

COMPUTER SEWING MACHINE

HZL-UX8**INSTRUCTION MANUAL****EN**

Please read this instruction manual before using the machine as it contains important operational and safety information.
Keep this manual accessible so that you may refer to it at anytime while operating the machine.

“IMPORTANT SAFETY INSTRUCTIONS”

When using an electrical appliance, basic safety precautions should always be followed, including the following: Read all instructions before using this sewing machine.

“DANGER ____ To reduce the risk of electric shock:”

1. The appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.

“WARNING ____ To reduce the risk of burns, fire, electric shock, or injury to persons:”

1. Do not allow this appliance to be used as a toy. Close attention is necessary when this appliance is used by or near children. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
6. Always use the proper stitch plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
9. Switch the sewing machine off “O” when making any adjustments in the needle area, such as changing needle, threading bobbin, or changing presser foot.
10. Always unplug the machine from the electrical outlet when removing covers, when lubricating or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off “O” position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
16. Basically, the machine should be disconnected from the electricity supply when not in use.
17. If the power cord of this appliance is damaged, it must be replaced with a special cord by your nearest authorized dealer or service center.
18. (Except USA/Canada) This machine is provided with double insulation.
Use only identical replacement parts. See instructions for servicing Double-Insulated machine.

“SERVICING DOUBLE-INSULATED PRODUCTS”

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double-insulated product is marked with the words DOUBLE INSULATION or DOUBLE INSULATED.

The symbol  may also be marked on the product.

“SAVE THESE INSTRUCTIONS”

“This sewing machine is intended for household use only.”

Congratulations on your purchase of a JUKI sewing machine.

Please be sure to read safety precautions in "To use the sewing machine safely" in the Instruction Manual before use to fully understand the functions and operating procedures of the sewing machine so as to use the sewing machine for a long time.

After you have read the Instruction Manual, please be sure to keep it together with the warranty so that you can read it whenever necessary.

To use the sewing machine safely

Marks and pictographs included in the Instruction Manual and shown on the sewing machine are used so as to ensure safe operation of the sewing machine and to prevent possible risk of injury to the user and other people.

Warning marks are used for different purposes as described below.

 WARNING	Indicates that there is a possible risk of death or serious injury if this mark is ignored and the sewing machine is used in a wrong manner.
 ATTENTION	Indicates the operation, etc. which can cause a possible risk of personal injury and/or physical damage if this mark is ignored and the sewing machine is used in a wrong manner.

Pictographs mean the following:

	Danger warning which is not specified		There is a risk of electrical shock		There is a risk of fire		There is a risk of injury to hands, etc.
	Prohibited matter which is not specified		Disassembly/alteration is prohibited		Do not place fingers under the needle		Do not pour oil, etc.
	Generally required behavior		Disconnect the power plug				

⚠️ WARNING

For the combination of the material and the thread and needle, in particular, refer to the explanation table in "Replacement of the needle".

If the needle or thread does not match the material used such as in the case that an extra heavy-weight material (e.g., denim) is sewn with a thin needle (#11 or higher), the needle can break resulting in an unexpected personal injury.

Other precautions

- Do not put the sewing machine under the direct sunlight or in a humid place.



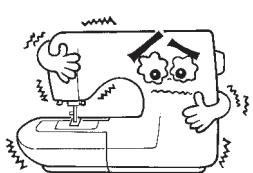
- Do not wipe the sewing machine with solvent such as thinner.

When the sewing machine is soiled, put a small quantity of neutral detergent on a piece of soft cloth and carefully wipe off the sewing machine with it.



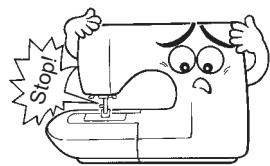
Be aware that the following state can take place since the sewing machine incorporates semi-conductor electronic parts and precise electronic circuits.

- Be sure to use the sewing machine in the temperature range from 5°C to 40°C.
If the temperature is excessively low, the machine can fail to operate normally.



- The safety device of the sewing machine will work to stop the sewing machine in order to prevent the generation of abnormal heat in the case the sewing machine is continuously engaged in sewing at a low sewing speed for a long time or it is continuously engaged in sewing for a long time under the high temperature environment. In this event, Start and Stop button will not light.

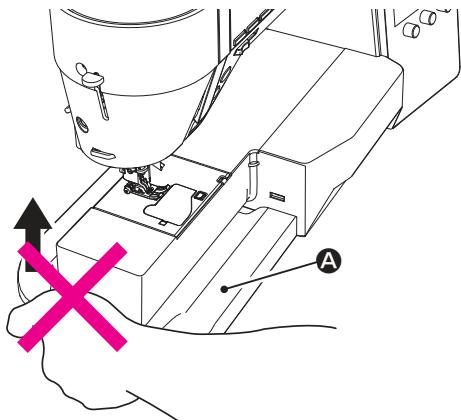
The sewing machine will return to working condition after about 10 minutes.



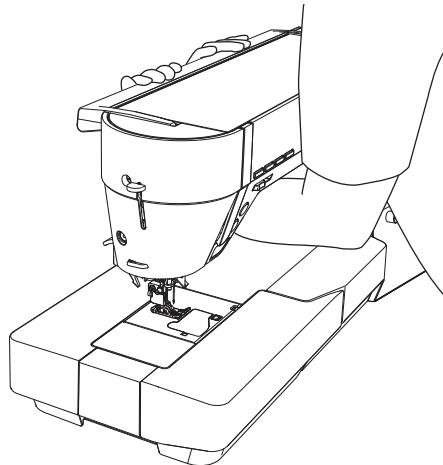
* The operating temperature of the sewing machine is between 5°C and 40°C. Do not use the sewing machine under the direct sunlight, near the burning things such as a stove and candle, or in a humid place. By so doing, the temperature in the interior portion of the sewing machine can rise or the coating of the power cord can melt, causing fire or electrical shock.

- Be sure to move the sewing machine by holding its handles.

Do not hold portion **A** when you lift the sewing machine.



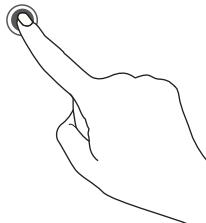
If the sewing machine is heavy, lift it by putting your arm through the arm section.



Basic screen operation method

- **Tap**

Tap the screen with your fingertip once.

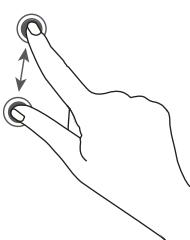


- **Pinch the screen**

Pinch with two fingers.

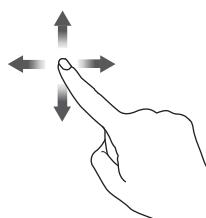
- **Pinch in**

Squeeze your fingers together.



- **Pinch out**

Spread your fingers



- **Swipe**

Tap the screen and slide your fingertip.

CAUTION

For customers in the USA

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

For customers in the Europe

This radio equipment is intended to be used with the approved version(s) of software that are indicated in the EU Declaration of Conformity.

The software loaded on this radio equipment is verified to comply with the essential requirements of the Directive 2014/53/EU.

IC STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

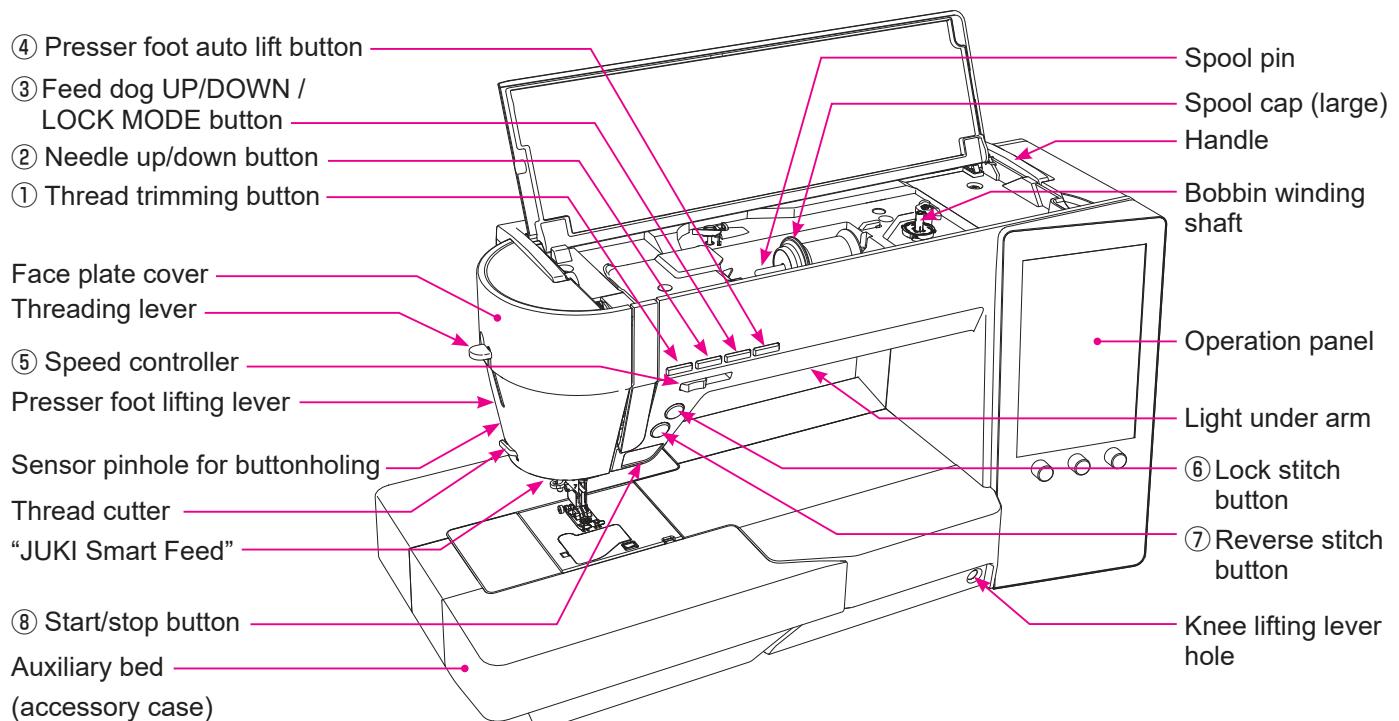
- (1) Cet appareil ne doit pas causer d'interférences.
- (2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.

Contents

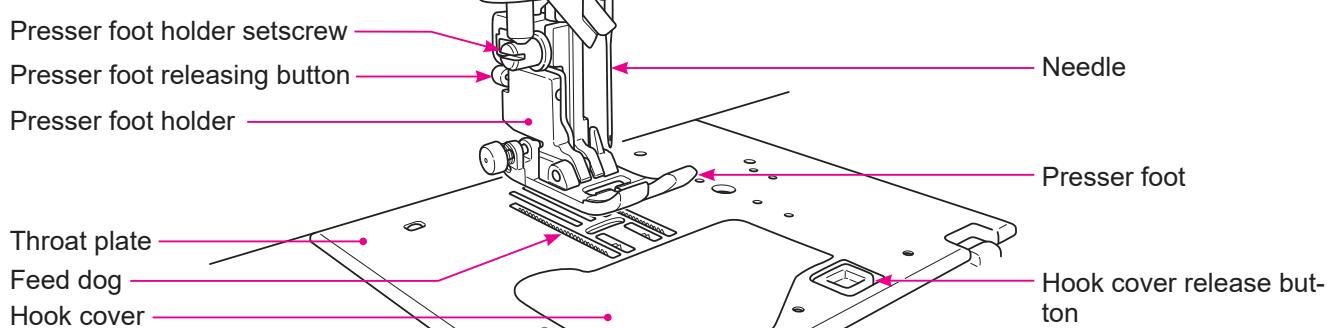
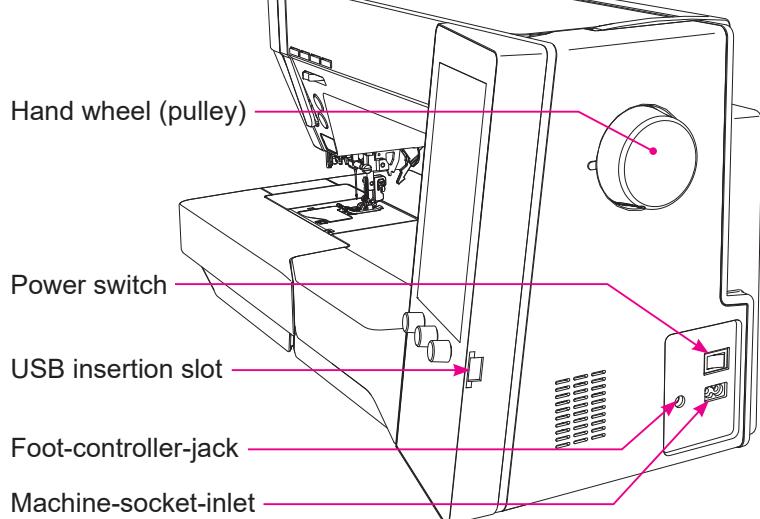
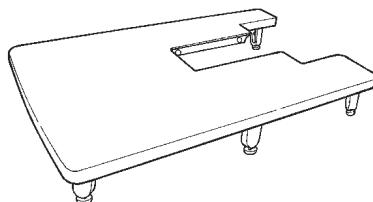
“IMPORTANT SAFETY INSTRUCTIONS” .. 1	5. Setting for the pattern sewing..... 44
Contents 6	5.1. Single mode / Combination mode..... 44
1. Configuration and functions 8	5.1.1. Single mode..... 44
1.1. Operating buttons	5.1.2. Combination mode..... 45
1.2. Operation panel	
2. Accessories 12	5.2. Types of patterns under the single mode, and how to selected a pattern 46
3. Set-up 14	5.2.1. Practical
3.1. How to install Wide Table..... 14	5.2.2. Buttonhole
3.2. Changing the position of the foot switch..... 15	5.2.3. Appliqu�
3.3. Installation of knee lifting lever..... 15	5.2.4. Tapering
4. Basic settings and basic operations 16	5.2.5. Quilt line
4.1. Connecting to the power supply	5.2.6. Scallop
4.2. Speed control..... 18	5.2.7. One-point
4.3. Lifting/lowering of the presser foot	5.2.8. Decorative
4.4. Changing the presser foot..... 20	5.2.9. Vintage
4.5. Placing and releasing “JUKI Smart Feed”	5.2.10. Feather / Lace
4.6. Changing the throat plate and the feed dog	5.2.11. Letters
4.7. How to use the throat plate for straight stitch	5.3. Combination of patterns under the combination mode 55
4.8. Attaching the needle	5.4. Types of edit functions and how to use them 58
4.9. Fabric, thread and needle table..... 26	5.4.1. Pattern inversion
4.10. Bobbin thread preparation	5.4.2. Setting the interval between patterns
4.11. Needle thread preparation	5.4.3. Reset settings..... 60
4.12. How to adjust thread tension	5.4.4. Writing / capturing the pattern data.. 61
4.13. Setting the presser foot pressure	
4.14. Setting the micro-lifter	
4.15. Setting the automatic back tacking, thread trimming and presser foot lifting..... 39	
4.16. When changing the needle position	
4.17. When changing the zigzag width	
4.18. When changing the stitch length	
4.19. Setting the stop position of needle..... 43	
4.20. Pivot setting	

6. Sewing	62	7. Operation of the operation panel ...	102
6.1. Straight stitch	62	7.1. Support.....	102
6.2. Inserting zippers.....	67	7.2. Setting	103
6.3. Patchwork piecing.....	68	① Darning adjustment.....	104
6.4. Overcasting stitch	69	② Stop position of needle.....	105
6.5. Blind stitch.....	70	③ Pivot.....	105
6.6. Shell tuck.....	73	④ Sound volume.....	106
6.7. Bartacking	74	⑤ Brightness.....	106
6.8. Eyelet.....	76	⑥ Stitch speed	107
6.9. Decorative stitches.....	77	⑦ Presser foot lifting height	107
6.10. Lace / feather / overlapping and tiling (blackwork) patterns.....	78	⑧ Cancel safety	108
6.11. Scallop stitches	79	⑨ Foot switch functions	108
6.12. Random pattern	80	⑩ Two needles	109
6.13. Tapering.....	81	⑪ Wireless LAN.....	110
6.14. Buttonhole stitches	84	⑫ Factory data reset.....	111
6.15. Manual 2-step buttonhole	91	⑬ Software version.....	111
6.16. Sewing buttons.....	93	⑭ Machine log.....	114
6.17. Quilting (free motion).....	94	⑮ Language.....	115
6.18. Hand look quilt stitches	96	⑯ Accessibility (Black-and-white inversion of display)	115
6.19. Quilting (quilt guide)	97	⑰ Shutdown	116
6.20. Elongation	98	7.3. Sewing	117
6.21. Stitch in ditch quilting.....	99	7.4. History	117
6.22. Attaching a quilt sleeve.....	100	7.5. JUKI Sewing Net	117
		8. Message catalog.....	118
		9. Machine Maintenance	123
		10. Introduction of optional accessory parts	124
		11. Performance check list	126
		12. List of stitch patterns	128
		Specification list.....	back cover

1. Configuration and functions



Wide table



1.1. Operating buttons

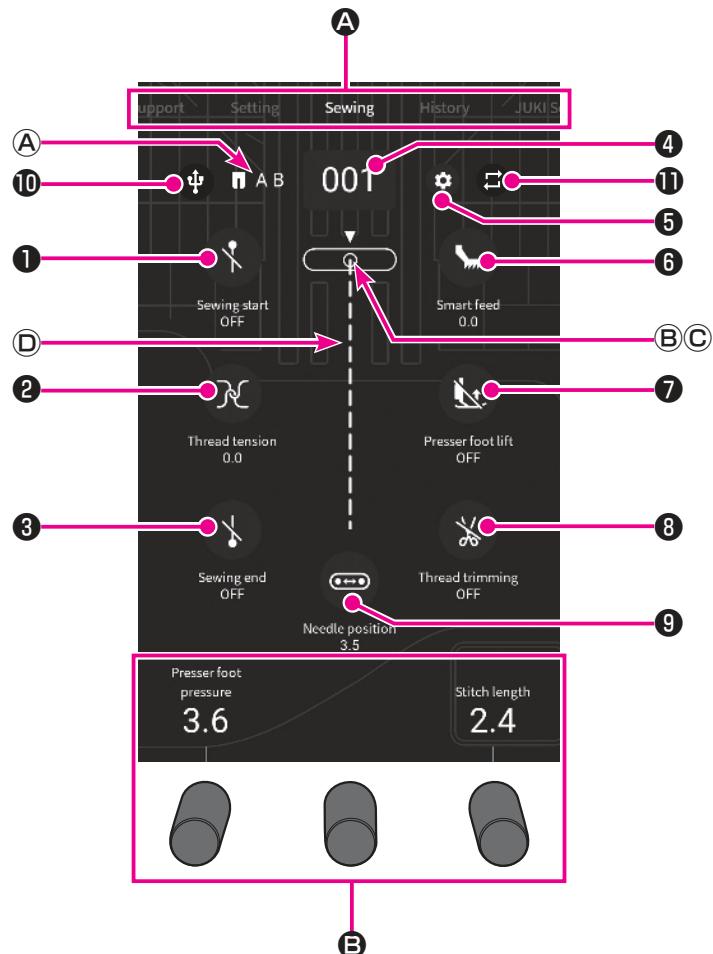
		Name	Function
①		Thread trimming button	After sewing, press this button to trim both threads automatically. The sewing machine stops with its needle up after thread trimming. In the case of 2-needle setting, this button will not operate even if the thread trimming button is pressed.
②		Needle up/down button	When machine stops, press this button to change the needle position. When the needle is up, the needle moves down and vice versa. The sewing machine performs sewing at a low speed by keeping this button held pressed for a long time.
③		Feed dog UP/DOWN / LOCK MODE button	When you press this button while the sewing machine is at rest, the feed dog position is changed over. Lamp lights up: The feed dog is at its lower position Lamp goes out: The feed dog is at its upper position *1 If you keep this button held pressed, all operations can be disabled (lock mode). If you keep it held pressed again, the lock mode will be reset.
③		Presser foot auto lift button	When this button is pressed while the sewing machine is at rest, the presser foot position is changed. When the presser foot is in its upper position, it comes down to its lower position and vice versa.
④		Speed controller	Sewing speed can be adjusted with the sliding lever of Speed Controller freely. The sewing speed is increased by moving the speed controller to the right, or decreased by moving it to the left. When sewing with foot controller, Max. sewing speed can be set by Speed Controller.
⑤		Lock stitch button	When this button is pressed, the sewing machine performs lock stitch. When this button is pressed while the sewing machine is engaged in pattern sewing, the sewing machine stops after it has completed the sewing of the one-cycle/one-point of the pattern.
⑥		Reverse stitch button	For straight stitch/zigzag stitch: The sewing machine performs reverse stitch as long as this button is held pressed. For other stitch types: The sewing machine performs lock stitch.
⑦		Start/stop button	When pressing this button, machine starts to sew slowly and then up to the speed set by speed controller. Another press of this button stops the sewing machine. Color of button indicates machine status. Green: Ready to start and/or while sewing Red: Not ready to start Orange: When the lock stitch button is pressed while the sewing machine is engaged in pattern sewing (The sewing machine performs lock stitch after it has completed the sewing of the pattern by one cycle. Then, the sewing machine stops.) * When the foot controller is plugged in, the start/stop button cannot be used to start sewing. Start button: Can not operate to start sewing. Stop button: Can operate to stop sewing.

