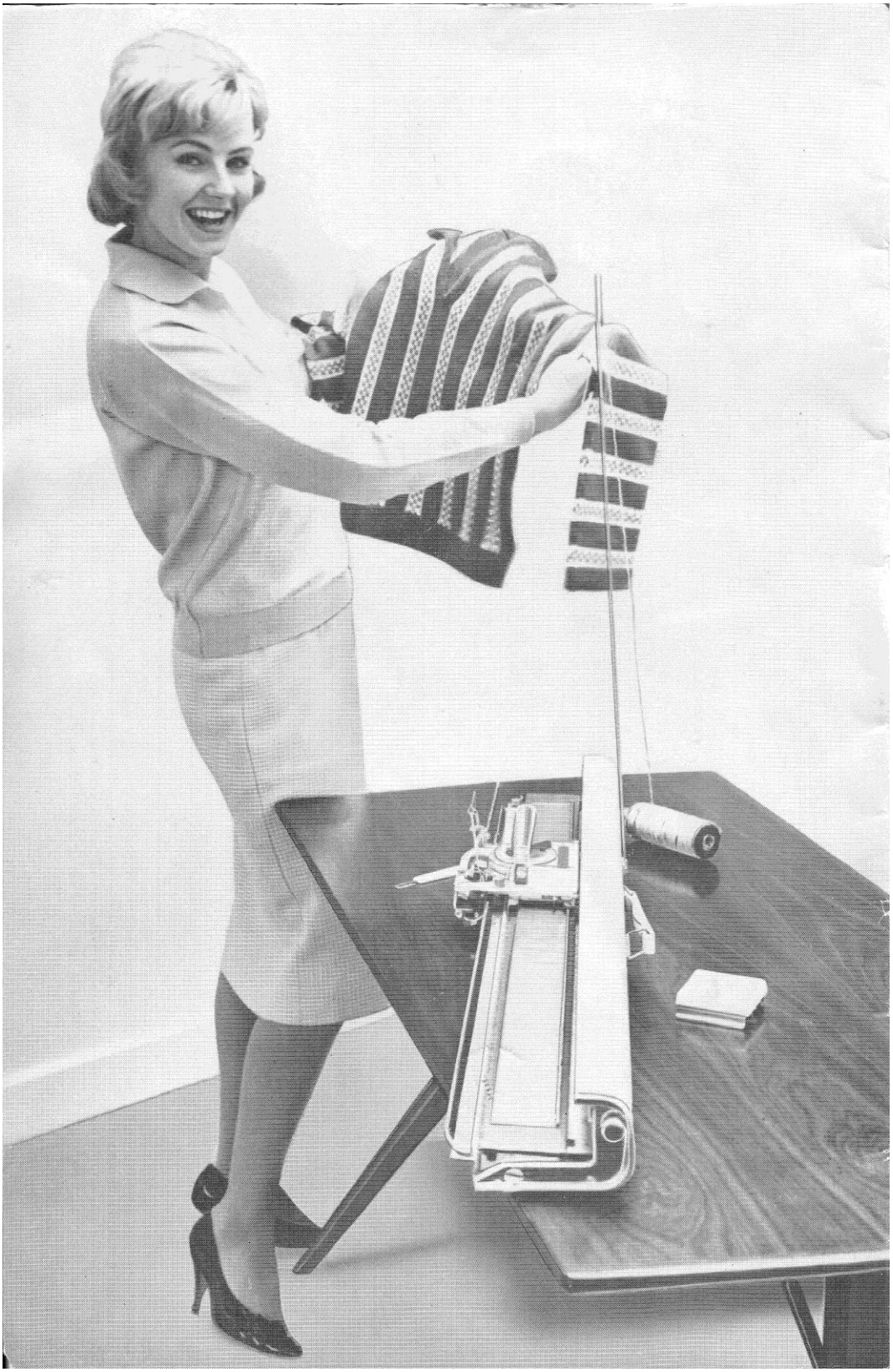
ALL ABOUT THE SUPER SPEED H.8

Super Speed



Introducing the "Super Speed"

The Super Speed hand knitting machine is the result of many years' careful study of the problems besetting the production of knitted garments.

These garments must retain the quality and texture of hand-knitted goods whilst having the advantages of a perfectly even fabric and being quickly produced.

SPEED

With your new SUPER SPEED MACHINE it will be possible for you after a little practice to produce garments in about two hours or so. Garments have the "handle" of top quality hand knitted whilst being perfectly even.

FOLLOW THE INSTRUCTIONS

In the pages which follow are carefully laid out and devised instructions.

Please follow these instructions step by step as they are written. This is especially important in the early stages until you become conversant with the Super Speed Machine. Remember that a few hours' careful practice will soon result in your becoming proficient in the machine knitting technique, saving you time and money.

The basic principles discussed in the following pages will give you the necessary knowledge enabling you to make innumerable dresses, sweaters, scarves,socks, gloves, etc.

ANY TYPE OF WOOL MAY BE USED

Most of the wools and yarns already obtainable in your local shop can be used on the Super Speed; however there are some exceptions and we advise you to choose a smooth, evenly-spun yarn with a soft texture or "handle". The wool should be wound evenly in balls, preferably shortly before being used, as this prevents the wool from becoming matted.

MECHANISM

By using the Tension Dial Control to obtain the correct tension (size of stitch) it is possible to use ordinary hand patterns, the adaption of which is quite simple. The production of patterned fabric is allowed for by the incorporation of a Needle Holding position which is fully described on later pages. The provision of a Wool Feed Unit allows for the production of perfect stocking stitch at super speeds whilst virtually operating the machine with only one hand. The Wool Feed is of unique design and incorporates a system of tensioning exclusive to the Super Speed Knitting machine, which ensures that a constant flow of wool is maintained at an even tension to the Needles at all times.

GUARANTEE

The Super Speed Knitting Machine is backed by a team of experts having many years' experience in all fields of machine knitting, ready at all times to offer advice should you require it. Please complete the guarantee form and forward to our Head Office in London within seven days of purchase so that your guarantee for 12 months can be registered.

In conclusion may we wish you many happy hours of knitting with your new Super Speed Knitting Machine in the coming years.

