Instruction Manual
## 5 Stitch Sewing Machine

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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.

In addition to the many familiar SINGER exclusives, like a removable extension table and a horizontal spool pin, this machine offers you these features:

* Zig-zag stitching for buttonholes, mending and decorative stitches.

* Flexi stitch patterns for sewing knitted and other stretch fabrics. (only for machines with 6, 8 and 10 stitches)

* Built-in 4-step buttonholer that takes the difficulty out of making a buttonhole. (only for machines with 5, 6, 8 and 10 stitches)

* Blindsitching for invisible hems. (only for machines with 5, 6, 8 and 10 stitches)

* Easy to find "Letter-Coded" Accessories.

* Drop in front bobbin for easy, quick bobbin replacement.

* Simple stitch length dial and push button reverse stitching.

* Snap on presser feet that are quickly removed and easily replaced.

* One-way needle insertion that makes it impossible to insert the needle incorrectly.

May we recommend that, before you start to use your sewing machine, you discover the many advantages 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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Copyright (c) 1992 Singer Sewing Machine Company

All rights reserved throughout the world.
Dear Customer,

We recommend that for future reference you record the Serial Number of your Sewing Machine in the space provided.

Refer to illustration at right for location of Serial Number on your machine.

For European Territories:

This Singer Sewing Machine was tested according to European norms and meets the requirements regarding electrical safety radio, interference and electromagnetic immunity.

The conformity is documented with the \( \text{\textcopyright} \) mark.
1 Getting to know your machine

Principal parts

1. Hand wheel
2. Bobbin winder
3. Pattern selector lever (only for machines with 5, 6, 8 and 10 stitches)
4. Horizontal spool pin and holder
5. Needle position selector
6. Stitch width lever
7. Snap-in thread guide
8. Bobbin winder tension disc
9. Thread guide
10. Take up lever
11. Face plate
12. Needle thread tension dial
13. Thread guides
14. Snap on presser foot
15. Feed system
16. Needle plate
17. One-way needle clamp
18. Removable extension table
19. Stitch length dial/ four-step buttonhole (only for machines with 5, 6, 8 and 10 stitches)
20. Push button reverse
21. Stitch balance control (only for machines with 6, 8 and 10 stitches)
22. Presser foot lifter
23. Thread cutter
24. Slide plate
25. Foot control
26. Electrical lead
27. Machine plug
28. Power and light switch
29. Bobbin winding indent
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Accessories

The following accessories furnished with your sewing machine are designed to simplify your sewing projects and increase the versatility of your machine.

The letter in a circle adjacent to the illustrated part is reproduced on the part itself to help you select the correct attachment for the type of work you are doing.

1. Special purpose presser foot (J) is used for decorative and zig-zag sewing. (only for machines with 5, 6, 8 and 10 stitches)

2. General purpose needle plate (A) and presser foot (B) are on your machine when delivered. Use together for alternating between straight and zig-zag stitching.

3. Buttonhole presser foot (L) is used with the General Purpose Needle Plate to make four-step buttonholes. (only for machines with 5, 6, 8 and 10 stitches)

4. Zipper foot (E) is used for inserting zippers and stitching corded seams. (only for machines with 5, 6, 8 and 10 stitches)

5. Friction free spool holder is used to hold various size spools and allows thread to unwind smoothly. The spool does not turn.

6. Small thread spool holder (Q) for use with small diameter spools of thread.

7. Needlepack includes an assortment for sewing various types of fabrics.
8. **Feed cover (F)** is used to prevent the feed from moving the fabric when darning or free motion embroidery.

9. **Transparent bobbins** for easy viewing of thread supply

10. **Blindstitch hem presser foot** is used to position the hem for blindstitch hemming. (only for machines with 5, 6, 8 and 10 stitches)

11. **Twin needle and spool pin** are used to stitch two parallel rows of decorative stitching simultaneously. When using twin-needle for decorative stitching, set stitch width lever to zig-zag mid range. (Optional for some markets).

12. **Felt** for twin needle spool pin. (Optional for some markets).

Optional accessories are available for your machine from your local Singer retailer.
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IMPORTANT SAFETY INSTRUCTIONS

When using this machine, basic safety precautions should always be followed including the following:

Read all instructions before using this machine.

DANGER - To reduce the risk of electric shock:

* The machine should never be left unattended when plugged in. Always unplug the machine from the electric outlet immediately after using and before cleaning.

* Always unplug before re-lamping. Replace bulb with the same type rated 15 watts. Be sure to replace the face plate which covers the light bulb before operating the machine.

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

* Be sure that the electrical voltage of the socket outlet (wall receptacle) is the same as the rated voltage of the motor.

* Use this machine only for its intended use as described in this Operator's Guide. Use only attachments recommended by the manufacturer as contained in the Operator's Guide.

* To disconnect, turn all controls to the off ("0") position, then remove plug from outlet.

