



Optional Device Manual

Boring Device II

Foreword

This user's manual describes about the correct using method and instructions for use of this product. Please use this machine after understanding the contents of the manual.

This manual may contain discrepancies in detailed specification as compared with the actual production. If you have any question about this manual, consult your TAJIMA distributor.

We believe that "BASICS" of TAJIMA EMBROIDERY MACHINES and "MACHINE SETUP INSTRUCTIONS" are useful to deepen your knowledge about this product. Please also read those booklets.

Regarding how to handle the products related, refer to the user's manual exclusive for them included in the manual CD.

TISM Co.,Ltd.

SAFETY PRECAUTIONS

To prevent any harm or damage to the person who use this product or other person, we describe items that must be surely followed as below.



Indicates that there is a lot of danger of death or serious injuries [*1] if handled by mistake.




Indicates that there is a likelihood of death or serious injuries [*1] if handled by mistake.





Indicates a potentially hazardous situation which may result in minor or moderate injury [*2] or property damage if handled by mistake.

*1: A condition caused by electric shock, injury, fracture of a bone, etc., that leads to aftereffects, or an injury that necessitates hospitalization or visits to a hospital over a long period.

*2: An injury that does not necessitate hospitalization or visit to a hospital over a long period.

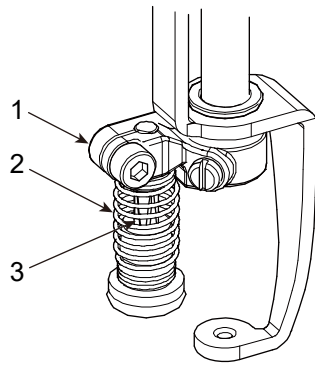
: Prohibited items

: Items that may cause electric shock if not observed

: Items that must be followed carefully to ensure safe operation

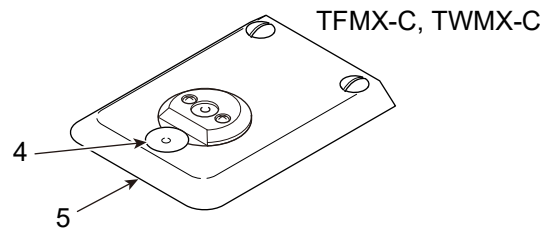
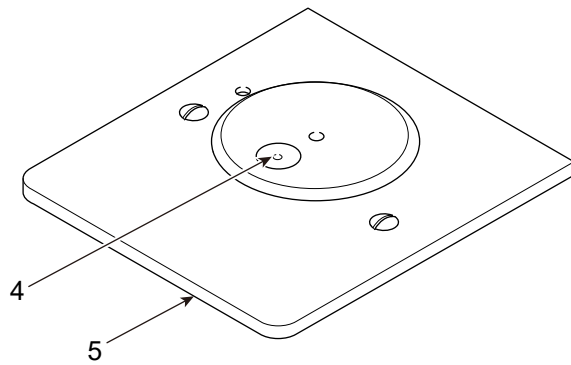
- 1. Name of each part5
- 2. Attaching a device6
 - 2-1. TFMX-C, TFMX, TWMX-C, TCMX mixed type,
TLMX mixed type, TMCP, TMCS6
 - 2-2. TMCR11
- 3. Setting on the operation panel.....19
 - 3-1. TFMX, TCMX mixed type, TLMX mixed type, TWMX-C19
 - 3-2. TMCR, TMCP, TMCS.....20

1. Name of each part



1. Boring knife base
2. Compression spring
3. Knife
4. Knife holder
5. Needle plate (for boring)




TFMX, TMCR, TMCP, TMCS, TCMX mixed type, TLMX mixed type

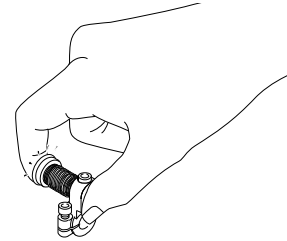


2. Attaching a device

2-1. TFMX-C, TFMX, TWMX-C, TCMX mixed type, TLMX mixed type, TMCP, TMCS

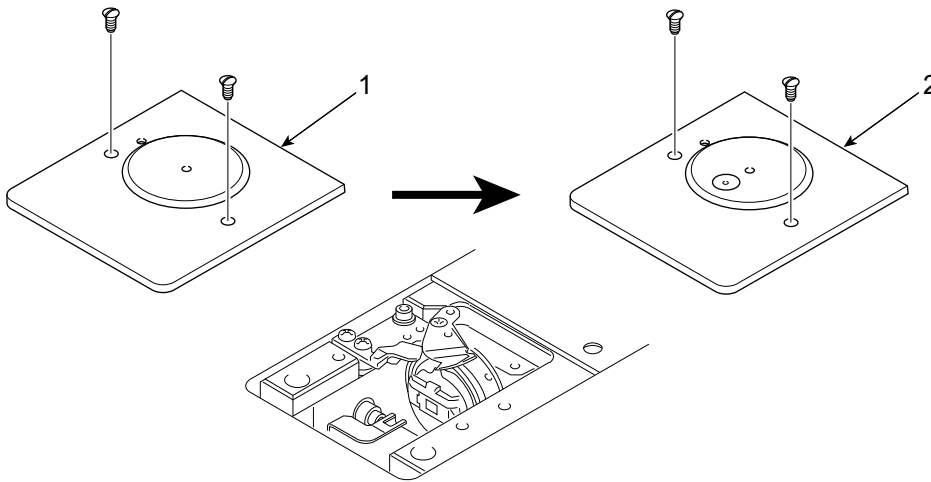
CAUTION

-  When attaching the device, turn "OFF" the power switch. Working with the power turned on could injure you by unexpected malfunction of the machine.
-  Boring hole is affected depending on the type of fabric and upper thread, the number of "overlocking", stitch length of "finishing" etc. Therefore, perform adjustment according to the condition.
-  Do not have the boring device as the right figure shows. Otherwise, the knife could stick in your finger resulting in injury.

