MANUAL

Short shan

machine

7 7 7

2

MODEL 536FB

#### CONGRATULATIONS.....

You are about to discover the wonderful pleasure of sewing with your new Necchi model 537FA/536FB sewing machine. We know you are eager to get started on a sewing project..... but we urge you to become familiar with this book before you begin.

# BULLETIN

"SEWING IS FUN"... IN ORDER TO ENHANCE YOUR SEWING PLEASURE WE SUGGEST THAT THE FOLLOWING HABITS BE DEVELOPED!

#### HABITS:

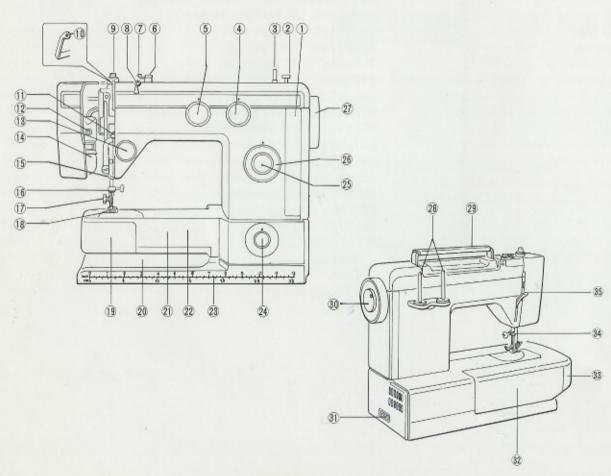
- When turning the balance wheel, it must be turned toward the operator (counter-clockwise).
   Turning the wheel in the opposite direction may break the needle and/or cause thread entanglement in the hook area.
- The take up lever must be at it's highest point in order to remove the material from the sewing machine. This important habit will also help prevent the mess of tangled threads at the beginning of seams and also prevent the thread from pulling back through the needle when starting to sew.
- The thread should be placed under the presser foot, (to the side is best), and held tight until lowering the foot. It is also a good practice to hold the thread until the first stitch is made.

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# MODEL 537 FA

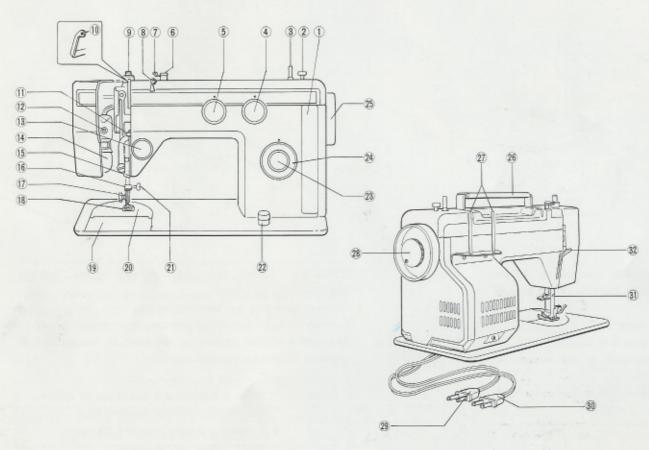
### NAMES OF PARTS



- 1.Pattern Chart
- 2. Bobbin Winder Stop
- 3. Bobbin Winder Spindle
- 4.Stitch Width/Buttonholer Knob
- 5. Pattern Selector Knob
- 6. Bobbin Winder Tension Disc
- 7.Rear Thread Guide
- 8.Front Thread Guide
- 9.Pressure Regulator
- 10. Thread Take-Up Lever
- 11.Upper Thread Guide
- 12.Sewing Light Switch
- 13.Upper Thread Tension Regulator
- 14.Sewing Light Bulb
- 15.Lower Thread Guide
- 16.Needle Bar Thread Guide
- 17.Presser Foot Thumb Screw
- 18.Presser Foot
- 19.Bobbin Case Cover
- 20.Needle Plate
- 21.Needle Clamp Screw
- 22.Free Arm
- 23.Measure
- 24.Drop-Feed Knob
- 25.Reverse Stitch Button
- 26.Stitch Length Knob
- 27. Hand Wheel
- 28.Handle
- 29.Spool Pins
- 30.Stop Motion Knob
- 31.Terminal Box
- 32.Extension Plate
- 33.Drawer
- 34.Thread Cutter
- 35.Presser Foot Lifter

