



# TOYOTA

RS Series

## HOME-USE SEWING MACHINE

# INSTRUCTION MANUAL

- Read this manual carefully before use and always follow the instructions.
- Keep the manual in a convenient place for easy reference.
- If you give the sewing machine to someone else, also give them this instruction manual.



## Type designation

RS series has several types.

The types are shown on the model label as follows:

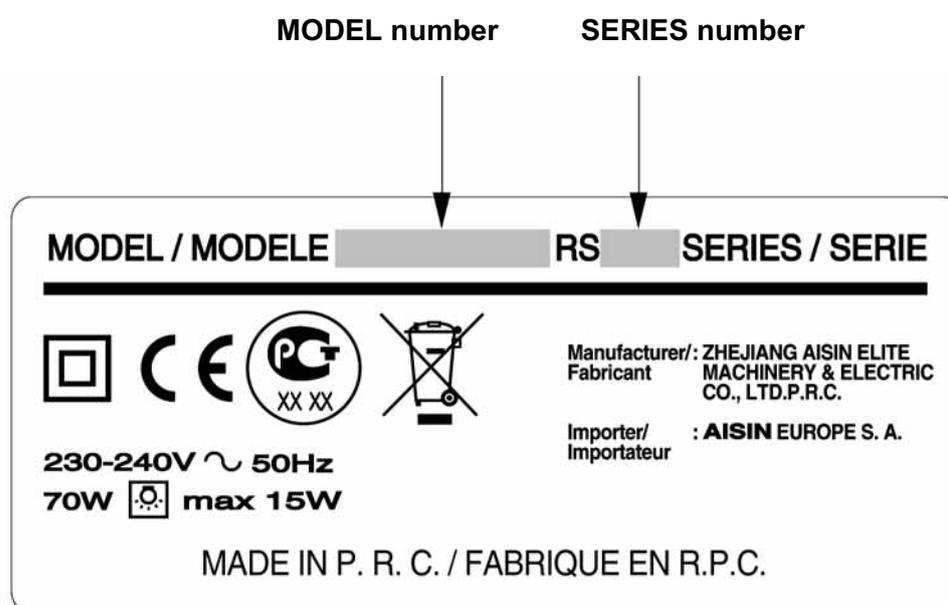
### MODEL/MODELE(MODEL NAME) SERIES/SERIE

- ♦RS SERIES/SERIE
- ♦RS2000 SERIES/SERIE
- ♦RS2000A SERIES/SERIE
- ♦RS2000B SERIES/SERIE

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## Model label

When calling for service, please note the MODEL and SERIES numbers that are inscribed on the back of your sewing machine.



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# I. Before use

**Be sure to read this section before use**

## 1. Important safety instructions

These safety instructions are designed to prevent danger or damage arising from the incorrect operation of the machine. Read carefully and always follow the instructions.

### Explanation of " ⚠ WARNING " and " ⚠ CAUTION "

**⚠ WARNING**

An incorrect operation could result in death or serious injury.

**⚠ CAUTION**

An incorrect operation could result in an injury or damage to the machine.

### Symbol explanation



Do not touch



Prohibited actions



Required actions



Remove the power plug from the outlet.

### **⚠ WARNING**



**Use an AC 220 to 230 V power source.**

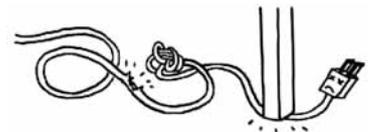
Not doing so could cause an electric shock or a fire.

220 to 230 V



**Do not damage the power cord, modify it, bend it excessively, jerk it or twist it.**

Doing so could cause an electric shock or a fire.  
If the power cord is damaged, it must be replaced by the manufacturer or its service agent.



**Do not operate where aerosol ( spray ) products are being used or where oxygen is being administered.**

Doing so could cause a fire.



**Do not use outdoors.**

Doing so could cause an electric shock or a fire.

 **CAUTION**



**When the machine is not in use it should be stored safely, not on the floor as protruding parts could cause injury if a person fell on the machine.**  
Not doing so could cause an injury.



**Use with the shuttle cover closed.**  
Not doing so could cause an injury.



**Before replacing the needle or presser foot or when threading the upper or lower thread, remove the power plug from the outlet.**  
Not doing so could cause an injury.



**Do not look away from the needle while operating the sewing machine.**  
If the needle breaks it could cause an injury.



**Do not touch moving parts such as the needle, take-up lever or handwheel.**  
Doing so could cause an injury.



**Children should only use the machine under the supervision of a parent or guardian.**  
Otherwise they could injure themselves.



**Do not use when young children are near the machine.**  
They could touch the needle and be injured.



**Before leaving the sewing machine after using it, remove the power plug from the outlet.**  
Not doing so could cause an injury.



**Before using the sewing machine make sure that the presser foot holder clamp screw, needle clamp screw and needle plate screw are firmly tightened, and that the presser foot is properly set in the presser foot holder.**  
Not doing so could cause an injury.



**Do not perform the following actions.**  
Doing so could cause an injury.

- ◆ Sewing without lowering the presser foot.
- ◆ Sewing while the needle is incorrectly installed.
- ◆ Using a bent needle.
- ◆ Sewing while jerking the fabric.
- ◆ Moving the pattern selection dial while sewing.



**Do not operate on an unstable surface such as a sofa or a bed.**  
If the sewing machine falls down, it could cause an injury or damages to the machine.



**Do not drop or insert any foreign objects into any openings such as opening space when you remove the face cover and / or the outer casing space of bobbin case.**  
Doing so could cause an injury or damages to the machine.



**Do not repair, disassemble or modify except what is mentioned in the instruction manual.**  
Doing so could cause an electric shock, a fire or an injury.

**UK ONLY**

**IMPORTANT**

**PLEASE READ CAREFULLY**

## 2. How to change the power plug

### **WARNING**



**When you change the power plug or cord, do not repair, disassemble or modify except at the authorised dealer or service centre.**

Doing so could cause an electric shock or a fire.



**If for any reason the power plug for this product is removed it should be immediately disposed of safely and not stored anywhere where it could be inadvertently used again.**

Doing so could cause an electric shock or a fire.

The wires in this mains lead are coloured in accordance with the following code:

**BLUE-NEUTRAL BROWN-LIVE (OR ACTIVE)**

As the colours of the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug - PROCEED AS FOLLOWS:

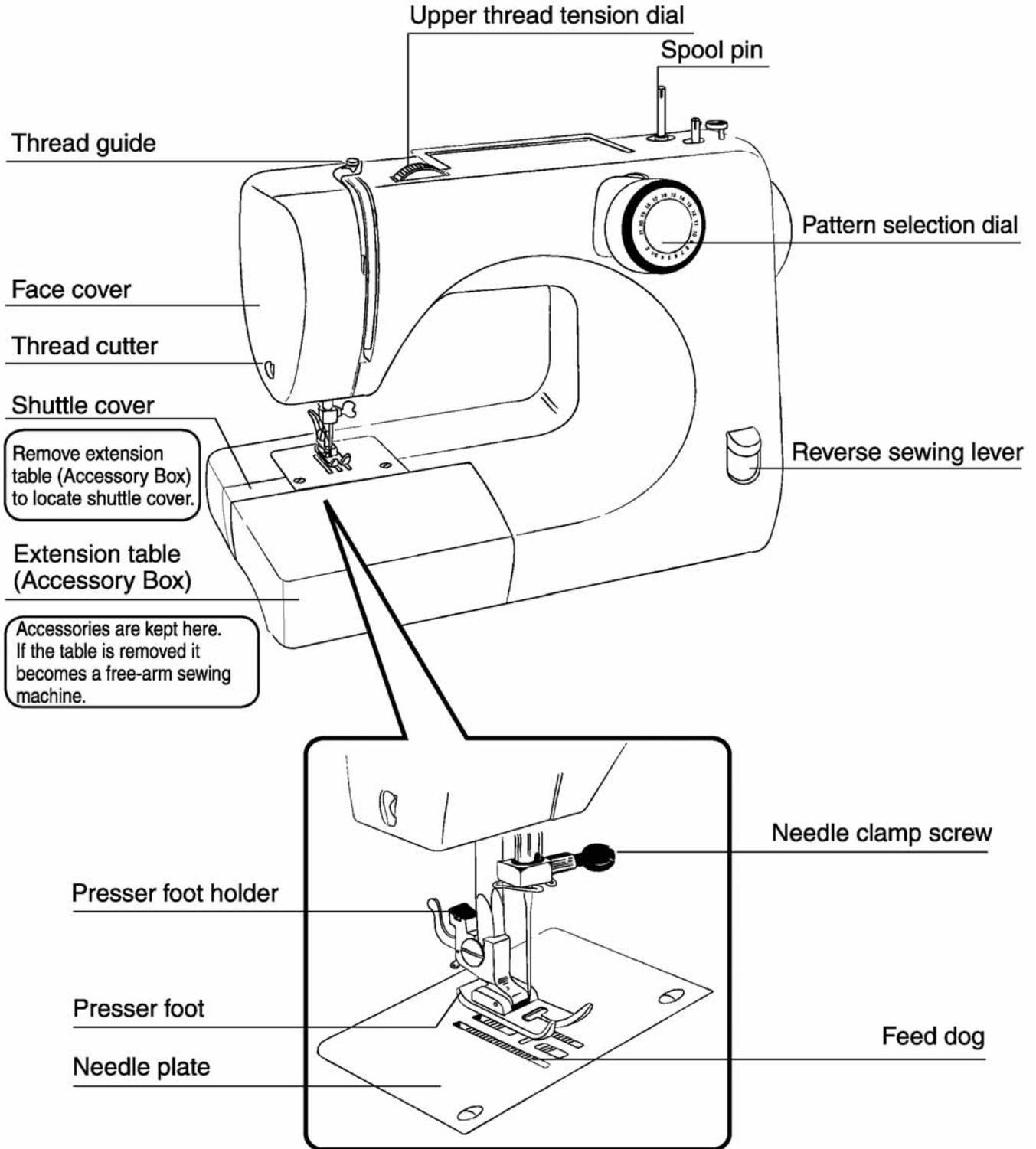
The earth plug pin is unnecessary. As the machine is designed under double insulation structure, the earth wire is removed from the machine. The wire coloured BROWN must be connected to the terminal marked L or A or coloured RED. The wire coloured BLUE must be connected to the terminal marked N or coloured BLACK. Neither core is to be connected to the earth terminal of a three-pin plug.

### 3. Part names

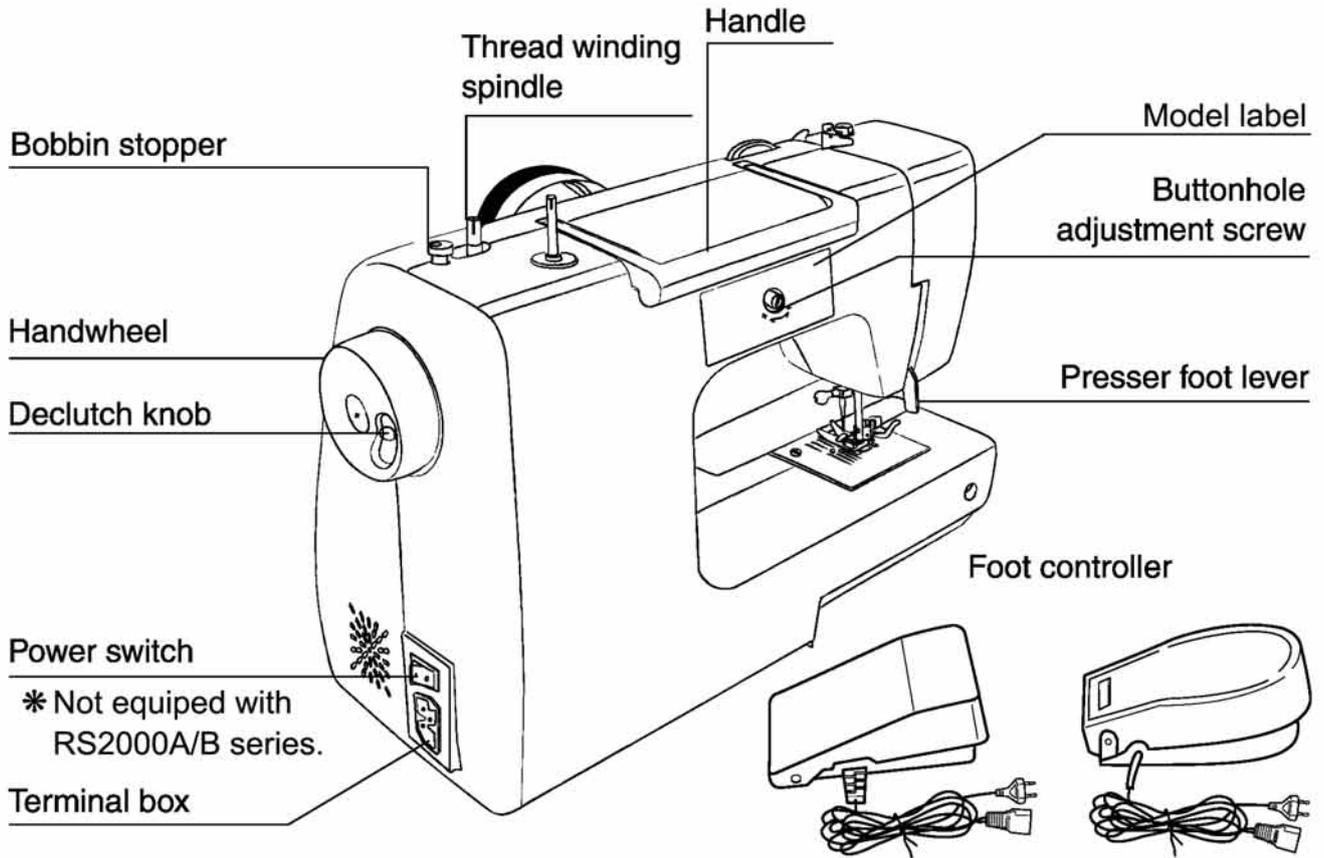
\* Some parts may not apply to your sewing machine.

The MODEL and SERIES numbers are located on the model label on the back of the sewing machine.

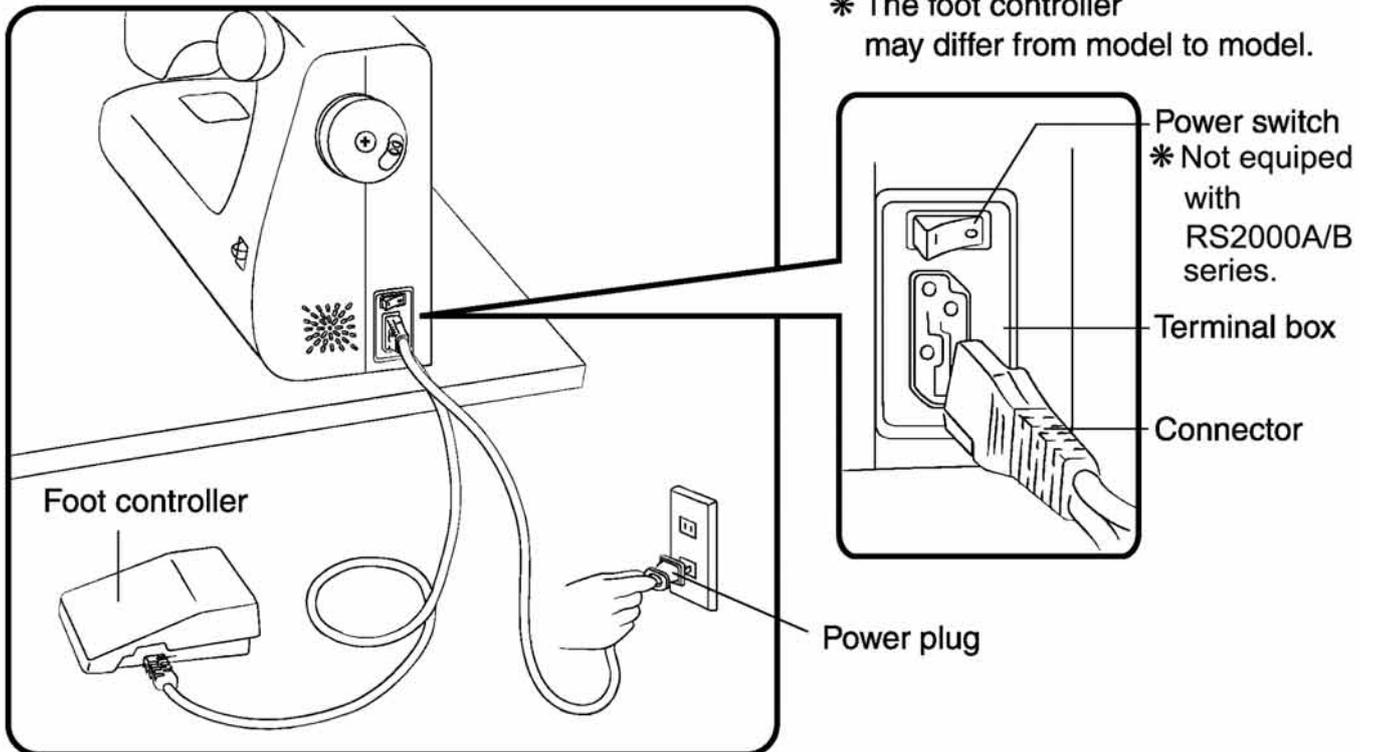
### ★★ Front pattern selection dial type ★★



Part name	Detail by use
Upper thread tension dial	Refer to P.30 [Adjusting thread tension]
Spool pin	Refer to P.13 [Winding the lower thread]
Reverse sewing lever	Refer to P.26 [ ☆ Reverse sewing ☆ ]



\* The foot controller may differ from model to model.



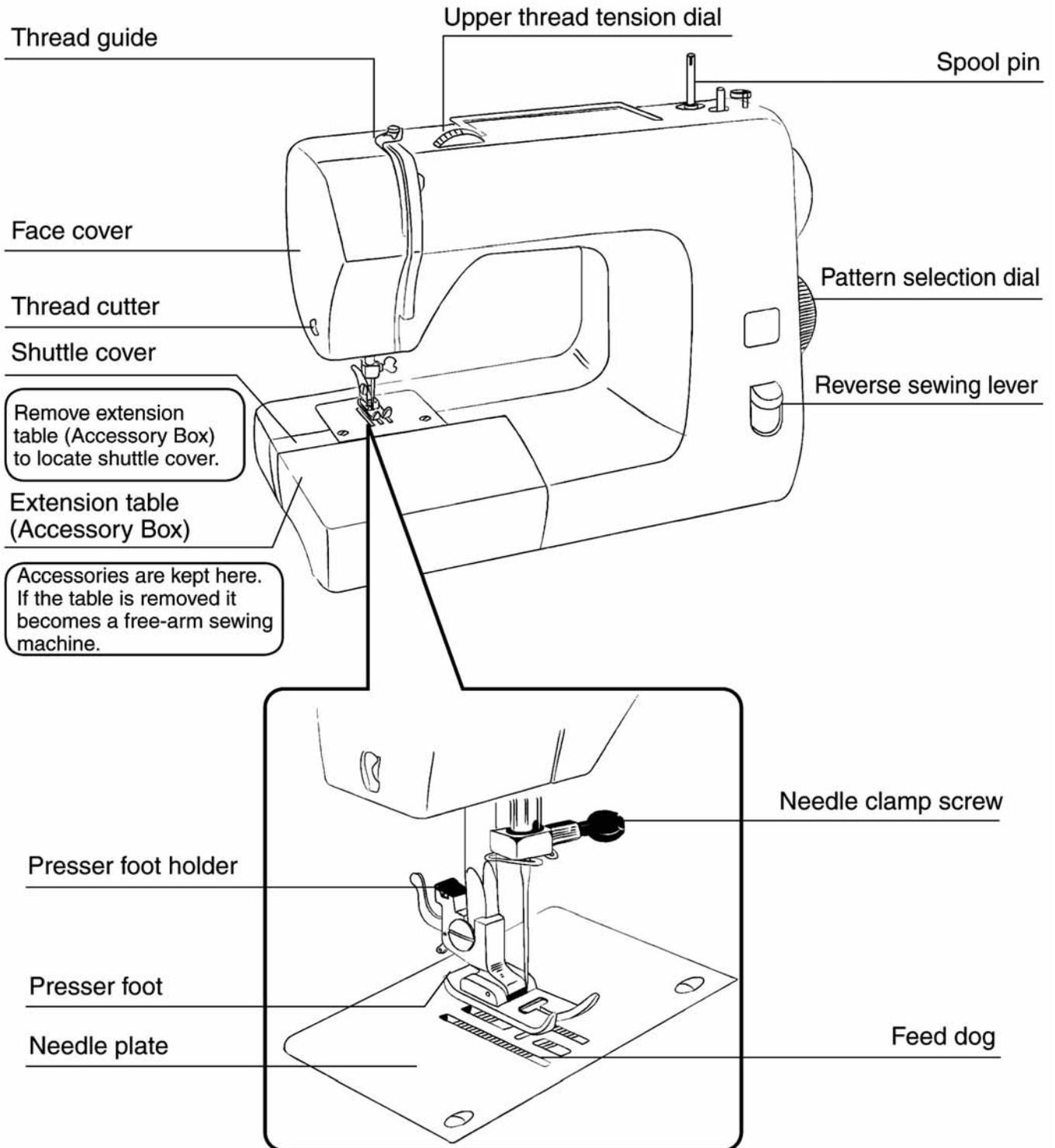
Part name	Detail by use
Declutch knob	Refer to P.14[Winding the lower thread] 4)
Buttonhole adjustment screw	Refer to P.36 [ ☆ Adjustment of buttonhole balance ☆ ]
Presser foot lever	Refer to P.16 [Threading the upper thread]

Before use

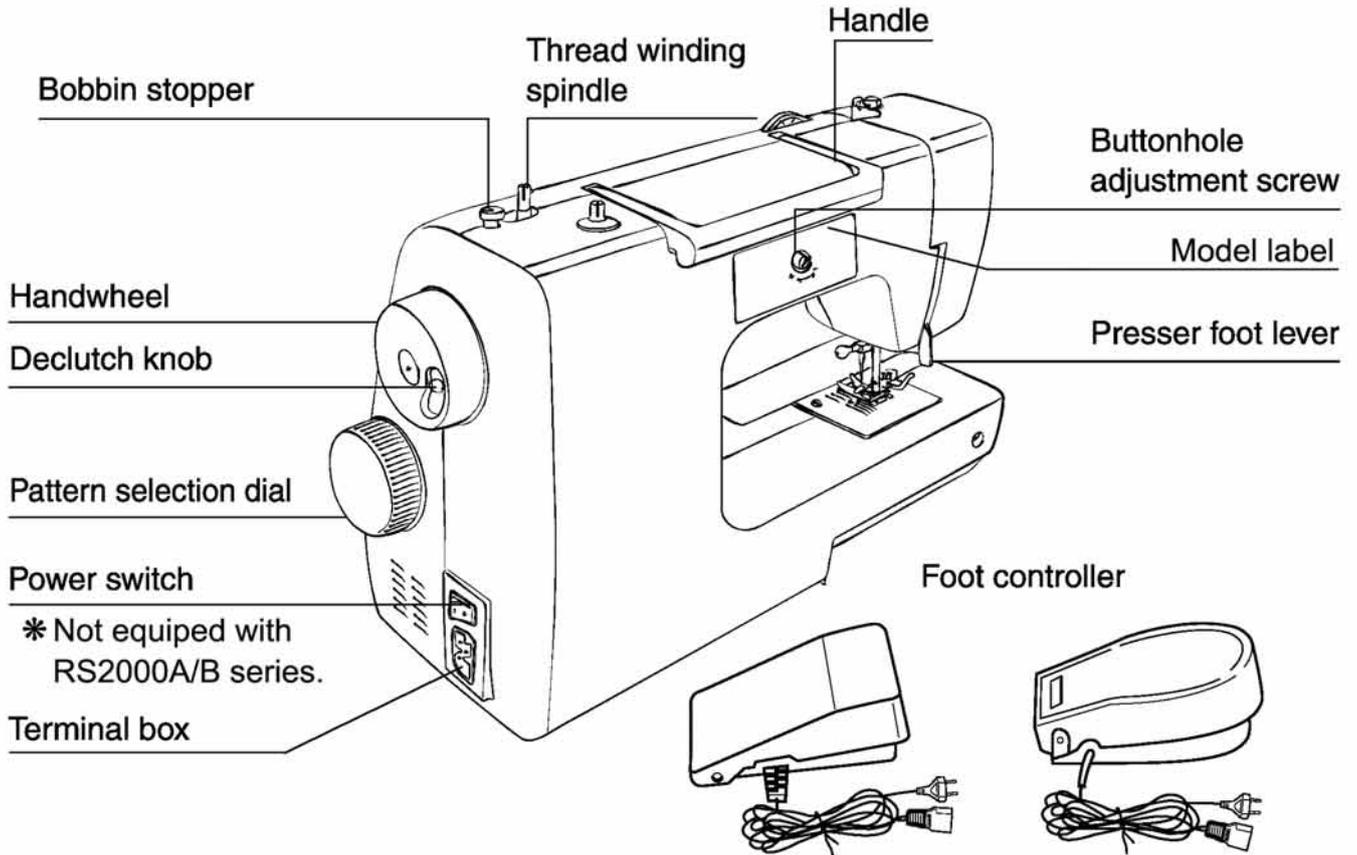
\* Some parts may not apply to your sewing machine.

