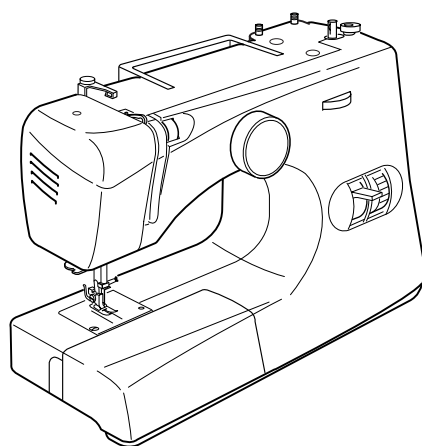


Instruction book





IMPORTANT SAFETY INSTRUCTIONS

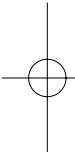
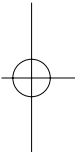
This sewing machine is not a toy. Do not allow children to play with this machine.

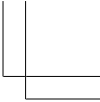
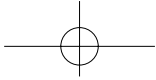
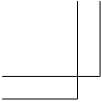
The machine is not intended for use by children or mentally infirm persons without supervision.

This sewing machine is designed and manufactured for household use only.

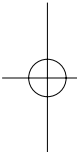
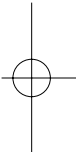
Read all instruction before using this sewing machine.

DANGER — To reduce the risk of electric shock:

- 
- 
1. An appliance should never be left unattended when plugged in.
Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
 2. Always unplug before replacing a sewing machine bulb.
Replace bulb with same type rated 15 watts.
 3. Do not reach for the appliance that has fallen into water.
Unplug immediately.
 4. Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.



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

1. Do not allow children to play with the machine. The machine is not intended for use by children or infirm persons without proper supervision. Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children.
 2. Use this appliance only for its intended use as described in this owner's manual. Use only attachments recommended by the manufacturer as contained in this owner's manual.
 3. Never operate this sewing machine 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.
 4. Never operate the appliance with any air opening blocked. Keep ventilation opening of this sewing machine and foot controller free from accumulation of lint, dust and loosen cloth.
 5. Never drop or insert any object into any opening.
 6. Do not use outdoors.
 7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
 8. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
 9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
 10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
 11. Always use the proper needle plate. The wrong plate can cause the needle to break.
 12. Do not use bent needles.
 13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
 14. Switch this sewing machine off ("O") when making any adjustment in the needle area, such as threading the needle, changing the needle, threading the bobbin or changing the presser foot, and the like.
 15. Always unplug this sewing machine from the electrical outlet when removing covers, lubricating, or when making any other adjustments mentioned in this owner's manual.
- 
- 

SAVE THESE INSTRUCTIONS

The design and specifications are subject to change without a prior notice.



Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance. (European Union only.)

II



Safety instructions

Like any other electrical device, a sewing machine can cause serious, even life-threatening injuries. To avoid this, and in order to work safely:

- Before initial use of your sewing machine, read these operating instructions thoroughly.
- Keep the operating instructions in a suitable place near the machine. When passing the appliance on to others, always enclose the operating instructions.
- Always disconnect the power supply when leaving the machine unattended. This will prevent the risk of accidents if the machine is switched on accidentally.
- First pull the power plug before changing the bulb or performing maintenance work on the machine.
This will prevent possibly life-threatening electric shocks.
- Do not remove the plug from the socket by pulling on the cable. Always grip the plug and not the cable when pulling out the power plug.
- Only use the sewing machine in dry rooms.
- In case of any visible damage on the machine, the foot switch or the power cable: Have the damage repaired by Customer Service before using the sewing machine again.
- Never let children or elderly persons handle the machine unsupervised because they may not properly appreciate the possible dangers. Keep electrical appliances outside the reach of children.
- Never use the machine when the ventilation apertures are blocked. Keep the ventilation apertures of the machine and the foot switch free from fluff, dust and waste material.
- Always switch off the machine when making any adjustment in the needle area such as thread needle, changing needle, threading bobbin or changing presser foot, and the like.

Warning against injuries and material damages:

According to legislation, you as the user of an electrical appliance are responsible for preventing possible accidents through safety-conscious behaviour:

- Keep your work space tidy. An untidy workplace can lead to accidents.
- Provide adequate lighting when working!
- Do not wear loose clothing or jewellery, as these can be caught in the moving parts. You should also wear a hair net if you have long hair.
- Avoid abnormal posture. Remain steady and in a well-balanced position at all times.
- Be alert! Pay attention to what you are doing. Always take a rational approach to your work. Never work with the sewing machine if you are unable to concentrate or if you are feeling unwell!

If accidents occur as a result of handling the machine with insufficient care, or failure to follow the safety instructions in this manual, then the manufacturer cannot accept liability.

Please use for your sewing machine the LISHUI FOUNDER foot controller, type KD-2902.
Power rating: ~220 - 240V, 50Hz
Wattage rating: 100W
Protection Class : II

The sound pressure level under normal operating conditions is 78dB (A).

If the supply cord that fixed with foot controller is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard.

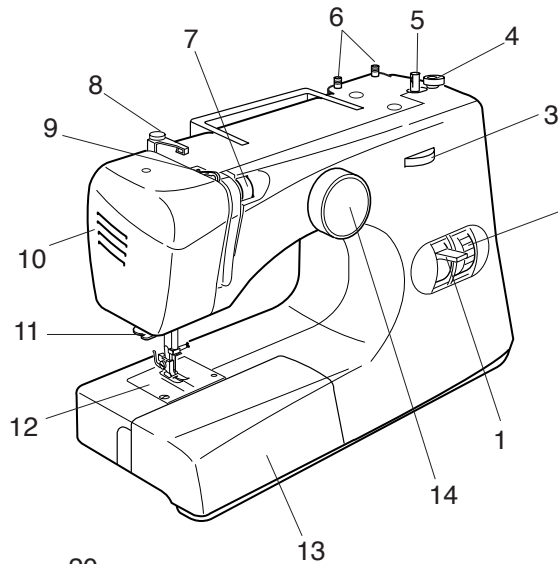
This equipment is marked with the recycling symbol. It means that at the end of the life of the equipment you must dispose of it separately at an appropriate collection point and not place it in the normal domestic unsorted waste stream. This will benefit the environment for all. (European Union only)



TABLE OF CONTENTS

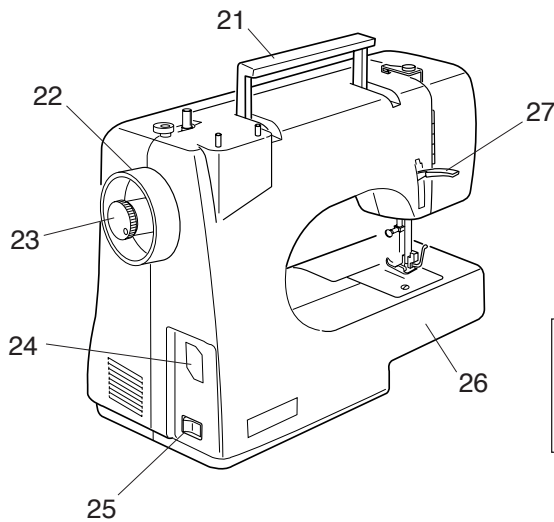
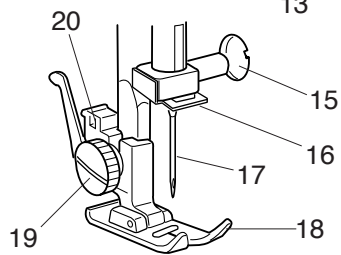
1. ESSENTIAL PARTS	2-3
Name of Parts	2
Standard Accessories	3
2. GETTING READY TO SEW	4-18
Connecting the Machine to the Power Supply	4
Foot Control	5
Extension Table	6
Accessories Storage Box	6
Levelling the Machine	7
Presser Foot Lifter	8
To Attach and Remove the Presser Foot	8
Removing or Inserting the Bobbin Case	9
Removing Bobbin	9
Setting Spool Pins	10
Winding the Bobbin	10
Threading Bobbin Case	11
Threading the Machine	12
Drawing Up Bobbin Thread	13
Balancing Needle Thread Tension	14
Changing Needle	15
To check the needle	15
To Drop or Raise the Feed Dogs	16
Reverse Stitch Button	16
Pattern Selector Dial	17
Stitch Length Dial	17
Stitch Width Dial	17
Stich Reference Chart	18
3. BASIC SEWING	19-20
Straight Stitch	19-20
Quilting Guide	20
4. UTILITY STITCHES	21-29
Basic Zigzag	21
Overcasting	21
Mending	22
Blind Stitch	22-23
Zipper Sewing	24-26
Buttonhole	27-28
Corded Buttonhole	29
5. DECORATIVE STITCHES	30-31
Embroidery	30
Satin Stitch	30
Strech Stitches	31
6. CARE OF YOUR MACHINE	32-36
Cleaning the Feed Dog	32
Dismantling and Assembling Hook Race Unit	33
Sewing Light	34
Oiling	34
Troubleshooting	35-36