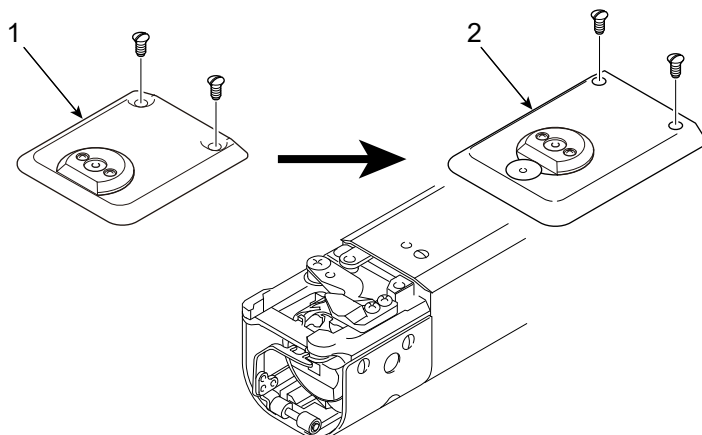


(1) Detach normal needle plate 1 and attach the needle plate 2 for boring.

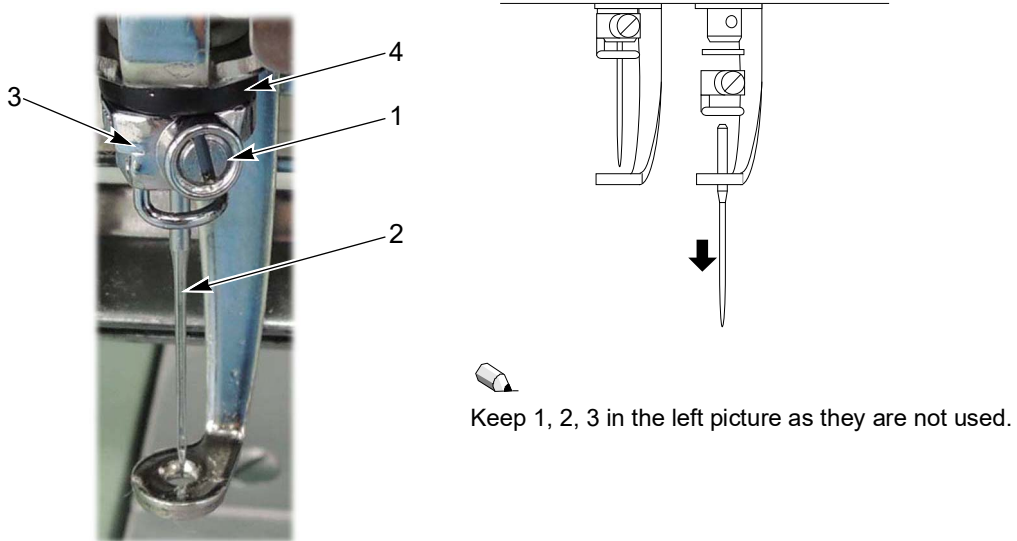
TFMX, TCMX mixed type, TLMX mixed type, TMCP, TMCS



TFMX-C, TWMX-C

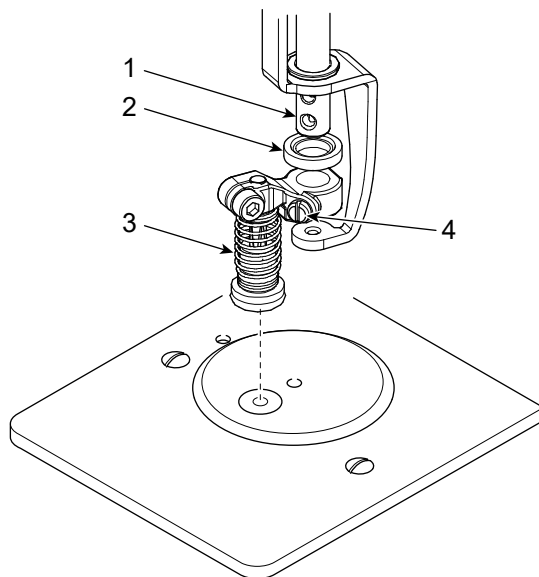


(2) Loosen the screw 1, then detach the needle 2, the needle clamp 3 and the cushion ring 4.

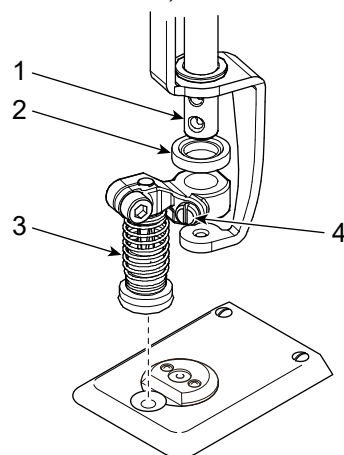


(3) Attach the cushion ring 2 and the boring device 3 to the needle bar 1, and tighten the screw 4.

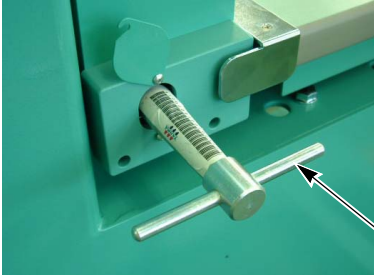
TFMX, TCMX mixed type, TLMX mixed type, TMCP, TMCS



TFMX-C, TWMX-C

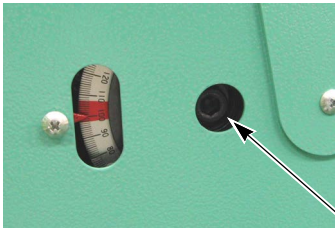


- (4) Insert the main shaft handle into the left-side box and turn 1 counterclockwise to set the main shaft angle to 178°.



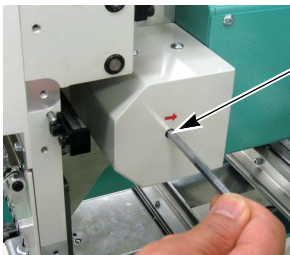
For the single-head machine, turn the main shaft by the following method.

TFMX-C



Left-side box

TWMX-C



Insert the hexagon wrench to turn the main shaft.

