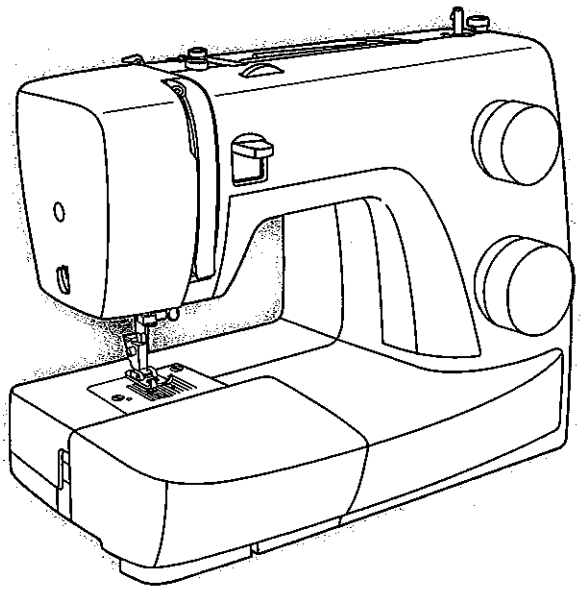


SINGER®

3210 Instruction Manual

IMPORTANT SAFETY INSTRUCTIONS

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

DANGER - To reduce the risk of electric shock:

1. An appliance should never be left unattended when plugged in.
2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
3. Always unplug before re-lamping. Replace bulb with same type rated 10 watts (110-120V area) or 15 watts (220-240V area).

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

1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
6. Always use the proper needle plate. The wrong plate can cause the needle to break.
7. Do not use bent needles.
8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
9. Switch the sewing machine off ("O") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
10. Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
11. Never drop or insert any object into any opening.
12. Do not use outdoors.
13. Do not operate where aerosol spray products are being used or where oxygen is being administered.
14. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
16. The sound pressure level under normal operating conditions is 75dB(A).
17. Please turn off the machine or unplug when the machine is not operating properly.
18. Never place anything on the foot controller.
19. If the supply cord that is 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.
20. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
21. Children should be supervised to ensure that they do not play with the appliance.

SAVE THESE INSTRUCTIONS

This sewing machine is intended for household use only.

Congratulations

As the owner of a new Singer sewing machine, you are about to begin an exciting adventure in creativity. From the moment you first use your machine, you will know you are sewing on one of the easiest to use sewing machines ever made.

May we recommend that, before you start to use your sewing machine, you discover the many features and the ease of operation by going through this instruction book, step by step, seated at your machine.

To ensure that you are always provided with the most modern sewing capabilities, the manufacturer reserves the right to change the appearance, design or accessories of this sewing machine when considered necessary.

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☐ List of contents

Machine Basics

Principle Parts of the Machine....2/3
Connecting Machine to Power Source....4
Two Step Presser Foot Lifter....5
Accessories....6

Threading the Machine

Winding the Bobbin....7
Inserting the Bobbin....8
Thread Tension....9
Threading the Upper Thread....10
Raising the Bobbin Thread....11

Sewing

How to Choose Your Pattern....12
Stitch Length Dial....13
Sewing Straight Stitch....14
Reverse Sewing/ Removing the Work/ Cutting the Thread....15
Blind Hem....16
Sew 4-Step Buttonhole....17
Sewing on Buttons....18

General Information

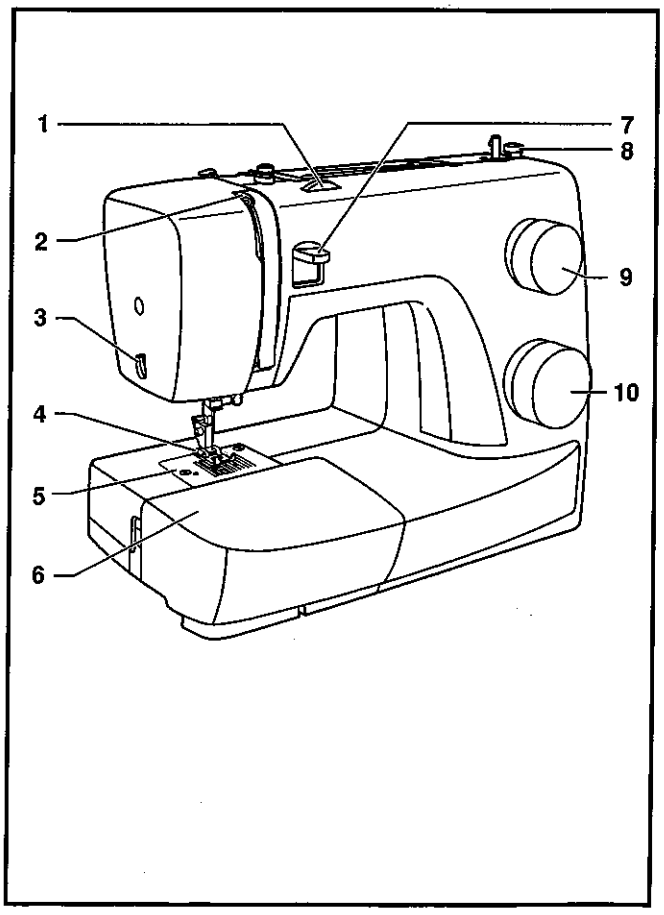
Installing the Removable Accessory Storage....19
Attaching the Presser Foot Shank....20
Needle/Fabric/Thread Chart....21
Darning Plate....22

Maintenance and Troubleshooting

Inserting & Changing Needle....23
Changing the Bulb....24
Troubleshooting Guide....25

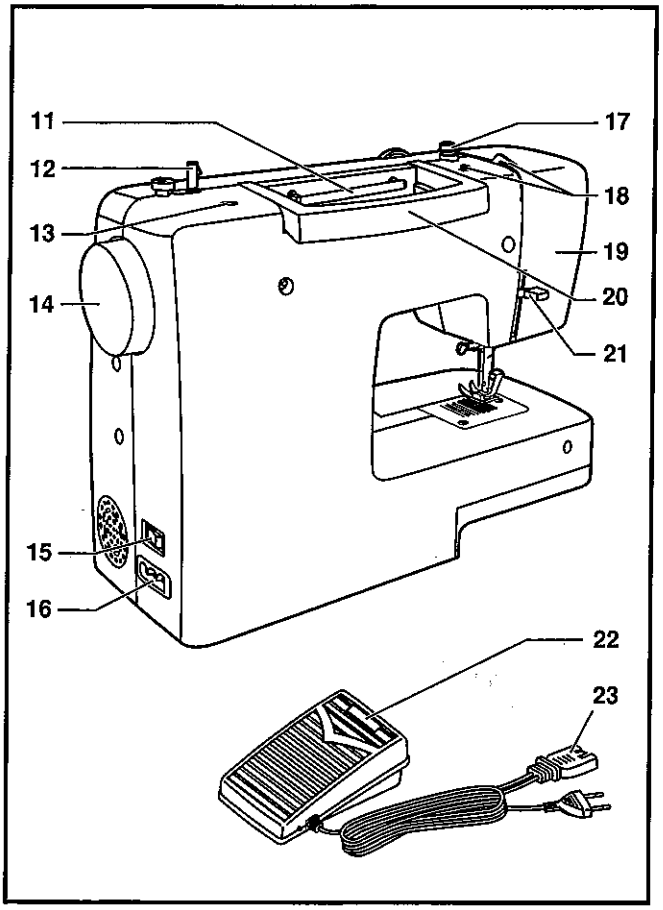
☐ Principal Parts of the Machine

1. Thread tension dial
2. Thread take-up lever
3. Thread cutter
4. Presser foot
5. Needle plate
6. Removable accessory storage
7. Reverse sewing lever
8. Bobbin stopper
9. Stitch length dial
10. Pattern selector dial



☐ Principal Parts of the Machine

11. Horizontal spool pin
12. Bobbin winding spindle
13. Hole for second spool pin
14. Handwheel
15. Power and light switch
16. Main plug socket
17. Bobbin thread guide
18. Upper thread guide
19. Face plate
20. Handle
21. Presser foot lifter
22. Foot speed control
23. Power cord



☐ Connecting Machine to Power Source

Connect the machine to a power source as illustrated. (1)
This appliance is equipped with a polarized plug which must be used with the appropriate polarized outlet. (2)

Attention:
Unplug power cord when machine is not in use.

