



Getting the Knit-knack

A Picture Guide
for Beginners

brother

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Hello.

I'm "Knitting Nell."

I'm going to help you learn to knit.

Really, it's easy. And it's fun.

Just read the book with me.

Study the pictures,

follow the simple directions.

You'll be surprised

how quickly you'll learn.

Now, shall we start?



Introduction

Until a few years ago, machine knitting was extremely difficult. It took a lot of time—a lot of training—a lot of patience. Machine knitting was for the expert.

But Auto L changed all that. The revolutionary **Knit-Leader*** has taken the chore and confusion out of knitting. With Brother Auto L, you can knit anything quickly and easily. This little book will tell you how to begin.

This booklet, then, is for you, the beginner. It will teach you the basic principles for all machine knitting. After reading the instructions and studying the pictures, you'll be able to knit a beautiful child's sweater. And you will learn the techniques that will enable you to knit more difficult patterns later. Once you get that "knit-knack", you'll be able to knit anything, and you'll have fun doing it.

Keep this book right next to your knitting machine.

If you have any difficulty in your knitting, refer to the book again. As you read and practice, your knitting will become easier and easier. If you follow this booklet very carefully, we are sure you'll master the knack of knitting. You'll get that "knit-knack" right away.

*The impression of difficulty which many people had about knitting machines, was eliminated by the introduction of Knit-Leader (pattern calculator). You are now able to get any type of knitting by setting your pattern on the Knit-Leader. This is especially good for beginners of knitting.



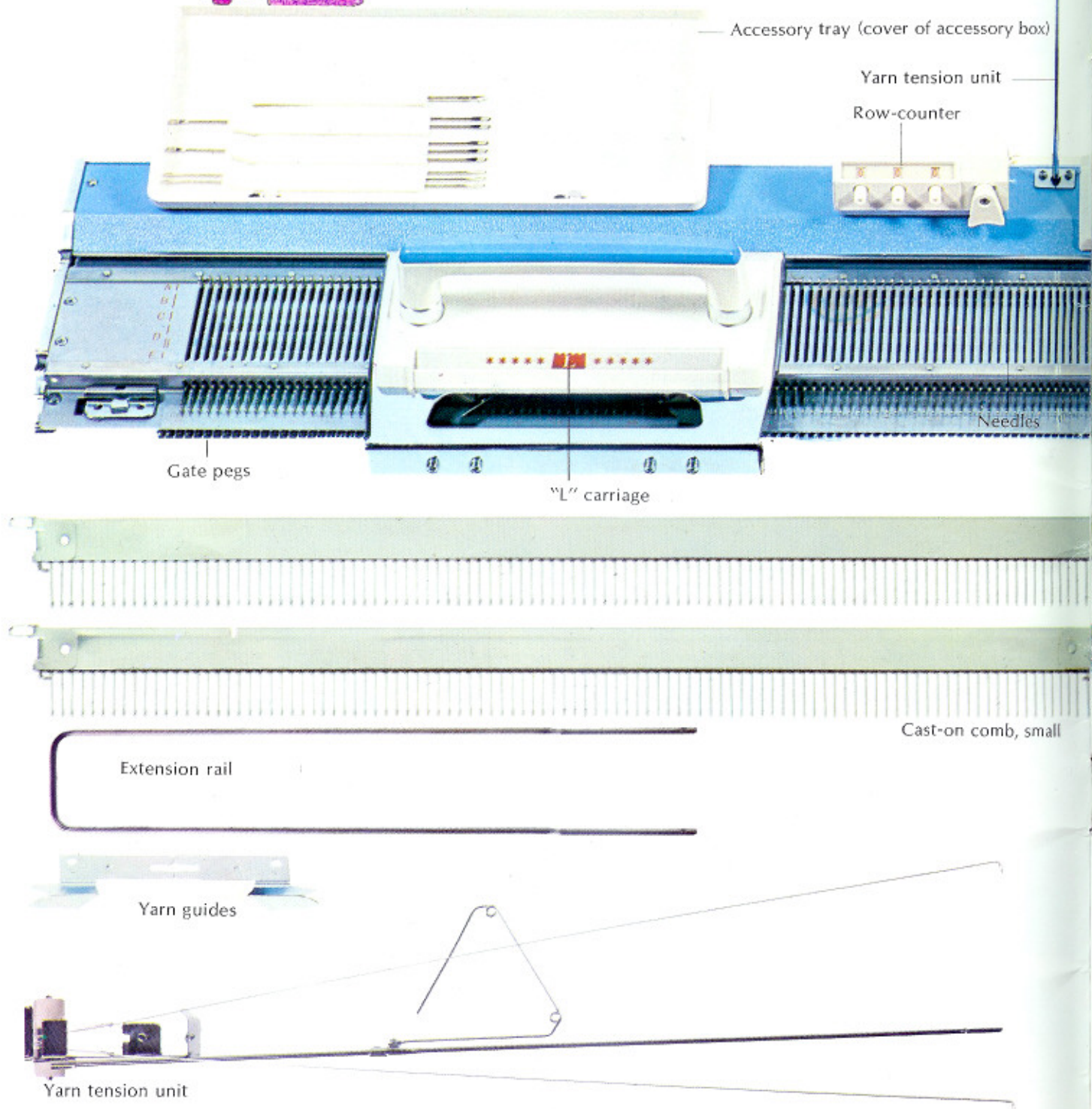
Fundamental Knowledge

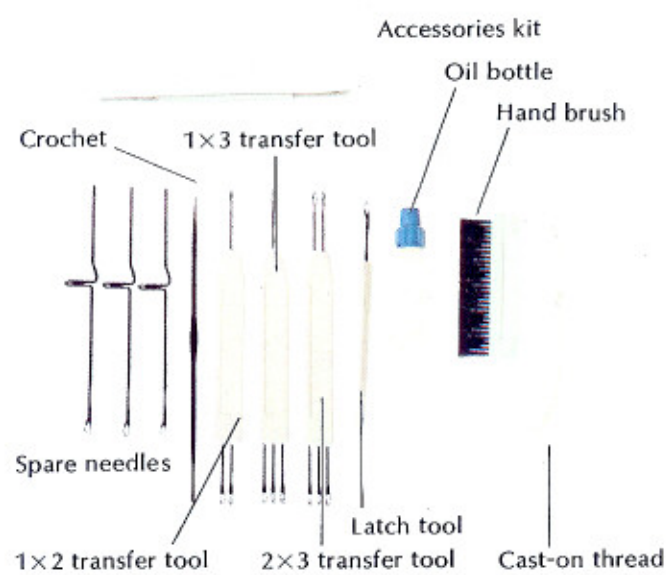
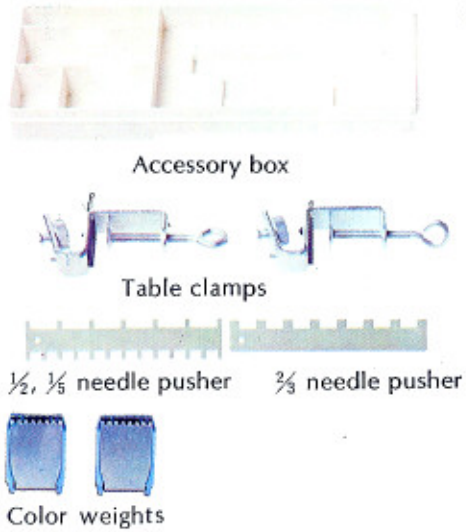
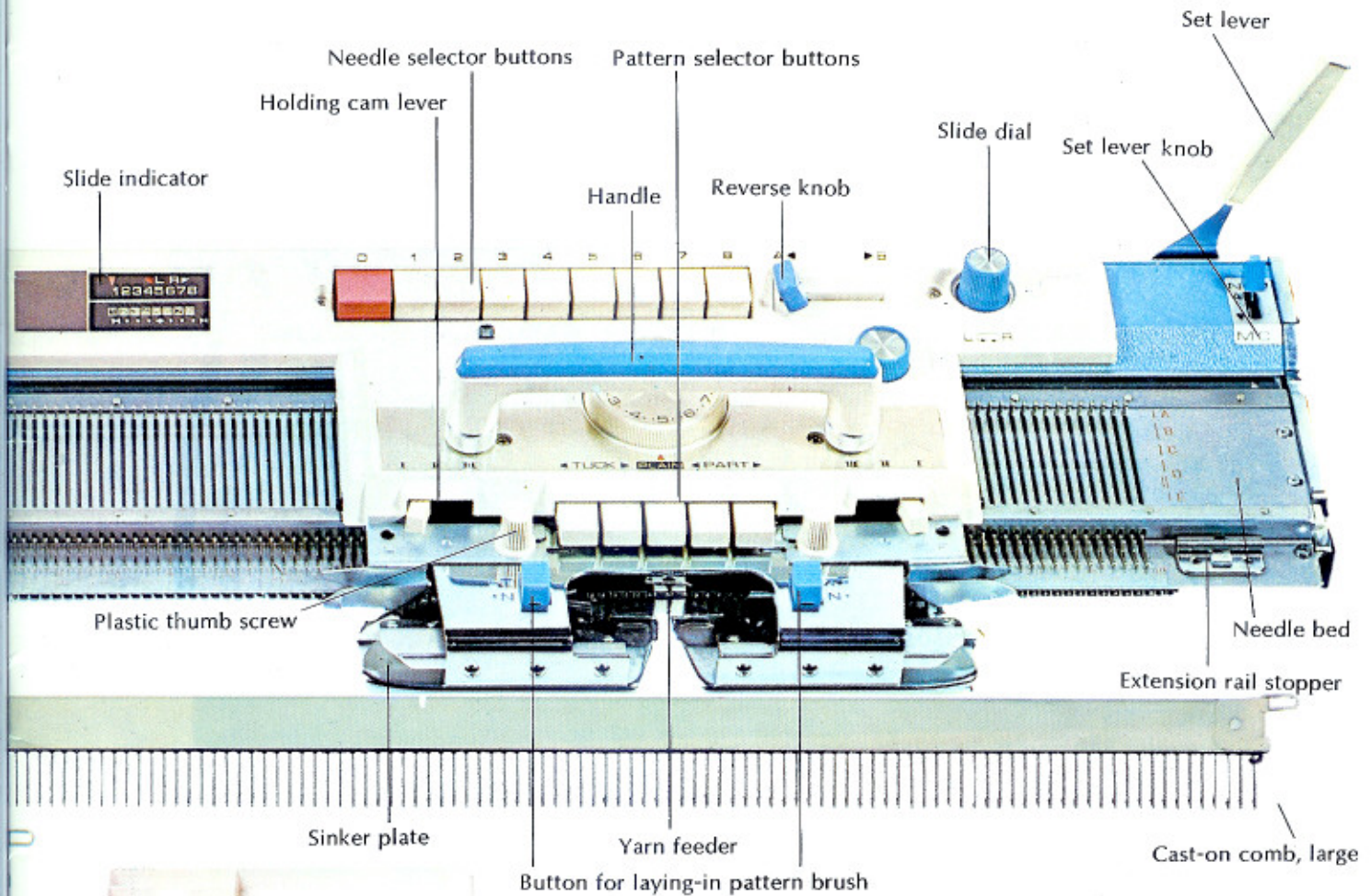
Names of parts

* Auto L

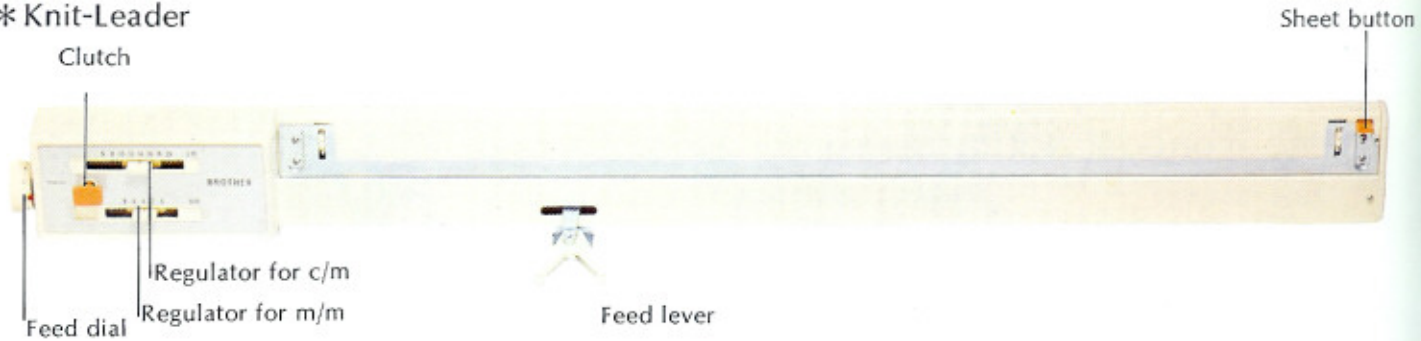


First, we have to get to know the knitting machine very well. Study all the different parts, and memorize the names of the important ones. When you know the names, it is really easy to follow the instructions.





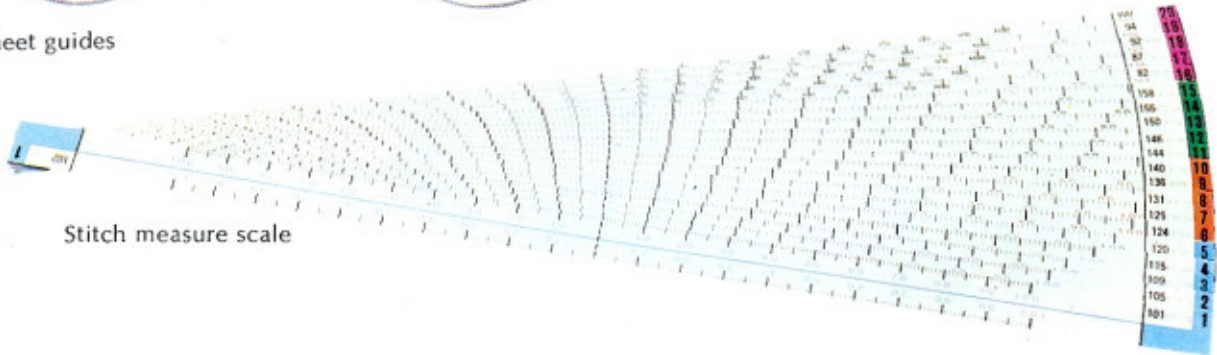
* Knit-Leader



Sheet guides



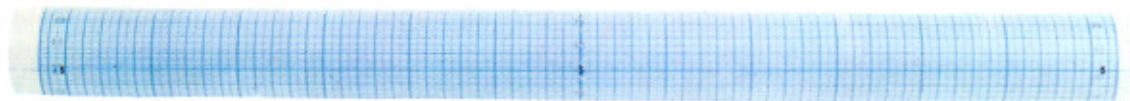
Stand



Stitch measure scale



Sheet case



Sheet



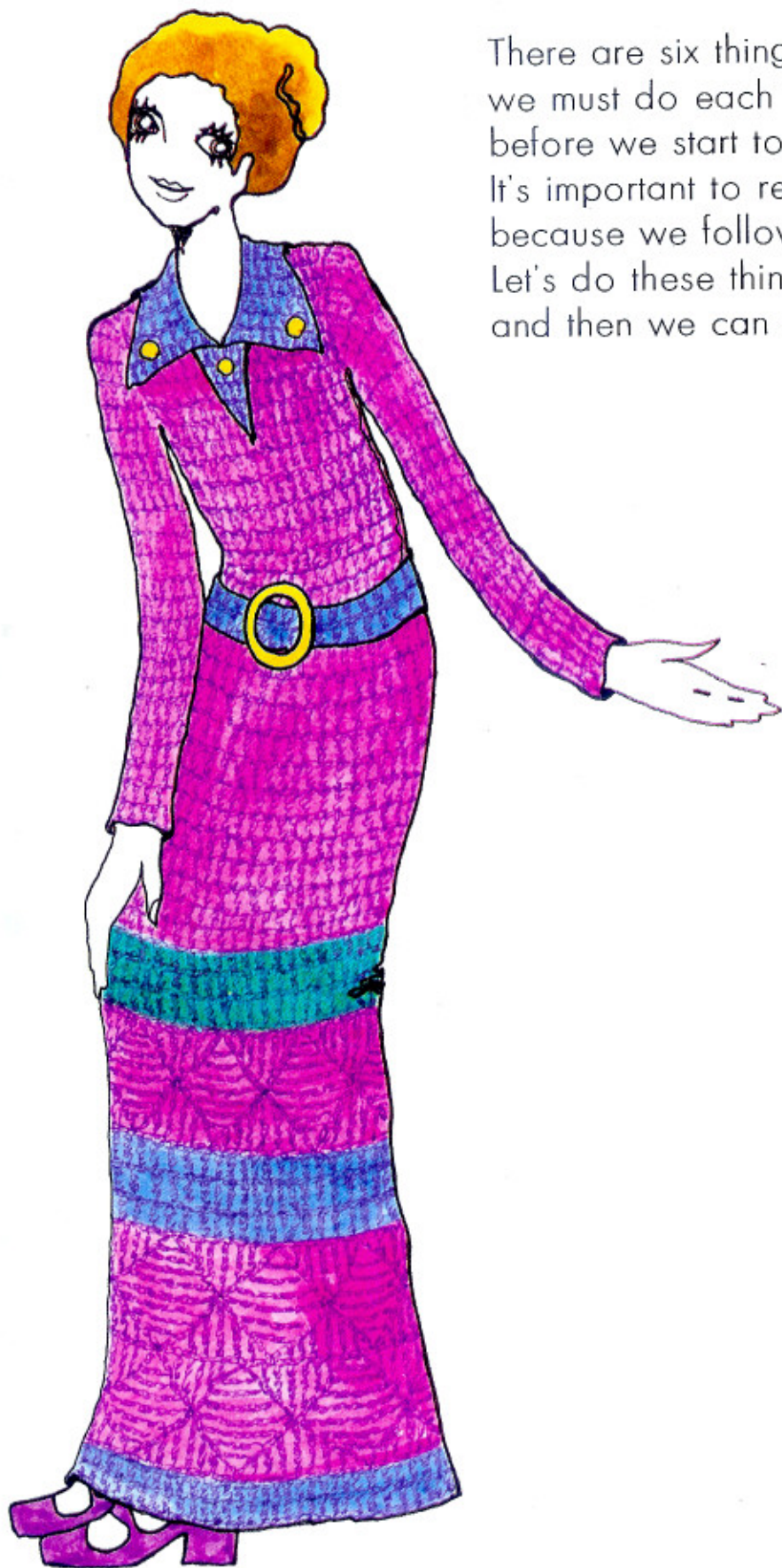
Ruler for stitch measure



Felt pen

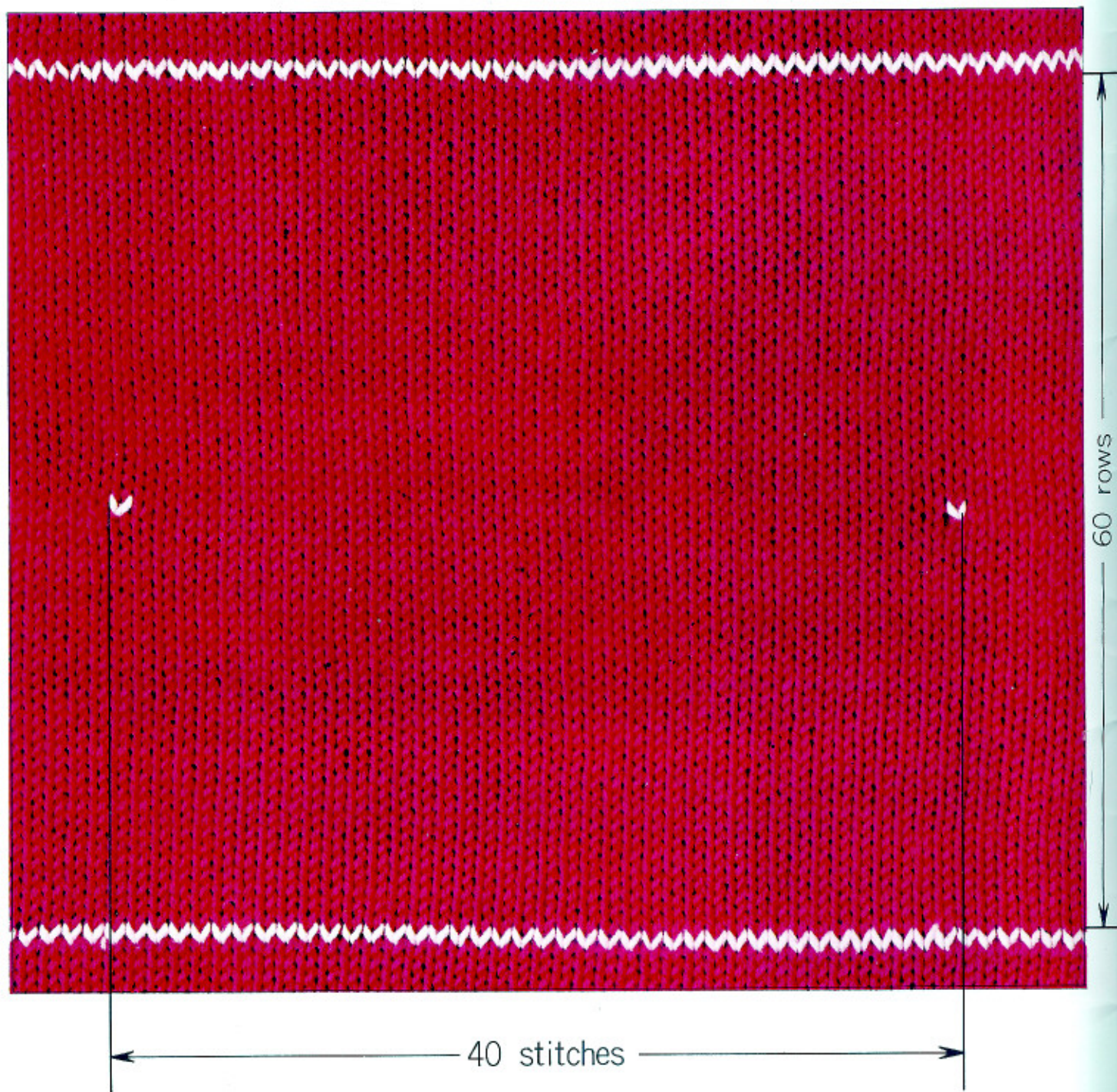
Notes before you start

There are six things we must do each time before we start to knit. It's important to remember these things, because we follow the same order every time. Let's do these things now, and then we can start.



- (1) Slide the carriage completely to the end until it clicks.
- (2) Confirm that the yarn is being fed smoothly and not hooked on the gate pegs.
- (3) Make sure there is nothing near the sheet that may interfere with smooth travel of the sheet.
- (4) When knitting lace using the "L" carriage, do not forget to install the extension rails.
- (5) Set the tension dial at the position used in gauging.
- (6) Move the carriage until it passes over the feed lever of the Knit-Leader. Otherwise, it cannot deliver the sheet.

Tension



Tension differs according to the size of the yarn used. The tension of the garment should be adjusted by the size of the yarn. In this case, use the Tension Dial. The Tension Dial is graduated 0–10. The larger the figures, the

greater the tension. In order to determine the tension, a test piece is made. This is called "Gauging". In the Knit-Leader, measure 40 stitches horizontally and 60 rows vertically and set the machine to measure the tension. The

40 horizontal stitches are a scale for knitting, and 60 vertical rows are set in the Gear Unit of the Knit-Leader. Thus, you knit by the tension obtained in the test piece.