* 1  **Lock Mode** given in the Instruction Manual refers to the

operation to “keep the feed dog UP/DOWN / LOCK MODE button held pressed to disable operation of the all keys”. (Refer to page 17)



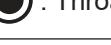
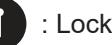
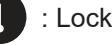
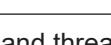
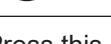
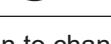
1.2. Operation panel



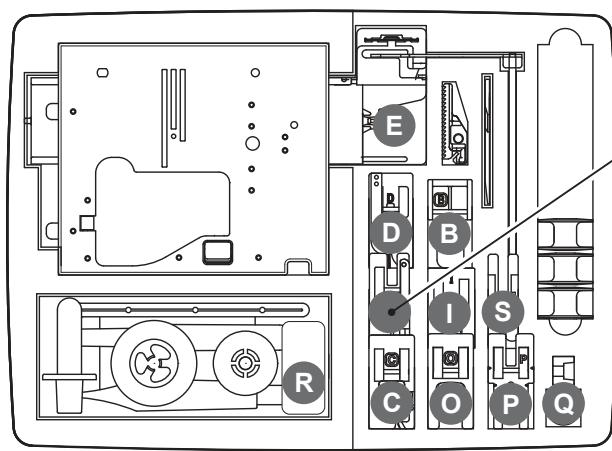
Tap the screen with your fingers.

When you have changed the setting, the color of the screen display changes.
White: Initial value
Blue: Changed value

	Name	Function
A	Tab	Select the screen according to your purpose.
	Support	Main usage of the sewing machine can be checked. (Refer to page 102)
	Setting	Setting of the functions (17 kinds) can be changed. (Refer to page 103)
	Sewing	Selection and adjustment of the pattern can be carried out.
	History	Information on the patterns you have sewn remains as history. If you want to sew the pattern using the condition you have set previously, you may select it from the history.
	JUKI Sewing Net	JUKI website is displayed.
B	Adjusting Dial	Function of the adjusting dial differs with the selected pattern. Function and the numeric value are displayed on the screen. Type: "Presser foot pressure", "Stitch length", "Zigzag width", "Tapering length", "Elongation"

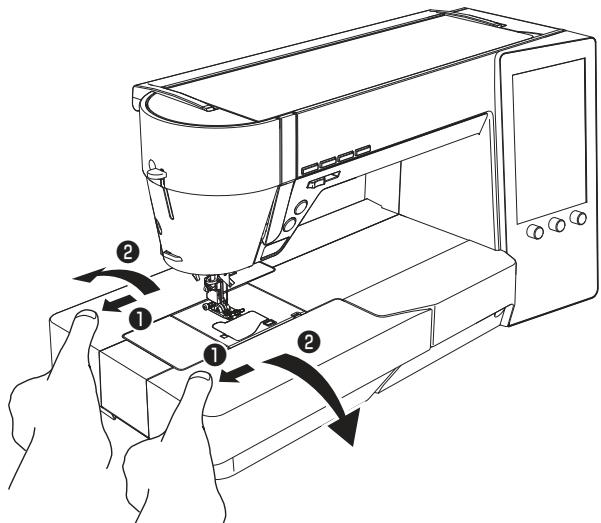
		Name	Function
Ⓐ		Presser Foot	Suitable presser foot for the stitch pattern is displayed.
Ⓑ		Needle Position	Needle position ▼ is displayed.
Ⓒ		Type of Throat Plate	The type of throat plate is displayed.  : Standard throat plate  : Throat plate for straight stitch
Ⓓ	-	Sewing Condition	Stitch Pattern which is sewn currently or to be sewn is displayed.
①		Sewing-start back tacking icon	Automatic back tacking at the start of sewing can be set.  : OFF  : Reverse stitch  : Lock stitch
②		Thread tension icon	Press the thread tension icon when you want to change the thread tension. The thread tension set value will be returned to the initial value by selecting a different pattern.
③		Sewing-end back tacking icon	Automatic back tacking at the end of sewing can be set.  : OFF  : Reverse stitch  : Lock stitch
④		Pattern selection icon	Press this icon to select a pattern. Pattern number of the selected pattern is displayed.
⑤		Pattern edit icon	Stitch patterns can be edited.
⑥		“JUKI Smart Feed” adjustment icon	Adjustment value of “JUKI Smart Feed” can be set.
⑦		Presser foot auto lift icon	Presser foot lifting after thread trimming can be set.  : OFF  : ON
⑧		Automatic thread trimmer icon	Back tacking and thread trimming can be set.  : OFF  : ON
⑨		Needle position icon	Press this icon to change the needle position.
⑩		USB icon	This icon is displayed on the pattern edit screen when a USB thumb drive is inserted into the USB slot of the sewing machine. Patterns can be “captured” from and “written” in the USB thumb drive by pressing this icon.
⑪		Repetition sewing	This icon can be used to set for sewing a combination pattern in repetition or for sewing a single pattern by one cycle. In the case of sewing the pattern by one cycle, “1” is displayed. Initial setting Single pattern: Repetition Combination pattern: 1

2. Accessories

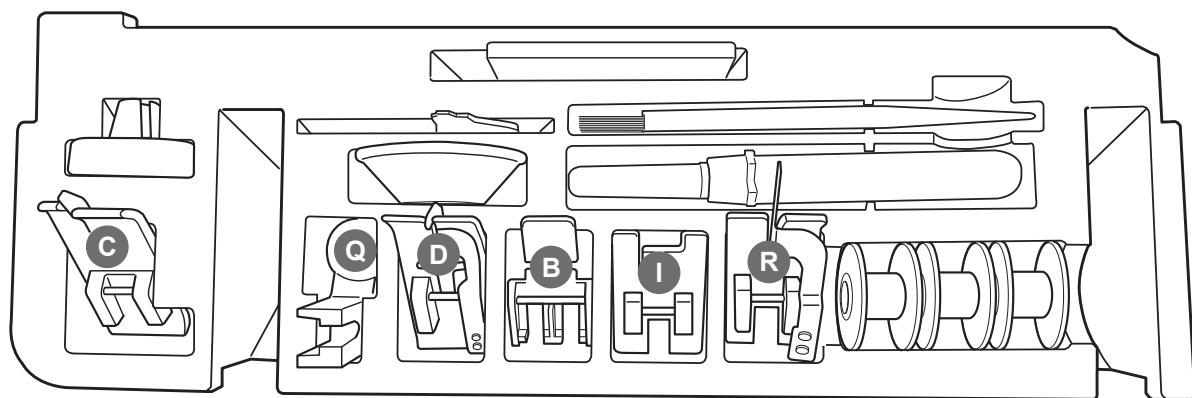


Auxiliary box

Accessories in the accessory box can also be stored in the auxiliary bed.
Refer to the figure given below for the storage procedure (storage location).

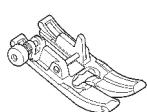


Slightly draw the auxiliary bed cover toward ① side, then open it toward ② side.



Inside of the auxiliary bed

- Supplied with the machine



Standard presser
foot (A)

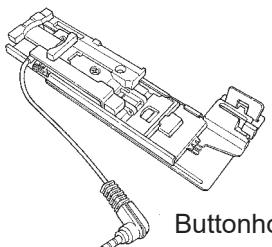


Bobbin (1)

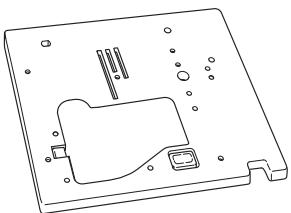


Spool cap (large)

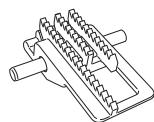
- Inside the auxiliary box.



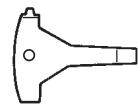
Buttonhole
presser foot (E)



Straight throat plate



Straight feed dog



T-shape
screwdriver



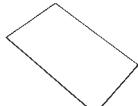
Quilt guide



Bobbin (3)



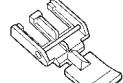
Auxiliary spool pin



Needle set
HA x 1 # 11 (1)
14 (1)
16 (1)
for knit # 11 (1)



Blind stitch presser
foot (D)



Zipper presser
foot (B)



Edge Sewing
presser foot (R)



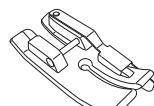
Cleaning brush



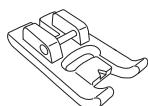
Spool cap (Small)



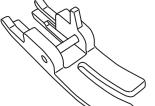
Spool cap (Middle)



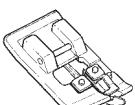
7mm guide foot or
1/4" guide foot



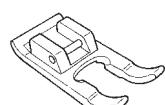
Manual buttonhole
presser foot (I)



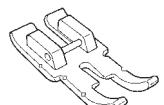
Straight presser
foot (S)



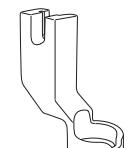
Overcasting
presser foot (C)



Open toe presser
foot (O)



Patchwork
presser foot (P)



Quilt presser foot
(for the ruler) (Q)

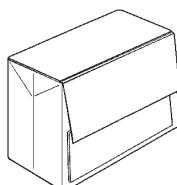
- It is contained in the packing.



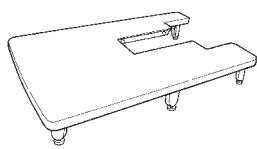
Foot Controller



Power cord



Sewing machine cover



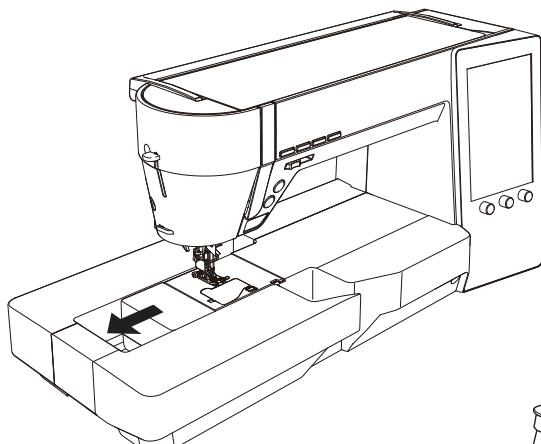
Wide table



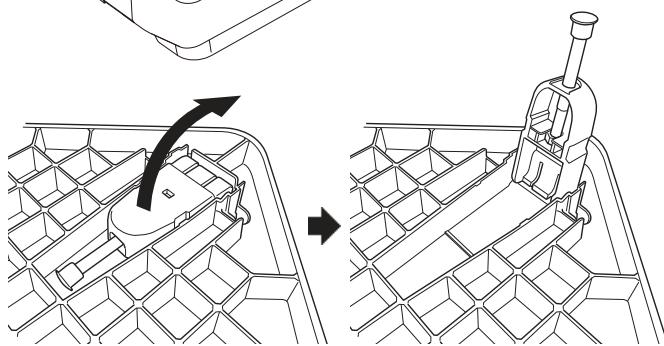
Quick Reference
Guide
(This manual)

3. Set-up

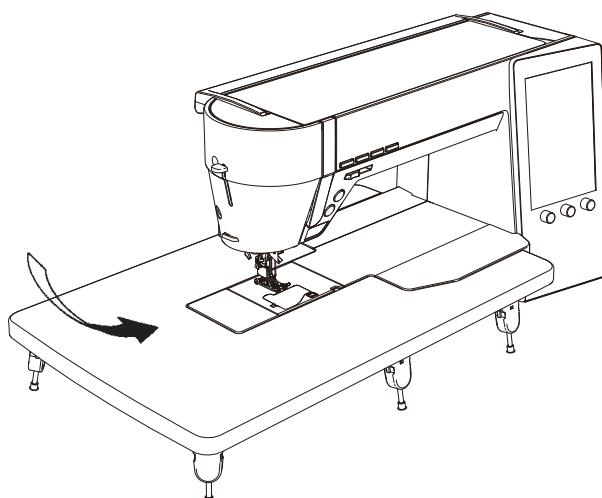
3.1. How to install Wide Table



1 Draw the auxiliary bed out to the left.

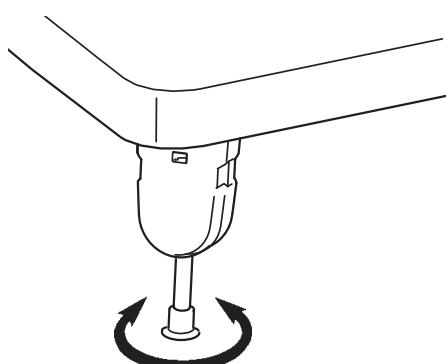


2 Open legs of Wide Table until they stop securely at the stopping position.



3 Assemble Wide Table to sewing machine body.

Attach it to free arm of sewing machine.



4 Adjust the height of legs so that the top surface of Wide Table is the same height of sewing machine body.



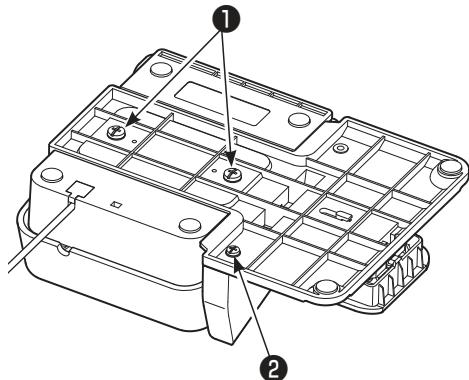
* Don't put any heavy materials on the Wide Table.

* Don't move sewing machine with Wide Table attached.

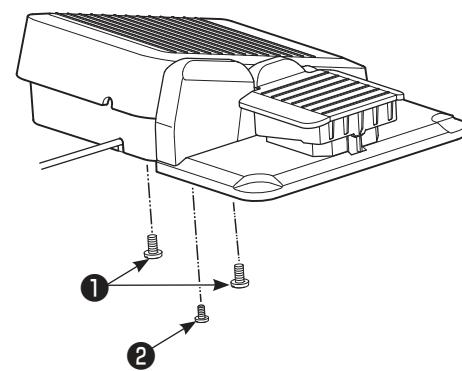
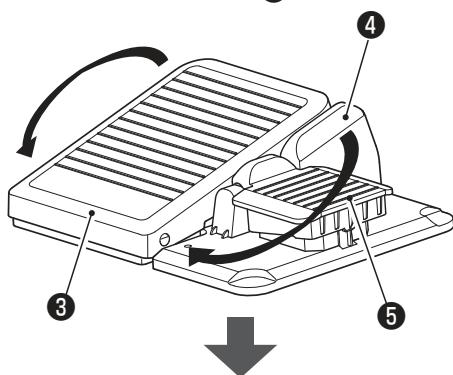
3.2. Changing the position of the foot switch

The lateral position of the foot switch in reference to the pedal can be changed.

Use the foot switch at your desired position.



 Attention	Unplug the controller before you change the position of the foot switch.
--	--

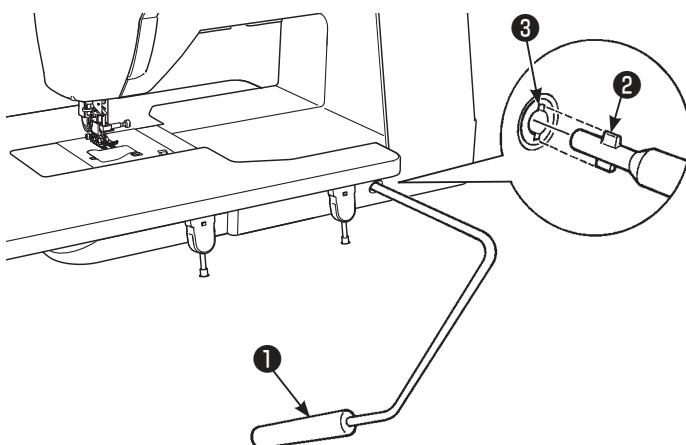


1 Remove pedal setscrew ① and block setscrew ②.

2 Attach pedal ③ and block ④ to the opposite side while turning them in the other way around, and tighten the pedal setscrew and block setscrew.

⑤ Foot switch

3.3. Installation of knee lifting lever



Insert the knee lifting lever ① so that concave ③ and convex ② meet.

4. Basic settings and basic operations

4.1. Connecting to the power supply

WARNING	<ul style="list-style-type: none">• Disconnect the plug and turn off the power switch (turn to "O") that always sewing machine is not to use.
----------------	---

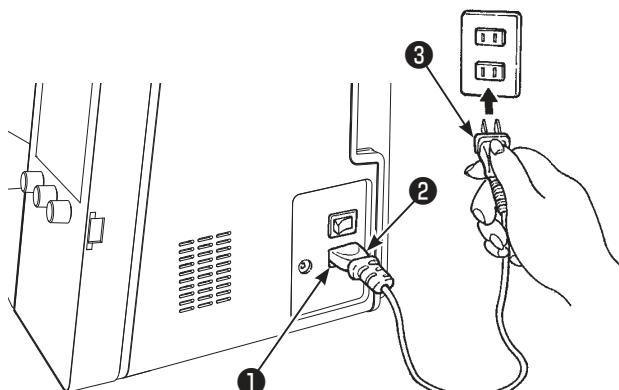
■ Connecting the codes



① Turn OFF the power switch (turn to "O")

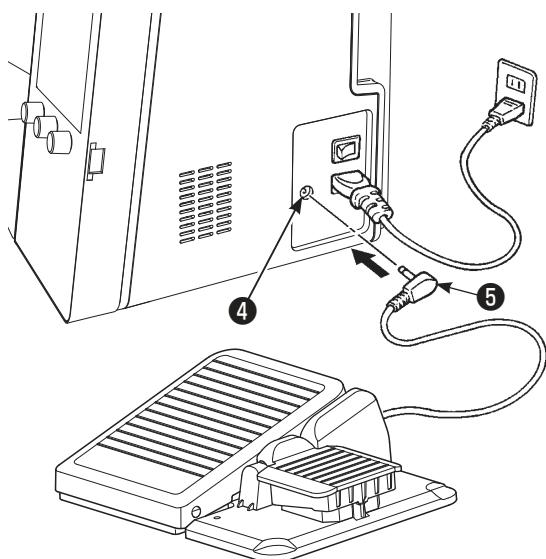
WARNING (For U.S.A., Canada only)

This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.



● Not-using foot-controller that using start/stop-button:

- ② Insert cord-connector ② into machine-socket-inlet ① .
- Insert plug ③ into socket-outlet.



● Using the foot-controller:

- ② Insert the foot-controller-plug ⑤ into the foot-controller-jack ④ .
- ③ Insert cord-connector into machine-socket-inlet. Insert plug into socket-outlet.

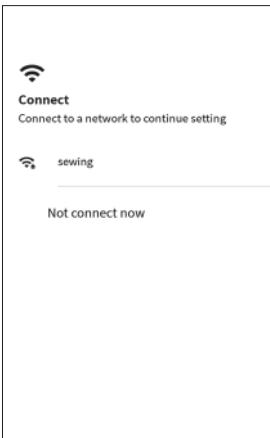
- * When the foot controller is plugged in, the start/stop button cannot be used to start sewing.
- Start button: Can not operate to start sewing.
- Stop button: Can operate to stop sewing.

■ Turning the power ON



Turn ON the power switch. (Turn to "I")

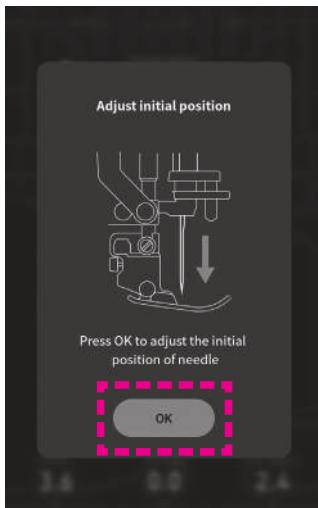
- * Be aware that the presser foot goes up automatically when the power to the sewing machine is turned ON.



The screen shown on the left is displayed when you turn ON the power to the sewing machine for the first time after the delivery.

1. Select the language for display.
2. Press [Start].
3. Set the wireless LAN to which the sewing machine is connected.
4. Enter the password for the wireless LAN.
5. Press [CONNECT].

- * This screen is not displayed when you turn ON the power to the sewing machine next time.



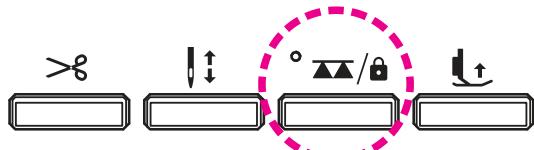
The screen shown on the left when the power to the sewing machine is turned ON.

The needle moves and the screen shown on the left disappears by pressing [OK].



Do not place fingers under the needle

● Lock mode



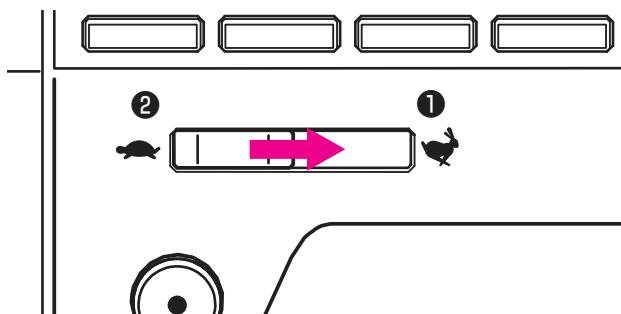
If the sewing machine is put in the lock mode, operation of all operating buttons, operating keys and operation panel will be disabled. In addition, the sewing machine itself will also be disabled.

The power to the sewing machine should be turned OFF for the sake of safety when changing the presser foot, changing the throat plate and feed dog, changing the needle or taking care of the sewing machine. However, those kinds of work can be carried out while retaining the current settings of the sewing machine by putting the sewing machine in the lock mode.

- When you want to put the sewing machine in the lock mode, keep the feed dog UP / DOWN / LOCK MODE button held pressed for two seconds.
- When you want to reset the lock mode, keep the feed dog UP / DOWN / LOCK MODE button held pressed for two seconds.
- When turning off the machine, lock mode is disengaged.

4.2. Speed control

■ Speed controller

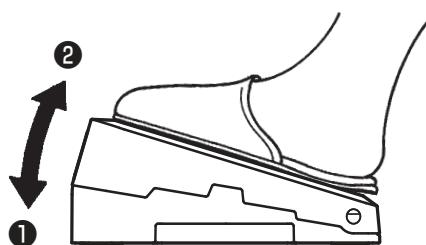


Maximum sewing speed can be freely set by the speed controller.

① : Faster speed

② : Slower speed

■ Foot controller



To run the machine, press the foot controller.

The harder you press, the faster the machine sews.

Speed controller will set the maximum sewing speed.

