

**My
BERNINA
Guide**

Table of contents

| | Page | Page | Page |
|-----------------------------------|-------|-----------|-------|
| Adjusting stitch length | 8 | | |
| Applique work | 42-43 | | |
| Automatic patterns | 15 | | |
| Automatic stitches | 14 | | |
| Basting | 25 | | |
| Blind-hems | 24 | | |
| Bobbin and bobbin case | 4 | | |
| Breakdowns | 61-62 | | |
| Buttonhole gauge | 63 | | |
| Buttonholes | 26 | | |
| Buttonholes with cord | 27 | | |
| Changing presser feet | 7 | | |
| Circular embroidery | 54 | | |
| Cleaning and oiling | 62 | | |
| Corded buttonholes | 27 | | |
| Cordonnet | 59 | | |
| Darning | 29-30 | | |
| Darning fine socks | 30 | | |
| Darning sleeves | 30 | | |
| Darning Terry Cloth | 33 | | |
| Darning with wool | 33 | | |
| Double hemstitch needle | 53 | | |
| Double needle | 50 | | |
| Edgings — Fancy | 21 | | |
| Edging with glimp | 45 | | |
| Elastic seams | 19 | | |
| Elastic thread | 23 | | |
| Elastic waistband | 21 | | |
| Electrical connections | 3 | | |
| Embroidery designs | 14 | | |
| Embroidery with the automatic | 46-49 | | |
| Eyelet or English embroidery | 56-57 | | |
| Finishing of seams | 13 | | |
| Flat joining seam | 19 | | |
| Flat seam | | 18 | |
| Flower designs | | 47 | |
| Gathering of material | | 23 and 41 | |
| Gusset seam | | 18 | |
| Hemmer | | 38 | |
| Hems in Jersey material | | 16 | |
| Hemstitching | | 52 | |
| Hemstitch needle | | 52 | |
| Hints | | 11 | |
| Inserting the bobbin | | 5 | |
| Inserting zips | | 35 | |
| Jersey repairs | | 17 | |
| Jersey seams | | 18 | |
| Lace on Jersey | | 21 | |
| Lace in material | | 22 | |
| Lap hemmer | | 41 | |
| Lifter | | 9 | |
| Lowering drop feed control | | 6 | |
| Lycra seams | | 19 | |
| Monograms | | 58 | |
| Neatening seams | | 13 | |
| Needle position | | 12 | |
| Oiling | | 56 | |
| Overlock | | 20 | |
| Oversewing broders | | 46 | |
| Oversewing with cord | | 46 | |
| Oversewing with metallic thread | | 46 | |
| Patching | | 28 | |
| Patching Jersey | | 17 | |
| Patching material | | 28 | |
| Pattern indicator | | 15 | |
| Pintucking | | 51 | |
| Pre-embroidered applique | | 52 | |
| Quick seam | | 18 | |
| Reverse sewing | | | 12 |
| Reverse stitching | | | 12 |
| Ruche | | | 52 |
| Saddle stitch | | | 60 |
| Satin stitch | | | 8 |
| Satin stitch embroidery | | | 44-45 |
| Scissors holding | | | 17 |
| Securing threads | | | 12 |
| Securing elastic thread | | | 23 |
| Sewing on buttons | | | 34 |
| Sewing table | | | 7 |
| Shell Edging | | | 21 |
| Shell hemmer | | | 39 |
| Straight stitch | | | 12 |
| Stretch stitch | | | 18-21 |
| Tailor tacking | | | 36 |
| Terry Cloth Darning | | | 33 |
| The various parts of the machine | | | 2 |
| Thread correct holding | | | 16 |
| Thread cutter | | | 7 |
| Threading machine | | | 6 |
| Thread table | | | 4 |
| Trellis work with metallic thread | | | 52 |
| Tricot hems | | | 16 |
| Tricot patching | | | 17 |
| Tricot repairs | | | 17 |
| Tricot seams | | | 18 |
| Unpacking and packing the machine | | | 3 |
| Waving on Jersey | | | 16 |
| Winding bobbin thread | | | 4 |
| Wool darning | | | 33 |
| Zigzag sewing | | | 13 |
| Zip insertion | | | 35 |

Bernina record model 830
Bernina model 831

Plain, zigzag, utility and embroidery machine, 20 built-in cams and automatic buttonholer
Plain, zigzag and utility machine with automatic buttonholer

General information

| | |
|----------------------------|--------------------------------|
| Max. zigzag width | 4,5 mm |
| Stitch distribution | left – center – right |
| Max. forward stitch length | 4 mm |
| Max. reverse stitch length | 2 mm |
| Presser foot lift | 6,5 mm |
| Passage space | 110 X 200 mm |
| Size of baseplate | 375 X 182 mm |
| Shuttle system | non-jam central bobbin shuttle |

| | |
|-----------------|--|
| Bobbin capacity | 75 m cotton yarn |
| Needle system | 705 B |
| Thread tension | inbuilt controlled upper thread tension assembly |

| | |
|------------------------------------|----------------------------|
| Winder | self-releasing |
| Motor | power: 85 watts |
| Sewing lamp (built-in) | power: 15 watts |
| Number of stitches | approx. 1200 stitches/min. |
| Weight of machine | approx. 9,15 kg |
| Weight complete with carrying case | approx. 15 kg |

| | |
|-----------------------------|--------|
| Machine dimensions: | |
| overall length | 388 mm |
| overall width | 182 mm |
| height over adjusting lever | 315 mm |

**Important note
(safety regulations – BEAB, OSHA etc.)**

Please observe the sewing position while sewing. The moving needle is a source of danger (danger of injury to fingers).
The sewing machine should be disconnected from the power supply by pulling out the plug from the socket when changing the light bulb, the needle, presser foot, bobbin or needle plate, when stopping work without supervision and during servicing (cleaning).

