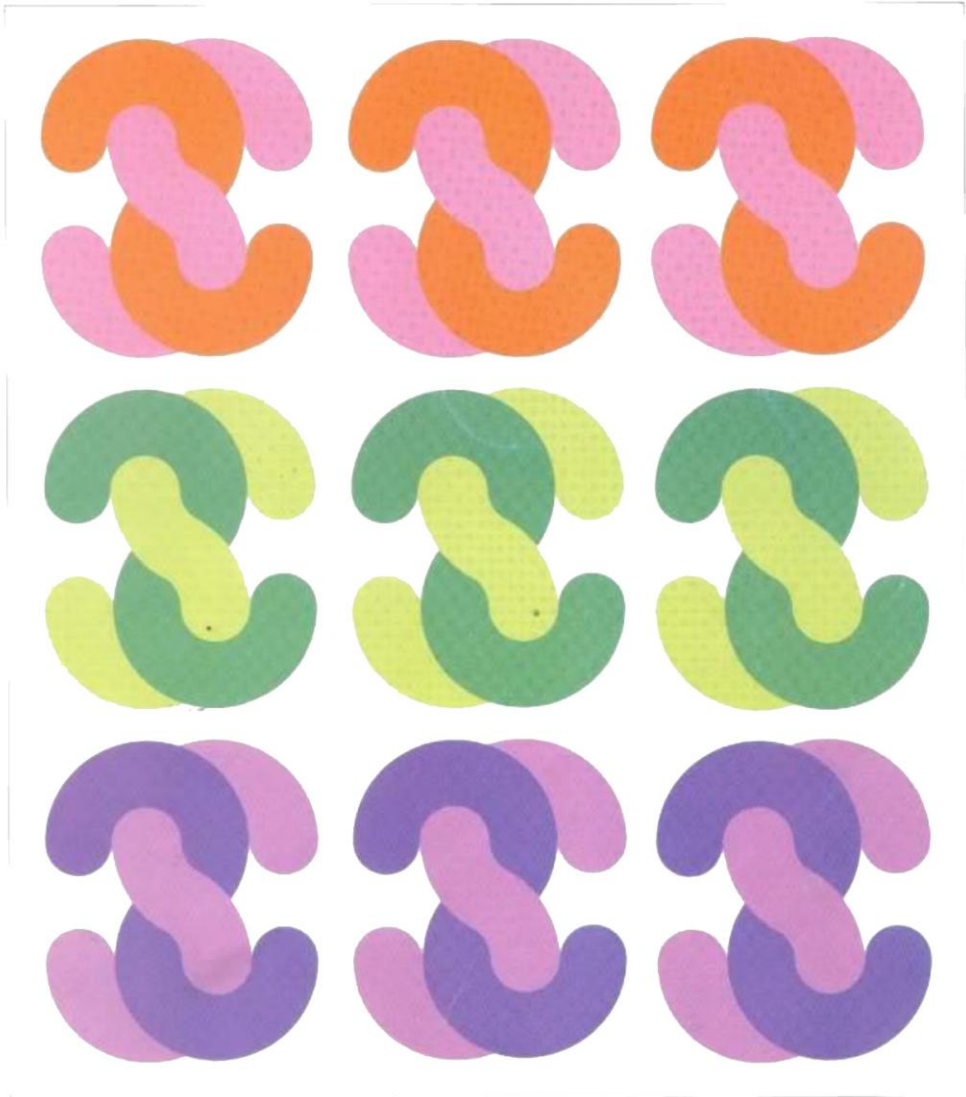


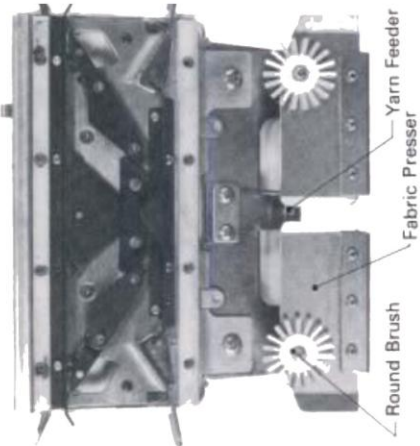
BULKY KNITTING MACHINE

MODEL 120

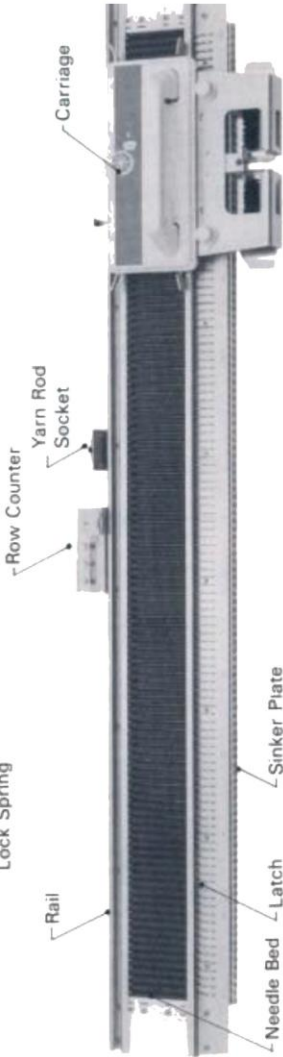
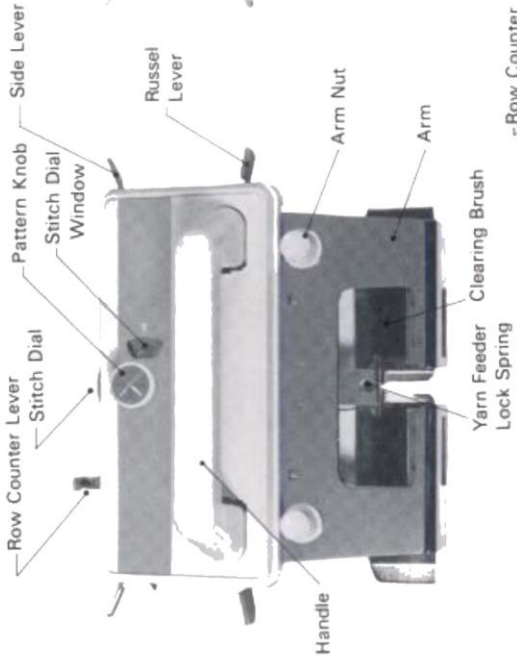


