

*Barudan*

## Cap frame (Shaft-less type) Installation manual

**\*\* Model : XT-CAII / XT-CBII / XT-CII / XY-CII / XS-C \*\***



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## 1. Wide cap frame

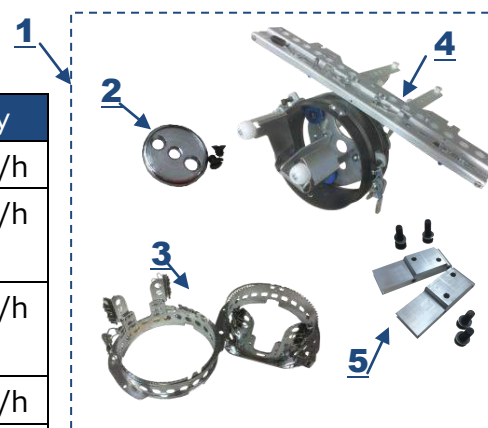
Thank you very much for your purchasing Barudan cap frame (shaft-less type).  
As soon as possible you received the products, please check the parts included.

Here are the components of the cap frame set and the cap frame setting jig a'ssy.  
The parts numbers and the names are different according to the machines model used with.

### Wide Cap frame set

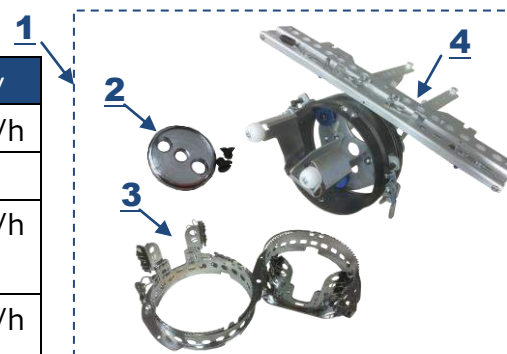
#### For XT-CAII

| No.                      | Part No. | Description                                      | Q'ty    |
|--------------------------|----------|--|---------|
| 1                        | LA733000 | Wide cap frame set (CAII)                        | 1 set/h |
| 2                        | KX270442 | Needle plate attachment for cap frame            | 1 set/h |
| 3                        | LA730022 | Cap Change Frame Assy (Single Band TYPE) 4 Clips | 2 set/h |
| 4                        | LA733010 | Cap frame Assy (CAII)                            | 1 set/h |
| LA733010 includes below; |          |  |         |
| 5                        | LA733060 | Lock attachment set                              | 1set/h  |



#### For XT-CBII

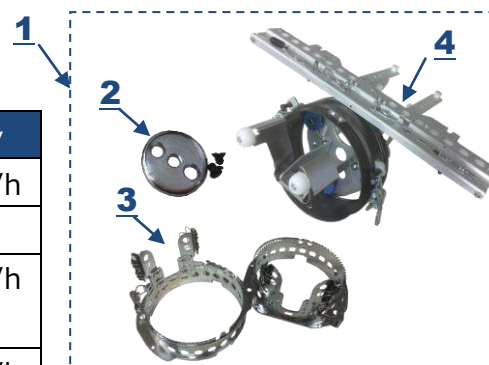
| No.                      | Part No. | Description                                      | Q'ty    |
|--------------------------|----------|--|---------|
| 1                        | LA732290 | Wide cap frame set (CBII)                        | 1 set/h |
| LA732290 includes below: |          |  |         |
| 2                        | KX270442 | Needle plate attachment for cap frame            | 1 set/h |
| 3                        | LA730022 | Cap Change Frame Assy (Single Band TYPE) 4 Clips | 2 set/h |
| 4                        | LA732690 | Cap frame ASSY (CBII)                            | 1 set/h |



## For XT-CII (single-bridge machines)

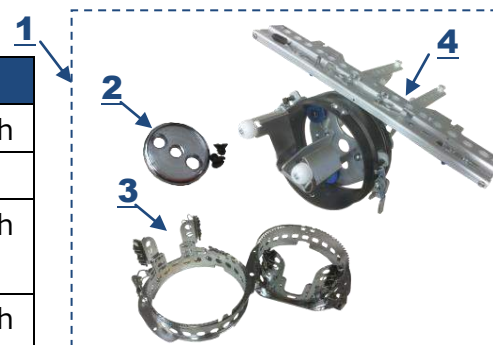
## For XY-CII (compact machines)

| No.                      | Part No. | Description                                      | Q'ty    |
|--------------------------|----------|--|---------|
| 1                        | LA732801 | Wide cap frame set (XY-C)                        | 1 set/h |
| LA732801 includes below: |          |  |         |
| 2                        | KX270442 | Needle plate attachment for cap frame            | 1 set/h |
| 3                        | LA730022 | Cap Change Frame Assy (Single Band TYPE) 4 Clips | 2 set/h |
| 4                        | LA732411 | Cap frame ASSY (XY-C)                            | 1 set/h |



## For XS-C (more than 12 heads)

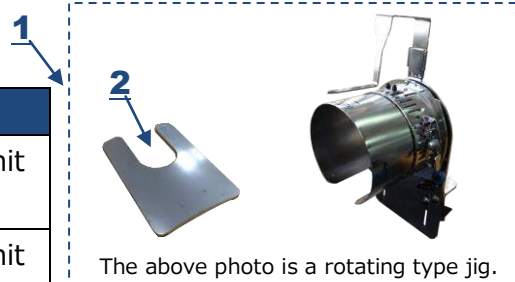
| No.                      | Part No. | Description                                      | Q'ty    |
|--------------------------|----------|--|---------|
| 1                        | LA732270 | Wide cap frame set (XS-C)                        | 1 set/h |
| LA732270 includes below: |          |  |         |
| 2                        | KX270442 | Needle plate attachment for cap frame            | 1 set/h |
| 3                        | LA730022 | Cap Change Frame Assy (Single Band TYPE) 4 Clips | 2 set/h |
| 4                        | LA732390 | Cap frame ASSY (XS-C)                            | 1 set/h |



## Cap frame setting jig a'ssy (wide type)

## Fixed type setting jig

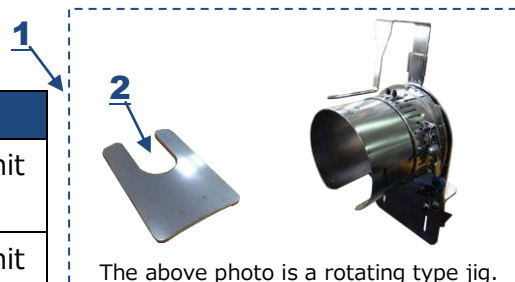
| No. | Part No. | Description                      | Q'ty       |
|-----|----------|----------------------------------|------------|
| 1   | LA730090 | Cap frame setting jig A'ssy [OT] | 1 set/unit |
| 2   | LA732710 | Needle plate gap jig (P1.5)      | 1 set/unit |



The above photo is a rotating type jig.

## Rotating type setting jig

| No. | Part No. | Description                                    | Q'ty       |
|-----|----------|--|------------|
| 1   | LA732700 | Cap frame setting jig A'ssy [OT Rotating type] | 1 set/unit |
| 2   | LA732710 | Needle plate gap jig (P1.5)                    | 1 set/unit |



The above photo is a rotating type jig.

## 2. Semi-wide cap frame

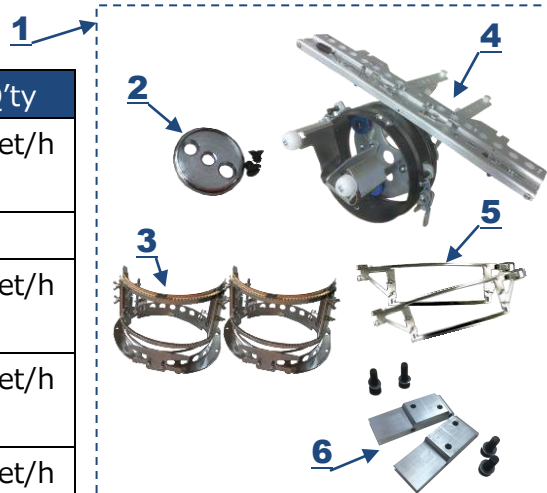
Thank you very much for your purchasing Barudan cap frame (shaft-less type).  
As soon as possible you received the products, please check the parts included.

Here are the components of the cap frame set and the cap frame setting jig a'ssy.  
The parts numbers and the names are different according to the machines model used with.

### Semi-wide Cap frame set

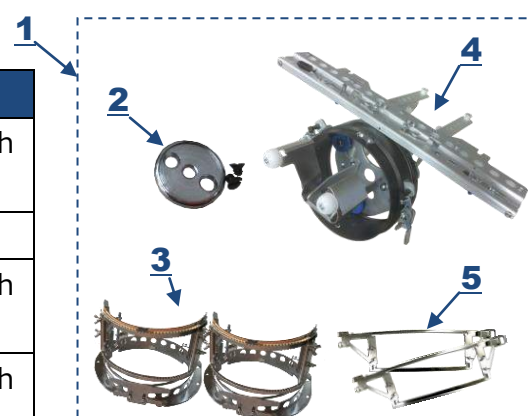
#### XT-CAII

| No.                      | Part No. | Description                           | Q'ty    |
|--------------------------|----------|---------------------------------------|---------|
| 1                        | LA733100 | Semi-wide cap frame set (CAII)        | 1 set/h |
| LA733000 includes below: |          |                                       |         |
| 2                        | KX270442 | Needle plate attachment for cap frame | 1 set/h |
| 3                        | LA730930 | Semi Cap Change Frame Assy 120        | 2 set/h |
| 4                        | LA733010 | Cap frame Assy (CAII)                 | 1 set/h |
| 5                        | LA730960 | Semi-wide 180 parts set               | 2 set/h |
| LA733010 includes below  |          |                                       |         |
| 6                        | LA733060 | Lock attachment set                   | 1set/h  |



#### XT-CBII

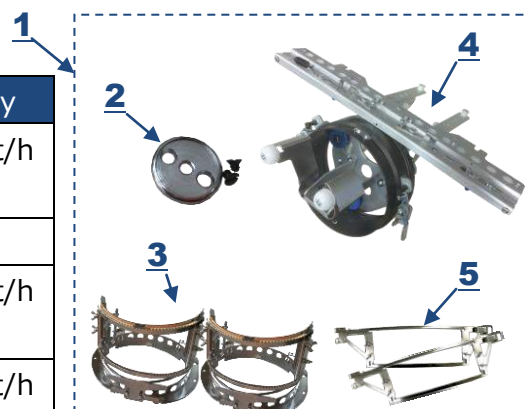
| No.                      | Part No. | Description                           | Q'ty    |
|--------------------------|----------|---------------------------------------|---------|
| 1                        | LA732960 | Semi-wide cap frame set (CBII)        | 1 set/h |
| LA732960 includes below: |          |                                       |         |
| 2                        | KX270442 | Needle plate attachment for cap frame | 1 set/h |
| 3                        | LA730930 | Semi Cap Change Frame Assy 120        | 2 set/h |
| 4                        | LA730960 | Semi-wide 180 parts set               | 2 set/h |
| 5                        | LA732690 | Cap frame Assy (CBII)                 | 1 set/h |