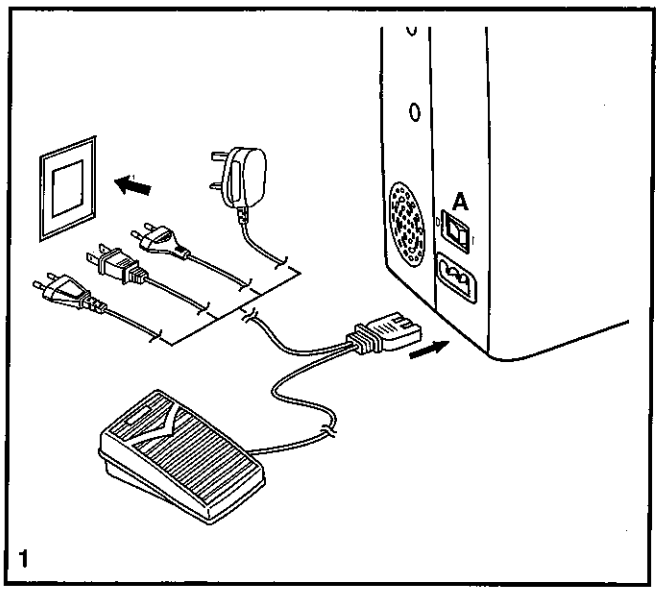
Foot control
The foot control pedal regulates the sewing speed. (3)

Attention:
Consult a qualified electrician if in doubt of how to connect machine to power source.
Unplug power cord when machine is not in use.
The foot control must be used with the appliance by KD-1902 (110-120V area)/ KD-2902 (220-240V area) ; 4C-316B (110-120V area)/ 4C-326G (230V area).

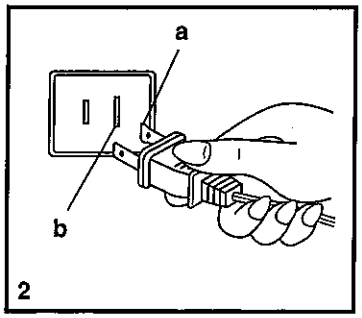
Sewing light
Press main switch (A) to " I " for power and light.

IMPORTANT NOTICE
For appliance with a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If 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.

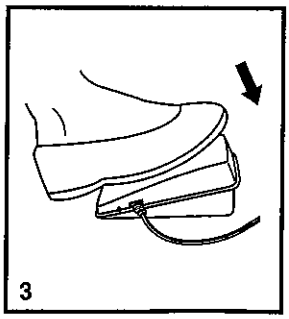
a. Polarized attachment plug
b. Conductor intended to be grounded



1

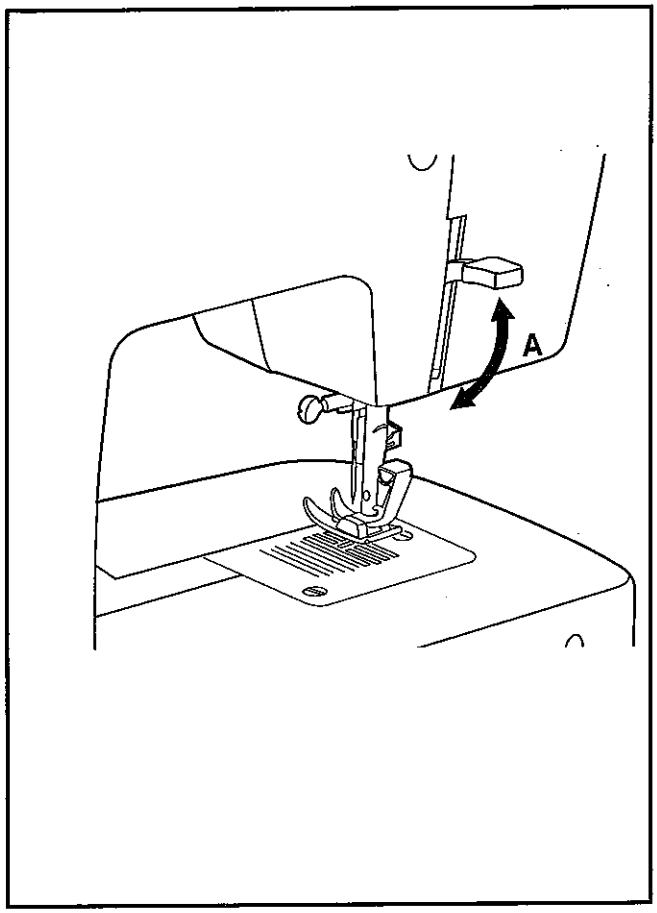


2


3

☐ Two Step Presser Foot Lifter

When sewing several layers or thick fabrics, the presser foot can be raised to a higher position for easy positioning of the work. (A)



☐ Accessories

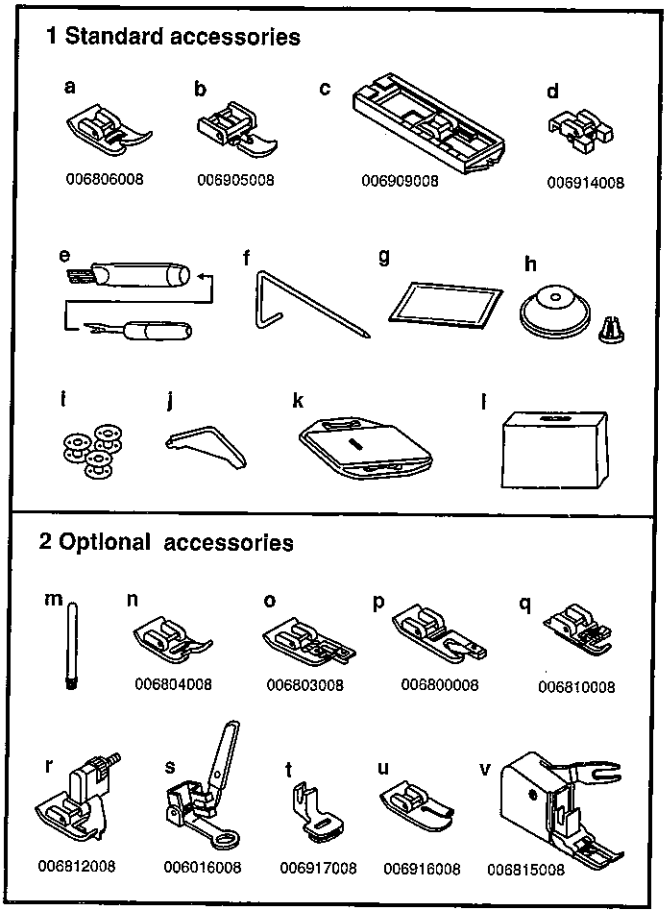
Standard accessories (1)

a. All purpose foot
b. Zipper foot
c. Buttonhole foot
d. Button sewing foot
e. Seam ripper/ brush
f. Edge/ quilting guide
g. Pack of needles
h. Spool holder
i. Bobbin (3x)
j. L-screwdriver
k. Darning plate
l. Soft cover

Optional accessories (2)

(These 10 accessories are not supplied with this machine; they are however available as special accessories from your local dealer.)

