



**SIMULKNIT**  
**SITULKNIT**  
**TOYOTA K80**



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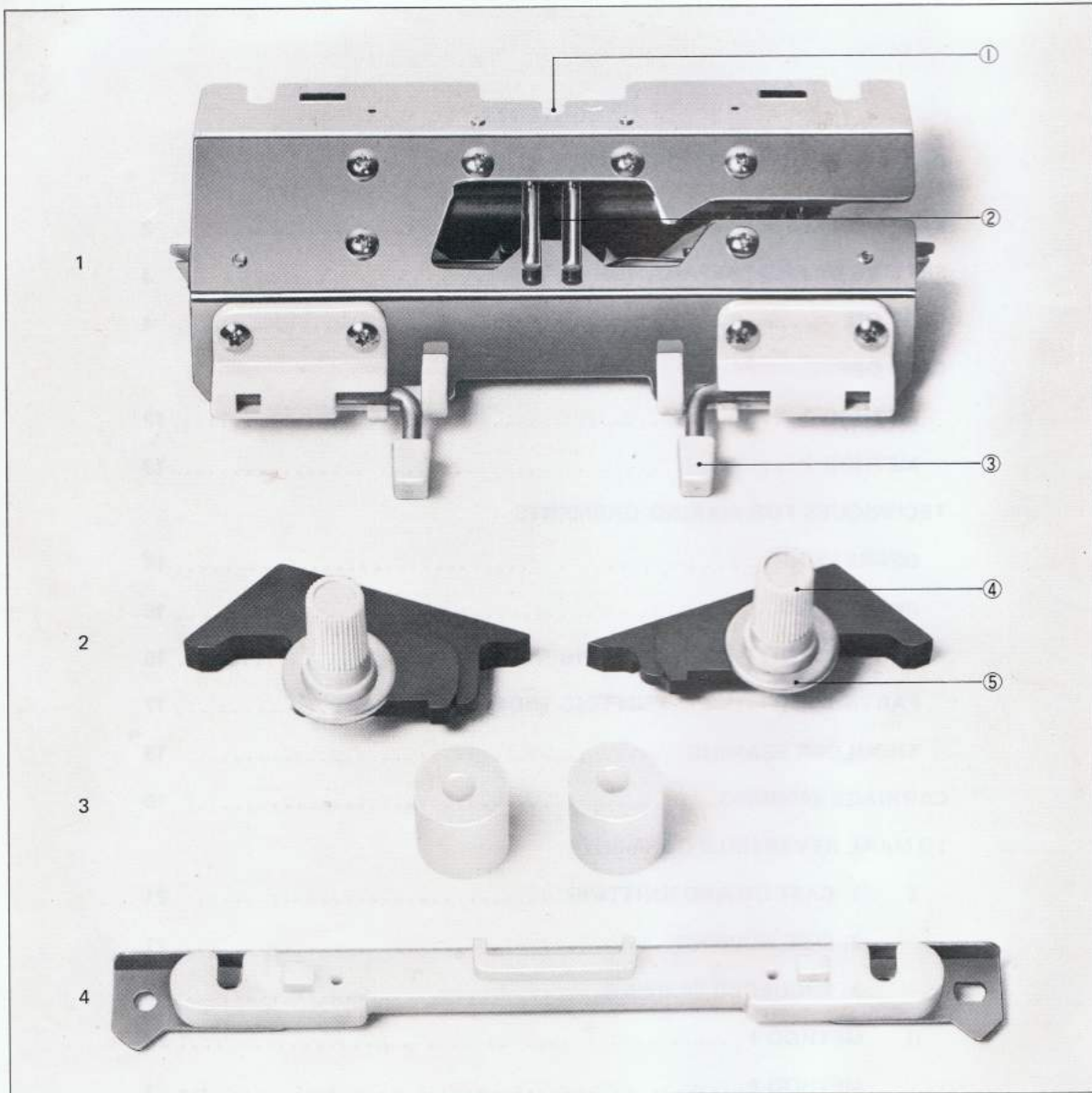
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# PART I

## SIMULKNIT-PARTS NAMES



### 1. Simulknit unit

- ① Yarn feeder for colour 1 yarn (main yarn)
- ② Yarn feeder for colour 2 yarn (contrast colour yarn)
- ③ Metal pins

### 2. Triangle cams (left and right)

- ④ Screws
- ⑤ Washers

### 3. Waxes

### 4. Base bar

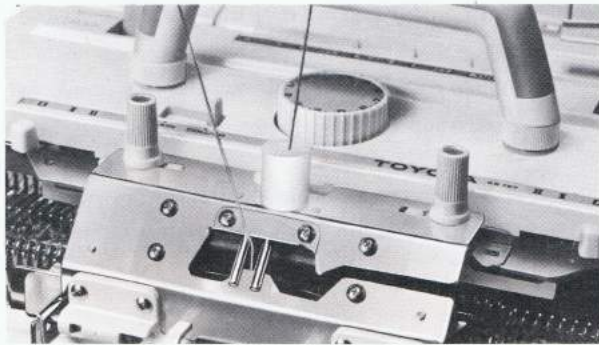
## SETTING UP

Set up main and rib knitters referring to Ribber instruction manual page 1–5. On page 4, be sure to set Base bar, one of accessories of Simulknit, instead of Rib Yarn Feeder Base. You can use Base bar for doing both simulknitting and ordinary rib.

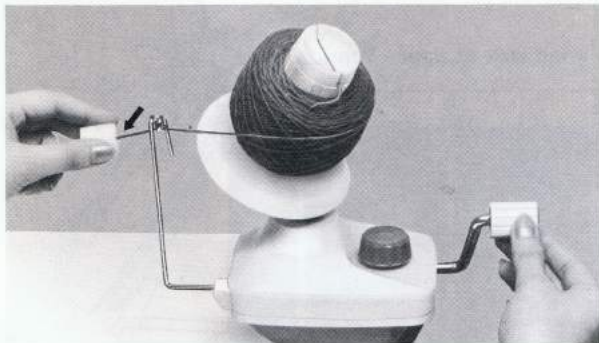
## PREPARATION OF YARN

Careful preparation of yarn is important, it makes knitting smoother and saves a lot of trouble.

Main yarn for Simulknitting needs one of these preparations.

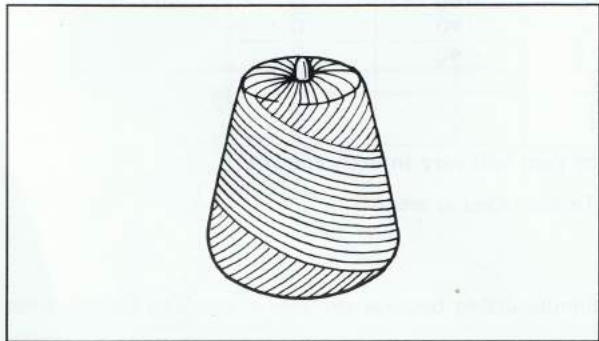


A. Before casting-on, thread main yarn through wax, and continue knitting with wax.



B. Pass yarn through the hole of wax and wind yarn as shown.

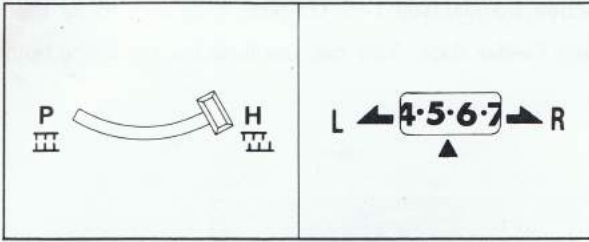
The ball should not be too tight nor too loose.



C. Use pre-waxed yarn.

There are many yarns available which are already waxed.

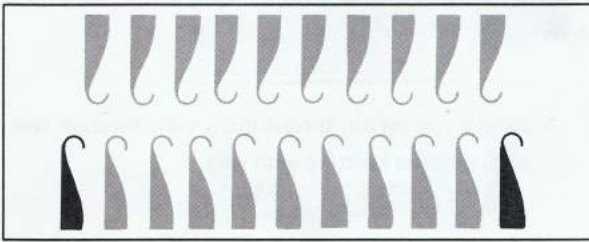
# CAST-ON



1. Set Half Pitch Lever at "H" and Racking Indicator at "5-6".

Carriages are on the right.

To prevent the needles from being damaged, be sure not to operate Racking Handle while both main and rib bed needles are set at Dor E position.

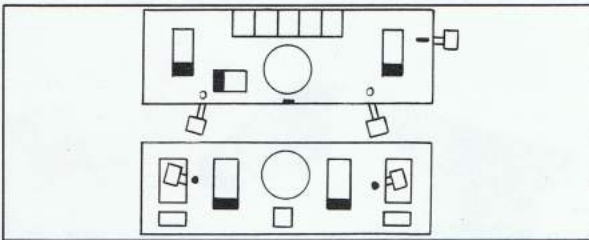


2. Centering "0" marks of both beds, bring required number of needles to B position.

Both END needles are on Ribber.

\* Cast-on for making reversible garment, see page 21.

\* When more than 180 needles are used, set extension rails.



3. Set both carriages all in neutral.

Set both Tension dials referring to the chart below.

Set Upper tension dial between "◀▶" and "—". Use parafine wax at upper Tension unit.

		1	2	3
TYPE OF YARN				
ACTUAL SIZE				
NAMES		Fine 2 ply	2 ply	3 ply
CAST ON	1st threading	●●0 * ●●0	●●0 ** ●●0	0 0
	2nd row	●●0 0	●●0 1	2 0
	3rd and 4th row	0 0	1 1	2 2

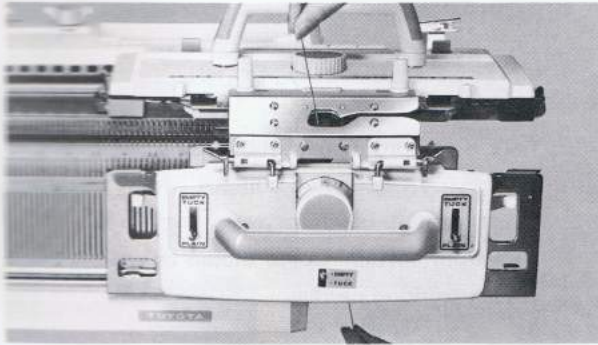
(Names of type of yarn will vary in each country.)

Eg.  $\frac{1}{0}$  means that Main Tension Dial is set at 1 and Rib Tension Dial is set at 0.

\* ●●0 means to set at the lowest point.

\*\* ●●0 means to set at the point below 0.

The yarn thicker than 3 ply is not recommended for Simulknitting because the fabric tends to be too thick and coarse.



## THREADING YARN INTO RIB YARN FEEDER

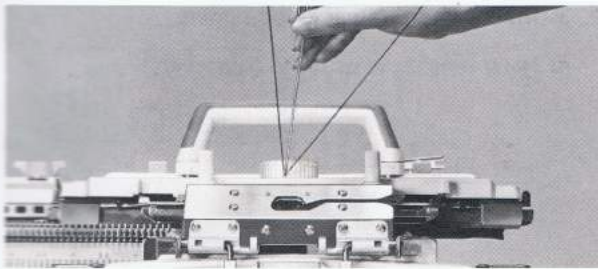
Use one of two methods

### METHOD 1

Slide carriage to Right until the edge of carriage comes off the bed.

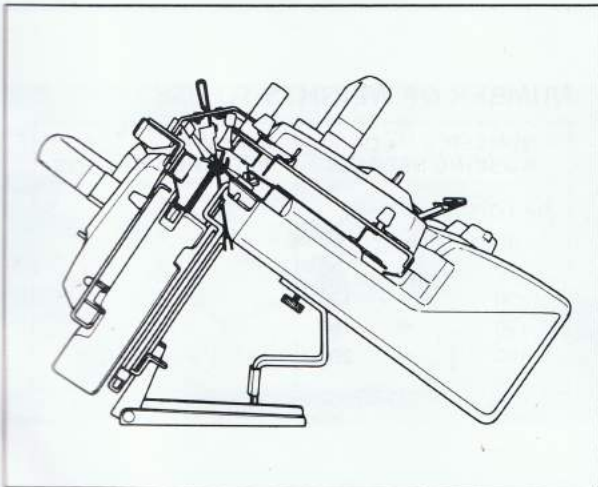
Bring yarn between both carriages, and thread it by pushing sideways into feeder.

