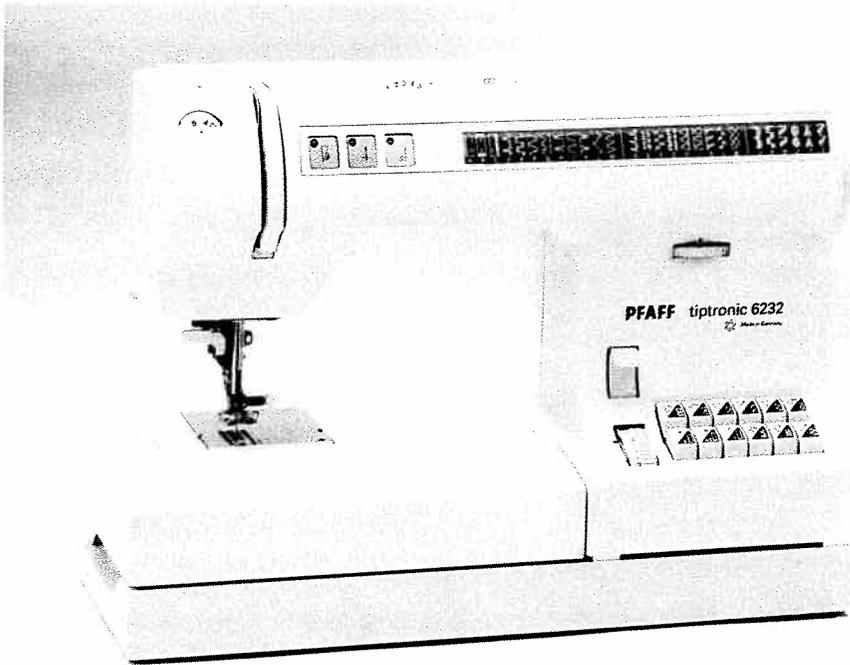


# PFAFF

tiptronic  
6232

tipmatic  
6152, 6122, 6112



Instruction manual

When reading this instruction manual, please fold this page or the last page open to better understand the manual.



### Safety rules

For the United Kingdom only

**The leads must definitely not be connected to the safety lead terminal I nor to a plug with three pins.**

The wires in the mains lead are coloured according to the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the colour coding of the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

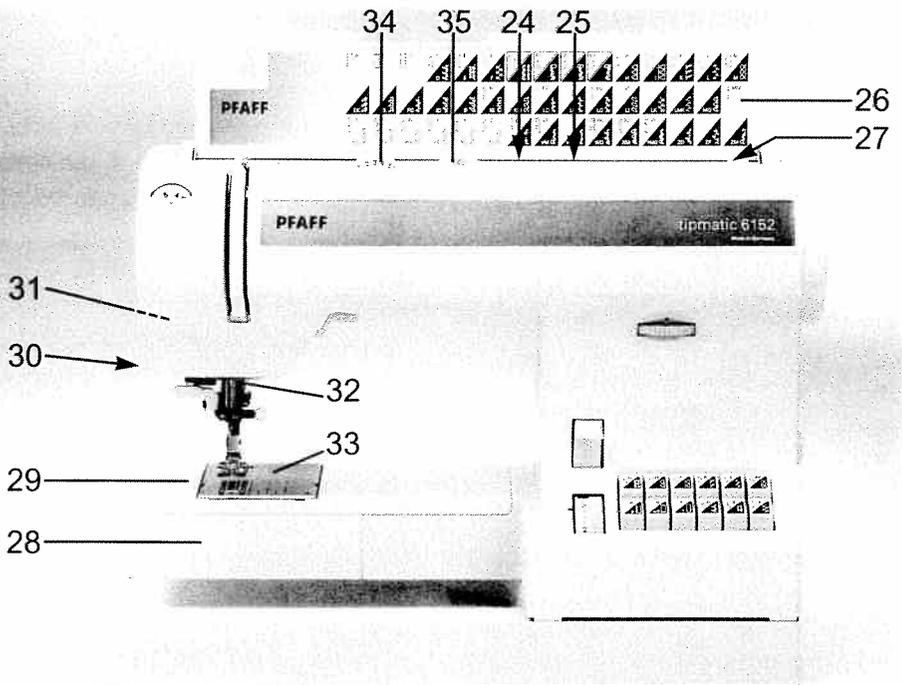
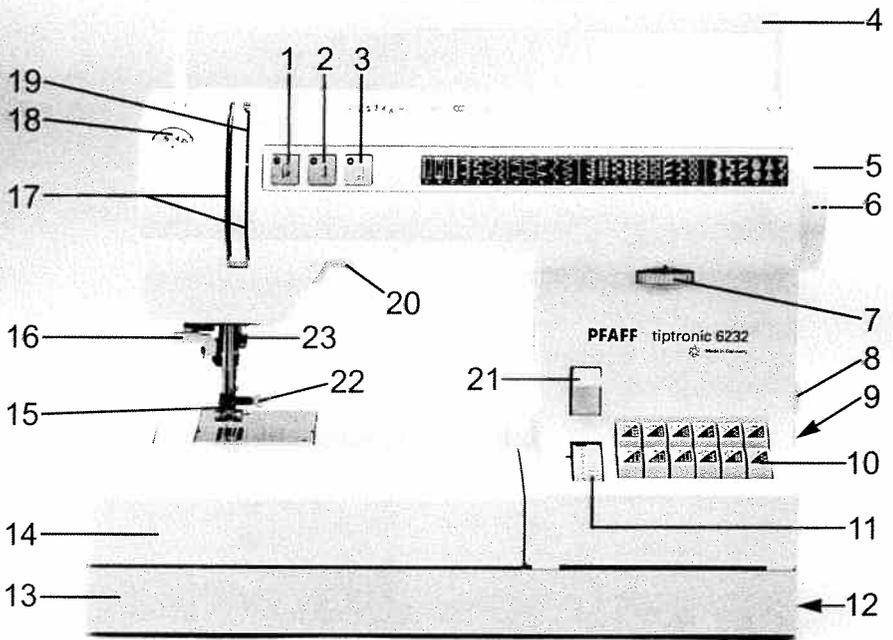
Cut-off mains plugs are definitely not to be used, but disposed of immediately. Defective mains leads must be replaced completely.

Only 3 A spare fuses must be used as approved by ASTA according to BS 1362 and the fuse cover must be marked 3 A or with the corresponding colour code.

The plug must never be used without fuse cover. Spare fuse covers are available from electrical suppliers or the PFAFF agencies.

Please also observe the general safety notes on page 2.

The **Contents** are found on pages 4 and 5.



## **Parts of the sewing machine (models 6232 and 6152)**

- (1) Key for "slow sewing" (**model 6232**)
- (2) Key for "needle down position" (**model 6232**)
- (3) Key for "tacking" (**model 6232**)
- (4) Carrying handle
- (5) Handwheel
- (6) Handwheel release disk
- (7) Fancy stitch knob
- (8) Main switch
- (9) Connection socket "foot control with mains cord" (**model 6152**)
- (10) Touch controls
- (11) Stitch length knob
- (12) Connection socket "foot control" (**model 6232**)
- (13) Base plate
- (14) Detachable work support
- (15) Sewing foot holder with sewing foot
- (16) Needle threader
- (17) Threading slit
- (18) Needle thread tension
- (19) Take-up lever
- (20) Presser bar lifter
- (21) Key for "reverse sewing"
- (22) Needle holder with fixing screw
- (23) IDT System/Integrated Dual Transport (top feed)
- (24) Reel holder with unwinding disk
- (25) Second spare reel holder
- (26) Lid with program table
- (27) Bobbin winder
- (28) Hook cover (behind it- hook)
- (29) Free arm
- (30) Thread trimmer
- (31) Sewing lamp (max. 15 watt)
- (32) Thread guide
- (33) Needle plate
- (34) Stitch width knob
- (35) Needle position knob



# Important safety instructions

For the United States only

When you use an electrical appliance, basic safety precautions should always be adhered to as follows: Read all instructions before using this sewing machine.

## **DANGER** To reduce the risk of electric shock:

1. The sewing machine should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning it.
2. Always unplug before relamping. Replace bulb with same type rated 15 Watts.
3. Do not reach for a sewing machine that has fallen into water. Unplug immediately.
4. Do not place or store a sewing machine where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.

## **WARNING** To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children.
2. Use this sewing machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
4. Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn all controls to off ("0") position, then remove plug from outlet.
9. Never operate on a soft surface such as a bed or couch where the air openings may be blocked.
10. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
11. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
12. Always use the proper needle plate. The wrong plate can cause the needle to break.
13. Do not use bent or blunt needles. Use needles recommended by the manufacturer only.
14. Do not pull or push fabric while stitching. It may deflect the needle, causing it to break.
15. Switch the sewing machine off ("0") when making any adjustments in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
16. Always unplug sewing machine from the electric outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
17. Hold plug when rewinding into cord reel. Do not allow plug to whip when rewinding.

Please also observe the general safety notes on page 2.

## Keep these instructions in a safe place

This sewing machine is designed and manufactured for HOUSEHOLD use only.



## Notes on safety

Notes on safety for household sewing machines in accordance with EN 60 335-2-28 and IEC 60 335-2-28

1. The user must exercise adequate caution with regard to the **up and down movement of the needle** and must constantly observe the sewing area while sewing.
2. **When leaving the machine unattended, during maintenance work or when replacing mechanical parts or accessories, always disconnect the machine from the mains by pulling out the mains plug.**
3. The maximum permissible wattage for the sewing lamp is 15 watts.
4. The tension of the drive belt **must only be adjusted by a PFAFF mechanic.**
5. The machine must be operated **in accordance with the indications on the specification plate.**
6. Do not insert any objects into openings on the machine.
7. Do not use the sewing machine if:
  - there is visible damage
  - its function is disturbed
  - it is wet, e.g. with condensation **which can occur when a cold machine is brought into a warm room.**
8. Do not pull the mains plug out of the socket by its cord.
9. If this appliance is used for another purpose than that for which it is intended or if it is wrongly operated, we cannot accept any liability for any damage caused.
10. To avoid the risk of electric shock, do not open the machine. There are no parts inside the machine which the user can repair. Repairs are solely the responsibility of our qualified service staff.
11. Be sure to use only original PFAFF parts.
12. **The machine is designed for a mains supply with a nominal voltage of +/- 10% and a rated frequency of +/- 4%.**

13. When used properly, the temperature of the outer components of a non-electronically controlled foot control can reach up to 85°C. Constant use at a low speed is therefore not permitted in order to avoid damage.

### Environment

The recommended environment is:

Ambient temperature 10°C to 40°C

Humidity 20% to 80%

Storage temperature: -25°C to +60°C

The machine is suppressed and immune to interference; however, it should not be operated near electronic devices such as radios, TVs, PCs, broadcasting transmitters etc.

This sewing machine is a high-quality electro-mechanical device. It is a machine for supervised use in the home. It should not be subjected to: dust, dampness, direct sunlight, static electricity, heat-radiating objects, corrosive chemicals or liquids.

For ventilation purposes the machine must only be operated on an open surface which is both firm and horizontal.

### Care of the machine

Always protect the machine from damage which may be caused by it being hit or dropped.

### Cleaning

Housing and display:

To clean the housing, use only a clean, dry, soft, lint-free cloth. To remove any stubborn dirt use a soft cloth with alcohol.

### Please note!

Do not use any insecticides or chemical products such as petrol or liquid chemicals to clean the housing.

## **Modern and uncomplicated – Sewing at the touch of a button**

Congratulations! You have purchased a top-quality product which features unique advantages. Your new sewing machine can handle almost any material and will sew through thick and thin for you.

The design and technology incorporated in this machine are state-of-the-art. You will also discover that these instructions are just as easy to use as your PFAFF sewing machine itself.

If you take the time to read through the instruction booklet carefully, nothing can go wrong.

A small investment of your time is worth it! This approach is the only way to really find out about all of the options your machine has to offer and how to make the most of them.

If you have any questions – no problem! Your PFAFF dealer is always happy to help.

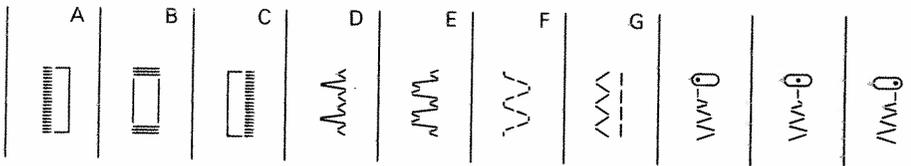
So get ready to have some fun! And have a great time turning your fashion ideas into reality.

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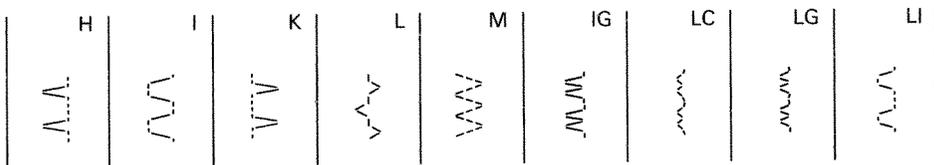
# Utility stitch table (non-elastic stitches)



For these programs, the stitch length can be selected using the stitch length knob (11) as desired between 0 and 6 mm.

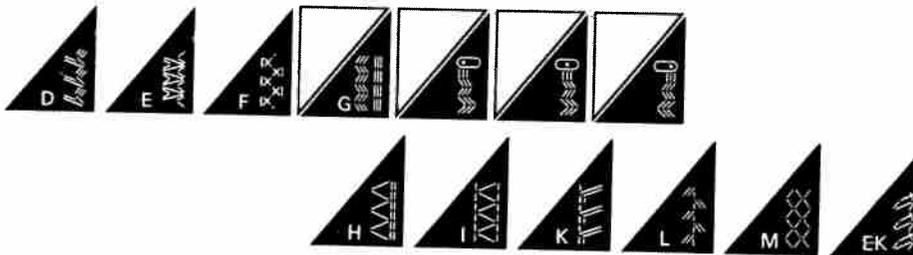
Program	Description	Application
A/B/C	Buttonhole	Standard buttonhole for e.g. blouses or bed linens.
D	Blind stitch with zigzag (elastic)	For invisible hem-securing with simultaneous seam serging. Especially for stretch material.
E	Greek stitch with zigzag	A traditional decorative stitch e.g. for towel borders
F	Scallop stitch	A traditional decorative stitch e.g. for embroidering blouses or table linens.
G	Straight stitch with 15 needle positions. Stitch width knob set at 0	For all straight stitching and top-stitching work up to 6 mm.
	Zigzag stitch, stitch width knob set at 0.5 – 5 with up to 15 needle positions	For serging and appliqué. Also suitable for tapering, eyelet embroidery and cording work.
	Outermost left needle position (for straight stitch and zigzag stitch)	Straight stitch: For all sewing and top-stitching operations which require a left needle position. Zigzag stitch: For serging, appliqué, tapering, eyelet embroidery and cording work.
	Central needle position (for straight stitch and zigzag stitch)	Straight stitch: For all sewing and top-stitching operations which require a center needle position. Zigzag stitch: For serging, appliqué and tapering.
	Outermost right needle position (for straight stitch and zigzag stitch)	For all sewing and top-stitching operations which require a right needle position. Zigzag stitch: For serging, appliqué, tapering and cording work.

# Utility stitch table (non-elastic stitches)



Program	Description	Application
H	Blind stitch	For invisible hem-securing on sturdier materials.
I	Greek stitch, wide	A traditional decorative stitch.
K	Shell- edging stitch	For decorative hem edges on light fabrics e.g. underwear.
L	Fancy elastic stitch	For over stitching two buttjoined plies
M	Elastic stitch	For sewing on elastic band, darning tears and inserting patches.
IG	Viennese stitch	Decorative stitch e.g. for household textiles.
LC	Emperor stitch, narrow	A dainty decorative stitch.
LG	Emperor stitch, wide	A dainty decorative stitch.
LI	Greek stitch, narrow	A traditional decorative stitch.

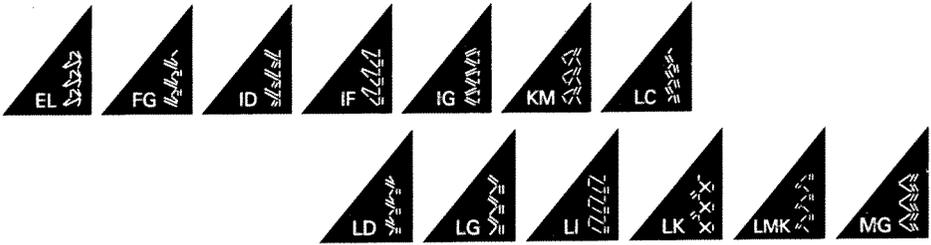
# Utility stitch table (elastic stitches)



For these programs, turn the stitch length knob (11) in the grey area until it stops i.e. to "Stretch".

Program	Description	Application
D	peacock's eye stitch	Elastic closing and serging seam. The material must be turned by 180 degrees.
E	cover stitch	For top-stitching and overstretching stretch materials, e.g. cuffs, hems and panels.
F	Herringbone stitch	A decorative stitch for top-stitching or whip-stitching hems, e.g. pajamas and sweatsuits.
G	Stretch triple straight stitch with 15 needle positions	For stretch seams, e.g. inside seams as well as seams on sportswear and workwear.
	Stretch triple zigzag stitch with up to 15 needle positions. Stitch width knob 0.5 – 5 ▶	For sewing elastic bands on elastic materials or seams on stretch materials.
	Outermost left needle position (for stretch triple straight and zigzag stitches)	For elastic seams which require a left needle position.
	Center needle position (for stretch triple straight and zigzag stitches).	For elastic seams which require a center needle position.
	Outermost right needle position (for stretch triple straight and zigzag stitches).	For elastic seams which require a right needle position.
H	Pullover stitch	Elastic closing and serging seams for rough jersey. The material must be turned by 180 degrees.
I	Closed overlock stitch	A closing and serging seam for materials which fray easily.
K	Open overlock stitch	A closing and serging seam for sturdy materials or materials which do not fray easily.
L	Feather stitch	For overstretching two buttjoined plies. Also suitable for stretch materials.
M	Honeycomb stitch	For sewing on elastic thread, overstretching terry cloth seams and for ornamental hem seams.
EK	Spiral stitch	A decorative stitch, e.g. for household textiles.

# Utility stitch table (elastic stitches)

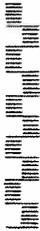
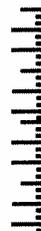
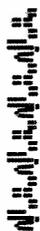


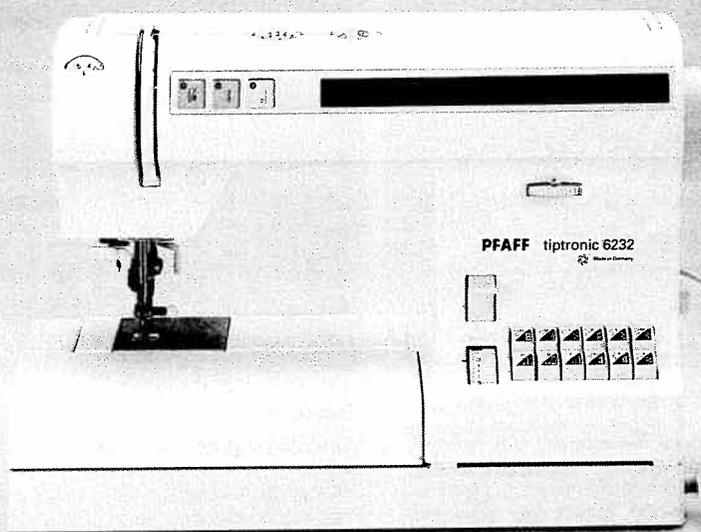
Program	Description	Application
EL	Diagonal coverstitch	For top-stitching and overstretching stretch materials, e.g. cuffs, hems and panels.
FG	Turkish stitch with zigzag	A top-stitching seam for patchwork and quilting
ID	Branch stitch	A decorative elastic stitch, e.g. for sportswear.
IF	Floss stitch	For whip-stitching hems, e.g. on pajamas and sweatsuits. The material must be turned by 180 degrees.
IG	Penant stitch	A decorative stitch also used as a covering stitch.
KM	Cord stitch	A loose decorative stitch.
LC	Dutch stitch, narrow	A decorative stitch, e.g. for household textiles.
LD	Dutch stitch	A decorative stitch, e.g. for household textiles.
LG	Border stitch	A decorative stitch, e.g. for traditional embroidery.
LI	Weaving stitch	An ornamental stitch, e.g. for bath accessories.
LK	Diagonal stitch	An elastic decorative stitch.
LMK	Triangle stitch	A decorative, elastic stitch.
MG	Florentine stitch	A stretch, decorative stitch

# Fancy stitch table

Various pattern combinations can be created by pressing the keys together while sewing with the decorative stitches. The table indicates the decorative stitch and the corresponding letter (or letter combination) to be selected.

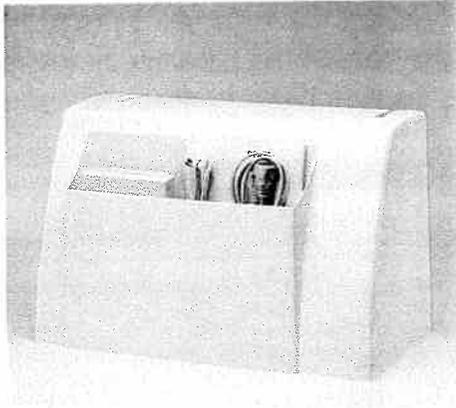
If "Stretch" is indicated, the stitch length knob (11) must be turned as far as it will go in the green area, i.e. to "Stretch".

	U		V		W		X		Y		Z						
	UG		VG		WG		XG		YG		ZG						
	MDF		UD		VF		WD		XD		YE						
	Stretch		Stretch		Stretch		Stretch		Stretch		Stretch		Stretch		Stretch		Stretch



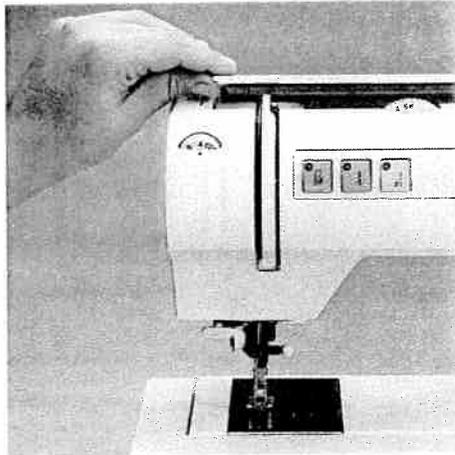
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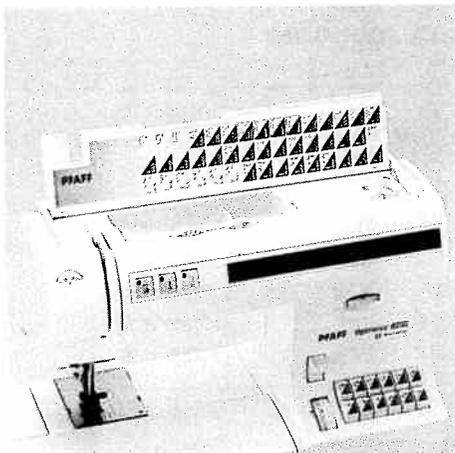
### Cover-case

Place the enclosed mains cord, foot control and instruction book in the **compartment** of the cover-case.



### Top cover

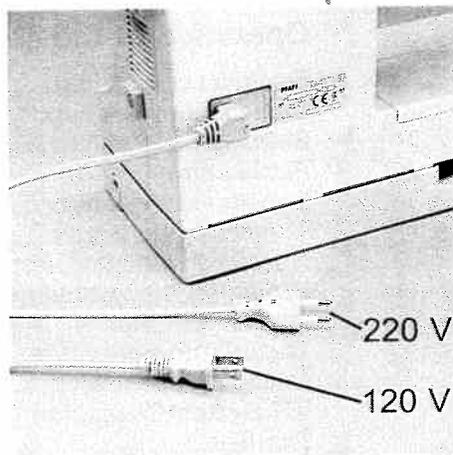
Open the folding cover (26) upwards.



