

Simplicity
Model 621-401-008

**Sewing Machine
Instruction Manual**

Dear Owner:

You can be proud of your new sewing machine – an outstanding product of many years of development. The highest quality materials and functional design are combined in it to achieve years of dependable service.

If you have ever admired the beautiful and intricate sewing professional seamstresses, you will be amazed and delighted to learn that you can now do it yourself with this remarkable sewing machine.

Before attempting to sew, however, please read this instruction book carefully. If you follow these instructions and give your machine proper care, it will operate perfectly for many years.

Should the machine fail to function correctly, stop sewing and review the manual before starting again. Time spent in learning the features, controls and adjustments of your machine will eliminate errors and will result in satisfaction and enjoyment of your sewing skills.

“IMPORTANT SAFETY INSTRUCTIONS”

“When using an electrical sewing machine, basic safety precautions should always be followed, including the following.”

“Read all instructions before using this sewing machine.”

“This sewing machine is designed for household use.”

“DANGER- TO REDUCE RISK OF ELECTRIC SHOCK:”

“A sewing machine should never be left unattended when plugged in. Always unplug this sewing machine from the electrical outlet immediately after using and before cleaning.”

“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 attentions is necessary when this sewing machine is used by or near children.”
2. “Use this sewing machine 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 sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damages, or dropped into water. Return the sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.”

4. “Never operate the sewing machine with any air opening blocked. Keep ventilation openings from the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.”
5. “Never drop or insert any object into any opening.”
6. “Do not use outdoors.”
7. “Do not operate where aerosol (spray) products are being used or where oxygen is being administered.”
8. “To disconnect, turn all controls to the off (“O”) position, then remove plug from outlet.”
9. “Do not unplug by pulling on cord, To unplug, grasp the plug, not the cord.”

A. Sewing Machines

10. “Keep fingers away from all moving parts. Special care is required around the sewing machine needle.”
11. “Always use the proper needle plate. The wring plate can cause the needle to break.”
12. “Do not use bent needles.”
13. “Do not pull or push fabric while stitching. It may deflect the needle, causing it to break.”
14. “Switch 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,”
15. “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.”
16. “Always unplug before relamping. Replace bulb with the same rated 15 watts.”

“SAVE THESE INSTRUCTIONS”

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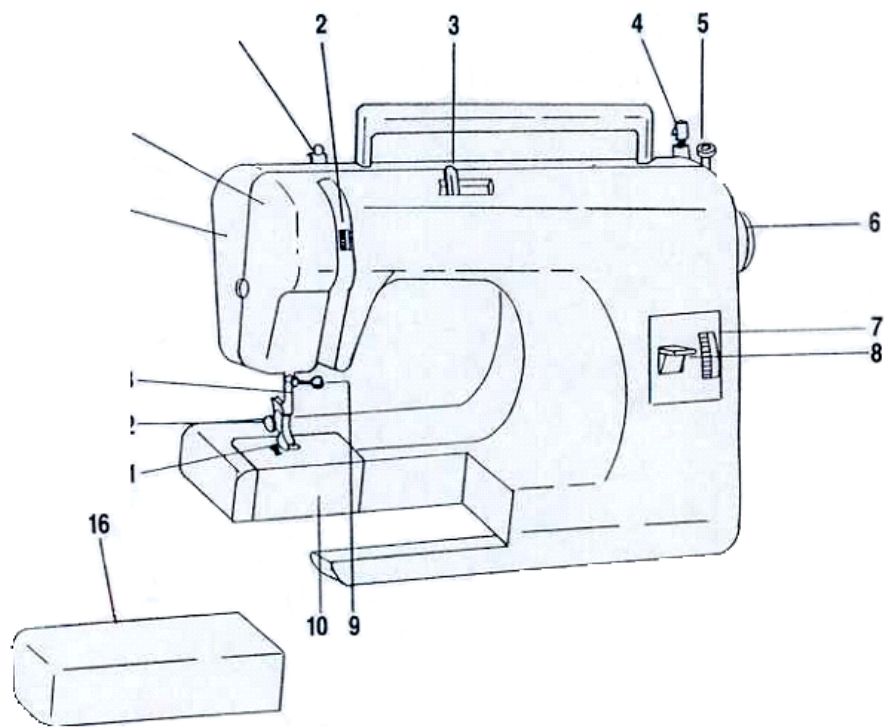
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PRINCIPAL PARTS

1. Bobbin winder thread guide
2. Thread tension dial
3. Stitch width control lever
4. Bobbin winder spindle
5. Bobbin winder stopper
6. Balance wheel
7. Stitch length dial
8. Reverse lever
9. Needle clamp and screw
10. Shuttle cover
11. Presser foot
12. Presser foot thumb screw
13. Needle
14. Rear cover
15. Front cover
16. Extension table



ACCESSORIES



Oiler



Needle set
Type: 15x1



Bobbin3



Straight stitch foot



Felt pads



Sewing lamp holder
(for replacing the lamp)



Darning Plate

This product is equipped with a polarized alternating current line plug (a plug having one blade wider than other. This plug will fit into the power outlet only one way. This is safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of the polarized plug.

HOW TO CONNECT THE MACHINE TO THE POWER SUPPLY

1. Fit the machine plug into the machine.
2. Plug the machine to the power supply.

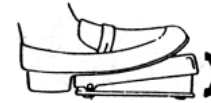
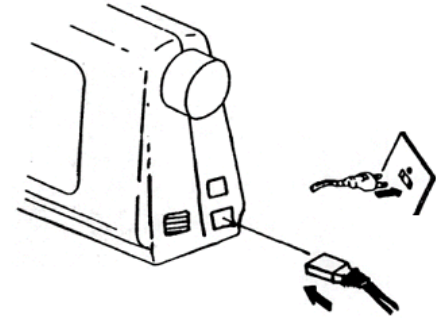
Note: *Before plugging in the machine, ensure that the voltage and number of cycles indicated, conforms to your electrical power supply.