NAMES OF COMPONENT PARTS

VIEW OF UNDERSIDE OF CARRIAGE



TOP VIEW OF CARRIAGE

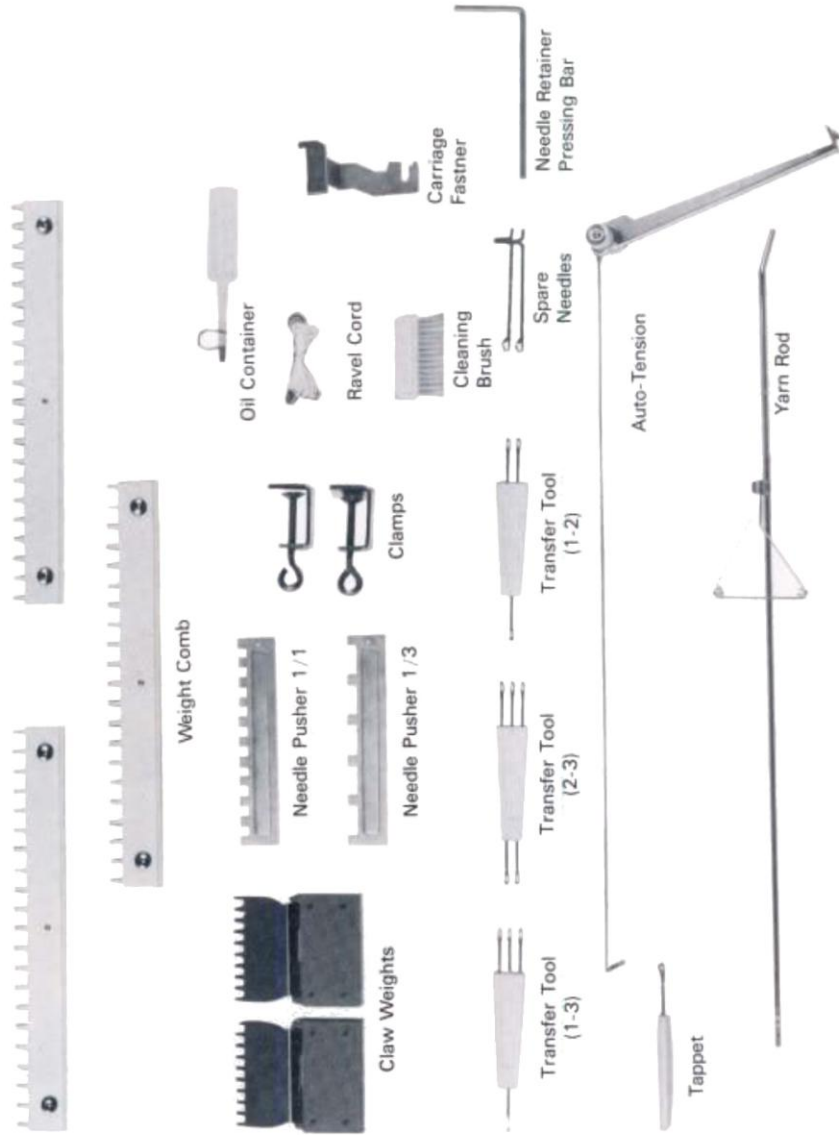


MAIN BODY OF MACHINE

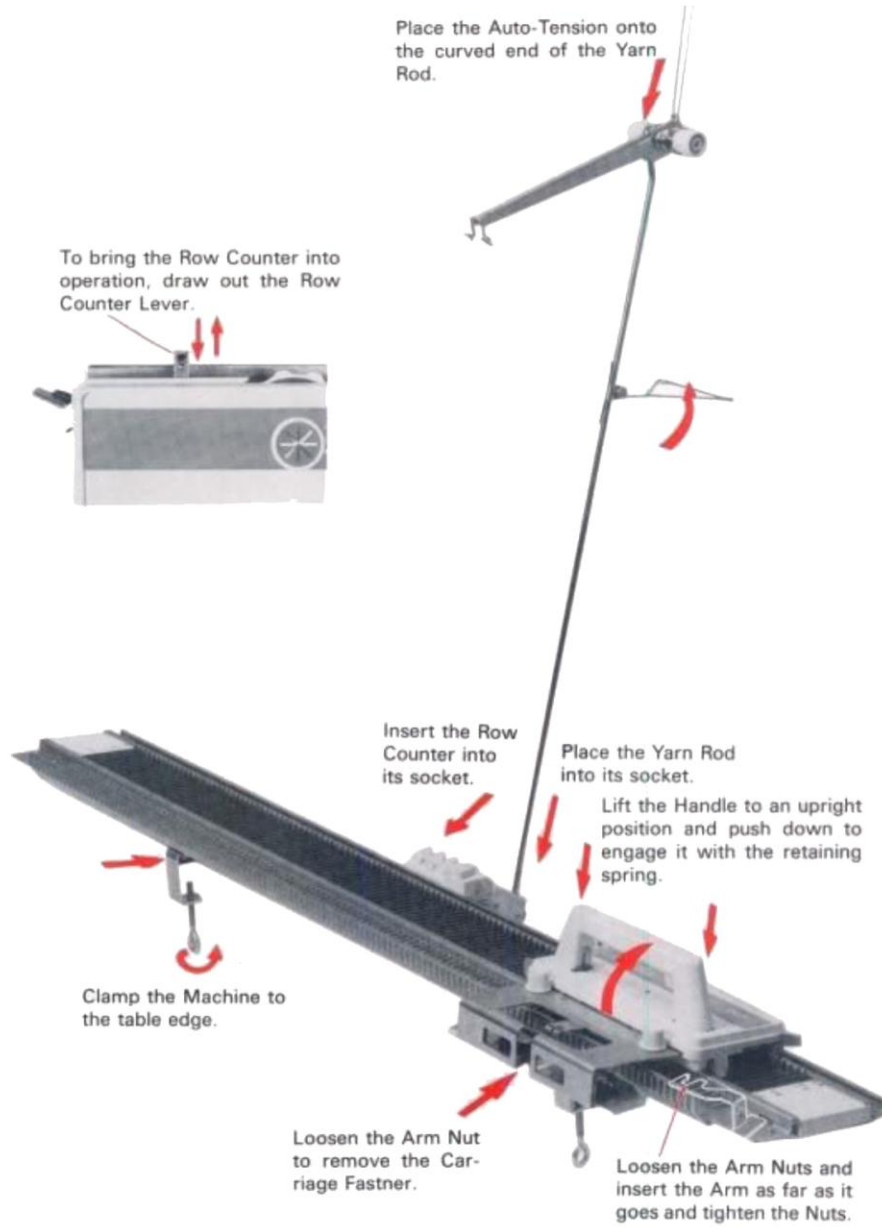
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ACCESSORIES

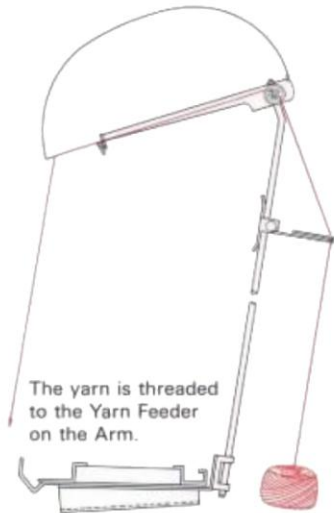