1. ESSENTIAL PARTS



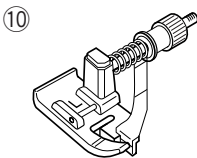
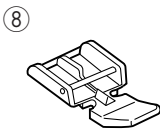
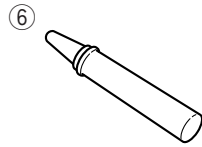
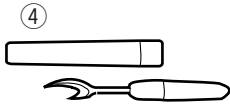
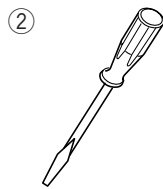
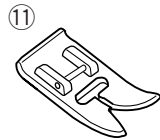
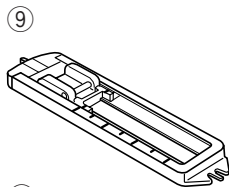
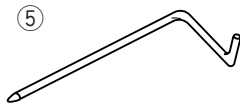
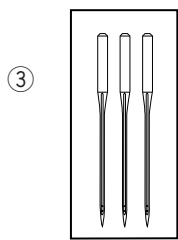
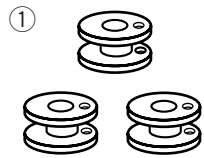
Name of Parts

- ① Reverse stitch button
- ② Stitch length dial
- ③ Stitch width dial
- ④ Bobbin winder stopper
- ⑤ Bobbin winder spindle
- ⑥ Spool pins
- ⑦ Thread tension dial
- ⑧ Bobbin winder thread guide
- ⑨ Thread take-up lever
- ⑩ Face plate
- ⑪ Thread cutter
- ⑫ Needle plate
- ⑬ Extension table
- ⑭ Pattern selector dial
- ⑮ Needle clamp screw
- ⑯ Thread guide
- ⑰ Needle
- ⑱ Presser foot
- ⑲ Thumb screw
- ⑳ Presser foot holder
- ㉑ Carrying handle
- ㉒ Handwheel
- ㉓ Stop motion knob
- ㉔ Machine socket
- ㉕ Power switch
- ㉖ Free arm
- ㉗ Presser foot lifter



Note:

The specifications are subject to change without prior notice.



Standard Accessories

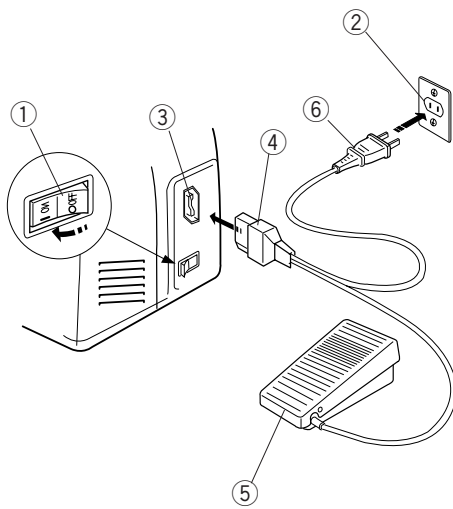
- ① Bobbins
- ② Screwdriver
- ③ Needle set
- ④ Seam ripper / buttonhole opener
- ⑤ Quilting guide
- ⑥ Machine oil
- ⑦ Felt
- ⑧ Zipper foot
- ⑨ Buttonhole foot
- ⑩ Blind hem foot
- ⑪ Zigzag foot (set on the machine)

2. GETTING READY TO SEW

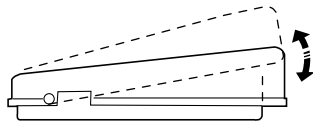
Connecting the Machine to the Power Supply

Before connecting the power cord, make sure the voltage and frequency shown on the machine conform to your electrical power.

1. Turn off the power switch.
2. Insert the machine plug into the machine socket.
3. Insert the power supply plug into the outlet .
4. Turn on the power switch to turn on the power and sewing light.



- ① Power switch
- ② Outlet
- ③ Machine socket
- ④ Machine plug
- ⑤ Foot control
- ⑥ Power supply plug



Foot Control

Sewing speed can be varied by the foot control.

The harder you press on the control, the faster the machine runs.



WARNING:

While in operation, always keep your eyes on the sewing area, and do not touch any moving parts such as the thread take-up lever, handwheel or needle.

Always turn off the power switch and unplug from the power supply:

- when leaving the machine unattended.
- when attaching or removing parts.
- when cleaning the machine.

Do not place anything on the foot control, otherwise the machine will run intermittently.

Operating Instructions:

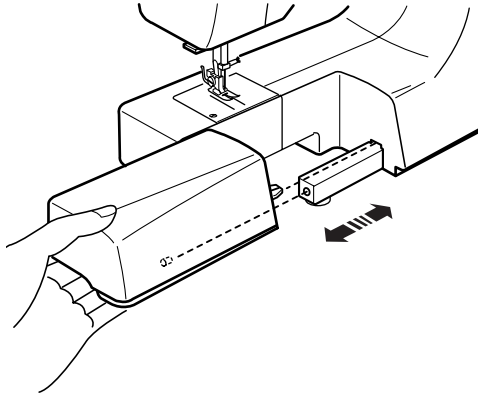
The symbol "O" of a switch indicates the "off" position of a switch.

For an appliance with a polarized plug (one blade wider than the other):

To reduce the risk of electrical shock, this plug is intended to fit in a polarized outlet only one way.

If it 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.

The foot controller Model KD-1902 (USA and Canada market) or KD-2902 (230V, Europe) is used with the sewing machine. Model Sew Simple 113.



Extension Table

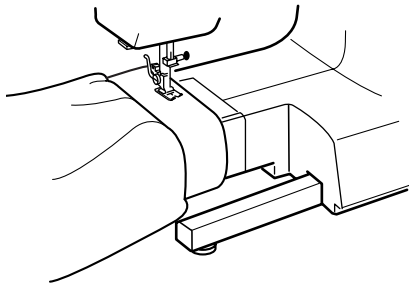
The extension table provides added sewing surface and can be easily removed for free arm sewing.

Detaching the table:

Pull the table away from the machine.

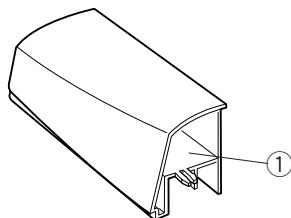
Attaching the table:

Push the extension table until it snaps into the machine.



•Advantages and uses of free arm sewing:

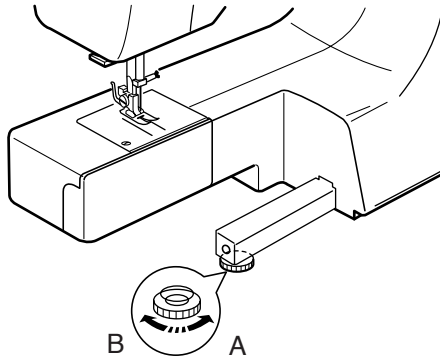
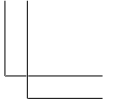
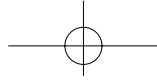
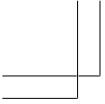
- Avoid fabric bunching around the needle when bartacking to reinforce pockets, plackets and waistlines.
- For stitching sleeves, waistbands, pant legs or any circular garment area
- For darning socks or mending knees, elbows or areas of wear in children's clothes



Accessories Storage Box

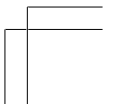
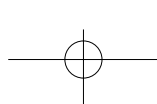
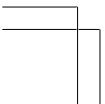
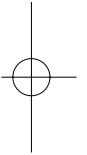
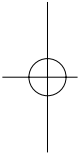
Sewing accessories are conveniently located in the extension table.

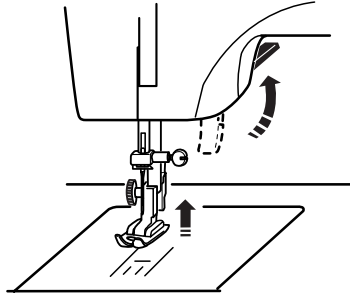
- ① Accessories storage box



Levelling the Machine

Turn the adjusting foot to adjust its height so the machine sits stable, without wobbling.