HOW TO USE THE FOOT CONTROL

Sewing speed can be varied by the foot control. The harder you press on the controller, the faster the machine runs.

Note: *By releasing the controller, the machine stops running automatically.

*Before using the machine, practice controlling the speed with out threading.



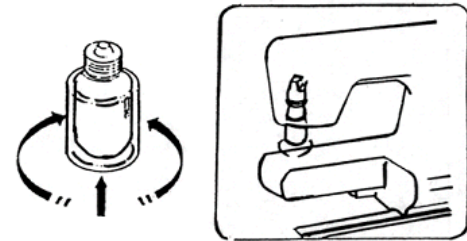
HOW TO REPLACE THE SEWING LAMP

Before replacing a lamp, disconnect the machine from the power supply.

To replace the sewing lamp, use the sewing lamp holder which you may find in the accessory storage.

Push the holder from bottom until the lug over the sewing lamp, and twist the holder together with sewing lamp in counterclockwise, until the lamp is taken down.

To replace the new sewing lamp, twist the holder together with sewing lamp in clockwise.



THREAD AND NEEDLE CHART**NEEDLE TYPE: 15x1**

	FABRICS	THREADS	NEEDLE SIZE
LIGHT WEIGHT	Sheer cotton, Silk Synthetics, Georgette	Fine Silk Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 11
MEDIUM WEIGHT	Medium Weight Cottons, Synthetics, Poplin, Velvet, Light Weight Wools	50 silk 50 to 80 Cotton 50 to 60 Synthetic Cotton Covered Polyester	11 or 14
HEAVY WEIGHT	Heavy Weight Cottons, Denim Tweed, Gabardine, Drapery	50 Silk 40 to 50 Cotton 40 to 50 Synthetic Cotton Covered Polyester	14 or 16

Note *In general, fine threads and needles are used for sewing thin fabrics, and thicker threads and needles are used for sewing heavy fabrics. Always test thread and needle size on a small piece of fabric, which will be used for actual sewing.

*Use the same thread for needle and bobbin.

*When sewing stretch, or fine fabrics and synthetics, use a BLUE SHANK needle. The blue shank needle effectively prevents skipped stitches.

*When sewing very fine fabrics, sew over a piece of paper to prevent yarn distortion.

CHANGING THE NEEDLE

1. Turn the balance wheel towards you until the needle is at its highest position.
2. Loosen the needle clamp screw by turning its top edge towards you. Remove the needle from the clamp.
3. Place the new needle in the needle clamp with its flat side facing away from you. Push the needle up into the needle clamp as far as possible.
4. Tighten the needle clamp screw firmly.

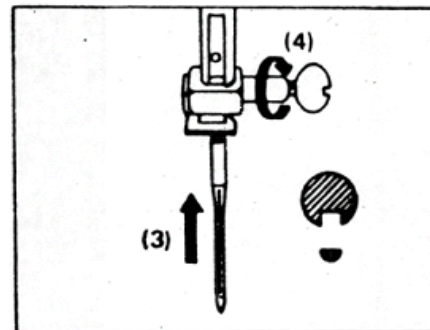
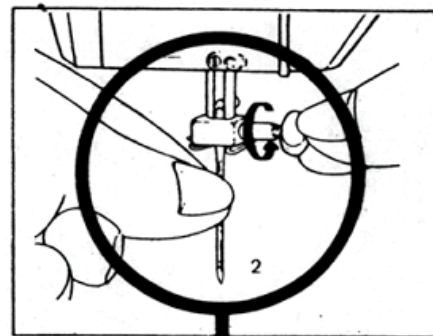
TO SELECT A SUITABLE NEEDLE



- A number indicating the size of needle is marked on the stem. The higher the number, the thicker the needle.



- Do not use any needle which is bent or blunted.



REMOVING AND ATTACHING THE PRESSER FOOT

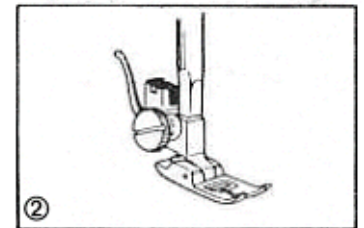
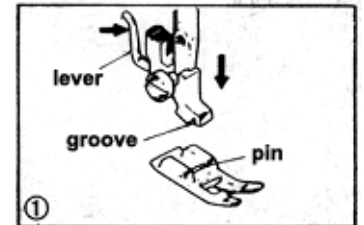
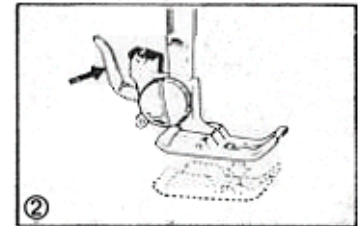
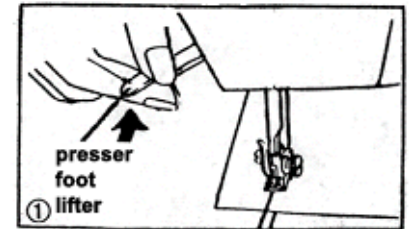
To Remove:

1. Turn the balance wheel towards you until the needle is at its highest position.
Raise the presser foot by lifting the presser foot lifter.
2. By lifting the lever on the back of the foot holder, the presser foot will drop off.

Note: *Do not force the presser foot to remove it.

To Attach:

1. Place the presser foot so that the pin on the foot lies just under the groove of the foot holder. Lower the foot holder.
2. When the presser foot lifter is raised you'll find the presser foot is locked in place.

