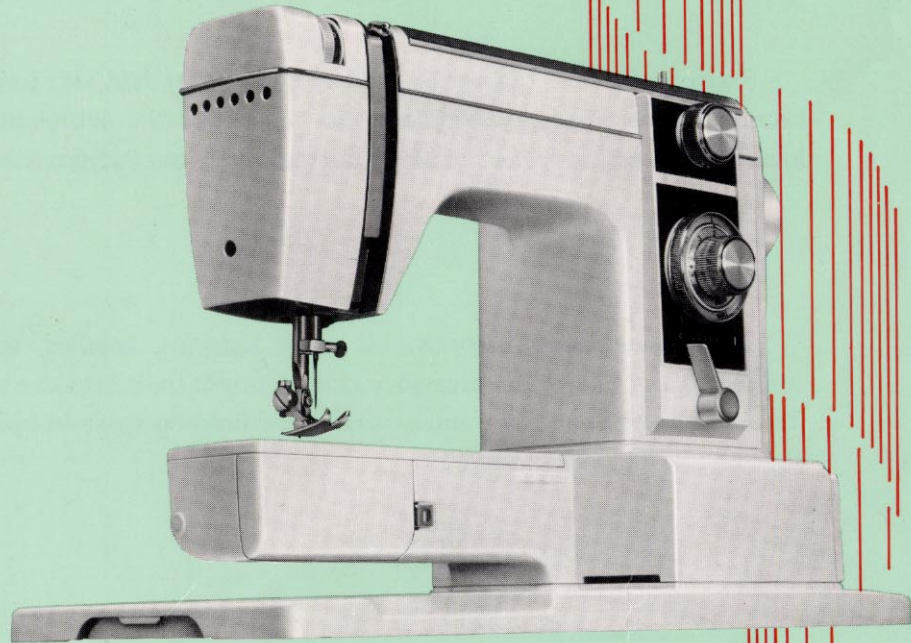


INSTRUCTION BOOK



NEW HOME

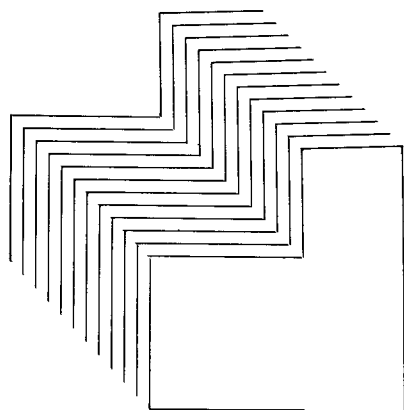
IMPORTANT

MODEL XL-II ACCESSORIES

Please note that the various SNAP-ON presser feet and basting attachment are housed in the accessory compartment built into the actual **machine head**. This is located by pressing twice the white button above the Pattern Selector Dial.

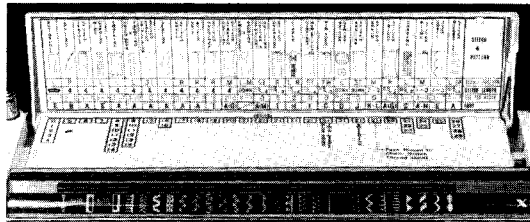
The remaining accessories, i.e. spare bobbins, needles, screwdrivers, etc. are housed in the additional accessory compartment built into the top of the **carry case**. This compartment is extremely useful for holding spare bobbins of cotton on the special holding pegs provided.

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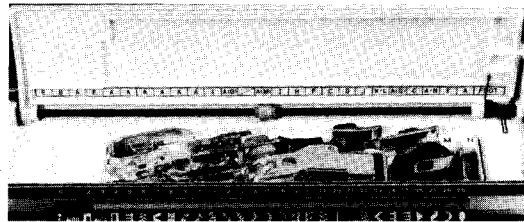


<ul style="list-style-type: none"> ★ ESSENTIAL PARTS AND WHAT THEY DO 2 ★ SEWING INSTRUCTION PANEL ... 4 ★ ATTACHMENT COMPARTMENT .. 4 ★ SNAP-ON FEET 5 ★ PREPARATION FOR RUNNING YOUR MACHINE <ul style="list-style-type: none"> ● DETACHMENT OF EXTENSION TABLE AND ITS ATTACHMENT 6 ● TO USE FOOT CONTROLLER 6 ● TO SWITCH ON OR OFF SEWING LIGHT 7 ● SLIDE SWITCH 7 ● NEEDLE, CLOTH AND THREAD TABLE 8 ● CHANGING NEEDLE 8 ● CHANGING PRESSER FEET 9 ● WINDING BOBBIN THREAD 10 ● REMOVING BOBBIN CASE 11 ● THREADING BOBBIN CASE AND INSERTING INTO HOOK 11 	<ul style="list-style-type: none"> ● THREADING MACHINE 12 ● DRAWING UP BOBBIN THREAD 13 ★ BASIC SEWING <ul style="list-style-type: none"> ● STRAIGHT STITCHING 14 <ul style="list-style-type: none"> * Starting the seam * Corner sewing * Ending the seam ● FREE ARM SEWING 16 ● ADJUSTING PRESSURE ON THE PRESSER FOOT 17 ● STITCH-BY-STITCH BASTING 18 <ul style="list-style-type: none"> * Basting * Tailor's tacking * Gathering ● ZIGZAG STITCHING 22 ● AUTOMATIC PATTERN SEWING ... 23 ● TWIN NEEDLE STITCHING 24 ● CHAINSTITCHING 25 ★ UTILITY STITCHING <ul style="list-style-type: none"> ● OVERLOCK STITCH 28 ● OVEREDGE STITCH 29 ● STRETCH SEWING 30 <ul style="list-style-type: none"> * Knit stitch * Feather stitch * Outline stretch stitch * Tricot stitch ● BUTTONHOLE STITCHING 32 ● CORDED BUTTONHOLE 33 ● BUTTON SEWING 34 ● ZIPPER INSERTION 35 ● CONCEALED ZIPPER INSERTION .. 35 ● BLIND STITCH HEMMING 36 ● TOP STITCHING 37 ● HEMMING 38 ● TRIPLE SEAM STRETCH STITCH ... 39 	<ul style="list-style-type: none"> ● DECORATIVE STITCH BY USING CLOTH GUIDE 39 ★ FANCIFUL DECORATIVE STITCHES <ul style="list-style-type: none"> ● PATCH WORK 40 ● LACE EDGING 40 ● APPLIQUE 41 ● DRAWN WORK 42 ● BLANKET STITCH (SHELL STITCH) . 42 ● PIN TUCKING 43 ● CORDING 44 ● WIDE CORDING 45 ● SHELL TUCK 45 ● SCALLOPING 46 ● QUILTING 47 ● SMOCKING 47 ● EMBROIDERY 48 ● FAGOTING 49 ● CUT WORK 49 ● FRINGING 49 ★ CARING THE MACHINE <ul style="list-style-type: none"> ● CLEANING YOUR MACHINE 50 ● CLEANING FEED DOG 50 ● OILING YOUR MACHINE 51 ● CLEANING HOOK RACE 52 ● TROUBLE-SHOOTING 53
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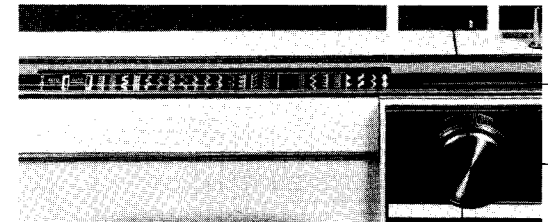
★ ESSENTIAL PARTS AND WHAT THEY DO



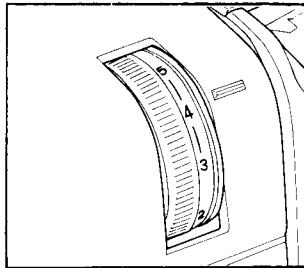
- SEWING INSTRUCTION PANEL (Lid of top plate is raised by pushing the button.)



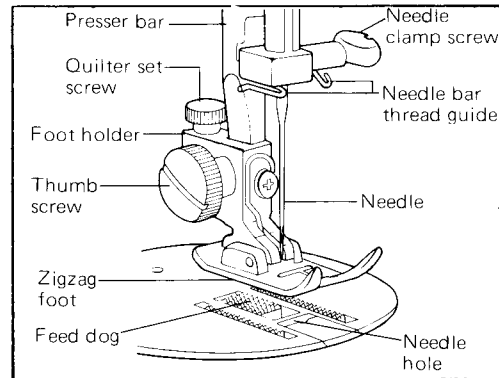
- SEWING FEET (appear when sewing instruction panel is raised by pushing the lid opener button.)



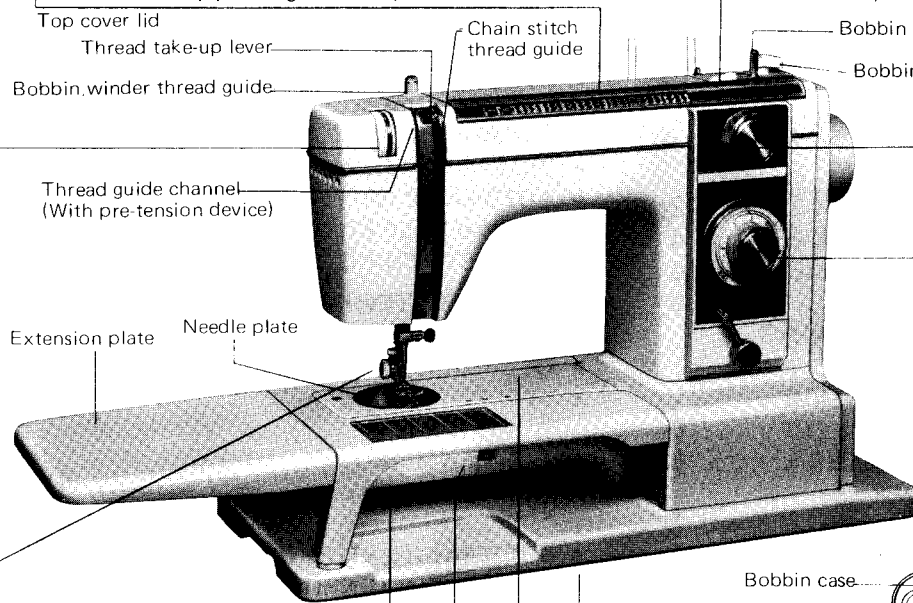
- Lid opener button
- Bobbin winder spindle
- Bobbin winder stopper



- THREAD TENSION REGULATOR DIAL (Thread tension adjustment)
0 ~ 4 weak tension, 3 ~ 6 medium tension, 5 ~ 9 strong tension

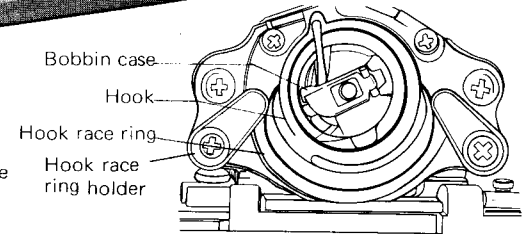


- SNAP-ON FOOT HOLDER



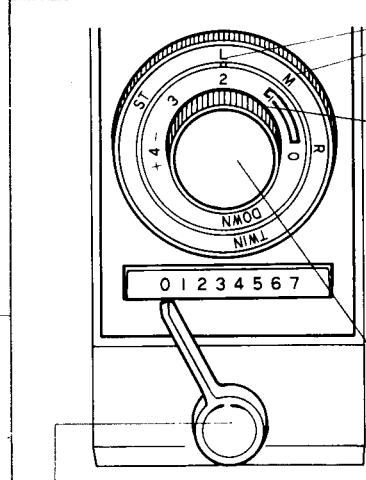
- Top cover lid
- Thread take-up lever
- Chain stitch thread guide
- Bobbin winder thread guide
- Thread guide channel (With pre-tension device)
- Extension plate
- Needle plate
- Base plate
- Free arm cover
- Hook cover
- Hook cover opener

● ROTARY HOOK



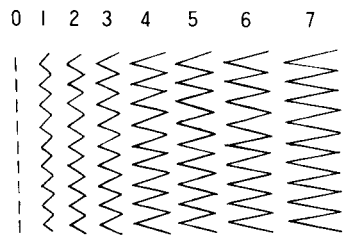
- Bobbin case
- Hook
- Hook race ring
- Hook race ring holder

Stitch pattern panel
 Pattern selector dial
 0 ~ 4 ... Buttonhole
 (Select No. 0 and press the knob)
 5 ~ 29 ... Automatic patterns
 (Turn the knob to select pattern and press it.)



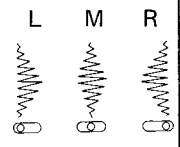
Push-and-turn zigzag lever

- By setting stitch length dial at "1", and moving zigzag lever



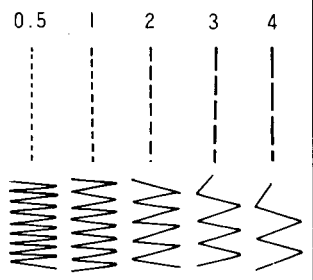
Setting indicator
 Needle position dial

- LMR ... Needle position changes
- ST ... Straight stitch Triple seam stretch stitch
- TWIN ... Twin needle stitches



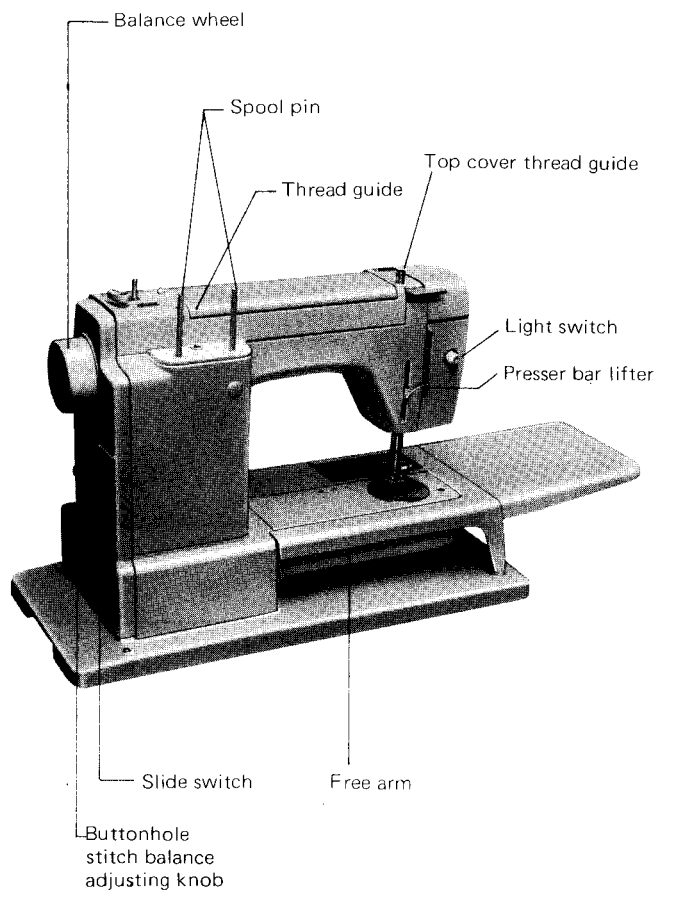
Stitch length dial

- By setting zigzag lever at "0", and turning stitch length dial ...
- By setting zigzag lever at "7", and turning stitch length dial ...



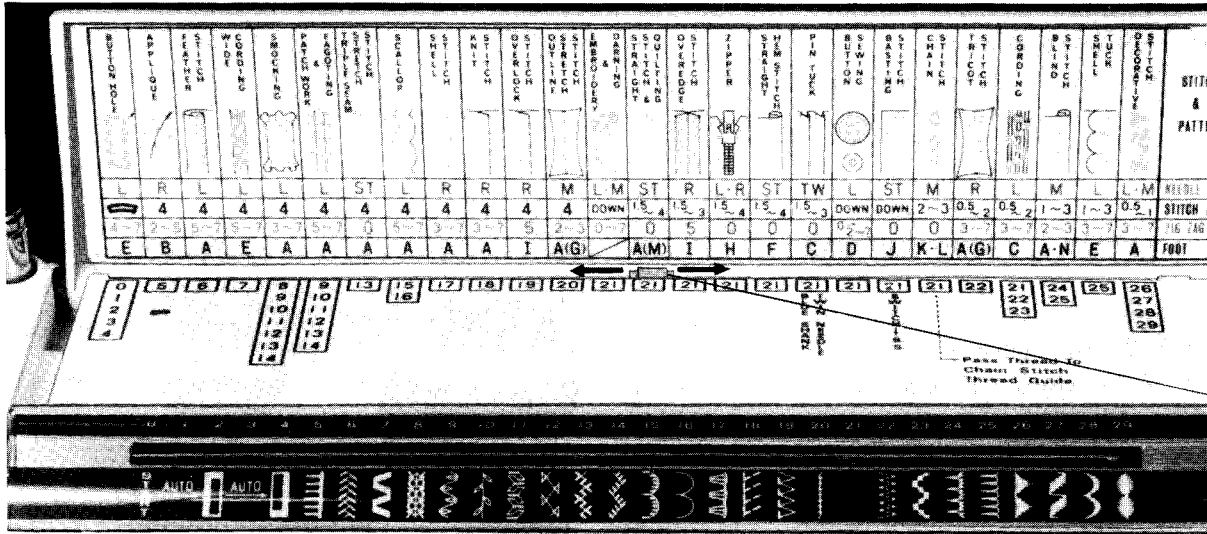
- Buttonhole
- DOWN ... Machine feed is disengaged Basting, Button sewing, Embroidery
- + 4 - ... Super patterns elongate or shorten.

Reverse push button

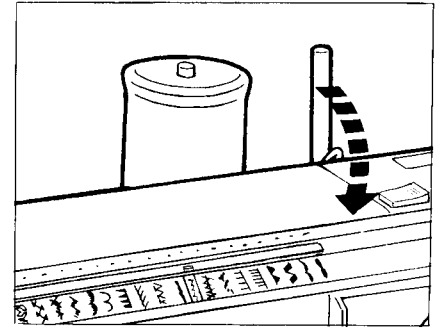


★ **SEWING INSTRUCTION PANEL**

Lid at the top of the machine flips up to show the sewing instruction panel when the lid opener button is pressed. The panel shows at a glance, 26 stitches including utility stitches to choose from.



● **To close lid**



Press down the right hand side of the lid to close.

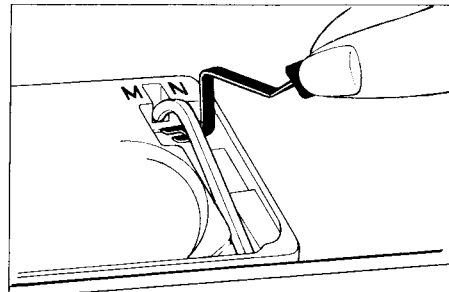
● **FOOT INDICATOR TAB**

Set this tab at column of the stitch you want to sew. Then, you will find the instruction on the reverse side of the lid which foot to be used for the stitch.

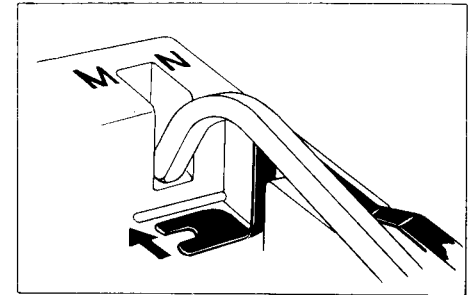
★ **ATTACHMENT COMPARTMENT**

Snap-on feet, chain stitch looper and other attachments are stored in the compact space beneath the lower sewing instruction panel.

* **To store blind hem guide**

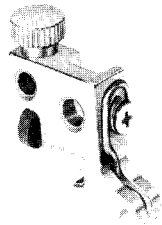


Firstly store the quilter in the groove "M". Place U shaped end of the blind hem guide under the quilter.



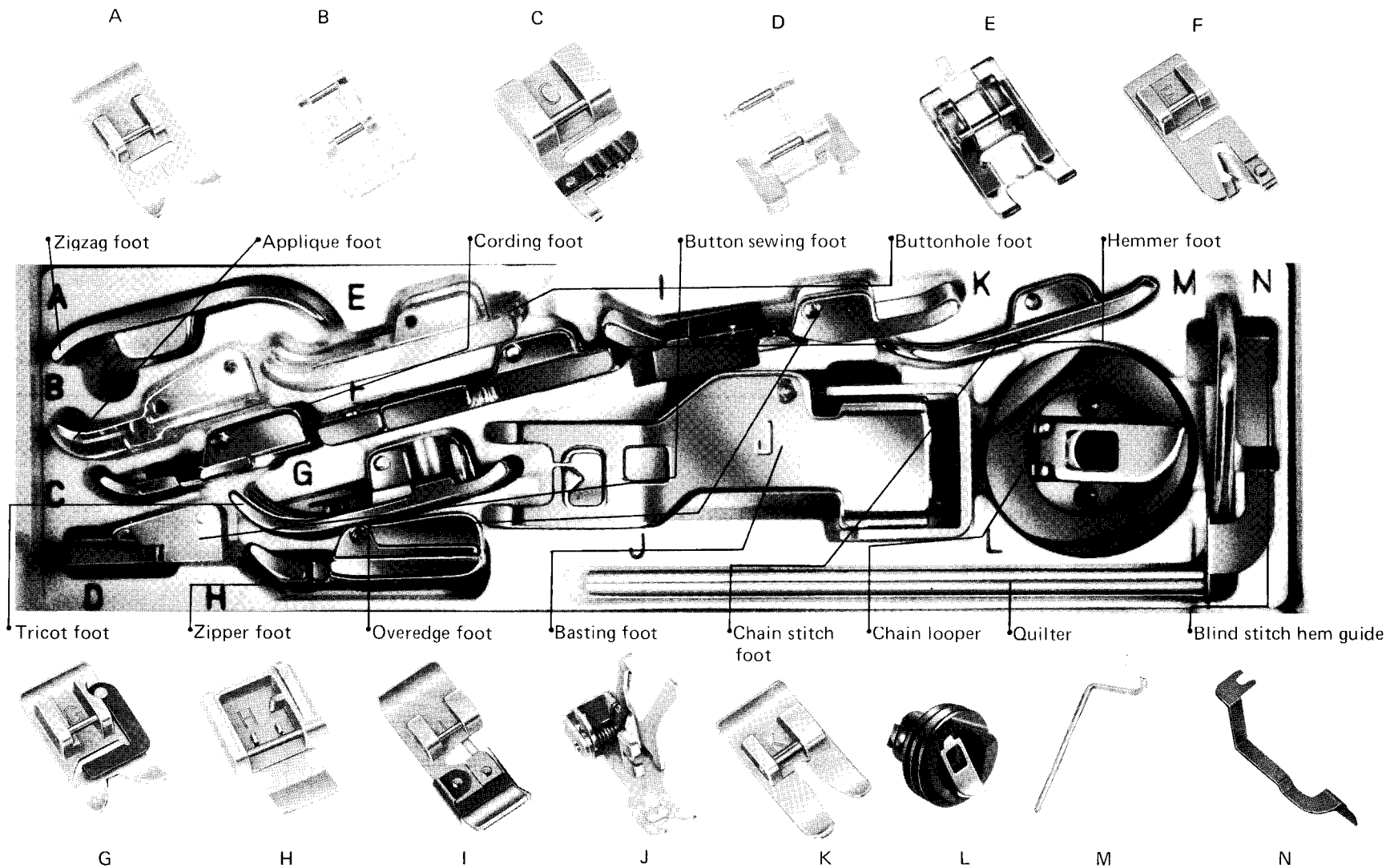
Then lay down the blind hem guide in the hole "N" and insert the U shaped end into the slot in the rear side wall as shown.

● **SNAP-ON FEET HOLDER**



Snap-on feet can be changed easily. You can enjoy various stitching with a proper foot.

★ SNAP-ON FEET



★ PREPARATION FOR RUNNING YOUR MACHINE

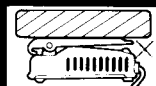
Before you start sewing, learn selection of needles & threads, and threading the machine.

“FOR SAFETY OF SEWING”

* In either of the following cases, be sure to disconnect the plug from the power line.

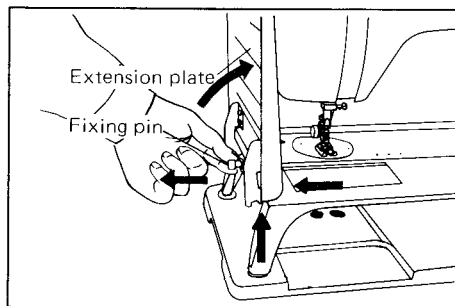
- After sewing work
- When attaching or removing parts
- When cleaning or oiling the machine
- When leaving your machine unattended

* Don't place an object on foot controller.



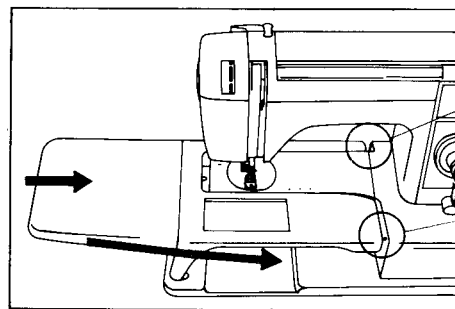
* When the machine is running, keep your eye on the moving parts around your hands.

● DETACHMENT OF EXTENSION TABLE AND ITS ATTACHMENT



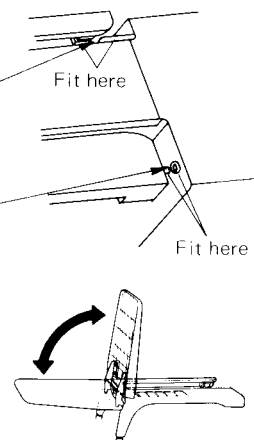
* HOW TO DETACH

1. Lift up the end of the extension plate.
2. Lift the extension table slightly upward while drawing out the fixing pin.
3. Slide the table off the free arm.



* HOW TO ATTACH

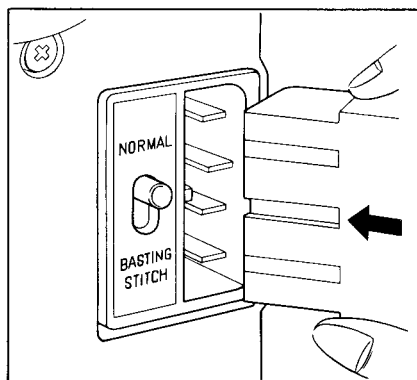
1. Slide the extension table over free arm.
2. Let the groove and the pin shown on meet their catches.



Turn the extension plate down when sewing, and turn it up when housing in the carrying case.

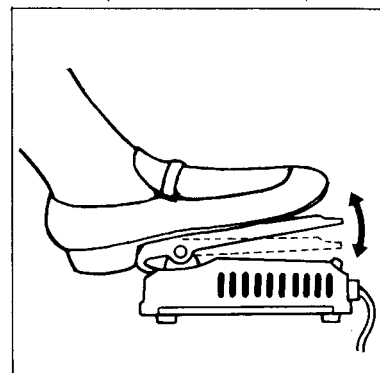
* Electrical connections

Push the connector plug into machine socket as illustrated and the power supply plug into the wall socket.