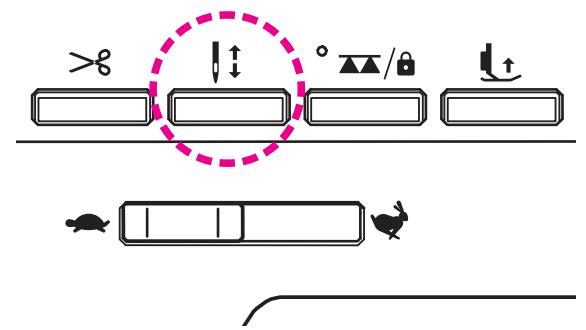
① Pressing harder → faster speed

② Pressing weaker → slower speed

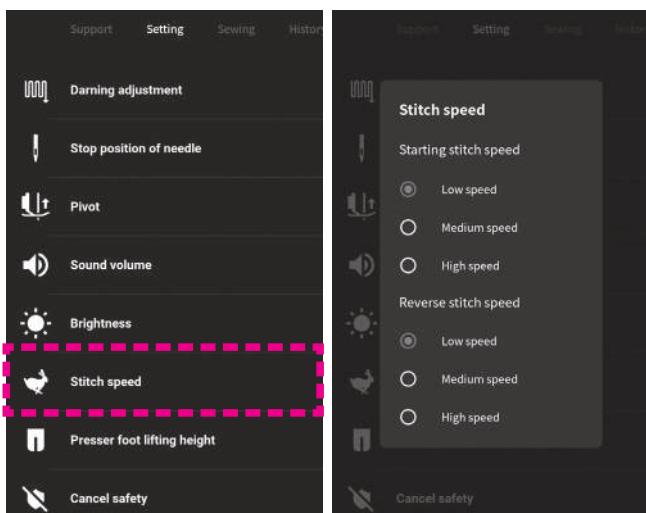
* Always clean the foot controller.

It is important that you do not place any objects on the foot controller as it may cause injury to the user and may cause malfunctions.

■ Low-speed inching sewing



When the needle up/down switch is held pressed, the sewing machine performs sewing at a low speed.



Setting > Stitch speed Adjustable starting stitch speed

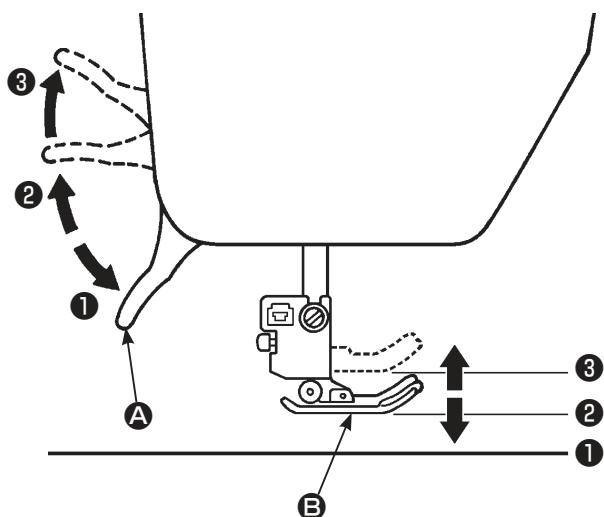
From the setting, the sewing speed at the start of sewing can be changed. (Refer to page 107)

Setting > Stitch speed Adjustable reverse stitch speed

From the setting, the sewing speed for the reverse stitching can be changed. (Refer to page 107)

4.3. Lifting/lowering of the presser foot

■ Presser foot lifting lever



The presser foot **B** is lifted/lowered with the presser foot lifting lever **A**. The presser foot can be lifted higher than the ordinary lift position. This feature is useful when placing a heavy-weight material on the sewing machine.

Even after the presser foot has been lifted with the presser foot lifting lever, the presser foot can be lowered with the presser foot auto lift button.

- ① Lowered position..... Presser foot should be lowered when sewing.
- ② Ordinary lift position..... This position is used for fabric removal and/or changing the presser foot.
- ③ Extra lift position..... This position is used to put heavy materials underneath the presser foot.

* **Be careful that the presser foot and the needle should not interfere when the needle is in down position and the presser foot is raised to the extra lift position.**

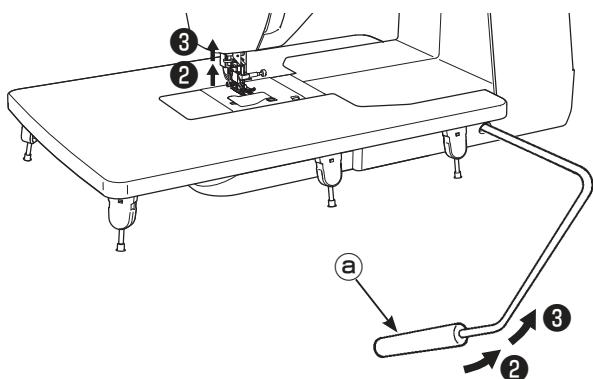
■ Presser foot auto lift button



The presser foot can be lifted/lowered by pressing the presser foot auto lift button. (Refer to page 9)

Operation of the presser foot lifting lever is enabled by lifting the lever to position ③ once after lifting the presser foot with the presser foot auto lift button.

■ Knee lifting lever



It is possible to lift and lower the presser foot with your knee instead of using your hands.

Push the lever **a** to right-hand side to lift the presser foot. The presser foot is lowered when the lever goes back to the original position.

The presser foot can be lifted to the extra lift position with the knee lifting lever as in the case of using the presser foot lifting lever.

Operation of the knee lifter lever is enabled by pressing the lever to the rightmost position after lifting the presser foot with the presser foot auto lift button.

* Do not touch the knee lifting lever while sewing. If you touch the knee lifter lever during sewing, the presser foot will go up causing a deformation in the pattern.

● Automatic lowering of the feed dog when lifting the presser foot

When you lift the presser foot to its extra lift position with the knee lifting lever, the feed dog automatically comes down to its lower position.

This feature is helpful for placing the material under the presser foot or removing it from there as well as preventing the material from being damaged since the material will not be caught in the feed dog.

■ Automatic presser foot lifting

Setting > Pivot setting

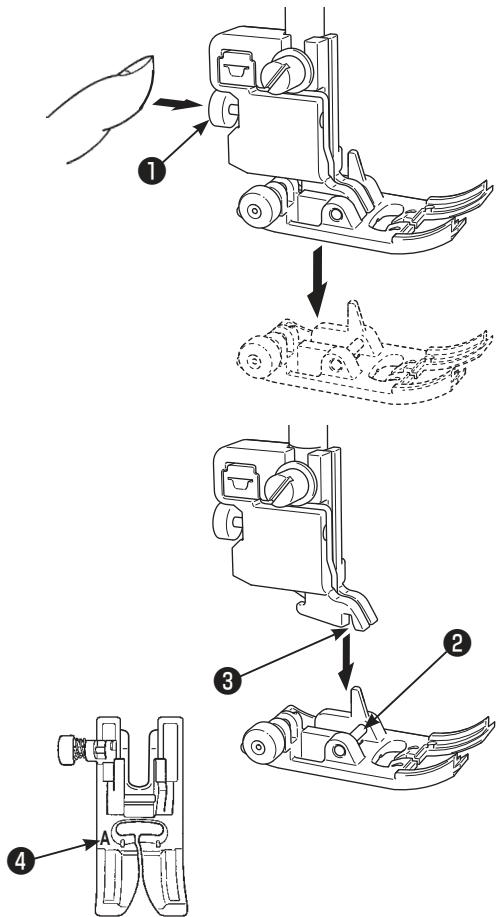
It is possible to set so that the presser foot goes up automatically with the needle kept at the lower position when the sewing machine is stopped.

Sewing > (Presser foot lift after trimming setting)

It is possible to set so that the presser foot goes up automatically after thread trimming.

4.4. Changing the presser foot

■ Removing and installing the presser foot



⚠ Leave the machine in Lock mode

● Removing presser foot

Raise the needle.

Move up the presser foot lifting lever.

Press the presser foot releasing button 1 to remove the presser foot.

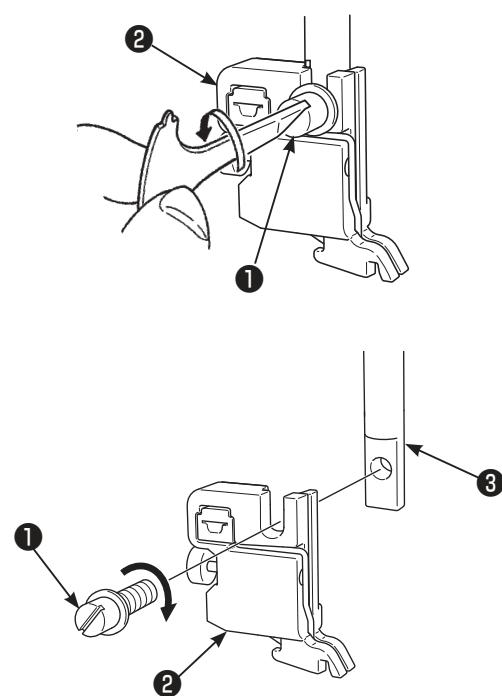
● Installing presser foot

Align the pin 2 of the presser foot and the groove 3 in the presser foot holder.

Move down the presser foot lifting lever.

* Each presser foot has a marking 4. Use the appropriate presser foot for the stitch pattern to be sewn.

■ Removing and installing presser foot holder



● Removing presser foot holder

Lift the needle and presser foot lifting lever.

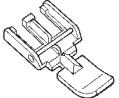
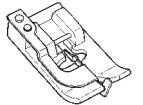
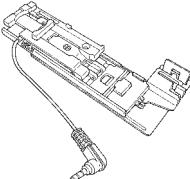
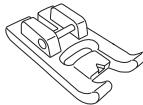
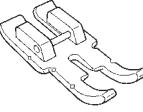
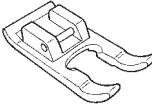
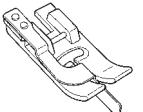
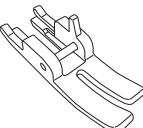
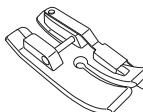
Loosen the setscrew 1 of the presser foot holder to the left and remove the presser foot holder 2.

● Installing presser foot holder

Align the screw hole at the presser bar 3 with the hole of presser foot holder 2 (long groove).

Tighten the setscrew 1 firmly by turning it to the right side.

■ The type and application of the presser foot

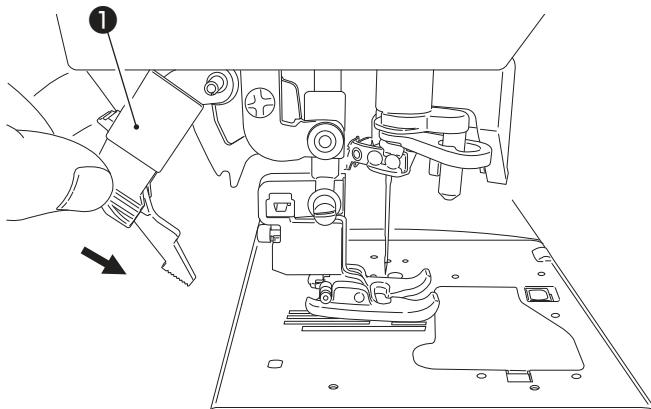
Marking of presser foot		
	Standard presser foot	A This is used mainly for straight stitch and zigzag stitches. Use this presser foot especially when sewing heavy-weight materials.
	Zipper presser foot	B This is used to attach zippers.
	Overcasting presser foot	C This presser foot is used exclusively for overcasting to prevent the cut edge of fabrics from fraying.
	Blind stitch presser foot	D This presser foot is used for blind stitch on hems of trousers and skirts, or sleeves.
	Buttonhole presser foot	E This presser foot is used for automatic buttonholing.
	Manual buttonhole presser foot	I This is used for sewing decorative stitches, letters and bartacks. Also for manual buttonhole (pattern No.402, No.403).
	Patchwork presser foot	P This presser foot is used for patchwork stitches. There are two seam lines, 1/4-inch and 1/8-inch from center needle position.
	Open toe presser foot	O This is used for the applique and decorative stitches. (Front part of the presser foot is open for better visibility.)
	Quilt presser foot (for the ruler)	Q This is used for the quilt stitch. (Machine setting: Straight Stitch and Center needle position) The ruler can be used together with the quilt presser foot.
	Edge Sewing presser foot	R This presser foot is used for patchwork, etc. Use the guide at the center of the edge sewing foot for sewing the center of the joining part of two pieces of materials.
	Straight presser foot	S Use this presser foot when using the throat plate for straight stitch.
	7mm guide foot or 1/4" guide foot	7 This guide presser foot is provided with a guide for 7-mm or 1/4-inch seam allowance for piecing.

4.5. Placing and releasing “JUKI Smart Feed”

“JUKI Smart Feed” is used when sewing the materials (knit, jersey, vinyl cloth, artificial leather, etc.) that are generally hard to be fed, and the materials (quilt, etc.) that are likely to cause uneven material feed.

“JUKI Smart Feed” can only be used for sewing limited types of patterns.

Refer to “12. List of stitch patterns” for the patterns that can be sewn with the “JUKI Smart Feed”.

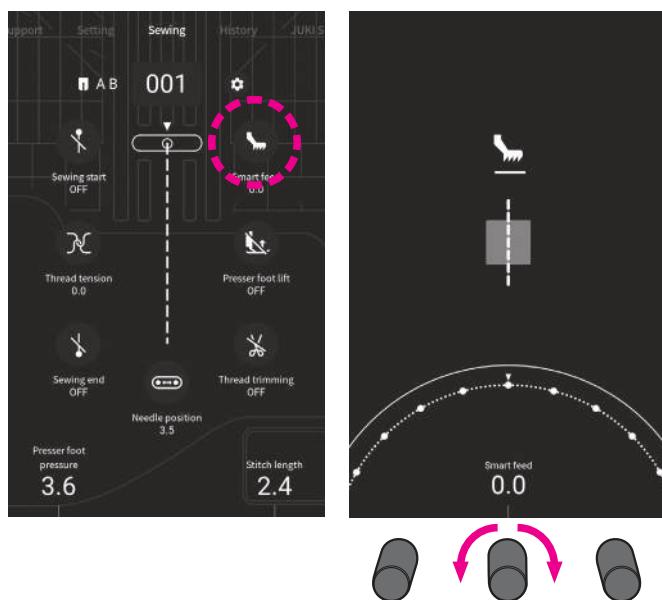


● Placing “JUKI Smart Feed”

Raise the presser foot.

Fully lower “JUKI Smart Feed” ① while pinching it with fingers.

When “JUKI Smart Feed” is fitted appropriately, the relevant icon is displayed on the screen.



● Adjusting “JUKI Smart Feed”

Press  .

Adjust the “JUKI Smart Feed” by sliding your finger on the scale mark part.

The “JUKI Smart Feed” can also be adjusted by turning the adjusting dial.

(Setting range: -5.0 - 5.0)

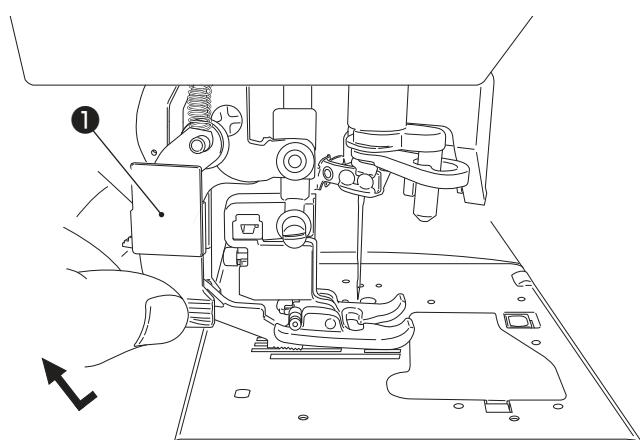
The top feed amount is decreased.



The top feed amount is increased.

White: Initial value
Blue: Changed value

When you tap the portion above the semicircular portion shown in the above-given figure, the setting you have done is confirmed. Then, the screen returns to the previous screen.



● Releasing “JUKI Smart Feed”

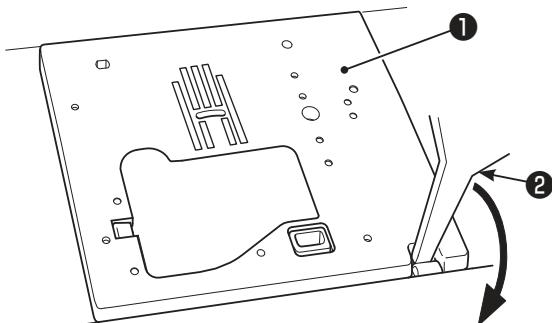
Raise the presser foot.

Pinching “JUKI Smart Feed” ①, pull it down and push backward until it is brought to its upper position.

4.6. Changing the throat plate and the feed dog

The normal throat plate and feed dog can be changed to the throat plate and feed dog for straight stitch.

In the case of starting sewing from the edge of material, the material can be smoothly fed without being pulled into the needle hole by changing the throat plate and feed dog to those for straight stitch.

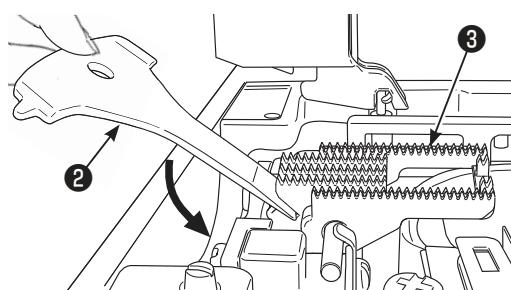


⚠ Turn off the machine or leave the Machine in Lock Mode

● Removing the throat plate

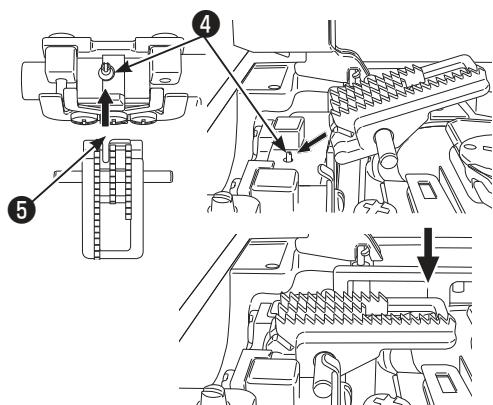
Remove the presser foot and needle.

Push the T-shape screwdriver (2) into the groove in front of the throat plate (1). When pressing the screw-driver downward, throat plate will come off.



● Removing the feed dog

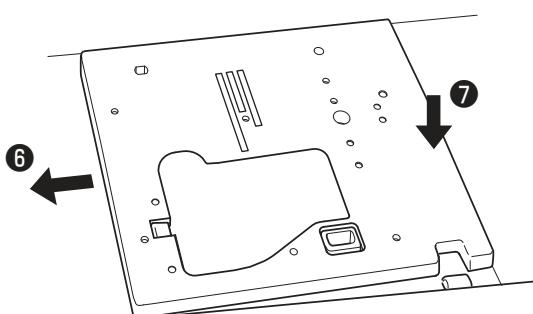
Push the T-shape screwdriver (2) into the groove in the back of the feed dog (3). When pressing the screw-driver downward, feed dog will come off.



● Attaching the feed dog

Follow the angle in the sketch and place the feed dog so that the pins (4) of the feed dog meet the groove (5) in the back of feed dog.

Press down the front part of feed dog and engage the feed dog.



● Attaching the throat plate

Place the area (6) first and then push center to right hand part of the throat plate to assemble (7).

● Patterns that can be sewn with the throat plate for straight stitch

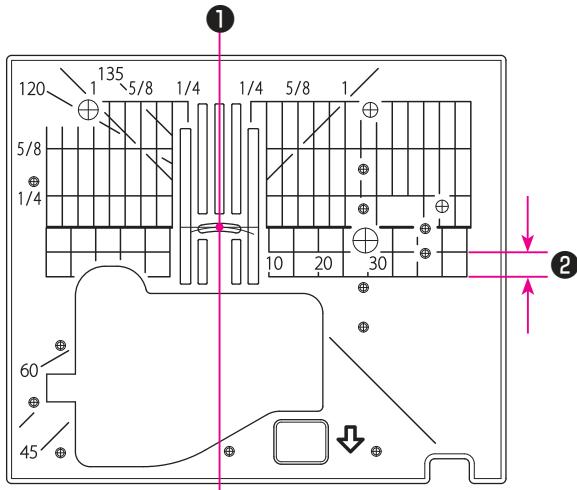
001	004	030	418	419	420

Once the throat plate and feed dog for straight stitch are installed, the limited types of patterns that can be sewn with them can be selected.

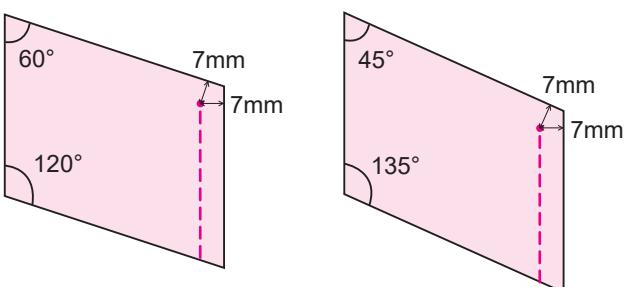
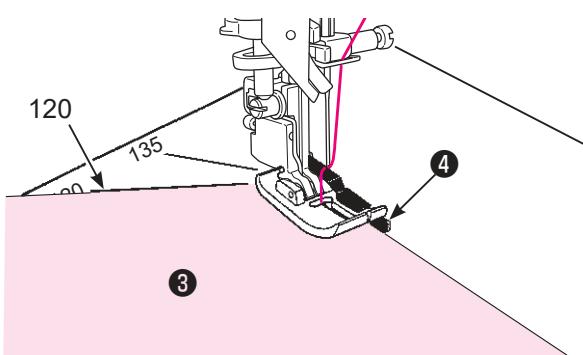
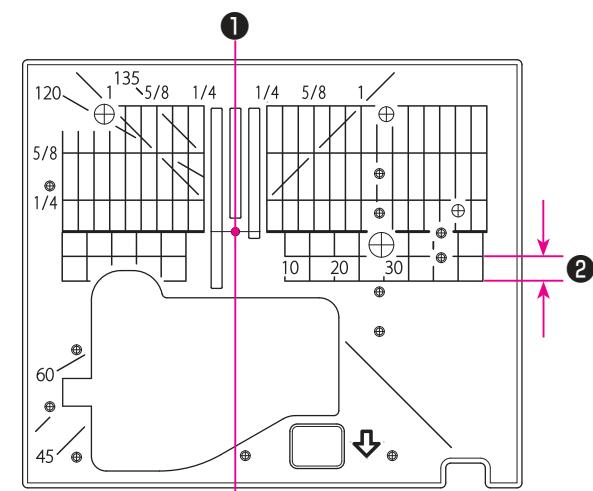
4.7. How to use the throat plate for straight stitch

The throat plate is provided with a useful guide for you to determine the sewing position of material.