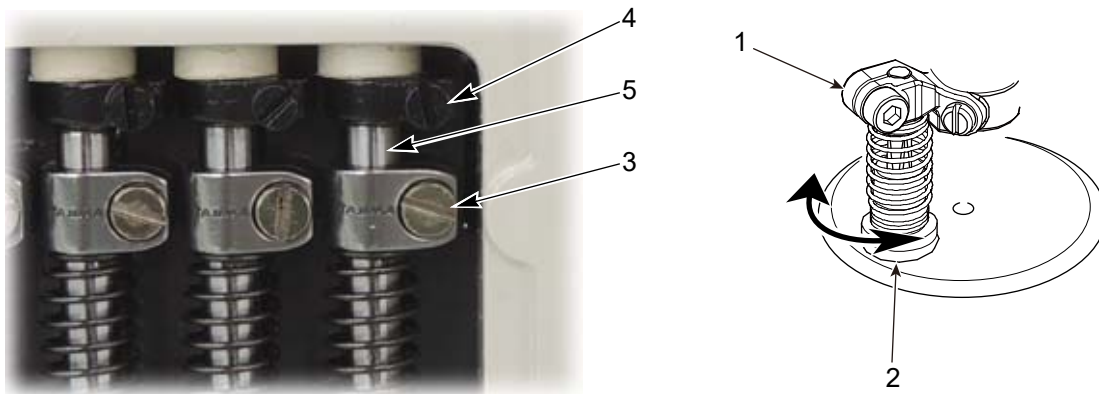
- (5) Push down the needle bar 1 by hand.



- (6)** If the boring device 1 will not come to just above the knife holder 2, loosen the screw 3 and screw 4 to adjust the position of the boring device 1.

Loosen the screw 3 and screw 4 in the minimum. If the fixed position of the needle bar 5 is changed, it may cause misjumping or affect stitching.

In this case, refer to the separate volume “MACHINE SETUP INSTRUCTIONS”, and adjust the upper dead point and lower dead point of needle bar.



- (7)** Check the direction and the height of the knife 1. The direction showed in the figure A is correct. In case of the figure B, adjust the direction of knife 1 by using the screw 2.

Viewing the knife from the top

Figure A



Front

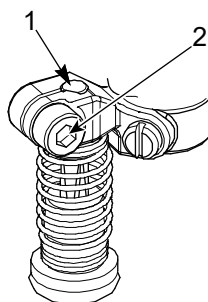
Good

Figure B



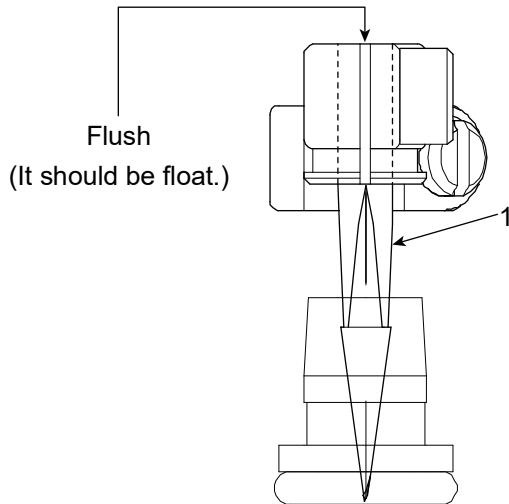
Front

Wrong

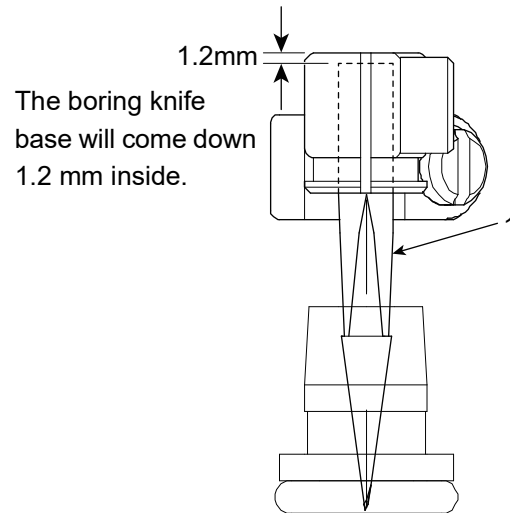


The fixing position of knife 1 differs depending on model.

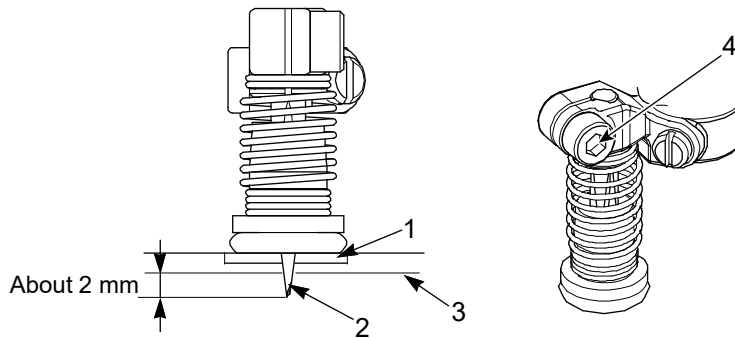
TFMX, TCMX mixed type, TLMX mixed type, TMCP, TMCS



TFMX-C, TWMX-C






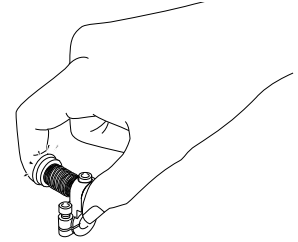
- (8)** Check if the knife 2 sticks in the center of the knife holder 1 and the tip of the knife comes out around 2 mm from the bottom face 3 of the the needle plate. If adjustment is needed, loosen the screw 4 to adjust.