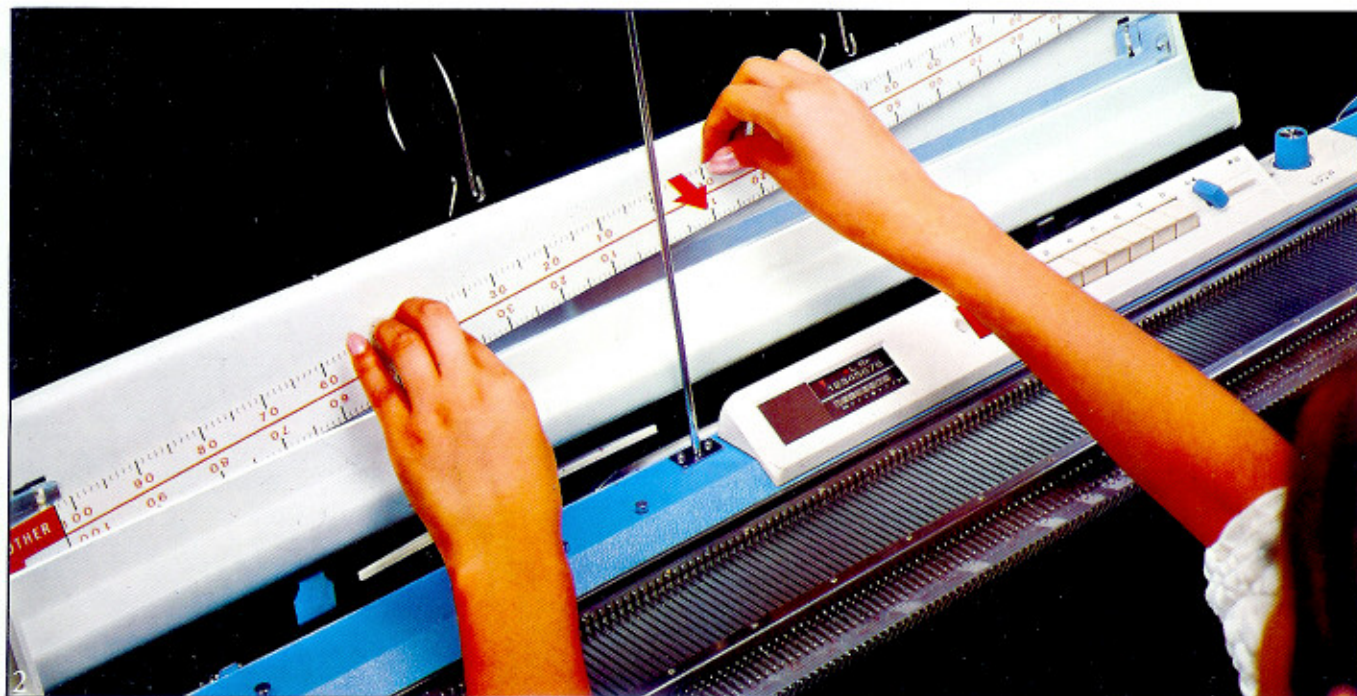
Child's Sweater

We're almost ready to go now.
We're going to start with the back of
a child's sweater.

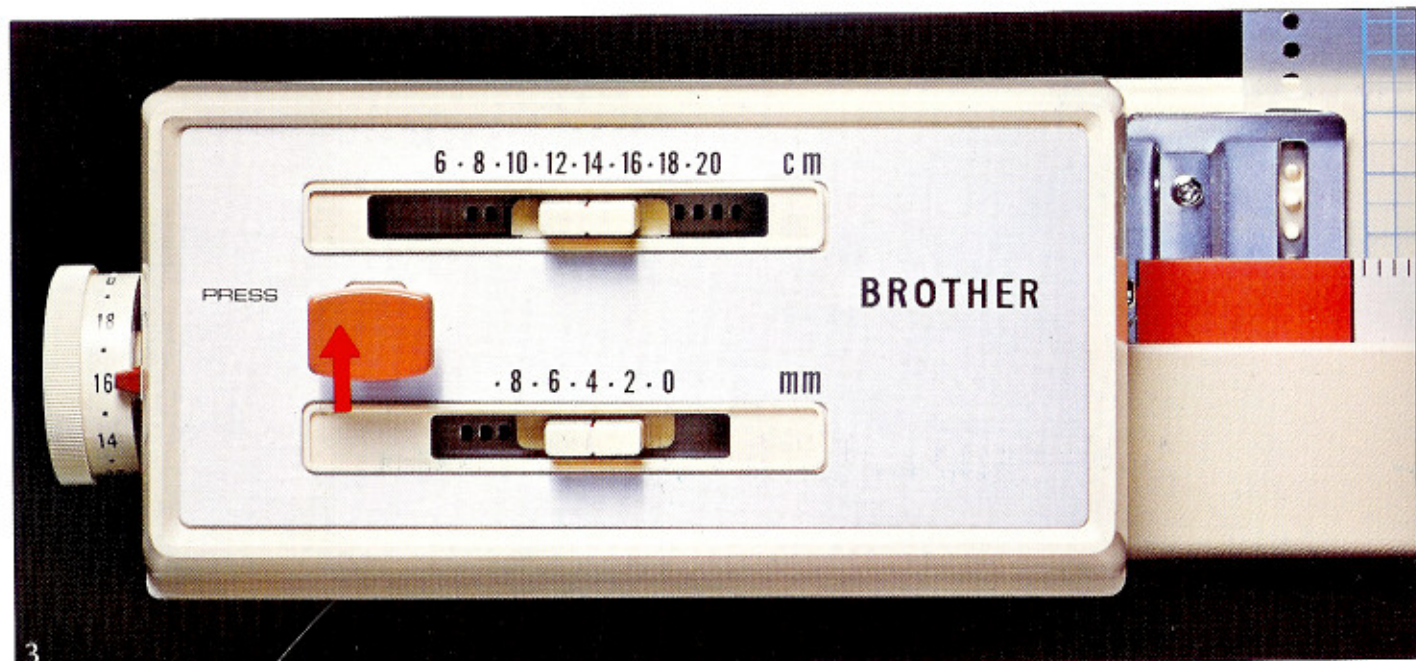


Materials:
Knitting Yarn: 200 grams (4 ply) Red
Spare Yarn: 50 grams Blue
Tension Dial: 5 plain knitting
Tension: 40 stitches measuring 12.4cm, 60 rows measuring 14.4cm.

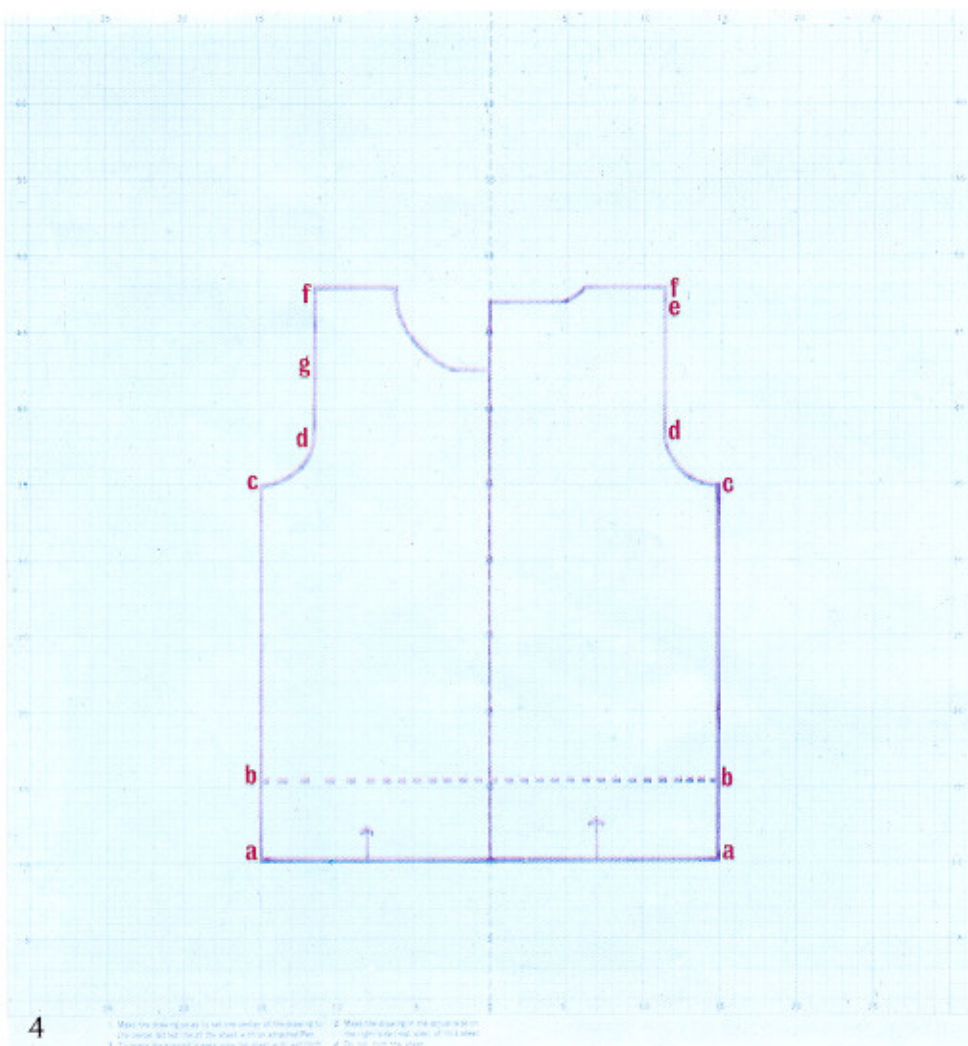
(Note) The tension will differ according to the size of the woolen yarn with which you wish to knit. (Refer to Tension, P. 6) Here it is supposed that 40 stitches equal 12.4cm, and 60 rows 14.4cm.



By referring to the "Stitch Measure Scale Table", you will find that 12.4cm falls under green sheet No.12. Insert the scale in the machine carefully with the numbers 124 at the upper right. (See fig. 2)

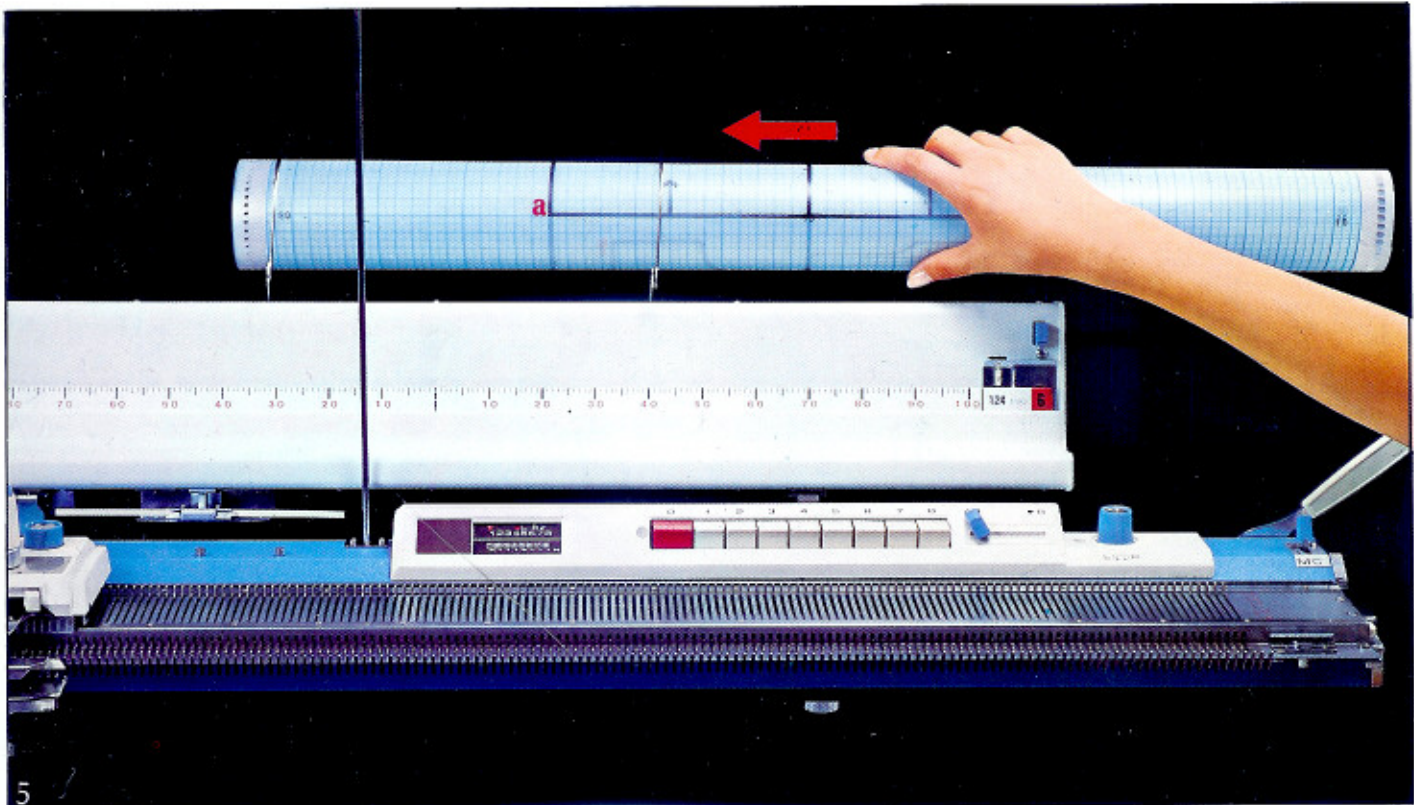


3 Press the clutch of the Knit-Leader with your left hand and position the c/m regulator to 14 and the m/m regulator to 4. (See fig. 3)

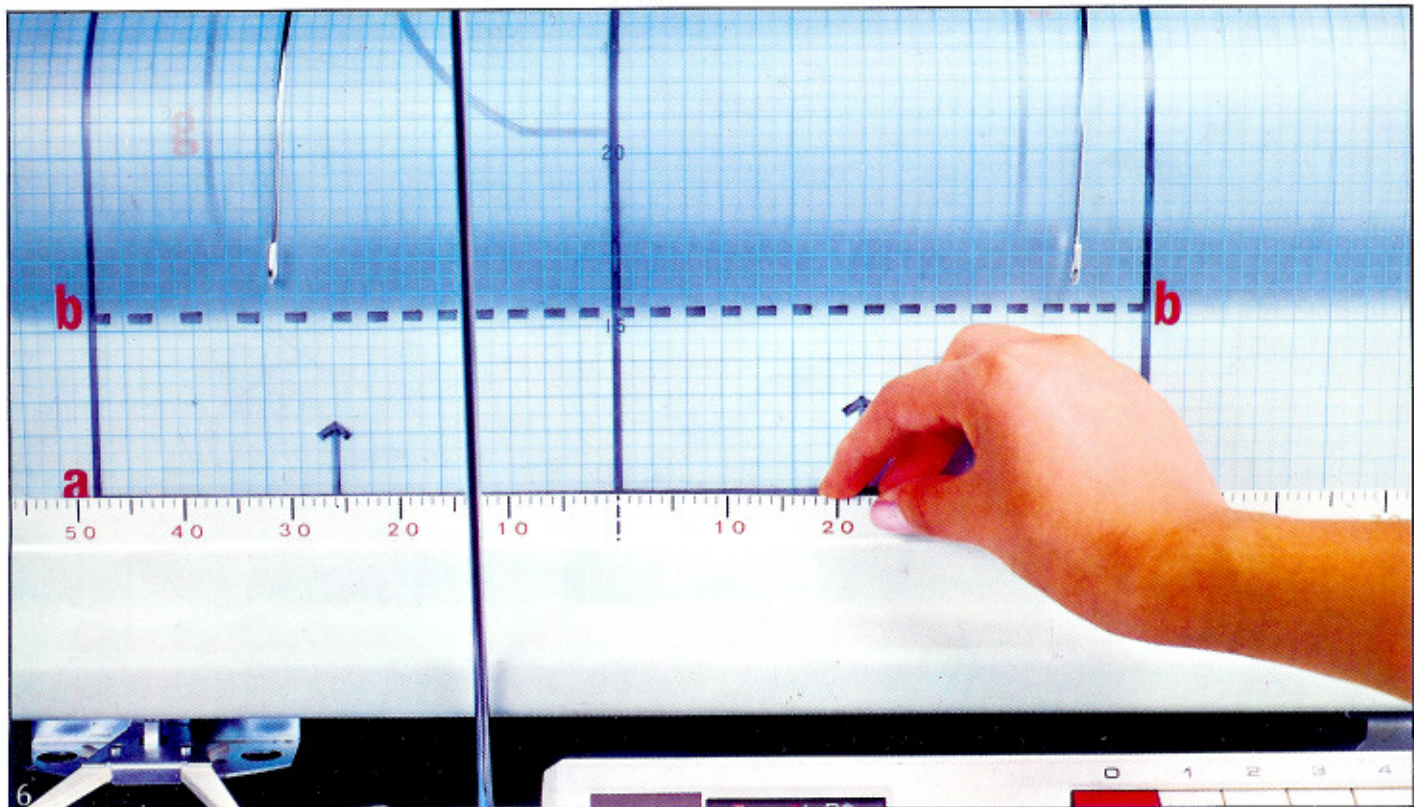


Tracing:

(1) Use the pattern for a child's sweater that comes with this booklet. Take a sheet from the case and place it over the pattern. Trace the pattern with a felt pen the front and back bodices. If the right and left of the pattern are symmetrical, draw only one side of the front and back bodices up to center line of the pattern. (See fig. 4)



(2) After the ink has completely dried, roll it from the top down, and insert it in the sheet guides. (See fig. 5)



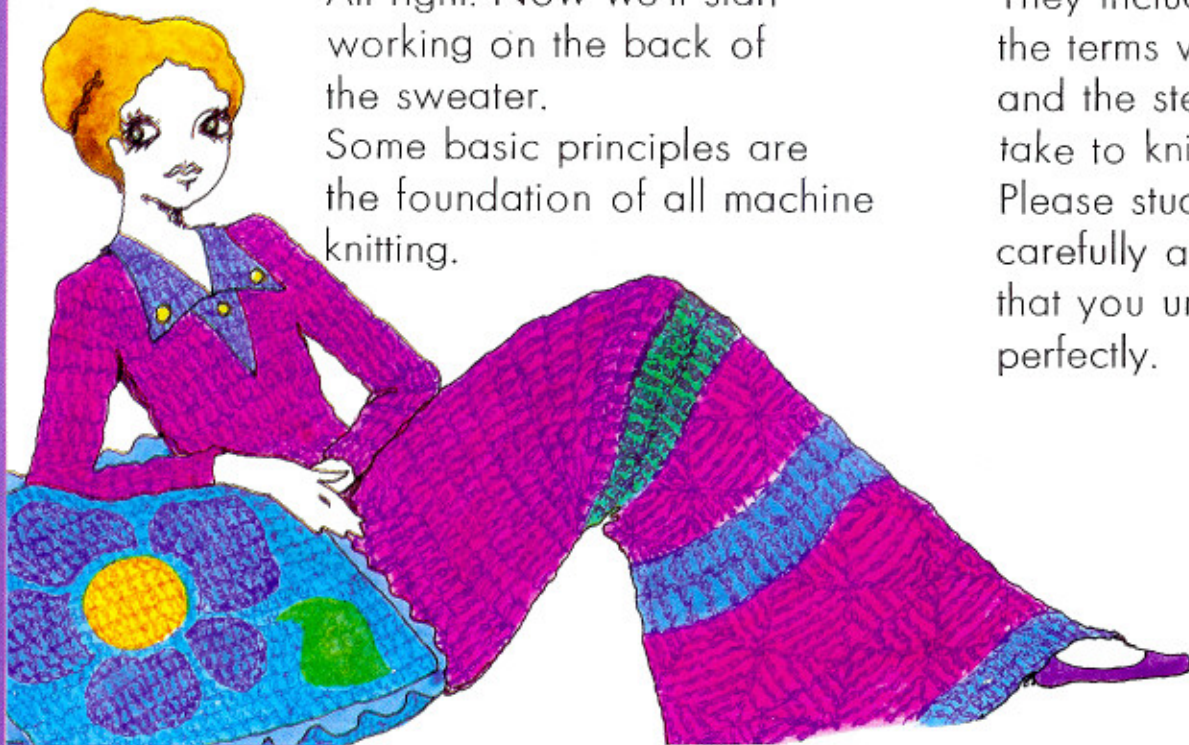
(3) Insert the sheet so that its center coincides with the center of the stitch measure scale. (See fig. 6)

Back

All right. Now we'll start working on the back of the sweater.

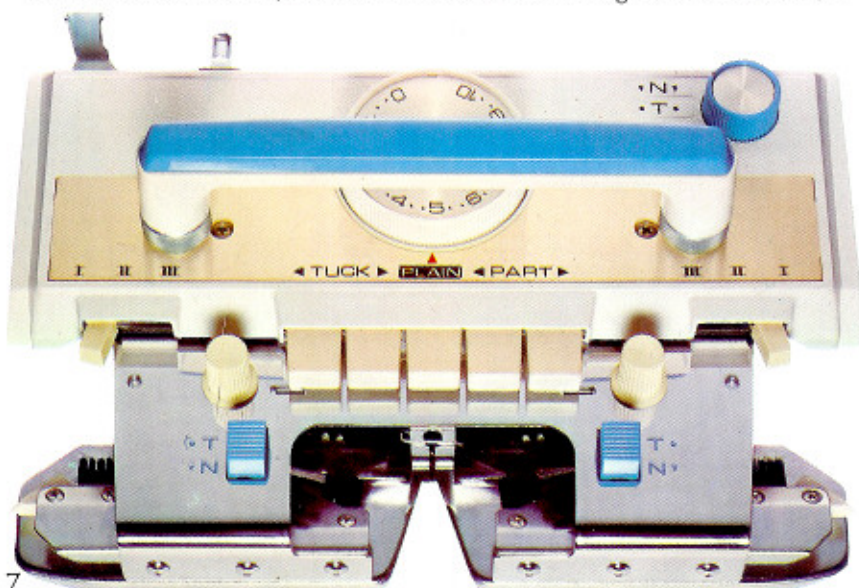
Some basic principles are the foundation of all machine knitting.

They include the terms we have to use and the steps we have to take to knit anything. Please study these points carefully and be sure that you understand them perfectly.



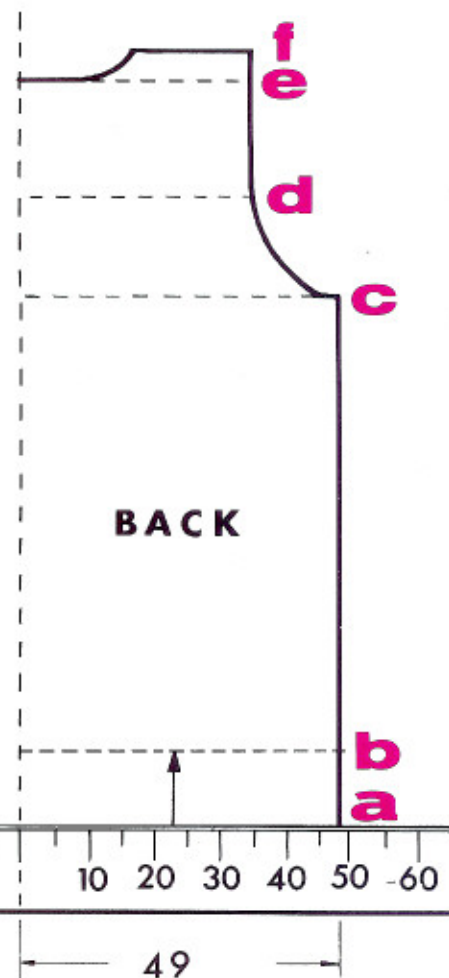
Start knitting the back bodice. The feed lever, however, is set at the rest position.

(1) Pull out 98 needles, 49 to the left and 49 to the right from the center.