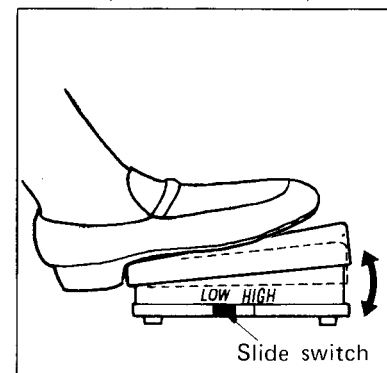


● TO USE FOOT CONTROLLER

(FOR 100 ~ 125V)

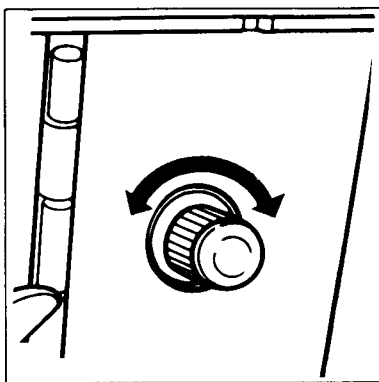


(FOR 200 ~ 240V)

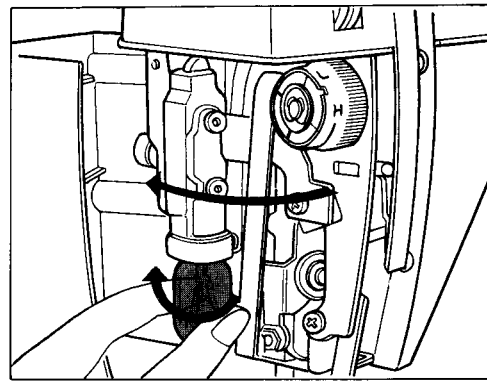
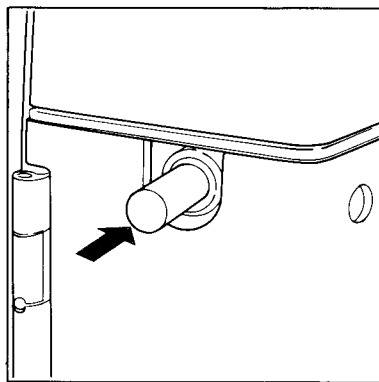


Gently step your foot on the foot controller, as you turn the balance wheel toward you when starting
(The harder you press, the faster the machine sews.)

● TO SWITCH ON OR OFF SEWING LIGHT



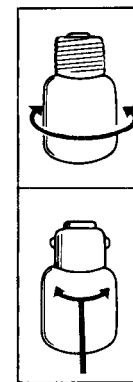
Sewing light switch is located on the back of face plate.



If the light bulb is burnt out, replace it.

* Use a 15-watt bulb.

● To change bulb



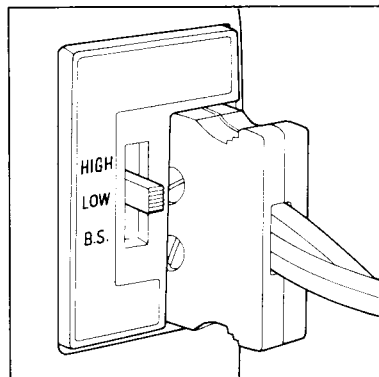
* To remove – Unscrew

* To replace – Screw

* To remove – Push and twist anti-clock wise

* To replace – Push and twist clock-wise

● SLIDE SWITCH
(FOR 100 ~ 125V)

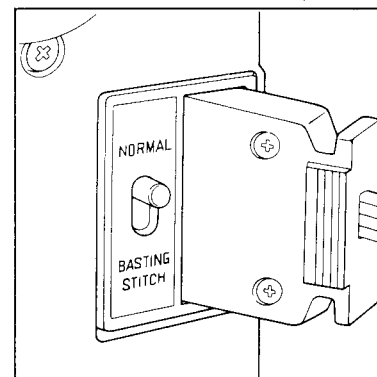


- HIGH → The HIGH setting for high speed range.
- LOW → The LOW setting for low speed range.

- B.S. → The B.S. setting for basting stitch only.

* Do not move the switch when machine is running.

(FOR 200 ~ 240V)



- NORMAL → For sewing other than incase of basting stitch
- BASTING STITCH → For basting stitch only

* Slide the switch after stopping the machine.

* Be sure to align the knob to the setting indicator.

* Slide switch on foot controller

- HIGH → The HIGH setting for high speed range.
- LOW → The LOW setting for low speed range.

• NEEDLE, CLOTH AND THREAD TABLE

Size of Needles	Cloth	Size of Threads
No. 9	Thin calico, silk, serge and muslin.	No. 80 – 100 cotton thread or fine silk thread.
No. 11	Thin calico, cotton cloth, crêpe de Chine, hosiery and silk.	No. 60 – 100 cotton thread or ordinary silk thread.
No. 14	Ordinary cotton cloth, thick silk, thin woolen goods, towels and shirting.	No. 50 – 60 cotton thread or ordinary silk thread.
No. 16	Thick cotton cloth, serge and thin woolen goods.	No. 30 – 40 cotton thread or ordinary silk thread.
No. 18	Ordinary woolen goods, trousers, over-coats, thick calico and children's clothes.	No. 30 – 40 cotton thread or ordinary silk thread.
Twin Needle No. 14	Calico, silk, serge, cotton cloth and thin woolen goods.	No. 50 – 80 cotton thread or ordinary silk thread.
No. 11 SS scarfed needle	Jersey, tricot and all synthetic stretch materials.	No. 60 – 100 nylon thread, or No. 100 – 150 silk or cotton thread.



* The needle size is marked in the position given in the left illustration. The needle size becomes larger as the number increases.

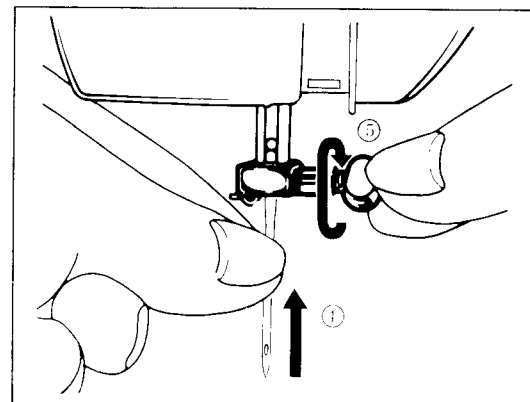
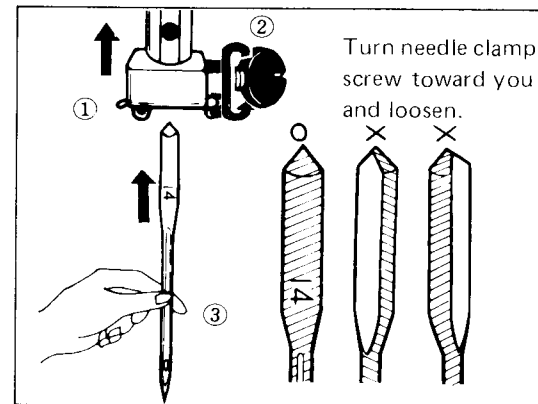
* Sew light weight fabrics together with a piece of paper placed under neath.

* SS scarfed needle is effective in preventing skipped stitches with stretch materials.

To see if needle
is bent or blunt



• CHANGING NEEDLE



(1) Raise the thread take-up lever to its highest position by turning balance wheel toward you.

(2) Loosen needle clamp screw.

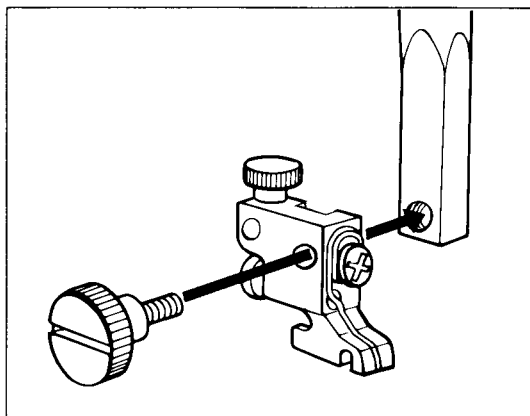
(3) Insert needle, with flat side of needle to the back.

(4) Push it up as far as it will go until it hits pin.

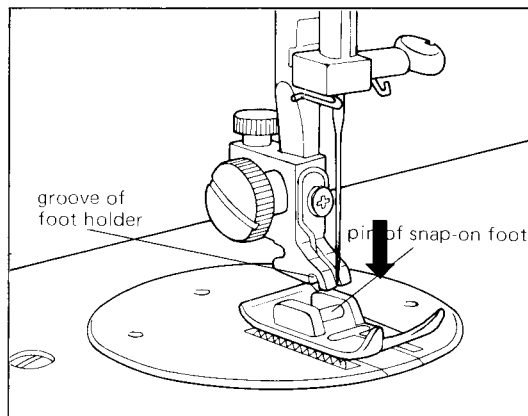
(5) Tighten the needle clamp screw firmly.

* The incorrect insertion of needle will often cause unsatisfactory sewing or needle breakings.

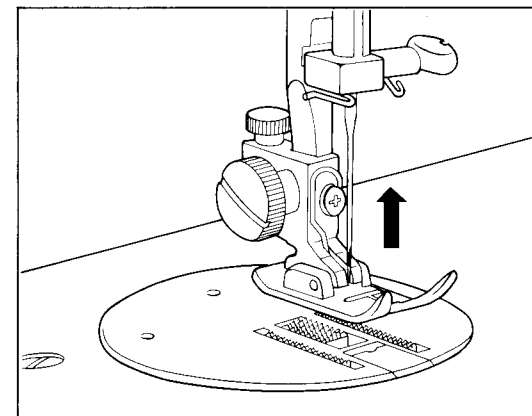
● CHANGING PRESSER FEET (SNAP-ON FEET)



(1) Fix foot holder on presser bar by tightening thumb screw firmly.

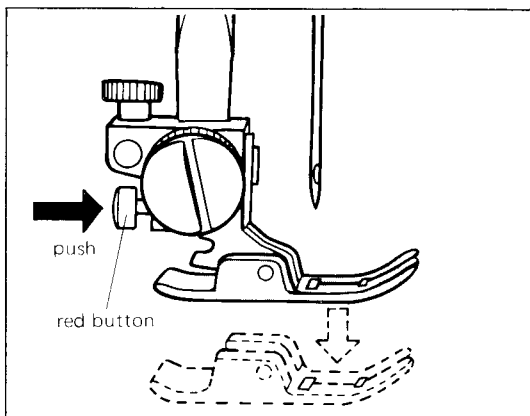


(2) Raise needle and place pin of snap-on foot just under groove of foot holder and lower presser foot lifter.



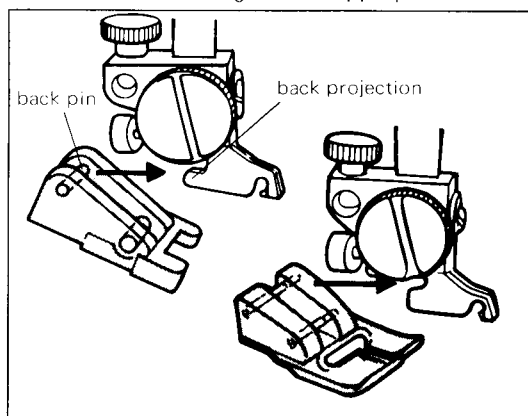
(3) When presser foot lifter, is raised the machine is ready for sewing.

“To remove foot”

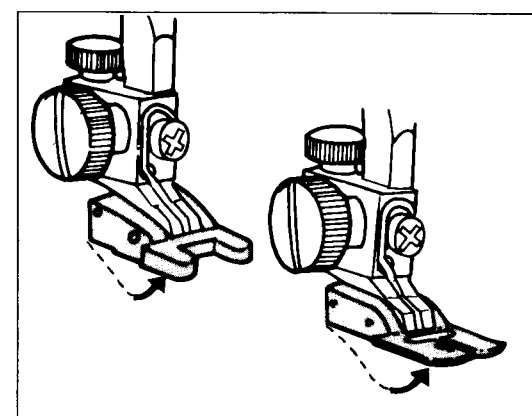


Raise presser foot. Then press the red button on the back of foot holder, and the foot will drop.

“To set button sewing foot or applique foot”

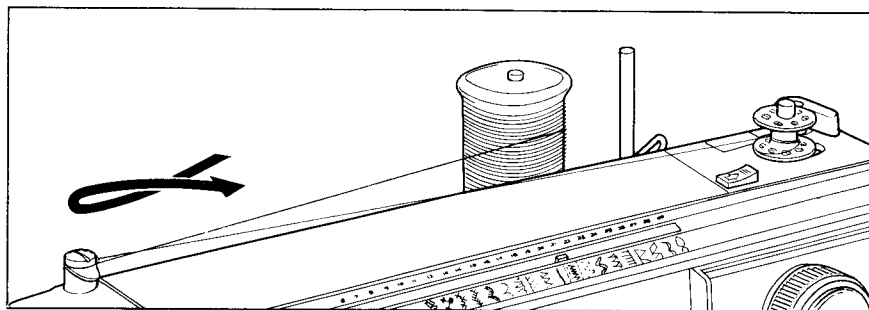


(1) Raise needle to its highest position and slant back snap-on foot. Then hang back pin on the back projection.

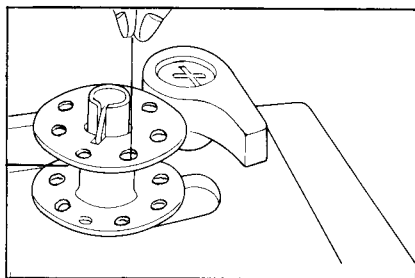


(2) Press toe of the foot upward and the foot snaps on foot holder. To remove the foot, press the red button like other snap-on feet.

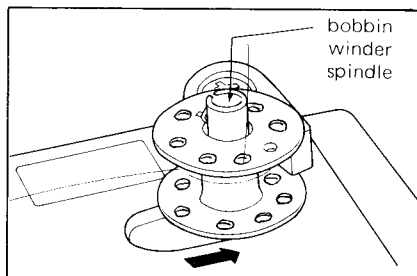
● WINDING BOBBIN THREAD



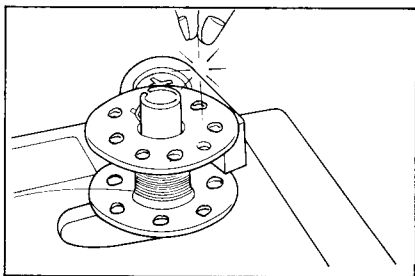
Guide thread from outside of the spool.



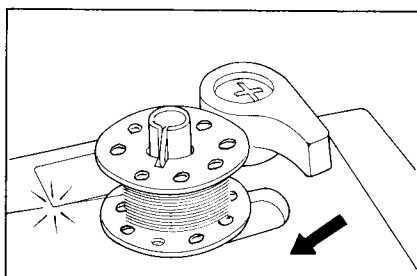
(1) Pass the end of thread through the hole in the bobbin from inside to outside.



(2) Push the bobbin winder spindle against the bobbin winder stopper.



(3) Depress the foot controller while holding the thread end. When the thread is wound a little, cut the free end of thread.



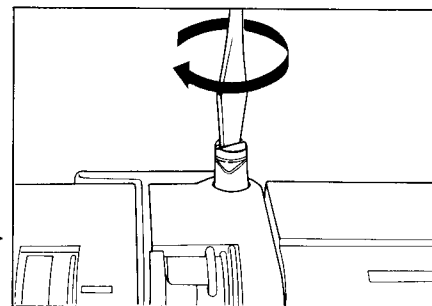
(4) Pull the spindle toward you and cut the thread. (Bobbin will stop automatically when it is fully wound.)

* If the thread is not properly wound on the bobbin . . .

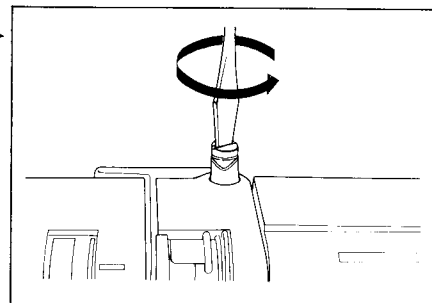
Correct winding



Incorrect winding



Incorrect winding

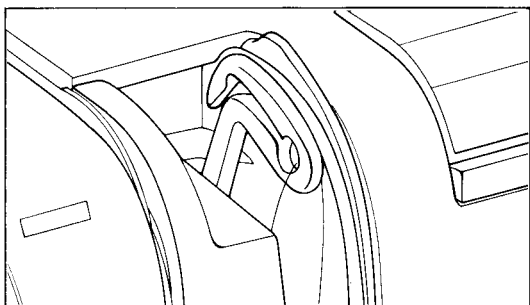


NOTE:

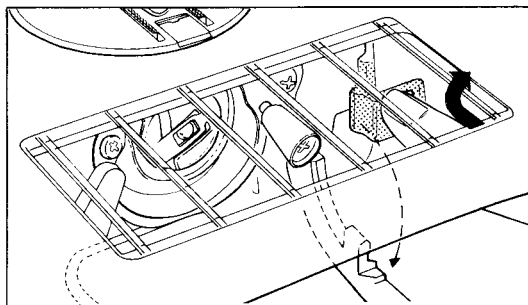
The lip of bobbin winder thread guide should point toward you.

On this machine, the stitching mechanism is automatically disconnected by just moving bobbin winder spindle toward bobbin winder stopper. Make sure that machine is stopped before moving bobbin winder spindle.

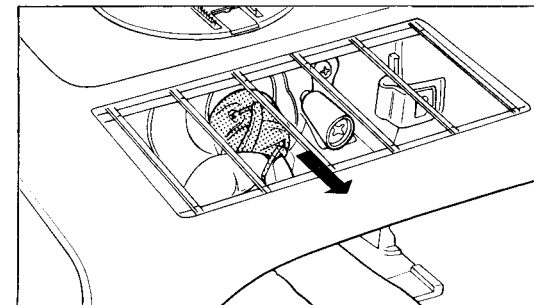
● REMOVING BOBBIN CASE



(1) Raise thread take-up lever to its highest point by turning balance wheel toward you.



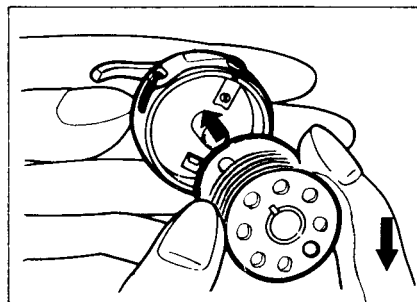
(2) Open lid by pressing hook cover opener to the right.



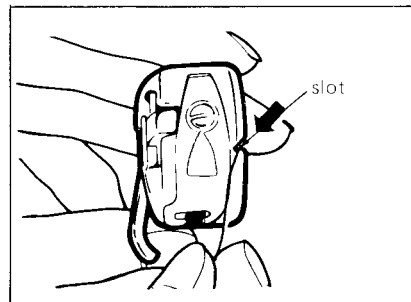
(3) Take out the bobbin case by holding the latch.

● THREADING BOBBIN CASE AND INSERTING INTO HOOK

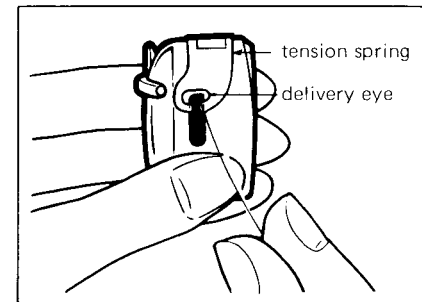
* Unless bobbin case is properly housed into hook, it will not stay there.



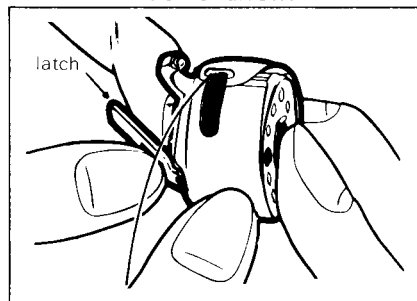
(1) Place bobbin into bobbin case.
* Make sure the thread unwinds in the direction of arrow.



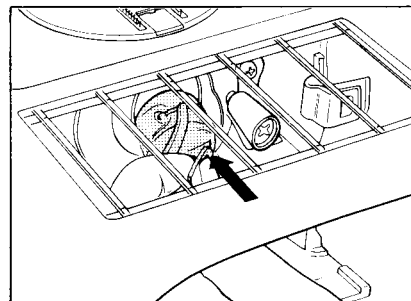
(2) Pull thread into bobbin case slot.



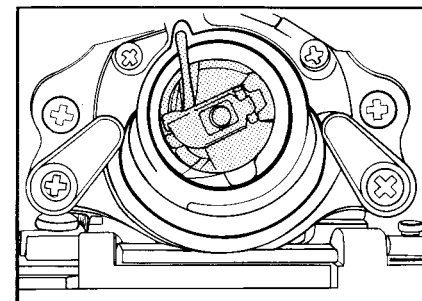
(3) Draw thread under tension spring and then into delivery eye.
* Leave about 10cm (4 inches) of free thread.



(4) While latch is held open, bobbin will not drop out.

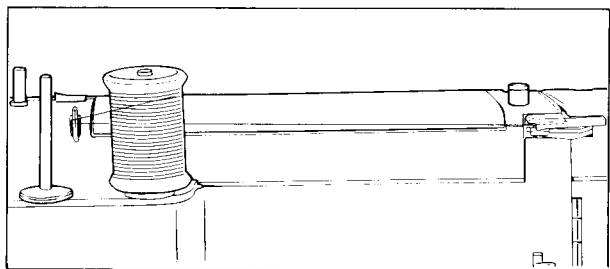


(5) Insert bobbin into hook by holding latch open.

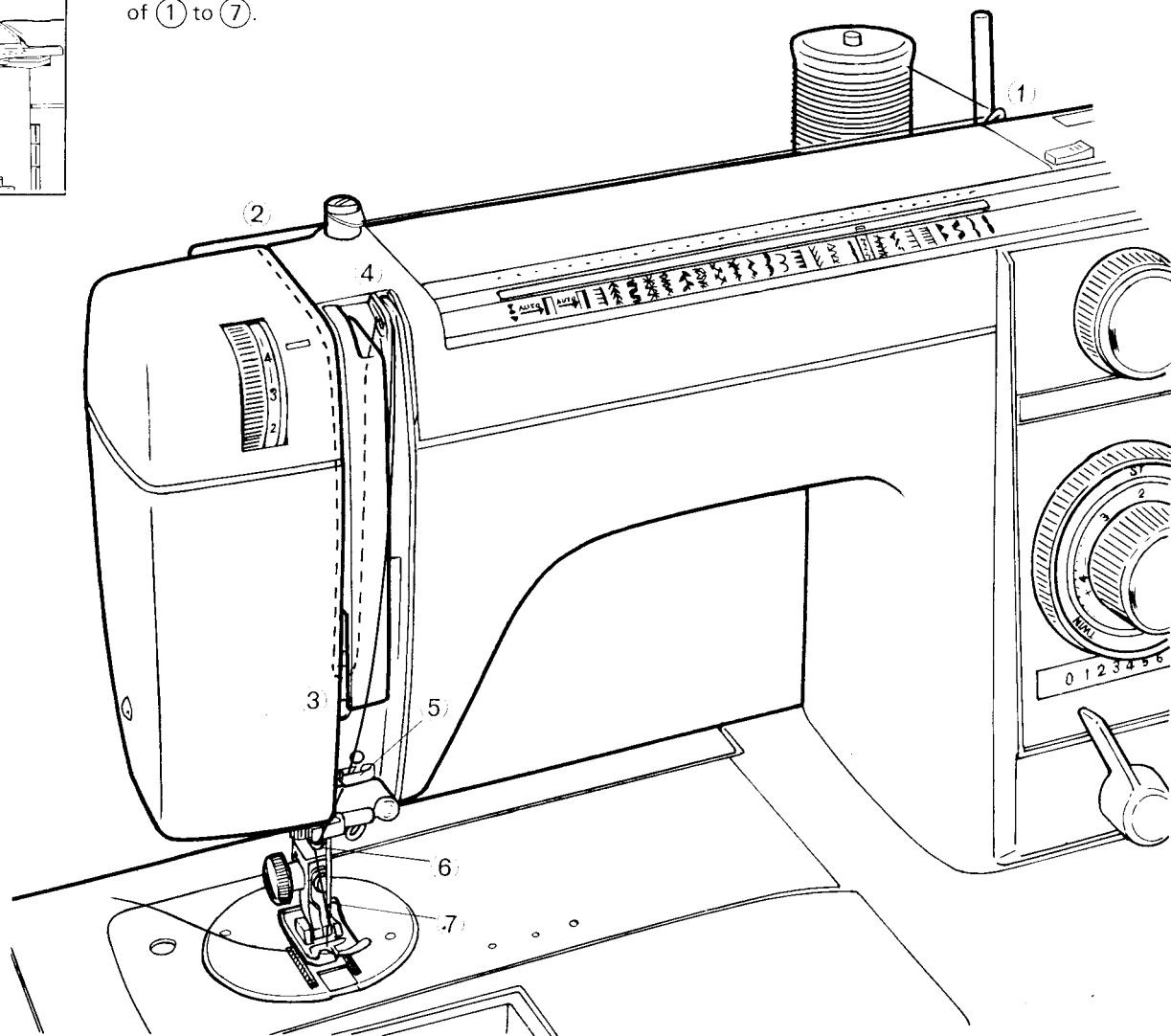
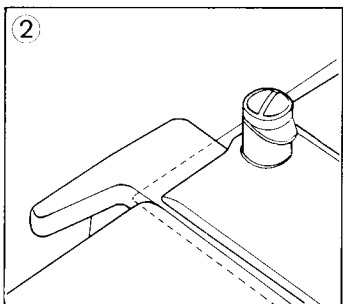
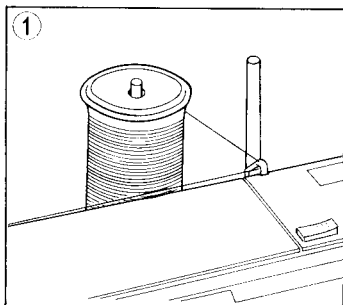


(6) Place the horn of bobbin case into the recess of hook race.

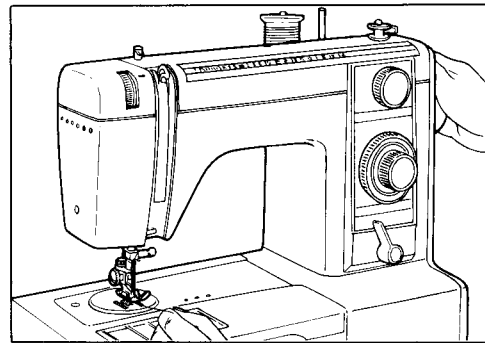
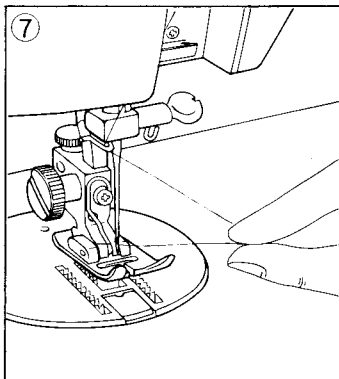
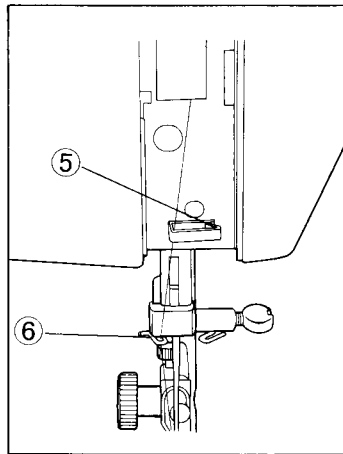
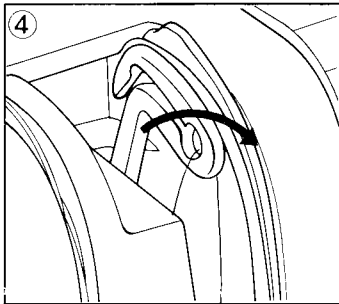
• THREADING MACHINE



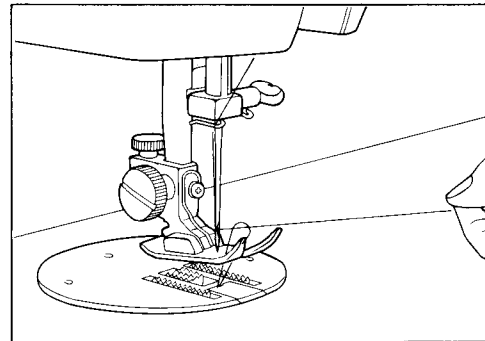
Raise thread take-up lever to its highest position by turning balance wheel towards you, and guide thread in the order of ① to ⑦.



