Binding edges with the hemmer

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Hemmer foot

Hemming secures the fabric edge against fraying and produces a neat and durable edge. Begin by folding the fabric edge by approx. ⅛ inch and placing the folded edge under the hemmer foot. Lower the foot and secure the hem in position with a few stitches, leaving thread ends long enough so you can pull on them.

Fig. 0 shows how the fabric is drawn into the hemmer foot scroll by pulling on the stitched-down threads.

Fig. 2 shows how the fabric edge is fed into the hemmer foot scroll. Make sure the fabric is not fed under the right half of the hemmer foot as it enters the scroll.
Binding edges with the roll hemmer

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* Roll hemmer (special accessory)

Use the roll hemmer foot for hemming nylon, tricot and chiffon. Begin by stretching the fabric to see which way the edge curls. This is the side to which the hem must be rolled. Draw the fabric into the hemmer scroll with the aid of sewn-on threads. Set the stitch width just wide enough that the needle stitches close to the drawn-in hem edge (Fig. 3). In this way, an attractive shell edge effect is obtained.
Shirring
with straight stitch

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Stitch length: 4 mm

In order to obtain consistent gather with straight stitch it is imperative to insert 2 to 4 shirring threads.

First mark the starting line for the shirring seams on the face side of the fabric. Sew the first seam straight and carefully. During sewing, pull the fabric taut a little with your hands, because with long stitches the seam will pucker easily (Fig. 1). After sewing, leave thread ends of about 15 cm (6 in.). The next two or three seams can be sewn at about sewing-foot width.

Finally take hold of all underthreads and pull on them. By this means you determine the amount of gather yourself. Please do not use fine threads, in order to ensure they do not break when you pull. Do not forget to tie off the threads on the reverse fabric side at the beginning and end of the seams afterwards (Fig. 2).
Shirring with elastic threads

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* Cording foot (special accessory)

First mark the starting line for the shirred se on the underside of the fabric. Insert the needle in the fabric at the seam beginning point and p an elastic thread around the needle. Insert elastic thread in the groove of the sewing fo use. Lower the sewing foot and sew a numb seams at about foot width. Make sure that elastic thread is not pierced during sewing an not stretch it. Finally, pull the threads with hand, and determine the amount of gather y self. Tie off the threads on the reverse side Fig. 1).

Instead of elastic thread it is also possible to use heavy cotton thread (see Fig. 2).

Pull the fabric to the required width and stitch threads down. This results in a fixed shirred edging.

This operation can also be carried out with dual feed engaged (sewing foot 1A).
Gathering with shirring foot

(special accessory)

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How to insert the shirring foot
Insert the shirring foot with its rear pin in groove “A” and push the shoe upwards so that front pin “B” snaps in (Fig. 2).

How to gather
Both outer fabric and the material to be shirred are sewn together with the shirring foot in one workstep. Make sure the material to be gathered always moves under the foot and the smooth outer fabric in the foot cutout (Fig. 1). Lightly stretch the outer fabric during sewing; by this means you determine the degree of gathering.

How to disengage the foot:
Raise the presser bar lifter. Disengage the sewing foot by pushing it down. Push up and hold the presser bar lifter and remove the sewing foot to the rear.
Smocking with elastic thread

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**Stitch length:** 3 to 4 mm  
**Bobbin thread:** elastic thread, (wind tension-free on bobbin)  
**Needle thread:** sewing thread

For sewing with elastic threads we recommend buying an additional bobbin case. Since elastic threads are much thicker than an ordinary bobbin thread, the tension on the bobbin case has to be decreased. The higher the bobbin thread tension the greater the shirring effect. The most suitable fabrics are nylon, satin, batiste and silk. The amount of gathering can be tested on a piece of waste fabric. Sew the seams at about foot width (Fig. 1). Tie off the seams on the reverse fabric side at their beginning and end. If there are several parallel seams, the material must be stretched to its original length during sewing, otherwise the shirring will turn out irregular. Do not forget to carry out a sewing test.
Overcasting raw edges with the zigzag-stitch

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Stitch width: 2 to 5, as required
Sewing thread: embroidery, darning, or sewing thread

The stored zigzag stitch is suitable for serging light materials. The heavier the material, the wider the stitch width must be selected for the zigzag stitch. Be sure the needle penetrates beyond the outer fabric edge during sewing. In this way the material edge is properly serged and well covered (Fig. 1).

For heavy or easily fraying materials, use:
- Program: 13, 21, or 22 (Fig. 3).

Overcasting raw edges with zigzag stitch and overlock foot

For materials which contract during serging use the overlock foot.

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Stitch width: 2 to 5, as required
Serge the raw edge with the required zigzag stitch.

- Preparation of the sewing foot (overlock foot No. 3)

Turn knurled nut "A" clockwise as far as it will go. The red edge guide "B" is then at the right sewing foot side. Allow the edge of the material to enter next to the red edge guide. During sewing, the thread is placed over wire "C". By this means you will receive a beautiful smooth seam (Fig. 2).

For change of needle position for zigzag stitch see page 61.

Note:
The stitch width must not be set below 1.5 mm.
Stretch triple zigzag stitch
Lycrastitch

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Needle: 130/705 H 80 or 130/705 H SKF 80
Stitch width: as required

Elastic tapes on underwear or bathing wear, as well as high-stretch materials such as Lycra and other synthetic problem materials can be suitably repaired or joined with the above programs.
Select the appropriate stitch width for the application. For this work it is recommended to use fine sewing threads (Figs. 1 and 2).

Fagoting stitch
for corsetry

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Needle: 130/705 H 80 or 130/705 H SKF 80

With fagoting stitch it is possible to sew a highly elastic seam with hem-stitching effect. Fold and pin the edges to be sewn and place them under the sewing foot with a clearance of 3 mm between them (Fig. 3).
Overstitch with program 29. The needle must penetrate the material on the left and right (Fig. 4).
Cut off the worn elastic tape close to the fabric edge. Gather the fabric to waist size with straight stitches. Push the fabric thus prepared between the lips of the new elastic tape and pin it on. Sew the elastic tape on with the elastic stitch. Then overstitch the closed elastic tape with the elastic stitch (Fig. 1).

**Elastic stitch (for underwear)**

| prog | 13a | ñññ | 3-5 | 0A |

On skirts or trousers sew the strap onto the prepared edge with the elastic stitch (Fig. 2).

**Elastic straps (outerwear)**

| prog | 13a | ñññ | 3-5 | 0A |

Belt loops, flies or pockets can be very easily tacked down with automatic bartacks (Fig. 3).

**Change of bartack width and length**

It is possible to adjust various bartack size (length and width), or to only change the length or the width (Figs. 4a + 4b).

| prog | ñññ | 3-5 | 0A |

Pattern length: as required
Stitch width: as required
In order to ensure correct feeding over crossed seams, belt loops, etc., we recommend to support the sewing foot with a correspondingly thick piece of fabric (see page 55).

**Bartacks**

| prog | 157 | ñññ | 3-5 | 0A |
Closing- and serging seams

Seams which are not ironed open can be sewn together and serged in one workstep. This method is fast, very durable and suitable for many different materials. The Pfaff Creative 1475 offers a selection of different elastic closing and serging seams from which you can easily select the required seam for any stretchable material.

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Closed overlock stitch or overcasting stitch

Material: Jersey

Especially jersey materials can be sewn together and serged in one workstep with the recommended stitches (Fig. 1).

