

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





① Enter Mirror Mode


- ▶ Enter pattern transfer mode
- ▶ Press  .
- ▶ Press  for confirmation





② Set the Method of Mirror

- ▶ Original Figure
-  : Delete the original figure

-  : Keep the original figure
- (Select "Delete the original figure" here.)

- ▶ Mirror Direction
-  : In horizontal (X) direction.

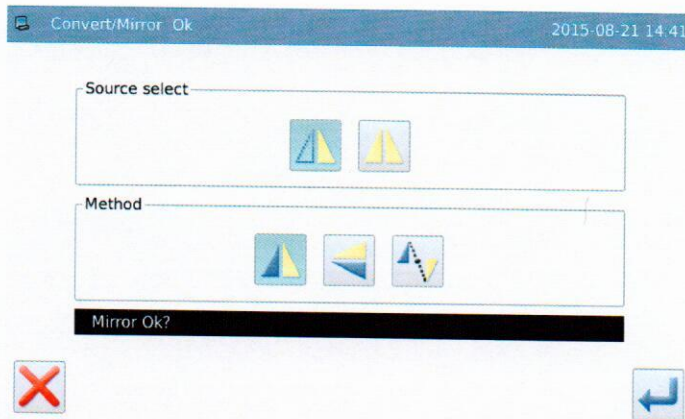
-  : In vertical (Y) direction.



-  : In diagonal (XY) direction
- (Select "In diagonal (XY) direction" here.)

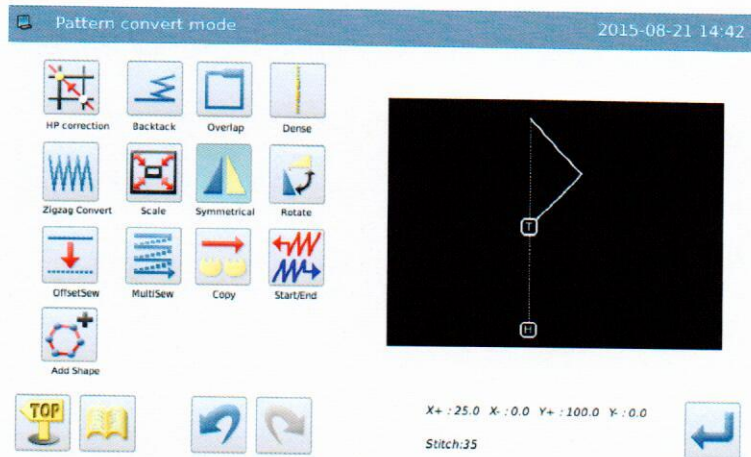
- ▶ Press  for confirmation.

③ Confirm the Pattern after Change

- ▶ Finish Transformation Mode.

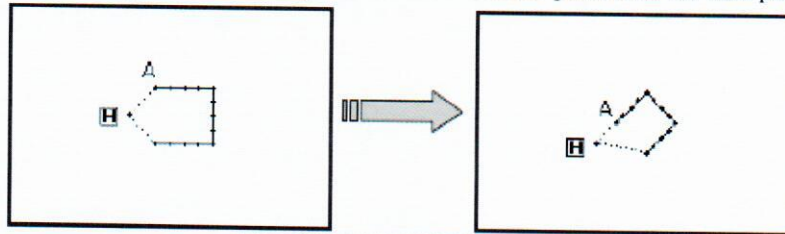


Press  to return to the interface for saving the transformed data. The system will return to standard interface after the data is saved. (Pressing  is to withdraw the last modification and to return to previous point.)






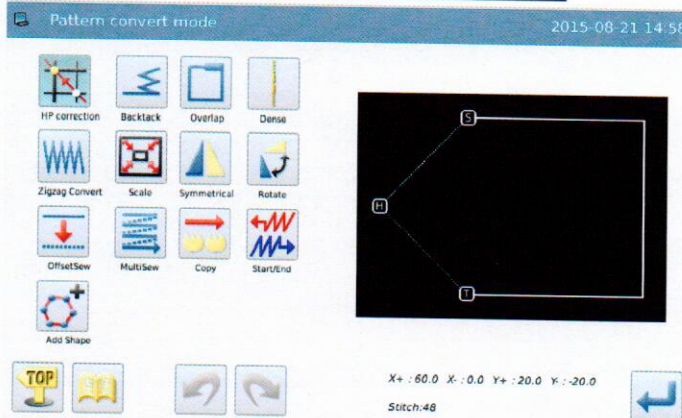
3.13 Rotation

[Example]: Rotate the pattern for 45 degrees leftwards with the point A as the base point.