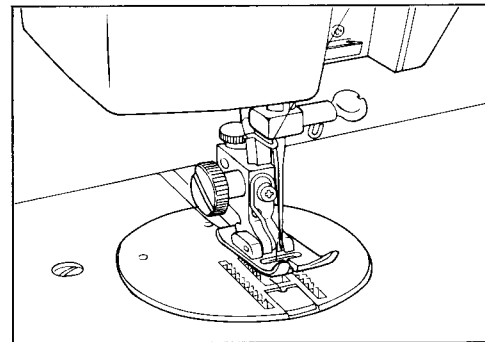
● DRAWING UP BOBBIN THREAD



(1) Hold needle thread end, and turn balance wheel toward you.



(2) When take-up lever is at its highest position, pull needle thread.



(3) Draw about 15cm (6") of needle and bobbin thread under presser foot and place them away from you.

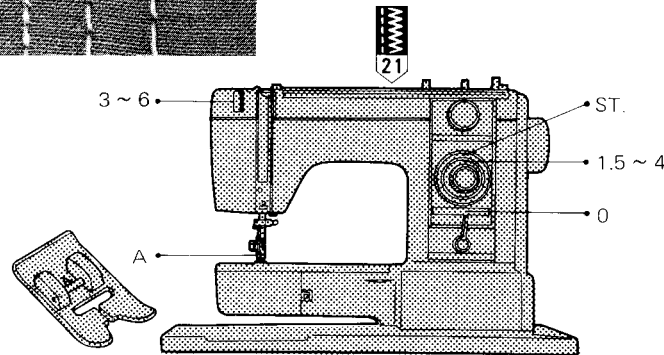
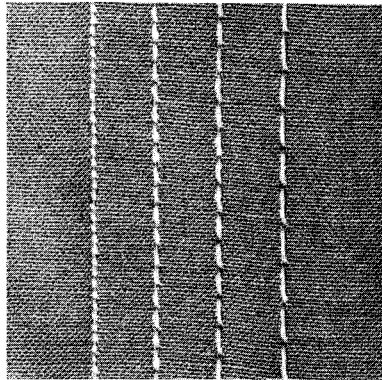
★ BASIC SEWING

Learn correct dial settings so that beautiful stitches can be sewn.

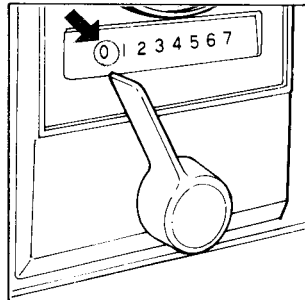
* Indicated numbers for stitch length, stitch width and thread tension regulators on following pages are only aims for sewing with ordinary materials. Therefore, adjust the regulators depend upon the material, which you want to sew, without concern the numbers.

* Try to sew test on a piece of the fabric before sewing garments.

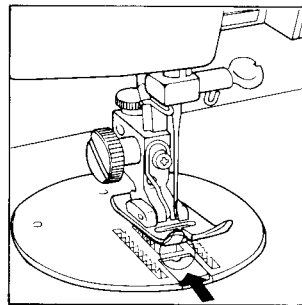
● STRAIGHT STITCHING



When set the needle position dial at "ST".....

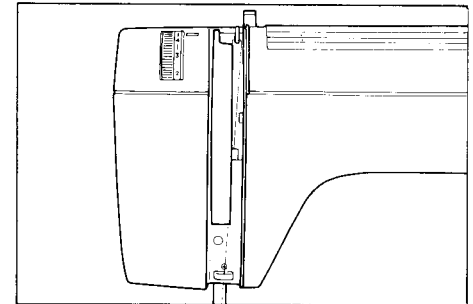


Automatically returns to "0", and fixed.



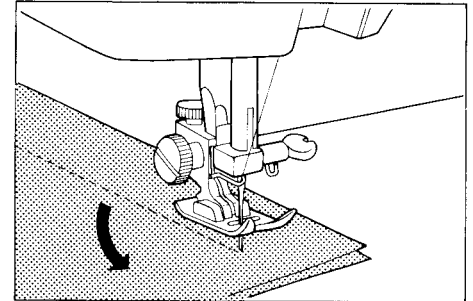
The needle hole is automatically set for a straight stitch.

Starting the seam



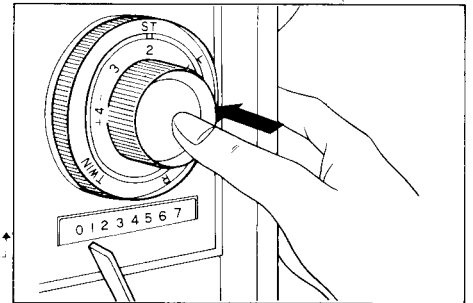
(1) Remove slack of the thread.

Corner sewing

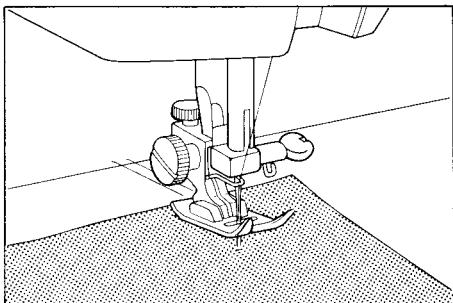


(1) Stop sewing with needle in fabric and lift presser foot. Then turn fabric on needle.

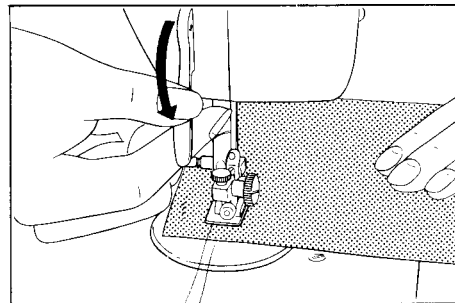
Ending the seam



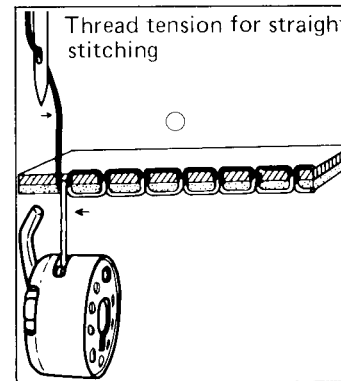
(1) Reverse stitch reinforces the seam. Depress the reverse push button to sew a few reverse stitches.



(2) Position needle in fabric at start point.

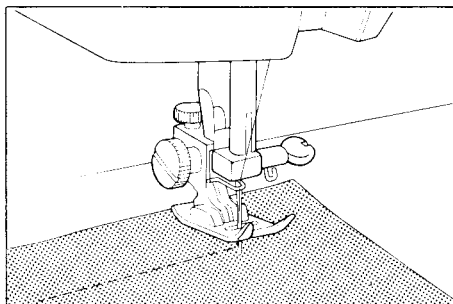


(3) Lower the presser foot and start machine.

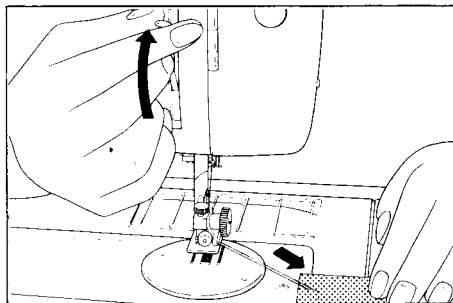


Thread tension for straight stitching

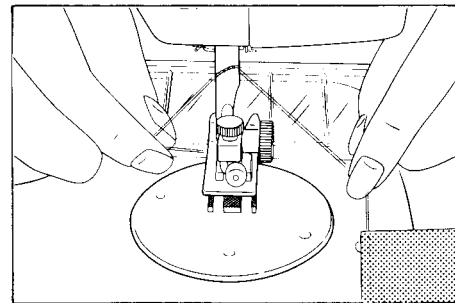
Generally, thread tension should be controlled by thread tension regulator dial. Bobbin thread tension has been correctly adjusted at the factory and readjustment scarcely needed except for special stitch, thread and fabric. Bobbin thread tension is just right when you can pull the thread from bobbin case easily with a little resistance.



(2) Lower the presser foot and stitch in the new direction.

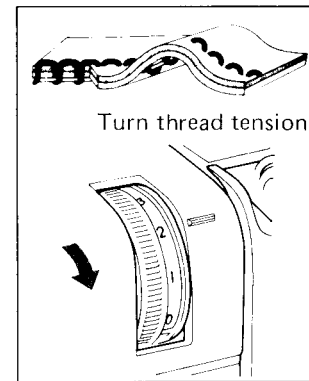


(2) Raise the thread take-up lever to its highest position, raise the presser foot, and remove fabric from machine by pulling it to the back and left.



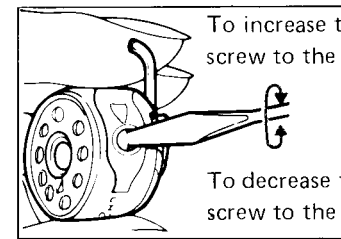
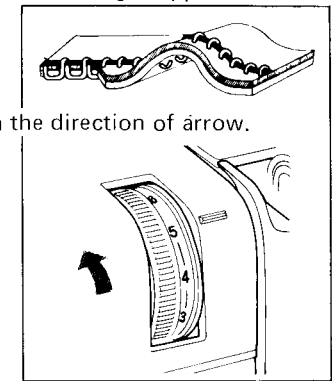
(3) Sever threads on thread cutter at the rear of presser bar or with a pair of scissors.

× Too loose upper tension



Turn thread tension dial in the direction of arrow.

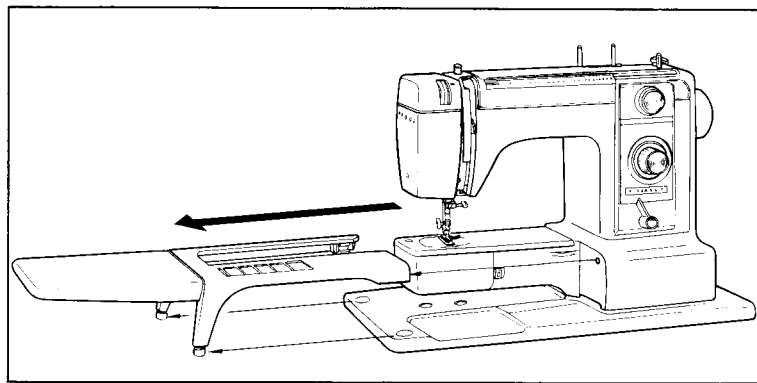
× Too tight upper tension



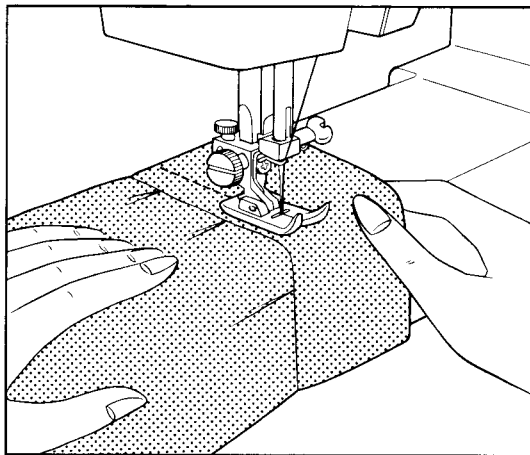
To increase tension, turn screw to the right.

To decrease tension, turn screw to the left.

● FREE ARM SEWING

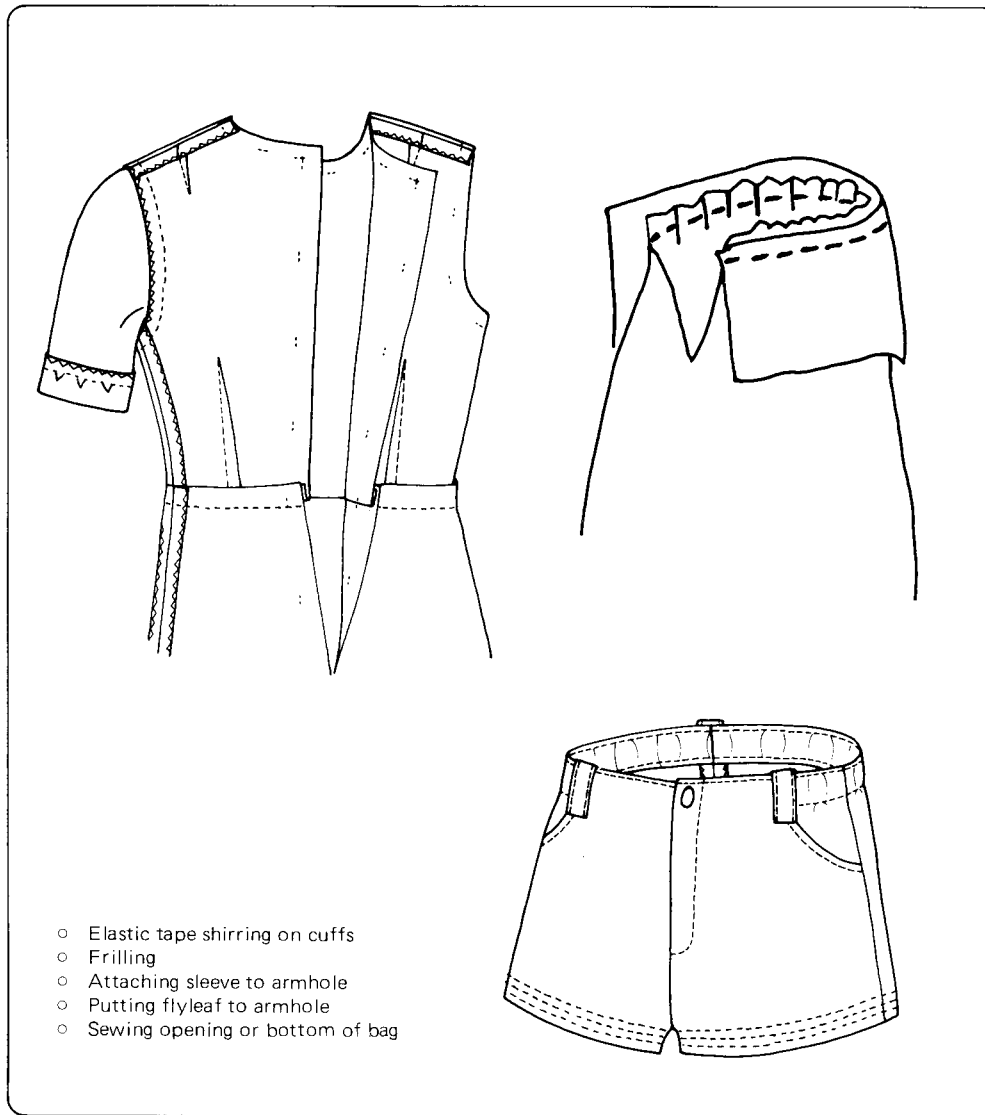


Detach extension table

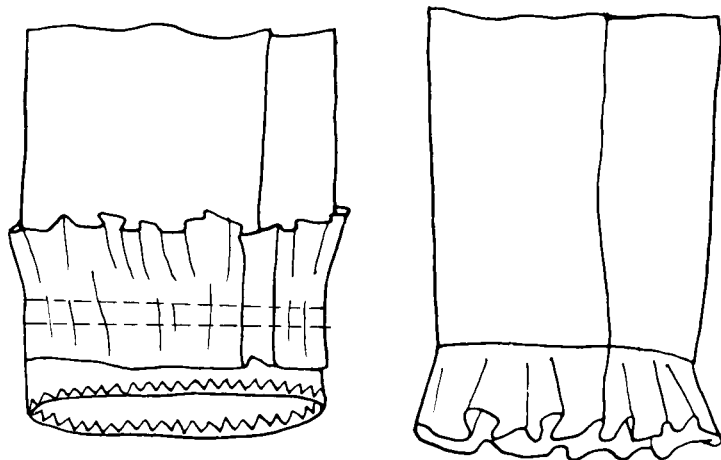
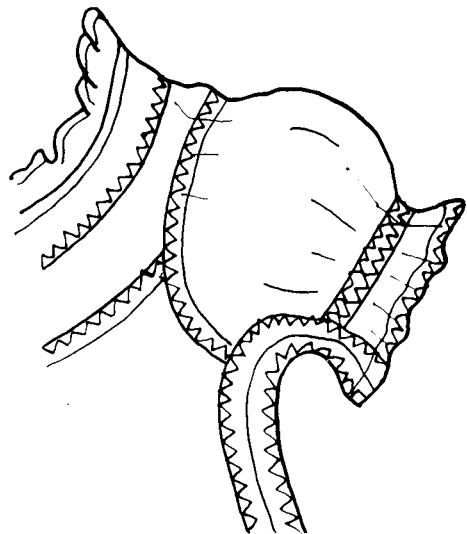


Sew you fabric applying the free arm as illustrated above.

Applications of free arm sewing



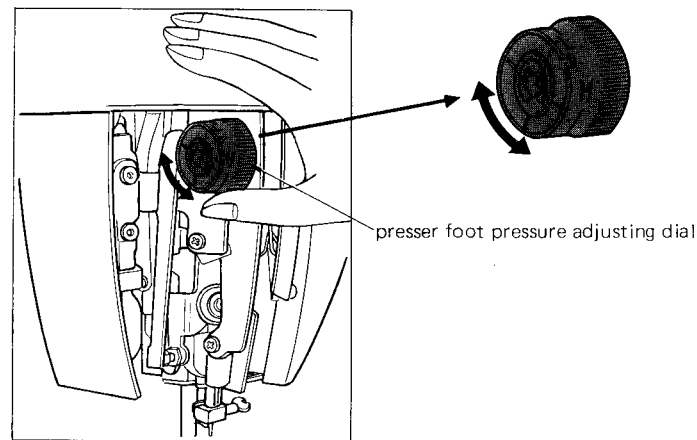
- Elastic tape shirring on cuffs
- Frilling
- Attaching sleeve to armhole
- Putting flyleaf to armhole
- Sewing opening or bottom of bag



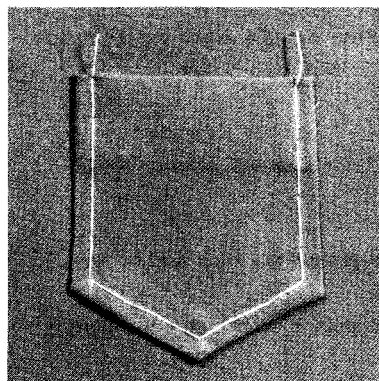
● ADJUSTING PRESSURE ON THE PRESSER FOOT

The presser foot pressure can be adjusted with the aid of a dial installed inside a face plate.

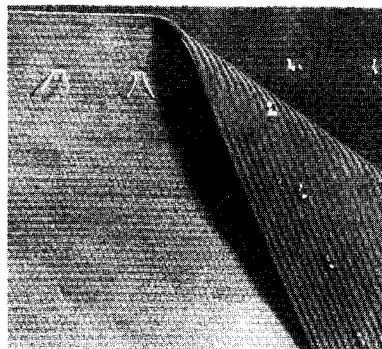
1. Press down the presser bar lifter.
2. Set the dial at recommended position.
 - “H” (high pressure) For normal sewing on thick and heavy materials.
 - “M” (medium pressure) For normal sewing on midium and light materials.
 - “L” (low pressure). For darning and mending.
3. After using “L”, make sure to return the dial setting to “M” or “H” for normal sewing.



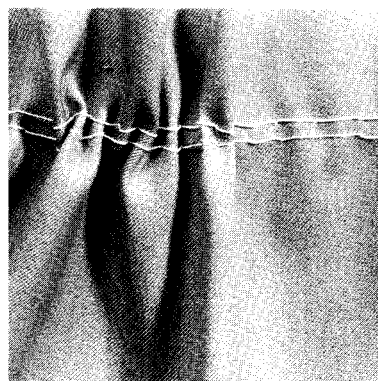
• STITCH-BY-STITCH BASTING



Basting

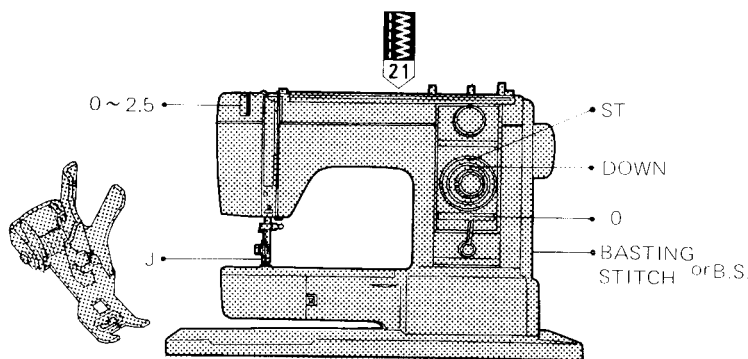


Tailor's Tacking



Gathering

You can produce stitch-by-stitch basting of any length, only by pressing speed controller and guiding your fabrics with both hands. Stitch-by-stitch basting makes marking, temporary joining, tailor's tacking and gathering.



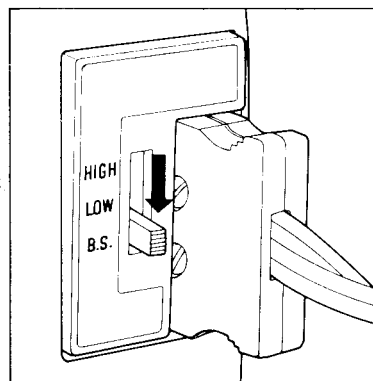
NOTE: Make sure that thumb screw and needle clamp screw have been tightened firmly.

NOTE: Raise needle to its highest position.

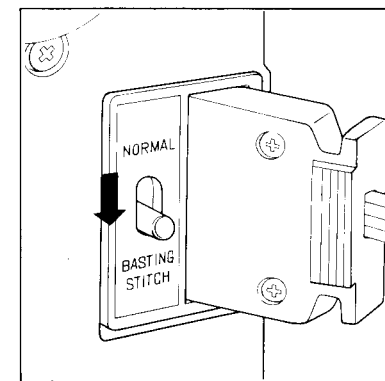
NOTE: Stretch your fabrics with both hands while basting so that skipped stitch can be prevented.

NOTE: When sewing elastic materials, it is recommended to use blue tip scarf needle.

Slide switch

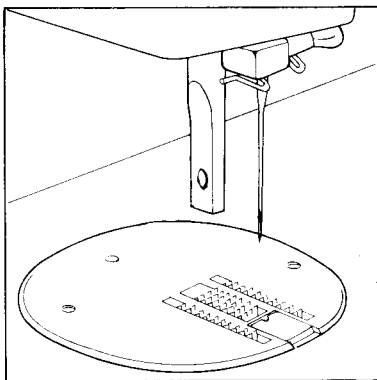


When changing the switch from "B.S." to "LOW", slide it up to "HIGH" first, then down to "LOW".

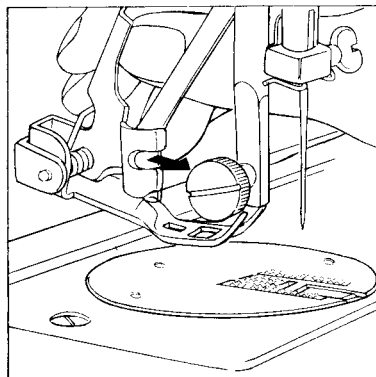


* Do not move the switch when machine is running.

ATTACHING BASTING FOOT

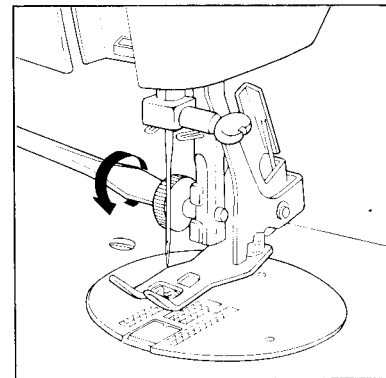


Raise needle to its highest position of travel. Remove thumb screw and foot holder.



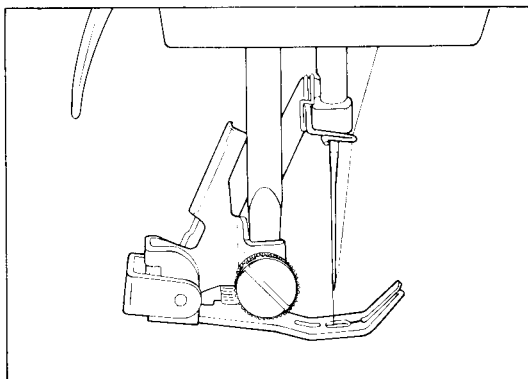
Attach the thumb screw to the presser bar and screw it for a couple of turns. Hang the fork of the basting foot on the thumb screw and the front lever of the basting foot on the needle clamp screw at the same time.

As you tighten the thumb screw, press the back lever of the basting foot towards you until the fork is clamped around the presser bar.

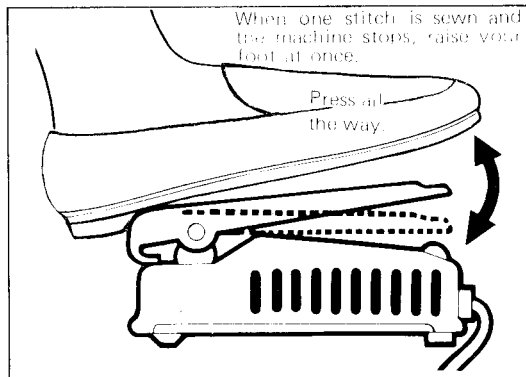


Make sure the U shaped fork of the basting foot is clamping the presser bar completely.

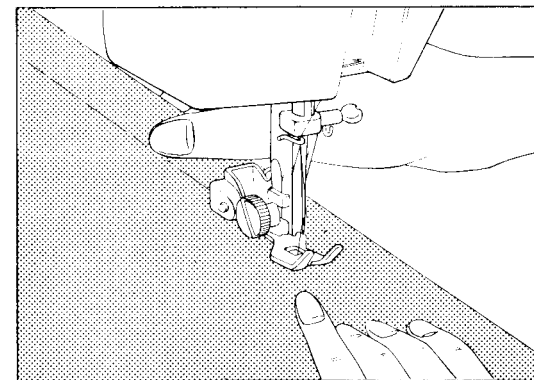
“Sewing procedure”



Place the fabric under foot at the position where to start stitching. Lower basting foot and start sewing. Basting foot gives slight tension to the fabric. Therefore you can guide the fabric freely.



Sew one stitch by pressing the controller all the way. When one stitch is sewn and the machine stops, raise your foot at once.



Feed the fabric with your hands to make required stitch length. Then sew another stitch. When you move the fabric at the start of basting, hold both thread and fabric with your hands (as shown) close to the foot.

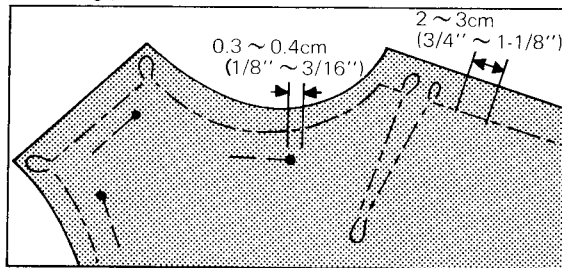
TAILOR'S TACKING

This stitch is especially effective when marking guidelines on such materials as laces, woolen goods, pile fabrics and others those cannot be marked with a roulette or a tracing spatula.

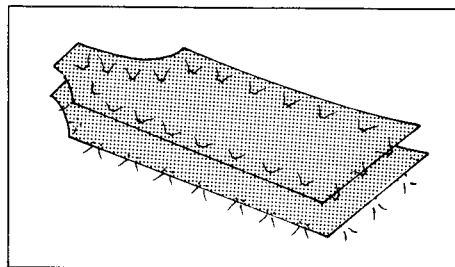
NOTE:

Use cotton thread No. 50 and needle No.11.

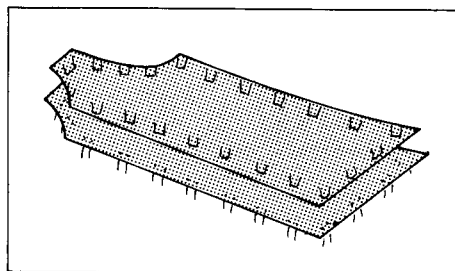
"Sewing procedure"



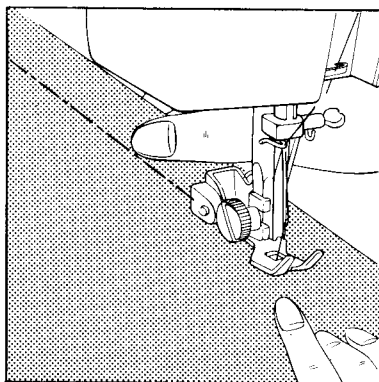
(1) Sew along and short stitches as shown above.