## For XT-CII (single-bridge machines)

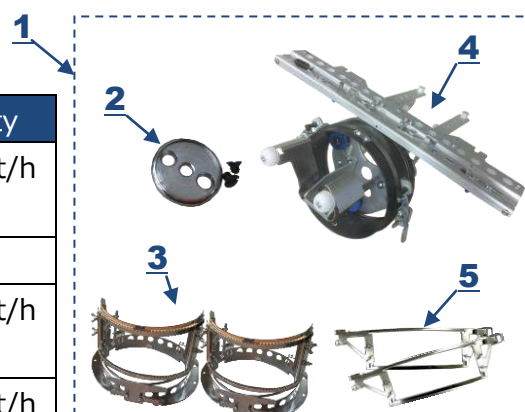
## For XY-CII (compact machines)

| No.                      | Part No. | Description                           | Q'ty    |
|--------------------------|----------|---------------------------------------|---------|
| 1                        | LA732940 | Semi-wide cap frame set (XY-C)        | 1 set/h |
| LA732801 includes below: |          |                                       |         |
| 2                        | KX270442 | Needle plate attachment for cap frame | 1 set/h |
| 3                        | LA730930 | Semi Cap Change Frame Assy 120        | 2 set/h |
| 4                        | LA730960 | Semi-wide 180 parts set               | 2 set/h |
| 5                        | LA732411 | Cap frame Assy (XY-C)                 | 1 set/h |



## For XS-C (more than 12 heads)

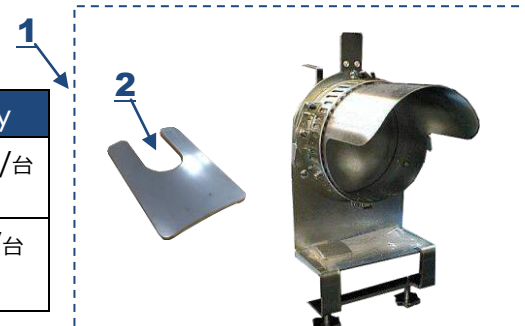
| No.                      | Part No. | Description                           | Q'ty    |
|--------------------------|----------|---------------------------------------|---------|
| 1                        | LA732950 | Semi-wide cap frame set (XS-C)        | 1 set/h |
| LA732950 includes below: |          |                                       |         |
| 2                        | KX270442 | Needle plate attachment for cap frame | 1 set/h |
| 3                        | LA730930 | Semi Cap Change Frame Assy 120        | 2 set/h |
| 4                        | LA730960 | Semi-wide 180 parts set               | 2 set/h |
| 5                        | LA732390 | Cap frame Assy (XS-C)                 | 1 set/h |



## Cap frame setting jig a'ssy (semi-wide type)

## Fixed type setting jig

| No. | Part No. | Description                               | Q'ty    |
|-----|----------|---|---------|
| 1   | LA733090 | Semi-wide cap frame setting jig assy [OT] | 1 set/台 |
| 2   | LA732710 | Needle plate gap jig (P1.5)               | 1set/台  |



\* There is no Rotating type setting jig for Semi-wide cap frame.

### 3. Before mounting Cap frame

The following checks and settings are needed before mounting the cap frame to the embroidery machine.

- 1) Please be careful so that the clamp pin of cap frame does not come in contact with the bed cover with using either of the following functions.

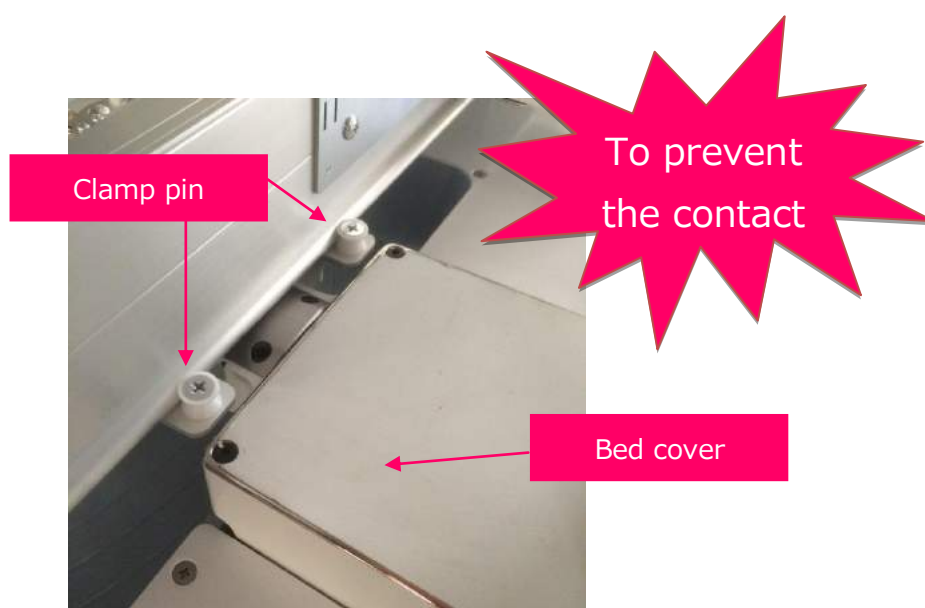
**Purpose** In case the frame of the embroidery machine moved to the unintended direction by operators error, the cap frame might be damaged.

**Recommended functions of the setting to prevent the contact/damage**

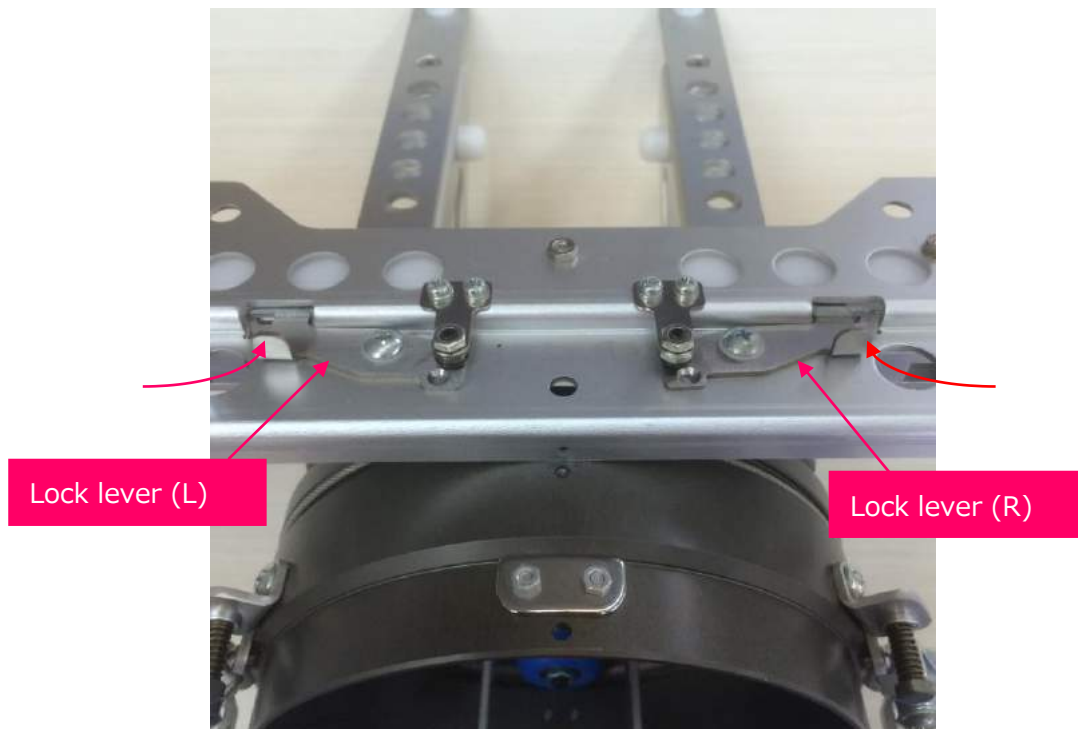
- ① Setting with Sub-soft limit. (Refer to Operation Manual, P.7 19-6 Sub-soft limit setting)
- ② Setting of #25 Front limit of MC

Notice) In order to enable #25 Front limit setting of MC, the special operation is necessary. Please ask the distributor for the change of the setting.

| Model   | Machine type                  | Default | Setting for Cap frame |
|---------|-------------------------------|---------|-----------------------|
| XT-CAII | Table top single head machine | 100     | 20                    |
| XT-CBII | Table top single head machine | 210     | 82                    |
| XT-CII  | Single bridge type            | 98      | 98                    |
| XY-CII  | Compact machine               | 98      | 98                    |
| XS-C    | More than 12 heads            | 330     | 90                    |

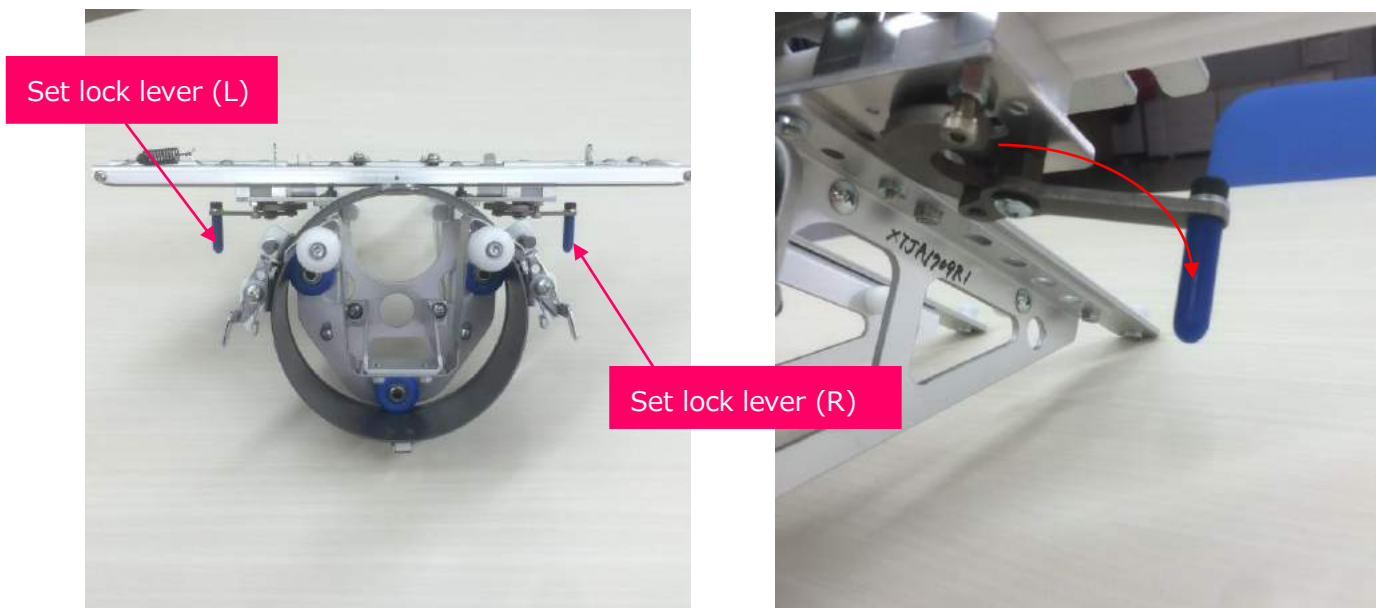


- 2) Please see 2 lock levers of Cap frame main body a'ssy are on the lock position.  
When the cap frame has been removed, 2 lock levers should be on the lock position to prevent the wire from coming off.