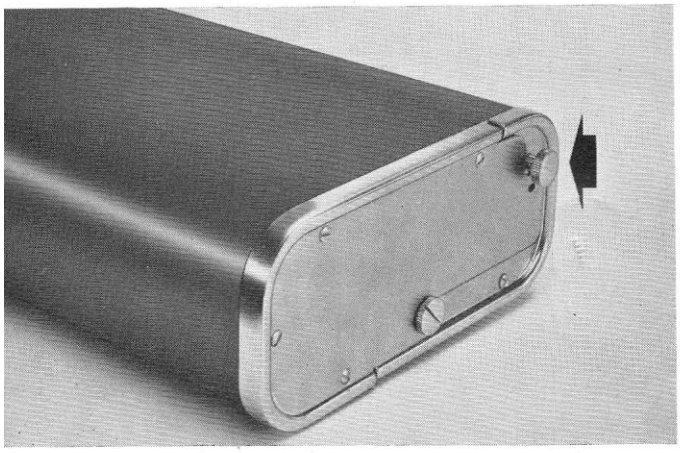


Fig. 1
Releasing screws at each end of cover.

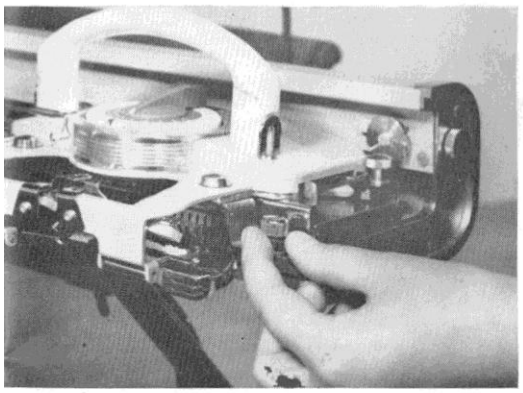


Fig. 2 Removing the retaining brackets.

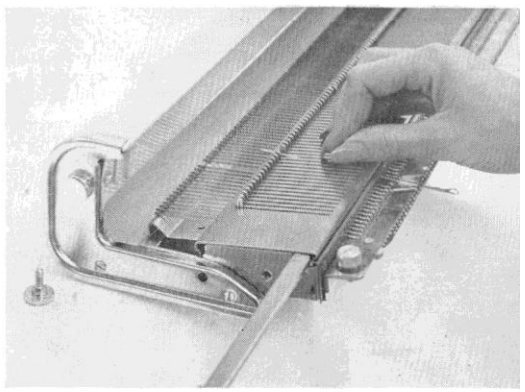


Fig. 3 Fitting a needle.

UNPACKING

Your Super Speed Knitting Machine has a base which is designed to act as a cover and carrying case for the machine. To open the machine place it on its rubber feet on a table with the coloured part of the cover towards you, the handle pointing away. Pull out the two large knurled screws situated (Fig. 1) at either end of the machine. Turn the screws half way round and release. You should now be able to slide the front cover off the machine. Make sure when replacing the cover that the small pin in the screw head is located securely in the hole provided for it.

CAM BOX

Lift Cam Box handle upright and position in the holes in Cam Box cover, tightening the retaining screws firmly to hold it in position. Unscrew and remove the bracket holding the Cam Box in its packed position (Fig. 2).

CASTING ON COMB

Turn metal disc at right hand end of the Comb so that the slot aligns, and remove comb.

DESCRIPTION OF MACHINE

(*See illustration at back of book.*) The machine throughout is manufactured from the finest quality materials assembled by craftsmen and tested by experts to ensure it reaching the very high standard required.

The Needle Bed is made from stainless steel in one piece incorporating the slots which guide the needles (Fig. 2), as are the grooves in which the Cam Box Rail Guides are located. The Needle Bed contains 200 Needles manufactured from carefully selected steels most suitable for the work involved. It is extremely unlikely that these needles will break but in this event spares are provided in the tool kit.

To fit a new needle proceed as follows: Remove Cam Box and turn machine on its face. Undo and remove the two

knurled screws adjacent to the rubber feet, turn the machine over and remove the knurled screws at either end of the case. Pull the Needle Bed forward about ¾ in. and slide the Needle Retaining Bar (Fig. 3) from the end of the Needle Bed until it clears the needle which is to be changed. Push the butt of damaged needle forward and lift the shank out of the slot, pulling the needle out backwards. Replace new needle using the reverse procedure, making sure all screws are tight on completion.

The Cam Box runs on the Needle Bed and is held in position by the front and back Rail Guides. The Cam Box controls the tension by means of the Tension Control Dial (Fig. 10) and is equipped with Brushes (Fig. 15) to ensure that the Needle Latches are always open when the wool is fed in by the Wool Inserter (Fig. 7) via the Tension Take-up spring (Fig. 3).

A Row Counter (Fig. 9) is fitted to the Cam Box, the Dial of which registers from 0 to 100. To set the Dial turn it in a clockwise direction until the fixed pointer is opposite 100 or 0.

Whilst your Super Speed Knitting Machine is designed to take most wools, care must be taken to ensure that the wool unwinds freely and runs smoothly through the Wool Feed Unit.

If you should be unfortunate and allow the Cam Box to become jammed, do not try to force it across the needles. Your Super Speed Knitting Machine is designed to overcome these difficulties. Simply unscrew the two large knurled screws at either side at the back of the Cam Box and lift the Cam Box off the Needle Bed. Replace on Needle Bed beyond the jam and tighten the screws making sure that the Rail Cover is tight against the Needle Bed.

PREPARING THE MACHINE

The machine should be placed on a firm table, without a tablecloth, in order to obtain the maximum degree of steadiness. Before starting to knit make sure the Cam Box handle is secure and the Cam levers are in the working position. The needles must be placed into position according to the design being made.