Name: _____

Address: _____

Date of delivery: _____

Machine No. _____

Dear Bernina Customer,

You are now the fortunate owner of a new Bernina! We congratulate you on your choice and thank you for the confidence you have placed in us.

We have called this introductory Tuition Book «My Bernina Guide» because we are convinced that it will enable you to make the best use of your sewing machine in the years ahead.

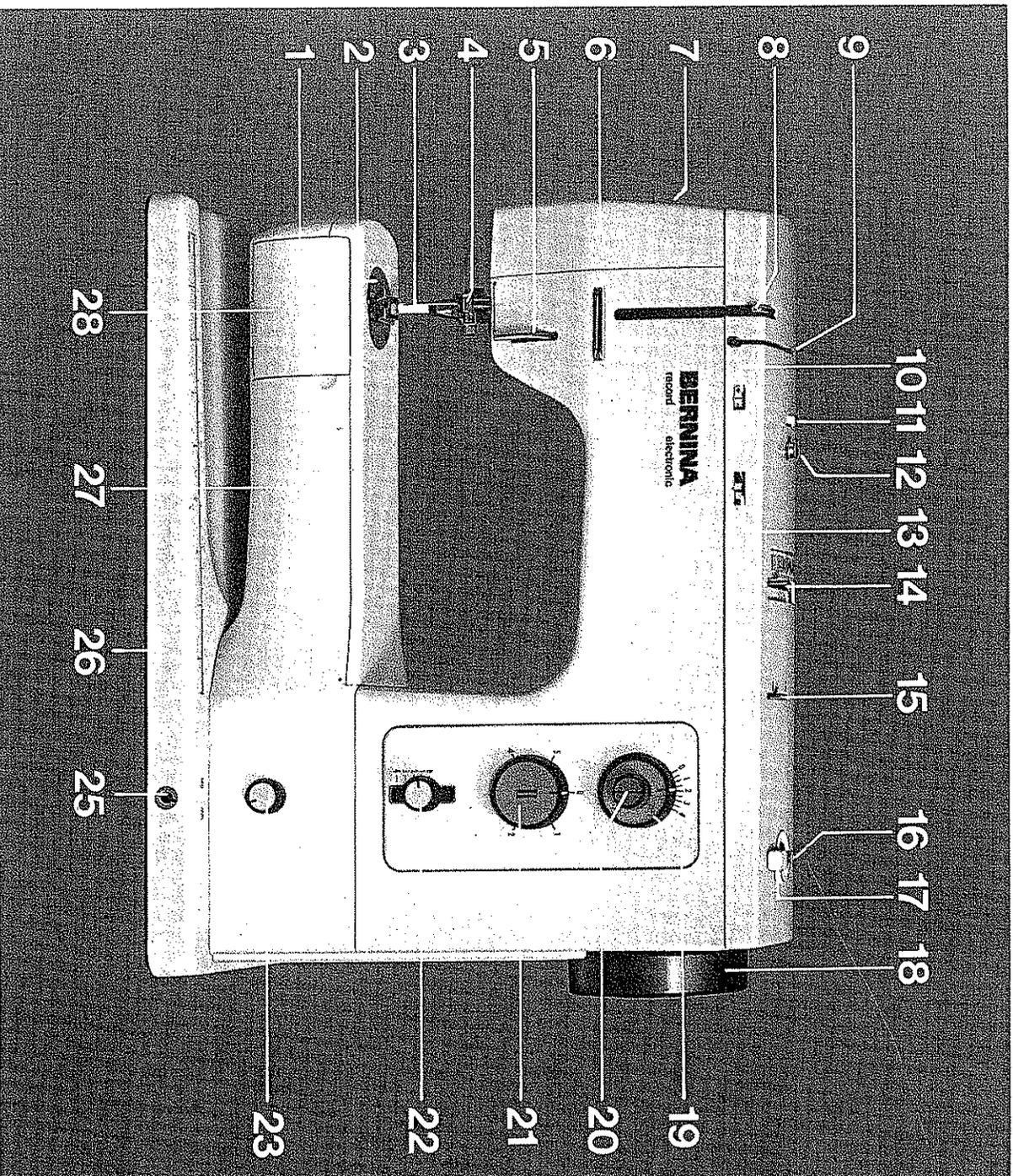
We hope that you will find it an invaluable aid to your sewing.

Very soon you will be thrilled by the easy operation of your Bernina and by its extreme versatility. But only if you master the techniques described in this book will you experience the true pleasure of sewing, and creating for yourself attractive and useful articles.

We advise you, therefore, to follow the text and study the illustrations in this book carefully while practising individual samples. If you glue your most successful samples in the appropriate spaces printed in red, you will provide yourself with a very useful reference book that will serve you for a life-time. We wish you every success in your future sewing.