(2) Cut threads between long stitches and between fabrics.

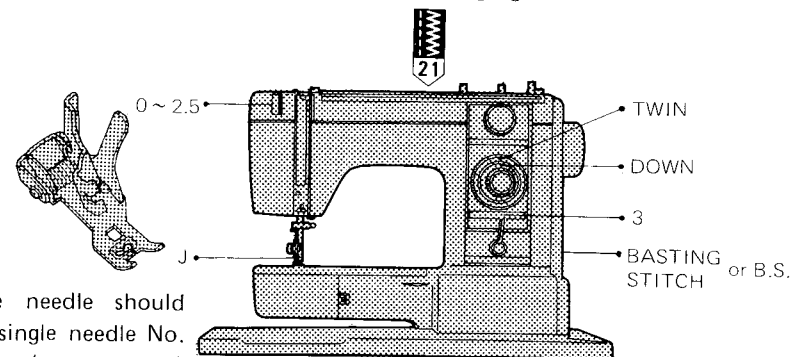


(3) Cut the threads evenly, leaving 2 ~ 3mm (1/16\"/>



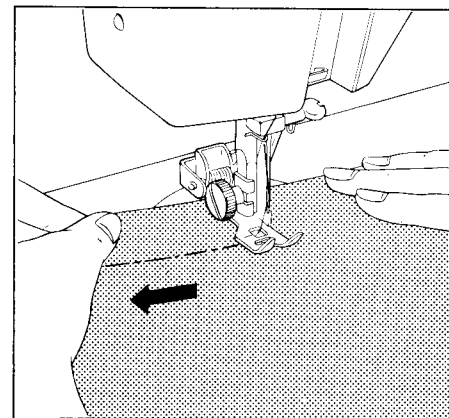
CROSSWISE TAILOR'S TACKING

NOTE: Crosswise basting can be sewn when needle position dial is set at "TWIN" and zigzag lever at "3".



The needle should be single needle No. 11 (not twin) though needle position dial is set at "TWIN".

"Sewing procedure"



With zigzag lever set at "3", sew one stitch with needle falling at left side. Then give another one press on foot control with fabric unmoved. Move fabric to the left with your hands to make required stitch length.

BASTING

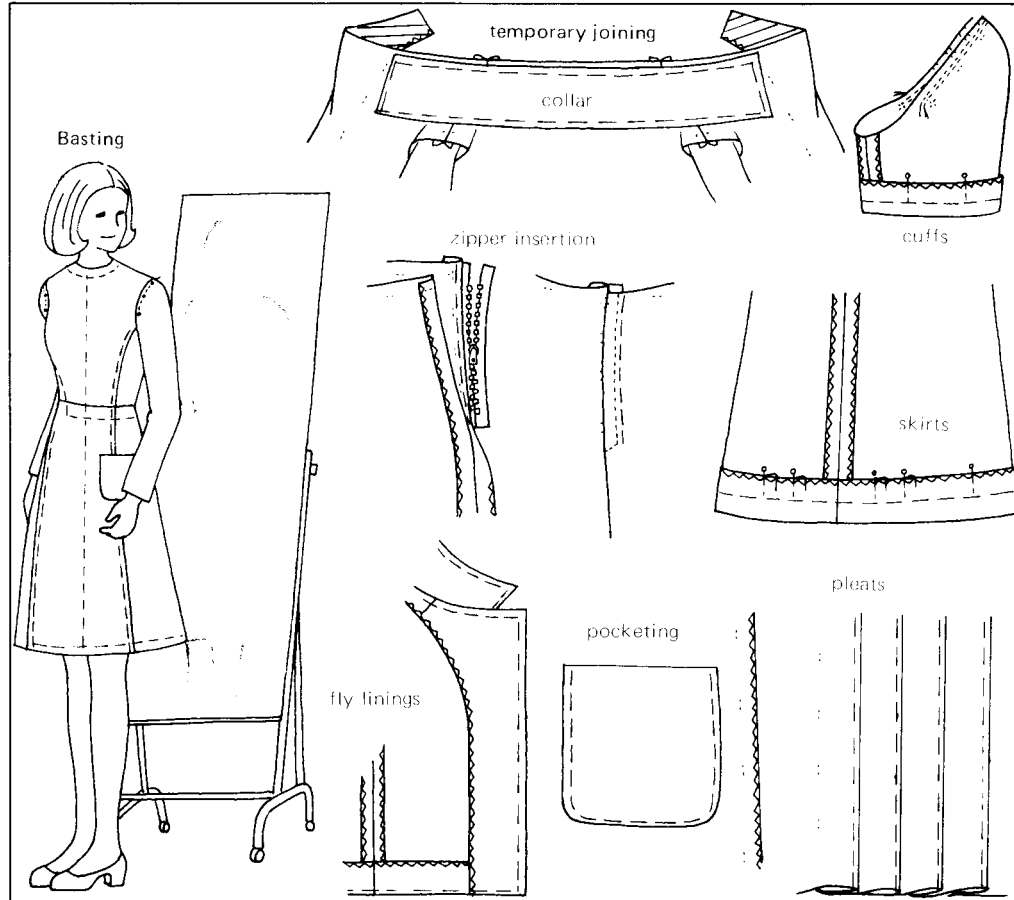
Temporary joining

Stitch-by-stitch basting

Baste every stitch about between 1cm and 3cm ($3/8'' \sim 1-1/8''$).

This stitch is particularly useful for temporary joining collars, reversible positions, skirts, cuffs, fly linings, linings, pockets, belts, pleats, zippers, etc. and basting required positions.

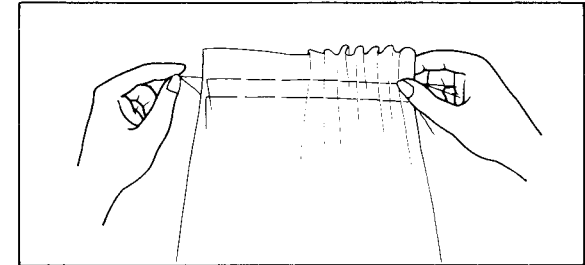
Applications of basting stitch feature



GATHERING

Baste stitches with 0.5cm interval for ordinary gathering and 2 ($3/4''$) for soft pleats, etc. gather fabrics after basting. The fullness of gathers can be regulated by adjusting stitch length.

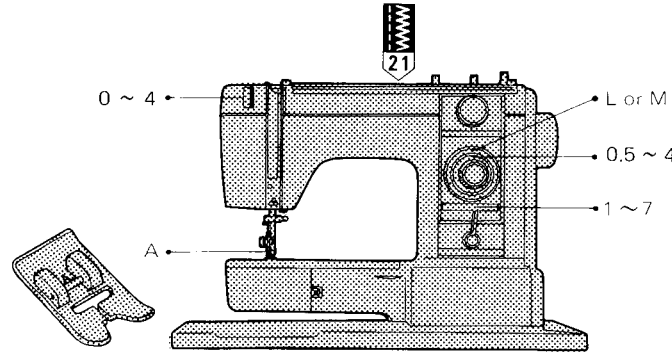
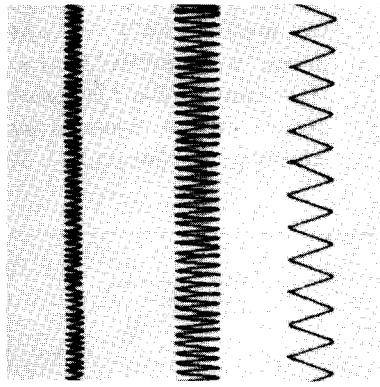
"Sewing procedure"



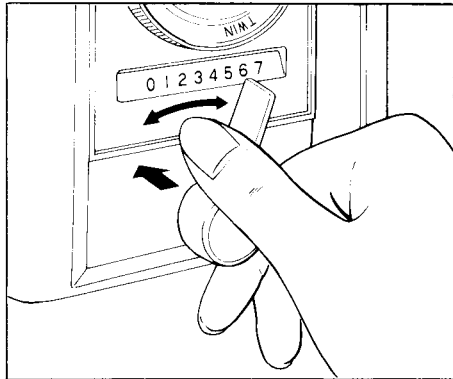
Applications of gathering



● ZIGZAG STITCHING



“Setting zigzag lever”

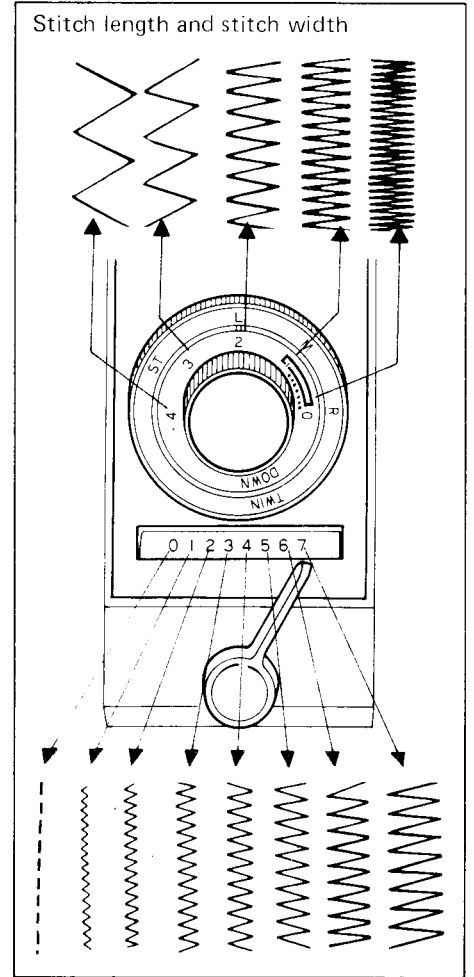
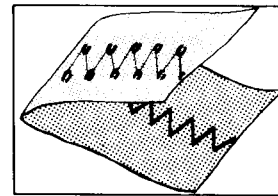


Move the lever while keeping it pressed until it comes to the desired stitch width. Release the lever with pulling so that it will be locked in position.

* If the lever is moved without pushing, it will return to former position when you release it.

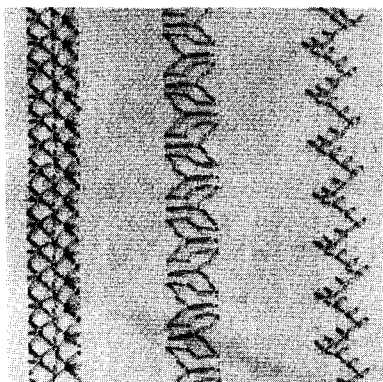
* Figures on the dial approximately correspond to millimeters.

* Apply a looser needle thread tension for zigzag stitching! Loosen needle thread tension so that needle thread will slightly appear on wrong side of fabric. Thus patterns on the right side will be neatly sewn.

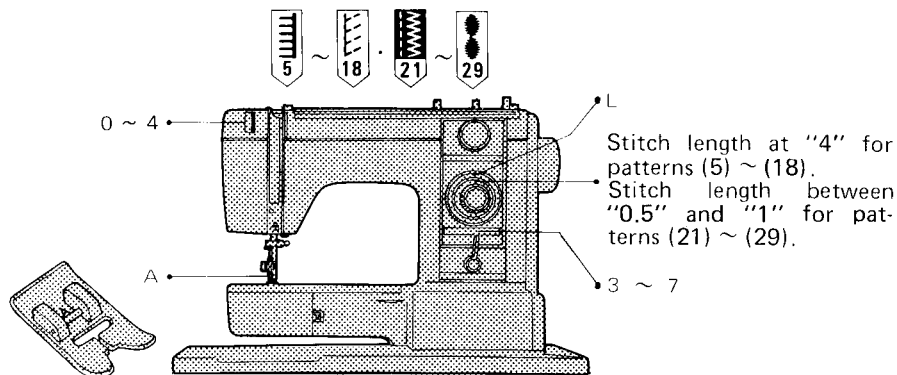


Stitch length and stitch width

● AUTOMATIC PATTERN SEWING

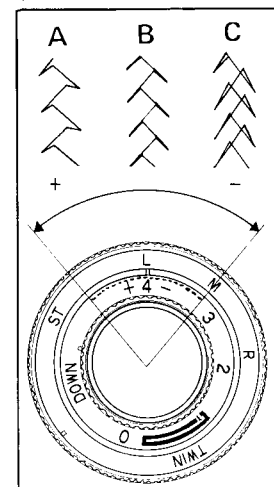


Setting differs in stitch length between patterns (5) ~ (18), and (21) ~ (29).

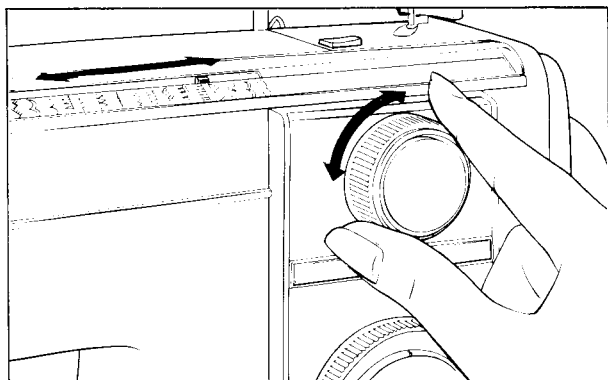


Stitch length at "4" for patterns (5) ~ (18).
Stitch length between "0.5" and "1" for patterns (21) ~ (29).

"Stitch length at "4" for patterns (5) ~ (18)!"



CHANGING PATTERNS



(1) Turn patterns selector dial until pointer comes to the desired stitch setting.

* Unnecessary to push or pull the dial before turning.

(2) Push pattern selector dial before sewing.

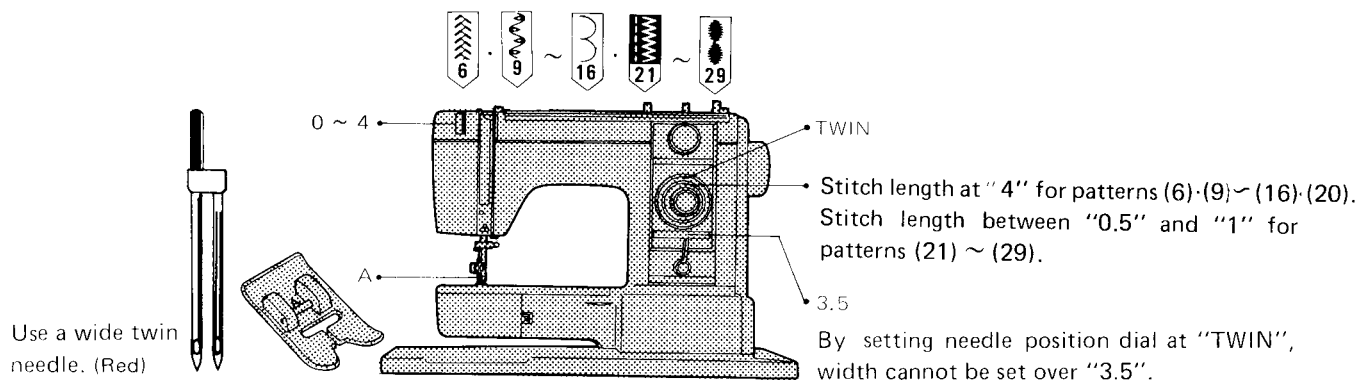
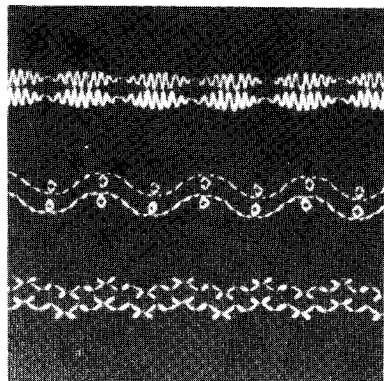
* Even if you fail to push the dial, it will be automatically set with a click sound.

When sewing patterns (5) through (18), set stitch length dial at "4" normally. However, forward and reverse feeds may become unbalanced depending upon fabrics. When it occurs, correct the balance as follows:

* If the patterns are shortened as illustration (C), turn the stitch length dial toward "+" (clockwise).

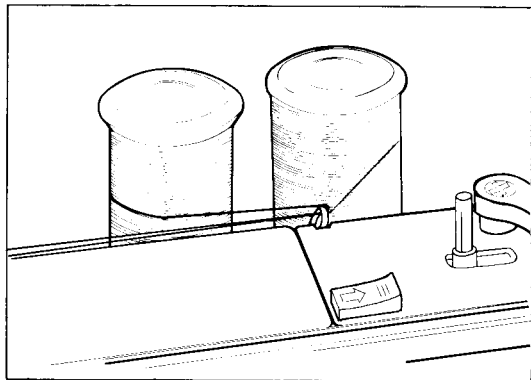
* If the patterns are lengthened as illustration (A), turn the stitch length dial toward "-" (anticlockwise).

● TWIN NEEDLE STITCHING

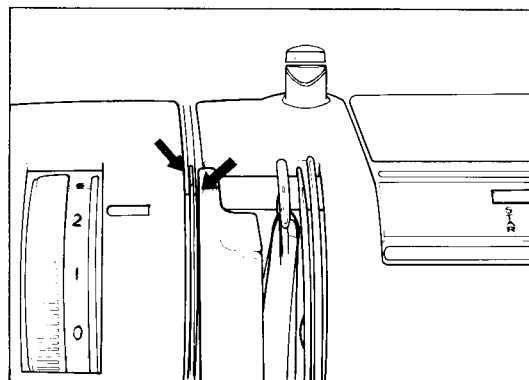


* Attach the twin needle after setting the dial knobs.

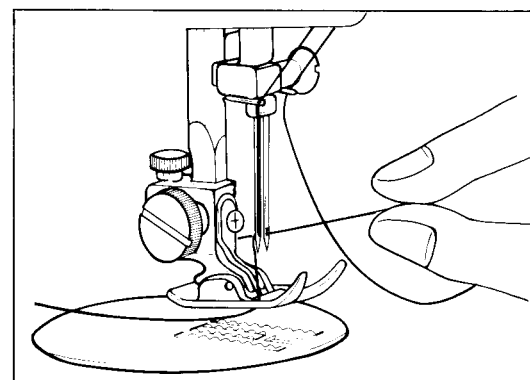
“Threading the needle”



(1) Place spools of thread on spool pins, and thread the machine as for single thread stitching.

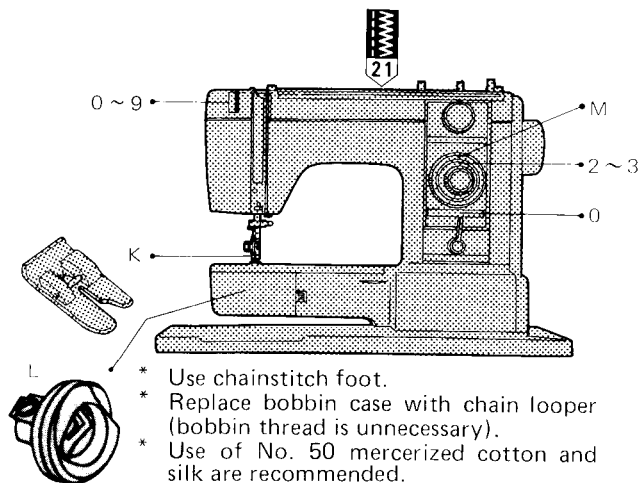
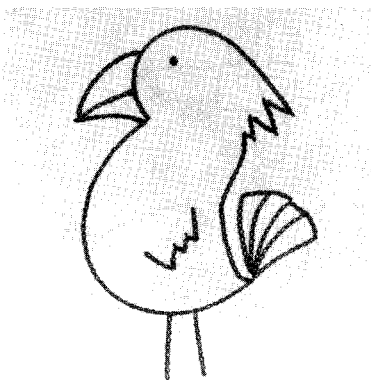


(2) Separate threads through thread guide channel and between discs of thread tension regulator.



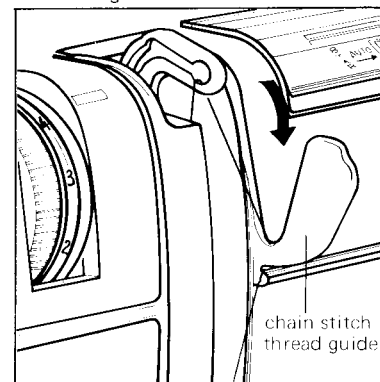
(3) Separate threads again through thread guides either side of needle bar and eyes of twin needle.

● CHAINSTITCHING



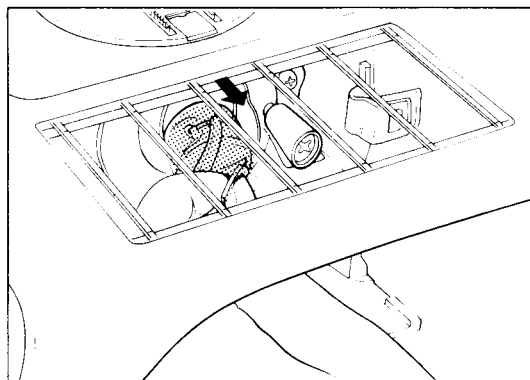
- * Use chainstitch foot.
- * Replace bobbin case with chain looper (bobbin thread is unnecessary).
- * Use of No. 50 mercerized cotton and silk are recommended.
- * Chainstitching is not possible with zig-zag sewing, twin needle sewing or reverse sewing.

Threading the needle

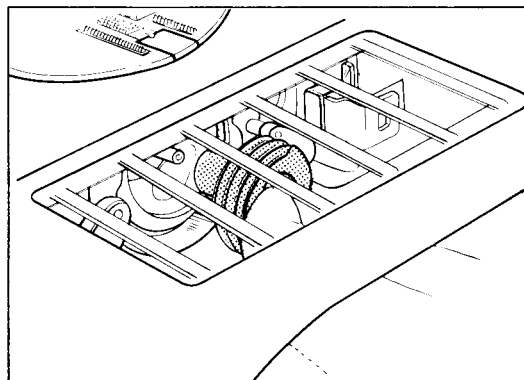


Draw out chainstitch thread guide all the way toward you, and guide thread to it just after passing through take-up lever. Other threadings are the same as those of straight stitching.

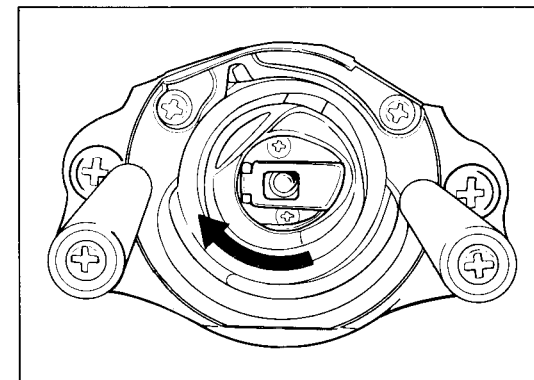
“Inserting chain looper”



(1) Raise thread take-up lever to its highest position and remove bobbin case.



(2) Insert chain looper.

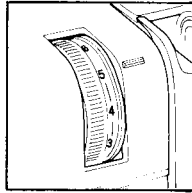


(3) Rotate chain looper clockwise while pressing it until it will not move any longer with a click sound.

* When removing it, take out chain looper by holding the latch.

Apply a tighten needle thread tension for chainstitching!

Regulate tension between "0" and "9"



* Chainstitch seams appear on wrong side of fabric.



Correct tension

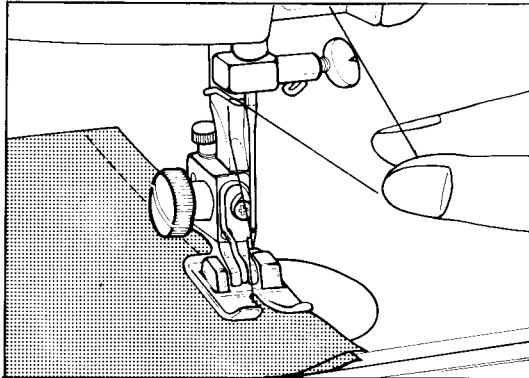


Loose tension (Increase)



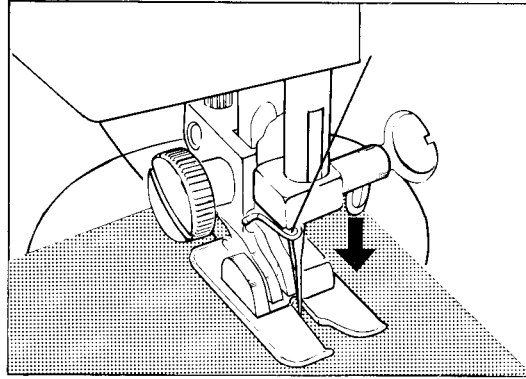
Tight tension (Decrease)

"Ending the seam"



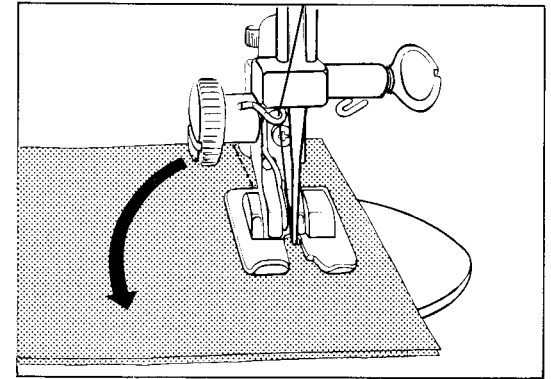
- (1) Raise thread take-up lever at its highest position and lift presser foot.
- (2) Draw out about 15cm (5 inches) of needle thread at needle bar thread guide.

"Starting the seam"

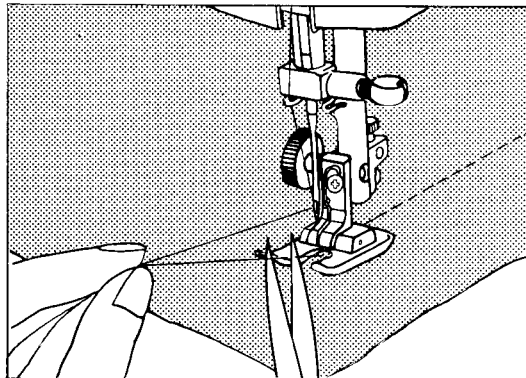


- (1) Draw about 20cm (about 6 inches) of thread under foot to back of machine.
- (2) Lower foot, and sew 2 or 3 stitches by turning balance wheel toward you. Start machine and stitch to end of seam.

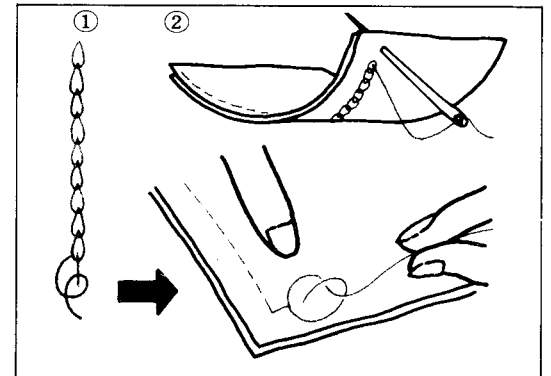
"Corner sewing"



- (1) Stop stitching with needle in fabric when needle eye appears a little on top side of fabric on its rising travel.
- (2) Raise presser foot, and turn fabric on needle.

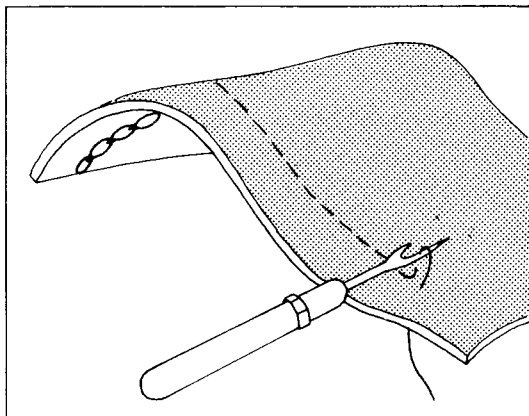


- (3) Pull the slackened needle thread under presser foot and cut thread near the seam end.
- (4) Remove fabric from machine by pulling it away from you. The end of thread will pull through fabric to underside of fabric and form a temporary lock.