### Programs

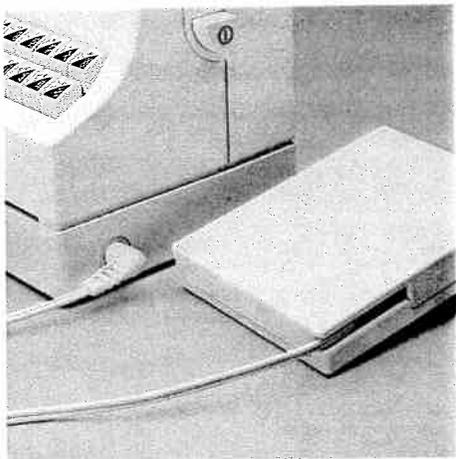
The programs of the sewing machine are illustrated on the inside of the top cover.

This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not modify the plug in any way.



### Electrical connection (Model 6232)

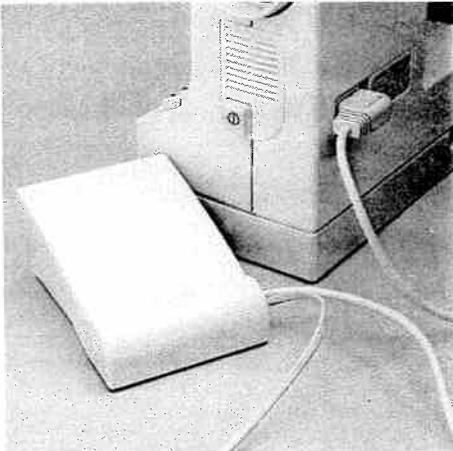
Connect the mains cord between socket (9) of the sewing machine and the wall socket.



### Connecting the foot control (Model 6232)

Connect the plug of the foot control with the connecting socket (12) of the sewing machine. The **sewing speed** is regulated by pressing the pedal.

For this sewing machine has to be used foot controller typ ATK 0060 or ATK 0033.

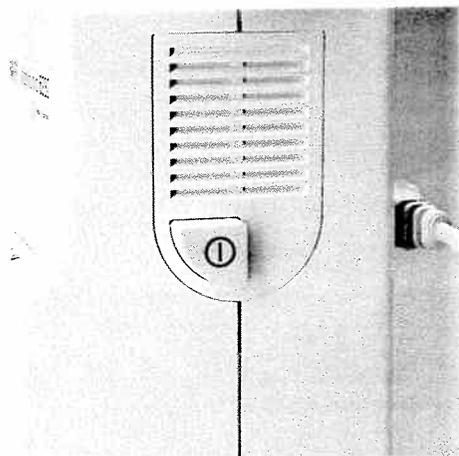


### Connecting the foot control (Models 6112, 6112, 6152)

Connect the plug of the foot control to the connecting socket (9) of the sewing machine and to the wall socket. The **sewing speed** is regulated by pressing the foot control. Additionally, you can regulate the sewing speed by the slide on the front part of the foot control.

Position ► = half speed  
Position ◀◀ = full speed

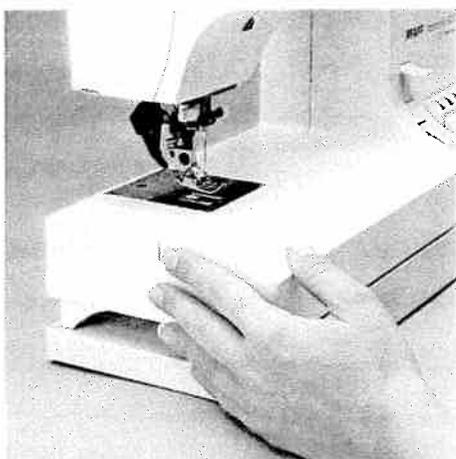
For this sewing machine has to be used foot controller typ AW 0253 or AE 013.



### Main switch

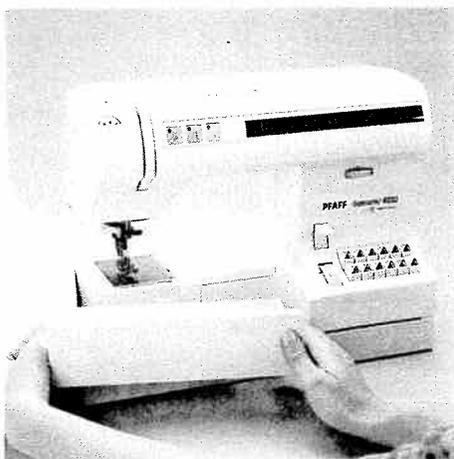
When the main switch (8) is switched on, the sewing lamp lights up.

The sewing machine is now ready to use.



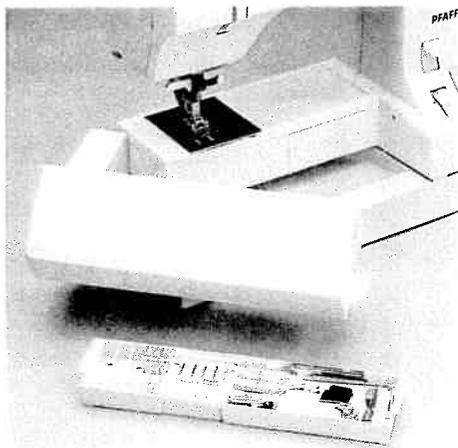
### Accessory compartment

Open the detachable work support (14) and take out the accessory compartment.



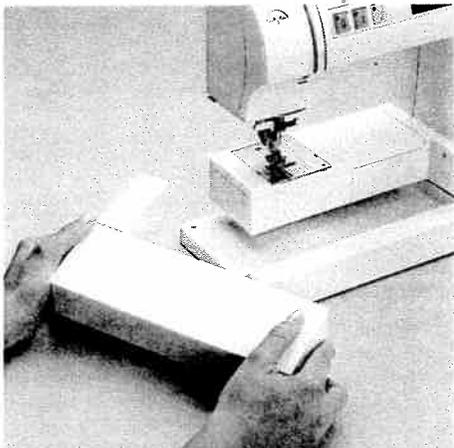
### Detachable work support

Using both hands, swing the detachable work support (14) to the left.



### Organizing the accessories

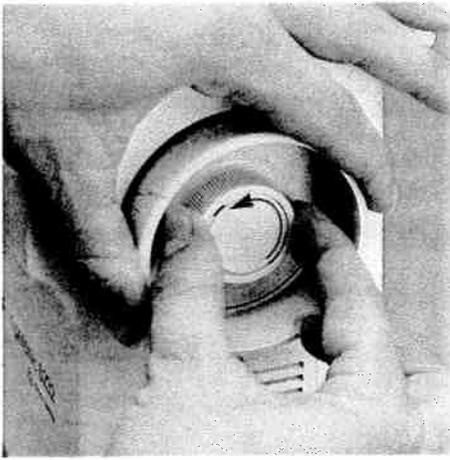
The enclosed accessories are numbered. Sort the enclosed accessories into the corresponding sections of the accessory compartment.



### Removing the detachable work support / free arm

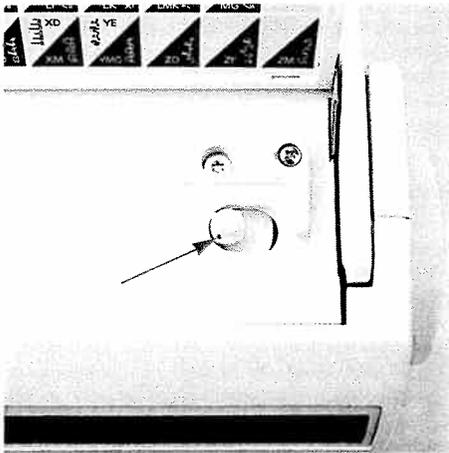
In order to be able to sew with the free arm, you must swing the detachable work support to the left and lift it out of the hole.

When inserting and returning the detachable work support to its proper position, be careful to ensure that it is flush with the free arm of the sewing machine.



### Preparing the machine for bobbin winding

Hold the handwheel (5) firmly and turn the handwheel release disc (6) until it stops in the direction of the arrow. This stops the needle from moving while the machine is winding the bobbin.



### Placing the bobbin Switch off the on/off switch (8).

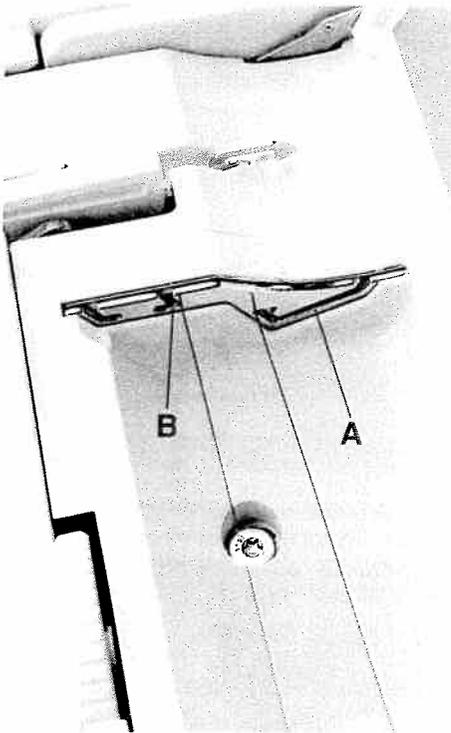
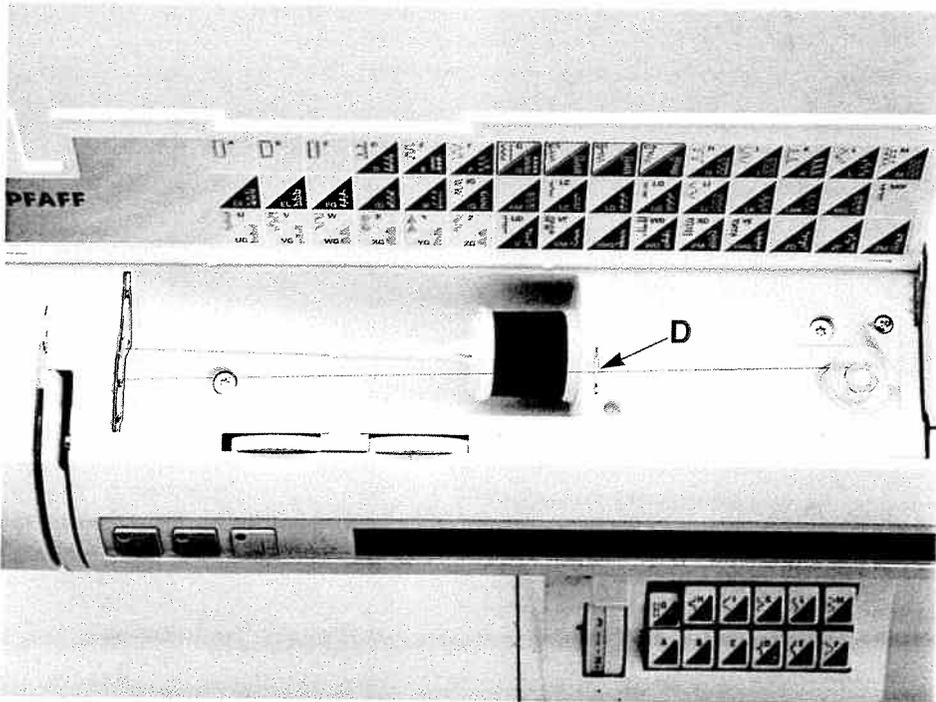
Place the empty bobbin so that the black pin of the bobbin winder (27) snaps into the slot of the bobbin.



Push the bobbin to the right.

### Note:

The bobbin can only be wound when it is moved fully to the right.



### **Winding the bobbin from the spool holder**

Place the sewing thread on the spool holder (24). To guarantee free movement of the thread and to give additional hold to the thread spool, fit an unwinding disk corresponding to the size of the thread spool.

### **Threading**

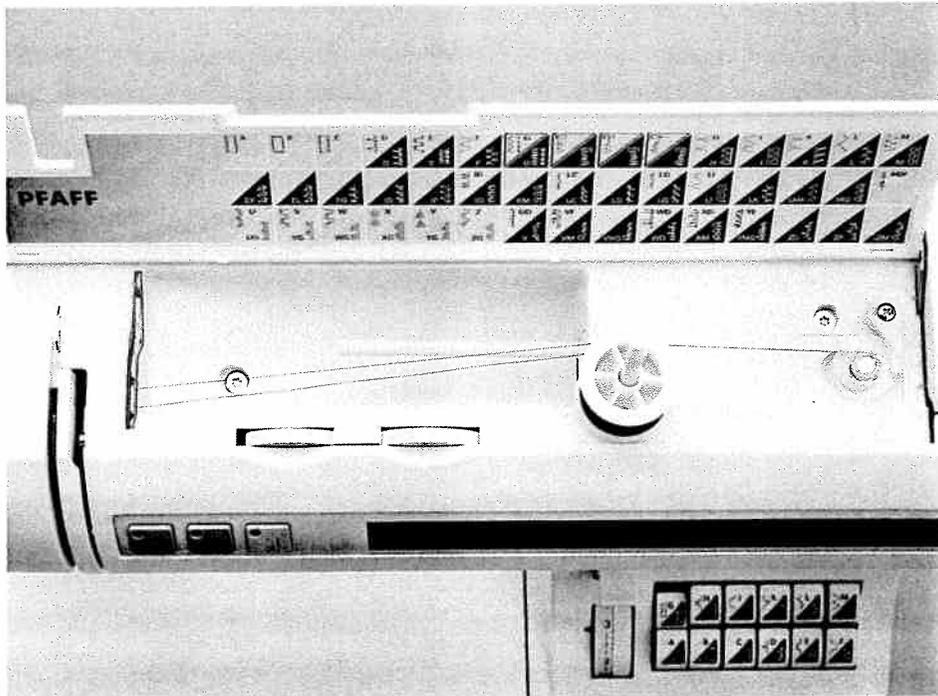
Place the thread into guide A and pull it through opening B to the right under the hook D. Wind the thread clockwise a few times around the bobbin.

### **Switch on the on/off switch**

Hold the end of the thread firmly and press the foot control. The winding action will stop automatically as soon as the bobbin is full. Cut the thread, push the bobbin to the left and remove it.

### **Don't forget:**

Turn the handwheel release disk (6) fully back again. Then turn the handwheel (5) towards you until it snaps into place.



### Winding from the second spool holder

Swing the **second spool holder (25)** up and place a spool of thread with the corresponding unwinding-disk on it.

### Threading

Place the thread into guide **C** and pull it through opening **B** to the right under hook **D** (see page 16, top illustration). Wind the thread **clockwise a few times** around the bobbin.

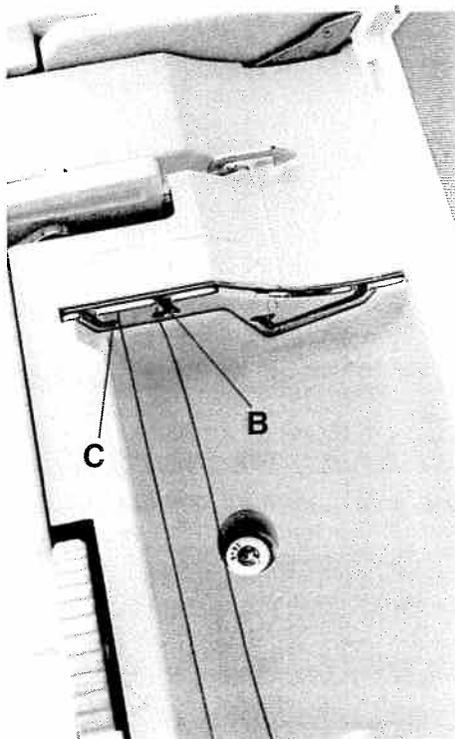
### Switch on the on/off switch

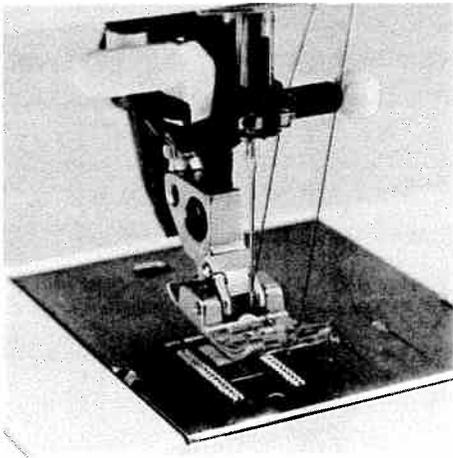
Hold the end of the thread firmly and press the foot control. The winding action will stop automatically as soon as the bobbin is full. Cut the thread, push the bobbin to the left and remove it.

### Don't forget:

Turn the handwheel release disk **(6)** fully back again. Then turn the handwheel **(5)** towards you until it snaps into place.

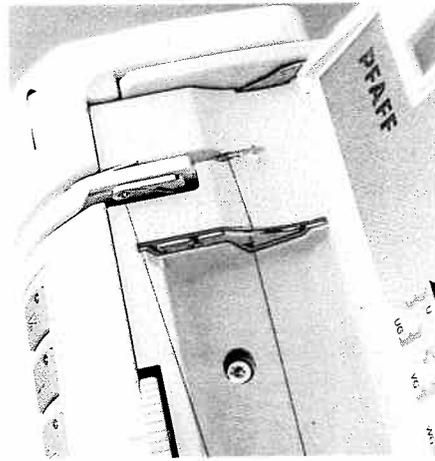
**TIP:** If the machine is already threaded, you can easily wind thread from the second spool holder without having to unthread the machine.



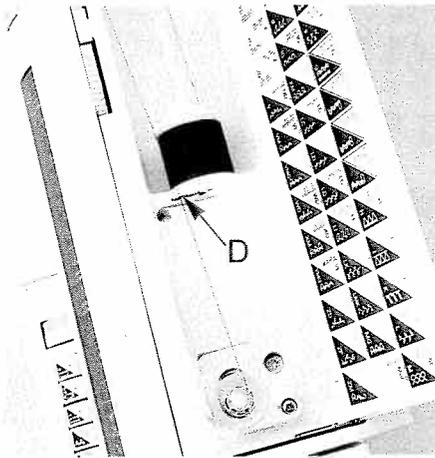


### Winding through the needle

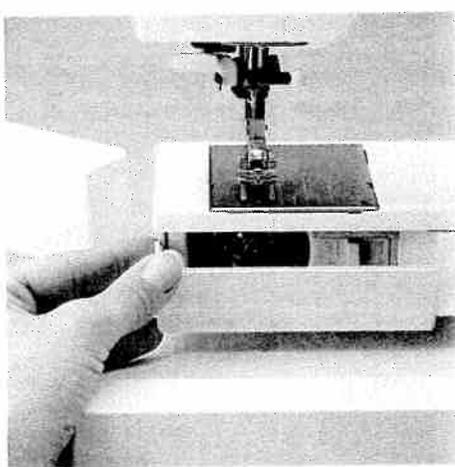
Even if the machine has been completely threaded, you can still wind the bobbin. Raise presser bar lifter (20). Pass the needle thread through the sewing foot and downwards; then through the right threading slot (17) and upwards.



Now, pull the thread into the take-up lever from left to right (19). The take-up lever must be positioned at the very top.

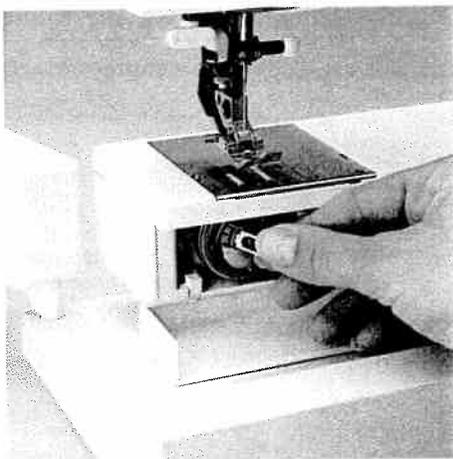


Pass the thread to the right under the guide hook D. Then wind the thread several times around the bobbin. Activate the foot control and winding the bobbin with the needle can be started.



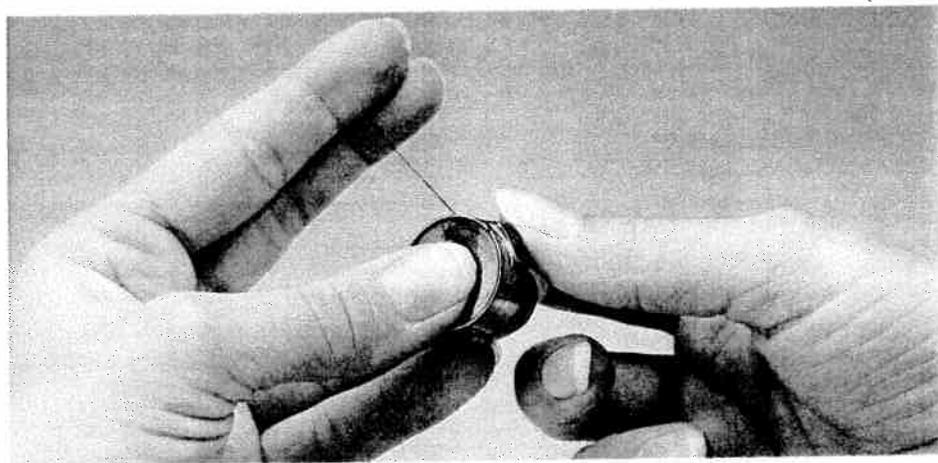
**Hook cover  
Switch off on/off switch**

Hold the side of the hook cover (28) and open it towards you.



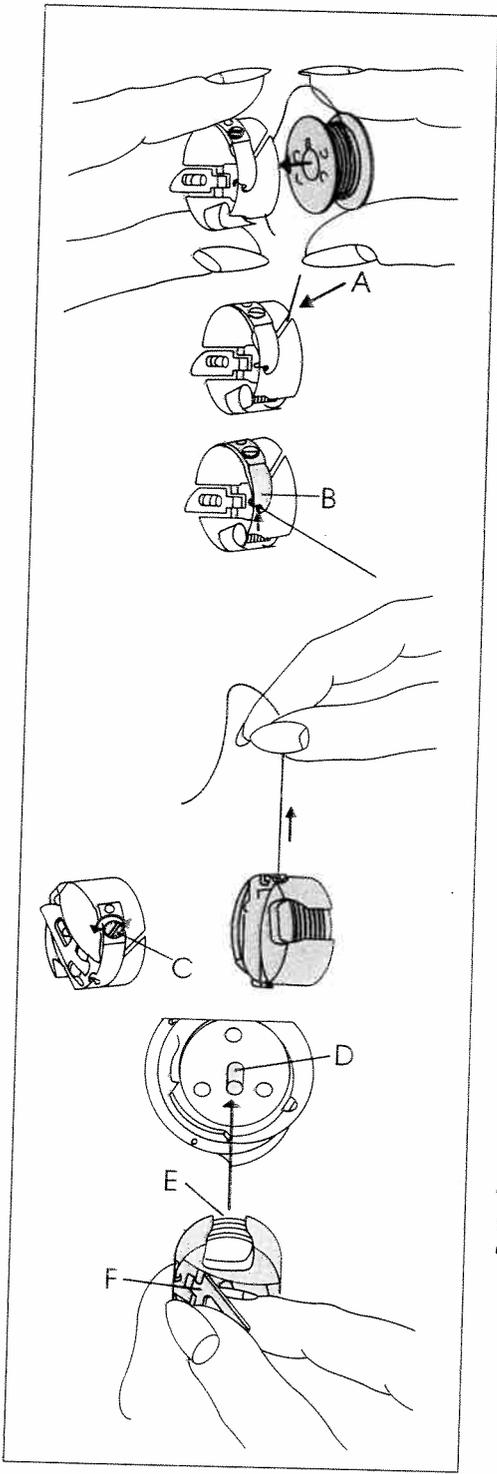
**Removing the bobbin case**

Raise the bobbin case cover and pull out the bobbin case. Release the cover and remove the empty bobbin.



**Thread tension**

To ensure perfect sewing and a durable seam, the top and bottom thread-tensions must be well adjusted to each other and the threads must be interlaced between the two fabric plies. The interlacing should be visible from the underside of the material ply when sewing decorative seams, buttonholes and darning.



### Inserting the bobbin

Insert the full bobbin into the bobbin case. In doing so, pull the thread sideways through slot **A**, then under the tension plate **B** until it rests in the opening (see arrow).

#### Check:

When you pull the thread, the bobbin must turn clockwise.

