



Optional Device Manual

# Multi Cording Device 2



## Foreword




Thank you for purchasing the TAJIMA embroidery product.

Please read this manual thoroughly, understand the contents, and then use the machine.

This manual may contain discrepancies in detailed specifications when compared with the actual product. If you have any question, please ask the distributor for information.

## Safety Precautions and Symbols




Items that require your special attention on handling the machine are specified below.

Description	Meaning
 <b>DANGER</b>	Indicates that there is a lot of danger of death or serious injuries <sup>*1</sup> .
 <b>WARNING</b>	Indicates that there is a likelihood of death or serious injuries <sup>*1</sup> .
 <b>CAUTION</b>	Indicates a potentially hazardous situation which may result in minor or moderate injury <sup>*2</sup> or physical damage.



\*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.

The meaning of the symbols used throughout this document have the following meanings.

Symbol	Meaning
	Item to be prohibited
	Items that could cause electric shock
	Items to keep safety

## Other Precautions

Description	Meaning
	Items that may affect stitching
	Recommended and useful tips.

## Disclaimer, etc.

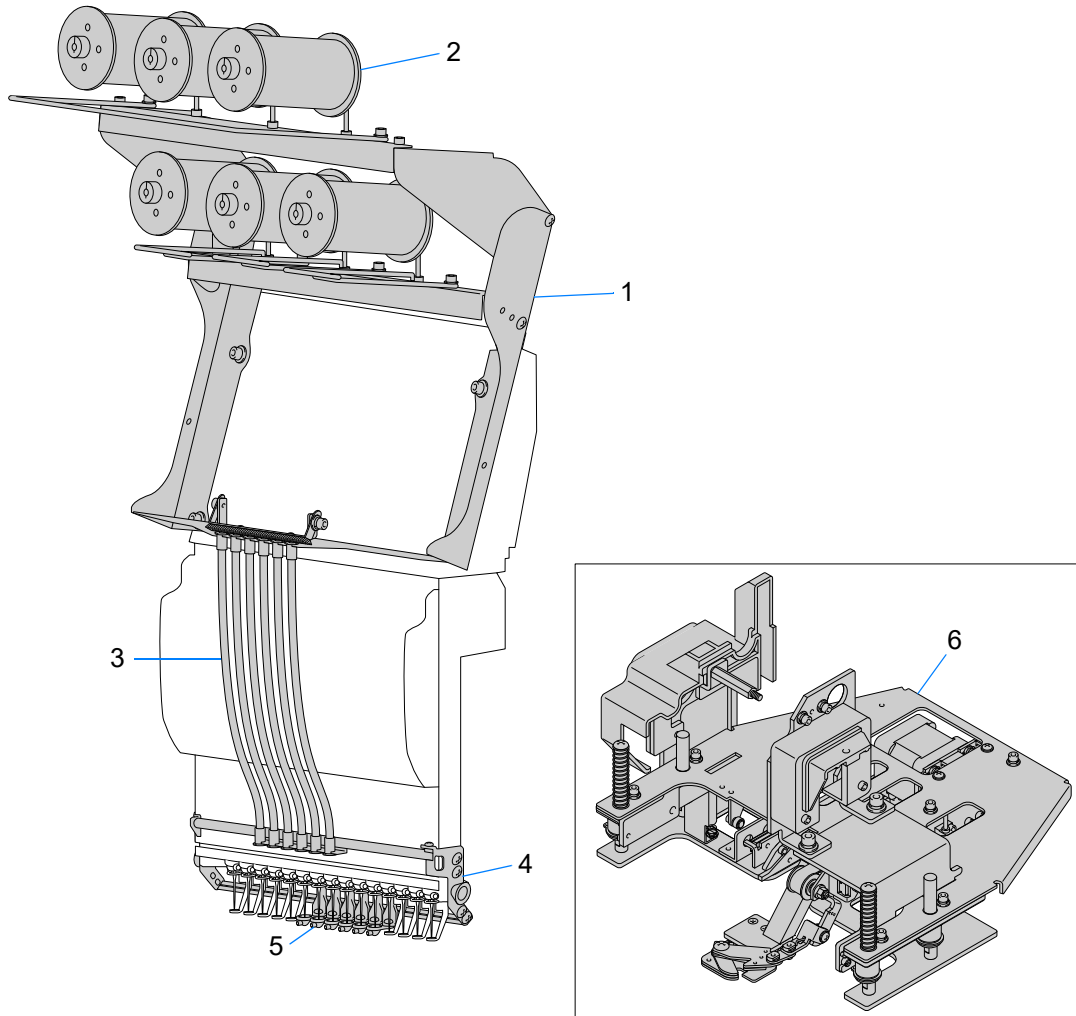
- The external views and specifications of the machine and the contents of this manual are subject to change without notice due to improvement.
- TAJIMA bears no responsibility regarding any damage arising from not observing the instructions in the manual or any fault or damage resulting from repair, disassembly, or modification not indicated in the manual.
- You may not copy, reproduce, or transcribe a part or whole of this manual without consent of TAJIMA.

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# 1. Name of each part

## 1-1. General drawing



1	Bobbin holder	4	Upper thread holder
2	Bobbin	5	Cord presser
3	Spiral tube	6	Cord-cutting device (optional: TMCR-VF, TMAR-KC only)

### **⚠ Caution**

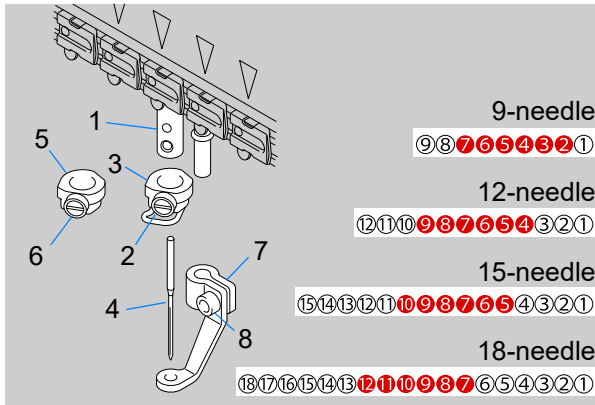
-  Cannot be used in combination with Laser Cross Marker.
-  Change the mounting method of the beads reel to prevent the interference of the beads reel with the bobbin if the seed beads device is used in combination.

## 2. Preparation

### 2-1. Removing the presser foot and needle

#### Warning

! To prevent an accident due to an unexpected startup, be sure to turn OFF the power before accessing the machine.



1 Loosen the screw 2 and remove the needle clamp 3 and needle 4 from the needle bar 1 compatible with the Multi Cording Device.



• With reference to the figure, remove the needle clamp and needle from each needle bar whose number is indicated in red.

2 Temporarily fixing the needle clamp 5 for the multi cording device to the needle bar 1 from which the needle clamp 3 and needle 4 have been removed with the screw 6.

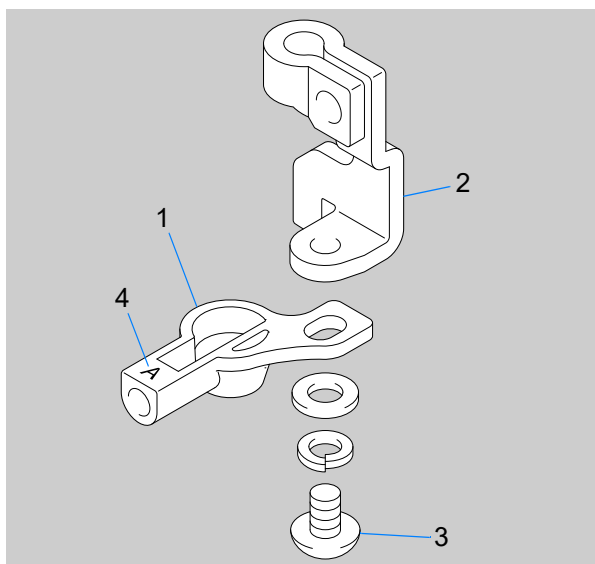
3 Loosen the screw 8 and remove the presser foot 7 corresponding to the needle bar 1 from which the needle clamp 3 and needle 4 were removed.

### 2-2. Installing the cord presser and needle

#### Caution

⊘ The Multi Cording Device 2 requires the use of the exclusive cord presser. Embroidering cord with ordinary presser foot could result in machine failure.

#### Assembling the cord presser



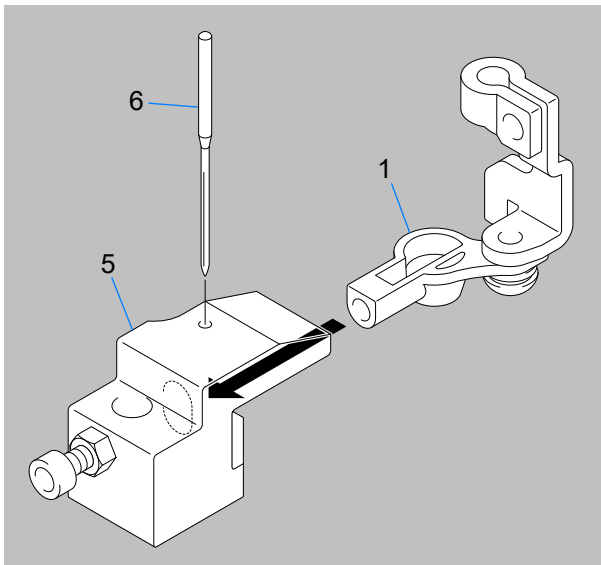
1 Temporarily fixing the cord presser 1 and base 2 with the hexagon socket head button screw 3.

The cord presser 1 has an engraved mark 4 that identifies the size.

A	B	C
1.0 mm dia.	1.5 mm dia.	2.0 mm dia.
0L114626A000	0L114626B000	0L114626C000



• Attaching the presser foot from the right-side in descending order of above diameters (sizes) will make the adjustment easier.