① Enter Rotation Mode


- ▶ Enter  pattern transformation mode.
- ▶ Press .
- ▶ Press  for confirmation.



② Select Method of Rotation

- ▶ Select Rotating Direction


 : Left


 : Right

(Select “Left” here.)

- ▶ Set Rotating Angle
Use number keys (set at 45.0 here).

- ▶ Select the base point

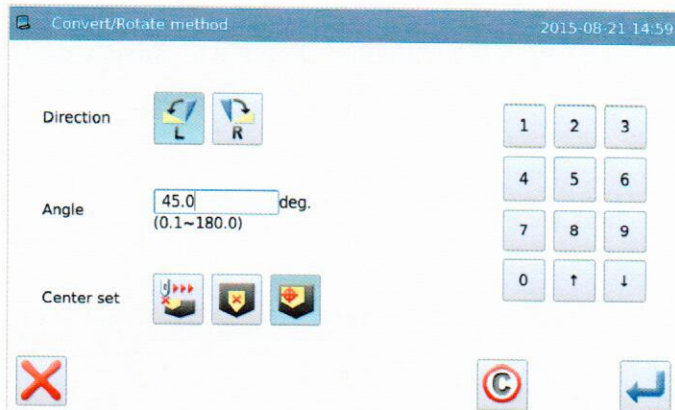
 : Set by User

 : Center of Pattern

 : Origin


(Select “Set by User” here.)


- ▶ Press  for confirmation.

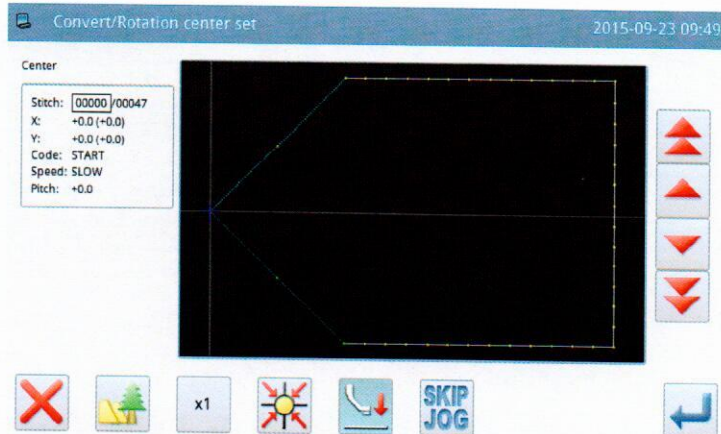


③ Set the Position of Base Point

- ▶ Move the needle to point A.


- ▶ Press  for confirmation.

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



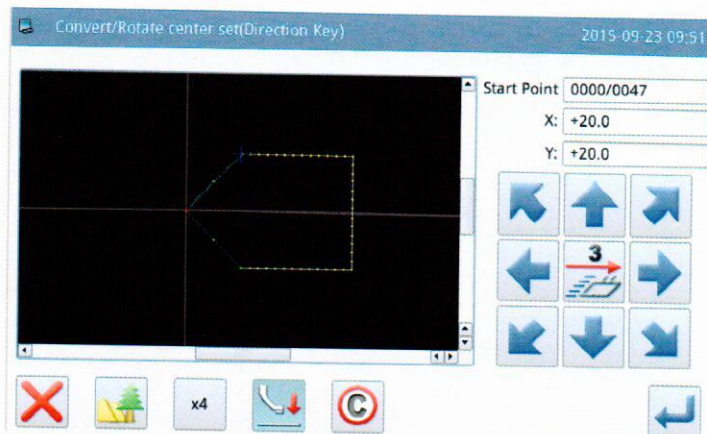
④ Set the Position of Base Point (Details)

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

▶ Press  for confirmation.

Note: If the base point is on the pattern, please press

 directly.





⑤ Confirm the Rotation

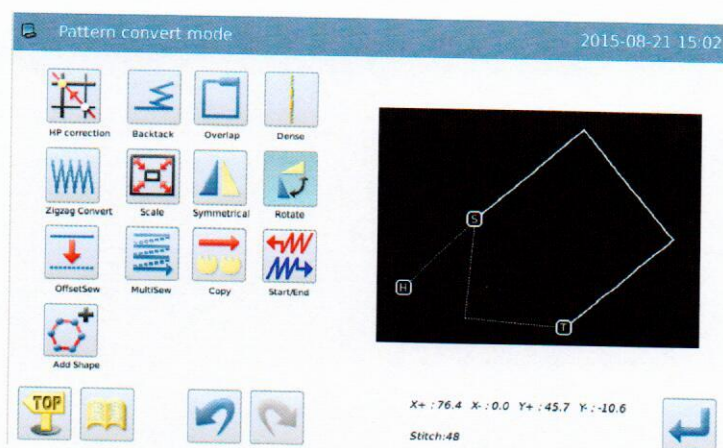
▶ Press  for confirmation.

