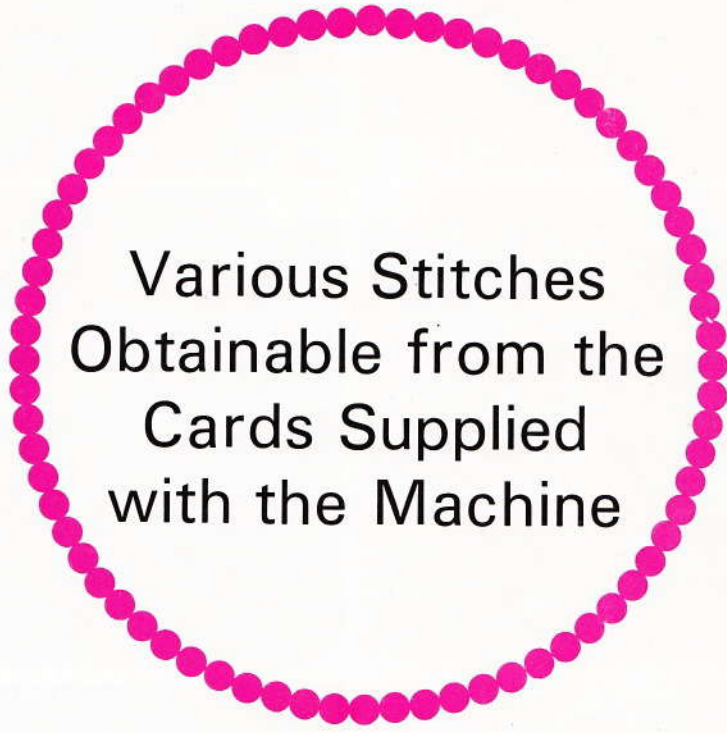




INSTRUCTION BOOK

KNITTING MACHINE **KE-2500**



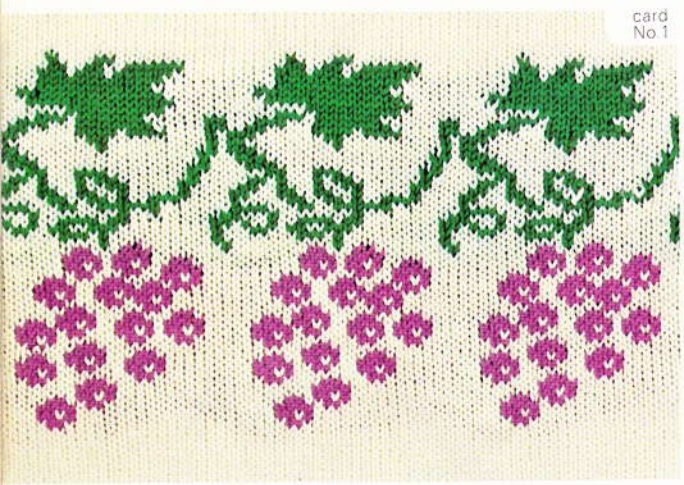
Various Stitches
Obtainable from the
Cards Supplied
with the Machine

Tow color	17 versions
Slip Stitch	9 versions
Tuck Stitch	7 versions
Weaving Stitch	6 versions
Lace Stitch	3 versions

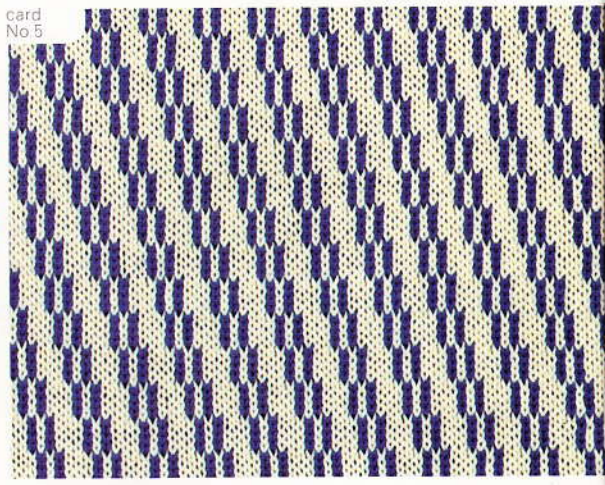
Two Color Patterns



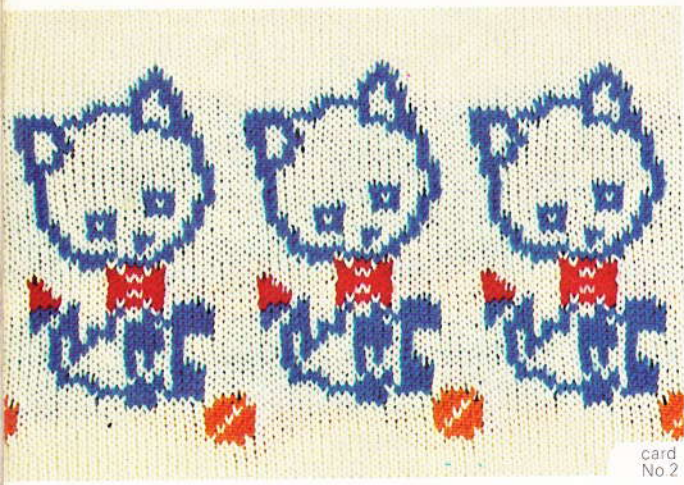
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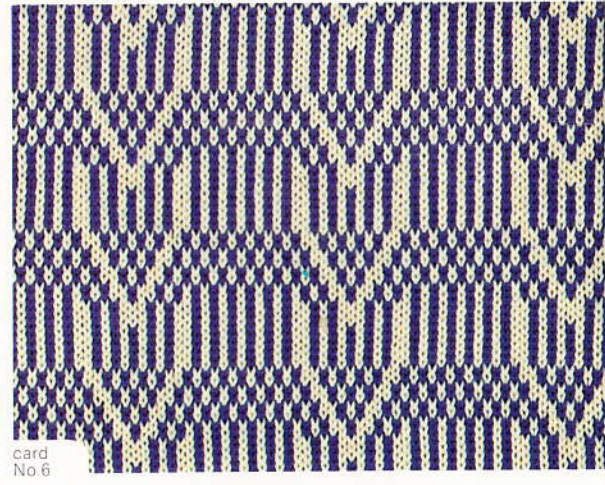
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card No.5



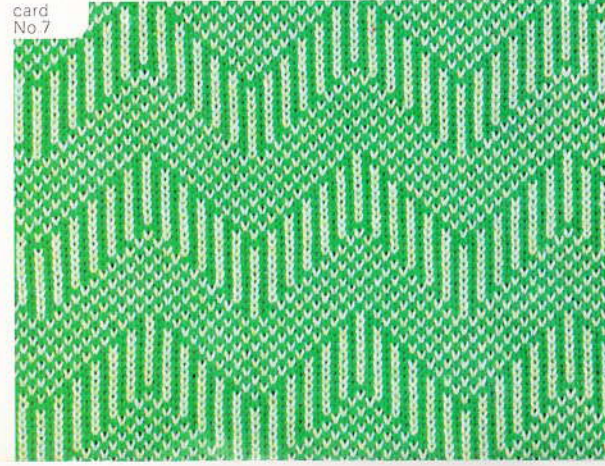
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card No.6



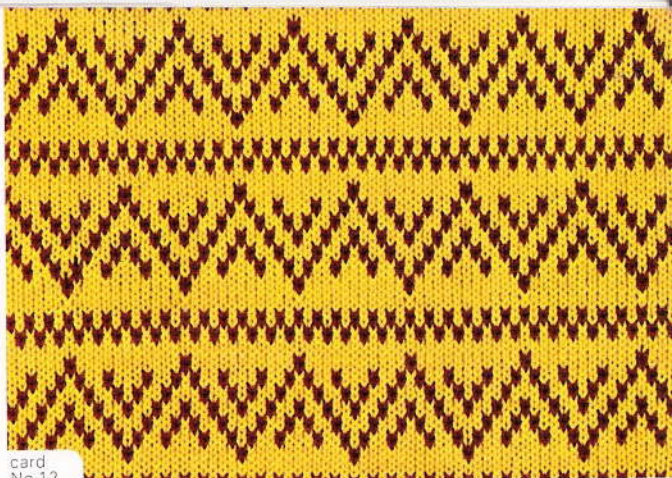
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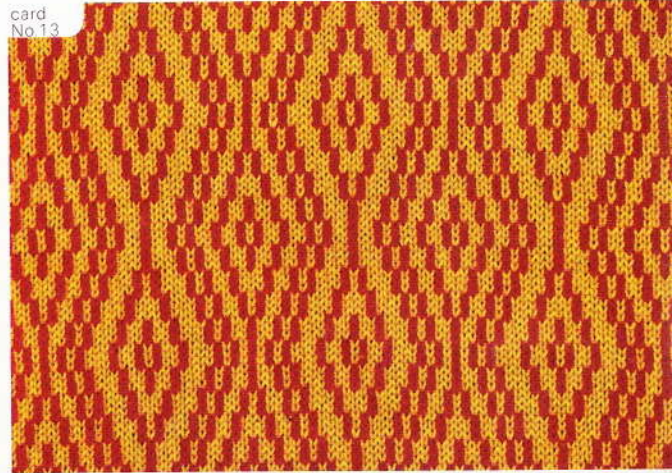
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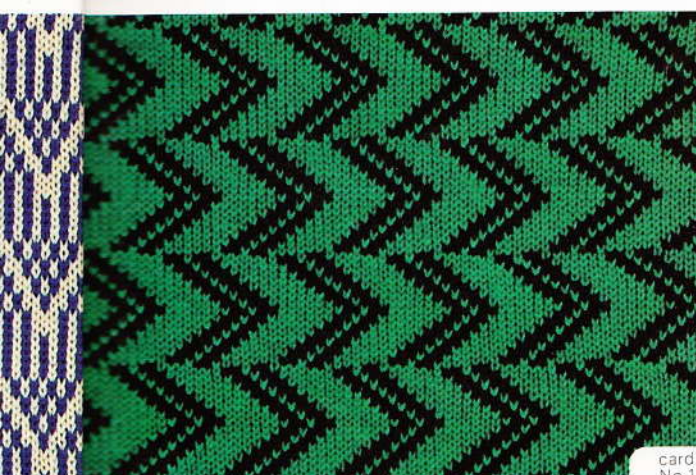
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card
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card
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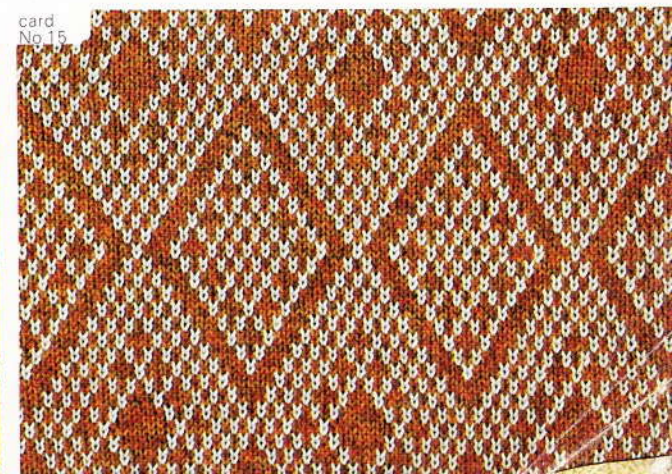
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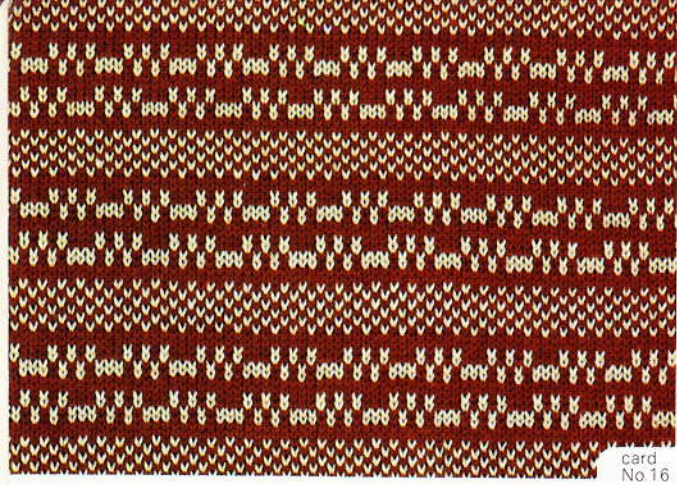
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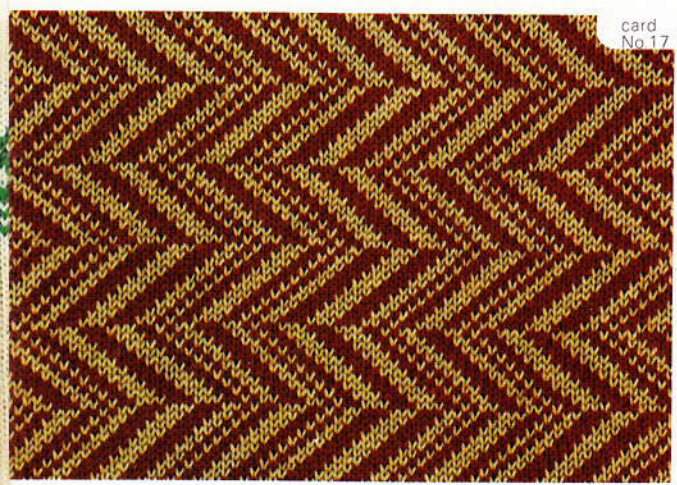
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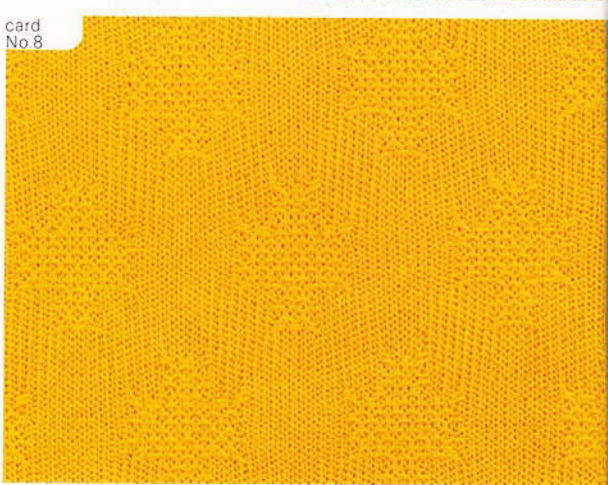
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card No 9



card No 17

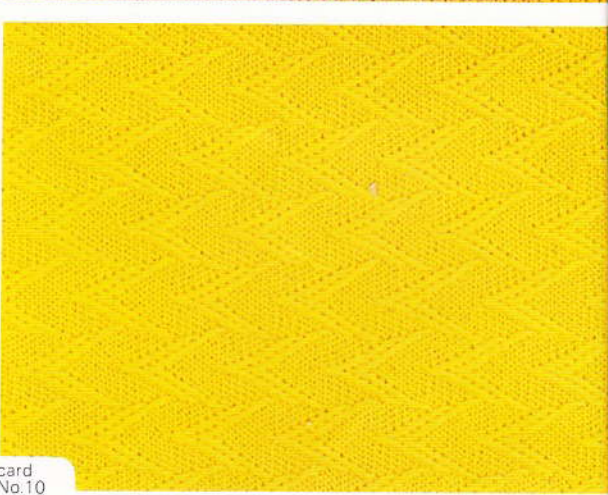


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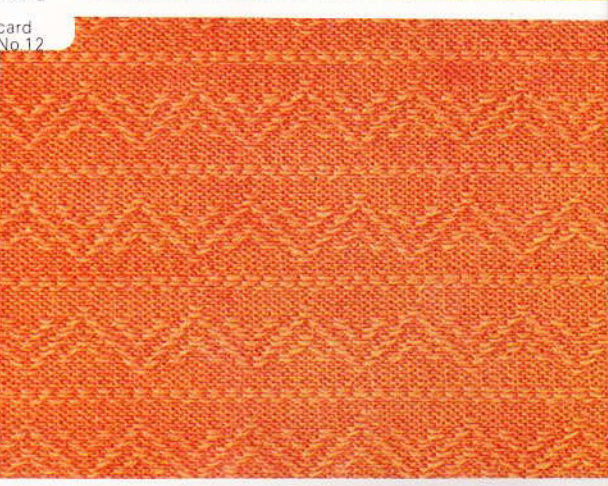
Slip Stitch Patterns



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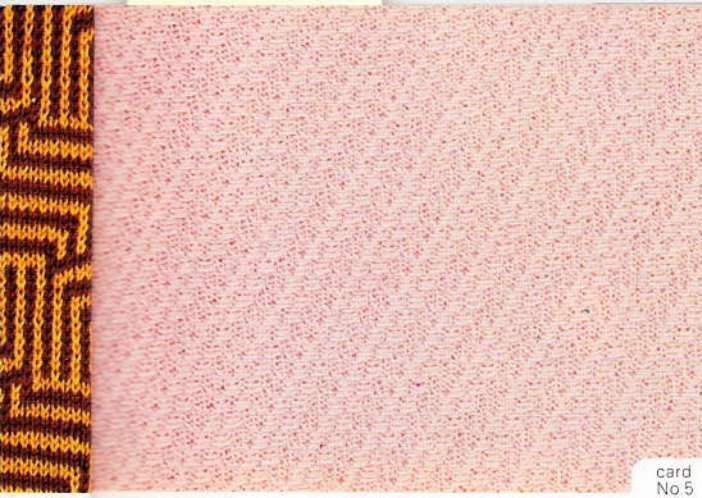
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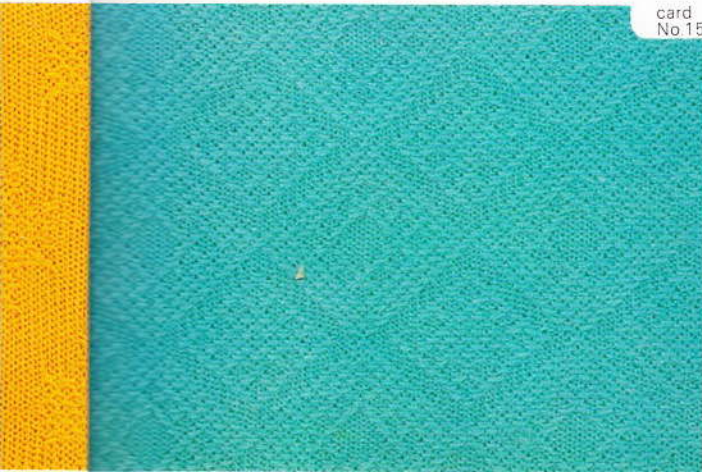
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Tuck Stitch Patterns



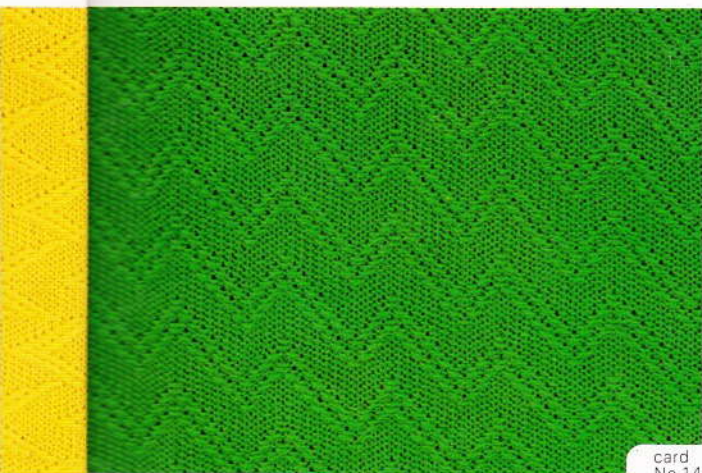
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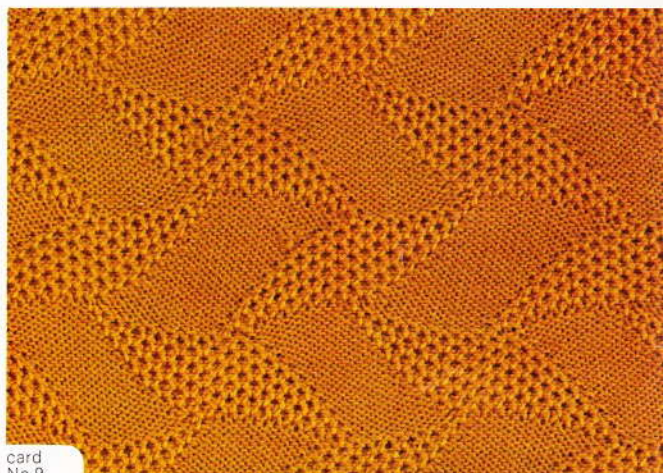
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card
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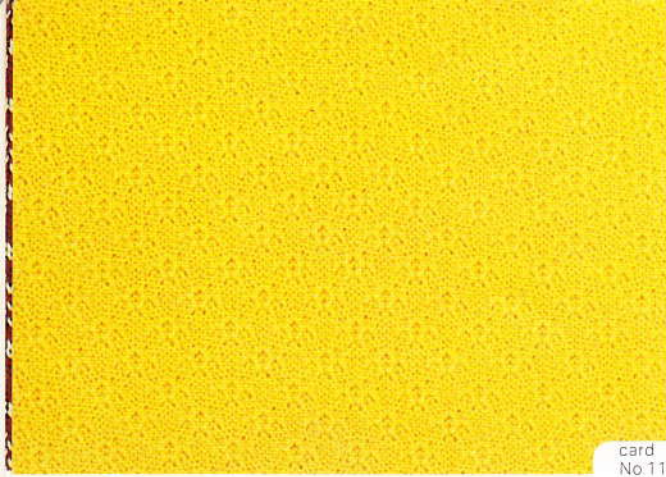


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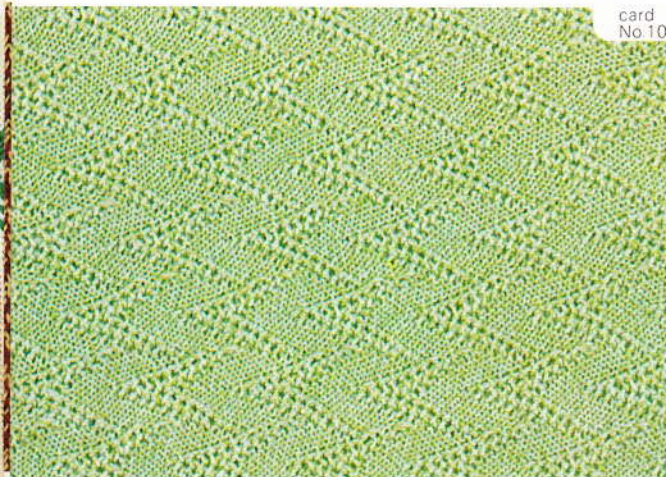


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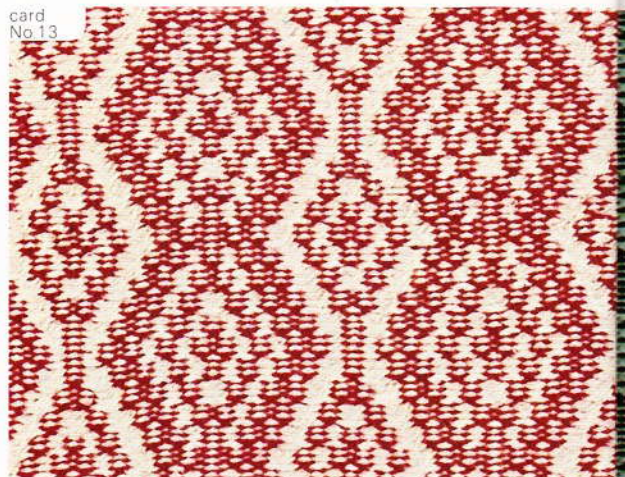
Weaving Stitch Patterns



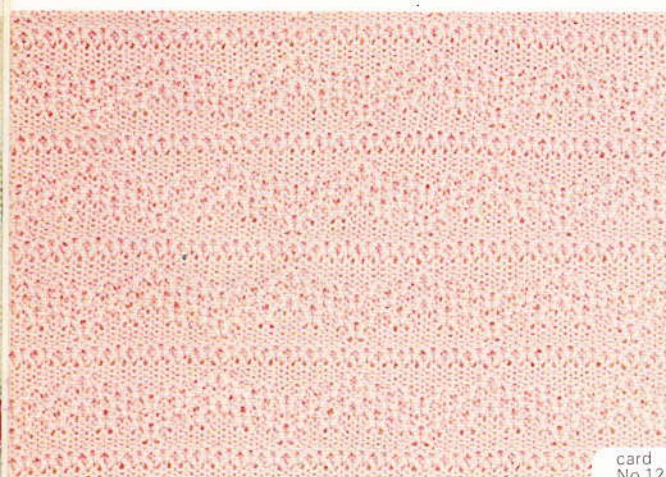
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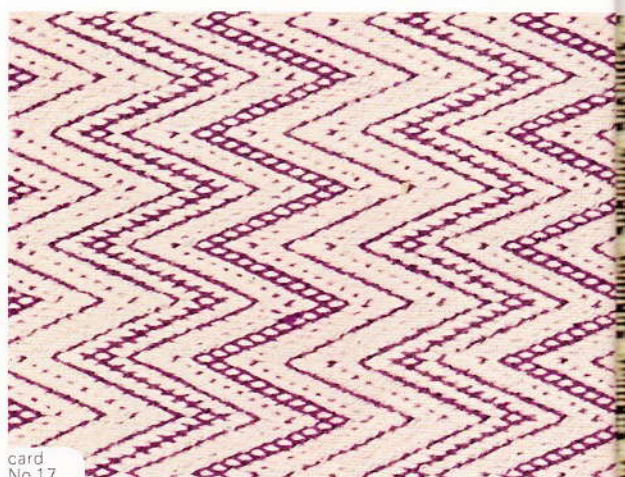
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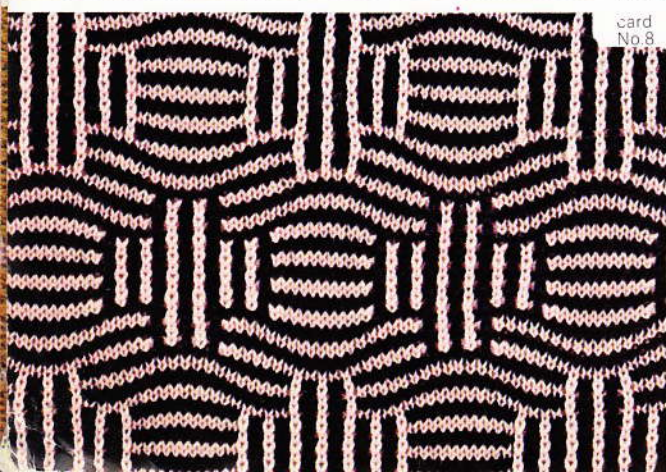
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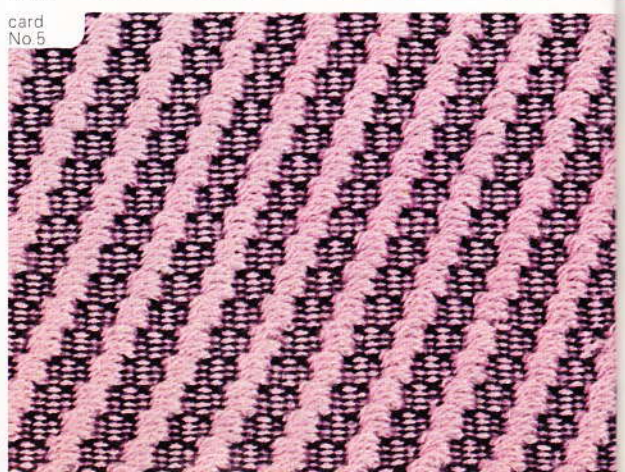
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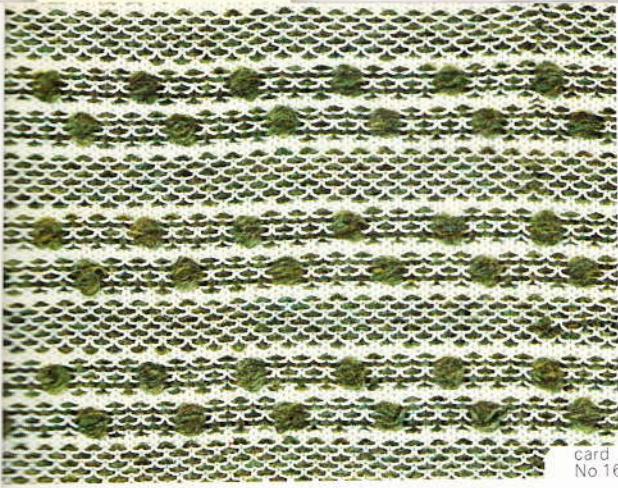


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No. 8

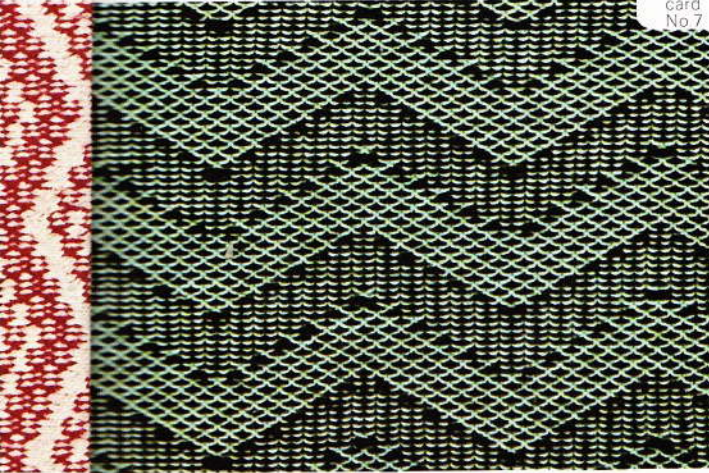


card
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Lace Stitch Patterns

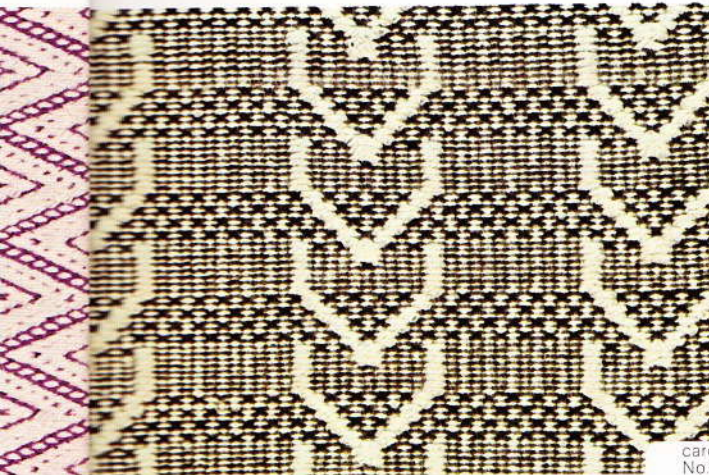
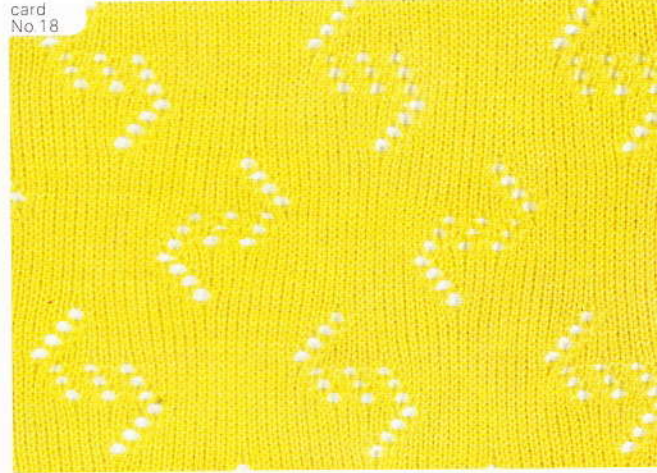


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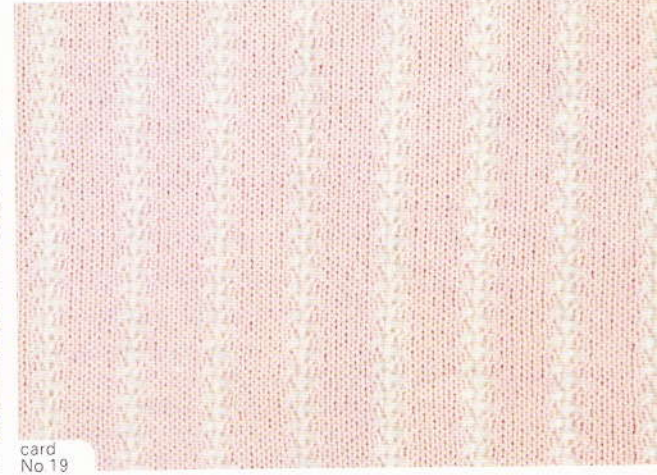


card
No 7

card
No 18



card
No 6



card
No 19



card
No 20



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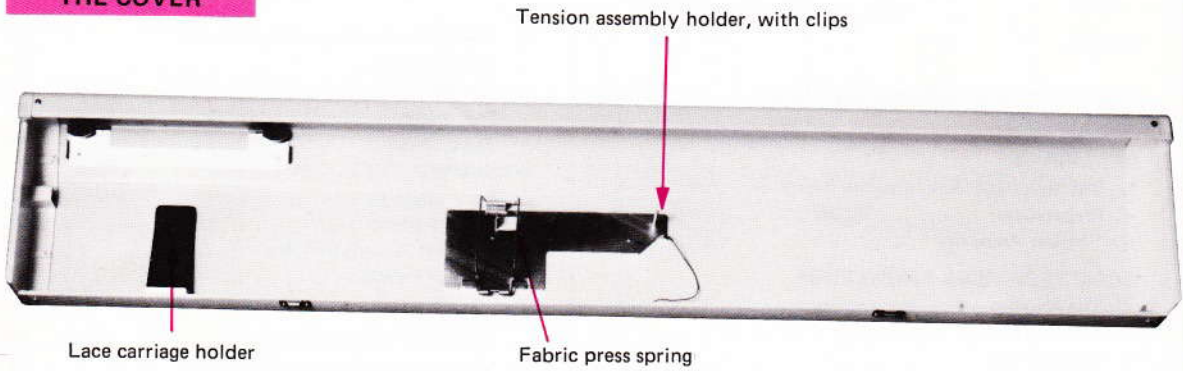
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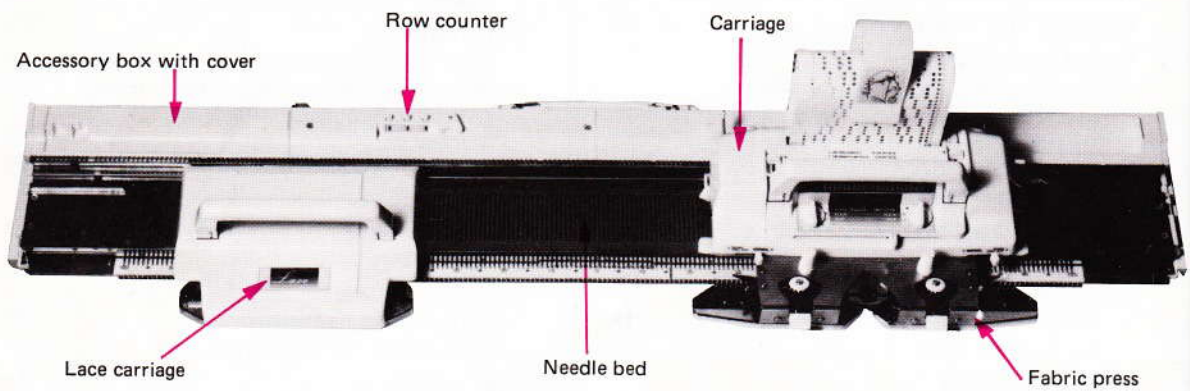
PACKING THE MACHINE AWAY 72

THE KNITTING MACHINE

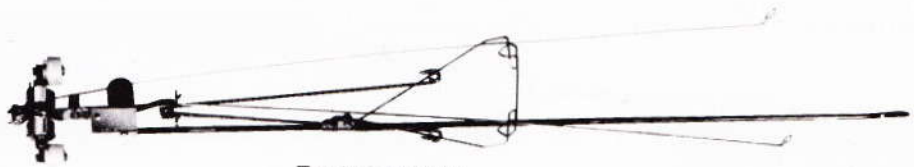
THE COVER



THE MACHINE



ACCESSORIES



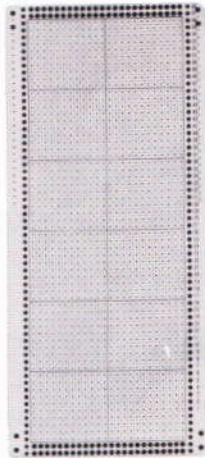
Tension assembly



Auxiliary rails (2)



Weight combs (3)



Blank punch card (5)



Punch card (20)



Point cams (6)



Brush



Removable cord



Puncher



Name label



1 x 2 transfer tool



Side weights (2)



Plastic clips (2)



1 x 3 transfer tool



Spare needles (3)



Oil



Card support



2 x 3 transfer tool



Sewing needle



Paraffin wax



Latch tool



Carriage clamp



Crochet hook



Needle selection bars (2)

SETTING UP

1. SECURING THE MACHINE TO THE TABLE

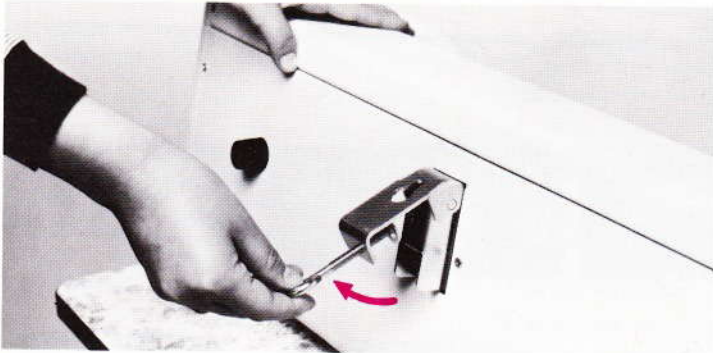


Fig. 1

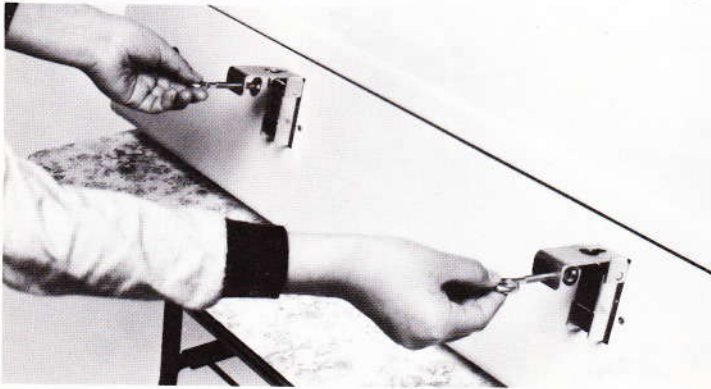


Fig. 2

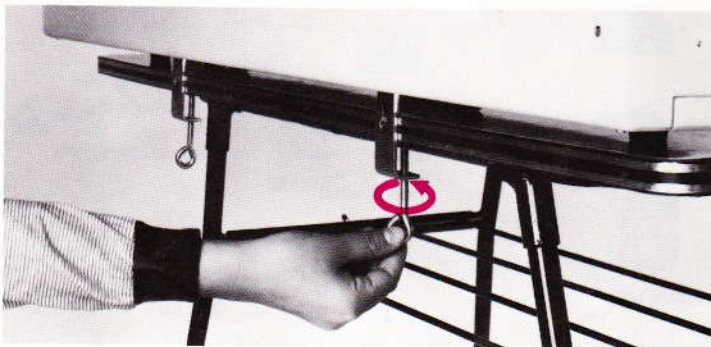


Fig. 3

2. PREPARATION

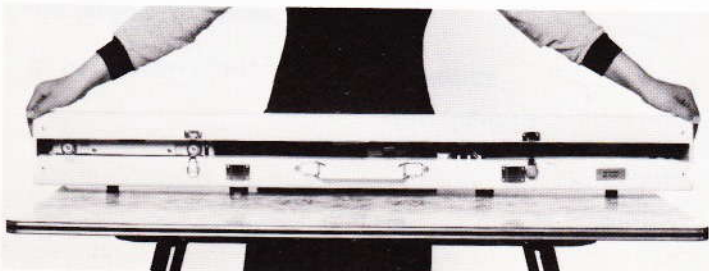


Fig. 4

- Place the case on the edge of the table, the handle facing away. Lift up the near side of the case to give access to the clamps underneath (fig. 1).

