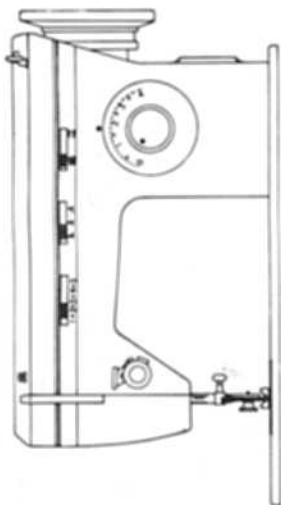


Instruction Booklet
SINGER
Zig-Zag Sewing Machine



Model **3105/6105**

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.



Serial No.

Serial No

PREPARING TO SEW

Choosing Needle and Thread

The needle and thread you choose will depend upon the fabric being stitched. The table below is a practical guide to needle and thread selection. Refer to it before starting to sew. Be sure to use the same size and type of thread in both needle and bobbin.

IMPORTANT

Before inserting plug into your electrical outlet, be sure that the electrical information stamped on the motor conforms to your electrical power supply.

- To turn light on and off, simply press the switch located on the motor.
- To run the machine, insert plug into outlet and press the speed controller. The harder you press, the faster the machine will sew. To stop the machine, release pressure from controller.

CAUTION: We recommend that you unplug your machine from the electrical outlet before changing needles, presser feet, needle plates, and when leaving machine unattended. This eliminates the possibility of starting the machine accidentally by pressing the speed controller.

For European Territories—
This is suppressed for radio and television interference in accordance With the International Electrotechnical Commission of the CISPR.

IMPORTANT: Machines for Great Britain and some other countries having similar wiring standards are shipped from the factory without a plug for connection to the mains. The wire in this mains lead are coloured in accordance with the following code:

Blue: neutral (N) Brown: live (L)

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

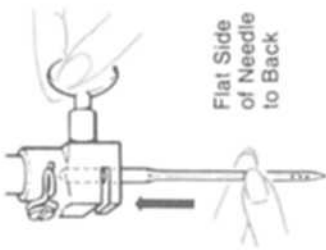
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black: The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. If a 13 Amp. (BS 1363) plug is used, a 3 Amp. fuse must be fitted, or if any other type of plug is used, a 5 Amp. fuse must be fitted with either in the plug or adaptor or at the distribution board.

Fabric	Thread	Needles	
		Type	Size
Delicate — tulle, chiffon, fine lace, organza	Fine mercerized cotton Fine synthetic thread	Catalog 2020 (15x1)	9/70
Lightweight — batiste, organdy, jersey, voile, taffeta, crepe, chiffon velvet, plastic film	50 mercerized cotton "A" silk Synthetic thread Polyester core/cotton	Catalog 2020 (15x1)	11/80
Medium Weight — gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, knits, deep-pile fabrics, vinyl	50 mercerized cotton 60 cotton "A" silk Synthetic thread Polyester core/cotton	Catalog 2020 (15x1)	14/90
Medium Heavy — gabardine, tweed, sailcloth, denim, coatings, drapery fabrics, vinyl, deep-pile fabrics	Heavy-duty mercerized cotton 40 to 60 cotton Synthetic thread	Catalog 2020 (15x1)	16/100
Heavy — overcoatings, dungaree, upholstery fabrics, canvas	Heavy-duty mercerized cotton 24 to 40 cotton Synthetic thread	Catalog 2020 (15x1)	18/110
All Weights — decorative top stitching	"D" silk† (Buttonhole twist)	Catalog 2020 (15x1)	18/110
Synthetic Knits and Stretch Fabrics — polyester doubleknit, nylon tricot, jersey, spandex, ciré tricot, panné velvet	"A" nylon 50 mercerized cotton "A" silk Polyester core/cotton	Catalog 2045 Ball Point	14/90
Leather — suede, kidskin, capeskin, lambskin, lined leathers	50 mercerized cotton Synthetic thread "A" silk Polyester core/cotton	Catalog 2032 (15x2)	11/80 14/90 16/100

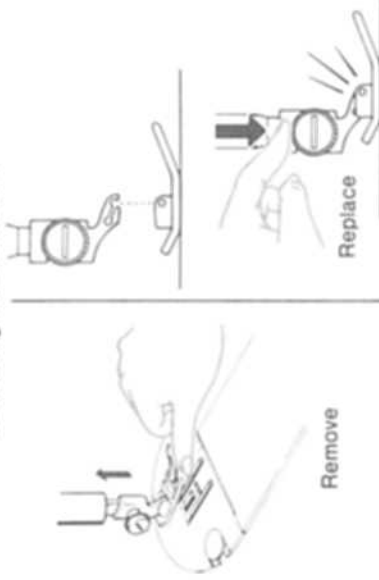
†Use with 50 mercerized cotton or "A" silk in bobbin

IMPORTANT: Your sewing machine has been designed to obtain best results with SINGER® needles. You should follow the recommendations in this instruction book and on the needle package for correct style and size of needle for different types and weights of fabric.