Cap frame main body A'ssy

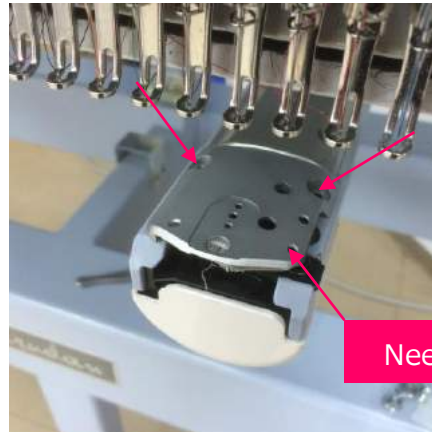
- 3) Please make 2 set lock levers under the cap frame main body a'ssy in the situation they have been pulled frontward.



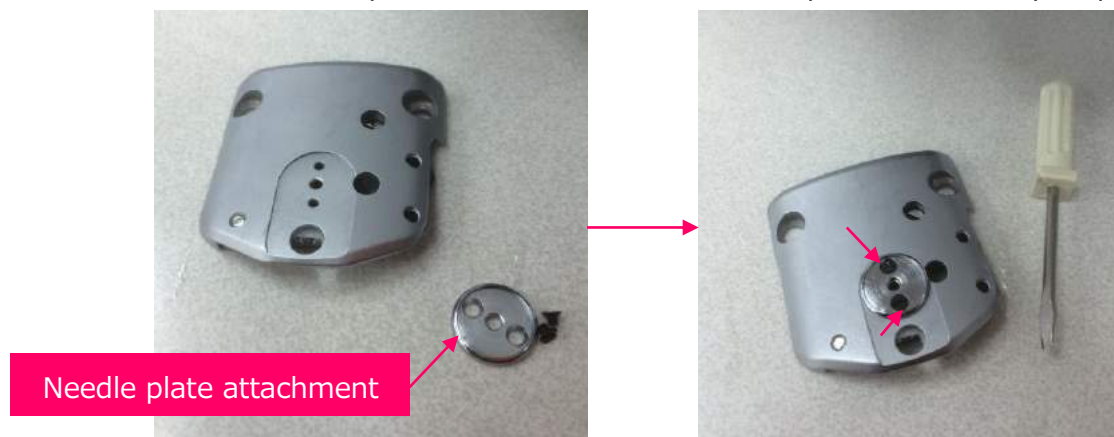


## 4. How to mount the cap frame

- 1) Fix the "needle plate attachment" included in a cap frame set on the needle plate as below;
  - a. Loosen 2 fixed screws, take them out and remove the needle plate from the embroidery machine.

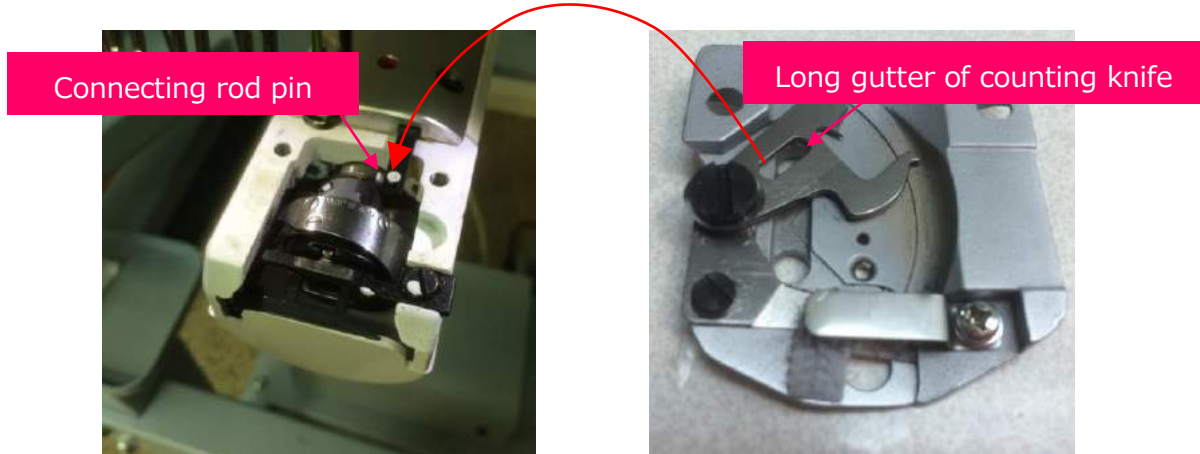


- b. Mount the needle plate attachment on the needle plate and fix it by 2 special screws.



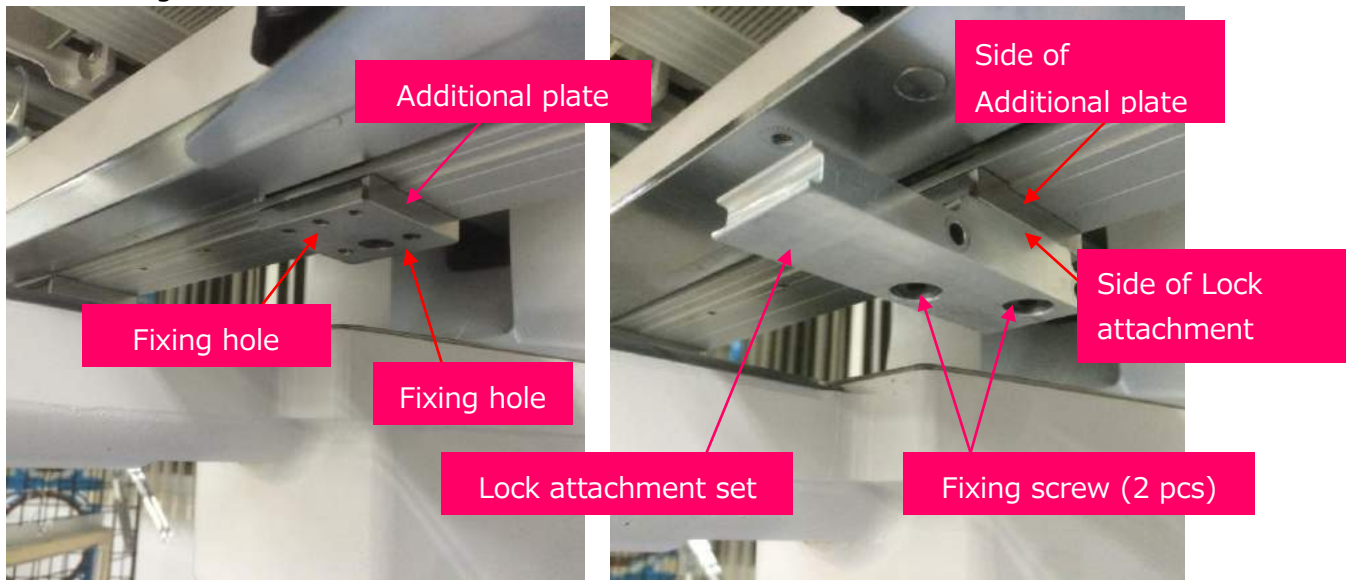
- c. Put the needle plate back to the original position and tighten 2 fixing screws.

Notice) Please put the connecting rod pin into the long gutter of counting knife certainly when putting the needle plate back to the original position.





- 2) Only XT-CAII needs this procedure. For other models, please go to the next procedure. XT-CAII is shipped from the factory on the status the additional plate has been fixed under the frame of the embroidery machine as the pictures below. Before using the cap frame, the lock attachment set in the box of Cap frame main body a'ssy (CAII) must be fixed. This is not needed to be removed on using the frames for finished goods.



Additional plate has been fixed.

Lock attachment has been fixed.

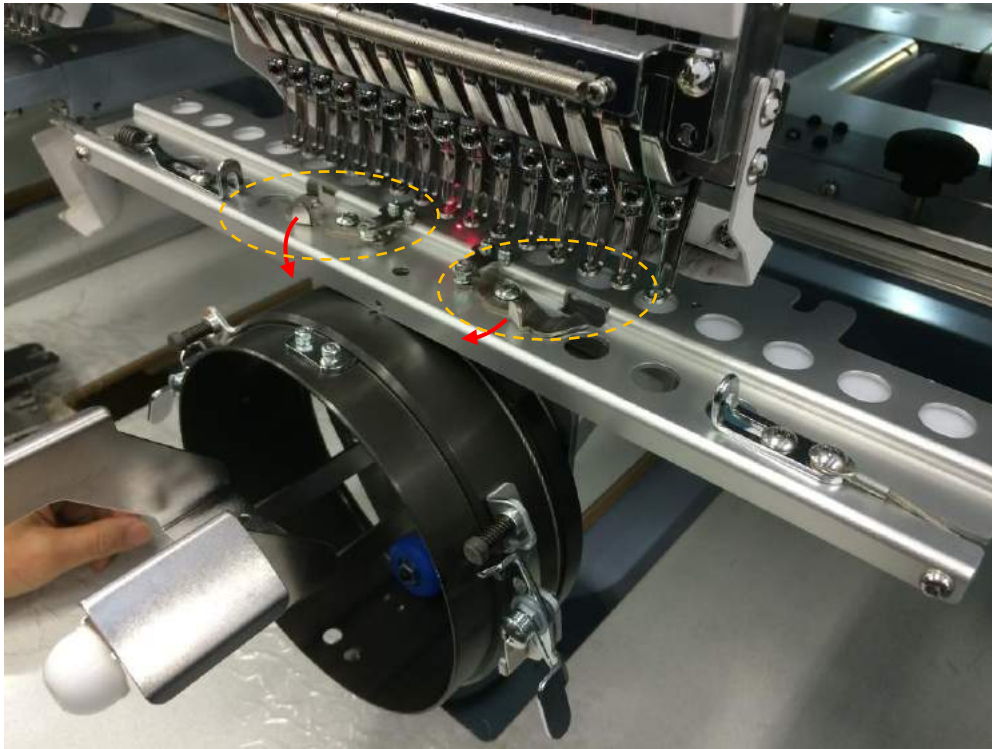
- a. Set the lock attachment set to the additional plate of the frame of the embroidery machine and tighten 2 fixing screws tentatively.

Please pay attention that the lock attachment sets are for right and for left.