- Pull the 2 clamps out and holding them in this position (fig. 2) pull the machine towards you until the clamps can just hang over the edge of the table. Release the clamps in this position.

- Unwind the 2 screws enough to fit the thickness of the table. Push the machine back on to the table as far as it will go and tighten the 2 screws very firmly (fig. 3).

- Open the 2 locks. Lift up the cover and remove it from the main part of the machine (fig. 4).

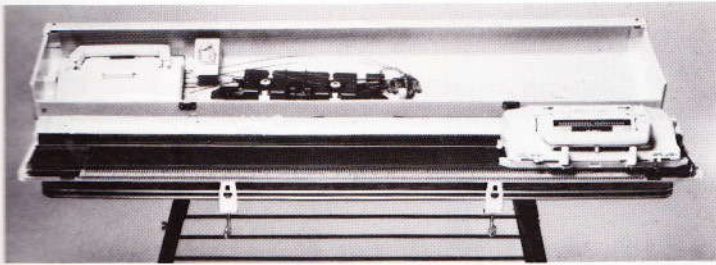


Fig. 5

- Place the cover upside down on the table (fig. 5).

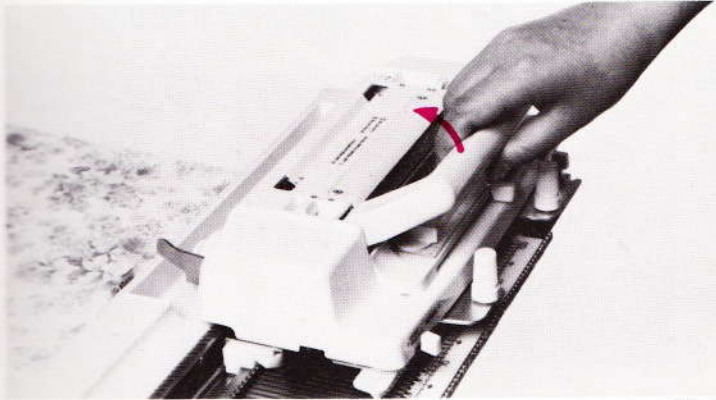


Fig. 6

- Raise the handle of the carriage until it clicks into place (fig. 6).

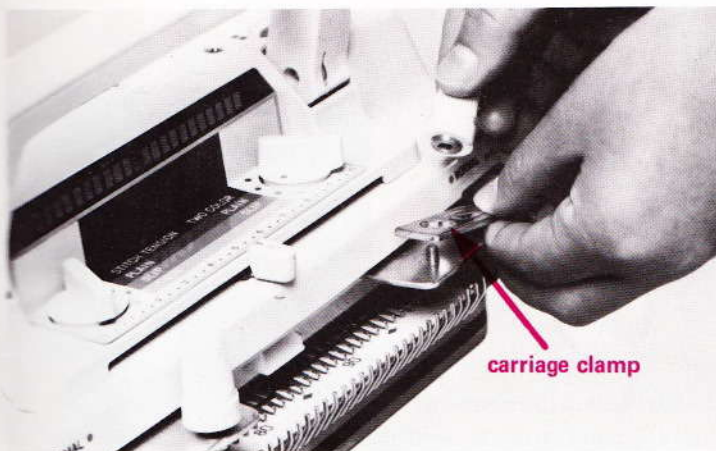


Fig. 7

- Unscrew and lift off the right hand white knob on the carriage and take off the carriage clamp. Replace the knob but do not tighten it, and partially unscrew the left hand knob (fig. 7).

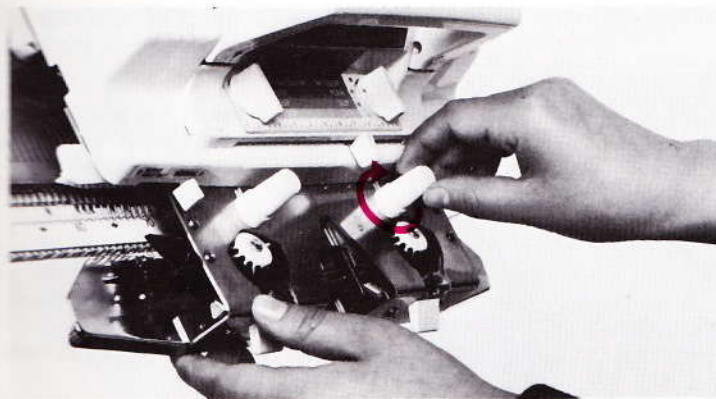


Fig. 8

- Release the holding spring of the fabric press (in the box-cover) and lift the fabric press out. Slip it under the 2 white knobs and secure it firmly to the carriage by tightening these knobs (fig. 8). You will find a brass flange underneath the white knobs which fits into the round space on the fabric press to ensure correct positioning.

Make sure that the fabric press is correctly placed and firmly secured or faults could occur in the knitting.

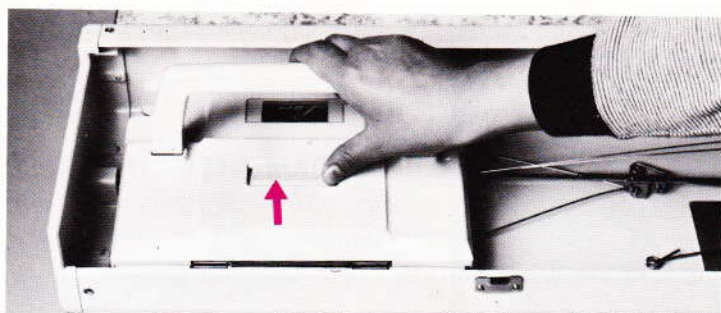


Fig. 9

- Take the lace carriage out of the cover. To release it press the bar as illustrated (fig. 9).

3. TENSION ASSEMBLY

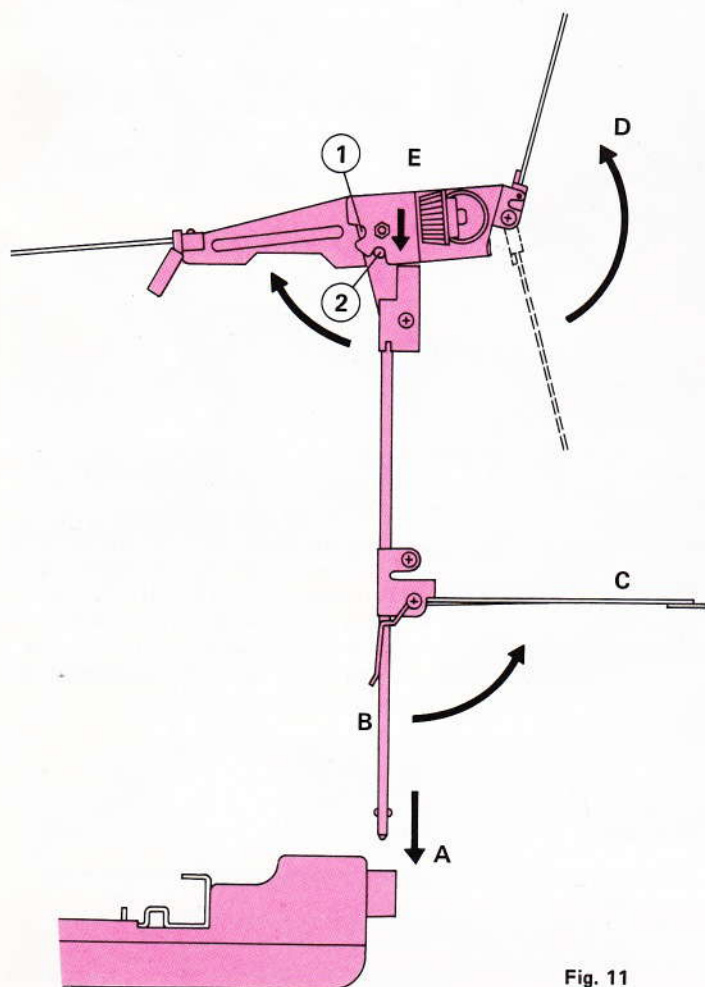


Fig. 11

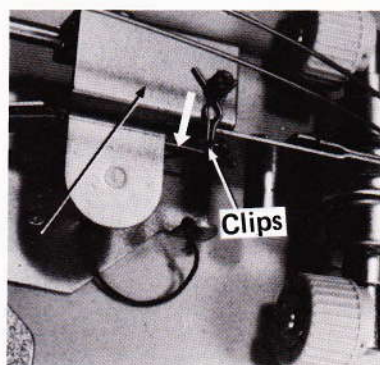


Fig. 10

- Remove the clips and take the Tension Assembly out of the cover (fig. 10).

- Lift up the triangle C and put the rod B in the hole A so that the triangle C is at the back of the machine.

Slightly lift up the head E of the tension assembly to take it out of the groove ①. Turn it horizontally and engage it in groove ②. Place the 2 tension springs D vertically (fig. 11).

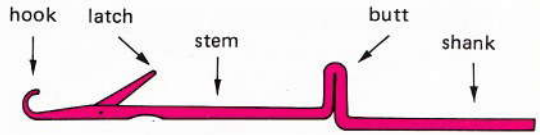
BASIC TECHNICAL KNOWLEDGE

THE NEEDLES

1. WORKING PRINCIPLE

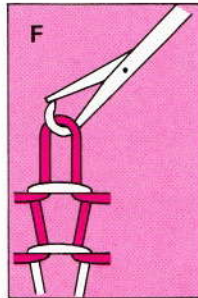
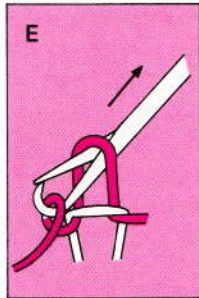
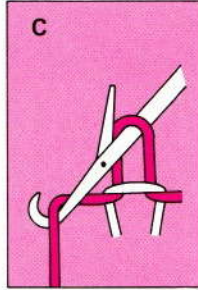
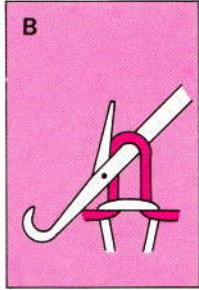


needle with latch closed



needle with latch open

As the carriage is moved across the needle bed the cams underneath the carriage cause the needles to move forwards and backwards enabling them to form stitches as follows:-



- A) The needle comes forward causing the stitch to push the latch open.
- B) The needle is forward; the stitch has slid over the latch and is now laying behind it.
- C) The new yarn, fed by the yarn-guide, is placed **in the hook** of the needle.
- D) The needle **starts to move backwards** thus causing the stitch to push the latch shut.
- E) The needle goes backwards, pulling the new yarn through the old stitch.
- F) The needle has returned to 'B' position (the working position) and a new stitch has been formed.

Fig. 12

2. POSITION OF THE NEEDLES

- A) **Resting (non-working) Position** : the needle butts are at the bottom of the needle bed.
- B) **Working Position** : the needle butts are about 1/3 up the needle bed.
- D) **Selected Position** : the needle butts are about 2/3 up the needle bed.
- F) **Holding Position** : the needle butts are at the top of the needle bed.

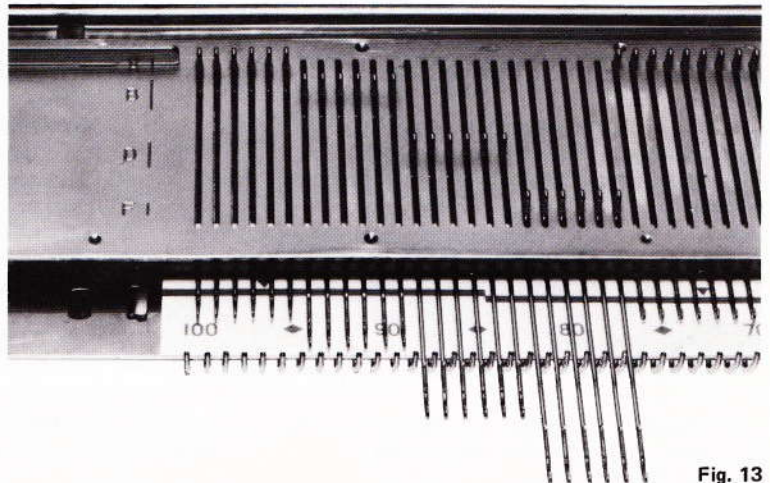
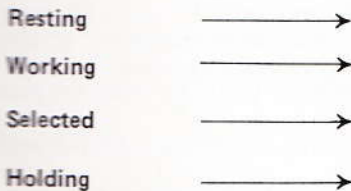


Fig. 13

3. THE NEEDLE BED

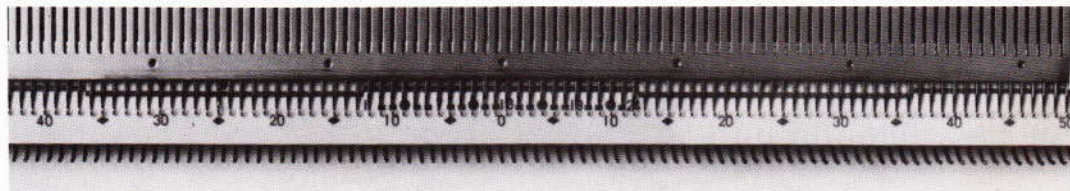


Fig. 14

- The bed has 200 needles.
- The figure 0 is in the centre.
- Figures 10, 20, 30, 40 ... up to 100, on either side of the figure 0 indicate the number of needles.

Example: To place 80 needles in working position, bring up 40 needles each side of the figure 0.

THE CARRIAGE (Fig. 15)

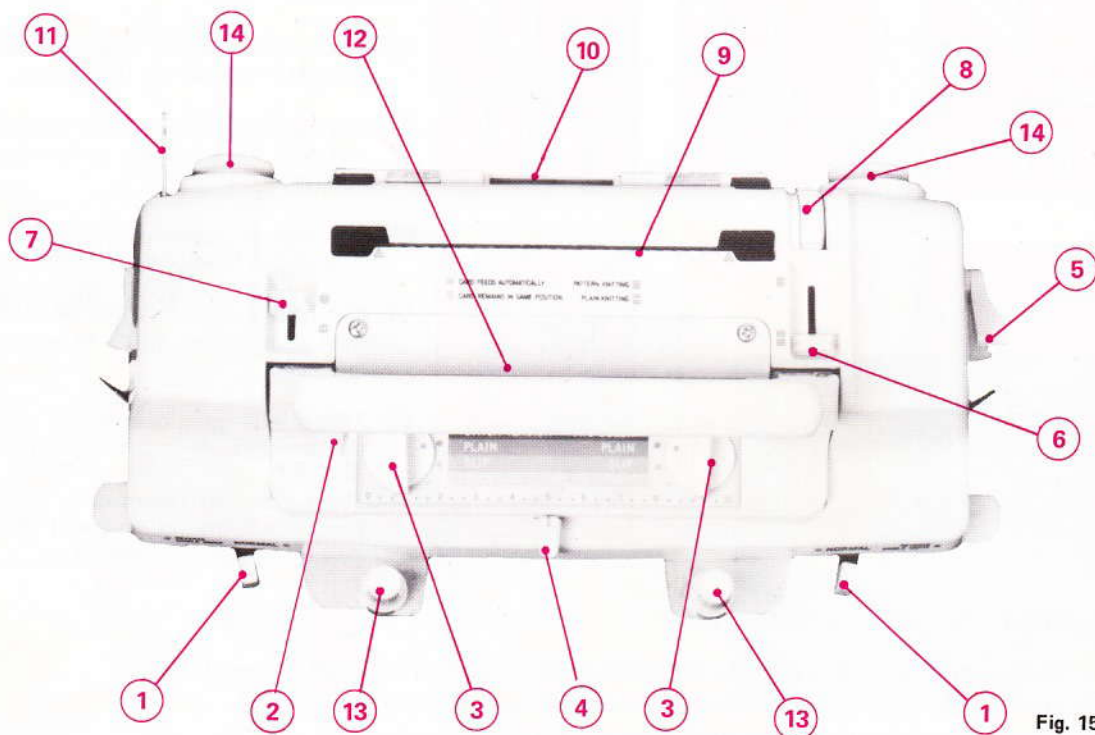


Fig. 15

1. Left and Right-hand Returning Levers :

- Normal position : for all normal knitting except when some needles are to be kept in F position or when working a single motif. Brings needles in F position back to working position.
- Reverse position, Single Motif : used when some needles are in F position. Also required when a Single Motif is to be knitted (see page 35).

2. **Handle Lock** : To lower the handle press the lock in.

3. **Left and Right-hand Pattern Selectors** : Used to set the carriage according to the type of stitch required.

4. **Stitch Tension Slide** : Used to adjust the size of the stitches.

5. **Clutch** :

- back : for removing the carriage.
- centre : Knitting with a card.
- front : knitting without a card.

6. **Right-hand Pattern Switch** :

- for pattern knitting (with needles selected)
- for plain knitting (no needles selected)

7. **Left-hand Pattern Switch** :

- the card feeds automatically
- the card stays in same position

8. **Manual Card Feed Dial** : To move the punched card by hand.

9. **Card Slot** : Into which the punched card is inserted.

10. **Support Slot** : To hold plastic card support.

11. **Row counter Lever**

12. **Card Viewer** : Shows which needles have been selected for next row.

13. **Fabric Press Screws**

14. **Left and Right-hand Pattern Position Dials** :

- Used when a motif is being worked. See pages 37~39 and pages 46~48 for correct use.

FABRIC PRESS

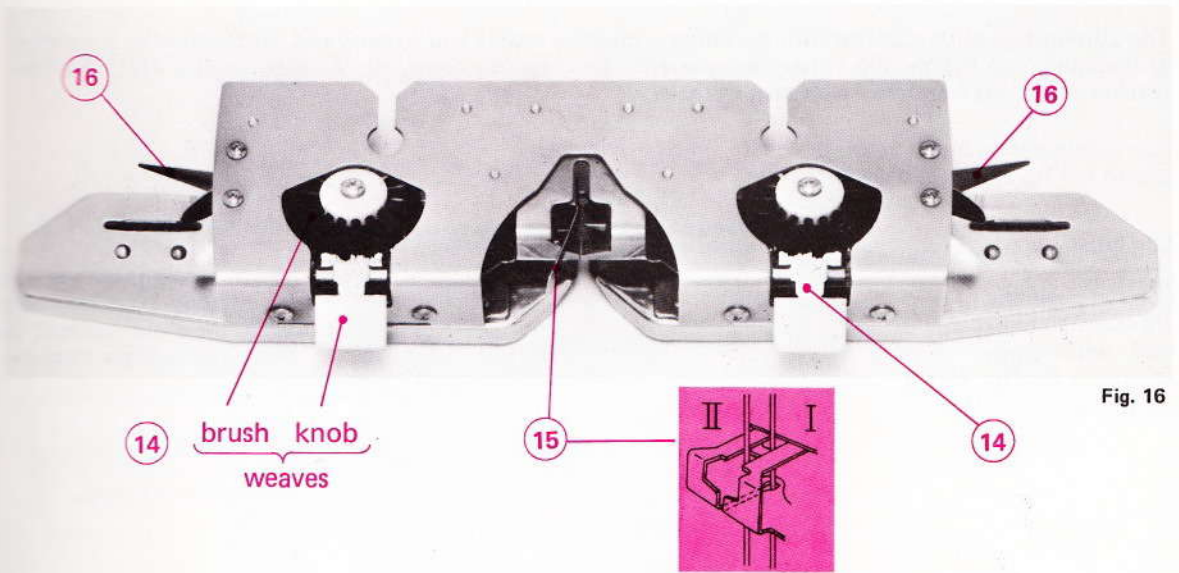


Fig. 16

14. Weavers, right and left-hand, each consisting of a brush, and a knob which moves the brush in and out of position.
weaving position : knob upwards. For all other types of knitting the knob should be down.
15. Yarn-Guide and Lever : Yarn (or yarns) fed to the needles through this. See page 15 for correct use.
16. Left and Right-hand Weaving Guides : To guide and feed the weaving yarn onto the needles.

ROW COUNTER

Row counter arm :

- operates the row counter when pulled out (Fig. 17).
- by-passes the row counter when pushed in (Fig. 18).

The row counter indicates the number of rows worked. To return to 0, turn the knobs until the 3 figures "0" appear in the windows.

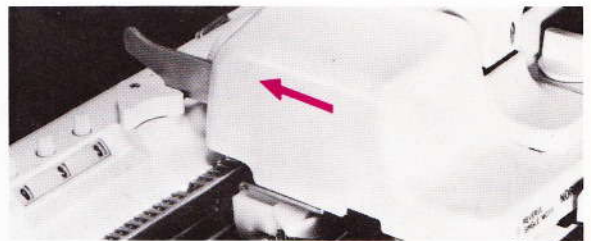


Fig. 17

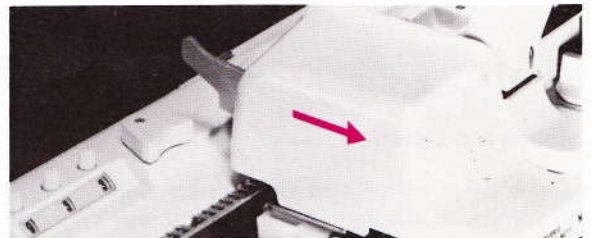


Fig. 18

Before turning to the next page, learn the various names of the parts of the carriage and fabric press as these will often be used in the following instructions.

THE PUNCHED CARD

The 20 punched cards supplied with the knitting machine enable you to carry out, automatically, a number of 2-colour, tuck stitch, slip stitch, weaving and lace stitch patterns, etc. A table on page 46 shows the stitches which can be worked with each of the cards.

DESCRIPTION

Clip holes

holes at each end of card are matched together and held with plastic clips to enable card to rotate continuously.

Card end holes

When the ends of the card are overlapped these holes allow the design holes at the other end to show through.

Number

to identify the card.

Card feed holes

these fit into ratchet wheels inside the carriage. The ratchet wheels rotate and move the card round.

Figures

to indicate the number of rows in the pattern.

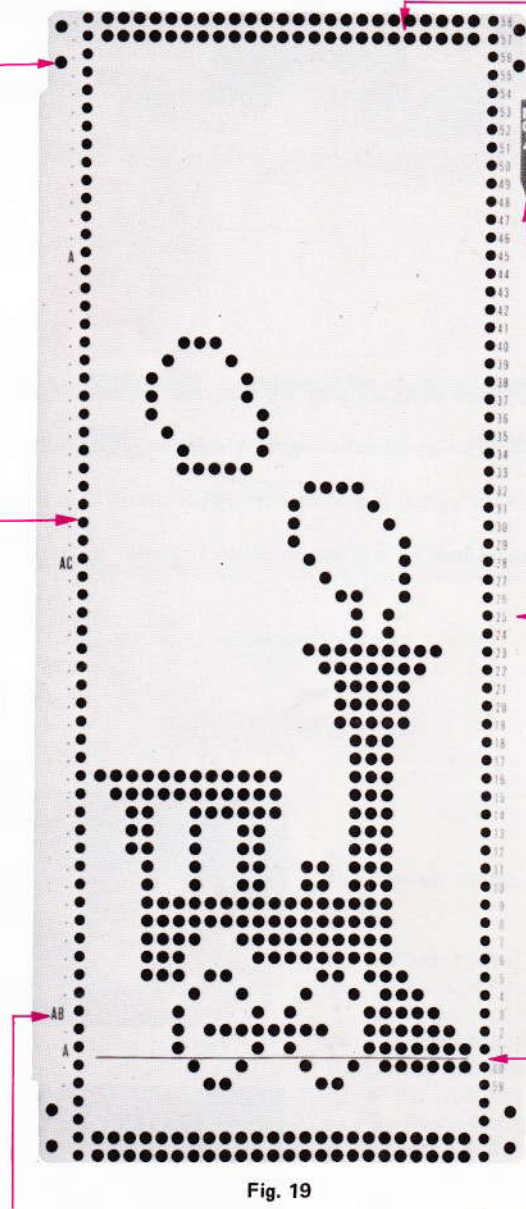


Fig. 19

Symbols and Letters

a single letter of the first of 2 letters indicates which colour yarn should be in thread mouth I of the yarn guide. The second letter indicates the colour yarn which should be in thread mouth II of the yarn guide.

Arrows (on lace pattern cards) indicate direction lace carriage should be pushed.

Starting Line

the card must always be inserted evenly so that this line is parallel with the edge of the slot. When the line is level with the slot the card is in the starting position.

RELATION BETWEEN CARD AND NEEDLES

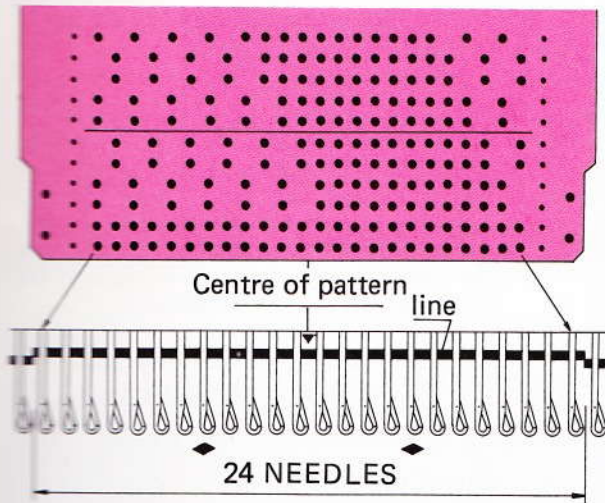


Fig. 20

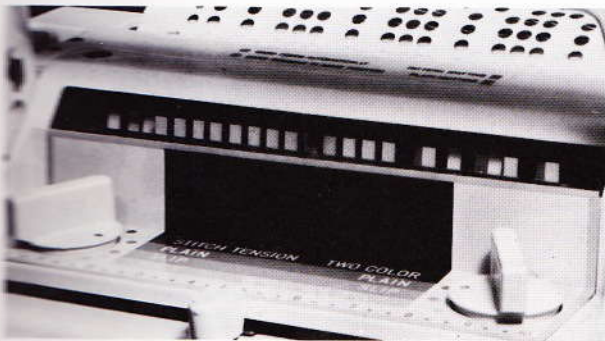


Fig. 21

Patterns are worked in groups of 24 stitches.

The red lines printed on the plastic scale under the needles marks off the needles in groups of 24.

When the Pattern Position dials are on "1" the card relates to the needles as shown in fig. 20. To move this position see pages 46, 47 and 48.

The triangle above the lines indicates the halfway point, ie there are 12 needles each side.

The 24 flaps appearing in the window correspond to the 24 needles forming the pattern (fig. 21); these flaps show the existing selected needles :

- flaps in the forward position correspond to the needles in B position (working).
- flaps in the rear correspond to the needles in D position (selected).

POSITIONING THE CARD

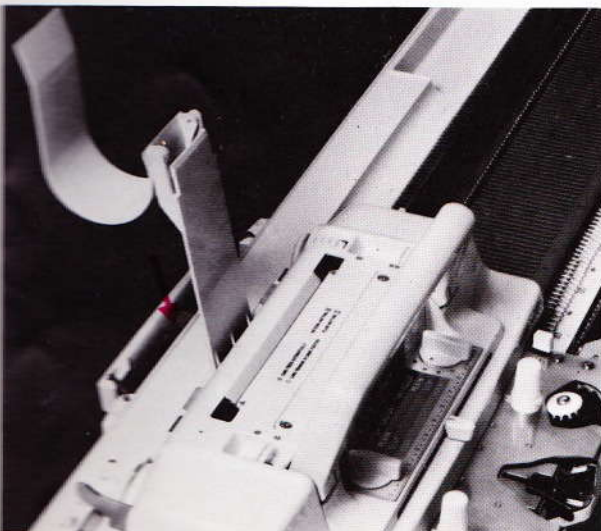


Fig. 22

- Insert the card support firmly into the slot at the back of the carriage (fig. 22). Leave the cover of the support open.

If the support is incorrectly inserted, it could prevent the card from turning correctly.

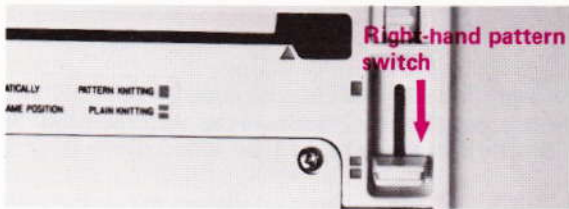


Fig. 23

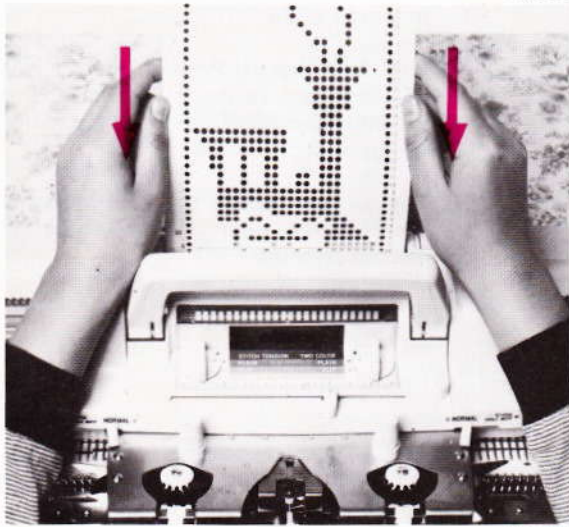


Fig. 24

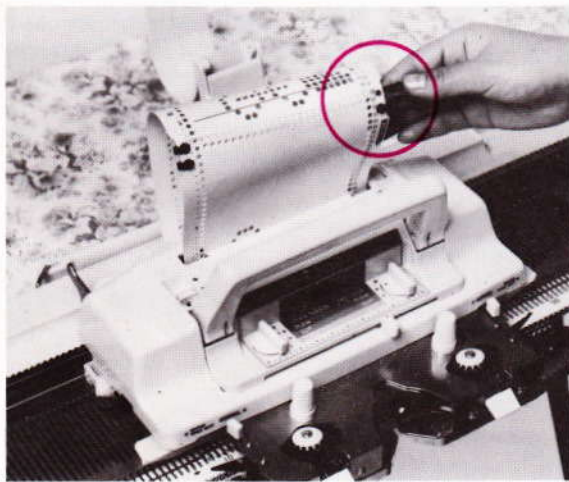


Fig. 25

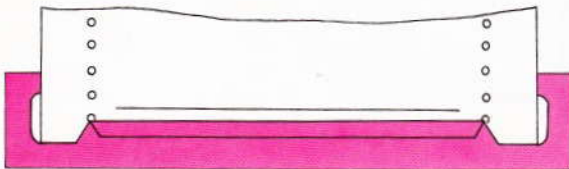


Fig. 26

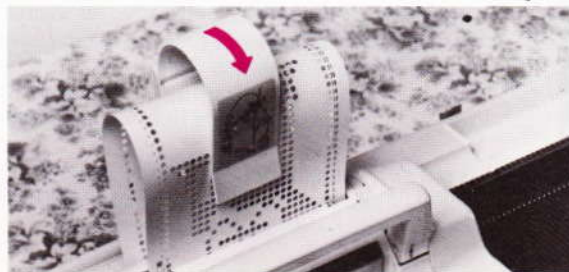
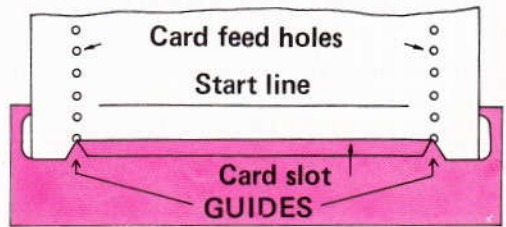


Fig. 27

- Push the right-hand pattern switch on to 'plain knitting' (fig. 23).

The card cannot be inserted unless the switch is in this position.

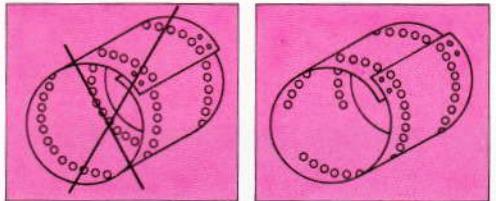
- With the row numbers at the right-hand side and using both hands insert the card into the card slot. The card must be straight, with the start line parallel to the slot, and the card feed holes must be in line with the guides at each end of the card slot.



Still with both hands, slightly push the card in to engage it in one hole (fig. 24).

- Turn the card feed dial towards you until figure 40 shows.
- Overlap the ends of the card, the end nearest to you on top of the other end.

Match the fastening holes and secure them with the plastic clips (fig. 25).



- Turn the card feed dial towards you so as to bring the start line of the card level with the card slot. The figure 1 will show (fig. 26).

- Close the cover of the card support (fig. 27).

THE WINDING THE YARN

The knitting machine can knit or weave yarns of various thicknesses.

For practising and to knit your first garments it is essential to use fine, soft yarns. Above all, do not use old yarn or yarn which has been knitted before.

The preparation of the yarn is **very important**. It **must** unwind freely to obtain even knitting and so that the machine runs smoothly.

DO NOT

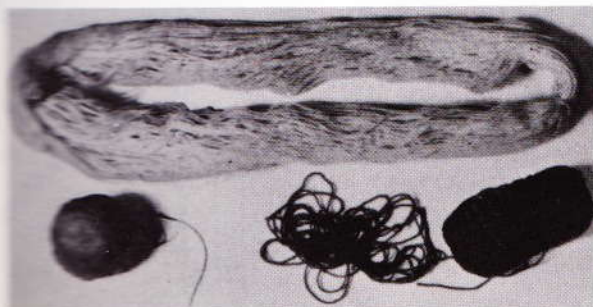


Fig. 28

- Use the yarn directly as purchased either from the outside or the inside of the ball.
- Wind the yarn into a ball by hand.
- Use the yarn directly from a hank or skein.

DO

Wind the yarn with a mechanical winder (fig. 29).



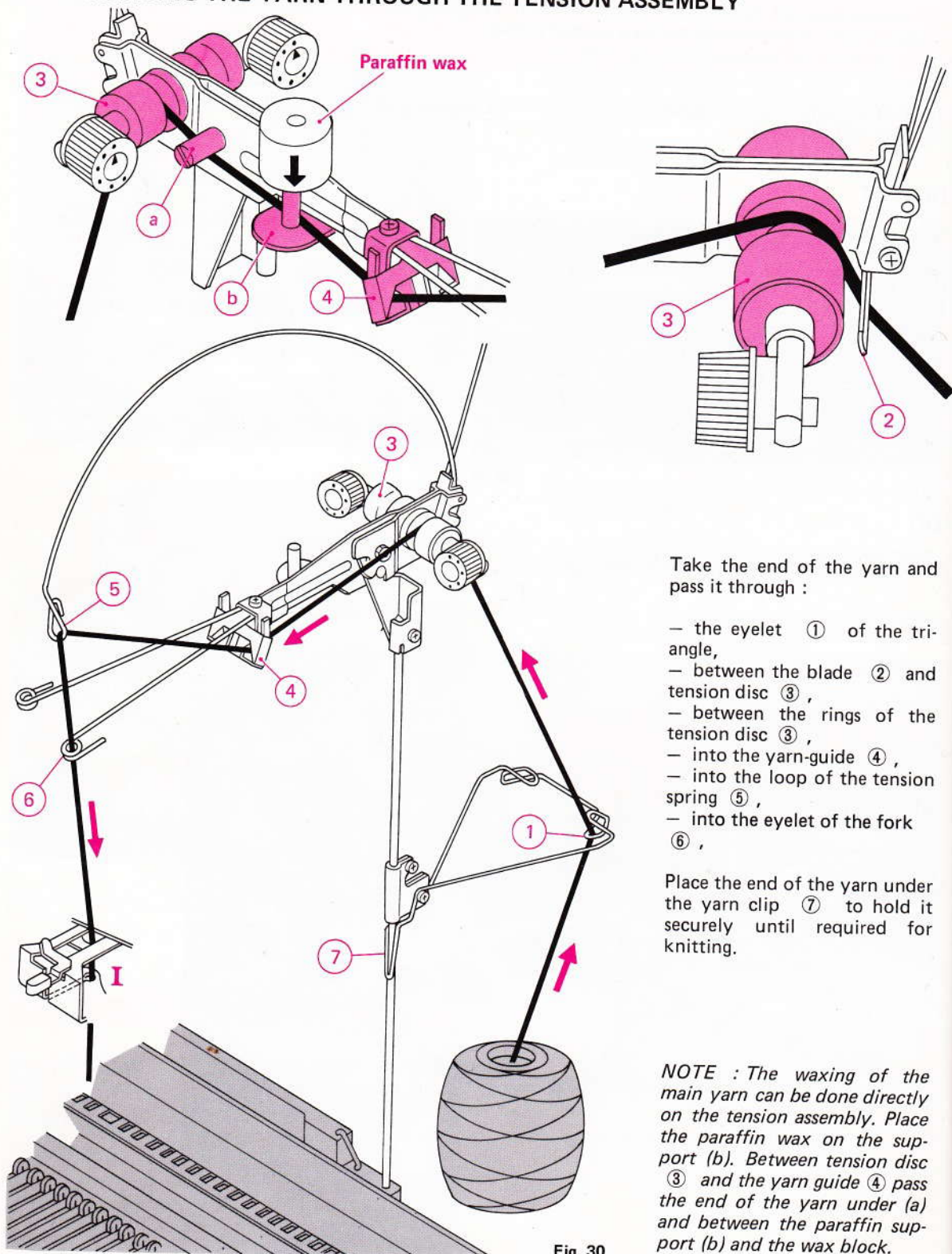
Fig. 29

THREADING THE YARN

The yarn must go through the tension assembly exactly as indicated below. We advise you to thread the main yarn on the left-hand side (in thread mouth I of the yarn guide) and the contrast yarn on the right-hand side (in thread mouth II of the yarn guide).