There are three needle positions, as follows:

NON WORKING

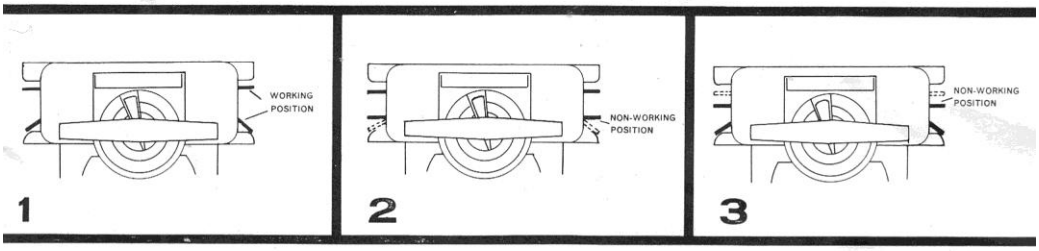
In this position the Needle Butts rest against the rear of the Needle Bed in which position they are not operated by the Cam Box or Needle Selector.

WORKING POSITION

This is the position maintained by the needles when the machine is working. Here the needle butts are approximately ⅜ in. from the rear of the Needle Bed. This position is used also when casting-on using the Comb.

HOLDING POSITION

Here the Needle Butts rest against the front of the Needle Bed. This position is used for casting-on using the Closed Edge method for knitting various patterned fabrics, and for turning sock heels, etc.



USE OF CAM LEVERS

The Cam Box is designed to operate needles in these various positions as follows:

1 For stocking stitch both sets of Cam Levers are towards the front and rear rails respectively.

2 For pattern work requiring needles in the Holding Position, turning heels, etc., put Sub Cam Lever into control position; Main Cam Lever remains in normal working position.

3 For Fair Isle knitting requiring the use of two colours in the same row. Main Cam Lever in forward position, Sub Cam Lever remains in normal working position.

THE WOOL FEEDER UNIT

This is of unique design and will take all thicknesses of wool including nylon and other synthetic fibres, maintaining a constant rate of flow and tension at all times. It can be used for all plain knitting and for many patterned fabrics.

TO PREPARE it for use:

1. Remove the Wool Support from the lid of the machine case and slide the squared end into the socket clip (Fig. 11) on the outside of the machine case to the left of the handle.
2. Fit Tension Control Assembly into Slide (Fig. 4) left of Cam Box.
3. Turn the Tension Spring (Fig. 3) upright.
4. Thread wool through the Wool Support.
5. Through loop on Tension Keeper and into the hook at the end.
6. Loop wool into Tension Spring Hook.
7. Pass wool down through Wire Guide (Fig. 6) and into Wool Inserter (Fig. 7).
8. The end is taken and attached to one of the Eyelets on the Casting-on Comb or, when this is not in use, tie it round the knurled screw at either end of the machine.

CASTING-ON OPEN EDGE METHOD

1. Push up the required number of needles into the Working Position and align correctly by moving the Cam Box over them once or twice.

2. With the Cam Box at the extreme right hand end of the machine clip into position the Casting-on Comb.

3. Thread wool through the wool feed assembly and attach the loose end to one of the eyelets on the Casting-on Comb.

4. Set Automatic Tension Dial pointer to required setting.

5. Push Cam Box firmly and carefully across the needle bed. It is essential to take up any slack wool at this point, so that it feeds evenly into the needles, the strain being taken by the Spring. The Cam Box should only be moved sufficiently to completely clear the needles in use.

6. The casting-on is now completed, loops having been formed over each needle; and the Casting-on Comb must be released from the machine.

7. Move the Cam Box across the needles. Hold down the first few stitches of the row until the Rubber Rollers engage; do this at either end for at least four rows until sufficient fabric is made for the rollers to grip.

8. The comb may be removed after 40 or 50 rows, and the Nylon Strip threaded through the loop using the Tapestry Needle provided, to prevent the stitches unravelling.

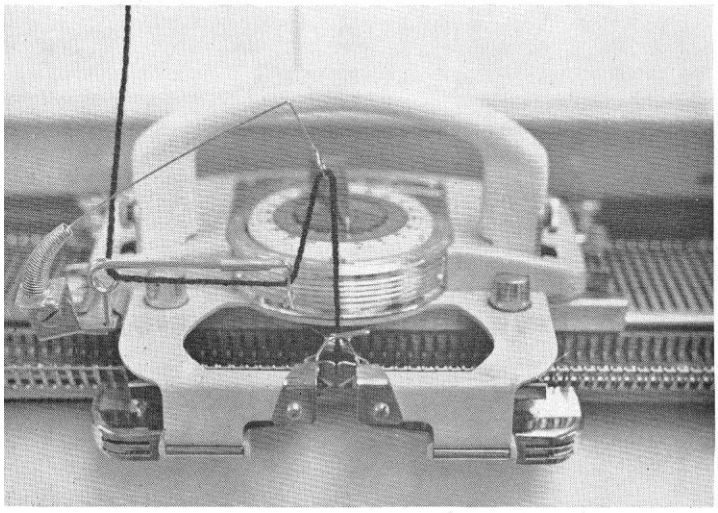


Fig. 4
The wool feeder unit

CLOSED EDGE METHOD

This method of casting-on gives a finished edge to the fabric which will not unravel; it does however require a little more practice than the Open Edge method. The Casting-on Comb is not required. Set up the wool feeder unit as described and fasten the loose end of wool securely to the left hand knurled screw.

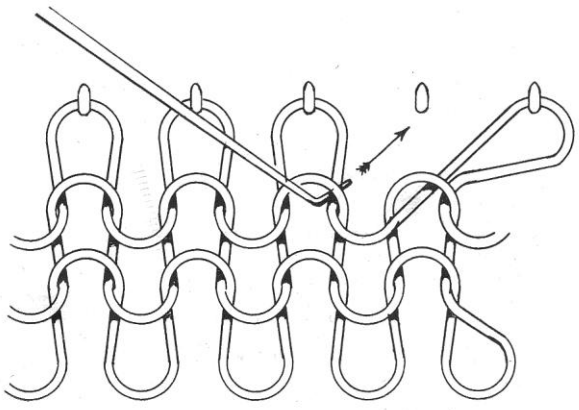
1. Push up the required number of needles into the Holding Position and
2. Pass Cam Box over these to the right hand side of the machine.
3. Make sure all the latches are closed. Now wind the wool, commencing at the left hand side and working to the right, in an anti-clockwise direction round the needles.
4. When the last needle is reached take up any slack wool.
5. Set the Tension Pointer to 3 or 4.
6. Push Cam Box smoothly from right to left across the machine, knitting the first row.
7. Change Tension Pointer to setting necessary to obtain the correct tension for the pattern being made.