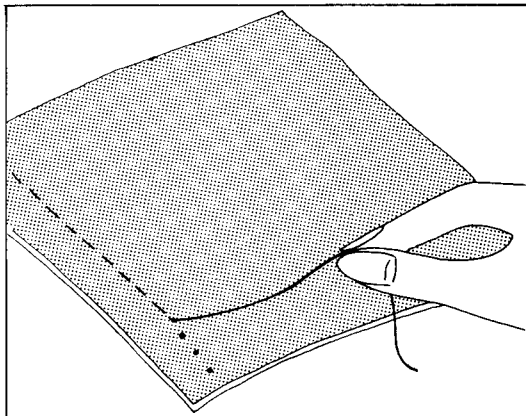


To lock thread firmly, tie thread end as show in the illustration ① or make a knot on topside of fabric after passing thread with a hand sewing needle from wrong side of fabric.

REMOVING SEAM

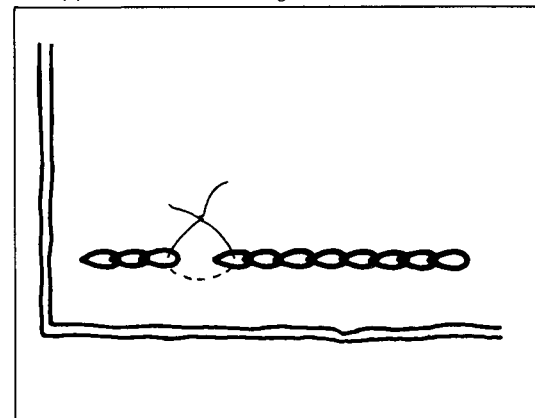


(1) Pick up the free thread end to top side of fabric with a seam ripper.



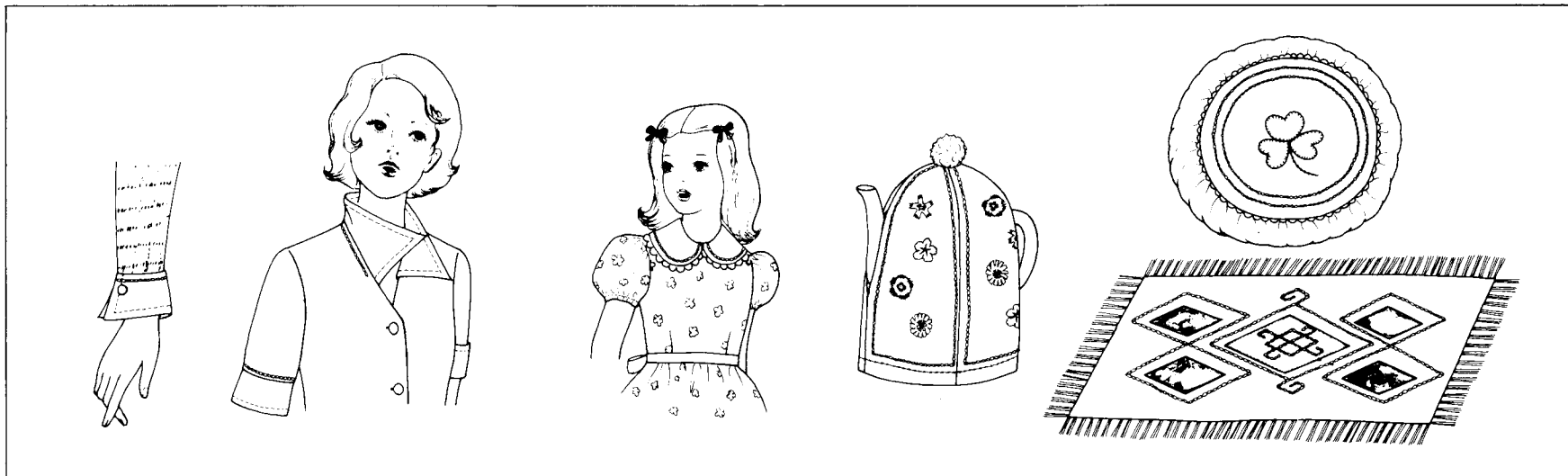
(2) Seams are removed easily by pulling free end of thread.

"Skipped stitch mending"



When skipped stitches are found on wrong side of fabric, remove thread up to skipped stitches and try again. Otherwise lock seam with a hand sewing needle as shown above.

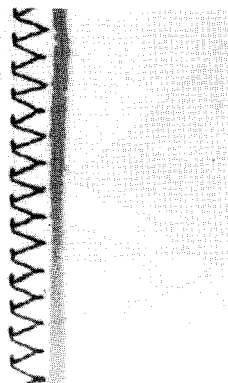
Applications of chainstitching



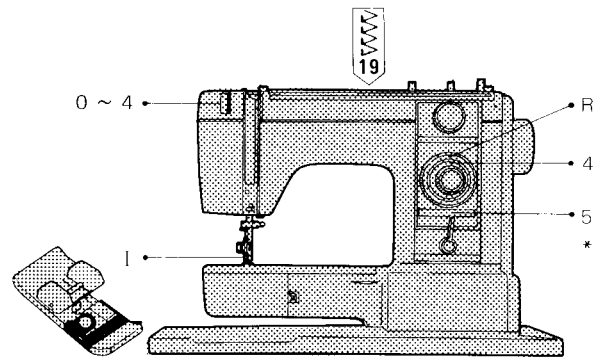
★ UTILITY STITCHING

By using special presser feet, overedge stitching blind stitching, buttonhole stitching and plain stitching for elastic material can be sewn speedily.

● OVERLOCK STITCH



When seam allowance need not be opened, finishing seams can be sewn speedily with overlock stitches.

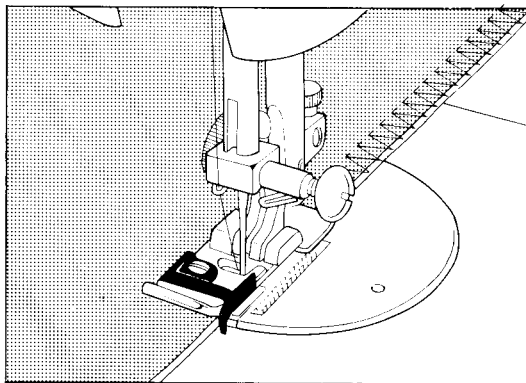


* When the stitches are loose, make the stitch width wider.

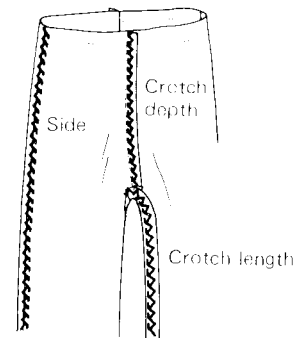
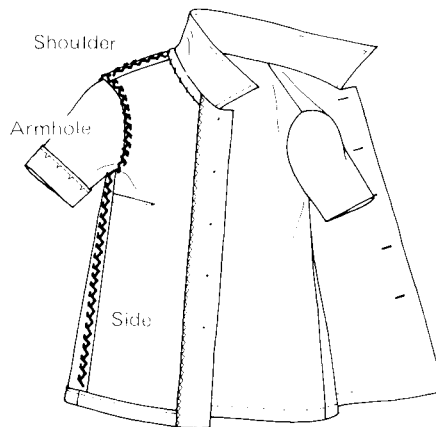
* If the stitches are found too close together even when setting stitch length dial at "4", turn it toward "+" (clockwise).

Applications of overlock stitch

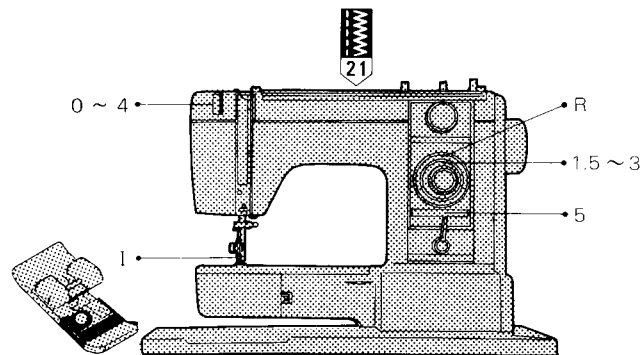
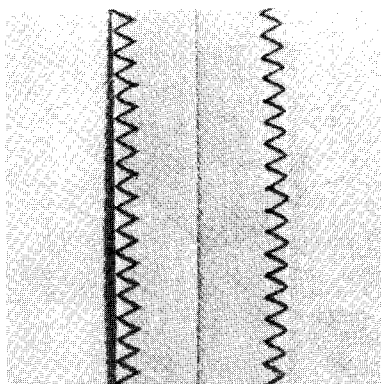
"Sewing procedure"



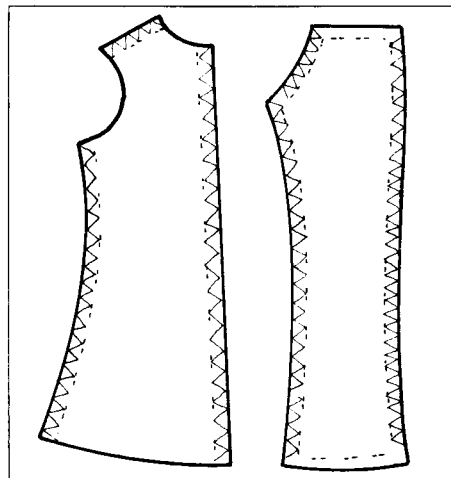
Put needle and bobbin threads together leftward away from you, apply cloth end closely to the guide of overedging foot. Then lower presser foot, and sew along the guide.



● OVEREDGE STITCH

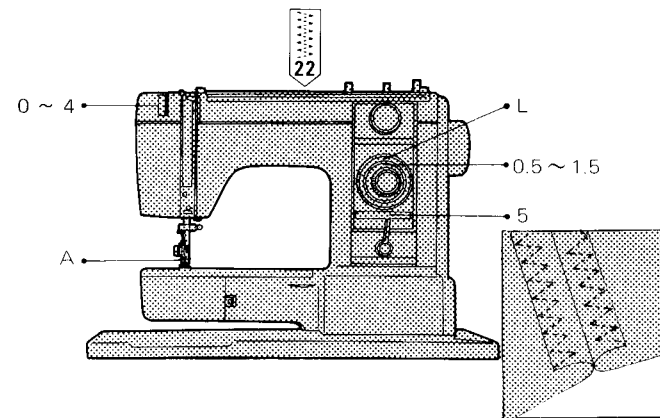


Applications of overedge stitch

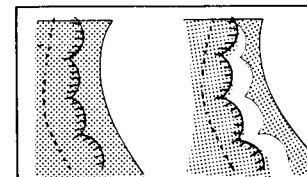
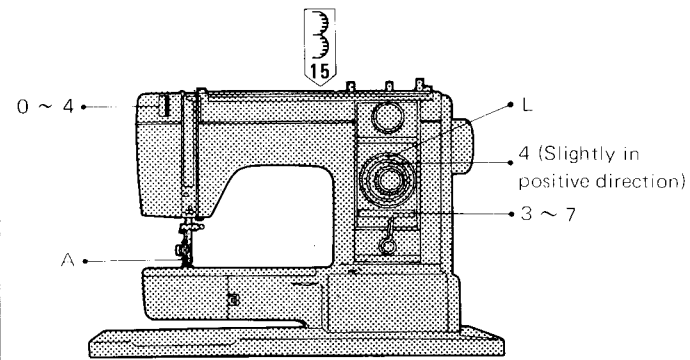


* In case of sewing without lining, use overedge stitch for shoulder, shirt sleeve, side sewing, crotch length and etc.

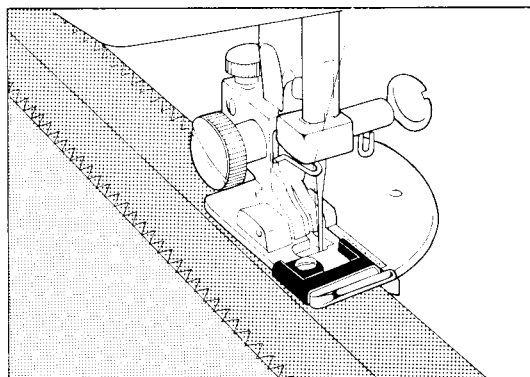
* In case of frayable or light weight fabrics.



* Curved portions such as side of chest or crotch depth

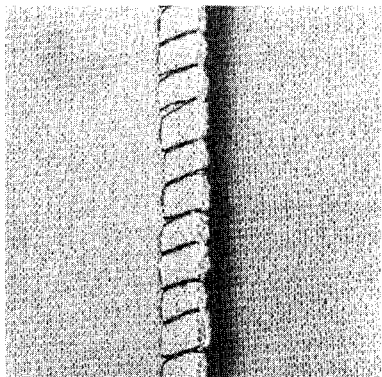


"Sewing procedure"



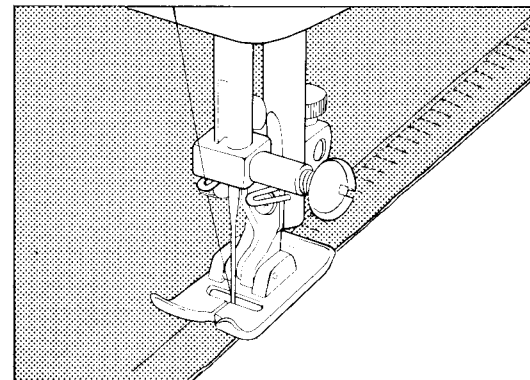
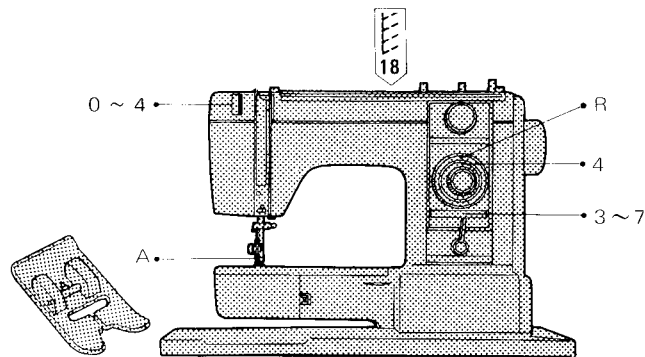
Position fabric edge under foot resting against wall of guide in overedge foot and commence sewing.

● STRETCH SEWING

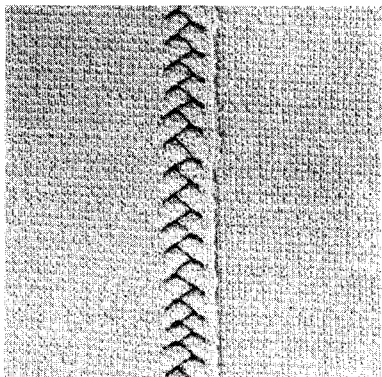


Knit stitch is useful for sewing elastic fabrics, frayable fabrics, hemstitching, patching and inter-edging.

KNIT STITCH

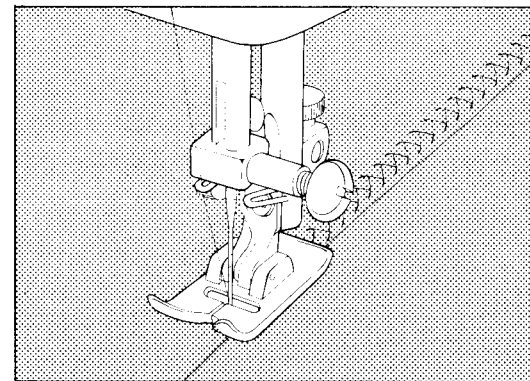
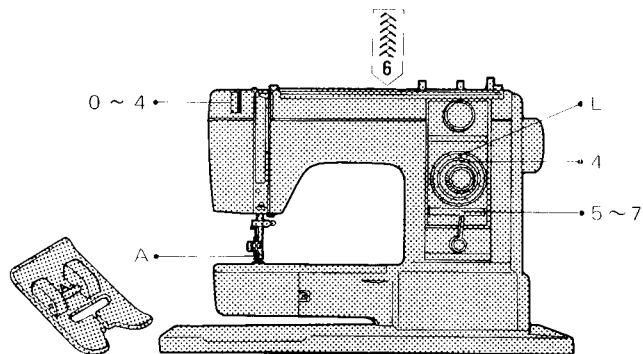


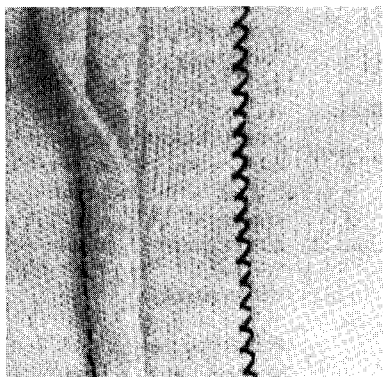
Sew along cloth edge allowing more than the bight of the knit stitch and cut off the extra edge afterwards.



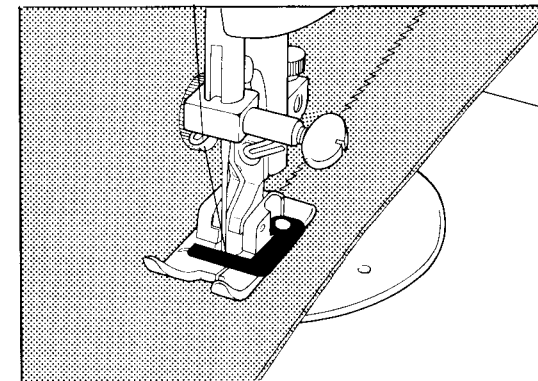
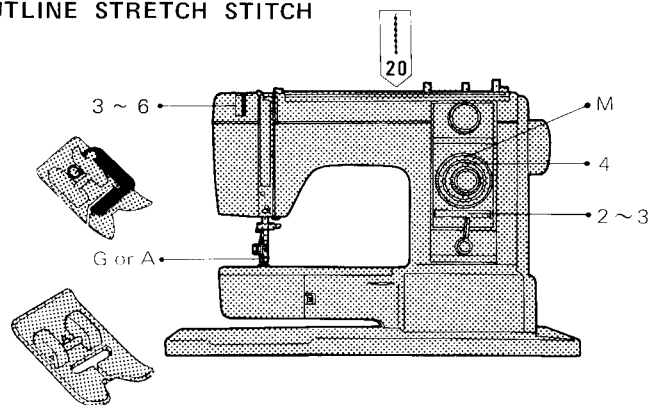
Feather stitch is used for sewing elastic fabrics, hem taping, patching and interedging.

FEATHER STITCH



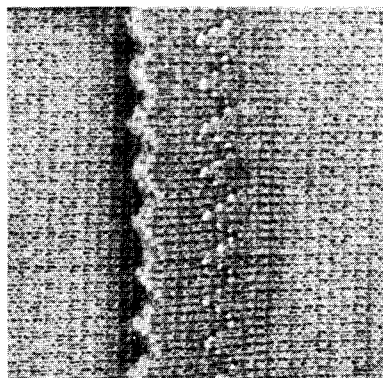


OUTLINE STRETCH STITCH

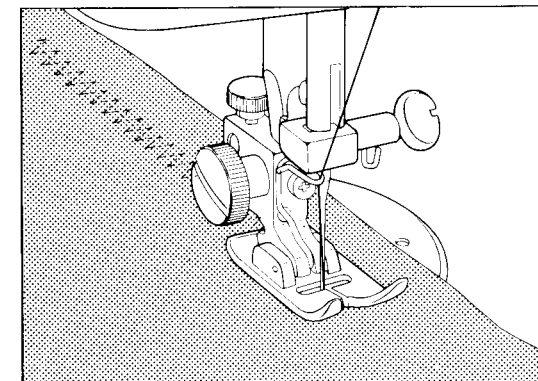
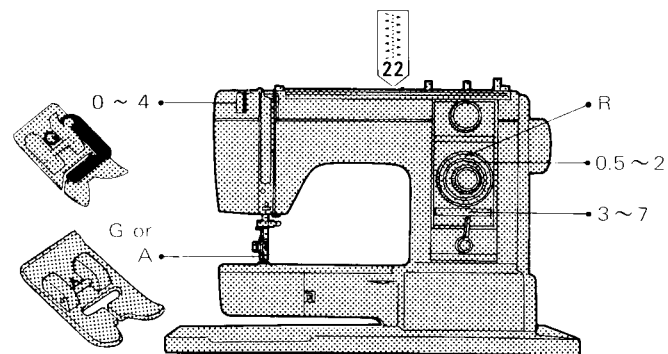


This stitch is effective to join elastic fabrics. By setting zigzag width at "2" ~ "3", seam allowance can be opened and thread breaking and fraying are prevented because seams have elasticity.

- * Needle position is normally set at "M". The position "R" is recommended for joining knits that curl easily.
- * If skipped stitches have occurred, use a blue tip scarf needle. Tricot foot (G) also prevents skipped stitches.



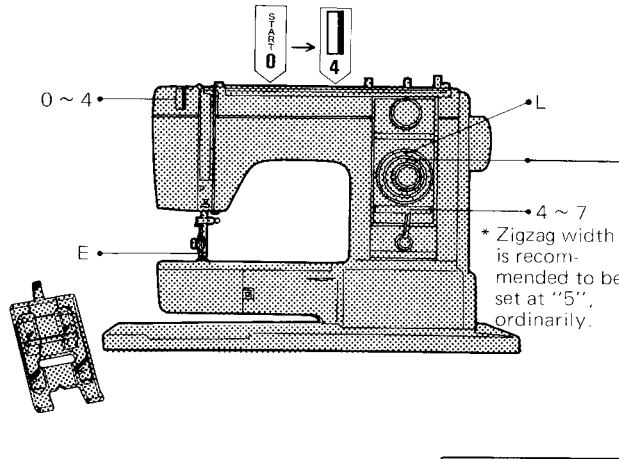
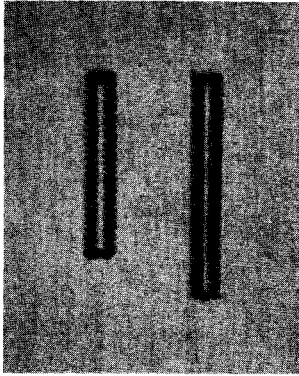
TRICOT STITCH



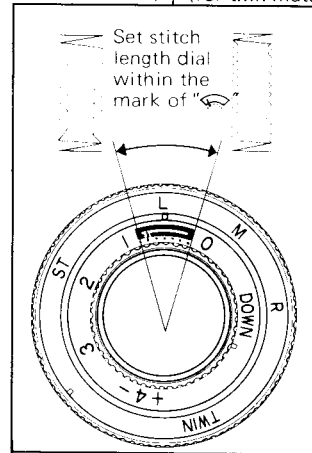
With tricot stitch, you can overedge and join elastic fabrics.

- * If skipped stitches have occurred, use a blue tip scarf needle. Tricot foot (G) also prevents skipped stitches.

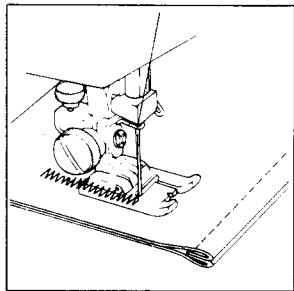
● BUTTONHOLE STITCHING



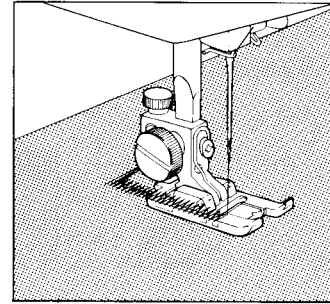
Coarse stitches (for thick material) Dense stitches (for thin material)



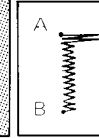
- * If you fail to make stitches halfway of buttonhole and do it again from its start position, move the position to (4) or (5) first, then set it at "START (0)".
- * It is recommended that you set the sewing machine at "LOW" speed range with the switch which is located either in the terminal under the balance wheel or on the foot controller.
- * When you sew buttonholes on stretch material, it is recommended to baste a piece of backing fabric underneath.



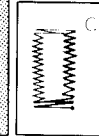
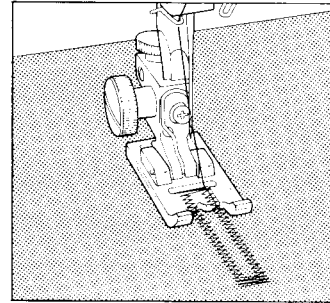
When you sew buttonhole stitches near the edge of folded material, sew towards its edge as shown in the above.



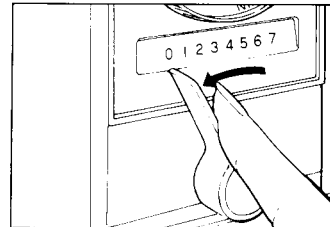
"Sewing Procedure"



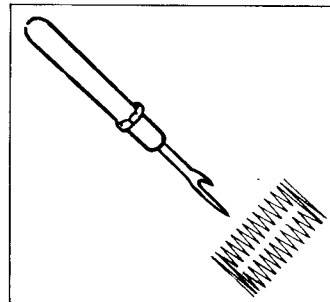
Place needle and bobbin threads together under presser foot away from you. Set pattern selector dial at "START (0)" and push it. Start machine while holding both threads for first a few stitches and continue to sew from "A" to "B". Pointer automatically moves from "START" to (1) and (2) while stitching.



Raise needle and push pattern selector dial. Then restart machine and continue to sew up to "C" position while pointer moves from "2" to "3" and to "4".



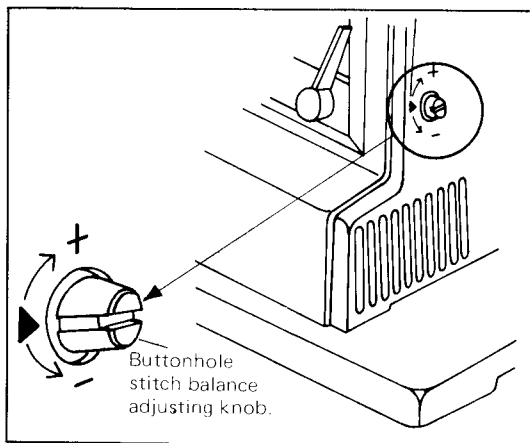
Raise needle, move zigzag lever to "0" (without pressing), and reinforce several stitches.



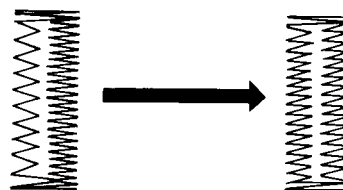
Cut button opening with a seam ripper or a buttonhole cutter.

- * Marking for buttonhole feed "☞" merely indicates the approximate area of the adjustment. Therefore, a finer adjustment should be made according to the material sewn.

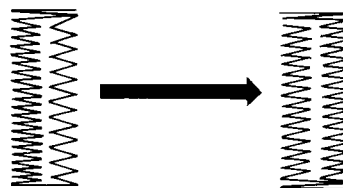
ADJUSTMENT OF BUTTONHOLE STITCH BALANCE



Buttonhole stitch balance adjusting knob should normally be set at "►" position. However, if numbers of stitches on rows are not equal, make the following adjustment.



1. If you turn the knob to "—" direction, the right row will be coarse and the left will be dense.



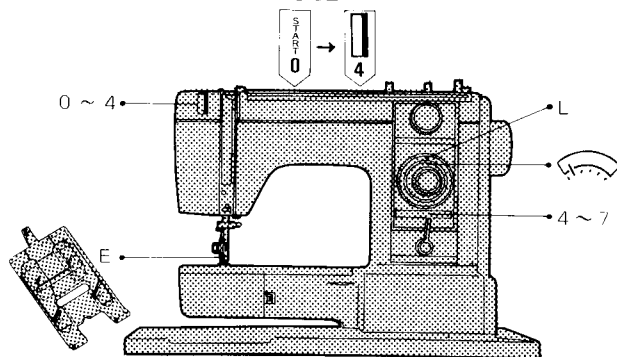
2. If you turn the knob to "+" direction, the right row will be dense and the left will be coarse.