Note: Fig. 30 shows the route the yarn must follow for the right-hand side, normally used for contrast yarn.

1. THREADING THE YARN THROUGH THE TENSION ASSEMBLY



Take the end of the yarn and pass it through :

- the eyelet ① of the triangle,
- between the blade ② and tension disc ③,
- between the rings of the tension disc ③,
- into the yarn-guide ④,
- into the loop of the tension spring ⑤,
- into the eyelet of the fork ⑥,

Place the end of the yarn under the yarn clip ⑦ to hold it securely until required for knitting.

NOTE : The waxing of the main yarn can be done directly on the tension assembly. Place the paraffin wax on the support (b). Between tension disc ③ and the yarn guide ④ pass the end of the yarn under (a) and between the paraffin support (b) and the wax block.

Fig. 30

2. THREADING THE YARN THROUGH THE YARN-GUIDE

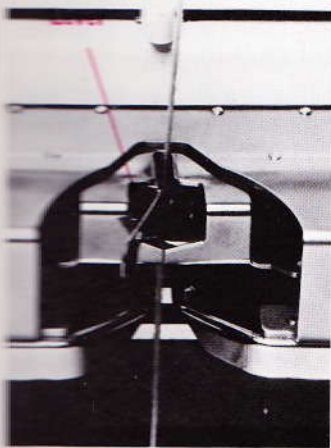


Fig. 31

Push the lever to the left and slip the yarn to the back of thread mouth I of the yarn-guide (fig. 31).

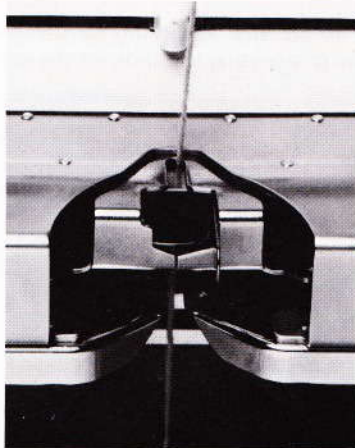


Fig. 32

Push the lever back to the right to hold the yarn inside (fig. 32). Make a loop at the end of the yarn and slip this onto the clamp under the machine.

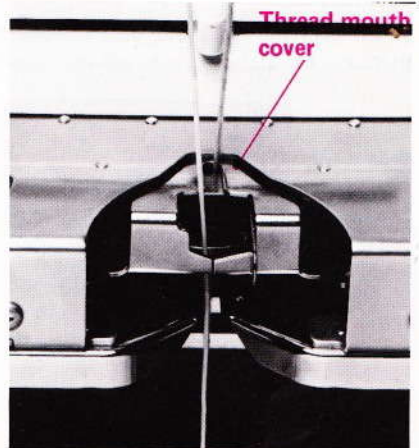
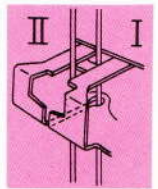


Fig. 33

Insert the second yarn into thread mouth II by slipping it between the 2 ends of the thread mouth cover in front. The 2 yarns are separated (fig. 33).



3. ADJUSTING THE TENSION

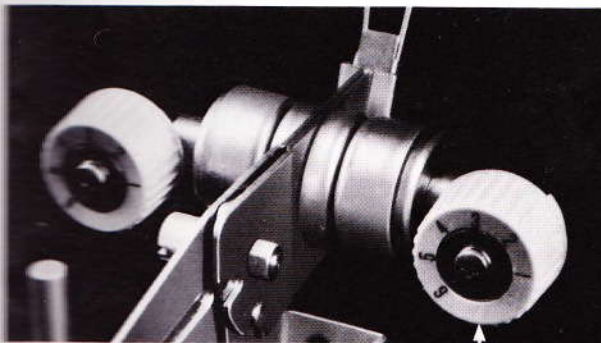


Fig. 34

The tension disc is regulated according to the thickness of the yarn used (fig. 34) :

- 1 - 2 : thick yarns
- 3 - 4 : medium yarns
- 5 - 6 : thin yarns

To avoid the formation of loops at the sides of the work and to ensure that the yarn does not become tangled under the fabric press, it is most important that the tension spring (No 5 in the drawing on page 14) is always flexed, thus holding the yarn taut. If necessary pull the excess yarn down at the back to flex the spring. (Fig. 35)

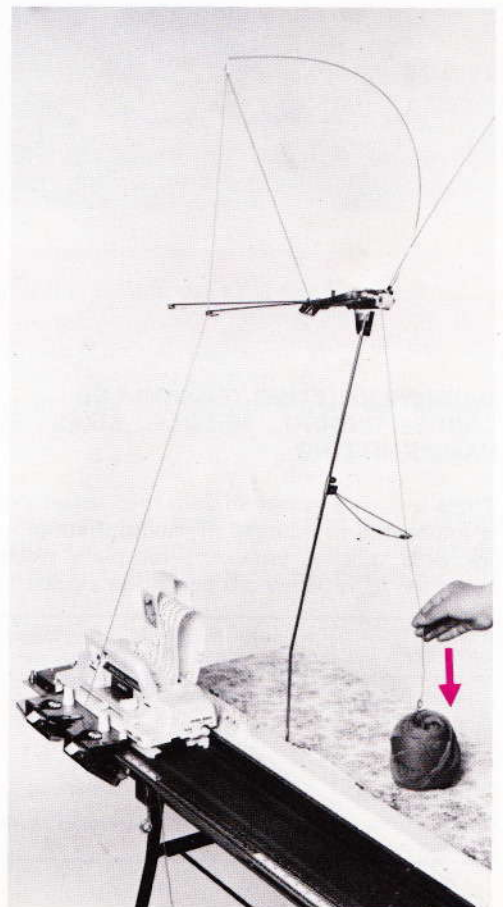


Fig. 35
15

ADJUSTING THE STITCH

When knitting by hand you change the needle size according to the thickness of the yarn used; on the machine the size of the stitch is adjusted by positioning the slide on the graduated figures 0 to 10.

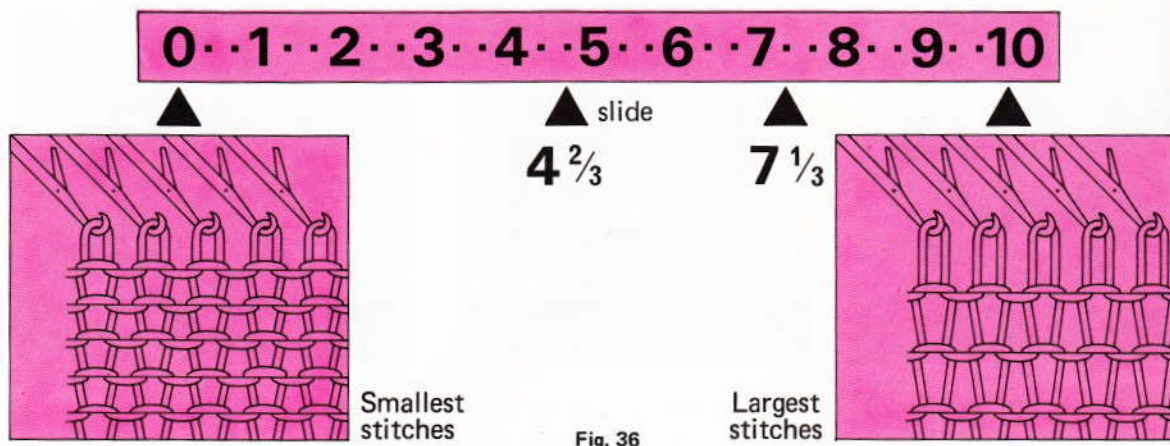


Fig. 36

If the slide is on 0, small stitches will be obtained; if it is on 10 the largest stitches will be obtained. Between each figure there are 2 degrees to enable a very precise adjustment of the tension of the stitch.

If the tension is too tight it will be difficult to knit, the carriage will be hard to push and the yarn could break.

If the tension is too loose the knitting will be too floppy and the garment will not hold its shape.



Fig. 37

- Turn the left-hand pattern selector to 'stitch tension' (fig. 37).
- Move the slide sideways to the right or left and place it on the tension number required.
- Turn the left-hand pattern selector to the required stitch pattern.

Note : The stitch tension slide will not move unless the left hand pattern selector is placed on 'stitch tension'.

MACHINE KNITTING TENSION AND CORRESPONDING NEEDLE SIZES FOR HAND KNITTING

There is such a variety of yarn thicknesses that it is impossible to indicate the appropriate tension for each quality. However, for plain stocking stitch the table below can be used as a guide :

Yarn	Hand-Knitting Needles	Knitting Machine Tension
Very fine	1 1/2 - 2 mm	0 - 3
Fine	2 - 3 mm	3 - 6
Medium	3 - 4 mm	6 - 8
Fairly thick	4 - 5 mm	8 - 10
Very thick (chunky)	5 mm and over	every alt needle 5 - 7

ADJUSTMENT ACCORDING TO THE STITCH

For the same quality yarn, the tension will vary according to the pattern stitch being used. In comparison to the tension for stocking stitch, we advise the following :

Two color	1 or 2 degrees higher
Tuck Stitch	1 to 2 numbers lower
Slip Stitch	2 degrees to 1 number higher
Lace Stitch	1 to 2 numbers lower
Weaving with thick yarn	from 1 to 3 numbers higher

STARTING TO KNIT

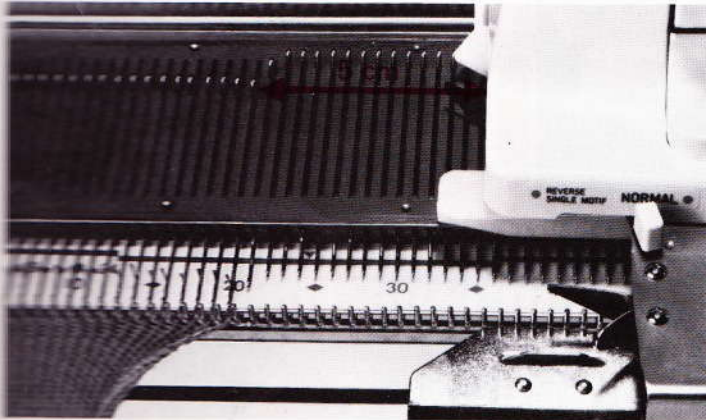


Fig. 38

A few hints and tips

- Always push the carriage evenly without jerking.
- Make sure that the carriage is always pushed 5 cms (2 ins) beyond the last of the needles in working position before pushing it back again for the next row (fig. 38).

If you push it too far the tension assembly will not pull the yarn back sufficiently to keep the yarn taut.

If the carriage becomes jammed, do not force it. (See page 69 for how to set it right.)

In all the following instructions, the stitch tension given is for a yarn which would require 2-1/2 mm - 3 mm needles if knitted by hand.

OPEN EDGE CASTING ON

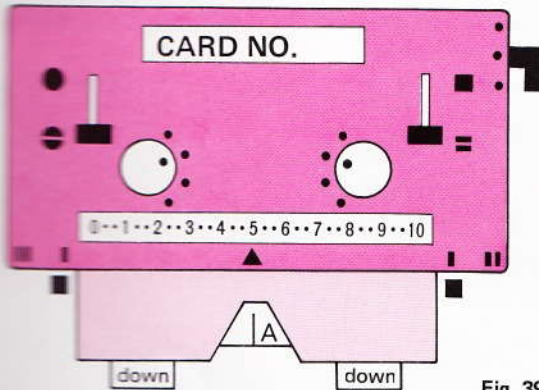


Fig. 39

Make sure that the carriage is correctly placed in the grooves.

- The carriage is on the right – Left-hand pattern selector on 'stitch tension', tension slide on 5.
- Adjust the carriage as follows : (fig. 39)

Right and left-hand pattern selectors on 'plain'.
Clutch on 'plain'.
Right-hand pattern switch on '■'.
Left-hand pattern switch on '●'.
Left and right-hand returning levers on 'normal'.
Weaving knobs pressed down.

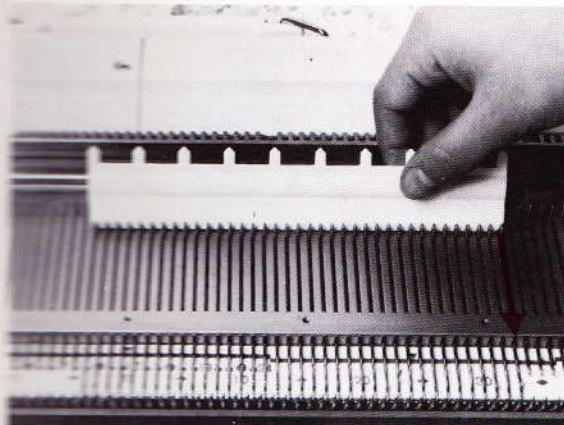


Fig. 40

- With the flat needle selection bar, bring 40 needles to B position (20 on each side of the figure 0 at the centre of the needle bed, fig. 40).

- Thread the yarn in the tension assembly and the yarn-guide (see pages 14 and 15) and attach the end to the clamp under the machine.

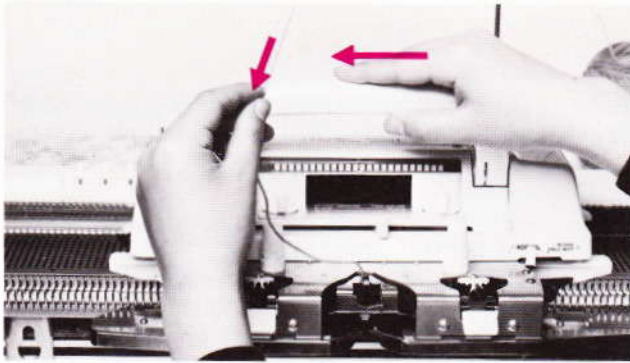


Fig. 41

- Push the carriage slowly from right to left, at the same time slackening the yarn so that the "zig-zag" of the first row is even (fig. 41).

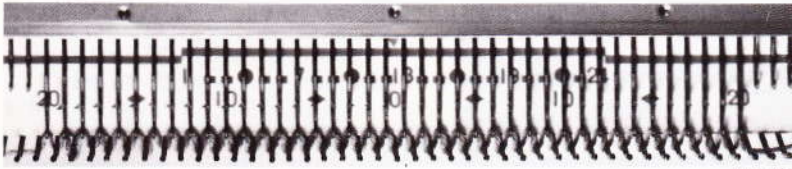


Fig. 42

THIS CASTING ON CORRECT
THE ZIG-ZAG IS REGULAR

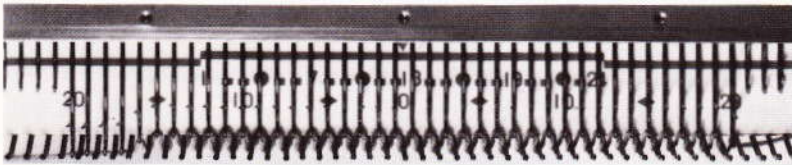
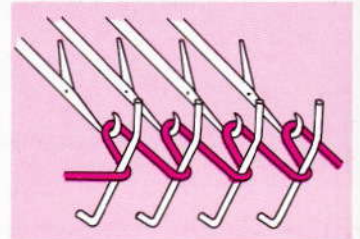


Fig. 43

THIS CASTING ON IS INCORRECT
THE YARN IS PULLING

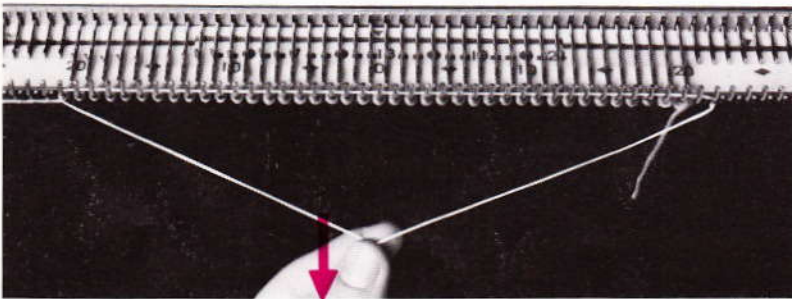
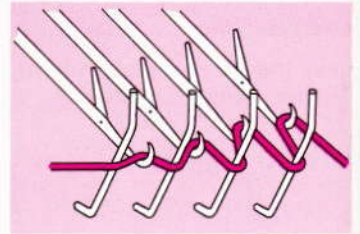


Fig. 44

- Place the removable cord between the needle hooks and the teeth of the needle bed on the "zig-zag" already made, just before the first needle and after the last needle (fig. 44). Hold the two ends of the removable cord with the left hand pulling it downwards.
- Knit 5 rows.
- Release the removable cord and pull it out from one end (fig. 45). Continue to knit.

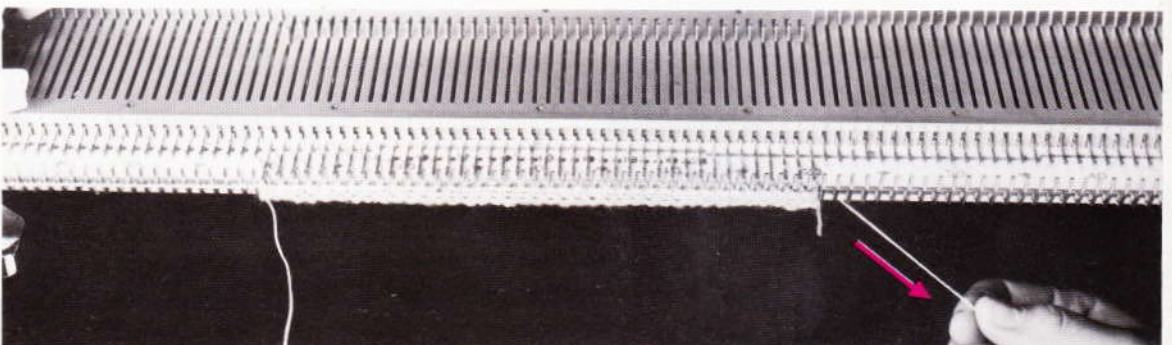
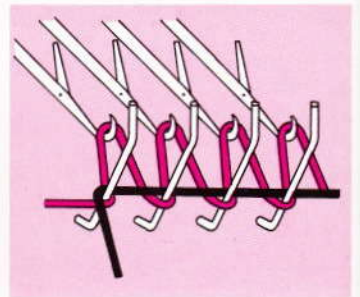


Fig. 45

right to
the yarn
row is

CLOSED EDGE CASTING ON (AUTOMATIC)

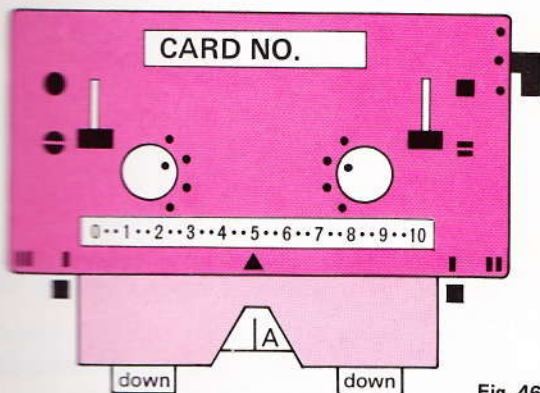


Fig. 46

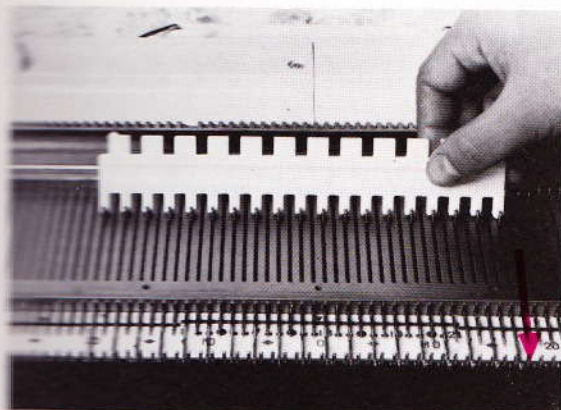


Fig. 47

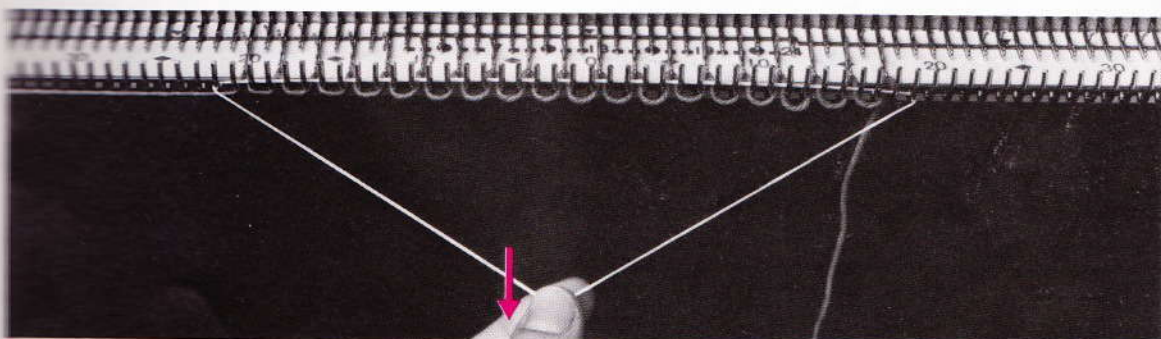


Fig. 48

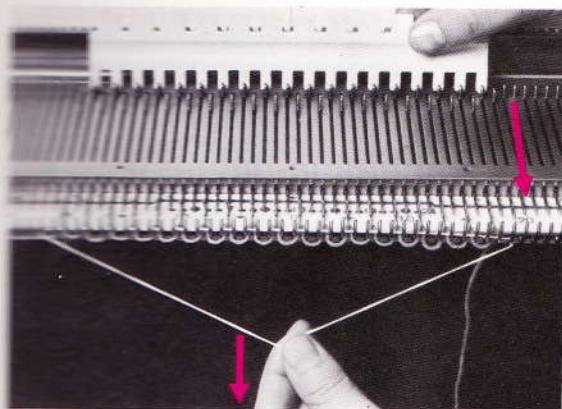


Fig. 49

- The carriage is on the right — put left-hand pattern selector on 'stitch tension' and push tension slide to 5.

- Adjust the carriage as follows : (fig. 46)

Right and left-hand pattern selectors on 'plain'.
Clutch on 'plain'.

Right-hand pattern switch on '■'.

Left-hand pattern switch on '●'.

Right and left-hand returning levers on 'normal'.
Weaving knobs pressed down.

- Using the alternate needle selection bar bring 10 needles on each side of the figure 0 to B position (fig. 47).

- Thread the yarn through the tension assembly and yarn-guide (see pages 14 and 15) and attach the end to the clamp under the machine.

- Push the carriage slowly from right to left at the same time slackening the yarn (fig. 41, page 18).

- The zig-zag of the first row is formed. Place the removable cord as shown in fig. 48 and hold it down firmly.

- Still holding the removable cord, bring the 19 needles left in A position forward to F position (fig. 49).

- Knit 5 rows.

- Take out the removable cord and continue to knit. (When the work is finished, pull the end of yarn which had been attached to the clamp until the loops are evened out.)

g-zag"
of the

CASTING ON BY HAND

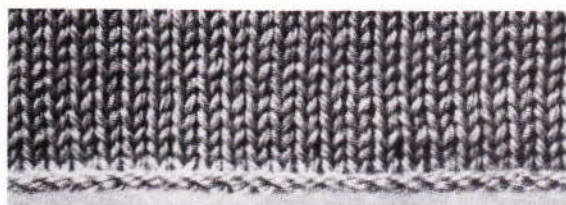


Fig. 50

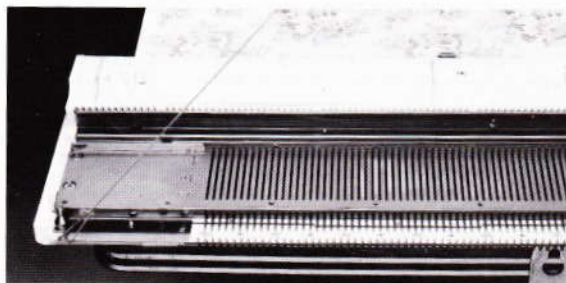


Fig. 51

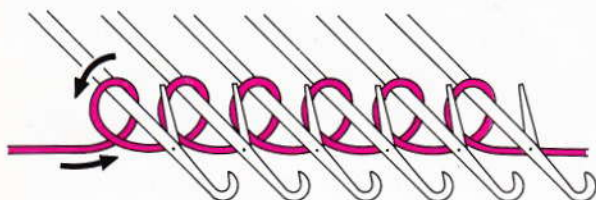


Fig. 52

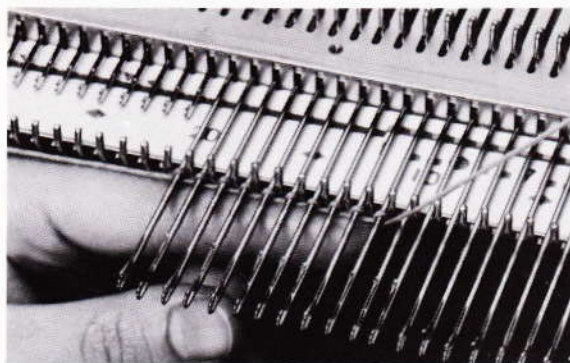


Fig. 53

This method takes a little longer than the previous ones but it gives a good firm edge to the knitting. It will often be used (fig. 50).

- **The carriage is on the right** – identical adjustment as for closed edge casting on (fig. 46, page 19).
- With the flat needle selection bar bring the required number of needles to F position.
- Thread the yarn through the tension assembly and with a slip knot hook the end to the clamp under the machine at the left-hand side (fig. 51).
- Slacken the yarn.
- Starting from the left-hand side, with the right hand wind the yarn under the needle and round over the top (fig. 52).
- With the left hand push back the loops thus formed against the teeth of the needle bed (fig. 53).
- Thread the yarn through the yarn-guide of the carriage and, if necessary pull the yarn at the back of the tension assembly (fig. 35, page 15).
- Push the carriage from right to left.
- Place the removable cord and pull it down firmly.
- Knit 5 rows.
- Take out the removable cord and continue to knit.

Always wind the yarn round the needles starting at the side opposite to the carriage.

– Carriage at left : wind from right to left.

– Carriage at right : wind from left to right.



Fig. 54

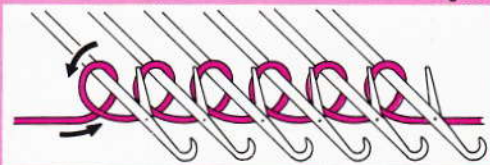


Fig. 55

HEMS AND WELTS

STOCKING STITCH HEM (fig. 56)

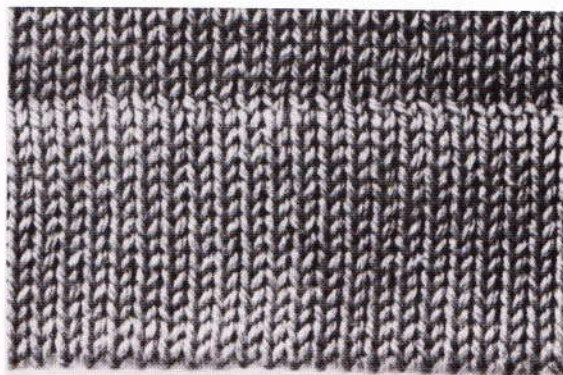


Fig. 56

Mainly used for jackets, suits, coats, trousers, soft furnishing.

1. Bring the needles to B position with the flat needle selection bar. Place tension slide on 5.
2. Cast on by the open edge method (see pages 17 and 18) using waste yarn (dark coloured yarn in fig. 57), that is with any fine yarn in a different colour from the main yarn, (light colour yarn in fig. 57). Place the removable cord.
3. Knit 5 rows, pull out the removable cord and knit a further 6 rows.
4. Carriage is at right — Break off the waste yarn and take it out of the yarn-guide. Thread the main yarn through the yarn-guide. Set row counter on 000.
5. Place tension slide on 7. Knit 1 row (this loose row makes it easier to pick up the stitches for the hem). Place tension slide on 5. Knit 14 rows.
6. Carriage is at left and row counter shows 15. Place the tension slide on 7. Knit 1 row (this loose row facilitates the folding of the hem).
7. Tension slide on 5. Knit 15 rows. Carriage is at left and row counter shows 31.
8. Open the latches of the needles with the brush. Fold hem in half.
 - Starting at right hand side insert the transfer tool into the first stitch of the first row in main yarn.
 - Hook the transfer tool onto the hook of the 2nd needle on the right-hand side (fig. 57). **Note :** The first needle is left as there is always 1 loop fewer to be picked up than there are needles.
 - Slip the stitch onto the needle (this needle now holds 2 stitches).
 - Now transfer the 2nd stitch of the hem onto the 3rd needle, the 3rd stitch onto the 4th needle and so on to the end of the row. (fig. 58)

NOTE : After some practice it will be possible to transfer 2 or 3 stitches at a time by using the 2-stitch or 3-stitch transfer tool.

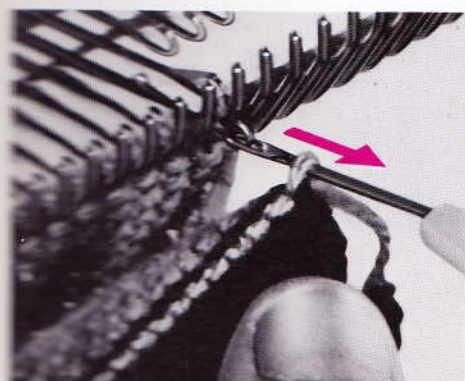


Fig. 57

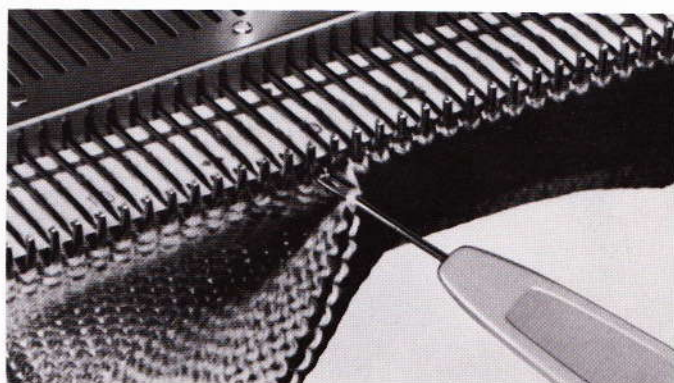


Fig. 58

9. With the flat needle selection bar bring all needles to B position and knit 1 row.

IMPORTANT

When a punch card is used work as follows before knitting this last row :

- Take the yarn out of the yarn-guide and leave it at one end of the needle bed (fig. 59).
- Set left and right-hand pattern selectors onto 'slip' and knit 1 row. Carriage is at right.
- Insert the punch card and set on row 1 (see pages 11 and 12).
- Set :
 - Clutch on 'pattern'
 - Right-hand pattern switch on '■'
 - Left-hand pattern switch on '●'
- Push the carriage from right to left; the needles are selected.
- Thread the yarn or yarns into the yarn-guide. Place the left-hand pattern switch on '●'. Deduct 2 rows from the row counter.

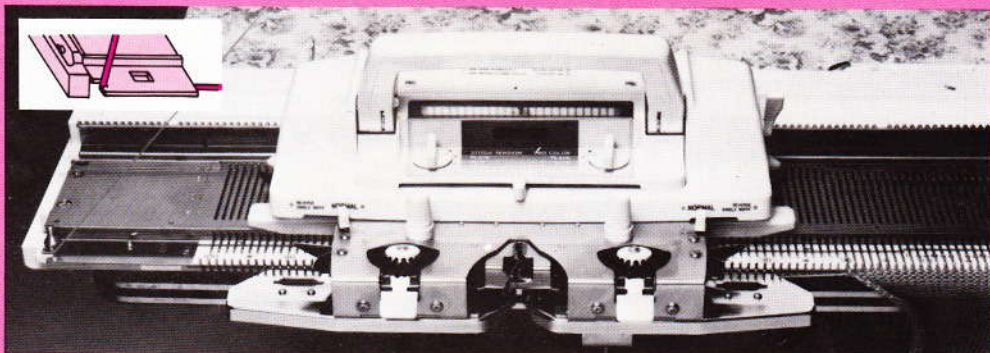


Fig. 59

10. Set the carriage and stitch tension according to the required pattern stitch (see pages 34 onwards under the heading "Pattern Stitches") and continue to knit.

11. When the work is completed, the piece knitted with the waste yarn is removed by cutting the stitch at the left hand end of the waste yarn and pulling it out (fig. 60). Press according to instructions indicated on the ball band of the yarn being used.

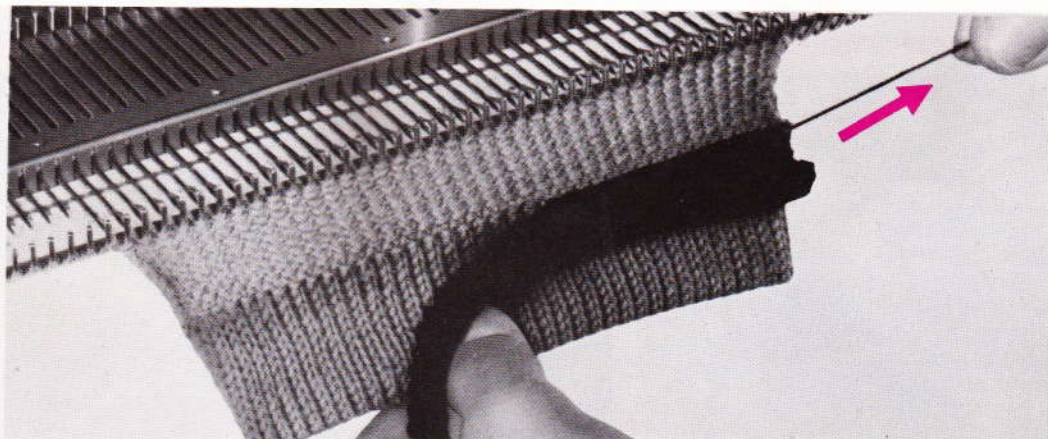


Fig. 60

PICOT HEM (fig. 61)

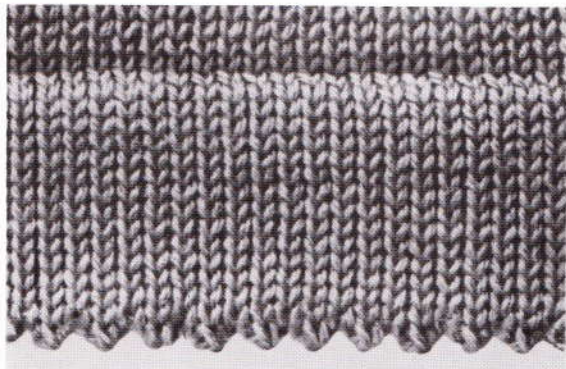


Fig. 61

Generally used for fancy necklines, layette, soft furnishing, etc., it gives a 'lacy' appearance.

1 to 5. Same steps as for stocking stitch hem on page 21.

6. Carriage is at left and row counter shows 15. Transfer stitch from the 2nd needle onto the 3rd needle, the stitch on 4th needle onto 5th needle and so on all along the row (fig. 62).

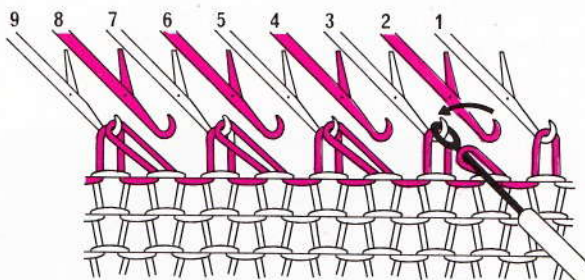


Fig. 62

NOTE : a) the method for the transfer of a stitch onto the adjacent needle using the transfer tool is explained on page 28.

b) the transfer of these stitches can also be made by automatically using the lace carriage. In this case place 2nd and every alternate needle in D position using the alternate needle selection bar and push the lace carriage across (see explanation for the use of the lace carriage on pages 42 to 45).

7. Push empty needles to B position. Knit 16 rows. Carriage is at left and row counter shows 31.

8 to 11. Same steps as for stocking stitch hem on pages 21 and 22.

1/1 MOCK RIB HEM (fig. 63)

Mainly used for welts, cuffs and neckbands.