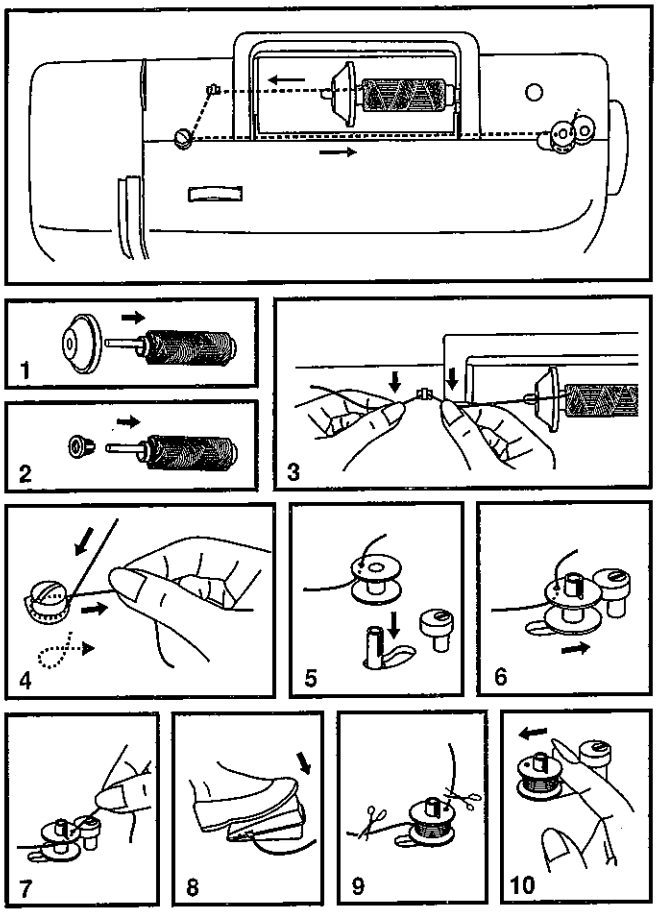
m. Auxiliary spool pin
n. Satin stitch foot
o. Overcasting foot
p. Hemmer foot
q. Cording foot
r. Blind hem foot
s. Darning/ embroidery foot
t. Gathering foot
u. Quilting/ straight stitch foot
v. Even-feed foot



☐ Winding the Bobbin

- Place thread and corresponding spool holder on to spool pin. (1/2)
- Snap thread into thread guide. (3)
- Wind thread clockwise around bobbin winder tension discs. (4)
- Thread bobbin as illustrated and place on spindle. (5)
- Push bobbin spindle to right. (6)
- Hold thread end. (7)
- Step on foot control pedal. (8)
- Cut thread. (9)
- Push bobbin spindle to left (10) and remove.

Please Note:
When the bobbin winder spindle is in "bobbin winding" position, the machine will not sew and the hand wheel will not turn. To start sewing, push the bobbin winder spindle to the left (sewing position).

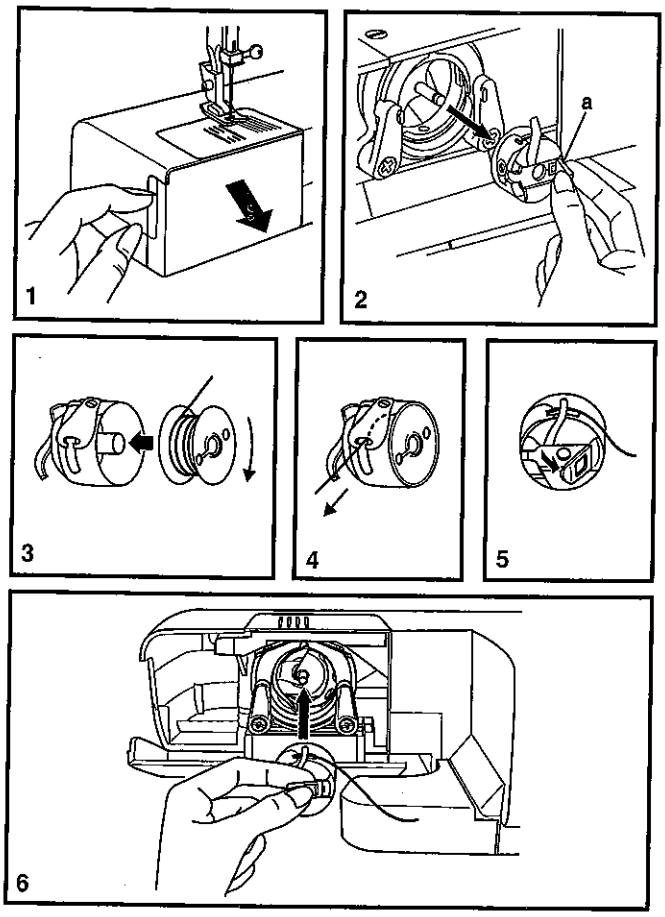


☐ Inserting the Bobbin

When inserting or removing the bobbin, the needle must be fully raised.

- Remove the extension table, then open the hinged cover. (1)
- Pull the bobbin case tab (a) and remove the bobbin case. (2)
- Hold the bobbin case with one hand. Insert the bobbin so that the thread runs in a clockwise direction (arrow). (3)
- Pull the thread through the slit and under the finger. (4) Leave a 6 inch tail of thread.
- Hold the bobbin case by the hinged latch. (5)
- Insert it into the shuttle. (6)

Attention:
Turn power switch to off ("O") before inserting or removing the bobbin.



☐ Thread Tension

Upper thread tension

Basic thread tension setting: "4"

To increase the tension, turn the dial to the next number up.

To reduce the tension, turn the dial to the next number down.

A. Normal thread tension for straight stitch sewing.

B. Thread tension too loose for straight stitch sewing. Turn dial to higher number.

C. Thread tension too tight for straight stitch sewing. Turn dial to lower number.

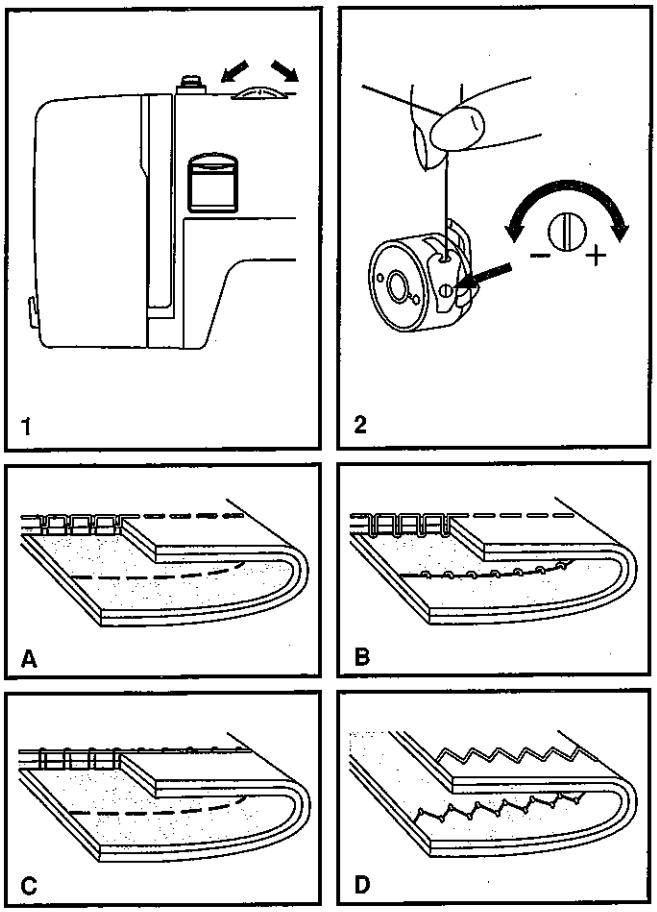
D. Normal thread tension for zig zag and decorative sewing. Correct thread tension is when a small amount of the upper thread appears on the bottom side of fabric.

Lower thread tension

To test the bobbin thread tension, remove the bobbin case and bobbin and hold it by suspending it by the thread. Jerk it once or twice. If the tension is correct, the thread will unwind by about an inch or two. If the tension is too tight, it does not unwind at all. If the tension is too loose, it will drop too much. To adjust, turn the small screw on the side of the bobbin case.

Please note:

- Proper setting of tension is important to good sewing.
- There is no single tension setting appropriate for all stitch functions, thread or fabric.
- A balanced tension (identical stitches both top and bottom) is usually only desirable for straight stitch construction sewing.
- 90% of all sewing will be between "3" and "5".
- For zig zag and decorative sewing stitch functions, thread tension should generally be less than for straight stitch sewing.
- For all decorative sewing you will always obtain a nicer stitch and less fabric puckering when the upper thread appears on the bottom side of your fabric.



☐ Threading the Upper Thread

This is a simple operation but it is important to carry out correctly as by not doing so several sewing problems could result.

- Start by raising the needle to its highest point (1), and continue turning the handwheel counterclockwise until the needle just slightly begins to descend. Raise the presser foot to release the tension discs.
  Note: For safety, it is strongly suggested you turn off the power before threading.