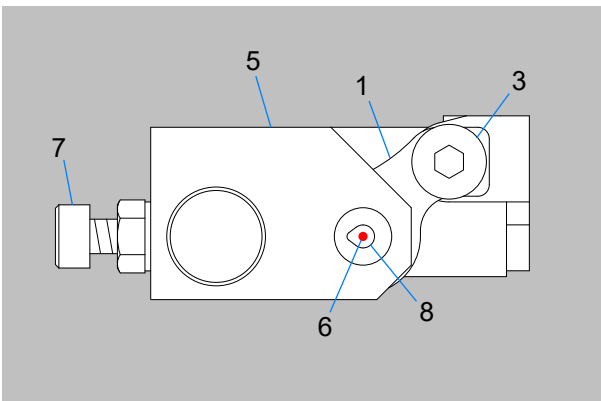


2 Set the cord presser 1 on the accessory gauge 5.



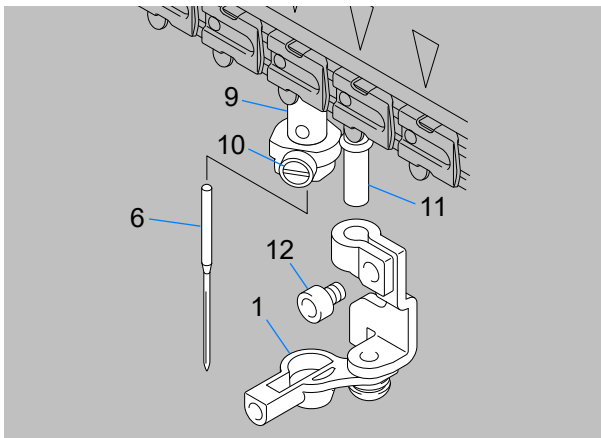
- Gauge 5 Part Name and Part No.  
Part Name Gauge :Positioning :Cord Presser[A]  
Part No. 7Z17C0501A00

3 Insert needle 6 into gauge 5.



4 Viewing gauge 5 from the bottom, loosen hexagon socket button bolt 3, turn screw 7 to adjust the needle 6 so that it is positioned in the center of needle hole portion 8 of cord presser 1, and tighten hexagon socket button bolt 3.

5 Pull the needle 6 from the gauge 5 and remove the cord presser 1.

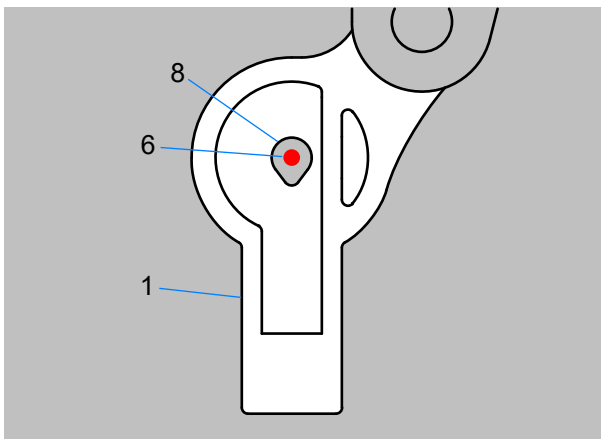


6 Insert needle 6 into needle bar 9 and tighten screw 10..



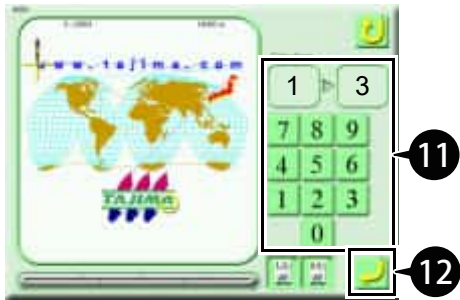
- When using a cord presser with a hole diameter of 1.5 mm or less, use the supplied needle (DB-K5SS#65/9).

7 Temporarily fasten the cord presser 1 to the shaft 11 with a hexagon socket bolt 12 in a high position.



8 Check that the needle 6 is positioned in the center of the needle hole portion 8 of the cord presser 1. If it is not centered, remove the cord presser 1 from the shaft 11, set it on the gauge 5, and adjust it again.

■ Sliding of the needle bar case



9 Turn ON the power.

10 Press  on the main screen.

11 Enter the needle bar number immediately preceding the needle bar where you want to install the cord presser.




• If you do not specify the needle bar number immediately preceding the needle bar where you want to install the cord presser, pressing the Start button in step 28 fails to lower the presser foot of the needle bar you are installing to the attaching position.

12 Press .

The needle bar case slides and moves to the specified needle bar.

■ Cancellation of the functional limit



13 Press  twice on the parameter screen.



14 Press .



15 Input a password.



- For details of the password, consult the distributor.



16 Press 

17 Press 

18 Press 



19 Press 

20 Press 



21 Press 

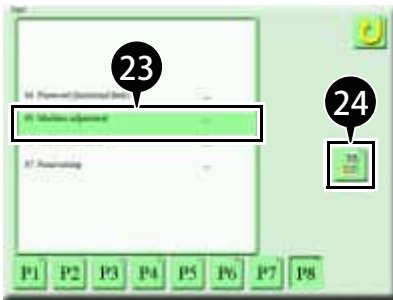


22 Check that "SEL" is displayed in the red frame and

press 

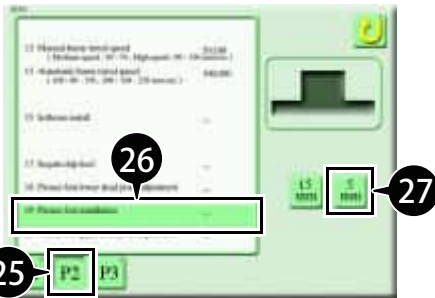
If "SEL" is not displayed, perform step 17 and later again.

■ Installing the cord presser



23 Select "85. Machine adjustment".

24 Press .

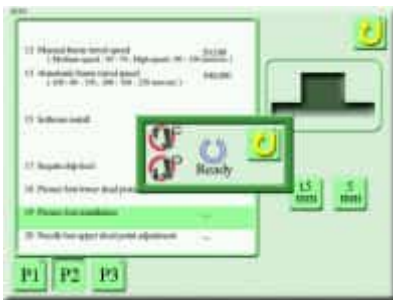


25 Press .

26 Select "19. Presser foot installation".

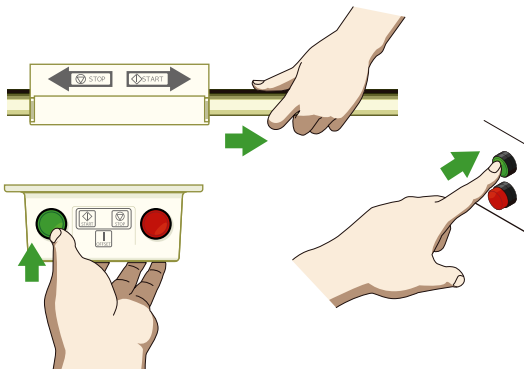
27 Press .

The machine enters into the presser foot installation mode and "Ready" appears on the screen.

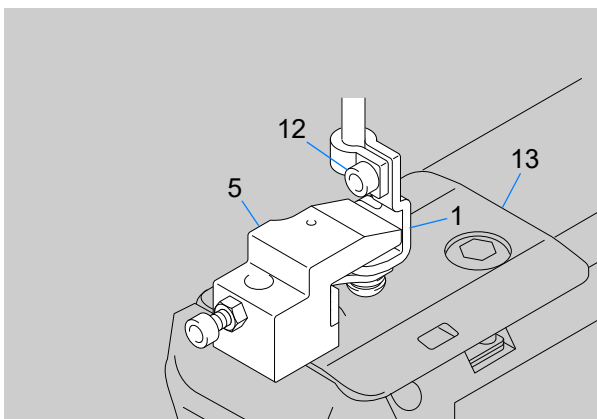


- When the machine is in the presser foot installation mode, it does not start at all.
- To cancel the presser foot installation mode,

press .



28 Operate the Bar switch and press the Start button.  
The needle bar case slides to the next needle bar and the presser foot lowers to the installation position.

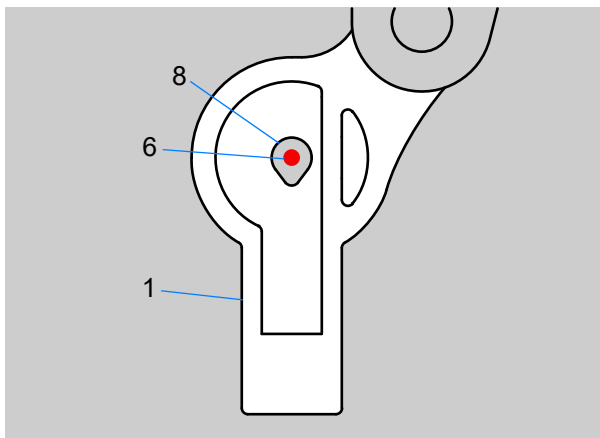


29 Set the gauge 5 on the cord presser 1.

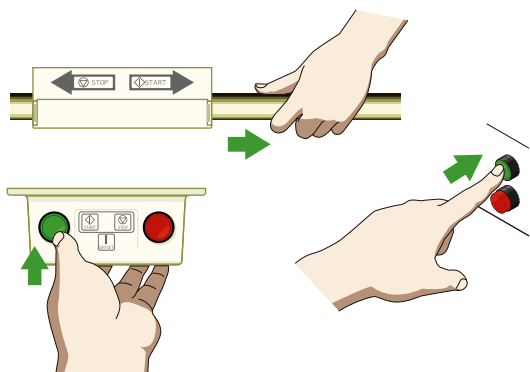
30 Loosen the hexagon socket bolt 12, lower the cord presser 1, and lightly touch the bottom of the gauge 5 to the top of the needle plate 13.

31 Tighten the hexagon socket bolt 12 so that the hexagon socket bolt 12 faces the front.

32 Remove gauge 5.



33 Manually lower the needle bar and check again that the needle 6 is positioned in the center of the needle hole portion 8 of the cord presser 1. If it is not centered, start over from step 29.



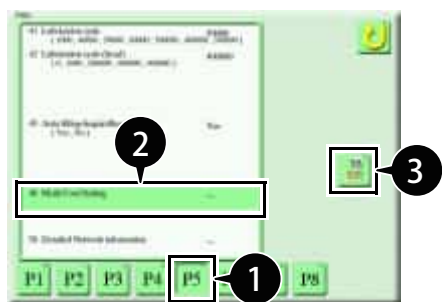
34 Operate the Bar switch and press the Start button. The needle bar case slides to the next needle bar and the presser foot lowers to the installation position.



- Similarly, install the cord pressers and needles to the other needle bars by repeating steps 22 to 28.
- For more information how to return the needle bar case to the previous needle bar, refer to "■ Sliding of the needle bar case">P.8.