Fr. Gegauf Ltd., Manufacturer of Bernina Sewing Machines
Steckborn TG/Switzerland

The various parts of the machine

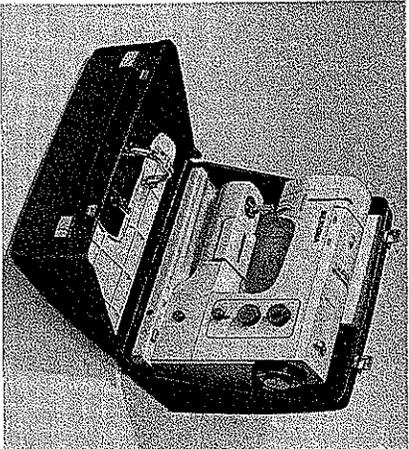


- 1 Free-arm cover-plate
- 2 Needle-plate
- 3 Presser-foot
- 4 Needle-clamp
- 5 Thread guide
- 6 Face-plate
- 7 Lamp switch
- 8 Take-up lever
- 9 Thread tension and thread guide
- 10 Tension indicator window
- 11 Thread tension control wheel
- 12 Winder pre-tension
- 13 Ornamental stitch indicator window
- 14 Selector lever for plain or ornamental stitch
- 15 On and off lever for automatic patterns
- 16 Bobbin winder spindle
- 17 Bobbin winder starting lever
- 18 Handwheel
- 19 Adjusting knob for straight stitch and zigzag
- 20 Left-Center-Right adjusting knob (needle position)
- 21 Knob for buttonhole sewing
- 22 Stitch length adjustment
- 23 Drop-feed control
- 25 Aperture for knee control lever
- 26 Base plate
- 27 Free-arm
- 28 Hinged cover (shuttle)

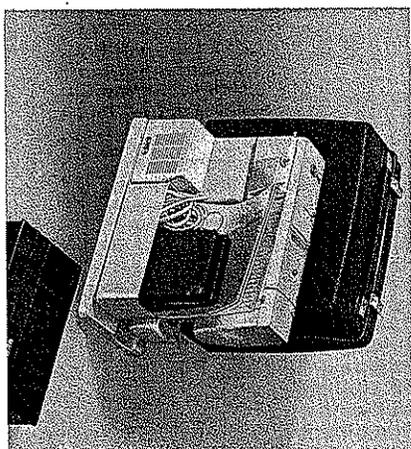
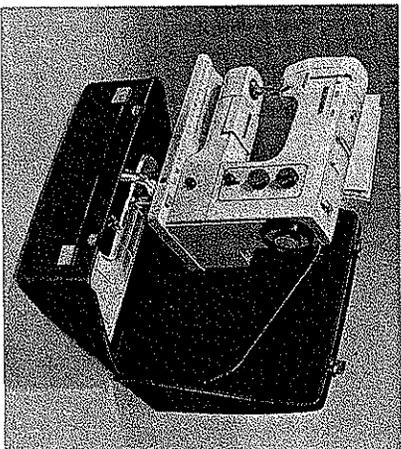
Unpacking and packing the machine

Electrical Connection

Sewing machine with foot starter, attachment table, knee control lever and accessory box are included in the case.



To unpack the machine, the case is best placed on the floor. After opening the locks, one half of the case can be laid flat. It is then easy to remove the Bernina and place it at the desired work-place.



The container, which can be fitted on the free-arm, is used to house the foot starter with cable and the Bernina Guide. Ensure when packing that the machine is properly placed in the case. The illustration in the lid of the case shows the correct way. If the machine is wrongly packed the case will not close.

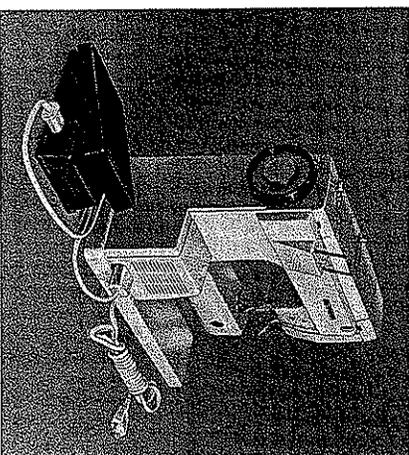
Connecting to supply

Warning! First compare voltage specified on machine with the existing mains voltage.

Fit special plug on foot-starter. After inserting the special combination plug for mains and starter connection in the machine, only then connect the mains plug with the socket and start the machine by pressing lightly on the foot-board of the starter.

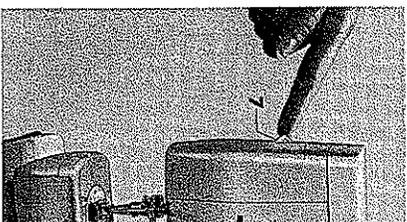
Warning! The special connecting cable may only be used for connecting Bernina sewing machines.

Please ensure that the cable is not pulled when removing the special plug from the machine. Hold the plug in the hand. Never lift the foot control by the cable.



This machine is fitted with an electronic foot regulator. The electronic speed control permits extremely slow sewing on full power.

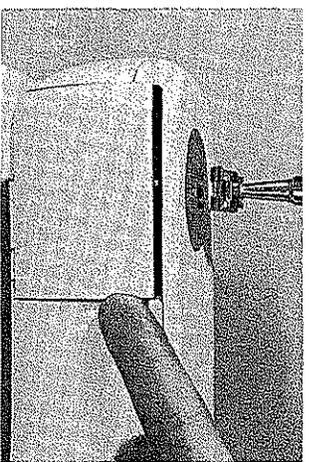
Light switch. By pressing switch (7) the light can be switched on and off. Pull out light cover sideways to change the bulb. Press bulb upwards, turn anticlockwise and pull downwards. To insert bulb push up and turn it clockwise. Sewing lamp: 15 watts.