1. Using alternate needle selection bar bring every alternate needle to B position (fig. 64). Tension slide on 3.

2. Cast on by open edge method with waste yarn (see pages 17 and 18). Place the removable cord.

3. Knit 5 rows. Pull out the removable cord and knit a further 6 rows.

4. Carriage is at right — Break off waste yarn and take it out of yarn-guide. Thread main yarn into yarn-guide. Turn row counter to 000.

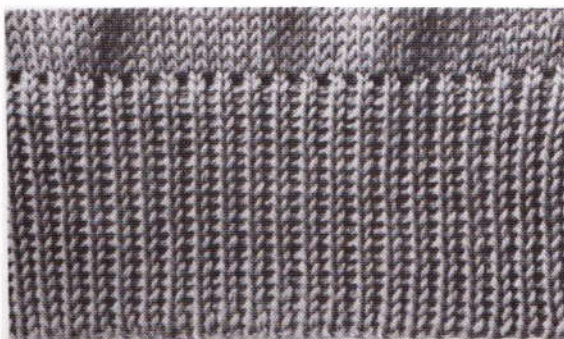


Fig. 63

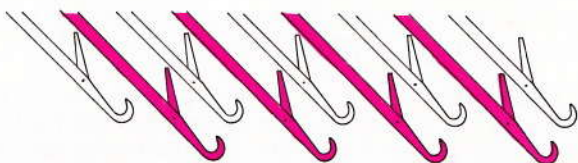


Fig. 64

5. Knit 20 rows. Tension slide on 6. Knit this row (to facilitate the folding of the hem).

6. Tension slide on 3. Knit 20 rows (row counter shows 41).

7. **Carriage is at left** — Bring the needles left in A position to B position and open all latches with the brush.

8. Fold hem in half and with transfer tool place all the stitches of the first row in main yarn onto the empty needles as follows :

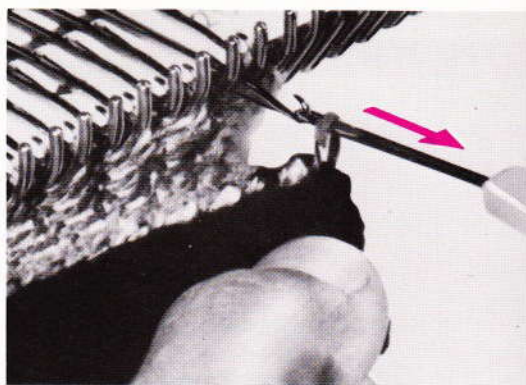


Fig. 65

- the first stitch at the right onto the 2nd needles, (fig. 65)
 - the 2nd stitch onto the 4th needle,
 - the 3rd stitch onto the 6th needle,
- and so on to the end (fig. 66).



Fig. 66

9. With the flat needle selection bar line up all the needles into B position and knit the row.

IMPORTANT

When a punched card is used, work as follows before knitting this last row :—

- Take the yarn out of the yarn-guide and leave it at one end of the needle bed (fig. 59, page 22),
 - Set left and right-hand pattern selectors onto 'slip' and knit 1 row. Carriage is at right,
 - Insert the punched card and set on row 1 (see pages 11 and 12),
 - Set : — Clutch on 'pattern'
 - Right-hand pattern switch on '■'
 - Left-hand pattern switch on '●'
 - Push the carriage from right to left; the needles are selected.
 - Thread the yarn or yarns into the yarn-guide. Place the left-hand pattern switch on '●'
- Deduct 2 rows from the row counter.**

10. Set the carriage and stitch tension according to the required pattern (see pages 34 onwards under the heading "Pattern Stitches") and continue to knit.

11. When the work is completed, the piece knitted with the waste yarn is removed by cutting the stitch at the left hand end of the waste yarn and pulling it out (fig. 60).

Press according to instructions indicated on the ball band of the yarn being used.

2/1 MOCK RIB HEM (fig. 67)

Same uses as for 1/1 mock rib hem.

1. With the 1/2 needle selection bar place 2 out of 3 needles in B position, every 3rd needle staying in A position (fig. 68).
Tension slide on 3.

2 to 7. Same steps as for 1/1 mock rib hem on pages 23 and 24.

8. Fold hem in half and with transfer tool transfer the stitches of the first row in main yarn as follows (fig. 69):—

- the first stitch on the right-hand side onto the 2nd needle on the right,
- the 2nd stitch onto the 3rd needle (which is empty),
- the 3rd stitch onto the 5th needle,
- the 4th stitch onto the 6th needle (which is empty),

and so on to the end.

9 to 11. Same steps as for 1/1 mock rib hem on page 24.



Fig. 67



Fig. 68

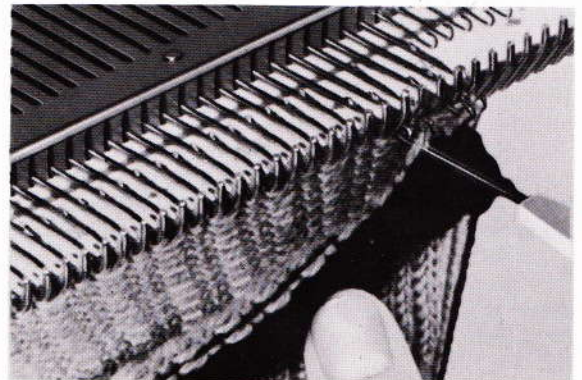


Fig. 69

3/1 MOCK RIB HEM (fig. 70)

Same uses as for 1/1 and 1/2 mock rib hems.

1. Bring all needles to B position and with 1/3 needle selection bar return every 4th needle to A position.
Tension slide on 3.

2 to 7. Same steps as for 1/1 mock rib hem (pages 23 and 24).



Fig. 70



Fig. 71

8. Fold hem in half and with the transfer tool place the stitches of first row in main yarn as follows (fig. 72):—

- the first stitch on the right onto the 2nd needle on the right,
 - the 2nd stitch onto the 3rd needle,
 - the 3rd stitch onto the 4th needle (which is empty),
 - the 4th stitch onto the 6th needle,
- and so on to the end.

9 to 11. Same steps as for 1/1 mock rib hem on page 24.

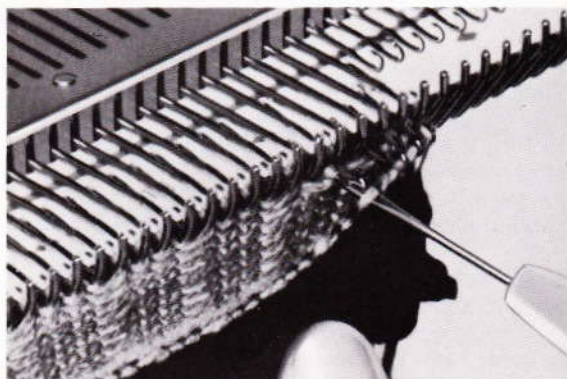


Fig. 72

1/1, 1/2 AND 1/3 MOCK RIB HEM WITH STOCKING STITCH BACKING

Mainly used for bands with buttonholes, neckbands, collars, pocket edges. However, for welts and cuffs it is preferable to use mock rib hems without the stocking stitch backing (see previous instructions).

1 to 5. Same steps as for stocking stitch hem on page 21.

6. The carriage is on the left and row counter on 15.

— For 1/1 - With the transfer tool transfer stitch from 2nd needle onto 3rd needle, stitch from 4th onto 5th needle and so on all along the row (fig. 73).

— For 2/1 - With the transfer tool transfer stitch from 3rd needle onto 4th needle, stitch from 6th needle onto 7th needle and so on (fig. 74).

— For 3/1 - Transfer stitch from 4th needle onto 5th needle, stitch from 8th needle onto 9th needle and so on (fig. 75).

NOTE : a) the method for the transfer of a stitch onto the adjacent needle using the transfer tool is explained on page 28.

b) the transfer of these stitches can also be made automatically by using the lace carriage. In this case, using the corresponding needle selection bar, place in D position:

for 1/1, needles 2 - 4 - 6 - etc.

for 2/1, needles 3 - 6 - 9 - etc.

for 3/1, needles 4 - 8 - 12 - etc.

and push the lace carriage across once (see explanation for the use of the lace carriage on pages 42 to 45).

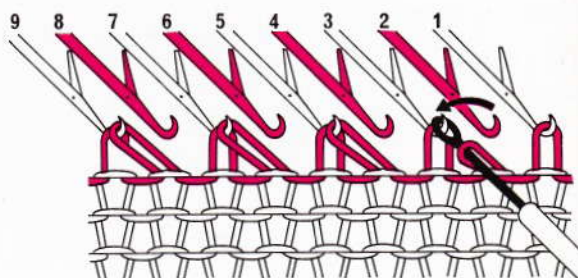


Fig. 73

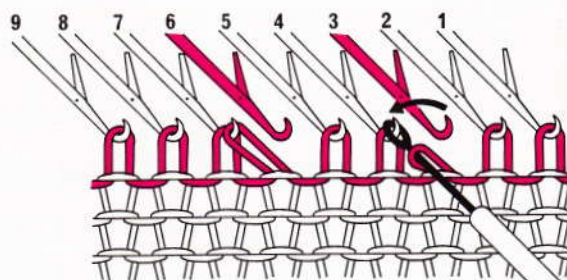


Fig. 74

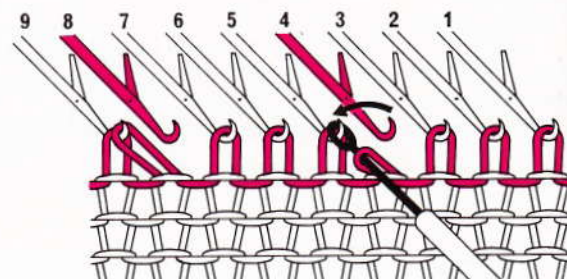


Fig. 75

7. Push empty needles back to position A. Put tension slide on 3 and knit 16 rows. The carriage is on the left and row counter shows 31. Bring needles left in A position back to B position.

8 to 11. Same steps as for stocking stitch hem on pages 21 and 22.

1/1 AND 1/2 TUCK RIBS (figs. 76 and 78)

Same uses as for mock rib hems with stocking stitch backing page 26.

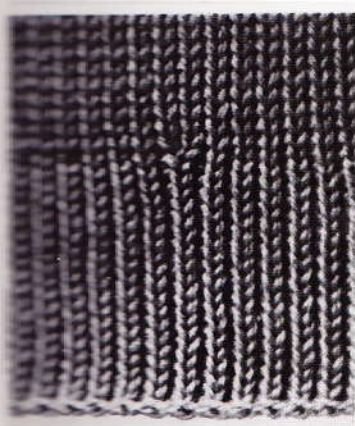


Fig. 76

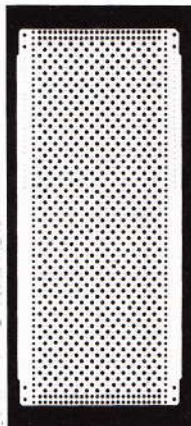


Fig. 77



Fig. 78

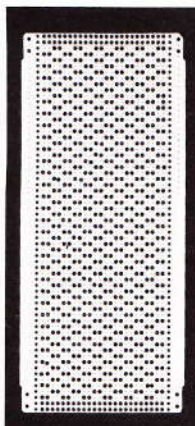


Fig. 79

1. Cast on by hand as far as (see page 20). The carriage is on the right. Set row counter to 300.

2. Place card (see pages 11 and 12):
 - A (fig 77) for 1/1 rib
 - B (fig 79) for 2/2 rib

3. Set carriage as in fig. 80. Tension slide on 4. Still holding removable cord push the carriage from right to left, the needles are selected. Pull cord out.

4. Set carriage as in fig. 81 (both pattern selectors on "tuck"). Knit 35 rows.

5. The carriage is on the right and row counter shows 36. Push clutch onto "Plain" and knit 1 row.

6. The carriage is on the left - Turn pattern selectors to "plain", tension slide on 5 and knit.

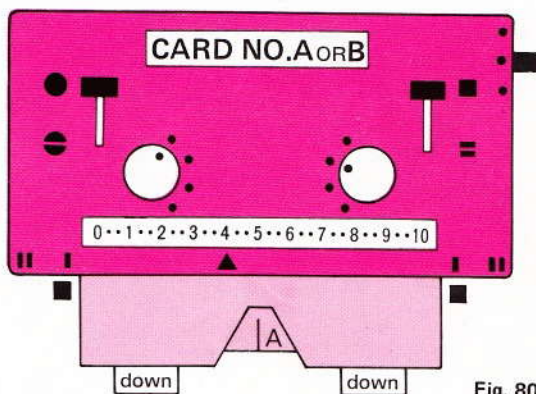


Fig. 80

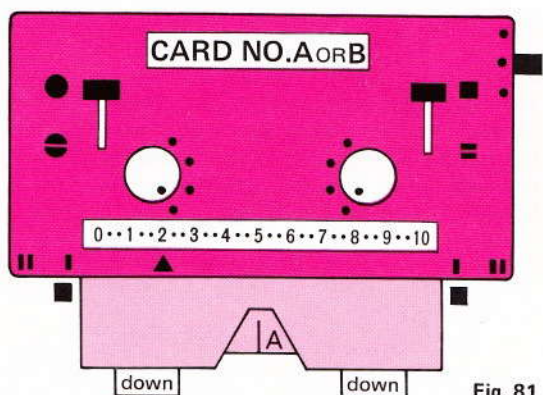


Fig. 81

When knitting a pattern with a punched card, follow same process as indicated in the paragraph headed "Important" on page 22.

7. Press according to instructions indicated on the ball band of the yarn being used.

NOTE: It is advisable to use tuck ribbing only when the right side of the work is the "knit" side, as in stocking stitch, 2 colour or lace patterns. If the pattern shows on the "purl" side of the work (slip stitch, tuck stitch, weaving), it is necessary to take the work off the needles, turn it to the other side and replace the stitches on the needles.

TRANSFER OF STITCHES

Before explaining the different increases and decreases, you must know exactly how to transfer one stitch onto the adjacent needle using the transfer tool.

- Slip the eye of the transfer tool over the hook of the needle and pull the needle towards you so that the stitch slips behind the latch (fig 82).

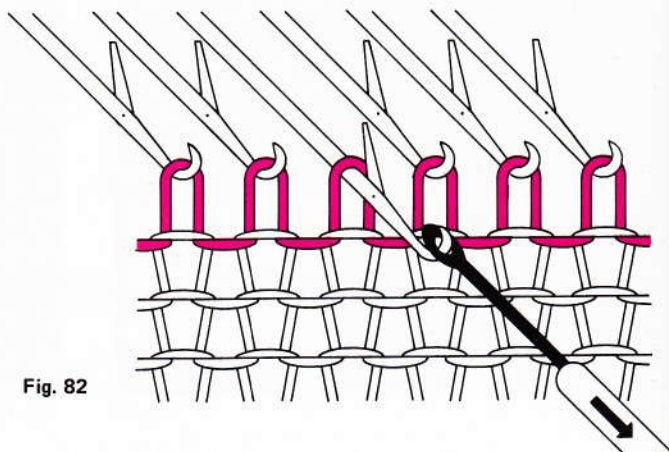


Fig. 82

- Push the needle back towards A position so that the stitch slips onto the transfer tool (fig. 83).

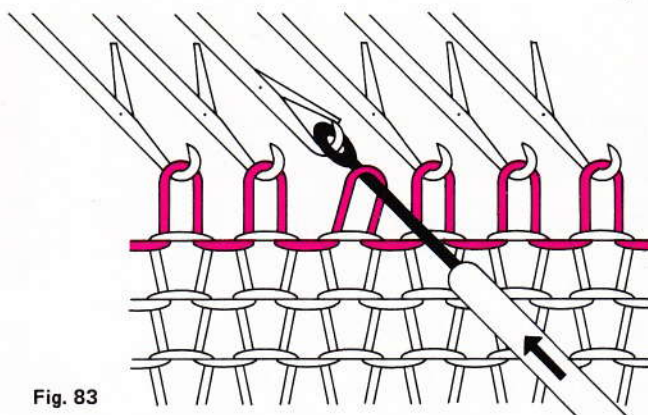


Fig. 83

- Lift the transfer tool off the needle and replace onto the hook of the adjacent needle. Hold the work down with your left hand and lift the handle of the transfer tool until the stitch slips into the hook of the needle (fig. 84).

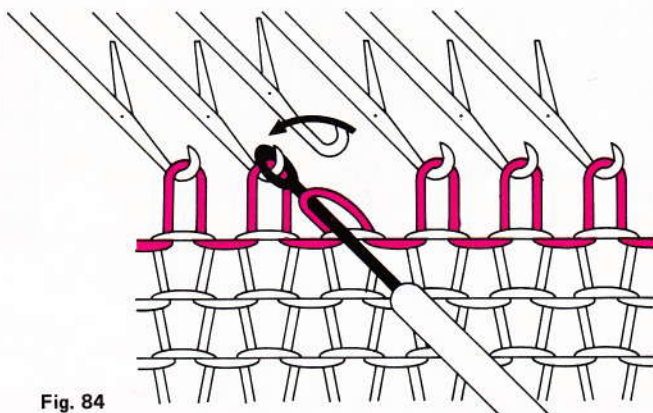


Fig. 84

ADVICE

Before starting to knit a whole garment, practise on samples of 30 to 50 stitches as indicated in our examples. Make sure you know the names of all the machine parts and learn all the methods used so far and in the following pages:— casting on, increasing, decreasing, armhole shaping, necklines and shoulders.

INCREASES

INCREASING 1 STITCH

There are two methods of increasing 1 stitch at the edge of the knitting.

1st Method

The simplest way is always worked on the same side as the carriage.

- When the carriage is on the right bring the first needle at the right from position A to position B (fig. 85). Continue knitting.

Proceed in the same way when the carriage is at the left.

2nd Method

This gives a neater edging and makes the sewing of the garment easier. It can be done on each side of the work at the same time.

- Bring the first needle at the right or left from A to B position (fig. 85).

- Using the 1-stitch transfer tool, transfer the edge stitch onto the empty needle (fig. 86).

- Using the same tool pick up the loop of the 2nd stitch of the previous row (fig. 87).

- Transfer this loop onto the empty needle (fig. 88).

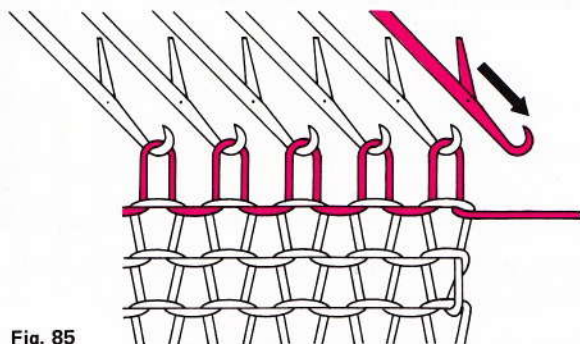


Fig. 85

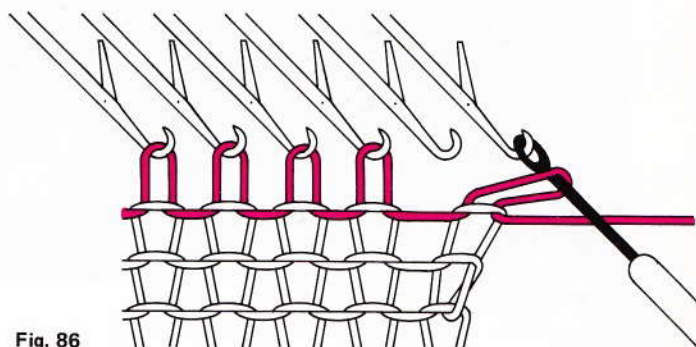


Fig. 86

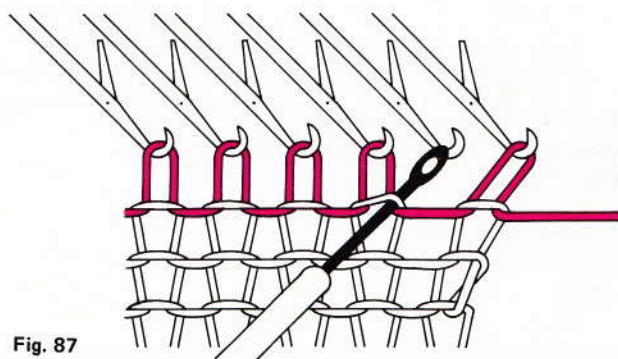


Fig. 87

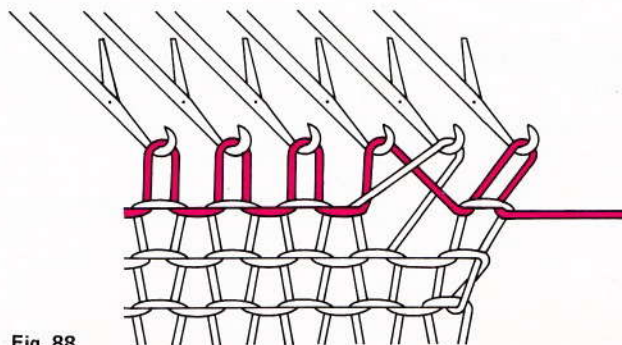


Fig. 88

FULLY FASHIONED INCREASING

This gives a really neat appearance to the edge of the material (fig. 89). Fully fashioning is worked both on the right and left-hand sides of the knitting if required in the same row.



Fig. 89

- Bring the first needle at each side from A position to B position (fig. 90).
- Open the latches of the first 4 needles each side.
- Hold the knitting against the needle bed with the left hand. With the 3-stitch transfer tool pick up the first 3 stitches (fig. 90).

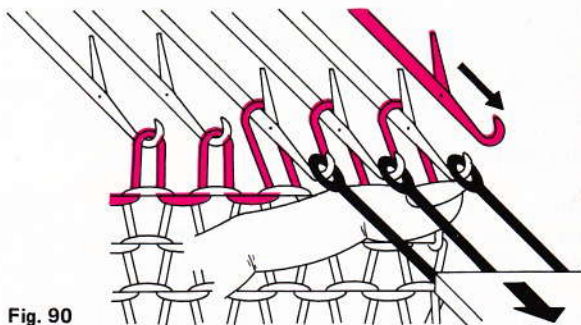


Fig. 90

- Transfer these 3 stitches onto the 3 end needles (fig. 91).

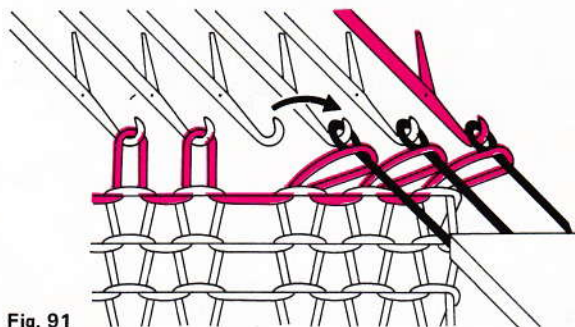


Fig. 91

- Using the 1-stitch transfer tool pick up the loop of the 4th stitch of previous row (fig. 92).

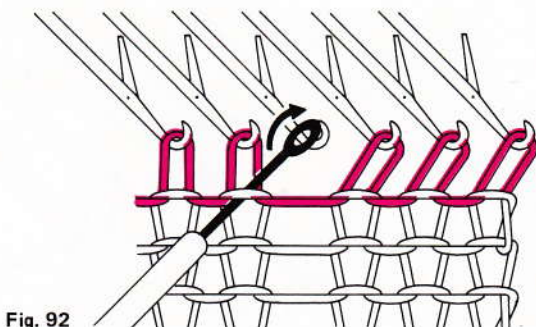


Fig. 92

- Place this loop onto empty needle (fig. 93).

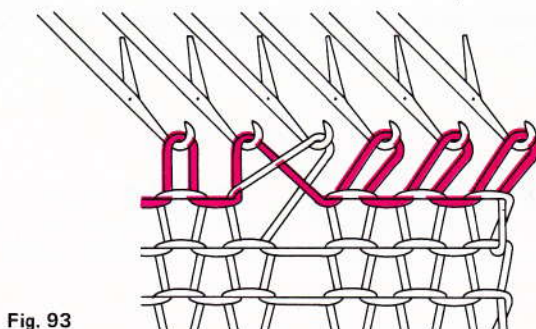


Fig. 93

INCREASING SEVERAL STITCHES AT A TIME (CASTING ON)

This is always done on the same side as the carriage.

The carriage is on the right

- After the last needle on the right, bring as many empty needles to F position as the number of stitches required to be increased.
- Pull on the length of yarn between the carriage and the knitting so as to slacken the yarn.
- Wind the yarn loosely behind the latches, under the needle and round over the top (fig. 94).
- Gradually push back the loops thus formed against the needle bed teeth with the left forefinger (fig. 95).
- Pull the yarn back slightly and knit.

The carriage is on the left

- Same process as above but winding the yarn from right to left (fig. 96).

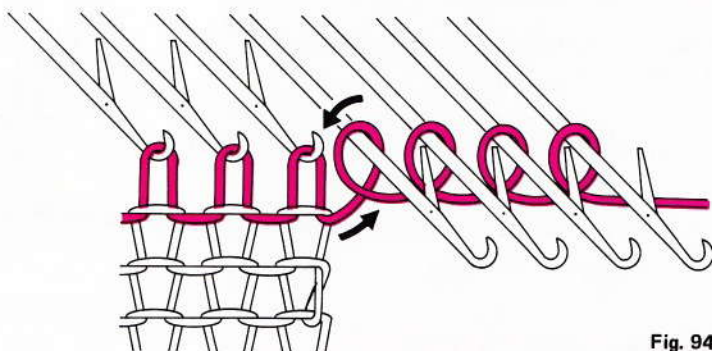


Fig. 94

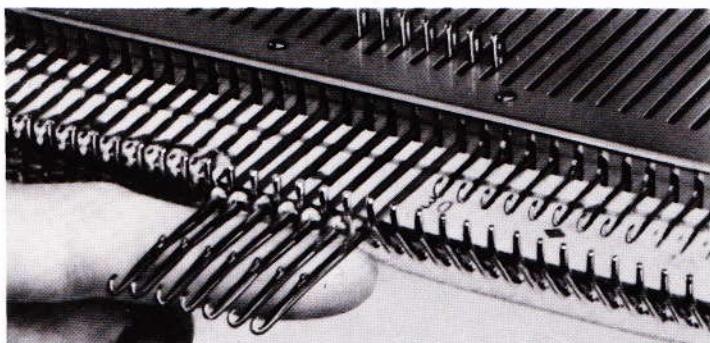


Fig. 95

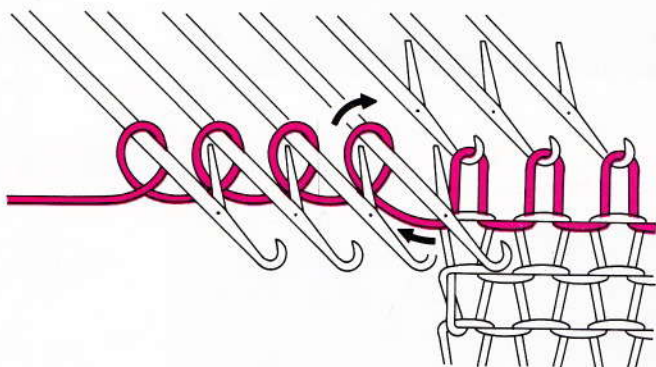


Fig. 96

ADVICE

- Always cover your knitting machine so that it does not get dusty.
- Periodically clean your machine, if not the carriage will become hard to push (see maintenance of the machine page 63).
- Never allow anyone to use the machine unless they really know how.

DECREASING AND CASTING OFF

DECREASING 1 STITCH

Can be done on either side of the machine at the same time.

- Transfer the stitch at the edge of the knitting onto the adjacent needle (see transfer of a stitch page 28) (fig. 97).

- Push empty needle back to A position.

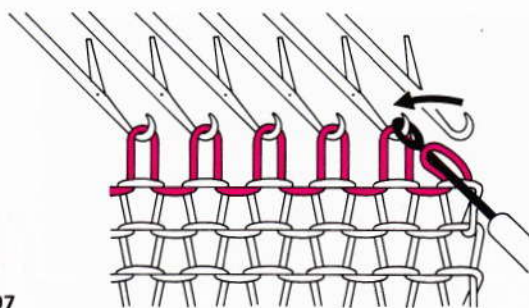


Fig. 97

DECREASING 1 STITCH 3 NEEDLES INSIDE EDGE (Fully fashioned decreases)

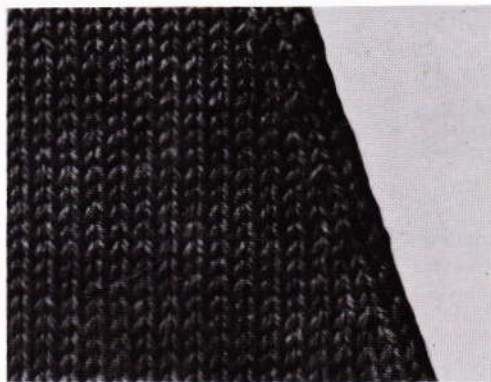


Fig. 98

This is mainly used for raglan seams, saddle shoulder sleeves and any fancy armhole shaping (fig. 98).

Decreases are worked on the right and left-hand sides at the same time.

- Open latches of the 4 needles at each end.
- With the left hand hold the knitting against the needle bed and using the 3-stitch transfer tool pick up the 3 edge stitches (figs. 99 and 100).
- Transfer these 3 stitches one needle nearer the centre (fig. 101).
- Push empty needle at each side back to A position (fig. 102).

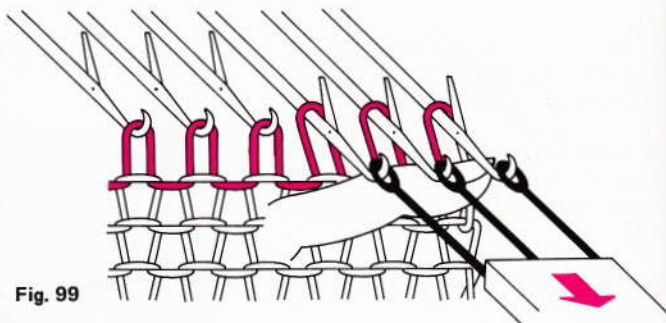


Fig. 99

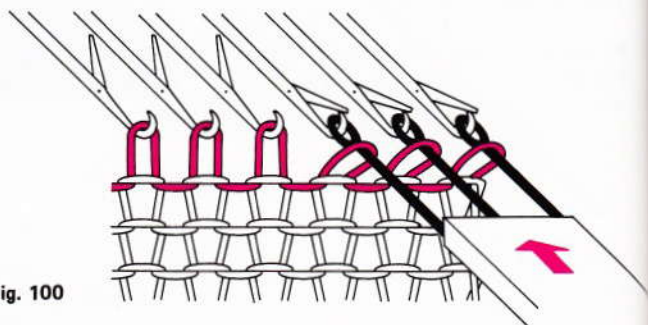


Fig. 100

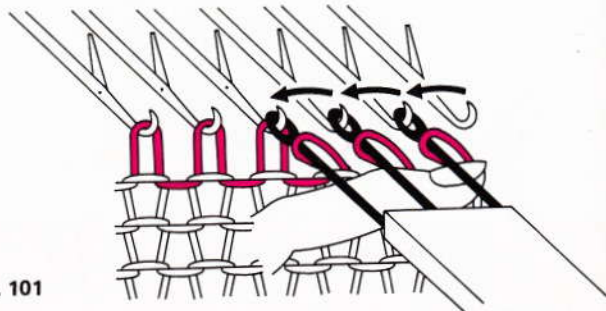


Fig. 101

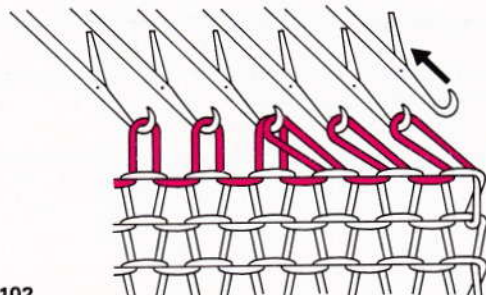


Fig. 102

CASTING OFF DURING THE WORK

This is used to shape a shoulder, a neck edge or an armhole and is always done on the same side as the carriage.

- Open the latches with a brush,
- Hook the side weight on the edge of the knitting,
- Pull slightly on the yarn between the knitting and the carriage so as to have enough slack yarn.

When the Carriage is on the right:

1. Transfer the stitch from the first needle on the right onto adjacent needle. There are now two stitches on this needle.
2. Pull the needle forward until the 2 stitches slip behind the latch (fig. 103).
3. Remove the transfer tool.
4. With the right hand place the yarn in the hook of the needle and holding the butt of the needle with the left hand pull the needle back to B position to form a stitch (fig. 104). This stitch must stay loose or the cast off edge will be tight.
5. Repeat process 1 to 4 until the required number of stitches is cast off.
6. Push empty needles back to A position and continue to knit.

When the carriage is on the left:

Same process as 1 to 6 but transferring the stitch from the first needle on the left to adjacent needle.

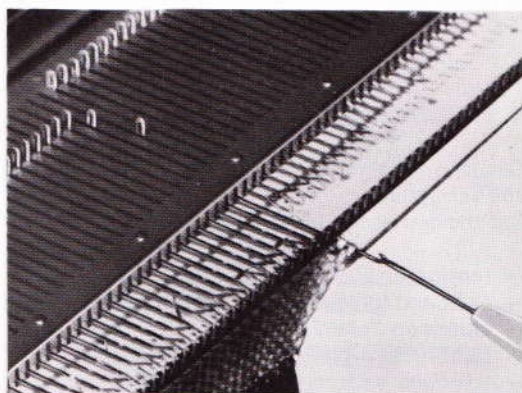


Fig. 103

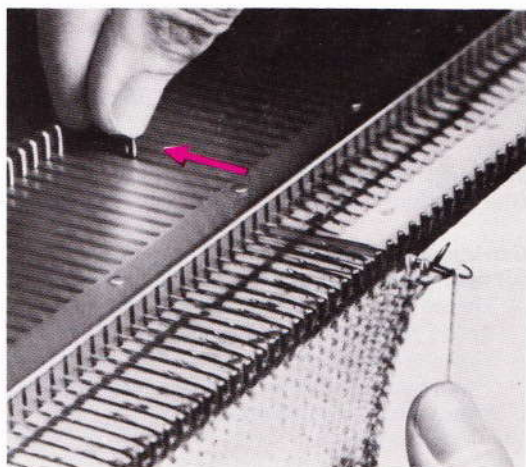


Fig. 104

CASTING OFF AT END OF WORK (fig. 105)

Same process as for casting off stitches during the work (paragraph above) until 1 loop only remains on the last needle.

Break off the yarn 20 cms (8 ins) from edge and thread it through the remaining loop to close the stitch.



Fig. 105

We remind you that it is absolutely necessary:

- when moving the tension slide to place the left-hand pattern selector on "stitch tension",
- when inserting the card or turning it by hand with the card feed dial, to place the right-hand pattern switch on "■".

To avoid repetition detailed instructions will not be given from here on, for example :

- "Tension on 5" – pattern selector to "stitch tension", move the slide onto 5, then place pattern selector on the required stitch.
- "Bring card back onto 20" – push right-hand pattern switch to "■", turn the card back to 20, then push right-hand pattern switch back to "■".

PATTERN STITCHES

STOCKING STITCH

1. Plain Stocking Stitch

Carriage is at right and yarn A in thread-mouth I of the yarn-guide.

Set the carriage as in fig. 106:

- tension on 5,
- right and left-hand pattern selectors on "plain",
- clutch on "plain",
- right-hand pattern switch on " = ",
- left-hand pattern switch on " ⊖ ",
- right and left-hand returning levers on "normal",
- weaver knobs down.

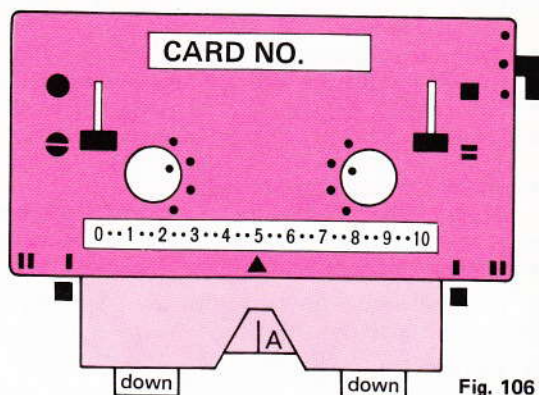


Fig. 106

2. Horizontal Stripes

Same setting of the carriage as for plain stocking stitch. Take 2 yarns A and B of the same thickness but different colours.

a) Stripes with even number of rows

(the example given is for 4 rows, but it can be done with any even number of rows)

Carriage is at right:

- Take yarn A out of yarn-guide and leave at end of left side of needle bed (fig. 107),
- Thread yarn B in yarn-guide and slightly pull on yarn to correct the tension,
- Knit 4 rows. Carriage is at right,
- Take yarn B out of yarn-guide and leave it on the right (fig. 108),
- Thread yarn A in yarn-guide and slightly pull on yarn to correct the tension, knit 4 rows.
- Repeat from the beginning.

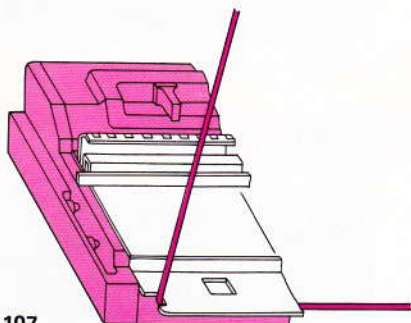


Fig. 107

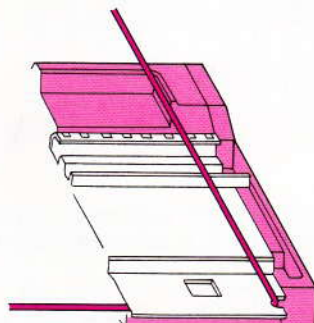


Fig. 108

b) Stripes with odd number of rows

(the example is given for 5 rows, but can be done with any odd number of rows)

Carriage is at right:

- Take yarn A out of yarn-guide, thread yarn B in yarn-guide,
- Leave yarn A on the right side. Knit 5 rows. Carriage is at left,
- Take yarn B out of yarn-guide and leave it on the left side,
- Set right-hand pattern selector on "slip" and push carriage from left to right. Deduct 1 row from row counter,
- Set right-hand pattern selector on "plain". Thread yarn A and knit 5 rows,
- Take out yarn A, thread in yarn B leaving yarn A on the left side,
- Knit 5 rows. Carriage is on the right,
- Take out yarn B and leave it on the right side,
- Set left-hand pattern selector on "slip" and push carriage from right to left. Deduct 1 row from row counter,
- Set left-hand pattern selector on "plain". Thread yarn A and knit 5 rows,
- Repeat from the beginning.