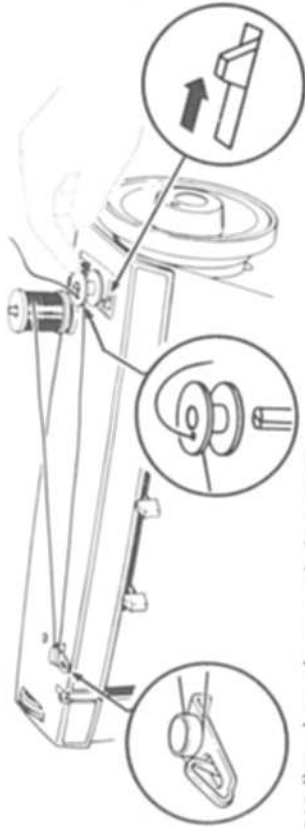
Changing the Needle



Removing Presser Foot



Winding the Bobbin (continued)



- Place thread spool on spool pin over the felt. Lead thread around bobbin winder tension disc and through small hole in bobbin (from inside out).
- Place bobbin on spindle and move bobbin-winder lever to right.
- Hold thread end and start the machine. Cut off thread end after a few coils have been wound.
- When required amount of thread has been wound (winding will stop when bobbin is full) stop machine and cut connecting thread.
- Move bobbin winder lever to the left and remove bobbin.
- Hold hand wheel and tighten hand wheel knob.

THREADING THE BOBBIN CASE



- Hold bobbin so that thread unwinds in direction shown, and insert bobbin in bobbin case.



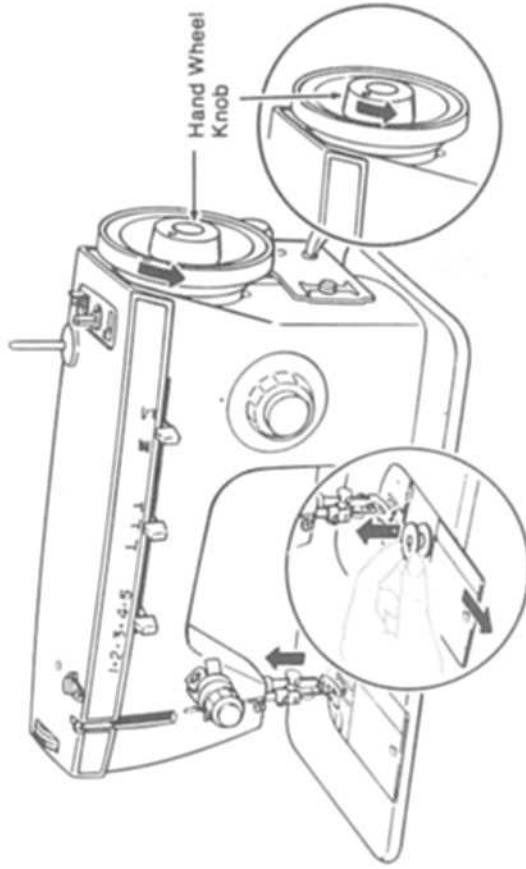
- Pull thread into notch A in bobbin case, draw it toward left and into slot B.



- Draw approximately four inches of thread diagonally across the bobbin.



- Close slide plate, allowing thread to extend through the slot between the slide plate and the needle plate.