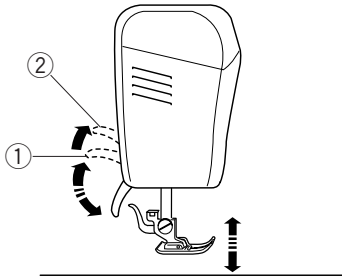




Presser Foot Lifter

The presser foot lifter raises and lowers your presser foot.

You can raise it about 0.6 cm (1/4") higher than the normal up position for easy removal of the presser foot or to help you to place heavy fabric under the foot.



- ① Normal up position
- ② Highest position

To Attach and Remove the Presser Foot



CAUTION:

Turn off the power switch when changing a presser foot.

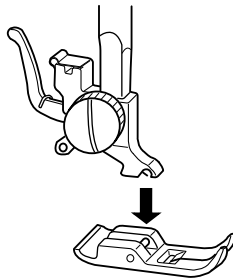
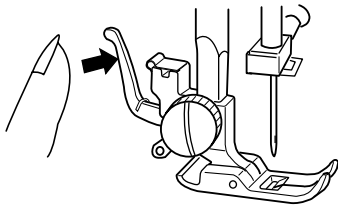
To remove:

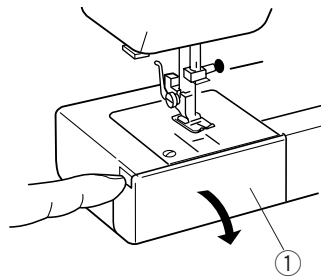
Turn the handwheel toward you to raise the needle to its highest position.
Raise the presser foot.

Press the lever on the back of the foot holder.
The presser foot will drop off.

To attach:

Place the presser foot so the pin on the foot lies just under the groove of the foot holder.
Lower the foot holder to lock the foot in place.

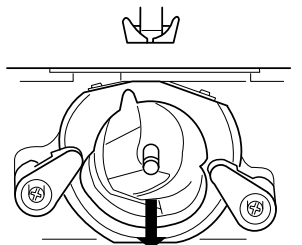




Removing or Inserting the Bobbin Case

Open the hook cover.

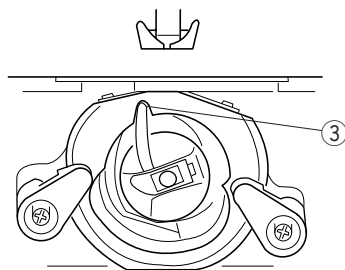
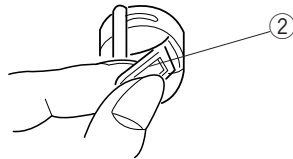
① Hook cover



Raise the needle by turning the handwheel toward you.

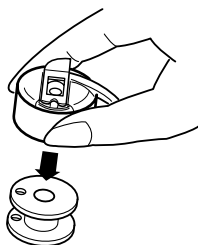
Take out the bobbin case by holding the latch.

② Latch



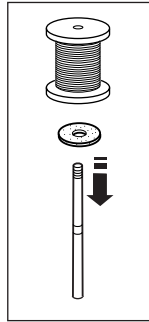
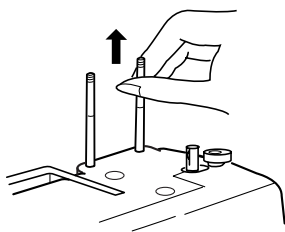
When inserting the bobbin case, place the horn into the recess of the hook race.

③ Horn



Removing Bobbin

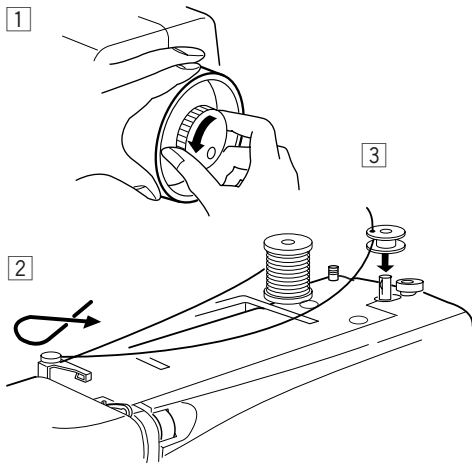
Release the latch and the bobbin will fall out easily.



Setting Spool Pins

The spool pins are used for holding the spool of thread in order to feed thread to the machine.

To use, pull up the spool pin. Push down for storage.



Winding the Bobbin

1 Release stop motion knob by turning it counterclockwise.

2 Draw the thread from spool. Guide the thread around the bobbin winder thread guide.

3 Insert the thread through the hole in the bobbin from the inside to the outside.

Put the bobbin on the bobbin winder spindle.

4 Push it to the right.

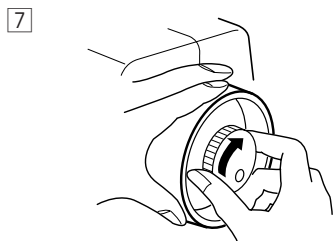
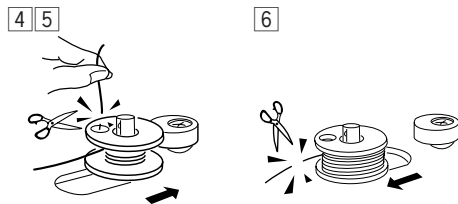
5 With the free end of the thread held in your hand, depress the foot control. Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin.

6 Depress the foot control again.

When the bobbin is fully wound, stop the machine.

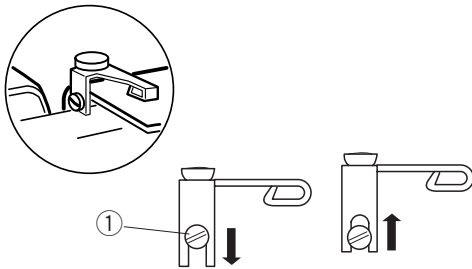
Return the bobbin winder spindle to its original position by moving the spindle to the left, and cut the thread.

7 Tighten stop motion knob by turning it clockwise.



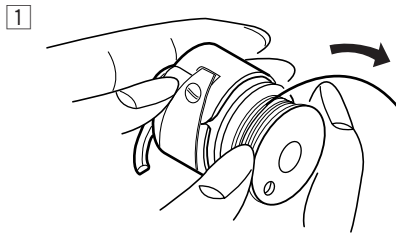


If the bobbin is not wound evenly, open the face plate (see page 34) and loose the screw and move the bobbin winder thread guide up or down to adjust.



① Screw

Threading Bobbin Case

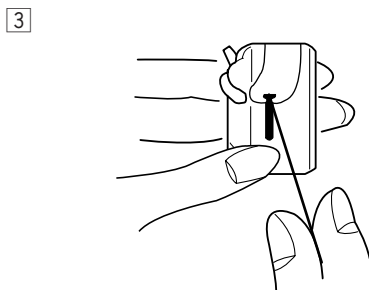


① Place the bobbin into the bobbin case.

Make sure the thread unwinds in the direction of arrow.

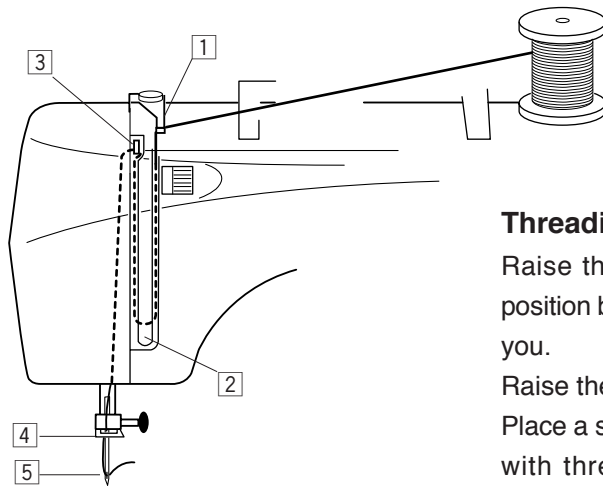


② Pull the thread into the bobbin case slot.



③ Draw the thread under the tension spring and into the delivery eye.

* Leave about 10 cm (4") of free thread.

