

**Pocket Hemming Automat (Double Chainstitch)**

# **JTR-MF7523 / PHA Series**

# **INSTRUCTION MANUAL**



**No.JTR000**

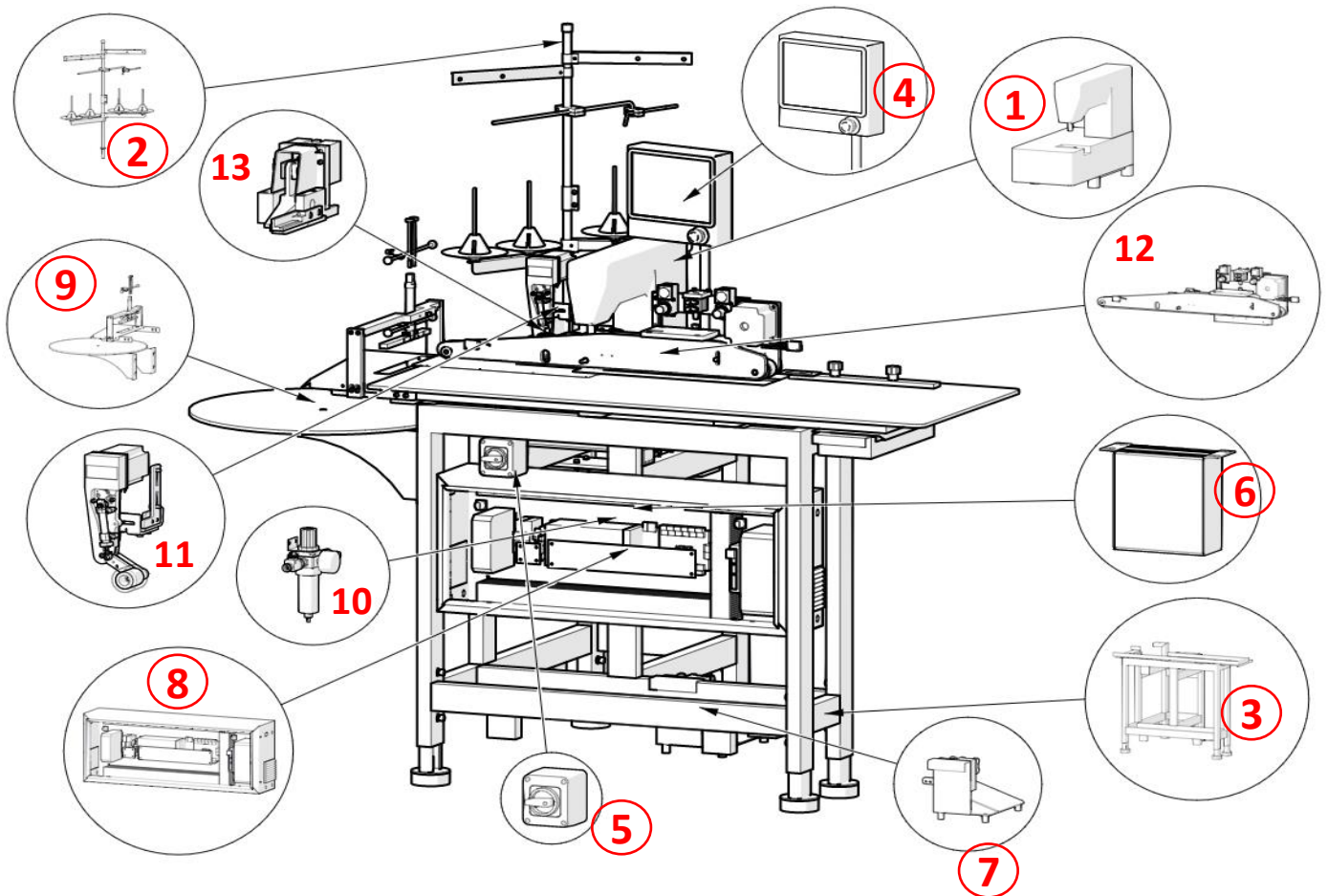
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**MF7523PHA-TM**

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## 1) CONFIGURATION OF THE MACHINE



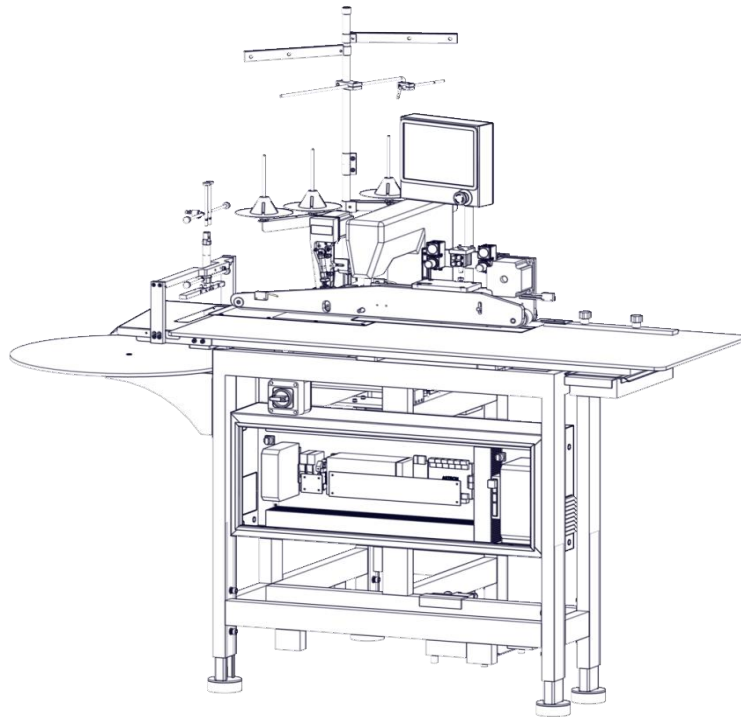
①	MACHINE HEAD	⑧	PLC BOX
②	THREAD STAND	⑨	STACKING GROUP
③	CHASSIS GROUP	⑩	AIR PRESSURE
④	PANEL	⑪	ROLLER GROUP
⑤	MAIN SWITCH	⑫	CONVEYOR BAND SYSTEM
⑥	JTRON CONTROL BOX	⑬	KNIFE GROUP
⑦	PEDAL		

## 2) SPECIFICATION

No.	Category	Description
1	MACHINE HEAD	MF7523
2	MODEL NAME	JTR-MF7523/PHA
3	MOTOR	HOHSING M5-60-JA2BL
4	CONTROL BOX	HOHSING G60-4-79-220
5	MAXIMUM SEWING SPEED	Max: 3000 sti/min DELIVERY SPEED : 2500 sti/min
6	STITCH LENGTH	Delivery stitch length : 3 mm - 3.2 mm
7	NEEDLE TYPE	GB - UY128 - #19
8	GAUGE	JTRON original gauge (4.8 - 6.4 - 7.2)
9	HEMMING SIZE	9 - 15 mm
10	FABRIC CUTTING SYSTEM	ORIGINAL JTRON CUTTING SYSTEM
11	SEWING SPECIFICATIONS	THIN TO MEDIUM THICKNESS
12	TARGET PROCESS	Pocket Hemming
13	AIR PRESSURE	MIN: 0.6 MPa MAX: 0.8 MPa Standard: 0.6 Mpa
14	VOLTAGE CLASSIFICATION	Single-phase 200-240V/50Hz
15	AIR CONSUMPTION	11 L / min
16	POWER CONSUMPTION	550VA
17	CAPACITY	15000 - 18000 pcs / 9 hours
18	DAILY PIECE COUNTER	YES

### 3) INSTALLATION

3.1) The machine is delivered as below

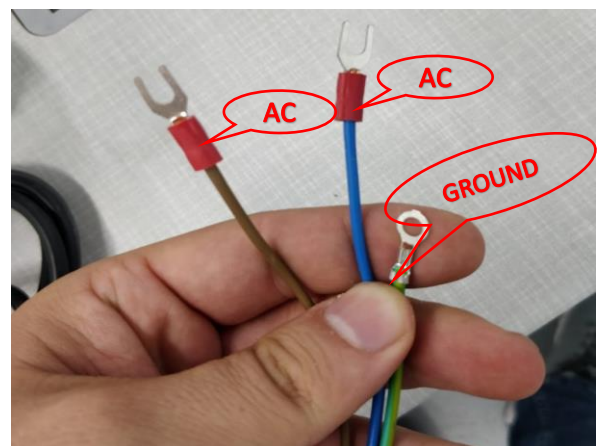


There is not any special occasion for transportation of the machine thus there is no need for extra installation notes.

3.2) The supply air to the machine



3.3) Connecting the power supply

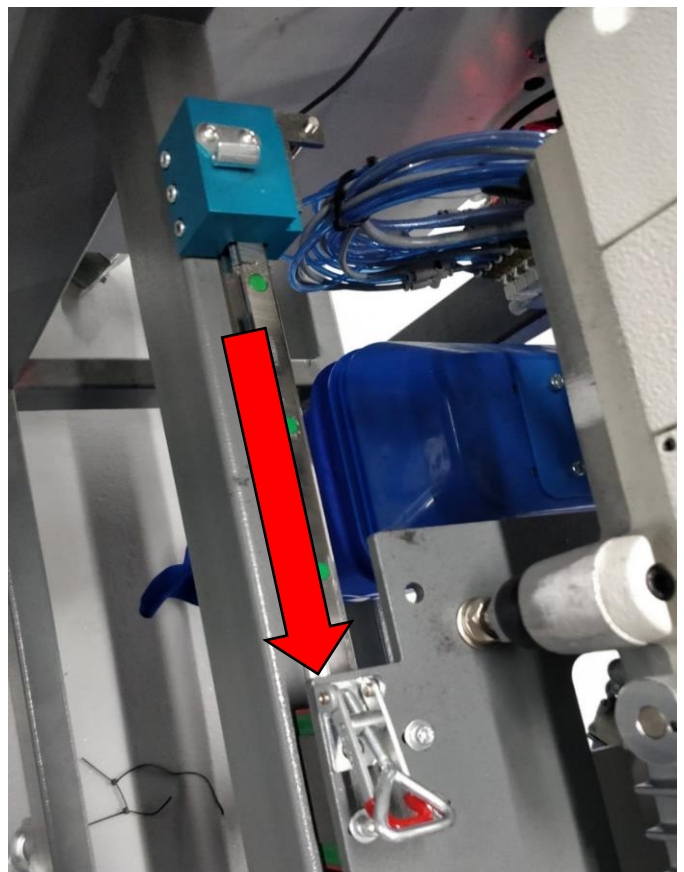
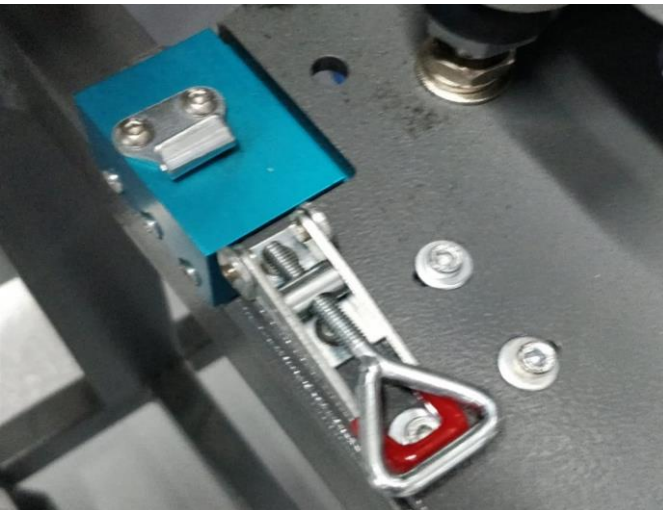
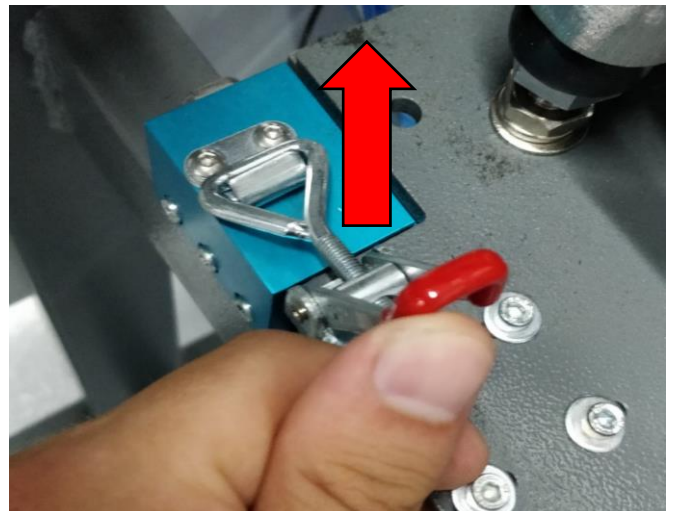
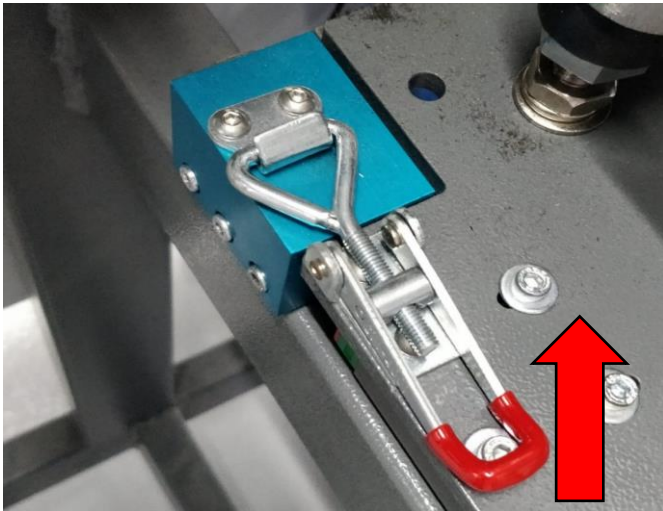


The machine is not supplied with a power plug. It is therefore necessary for you to select to plug that matches the receptacle available under a given operating environment and attach it to the power cable.

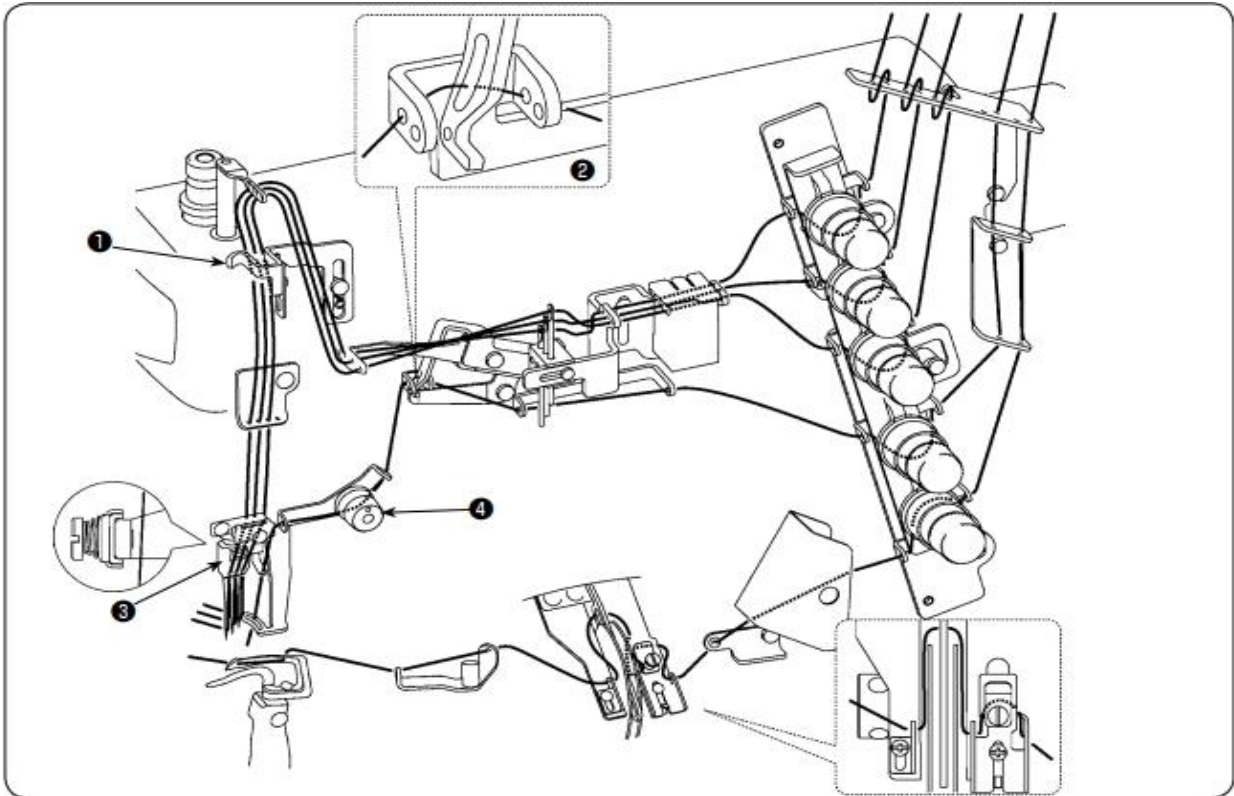
## 4) PREPARATION FOR OPERATION

4.1) Please put the Juki genuine oil 18 from upper cover of the machine head. (Please refer to machine head instructions – MF-7500)

4.2) Move the machine head to behind.