Assembling the machine

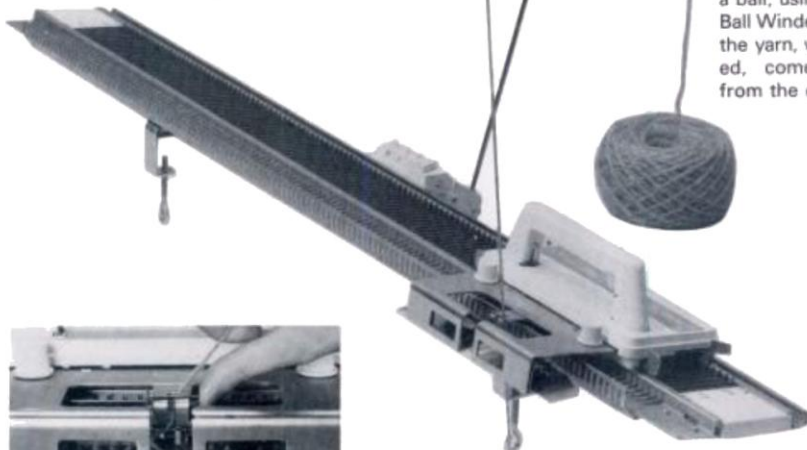


PREPARATION FOR KNITTING

Thread the yarn through the Auto-Tension, as below, following the direction of the arrow.



Prior to Knitting, make sure that the yarn has proper tension on it.