When operating the machine make sure that the Cam Box clears the last needle in use by about $\frac{1}{2}$ in. before returning it across the Needle Bed to knit the next row. Hold down the first few stitches of the row until the Rubber Rollers engage. Do this at either end for at least four rows until sufficient fabric is made for the rollers to grip.

DO NOT ATTEMPT TO REVERSE THE CAM BOX IN THE MIDDLE OF KNITTING A ROW.

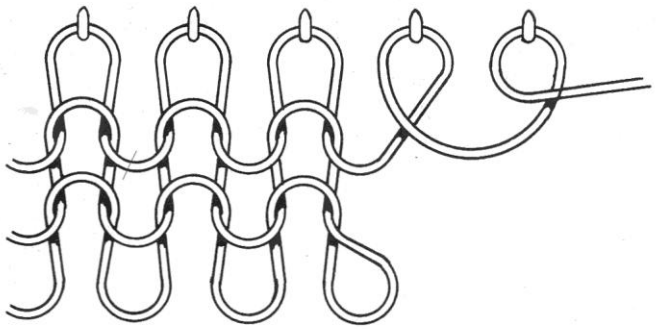
INCREASING BY ONE STITCH

Bring up another needle and transfer the first stitch onto this, leaving the empty needle in position, hook (using Stitch Hook/Crochet Tool) the stitch on the row below to the left or right of the empty needle and place this over the needle.



INCREASING BY A NUMBER OF STITCHES

This should be done at the edge nearest the Cam Box. Push up the required number of needles and onto these wind the wool in an anti-clockwise direction. Once this is done continue operating the Cam Box normally. Remember to take up any slack wool on the first row.



DECREASING BY ONE STITCH

Transfer the first stitch to the next needle in use and continue knitting.

A NUMBER OF STITCHES can be decreased using the normal method for casting-off.

CASTING-OFF

If a number of stitches have to be decreased or the particular part of the garment upon which you are working is finished and requires casting off proceed as follows.

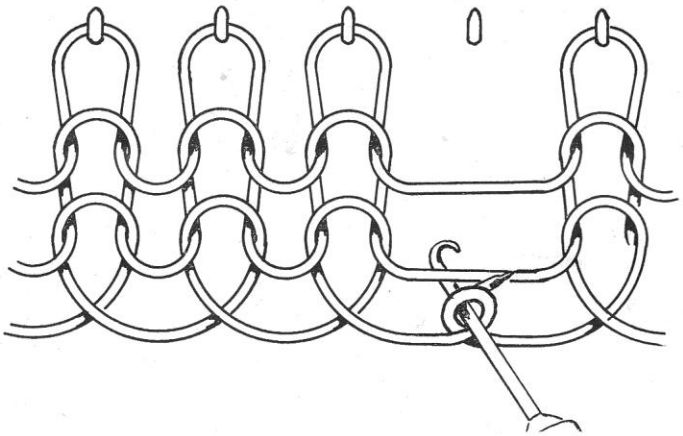
Transfer the end stitch to the next needle (as above), placing it *behind* the latch. (You now have two stitches on this needle.) Lay the wool over this needle and knit the stitches by operating the needle butt by hand. Push the Needle Butt back in the Needle Bed forming the stitch and forward again into the holding position. Transfer this stitch to the next needle and continue in this manner until the stitches have been cast off. When you come to the last stitch cut the wool and thread the end through this stitch.

RIBBING USING HAND TOOL

To make a ribbed welt certain stitches must be dropped and picked up on the side of the fabric facing the operator, forming plain stitches on the pearl side.

Stitches should be dropped down to the cast-on edge, one at a time. (Always complete one vertical line before dropping the next.) Hook the Latch Needle tool on to the last strand and twist in a clockwise direction forming a loop. Holding the tool as you would a pencil push it forward, placing the loop behind the latch: hook the next bar and pull the tool towards you, closing the latch and pulling the thread through the loop to form a new stitch.

Hook the next bar and continue up the "ladder" caused by the dropped stitch, placing the final stitch onto the needle behind the open latch. Whilst carrying out this operation the fabric should be held taut in the left hand away from the machine.



When using ribbing within the body of the garment, e.g. gathered waistline, the commencing row should be marked by knitting in a piece of contrasting cotton which is laid across the needles and knitted in with the wool for one row.

DROPPED STITCHES

To pick up a stitch which has dropped is quite simple and can be done invisibly. The method used is exactly the same as that used for ribbing with the Latch Needle tool except that the tool is used on the other side of the fabric (plain side).

Push the empty needle into the non-working position, and the needles holding the fabric into the Holding Position. Insert the Latch Needle tool *behind* the fabric from the *top* of the work. Holding the knitting towards you with the left hand push the Latch Hook through the loop of the dropped stitch placing it behind the open Latch.

Catch the bar immediately above in the hook and pull, thus forming a stitch. Continuing in this manner, catch each bar pulling it through the loop already behind the latch until the last bar of the "ladder" is dealt with. Place the loop remaining on the Latch Needle Tool onto its appropriate needle.

TRANSFERRING STITCHES

For this transfer tools are provided capable of transferring from one to four stitches in one operation. To use these hook the eye of the transfer tool over the hook of the needle. Pull the tool sharply towards you, placing the stitch behind the open latch. Push the tool away, closing the latch, and leaving the stitch on the shaft of the transfer tool. Place this onto an adjacent needle, making sure the stitch is left on the hook and not behind the open latch of the needle.

BASIC PRINCIPLES

Unlike hand knitting it is *not* possible to measure your work as it is produced and therefore another method must be used.

To do this your Super Speed Knitting Machine is equipped with an automatic Row Counter and Tension Control both of which are located on the Cam Box and are therefore visible at all times.