⑥ Confirm the Pattern after Change

▶ Finish Transformation Mode.

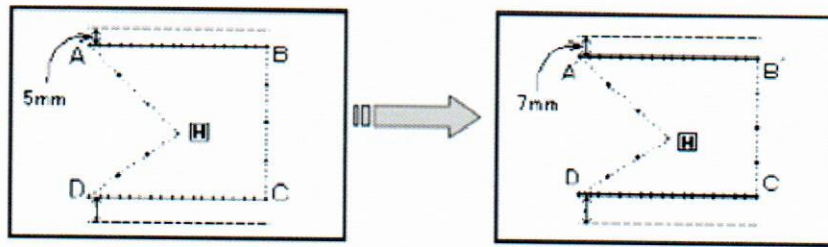
Press  to return to the interface for saving the transformed data. The system will return to standard interface after the data is

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





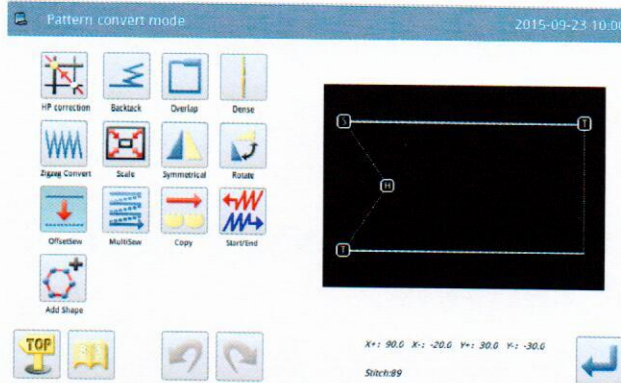
3.14 Off-side Transformation

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






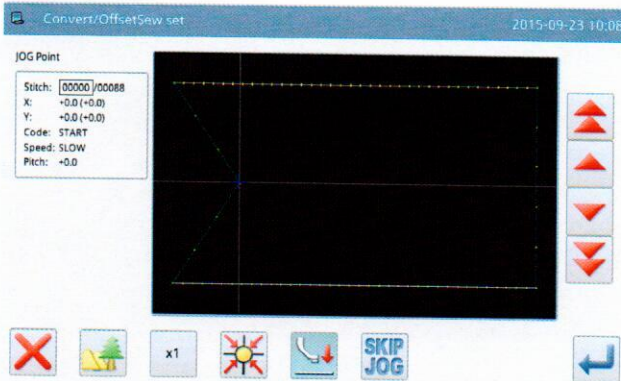
① Enter Off-side Transformation Mode

- ▶ Enter pattern transformation mode.
- ▶ Press .
- ▶ Press  for confirmation.






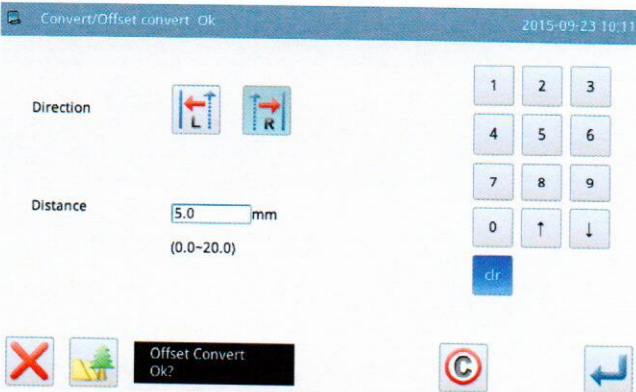
② Select the Off-side Section for Transformation

- ▶ Press   to select it.
(The inputted numbers will be displayed in order.)
- ▶ Press  for confirmation.





