

Part 4: Programming manual

1. Programming the seam contours	1-5
2. Milling the shape-related parts of the style kit	
2.1 Calling up the "milling" menu	6, 7
2.2 Milling the transfer plate, centre slider, outer frame and hose insert	8-13
3. Assembling, gluing and adjusting the style kit	
3.1 Assembling the centre slider	14, 15
3.2 Assembling and gluing the inner frame	16-19
3.3 Assembling the outer frame	20-27
3.4 Assembling the hose insert	28, 29
3.5 Assembling and gluing the transfer plate	30-48
3.6 Making fine adjustments on miscellaneous parts	49, 50
4. Correcting the program	
4.1 General information	51
4.2 Correcting the positions of the corner stitches	52
4.3 Changing the stitch length	53
4.4 Changing the position of the seam pattern	54
4.5 Changing the position of the seam contours and forming an additional seam	55, 56
4.6 Programming the signal points for the stroke position adjustment	57, 58
4.7 Changing the activation timing of the transfer plate centre slider	58
5. Processes during disk operation	
5.1 Formatting the disk	59
5.2 Calling up the contents of a disk	59
5.3 Deleting a program from a disk	60
5.4 Transferring a program from the machine to a disk	61
5.5 Transferring a program from the disk to a machine	62
6. Calling up, printing and deleting data from the machine memory	
6.1 Deleting the program from the memory	63
6.2 Questioning the geometry, data and code	64
6.3 Printing the pocket parameters	65
6.4 Calling up the available pockets	65
6.5 Joining programs	66
6.6 Deleting the joining of programs	67
6.7 Changing the identity code of a program	68

Part 4: Programming manual

Program Version: A03

1. Programming the seam contours

1.1 Programming the seam contours of the available basic pocket styles

During programming, the parameter values can be corrected as follows:

1. When the key "Enter" is not yet pressed:
 - Press key ← as often as necessary
 - Repeat the entry with the correct values
2. When the key "Enter" has already been pressed:
 - Call up the "Programming" menu using the menu key
 - Repeat all previous entries

Entry sequence	Remarks/On-screen text (BT)
<i>Prerequisites:</i>	
– Geometry of the outer and seam contour is known	
– Stitch length is known	
– Menu "Service technician" called up	– BT: 1: Programming
1. <u>Call up menu "1":</u>	
– Press key "1"	– BT: Input identity of the pocket
2. <u>Enter the identity code:</u>	
– Enter the no.	– Select a number between 1 - 510 and observe the following: If a customer has several 805 sewing units and programming is not done on one unit only, a code number must be entered that has not been used before. Otherwise, different style kits will have the same code.
– Press key "Enter"	– 4 basic pocket styles and the following BT appear on the screen: Select the desired pocket style (1-4) New page
3. <u>Selecting a basic pocket style:</u>	
– If necessary, press key ← or →	– Until the 4 pocket styles appear, one of which is the desired style. A total of 16 styles is available.
– Select the style using the corresponding key (1, 2, 3 or 4)	– BT: 1: Single seam beginning on the left 2. Single seam beginning on the right 3. Double seam beginning on the right 4. Double seam beginning on the left

4. Selecting the desired process:

- Press key 1, 2, 3 or 4

- Press key "1" for sewing start on the left side, so that the left side seam visible in the wrapping actually is a forward seam.
Press key "2" for sewing start on the right side, if eg the lower material pieces are very wide
- Besides the display of the selected pocket style the following BT appears:
Enter the parameters of the pocket.

5. Entering the pocket parameters:

- Proceed according to the BT

- When a double seam is programmed the question "Inner slider? Yes/No" appears, which refers to the transfer plate version. On the 805-121 for example, the inner slider is needed for certain fabric types, where the seam margin with respect to the outer seam should be smaller than 1.5 mm.
- After the last entry the available tack versions appear on the screen.

6. Enter the desired tack version:

- Press the corresponding key

- BT:
Enter the parameter values of the tack

7. Enter the parameter values of the tack:

- Proceed according to the BT

- After the last entry the following BT appears:
9 8 7 Marked sections of the code field of the
4 5 6 transfer plate are to be covered with
3 2 1 reflector tape!

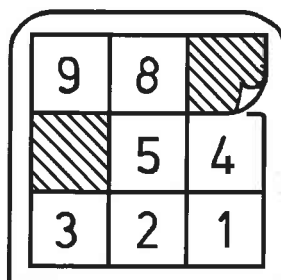
Proceed with Enter

8. Mark the sections to be covered with reflector tape on the code field 1:

- Proceed according to the BT

9. Call up the menu "Service technician":

- Press key "Enter"



1.2 Programming "free" seam contours

As compared to the method described in subject 1.1 this programming mode offers the following additional possibilities:

Programming of contours that differ from the available basic pocket styles, eg asymmetrical styles.
Formation of additional seams that are not parallel to the side seams or that are not straight.

The data of programs with "free contours" can be corrected as follows:

1. When the programming mode has already been left:
In the menu "Program correction" press key 8 and enter the running number of the program to be corrected.
2. Call up the line with the data to be corrected:
To do this, press the key ↓ ↑ or so often, until the belonging seam section with the corresponding line appears.
This line must be the last line of the listing.
3. Delete the line:
To do this, press key 7 (DELETE).
4. Enter all data of the line with the corrected values:
As described in this subject.

Entry sequence

Remarks / On-screen text (BT)

Prerequisites:

- Geometry of the outer and seam contour is known
 - Stitch length is known
 - Position of the signal points for certain functions is determined
 - Menu "Service technician" called up
-
1. Call up menu "1":
 - BT:
1: Programming
 2. Enter the identity code:
 - BT:
Input identity of the pocket
 - Enter the no.
 - Select a number between 1 - 510 and observe the following:
If a customer has several 805 sewing units and programming is not done on one unit only, a code number must be entered that has not been used before. Otherwise, different style kits will have the same code.
 - Press key "Enter"
 - 4 basic pocket styles and the following BT appear on the screen:
Select the desired pocket style (1-4)
Free contour: 0
New page
 3. Call up the "Free contour" mode:
 - Press key "0"
 - BT:
Start
X:
Y:
Stitch length

Entry sequence**Remarks/On-screen text (BT)****4. Enter the position of the seam beginning point and the stitch length**

Enter all values in mm and observe the following:

- The coordinates refer to the X- and Y-axis
- Enter the minus sign "-" only for X-values to the right of the Y-axis
- Confirm all entered values using the key "Enter"
- When the entries have been made, a dotted line represents the "idle travel" up to the seam beginning point, while the seam sections appear as continuous lines.
A list of the entries LINE, AWARC, CWARC, SEON, SEOF, SPEED, DELETE and FUN 805 appears as well.

5. Enter the function "Sewing":

- Press key 4 for SEON

- BT:
SEON

6. Enter the sewing speed:

- Press key 6 for SPEED
- With the keys ← → enter the desired value

- BT:
SPEED: 100%
- The values can be changed in steps of 5%

7. Entering the data of all other points of the seam contour:

When the seam section to the next point is straight:

- Press key 1 for LINE
- Enter the coordinates of the end point
- Answer the question "Stitch at end" with the key YES or NO

- BT:
LINE
END
X:
Y:
- BT:
STITCH? YES/NO
- "YES" is entered the sewing speed is reduced in this section

When the seam section to the next point should be an arc:

- Press key 2 (AWARC) or 3 (CWARC)
- Enter the coordinates of the end and centre point of the arc

- AWARC = Arc in anti-clockwise
CWARC = Arc in clockwise direction
- BT:
AWARC or CWARC
END
X:
Y:
CENTER
X:
Y:

Entry sequence

Remarks / On-screen text (BT)

When the following seam section is not to be sewn at the previously entered speed:

- Press key 6 for SPEED
- With the keys ← → enter the desired value

- BT:
SPEED: eg 100%

When certain functions are to be triggered in the point entered last:

- Press key 8 (FUNCT)
- Enter the no. of the desired function and press key "Enter"

- No. Function

01	Zigzag on (on 805-111)
02	Zigzag off (on 805-111)
03	Enabling activation of "Inner slider to rear" (Enter before function 04)
04	Inner slider to the rear
05	Questioning "Inner slider at rear"
06	Stroke position adjustment On
07	Stroke position adjustment Off
08	Blowing out the sewn piece
09	Lowering the transfer plate
10	Raising the transfer plate

- BT: FUN 805/XX

8. After entry of the end point of the seam contour

- Enter the function "Sewing off" using the key 5 (SEOF)
- Press key "Enter"

- BT:
SEOF
LIFT
NO LIFT

- The entry "Lifting the transfer plate" (LIFT) is only required for special applications
- If yet another seam contour is to be included: Proceed as described from point 5 onwards

9. After the entry of all geometry data:

- Press the menu key

- Menu "Service technician" is called up

10. Call up the menu "Program correction" and select the process "Free contour"

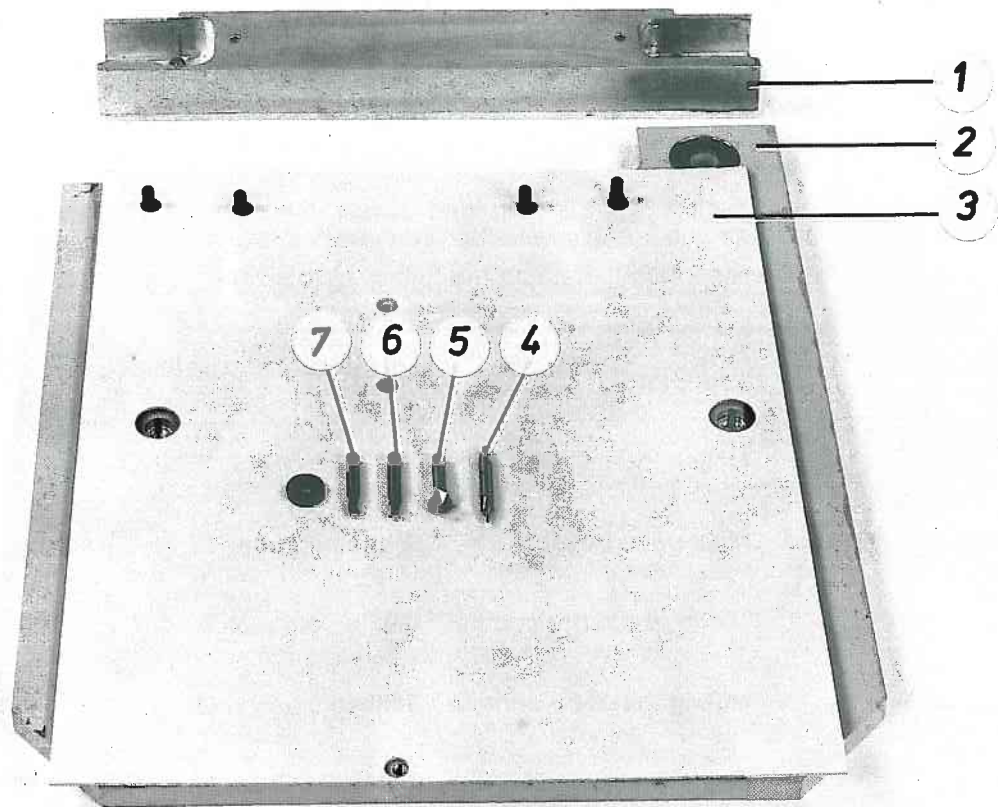
11. Answer the questions in the BT

- These are the following:
"Pocket size", "Folding variant", "With centre slider", "With folding" and "With stroke position"

2. Milling the shape-related parts of the style kit

2.1 Calling up the menu "Milling"

Process	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
– Position of the carriages to the milling station is correct	– See subject 6.4 of the service manual
– Menu "Service technician" called up	– BT: 4: Milling
– Seam program has been set up	
– Parts of the style kit exist	
– Main switch on the milling machine turned on	
– Speed "3" adjusted on the milling machine using dial 8	
– Aids are existing	– Milling cutters 7 and 6 with 4 and 6 mm – Forming cutter 5 – Centre drill 4 – Milling plate 2 – Cardboard milling base 3 – Support bar 1
1. <u>Call up menu "4"</u>	
– Press key "4"	– BT: Milling for cl. 805-121 Milling for cl. 805-111
– Determine the subclass	– See name plate on the sewing unit
– Make the corresponding entry	– Besides the listing of programs the following BT appears: Should a program be milled: Yes
– Press key "Yes"	– BT: Enter the running no. of the program to be milled
– Enter the running no. of the program	
– Press key "Enter"	– BT: Milling Transfer plate Centre slider Outer frame Hose insert Front slider (if necessary)



2.2 Milling the transfer plate, centre slider, outer frame and hose insert

2.2.1 General information

The mentioned parts can be milled in any sequence.

When the transfer plate is milled, the groove, however, must be milled first, before the bevel can be milled in 2 steps with 2 different forming cutter heights each. Before "Contour milling" of the outer frame, center all holes.

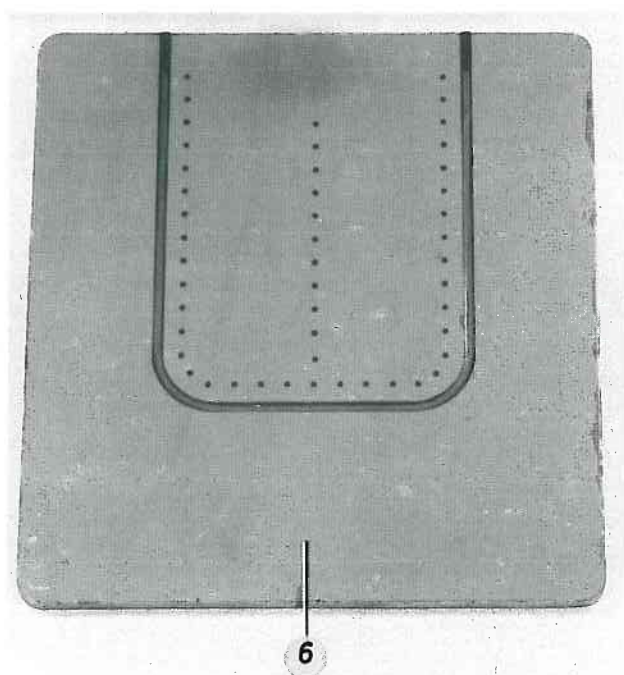
The dial at the milling machine for regulating the speed should always be set at "3".