Sew a seam at the required width, close the stand at the correct curvature and press the seam open, fold over in lengthwise direction and pin onto neck cutout from face side. The raw edges of the knit facing are placed on the raw edge of the cutout. In one workstep, knit facing and cutout edge are sewn together (Fig. 3). In order to avoid waviness in the case of loose woven materials, insert an elastic thread. By this means, the seam stays in its original shape (Fig. 2).

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Sewing neck cutouts: Measure the required width, close the stand at the correct curvature and press the seam open, fold over in lengthwise direction and pin onto neck cutout from face side. The raw edges of the knit facing are placed on the raw edge of the cutout. In one workstep, knit facing and cutout edge are sewn together (Fig. 3). In order to avoid waviness in the case of loose woven materials, insert an elastic thread. By this means, the seam stays in its original shape (Fig. 2).
Closed overlock stitch

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* Knit-edge foot (special accessory)

Needle: 70 or 80

Fashioned knit parts can easily be sewn together with the closed overlock stitch. To obtain a good-looking seam we recommend inclusion of a lightly tensioned wool thread in the seam (Fig. 1).

Overlock stitch with edge-thread

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Stitch length: 3.0 mm

Place the raw edges under the sewing foot, as shown in Fig. 2. Make sure the needle stitches just beyond the fabric edge, as it descends in its right position. In this way, the edge thread is sewn to the raw edge and serves as an edge protection. For adjustment of overlock foot No. 3 see page 72.

Overedge stitch

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The overedge stitch is used for joining two fabric parts at a width of up to 9 mm and serging them with a double edge finish (very durable).
Overedge stitch

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With the overlock stitch it is possible to make decorative hem edges. Fold the fabric to the reverse side, secure the hem or facing with pins and, as Figs. 1 and 2 show, overcast the open edge.

Honeycomb stitch

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The honeycomb stitch is especially suitable as a means of securing hems on stretchable lining materials. Fold a double hem and overcast with honeycomb stitch (Fig. 3).

Securing hems with the double needle
(T-shirt seam)

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Needle: double needle, 4 mm needle gauge
For a hem width of 2 cm fold about 2.5 cm of material and secure it with pins. Topstitch on the fabric face side leaving a margin of 2 cm. Cut off excess material on the inside of the hem, along the seam (Fig. 4).
Elastic stitch or overedge stitch

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Overlap the material edges by 1.5 cm and overstitch each edge with:
- Program 13a
- Stitch length 0.5 mm (Fig. 2)
- or as shown by Fig. 1
- Program 147
- Stitch width 4.5 mm
- Stitch length 3.0 mm

Overstitch the raw edge in such a way that the small stitches of the overedge seam are sewn along the raw edge, as shown in Fig. 1. The second raw edge can be sewn without turning the material, by pressing:
- Pattern mirroring key 28.
Binding edges
with bias tape

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Fold ready-made bias binding lengthwise and shape-press. Push the folded binding over the fabric edge and secure it with pins, if required. Then sew it on with straight stitches (Fig. 1).

Edge-binding with
the binder

Sewing foot: Binder (special accessory)
Program: 00
Stitch length: 2.5 mm, (Fig. a) or
Program: 10
Stitch width: 2.5 mm
Stitch length: 1.5 mm, (Fig. b) or
Program: 44
Pattern length: 10 (Fig. c)
Bias tape width: 24 to 26 mm

Remove sewing foot and screw on binder. Insert the bias tape in the scroll of the binder and pull it out to the rear. Set the binder in such a way that the needle enters 1 to 1.5 mm from the turned-in bias edge. Sew a number of stitches along the bias tape. Place the raw edge in the groove of the binder. During sewing, the bias tape is folded over the material edges automatically. Sew the bias tape on with the above mentioned program or a program of your own selection. Straight material edges are the simplest to bind (Fig. 2).
Blind stitch

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Fold the previously overcast raw edge over to form a hem of the desired width and secure it with pins at about 0.5 cm from the fabric edge. Place the fabric under the blindstitch foot and sew, making sure the folded fabric edge runs along edge guide “B” of the blindstitch foot (Fig. 1 + 2a).

**Before you start blindstitching, adjust the needle penetration point on the folded fabric edge.**

To do this, adjust the position of edge guide “B” by turning regulating screw “A” so that the needle catches only one thread in the folded edge when it makes its left stitch. Sew a trial seam on a piece of scrap material first.

Then proceed as described above (Fig. 2).

Elastic blind stitch

(for elastic materials)

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This type of stitch is suitable for stretch fabrics. First fold the hem to the desired width and secure with pins. Adjust the needle position as described above (Fig. 2b).

- Then start hemming, following the instructions given above.
Darning with elastic stitch

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Depending on the size of the damaged area, stitch over it with as many elastic stitch seams as are needed to cover it. Each seam should just slightly overlap the one sewn before (Fig. 1).

Inserting patches

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Stitch length: 0.5 mm
Needle position: down

The new piece of fabric is pinned on the face side and the fabric edge oversewn with the selected stitch. To make the patch more durable you can sew a second seam at sewing-foot width from the first. Afterwards cut off the damaged material on the inside (Fig. 2).

Darning torn fabrics

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For mending tears, frayed edges and small holes, place a piece of material larger than the damaged area under the torn fabric. Stitch over the area at the width of the tear. The material underneath reinforces the damaged material and ensures reliable darning. Trim any protruding material on the underside close to the edge (Fig. 3).
Automatic darning

| prog | 158 | 159 | +3 | 2A 5A |

Sewing thread: embroidery and darning thread

Darning program 158 is mainly intended for darning damaged spots. Stitch over the damaged spot at the required length, then press "reverse" key 18. The length of the darning seam is now memorized in the computer. The Pfaff Creative then automatically stitches over the damaged area. The programmed darn size can then be repeated as often as required.

In darning program 159, the machine will stitch over the damaged area also crosswise after pressing key 18, and repeat the same size continuously without further adjustment.

If the worn area is wider than the darning program, the darning program must be repeated several times until the damaged spot has been covered completely.

Depending on the fabric, the darn may have an irregular shape. If so, this can be compensated by balance key 6.

Example:

Fig. 1: Select +1 to +3 with balance key, or more, if required.

Fig. 2: Select −1 to −3 with balance key, or more, if required.

If you wish to darn a larger area we recommend to use buttonhole foot 5A. The darning program must be repeated several times until the damaged spot has been covered.

Changing the darning length

If you wish to change the programmed darning length, press the "pattern start" key. The darn length is cleared and a new length can be programmed.
Darning with straight stitch

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Feed dog: lowered
Presser bar lifter: in darning position
Sewing thread: embroidery and darning thread

Darning position (Fig. 1):
Lower presser bar lifter “A”, at the same time pushing it back slightly until it enters notch “B” at the bottom of its slot.

Attaching the darning foot (Fig. 2):
Raise the needle. Push lever “E” towards the back and hold it. Insert the pin of the foot in hole “C” and insert the foot so that it rests against its stop. When you do so, guide fork “G” fits around the presser bar. Release lever “E”, which then moves down onto retaining screw “F”. Tighten screw “D”.

Draw up the bobbin thread. Hold both threads until the machine has made a few stitches. First sew a few stitches in the unworn area of the fabric. Then stitch over the damaged spot from one side to the other in serpentine fashion, placing the lines of stitching close together (Fig. 3). When the damaged spot has been covered completely, turn the workpiece through 90° and darn at right angles to the preceding row of stitches (see Fig. 4). You determine the length of the darning stitches by the rate at which you move the fabric back and forth.