4.3) Threading the machine. (Please refer to machine head instructions – MF-7500)



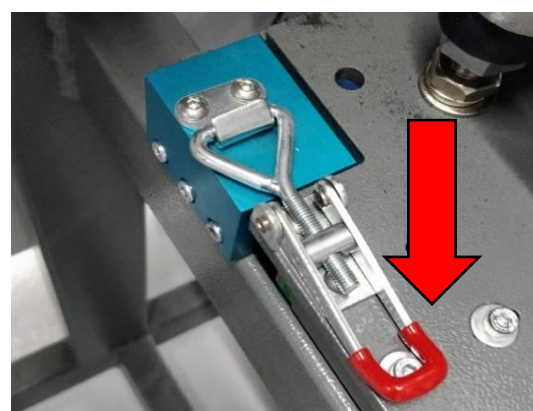
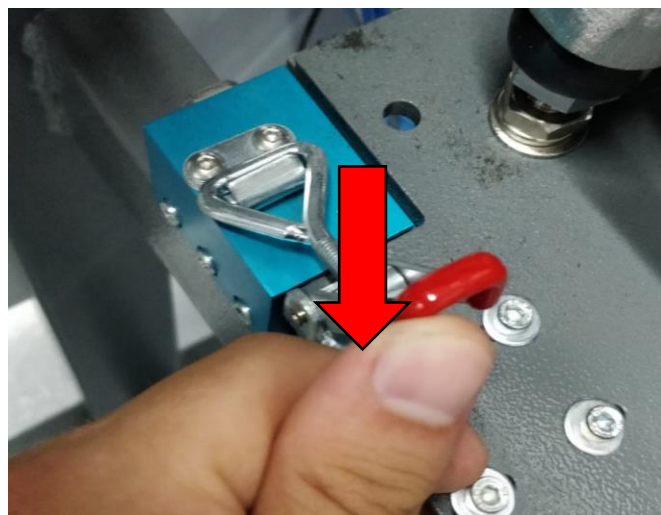
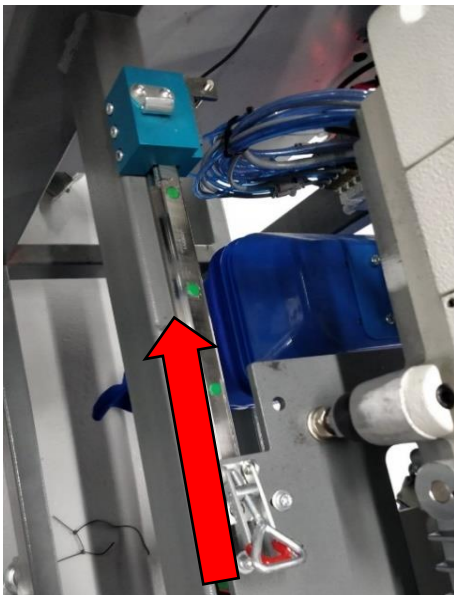
4.4) Run the machine.



4.5) Sample sewing should be made by using the pedal manually.



4.6) Move the machine head to front.



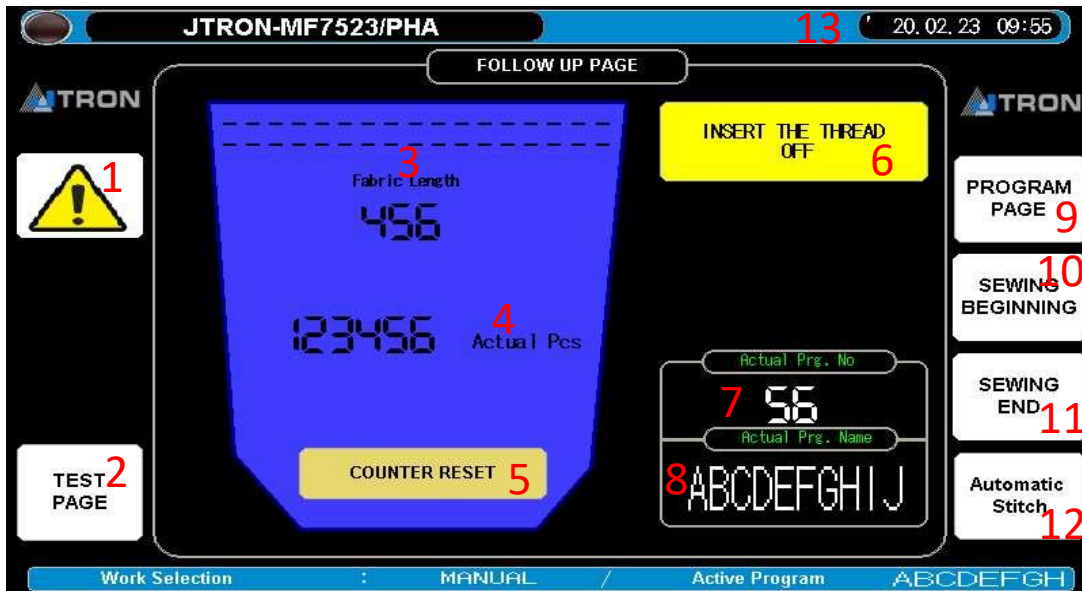


## 5) PANEL

### 5.1) Intro Screen (Select Language)



### 5.2) Follow Up Page

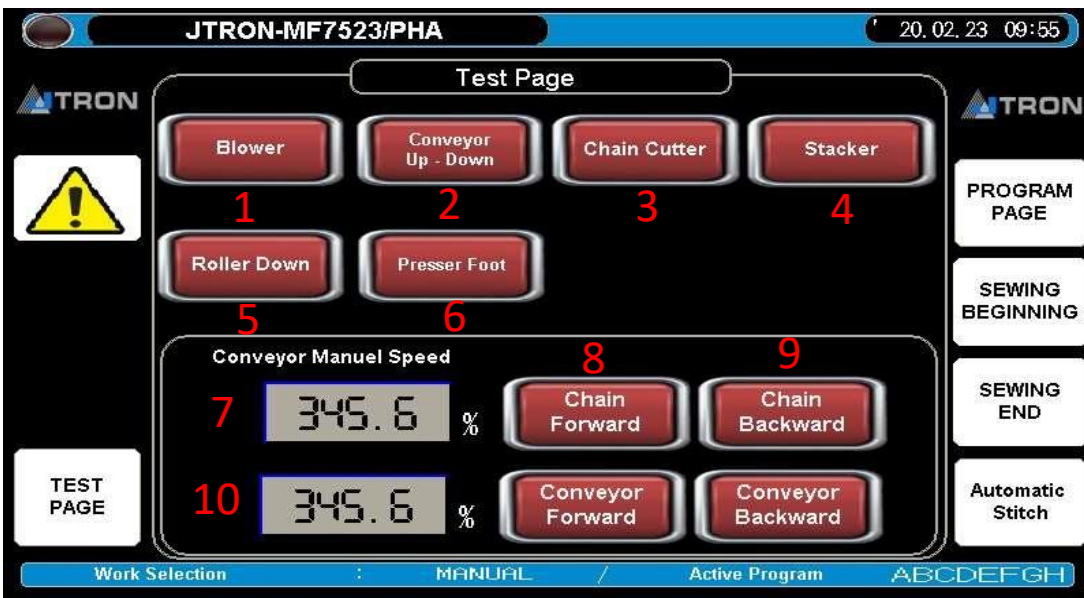


1-Alarm Page [Ref; 5.3]	6-Insert The Thread Off	11-Sewing End [Ref; 5.7]
2-Test Page [Ref; 5.4]	7-Actual Prg. No	12- Automatic Stitch
3-Fabric Length	8-Actual Prg. Name	13- Date and Time
4-Actual Pcs	9-Program Page [Ref; 5.5]	
5-Counter Reset	10-Sewing Beginning [Ref; 5.6]	

### 5.3) Alarm Page

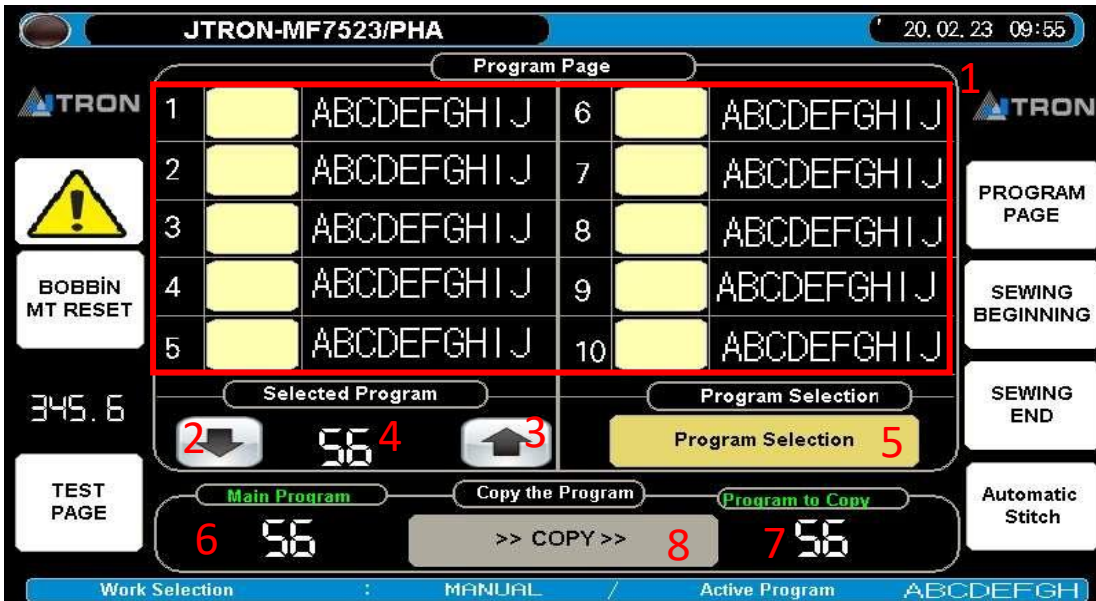


### 5.4) Test Page



1-Blower	5-Roller Down	9-Chain Roller Backward
2-Conveyor Up - Down	6-Presser Foot	10-Conveyor Manual Speed Rate
3-Chain Cutter	7-Chain Roller Manual Speed	11-Conveyor Forward
4-Stacker	8-Chain Roller Forward	12-Conveyor Back

### 5.5) Program Page



1-Program List	4-Actual Prg. Number	7-Program to Copy
2-Program Down	5-Program Selection	8-Copy Button
3-Program Up	6-Main Program	

#### 5.5.1) Copy the Program

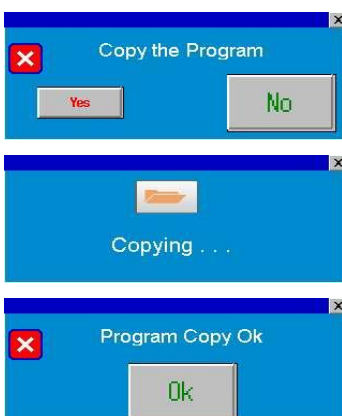
Press the number of main program (6).

Enter the number of the program that you want to copy.


Press the number of program to copy (7).

Enter the number of the program that you want to target.

Press the ">> COPY >>" button (8).

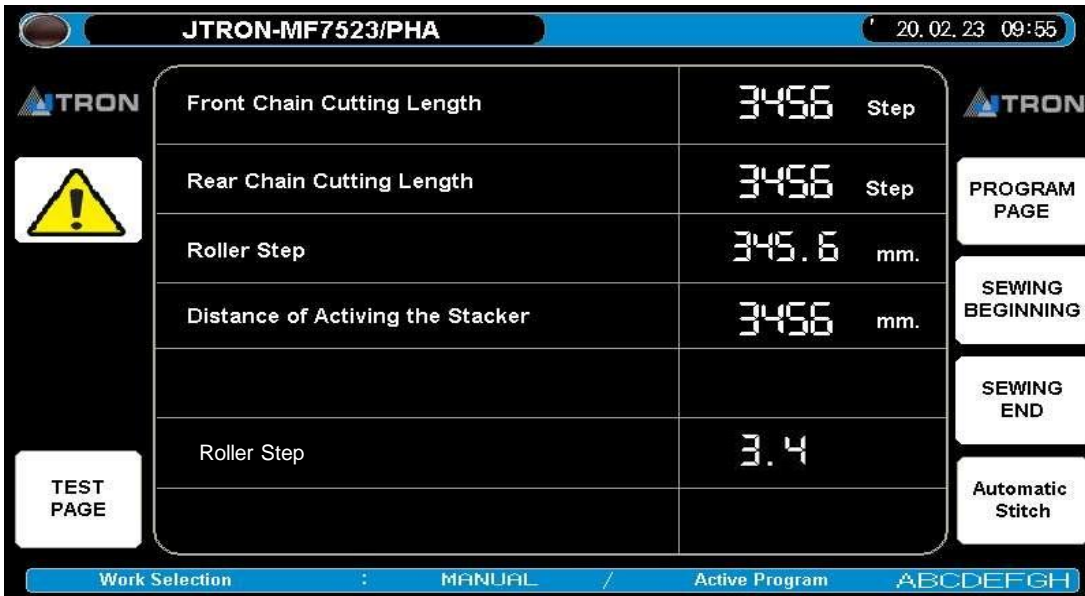


## 5.6) Sewing Page

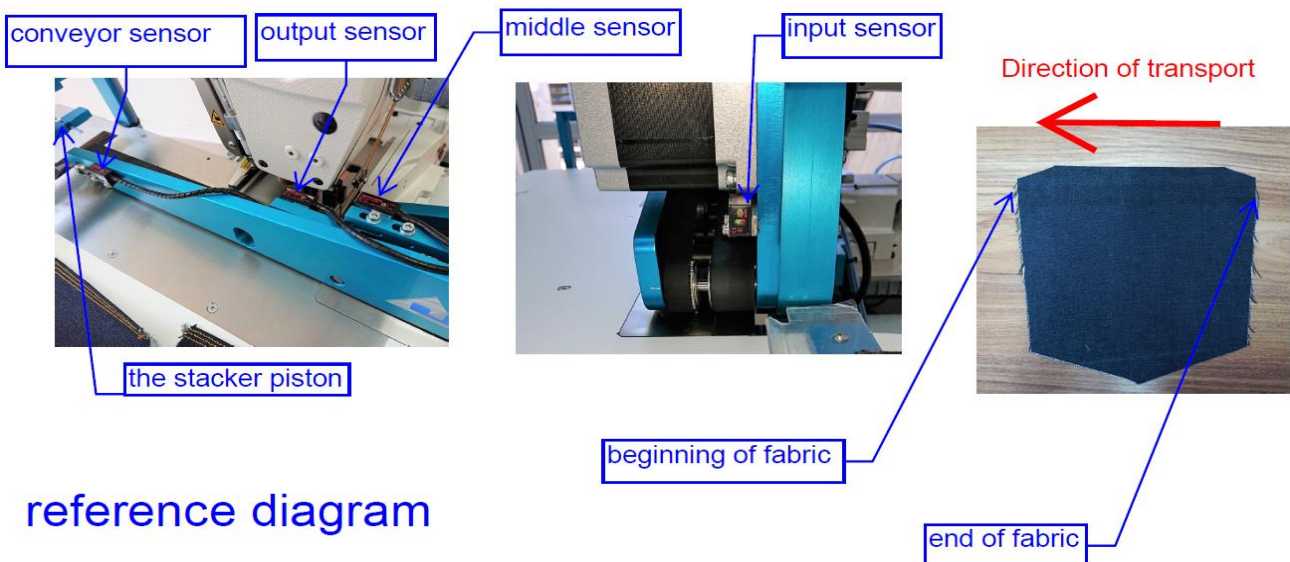
JTRON-MF7523/PHA		20.02.23 09:55	
  TEST PAGE	Input Photocell Delay	3456	msec.
	Output Photocell Delay	3456	Step
	Stitch Length	345.6	mm.
	Machine Speed	3456	rpm
	Machine Slow Speed	3456	rpm
	Timing of Machine Slow Speed	3.456	sec.
	Delay of Vacuum Stop	3.456	sec.
	Sensitivity of Thread Breakage Sensor	3.456	sec.
	Delay of Roller Up	3456	mm.
	Delay of Roller Down	3456	mm.
		345.6	
Work Selection : MANUAL		Active Program ABCDEFGH	