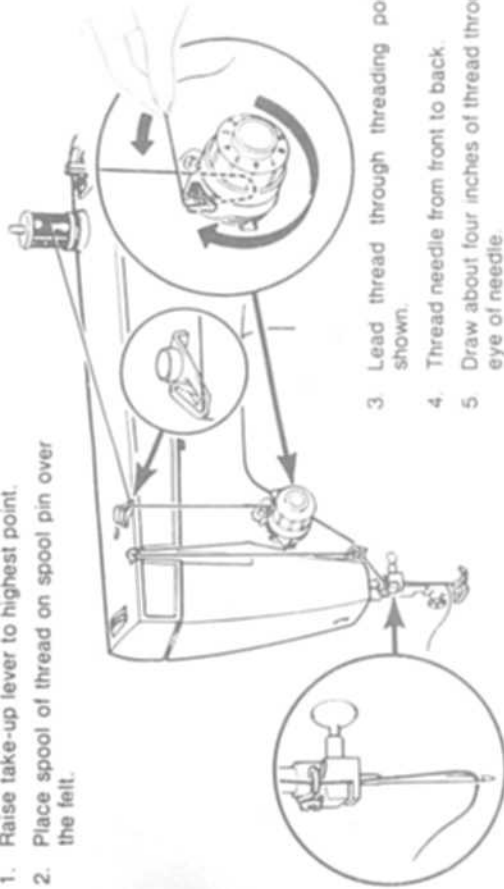


Winding the Bobbin

- Raise presser foot and turn hand wheel toward you until needle is at its highest point.
- Loosen hand wheel knob by turning it toward you with right hand while holding hand wheel with left hand.
- Open slide plate and lift out bobbin.

Threading the Needle

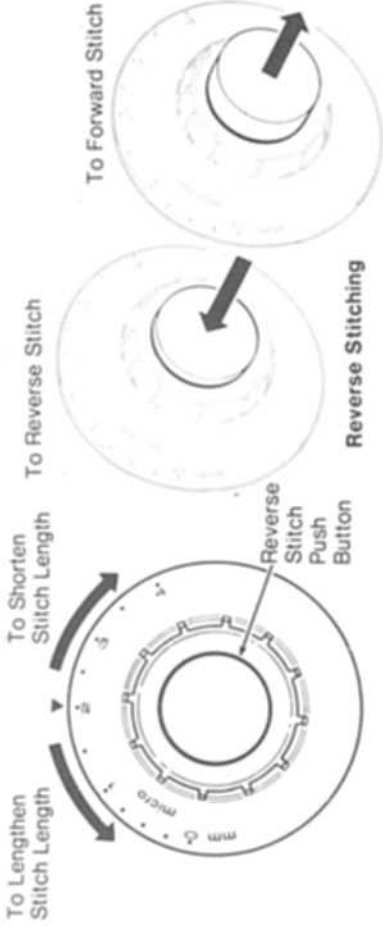
1. Raise take-up lever to highest point.
2. Place spool of thread on spool pin over the felt.



3. Lead thread through threading points shown.
4. Thread needle from front to back.
5. Draw about four inches of thread through eye of needle.

Raising the Bobbin Thread

<p>1. Hold needle thread lightly with left hand and turn hand wheel slowly towards you so that needle enters needle plate.</p>	<p>2. Continue turning hand wheel and holding needle thread until needle rises and brings up bobbin thread in a loop.</p>
<p>3. Undo the loop with your fingers.</p>	<p>4. Place both needle and bobbin threads under the presser foot and draw them to back of machine.</p>



Adjusting Stitch Length

Numerals from 1 to 4 represent the length of each stitch; the higher the number, the longer the stitch. Generally, shorter stitches are best for lightweight fabric, longer ones for heavier fabric. Area between 0 and 1 is used for closed zig-zag or satin stitching.

Setting the Dial

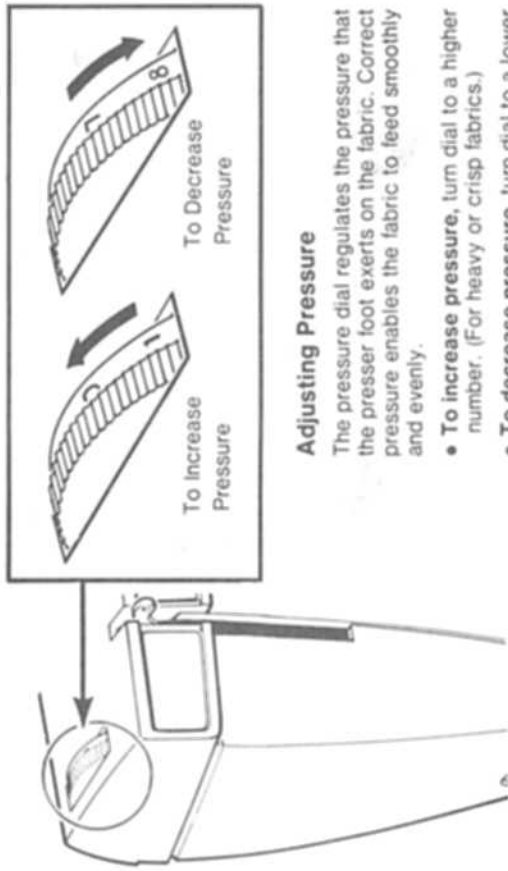
- Turn dial so that desired stitch length is positioned under ∇ symbol.
- To shorten stitch length, turn dial clockwise to a lower number.
- To lengthen the stitch, turn dial counterclockwise to a higher number.