### 2-3. Upper thread hook operation check

When you finish installing and adjusting the cord presser, check if the upper thread hook smoothly passes over the cord presser.



1 Press **P5** on the parameter screen.

2 Select "48. Multi Cord Setting".




- If 48. Multi Cord Setting is not displayed, refer to "3-1. Connection setting">P.18 to recognize that Multi Cording Device 2 is connected.


3 Press .


2. Preparation




4 Select "2. Multi cord threading position".

5 Press  so that "11.0" appears on the screen.

6 Press .  
The display in the red frame changes to "11.0mm".


7 Press  twice.  
You are returned to the main screen.

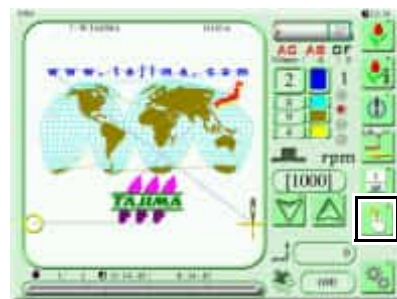
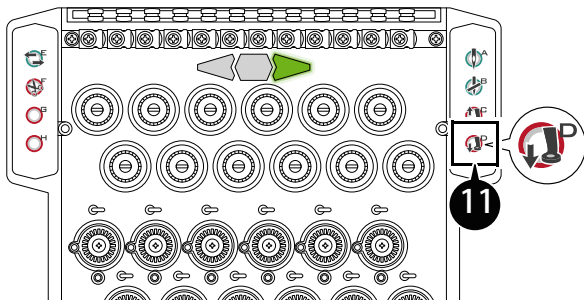
8 Press  on the main screen.


9 Enter the needle bar number at the right end of the cord presser.

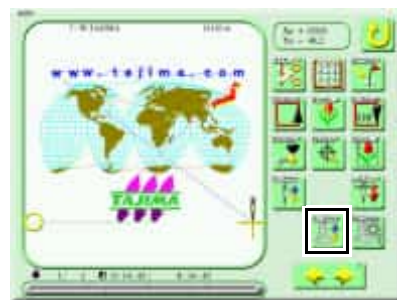
10 Press .



11 Press  twice on the tension base.  
For TMBR2-SC.



Press  on the main screen.

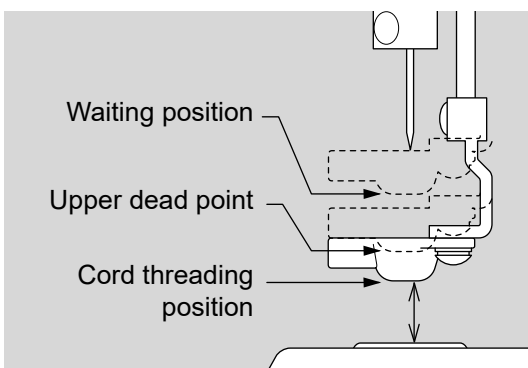


Press .





Press  .






- For  .

The cord presser reaches the upper dead point at the first press, the cord threading position (at a height of 11 mm) at the second press, and the lower dead point at the third press.

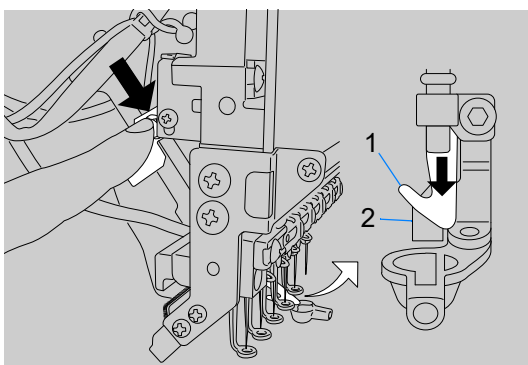
If the upper dead point is lower than the cord threading position, the cord presser reaches the cord threading position at the first press.

- For TMBR2-SC.

 is upper dead point.  is cord threading position (at a height of 11 mm).

If the upper dead point is lower than the cord threading position,  is cord threading position.

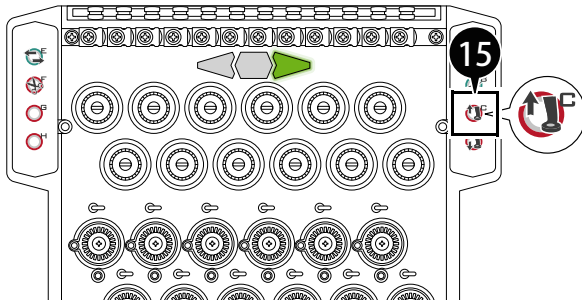
- The upper dead point of the cord presser is the position raised by the stroke width of the cord presser.



12 Pull out the upper thread hook 1 by finger and check for interference with the cord presser base 2.

13 When you are done checking the right end cord presser, similarly check the left end cord presser by repeating steps 8 to 12.

## 2. Preparation



If the upper thread hook and cord presser base interfere with each other and the hook does not come out, do the following steps.

14 Return the upper thread hook.

15 Press twice on the tension base.

For TMBR2-SC, Press

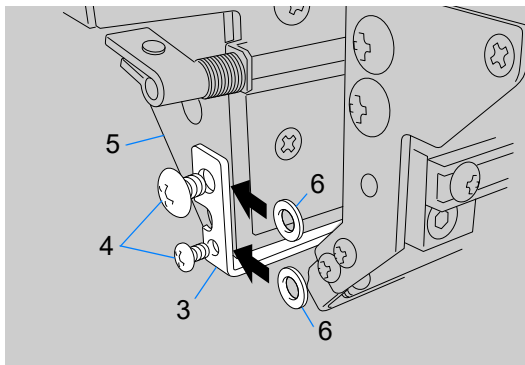
Return the cord presser to the waiting position.



16 Press on the main screen.

17 Enter the needle bar number of the last needle.

18 Press .



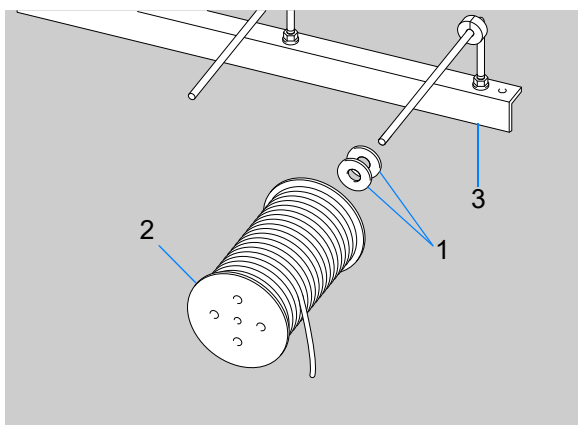
19 Remove the screws 4 on the left side of the hook guide 3.

20 Insert the supplied washers 6 (M4\*8\*t0.5) into between the hook guide 3 and head 5, and then tighten the screws 4.

## 2-4. Installing the bobbins and passing the cords

### ⚠ Caution

- ⊘ Do not use knotted cord material. The machine may fail if a knot is caught in it.
- ⊘ Do not wind the cord on the bobbin with high tension. Doing so may cause the cord to enter the gap between cord threads. In that case, when the cord is pulled out of the bobbin, the cord may be caught, breaking the needle under an excessive load, or resulting in sewing omission or the dropping of the cord from the cord presser.



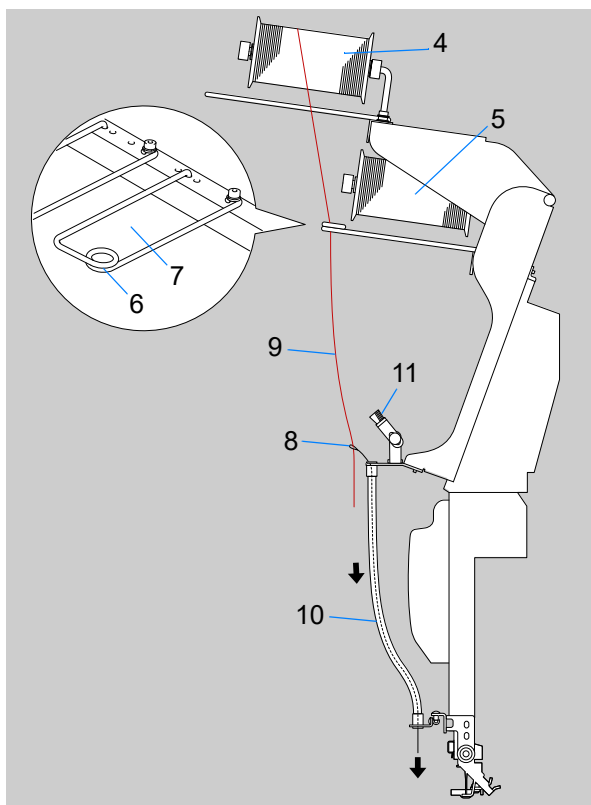
1 Install two felts 1 and then the bobbin 2 to the holder 3.



- Install the bobbin so that it can rotate clockwise.



- If the bobbin spins free, install two felts and then the stopper on the front side of the bobbin and adjust the stopper so that the cord can be fed smoothly.
- Install the felts so that they lightly contact the bobbin.

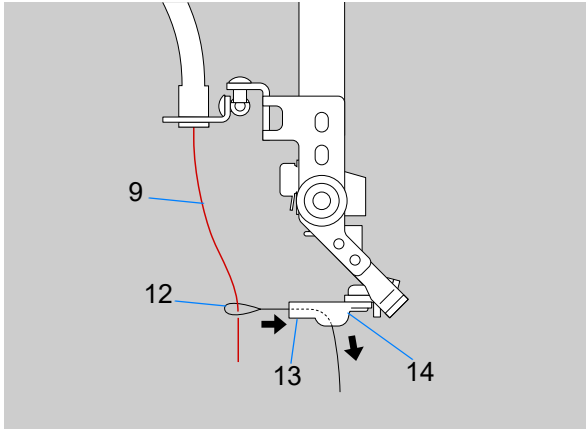


2 To avoid interference between the cords from the bobbins of the upper side 4 and lower side 5 pass the cord from the upper side 4 through the thread guide 6 and pass the cord from the lower side 5 through the thread guide 7.