### Checking the bobbin thread tension

Hold the bobbin case by the thread and pull the thread upwards sharply. The bobbin case must **slip downwards a little** with each hand movement.

### Adjusting the setting:

Turn setting screw **C** to the left very slightly – the bobbin thread tension becomes **weaker**.

Turn setting screw **C** just a little to the right – the bobbin thread tension becomes **stronger**.

### Inserting the bobbin case

Lift cover **F** and slide the bobbin case onto the hook pin **D** as far as it will go. Opening **E** of the bobbin case must face upwards.

#### Check:

Pull the bobbin thread sharply. The **bobbin case must not fall out of the hook**.

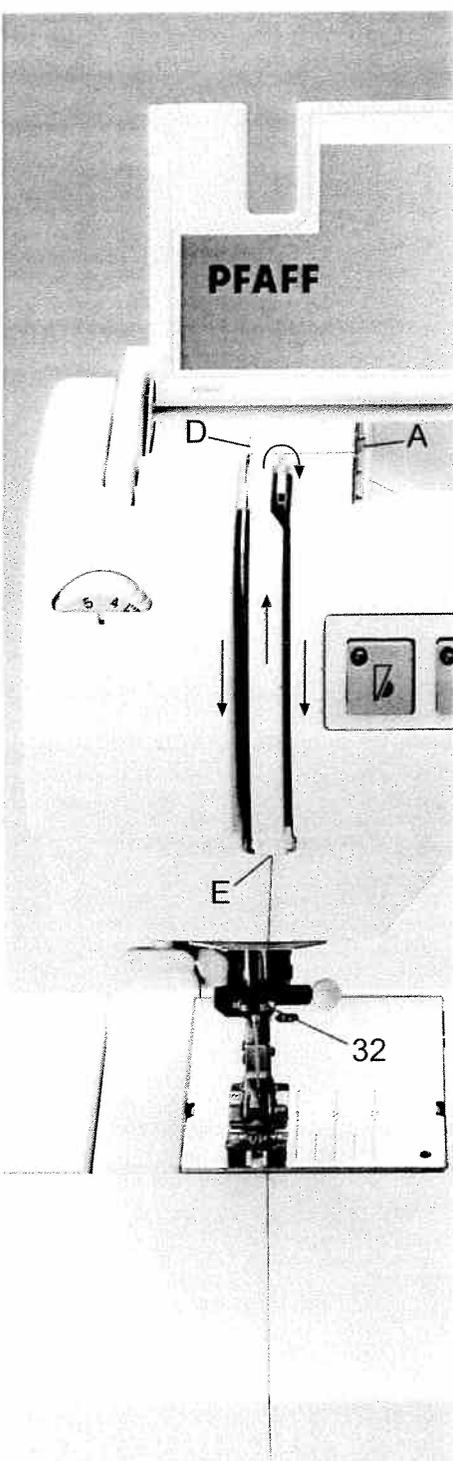


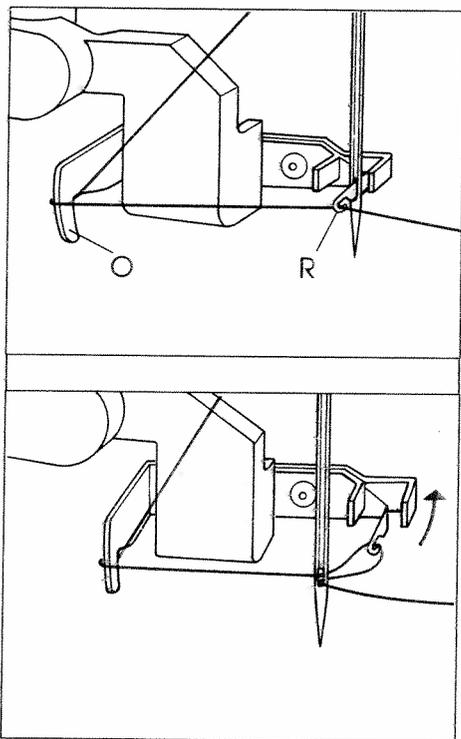
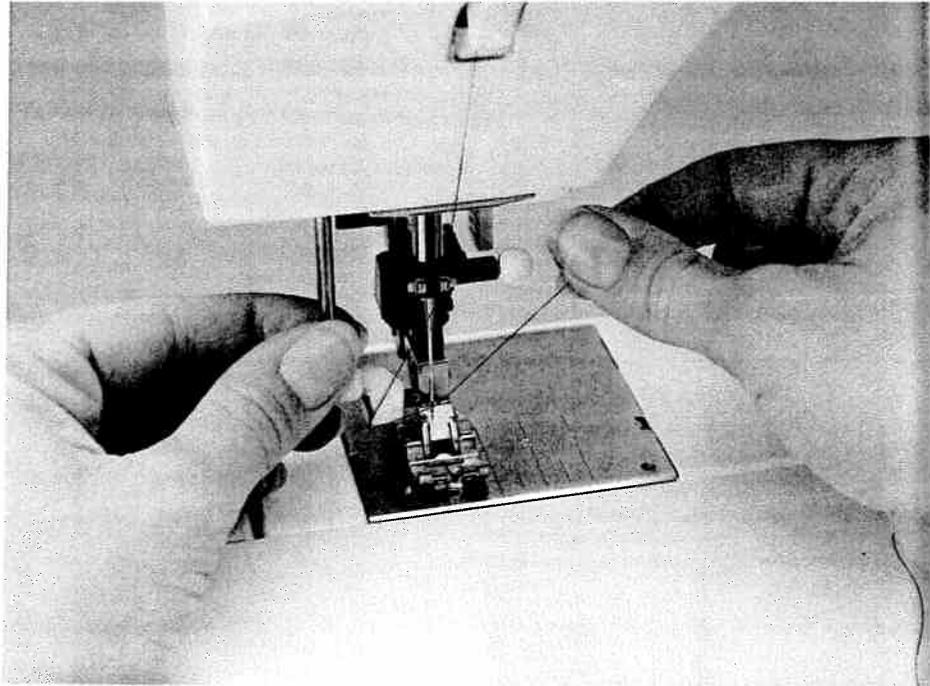
### Threading the needle thread Switch off the on/off switch

Raise the presser bar lifter (20) and turn the handwheel until the take-up lever (19) has moved to the top. Place the thread on the spool holder (24) and fit the corresponding unwinding disk.

Now, using both hands, pull the thread into guide A and under thread guide hook D. Pass the thread through the lefthand threading slot (17) and downwards. Pull the thread around stop E into the righthand threading slot and upwards to the take-up lever (19). The thread must be pulled into the take up lever (19) from left to right and downwards again in the righthand threading slot. Finally, pass the thread from the side behind one of the two **thread guides (32)**.

To thread the needle, please refer to the next page.

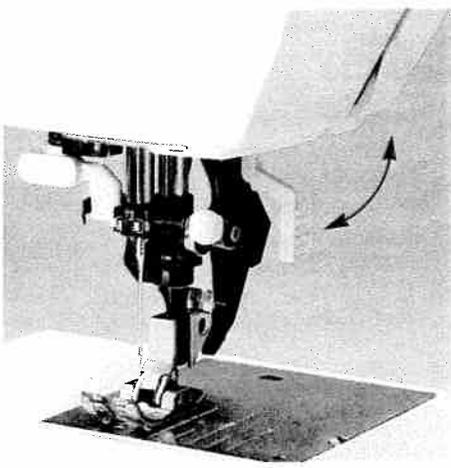




#### Needle threader (Models 6122, 6152, 6232)

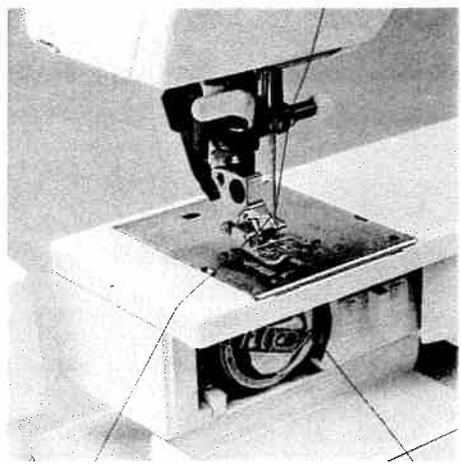
To make threading the needle easier and quicker, you have been provided with the **PFAFF needle threader (16)**. Lower the sewing foot (see next page). Turn the hand-wheel until the needle is at its highest position. Place the needle thread under hook **O** and hold it taut. Move the needle threader fully downwards and turn it towards the needle so that the small hook **R** goes through the needle eye. Place the thread in to the hook from below.

Turn the needle threader towards the rear, releasing the thread carefully, and allow the threader to move upwards. You can now pull the thread through the needle eye.



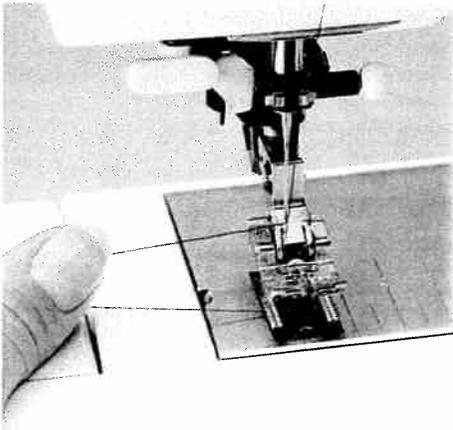
### Presser bar lifter

The sewing foot is raised or lowered with the presser bar lifter (20).



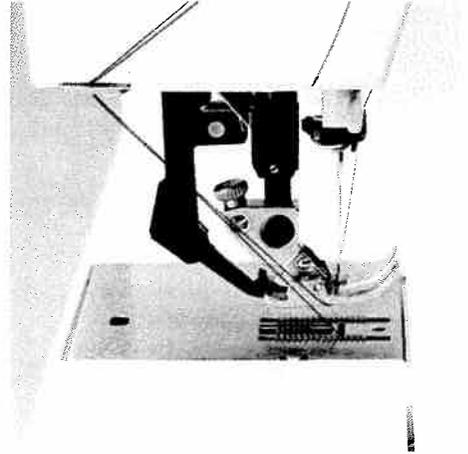
### Drawing up the bobbin thread

Raise the sewing foot. Hold the needle thread and turn the hand wheel towards you until the needle is at the top again and the bobbin thread has formed a loop. **Pull the needle thread** to draw up the bobbin thread.



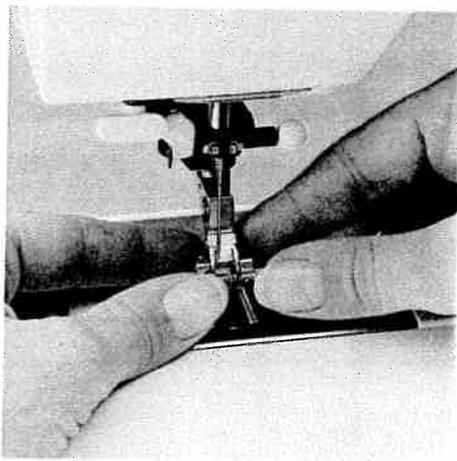
### Bobbin thread

Close the **hook cover (28)** and pull the thread under the sewing foot to the left.



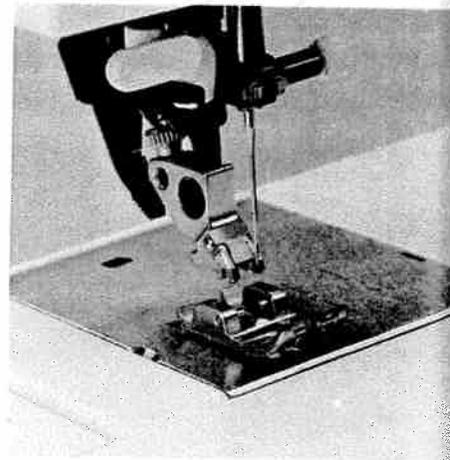
### Thread trimmer

Pull the threads from the back to the front over the thread trimmer (30).



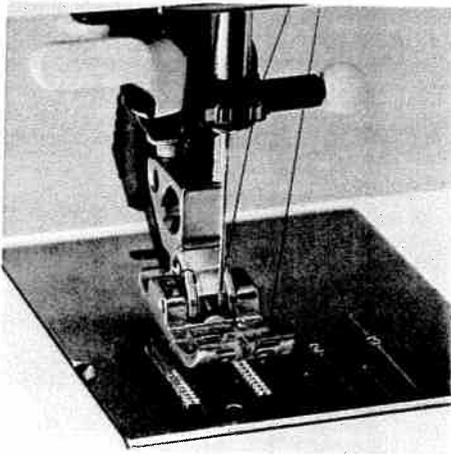
**Removing the sewing foot  
Turning off the main switch**

Position the needle at its highest point. Press the sewing foot upwards at the front and downwards at the back at the same time so that it disengages from the sewing foot holder (15).



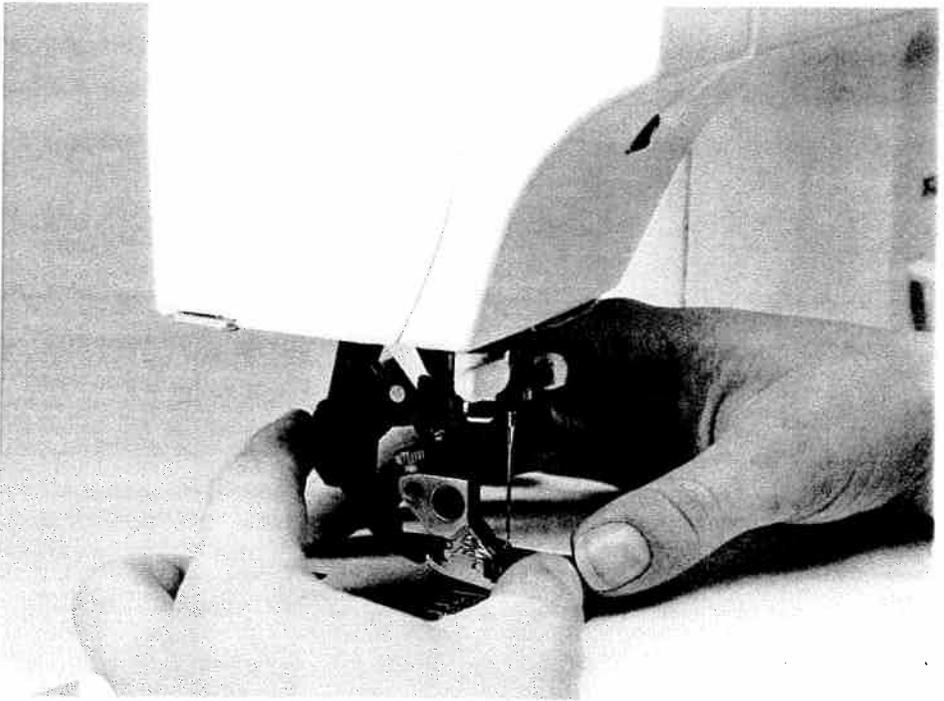
**Engaging the sewing foot**

Place the sewing foot under the sewing foot holder (15) so that when the presser bar lifter (20) is lowered, the pins of the foot engage in the sewing foot holder.



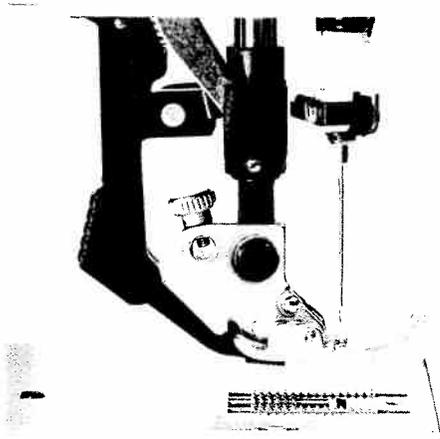
**Check:**

Please check that the sewing foot is properly engaged by raising the presser bar lifter.



**The built-in dual feed/IDT System (Integrated Dual Transport)  
(Models 6122, 6152, 6232)**

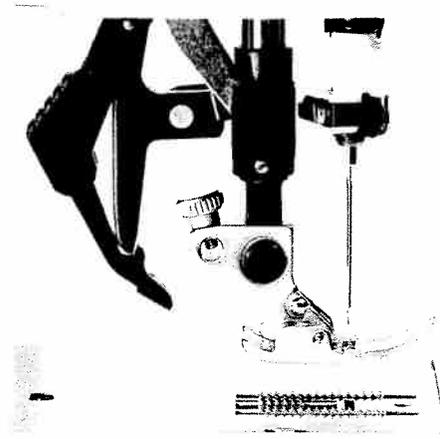
**PFAFF** offers the ideal solution for sewing difficult materials: **the built-in dual feed**. This system feeds the material from the **top** and **bottom** simultaneously as is done in industrial sewing machines. The fabric is fed precisely. When sewing light or difficult materials such as silk and rayon fabrics, the dual feed prevents seam puckering.



**Engaging the top feed**  
(Models 6122, 6152, 6232)

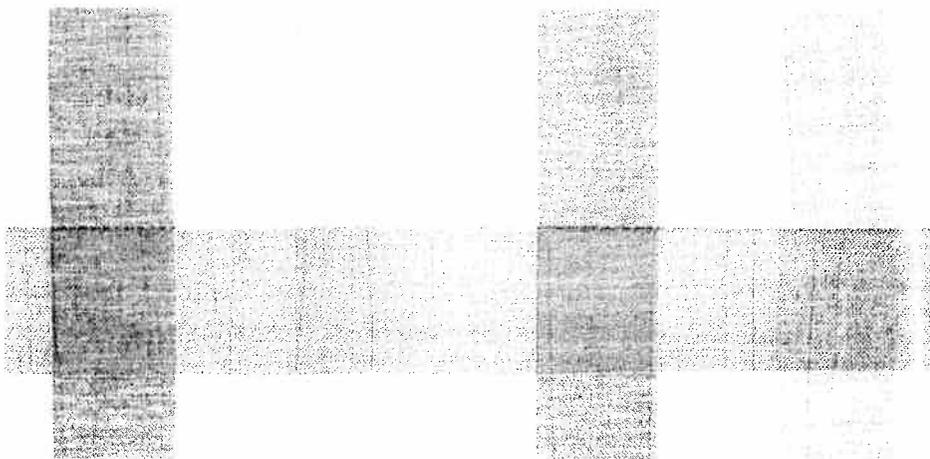
**Important!** For all sewing jobs with the **top feed**, only use sewing feet with cutout at the back.

Raise the sewing foot. Then push the top feed (23) downwards until it snaps into place.

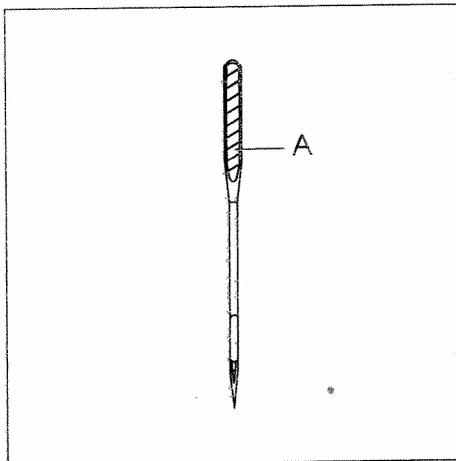
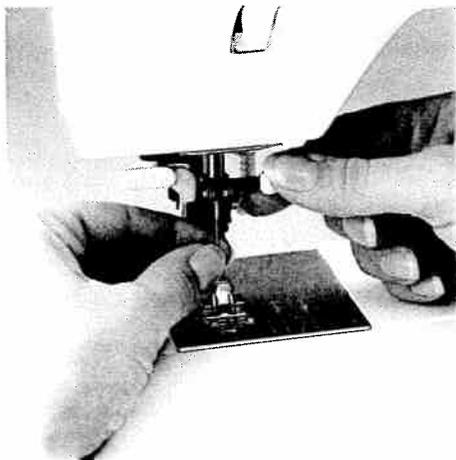


**Disengaging the top feed**

Hold the dual feed with two fingers at the marked places. Push the top feed (23) down little and out to the rear, and let it move slowly upwards (also see the illustration on page 25).



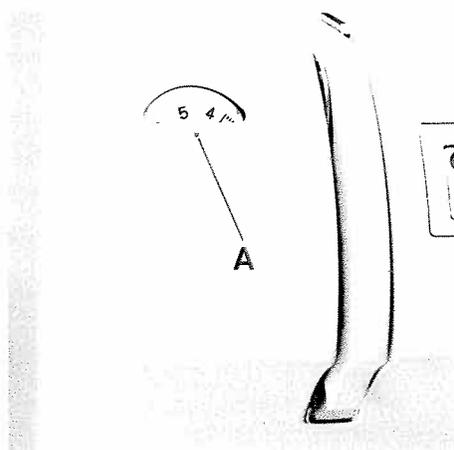
The even feeding action also ensures perfect matching of checked and striped fabrics.



**Changing the needle**  
**Switch off the on/off switch**

**To remove:** Lower the sewing foot and set the needle at its highest point. Now loosen the fixing screw (22) and pull the needle downwards.

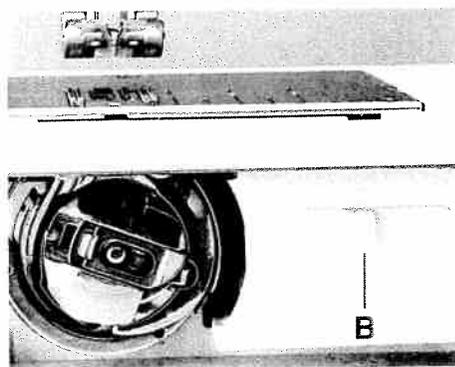
**To insert:** The flat side A of the needle must face to the rear. Lower the sewing foot and insert the needle, pushing it up as far as it goes. Hold the needle and tighten the fixing screw (22) firmly.



**Setting the needle thread tension**

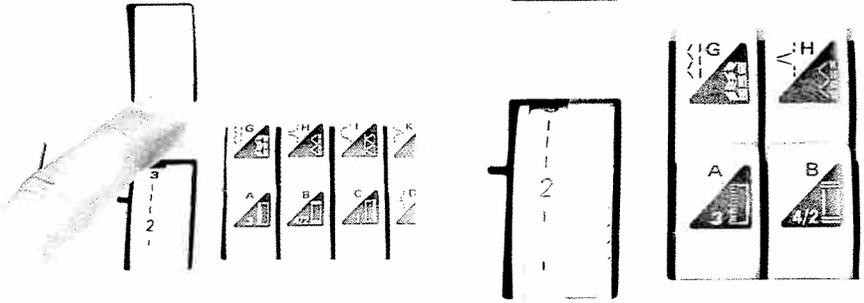
Set the required needle thread tension (18) with the help of the marking A.

The normal setting for sewing is 4 to 5. For embroidering, darning and buttonhole sewing it is between 2 and 3.



**Dropping the feed dog**

For certain sewing work, e.g. darning, the feed dog has to be dropped. To do this, open the hook cover and move slide B fully to the right. Now the feed dog is dropped.

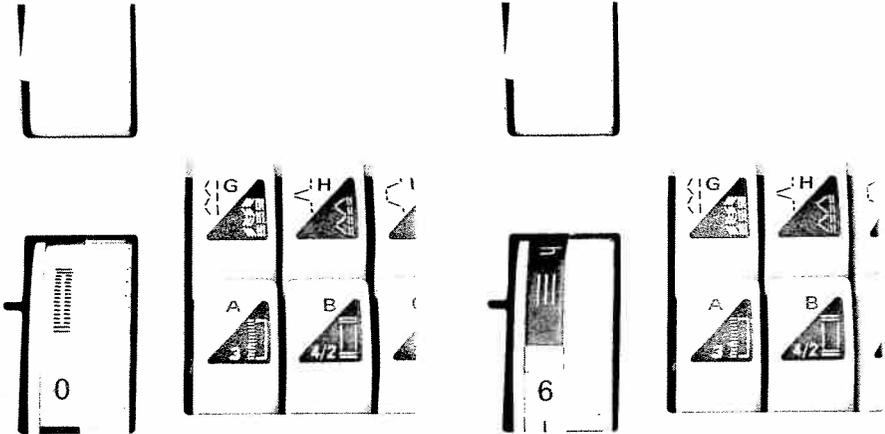


**Reverse sewing**

The machine sews in reverse only as long as the reverse sewing key (21) is pressed.