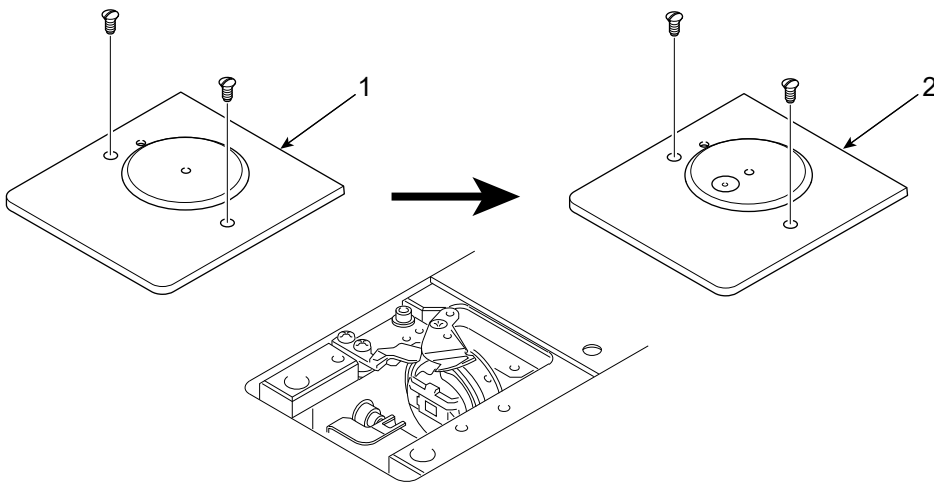
2-2. TMCR


CAUTION

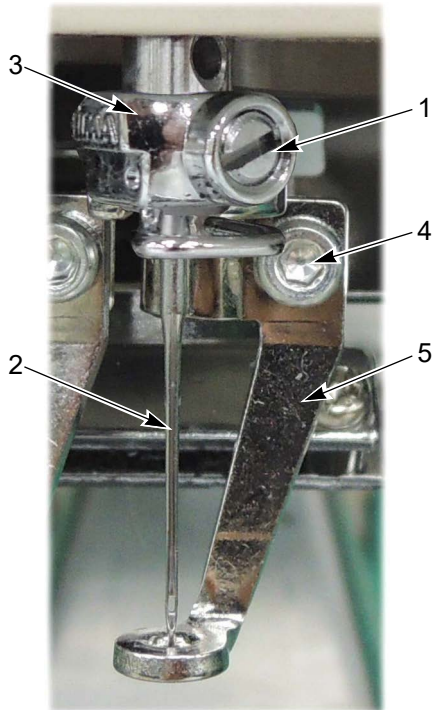
- 
 When attaching the device, turn "OFF" the power switch. Working with the power turned on could injure you by unexpected malfunction of the machine.
- 
 Boring hole is affected depending on the type of fabric and upper thread, the number of "overlocking", stitch length of "finishing" etc. Therefore, perform adjustment according to the condition.
- 
 Do not have the boring device as the right figure shows. Otherwise, the knife could stick in your finger resulting in injury.



(1) Detach normal needle plate 1 and attach the needle plate 2 for boring.

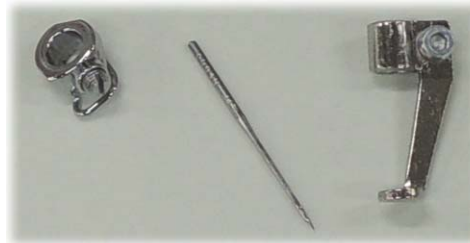


- (2) Loosen the screw 1 of the needle bar to be attached the boring device, then detach the needle 2 and the needle clamp 3. Loosen the screw 4 and detach the presser foot 5.

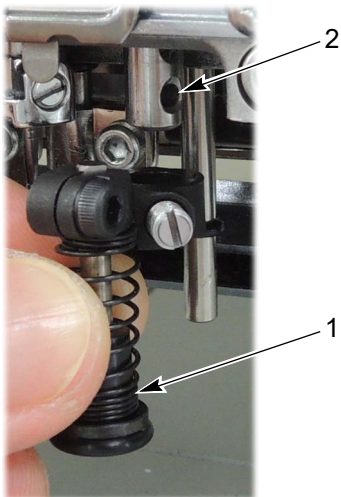


The detached parts are not used. Please keep them.

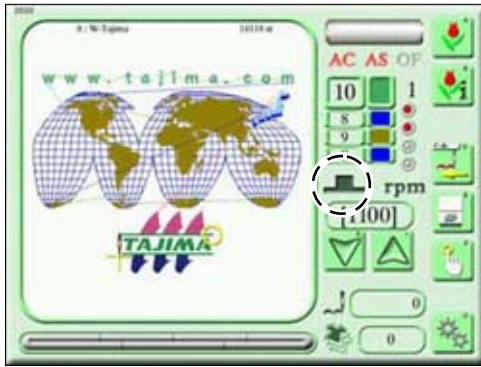
The detached parts




- (3) Attach the boring device 1 to the needle bar 2, and loosen the screw 3.

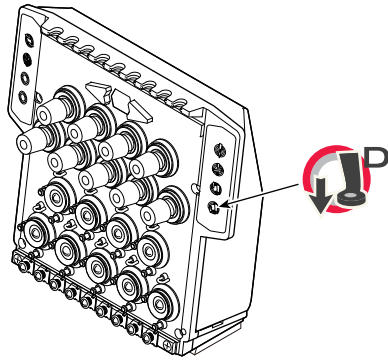


- (4) Set "Main Shaft Brake" to "No" by operating the operation panel.

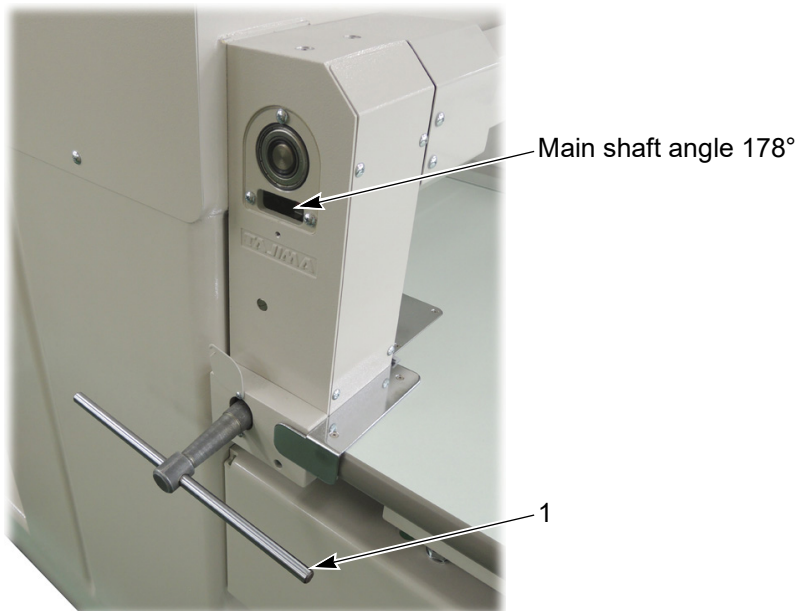


Press  long. The main shaft brake is released and it is displayed in blinking.