- Lift up the spool pin. Place the spool of thread on the holder with the thread coming off the spool as shown. For small thread spools, place small side of spool holder next to spool. (2)

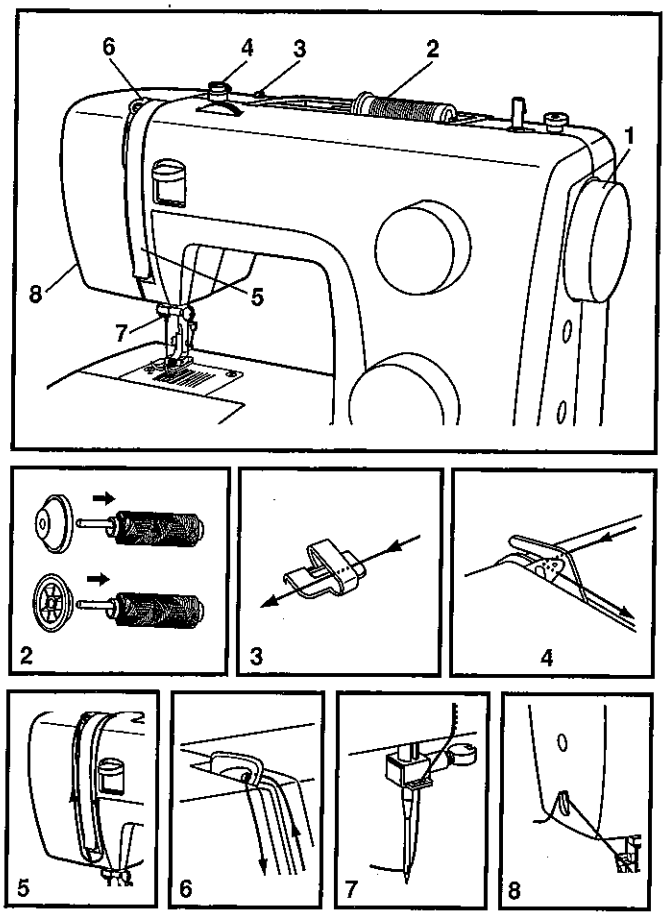
- Draw thread from spool through the upper thread guide (3) and pulling thread through pre-tension spring as illustrated. (4)

- Thread tension module by leading thread down right channel and up left channel. (5) During this process it is helpful to hold the thread between the spool and thread guide.

- At the top of this movement pass thread from right to left through the slotted eye of the take-up lever and then downwards again. (6)

- Now pass thread behind the thin wire needle clamp guide (7) and then down to the needle which should be threaded from front to back.

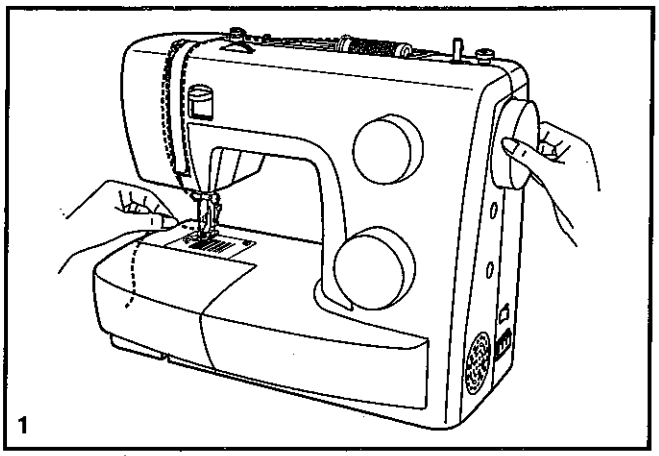
- Pull about 6-8 inches of thread to the rear beyond the needle eye. Trim thread to length with built in thread cutter. (8)



☐ Raising the Bobbin Thread

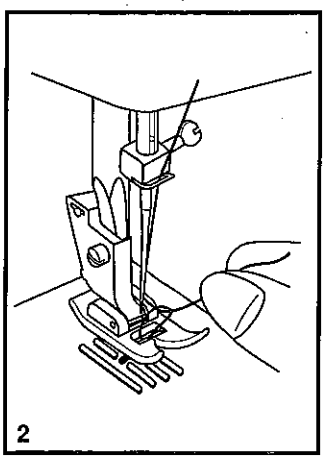
Hold the upper thread with the left hand. Turn the handwheel (1) towards you (counterclockwise) lowering, then raising needle.

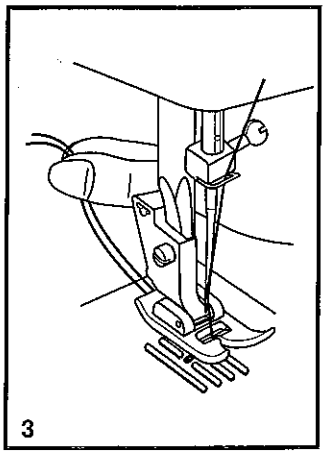
Note:
If it is difficult to raise the bobbin thread, check to make sure the thread is not trapped by the hinged cover or the removable accessory storage.


1

Gently pull on the upper thread to bring the bobbin thread up through the needle plate hole. (2)

Lay both threads to the back under the presser foot. (3)

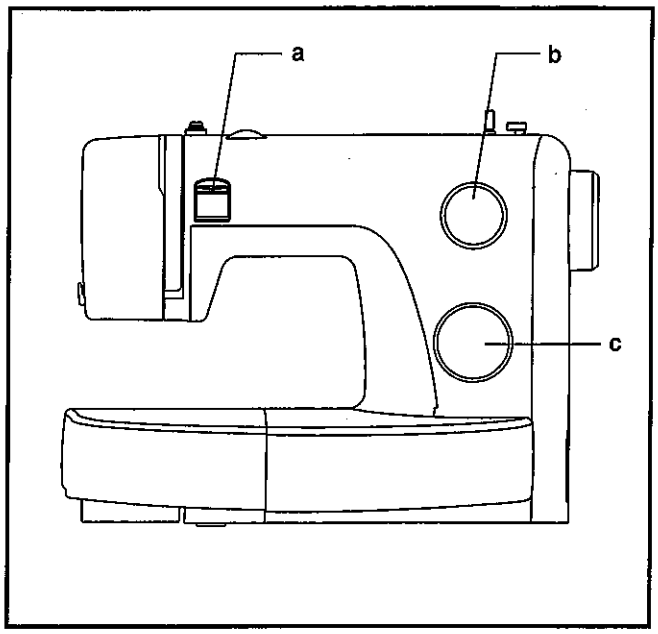

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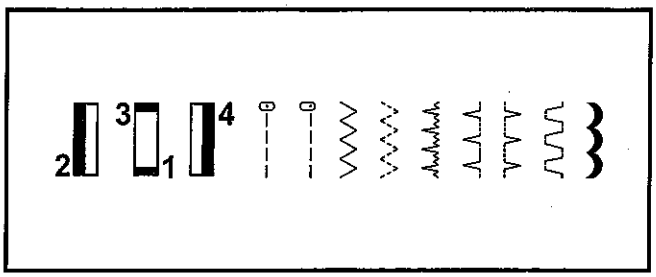

3

☐ How to Choose Your Pattern

To select a stitch, simply turn the pattern selector dial (c). The pattern selector dial may be turned in either direction. The following page shows the recommended range of stitch lengths.

Adjust the stitch length with the stitch length dial (b) according to the fabric being used.



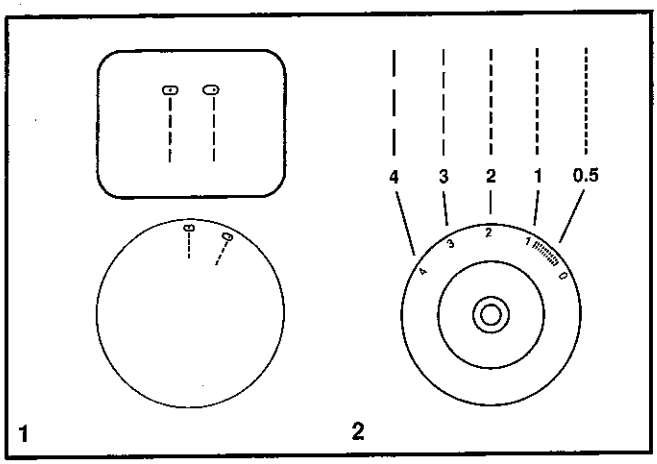


a. Reverse lever
b. Stitch length dial
c. Pattern selector dial

☐ Stitch Length Dial

Function of stitch length dial for when straight stitching

For straight stitch sewing, turn the Pattern Selector Dial to the straight stitch setting. (1) Turn the Stitch Length Dial, and the length of the individual stitches will decrease as the dial approaches "0". The length of the individual stitches will increase as the dial approaches "4". (2) Generally speaking, use a longer stitch length when sewing heavier weight fabrics or when using a thicker needle or thread. Use a shorter stitch length when sewing lighter weight fabrics or when using a finer needle or thread.