# MODEL 536 FB

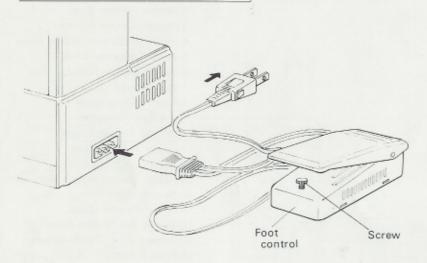
## NAMES OF PARTS



- 1.Pattern Chart
- 2. Bobbin Winder Stop
- 3.Bobbin Winder Spindle
- 4.Stitch Width/Buttonholer Knob
- 5.Pattern Selector Knob
- 6 Bobbin Winder Tension Disc
- 7.Rear Thread Guide
- 8.Front Thread Guide
- 9.Pressure Regulator
- 10.Thread Take-Up Lever
- 11.Upper Thread Guide
- 12.Sewing Light Switch
- 13.Upper Thread Tension Regulator
- 14.Sewing Light Bulb
- 15.Lower Thread Guide
- 16.Needle Bar Thread Guide
- 17.Presser Foot Thumb Screw
- 18.Presser Foot
- 19.Hinged Cover Plate
- 20.Needle Plate
- 21.Needle Clamp Screw
- 22.Drop-Feed Knob
- 23.Reverse Stitch Button
- 24.Stitch Length Knob
- 25.Hand Wheel
- 26 Handle
- 27.Spool Pins
- 28.Stop Motion Knob
- 29.Light Plug
- 30.Motor Plug
- 31.Thread Cutter
- 32.Presser Foot Lifter

# MODEL 537 FA

## ELECTRICAL CONNECTION



Connect foot control to the machine by inserting the 3-hole plug onto the three prongs located on the side of the sewing machine head.

Connect cord plug into electrical outlet.

Turn on electrical current by pressing foot control.

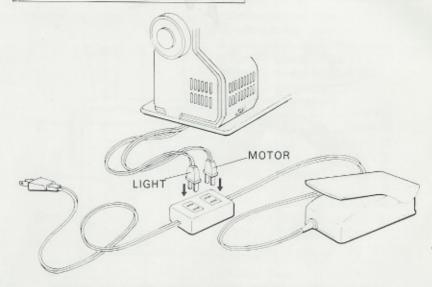
The speed of the machine is regulated by the amount of pressure exerted on the foot control.

Adjust the maximum speed by setting the screw on the foot control higher or lower.

CAUTION: When the machine is not in use or cleaning the machine, remove the cord plug.

# MODEL 536 FB

## **ELECTRICAL CONNECTION**



Attach the "LIGHT" and "MOTOR" plug to the "LIGHT" and "MOTOR" connector.

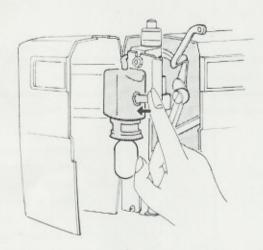
Connect cord plug into electrical outlet.

Turn on electrical current by pressing foot control.

The speed of the machine is regulated by the amount of pressure exerted on the foot control.

- CAUTION: 1. When the machine is not in use or cleaning the machine, remove the cord plug.
  - If motor and light plugs are reversed, motor will run continuously.

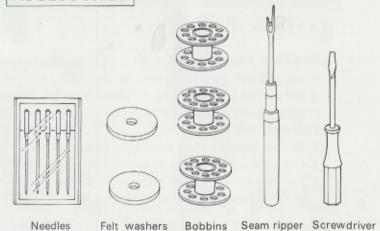
## SEWING LIGHT



The on and off push button type sewing light switch is on the light socket. The light socket is inside face plate. To replace the bulb, open face plate and turn bulb out of socket.

CAUTION: Before attempting to change the bulb, remove the electrical cord from the wall outlet.

## **ACCESSORIES**









Buttonhole foot



Button sewing foot



Zipper foot



Regular foot This foot is attached on the machine.

# MODEL 537 FA

## **EXTENSION PLATE**

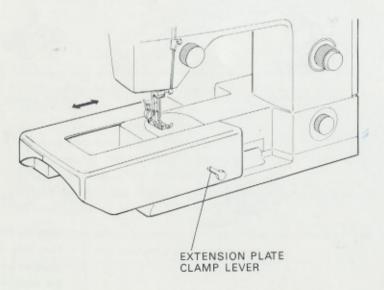
#### FOR FREE ARM SEWING

- 1. Set extension plate clamp lever to the left.
- Remove the extension plate by sliding it to the left while slightly lifting the left side up.

#### FOR FLAT BED SEWING

- 1. Set the extension plate clamp lever to the left.
- 2. Attach the extension plate by sliding it into the tubular bed.
- Turn the extension plate clamp lever to the right and the extension plate will be fixed to the machine.