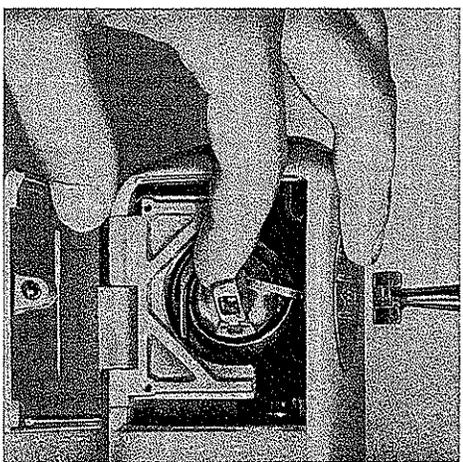
Bobbin and Case

Winding of thread on bobbin

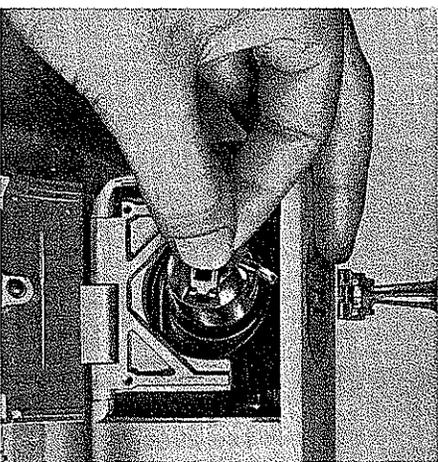
Removing the bobbin case



Open hinged bobbin case cover. Turn hand wheel towards you until the needle is in its highest position.



Open the hinged latch with thumb and forefinger of the left hand and remove the bobbin case. The insertion of the bobbin case is carried out in the same manner.



Needle and thread table

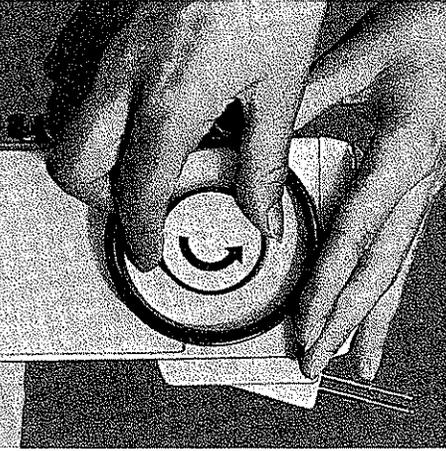
| | | | | | |
|----------------------------------|-----------|-------|--------|--------|-------|
| | very fine | fine | medium | strong | large |
| Needle system 705 B | 60 | 70 | 80 | 90 | 100 |
| Mercerised sewing thread (3 ply) | | 50 | 50 | 40 | 40 |
| Darning thread (2 ply) | 50 | 30-50 | 30 | | |

Correct choice of needle and thread

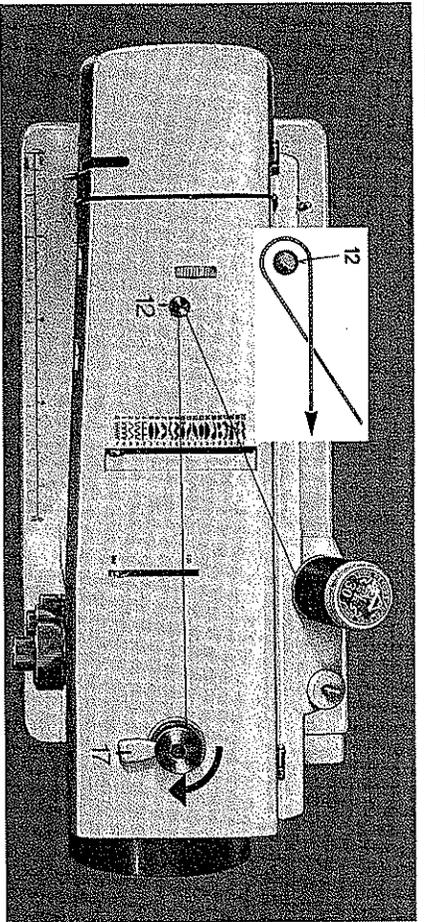
Use only needle system 705 B for the Bernina machine class 830. Make sure that both, needle and thread correspond with the sewing table given above. The usual needle numbers for sewing are 80, 90 and 100. For darning, needle numbers 70 and 80.

Winding of thread on bobbin

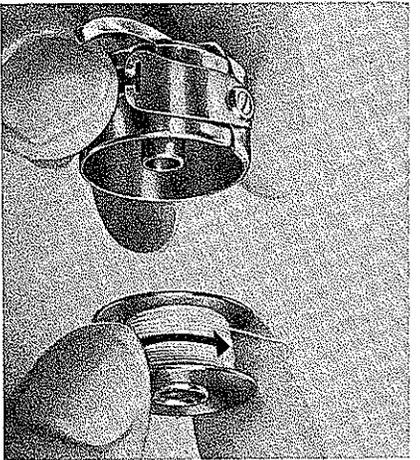
Loosen handwheel: Hold handwheel with the left hand. Loosen the handwheel release with the right hand by turning anti-clockwise.