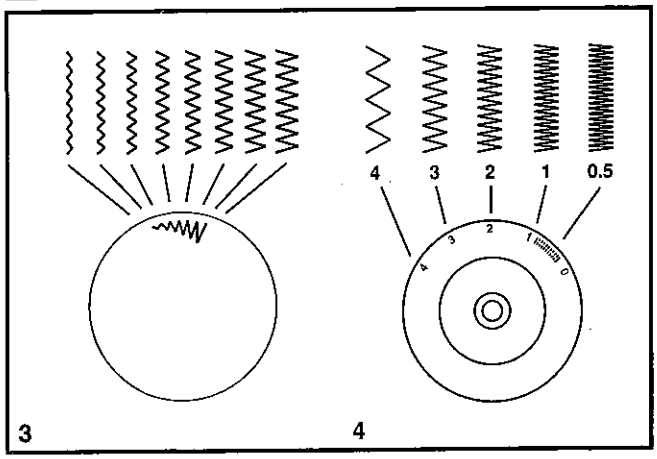
Function of stitch length dial while zig-zag stitching

Turn the Pattern Selector Dial to " ". (3)

The density of zig-zag stitches increases as the setting of stitch length dial approaches "0".

Neat zig-zag stitches are usually achieved at "2.5" or below.

Dense zig-zag stitches are called satin stitches. (4)

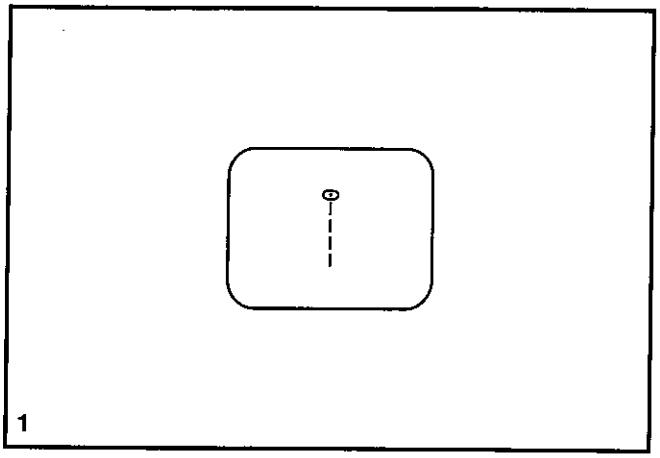


☐ Sewing Straight Stitch

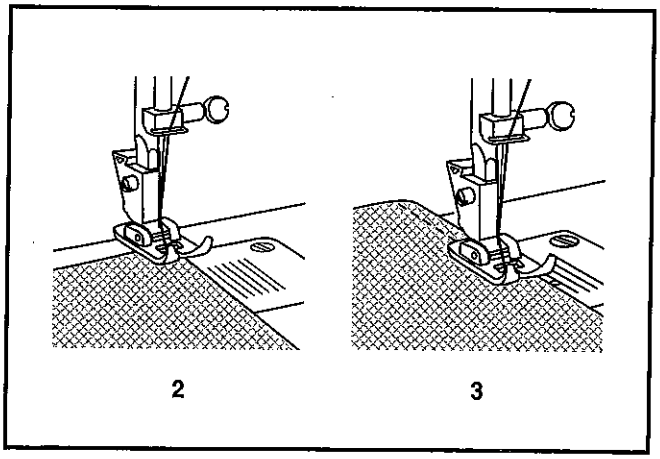
To begin sewing, set the machine for straight stitch. (1)

Place the fabric under the presser foot with the fabric edge lined up with the desired seam guide line on the needle plate. (2)

Lower the presser foot lifter, and then step on the foot controller to start sewing. (3)



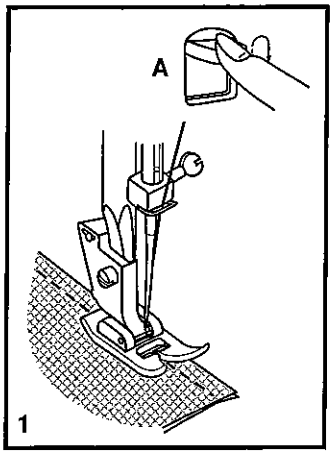
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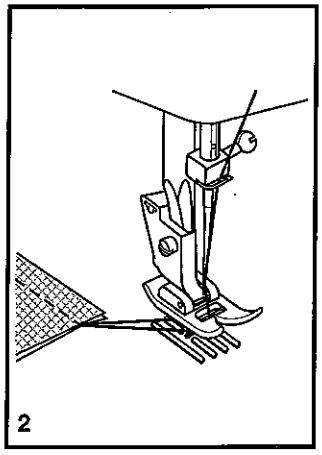


2 3

☐ Reverse Sewing

To secure the beginning and the end of a seam, press down the reverse sewing lever (A). Sew a few reverse stitches. Release the lever and the machine will sew forward again. (1)



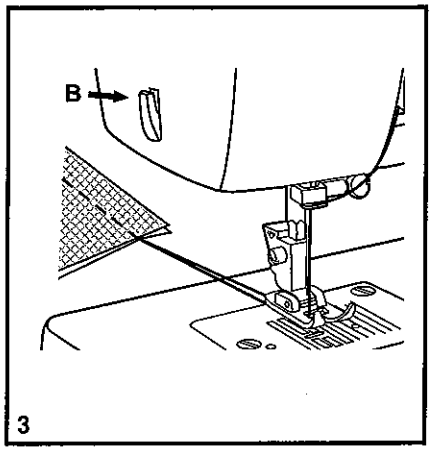


☐ Removing the Work

Turn the handwheel toward you (counterclockwise) to bring the thread take up lever to its highest position, raise the presser foot and remove work behind the needle and presser foot. (2)

☐ Cutting the Thread

Pull the threads under and behind the presser foot. Guide the threads to the side of the face plate and into thread cutter (B). Pull threads down to cut. (3)



☐ Blind Hem

For hems on curtains, trousers, skirts, etc.

Blind hem for stretch fabrics.

Blind hem for firm fabrics.

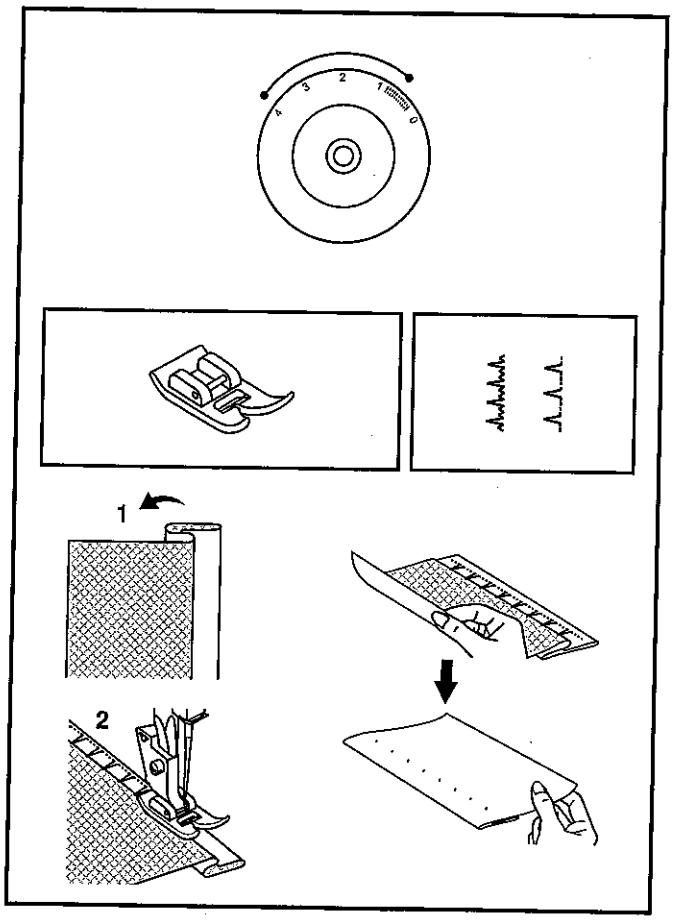
Set the stitch length dial with the range shown on the diagram at the right. Blind hems, however, are normally sewn with a longer stitch length setting. Set the stitch width dial at a setting appropriate for the weight/type of fabric being sewn, within the range shown in the diagram on the right of the page. Generally, a narrower stitch is used for lighter weight fabrics, and a wider stitch is used for heavier weight fabrics. Sew a test first to make sure the machine settings are appropriate for the fabric.