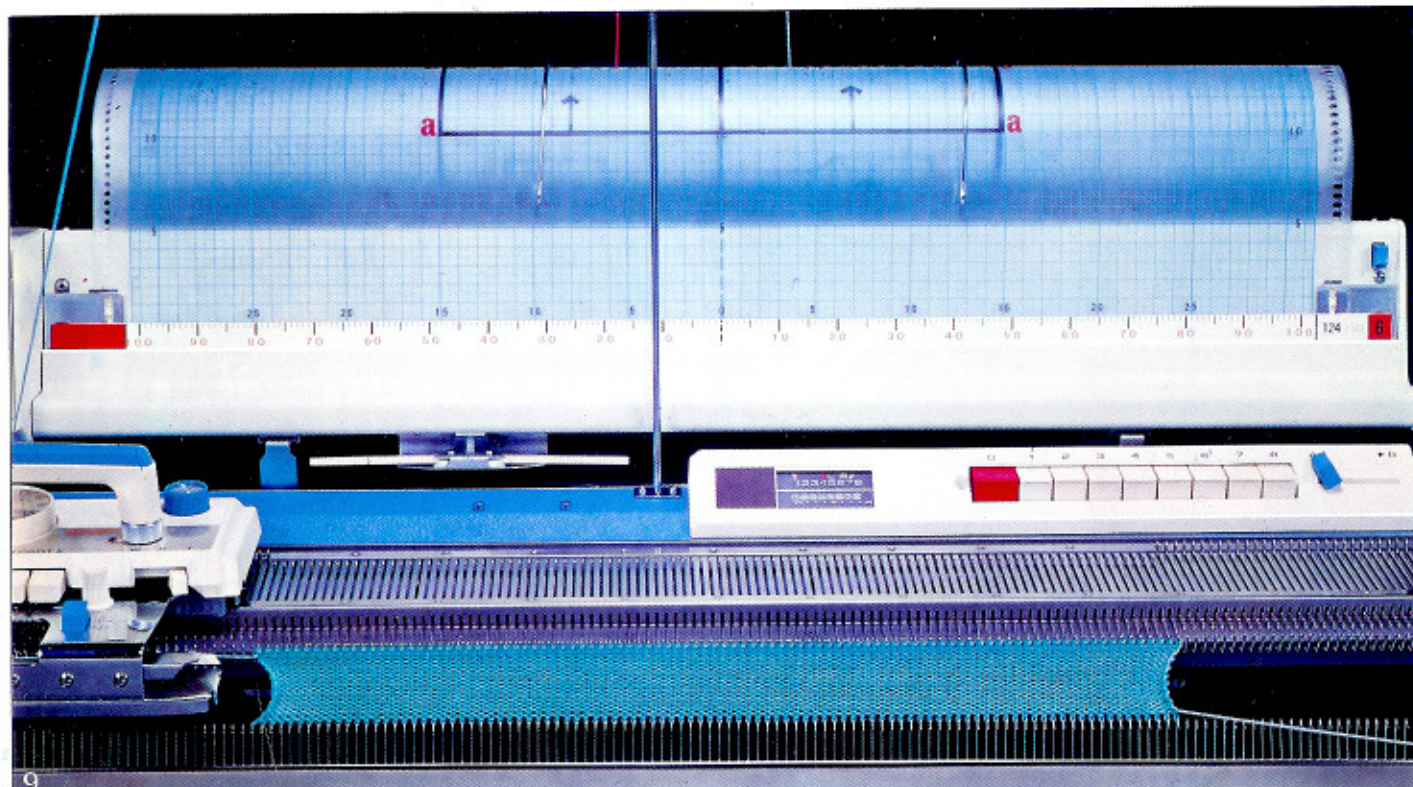


7

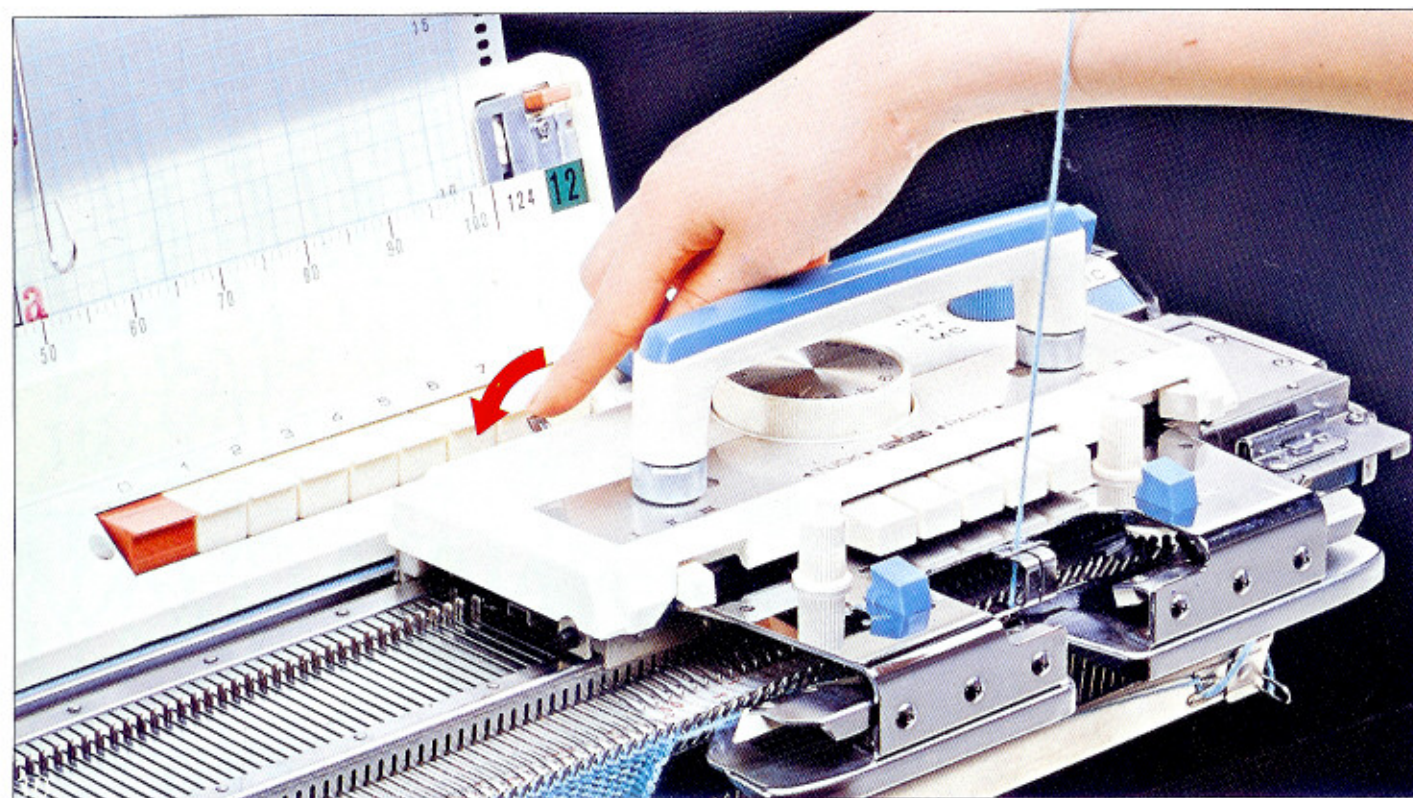
Check to see that the Knit-Leader and the carriage of the Knitting machine are in the same as in fig. 7.



8

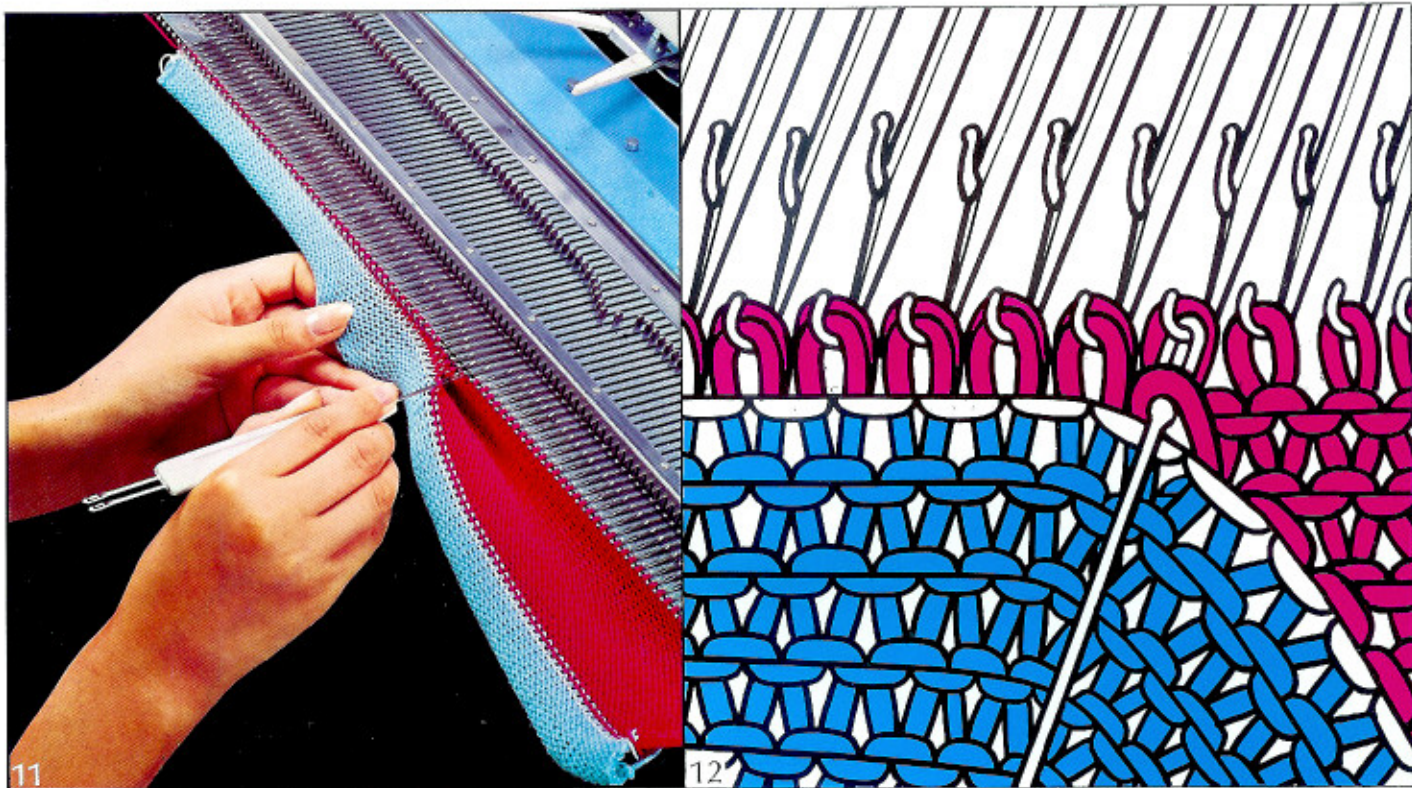


9 **POINT-1 Casting-on** Attach cast-on comb and knit 15 rows with the spare yarn (blue yarn). (See fig. 9)

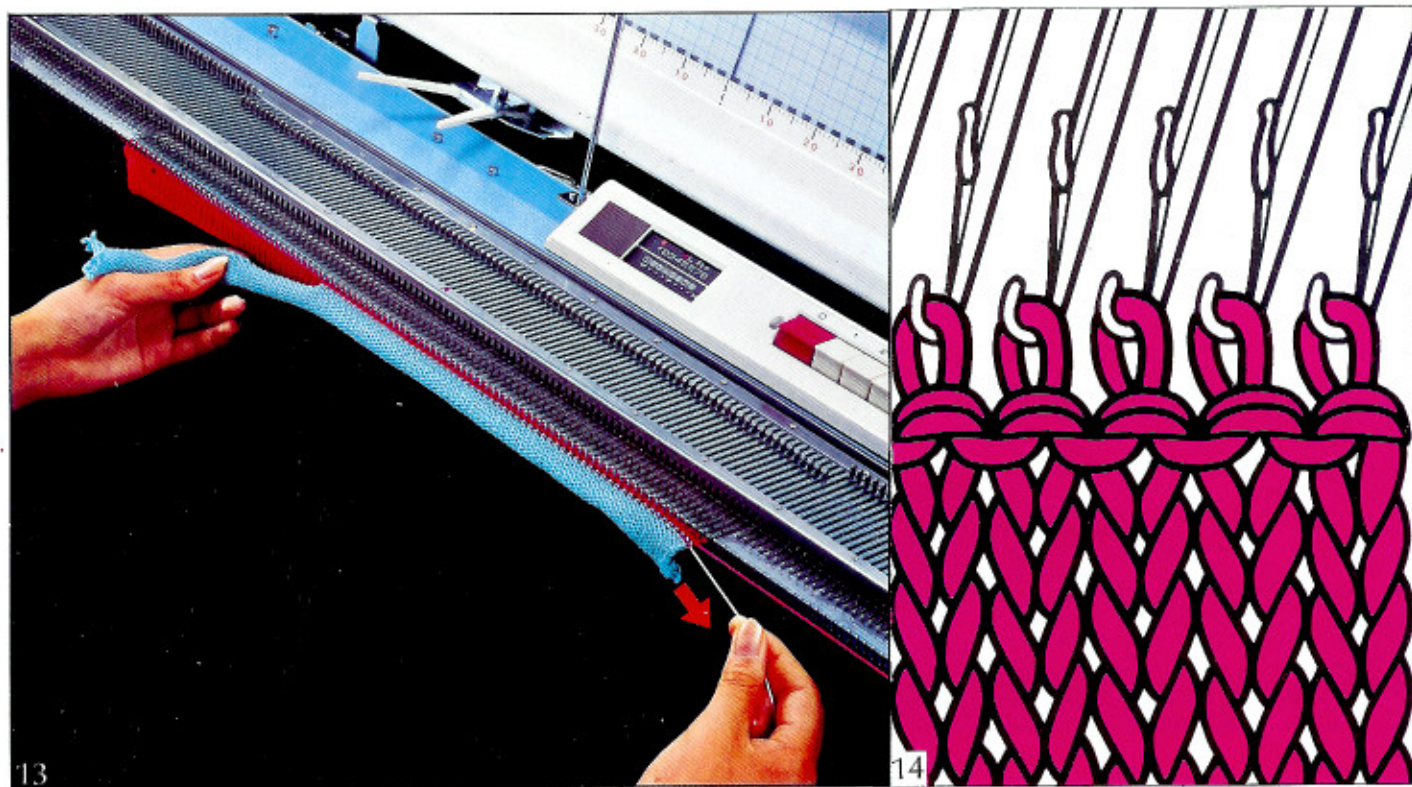


- (2) Knit one row with cast-on thread.
- (3) Set the row counting tripper on the carriage to working position. (Refer to the Knit-Leader instruction booklet for details.) (See fig. 10) Turn the feed dial so that the bottom of the pattern is inserted into the scale as far as point A on the pattern .

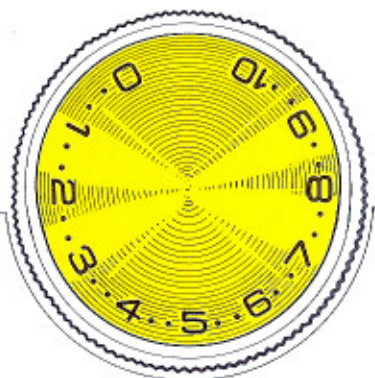
(4) Change the spare yarn to the knitting yarn, and knit with knitting yarn until Line b comes to the end of the scale.



(5) Detach cast-on comb and pick up the stitches on the row next to the row knitted, with transfer tool. Hook two stitches on one needle. (See fig. 11, 12)



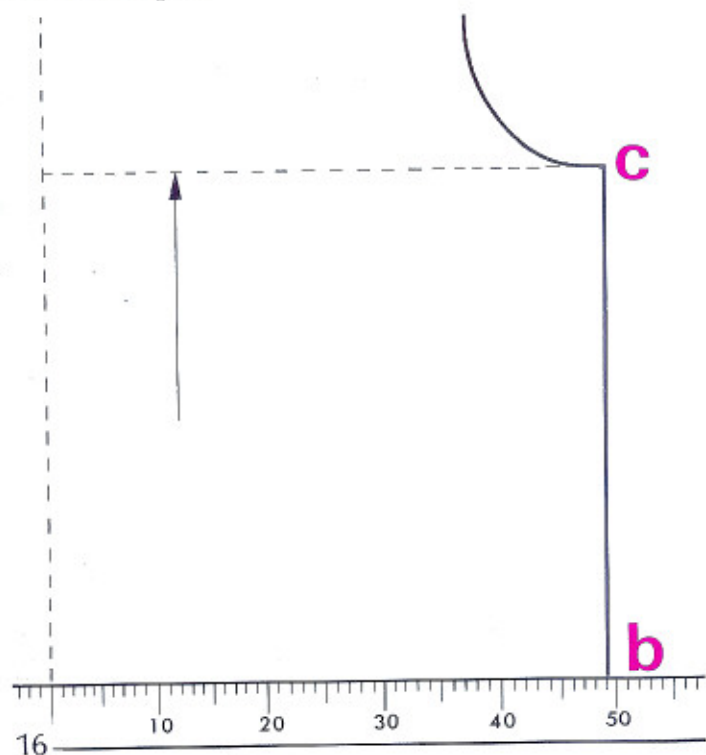
(6) Knit one row with the Tension Dial at 6. Remove cast-on thread. (See fig. 13) The state of the removing is shown in fig. 14.



15

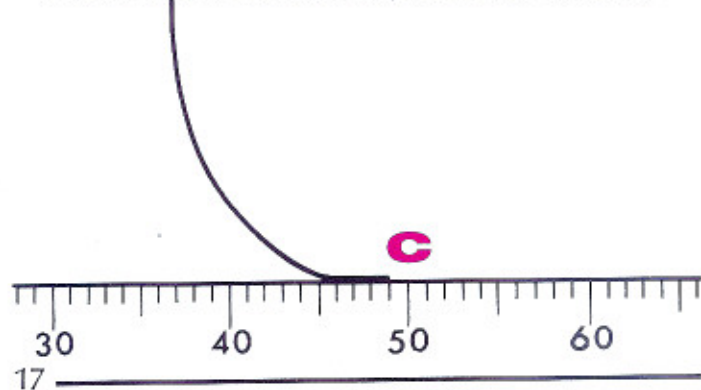
◀ TUCK ▶ **PLAIN** ▶ PART ▶

(7) Place the Tension Dial to 5 (See fig. 15) and knit up to Line c. (See fig. 16)



16

(8) Cast-off 4 stitches. (See fig. 17)
Refer to POINT 2 Casting-off, fig. 18 to 25, P. 14, 15, 16, 17.

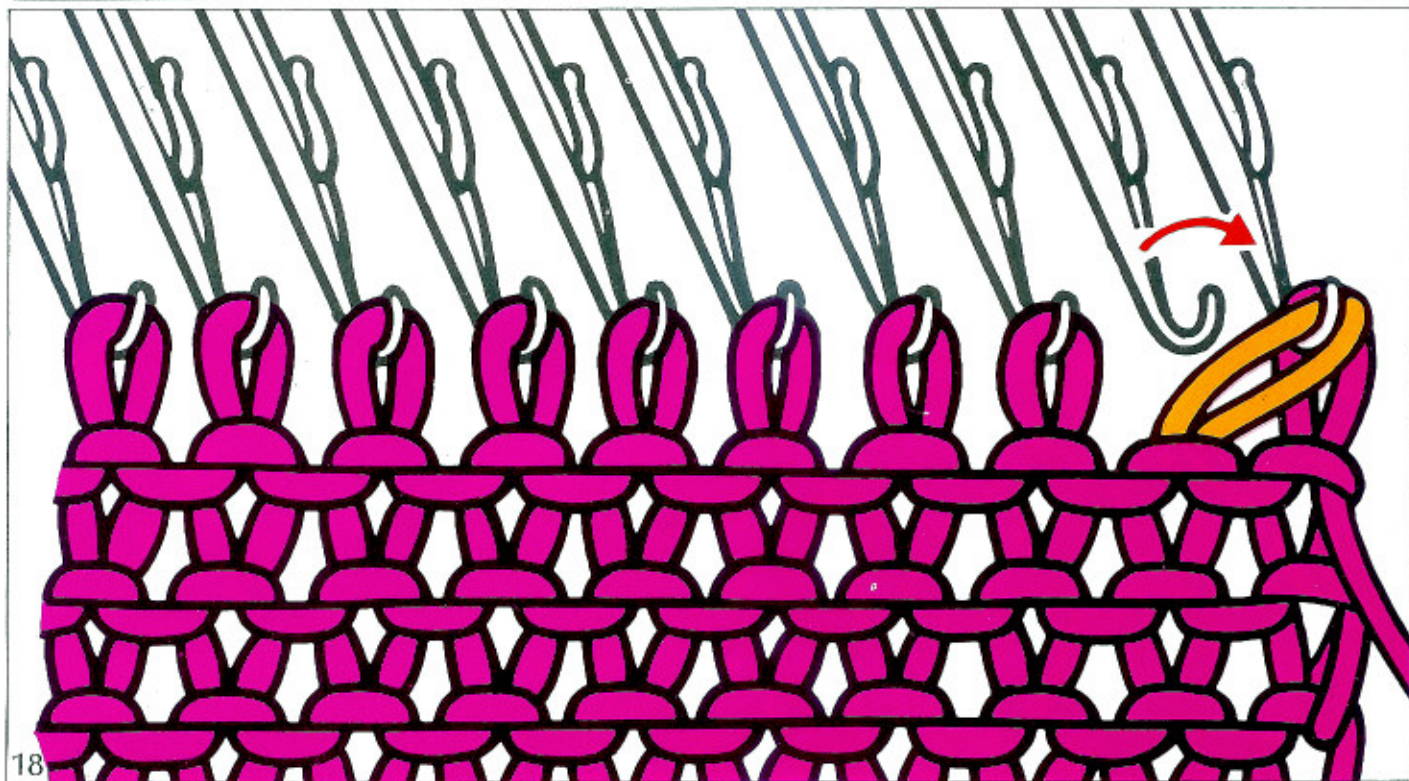


17

(Note) Do not forget to cast off stitches at both sides.

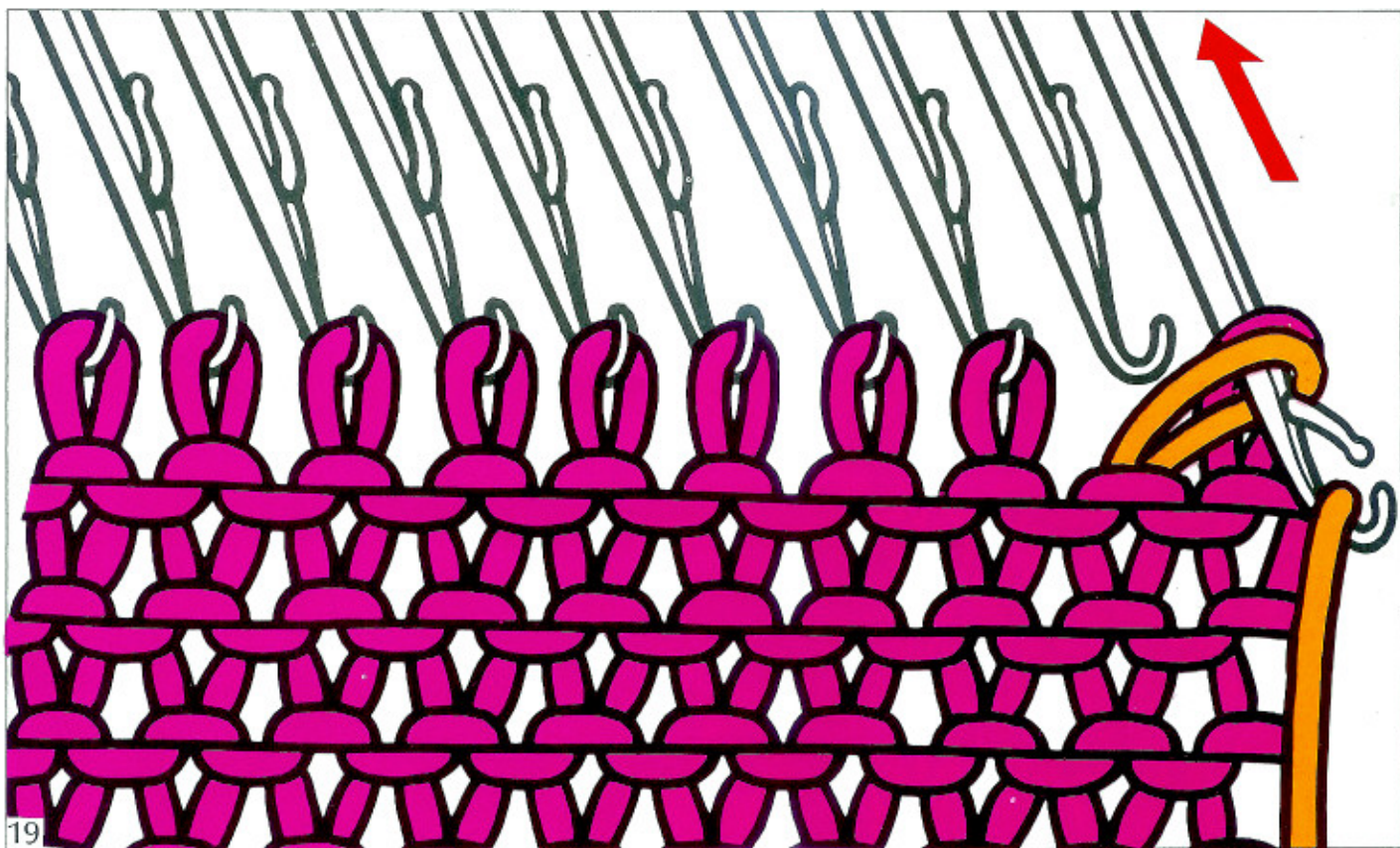


POINT 2 Casting-off There are *different methods* for casting-off stitches depending on whether there is yarn at the end stitch.