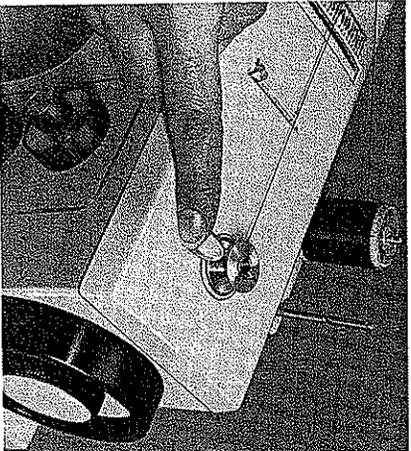
Inserting the bobbin



Insertion of bobbin into the bobbin case.
When the bobbin is in the case make sure that the thread unwinds in the direction of the arrow.



Draw thread from the spool around (clockwise) the pre-tension (12) and from there — as shown in the illustration — take it to the mounted bobbin. Press lever (17) towards the bobbin, the winder is switched on. Start motor with foot starter. When the bobbin is full the winding action stops automatically.

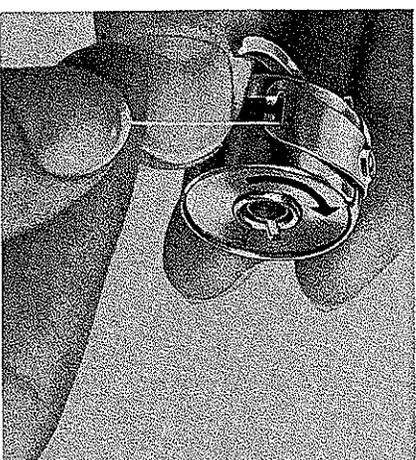


Draw thread through slot and then under tension spring. Do not hold the bobbin. The bobbin must turn in the direction of the arrow when unwinding.



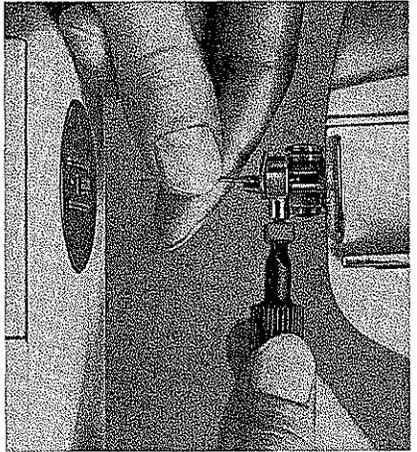
Insertion of the bobbin case into the hook. Raise needle to top position by turning the handwheel. As when removing the bobbin case hold it by hinged latch with thumb and forefinger of the left hand. Hold bobbin case in such a way that the finger arm is directed upwards and fits into the notch of the hook race cover.

Check: Pull end of thread.

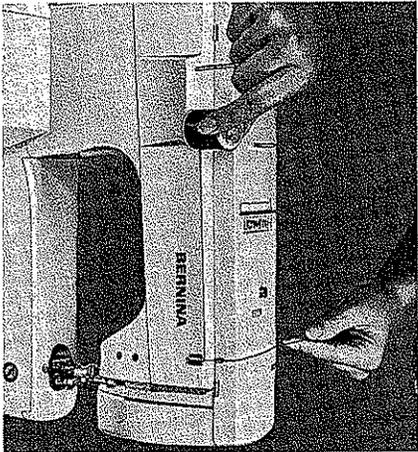


To thread the machine

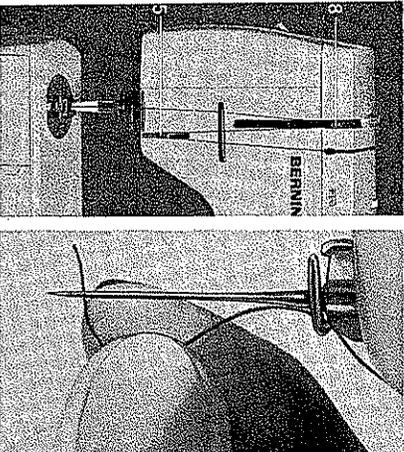
Inserting the needle. Loosen the needle clamp screw (#) half a turn. Push the needle upwards as far as it will go with the flat side of the needle to the rear. Tighten needle clamp screw.



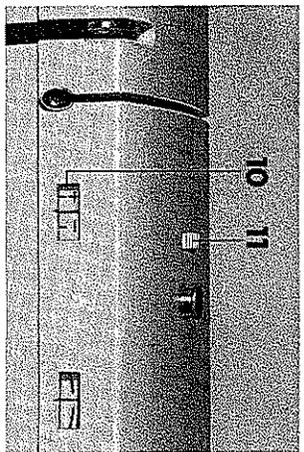
Threading the machine. The thread is guided from the spool to the needle in one movement. Presser foot and take-up lever must be in their highest position. Place spool on pin. Guide the thread with the left hand through the eyelet then pull it through the slot of the tension disc (#9). With the right hand hold the spool steady.