- 1 - Input Photocell Delay : It is the delay time between the input sensor detecting the fabric and the conveyor starting.
- 2 - Output Photocell Delay : It is the step of the delay's between the input sensor does not detecting fabric and the conveyor stopping.
- 3 - Stitch Length: It is the length of the stitch.
- 4 - Machine Speed : It is the speed of the machine in terms of rpm.
- 5 - Machine Slow Speed: It is the speed of the machine run in a slower pace.
- 6 - Timing of Machine Slow Speed: It is the time at machine start-up with slow-paced running.
- 7 - Delay of Vacuum Stop : It is the delay time between cutting chain and stopping vacuum.
- 8 - Sensitivity of Thread Breakage Sensor : It is the delay of the machine stop after the thread breakage occurs.
- 9 - Delay of Roller Up : It is the delay distance between the roller lifting and the middle sensor detecting the fabric.
- 10 - Delay of Roller Down : It is the delay distance between the roller descend and the output sensor does not detecting the fabric.

### 5.7) Sewing End Page

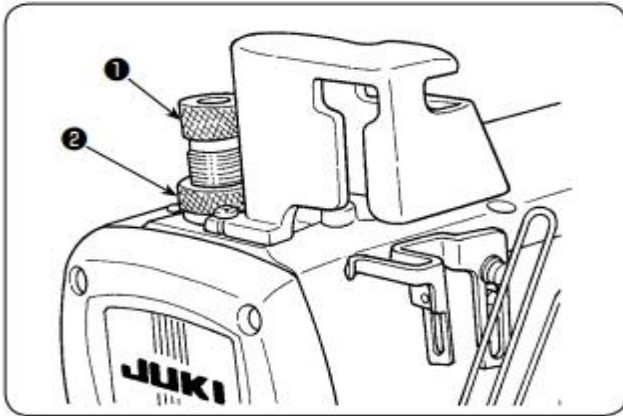


- 1 - Front Chain Cutting Length : The step between the output sensor detects the end of fabric and cutting the chain of the end of the fabric .
- 2 - Rear Chain Cutting Length : The step between the output sensor detects the beginning of fabric and cutting the chain of the beginning of the fabric
- 3 - Roller Step : It is the synchronization between the roller and stitch length of the machine.
- 4 - Distance of Actibing the Stacker : It is the distance between the conveyor sensor and stacker piston.
- 5- Roller Step : Length of roller feeding per step.



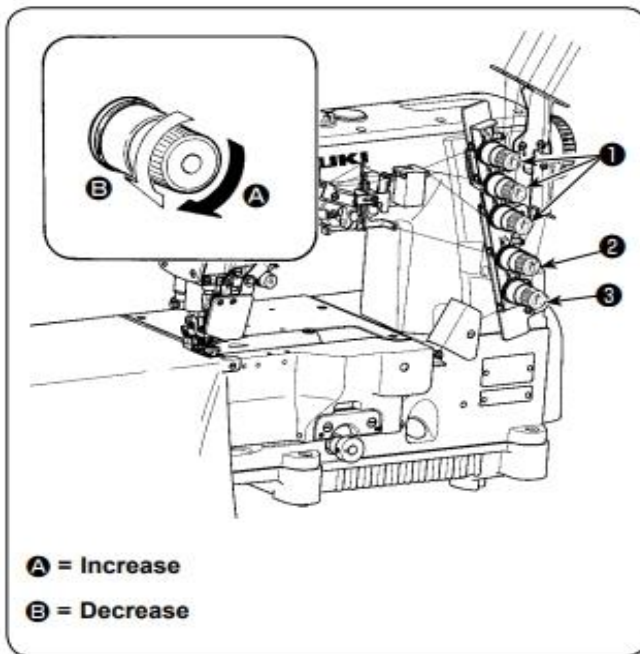
## 6) ADJUSTMENT

### 6.1) Adjusting the presser foot pressure



Decrease the presser foot pressure as low as possible to such an extent that stitches are stabilized. To adjust the pressure, loosen lock nut (2) of presser spring regulator (1) and turn presser spring regulator (1). After the adjustment, tighten lock nut (2). Turning it clockwise to increase the pressure. Turning it counterclockwise to decrease the pressure.

### 6.2) Adjusting the thread tension



Adjust the thread tension with the following thread tension nuts.

1 - Needle thread tension nut

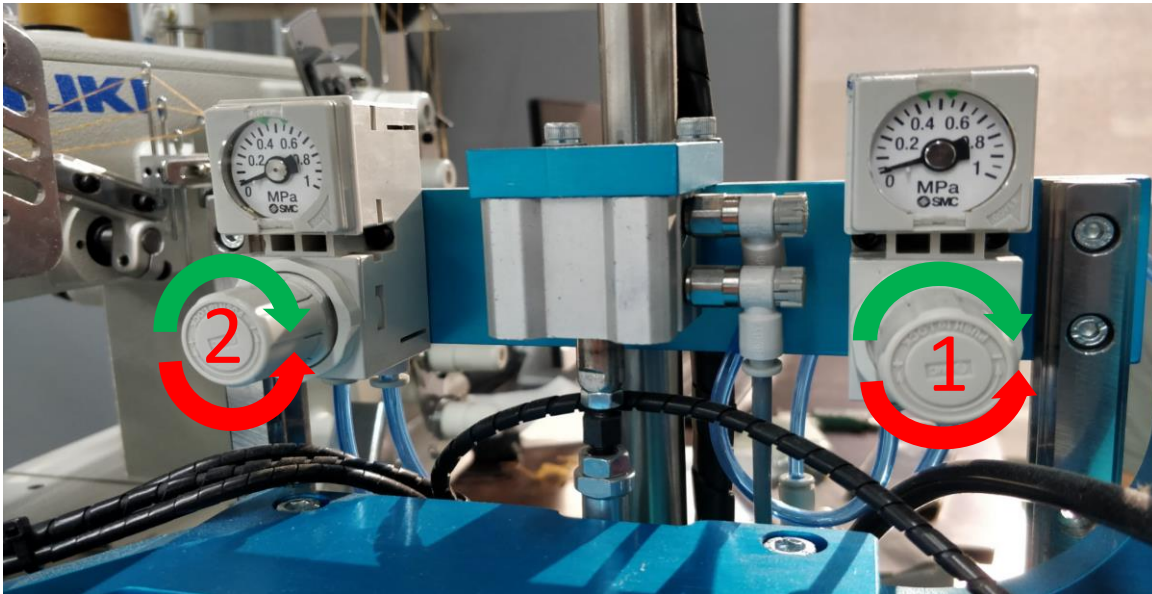
2 - Top covering thread tension nut

3 - Looper thread tension nut

Turn clockwise to increase the thread tension.

Turn counterclockwise to decrease the thread tension.

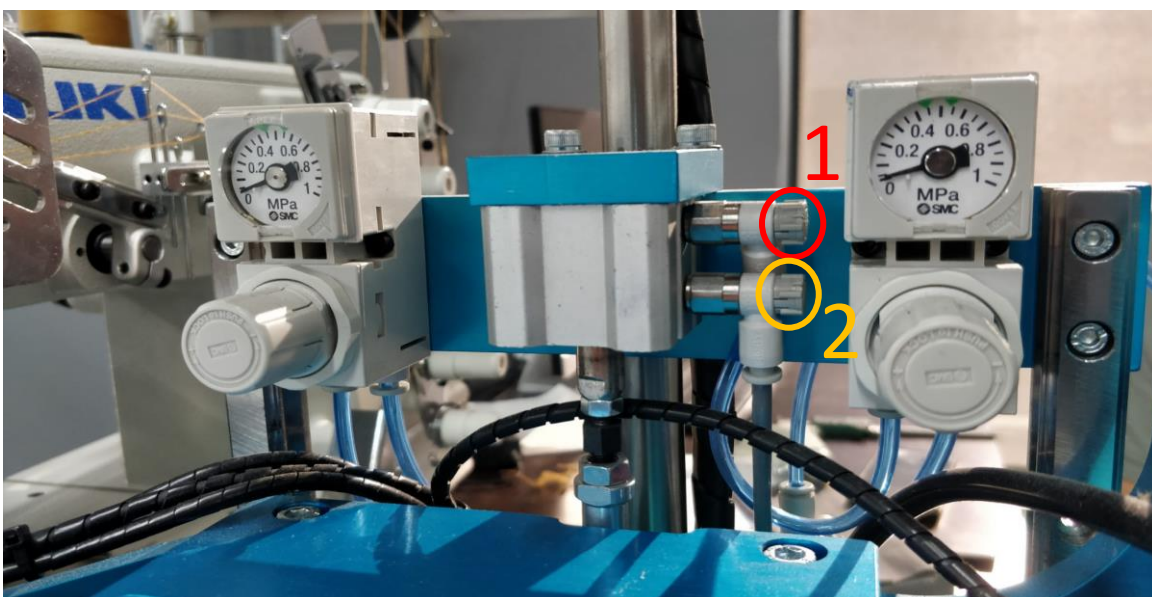
### 6.3) Adjusting the regulator pressure for Roller and Conveyor



1 - Rotate the knob clockwise to increase the pressure of the conveyor. Rotate the knob counter-clockwise to decrease the pressure of the conveyor.

2 - Rotate the knob clockwise to increase the pressure of the roller. Rotate the knob counter-clockwise to decrease the pressure of the roller.

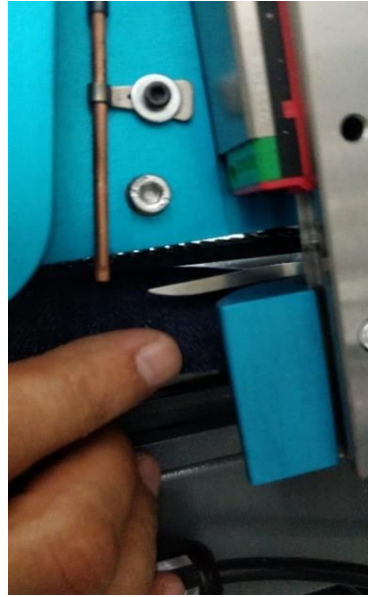
### 6.4) Adjusting the speed for Conveyor lifting and descent



1 - Rotate the knob clockwise to decrease the speed of the conveyor lifting. Rotate the knob counter-clockwise to increase the speed of the conveyor lifting.

2 - Rotate the knob clockwise to decrease the speed of the conveyor descent. Rotate the knob counter-clockwise to increase the speed of the conveyor descent.

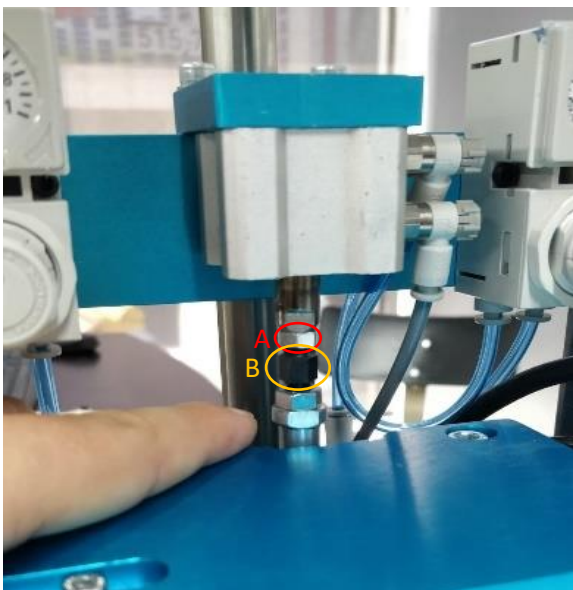
### 6.5) Adjusting the air flow rate for curving fabric



Rotate the knob clockwise to decrease the air flow rate for curving fabric.

Rotate the knob counter-clockwise to increase the air flow rate for curving fabric.

### 6.6) Adjusting the conveyor height between base ground and conveyor belt



1 - Lifting the conveyor.[Refer 5.4) Test Page : Conveyor Up - Down )

2 - Loosen the nut(A).

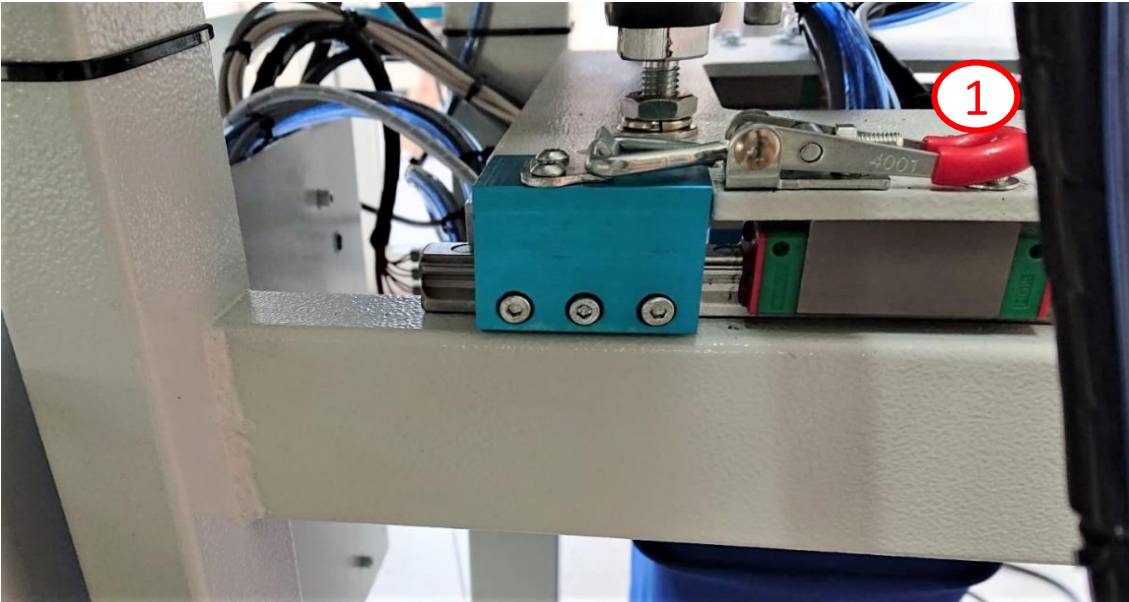
3 - By locating the special screw(B) adjust the height of the conveyor.