**Stitch length adjustment button**

With the stitch length adjustment button (11) you can adjust the stitch length infinitely between 0 and 6 mm by turning the point marking on the button to the required length.



Between the numbers 0 and 1 you will find the "buttonhole" symbol. This area is the optimum stitch density for sewing buttonholes and embroidering. The further you turn the dial to 0, the higher the density of the stitch.

To sew the **stretch stitches** on the colored background you must turn the stitch length adjustment knob (11) as far as it will go in the grey area. (Special model 6152 "Jeans & Satin" – see page 29).



## Pushbutton controls Setting utility stitches

Each program has been given a letter that you can find on the pushbutton controls. By pressing the correct button, the program is selected and the machine is ready to sew. **Key B** releases the keys that have been activated.

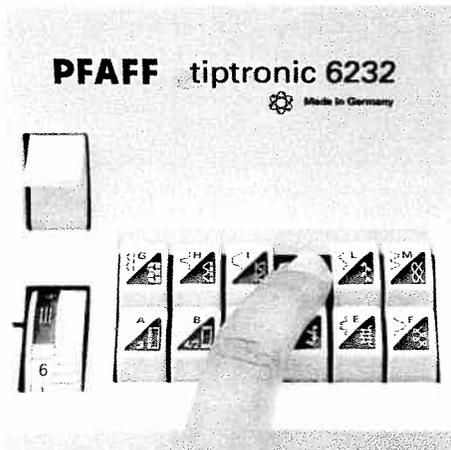
Under the lid (**26**) you will find the program table with all the utility stitches and stitch combinations. On **model 6232** the most important stitches are additionally illustrated on the lighted display.

### Note:

In the individual models, various stitch combinations are possible.

The stitch combinations which are possible with your machine are found on the inside of the lid (**26**) in the program table shown there.

Only **models 6232 and 6152** have all of the stitch combinations specified and described on pages 6 – 10.



## Setting stretch stitches

All the stitches with a **colored** background are stretch stitches, i.e. they are suitable for stretch material. Press the selected key down and turn the **stitch length knob (11)** as far as it will go in the grey area.

**Key B** releases the keys that have already been activated.

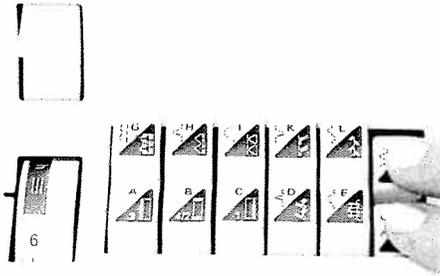
**Important:** When sewing with **utility stitches** with models 6152 and 6232, the **fancy stitch knob (7)** must be **switched off**, i.e. turned to ●.

### Note for special model 6152 "Jeans & Satin"

In this model the stretch stitches are not on a colored background. On the pushbuttons and in the program table, the stretch stitches are found in the bottom right half of a square respectively. Select the desired stretch stitch by pressing the corresponding key. Then turn the **stitch length knob (11)** as far as it will go in the grey area.

# PFAFF tiptronic 6232

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## Utility and stretch stitch combinations

By striking **two** or **several** keys you can create combinations in the utility stitch range.

The stitch length knob can either be in the normal sewing range or in the stretch range.

All the stitch combinations are illustrated on the **program table** in the lid. You can release keys that are already activated with **key B**.



# PFAFF tiptronic 6232

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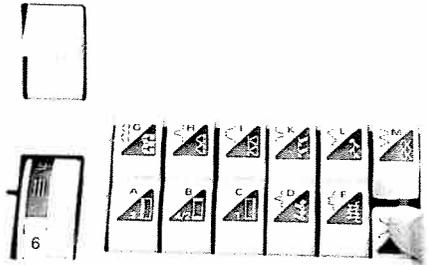


## Fancy stitch knob (Models 6152 and 6232)

Each fancy stitch has been given a letter. Select a fancy stitch from the program table and turn the fancy stitch knob **(7)** to the correct letter under the marking. The stitch length is between 0.5 and 1 mm.

# PFAFF tiptronic 6232

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## Fancy stitches and combinations (Models 6152 and 6232)

Pattern combinations can be created by pressing the keys together with the fancy stitch knob. An overview of the possible pattern combinations can be found in the fancy stitch table on page 10. The stitch length is between 0.5 and 1 mm. Wherever "stretch" is indicated, you must turn the stitch length knob **(11)** as far as it will go, i.e. in the grey area.



34

### Stitch width knob

The stitch width can be infinitely adjusted via the knob (34). When selecting the width, the needle must not be in the material.

**Basic setting:** Turn the stitch width knob (34) to the symbol (maximum stitch width).

**Exception:** Straight stitch is sewn with stitch length 0.

In chapter "Utility stitches and practical sewing" (pages 33 – 58), you will find recommendations in the tables for the stitch width selection of individual stitches. During sewing you can also change the stitch width.



35

### Needle positioning knob

In the center needle position (0) 14 additional needle positions can be selected by turning the needle positioning knob (35) in increments to the left or right. The furthest needle position to the left (14) can be achieved by turning the knob (35) as far as it will go to the right. The furthest needle position to the right (0) can be achieved by turning the knob as far as it will go to the left. When the position of the needle is being changed, the needle must not be in the material.

### Note:

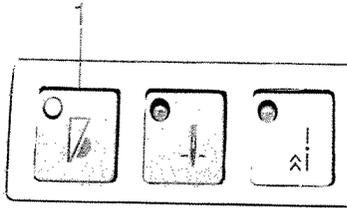
If you have selected the needle position to the right, you can now use the width knob (34) to increase or reduce the width of the left side of the stitch. The reverse applies also for needle position to the left (see page 66).

## Function keys (Model 6232)

The tiptronic has three function keys.

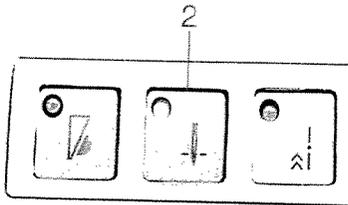
### 1. Sewing slowly

When key (1) "slow sewing" is pressed the green diode lights up. The sewing machine now sews at **half speed**. If the key is pressed again the green diode is extinguished and the machine sews at full speed again.



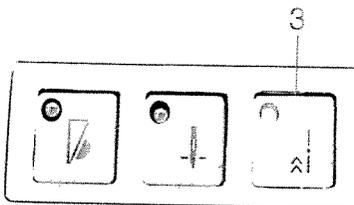
### 2. Needle position up/down

Each time sewing is interrupted the needle automatically moves to its uppermost position. If key (2) is pressed the diode lights up. The needle now remains in the material each time there is an interruption in sewing. If you press the key again the diode is extinguished and the needle automatically goes up again.



### 3. Tacking

If key (3) "tacking" is pressed the green diode lights up. The machine now only sews **one stitch** when the foot control is activated. If the key is pressed again the diode is extinguished together with the function (see page 36).

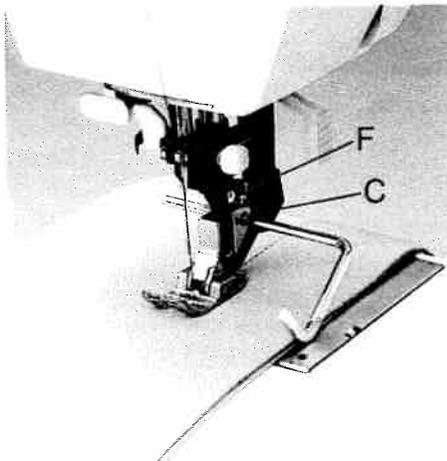
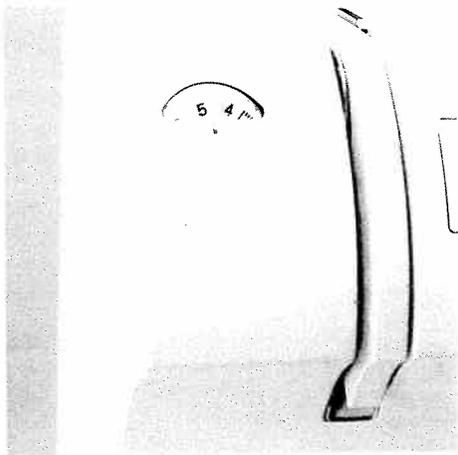




## **Utility stitches and practical sewing**

Sewing chart	page 34
General sewing aids	page 35
Non-elastic stitches	page 36 – 39
Elastic stitches	pages 40, 41
Overlock stitches	page 42, 43
Covering stitches	page 44, 45
Buttonhole	pages 46, 47
Hemming with the twin needle	page 48
Smocking	page 48
Gathering	pages 49, 50
Darning	pages 51 – 53
Sewing on zippers	pages 54, 55
Rolling	page 56
Sewing lace	page 57
Shell edging	page 58





**Needle thread tension** To ensure perfect sewing results, the needle and bobbin thread tensions must be perfectly tuned to each other. The normal setting for utility stitches is in the range 4 – 5.

Check the tension with a broad zigzag stitch. The threads must be interlaced between the two fabric plies.

If the needle thread tension is too high, the threads are interlaced above the top fabric ply. If the needle thread tension is too low, the threads are interlaced below the lower fabric ply.

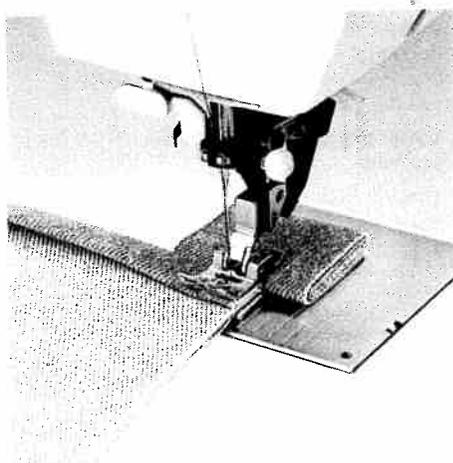
The adjustment of the bobbin thread tension is described on page 20.

### Sewing aid for thick seams

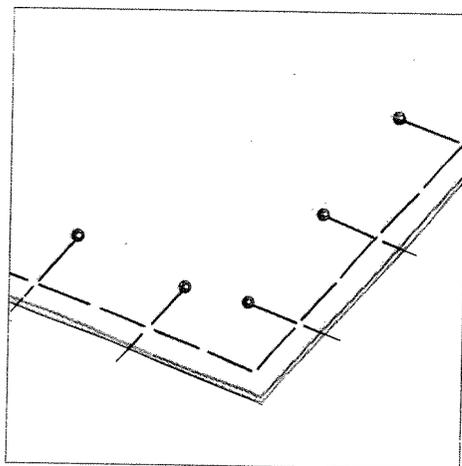
To ensure a consistent feed when beginning sewing we recommend supporting the presser foot on a piece of fabric of the same height as the workpiece.

### Topstitching

Straight stitch **G** can be sewn using any of 15 various needle positions in such a way that you can always guide the sewing foot along the fabric edge for top-stitching work. The top-stitch width is determined by the needle position. If you wish to top-stitch at a wider width than this, simply guide the fabric along the guide marks on the needle plate, or use



edge guide (standard accessory No. 8). The edge guide is inserted into hole **C** and is secured with fixing screw **F**.



	prog	↑ ↓	∞	~	∩	⌋
a	key 3	-	0	○	3	0/1
b	-	-	0	-	-	-

### Basting stitch (model 6232)

With key **(3)** "basting" you can baste a garment before trying it on. When you press the foot control the machine will only make one stitch. For each further stitch you have to press the foot control each time.

- Lower the bottom feed and switch off the top feed.
- Place the fabric under the sewing foot.
- Sew one stitch, then pull the fabric the required amount to the rear.
- Repeat this as many times as you need to finish the seam.

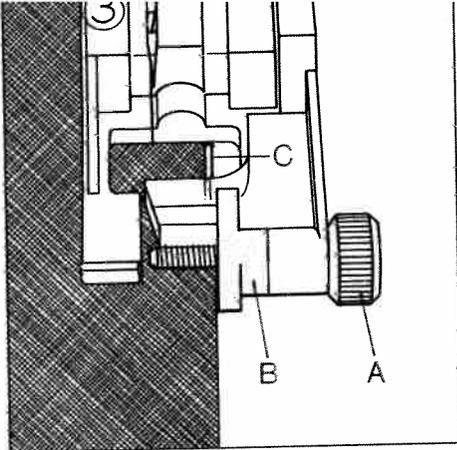
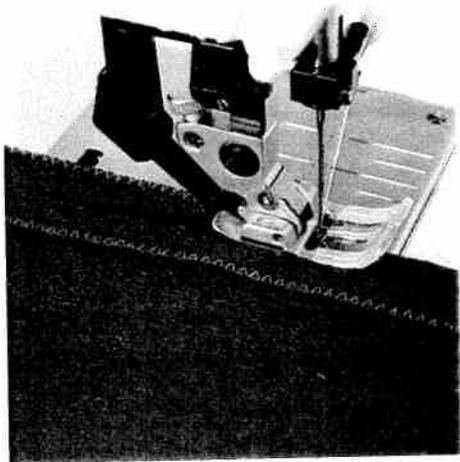
**TIP:** To prevent the fabric layers from shifting, insert dress pins crosswise to the basting position. Light fabrics are easier to baste with long straight stitches (6 mm). In this case the bottom feed need not be lowered.

	prog	↑ ↓	∞	~	∩	⌋
a	G	2.5	0	●	3-5	0/1
b	G	2.5	0	-	3-5	0

### Straight stitch

Program **G** is the basic straight stitch. The stitch length can be increased up to 6 mm as required. It is easier to do some sewing jobs by changing the needle position, e.g. top-stitching a collar or sewing in a zipper. You can select up to 15 different needle positions (see page 31).

Please ensure that the needle is at its highest position when adjusting its setting.



	prog	↑ ↓	↯	⌋	⌋	⌋
a	G	1-2	2-5▶	●	3-5	0/1/3
b	G	1-2	2-5▶	-	3-5	0/3

### Zigzag stitch

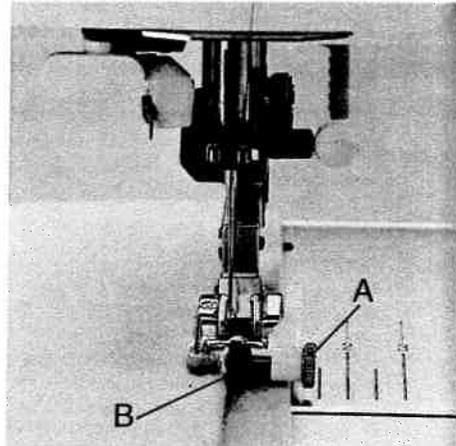
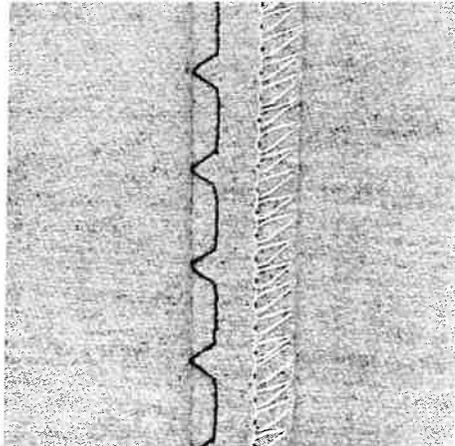
In addition to overlock stitching, zigzag stitch G, stitch width 5 ▶, is also suitable for serging various materials. In this case, the material should only be positioned halfway under the sewing foot. When serging the edge, make sure the needle goes into the material and over the edge alternately.

The width for serging can be reduced up to 2mm.

For serging difficult materials, blind stitch foot No. 3 is very useful. When sewing, the thread lies over pin C, thus preventing curling of the fabric edge. In this way you can sew beautiful smooth seams.

The raw edge must be guided along edge guide B. You can adjust this edge guide with adjusting screw A.

**Important:** When the blind stitch foot is used for serging with the zigzag stitch, select the needle position to the utmost right (0). Choose a stitch width in the range 3 – 5 mm (do not use any other needle position).



	prog	↑ ↓	↻	⚙	⌒	👤
a	H	2.5	5 ▶	●	3-5	3
b	H	2.5	5 ▶	-	3-5	3

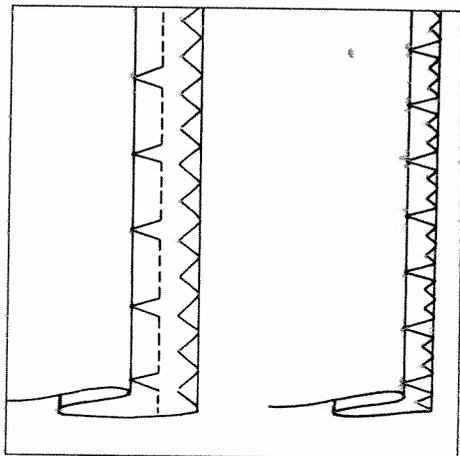
If the stitches are visible on the **right side**, adjust edge guide **B** by turning adjusting screw **A**.

If the needle position to the right  is used, using the width knob (**34**) you can regulate the penetration of the needle in the crease.

### Blind stitch

Blind stitch **H** is best suited for **invisible** hems; sewing by hand is no longer necessary.

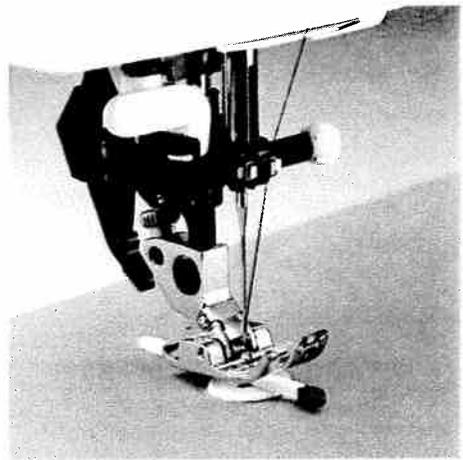
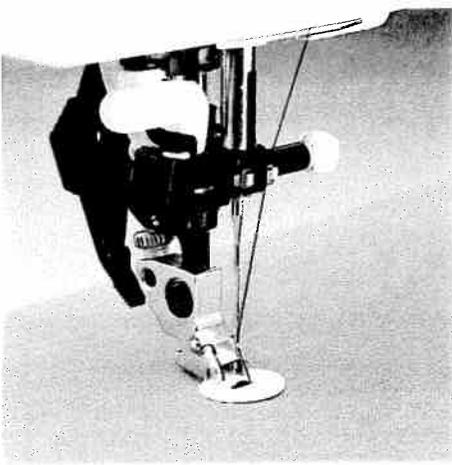
- Serge the edge of the hem.
- Fold the edge inwards by the hem width.
- Now unfold the hem again so that the hem edge protrudes by about 1 cm.
- Now place the fabric under the sewing foot so that the crease line runs along edge guide **B**.
- Using the needle positioning knob (**35**), select the needle position to the right .
- When the needle enters the crease line, it must only pick up one fiber of the fabric.



### Remember!

If, when blind stitching with sewing foot No. 3, you select a position other than needle position „right“  and stitch width 5, make sure that the needle does not strike the bar of the sewing foot. Otherwise the needle will break.

Program **D** is a blind stitch for elastic materials. The hem is sewn and serged at the same time, i.e. it is not necessary to serge the fabric edge.



	prog	↑ ↓	∩	⌋	⌒	⌒
a	G	-	4	○	2-3	-
b	G	-	4	-	2-3	-

### Sewing on buttons with stems

- Insert the sewing foot.
- Place a matchstick between the holes of the button and sew it on as described on the left.

### Sewing on buttons

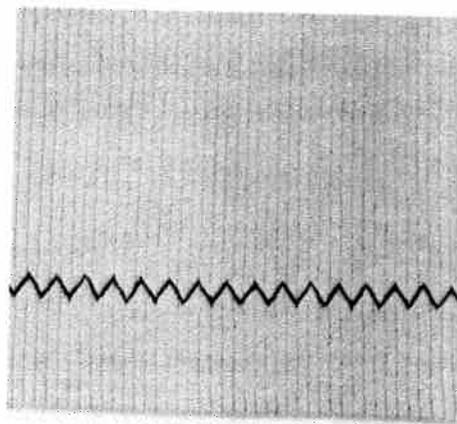
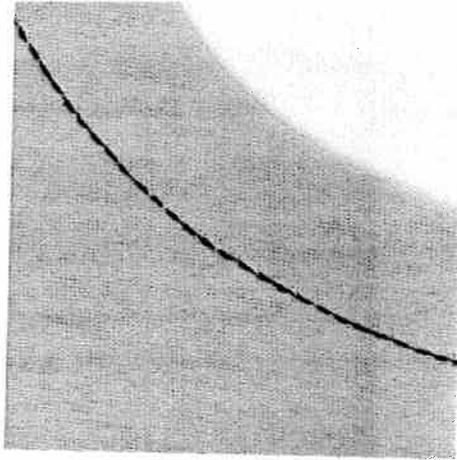
With zigzag stitch **G** (stitch width 4 mm) you can sew on two- and four-hole buttons with no problem at all.

- Remove the sewing foot and lower the feed dog.
- Turn the handwheel towards you and move the button in such a way that the needle enters the left hole in the button.
- Now lower the presser foot lifter; this holds the button off the blade.
- Sew on the button. Take care to ensure that the needle also enters the right-hand hole in the button.

### Securing

- Select straight stitch by turning the width knob (34) to 0.
- Change the needle position with the knob (35) so that the needle enters one of the two holes.
- Sew a few securing stitches.

- Remove the match and pull the fabric and the button apart.
- Wrap the stem you have just created with sewing thread and knot it.



	prog					
a	G	Stretch	0	●	3-5	0/1
b	G	Stretch	0	-	3-5	0

	prog					
a	G	Stretch	3-5▶	●	3-5	0/1
b	G	Stretch	3-5▶	-	3-5	0

### Stretch triple straight stitch

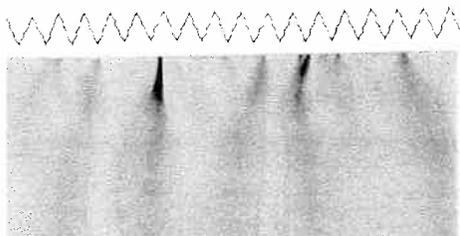
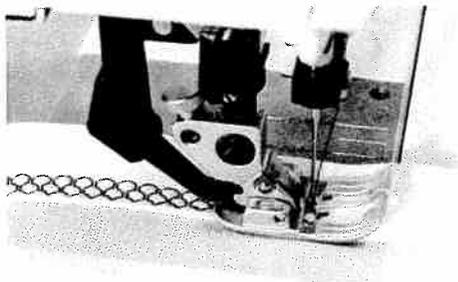
This program is used for sewing all seams where great strength is needed, e.g. inside trouser seams.

The farther you turn the stitch length knob, the longer the stitch length.

### Stretch triple zigzag stitch

The stretch triple zigzag stitch is a highly elastic and decorative seam which is very suitable for hems on T-shirts and underwear.

- Serge the edge of the hem.
- Fold the hem inwards at the required width.
- Topstitch the hem from the face side.



	prog	↑↓	∞	👤	👤	👤
a	M	1-2.5	5▶	●	3-5	0/1
b	M	1-2.5	5▶	-	3-5	0

	prog	↑↓	∞	👤	👤	👤
a	M	Stretch	5▶	●	3-5	0/1
b	M	Stretch	5▶	-	3-5	0

### Elastic stitch

Because of its high elasticity, this stitch is used for sewing on elastic tape, e.g. on underwear.

- Cut off the old elastic band close to the fabric edge.
- Gather the fabric with the 6 mm long straight stitch.
- Slide the workpiece between the elastic tape or lay it underneath it and fasten it with pins.
- Sew it on using the elastic stitch. Allow the ends of the elastic band to overlap a little and overstretch with the elastic stitch.
- On skirts and trousers, the elastic tape is sewn onto the edge which has been prepared as above using the elastic stitch.

### Honeycomb stitch

The honeycomb stitch is an elastic and decorative hem which is particularly suitable for hems on underwear and T-shirts.

- Fold the hem over double and overstretch it.



### What is an overlock stitch?

For elastic materials and knits, the pushbutton key models offer overlock stitches which sew two fabric layers together and serge simultaneously. They are more elastic than normal seams, very durable and quickly sewn.