Standard throat plate



Throat plate for straight stitches



● Guide lines

It is possible to sew the material from its edge by sewing the material while aligning its edge with the guide line on the throat plate.

① On center needle position basis

② 5 mm

* Numbers on the guide line show the distance in mm and inches between the center needle position and the guide line.

Numbers, 7, 10 and 20 are millimeter.

Numbers, 1/4, 5/8 and 1 are inches.

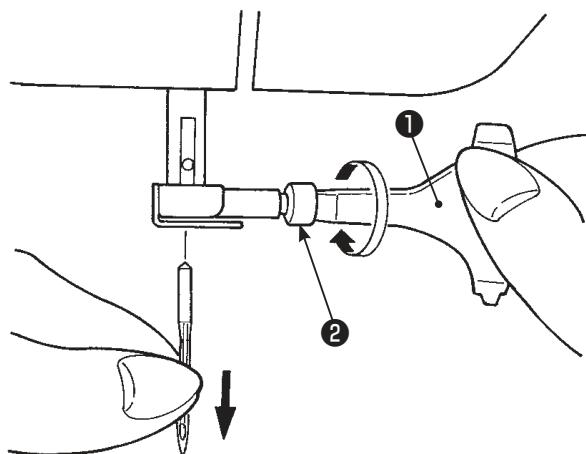
● Angle index

The angle index is useful when using it for piecing of patchworks.

If you align the material edge with the angle index which is same of the angle of patchwork (piece) corner ③, you will know the start and end positions while setting the seam allowance to 7 mm without marking the material.

④ Guide

4.8. Attaching the needle



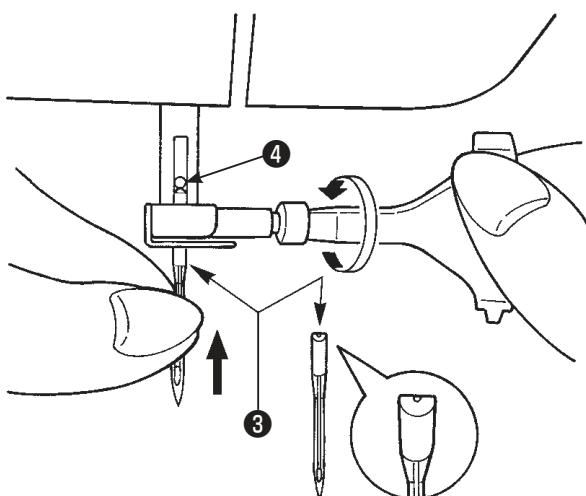
⚠ Turn off the machine or leave the Machine in Lock Mode

● Removing needle

Turn the hand wheel towards you until the needle comes to the highest position and lower the presser foot.

Turn the needle setscrew ② towards you 1-2 times and remove the needle.

① T-shape screwdriver



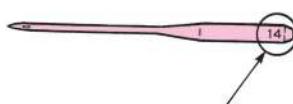
● Attaching the needle

Hold the needle with its flat part facing away from you (③), and insert it fully until it touches the stopper pin ④. Securely tighten the needle setscrew.

The needle cannot be inserted unless it is correctly positioned.

● Needles to be purchased

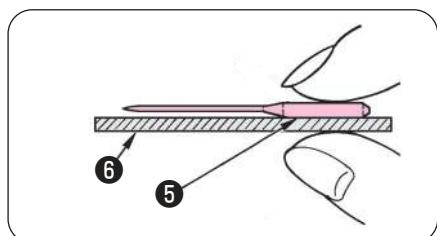
When purchasing spare needles, specify HA×1 (130/705H) or HA×1 SP (needle for knits).



Needle size:

The larger the number, the thicker the needle.

● Checking the needle



Check the needle for its straightness occasionally.

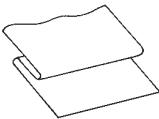
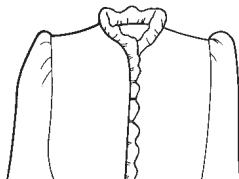
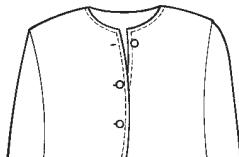
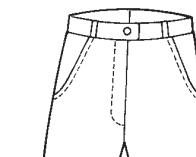
Any bent needle would cause skipped stitches, thread breakage or damage to materials.

⑤ The flat part of the needle

⑥ Flat object

⚠ Attention: If the needle is not properly installed or a bent needle is used, needle breakage can be caused. It will cause damage to the machine.

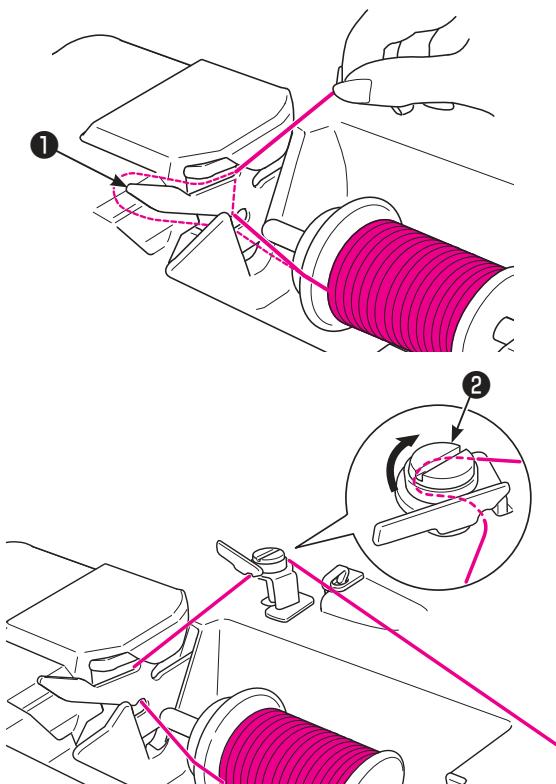
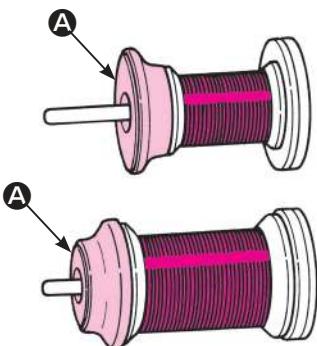
4.9. Fabric, thread and needle table

	Fabric	Thread	Needle
			 HAx1
 Light-weight materials	Lawn	Silk thread No.80,90	No.11
	Georgette	Spun thread No.80,90	
	Tricot	Spun thread No.60-90	Knit needle No.11
	Wool and synthetic fabrics	Silk thread No.80 Spun thread No.60-90	No.11-14
 Medium-weight materials	Cotton and synthetic fabrics	Spun thread No.50, 60	No.11-14
	Light jersey	Silk thread No.50 Spun thread No.50, 60	Knit needle No.11
	Ordinary wool and synthetic fabrics	Silk thread No.50 Spun thread No.50, 60	No.11-14
 Heavy-weight materials	Denim	Spun thread No.30-50	No.14-16
	Jersey	Silk thread No.50 Spun thread No.50, 60	Knit needle No.11-14
	Coat	Silk thread No.50	No.11-14

- * In general, the same thread is used for both needle and bobbin threads.
- * Thin thread and needle will be used for light-weight fabrics and thick thread and needle will be used for heavy-weight materials.
- * Check that the combination of needle and thread is OK by trial sewing on the material which will be sewn.
- * Knit needle is good for stretchy fabrics (such as knits) and synthetic fabrics.
- * Use thread No. 30 - 90.
- * When it is difficult to go over an overlapped section, guide the fabric by hand.
- * When sewing "quilt patterns", "decorative patterns" or "letters", better finish will be ensured by using a knit needle.

4.10. Bobbin thread preparation

■ Winding a bobbin



● In the case of using the spool pin

1 Place the thread spool to the spool pin.

There are three types of the spool caps A, large, medium and small.

Select the size of spool cap according to the thread spool to be used and use it while changing its direction appropriately.

* Be aware that a spool with a small remaining amount of thread can cause tangling or slip-off of thread.

2 Thread the guide ① .

3 Thread the thread guide ② (guide in the circle) .

Pull the thread by both hands and thread it to bobbin winding thread guide.

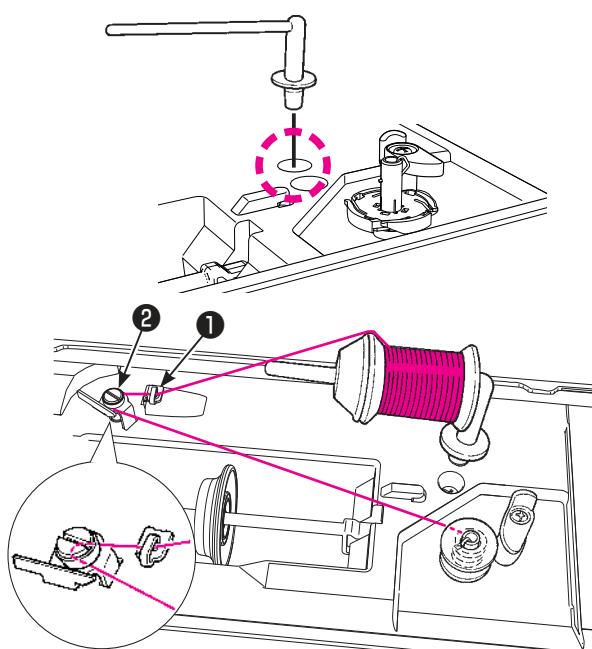
● In the case of using the auxiliary spool pin

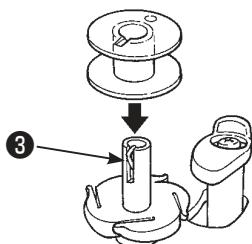
1 Place the auxiliary spool pin.

2 Place the thread spool to the auxiliary spool pin.

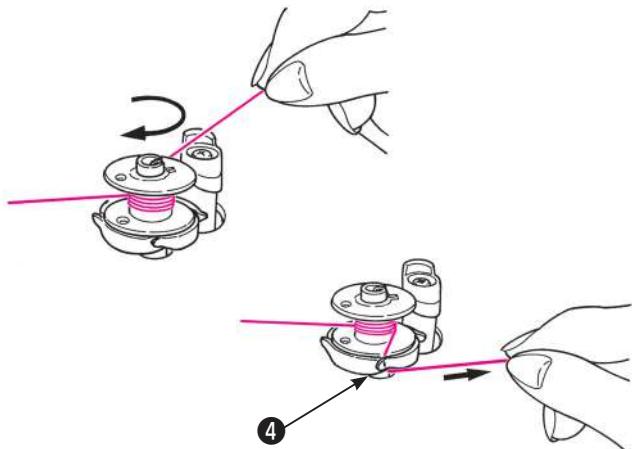
3 Pass the thread through thread guide ① . Then, pass the thread through thread guide for bobbin winding ② .

Pull the thread by both hands and thread it to bobbin winding thread guide.





4 Set the bobbin on the bobbin winding shaft ③ .

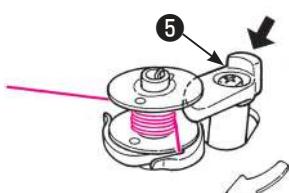


5 Wind the thread on the upper part of the bobbin by four to five turns in the clockwise direction while taking care not to allow the thread coming from the bobbin winding thread guide to loosen.

Put the thread end into the guide ④ at the bobbin winding shaft and pull it to the right side to cut it.

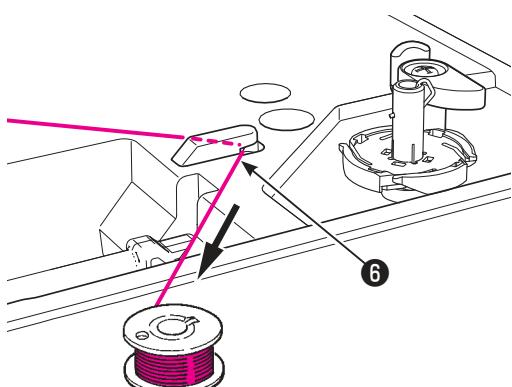


6 Turn the power ON.



7 Push the bobbin winding regulator ⑤ towards the bobbin to start winding the bobbin.

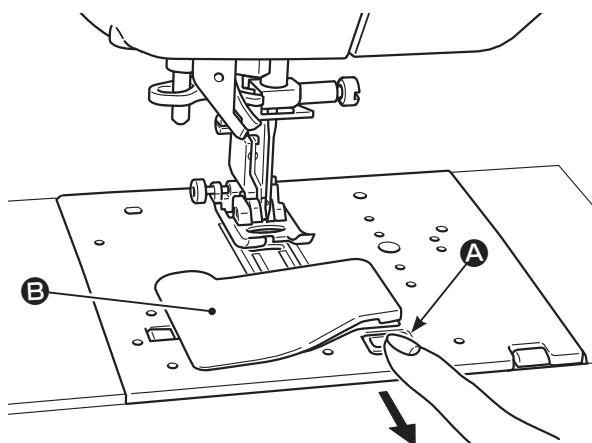
* Be careful that the bobbin winding regulator works as a switch.



8 When winding is finished, the shaft stops automatically, the bobbin winding regulator moves to right and return to the original position. Remove the bobbin from the bobbin winding shaft and cut the thread by cutter ⑥ .

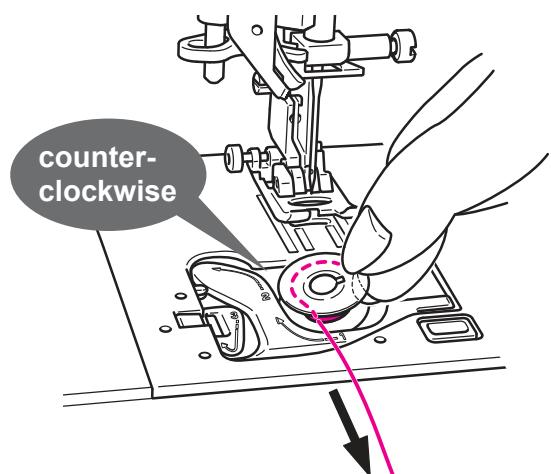
* Bobbin winding will automatically stop even while winding, when the winding speed is reduced due to a load to the bobbin winding motor caused by thread tangling.

■ Placing the bobbin



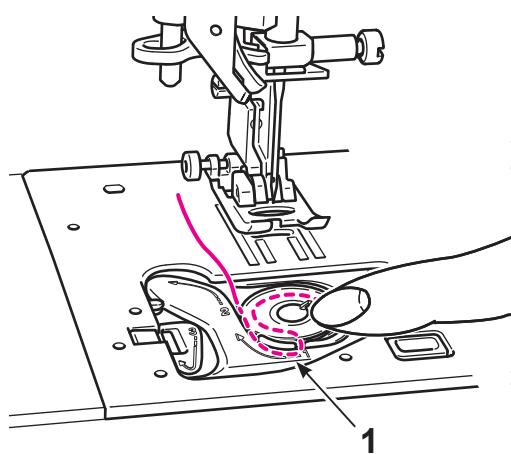
⚠ Turn off the machine or leave the Machine in Lock Mode

1 Pull forward hook cover release button **A** and open the hook cover **B**.



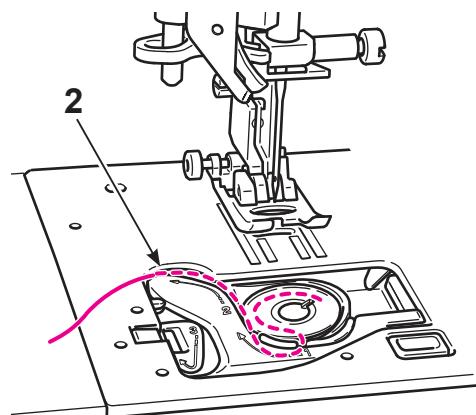
2 Put the bobbin in the bobbin case.

* Place the bobbin so that thread winds counter-clockwise.

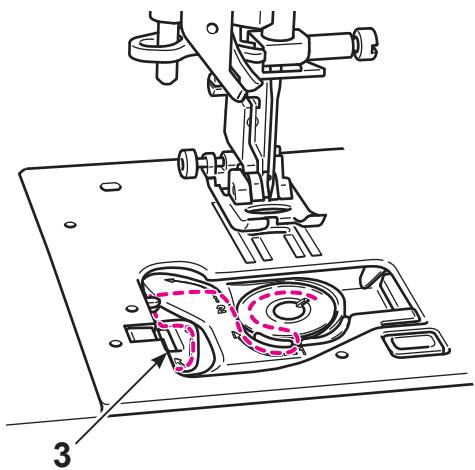


3 Thread groove and 1 by pulling the thread end.

* It will be easier to thread grooves when you press the bobbin lightly with your finger.

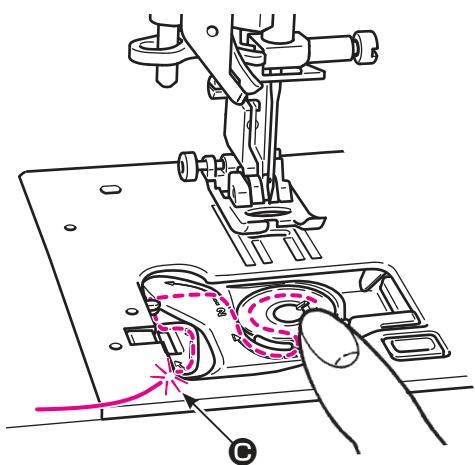


4 Thread guide 2 by pulling the thread to left side.

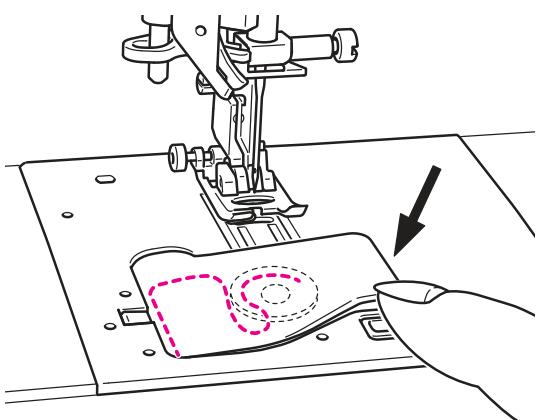


5 Thread 3 .

* When pulling bobbin thread, bobbin rotates counterclockwise. If bobbin rotates clockwise, put the bobbin upside down.



6 Cut the thread with the built-in cutter ④.



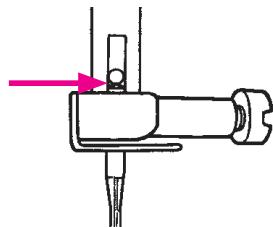
7 Close the hook cover.

You can start to sew in this condition (without pulling up the bobbin thread), however, if you want to sew with the bobbin thread pulled out, refer to "Pulling up the bobbin thread" in the page 35.

4.11. Needle thread preparation

■ Preparation

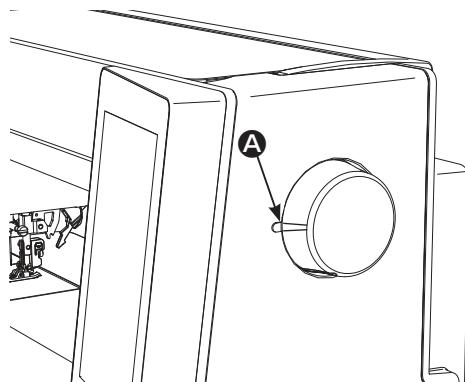
Turn off the machine



1 Make sure to push the needle to the top.

If the needle is not attached appropriately, the needle cannot be threaded with the automatic needle threader.

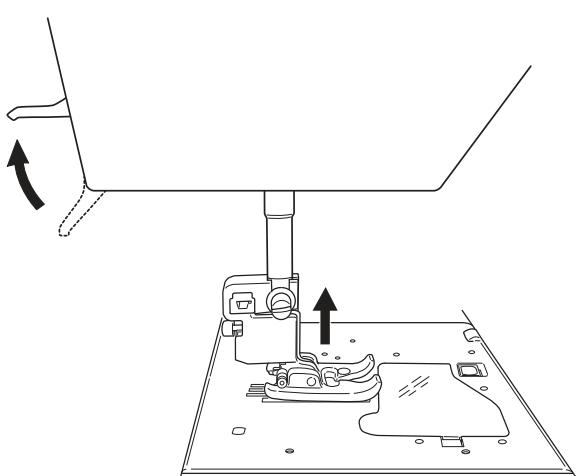
* Use the needle: No.11-16 and the thread: No.30-90.