Reverse Stitching

Adjusting Pressure

The pressure dial regulates the pressure that the presser foot exerts on the fabric. Correct pressure enables the fabric to feed smoothly and evenly.

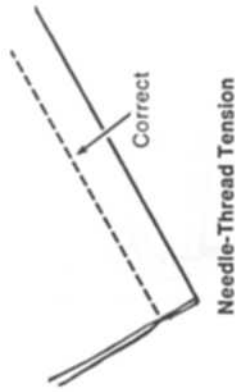
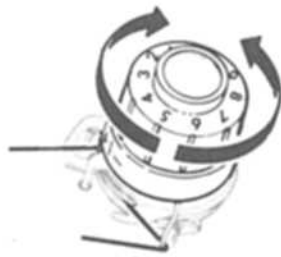
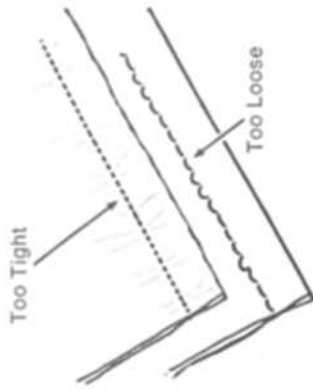
- To increase pressure, turn dial to a higher number. (For heavy or crisp fabrics.)
- To decrease pressure, turn dial to a lower number. (For lightweight or soft fabrics.)
- For darning, turn dial to 0.



REGULATING THREAD TENSION

Needle Thread Tension

Make a test sample with fabric and thread you plan to use. If stitches look too loose, increase tension by turning dial to a higher number. If fabric puckers, decrease tension by turning dial to a lower number.



Needle-Thread Tension

DARNING

- Set machine for straight stitching as instructed on page 8.
- Set stitch length between 1.5 and 2.5.
- Set pressure dial on 0.

Place area to be darned under presser foot; lower foot and start stitching, alternately drawing fabric toward you and pulling it gently away from you.



STRAIGHT STITCHING

Setting Stitch Width

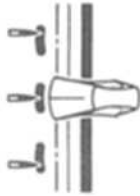
- Set stitch width selector to left (; straight stitch)

1 2 3 4 5



Setting Needle Position

- Set needle position selector at (center).



CAUTION: Make certain that needle is above the fabric before adjusting selectors.

ZIG-ZAG STITCHING

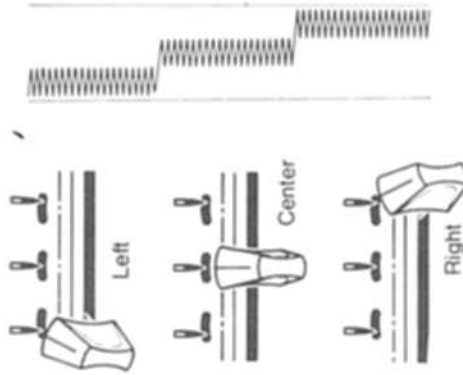
Adjusting Selectors

Needle Position Selector

Needle position setting of (; places stitching in center needle position.

Settings (; and (; place stitching in left or right needle position at stitch widths less than maximum.

Center (; position is preferred. Left or right settings are used only for special stitch placement, as when making buttonholes.



Stitch Width Selector

As the selector is moved to the right, the width of the zig-zag stitch is increased. Four settings are indicated, but intermediate settings may also be used.

1 2 3 4 5



STITCH PATTERN

For plain zig-zag stitching, position indicator line on lever under () symbol.



For Plain Zig-Zag

For blindstitching, position indicator line on lever under () symbol.