- (5) Press D switch at the tension base one time. The presser foot will move down to Frame Back position.



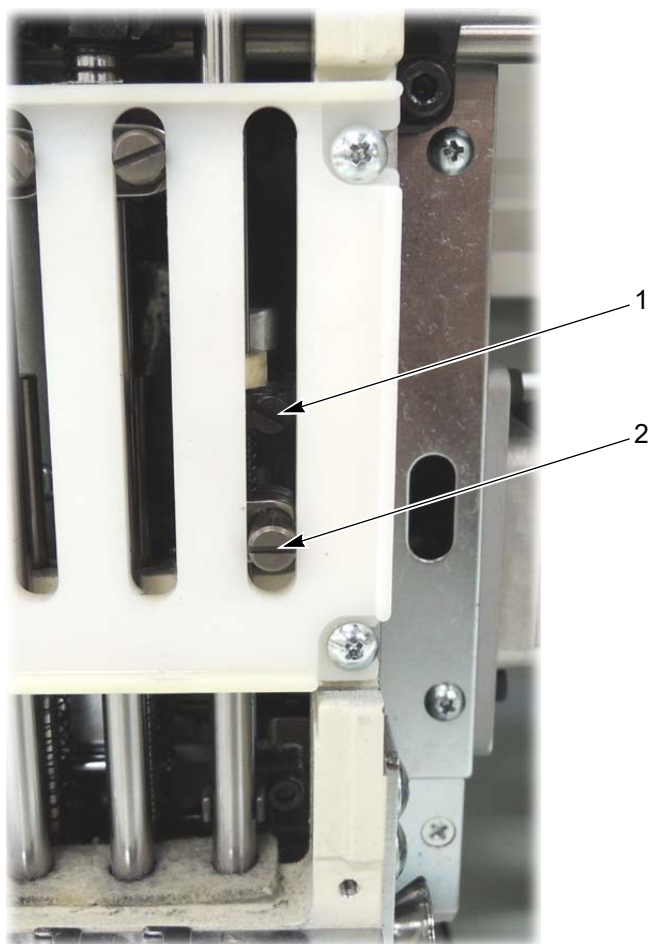
- (6) Insert the main shaft handle 1 into the left-side box and turn the main shaft handle 1 counterclockwise to set the main shaft angle to 178° (the needle bar lower dead point).



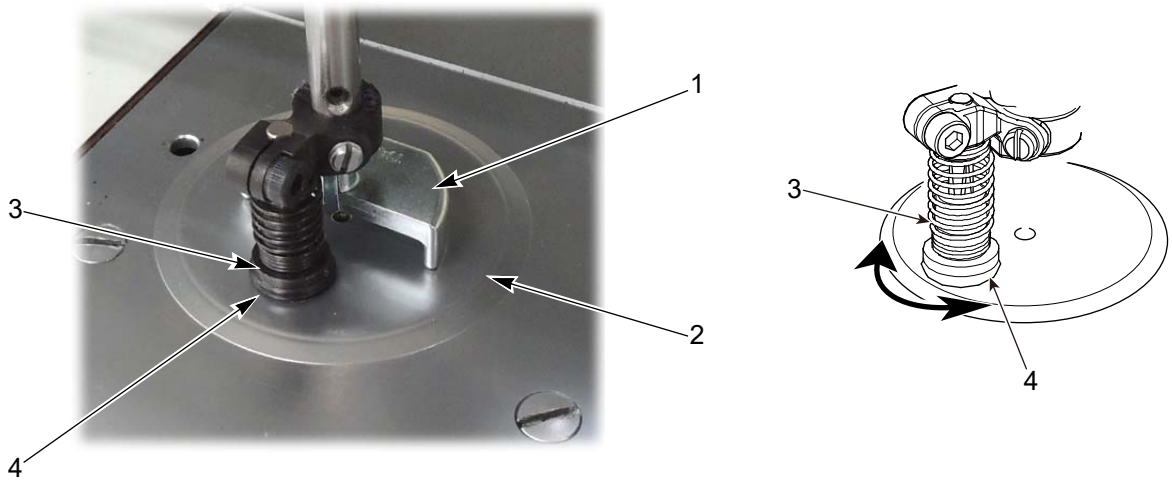
(7) Push down the needle bar 1 by hand.



(8) Loosen the screw 1 and screw 2.



- (9) Place the lower dead point gauge 1 on the needle plate 2. Push down the needle bar and touch it to the lower dead point gauge 1. Adjust the position of the boring device 3 so that 3 will come just above the knife holder 4.



There are two types of the lower dead point gauge. Either one of them is attached according to your machine model.

Lower dead point gauge

Engraved mark



Engraved mark	Application
TAJIMA B	For flat bed type machine
TAJIMA	For cylinder type machine

(10) Tighten the screw 1 in the following state.

- a. In the state that the needle bar 2 is pushed to touch the lower dead point gauge 3 (Photo A)
- b. In the state that the needle bar connecting stud is raised by using the wrench (Photo A, Figure A)