For mending you can clamp the damaged part of the fabric in an embroidery hoop.
Darning with wool

| prog | 10 13a | 2-3 | 6 |

Feed dog: lowered
Presser bar lifter: in darning position
(see page 84)
Sewing thread: Embroidery and darning thread, wool

Draw the wool thread through the needle hole of the darning foot and into the thread guide (Fig. 1). Place the wool thread under the darning foot. Start at the top left and place the wool thread back and forth across the damaged area, using program 10 (Fig. 2). Then cut the wool thread and sew over the rows of wool thread with zigzag stitches or an elastic-stitch seam (Fig. 3). Do not place the lines of stitching too close together as this would make the darn too hard. All darning work described above is carried out on the reverse side of the fabric, so that the darn looks neater on the face side.
Sewing in zippers

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<td>needle down</td>
<td>3–5</td>
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There are different kinds of zippers: joined or split zippers and special ones for trousers or slacks. They can be inserted concealed or visible, as required. The zipper foot can be engaged on the left or on the right, depending on the work (Figs. 1 and 2).

**Fully concealed zippers**

Baste the zipper in first. Snap the zipper foot in at the right (Fig. 1). Place the open zipper under the foot so that the zipper teeth move along the right-hand edge of the foot (Fig. 3). By changing the needle position (see page 61) the zipper can be stitched in at a narrow depth. Sew about half the seam at the required depth, leave the needle down in the material, raise the zipper foot and close the zipper (Fig. 4). Then lower the foot again, continue stitching until you reach the end of the zipper and sew across this end. Sew along the other side of the zipper parallel to the edge and at the same distance as the first seam. Shortly before you reach the end of the seam, leave the needle down in the material, raise the sewing foot, open the zipper (Fig. 5), lower the foot again and sew to the end of the seam.

**Our sewing tip:** If you lack practice, we recommend using the quilting gauge to obtain parallel seams.

If the sewing foot shoe is engaged at the right, the needle position must only be changed to the right. If the shoe is engaged at the left, the needle position must only be changed to the left.
Zippers for ladies' slacks

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<td>2.5–3.0 mm</td>
<td>Needle down</td>
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</table>

- Snap the zipper foot in at the right.
- Iron the fly edges. Baste the closed zipper under the pressed right-hand fly edge so that its teeth are still visible. Pin facing strip "A" to the underside and stitch it down at the same time as you sew on the zipper. The zipper teeth move along the right-hand edge of the foot (Fig. 1). Shortly before you reach the end of the seam, leave the needle down in the material, raise the sewing foot and open the zipper. Then lower the foot again and sew the seam to the end. Close the zipper.
- Fold the right edge over the left and pin it in place according to the seam line. Then baste in the left zipper chain (Fig. 2).
- Open the zipper: Attach the edge guide and adjust it so that its finger moves along the fabric edge (Fig. 3). Shortly before you reach the end of the seam, leave the needle down in the material, raise the sewing foot and close the zipper. Then lower the foot again and sew to the end of the seam. Secure the end of the zipper seam with a tack, program 157.
- **Our sewing tip:** If a zipper jams after dry cleaning, rub candle wax or a piece of soap over its teeth. It can then be opened and closed without any effort.
Sewing thread: Embroidery and darning thread

Generally, buttonholes are sewn in double material. Nevertheless, a piece of paper should be placed underneath during sewing. First mark the spacings and the distance from the edge. Sewing always starts where the markings cross each other.

Ten buttonhole lengths are stored in the computer, from 7.0 to 16 mm.

On program selection a programmed buttonhole length of 14 mm and a buttonhole width of 4 mm appear in the display. Select the length of the buttonhole using stitch-length keys 7 (Fig. 1). The machine will automatically sew the selected buttonhole.

Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.

For the following buttonholes it is best to lift the fabric a little in order not to affect feeding. The sewing speed should always be the same.

Correcting a buttonhole

If a buttonhole does not turn out well, cancel it by pressing "pattern start" key 26 and sew it again.

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 5). A buttonhole width of 4 mm is stored.

Adapting the buttonhole seam lengths with the balance keys

With "balance" keys 5 the left buttonhole seam length can be adapted to the right one. Sew a sample buttonhole first.

Example:

**If the left seam is too short**

(Fig. 4a)

Select +1 to +3 with "balance" key, or more, if required.

**If the left seam is too long**

(Fig. 4b)

Select −1 to −2 with "balance" key, or more, if required.

- Sew the first buttonhole seam at the required length and
- the first bartack.
- Press balance keys 5, "+" or "+", and adjust the second buttonhole seam length to the first one (Figs. 4a, 4b).
- Sew final bartack.

The change made in this way will be maintained for the following buttonholes.
Determining the second bartack

If you wish to determine the second bartack in a programmed buttonhole, press "tie-off/button-hole" key 19 (Fig. 2). A dash flashes in display 21 (Fig. 3) to the right of program 18. The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The bartack is now sewn and tied off (Fig. 2). This method can also be used for fully automatic buttonholes when the two buttonhole seams are not the same length anymore.

If you wish to sew the next buttonhole fully automatically, press key 19 again. (Same sewing sequence as described on page 90). The flashing dash will then disappear.

Note:
If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.
Linen buttonholes (fully automatic)

<table>
<thead>
<tr>
<th>prog</th>
<th></th>
<th>3+</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>A</td>
<td>3+</td>
<td>5A</td>
</tr>
</tbody>
</table>

Sewing thread: Embroidery and darning thread

Mark the location of the buttonhole. Test-sew a buttonhole on a piece of waste material and choose the buttonhole size.

**21 buttonhole lengths are stored in the computer, from 7.0 to 44 mm.**

On program selection a programmed buttonhole length of 22 mm and a buttonhole width of 4.5 mm appear in the display.

Select the length of the buttonhole with stitch-length keys 7 (Fig. 1). The machine will automatically sew the selected buttonhole.

**Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.**

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 5). A buttonhole width of 4.5 mm is stored.

Correcting a buttonhole

If a buttonhole does not turn out well, cancel it by pressing "pattern start" key 26 and sew it again.

Adapting the buttonhole seam lengths with the balance keys

With "balance" keys 5 the left buttonhole seam length can be adapted to the right one.

Sew a sample buttonhole first.

Example:

**If the left seam is too short**

(Fig. 4a)
Select +1 to +3 with "balance" key, or more, required.

**If the left seam is too long**

(Fig. 4b)
Select −1 to −2 with "balance" key, or more, required.

- Sew the first buttonhole seam at the required length and
- the first bartack.
- Press balance keys 5, "+" or "−", and adjust the second buttonhole seam length to the first one (Figs. 4a, 4b).
- Sew final bartack.

The change made in this way will be maintained for the following buttonholes.

For programmable linen buttonholes see page 9.
Determining the second bartack
(semi-automatic)

If you wish to determine the second bartack in a programmed buttonhole, press "tie-off/buttonhole" key 19 (Fig. 2). A dash flashes in display 21 (Fig. 3) to the right of program 150. The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The second bartack is now sewn and tied off.

This method can also be used for fully automatic buttonholes when the two buttonhole seams are not the same length anymore.

If you wish to sew the next buttonhole fully automatically, press key 19 again. (Same sewing sequence as described on page 92). The flashing dash will then disappear.