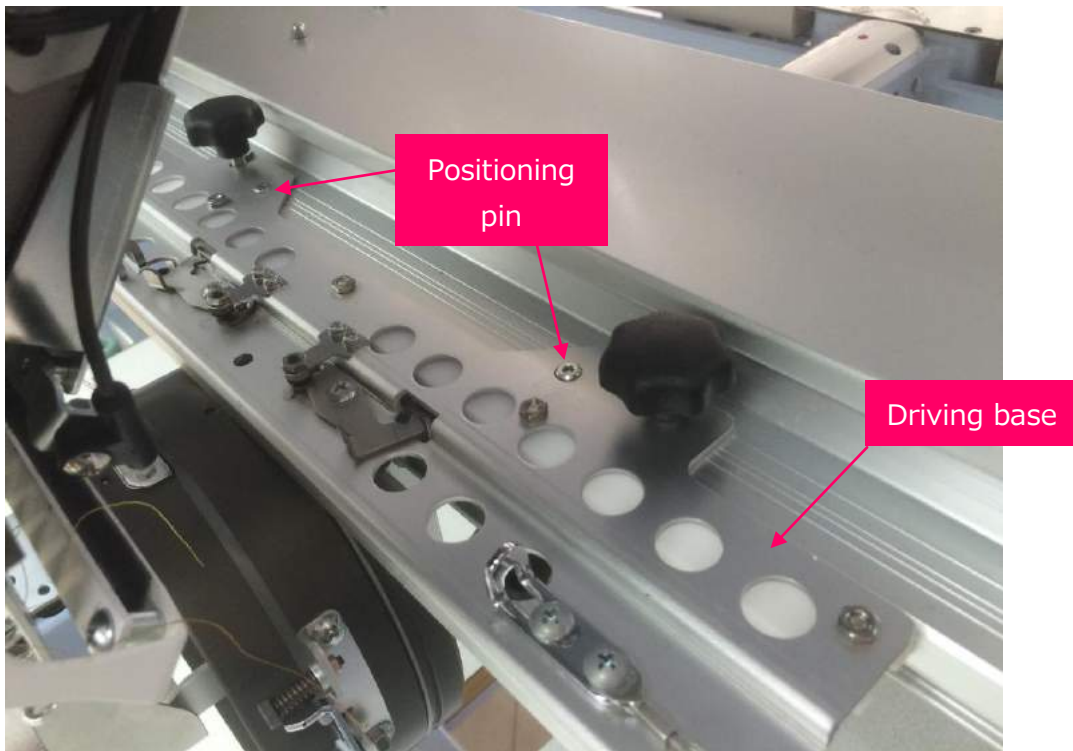
- b. Align the side of additional plate and the lock attachment set horizontally. On the status the lock attachment set has been pulled frontward, tighten 2 fixing screws.

- 3) Slide the cap frame main body a'ssy on the cylinder bed as the picture below.  
Pull 2 lock levers to prevent the wire from coming off frontward to the place "click" sounds to cancel the lock.

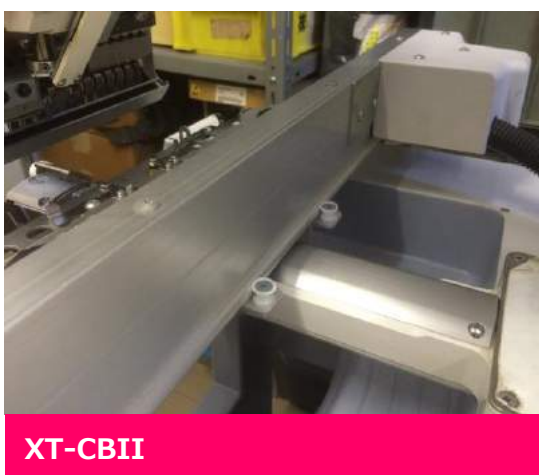
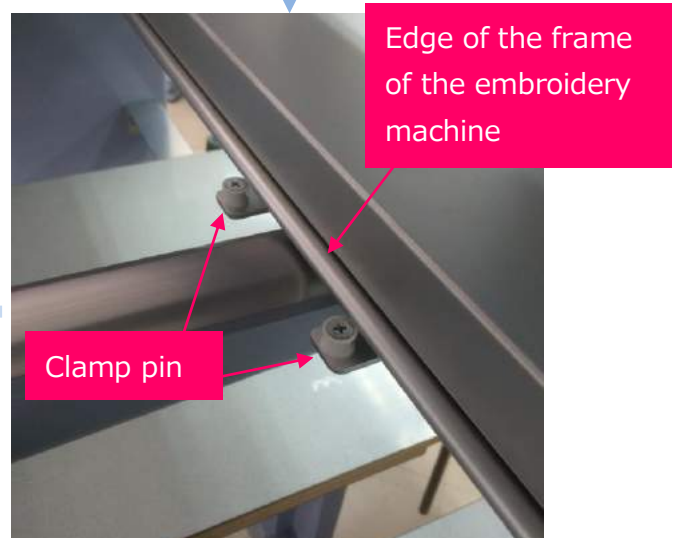
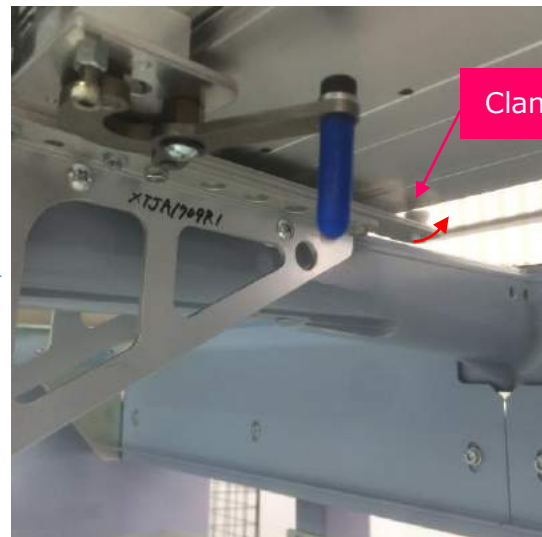
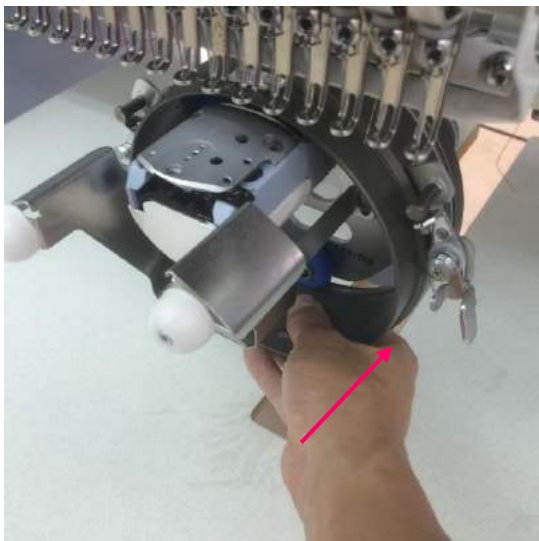


- 4) Put the driving base of the cap frame main body a'ssy on the frame of the embroidery machine.

On this time, the positioning pin must be inserted into the hole of driving base.



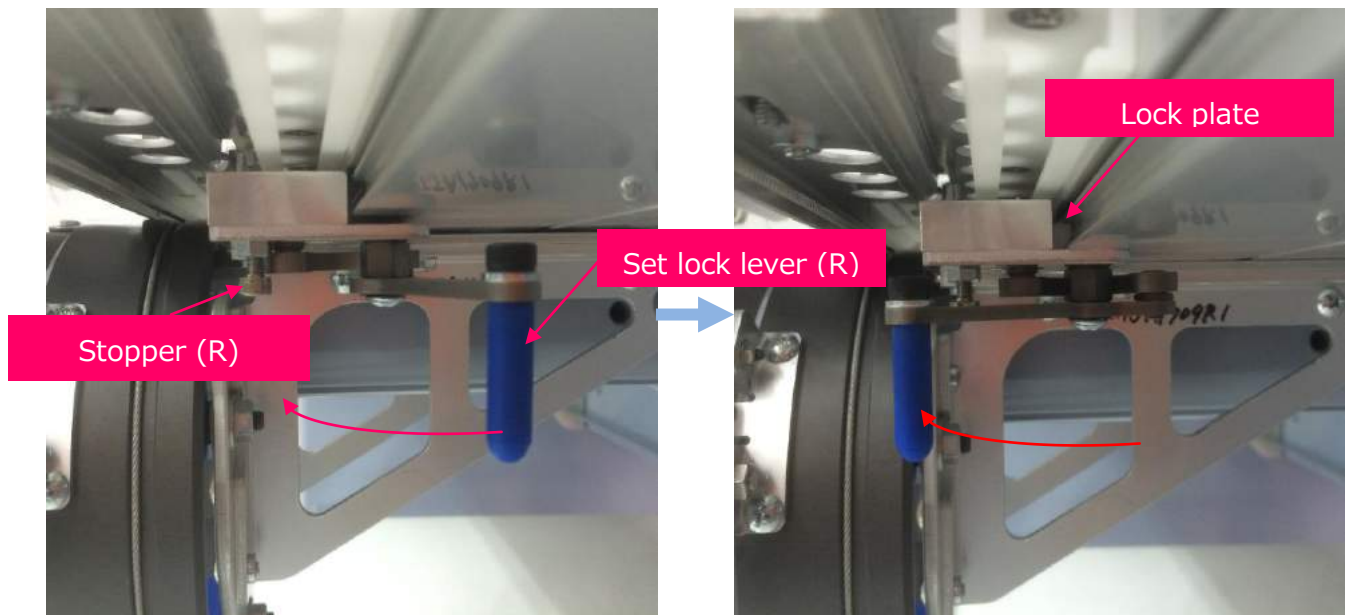
- 5) Grasp the lower side of the cap frame main body a'ssy by hand, push it backward (to the embroidery machine) and hang the clamp pin on the rear edge of the frame.



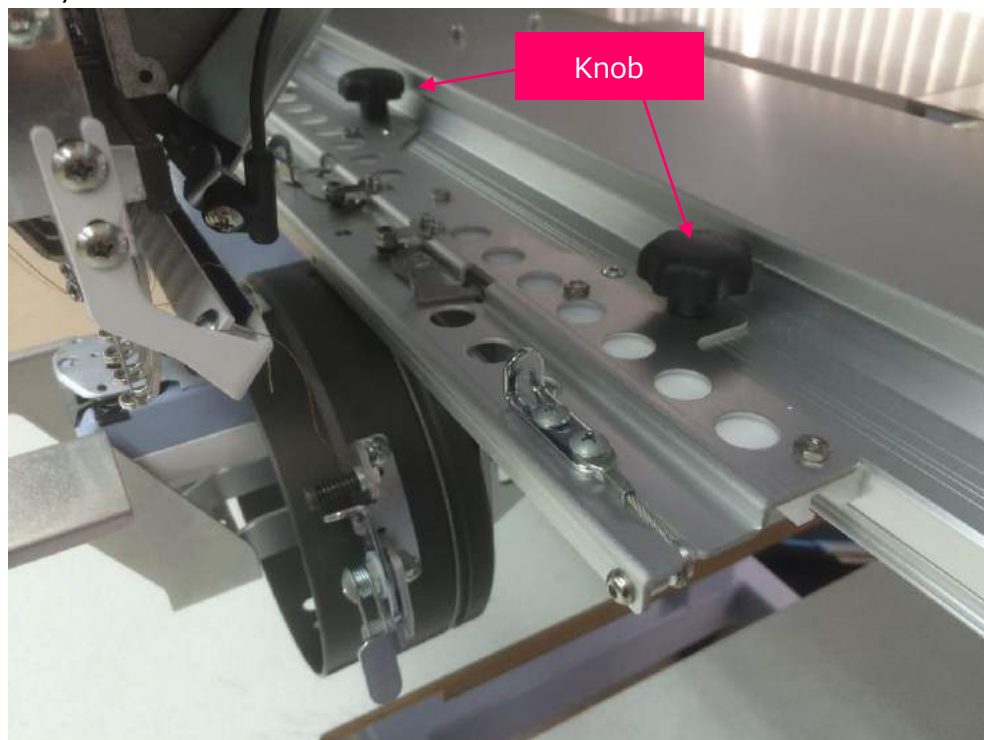


- 6) Pull 2 set lock lever frontward to the position they hits the stopper.