* Disconnect the power-line plug from the socket outlet or switch the machine off when making any adjustments in the needle area, such as threading needle, changing needle, changing throat plate or changing presser foot, etc.

* Always unplug the machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the Operator's Guide.

* Do not attempt to adjust the motor belt. Contact your nearest Service Center should any adjustment be required.

* Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

* Handle the foot controller with care and avoid dropping it on the floor. Be sure not to place anything on top of it.

* Always use the proper throat plate. The wrong plate can cause the needle to break.

* Do not use bent needles.

* When sewing, keep fingers away from all moving parts. Special care is required around the sewing machine needle.

* Do not pull or push fabric while stitching. It may deflect the needle causing it to break.

* Before removing the bobbin case, remove plug from the socket outlet.

* For double insulated machines, when servicing use only identical replacement parts.

* Never operate the machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damage, or dropped into the water. Return the machine to the nearest authorized dealer or Service Center for examination, repair, electrical, or mechanical adjustment.
* Never operate the machine with any air openings blocked. Keep ventilation openings of the machine and foot controller free from the accumulation of lint, dust, and loose cloth.

* Never drop or insert any object into any opening.

* Do not use outdoors.

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

* Do not allow to be used as a toy. Close attention is necessary when the machine is used by or near children.

SAVE THESE INSTRUCTIONS

Servicing should be performed by an authorized service representative.

This product is intended for household use.
5 Stitch Sewing Machine

2 Getting ready to sew

Operating the machine

Connecting the machine
Push plug (1) into the receptacle (2) at the right end of the machine. Then connect plug (3) to your socket outlet.

For North America
This appliance has a polarized (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way.

If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.

Running the machine
To turn on machine and sewing light, press upper portion "I" of power switch (4). To turn off machine and light, press lower portion "0" of power switch.

To run the machine and control speed press the foot control (5) with your foot. The harder you press, the faster the machine will sew. To stop machine, remove foot from control.

Note: Do not operate machine without fabric under the presser foot as this may damage the feed and the presser foot.

Choosing and changing needles
Important: For best results from your sewing machine, use only SINGER * needles. Check the needle package, and the Fabric, Thread and Needle Table on page 16 for the correct needle and fabric combination.

* Raise needle to its highest position.

* Loosen needle clamp screw and remove needle.

* With flat side of needle to the back, insert new needle up into clamp as far as it will go.

* Tighten needle clamp screw securely.
Changing snap-on presser feet (B), (D), (J), (L)

Your machine comes with the General Purpose Presser Foot (B) already attached. You can easily change to any one of the other presser feet which snap onto a common shank by following the directions below.

* Raise needle to its highest position by turning hand wheel toward you.

* Raise presser foot using presser foot lifter at back of machine.

* Push toe of presser foot (1) up, until it snaps off the shank (2).

* Remove foot from machine.

* Place new foot under center of shank.

* Lower presser foot lifter, fitting shank over presser foot pin (3).

* Don't turn screw. Instead, push presser foot screw (4) down, firmly until foot snaps into place.

Changing screw-on presser feet (H)

Some special presser feet with built-in shanks can be purchased at your SINGER dealer and can be replaced as follows:

* Raise needle and presser foot.

* Loosen presser foot screw (1) and remove presser foot with shank (2), guiding it toward you and to the right.

* To replace presser foot with shank, hook shank around the presser bar and tighten presser foot screw with the use of a coin.
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Changing the needle plate (A), (C)

Your machine comes with the General Purpose Needle Plate (A) attached. The Straight Stitch Needle Plate (C) may be purchased at your sewing center and can be attached as follows:

* Raise needle and presser foot.
* Open slide plate.
* Lift up needle plate from right corner and slide out from under foot.
* To replace needle plate, slide it under pin (1) and push it firmly to the left
* Press down until it snaps into place.

Attaching the feed cover (F)

The feed cover is used to keep the feed from moving the fabric when attaching a button, darning or sewing free-motion embroidery. To attach it, follow the directions below:

* Raise needle and presser foot.
* Open slide plate.
* Slide feed cover on top of needle plate, pressing tabs (1) and (2) into holes.
* Close slide plate.
* To remove, open slide plate and lift front edge of cover; pull it away.

Removing the extension table

Free arm sewing makes it easier to sew hard-to-reach areas.

To change machine for free arm sewing, lift right edge (1) of extension table, slide it to the left and off the machine.
The needle and thread you choose will depend upon the fabric being sewn.

The table below is a practical guide to needle and thread selection.

Always refer to it before beginning a sewing project. Be sure to use the same size and type of thread in both needle and bobbin.