Photo A

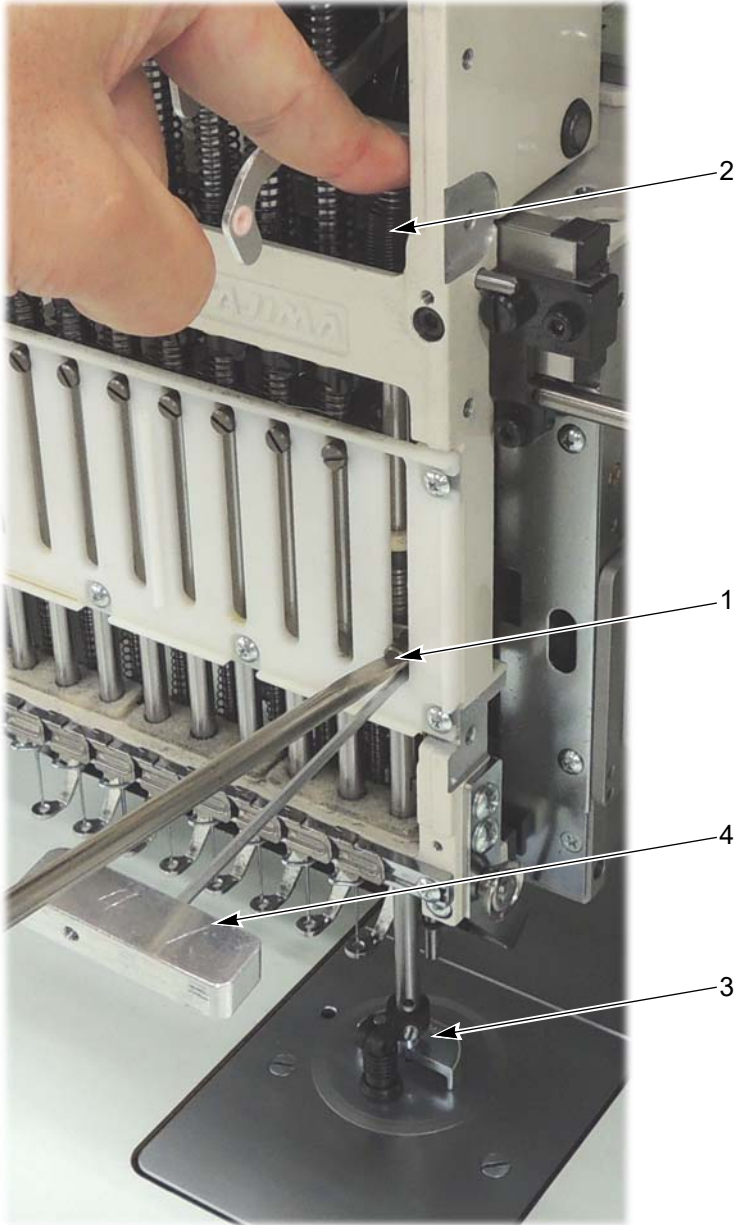
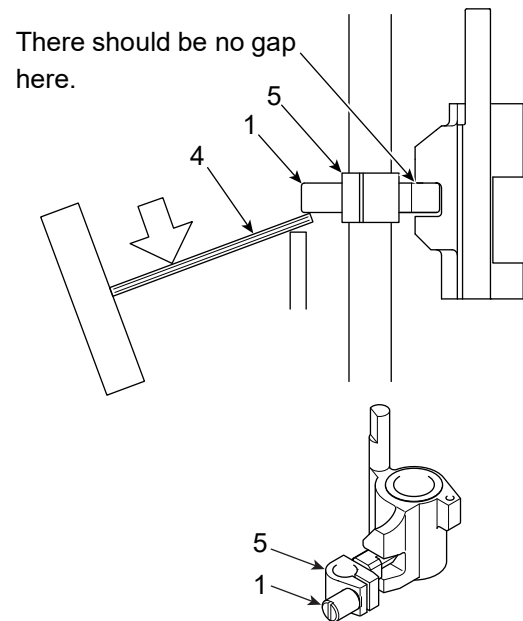
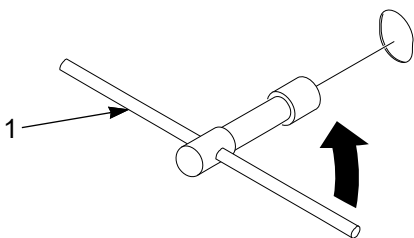


Figure A
Viewing from side



(11) Detach the lower dead point gauge 3.

(12) Insert the main shaft handle 1 to the left-side box and turn 1 counterclockwise to set the main shaft angle to 0°.



(13) Loosen the screw 1 and tighten the screw 1 again in the state of facing the front (1 or 2 in figure A).

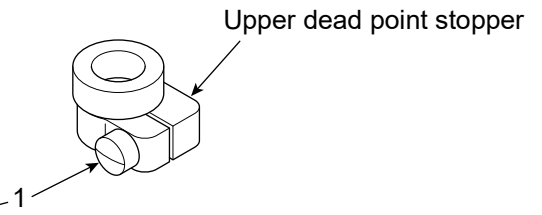
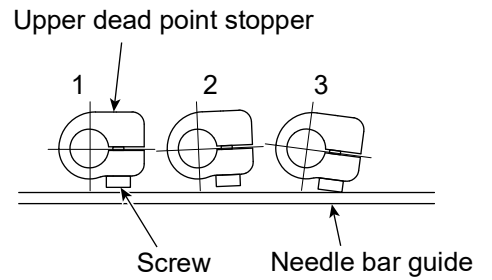


Figure A (Viewing from top)



In the state of 3 in the figure A above, the upper dead point stopper touches the needle bar guide.

(14) Check the direction and the height of the knife 1. The figure A shows its correct direction. In case of the figure B, adjust the direction of the knife 1 with the screw 2.

Viewing the knife from top

Figure A

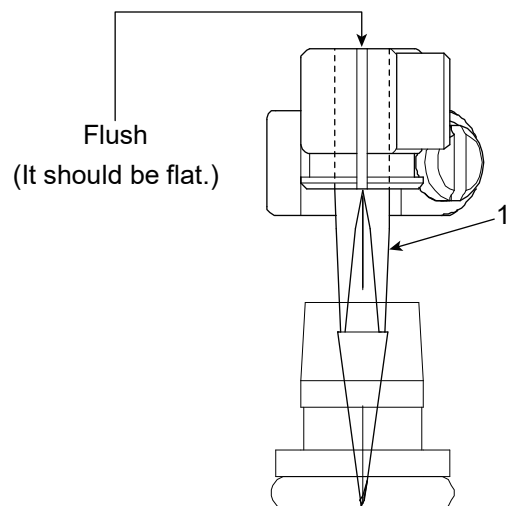
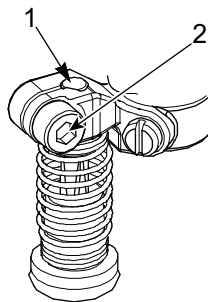