* When you set the adjustment knob, use the same material and thread as ones you intend to sew buttonhole stitching with.

* Generally it is recommended to set the knob toward "—" position when sewing heavy and stretchy materials.

* When you finish buttonhole sewing, turn the knob back to a normal position of "►".

● CORDED BUTTONHOLE

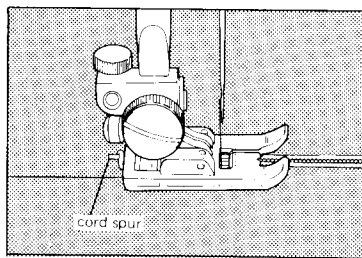


* Embroidery or crochet threads make good filler cords.

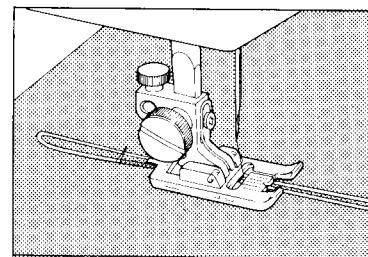
* Operation of pattern selector dial and reinforcement sewing are the same as those of ordinary buttonhole sewing.

* When you sew buttonholes on stretch material, it is recommended to baste a piece of backing fabric underneath.

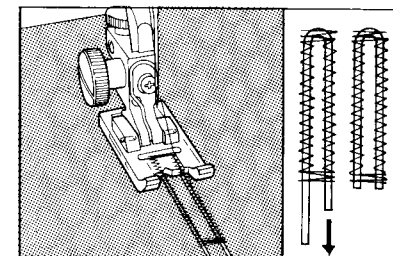
"Sewing procedure"



(1) Hook filler cord over the cord spur of buttonhole foot from behind.

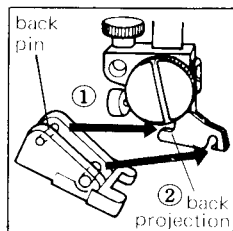
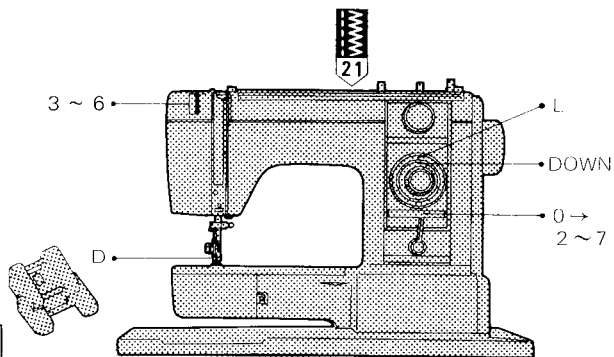
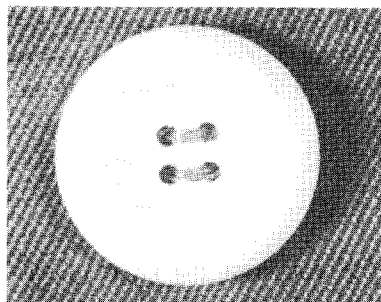


(2) Sew starting bar tack.
(3) Sew left row.

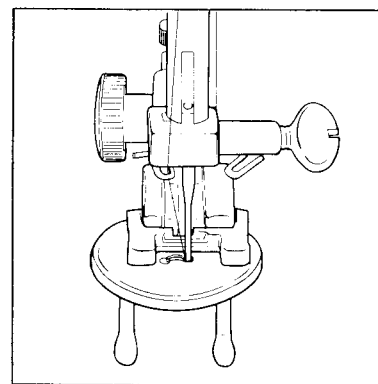


(4) Sew the other bar tack.
(5) Sew right row, and reinforcement stitches.
(6) Pull right or left end of filler cord to remove slackness.
(7) Cut off excess cord.

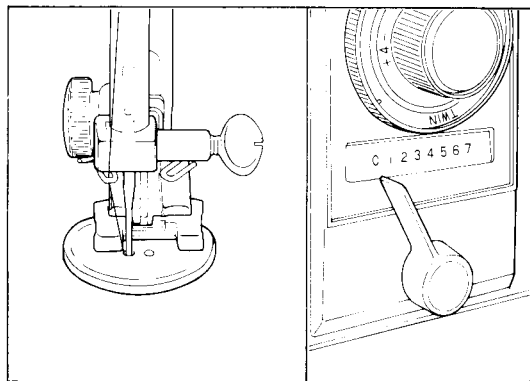
● BUTTON SEWING



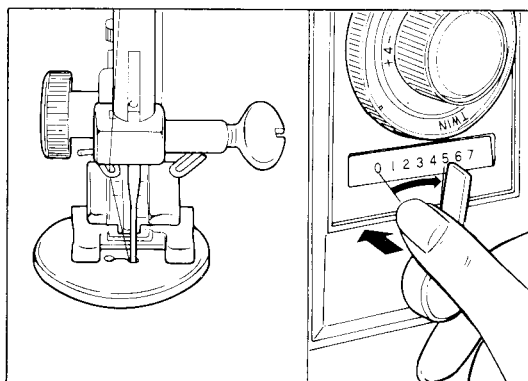
To attach button sewing foot, hang the back pin on the back projection. Then press toe of the foot upward and the foot snaps on foot holder.



When attaching a button on coats or jackets, the button should have a thread shank to make it stand away from the fabric. To form a thread shank, sew over the matchsticks.

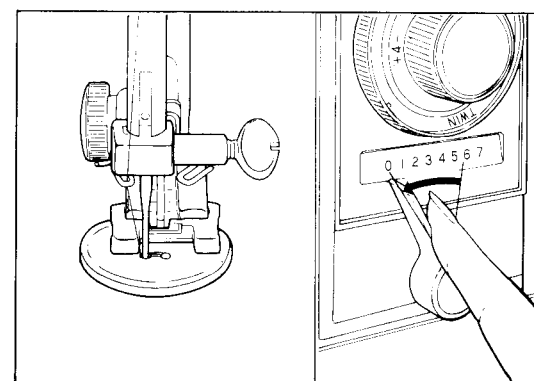


(1) Set zigzag lever at "0". Place a button on fabric, making sure that needle drops into left hole of button. Then lower presser foot onto button.



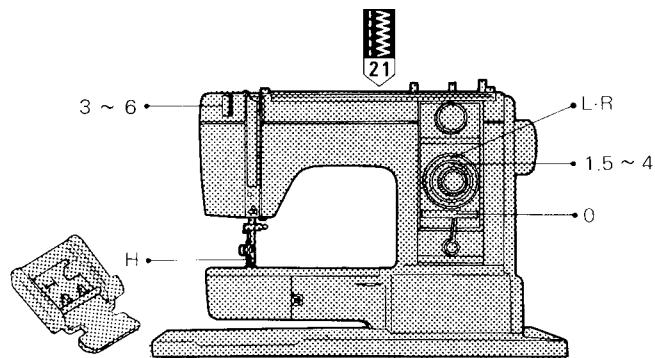
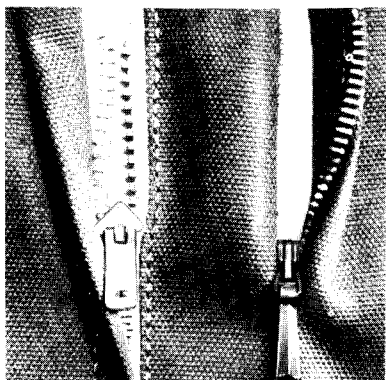
(2) Raise needle about 1mm (1/16") from the button by turning balance wheel towards you. Push and move zigzag lever to the position where tip of needle points right hole of button and release lever to fix.

* When you find needle unmoved, return the lever to "0" and sew one stitch by turning balance wheel.

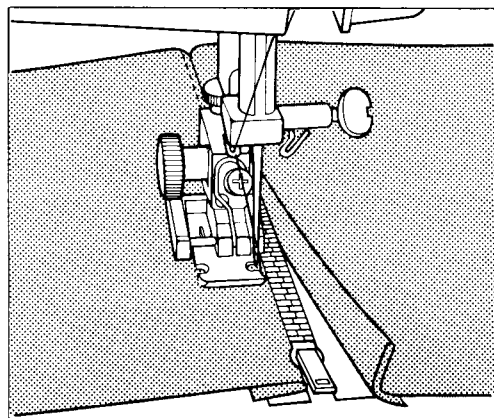


(3) Now sew ten to twelve stitches. Then move zigzag lever to 0 (without pressing), and sew a few stitches for reinforcement.

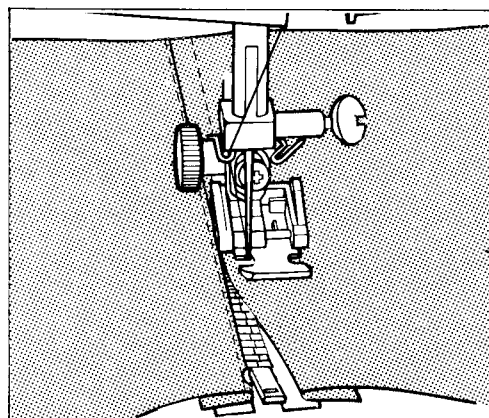
● ZIPPER INSERTION



“Sewing procedure”

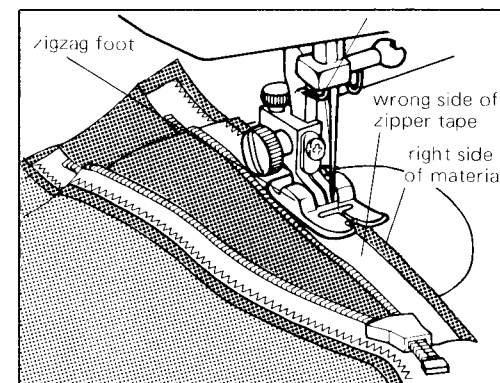


(1) To sew left side of zipper, set needle position dial at “R” and attach zipper foot on left side of needle.



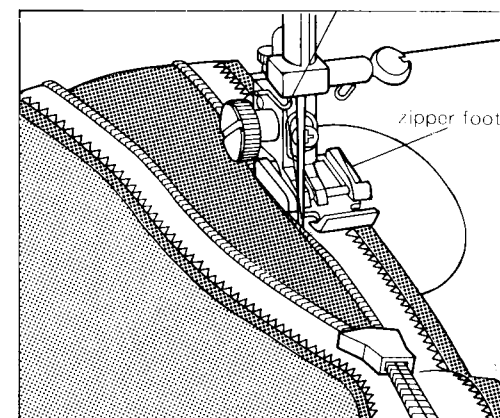
(2) To sew right side of zipper, set needle position dial at “L” and attach zipper foot on right side of needle.

● CONCEALED ZIPPER INSERTION



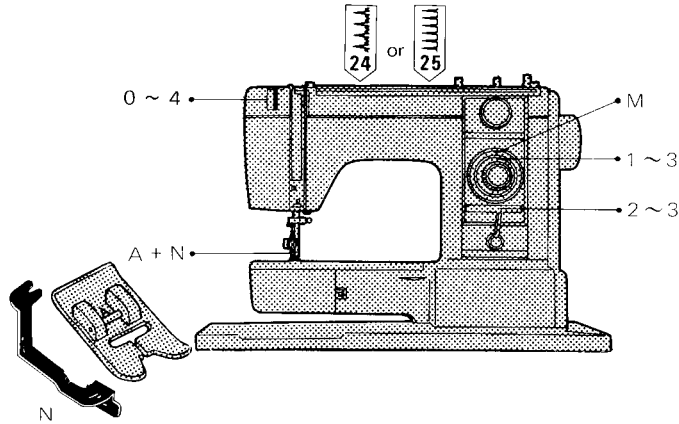
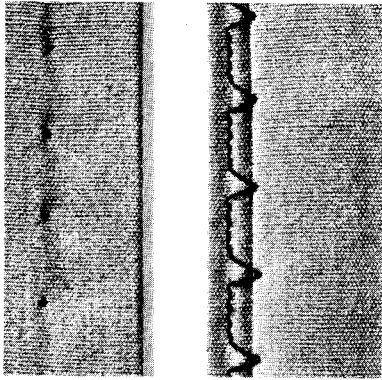
(1) Using zigzag foot, stitch edges of right side of zipper tape on the right side of the material as shown.

* Select the zipper about 2cm (¾”) longer than zipper opening.

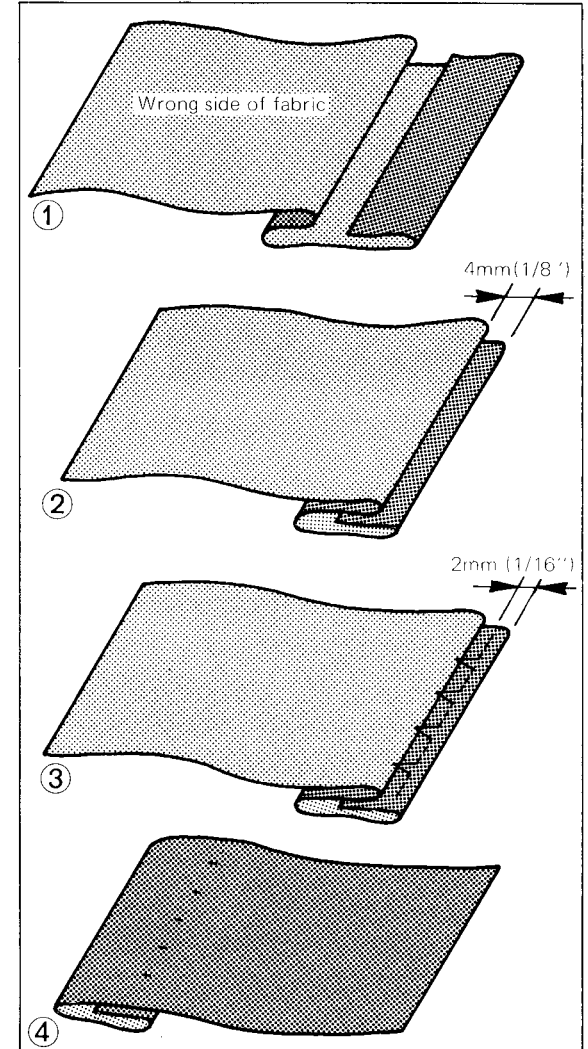


(2) Replace zigzag foot with zipper foot and set the machine for zipper sewing. Sew straight stitches close to the zipper coil while guiding the coil under the brim of zipper foot as illustrated.

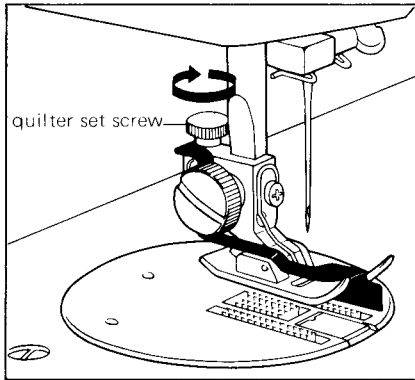
● BLIND STITCH HEMMING



“How to fold the fabric”

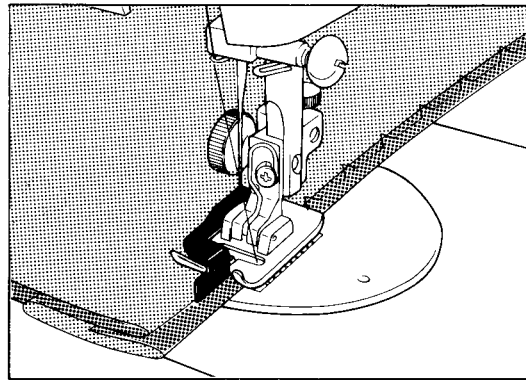


“To set blind stitch hem guide”



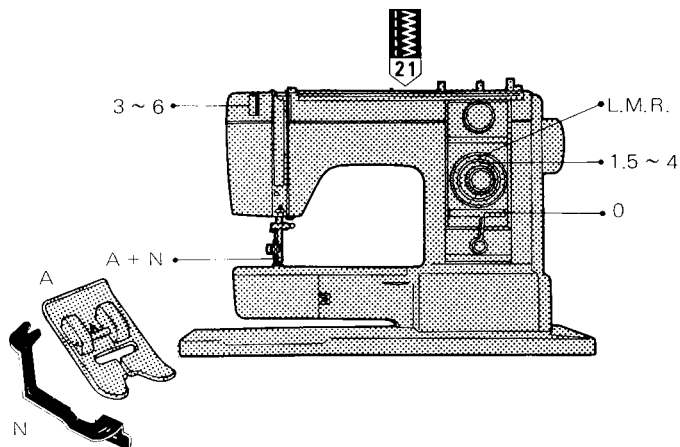
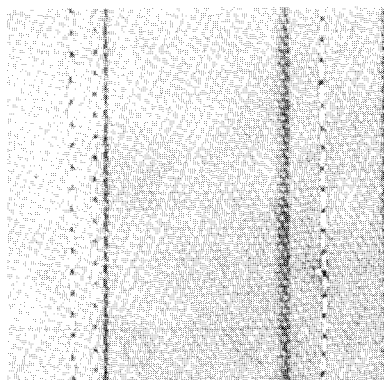
Loosen quilter set screw and insert blind stitch hem guide. Then tighten screw firmly.

“Sewing procedure”

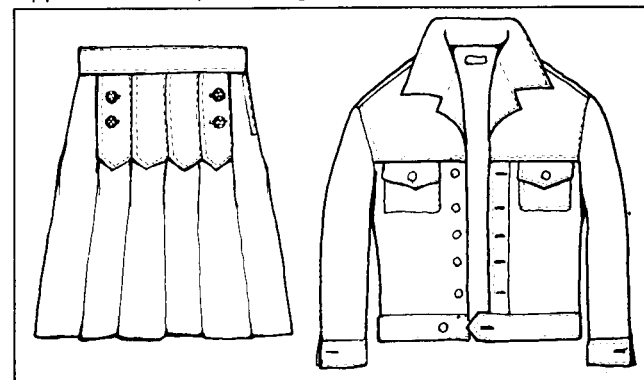


Fold the fabric as illustrated in (1) and (2) while sewing, rest the fold against the wall of the guide. Unfold the fabric after sewing. Also refer to (3) and (4).

● TOP STITCHING

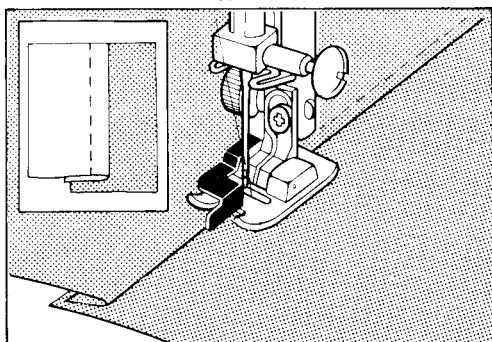


Application of top stitching



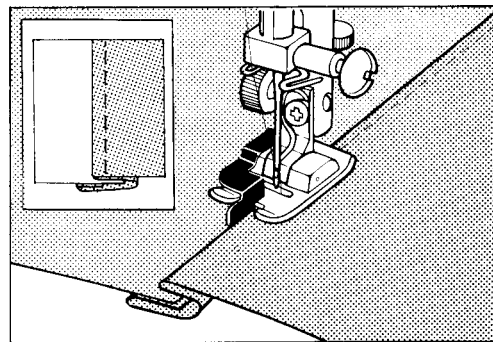
“Sewing procedure”

In case of L



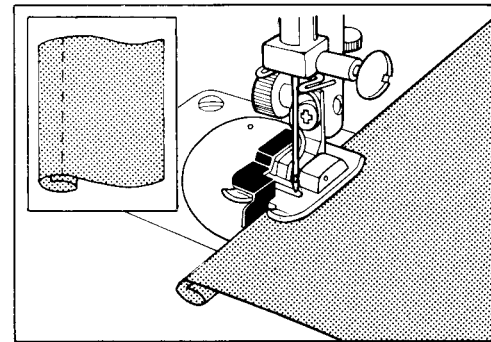
Rest folded edge against left side of blind stitch hem guide.

In case of M



Rest folded edge against right side of blind stitch hem guide.

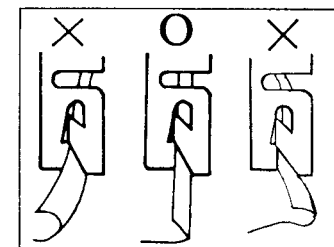
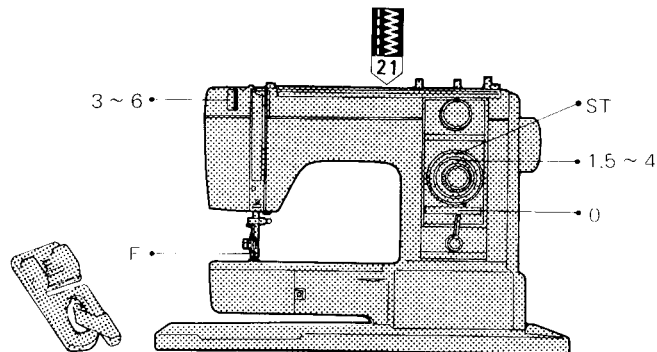
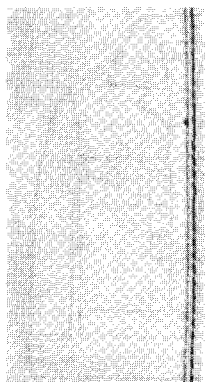
In case of R



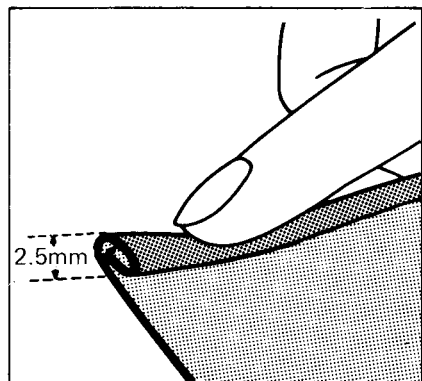
Rest folded edge against right side of guide.

* Confirm needle drop. It is advisable to set needle position at midway between “M” and “R”.

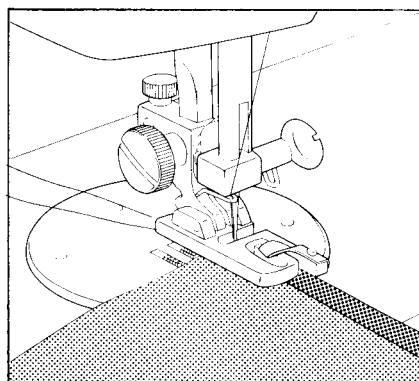
● HEMMING



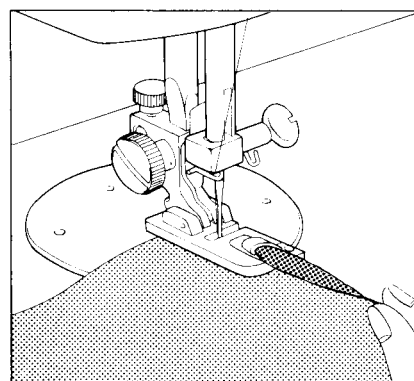
“Sewing procedure”



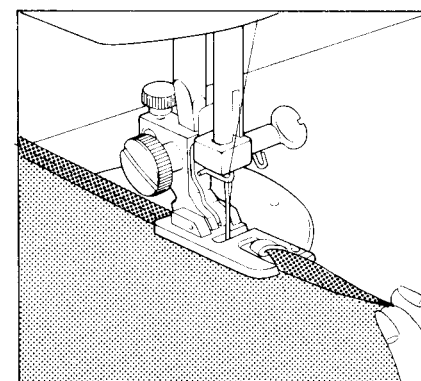
Crease a double 2.5mm (3/32") fold for about 6cm (2-3/8") along the edge of fabric to be hemmed.



Place folded edge under foot and lower needle. Then lower hemmer foot and pull both thread ends backward until a few stitches are sewn.

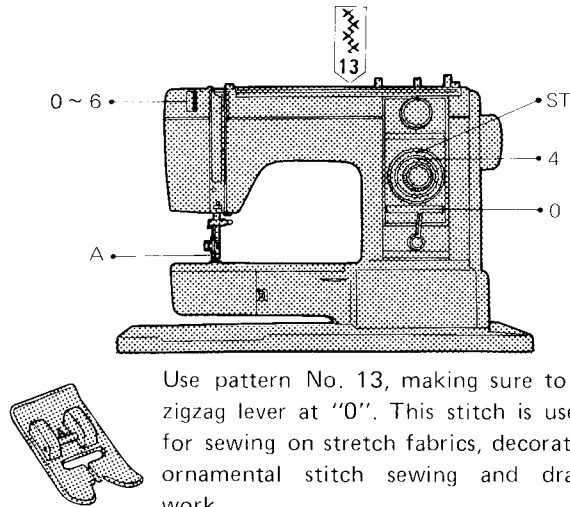
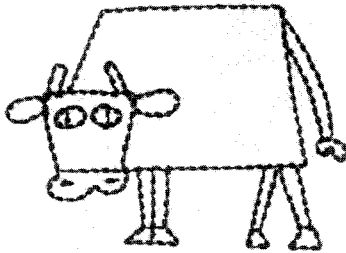


Raise foot and insert folded edge into mouth of foot with needle in fabric.



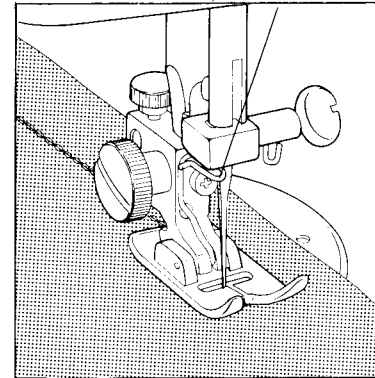
Lower foot. While sewing, hold fabric carefully with your right hand so that it is evenly fed into mouth of hemmer foot.

● TRIPLE SEAM STRETCH STITCH

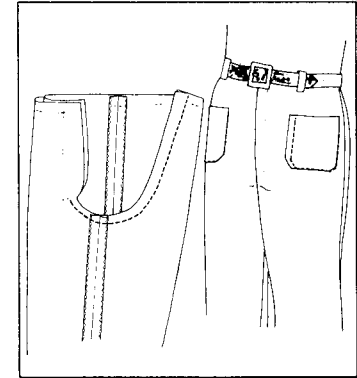


Use pattern No. 13, making sure to set zigzag lever at "0". This stitch is useful for sewing on stretch fabrics, decorative, ornamental stitch sewing and drawn work.

"Sewing procedure"



Applications of triple seam stretch stitch

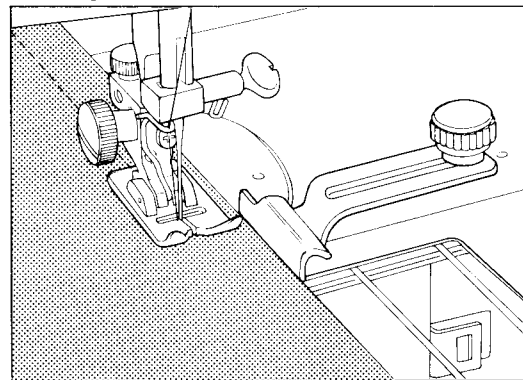


This is used for reinforcing seams such as crotch depth, pocket, belt loop, braid for bag, etc. where strength is required.

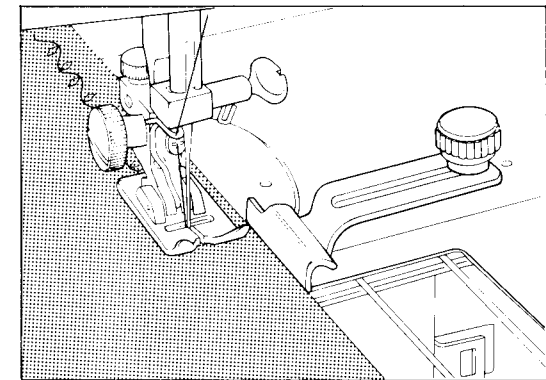
● DECORATIVE STITCH BY USING CLOTH GUIDE



"Sewing procedure"



Position cloth guide in desired position and mount it to free arm cover with a screw. Rest the cloth end closely to cloth guide, and sew.