Note:
If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.
Linen buttonhole, prog. 150, programmable

Determining your own buttonhole length and bartack

When you press the right "+" program key 22 the buttonhole symbol appears at the right side of program 150 and both segments will flash (Fig. 1).
- **Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.**
- Sew the first buttonhole seam at the length required (Fig. 2a).
- Press "tie-off/buttonhole" key 19 (Fig. 2). Now, only the upper left segment of the buttonhole symbol is flashing (Fig. 3). The machine then automatically sews the first bartack and the return seam (Fig. 2b). Shortly before the end of the seam the machine sews slowly, stitch by stitch, in order to draw attention to the last bartack. One zigzag stitch before the end of the first buttonhole seam:
- Press key 19 again. The second bartack is now sewn and tied off (Fig. 2c). (Both segments of the buttonhole symbol are off, Fig. 4). Now the buttonhole is stored. Without having to actuate further keys, all following buttonholes can be sewn automatically.

Adjusting the density of buttonhole seams

With stitch-length keys 7 the buttonhole seams can be set more densely or loosely. The stored buttonhole density is 0.5 mm. Make a sample buttonhole first.

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 6). A buttonhole width of 4.5 mm is stored.

Adapting the density of the left buttonhole seam to the right one

With "balance" keys 5 the left buttonhole seam can be adapted to the right one.
- Sew the first buttonhole seam at the required length and the first bartack.
- Press "balance" keys 5, "+" or "-", and adapt the second buttonhole seam to the first one (Fig. 5).
- Press "pattern start" key 26.

Adapting the seam lengths of stored buttonholes with the balance keys, see page 92.

Note: If the buttonhole seams of the stored buttonhole do not coincide, make another correction at "balance" keys 5.
Adapting the buttonhole length

A garment may consist of different numbers of fabric plies, e.g. the buttonhole strip may consist of three plies and the collar stand of six - owing to the folded seam edge. In this case it is necessary to program the buttonhole for varying numbers of fabric plies in order to maintain the same buttonhole length as on the three-ply buttonhole strip.

Note:
For sewing buttonholes on knitted or very thin materials we recommend sewing foot No. 1 A and dual feed.

If the buttonhole seams do not coincide, press "tie-off/buttonhole" key 19 to switch from fully automatic to semi-automatic during sewing; one segment flashes (Fig. 3) and you can determine your own second bartack. When key 19 is pressed again the buttonhole programmed before is sewn fully automatically and the segment does not flash anymore.
Stretch buttonhole, reinforced
(fully automatic)

<table>
<thead>
<tr>
<th>prog</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>151</td>
<td>X</td>
<td>X</td>
<td>-3+</td>
</tr>
</tbody>
</table>

Sewing thread: embroidery and darning thread
18 buttonhole lengths are stored in the computer, from 10 to 44 mm.
On program selection, a programmed buttonhole length of 22 mm and a buttonhole width of 4.5 mm appear in the display. Select the required length of buttonhole with stitch-length keys 7 (Fig. 1).
The machine automatically sews the selected buttonhole.
Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.

Correcting a buttonhole
If a buttonhole does not turn out well, cancel it with “pattern start” key 26 and sew it again.

Changing the buttonhole width
For every type of fabric the corresponding buttonhole width can be determined up to 5.5 mm.
For heavy fabrics select a wide buttonhole and for light fabrics a narrow one. At stitch width keys 8 you can set the required width. The width of the area of cut changes automatically (Fig. 5).
The stored buttonhole width is 4.5 mm.

Adapting the buttonhole seam length with the balance keys
With “balance” keys 5 the left buttonhole seam length can be adapted to the right one.
Make a sample buttonhole first.

Example:
If the left seam is too short
(Fig. 4a)
Select +1 to +3 with “balance” key 5, or more, required.

If the left seam is too long
(Fig. 4b)
Select -1 to -2 with “balance” key 5, or more, required.
• Sew the first buttonhole seam at the length required and
• the first bartack.
• Press balance keys 5, “+” or “-”, and adjust the second buttonhole seam length to the first one
(Figs. 4a, 4b).
• Sew final bartack.
The change made in this way will be maintained for the following buttonholes.
Determining the second bartack

(semi-automatic)

If you wish to determine the second bartack in a programmed buttonhole, press "tie-off/buttonhole" key 19 (Fig. 7). A dash then flashes in display 21 (Fig. 6) at the right side of program 151. The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The bartack is now sewn and tied off (Fig. 7).

This method can also be used for fully automatic buttonholes when the buttonhole seams are not the same length anymore.

If you wish to sew the next buttonhole fully automatically again, press key 19. (Sewing sequence as described on page 96). The flashing dash disappears.

Note:

If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.

See next page for programmable stretch buttonholes.
Stretch buttonhole, prog. 151 programmable

Determining your own buttonhole length and bartack

When you press the right “+” program key 22 the buttonhole symbol appears at the right side of program 151 and both segments will flash (Fig. 1).

- Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.
- Sew the first buttonhole seam at the length required (Fig. 2a).
- Press “tie-off/buttonhole” key 19 (Fig. 2). Now, only the upper left segment of the buttonhole symbol is flashing (Fig. 3). The machine then automatically sews the first bartack and the return seam (Fig. 2b).
- Shortly before the end of the seam the machine sews slowly, stitch by stitch, in order to draw attention to the last bartack. One zigzag stitch before the end of the first buttonhole seam.
- Press key 19 again. The second bartack is now sewn and tied off (Fig. 2c). (Both segments of the buttonhole symbol are off, Fig. 4). Now the buttonhole is stored. Without having to actuate further keys, all following buttonholes can be sewn automatically.

Changing the density of buttonhole seams

With stitch-length keys 7 the buttonhole seams can be set more densely or loosely. The stored buttonhole density is 1 mm.

Adapting the density of the left buttonhole seam to the right one

With “balance” keys 5 the left buttonhole seam can be adapted to the right one.

- Sew the first buttonhole seam at the required length and the first bartack.
- With “balance” keys 5, “+” or “-”, adapt the second buttonhole seam to the first one (Fig. 5).
- Press “pattern start” key 26. Afterwards program the buttonhole as described on this page. Make a sample buttonhole before you sew buttonholes in a garment.

Note: If the seam lengths of the stored buttonhol do not coincide, make another correction at “balance” keys 5.

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm.

For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 6). The stored buttonhole width is 4.5 mm.

Make a sample buttonhole first.
Adapting the seam lengths of stored buttonholes with the "balance" keys, see page 9
Stretch buttonhole (fully automatic)

<table>
<thead>
<tr>
<th>prog</th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>152</td>
<td>K K</td>
<td>-3+</td>
<td>5A</td>
</tr>
</tbody>
</table>

Sewing thread: embroidery and darning thread

18 buttonhole lengths are stored in the computer, from 10 to 44 mm.

On program selection, a programmed buttonhole length of 22 mm and a buttonhole width of 5 mm appear in the display. Select the required length of buttonhole with stitch-length keys 7 (Fig. 1). The machine automatically sews the selected buttonhole.

Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.

For the following buttonholes it is best to lift the fabric a little in order not to affect feeding. The sewing speed should always be the same.

Correcting a buttonhole

If a buttonhole does not turn out well, cancel it by pressing "pattern start" key 26 and sew it again.

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 4). A buttonhole width of 5 mm is stored.