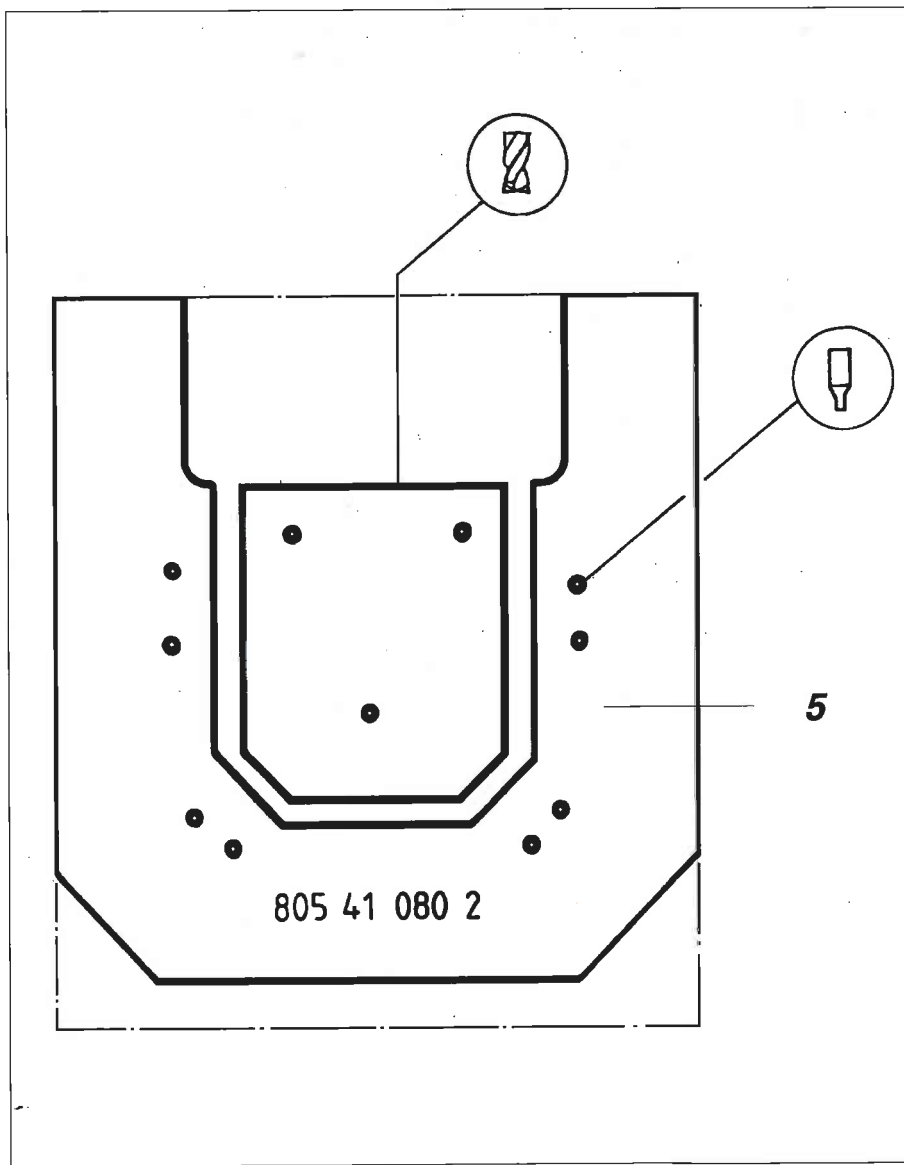
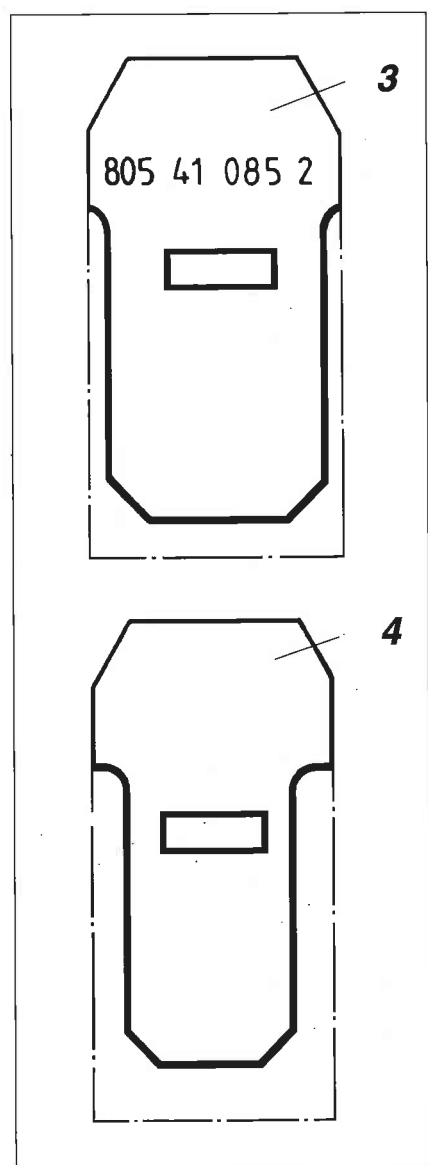
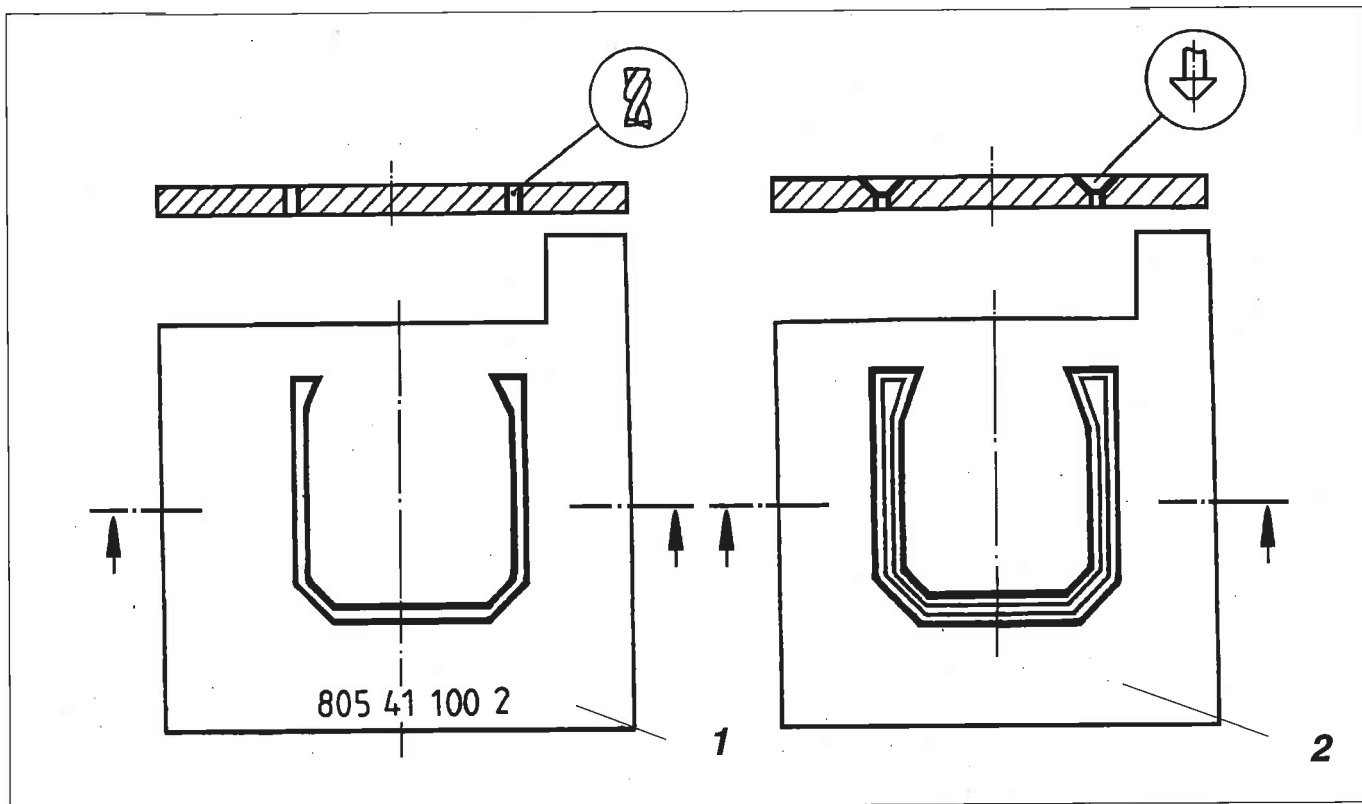
The hose insert of the 805-121 can only be milled by the customer, when the width of the folding bars of the outer sliders does not exceed 5 mm.

When the bars are wider than 5 mm, eg bars for knitted fabrics, the hose inserts must be milled at the factory. Here, a program with an accordingly "smaller" contour is formed.

For milling and drilling the corresponding element the following tools should be used with the following advance speeds:

Element	Process	Tool	Advance speed
Transfer plate 1	Milling the groove	Milling cutter 6 Ø	66%
Transfer plate 2	Milling the bevel	Forming cutter	66%
Upper centre slider 3	Milling the outer contour	Milling cutter 4 Ø	33%
Lower centre slider 4	Milling the outer contour	Milling cutter 4 Ø	33%
Outer frame 5	Centering the holes	Centre drill	100%
Outer frame 5	Milling the contour	Milling cutter 6 Ø	66%
Hose insert 6 (only on 805-121)	Milling the groove	Milling cutter 4 Ø	33%





2.2.2 Milling the parts of the style kit

Process	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– "Milling" menu called up	– BT: Transfer plate Centre slider Outer frame Hose insert Front slider (if necessary)
1. <u>Call up the desired process:</u>	
– Press the corresponding key	– BT after selection of "Transfer plate": Contour milling Form milling – BT after selection of "Centre slider": Fabric correction – BT after selection of the process "Outer frame" or "Front slider": Centering holes Contour milling – BT after selection of "Hose insert": Fix part no. 805 40 232 0 Install 4 mm cutter for 4 mm depth
2. <u>Moving the transfer carriage to the "Mounting position":</u>	
<i>When the process "Transfer plate" was selected:</i>	
– Either select the process "Contour milling" for milling the groove using the key "Enter"	– BT: Fix part no. 805 41 100 2 Install 6 mm cutter
– or the process "Form milling" for milling the bevel using the keys "↓" and "Enter"	– BT Fix pre-milled transfer plate Install form cutter
<i>When the process "Centre slider" was selected:</i>	
– Enter the material thickness in mm as a "correction value"	– The centre slider is milled "smaller" by this value
– Press key "Enter"	– BT: Upper centre slider Lower centre slider
– Either select "Upper centre slider" using the key "Enter" or "Lower centre slider" using the keys "↓" and "Enter"	– BT: With window Without window
– Either select the process "With window" or the process "Without window"	– Select the process "With window" only, when the pockets are to be set "according to the pattern". Centre sliders without window are sturdier.

Process

Remarks / On-screen text (BT)

When the process "Outer frame" or "Front slider" was selected:

- Either select "Centering hole" using the key "Enter"
- Or select "Contour milling" using the keys "↓" and "Enter"

- BT:
Fix part no. 805 41 085 2
Install 4 mm cutter
- BT:
Fix part 805 41 080 2 or 805 41 094 2
Install center drill
- BT:
Fix part 805 41 080 2 or 805 41 094 2
Install 6 mm cutter

When the process "Hose insert" was selected:

- The transfer carriage is already in the "Mounting position"

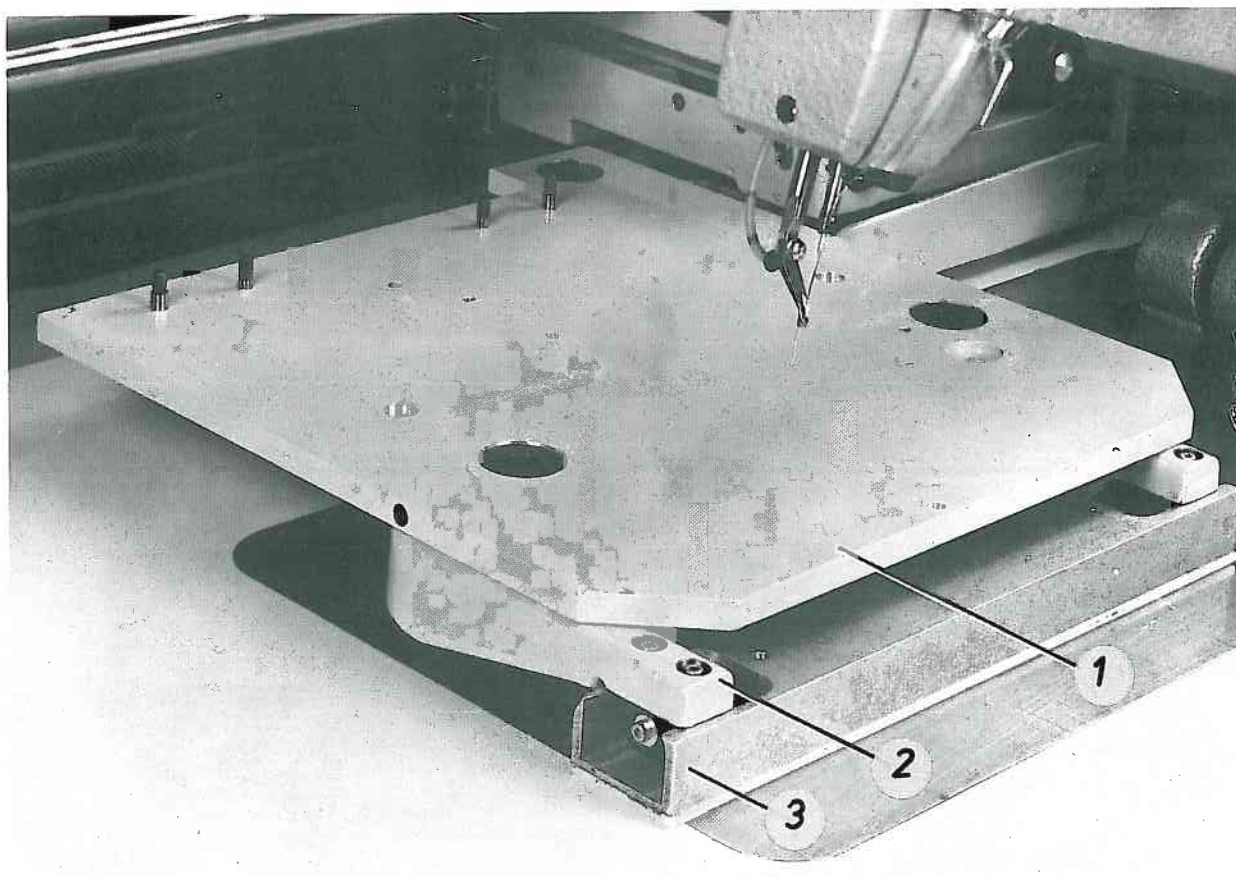
3. When the supporting plate and milling plate are not yet mounted:

- Insert the support bar 3 into the holder of the transfer lever 2
- Screw the milling plate 1 on the transfer lever 2
- Lay the milling base on the milling plate

- The milling base is of 2-mm-thick cardboard

4. Screw the corresponding semi-finished part on the the milling plate

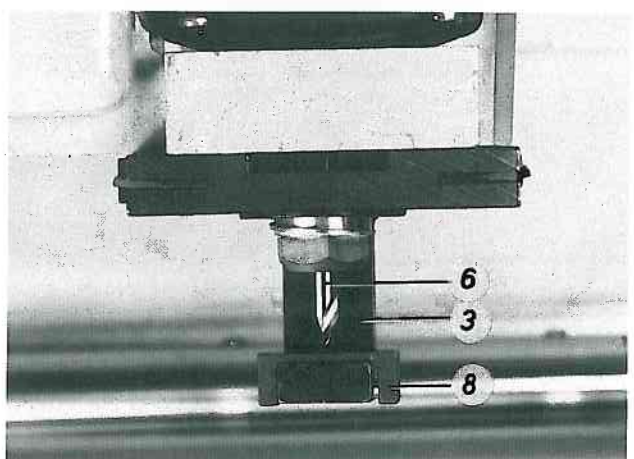
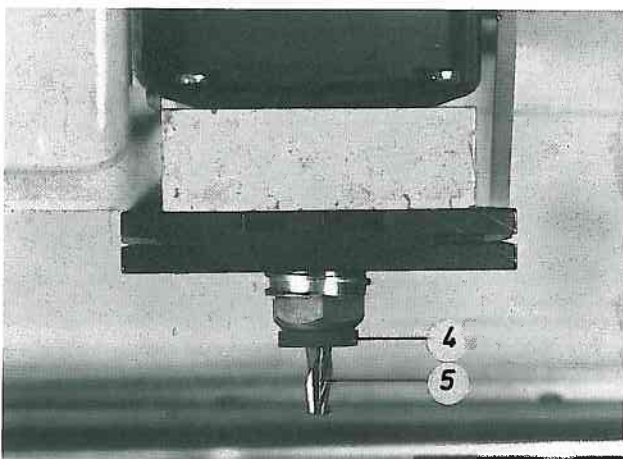
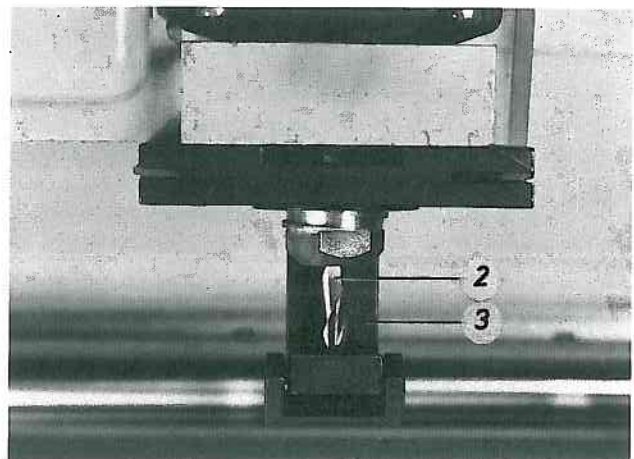
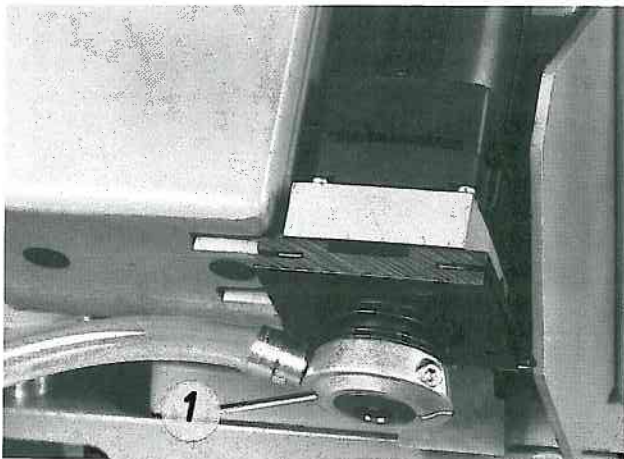
- See BT



5. Insert the respective tool:

- Remove the suction head 1
- Insert the milling cutter 2 or centre drill 6 or forming cutter
- Lock the gauge 3 into place in the holder of the suction head
- Adjust the milling cutter or centre drill or forming cutter to the gauge
- Fix the tool
- Slightly loosen the tool, pull it downward accordingly and fix it
- Remove the gauge 3
- Slip the sealing washer 4 on the milling cutter and push it right against the clamping sleeve
- Lock the suction head 1 into place in the holder

- The centre drill must rest on the bracket 8 of the gauge.
- The forming cutter must be at the same height during "pre-milling" of the bevel in the transfer plate
- The milling cutter 2 must rest on the surface of the gauge 3.
- The milling cutter must be at this height when "finish-milling" the bevel.
- To mill the groove in the hose insert the milling cutter (4) must be set higher by 0.8 mm
- Thereby, the tool is raised by approx. 1 mm
- So as to prevent chips from getting into the milling machine



Process

Remarks / On-screen text (BT)

6. Move the transfer carriage to the "milling position" and swing down the milling device:

- Press the key "Enter"

- BT:
Proceed with Enter

7. Enter the defined advance speed:

- Press the key ← or key → accordingly

- Enter 66% for milling the transfer plate, 33% for the centre slider and 66% for the outer frame

8. Activate the milling or centering process:

- Press key "Enter"

- The milling machine operates and is lowered. The carriage motion for the milling process starts, when the switch "Milling machine down" is activated.
- In the case of milling cutter breakage proceed as follows:
 1. Press key "Stop":
Carriages stop
BT: Cutter broken? Yes/No
 2. Press key "Yes":
Vacuum unit off
Milling machine off and up
Swing the milling machine up
 3. Press the key "r":
Carriages to the "Mounting position"
 4. Restart the process as described in point 1 of this subject
- Until the following functions have taken place:
 1. Milling machine off and up
 2. Milling machine up
 3. Carriages to the "Mounting position"
 4. BT:
Milling
Transfer plate
Centre slider
Outer frame
Hose insert
Front slider (if necessary)