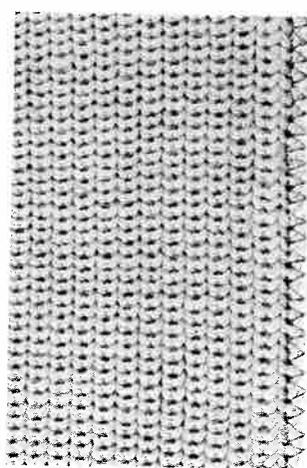
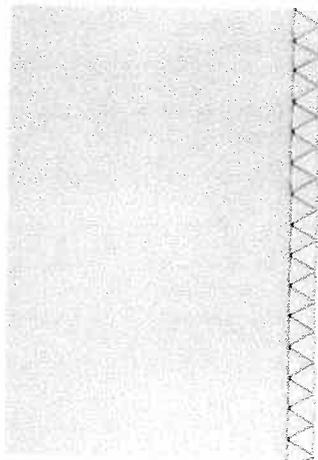
**Tip:** We recommend using blind stitch foot No. 3 when sewing overlock seams. It guides particularly well and prevents the seam from puckering even on broad seams.

	prog					
a	K	Stretch	5▶	●	3-5	0/1/3
b	K	Stretch	5▶	-	3-5	0/3

### Open overlock stitch

With this stitch, thicker materials and fabrics which do not fray too much can be sewn together perfectly.

**TIP:** Make sure that the needle sews to the right of the material just over the edge and not in it.



	prog					
a	I	Stretch	5▶	●	3-5	0/1/3
b	I	Stretch	5▶	-	3-5	0/3

	prog					
a	H	Stretch	5▶	●	3-5	0/1
b	H	Stretch	5▶	-	3-5	0

### Closed overlock stitch

With program I you can especially sew jersey quality perfectly. You can also sew on sleeve cuffs and knit collars which are well-sewn and long-lasting.

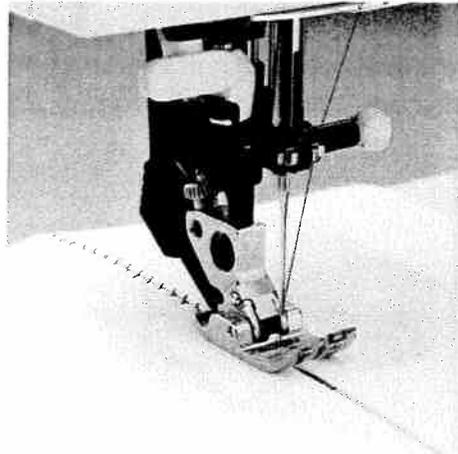
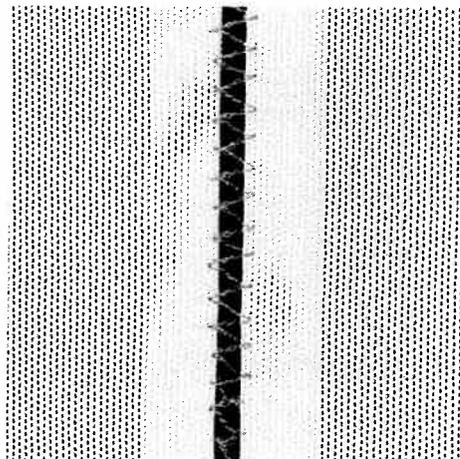
**TIP:** Ensure that the sleeve cuff is stretched while it is being sewn.

**Remember!** If, when overlock stitching with sewing foot No. 3, you select a position other than needle position „center“ and stitch width 5▶, make sure that the needle does not strike the bar of the sewing foot. Otherwise the needle will break.

### Pullover stitch

This stitch is suitable for open-knit fabrics. Fashion-knit garment sections can also be joined effortlessly with this stitch. Make sure that the material is fed to the right of the needle, not to the left.

**TIP:** To prevent the seam from stretching while sewing, it is advisable to add a woolen thread under light tension.



### What is a covering stitch?

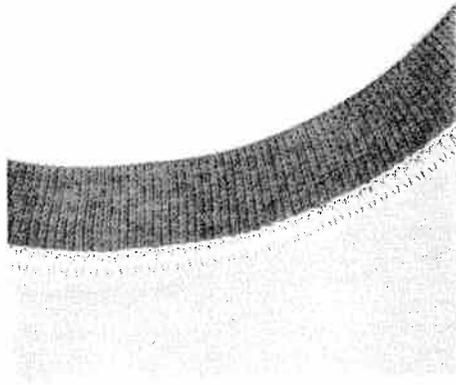
You can use the following programs for sewing a flat covering seam. This produces a so-called "flatlock effect" which lends a professional look to collar plackets or raglan seams.

	prog					
a	L	Stretch	5▶	●	3-5	1
b	L	Stretch	5▶	-	3-5	0

### Feather stitch

With the feather stitch you can sew highly elastic materials with an effect similar to that of hem stitching, e.g. foundation wear.

- Serge the fabric edges and baste them over.
- Lay the edges to be sewn underneath the pressing foot with a distance between the edges of about 3 mm.
- Overstitch from the face side, ensuring that the needle perforates the material both right and left.



	prog	↕	∩	⋯	∩	⌋
a	L	1-2	5▶	●	3-5	1
b	L	1-2	5▶	-	3-5	0

	prog	↕	∩	⋯	∩	⌋
a	IG	Stretch	5▶	●	3-5	1
b	-	-	-	-	-	-

### Fancy elastic stitch

The fancy elastic stitch is very useful for materials that require a flat seam, e.g. terry cloth.

- Place the two fabric edges so that they overlap by about 2 cm and overstretch each edge with fancy elastic stitch.

### Pennant stitch (models 6152 and 6232)

The pennant stitch is one of the many types of covering stitches. Since it can be stretched it is particularly suitable for overstretching bands on elastic material, e.g. sweatshirts or sportswear.

- Sew the band onto the part with overlock stitch.
- The seam allowance can now be overstretching from the right side of the fabric. Make sure that the needle enters in the shadow of the seam.

## Buttonholes

Sewing buttonholes is very easy with all the models with pushbutton controls since the fabric does not have to be turned.

Buttonholes are generally sewn onto a piece of doubled fabric. However, for some materials, e.g. silk, organza and viscose, it is necessary to use silk paper backing to prevent the material from contracting while sewing.

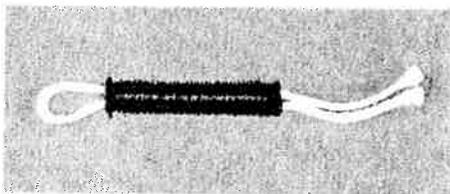
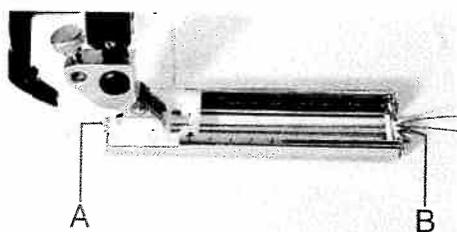
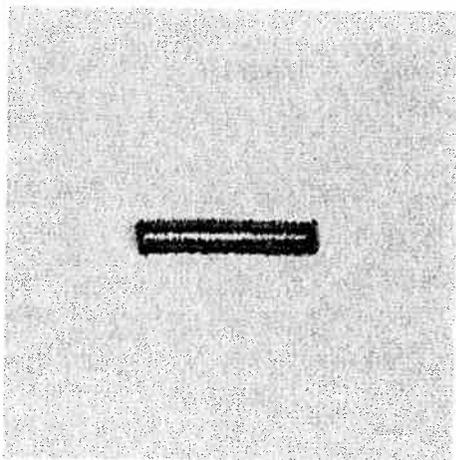
Avalon (from Madeira) is ideal for this purpose. It is a special non-woven fiber which dissolves when it comes into contact with water. For materials such as velvet or thick woolens, which are difficult to feed, it can be placed over or under the fabric. In this way the material is not braked and buttonholes are much easier to make.

To produce beautiful seams, embroidering or darning threads are ideally suited to this purpose.

Mark the starting point of the buttonhole either with a magic pen or dress pin, and always sew a sample buttonhole first.

### Note:

Before starting any buttonhole, always push the guide of the buttonhole foot fully to the front, i.e. so that the red arrow is at the first red mark. The red marks are arranged at an interval of 0.5 cm. They are a guide when determining the length of the buttonhole.



	prog	↕	∩	⌋	⌋	⌋
a	A/B/C	⌋	5▶	○	3	5
b	A/B/C		5▶	-	3	5

	prog	↕	∩	⌋	⌋	⌋
a	A/B/C	⌋	5▶	○	3	5
b	A/B/C		5▶	-	3	5

### Lingerie buttonhole

Insert the buttonhole foot and slide the foot forwards as far as it will go.

Press **key C** and sew the first buttonhole seam to the required length.

Then press **key B**. Keep it pressed and sew a few stitches for the bartack, while holding the material securely.

Then press **key A** and sew back the second buttonhole seam to the same length.

Now press **key B** again and sew a few bartack stitches while holding the material securely.

For securing the seams, select straight stitch (turn width knob (34) to 0) and select the left needle position (needle position knob (35) to ). Sew a few stitches.

Cut open buttonhole with scissors or a seam ripper.

**Note:** If you would like to sew very fine buttonholes, you can reduce the buttonhole width with the stitch width knob (34) down to approx. 3mm. In this case, use the center needle position .

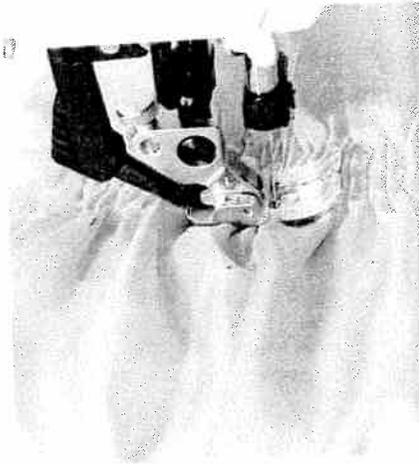
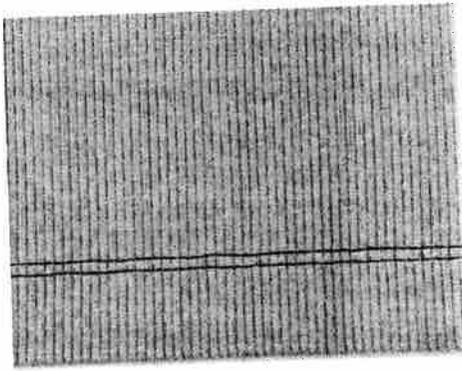
### Lingerie buttonhole with gimp thread

To sew especially durable buttonholes, e.g. on sportswear, we recommend using a gimp thread.

On elastic materials the gimp thread is particularly important to prevent the buttonhole from stretching.

- Lay the gimp thread over the rear protrusion **A** and pass the thread ends underneath the presser foot towards the front.
- Clamp the threads to the left and right of protrusion **B**.
- Slide the buttonhole runner as far forwards as possible and sew the buttonhole as described in the left-hand column.
- Pull the loop of the gimp thread into the buttonhole and cut the threads.

**TIP:** In addition to traditional buttonholes, you can also sew **ornamental buttonholes** as described on page 68.



	prog	↑↓	∩	~	∩	⏏
a	G	3	0	●	3-5	0/1
b	G	3	0	-	3-5	0

	prog	↑↓	∩	~	∩
a	G	3-4	0	●	3-5
b	G	3-4	0	-	3-5

### Hemming with the twin needle

With the twin needle you can not only embroider (see page 64), but also make topstitch seams.

Using the twin needle you can add a professional touch to hems on stretch materials such as T-shirts, knitted articles or cycling shorts both quickly and easily. Twin needles are available in different widths. The traditional width for topstitching is 4 mm. To prevent the needle from striking the needle plate, you must make sure that you select the center needle position (⊙).

- First fold and iron the width of fabric desired for the hem.
- Then topstitch the hem from the face side.
- Finally, cut the protruding hem edge back to the seam.

Use only a jersey needle when sewing stretch material!

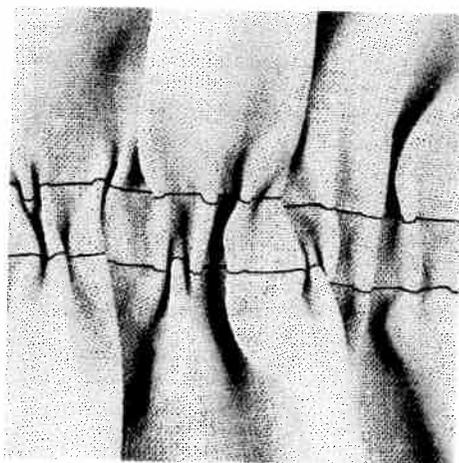
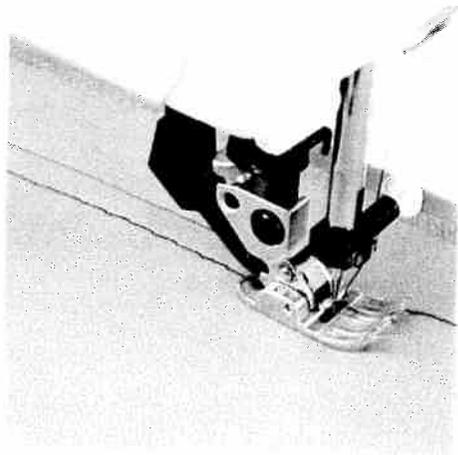
**Tip:** On difficult materials such as ribbed knitwear it is advisable to baste the hem before topstitching it.

**On page 64 you will find a description of how to thread the twin needle.**

### Smocking effect with elastic threads

Fine, light fabrics such as Batist, rayon a silk are especially suitable for beautiful smocking work. For smocking work with the elastic thread you should use an additional bob case and wind it by hand with the elastic thread. As the elastic thread is much stronger than the normal bobbin thread, the bobbin case must be set at very low tension, the higher the bobbin tension, the more intense the gathering.

- Sew a test seam to determine the level of gather.
- Mark the first line on the face side of fabric and sew along it.
- Each additional seam can be sewn at presser foot's width from the first row.
- When sewing several seams next to another, you must stretch the fabric to original length when sewing the subsequent seams. Otherwise, the gather will be larger.
- Knot the threads at the beginning and end of the seam on the reverse side.



	prog	↑ ↓	∞	⌊-	⌋	⌋
a	G	6	0	●	3-5	0/1
b	G	6	0	-	3-5	0

**Gathering with the straight stitch**

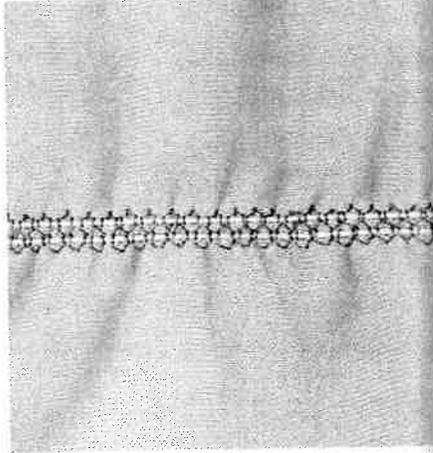
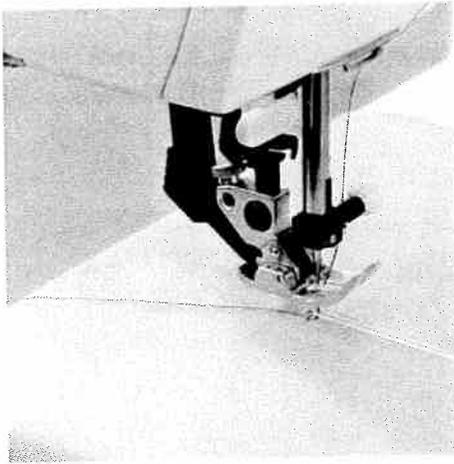
Using program **G** you can gather sleeves, skirts and valances with a stitch length of 6 mm. To ensure consistent gathering you should sew two or three rows of gathering.

Mark the first line on the face side of the fabric and sew along it. Allow the threads to protrude approx. 10 – 20 cm.

Each subsequent seam can be sewn one presser foot width from the last.

Gather the piece of fabric by pulling the bobbin thread. You determine the amount of gather by how much you pull the thread.

Finally, the thread ends are knotted to secure the gather.



	prog	↑ ↓	∩	⌋	⌋	⌋
a	M	Stretch	5▶	●	3-5	0/1
b	M	Stretch	5▶	-	3-5	0

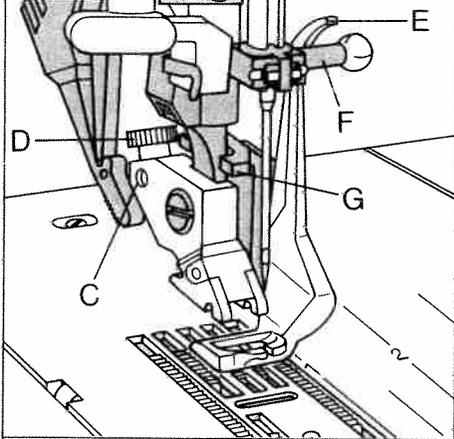
### Gathering with elastic thread

Sleeve and waist seams can be gathered with ease using an elastic thread. The elastic thread does not have to be wound onto the bobbin.

- Mark the first gathering seam on the reverse side of the fabric.
- Sew a few stitches using program **M** and leave the needle in the fabric. The needle must be in the center of the presser foot. Raise the presser foot and lay the elastic thread around the needle.
- Lower the presser foot and sew a few stitches. Then pull the elastic thread evenly at both ends.
- You determine the amount of gather by the amount you pull the threads.
- The gather can also be altered after sewing by pulling the ends of the elastic threads.
- Finally, knot the threads and the elastic.

**Tip:** The cording foot (special accessories) particularly suitable for gathering. Due to its guide grooves the elastic is fed evenly during the sewing process.

	prog	↑ ↓	∞	⋈	⌒	⌒
a	G	-	0	○	2-3	6
b	G	-	0	-	2-3	Special- accessories



### Darning with the straight stitch

Insert the darning foot:

Set the needle at its highest point and push the pin of the darning foot fully into the hole **C** of the sewing foot holder. When doing this, the guide fork **G** should position itself around the presser bar. The wire **E** must be behind the fixing screw **F**. Now tighten screw **D**.

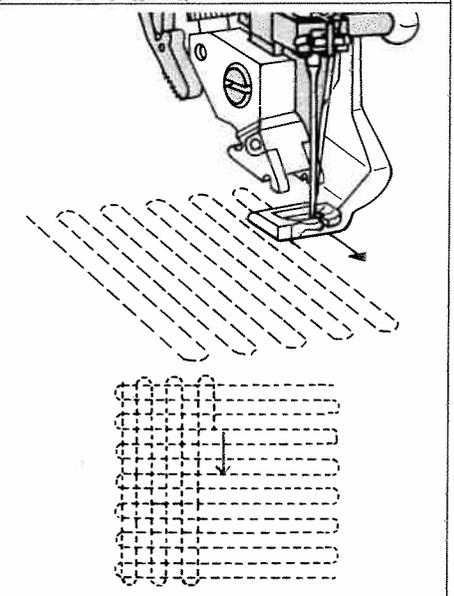
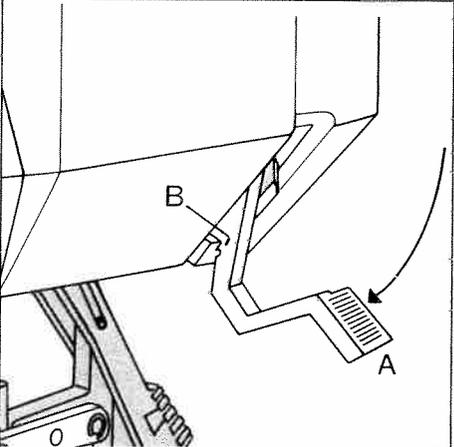
Darning position:

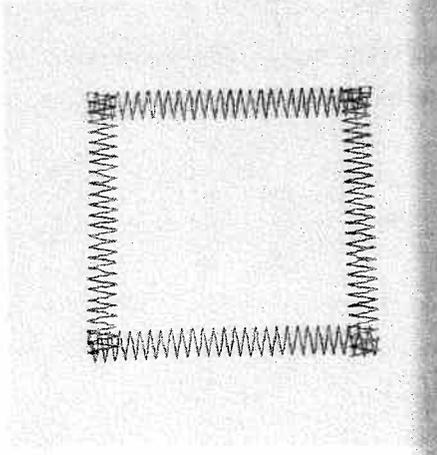
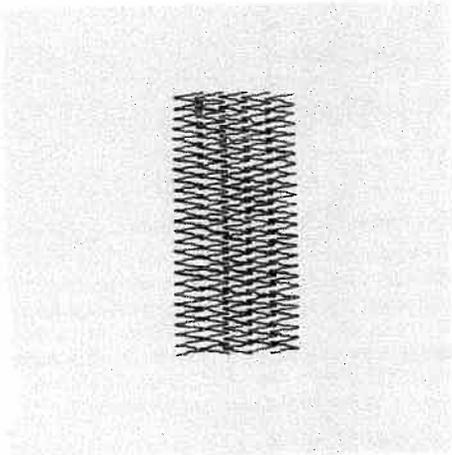
Lower the presser-foot lifter while pushing it lightly to the rear. This snaps the presser-foot lifter into notch **B** (darning position).

- Place the darning work in the darning hoop.
- Drop the feed dog.
- Pull up the bobbin thread and hold the threads when you start sewing.
- Darn the damaged area by guiding the fabric back and forth evenly in the prescribed direction while ensuring that each line ends with a small curve. This helps to avoid<sup>†</sup> the fabric ripping again.
- When you have finished sewing the damaged area, rotate the fabric a half turn and darn the area once again.

You determine the stitch length yourself by moving the fabric back and forth.

**Tip:** If you move the fabric too slowly, small knots will appear on the reverse side of the fabric.





	prog	↕	↘	⚡	⤴	👤
a	M	0.2-1	5▶	●	3-5	0/1
b	M	0.2-1	5▶	-	3-5	0

	prog	↕	↘	⚡	⤴	👤
a	M	0.2-1.5	5▶	●	3-5	0/1
b	M	0.2-1.5	5▶	-	3-5	0

### Darning with the elastic stitch

Darning with the elastic stitch is especially suitable for repairing damaged areas.

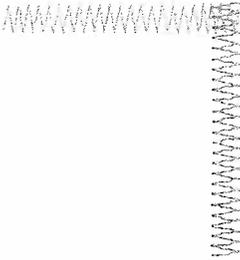
- Sew over the damaged area in rows until it is well covered. Take care to ensure that the rows overlap.

### Sewing on patches

To cover larger holes well, it is necessary to sew a new piece of fabric onto the damaged area.

- Baste the new piece of fabric onto the damaged area of the face side of the fabric.
- Sew over the fabric edges with the elastic stitch.
- Now cut the damaged area back to the seam from the reverse side of the fabric.

**Tip:** To simplify turning the corners of the patch, in the case of model 6232 select the "needle down" function.

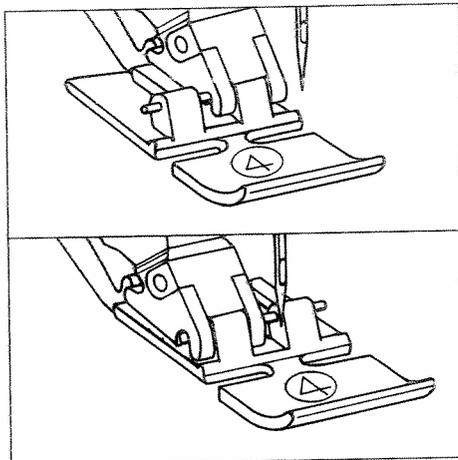


	prog					
a	M	0.2-1.5	5▶	●	3-5	0/1
b	M	0.2-1.5	5▶	-	3-5	0

### Repairing tears

On tears, frayed edges or small holes it is useful to lay a piece of material under the reverse side of the fabric. The underlayered fabric reinforces the workpiece and ensures perfect repair.