This procedure inserts the frame between the clamp pin and the lock plate of the cap frame main body a'ssy

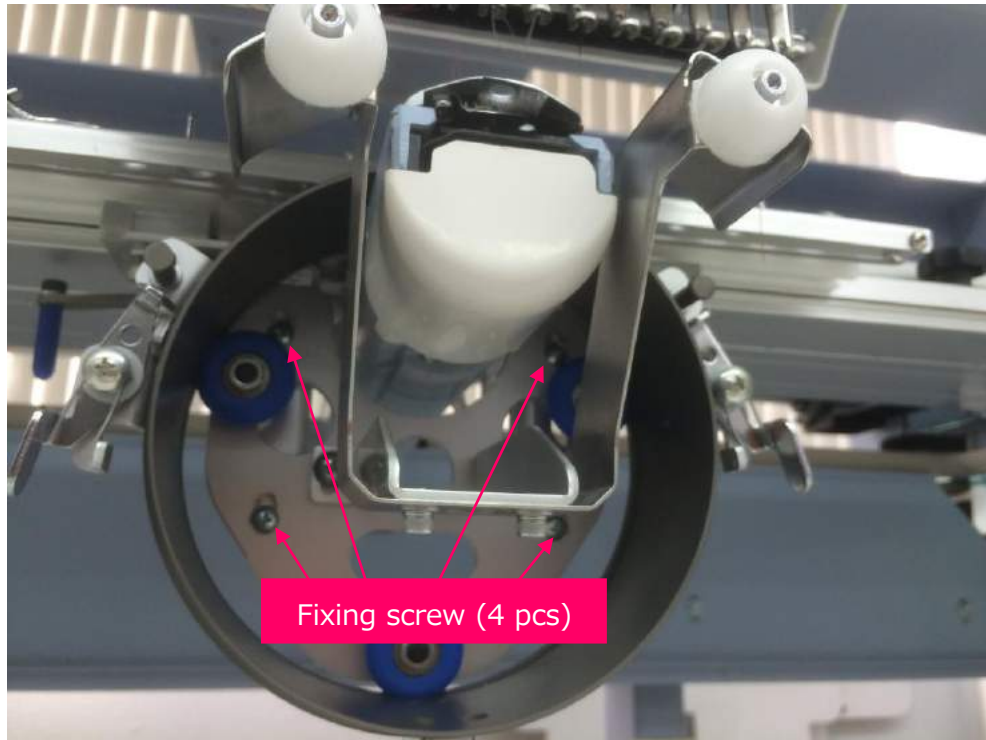


- 7) At last tighten 2 knobs to fix the cap frame main body a'ssy to the frame of the embroidery machine.

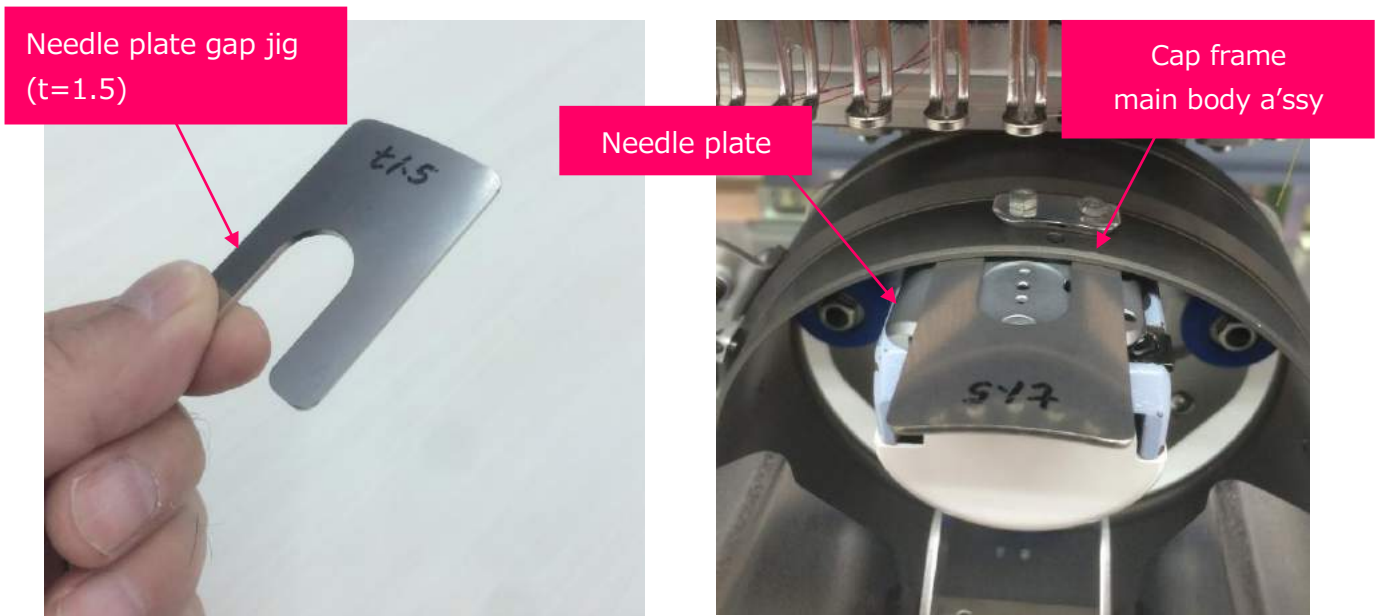


8) Adjust the height of the cap frame main body a'ssy.

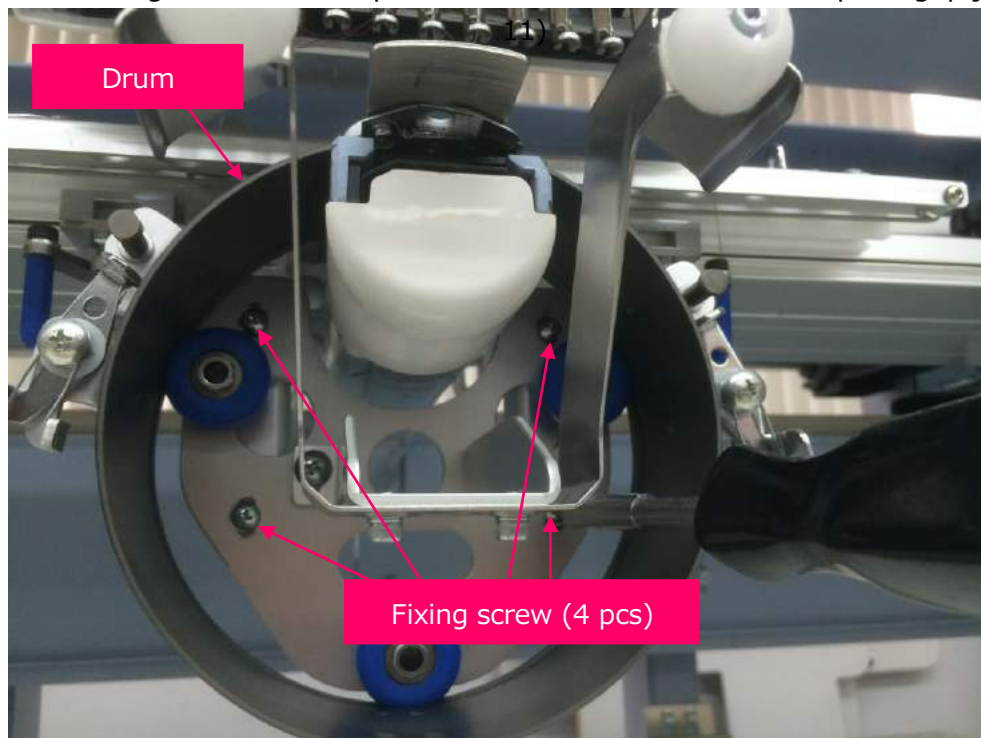
Loosen 4 fixing screws of the picture below;



9) Insert "Needle plate gap jig (t=1.5)" between the cap frame main body a'ssy and the needle plate.



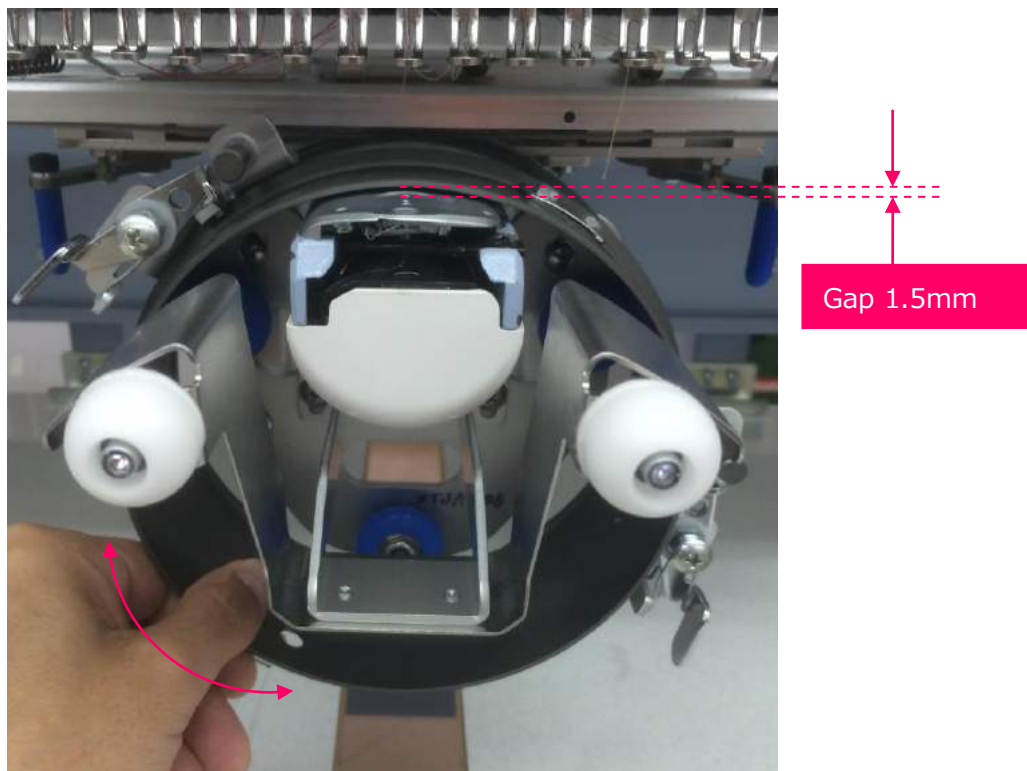
10) Tighten 4 fixing screws on the place the drum hits to the needle plate gap jig.



