

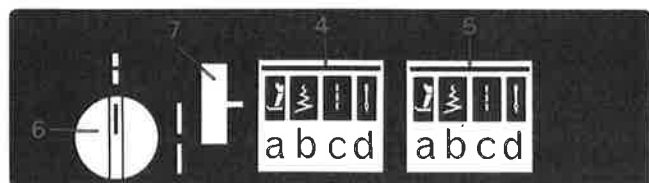
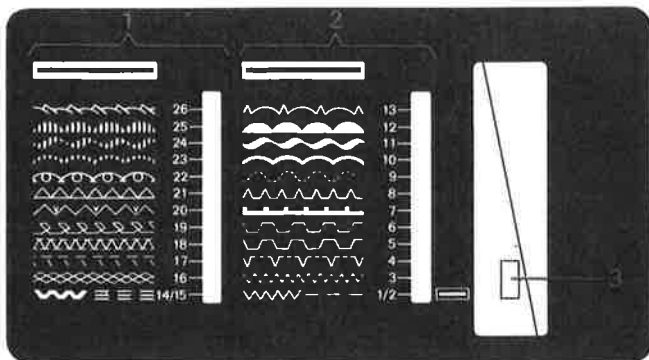
My
BERNINA®
Guide

Model 1030/1020

BERNINA  1030

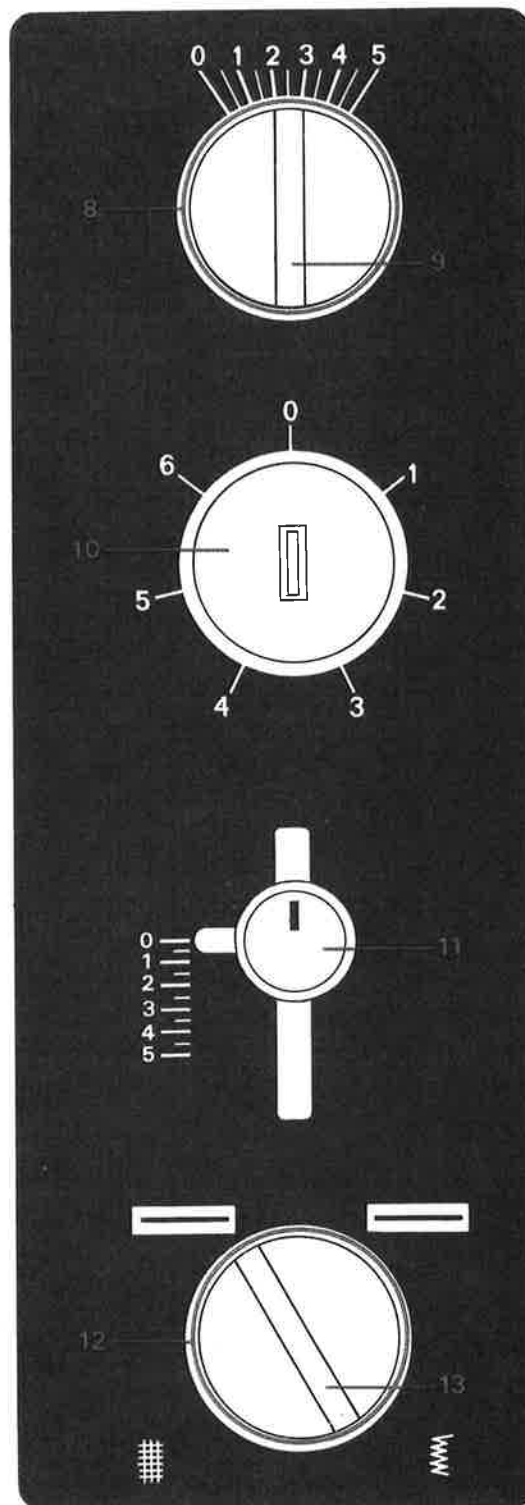
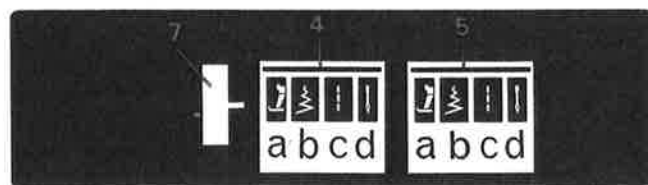
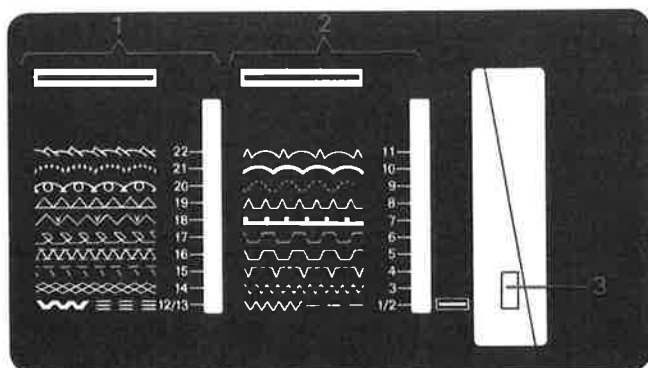


Model 1030

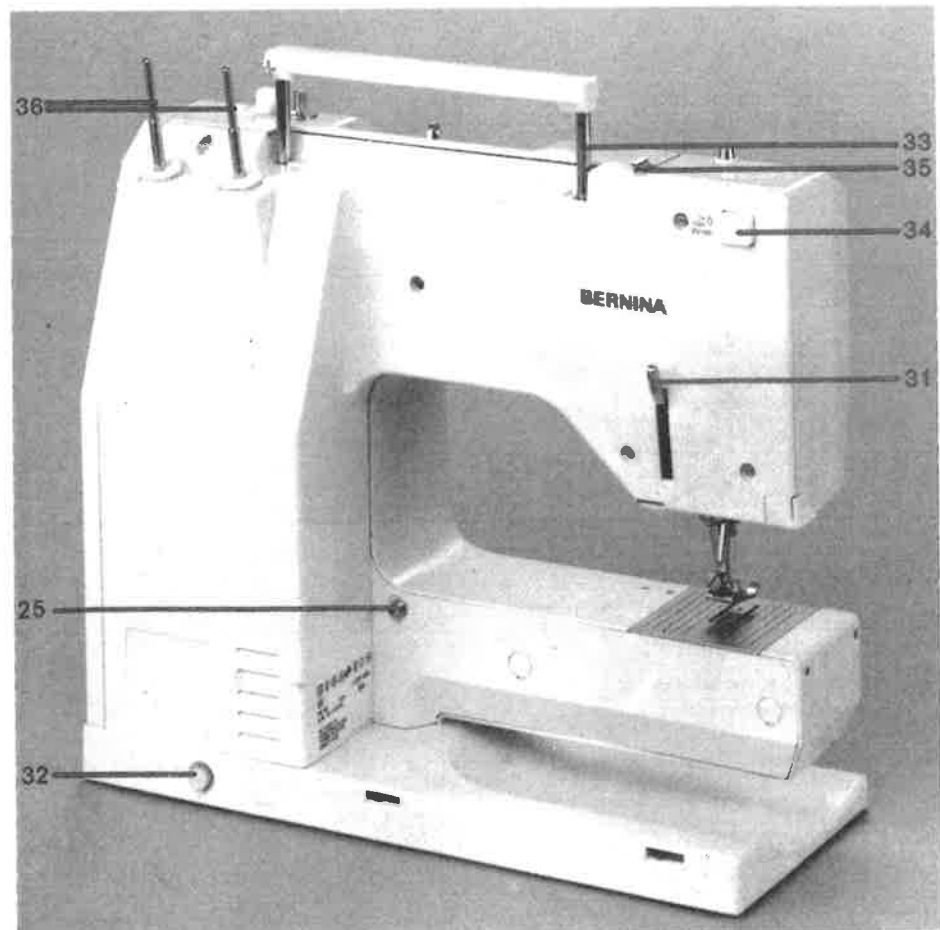
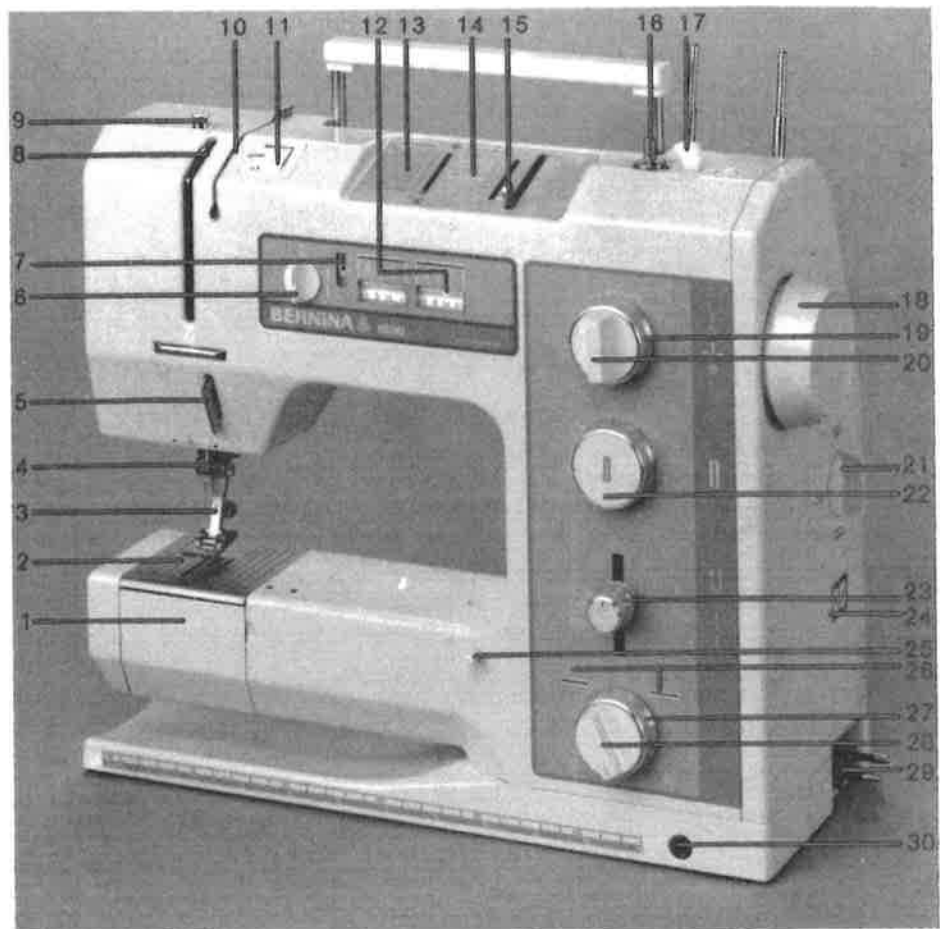


- 1 Red stitch programme
- 2 Green stitch programme
- 3 Selector lever
- 4 Basic setting scale, red stitches
 - a. Presser foot indicator
 - b. Stitch width
 - c. Stitch length
 - d. Needle position
- 5 Basic setting scale, green stitches
 - a. Presser foot indicator
 - b. Stitch width
 - c. Stitch length
 - d. Needle position
- 6 Long stitch selector
- 7 Pattern indicator
- 8 Stitch width knob
- 9 Needle position knob
- 10 Buttonhole knob
- 11 Stitch length knob
- 12 Red-Green stitch programme selector knob
- 13 Feed-dog knob

Model 1020



- 1 Hinged front cover
- 2 Stitch plate
- 3 Presser foot
- 4 Needle clamp
- 5 Thread regulator
- 6 Long stitch selector (model 1030 only)
- 7 Pattern indicator
- 8 Thread take-up lever
- 9 Pre-tension stud
- 10 Thread tension slot
- 11 Adjusting knob for thread tension
- 12 Basic setting scale
- 13 Red stitches
- 14 Green stitches
- 15 Selector lever
- 16 Bobbin spindle
- 17 Engaging lever for bobbin winder
- 18 Handwheel
- 19 Stitch width knob
- 20 Needle position knob
- 21 Power switch
- 22 Buttonhole knob
- 23 Stitch length knob
- 24 Socket for foot control unit
- 25 Securing pins for sewing table
- 26 Indicator for stitch programme (RED-GREEN)
- 27 Stitch programme selector knob
- 28 Selector knob for sewing/darning
- 29 Mains cable
- 30 Presser foot lifter socket
- 31 Presser foot lever
- 32 Cable winder knob
- 33 Carrying handle
- 34 Sewing light switch
- 35 Thread guide
- 36 Thread holder pins



Index 3

Setting up the sewing machine 7

Threads 17
Needles
Presser feet
Practical stitches
Decorative stitches

Practical sewing 27

Creative sewing 49

Troubleshooting 67
Maintenance



Dear BERNINA customer,

You are now the proud owner of a BERNINA 1030/1020. Congratulations on your choice! Our machines are manufactured with the greatest care, they are simple to operate and highly robust. You have bought a high quality product that will give endless enjoyment.

You and your BERNINA 1030/1020 are a winning team. You have the creative ideas while your BERNINA 1030/1020 does the sewing for you. Together you can achieve superb results. By sewing for yourself you can create your own individual style, let your imagination run free. Your BERNINA will give unlimited possibilities for sewing a complete personal wardrobe for yourself. If you require any further information on your sewing machine or any advice on sewing problems you can call on your BERNINA dealer for help.

We wish you enjoyment with your BERNINA 1030/1020 and success in your sewing.

Yours truly,

Odette Ueltschi

Odette Ueltschi-Gegauf, Chairman of the Board
FRITZ GEGAUF LIMITED
Manufacturer of Swiss Sewing Machines, CH-8266 Steckborn TG, Switzerland

BERNINA®

Index

Index

A

Accessories	8
– standard 1030	9
– standard 1020	9
Accessories box	9
– fitting	9
– removing	9
Appliqué	
– multi-colour	57
– single colour	56

B

Basic setting scale	30
Basting	37
Blind hemming	38
Bobbin	
– inserting into bobbin case	13
– winding	12
Bobbin case	
– inserting into hook	13
– removing	12
Bulbs	
– changing	69
– inserting	69
Buttonholes	
40/41/42/43	
Buttonhole-Jeans	41

C

Carrying case	8
Cleaning and oiling	70
Corners	
– sewing and calculating	61
Curves	
– sewing and calculating	62
Cut'n'Sew	65

D

Darning	46
Darning with small darning ring	47
Decorative stitches	
– additional 1030	23
– green 1030	22
– green 1020	24
– red 1030	23
– red 1020	25
Double overlock seam	35

E

Edge stitching	39
Edges	
– oversewing	29
Edging with shirring elastic	44
Edgings on jersey fabric	
– shell	53
Edgings on woven fabric	
– fine	52
– scallop	52
Elastic	53
Elastic-shirring	44/51
Embroidery – basic guidelines	58/59/60/61/62

F

Fault prevention	68
Faulty tension	68
Feed-dog	
– and fabric feed	18
– and sewing corners	18
– and stitch length	18
– lowering	15
Flat joining seams	34
Flowers	59
Foot control unit	10
Forward sewing	28

G

Gathering	
– normal	51
– with perle cord	51
– with shirring elastic	51
Green stitches	
– decorative 1030	22
– decorative 1020	24
– practical 1030	22
– practical 1020	24
– selecting	30

H

Hems – blind	38
Hems – visible	
– with Jersey stitch	33
– with Triple zig-zag	33
– with Vari-overlock	33

I

Interlock fabric	
– mending	44

J

Jeans buttonhole	41
Jeans foot	36

K

Knitted fabrics	
– sewing	32

L

Lace and insertion on woven fabrics	52
Lace on jersey fabric	53
Leaflets – Sewing	66
Service	36
Leather	59
Leaves	37
Long stitch	37
– possibilities	37
Lower thread	
– winding	12

M

Mains cable	10
Maintenance – cleaning and oiling	70
Magazine – «Sewing Club»	66
Mending	
– interlock fabric	44
– tears with Running stitch	45
– woven fabrics	45
Monograms	63
Motor	10

N

Neckband	
– with overlock seam	32
– with visible seam	32
Needle	
– and fabric	19
– and thread	19
– and the sewing machine	19
– breaks	68
– condition	19
– inserting	16
– position	28
– special	20
– the importance of	19
– /thread table	19

O

Oiling and cleaning	70
Open seams	34
Overlock seams	34
Oversewing edges	29

P

Parallel sewing of patterns	60
Patching	
– Jersey stitch	44
– Running stitch	45
Pattern indicator	23/25/58
Plastics	36
Power switch	10
Practical stitch	
– hems	33
– seams	34/35
Practical stitches	
– green 1030	22
– green 1020	24
– red 1030	23
– red 1020	25
Presser feet	
– an aid to sewing	21
– changing	16
Presser foot lifter	
– attaching	11
– lowering the feet-dog	11
Publications	66

R

Red stitches	
– decorative 1030	23
– decorative 1020	25
– practical 1030	23
– practical 1020	25
– selecting	31
Reinforced overlock seam	35
Reverse sewing	28
Ruler/Template	48

Index

S

Satin stitch	34
Seams	
– Double overlock	35
– Flat	35
– Reinforced overlock	35
– Stretch	34
– Triple zig-zag	34
– Zig-zag	34
Seam/quilting guide	37
Securing the ends	28
Securing thick seams	28
Selecting	
– green stitches	30
– red stitches	31
«Sewing Club» magazine	66
Sewing knitted fabrics	32
Sewing light	10
Sewing Service leaflets	66
Sewing table	
– fitting	11
– removing	11
Sewing tips	26
Shell edging	53
Shirring elastic	
– edges	44
– gathering	51
Straight stitch	28
Stretch seam	34

T

Tailor tacking	54/55
Tension	15
Thread	
– bringing up the lower thread	15
– /needle table	19
– tension	15
– upper	14
Thread breaks	
– lower	68
– upper	68
Top stitching	39
Triple straight stitch seam	34

V

Vari-overlock seam	35
Visible hem	
– with Jersey stitch	33
– with Triple zig-zag	33
– with Vari-overlock	33

W

Walking foot	64
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Z

Zig-zag	
– close = satin stitch	34
– setting	29
Zig-zag seam	34
Zips	36

Important

Safety instructions

The following safety instructions must be observed.

– The moving needle is a source of danger (risk of injury to the fingers). Always therefore keep your eyes on the area in which you are working.

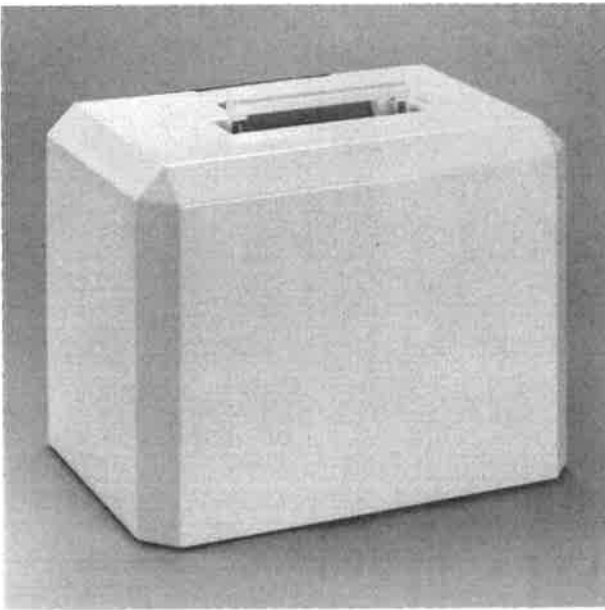
– Any operations performed within the needle movement area, e. g. changing a needle or presser foot, must always be carried out with the machine switched off (power switch at 0). The same applies to removing and replacing the lower thread bobbin.

– When carrying out maintenance (cleaning or oiling), whenever work is interrupted or finished and also for changing bulb, the sewing machine should be disconnected from the mains by removing the mains plug from the socket.

– All repairs to the machine, especially electrical repairs (for example, changing wiring connections) may only be carried out by one of our service agencies.

Setting up the sewing machine

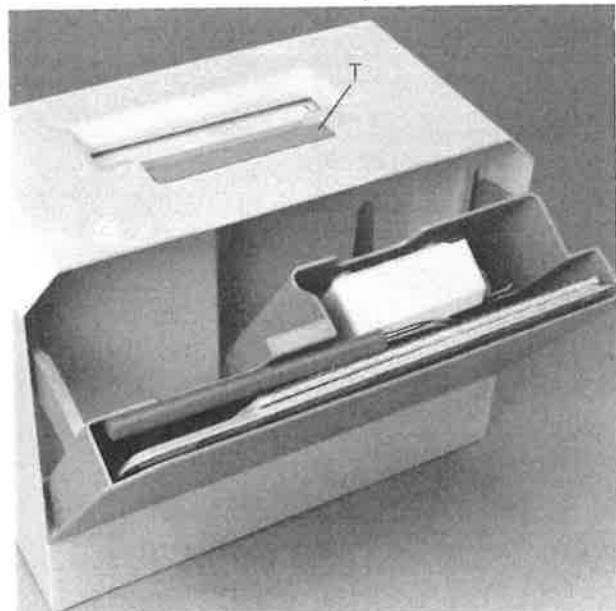
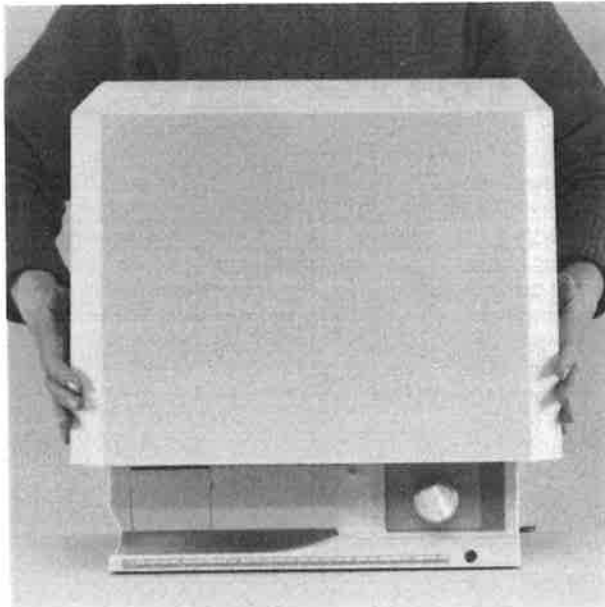
Carrying case	
Accessories	8
Accessories box	
Standard accessories	9
Mains cable	
Foot control unit	
Sewing light	
Power switch	
Needle stop	
Needle stop and foot control unit	10
Presser foot lifter	
Sewing table	11
Bobbin case and bobbin	
Winding the lower thread	12
Inserting the bobbin	13
Threading the upper thread	14
Bringing up the lower thread	
Thread tension	
Feed-dog	15
Inserting the needle	
Changing presser feet	16



**Carrying case,
accessories**

The carrying case protects the machine from dust and dirt.

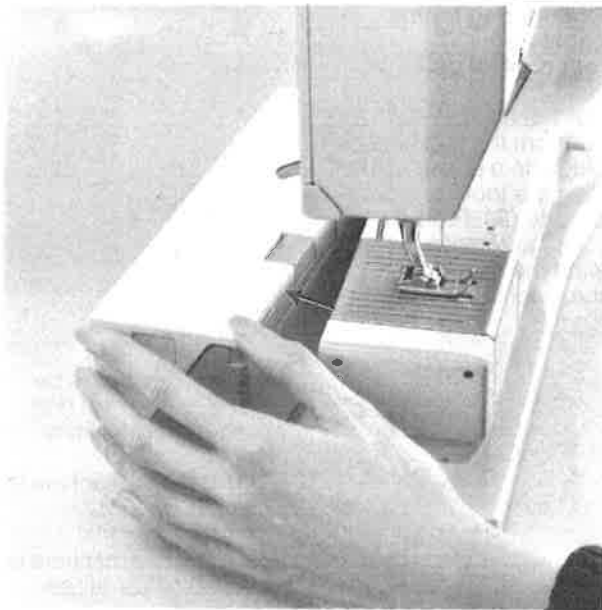
Always carry the machine by its handle.



The case has a built-in accessories compartment. Press bar T to swing out the accessories compartment. This has space to stow the foot control unit, the presser foot lifter, the sewing table and the BERNINA instruction book.

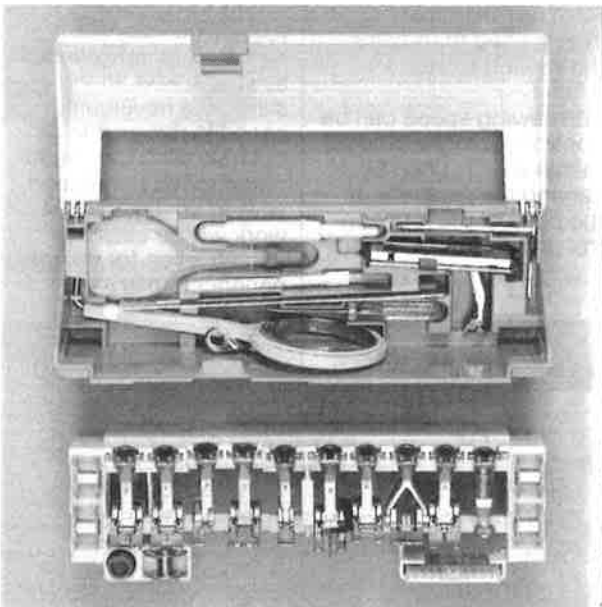
BERNINA 1020

Without carrying case, sewing table and presser foot lifter.



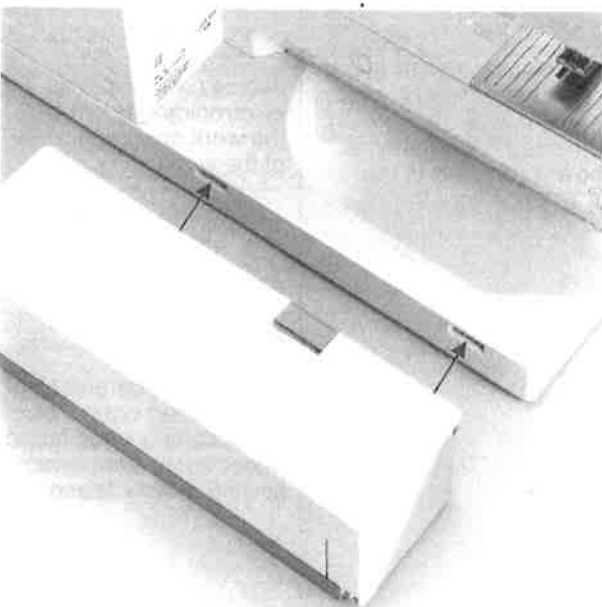
Removing the accessories box

Simply push the accessories box backwards.



Accessories box

The accessories box allows the accessories to be seen at a glance.



Fitting the accessories box onto the machine

The accessories box has two fixing lugs that fit into the base plate of the machine.

Lay the accessories box onto the base plate from the rear, and press against the free arm until the fixing lugs engage in the holes provided.

Standard accessories for the BERNINA 1030

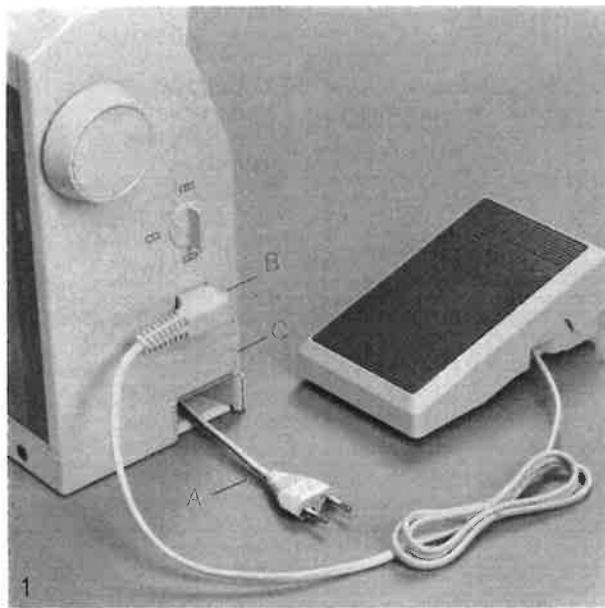
- 6 bobbins with holes
- Needle assortment
- Ruler/template
- Seam ripper
- Darning ring, with arm
- Small screwdriver
- Special screwdriver
- Cleaning brush
- Oiler, filled
- Seam/quilting guide
- Zig-zag presser foot
- Reverse pattern foot
- Overlock foot
- Blind stitch foot
- Buttonhole foot
- Buttonhole foot with slide
- Zip foot
- Darning foot
- Jeans foot
- Tailor tack foot
- Embroidery foot

Standard accessories for the BERNINA 1020

- 6 bobbins with holes
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- Buttonhole foot
- Buttonhole foot with slide
- Zip foot
- Darning foot

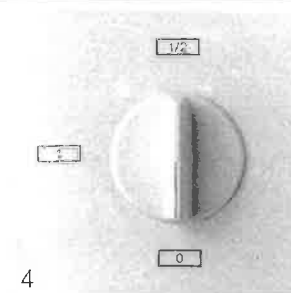
Mains cable, foot control unit, sewing light, power switch, needle stop

Model 1030/1020



Connecting mains cable and foot control unit

Pull the mains cable (A) out from the machine and plug into a power socket. Plug the foot control cable into (B). Press button (C) to automatically rewind the mains cable into the machine.



Power switch

The power switch is below the handwheel (Fig. 4) and has 3 positions.

0 Off The machine is switched off.

1 On The machine is switched on for full sewing speed.

1/2 The machine is switched on for reduced sewing speed. In this position, the maximum speed is reduced to about half. With the machine switched to reduced sewing speed, difficult work will be easier to handle, even for the inexperienced user.