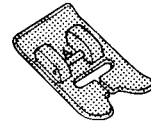
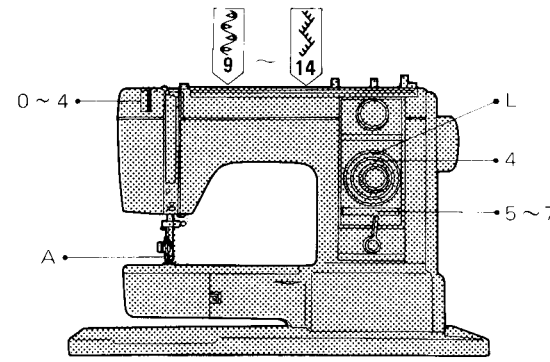
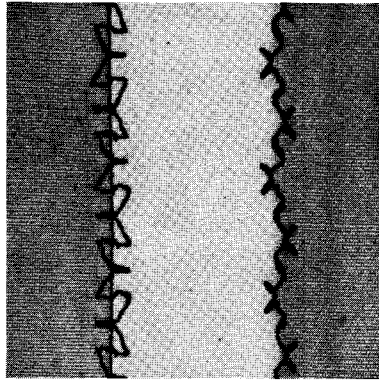


This can be applied to automatic pattern sewing.

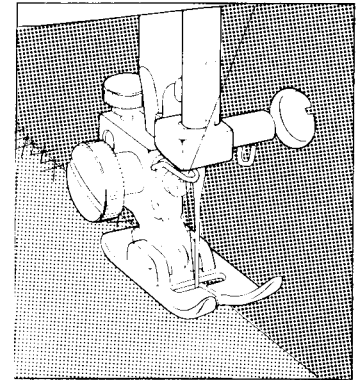
★ FANCIFUL
DECORATIVE STITCHES

Decorative stitches are
sewn by changing feet
and patterns.

● PATCH WORK

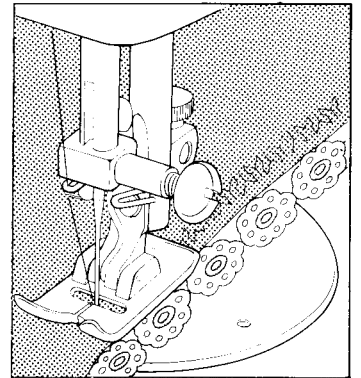
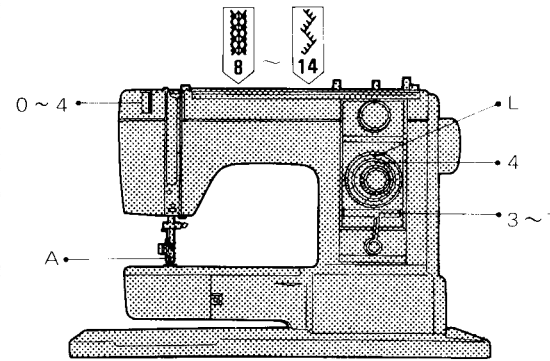
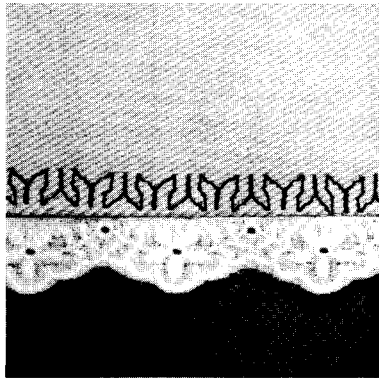


“Sewing procedure”



Fold edge of fabric to be patched by 1 ~ 2cm (3/8" ~ 3/4") to wrong side, place it on the other fabric and sew over the edge of fabric.

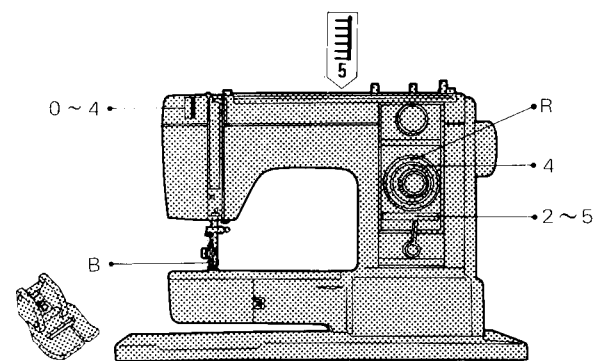
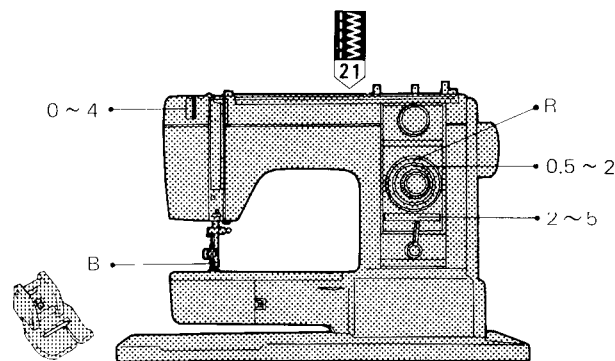
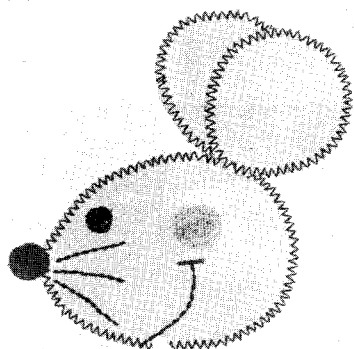
● LACE EDGING



Automatic patterns will make lace edging fine and strong.

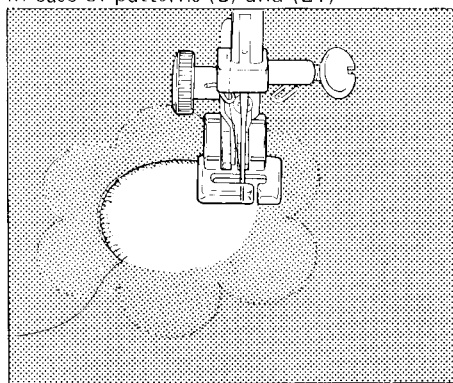
* Zigzag lever should be set at "7" for No. 8 pattern sewing.

● APPLIQUE



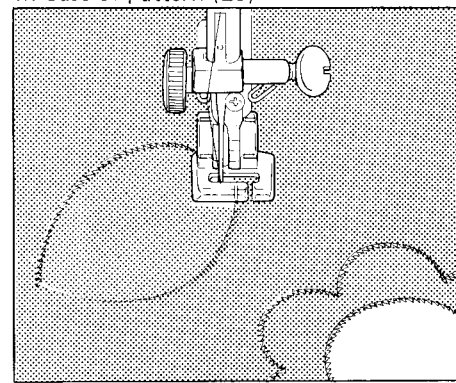
“Sewing procedure”

In case of patterns (5) and (21)

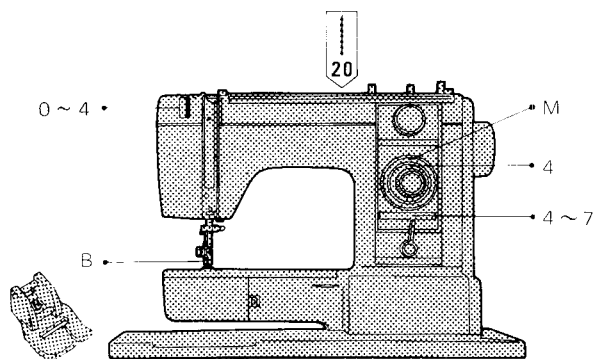


Set needle position at “R”, and line up edge of applique cloth with slit of presser foot.

In Case of pattern (20)

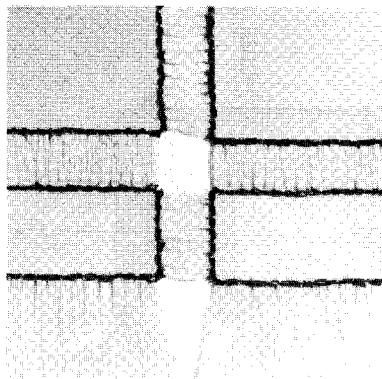


Set needle position at “M”, and line up edge of applique cloth with center line marked on presser foot.

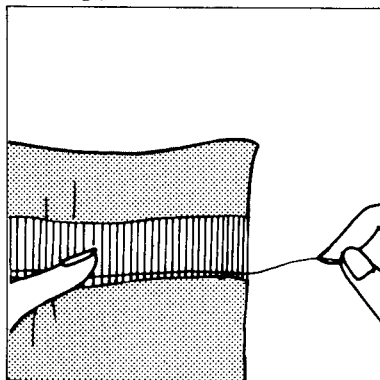


* Generally it is recommended to set the presser foot pressure adjusting dial at “M” or “L”.

● DRAWN WORK

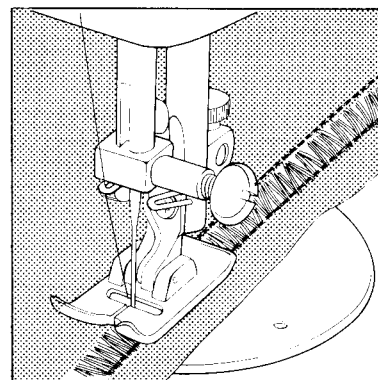


“Sewing procedure”



Pull out either warp or woof.

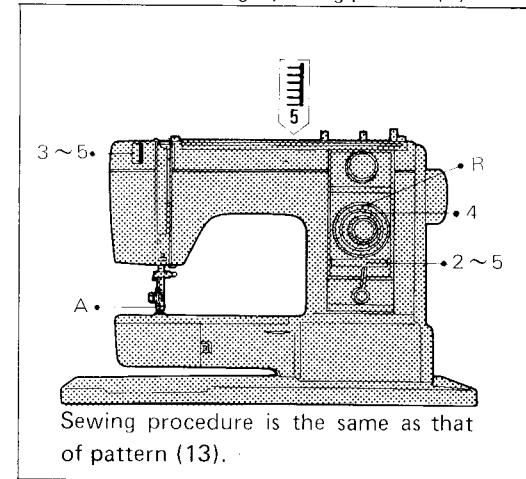
* To set machine, see page 39.



Hemstitch both sides with triple seam stretch stitch. Drawn work only in fabric edge makes fringing.

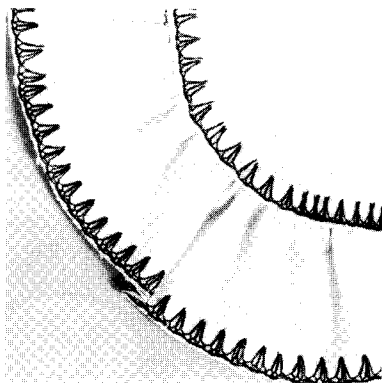
If hemstitching is difficult, pull out several warps or woofs first and then sew on the rest. Then pull out all the thread required.

Applied sewing by using pattern (5)

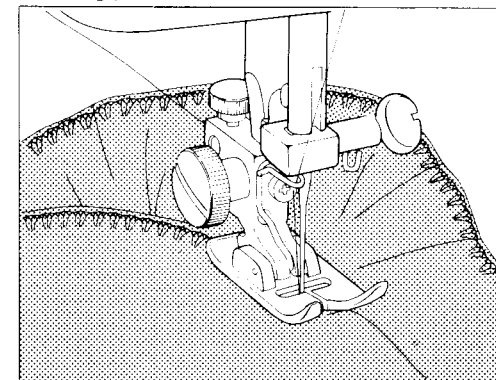
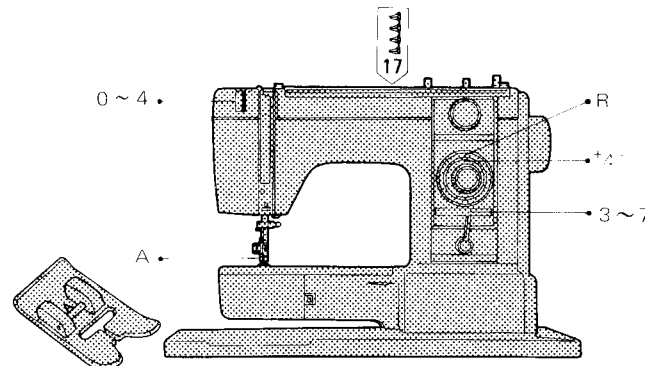


Sewing procedure is the same as that of pattern (13).

● BLANKET STITCH (shell stitch)

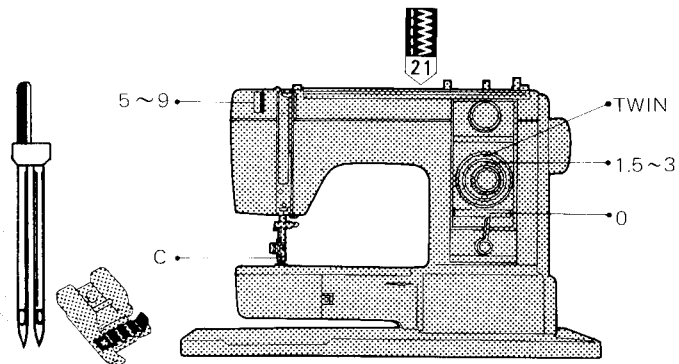
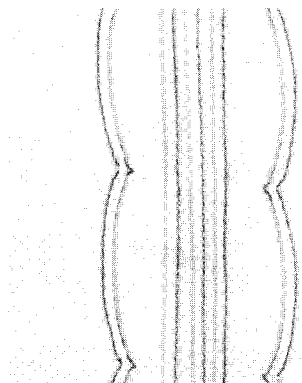


“Sewing procedure”



To sew frill edge neatly, it is advisable to sew along cloth edge with a seam allowance of about 1cm (3/8”), and cut allowance later. If the pattern looks shortened, turn the stitch length dial toward “+”.

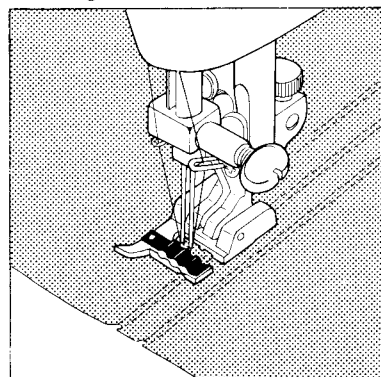
● PIN TUCKING



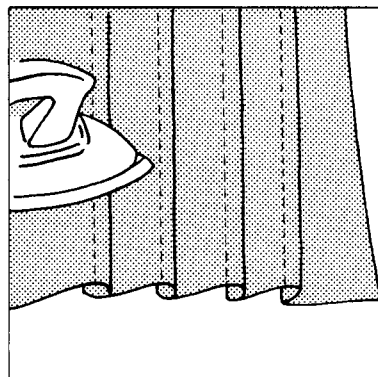
* Use narrow twin needle (Blue)

* When pin tucking, apply a stronger bobbin thread tension by turning the bobbin case screw. When changing stitches from pin tucking to another one, bobbin thread must be changed to normal tension (See page 15).

“Sewing procedure”



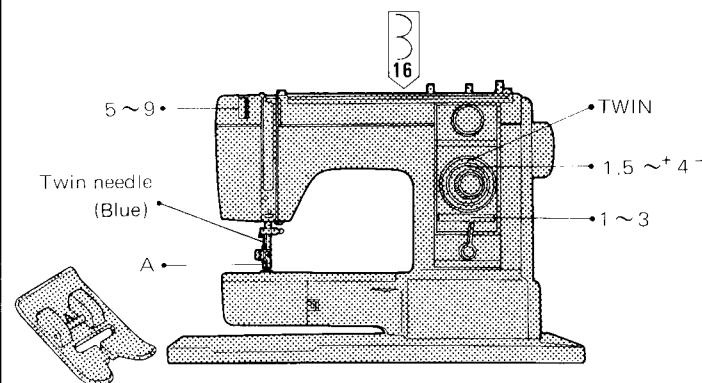
(1) Sew pin tuck portion of fabric. When several lines of pin tuck of about 4mm (1/8") are required, introduce the convex of the preceding pin tuck into the guide slot of the cording foot as illustrated.



Press down the convex of the seam by an iron.

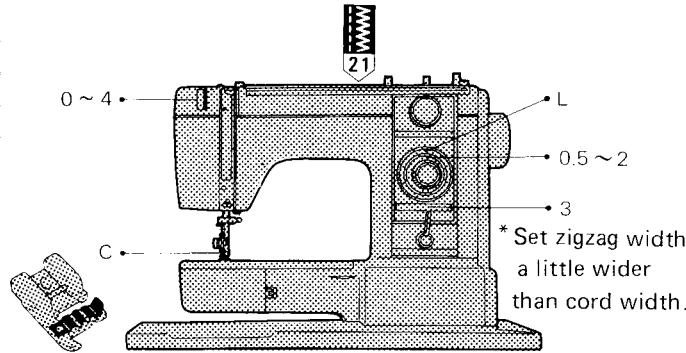
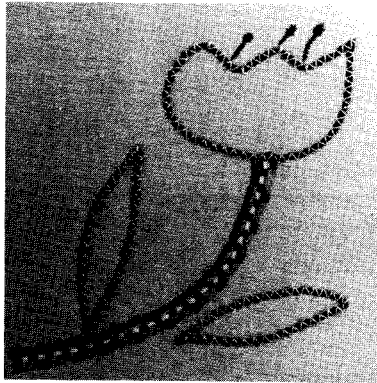
(Applied sewing)

Scallop pin tucking

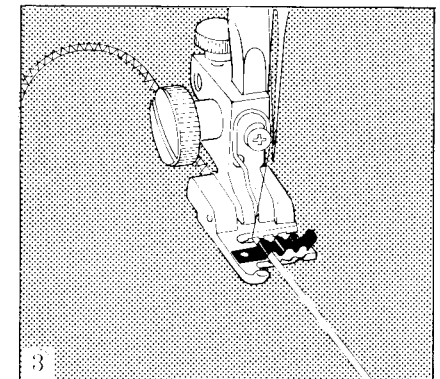
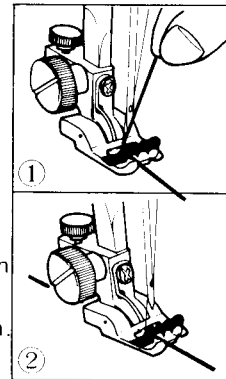


* Tighten bobbin thread tension.

● CORDING



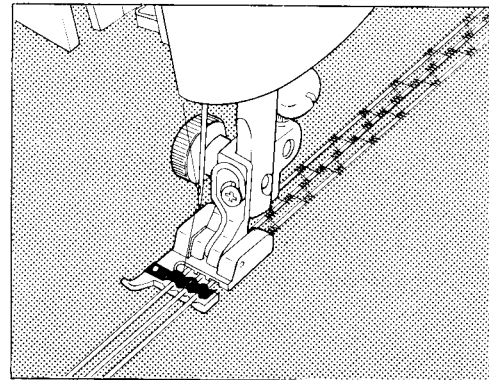
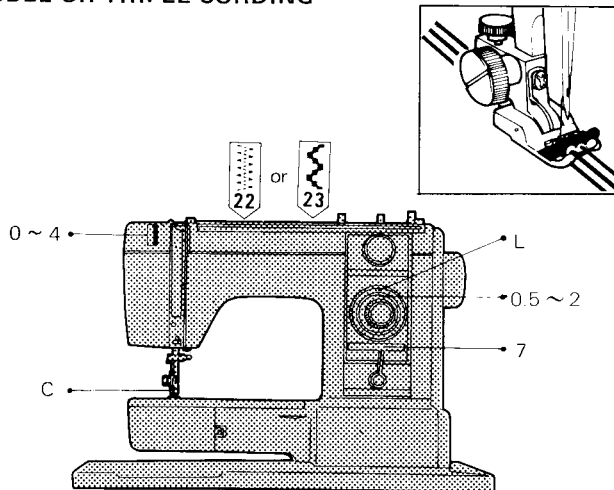
"Sewing procedure"



SINGLE CORDING

- (1) Pass cord in leftmost of slots located under spring of cording foot.
- (2) Guide cord into slot on bottom surface of the foot, and then lower foot.
- (3) Proceed to sewing in accordance with the drawing.

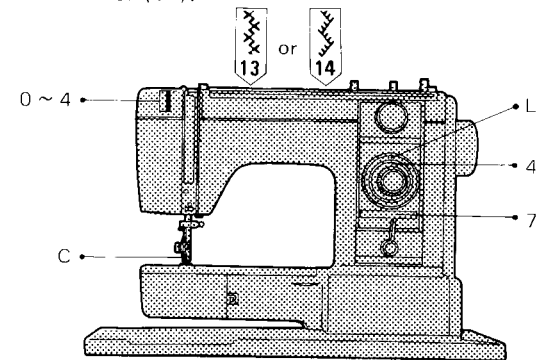
DOUBLE OR TRIPLE CORDING



Pass two or three cords, and proceed to sewing in the same as in a single cord.
 * When two cords are to be sewn, pass them through grooves on both ends.

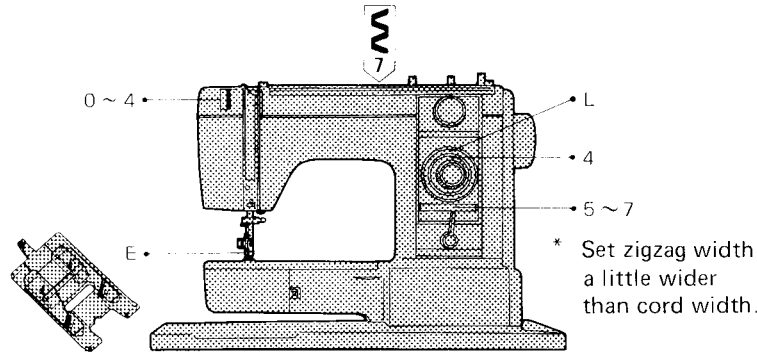
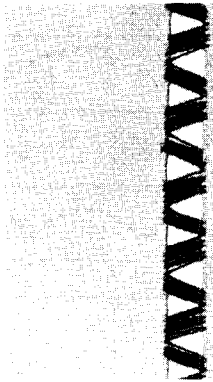
(Applied sewing)

Sewing double or triple cording can also be made by using a pattern (13) or (14).

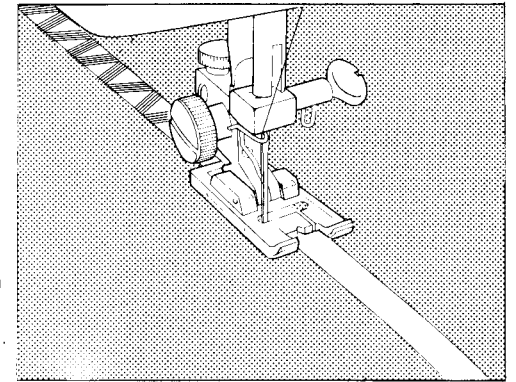


* The sewing procedure is the same as that of ordinary double or triple cording.

● WIDE CORDING

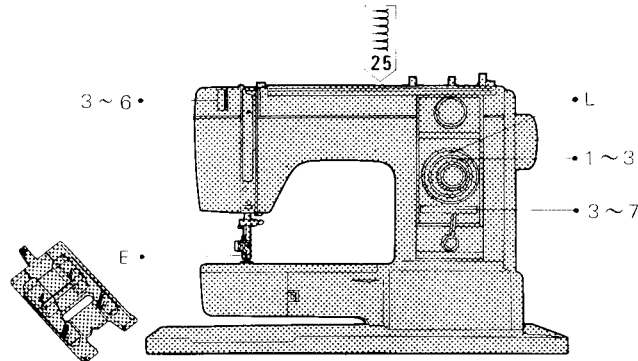
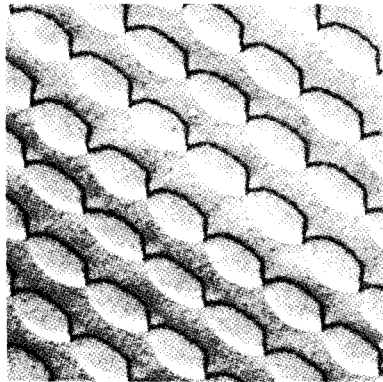


"Sewing procedure"



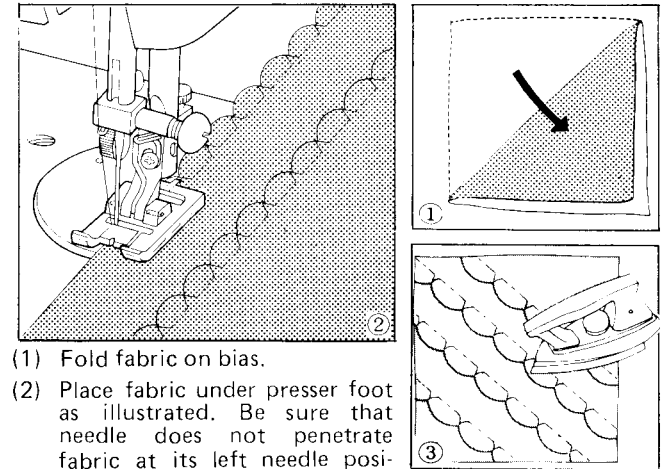
Pass a cord, string or blade of 5 ~ 7mm (3/16" ~ 1/4") wide into bottom groove of presser foot, and sew along drawn lines. It is advisable to reinforce stitches before starting.

● SHELL TUCK



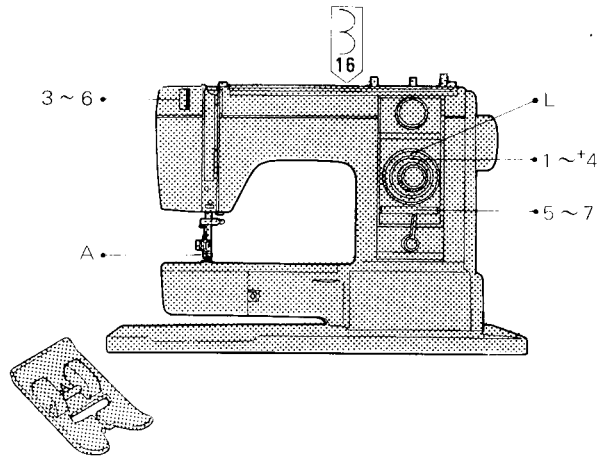
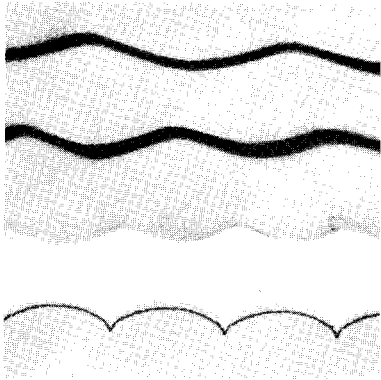
* If thread tension is too loose, tuck will not be formed. Therefore, increase the tension from 3 to 6.

"Sewing procedure"



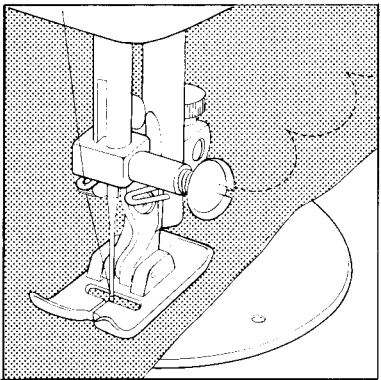
- (1) Fold fabric on bias.
- (2) Place fabric under presser foot as illustrated. Be sure that needle does not penetrate fabric at its left needle position.
- (3) Unfold fabric and press tucks to one side with an iron.