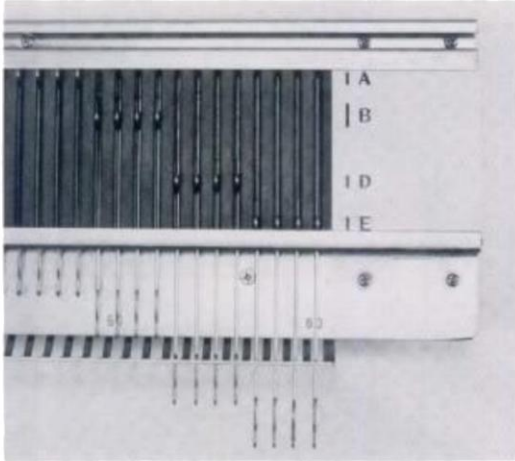


Slide the yarn under the Yarn Feeder Lock Spring while slightly pushing the Spring with the tip of your thumb and pull the yarn through to the Yarn Feeder.

FUNCTION OF MAIN PARTS

Positions of the Latch Needle

On both sides of the Needle Bed you will see the letters A, B, D and E. These are the various positions that the Needles go through during the course of Knitting.



A position: Needles in this position do not operate when the Carriage is moved across the Needle Bed.

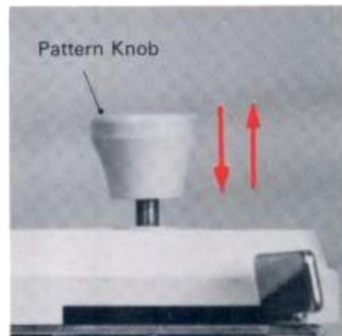
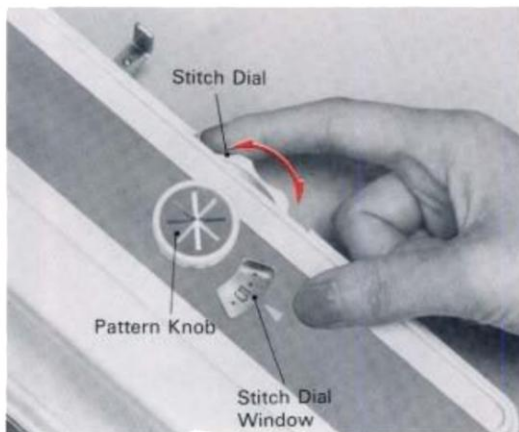
B position: On most occasions the Needles are positioned in B position.

D position: The Needles in this position knit Stockinet stitch.

E position: Needles set in this position are used for Partial Knitting and Pattern Knitting when using the Needle Pusher.

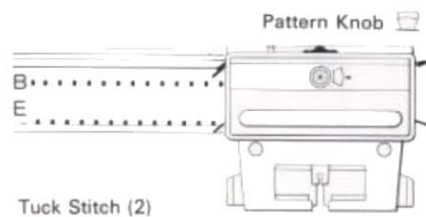
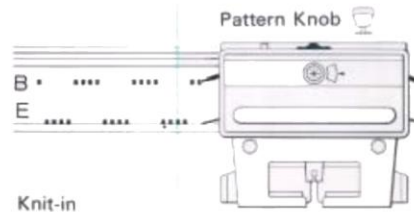
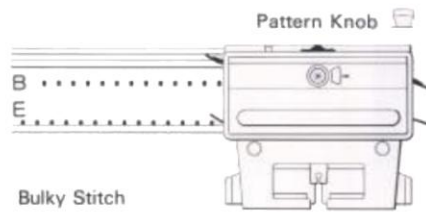
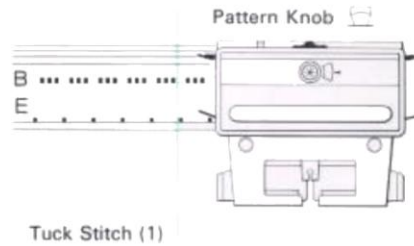
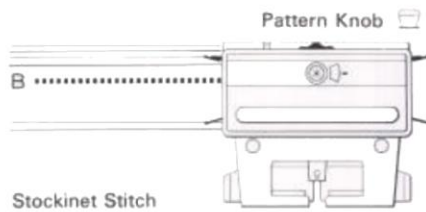
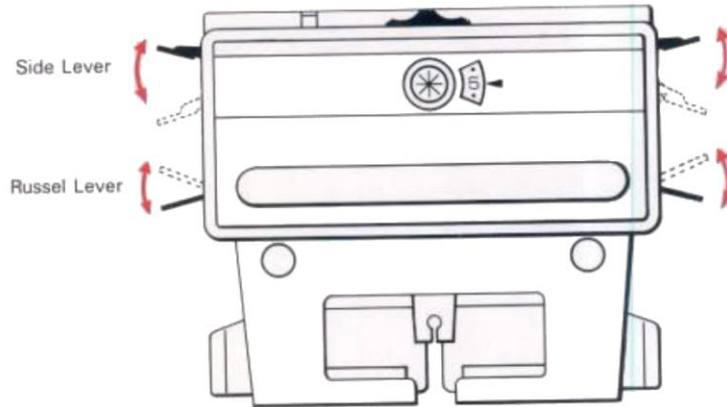
Stitch Dial and Pattern Knob

The Stitch Dial is used to adjust the size of the stitches. The higher the number, the looser the stitches and vice versa.