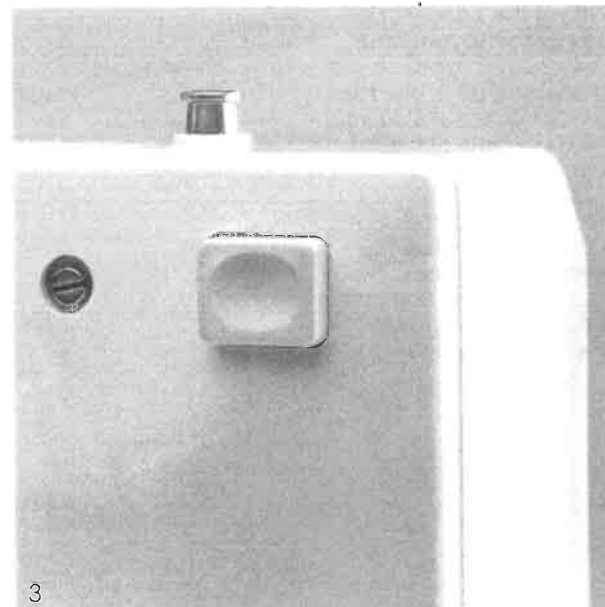
Foot control unit

This is used to regulate the sewing speed.

The sewing speed can be controlled from virtually 0 to maximum speed by varying the pressure on the plate of the foot control unit.

Needle stop and foot control unit

Whenever you stop sewing, the electronic system returns the needle to its highest position. By gently tapping the back of the foot control, the needle can be moved electronically down into the work or up again out of the work.

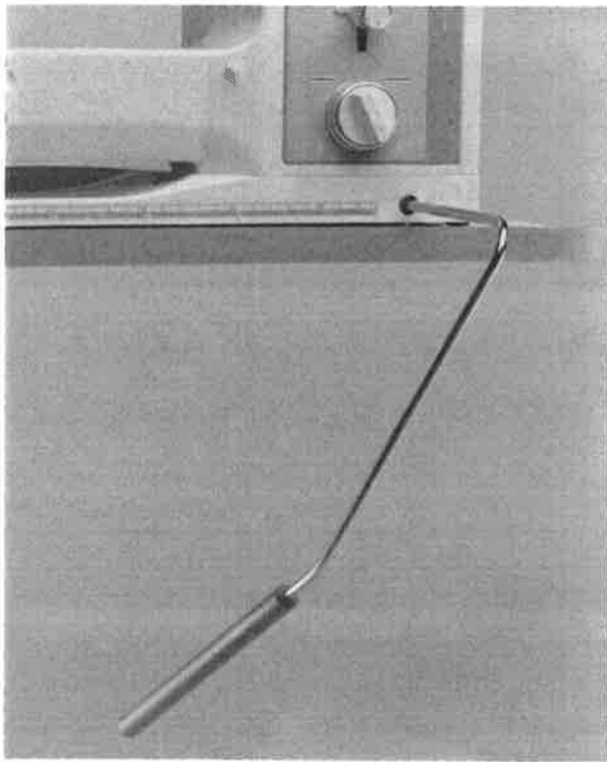


Sewing light

The sewing light is switched on and off by means of the switch at the rear of the machine. When the power switch is in the **0** position, the sewing light is also off.

Motor

The D.C. motor and electronic speed control give exceptionally good fabric penetration, even when sewing at slow speed.



Raise the presser foot Lower the feed-dog

Many sewing techniques are much simpler if both hands are free to guide the work.

The presser foot lifter is operated by the right knee and is used to raise and lower the presser foot, leaving both hands free.

When the presser foot lifter is moved to the right, the presser foot is raised and at the same time the feed-dog is lowered.

The next stitch returns the feed-dog to the normal sewing position.

Attaching the presser foot lifter

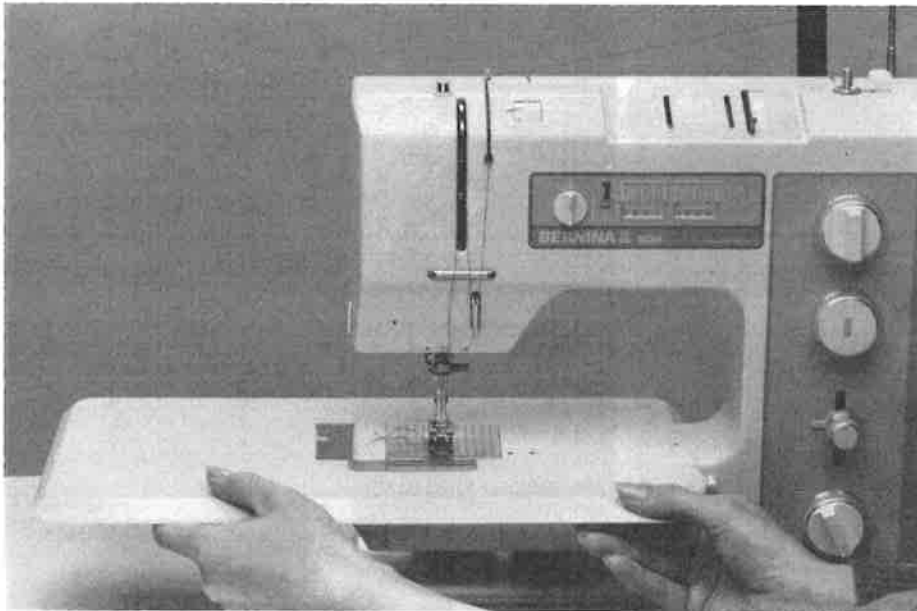
The presser foot lifter is stored in the carrying case (see picture on page 8).

The presser foot lifter socket is located on the front right hand side of the base plate. Insert the presser foot lifter so that it hangs to the left.

It should be possible to operate the presser foot lifter comfortably with the right knee, without the need to alter the customary sitting position.

If the angle of the presser foot lifter is uncomfortable, it can be adjusted.

Your BERNINA dealer will be pleased to make this adjustment for you.



The sewing table

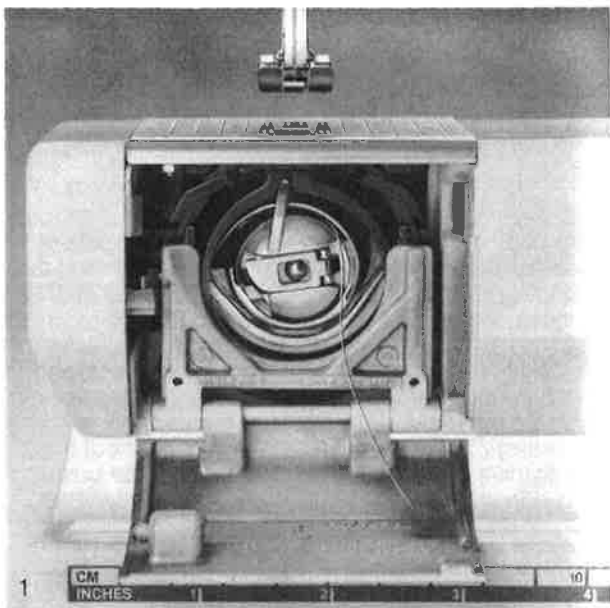
The sewing table is used to enlarge the working surface. It simplifies all sewing where the free arm is not required.

Fitting the sewing table


Slide the table along the free arm until the securing pins engage in the holes provided. Press firmly from the left to lock the sewing table in position on the machine.

Removing the sewing table

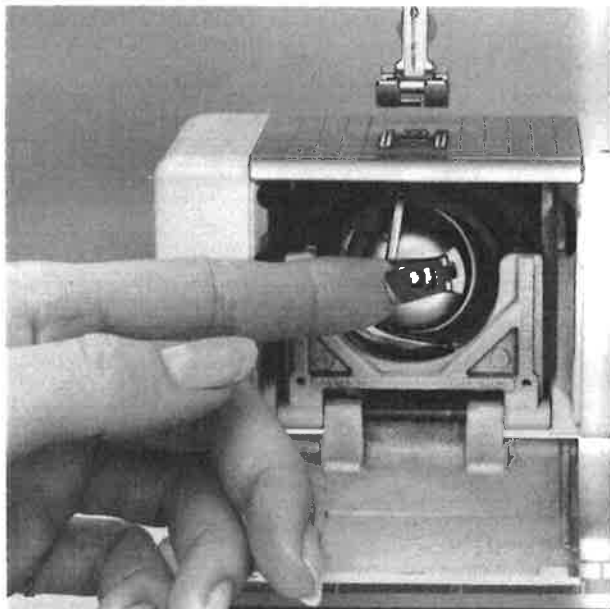
Push firmly to the left (away from the machine) to release the sewing table.



Removing the bobbin case

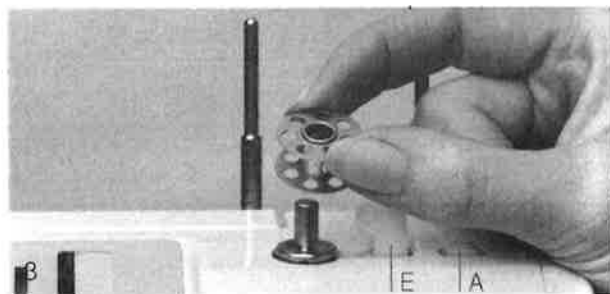
Set the power switch to the  position.

Check that the needle is raised. Open the hinged front cover on the free arm (Fig. 1).

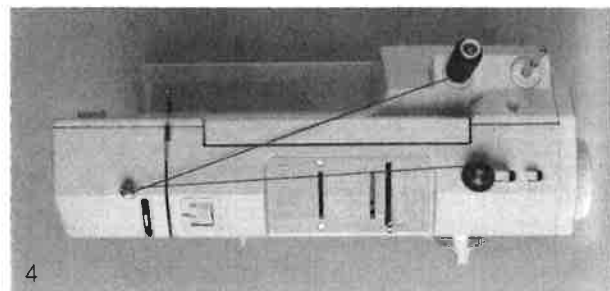



With the index finger and thumb of the left hand, pull the bobbin case latch forward and remove the bobbin case (Fig. 2).

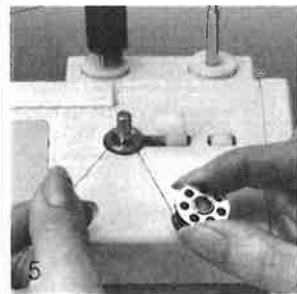
Winding lower thread



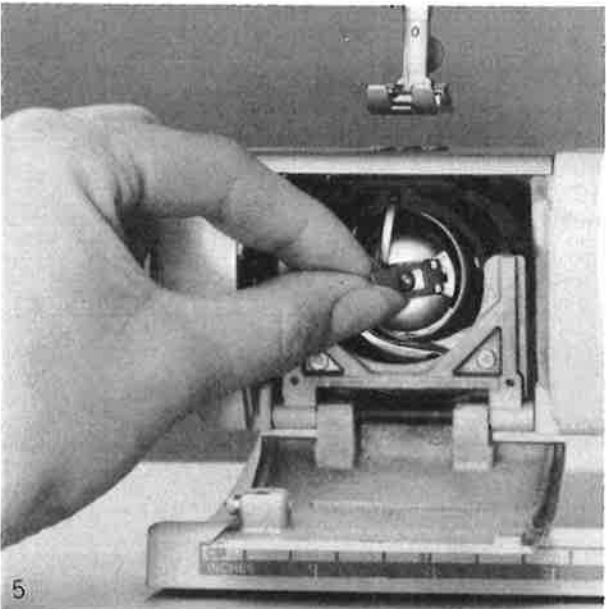
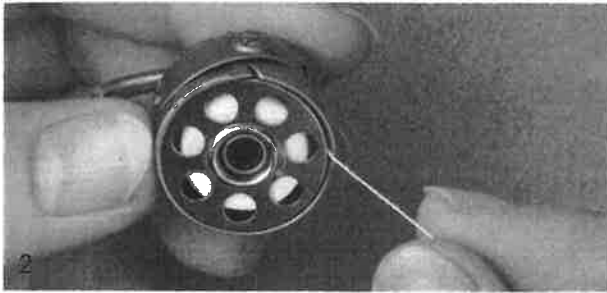
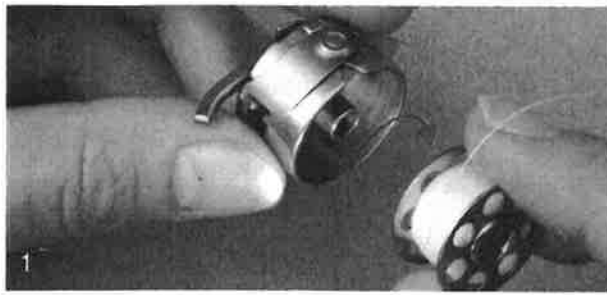
Place empty bobbin on spindle (Fig. 3). Take thread from the reel of thread on the thread holder pin, pass thread clockwise around the pre-tension stud to the empty bobbin (Fig. 4). Wind around the empty bobbin several times, again in a clockwise direction.



Set the power switch to the  position. Press the engaging lever E against the bobbin. The bobbin motor will start to run. When the bobbin is full, the bobbin winder will stop automatically. The winding operation can be stopped at any time, if necessary, by pressing lever A (Fig. 3).



When removing the bobbin, cut the thread by pulling it under and up against the thread cutter at the base of the spindle (Fig. 5).



Inserting the bobbin

Hold the bobbin case in the left hand. Insert the bobbin with the thread running in a clockwise direction, see arrow.

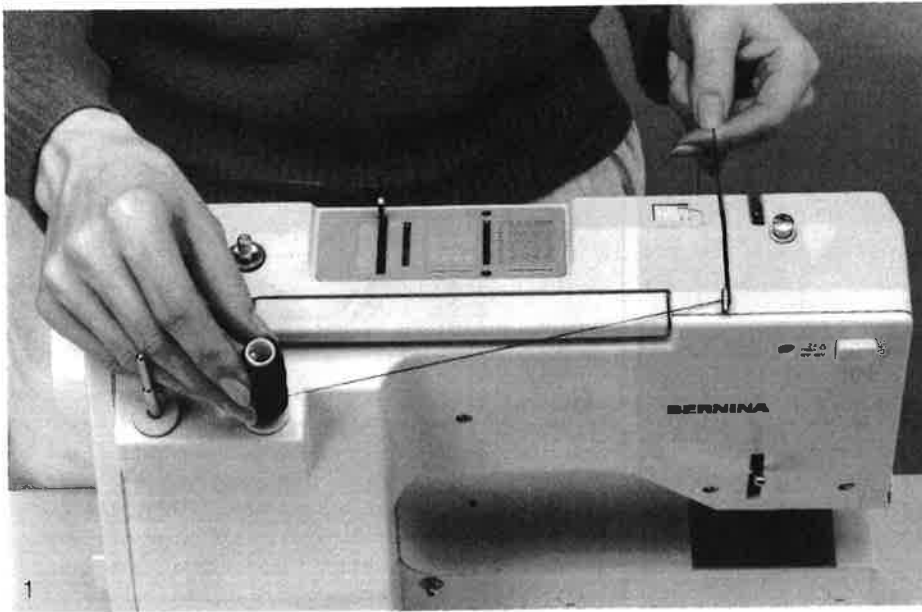
Take the thread anti-clockwise to the slot.

Pull the thread into the slot and under the spring, until it lies in the T-shaped slot at the end of the spring.


When the end of the thread is pulled, the bobbin should turn clockwise, in the direction of the arrow.

Inserting the bobbin case into the hook

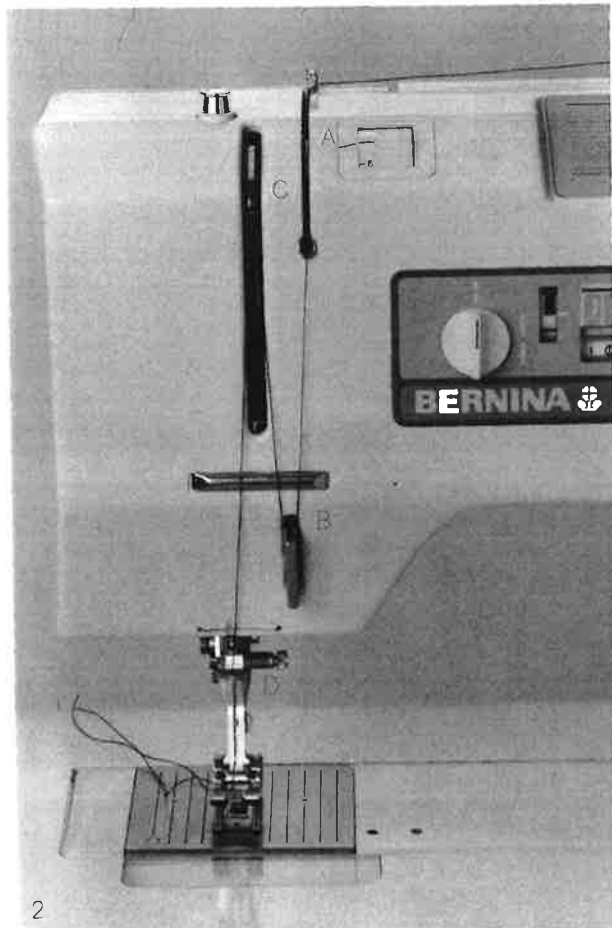
Hold the bobbin case by the latch with the index finger and thumb of the left hand. Insert so that the finger of the bobbin case points upwards, engaging in the notch of the hook race cover. Check: Pull end of thread. Close the hinged front cover.






Threading the upper thread

Set the power switch to OFF . Check that the needle is in the raised position. Raise the presser foot. Place the reel of thread on one of the two thread holder pins. Hold the reel of thread in position while threading.

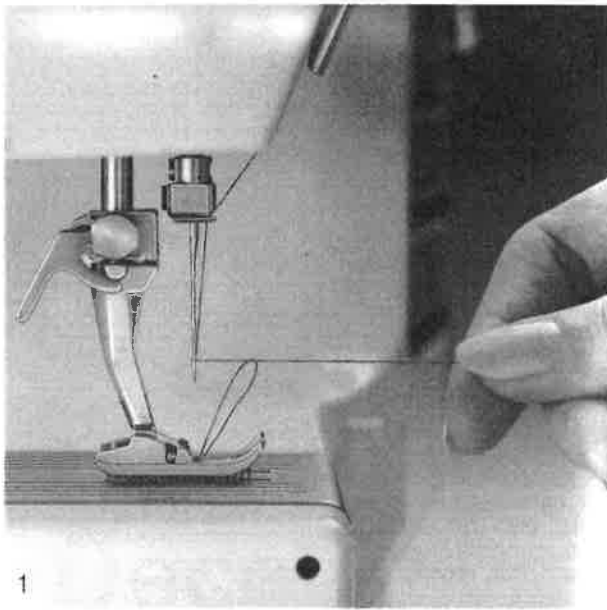
First clip the thread in the thread guide on the top of the machine. Then pull it through the long slot (A) into the thread tension (Fig. 1).




At the front of the machine, take the thread downwards under the thread regulator , then up to the thread take-up lever at the top , and down again to the needle holder thread guide  (Fig. 2).

Always thread the needle from front to back.

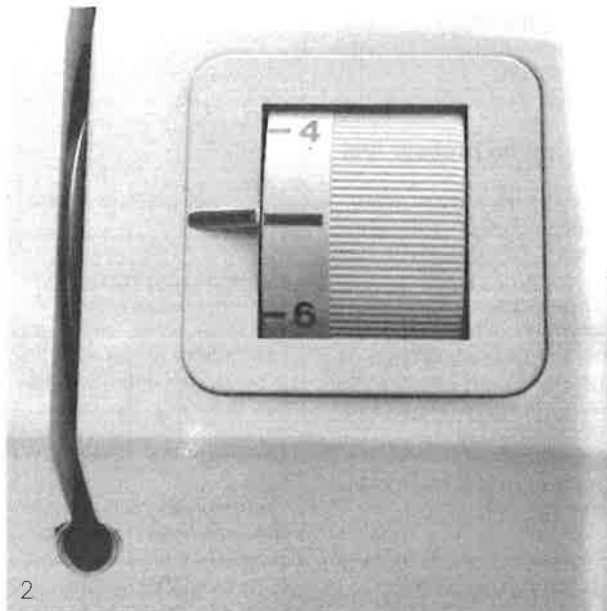
The small white plate on the front of presser foot shank helps when threading the needle eye. Pull the thread approx. 10 cm (4") through the needle eye.



Bringing up the lower thread

Set the power switch to  position. Hold the end of the upper thread with the right hand. Sew a single stitch by tapping on the foot control. Pull the upper thread so that the lower thread is brought up through the stitch plate hole (Fig. 1). Take both threads through the slot in the presser foot and place to the side.

Instead of using the needle stop, the lower thread can also be brought up by turning the handwheel forward until the needle returns to its highest position. In this case the upper thread has to be held with the left hand.

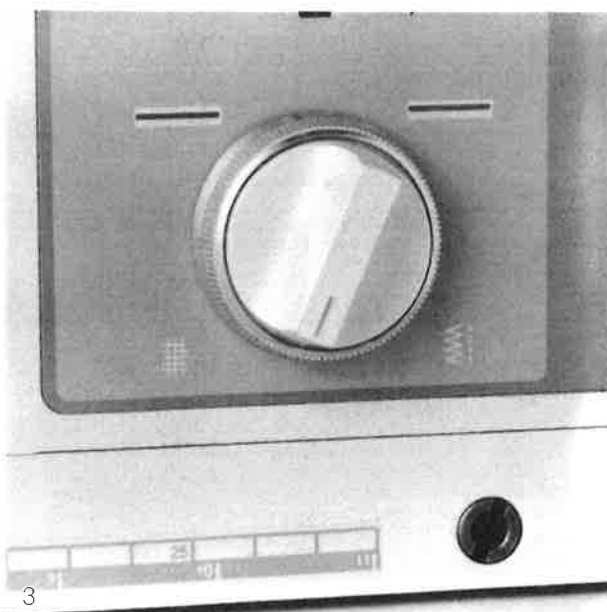


Thread tension



One of the great advantages of BERNINA machines is that the thread tension vary rarely has to be altered for normal sewing. Normal tension is set when the red mark on the regulating dial matches the adjacent mark on the machine (Fig. 2).

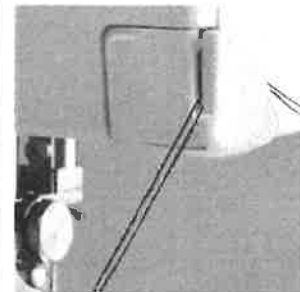
Turning the regulating dial forwards, to number 4 or below, gives a looser upper thread tension. Turning the regulating dial backwards, to number 6 or above, gives a tighter upper thread tension.

Do not forget: The thread tension should be reset to normal when special sewing has been completed.

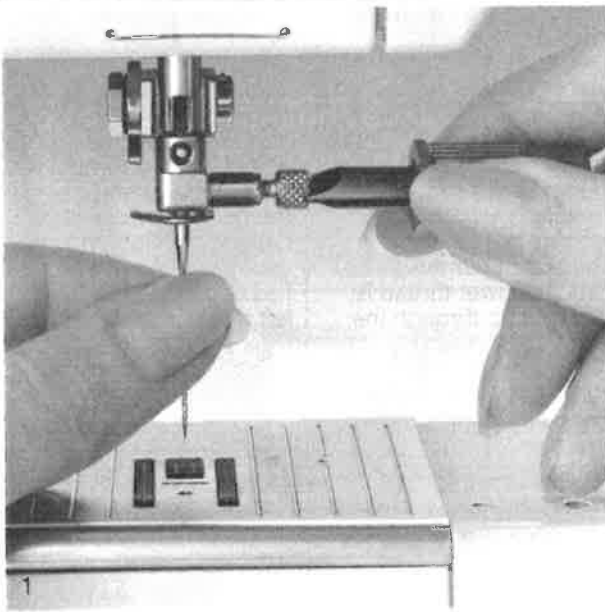


Lowering the feed-dog

For certain types of sewing, eg. for darning, the fabric must not be moved by the feed. Therefore the feed-dog must be lowered, by turning the knob to the left until the mark points to the symbol  (Fig. 3). For all normal sewing, the mark on the knob should point to symbol .




To remove the work, raise the presser foot, pull work out to the rear left and hook both threads into the thread cutter. The thread ends free themselves when you start sewing again.



Inserting the needle

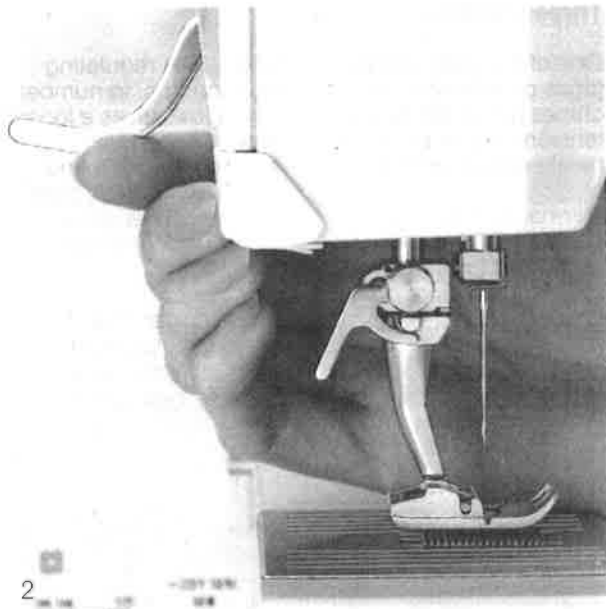
A small brown screwdriver for slackening or tightening the needle clamp is provided in the accessories box.

Set the power switch to the  position. Check that the needle is in the raised position.

To slacken the needle clamp: half a turn forwards, anti-clockwise (Fig. 1).

To insert the needle: The flat side of the needle shank should always be to the rear. Insert the needle until it reaches the top. If the needle does not reach the top, i.e. is set too low, skipped stitches will result.

Tighten the needle clamping screw securely.



Changing presser feet

For the various presser feet and their uses, see page 21.

The success of a piece of sewing largely depends on the correct choice of **presser foot**. The **presser feet** are **easy** and **practical** to change.

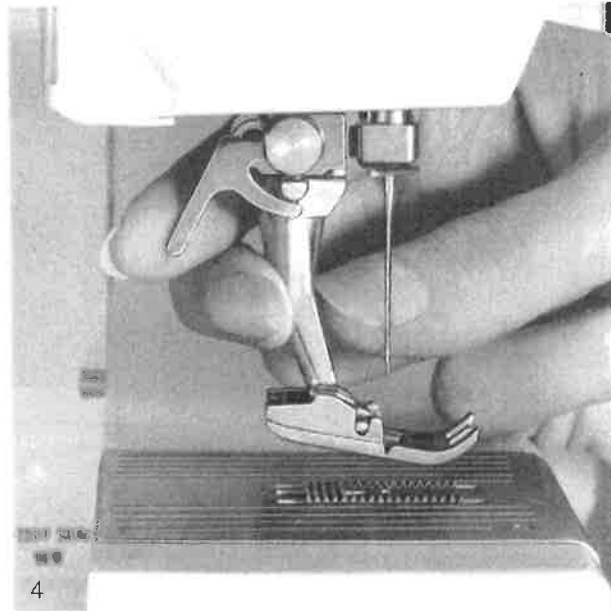
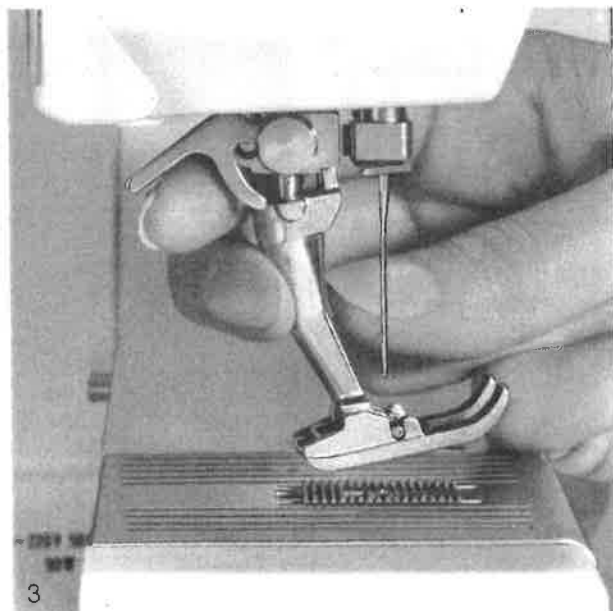
Set the power switch to the  position.

Check that the needle is in the raised position.

Raise the presser foot (Fig. 2).

Raise the clamping lever with the index finger of the right hand, and using the middle finger and thumb, remove the presser foot (Fig. 3).

To attach the presser foot: The procedure is the same, but press the clamping lever downwards with the index finger (Fig. 4).



Threads

Needles

Presser feet

Practical stitches

Decorative stitches

Feed-dog and fabric feed	18
Threads and needles	19
Special needles	20
Presser feet	21
Practical and decorative stitches	
Model 1030	22/23
Practical and decorative stitches	
Model 1020	24/25
Some sewing tips	26

1. Feed-dog and stitch length

With each stitch, the feed-dog moves forward by one stitch. The length of this step is governed by the stitch length selected. With an extremely short stitch length, the steps are extremely short. The fabric moves under the presser foot slowly. For example, buttonholes and satin stitching are sewn with this short stitch length.

Important

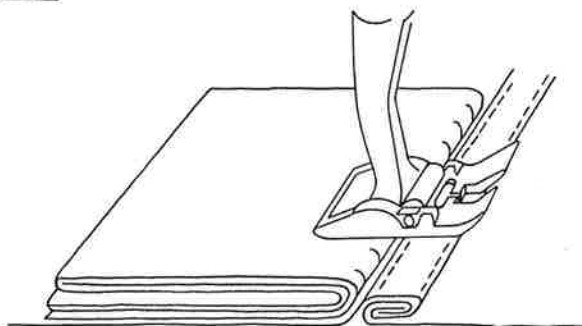
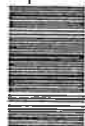
a) Make sure that the fabric feeds evenly!



b) Pulling or pushing will result in «gaps».

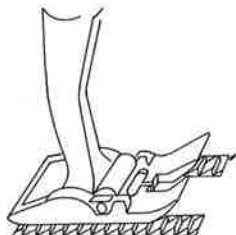


c) Holding back will result in «pile-ups».