<table>
<thead>
<tr>
<th>Fabrics</th>
<th>Thread</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Light-Weight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batiste</td>
<td>Cotton-wrapped</td>
<td>2020</td>
<td>11/80</td>
</tr>
<tr>
<td>Chiffon</td>
<td>Polyester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crepe</td>
<td>100% Polyester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Mercerized Size 50 Nylon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium-Weight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corduroy</td>
<td>Cotton-wrapped</td>
<td>2020</td>
<td>14/90</td>
</tr>
<tr>
<td>Flannel</td>
<td>Polyester</td>
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<td></td>
</tr>
<tr>
<td>Gabardine</td>
<td>100% Polyester</td>
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<tr>
<td>Gingham</td>
<td>*Mercerized Size 50</td>
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<td>Linen</td>
<td>Nylon</td>
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<tr>
<td>Muslin</td>
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<tr>
<td>Wool Crepe</td>
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<tr>
<td><strong>Medium-Heavy</strong></td>
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<tr>
<td>Bonded Wovens</td>
<td>Cotton-wrapped</td>
<td>2020</td>
<td>16/100</td>
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<tr>
<td>Canvas</td>
<td>Polyester</td>
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<tr>
<td>Coating</td>
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<tr>
<td><strong>Heavy Duty</strong></td>
<td>*Mercerized Size 40</td>
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<tr>
<td>Denim</td>
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<td>Duck</td>
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<td></td>
</tr>
<tr>
<td>Sailcloth</td>
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<tr>
<td><strong>Knits</strong></td>
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<tr>
<td>Tricot</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Not recommended on stretch fabrics

Ball-Point 2045
Size 11/80, 14/100, 16/110
Winding a bobbin

Winding a bobbin is quick and easy when you follow the directions below. Always wind the bobbin before threading the machine and needle.

* Push in indent (1) on hand wheel disc. This will stop the needle from moving.

* Place spool of thread on spool pin.

* Slide spool cap (2) firmly over rim of spool to prevent thread tangling.

* Lead thread from spool and snap into thread guide post (3).

* Wind thread clockwise around front of bobbin winder tension disc (4).

* Pass thread end, from inside, through small hole in rim of bobbin.

* Place bobbin on spindle and push it to the right

* Holding thread end, step on speed controller to run machine until desired amount of thread is wound. (Winding stops automatically once bobbin is full.)

* Cut thread; push bobbin to the left and remove it from spindle.

* Trim thread end from top of bobbin.

* Return hand wheel disc to sewing position by pressing on side opposite indent.
To insert a bobbin, follow the instructions below:

* Raise presser foot

* Turn hand wheel toward you until needle is in its highest position.

* Open slide plate and remove empty bobbin.

1. Pull 4” (10cm) of thread from replacement bobbin and insert bobbin into case, as shown.

2. Holding bobbin in place, guide thread into notch (1) and then down the slot to the left and guide around into notch (2).

3. Draw several inches of thread diagonally across the bobbin toward the back of the machine.

4. While holding thread on outside, close the slide plate, allowing thread to extend through the slot between the slide plate and needle plate.

* Follow directions for "Raising Bobbin Thread"
Threading the machine

To thread your machine correctly, follow the steps below:

* Raise take-up lever (6) to highest position by turning hand wheel toward you.

* Raise presser foot to release thread tension.

* Place spool of thread on spool pin (1).

* Slide spool cap (2) firmly over rim of spool to prevent thread tangling.

* Lead thread from spool and snap into thread guide (3) and with only one hand pass the thread under the guide and through the slot, as illustrated (4).

* Thread the tension discs by leading the thread down and around the tension (5). Hold the spool lightly and pull the thread up, lifting the spring and allowing the thread to slip into thread guard.

* Slip thread into take-up lever as illustrated (6).

* Pass thread through guides (7) and (8).

* Thread needle from front to back, pulling 4" (10 cm) of thread through eye.
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Raising the bobbin thread

Once the needle has been threaded and the bobbin placed in the bobbin case, the bobbin thread must be brought up through the hole in the needle plate.

1. Hold needle thread loosely with left hand.
   * Turn hand wheel slowly toward you, lowering needle into hole in plate.

2. Continue to do this until needle rises above needle plate.
   * Pull gently on needle thread and bring up bobbin thread in a loop.

3. Open loop with fingers to find end of bobbin thread.

4. Draw needle thread through left side opening in presser foot
   * Pull both threads to back of machine.
3 Straight stitching

Stitch width selector

Before you move the selectors to set your machine for straight stitching, turn the hand wheel toward you until needle is at its highest point.

Straight stitching can be performed with pattern selector in any position; stitch width lever must be set at only.

Needle position selector

Needle Position Selector positions the needle in left ( ), center ( ) or right ( ) needle positions.

Stitch length selector

The stitch length indicator is numbered 0 to 5. The lower the number, the shorter the stitch. Shorter stitches are best for lightweight fabrics; longer ones for heavy fabrics. To adjust the length of your stitches, turn the dial so that desired stitch length is positioned under ( * ) symbol.

* To shorten stitch length, turn dial toward a lower number.
* To lengthen stitch length, turn dial toward a higher number.

Reverse stitch button

The reverse stitch button with the (???) symbol, is located in the center of the stitch length selector.
* For reverse stitching, push in the button and hold in place. The machine will stitch in reverse only as long as you keep the button pushed in.
5 Stitch Sewing Machines

Adjusting thread tension

When an even amount of tension is exerted on both threads, a smooth even stitch, known as a balanced stitch, is produced.