Fasten end of yarn at table clump or hold it by hand.

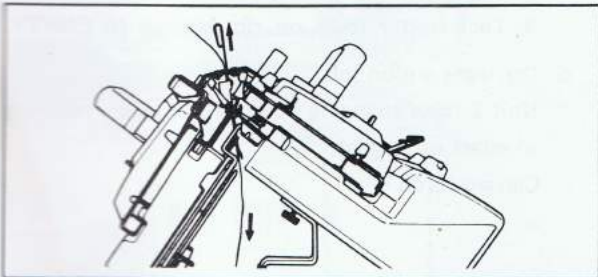


### METHOD 2

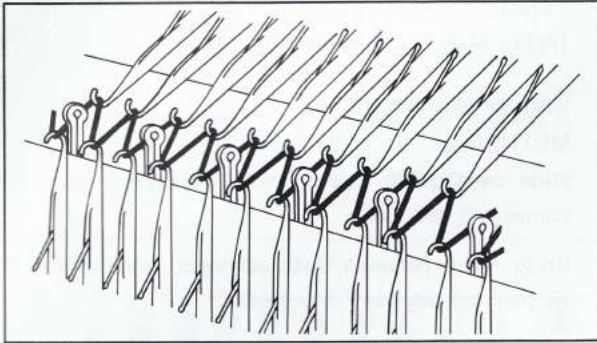
Take threader, one of accessories of Ribbing attachment.



Hook yarn at the slit of threader and insert threader with yarn into feeder.

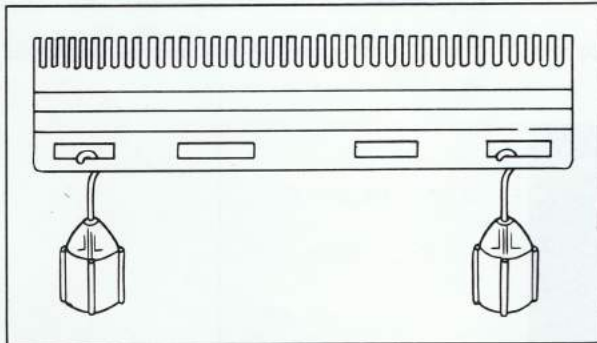
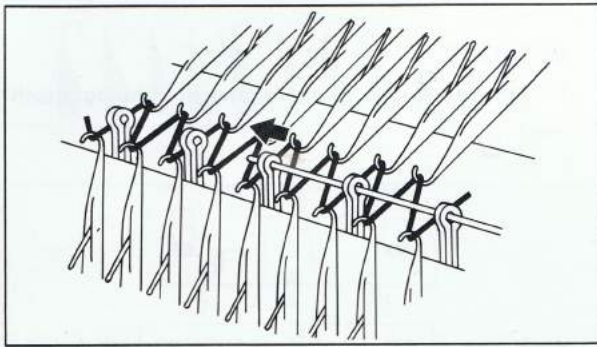


Pull yarn down at bottom and take out threader.



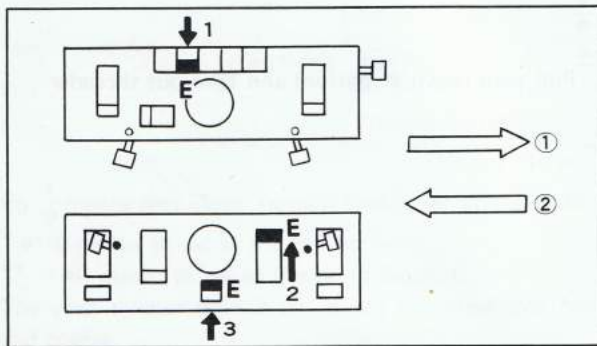
### FIRST ROW

1. Move carriages slowly to left, pushing them downwards.
2. Take the appropriate cast-on comb for a number of working needles and pull out wire. Insert cast-on comb between main and ribbing beds from bottom. Comb should be well-balanced against working needles.
3. Insert wire through cast-on comb.
4. Hang weights so as to be balanced.



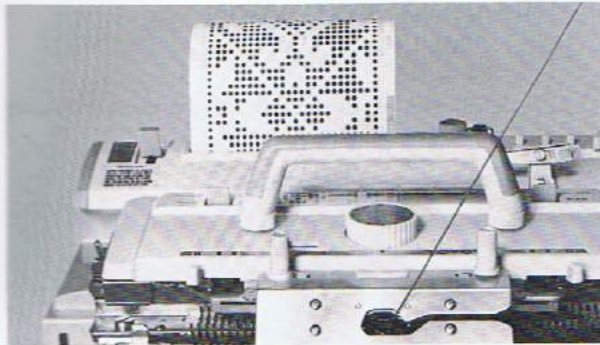
### NUMBER OF WEIGHTS TO USE

NUMBER OF WORKING NEEDLES	NUMBER OF REQUIRED WEIGHTS
UP TO 30sts	1
30sts ~ 60	2
60 ~ 90	3
90 ~ 120	4
120 ~ 150	5
150 ~ 200	6



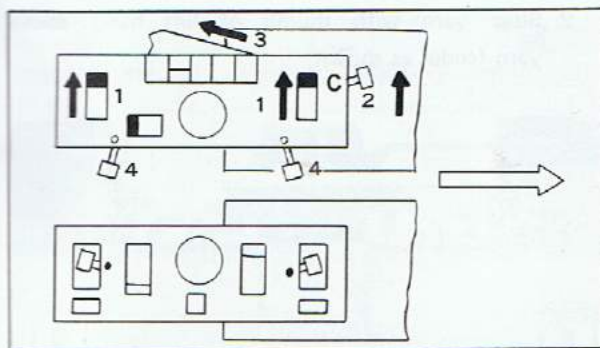
5. 1. Set left EMPTY Button on main carriage.
2. Right knitting lever on rib carriage to EMPTY.
3. Tuck-empty lever on rib carriage to EMPTY.
6. Carriages are on left. Knit 2 rows changing both tension dials. referring to chart on page 4. Carriage is on left.





## SELECTING NEEDLES

Set punch card.  
Carriages are on left.



Set main carriage for pattern knitting.

1. Both pattern levers to PATTERN.
2. Card feed lever to C.
3. Card feed tripper to LEFT.
4. Set both front levers to 0.
5. Empty button is still set.

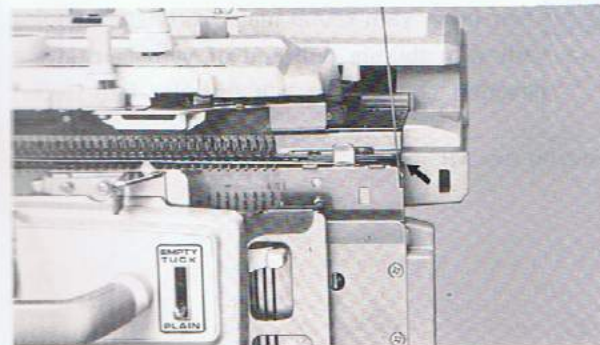
Rib carriage is in neutral. Empty/Tuck lever is always set at EMPTY while doing simulknitting.

Knit one row to right and the needles on main bed are selected. Release Empty button on main carriage and knitting lever on rib carriage.

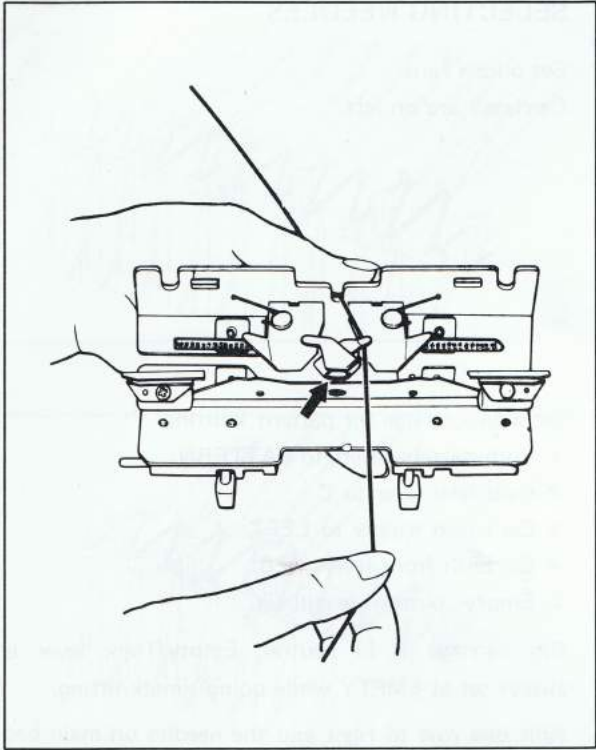


## REMOVING RIB YARN FEEDER

1. Remove Rib yarn feeder from carriages.



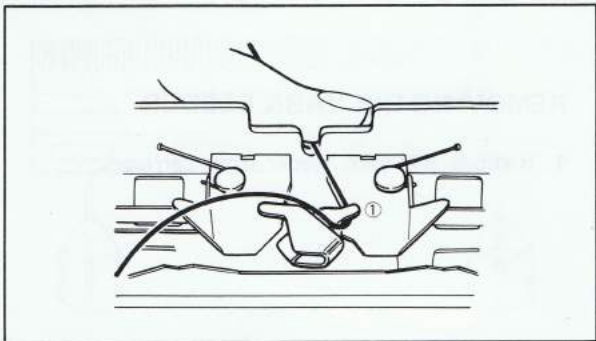
2. Remove yarn from feeder.  
Hook it at yarn end holder on the end of ribber.



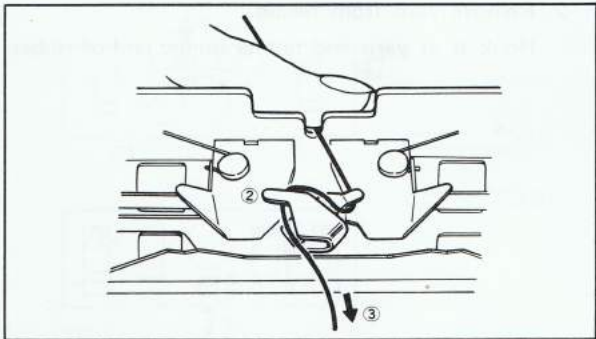
### THREADING MAIN YARN INTO SIMULKNIT UNIT

1. Hold Simulknit unit with left hand, wrong side up and metal pins towards you.  
You can see col. 1 feeder (arrow.)

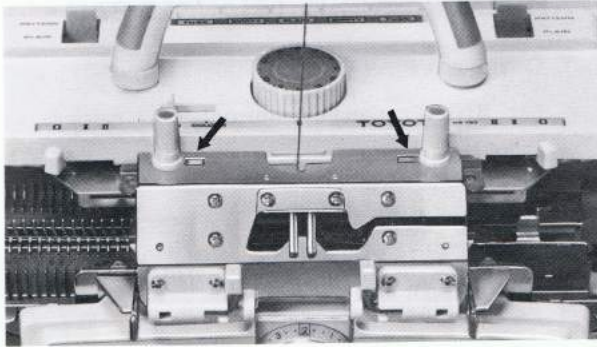
2. Stop yarn with thumb of left hand above yarn feeder as shown.



3. Bring yarn round metal part ①. (See diagram)



4. Then bring yarn round metal part ②. Stopping yarn with thumb, pull end of yarn hard in the direction ③, so that it is threaded into feeder.