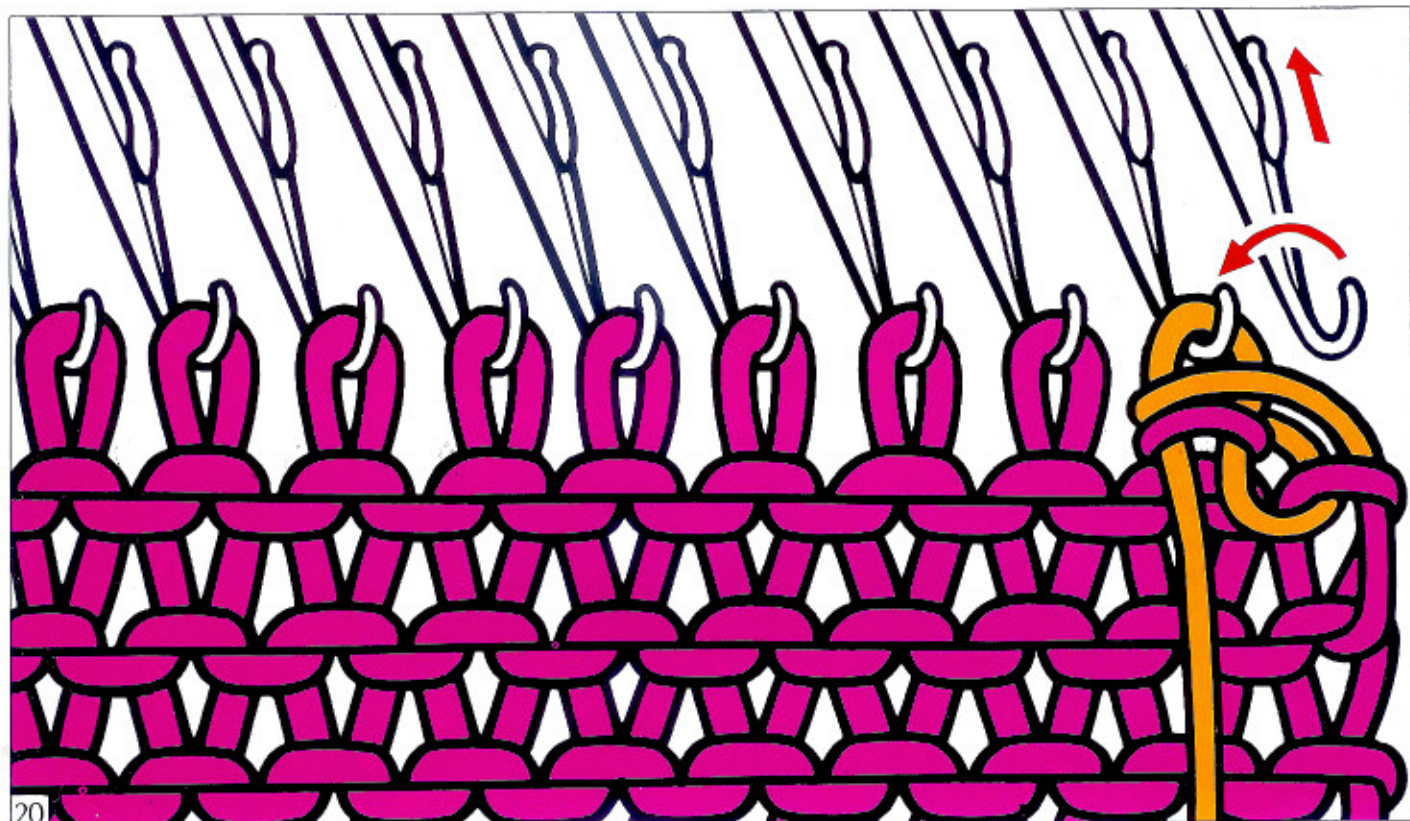
18

(a) When there is yarn at the end, hook the second stitch to the needle at the end. (See fig. 18)

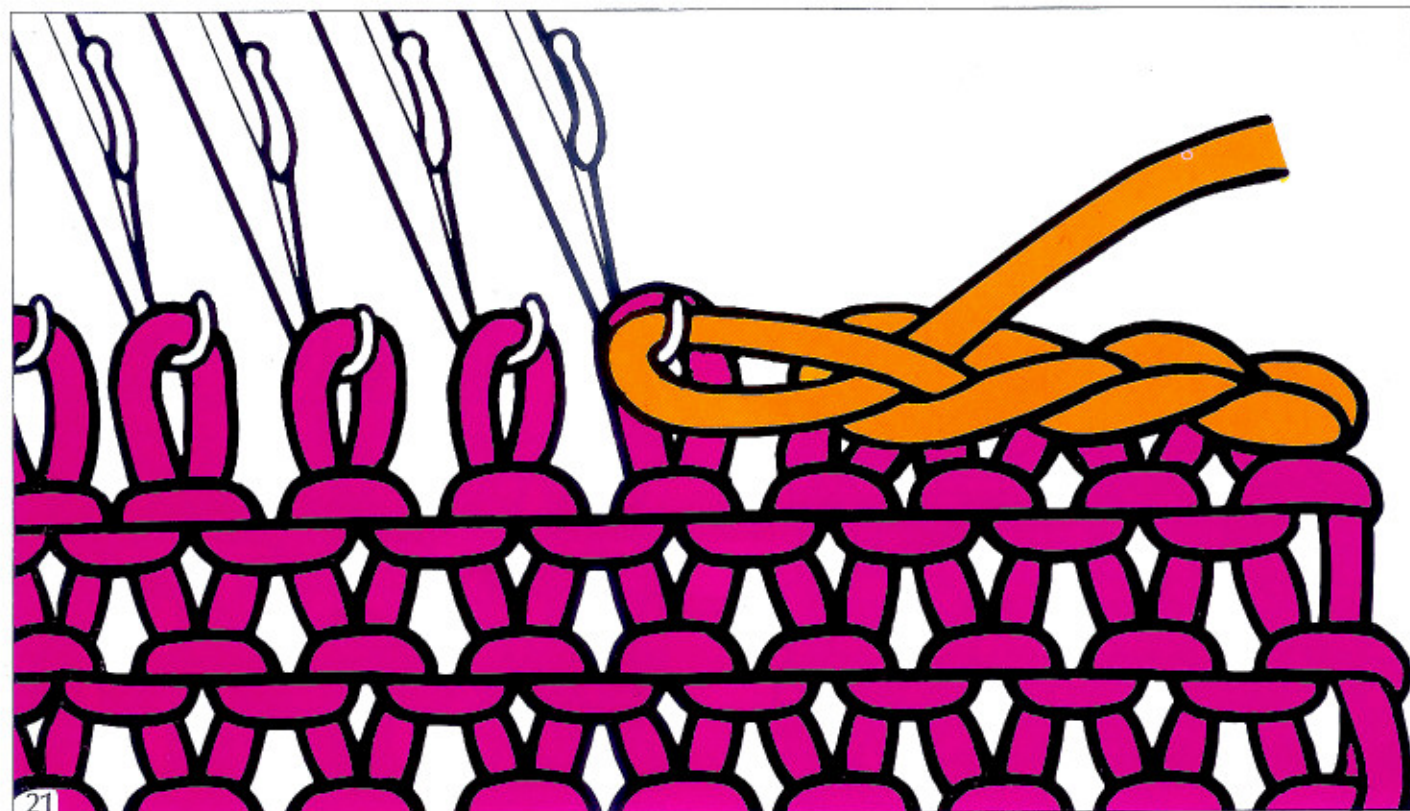


19

Pull out the needle to the E position and hook the yarn. Return the needle to the B position and make one stitch. (See fig. 19)

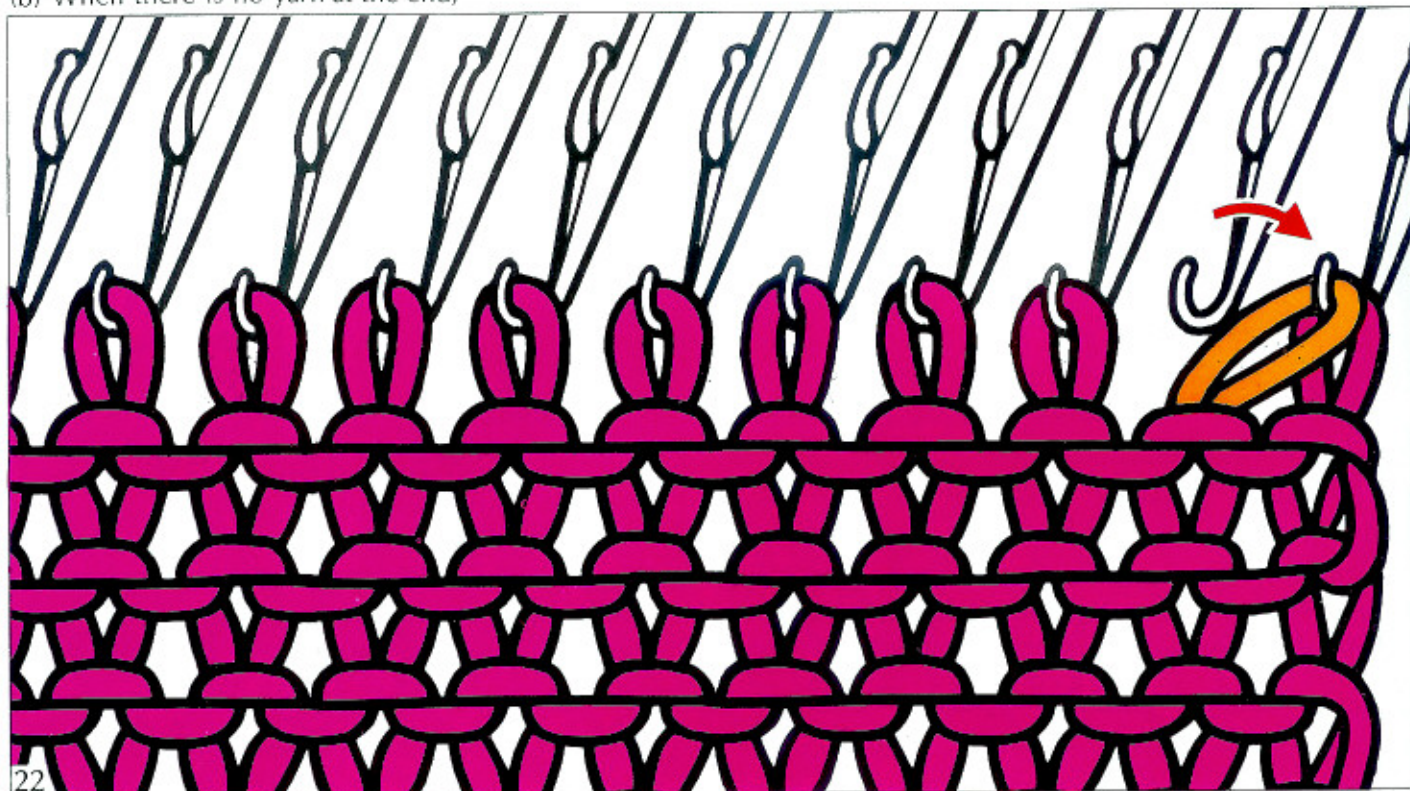


20 Hook the newly made stitch to the empty needle. (See fig. 20)

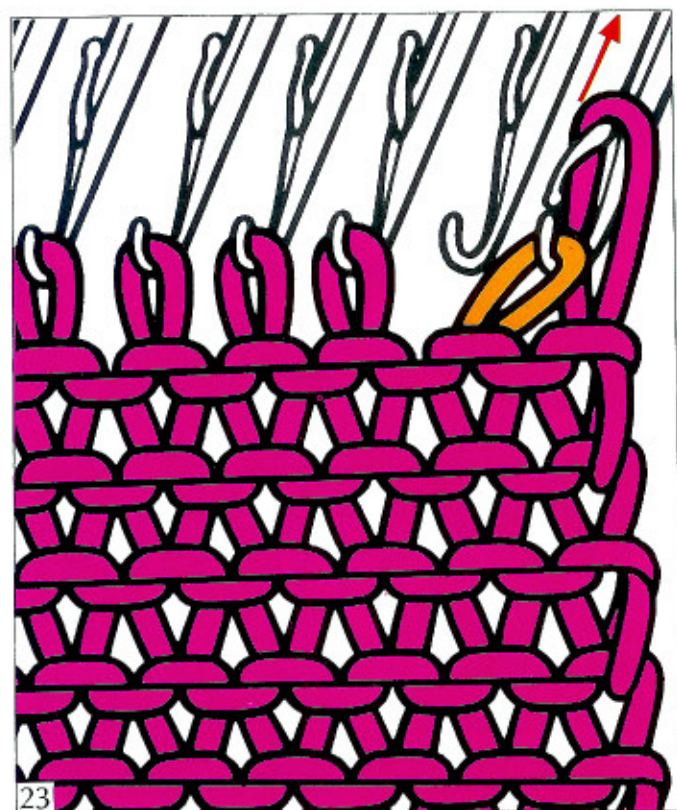


21 Repeat the above procedure until 3 stitches are made. The fourth stitch is hooked over the fifth needle. (See fig. 21)
(NOTE) Be careful not to pull the yarn too tightly.

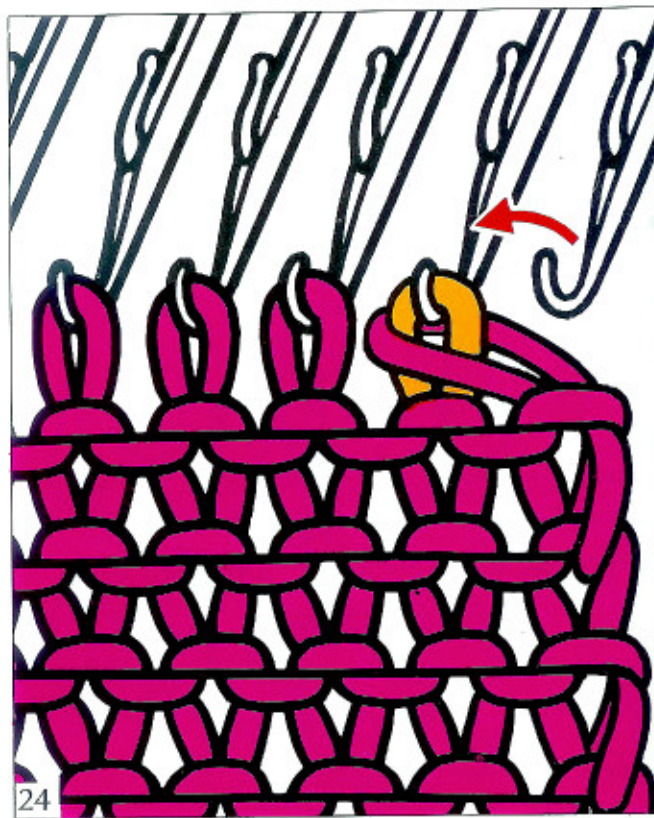
(b) When there is no yarn at the end,



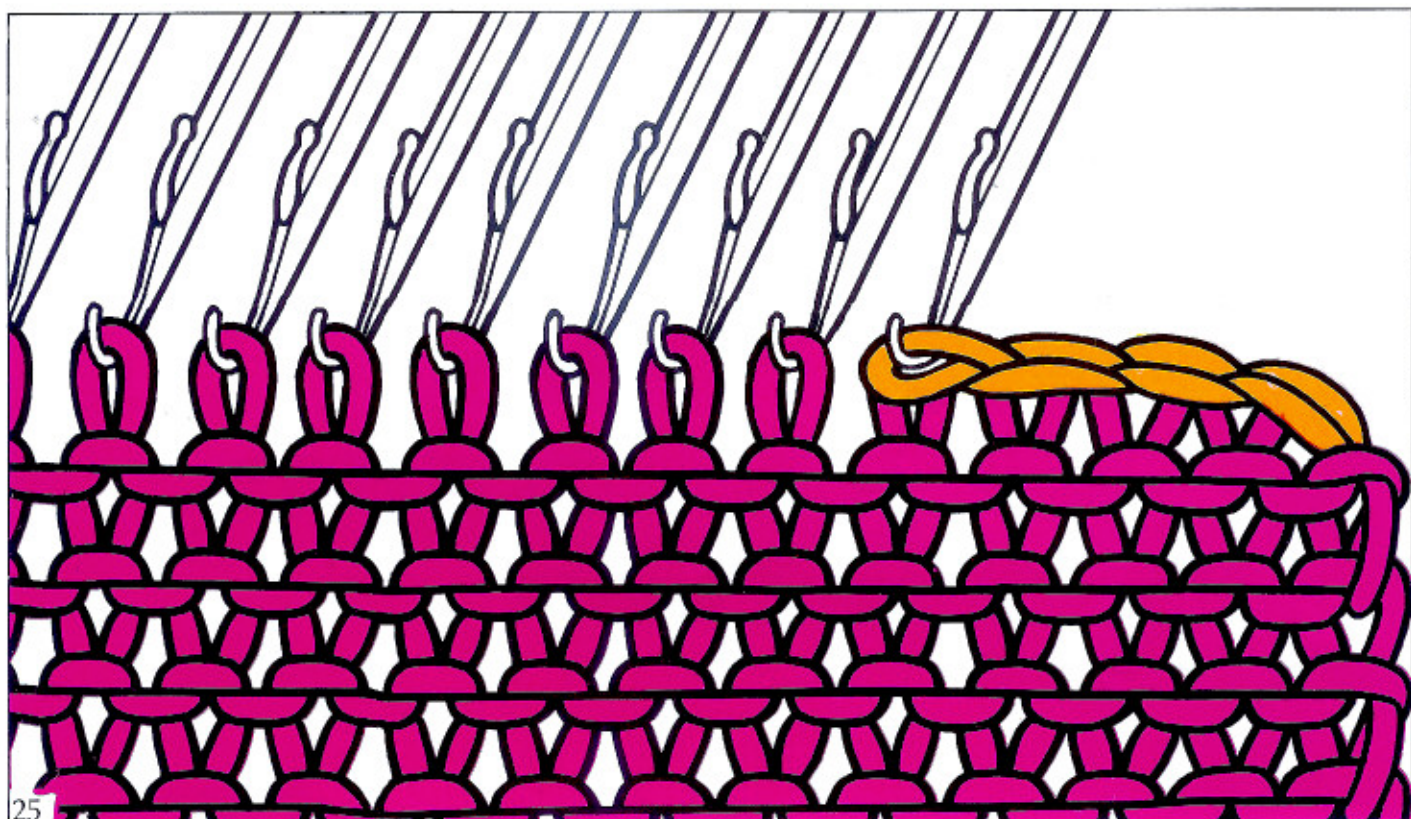
hook the second stitch to the end needle. (See fig. 22)



Pass the end stitch through the needle latch; the second stitch is kept on the hook. Return the needle in the original position (B position) and make one stitch. (See fig. 23)



The newly made stitch is hooked on the empty second needle. (See fig. 24)

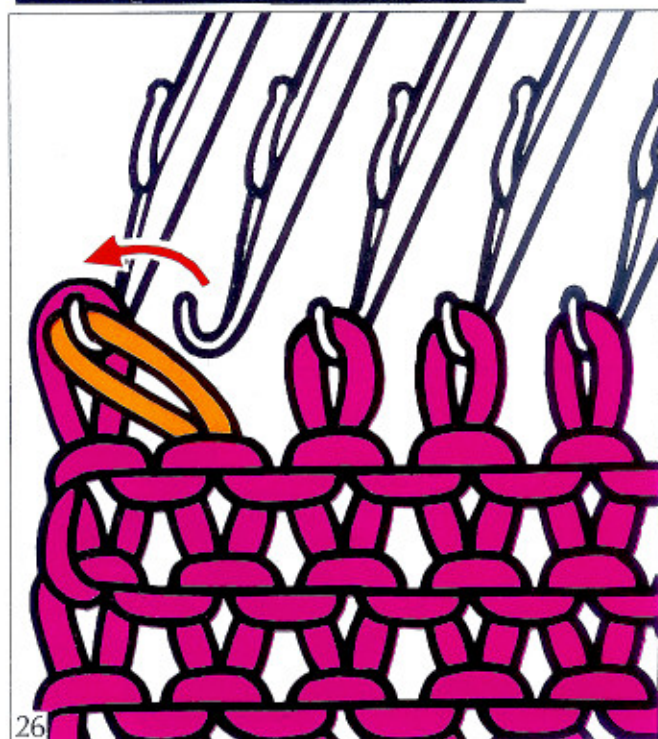


25 Repeat this until 3 stitches are made. Hook the fourth stitch over the following stitch. (See fig. 25)

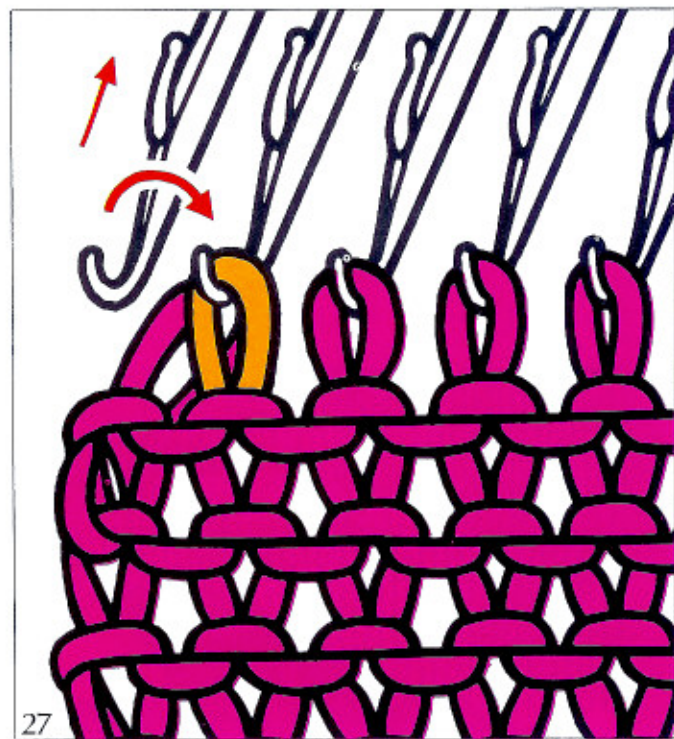
(10) As the cast-off stitches finish, knit up to Line d decreasing stitches according to the pattern.

How to decrease stitches

POINT 3 Decreasing stitch of front and back



26 (a) Hook the second stitch to the end needle with transfer tool. (See fig. 26)

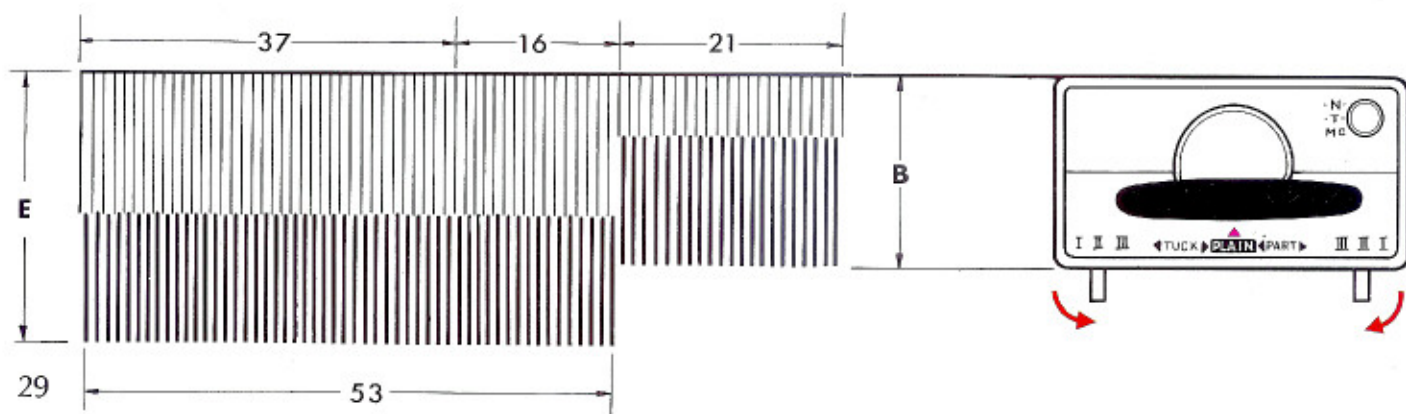


27 (b) Take off the stitches on the end needle and hook them to empty second needle as shown in fig 27.

(NOTE) Always place the empty needle back to A position.

(11) From Line **d** (37 stitches to the right and left of the center) to Line **e**, stitches need not be decreased.

(12) Figure 28 shows stitches on Line **e**.