The Pattern Knob has two positions, "Up" and "Down".

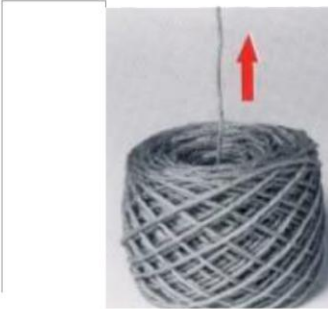
FUNCTION OF THE RUSSEL AND SIDE LEVERS



There are various combinations of Russel and Side Lever positions depending on the purpose.

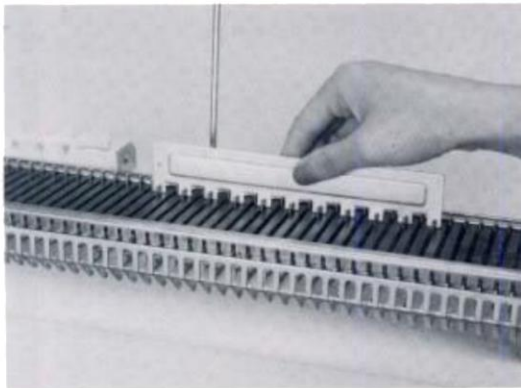
CAST ON AND STOCKING STITCH

1. Preparing your knitting yarn.

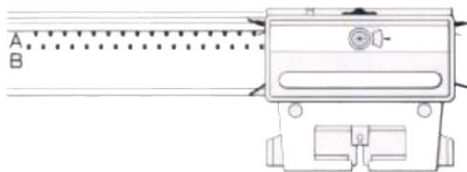


For practice it is recommendable to use a thick yarn. Wind the yarn into a ball using the Yarn Ball Winder so that the yarn, when wound, can be pulled from the centre of the ball.

2

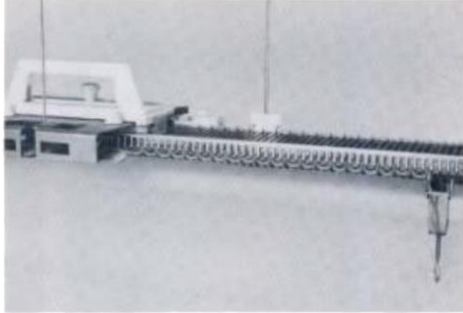


With the Needle Pusher (1/1), bring the required number of Needles to B position.



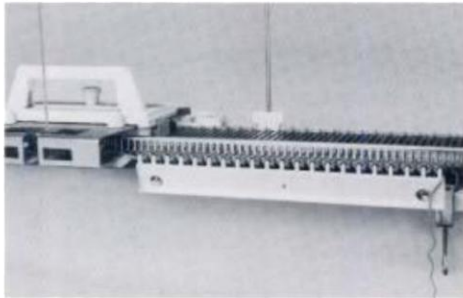
Set both Russel Levers and Side Levers to the position for Knitting Stockinet Stitch and move the Carriage from right to left.

3.



Move the Carriage slowly. The yarn will hang as shown in the opposite picture.

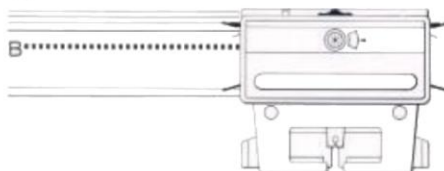
4.



Hook the Weight Comb on the stitches as shown below.



5.



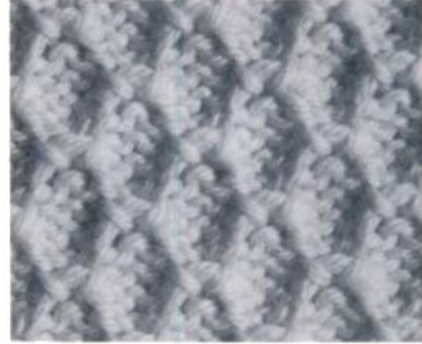
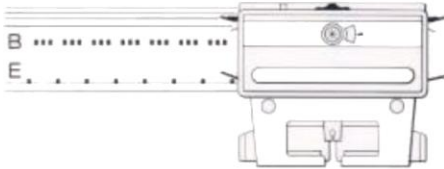
Push to B position those Needles that were resting in A position. Move the Carriage slowly and Stockinet stitches will be knitted when knitting, if you pull the Weight Comb downwards with your hand, a cast on can be made smoothly.

Note : Once you begin a stroke of the Carriage do not return it. Only after you have passed the last Needle to complete a row can you return the Carriage.

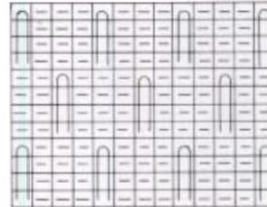
When actually knitting (remember this is just a practice), cast-on with a waste yarn and knit 5 or 6 rows with this yarn. Remove the waste yarn from the Yarn Feeder and re-thread the Yarn Feeder with yarn you intend to knit with. Set the Row Counter to 0 and proceed to knit.