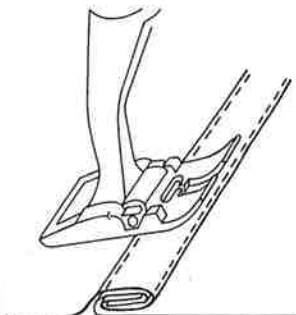


2. Feed-dog and fabric feed

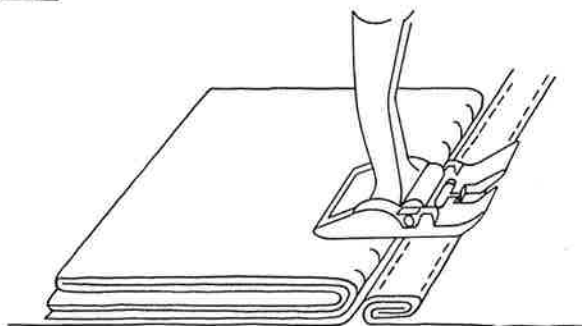
a) The feed-dog can only work effectively if the presser foot is horizontal.



b) If the presser foot is tilted, eg. at a very thick seam or hem, the feed-dog will be unable to grip the fabric. The work will stick.



c) Place a piece of fabric, neatly folded to the thickness of the seam, beside the sewing, so that the presser foot is again level.

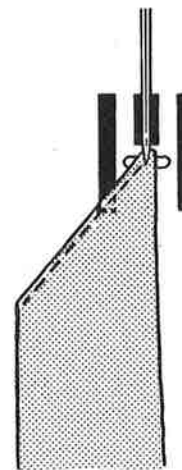


3. Feed-dog and the sewing of corners

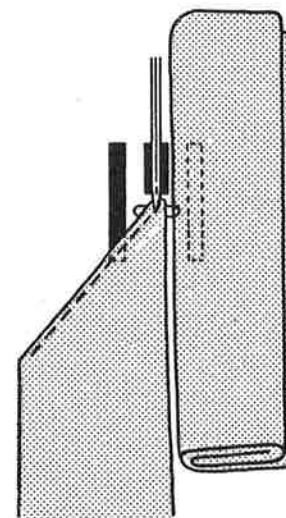
a) The two rows of teeth of the feed-dog are quite a distance apart, because of the width of the needle hole.



b) When sewing corners, only a small part of the fabric is on the feed-dog, so it cannot transport the work correctly.



c) If a folded piece of fabric is placed against the corner, the feed-dog will once again be able to work properly.



The importance of the sewing machine needle

Needles and the sewing machine

Your BERNINA has a 130/705 H needle system. Make sure, when buying new needles, that they are the 130/705 H system.

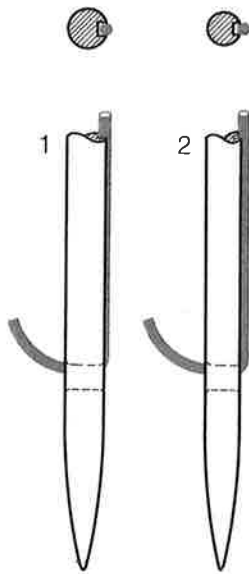
Commercially available needle sizes are nos. 70 to 120. The finer the needle, the lower the number. For thread, the opposite applies. The finer the thread, the higher the number.

The table below shows which needle should be used for which thread.

Needles and thread

The needle size required depends on the thread selected. The needle must match the thread.

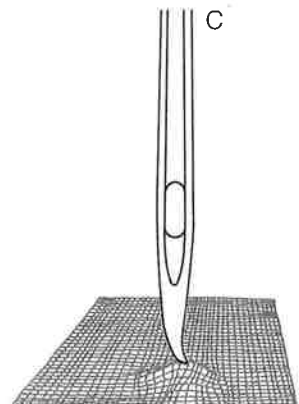
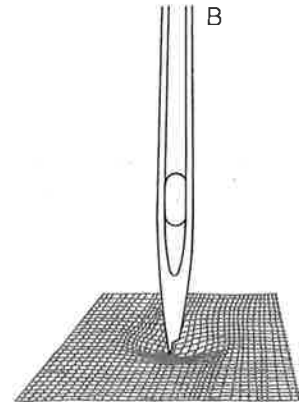
When sewing, the thread lies in the long groove to the front of the needle (Fig. 1). If the needle is too fine, the thread will not fit into the groove (Fig. 2) and skipped stitches will result.



Needle and fabric Needle condition

The needle must be in perfect condition. Sewing problems are caused by:

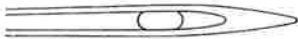





- Bent needles (A)
- Blunt needles (B)
- Hooked tips (C)



Needle/Thread Table

Needle	70	80	90	100	110-120
Darning/Embroidery thread 60	*	*			
Embroidery thread 30		*			
Mercerised cotton sewing thread		*	*		
Synthetic sewing thread		*	*		
Coarse mercerised cotton Mercerised synthetic			*	*	
Buttonhole thread for top stitching (Cordonnet)				*	*

The modern domestic sewing machine is capable of handling a very wide range of fabrics. However, as with industrial machines, special needles are required for some of these tasks, i.e. needles with varying types of point.

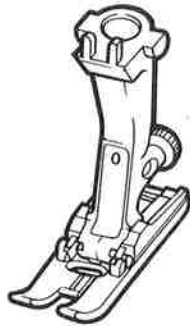
Table of needles	Needle description	Needle point	Suitable for
Standard needles	130/705 H	Normal point, slightly rounded	Universal needle for woven synthetic and natural fibres, e.g. chiffon, batiste, organdy, linen, wool, velvet, etc.
			
Special needles	130/705-SES	Fine ball point	Fine knits in silk, synthetics, cotton and fine wool.
			
	130/705 H-SUK	Medium ball point	Heavier knitted fabrics in synthetic or natural fibres.
			
	130/705 H-Stretch	Medium ball point	Special stretch needle. Especially for delicate or difficult stretch fabrics.
			
	130/705 H-J	Extra fine point	Twill, workwear, heavy linen, denim fabrics, canvas. Penetrates dense fabrics more easily.
			
	130/705 H-LL or H-LR	Cutting point	Leather, suede, calfskin, kid, pigskin, imitation leathers and suedes, plastics.
			

Presser feet are an important aid to sewing. They are designed with grooves and guides. The success of a piece of sewing is determined by the correct choice of presser foot.

However, individual presser feet are not just for one particular type of work. They can also be used to simplify other tasks.

* Additional accessory for Model 1020

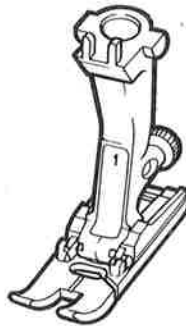
0



Zig-zag foot

Straight stitch
Zig-zag
Green practical stitches

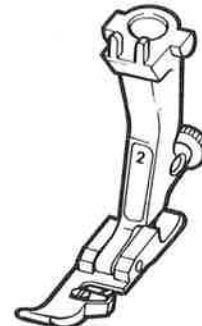
1



Reverse pattern foot

Red practical stitches
Red decorative stitches

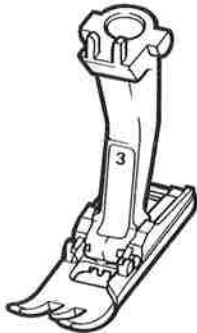
2



Overlock foot

Vari-overlock seam
Vari-overlock hem
Oversewing seam edges

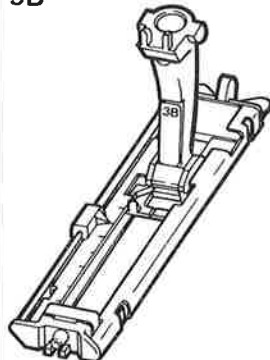
3



Buttonhole foot

Buttonholes

3B



Buttonhole foot with slide

Buttonholes

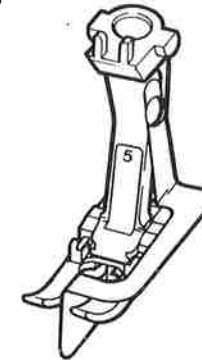
4



Zip foot

Sewing in zips
Sewing close along raised seam

5



Blind stitch foot

Blind hemming
Edge stitching

6*



Embroidery foot

Decorative stitches
Satin stitching
Applique
Couching

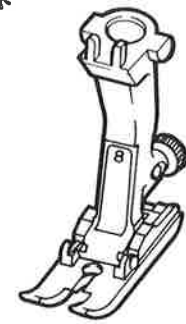
7*



Tailor tack foot

Tailor tacking
Fringing
Faggotting

8*



Jeans foot

Straight stitch seams in hard, thick fabrics and over thick seams

9



Darning foot

Darning
Free hand monograms
Free hand embroidery


Range of applications

Green practical stitches

Model 1030

Green decorative stitches


1 Straight stitch



All types of non-elastic fabric

All straight stitch work


2 Zig-zag stitch



For most types of fabric

All simple zig-zag work, eg. over-sewing, especially on fine fabrics. Sewing elastic and lace.


3 Sewn-out zig-zag



For most types of fabric

Oversewing loosely woven fabrics, reinforcing and repairing edges, decorative work.


4 Blind stitch



For most types of fabric

Blind hemming, shell edging on soft jersey and fine fabrics, decorative work.


5 Universal stitch



For firmer knitted fabrics, felt leather etc.

Flat joining seams, visible hems, patchwork, mending interlock fabrics, sewing on elastic, decorative seams.

6 Lycra stitch



Especially for lycra fabric

Flat joining seams and hems, re-sewing of seams in foundation garments.

7 Stretch stitch



For highly elastic fabrics

Highly elastic open seams for ski, horse-riding, climbing and hiking wear.


8 Vari-overlock



Primarily for fine synthetic and silk jerseys, helanca and fine cotton and wool jerseys.

Elastic overlock seams and hems, particularly suitable for sports underwear, pyjamas, T-shirts, sweat-shirts, jogging suits etc.


9 Running stitch



For most types of fabric

Darning with running stitch, mending of woven fabric, reinforcing edges etc.


10 Scallop stitch





Primarily for woven fabrics

Edging of tablecloths, place mats, collars, cuffs etc.

11-13 Decorative stitches

11 

12 

13 

Range of applications

Red practical stitches

Model 1030

Red decorative stitches

14 Triple straight stitch



For corduroy, denim, overall and deckchair fabrics, carpet borders, rucksacks, sleeping bags and similar.

Hard wearing seams for joining pieces of fabric or top stitching of seams.

15 Triple zig-zag



For denims, corduroys, leathers, decorative hems, light fabrics for blinds and similar

Visible hems and seams, sewing on tape, extra strong seam for sportswear, woollen blankets, sleeping bags, rucksacks, deckchair fabrics etc.

16 Honeycomb stitch



For many types of jersey and smooth fabrics

Visible hems and seams for T-shirts, sweatshirts, underwear, place mats, table-cloths, craft work etc.

17 Towelling stitch



Primarily for towelling fabrics, denim, leather and other firmer fabrics.

Flat joining seams, visible hems for beachwear, craft work.

18 Double overlock



For all types of knitted fabrics and hand and machine knitted items.

Overlock seam = Sewing and over-sewing in one operation (hand and machine knitted goods).

19 Jersey stitch



For jersey in natural, blended and synthetic fibres

Visible hems and seams, particularly in underwear and sweatshirts, mending interlock fabrics, sewing on elastic etc.


20 Edge stitch



For most types of fabric

Visible hems, sewing on lace and tapes of all kinds, decorative edges, craft work.

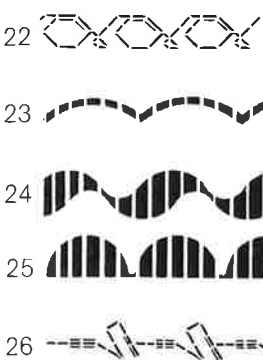
21 Reinforced overlock stitch

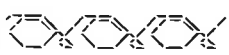



For sweatshirt material, towelling, medium knits


Reinforced overlock seams, craft work.


22-26 Decorative stitches




22 

23 

24 

25 

26 

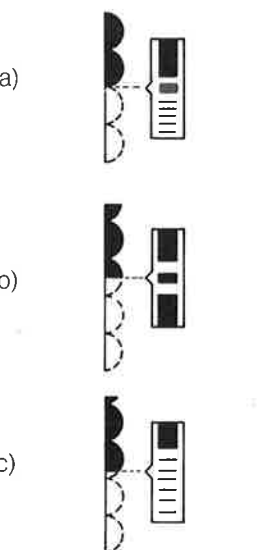
The pattern indicator


The pattern indicator shows how far a pattern has been sewn.

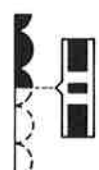
a) The red mark shows the beginning and end of a pattern.

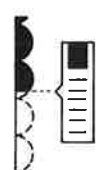
b) The black mark shows the centre of the pattern.

c) The broken bar (horizontal black marks) warns that the pattern is nearly finished.



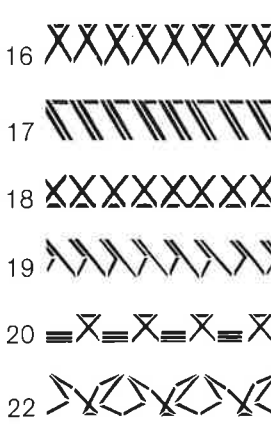
a) 


b) 


c) 


Additional Decorative stitches


Red stitches combined with Long Stitch





16 

17 

18 












19 

20 

22 

Range of applications Green practical stitches

Model 1020 Green decorative stitches

<p>1 Straight stitch</p>  <p>All types of non-elastic fabric</p> <p>All straight stitch work</p>	<p>2 Zig-zag stitch</p>  <p>For most types of fabric</p> <p>All simple zig-zag work, eg. over-sewing, especially on fine fabrics. Sewing elastic and lace.</p>	<p>3 Sewn-out zig-zag</p>  <p>For most types of fabric</p> <p>Oversewing loosely woven fabrics, reinforcing and repairing edges, decorative work.</p>	<p>4 Blind stitch</p>  <p>For most types of fabric</p> <p>Blind hemming, shell edging on soft jersey and fine fabrics, decorative work.</p>
<p>5 Universal stitch</p>  <p>For firmer knitted fabrics, felt leather etc.</p> <p>Flat joining seams, visible hems, patchwork, mending interlock fabrics, sewing on elastic, decorative seams.</p>	<p>6 Lycra stitch</p>  <p>Especially for lycra fabric</p> <p>Flat joining seams and hems, re-sewing of seams in foundation garments.</p>	<p>7 Stretch stitch</p>  <p>For highly elastic fabrics</p> <p>Highly elastic open seams for ski, horse-riding, climbing and hiking wear.</p>	<p>8 Vari-overlock</p>  <p>Primarily for fine synthetic and silk jerseys, helanca and fine cotton and wool jerseys.</p> <p>Elastic overlock seams and hems, particularly suitable for sports underwear, pyjamas, T-shirts, sweat-shirts, jogging suits etc.</p>
<p>9 Running stitch</p>  <p>For most types of fabric</p> <p>Darning with running stitch, mending of woven fabric, reinforcing edges etc.</p>	<p>10 Scallop stitch</p>  <p>Primarily for woven fabrics</p> <p>Edging of tablecloths, place mats, collars, cuffs etc.</p>	<p>11 Decorative stitches</p> 	

Range of applications Red practical stitches

Model 1020 Red decorative stitches

12 Triple straight stitch



For corduroy, denim, overall and deckchair fabrics, carpet borders, rucksacks, sleeping bags and similar.

Hard wearing seams for joining pieces of fabric, or top stitching of seams.


13 Triple zig-zag



For denims, corduroys, leathers, decorative hems, light fabrics for blinds and similar.

Visible hems and seams, sewing on tape, extra strong seam for sportswear, woollen blankets, sleeping bags, rucksacks, deckchair fabrics etc.


14 Honeycomb stitch



For many types of jersey and smooth fabrics.

Visible hems and seams for T-shirts, sweatshirts, underwear, place mats, table-cloths, craft work etc.


15 Towelling stitch



Primarily for towelling fabrics, denim, leather and other firmer fabrics.

Flat joining seams, visible hems for beachwear, craft work.


16 Double overlock



For all types of knitted fabrics and hand and machine knitted items.

Overlock seam = Sewing and over-sewing in one operation (hand and machine knitted goods).

17 Jersey stitch



For jersey in natural, blended and synthetic fibres.

Visible hems and seams, particularly in underwear and sweatshirts, mending interlock fabrics, sewing on elastic etc.


18 Edge stitch



For most types of fabric.

Visible hems, sewing on lace and tapes of all kinds, decorative edges, craft work.

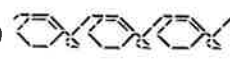

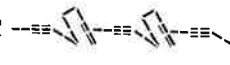
19 Reinforced overlock stitch



For sweatshirt material, towelling, medium knits.

Reinforced overlock seams, craft work.

20 Decorative stitches


The pattern indicator

The pattern indicator shows how far a pattern has been sewn.


a) The red mark shows the beginning and end of a pattern.

b) The black mark shows the centre of the pattern.


c) The broken bar (horizontal black marks) warns that the pattern is nearly finished.



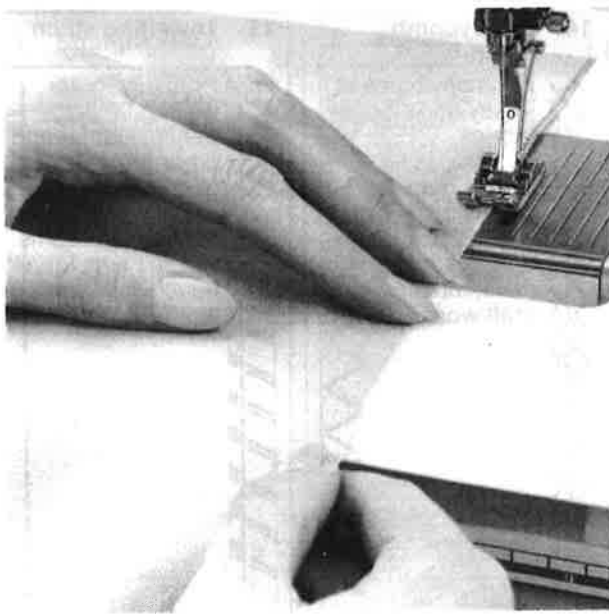
a)



b)



c)



A few hints

Set your BERNINA far enough away from the table edge. The inserted presser foot lifter should be only a short distance in front of the table edge. (1030 only)

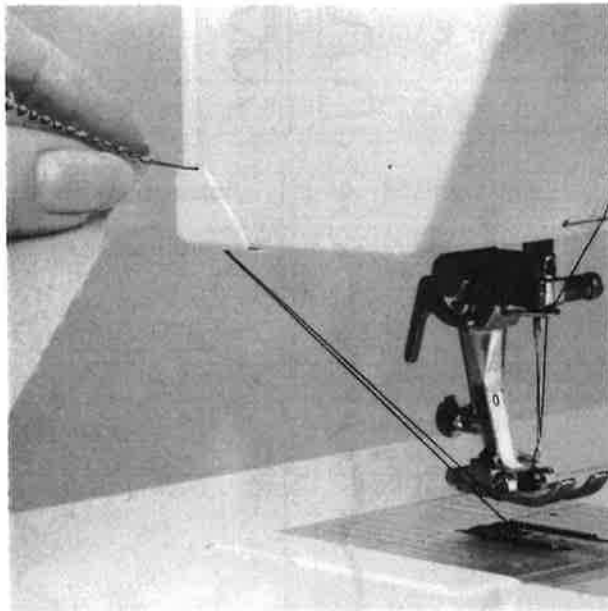
Correct seating position and correct guiding of the work will make sewing easier. Sit right in front of the needle, i.e. in front of the working area.

This will enable you to watch the working area without strain.

Ensure that the height of your seat allows you to work comfortably.

It is best to guide the work from the side, with the fingers of the left hand close to the presser foot (Fig. 1).

With delicate work it is preferable to stop and guide it a little at a time, rather than let the work slide beneath the fingers.

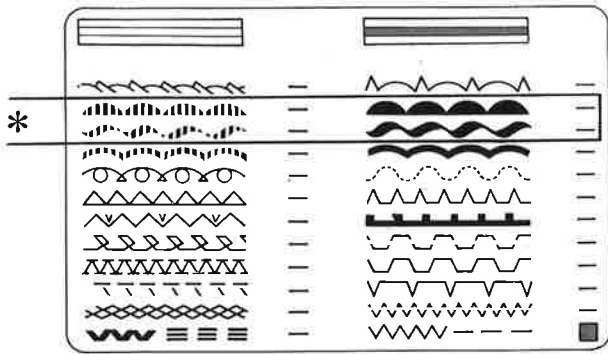


To remove the work, raise the presser foot, pull work out to the rear left, and hook both threads into the thread cutter (Fig. 2).

The thread ends free themselves when you start sewing again.

Practical sewing

Straight stitch	
Needle position	28
Zig-zag	
Satin stitch	
Oversewing edges	29
Selecting green stitches	30
Selecting red stitches	31
Sewing knitted fabrics	32
Practical stitch hems	33
Practical stitch seams	34/35
Zips	
Jeans foot	
Plastics/leather	36
Long stitch	
Seam/quilting guide	37
Blind hemming	38
Edge stitching using the needle position	39
Buttonhole – buttonhole foot 3B	40
Buttonhole – buttonhole foot 3B with gimp cord	41
Buttonhole (foot no. 3)	42
Buttonhole (foot no. 3) with gimp cord	43
Mending interlock fabric	44
Mending woven fabric	45
Darning	46
Darning with small darning ring	47
Ruler Template	48



* not available on Model 1020

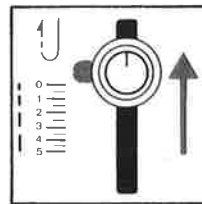
Presser foot:	0
Thread:	according to fabric
Needle:	according to thread
Stitch:	-----
Stitch width:	0
Stitch length:	1-5 according to fabric
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	██████████

Forward sewing

The machine sews forwards with the settings specified and with the selected stitch length. The stitch length is selected according to the type of sewing and fabric.

Reverse sewing

Push the stitch length knob upwards above 0 and hold until reverse sewing is finished. When the knob is released, the machine will again sew forwards with the previously selected stitch length.

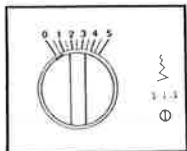


Securing the ends

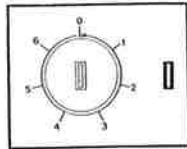
At the beginning and end of a seam, sew in reverse for approx. 1 cm (3/8") and then forwards again.

Securing thick seams

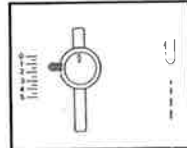
When changing from forward to reverse sewing and vice versa, stop the machine. The needle stop device always returns the needle to its highest position when the machine stops. This prevents the needle from being bent by thick fabrics.



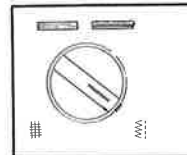
Stitch width
Needle position



Buttonhole

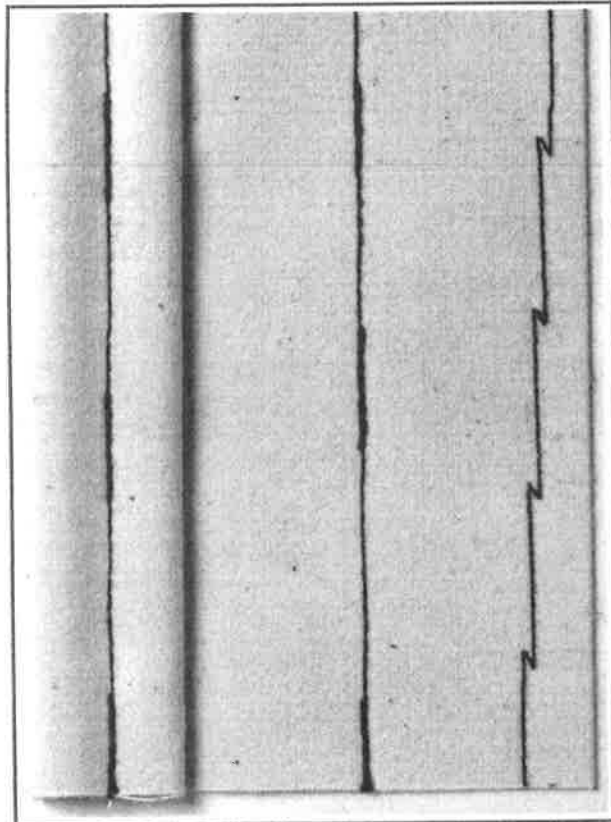


Stitch length
Normal stitch length is approx. 2



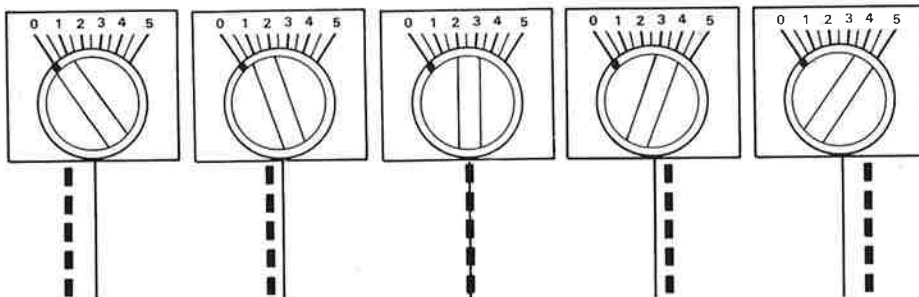
Colour indicator

Feed-dog



Five needle positions

The position of the stitch needle position knob. can be set to left and right in five positions with the




For normal sewing, the needle is in the centre

Examples of use:

- Sewing in zips page 36
- Blind hem page 38
- Edge stitching page 39

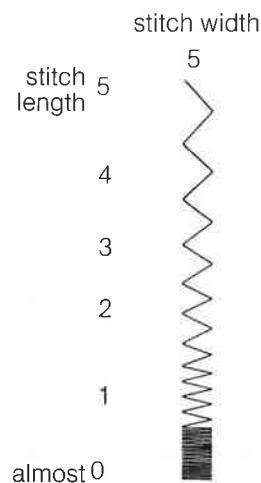
Setting zig-zag

Presser foot:	0
Thread:	according to fabric
Needle:	according to thread
Stitch:	^/~/~/~/~/~/~/~/~/~/
Stitch width:	1-5
Stitch length:	1-5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Setting zig-zag width and length

The stitch width and length can be altered during sewing or while the machine is stopped.

Set the width of the zig-zag stitch with the stitch width knob. It is completely step-free up to 5 mm. **The needle must not be left in the work when the machine is stopped.**



Satin stitch = close zig-zag

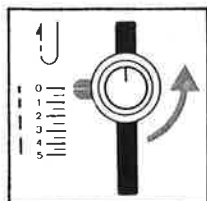
Presser foot:	0 (6*)
Thread:	embroidery thread no. 30
Needle:	80
Stitch width:	1½-5
Stitch length:	IIII

*Additional accessory for Model 1020

Set stitch length to very close zig-zag

Turn stitch length knob to the right until it locks.

The mark on the knob is at the top. Stitch length is now 0.



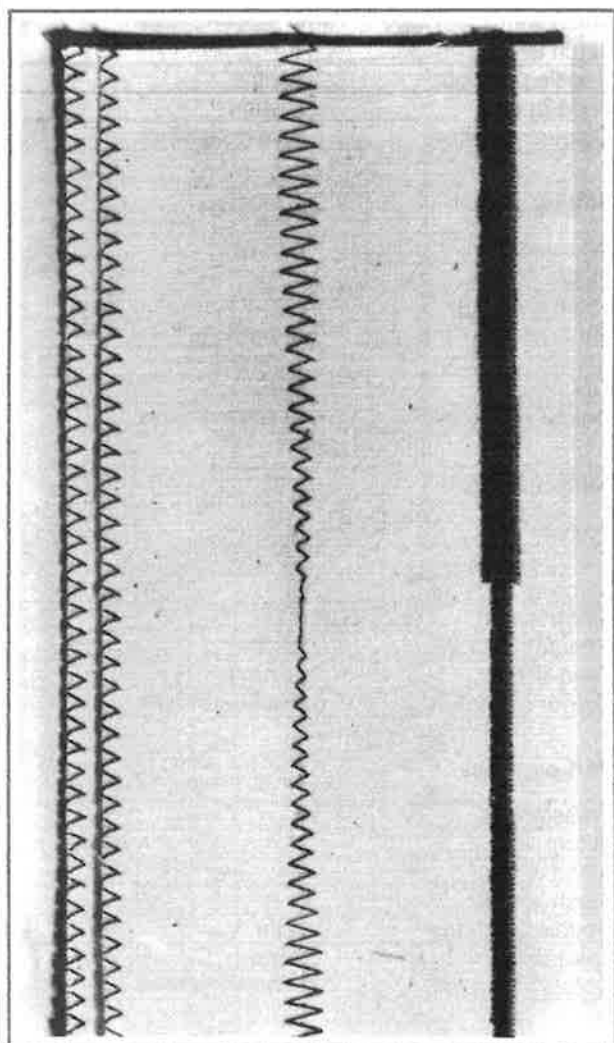
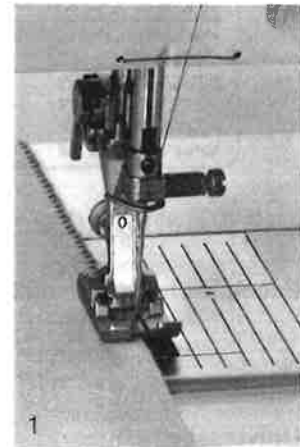
By rotating half a turn to the left (mark at the bottom) the basic setting for satin stitch is obtained. Adjust stitch density from the basic setting according to the work. Turn anti-clockwise for thicker work, clockwise for finer work.