For Blindstitch

BLINDSTITCH HEMS

Settings:

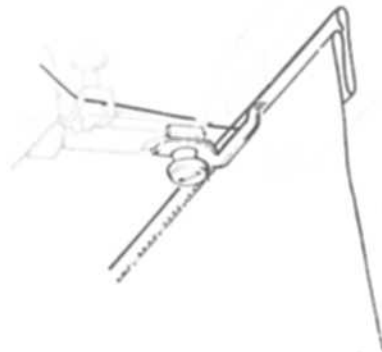
- Pattern:  (blindstitch)
- Stitch Width: To suit fabric
- Needle Position:  1
- Stitch Length: 1 to 2.5
- General Purpose Presser Foot
- Blindstitch Hem Guide
- General Purpose Needle Plate

1. Mark, turn, and press hem in the usual way.
2. Baste a guideline at least 12 millimeters ($1/2$ "") from the top edge of the hem so that the basting will not be caught by the flange of the blindstitch hem guide.

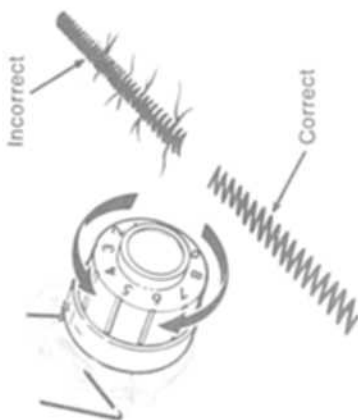


Basted Guideline

3. Attach the blindstitch hem guide to the presser bar
4. With the work wrong side up and the bulk of the fabric to the left, turn the hem under, creating a soft fold about 6 millimeters ($1/4$ "") from top edge of the hem.
5. Position the hem under the presser foot with the flange on the front of the guide resting on the 6 millimeter ($1/4$ "") hem edge and the soft fold against the wall of the flange.
6. Stitch so that straight stitches fall on the hem edge and the sideward stitches pierce the soft fold. While stitching, feed the soft fold against the wall of the flange and guide the hem edge in a straight line.



Blindstitch Hem



Setting Tension for Zig-Zag Stitching

Make a test sample with the fabric and thread you plan to use so that you can adjust the tension properly. The stitches should lie flat against the fabric without causing the fabric to pucker. If the stitches are not flat and the fabric is puckered, lower the needle-thread tension by turning the dial to a lower number.



Adjusting Stitch Length

Any stitch length setting from 1 to 4 will give you an open zig-zag stitch. The higher the number, the more open your stitches will be. The micro area, between 0 and 1, is used for the adjustment of zig-zag satin stitching.

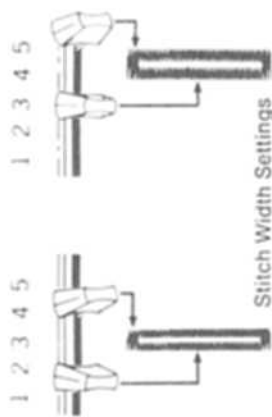
Keeping the Seam Straight

To keep the seam straight, use one of the numbered guidelines on the needle plate. The numbers indicate distance, in eighths of an inch, from the needle. If you want a $5/8$ -inch seam, for example, line up your fabric with the number 5 guideline. Note that the number 5 guideline is extended on the slide plate for your convenience.



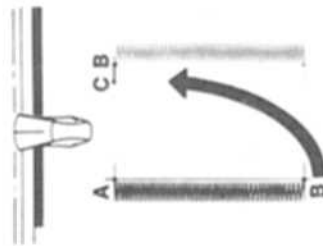
BUTTONHOLES

- Stitch Width: (see illus.)
- Needle Position: 
- Stitch Length: between 0 and 1



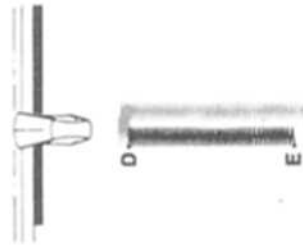
Stitch Width Settings

1 2 3 4 5



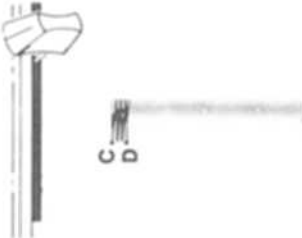
1. **Side Stitching:** Position needle in fabric at point A. Lower foot and stitch to end of marking. Leave needle in fabric at point B. Raise foot and pivot work on needle. Lower foot. Take one stitch without changing width setting, bringing work to point C.

1 2 3 4 5



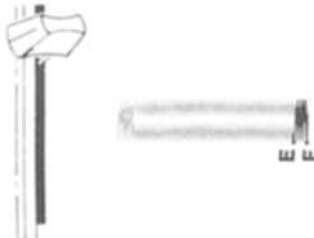
3. **Side Stitching:** Readjust stitch width selector for side stitching. Complete work to point E. Leave needle in fabric.