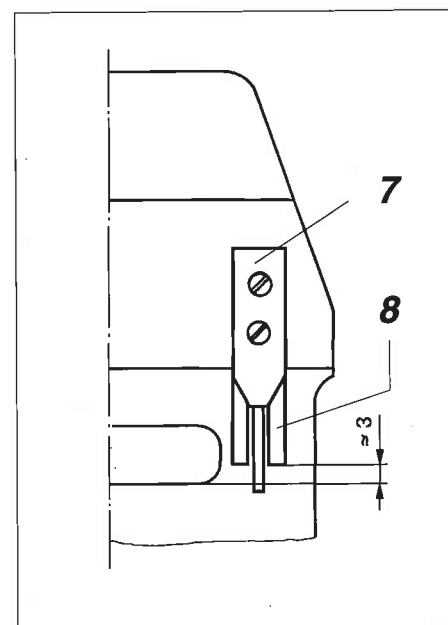
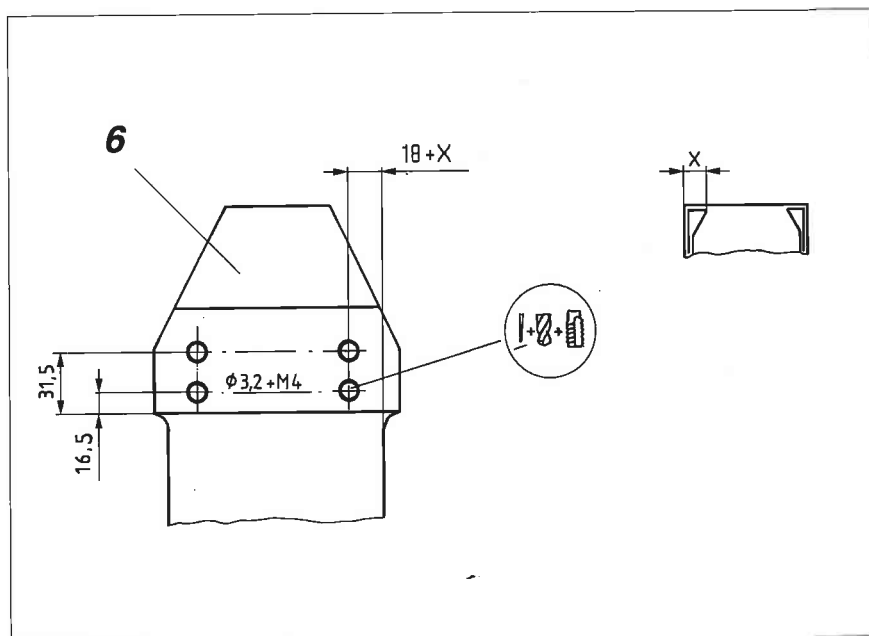
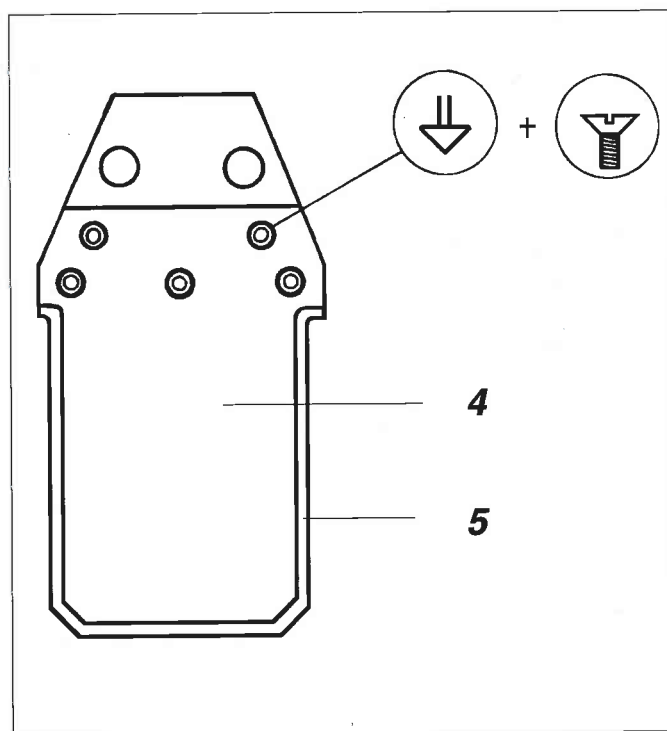
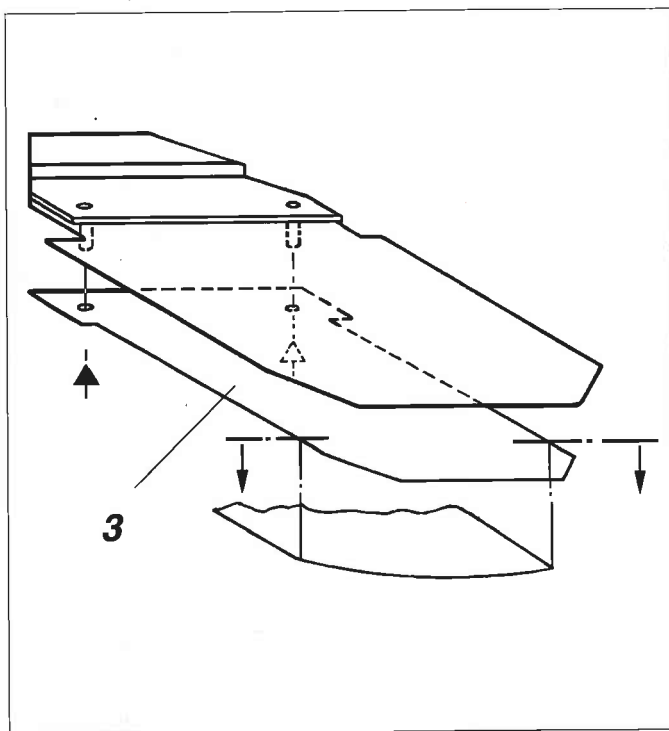
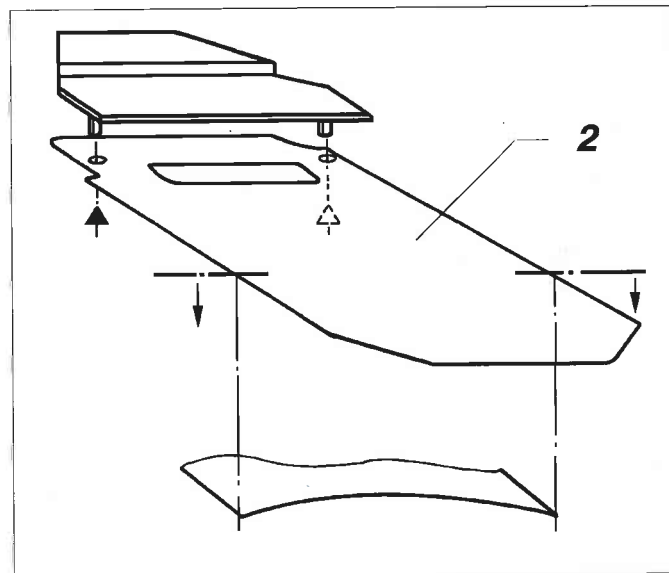
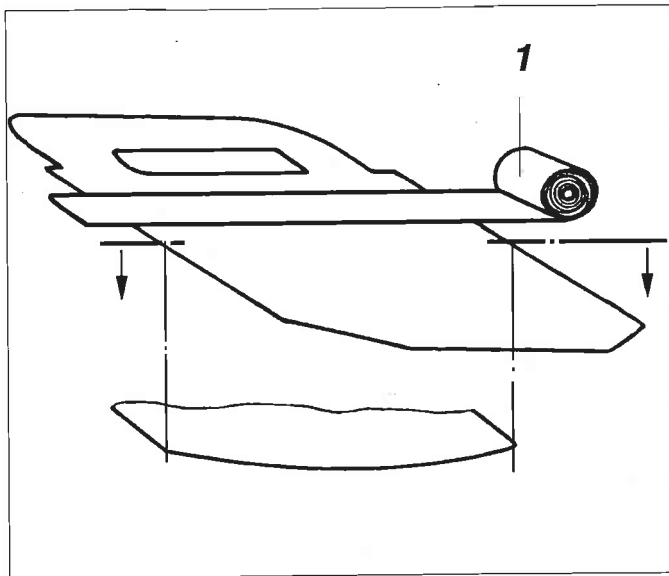
- Wait

3. Assembling, gluing and adjusting the style kit

3.1 Assembling the centre slider

The two plates of the centre sliders are usually slightly arched. To even out this deformation, the two plates must be stuck together at a certain position to each other.

Process	Remarks
1. <u>Deburr and polish both centre slider plates</u>	– eg using a file and a polishing wheel
2. <u>Stick together both centre slider plates:</u>	– Clean both plates
– Stick double-sided adhesive tape 1 on the whole surface of the smaller plate	– Stick on the side shown in the fig. using the necessary pressure
– Remove the foil from the stuck on adhesive tape 1	
– Slip the larger plate 2 on the pins of the holder	– Make sure that the plate is positioned to the holder as shown in the figure
– Slip the smaller plate 3 on the pins of the holder	
– Press both plates against each other with a maximum of pressure	
– Countersink 5 holes	– Make sure that the screw heads are level with the plate 4
– Screw both plates 4 and 5 on the holder	– With 5 countersunk head screws
3. <u>Mount the pocket stoppers and cloth clamps:</u>	
– Mark the position of the 4 threaded holes on the plate holder 6	
– Drill 4 holes with a of 3.2 mm	
– Screw the stoppers 8 and the clamps 7 on the holder	– Observe the following:
	– As a pre-adjustment, position the stoppers at a distance of 3 mm to the lower cut-out edge
	– The clamps should be pushed to the rear up to the stoppers
– Adjust the pressure of the clamps 7	– To do this, bend the clamps such that the cut pocket is clamped securely with a minimum of pressure.



3.2 Assembling and gluing the inner frame

Process

Remarks

1. Deburr the inner frame

2. Drill and countersink holes:

- Drill 2 holes with a 4.2
 - In the centering holes
- Drill 1 hole with a 7.1
 - In the centering holes
- Countersink both 4.2-mm-holes
 - For M4-countersunk head screws

3. Fasten 2 fastening screws:

- Slide the screws 4 through the two countersunk holes
- Slip the washers 3 on the screws
- Turn the nuts 2 on the screws

4. Screw-on the suction nozzle 1

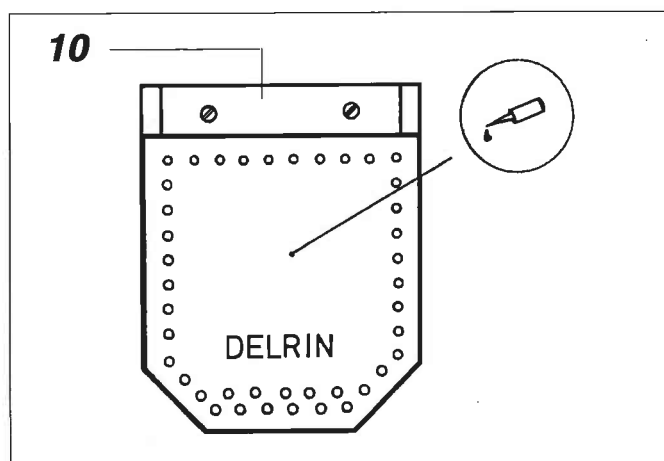
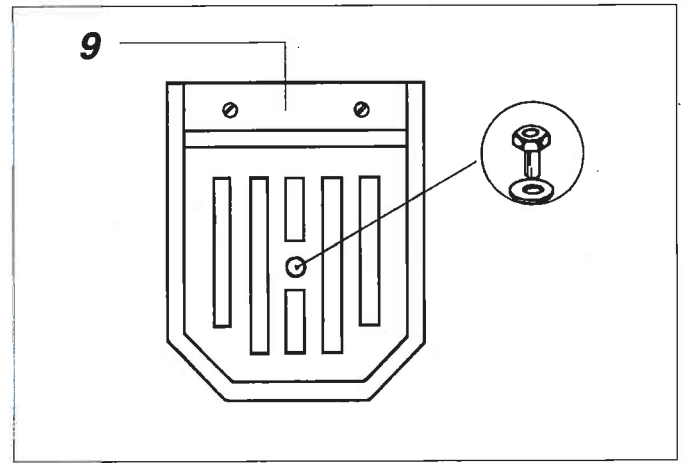
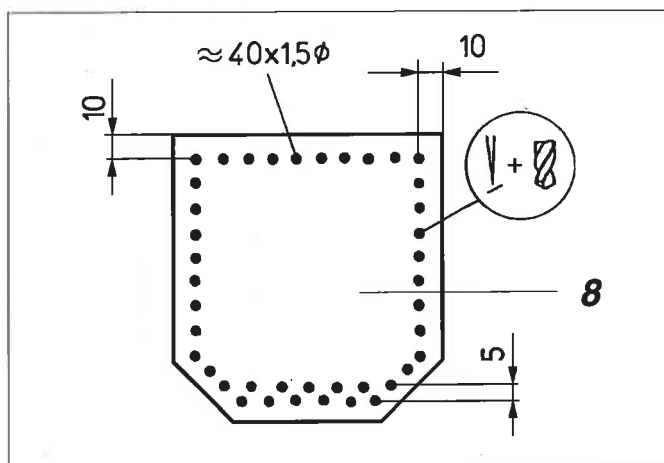
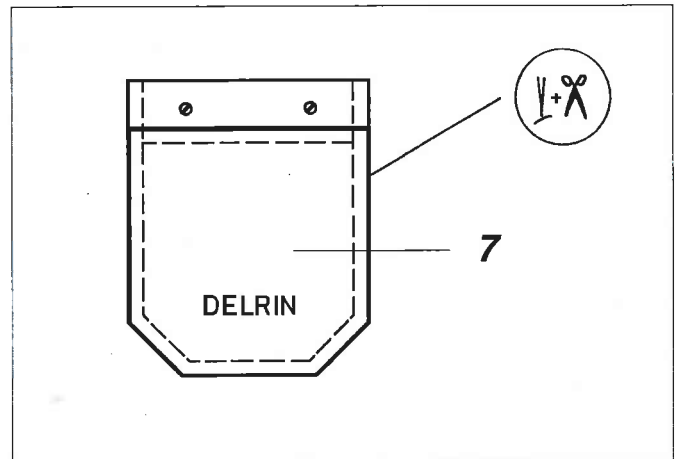
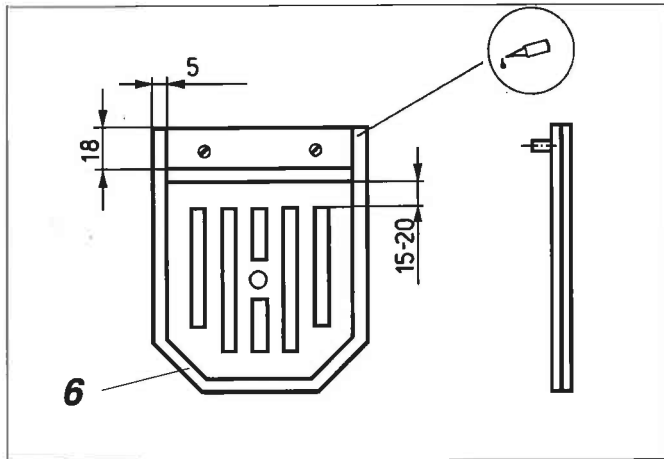
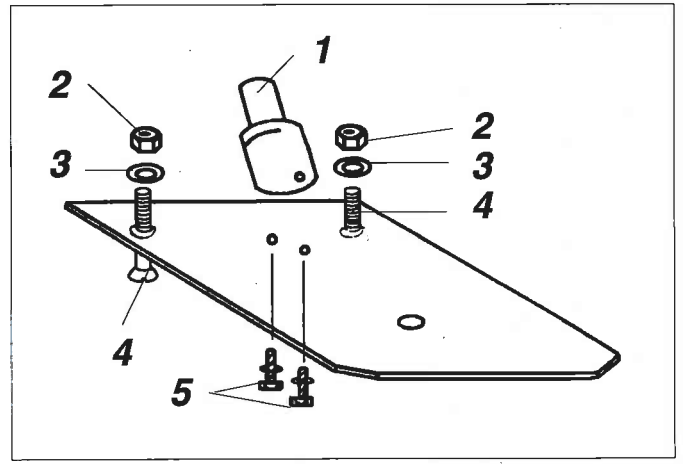
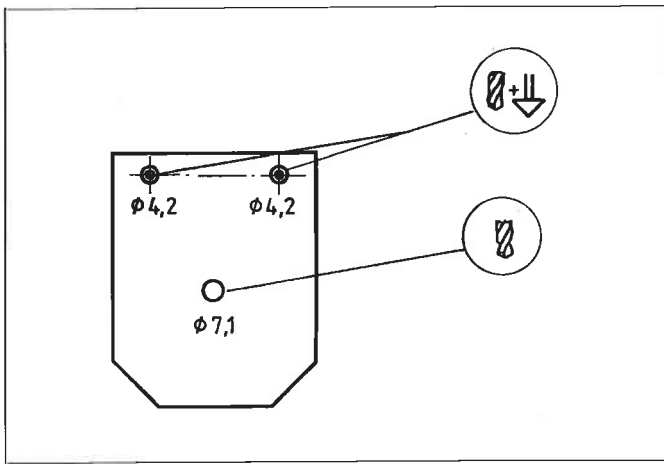
- With 2 M3-hexagon head cap screws 5

5. Stick on the rubber strips 6:

- Stick the rubber strips on the inner frame edge
 - The 5-mm-wide sponge rubber strip should be flush with the outer edge of the inner frame
- Stick the rubber strips parallel to the upper edge of the inner frame
 - At a distance of 18 mm
- Stick the rubber strips within the vacuum area on the inner frame
 - These strips should "support" the Delrin, which is stuck on later.
The distance between the strips and to the already glued inner frame edges should be approx. 15-20 mm. Larger distances may lead to a "fullness" of the set pocket

6. Cut out, drill and stick on the Delrin:

- Mark the outer contour of the Delrin 7
 - The lateral and lower contour must be identical with the outer contour of the inner frame. The upper Delrin edge must be flush with the upper rubber strip.
- Cut out the Delrin
- Mark the position of the ca. 40 vacuum holes on the Delrin 8
 - Observe the following:
The distance between the holes and the Delrin edge should be ca. 10 mm.
Mark another row of holes at a distance of 5 mm to the row of holes at the front edge.
- Drill 1.5-mm-holes in the marked places
- Slide the bushing through the hole of the inner frame 9
- Stick the Delrin on the rubber of the inner frame 10



Process**Remarks****7. Stick on the adhesive tape 1:**

- Cut ca. 8-mm-wide strips and stick them on the Delrin
- Cut 5-mm-wide strips and stick them on the rubber

- The strips must be flush with the outer edge of the Delrin
- In the upper area of the inner frame. Depending on the thickness of the pocket opening, it may be necessary to grind off the rubber or to stick several adhesive tapes on top of each other.