Oversewing edges

Presser foot:	0
Thread:	darning or sewing thread
Needle:	80-70
Stitch width:	2½-5 (according to fabric)
Stitch length:	1-3 (according to fabric)

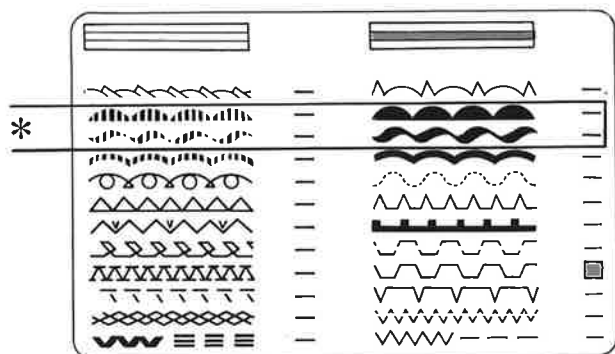
Generally, the zig-zag should not be too wide or the stitch length too long. Start by cutting a neat edge. Use as fine a thread as possible, especially on fine fabrics.

Guide the edge of the fabric to the centre of the foot, so that the needle goes alternately into the fabric and then over the edge (Fig. 1).

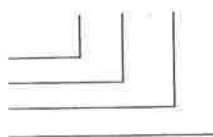


– Push the selector lever to the right to disengage and set to the desired stitch.

– Set the colour indicator to **green**.



Presser foot
Stitch width
Stitch length
Needle position



Basic setting scale

- As the stitch is selected, the basic setting will be displayed at the same time.
- Each type of stitch has many different applications.
- The presser foot display recommends the best type of presser foot to use, to make the work easier and achieve the best result.
- The stitch width and stitch length can be adjusted to the type of work and to the fabric.

*not available on Model 1020

Examples for choosing a stitch

Thread:	according to fabric
Needle:	according to fabric

Universal stitch

Presser foot:	0
Stitch:	
Stitch width:	4
Stitch length:	1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Scallop stitch

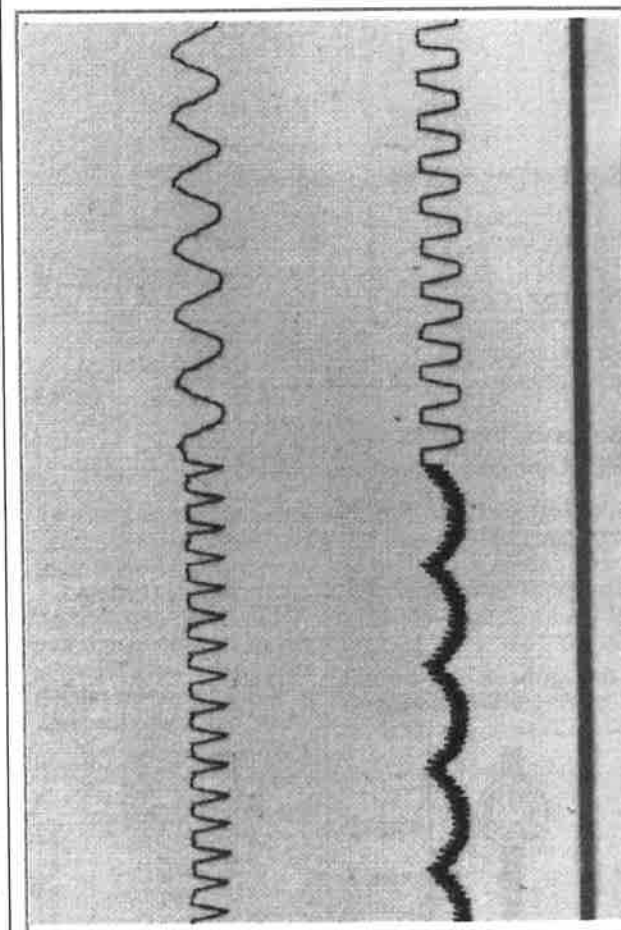
Presser foot:	0 (6*)
Stitch:	
Stitch width:	5
Stitch length:	approx. 1/4 IIIII
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Running stitch

Presser foot:	0
Stitch:	
Stitch width:	5
Stitch length:	1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Vari-overlock

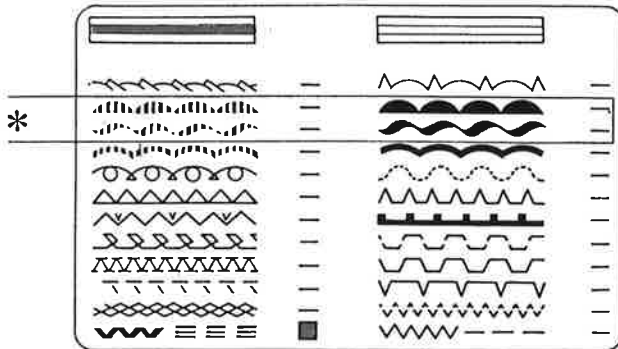
Presser foot:	0 (2)
Stitch:	
Stitch width:	4
Stitch length:	1
Needle position:	right
Feed-dog:	sewing
Colour indicator:	



*Additional accessory for Model 1020

– Push the selector lever to the right to disengage and set to the desired stitch.

– Set the colour indicator to **red**.





*not available on Model 1020



Examples for choosing a stitch

Thread: according to fabric
 Needle: according to thread



Triple straight stitch

Presser foot: 1
 Stitch: 
 Stitch width: 0
 Stitch length: 3
 Needle position: centre
 Feed-dog: sewing
 Colour indicator: 



Triple zig-zag

Presser foot: 1
 Stitch: 
 Stitch width: 5
 Stitch length: 3
 Needle position: centre
 Feed-dog: sewing
 Colour indicator: 

Jersey stitch

Presser foot: 1
 Stitch: 
 Stitch width: 5
 Stitch length: 2
 Needle position: centre
 Feed-dog: sewing
 Colour indicator: 

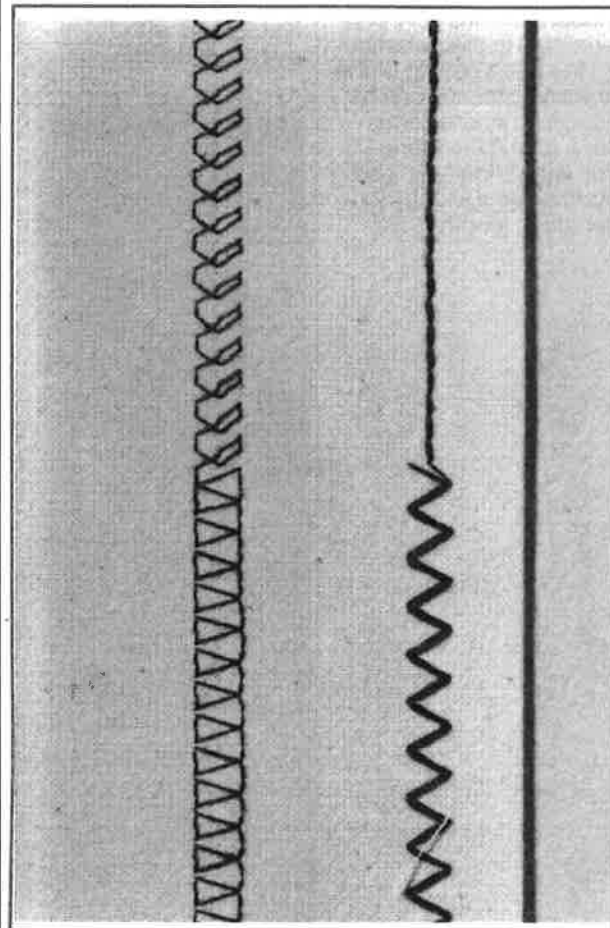
Double overlock

Presser foot: 1
 Stitch: 
 Stitch width: 5
 Stitch length: 2
 Needle position: centre
 Feed-dog: sewing
 Colour indicator: 



Basic setting scale

- As the stitch is selected, the basic setting will be displayed at the same time.
- Each type of stitch has many different applications.
- The presser foot display recommends the best type of presser foot to use, to make the work easier and achieve the best result.
- The stitch width and stitch length can be adjusted to the type of work and to the fabric.



eg. interlock, jersey

When sewing knitted fabrics, the following points generally apply:

1. Use a perfect needle. Even a very slightly blunt needle will damage the knit, causing it to ladder.

2. Use fine sewing thread, particularly for fine jerseys. Coarse thread can also damage the knit.

3. Use darning thread for basting. After the seam has been sewn, darning thread is more easily removed than the considerably thicker and shorter fibre basting thread.



4. Press each seam as it is sewn. This will make subsequent work easier.

5. Sew a sample to test the stretch of the stitch. The seam should be as elastic as the fabric. As modern textiles vary considerably in their elasticity, the basic setting of the practical stitches can be adjusted, where necessary, to suit the fabric. For «hand-look» knitted fabrics use a slightly longer stitch length.

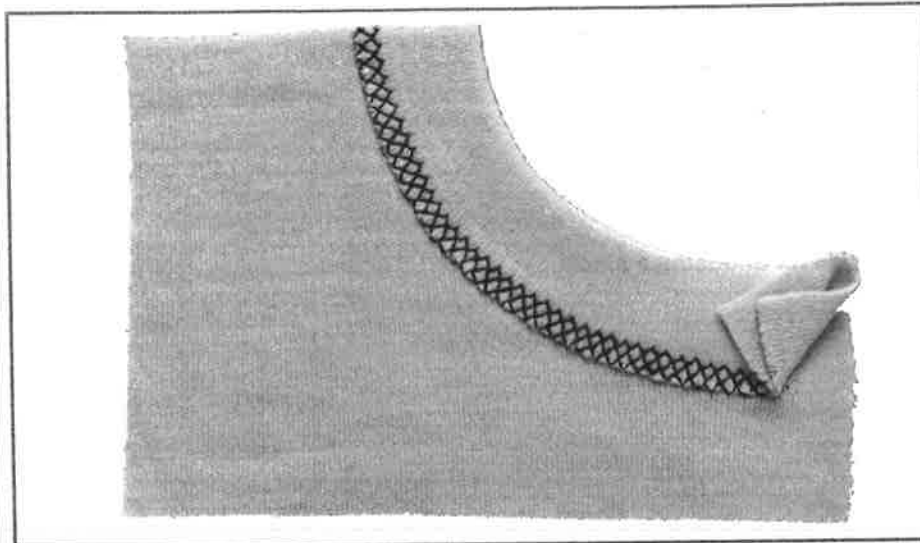
Neckband with visible seam

Primarily for knitted cot-

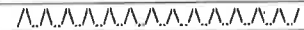

ton fabrics (pyjamas, T-shirts, sports underwear, underwear)

Presser foot:	1
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

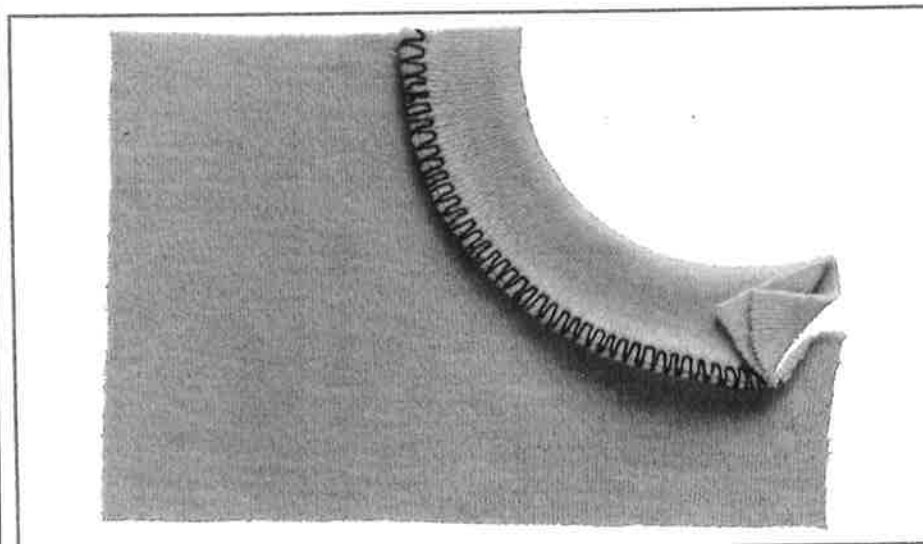
Fold the neatly cut neckband in half and press. Pin and baste to the right side of the neckline. Then sew with Honeycomb stitch. Guide the work so that the stitches come exactly to the edge of the band. Cut off the surplus fabric from the inside.



Neckband with overlock seam

Presser foot:	2
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	4-5
Stitch length:	1
Needle position:	right
Feed-dog:	sewing
Colour indicator:	

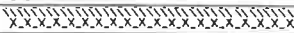

Fold the neatly cut neckband in half and press. Pin to the right side of the neckline, with the cut edges of the band exactly in line with the neckline edge. When sewing, guide the edges to the pin of the overlock foot.



Preparation:

Baste the hem – depth of hem plus 1 cm (3/8") – mark the desired width – sew and cut off surplus fabric. When working with knitted fabrics, see general pointers on page 32.

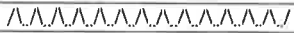

Visible hem with Jersey stitch

Presser foot:	1
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Elastic hem for garments in cotton, fine wool, synthetic and blended fibres, i. e. Pyjamas, T-shirts, underwear and sports underwear.

Pin or baste hem (with Long stitch)*. Sew hem from right side, trim surplus fabric from wrong side.



Visible hem with Vari-overlock

Presser foot:	2
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	4
Stitch length:	approx. 1
Needle position:	right
Feed-dog:	sewing
Colour indicator:	

Elastic hem for all jerseys: Stretch towelling, helanca etc.

Pin or baste hem (with Long stitch)*. Sew hem from right side, trim surplus fabric from wrong side.

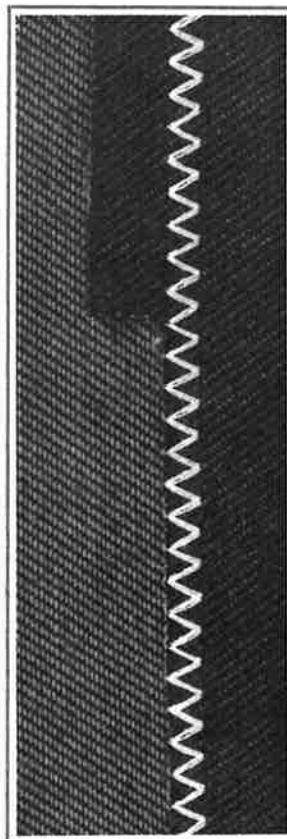
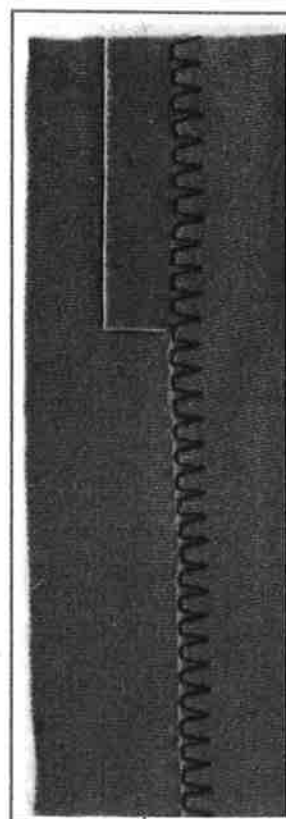
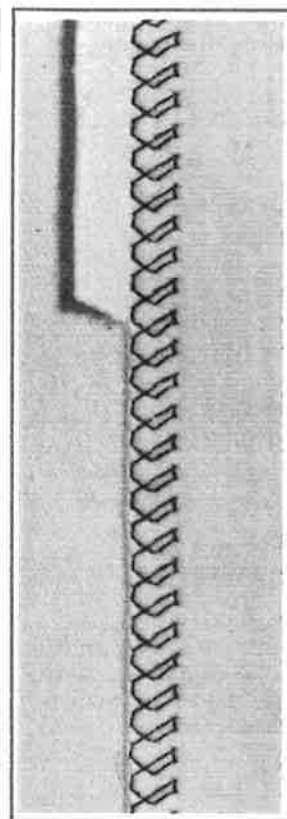
Visible hem with Triple zig-zag

Presser foot:	1
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	2½ – 5 according to fabric
Stitch length:	2 – 3
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Hard wearing hem for firm fabrics, e.g. Denim etc.

Pin or baste hem (with Long stitch)*. Sew hem from right side, trim surplus fabric from wrong side.

*Model 1030 only



There are three types of seam:

Open seams

These are seams that are pressed open

- they lie flat and are not bulky
- they allow garments to be let out

Overlock seams

These are seams that are sewn and oversewn in one operation

- they are quick to produce
- they are narrow, but do not allow garments to be let out

Flat joining seams

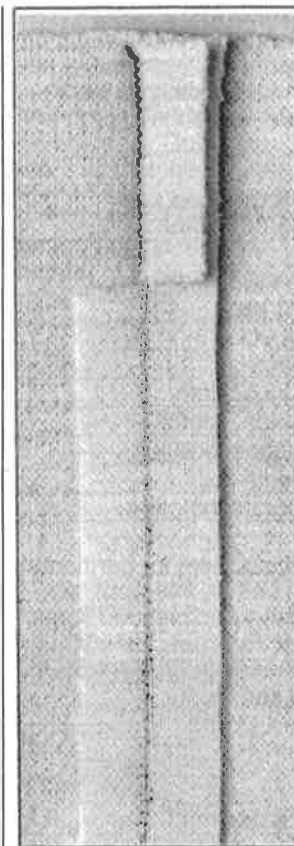
These are seams in which the cut edges are overlapped and then over-sewn

- they lie flat
- they are narrow and cannot be let out
- they do not curl and the edges are neat.

Triple straight stitch seam, open seam

Hard wearing, re-inforced seam for firm fabrics Especially for Denim and corduroy.

Presser foot:	1
Thread:	sewing thread
Needle:	80-90
Stitch:	*****
Stitch width:	0
Stitch length:	2-3
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█

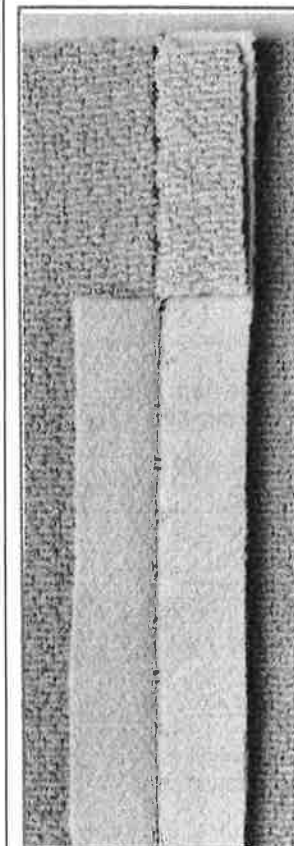


Zig-zag seam

Zig-zag seam, open seam

Elastic seam for jersey fabrics in wool, synthetic or blended fibres, and for silk, cotton and wool interlock. Suitable for sweaters, jackets and all hand and machine knitted garments.

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	^/~/~/~/~/~/~/~/~/~/~/~/~/~/~/~/~/
Stitch width:	1
Stitch length:	1 1/2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█

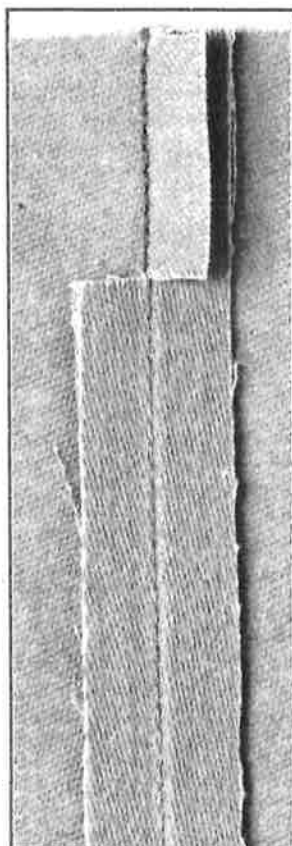


Stretch seam

Stretch seam, open seam

Highly elastic seam for stretch fabrics, especially for sportswear of all kinds. Suitable also for lounge-wear and craft work.

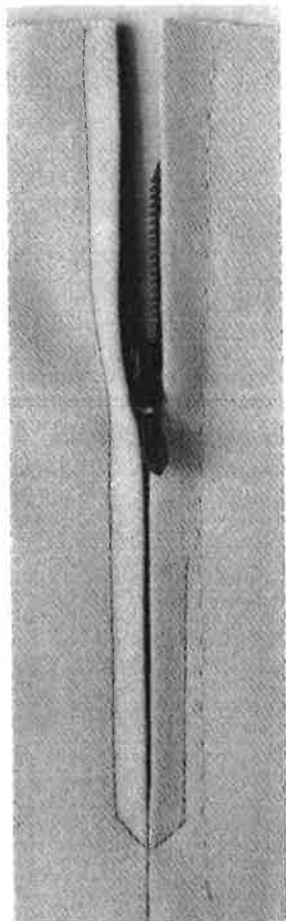
Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	~~~~~
Stitch width:	1 3/4
Stitch length:	3/4-1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█



Triple straight stitch seam

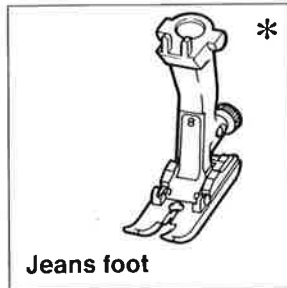
**Zip fastener,
inserted flat**

Presser foot:	4
Thread:	sewing thread
Needle:	80
Stitch:	-----
Stitch width:	0
Stitch length:	approx. 2
Needle position:	left/right
Feed-dog:	sewing
Colour indicator:	██████████



Preparation:

Baste entire length of seam. Mark length of zip and sew seam as far as the zip opening. Remove basting stitches, except in the zip section. Press the entire seam, trim and oversew. Remove remaining basting stitches. Baste the zip into position so that the teeth are covered by the fabric. Sew in the zip, starting each side at the bottom and sewing to the top, once with needle position right, once with needle position left.



Jeans foot

* Additional accessory for Model 1020

The Jeans foot enables exceptionally thick and hard fabrics to be sewn easily. Select a stitch length of between 2 and 3.5 mm, depending on fabric.

Note that needle position setting must be «centre» and stitch width «0».
Use needle no. 100.

Plastics

Like synthetic fabrics, plastic is also made from a variety of raw materials. Plastics have to be handled differently when sewn, depending on the surface and grain.

If the fabric does not feed properly, it is often sufficient to wipe a little sewing machine oil along the line of the seam (with a small, absorbent cotton wool pad wrapped in fabric).

Otherwise, use one of the special presser foot – Walking foot (No 50) *, Roller foot (No 51) * or Teflon foot (No 52) *. Always sew plastics with a long stitch length to avoid tearing.

Leather and imitation leather

Naturally it is possible to sew leather. Some leathers may require a special leather needle. Sew a test piece before starting on the work itself. Do not choose too short a stitch length. Where necessary, use the Walking foot (No 50) *, Roller foot (No 51) * or Teflon foot (No 52) *.

* Additional accessory for Models 1030/1020

Top stitching and Basting with Long stitch

The Long stitch switch has 2 positions.

* Long stitch off. Machine sews normally.



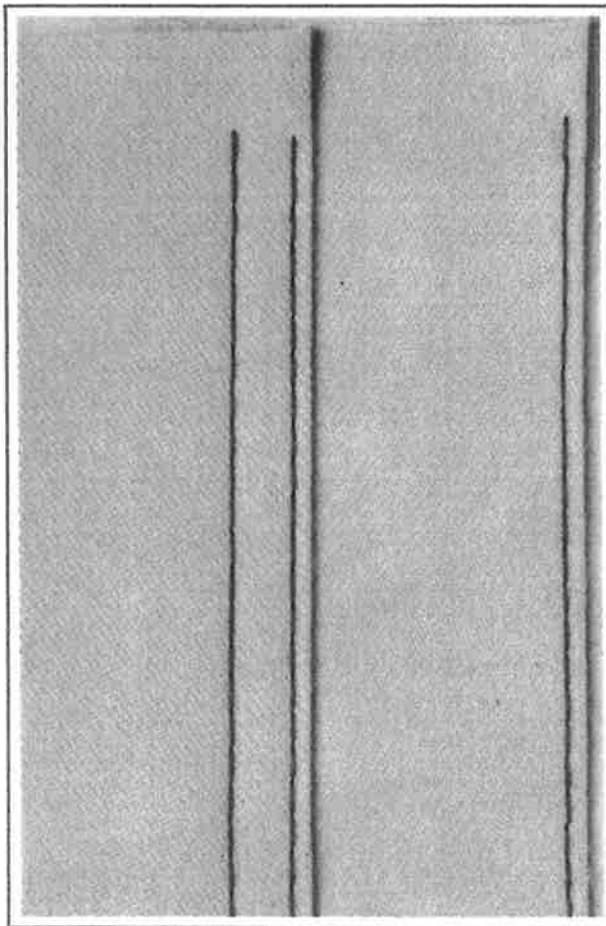
* Long stitch in operation.



Now the machine sews every second stitch, Longest stitch 10 mm. Long stitch can be sewn in any of the 5 needle positions.

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	-----
Stitch width:	0
Stitch length:	2-5
Needle position:	any position
Feed-dog:	sewing
Colour indicator:	

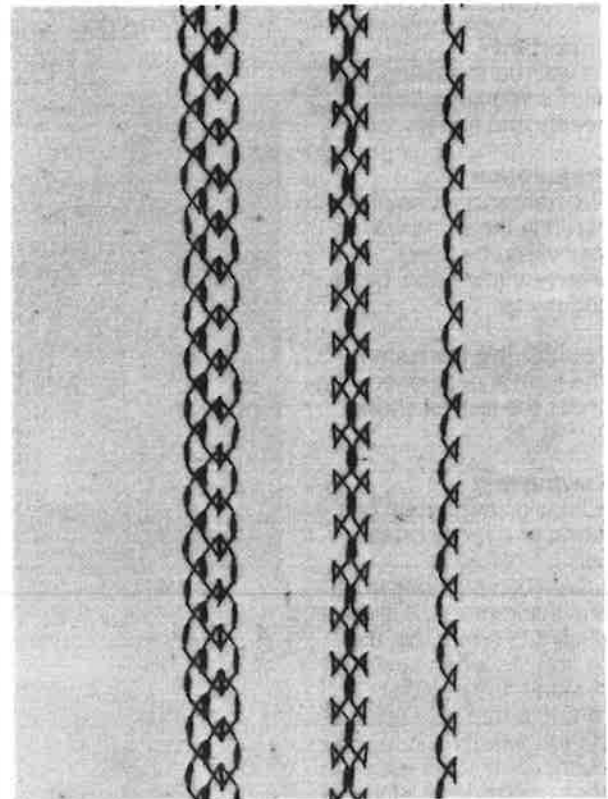
Note: The same settings (length 5) can be used for basting.



Other Long Stitch possibilities

Various practical stitches in the red range can be combined with Long stitch to give a different decorative stitch, eg. stitch no. 20 (Fig. 1).

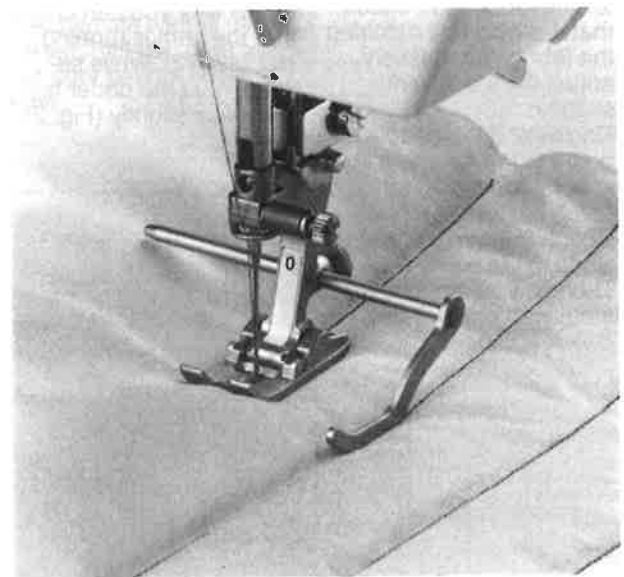
Other stitch combination possibilities see page 23.





Sewing with seam / quilting guide

Insert the seam / quilting guide into the presser foot. The distance between the seam / quilting

guide and the centre of the presser foot corresponds to the space between the rows of sewing.



Presser foot:	5
Thread:	sewing thread/darning thread
Needle:	80-70
Stitch:	
Stitch width:	approx. 3
Stitch length:	2¼
Needle position:	right/half right
Feed-dog:	sewing
Colour indicator:	

Important

As with hand sewing, fine fabrics require a fine needle and fine thread.

Preparation

The hem should be prepared in the same way as for sewing by hand. Oversew raw edge, baste and press.

Positioning the hem

The hem is positioned under the foot as shown in (Fig. 1).

Sewing test

(Either on a remnant of fabric or directly on the hem).

Given the variations in fabric thicknesses, it is advisable to sew a test piece first. As when sewing by hand, the needle should only catch the fold of the fabric.

Because of these variations, a slight adjustment may be necessary.

Set the needle position to right or half right.

Sew slowly, until the needle swings to the left.