Blind Hem:
Turn up the hem to the desired width and press. Fold back (as shown in Fig. 1) against the right side of the fabric with the top edge of the hem extending about 7 mm (1/4") to the right side of the folded fabric.

Start to sew slowly on the fold, making sure the needle touches slightly the folded top to catch one or two fabric threads. (2)

Unfold the fabric when hemming is completed and press.

Note:
To make blind hem sewing even easier, use a blind hem foot, available from your SINGER® retailer. (See page 6 for part number)



☐ Sew 4-step buttonhole

Prepare

1. Take off the all purpose foot and attach the buttonhole foot.
2. Measure diameter and thickness of button and add 0.3 cm (1/8") for bar tacks; mark buttonhole size on fabric. (a)
3. Place fabric under the foot, so that marking on the buttonhole foot aligns with starting marking on fabric. Lower the foot, so that the buttonhole center line marked on the fabric aligns with the center of the buttonhole foot. (b)

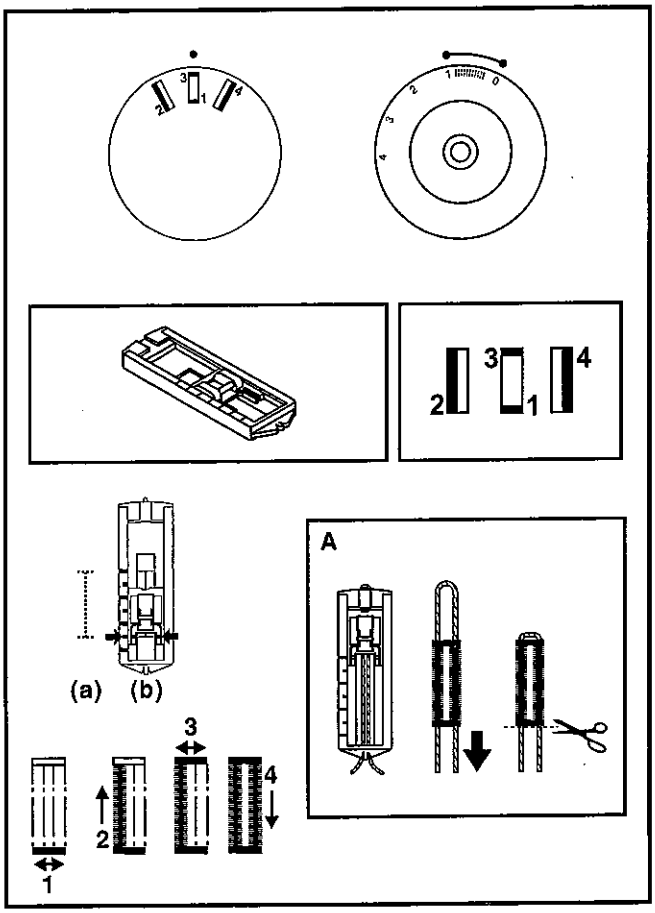
Adjust the Stitch Length Dial in the " ▥ " range to set stitch density.

> **Note:**
> Density varies according to the fabric.
> Always test sew a buttonhole on the fabric you are using to sew the buttonhole.

Follow the 4-step sequence changing from one step to another with the pattern selector dial. When moving from step to step through the buttonhole process, be sure that the needle is raised before turning the pattern selector dial to the next step. Take care not to sew too many stitches in steps 1 and 3. Use seam ripper and cut buttonhole open from both ends towards the middle.

Tips:

- Slightly reducing upper thread tension will produce better results.
- Use a stabilizer for fine or stretchy fabrics.
- It is advisable to use heavy thread or cord for stretch or knit fabrics. The zig-zag should sew over the heavy thread or cord. (A)



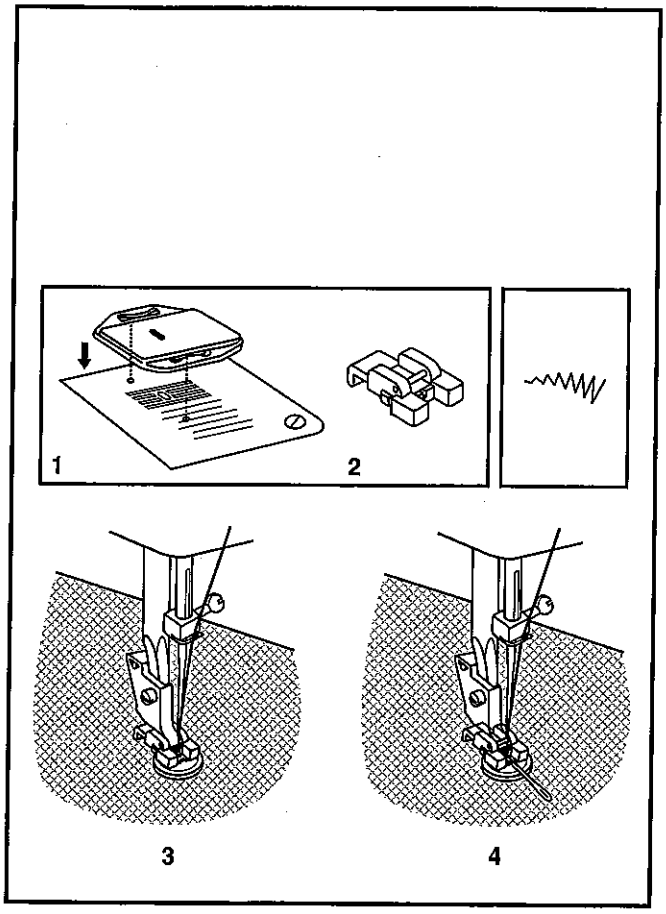
☐ Sewing on Buttons

Install the darning plate. (1)
Change the all purpose foot to button sewing foot. (2)

Position the work under the foot.
Place the button in the desired position and lower the foot.
Set the pattern selector dial on " ⎮ " and sew a few securing stitches. Select one of the two narrow zig-zag patterns according to the distance between the two holes of the button. Turn the handwheel to check if the needle goes into the right and the left hole of the button without hitting the button. Slowly sew on the button with about 10 stitches.

Select pattern " ⎮ " and sew a few securing stitches. (3)

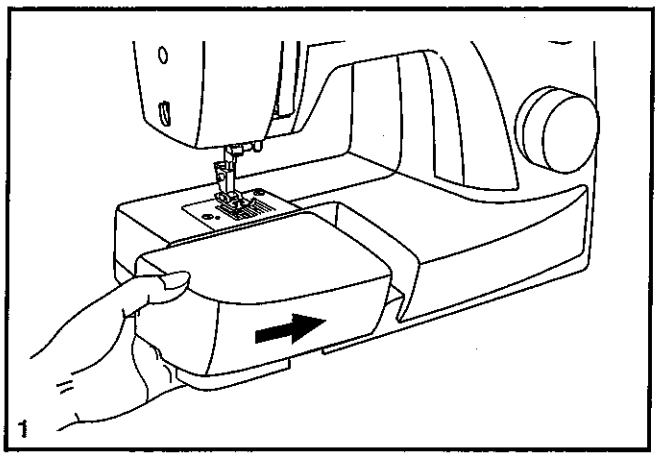
If a shank is required, place a darning needle on top of the button and sew. (4)
For buttons with 4 holes, sew through the front two holes first, push the work forward and then sew through the back two holes.