Correct tension is important because too much or too little will weaken your seams or cause your fabric to pucker. Make a test sample with the fabric and thread you plan to use and examine it.

A perfect, well balanced stitch (1), will have the needle and bobbin threads locked between the two layers of fabric with no loops on top or bottom and no puckering.

Too much tension will produce a tight stitch (2) which will cause the fabric to pucker.

* To decrease tension, turn the dial to a lower number.

Too little tension will produce a loose stitch (3) which will cause loops in your seam.

* To increase tension, turn the dial to a higher number.
You can sew seams easily and accurately when you follow the suggestions below.

**Placing fabric under foot**

Most fabrics can be placed under the foot by raising the presser foot lifter (1) to its normal "Up" position (2), where it locks in place.

When using bulky fabric, multiple fabric layers or an embroidery hoop, raise the lifter to the high rise position (3), thus increasing the space between the foot and the needle plate.

* Lower presser foot lifter all the way down and you are ready to sew.

**Basting**

Pin basting and hand basting are easy ways to make temporary seams before machine sewing.

* To pin baste, insert pins at stitching line. NEVER place pins on the underside of fabric in contact with the feed. Do not sew over pins; pull them out as you stitch.

* To hand baste, make long stitches that can be easily removed.

**Keeping seams straight**

To keep seams straight, use one of the guidelines on the needle plate.

The most commonly used line (1), the 5/8 inch (1.6 cm) seam allowance, is extended onto the slide plate.
Starting a seam

Place fabric under presser foot 1/2 inch (12 mm) from rear of fabric. Align the right edge with one of the seam guidelines on the throat plate. Lower the presser foot.

Backstitch to the edge of the fabric for reinforcement by pushing in the reverse button located in center of the stitch length dial. Hold button in until stitching reaches edge of fabric.

Release push button for forward stitching.

Guiding and supporting fabric

Most fabrics need only to be guided in front of the presser foot. Some fabrics, however, require support while being stitched.

* For tricot, and other similar synthetic knits, apply gentle tension by holding the fabric at the front and back of presser foot as you sew. Do not pull fabric.

* For elastisized fabric, stretch lace, and knits with an unusual amount of elasticity, hold the fabric firmly in front and back of the presser foot to stretch the seam as the stitches are being placed.

Sewing in reverse

To neaten the end of a seam, push in the reverse button and backstitch 3-4 stitches. Raise needle and presser foot and remove fabric by drawing it to the back and left. Cut thread on thread cutter on presser bar.
Worn or torn spots on children's clothes and household linens can be darned effortlessly and quickly with lime practice. When greater control is needed, an embroidery hoop and a special darning and embroidery foot, which may be purchased at your SINGER dealer should be used.

**Recommended settings**

Stitch Selection: Straight Stitch

Needle Position: 

Stitch Width: 

Stitch Length: 2-5

Foot: General Purpose (B)

Needle Plate: General Purpose (A)

Attach feed cover plate (F).

* If the area to be darned is open, baste a backing on the underside.

* Place area to be darned, right side up, under presser foot: lower the foot and begin stitching, alternately drawing the fabric toward you and pulling it gently away from you.

* Continue this forward and backward motion as you till the area in with parallel lines of stitching.
Quilting

Quilting is the art of stitching two or more thicknesses of fabric together in a planned design. A padding is used to produce a soft, puffed effect.

**Recommended settings**

<table>
<thead>
<tr>
<th>Stitch Selection: Straight Stitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Position:</td>
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<tr>
<td>Stitch Width:</td>
</tr>
<tr>
<td>Stitch Length: 2-5</td>
</tr>
<tr>
<td>Foot: General Purpose (B)</td>
</tr>
<tr>
<td>Needle Plate: General Purpose (A)</td>
</tr>
</tbody>
</table>

* Mark the design or quilting lines with a tailors chalk or a washable marker on the right side of garment.

* Place a wadding, or padding, over the underside of garment and cover it with a backing or lining fabric.

* Baste together to prevent the layers from moving.

* Place fabrics under needle and carefully begin to stitch along your marked pattern on the fabric.

* If you are quilting a very large piece, work from the center of the fabric to the outside edge and guide fabric with both hands.
Inserting a zipper

We recommend using the Zipper Foot to form an even line of stitching close to the zipper.

**Recommended settings**

Stitch Selection: Straight Stitch

Needle Position:

Stitch Width:

Stitch Length: 2-5
Foot: Zipper (E)
Needle Plate: General Purpose (A)

When the zipper teeth are to the left of the needle:

* Slide the adjusting block, (1) which slides on the pin, across to the right.

* Snap-on the foot to the left side of the pin. (See changing snap-on presser feet).

* Check the position of the foot by lowering the needle into the notch on the side of the foot, to ensure that it clears the foot.