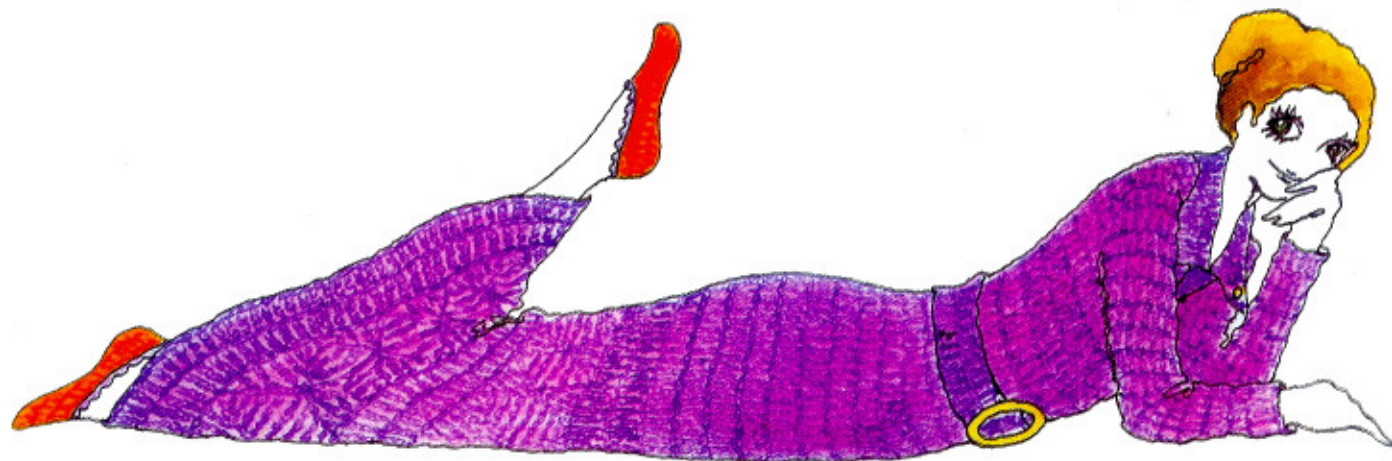


(13) The next step depends upon whether the carriage is placed in the right or left end position.

Suppose carriage is at the right side. . .

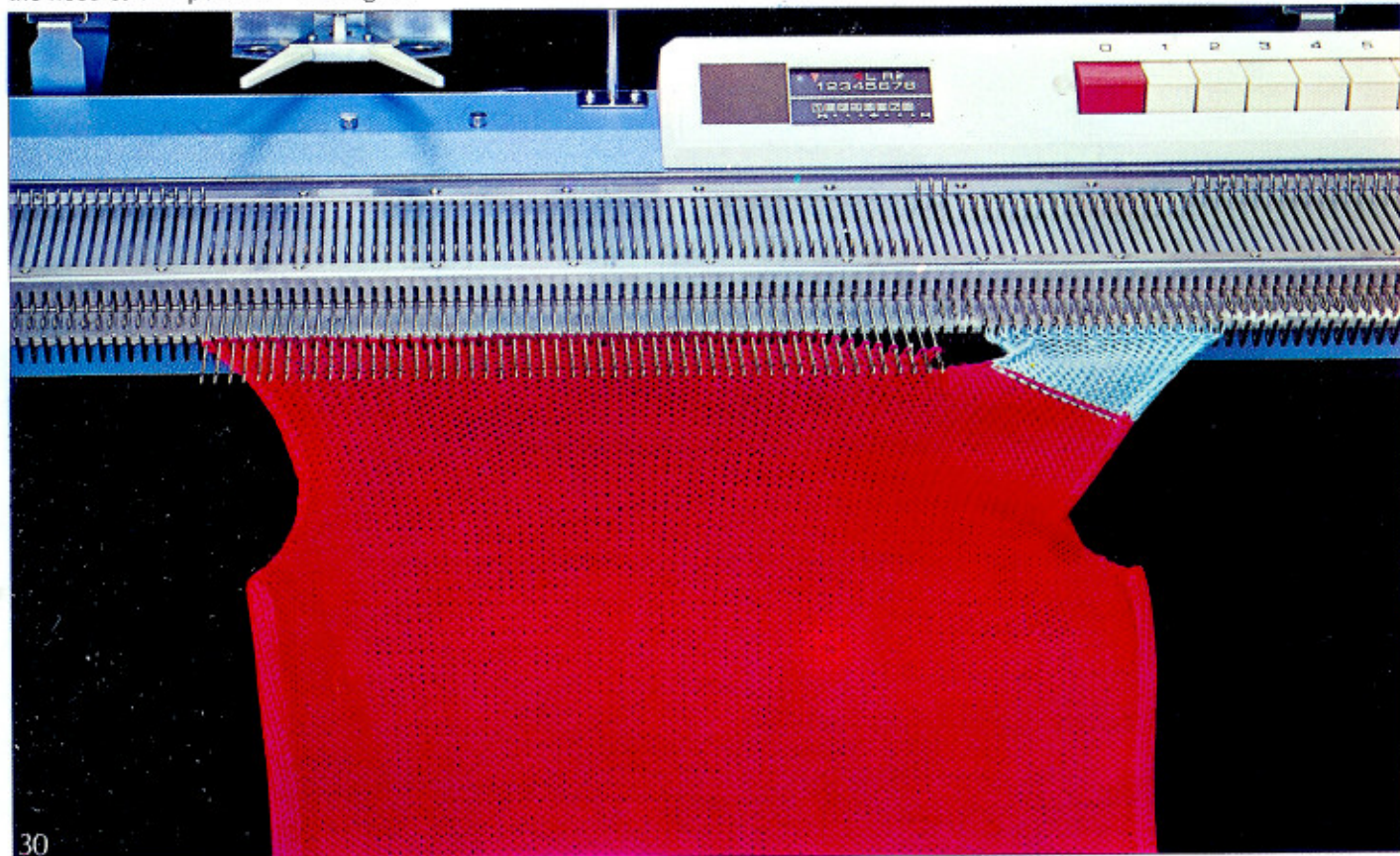
From the left end position, pull out 53 working needles to E position. (See fig. 29)

(14) Set both right and left holding cam levers to II position. (53 needles at E position will not knit.)



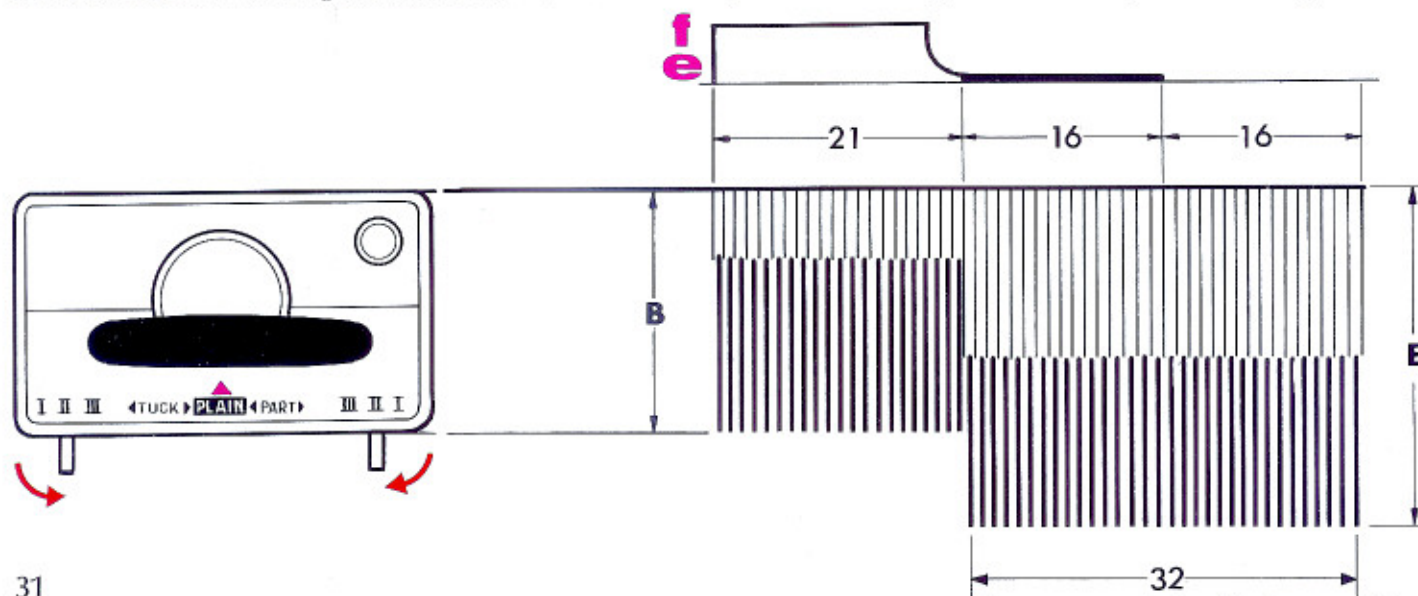
(15) Continue to decrease stitches according to the pattern on the sheet. Refer to (10), P. 17, for the method of decreasing stitches.

(16) Knit up to Line f and cut the yarn leaving about 30 cm. Now feed spare yarn from the yarn feeder and knit 15 rows with 18 stitches. Then, remove this side of the garment from Knitting Machine and place the needles back to A position except for the needles at E position. (See fig. 30)



30

(17) Now knit left shoulder part on needles at E position. Turn the feed dial of Knitting Machine to set it at the Line e. Keep both the holding cam levers at II position. (See fig. 31)

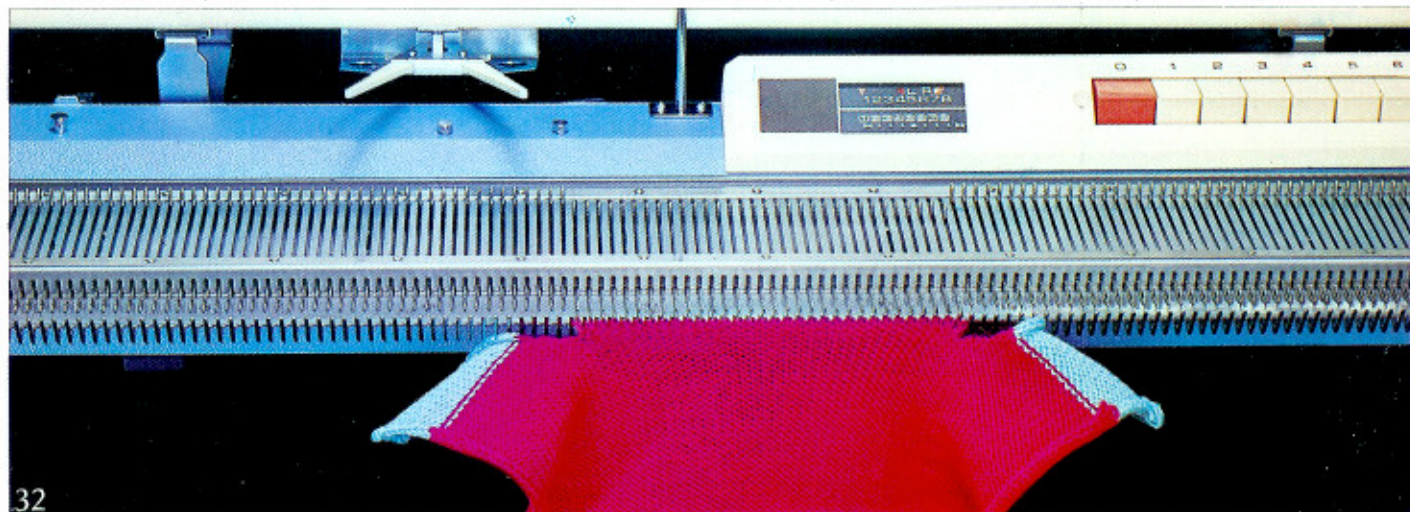


31

(NOTE) When backing the sheet, return the sheet down further 5 rows below Line e and again turn the feed dial reversedly to set it at Line e.

(18) Keep the 12 needles to the right and left of the center at E position. The remaining 21 needles from the left end are pushed back to D position.

32 stitches at E position will not be knitted. Knit, decreasing stitches, up to the Line f and cut the yarn leaving about 30 cm.

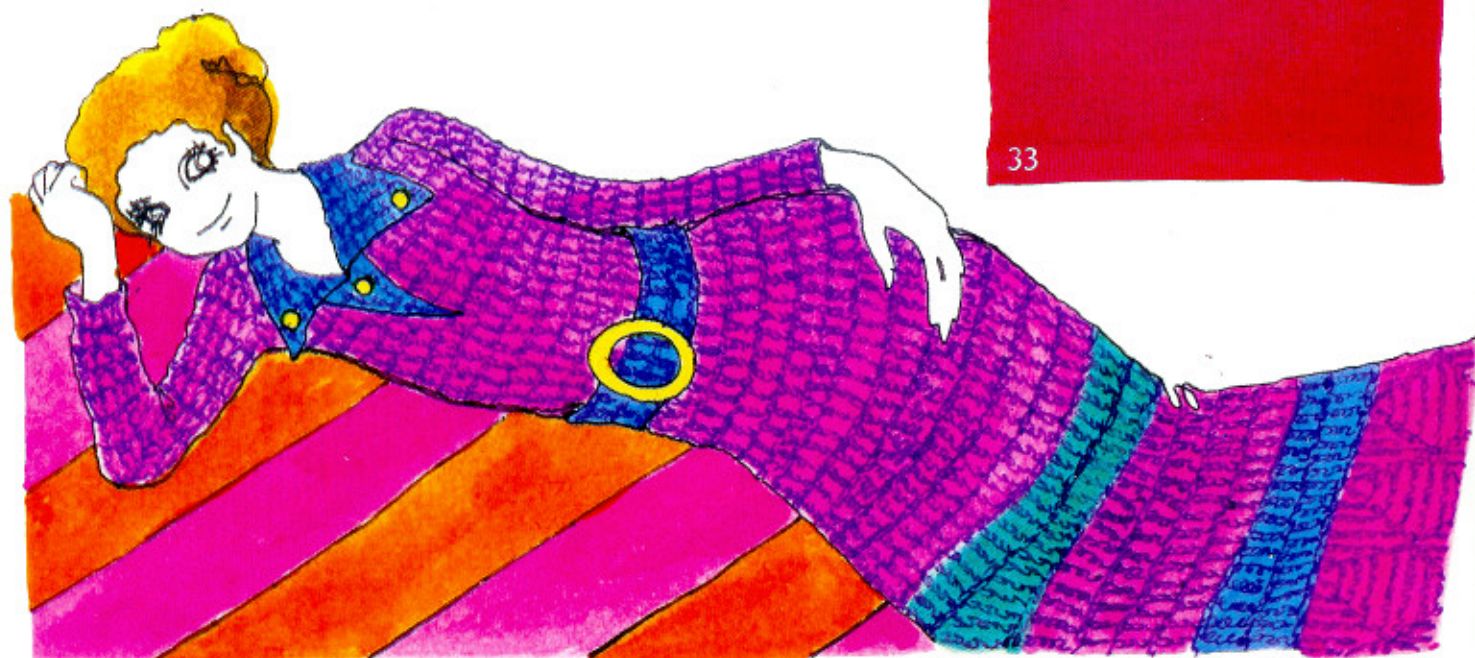


(19) Change to the spare yarn and knit 15 rows. Remove the garment from Knitting Machine. (See fig. 32. Refer to (3), P. 5)

(20) Set both the holding cam levers to I position and knit 32 stitches at e position with spare yarn. After working 15 rows, remove the thread and move the carriage until the garment is released. (See fig. 33)

(21) When the carriage is at left side (refer to step 13, P.18), repeat the same procedures as explained in step 13 to 20. Back bodice is completed.

Getting a little tired?
Really, you're doing fine.
We're about half finished already.
Let's take a little rest
before we start again.



Front

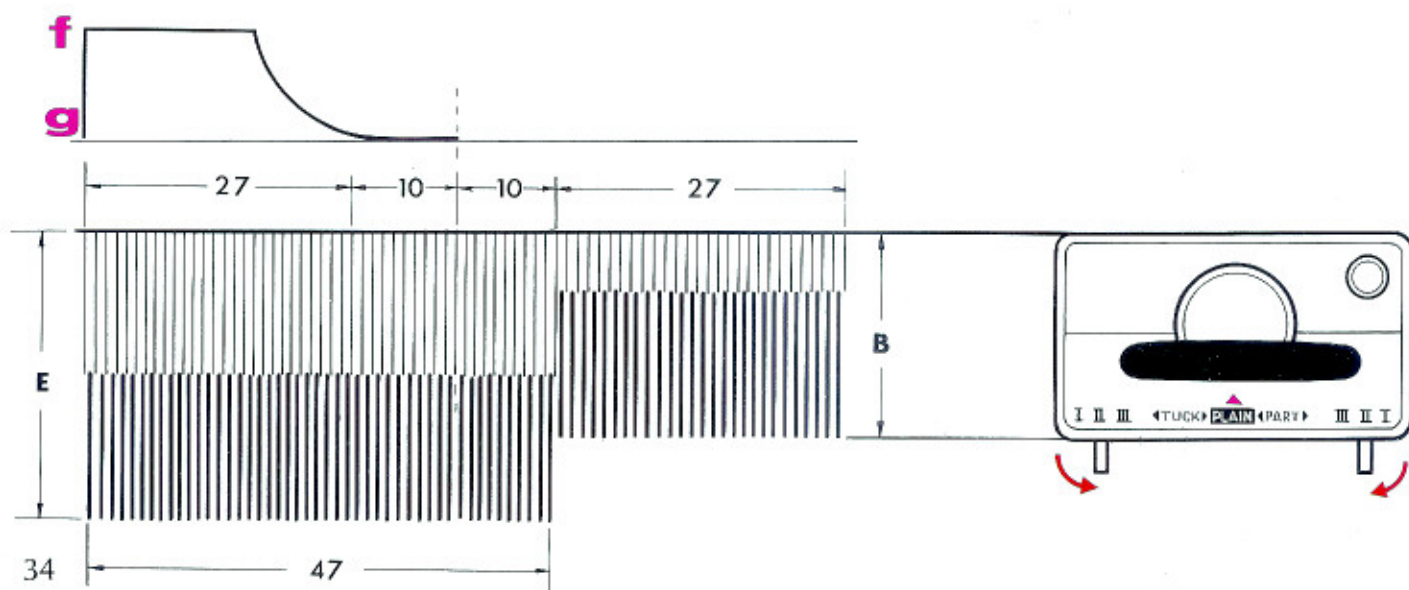


Next is the front of the sweater. Actually, this is just a review of what we have already done. We knit the front in the same as we knitted the back.

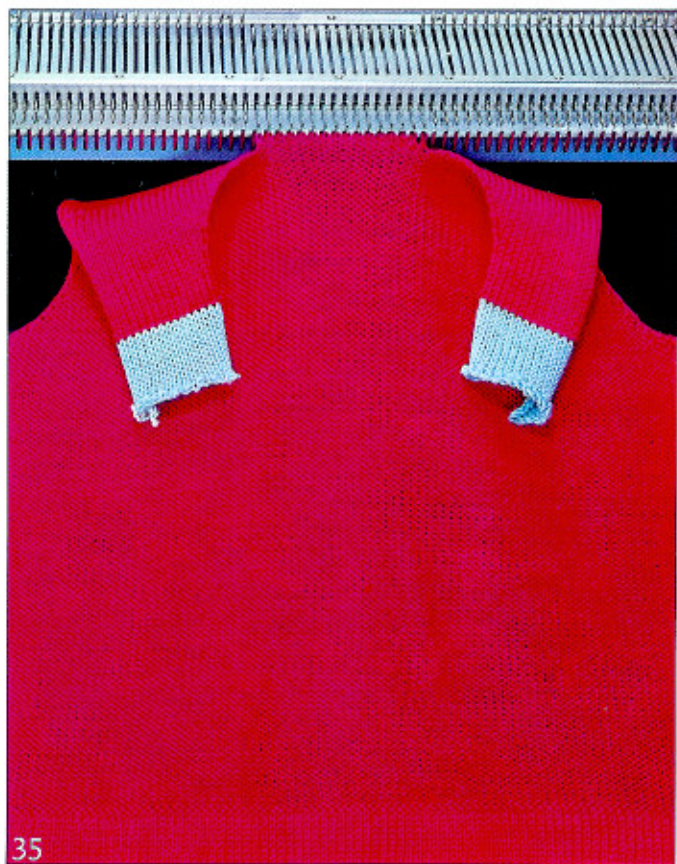
- (1) Tension: 5
Holding cam levers: Position I (both sides)
Plain knitting
Knit up from Line **a** to the Line **g** as was done for the back.

Procedure:

- *98 stitches (49 to the right and 49 to the left)
- *Waste knitting: 15 rows
- *Cast-on thread: 1 row
- *Position the sheet on the starting line (Line **a**).
Change cast-on thread to the knitting yarn and knit up to Line **b**. Hang the first row on the needles as described in fig. 11 & 12 , P12.
- *Knit up to Line **c** without decreasing.
- *Cast off 4 stitches at Line **c** and knit up to line **d** by decreasing.



- (2) At Line g, place 47 needles counting from the left end (10 to the right and 37 to the left of the center) to E position. Set both the holding cam levers to II. (See fig. 34)
- (3) Knit and decrease stitches from Line g to Line f. (Refer to POINT 3, P. 17). At Line f there will be 18 stitches remaining.
- (4) Cut the yarn leaving about 30 cm. Feed spare yarn and knit 15 rows and remove it from Knitting Machine.
- (5) To knit the left side, first unroll the sheet back to Line g. (Refer to Note of step 17, P. 19). Push back 27 needles from left side to D position. 10 needles each to the left and to the right from the center are kept at E position.



35

- (6) Keep both the holding cam levers at II and knit by decreasing up to line f. Cut the yarn leaving about 30 cm. Feed spare yarn and knit 15 rows and remove it from Knitting Machine. (See fig. 35)

- (7) 20 stitches on the needles at E position are knitted with spare yarn with holding cam levers at I position. Remove the garment from Knitting Machine.

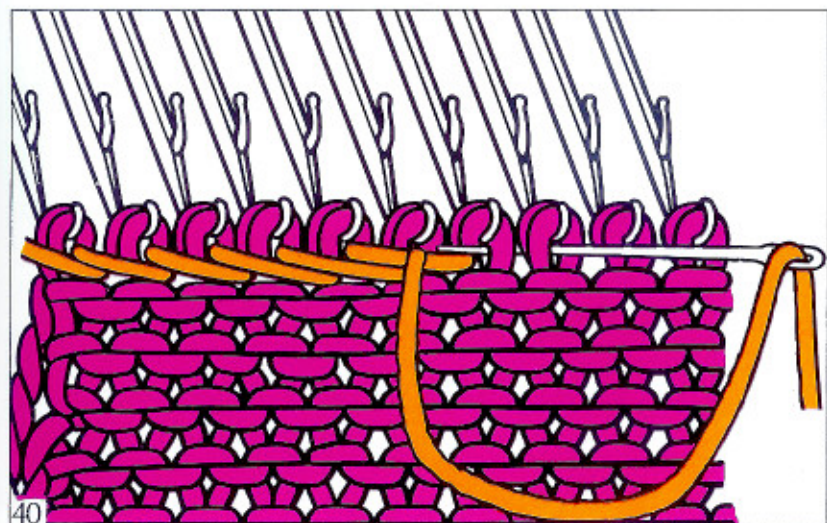
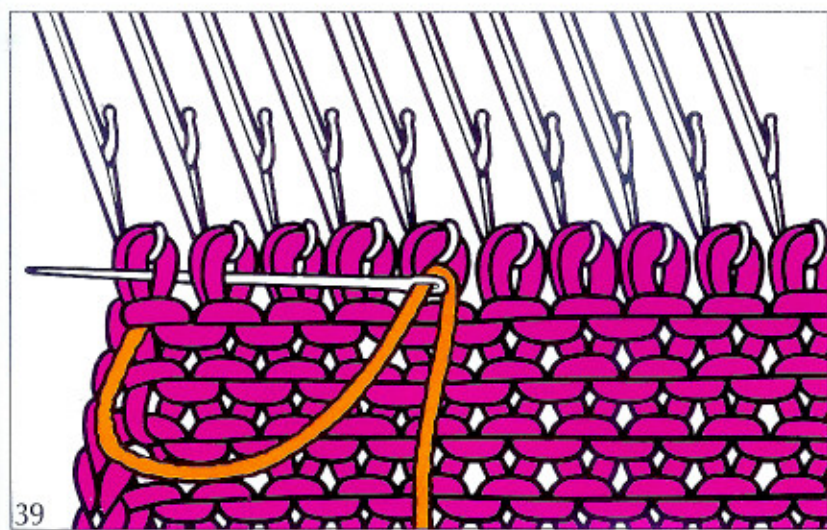
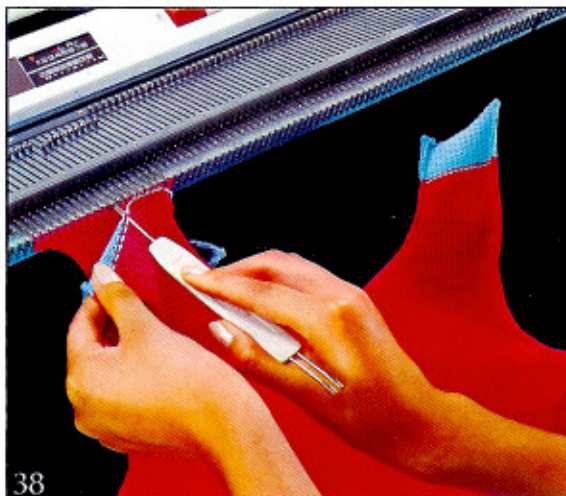
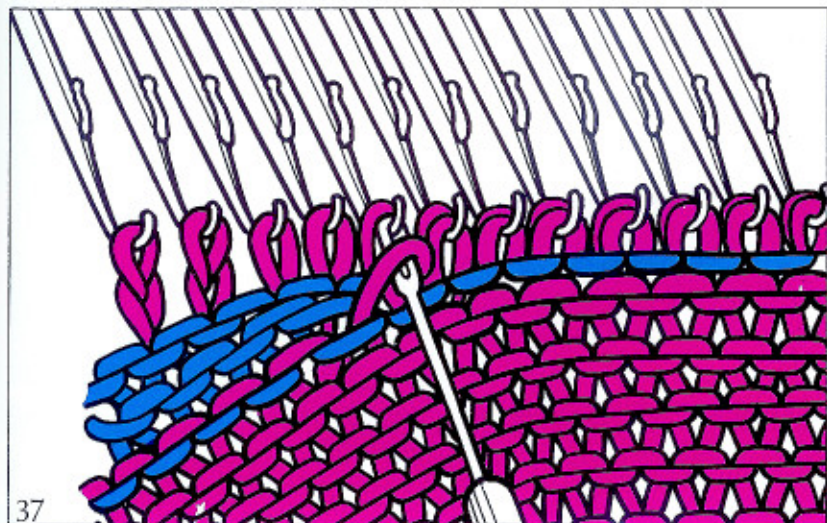


36

This completes the front bodice. (See fig. 36)

How to seam shoulders

Now that the back and front are completed, they must be stitched together before going on to the neck. Shoulders are stitched together according to the procedure shown below.