With machine knitting the size of stitches produced is governed by the amount of wool allowed to form them. This amount of wool is governed by the movement of the needle which in turn is controlled by the setting of the Tension Control Pointer. Therefore if the Pointer is set at 1 the stitch produced will be tighter than when the pointer is set at 9.

Most patterns give a tension sample either illustrated or as a number of stitches to one inch. When attempting to knit, this tension must be obtained on the machine by setting the Tension Control Pointer to the appropriate figure.

Some indication of the correct setting can be obtained from the table below. It is important that the exact number of stitches is obtained and to ensure this a sample piece should be made covering 40 stitches and 40 rows. If the tension is tight or loose the setting must be adjusted and another sample knitted.

To measure the sample it must be removed from the machine, laid flat, and the number of stitches and rows per inch checked against a ruler or tape measure.

Once your tension is set correctly you can commence knitting and will always be able to check the amount done by merely glancing at the row counter conveniently placed on the Cam Box. This will show the number of rows knitted which can by a simple calculation be turned into the number of inches knitted, e.g.:

Tension: 8 stitches and 12 rows to 1 inch.
Measurements (Back) :
Waist: 12 inches. Cast on 8 x 12 sts.—96 stitches.
Length to armhole: 10 inches. Knit 12 x 10—120 rows.

Type of Wool	Tension Gauge Setting	Stitches per inch		Rows per inch	
2 ply	2 4 6	10 6	9	15 12	$13\frac{1}{2}$
3 ply	3 6 9	9 $6\frac{1}{2}$	8	$12\frac{1}{2}$ $8\frac{1}{2}$	11
4 ply	7 8 9	8 7	$7\frac{1}{2}$	11 10	$10\frac{1}{2}$
O.K.	7 Alternate Needles 9 used only	6 $5\frac{1}{2}$		8 8	

THE NEEDLE SELECTOR

This unique tool is supplied with your Super Speed Machine and is designed to set any combination working on the first eight Needles into the Holding Position.

As you will readily appreciate, it can become very tedious when making a patterned fabric if, as may well be the case, after every other row it is necessary to stop and, by hand, move every second needle into the Holding Position. With the Needle Selector this problem is solved. With one quick movement across the Needles it arranges them ready for whatever design you want to knit.

The Needle Selector is self-contained and requires no pre-setting. It is designed to run over the Needle Bed from right to left *only*, on the rails which the Cam Box runs, and is operated as follows:

Select the pattern you require and set this on the first eight needles on the right pushing the needles necessary into the Holding Position, e.g. if the pattern you are making requires two needles in Working Position, two needles in Holding Position along the entire row. The first two needles remain in the Working Position. Push up needles 3 and 4 into Holding Position. Needles 5 and 6 remain in Working Position while needles 7 and 8 move to Holding Position. Grip the Selector firmly and push it across the needles which will now be placed automatically: two into Holding Position and two in Working Position across the entire needle bed, according to those you have already pre-set.

BUTTON HOLES & NECK OPENINGS

Vertical Openings

It is often necessary to make a neck opening or vertical slit in the back of a jumper, to accommodate a zip fastener, buttonholes, etc., and for all these the same basic principles apply.

Having reached that point in your pattern where the neck opening commences, divide the work in the centre and transfer the centre stitch to an adjacent needle. From this point onwards, each side of the neck must be knitted separately.

Place all the needles on one side of the opening into the holding position, or on to a stitch holder. Having done this, it is possible to carry on and knit one side of the neck up to the shoulder decreasing at the armhole edge and neck edge as required by your pattern. When sufficient rows have been knitted, cast off in the usual way. Replace the stitches, or move the needles into the working position and complete the other side.

Please remember if you use the holding position method then the sub cam levers on the cam box must be set in the non-working position. Having done one side, the needles must be re-set to the working position, before the other side can be completed.

A buttonhole is knitted in a similar fashion, using a stitch holder.

Horizontal Openings

For buttonholes or pockets are much simpler to make than the vertical openings. When you reach the row where the slit or buttonhole is located, push out the needles affected, placing their stitches behind the open latches, and knit in a separate length of different coloured wool by hand. With all the needles in the working position, carry on knitting in the normal way. When the piece is finished, pull out the length of wool and sew up the edges of the buttonhole by hand.

The appearance of any buttonhole is improved by hand stitching round its edges after garment is removed from the machine.

MULTI COLOUR KNITTING

Your Super Speed machine, whilst being capable of knitting an infinite variety of patterned fabrics, can also be used to make multi-coloured garments. This is done quite simply, but you must first unthread the wool from the wool feed unit and remove the tension control assembly from the front of the Cam Box. Each time you wish to change the colour of your wool, you must first remove the wool in use and then re-thread the new wool through the wool inserter and wire guide, so the wool support will not be necessary as the wool can best be controlled by hand.

FAIR ISLE

Patterns are worked in a similar fashion but the colours used are knitted on the needles in the holding position only, as follows:

1. Remove wool from the feed unit and take off the tension control assembly.
2. Push into the holding position those needles corresponding with the colour stitches in your pattern: set main cam levers to non-working position.
3. Thread coloured wool and pass the cam box across the machine.
4. Remove the coloured wool and pass the cam box back across the needles *without* wool.
5. Move the cam levers to working position and, having re-threaded with main colour, knit the cam box across the machine.

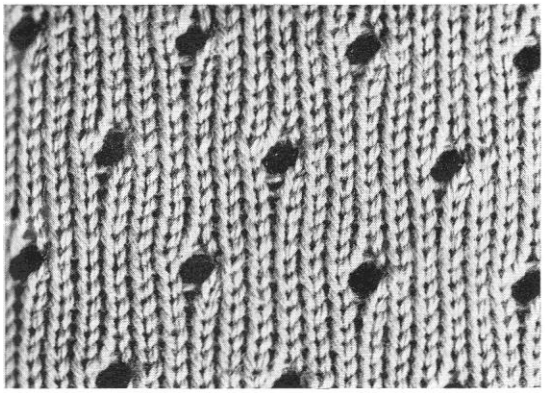
It must always be remembered that, for each different colour used in any one row, a separate movement of the cam box will be required. After each movement, the Cam Box must be returned to the original side to pick up the new colour.