When the zipper teeth are to the right of the needle:

* Slide the adjusting block, (1) across to the left.

* Snap on the foot to the right side of the pin. (See changing snap-on presser feet).

* Check the position of the foot by lowering the needle into the notch on the side of the foot, to ensure that it clears the foot.
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4 Zigzag stitching

Stitch pattern selector
(only for machines with 5, 6, 8 and 10 stitches)

* To produce any of the zig-zag stitches, the stitch width selector is moved from its straight position to any of its other positions. The further you move the selector lever toward the right, the wider your stitch will be.

Raise the needle to its highest position.

* Set the stitch width selector to the straight position. (This allows the pattern selector to be moved easily).
* Slide the pattern selector to the center of the desired pattern group.

Machine Pattern

only for machine 1 to 7
with 6 stitches

only for machine 1 to 9
with 8 stitches

only for machine 1 to 11
with 10 stitches

Needle position selector

Before moving selector, make sure needle is fully raised.

* Most of your zig-zag stitching will be done with the needle in the center ( ) position.

* Left ( ) and right ( ) settings are used for special stitch placement.

Stitch width selector

Before moving selector, make sure needle is fully raised.
5 Stitch Sewing Machines

Adjusting stitch length

Any stitch length setting from 1 to 5 will give you an open zig-zag stitch.

The higher the number, the more open, or further apart your stitches will be.

The area between 0 and 1 on the dial is used for satin stitching a series of closely spaced plain zig-zag stitches that form a smooth satin-like surface.

Needle thread tension

The needle-thread tension dial regulates the amount of tension on the needle thread and lets you select just the right setting for your fabric and thread.

The correct tension setting will produce a smooth even stitch (1).

Too much tension will produce a tight stitch (2), causing fabric to pucker. Loosen tension by turning dial to a lower number.

Too little tension will produce a loose stitch (3), causing loops in your pattern. Tighten tension by turning dial to a higher number.
Zig-zag stitch

The Zig-Zag Stitch can be used when sewing seams, appliqueing, monogramming or for decorative sewing.

**Recommended settings**

Stitch Selection: Zig-zag Stitch

Needle Position: 

Stitch Width: 

Stitch Length: 2-5

Foot: General Purpose B)

Needle Plate: General Purpose A)

Seam finishing

Use a zig-zag stitch to finish seam edges of fabrics that are likely to fray.

* Sew seams as desired; trim and press open.

* Place edge of seam allowance under foot, as shown.

* Stitch close to edge, letting outer zig-zag fall over edge of fabric.
Satin stitching

**Recommended settings**

Stitch Selection: Zig-zag Stitch

Needle Position:   
Stitch Width:   
Stitch Length: 0-2
Foot: Special Purpose (J)
Needle Plate: General Purpose (A)

Satin stitching is a series of closely spaced zig-zag stitches. Satin stitch can be used for monograms, embroidery and applique work to produce a smooth satin-like finish.

* Practice to get desired stitch appearance.

**Block monogramming**

* Lightly trace letters on right side of fabric.

* Center tracing under needle.

* Stitch entire outline, leaving needle in fabric when turning.

* Pull threads to wrong side of fabric, tie and trim.
Blindstitching provides a durable hem finish that can be used on a variety of different weight fabrics. Blindstitching takes a little practice, however, so make a test sample first.

**Recommended settings**

<table>
<thead>
<tr>
<th>Stitch Selection: Blindstitch</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Needle Position:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stitch Width:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stitch Length: 1-1/2 to 2-1/2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Foot: Special for blindstitch</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Needle Plate: General Purpose (A)</th>
</tr>
</thead>
</table>

Prepare the hem by folding it and pressing it in the usual way. You may want to baste the hem to hold it in place, as shown. Be sure to place the basting at least 1/2 inch (12mm) below the top edge of the hem allowance.

With the wrong side of fabric uppermost, turn the hem under, as shown, creating a soft fold from the top edge of hem. Pin or baste all three layers together in place.

Position the hem under the presser foot with the soft fold resting against wall of the guide, as shown.

* Lower the presser foot and begin sewing making certain the straight stitches fall on the edge of the hem and the zig-zag stitches just pierce the soft fold of the work. Adjust stitch width if necessary. While stitching, guide the hem edge in a straight line and feed the soft fold evenly against the wall of the guide.

* If layers of fabric are pinned together, remove pins as you come to them. Do not sew over pins.
Ladder seams

A ladder seam, made with blindstitching is functional and decorative at the same time. Appropriate for stretch and knitted fabrics, it provides stretchable, decoratively constructed seams and edge finishes for collars, pockets and necklines in sportwear and swimwear.

**Recommended settings**

<table>
<thead>
<tr>
<th>Stitch Selection: Blindstitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Position:</td>
</tr>
<tr>
<td>Stitch Width:</td>
</tr>
<tr>
<td>Stitch Length: 1-1/2 to 2-1/2</td>
</tr>
<tr>
<td>Foot: General Purpose (B)</td>
</tr>
<tr>
<td>Needle Plate: General Purpose (A)</td>
</tr>
</tbody>
</table>

* Make a test sample to adjust thread tension and stitch length to suit your fabric. Needle thread tension should be lighter than normal.