- Lay a piece of material underneath the fabric. It must always be a little larger than the damaged area.
- Now sew over the damaged area in accordance with the size of the tear.
- Cut the underlayered piece of material back to the seam.



	prog	↑ ↓	∩	⚡	⤴	👤
a	G	3	0	●	3-5	4
b	G	3	0	-	3-5	4

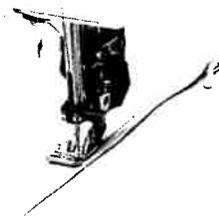
**Sewing on zippers** There are various methods of sewing on zippers. For skirts we recommend the fully concealed zipper, for men's and ladies' trousers the semi-concealed zipper. Various zippers are available. We recommend using a metal zipper for strong fabrics such as denim. For all other materials we recommend a plastic zipper.

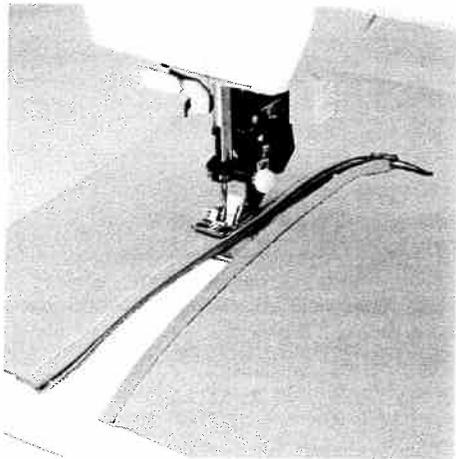
It is important for all types of zippers to sew very close to the edge of the teeth of the zipper. This is why it is possible to insert the zipper foot either on the right or the left of the presser foot holder.

Additionally, you can set the needle so that it enters close to the edge of the zipper teeth by using one of the 15 available needle positions. If the foot is engaged right, the needle must only be moved to the right. If the foot is engaged left, the needle must only be moved to the left.

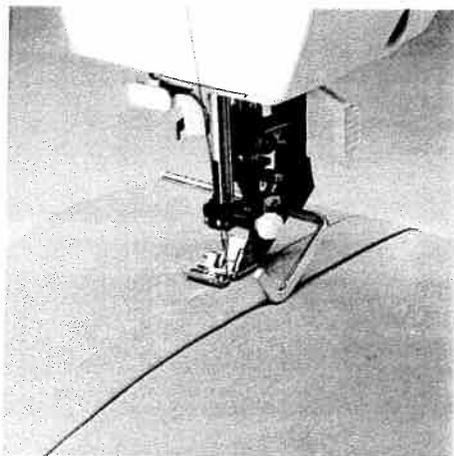
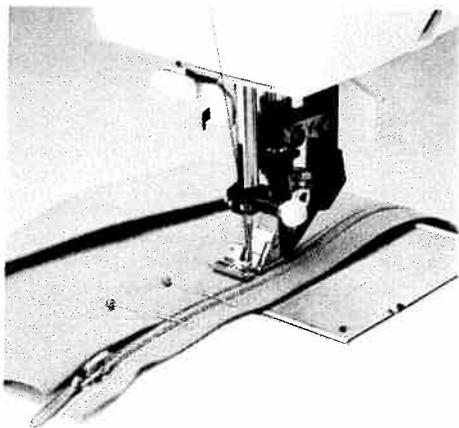
### Fully concealed, sewn-in zipper

- Insert the zipper foot on the right-hand side.
- Baste in the zipper and lay it underneath the presser foot so that the teeth of the zipper run alongside the foot.
- Stitch in half of the zipper, leave the needle in the fabric, raise the presser foot and close the zipper.
- Now you can continue sewing the seam to the end of the zipper and sew the cross-seam.





- Sew the second half of the zipper parallel at the same distance.
- Stop after the first half and leave the needle in the fabric. Raise the presser foot and open the zipper.
- Now you can finish sewing the seam.

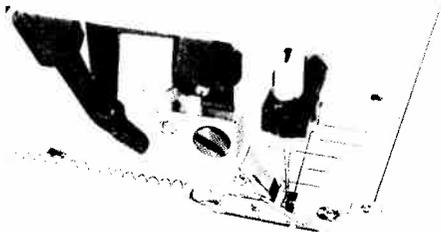
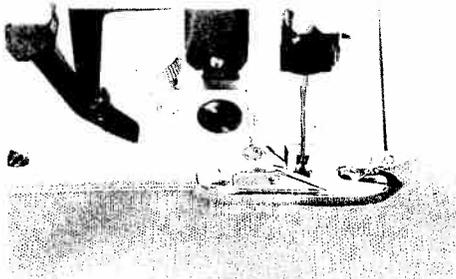
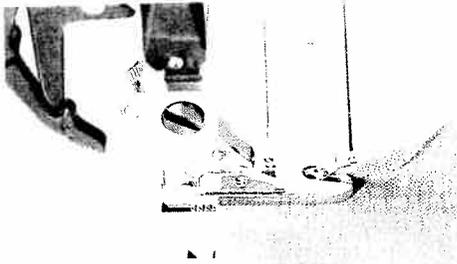


### The trouser zipper

- Iron over the seam allowances, taking care to ensure that the underlap protrudes by about 4 mm.
- Baste the zipper under the underlap so that the teeth are visible.
- Insert the zipper foot on the right hand side and move the needle to the correct position.
- Stitch along the edge of the zipper.

- Just before the end of the seam, open the zipper and finish sewing the seam.
- Close the zipper and baste the overlap evenly to the other half of the zipper.
- Then sew through the basted seam.

**Tip:** To achieve a perfect seam, we recommend using the edge guide.



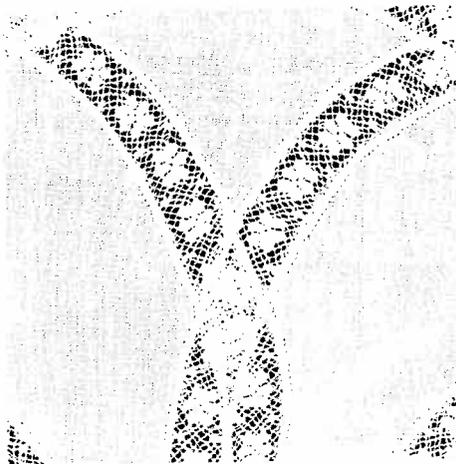
	prog	↑ ↓	∞	⌋	⌒	⌒
a	G	3	0	○	3-5	7
b	G	3	0	-	3-5	Spec access

### Stabilizing edges

With the hemmer you can stabilize blouses, silk cravats and valances with ease, without having to pre-iron the fabric edges. The hemming prevents the edges from fraying and a clean, durable edge is the result.

- Fold the beginning of the fabric edge over twice (each approx. 2 mm).
- Lay the folded fabric edge underneath the hemmer and sew a few stitches.
- Leave the needle in the fabric, raise the presser foot and insert the hemmer foot scroll into the fabric.
- Lower the presser foot and guide the fabric edge evenly into the hemmer. Take care to ensure that the fabric does not run under the right half of the presser foot.

**Tip:** On silk, viscose and chiffon fabrics, the roll hem is particularly attractive with a zigzag stitch.

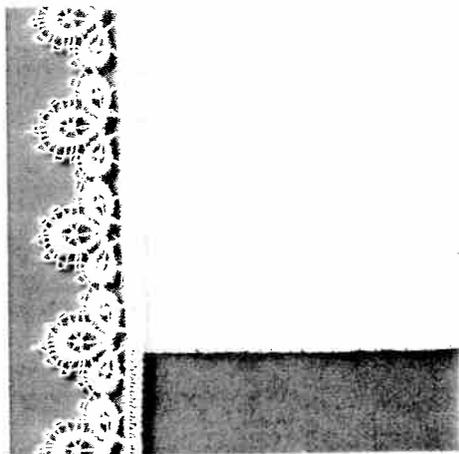


	prog	↑ ↓	∩	∪	∩	∪
a	G	2.5	0	●	3-5	0/1
b	G	2.5	0	-	3-5	0

### Inserting lace

You can achieve a beautiful effect by inserting lace, e.g. on babywear and children's clothing.

- First the lace is basted onto the face side of the fabric.
- Sew on both sides of the lace at a narrow margin.
- The fabric underneath the lace is cut down the middle and ironed to the side.
- Sew over both edges of the lace with a small, dense zigzag stitch (stitch width knob {34} between 2 and 4).
- Cut back the extra fabric.

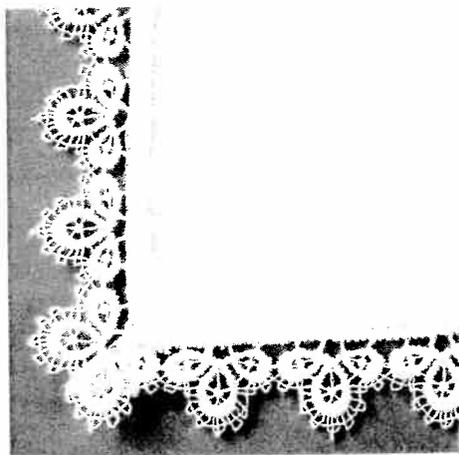


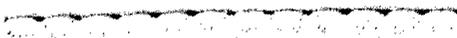
### Attaching lace

You can beautify and remodel home textiles with the desired suitable lace as often as you like.

Here's how it's done:

- First serge the cut edges.
- Sew the lace onto the face side of the fabric up to the first corner.
- Fold the corner and sew over it diagonally.
- Process all the following sides in the same way.





	prog					
a	K	1.5	4.5	●	4-5	0/1
b	K	1.5	4.5	—	4-5	0

### Shell-edging

Shell-edging is especially attractive on thin, soft fabrics such as silk and viscose. It is often used as an edging on underwear. The higher the needle thread tension, the deeper the shell edge feed.

- Serge the fabric edge and iron the seam allowance to the left.
- Take care that the fabric only runs half underneath the presser foot while sewing. This intensifies the effect of the shell-edging.

**Tip:** By sewing a colored woolen thread into the seam you strengthen the shell-edge while also creating an attractive contrast in the seam. A fine fabric of another color can also be used instead of a woolen thread.



## **Decorative stitches and traditional embroidery techniques**

Sewing table for embroidery	page 60
Decorative stitches	page 61 – 64
Monograms	page 65
Embroidering with the dense zigzag stitch/Tapering	page 66 – 68
Appliqué	page 69
Richelieu	page 69
Patchwork quilt	page 70
Quilt and patchwork foot	page 70
Eyelet embroidery	page 71
Hemstitching	page 72

## Decorative stitches

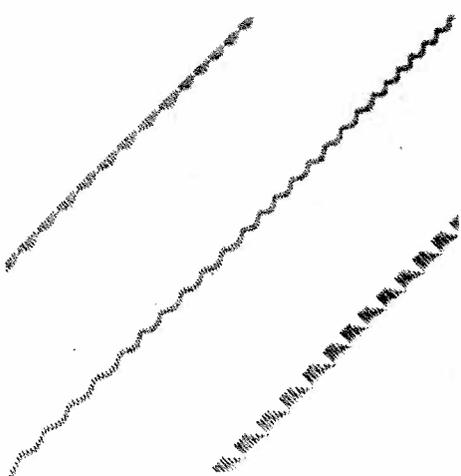
To enhance home textiles or garments models 6152 and 6232 offer you a whole range of fancy and decorative stitches to choose from. You can produce even greater embroidery variations by selecting different combinations, colors or sizes. For embroidery work we recommend using special embroidery threads which are available from your Pfaff dealer.

For the parts to be embroidered you should either use an iron-on backing or place silk backing paper under the fabric. This prevents the material from contracting. You can mark out the embroidery pattern with a magic pen or marking chalk. These lines will dissolve after a few hours or can be ironed away. The following recommendations apply to all embroidery work:

	prog					
a	-	0.5-1	5▶	○	2-3	Clear-view-foot
b	-	-	-	-	-	

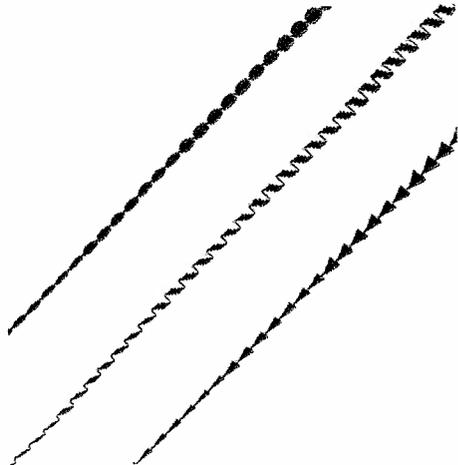
The stitch length and stitch width can be varied as required.

Always use the center needle position  if not otherwise indicated.



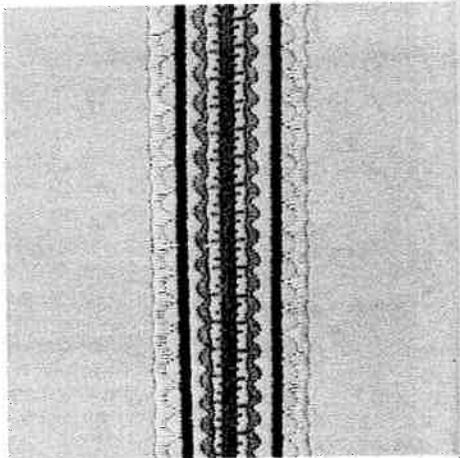
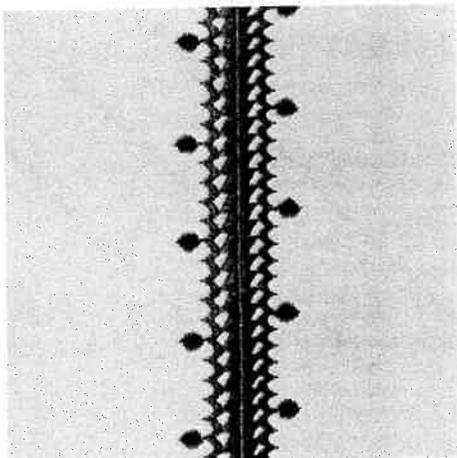
### Changing the pattern length

You can vary the pattern length infinitely with the aid of the stitch length knob (11). The stitch density for embroidery is generally in the buttonhole range. The larger the stitch density you set is, the farther the pattern is stretched apart.



### Changing the pattern width

With the stitch width knob (34) decorative stitches – even during sewing – can be infinitely widened or made narrower. Make sure that when the stitch width is changed, the needle is not in the material.



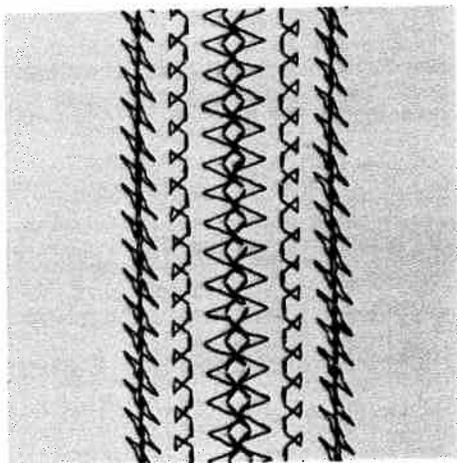
### Borders

By combining different embroidery programs you can embroider borders of any width. Madeira embroidery threads are very suitable. They are available in many color shades and different sizes. However, only use one thread size for one piece of embroidery work.

- Apply iron-on backing or place silk backing paper under the fabric.
- Embroider with program **Y/G**, stitch width 5 ► over the marked middle point. After that, turn the fabric and sew the border back again in reverse.
- Embroider stitch **U** parallel to it.
- Finally, add program **X** to every fifth zigzag point.

In this border embroidery example multi-colored embroidery thread is used as an additional effect.

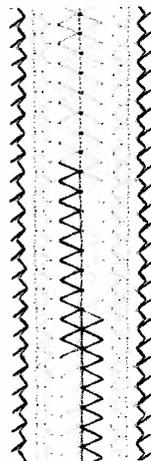
- Apply iron-on backing or place silk backing paper under the fabric.
- Embroider with program **V/F**, stitch width ► over the marked middle point. After that, turn the fabric and sew the border back again in reverse.
- Set program **X/G** parallel to it. \*
- You can now stitch the straight row with program **G**, stitch width 3 – 4 mm and, finally, the outside zigzag row with program **U/G**, stitch width 5 ►.



### Borders with a combination of stitches

By combining different embroidery keys as desired you can easily achieve other embroidered effects. This is a simple and pleasing way to embellish tablecloths and garments.

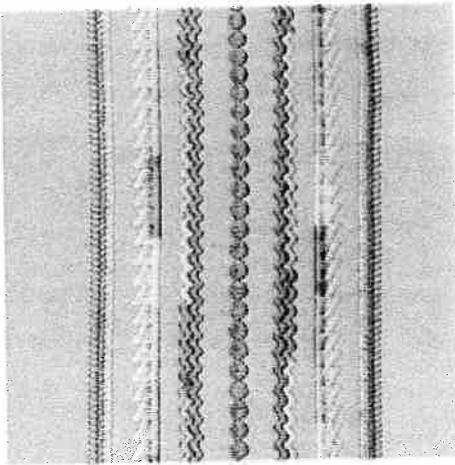
- Apply iron-on backing or place silk backing paper under the fabric.
- Mark the center with tailor's chalk.
- You can now begin with the combination **M/G Stretch**, stitch width 5 ►. Embroider along the marked line. Then turn the fabric and embroider back down the border in reverse.
- Then sew close to the first border with the combination **L/K Stretch**, stitch width 5 mm ►.
- **I/F Stretch**, stitch width 5 mm ►, completes the border. Embroider one row. Then turn the material and embroider back down the border in reverse.



### Combinations with colored thread

An additional effect can be produced with different colored thread. Multicolored thread was used for the middle border in this example. You can purchase it in a great variety of shades from your PFAFF dealer.

- Apply iron-on backing or place silk backing paper under the fabric.
- Mark the middle with tailor's chalk.
- You can now begin with the combination **H Stretch**, stitch width 5 ►. Embroider along the marked line. Then turn the fabric and embroider back down the border in reverse.
- Then sew close to the first border with the combination **M/G Stretch**, stitch width 2 – 4 mm.
- **F/G Stretch**, stitch width 3 – 4 mm, completes the border.

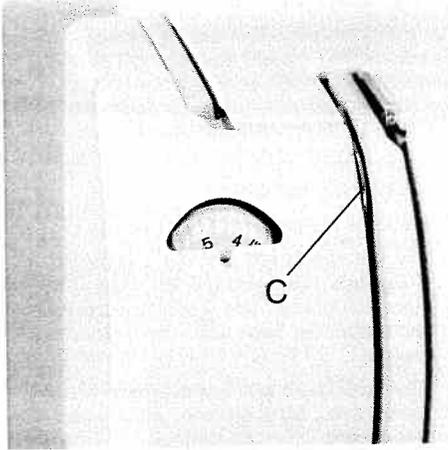


### Twin needle

You can achieve further embroidery effects by using the twin needle. The illustrations show some of the beautiful borders that can be made using your imagination.

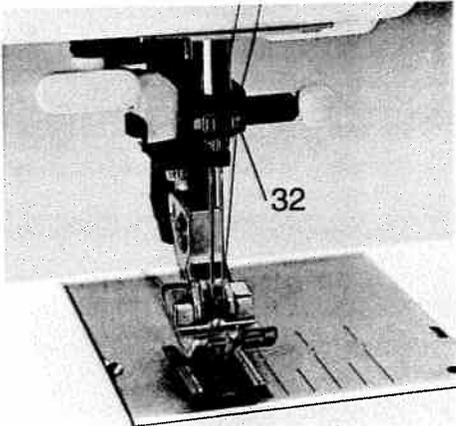
#### Note:

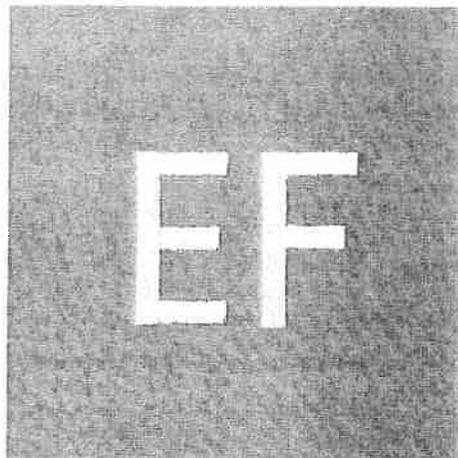
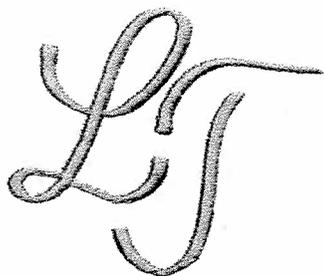
Only use a twin needle with a width of up to 2.0 mm for all embroidery.



### Threading the twin needle

- Insert the twin needle.
- Fit the **second** reel holder and place one reel of thread on each holder.
- In the left threading slot (17) you will find tension disk **C**. During threading, make sure that you pass one thread **left** and one thread **right** over tension disk **C**.
- Carry on threading in the usual way, but make sure the threads are not twisted with each other.
- Pull the threads right and left into **thread guide (32)** and thread the needles.





### Monograms

Whether working with terry-cloth or woven fabric, with the help of the darning foot and the program **G**, stitch width 2.5 -5 ►, you can embroider initials of your own design.

Sewing this way without a set pattern does, however, require a little practice.

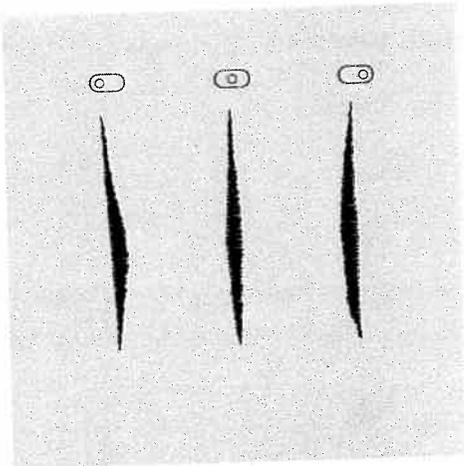
- Draw the initials onto the fabric with an invisible-ink marker.
- Drop the feed dog. Insert the darning foot and bring it into darning position (see page 51).
- Place Avalon under the fabric.
- Spread the fabric in an embroidery hoop and embroider using the zigzag stitch.
- Tie off the threads and remove the Avalon. (Any remaining pieces dissolve in water.)

**Tip:** By sewing quickly and moving the material slowly, you will achieve dense stitches.

When embroidering on terry-cloth, the monogram must first be sewn with a narrow zigzag stitch and then over stitched with a broader zigzag stitch. In this way the terry-cloth loops are completely sewn over.

Embroidering block letters is somewhat easier. Here the feed dog is not dropped which means that free sewing is no longer necessary. You can simply sew along the lines with program **G**, stitch width 2.5 – 5 ►.

- Iron the fabric or use a paper underlay.
- Before sewing, draw the monogram onto the fabric.
- Sew along the lines you have sketched using the zigzag stitch.



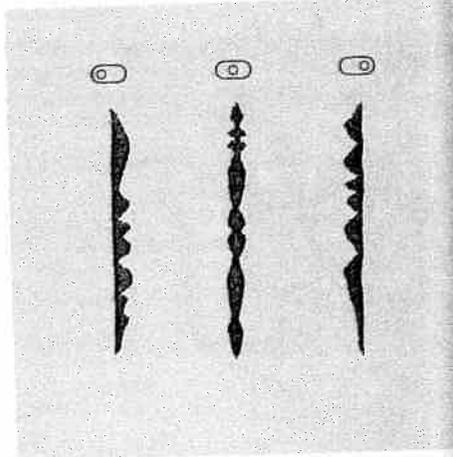
### Embroidering with a dense zigzag stitch/ Tapering

With your machine the zigzag stitch can be infinitely varied in its width. In Anglo-Saxon usage this technique – in which a dense zigzag stitch becomes narrower – is called “tapering”. By regulating the width of this dense zigzag stitch you can create interesting embroidery.

#### Even embroidering

- Apply iron-on backing or place silk backing paper under the fabric.
- Set needle thread tension to “buttonhole”, select zigzag stitch **G**, set stitch length to „buttonhole” and select the center needle position .
- Turn the width knob **(34)** smoothly and consistently from 0 to 5  mm and back again to 0 while sewing at a constant speed throughout the procedure.