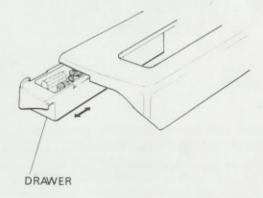
Free arm sewing machine is very convenient for sewing sleeves, trousers and/or similar places that are difficult to sew on an ordinary flat bed machine.



#### **♦ DRAWER**

The accessories are found in the drawer located at rear side of extension plate.

Be sure the drawer is fitted properly into the rail guides when replacing the drawer.



#### PATTERN SELECTOR KNOB



The pattern chart on the front of the machine shows the stitches your machine is capable of making automatically. The setting of the pattern selector knob determines which one your machine will make.



### STITCH WIDTH/ BUTTONHOLER KNOB

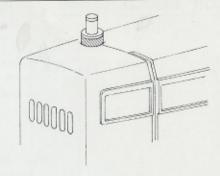


The Stitch width/Buttonholer knob has two uses.

- Limiting the width of the stitches.

  For straight sewing, set the Stitch width/
  Buttonholer knob at 
   As you turn the knob to the right the machine will sew wider zigzag stitches.
- Buttonhole sewing.Refer to page 21 for buttonhole sewing.

## PRESSURE REGULATOR

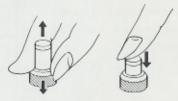


Pressure on the presser foot can be adjusted for different weight of fabric.

The heavier the fabric, the heavier the pressure; the lighter the fabric, the lighter the pressure.

To release the pressure completely, press down the outer ring and the center bar will pop up.

Then push down the bar to the position where correct pressure is obtained.





Do not adjust Pattern selector or Stitch width/Buttonholer knob with needle in fabric. Turn hand wheel until needle is clear of fabric before making adjustment in settings.

## COLOR CODED GUIDE

The color coded guide on this machine will help you set the dials. You merely match the color on knobs with the colors on pattern chart. For example, when you sew the blind hem stitch (No. 10) set the pattern selector knob at "10" which is a blue color pattern. Then set the stitch length knob within the blue line and buttonholer/stitch width knob to a desired position within the zigzag markings.

## STITCH LENGTH KNOB



This knob controls the length of the stitches.

For shortest stitch, turn knob to green colored line between 1 and 0

For longest stitch or whenever sewing stretch stitch patterns colored red, turn knob to "4".

- Does not feed fabric
   For buttonhole sewing
   or satin stitches
- 1 ......
- 2 -----
- 3 -----
- 4 -----

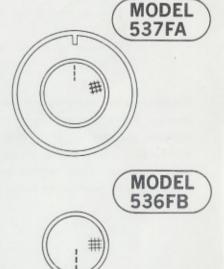
### REVERSE STITCH BUTTON



To sew in reverse as for tacking ends of seams, press button in center of stitch length knob and hold.

Machine will feed fabric in reverse as long as button is held in all the way.

### **DROP-FEED KNOB**



The Drop-Feed knob controls the fabric feed dogs.

FOR ORDINARY SEWING, turn knob to " | "

FOR DARNING or whenever fabric is to be moved by hand, turn knob to " ## ".

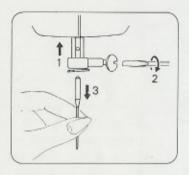
## SELECTING NEEDLE

Size and Grades of Needles		Tune of Febria and Work to be Dane		
US size 15×1	European 705	Type of Fabric and Work to be Done		
# 10	<b>#</b> 70	Delicate fabrics like georgette, chiffon, batiste, fine lace, linen and other sheer fabrics. For fine lingerie, infants' clothes and fine lace work.		
# 12	# 80	Medium light-weight and summer-time fabrics, for house dresses, washable cotton dresses, aprons, curtains, children's dresses.		
# 14	# 90	Dress silks and cottons, light weight woolens, draperies, fabric furnishings. For general household sewing, men's fine shirts, smocks and fabric decoration.  Heavy cretonne, madras, muslin, brocades, and quilts.  For men's work shirts, and fabric furnishings.		
<b># 18</b>	# 110	Heavy woven coating, light weight canvas, bed ticking, upholstery and awning material, slip covers.  Heavy woven suiting, coating, duck ticking, drilling, canvas and sacking.		
# 20	<b># 120</b>	For bags, canvas, coarse clothes and heavy goods.		

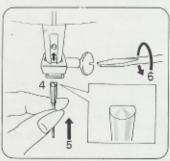
The knit needle (with blue shank) is designed especially for sewing synthetic woven stretch and knit fabrics.