4 - Tighten the nut(A).

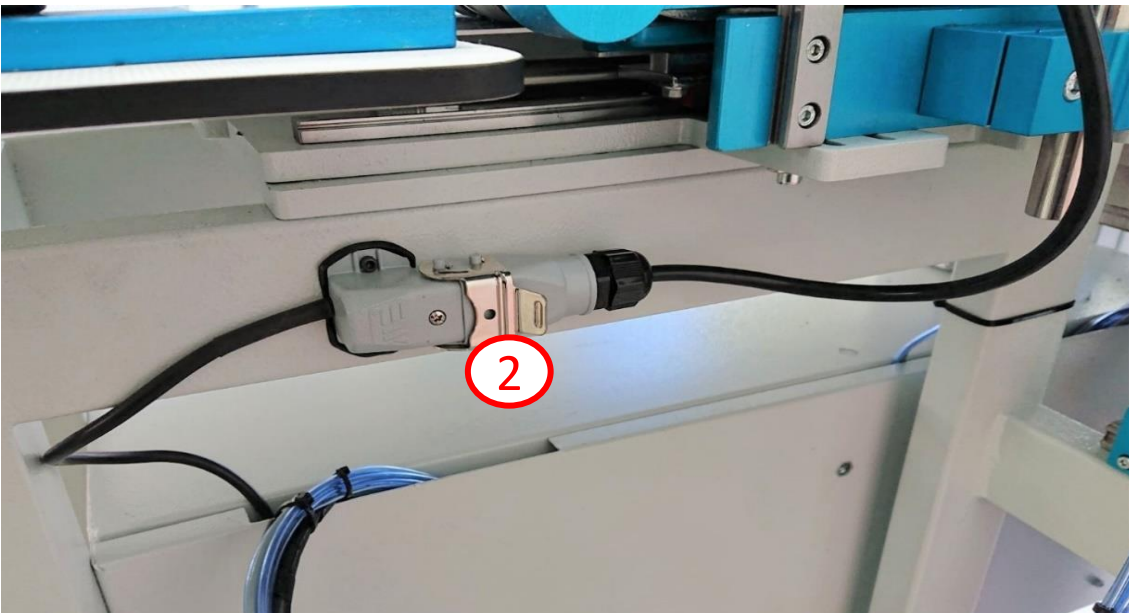


## 6.7) Assembling and adjusting the fabric curving equipment

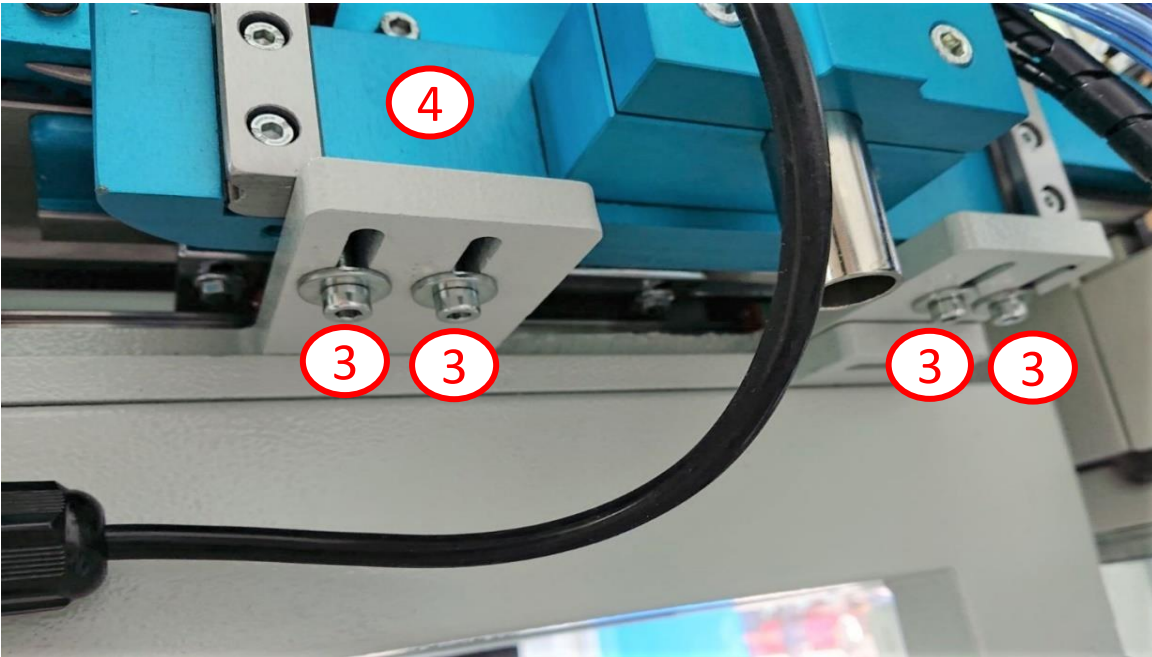
6.7.1) Raise lever ① and unlock the head.



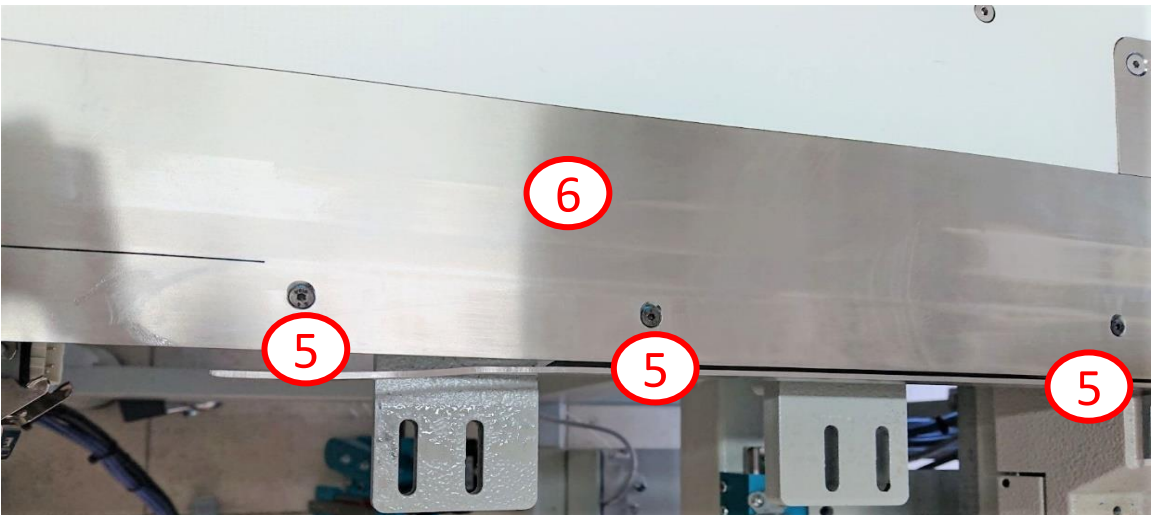
6.7.2) Raise lever ② to unlock the connector.



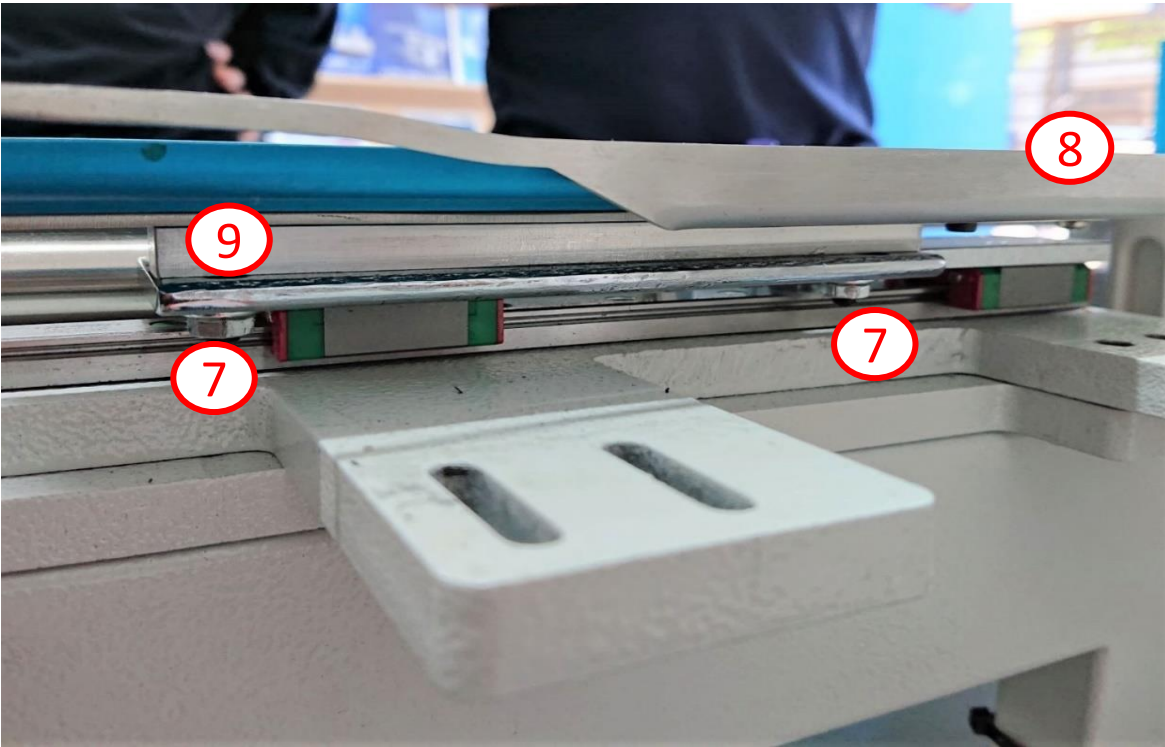
6.7.3) Remove the 4 screws ③ and remove the CONVEYOR BAND SYSTEM ④.



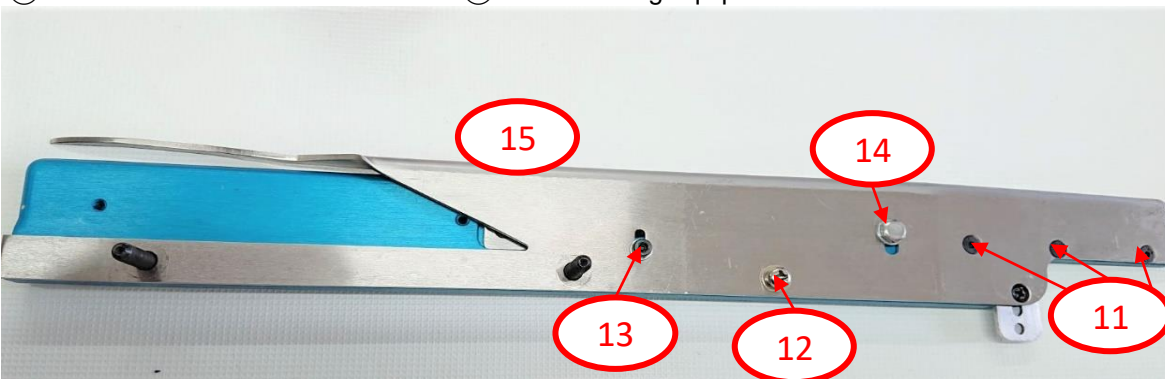
6.7.4) Remove the 3 screws ⑤ and remove the curving equipment cover ⑥.



6.7.5) Remove the 2 nuts ⑦ and remove the curving equipment ⑧ and spacer ⑨.

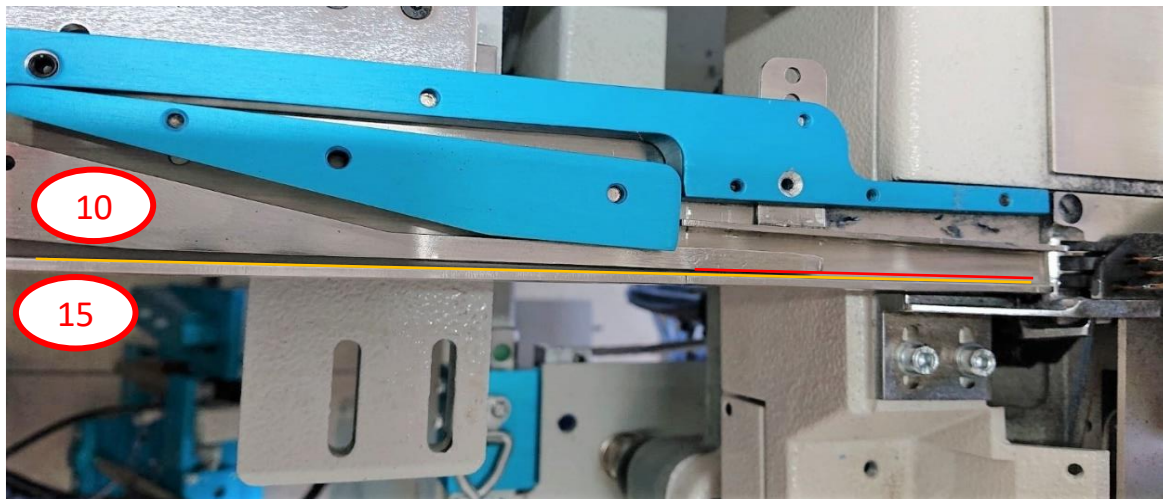
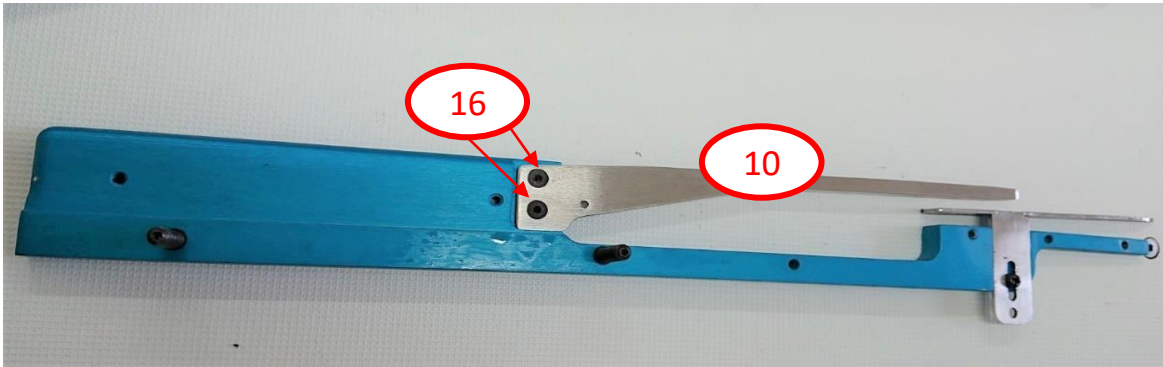


6.7.6) If you adjust the position of guide A ⑩, first, remove the 3 screws A ⑪, screw B ⑫, screw C ⑬ and nuts ⑭ and then remove the bottom cover ⑮ of the curving equipment.