2 Align the marking A at the hand wheel with the one on the machine body.

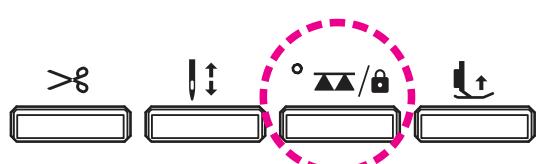


3 Turn the power ON.



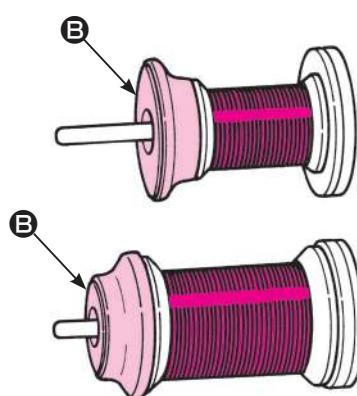
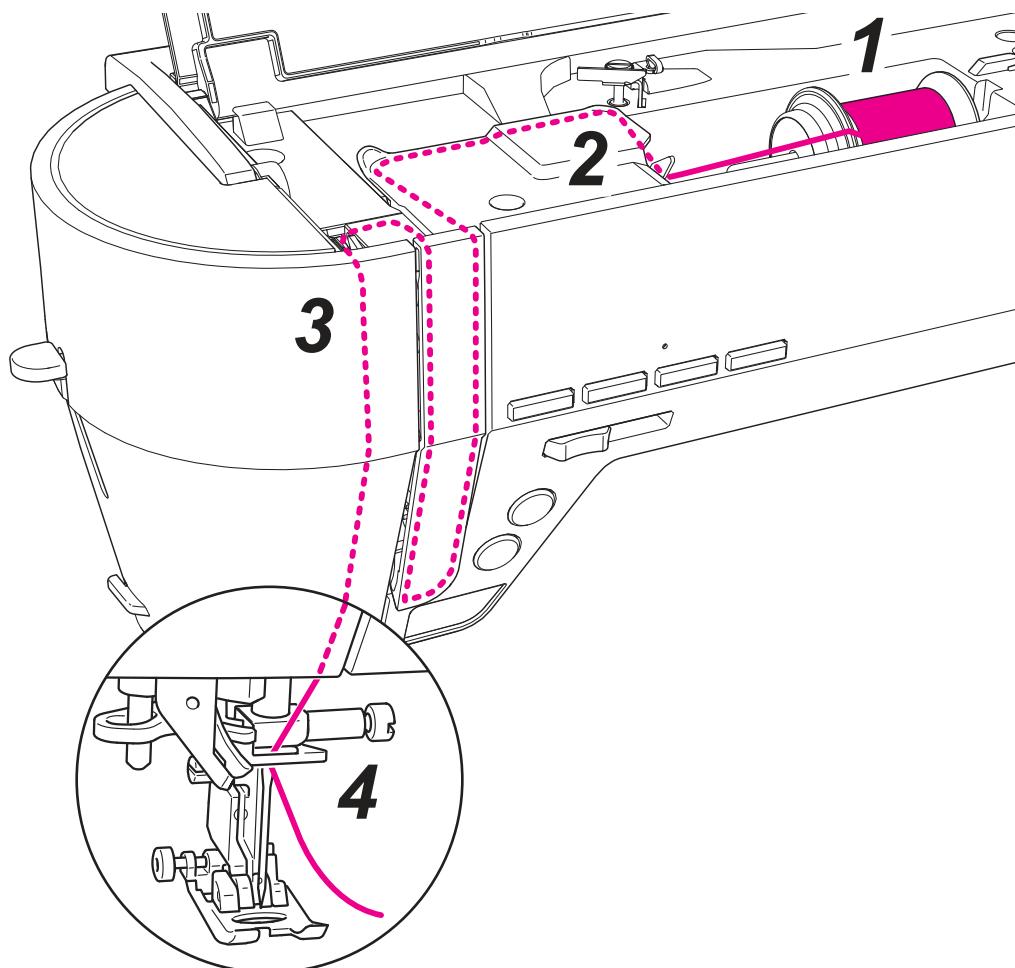
4 Lift the presser foot.

* You can thread the machine correctly on condition that the machine is turned on and presser foot is up position.



5 Keep the feed UP / DOWN / LOCK MODE button held pressed to put the sewing machine in the lock mode.

■ Threading the needle thread

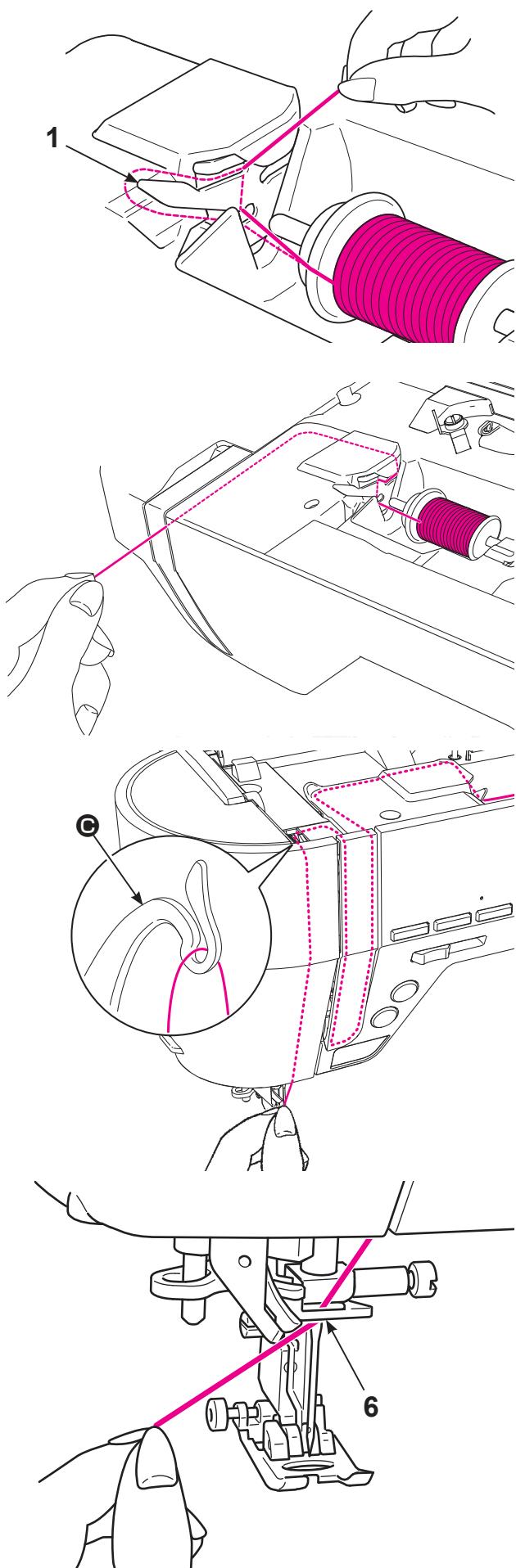


1 Place the thread spool to the spool pin.

There are three types of the spool caps B, large, medium and small.

Select the size of spool cap according to the thread spool to be used and use it while changing its direction appropriately.

* Be aware that a spool with a small remaining amount of thread can cause tangling or slip-off of thread.



2 Thread to guide 1.

3 Hold the thread end and thread according to the arrow marking.

* Check that the thread take-up **C** is correctly threaded.

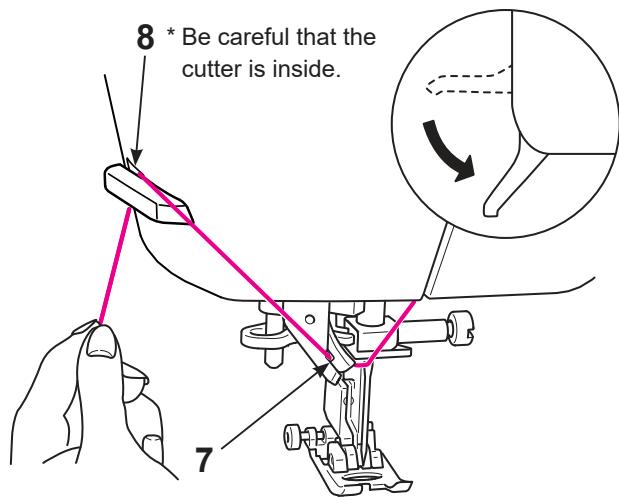
4 Thread the guide 6 from the right-hand side.

Draw the needle thread out from the guide by approximately 10 cm.

■ Automatic needle threader

Turn off the machine or leave the Machine in Lock Mode

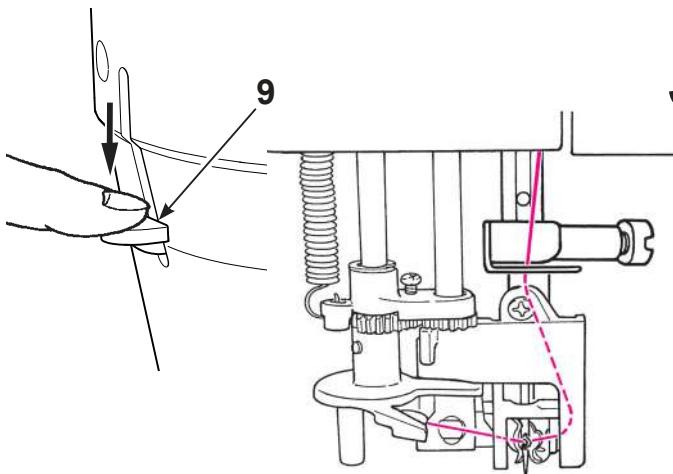
- * When twin needle is used, the automatic needle threader can not be used.
- * Use the needle: No.11-16 and the thread: No.30-90.



1 Lower the presser foot with the presser foot lifting lever.

- * The automatic needle threader sometimes fails to thread the needle when the presser foot is raised.

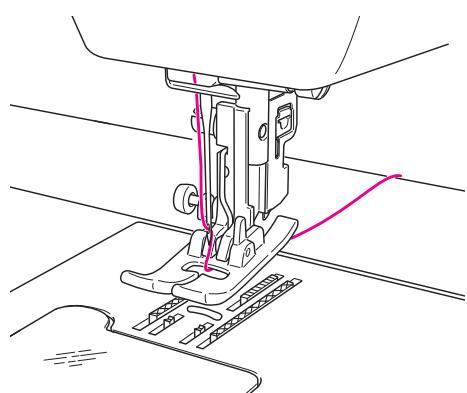
2 Thread to 7 and cut the thread with the thread cutter 8.



3 Lower the threading lever 9 until it comes to a complete stop.

- * Lower the threading lever slowly.

4 Release the threading lever and the needle thread is threaded to the needle eye.

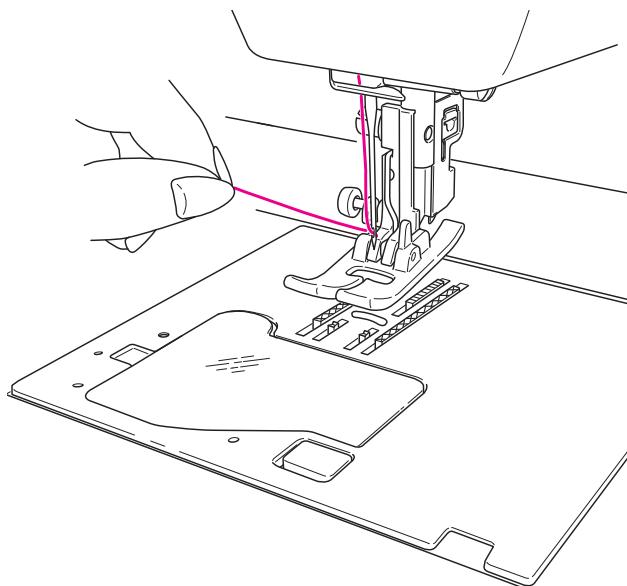


5 Lift the presser foot. Then, draw the needle thread backward. Pull out the thread from the needle eye by approx.10 cm or 4 inches long.

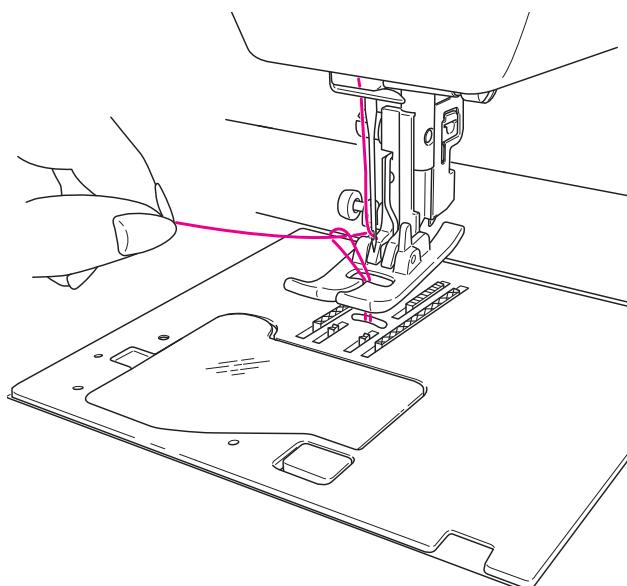
■ Pulling up the bobbin thread

Basic operation:

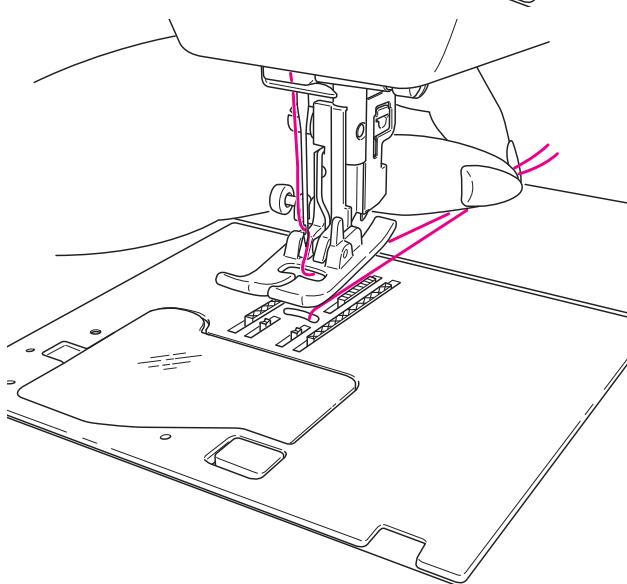
You can start to sew without pulling up the bobbin thread, however, if you want to sew with the bobbin thread pulled out, follow the directions below.



- 1 Lift the presser foot and lightly hold the end of the needle thread.



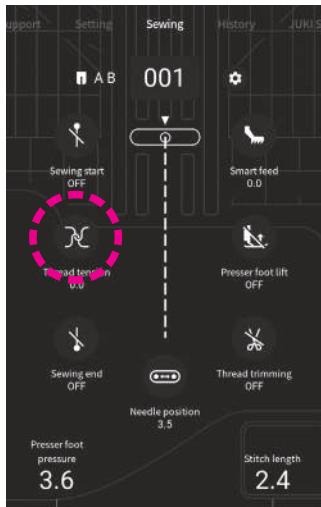
- 2 Turn the hand wheel towards you to move the needle up and down. Loop of bobbin thread will be pulled out when you will pull the needle thread lightly.



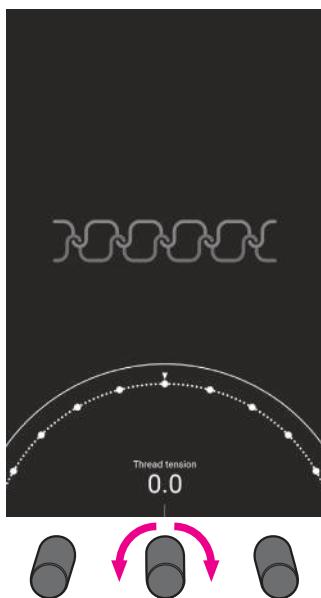
- 3 Pull out both needle and bobbin threads by approx. 10 cm (4 inches) long and pass them under the presser foot towards the back of the machine.

4.12. How to adjust thread tension

If the thread tension is not adjusted correctly, seam balance will be lost resulting in puckering or thread breakage. Default setting is suitable for most fabrics. Adjustment may be necessary according to fabrics and sewing applications. Thread tension can be changed even during sewing.



Press .



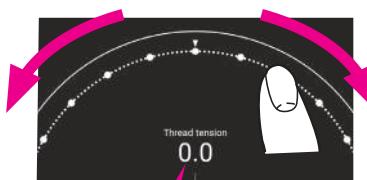
Adjust the thread tension by sliding your finger on the scale mark part.

The thread tension can also be adjusted by turning the adjusting dial.

(Setting range: -5.0 - 5.0)

The needle thread tension is decreased.

The needle thread tension is increased.

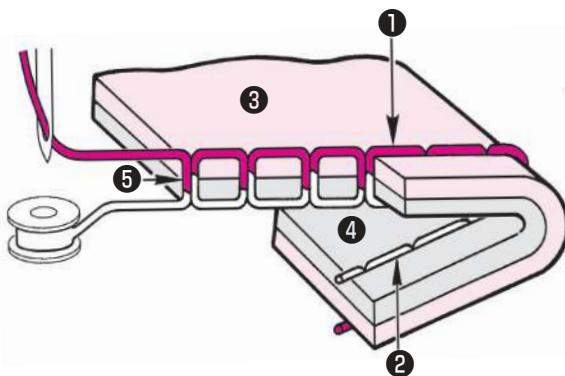


White: Initial value
Blue: Changed value

When you tap the portion above the semicircular portion shown in the above-given figure, the setting you have done is confirmed. Then, the screen returns to the previous screen.

* If a new pattern is selected, the set value will be returned to the initial value.

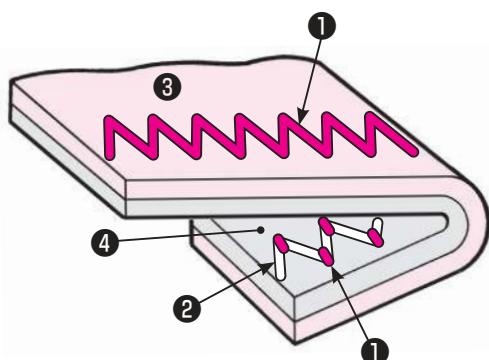
■ Well-balanced thread tension



<In the case of straight stitch>

The needle thread and the bobbin thread interlace with each other approximately at the middle of material thickness.

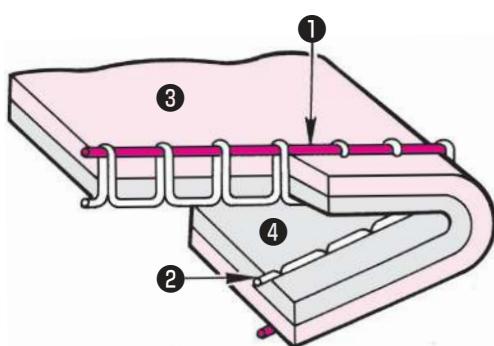
- ① Needle thread
- ② Bobbin thread
- ③ Fabric (right side)
- ④ Fabric (wrong side)
- ⑤ Middle of the fabric thickness



<In the case of zigzag stitch>

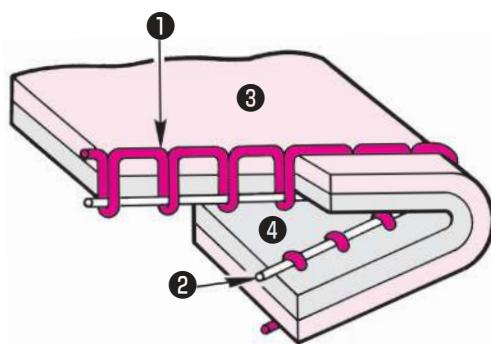
The needle thread is pulled a little bit to the wrong side of material.

■ When the needle thread is too strong



The bobbin thread will be pulled to the front side of the fabric. In this case, decrease the thread tension value (to decrease the needle thread tension).

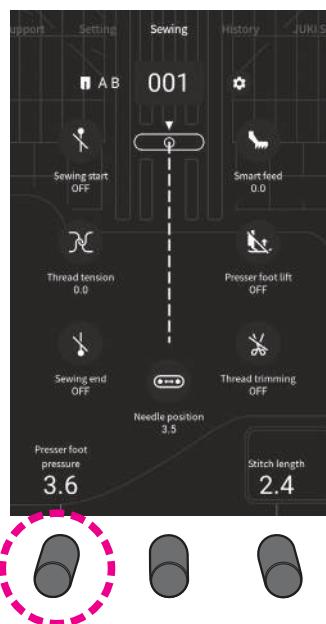
■ When the needle thread is too low



The needle thread will be pulled to the wrong side of fabric. In this case, increase the thread tension value (to increase the needle thread tension).

4.13. Setting the presser foot pressure

Presser foot pressure can be changed even during sewing.

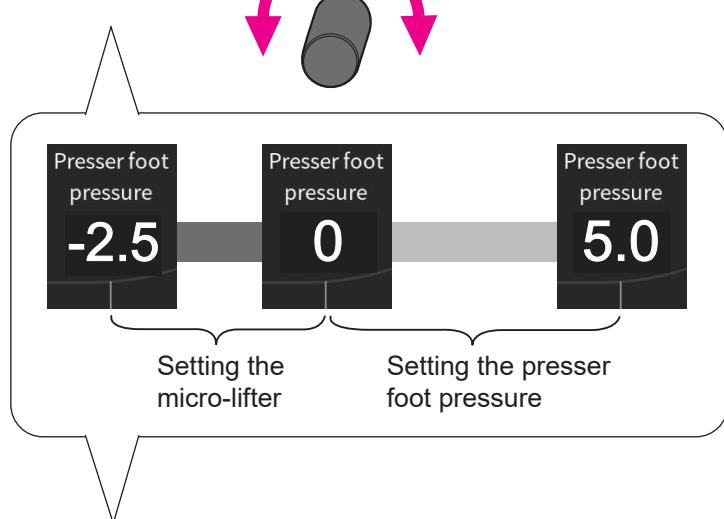


Set the presser foot pressure by turning the adjusting dial located below the indication [Presser foot pressure].
(Setting range: 0 - 5)

Set the presser foot pressure to "3.6" (initial value) in the case of standard stitching.

Set the presser foot pressure to a smaller value (decrease the presser foot pressure) in the case of sewing light-weight synthetic materials or elastic materials, and sewing applique, quilt and curve sections of materials, since in that case uneven material feed is likely to occur.

The presser foot pressure is decreased. The presser foot pressure is increased.

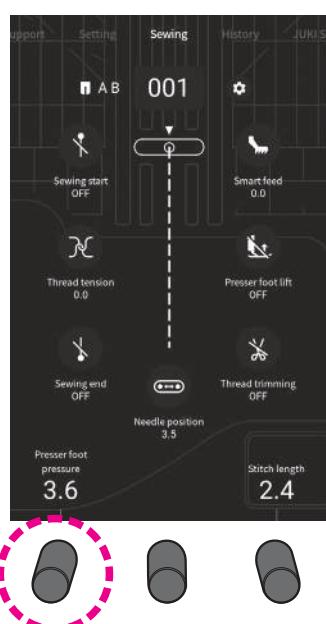


4.14. Setting the micro-lifter

It is possible to sew the material with the presser foot slightly lifted according to the material thickness.