## SETTING THE NEEDLE

Select a needle of proper type and size for fabric to be sewn. See Page 9 SELECTING NEEDLE.



- Turn hand wheel toward you until needle bar is at its highest point.
- 2. Loosen needle clamp screw.
- 3. Remove the needle.



- Place flat side of needle towards the back of machine.
- Insert needle in needle clamp as far as it will go.
- 6. Tighten needle clamp screw.

## CHANGING THE PRESSER FOOT

Presser foot must be changed according to the stitch or operation you sew.



- Turn hand wheel toward you until needle bar is at its highest point.
- 2. Raise the presser foot lifter.
- Remove presser foot by pulling the presser foot release lever toward you.



- 4. Place the desired foot below the presser foot holder so that the pin on the foot fits into the space between the presser foot holder bracket and spring.
- Lower the presser foot lifter and presser foot will snap into place.

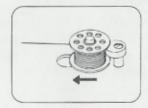
Certain presser feet are not constructed as snap-on feet. In such instances, presser foot holder must be changed. Remove presser foot holder by loosening thumb screw.

### WINDING THE BOBBIN

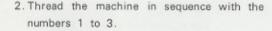


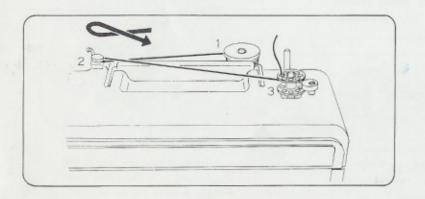
 Turn the stop motion knob toward you with the right hand (while holding the hand wheel with the left hand) to disconnect the sewing mechanism for the bobbin winding operation.

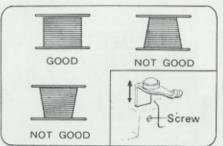


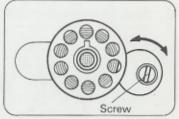


- Insert thread through any hole on the upper side of the bobbin from inside-out.
   Leave 3 to 4 inches of thread projecting from the bobbin.
- Place bobbin on bobbin winder spindle and push spindle toward bobbin winder stop, to engage the bobbin winding mechanism.
- Hold end of thread and operate foot control to start the machine.
- When spindle starts to spin, end of thread will break off.
- Bobbin winder will stop itself when bobbin is full. Push bobbin and spindle to the left.
   Remove bobbin from spindle and cut thread
- Hold hand wheel and tighten stop motion knob by turning it away from you.









If bobbin winds unevenly, loosen screw which holds bobbin tension disc and move disc up or down, as required, to align it with bobbin winder. When the bobbin thread is wound too little or too much, adjustment can be made by turning the bobbin winder stop slightly after loosening the center screw.

## INSERTING BOBBIN INTO CASE

When replacing the bobbin case, needle bar must be at its highest position.

· Removing the bobbin case

Open the bobbin case cover.

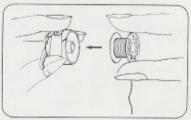


MODEL 537FA

Open the hinged cover plate.



Grasp bobbin case latch and withdraw bobbin and case from shuttle body. MODEL 536FB Inserting bobbin into case



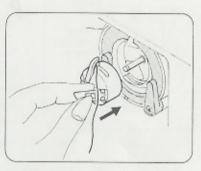
Insert bobbin into case with thread on top leading left to right.



Draw thread under tension spring and into forkshaped opening of spring.

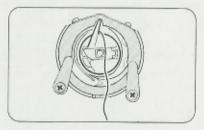


Bobbin turns clockwise in case when the extending thread is pulled.  Inserting the bobbin case into shuttle body



Open bobbin case latch, grasping it in your left hand, with bobbin case finger pointing up.

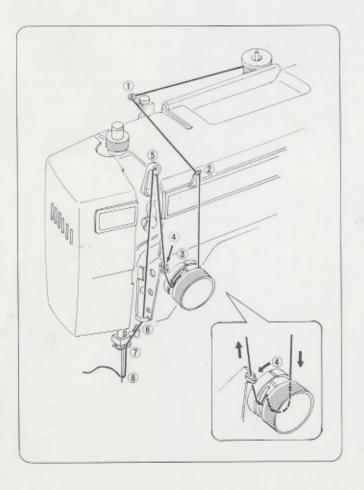
Slip bobbin and case on stud of shuttle body, and press on securely.



Release bobbin case latch. If bobbin case is not positioned properly, it could cause trouble.