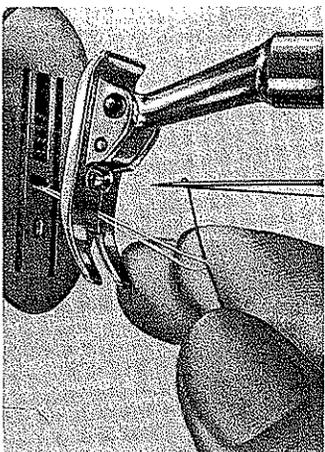
Now draw thread through the thread guide (5) up to the slot of the take up lever (8) and down to the needle eye. Thread the needle from the front to the back leaving a loose end of approximately 10 cm (4 ins.).



The thread tension discs. Bernina has the unique advantage that during normal sewing the thread tension does not have to be altered. The tension centering wheel (11) can be regulated for special purposes. Four 'your guidance' for special purposes = Black line in center of window, + in center = Tighter tension, - in center = Loser tension.

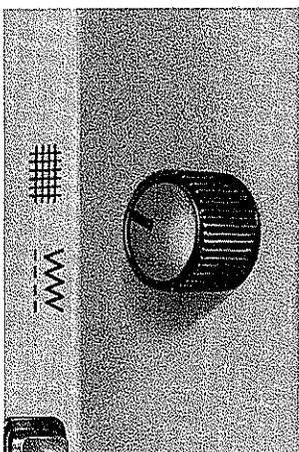


Bringing up the bottom thread. Hold needle thread loosely. Now turn the handwheel towards you, until the take-up lever is in its highest position. Pull the needle thread slightly and the bobbin thread will come up through the needle hole. Pull both threads under the presser foot and lay them sideways.



Lowering the feed dog. For certain types of sewing, in particular darning, the feed dog must be lowered.

Darning. For this turn the mark on knob (23) to the left, towards the darning symbol. For normal sewing turn the mark on the knob to the right as far as it will go towards the straight stitch and zig-zag symbol.



The sewing table

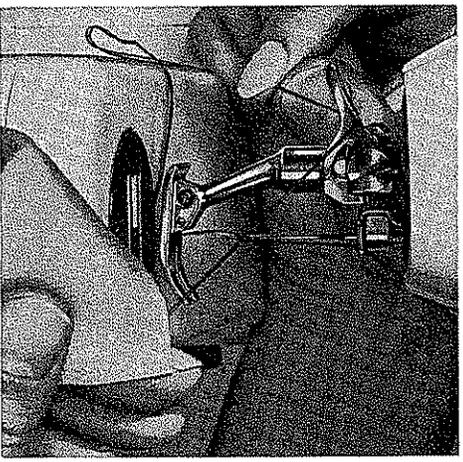
Changing the presser feet

Removing work. It is essential to bring the take-up lever (8) into its highest position by use of the handwheel when sewing is finished. Raise presser foot by means of the lever at the back of the machine; this will release the top thread tension and the material can be removed easily by pulling to the rear or side. Note: Never pull fabric straight out.

Thread cutter. The lever on the presser foot bar is made in such a way that it can be used as a thread cutter. This small device helps to save time, especially when scissors, are not close at hand.

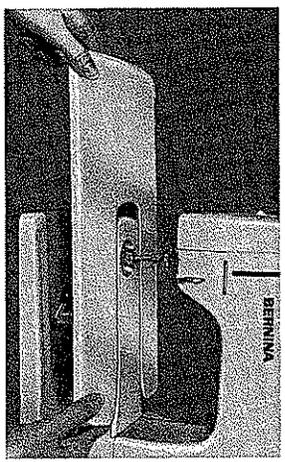
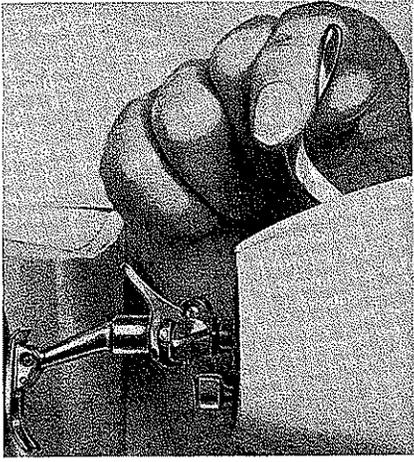
Fitting the sewing table. The attachment tables is fitted in the case. It can be removed by turning the securing strap.

When sliding the table on the free arm, make sure that the locking lever is turned to the left. To secure the sewing table the lever must be turned to the right in the direction of the arrow.

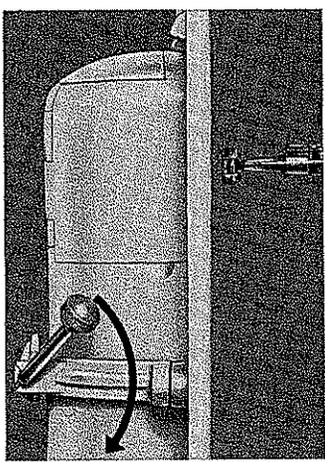
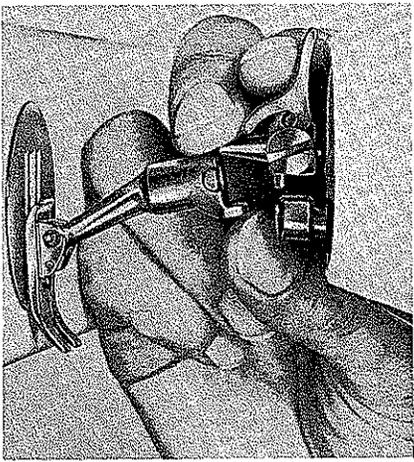


Use the correct presser foot for each type of work. Only in this way will you achieve easy and perfect work. The patented Bernina presser foot clamping lever permits quick and easy changes. The Bernina principle: "just clip it on!" the work is done in no time.