8. Connect the inner frame with the holding plate:

- Place the conical springs 3 on the two screws of the inner frame
- Place the holding plate 5 on the two screws
- Turn the bushings 4 on the screws
- Turn the lock nut 6 on the screw
- Place the black conical spring 10 on the bushing

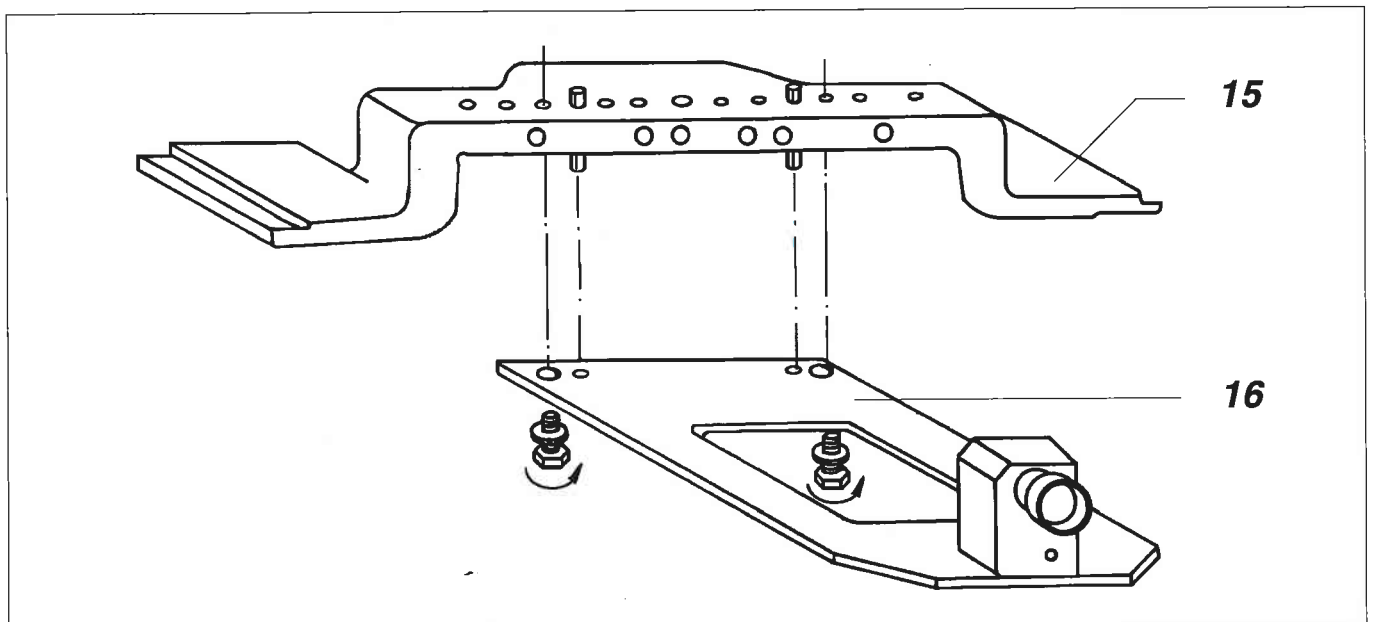
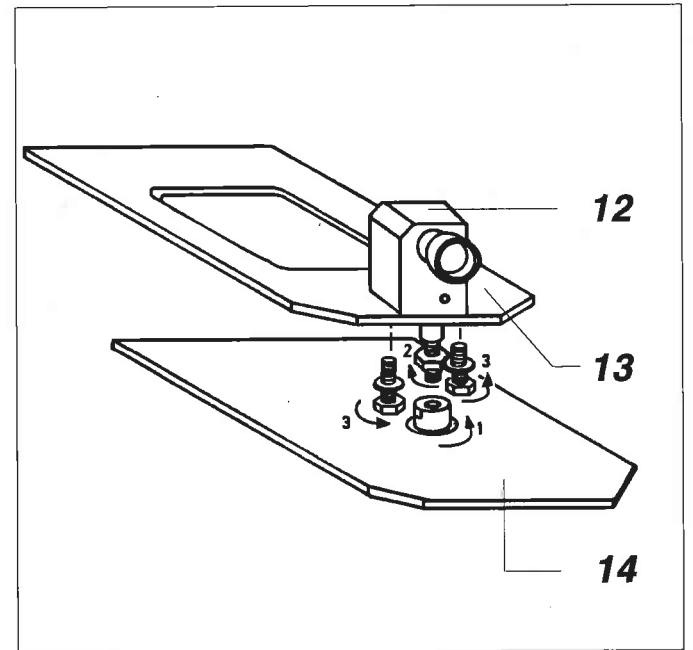
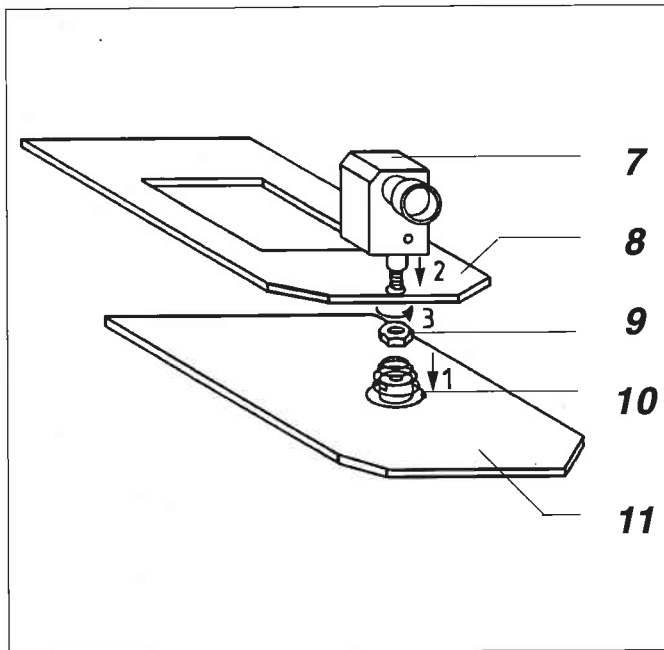
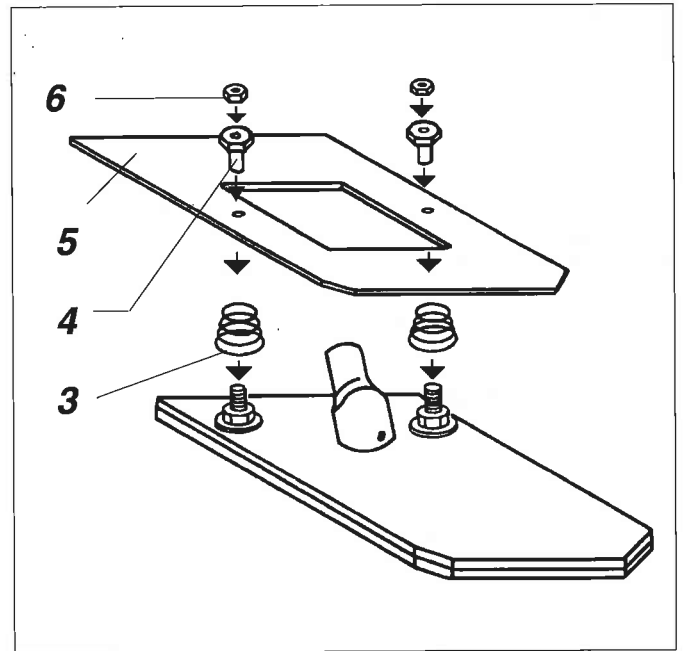
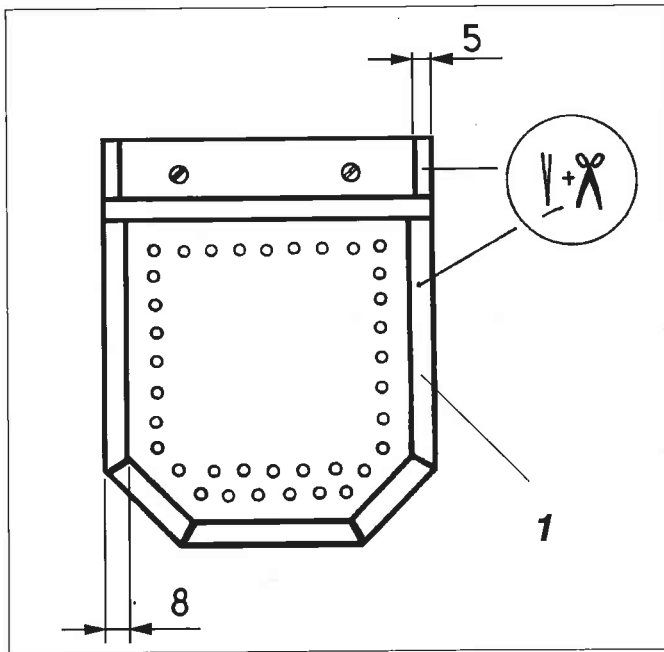
- The wider end of these bright springs must rest on the inner frame
- Turn the bushing so far that the lock nuts 6 that have to be turned on afterwards, will be flush with the screw ends
- Install the thin spring only on cl. 805-121. Use the thick spring for cl. 805-111, and in the case of special applications use it as well for cl. 805-121

- Insert the adjustment element 7 into the hole in holder 8
- Turn the lock nut 9 on the screw at the adjustment element
- Turn the bushing on the screw of the adjustment element 12
- Turn the lock nut against the bushing
- Screw the adjustment element 12 on the holding plate 13

- The distance between the holding plate 13 and the inner frame 14 should be the same as the distance between the two other connection points
- Align the adjustment element such that the inner frame 14 can be moved smoothly

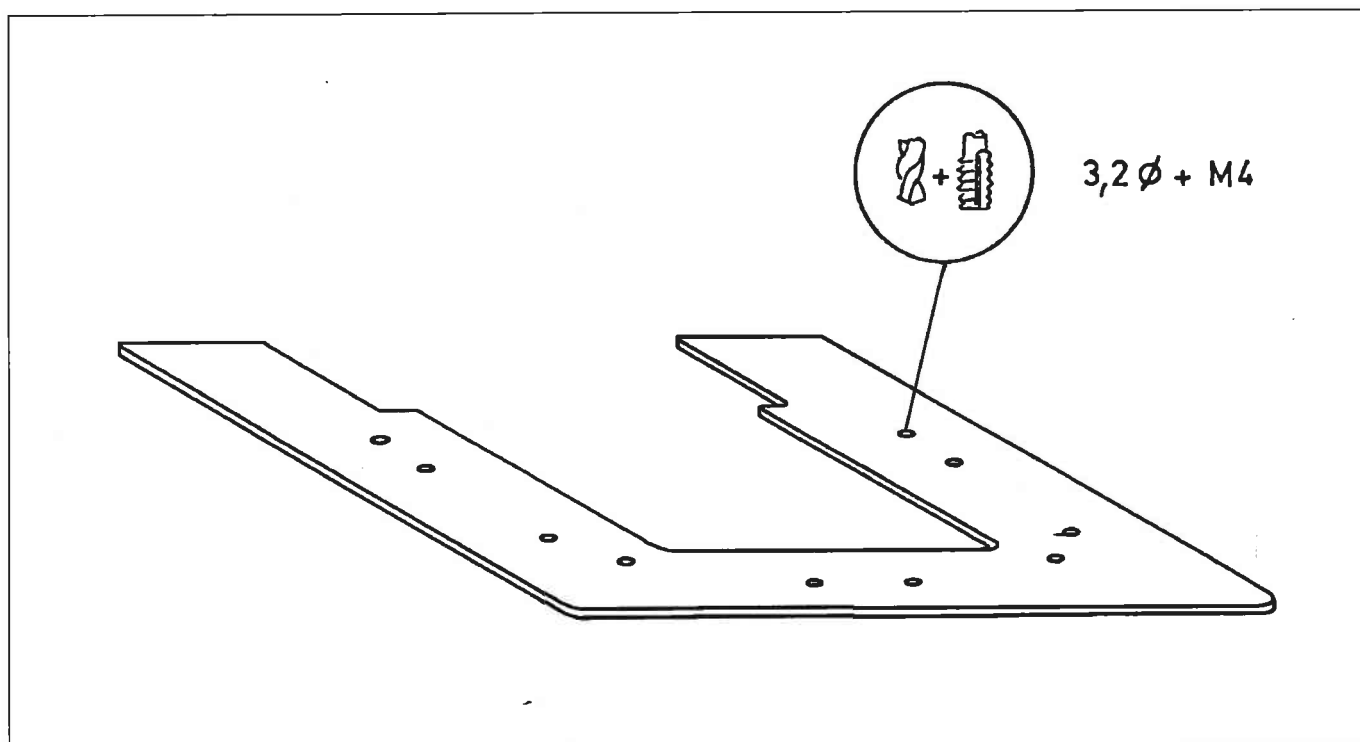
9. Screw the holding plate 16 of the inner frame on the bridge 15

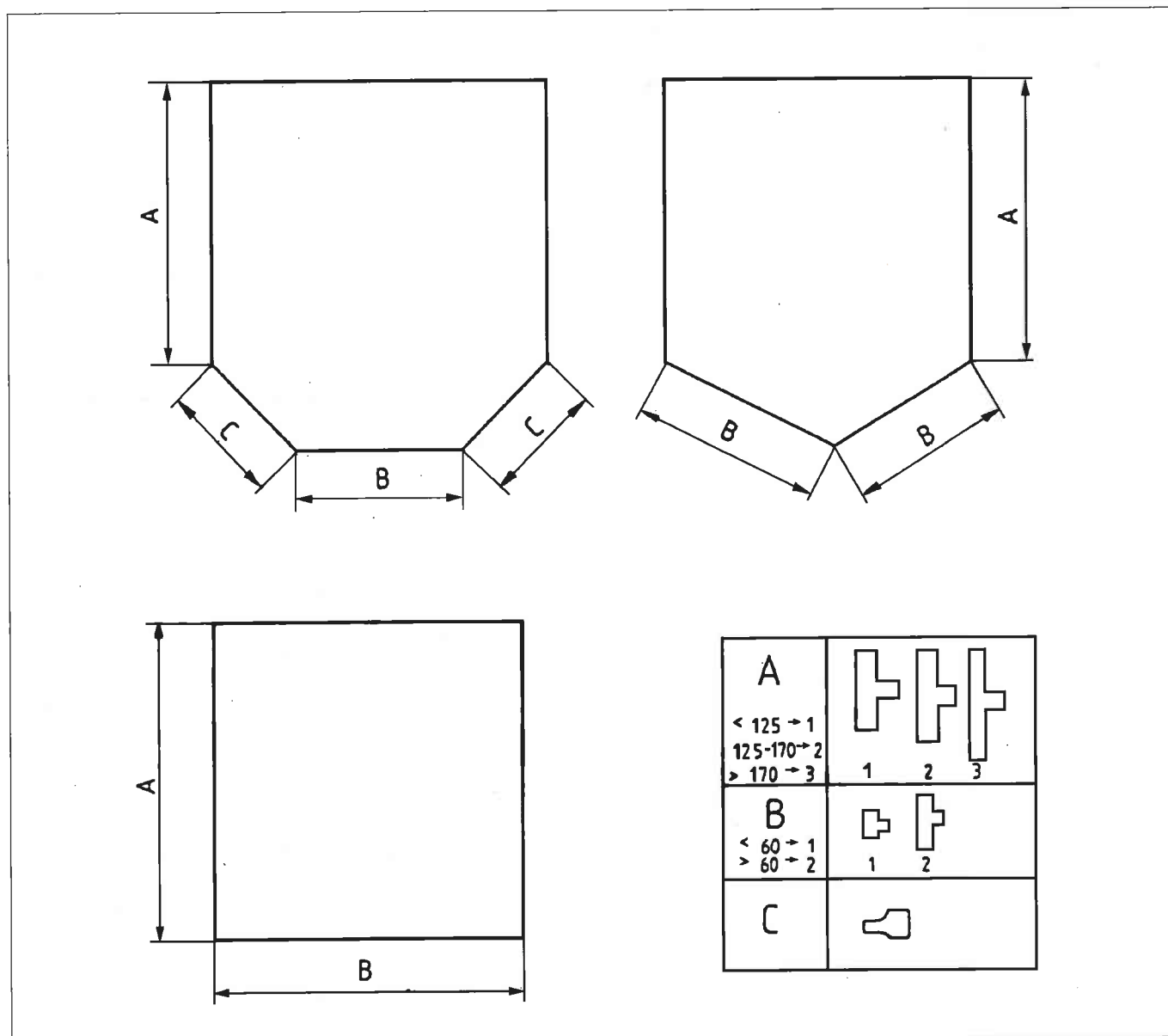
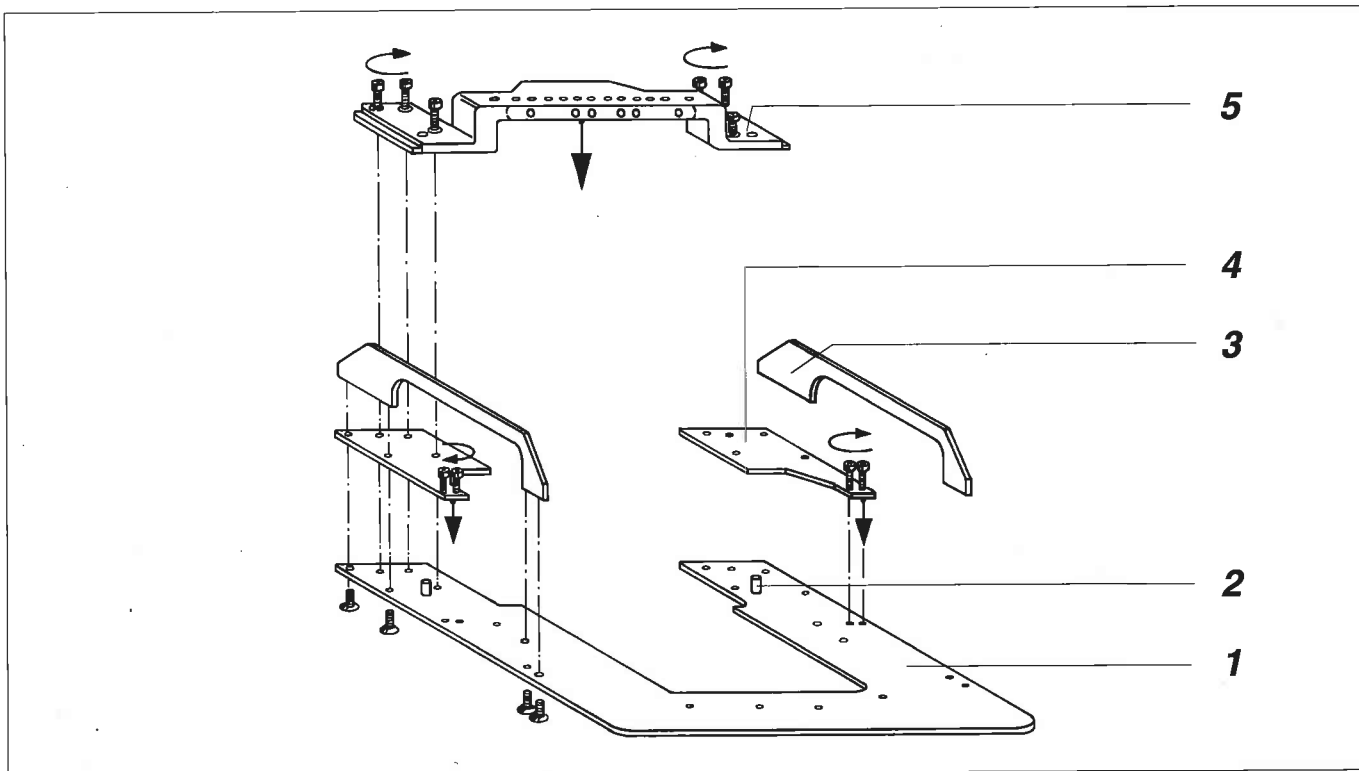
- The holding plate is secured by the 2 pins in the bridge