## THREADING THE MACHINE

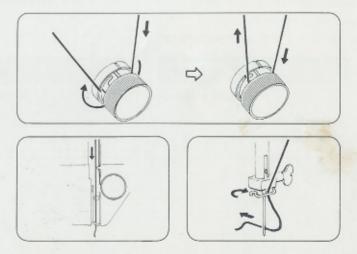
The illustration below shows machine completely threaded. Open the face plate and thread the machine in sequence with the numbers  $\bigcirc$  to  $\bigcirc$ 



- Turn hand wheel toward you until the needle is raised to its highest position. Raise the presser foot lifter.
- Slip thread under and up into rear and front thread guide with your left hand. (1) & (2)
- Draw the thread down, and between the tension discs from right to left while holding the spool of thread on spool pin with your right hand.

Pull the thread upward until it catches the check spring.

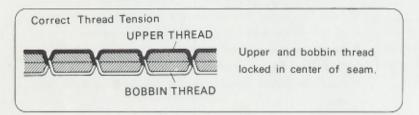
- Pass the thread through large thread guide 
   and eye
   of the thread take-up lever 
   from right to left.
- Draw the thread down through the lower thread guide
   and needle bar thread guide 7.
- Pass the thread through eye of needle from front to rear.



#### REGULATING THE THREAD TENSION

The thread tension must be properly balanced.

If adjustment is required, it can be made normally by regulating the upper thread tension.

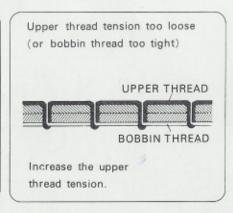


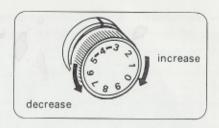
Upper thread tension too tight
(or bobbin thread too loose)

UPPER THREAD

BOBBIN THREAD

Decrease the upper thread tension.

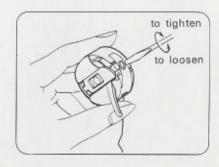




TO INCREASE UPPER THREAD TENSION, lower presser foot and turn tension dial to a higher number (to the right)

TO DECREASE UPPER THREAD TENSION, lower presser foot and turn tension dial to a lower number (to the left)

· Adjusting the bobbin thread tension



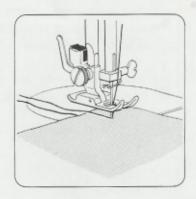
If it is impossible to balance the stitch by adjusting the upper thread tension, it may be necessary to make a slight adjustment on the bobbin tension.

## DRAWING UP BOBBIN THREAD

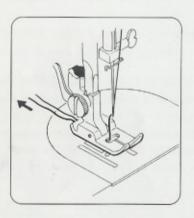
## STARTING TO SEW



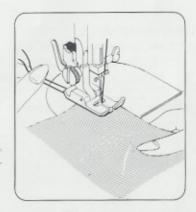
 Raise presser foot liffer. Hold upper thread loosely in left hand and turn hand wheel toward you one complete turn with right hand and watching that the take-up lever has reached it's highest point.
 Draw end of bobbin thread up through hole in needle plate by pulling upper thread.



 Place double thickness of fabric under the presser foot, insert needle into fabric by rotating hand wheel toward you, and lower the foot.

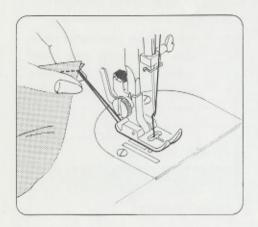


Place both threads under presser foot toward rear of machine.



 Always hold on to both threads when beginning to sew for the first several stitches in order to avoid jamming the machine.
 Guide the fabric but do not pull it.

## REMOVING THE WORK

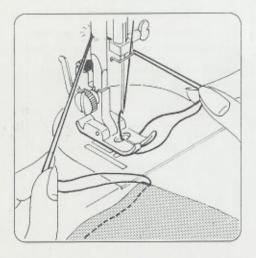


- Turn hand wheel toward you until the thread take-up lever is at its highest point.
- Raise presser foot and draw fabric back and to the left.





- Stop the machine with the needle in the fabric.
- 2. Raise the presser foot.
- Using needle as a pivot, turn fabric.
- Lower presser foot and continue sewing.

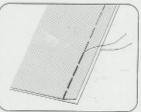


 Cut threads by passing them over thread cutter and pulling down on thread.

## TACKING ENDS OF SEAMS

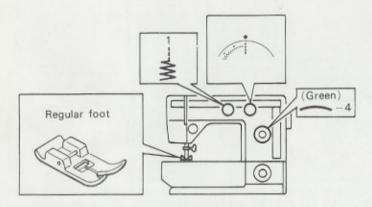


To reinforce the end of a seam, position the needle in the fabric about 1/2 inch from the beginning point and lower the presser foot. Press the reverse stitch button and hold in while backstitching to the edge of the fabric. Release the button and sew the seam.