3 Using the supplied threader 8, pass the cord 9 through the spiral tube 10.



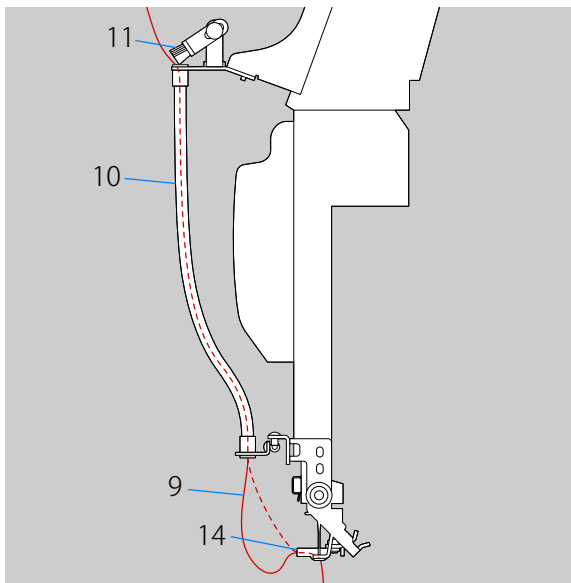
- Pass the cord with the brush 11 raised. Once you pass the cord, lower the brush 11 to apply a light tension to the cord.



- 4 Using the supplied threader 12, pass the cord 9 through the cord presser 14 from the guide 13.

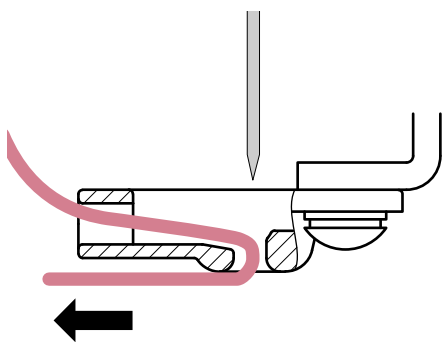
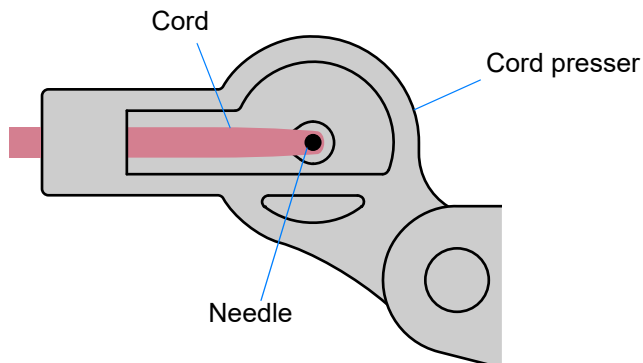


- To make it easy to pass the cord through the cord presser, lower the cord presser to the cord threading position- Refer to "3-2. Raising or Lowering the cord presser">P.19.



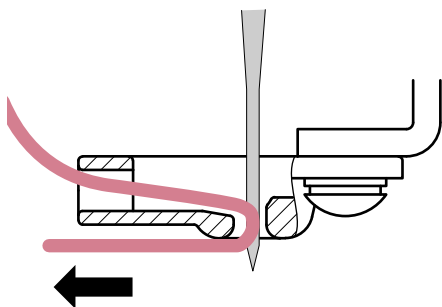
- 5 To prevent the cord 9 from loosening in front of the cord presser 14, lower the brush 11 so that it comes in contact with the inlet of the spiral tube 10.

## 2-5. Adjustments to cord presser with cord



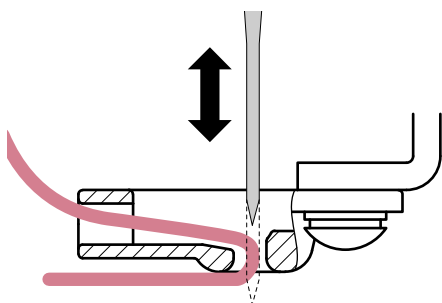
- 1 Pass the cord through the cord presser and check that the cord can be pulled out smoothly.

If the cord resists when pulled, change the size of the cord presser to a larger one.



- 2 Lower the needle while the cord is lightly pulled, and check that the needle sticks to the cord and the cord is sewn.

If the needle does not stick to the cord or the cord is not sewn, make a cord presser position adjustment so that the needle will stick to the cord and the cord will be sewn.



- 3 Move the needle up and down and check that the needle passes through the presser foot smoothly. If the needle does not pass smoothly, review the conditions, such as the position and size of the cord presser and the cord material.

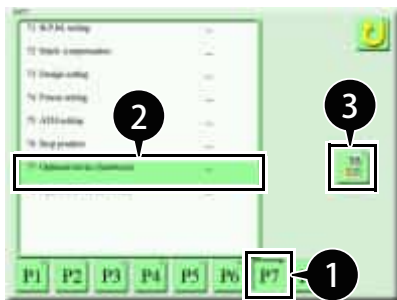
# 3. Setting

## 3-1. Connection setting

To make the machine recognize the connection of the Multi Cording Device 2, use the following steps:



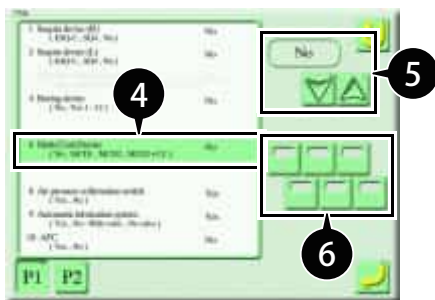
- If "P7" or "P8" is not displayed, cancel the functional limit level.  
For information on how to configure them, refer to "■ Cancellation of the functional limit">P.8 steps 13 to 22.
- If "6. Multi Cord Device" is not displayed, set "19. Laser Crosshair Marker" to "No".



1 Press **P7** on the parameter screen.

2 Select [77. Optional Device (hardware)].

3 Press



4 Select "6. Multi Cord Device".

MCD1: multi cording device

MCD2: multi cording device 2

MCD2 + CC: multi cording device 2 and cord-cutting device

5 Press so that "MCD2" appears on the screen.

6 Press the button for the needle bar number for which is installed the multi cording.



- Multi cording (disable) ↔ (enable)  
Every press of the button toggles between enable and disable.



7 Press

8 Press twice.

You are returned to the main screen.

### 3-2. Raising or Lowering the cord presser

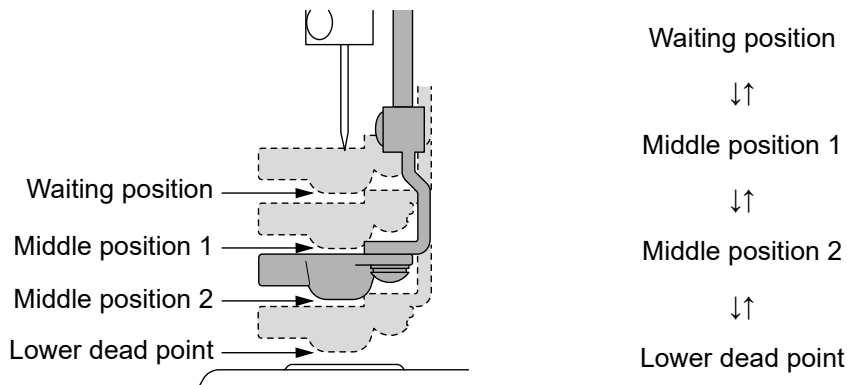
You can lower or raise the selected needle bar cord presser.

**⚠ Caution**

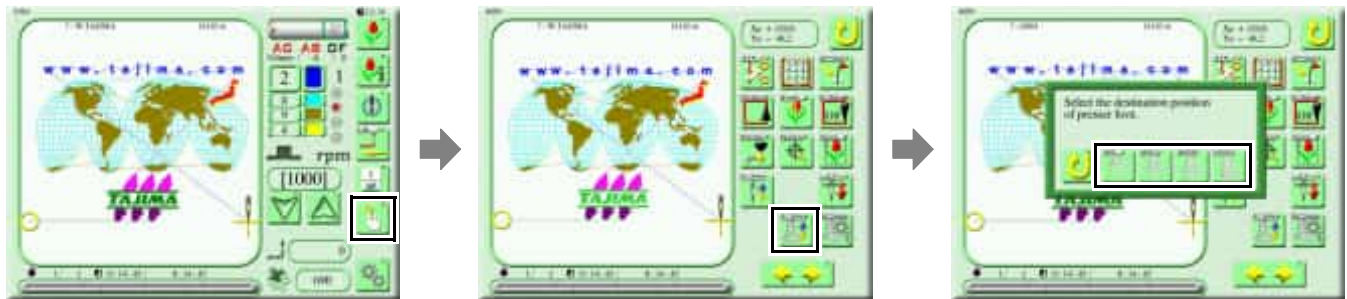
⊘ Do not put your hands near the needles when you operate the machine because doing so may cause your finger or hand to be injured when the cord presser raises or lowers.

You can change the height of the cord presser among four levels: "waiting position", "middle position 1", "middle position 2" and "lower dead point".

On the tension base, press to lower the cord presser or press to raise the cord presser.



For TMBR2-SC.



Press on the main screen.

Press .

Press for Waiting position.

Press for Middle position 1.

Press for Middle position 2.

Press for Lower dead point.

The middle positions 1 and 2 change depending on the upper dead point and the setting of "Multi Cord - Cord Threading Position".

	Upper dead point < Cord threading position	Upper dead point > Cord threading position
Middle position 1	Cord threading position	Upper dead point
Middle position 2	Upper dead point	Cord threading position

\* The bottom and top of the cord presser stroke are referred to as "lower dead point" and "upper dead point", respectively.

### 3-3. The cord presser setting

#### ⚠ Caution

! Take into account the thickness and overlap of the cord material when setting the cord presser. If the cord presser lower dead point is too low or its stroke is small, the cord presser may interfere with the embroidered material, possibly causing the machine to fail.

You can configure the lower dead point, stroke, and other settings of the cord presser.

The cord presser settings have three categories: "Entire Machine", "Needle Bar Setting", and "Manual Operation".

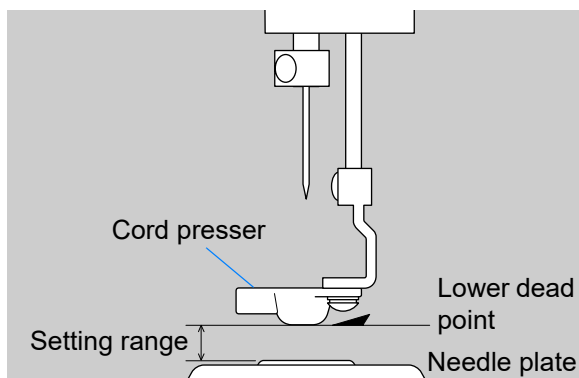
If the different settings are differently set among the three categories, the top priority is given to the "Needle Bar Setting".