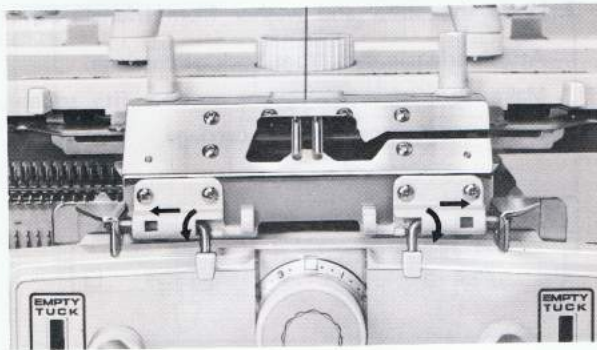


## ATTACHING SIMULKNIT UNIT AND SETTING TENSION

1. Mount Simulknit between both Carriage guides, and place it onto Base bar, making sure metal pins are not projecting.

Ensure both cut-outs of Simulknit fit well over small pegs of Base bar.

Tighten screws.



2. Push Metal pins home.

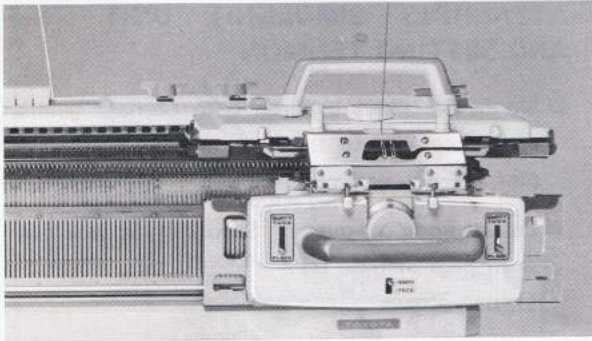
Secure metal pins by turning handles downwards.

3. For fine yarns such as 1 and 2 in the chart, set both tension discs on upper tension unit between "◀•▶" and "—". For the other yarns set tension discs at ◀•▶, and hook short wire onto the upper tension which col. 1 is threaded.

4. Set Tension dials referring to the chart below.

	1	2	3
TYPE OF YARN ACTUAL SIZE			
NAMES	Fine 2 ply	2 ply	3 ply
SIMULKNIT	$\frac{1}{3-4}$	$\frac{2}{3-4}$	$\frac{4}{5-6}$

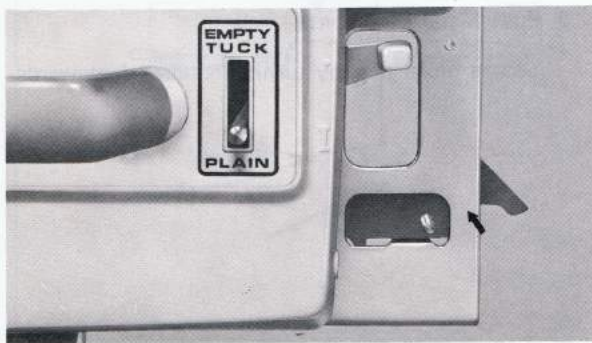
(Names of type of yarn will vary in each country.)



## ATTACHING RIGHT TRIANGLE CAM

1. Carriages are at right.

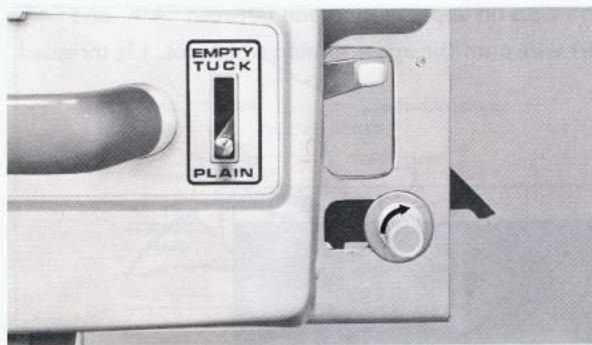
Set **RIGHT** triangle cam onto rib carriage as follows.



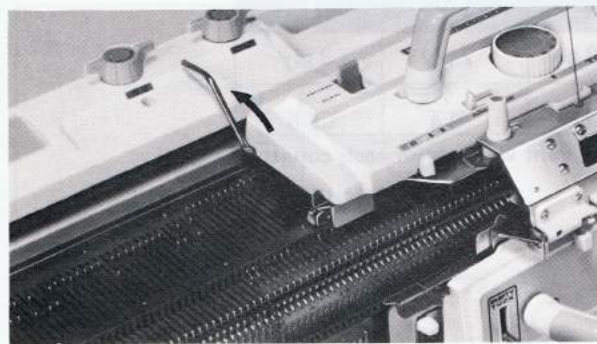
2. Undo the screw and washer from triangle cam.

Attach triangle cam from back of carriage.

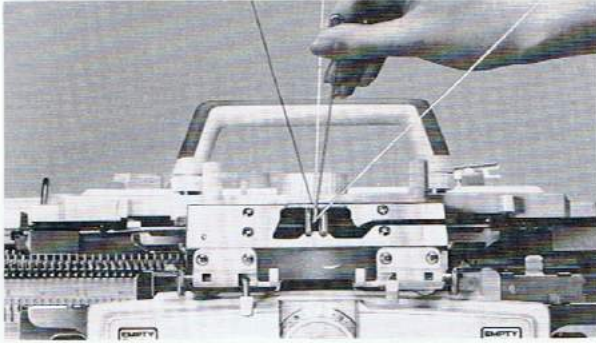
Make sure elevated square section fits square window at bottom right of carriage.



3. Place the washer and tighten the screw.



4. Set row counter 000 and row counter lever to working position.

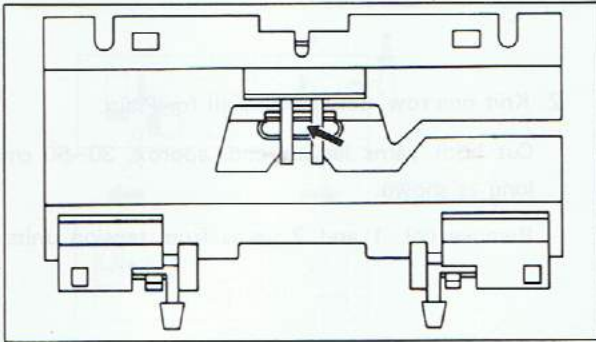
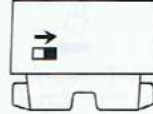


## THREADING COL. 2

1. Set Fairisle switch to COLOUR.

Thread col. 2 into feeder using threader.

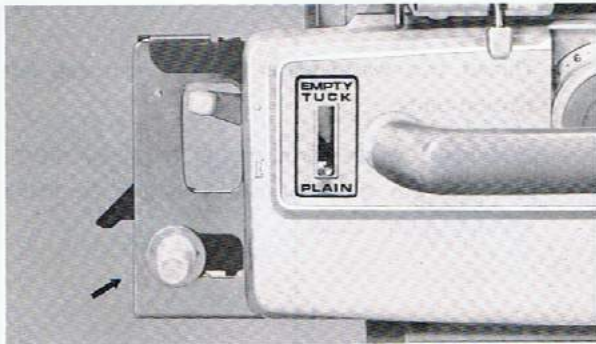
Insert threader between two bars (arrow in the middle diagram.) Slant it slightly towards outer side of machine.



2. Pull down col. 2 yarn at back of carriages.

Be sure that col. 1 and 2 yarns are not crossed and there is no slack between tension wire and feeder.

3. Knit 1 row to left holding the end of col. 2 by left hand.



## ATTACHING LEFT TRIANGLE CAM

Set LEFT triangle cam at left end of carriage.

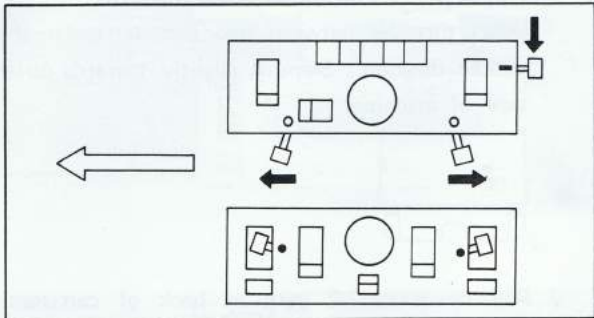
Continue knitting.

- \* Move carriages slowly.
- \* When end stitches are likely to come up, hang side weights (see page 24).

## CAST-OFF

Method 1 Neat finish with waste knitting, suitable for shoulder and other seaming.

Method 2 Close stitches with big loop using only main bed.



### METHOD 1

1. Set both Tension dials one number higher.

Set card feed lever to .

Both front levers to 0.

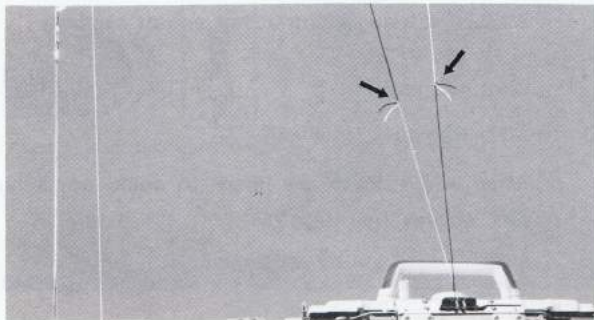
Rib carriage is set in neutral.



2. Knit one row. Set carriages all for Plain.

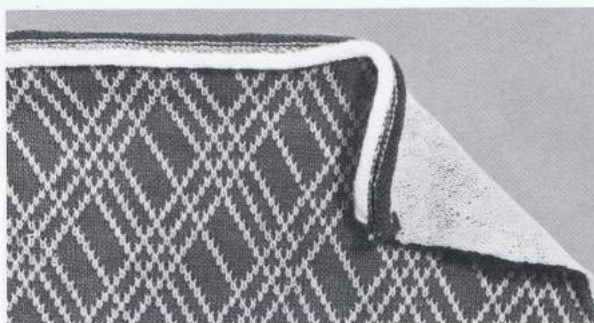
Cut both yarns leaving ends approx. 30~50 cm long as shown.

Remove col. 1 and 2 yarns from tension units.



3. Thread two waste yarns through right and left tension units.

Colours of waste yarns should be easily distinguished from those of col. 1 and 2 to make seaming much easier.

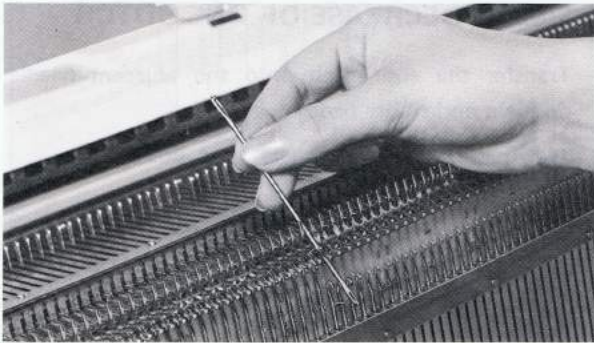


4. Tie one of waste yarns with col. 1 and the other with col. 2

Pull down both yarns under the carriages. Move carriages holding yarns at knots with left hand. Do some waste knitting.

Remove the work from the machine.

For seaming, see page 18.



## METHOD 2

### 1. Carriages are on Left.

Transfer all stitches on ribber to main bed, using double-eyed transfer tool. (For use see page 27 of Ribber instruction manual)

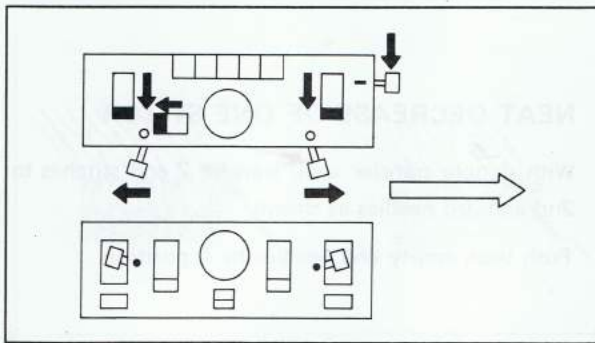
Push back all needles on ribber to A position.