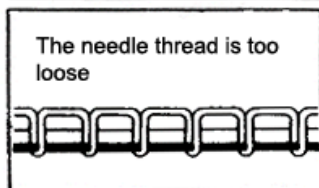
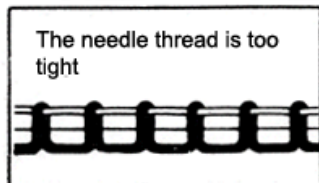
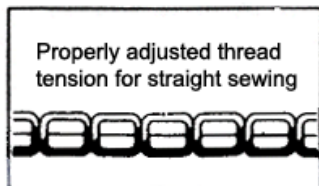


REGULATING THE THREAD TENSION

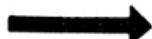
Generally, should any tension adjustment be necessary, the adjustment can normally be made by regulating the upper thread tension dial only. Bobbin thread tension has been adjusted at the factory and readjustment is seldom required except for special instances, thread and fabric.

Bobbin thread tension is just right when you can pull the thread from bobbin case easily with a little resistance.

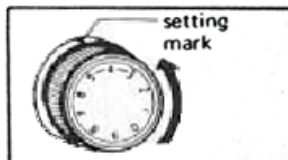
Thread tension may be adjusted by tightening or loosening the thread tension dial.



**The needle thread and the bobbin thread
Should interlock in the center of two layers of fabric.**



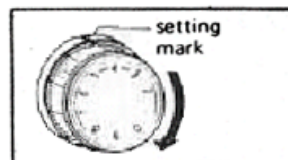
The bobbin thread appears on the upper surface of the fabrics



Loosen the needle thread tension by moving the dial to the lower number

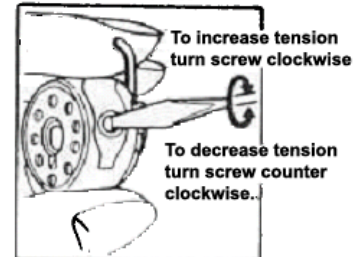


The needle thread appears on the underside of the fabrics



Tighten the needle thread tension by moving the dial to the higher number

***How to adjust the bobbin thread tension**



Remember the higher the number, the tighter the tension. Correctly balanced tension for one fabric may not be suitable for another. The required tension depends upon the stiffness of fabric, thickness of the fabric, numbers of layers of fabric being sewn, as well as the type of stitch you are making. It is better to test the stitching on a scrap of the fabric you are using before starting to make a garment.

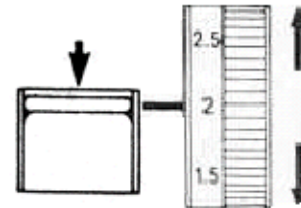
STITCH LENGTH DIAL REVERSE LEVER

STITCH LENGTH DIAL

To change the length of the stitches proceed as follows:
Turn the dial so that the number for the required stitch length is at setting mark. The numbers indicate the approximate is at setting mark. The numbers indicate the approximate stitch length in millimeters. The lower the number, the shorter the stitch.

REVERSE STITCH

Press downward the reverse lever and hold for reverse stitching. Fabric will immediately start feeding backwards. Release the lever and machine will resume normal forward sewing. Release the lever and machine will resume normal forwarding sewing. Very useful for fastening ends of seams and darts without having to tie threads, and for strengthening seams.



STITCH WIDTH CONTROL

The desired stitch width can be selected by moving the control lever of the dial. The marks on the dial correspond to the different stitch width shown on the panel respectively, as follows:

0 (----) straight stitch

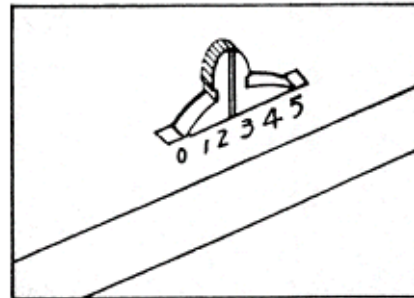
1 (w w w) zigzag stitch

2 (w w w) zigzag stitch

3 (W W W) zigzag stitch

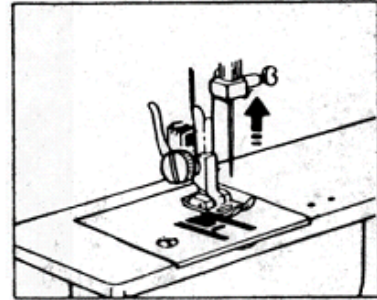
4 (W W W) zigzag stitch

5 (W W W) zigzag stitch

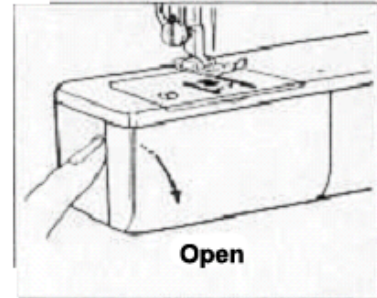


REMOVING THE BOBBIN CASE AND BOBBIN

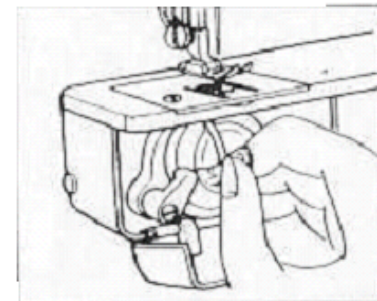
1. Raise the presser foot and turn the balance wheel towards you until the thread take-up lever is at its highest position.