☐ Installing the Removable Accessory Storage

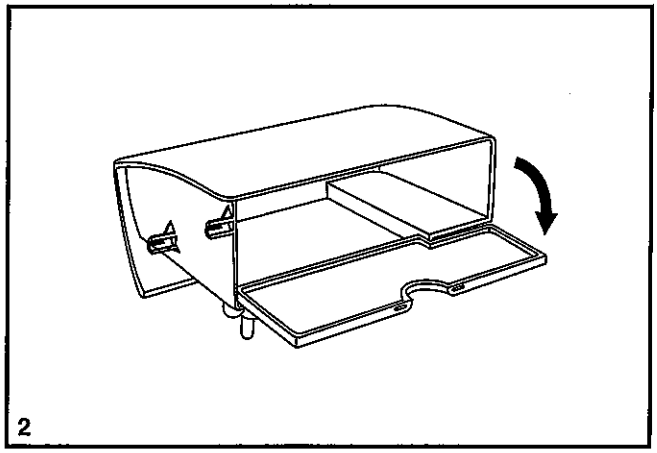
Hold the removable accessory storage horizontally, and push it in the direction of the arrow. (1)

To remove the accessory storage, pull it toward the left.


1

The standard accessories are contained inside the removable accessory storage compartment.

To open, flip cover down as shown. (2)


2

☐ Attaching the Presser Foot Shank

Raise the presser bar (a) with the presser foot lifter. Attach the presser foot shank (b) as illustrated. (1)

Attaching the presser foot

Install the pin (d) of the presser foot (e) into the cut-out (c) of the presser foot lifer. (2)

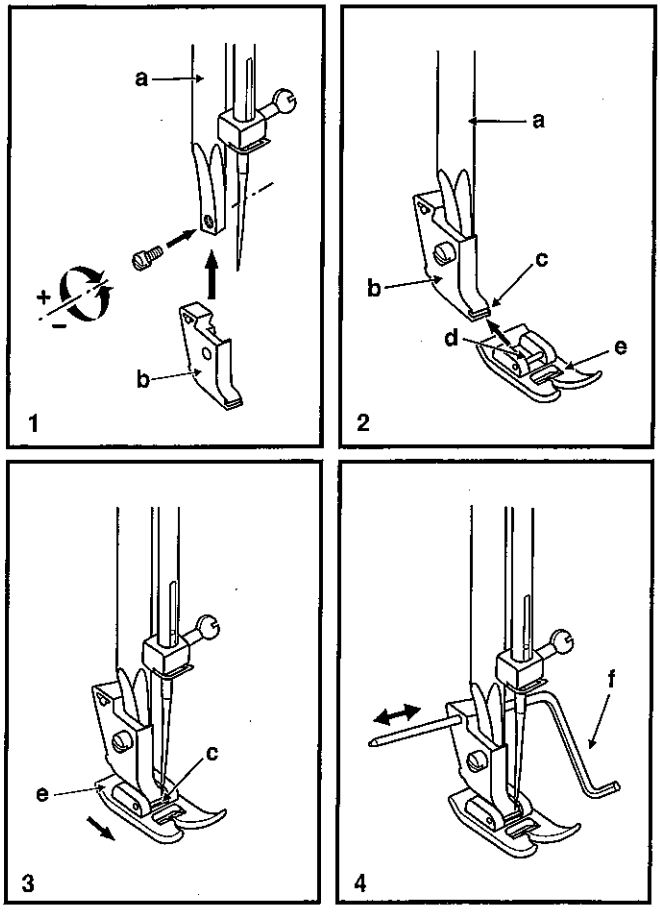
Removing the presser foot

Push the pin (d) of the presser foot forward to separate. (3)

Attaching the edge/quilting guide

Attach the edge/quilting guide (f) in the slot as illustrated. Adjust as needed for hems, pleats, quilting, etc. (4)

Attention:
Turn power switch to off ("O") when carrying out any of the above operations!



☐ Needle/ Fabric/ Thread Chart

NEEDLE, FABRIC, THREAD SELECTION GUIDE

NEEDLE SIZE	FABRICS	THREAD
9-11 (70-80)	Lightweight fabrics-thin cottons, voile, silk, muslin, interlocks, cotton knits, tricots, jerseys, crepes, woven polyester, shirt & blouse fabrics.	Light-duty thread in cotton, nylon, polyester or cotton wrapped polyester.
11-14 (80-90)	Medium weight fabrics-cotton, satin, kettlecloth, sailcloth, double knits, lightweight woolens.	Most threads sold are medium size and suitable for these fabrics and needle sizes. Use polyester threads on synthetic materials and cotton on natural woven fabrics for best results. Always use the same thread on top and bottom.
14 (90)	Medium weight fabrics-cotton duck, woolen, heavier knits, terrycloth, denims.	
16 (100)	Heavyweight fabrics-canvas, woolens, outdoor tent and quilted fabrics, denims, upholstery material (light to medium).	
18 (110)	Heavy woolen, overcoat fabrics, upholstery fabrics, some leathers and vinyls.	Heavy duty thread.

IMPORTANT: Match needle size to thread size and weight of fabric.

NEEDLE, FABRIC SELECTION

NEEDLES	EXPLANATION	TYPE OF FABRIC
SINGER® 2020	Standard sharp needles. Sizes range thin to large. 9 (70) to 18 (110).	Natural woven fabrics-wool, cotton, silk, etc. Not recommended for double knits.
SINGER® 2045	Semi-ball point needle, scarfed. 9 (70) to 18 (110).	Natural and synthetic woven fabrics, polyester blends. Knits-polyesters, interlocks, tricot, single and double knits. Also sweater knits, Lycra®, swimsuit fabric, elastic.
SINGER® 2032	Leather needles. 12 (80) to 18 (110).	Leather, vinyl, upholstery. (Leaves smaller hole than standard large needle.)

Note :

1. For best sewing results always use genuine SINGER® needles.
2. Replace needle often (approximately every other garment) and/ or at first thread breakage or skipped stitches.

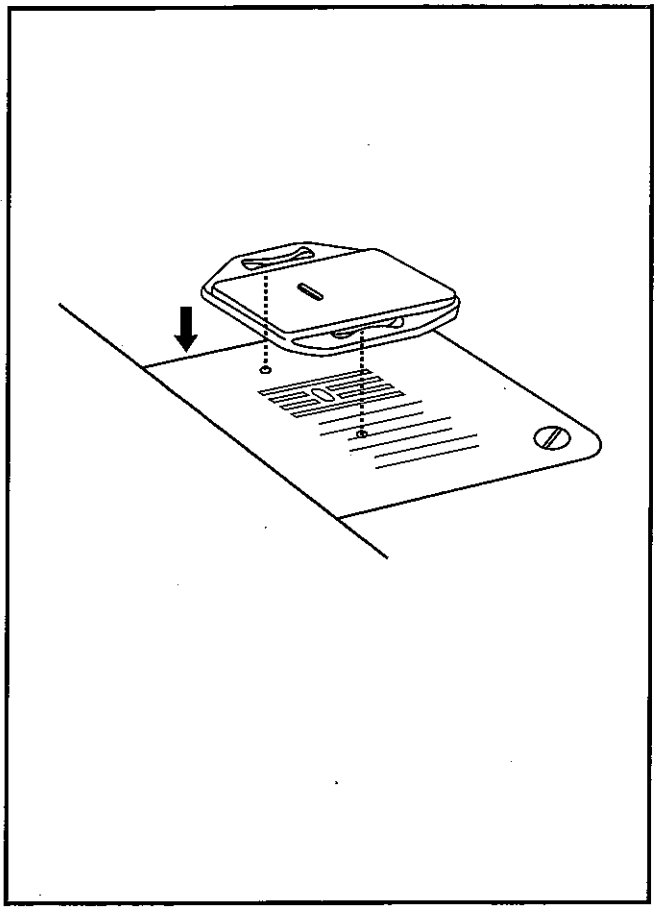
☐ Darning Plate

For certain types of work, (e.g. darning or free-hand embroidery), the darning plate must be used.