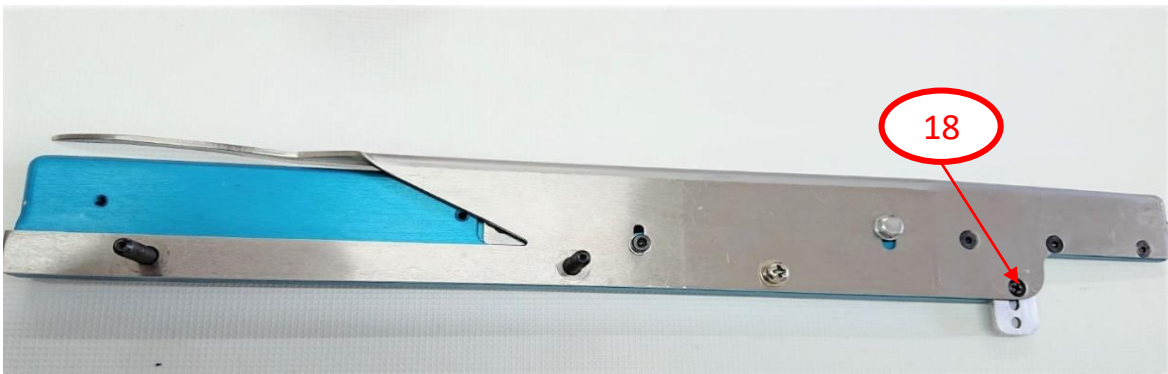
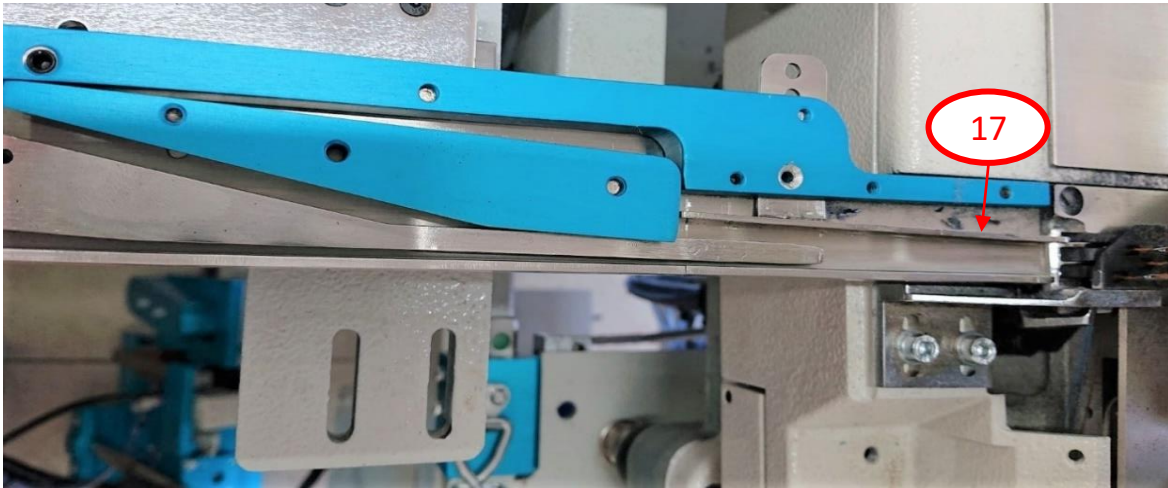
**6.7.7)** If you adjust the position of guide A ⑩, first, remove the 3 screws A ⑪, screw B ⑫, screw C ⑬ and nuts ⑭ and then remove the bottom cover ⑮ of the curving equipment.

Adjust the gap between guide A ⑩ and bottom cover ⑮ according to the thickness of the fabric to be folded. After adjustment, assemble the bottom cover ⑮ of the curving equipment with 3 screws A ⑪ and screw B ⑫. However, screws C ⑬ and nuts ⑭ should be temporarily fixed.

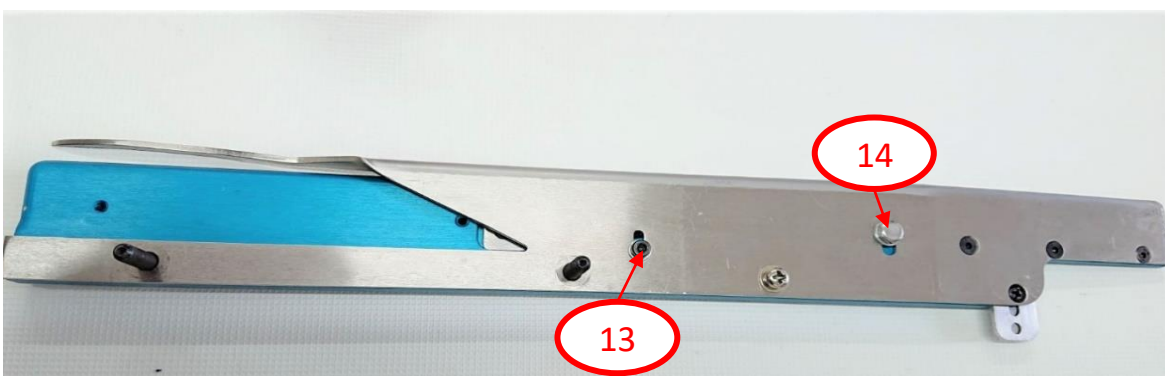
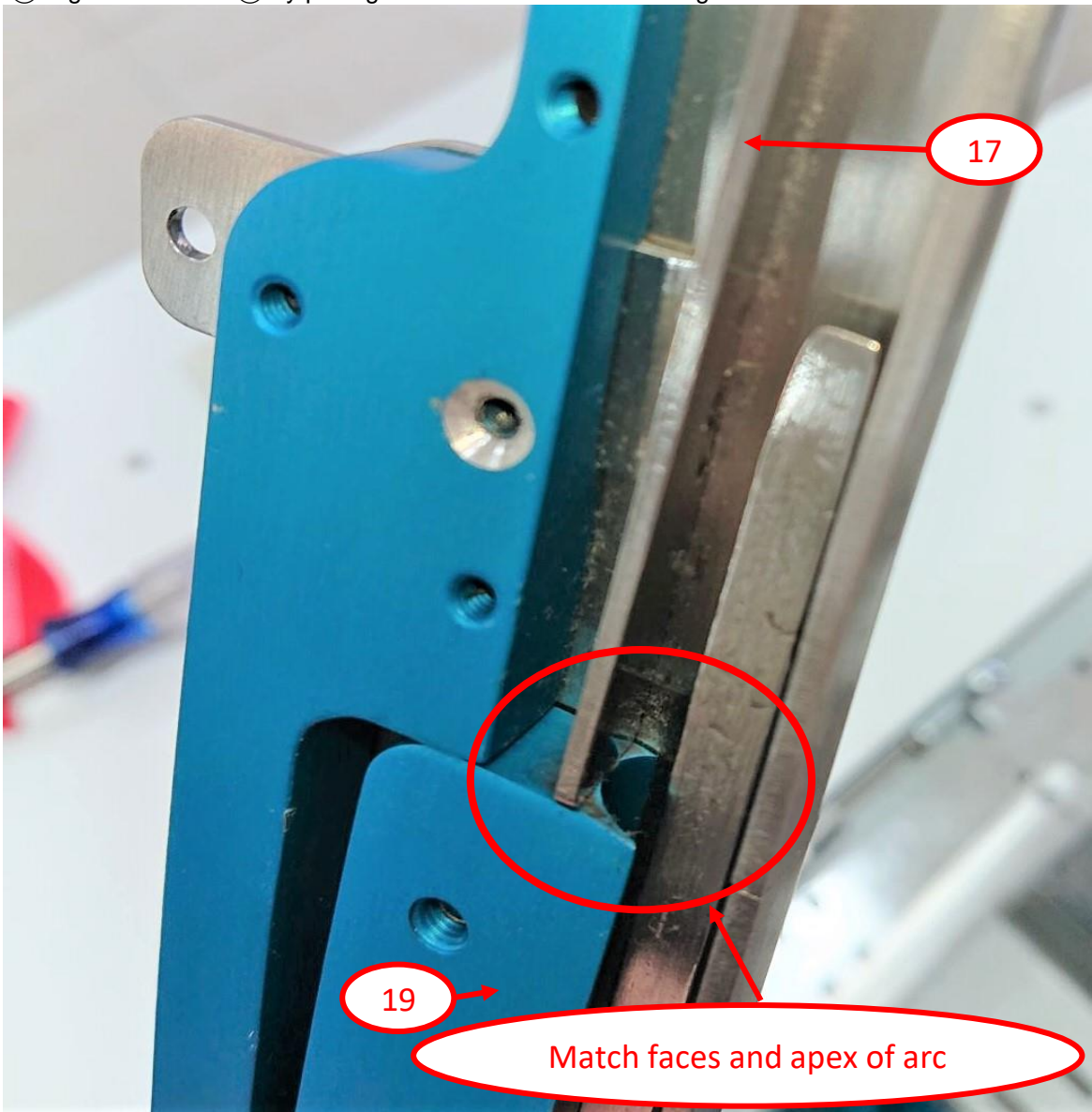


Two lines should be parallel.

6.7.8) Loosen screw ⑱ and adjust the position of guide B ⑰ to suit around the hem width + fabric thickness.

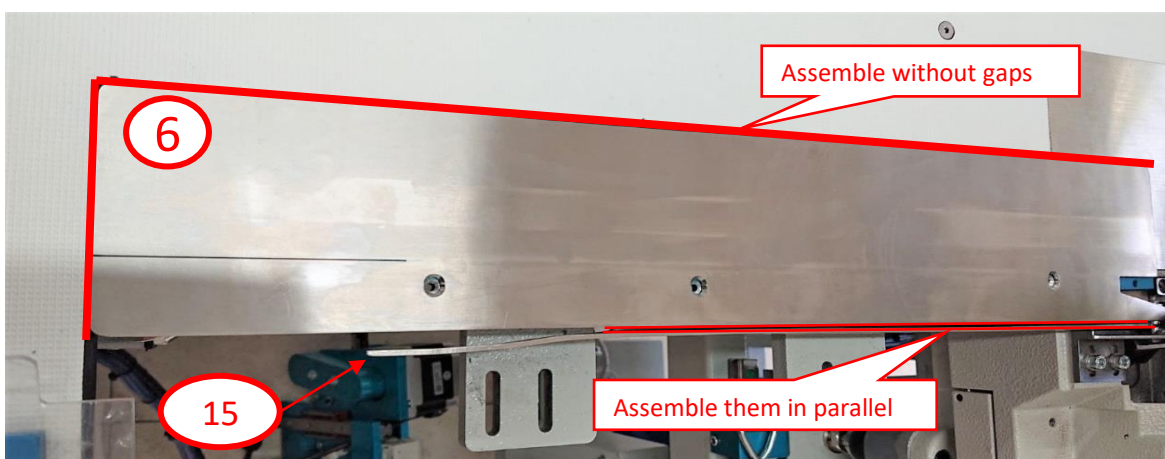
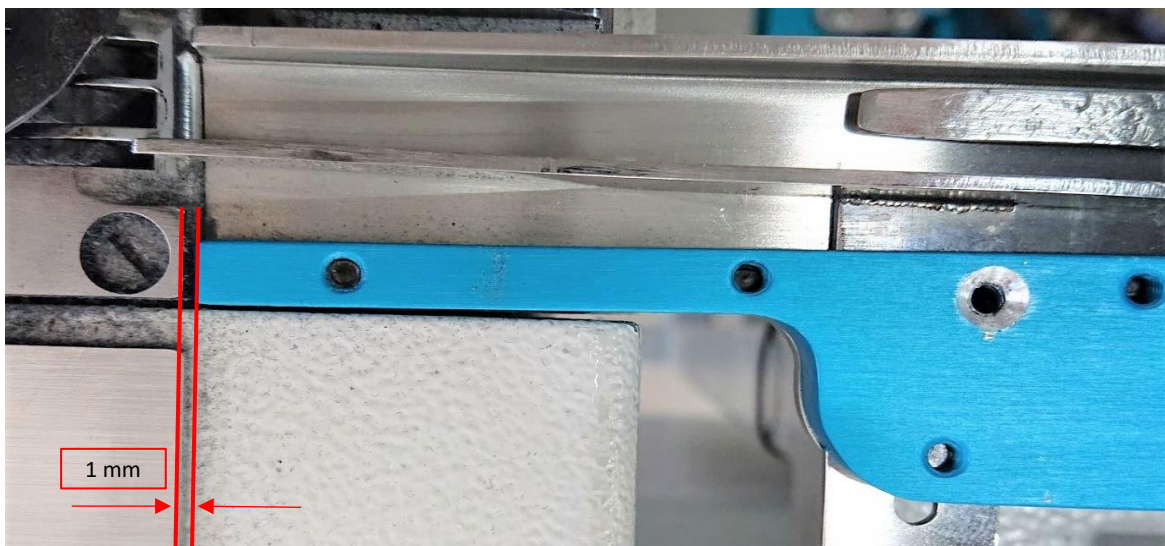


**6.7.9)** Adjust the face of guide B (17) so that it is aligned with the apex of the arc of guide C (19) and tighten nut (14). Tighten screw C (13) by pulling it towards the end of the long hole as shown.