### 2. Cut col. 2 and remove it from feeder.

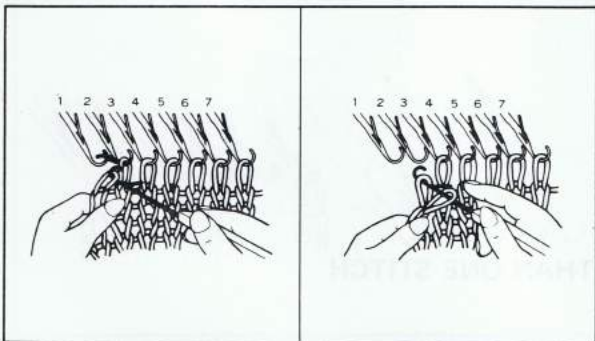
### 3. Set carriages all for plain.

Set tension dial of main carriage to very high number.

### 4. Knit 1 row to Right and cut the yarn leaving the end approx. 3 times longer than width of knitting. Remove Simulknit unit and drop ribber. (See page 33 of Ribber instruction manual)



### 5. Insert latch tool into the FIRST stitch at LEFT. Remove the stitch from the needle.



### 6. Push latch tool forward until the stitch is BEHIND the latch. Remove 2nd stitch from LEFT off its needle.

Remove 2nd stitch from LEFT off its needle.

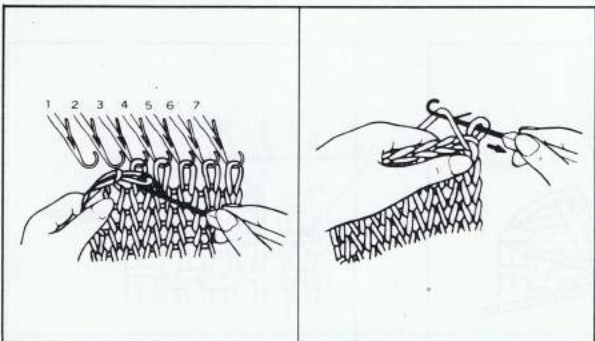
### 7. Pull 2nd stitch through the first one.

Let 2nd stitch slide behind the latch and hold it down.

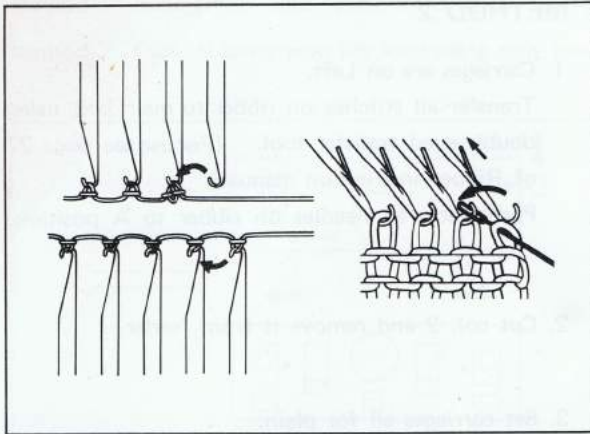
Remove 3rd stitch and continue the same way until last stitch is on the latch tool.

### 8. Pull yarn end through last stitch.

Now cast off last stitch.



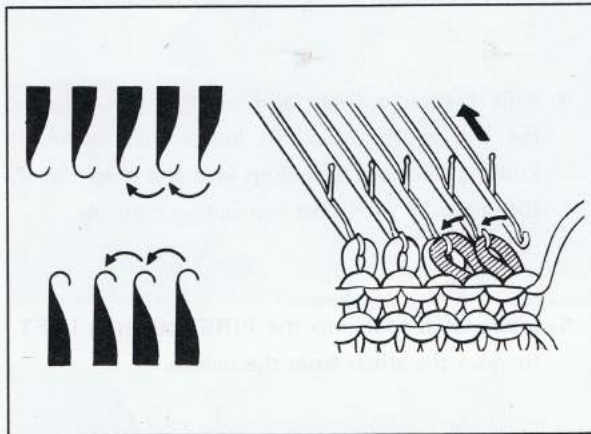
## TECHNIQUES FOR MAKING GARMENTS



### SIMPLE DECREASE OF ONE STITCH

Transfer the end stitch onto the adjacent needle on main and ribber beds.

Push back empty end needles to A position.



### NEAT DECREASE OF ONE STITCH

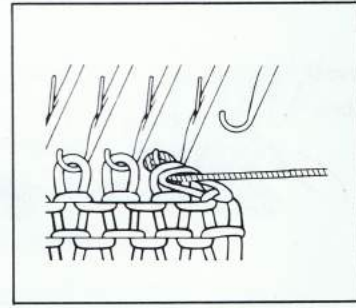
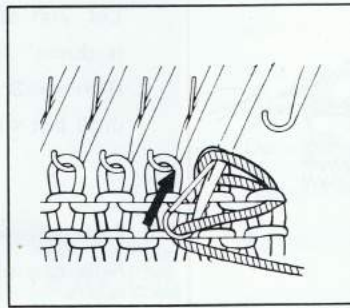
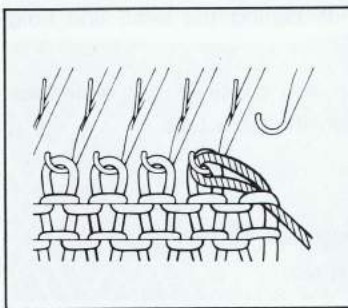
With double transfer tool, transfer 2 end stitches to 2nd and 3rd needles as shown.

Push back empty end needles to A position.

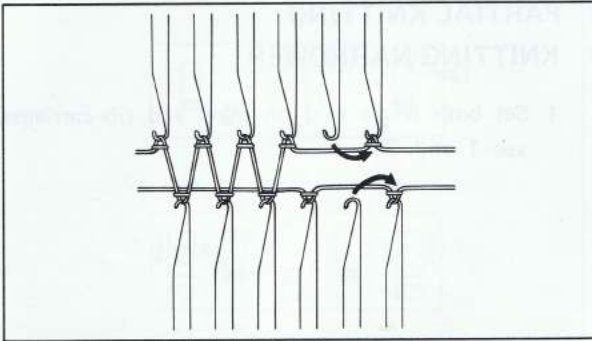
### DECREASE OF MORE THAN ONE STITCH

Work at carriage side.

Cast off each stitch on main and rib beds separately.

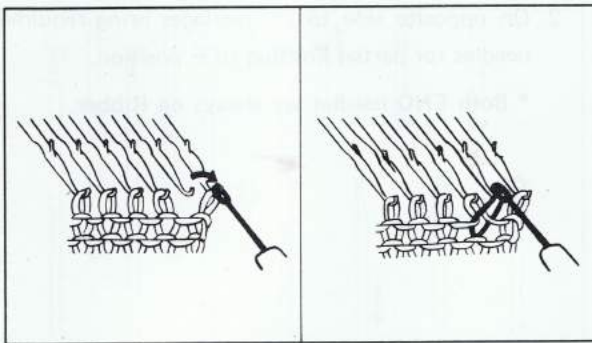




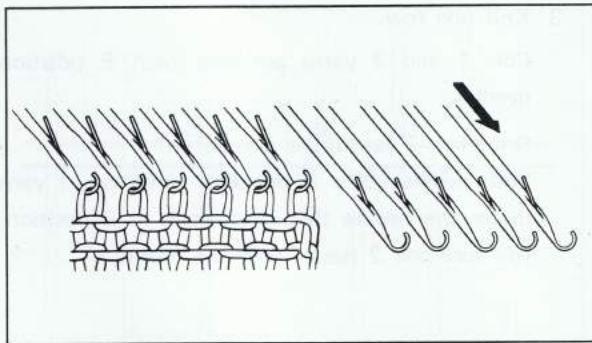


### INCREASE OF ONE STITCH

1. Transfer the end stitch on each bed onto the outside empty needle.

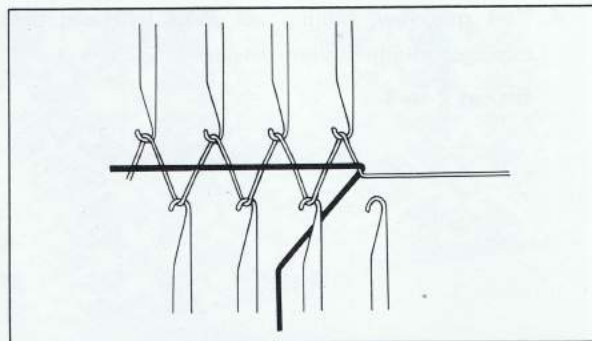


2. Pick up bar of second stitch and place it onto empty needle on both beds.

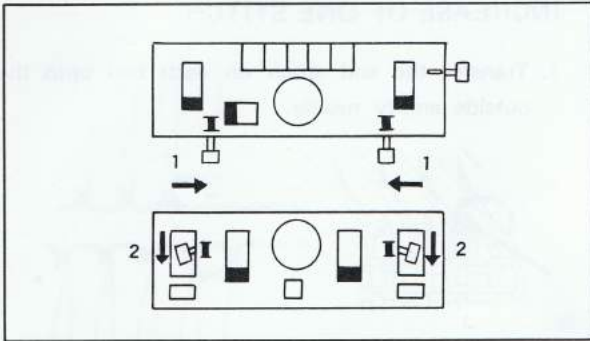


### INCREASE OF MORE THAN ONE STITCH

1. On opposite side to the carriages bring required number of needles to be increased, to D position on main and rib beds.

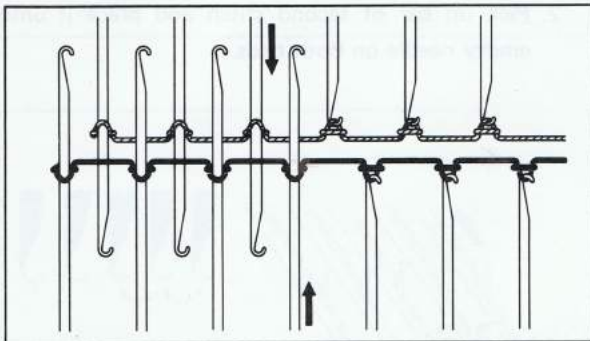


2. Knit one row.  
Hook side weights (see page 24).  
Bring yarn under the end needle on ribber.  
Continue knitting.



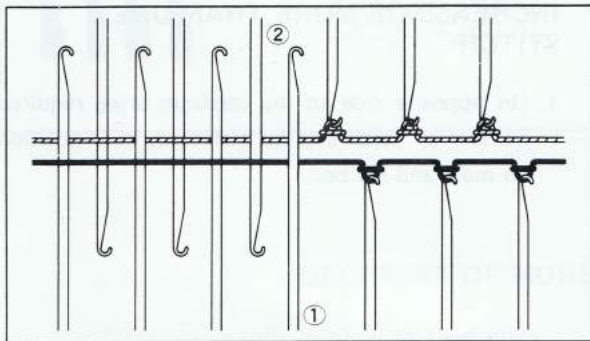
## PARTIAL KNITTING KNITTING NARROWER

1. Set both levers to I on main and rib carriages, see 1 and 2.



2. On opposite side to the carriages bring required needles for partial knitting to E position.

\* Both END needles are always on Ribber.



3. Knit one row.

Col. 1 and 2 yarns are over each E position needles.

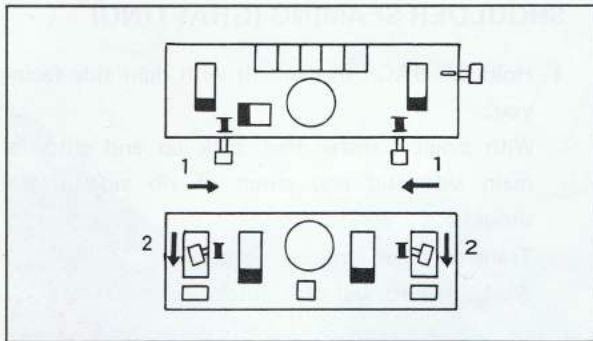
Bring col. 2 yarn under needle ①.