The MODEL and SERIES numbers are located on the model label on the back of the sewing machine.

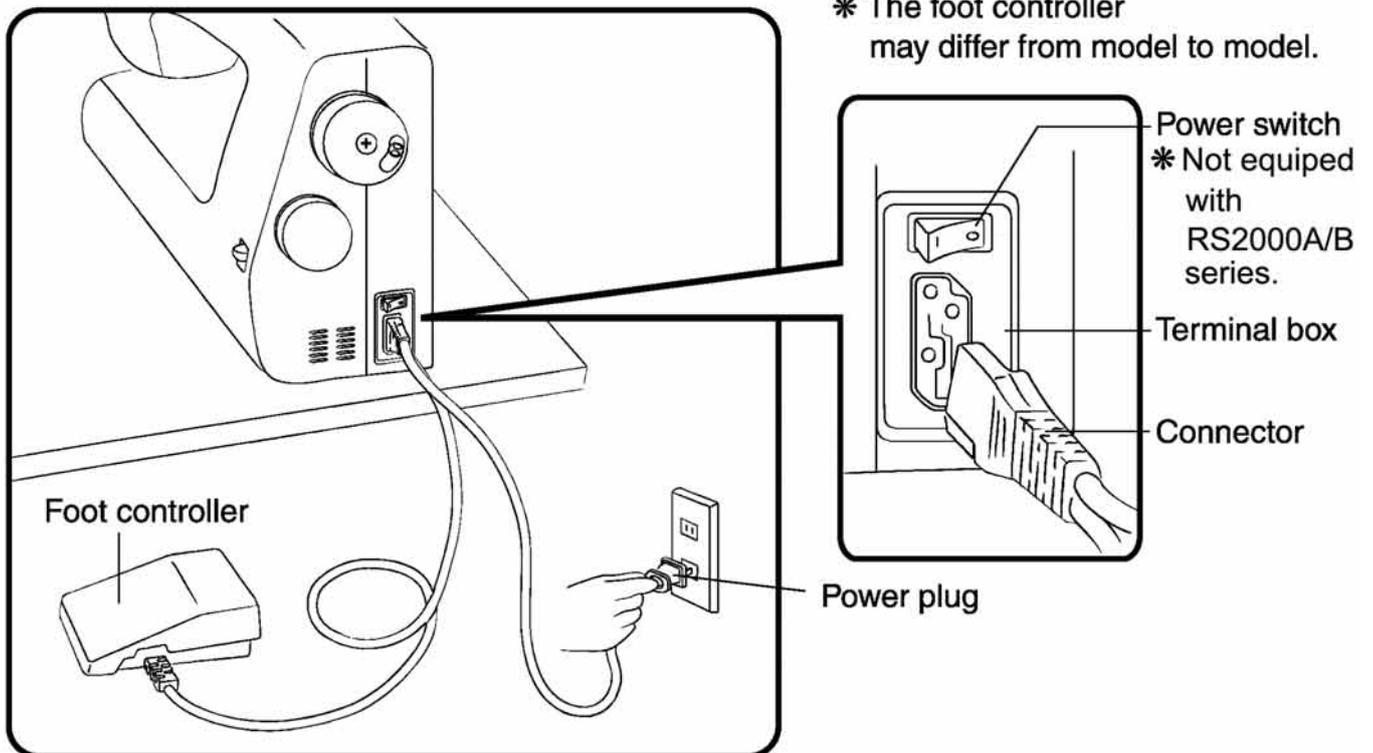
## ★★ Side pattern selection dial type ★★



Part name	Detail by use
Upper thread tension dial	Refer to P.30 [Adjusting thread tension]
Spool pin	Refer to P.13 [Winding the lower thread]
Reverse sewing lever	Refer to P.26 [ ☆ Reverse sewing ☆ ]



\* The foot controller may differ from model to model.



Part name	Detail by use
Declutch knob	Refer to P.14[Winding the lower thread] 4)
Buttonhole adjustment screw	Refer to P.36 [ ☆ Adjustment of buttonhole balance ☆ ]
Presser foot lever	Refer to P.16 [Threading the upper thread]

## II. Sewing preparations

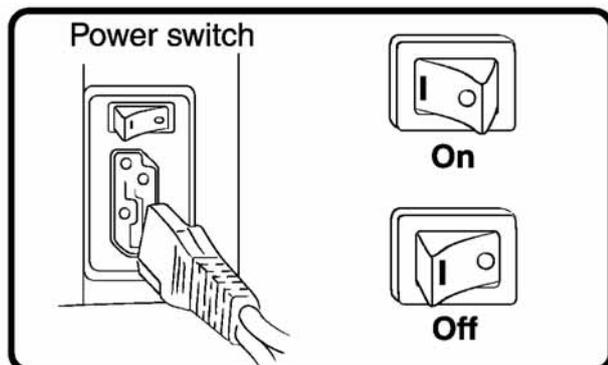
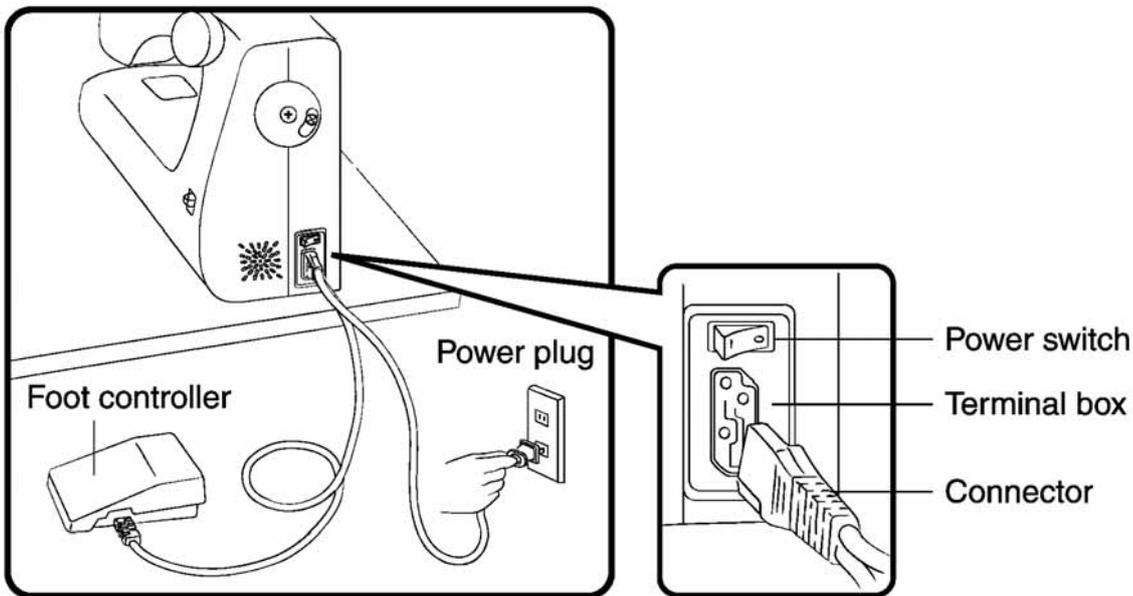
### 1. Connecting the power

#### ★★ Machine with a power switch ★★

#### WARNING

-  **Turn the power switch off when inserting the power plug.**  
Not doing so could cause an injury.
-  **Hold the power plug when removing it from the outlet.**  
Not doing so could damage the cord and cause an electric shock, fire or injury.
-  **Do not touch the power plug with wet hands.**  
Doing so could cause an electric shock.

- ◆Prepare the foot controller.
- ◆Insert the power cord connector into the terminal box.
- ◆Insert the power plug into the outlet.



Press the power switch to  (On).  
The power is turned on.

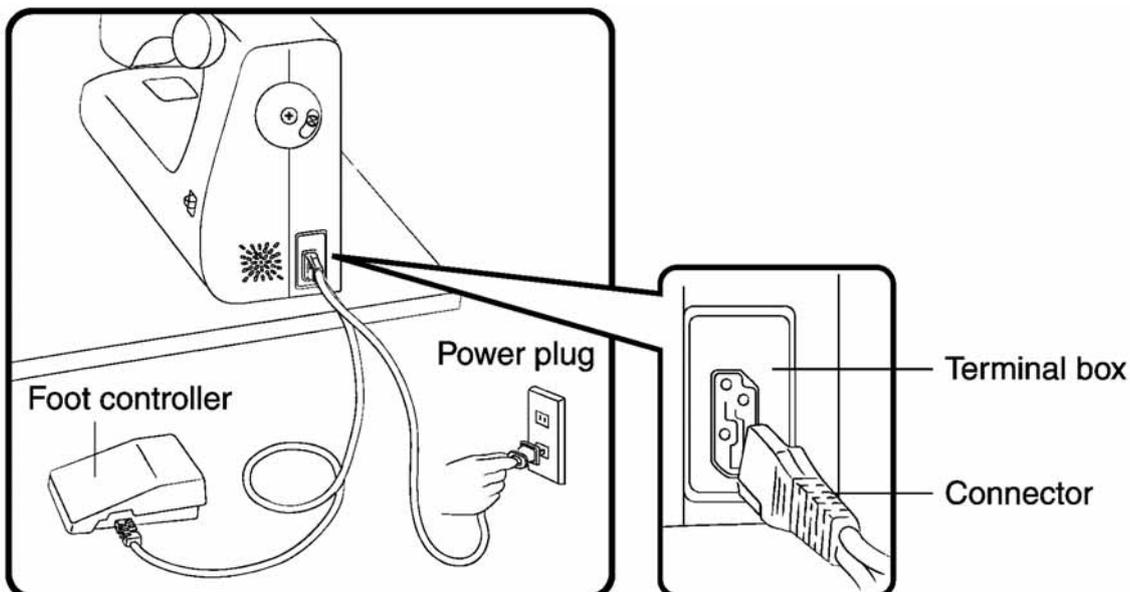
## ★★ Machine without a power switch ★★

\* RS2000 A/B series only.

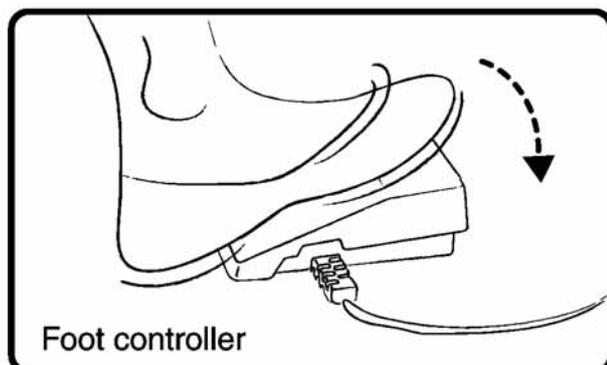
### WARNING

-  **Hold the power plug when removing it from the outlet.**  
Not doing so could damage the cord and cause an electric shock, fire or injury.
-  **Do not touch the power plug with wet hands.**  
Doing so could cause an electric shock.

- ◆ Prepare the foot controller.
- ◆ Insert the power cord connector into the terminal box.
- ◆ Insert the power plug into the outlet.
- ◆ The power is turned on at the outlet.



## ☆ How to operate foot controller ☆



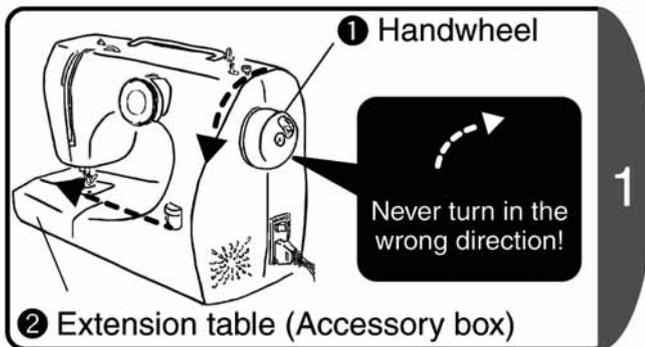
Step on the foot controller to operate the sewing machine.  
The more you press the foot controller, the faster the machine runs.  
Release the foot controller to stop the machine.

## 2. Taking out the bobbin

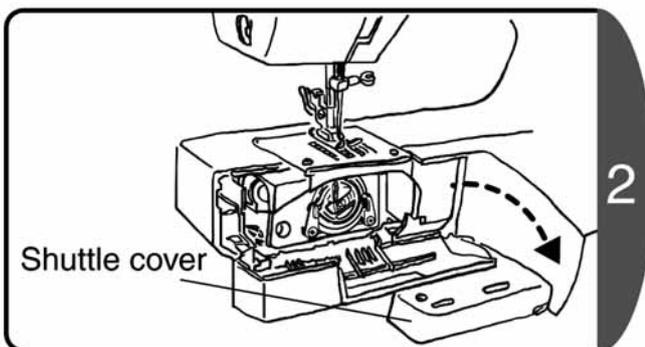
### WARNING



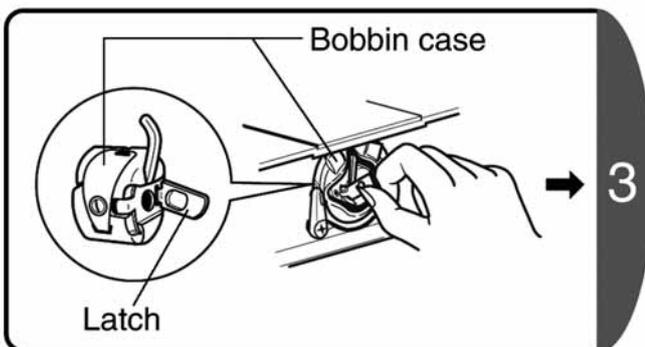
**Before taking out or setting the bobbin case, remove the power plug from the outlet.**  
Not doing so could cause an injury.



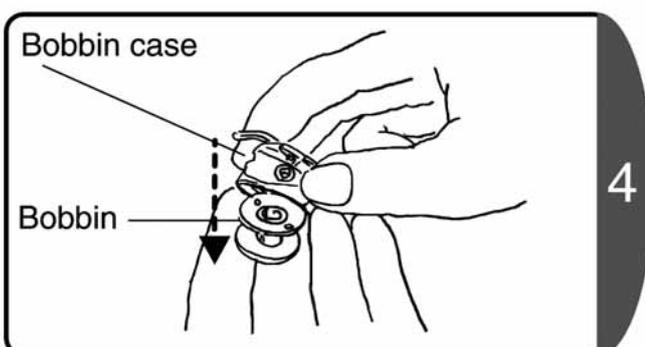
1. Turn the handwheel to move the needle to the highest position. Always turn the handwheel towards yourself. (in the direction of the arrow)
2. Hold the left edge of the extension table and pull out to the left. (in the direction of the arrow)



2. Open the shuttle cover.  
(Open out in the direction of the arrow.)



3. Pull up the latch of the bobbin case, and use it to pull out the case.



4. Take out the bobbin from the bobbin case.

### 3. Winding the lower thread

#### CAUTION



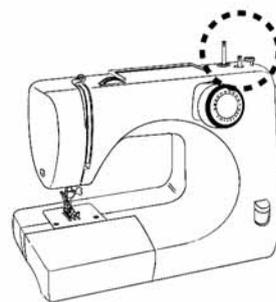
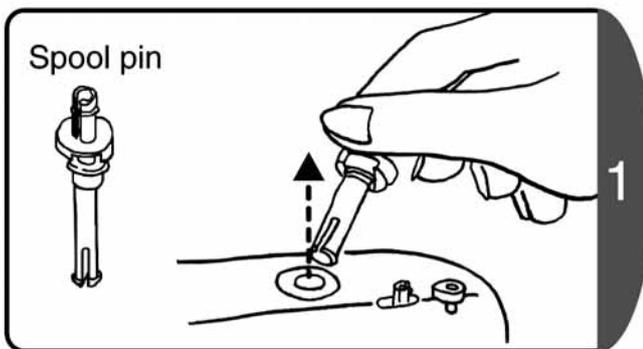
**Before taking out or setting the bobbin case, remove the power plug from the outlet.**  
Not doing so could cause an injury.



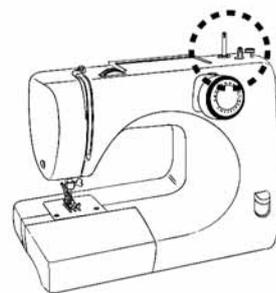
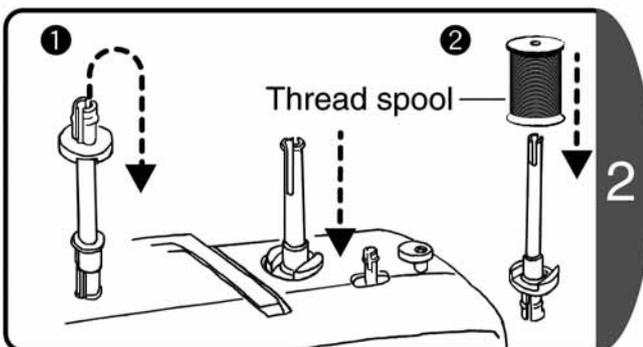
**Do not touch the lower thread winding spindle when winding the lower thread.**  
Not doing so could cause an injury.

#### Attention

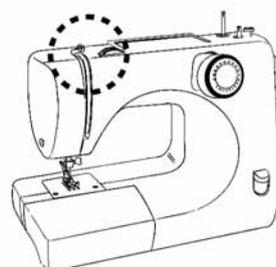
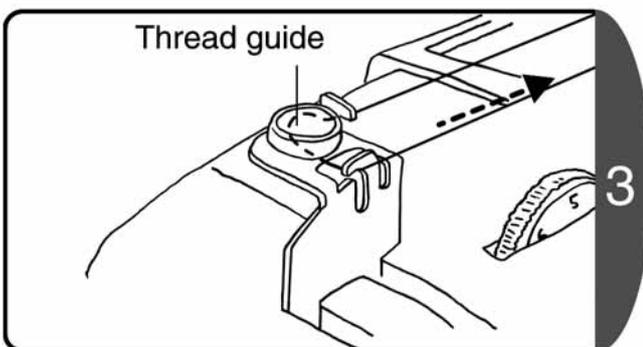
Use a TOYOTA-exclusive bobbin.



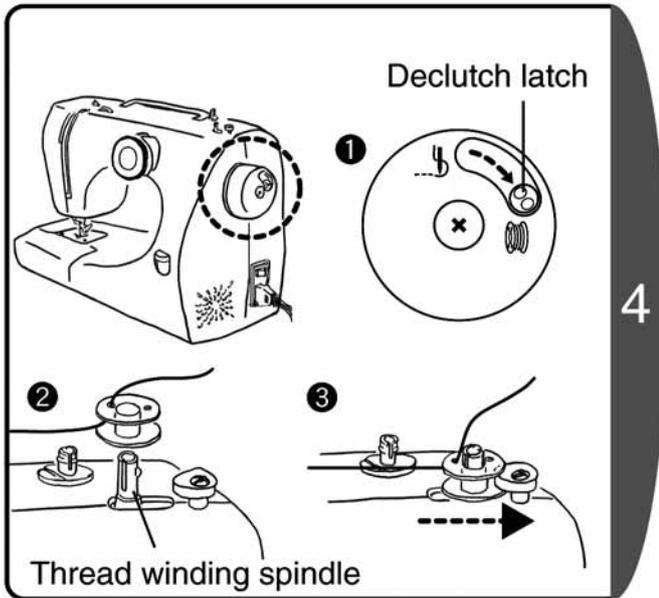
Remove the sticker. Pull up the spool pin from the sewing machine.