* Cut and fit garment, allow 5/8 inch (16mm) seam allowance. Baste seam line.

* Position fabric so that the large zig-zag stitches tall on the stitching line, towards the center of the garment.

* When stitching is completed, open the seam by pulling the fabric back on opposite sides of seam to produce a ladder effect and press seam allowances.
Multi-stitch zig-zag

Mending, overcasting, joining or reinforcing can all be done using the Multi-Stitch Zig-Zag.

**Recommended settings**

<table>
<thead>
<tr>
<th>Needle Position:</th>
<th>Stitch Width:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Purpose (J)</td>
<td>General Purpose (A)</td>
</tr>
</tbody>
</table>

**Mending a tear**

* Trim ragged edges of tear.

* Cut a lining for reinforcement.

* Bring the edges of tear together and baste lining to wrong side of fabric.

* Place tear, right side up, under foot.

* If necessary, sew over tear again.

* Trim away lining close to stitching.
Bar tacks

Strong multi-stitch bar tacks are effective for tacking belt loops on heavy fabrics such as denim.

<table>
<thead>
<tr>
<th>Recommended settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stitch Selection: Multi-Stitch Zig-Zag</td>
</tr>
<tr>
<td>Needle Position:</td>
</tr>
<tr>
<td>Stitch Width:</td>
</tr>
<tr>
<td>Stitch Length: 1-2</td>
</tr>
<tr>
<td>Foot: Special Purpose (J)</td>
</tr>
<tr>
<td>Needle Plate: General Purpose (A)</td>
</tr>
</tbody>
</table>

* Mark start and finish lines of belt loop on fabric.

* Place one end of belt loop, wrong side up, on beginning mark on fabric and straight stitch in place.

* Trim raw end close to stitching and fold belt loop over, right side up.

* Stitch a bar tack about 1/8” (3mm) from the fold, as shown.

* Fold loose end of belt loop under and press it in place on finishing line.

* Stitch second bar tack about 1 1/8” (3mm) from the fold.
"M" Stitch

This stitch can be used for stretch seams and decorative stitching.

Elastic insertion

**Recommended Settings**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Selection: &quot;M&quot; Stitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Position</td>
<td></td>
</tr>
<tr>
<td>Stitch Width</td>
<td></td>
</tr>
<tr>
<td>Stitch Length: 1-2</td>
<td></td>
</tr>
<tr>
<td>Foot: Special Purpose (J)</td>
<td></td>
</tr>
<tr>
<td>Needle Plate: General Purpose (A)</td>
<td></td>
</tr>
</tbody>
</table>

* Fit elastic for snugness and allow 1 inch (25mm) for joining. Lap the two ends and stitch.

* Divide elastic and garment into equal quarters. Place elastic over the fabric and pin the two together at these points keeping top edges even.

* Anchor the elastic to the fabric with a few stitches. Now stretch elastic between the pins as you sew, using both hands to hold elastic tight in front and back of presser foot.
Lace insertion

Lace is inserted after fabric is cut, but before it is sewn together.

**Recommended Settings**

Stitch Selection "M" Stitch

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Position:</td>
<td>![Needle Position Diagram]</td>
</tr>
<tr>
<td>Stitch Width:</td>
<td>![Stitch Width Diagram]</td>
</tr>
<tr>
<td>Stitch Length:</td>
<td>1/2-2</td>
</tr>
<tr>
<td>Foot:</td>
<td>Special Purpose (J)</td>
</tr>
<tr>
<td>Needle Plate:</td>
<td>General Purpose (A)</td>
</tr>
</tbody>
</table>

* Cut lace to desired size.

* Position lace on right side of fabric and pin in place.

* Place the work under the presser foot so that the stitches fall over the lace edges. as shown.

* After both sides of lace are sewn, turn fabric over to the back side and cut the fabric on both sides close to the stitching lines and remove.
5 Four-step buttonhole
(only for machines with 5, 6, 8 and 10 stitches)

Your machine makes buttonholes to any size you choose in only four, easy steps.

* You never need to move the fabric or reposition the needle.
* Always make a practice buttonhole on a sample of your fabric.
* Be sure bobbin contains enough thread.
* When making buttonholes on hard-to-reach areas convert machine bed to free arm sewing.
* Mark buttonhole position on fabric as indicated in pattern.

Recommended settings

<table>
<thead>
<tr>
<th>Stitch Selection</th>
<th>Buttonhole Stitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stitch Width:</td>
<td>Pre-set</td>
</tr>
<tr>
<td>Foot:</td>
<td>Buttonhole (L)</td>
</tr>
<tr>
<td>Needle Plate:</td>
<td>General Purpose (A)</td>
</tr>
</tbody>
</table>

Step A

* Raise presser foot.
* Place fabric under foot.
* Center 3 red guidelines (1) of foot around beginning line of buttonhole.
* Turn buttonhole dial to the buttonhole symbol (A) for the first step.
* Position needle in fabric at point (2) by turning the hand wheel towards you.
* Stitch down to point 3.
5 Stitch Sewing Machine

Step B

* Raise needle out of fabric.