Setting the cord presser lower dead point	P.20
Setting the cord presser FB lower dead point	P.22
Setting the cord presser stroke	P.24
Setting the cord presser timing	P.28

#### ■ Setting the cord presser lower dead point

Set the height from the needle plate to the cord presser lower dead point in units of needle bar.

When you configure this setting, take into account the thickness of the cord material sewn.



#### ⚠ Caution

⊘ Do not the setting smaller than the cord material thickness. Otherwise the cord presser may be hit by a thicker portion resulting from the overlap of the material, possibly resulting in machine failure.

#### Parameter setting

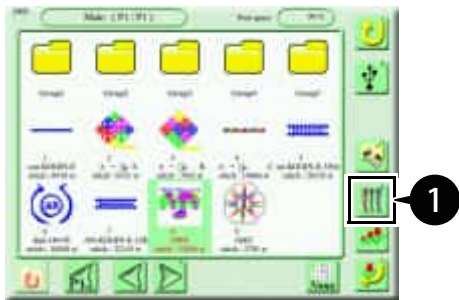
These settings apply to all the needle bars of the machine.




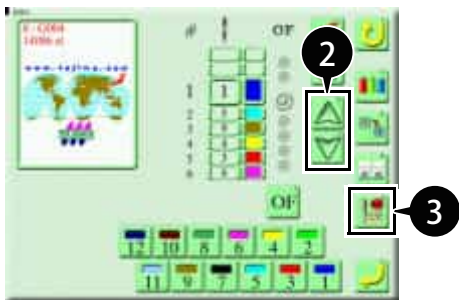
- 1 Press **P2** on the parameter screen.
- 2 Select "16. Presser foot lower dead point".
- 3 Press **← →** and select the desired needle bar.
- 4 Press **↑ ↓** to set the height of the lower dead point.
- 5 Press **↶**.


**Needle bar setting**

These settings apply to all the needle bars for the selected design. (The settings are stored as part of the design data.)

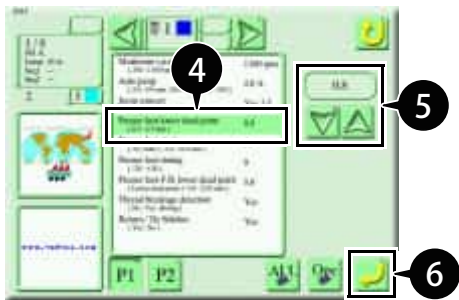


1 Press  on the design selection screen.




2 Press  and select the desired needle bar.

3 Press .



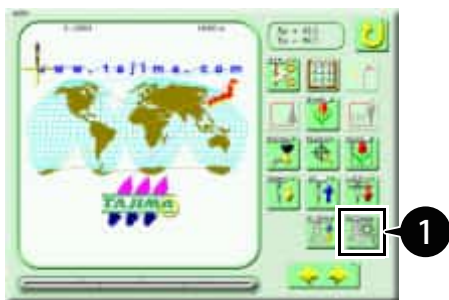
4 Select "Presser foot lower dead point".


5 Press  to set the height of the lower dead point.

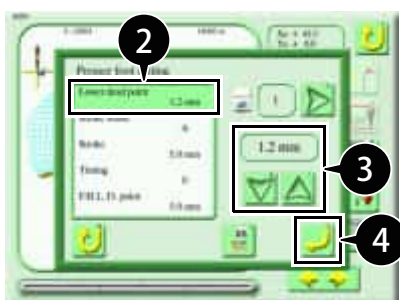
6 Press .

**Manual operation**


These settings apply to the steps of the design currently in use. (The settings are stored as part of the design data.)



1 Press  on the manual operation screen.



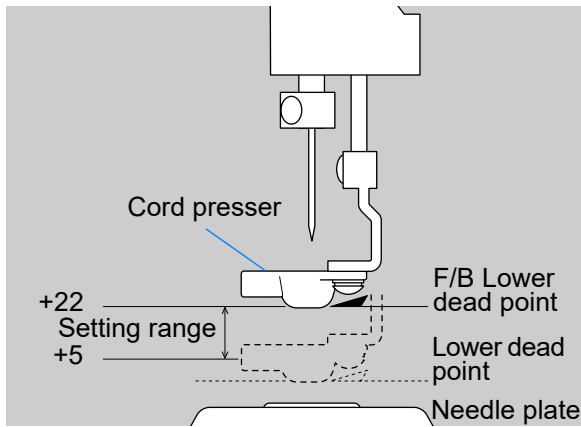
2 Select "Lower dead point".

3 Press  to set the height of the lower dead point.

4 Press .

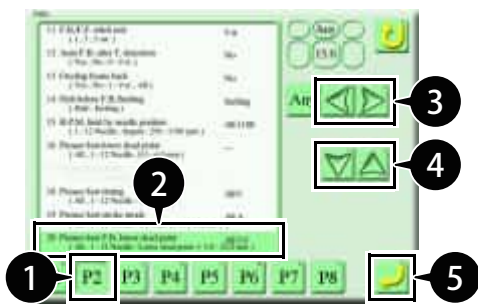
### ■ Setting the cord presser FB lower dead point




Set how many millimeters (+5 to +22 mm) the cord presser is raised from the cord presser lower dead point during frame back process in units of needle bar.



#### Parameter setting

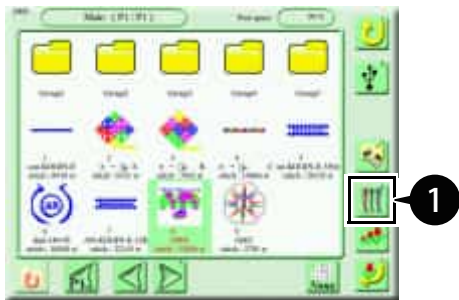
These settings apply to all the needle bars of the machine.




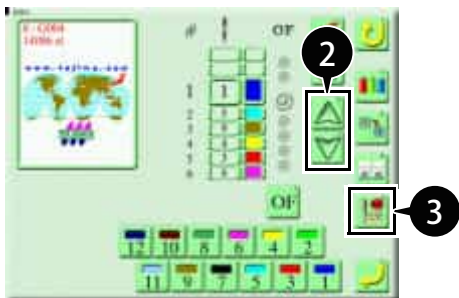
- 1 Press **P2** on the parameter screen.
- 2 Select "20. Presser Foot F.B. lower dead point".
- 3 Press  and select the desired needle bar.
- 4 Press  to set the height of the FB lower dead point.
- 5 Press .


### Needle bar setting

These settings apply to all the needle bars for the selected design. (The settings are stored as part of the design data.)

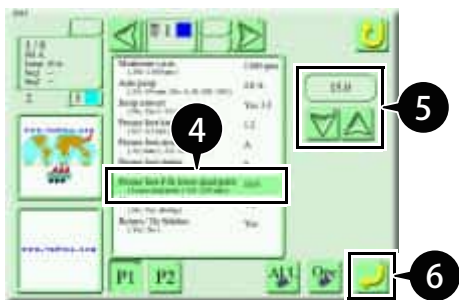


1 Press  on the design selection screen.




2 Press  and select the desired needle bar.

3 Press .



4 Select "Presser Foot F.B. lower dead point".


5 Press  to set the height of the FB lower dead point.

6 Press .

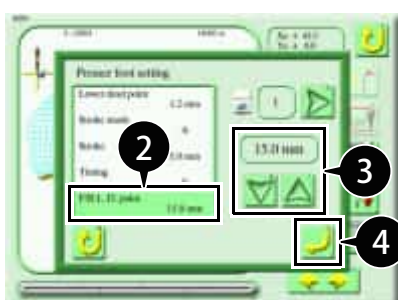
### Manual operation


These settings apply to the steps of the design currently in use. (The settings are stored as part of the design data.)



1 Press  on the manual operation screen.

2 Select "F/B L,D point".



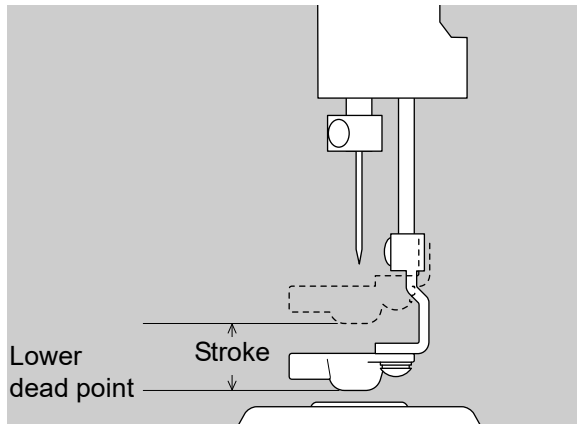
3 Press  to set the height of the FB lower dead point.

4 Press .

### ■ Setting the cord presser stroke

Set the cord presser stroke in units of needle bar.

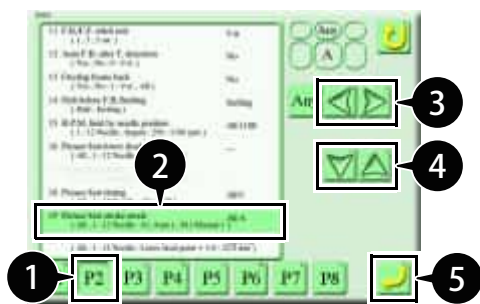
When performing loop stitches, the larger the stroke of the cord presser, the larger the loop size.



- The larger the stroke, the more likely mis-stitching will occur. Check and set the sewing condition.


### Parameter setting

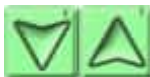
These settings apply to all the needle bars of the machine.



1 Press **P2** on the parameter screen.


2 Select "19. Presser foot stroke mode".


3 Press  and select the desired needle bar.

4 Press  so that "M" appears on the screen.

5 Press .

6 Select "17. Presser foot stroke".

7 Press  and select the desired needle bar.

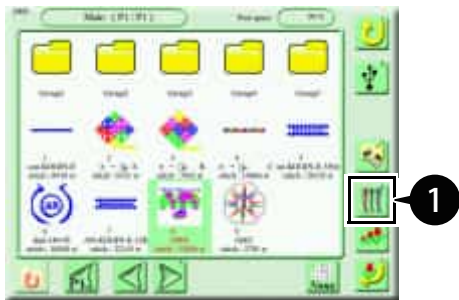
8 Press  to set the height of the stroke.