11) Take the needle plate gap jig out.

Gap between the needle plate and the drum is 1.5mm.

Moving the frame of the embroidery machine from side to side manually, rotate the drum to see if the drum doesn't contact to the needle plate.





12) Check the height of the guide screw on both side of the cap frame main body a'ssy.

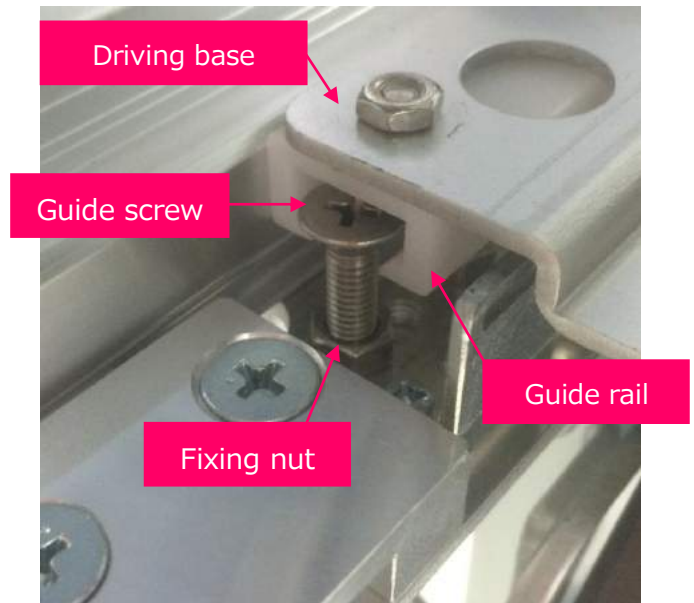
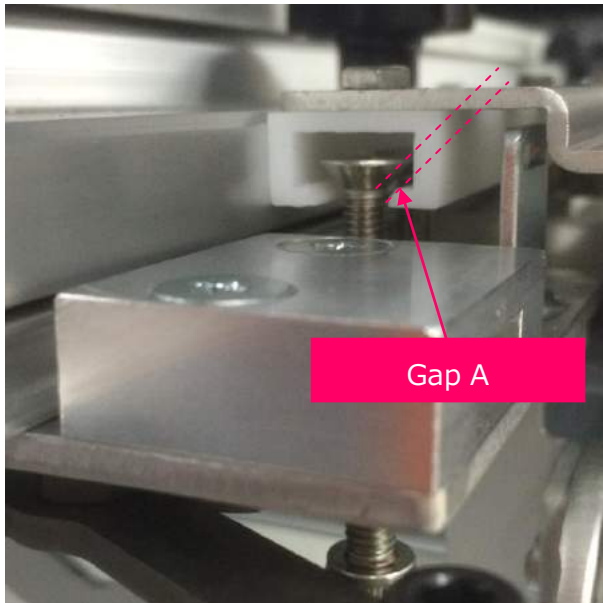
The designated measurement of gap A ;

✧ XT-CAII, XT-CBII : 1.5mm

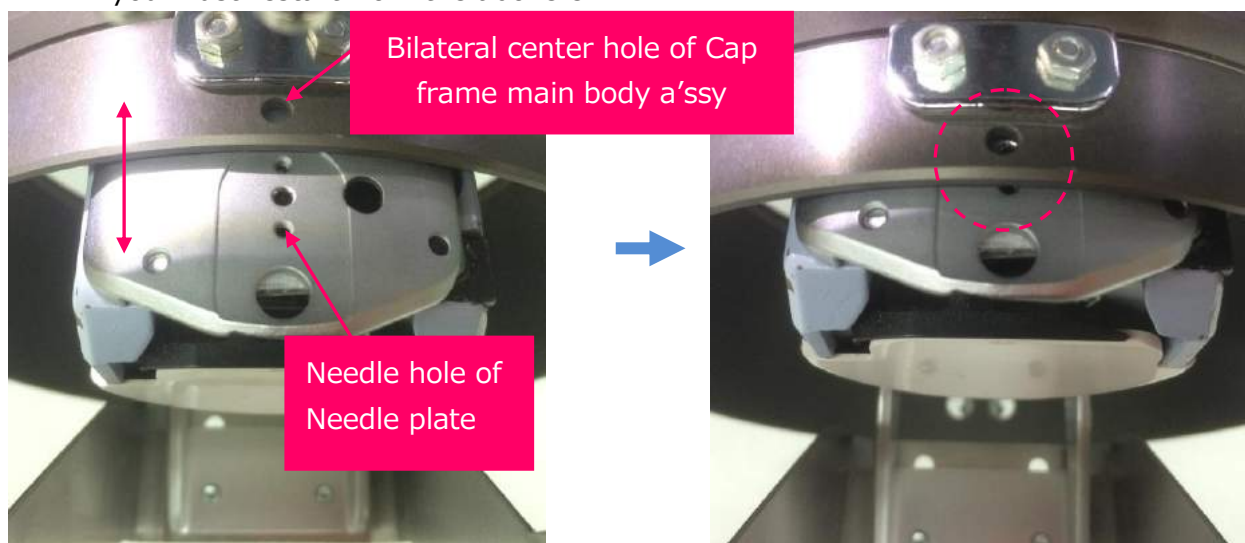
✧ XT-CII, XY-CII, XS-C : 1.8mm

If the above measurement has not been secured, please loose the fixing nut and adjust the height of the guide screw.

In case the gap A is not secured, it is difficult to put the driving base on the frame of the embroidery machine.



- 13) Match the bilateral center hole of both Cap frame main body a'ssy and the frame of the embroidery machine.
- Move the frame manually and set the cap frame main body a'ssy into the embroidery field area.
  - Turn the power of the embroidery machine ON.
  - Execute "ORG" of the origin set.
  - Select the available number in the design memory list on the Automat.
  - Press the origin set of the frame and move the frame to the origin.
  - Press the up and down of JOG key for the frame movement to set the positioning hole of the cap frame main body a'ssy on the needle hole of the needle plate.
- < Notice > Please do not press the right and left of JOG key. When you pressed it, you must restart from the above e.

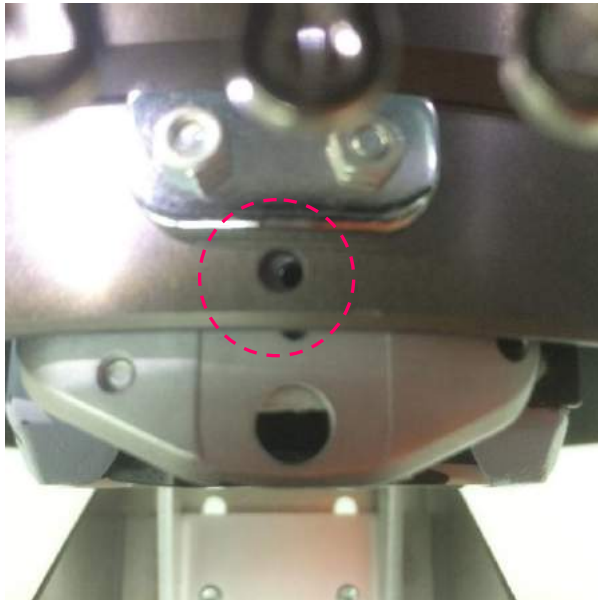


- In case the positioning hole of Cap frame main body a'ssy doesn't match with the needle hole, the following procedure is required.

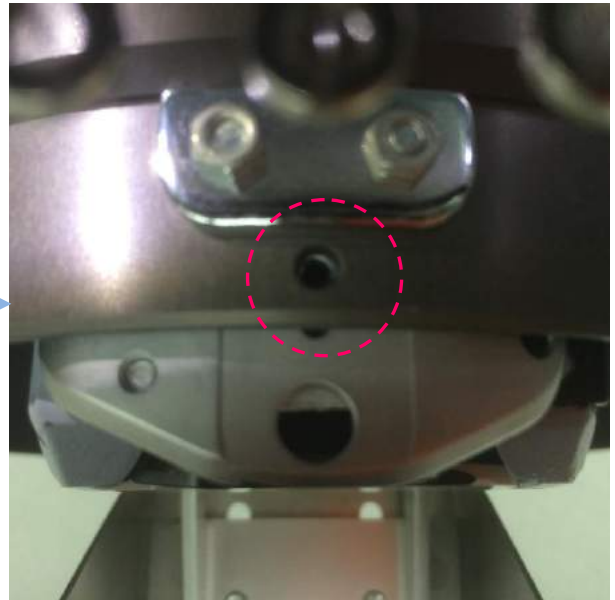
- ◆ The positioning hole of Cap frame main body a'ssy is on the **left** side than the needle hole. ;

Loosen the fixing screw A and slide the plate B to the left. This makes the positioning hole on the cap frame main body a'ssy to the right.

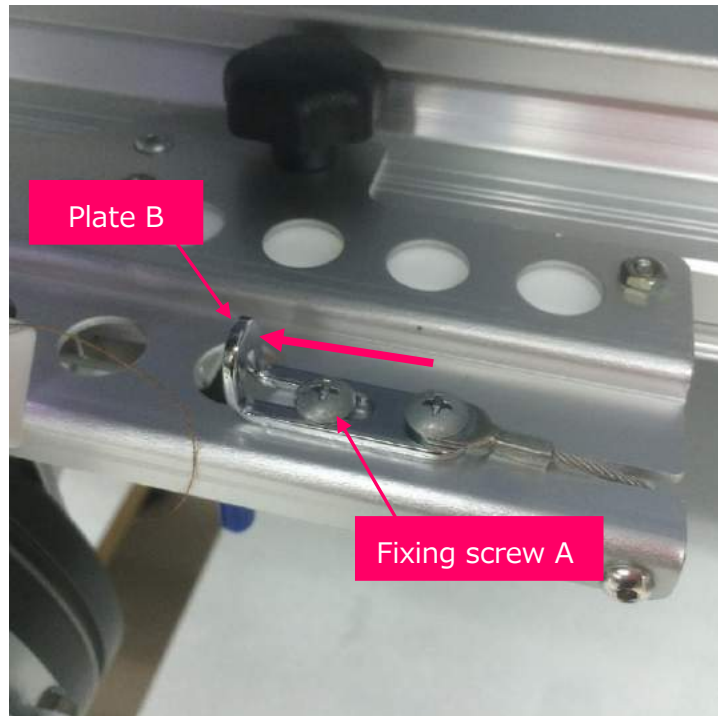
After moving the suitable position, tighten the fixing screw A with holding the plate B.