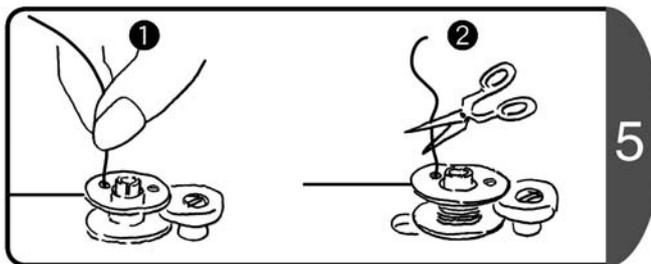
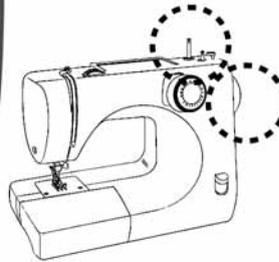
1. Turn the pin around and insert.  
2. Insert the thread spool.



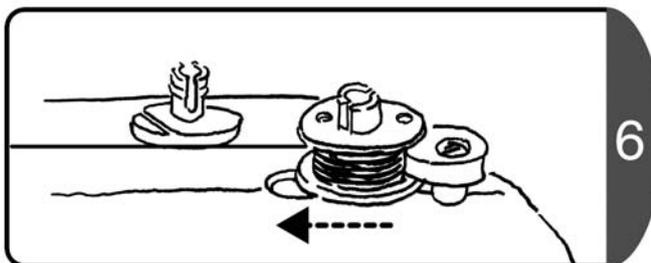
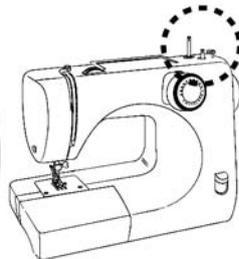
Support the thread on the sewing machine with one hand, using the other hand pass the thread around the thread guide as shown in the diagram.



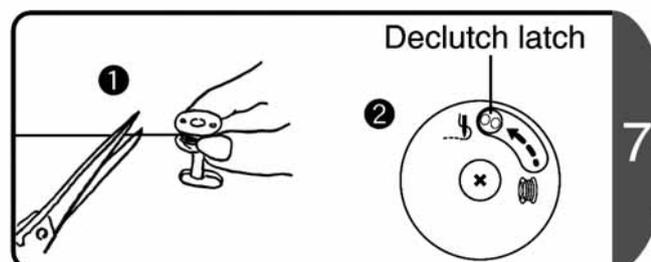
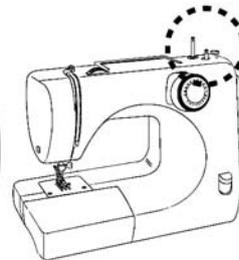
1. Move the declutch latch in the  direction (in the direction of the arrow)  
(This ensures that the needle does not move.)
2. Pass the thread from the inside through the bobbin hole.
3. Set the bobbin on the thread winding spindle and move the spindle to the right (in the direction of the arrow)



1. Holding the end of the thread, step on the foot controller to wind the thread.
2. After winding it a little, stop the sewing machine and cut the thread that protrudes from the bobbin hole. Then continue winding the thread.



After the winding has finished, move the thread winding spindle back to the left. (in the direction of the arrow)



1. Remove the bobbin and cut the thread.
2. Move the declutch latch in the  direction (in the direction of the arrow)

Note : If the declutch is not returned to its original position, the sewing machine cannot move and will not sew.

## 4. Threading the lower thread

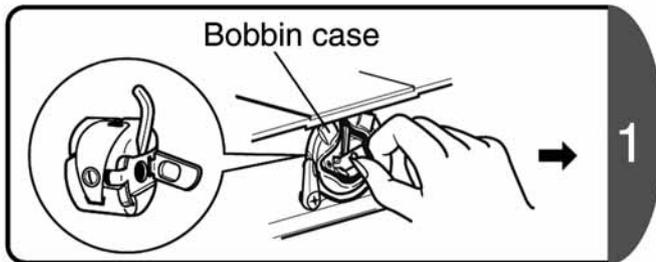
### ! CAUTION



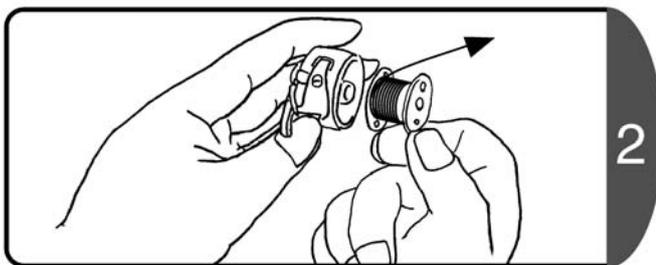
**Before setting the bobbin case, remove the power plug from the outlet.**  
Not doing so could cause an injury.

### Attention

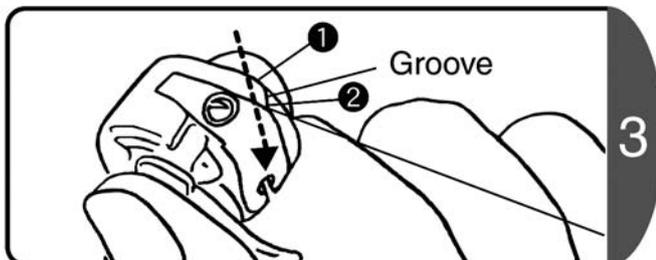
Use a TOYOTA-exclusive bobbin.



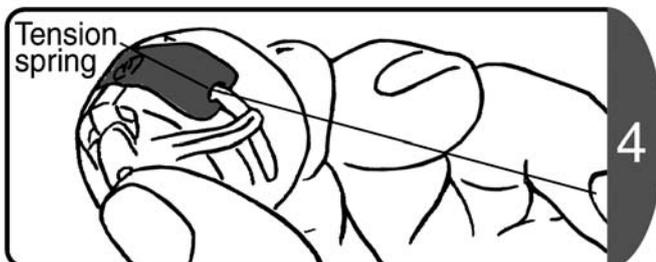
Take out the bobbin case.  
(refer to P.12 [Taking out the bobbin])



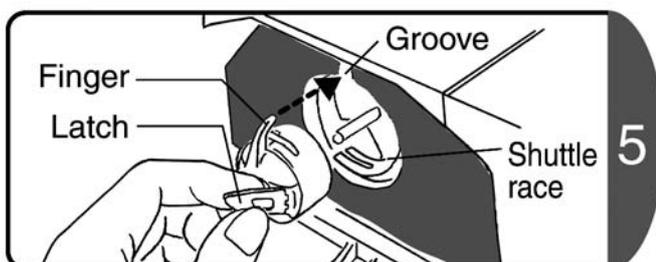
The thread must flow off the bobbin in the direction of the arrow, and then insert the bobbin into the bobbin case.



Hold the end of the thread in your right hand and pass it through the groove in the bobbin case.  
(Pass the thread from 1 to 2)



Press the bobbin with the finger of your left hand, and then pass the thread through the tension spring as shown in the diagram.  
(Pull until there is a locking sound.)



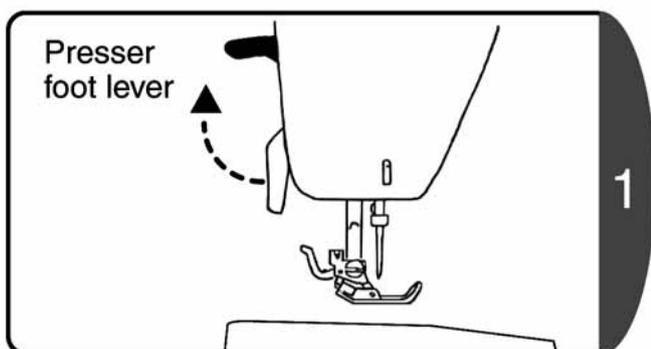
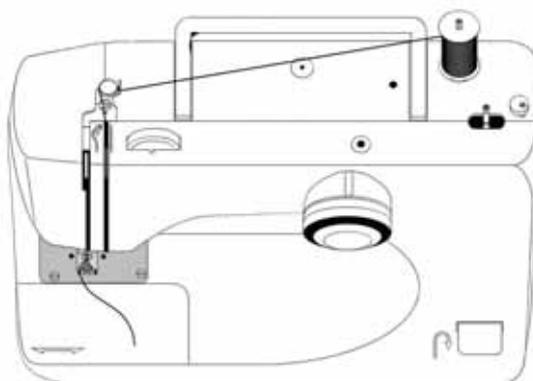
- ♦ Turn the handwheel to move the needle to the highest position.  
Always turn the handwheel towards yourself.
- ♦ Holding the latch of the bobbin case, insert the bobbin case into the shuttle race.  
The bobbin case finger must slot into the groove.

## 5. Threading the upper thread

### CAUTION

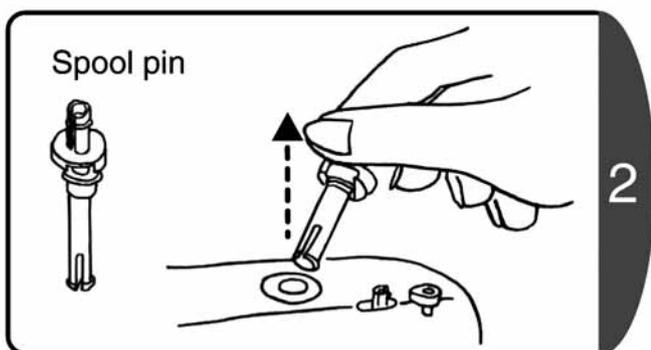


Before threading the upper thread, remove the power plug from the outlet.  
Not doing so could cause an injury.

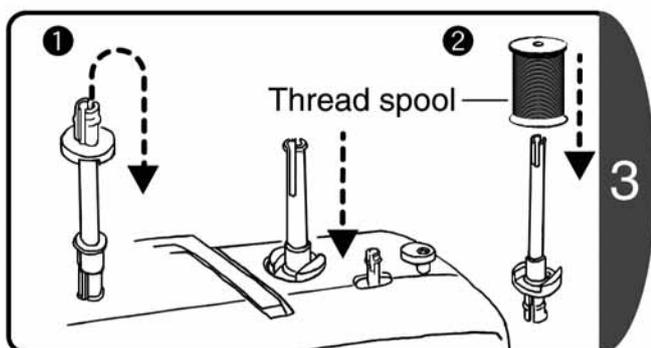


Raise the presser foot lever.

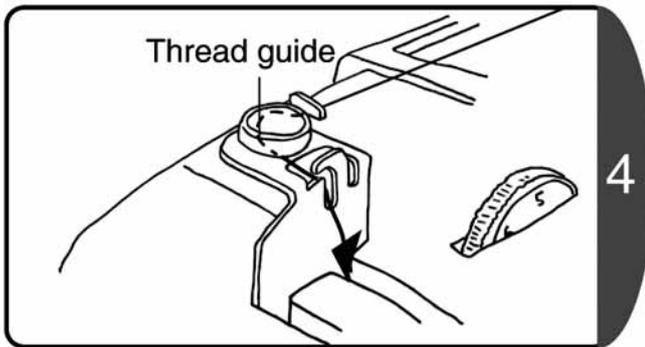
Note: If the presser foot lever is not raised, the thread cannot be set correctly.



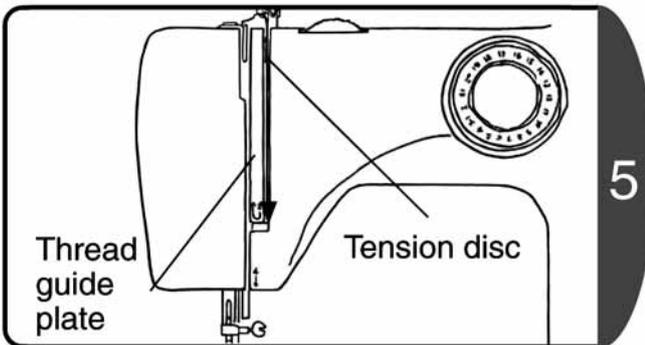
Pull out the spool pin from the main unit.



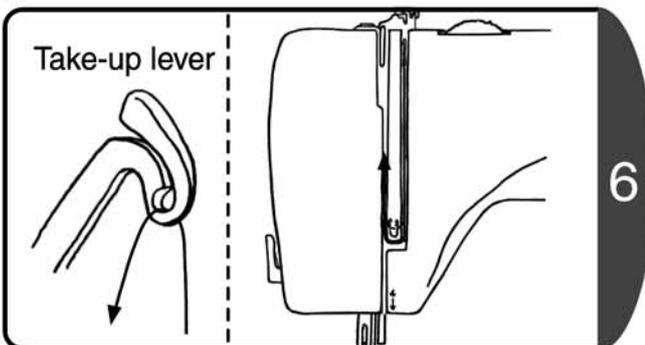
1. Turn the spool pin over and insert.  
2. Insert the thread spool.



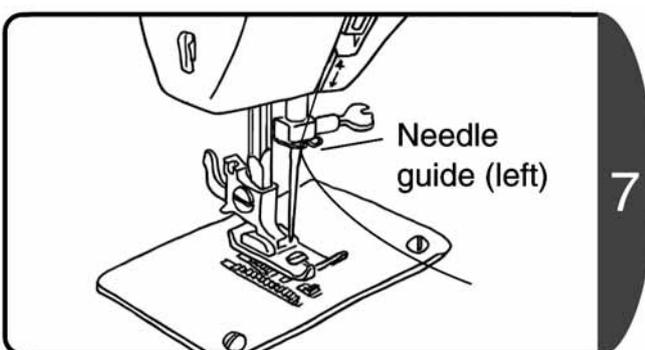
Support the thread on the sewing machine with one hand, using the other hand pass the thread around the thread guide as shown in the diagram.



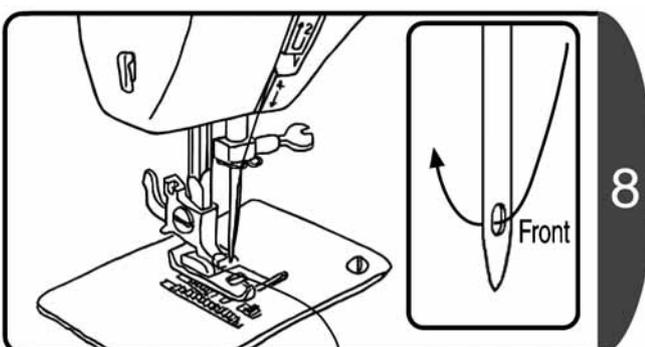
Pass the thread between the thread guide plate and the tension disc.



- ♦ Pass the thread along the groove of the thread guide plate.
- ♦ Turn the handwheel towards yourself until the take-up lever is visible.
- ♦ Pass the thread through the take-up lever.

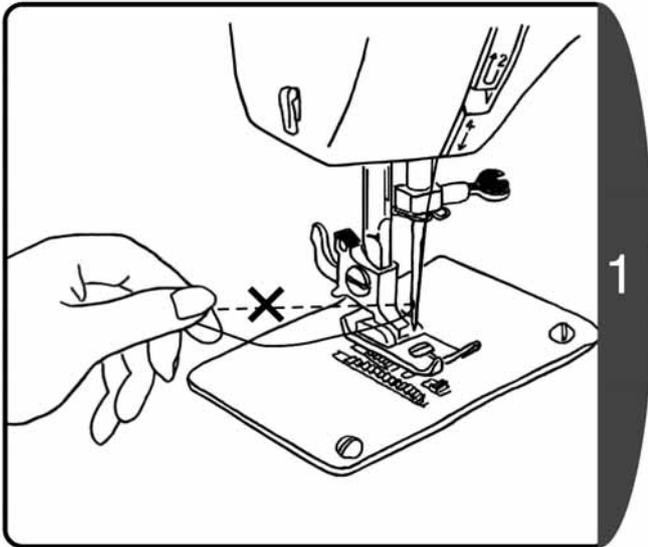


- Set the thread on the left side of the needle guide. Check that the thread is set correctly
- ♦ Raise the presser foot and pull the upper thread towards yourself. The thread should come out smoothly.
  - ♦ Lower the presser foot and pull the upper thread towards yourself. It should be resistant and difficult to pull.

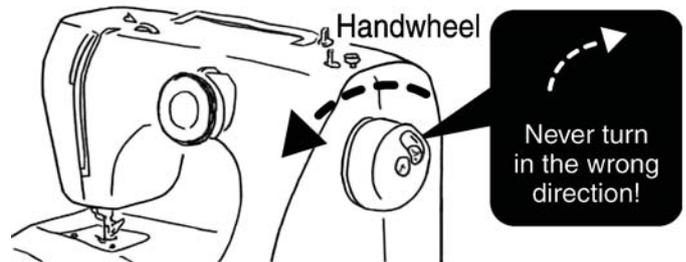


Pass the thread through the needle eye from the front.

## 6. Pulling up the lower thread

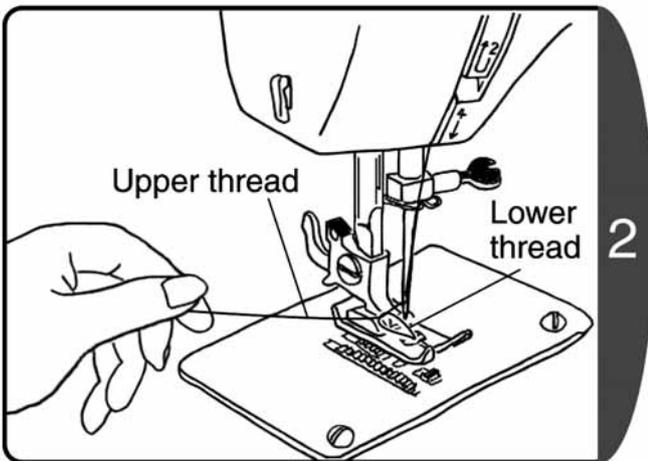


Hold the end of the thread, turn the handwheel towards yourself for one full turn, and stop when the needle is at its highest position.

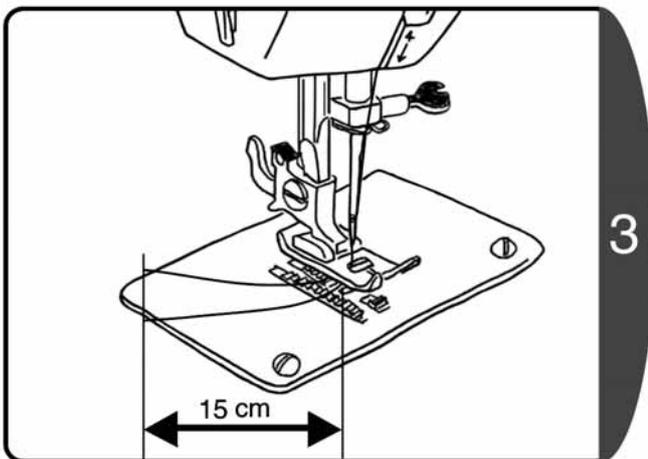


Note : Always turn the handwheel towards yourself. (in the direction of the arrow)  
If you turn it in the reverse direction it could tangle the thread.

Note : If the thread is tight the lower thread will not come out, so hold the thread loosely.



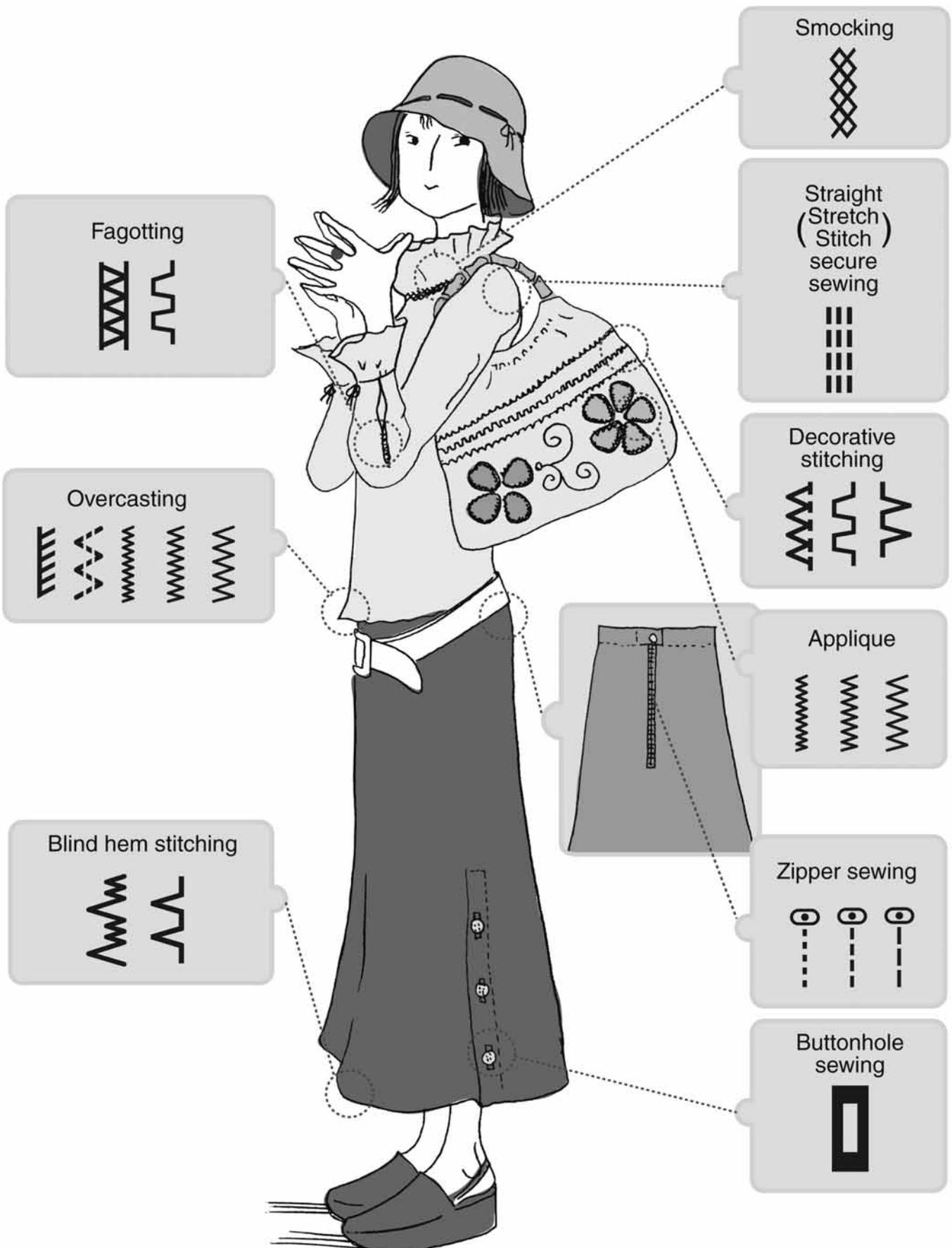
- ♦ Pull the upper thread and the loop of the lower thread will come out.
- ♦ Pull out this lower thread.