1 2 3 4 5



2. **Bar Tack:** Adjust stitch width selector for bar tacks and take at least six stitches. Stop at point D.

1 2 3 4 5



4. **Final Bar Tack:** Adjust stitch width selector for bar tacks, and take at least six stitches ending at point F.

CARING FOR YOUR MACHINE

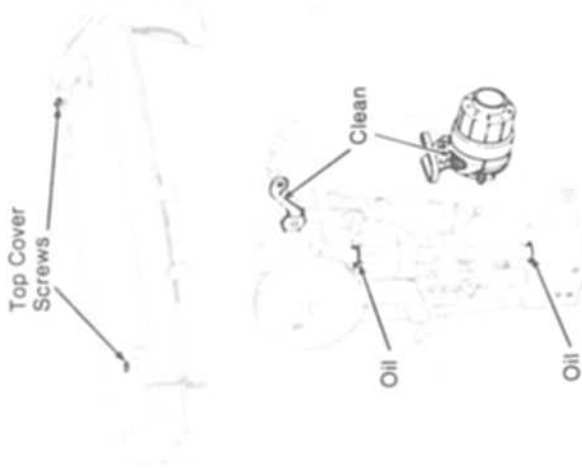
CAUTION: Before cleaning your machine always remove the power-line plug from the electrical outlet.

How often you will need to clean your machine will depend on how often you use it. When lint and fluff accumulate, clean and oil the areas shown.

For best results, apply SINGER® oil at points indicated. SINGER oil is specially prepared and does not contain harmful deposits that

can interfere with the smooth action of precision parts.

Periodically clean and lubricate all moving connections in top and bottom of machine to ensure freedom of movement and to protect metal parts from excessive wear. Put a drop of oil at each point where parts move against each other. To determine oiling points, turn hand wheel slowly by hand while covers are removed, and observe movement of parts.



Changing the Light Bulb

CAUTION: Before changing the light bulb, disconnect power-line plug from your electrical outlet.

Removing Bulb

Press bulb into socket and at the same time turn bulb over in direction shown to unlock bulb pin. Do not attempt to unscrew bulb.

Replacing Bulb

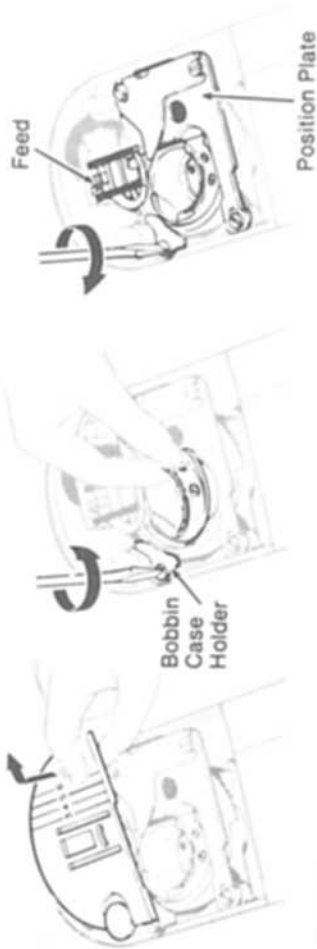
Press new bulb into socket, with bulb pin entering slot of socket, and turn it over in direction shown to lock bulb in position.

Use a 15 watt maximum light bulb.



Removing and Replacing Bobbin Case

1. Turn hand wheel toward you to raise needle to its highest position.
2. Open slide plate, remove needle plate and remove bobbin.
3. Insert screwdriver into bobbin case hold down and turn it toward the rear as illustrated.
4. To remove bobbin case:
 - Push bobbin case toward the rear and lift it up and out toward the front.
5. To replace bobbin case:
 - Guide forked end under the feed.
 - Draw bobbin case toward you so that front of case is under the position plate as illustrated.
 - Turn bobbin case hold down toward you to lock bobbin case in position.
6. Replace bobbin, needle plate and close slide plate.



Removing Needle Plate

- Open slide plate; place thumb under right side of needle plate, lift it up and withdraw it to right.

Replacing Needle Plate

- Replace needle plate under clamping pin, push it gently to the left, and press down until it snaps into place. Close slide plate.

If the Slide Plate Needs Replacing:

- Raise presser foot and make sure needle is in its highest position.
- Place slide plate in sideways with front edge close to but not covering the retaining spring as shown.
- With a small screwdriver, lift ends of spring into the slide grooves on underside of plate.
- Draw plate gently toward you to fully engage the spring.



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