* Turn buttonhole dial to the buttonhole symbol (B) for the second step.

* Make at least four stitches, ending at point (4).

Step C

* Raise needle out of fabric.

* Turn buttonhole to the buttonhole symbol (C) for the third step.

* Stitch up to point (5).

Step D

* Raise needle out of fabric.

* Turn buttonhole dial to the buttonhole symbol (D) for the fourth step.

* Make at least four stitches, ending at point (6).

* Raise presser foot and remove garment from machine. Clip thread ends.

* Carefully cut buttonhole opening with a seam ripper or small, sharp scissors.
5 Stitch Sewing Machine

Balancing the buttonhole

On some kinds of fabrics, there may be a difference in the density of the stitches on the right or the left side of the buttonhole. This is easily adjusted by turning the balance knob (1) in the center of the stitch length dial to balance the density of the stitching. A very slight turn of the dial will produce a noticeable change.

* If the stitches on the right side of the buttonhole (1) are too open, turn the balance dial slightly to the right, until the density of the stitches increases.

* If the stitches on the left side of the buttonhole (1) are too open, turn the balance slightly to the left, until the density of the stitches increases.

After the buttonhole has been made and the balance has been altered, return the balance dial back to its neutral position after all the buttonholes on the garment have been sewn.
6 Free-arm sewing

Fabric handling, when sewing tubular and hard to reach garment areas, is simplified and made easier when you use the free-arm sewing capability of your sewing machine.

Sleeves

* Free-arm sewing takes the difficulty out of topstitching, sleeves, finishing waistbands and trouser legs rotate smoothly under the needle, around the arm, allowing you to place your stitching accurately.

Buttons

* Sewing buttons on a cuff or neckband is easy with free-arm sewing. The sewing arm allows room for cuffs to slip onto without being stretched out of shape, and you can also see and handle the stitching area more easily.

Bar tacks

* Bar tacks reinforce areas of strain and can be applied to ready-made garments, as well as to those sewn at home. Use the free-arm surface to avoid fabric bulk around the needle when you apply bar tacks to pockets, pleats and waistlines.
7 Twin needle sewing

Twin needle sewing produces two parallel lines of closely-spaced decorative stitching. You can sew with either one or two thread colors.

Your machine is not supplied with the twin needle or spool pin. These may be obtained from your local

**Recommended settings**

Stitch Selection: Overedged Seams

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Position</td>
<td></td>
</tr>
<tr>
<td>Stitch Width</td>
<td></td>
</tr>
<tr>
<td>Stitch Length</td>
<td>2-5</td>
</tr>
<tr>
<td>Foot</td>
<td>General Purpose</td>
</tr>
</tbody>
</table>

39
* Turn the machine off.

* Insert the twin needle with the flat side of the shank toward the rear of the machine.

* Thread the machine as you normally would for single needle stitching, and pass the thread through the left eye of the twin needle.

* Insert a second spool pin into the hole on the top cover of the machine, as illustrated.

* Thread the machine in the usual way.

* Pass the thread through the remaining points, making certain to omit the thread guide just above the needle and pass thread through right eye of needle.

* Draw both threads under the foot and back along with the bobbin thread

* Slowly lower the needle into the hole in the needle plate by turning the hand wheel toward you to make sure the needle clears the plate.

**Caution:**
Make sure not to use a stitch width greater than that what is recommended when twin needle stitching
8 Caring for your machine
Removing and replacing bobbin case

Caution: Before cleaning or adjusting the machine, remove plug from the socket outlet.

* Raise presser foot and needle.

* Open slide plate, remove bobbin and remove needle plate.

To remove bobbin case

* With a small screwdriver, turn bobbin case holder (1) to the rear as far as it will go.

* Lifting the left side of the bobbin case, slide it out from machine.

To replace bobbin case

* Guide forked end (2) of bobbin case under feed (3).

* Draw rim of bobbin case under position plate (4). Be sure bobbin case is freely seated on hook race.

* Turn bobbin case holder (1) forward as far as it will go, locking bobbin case in place.

Note: Turn handwheel towards you to check to make sure it is properly replaced.

* Replace needle plate.

* Insert bobbin and close slide plate.
Caution: Before changing light bulb, make sure you have removed plug from socket outlet and remove face plate which covers the light bulb. Be sure to replace the face plate which covers the light bulb before operating the machine.

This machine is designed to use a 15-watt maximum light bulb with a bayonet fitting.

* Loosen and remove screw (1) located on face plate.

* Remove face plate by grasping it around the bottom edge and pulling toward the left, then down and away from machine.

* Do not attempt to unscrew light bulb.