**Note:** If you selected the right or left needle position, the stitch width will only change in one direction.



#### Unven embroidering

- Apply iron-on backing or place silk backing paper under the fabric.
- Set needle thread tension to “buttonhole”, select zigzag stitch **G**, set stitch length to „buttonhole” and select the center needle position .
- Increase or decrease the width of the stitch using the width knob **(34)**.

**Note:** If you selected the right or left needle position, the stitch width will only change in one direction.



### Floral embroidery

For this flower arrangement, only a dense zigzag stitch was used in combination with the variable stitch width and the various needle positions.

- Apply iron-on backing or place silk backing paper under the fabric.
- Draw the contours of a flower motif with a self-erasing textile pen.
- Set needle thread tension to „buttonhole“, select zigzag stitch **G**, set stitch length to „buttonhole“.

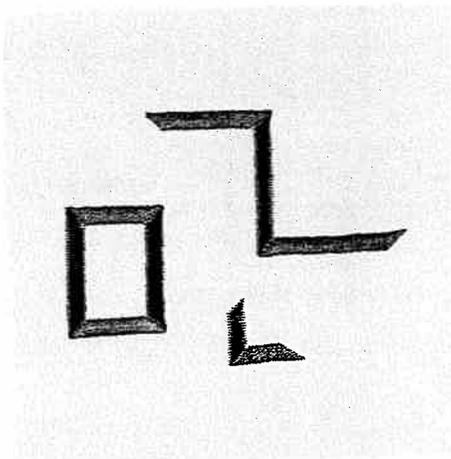
#### - Flowers:

Select center needle position  and embroider individual pedals. Regulate the stitch width according to the contours of the flower with the width knob **(34)** during sewing.

#### - Leaves:

Select right needle position  and embroider half of the leaf. Vary the stitch width using the width knob **(34)**. Turn the handwheel towards you after finishing the first half of the leaf until the needle is positioned in the material.

- Turn the material 180 degrees and embroider the other half of the leaf.

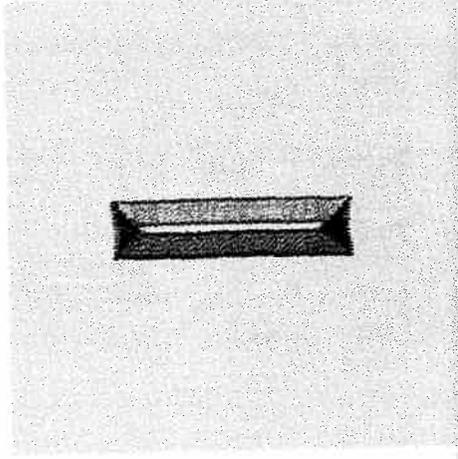


### Embroidering corners

By changing the stitch width during sewing of dense zigzag stitches you can embroider corners with 45 degree angles.

- Set needle thread tension to "buttonhole", select zigzag stitch **G**, set stitch length to „buttonhole“ and stitch width 5 mm.
- Select the outermost right needle position  and embroider a straight line.
- Embroider corner:  
After the needle has penetrated the material to the right, reduce the stitch width using the width knob (34) by 0.5 mm to 4.5 mm. Sew a stitch.
- Reduce the width once again by 0.5 mm and sew a stitch. Continue in this manner until the stitch width is 0.5 mm.
- Turn the handwheel towards you until the needle penetrates the material. Turn the material 90 degrees and sew a stitch.
- Increase the width by 0.5 mm to 1.0 mm. Sew one stitch.
- Increase the width by 0.5 mm again and sew one stitch. Continue in this manner until the initial width is achieved. Now embroider a straight line.

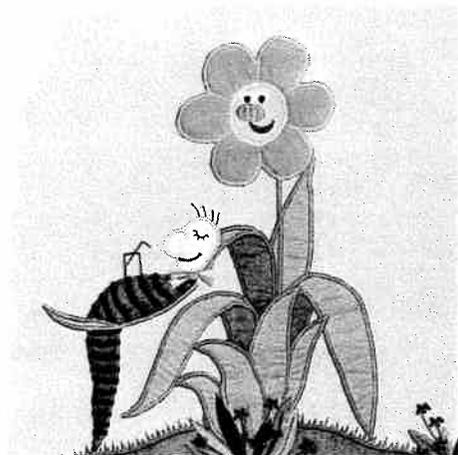
If the corner is to continue in the opposite direction, use the outermost left needle position .



### Decorative buttonhole

This buttonhole is a beautiful alternative to the traditional lingerie buttonhole (see page 47). Since you determine the width of the buttonhole seam, the buttonhole can have a width of up to 10 mm.

- Sew two buttonhole seams about 1 mm apart, using the dense zigzag stitch (Program **G**, stitch width 3 – 5  mm). The needle thread tension is set to „buttonhole“.
- Select the right needle position and sew over both ends of the buttonhole seam with a triangle. To do this, turn the stitch width knob (34) during sewing constantly from 0 to 5  and back to 0. The top of the triangle should meet the middle of both buttonhole seams.



### Appliqué

Appliqués are quickly made and always produce a beautiful fancy effect. By using different materials and patterns you can sew many different variations. You can make a perfect, densely stitched seam with the appliqué foot (special accessories), because it has a special cutout on the underside for the buttonhole seam. The fusible backing fabric "Vliesofix" can be used to iron the appliqué onto the material, making it easier for you to appliqué.

- Insert the appliqué foot in the sewing machine.
- Transfer your drafted pattern to the face side, smooth side, of the fusible backing fabric. Remember that e.g. letters have to be drawn as a mirror image.
- Now iron the backing fabric onto the appliqué material. Cut the motif out and pull the paper off.
- Place and iron on the appliqué parts on the base material.
- Afterwards over-stitch all contours with dense zigzag stitch **G**, stitch width 2 – 4 mm, stitch length "buttonhole". The needle thread tension is in the „buttonhole" area. Make sure the needle stitches over the outer edge so that no fraying occurs later.

**Tip:** For appliqué pieces which are pointed at the ends, you can make the dense zigzag stitch narrower using the width knob **(34)** so that the ends are pointed.

### Richelieu

This especially artistic form of eyelet and insert embroidery is easy to sew with your sewing machine.

- Using a magic marker, draw your motif onto the face side of the fabric.
- Then place two layers of Avalon fleece underneath the parts to be embroidered and clamp both the fabric and the fleece into an embroidery frame.
- Insert decorative embroidery foot number **1**.
- To lend more durability to the embroidery, sew all of the contours twice using the straight stitch (stitch length approx. 1 mm).
- Then carefully cut out the fabric 2 mm next to the contour from the areas which are to be hollow. The fleece must not move.
- Embroider the contours with a dense zigzag stitch.
- Due to the fleece, this part of the work is much more stable and strong.
- Finally, simply dissolve the embroidery fleece in cold water and your one-of-a-kind design is finished.



### Patchwork quilt

Patching and quilting are traditional handicraft techniques which were originally used by North American pioneer women to make use of leftover fabric. Over the years it has developed into a creative hobby.

Patchwork quilts used to be sewn exclusively by hand. Nowadays, however, you have the possibility to make your creative ideas a reality in a much shorter time.

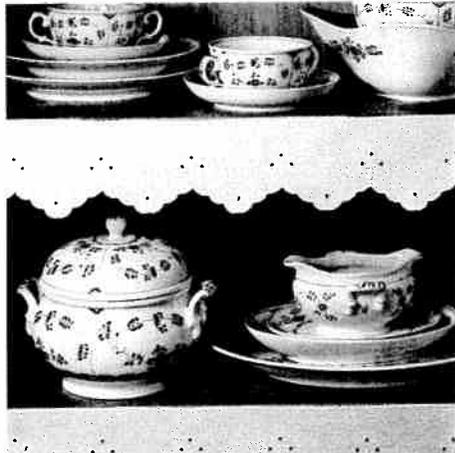
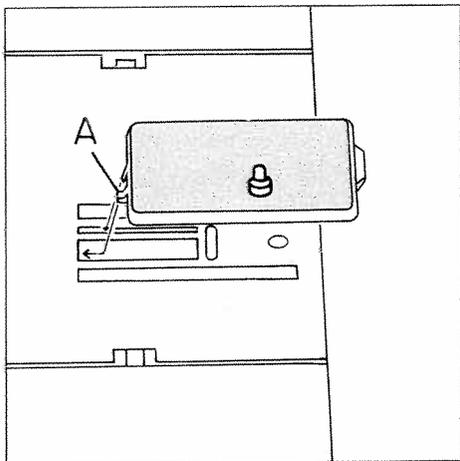
A patchwork quilt always consists of three layers of fabric:

A number of geometric pieces of fabric are combined in different variations to create a **patchwork** which forms the **top of the quilt**. This is then basted to a **fleece layer** and then sewn onto the **back of the quilt** which usually consists of one piece of fabric. The entire quilt is often bound by this bottom layer.

The **quilt and patchwork foot** (special accessories – see page 81) is particularly helpful for sewing patchwork and quilting. The distance of the needle to the outer edge of the foot is 1/4 inch (6.3 mm), and 1/8 inch (3.15 mm) to the inner edge.

And here's how it's done:

- Using your own or commercially available templates, cut the pieces you need for your patchwork. The templates should include a seam allowance of 1/4 inch (6.3 mm).
- Spread these pieces out in front of you in accordance with the pattern and form small squares which you can then put together. These squares will then be sewn together and will form the top ply of the quilt.
- The seam allowances are not serged when quilting, but instead are to be smoothed down, never ironed!
- Baste the finished top ply of the quilt onto the fleece insert and the bottom quilt layer.
- Traditionally, these three fabric layers are sewn together with small stitches by hand. This procedure is faster and more practical with a sewing machine, e.g. with the program FG Stretch or L Stretch. Always sew approximately 3 mm next to the seam. Embroidery stitches are particularly suitable for uni-colored materials. Here you should use the decorative stitch foot No. 1. You can then continue to sew your quilt, making it into a cushion, a wall hanging or a bed-spread.



### Eyelet embroidery

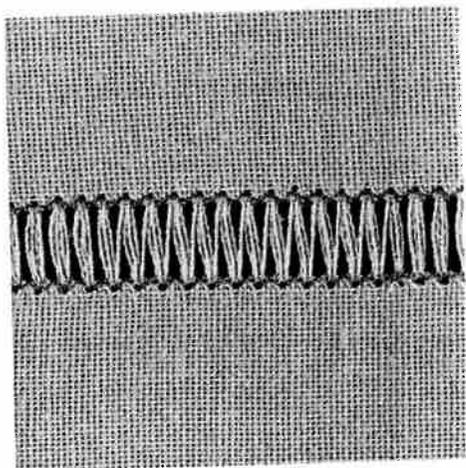
Traditional eyelet embroidery which previously had to be made laboriously by hand can now be made quite easily with the help of an eyelet plate (special accessory).

This is very effective on blouses, bed- or table linen. Use utility stitches such as the zigzag stitch, blind stitch, elastic stitch or fancy stitches of the knob (model 6152, 6232).

For classic eyelet embroidery, program **G**, with a stitch width 3 – 5 mm is very suitable.

- Remove the sewing foot.
- Set the presser bar lifter at the darning position (see page 51).
- Place the eyelet plate on the needle plate, making sure pin **A** fits in the middle cutout of the needle plate. Then push the plate down at the front.
- Place the marked fabric taut in an embroidery hoop. Cut one or two of the fabric threads and push the fabric over the pin in the eyelet plate. The fabric must fit snugly around the pin.
- Draw up the bobbin thread and hold it for the first few stitches.
- You can now stitch around the cut with the selected program. When you do this it is important to turn the fabric slowly and evenly. The stitches should be very close to each other.
- Afterwards secure with straight stitch.

**TIP:** If you choose another program, e.g. a decorative stitch from the Model 6152 or 6232, or a blind stitch, in which the cut is only partly stitched around or not at all, you must then use key **A** to stitch around the cut.

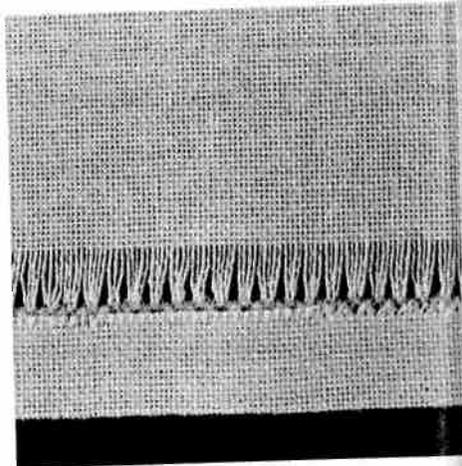


### Hemstitch seam

The hemstitch seam is an old embroidery technique and can be used to secure edges on table linen as well as for decoration on clothing. For your hemstitching work you will require a wing needle and coarse linen out of which you can easily pull single threads. Furthermore, the darning and patching thread is particularly suitable. With the stretch zigzag stitch **G** you can sew various hemstitching techniques such as the wale hemstitch seam, a hem sewn with the hemstitch and a hemstitch seam as an edge. Use the decorative stitch foot **1**.

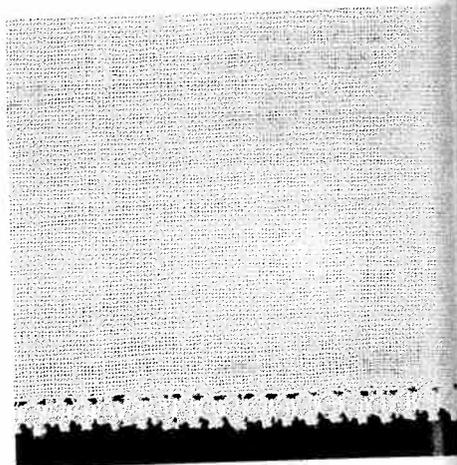
### Wale hemstitch seam

- As with the hand hemstitch seam the threads are pulled out to the desired width.
- Using stretch zigzag stitch **G**, stitch width 2 – 3 mm, sew along both of the fabric edges. The needle must perforate the area of the pulled threads just next to the edges. This bundles the threads.



### Hem edge sewn with hemstitch seam

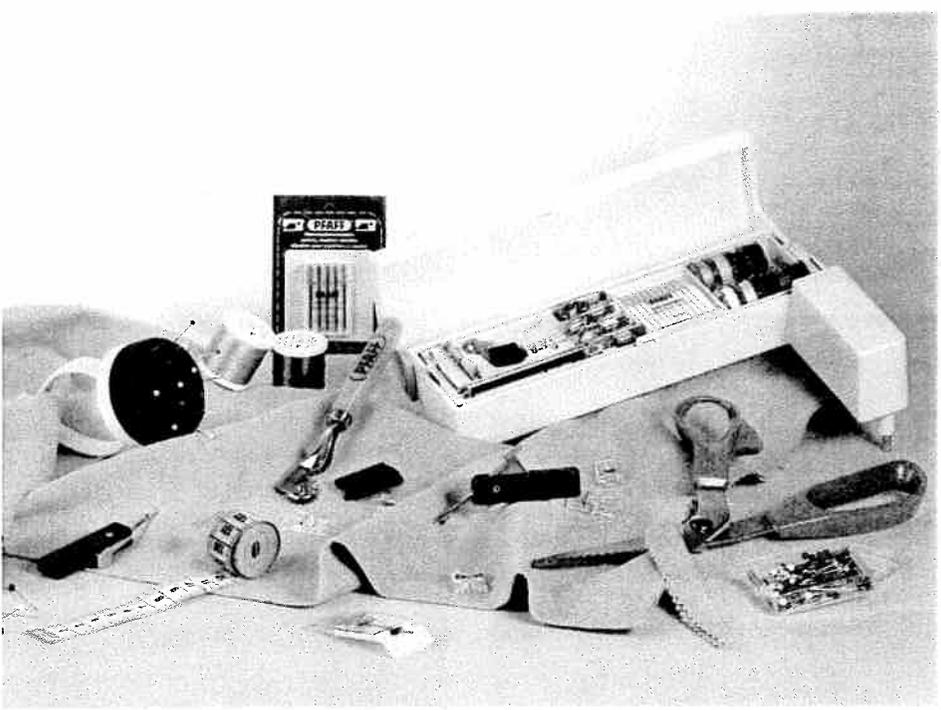
- Iron the hem over twice and pull one or more threads out from above the hem.
- Using the stretch zigzag stitch **G**, stitch width 2 – 3 mm, sew the hem from the face side. The needle must perforate the hem on the right hand side and bundle the pulled threads on the left hand side.



### Hemstitching seam as edge

This edge is used for very fine, thin materials. It is particularly suitable for valances and ruffles. No threads have to be pulled.

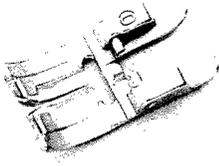
- Using the program **G** Stretchstitch, width 2 – 3 mm, sew at a presser foot's width along the edge of the fabric.
- Using a small pair of scissors, trim off the excess fabric on the hemstitch edge.



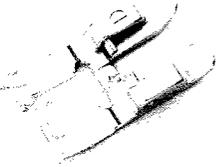
## Accessories and needles

Presser feet (normal accessories)	page 74, 75
Special accessories table	page 76
Felling foot	page 77
Gathering foot	page 77
Cording foot	page 78
Bias-tape binder	page 79
Multi-stitch gathering attachment	page 79
Cording foot	page 80
Appliqué foot	page 80
Fringe foot	page 81
Needle table	page 82, 83

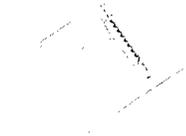
## Sewing feet (normal accessories)



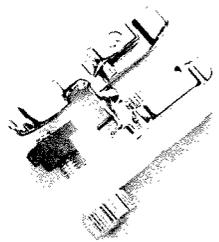
- 0 Standard presser foot**  
Part No. 98-694 816-00  
(models 6122-6232)  
Part No. 96-694 847-00  
(model 6112)



- 1 Fancy-stitch foot (for top feed)**  
Part No. 98-694 814-00  
(models 6122-6232)



- 1 Clear view foot**  
(Fancy-stitch foot not suitable  
for top feed)  
Part No. 98-694 864-01  
(models 6122-6232)



- 3 Blind stitch and overlock foot**  
Part No. 98-694 890-00  
(models 6122-6232)  
Part No. 98-694 845-00  
(model 6112)



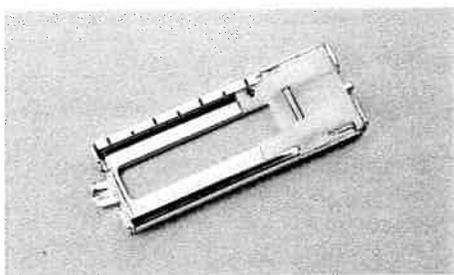
- 4 Zipper- and edge-stitching foot**  
Part No. 98-694 884-00  
(models 6122-6232)  
Part No. 98-694 843-00  
(model 6112)

**Sewing feet (normal accessories)**

**5 Buttonhole foot**

Part No. 98-694 882-00

(models 6122-6232)

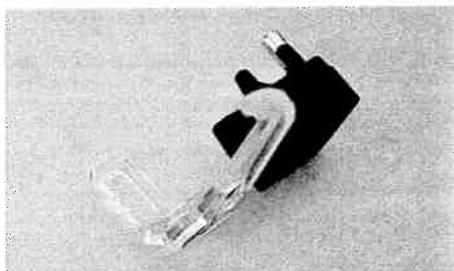


**6 Darning foot**

Part No. 93-035 960-91

(models 6122-6232)

For model 6112 special accessory



**7 Hemmer**

Part No. 98-694 818-00

(models 6122-6232)

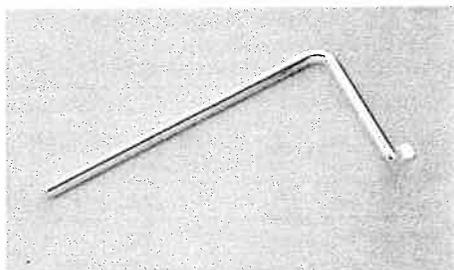
For model 6112 special accessory



**8 Edge guide**

Part No. 98-802 422-00

(models 6122-6232)

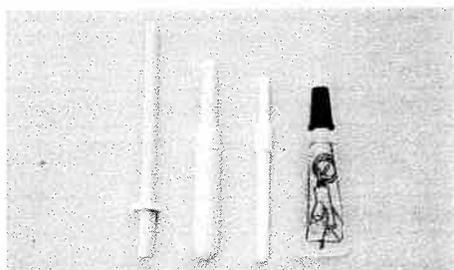


**Second spool holder**

**Seam ripper**

**Brush**

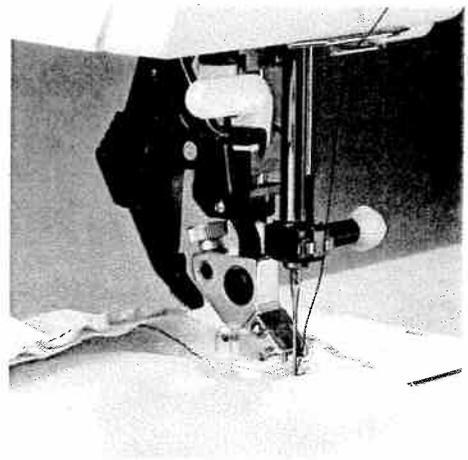
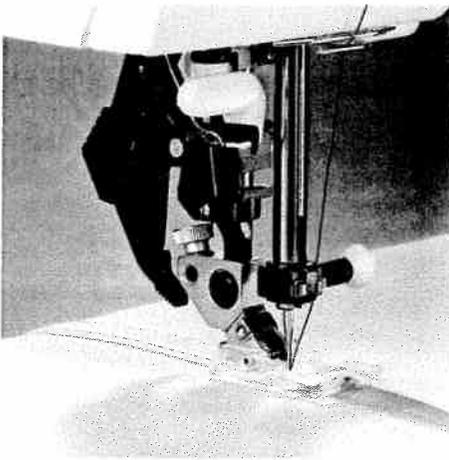
**Oil tube**



**Sewing feet** (special accessory) for special sewing work. They are available at an extra charge from your dealer.

Accessory	Part No.	Sewing work
Appliqué foot	93-042 941-91	For appliqué work
Open appliqué foot	93-036 931-91	
Bias tape binder (remove foot holder)	98-053 484-91	For binding edges with bias tape
Cording foot, 5 grooves (twin needle with needle spacing 1.6 to 2.0)	93-042 950-91	For cording work (needle size 80)
Cording foot, 7 grooves (twin needle with needle spacing 1.6 to 2.0)	93-042 953-91	
Cording tongue (2)	93-035 952-45	
Fringe foot	93-042 943-91	For sewing loop embroidery
Straight-stitch foot with round hole	98-694 821-00	Caution! Only use straight stitch in center needle position! For topstitching seams and sewing very light and soft materials (silk jersey, etc.)
Needle plate with round hole	98-694 822-00	
Lap-feller 4.5 mm	93-042 946-91	For lap-felled seams
Lap-feller 6.5 mm	93-042 948-91	
Gathering foot	93-036 998-91	For gathering valances
Multi-stitch gathering foot (remove sewing holder)	98-999 650-00	For placing dense or loose pleats on valances
Cording foot	93-036 915-91	For cording
Eyelet plate $\varnothing$ 6 mm	93-036 947-45	For eyelet embroidery
Eyelet plate $\varnothing$ 8 mm	93-036 948-45	
Roll hemmer, 2 mm	98-694 873-00	For hemming edges
Hemer, 4 mm (for top feed)	98-694 823-00	For hemming edges
Hemer (not suitable for top feed 6112)	98-694 818-00	
Knit-edge foot	93-042 957-91	For sewing knitted fabrics
Darning foot (model 6112)	93-035 960-91	For darning damaged pieces
Teflon foot	93-036 917-91	For sewing leather and synth.
Decorative stitch foot	93-036 962-91	For embroidering
Compass guide	93-036 953-91	For circle-shaped embroidery
Fagotting guide	93-036 952-46	Foundation wear
Patchwork foot (without top feed 6112)	93-036 925-91	Quilt and patchwork sewing
Patchwork foot (with top feed)	93-036 927-91	
Cording decorative stitch foot	93-036 942-91	Sewing spaces between cords
Braiding foot	93-036 936-91	For over stitching cords
7/9 hole foot	93-036 946-91	For sewing yarn and ribbons
Free-form embroidery foot	93-036 963-91	For embroidery work
Finger guard	93-036 910-91	All types of sewing
Lamp changer	93-036 960-91	

On the following pages you will find examples of some of the special accessory feet.



	prog	↑ ↓	∞	⊖	⊕	⊔
a	G	3	0	○	3-5	Lap-feller
b	G	3	0	-	3-5	

	prog	↑ ↓	∞	⊖	⊕	⊔
a	G	3	0	○	3-5	Gathering foot
b	G	3	0	-	3-5	

### Lap-feller

Lap-feller seams are not only ornamental but strong too. This makes them very suitable for sportswear and children's wear, men's shirts and jeans. You can make these seams very effective if you use a sewing thread of a contrasting color.