Adapting the buttonhole seam lengths with the balance keys

With "balance" keys 5 the left buttonhole seam length can be adapted to the right one. Sew a sample buttonhole first.

Example:

If the left seam is too short (Fig. 3a)

Select +1 to +3 with "balance" key, or more, required.

If the left seam is too long (Fig. 3b)

Select -1 to -2 with "balance" key, or more, required.

- Sew the first buttonhole seam at the length required and
- the first bartack.
- With balance keys 5, "+" or "-", adjust the second buttonhole seam length to the first one (Figs. 3a, 3b)
- Sew final bartack.

The change made in this way will be maintained for the following buttonholes.
Determining the second bartack  
(semi-automatic)

If you wish to determine the second bartack in a fully automatic buttonhole, press "tie-off/buttonhole" key 19 (Fig. 6). A dash flashes in display 21 (Fig. 5) to the right of program 152. The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The bartack is now sewn and tied off (Fig. 6). This method can also be used for fully automatic buttonholes when the two buttonhole seams are not the same length anymore.

If you wish to sew the next buttonhole fully automatically, press key 19 again. (Same sewing sequence as described on page 100). The flashing dash will then disappear.

Note:
If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.

For programmable stretch buttonholes see next page.
Stretch buttonhole, prog. 152, programmable

**Determining your own buttonhole seam length and bartack**

When you press the right "+" program key 22 the buttonhole symbol appears at the right side of program 152 and both segments will flash (Fig. 1).

**Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.**

- Sew the first buttonhole seam at the length required (Fig. 2a).
- Press the "tie-off/buttonhole" key 19 (Fig. 2). Now, only the upper left segment of the buttonhole symbol is flashing (Fig. 3). The machine then automatically sews the first bartack and the return seam (Fig. 2b). Shortly before the end of seam the machine sews slowly, stitch by stitch, in order to draw attention to the last bartack. One zigzag stitch before the end of the first buttonhole seam press key 19 again. The second bartack is now sewn and tied off (Fig. 2c). (Both segments of the buttonhole symbol are off, Fig. 4).
- Now the buttonhole is stored. Without having to actuate further keys, all following buttonholes can be sewn automatically.

**Adjusting the density of buttonhole seams**

With stitch-length keys 7 the buttonhole seams can be set more densely or loosely. The stored buttonhole density is 1.5 mm.

Make a sample buttonhole first.

**Changing the buttonhole width**

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 6). The stored buttonhole width 5 mm.

**Adapting the density of the left buttonhole seam to the right one**

With "balance" keys 5 the left buttonhole seam can be adapted to the right one.

- Sew the first buttonhole seam at the required length and the first bartack.
- With "balance" keys 5, +" or ", adapt the second buttonhole seam to the first one (Fig. 5).
- Press "pattern start" key 26. Afterwards program the buttonhole as described on this page. Make a sample buttonhole before you sew buttonholes in a garment.

**Note:** If the buttonhole seams of the stored buttonhole do not coincide, make another correction at "balance" keys 5.

**Adapting the seam lengths of stored buttonholes with the balance keys, see page 100.**
Adapting the buttonhole length

A garment may consist of different numbers of fabric plies, e.g. the buttonhole strip may consist of three plies and the collar stand of six – owing to the folded seam edge. In this case it is necessary to program the buttonhole for varying numbers of fabric plies in order to maintain the same buttonhole length as on the three-ply buttonhole strip.

Note:
For sewing buttonholes on knitted or very thin materials we recommend sewing foot No. 1 and dual feed.

If the buttonhole seams do not coincide, press "tie-off/buttonhole" key 19 to switch from fully automatic to semi-automatic during sewing; one segment flashes (Fig. 3) and you can determine your own second bartack. When key 19 is pressed again the buttonhole programmed before is sewn fully automatically and the segment does not flash anymore.
Various buttonhole bartacks
Round buttonholes and eyelet buttonholes can be sewn with three different bartack designs.

<table>
<thead>
<tr>
<th>Round buttonhole with wedge tack</th>
<th>or</th>
<th>Eyelet buttonhole with wedge tack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program 153 a</td>
<td></td>
<td>Program 154a</td>
</tr>
<tr>
<td>This bartack design is very suitable for buttonholes in trousers and casual wear</td>
<td></td>
<td>This bartack design is very suitable for buttonholes in jeans, trousers and sportswear</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Round buttonhole with lengthwise tack</th>
<th>or</th>
<th>Eyelet buttonhole with lengthwise tack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program 153b</td>
<td></td>
<td>Program 154b</td>
</tr>
<tr>
<td>This tack design we recommend for buttonholes in outerwear of light materials</td>
<td></td>
<td>This tack design we recommend for buttonholes in outerwear, costumes, coats, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Round buttonhole with crosswise tack</th>
<th>or</th>
<th>Eyelet buttonhole with crosswise tack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program 153c</td>
<td></td>
<td>Program 154c</td>
</tr>
<tr>
<td>This reinforced tack design is very suitable for buttonholes in outerwear of thicker materials</td>
<td></td>
<td>This reinforced tack design is very suitable for buttonholes in outerwear that has to withstand great wear.</td>
</tr>
</tbody>
</table>
**Round buttonhole (fully automatic)**

<table>
<thead>
<tr>
<th>prog</th>
<th>153a, b, c</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>153a = buttonhole with wedge tack</td>
</tr>
<tr>
<td></td>
<td>153b = buttonhole with lengthwise tack</td>
</tr>
<tr>
<td></td>
<td>153c = buttonhole with crosswise tack</td>
</tr>
</tbody>
</table>

Sewing thread: embroidery and darning thread

Key:

- press "slow sewing"

For round buttonholes with different bartack designs please see table on page 104.

The buttonhole must be 3 mm longer than the diameter plus thickness of the button. The distance from the edge should be the same measure as the button width.

First mark the spacings and the distance from the edge, then mark the buttonhole towards the inside from this point. Sewing is always begun from the inside outwards.

19 buttonhole lengths are stored in the computer, from 7.0 to 40 mm.

On program selection a programmed buttonhole length of 22 mm and a buttonhole width of 4.5 mm appear in the display.

Select the length of the buttonhole with stitch-length keys 7 (Fig. 1). The machine will automatically sew the selected buttonhole.

Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.

**Changing the buttonhole width**

For every type of fabric, the corresponding buttonhole width can be determined up to 5.5 mm.

For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut changes automatically (Fig. 7). The stored buttonhole width is 4.5 mm.

**Adapting the buttonhole seam lengths with the balance keys**

With "balance" keys 5 the left buttonhole seam length can be adapted to the right one.

Sew a sample buttonhole first.

Example:

**If the left seam is too short**

(Fig. 8d)

Select +1 to +3 with "balance" key, or more, required.

**If the left seam is too long**

(Fig. 8e)

Select -1 to -2 with "balance" key, or more, required.

**Correcting a buttonhole**

If a buttonhole does not turn out well, cancel it by pressing "pattern start" key 26 and sew it again.
Determining the bartack

(semi-automatic)

If you wish to determine the bartack in a programmed buttonhole, press "tie-off/buttonhole" key 19 (Fig. 5). A dash flashes in display 21 (Fig. 4) to the right of program 153a, b, or c. The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The bartack is now sewn and tied off.

If you wish to sew the next buttonhole fully automatically, press key 19 again. (Same sewing sequence as described on page 106). The flashing dash will then disappear.

Note:
If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.