2. Open the shuttle cover.

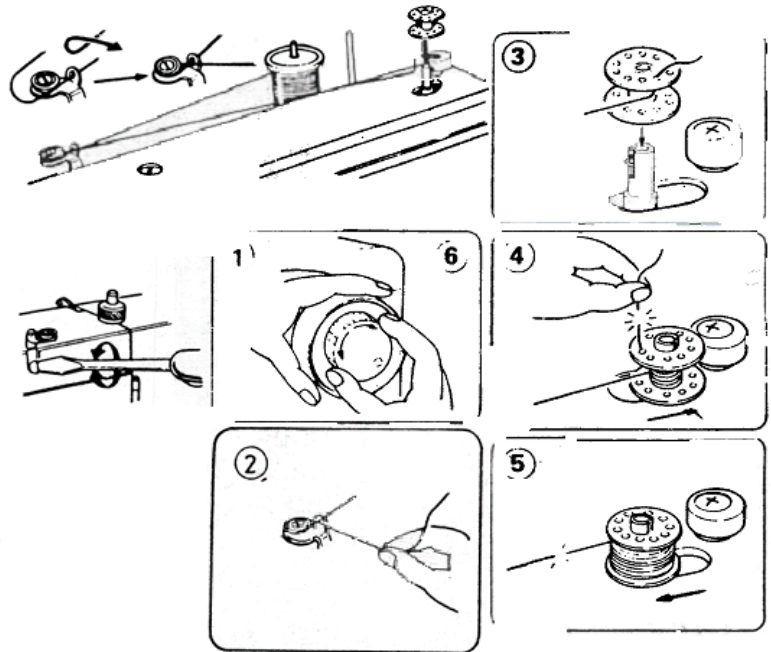
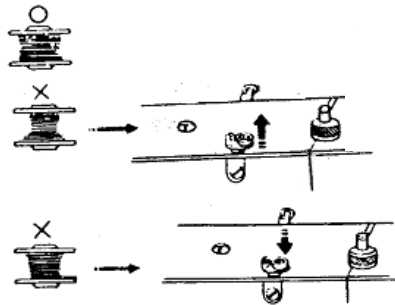


3. Open the hinged latch of the bobbin case and pull the bobbin case out of the machine.
Release the latch and the bobbin will fall out. As long as you hold the bobbin case latch open, the bobbin cannot drop out.



WINDING THE BOBBIN

1. Release the clutch by turning the clutch knob toward you.
2. Draw the thread from the spool through the bobbin winder tension disc as shown.
3. Pull the end of the thread through the hole in the bobbin as shown.
4. Place the bobbin onto the bobbin winder shaft with the end of the thread coming from the top of the bobbin. Push the bobbin winder shaft to the right until it clicks. Holding onto the end of the thread, start the machine. When the bobbin is slightly filled, snip off the end of the thread.
5. Wind the thread until the winder stops above the bobbin. Clip the thread, tighten the clutch knob.
6. Tighten the clutch knob.



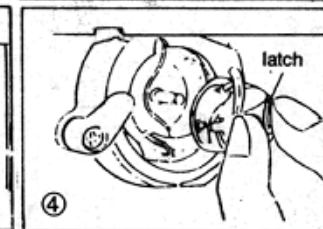
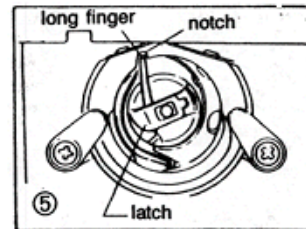
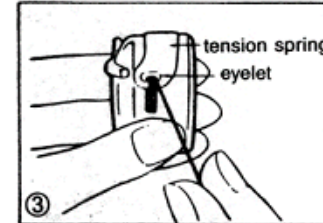
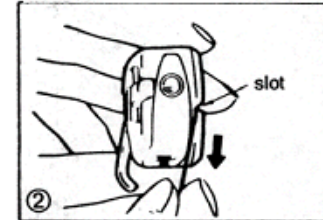
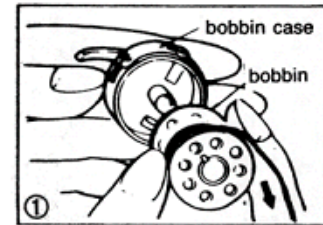
THREADING THE BOBBIN CASE

Hold the bobbin between the thumb and forefinger of your right hand and pull off about 15 cm (16 inches) of thread.

1. Hold the bobbin case in your left hand as shown and place the filled bobbin inside.
2. Pull the thread into the slot in the edge of the bobbin case.
3. Now pull the thread under the tension spring and into the thread eyelet.

To insert the bobbin case and bobbin.....

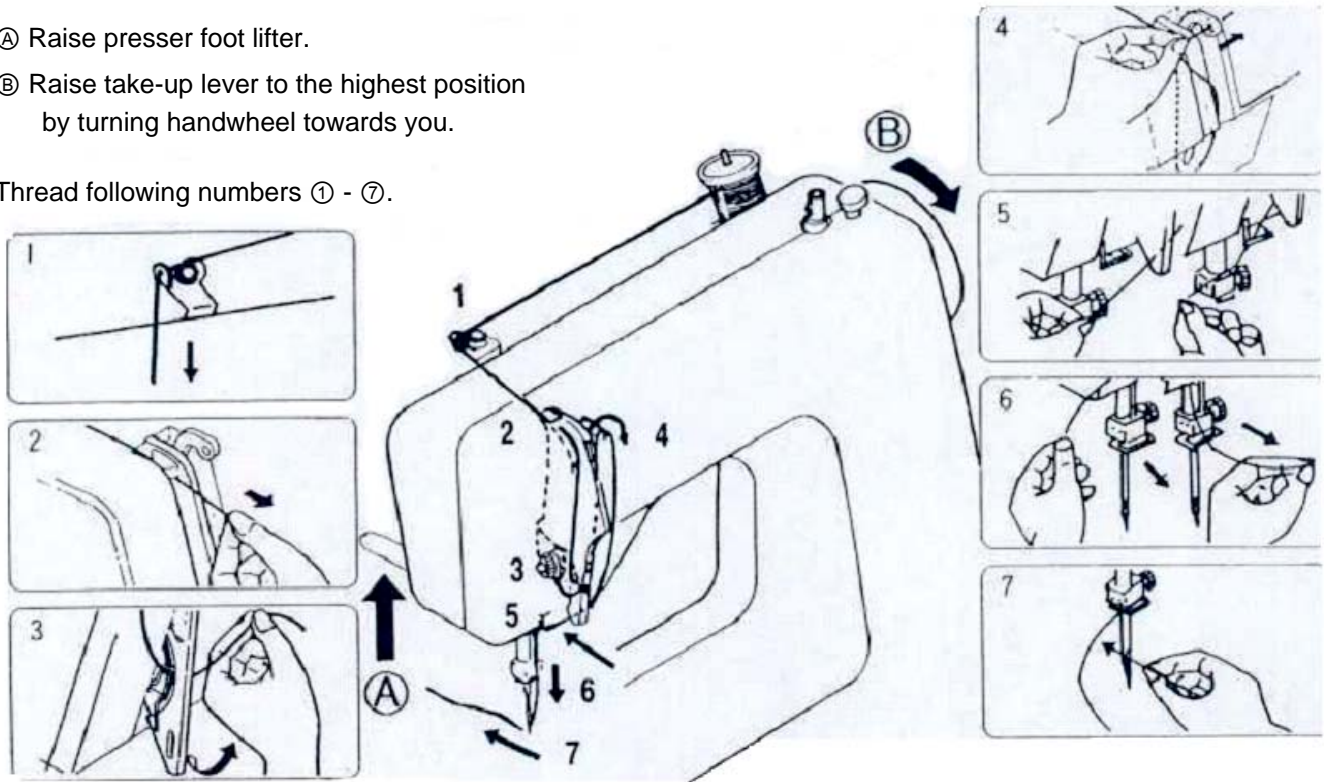
Make sure that about 15 cm (6 inches) of thread extends out of bobbin. Hold the bobbin case so that the long finger of the case points up. Open the latch of the bobbin case. Slip the bobbin case over the center pin of the hook and press in place until the long finger of the bobbin case enters the notch. Release the latch and press down.