2-COLOR (FAIRISLE)

Carriage is on the left

- Place the card, for example No. 11 (for other cards see table on page 46),
- Set carriage as in fig. 109. Take the yarn out of the yarn-guides and leave it at the end of the needle bed,
- Push carriage from left to right. Place clutch on 'pattern',
- Push carriage from right to left. The needles are selected,
- Set the carriage as in fig. 110. Thread yarns A and B in thread mouths I and II of yarn-guide,
- Deduct 2 rows from row counter.

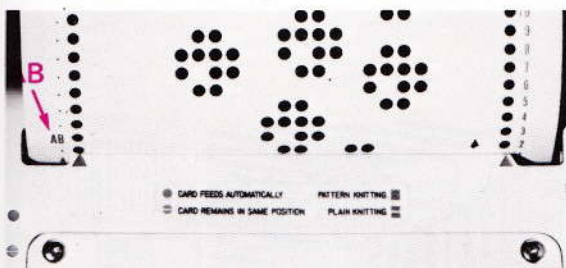


Fig. 111

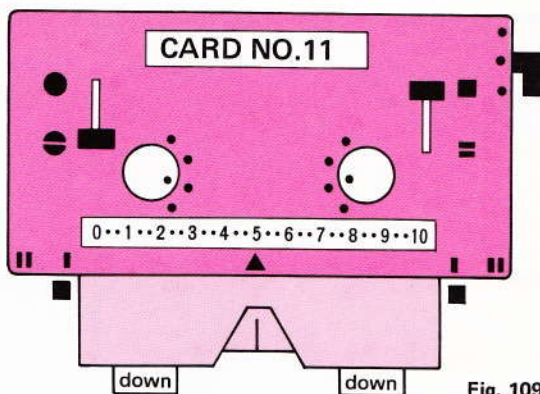


Fig. 109

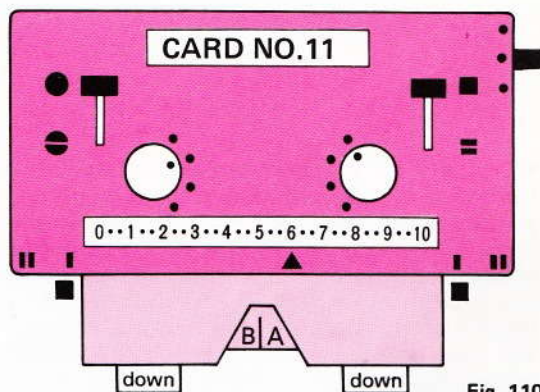


Fig. 110

- When more than 2 colours are required for the fairisle, follow symbols A/B/C/D on the left side of the card, the first letter indicates the colour of the yarn in thread mouth I of yarn-guide, the 2nd letter indicates the colour of the yarn in thread mouth II of yarn-guide.
- The symbols must be read as they appear above the card slot, not when they are below it (fig. 111).

DEVICE FOR KNITTING A SINGLE MOTIF AND PLACING 2 COLOR (FAIRISLE) PATTERN WHERE REQUIRED

- By placing the point cams on the needle bed, it is possible to knit rows of stocking stitch and fairisle at the same time.
- To knit a single motif follow the same steps as for fairisle, but after the first selection of the needles, set the carriage as in fig. 112, noting that the returning levers go on to "single motif".

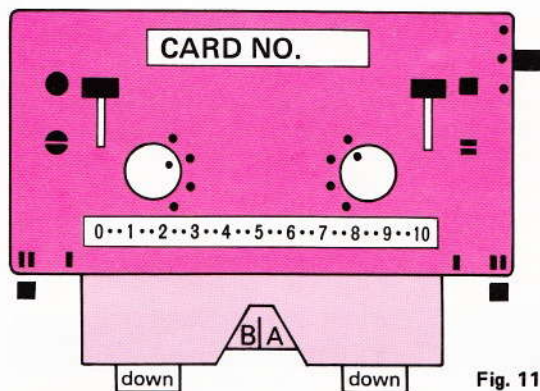
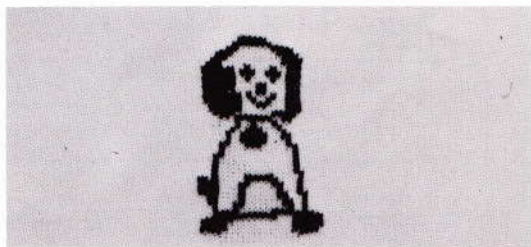


Fig. 112

- Place the point cam at the front of the needle bed (as in fig. 113). Push the cam to the front so that it is secure on the needle bed. If this is not done the machine will not knit.

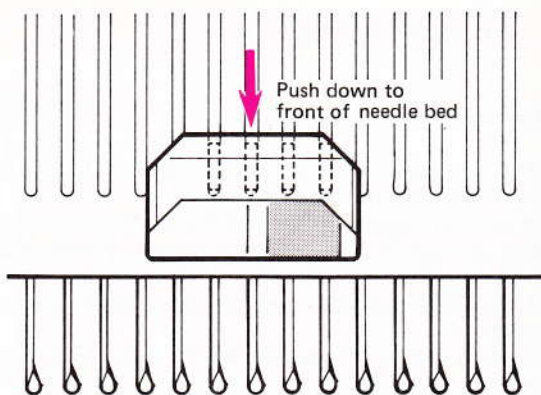


Fig. 113

- You will see that the cams are in 2 colours – the orange ones have the thicker part to the left and the green ones have the thicker part on the right. Therefore, the cams are always placed in alternate colours so that the high and low parts face each other in pairs. The needle adjacent to the higher part sets the position of the motif. The space between the two high parts will knit in pattern and the space between the two lower parts will knit in stocking stitch.

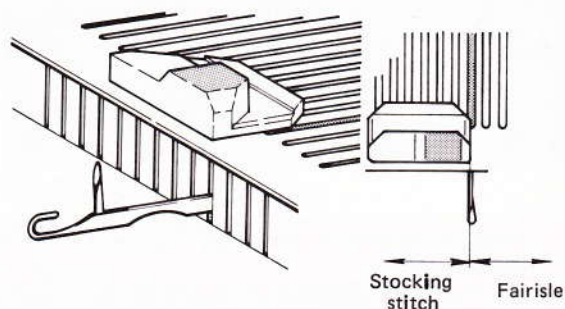


Fig. 114

- When the motif cams are placed as indicated in fig. 115, the motif will knit between the green and orange cams in the centre and there will be plain stocking stitch each side.

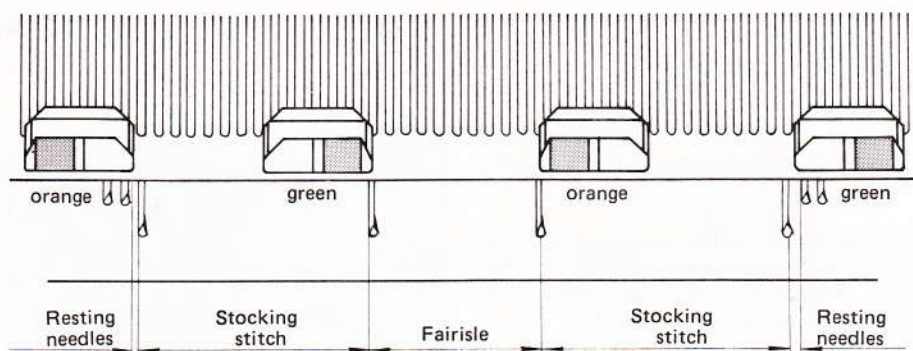


Fig. 115

When the stitches at each end are to be knitted in stocking stitch (as in fig. 116) put a cam at each end of the work as in fig. 115.

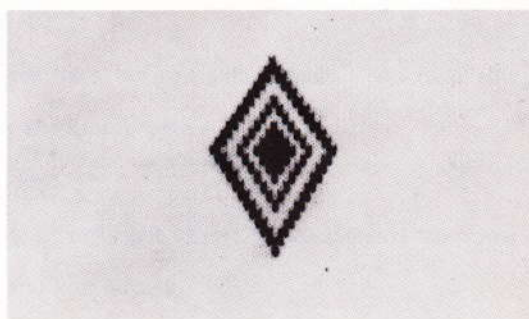


Fig. 116

Correction:

Fig 114, Fig 115 of page 36 and Fig, 117 of page 37 are corrected as follows.

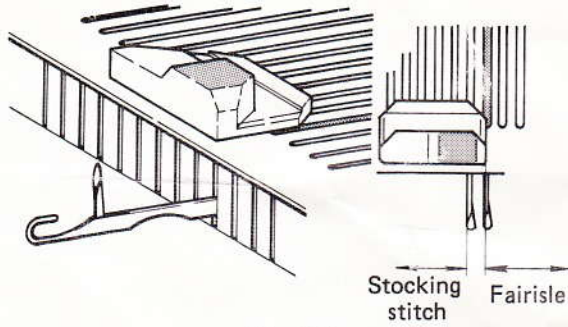


Fig. 114

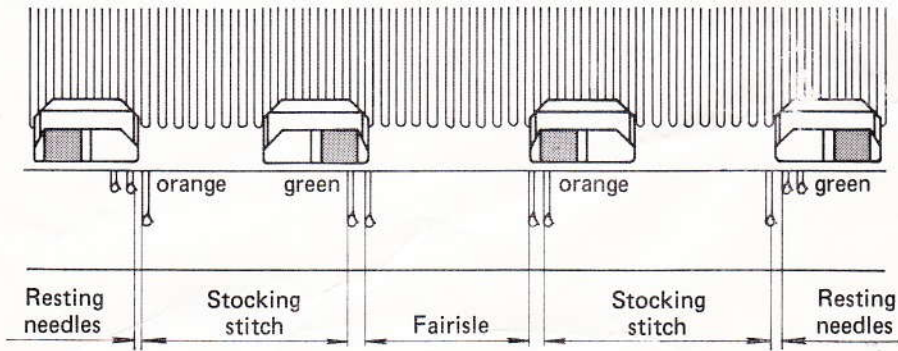


Fig. 115

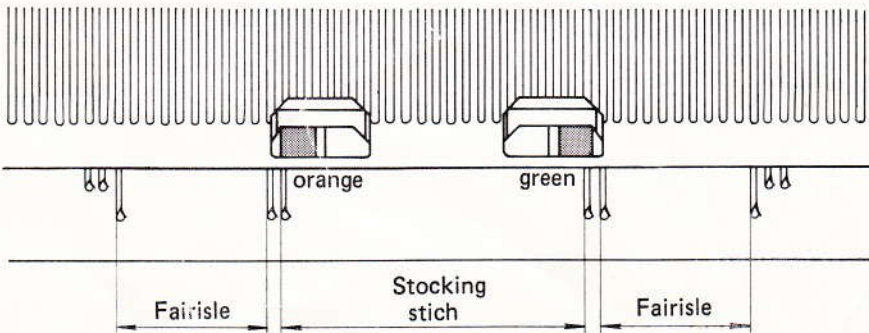


Fig. 117

- The point cams being placed as indicated in fig. 117, the space between the orange cam and the green cam in the centre is in stocking stitch, and on each side of the stocking stitch it is in fairisle.

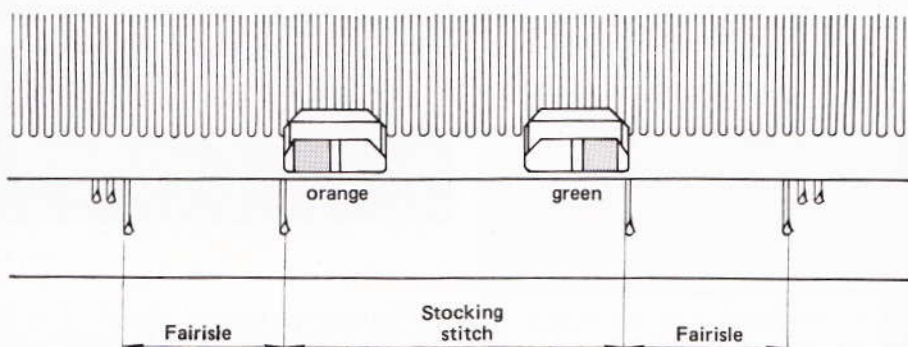


Fig. 117

When the stitches at each end of the work are to be in pattern (as in fig. 118) do not put a cam at each end of the work – only at each side of the motif (as in fig. 117).

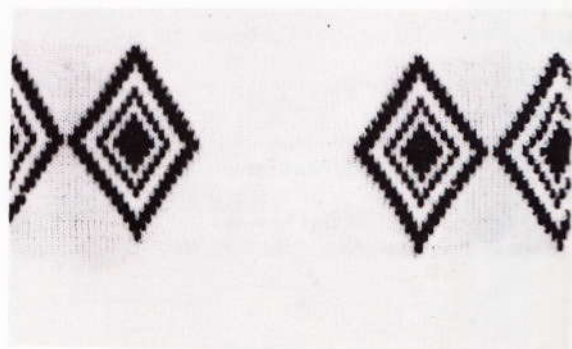


Fig. 118

SINGLE MOTIF

1. Take card No. 2,
2. Prepare the main yarn (white) and contrast yarns (blue, red, orange).
3. Proceed as for 2 color fairisle pattern (see page 35).
4. Place left-hand pattern selector on "plain" and right-hand selector on "two color".
5. Place the two pattern position dials on 1 (see page 46).
6. Place the two returning levers on "single motif".
7. As indicated in fig. 120, place the motif cams on the needle bed so that they correspond with a complete group of 24 stitches as indicated by the red line. Place the orange point cam on the right-hand side and the green point cam on the left-hand side.

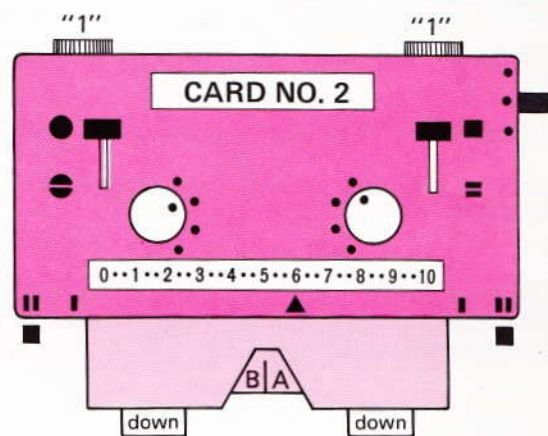


Fig. 119

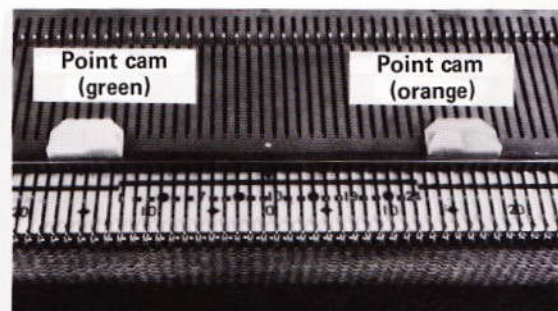


Fig. 120

8. At each side of the work place another cam, the orange one on the left and the green one on the right.

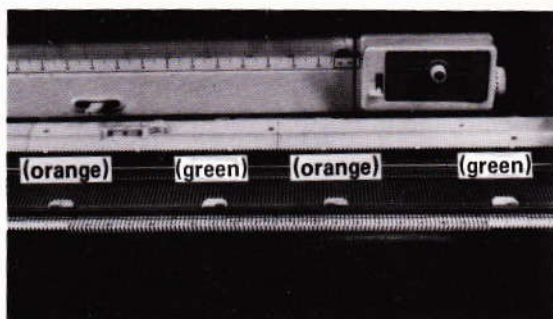


Fig. 121

9. Knit 3 rows in stocking stitch with this setting. After the carriage has been pushed across for the third row, the needles will have been selected; one group of needles in B position and another group in D position.

10. Thread the contrast yarn (orange) into thread mouth II of the yarn-guide and knit 1 row. The contrast yarn has knitted the pattern between the two point cams placed in the centre of the needle bed.

11. Pass the contrast yarn, as in fig. 122, round the needle next to the last one holding the contrast yarn, then knit next row.

Note : Take care not to alter the position (from B to D or vice versa) of this needle.

* Repeat the same process for each row.

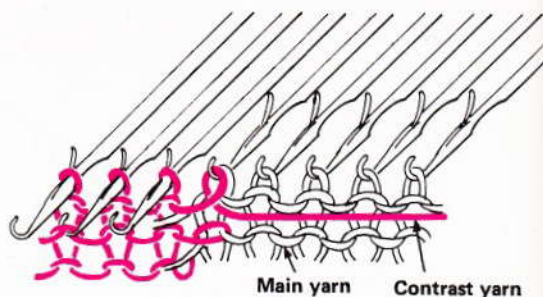


Fig. 122

12. Knit to No. 8 on the card,

13. Change to the blue contrast yarn in thread mouth II (following the symbols) and knit to No. 21 on the card.

14. Change to the red contrast yarn and knit to 25 on card, then with the blue contrast yarn knit to 51.

15. From No. 52 onwards remove the contrast yarn, adjust the pattern selectors to 'plain' and knit in stocking stitch with main yarn only.

As the yarn in thread mouth II is only knitted in one spot, it might happen that the tension assembly on that side will slacken. Take care when knitting to pull lightly on the contrast yarn to ensure that tension is maintained.

VARIATIONS ON SINGLE MOTIF KNITTING

Practise with the train motif shown on Pattern Book 24.

1. Copy the drawing of the train from the book onto the card.

2. Punch the card using the puncher (see page 65).

3. Prepare the main (white) and contrast yarns (black and red).

4. Proceed as for 2-color (fairisle) (see page 35).

* For this sample, the width of the knitting should be 60 needles each side of the figure "0", 120 stitches in all.

5. Place left-hand pattern selector on 'plain' and right-hand on 'two color'.

6. Place the two pattern position dials on 1 (see page 46).

7. Place the two returning levers on 'single motif'.

8. After knitting the second row all needles are in D position. Thread black contrast in thread mouth II.

9. Knit to No. 4 on the card.

10. Take out contrast and knit 1 row in main yarn only.

11. Thread black into thread mouth II and continue knitting. When figure 6 appears on the card place the point cams as in the lower part of fig. 125.

The green point cams

– on the outside of the right hand side of the work.

– on the outside of the 36th stitch on the left.

The orange point cams

– on the outside of the left hand side of the work.

– on the outside of the 36th stitch on the right.

12. When figure 9 appears on the card, change the black contrast yarn for the red one and knit to 26 on the card.

13. When the figure 26 appears place the two other point cams as shown in the upper part of fig. 125.

The green point cam

– on the inside of the 25th needle on the right.

The orange point cam

– on the inside of the 25th needle on the left.

14. Change to black contrast yarn and knit to No. 36 on the card.

15. Remove contrast yarn and knit in stocking stitch with main yarn only.

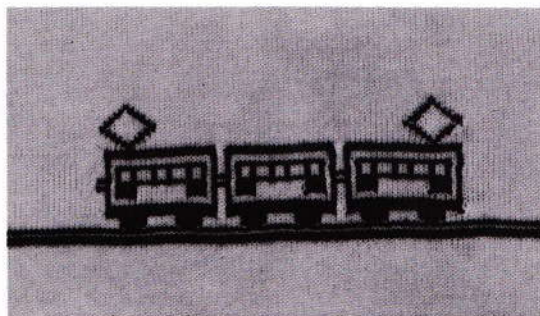


Fig. 123

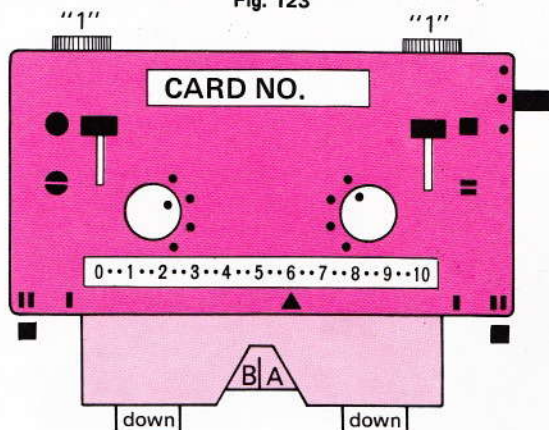


Fig. 124

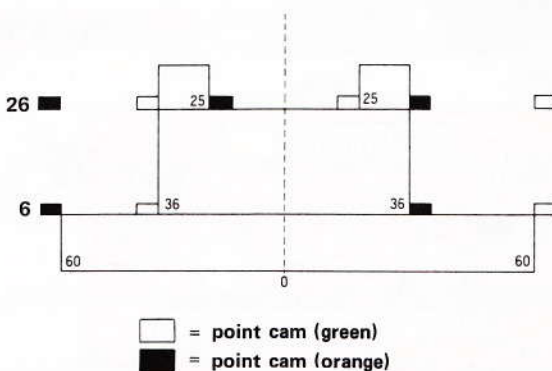


Fig. 125

SLIP STITCH

The carriage is on the left

- Place, for example, card No. 10 (for the choice of other cards see table on page 46).
- Set the carriage as in fig. 126. Take the yarn out of thread mouth and leave it at the end of the needle bed.
- Push carriage from left to right. Place clutch on 'pattern'.
- Push carriage from right to left. The needles are selected.
- Set carriage as in fig. 127. Thread yarn in thread mouth.
- Deduct 2 rows from row counter and continue knitting.

To knit two colours in slip stitch, knit 2 rows in colour A and 2 rows in colour B (refer to paragraph "Stripes with even number of rows in Stocking Stitch" on page 34 for how to change the yarn).

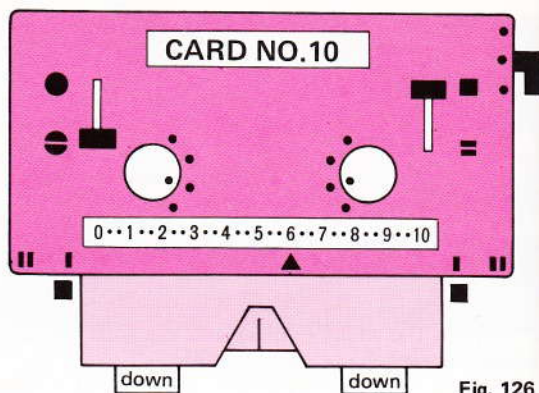


Fig. 126

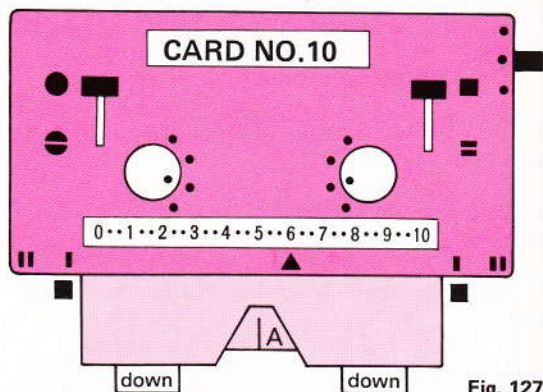


Fig. 127

TUCK STITCH

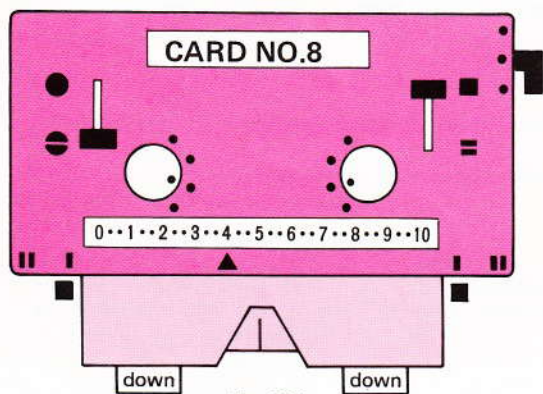


Fig. 128

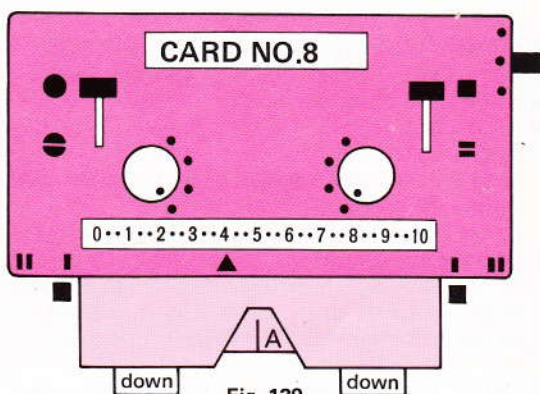


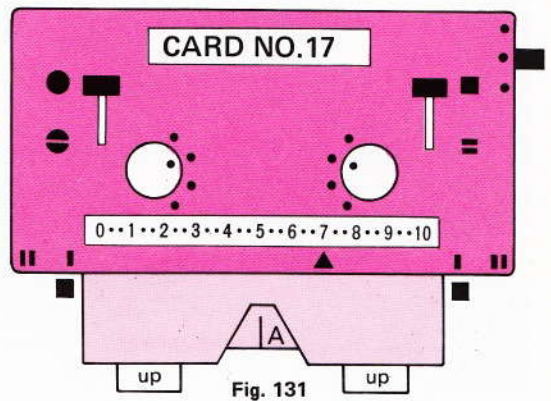
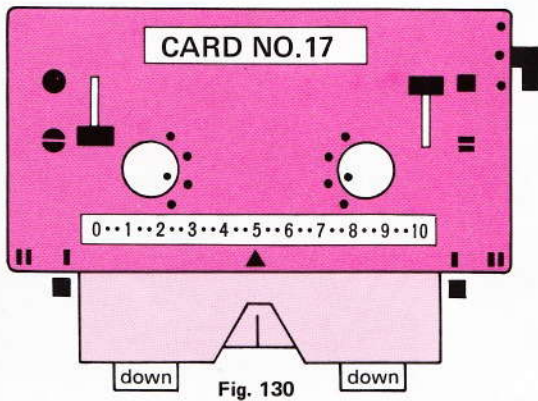
Fig. 129

The carriage is on the left

- Place, for example, card No. 8 (for the choice of other cards see table on page 46).
- Set the carriage as in fig. 128. Take the yarn out of thread mouth and leave it at the end of the needle bed.
- Push the carriage from left to right. Place clutch on 'pattern'.
- Push carriage from right to left. The needles are selected.
- Set the carriage as in fig. 129. Thread yarn in thread mouth.
- Deduct 2 rows from row counter and continue knitting.

To knit two colours in tuck stitch, knit 2 rows in colour A and 2 rows in colour B (refer to paragraph "Stripes with even number of rows in Stocking Stitch" on page 34 for how to change the yarn).

WEAVING



The carriage is on the left :

- Place the card, for example No. 17 (for other cards see table on page 46).
- Set carriage as in fig. 130. Take the yarn out of thread mouth and leave it at the end of the needle bed.
- Push carriage from left to right. Place clutch on 'pattern'.
- Push carriage from right to left. The needles are selected.
- Set carriage as in fig. 131. Thread yarn A in thread mouth.
- Deduct 2 rows from row counter.

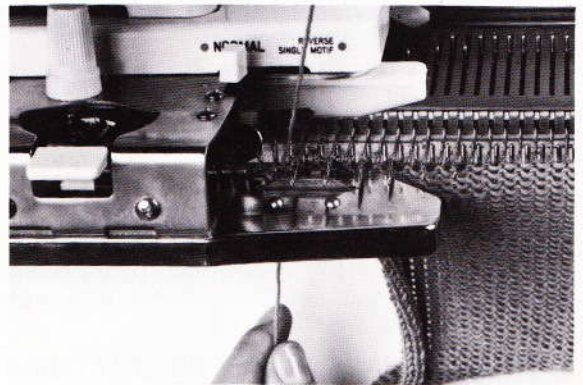


Fig. 132

- Thread weaving yarn B in tension assembly (a thicker yarn than main yarn A) and through the right hand weaving guide (fig. 132).
- Bring the first left-hand needle to F position.
- Push the carriage from left to right.
- Bring the weaving yarn under the fabric press, clearing it from the brushes by pushing the carriage slightly towards the right (fig. 133). Release yarn B.
- Bring the first right-hand needle to F position.
- Push the carriage from right to left. The weaving yarn B will automatically enter the weaving guide (fig. 134).
- Bring the weaving yarn B under the fabric press clearing it from the brushes by pushing the carriage slightly towards the left. Release yarn B.
- Repeat from ●.

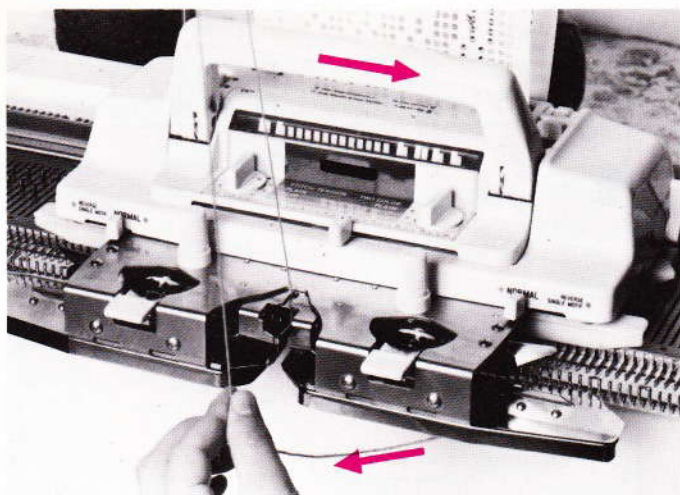


Fig. 133

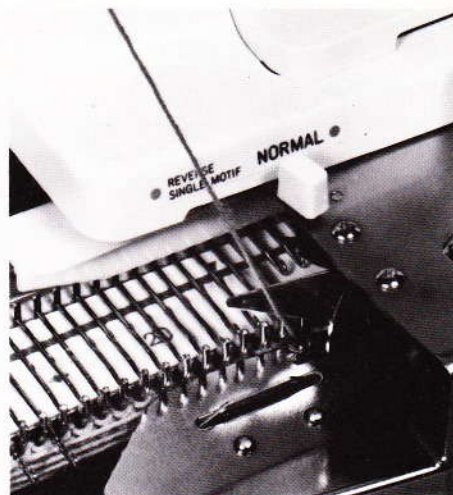


Fig. 134

- To obtain neat edges when weaving, do not forget to place the first needle at the same side as the carriage in F position on every row.
- For every weaving pattern the weaving brushes must be placed in working position, therefore the knobs must be pushed upwards.

LACE STITCH

Lace stitches are worked automatically by the lace carriage which, when pushed from one side to the other, transfers stitches from selected needles to their adjacent needle without the use of a transfer tool.

1. THE CARRIAGE STOPPERS AND THE AUXILIARY RAIL

- The carriage stoppers at each end of the front of the needle bed prevent the carriage from slipping off. For wide knitting (of more than 160 stitches) or to use the lace carriage, take off the carriage stoppers and replace with the auxiliary rails.

Use a coin to take off the carriage stoppers.

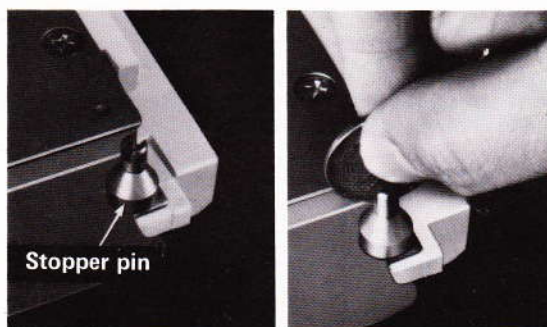


Fig. 135

Always fix the auxiliary rail before taking off the carriage stoppers.

- Having removed the carriage stoppers, insert the end of the auxiliary rail into the groove at the back of the needle bed and slip the auxiliary rail into the needle bed.

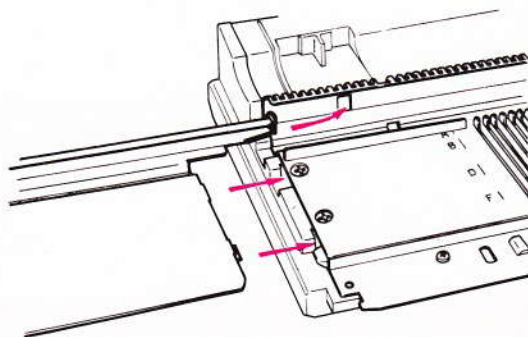


Fig. 136

- Lift up the end of the auxiliary rail slightly, push it a little and let it come down to secure it (fig. 137).

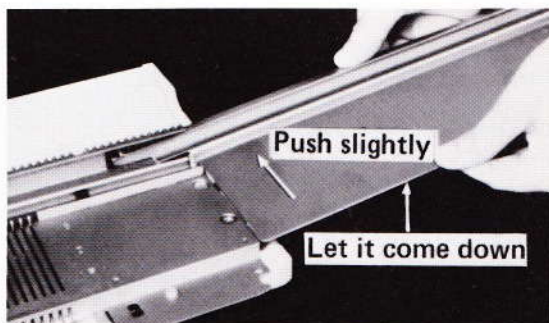


Fig. 137

Weight combs

- So that the stitches come off the needles easily when working a lace stitch or a tuck stitch, use weight combs placing the teeth into the knitted fabric.

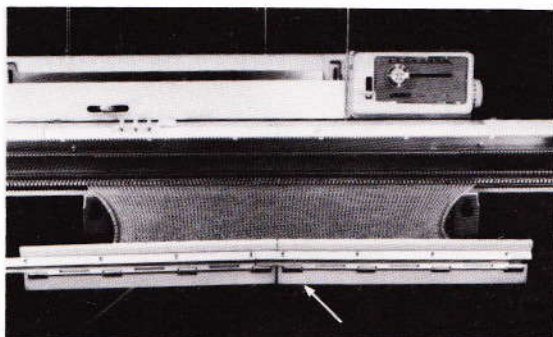


Fig. 138

- Join the weight combs as indicated in fig. 139 according to the width of the knitting.

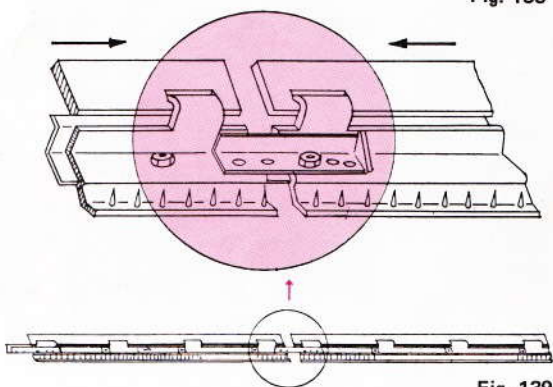


Fig. 139

2. PLACING THE LACE CARRIAGE

- (1) Place the lace carriage at the right hand side of the needle bed. Pull the release handle towards you and fix the stopper plate under the guide rail.
- (2) Slip the lace carriage onto the right hand auxiliary rail.
- (3) Adjust the stitch tension according to the thickness of the yarn.

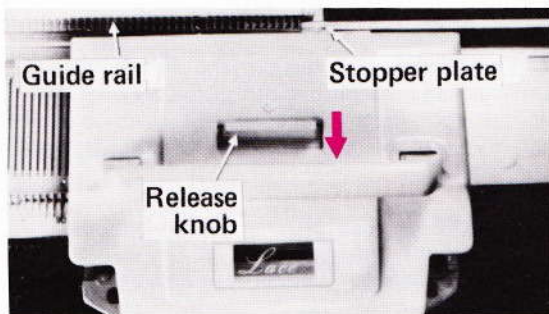


Fig. 140

Yarn	Stitch Tension
Medium	5-6
Very fine	4-5

- (4) Place pattern selectors on 'plain'.
- (5) Yarns which are not smooth must be waxed as illustrated in fig. 141.

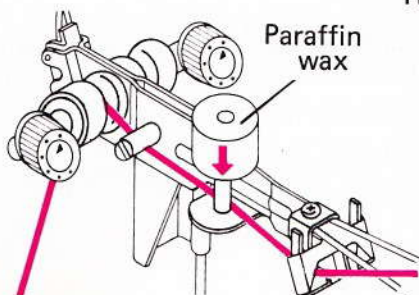


Fig. 141

(6) Work 10 cms (4 ins) in stocking stitch with waste yarn finishing with carriage at left of needle bed.

(7) Hook weights onto the fabric, 6 or 8 cms (2 1/2 to 3 ins) below the needles.

(8) Hook side weights on at edges of work 3 or 4 cms (1 1/2 to 2 ins) below the needles.

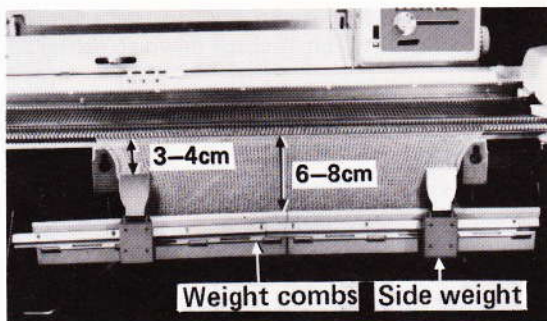


Fig. 142

3. KNITTING WITH THE LACE CARRIAGE

- Place the card, for example No. 19 (for other cards see table on page 46).

- Set the carriage as in fig. 143. Push carriage from right to left. The needles are selected.

- Push the lace carriage from right to left according to the arrow ← printed on the card (fig. 144). The stitches from the selected needles are transferred onto the adjacent needle at the left. Push the lace carriage back from left to right leaving it on the right-hand rail out of the way.