ALWAYS CHECK THE POSITION OF THE CONTROL CAM LEVERS

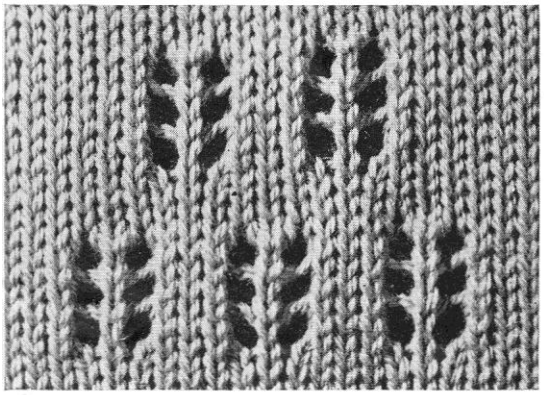
SOME PATTERNS OBTAINABLE ON YOUR SUPER SPEED

In the following pages are a few examples of the patterned fabric which can be produced on your Super Speed Machine. These patterns have been selected because they embody the use of your various hand tools and also the Holding Position. Obviously the different variations possible are innumerable and with a little practice you will be able to design patterns to suit your own requirements.

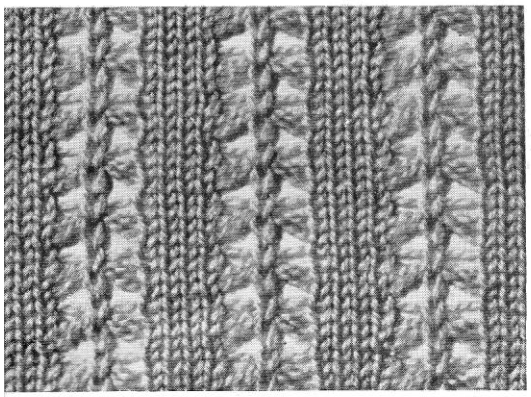
Always remember to check that the Cam Levers are correctly placed for the pattern intended.



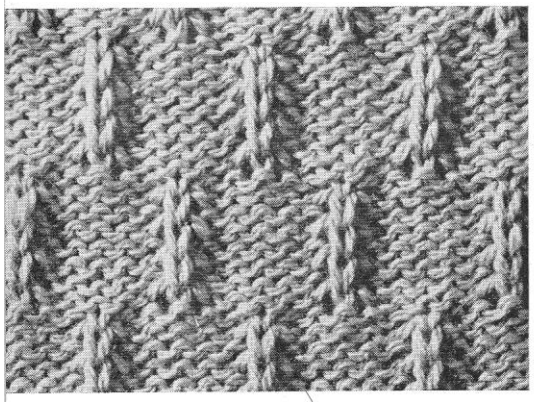
1. Transfer every 6th stitch on to its adjacent Needle, either to the right or left.
2. Leave all Needles in the Working Position.
3. Knit 7 rows.
4. Repeat steps 1 to 3, moving the pattern along so that every hole is placed exactly half-way between each 2 holes of the previous pattern row.



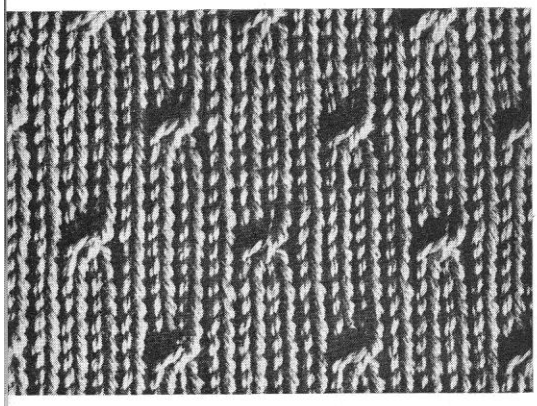
1. Always counting from the left of Needle Bed, transfer the 4th and every following 6th stitch to its adjacent Needle at left, and the 6th and every following 6th stitch on its adjacent Needle at right.
2. Leaving the empty Needles in Working Position, knit 2 rows.
3. Repeat steps 1 and 2 twice more.
4. Knit 4 rows.
5. Repeat steps 1 to 4 as required, moving the pattern along as in the previous example.



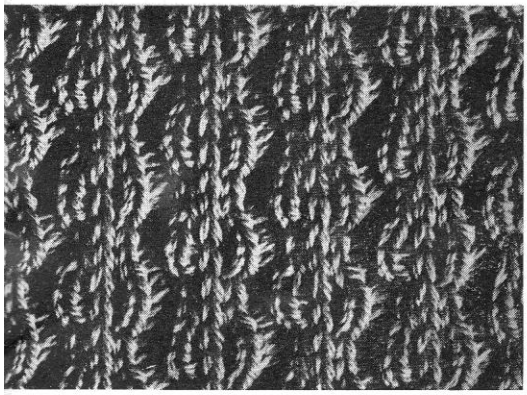
1. Counting from left of Needle Bed, transfer the 5th and every following 7th stitch to its adjacent Needle towards the right, and the 7th and every following 7th stitch to its adjacent Needle towards the left. There are now 3 stitches on the 6th and every following 7th Needle all along the row. Push the empty Needles into Non-Working Position.
2. Knit 2 rows.
3. Counting Needles in Working Position only, push the 5th and every following 5th Needle into Holding Position.
4. Knit 2 rows.
5. Push Needles from Holding Position back into Working Position.
6. Repeat steps 2 to 5 as required.



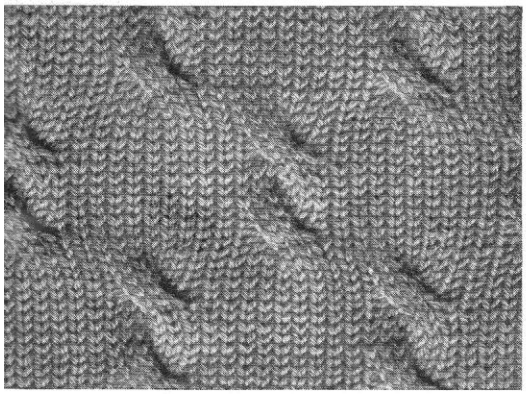
1. Knit 8 rows.
2. Let every 6th stitch in turn drop down 8 rows.
3. Pick up the dropped stitches, using the Latch Needle Tool, but forming the new stitches with every second bar of the 'ladder' only.
4. Repeat steps 1 to 3 as required, moving the pattern along 3 Needles each time.