Good

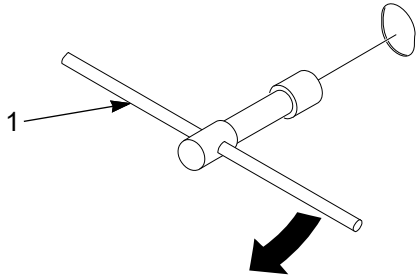
Figure B



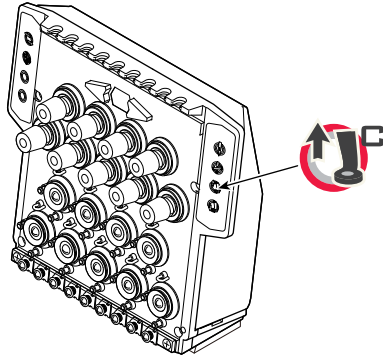
Wrong



- (15) Insert the main shaft handle 1 into the left-side box and turn 1 counterclockwise to set the main shaft angle to 100° (the fixed position).



- (16) Press the C switch. The presser foot and needle bar will move up.

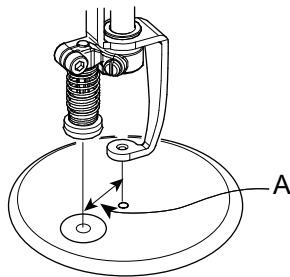


3. Setting on the operation panel

3-1. TFMX, TCMX mixed type, TLMX mixed type, TWMX-C

Before using the device, check if the setting on the operation panel is "To use (step 1 or step 2)". Besides, select the needle bar No. (1st to last needle) to attach the device.

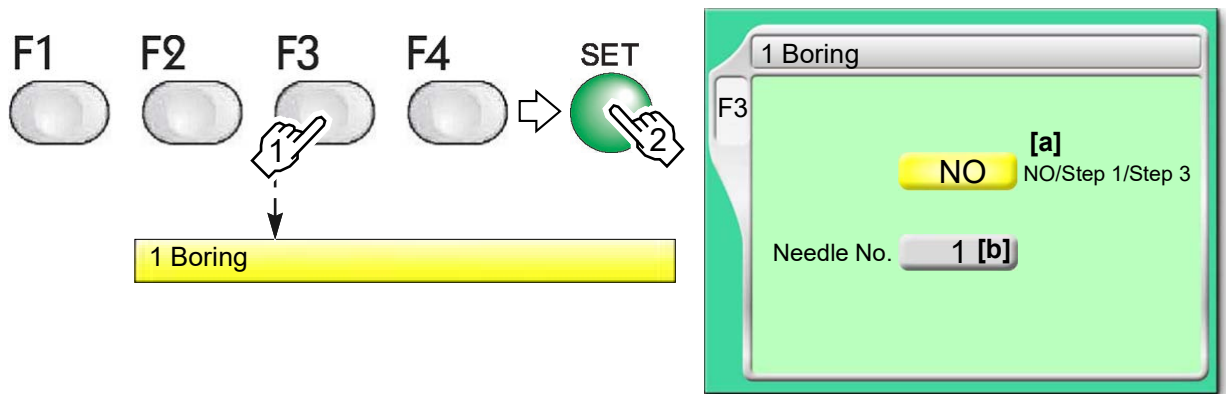
When normal embroidery is switched to boring, the frame will move 12 mm to the front. (Boring Offset, A in the right figure)



When embroidering boring design or after installing the software, the setting of Boring Offset is necessary. Follow the procedure shown below.

<Procedure>

(1) Select "F3".



<Explanation of screen>

[a] The chart below

	Boring Offset	Design Data Conversion
NO	Not equipped	-
Step 1	12 mm is not added. The frame will move as data is.	Unable
Step 3	12 mm is added.	Able

[b] Select the needle bar No. (1st to last needle) to attach the device.

(2) Select a value and [SET].



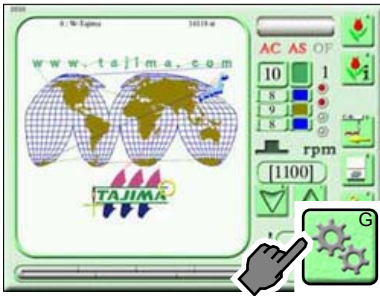
3-2. TMCR, TMCP, TMCS

(1) To use/not to use device

Before using the device, check if the setting on the operation panel is "To use "Yes 1" (The number differs depending on the needle to attach the device). Also, select the needle bar No. (1st to last needle) to attach the device.

<Procedure>

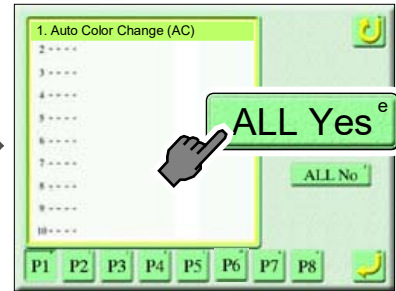
1. Icon G



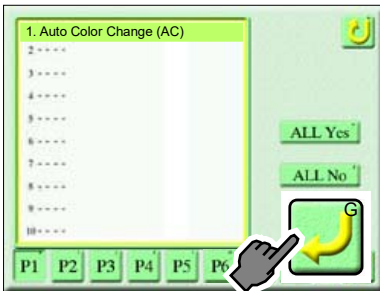
The left screen is an example of TMCR.

After that, cancel the functional limit level. For details, refer to the chapter for "Parameter" in the user's manual.