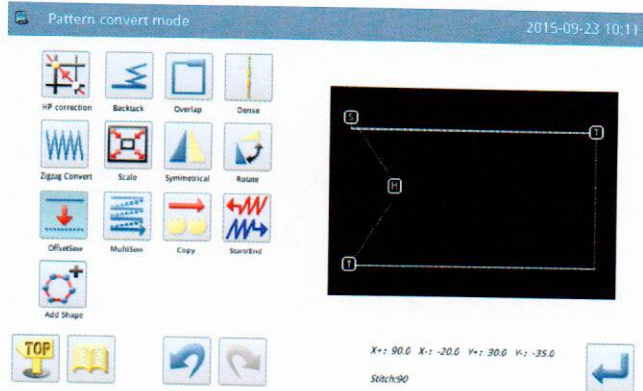
③ Select the Method of Off-side Transformation

- ▶ Off-side Direction. (Select "Right" here.)
: Left
: Right
- ▶ Set deviation distance. (Set as 7mm here.)
- ▶ Press  for confirmation



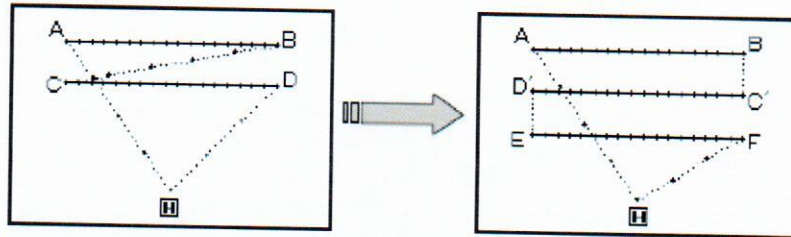
④ **Confirm the Pattern after Change**
 ► **Finish Transformation Mode**




Press  to return to the interface for saving the transformed 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.)

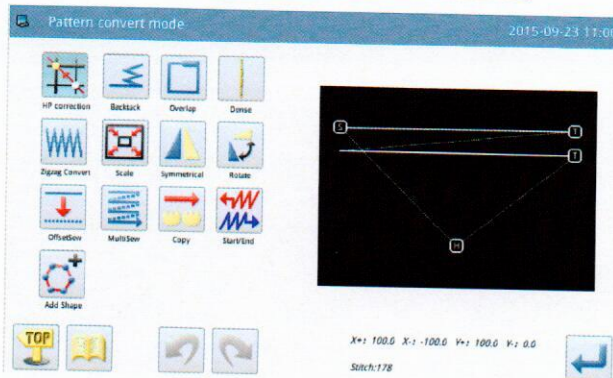


3.15 Reentry Multi-sewing



[Example]: Transform the twice multi-sewing (Feed) ABCD to the three-time reentry multi-sewing (Feed) ABC'D'EF.



- ① **Enter Reentry Multi-sewing Mode**
- Enter  pattern transformation mode
 - Press  .
 - Press  for confirmation

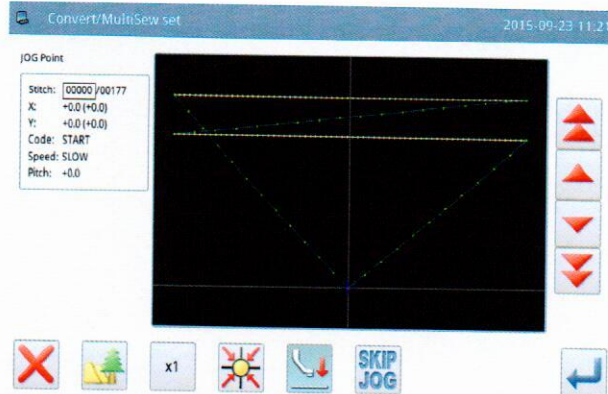


② Select the Multi-sewing Section for Transformation

▶ Press   to select it.


(The inputted numbers will be displayed in order)


▶ Press  for confirmation





③ Set the Method for Multi-sewing Transformation

▶ Select multi-sewing type

 : Cocurrent Multi-sewing (Feed)

 : Reverse Multi-sewing (Feed)

 : Cocurrent Multi-sewing (Sewing)

 : Reverse Multi-sewing (Sewing)

(Select "Reverse Multi-sewing (Feed)" here.)

▶ Select Direction. (Select "Right" here.)