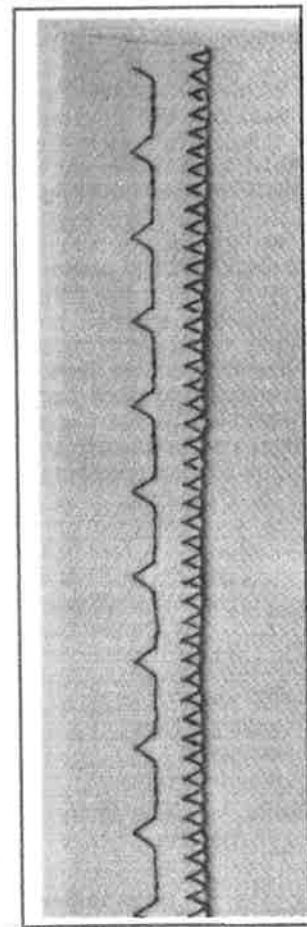
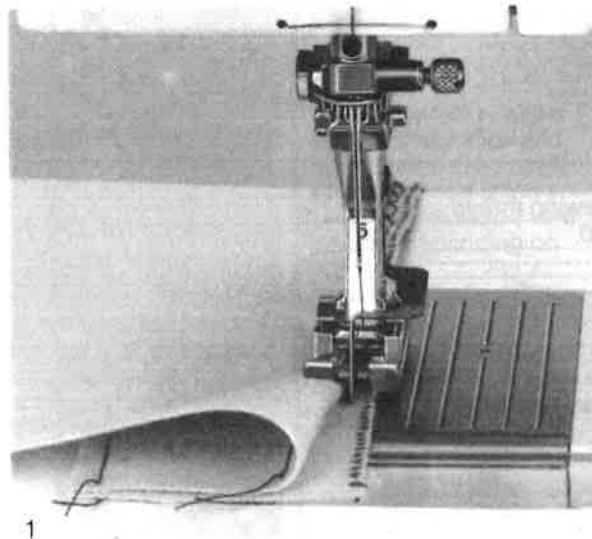
Using the handwheel, bring the needle down until it is just about to enter the fabric, and check that it is only just catching the fabric. If necessary, adjust the stitch width slightly:

Narrower if the needle is going in too far and a little wider if it is failing to catch sufficiently. Check the next zig-zag stitch in the same way.

Then sew for approximately 10 cm (4") and check again.

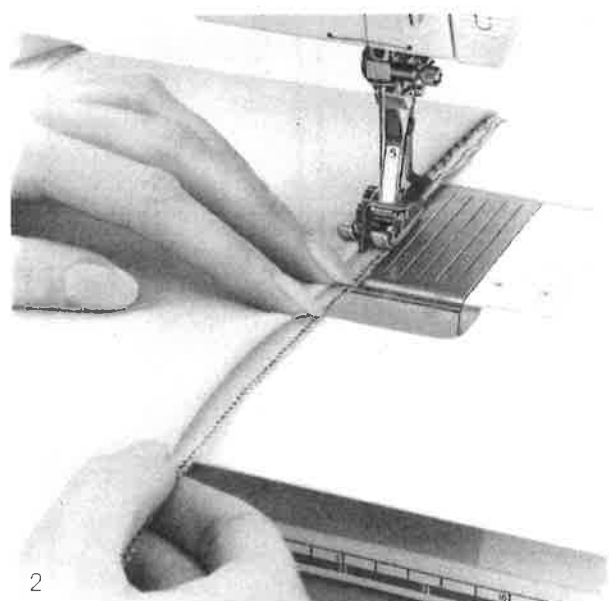
Then sew for approximately 10 cm (4") and check again.

Then sew for approximately 10 cm (4") and check again.



Guiding the work

In this way you can check that the hem is running straight. Tip: While sewing, hold the under fabric back slightly (Fig. 2).



Edge stitching using the needle position

Model 1030/1020

Edge stitching on collars, cuffs, lapels, hems etc.

Top stitching, for edges of all kinds

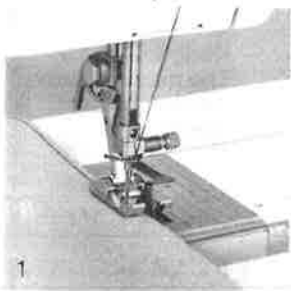
Presser foot:	5
Thread:	sewing thread
Needle:	80
Stitch:	-----
Stitch width:	0
Stitch length:	2-5 as required
Needle position:	left/half left
Feed-dog:	sewing
Colour indicator:	██████████

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	-----
Stitch width:	0
Stitch length:	2-5 as required
Needle position:	any position
Feed-dog:	sewing
Colour indicator:	██████████

Place the edge of the fabric from the left against the guide of the Blind stitch foot (Fig. 1). Set the

needle position to left or half left.

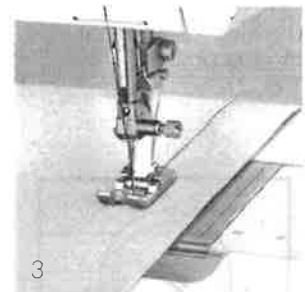
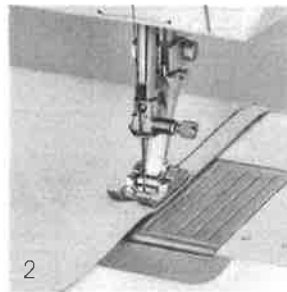
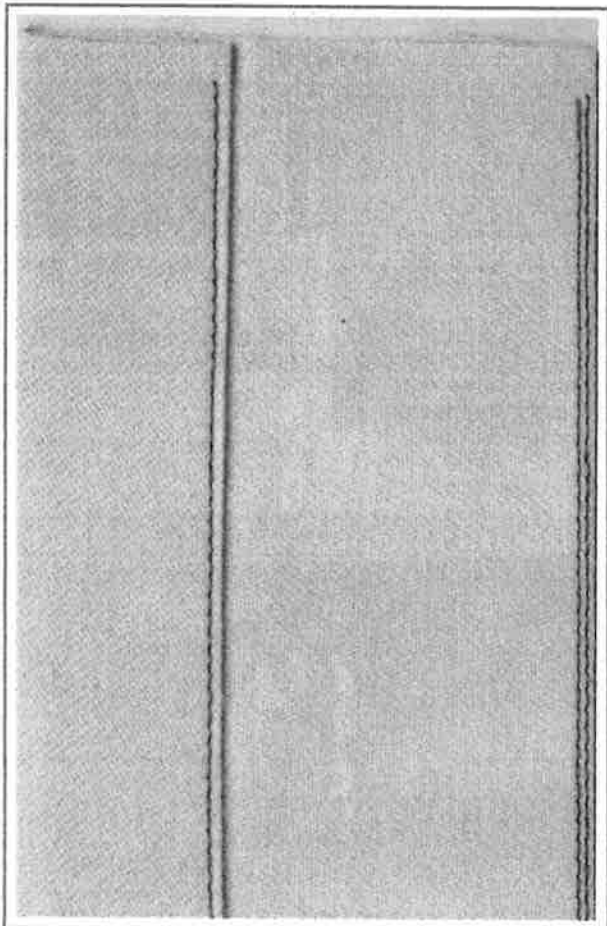
Guide the edge of the fabric to the edge of the presser foot or along the marks in the stitch plate.





Widths:

(Needle position: centre)

- Edge of presser foot = 7.5 mm ($\frac{3}{16}$ "') (Fig. 2)
- Marks in stitch plate
- Line 1 = 1 cm ($\frac{3}{8}$ "')
- Line 2 = 1.5 cm ($\frac{5}{16}$ "')
- Line 3 = 2 cm ($\frac{3}{4}$ "')
- Line 4 = 2.5 cm (1"')
- Line 5 = 3 cm ($1\frac{1}{8}$ "')



It is also possible to sew intermediate widths using the left, half left, right and half right needle positions.

Presser foot:	buttonhole foot with slide 3B
Thread:	sewing thread / darning thread
Needle:	80-70
Stitch:	
Stitch width:	set automatically
Stitch length:	
Needle position:	set automatically
Feed-dog:	sewing
Colour indicator:	

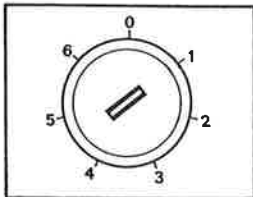
When sewing buttonholes, thread the lower thread through the finger of the bobbin case (Fig. 1).



1

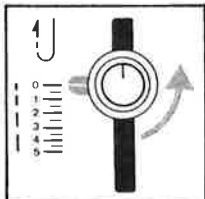
Setting buttonhole

1. Switch buttonhole knob to position 1 (Fig. 2).



2

2. Set stitch length: Turn knob to the right until it locks. The mark will be at the top (Fig. 3). Stitch length is 0. By rotating half a turn to the left (mark at the bottom) the basic stitch length setting for buttonholes is obtained.



3

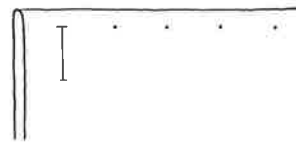
Set the stitch density according to the fabric. Turn anti-clockwise for thicker fabrics, clockwise for finer fabrics.

Always sew a trial buttonhole

The stitch length will vary slightly depending on the fabric.

Mark buttonholes

Mark one buttonhole only.

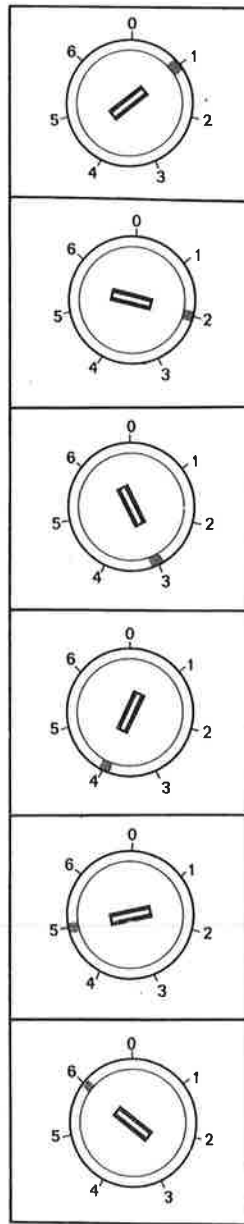


Sewing the buttonhole

Bring the needle to the centre of the presser foot with the aid of the handwheel or with the needle stop. Lower the needle into the fabric at the start of the buttonhole. Lower the presser foot.

Sewing the first bead

Stop at the end of the buttonhole marking. Set the slide at the side of the foot precisely to this length (Fig. 4). The length of all further buttonholes can then be sewn to this marker.



Knob to 1
The machine sews the first bead forwards.

Knob to 2
The machine sews a reverse straight stitch.

Knob to 3
The machine sews the bar tack.

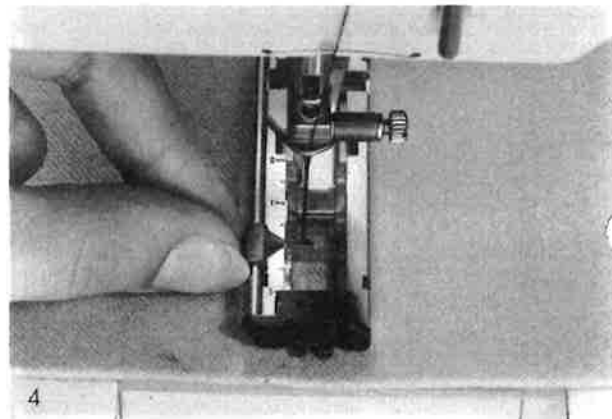
Knob to 4
The machine sews the 2nd bead forwards.

Knob to 5
The machine sews the bar tack.

Knob to 6
The machine sews the securing stitch.

Sew the buttonhole step by step. For further buttonholes, reset to 1. The sewing sequence continues as described.

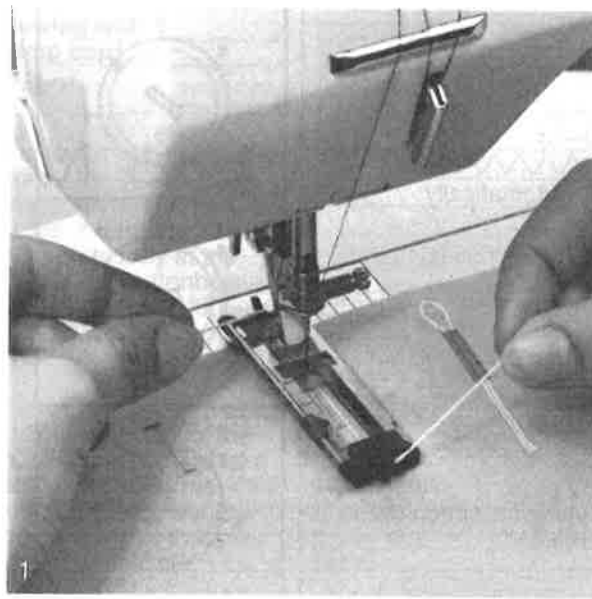
For all other sewing, set knob to 0.



4

The gimp cord strengthens the buttonhole

The gimp cord is especially important for all knitted fabrics – including hand and machine knits – to prevent the buttonhole from pulling out of shape. The thickness of the cord depends on the fabric to be sewn. Suitable cords are: perle cord no. 8, thick hand sewing thread or fine crochet cord. The loop of gimp should lie at the end of the buttonhole where the button will pull. Lay the fabric under the presser foot accordingly (Fig. 1).

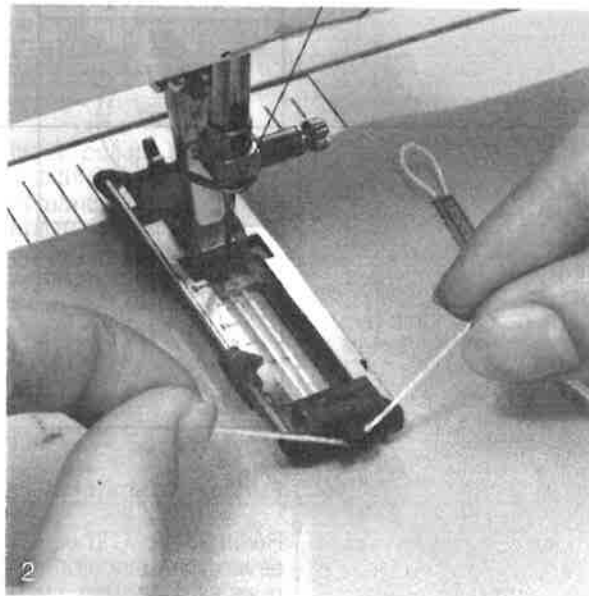


Positioning the cord

It is easier to position the cord if the needle is already in the fabric. Bring the needle to the centre of the presser foot using the handwheel or needle stop. Lower the needle into the fabric precisely at the start of the buttonhole. Do not lower the foot yet.

Guide the cord to the right under the buttonhole foot and hook it over the prong at the back (Fig. 1).

Then bring it round to the left and forwards under the foot. Pull the ends of the cord into the retaining slots at the front (Fig. 2) and trim away any surplus.

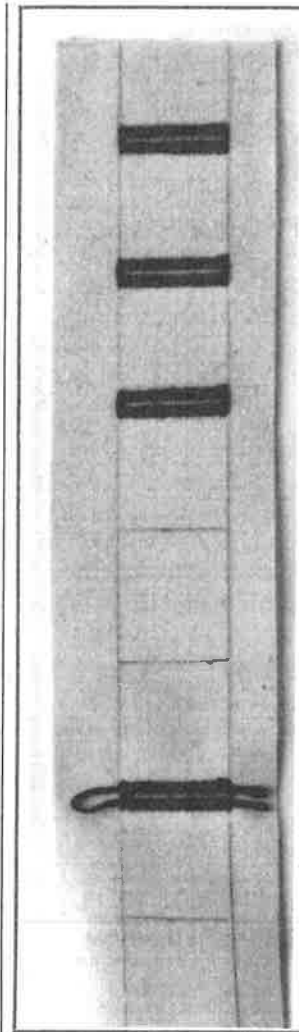




To secure the gimp cord and cut the buttonhole open, see page 42–43.

Jeans buttonhole

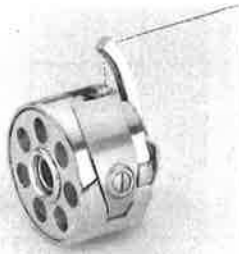
(strengthened buttonhole for Denim, sporty shirts and work clothes)

- Set colour indicator to RED.
- Set stitch length a little longer (approx. 1 – test).
- Set buttonhole to position 1, sew.
- At the END of the first forward bead, the needle should be going towards the LEFT. Then switch to position 2 and sew buttonhole as usual.



Presser foot:	3
Thread:	sewing thread/darning thread
Needle:	80-70
Stitch:	
Stitch width:	set automatically
Stitch length:	
Needle position:	set automatically
Feed-dog:	sewing
Colour indicator:	

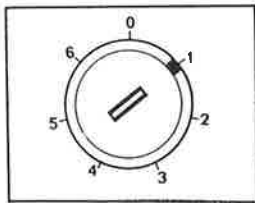
To sew buttonholes, thread the lower thread through the finger of the bobbin case (Fig. 1).



1

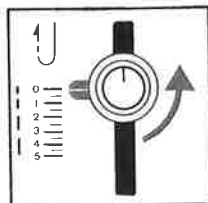
Setting buttonhole

1. Switch buttonhole knob to position 1 (Fig. 2).



2

2. Set stitch length: Turn knob to the right until it locks. The mark will be at the top (Fig. 3). Stitch length is 0. By rotating half a turn to the left (mark at the bottom)



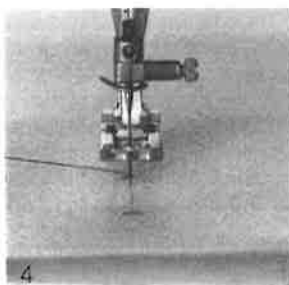
3

the basic stitch length setting for buttonhole is obtained.

Set the stitch density according to the fabric. Turn anti-clockwise for thicker fabrics, clockwise for finer fabrics. Always sew a trial buttonhole. The stitch length will vary slightly depending on the fabric.

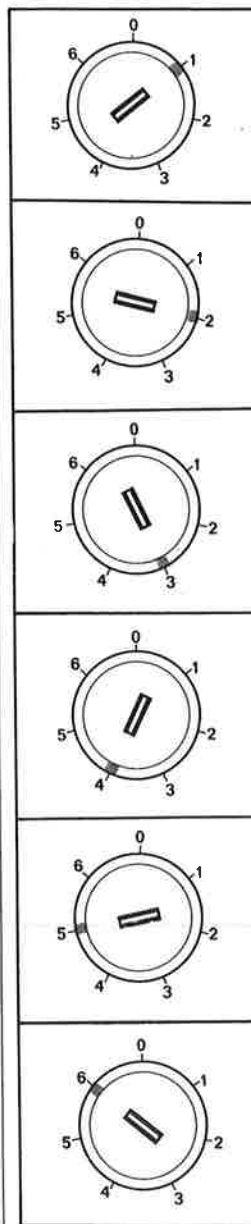
Sewing the buttonhole

Lower the needle with the aid of the handwheel and check that it is in the **centre** of the presser foot. If not, do one stitch by tapping the foot control once.



4

Lay the fabric under the foot, so that the edge of the fabric lies in front of the presser foot (Fig. 4). Lower the needle into the fabric precisely at the start of the buttonhole. Lower the presser foot and sew the buttonhole.



Knob to 1
The machine sews the first bead forwards.

Knob to 2
The machine sews a reverse straight stitch.

Knob to 3
The machine sews the bar tack.

Knob to 4
The machine sews the 2nd bead forwards.

Knob to 5
The machine sews the bar tack.

Knob to 6
The machine sews the securing stitch.

Further buttonholes

Reset button 1. The sewing sequence continues as described. For all other sewing, set knob to 0.

Cutting the buttonhole open

It is best to cut from each end of the buttonhole towards the centre (Fig. 5). This avoids cutting through a bar tack.



5

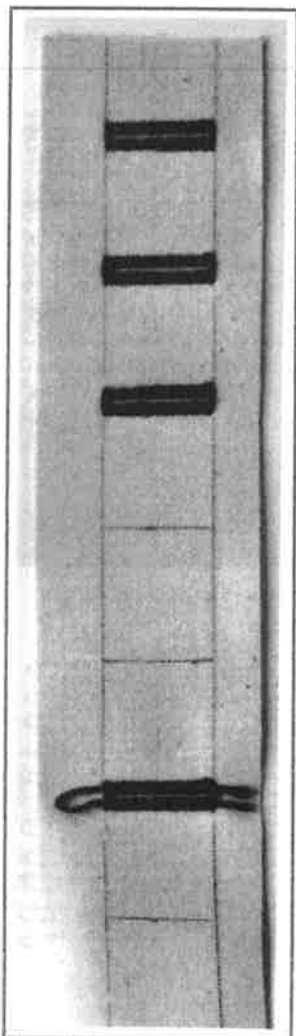
Buttonhole with gimp cord

The gimp cord strengthens the buttonhole

The gimp cord is especially important for all knitted fabrics – including hand and machine knits – to prevent the buttonhole from pulling out of shape.

The thickness of the cord depends on the fabric to be sewn. Suitable cords are: perle cord no. 8, thick hand sewing thread or fine crochet cord. Sew a trial buttonhole.

Lower the needle with the aid of the handwheel and check that it is in the centre of the presser foot. If not, do one stitch by tapping the foot control once. Lay the fabric under the foot, so that the folded edge or seam lies in front of the presser foot. The loop of the gimp will lie at the end of the buttonhole where the button will pull (Fig. 2).



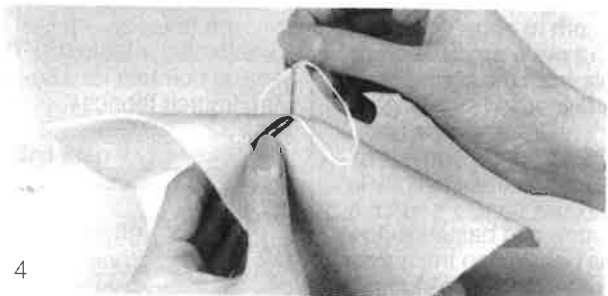
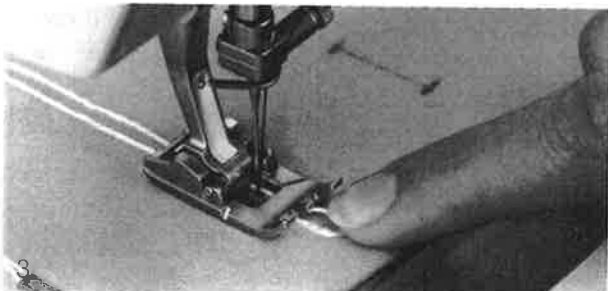
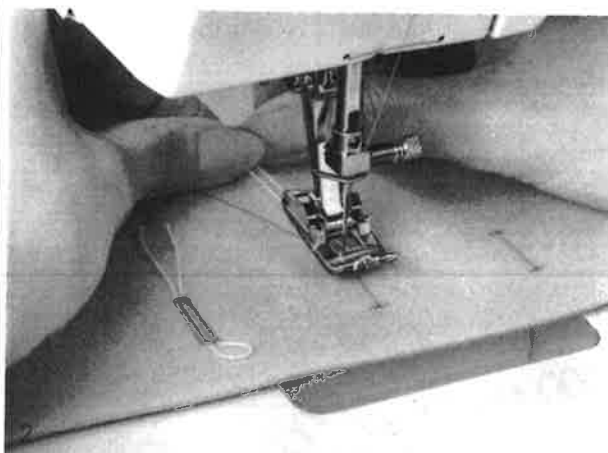
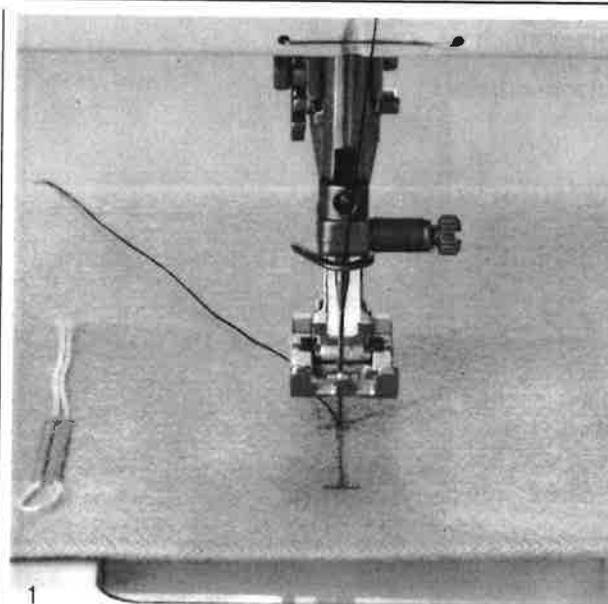
Sewing with gimp cord

It is easier to position the cord if the needle is already in the fabric: Lower the needle into the fabric precisely at the start of the buttonhole. Do not lower the foot yet (Fig. 1).

Hook the gimp cord over the centre prong of the buttonhole foot and take both ends back under the foot (Fig. 2). Lower the foot and check that the cord is able to slide, i.e. is not trapped by the foot.



Sew the buttonhole. At position 2 («reverse straight stitch»), the cord comes away from the prong of the foot. Therefore it is advisable to hold the loop of gimp down LIGHTLY with the finger (Fig. 3).

Finally, pull the loop of gimp through. With knitted fabrics, pull the gimp ends to the rear with a coarse hand sewing needle (Fig. 4) and tie or sew in securely. In woven fabrics, the gimp ends can be simply cut off.



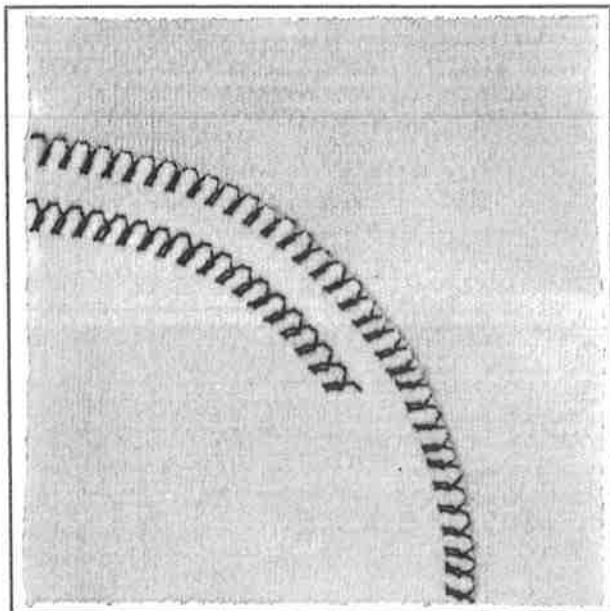
Patching using Jersey stitch

Primarily for mending interlock underwear

Presser foot:	1
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Stitch:	
Stitch width:	5
Stitch length:	2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Small tears/worn areas are best darned. See page 46. For larger tears or worn areas, it is better

to sew on a patch, as this retains the elasticity.





Cut out a patch, if possible from the sound part of a discarded similar garment. Where possible, round off the corners to preserve the elasticity in all directions. Pin on the patch and baste as close as possible to the edge with Long stitch*. Then sew with 1-2 rows of Jersey stitch. Finally, cut away torn/worn piece from behind patch.

For all knits, refer to the general pointers for «Sewing knitted fabrics», page 32.

*Model 1030 only

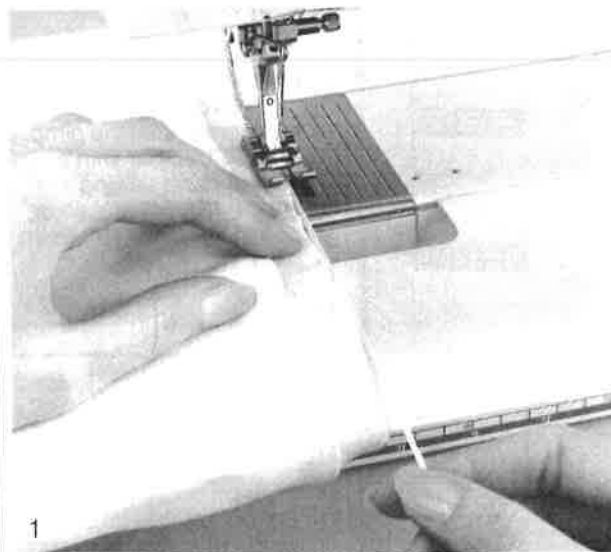
Edging with shirring elastic

The shirring elastic is used to restore distorted edges to their original shape (to save bands being replaced).

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80
Stitch:	
Stitch width:	4-5
Stitch length:	1½
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



Guide two strands of shirring elastic along the edge and oversew with zig-zag stitches, gently

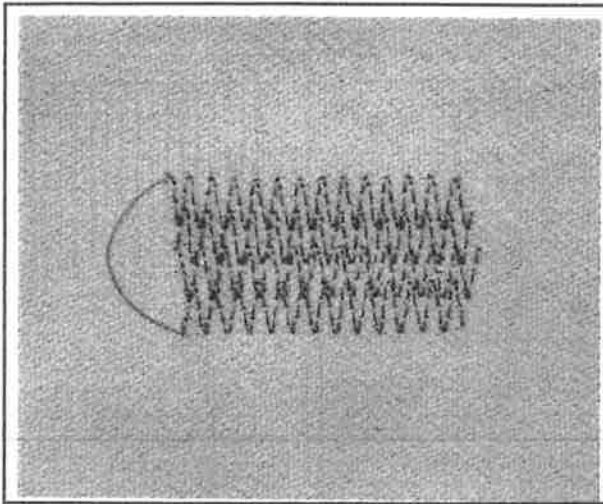
pulling the elastic thread (Fig. 1).



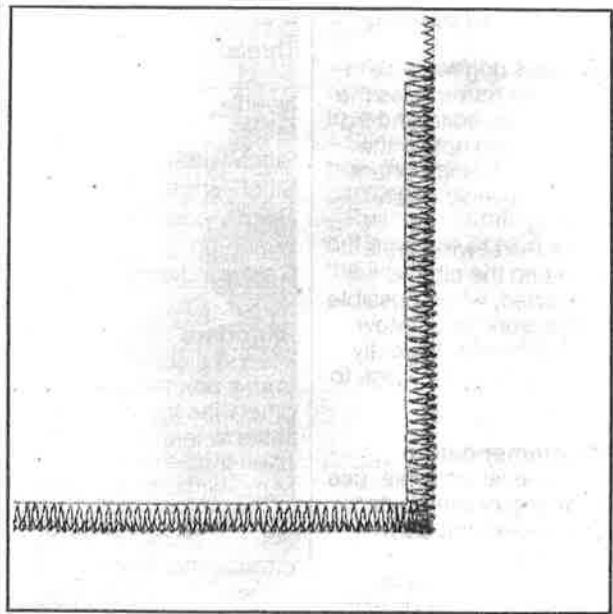
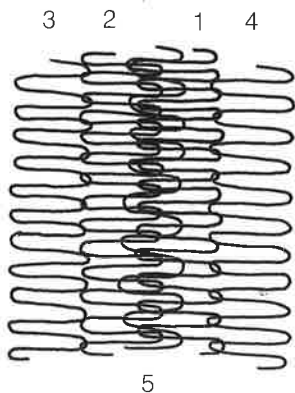
Mending tears using Running stitch

(Modern darning method) for tears and thin areas on virtually all fabrics.