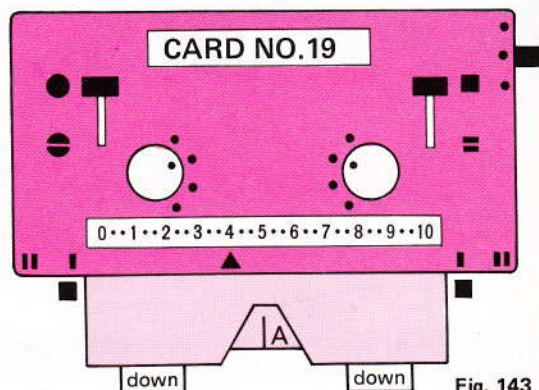


Fig. 143

IMPORTANT : *The symbols on the card must be read when they appear above the card slot and not when they are under this slot.*

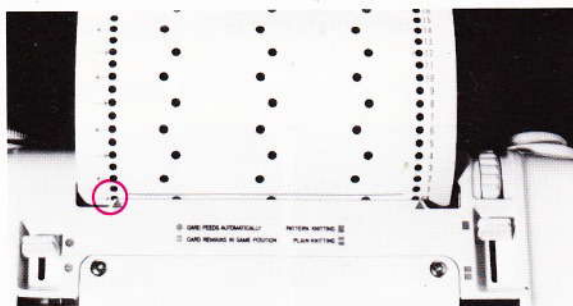


Fig. 144

- Knit 2 rows with the carriage. As the knitting carriage had been pushed out of the way the yarn at the back might have become slack so pull slightly on the yarn to correct the tension (fig. 145).

- Remove the lace carriage (by pressing on the release knob) and replace it at the left of the needle bed between the carriage and the edge of the knitting.

- Push the lace carriage from left to right according to the arrow → printed on the card. The stitches from the selected needles are transferred onto the adjacent needle at the right.

- Knit 2 rows with the carriage correcting the yarn tension at the same time. The needles are selected.

- Repeat from ● .

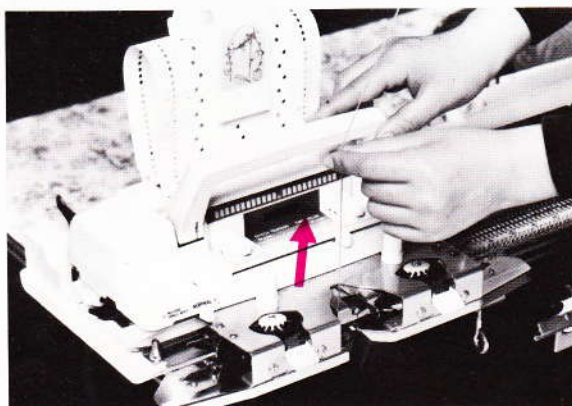


Fig. 145

— If two or more needles are selected side by side, it will not be possible to transfer the stitches. It is necessary to have a needle in B position next to the selected needle.

— If the first or last needle at the edge of the work is selected, push this needle back to B position by hand so as to keep the edges neat (fig. 146).

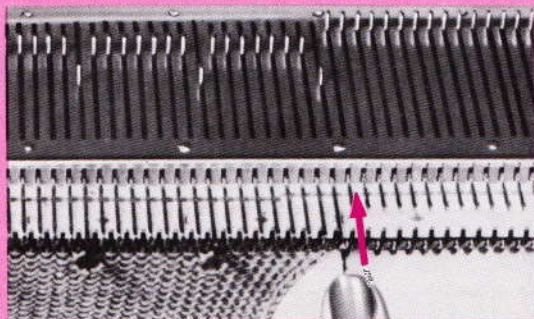


Fig. 146

IF THE LACE CARRIAGE GETS JAMMED :

- (1) Take the lace carriage off the needle bed.
- (2) Push all the needles to F position holding the work against the needle bed with the left hand (if two needles are crossed lift up the hook of the upper needle).
- (3) Knit 1 row, then unravel this row following the instructions of paragraph (b) in the chapter "How to unravel one row", page 66.

CABLE PATTERN

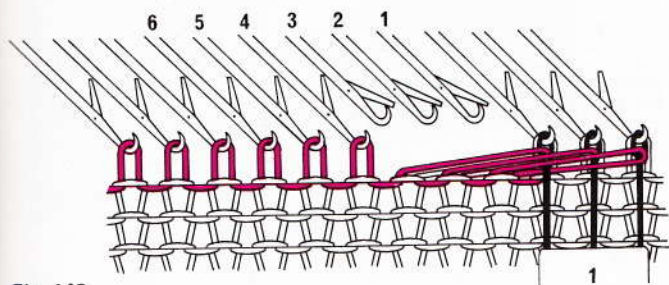


Fig. 148

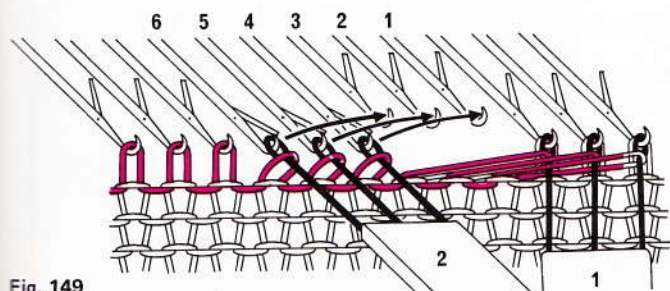


Fig. 149

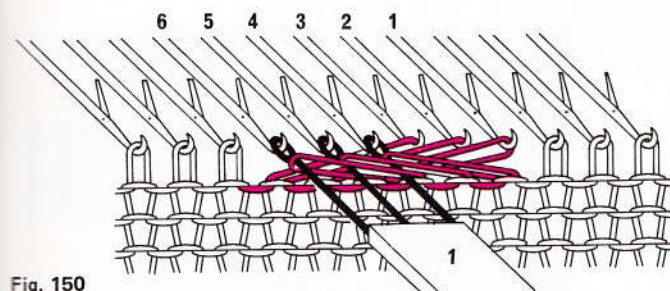


Fig. 150



In this pattern stitches are crossed over (2 stitches over 2 or 3 stitches over 3). To obtain identical cables, the stitches must be crossed in the same direction (fig. 147). The cables are most often worked over 6 stitches using 2 3-stitch transfer tools.

- Set the carriage as for stocking stitch — tension 6.
- Knit 10 rows.
- With the first transfer tool pick up stitches from needles 1–2–3. Move the transfer tool to the right, hook it onto the adjacent needles at the right and leave it hanging down in front of the knitting (fig. 148).
- With the second transfer tool pick up stitches from needles 4–5–6 and transfer them onto needles 1–2–3. Remove this tool (fig. 149).
- Unhook the first transfer tool and transfer the stitches onto needles 4–5–6 (fig. 150). Line up the cable needles and push them forward so that the stitches lay just behind the latches.
- Repeat from ●.

TABLE OF PATTERN STITCHES

The shaded areas on this table show which types of pattern stitch can be made using the 20 cards supplied with the knitting machine. Illustrations in colour of some of these stitches can be seen on the cover.

N ^o	2-color (Fairisle)	Slip st	Tuck st	Weaving	Lace	N ^o	2-color (Fairisle)	Slip st	Tuck st	Weaving	Lace
A						10					
B						11					
1						12					
2						13					
3						14					
4						15					
5						16					
6						17					
7						18					
8						19					
9						20					

PATTERN POSITION

- The pattern position dials are used to move the position of the pattern to left or right.

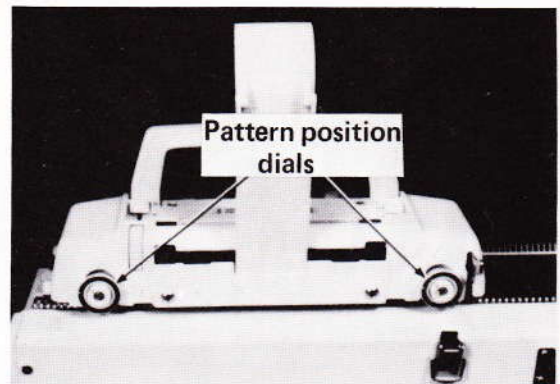


Fig. 151

- Before turning the dials take the carriage off the machine or place it onto the auxiliary rail. Turn the dials so that the marks point downwards.

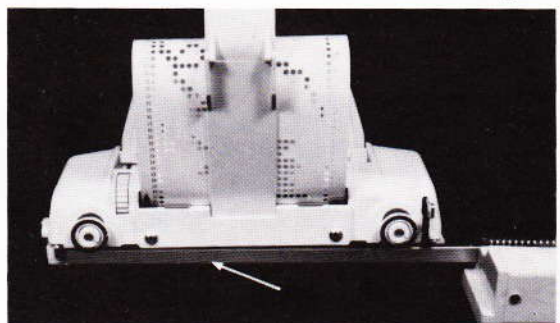


Fig. 152

- Always turn the dials separately as follows :— Holding the left-hand dial with the left hand, pull the right hand dial out and turn it to the required number. Release the dial until it clips automatically into place. Repeat for the second dial.

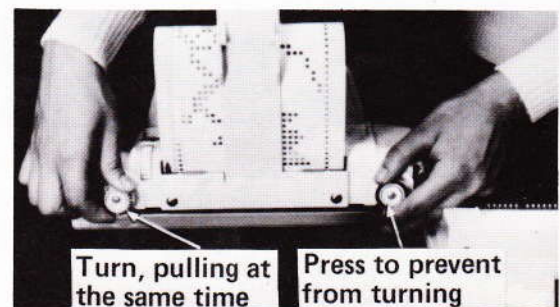


Fig. 153

- The pattern position dials must be correctly positioned. Turn them so that the mark is on the figure or the required symbol. Proceed in the same way for the right and left-hand dials.

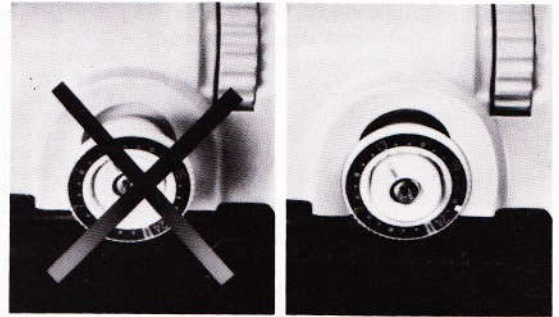


Fig. 154

Always place the two dials on the same number. If the dials showed different numbers or if they were not slipped completely into place the carriage would stop in the middle of the row.

Relationship between card and needles

- When the dials are placed on 1, the pattern on the card is repeated every 24 stitches to correspond with the groups of 24 stitches indicated by the red line under the needles as described on page 11. The punched hole on the left hand side of the card corresponds to needle 1 of the needle bed (as shown in fig. 155).

The small triangle at the centre of the pattern is used as a guide when a pattern has to be traced.

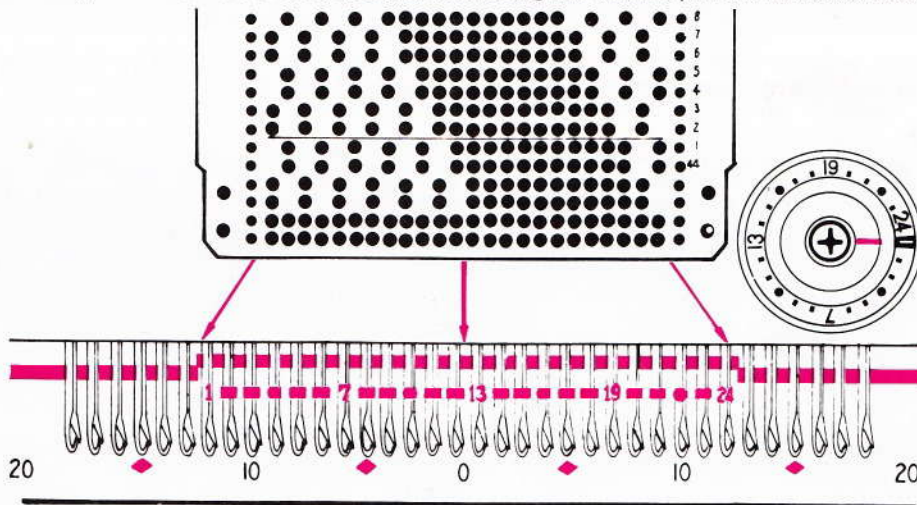


Fig. 155

- The dials enable you to place a pattern exactly as required. For example, if you wish to work a band of fairisle across the bottom of a cardigan front and then carry a single motif up the front edge, you can place the pattern by means of the dials exactly where you require it.

For example, when the dials are on 7, the punched hole on the left-hand side of the card corresponds to needle 7 on the needle bed (as shown in fig. 156). Therefore the whole pattern has been moved 6 needles to the right.

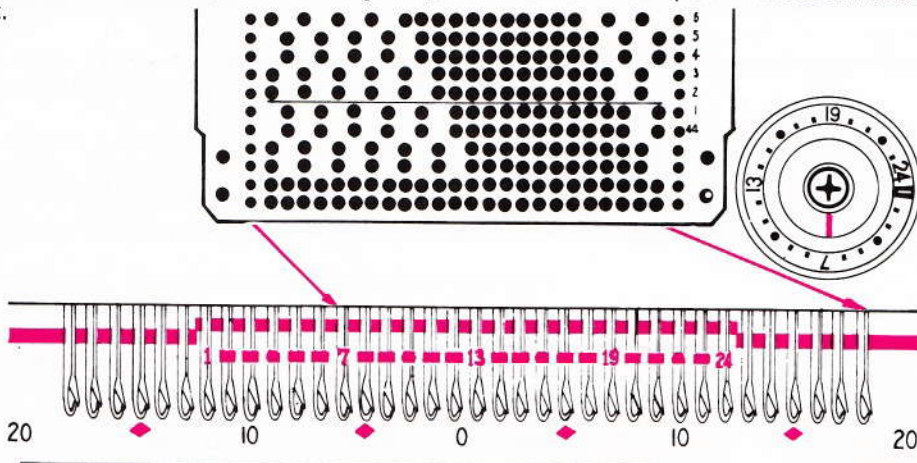


Fig. 156

● When the dials are on the dot halfway between Nos. 19 and 24, the needle corresponding to the punched hole on the left-hand side of the card will be the one indicated by the dot halfway between Nos. 19 and 24 on the needle bed.

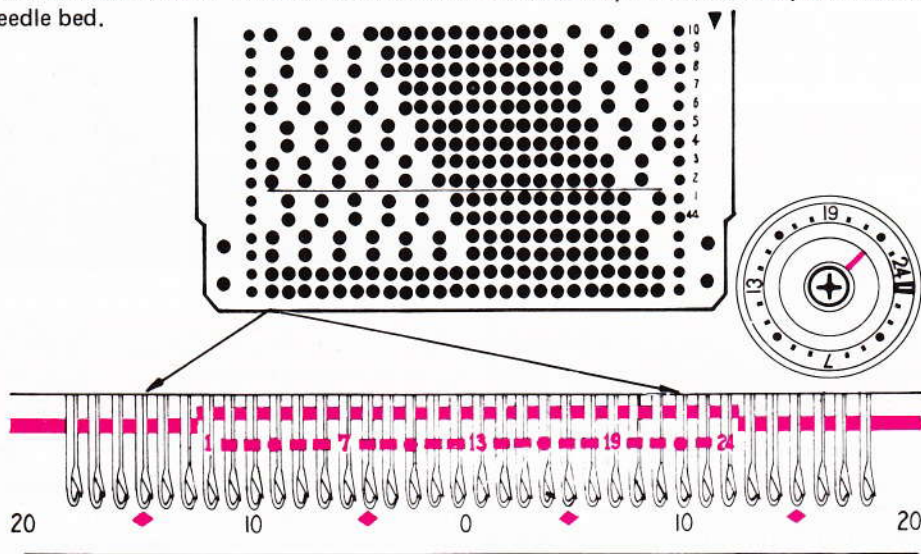


Fig. 157

Illustration shows patterns with position altered successively by 6 needles with the dial set on 7, then 13 then 19.



Pattern with position altered by 12 needles with the dial set on 1 then 13.

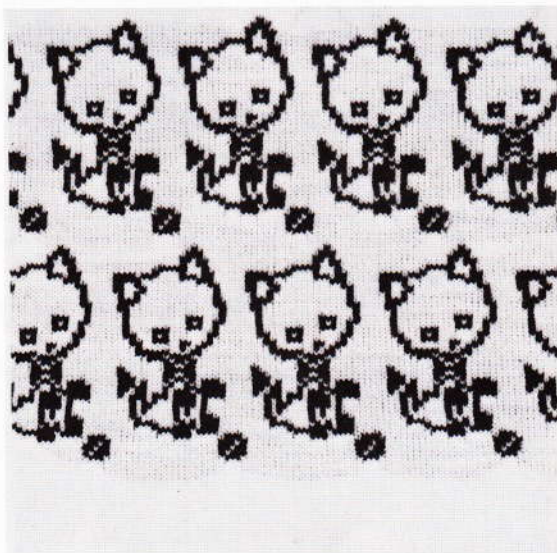


Fig. 158

NECK EDGES

V NECK IN STOCKING STITCH

1. Cast on 50 stitches by open edge method (25 needles on each side of figure 0) and work 19 rows. Row counter shows 20. Carriage is on the right. SET RETURNING LEVERS ON 'reverse'.

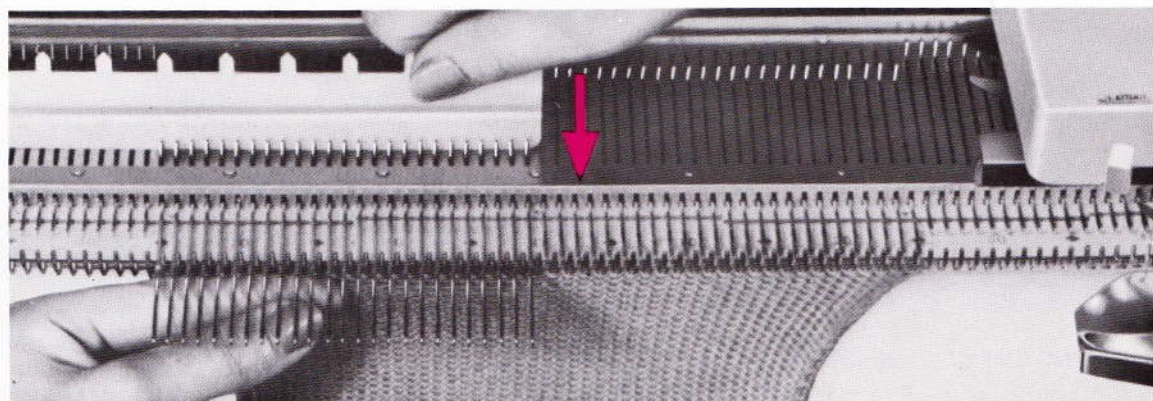


Fig. 159

2. With the flat needle selection bar, push the 25 needles at the left to F position holding the knitting against the needle bed with the left forefinger (fig. 159). From now on only the needles on the right will knit.

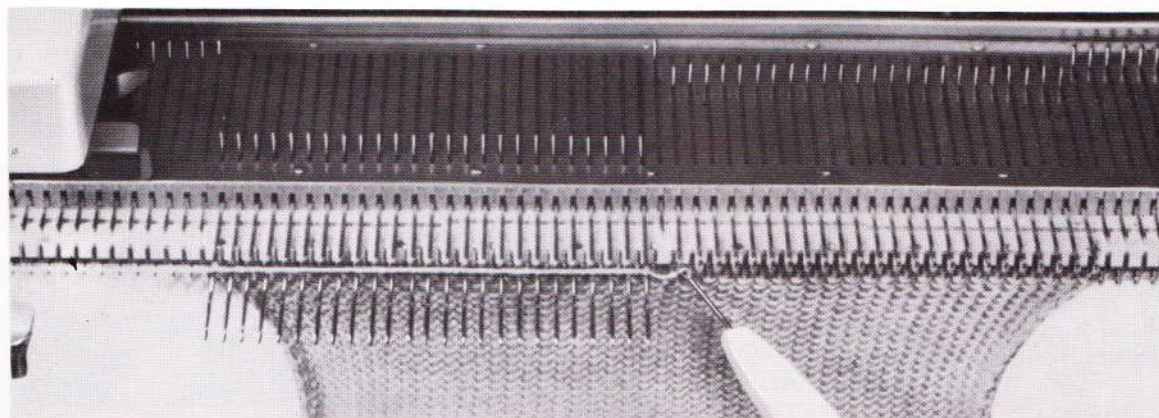


Fig. 160

KNITTING THE FIRST SIDE

3. Knit 1 row. The carriage is on the left. Row counter shows 21. Transfer the first stitch on the left onto adjacent needle and place empty needle in A position (fig. 160).

4. Knit 4 rows. Carriage is on the left. Row counter shows 25. Work a second decrease. Push empty needle to A position. Knit 4 rows. Carriage is on the left. Row counter shows 29. Work a third decrease. Push empty needle to A position.

NOTE : Hook the side weight on at the same side as the decreases are worked.

5. — Knit 4 rows - Row counter shows 33. Work 1 decrease
- Knit 4 rows - Row counter shows 37. Work 1 decrease
- Knit 4 rows - Row counter shows 41. Work 1 decrease
- Knit 4 rows - Row counter shows 45. Work 1 decrease
- Knit 4 rows - Row counter shows 49. Work 1 decrease. Bring up side weight.
- Knit 4 rows - Row counter shows 53. Work 1 decrease
- Knit 4 rows - Row counter shows 57. Work 1 decrease.

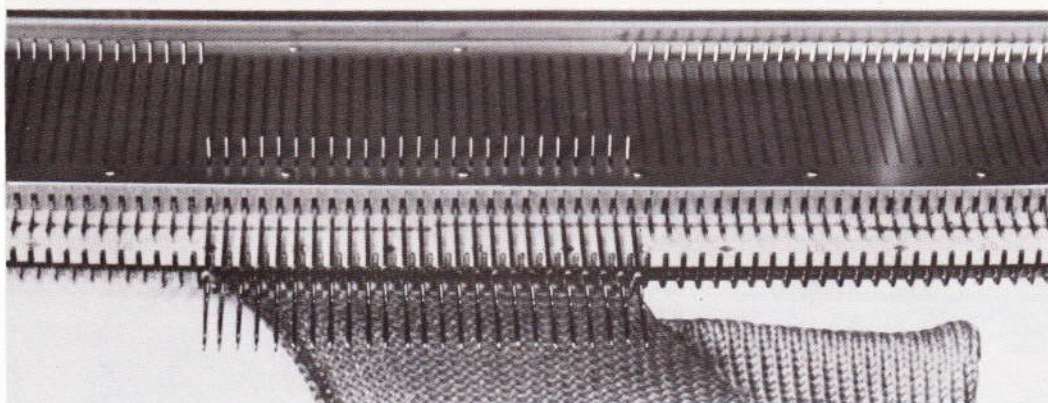


Fig. 161

6. — Knit 3 rows. **Carriage is on the right.** Row counter shows 60.
 — Cast off remaining 15 stitches (see casting off on page 33) (fig. 161). Remove yarn from thread mouth.

KNITTING THE SECOND SIDE

7. — Push carriage from right to left (fig. 162). **SET RETURNING LEVERS ON 'normal'.**

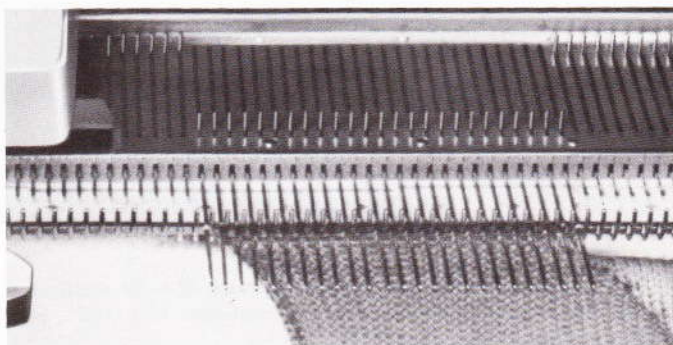


Fig. 162

8. — Turn row counter back to 20.
 — Thread yarn and knit 1 row. **Carriage is on the right.**
 — Transfer first stitch on the right to adjacent needle and place empty needle in A position (fig. 163).

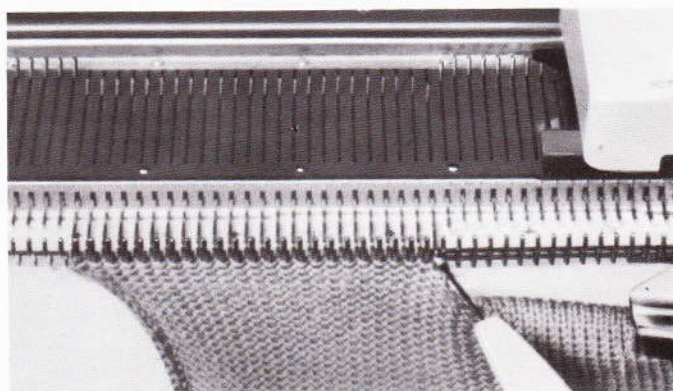


Fig. 163

9. — Knit 4 rows. **Carriage is on the right.** Row counter shows 25. Work a second decrease.
 — Continue to work decreases in the same way until row counter shows 57. Work one decrease.

10. — Knit 3 rows. The carriage is on the left. Row counter shows 60.
 — Cast off remaining 15 stitches.

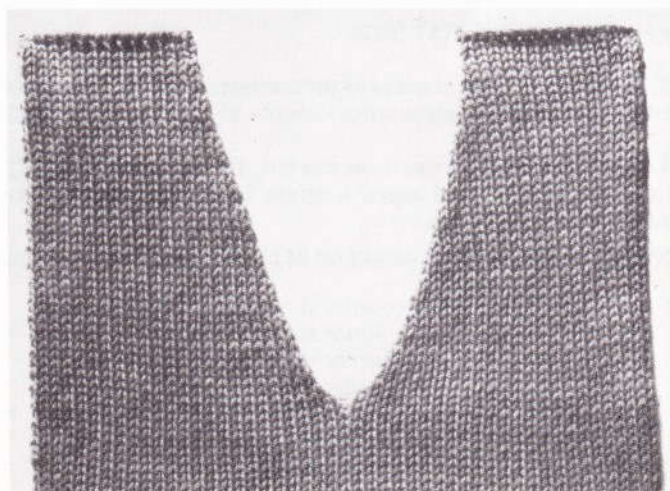


Fig. 164

The neck edge just worked is rather small (fig. 164). The required size will be obtained by adapting it to the pattern sizes following the same process as above.

V NECK USING PUNCHED CARD

1. — Cast on 50 stitches by open edge method. Knit 6 rows. Row counter shows 7.
 - Insert card No. 11, for example, set carriage and yarns for 2 color (fairisle) as on page 35.
 - Knit until row counter shows 20. **The carriage is on the right.** The card reads 14. SET RETURNING LEVERS ON 'reverse'.

Steps 2 to 6. Same as for V neck in Stocking Stitch.

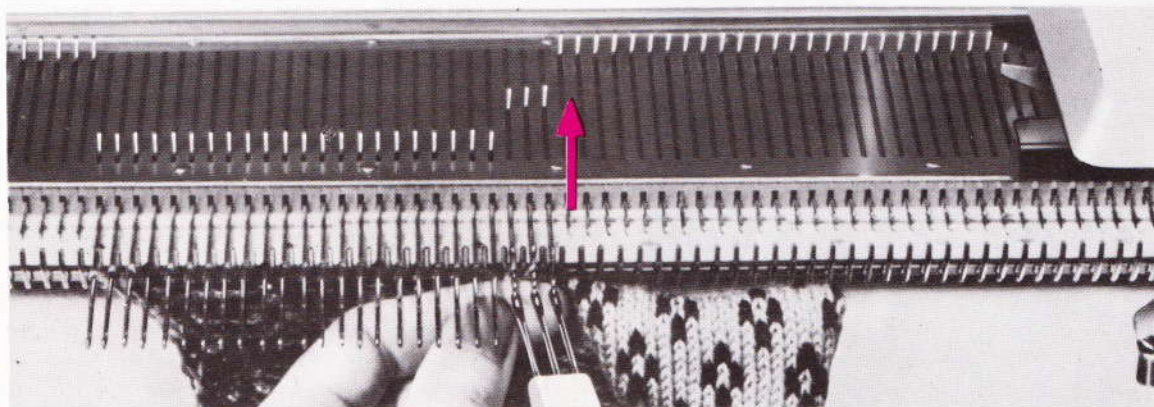


Fig. 165

KNITTING THE SECOND SIDE

7. — Using the 3-stitch transfer tool bring back the needles in F position back to B position by hand (fig. 165).

- Turn card back to 14 by turning card feed dial in the opposite direction.

- Set carriage as in fig. 166 (returning levers on 'normal') and push carriage to the left. The needles are selected.

- Set carriage for 2-color as before.

Steps 8 to 10. Same as for V Neck in Stocking Stitch.

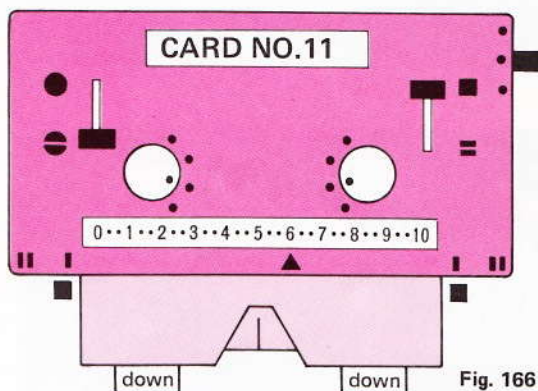


Fig. 166

IMPORTANT : When working a lace stitch using the lace carriage, it is not possible to work with needles in F position. Therefore the 2nd part of the work must be held as follows :

- using the removable cord knit through by hand the needles to be held and as each stitch is knitted push the needle back to A position (fig. 167).
- to pick up the stitches again, unravel stitch by stitch the row knitted with the removable cord.

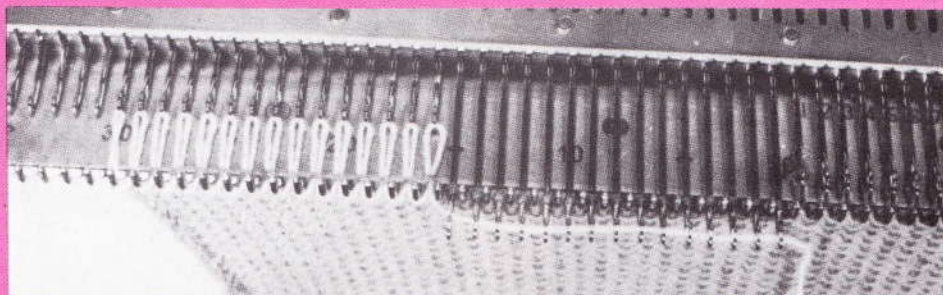


Fig. 167

ROUND NECK IN STOCKING STITCH

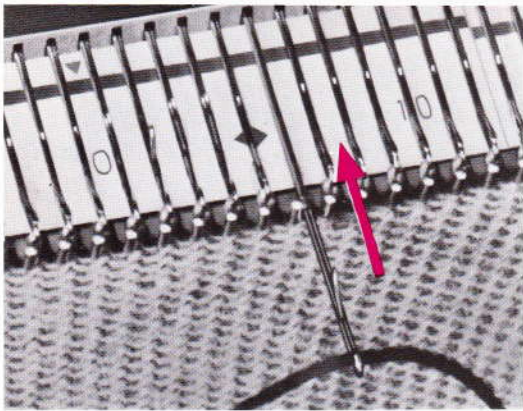


Fig. 168

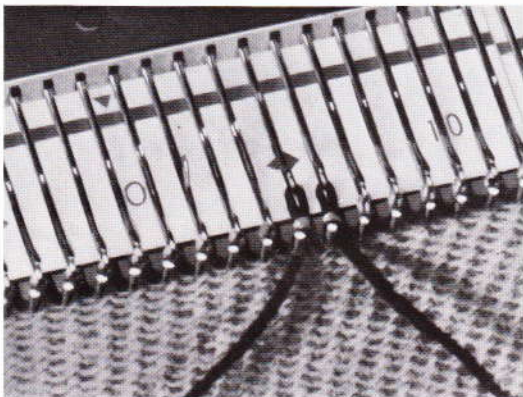


Fig. 169

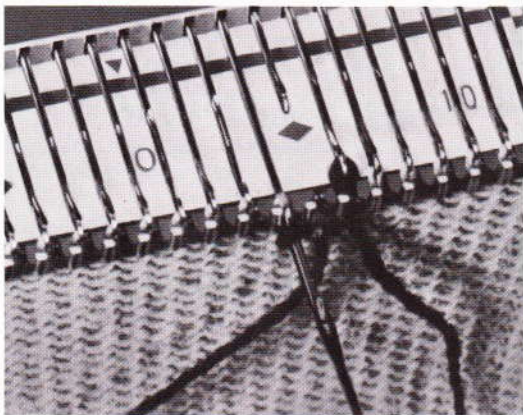


Fig. 170

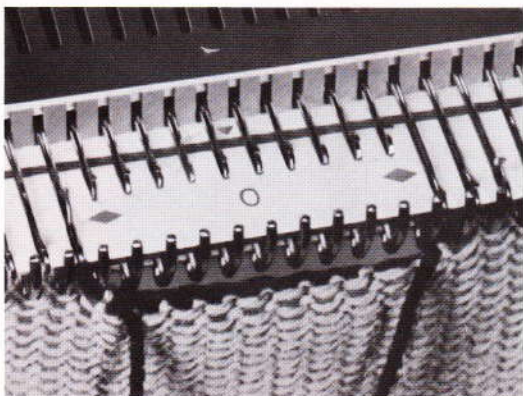


Fig. 171

1. — Cast on 50 stitches open edge method (25 on each side of figure 0) and knit 29 rows. Row counter on 30. **Carriage is on the right. SET RETURNING LEVERS ON 'reverse'.**

2. — Take about 50 cms (1/2 yard) of the same yarn as being used for your knitting (to show the process in the photo a darker yarn has been used). With this piece of yarn :

— knit through by hand the 6th and 5th needles to the right of figure 0 (figs. 168 and 169).

— transfer the 5th stitch onto the 4th needle (fig. 170), bring the needle forward, place yarn into the hook, push needle back to B position to form a stitch.

— repeat this process up to the 6th needle on the left (fig. 171). Leave remaining yarn hanging down the knitting.

The centre neck opening is completed.

3. — Using the flat needle selection bar push the 20 needles at the left to F position at the same time holding the work against the needle bed with the left hand, (fig. 172). From now on only the needles on the right will knit.

KNITTING THE FIRST SIDE

4. — Knit 1 row. **The carriage is on the left.** Row counter shows 31. **Cast off 3 stitches on the left of the first side** and place the empty needles in A position.

5. — Knit 2 rows. The carriage is on the left. Row counter shows 33. **Cast off 3 stitches on the left** and place the empty needles in A position.

NOTE : *Hook the side weights on to the same side as the decreases.*

6. — Knit 2 rows. Row counter shows 35. Work a decrease. Repeat the same process 5 times more. Row counter shows 45. **The carriage is on the left.** 8 needles remain in B position.

7. — Knit 15 rows. **The carriage is on the right.** Row counter shows 60.

— Cast off the remaining 8 stitches (see 'casting off' on page 33). Take yarn out of the yarn-guide.

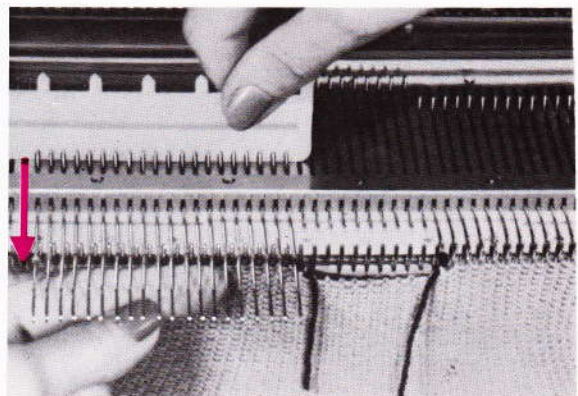


Fig. 172

KNITTING THE SECOND SIDE

8. — Push the carriage from right to left. SET RETURNING LEVERS ON 'normal'.
9. — Turn row counter back to 30.
 - Thread yarn and knit 1 row. **The carriage is on the right. Cast off 3 stitches on the right of the second side** and place empty needles in A position.
 - Knit 2 rows. The carriage is on the right. Row counter shows 33. Cast off 3 stitches. Push empty needles to A position.
10. — Knit 2 rows. Row counter shows 35. Work one decrease. Repeat this process 5 times more. Row counter shows 45. **The carriage is on the right** 8 needles remain in working position.
11. — Knit 15 rows. **The carriage is on the left.** Row counter shows 60.
 - Cast off remaining 8 stitches.

The round neck edge just worked is rather small (fig. 173). The required size will be obtained by adapting it to the pattern sizes following the same process as above.

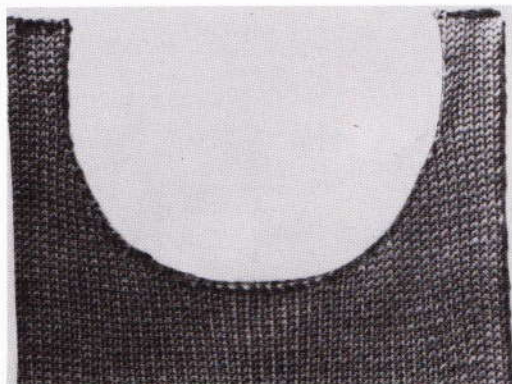


Fig. 173

ROUND NECK USING PUNCHED CARD

1. — Cast on 50 stitches by open edge method. Knit 6 rows. Row counter shows 7.
 - Insert card No. 11 for example, and set carriage and yarn for 2 color (fairisle) on page 35.
 - Knit until row counter shows 30. **The carriage is on the right.** The card reads 24. SET RETURNING LEVERS ON 'reverse'.
 - Push the 10 needles at the centre of the work to B position.

Steps 2 to 7. Same as for Round Neck in Stocking Stitch.

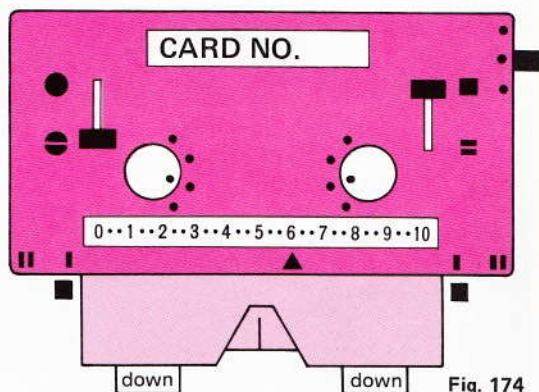


Fig. 174

KNITTING THE SECOND SIDE

8. — Using the 3-stitch transfer tool, bring the needles in F position back to B position (see fig. 165, page 51).
 - Turn card back to 24 by turning card feed dial in the opposite direction.
 - Set carriage as in fig. 174 (returning levers on 'normal') and push carriage to the left. The needles are selected.
 - Set carriage for 2-color as before.