Install the darning plate as illustrated.

For normal sewing, remove the darning plate.

For free-motion sewing it is recommended to use a darning/embroidery foot, available as an optional accessory from SINGER® retailers. (See page 6 for part number of darning/embroidery foot)



☐ Inserting & Changing Needles

Change the needle regularly, especially if it is showing signs of wear and causing problems. For best sewing results always use SINGER® brand needles.

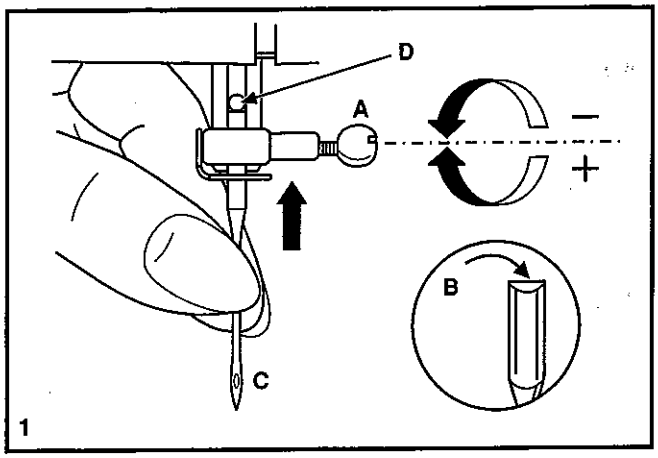
Insert the needle as illustrated as follows:

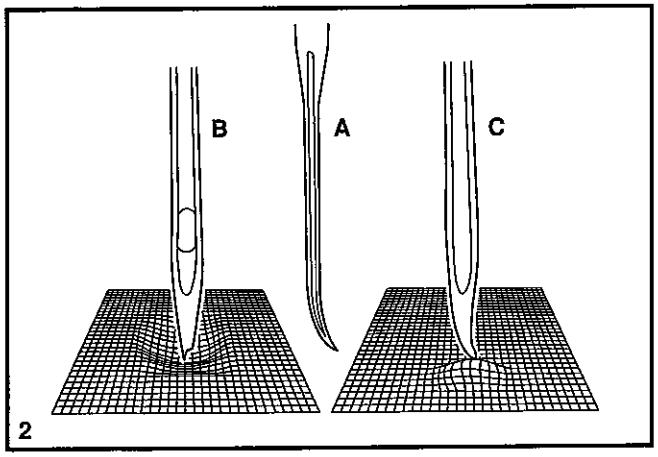
A. Loosen the needle clamp screw and tighten again after inserting the new needle. (1)
B. The flat side of the shaft should be towards the back.
C/D.Insert the needle as far up as it will go.

Attention:
Turn power switch to off ("O") before inserting or removing the needle.

Needles must be in perfect condition. (2)

Problems can occur with:
A. Bent needles
B. Damaged points
C. Blunt needles



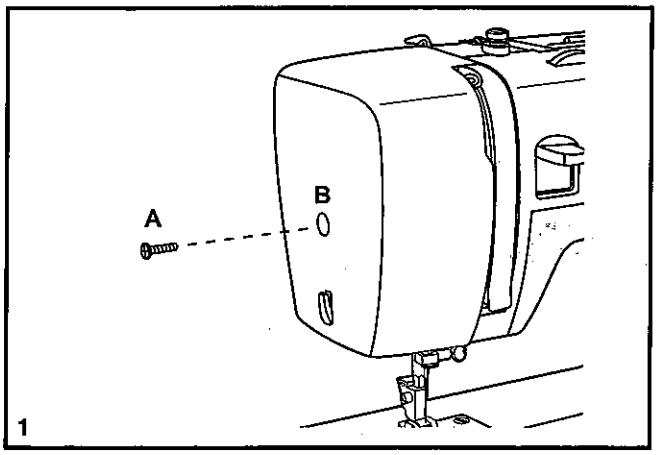


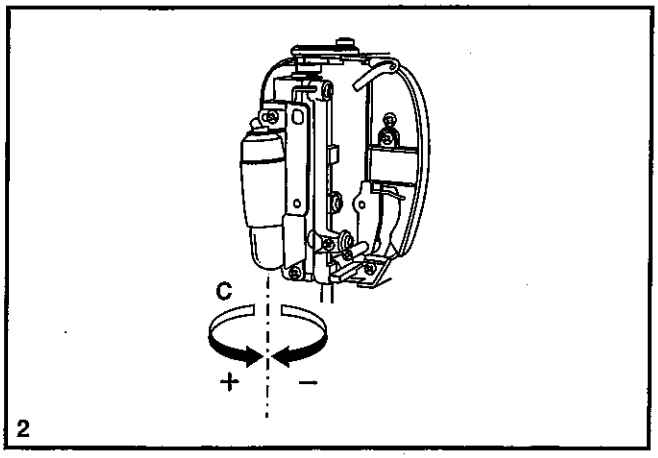
☐ Changing the Bulb

Disconnect the machine from the power supply by removing the plug from the electrical socket!
Replace bulb with same type rated 10 watts (110-120V area) or 15 watts (220-240V area).

- Loosen screw (A) as illustrated. (1)
- Remove the face plate (B).
- Unscrew the bulb and install a new one (C). (2)
- Replace the face plate and tighten screw.

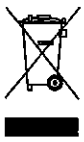
Should there be any problem, consult your SINGER® retailer.





☐ Troubleshooting Guide

Problem	Cause	Correction
Upper thread breaks	1. The machine is not threaded correctly. 2. The thread tension is too tight. 3. The thread is too thick for the needle. 4. The needle is not inserted correctly. 5. The thread is wound around the spool holder pin. 6. The needle is damaged.	1. Rethread the machine. 2. Reduce the thread tension. (lower number) 3. Select a larger needle. 4. Remove and reinsert the needle. (flat side towards the back) 5. Remove the reel and wind thread onto reel. 6. Replace the needle.
Lower thread breaks	1. The bobbin case is not inserted correctly. 2. The bobbin case is threaded wrong. 3. The lower thread tension is too tight.	1. Remove and reinsert the bobbin case and pull on the thread. The thread should pull easily. 2. Check both bobbin and bobbin case. 3. Loosen lower thread tension as described.
Skipped stitches	1. The needle is not inserted correctly. 2. The needle is damaged. 3. The wrong size or type of needle has been used. 4. The foot is not attached correctly.	1. Remove and reinsert needle. (flat side towards the back) 2. Insert a new needle. 3. Choose a needle to suit the thread and fabric. 4. Check and attach correctly.
Needle breaks	1. The needle is damaged. 2. The needle is not correctly inserted. 3. Wrong needle size for the fabric. 4. The wrong foot is attached.	1. Insert a new needle. 2. Insert the needle correctly. (flat side towards the back) 3. Choose a needle to suit the thread and fabric. 4. Select the correct foot.
Loose stitches	1. The machine is not correctly threaded. 2. The bobbin case is not correctly threaded. 3. Needle/ fabric/ thread combination is wrong. 4. Thread tension wrong.	1. Check the threading. 2. Thread the bobbin case as illustrated. 3. The needle size must suit the fabric and thread. 4. Correct the thread tension.
Seams gather or pucker	1. The needle is too thick for the fabric. 2. The stitch length is incorrectly adjusted. 3. The thread tension is too tight.	1. Select a finer needle. 2. Readjust the stitch length. 3. Loosen the thread tension.
Uneven stitches, uneven feed	1. Poor quality thread. 2. The bobbin case is incorrectly threaded. 3. Fabric has been pulled.	1. Select a better quality thread. 2. Remove bobbin case, thread and insert correctly. 3. Do not pull on the fabric while sewing, let it be drawn through by the machine.
The machine is noisy	1. The machine must be lubricated. 2. Lint or oil have collected on the hook or needle bar. 3. Poor quality oil has been used. 4. The needle is damaged.	1. Lubricate as described. 2. Clean the hook and feed dog as described. 3. Only use good quality sewing machine oil. 4. Replace the needle.
The machine jams	Thread is caught in the hook.	Remove the upper thread and bobbin case, turn the handwheel backwards and forwards by hand and remove the thread. Lubricate as described.



This marking indicates that this product should not be disposed with other household wastes throughout the European Union. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

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