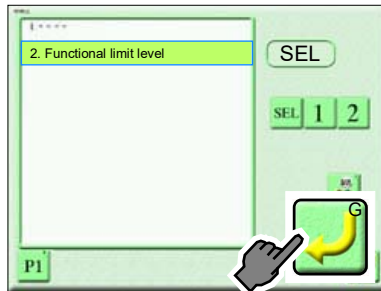
2. ALL Yes



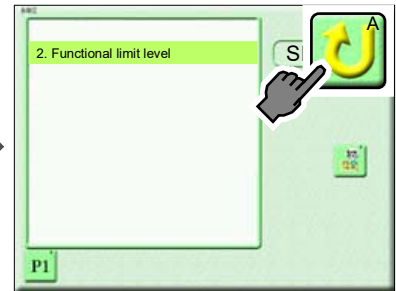
3. To set



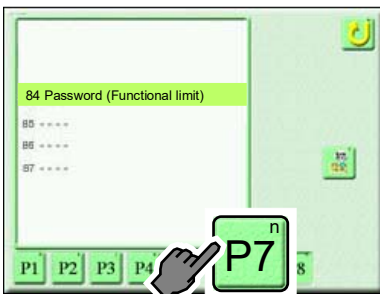
4. To set



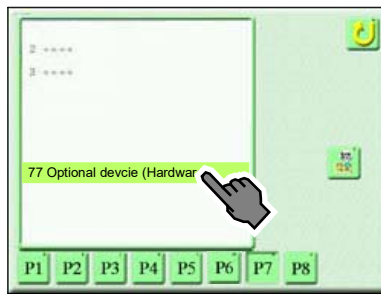
5. Icon A



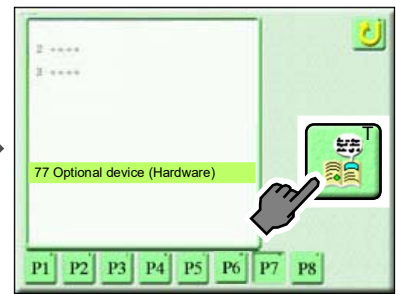
6. P7



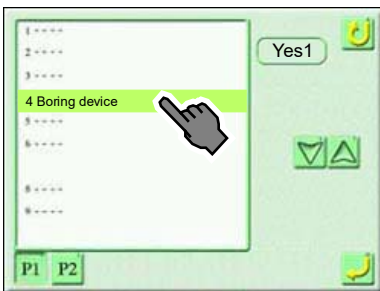
7. 77 Optional device (Hardware)



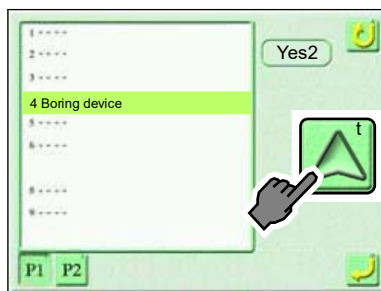
8. Icon T



9. 4 Boring device

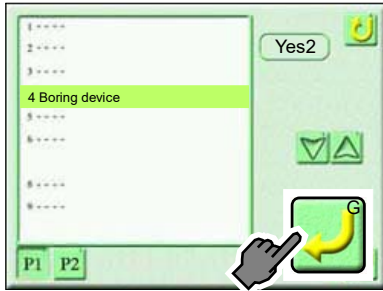


10. Yes 2



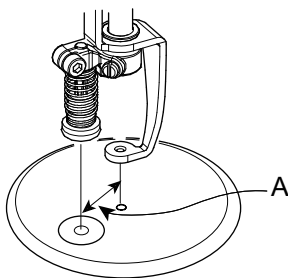
Yes1 : Device is equipped to 1st needle.
 Yes2 : Device is equipped to 2nd needle.
 Yes3 : Device is equipped to 3rd needle.
 No : Device is not equipped.

11. To set



(2) Setting for Boring Offset

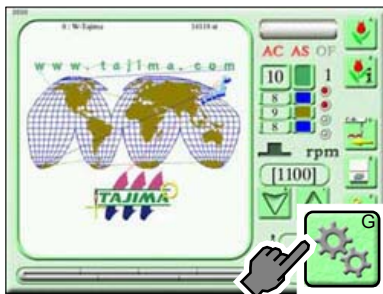
When normal embroidery is switched to boring, the frame will move 12 mm to the front. (Boring Offset, A in the figure below) When embroidering boring design, the setting of Boring Offset is necessary. Follow the procedure shown below.



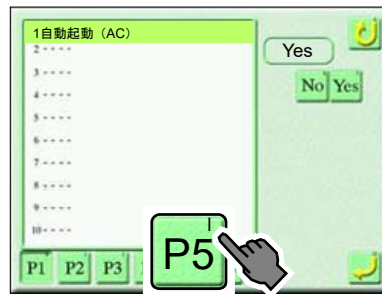
	Boring Offset	Design Data Conversion
Step 1	12 mm is not added. The frame will move as data is.	Unable
Step 2	Offset amount on design data is deleted and 12mm is added.	Able
Step 3	12mm is added.	
Without	-	-

<Procedure>

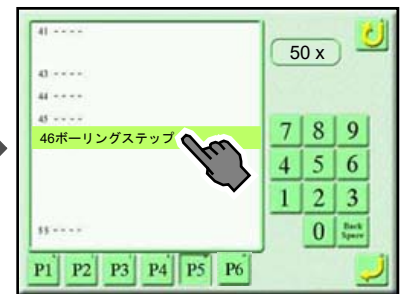
1. Icon G



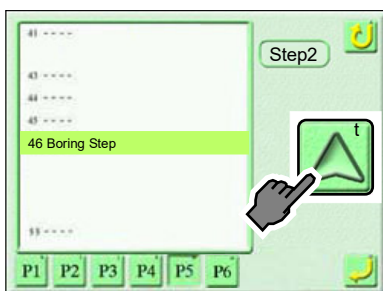
2. P5



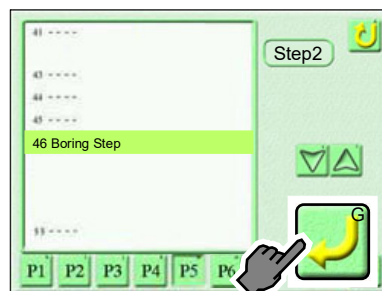
3. 46 ポーリングステップ



4. Step 2



5. To set



1st Edition February, 2012

9th Edition May, 2025

■ **Manufactured by : TISM Co.,Ltd.**

Address : NO.1800, Ushiyama-cho, Kasugai, Aichi -pref., 486-0901, Japan

■ **Distributed by : Tajima Industries Ltd.**

Address : NO.1800, Ushiyama-cho, Kasugai, Aichi -pref., 486-0901, Japan

- Copy, reprint, or reform of a part or whole of this manual without permission is prohibited.