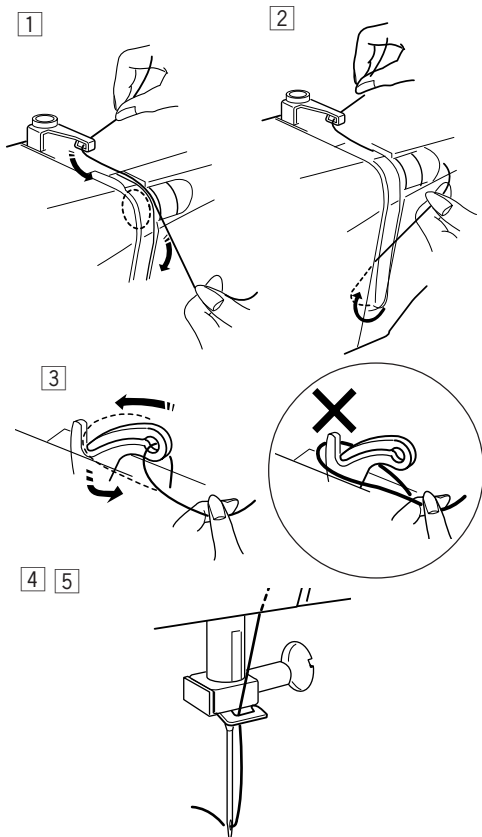


Threading the Machine

Raise the take-up lever to its highest position by turning the handwheel toward you.

Raise the presser foot.

Place a spool on the spool pin as shown, with thread coming from back of the spool.



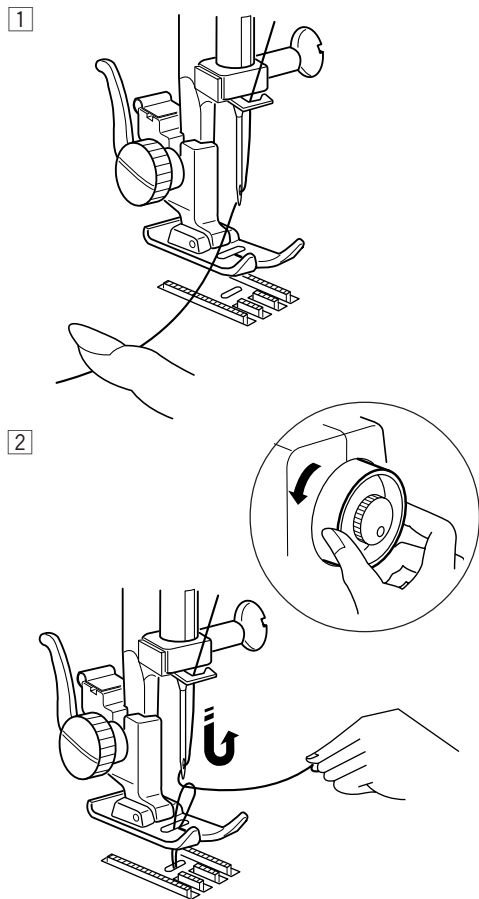
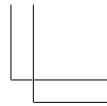
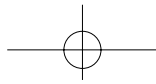
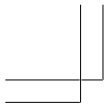
1 Draw the thread into thread guide using both hands.

2 While holding the thread near spool, draw thread down into the tension area and then around the check spring holder.

3 Firmly draw the thread up and through the take-up lever from right to left.

4 Draw the thread down and slip it into needle bar thread guide.

5 Thread the needle eye from front to back.

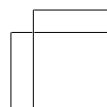
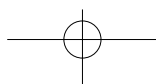
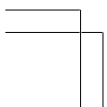
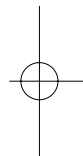
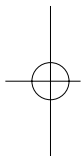


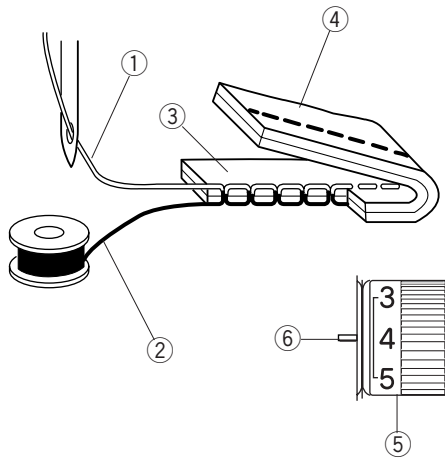
Drawing Up Bobbin Thread

1 Raise the presser foot and hold the needle thread lightly with your left hand.

2 Turn the handwheel slowly toward you with your right hand until the needle goes down and continue turning the handwheel until the take-up lever is at its highest position. Lightly draw up the needle thread forming a loop of the bobbin thread.

3 Pull 15 cm (6") of both threads back and under the presser foot.





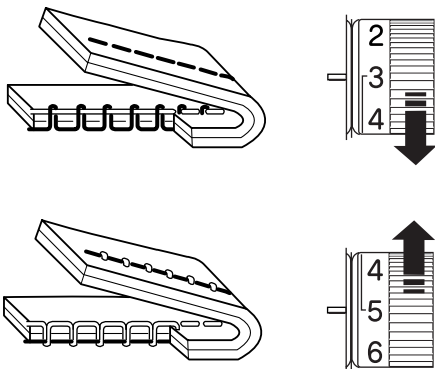
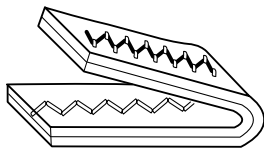
Balancing Needle Thread Tension

1 Correct tesion:

The thread tension is adjusted depending on the sewing materials, layers of fabric and sewing method.

- * The ideal straight stitch has threads looked between two layers of fabric, as illustrated (magnifies to show detail).
- * For an ideal zigzag stitch, the bobbin thread does not show on the right side (top side) of the fabric, and the needle thread shows slightly on the wrong side (bottomside) of the fabric.

- ① Needle thread (Top thread)
- ② Bobbin thread (Bottom thread)
- ③ Right side (Top side) of fabric
- ④ Wrong side (Bottom side) of fabric
- ⑤ Thread tension dial
- ⑥ Setting mark

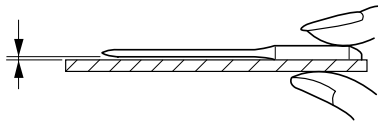
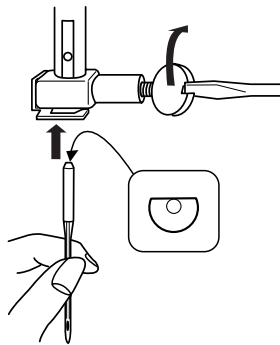
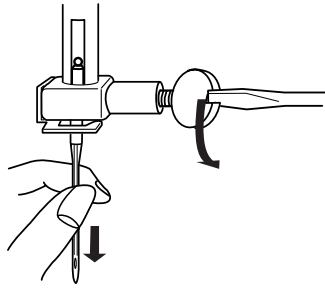


2 Needle thread tension is too tight:

The bobbin thread (bottom thread) will appear on the right side (top side) of the fabric.....Loosen the needle thread tension by moving the dial to a lower number.

3 Needle thread tension is too loose:

The needle thread (top thread) will appear on the wrong side (bottom side) of the fabric.....Tighten the needle thread tension by moving the dial to a higher number.



Changing Needle



CAUTION:

Turn off the power switch when changing needles.

Raise the needle by turning the handwheel toward you and lower the presser foot.

Loosen the needle clamp screw by turning it counterclockwise.

Remove the needle from the clamp. Insert the new needle into the clamp with the flat side away from you.

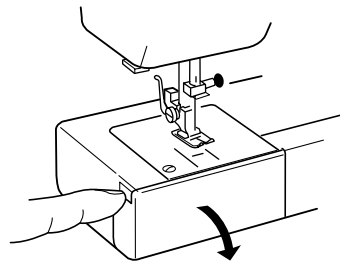
When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly with the screwdriver.

* Check your needles frequently for barbed or blunted points. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are almost always caused by a damaged needle.

To check the needle

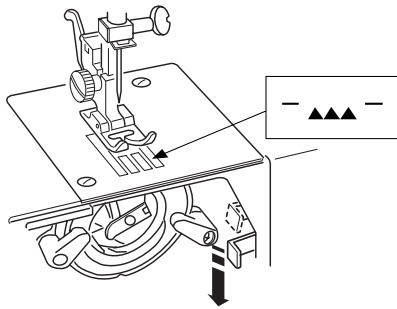
Place the flat side of the needle on something flat (needle plate, glass etc.). The clearance between the needle and flat surface should be consistent. Never use a bent or blunt needle.