THREADING THE NEEDLE THREAD

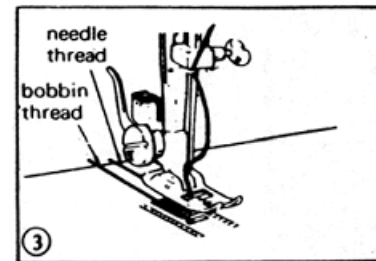
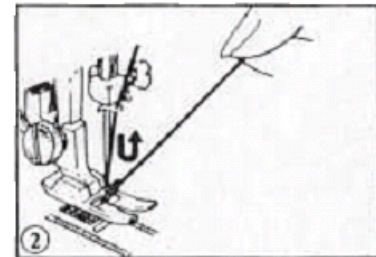
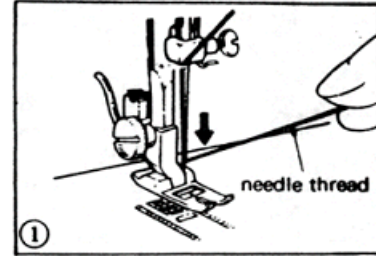
- Ⓐ Raise presser foot lifter.
- Ⓑ Raise take-up lever to the highest position by turning handwheel towards you.

Thread following numbers ① - ⑦.

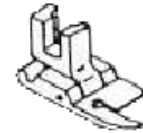


DRAWING UP THE BOBBIN THREAD

1. Hold the end of the needle thread with your left hand
2. Turn the balance wheel slowly towards you with your right hand until the needle goes down and comes up. Then stop the balance wheel the take-up lever is at its highest position. Lightly draw up the needle thread forming a loop with the bobbin thread.
3. Pull about 15 cm (6 inches) of both threads away from you under the presser foot.

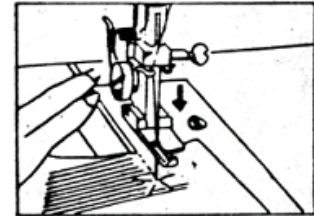


STRAIGHT STITCH AND ZIGZAG STITCH



Straight stitch foot

Presser foot	Straight stitch foot (for straight stitch)
	Zigzag foot (for zigzag stitch)
Pattern selection	(0) for straight stitch
	(1-5) for zigzag stitch



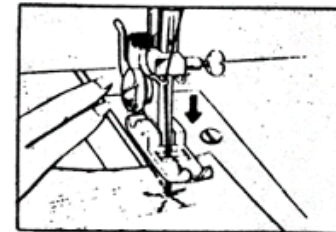
Zigzag foot

Starting To Sew

1. Be sure both the threads are drawn back under the presser foot
2. While holding the threads with your left hand, turn the balance wheel towards you to bring the needle into the fabric where you wish to start sewing.
3. Lower the presser foot, and gently depress the foot control until you reach the desired sewing speed.

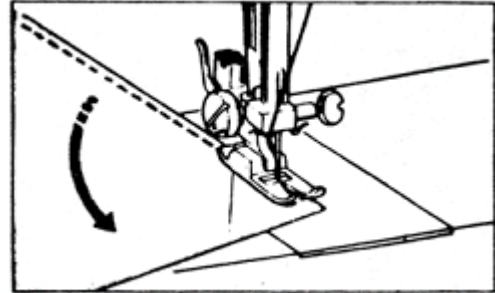
*Sew a few reverse stitches by pushing reverse button for reinforcing the end of seams.

*Raise the needle to its highest position before turning the pattern selector dial and stitch width dial.



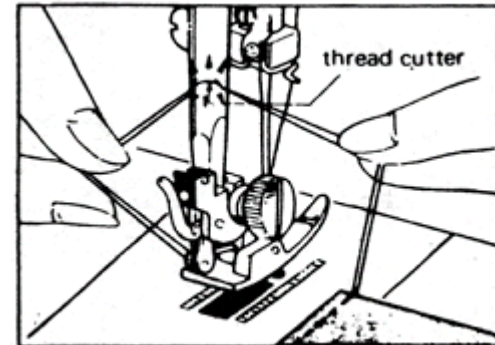
Changing Sewing Directions

1. Stop the machine, and turn the balance wheel toward you to bring the needle down into the fabric. Raise the presser foot.
2. Pivot the fabric around the needle to change direction as desired.
3. Lower the presser foot and continue sewing.