Raise presser foot by using lifting lever



Loosen clamping lever and release presser foot

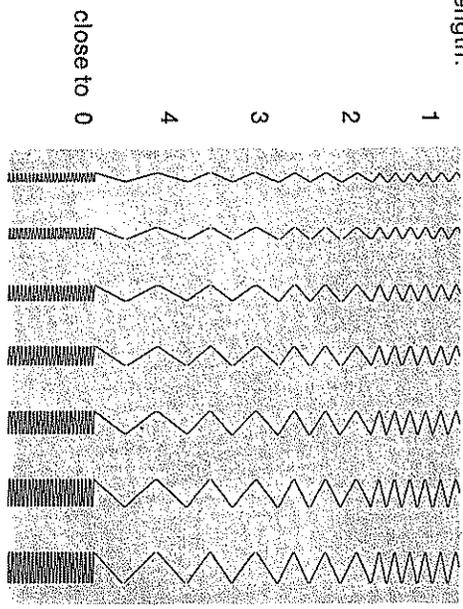


Fix the required presser foot on and push lever downwards. The presser foot is secured and the machine is ready for sewing. Only Bernina has this advantage.



Satin Stitch — Zigzag sewing

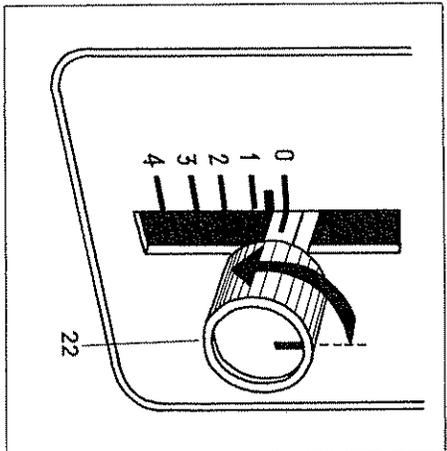
Needle position: center
 Zigzag width:
 1 1.5 2 2.5 3 3.5 4
 Satin stitch spacing



Zigzag sewing

The line on the zigzag knob (19) allows the zigzag width to be read on the scale behind.

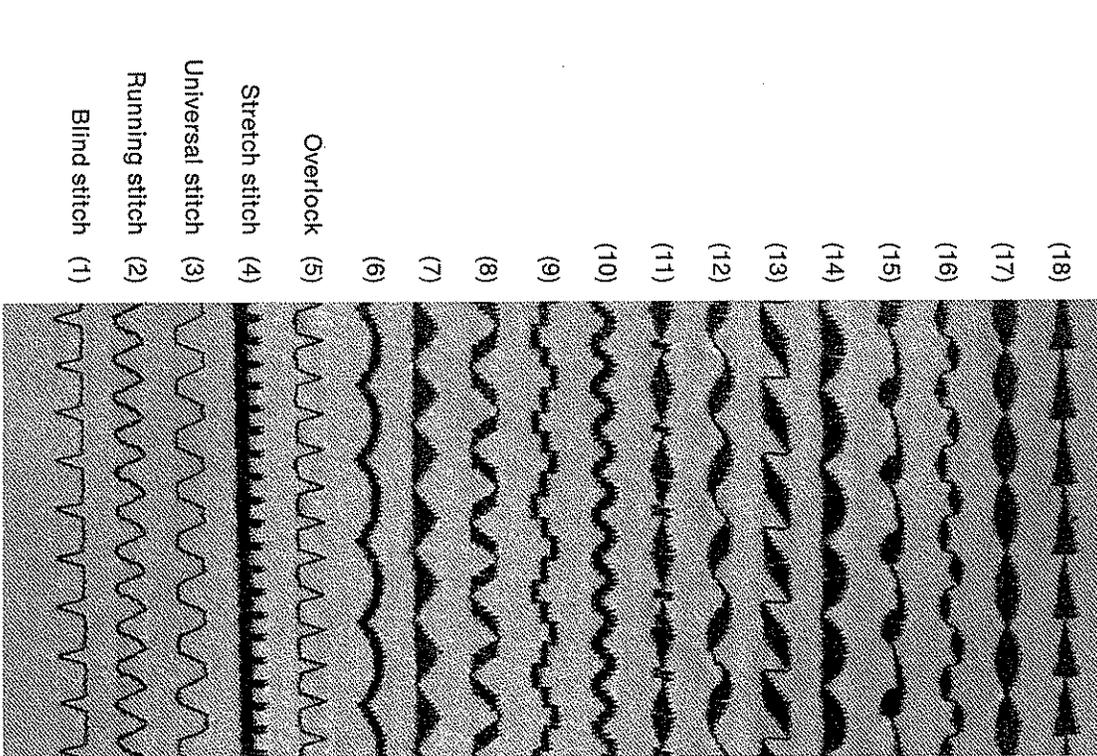
Setting the machine for the zigzag width: use knob 19. The pointer on zigzag knob (19) indicates the zigzag width on the dial behind. For straight stitching the pointer on the knob is set to 0. Turning the knob to the right from 0-4 the width of the stitch will increase. The larger the number the wider the stitch. While sewing, the knob may be moved freely. **But never turn the knob when the needle is still in the fabric.**



Set stitch length adjustment knob (22) to zero. Then set to the desired stitch density by turning left depending on the material and thread. It is best to sew a trial buttonhole on remnants of the material used.