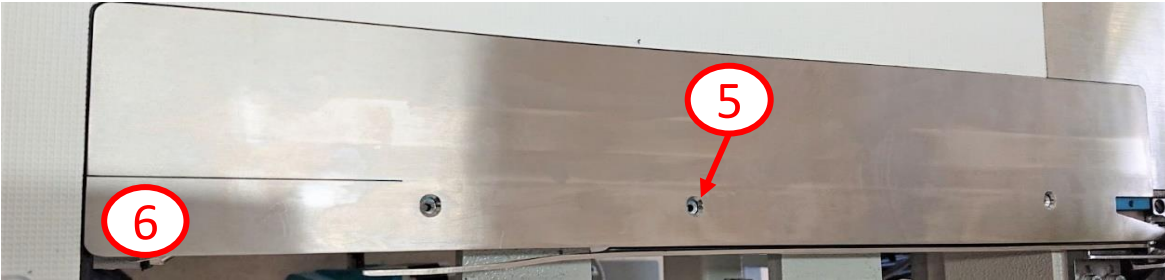


**6.7.10)** Assemble the curving equipment ⑧ and spacer ⑨ with 2 nuts ⑦.

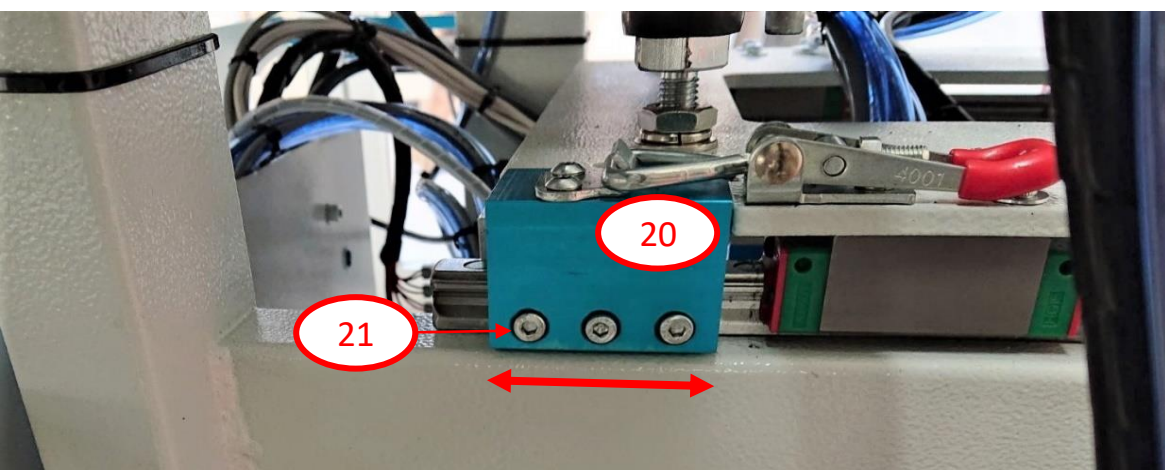
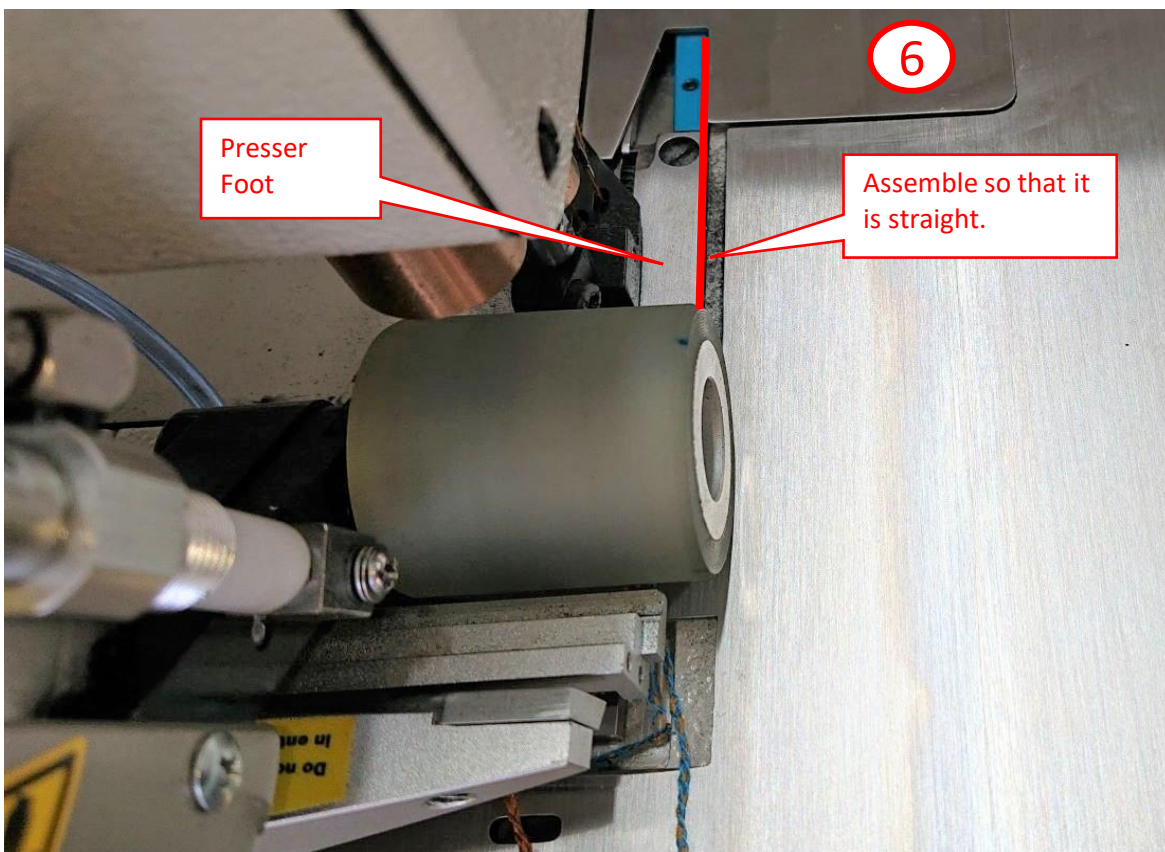
The gap between the curving equipment ⑧ and the needle plate of the sewing machine head should be positioned with a gap of 1 mm. Assemble the curving equipment so that the guides on bottom cover ⑮ of the curving equipment and the cover ⑥ is parallel and that no gap occurs between the table and the cover ⑥.



6.7.11) Attach the curving equipment cover ⑥ with 3 screws ⑤.

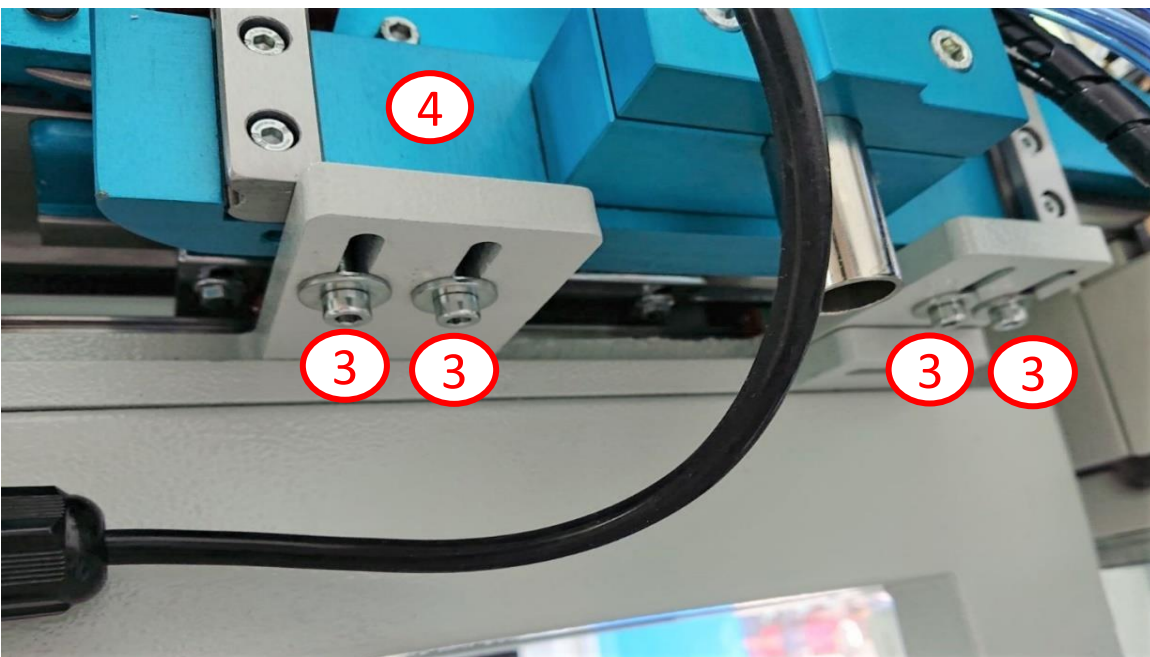
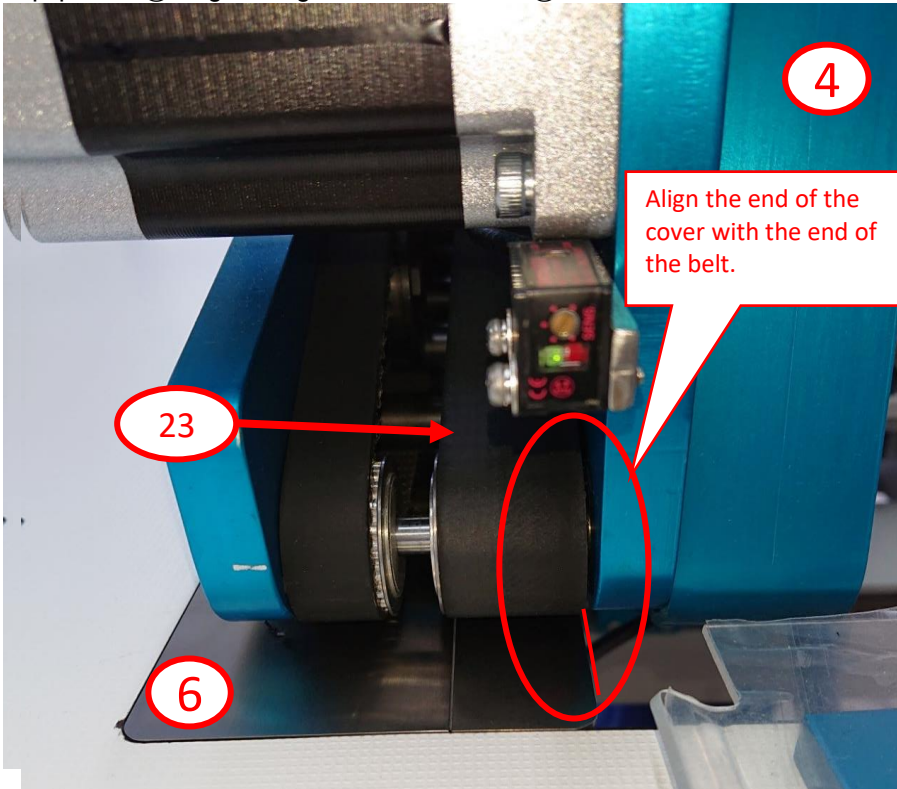


6.7.12) If the Presser foot of the sewing machine head and curving equipment cover ⑥ are not straight as shown, adjust the position of the sewing machine head. Loosen the 3 screws ②① of the stopper ②②, and adjust the position so that the presser foot and the cover ⑥ are straight.

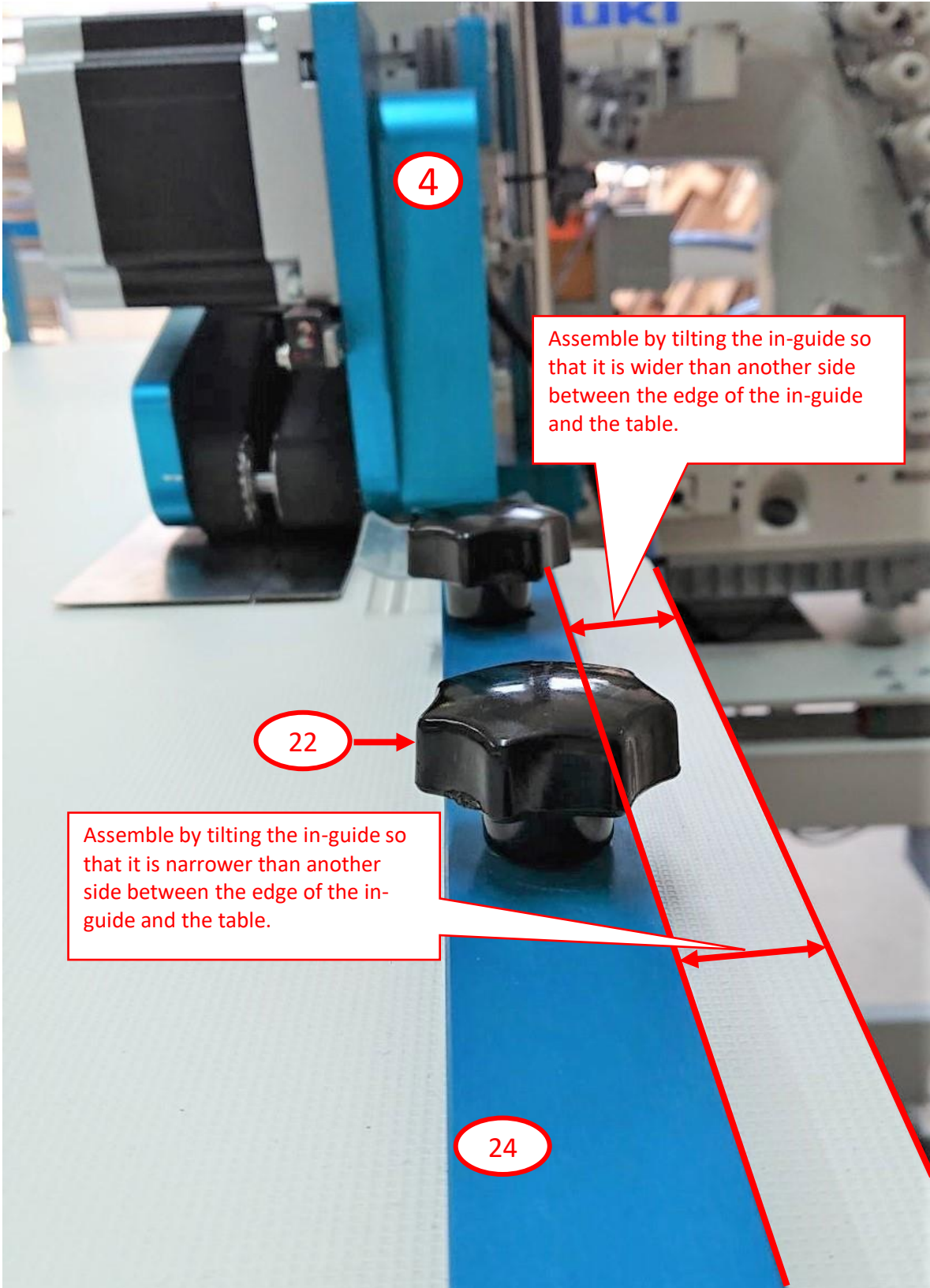




**6.7.13)** With the end of the belt ②③ of the CONVEYOR BAND SYSTEM ④ and the end of the cover of the curving equipment ⑥ aligned, tighten the 4 screws ③.



6.7.14) Loosen the two knobs<sup>22</sup> and assemble the in-guide<sup>24</sup> with a slight tilt as shown. If assembled straight, the left and right pockets will not be aligned. Let the pocket hem several times and adjust the CONVEYOR BAND SYSTEM <sup>4</sup> transport speed, pitch and in-guide direction so that the left and right positions of the pocket match.



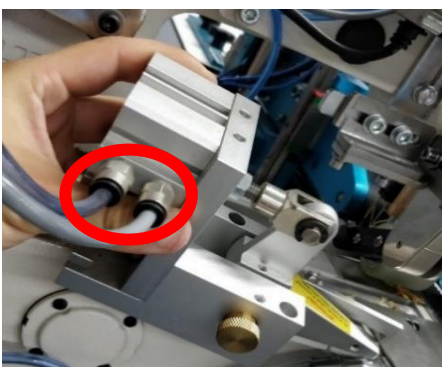
## 6.8) Knife replacement

**Note!** Cut the air compressor of the machine at first!

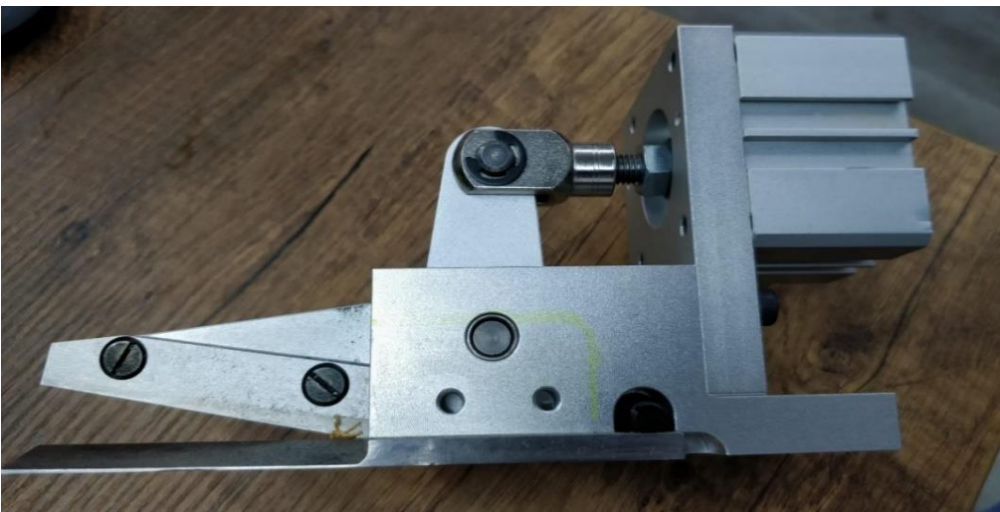
### 6.8.1) Remove the screws.