Push needle ② to B position, bring col. 1 yarn under the needle then push back to E position. (Be sure col. 2 passes over the needle.)



4. Knit one row, pulling up yarns by hand over carriages to adjust yarn tension.

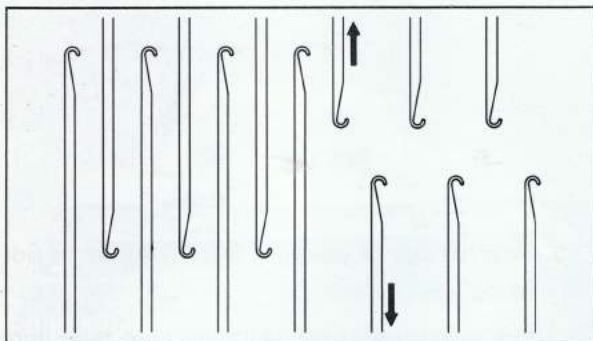
Repeat 2 to 4.



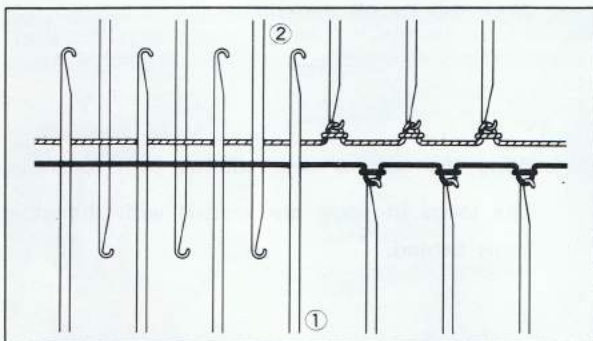
## KNITTING WIDER

1. Set both levers to I on main and rib carriages, see 1 and 2.

Assume some of needles are already in E position in this case.



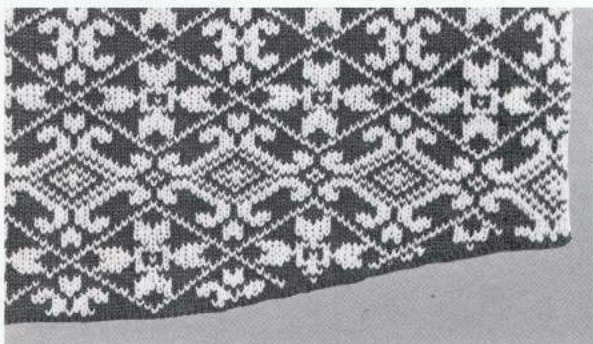
2. On the opposite side to the carriages, push back required needles to be knitted wider, to B or D position according to the pattern on main bed, and all to D position on rib bed.



3. Knit one row.

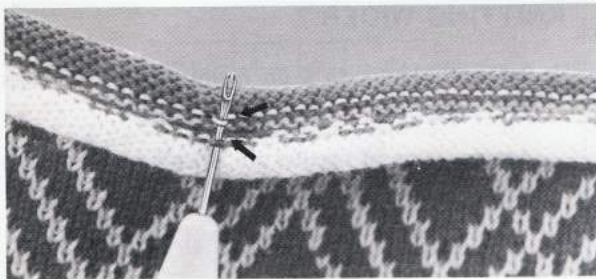
Col. 1 and 2 yarns are over each E position needles. Bring col. 2 yarn under needle ①.

Push needle ② to B position, bring col. 1 yarn under the needle then push back to E position. (Be sure col. 2 passes over the needle.)



4. Knit 1 row, pulling up yarns by hand over carriages to adjust yarn tension.

Repeat 2 to 4.



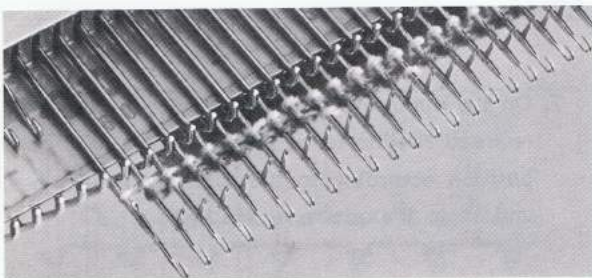
## SHOULDER SEAMING (GRAFTING)

1. Hold the BACK of garment with right side facing you.

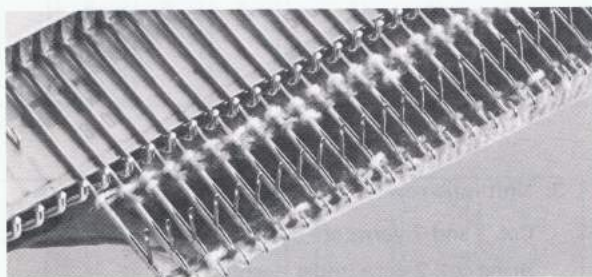
With single transfer tool, pick up end stitch of main side and end stitch of rib side of left shoulder.

Transfer them onto a needle.

Work this for all the stitches.



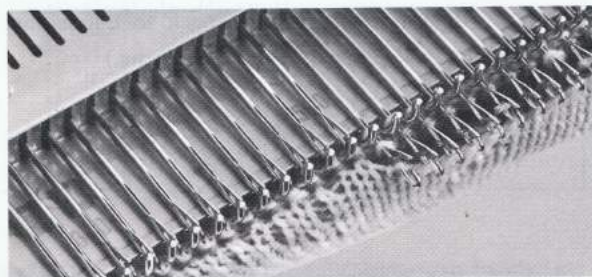
2. Bring needles forward and push back stitches behind latches.



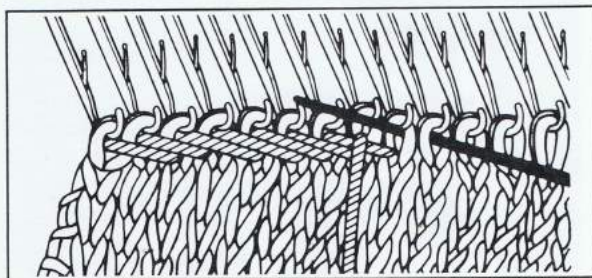
3. Hold left side of garment FRONT with wrong side facing you.

Pick up stitches as for BACK and hook them onto the right end needle which already has two loops.

Work this for all the stitches.

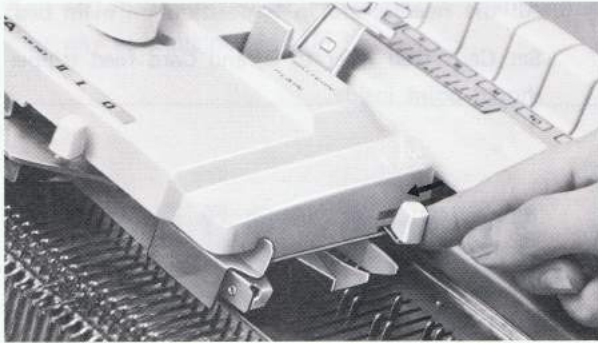


4. Bring the needles with stitches to B position.  
The loops in hook are knitted with the other loops behind.

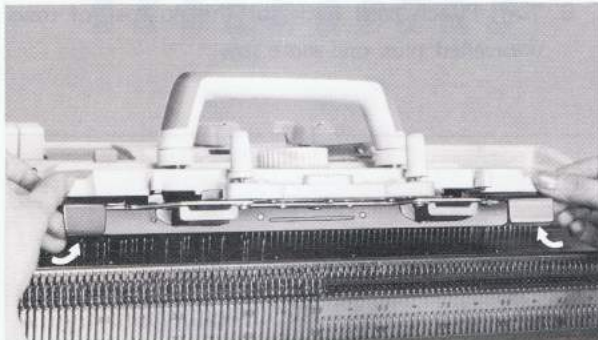


5. Thread yarn end into tapestry needle.  
Graft the stitches as shown.

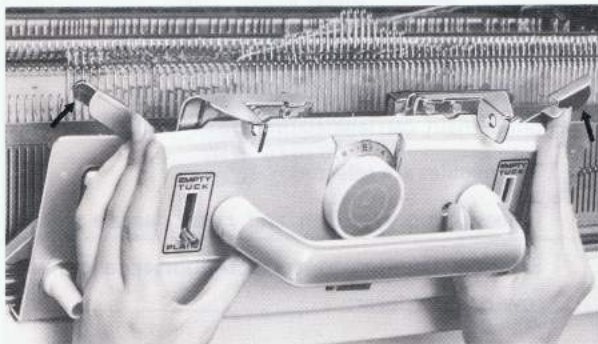
## CARRIAGE JAMMING



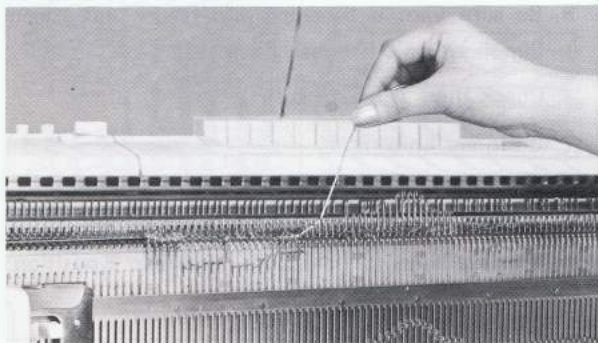
1. Remove Simulknit unit from carriages.  
Make sure no needle is caught in the feeder.  
Set Card feed lever to ☐.  
Disengage row counter lever.



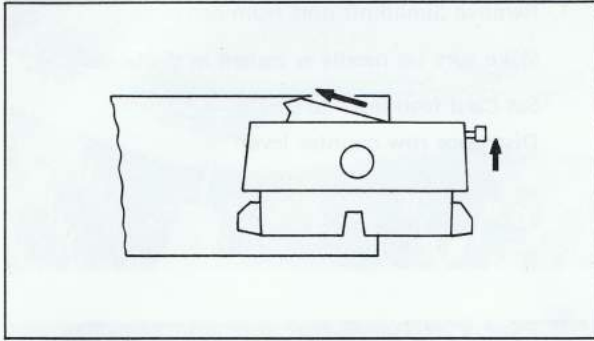
2. Pull both front holders of main carriage towards you and tilt it up.  
Holding it in raised position slide it out of fabric in knitting direction.  
Re-attach it onto bed.



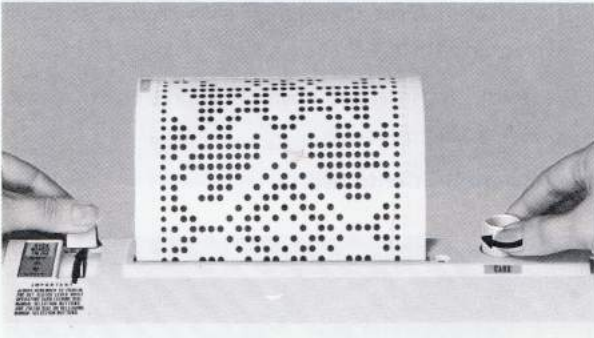
3. Tilt up rib carriage with front holders as for main carriage.  
Slide it to the opposite side of main carriage.  
Re-attach it onto bed.



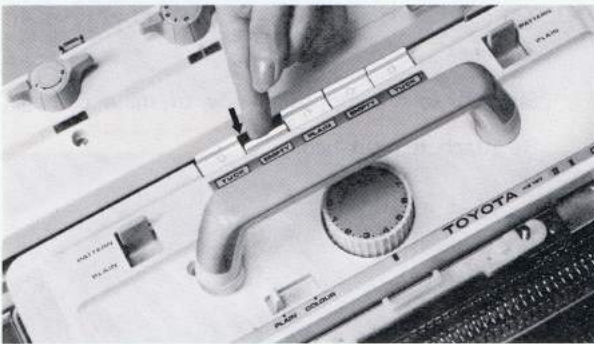
4. Put back any dropped stitches into needles and bring all the needles to B position. (See page 32 of Ribber instruction manual)  
Exchange needles if they are bent or broken.  
Unravel stitches carefully up to beginning of row on the side of rib carriage.  
If necessary, unravel the required number of rows.