Before starting to sew please always ensure that the marker of the buttonhole knob (21) is at position «0».

The 20 different ornamental stitches that can be made with the Bernina class 830

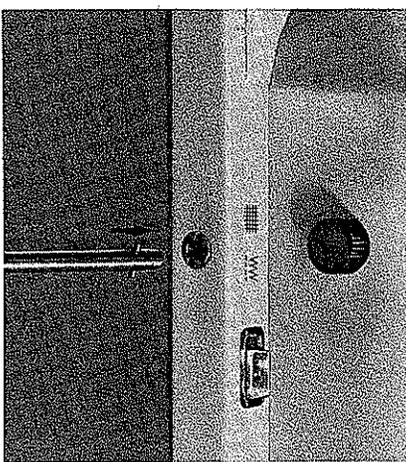


- Overlock (5)
- Stretch stitch (4)
- Universal stitch (3)
- Running stitch (2)
- Blind stitch (1)

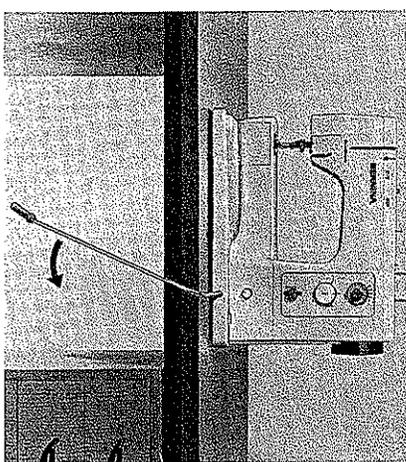
Knee control / Lifter

Your Bernina machine has an attachable knee control lever. This knee lifter will be a welcome aid in many sewing operations. You will particularly appreciate this device for embroidery work. You can guide the work exactly with both hands since your "third hand", the knee, takes care of raising and lowering of the presser foot.

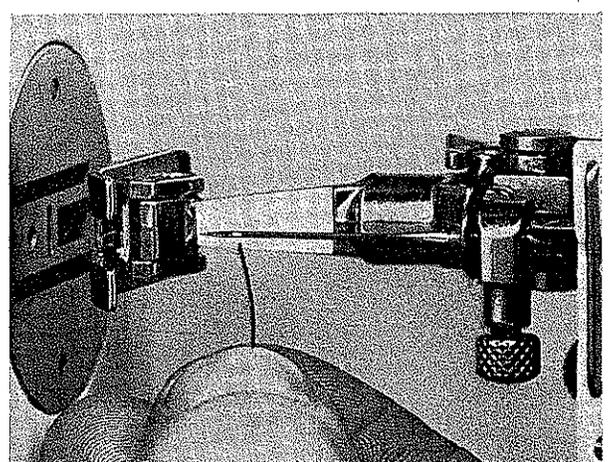
The knee lifter lever is secured in the case and can easily be removed from its clamp.



Inserting the knee lever beneath the drop feed knob.



The presser foot is raised by pressing to the right (in direction of arrow).



The presser foot with the white plate is a Bernina innovation. Set the needle with the handwheel high enough so that the eye of the needle is in front of the white surface. The eye becomes much more clearly visible and threading is thereby made considerably simpler.

Some technical hints

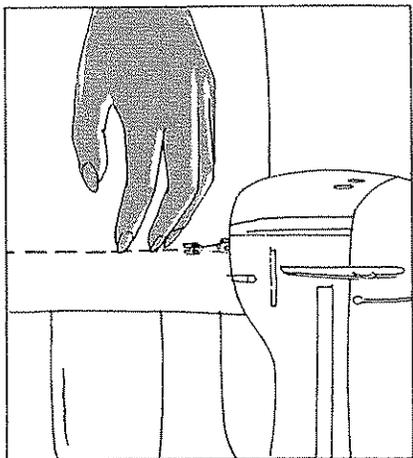
If you like to work as comfortably as possible we would advise you to observe the following points:

Place your Bernina far enough from the table edge (about 4 inches) for you to lean your left elbow on the table even when using the slide-on sewing plate which makes sewing easier.

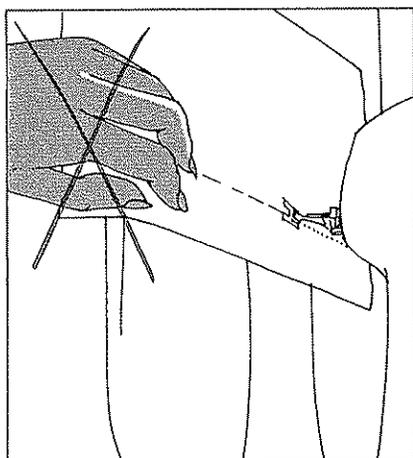
Sit exactly in front of the needle bar. The mastering of your sewing depends only on how you guide the material.

The basic rules are therefore:

1. Guide the material as close as possible from the side, and near the presser foot



2. ... not from the front



3. ... and not with the hand flat. Nor must the material be pulled to the rear.