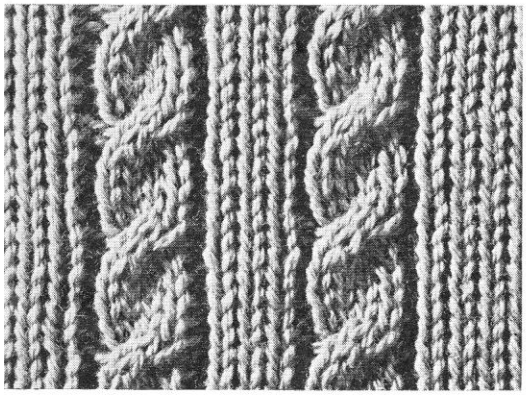
1. Knit 6 rows.
2. Using two Single Transfer Tools, cross over every 5th and 6th stitches.
3. Repeat steps 1 and 2 as desired, moving the pattern along 3 stitches each time.



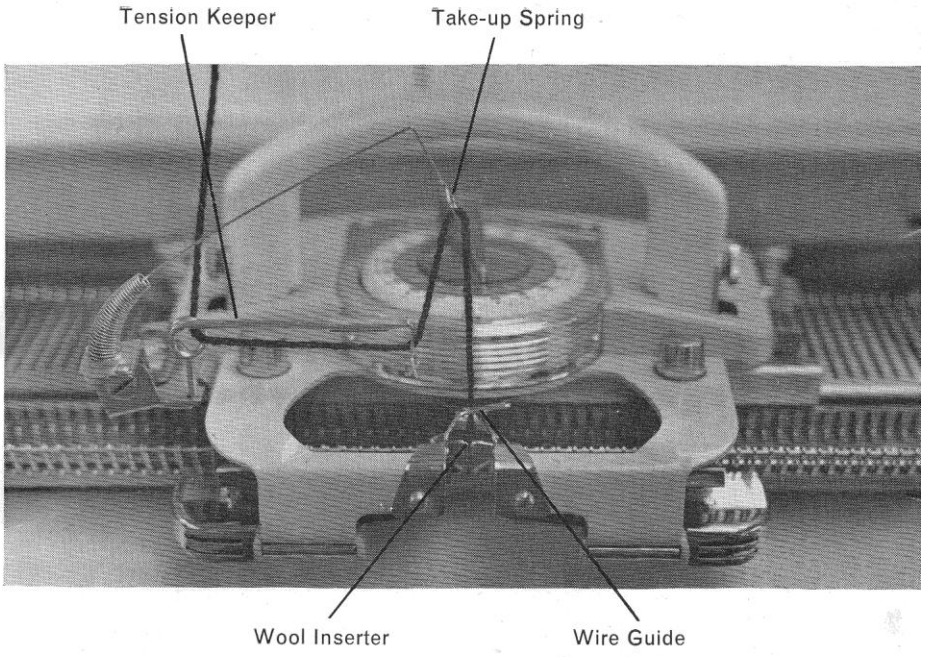
1. Always counting from left of Needle Bed, transfer the 4th and every following 4th stitch to its adjacent Needle and push the empty Needles into Non-Working Position.
2. Push the 2nd and every following 8th Needle into Holding Position.
3. Knit 4 rows.
4. Push Needles from Holding Position back into Working Position, then push the 6th and every following 8th Needle into Holding Position.
5. Knit 4 rows.
6. Repeat steps 2 to 5 as required.

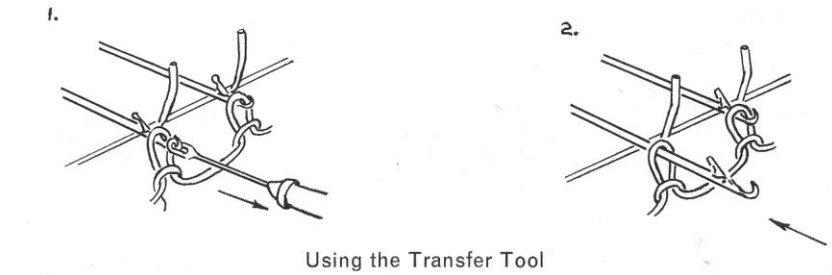


1. Knit 6 rows.
2. Cross the 4th, 5th and 6th stitches with the 7th, 8th and 9th stitches, and every following 11th, 12th and 13th stitches with the 14th, 15th and 16th stitches.
3. Knit 8 rows.
4. Repeat step 2.
5. Knit 6 rows.
6. Cross the 12th, 13th and 14th stitches with the 15th, 16th and 17th stitches and every following 11th, 12th and 13th stitches with the 14th, 15th and 16th stitches.
7. Knit 8 rows.
8. Repeat step 6.
9. Repeat steps 1 to 8 as required.

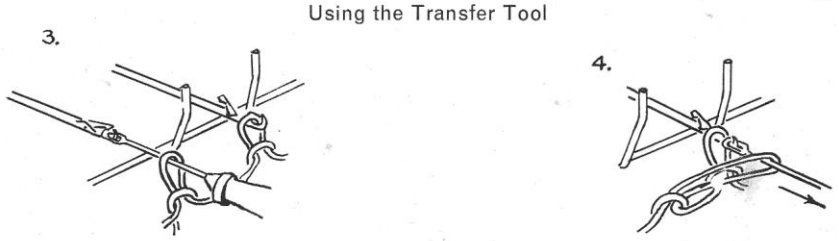


1. Knit 6 rows.
2. Counting from the left of Needle Bed, drop the 5th and 10th and every following 4th and 9th stitches down 6 rows only, leaving the empty Needles in Working Position.
3. Using two Double Transfer Tools and counting Needles in Non-Working Position, cross the 6th and 7th stitches with the 8th and 9th stitches all along the row.
4. Repeat steps 1 to 3 as required, picking up the dropped stitches at convenient intervals as for ribbing, using the Latch Needle Tool.