	Fabrics	Thread	
Light weight	Crepe de Chine, Voile, Lawn, Organdy, Georgette, Tricot	Fine Silk Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 11
Midium weight	Linens, Cotton, Pique, Serge, Double Knits, Percale	50 Silk 50 to 80 Cotton 50 to 60 Synthetic Cotton Covered Polyester	11 or 14
Heavy weight	Denim, Tweed, Gabardine, Coating, Drapery and Upholstery Fabric	50 Silk	14
		40 to 50 Cotton 40 to 50 Synthetic Cotton Covered Polyester	16

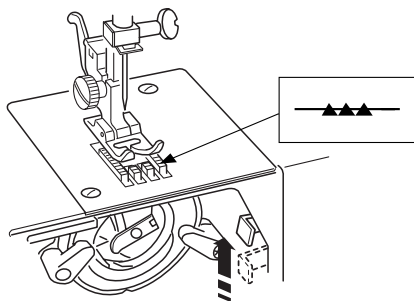


To Drop or Raise the Feed Dogs

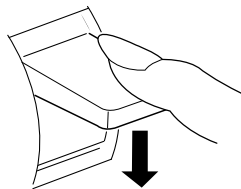
Remove the extension table from the machine by pulling it to the left. Open the shuttle cover by pulling down the embossed part on the left of the cover.



- ① To drop the feed dogs, push feed lever down in the direction of the arrow as illustrated.

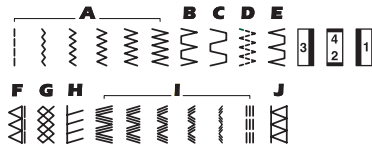
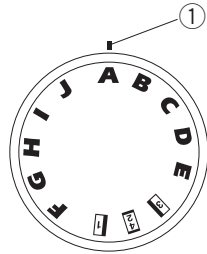


- ② To raise the feed dogs, push feed lever up in the direction of the arrow as illustrated, and then turn handwheel towards you. Feed dogs must be up for normal sewing.



Reverse Stitch Button

As long as you keep the reverse stitch button depressed, the machine sews backwards.



Pattern Selector Dial

Raise the needle and presser foot.
Turn the pattern selector dial to set the letter corresponding to the desired pattern.

① Setting mark

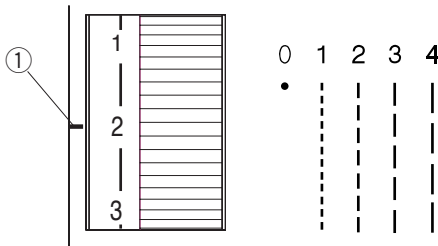
Note:

Do not turn the pattern selector dial while the needle is in the material.

Stitch Length Dial

Turn the stitch length dial to set the desired stitch length at the setting mark.
The higher the number, the longer the stitch length.

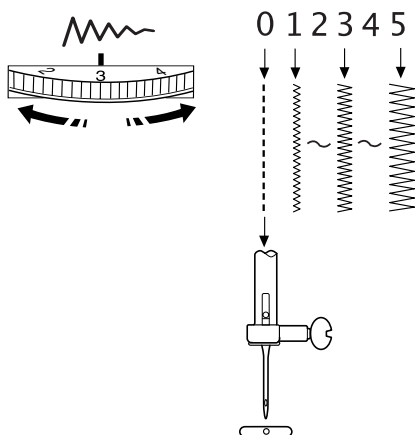
① Setting mark



Stitch Width Dial

Turn the stitch width dial to set the the desired stitch width at the setting mark.
The higher the number, the wider the stitch width.

① Setting mark

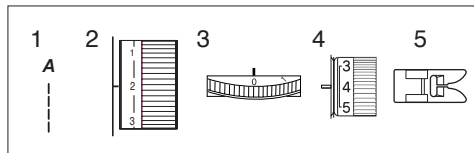


Stitch Reference Chart

Stitch patterns			Stitch length	Stitch width	Presser foot	Drop feed
A	Straight stitch		1.5-4	0-5		
	Zigzag					
B	Blind hem		1-3	5		
C	Box stitch					
D	Three step zigzag stitch		0.5-3	5		
E	Blind stitch		1-3	5		
	Buttonhole		0.5-1	5		
F	Single overlock stitch		4	5		
G	Honeycomb stitch					
H	Slant over edge					
I	Zigzag stretch stitch					
	Straight stretch stitch					
J	Double overlock stitch					
	Free-hand embroidery		0	0-5	Removed	

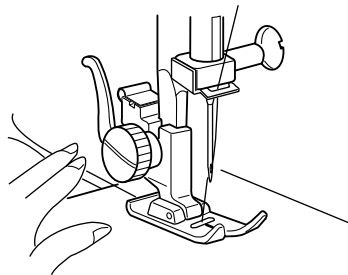
3. BASIC SEWING

Straight Stitch



Machine Setting

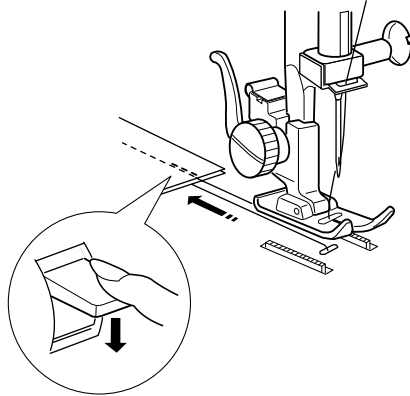
- 1 Stitch Pattern : A
- 2 Stitch Length : 1.5-4
- 3 Stitch Width : 0
- 4 Thread Tension : 2-6
- 5 Presser foot : Zigzag foot



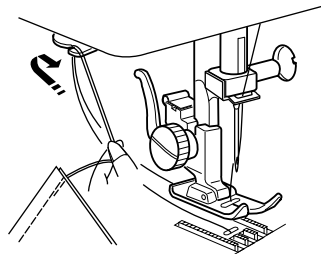
- 1 Raise the presser foot and position the fabric with its edge lining up with a seam guide line on the needle plate.

Lower the needle into the fabric.
Lower the presser foot and smooth the threads toward the back.
Depress the foot control.

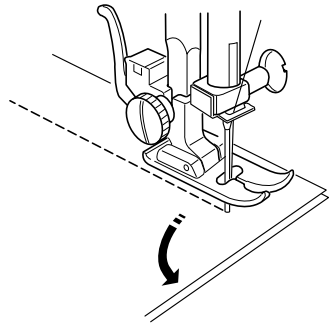
Gently guide the fabric along the guide line letting the fabric feed by itself.



- 2 For fastening the end of seams, press the reverse stitch button and sew several reverse stitches.
Raise the presser foot and remove the fabric, drawing the threads to the back.



- 3 Draw the threads up and into the thread cutter.
The threads are cut the proper length for starting the next seam.



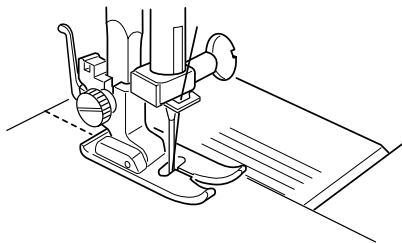
To change sewing direction

Stop the machine and turn the handwheel toward you to bring the needle down into the fabric.

Raise the presser foot.

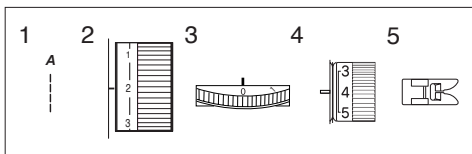
Pivot the fabric around the needle to change sewing direction as desired.

Lower the presser foot and continue sewing.



Using the seam guides on the needle plate

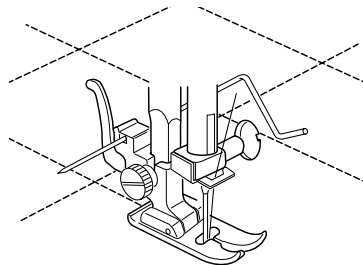
The seam guides on the needle plate help you to measure seam width.



Quilting Guide

Machine Setting

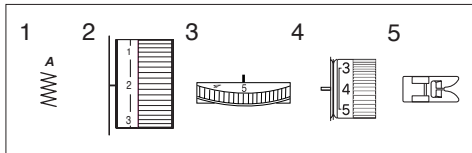
- 1 Stitch Pattern : A
- 2 Stitch Length : 1.5-4
- 3 Stitch Width : 0
- 4 Thread Tension : 2-6
- 5 Presser foot : Zigzag foot



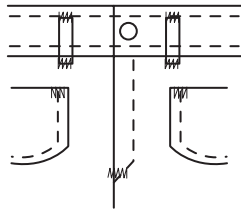
1. Slide the quilting guide through the hole on top of the pressure foot holder.
2. Move the quilting guide to the required stitch distance.
3. Sew, tracing the previous stitching with the quilting guide.