The micro-lifter function is used for sewing materials such as quilt and velvet that are likely to cause uneven material feed.

Micro-lifter lifting height can be changed even during sewing.



Adjust the presser foot height by adjusting the presser foot pressure value.

Set the presser foot height by turning the adjusting dial located below the indication [Presser foot pressure].

(Setting range: -2.5 - 0)

In the case it is not necessary to slightly lift the presser foot during sewing, set the presser foot height for the micro-lifter function to "0".

Set the presser foot height by turning the adjusting dial so that the presser foot appropriately holds the material. The larger the negative set value becomes, the higher the presser foot can be lifted.

Presser foot pressure value is decreased. Presser foot pressure value is increased.

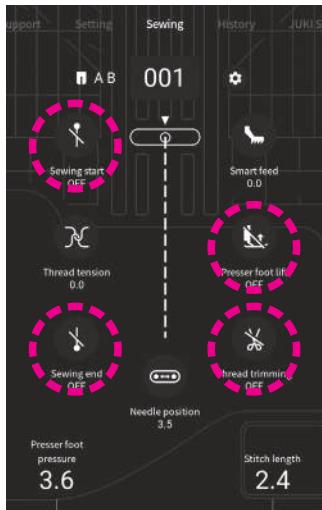


Place the material (for trial stitching) that is the same with the material to be actually sewn. Then, adjust the presser foot height and carry out trial stitching.

Be aware, if the presser foot is lifted excessively during sewing, the material cannot be fed resulting in thread entanglement.

4.15. Setting the automatic back tacking, thread trimming and presser foot lifting

The back tacking at the beginning and end of sewing and the back tacking and thread trimming / presser foot lift after thread trimming at the end of sewing can be set.



Select a pattern. Set operations of the sewing machine by pressing the relevant button on the screen.

Setting for the back tacking at the beginning of sewing

Select one from the three types of back tacking.

: OFF : Reverse stitch : Lock stitch

Setting for the back tacking at the end of sewing

Select one from the three types of back tacking.

: OFF : Reverse stitch : Lock stitch

Presser foot lift after thread trimming

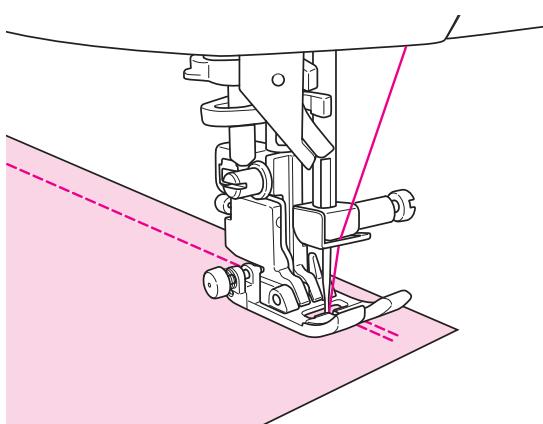
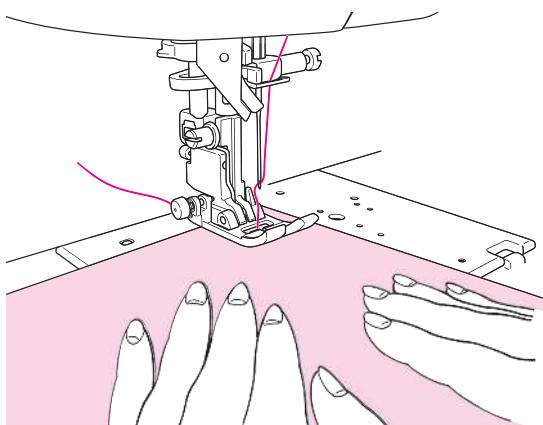
: OFF The presser foot is not lifted after thread trimming

: ON The presser foot is lifted after thread trimming

Back tacking and thread trimming

: OFF Thread trimming is not carried out

: ON Thread trimming is carried out



● In the case of setting the automatic back tacking

Sewing start

Place the material at the sewing start position and begin sewing. In the case the back tacking at the beginning of sewing is selected, the reverse stitch button and back tacking button will not operate.

Sewing end

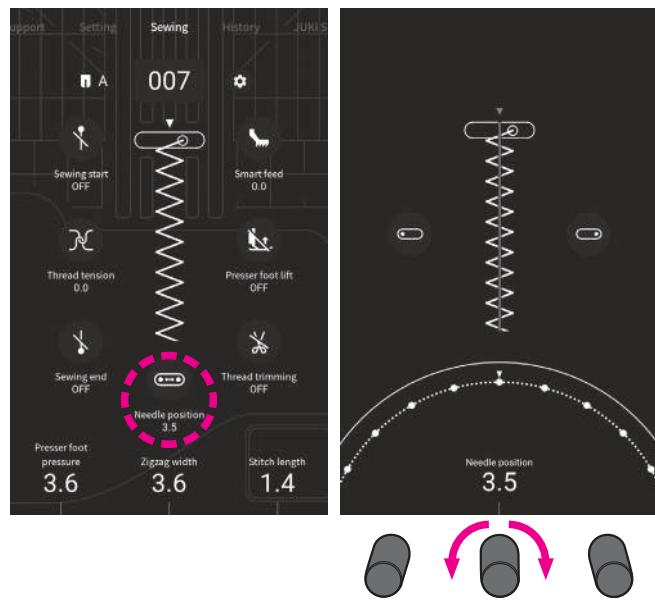
Press the button which corresponds to the type of back tacking you have selected.

(/)

Even if you press the button that does not correspond to the type of back tacking you have selected, the back tacking you have selected will be carried out.

4.16. When changing the needle position

The needle position can be changed even during sewing.

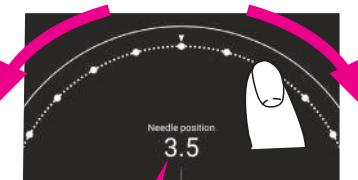


Press .

Change the needle position by sliding your finger on the scale mark part.

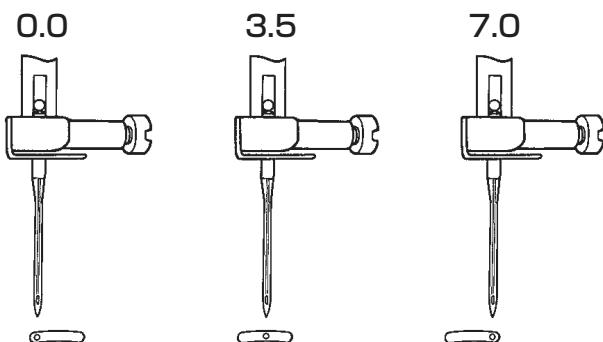
The needle position can also be changed by turning the adjusting dial.

The needle is moved to the left.



The needle is moved to the right.

White: Initial value
Blue: Changed value



When you press , the needle is brought to the left-most position.

When you press , the needle is brought to the right-most position.

The leftmost end represents "0.0" The rightmost end represents "7.0".

The needle position is represented by  of .

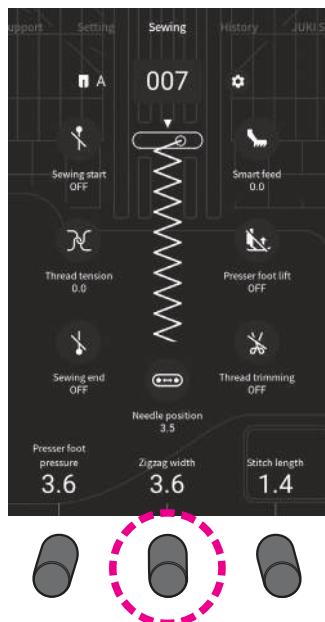
Numeric values displayed on the screen: In mm

When you tap the portion above the semicircular portion shown in the above-given figure, the setting you have done is confirmed. Then, the screen returns to the previous screen.

* If a new pattern is selected, the set value will be returned to the initial value.

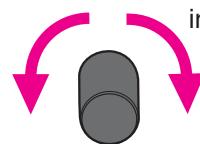
4.17. When changing the zigzag width

Zigzag width can be changed even during sewing.



Change zigzag width **A** by turning the adjusting dial located below the indication [Zigzag width].

Zigzag width is decreased.



Zigzag width is increased.

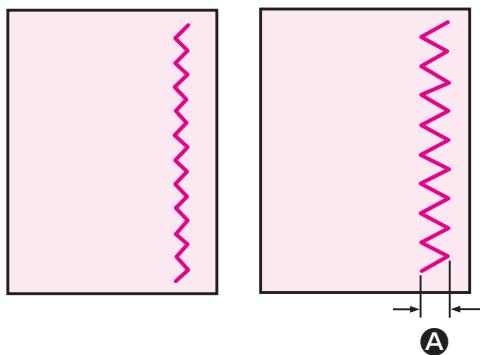
The displayed numeric value is decreased and the zigzag width is decreased by turning the dial counterclockwise.

The displayed numeric value is increased and the zigzag width is increased by turning the dial clockwise.

The zigzag width can be adjusted while sewing.

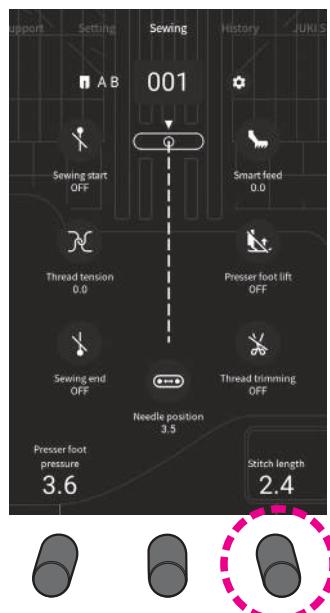
Numeric values displayed on the screen: Measure of the zigzag width (In mm)

2.0 7.0

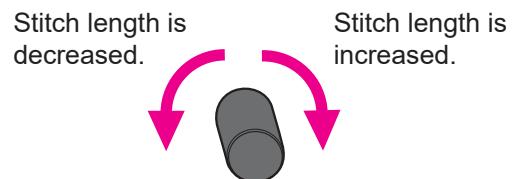


4.18. When changing the stitch length

Stitch length can be changed even during sewing.

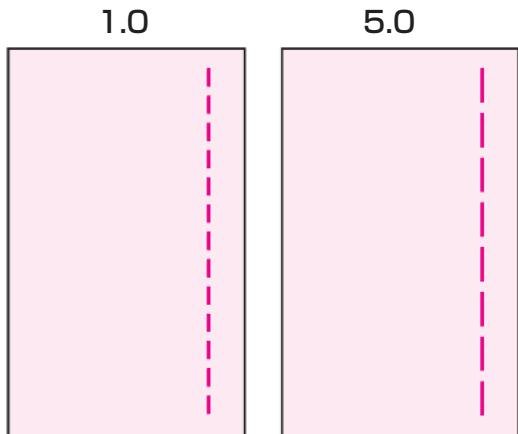


Change the stitch length by turning the adjusting dial located below the indication [Stitch length].



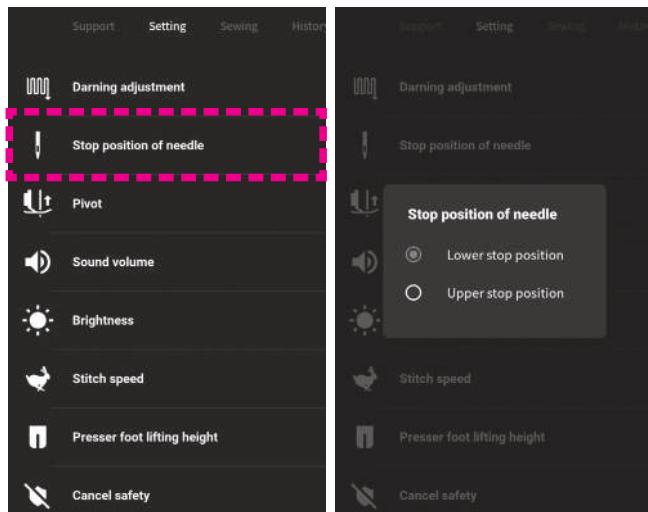
Change the stitch length with the adjusting dial (right). The displayed numeric value is decreased and the stitch length is decreased by turning the dial counterclockwise. The displayed numeric value is increased and the stitch length is increased by turning the dial clockwise.

Numeric values displayed on the screen: Measure of the stitch length (In mm)



4.19. Setting the stop position of needle

It is possible to set the position of the needle (upper or lower position) at the time of stopping the sewing machine.



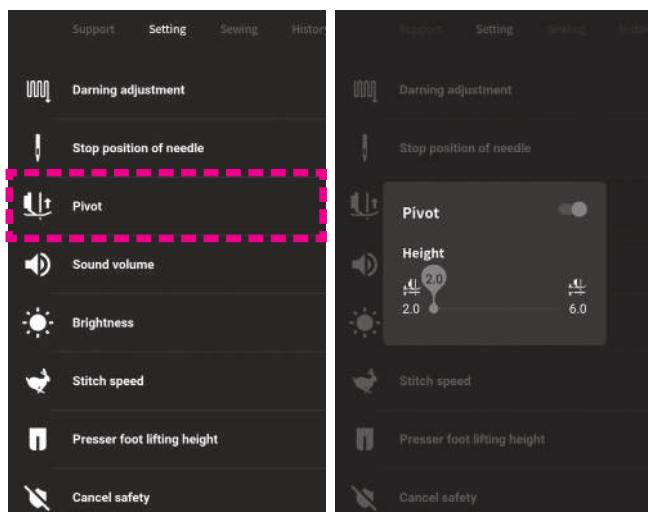
Select [Stop position of needle] from [Setting].
Select the “Lower stop position” or the “Upper stop position”.

When you tap the portion outside the setting screen, the screen returns to the common setting screen.

- * In the case the “upper stop position” (the sewing machine stops with its needle up) is selected, the pivot function will be automatically turned OFF.

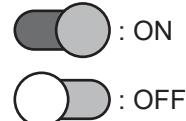
4.20. Pivot setting

It is possible to set so that the presser foot goes up while the needle is kept at the lower position at the time of stopping the sewing machine.



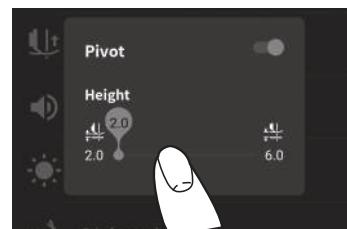
Select [Pivot] from [Setting].

- **Setting the ON / OFF of the pivot function**



- **Setting the pivot height**

Set the pivot height by sliding the slide bar with your finger to the right or left.



When you tap the portion outside the setting screen, the screen returns to the common setting screen.

5. Setting for the pattern sewing

5.1. Single mode / Combination mode

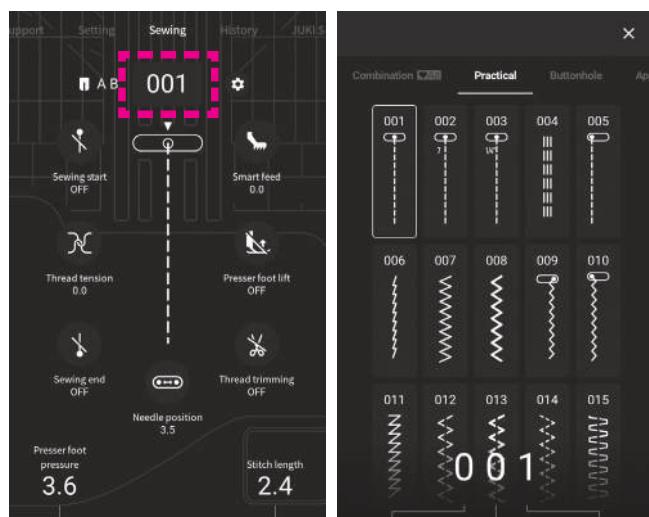
Some of the patterns cannot be sewn depending on the mode selected.

The list of patterns is shown on the inside of the top cover of the sewing machine.

5.1.1. Single mode

Under the single mode, the sewing machine directly sews the pattern you have selected.

■ Selecting the pattern



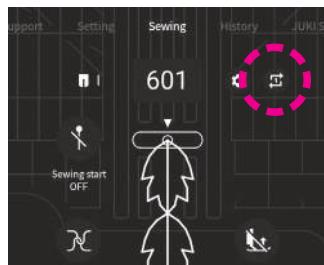
Press **001** (Pattern selection icon).

Select the pattern you want to sew from among [Practical], [Buttonhole], [Appliqué], [Tapering], [Quilt line], [Scallop], [One-point], [Decorative], [Vintage], and [Feather / Lace].

<How to select the pattern>

- Press the pattern icon.
- Enter the pattern number.

● Setting for the repetition stitching (single mode)



The setting can be changed by pressing the icon.



: The pattern is sewn in repetition (continuously) (Initial setting)



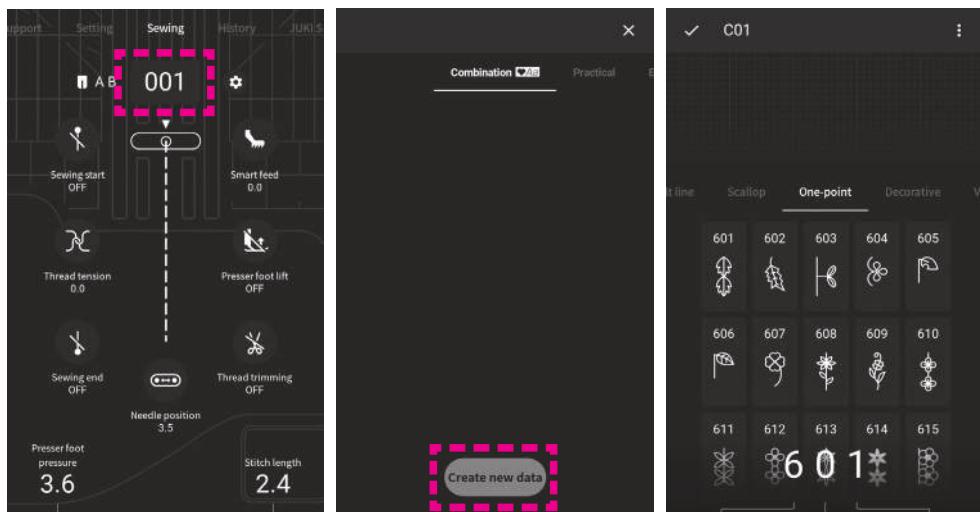
: One stitch is sewn

: One cycle is sewn

5.1.2. Combination mode

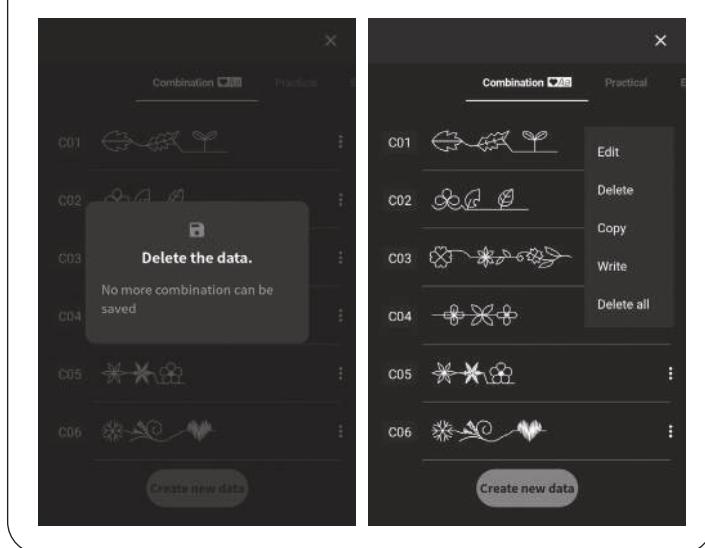
The combination stitching mode is used for sewing two or more patterns in combination.
As many as 70 patterns can be combined in one combined pattern.
As many as 10 combined in one combined pattern.

■ Selecting a pattern (letter)



In the case 10 patterns have been saved, the message will be displayed when you press [Create new data].

Press to delete the combined patterns.



Press **001** (Pattern selection icon).

Select [Combination].

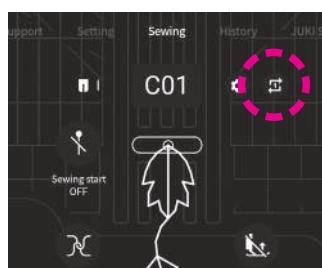
Press [Create new data].

Select the pattern you want to sew from among [Appliquéd], [Quilt line], [Scallop], [One-point], [Decorative], [Vintage], [Feather / Lace] and [Characters].

<How to select the pattern>

- Press the pattern (letter) icon.
- Enter the pattern number.

● Setting for the repetition stitching (combination mode)



The setting can be changed by pressing the icon.



: Selected pattern or selected combination of patterns is sewn once.
(Initial setting)

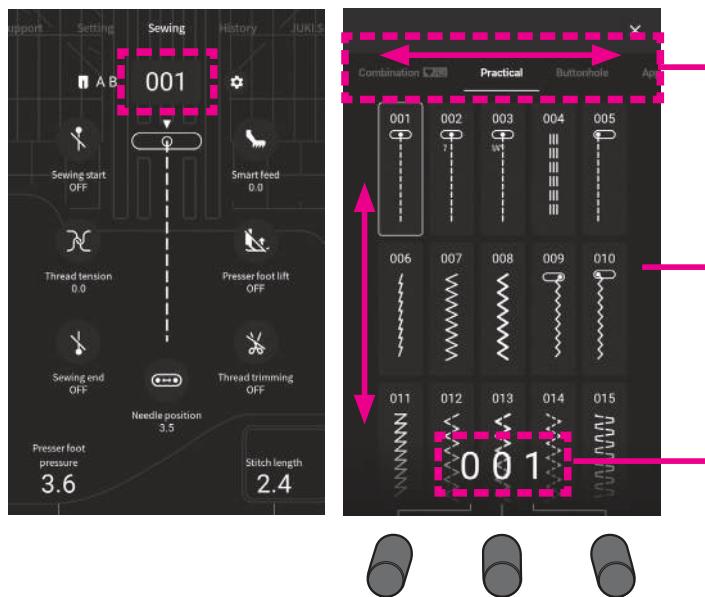


: Selected pattern or selected combination of patterns is sewn continuously.