Fastening Seams

1. For fastening the ends of seams, press in the reversing button and sew several reverse stitches.
2. To remove the fabric, raise the needle to its highest position, raise the presser foot and draw the fabric away from you.
3. Cut threads on the thread cutter at the rear of presser bar or with a pair of scissors.
Leave about 15 cm (6 inches) of thread hanging from the needle eye.

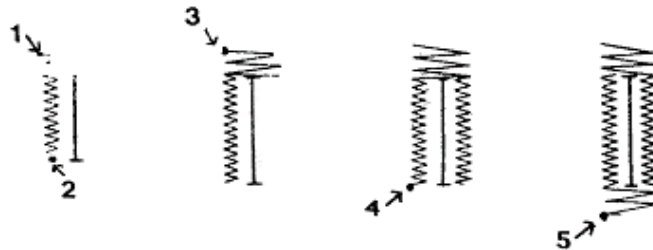
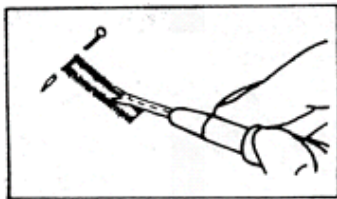


SEWING BUTTONHOLES

1. Set the stitch width control at “3”, and stitch length dial at the buttonhole **symbol** then pass the needle thread through the opening in the zigzag foot and draw both needle and bobbin threads to the left side. Turn the balance wheel towards you until the needle comes to point (1).
 2. Lower the foot and sew slowly until the desired length is sewn, then stop the machine at point (2). Stop with the needle in the down position and on the right side of the zigzag sewing.
 3. Lift the presser foot and using the needle as a pivot, turn the fabric 180 degree lower the presser foot, raise the needle, set the stitch width control at “5”. Sew several stitches of bar back until the needle is at point (3).
 4. Raise the needle and set stitch width control at “3” then sew the left side of buttonhole the same length as the right side of buttonhole. Stop the machine at point (4).
 5. Raise the needle and set stitch width control at “5”, then sew several stitches of final bar tack. Stop the machine when the needle is at point (5).
 6. Cut the buttonhole open carefully by using a seam ripper, taking care not to damage the bar tacks.
- Note: *To make a heavier buttonhole, set the stitch length control between the buttonhole **symbol** and “O”.

Note: *To find the most suitable stitch length, it is better to sew a sample buttonhole on a piece of waste fabric.

*When sewing very fine fabrics and synthetics, decrease the pressure of the foot and sew over a piece of paper to prevent yarn distortion.



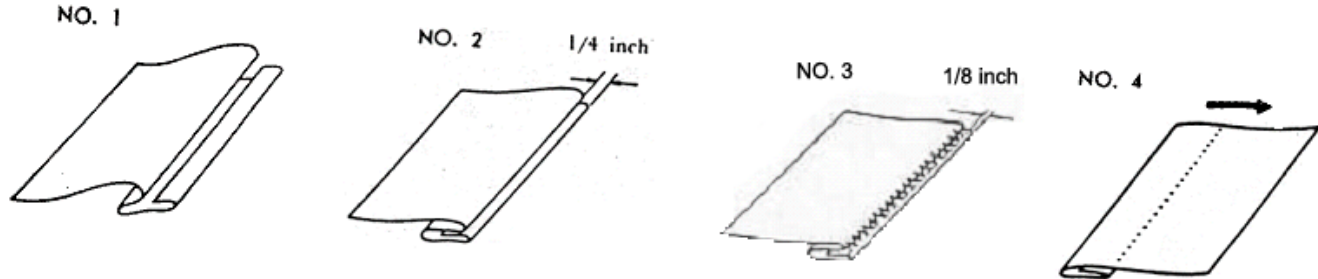
BLIND STITCH HEM

With the fabric inside out, fold it to the desired size of the hem (No. 1)

Fold it again with a $\frac{1}{4}$ inch overlap on the bottom fold. (No. 2)

Set the pattern selector at "3" and the stitch length regulator knob at about "2".
and sew on the fold. (No. 3)

Unfold the fabric, and you will have a blind stitch hem. (No. 4)



CLEANING THE FEED DOG

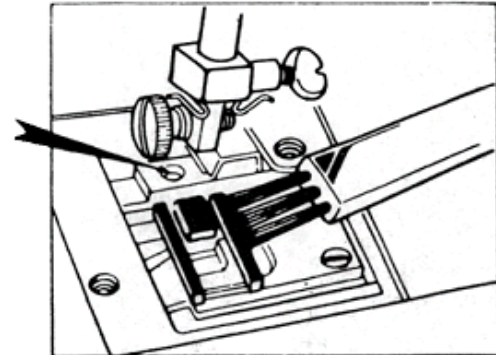
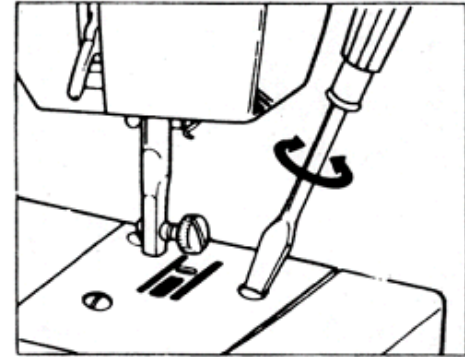
It is necessary to keep the feed dog teeth always cleaned in order to ensure smooth sewing.

Remove the needle and the presser foot.

Unscrew the needle plate set screws with a screw driver to take off the needle plate from the machine.

With a brush, clean out dust and lint clogged on the feed dog teeth.

