

In order to conduct adjustment and exchange safely and surely,  
please be sure to abide by what is mentioned in this manual to prevent trouble.



When you conduct adjustment and exchange using this manual, please be sure to use together with instruction with it in hand.

# Please conduct in accordance with work process in this manual.

# In case there are no specific instructions or explanations in work process.

please be sure to unplug cord from receptacle.

# When you exchange parts, please be sure to use genuine parts designated by us.

# Please never remodel the embroidery machine.

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# Assemble and remove moving head

3-3-1

1. Remove TC cover. (Fixing screw 6 pcs)



4. Remove thread guide plate B ass'y. (Fixing screw 2 pcs)



2. Remove TC cable and needle safety cable. (Option)



5. Remove front panel. (Fixing screw 2 pcs)



3. Plug off every cable from thread tension box.



# Assemble and remove moving head

3-3-1

6. Remove moving head. (Fixing screw 4 pcs)

<Caution> For back on moving head latter, please note needle number when you take off moving head.



7. Remove it by holding moving head up.

<Caution> Confirm that hook is apart from thread holder.



# Assemble and remove moving head

3-3-1

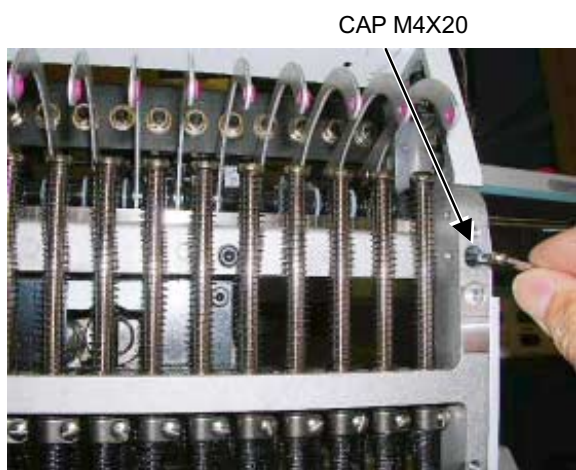
## 8. Install moving head tentatively.

<Caution> Please back on moving head to same needle position when you take off moving head.



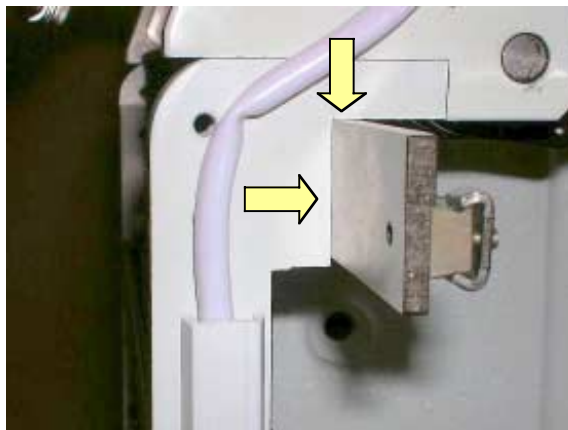
<Caution> Two type of setscrews.

Please check length of screw



## 9. Please check NO gap between Moving head and Rail support .

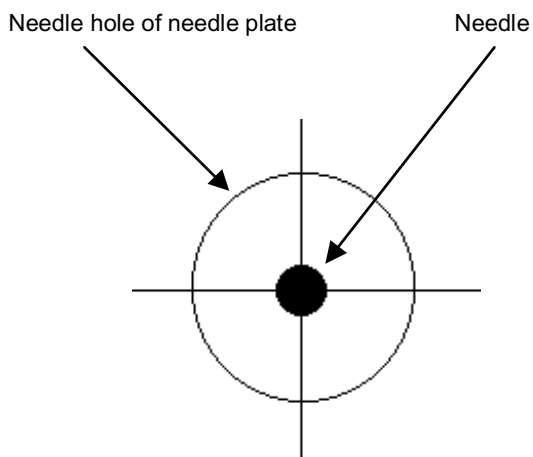
You can check from side of moving head.



## 10. Check center (right and left)(back and forth) of needle and needle hole of needle plate.(Needle No.1 ,8 and 15.)

<Caution>

Should be check needle No.1 ,8 and 15.



## 11. If not center (back and forth),please adjust needle position (back and forth).

Refer to [3-3-4 Adjustment of needle position (back and forth)].

## 12. If OK . Please check [needle position].

Refer to [3-3-5 Check of needle position].

# Adjustment of needle position (back and forth)

3-3-4

1. Bring needle bar down.

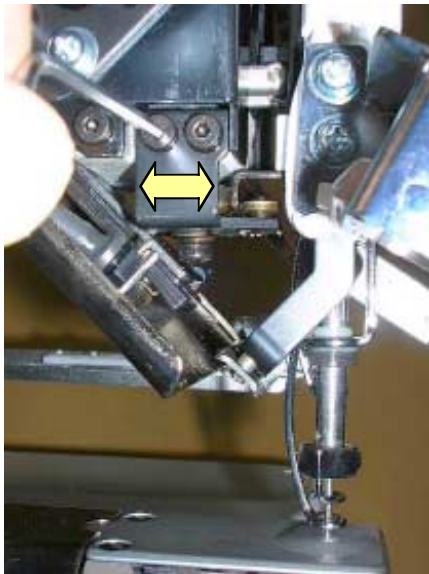


Viewing from side, set to center of needle hole.