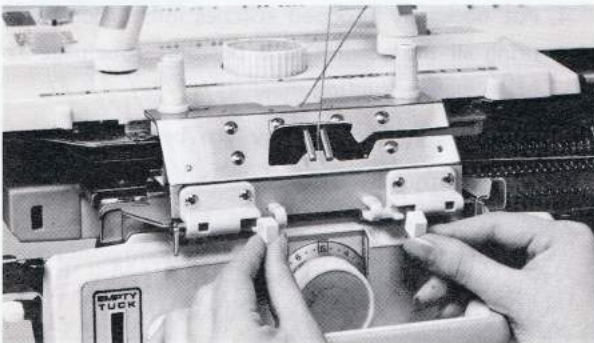
5. All the needles are in B position on main bed.  
Set Card feed lever to C, and Card feed tripper should point inside.



6. Turn Punch card back for the number of rows unraveled plus one more row.



7. Set fairisle switch to PLAIN and push Empty button of knitting side. Front levers (Partial knitting levers) are set at 0.  
Slide main carriage to the other side of knitting.  
The needles are selected.  
Release empty button and re-set fairisle switch.  
Set row counter to correct number and re-set row counter lever.

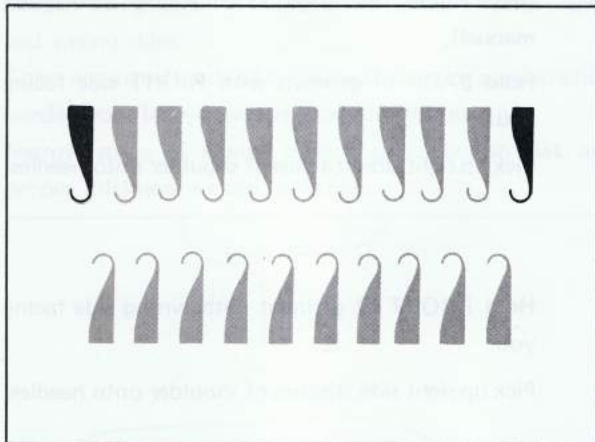


8. Be sure yarn is threaded into feeder and attach Simulknit unit between carriages.  
Check there is no slack.  
Continue knitting.

\* To slide rib carriage without knitting, set partial knitting levers to I and push needles to E position.

## TO MAKE REVERSIBLE GARMENTS

Knit and make up reversible garments in neat way as explained in **I** or in quick and easy way as explained in **II**



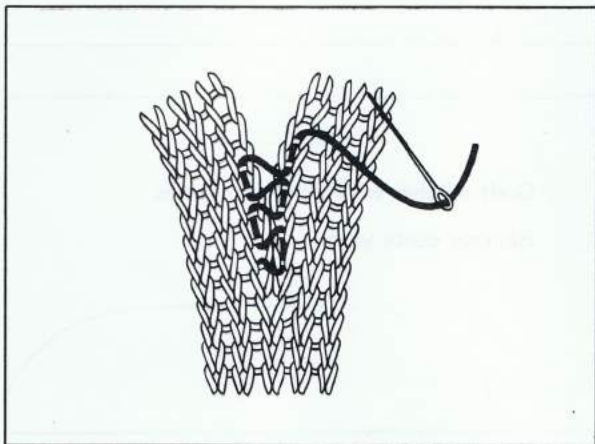
**I**

### 1. CAST ON AND KNITTING

Set needles as shown.

End needles are on MAIN bed.

Bring both end needles on main bed to D position after each row knitted.



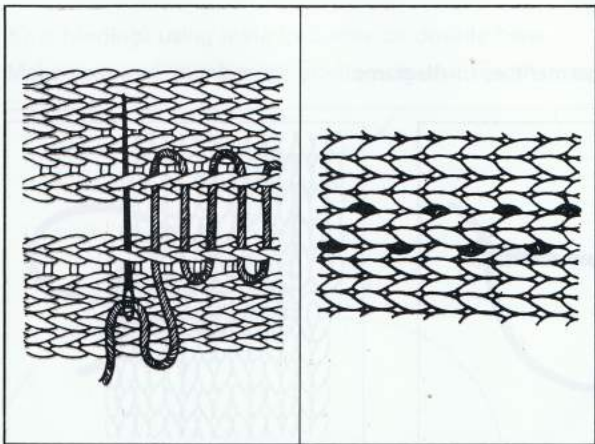
### 2. SIDE SEAMING

Seam right side with right side and wrong side with wrong side.

#### RIGHT SIDES:

Take bars of two rows HALF a stitch in.

Hold seam and pull sewing yarn gently so that edges come together and leave an invisible seam.



#### WRONG SIDES:

Take inside loop of edge stitch.

Sew every row.

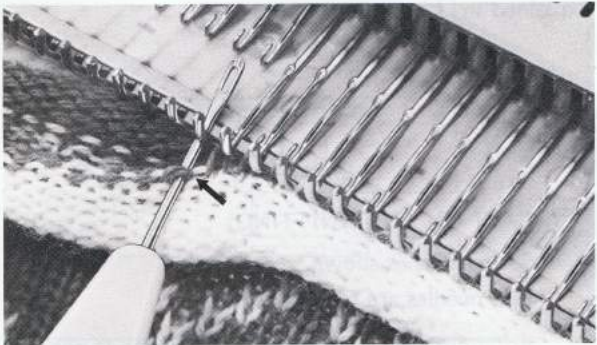
### 3. SHOULDER SEAMING

—Finish pieces with waste knitting using 2 colours:

Drop ribber (see page 33 of Ribber instruction manual).

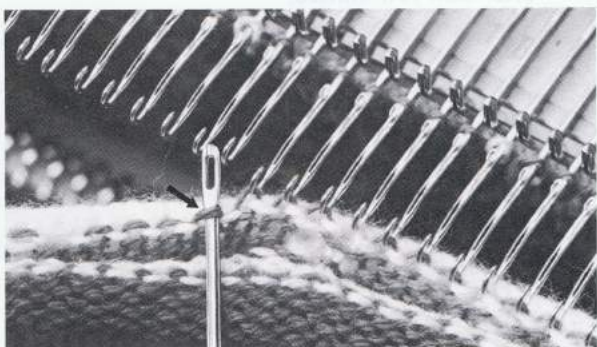
Hold BACK of garment with RIGHT side facing you.

Pick up right side stitches of shoulder onto needles.



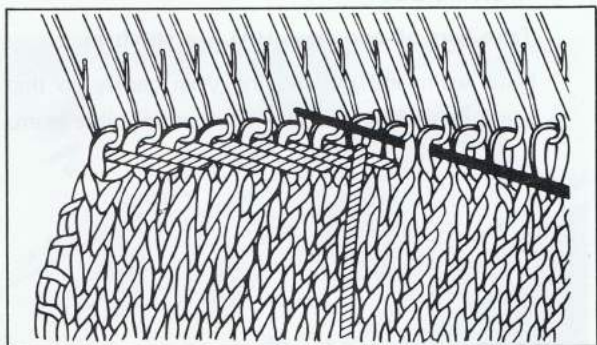
Hold FRONT of garment with wrong side facing you.

Pick up right side stitches of shoulder onto needles.

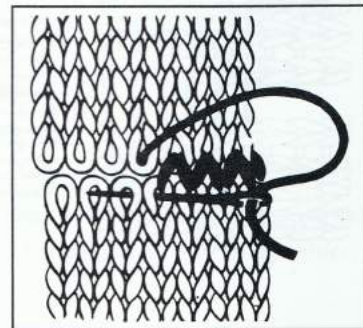
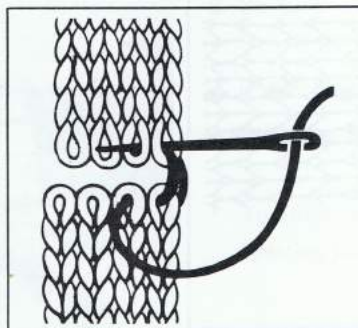
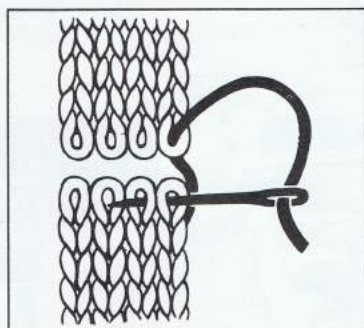


Graft stitches with tapestry needles.

Remove waste yarn.



Then graft stitches of WRONG side, front and back of garment as in diagrams.





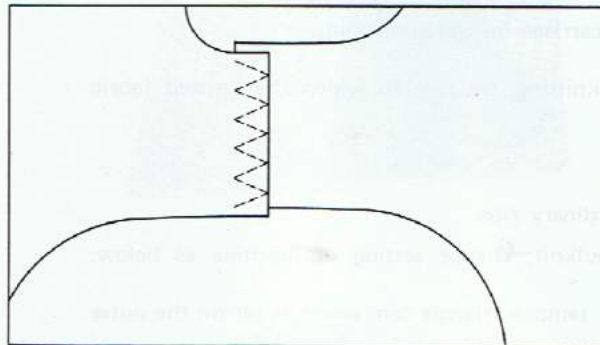
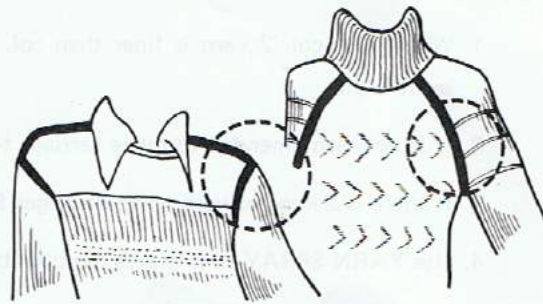
## II

### METHOD 1

Use tapes for sewing onto seams of garment. The length needed being equal to length of all seams of both right and wrong sides.

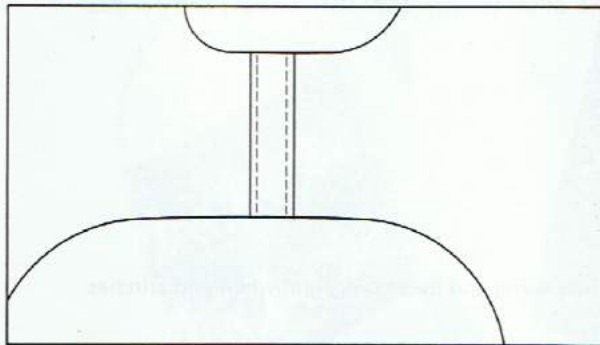
There are many kinds of tapes available such as synthetic suede, wool tape, velvet or program ribbons.

Narrow strips of sewing materials, not cut in bias, at proper thickness are also suitable.



Sew shoulder seams of garment using zigzag stitch of sewing machine as shown in diagram.

Or you can use straight stitch and open the seams.



Place tapes onto seams on each side of work.

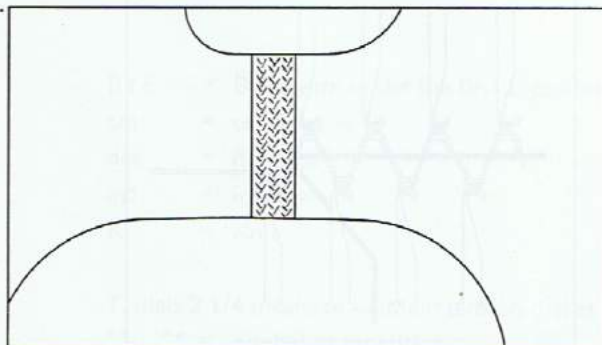
Sew on tapes.