* Push bulb up into socket and turn in the direction of arrows to unlock bulb pin.

* Pull bulb down and out of socket.

* Push new bulb up into socket and turn in the direction of arrows until pins lock into position.

* Making sure the presser foot lever is up, replace the face plate by guiding front top corner under and behind lowest front corner of top cover. Push bottom of face plate up and back until it is aligned with top cover.

* Insert screw and tighten.
5 Stitch Sewing Machine

Cleaning the machine

Your machine is designed to give you many years of dependable service. To ensure this reliability, take a few minutes to keep the machine clean.

The machine surfaces and covers can be cleaned when necessary, with a damp, soft cloth and a mild soap.

Remove lint and fluff from exposed parts and, with a lint brush clean these parts:

* Take-up lever and thread guides.

* Presser and needle bars.

* Bobbin case and needle plate areas.

Your machine should be periodically checked by your local SINGER stockist for wear.
Lubricating the machine

How often you need to lubricate the machine depends on how often you use it and where you keep it. The following general guidelines assume that you will be sewing several times a week. But if you use your machine more frequently, lubricate it more often than the guidelines suggest.

Approximately once a year, lubricate all moving connections as shown, to ensure freedom of movement and to protect metal parts from excessive wear.

To determine which connectors move and need lubrication, turn the handwheel slowly, by hand, while face plate is removed.

When lubricating, apply only SINGER* oil at the points shown. SINGER* oil is specially prepared and does not contain harmful deposits that can interfere with the smooth action of precision parts.
Additional accessories

Additional Accessories for your sewing machine are available for purchase at your SINGER dealer.

1. **Straight stitch presser foot (D) and needle plate (C)** are used together when straight stitching lightweight fabrics or when your fabric or sewing procedure requires close control.

2. **Button sewing foot (H)** is used to hold any two-hole or four-hole button securely for stitching.

3. **Lint brush** is used for cleaning hard to reach areas on your sewing machine.

4. **Oil container** for machine lubrication.
Attaching a button

Flat buttons can be sewn on quickly and easily using the plain zig-zag stitch. A special button sewing foot (H), may be purchased at your sewing center.

<table>
<thead>
<tr>
<th>Recommended settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stitch Selection: Zig-Zag Stitch</td>
</tr>
<tr>
<td>Needle Position:</td>
</tr>
<tr>
<td>Stitch Width:</td>
</tr>
<tr>
<td>Foot: Button Sewing (H)</td>
</tr>
<tr>
<td>Needle Plate: General Purpose (A)</td>
</tr>
<tr>
<td>Attach Feed Cover (F)</td>
</tr>
</tbody>
</table>

Before you can attach a button, the bobbin thread must be brought up through the hole in the feed cover.

1. Set stitch width at (???) and needle position selector at (??) Position button under foot and lower the needle into the center of the left hole. Lower the foot. Turn hand wheel toward you until needle rises out of button and is above the foot.

2. Move stitch width selector until needle is over the other hole in the button Then, when you begin to stitch, the needle should enter into the right hole of the button Take six or more zig-zag stitches to attach button and finish with the needle on the left side.

3. To fasten stitching, adjust width to (???) and take three or four stitches. Remove work, draw threads to underside, fasten, and trim.
Performance checklist

When sewing difficulties occur, look back through this manual to make sure you are correctly following the instructions. If you still have a problem, the reminders below may help you to correct it.

**Needle Does Not Move**
- Is machine connected to electrical supply?
- Is the power and light switch on? Is controller connected?
- Is the handwheel engaged for bobbin winding?

**Needle Moves But Stitch Is Not Formed**
- Is needle defective?
- Is needle fully inserted into needle clamp?
- Are bobbin and needle correctly threaded?
- Is bobbin correctly inserted into bobbin case?

**Needle Breaks**
- Is needle straight and sharp? Is needle correct size?
- Is needle fully inserted into needle clamp?
- Are controls properly set?
- Are accessories correct for application?

**Bobbin Winding Difficulties**
- Is thread unwinding freely from spool?
- Is bobbin winder engaged?
- Is thread end securely held at start of wind?
- Is thread hanging up on the slit on the thread spool?

**Upper Thread Breaks**
- Is machine properly threaded?
- Is thread freely unwinding from spool?
- Is proper spool cap being used?
- Is needle correct size for thread?
- Is upper thread tension too tight?
- Is bobbin case properly inserted?
- Is bobbin rim free of nicks?

**Lower Thread Breaks**
- Is bobbin correctly wound?
- Is bobbin correctly inserted into bobbin case?
- Is bobbin case correctly threaded?
- Is thread hanging up on the slit on the thread spool?

**Skipped Stitches**
- Is machine properly threaded?
- Is fabric firmly held down?
- Is needle correct style and size?
- Is needle straight and sharp?

**Fabric Does Not Move Properly Under Presser Foot**
- Is presser foot correctly attached to machine?
- Is presser foot lowered?
- Is stitch length correctly set?