● SCALLOPING

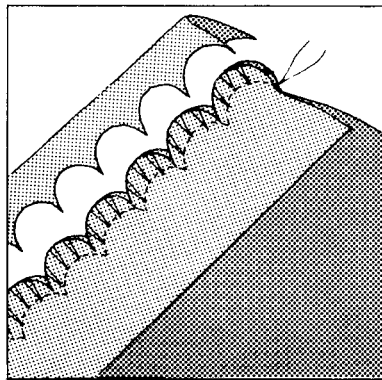


stitch length	seam variation
4	
2	
1	

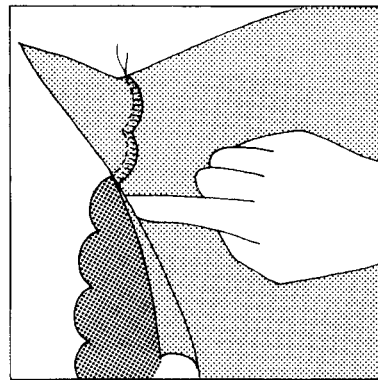
“Sewing procedure”



Fold together as facing right sides in and stitch scallops.



Trim allowance to less than 3 mm (1/8”) and notch in the allowance as illustrated above.

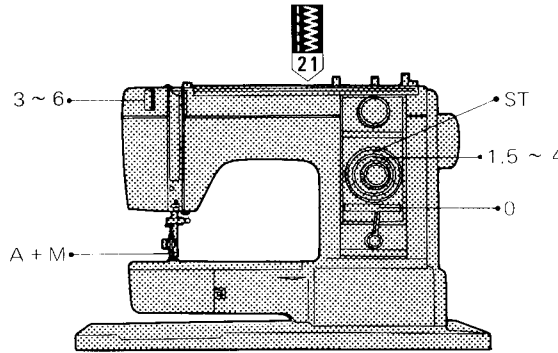
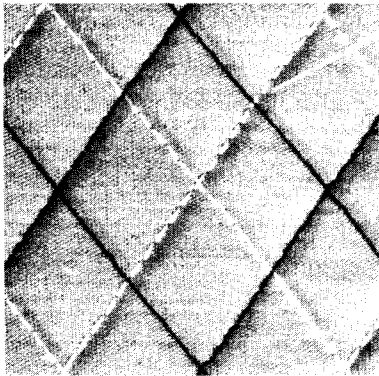


Turn inside out, push scallops out and press flat.

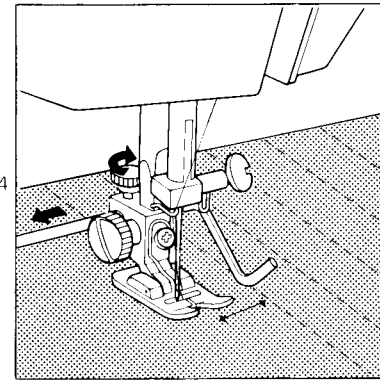
In case of pattern 15

Set stitch length to around 4 and sew, then cut outside of cloth.
Note: Be sure not to cut the thread.

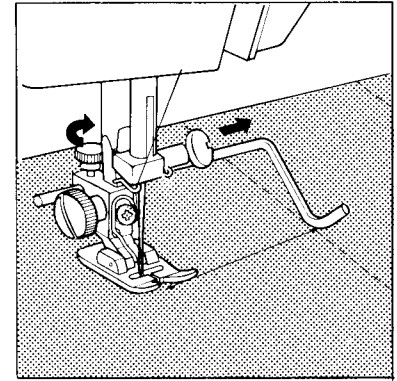
● QUILTING



“Sewing procedure”



When sewing narrow parallel lines.



When sewing wide parallel lines.

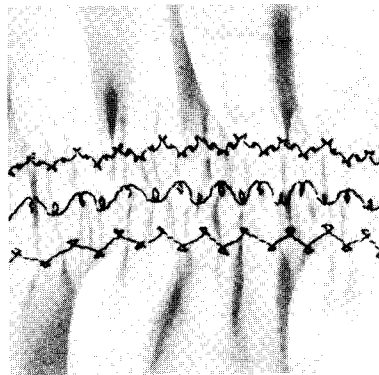
“To attach the quilter”

Loosen quilter set screw. Insert quilter attachment and tighten quilter set screw according to required parallel distance.

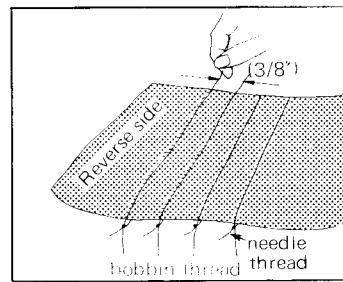
* If you want to make automatic zigzag stitches in parallel, use of quilter attachment is recommended.

* Quilter finger should run along the seam previously sewn.

● SMOCKING

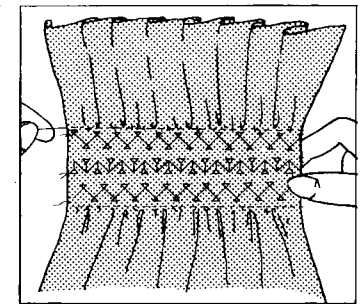
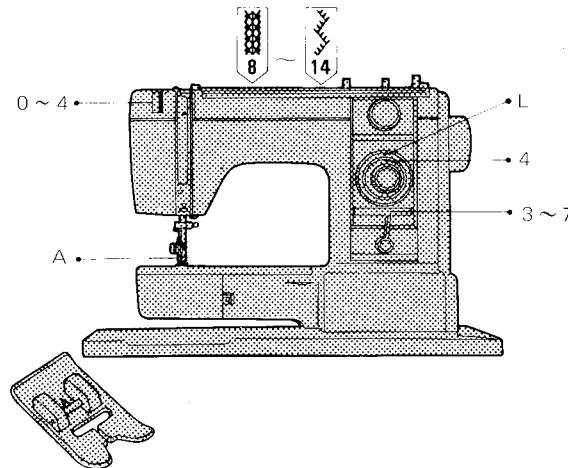


“Sewing procedure”



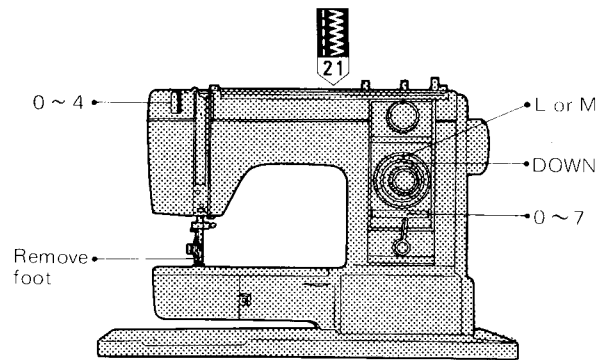
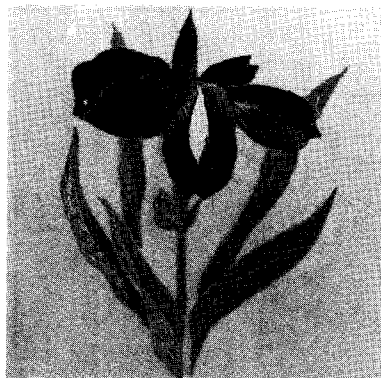
When smocking on fine fabric, use of 'blue tip scarf needle' is recommended.

Sew straight lines with thread tension regulator between “Q” and “3” and draw bobbin thread to make gathers.



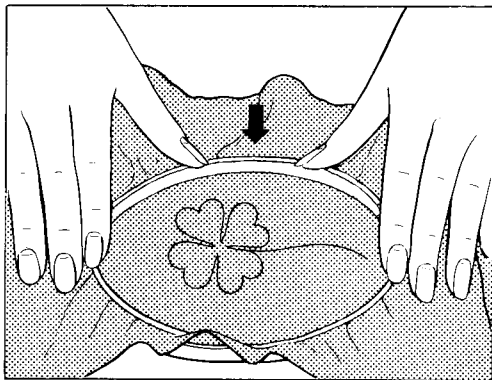
Sew patterns on smocking. Then pull out threads of straight stitch.

● EMBROIDERY

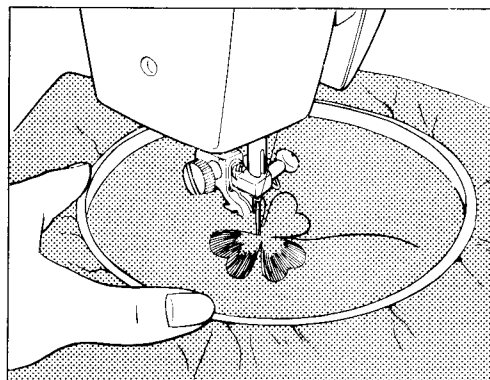


- * When putting embroidery hoop under needle, raise needle to its highest position and lift presser bar lifter up further than its ordinary raising position. While holding it in position, slide embroidery hoop under needle.
- * The presser bar lifter must be lowered when sewing.

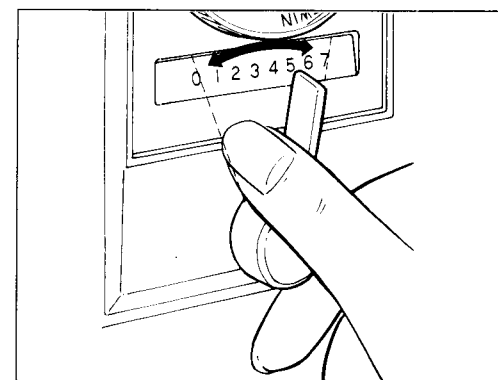
“Sewing procedure”



Draw your desired design on fabric with a pencil or tailor's chalk. Stretch and set fabrics in an embroidery hoop.

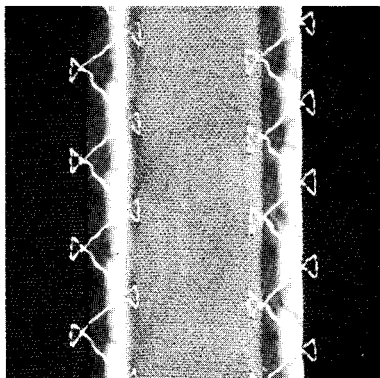


While moving hoop slowly with left hand, follow design on fabric.

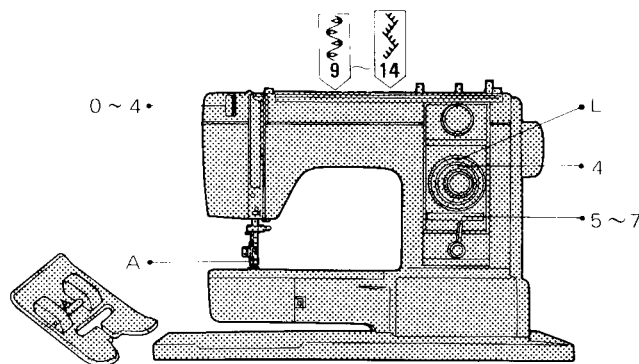


Move zigzag lever with right hand to change stitch width.

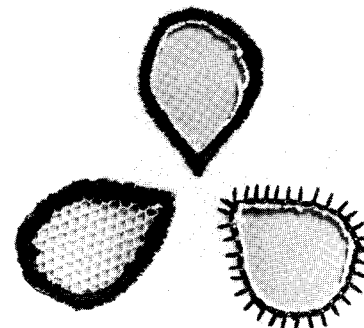
● FAGOTING



Place two pieces of fabric on a piece of paper. Sew with pattern (9) to (14). Remove paper after sewing. Stitches are drawn in criss-cross across open seam.



● CUT WORK

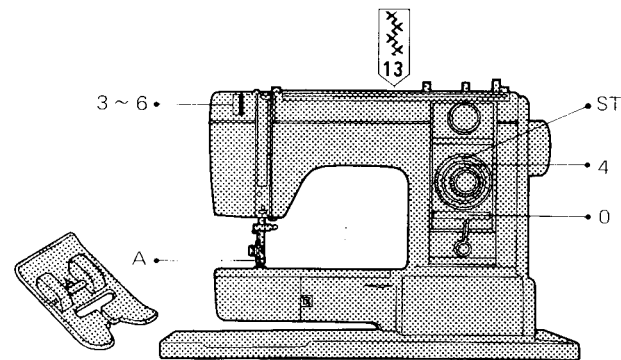
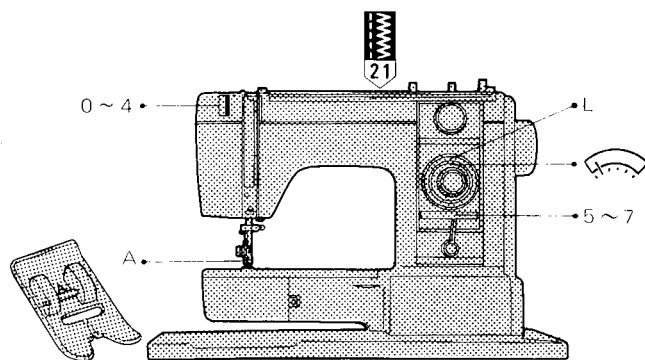


Draw a design of fabric by using pattern (5) or (21) or cording then cut inside portion. By lining with tulle, a beautiful ornament is obtained.

● FRINGING



After sewing zigzag stitches, sew triple seam stretch stitch on one edge of zigzag seam. Pull out bobbin thread. Then draw out stitches on top side of fabric and you will have beautiful fringes.



★ CARING THE MACHINE

Good care secures best condition. If you find something wrong with your machine, consult troubleshooting on page 53.

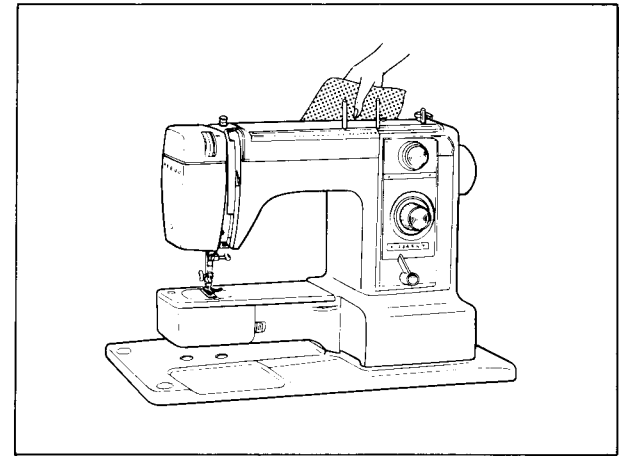
* Before caring machine, disconnect power plug from electrical supply.

● CLEANING YOUR MACHINE

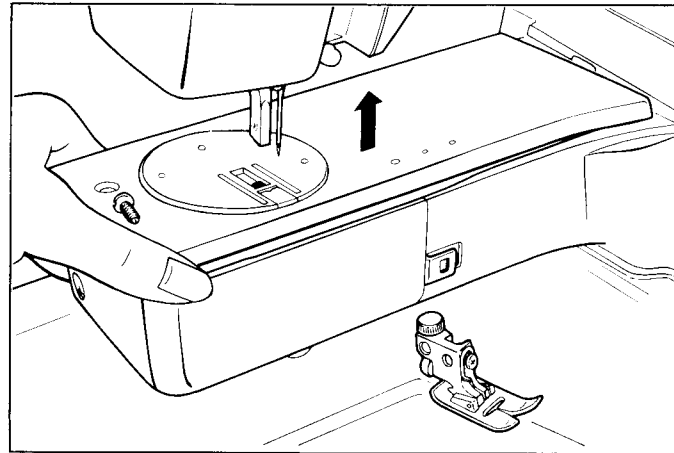
Wipe dust, thumbmark and oil over your machine with a soft and dry cloth.

It is effective to wip portable case lightly with neutral detergent.

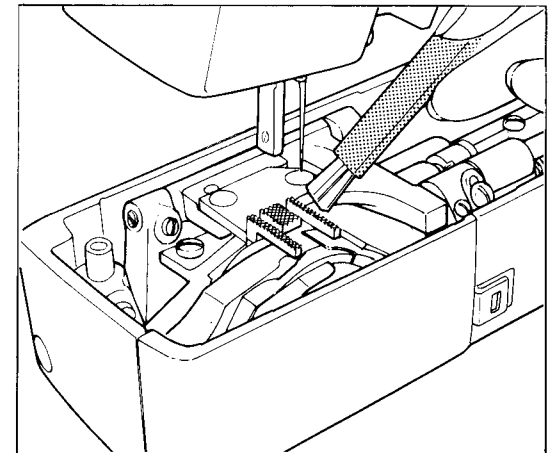
- * Positively avoid using thinner, benzine or cleaning compound.
- * Avoid direct sunbeam, fire and heat onto portable case.



● CLEANING FEED DOG



Set needle position at "L", and raise needle to its highest position. Remove foot holder, loosen free arm cover set screw, and take out free arm cover.



Clean feed dog with a brush. Also be sure to remove dust on rear surface of feed dog.

After cleaning feed dog, also clean the hook race in accordance with the procedure on page 52.

● OILING YOUR MACHINE

Fine quality sewing machine oil and proper oiling assure free running and long life, so supply oil to positions indicated by arrows in illustrations.

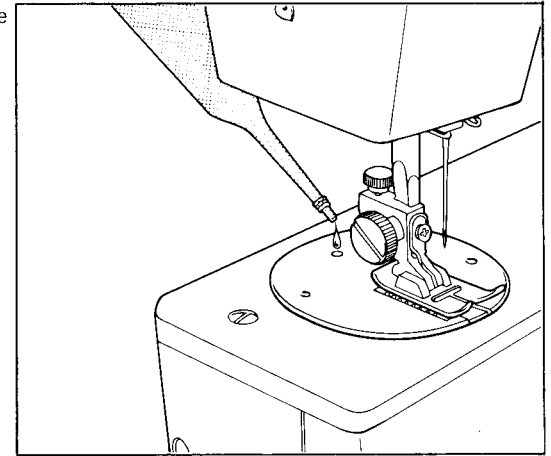
“Time of oiling”

Apply oil once a week in ordinary domestic use, and at every ten hours for continuous operation. When the machine is operated after storage for some period, apply oil before using it.

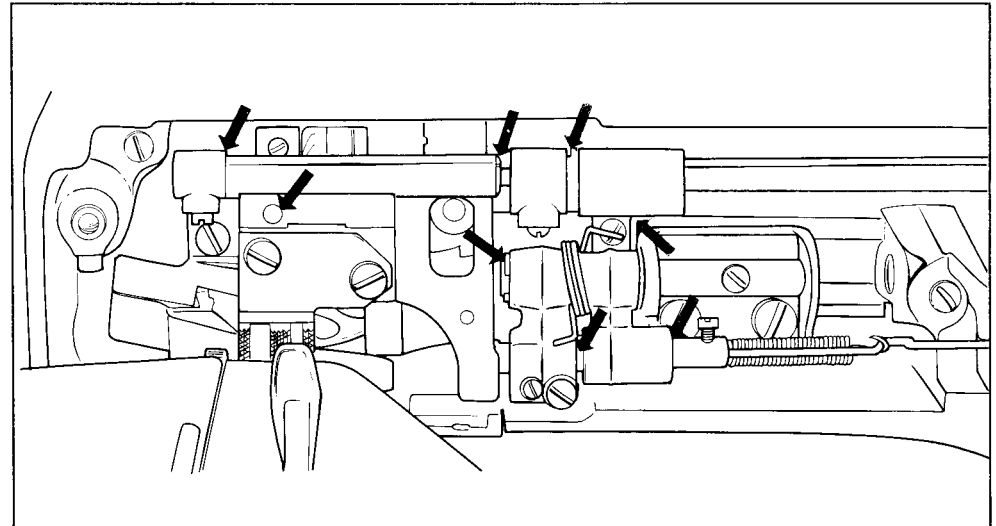
“Method of oiling”

After oiling run the machine rapidly for a few minutes to allow oil to penetrate every part.

Oiling points on needle plate

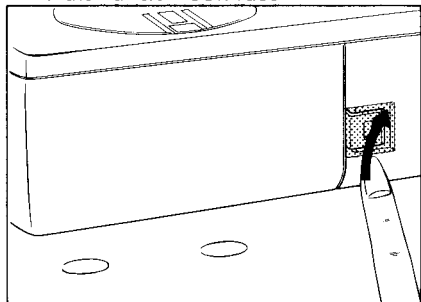


Oiling points under free arm cover

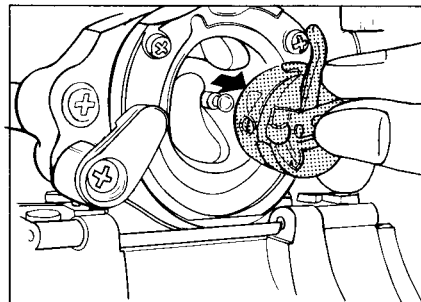


● **CLEANING HOOK RACE**

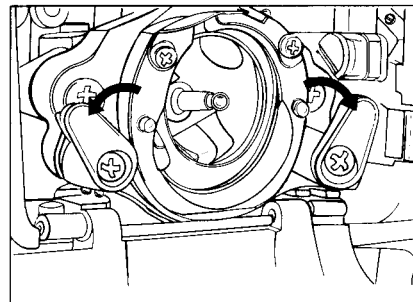
“To dismantle hook race”



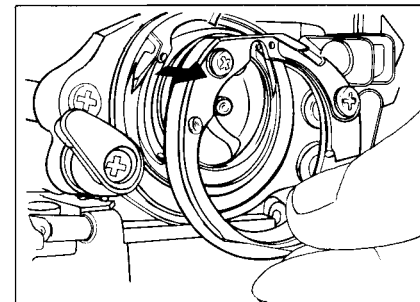
(1) Open hook cover by pushing cover opener to the right.



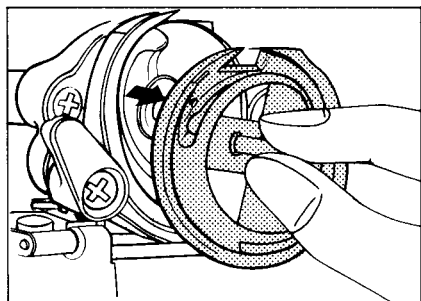
(2) Take out bobbin case.



(3) Open hook race ring holders out-side.

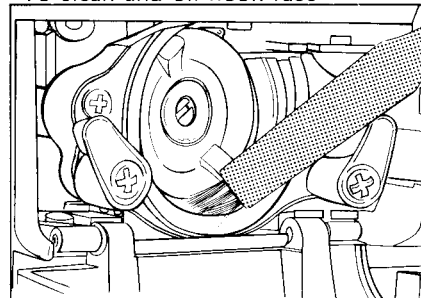


(4) Take out hook race ring.

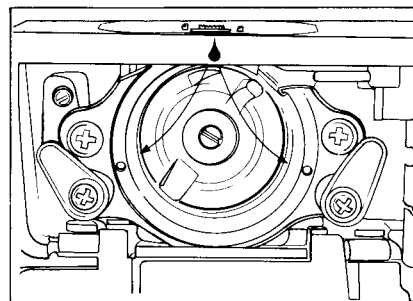


(5) Remove hook.

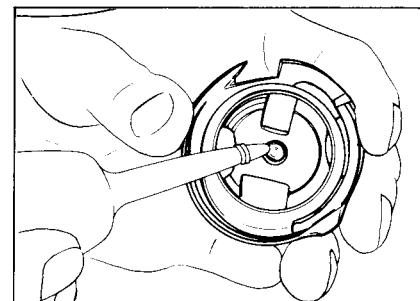
“To clean and oil hook race”



(1) Clean hook race inside with a brush.



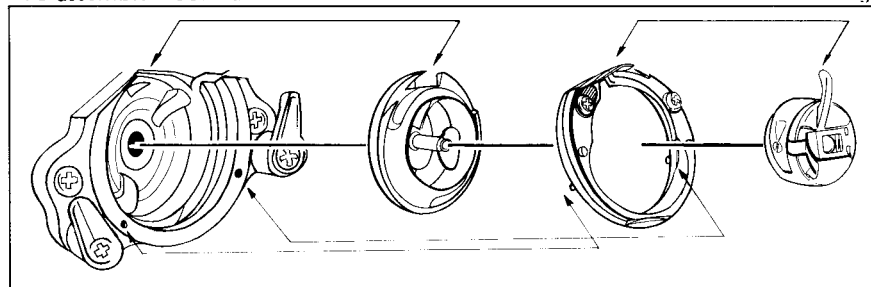
(2) Apply two or three drops of oil to this part, and wipe it lightly with soft cloth.



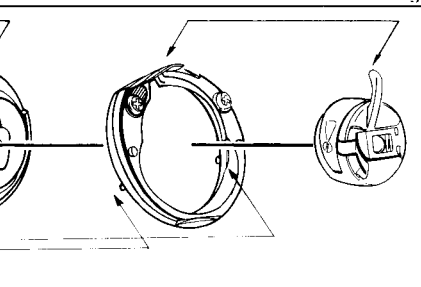
(3) Also apply one or two drops of oil to center post of hook, and wipe it lightly with soft cloth.

“To assemble hook race”

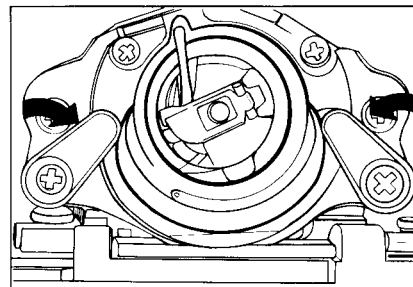
Assemble in the reverse order of dismantling.



(1) Insert hook with its tip against red mark on hook driver.



(2) Mount hook race ring with its small guide pins against the holes in the hook race body.



(3) Close left and right hook race ring holders, and mount bobbin case.

* Too much oil may dirt thread or fabric, or cause thread breaking. Always save oil.

● TROUBLE-SHOOTING

Condition	Cause
* The machine does not run smoothly and is noisy :	<ol style="list-style-type: none"> 1. The machine is in need of oil. 2. Oil of inferior quality is used. 3. Loose thread has collected in the hook mechanism. 4. Lint has collected on the feed teeth. 5. Something is wrong with the motor.
* The needle thread breaks :	<ol style="list-style-type: none"> 1. The needle thread is not threaded correctly. 2. The thread is not threaded correctly for chainstitching. 3. The tension on upper thread is too tight. 4. The needle is bent or dull. 5. The needle is incorrectly inserted. 6. The eye of the needle is nicked. 7. The fabric is not correctly removed after sewing is over. 8. The thread is too heavy or light for the needle. 9. Chainstitch looper is not inserted correctly.
* The bobbin thread breaks :	<ol style="list-style-type: none"> 1. The bobbin thread is incorrectly threaded in the bobbin case. 2. The bobbin case tension is too strong. 3. Dust has collected in the hook and spring. 4. The thread is wound unevenly around the bobbin.
* The needle breaks :	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent. 3. The needle clamp screw is loose. 4. Tension of needle thread is too strong. 5. The fabric is not correctly removed after sewing is over. 6. The needle is too fine for the cloth sewn. 7. The stitch length regulator knob or the zigzag width regulator lever is moved while the needle is in fabric.

Condition	Cause
	<ol style="list-style-type: none"> 8. The needle position selector knob is not set at TWIN in case of twin needle sewing. 9. The needle position selector knob is not set at ST in case of chainstitch sewing. 10. Chainstitch looper is not inserted correctly. 11. Incorrect presser foot is used for each sewing application.
* Skipped stitches :	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted in the needle bar. 2. The needle is bent. 3. The thread is not the correct size for the needle. 4. The needle thread is not threaded correctly. <p>* When a stitch skips in chainstitching, be sure to lock the skipped stitch.</p>
* Seam shrinks or puckers :	<ol style="list-style-type: none"> 1. The thread tension is too strong. 2. The thread is not threaded correctly. 3. The needle is too heavy for the fabric. 4. The stitch is too coarse for the material. 5. The thread is wound unevenly around the bobbin. <p>* When sewing light fabric, use of paper lining is recommended.</p>
* Stitching forms loops :	<ol style="list-style-type: none"> 1. The tension of the needle thread is too weak. 2. The bobbin case tension spring is either too strong or too weak. 3. The needle is the wrong size for the thread.
* The fabric is not feeding smoothly :	<ol style="list-style-type: none"> 1. Lint has collected on or around the feed teeth. 2. The drop feed knob setting is incorrect for the fabric sewn.
* Stitch-by-stitch basting bastes unsatisfactorily :	<ol style="list-style-type: none"> 1. Skipped stitches — The fabric is not stretched tightly.