Before adjustment



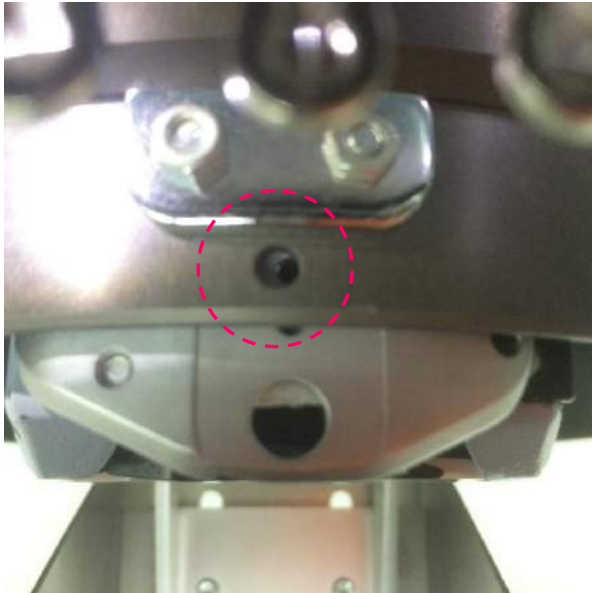
After adjustment



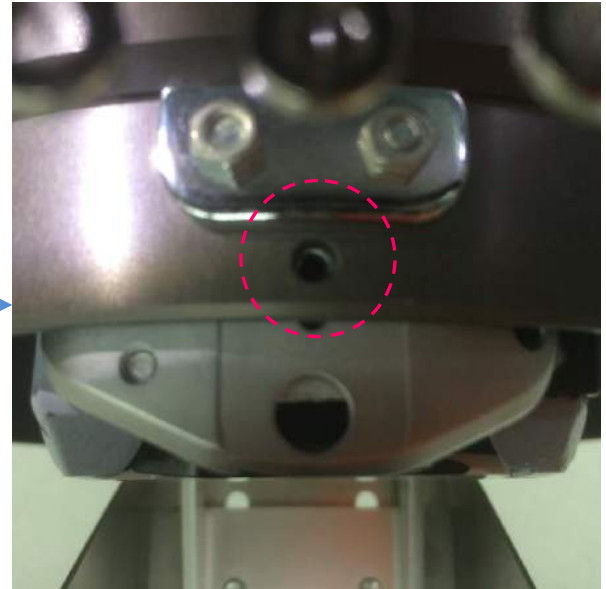
- ◆ The positioning hole of Cap frame main body a'ssy is on the **right** side than the needle hole. ;

Loosen the fixing screw C and slide the plate D to the right. This makes the positioning hole on the cap frame main body a'ssy to the left.

After moving the suitable position, tighten the fixing screw C with holding the plate D.



Before adjustment



After adjustment

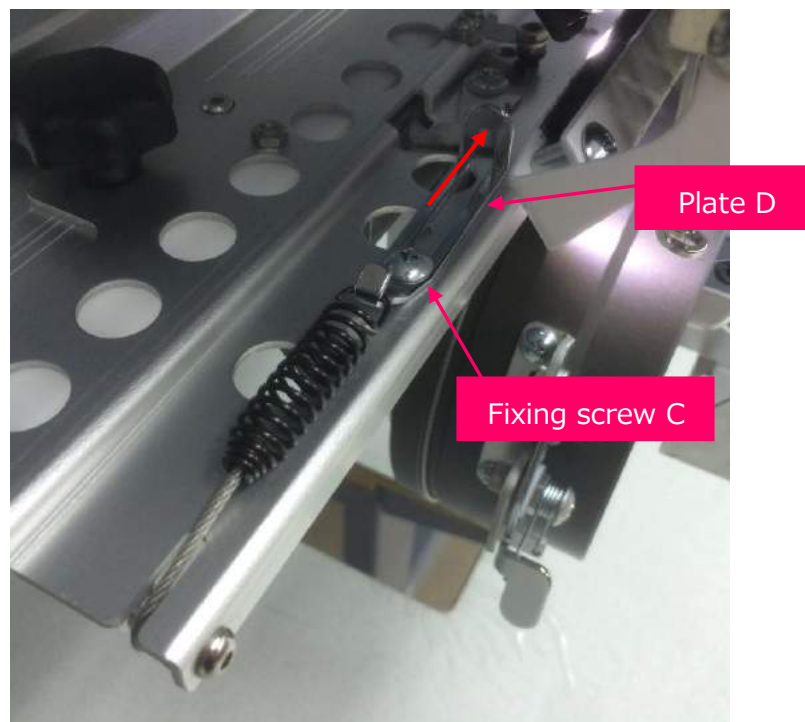


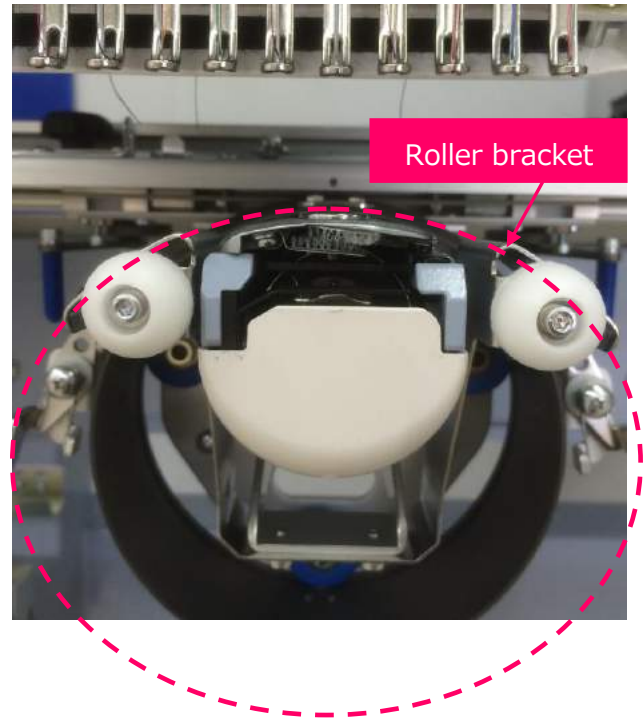
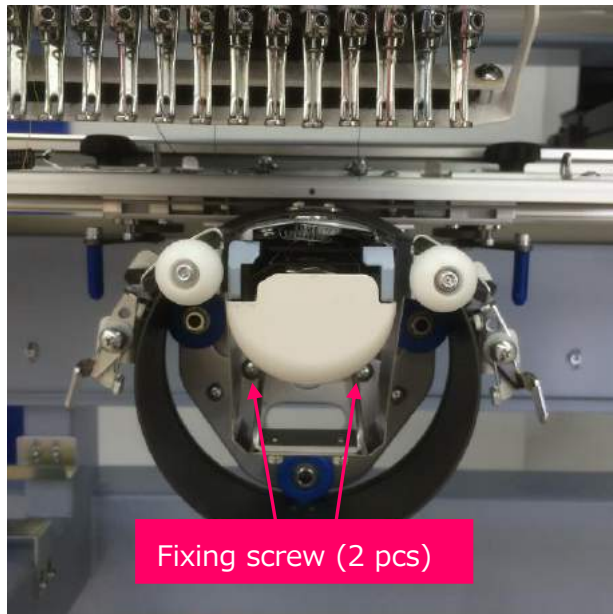
Plate D

Fixing screw C

14) Check the position of the roller bracket.

The position of the roller bracket must match with the curve of the needle plate as like the circle in the right picture.

If it is not on the proper position, loosen 2 fixing screws and adjust the position of the roller bracket.



On this stage, the installation of Cap frame main body a'ssy completes.



## 4. Easy switch-over of Cap frame and Normal frame

We made the new icons, "Cap frame auto setting icon" and "Cap frame mode icon" for the cap frame embroidery.

"Cap frame auto setting icon" : This enables the setting of the cap frame mode (#13 CAP frame) and the frame outline display by one button.

"Cap frame mode icon" : By using the short cut function, you can put the cap frame mode icon on the top screen. This enables the easy switch-over of Cap frame and Normal frame.

This operation is available from Version 5.10R02.

### How to display the function of Cap frame auto setting

Prior to use the cap frame mode icon, the initial setting must be done by Cap frame auto setting function only once.

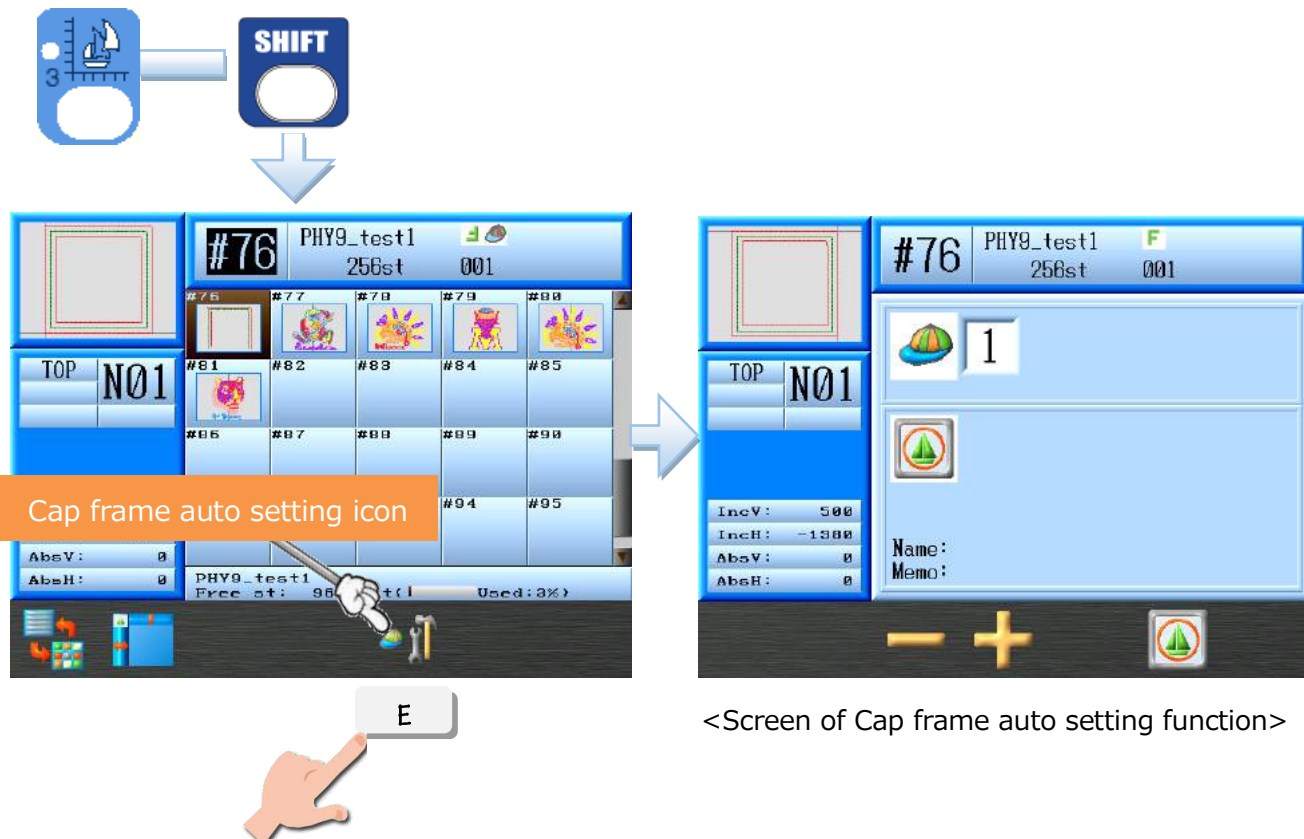
It sets up the setting value of #13 CAP frame in the operation condition and which frame is displayed on the screen.