When you are working in the bartack-determining mode and have selected bartack design "a", you have to press the "tie-off/buttonhole" key when the second buttonhole seam has reached the mark next to the last one on the buttonhole foot. Observing this instruction ensures a correct bartack finish of the buttonhole.

Adapting the buttonhole seam lengths

A garment may consist of different numbers of fabric plies, e.g., the buttonhole strip may consist of three plies and the collar stand of six – owing to the folded seam edge. In this case it is necessary to program the buttonhole for varying numbers of fabric plies in order to maintain the same buttonhole length as on the three-ply buttonhole.

Note:
For sewing buttonholes on knitted or very stretchy materials we recommend sewing foot No. 2 and dual feed.
Sewing thread: embroidery and darning thread

Key:
- press "slow sewing"

Eyelet buttonholes with different tack designs:
(see table on page 104).

154a = buttonhole with wedge tack
154b = buttonhole with lengthwise tack
154c = buttonhole with crosswise tack

Eyelet buttonholes are often sewn in outerwear, such as jackets, coats or casual wear. They should always be sewn with backing material underneath. Moreover, a piece of paper should be placed underneath during sewing.

The buttonhole must be 3 mm longer than the diameter of the button, plus its height. The distance from the front edge should be equal to the button width. First mark the spacings and the distance from the edge. Mark the buttonhole length from the resulting point to the inside. Sewing is then always begun from the inside towards the edge.

16 buttonhole lengths are stored in the computer, from 10 to 40 mm

On program selection a programmed buttonhole length of 22 mm and a buttonhole width of 6 mm appear in the display. Select the length of the buttonhole with stitch-length keys 7 (Fig. 1). The machine will automatically sew the selected buttonhole.

Before beginning the buttonhole pull the runner of the buttonhole foot fully to the front.

Correcting a buttonhole

If a buttonhole does not turn out well, cancel it by pressing "pattern start" key 26 and sew it again.

Changing the buttonhole width

For every type of fabric, the corresponding buttonhole width can be determined from 5.5 to 8 mm. For heavy materials select a wide buttonhole and for light materials a narrow one. With stitch width keys 8, you determine the required buttonhole width. The width of the area of cut change automatically (Fig. 7).

The stored buttonhole width is 6 mm.

Adapting the buttonhole seam lengths with the balance keys

With "balance" keys 5 the left buttonhole seam length can be adapted to the right one. Sew a sample buttonhole first.

Example:
- If the left seam is too short
(Fig. 8d)
Select +1 to +3 with "balance" key, or more, required.

- If the left seam is too long
(Fig. 8e)
Select −1 to −2 with "balance" key, or more, required.
Determining the bartack

(Semi-automatic)

If you wish to determine the bartack in a programmed buttonhole, press "tie-off/buttonhole" key 19 (Fig. 6). A dash flashes in display 21 at the right side of program 154a, b, or c (Fig. 4). The machine now sews slowly just before the end of the second seam. When both seams are the same length, press key 19 again. The bartack is now sewn and tied off.

If you wish to sew the next buttonhole fully automatically, press key 19 again. (Sewing sequence as described on page 108). The flashing dash will then disappear.

Note:
If you interrupt sewing at the reduced sewing speed by releasing the foot control, the machine will return to normal speed when you start sewing again.

When you are working in the bartack-determining mode and have selected bartack design "a", you have to press the "tie-off/buttonhole" key when the second buttonhole seam has reached the mark next to the last one on the buttonhole foot. Observing this instruction ensures a correct bartack finish of the buttonhole.

Adapting the buttonhole seal length

A garment may consist of different numbers of fabric plies, e.g. the buttonhole strip may consist of three plies and the collar stand of six - or more - fabric plies. In this case it is necessary to program the buttonhole for varying numbers of fabric plies in order to maintain the same buttonhole length as on the three-ply buttonhole.

Note:
For sewing buttonholes on knitted or very soft materials we recommend sewing foot No 1 and dual feed.
Buttonhole with gimp thread

In the case of elastic materials, it is possible that the buttonholes extend. Therefore, the buttonhole strip should be reinforced with interlining material. In order to retain the shape of the buttonhole, use gimp thread, if possible. Place the gimp thread over the back ridge "A", pull taut and jam it into front ridge "B" to the left and right (Fig. 1).

(Pull runner fully to the front)

The buttonhole sequence is the same as without gimp thread. After completing the buttonhole pull on the left gimp thread (Fig. 2) until the loop is covered by the bartrack. This is where the button will be located later.

On elastic materials pull the gimp threads through to the reverse fabric side with a needle and tie them off.

On normal fabrics the gimp threads can be trimmed immediately behind the final bartack.

Eyelet buttonhole with gimp thread

Suitable threads: bead yarn No. B, or thick sewing thread

- Move runner slightly to the rear.
- Jam the gimp thread in the left slot of ridge "A" (Fig. 3) and pull to the front under the buttonhole runner.
- Place it over front ridge "B" and jam it in the right and left slots (Fig. 4).
- Pull it to the rear again and jam it in the right slot of ridge "A" (Fig. 5).
- Place the fabric under the sewing foot.
- pull the buttonhole runner fully to the front and lower the sewing foot.
- Before you start sewing press "slow sewing key 16 (Fig. 6).
- Sew the first buttonhole seam.
- When the machine starts to sew slowly (at the beginning of the curve), take the gimp thread out of the left slot of ridge "A".
- Pull the thread from ridge "B" with a needle and pull it to the rear until a loop appears in need plate cutout "C" of the buttonhole runner (Fig. 7).
- Sew the curve and - when the machine has again reached its normal speed –
- pull the thread taut and finish sewing the buttonhole. To prevent the gimp threads from showing at the end of the bartack, pull the taut and cut them off.

Round buttonholes with gimp threads are sewn in exactly the same way.

Note:

The thicker the gimp thread you use, the wider the buttonhole seams must be.
Cutting buttonholes open

When you cut open a buttonhole it is important not to damage the bartacks. To avoid this, insert the seam ripper about 1 mm away from the bartack. Now carefully cut the buttonhole open to the middle, then repeat this from the bartack at the other end (Fig. 1). If you have no punch pliers to cut the eyelet, simply cut around the curve with a pair of pointed scissors.

Sewing on buttons

| prog | | | |
|------|------|------|
| 19, 11 | -2 | 2A |

**Feed dog:** lowered (prog 11)

Place the button on the mark made on the fabric beforehand and push the fabric with the button under the sewing foot holder or sewing foot (Fig. 2). Turn the hand wheel towards you and adjust the position of the button so that the needle stitches into its left hole. Lower the presser bar lifter. Turn the hand wheel and check to make sure the needle enters the right hole of the button. Now sew the button on. After tying off the needle stops in its top position.

Sewing on buttons with stems

Place a match or toothpick on the button between the two holes and sew the button on as described (Fig. 3). Then remove the match, pull the button up and wrap the stems with the needle and bobbin threads drawn between fabric and button, and tie off the thread ends (Figs. 4, 5). To prevent small or flat buttons from slipping, use the normal sewing foot and switch off the top feed. For some buttons the zigzag stitch width must be changed. Fine adjustment to these buttons can be made with program 11.

To this end, position the button so that the needle in its right position stitches exactly in the right hole of the button. Then adjust the zigzag stitch width so that the needle exactly enters the left hole of the button.
Cording
Cording foot + cording tongue (special accessories)

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<td>00</td>
<td>K K</td>
<td>-5+</td>
<td>cording foot</td>
</tr>
</tbody>
</table>

Needle: Twin needle
Cording seams are very popular as a decoration on underwear, dresses, blouses, etc.