4. UTILITY STITCHES

Basic Zigzag

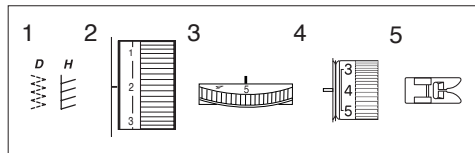


- Machine Setting
- 1 Stitch Pattern : A
 - 2 Stitch Length : 0.5-4
 - 3 Stitch Width : 3-5
 - 4 Thread Tension : 2-5
 - 5 Presser foot : Zigzag foot

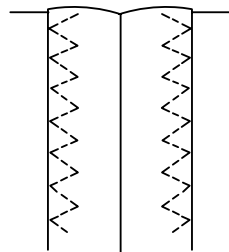


Zigzag stitch is widely used for overcasting, sewing on buttons etc.

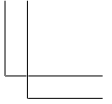
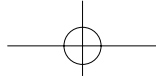
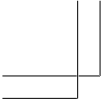
Overcasting



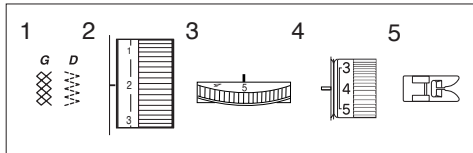
- Machine Setting
- 1 Stitch Pattern : D, (H)
 - 2 Stitch Length : 1.5-4, (4)
 - 3 Stitch Width : 5
 - 4 Thread Tension : 2-6
 - 5 Presser foot : Zigzag foot



Use these stitches for overcasting rough edges.

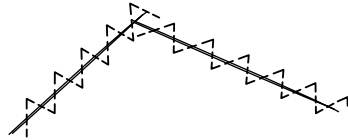


Mending

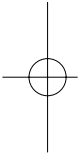


Machine Setting

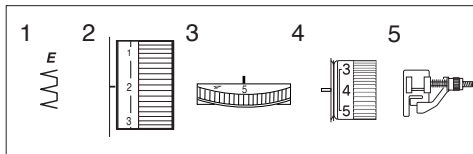
- 1 Stitch Pattern : D, (G)
- 2 Stitch Length : 1.5-4, (4)
- 3 Stitch Width : 5
- 4 Thread Tension : 2-6
- 5 Presser foot : Zigzag foot



To sew fabric edge select the multi-zigzag stitch.

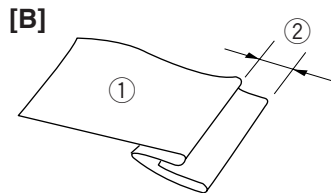
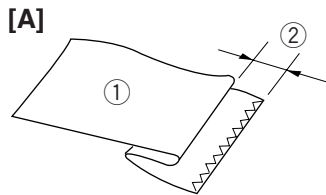


Blind Stitch



Machine Setting

- 1 Stitch Pattern : E
- 2 Stitch Length : 1-3
- 3 Stitch Width : 5
- 4 Thread Tension : 2-4
- 5 Presser foot : Blind hem foot



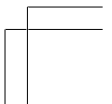
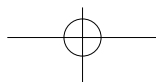
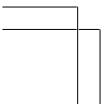
- 1 Fold up the hem and fold it back to from a 0.4 to 0.7cm (1/4") allowance as illustrated.

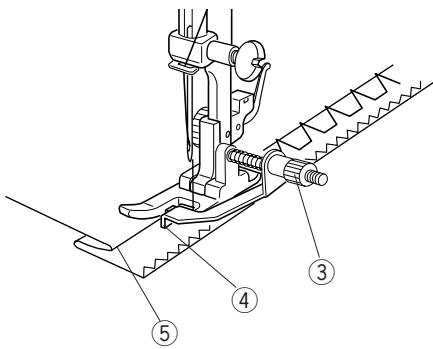
① Wrong side of the fabric

② 0.4 to 0.7 cm (1/4")

[A] Heavy weight fabrics

[B] Fine or medium weight fabrics

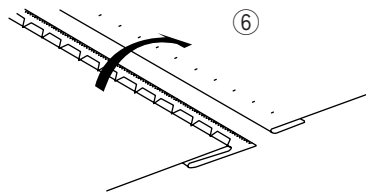




- 2 Position the fabric so that the needle just pierces the edge of the fold when the needle swings to the extreme right.
Lower the presser foot.

- 3 Turn the guide screw to adjust the guide aligning with the folded edge.
Sew along the folded edge guiding the fabric so the needle catches the folded edge.

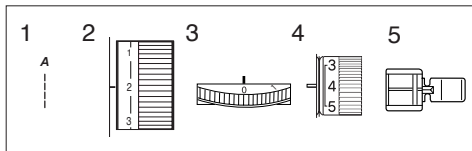
- 3 Guide screw
- 4 Guide
- 5 Folded edge



- 4 Open the fold flat.
6 Right side of the fabric

- * If the needle drops far left, the stitches will show on the right side of the fabric.

Zipper Sewing



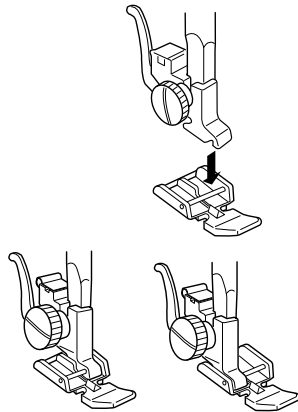
Machine Setting

- 1 Stitch Pattern : A
- 2 Stitch Length : 1.5-4
- 3 Stitch Width : 0
- 4 Thread Tension : 3-6
- 5 Presser foot : Zipper foot

*To snap on the zipper foot

Fit the pin on the zipper foot into the groove on the foot holder.

- To sew the left side of the zipper, attach the zipper foot on the right-hand side.
- To sew the right side of the zipper, attach the zipper foot on the left-hand side.



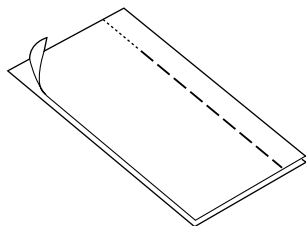
*Fabric preparation

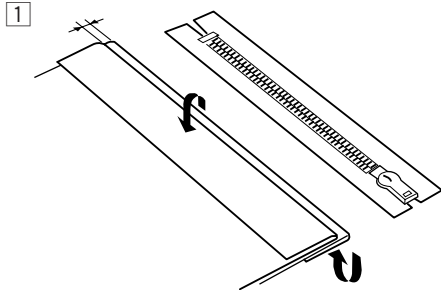
Place right side (Top sides of fabric together and sew to the end of the zipper opening.

Reverse stitch to lock the stitches.

Increase stitch length to 4 and set needle thread tension at 0.

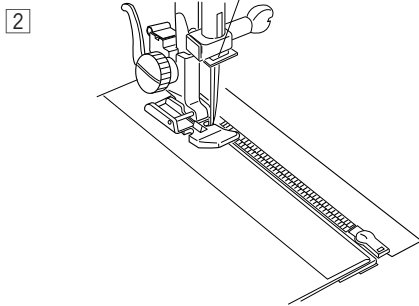
Sew the zipper opening with the basting stitch.



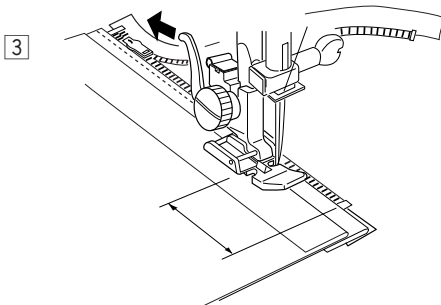


***To sew**

- 1 Fold back the left seam allowance. Turn under the right seam allowance to make a 1/8" (0.2 to 0.3cm) fold. Place the zipper teeth next to the fold and pin in place.

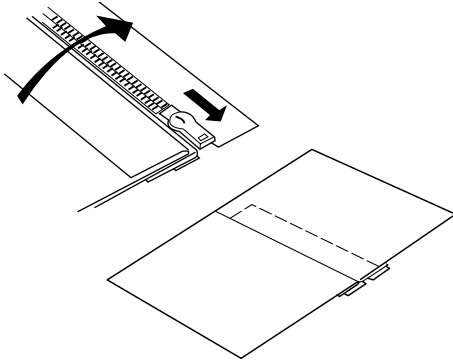


- 2 Attach the zipper foot with the pin of the foot on the right-hand side. Lower the zipper foot on the top side at the bottom of the zipper so that the needle pierces the fabric next to the fold and the zipper tape. Sew through all layers next to the fold.