(1) Place 18 needles at B position. Hook 18 stitches of back shoulder seam with *plain stitches facing yourself*. Unravel the spare knitting portion. Hook 18 stitches of front shoulder seam with *purl stitches facing yourself*. Unravel the spare knitting portion. Now, 2 stitches are hooked on each needle. (See fig. 37, 38)

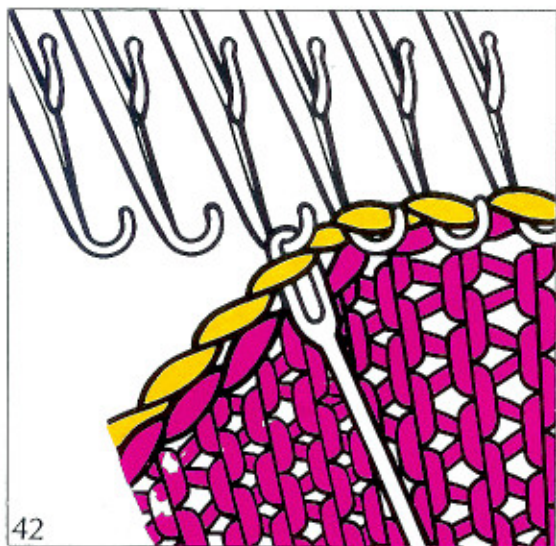
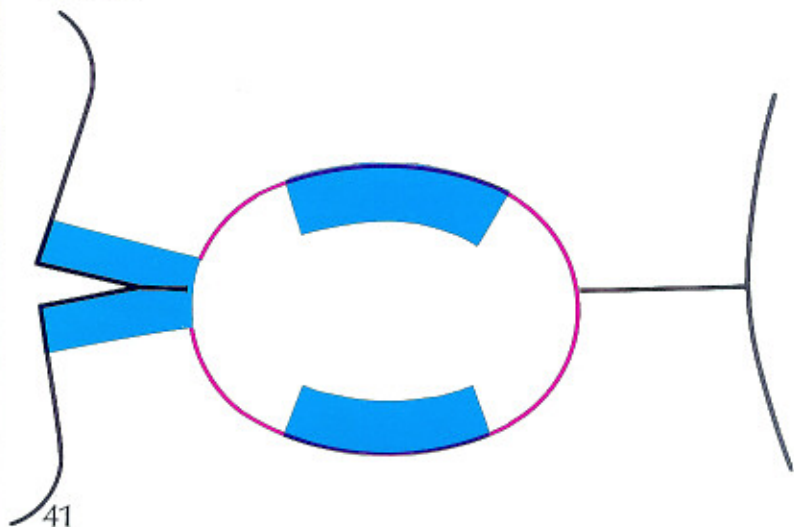
At this step, the other shoulder should not be seamed.

(2) Pass the knitting yarn on the left side through tapestry needle hole. Pass the tapestry needle through the 2 stitches on the second needle and on the first needle. (See fig. 39)

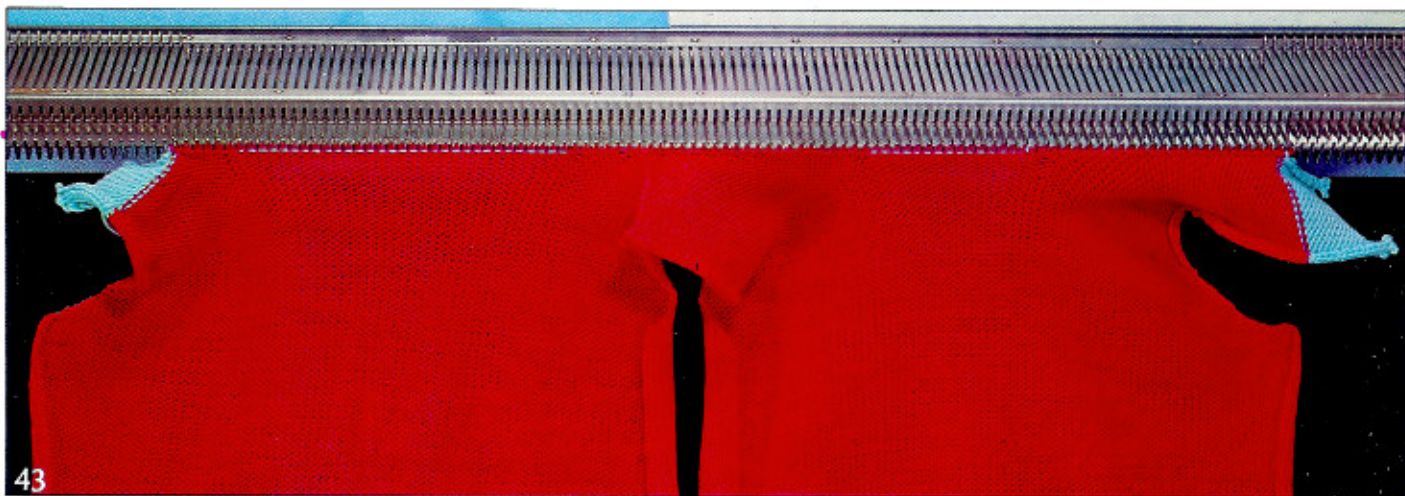
(3) Do the same with the stitches on the third and the second needle. Repeat this for stitches on all 18 needles. (See fig. 40) When seamed, remove the garment from Knitting Machine.

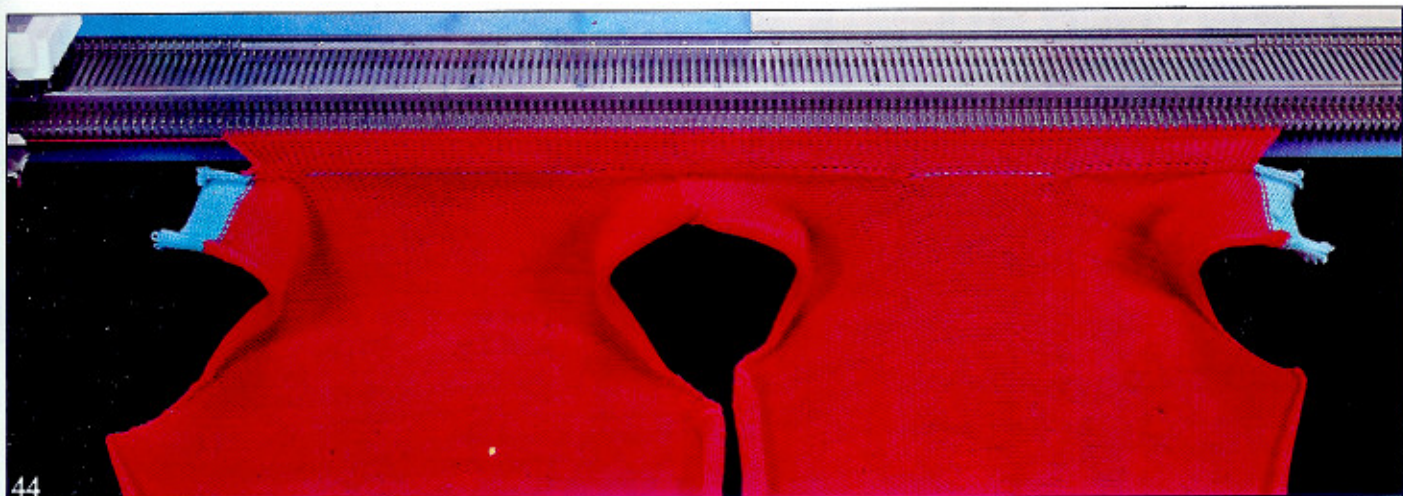
The other shoulder is seamed in the same way, after the neck has been completed.

Neck



- (1) Line described in red in Fig 41 is hooked on needles. Hook all stitches (about 106 stitches) with the *purl stitches facing yourself*. When the stitch loops are too numerous or a stitch loop is too small and the needle cannot go into it, skip them and insert the needle to the next stitch loop.
- (2) To hook the stitches on the needles, start from the right end using a transfer tool. (See fig. 42)
- (3) After picking up stitches, position the working needles to B position. (See fig. 43)
- (4) Set the Tension Dial at 4, holding cam levers at 1. (NOTE) Generally, when ribbing, the Tension Dial is set at lower number than that of other knitting.





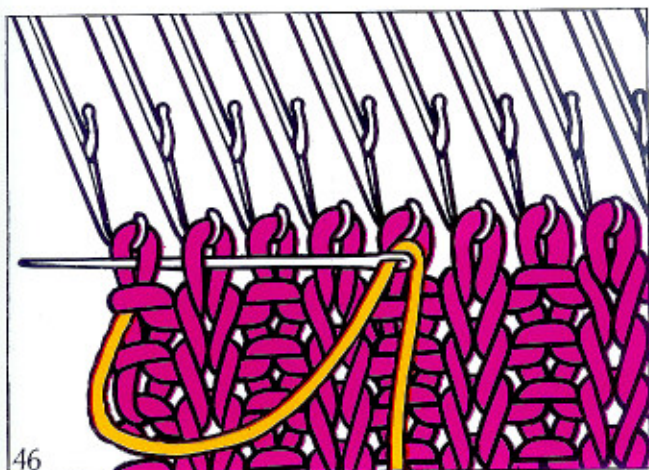
44

POINT 5 Ribbing

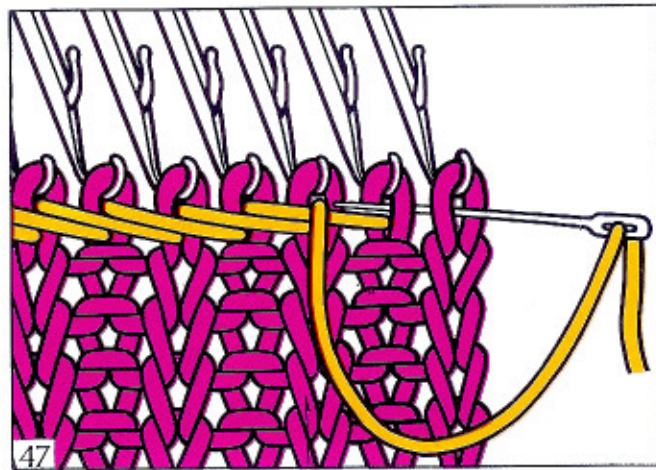


45

(5) Knit 10 rows from the left side. Cut the yarn about 1 m length to use for closing. (See fig. 44)
 Change the every other purl stitch to ribbing stitch between the second on the right and the third on the left of the second row. (1×1 rib.)



46



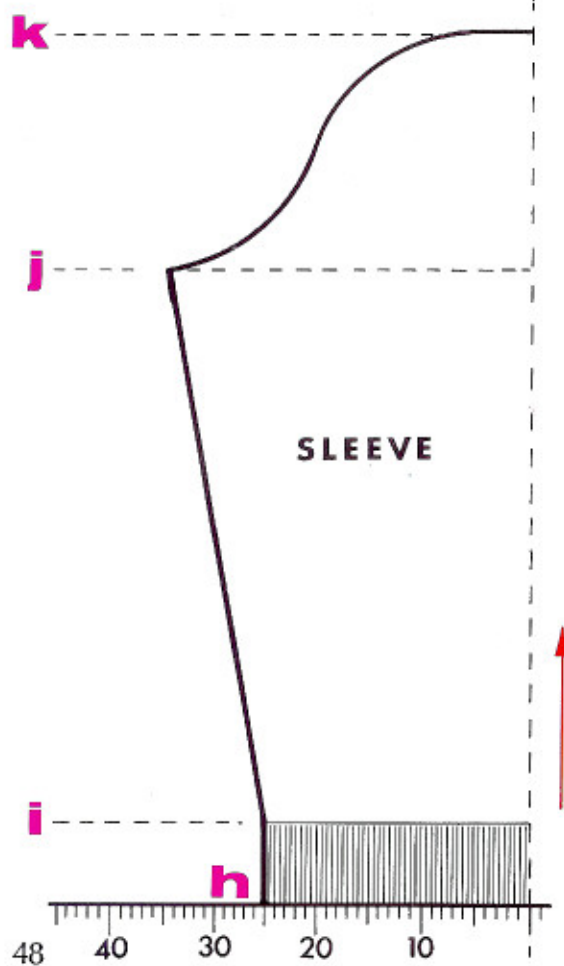
47

(6) Insert the remaining yarn (Refer to step 16, P.19) to the tapestry needle and seam one by one in picking two loops to one. (See fig. 46, 47. Refer to fig. 39, 40.)

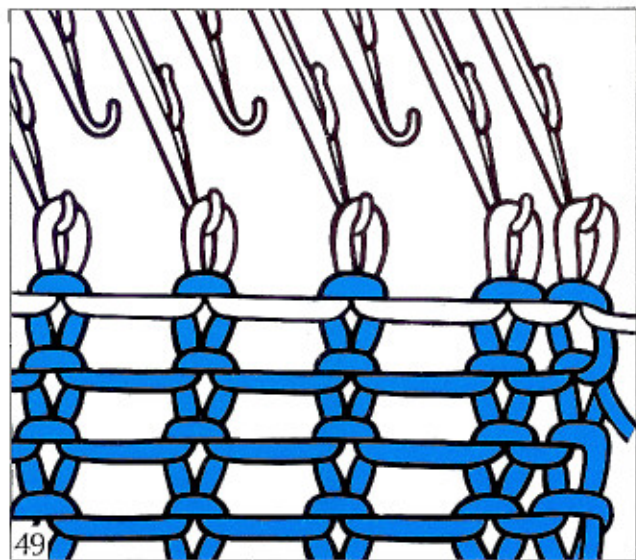
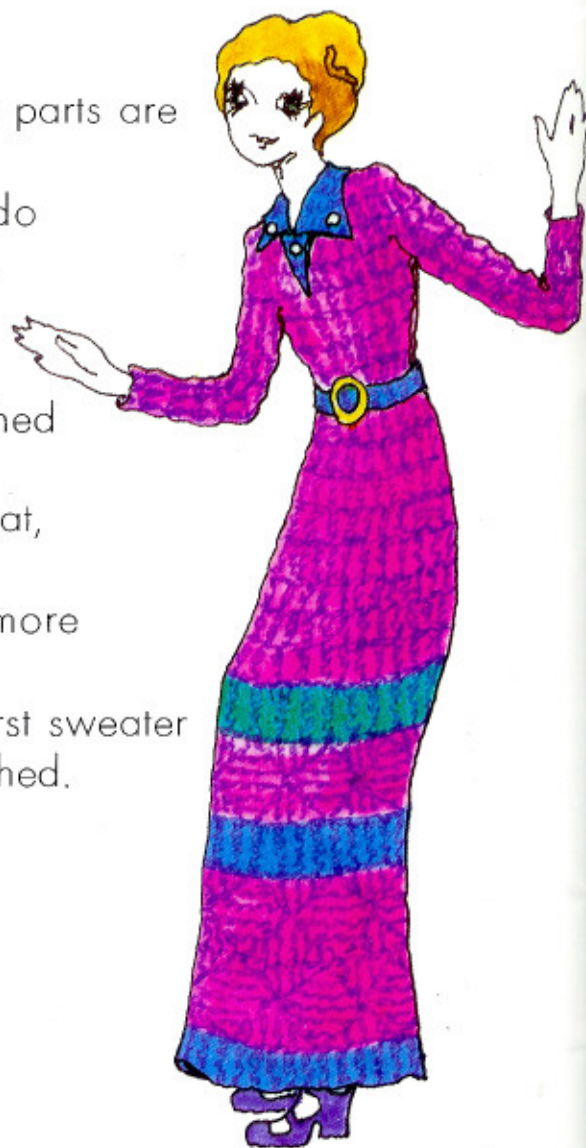
When completed, take off the garment from the machine.

(7) After making the seam of the neck, do the other shoulder, following the same steps as in fig. 37, 39 and 40.

Sleeves



All right.
The biggest parts are finished.
Next we'll do the sleeves.
Well, we're almost finished now.
It looks great, doesn't it?
Just a few more minutes
and your first sweater will be finished.



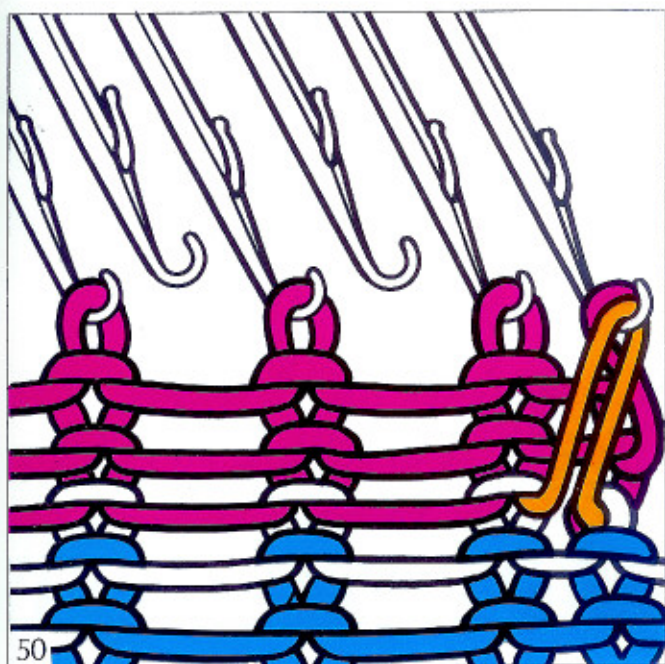
(1) Wipe off patterns of front and back bodices on the sheet with wet cloth.

(2) After the sheet has completely dried, copy the sleeve pattern. (See fig. 48)

(3) As the sleeve is knitted from the cuff, it begins with the ribbing knitting. Place 25 needles each from right and left to B position. Push back every other needle to A position between the third needle from the right end and the second needle from the left. Set Tension Dial at 5. (Return the feed lever to the rest position.)

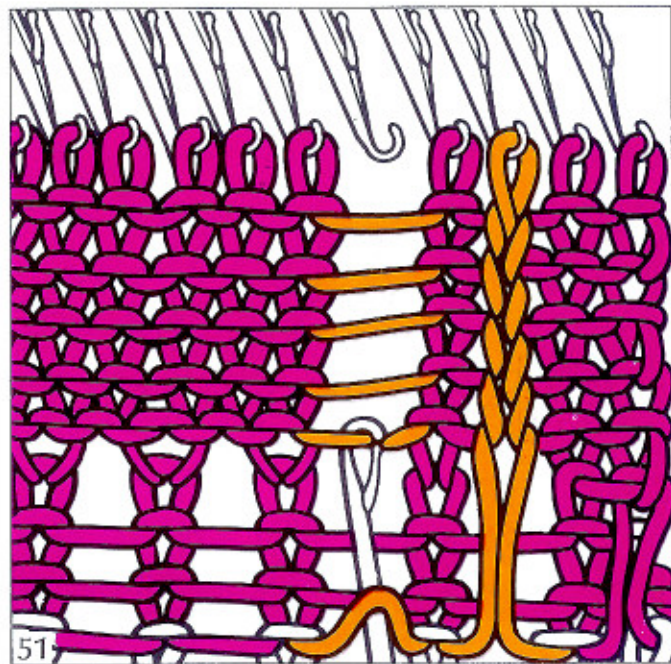
(4) Feed spare yarn and attach cast-on comb. Start knitting and knit 10 rows. Change the yarn to cast-on thread and knit 1 row. (See fig. 49)

(5) Set the Tension Dial to 1. Place the feed lever on the working position. Turn the feed dial so that the sheet gets into Line h and change the yarn to knitting yarn. Knit 3 rows from the left end.



(6) Pick up a stitch between the first and the second of the first row and hook it on the first needle. (See fig. 50)

(7) Position all needles (25 stitches each on the left and right) at A to B position. Set the Tension Dial to 4, and knit up to Line i. Unhook the third stitch from the right and unravel down to the last row.

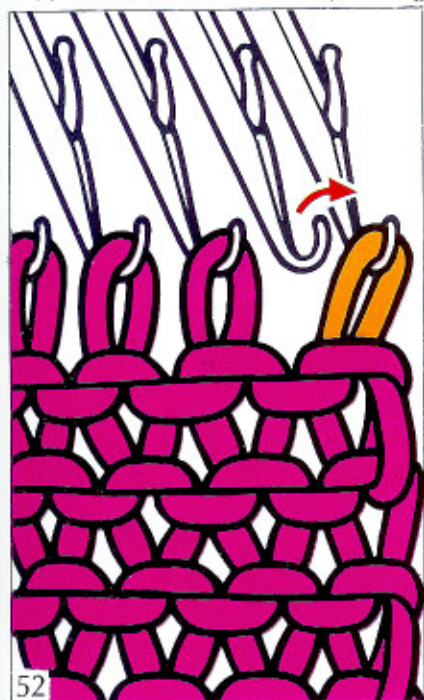


Catch the loop on the first row with latch tool and knit from the third row to the top row and hook it on the needle.

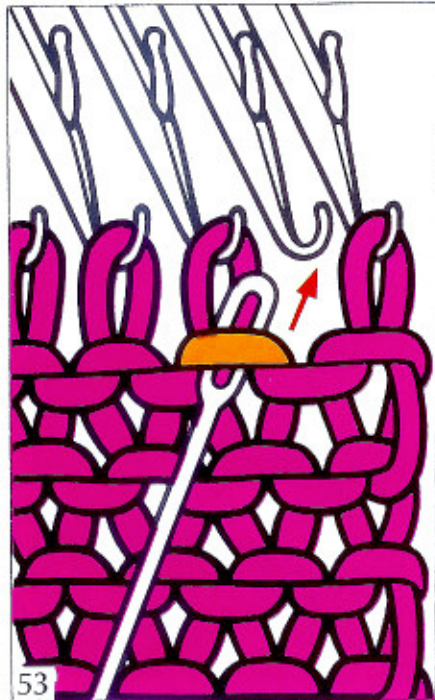
Make ribbing knitting by using latch tool from the third stitch on the right to the second stitch on the left. (1×1 rib.) (See fig. 51)

How to increase stitches

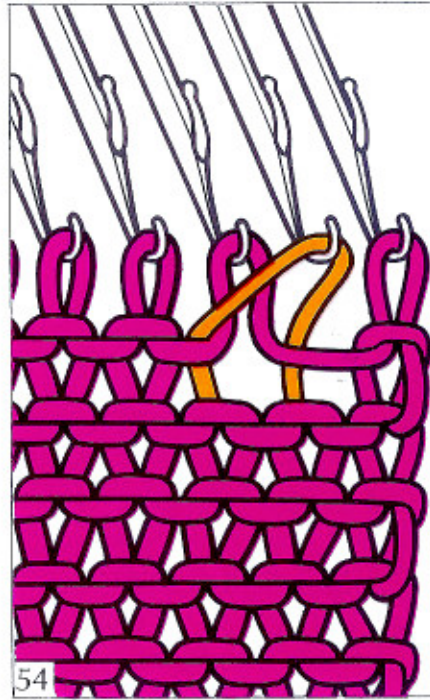
(8) Set the Tension Dial to 5, holding cam levers I, and knit up to line j while increasing.