#Check and adjust with 1st, 8th and 15th needle.



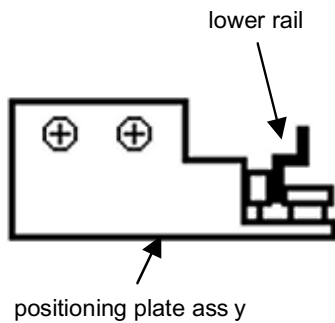
2. Turn upper shaft and set needle near to the lowest needle position [L] to adjust positioning plate ass y.



3. After adjustment, please be sure to check and adjust clearance between needle and shuttle hook.

Please refer to [3-5-1 Adjustment of rotary hook timing].

\* Insert Lower rail to between the two bearing deeply.  
(This is for setting of Moving head completely.)



## Check of needle position

1. Slide moving head to 8<sup>th</sup> needle.

2. Stick a seal on needle hole of a needle plate.



3. Bring needle bar down.



4. Turn an upper axis up to [ 298 degrees —300 °], and it is the needle mark to a seal. A hole is made.

<Note>

Needle point will become large if the angle of a dial disc is made into 301 degrees or more.

An exact needle position check becomes impossible.



5. Reverse-rotate an upper axis, raise a needle bar, and unite with C [270 degrees].

(It returns to 300 degrees-> 230°, and unites with 270 degrees after that.)

<Note>

If a top axis is right-rotated, a needle will enter deeply, and needle hole is greatly.

It becomes. Therefore, an exact needle position check becomes impossible.

6. 1st needle and the 15th needles are to 298 degrees - 300 degrees about an upper axis by the above-mentioned procedure. It turns, a needle is lowered and a needle position is checked.

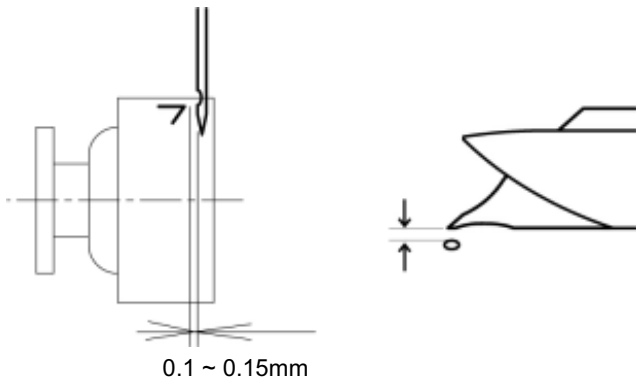
It will be O.K. if the needle point goes into the seal hole made by the 8th needles at this time.

7. Un-stick a seal on needle plate to finish.

# Exchange and adjustment of rotary hook timing

At this moment, clearance between needle and rotary hook should be [0.1-0.15mm].

Check and adjust with 1st, 8th and 15th needle.



6. For making sure, check position of retainer on bobbin case holder.

Please refer to [3-5-2 Adjustment of retainer on rotary hook] for adjusting value and follow it.



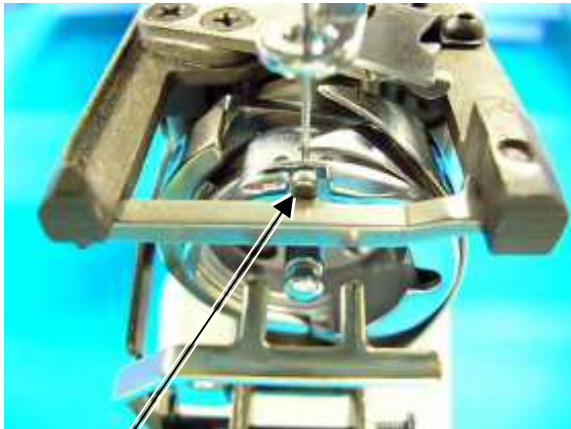
8. Adjustment has finished.

# Adjustment of retainer on rotary hook

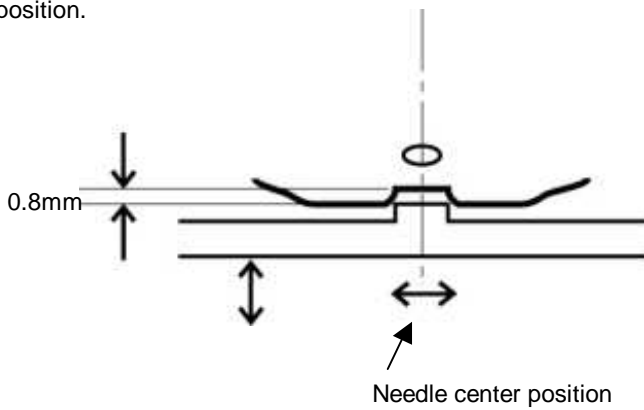
1. Loosen screw to the extent that retainer on bobbin case holder moves. ( 1 pcs)



2. Adjust position back and forth, left and right.  
Space has to be [0.8mm] and the position right and left is center of the needle.



Needle center and retainer center should come to same position.



4. Adjustment has finished.