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	lllll
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



Always lay a fine fabric underneath. On tears, sew 3–5 rows of Running stitch, depending on the type of fabric (Fig. 1). On thin areas, sew sufficient adjacent rows to cover. Let each row overlap the previous one very slightly.





Patching with Running stitch

for overalls and children's jeans



Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80
Needle position:	centre
Feed-dog:	sewing

1st step

Stitch:	
Stitch width:	2
Stitch length:	approx. 1
Colour indicator:	



Do not cut out damaged areas. Pin patch to the right side and sew along edge with a small zig-zag stitch.

2nd step

Stitch:	
Stitch width:	5
Stitch length:	approx. ¼ lllll
Colour indicator:	

Oversew edges with Running stitch. Ensure that the whole of the Running stitch is on the patch, and that the needle, on its right swing just goes to the edge of the patch.

3rd step

Stitch:	
Stitch width:	0
Stitch length:	approx. ¾
Colour indicator:	

Sew a straight stitch on the inside edge of the Running stitch. The line of straight stitches will make it easier to cut away the worn area.

Principles of darning

The feed-dog must be lowered for darning, as the work is moved to and fro by hand and not by the feed-dog. It is important to guide evenly when darning.

– Use the sewing table and keep the elbows supported, when possible by the work table. Move the machine sufficiently far away from the edge to do this.

Recommendation

– Whenever possible, use a darning or embroidery ring to keep the darning area taut.

– Move the ring backwards and forwards without pressure, otherwise jerky movements and thread breakage will result.

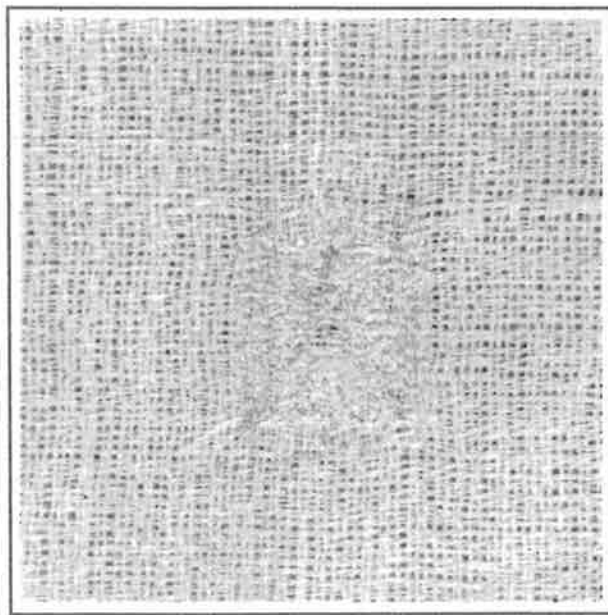
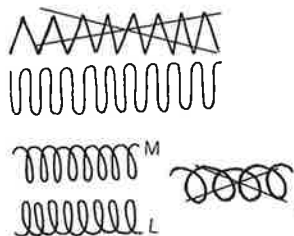
– Always work from left to right, moving up and down over the hole. Do not move the hoop from side to side.

– The ideal way to hold the ring is with the little fingers and thumbs to the outside of the ring, held firmly to give a smooth movement.

Presser foot:	9
Thread:	darning thread / Machine emb. 60
Needle:	80–70
Stitch:	-----
Stitch width:	0
Stitch length:	0
Needle position:	centre
Feed-dog:	lowered
Colour indicator:	█

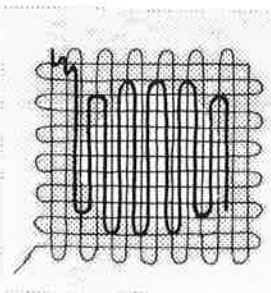
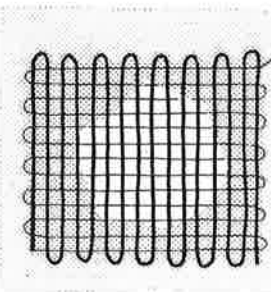
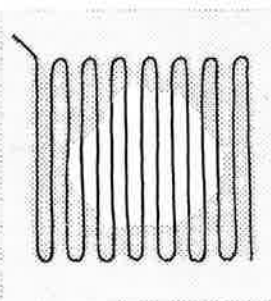
Important

Darn in a curved rather than a pointed shape, otherwise the fabric is liable to tear. Beginners often tend to prefer L and M movements, but care must be taken to ensure that this does not result in circular movements.



Darning technique

There are various methods of darning. Here is a method that is easy to learn:



The three steps

1. Bring lower thread up, start at top left, work from left to right across hole, finish at top right, then turn through 90°.

2. Again work from left to right, but not too densely that a ridge forms at the edge. Turn work through 180°.

3. Fill in the darn, but only across the «hole». The stitches will be in the same direction so that they blend with the 2nd row.

When the darning technique has been mastered, work the rows of stitches in irregular lengths so the darn blends into the fabric.

Main faults

Thread frequently breaks:

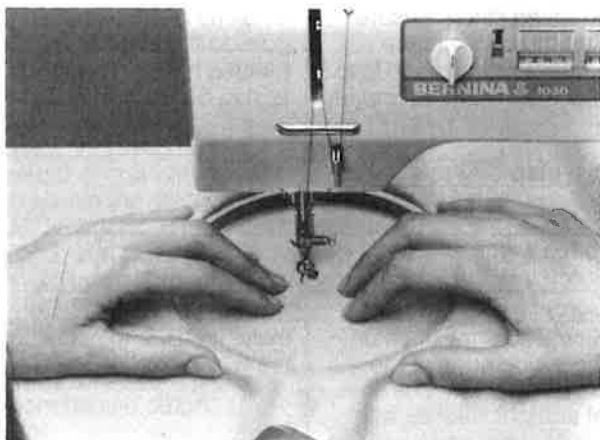
– Fabric is guided unevenly.

Stitching is unattractive, thread lies loose on top:

– Fabric is guided too quickly.

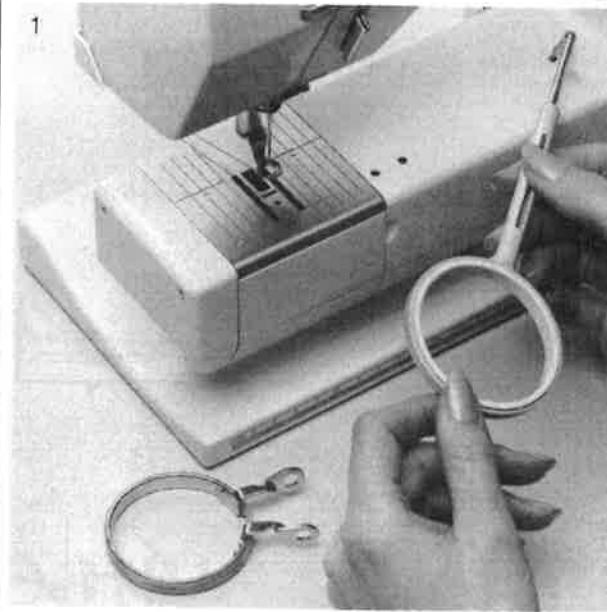
Small knots form on the underside:

– Fabric is guided too slowly.



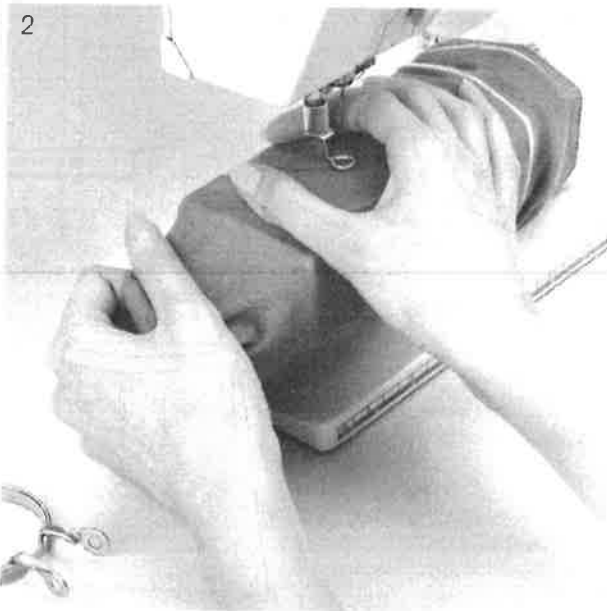
The small darning ring

The small darning ring is particularly practical for darning small torn/worn areas in fine fabrics and in fine underwear of all kinds, fine socks and pullovers, eg. in Helanca, interlock, jersey.

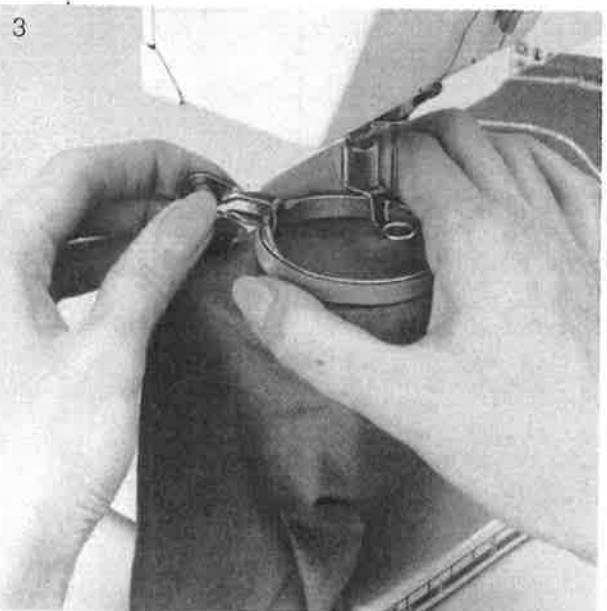


Stretching the work

- Fit the darning ring without the spring clip on to the free arm (Fig. 1).
- Slide the garment over both the free arm and the darning ring.
- Push the darning ring out as far as possible to the left.



- Place the index finger and thumb of the right hand on the darning ring to form a circle.
- With the left hand, stretch the fabric over the end of the free arm. Hold the tensioned fabric with the thumb of the right hand (Fig. 2).



- With the left hand, fit the spring clip as follows: Close the spring clip, insert under the index finger of the right hand and hold firmly. Then press the spring clip into the darning ring (Fig. 3).

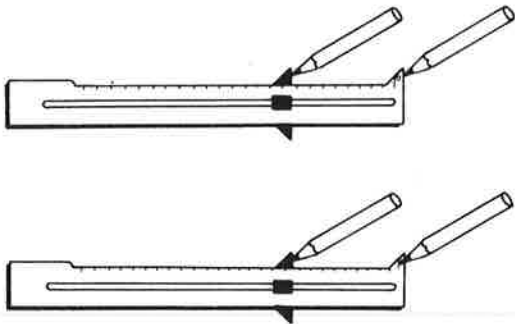
Darning technique

Tubular items are usually stitched up and down and then side to side as it is not possible to turn the work.

The ruler/template is extremely versatile and simple. Using the red slide, the required size can be set with millimetre accuracy.

There are two ways of using the template:

a) Using the edges, when lines are required.



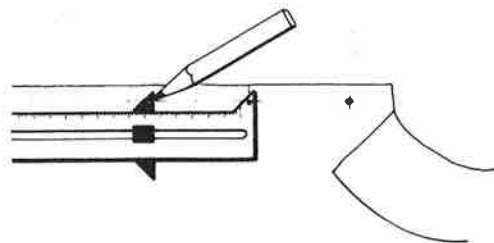
b) Using the small holes when dots are required.

Examples

1. Marking at intervals

For buttonholes, buttons, eyelets, pleats etc.

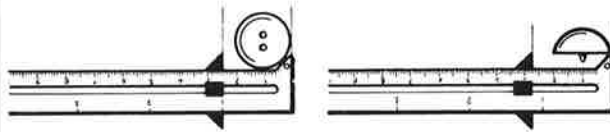
Set the desired space with the red slide. Transfer dots or lines to the work.



2. Calculation of buttonhole lengths

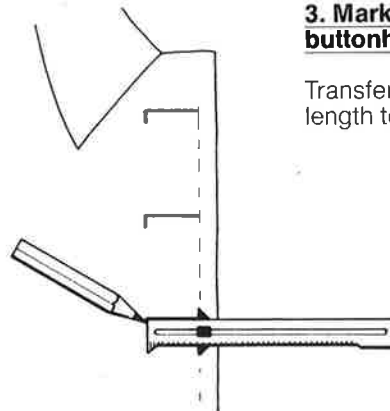
Flat buttons
Button + 2–3 mm ($\frac{1}{8}$ ")

Domed buttons (or thick fancy buttons)
Button + 5–8 mm ($\frac{1}{4}$ " – $\frac{3}{16}$ ")



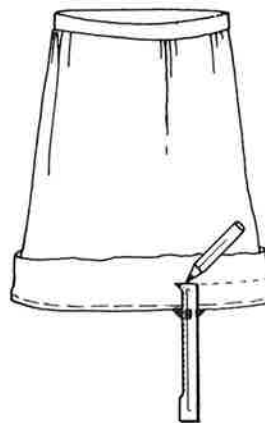
3. Marking of buttonholes

Transfer buttonhole length to the garment.



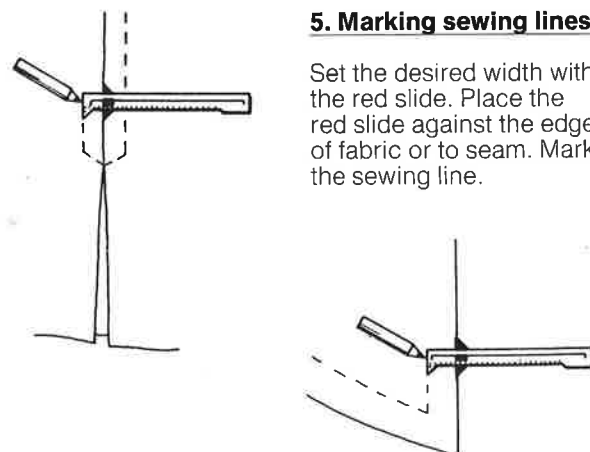
4. Marking of hem depths

Set the desired hem depth with the red slide. Place the red slide against the hem edge. Mark the hem depth.



5. Marking sewing lines

Set the desired width with the red slide. Place the red slide against the edge of fabric or to seam. Mark the sewing line.



Creative sewing

Gathering:	
Normal gathering	
Gathering with perle cord	
Gathering with shirring elastic	51
Edgings on woven fabric:	
Fine edging	
Lace on woven fabrics	
Scallop edge	52
Edging on jersey fabrics	
Lace on jersey fabric	
Shell edging	
Elastic	53
Tailor Tacking	54/55
Appliqué:	
Single-colour appliqué	
Multi-colour appliqué	56/57
Embroidery with decorative stitches:	
Basic guidelines	58/59/60/61/62
Monograms	63
BERNINA Walking foot	64
BERNINA Cut'n'Sew	65

Dear BERNINA customer

We are sure that you are enjoying using your BERNINA, and all the more so now that you are experienced in working with it. However you have not exhausted all the possibilities of this modern sewing machine. The second part of this BERNINA book describes further work that can be done with your BERNINA. Special accessories (at extra cost) are needed for some of these tasks. Your local BERNINA dealer will be happy to advise you.

Gathering

Normal gathering

Small pieces or thin fabrics can be gathered as follows:

Presser foot:	0
Stitch:	-----
Stitch width:	0
Stitch length:	4-5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█

Sew two rows of straight stitches. Then hold the two lower threads and gather the fabric to the required width.

Gathering with perle cord

Long pieces of fabric

Presser foot:	6*
Thread:	sewing thread
Needle:	80
Stitch:	∧∧∧∧∧∧∧∧∧∧
Stitch width:	2
Stitch length:	2-5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█

Thread the perle cord through the hole in the embroidery foot and oversew with zig-zag (Fig. 1). Always sew 2 rows, approx. 2 mm (1/8") apart. Then pull the two

ends of the perle cord to gather the fabric (Fig. 2).

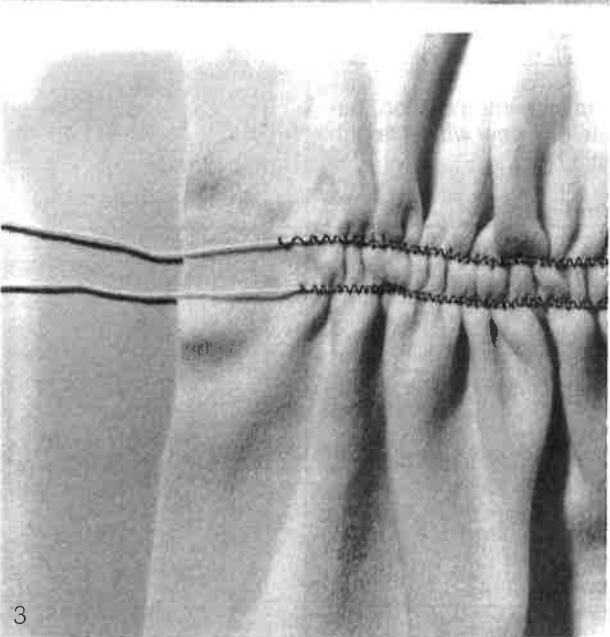
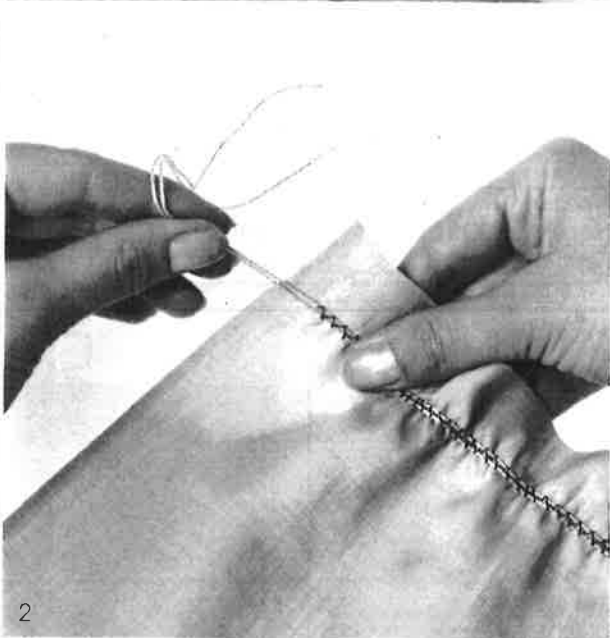
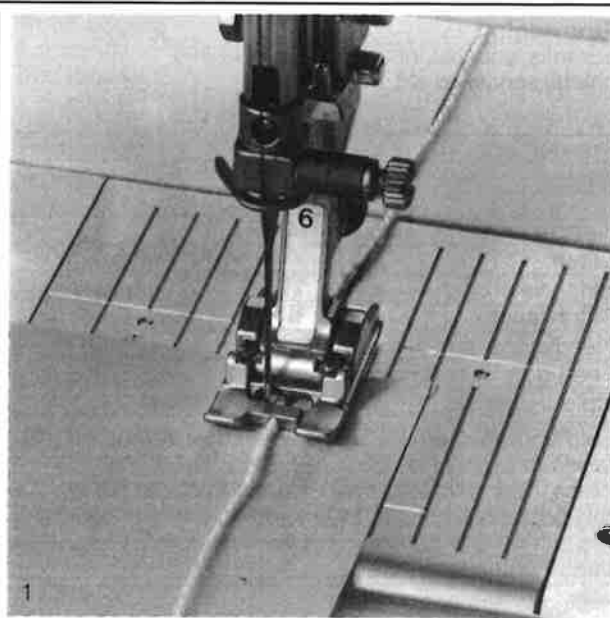
Gathering with shirring elastic

Presser foot:	6*
Thread:	sewing thread
Needle:	80
Stitch:	∨∨∨∨∨∨∨∨∨∨
Stitch width:	2
Stitch length:	2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	█

*Additional accessory for Model 1020

Thread the shirring elastic through the hole of the embroidery foot and oversew with zig-zag. Stretch the shirring elastic while sewing. The more the elastic is stret-



ched, the tighter the gathers will be. Guide the previous row to the edge of the foot when sewing subsequent rows. Stretch the fabric flat for sewing each row.



Edgings on woven fabric


Fine edging

For frills, scarves, neckerchiefs, serviettes etc.

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Stitch:	
Stitch width:	1 1/2 - 2
Stitch length:	3/4 - 1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

Fold approx. 1 cm (3/8") of fabric to wrong side and press. Sew a zig-zag over this pressed edge. Guide the fabric edge to the centre of the foot, as when oversewing edges. Finally, cut off surplus fabric from the wrong side against the zig-zag stitches (Fig. 1).

Lace and insertion on woven fabric


Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

1st step:

Stitch:	-----
Stitch width:	0
Stitch length:	approx. 1 1/2

Pin lace into position, baste and sew with straight stitch.



2nd step

Stitch:	
Stitch width:	1 1/2 - 2 1/2 (according to lace)
Stitch length:	approx. 1 (according to lace)

Press edge to wrong side against straight stitch. From the right side, oversew the edge of the lace with a zig-zag. Cut off surplus fabric from the reverse side against the zig-zag stitches (Fig. 2).

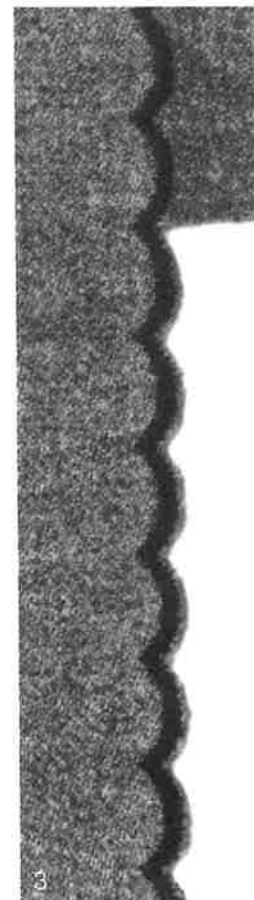
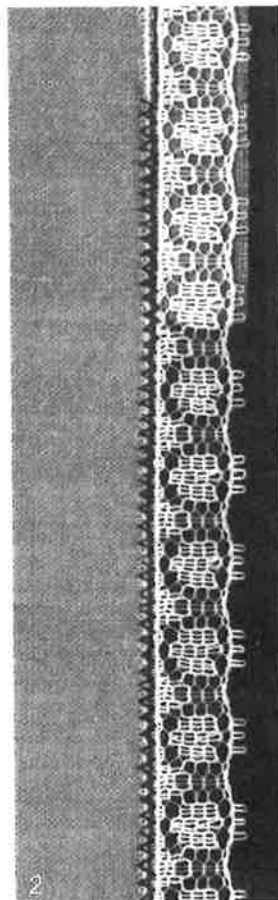
Scallop edge

For collars, frills, tablecloths, place-mats, lining hems etc.

Presser foot:	6*
Thread:	embroidery thread no. 30
Needle:	80-70
Stitch:	
Stitch width:	5
Stitch length:	lllll
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



*Additional accessory for Model 1020

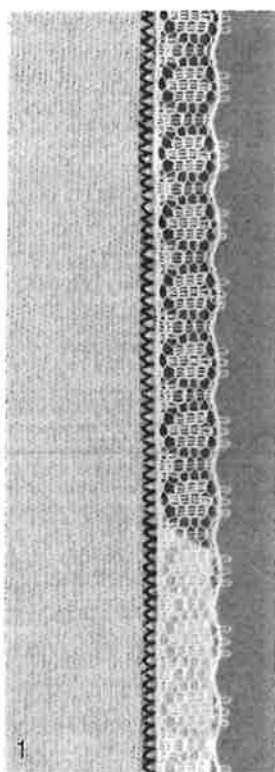
Mark the required line. Baste paper or tear-away backing underneath. Sew scallop stitch. Remove paper and cut round scallop (Fig. 3).



Edging on jersey fabrics

Lace on jersey fabric

Presser foot:	0
Thread:	darning thread / Machine emb. 60
Needle:	80-70
Stitch:	
Stitch width:	1½-2
Stitch length:	approx. 1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	





Pin on lace, baste with Long stitch * if necessary, sew with zig-zag over the edge of the lace. Cut off surplus fabric from the wrong side against the zig-zag stitches (Fig. 1).

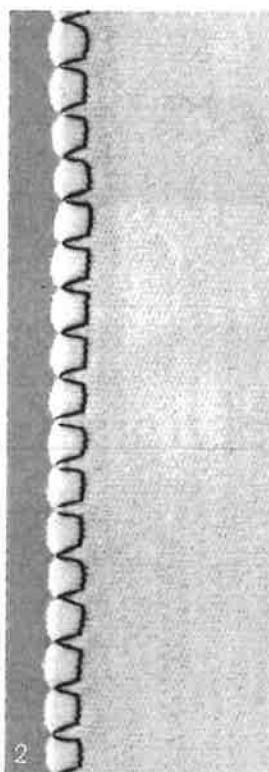
* Model 1030



Shell edging

Especially for fine fabrics and jerseys



Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	1-1½
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	



Place work under the presser foot so that the folded edge to be sewn is on the left. The needle, on its left swing, should go just over the edge (Fig. 2).

Elastic

Particularly for underwear and sports underwear

Presser foot:	0
Thread:	sewing thread
Needle:	80
Stitch:	
Stitch width:	3
Stitch length:	1
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	


The simplest method is first to gather the fabric: sew a long straight stitch, then pull the lower thread and gather the garment to the desired width.

Pin on the elastic and sew. Cut off surplus material from the wrong side (Fig. 3). The elastic should not be stretched while sewing.

Tailor Tacking

With the aid of the Tailor tack foot *, patterns can easily be transferred onto the fabric.

* Additional accessory for Model 1020

Presser foot:	7 *
Thread:	sewing thread
Needle:	80 (70/90)
Stitch:	/\/\/\/\/\/\/\/\/\/\/\/\
Stitch width:	2
Stitch length:	5
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

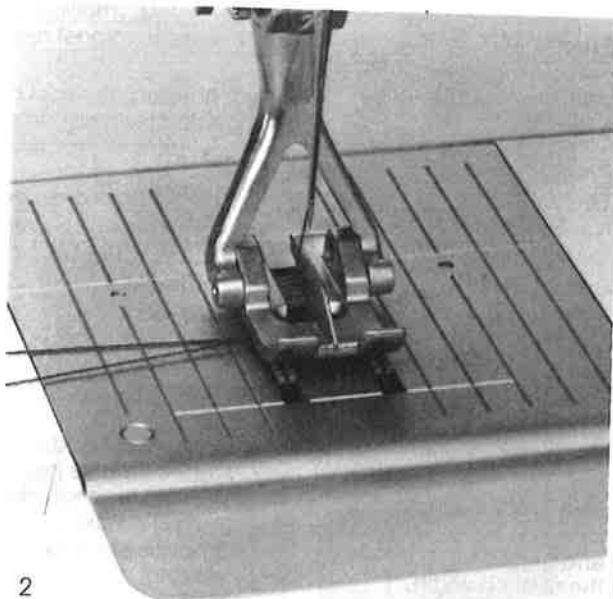
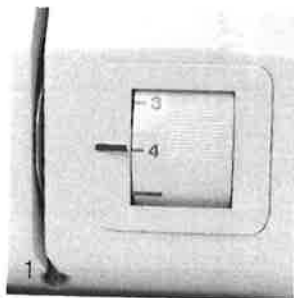
Preparation:

1. First set the stitch width. Check that the needle is at its highest position, only then attach the foot.

2. Loosen upper thread tension (Fig. 1) so that loose loops are able to form. **Reset thread tension to normal after tailor tacking.**

3. Take the upper thread through to the back of the foot. Before starting to sew, lay both thread ends to the left side under the foot (Fig. 2).

Sew the first two or three stitches slowly.



Tailor tacking with darning thread (in thin fabrics)

Needle: 70

Tailor tacking with sewing thread

Needle: 80

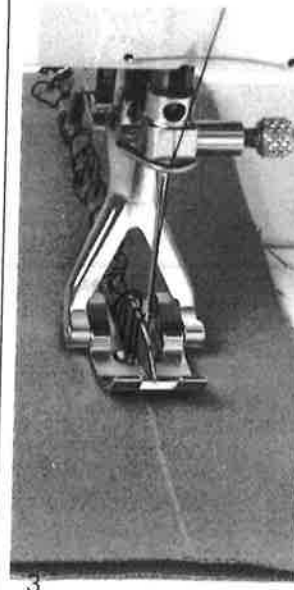
Tailor tacking with basting thread (particularly in woollens)

Needle: 90

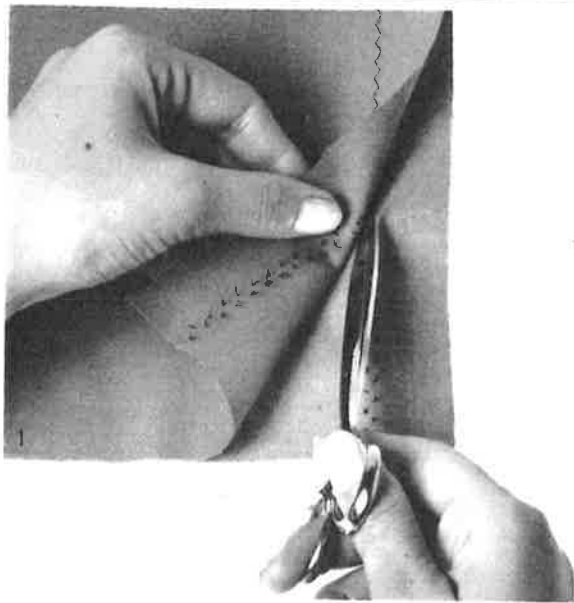
Basting thread as upper thread only; normal thread as lower thread.