Work for other seams in the same way.

### METHOD 2

Knit bindings using main bed only or double beds.

Make required number of bindings in the length for each seam, for both right and wrong sides.



Sew a binding on front shoulder with mattress stitch and on back shoulder.

Work for other seams in the same way.

## MUSTS AND HINTS FOR KNITTING

1. When your col. 2 yarn is finer than col. 1, set ribber tension dial lower, and when thicker, set it higher.
2. It is not recommended to move carriage too rapidly.
3. If there is a knot of yarn, slide darriages SLOWLY.
4. Use YARN SPRAY, this makes Simulknitting quite smooth.
5. It is not possible to move Racking Handle while doing Simulknitting.
6. DO NOT set TUCK buttons or levers of each carriage for Simulknitting.
7. When you re-hook the cast-on comb while knitting, be sure to widen the knitted fabric sideways and hook the comb.



You can not use SIMULKNIT for cast on or ordinary ribs.

When you do ordinary rib after finishing simulknit, change setting of machine as below.

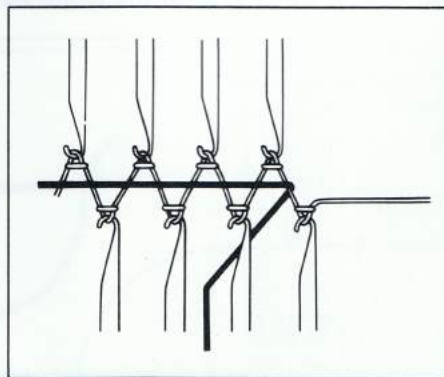
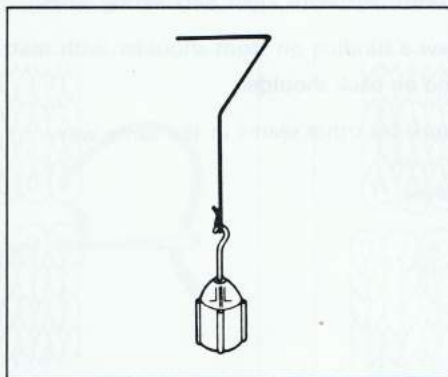
Before knitting the last row of simulknitting, remove triangle cam which is set on the outer side of carriage.

Knit last row of simulknitting, and remove the other triangle cam. Set carriages and needles for ribbing. Start ribbing.

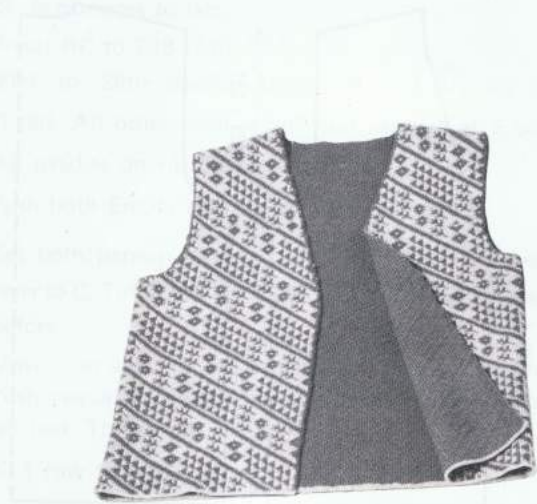
## SIDE WEIGHTS

Use side weights for such cases as partial knitting, increasing and decreasing, and when end stitches are likely to come up or not being knitted.

Re-hook side weights as often as required, or after every one complete turn of a Punch Card.



## PART 2



BYE = Bring yarn under the first E position needle  
 cm = centimetres  
 dec = decrease  
 inc = increase  
 K = Knit

pos = position  
 RC = row counter  
 st(s) = stitch(es)  
 T. dial = tension dial  
 2.2 = 2 · · that is · 2 · · ↓ 3,  
 1.1 = 1 · that is · 1 · · ↑ 2

T. dials 2.1/4 means to set Main tension dial at 2.2 and Rib tension dial at 4,

\*\* \*\* = symbol of repetition

## WAISTCOAT

<b>SIZES</b>	To fit 83 (87, 98) cm bust Hereinafter referred to as A (B, C)
<b>MATERIALS</b>	3 ply wool Approx. 100 g in col. 1 and 200 g in col. 2
<b>PUNCH CARD</b>	No. 634
<b>TENSION</b>	33 sts and 45 rows in 10 cm

### BACK:

Set 150 (156, 166) needles on main bed and 151 (157, 167) needles on ribber. To make reversible waistcoat, set 151 (157, 167) needles on main bed, and 150 (156, 166) needles on ribber.

Cast on with col. 1 (pages 4-6).

Insert punch card No. 634 and set machines for Simulknitting, with correct tensions, col. 2 and triangle cams (pages 7-11).

Set RC at 000. Knit 146 (146, 146) rows.

### SHAPE ARMHOLES:

At right cast off 3 sts. K 1 row.

At left cast off 3 sts. K 1 row.

\*At right cast off 2 sts. K 1 row.

At left cast off 2 sts. K 1 row.\*

\*-\* repeat twice.

\*\*dec 1 st both ends. K 2 rows.\*\*

\*\*-\* repeat twice.

\*\*\*At right dec 1 st. K 1 row.

At left dec 1 st. K 3 rows.\*\*\*

\*\*\*-\* repeat twice.

\*\*\*\*At right dec 1 st, K 1 row.

At left dec 1 st, K 5 rows. \*\*\*\*

\*\*\*\*-\* repeat 3 times for SIZE C only.

Dec 1 sts both ends. K 2 rows.

K 52 (52, 54) rows. RC shows 232 (242, 250).

### SHAPE SHOULDERS:

Set both carriages for partial knitting, page 16,

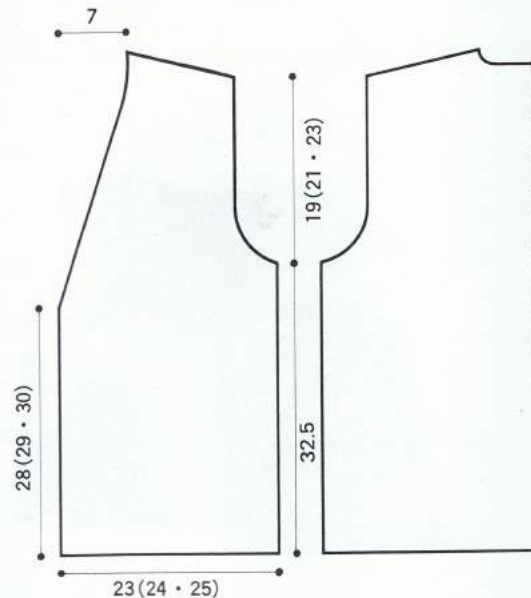
\* At left bring 5 (6, 6) needles to E pos. K 1 row.

BYE.

At right bring 5 (6, 6) needles to E pos. K 1 row.

BYE.\*

\*-\* repeat twice. RC shows 238 (248, 256).



### SHAPE NECKLINE-RIGHT SIDE OF NECK

Make a note of row number of punch card.

Bring 18 needles at right of machine center, and ALL needles on left to E pos. K 1 row.

BYE.

At right bring 5 (5, 6) needles to E pos. K 1 row.

BYE.

At left bring 3 (3, 3) needles to E pos. K 1 row.

BYE.

At right bring 5 (5, 6) needles to E pos. K 1 row.

BYE.

At left bring 2 (2, 2) needles to E pos. K 1 row.

BYE.


At right bring 5 (5, 6) needles to E pos. K 1 row.

BYE.

K 1 row. RC shows 245 (255, 263).

On right bring 24th needle and ALL to right of it to B pos.

K 1 row. RC shows 246 (256, 264).

Set both Pattern levers to PLAIN, card feed lever to , and fairisle switch to PLAIN.

Thread two waste yarns, work some waste knitting, and remove the right side from machine. Push back empty needles to A pos.

### LEFT SIDE OF NECK:

Slide carriages to left.

Reset RC to 238 (248, 256).

21st to 39th needles from left end are set at B pos. All other needles on main bed are at E pos.

All needles on rib bed are at E pos.

Push both Empty buttons of main carriage.

Set both pattern levers to PATTERN and Card feed lever to C. Turn back punch card to the number noted before.

Move carriages to right. Release Empty buttons. Push required needles to be knitted to D pos, on rib bed. Thread col. 1 and 2.

K 1 row to left.

At right bring 3 (3, 3) needles to E pos. K 1 row. BYE.


At left bring 5 (5, 6) needles to E pos. K 1 row. BYE.

At right bring 2 (2, 2) needles to E pos. K 1 row. BYE.

At left bring 5 (5, 6) needles to E pos. K 1 row. BYE.

K 1 row.

Bring 24th needle on the left of machine center and ALL at left of it to B pos. K 1 row. RC shows 245 (255, 263).

Set both Pattern levers to PLAIN and card feed lever to , and fairisle switch to PLAIN. Thread two waste yarns. Work some waste knitting, and remove the part from machine.

Push back empty needles to A pos.

Carriages are on left.

Bring needles to B pos on main bed. Transfer all sts on ribber to main bed. Remove col. 2 from feeder. Set tension dial 3-5 numbers higher, and K 1 row to right.

Cast off sts as on page 16.

### LEFT FRONT:

Set 75 (78, 83) needles on main bed from the center of machine to left. Set 76 (79, 84) needles on ribber. To make reversible waistcoat set 76 (79, 84) needles on main bed and 75 (78, 83) needles on ribber. Cast on with col. 1. (page 4-6). Insert punch card and

set machine for Simulknitting, with correct tensions, col. 2 and triangle cams. (page 7-11)

Set RC at 000. K 129 (133, 135) rows.

### SHAPE FRONT SLOPE:

Dec 1st at right.

Knit until 146 (146, 146)th row decreasing 1st at right every 5th row.

### SHAPE ARMHOLE:

Decrease 1 st at right every 5th row, and at the same time shape armhole at left as follows.

Cast off 5 sts, K 2 rows.

Cast off 3 sts, K 2 rows.

Cast off 2 sts, K 2 rows.

\*Dec 1st, K 2 rows.\*

\*-\* repeat once.

\*\*Dec 1 st, K rows.\*\*

\*\*-\* repeat 1 (1, 3) times.

Dec 1 st, K 66 rows. RC shows 232 (242, 250) rows.

### SHAPE SHOULDER:

Set both carriages for partial knitting. At left bring 5 (6, 6) needles to E pos. Knit 1 row. BYE.

K 1 row.

\*At left bring 5 (6, 6) needles to E pos, K 1 row. BYE. K 1 row.\*


\*-\* repeat once.

\*\* At left bring 5 (5, 6) needles to E pos, K 1 row. BYE. K 1 row.\*\*

\*\*-\* repeat twice.

Release carriages from partial knitting.

K 1 row. RC show 245 (255, 263).

Set both Pattern levers to PLAIN, Card feed lever to  and fairisle switch to PLAIN. Thread two waste yarns, work some waste knitting, and remove it from machine.

### RIGHT FRONT:

Work as for left front with all the shapings reversed.

### MAKE UP:

Pin out pieces and press lightly.

Sew shoulder seams and side seams.

## FULL-LENGTH SKIRT

<b>SIZES</b>	To fit 92 (96, 100) cm hip and 66 (70, 74) cm waist. Finished length is 95 (99, 103) cm.
<b>MATERIAL</b>	3 ply mixed of wool and acryl Approx. 300 g in col. 1 and 350 g in col. 2.
<b>PUNCH CARD</b>	No. 637
<b>TENSION</b>	24 sts and 48 rows in 10 cm. (when T. dials set at 2/3,2)

Make one panel of back and two panels of front. The bottom part of each panel is knitted changing the setting of tension dials.

### BACK:

Set 193 (199, 199) needles on main bed and 194 (200, 200) needles on ribber. To make a reversible skirt, set 194 (200, 200) needles on main and 193 (199, 199) needles on rib bed. In this case, REMEMBER to bring both end needles on main bed to D pos every row while knitting.