3.3 Assembling the outer frame

Process	Remarks								
1. <u>Deburr the outer frame</u>									
2. <u>Drill the holes and cut the thread</u>									
3. <u>Stick the sponge rubber on the outer frame 1</u>	– Stick the 2-mm-thick rubber with a double-sided adhesive tape on the whole surface. Press down the rubber firmly.								
4. <u>Connect the bridge 5 with the outer frame 1:</u>	– The inner frame is already screwed on the bridge – Make sure that the pins do not protrude on the sponge rubber side								
– Slide the 4-mm-pins 2 into the 2 holes of the outer frame – Lay the intermediate plates 4 on the outer frame – Slip the bridge 5 on the pins of the outer frame – Screw on the intermediate plates 4 and the bridge 5 – Screw on the reinforcement brackets 3									
5. <u>Mount the cylinders:</u>									
– Select the suitable slider element	<table> <tr> <td>Length of the pocket edge</td><td>Element</td></tr> <tr> <td>up to 125 mm</td><td>short version</td></tr> <tr> <td>from 125-170 mm</td><td>medium version</td></tr> <tr> <td>from 170 mm</td><td>long version</td></tr> </table>	Length of the pocket edge	Element	up to 125 mm	short version	from 125-170 mm	medium version	from 170 mm	long version
Length of the pocket edge	Element								
up to 125 mm	short version								
from 125-170 mm	medium version								
from 170 mm	long version								
For the side slider									
For the front slider	<table> <tr> <td>up to 60 mm</td><td>short version</td></tr> <tr> <td>from 60 mm</td><td>long version</td></tr> </table>	up to 60 mm	short version	from 60 mm	long version				
up to 60 mm	short version								
from 60 mm	long version								





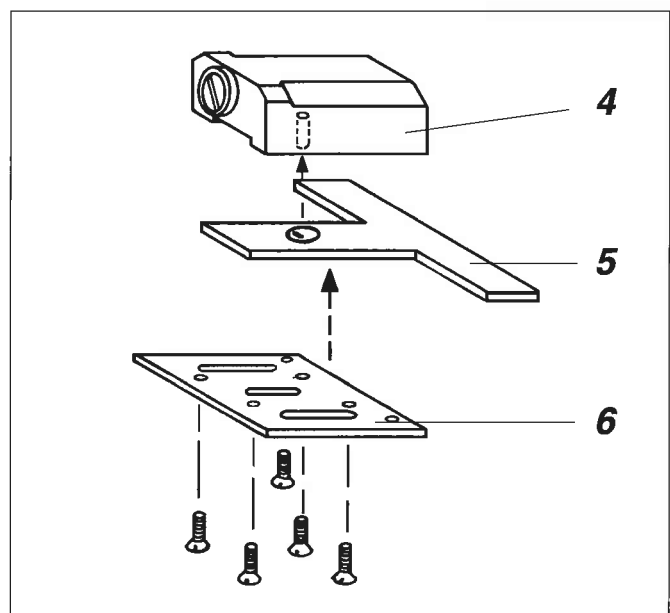
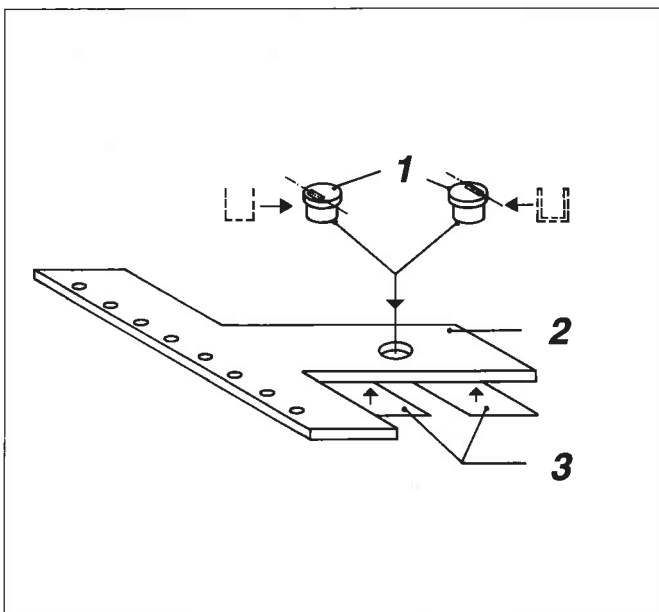
Process

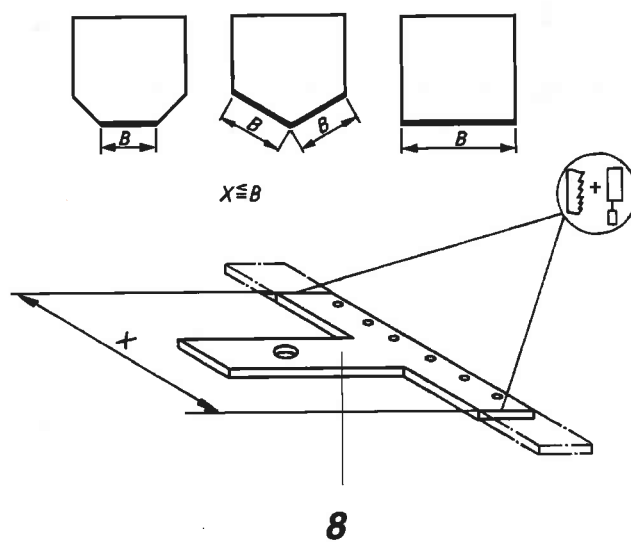
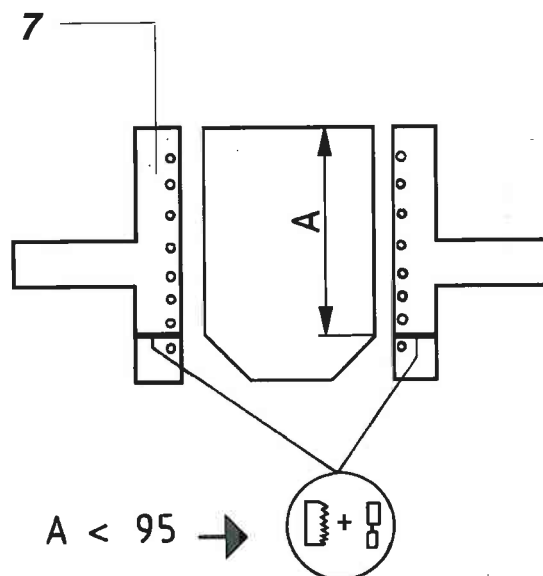
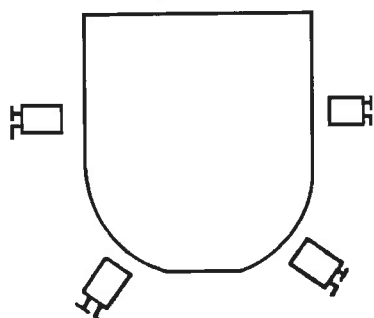
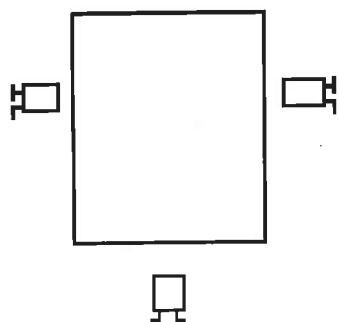
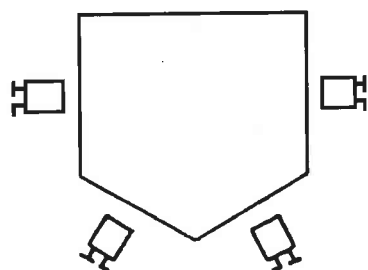
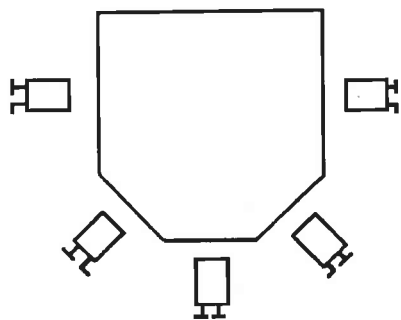
Remarks

- Insert the bushing 1 into the hole of the slider elements 2 of the side, front and corner slider
- Stick 2 slide foils 3 on the underside of the slider elements 2
- Slip the slider elements on the pins of the cylinders
- Screw the plate 6 on the cylinders
- Screw the pneumatic T- and L-connections on the cylinders
- 6. Check the width of the side slider elements 7 and adjust, if necessary
- 7. Check the width of the front slider elements 8 and adjust, if necessary

Observe the following:

- The elongated hole in the bushing 1 must be located crosswise to the "sliding direction"
- Depending on the seam pattern (double seam/single seam) the elongated hole must be positioned as shown in the figure
- Insert the bushing from the respective side into the elements for the right and left side slider
- As shown in the figure, stick to that side where the bushing collar does not protrude
- Make sure that the motion range of the slider elements lies opposite the pneumatic connections.
- Observe the following:
- The plate must be positioned to the cylinder as shown in the figure
- Tighten the screws such that the slider can still move smoothly
- As shown in the figure
- If the pocket side edge A is shorter than 95 mm, the lower edge of the slider element must be shortened accordingly
- The width X is correct, if the slider element is not wider than the front edge of the pocket





8. Assemble the corner tuckers to the side sliders:**CI. 805-121:**

With the medium or long version of the slider element for the side sliders:

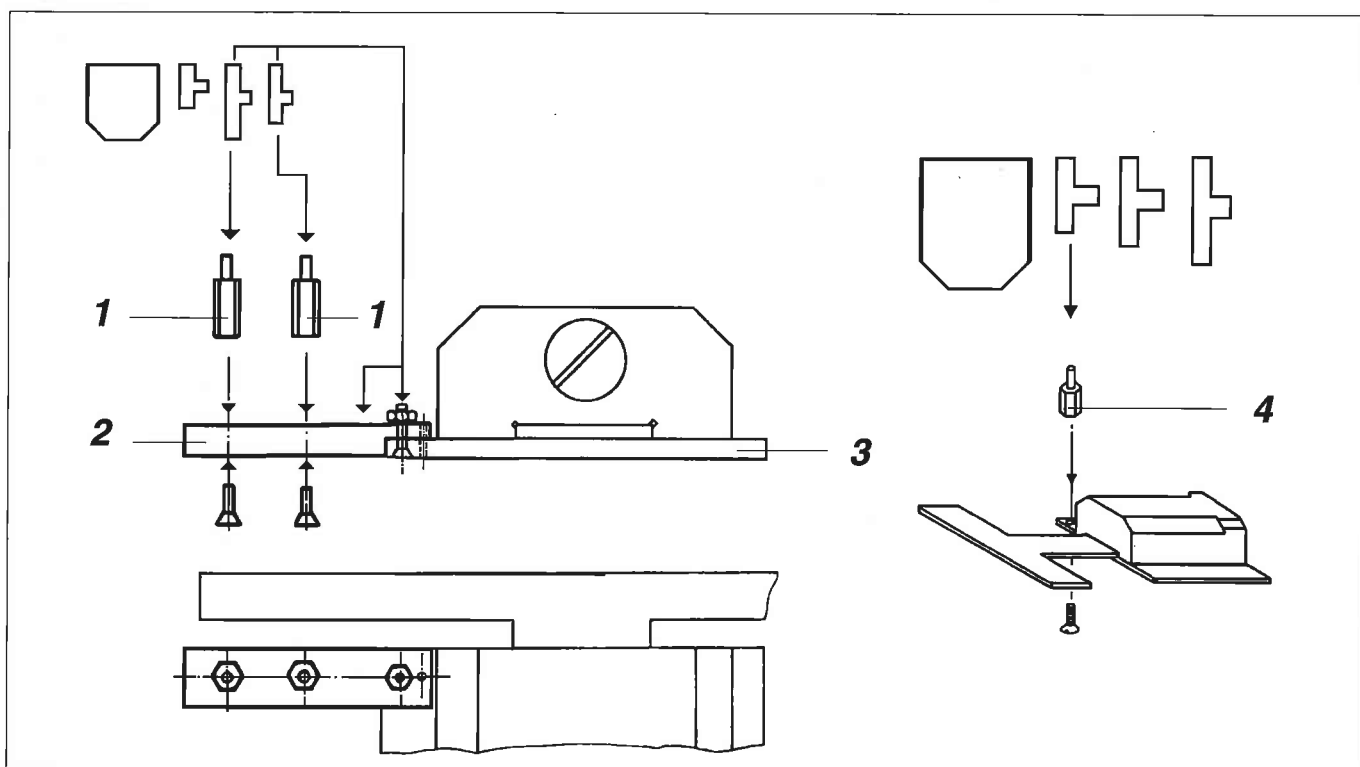
- Screw the bar 2 on the plate 3 of the cylinder
- Fasten the bolt 1 on the bar 2
 - Using M4-countersunk head screws
- With the short version of the slider element for the side sliders:
- Fasten the bolt 4 on the carrier plate
 - Using M4-countersunk head screws

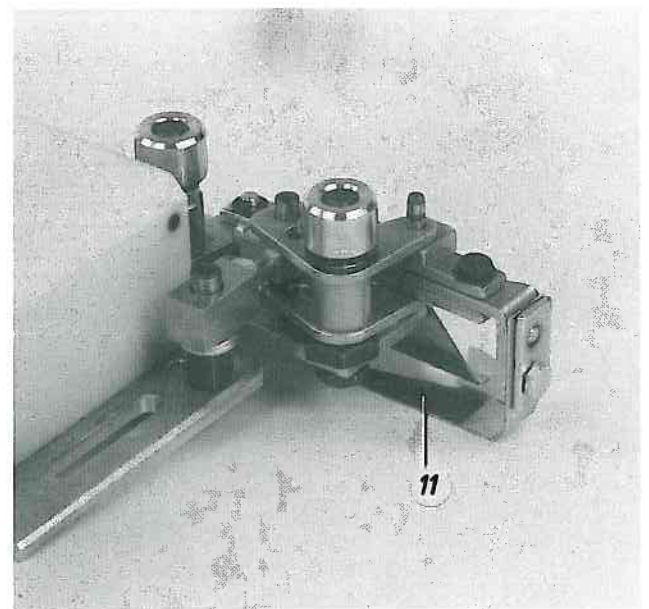
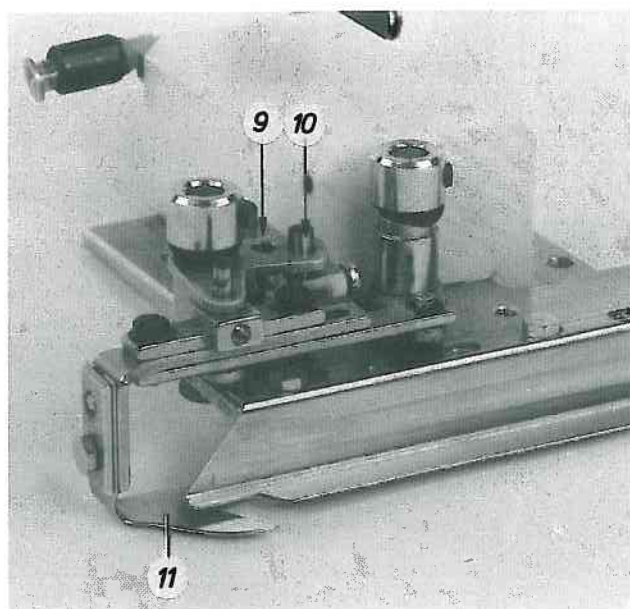
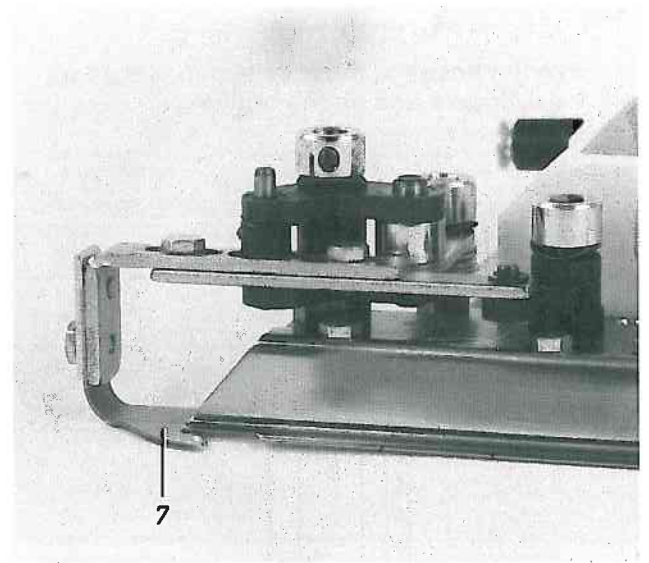
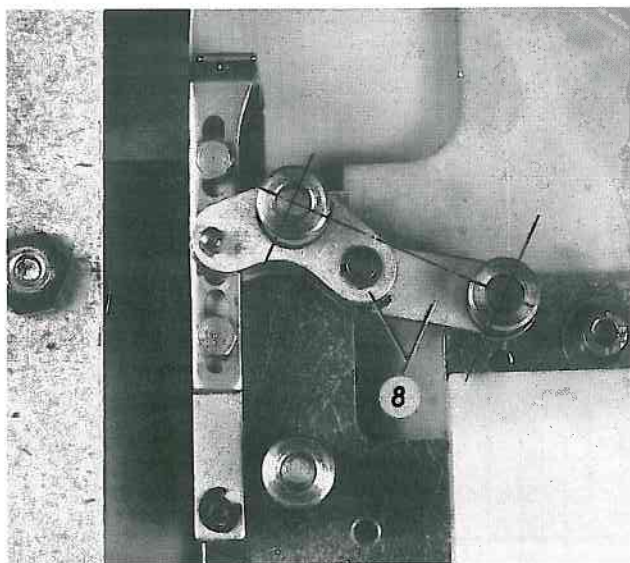
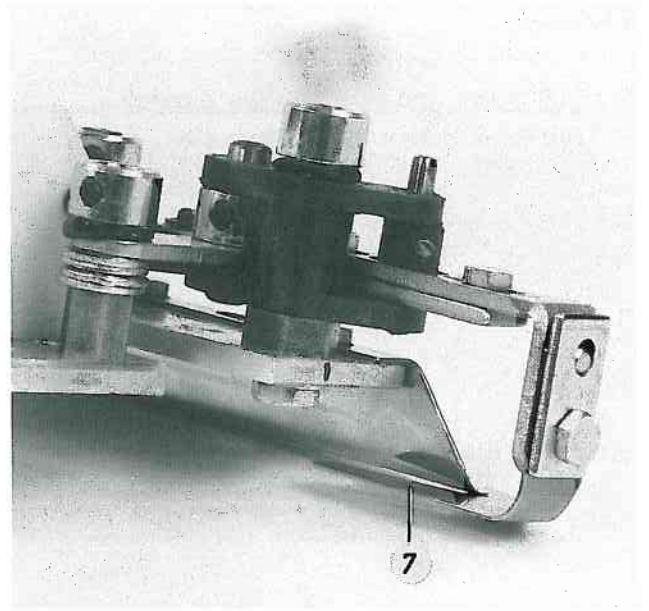
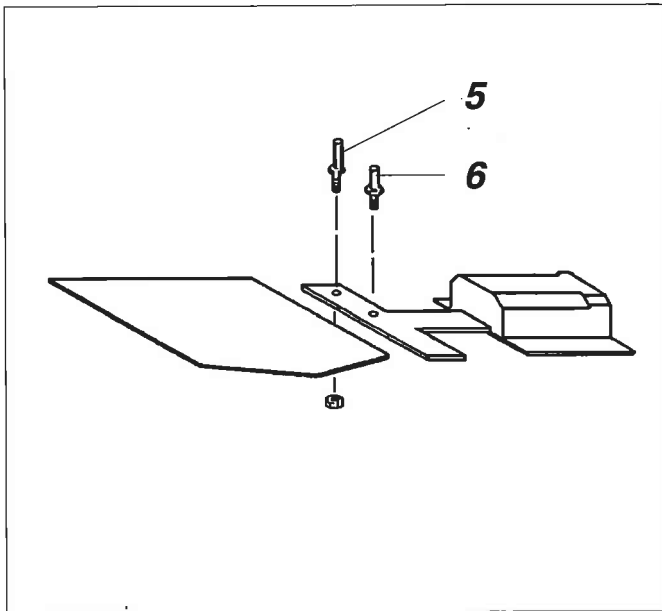
With all versions of the slider element:

- Fasten the eccentric bolt 5 on the side slider
 - To do this, slide the bolt into the hole of the side slider and fasten with a nut
- Screw the bolt 6 on the side slider
- Assemble the hinges, coupling element, bar and slider 7
 - To do this, proceed in the sequence shown in the figures
- Adjust the position of the eccentric bolt 5
 - The hinge 8 must not be extended, when the side slider has moved completely to the front

CI. 805-111:

- Assemble the corner tucker 11 with all belonging elements in the sequence shown in the figures
 - Make sure that the bolt is in the correct hole:
Hole 10 for double seams
Hole 9 for single seams





Process

Remarks

9. Cut to size and screw on the Z-bars:

- Cut the Z-bars to the correct size

Observe the following:

- The Z-bars must be 0.5 mm shorter than the corresponding pocket edge
- The distance between the "upper" edge of the Z-bar for the side slider and the centre of the next elongated hole should be ca. 15 mm
- The elongated holes of the Z-bars for the front and corner slider should be "centred"

- Screw the Z-bars 1 on the slider elements

- Fasten the Z-bars for the side and front slider with a minimum of 3 screws
- Align the Z-bars such that the fastening screws are at the centre of the elongated holes

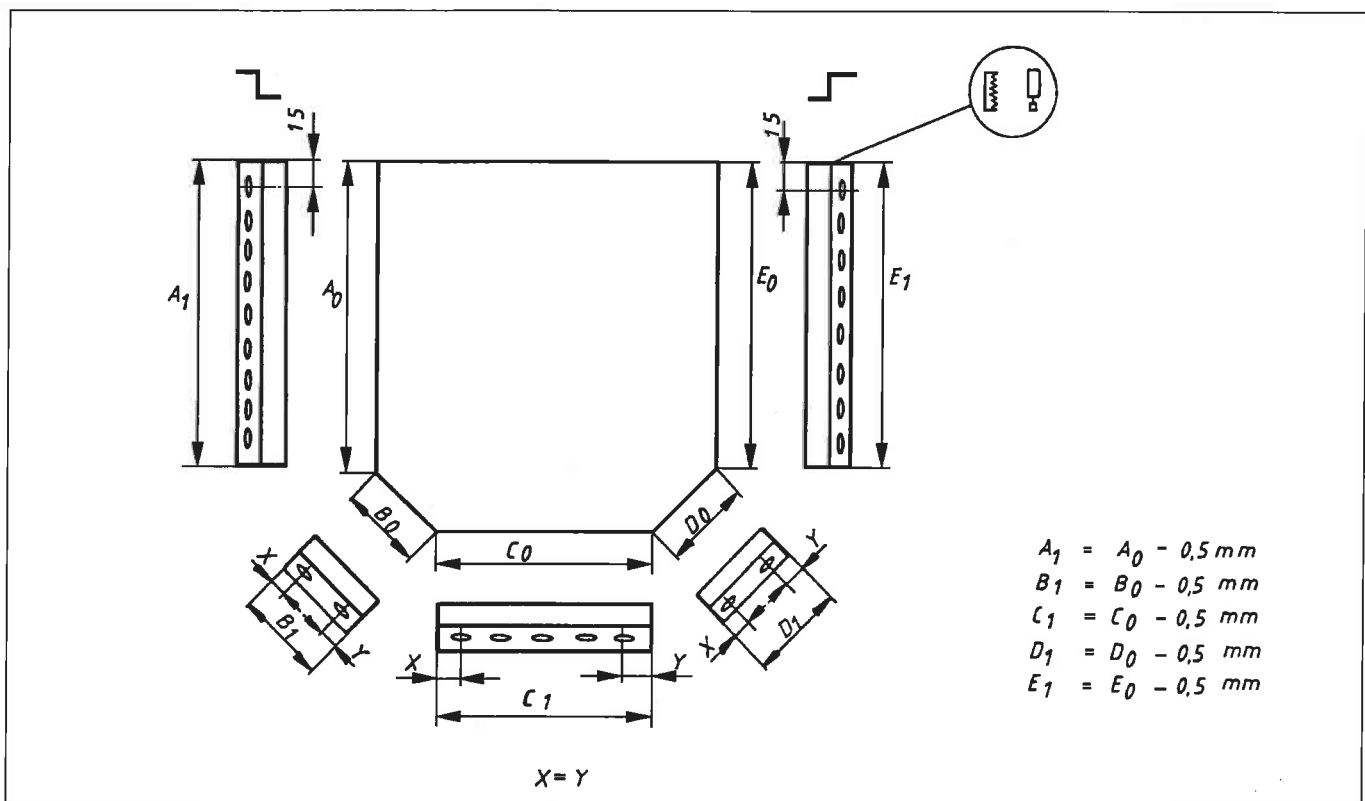
10. Screw the cylinders 2 on the outer frame

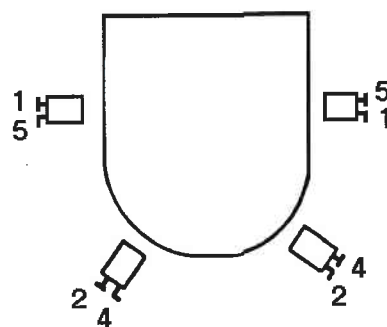
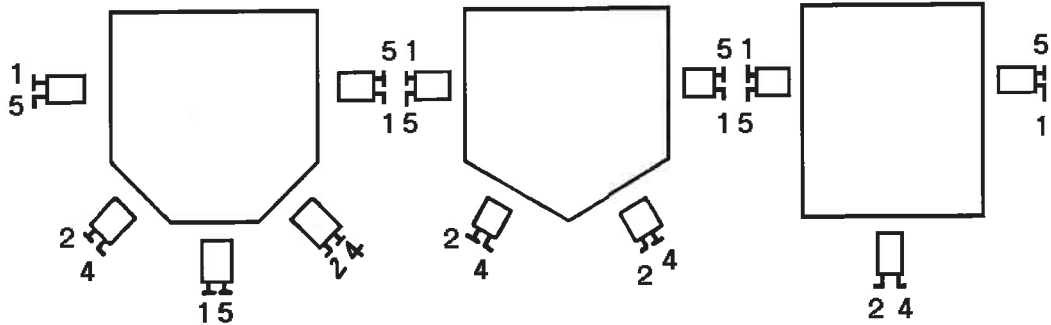
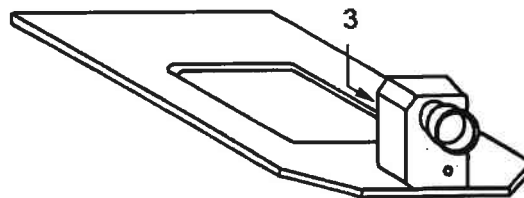
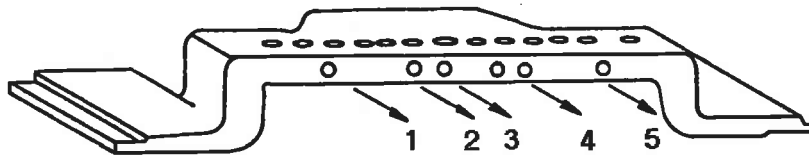
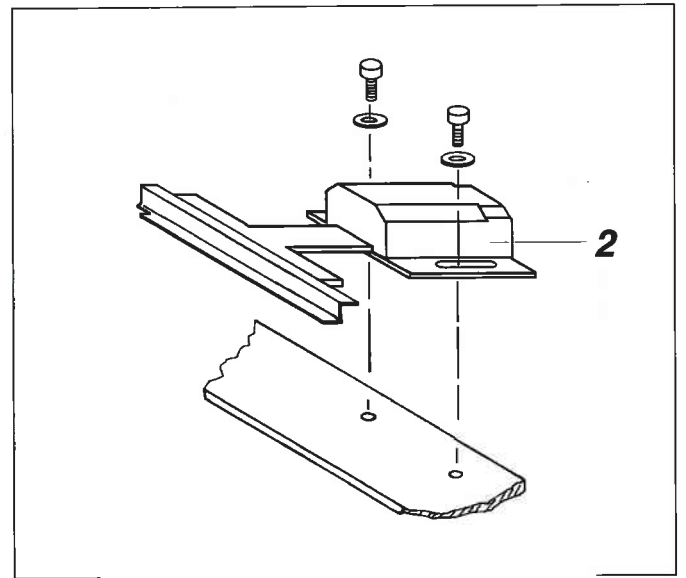
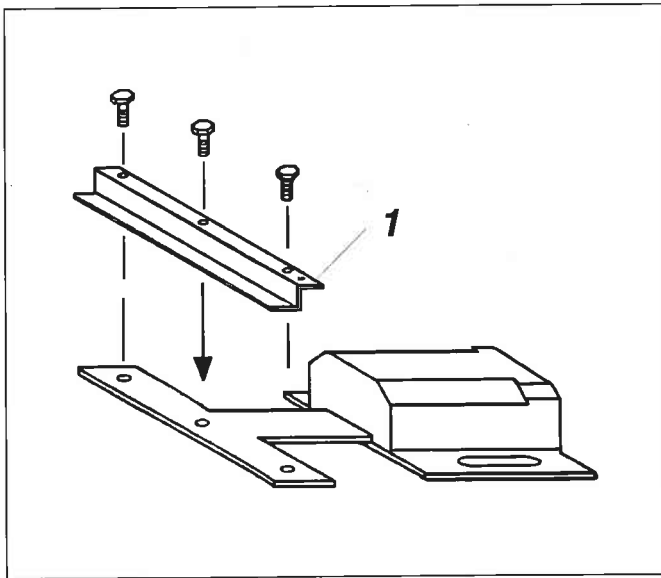
- Set the cylinders completely to the rear

11. Cut to size and connect the hoses:

- Cut the hoses to the correct length
- Join the hoses to the connection pieces on the cylinders and on the bridge

- As shown in the figure





3.4 Assemble the hose insert

Process	Remarks
1. <u>Deburr the milled groove in the plate 4</u>	
2. <u>File the bevel 7 to the size 1x1 mm</u>	– At the underside of the plate
3. <u>Drill and deburr the holes</u>	
– Mark the position of the holes	
– Drill 4 holes with a 3 Ø	– These holes must be at the centre of the groove
– Drill holes with a 2 Ø	
– Countersink the two upper 3 Ø holes from below	
– Deburr all holes	
4. <u>Stick on adhesive tape:</u>	
– Clean the upper side of the plate 4	
– Stick the double-sided adhesive tape on the upper side of the plate without folds and bubbles	– <u>This needs to be done before inserting the hose!</u>
– Remove the adhesive tape in the groove area	– eg using a knife
5. <u>Insert the hose 3 and the end pieces 1:</u>	
– Determine the required hose length	– Hose length = groove length + ca. 50 mm
– Cut off the hose accordingly	
– Pull the hose ends through the end pieces 1	
– Install the hose with the end pieces in the groove	– Thereby pass the hose through the hole in the plate and pull it until it lies tension-free in the groove
– Screw on the end pieces	
– Cut off the hose ends	– The hose should protrude by ca. 1 mm
6. <u>Connect or fasten all the other pneumatic elements</u>	Observe the following:
	– The hose 8 must be long enough to assure that its quick coupling is flush with the lower edge of the plate
	– To fasten the hoses 5, 6 and 8 drill three pocket holes with a of 2.4 mm and a depth of 5 mm and cut a M3 thread
	– Keep the sticky surface of the adhesive tape clean
7. <u>Stick on the foil and make 4 holes into it</u>	
	– Stick the foil on the plate without folds and bubbles
	– Remove the foil in the area of the holes using a drill
	– With a needle pierce 2 holes 2 each in the foil below the 2 end pieces at the groove edge, without damaging the hose

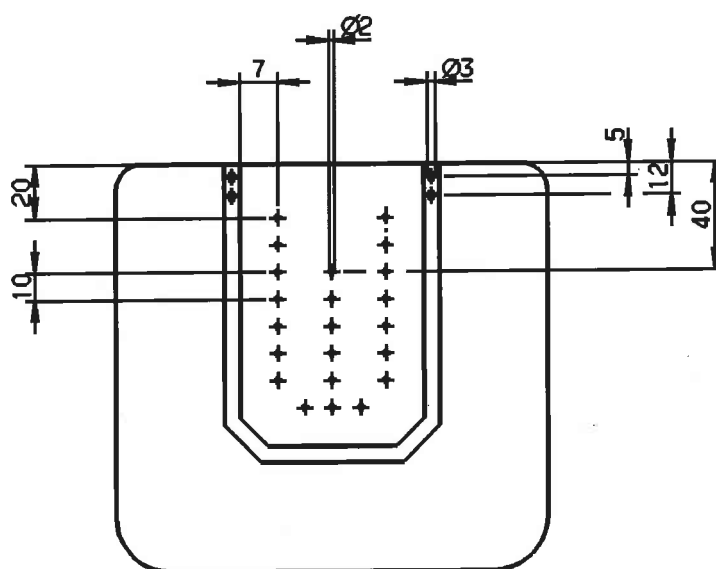
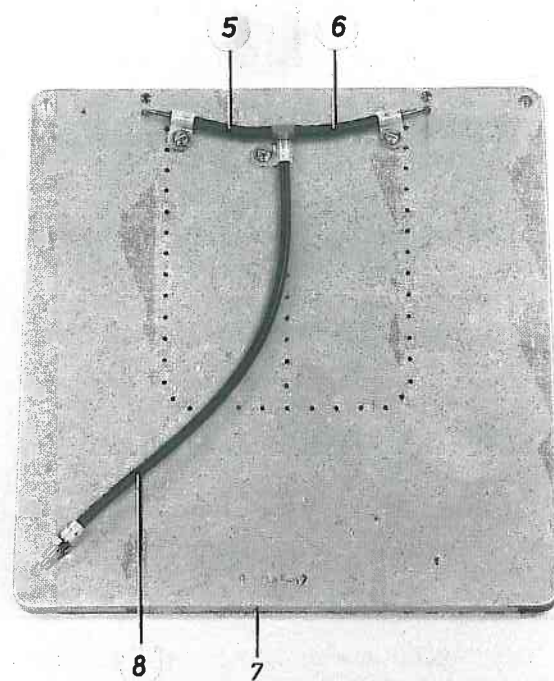
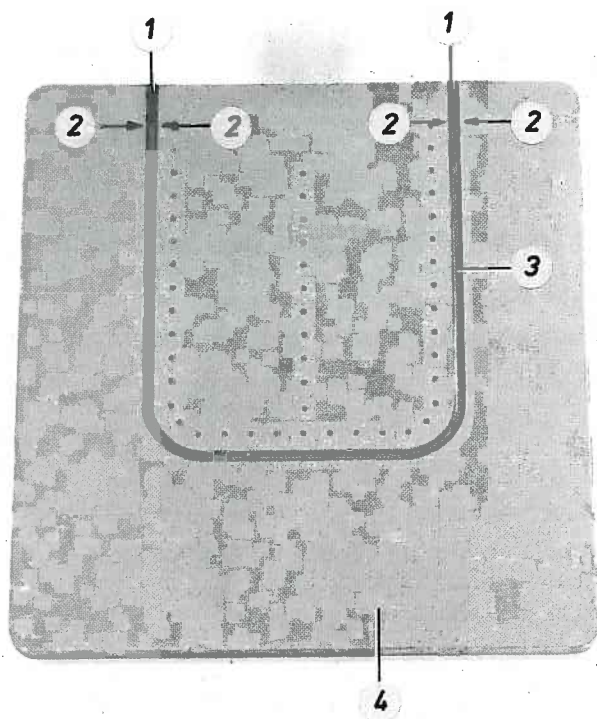
Process

Remarks

8. Check the height of the plate:

- Install the plate in the recess of the table top
- Check the height of the plate

- The plate must not be below the table top level. To correct the height, stick a correspondingly thick strip under the plate



3.5 Assembling and gluing the transfer plate

3.5.1 Gluing the transfer plate without inner slider

Transfer plates without inner slider can only be used for the sewing of programs with single seams.