5.2. Types of patterns under the single mode, and how to selected a pattern

☆ There are 368 types of stitch patterns.

☆ When turning on the machine, the straight stitch of the center needle position is chosen automatically.



① Select the type of pattern.

[Practical] [Buttonhole] [Appliqu  ] [Tapering]
[Quilt line] [Scallop] [One-point] [Decorative]
[Vintage] [Feather / Lace] [Combination]

② Press the pattern icon.

Alternatively,

① Enter the pattern number.

- The number is increased one by one by tapping it.
- It is also possible to change the number by turning the adjusting dial.

② The screen which contains the pattern with the number you have input is displayed. Select the pattern icon you want to sew.

5.2.1. Practical

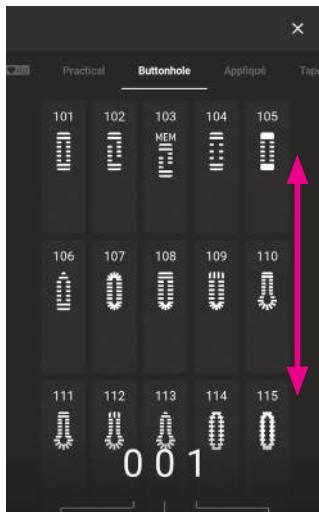
No.	Pattern	Application		Refer to page
001		Center needle position	Straight stitch	62
002		Piecing 7mm		68
003		Piecing 1/4"		68
004		Straight reinforced stitch		-
005		Left needle position	Straight stitch	62
006		Center needle position	Straight stitch for elastic	-
007		Zigzag stitch		-
008		Triangular zigzag stitch		-

No.	Pattern	Application		Refer to page	
009		Right needle position	Zigzag stitch	-	
010		Left needle position		-	
011		Ornamental pattern		-	
012		Two point zig zag		-	
013		Triple standard zigzag		-	
014		Three point zig zag		-	
015		Butting stitch		-	
016		Overcasting stitch		69	

No.	Pattern	Application	Refer to page
017		Overcasting stitch	69
018		Overcasting stitch Used for lightweight material	69
019			-
020		Overcasting stitch Used for flexible material	-
021			-
022			-
023		Ornamental pattern	-
024			-
025		Blind stitch	70
026		Blind stitch Used for lightweight material	70
027		Blind stitch Used for flexible material	70
028		Shell tuck	73
029			73
030		Back straightline stitch * Proceed with the reverse stitch button.	-
031		Back zigzag stitch * Proceed with the reverse stitch button.	-

No.	Pattern	Application	Refer to page
032		Bar tack	74
033		Bar tack (Memory) * Size of bartacking you have sewn once can be stored in memory.	74
034		Reinforced stitch	-
035			-
038			76
039			76
040		Eyelet	76
041			76
042			76
043			-
044		Darning stitch	-
045			-
044		Attaching a quilt sleeve	100

5.2.2. Buttonhole

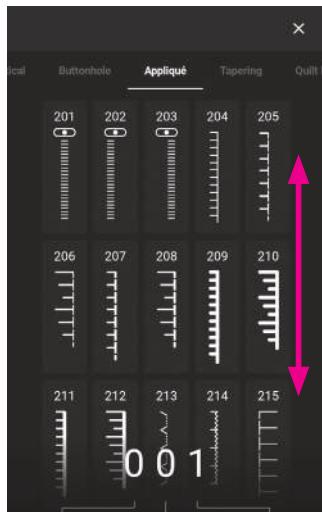


Select the pattern.

No.	Pattern	Application	Refer to page
101		Standard buttonholes	84
102		2-step buttonhole	91
103	MEM	2-step buttonhole (Memory) * It is possible to store the size of buttonhole you have sewn once in memory.	91
104		Standard buttonholes	84
105			
106		Decorative	84
107		Rounded end	84
108			
109			

No.	Pattern	Application	Refer to page
110		Keyhole buttonholes	84
111			
112			
113			
114		For knit	84
115			
116			
117			
118		Decorative	84
119			
120			
121		Basting stitch for buttonholing	90
122		Button sewing	93

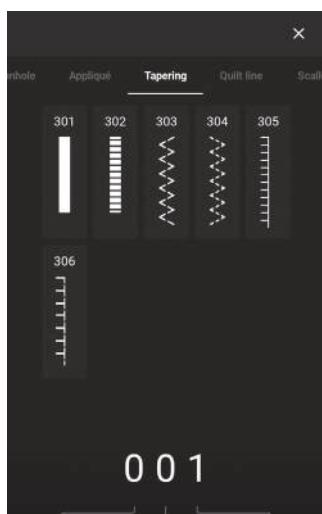
5.2.3. Appliqué



Select the pattern.

No.	Pattern								
201	○	209	☰	217	---	225	-	233	◇◇
202	○	210	☰	218	---	226	○○○	234	✗✗✗
203	○	211	☰	219	---	227	○○○	235	✗✗✗
204	---	212	☰	220	▽▽▽	228	●●●	236	○○○
205	---	213	▽▽▽	221	▽▽▽	229	●●●	237	○○○
206	---	214	~~~~~	222	▽▽▽	230	○○○	238	○○○
207	---	215	TTT	223	▽▽▽	231	○○○	239	---
208	---	216	---	224	---	232	◇◇	240	~~~~~

5.2.4. Tapering



Select the pattern.

No.	Pattern	No.	Pattern	No.	Pattern
301	---	303	^/^/^	305	---
302	---	304	^/^/^	306	---

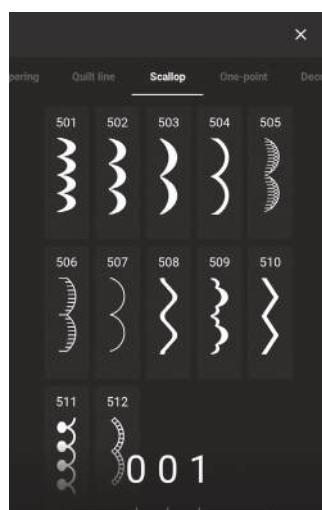
5.2.5. Quilt line



Select the pattern.

No.	Pattern								
401		406		411		416		421	
402		407		412		417		422	
403		408		413		418			
404		409		414		419			
405		410		415		420			

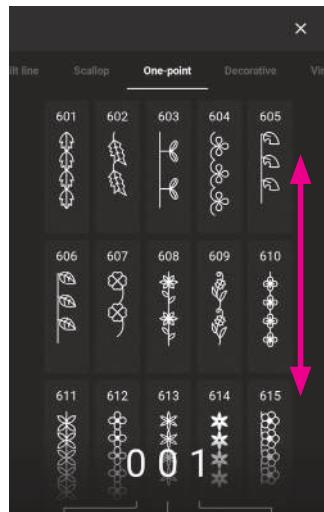
6.2.6. Scallop



Select the pattern.

No.	Pattern	No.	Pattern	No.	Pattern	No.	Pattern
501		504		507		510	
502		505		508		511	
503		506		509		512	

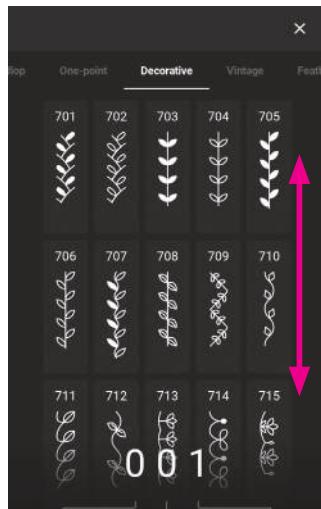
5.2.7. One-point



Select the pattern.

No.	Pattern								
601		618		635		652		669	
602		619		636		653		670	
603		620		637		654		671	
604		621		638		655		672	
605		622		639		656		673	
606		623		640		657		674	
607		624		641		658		675	
608		625		642		659		676	
609		626		643		660		677	
610		627		644		661		678	
611		628		645		662		679	
612		629		646		663		680	
613		630		647		664		681	
614		631		648		665		682	
615		632		649		666		683	
616		633		650		667		684	
617		634		651		668			

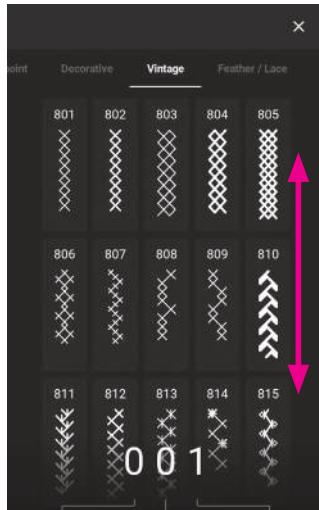
5.2.8. Decorative



Select the pattern.

No.	Pattern												
701		710		725		740		755		770		785	
702		711		726		741		756		771		786	
703		712		727		742		757		772			
704		713		728		743		758		773			
705		714		729		744		759		774			
706		715		730		745		760		775			
707		716		731		746		761		776			
708		717		732		747		762		777			
709		718		733		748		763		778			

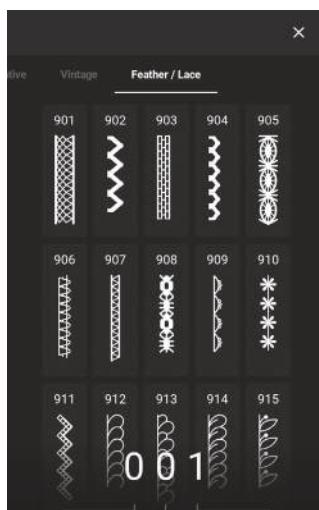
5.2.9. Vintage



Select the pattern.

No.	Pattern								
801	X	809	X	817	888	825	△△△	833	◇
802	X	810	1	818	1	826	△△△	834	1
803	◇	811	1	819	1	827	△△△	835	1
804	◇	812	X	820	1	828	X	836	1
805	◇	813	X	821	1	829	X	837	1
806	X	814	*	822	1	830	1		
807	X	815	1	823	1	831	1		
808	X	816	1	824	1	832	1		

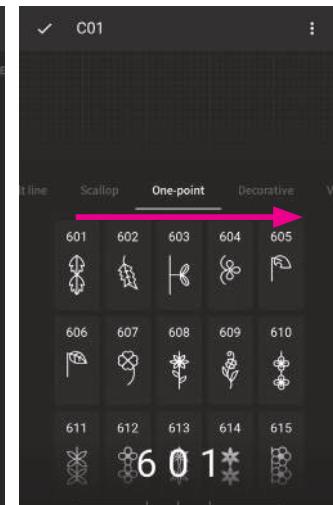
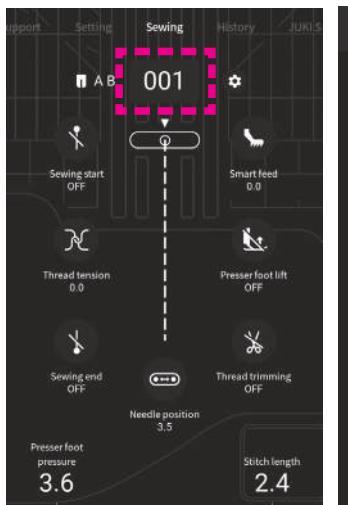
5.2.10. Feather / Lace



Select the pattern.

No.	Pattern								
901	1	904	1	907	1	910	*	913	1
902	1	905	1	908	1	911	1	914	1
903	1	906	1	909	1	912	1	915	1

5.2.11. Letters

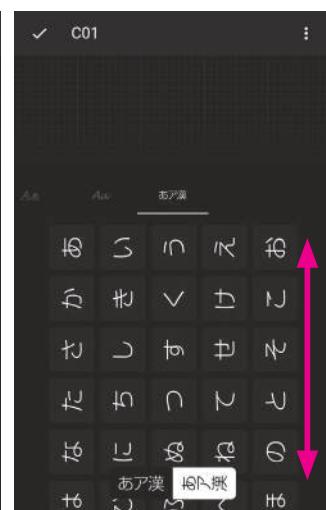
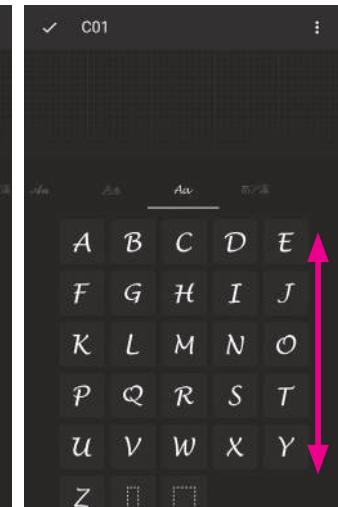
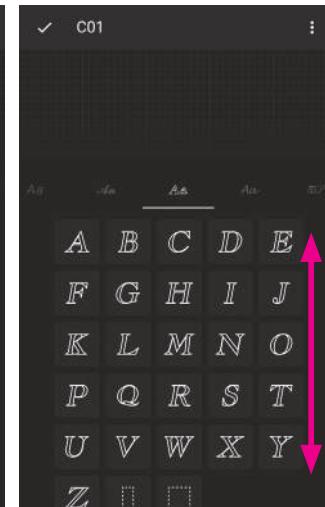
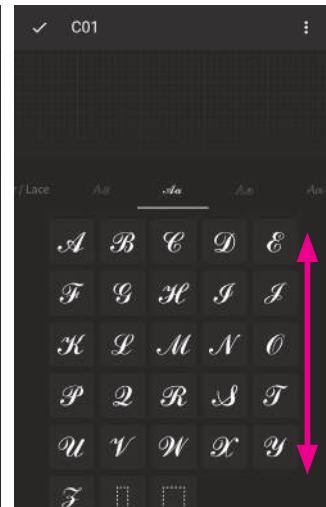
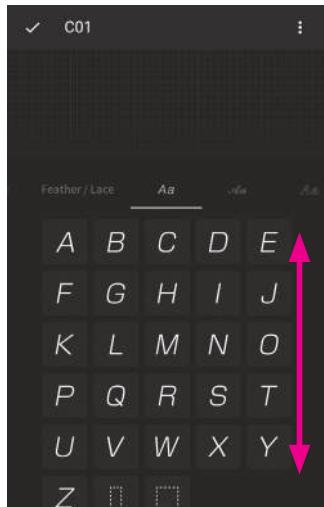


Press **001** (Pattern selection icon).

Select [Combination].

Press [Create new data].

Select the type of letter (font).

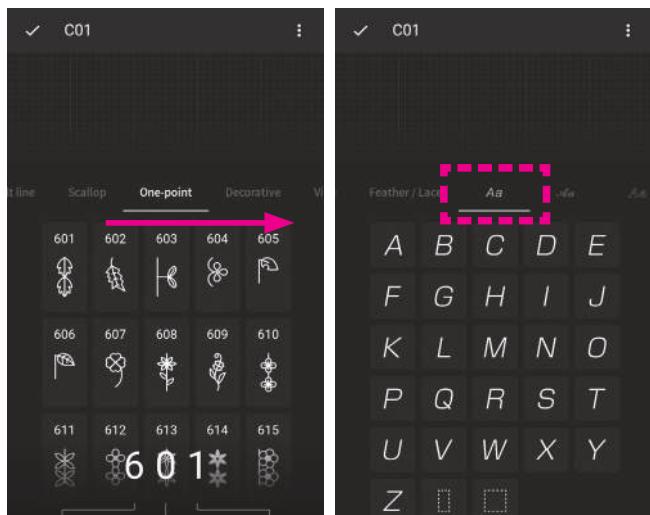


Select the letter.

Select the direction of letters between horizontal/vertical using **あア漢**.

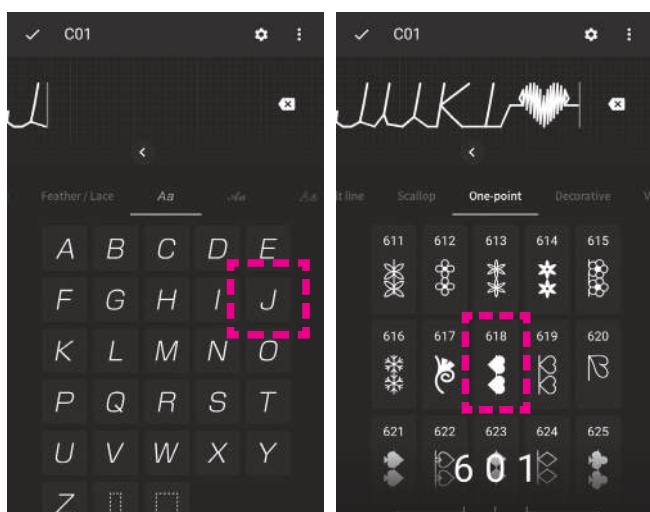
5.3. Combination of patterns under the combination mode

(1) Selecting and combining the patterns (letters)



(Example: **JUKI**♥)

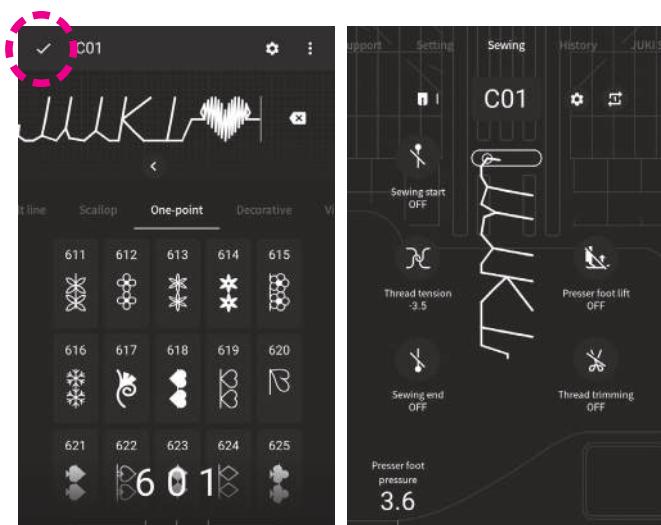
Select the type of letter (font).



Press the icon and enter "JUKI".

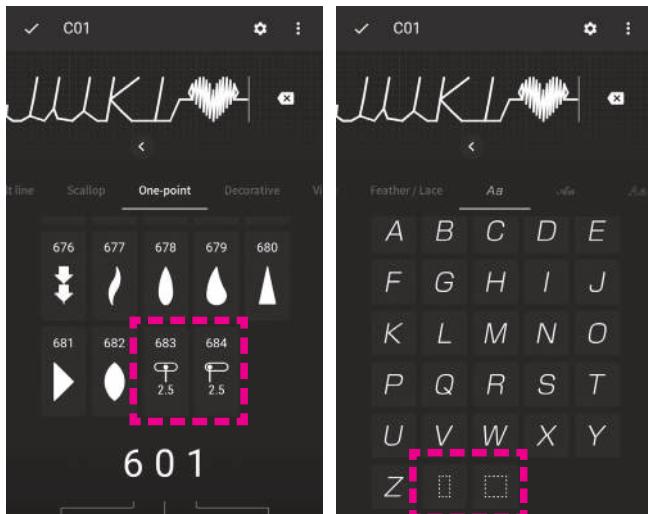
Select [One-point].

Press the pattern (No. 618).



When you press , the combination of the patterns is saved and the swing screen is displayed.

(2) Selecting a space



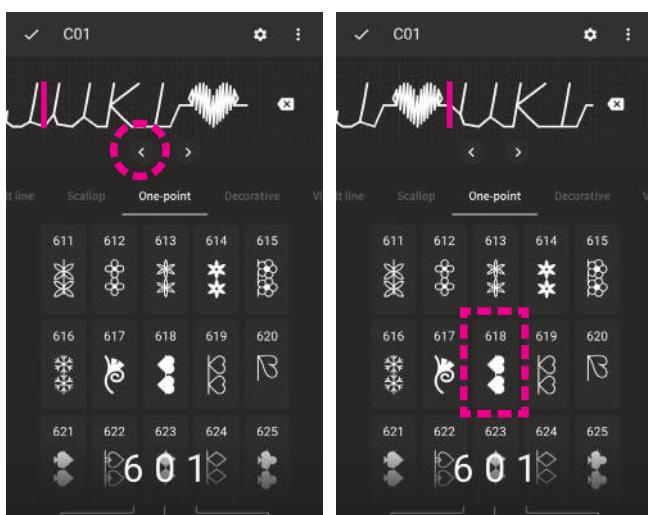
Combine a pattern (letter) with another pattern (letter) while inserting one of the following patterns between them.

- Pattern No.683 ( 2.5)
- Pattern No.684 ( 2.5)
-  (Small space)
-  (Large space)

(3) Adding a pattern (letter)

A pattern (letter) can be added to the colored vertical line portion.

● In the case of adding a pattern (letter) between the patterns

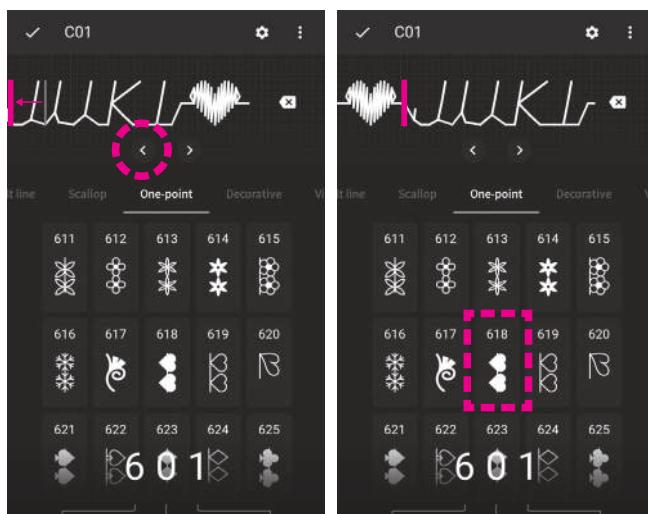


(Example: **J****UKI**)

Move the colored vertical line between “J” and “U” with .