(a) Move the stitches at both ends to an outside needles. (See fig. 52)



(b) Pick up half loop from lower stitch and hang over empty needles on both sides. (See fig. 53, 54)

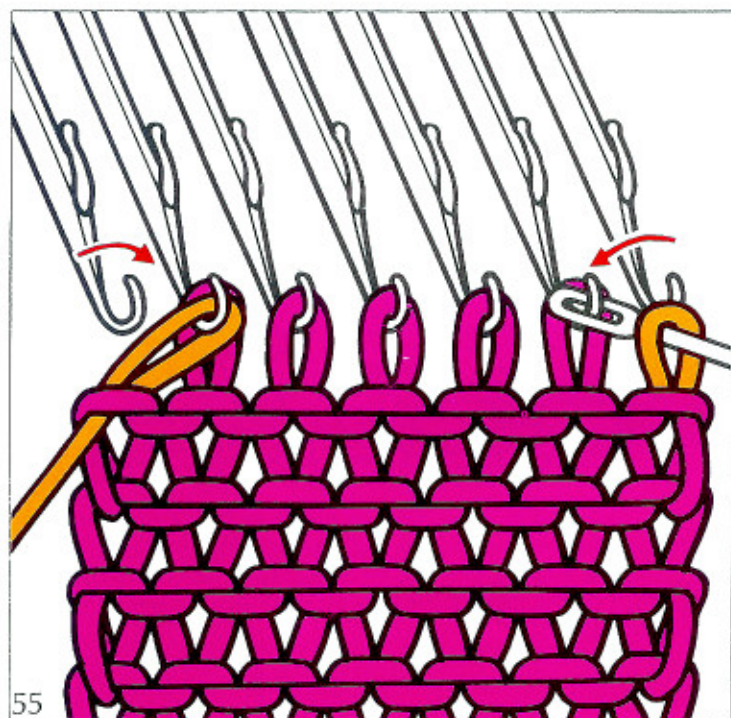


(9) On Line j, cast-off 4 stitches. (NOTE) Refer to POINT 2, P. 14.

(10) Decrease stitches by looking at the scale and knit up to Line k.
(However, the method of decreasing on the sleeve differs from that of front and back.)

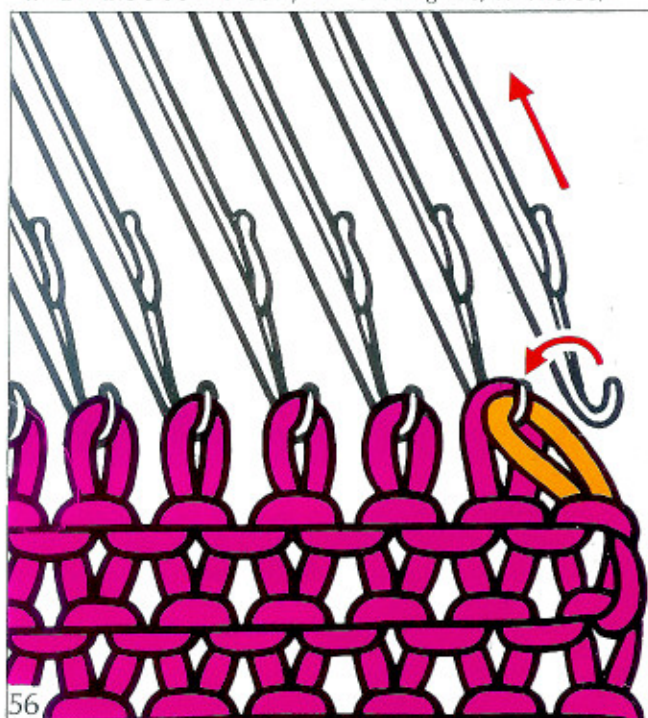
POINT 7 Decreasing of Sleeve

(a) To decrease one stitch. (See fig. 55)

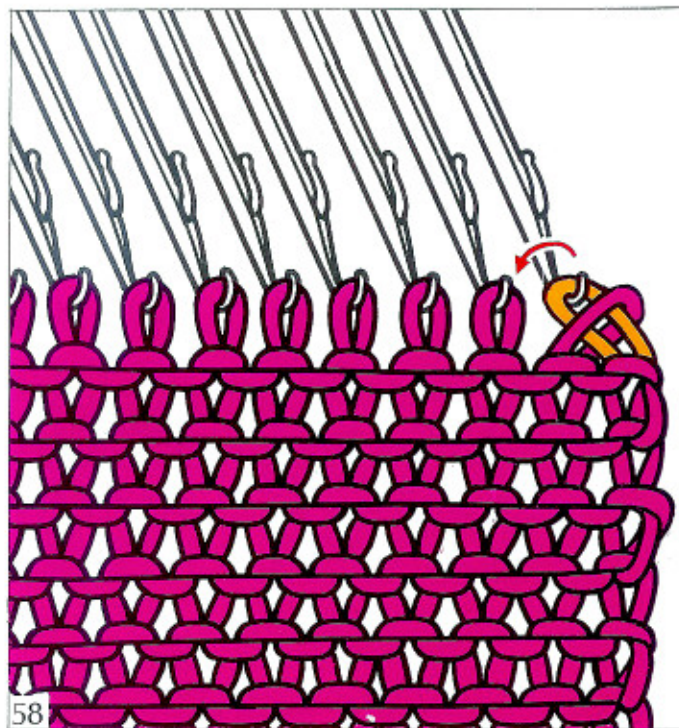
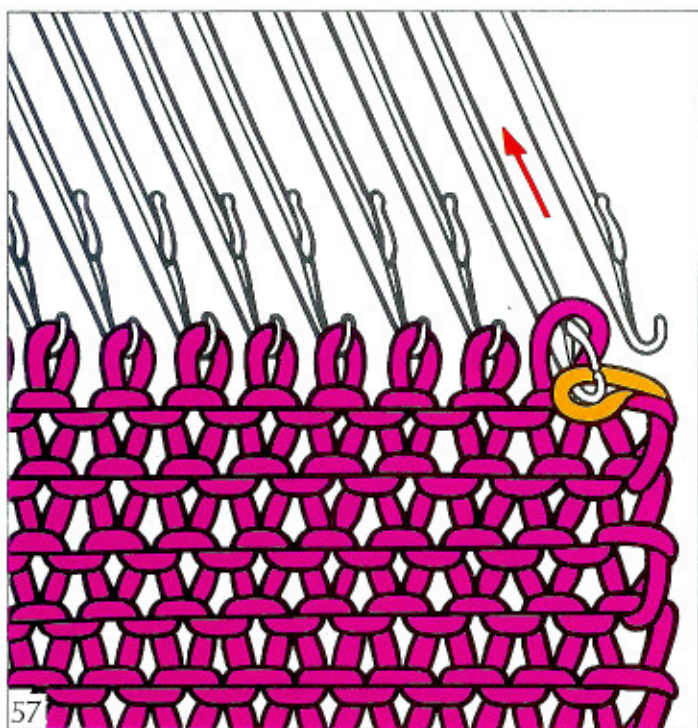


(b) To decrease more than 2 stitches.

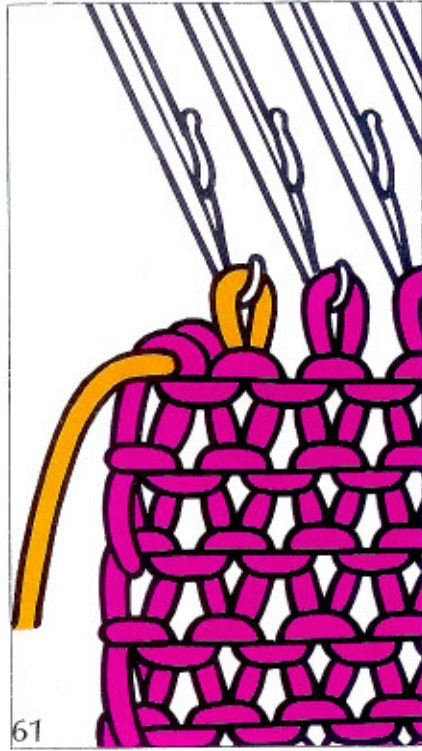
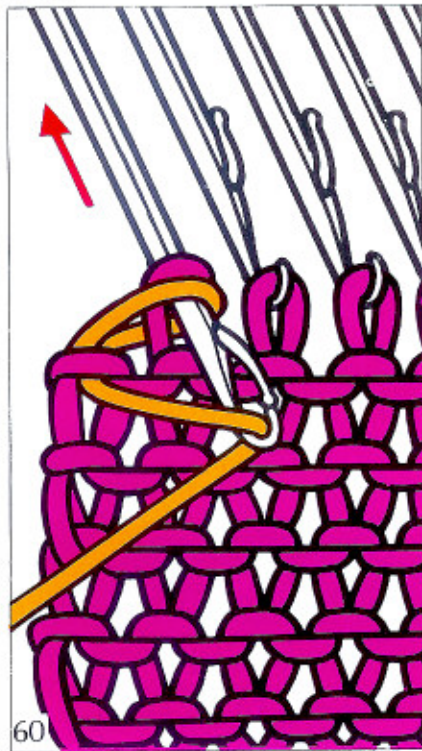
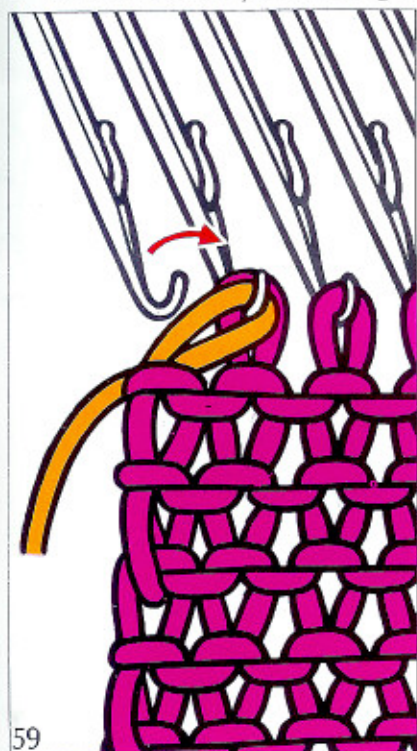
1. On the side without yarn. (See fig. 56, 57 and 58)



Repeat the same procedures as illustrated in fig. 56 to 58.



2. On the side with yarn. (See fig. 59, 60 and 61)



Repeat the same procedures as illustrated in fig. 59 to 61.

(11) On Line k, there are 24 stitches remaining. (12 stitches to the right and left of the center). Cast-off the stitches starting from the yarn side first.

(NOTE) Refer to POINT 2, P. 14.

(12) After casting off stitches, cut the yarn leaving about 10 cm.

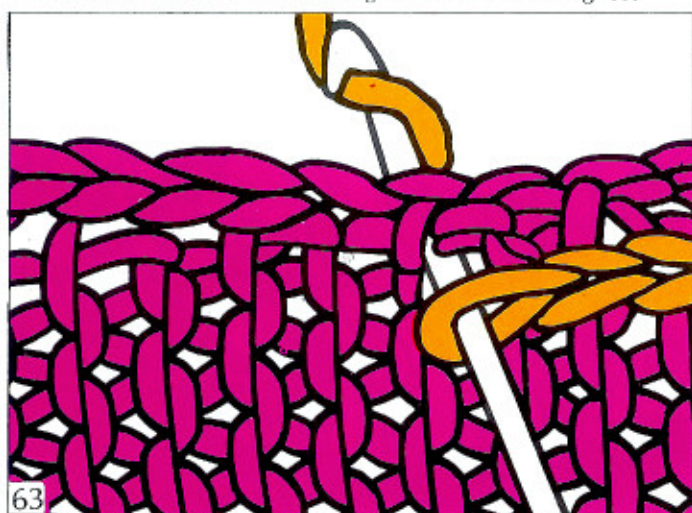
(13) Pull out cast-on thread and unravel the spare yarn. (See fig. 60)
One sleeve is completed.

(14) Make the other sleeve by following the procedures (1) to (12).
Sleeves are completed.



Seaming

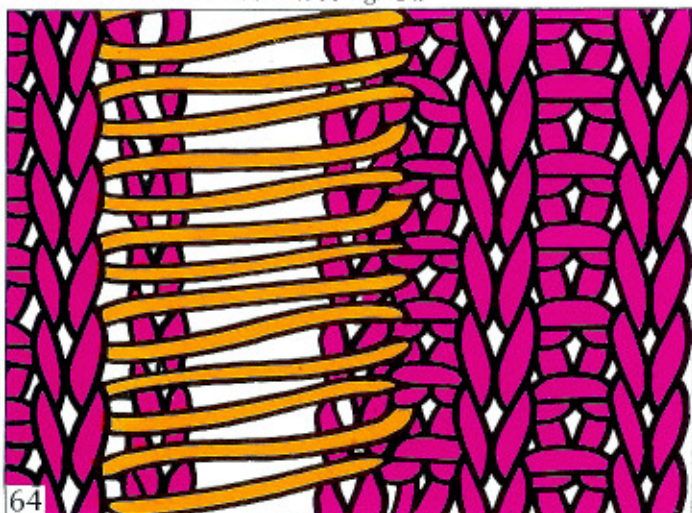
(1) For the front, back, sleeve and neck seams, turn the sweater inside out and make the seams on the reverse side (inside out) of the sweater using a crochet. (See fig. 63)



63

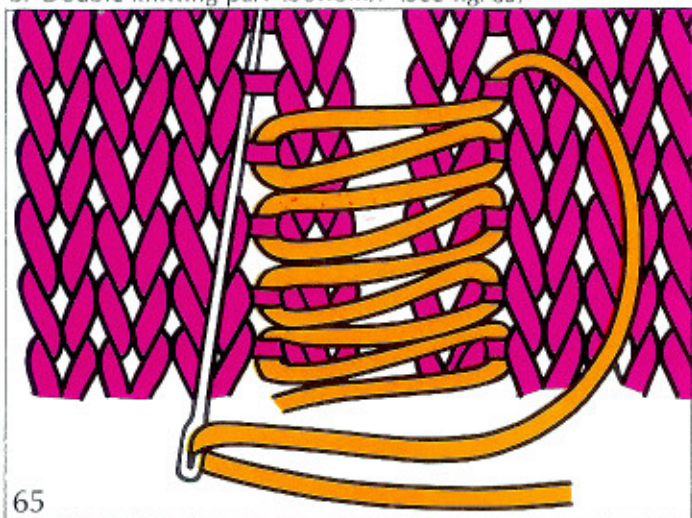
(2) To seam two separate pieces, a tapestry needle is used.

a. Sleeve cuff and neck. (See fig. 64)

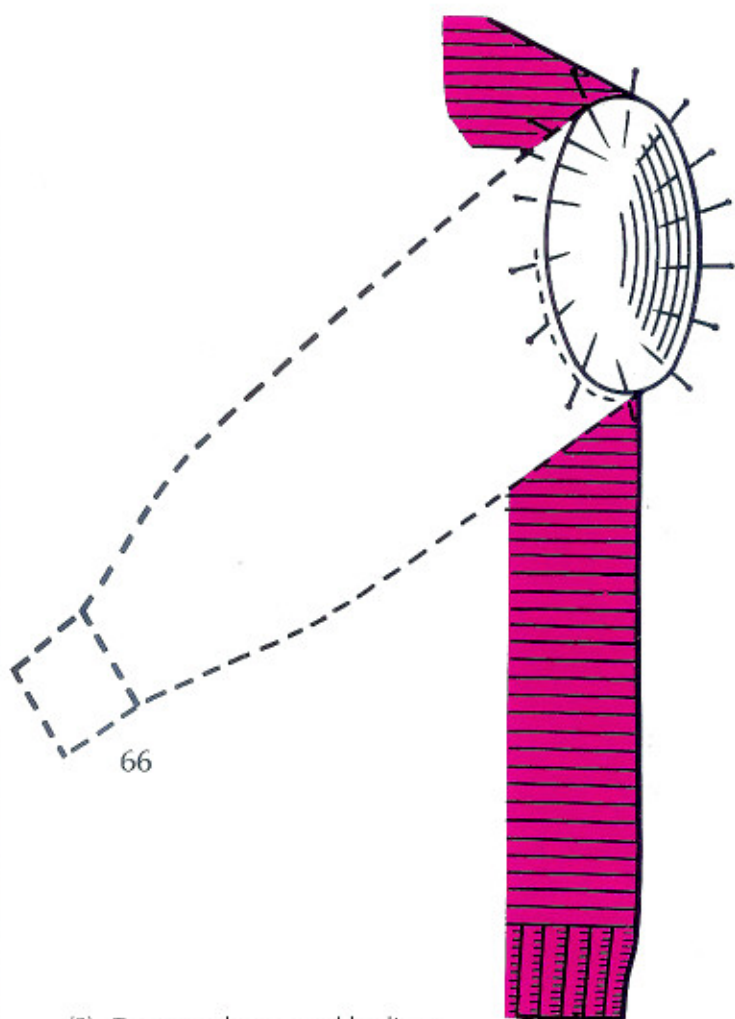


64

b. Double knitting part (bottom). (See fig. 65)



65



66

- (3) To seam sleeves and bodices
Place sleeve seam at center underarm and center of sleeve too at shoulder seam, and pin together. Seam with a crochet as described in fig. 66.

Finishing

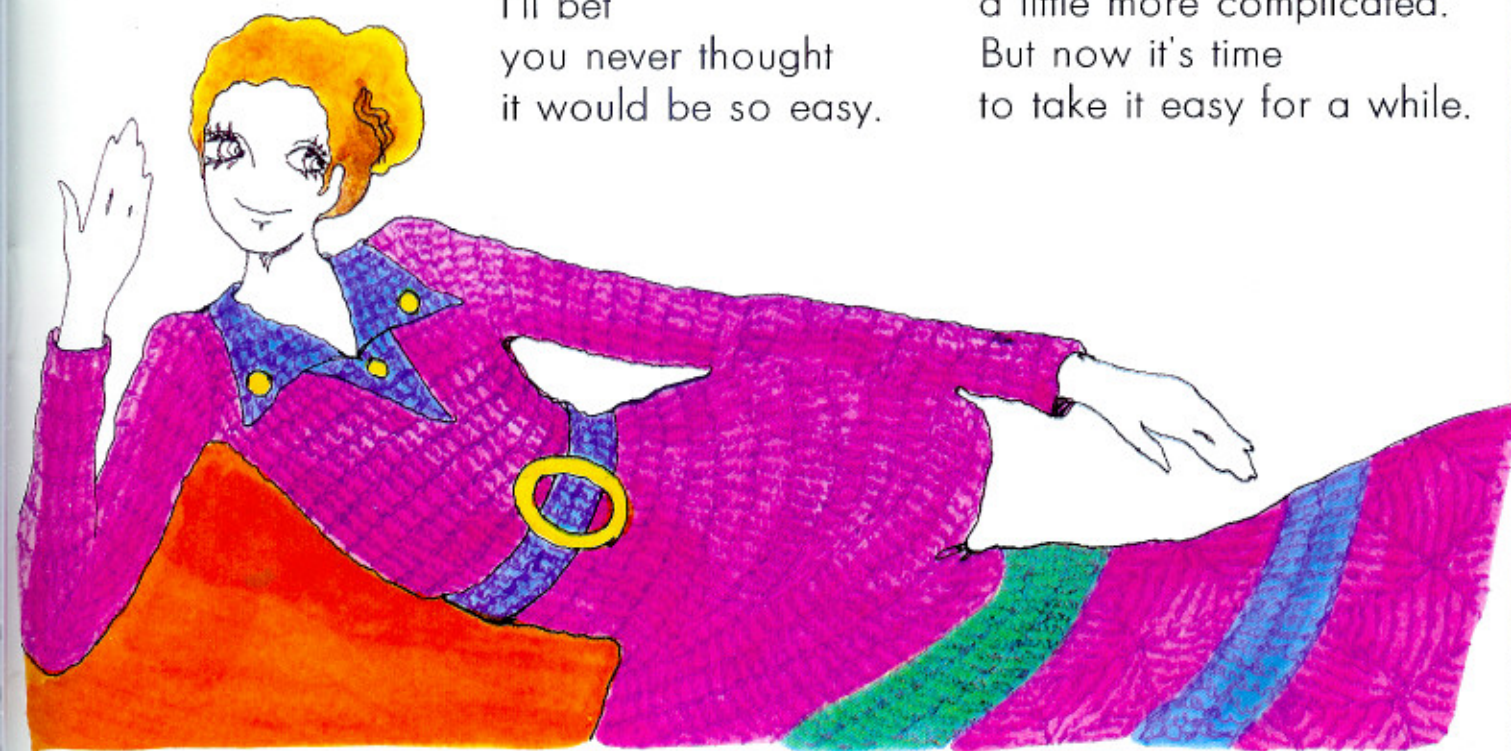
After making all the seams, steam-iron the garment for shape adjustment. As you can see in the picture below, white stripes may be worked into the pattern. (See fig. 67) In this event, the desired pattern should be included in the drawing of the original pattern sheet.



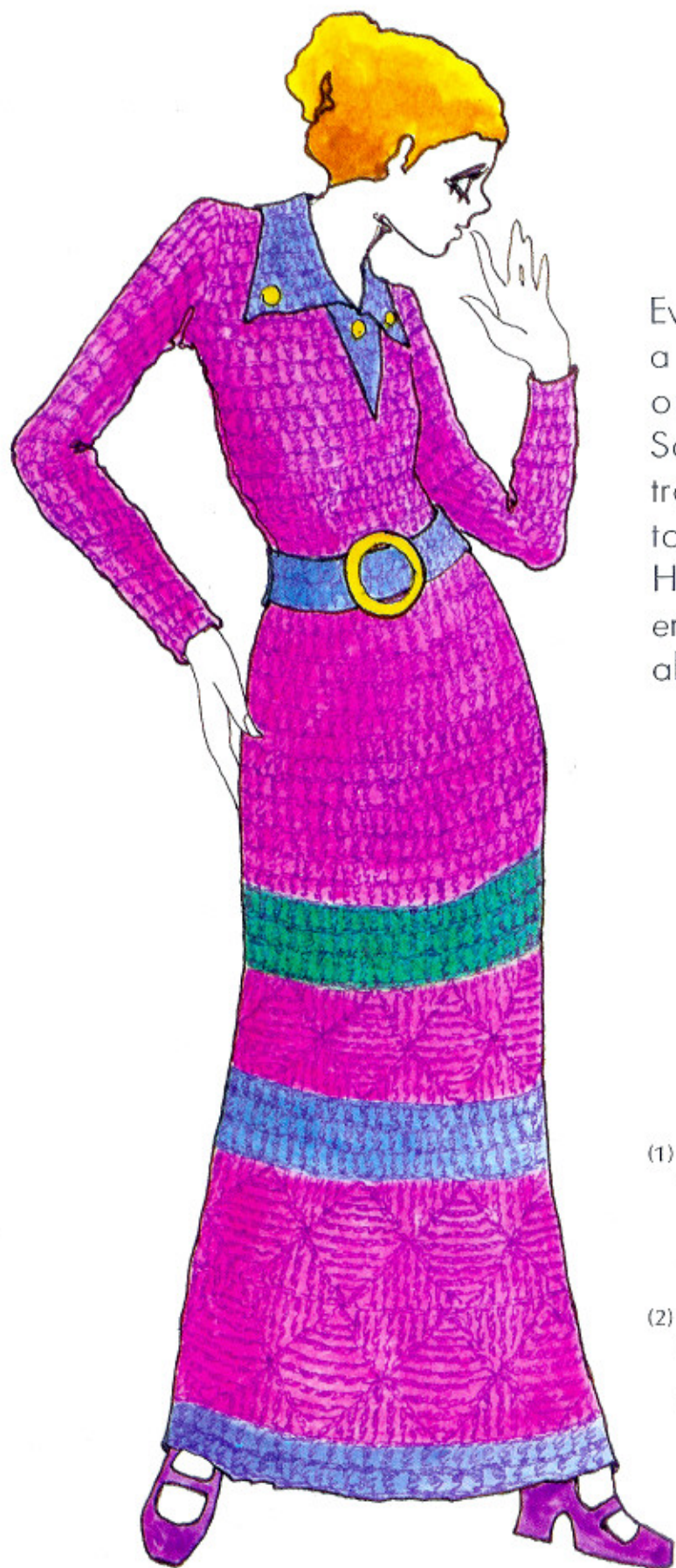
67

There—you did it!
What do you
think of it?
I'll bet
you never thought
it would be so easy.

After a little more practice,
you'll be ready
to try something
a little more complicated.
But now it's time
to take it easy for a while.