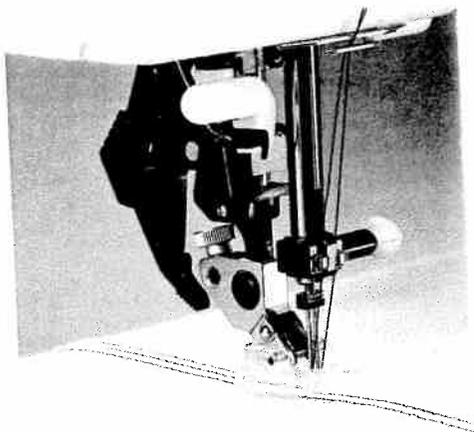
- Place the fabric reverse side to reverse side.
- Overlap the raw edge of the lower ply by about 1 to 1.5 cm.
- Now place this overlapping edge over the tongue of the lap-felling foot. The fabric must be placed fully under the sewing foot.
- Sew along the folded edge with straight stitch.
- Then pull the fabric apart and feed the protruding hem into the lap-feller. The hem is turned over by the foot and is over-stitched along the edge. Pull the two fabric plies apart during sewing.

### Gathering foot

Beautiful gathering effects, e.g. on children's wear or curtains, can be made quickly and easily with the gathering foot. This eliminates gathering by hand.

- Engage the gathering foot by hooking the rear bar of the foot into the rear groove of the foot holder. Push the foot upwards until it snaps into the front bar.
- Place the fabric to be gathered under the sewing foot, and the gather-free fabric from the top through the foot cutout. The fabric parts lie face side to face side.
- During stitching you have to pull the top fabric a little. The harder you pull, the greater the gathering effect you achieve.
- Be sure you guide the fabric edges evenly through the foot.
- Disengage the gathering foot by pushing it down at the front, and take it out to the back over the groove of the sewing foot holder.

**TIP:** You can also regulate the amount of gather by adjusting the needle thread tension and the stitch length.



	prog	↑ ↓	∞	⌋	⌒	⌒	⌒
a	G	2.5	0	○	5	Cording foot	
b	G	2.5	0	-	5		

### Cording foot

The classic sewing technique of cording can be used without any problems on fabrics such as cotton and light wollens. Underclothing and children's wear can be given a traditional look with cording.

- Engage the cording foot.
- Replace the needle with a twin needle (1.6 or 2 mm).
- Thread up with two needle threads (see page 64).
- Now set the needle thread tension quite tight (at about 5), to make the seam more prominent.

**TIP:** If you wish to emphasize the cording effect, you can fit a "cording tongue" on the front edge of the needle plate. This shapes the fabric during sewing and gives the cording more volume.

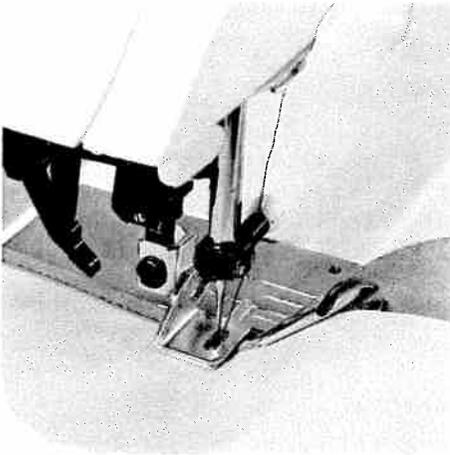
You can obtain a similar effect by using a gimp thread; this makes the cording look wider.

In this case, however, do not use a cording tongue.

- To do this, remove the needle plate.
- Thread the gimp thread through the hole of the needle plate from below to the top.
- Replace the needle plate. The notch between the needle plate and the sewing machine provides space for the gimp thread. This thread must be fed under the cloth plate, so that it does not become tangled during sewing.
- While sewing the cording pull the material lightly.
- You can use the grooves in the cording foot to guide the work along an already sewn cording seam. This ensures that the distance between cording seams is always constant.

**TIP:** There are two different cording feet: a five-groove and a seven-groove foot (see table on page 76).

With the seven-groove foot the sewn cordings are closer together than with the five-groove foot.



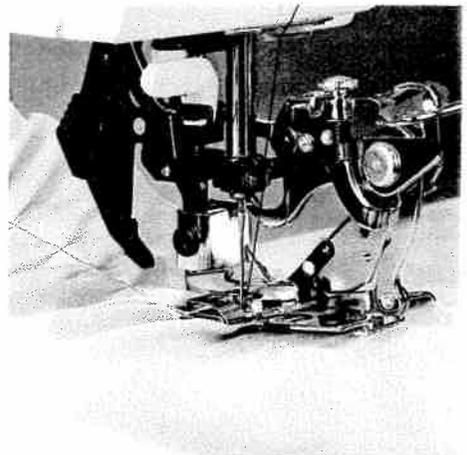
	prog	↑ ↓	↯	⌋	⌋	⌋
a	G	2.5	0	○	3-5	Bias tape binder
b	G	2.5	0	-	3-5	

### Bias-tape binder

**Binding with a bias tape is a simple way of lending fabric edges a smooth, neat appearance. You will need: bias tape, 24 mm wide, unfolded.**

- Remove the presser foot and the sewing foot holder and screw on the tape binder.
- Cut diagonally across the beginning of the bias tape.
- Guide the tape into the scroll of the tape binder and pull it out towards the back.
- Set the tape binder in such a way that the needle perforates 1 – 1.5 mm from the folded bias-tape edge or adjust the needle position.
- Sew a few centimeters (about an inch) along the bias tape before you insert the edge to be bound into the slot of the tape binder. The raw edge must be placed between the bias tape edges. The bias tape automatically encloses the raw edge during the operation.

**Tip:** You can achieve an additional effect by using the zigzag stitch or a fancy stitch.



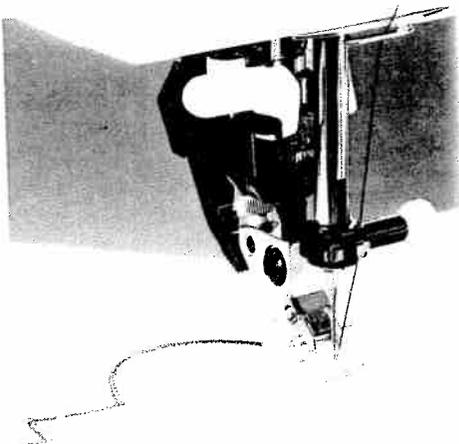
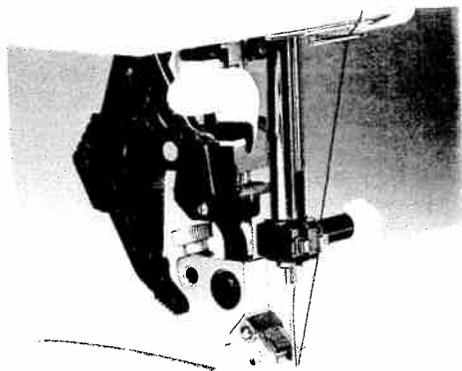
	prog	↑ ↓	↯	⌋	⌋	⌋
a	G	3	0	○	3-5	Multi-stitch gathering attachment
b	G	3	0	-	3-5	

### Multi-stitch gathering attachment

The classic sewing foot! You can make closely or widely spaced pleats as if by magic. The multi-stitch gathering attachment can be used in three different ways:

1. Folding the fabric in pleats.
2. Folding the fabric in pleats and sewing them simultaneously.
3. Folding the fabric in pleats, sewing them on and sewing lace onto them simultaneously.

When you buy your multi-stitch gathering attachment at your PFAFF dealer, full operating instructions are included.



	prog	↑↓	↯	⚡	⤴	👤
a	C	0.35-1	2	○	3	Cording foot
b	C	0.35-1	2	-	3	

	prog	↑↓	↯	⚡	⤴	👤
a	G	0.35-1	2	○	2-3	Appliqué foot
b	G	0.35-1	2	-	2-3	

### Cording foot

Cording is a technique in which pearl thread or a fine cord is over-stitched to produce a purl seam. With this you can obtain an effect similar to braiding. Appliqués can also be made more impressive by this seam.

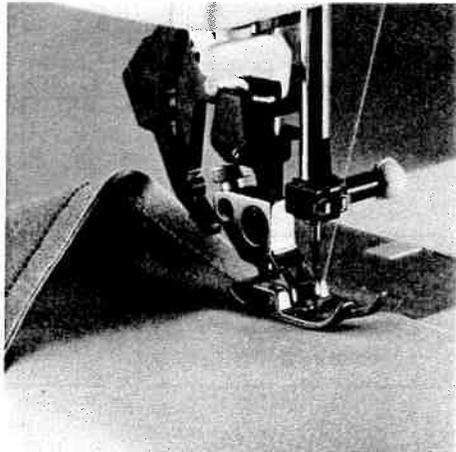
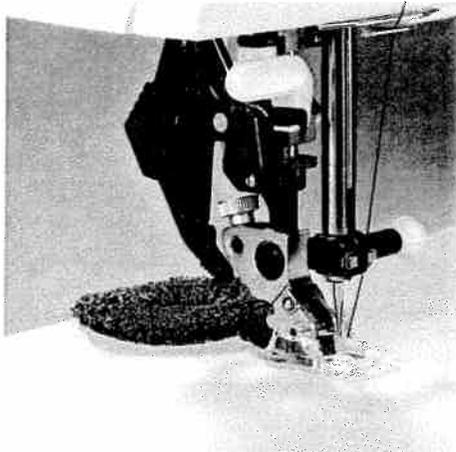
- Mark the required motif on the fabric, avoiding too tight curves or angles if possible.
- Engage the cording foot and place the filling yarn in one of the front grooves of the foot, then place the filling yarn in the back groove under the foot shoe.
- Now overstitch the filling yarn with narrow and dense zigzag stitches. Now you have made what is called a purl seam.

**TIP:** You can also obtain a special effect by overstitching a medium pearl thread with a thread of a different color.

### Appliqué foot

Appliqués are quickly made and always produce a beautiful fancy effect. By using different materials and patterns you can obtain many different variations. You can make a perfect, densely stitched seam with the appliqué foot, because it has a special cutout on its sole for the zigzag seam.

- Insert the appliqué foot in the sewing machine.
- Transfer your drafted pattern to the face side, smooth side, of the fusible backing fabric. Remember that e.g. letters have to be drawn in mirrored fashion.
- Now iron the backing fabric onto the appliqué material. Cut the motif out and pull the paper off.
- Place and iron on the appliqué parts on the base material.
- Afterwards overstitch all contours with narrow and dense zigzag stitches. When you reach a curve, use the "needle down" (model 6232) function to help you guide the work more easily. Also make sure the needle passes the outer edge so that no fraying occurs later.



	prog	↑↓	∩	⋈	⌒	⏏
a	G	0.35-1	2	○	2-3	Fringe foot
b	G	0.35-1	2	—	2-3	

	prog	↑↓	∩	⋈	⌒	⏏
a	G	0.25	0	●	4-5	Quilt and patch- work foot
b	G	0.25	—	—	4-5	

### Fringe foot

With this special foot for loop embroidery you can produce fantastic effects in no time. This foot is very useful for terry cloth.

- Mark out any pattern you wish with the magic pen.
- Use a silk paper underlay and engage the fringe foot.
- Embroider the motif, row by row. For circles you have to work from the outside inward.
- For thicker threads you may have to choose a longer stitch length; it is best to sew a test seam first.
- When you have finished, pull the work out of the machine carefully, because if you pull too fast, you will pull the last loops tight.
- Knot the threads on the reverse side.

### Quilt and patchwork foot

When using the quilt and patchwork foot, always sew the pieces of fabric with the required seam allowance of 1/4 or 1/8 inch because the distance from the needle to the outer right edge of the foot is 1/4 inch (0.63 cm) and to the inner right edge 1/8 inch (0.31 cm).

### Patching

(Sewing pieces of material together)

- Insert the quilt and patchwork foot.
- Sew the pieces of fabric together with the straight stitch. When working with a 1/4 inch seam allowance, guide the piece of fabric along the outer right edge of the foot. When working with a 1/8 inch seam allowance guide the fabric along the inner right edge of the foot.

### Quilting

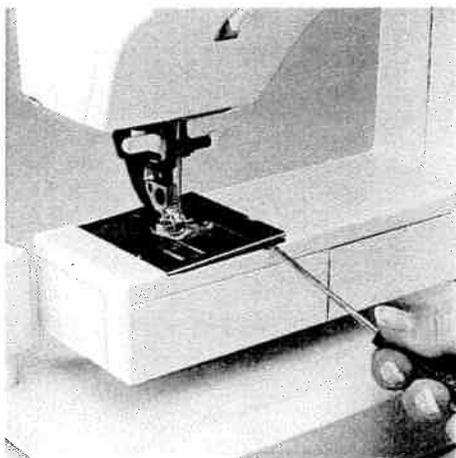
(Sewing through the top layer, fleece layer and bottom layer of the quilt)

- Sew the three fabric plies (e.g. with the straight stitch) approx. 3 mm next to the seam (see page 70).



# Needle table

	<b>Type</b>	<b>Stitch length</b>	<b>Stitch width</b>	<b>Needle spacing</b>	<b>suitable for</b>
	<b>130/705 H-ZWI</b> Size: 80	2.5 mm 2.5 mm	– –	1.6 mm 2.0 mm	Normal cording Normal cording
	<b>130/705 H-ZWI</b> Size: 80 Size: 90 Size: 100	2.5 mm 2.5 mm 3.0 mm	– – –	2.5 mm 3.0 mm 4.0 mm	Wide cording Extra wide cording cording
<p><b>Decorative designs sewn with twin needles</b> Before you sew a decorative pattern, check by turning the hand wheel that the needles enter without any obstruction. This is the best way of preventing needle breakage.</p>					
	<b>Decorative and zigzag patterns</b>				
	<b>130/705 H-ZWI</b> Size: 80 Size: 80 Size: 80	0.5 – 1.5 mm 0.5 – 1.5 mm 0.5 – 1.5 mm	wide narrow narrow	1.6 mm 2.0 mm 2.5 mm	Decorative work Decorative work Decorative work
	<b>Hemstitching/special double needle</b>				
	<b>130/705 H-ZWI-HO</b> Size: 80 Size: 100	2.3 – 3.0 mm 2.0 – 3.0 mm	very narrow very narrow	– –	Decorative hem-stitching effect. Heavily dressed fabrics and cambric are especially well-suited



**!** **Changing the needle plate**  
**Switch off the main switch**

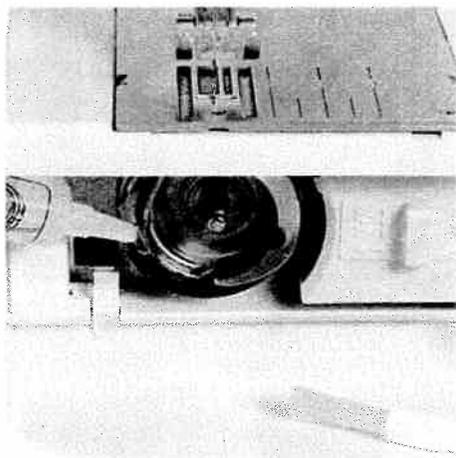
It is very important to clean and oil the sewing machine, because it will reward you with a longer service life. The more often you use the machine, the more care it needs.

**Removal:**

- Raise the sewing foot and remove the detachable work support.
- Push the point of a small screwdriver into the opening between needle plate and sewing machine. Twist it lightly to the right and the needle plate will snap half way out of its mounting. Now push the screwdriver into the left opening and take the needle plate out.

**Replacing**

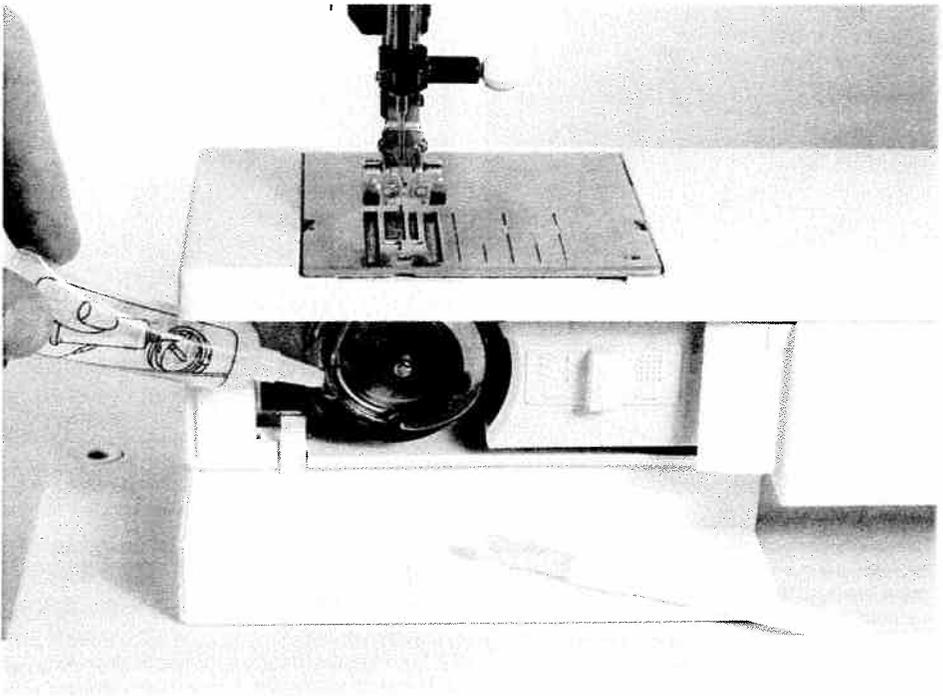
- Place the needle on flat at the back and push it down with both hands at the front until you hear it snap in place. Before you start sewing, check that the needle plate is lying flat.



**!** **Cleaning and oiling**  
**Switch off the main switch**

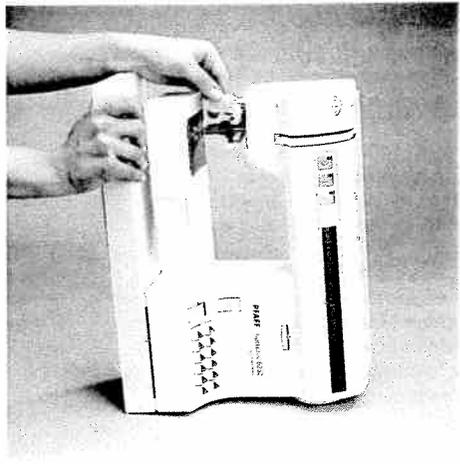
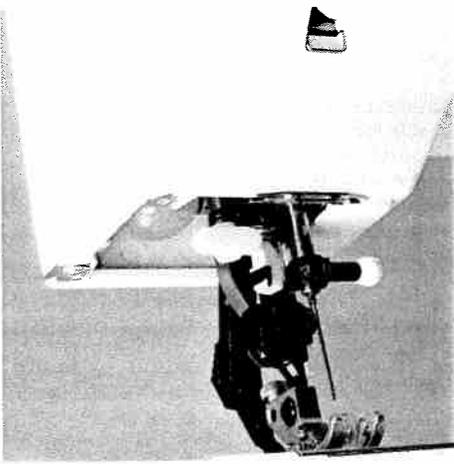
- Remove the needle plate and lower the feed dog.
- Clean the feed dog and hook area with the brush.
- Then apply a drop of oil (every 15 to 20 hours of operation) to the hook. You can see where to apply the oil in the illustration and on the provided oil bottle.

Otherwise, the machine is maintenance-free and must not be oiled.



## **Maintenance and trouble-shooting**

Changing the needle plate	Page 86
Cleaning and oiling	Page 86
Replacing the sewing lamp	Page 87
Trouble-shooting	Page 88



### **Changing the sewing lamp Switch off the main switch**

- Disconnect the mains plug and the foot control plug from the machine.
- Take off the detachable work support (14).

The sewing lamp is located inside the needle head of the sewing machine.

### **Removal**

To be able to change the sewing lamp, we recommend placing the sewing machine on its side as illustrated.

- Hold the sewing machine tightly.
- Push the lamp into its holder as far as it will go.
- At the same time, turn the lamp a half turn anti-clockwise and remove it.

### **Insertion**

- Insert the lamp in the diagonal holder and turn it so that both stops of the lamp engage.
- Now push the lamp fully into the holder and turn it clockwise so that it is held firmly.

### **Note:**

The lamp changer (available as a special accessory) will make changing the lamp much easier.

### **Important!**

The maximum permissible wattage of the lamp with a plug-in socket is 15 watts!

## **Trouble-shooting**

Problem:

### **1. The machine skips stitches**

The needle is not properly inserted.

The wrong needle is inserted.

Needle is bent or blunt.

Machine is not properly threaded.

Needle is too small for thread.

### **2. Needle thread breaks**

See reasons above.

Thread tension is too tight.

Thread is poor or has slubs in it,  
or has become dry after too-long storage.

Thread is too thick.

### **3. Needle breaks off**

Needle is not pushed fully in.

Needle is bent.

Needle is too thick or too thin.

Needle is bent, and has hit the needle  
plate because you are pulling or pushing  
the fabric.

The bobbin case is not properly inserted.

### **4. Seam is sewn unevenly**

The tension needs adjusting.

Thread is too thick, slubbed or hard.

The bobbin thread is unevenly wound.

Thread bunching at top or bottom  
side of fabric.

### **5. Machine does not feed or feeds irregularly**

Sewing lint has collected between the feed  
dog teeth rows.

Feed dog is lowered, slide B (see page 27)  
at right.

### **6. Machine is running with difficulty**

There are thread remnants in the hook race.

Remedy:

Push needle fully upwards,  
flat side facing the back.  
Use needle system 130/705 H.  
Insert a new needle.  
Check how machine is threaded.  
Use a larger needle.

See above.

Adjust thread tension.

Only use good threads.

Use needle with large eye  
(System 130 N).

Insert new needle and push fully in.  
Insert new needle.  
See needle chart (pages 82 and 83).  
Let the machine feed the fabric.  
Only guide the fabric lightly.

When you insert the bobbin case,  
push it fully into the stop.

Check top and bottom tensions.  
Only use perfect threads.  
Do not wind thread free-hand,  
but run it on through the winding tension.  
Thread up correctly. Check needle  
and bobbin thread tensions.

Remove needle plate, remove lint with brush.

Push slide B (see page 27) to left.

Remove the threads and apply one drop  
of oil to the hook.

### **Important note:**

Before you replace sewing feet or needles, you must switch off the main switch.

Do not start the threaded machine without fabric in it.

If you leave the machine, even for a short time, do not forget to switch off the main switch.

This is important if children are nearby.

## Parts of the sewing machine (Models 6122 and 6112)

- (4) Carrying handle
- (5) Handwheel
- (6) Handwheel release disk
- (8) Main switch
- (9) Connection socket "foot control with mains cord"
- (10) Touch controls
- (11) Stitch length knob
- (13) Base plate
- (14) Detachable work support
- (15) Sewing foot holder with sewing foot
- (16) Needle threader (**Model 6122**)
- (17) Threading slit
- (18) Needle thread tension
- (19) Take-up lever
- (20) Presser bar lifter
- (21) Key for "reverse sewing"
- (22) Needle holder with fixing screw
- (23) IDT System/Integrated Dual Transport (top feed) (**Model 6122**) \*
- (24) Reel holder with unwinding disk
- (25) Second spare reel holder
- (26) Lid with program table
- (27) Bobbin winder
- (28) Hook cover (behind it- hook)
- (29) Free arm
- (30) Thread trimmer
- (31) Sewing lamp (max. 15 watt)
- (32) Thread guide
- (33) Needle plate
- (34) Stitch width knob
- (35) Needle position knob