This is a procedure of the initial setting of the cap frame auto setting function.

1) Press the **design edit** key .

2) Press the **SHIFT** key  to display Cap frame auto setting icon.

3) Press **E**-key.



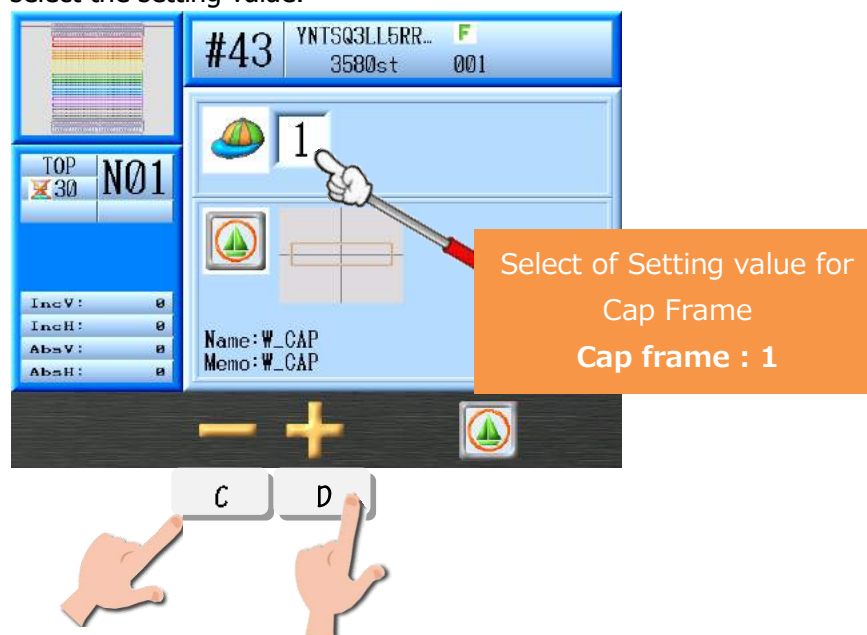
<Screen of Cap frame auto setting function>



## Cap frame setting function – Setting of Cap frame mode

On pressing the cap frame mode icon, the setting value set here is reflected to #13 CAP frame in the operation condition.

Press **C**-key and **D**-key to select the setting value.

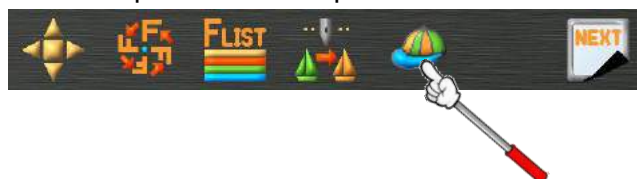


The setting value of #13 Cap Frame in the operation condition is changed automatically at the following timing.

- Cap frame mode : **ON** (Icon is displayed in yellow)  
--> The setting value at the screen of Cap frame auto setting function is reflected to #13 Cap Frame automatically.



- Cap frame mode : **OFF**  
--> The setting value of #13 Cap frame in the operation condition becomes 0.



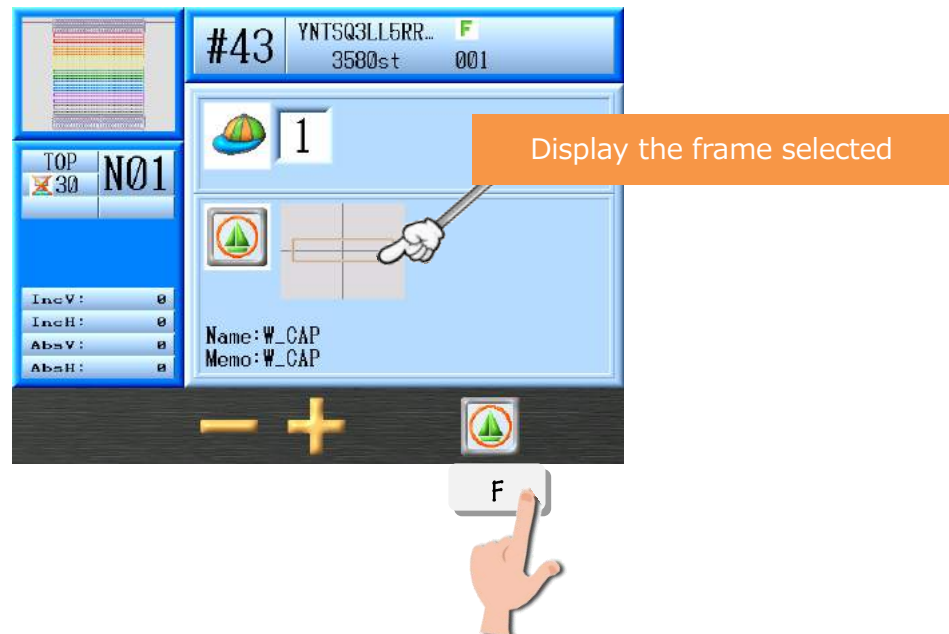
**Notice :** In order to prevent the complicated conditions, we recommend you to set up the cap frame mode by the cap frame auto setting function only.

- 1) The setting is available only at stand-by status.
- 2) After turning the cap frame mode icon ON at stand-by status, if the following procedures were done, that setting is prioritized;
  - a. Move to the menu of the operation condition
  - b. Change the setting value of #13 Cap frame
  - c. Select YES at the setting value update

## Cap frame setting function – Display setting of Frame Outline

This selection is reflected to the frame selection at the display setting of Frame Outline and displayed on the screen.

- 1) Press **F**-key to display the frame list.
- 2) Select the frame to be displayed by **JOG** key.
- 3) Press **F**-key to reflect it to Cap frame auto setting function.




Notice : In case the frame to be displayed on the screen by Cap frame auto setting function, even if the cap frame mode icon is turned OFF, it doesn't return to the previous frame display and the frame selected is left on the screen.

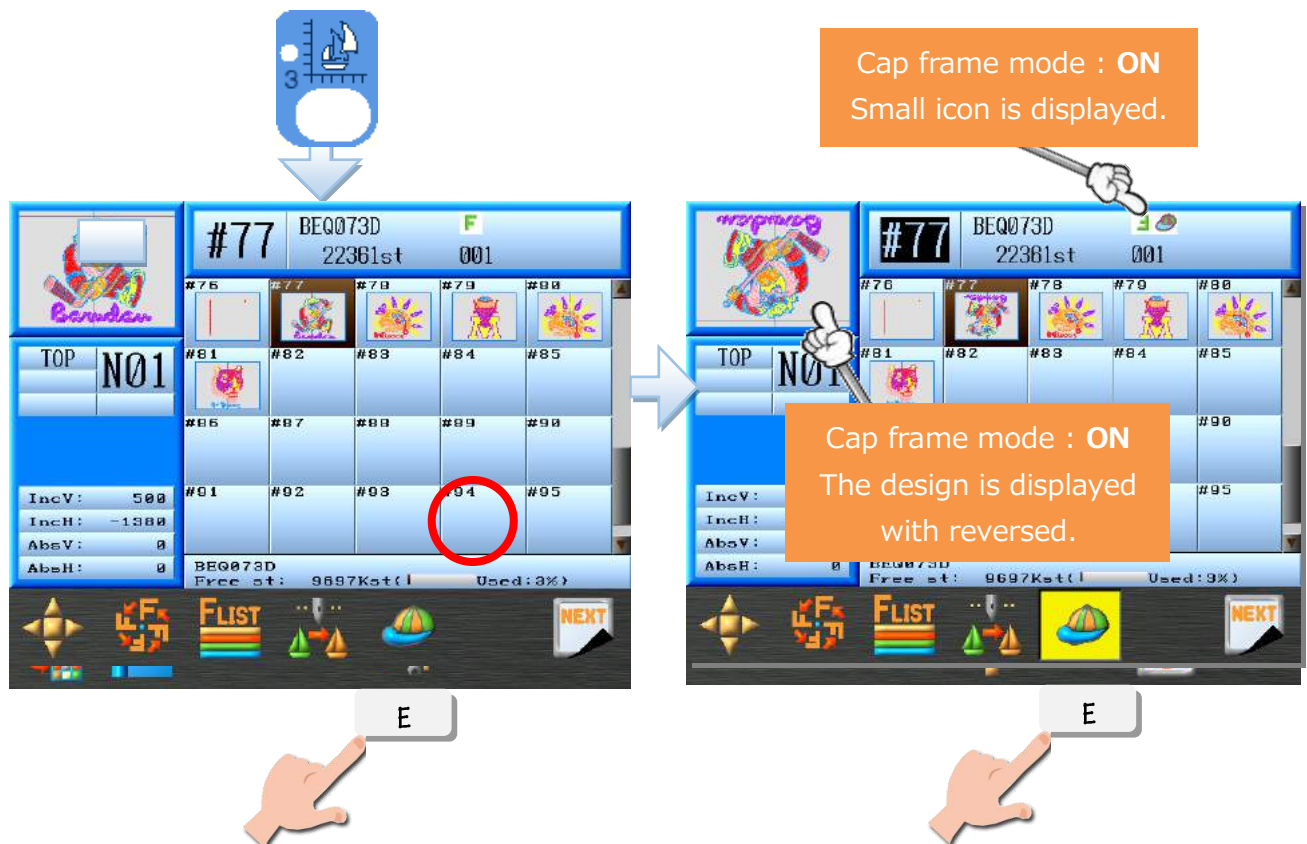
On the normal frame mode, you need to return to the frame outline function and select the frame to be displayed on the screen again.

## Change-over of Cap frame and Normal frame

This is a procedure to change over the cap frame mode and the normal frame mode.

In case the initial setting at Cap frame auto setting function in the previous page, the cap frame mode icon is non-display.

- 1) Press the **design edit** key .
- 2) Press **E**-key to display the cap frame mode icon in yellow and make the cap frame mode ON.
- 3) Press **E**-key again to recover the cap frame mode to the normal display and make the cap frame mode OFF.



## Operation of Shortcut functions

The cap frame mode icon can be selected in the icon list of Shortcut functions. This function enables to display the cap frame mode icon into the top menu. In other words, it makes the switch-over of Cap frame and Normal frame easy.



Addition of Icon to Shortcut functions



The cap frame mode icon has been displayed as a shortcut.

END