PATTERN KNITTING

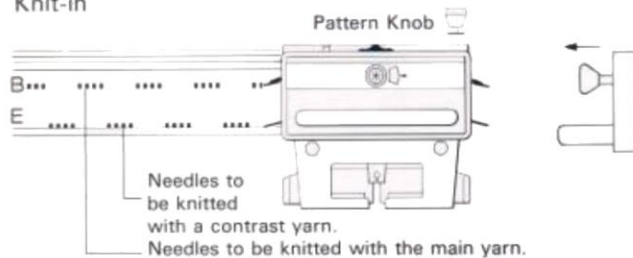
Tuck Stitch



1. Push the Needles to E position.
2. Set the Russel Levers to the position shown in the above diagram.
3. Move the Carriage once and you have one row of Tuck Stitch knitting. Tuck stitches can be made up to 3 rows depending on the yarn used.
4. When you wish to return to Stockinet stitch, set the Russel Levers to the position for knitting Stockinet stitch (towards you) and once the Carriage is moved across the Needle Bed the Needles will be brought to B position and knit Stockinet stitches.



Knit-in



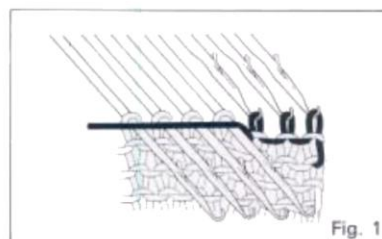
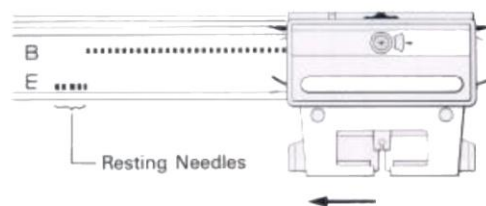
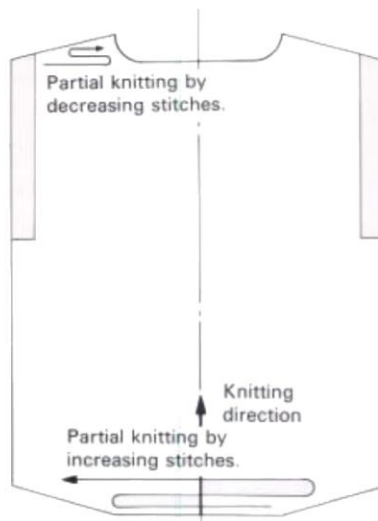
1. Set the Russel and Side Levers as shown in the above diagram.
2. Pull the Pattern Knob up.
3. Push the Needles to be knitted with a contrast yarn to E position.
4. Remove the main yarn from the Yarn Feeder and thread the contrast yarn.
5. Move the Carriage once, knitting one row.
6. All the Needles return to B position. Once again push the required Needles to E position and knit one row. You have now knitted 2 rows with the contrast yarn.
7. Remove the contrast yarn from the Yarn Feeder and re-thread the main yarn.
8. Push the Needles to be knitted with the main yarn to E position and knit 1 row.
9. Repeat this procedure once again and you will have 2 rows knitted with the main yarn. In order to knit the pictured pattern, repeat procedures 4-8.



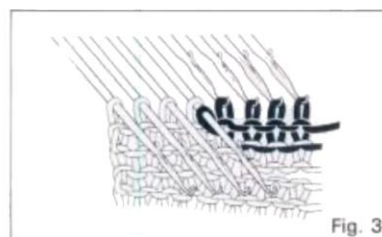
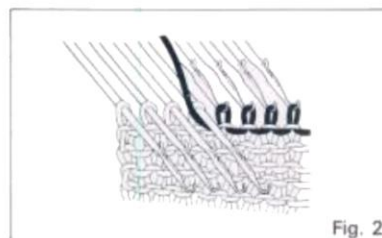
NOTE: The border between the main and contrast yarn at the edges of the fabric may not be knitted cleanly. If this happens, bring the end Needle, on the side of the Carriage to E position. (If the end Needle is already in E position, then the above instruction can be ignored.)

Partial Knitting

This is a method used for decreasing stitches.
(Partial Knitting by increasing the resting Needles.)

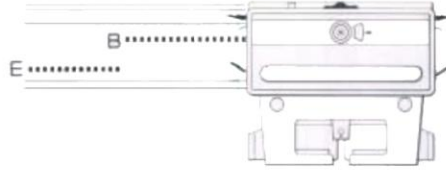


1. Push the number of Needles to be decreased on the opposite side of the Carriage to E position.
2. Set the Russel Levers to the position as indicated in the above drawing.
3. Knit 1 row. The Needles in B position are knitted and those in E position remain in that position and the yarn will pass over them. (Fig. 1)
4. To prevent a hole from being formed in the fabric, pass the yarn under the Needle in E position which is nearest to the end knitted Needle. (Fig. 2)
5. Knit 1 row and this will complete the first row of Partial knitting. (Fig. 3)
6. Repeat procedures 3-5, bringing an increased number of Needles to E position.