\*Cast on with Col. 1 (pages 4-6).

T. dials 2,2/2,2, K 6 rows of close rib. Insert punch card No. 637 and machine for Simulknitting, with col. 2 and triangle cams (pages 7-11). RC at 000.

T. dials 4/5,2, K 20 rows.

T. dials 3,2/5,1, K 20 rows.

T. dials 3,1/5, K 20 rows.

T. dials 3/4,2, K 25 rows.

T. dials 2,2/4,1, K 25 rows.

T. dials 2,1/4, K 25 rows.

RC shows 141. Set T. dials 2/3,2.

Shape sides decreasing 1 st at both ends as follows.

K 0 (14, 19) rows and dec 1 st.

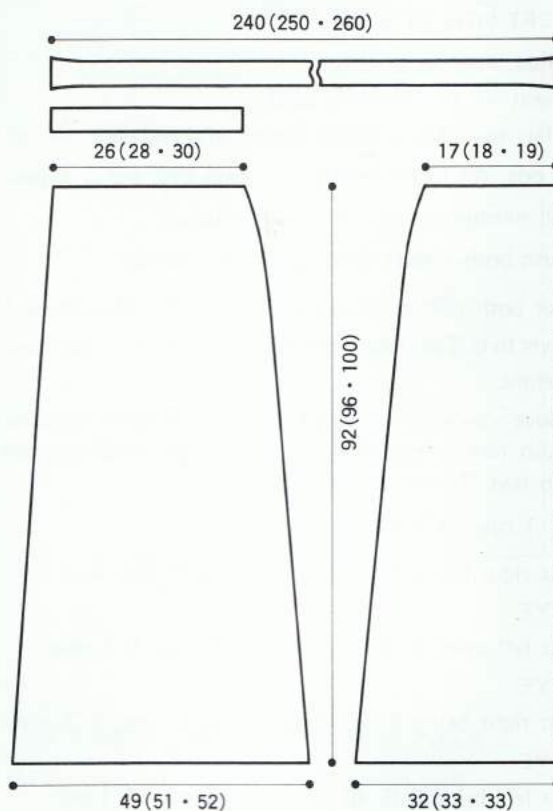
K 13 (14, 19) rows and dec 1 st, and repeat 8 (6, 3) times.

K 12 (13, 18) rows, and dec 1 st, and repeat 4 (5, 5) times.\*

\*\* K 8 (8, 9) rows, dec 1 st, SIZE B only repeat once.

K 7 (7, 8) rows, dec 1 st, SIZE A only repeat once.

K 6 (6, 7) rows. Dec 1 st, and repeat once.



K 5 (5, 6) rows, dec 1 st, and repeat 2 (2, 1) times.  
K 4 (4, 5) rows, dec. 1 st, and repeat 2 (3, 2) times. K 3 (3, 4) rows, dec 1 st, and repeat 1 (1, 3) times. K 3 (3, 2) rows. RC shows 388 (406, 424). Set carriages all for plain.\*\*

On both main and rib beds, transfer 10 sts, listed below, to the inside adjacent needle at each right and left side.

SIZE A – 19th, 22nd, 24th, 27th, 29th, 32nd, 34th, 37th, 39th and 42nd sts from both ends.

SIZE B – 21st, 24th, 26th, 29th, 31st, 34th, 36th, 39th, 41st and 44th sts from both ends.

SIZE C – 22nd, 25th, 27th, 30th, 32nd, 35th, 37th, 40th, 42nd and 45th sts from both ends.

Do some waste knitting and remove the piece from machine.

### LEFT FRONT:

Set 149 (155, 158) needles on main bed and 150 (156, 159) needles on ribber. To make a reversible skirt, set 148 (154, 147) needles on ribber.

For decreasing sts use single transfer tool at left end and double transfer tool at right end.

Work as for back from \*to\*. RC shows 318 (331, 344),  
At left end work as for back from \*\*to\*\*, but  
at the same time at the right shape as follows:  
K 13 (14, 16) rows, dec 1 st, repeat 3 (3, 4) times.  
K 18 (19, 16) rows.

On both main and rib beds, transfer 10 sts, listed  
below, to the adjacent needle on the right.

SIZE A – 19th, 22nd, 24th, 27th, 29th, 32nd, 34th,  
37th, 39th and 42nd sts from left edge.

SIZE B – 21st, 24th, 26th, 29th, 31st, 34th, 36th,  
39th, 41st and 44th sts from left edge.

SIZE C – 22nd, 25th, 27th, 30th, 32nd, 35th, 37th,  
40th, 42nd and 45th sts from left edge.

Do some waste knitting and remove the piece from  
machine.

#### RIGHT FRONT

Work as for left front but reversing all shapings.

#### BANDS

##### Longer band:

\* Work in close rib, see page 14 of Ribber manual.  
Use yarn in 2 strands, threading two yarns through  
both right and left upper tension units.\*

Set 16 needles on main bed and 17 needles on ribber.  
After casting on transfer the 2nd end needles on  
ribber on both sides, to adjacent needle and bring  
back the empty needle to A pos.\*

Set T. dials 9 on both carriages, K 30 rows.

T. dials 8, K 30 rows.

T. dials 7, K 30 rows.

T. dials 6, K 35 rows.

T. dials 5, K 40 rows.

T. dials 4, K 40 rows.

T. dials 3, K 45 rows.

T. dials 2.1, K 50 rows.

T. dials 1.2, K 30 (47, 62) rows. Mark around end  
st at right with waste yarn.

K 135 (146, 156) rows. Mark around end st at right.

K 176 (187, 199) rows. Mark around end st at right.

K 73 (88, 104) rows.

T. dials 2.1, K 50 rows.

T. dials 3, K 45 rows.

T. dials 4, K 40 rows.

T. dials 5, K 40 rows.

T. dials 6, K 35 rows.

T. dials 7, K 30 rows.

T. dials 8, K 30 rows.

T. dials 9, K 30 rows.

RC shows 014 (069, 122). Cast off.

**Shorter band:** Cast on as \*-\* of longer band.

T. dials 1.2 K 135 (146, 156) rows.

Cast off.

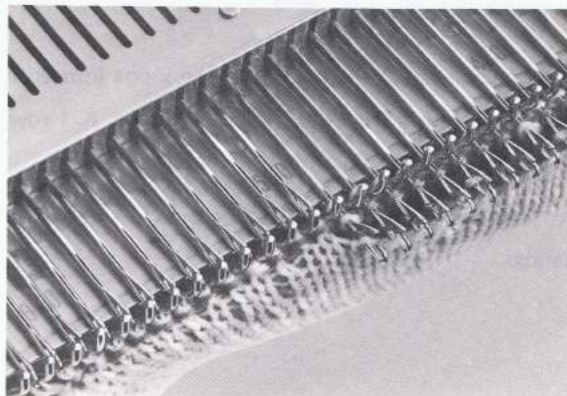
#### MAKE UP:

Pin out and press the pieces.

Seam right and left sides.

Hold Left Front panel of seamed garment with right  
side facing you.

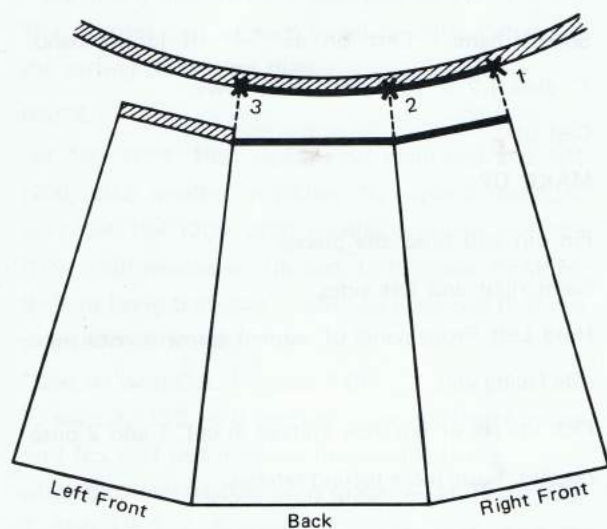
Pick up sts of last row knitted in col. 1 and 2 onto  
needles. Push them behind latches.



Hold shorter band wrong side facing you, pick up  
two loops of end sts onto the needles. Push all needles  
to B pos, and the loops in needle hooks are knitted  
by the other two loops. K 1 row with large tension.  
Cast off using latch tool.

Hold the garment right side facing you, pick up sts of Back and Right Front onto needles. Push them behind latches.

Hold longer band with wrong side facing you, pick up sts onto needles, starting from the 1st marked st with waste yarn towards the left. Pick up all sts evenly from 1st marked st to 3rd marked st. Be sure that marked 2nd st is fit to Right seam of garment and marked 3rd st is to Left seam.



Push back needles to B pos, and the loops in needle hooks are knitted by the other two loops. K 1 row with large tension. Cast off using latch tool.

At left side seam, catch together shorter and longer bands.

## SHOULDER BAG

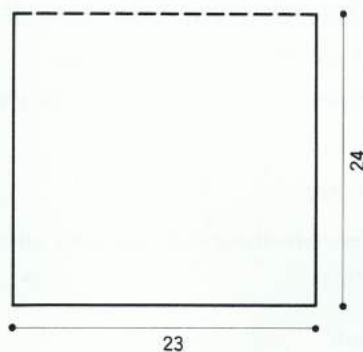
**FINISHED SIZE** approx 23 cm wide and 24 cm long

**MATERIALS** 4 ply wool

Approx. 80 g in col. 1 (charcoal grey), 30 g in col. 2 (blue), 35 g in col. 3 (red), 30 g in col. 4 (greyish blue) and 40 g in col. 5 (grey)

**PUNCH CARD** No. 618

The number of row on Punch Card is shown in brackets ( ).



**MAIN PART** in one piece

Set 74 needles on main bed and 75 needles on rib bed. To make it reversible, set 74 needles on main and 73 needles on rib bed. Cast on with col. 1 (pages 1-4). Insert punch card No. 618 UP SIDE DOWN. You can see row numbers at left. Set it at 31. Set both Pattern levers to PATTERN and Card feed tripper should point outside.

Set machine for Simulknitting; with correct tensions, col. 2 and triangle cams. (pages 7-11) Carriages are at right. K 6 rows. (25) Exchange col. 2 to col. 3, K 12 rows. (13)

With col. 4, 26 rows. (35)

K 2 rows with col. 5. (33)

K 8 rows with col. 2. (25)

K 12 rows with col. 3. (13)

K 26 rows with col. 4. (35)



K 2 rows with col. 5. <33>

K 8 rows with col. 2. <25>

Set both Pattern levers to PLAIN and card feed lever to .

K 7 rows with col. 2.

Set both Pattern levers to PATTERN, Card feed lever to C, and Card feed tripper should point outside.

Remove punch card and re-set it in ordinary way.

Set it at row number 41.

K 1 row to right and needles are selected.

K 6 rows with col. 2. <47>

K 4 rows with col. 5. <3>

K 24 rows with col. 4. <27>

K 12 rows with col. 3. <39>

K 8 rows with col. 2. <47>

K 4 rows with col. 5. <3>

K 24 rows with col. 4. <27>

K 12 rows with col. 3. <39>

K 10 rows with col. 2.

Transfer all sts on ribber to main bed. Set both Pattern levers to PLAIN and Card feed lever to .

K 1 row with larger tension. Cast off using latch tool.

**MAKE UP:** Pin out and press the piece.

Fold the piece in two and seam sides.

Sew yarn ends through fabric.

**STRAP:** Take 16 strands of each col. 3, 4 and 5 in 2.5 metres. Make a plait, leaving ends free. Knot and cut them to equal length so as to form a tassel.

Sew strap onto sides of bag.

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Faint, illegible text located below the sketch, possibly bleed-through from the reverse side.

Extensive faint, illegible text on the right side of the page, likely bleed-through from the reverse side of the document.





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