Refit the needle plate and tighten set screws.



SEWING ON BUTTONS

Presser foot.....	zigzag foot
Pattern selector	zigzag
Stitch length dial.....	O

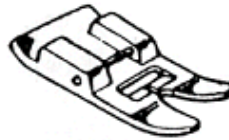
1. Align two holes of button with slot of presser foot and lower foot to hold the button securely.
2. Turn hand wheel manually until needle point is just above button.
3. Adjust stitch selector so needle enters right hole of button.
4. Turn hand wheel by hand so needle enters second hole. The stitch selector may need to be adjusted again. Stitch a number of times.

NOTE:

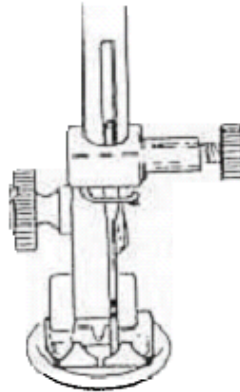
You may find it helpful to use transparent tape to position your button and to keep it in place during sewing.

Tear away after stitching.

5. Finish sewing with an extra two inches of thread remaining. Draw these threads to reverse side of garment and tie.



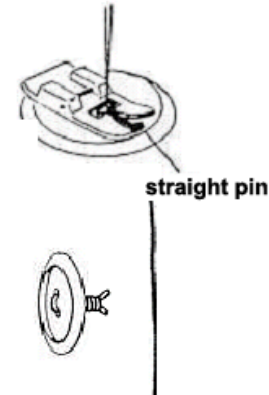
zigzag foot



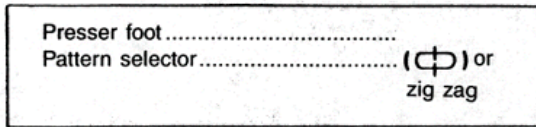
Holes of button

Thread Shank

Sew-through buttons on coats and jackets should have a thread shank to make them stand away from the fabric. Place a straight pin or sewing machine needle on top of button between the holes, and sew over the pin or needle. Pull thread to back of button and wind around stitches to form a firm shank. Tie thread ends securely.



SEWING EMBROIDERY

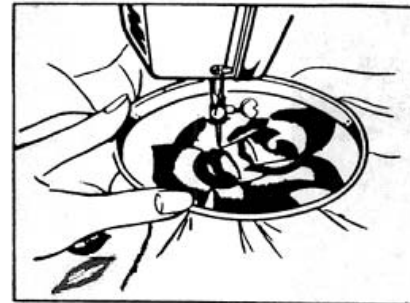
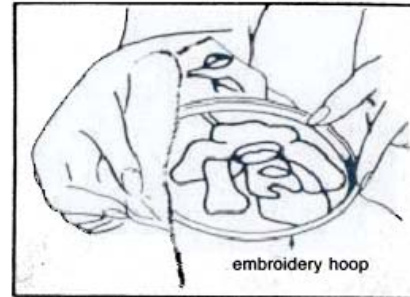


Place the fabric in embroidery hoop. Place darning plate over needle plate (see below). Lower the presser foot lifter. Hold the embroidery hoop firmly with your hand.

While sewing the desired pattern, move the embroidery hoop slowly and do not allow your fingers to get near the needle.

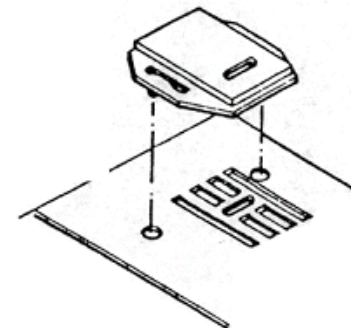
*Set the needle thread tension a little looser so that the bobbin thread is not pulled through to the right side of fabric. (see page 13).

*It is recommended to mark the required embroidery pattern on the right side of the fabric with a pencil or tailor's chalk.



DARNING PLATE

There are few times when you want to control the feeding of the fabric yourself. Raise needle to its highest position and raise presser foot. Place darning plate over needle plate aligning two pins of darning plate with holes of needle plate. You may then determine the movement of the fabric yourself. See above for embroidery.



CLEANING THE SHUTTLE RACE

Unplug the machine from the power supply.

To remove the shuttle.

Raise the needle to its highest position and remove bobbin case.

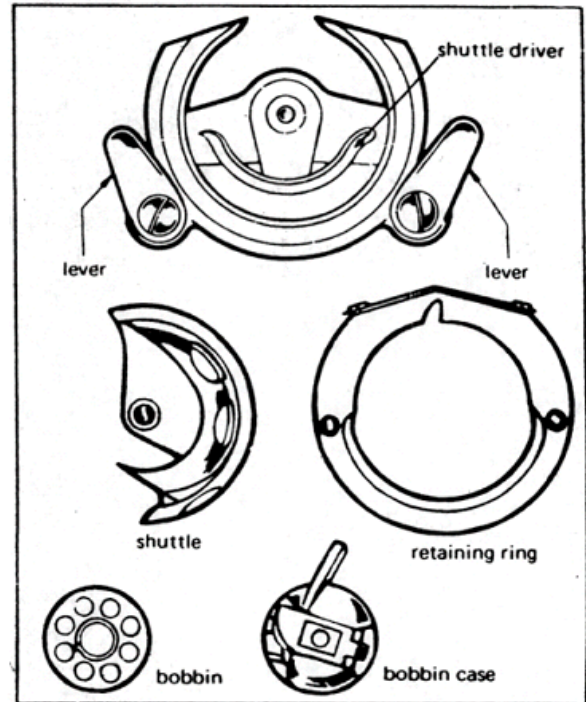
Turn levers away from the shuttle and lift out the retaining ring and shuttle, by grasping the center pin.

Clean the reverse side of feed dog with a small brush. Remove lint and thread from all parts of shuttle and wipe with lightly oiled cloth.