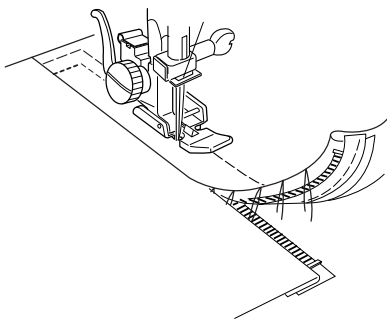
- 3 Stop just before the zipper foot reaches the slider on the zipper tape about 2" (5.0cm) from the top of the zipper. Lower the needle slightly into the fabric, raise the foot. Open the zipper to move the slide behind the zipper foot. Lower the foot and stitch the remainder of the seam, making sure the fold is even.

4



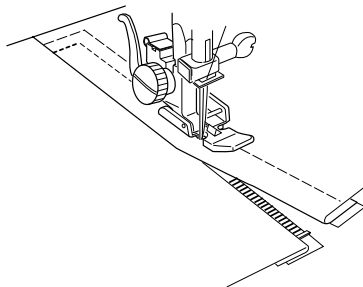
4 Close the zipper and spread the fabric flat with the right side (Top side) of fabric facing up.

5



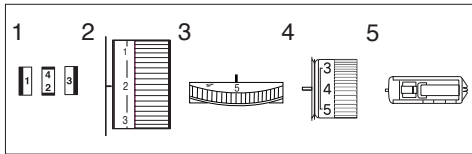
5 Move the zipper foot to the left pin. Guide the edge of the foot along the zipper teeth and stitch through the garment and zipper opening.

6



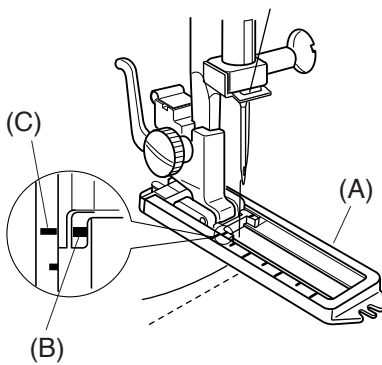
6 Stop at about 2" (5.0cm) from the top of the zipper. Lower the needle slightly into the fabric, raise the foot. Open the zipper to move the slider behind the zipper foot. Lower the foot and stitch the remainder of the seam, making sure the fold is even.

Buttonhole



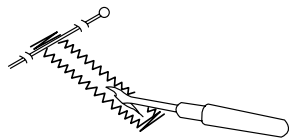
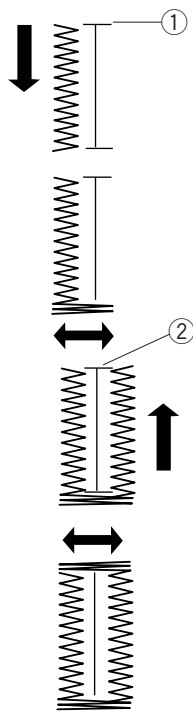
Machine Setting

- 1 Stitch Pattern : (BH)
- 2 Stitch Length : 0.5-1
- 3 Stitch Width : 5
- 4 Thread Tension : 1-5
- 5 Presser foot : Buttonhole foot



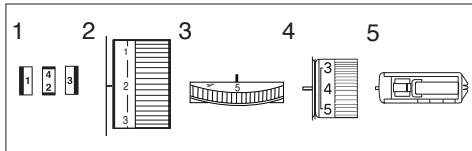
- 1 Carefully mark buttonhole length on fabric. Place the fabric under the foot with the buttonhole marking running toward you.
- 2 Move the slider (A) toward you so that the top mark (C) on the slider meets the start mark (B). Line up the markings on the starting point on the fabric.

Note: The scale on the slider is engraved in centimeters.



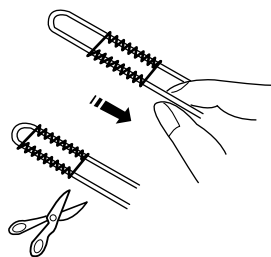
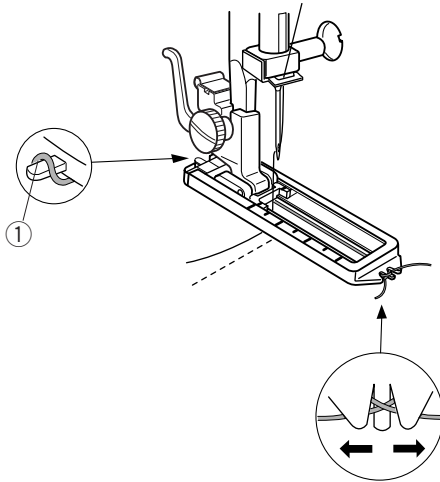
- 3 Set the pattern selector dial at " **1** ".
Sew forward until you reach the marking of your buttonhole ①.
Stop sewing at a left stitch.
- 4 Set the pattern selector dial at " **2** ".
Sew 5 stitches. Stop sewing at a right stitch.
- 5 Set the pattern selector dial at " **3** ".
Sew until you reach the marking of the buttonhole ②.
Stop sewing at a right stitch.
- 6 Set the pattern selector dial at " **2** ".
Sew a few bartacks and raise the needle from the fabric.
Set the stitch length dial to "0" and the pattern selector dial at straight sewing.
Sew a few locking stitches.
- 7 Remove the fabric from the machine and cut the sewing thread. Insert a pin inside the bartack.
Then cut the opening with a seam ripper.
Take care not to cut the stitches.

Corded Buttonhole



Machine Setting

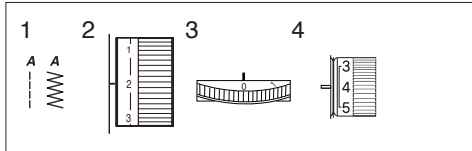
- 1 Stitch Pattern : (BH)
- 2 Stitch Length : 0.5-1
- 3 Stitch Width : 5
- 4 Thread Tension : 1-5
- 5 Presser foot : Buttonhole foot



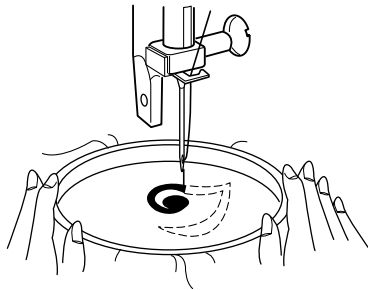
- 1 With the buttonhole foot is raised, hook the cord on the cord spur at the back of the buttonhole foot.
 - ① Spur
Bring the ends toward you under the buttonhole foot until they clear the front end.
Hook the filler cord into the forks on the front of foot to hold them tight.
- 2 Lower the needle into the garment where the buttonhole will start and lower the foot.
Depress the foot control gently and sew the buttonhole.
Each side of the buttonhole and the bartacks will be shown over the cord.
The sewing process is the same as the ordinary buttonhole (see page 27).
- 3 Remove the fabric from the machine, and cut the sewing threads.
Pull the left end of the filler cord to tighten it.
Thread the end through a darning needle, draw to the other side of the fabric and cut.

5. DECORATIVE STITCHES

Embroidery

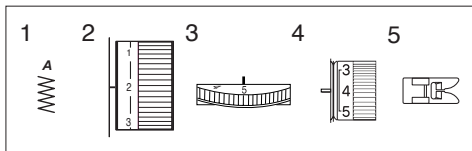


- Machine Setting
- 1 Stitch Pattern : A
 - 2 Stitch Length : Any
 - 3 Stitch Width : 0 or 5
 - 4 Thread Tension : 1-4
 - * Presser foot : Removed

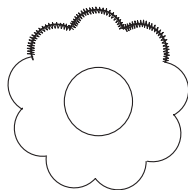


Drop feed dog (see page 16).
 Remove the presser foot and attach the darning plate.
 Lower feed dog and move the hooped fabric slowly in the desired direction until the fabric has been embroidered.

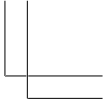
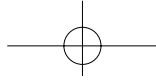
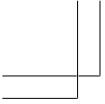
Satin Stitch



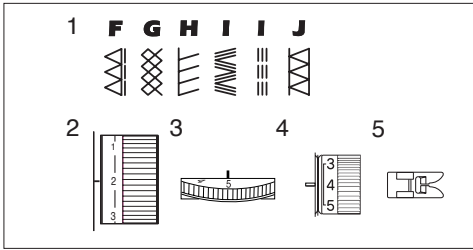
- Machine Setting
- 1 Stitch Pattern : A
 - 2 Stitch Length : 0.5-1
 - 3 Stitch Width : 3-5
 - 4 Thread Tension : 2-6
 - 5 Presser foot : Zigzag foot



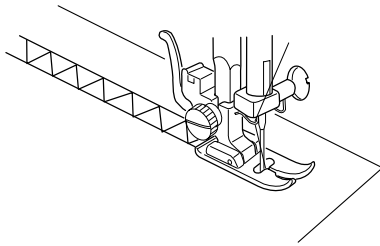
Satin stitching can be used for sewing initials, patterns, applique, etc.