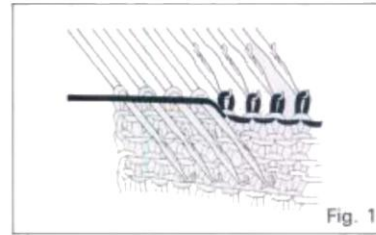


Partial Knitting

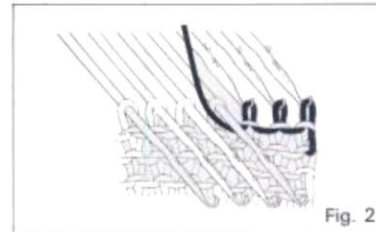
This is a method for increasing stitches. (Partial knitting by decreasing the resting Needles.)



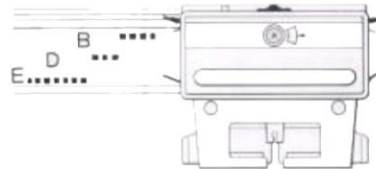
1. Leaving the first set of Needles to be increased in B position on the Carriage side, push the remaining Needles to E position.
2. Knit 1 row. The Needles in B position are knitted while the Needles in E position remain inactive and the yarn passes over them. (Fig. 1)



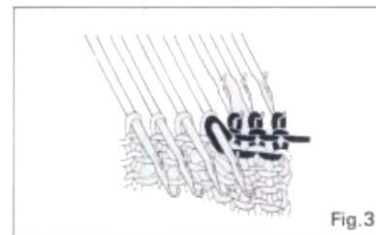
3. To prevent a hole from being formed in the fabric, pass the yarn under the first resting Needle in E position which is nearest to the end knitted Needle. (Fig. 2)



4. Push to D position the required number of Needles that were resting in E position and knit the third row.

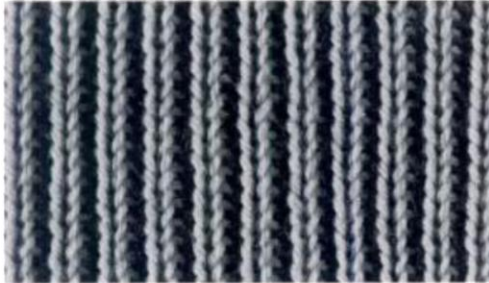


5. To prevent a hole from being formed in the fabric, pass the yarn under the first resting Needle in E position which is nearest to the end knitted Needle. (Fig. 3)



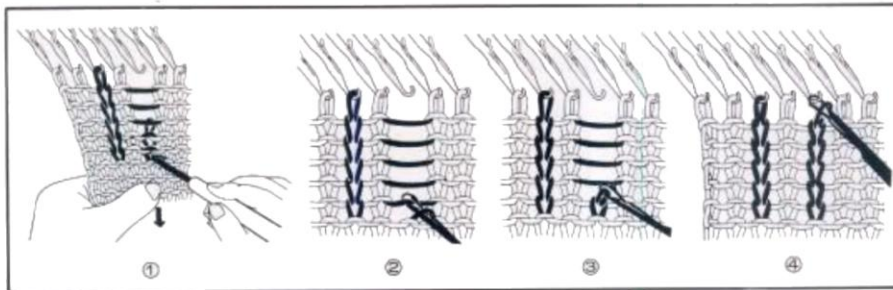
6. Repeat procedures 4 and 5.

K1 P1 Ribbing



—		—		—		—		—		—		—		—		12
—		—		—		—		—		—		—		—		11
—		—		—		—		—		—		—		—		10
—		—		—		—		—		—		—		—		9
—		—		—		—		—		—		—		—		8
—		—		—		—		—		—		—		—		7
—		—		—		—		—		—		—		—		6
—		—		—		—		—		—		—		—		5
—		—		—		—		—		—		—		—		4
—		—		—		—		—		—		—		—		3
—		—		—		—		—		—		—		—		2
—		—		—		—		—		—		—		—		1
12	11	10	9	8	7	6	5	4	3	2	1					

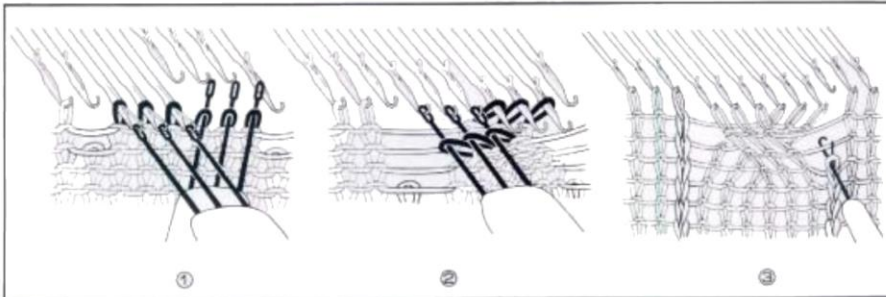
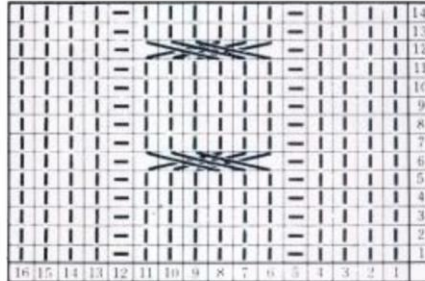
For Ribbing, set the Stitch Dial one number smaller than that normally used for Stockinet knitting.