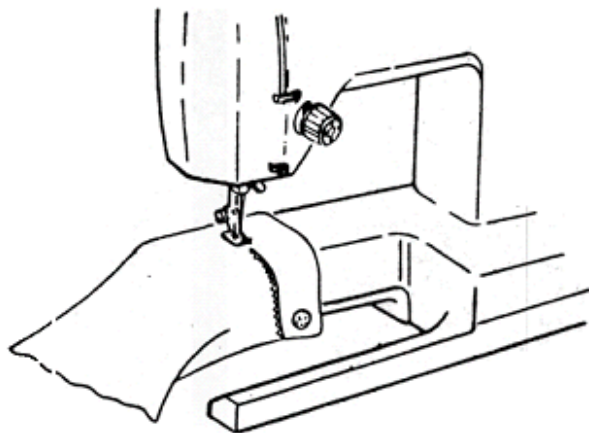
To reassemble:

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

Replace the retaining ring polished side out, making sure the bottom pin fits into the notch. Lock the retaining ring by turning levers back into position. Refit the bobbin case with the bobbin.



FREE ARM SEWING



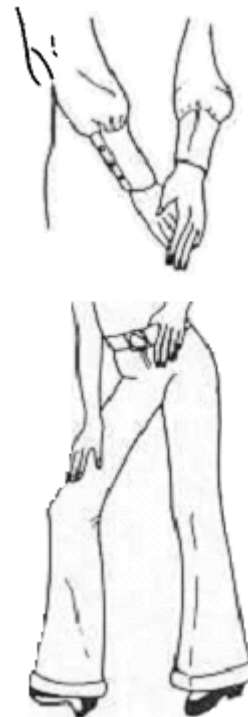
This sewing machine can be used like a flat bed machine, but easily converts to a free arm machine by removing the extension table.

The free arm enables you to sew tubular types of pieces more easily.

Just slip the sleeve or pants leg on the free arm as shown above.

You will find many uses for this free arm feature such as:

1. Mend elbows and knees of garments more easily.
2. Sew in sleeves more easily. This is especially true when sewing smaller garments.
3. Applique, embroider or hem around edges of cuffs or pants legs.
4. Sewing in elastic casings in skirts or pants at the waist line.



TROUBLE-SHOOTING GUIDE

STITCHING FORMS LOOPS

CAUSE	REMEDY
<ol style="list-style-type: none">1. Needle is not threaded correctly.2. Bobbin is not thread correctly.3. Needle/fabric/thread ratio is incorrect.	<ol style="list-style-type: none">1. Thread needle front to back.2. Thread bobbin according to chart.3. Match needle size to thread & fabric weight. (Check needle/fabric/thread chaft).

SEAMS SHRINK OR PUCKER

<ol style="list-style-type: none">1. Foot pressure is too heavy.2. Needle it too large for fabric.3. Wrong stitch length if used.	<ol style="list-style-type: none">1. Use smaller needle (see chart).2. Adjust length for proper stitches.
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IRREGULAR STITCHING/FEEDING

<ol style="list-style-type: none">1. Thread is of poor quality.2. Foot pressure us too light.3. Bobbin is threaded incorrectly.4. Material is being pulled by operator.	<ol style="list-style-type: none">1. Use quality thread!2. Thread bobbin again and check for proper insertion.3. Do not pull on fabric. Let it feet automatically.
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MACHINE IS NOISY AND ROUGH

<ol style="list-style-type: none">1. Machine needs oil.2. Lint and oil residue have collected in hook or on needle bar.3. Inferior oil has been used and gums-up machine.4. Needle is damaged.5. Stitc length/width dials set incorrectly for type of stitch used.	<ol style="list-style-type: none">1. Oil according to instructions.2. Clean race and hook according to instructions.3. Clean and oil again only with fine sewing machine oil.4. Replace needle.5. Follow INSTRUCTION P.21.
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TROUBLE-SHOOTING GUIDE

TOP THREAD BREAKS

CAUSE	REMEDY
<ol style="list-style-type: none">1. Machine is threaded incorrectly.2. Tension is too tight.3. Thread is too heavy for needle size (see needle/fabric/thread chart).4. Needle is inserted incorrectly.5. Thread may be caught on spool pin.6. Needle is damaged.	<ol style="list-style-type: none">1. Rethread machine and needle.2. Reduce tension on top (smaller numbers).3. Use larger needle.4. Reinsert needle (flat side toward back).5. Remove spool, rewind excess thread, thread, turn spool over, use felt disc on spool pin.6. Insert new needle.

LOWER THREAD BREAKS

<ol style="list-style-type: none">1. Bobbin case is not inserted correctly.2. Bobbin case is improperly threaded.3. Bobbin tension is too tight.	<ol style="list-style-type: none">1. Reposition bobbin. Check by pulling thread. If it pulls smoothly it is correct.2. Check for correct threading.3. Change bobbin tension according to instructions.
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SKIPPED STITCHES

<ol style="list-style-type: none">1. Needle is not inserted correctly.2. Needle is damaged.3. Wrong type of needle is used.4. Wrong foot is used.5. Foot pressure is wrong.	<ol style="list-style-type: none">1. Reinsert needle (flat side toward back).2. Insert new needle.3. Match needle size to fabric and thread weight. (Check needle/fabric/thread chart).4. Check to see if proper sewing foot is used.5. Check foot pressure regulation for proper setting.
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NEEDLE BREAKAGE

<ol style="list-style-type: none">1. Needle is damaged.2. Needle is not inserted correctly.3. Fabric too heavy/ wrong needle size.4. Fabric is being pulled by operator.	<ol style="list-style-type: none">1. Insert new needle.2. Reinsert needle correctly (flat side to ward back).3. Match needle size to thread & fabric weight. (Check needle/fabric/thread chart).4. Do not pull on cloth. Check for proper foot pressure
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