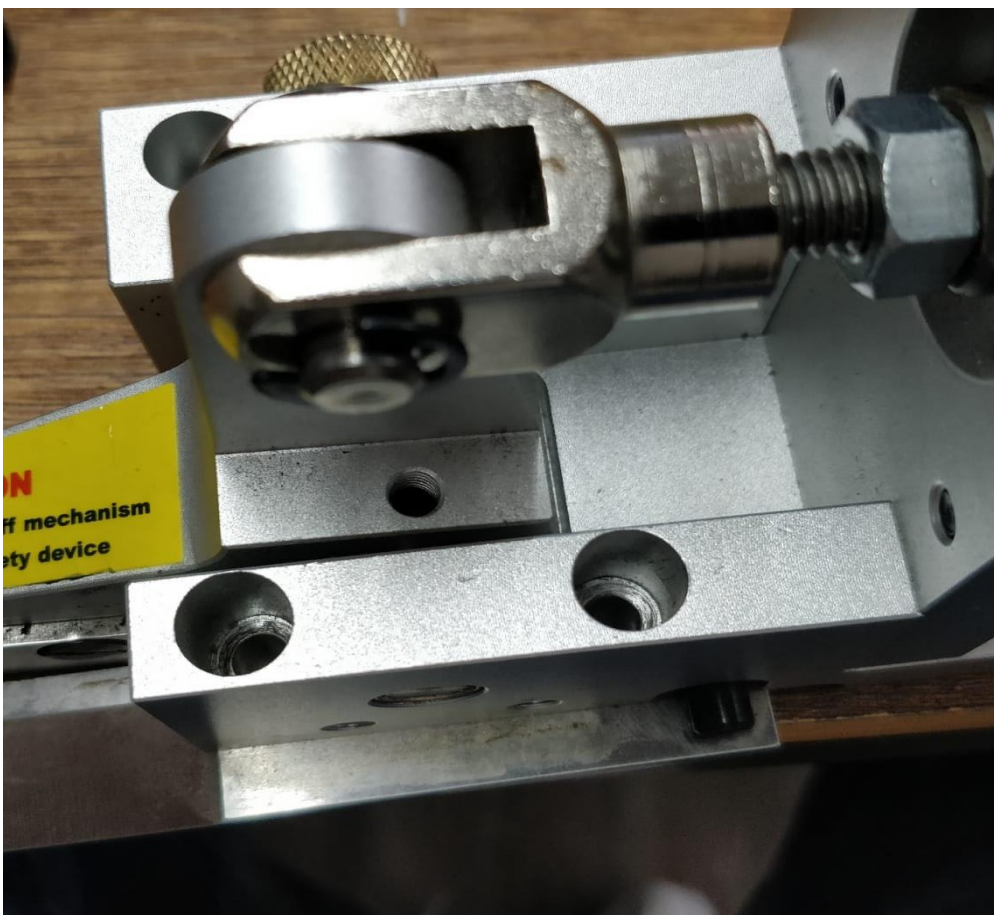
### 6.8.2) Remove the knife assembly and air hoses.



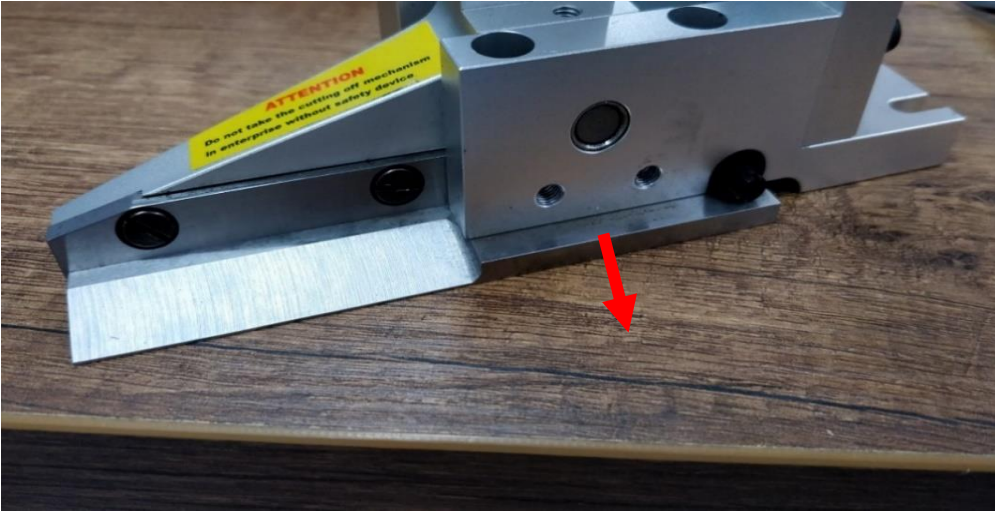
6.8.3) Remove the blower by removing the screws.



6.8.4) Remove the screws.



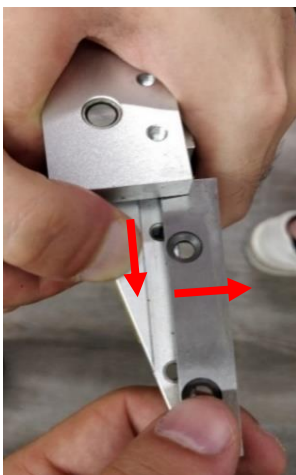
6.8.5) Remove the lower knife.



6.8.6) Remove the screws.



6.8.7) Remove the old upper knife and install the new upper knife.

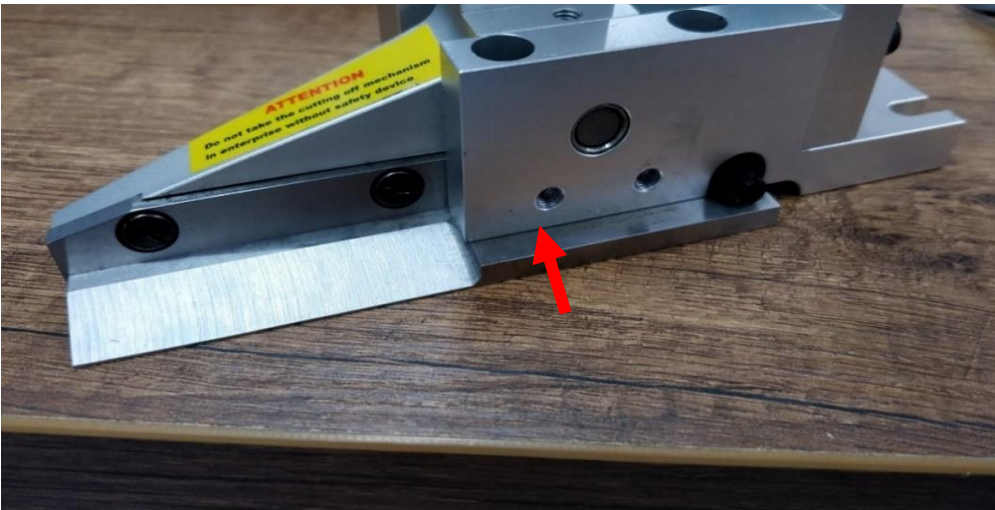


6.8.8) Install the screws.



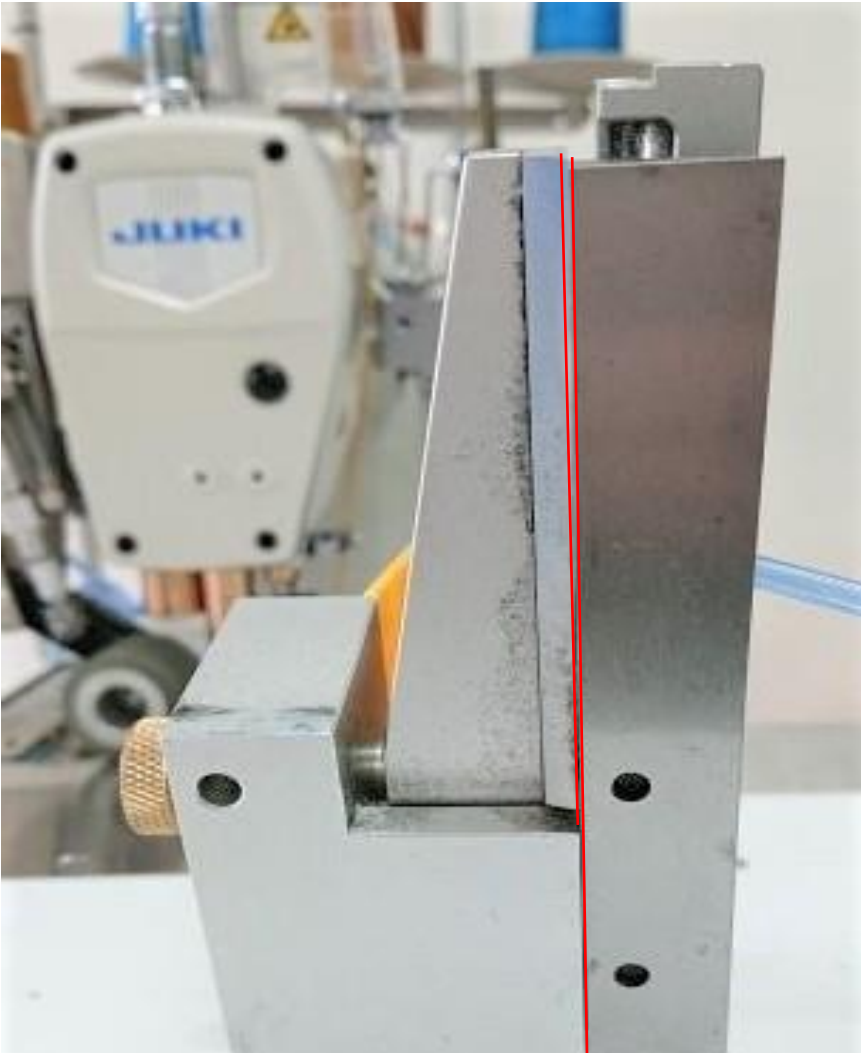


6.8.9) Install the new lower knife.



**6.8.10)** The upper and lower knives should be placed parallel to each other or with the tip of the lower knife inclining towards the upper knife.

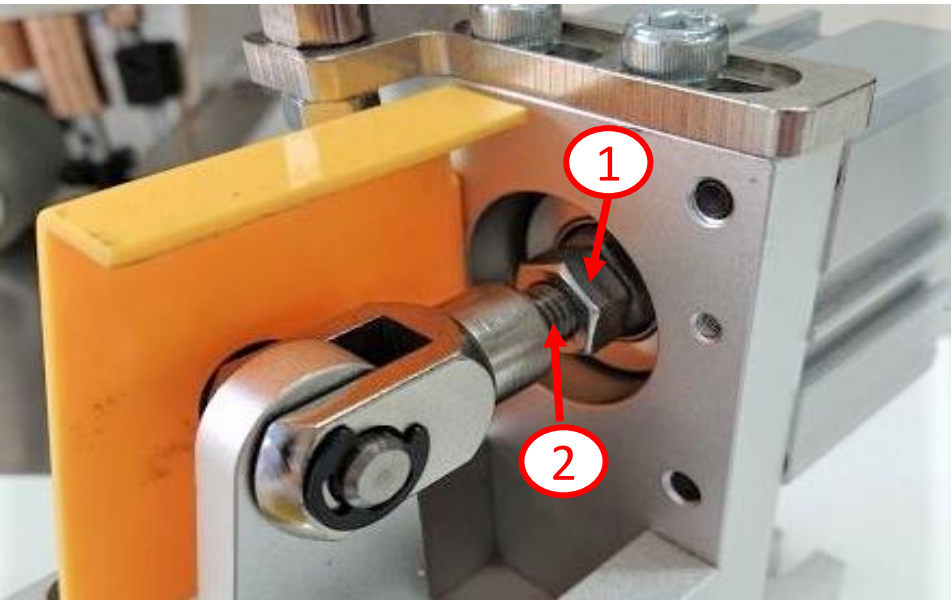
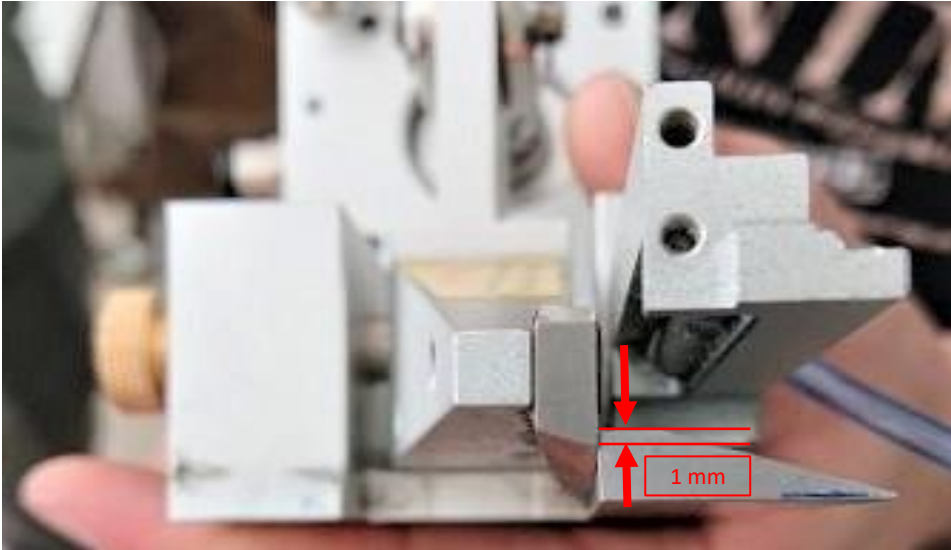
Note: Assemble the upper and lower knives in such a way that there is no gap between them when the cut is in operation.



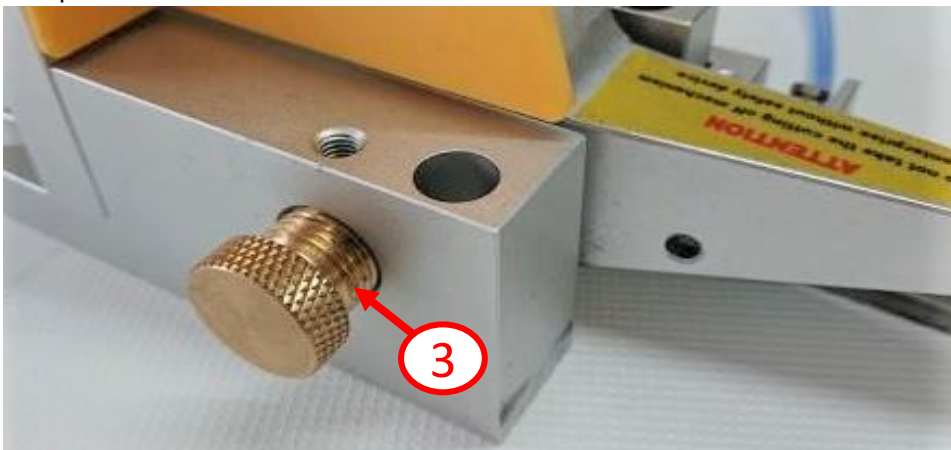
**6.8.11)** Install the screws.



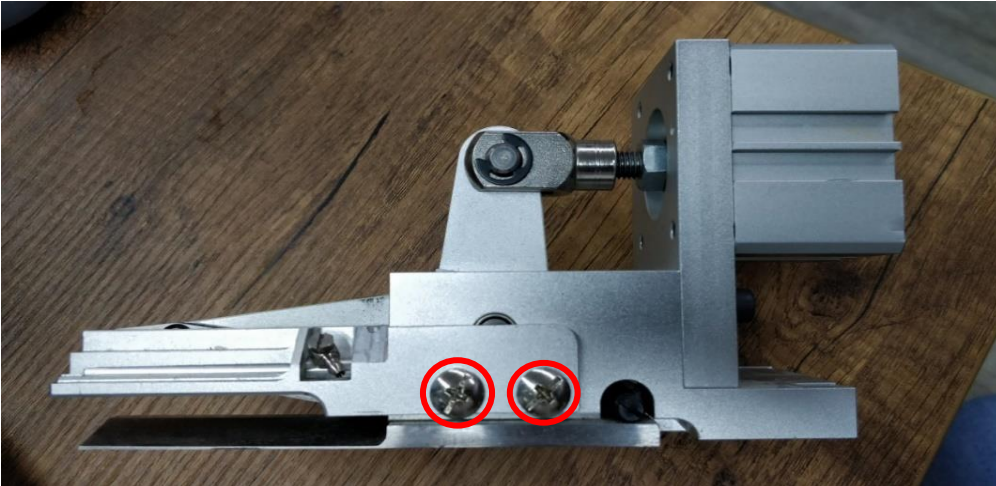
**6.8.12)** The overlap between the upper and lower knife should be 1 mm. The width of the overlap is adjusted by loosening nut (1) and turning screw (2). After adjustment, tighten nut (1).