Process	Remarks
1. <u>Deburr the transfer plate</u>	
2. <u>Cut to size the sponge rubber 1 and stick it under the transfer plate:</u>	
– Mark the size of the "inner" cutout on the sponge rubber	
– Cut the sponge rubber to size	
– Stick the sponge rubber under the transfer plate using the double-sided adhesive tape	– Centre the rubber in lateral direction, and position it at a distance of 15 mm to the upper edge of the transfer plate
– Cut the sewing slot into the sponge rubber	– Same width as the sewing slot in the transfer plate
3. <u>Cut to size the Delrin and stick it on the sponge rubber:</u>	
– Mark the cutout in the upper area of the Delrin	– According to the contour in the sponge rubber
– Mark the outer contour of the Delrin	– The Delrin should slightly jut out from the sewing slot of the transfer plate
– Trim the Delrin	– Along the marks
– Stick the Delrin with the adhesive tape on the sponge rubber	– With transfer plates for single seam programs, however, stick the Delrin only on the sponge rubber of the "tongue"
4. <u>Screw the take-up element 4 and the switching element 6 on the transfer plate</u>	– Screw on the two take-up elements using the countersunk head screws, screw the switching element into the threaded hole
5. <u>Stick on the code field:</u>	
– Stick the code field 3 on the transfer plate	– The field must be positioned as shown in the figure
– Stick the reflector tape 2 on the corresponding sections of the code field	– Stick the reflector tape on the sections shown during programming
– Stick the data field 5 on the transfer plate	
6. <u>Connect the style kit with the machine</u>	– See subject 4.4 of the operation manual
7. <u>Mark the seam contour on the Delrin:</u>	
– Call up the process "Sewing without folding"	– See subject 9.5.6 of the service manual
– Reduce the speed to 5% using the key ↓	
– Start the process and stop it again, when the sewing head has lowered	

Process

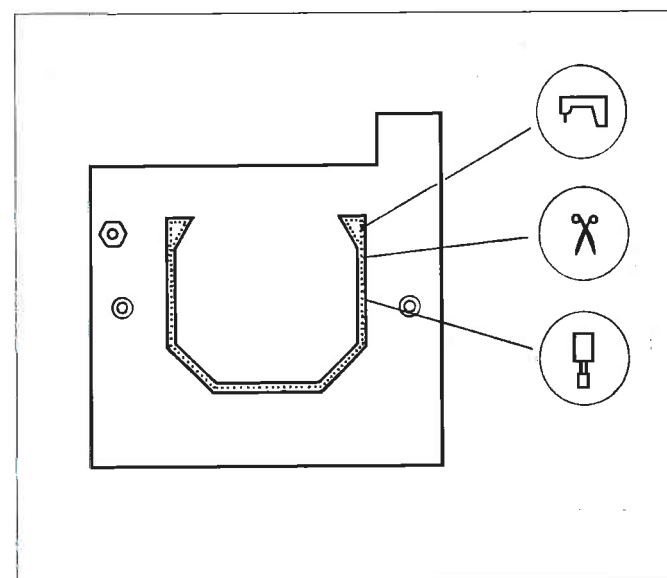
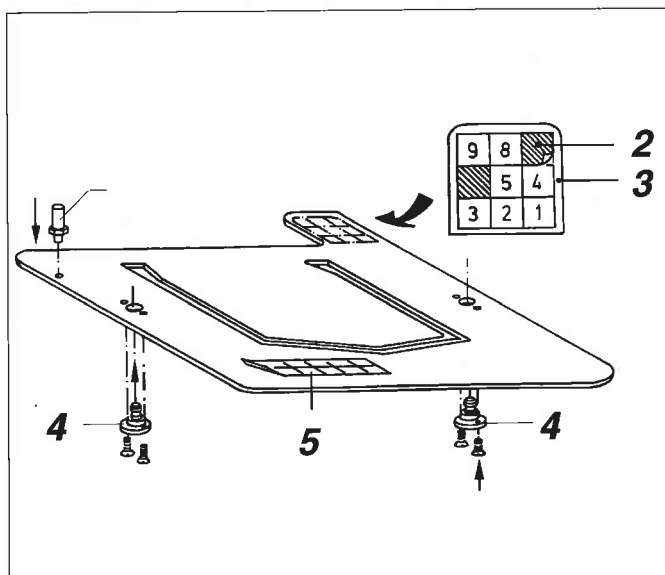
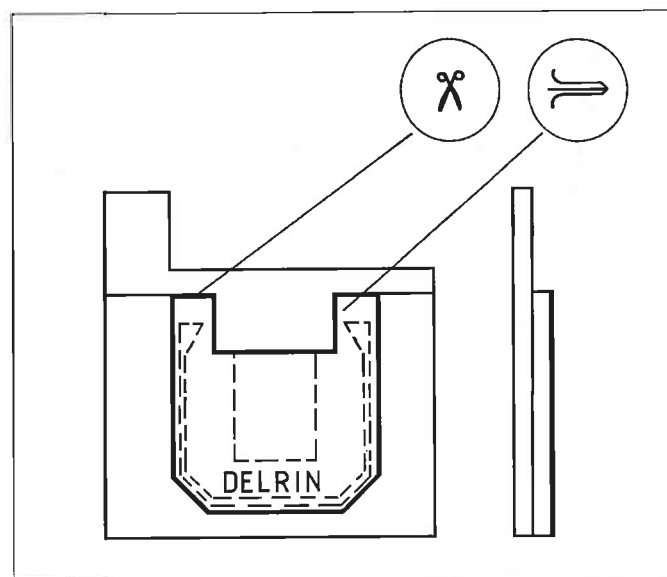
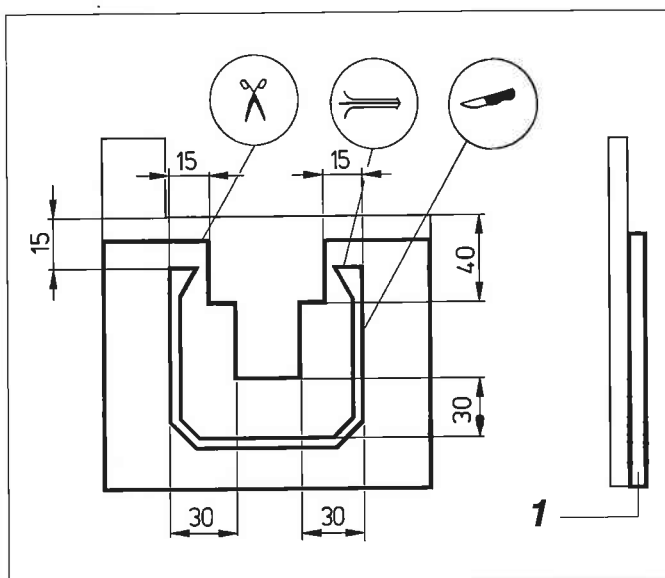
- Press the key "0"
- Insert a shortened needle
- Check the height of the needle and correct, if necessary
- Press key "1"
- Proceed with the process
- Remove the transfer plate

8. Trim and file the edges of the Delrin:

- Trim the Delrin along the marked contour
- File the edges of the Delrin

Remarks

- For "Safety stop" of the motors
- The needle must not penetrate the Delrin too deeply; otherwise the Delrin might break
- File or emery the Delrin until it has the minimum distance to the needle, without touching the needle



Process

Remarks

9. Check the distance between the Delrin and the needle:

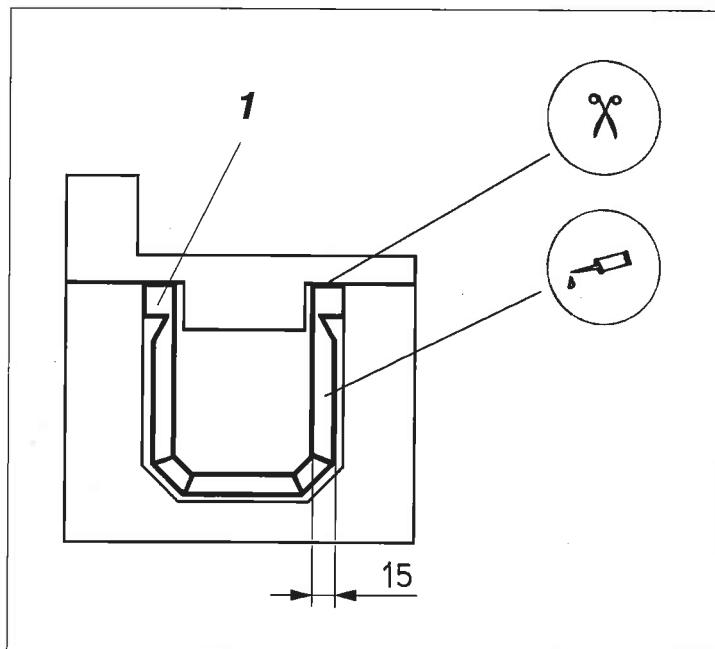
- Insert the transfer plate
 - BT:
Read identity code
Proceed with Enter
- Press key "Enter"
- Install the needle
 - The code of the transfer plate is read
- Start the sewing cycle and determine the distance
 - When the needle is deflected, file and emery the edges of the Delrin where necessary

10. Cut to size the rough adhesive tape 1 and stick it on the Delrin:

- Remove the transfer plate
- Cut the rough adhesive tape to the respective width
- Stick the rough adhesive tape on the Delrin
 - The tape must be flush with the outer edge of the Delrin
- Insert the transfer plate
 - BT:
Read identity code
Proceed with Enter

11. Reading the identity code:

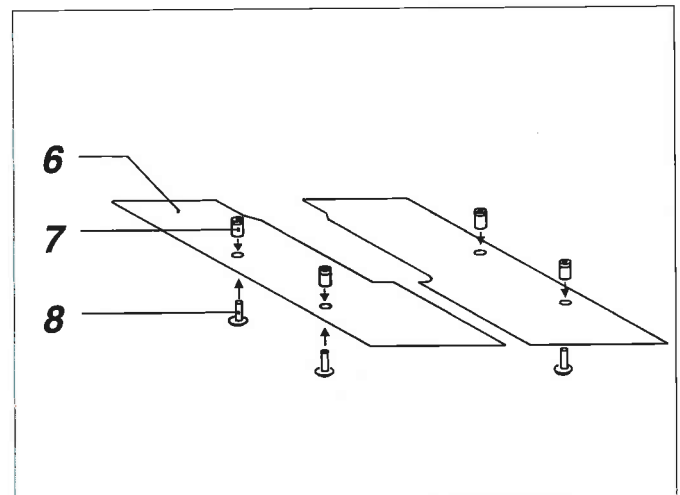
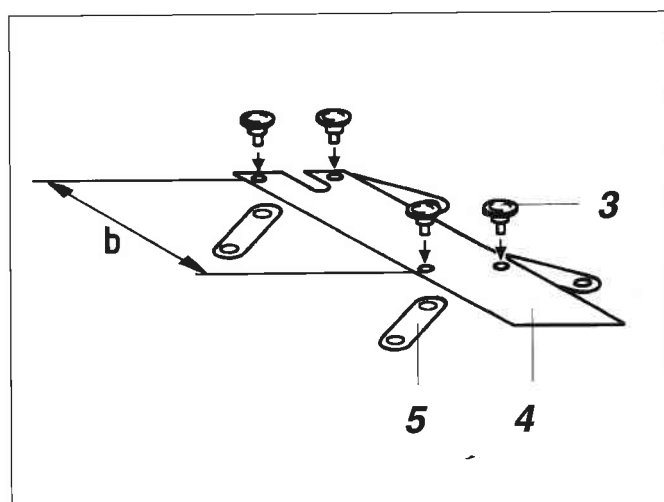
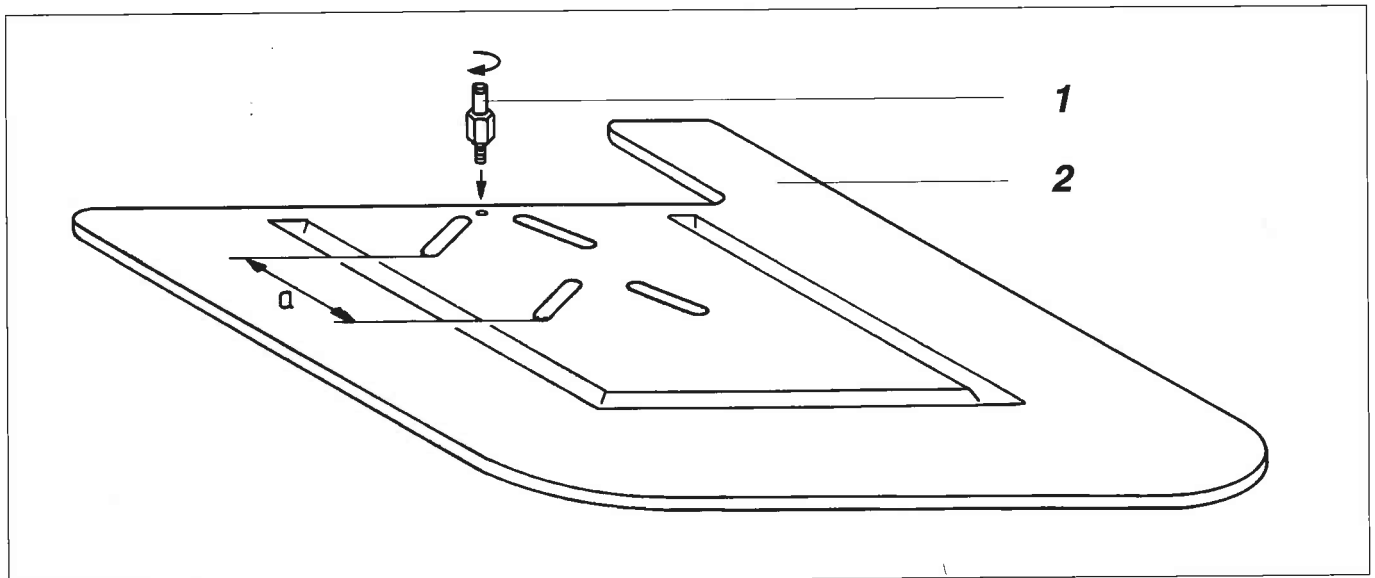
- Press key "Enter"



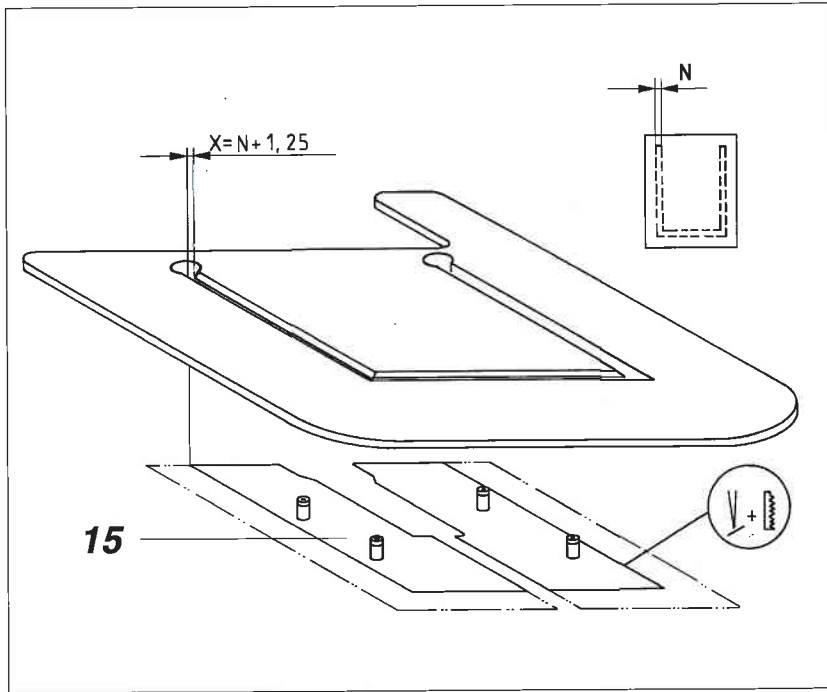
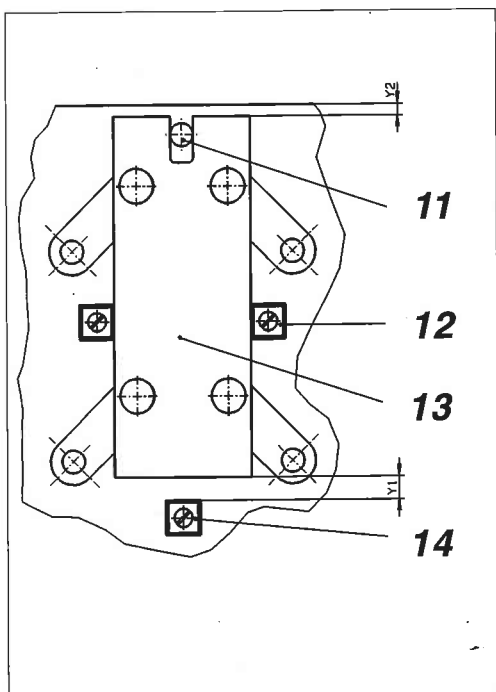
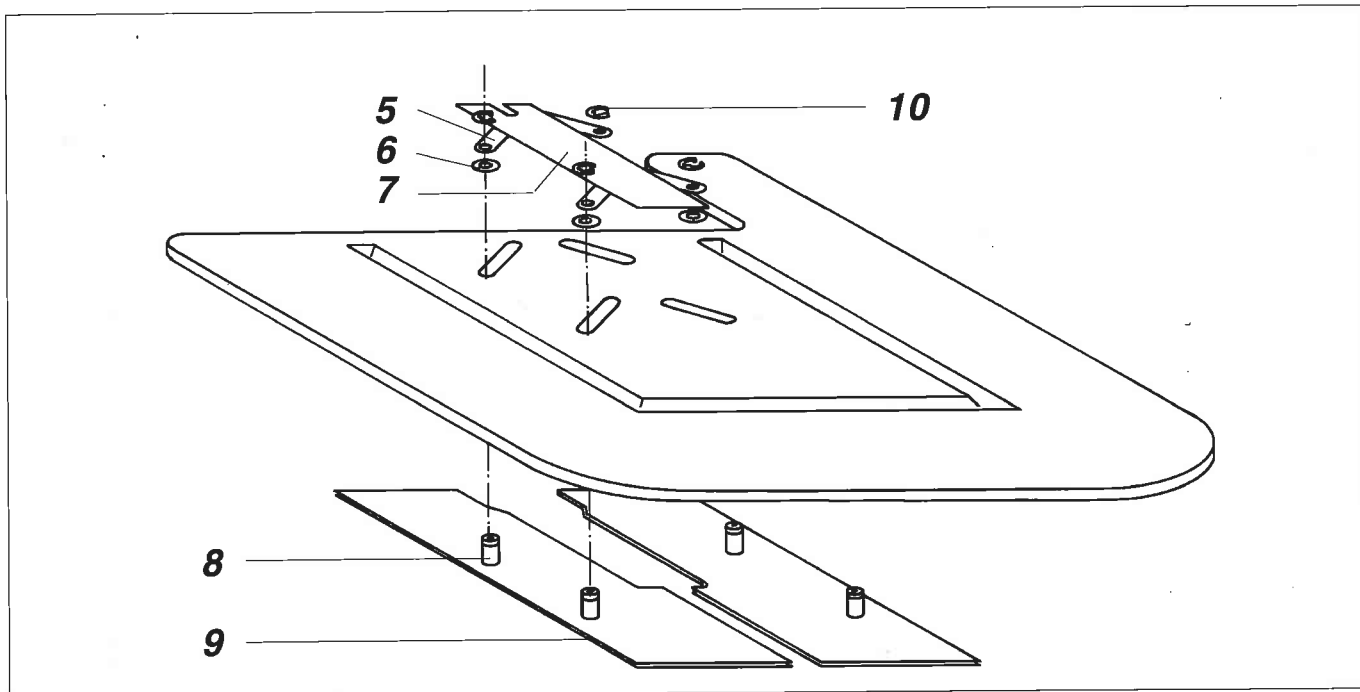
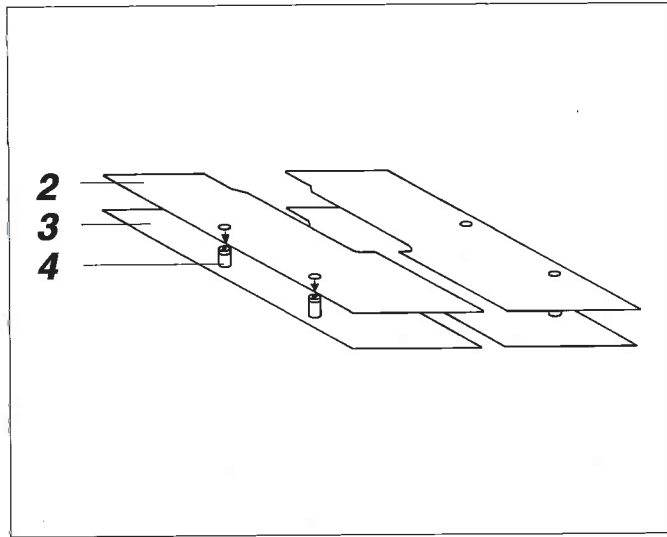
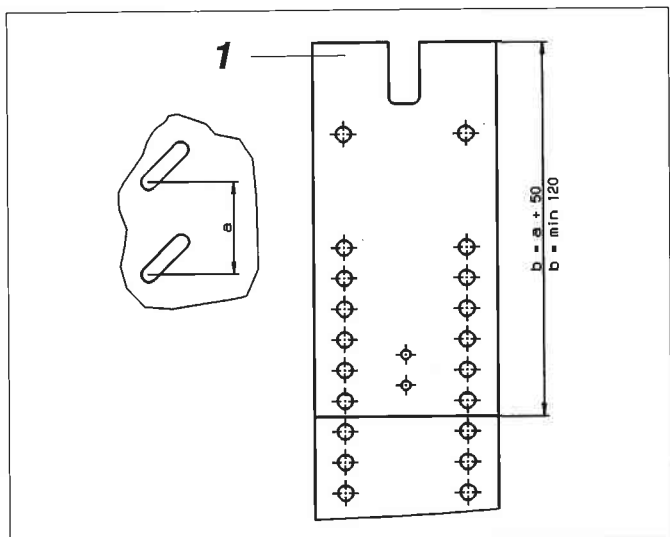
3.5.2 Assembling and gluing the transfer plate with inner slider for the 805-111