Steps 9 to 11. Same as for Round Neck in Stocking Stitch.

When working a lace stitch using the lace carriage refer to Note 'Important' on page 51 as to how to place needles in holding position.

POCKETS

POCKET IN STOCKING STITCH

1. Cast on 50 stitches open edge method and knit 39 rows. Row counter shows 40. The carriage is on the right. SET RETURNING LEVERS ON 'reverse'.

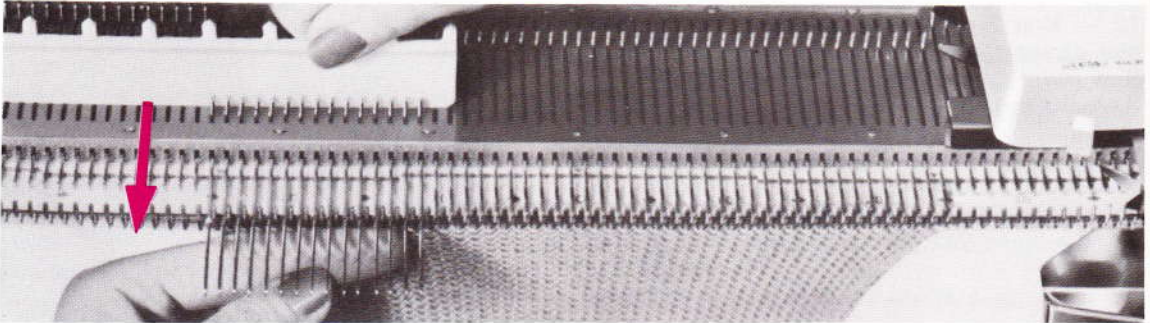


Fig. 175

2. Using the flat needle selection bar push the 15 needles on the left to F position holding the knitting against the needle bed with the left hand (fig. 175). Push carriage from right to left.

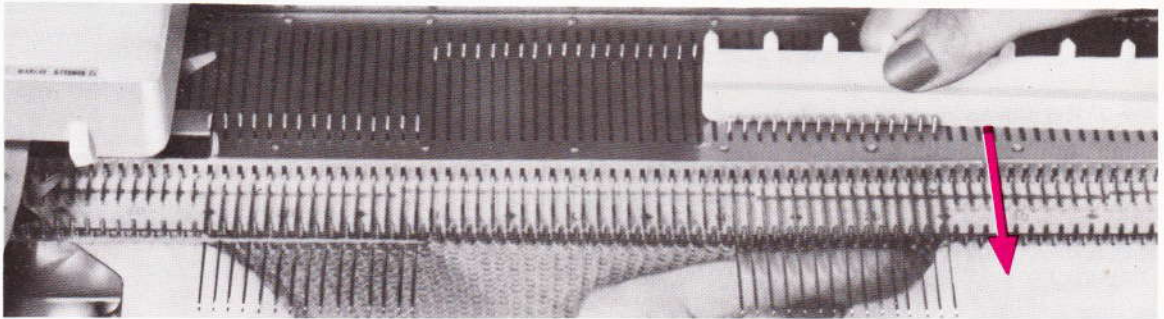


Fig. 176

3. Using the flat needle selection bar push the 15 needles on the right to F position. Turn row counter back to 000 (fig. 176).

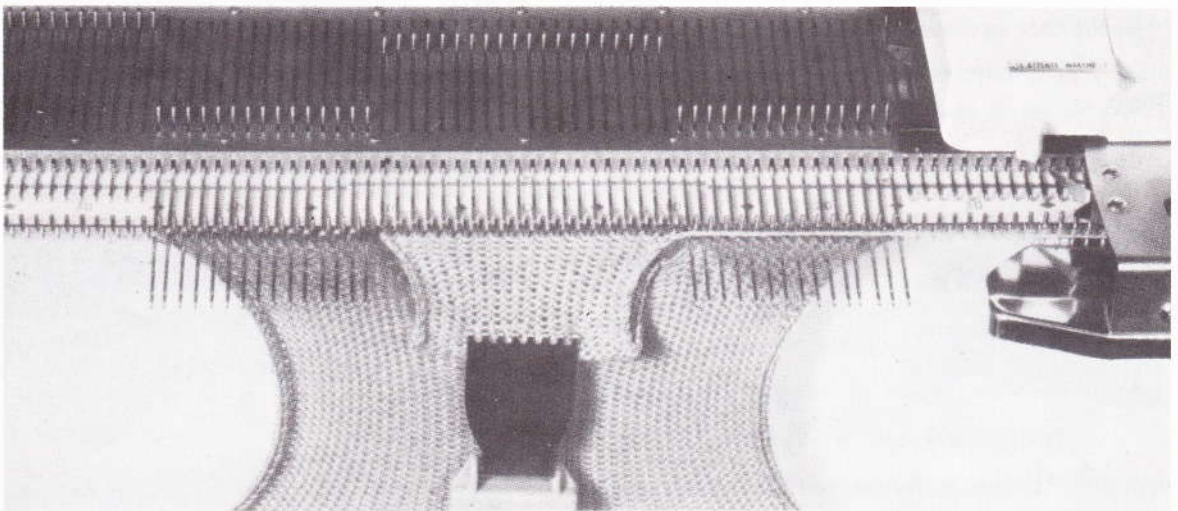


Fig. 177

4. Knit 10 rows, hook on the side weights and continue to knit pocket lining until row counter indicates 39 (fig. 177) (moving side weights up every 10 rows). The carriage is on the right. Take off side weights.

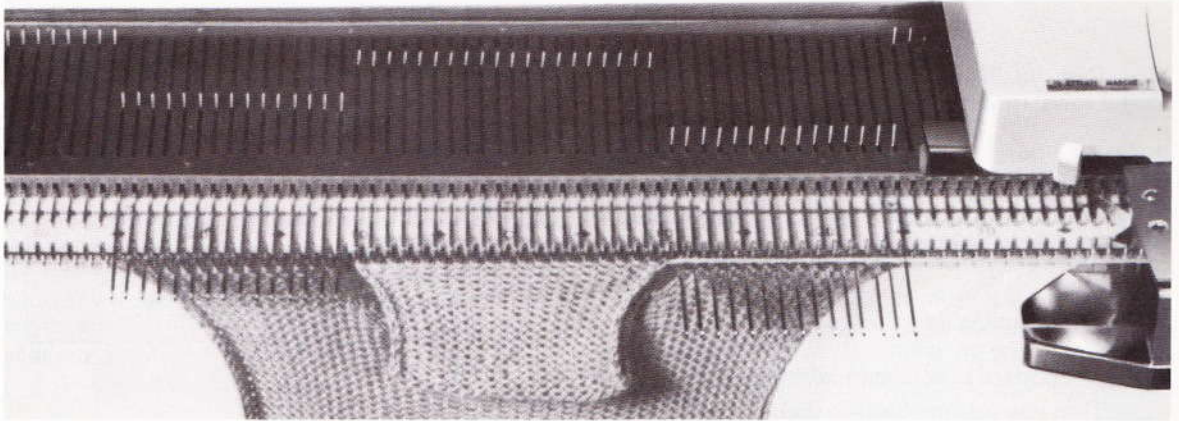


Fig. 178

5. Using needle selection bar push the 15 needles on the left to D position (fig. 178).

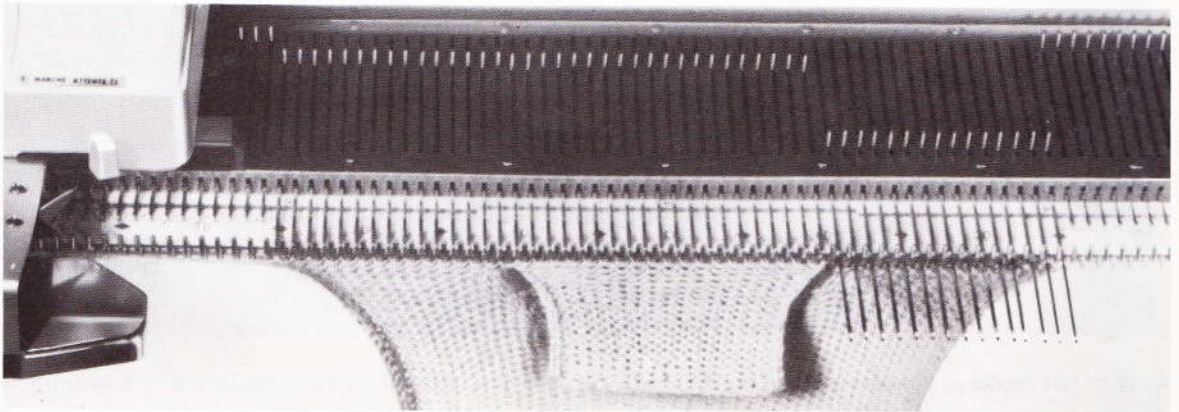


Fig. 179

6. Push carriage from right to left. The needles on the left are knitted and returned to B position (fig. 179). SET RETURNING LEVERS ON 'normal'. Turn row counter to 41.

7. The pocket is completed. Continue to knit normally. (The needles in holding position on the right are automatically knitted back to working position).

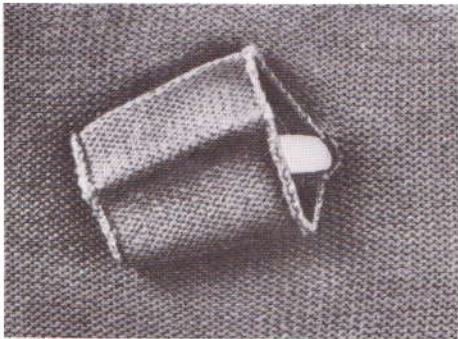


Fig. 180

Completed pocket seen from wrong side. The two side edges to be sewn by hand with a slip stitch.



Fig. 181

Pocket seen on right side of the knitting.

- The two edges of the pocket are to be slip stitched (fig. 180).
- To make a larger or smaller pocket, leave more or less needles in working position.
- To make a pocket more or less deep, knit more or less rows when working 4th paragraph.

POCKET USING PUNCHED CARD

1. — Cast on 50 stitches by open edge method. Knit 6 rows. Row counter shows 7.
2. — Take card No. 11 for example, and set carriage and yarn as in 2 color (fairisle) on page 35.
 - Knit until row counter shows 40. **The carriage is on the right. The card reads 34.**
3. — Set carriage as in fig. 182 :
 - returning levers on 'reverse'
 - clutch on 'plain'
 - pattern selectors on 'plain'
 - Turn row counter back to 000.

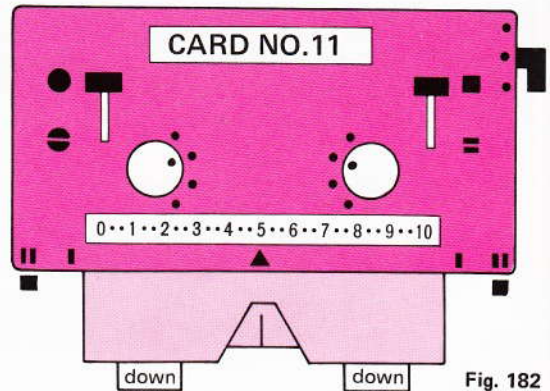


Fig. 182

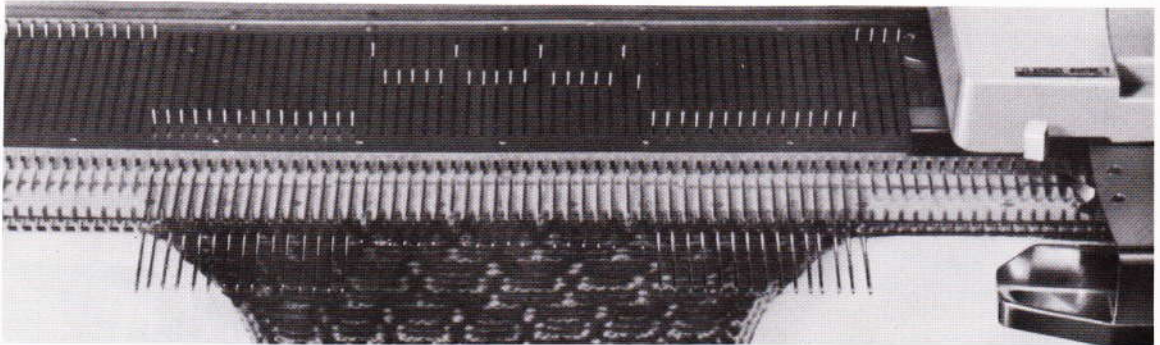


Fig. 183

4. With flat needle selection bar bring **the 15 needles at each end** to F position (fig. 183).
5. — Break off yarn or yarns and leave them in the clip of the tension assembly.
 - Rethread main yarn attaching end to clamp under machine, and push carriage gently from right to left.
 - Take the length of yarn which is laying across the right-hand needles in F position and place it under the needles.
6. — Knit 9 rows, hook on side weight and continue to knit pocket lining until row counter indicates 40 (moving side weight every 10 rows). **The carriage is on the right.** Take off side weight.
 - Break off yarn and leave end in the clip of the tension assembly.
7. Using the 3-stitch transfer tool, bring **the 15 needles** at each end back to B position (see fig. 165, page 51).
8. Set carriage as in fig. 184 (returning levers on 'normal') and push carriage from right to left. The needles are selected.
9. — Set carriage and yarns for pattern as before.
 - Turn row counter back to 40. Continue to knit

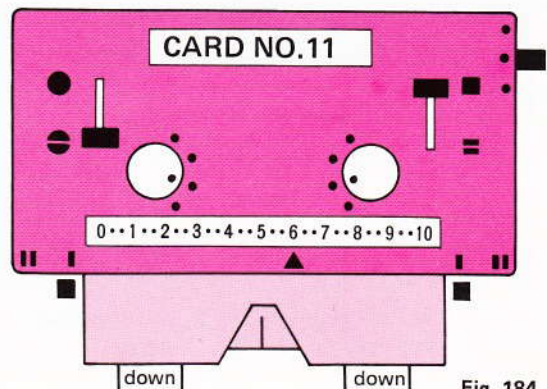


Fig. 184

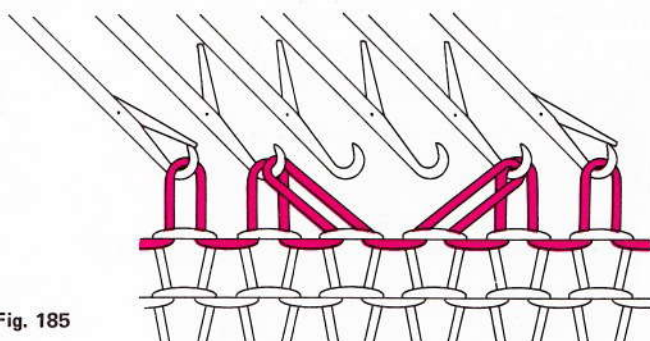
When working a lace stitch using the lace carriage refer to Note 'Important' on page 51.

BUTTONHOLES

SMALL HORIZONTAL BUTTONHOLE – across 2 stitches

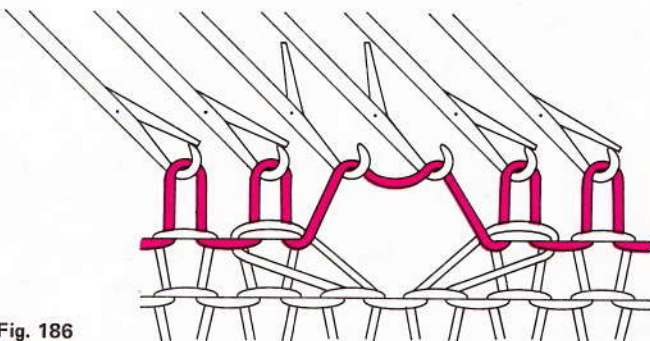
- When the row is reached upon which the buttonhole is to be worked and at the required position, transfer the **stitch on the left** to the **left-hand** adjacent needle and the **stitch on the right** to the **right-hand** adjacent needle. Leave the 2 empty needles in B position (fig. 185).

Fig. 185



- Knit 1 row; the yarn is on the hooks of the 2 empty needles (fig. 186).

Fig. 186

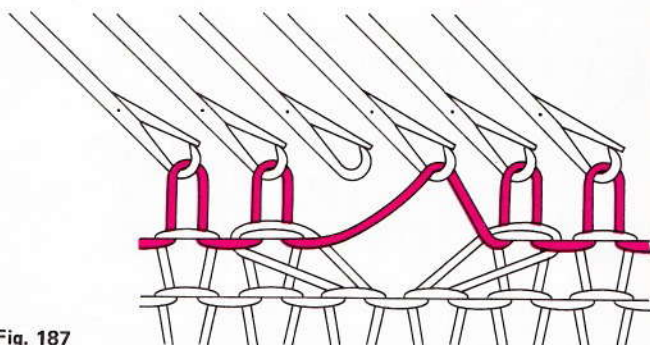


- Bring one of the needles forward so that the yarn slips behind the latch, then push it back to B position so that the yarn drops off (fig. 187).

- Continue to knit until the next buttonhole.

Buttonholes made this way should be finished off with buttonhole stitch afterwards.

Fig. 187



HORIZONTAL BUTTONHOLE WITH OPEN STITCHES

This buttonhole is usually used in front bands.

- At the required buttonhole position, bring 4 (or more according to the size required) needles to F position. Open the latches of these needles.
- Take a length of contrast yarn (about 15 cms) and one by one push these 4 needles back to B position, at the same time laying the contrast yarn in the needle so that it knits the contrast yarn to form a stitch (fig. 188).

Note : Take the needle back far enough to form a stitch of similar size to the rest of the work.

- Continue to knit until the next buttonhole.

When the garment is completed pull the contrast yarn out and finish the buttonhole with a buttonhole stitch.

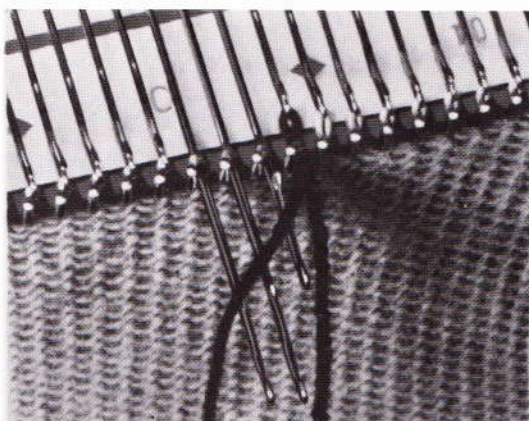


Fig. 188

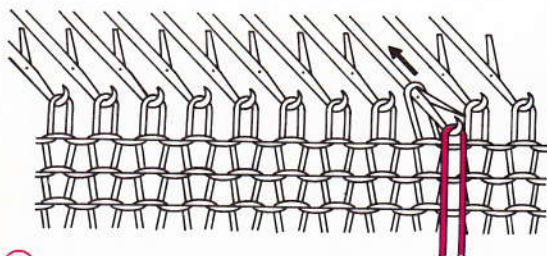
HORIZONTAL BUTTONHOLE WITH CAST OFF STITCHES

The example is given for a buttonhole 7 stitches wide (fig. 189). The width required can be obtained by increasing or decreasing the number of stitches.

Take a 25 cm length of matching yarn (so that the process can be clearly seen, a different colour yarn has been used in our drawings).



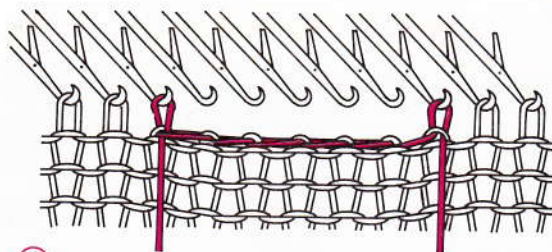
Fig. 189



①

Fig. 190

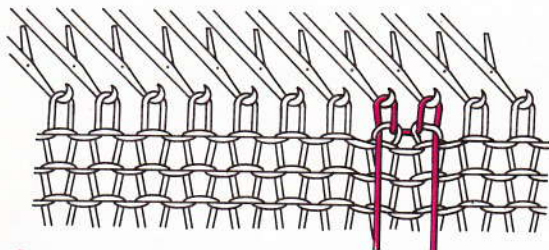
Bring forward the first needle so that the stitch is behind the open latch, place the length of yarn in the hook and push the needle back to B position. A stitch has been knitted through by hand (fig. 190).



④

Fig. 191

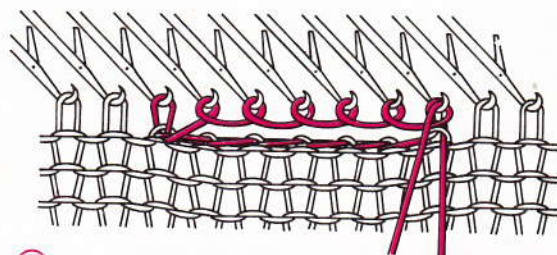
Repeat step 3 with the 4th, 5th, 6th and 7th needles until a new stitch is formed on the 7th needle (fig. 191).



②

Fig. 192

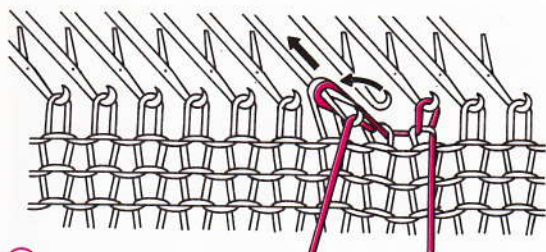
Repeat the same process with the second needle. A second stitch is formed (fig. 192).



⑤

Fig. 193

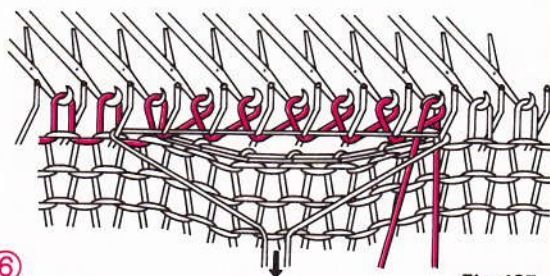
Starting at the left wind the yarn loosely around needles 6, 5, 4, 3, 2 and 1 (see page 20). Line up these needles again in B position (fig. 193).



③

Fig. 194

Transfer this second stitch (using the single transfer tool) onto the 3rd needle. Knit the 2 loops on this needle through by hand and push the needle back to B position (fig. 194). Transfer this stitch onto the 4th needle.



⑥

Fig. 195

Place removable cord onto the loops of the 7 needles and pull it downwards (fig. 195). Knit 2 rows and pull out removable cord. Continue to knit until the next buttonhole.

VERTICAL BUTTONHOLE

The example is given for a buttonhole 10 rows deep. (fig. 196). The length required can be varied by increasing or decreasing the number of rows.

IN STOCKING STITCH

1. **The carriage is on the right.** Using the needle selection bar push the **left-hand** needles to F position holding the knitting against the needle bed with the left hand.

2. Set RETURNING LEVERS ON 'reverse' and knit 10 rows (if necessary hook on a side weight).

3. Break off yarn and leave it in the clip of the tension assembly.

4. Using the needle selection bar push the needles at the right to F position and push carriage from right to left.

5. Using needle selection bar bring back the needles at left of buttonhole to D position.

6. Thread yarn in yarn-guide. Deduct 10 rows from row counter. Knit 10 rows.

7. **The carriage is on the left.** Set RETURNING LEVERS ON 'normal'. Continue to knit until the next buttonhole.

USING A PUNCHED CARD

Steps 1 to 3. Same as for Vertical Buttonhole in Stocking Stitch.

4. Using the 3-stitch transfer tool, bring left-hand needles back to position B (see fig. 165, page 51). With the flat needle selection bar push the right-hand needles to F position.

5. — Turn card back to the same number as the number of rows knitted in step 2 (in this example 10 rows).

— Set left-hand pattern switch on '☉' and both pattern selectors on 'slip'.

— Push carriage from right to left. The left-hand needles are selected.

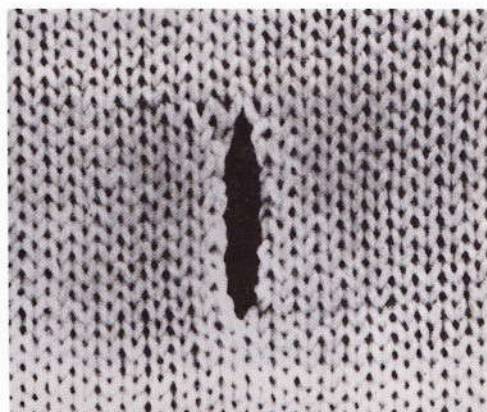


Fig. 196

6. Set carriage according to the required stitch. Thread yarn in yarn-guide. Deduct 11 rows from row counter. Knit 10 rows (if necessary hook on a side weight).

7. Using the 3-stitch transfer tool, bring right-hand needles back to B position (see fig. 165, page 51) and push left-hand selected needles to B position.

8. **The carriage is on the left.** Break off yarn and place it in the clip of the tension assembly. Set returning levers on 'normal', left-hand pattern switch on '☉' and pattern selectors on 'slip', then push carriage from left to right. The needles are selected.

9. Thread yarn in yarn-guide. Deduct 1 row from row counter.

10. Set carriage according to the required stitch and continue to knit until next buttonhole.

When working a lace stitch using the lace carriage refer to Note 'Important' on page 51.

SLITS

HORIZONTAL SLITS

Usually used for pockets, this is worked in the same way as for 'Horizontal Buttonhole with cast off stitches', but over a greater number of stitches.

VERTICAL SLITS

Used for back neck openings, pockets, it is worked in the same way as for 'Vertical Buttonhole' but over a greater number of rows. However, for back neck openings, the slit is worked up to the neck edge, then the zip fastener is stitched along the two sides of the opening.

DARTS

DARTS IN STOCKING STITCH

1. Cast on 60 stitches (open edge method) and knit 29 rows. The row counter shows 30. **The carriage is on the right.** Set RETURNING LEVERS ON 'reverse'.

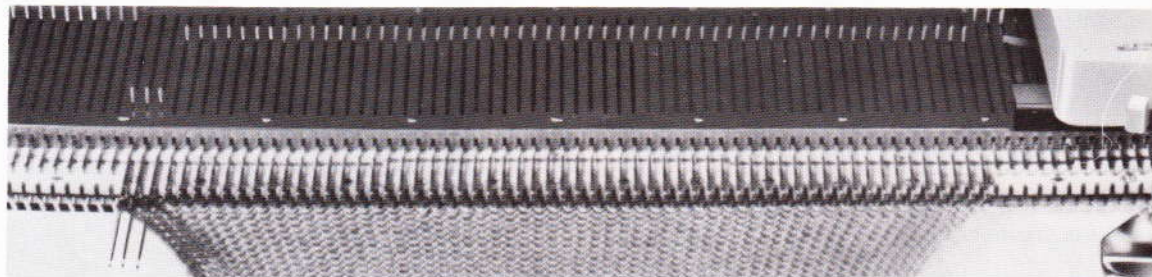


Fig. 197

2. Push the 3 end needles at the left to F position (fig. 197). Knit 1 row.

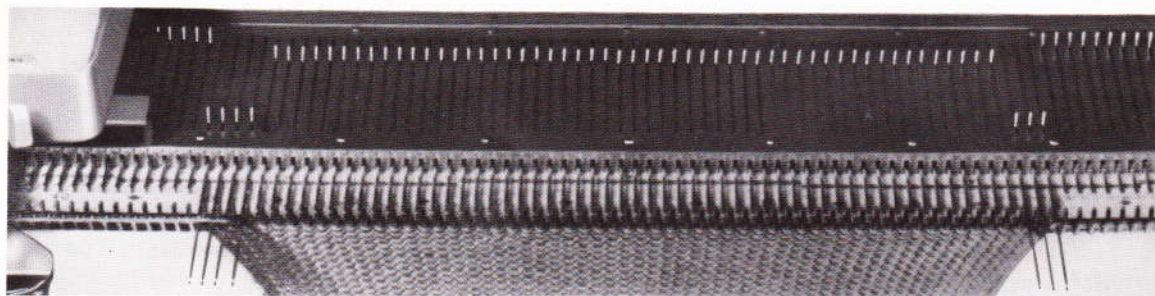


Fig. 198

3. Push 1 needle at left and 3 at right to F position (fig. 198). Knit 1 row.

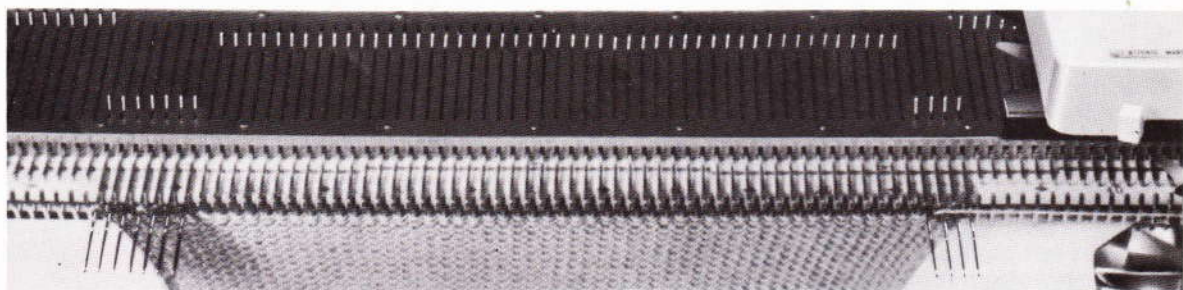


Fig. 199

4. Push 1 right-hand needle and 3 left-hand needles to F position (fig. 199). Knit 1 row.

5. Repeat steps 3 and 4 three times more.

6. Place in F position 1 needle on the left, 4 needles on the right. Knit 1 row. **The carriage is on the right,** the row counter shows 40. 20 needles remain in the centre in B position. Break off yarn and leave it in tension assembly clip.

7. Turn row counter back to 30 as the 10 rows knitted for the dart are not to be counted in the knitting.

8. SET RETURNING LEVERS ON 'normal'. Rethread yarn and continue to knit (the needles in F position knit again automatically). The dart is completed.

DARTS USING A PUNCHED CARD

1. — Cast on 60 stitches (open edge method). Knit 6 rows, row counter shows 7. Insert card No. 11 for example and set carriage and yarns for 2 color (fairisle) as on page 35.

— Knit until row counter shows 30. **The carriage is on the right, the punched card on 24. SET RETURNING LEVERS ON 'reverse'.**

Steps 2 to 6. Same as for Darts in Stocking Stitch.

7. Using the 3-stitch transfer tool, bring the 20 needles at each side back to B position (see fig. 165, page 51). Bring the selected needles in the centre back to B position.

8. — Set carriage : returning levers on 'normal'
pattern selectors on 'slip'
left-hand pattern switch on '●'

— Push carriage from right to left. The needles are selected.

9. Set carriage according to the required stitch as before.

10. Turn row counter back to 30. Thread the yarn or yarns in yarn-guide and continue to knit.

When working with the lace carriage refer to Note 'Important' on page 51.

SHOULDERS

FIRST METHOD (fig. 200)

- Cast on 25 stitches (open edge) and knit 30 rows. **Row counter shows 31, the carriage is on the left.**
- Hook on side weight at the left.
- Cast off 5 stitches on the left. Knit 2 rows. Repeat this process 3 times more.
- Cast off remaining 5 stitches. Break off yarn.

2ND METHOD (fig. 201)

- Cast on 25 stitches as before and knit 20 rows. **Row counter shows 30, the carriage is on the right. SET RETURNING LEVERS ON 'reverse'.**
- Push 4 needles on the left to F position. Knit 1 row. Place 1 needle on the left in F position. Knit 1 row. Repeat this process 3 times more.

The carriage is on the right, row counter shows 38.

- **SET RETURNING LEVERS ON 'normal'.** Knit 1 row (the needles in F position knit again automatically).

NOTE : *When using punched cards set carriage for stocking stitch before knitting this row.*

- Cast off (see casting off page 33).

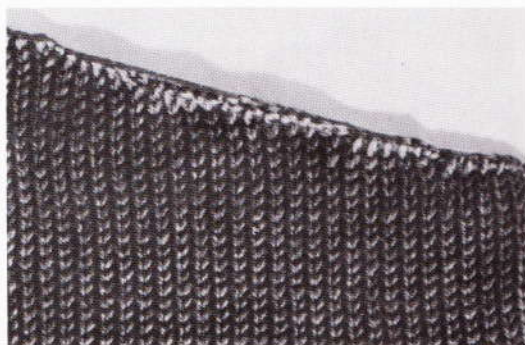


Fig. 200



Fig. 201

*The example is given for 25 stitches for a shoulder, one side only. The required shoulder width can be obtained by adapting the same above process to your pattern.
For the other shoulder proceed in the same way but reading left for right and right for left throughout.*

PREPARING TO KNIT A GARMENT

To obtain a well fitting garment, it is essential to proceed as follows :—

1. **Choose the correct stitch tension** suitable for yarn and stitch used (see page 16).
2. **Work a tension piece** over 60 stitches and 60 rows. Take it off the knitting machine and leave it to rest for about 5 hours.
3. **Press the tension piece** following the instructions on the ball band of the yarn.
4. **Measure the tension piece** accurately. Without pulling or stretching, pin the tension piece so that the rows and stitches are quite straight (fig. 202) and measure :
 - the number of row over 10 cms (4 ins) in depth (in fig. 202 = 40 rows),
 - the number of stitches over 10 cms (4 ins) in width (in fig. 202 = 29 stitches).

Note : *Always measure over 10 cms square.*

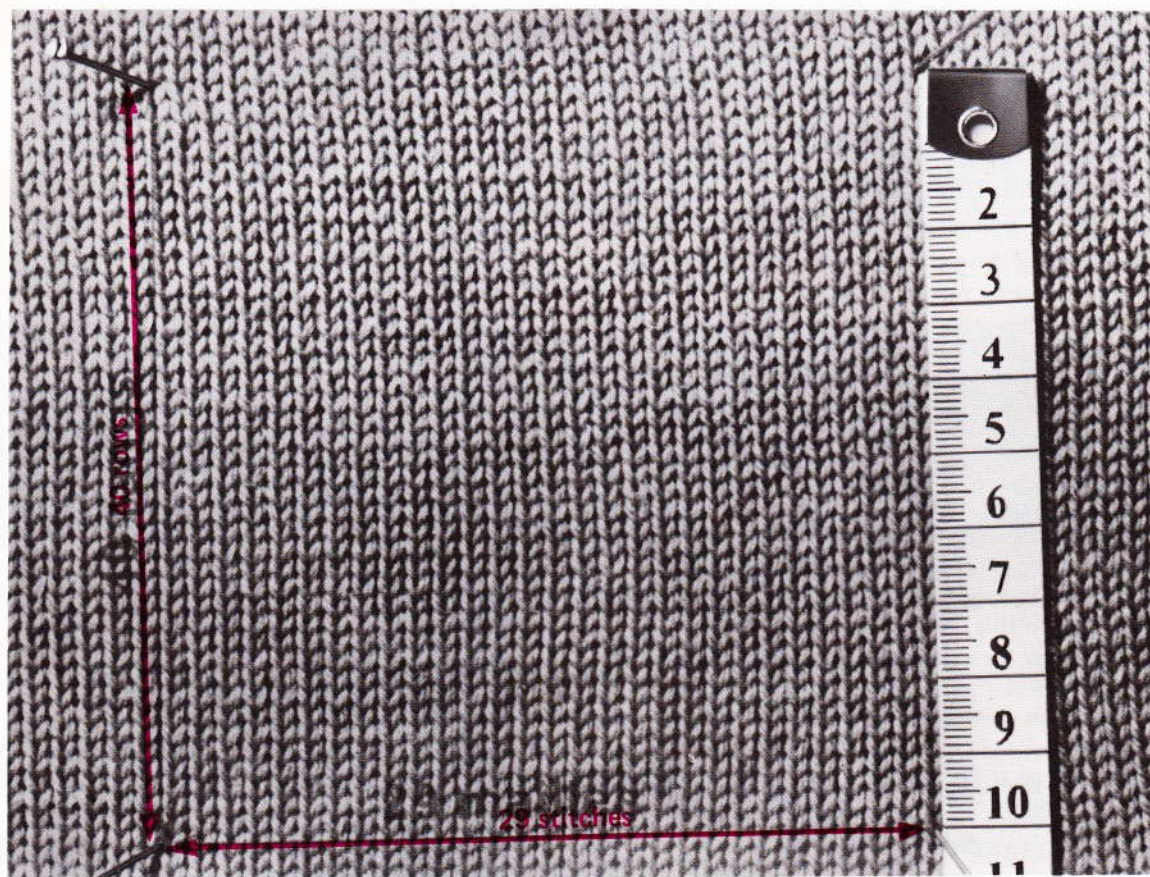


Fig. 202

5. **Take the correct measurements** of the person for whom the garment is intended, using a tape measure and following instructions on fig. 203.

NOTE : *Add 4 to 8 cms (1 1/2 to 3 ins) in width to allow for ease and seams.*

6. Translate the measurements into stitches and rows as follows :—

Example of fig. 203 using tension as fig. 202 :—

Tension = 29 stitches and 40 rows = 10 cms square
= 2.9 stitches and 4 rows to 1 cm square.

The 68 cm depth of the skirt will therefore require
 4×68 rows = 272 rows.

The 31 cm width will require 31×2.9 stitches = 90 stitches. (Actually 89.9 but you take it to the nearest whole stitch!).

(NOTE : You may find it helpful to use a pocket calculator when designing your own garments.