9 Press .

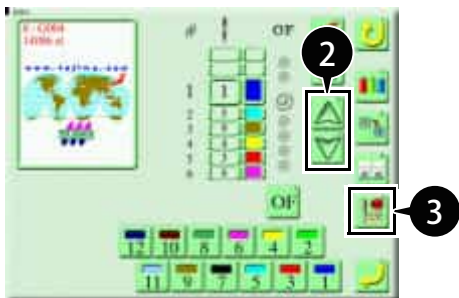



### Needle bar setting

These settings apply to all the needle bars for the selected design. (The settings are stored as part of the design data.)

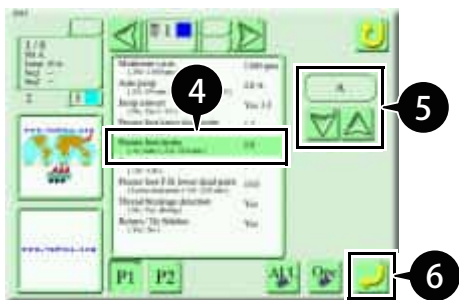


1 Press  on the design selection screen.




2 Press  and select the desired needle bar.

3 Press .



4 Select "Presser foot stroke".


5 Press  to set the height of the stroke.

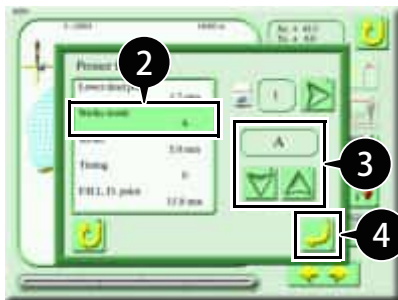
6 Press .

### Manual operation


These settings apply to the steps of the design currently in use. (The settings are stored as part of the design data.)



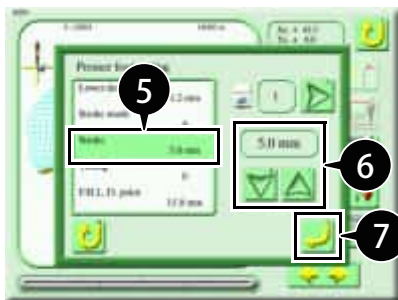
1 Press  on the manual operation screen.




2 Select "Stroke mode".

3 Press  so that "M" appears on the screen.

4 Press .



5 Select "Stroke".

6 Press  to set the height of the stroke.

7 Press .

Setting stroke and embroidery finish

Embroidery finish

Stroke height (mm)



0



5



10



15



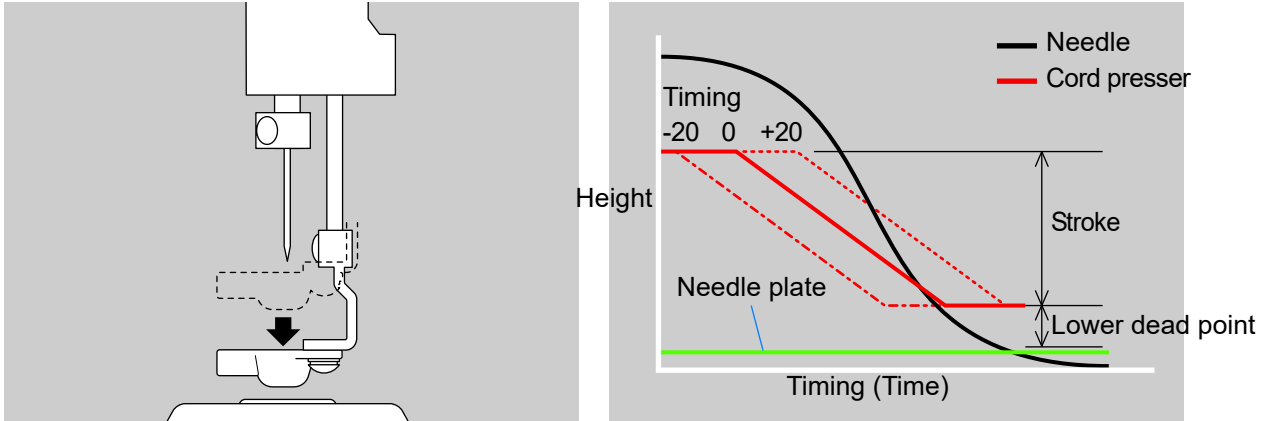
20

### ■ Setting the cord presser timing

Set the timing in which the cord presser lowers in units of needle bar.

The smaller the setting value, the faster the moving down of cord presser. The larger the setting value, the slower the moving down of cord presser.

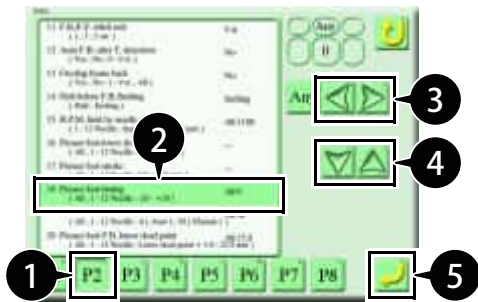
The mutual relation among the lower dead point, stroke, setting range of timing of the cord presser, and the locus of the needle is shown below for reference purposes only.






- To stabilize the stitching of cord material, set the value smaller for the loose-twisted cord. In case of using tight-twisted cord, set the value larger.

### Parameter setting

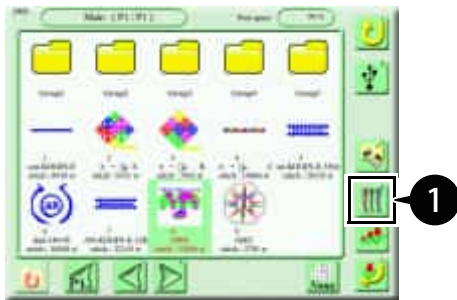
These settings apply to all the needle bars of the machine.




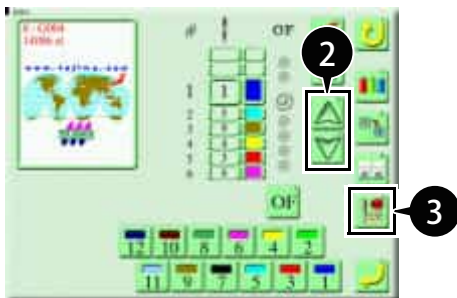
- 1 Press **P2** on the parameter screen.
- 2 Select "18. Presser foot timing".
- 3 Press  and select the desired needle bar.
- 4 Press  to set the timing.
- 5 Press .


### Needle bar setting

These settings apply to all the needle bars for the selected design. (The settings are stored as part of the design data.)

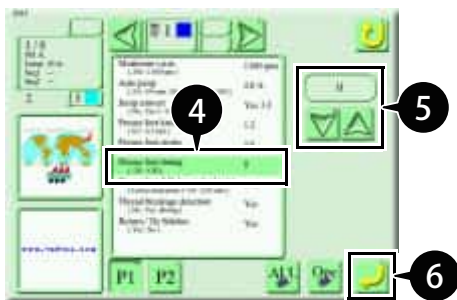


1 Press  on the design selection screen.



2 Press  and select the desired needle bar.

3 Press .



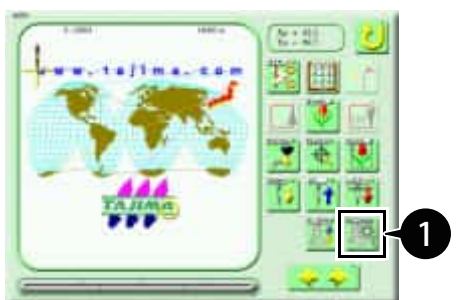
4 Select "Presser foot timing".


5 Press  to set the timing.

6 Press .

### Manual operation

These settings apply to the steps of the design currently in use. (The settings are stored as part of the design data.)

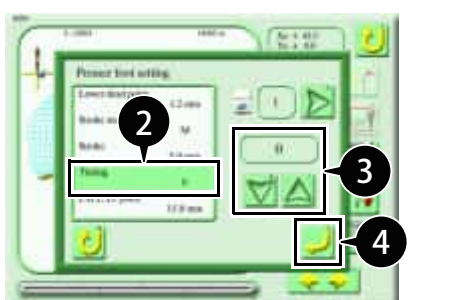


1 Press  on the manual operation screen.

2 Select "Timing".

3 Press  to set the timing.

4 Press .



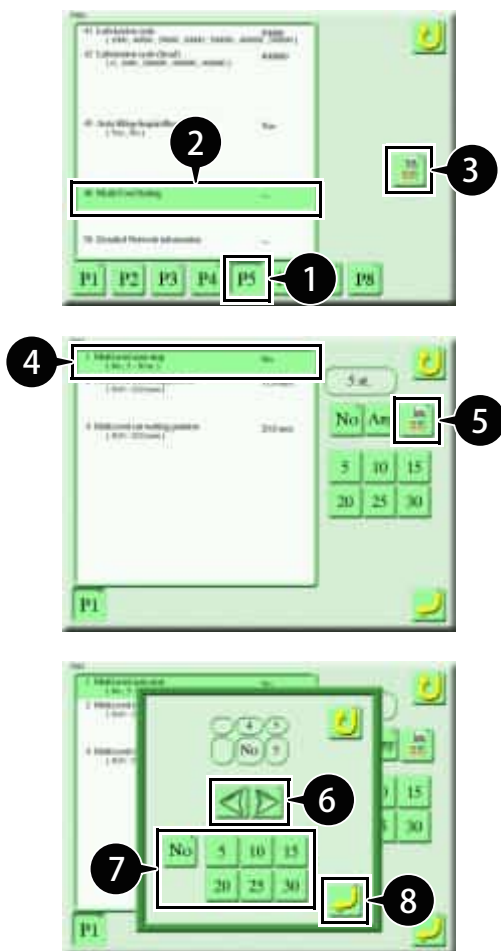
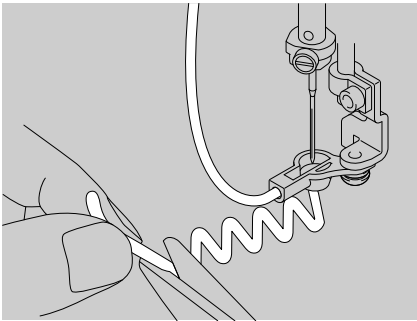
### 3-4. The multi cord settings

You can configure the auto-stop stitch count, cord threading position, and cord cutting waiting position for multi cording.