- ♦ Line up the upper thread and lower thread, and thread through the groove of the presser foot.
- ♦ Pull back about 15cm.

## 7. Main stitch pattern uses

\* Depending on the model of your sewing machine, some of the stitch patterns are not available. (refer to P.20)

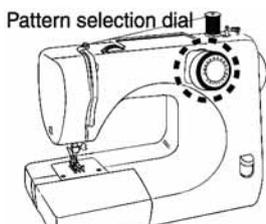


## 8. Application of each stitch pattern

### CAUTION



**Do not turn the pattern selection dial while operating the sewing machine.**  
Doing so could cause an injury.



#### Attention

- ♦The number of stitch patterns may differ from model to model.
- ♦The model number is located on the model label on the back of the sewing machine. (MODEL \*\*\*)  
21 Stitch programs --- MODEL XXX21, XXX17, XXX04, 7140, SA45  
18 Stitch programs --- MODEL XXX18, CB02, STF91  
16 Stitch programs --- MODEL XXX16, CB01, 7120

- ♦Turn the handwheel towards yourself to raise the needle to the highest position.
- ♦Turn the pattern selection dial to choose the pattern.

Stitch	Applications	Stitch programs			Stitch	Applications	Stitch programs		
		21	18	16			21	18	16
1/2/3/4 	Buttonhole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15 	Stretch fabric blind hem stitch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 	Thin fabric straight stitch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16 	Decorative stitch Overcasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/7/8 	Straight stitch Zipper sewing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17 	Straight stretch stitch (secure sewing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9/10/11 	Zigzag sewing Applique Overcasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18 	Fagoting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 	Blind hem stitching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19 	Overcasting Overlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 	Mending stitch Thin fabric overcasting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20 	Smocking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 	Fagoting/Casing Decorative stitch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21 	Decorative stitch Double overlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

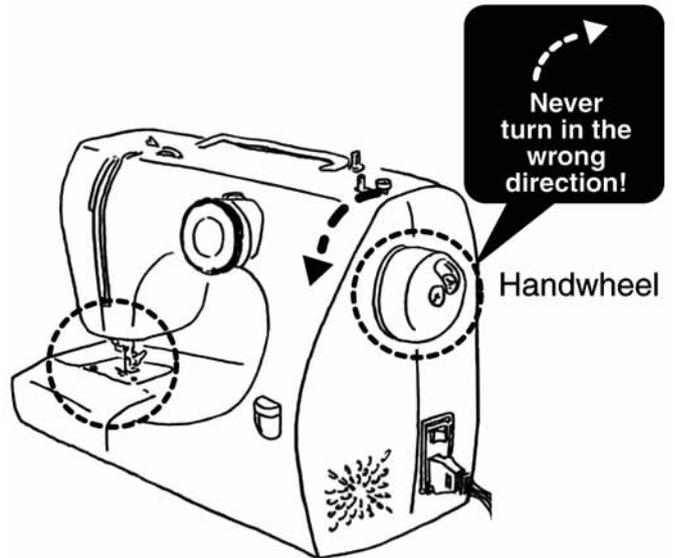
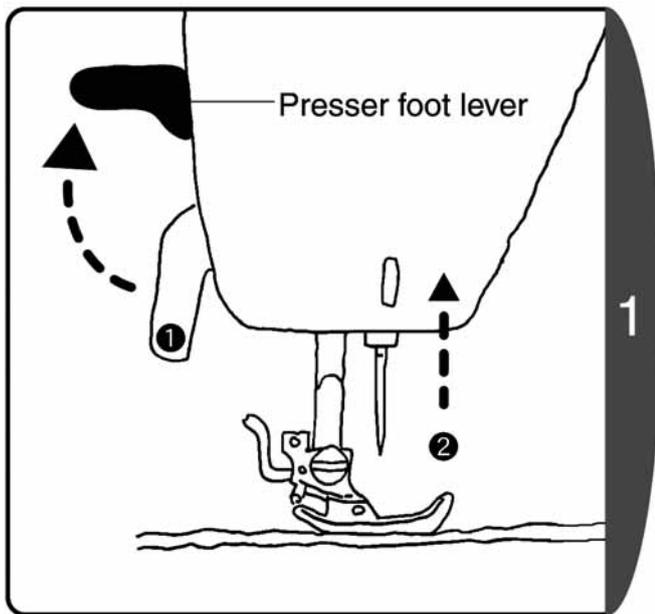
## 9. Changing the presser foot

### CAUTION

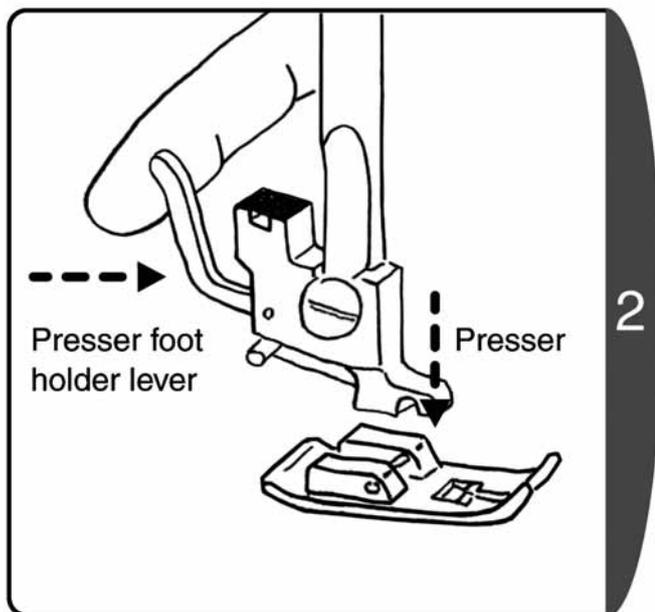


Before changing the presser foot, remove the power plug from the outlet.  
Not doing so could cause an injury.

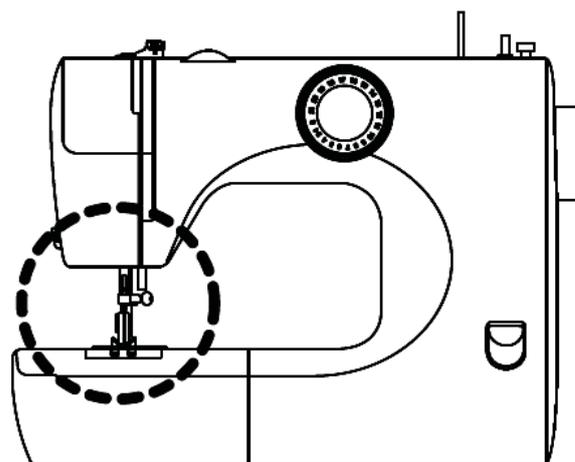
### ☆ Removal ☆



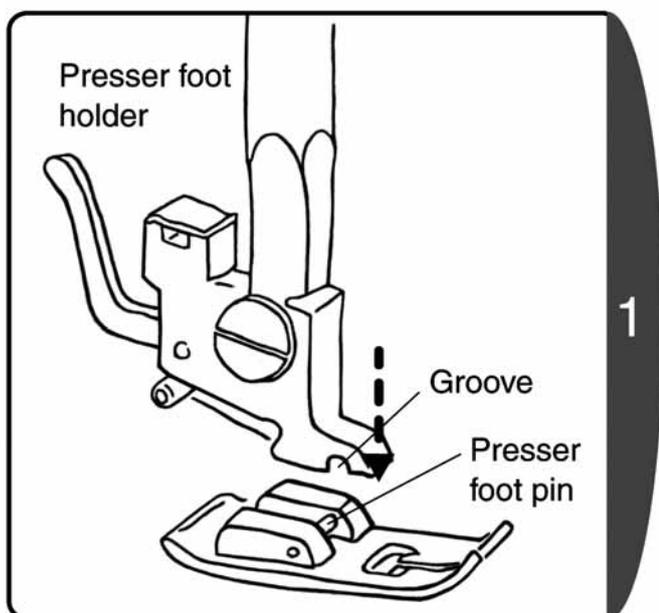
1. Raise the presser foot lever.
2. Turn the handwheel towards yourself to raise the needle.



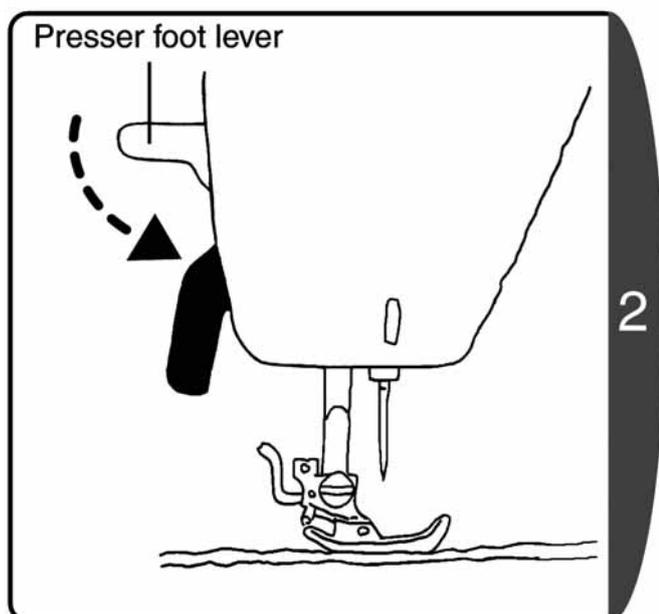
2. Press the presser foot holder lever in the direction of the arrow to release the presser foot



☆ Installation ☆



Position the presser foot pin directly below the groove in the presser foot holder.



Lower the presser foot lever to set the presser foot.

## 10. Changing the needle

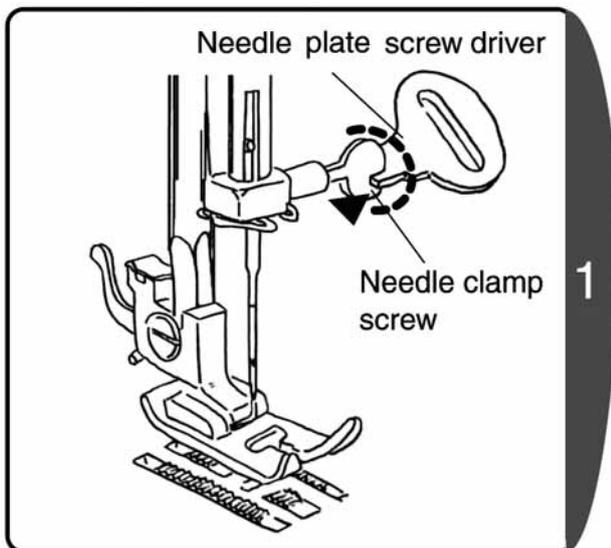
### ⚠ CAUTION



**Before changing the needle, remove the power plug from the outlet.**  
Not doing so could cause an injury.

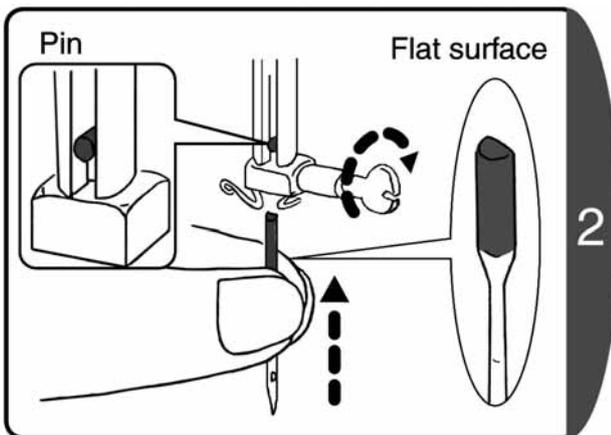


**Broken needles are dangerous. Be sure to dispose of them in a safe place away from children.**  
Not doing so could cause an injury.



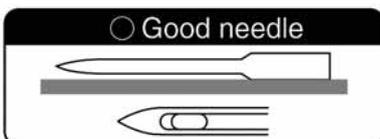
1. Turn the handwheel towards yourself to raise the end of the needle higher than the needle plate.
2. Hold the needle in one hand, loosen the needle clamp screw with the accessory needle plate screw driver, and remove the needle.

Note : Do not remove the needle clamp screw.  
Loosen the needle clamp screw to remove the needle.



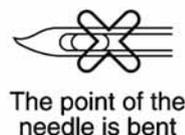
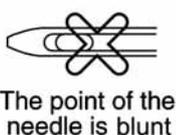
1. Face the flat surface of the needle to the rear and insert until it makes contact with the pin.
2. Firmly tighten the needle clamp screw with the needle plate screw driver.

### ☆ Correct needle selection ☆



Note : If a faulty needle is used not only will it impair the sewing performance, but it could also damage the metal plate or hook, or break the needle.

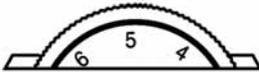
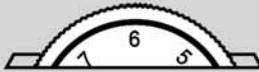
\* If a stitch is missed or the thread breaks, first try replacing the needle.



**It's dangerous to use a faulty needle!**

## 11. Relationship between the needle, thread and fabric, and adjusting the sewing machine

The quality of the sewing finish will improve if the needle and thread are changed to match the type of fabric. Follow the directions in the table below.

		Sewing thin fabric 	Sewing normal fabric 	Sewing thick fabric 
Relationship between the needle, thread and fabric	 Needle	No. 65/9 to No. 75/11	No. 75/11 to No. 90/14	No. 100/16
	 Thread	Polyester No. 90 Cotton No. 80 to No. 120 Silk No. 80	Polyester No. 50 to No. 60 Cotton No. 60 to No. 80 Silk No. 50 to No. 80	Polyester No. 30 to No. 50 Cotton No. 40 to No. 50 Silk No. 50
	 Fabric	Normal back fabric Quipler Georgette Lawn Lace, etc.	Normal front fabric Broad Soft denim Satin Pile Gingham, etc.	Curtains Denim Quilting Fleece Tweed Felt, etc.
Adjusting the thread tension	Thread tension	 (3 to 5)	 (4 to 6)	 (5 to 7)

- ♦Use a ball point needle for the sewing alignment of stretch fabric.
- ♦Please purchase any needles not included as accessories, after checking they are specified as home-use sewing machine needles.
- ♦Refer to P.30 [Adjusting thread tension] for how to adjust thread tension.
- ♦Use the same kind of threads for upper/lower thread.
- ♦The higher the needle number is, the needle gets thicker. The higher the thread number is, the thread gets thinner.

### III. Sewing

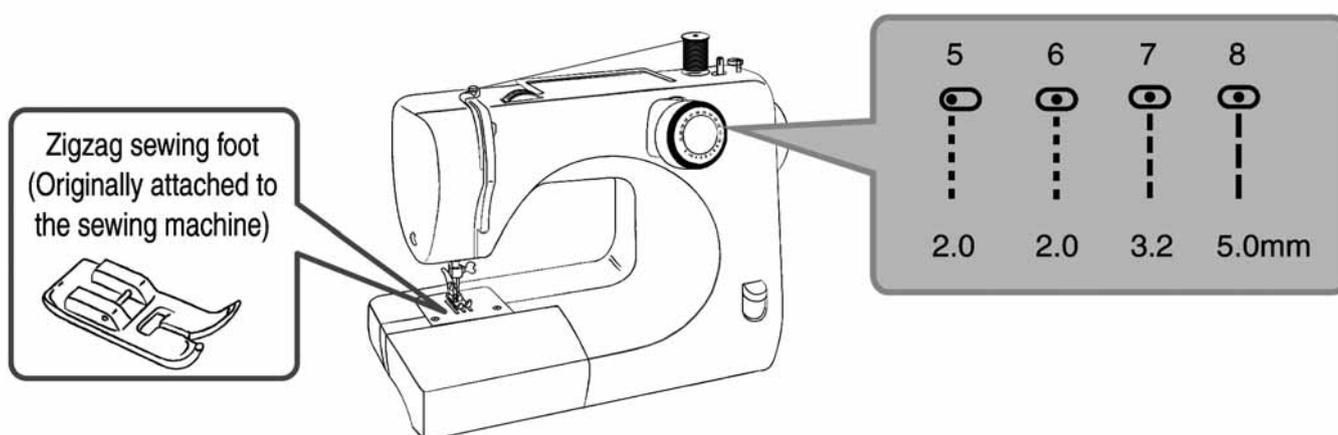
#### 1. Straight stitching and reverse sewing

Reverse sewing is performed at the beginning and end of sewing to prevent the thread from unraveling.

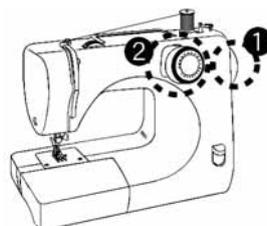
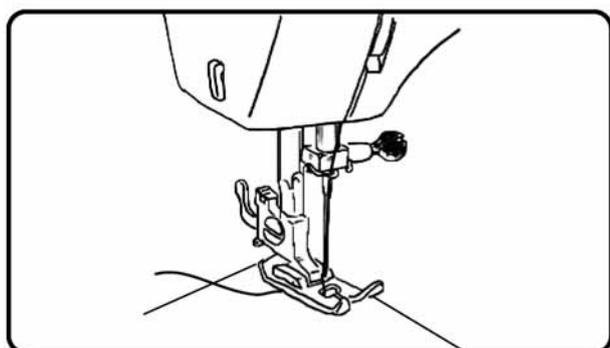
#### CAUTION



**Do not pull the fabric excessively while sewing.**  
Doing so could break the needle and cause an injury.

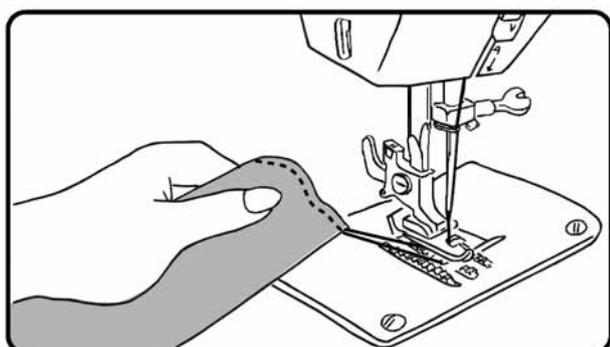


#### ☆ Straight stitch ☆



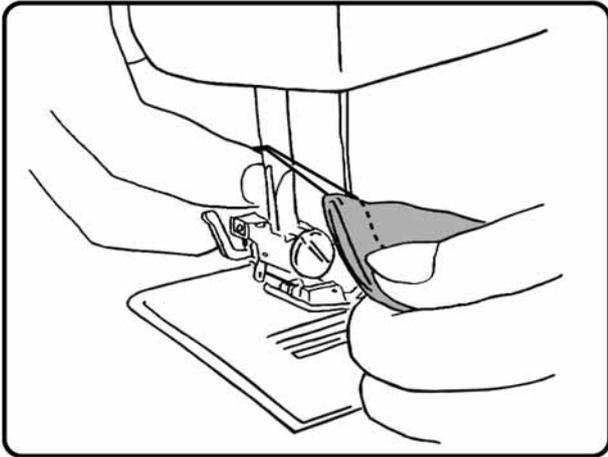
1. Turn the handwheel towards yourself to raise the needle.
  2. Turn the pattern selection dial to choose the pattern.
- ◆ Set the fabric and lower the presser foot lever.
  - ◆ Step on the foot controller to begin sewing.

#### ☆ End of sewing ☆



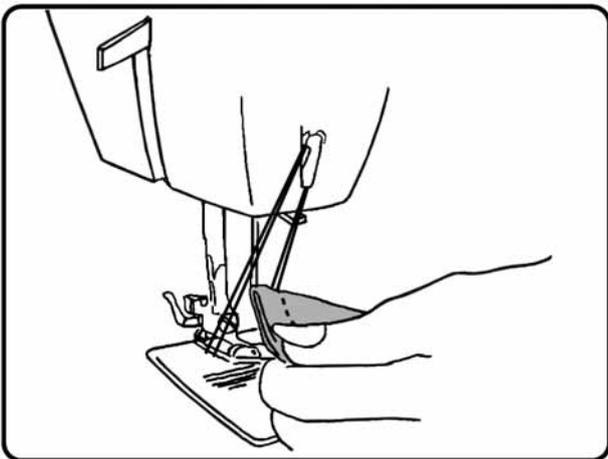
- ◆ After finishing sewing, turn handwheel towards yourself until the needle is in the highest position.
- ◆ Raise the presser foot and pull out the fabric to the rear.

★ Thread cutter on the needle bar ★



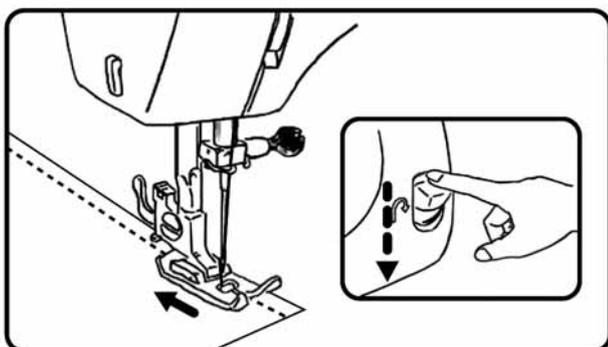
\* The thread cutter may differ from model to model.  
Line up two threads and cut with the thread cutter on the needle bar.

★ Thread cutter on the face cover ★

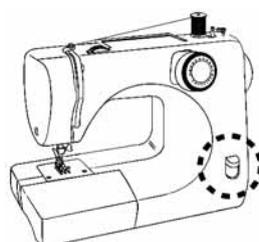


\* The thread cutter may differ from model to model.  
Line up two threads and cut with the thread cutter on the face cover.

★ Reverse sewing ★



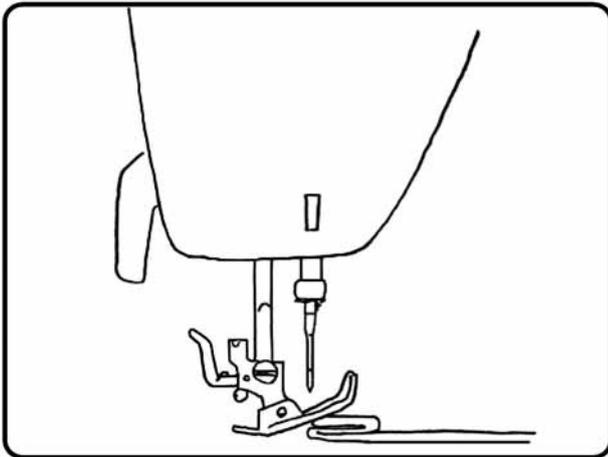
Reverse sewing is performed at the beginning and end of sewing to prevent the thread from unraveling. Reverse sewing is performed while lowering the reverse sewing lever.