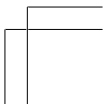
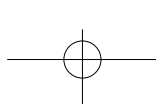
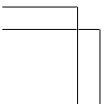
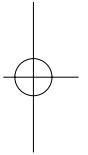
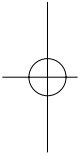
Stretch Stitches



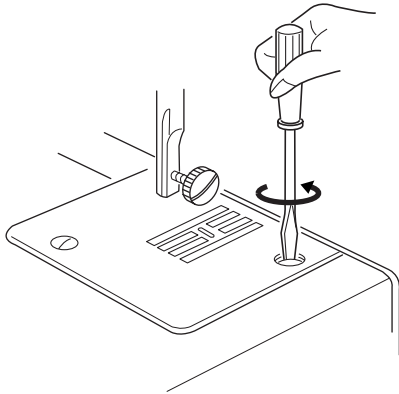
- Machine Setting
- 1 Stitch Pattern : F-J
 - 2 Stitch Length : 4
 - 3 Stitch Width : 5
 - 4 Thread Tension : 1-4
 - 5 Presser foot : Zigzag foot



Use this stitch with knitted, tricot or other stretchy fabrics. The stitch enables your seam to stretch without breaking the thread.



6. CARE OF YOUR MACHINE



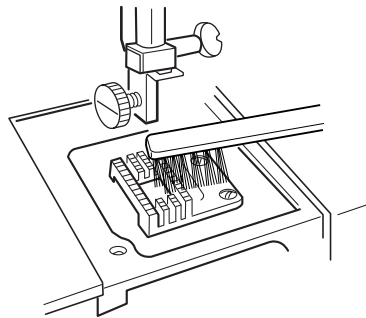
Cleaning the Feed Dog



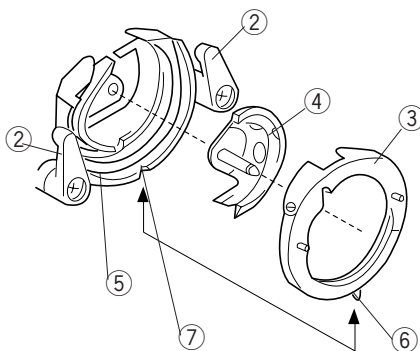
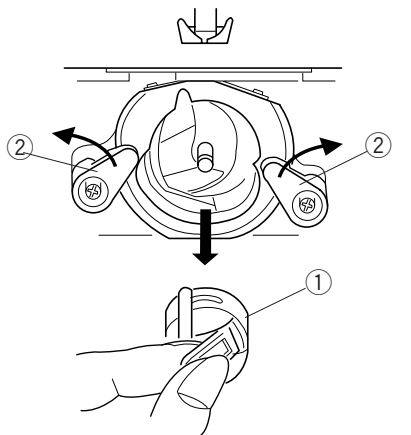
CAUTION:

Turn off the power switch and/or unplug the machine before cleaning the feed dog.

Remove the needle and the presser foot. Remove the needle plate set screw and remove the needle plate.



With a brush, clean out dust and lint clogging the feed dog teeth. Reset the needle plate.



Dismantling and Assembling Hook Race Unit

CAUTION:

Turn off the power switch and/or unplug the machine.

To dismantle hook race unit:

Raise the needle to its highest position and open the hook cover.

Open the hinged latch of bobbin case and take it out of the machine.

Open the hook race ring holders and remove the hook race ring.

Remove the hook.

* Clean the hook race with a brush and a soft dry cloth.

- ① Bobbin case
- ② Hook race ring holders
- ③ Hook race ring
- ④ Hook
- ⑤ Hook race

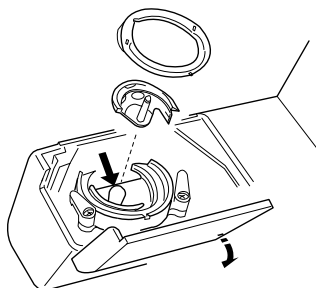
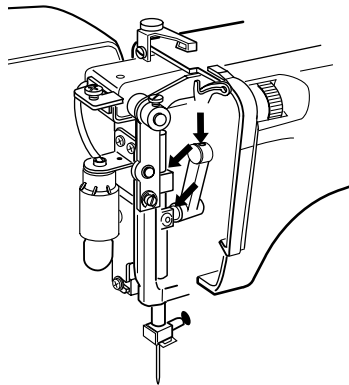
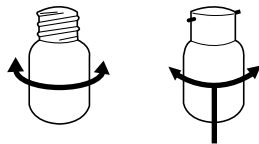
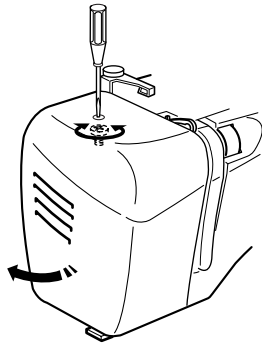
To assemble hook race unit:

Hold the hook by the center pin and fit it carefully back into the hook race, forming a perfect circle with the shuttle driver.

Attach the hook race ring making sure the bottom pin fits into the notch.

Lock the hook race ring by turning the holders back into position. Insert the bobbin case.

- ⑥ Pin
- ⑦ Notch



Sewing Light

The sewing light is located behind the face plate.

To change the bulb, take the face plate off the sewing machine by loosening the setscrew.

- * Unplug the power supply before changing the bulb.
- * Do not dismantle the machine other than explained in this manual.
- To remove Push the bulb up and turn to the left.
- To replace Push the bulb up and turn to the right.



CAUTION:

The bulb could be HOT.
Protect your fingers when handle it.

Oiling



CAUTION:

Turn off the power switch and/or unplug the machine.

Oil the points as shown at least once a year. Use good quality sewing machine oil. One or two drops of oil is sufficient.

Remove excess oil, otherwise it may stain fabric.

In case machine is not used for an extended time, oil it before sewing.

- Oil behind the face plate

Remove the cap, screw and face plate.

Oil the point as indicated in the illustration.

- Oiling the shuttle hook area

Remove the hook race ring and hook.

Oil the point as indicated in the illustration.

Troubleshooting

Condition	Cause	Reference
The needle thread breaks.	<ol style="list-style-type: none"> 1. The needle thread is not threaded properly. 2. The needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The fabric is not being drawn to the back when sewing is finished. 6. The thread is either too heavy or too fine for the needle. 	<p>See Page 12 See Page 14 See Page 15 See Page 15 See Page 19 See Page 15</p>
The bobbin thread breaks.	<ol style="list-style-type: none"> 1. The bobbin thread is not threaded properly in the bobbin case. 2. Lint has collected in the bobbin case. 3. The bobbin is damaged and doesn't turn smoothly. 	<p>See Page 11 Clean the bobbin case. Replace bobbin.</p>
The needle breaks.	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle clamp screw is loose. 4. The tension of the needle thread is too tight. 5. The fabric is not drawn to the back when sewing is finished. 6. The needle is too fine for the fabric being sewn. 7. The pattern selector dial had been turned while the needle was in the material. 	<p>See Page 15 See Page 15 See Page 15 See Page 14 See Page 19 See Page 15 See Page 17</p>
Skipped stitches	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle and/or threads are not suitable for the work being sewn. 4. The needle thread is not threaded properly. 	<p>See Page 15 See Page 15 See Page 15 See Page 12</p>

Condition	Cause	Reference
Seam puckering	1. The needle thread tension is too tight. 2. The machine is not threaded correctly. 3. The needle is too heavy for the fabric being sewn. 4. The stitches are too coarse for the fabric being new line sewn. * When sewing extremely light weight materials, place a sheet of paper underneath the fabric.	See Page 14 See Page 12 See Page 15 Make the stitches denser.
Stitches form loops below the work	1. The needle thread tension is too loose. 2. The needle is either too heavy or too fine for the thread.	See Page 14 See Page 15
The cloth is not feeding smoothly.	1. The feed dog is packed with lint. 2. The stitches are too fine.	See Page 32 Make the stitches coarser.
The machine does not work.	1. The machine is not plugged in. 2. Thread is caught in the hook race. 3. Stop motion knob is loosen for bobbin winding.	See Page 4 See Page 33 See Page 10
The machine does not run smoothly and is noisy.	1. Threads have been caught in hook mechanism. 2. The feed dog is packed with lint.	See page 33 See Page 32