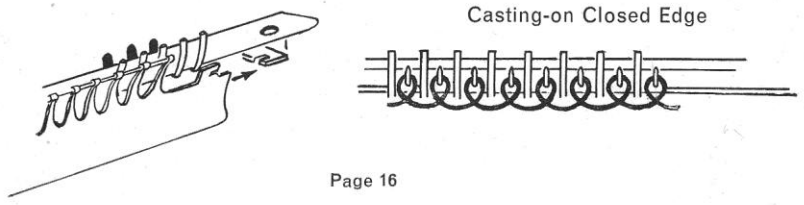




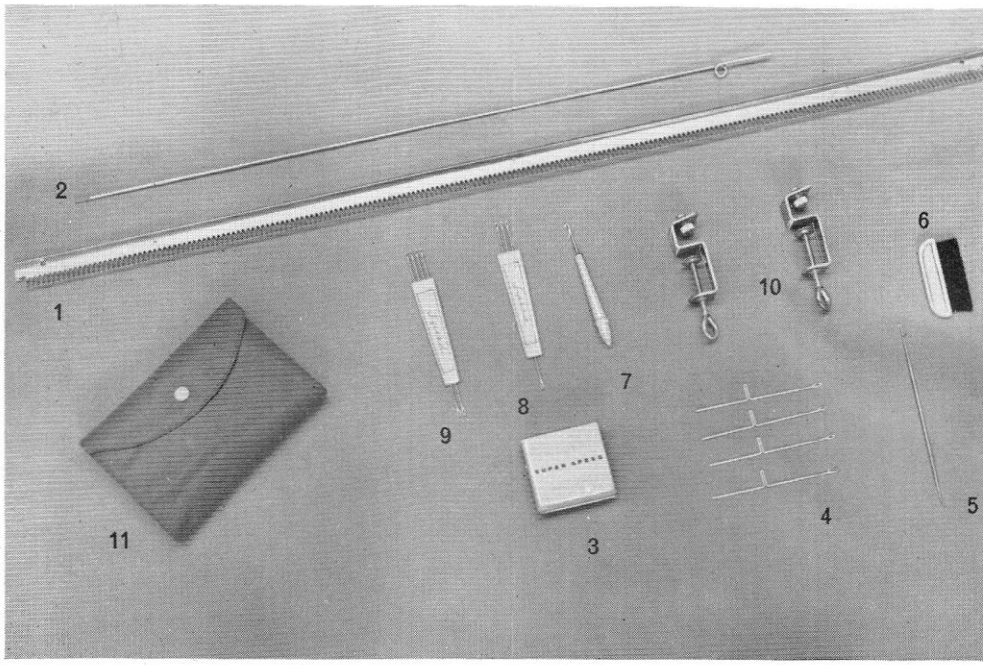
Using the Transfer Tool



Casting-on Closed Edge

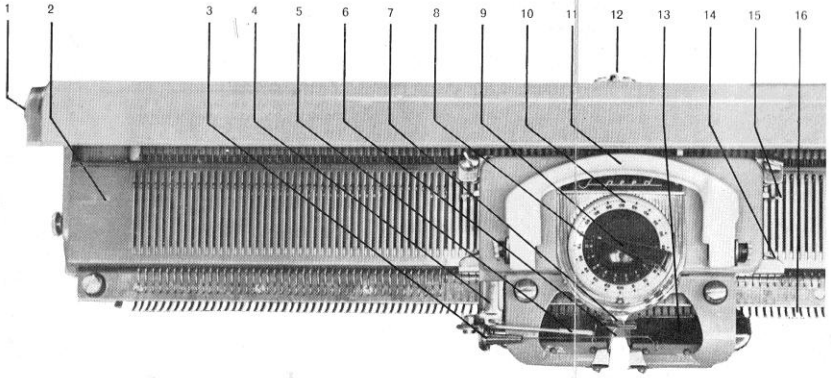


Accessories Pack Key



1. Cast-on Comb
2. Wool Support
3. Needle Selector
4. Latch Needles
5. Work Hook/Crochet Hook
6. Cleaning Brush
7. Latch Needle Tool
8. Transfer Tool 3-1 Type
9. Transfer Tool 4-2 Type
10. Table Clamps
11. Tool Pack

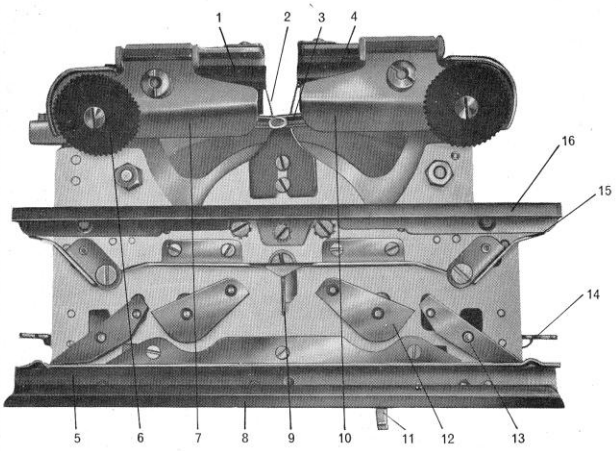
SUPER SPEED H.8 Key



1. Cover Retaining Screw
2. Needle Bed
3. Tension Take-Up Spring
4. Tension Asssembly Clip
5. Tension Keeper
6. Wool Inserter
7. Wire Guide
8. Tension Gauge
9. Tension Gauge Pointer
10. Row Counter Dial
11. Handle
12. Wool Support Clip
13. Latch Opening Brushes
14. Sub Cam Lever
15. Main Cam Lever
16. Sinker Fence

Cambox Key

1. L.H. Brush
2. Wire Guide
3. Wool Inserter
4. R.H. Brush
5. Brass Runner
6. Rubber Roller
7. Fabric Presser L.H.
8. Rear Rail Guide
9. Gate Cam
10. Fabric Presser R.H.
11. Row Counter Actuator
12. Tension Cam R.H.
13. Control Cam R.H.
14. Main Cam Lever
15. Sub Cam Lever
16. Front Rail Guide



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