When you reach the end, again hold in the reverse stitch button and backstitch for about 1/2 inch.

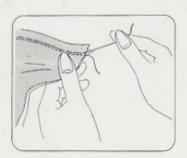
## STRAIGHT STITCH



Straight stitch is the most frequently used and simplest seam to sew. Set the stitch length suitable for the fabric.

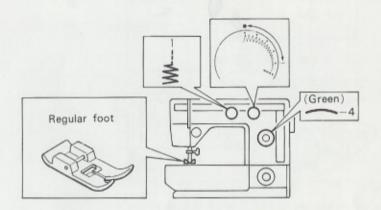
#### · Machine Basting

For machine basting, reduce upper thread tension by turning thread tension regulator to a lower number, and set the stitch length knob at "4". Stitch inside the seam allowance.



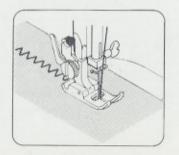
After permanent stitching of the article is completed, basting stitches can be removed easily by pulling the lower thread.

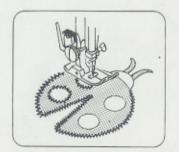
## ZIGZAG STITCH



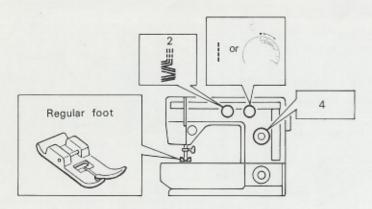
Your machine will produce zigzag stitches of various widths and lengths by setting the Stitch width/Buttonholer knob and Stitch length knob.

When sewing very thin fabrics, place a thin sheet of paper beneath the fabric while stitching. The paper can be easily torn away when sewing is completed.

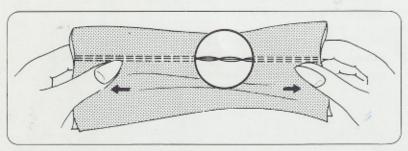


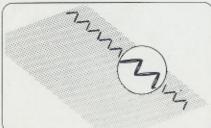


## STRETCH STITCH SEWING



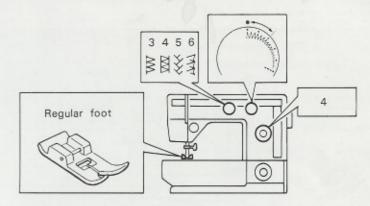
This stitch assures you of a stitch that is strong and flexible and will give with the fabric without breaking.





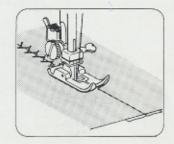
We recommend you that you should use knit needle (with blue shank) for sewing stretch fabrics.

### STRETCH PATTERN SEWING



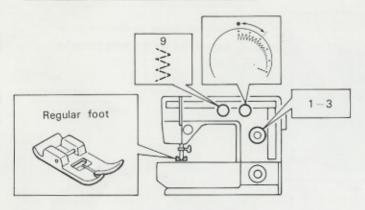
These stretch patterns are good for overcasting, joining two pieces of fabric, fagoting and sewing stretch fabrics.

We recommend you that you should use knit needle (with blue shank) for sewing stretch fabrics.



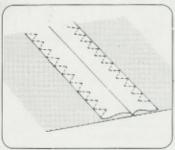


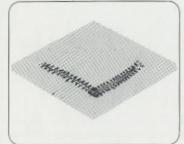
## MULTIPLE ZIGZAG STITCH



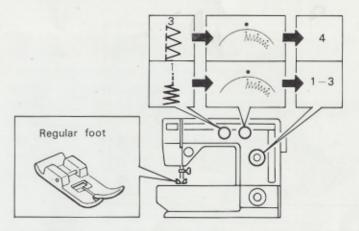
Multiple zigzag stitch is used for overcasting knit fabrics and mending the three-cornered tear.

When mending the three-cornered tear, stitch from each end to center. For large tears, place piece of fabric under tear for reinforcement.

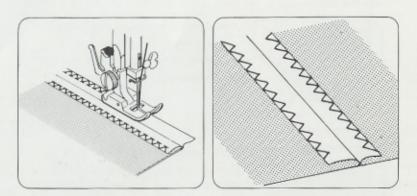




## **OVERCASTING**

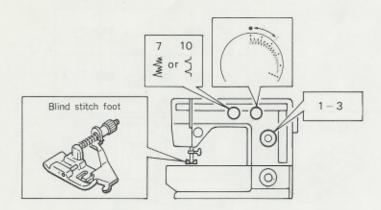


Seam edges which tend to ravel can be given a durable finish with machine overcasting.