* Knit the number of rows required for ribbing in Stockinet stitch.

1. Push a Needle, which stitch is to be turned into a purl stitch, to D position and by pushing the Needle back to B position, the stitch will drop.
2. Insert the Tappet into the stitch where the ribbing is to begin and unravel the rows above to this point.
3. Push the Tappet to the opposite side of the fabric. The loop of the stitch will be behind the latch and the hook will catch the yarn crossing above. Pull the yarn through the stitch and a new stitch will be formed.
4. Repeat the above operation until the last hanging yarn has been formed into a stitch and place this stitch onto its original Needle.

Cable Stitch



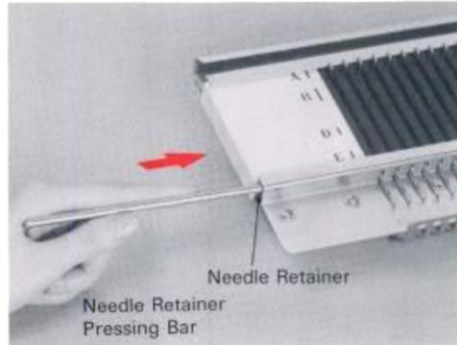
* Pull both Russel Levers towards you.
Knit 6 rows of Stockinet knitting.

1. Drop the stitches on the outside of the intended Cable stitches. Using 2 three-eye Transfer Tools, take 3 stitches off of the Needles onto one Transfer Tool and the adjacent 3 stitches onto the other in the same manner.
2. Cross these stitches and hook them onto the empty Needles.
3. Pull the 6 Needles to E position and knit 6 rows of Stockinet knitting. Repeat the above procedure and after three or four Cable stitches have been formed, purl the stitches on both sides, beginning at the bottom stitch, referring to page 13.

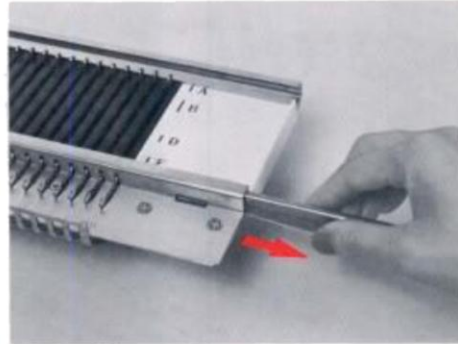
HINTS AND TIPS

Replacing damaged Needles

1. When you want to replace a damaged Needle, push the Needle Retainer (with the Needle Retainer Pressing Bar) which is located under the Needle Bed.

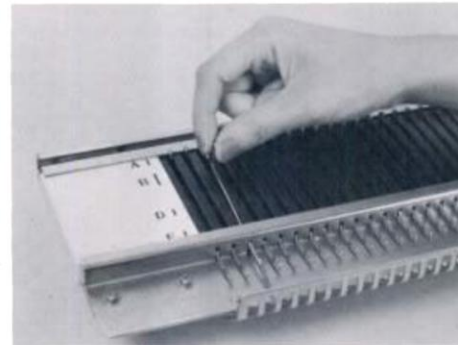


2. Pull the Needle Retainer at one end until it clears the Needle to be replaced.



3. Hold the butt of the damaged Needle and pull it out of the Needle Bed.

4. Open the latch of a new Needle and slip the Needle into the Needle Bed reversing the procedure in No. 3, above.



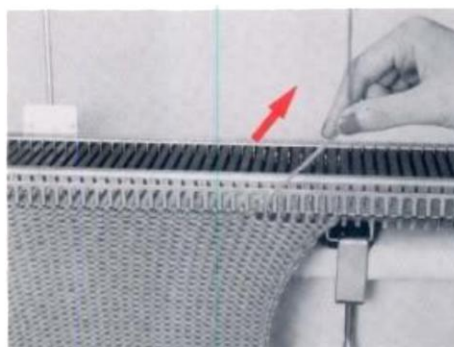
If the Carriage has jammed while knitting.

Do not move the Carriage by force.

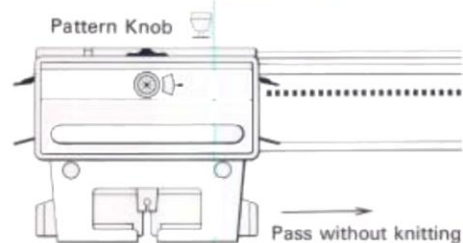
1. Loosen the Arm Nuts and remove the Arm from the Carriage.
2. Lift the centre part of the Carriage and slide the Carriage beyond the knitted Needles and replace the Arm to carry on knitting.

How to Repair Incorrect Knitting.

1. Holding the fabric firmly, pull the yarn tightly in an up and down motion to release the yarn from Needles. Do this until the row has been completely unravelled. The stitches of the row, below the one unravelled, will hang on the Needle hooks. Unravel the required number of rows in the above manner.



2. If the Carriage is on the opposite side to the yarn, pass the Carriage without knitting. For this purpose, set the Russel and Side Levers to the positions as shown in the opposite drawing.



3. Turn the Row Counter back the number of rows unravelled.