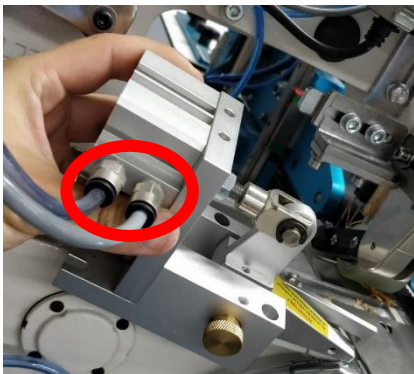
**6.8.13)** Turn the knob (3) and press the upper knife against the lower knife. Low pressure will result in poor sharpness.



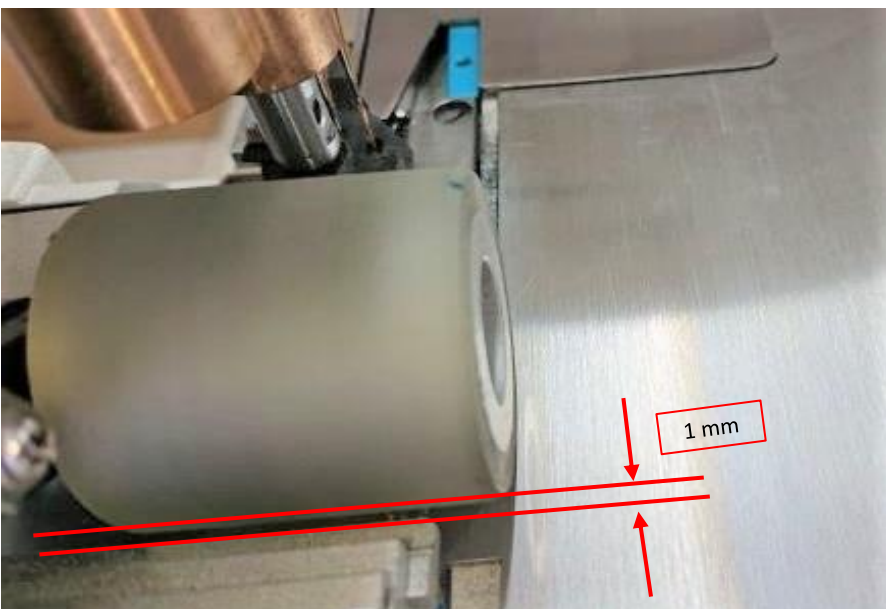
6.8.14) Install the blower and screws.



6.8.15) Install the knife assembly and air hoses.



6.8.16) The target gap between the roller and blower is 1 mm.

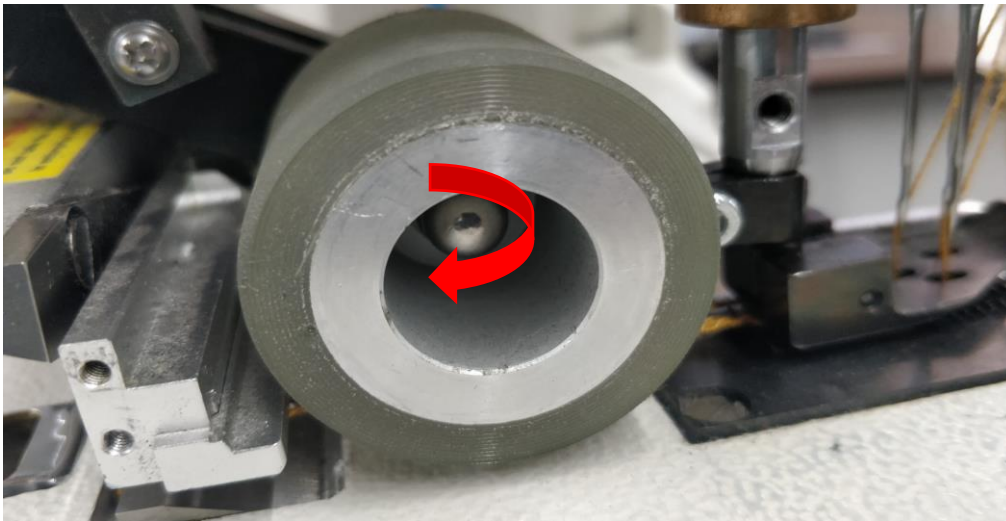
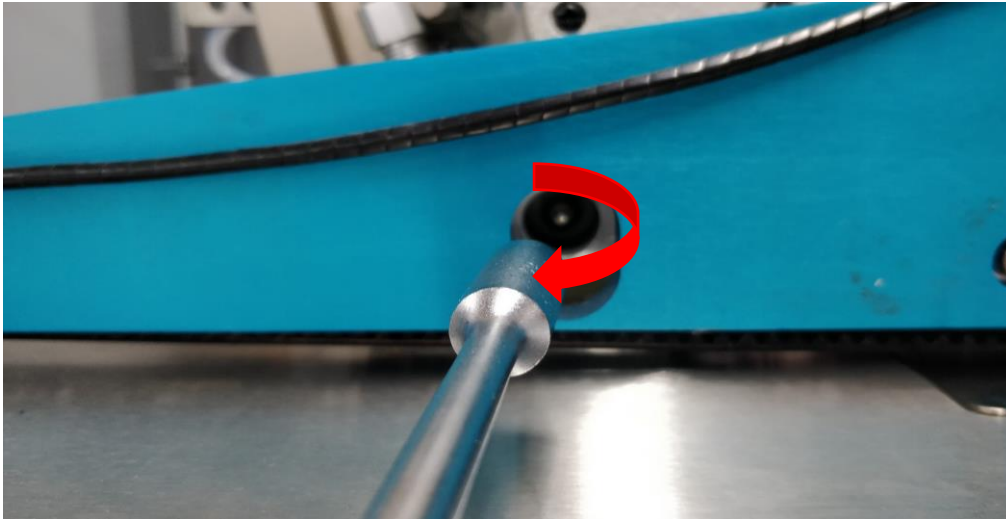


6.8.17) Install the screws.

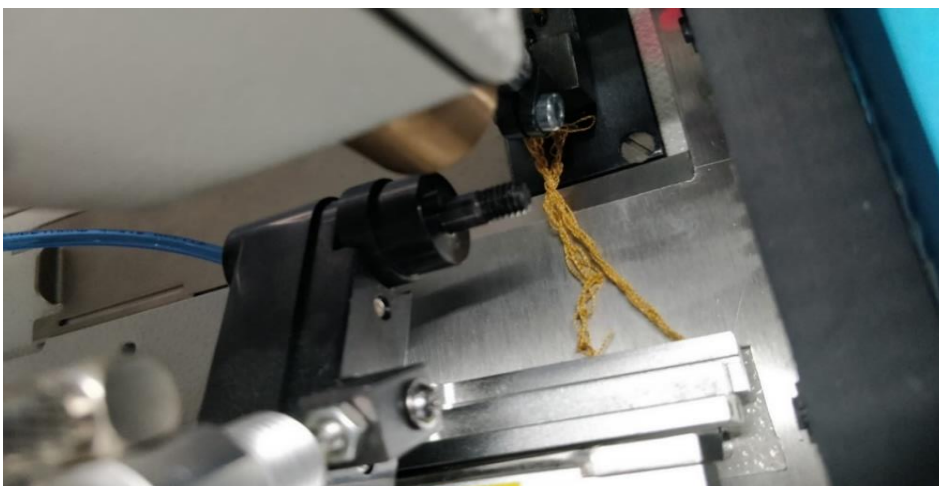


## 6.9) Roller replacement

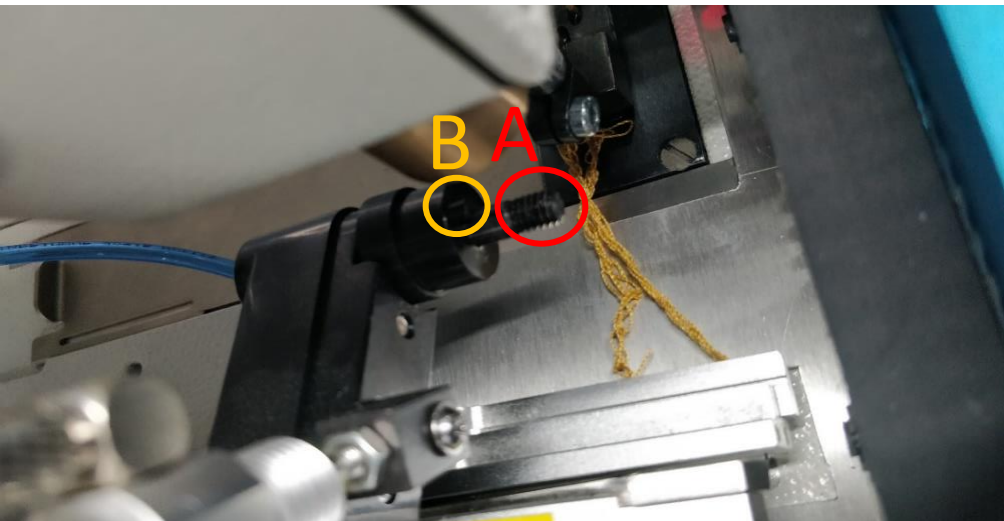
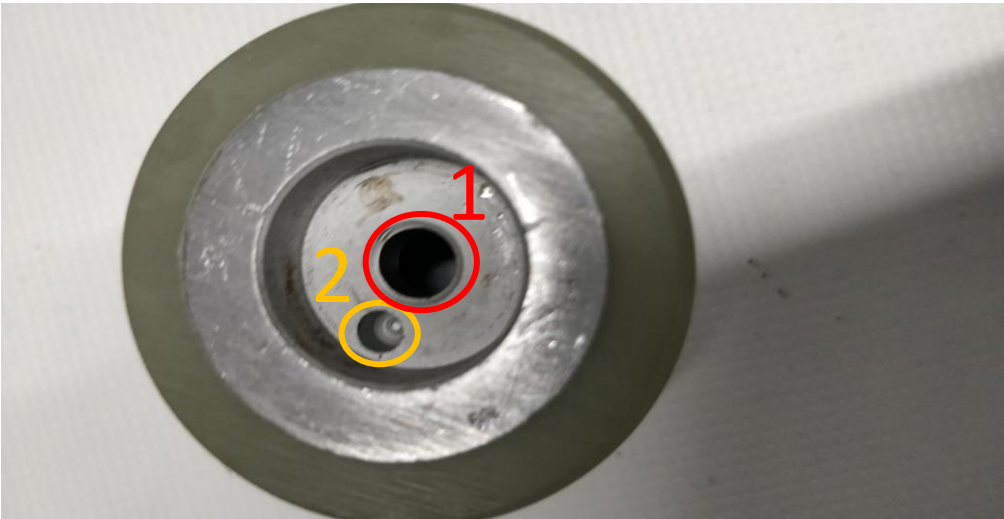
6.9.1) Remove the reverse thread nut (*Turn clockwise for loosening!*).



6.9.2) Remove the roller.



**6.9.3) Install the new roller** (*Match the pin and bolt with the related holes*).

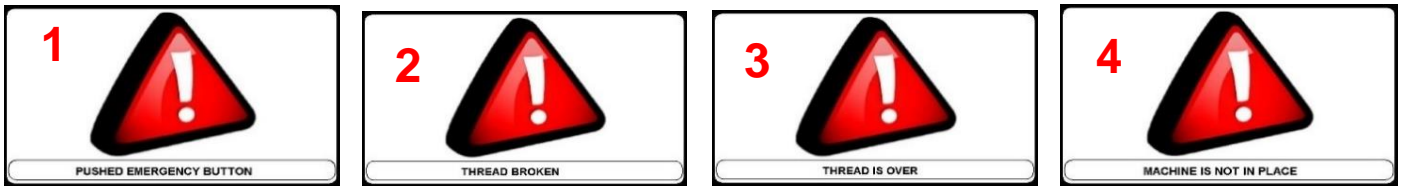


Make sure that bolt(A) should match with hole(1).

Make sure that pin(B) should match with hole(2).

If required parts do not match, try to rotate the roller to match.

## 7) LISTING OF ERROR CODES

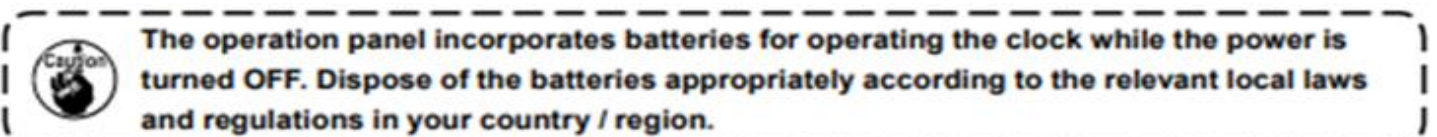


No.	Messages	Workaround
1	Pushed Emergency Button	When emergency button is pressed, machine stops immediately
2	Thread Broken	Indicates that the thread breakage has occurred. When the thread breakage occurs the red light becomes on. When the light is green, it means the machine is ready for sewing. <b>Note :</b> Turn off the power when threading.
3	Thread is over	There is no thread in the bobbin.
4	Machine is not in place.	When the machine is not at the sewing area. Please locate the machine into the sewing area and lock the clamp.

## 8) MAINTENANCE

Machine head is standard JUKI. Please refer to original machine heads instructions manual.  
The machine could be cleaned with pressed air blowing where it is unclean.  
If the thread tangled the part should be removed and should be cleaned separately.

## 9) DISPOSAL OF BATTERIES

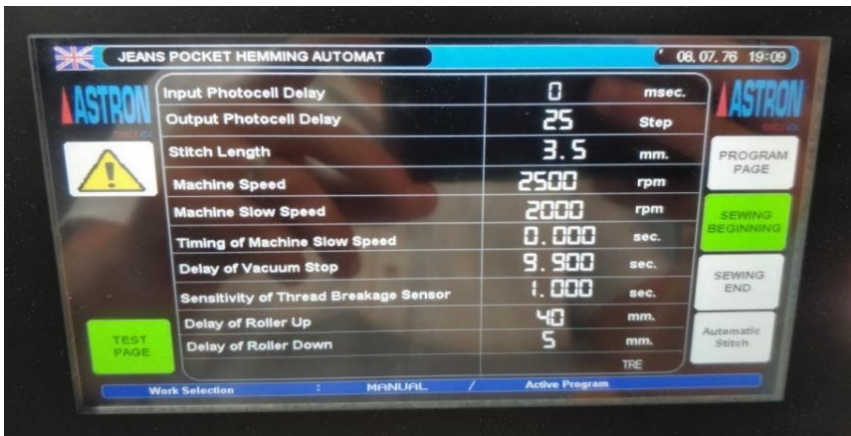




## 10) CAUSES AND COUNTERMEASURES

No.	Trouble	Causes and Countermeasures
1	Gathering thread to the lower side	Please surples the thread to the other side of the roller so that thread will not gets tangled.
2	If the sensor takes to the roller to up position and also the thread tangles.	Please check the thread around the belt and sensor. If there is, clean it.
3	Stitch skipping	Please check the needle.

## 11) LIST OF PATTERN DATA (SHIPPING VALUES)





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