Knitting Errors and Hints

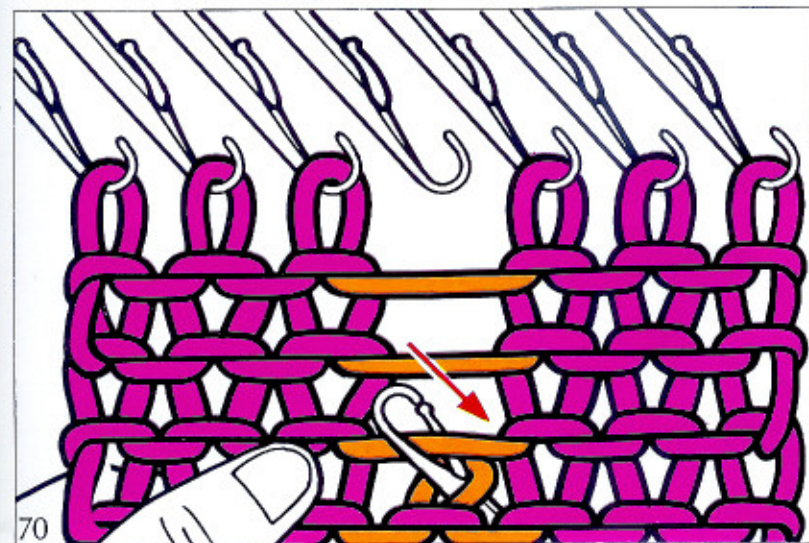
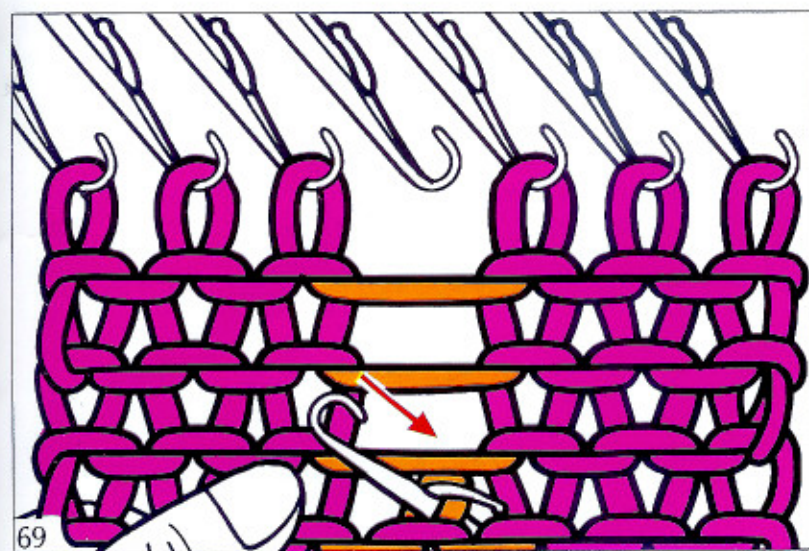
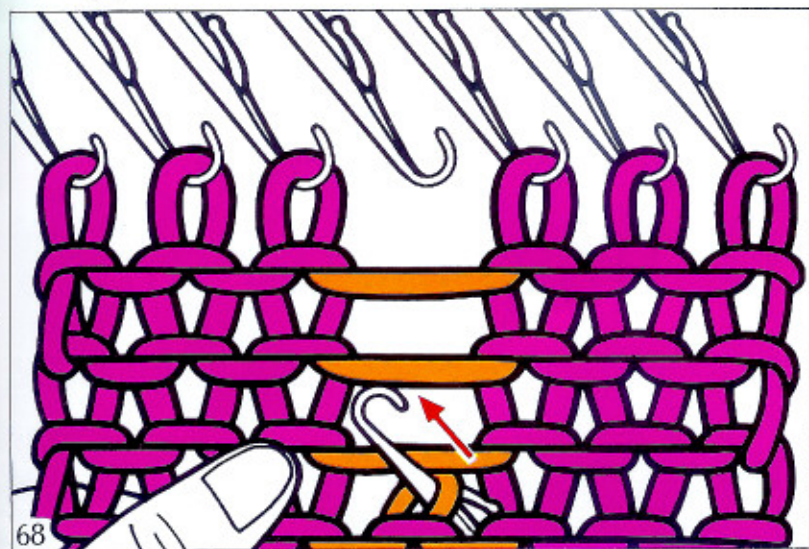


Everyone makes a mistake once in a while. So even if you did have a little trouble, it's nothing to worry about. Here are a few of the common errors, and some ideas about how to correct them.

- (1) Errors
 - * dropped stitch
 - (a) if one stitch is dropped
 - (b) if two stitches are dropped
 - * when the carriage is jammed
 - * undoing rows
- (2) Hints
 - * how to move the carriage without knitting
 - * how to replace the damaged needles

Errors

* Dropped stitch

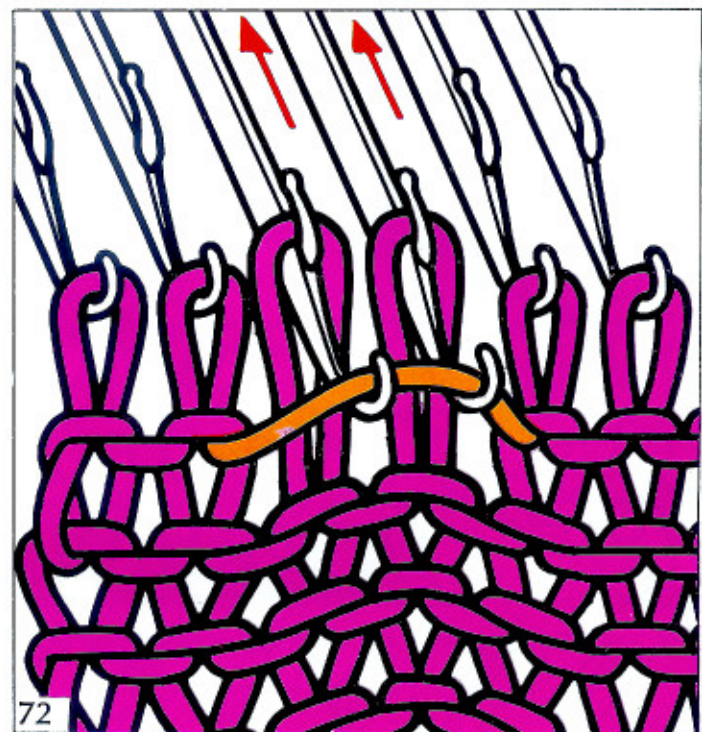
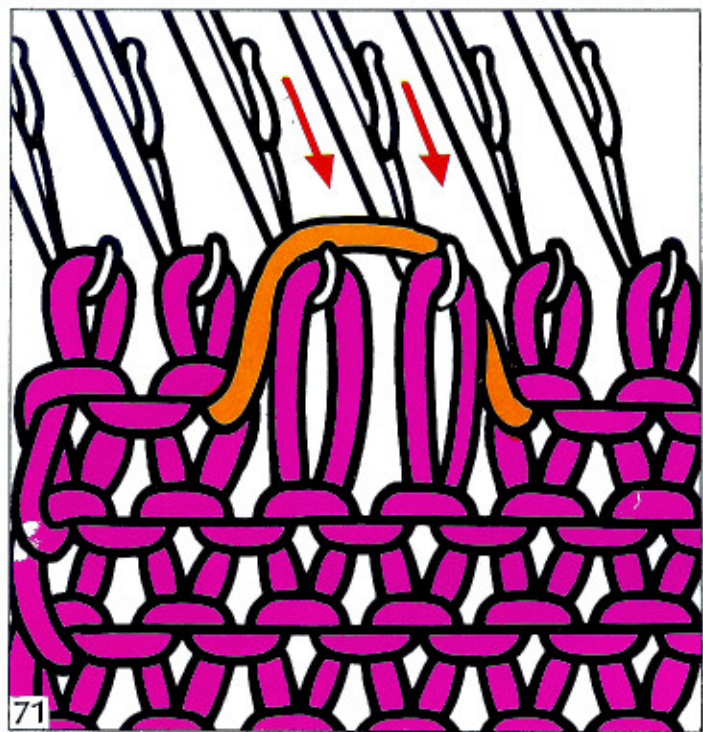


If one stitch is dropped:
Using the latch tool, hook the lowest loop and draw it upwards until it is behind the latch. (See fig. 68)

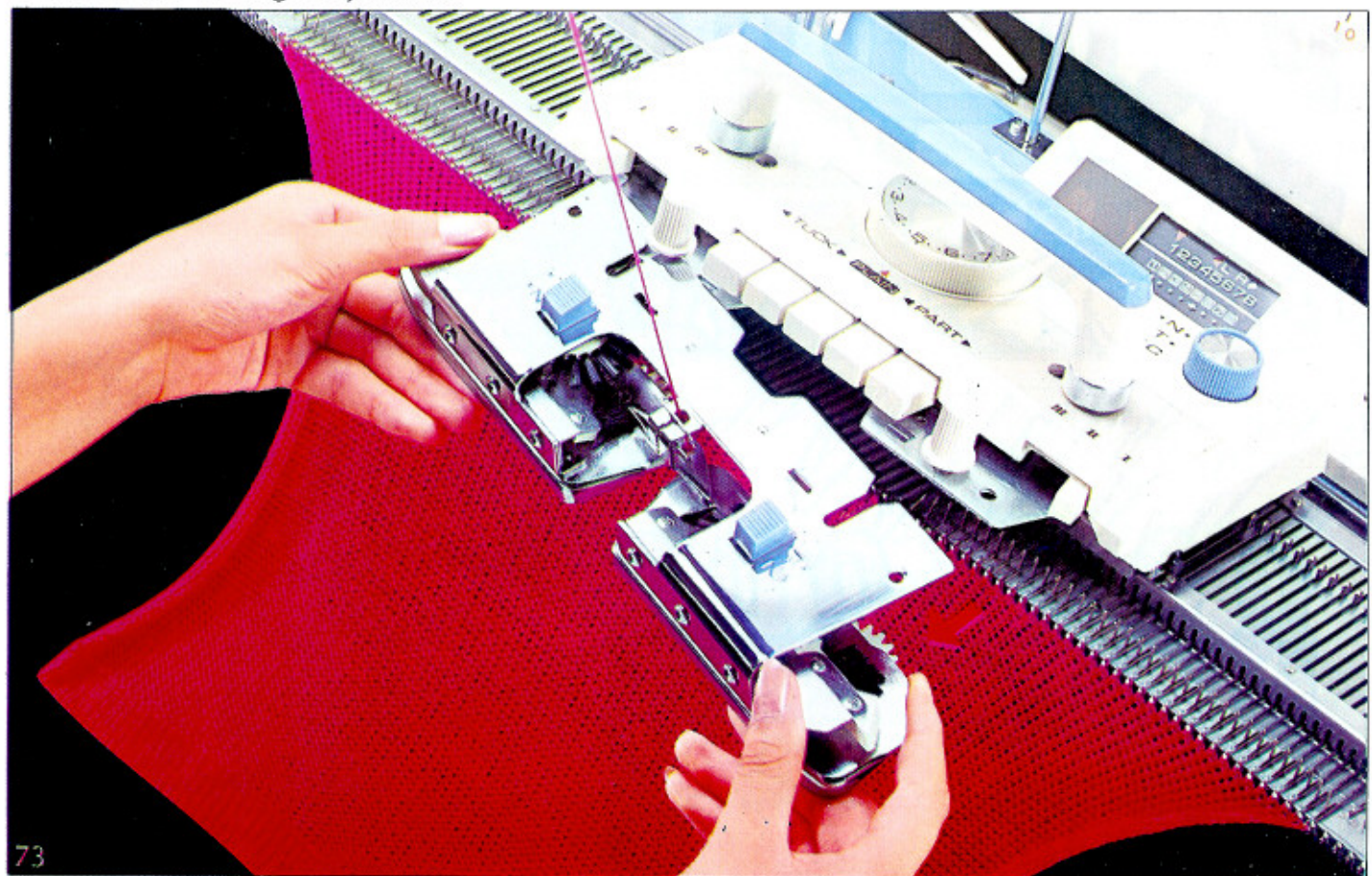
Keeping the loop behind the latch, hook the loose strand with the latch tool and pull downwards. (See fig. 69)

Now, with the latch tool closed, draw the loose strand through the loop to form a new stitch. Follow the same procedure until you have caught the last loose strand. (See fig. 70)

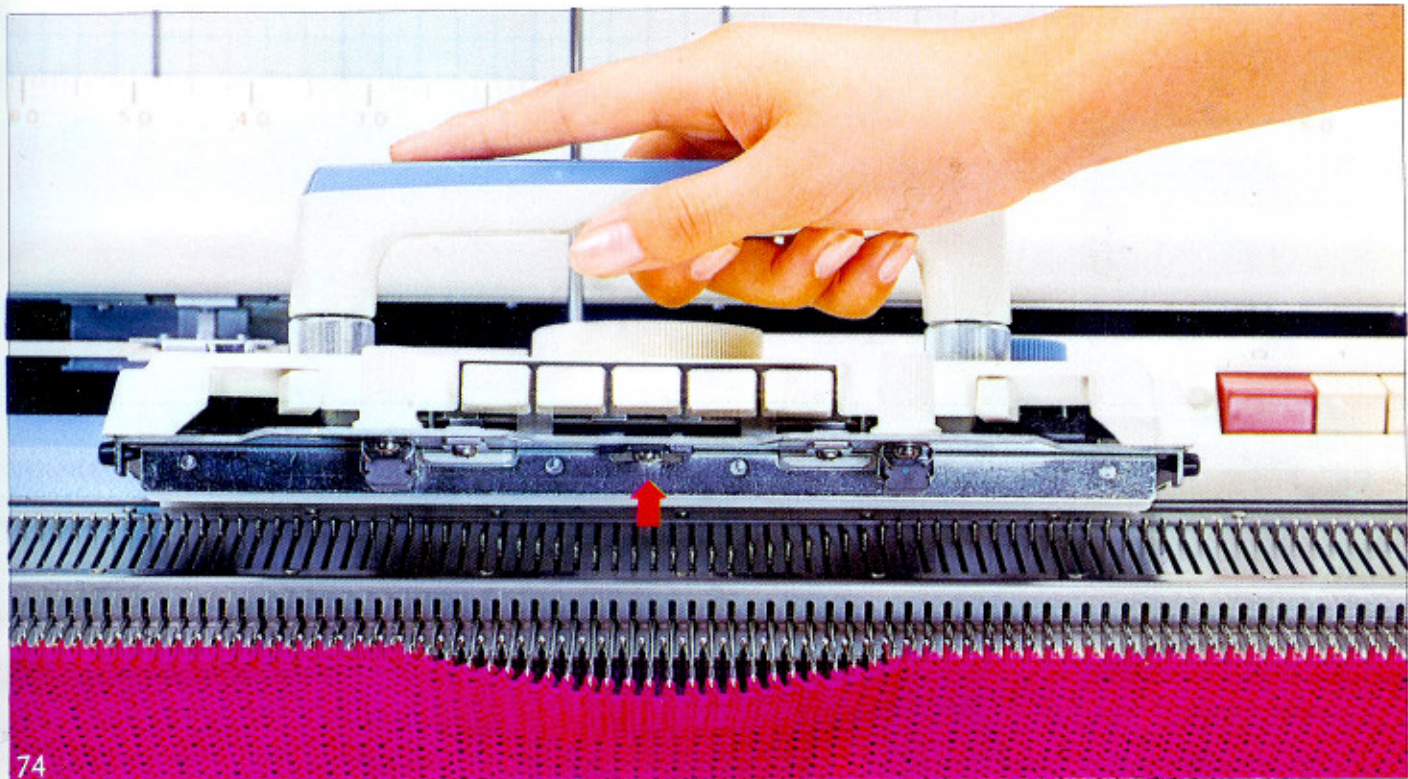
(b) If two stitches are dropped: (See fig. 68, 69, 70, 71 and 72)



* When the carriage is jammed



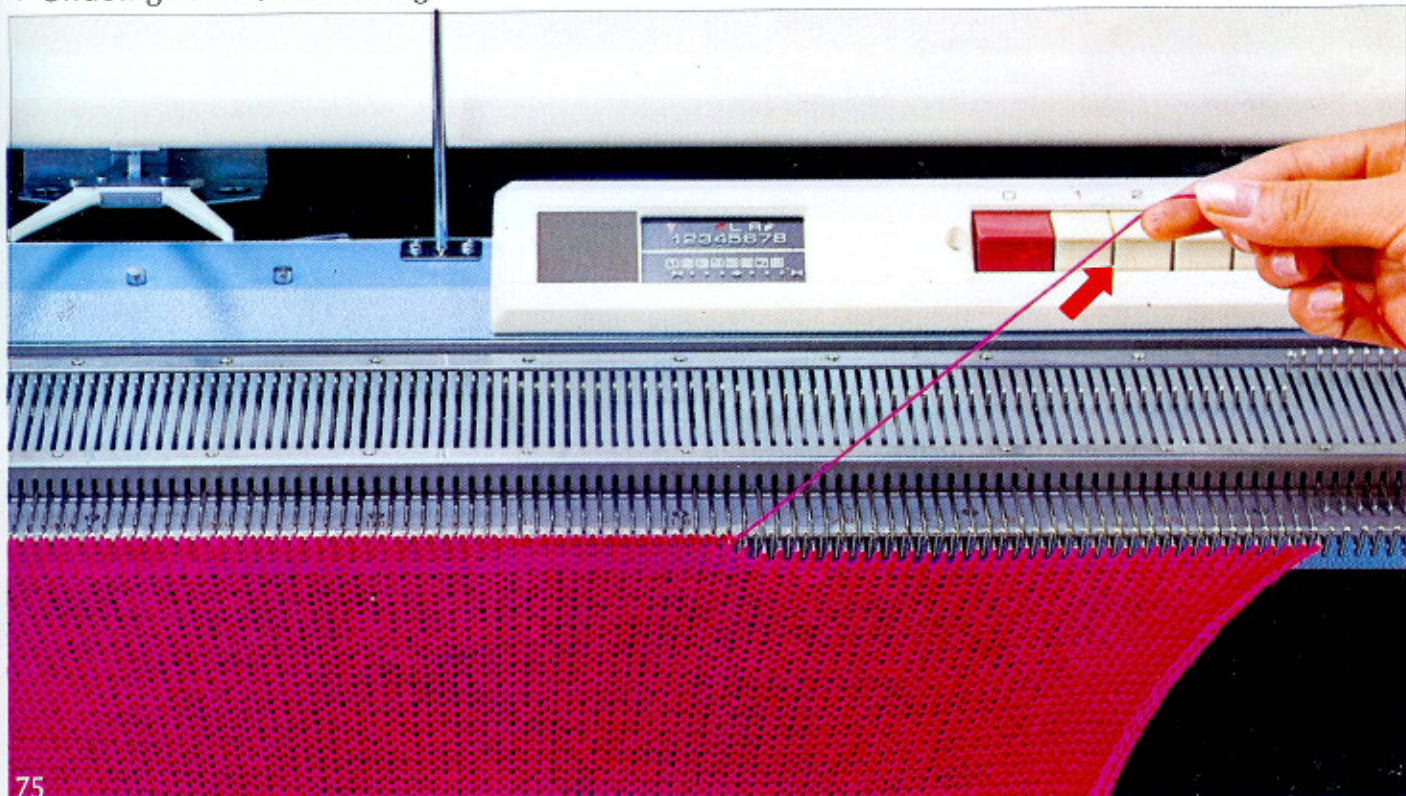
Loosen both the thumb screws of the sinker plate, and remove the sinker plate from the carriage. (See fig. 73)



74

Lift the front of the carriage and move the carriage to the side with yarn. (See fig.74). Unravel last row (Refer to * undoing rows) and attach the sinker plate to the carriage and feed the knitting yarn into the yarn feeder.

* Undoing rows (Unravelling)



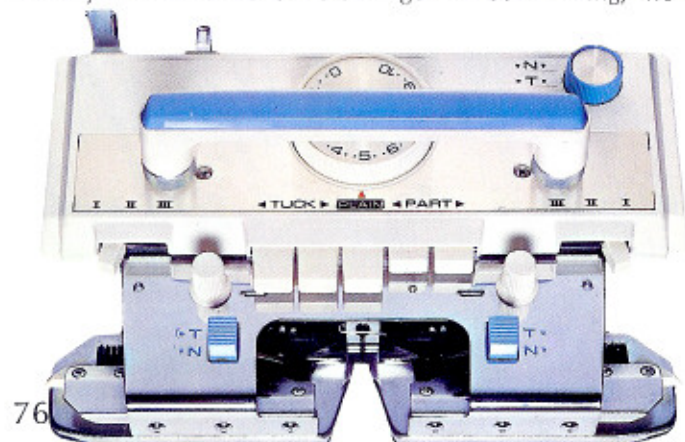
75

In case of incorrect knitting, remove the carriage as mentioned above (See fig. 74), and unravel the incorrect rows, pulling the yarn slightly upwards. (See fig. 75)

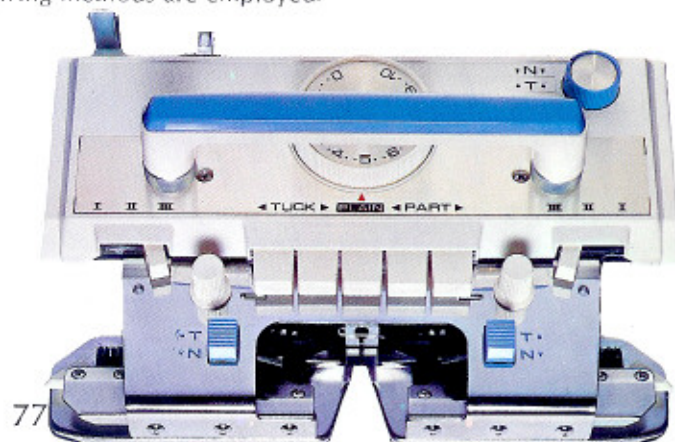
Hints

* How to move the carriage without knitting

When you wish to move the carriage without knitting, the following methods are employed:

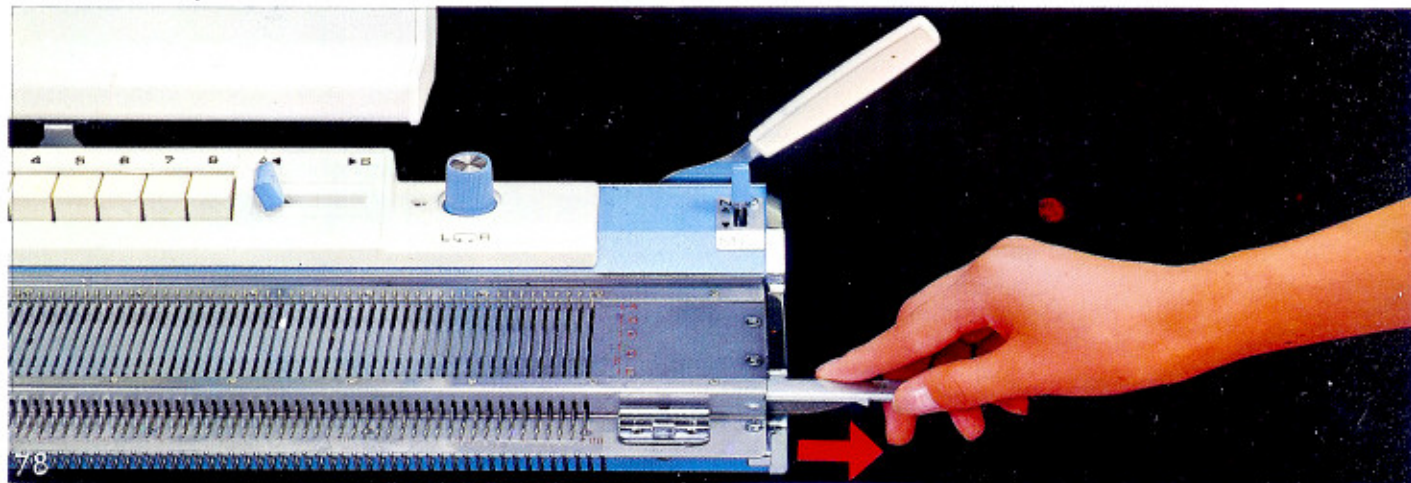


76 a. When working needles are in B position, push two PART buttons on the carriage. (See fig. 76)



77 b. When the working needles are in E position, set both the change levers of the carriage to III. (See fig. 77)

* How to replace the damaged needles



78 Push the felt bar with the end of latch tool and withdraw it from Knitting Machine until the needle you wish to change is free. (See fig. 78)



79 Pull the needle forward as far as it will go and down the hook of the needle until the shank of the needle is taken away from the needle bed, drawing it backwards and replace a spare needle. (See fig. 79)



I'll say
"good by"
for now.
But I'll be back soon.
In our next book,
We'll work together
on more
complicated patterns.



S. OKAMOTO

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brother