Press seam open and stitch each side separately near the edge of the seam allowance.

## BLIND HEM STITCHING



The blind hem stitching also can be done with using pattern selector  $7(\frac{3}{2})$ .

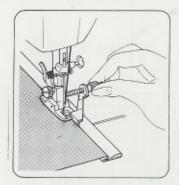
This pattern is good for hemming stretch fabrics. All other settings are the same.



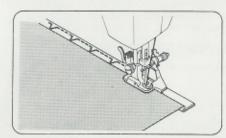
Fold hem back against right side of garment with top edge of hem extending about 1/4 inch to the right of the garment.



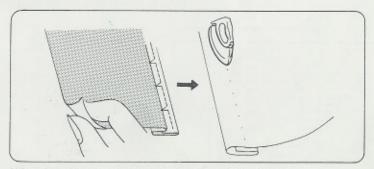
Place fabric so that the straight stitches are on the protruding hem edge and zigzag stitch just catches one thread of the folded edges.



Turn the screw so that the guide barely touches the folded edge of fabric.

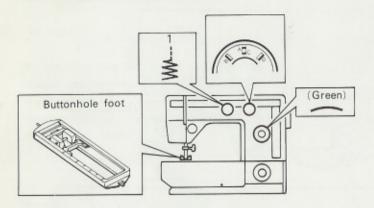


Lower the presser foot and sew hem, guiding fabric evenly along the guide.



When hemming is completed, unfold fabric and press.

## **BUTTONHOLE SEWING**



First make a sample buttonhole on the same fabric as the garment and adjust 'the stitch length knob within the green line mark to make sure that you have the most suitable settings.

Set the Stitch width/Buttonholer knob according to the below chart.

NOTE: Do not turn stitch width/buttonholer knob with needle in fabric.

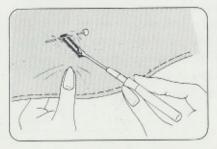
Turn hand wheel until needle is clear of fabric before making adjustment in settings.

	1	2	3	4
BUTTONHOLER KNOB	<sup>A</sup> $\square_{c}$	В	<sup>A</sup> D <sub>C</sub>	D
SEWING	<b>=</b>	<b> </b>		

- Mark position and length of buttonhole on fabric. Position fabric so that needle is on the mark at end furthest from you.
  - Pull the buttonhole foot all the way forward.
  - Sew 5 or 6 bartack stitches.
- Turn knob to "B" and sew at a moderate speed until you reach the end mark.
- 3. Turn knob to "C" and sew 5 or 6 bartack stitches.
- Turn knob to "D" and sew the right row until you reach the starting mark.



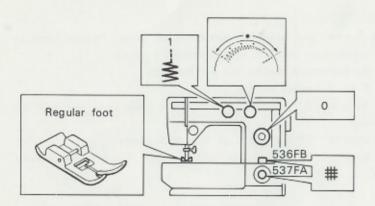




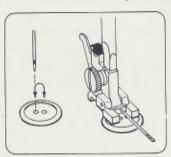
Draw upper thread through to underside and knot upper and bobbin threads.

Cut center of buttonhole with seam ripper, being careful not to cut stitching on either side.

## SEWING ON BUTTONS

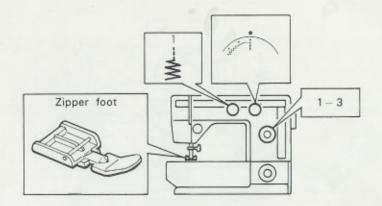


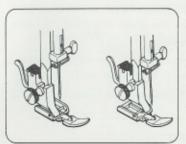
- 1. Place a button under the button sewing foot and lower the presser foot.
- Adjust the stitch width according to the width of the holes by turning the hand wheel slowly so that the needle enters the both holes of button.
- 3. Start the machine and make 5 or 6 stitches.
- 4. To knot the button in place, set the needle in either hole of the button, raise the presser foot, move the width control to zero (which will move the needle along with the button to the center position), lower the presser foot, then sew two or three stitches which will effectively tie off the button.



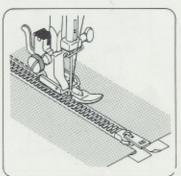
A rounded woodenpick may be placed on the button between the two holes while the button is being sewn to the fabric. When the woodenpick is removed, the button will be loosely attached.

### SEWING ZIPPERS





Attach the left side of the presser foot pin to the presser foot holder when sewing on the right side of the zipper, and right side of the presser foot pin to the holder when sewing the left side of the zipper.