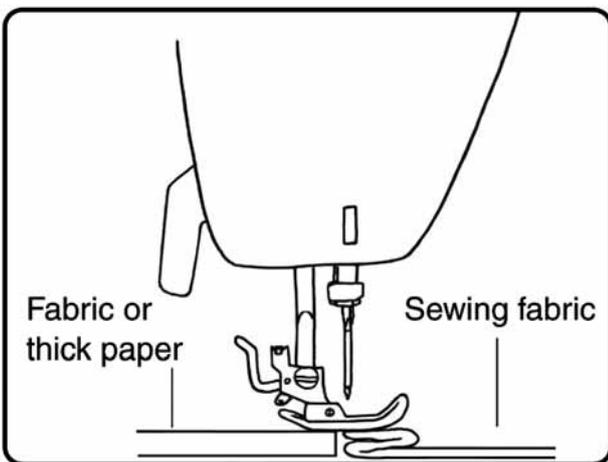
- ◆Stitch 1 to 2 cm from the edge of the fabric to prevent unraveling at the start of sewing.
- ◆Sew 3 to 4 reverse stitches at the end of sewing.

Note : Remove your finger from the reverse sewing lever to return to forward direction sewing.

☆ Sewing thick fabric ☆

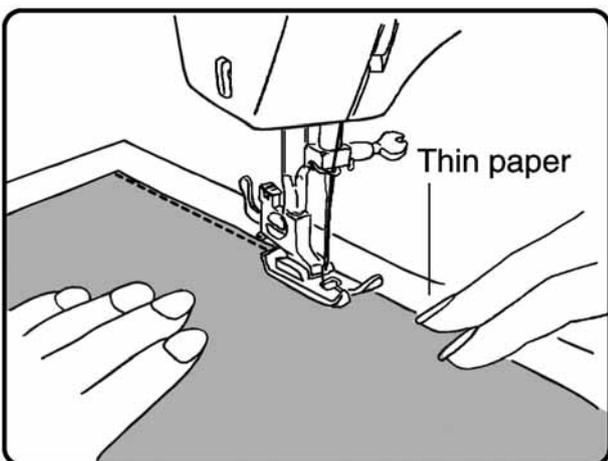


When sewing thick fabric from the edge, the presser foot may tilt and be unable to feed through the fabric.



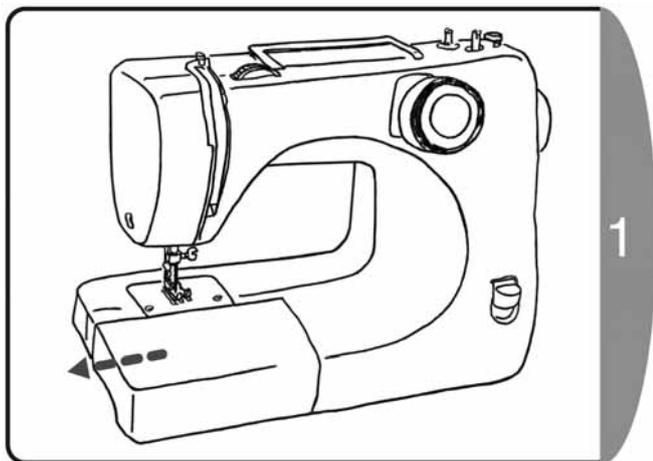
Place fabric or thick paper of the same thickness as the fabric you wish to sew under the presser foot. This will enable smooth sewing.

☆ Sewing thin fabric ☆

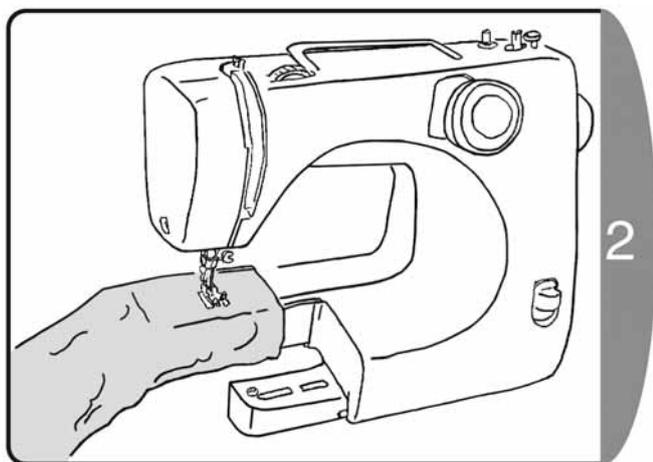


Sewing is easier if thin paper is laid out under the fabric.

☆ Sewing tube-shaped fabrics ☆



Pull out the extension table (accessory box) in the direction of the arrow.

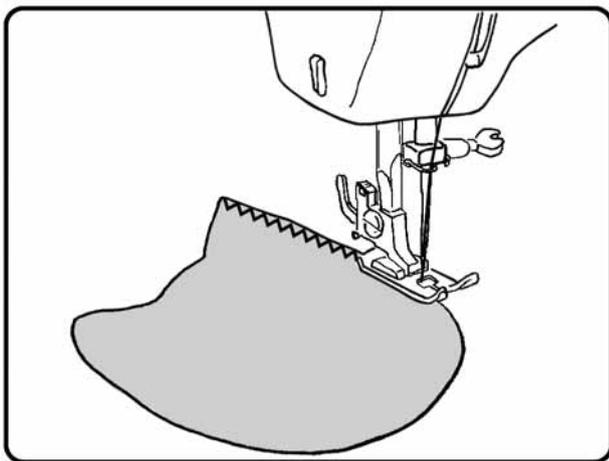
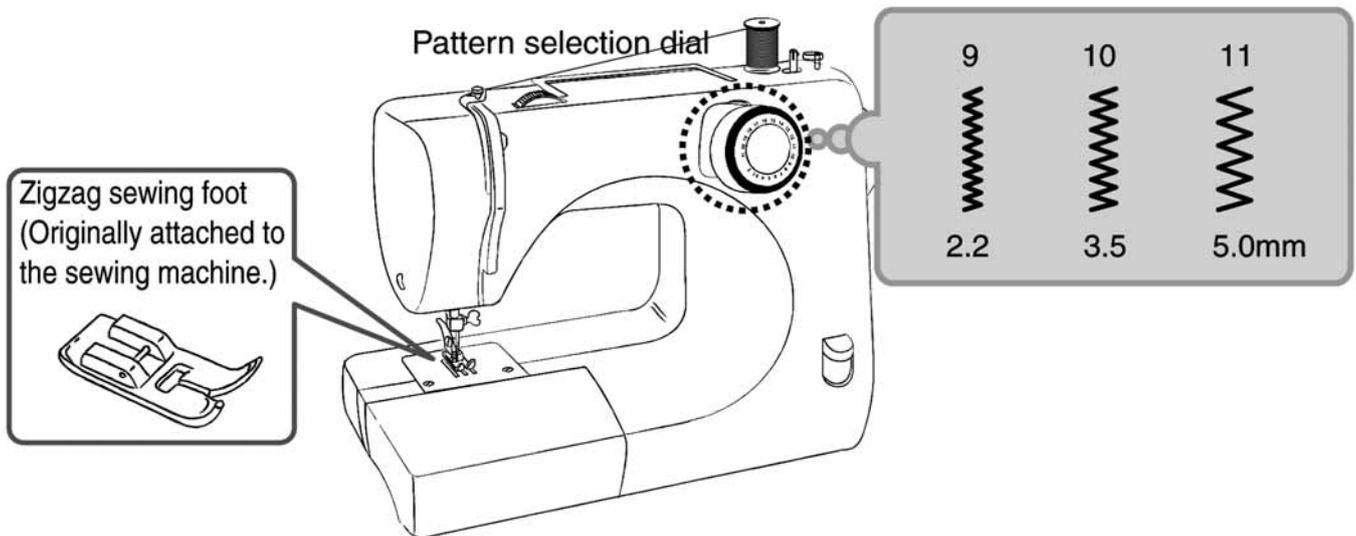


Sew tube-shaped fabrics such as trousers or sleeves.

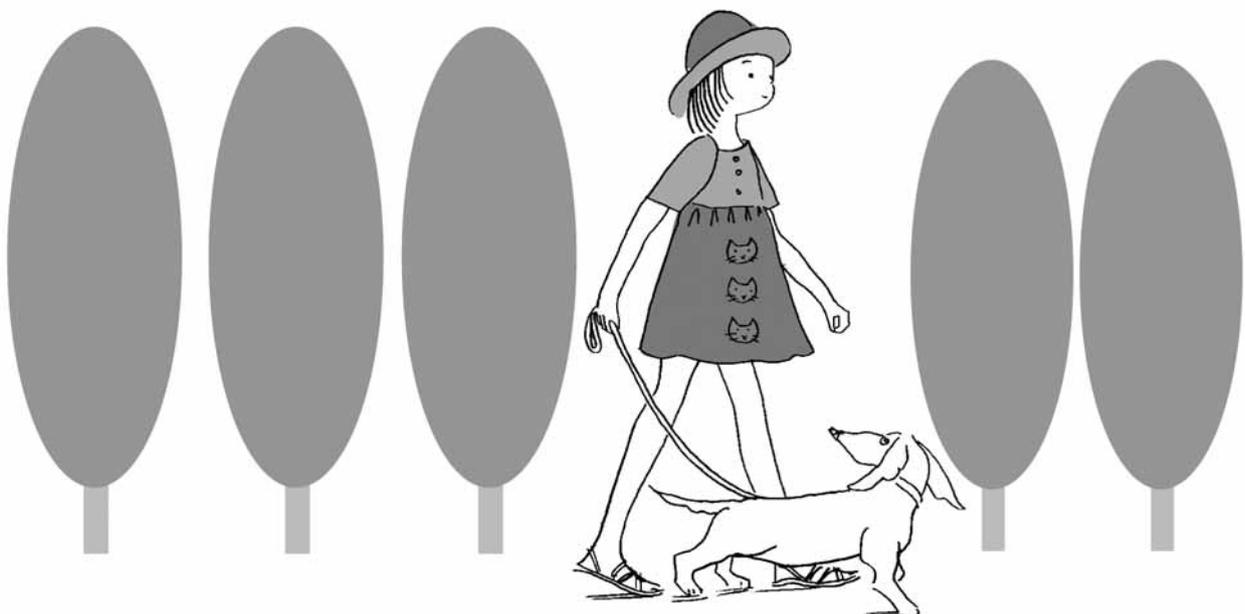


## 2. Zigzag sewing

There are various types of zigzag sewing methods, such as applique and overcasting.



- ◆ Turn the handwheel towards yourself to raise the needle.
- ◆ Turn the pattern selection dial to choose the pattern.
- ◆ Set the fabric and lower the presser foot.
- ◆ Step on the foot controller to begin sewing.

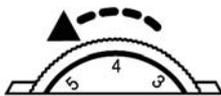


### 3. Adjusting thread tension

Before adjustment, check again that "P.16 [Threading the upper thread]" has been performed correctly.

#### ☆ Adjustment method for upper thread tension ☆

○Upper thread is tight



Turn down the upper thread tension dial.

○Upper thread is loose

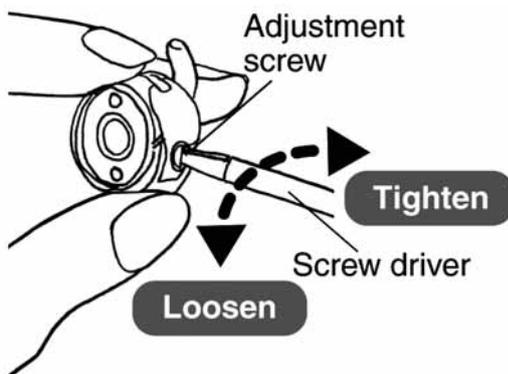


Turn up the upper thread tension dial.

Note : If the tension does not change even when you turn the upper thread tension dial, reset the upper thread.

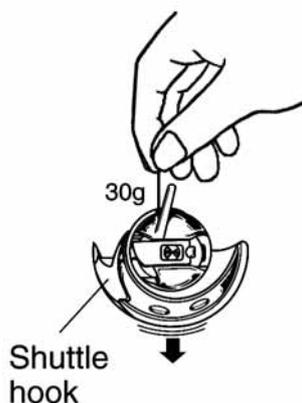
Note : If it does not change with the upper thread, adjust the lower thread.

#### ☆ Adjustment method for lower thread tension ☆



○Adjust by turning the bobbin case adjustment screw with the accessory screw driver.  
Turn right to tighten the tension  
Turn left to loosen the tension

○After adjusting the tension of the bobbin case, suspend bobbin, bobbin case, and shuttle hook all together and hold the bobbin thread as illustrated.  
(Please refer to P.46)



Note:  
When the bobbin case tension is correct: the thread should slide down with light resistance.  
When the bobbin case tension is too tight: the thread does not slide down, or the thread jerks.  
When the bobbin case tension is too loose,: the thread easily slides down with no resistance.

**Straight stitch**

---

Upper thread is tight

Wrong side  
Right side

Upper thread is loose

Wrong side  
Right side

---

**Zigzag sewing**

Upper thread is tight

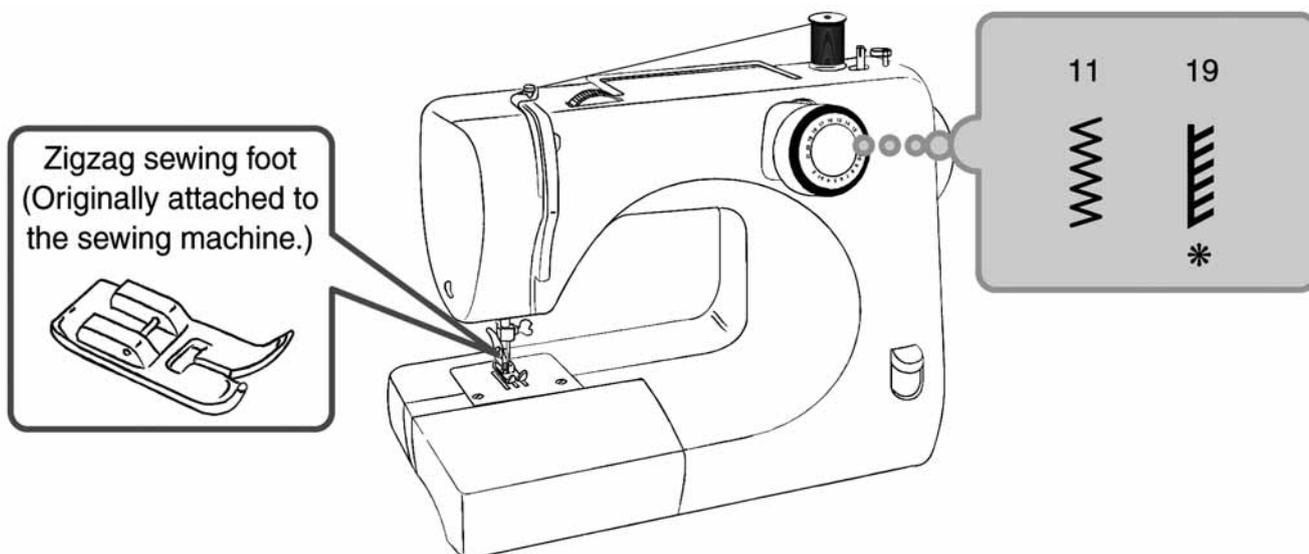
Right side  
Wrong side

Upper thread is loose

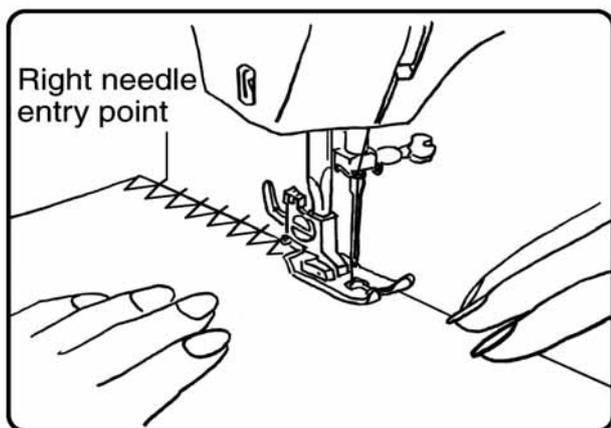
Right side  
Wrong side

## 4. Overcasting

This is a sewing method that prevents unraveling at the edge of the fabric.



\* Is not available for 16/18 stitch model. (refer to P.20 [Application of each stitch pattern])



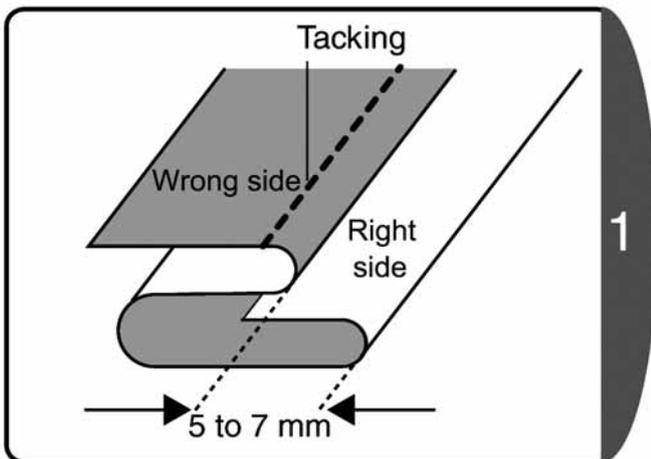
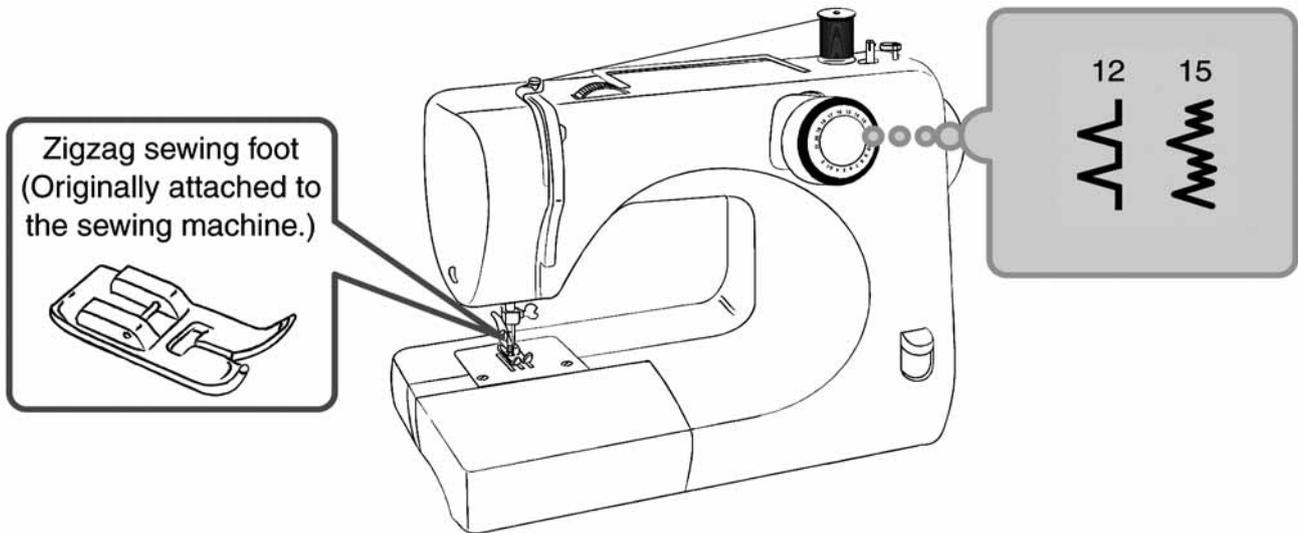
Position the fabric so that the right needle entry point at the edge of the fabric is slightly on the outside.



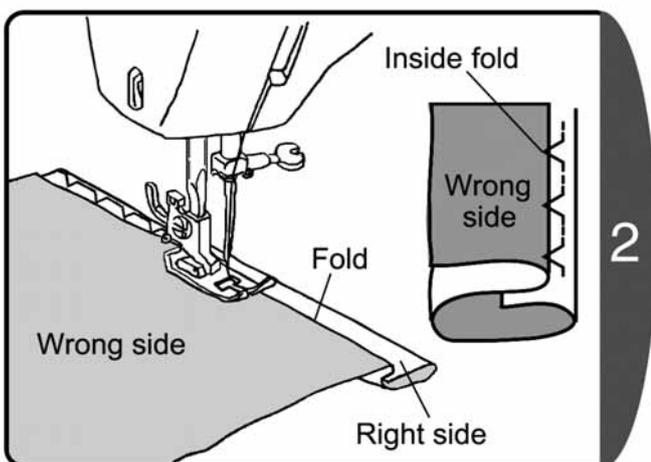
It is easier to sew accurately if an overcasting foot is used. (Optional Accessory).