#### ■ Setting the auto-stop stitch count

This is the setting to stop the machine automatically after sewing a particular number of stitches for the purpose of cutting off the extra cord that comes out when starting to sew the cord.

To automatically stop sewing, specify 5 to 30 stitches. If you do not want to stop sewing, select "No".



1 Press on the parameter screen.

2 Select "48. Multi Cord Setting".

3 Press .

4 Select "1. Multi-cord auto stop".

5 Press .

6 Press and select the desired needle bar.

To apply the same setting to all the needle bars of the Multi Cording Device 2, select "Any".

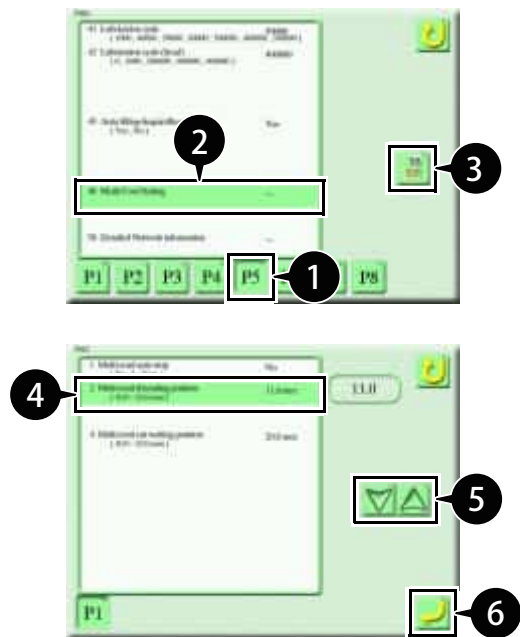
7 Select the desired number of stitch.





If you do not want to automatically stop sewing, select "No".

8 Press .

## ■ Setting the cord threading position

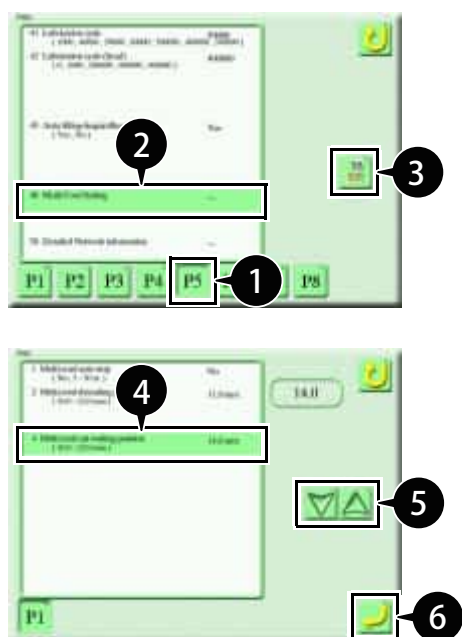
You can configure the height at which to pass the cord through the cord presser.



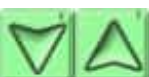



- 1 Press  on the parameter screen.
- 2 Select "48. Multi Cord Setting".
- 3 Press .
- 4 Select "2. Multi cord threading position".
- 5 Press  to set the height of the cording device.
- 6 Press .

## ■ Setting the cord cutting waiting position

After the ATH operation, set the height of the cord presser retractable position to cut the cord easier.



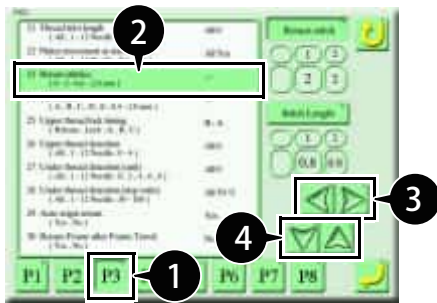
- 1 Press  on the parameter screen.
- 2 Select "48. Multi Cord Setting".
- 3 Press .
- 4 Select "4. Multi cord cut waiting position".
- 5 Press  to set the height of the cord cutting waiting position.
- 6 Press .

### 3-5. The return stitch and tie stitch settings

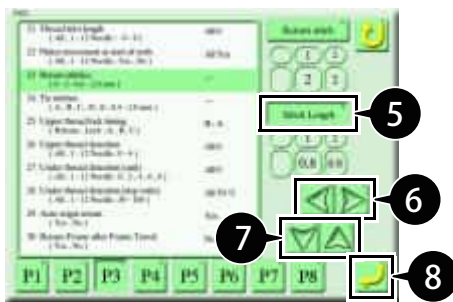
#### Return stitch settings

You can configure the return stitch settings to prevent fraying at start of sewing.

The needle bars for which the Multi Cording Device 2 is enabled have only two settings: "0 = Without Return Stitches" and "T1 = With Return Stitches".



- 1 Press **P3** on the parameter screen.
- 2 Select "23. Return Stitches".
- 3 Press and select the desired needle bar.
- 4 Press so that "T1" appears on the screen.



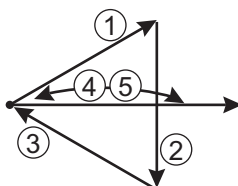
- 5 Press **Stitch Length**.
- 6 Press and select the desired needle bar.
- 7 Press to set the stitch length.
- 8 Press .

0 = Without Return

Stitch at start of sewing



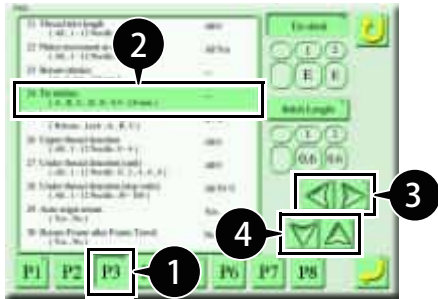
T1 = Triangle + one reciprocation (Multi Cording)



## Tie stitch settings


You can configure the tie stitch settings to prevent fraying at end of sewing,


The needle bars for which the Multi Cording Device 2 is enabled have only two settings: A: Without Tie Stitches / TE: With Tie Stitches.

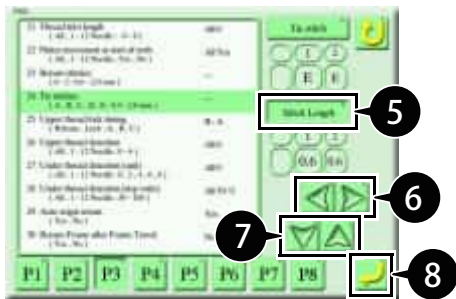


1 Press **P3** on the parameter screen.


2 Select "24. Tie Stitches".

3 Press  and select the desired needle bar.

4 Press  so that "TE" appears on the screen.



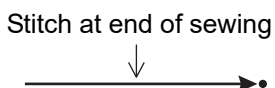
5 Press **Stitch Length**.

6 Press  and select the desired needle bar.

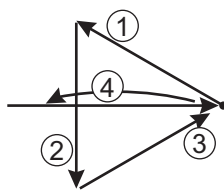
7 Press  to set the stitch length.

8 Press .

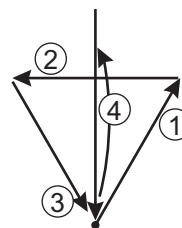
0. Without Tie Stitches



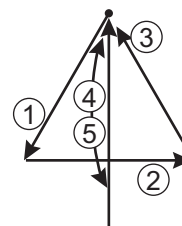
TE: Triangle + Tie  
(Multi Cording)



TE: Triangle + Tie  
(Multi Cording)



TE: Triangle + reciprocation  
(Multi Cording)



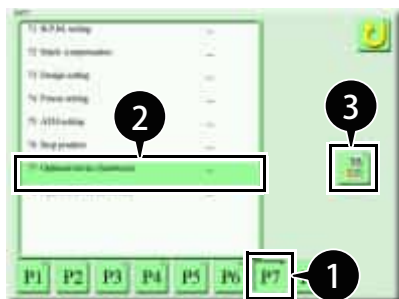
The last stitching movement automatically changes depending on the stitching direction.

### 3-6. The cord-cutting device settings

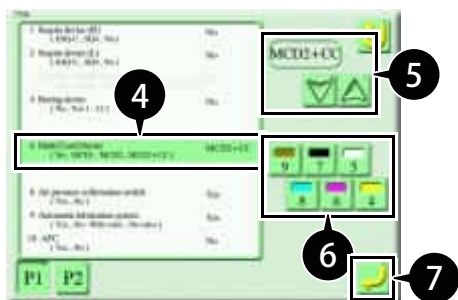
Make the machine recognize that the cord-cutting device is connected. (optional: TMCR-VF, TMAR-KC only)



- If "P7" or "P8" is not displayed, cancel the functional limit level.  
For information on how to configure them, refer to "■ Cancellation of the functional limit">P.8 steps 13 to 22.



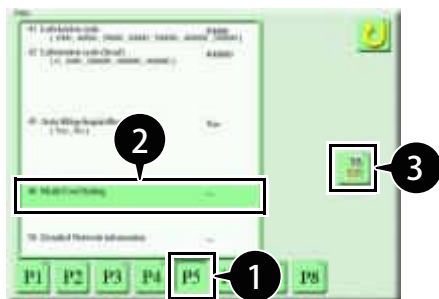
- 1 Press **P7** on the parameter screen.
- 2 Select [77. Optional Device (hardware)].
- 3 Press



- 4 Select "6. Multi Cord Device".
- 5 Press so that "MCD2+CC" appears on the screen.  
(Multi cording device 2 + cord-cutting device)
- 6 Press the button for the needle bar number for which is installed the multi cording.
- 7 Press

### 3-7. Cord cutting position of multi cording device

You can configure the height from the needle plate to the bottom of the cord cutting device when cutting the cord. (optional: TMCR-VF, TMAR-KC only)



- 1 Press **P5** on the parameter screen.
- 2 Select "48. Multi Cord Setting".
- 3 Press



- 4 Select "3 Multi cord cutting position".
- 5 Press to select the cord cutting position.
- 6 Press

### 3-8. The cord-cutting device operation check

You can operate the cord-cutting device stepwise using the switches on the tension base.  
(optional: TMCR-VF, TMAR-KC only)



1 Press **P8** on the parameter screen.

2 Select [85. Machine adjustment].

3 Press .



4 Press **P3**.

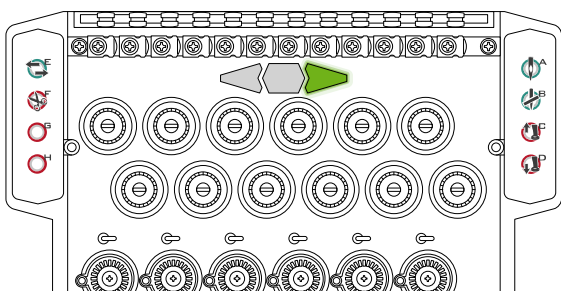
5 Select [24 Cord cutting device adjustment].