Cording sewn with the cording tongue
Cording is always sewn with two needle threads. Place a spool of thread on each spool pin and secure it in position with the corresponding unreeling disc. Place one thread to the right, and the other to the left of disc "C" (Fig. 3a). Then continue threading the machine, as usual. Do not twist the two threads. Thread each thread guide and needle separately (Fig. 3b). The thread tension should be adapted to the fabric type. The tighter the tension, the more prominent the cording appears. Fig. 1 shows how the cording tongue is engaged.

For thin materials, the cording foot with 7 grooves, the small cording tongue and a twin needle of up to 2 mm are used.

For thicker materials, the cording foot with 5 grooves, the large cording tongue and the required twin needle are used.

If you wish to sew several cordings beside each another, use the grooves of the cording foot (Fig. 2). For greater spacings we recommend using the edge guide.
Cording sewn
with gimp thread

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</table>

Needle: Twin needle

Lift the needle plate and pass the gimp thread through the round hole "A." After that have the needle plate snap in place again. Notch "B" is the entry groove (Fig. 1). Place the spool of gimp thread in front of the machine.

Place the gimp thread together with needle- and bobbin thread to the rear under the cording foot. Move the detachable work support against the machine. Choose a gimp thread of the same colour as the outer fabric.

Narrow pleats

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<th>prog</th>
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<th>(3-5)</th>
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</table>

Needle: 130/705-H, size 80

Iron the first fold line and stitch at the required width. Prepare and sew the rest of the pleats in the same manner (Fig. 3).

For stitching down wider pleats we recommend using the edge guide. Adjust the edge guide to the required width. Guide the material so that the fold runs along the edge guide. (See page 118).
Appliqué work

Two worksteps are required for this work:

First workstep

<table>
<thead>
<tr>
<th>prog</th>
<th>stitch pattern</th>
<th>stitch length</th>
<th>stitch width</th>
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<tr>
<td>10</td>
<td>2 - 3</td>
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</table>

Stitch width: 0.5 mm
Stitch length: 1.0 mm

Second workstep

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<th>stitch pattern</th>
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<td>2A</td>
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</table>

Stitch width: 1.5 mm
Stitch length: 0.2 to 0.25 mm (for cording)

Trace the design on the reverse side of the fabric, lay the appliqué on the face side and baste it on, making sure it matches the fabric grain.

First workstep

Sew along the outline of the design on the reverse fabric side (Fig. 1). Trim excess material close to the contour seam (Fig. 2).

Second workstep

Sew over the raw edges of the appliqué (single needle cording).

To make the edge of the appliqué more prominent, insert a gimp thread in the seam (Fig. 3). Ready-made fabric appliqués can be appliquéd much more easily. Before you cut out the design iron on a fusible backing. This reinforces the material, makes it easier to cut, and prevents fraying. Pin on the design and sew along the edges of the design with dense, narrow zigzag stitches. For cording underlay reverse fabric side with paper. In this way, a good-looking seam is produced.

- For cording we recommend the appliqué fcc (special accessory)
Quilting

Seams stitched on articles filled with cotton wool or some other soft padding have a very prominent effect. For this purpose, batting, foam plastic or hannel is placed between the top ply and a light-weight bottom ply (Fig. 3).

To keep the fabric plies and the padding in place, baste them together with rows of long basting stitches spread over the whole area. Squares and diamonds can be sewn on the straight or on the bias of the material. On fabrics with regular patterns stitch between the patterns or around them. The spacing between seams can be set as required by adjusting the guide accordingly. Trace the seam line for the first seam on the fabric or have the edge guide run along the straight-cut fabric edge. When you have completed the first seam move the workpiece sideways so that the edge guide runs along the first seam or the traced seam line. For each subsequent seam, have the guide run along the preceding line of stitching (Fig. 1). Quilts are also very attractive on patterned materials.

Preparation of the material is the same as described above. Just sew around the contours and you have a very beautiful piece of embroidery (Fig. 2).
Inserting lace

For this work, two worksteps are required

**First workstep**

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<th>Stitch width:</th>
<th>Stitch length:</th>
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<td>5.0 mm</td>
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**Second workstep**

- The lace insert is first secured to the material face side and is sewn on at a narrow margin with straight stitch.
- The material underneath the lace is cut open in the middle and ironed to the sides.

**First workstep**

- Sew over the lace edge on both sides with small, dense zigzag stitches from the face side. Cut off the excess material on the reverse side (Fig. 1).
Multi-color embroidery

These multi-color embroidery possibilities set no limits to your imagination. Carried out with great devotion to detail, color and decorative effects, multicolor embroidery gives your clothes the stamp of your personality.

The following pages are intended as an inspiration for ornamentation of dresses, blouses and other garments with embroidery motifs made on your Pfaff Creative.

Transfer the pattern onto the face side of the fabric with tracing paper. Always place paper under the material before you start sewing.

First workstep: stems
- Program 06
- Change the stitch length to 2.5 mm.
- Follow the traced lines with a program 06 seam.

Second workstep: leaves
- Program 62
- Change the stitch width to 4.0 mm.
- Change the pattern length to 25.
- Push the “single pattern” key.
- Needle in down position.
- Sew the leaf slightly curved, starting at the stem. Leave the needle down in the fabric, turn the fabric through 180° and sew the pattern backwards. By changing the pattern length all leaves can be increased or decreased in size.

Third workstep: half flower
- Program 65
- Stitch width: 5.0 mm.
- Pattern length: 20.
- Push the “single pattern” key.
- The tip of the pattern should contact the stem.

Fourth workstep: flowers
- Program: 62
- Stitch width: 4.5 mm.
- Pattern length: 20.
- Push the “single pattern” key.
- Sew the petals, including those of the half flower.

Fifth workstep: flower center (dot)
- Program: 127
- Stitch width: 5.0 mm.
- Push the “single pattern” key.
- Sew the flower centers (dots).

Sewing thread: Embroidery or darning thread
Motif 1 is sewn with the above programs.
**Border 1** consists of the following programs:
- Center motif: 104
- Side motif: 53

**First workstep: center motif**
- Select program 104.
- Sew the programmed stitch pattern.

**Second workstep: side motifs**
- Select program 53.
- Sew the programmed stitch pattern along both sides of the center motif. The second side motif can be sewn without turning the fabric by pushing the “pattern mirroring” key.

**Border 2** consists of the following programs
- 130, 65, 141.

**First workstep: center motif**
- Select program 130.
- Sew the programmed stitch pattern.

**Second workstep:**
- Select program 65 and change zigzag width to 4–5 mm.
- Sew the programmed stitch pattern along both sides of the center motif.

**Third workstep: side motifs**
- Enter program 141.
- Sew the programmed stitch pattern on both sides along the previously sewn motif.
Border 3 consists of the following programs:
- Center motif: 39
- Side motif: 92
- Single motifs: 62

First workstep: center motif
- Select program 39.
- Needle in down position.
- Sew the programmed stitch pattern. Shortly before you reach the end of the seam, press the “tie-off/buttonhole” key. At the end of the pattern, the needle remains down in the material. Turn the fabric through 180°.
- Sew the opposite half back in the other direction, making sure the patterns match.