When tailor tacking by hand, it is usual to transfer directly from the pattern.

To save time when tailor tacking by machine, first chalk mark the lines onto one side of the fabric (Fig. 3). Remove pattern, pin the two layers of fabric firmly so they cannot move and tailor tack along the chalk line.

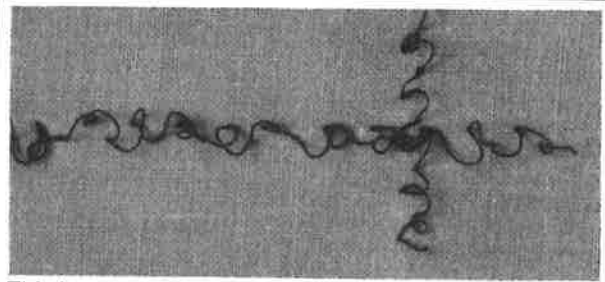


Tailor Tacking

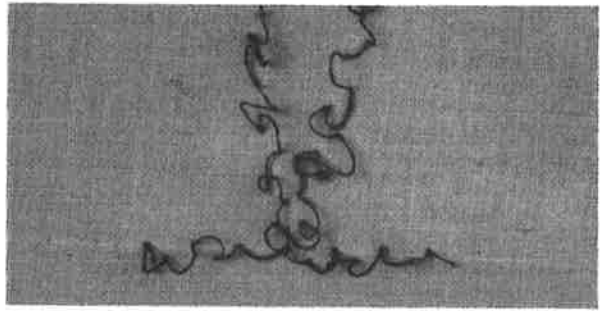


The two layers of material are then pulled apart and the threads cut through (Fig. 1).

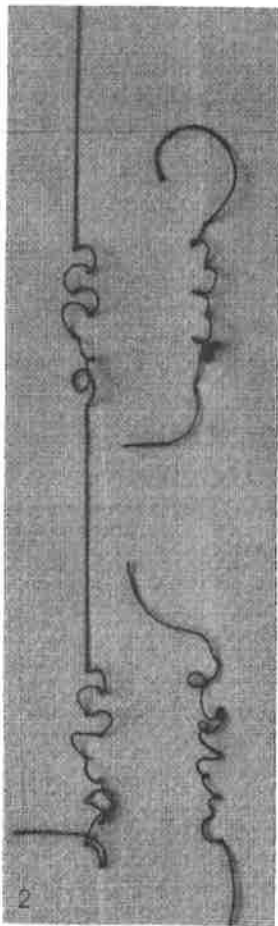
After cutting apart, snip through the lower thread a few times on the under side.



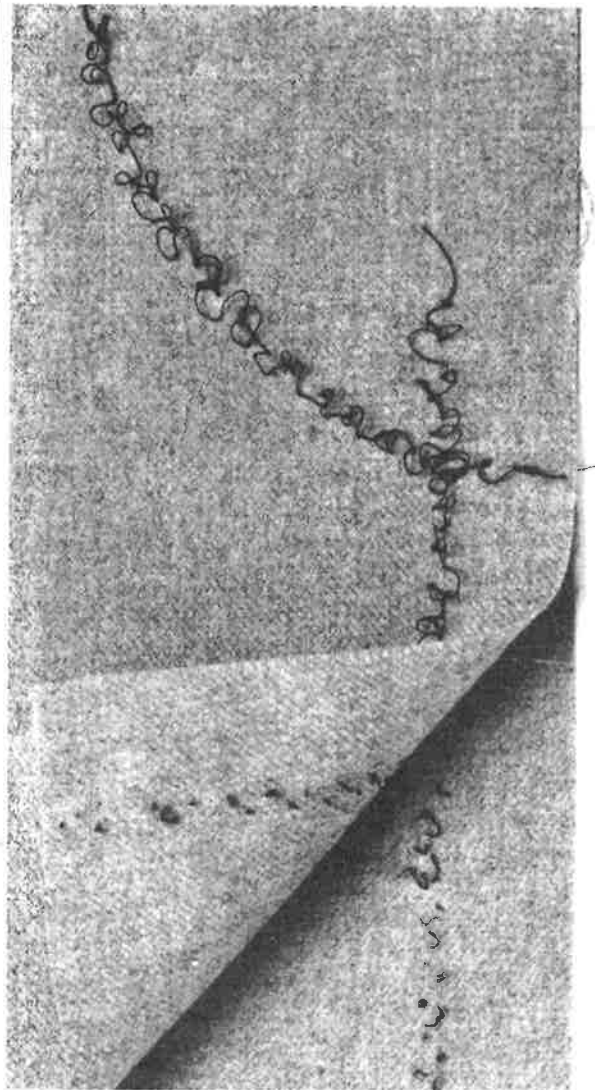
This is how to mark corners ...



and darts.



Long seams need not be tailor tacked for the whole length. Sew a few tailor tack stitches, raise the Tailor tack foot, pull the work along approx. 5 cm (2"), sew a few more stitches, and so on. Before cutting apart, snip through the long intermediate stitches on both sides (Fig. 2).



Appliqué

Single-colour appliqué

Appliqué is a method for sewing on shapes and figures, allowing full rein to your creative talents. There are various methods for sewing appliqué. The basic technique is described here.

Guiding the work

It is possible to work with or without a ring, but stretched fabric can be guided more easily. Therefore it is a good deal easier to learn with fabric in a ring.

The most important ground rules:

- Watch the work through the zig-zag slot of the presser foot.
- Stop the machine to reposition hands.
- Turn the work only while sewing, except in the case of very small curves, otherwise an uneven edge will result.

Guiding with ring

The ring is guided mainly by the left hand. You must hold it firmly, and be able to turn it easily.

Position hand initially as for darning. Draw the index finger straight back to the inner edge of the ring (Fig. 1). The middle and ring fingers remain extended.



Important note:

Do not hold the index finger parallel to the thumb, otherwise movement of the hand is restricted.

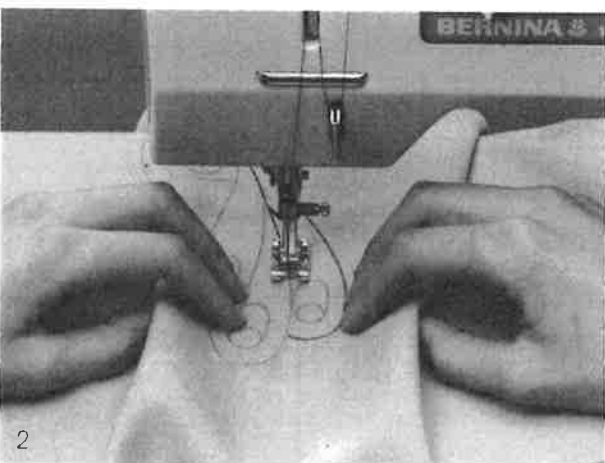
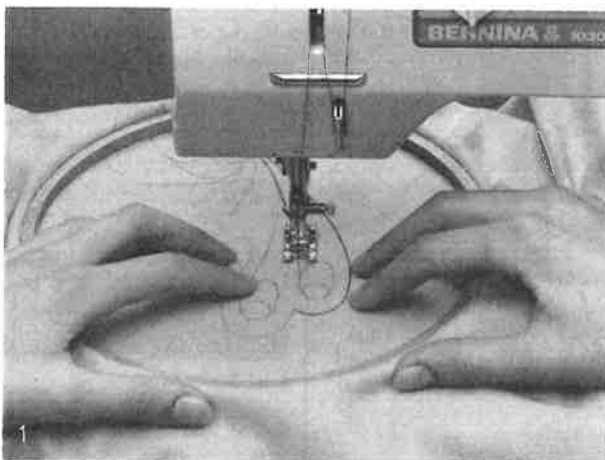
Guiding without ring

Some fabrics, eg. velvet, cannot be stretched in the frame. Nevertheless, it should be guided in as stretched condition as possible.

Place thumbs under the fabric. With large pieces of work, make a fold. Guide close to the foot. In this way the work can be stretched to some extent and turned easily (Fig 2).

Presser foot:	6 *
Thread:	darning thread / embroidery thread
Needle:	80
Stitch:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

* Additional accessory for Model 1020



Procedure

Trace reversed motif with tracing paper on to the wrong side of the background fabric. The motif can also be traced on to thin iron-on interfacing and ironed on to the wrong side of the fabric. This is recommended for coarse and uneven fabrics.

Stiffen applique fabric with iron-on interfacing and baste to the right side.

1st step

Stitch width $\frac{1}{2}$ –1
Stitch length approx. $\frac{1}{4}$

- From the wrong side sew along the marked lines.
- Cut off surplus fabric from the right side neatly against the sewn lines. Remove from the ring in order to do this.

2nd step

Stitch width $1\frac{1}{2}$
Stitch length IIIII

On the right side, cover the cut edge with satin stitch. Sew corners and small curves stitch by stitch. Finally, trace through lines which are not appliqued and sew from the right side.

Multi-colour appliqué

Corners and small curves

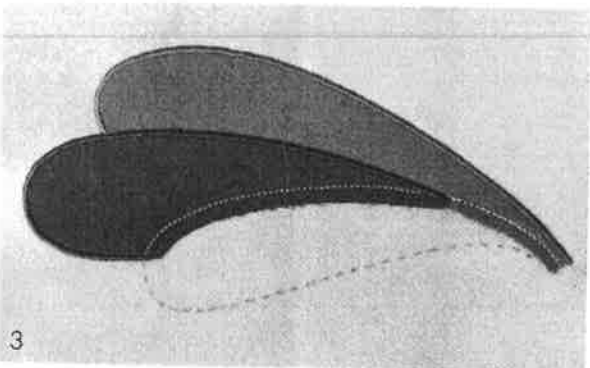
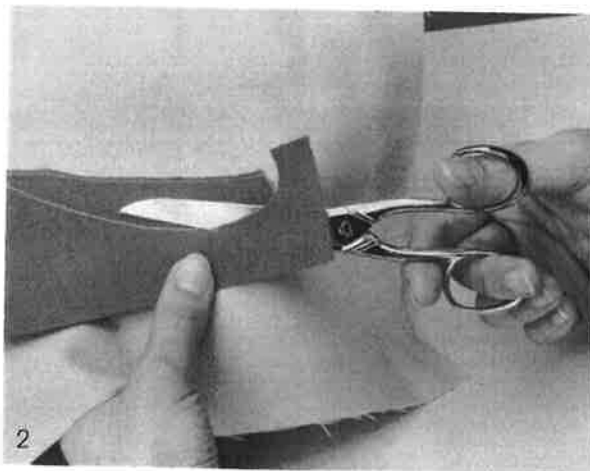
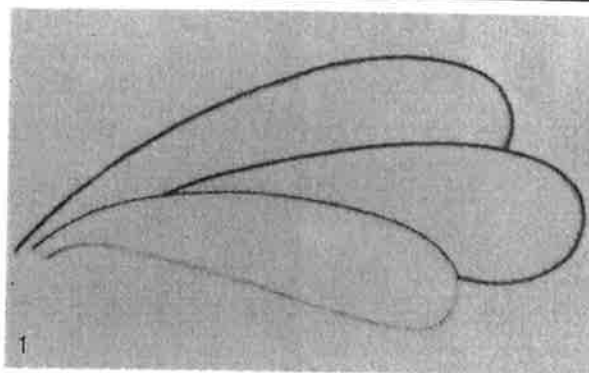
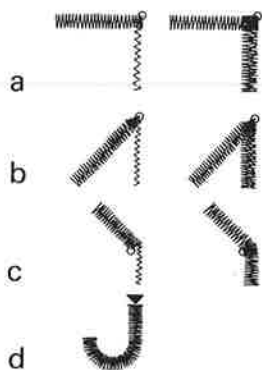
a) Right-angled corners:

Stop with the needle in the fabric on the outer edge, turn the work and continue to sew. The corner will then be over-sewn.

b) **Pointed corners:** Sew to ½ cm (¾") before the corner. Then turn zig-zag back to 0 while sewing. Raise the foot, turn the work, reset zig-zag to 1½ and carefully continue sewing.

c) **Blunt corners:** Sew until the needle is exactly in the centre of the angle, then sew the corner radially; i.e. after each stitch, place the needle in the centre of the angle. Raise the foot and turn the work very slightly.

d) **Small curves** should also be sewn radially.



The appliqué pieces must overlap.

Lower appliqué piece:

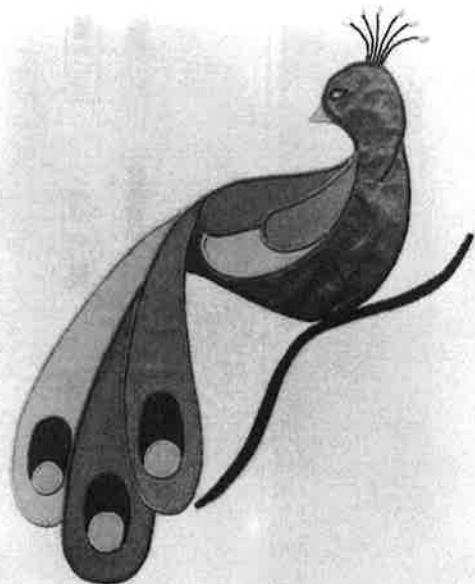
1. Pin on the appliqué fabric. Sew the first step. Where colours overlap, sew only with a straight stitch, the other lines with zig-zag (Fig. 1).

2. Cut away surplus material. **Note:** Where a straight stitch has been sewn, leave 2 mm (¼"). Where a zig-zag has been sewn, cut away fabric completely (Fig. 2).

3. When satin stitching the edges, do not sew over the straight stitch lines. These will be covered over by the next piece of appliqué (Fig. 3).

Upper appliqué piece:

Proceed as with normal appliqué.



To ensure success in sewing machine embroidery, a certain amount of basic knowledge and practice is necessary, as with any other handicraft, be it hand embroidery, knitting or weaving. It is worth practising. With a little skill, you can create works of art according to your own designs. Practise in the sequence described. Each step is based on the previous one. Even practising can be enjoyable.

Basic practice for decorative stitches

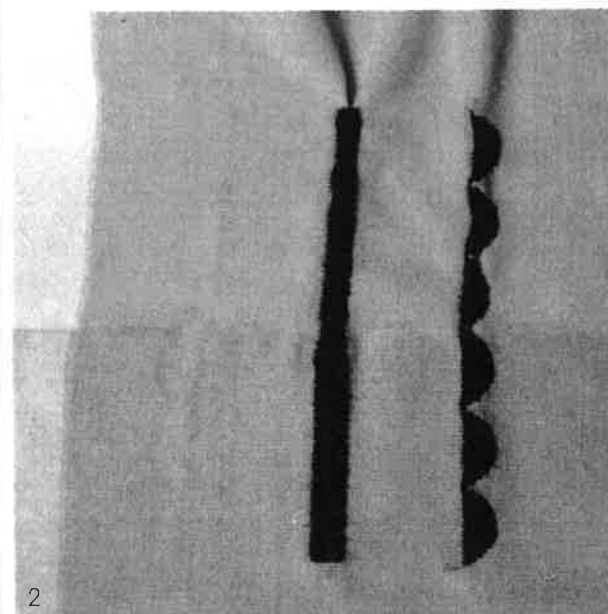
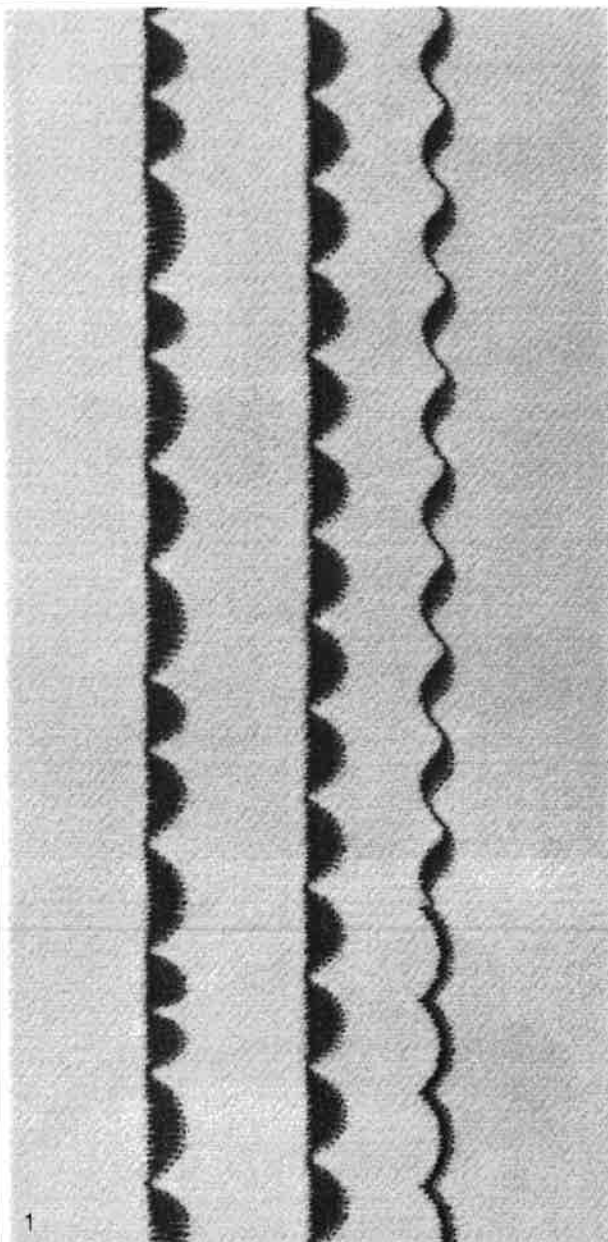
1. Leaves (pattern indicator exercise)
2. Flowers
3. Parallel sewing of patterns
4. Sewing and calculating corners
5. Sewing and calculating curves.

A light-coloured, even and rather firm cotton fabric is best for practice (folded double, instead of paper underlay). If necessary, starch material a little.

Guiding the fabric

Make sure that the fabric runs evenly under the presser foot. Pulling, pushing or restraining the fabric will produce irregular patterns (Fig. 1).

Use the sewing table. Do not place the machine on the table edge.



Paper or tear-away underlay

To ensure that the fabric does not «cave-in» due to the width of the stitch, always pin paper or tear-away backing underneath (Fig. 2). Suitable paper is pattern paper, typing paper, unprinted newspaper, but not tissue paper. For translucent fabrics, use a translucent paper or an organdie fabric.

The pattern indicator

(Fig. 3)
The pattern indicator shows how far a decorative pattern has been sewn.

a) The red line indicates the beginning and end of a pattern.

b) The black line shows the centre of the pattern.

c) The broken bar (horizontal black lines) warns that the pattern is nearly finished.

3

a)



b)





c)



1. Leaves

Practise watching the pattern indicator

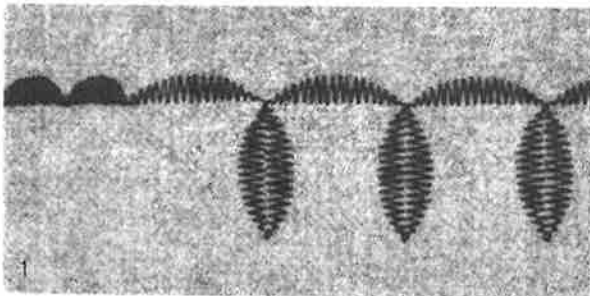
Presser foot:	6*
Thread:	embroidery thread no. 30
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	approx. 1/2
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

*Additional accessory for Model 1020

1. Sew pattern about as far as the centre of the pattern. While doing so, watch the sewing only in the zig-zag slot of the foot. After the centre of the pattern, sew slowly, so that you do not go past the end of the pattern. Towards the end of the pattern, check whether the pattern indicator is at the warning lines. **If so, watch only the pattern indicator.**

2. Lower needle into fabric (by tapping rear of foot control or by turning the handwheel)

3. Turn the work and sew the next half of the leaf in the same way (Fig. 1).



2. Flowers

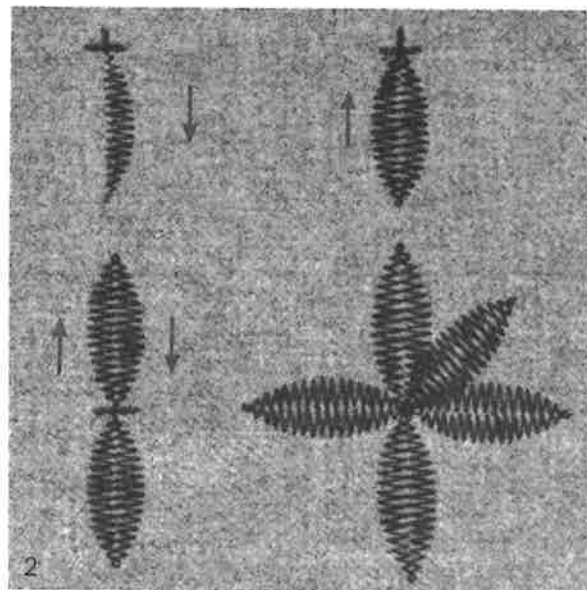
(Fig. 2)

1. Always start in the centre.



2. When sewing the second half, towards the centre of the flower, on no account «over-run» the red line at the end of the pattern indicator, otherwise the next leaf will be longer or shorter or out of line.

3. When the needle reaches the centre, always check that it really is at the central point of the design. If not, re-position the needle precisely to the centre.

4. For intermediate leaves, place the needle on the central line between the leaves already sewn.



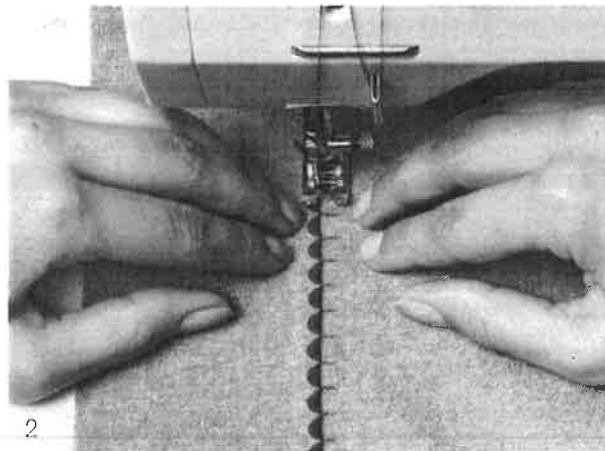
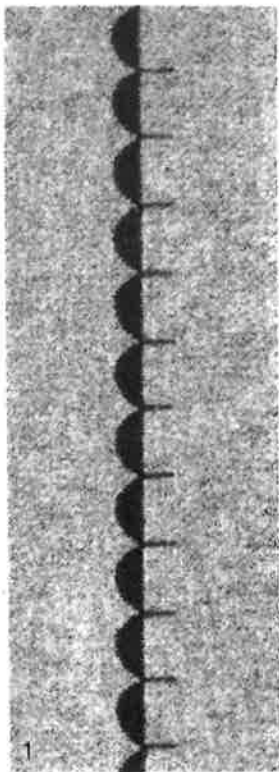
3. Parallel sewing of patterns

Presser foot:	6 *
Thread :	embroidery thread no. 30
Needle :	80
Stitch :	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog :	sewing
Colour indicator:	

* Additional accessory for Model 1020

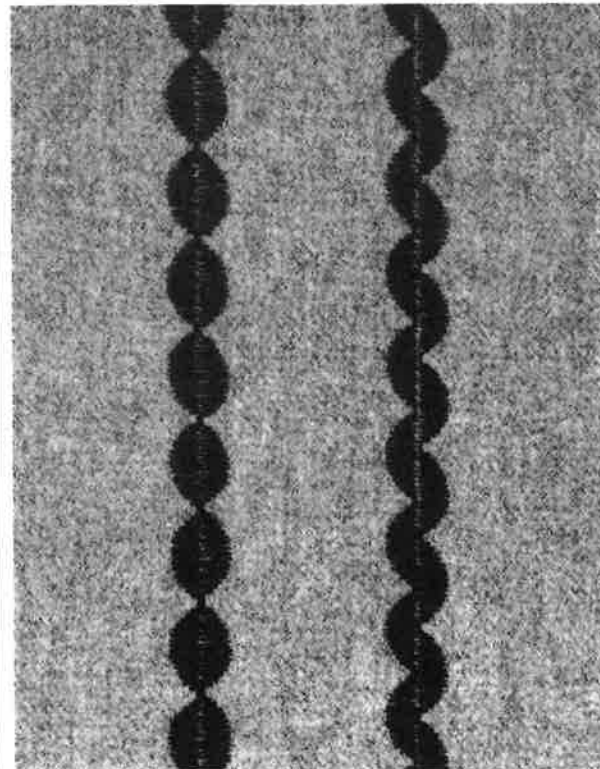
Sewing two perfectly matching parallel lines of embroidery patterns can be a problem. When working the 2nd row of sewing the 1st row will run partly under the foot. This acts as a thick fabric would do and shortens the stitch slightly. This must be compensated. With practise it is possible to sew two exactly matching rows of patterns.

1. Sew the first row. Turn the work and mark a line out from the end of each pattern, for practice only (Fig. 1).





2. For the 2nd row guide the fabric with fingers very close to the foot. All fingers should be on the fabric but the middle fingers are the ones that do most of the work. These should always be against the marked line. This means that at the end of each pattern your middle fingers must move down to the next marked line (Fig. 2).

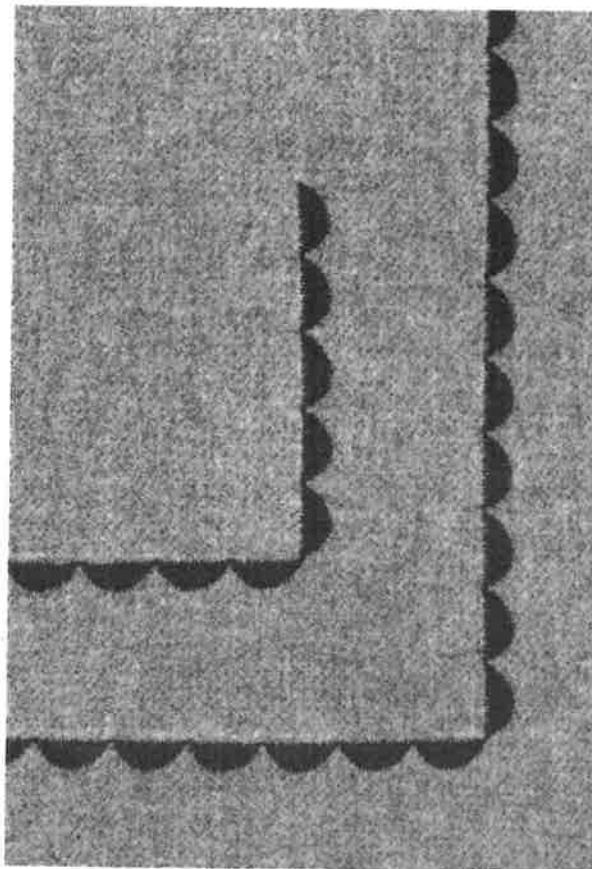
As you sew each individual pattern push the fabric slightly so that they match. Under no circumstances raise the presser foot and move the work. This procedure takes practice and you cannot expect perfectly matching patterns at your first attempt. Always sew slowly.



4. Sewing and calculating corners

Presser foot:	6*
Thread:	embroidery thread no. 30
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

*Additional accessory for Model 1020



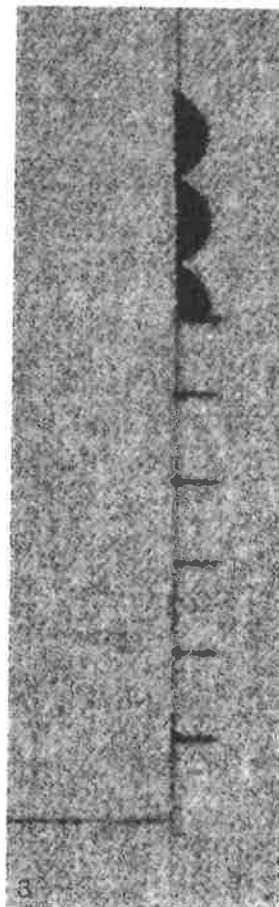
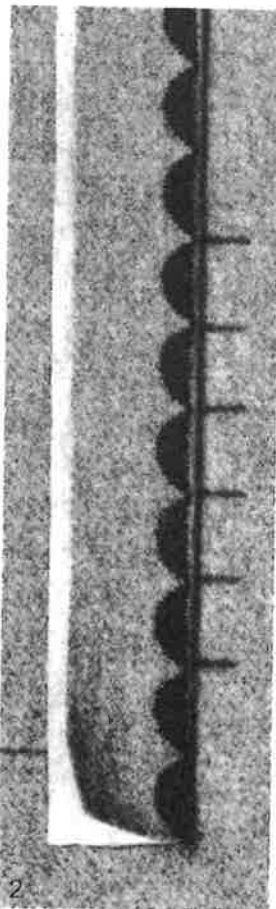
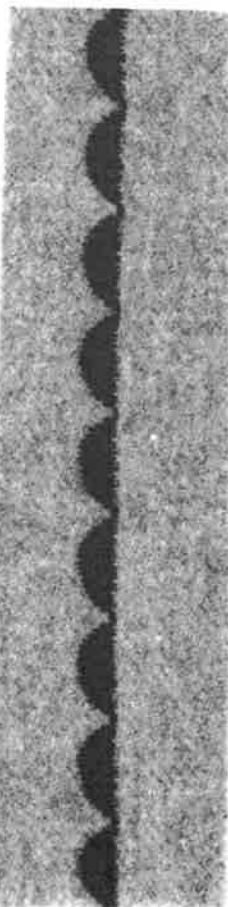
When sewing towards a predetermined corner, you do not know in advance whether the pattern will end exactly in the corner.