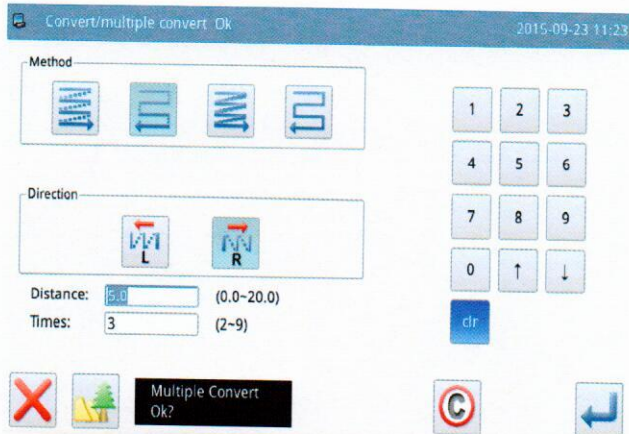
 : Left

 : Right

▶ Set deviation Distance at 5mm



▶ Set the Times at 3

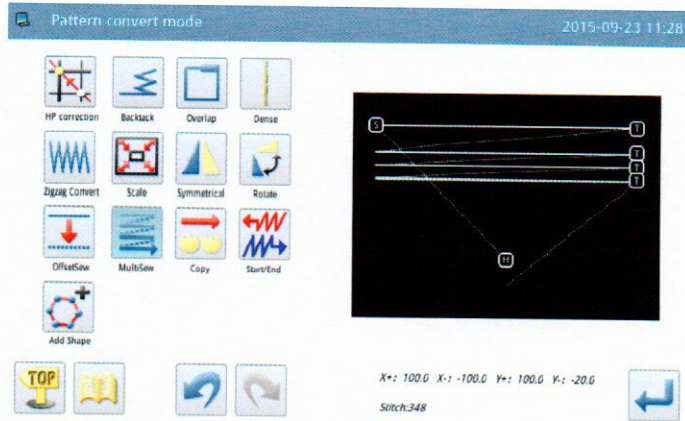
▶ Press  for confirmation



④ **Confirm the Pattern after Change**



► Finish Transformation Mode.

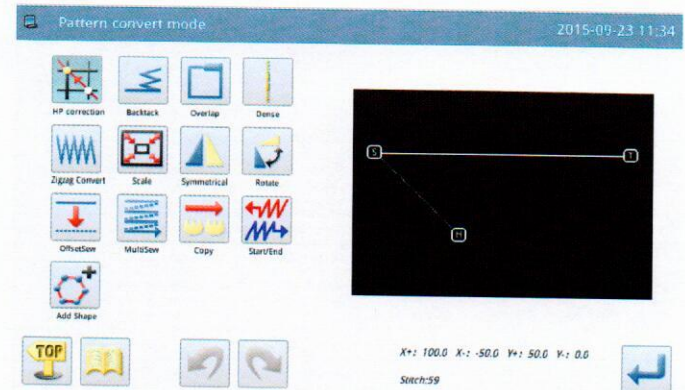
Press  to return to the interface for saving the transformed data. The system will return to standard interface after the data is saved. (Pressing  is to withdraw the last modification and to return to previous point.)






3.16 Reproduction

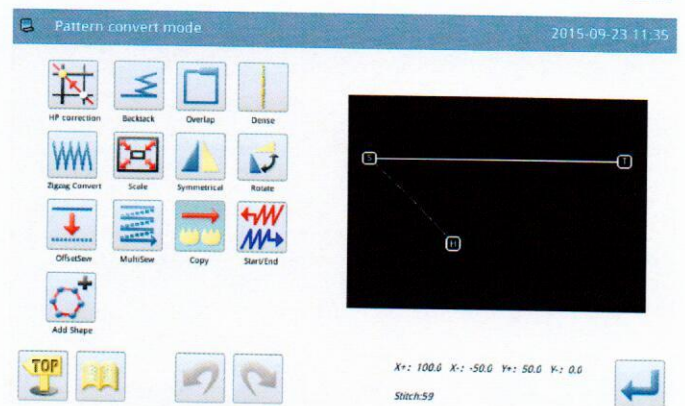
① **Enter Reproduction Mode**

- Enter reproduction mode.
- Press .
- Press  for confirmation.




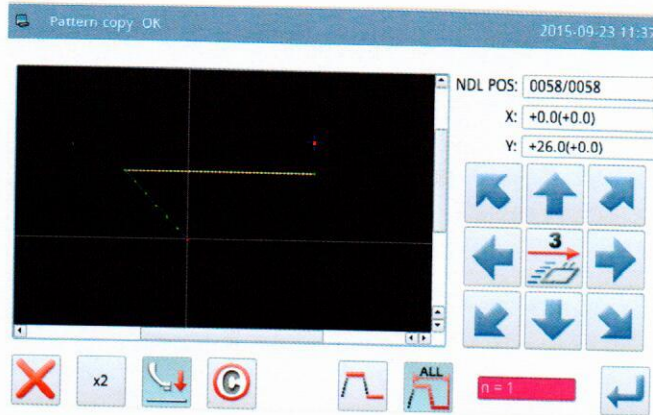
② **Set the Start Point of Reproduction**

- Use  &  to move the needle to the position needing reproduction.
- Press  for confirmation.