First, attach the left side of the presser foot pin to the presser foot holder and press the side of the foot against the zipper to sew the right side of the zipper. Next, attach the right side of the presser foot pin onto the holder and sew the left side of the zipper.

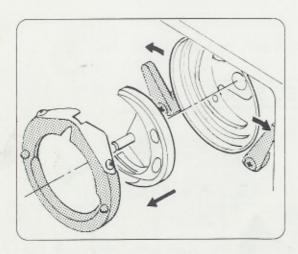
## MAINTENANCE

#### Cleaning

If lint and bits of thread accumulate in the shuttle, this will interfere with the operation of the machine.

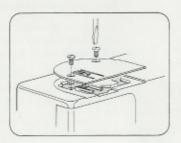
Check occasionally and clean the stitching mechanism when necessary.

Open latch retainers by swinging out and down. Remove shuttle cover and shuttle.

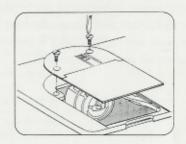


Remove the two screws holding the needle plate.

## MODEL 537FA



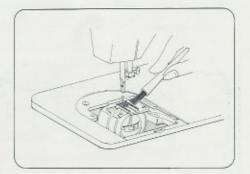
## MODEL 536FB



Thoroughly clean with a brush.



Put drops of oil insmall hole. also put a drop of oil on any of the places that rub



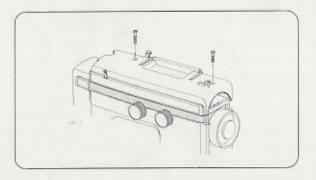
### MAINTENANCE

## Oiling

Place one drop of oil at each oiling point indicated by arrows.

Remove excess oil from part that could possibly come in contact with fabric and stain it.

To remove arm cover, remove the two screws as shown on hereunder sketch.

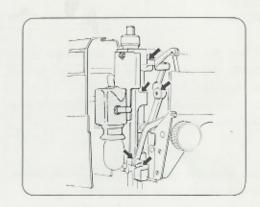


Also - from previous

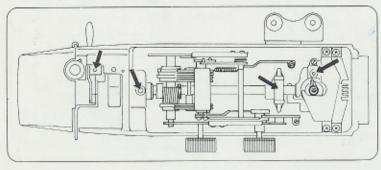
page - put one drop

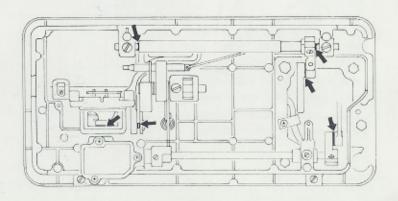
oil on outside edge

of shuttle (hook).



MODEL 536FB





## HELPFUL HINTS

PROBLEM	CAUSE	CORRECTION	
UPPER THREAD BREAKS	Needle inserted incorrectly Tension on upper thread too tight Needle eye has sharp edges Machine not properly threaded	Reset needle Loosen upper thread tension Insert new needle Rethread machine	
BOBBIN THREAD BREAKS	Bobbin case threaded incorrectly Bobbin thread tension too tight Bobbin wound unevenly or too full	Rethread bobbin case Loosen bobbin thread tension Rewind the bobbin	
MACHINE SKIPS STITCHES	Bent or blunt needle Needle inserted incorrectly Pressure on foot insufficient	Insert new needle Reset needle Increase pressure	
NEEDLE BREAKS	Pulling fabric while sewing Incorrect size needle or thread for fabric being sewn Needle is inserted incorrectly	Do not pull fabric Choose correct size needle & thread Reset needle	
MACHINE DOES NOT FEED  PROPERLY  Drop-feed knob improperly adjusted Pressure on presser foot insufficient Stitch length knob set too close to "0"		Set Drop-feed knob to "   " Increase pressure Turn stitch length knob to a higher position	
FABRIC PUCKERS	Upper thread tension too tight Bobbin thread tension too tight Fabric too sheer or too soft	Loosen upper thread tension Loosen bobbin thread tension Use underlay of tissue paper	
MACHINE MAKES LOOSE STITCHES OR LOOPS	Tension not adjusted properly	Check thread tensions	
MACHINE RUNS HEAVILY	Machine needs oiling Dirt or lint in shuttle Dirt or lint between teeth of fabric feed dogs	Oil the machine Disassemble and clean shuttle Remove needle plate and clean fabric feed dogs	
MACHINE WILL NOT SEW  Cord not plugged into electrical outlet Stop motion knob not tightened		Check plug Tighten stop motion knob	