## 5. Blind hem stitching

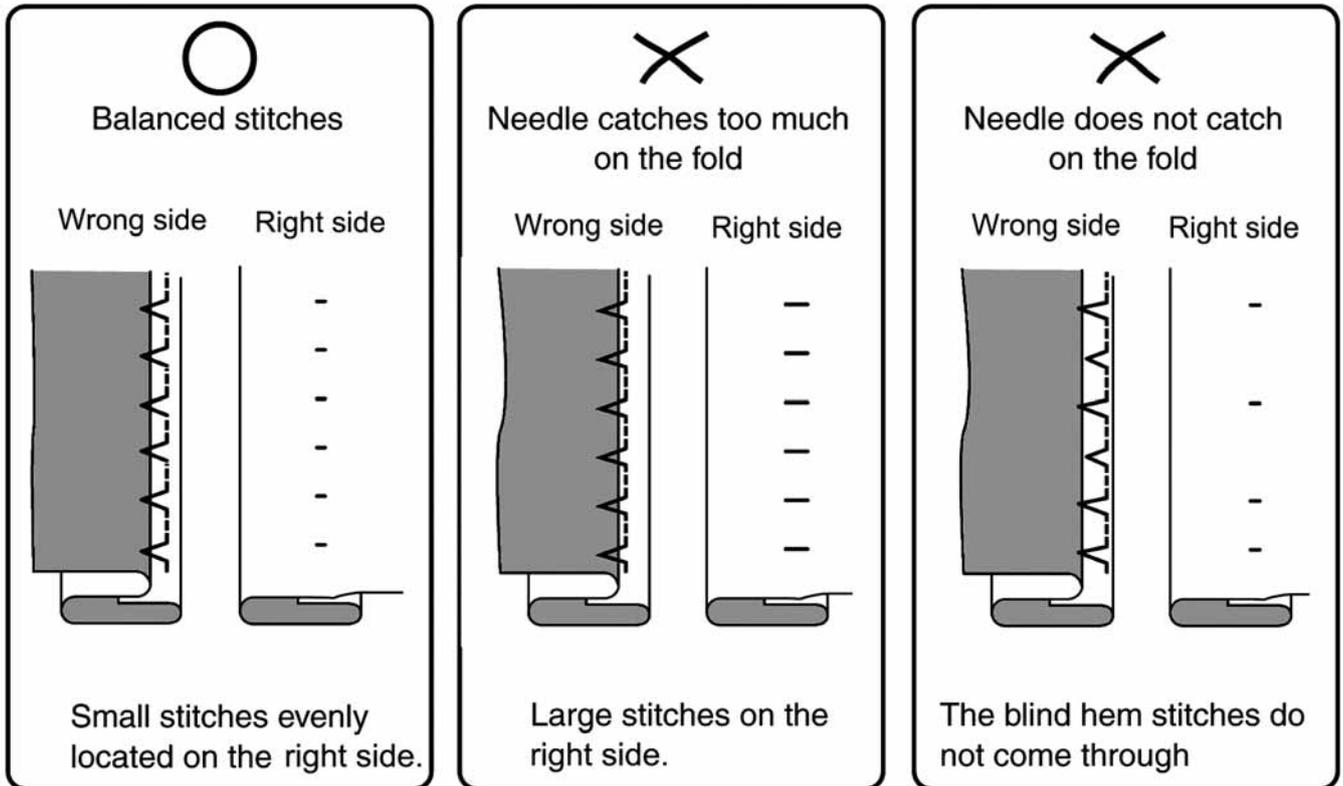
In this sewing method the stitch cannot be seen on the right side of the fabric.



- ◆ Fold back the fabric so that the folded area protrudes by about 5 to 7mm.
- ◆ Iron and tack by hand.



- ◆ Position the fabric so that the needle slightly catches the fold when the needle moves to the left.
- ◆ Lower the presser foot and start sewing. The part of the stitch that catches the fold will be visible from the right side of the fabric.
- ◆ Sew the stitch evenly so that the part of the stitch that catches the fold is not too large or too small.
- ◆ After sewing, pull out the tacking, open out the fabric.



It is easier to sew accurately if a blind stitch foot is used. (Optional Accessory)



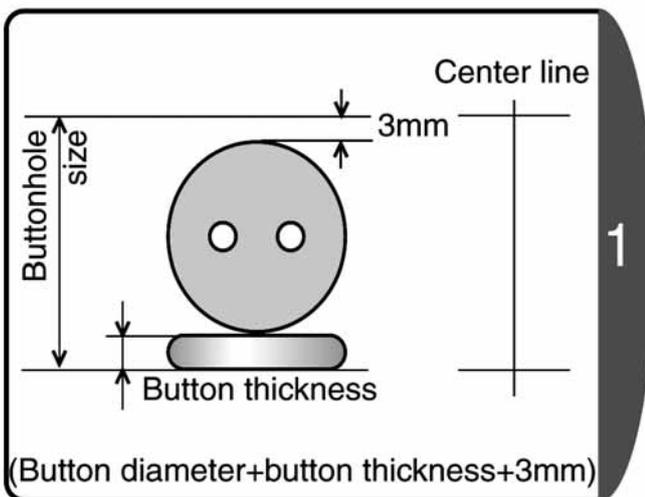
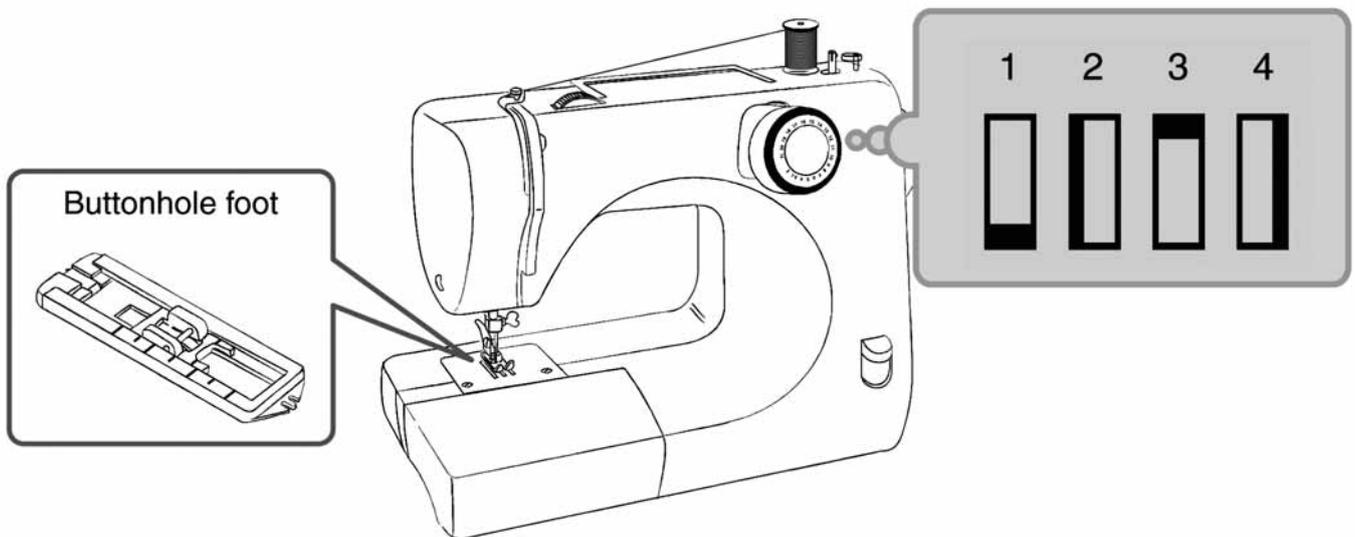
## 6. Buttonhole

### CAUTION



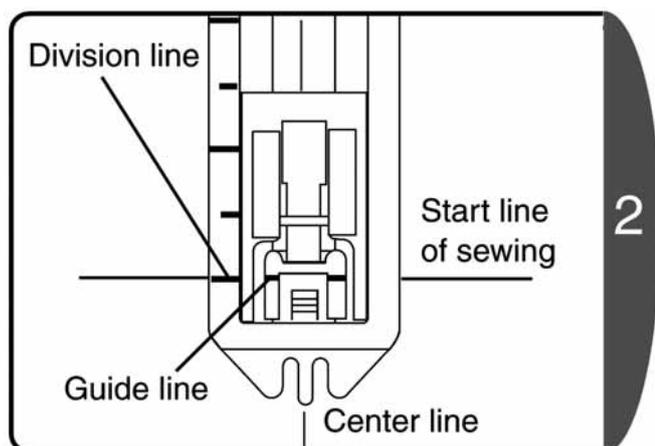
**Before changing the presser foot, remove the power plug from the outlet.**  
Not doing so could cause an injury.

Buttonhole sewing to match the size of the button is possible.  
For stretch fabric or thin fabric, a fusible interlining on the wrong side of the fabric will reinforce the fabric and produce a good finish for the buttonhole.

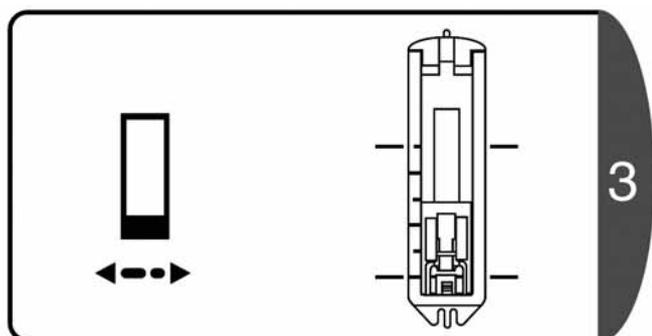


- ◆ Change to the buttonhole foot.  
(refer to P.21 [Changing the presser foot])
- ◆ Set the buttonhole size and mark a line on the fabric.

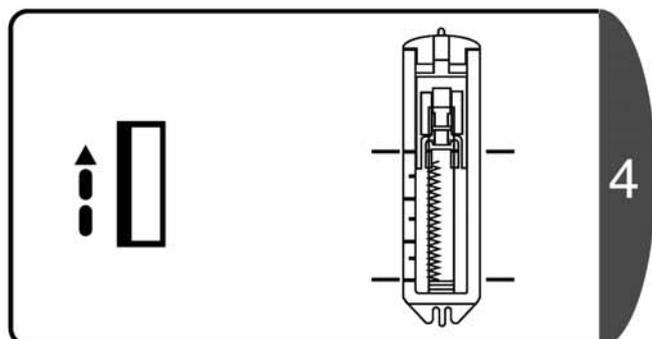
Note : For stretch fabric or thin fabric, insert a fusible interlining on the wrong side of the fabric before sewing.



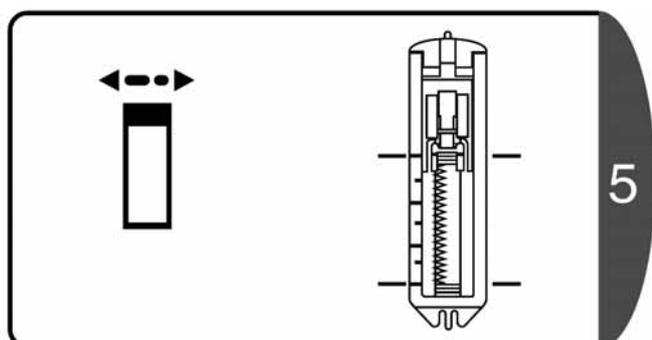
Align the buttonhole foot division line closest to you with the guide line, and lower the presser foot to the start line of sewing on the fabric.



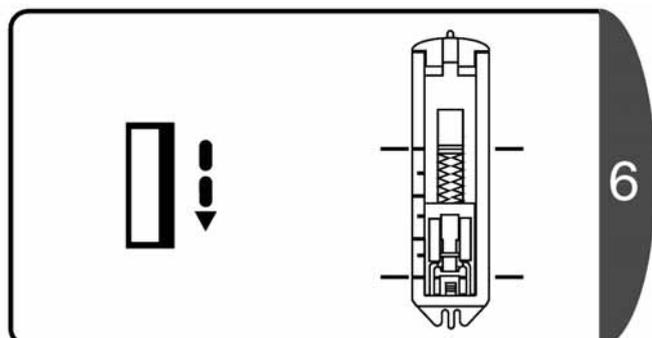
Raise the needle to the highest position, set the pattern dial to "1", and sew 5 to 6 bar-tack stitches.



Raise the needle to the highest position, set the pattern dial to "2", sew the left side and stop at the line marked on the fabric.



Raise the needle to the highest position, set the pattern dial to "3", and sew 5 to 6 bar-tack stitches. "1" and "3" on the pattern selection dial use the same dial position.



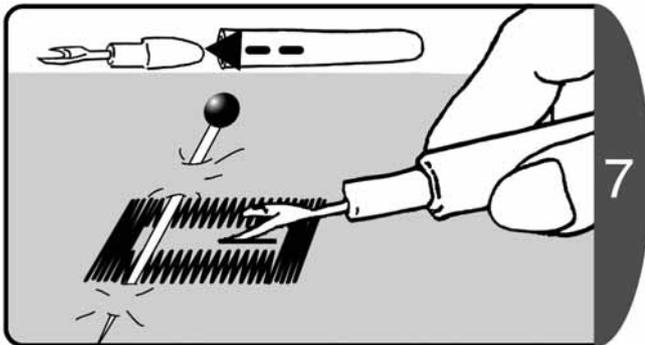
Raise the needle to the highest position, set the pattern dial to "4", sew the right side and stop at the line marked on the fabric.

### ⚠ CAUTION



When using the buttonhole cutter to cut the buttonholes, do not hold the fabric in front of the cutter.

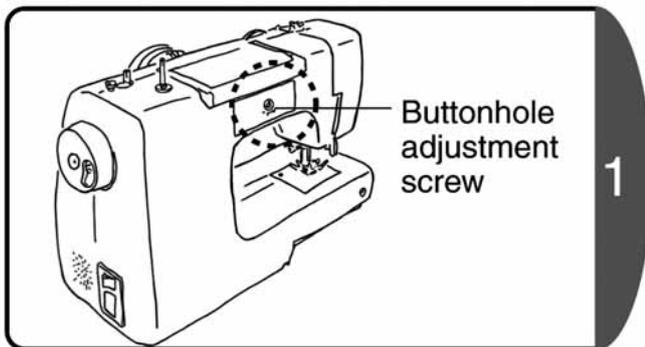
Doing so could cause an injury to your hand.



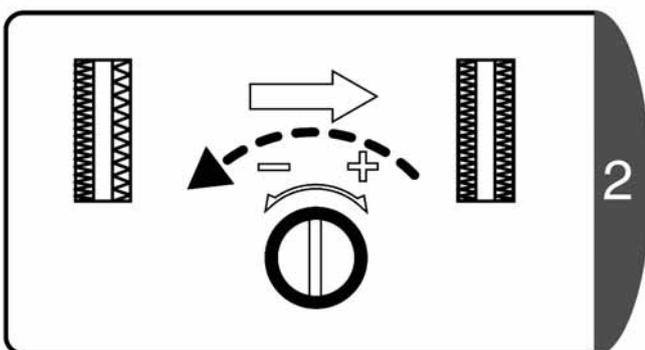
Use the buttonhole cutter to cut the center, making sure not to cut the stitches.

Note : If a marking pin is put in the bar-tack area it helps to prevent excessive cutting with the buttonhole cutter.

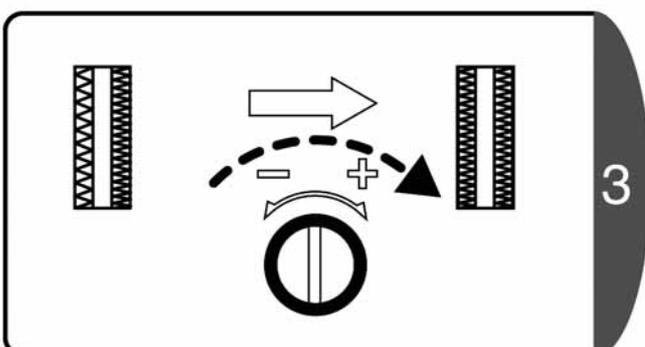
### ☆ Adjustment of buttonhole balance ☆



- ◆ Use the buttonhole adjustment screw to adjust the balance between the stitches. (rear side)
- ◆ Adjust by turning with the needle plate screw driver.



If the stitches are loose on the right side of the buttonhole, turn slightly in the "-" direction.



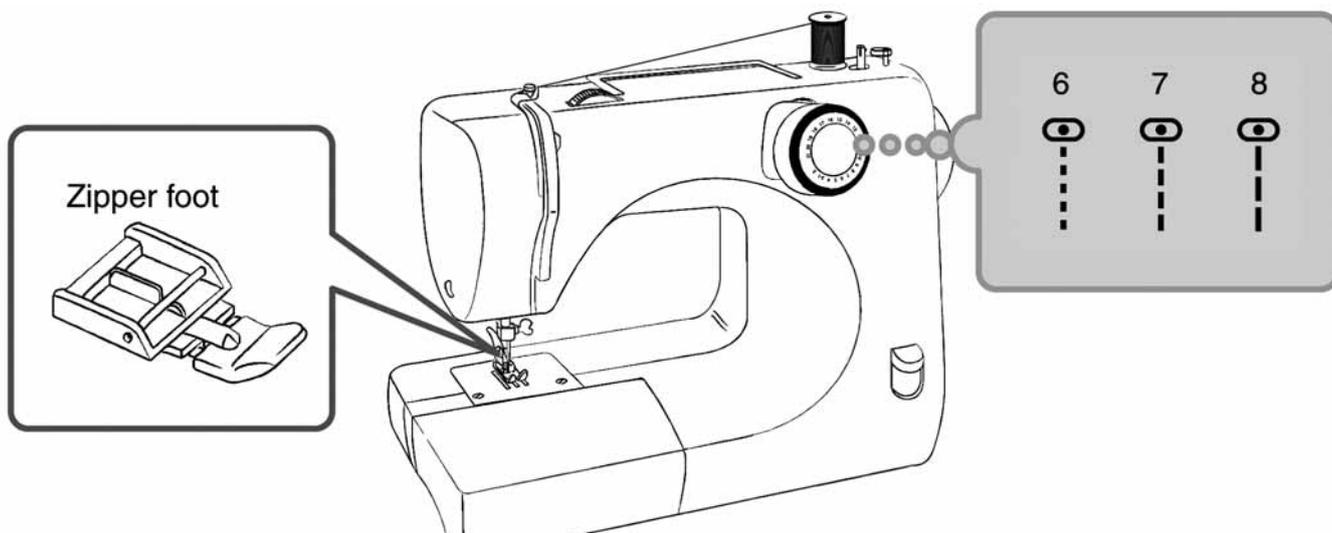
If the stitches are loose on the left side of the buttonhole, turn slightly in the "+" direction.

## 7. Zipper sewing

### ⚠ CAUTION

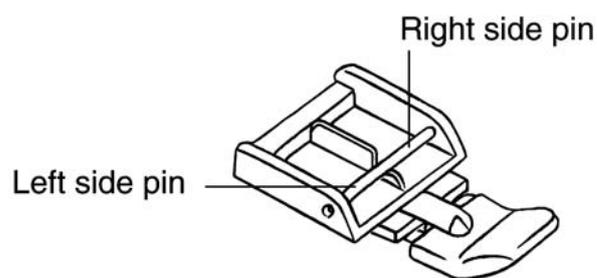
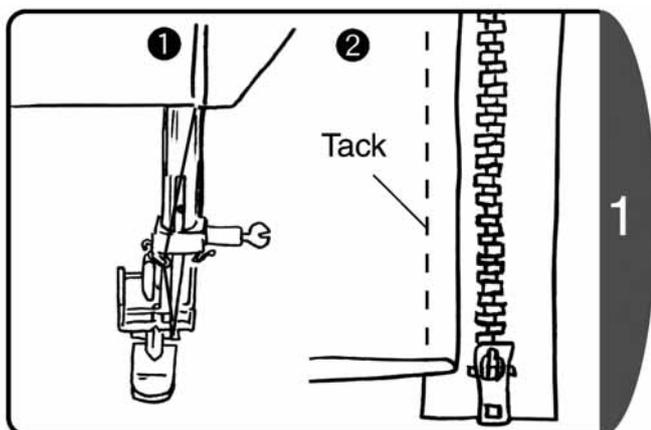


Before changing the presser foot, remove the power plug from the outlet.  
Not doing so could cause an injury.

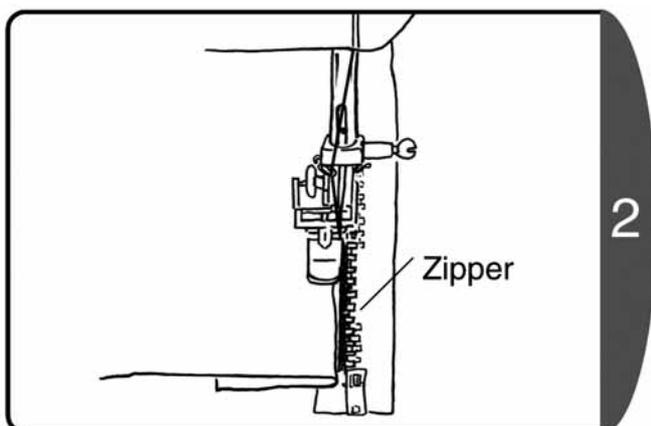


Change to the zipper foot. (refer to P.21 [Changing the presser foot])

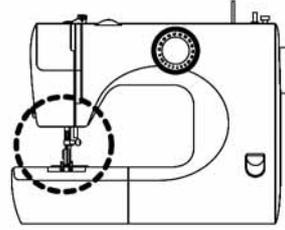
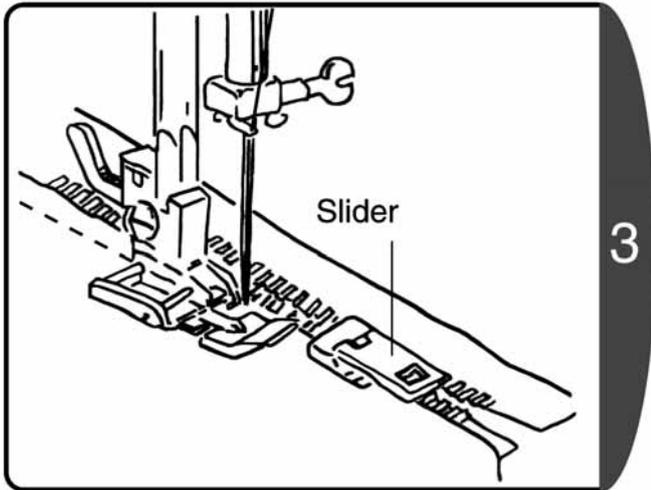
### ★ Sewing the left side of the zipper ★



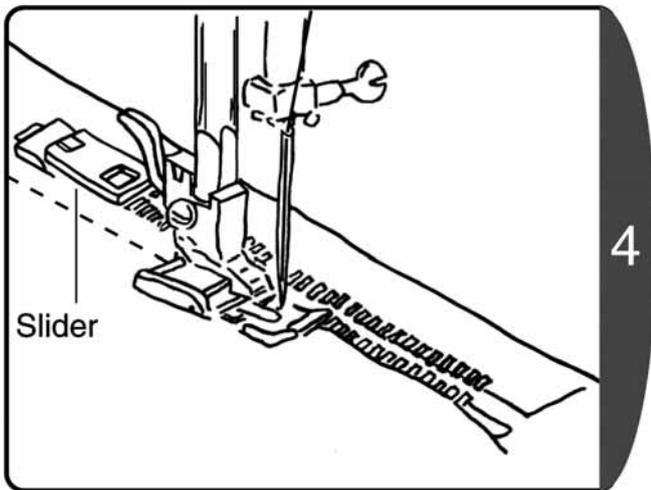
1. Set the zipper foot to the right side pin.
2. Align the zipper and the fabric, and tack.