6 Press .






#### ■ Switch manipulation for cord-cutting device



You can operate the cord-cutting device using the switches on the tension base.










Switch manipulation on the tension base

Switch	Movement
	Returning to the retracting position
	Moving the presser foot upward (to the retracting position)
	Moving the presser foot downward (to the cutting position)
	Moving the cutting unit upward
	Moving the cutting unit downward

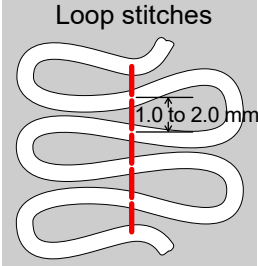
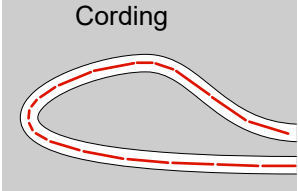
## ■ Cutting operation checks

You can check the sequence of operation by pressing each switch in the following order.

Switch	Movement
 H	Moving the cord-cutting device downward
 H	Enclosing the cord
 D	Moving the cutting unit to the cutting position as the presser foot moves downward
 H	Cutting the cord
 G	Moving the cutting unit upward
 C	Returning the presser foot to the retracting position and moving the cutting unit upward
 G	Returning the cutting unit to the retracting position

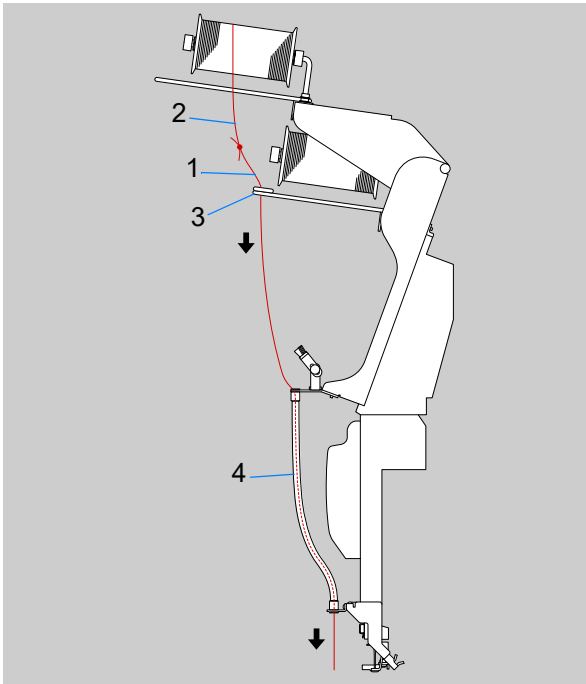
## 4. Troubleshooting

### 4-1. When the machine does not sew well

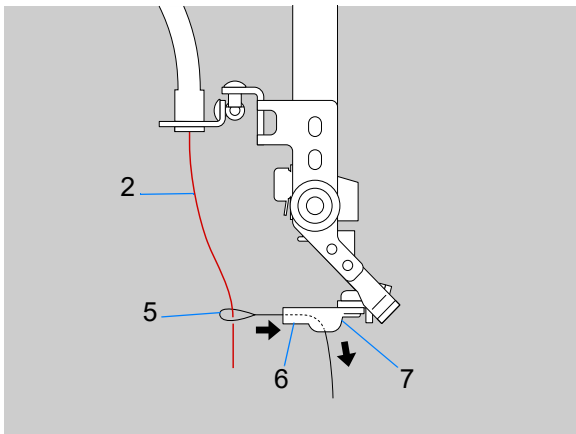
Problem		Cause and corrective action
A cord knot is caught in the machine		Do not use knotted cord. Doing so could result in machine failure.
Breakage of the needle, sewing omission, or the dropping of the cord from the cord presser		If you wind the cord on the bobbin with high tension, the cord will enter the gap between cord threads. In that case, when the cord is pulled out of the bobbin, the cord will be caught, and you cannot pull out the cord. Rewind the cord on the bobbin.
The cord presser "lower dead point", "FB lower dead point", "stroke", and "timing" settings do not take effect.		The cord presser settings have three categories: "Entire Machine", "Needle Bar Setting", and "Manual Operation". The top priority is given to the needle bar setting.
Cord material	The material is stitched on both the front and back sides	Check if your cord presser is suitable in size for the cord material.
		Front stitching and back stitching are sometimes mixed depending on stitch direction.
Design	Loop stitches are not stable	To stabilize the stitches, use running stitches with a pitch of 1.0 to 2.0 mm. Bean stitches further improve stability. 
	Cording curves are not smooth	Use a smaller stitching pitch to smoothen the curves. If you change to bean stitch, it will be more stable. 
	The cord material is untwisted or snarled	Pay attention to the direction of stitches when you create the design.
	The cord material flaps at the start of sewing	Configure the return stitching settings.

## 4-2. When running out of cord

When running out of cord, prepare new cord and install it through the following steps:



- 1 Knot the new cord 2 to the current cord 1. Pull the current cord 1 and pass the new cord 2 through the thread guide 3 and the spiral tube 4.



- 2 Untie the current cord 1. Using the supplied threader 5, pass the new cord 2 through the cord presser 7 from the guide 6.

### ⚠ Caution

- ! Passing the new cord through the cord presser without untying the current cord could cause the knot to be caught in the machine, possibly resulting in machine failure.



- To make it easy to pass the cord through the cord presser, lower the cord presser to the cord threading position- Refer to "3-2. Raising or Lowering the cord presser">P.19.

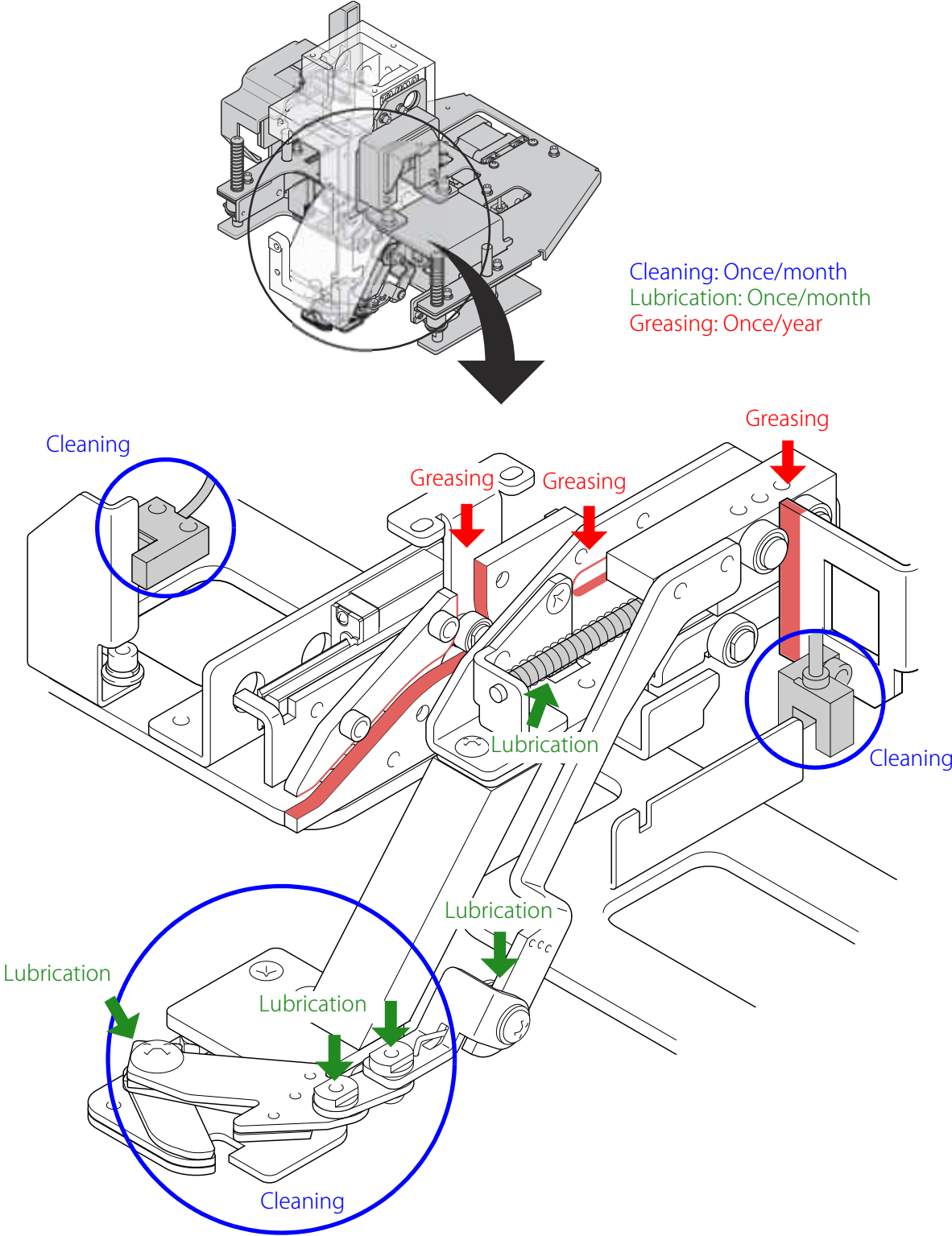
## 4-3. If an error occurs

This error is likely to occur if cord is folded to attain a thickness and that thickness is larger than the cord presser lower dead point setting. Therefore, you should change the cord presser lower dead point setting for the current needle bar to remove the error.

For information on how to do so, refer to "Setting the cord presser lower dead point".

# 5. Maintenance of cord-cutting device

## 5-1. Cleaning, Lubrication, Greasing





1st Edition            November, 2018

5th Edition            March, 2024

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