The following calculation can be made, to ensure that the pattern ends at the corner:



1. Sew a testpiece on a remnant of the same fabric, sewing at least six repeats, with a paper underlay (Fig. 1).

2. Place the testpiece to the pre-marked corner and mark the end of at least six patterns on to the fabric (Fig. 2).

3. When sewing towards the corner, you can stop 6 patterns away and see whether the patterns will line up, or whether it will have to be adjusted by slightly restraining or pushing the fabric. This adjustment will not be noticeable spread over 6 patterns (Fig. 3).



5. Sewing and calculating curves

Presser foot:	6*
Thread:	embroidery thread
Needle:	80
Stitch:	
Stitch width:	5
Stitch length:	
Needle position:	centre
Feed-dog:	sewing
Colour indicator:	

*Additional accessory for Model 1020

1. Sewing curves

A curve or a rounded line can be divided into small straight sections. Accordingly, a decorative pattern can be sewn along a curve, with the individual patterns being sewn «straight».

Practice method: Divide the pre-marked curve into straight sections, with dots along the line, corresponding to the length of the patterns. Sew the first pattern. Lower the needle into the fabric, raise the presser foot, turn the work until the next point is in line in front of the needle, lower the foot, sew the second pattern etc. (Fig. 1).

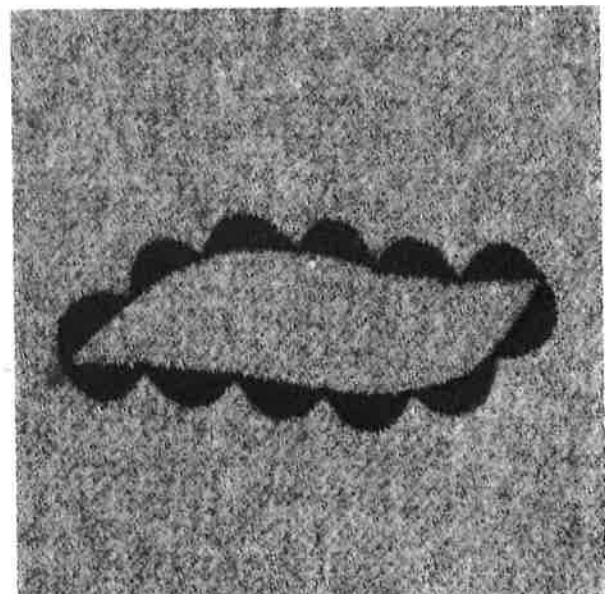
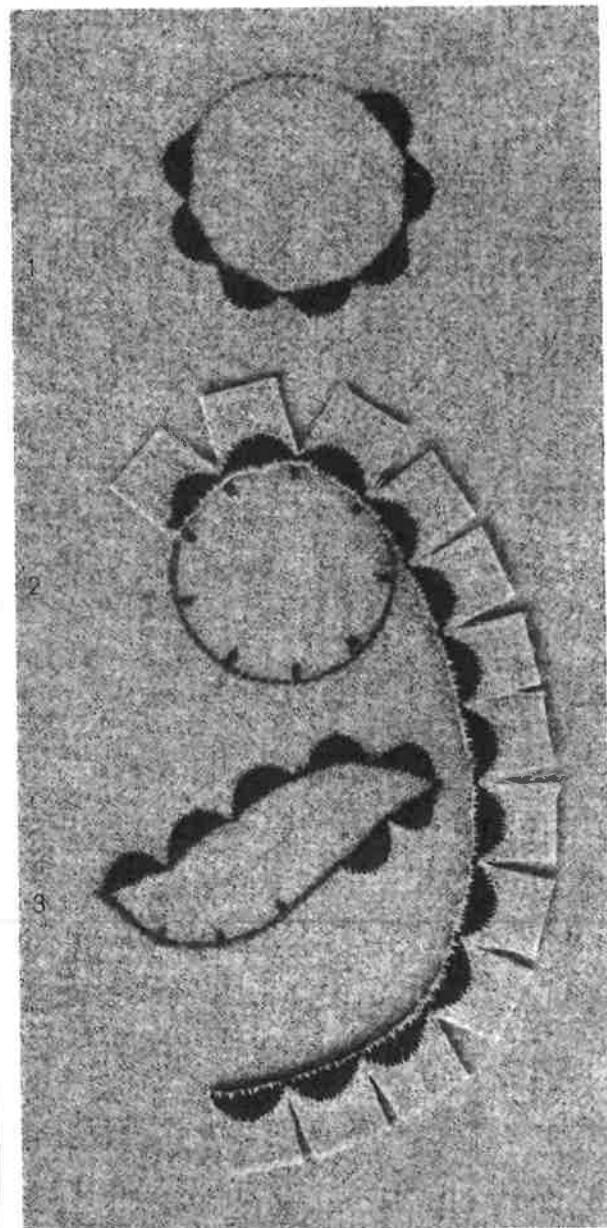
With a little practice, you will soon be able to estimate the distances between the dots, ie. the length of the pattern, so that the dots no longer have to be marked.

2. Calculating circles or closed shapes

If a closed circle (up to $\varnothing 2\frac{1}{2}$ cm / 1") or a closed shape has to be sewn, the patterns will have to be calculated to ensure that they match up.



Method: (figs. 2 and 3)

- Sew a sufficiently long testpiece (with paper underlay). Cut off the edge of the fabric fairly close to the straight edge of pattern.
- Snip into the curved side of the pattern.
- Place the testpiece on the circle or shape, and check whether the patterns match up. If not, alter the stitch length very slightly and sew a new testpiece. As soon as your calculation is correct, transfer the dots on to the motif.

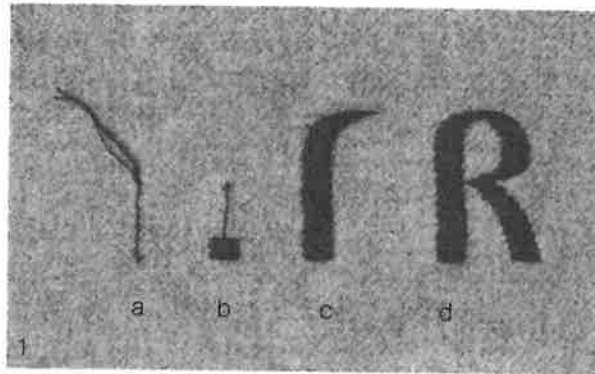


Monograms

The following applies to «free-hand» monograms

Presser foot:	– (possibly no. 9)
Thread:	darning thread / embroidery thread
Needle:	80
Stitch:	
Stitch width:	5–2
Stitch length:	0
Needle position:	centre
Feed-dog:	lowered
Colour indicator:	

Work without presser foot. However: Lower the presser foot lever, otherwise loose stitches will result. Always stretch the work in a ring. With thin fabrics, use a paper underlay as well. If you are worried at first about embroidering without a presser foot, you can use darning foot no. 9 (or the Free-hand embroidery foot no. 24 – special accessory). In most cases, darning thread is used. For large monograms, eg. on towels, embroidery thread is also suitable.



Learning and practising

– To begin with, do not pre-mark monograms, but «write» them freely. Concentrate only on guiding the ring.
 – Select stitch width 5 and do not sew letters of more than 2 cm (¾"). (Large monograms are more difficult as you must hold the hoop steady for longer.)

– The letters R and B are particularly suitable for practising.
 – Later on, practise some pre-marked monograms. The marked line should lie in the centre of the zig-zag stitch.
 – Run the machine at about three-quarters speed, but guide the ring slowly, evenly and smoothly.

Method: (Fig. 1)

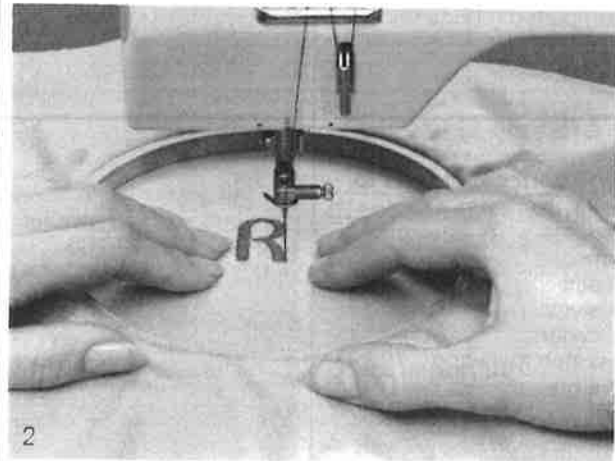
- Bring the lower thread up through the fabric. Secure with a few straight stitches. Cut off both thread ends.
- Set to zig-zag. Using the handwheel, sew 1–2 trial stitches. Make sure that zig-zag stitches cover the securing stitches.
- Move ring towards you, as if writing with it. Do not twist the ring however. The wide and narrow parts will come automatically. As soon as a curve starts, guide the ring along the curve without twisting it.
- Finally, secure with straight stitches.

Guiding the embroidery ring

The stitching of an even monogram largely depends on the correct holding of the ring. The more correctly and firmly it is held, the more attractive the monogram will appear. Hold the ring as for darning (Fig. 2). Make sure that only the ring is being held. Any finger pressure on the fabric will result in irregular and jerky movements, producing uneven monograms.

Important

Work as far as possible to the centre of the ring, otherwise it will be very difficult to guide evenly.



BERNINA Walking foot



The BERNINA Walking foot makes it easier to sew difficult fabric, eg,

a) fabrics that do not feed easily such as:
leather suede
imitation leather
imitation suede
plastic-coated fabrics
laminated fabrics etc.

b) Fabrics that tend to slip, such as:
stripes
checks
satin
velvet
corduroy
stretch towelling
velour
Helanca etc.

Preparation of the fabric

Pin pieces together as usual, basting where necessary. In the case of cross-wise stripes, insert pins crosswise.

Sewing machine settings

Select stitch and basic setting for stitch width and stitch length as usual. Adjust according to fabric. Carry out a sewing test.

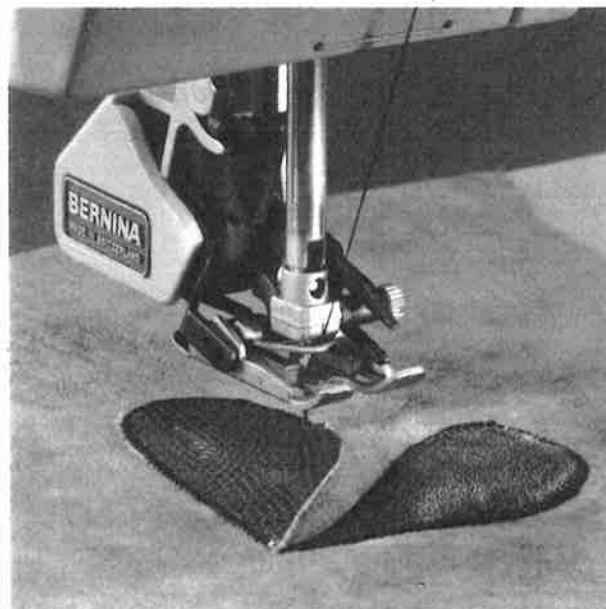
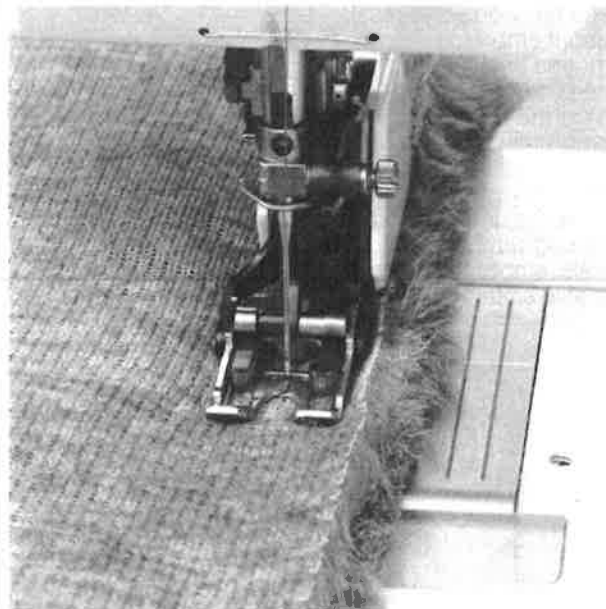
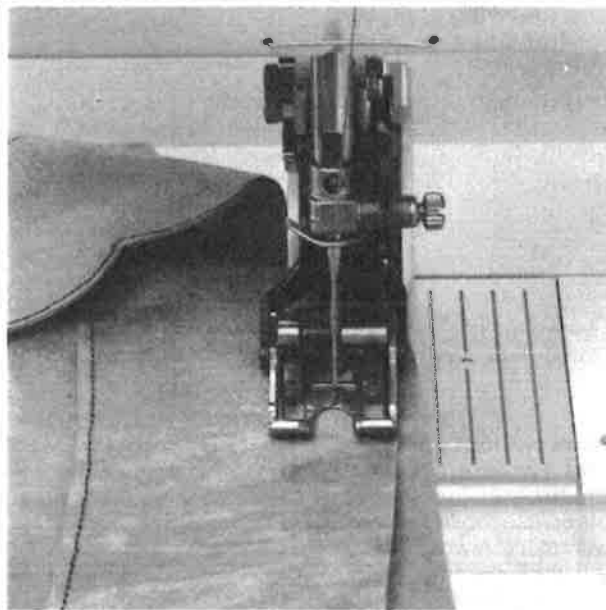
Note:

In the red stitch range, the maximum stitch length is 3 mm = stitch length 3.

Sewing tight curves

Do not turn the fabric while sewing, but stop the machine (needle in fabric), raise the foot and turn the fabric slightly. For this work, you should definitely use the presser foot lifter (Model 1030 only)

Full operating instructions with each Walking foot.



BERNINA publications

You will only really enjoy your sewing when you give free rein to your creativity and instinct. To help you, BERNINA bring out regular publications with ideas and hints for sewing. We would like to introduce you to two of them.



BERNINA «Sewing Club»

Creative seamstresses, amateur and professional dressmakers, and also newcomers to this field, will find many hints, ideas and instructions in this magazine, in language that is easy to understand. The BERNINA «Sewing Club» comes out twice a year and is obtainable from any BERNINA dealer. The 40 page magazine contains attractive, colourful pictures of the latest fashions, many useful working instructions, craft hints, ideas for baby fashions, suggestions for

creative and decorative sewing, product information and much more on the subject of do-it-yourself. Also you will find a paper pattern chart in the centre of magazine.

The designs for you to sew yourself are simple, so that they can be made up even by the less experienced seamstress. The paper patterns for all designs can be found, together with the sewing instructions, in the centre of the magazine.

Sewing Service Leaflets

In this book we have described certain sewing operations, some of which require special accessories. There are leaflets covering further techniques, called BERNINA Sewing Service leaflets. These give detailed explanations of sewing

processes, illustrated with pictures or drawings. At the present time, Sewing Service leaflets are available from BERNINA dealers on the following subjects:

BERNINA Näh-Service 15



Näh-Service 14



Service 13



Formgestrichelte Teile

Zugeschnittene Teile



- | | | | |
|--------|--|-------|---------------------------------------|
| N° 1 | Circle embroidery | | with the Edge Stitch foot |
| N° 2 | Eyelet or English embroidery | N° 10 | Satin stitch |
| N° 3 | Sewing pintucks | N° 11 | Embroidery with perle cord and wool |
| N° 4 | Open embroidery foot | N° 12 | Hemstitch/work with hemstitch needles |
| N° 5/6 | Practical and decorative work with double end triple needles | N° 13 | Sewing knitted fabrics |
| N° 7 | The Hemmers | N° 14 | Bulky Overlock foot |
| N° 8/9 | Practical and decorative work | N° 15 | Walking foot |

Troubleshooting Maintenance

Fault prevention	68
Changing the bulbs	69
Maintenance:	
Cleaning and oiling	70

If the sewing machine does not sew properly, it is usually due to incorrect operation.

Check whether:

- The upper and lower threads are correctly threaded.
- The needle has been correctly inserted, with the flat side of the shank to the rear.
- The needle size is correct. See needle and thread table.
- The machine is clean. Brush out any remnants of thread.
- The hook race is clean and oiled.
- Any remnants of thread are trapped between the thread tensioning discs and beneath the bobbin case spring.

Upper thread breaks

- The upper thread tension is too tight.
- Poor quality needles. Ideally, needles should be purchased from a BERNINA dealer.
- The needle has been fitted incorrectly. The flat side of the shank must be to the rear.
- The needle is blunt or bent.
- Poor quality thread, knotted or dried out thread
- Stitch plate or hook tip damaged. Take to a BERNINA dealer.

Lower thread breaks

- The lower thread tension is too tight.
- The bobbin is jamming in the bobbin case. Replace bobbin.
- The hole in the stitch plate has been damaged by the needle. This must be re-polished by an expert.
- The needle is blunt or bent.

Skipped stitches

- Wrong needles. Use only 130/705 H needle system.
- The needle is blunt, bent or incorrectly fitted. Push right to the top when inserting.
- Poor quality, badly polished needle.
- The needle point does not suit the fabric being sewn. If necessary, use ball point for knitted fabrics and cutting point for hard leather.

Needle breaks

- Needle clamping screw not sufficiently tightened.
- Fabric withdrawn forwards instead of backwards under the presser foot.
- When sewing over a thick area, the fabric was pushed while still in the fabric. Use the Jeans foot.
- Poor quality thread, unevenly wound or knotted.

Faulty tension

- Remnants of thread between the thread tensioning discs.
- Remnants of thread under the bobbin case spring.
- Lower thread still threaded in the bobbin case finger.
- Threaded with foot down.
- Incorrectly threaded. Check lower and upper threads.

Machine fails to run, or will run only slowly

- Plug is not properly inserted.
- Power switch in position.
- Power switch is on reduced speed.
- Machine gummed up by unsuitable oil. Machine will have to be cleaned by a BERNINA dealer.
- Machine has been standing in a cold room.

Important

If you have to take your machine to a BERNINA dealer, please always take the foot control unit and accessories.

Fitting the bulbs

Disconnect the machine from the mains by pulling the mains plug from the socket.

There are 2 low voltage 6 volt/4 watt bulbs provided. One is located in front to the left of the presser foot, the other one behind, to the right.

Changing bulbs

To change the front bulb: (Fig. 2). Using special tool A, press the bulb upwards, twist to the left and withdraw.

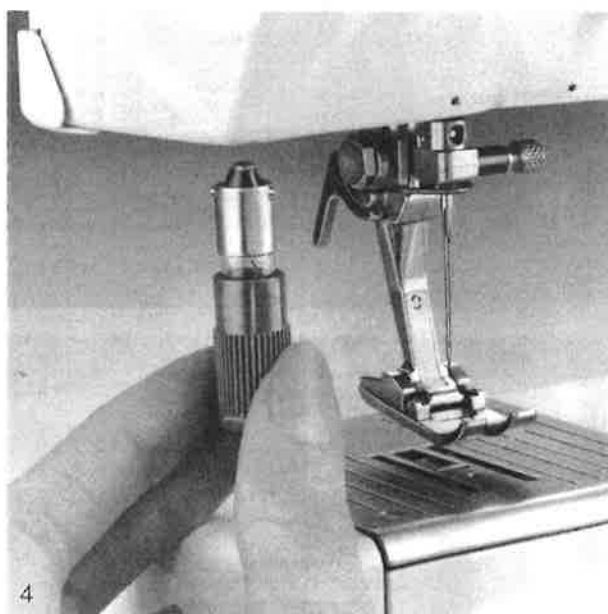
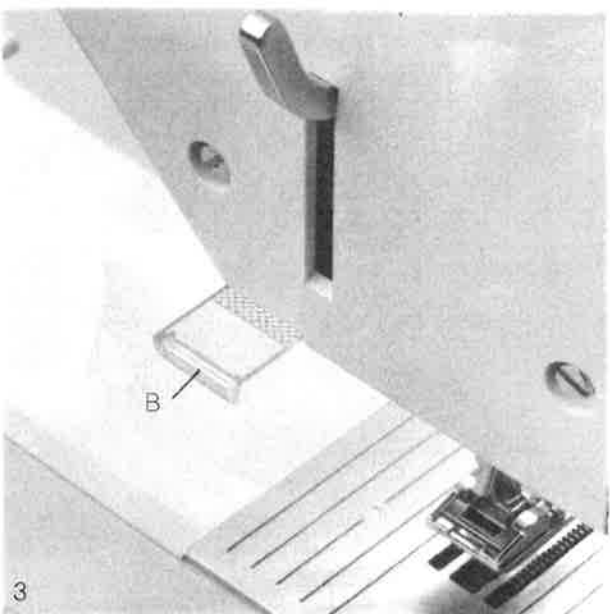
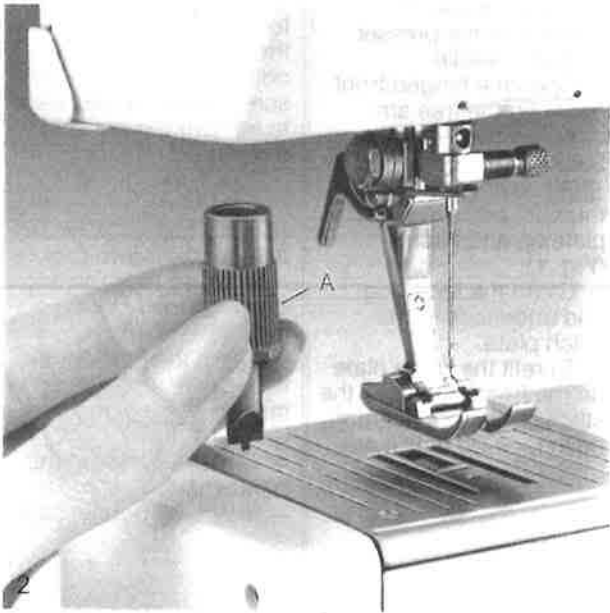
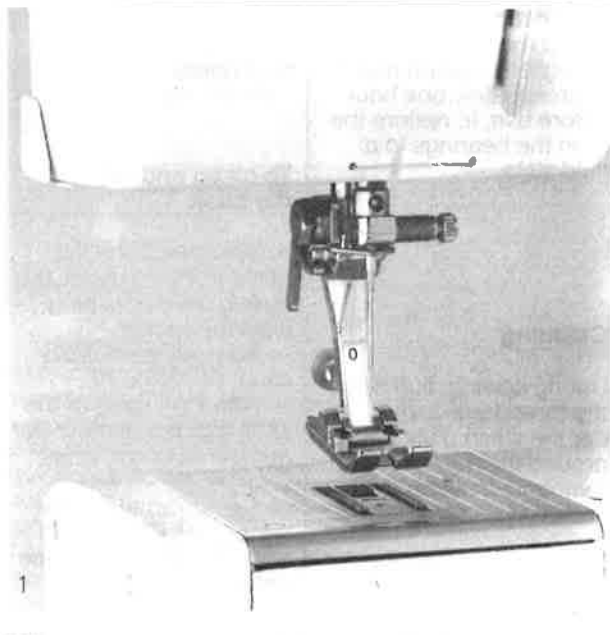
To change the rear bulb

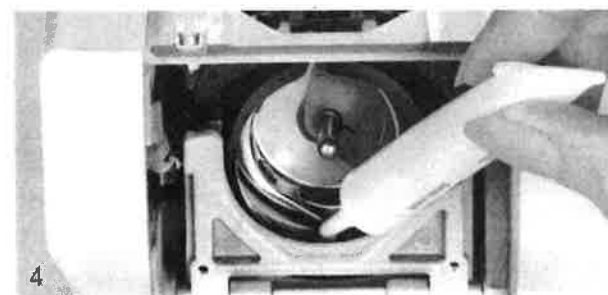
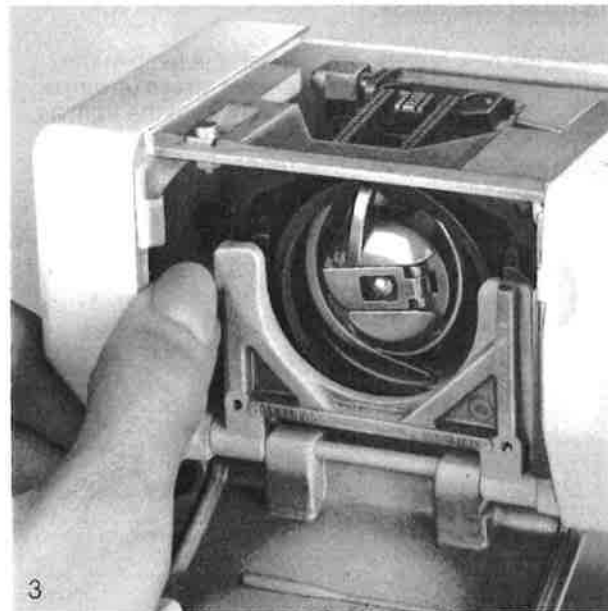
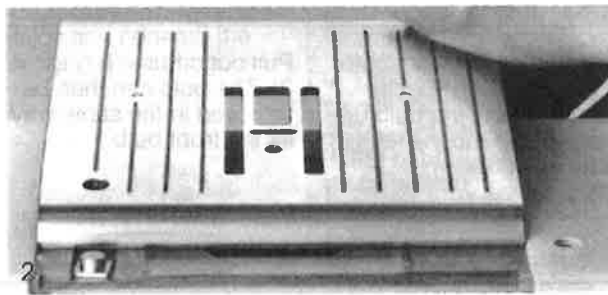
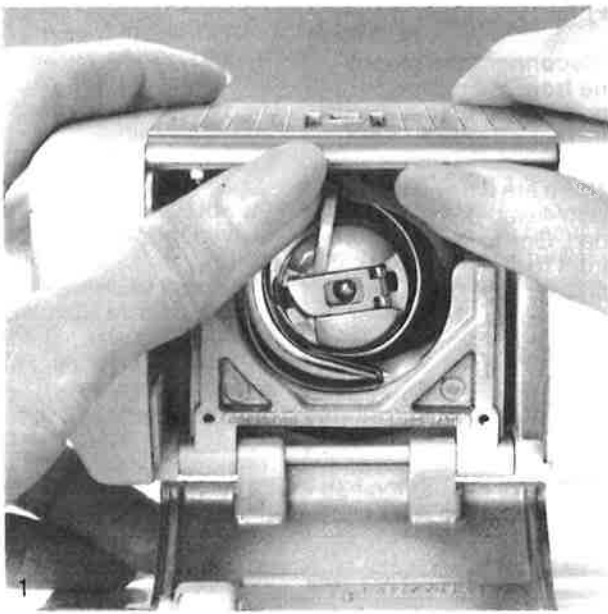
Pull out diffuser B (Fig. 3). The bulb can then be removed in the same way as the front bulb.

To insert new bulbs:

Place the new bulb on the special tool (Fig. 4).

Insert the lamp in the socket, press upwards and twist to the right as far as it will go. For the rear bulb, refit diffuser B.






If the machine is stored in a cold room, it should be brought to a warm room approximately one hour before use, to restore the oil in the bearings to a fluid state.

Cleaning

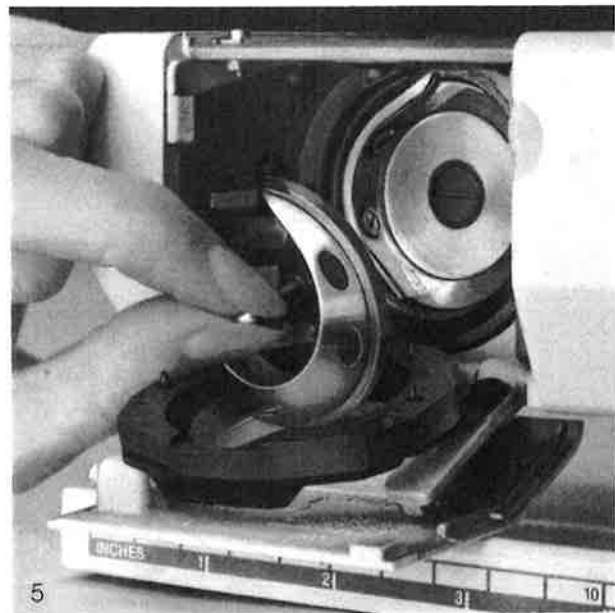
During sewing, fluff from the thread will collect under the stitch plate and around the hook. These remnants must be removed from time to time.

- Disconnect the machine from the mains by pulling the mains plug from the socket.
- Remove the presser foot and needle.
- Open the hinged front cover on the free arm.
- Lower the feed-dog. Set knob to position . Using both thumbs, press the stitch plate up and back (Fig. 1).
- Clean the feed-dog and underside of the stitch plate.
- To refit the stitch plate on the free arm, insert the stitch plate from the rear, push forward until it engages (Fig. 2).

To oil the hook: Apply 1–2 drops of oil after 3–4 hours' sewing.

To clean and oil the hook

- Disconnect the machine from the mains by pulling the mains plug from the socket.
- Take out the bobbin case, see page 12.
- With the thumb of the left hand, press the lower release lever to the left (Fig. 3).
- Fold down the semi-spherical locking strap with the black hook race cover.
- Take out the hook.
- Clean the top and bottom of the hook race with the cleaning brush and cotton cloth. Never use a screwdriver, scissors etc. to remove remnants of thread.
- Lightly oil the hook race with 1–2 drops of oil (Fig. 4). Insert the hook. If necessary, turn the handwheel until the hook driver is on the left (Fig. 5).
- Close the black hook race cover and locking strap. The pawl must engage.
- Check by turning the handwheel.
- Insert the bobbin case.



Important

Safety instructions

The following safety instructions must be observed.

– The moving needle is a source of danger (risk of injury to the fingers). Always therefore keep your eyes on the area in which you are working.

– Any operations performed within the needle movement area, e.g. changing a needle or presser foot, must always be carried out with the machine switched off (power switch at 0). The same applies to removing and replacing the lower thread bobbin.

– When carrying out maintenance (cleaning or oiling), whenever work is interrupted or finished and also for changing bulb, the sewing machine should be disconnected from the mains by removing the mains plug from the socket.

– All repairs to the machine, especially electrical repairs (for example, changing wiring connections) may only be carried out by one of our service agencies.



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