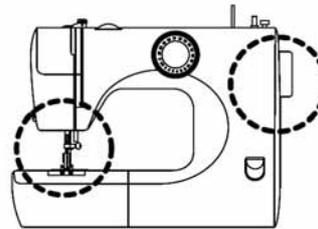
2. Position the fabric so that the zipper is on the right side of the presser foot.



Sew until just before the presser foot makes contact with the slider, and then stop the sewing machine.

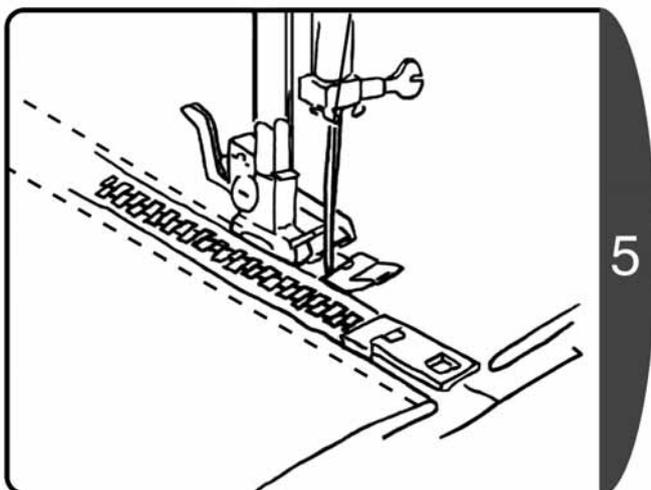


- ♦ Turn the handwheel towards yourself to lower the needle into the fabric.
- ♦ Raise the presser foot lever.
- ♦ Move the slider to the rear of the presser foot, and sew the remainder.



  
**Never  
turn in the  
wrong  
direction!**

★ Sewing the right side of the zipper ★



- ♦ Release the presser foot and set to the left side pin.
- ♦ Sew the right side of the zipper using the same procedures as for the left side.

Note : Sewing in the same direction as the left side will help prevent sewing misalignment.



## 9. Embroidery

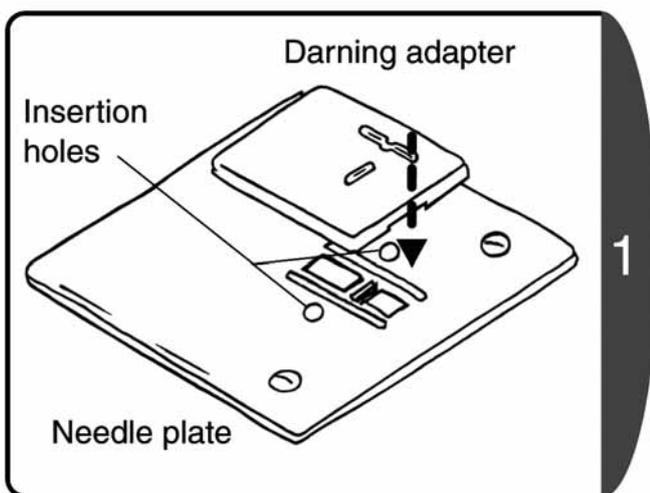
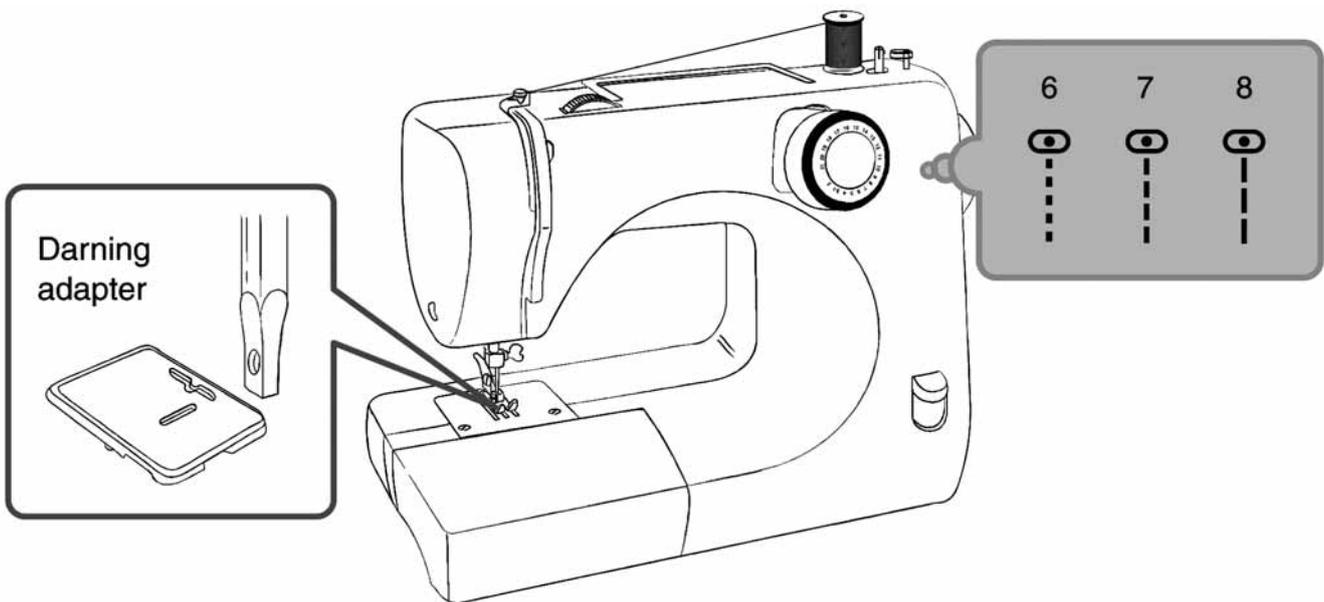
### CAUTION



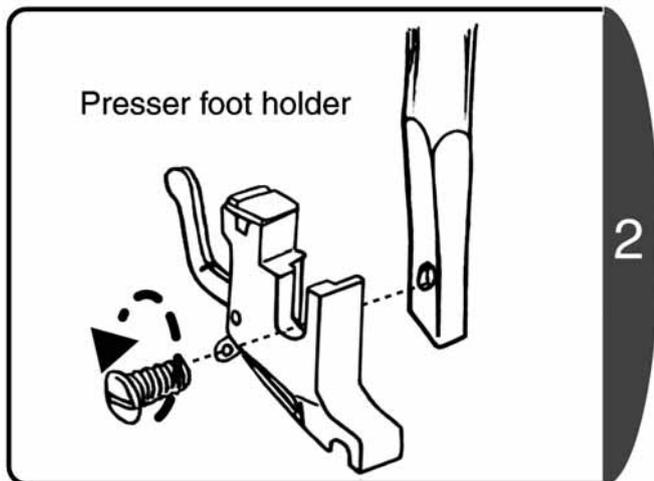
**Before setting the darning adapter, remove the power plug from the outlet.**  
Not doing so could cause an injury.

A free machine embroidery pattern can be created. Trace your design on the material and centre it in an embroidery hoop. Lay stabilizer underneath thin fabric. Install a darning adapter and then sew.

\* For model 7140, DE21 use the drop feed that comes with the sewing machine instead of a darning adapter. (refer to P.45 [Using the drop feed])

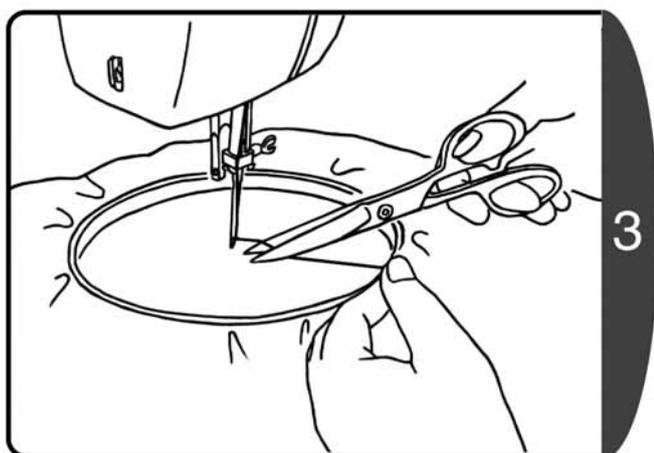


- ◆Align the accessory darning adapter with the insertion holes.
- ◆Insert until there is a locking sound to install to the needle plate.



2

Loosen the presser foot holder screw with the needle plate screw driver to release the holder.



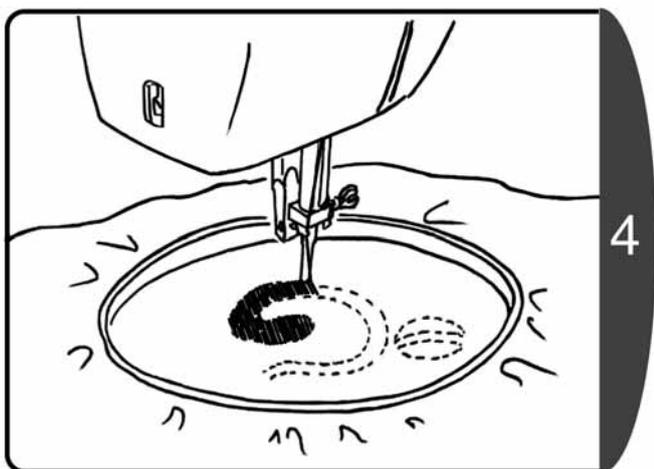
3

♦Firmly stretch the fabric with the design and set in the embroidery hoop.

Note : Purchase a commercially available embroidery hoop.

♦At the start of sewing, prepare by sewing one stitch, pulling the upper thread, and pulling out the lower thread above the fabric.

♦Hold the upper and lower threads then make 2-3 stitches, snip off excess threads.



4

Sew along the outline of the design so there is no clearance between stitches.



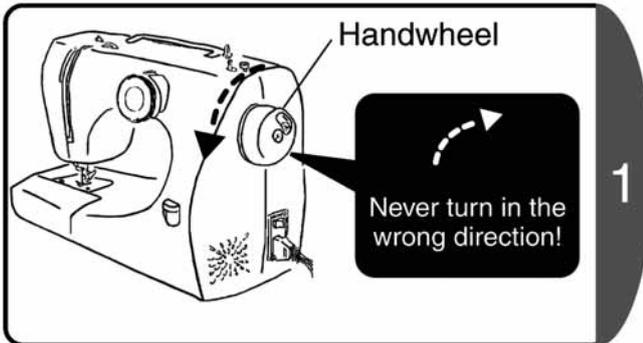
## IV. Special specifications

### 1. Using the needle threader

#### CAUTION

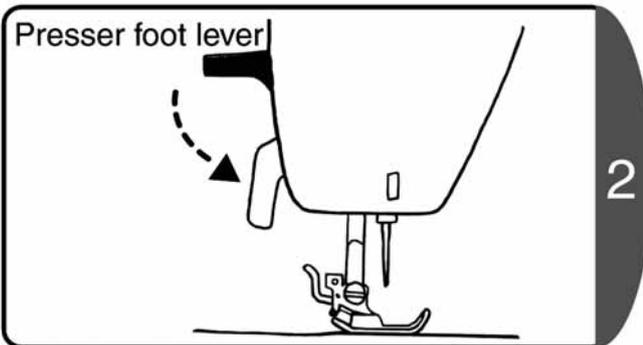


**Before using the needle threader, remove the power plug from the outlet.**  
Not doing so could cause an injury.

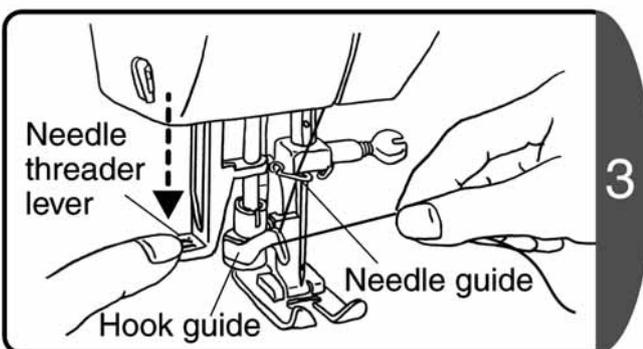


Turn the handwheel towards yourself to raise the needle to the highest position.  
(in the direction of the arrow)

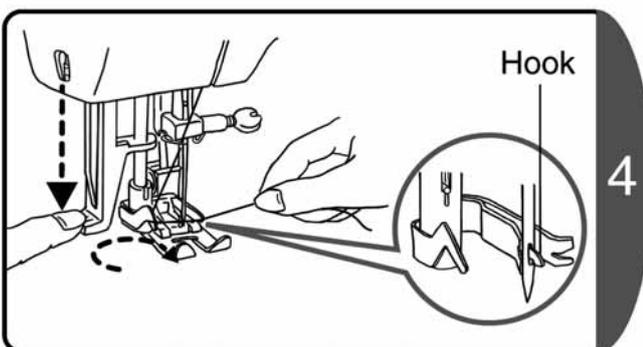
Note : Always turn the handwheel towards yourself. If you turn it in the reverse direction it could tangle the thread.



Lower the presser foot lever.

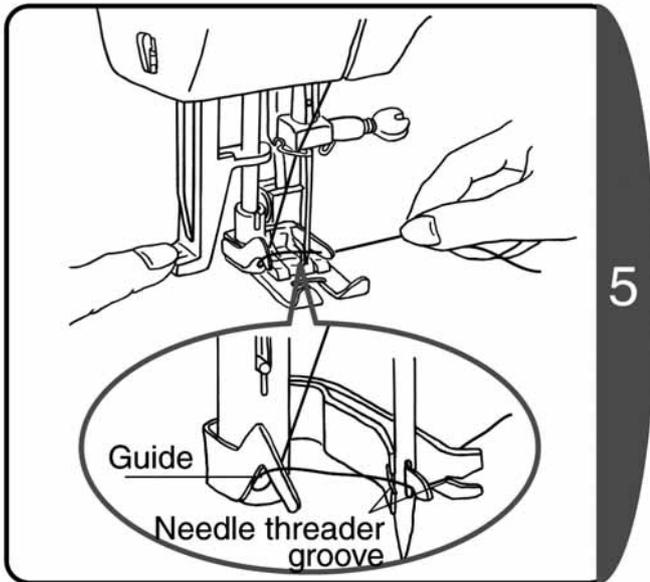


Slightly lower the needle threader lever, and set the thread you are holding in your right hand from the right side of the hook guide.

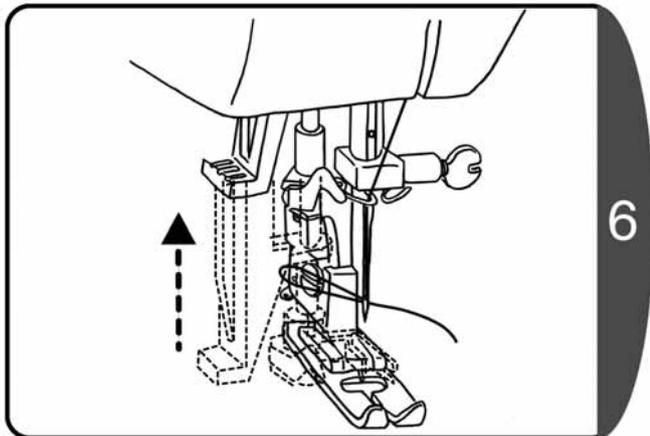


- ♦ Fully press down the needle threader lever to pass the hook through the needle eye.
- ♦ Make sure that the hook is in the needle eye.

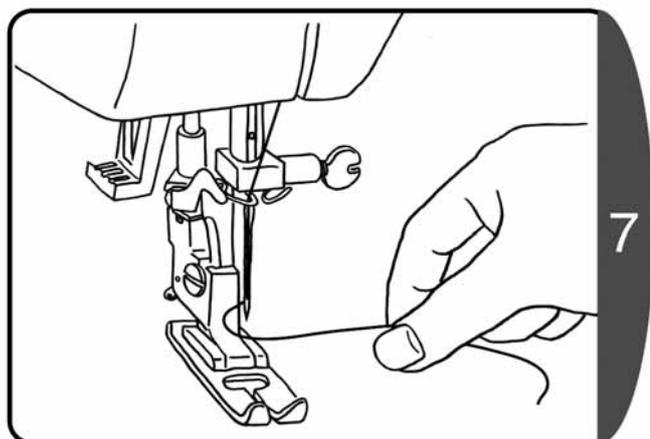
Note : If the hook is bent and cannot pass through the needle eye, straighten it with a screw driver.



Hold the thread set in the hook guide to the right side and insert in the needle threader groove.



While raising the needle threader lever, remove your hand from the thread. The thread is pulled by the hook and is passed through the eye of the needle as shown in the diagram.



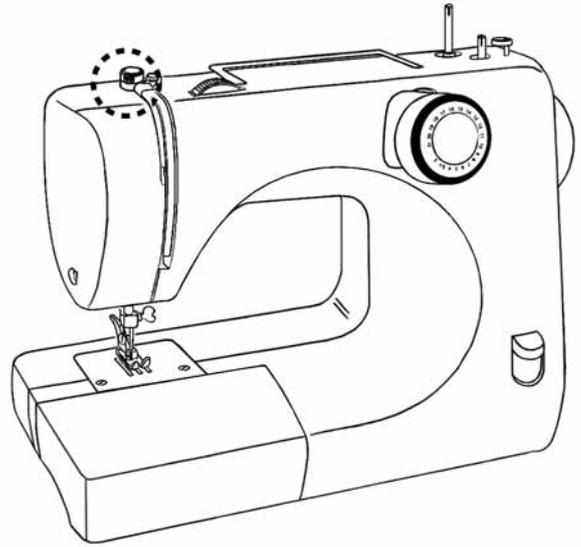
Pull out the loop of the upper thread to the rear.

Note 1 : If the needle is not set correctly, it is not possible to pass the thread through the needle with the needle threader.  
Refer to P.23 [Changing the needle].

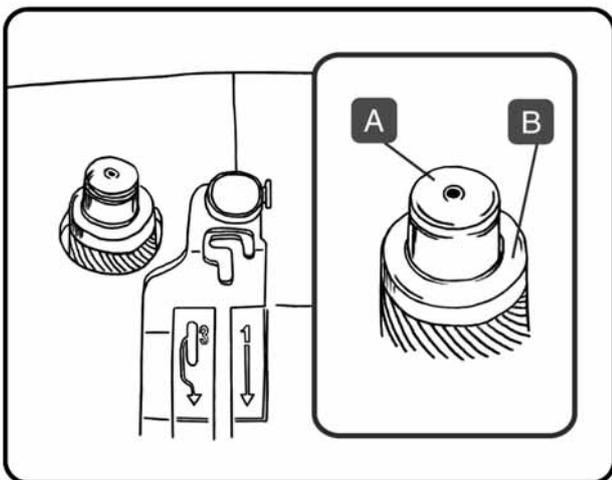
Note 2 : Needle No. 65/9 cannot be used with this needle threader.

## 2. Using the presser foot pressure adjuster

\* The presser foot pressure adjuster may differ from model to model.



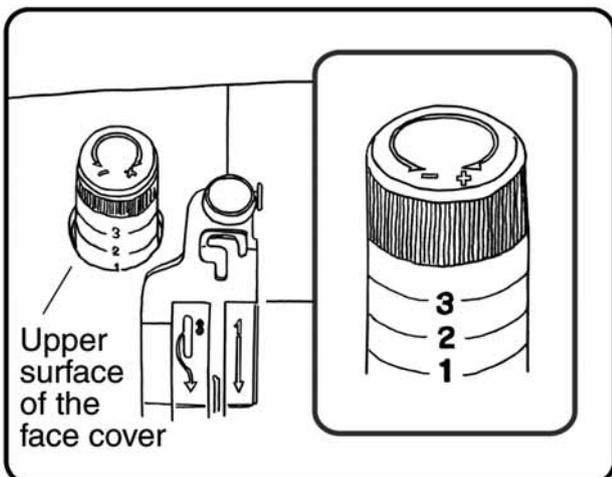
### ☆ Push-down type ☆



<Push-down type>

- Sewing normal fabric and thick fabric:  
For normal straight or zigzag sewing, press down "A".
- Sewing thin fabric:  
Push down outer ring "B" to pop out pin "A".  
Push down pin "A" about half way.

### ☆ Rotary type ☆



<Rotary type>

- Sewing normal fabric and thick fabric:  
Dial: Align "3" with the upper surface of the face cover.
- Sewing thin fabric:  
Dial: Align "2" with the upper surface of the face cover.

### 3. Using the drop feed

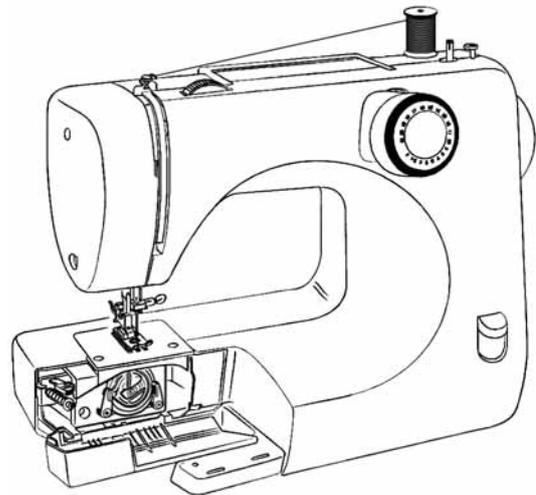
#### CAUTION



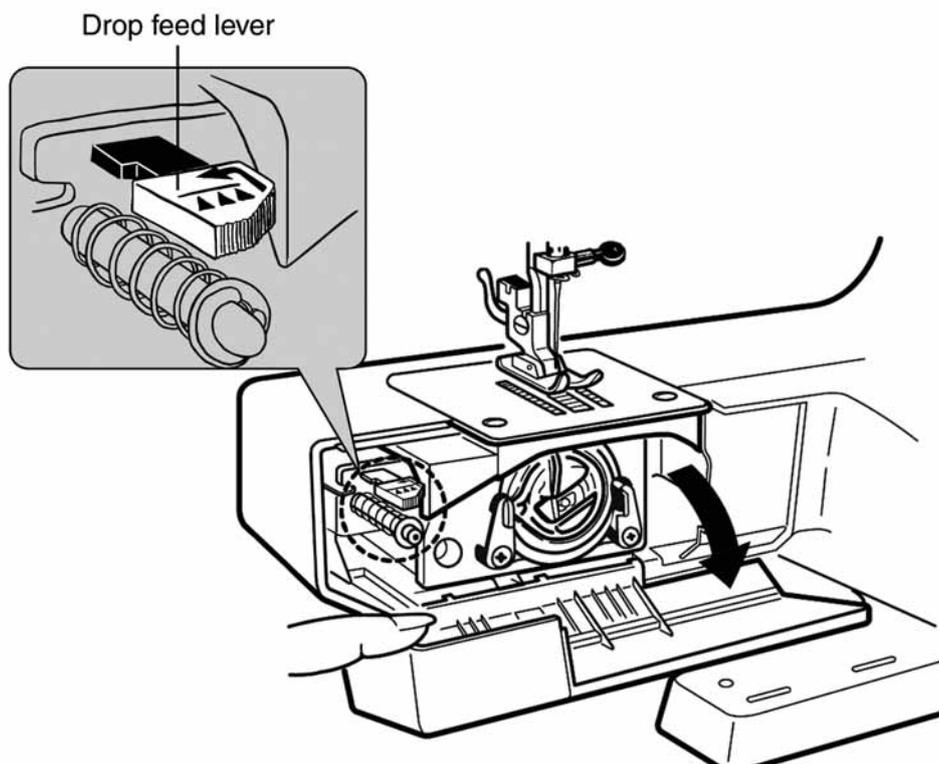
**Before using the drop feed lever, remove the power plug from the outlet.**  
Not doing so could cause an injury.