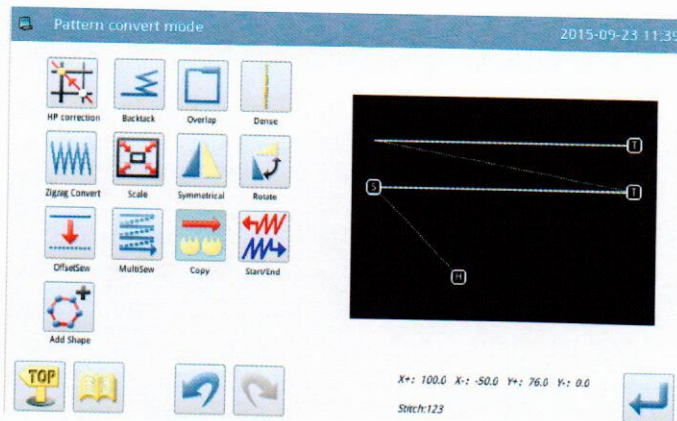
③ Set the Position for Reproduction

- ▶ Use direction keys to move the needle to the position needing reproduction.
- ▶ Press  for confirmation.





④ Confirm the Pattern after Change

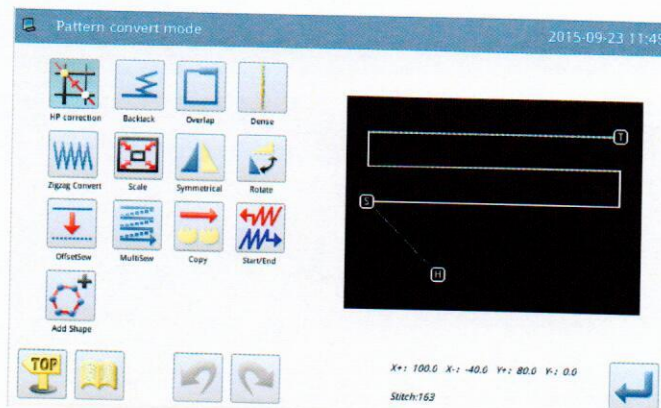
- ▶ Finish Reproduction.
- Press  to return to the interface for saving the transformed data. The system will return to standard interface after the data is saved. (Pressing  is to withdraw the last modification and to return to previous point.)






3.17 Reverse Direction

① Enter Reverse Direction Mode

- ▶ Enter reverse direction mode
- ▶ Press .
- ▶ Press  for confirmation.





② Set the Start Point for Direction Reverse

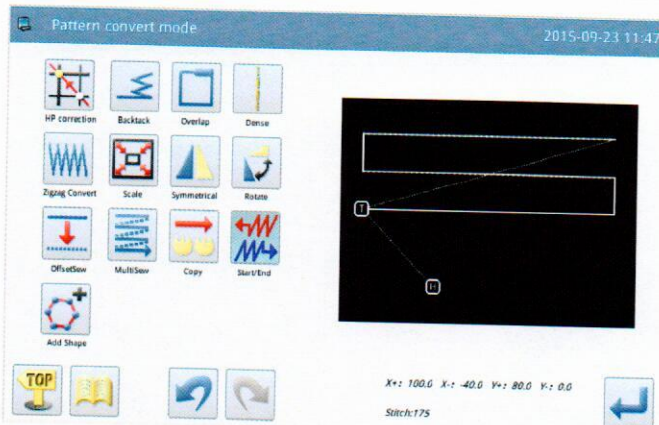
- ▶ Use  &  to move the needle to the position needing direction reverse.
- ▶ Press  for confirmation.



③ Confirm the Pattern after Change

- ▶ Finish Direction Reverse.

Press  to return to the interface for saving the transformed 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.)



3.18 Add Figure

The Patterns converted from non-standard formats (made up of point sewing) are restricted from making multi-sewing, backstitch sewing and zigzag sewing, as well as changing stitch interval, but through adding figure these restrictions can be removed. Smooth method and pointed method can be used match smooth patterns and pointed patterns respectively, but not absolutely. In the right picture, stitch interval refers to that of sewing after be converted from point sewing.