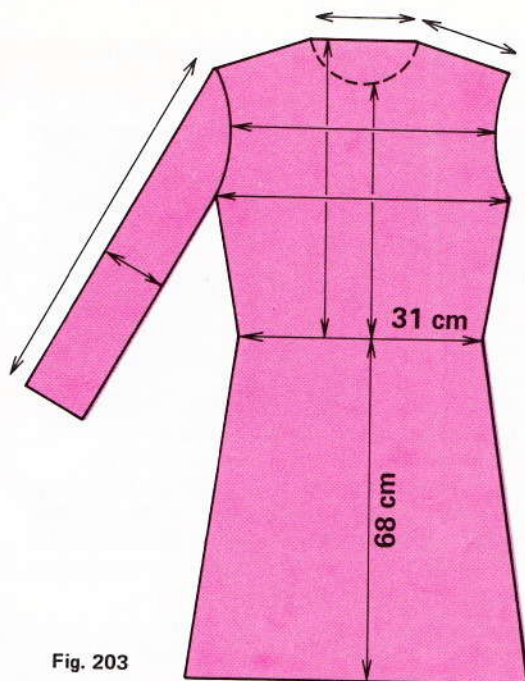


Fig. 203

MAKING A GARMENT

So that you may put into practice the various instructions given in this book, you could make the short sleeved sweater illustrated in fig. 204. The instructions are given for a 3-ply yarn to fit a bust measuring 80 cms (32 ins).

Tension for 10 cms (4 ins) square is 29 stitches and 40 rows.

If you want to change the size of the garment or use a yarn of a different thickness, amend the number of stitches and rows following the instructions in the previous section.

BACK

— Bring 125 needles to B position. Push 3rd and every following 3rd needle back to A position leaving 84 needles in working position for 2/1 rib. Using the light colour yarn make a hem in 2/1 mock rib as explained on page 25 but knitting 30 rows instead of 20 in paragraphs 5 and 6.

Row counter shows 61, the carriage is on the left.

— Set tension slide on 5, knit 76 rows.

Row counter shows 137, the carriage is on the left.

— Insert card No. 11 and proceed as in paragraph '2-color (fairisle)' on page 35, with dark yarn in thread mouth I and the light yarn in thread mouth II. Knit 30 rows.

Row counter shows 167, the carriage is on the left.

— Remove dark yarn and replace light colour in thread mouth I.

— Set carriage for plain stocking stitch (page 34) and knit 8 rows.

Row counter shows 175, the carriage is on the left.

— Cast off 5 stitches on the left, knit 1 row. Cast off 5 stitches on the right, knit 1 row (see "Casting off during the work" on page 33).

— Cast off 3 stitches on the left, knit 1 row. Cast off 3 stitches on the right, knit 1 row.

— Cast off 2 stitches on the left, knit 1 row. Cast off 2 stitches on the right, knit 1 row. Repeat these last 2 rows once more.

Row counter shows 183, the carriage is on the left.

101 stitches remain.



Fig. 204

– Knit 61 rows straight. **Row counter shows 244, the carriage is on the right.**

– Using a length of matching yarn cast off 19 stitches at centre of row. 41 stitches remain on each side.

– Set **returning levers on "reverse"** and place the 41 needles on the left in F position.

KNITTING THE FIRST SIDE

– Knit 1 row. Cast off 3 stitches on the left.

– Knit 2 rows. Cast off 3 stitches on the left.

– Knit 1 row. Cast off 5 stitches on the right (for the shoulder). Knit 1 row. Cast off 3 stitches on the left.

– Knit 1 row. Cast off 5 stitches on the right. Knit 1 row. Cast off 2 stitches on the left.

– Knit 1 row. Cast off 5 stitches on the right.

– Knit 2 rows. Cast off 5 stitches on the right. Repeat these 2 rows twice more. **Row counter shows 258, the carriage is on the right.** All the stitches on the first side are cast off.

KNITTING THE SECOND SIDE

– Bring carriage to the left. Set returning levers on "normal". Turn row counter back to 244. Thread yarn.

– Repeat the same process as for "Knitting the First Side" but reading right for left and left for right throughout.

FRONT

– Proceed in the same way as for the Back until **row counter shows 183.** 101 stitches remain.

– Knit 37 rows. **Row counter shows 220, the carriage is on the right.**

– Cast off 17 stitches at centre of row. 42 stitches remain on each side. Set returning levers on "reverse" and place the 42 needles on the left in F position.

KNITTING THE FIRST SIDE

– Knit 1 row. Cast off 2 stitches on the left.

– Knit 2 rows. Cast off 2 stitches on the left. Repeat these 2 rows twice more.

– Knit 2 rows. Decrease 1 stitch on the left. Repeat these 2 rows 3 times more. **Row counter shows 235, the carriage is on the left.**

– Knit 13 rows. Cast off 5 stitches on the right.

– Knit 2 rows. Cast off 5 stitches on the right. Repeat these last 2 rows 4 times more. **Row counter shows 258, the carriage is on the right.** All the stitches on the first side are cast off.

KNITTING THE SECOND SIDE

– Bring carriage to the left. Set returning levers on "normal". Turn row counter back to 220. Thread yarn.

– Proceed in the same way as for "Knitting the First Side" but reading right for left and left for right throughout.

SLEEVES

– Bring 86 needles to B position. Push 3rd and every following 3rd needle back to A position leaving 58 needles in working position for 2/1 rib. Using the light colour yarn make a hem in 2/1 mock rib (page 25) but knitting 13 rows instead of 20 as in paragraphs 5 and 6.

Row counter shows 27, the carriage is on the left.

– Set tension slide on 5.

– Increase 1 stitch on the left (page 29), knit 1 row, increase 1 stitch on the right, knit 5 rows. Repeat the last 6 rows twice more.

– Increase 1 stitch on the left, knit 1 row, increase 1 stitch on the right, knit 7 rows. Repeat the last 8 rows twice more.

– Increase 1 stitch on the left, knit 1 row, increase 1 stitch on the right, knit 1 row.

Row counter shows 71, the carriage is on the left. 100 needles are in working position.

– Knit 8 rows. Row counter shows 79.

Shape Top of Sleeve

– Cast off 4 stitches on the left, knit 1 row.

Cast off 4 stitches on the right, knit 1 row. (see page 33)

– Cast off 2 stitches on the left, knit 1 row. Cast off 2 stitches on the right, knit 1 row. Repeat these last 2 rows 4 times more.

– Decrease 1 stitch on the left and 1 stitch on the right, knit 2 rows and repeat these 2 rows until row counter shows 135. **The carriage is on the left.** 28 needles remain in working position.

– Cast off 2 stitches on the left, knit 1 row. Cast off 2 stitches on the right, knit 1 row. Repeat these last 2 rows once more. **Row counter shows 139.** Cast off remaining 20 stitches.

NECKBAND

– Bring 119 needles to B position. Take 3rd and every following 3rd needle back to A position leaving 80 needles in B position for 2/1 rib.

– With tension slide on 3, cast on by hand (page 20) and work until row counter shows 6. Take out removable cord.

– Knit 7 rows, tension slide on 4, knit 1 row.

– Tension slide on 3, knit 13 rows.

– Tension slide on 5. Bring into working position the needles previously in A position. Knit 3 rows. Cast off (page 33).

FINISHING

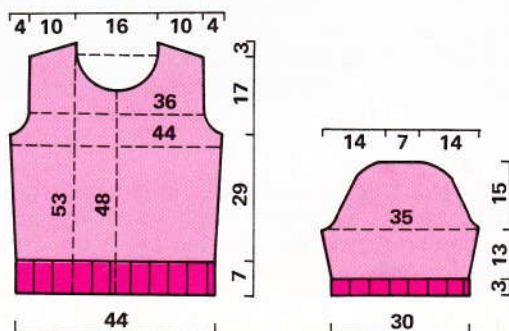
– Pin pieces out, wrong side up, to the correct measurements without pulling or stretching.

– Press pieces according to instructions on the ball band avoiding all ribbing.

– Join side and shoulder seams sewing by hand or machine.

– Fold sleeve in half and join underarm seam. Sew sleeves to armhole.

– Join ends of neckband neatly. Fold band in half and place over neck line joining cast on and cast off edges to right and wrong side with a slip stitch.



PUNCHING THE CARDS



Fig. 205

1. Trace the drawing to be reproduced onto graph paper (fig. 205). One square on the paper represents 1 stitch. The drawing can be done over 24 stitches and 60 rows.

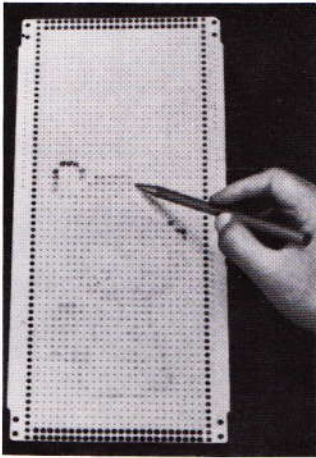


Fig. 206/A

2. Transfer the drawing from the paper onto the card by blackening the corresponding squares with a pencil. Use the vertical numbers on the right of the card as a guide (fig. 206/A).
3. If necessary write the letters A/B/C/D on the card for the yarn changes, or arrows if using the lace carriage.

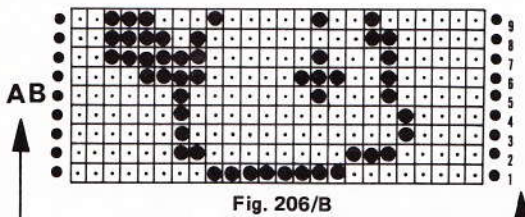


Fig. 206/B

On line 1, the knitting changes to 2-color (fairisle), therefore 2 yarns (A and B) will be needed. Write the letters AB on the 5th line, level with the number "1" on the card.

Note : The holes punched in the card activate the needle selection apparatus when the figure 1 shows above the slot. For this reason the symbols must be written 4 lines above the required change, but opposite the correct figure on the other side of the card (fig. 206/B).

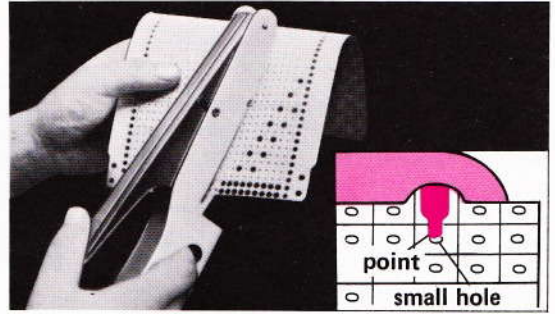


Fig. 207

4. Punch the card making sure that the point of the puncher is correctly placed in the small hole (fig. 207), if not the punched hole will be off centre and could cause knitting problems.

Relation between Punched Holes and Stitches

Pattern	Punched holes (Needles selected)	Unpunched (Needles not selected)
Fairisle (2-color)	The needles knit the yarn in thread-mouth II of the yarn-guide (contrast yarn)	The needles knit the yarn in thread-mouth I of the yarn-guide (Main yarn)
Slip Stitch	The needles knit the yarn in thread-mouth I of the yarn-guide	The needles do not knit (stitches are slipped)
Tuck Stitch	The needles knit the yarn in thread-mouth I of the yarn-guide	The needles do not knit but yarn lays over them
Weaving	The needles knit the main yarn but the weaving yarn lays over them	The needles knit the main yarn but the weaving yarn lays under them
Lace Stitch	The stitches are transferred onto their adjacent needles when lace carriage is taken across	

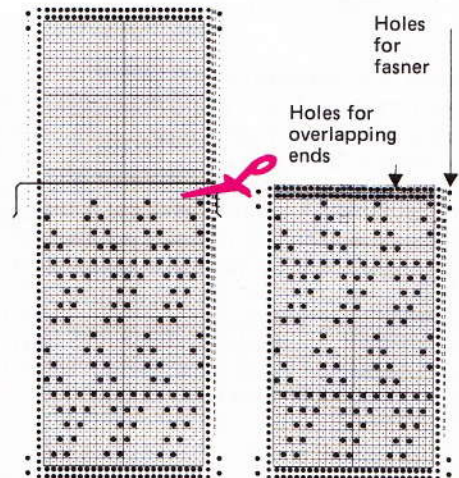


Fig. 208

5. For a pattern of less than 60 rows cut out the card as shown on fig. 208.

KNITTING ADVICE

HOW TO UNRAVEL ONE OR MORE ROWS

a) Pattern without Selected Needles

1. Take yarn out of yarn-guide and push carriage to the end of the machine.

2. — If the yarn is on the right-hand side, pull on it slowly with the right hand level with the needles and holding the knitting against the needle bed with the left hand (fig. 210).

— If the yarn is on the left-hand side, pull it with the left hand holding the knitting against the needle bed with the right hand.

3. Pull the yarn gently upwards so that the stitches slip automatically into the hooks of the needles (fig. 211).

4. Push the needles back to B position.

5. Repeat steps 2, 3 and 4 as many times as there are rows to unravel. Leave the yarn at the end of the needle bed.

6. If, after having unravelled the required number of rows:

— the yarn is on the same side as the carriage, deduct the number of rows unravelled from the row counter and continue with next step.

— the yarn is on the opposite side to the carriage, set the 2 pattern selectors on "slip", take the carriage across and deduct the number of rows unravelled + 1 from the row counter.

7. Thread yarn in yarn-guide and correct the yarn tension in tension assembly. Set carriage according to the stitch. Continue knitting.

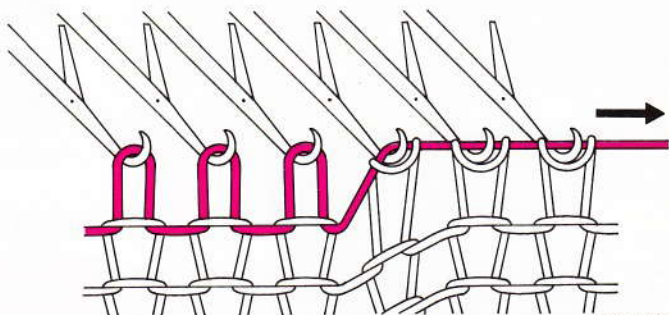
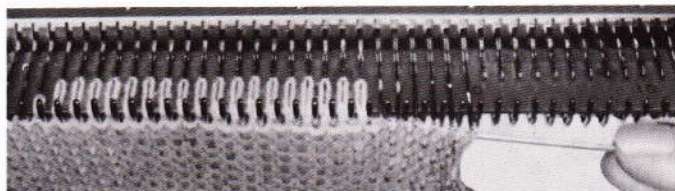


Fig. 210

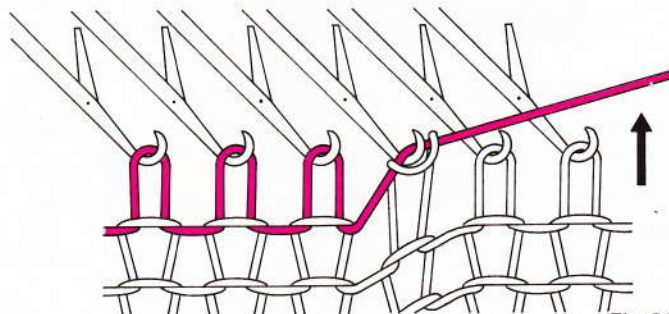
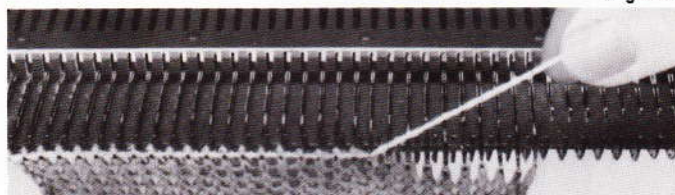


Fig. 211

b) Pattern with Selected Needles

1. Take yarn out of yarn-guide and push carriage to the end of the machine. Using the flat needle selection bar, push the selected needles back to B position.

2 to 5. Same as Steps 2 – 5 in previous paragraph (a).

6. — Set left-hand pattern switch on "●", right an left-hand pattern selectors on "slip".

— Turning the card feed dial away from you, turn card back the same number of rows as those unravelled (example: if card reads 57 – 3 rows unravelled – turn card back to 54).

If the carriage is on the same side as the yarn: set clutch on "plain" and take the carriage across without knitting the row (pattern selectors on "slip"). Set clutch on "pattern" and push the carriage without knitting the row (the needles are selected). Deduct the number of rows unravelled + 2 from the row counter.

If the carriage is on opposite side to the yarn: push the carriage without knitting the row – pattern selectors on "slip" (the needles are selected). Deduct the number of rows unravelled + 1 from the row counter.

7. Same process as in previous paragraph (a).

When knitting in fairisle or weaving, first unravel the main yarn. Place needles back in B position and then unravel contrast yarn.

HOW TO PICK UP A STITCH SLIPPED DOWN 1 ROW

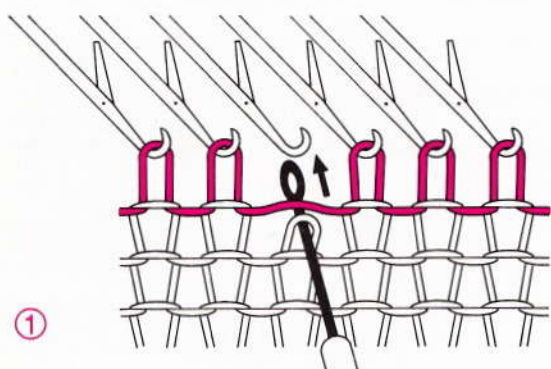


Fig. 212

- Place the 1-stitch transfer tool into the slipped stitch (fig. 212).

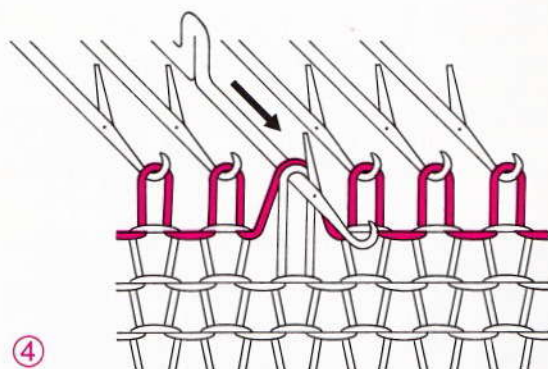


Fig. 215

- Push needle to D position so that the stitch and the yarn slip behind the latch (fig. 215).

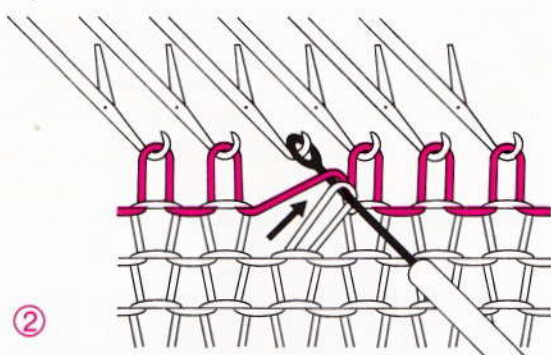


Fig. 213

- Place the eye of the transfer tool onto the hook of the empty needle (fig. 213).

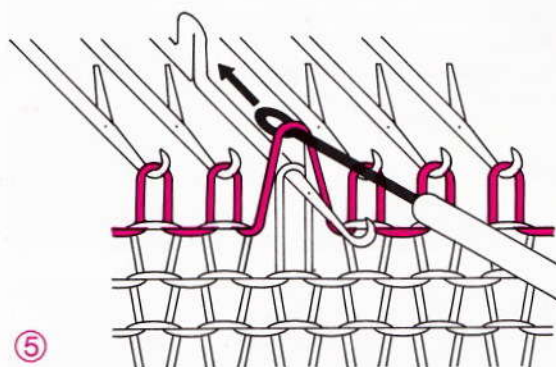


Fig. 216

- Lift thread up above the latch and drop it into the hook of the needle; the stitch stays behind the latch (fig. 216).

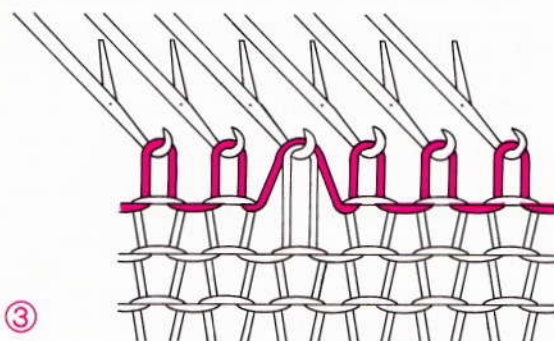


Fig. 214

- Slip the stitch and the yarn lying across it into the hook (1 stitch and 1 thread in the hook) (fig. 214).

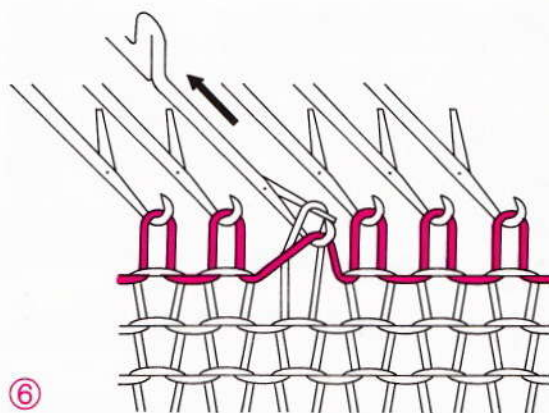


Fig. 217

- Push needle to B position to form a stitch (fig. 217). Pull the knitting slightly downwards so that the picked up stitch is the same size as the others.

HOW TO PICK UP A STITCH SLIPPED DOWN SEVERAL ROWS

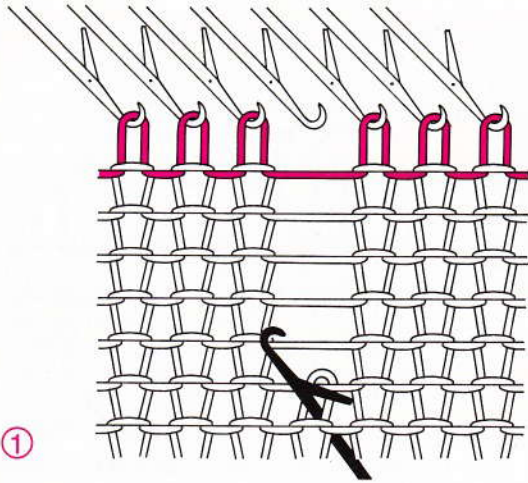


Fig. 218

- Place the latch tool into the slipped stitch from behind the knitting.
- Push latch tool through the knitting so that the stitch slips behind the latch and the thread lying across is in the hook (fig. 218).

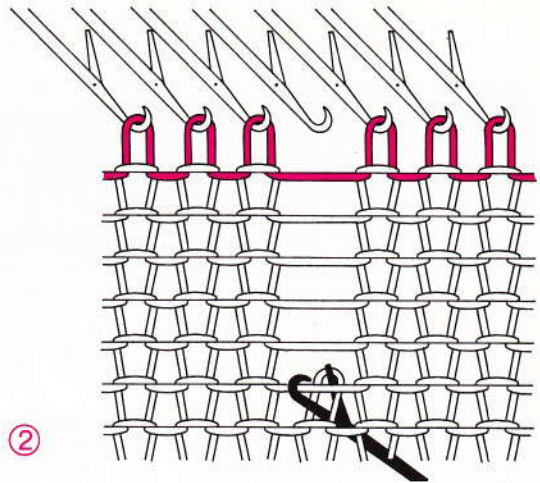


Fig. 219

- Pull the latch tool backwards, the thread is caught in the hook and goes through the stitch. A new stitch is formed (fig. 219).

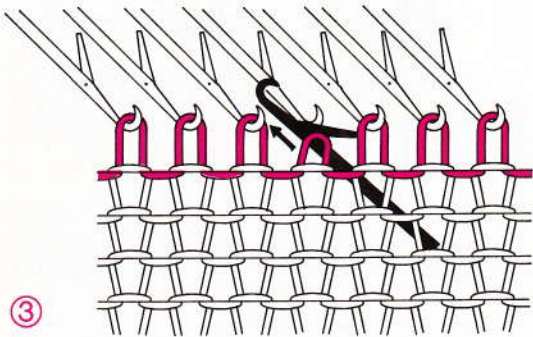


Fig. 220

- Push the latch tool forward again so that the new stitch slips behind the latch and the next thread is in the hook. Pull the latch tool backwards, and so on to the top of the knitting (fig. 220).

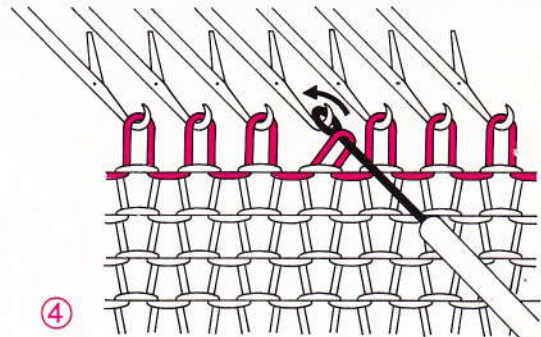


Fig. 221

- Pull slightly on the last stitch so as to make a larger loop and place the 1-stitch transfer tool into this stitch (from the front of the knitting).
- Remove the latch tool carefully and with the 1-stitch transfer tool place the stitch onto the empty needle (fig. 221).

HOW TO KNIT THICK YARN

When uneven or very thick yarns are used do not knit with every needle, but with every alternate needle. Instead of bringing all the needles to B position when casting on, bring only every alternate needle to B position with the 1 x 1 needle selection (fig. 222)



Fig. 222

TECHNICAL ADVICE

THE CARRIAGE IS HARD TO PUSH

- The tension of the stitch is too tight for the thickness of the yarn being used (see paragraph 'Adjusting the Stitch', page 16).
- The yarn is threaded into the tension assembly incorrectly and not feeding evenly into the yarn-guide (see paragraphs 'Winding and Threading the Yarn, pages 13, 14 and 15).
- The knitting machine needs cleaning and oiling (see paragraph 'Machine Maintenance, page 71).

THE CARRIAGE IS JAMMED

● If the carriage stops during the knitting, do not force it and proceed as follows :

1. Take off the fabric-press by unscrewing the white knobs (fig. 223).

2. Set clutch on 'remove' (fig. 224).

3. Lift carriage off (fig. 225). Correct the knitting using transfer tools if necessary.

4. Replace carriage taking care to place the front rail on the edge of the needle bed so that it is correctly positioned. Carriage will not run smoothly unless cogs on Pattern Position dials at back of carriage are matched to slotted rail at back of needle bed.

5. Set clutch on 'pattern' or 'plain' as required (fig. 226).

6. Make sure the carriage is correctly positioned on the needle bed by lifting the handle. Repeat the same process placing the levers on 'remove' if the carriage is incorrectly placed.

7. Replace the fabric press onto the carriage.

8. Turn the row counter and the pattern card back 1 row.

2-COLOR (FAIRISLE) WILL NOT KNIT EVEN WHEN CORRECTLY SET

● This is probably caused by previous incorrect use of point cams.

● Set carriage on 'single motif'. Place a point cam on the needle bed and push the carriage across once (fig. 227). This should release the mechanism and correct the fault.

* Do not forget to remove the point cam after pushing the carriage across.

● When pushing the carriage from right to left, use the orange point cam. When pushing the carriage from left to right use the green point cam.

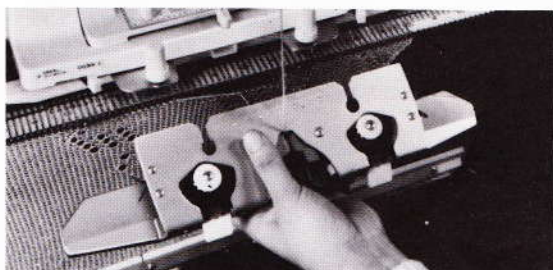


Fig. 223

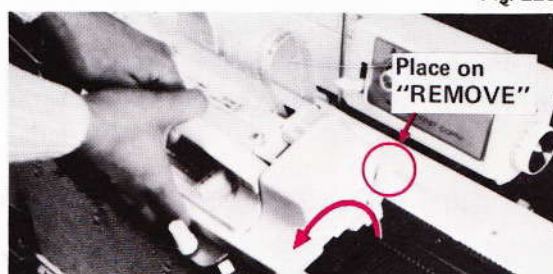


Fig. 224

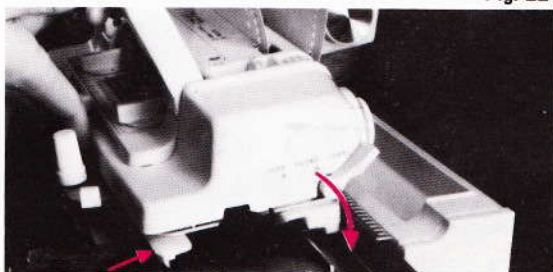


Fig. 225

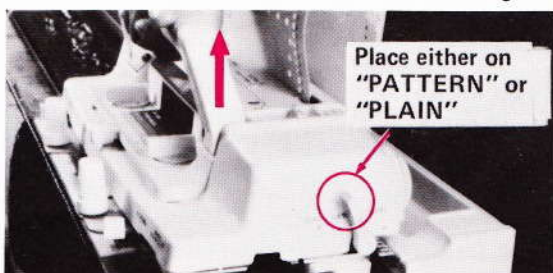


Fig. 226

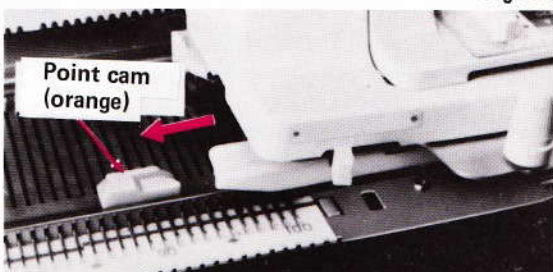


Fig. 227

EDGE STITCHES DO NOT KNIT

This could be caused by :-

- the tension discs are incorrectly adjusted (see 'Adjusting the Tension, page 15),
- the yarn is incorrectly threaded in the tension assembly (see 'Threading', page 14).
- the carriage has been pushed too far at the end of the row (a loop is formed on the edge, see page 17),
- if **the tension spring is not taut** (correct the tension, see page 15).

STITCHES COME OFF THE NEEDLES IN THE MIDDLE OF THE KNITTING

This could be caused by :

- **incorrect adjustment of the stitch tension** (too tight or too slack according to the thickness of the yarn, see adjustment of the stitches', page 16).
- excessive wear of the fabric press brushes.
- incorrect positioning of the fabric press,
- the carriage is incorrectly placed on the slip rail,
- if one or several latches of the needles are twisted (see below how to change a needle).

HOW TO REPLACE A FAULTY NEEDLE

A needle must be replaced if the latch is twisted or the needle is bent. Take the carriage off the machine.

- With the handle of the latch tool push the needle retaining bar at the side of the machine nearest the broken needle (fig. 228),

- When the bar has been pushed out 2 cms on the other side, pull it until the faulty needle is released (fig. 229).

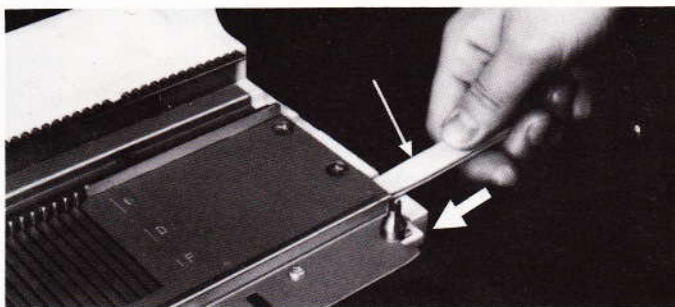


Fig. 228

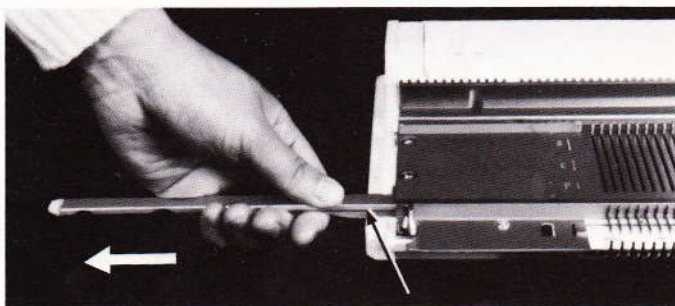


Fig. 229

- Pull the needle towards you to F position. Press the hook end down and the shank end will come up out of the slot. Hold the shank and lift it up, forcing a little so that it comes above the slotted rail. Pull the needle out (fig. 230).
- Insert the new needle into the slot starting with the latch open (fig. 231).
- Make sure the needle slips freely into the slot. Push it back to A position.



Fig. 230

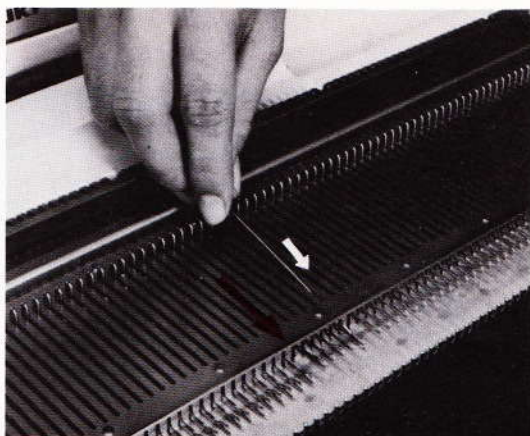


Fig. 231

- Push the retaining bar back by pressing the hooks of the needles down with the flat needle selection bar as the retaining bar is pushed in (fig. 232).

It is not necessary to take the knitting off the machine when replacing a needle.



Fig. 232

MACHINE MAINTENANCE

Your machine must be cleaned regularly :—

- Take the carriage off the machine.
- Push all needles to F position and using the brush clean out any dust or fluff, specially from the front of the needle bed (fig. 233).
- Using a piece of cotton rag clean :
 - the needle bed, the butts of the needles, the slip rails (fig. 234),
 - under the carriage, the cams, the wheels with cogs, the slip rails (fig. 235).
 - under the lace carriage, the cams, the slip rails.
- Make sure that the brushes of the fabric press turn freely. Take out any bits of yarn which might be caught in the brushes and which would prevent it from working correctly.
- Using a piece of cotton rag lightly impregnated with oil supplied with the machine, wipe the needle bed, the carriage and lace carriage where indicated above.



Fig. 233



Fig. 234

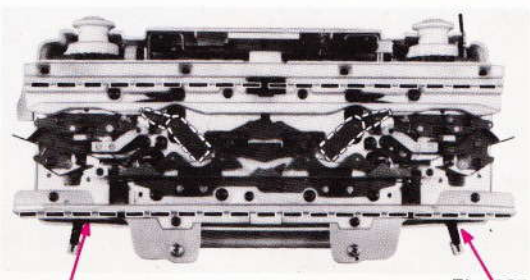


Fig. 235

Use methylated spirit to clean certain parts of the machine where greasy deposits are formed.

Never oil your machine directly from an oil can. Use a piece of material impregnated with the oil.

PACKING THE MACHINE AWAY

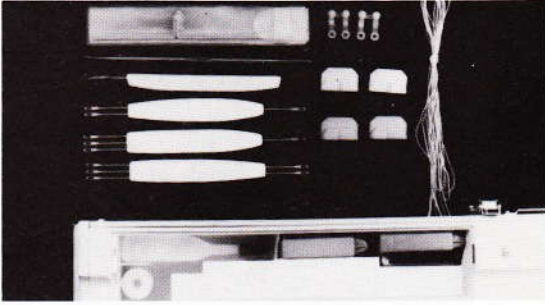


Fig. 236

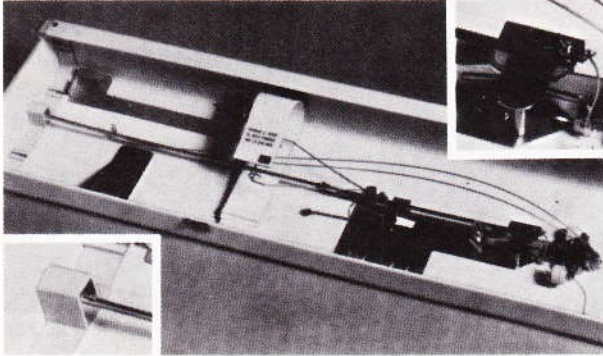


Fig. 237

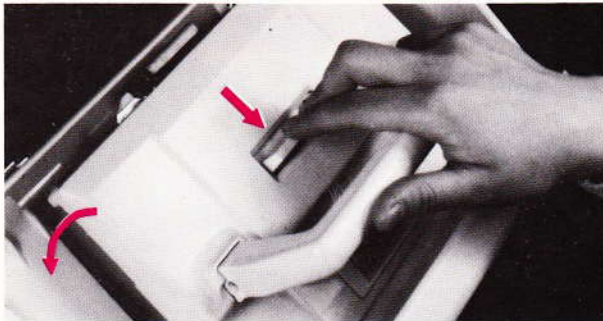


Fig. 238

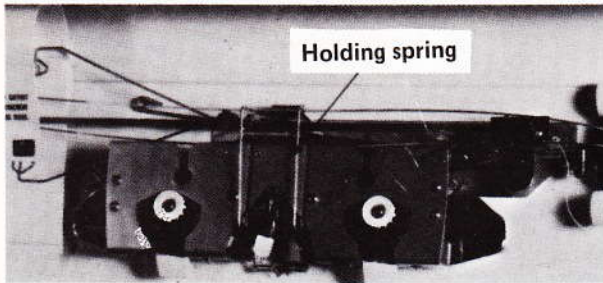


Fig. 239



Fig. 240

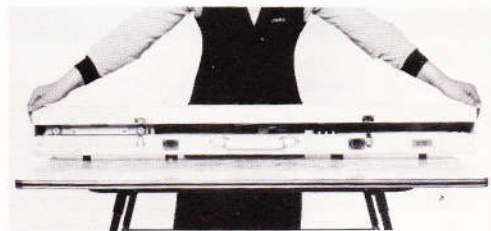


Fig. 241

- Pack the accessories in the box as shown in fig. 236.
- Take out the tension assembly. Fold the body and triangle along the rod. Take the tension springs back and place them through the triangle. Pack the tension assembly in the lid (fig. 237). Close the clips.
- Slide the card support under the rod of the tension assembly (fig. 237).
- Place the lace carriage in the lid. Press on the lace carriage by pushing and holding the handle. Release the handle, the lace carriage is locked (fig. 238). Press on the catch and lower the handle.
- Take the fabric press off the carriage and pack it in the lid. Close the holding spring (fig. 239).
- Completely unscrew the right-hand white knob (fig. 240). Press on the catch and lower the handle.
- Bring in the arm of the row counter. Place the needle selection bars in their space on the right side of the machine.
- Place the lid on the machine as in fig. 241.
- Close the two locks. Unscrew the two clamps. Store the machine in a dry place.

NOTE : *The 2 auxiliary rails and the 2 weight combs are not stored in the machine but outside it in the packing box.*