The feed dog can be lowered when feeding the fabric freely by hand, for example, when embroidering or quilting.

\* Model 7140, DE21 only.

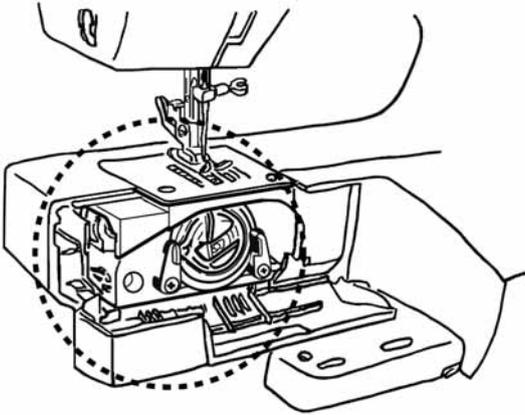


- ◆ Make sure the needle and the presser foot are both in the raised position.
- ◆ To lower the feed dog, push the lever back and to the left, to disengage the feed dog.
- ◆ To raise the feed dog, push the lever to the right to return it to its normal position, turn the handwheel one full turn to engage the feed mechanism.



## V. Maintenance

### 1. Feed dog and hook maintenance



If the sewing machine makes a loud noise or rotates slowly, the oil could have run out, or there could be thread waste or dust in the hook or feed dog. Clean and oil the hook and feed dog.

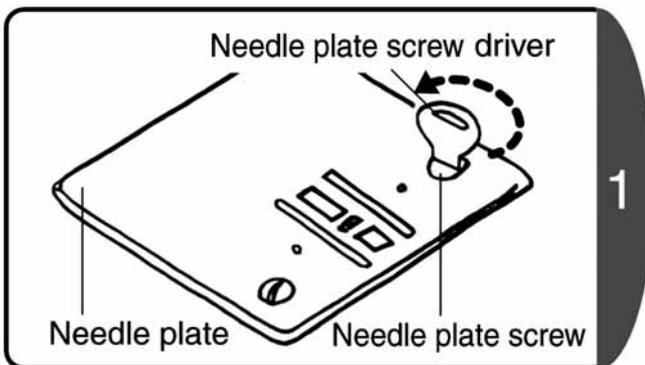
#### CAUTION



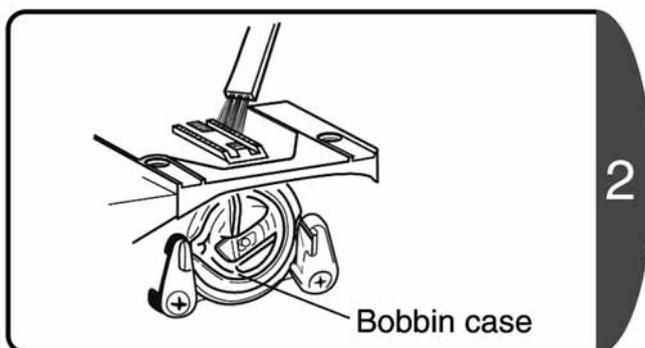
**Before cleaning the hook, remove the power plug from the outlet.**  
Not doing so could cause an injury.

#### Attention

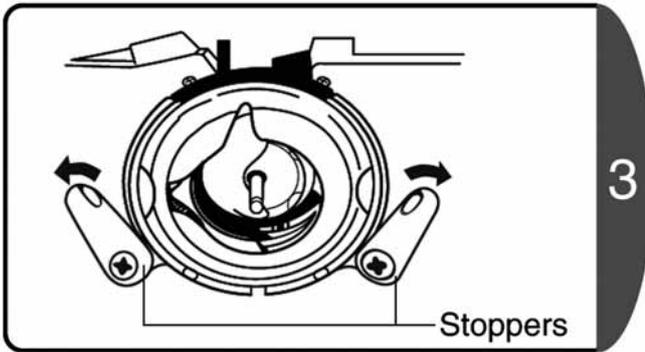
Do not use detergent, bleach, benzine, or thinner chemical cloths. Doing so could cause discoloration or cracking.



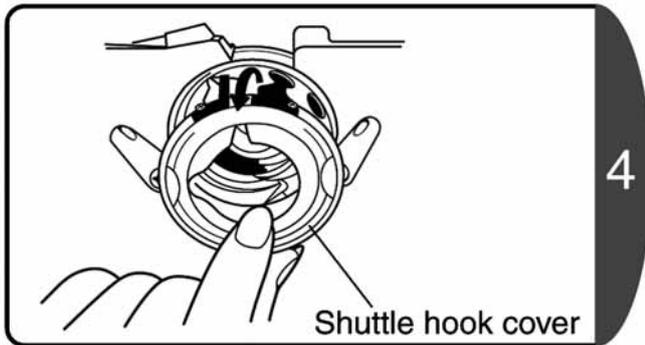
Release the presser foot, and use the needle plate screw driver to release the needle plate.



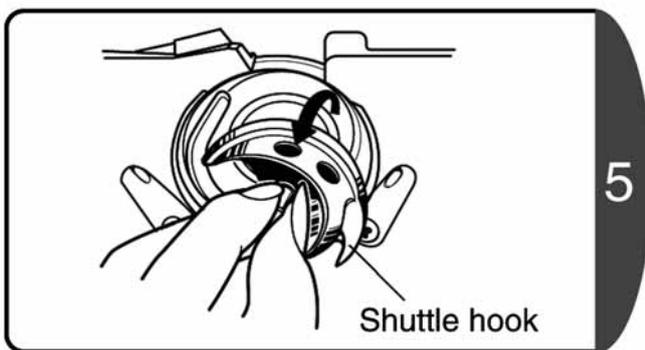
- ◆ Remove thread waste and dust with a brush (Optional accessory).
- ◆ Remove the bobbin case.



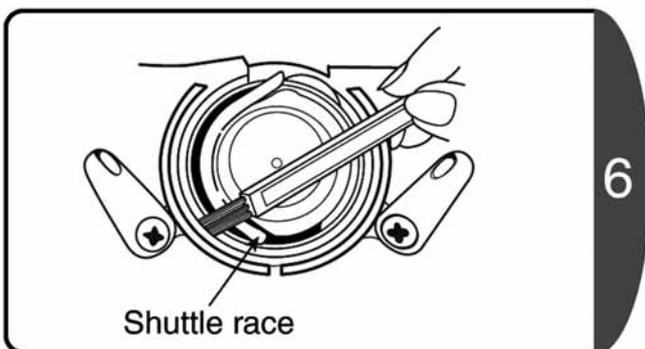
3 Open the left and right stoppers to the outside. (in the direction of the arrow.)



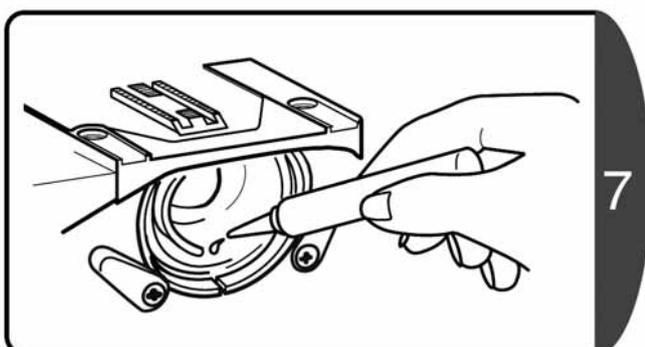
4 Take out the shuttle hook cover.



5 Take out the shuttle hook.



6 Wipe the shuttle race clean with a brush or soft cloth.



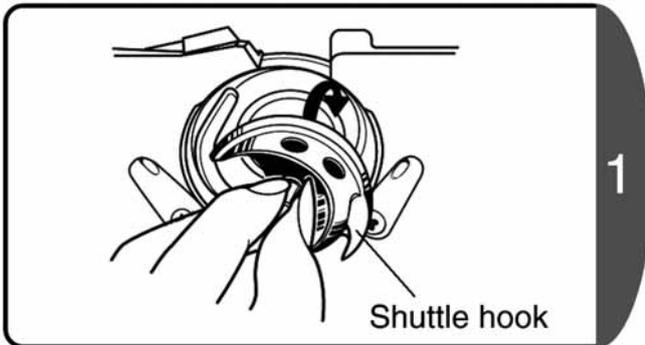
Apply one drop of oil to the shuttle race.

Note 1: If too much oil is applied it could cause trouble such as dirty thread or bobbins, or sewing malfunctions. Keep to this small amount.

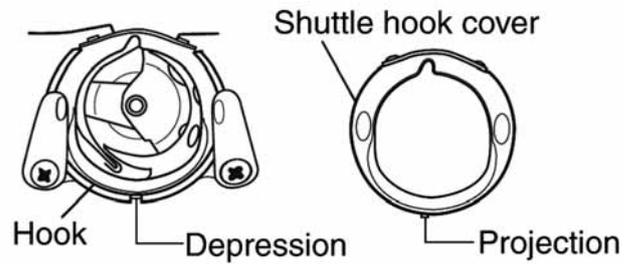
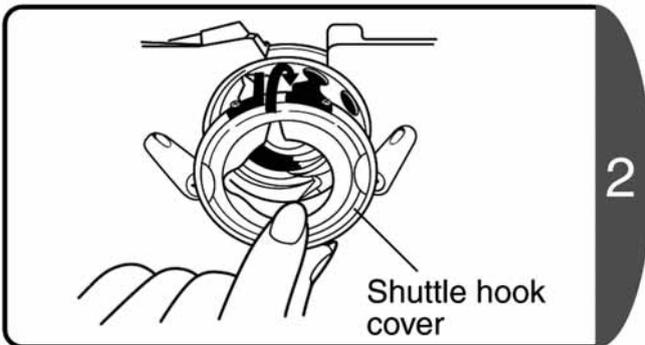
Note 2: Use the oil supplied with your machine or special oil for sewing machines. Other oils could cause mechanical problems.

## 2. Hook installation

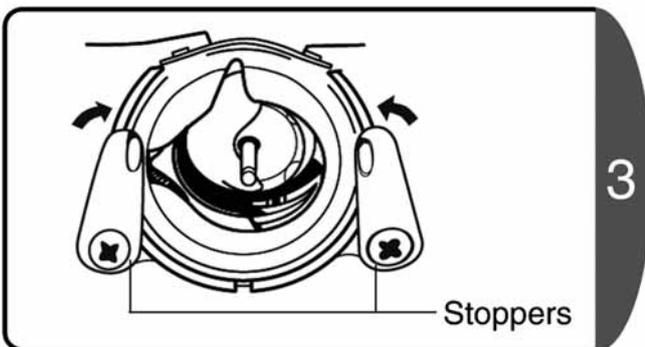
The hook is installed by reversing the removal procedures.



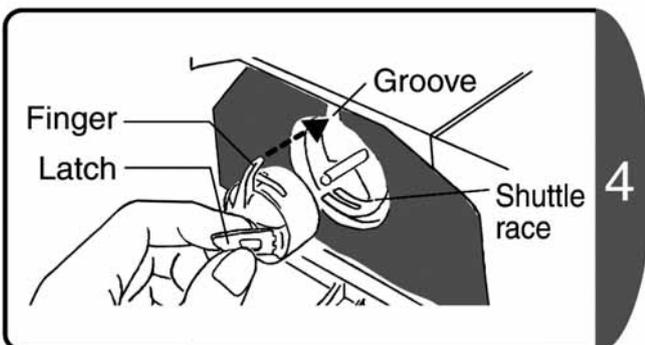
Replace the shuttle hook.



Align the projection of the shuttle hook cover with the depression of the hook, and install the shuttle hook cover.



Close the left and right stoppers to the inside. (in the direction of the arrow)



- ◆ Hold the latch of the bobbin case and insert the bobbin case into the shuttle race.
- ◆ The bobbin case finger must slot into the groove.

### 3. Light bulb replacement

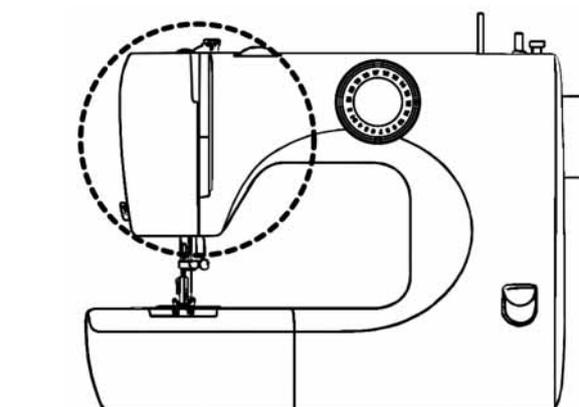
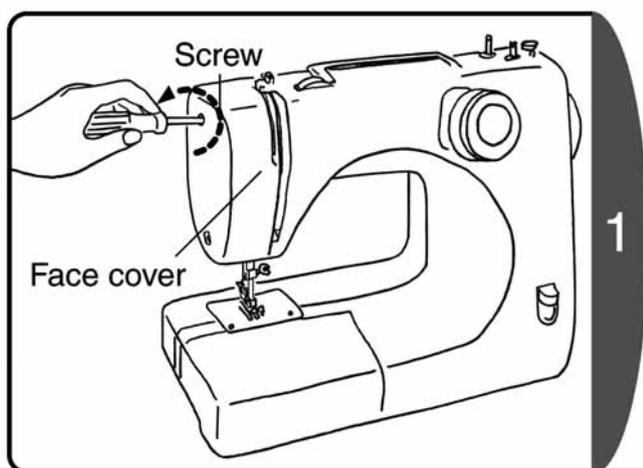
\* Light bulb is not equipped with RS2000B series.

#### WARNING

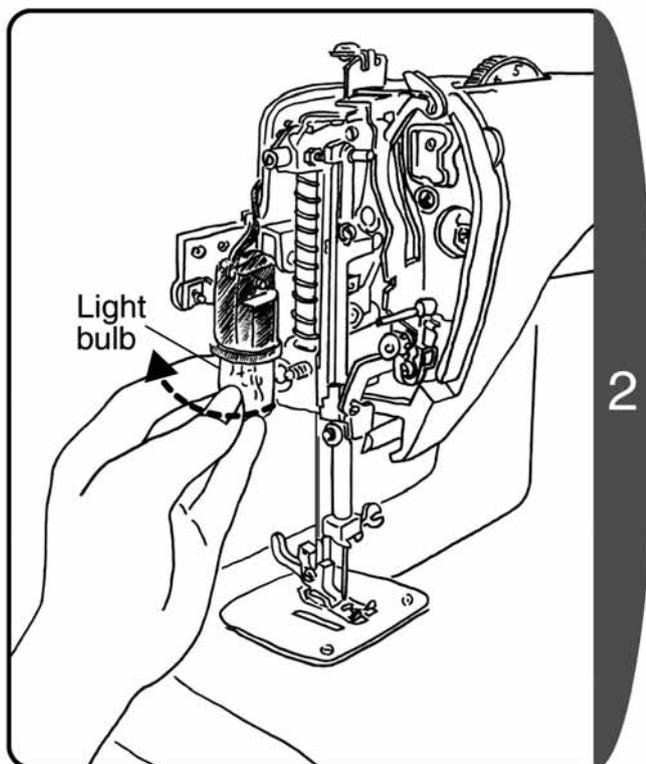


**Before changing the light bulb, remove the power plug from the outlet and wait until the bulb cools.**

Not doing so could cause a burn or electric shock.



Loosen the screw and take off the face cover.



- ♦ Turn the light bulb counterclockwise and remove.
- ♦ Turn the new light bulb clockwise to install.

Note : Use a light bulb with a maximum power of 15W. Always reinstall the face cover after replacing the light bulb.

## 4. Troubleshooting

What is the problem? Check the following possibilities before taking the sewing machine in for repair.

<b>Trouble</b>	<b>Cause</b>	<b>Countermeasure</b>	<b>Page</b>
Does not rotate Does not work	The power plug is not inserted	Connect the power plug correctly	10
	The power switch is off	Turn the power switch on	10
	The declutch knob is in the lower thread winding position	Move the declutch knob back to the original position (needle position)	14
	Thread is tangled in the hook, or there is a broken needle in the hook	Clean the hook	46
Loud noise	The oil has run out	Oil the shuttle race	46
Slow rotation	There is thread waste or dust in the hook or feed dog	Remove thread waste or dust	46
Broken needle	The needle is incorrectly installed	Install the needle correctly	23
	The needle clamp screw is loose	Firmly tighten the screw	23
	The needle is too fine for the fabric	Use a needle appropriate to the fabric	24
	The tension of the upper thread is too tight	Adjust the thread tension	30
	The fabric is being pulled too strongly	Do not pull the fabric strongly	25
	The wrong presser foot is being used	Use a correct presser foot	
	The bobbin case is not in the correct position	Put the bobbin case in the correct position	15
Broken upper thread	The upper and lower thread are not correctly threaded	Thread the upper and lower thread again	15 16
	The thread is tangled in the bobbin case or hook	Remove thread waste from the feed dog and hook	46
	The tension of the upper thread is too tight	Adjust the thread tension	30
	The needle is bent	Replace with a good needle	23
	The point of the needle is damaged		
Broken lower thread	The lower thread is not correctly threaded	Thread the lower thread correctly	15
Fabric not fed through	There is thread waste in the feed dog	Remove thread waste from the feed dog and hook	46
	A darning adapter has been installed	Remove the darning adapter	40
	The pattern selection dial is set to "1" or "3"	Set a correct pattern	

Trouble	Cause	Countermeasure	Page
Missed stitches	The needle is not correctly installed	Install the needle correctly	23
	The needle is bent	Replace with a straight needle	23
	The needle and thread are not appropriate for the fabric	Sew with a needle and thread appropriate to the fabric	24
	The upper thread is not correctly threaded	Thread the upper thread correctly	16
The fabric wrinkles	The tension of the upper thread is too tight	Adjust the thread tension	30
	The upper and lower thread are not correctly threaded	Thread the upper and lower thread again	15 16
	The needle is too thick for the fabric	Use a needle appropriate to the fabric	24
	The needle is damaged	Replace with a good needle	23
Too much lower thread appears on the right side of the fabric	The lower thread is not correctly threaded	Thread the lower thread correctly	15
	The tension of the upper thread is too tight	Adjust the thread tension	30
	The bobbin is not correctly inserted in the bobbin case	Correctly insert the bobbin in the bobbin case	15
Too much upper thread appears on the wrong side of the fabric	The upper thread is not correctly threaded (not inserted in the tension disc)	Thread the upper thread correctly	16
	The tension of the upper thread is too loose	Adjust the thread tension	30
	The upper thread is not correctly threaded (not threaded through the thread guide)	Thread the upper thread correctly	16
Needle threader does not work	The needle position is too low	Turn the handwheel towards yourself to raise the needle to the highest position	42
	Needle No.9 is being used	Use needle No.11 through 16	43
	The needle is not correctly installed	Install the needle correctly	23
	The needle is bent	Replace with a straight needle	23
	The thread is not correctly set in the needle guide	Pass the thread through the needle guide correctly	17

If the above treatments do not solve the problem, contact the service center as described in your warranty.

## 5. Servicing double-insulated products (230 V-240 V)

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means are 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 should only be done by qualified service personnel with knowledge of the system under his or her responsibility. Replacement parts for a double-insulated product must be identical to those parts in the product. The symbol is marked on the double-insulated product.

## VI. Others

### 1. Specifications

Model	RS2000-SDU Type
Hook type	Vertical, oscillating hook
Needle	Home-use sewing machine needle (HA-1)
Bobbin	TOYOTA-exclusive plastic bobbin
Maximum stitch length	5 mm
Maximum stitch width	5 mm
Standard needle position	Center standard, left standard
Sewing machine weight (main unit)	6.3 kg
Sewing machine size	Width: 419 mm Depth: 166 mm Height: 293 mm
Rated voltage	220 to 230 V
Rated frequency	50 Hz
Rated power consumption	70 W
Light bulb	15 W

If you have any queries about this TOYOTA sewing machine, check the warranty for details.

### 2. Recycling

EU ONLY



**DO NOT THROW AWAY!**

**We are committed to the protection of the environment. We strive to minimize the environmental impact of our products by continuously improving product design and our manufacturing methods.**

At end of life please dispose of this product in an environmentally responsible way.

The crossed-out wheeled bin symbol featured above and on the product's data-plate means that this product falls under the scope of the E.U. "Waste Electrical and Electronic Equipment" (WEEE) directive and "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" (ROHS) directive and should not be disposed of with your household waste. At end of life, you must ensure that this product is disposed of in accordance with national and local legislation and that it is sorted as Category 2 "Small Domestic Appliances" WEEE. You may be liable under local and national laws for improper disposal of this product. Please consult the web, or a competent national or local body, for the return and collections systems available to you and the locations of your nearest recycling points.

As an individual you can make a positive impact on reuse, recycling and other forms of recovery of WEEE. This will reduce use of landfill and minimize the environmental impact of the products you use.

Hazardous substances in electronic and electrical products can have a harmful impact on human health and on the environment.



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**679111-CCA10  
(RS2000-SDU)**