Press the pattern (No. 618).

● In the case of prepending a pattern (letter) at the beginning of the patterns

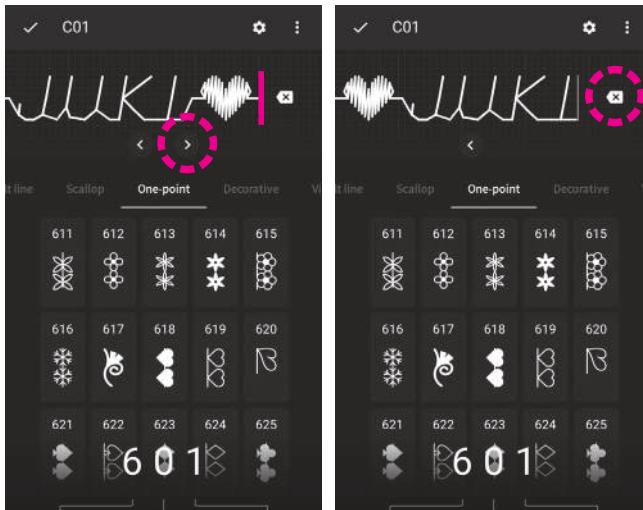


(Example: **JUKI**)

Move the colored vertical line before “J” with .

Press the pattern (No. 618).

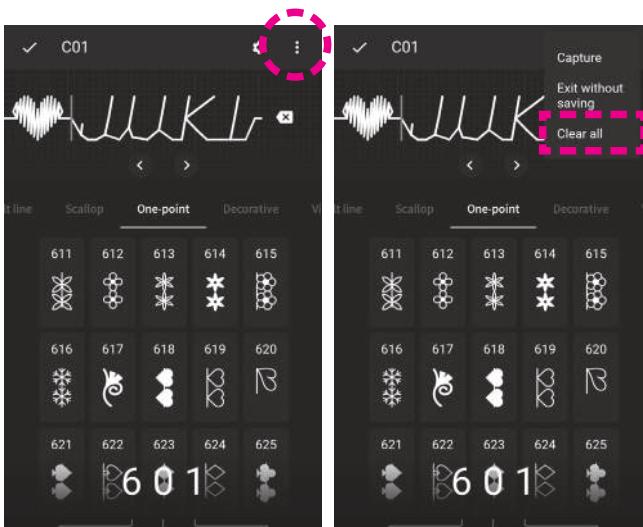
(4) Deleting a pattern (letter)



(Example: ♥JUKI♥ ⇒ ♥JUKI)

Move the colored vertical line with to the right side of the pattern you want to delete.

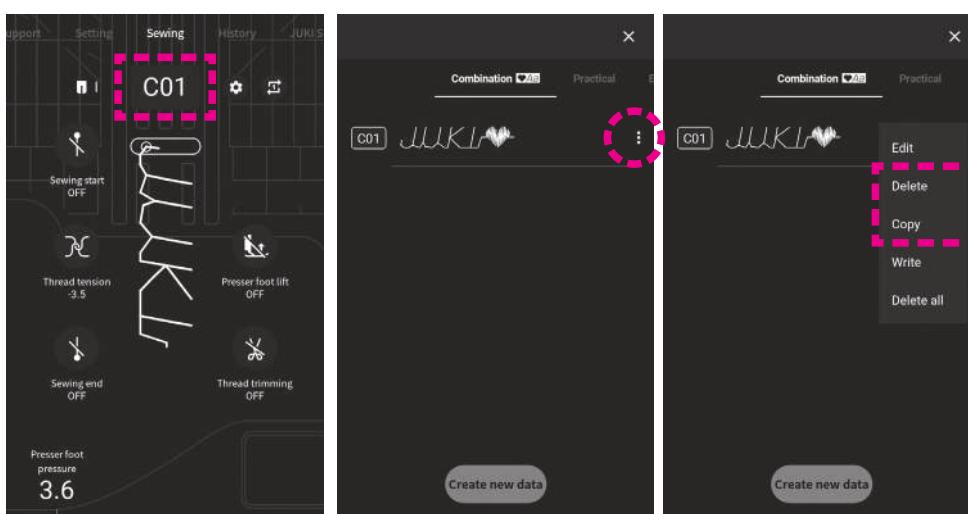
Press .



<In the case of deleting the patterns collectively>

When you select [Clear all] by pressing , all of the combined patterns can be deleted.

(5) Deleting/copying the combined patterns



Press .

Press of the combination display you want to delete (copy).

Select [Delete] or [Copy].

5.4. Types of edit functions and how to use them

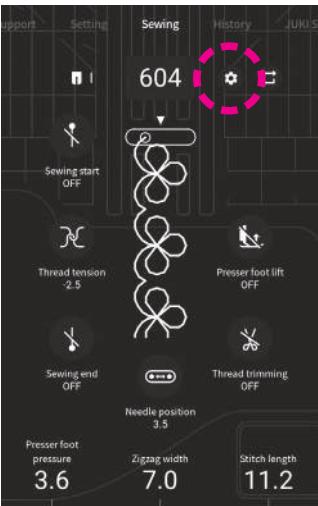
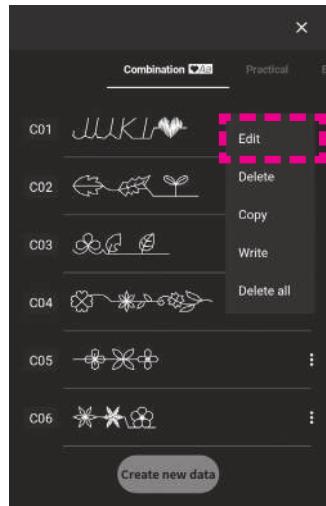
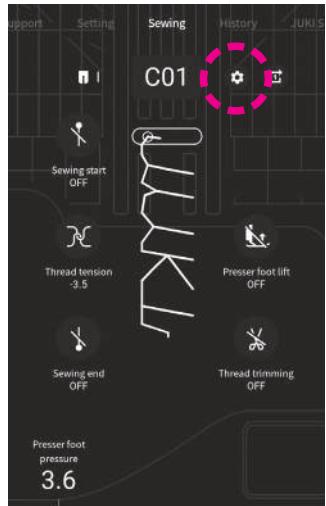


Types of editing functions that can be used differ with the pattern you have selected.

	Function	Refer to page
	Thread tension	36
	Needle position	40
	Horizontal inversion : OFF : ON	59
	Vertical inversion : OFF : ON	59
	Change in the elongation size	98

	Function	Refer to page
	Change in the angle and size of tapering	82
	Change of seam width of buttonhole	89
	Setting the interval between patterns	60
	Reset settings	60
	Writing / capturing the pattern data	61

● How to display the edit screen

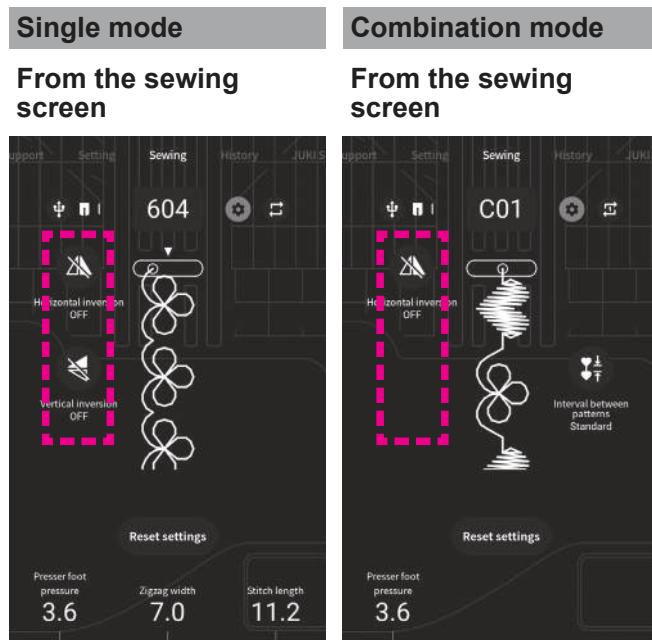
Single mode	Combination mode	Sewing screen	Pattern selection screen
Sewing screen 	Combination selection screen 	Sewing screen 	Pattern selection screen 
Press .	Select [Edit] by pressing .	Press .	Press .

5.4.1. Pattern inversion

● Horizontal inversion

Press  when you want to sew a horizontally-inverted pattern. The horizontally inverted pattern is displayed.

- * Horizontal inversion and vertical inversion are not applicable to some patterns.
- * It is also possible to “vertically invert the horizontally-inverted pattern” or “horizontally invert the vertically-inverted pattern”.

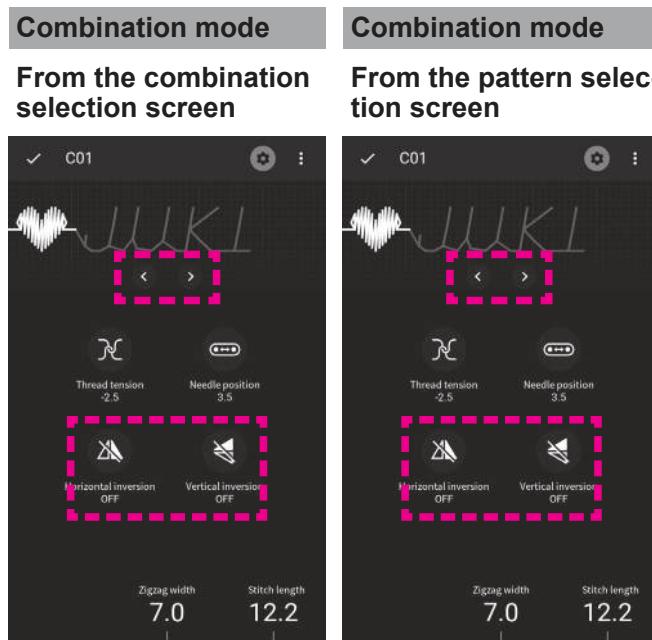


● Vertical inversion

Press  when you want to sew a vertically-inverted pattern. The vertically inverted pattern is displayed.

Single mode: Pattern is inverted.

Combination mode: Combined patterns are inverted collectively.



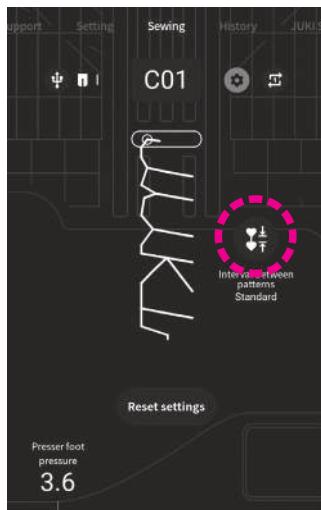
Combined patterns can be inverted on a pattern-by-pattern basis.

Select the pattern you want to edit with  .

5.4.2. Setting the interval between patterns

Combination mode

From the sewing screen



When you press  , the interval between the patterns is decreased.

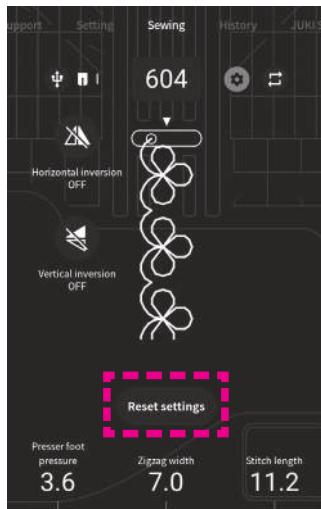
When you press  again, the pattern interval is restored to the standard setting.

For the standard setting, the lock stitch is set at the end of patterns. If the stitch interval is decreased, the lock stitch will be omitted.

5.4.3. Reset settings

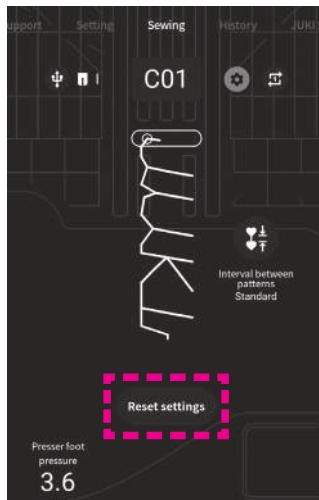
Single mode

From the sewing screen



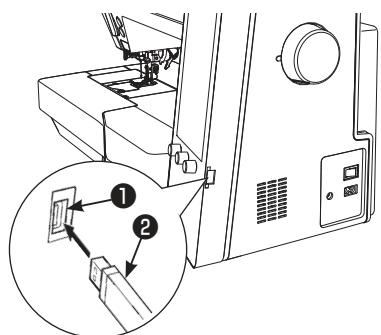
Combination mode

From the sewing screen



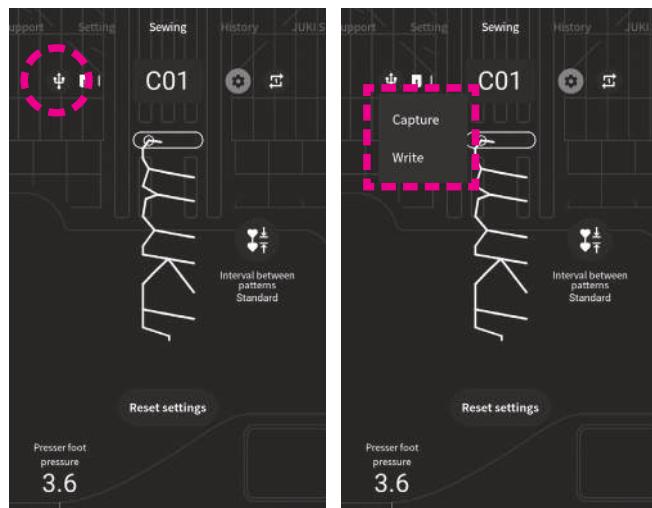
When you press [Reset settings], all of the settings you have done on the edit screen are reset.

5.4.4. Writing / capturing the pattern data



It is possible to capture or write the pattern information by means of a USB thumb drive.

Insert USB thumb drive ② into USB slot ① .



Press  .

Select [Capture] or [Write].



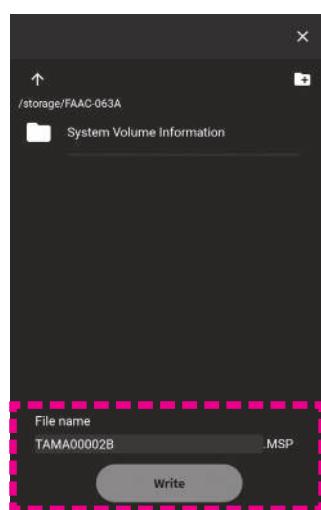
● In the case of [Capture]

Select the file you want to capture. Press [Capture].

Do not turn the power OFF while capturing (saving) is in progress .

When the backup data has been normally captured, the message "Turn OFF the power switch" is displayed.

Turn OFF the power to the sewing machine. Then, re-turn it ON.



● In the case of [Write]

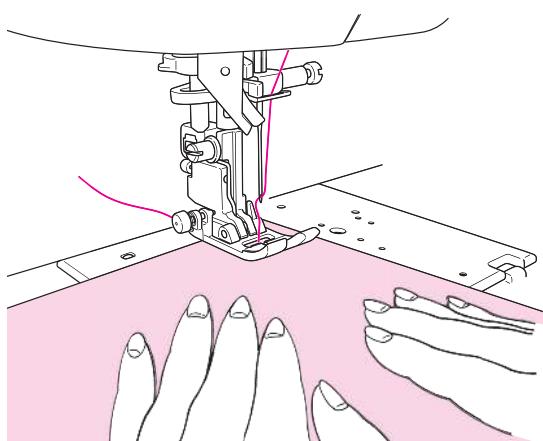
Enter an arbitrary file name and press [Write].

6. Sewing

6.1. Straight stitch

No.	Pattern	Presser foot
001		Standard presser foot (A)

 **Leave the machine in Lock mode**



■ Sewing start

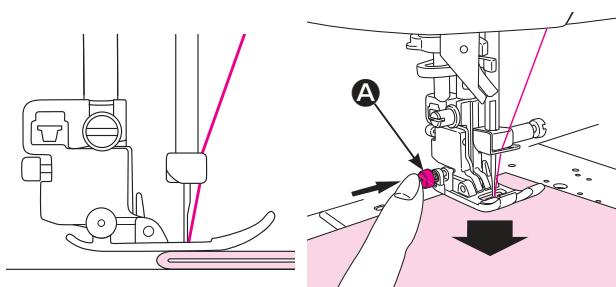
Pull the needle and bobbin threads under the presser foot to the rear of the machine and lower the presser foot to start sewing.

Setting > Cancel safety
Screen to set the functions while presser foot is up

It is possible to start sewing even if the presser foot is lifted. (Refer to page 108)

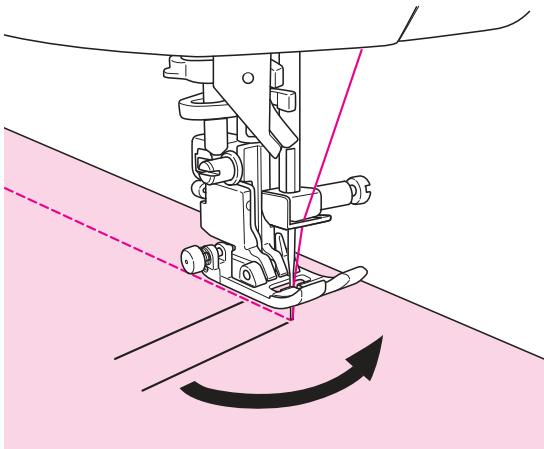
Setting > Stitch speed
Adjustable starting stitch speed

Sewing speed at the start of sewing can be changed. (Refer to page 107)



★ When sewing the edge of thick fabrics

Turn the hand wheel and let the needle enter at the position of sewing start. Push the black button **A** by finger and lower the presser foot. Release the finger from the black button and start sewing. When the presser foot will be on the fabric completely, the black button will be disengaged automatically.



■ When changing the sewing direction

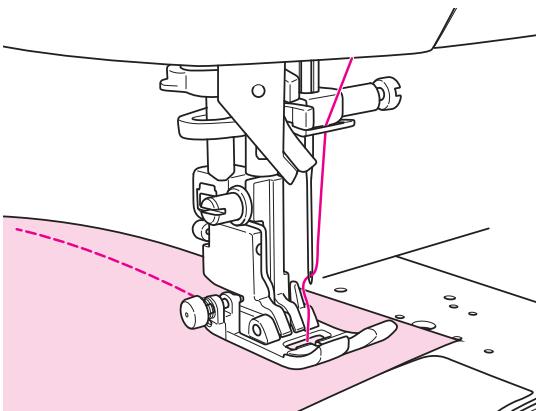
- ① Stop the sewing machine when the position for changing the direction of sewing is reached.
- ② If the needle is not penetrated into the material at that position, press the needle up/down button to allow the needle to penetrate into the material. Then, lift the presser foot.
 - * The sewing machine has been factory-set at the time of shipment, so that the needle penetrates into the material when the sewing machine is stopped.
- ③ Change the direction of sewing with the needle penetrated into the material. Then, lower the presser foot and start sewing.

Setting > Stop position of needle Changing over the needle stop position

It is possible to change the stop position to which the needle is brought when the sewing machine is stopped.
(Refer to page 105)

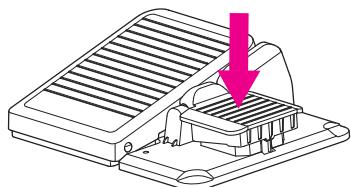
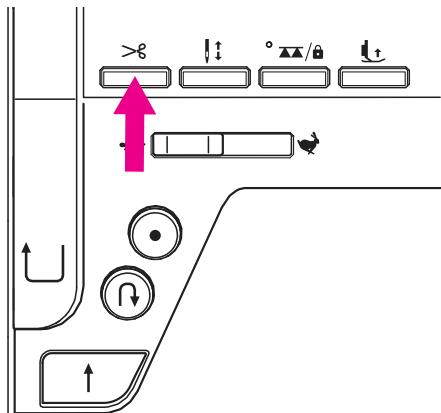
Setting > Pivot Presser foot pivot function

You can select the setting where the presser foot goes up with the needle held in the needle-down stop position when you stop the sewing machine.
(Refer to page 105)



■ Sewing end

Stop the sewing machine.



★ Thread trimming

<Using the thread trimming button>

Press the thread trimming button to trim the thread.

Lift the presser foot and remove the material from the sewing machine.

Notes for thread trimming:

1. Do not use thread thicker than No.30.
2. After trimming, the stitch can be done without pulling up bobbin thread.
3. When sewing again after thread trimming, if you pull up the bobbin thread again and place it underneath the presser foot together with needle thread, you can avoid birds nest on the wrong side of the fabric.
4. Regularly clean the machine (refer to page 123), as dust in the area of the thread trimming unit may cause malfunction.

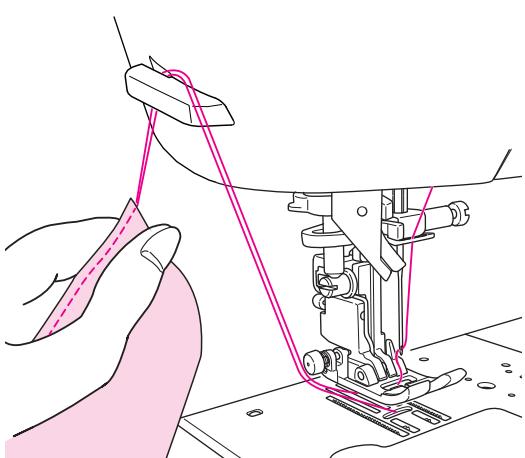
<Using the foot switch>

Setting > Foot switch functions

Foot switch functions

It is possible to set so as to trim the thread by pressing the foot switch. (Refer to page 108)

Press the foot switch to trim the thread.



<Using the thread cutter>

Lift the needle and lift the presser foot. In this state, it is possible to trim the thread with thread trimmer that is mounted on the face plate cover.

Sewing >

Presser foot lift after trimming setting

It is possible to set so that the presser foot goes up automatically after thread trimming.

(Refer to page 39)