Second workstep: side motifs
- Select program 92.
- Sew the programmed stitch pattern along both sides of the center motif. The second side motif can be sewn without turning the fabric by pushing the “pattern mirroring” key.

Third workstep: center dots
- Select program 62.
- Change the stitch width to 6 mm.
- Change the pattern length to 10 mm.
- Push the “single pattern” key.
- Sew the selected program (single pattern) in the center motifs.

Heart motif (Fig. 4)
- Select program 119.
- Change stitch length to 0.25 mm.
- Change pattern length to 9.0 mm.
- Press key 27 “single pattern”.
- Press key 15 “needle down”.
- Sew the heart motif and, with the needle down, turn the material so that the tip of the heart is exactly in line with the red mark on the left side of the sewing foot.
Repeat this process until the motif is closed.
Since leather is a pliable material, an underdouble-folded paper or light non-woven mi should always be used. Do not set the stitch close, because leather splits easily. Keep ir that penetration holes in leather will be vis you have to unravel a seam.

Fancy seams in leather

<table>
<thead>
<tr>
<th>prog</th>
<th>Thread: embroidery/darning thread</th>
<th>Needle: 130/705 H-LR, size 80</th>
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<tbody>
<tr>
<td>Optional</td>
<td>♂ ♂</td>
<td>-3+</td>
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* Teflon sewing foot (special accessories)

Flat leather seams

Overlap the raw edges by about 1/2 cm stitch both sides at a narrow margin using st stitch. Instead of straight stitch it is also po to use zigzag stitch or some other program f double seam. This method of sewing is com used for joining parts of different colors patchwork.
Shell edging

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<tr>
<td>14 16</td>
<td>X X</td>
<td>-5+</td>
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</table>

Stitch length: 1.5 mm  
Key: 28 pattern mirroring in program 16

Shell edging provides nice trimming, especially on sheer, soft materials. Fold over the fabric edge once along the line which is to be decorated. During sewing, the blindstitches draw in the fabric edge at regular intervals, thus producing a shell-edge effect. The stronger the needle thread tension, the more the fabric edge is indented (Fig. 2). Adding a wool thread in a different color not only reinforces the edge, but also makes an attractive contrast trimming.

Place the material under the needle so that it protrudes far enough to allow the wide zigzag blind-stitch to pass over its edge (Fig. 1).
Fringe seams

Butterfly
Two worksteps are required for this work:

First workstep (wings)

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<td>2 - 3</td>
<td>Fringe foot</td>
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Stitch width: 1.5
Stitch length: 0.5
Fringe foot: (special accessory)

Second workstep (body)

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<tbody>
<tr>
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<td>A A</td>
<td>2 - 3</td>
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Pattern length: as required
Key: single pattern

First workstep (wings)
- First sew a fringe seam as a trial, using a piece of waste fabric. During sewing, try different stitch lengths until you find the one most suitable. The wings are best sewn in circular seams, working from the outside inwards.

Second workstep (body)
- Sew the body as shown in the illustration (Fig. 1).

Flower

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<tbody>
<tr>
<td>06</td>
<td>62</td>
<td>A A</td>
<td>-3+</td>
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Trace the pattern of the flower on the fabric, the petals, stem and leaves as shown in the illustration. Now fill in the seed capsule using a seam, working spirally from the outside inwards (Fig. 2).

Suggestions: (not described)
Hem-stitching

As the illustrations show, hem-stitching can be used in different ways, both as an edge reinforcement and as a fancy effect on table linen or clothing articles.

"Ladder" hem-stitching

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<tbody>
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Stitch width: 2 mm
Thread: embroidery/darning thread
Needle: normal needle, size 80

In the same way as in hand hem-stitching, thread are drawn out of the fabric at the required width. Stitch the fabric edges with the program indicated above.

The needle must penetrate very closely to the edge where the threads were drawn. When sewing the second seam, make sure the crossed threads are always tied off parallel (Fig. 1).

Hem-stitching turned-in hem edges

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Stitch width: 2 mm
Thread: embroidery/darning thread

To hem-stitch a turned-in hem edge (Fig. 4), first draw the number of fabric threads for the required hem-stitch width. Place the hem breaklin against the edge where the threads are drawn and tack it in place. Now secure the hem using the above-mentioned program.
Hem-stitching with wing needle

| prog | | | | |
|------|---|---|---|
| 164  | 166 | XX | -3+ | 2A |

Thread: embroidery/darning thread
Needle: wing needle

For this work, four threads are drawn, five threads are left in, then a further four threads drawn. oversew the five threads left in the fabric with program 164 or 166 (Figs. 2 and 3).

Hem-stitching as an edge finish made with the wing needle

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<tbody>
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<td>XX</td>
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<td>0A</td>
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</table>

Thread: embroidery/darning thread
Needle: wing needle

This edge finish is used on very light and thin fabrics. It is particularly well suited for valances, flounces and frills or for finishing edges. For this sewing job no threads must be drawn out of the fabric. Sew at sewing-foot width along the fabric edge, using the edge of the sewing foot as a guide. Then carefully trim the excess material along the hemstitching with a small scissors (Fig. 5).
Linen embroidery

Plain embroidery on linen is a widely known and popular ornamentation. The patterns illustrated can be made on your Pfaff Creative in a very short time by combining all kinds of stitches. Transfer the pattern illustrated onto the face side of the fabric either by ironing it on (iron-on pattern) or with the aid of tracing paper. Always place two sheets of tissue paper under the fabric during embroidering.

Transfer the pattern illustrated onto the face side of the fabric either by ironing it on (iron-on pattern) or with the aid of tracing paper. Always place two sheets of tissue paper under the fabric during embroidering.

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<th>R</th>
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<tbody>
<tr>
<td>06</td>
<td>10</td>
<td>117</td>
<td>156</td>
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</table>

Thread: embroidery/darning thread

The motif in Fig. 1 is sewn with the above-mentioned programs.

**First workstep:** scallops
- Program: 10
- Stitch width: 2.0 mm
- Stitch length: 0.3 mm
- Needle in down position
- Stitch along the pre-traced contours.

**Second workstep:** stems
- Program: 06
- Stitch length: 2.5 mm
- Follow the pre-traced stem lines with a program 06 seam.

**Third workstep:** leaves
- Program: 117
- Stitch width: 5.0 mm
- Press the "single pattern" key.
- Sew the leaf motifs slightly curved, starting at the stem.

**Fourth workstep:** eyelets
- Program: 156
- Press the "single pattern" key.
- Sew the eyelets in the middle of the scallops according to their pre-traced position.
Eyelet embroidery with the eyeletting plate (special accessory)

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<th>prog</th>
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<tbody>
<tr>
<td>11</td>
<td></td>
<td>2 – 3</td>
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</tbody>
</table>

Key: 28 pattern mirroring
Feed dog: lowered
Presser bar lifter: in darning position (page)
Sewing thread: embroidery and darning thread

Fitting the eyeletting plate: Insert the eyeletting plate so that the catches enter in the three notches and push it towards the back (Fig. 1) so that the middle tooth will engage. Then push the eyeletting plate down at the front so that it snaps into position. Place the traced fabric tautly in an embroidery hoop. Cut one or two fibres in the fabric and place the fabric over the pin. The fabric must fit tightly around the pin. Draw the bobbin thread and hold it for the first few stitches (set presser bar lifter in darning position beforehand). Slowly turn the hoop clockwise at the same time. Secure the seam with a few straight stitches at the edge (Fig. 2).