The transfer plate with inner slider shown on page 39 is required for sewing double seams. Transfer plates for programs with different seam distances can only be manufactured at the factory.

Process	Remarks
1. <u>Deburr the milled transfer plate 2</u>	
2. <u>Assemble the slide plate and inner slider plate</u>	
- Screw the bolt 1 into the transfer plate 2	
- Connect the slide plate 4 and the 4 coupling elements 5 using the large-head rivets 3	- Connect the upper coupling elements with the top holes of the slide plate
	- The distance (b) between the lower coupling elements and the upper coupling elements must be equal to the distance between the upper guide grooves and the lower guide grooves (distance a)
- Connect the rivets 8 and bushings 7 with the 2 semi-finished inner slider plates 6	- To do this, slide the rivets through the holes, and from the other side slip the bushings on the rivets and rivet them. The bushings must be located above the right and left plate halves



Process	Remarks
– Shorten the slide plate 1	– The slide plate should have the following length: Distance (a) between the upper and lower guide grooves + 50 mm (eg $80 + 50 = 130$ mm). The minimum length must, however, not fall below 120 mm.
– Slip the semi-finished plastic plate 2 (0.5 mm Delrin) on the bushings 4 of the inner slider plates 3 – Insert the inner slider plates 9 from below into the transfer plate – Slip the plastic discs 6 on the bushings – Connect the slide plate 7 with the inner slider plates	– The bushings 8 must be in the guide grooves of the transfer plate – Slip the coupling elements 5 on the bushings 8 and secure with the circlips 10
3. <u>Mounting the guide blocks 12 and stopper 14:</u>	
– Screw on the lateral guide blocks 12	– Align the blocks such that the motion of the slide plate 13 is centred. – If necessary, drill the corresponding holes before and cut the thread (M3) Proceed as follows:
– Adjust the stopper 14 for "Inner slider in outer seam position" and fasten with screws	– Push the slide plate 13 completely to the rear – Determine the distance Y2 of the slide plate 13 to the transfer plate edge (eg 1.1 mm) – Pull the slide plate to the front by 0.7 mm and hold in this position. (This is the position "Inner seam" of the inner slider.) – Note down the distance between the slide plate and the transfer plate, eg $1.1 + 0.7 = 1.8$ mm. – Position the stopper 14 for the position "Outer seam" at the following distance (Y1) to the slide plate and then fasten it with screws: Seam distance between the double seams + 0.5 mm (eg 6.35 mm + 0.5 mm = 6.85 mm). If necessary, drill a 2.4-mm-hole and cut a thread for M3.
4. <u>Trim the inner slider and the Delrin plates</u>	
– Mark the outer contour of the inner slider plates and Delrin plates 15	– For this process a milling program is currently being prepared – To do this, push the slide plate 13 to the front against the stopper 14 and then mark the contour at the following distance (x) to the inner side of the sewing slot: Distance between the double seams + 1.25 mm (eg 6.35 mm + 1.25 mm = 7.6 mm)
– Trim and deburr the plates along the marked contour	– To do this, remove the plates – After this process, re-install the plates



Process

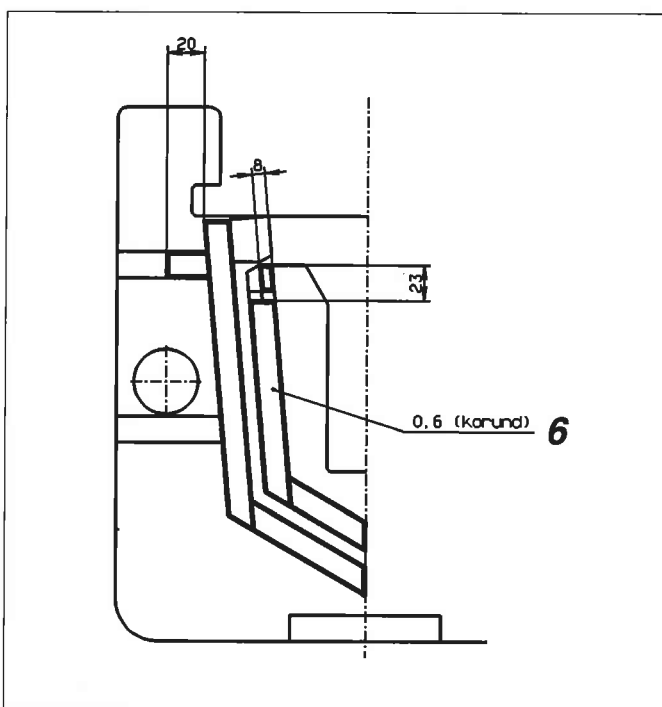
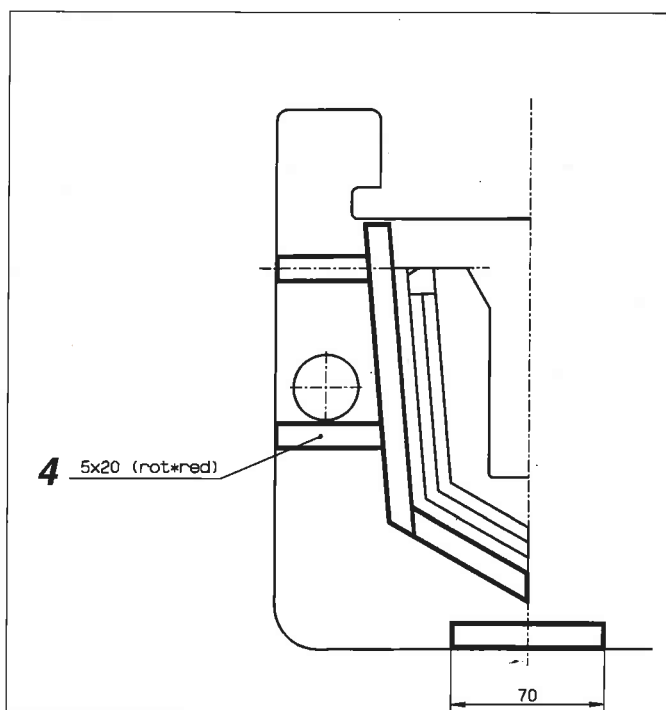
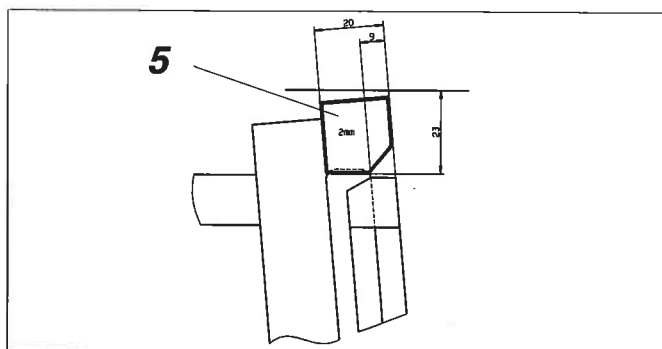
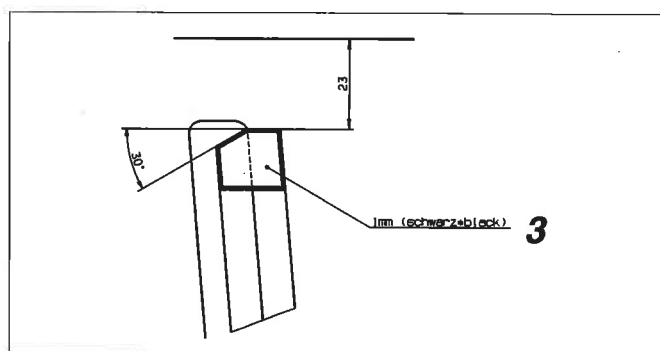
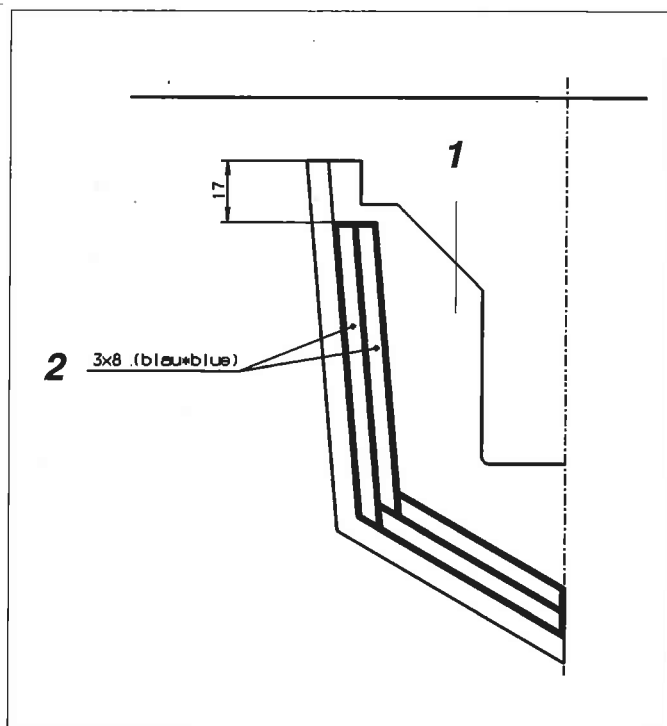
Remarks

5. Stick on the rubber strips:

- Stick 2 rubber strips 2 of 3x8 mm on the inner slider plates 1
- Cut to size the sponge rubber 3 (1 mm thick) and stick it on
- Cut the sponge rubber 4 (red) in 20-mm-wide strips and stick it on
- Cut the hard rubber 5 to size (2 mm thick) and stick it on
- Stick the flint-coated paper 6 on the sponge rubber (red)

- The outer strip should be flush with the outer contour of the plates.
The inner strip should rest against the outer strip

- Using a double-sided adhesive tape

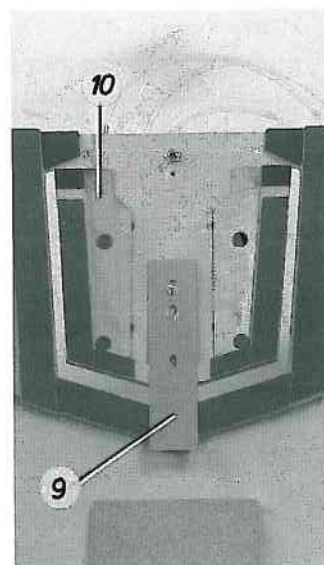
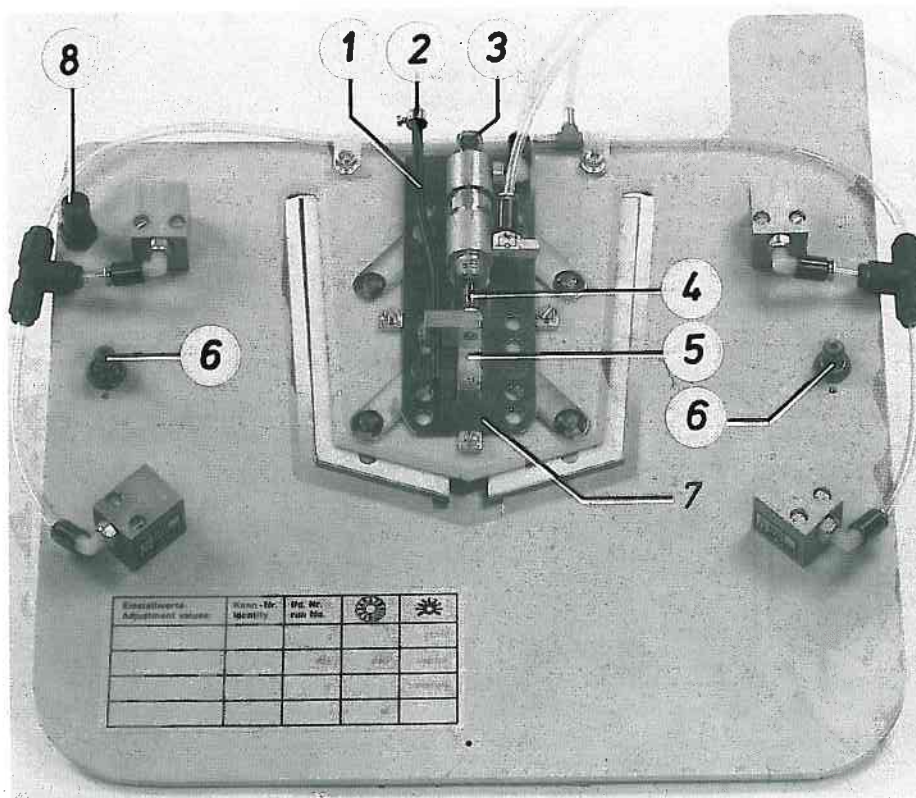


6. Mounting the block, cylinder and overlapping plate:

- Turn the piston rod 4 into the thread of block 5
 - Slip the cylinder on the bolt 3 in the transfer plate and secure with circlips
 - Screw the overlapping plate 9 on the block 5
 - Bend the overlapping plate
 - Remove the flint-coated paper (on the rubber strips), which lies under the overlapping plate
 - Cut off the front edge of the overlapping plate
 - Stick flint-coated paper on the point of the plate
- Turn the piston rod until its end is flush with the block
 - 2 bushings must lie between both elements
 - The plate should rest evenly on the flint-coated paper of the two rubber strips (3x8)
 - The front edge of the plate must be flush with the two inner slider plates 10
 - Use double-sided adhesive tape or superglue

7. Adjusting the inner slider, mounting the take-up and switching elements:

- Adjust the position "Inner seam" of the inner slider
 - Check the function of the inner slider
 - Fasten the switching rod 1 with the adjusting ring 2 on the block 5
 - Screw the take-up element 6 and the switching element 8 on the transfer plate
- With completely retracted piston rod, the distance between the slide plate and the transfer plate should be such as described in point 3 of this subject.
To correct, turn the piston rod in block 5 accordingly.
 - It must be possible to move the slider smoothly
 - The switching rod end should be set at the height of the bolt 3 (pre-adjustment)
 - Screw on the two take-up elements using the countersunk head screws, screw the switching element into the threaded hole



Process**Remarks****8. Mounting the cylinder "Lifting transfer plate":**

- Stick the rubber discs 9 (14 Ø) on the aluminium discs 10 (14 x 6)
- Screw the stuck together discs on the face of the piston rod of the 4 cylinders 5
- Screw the 4 cylinders 5 on the transfer plate

9. Joining the connection elements and hoses

- Cut the hoses to the proper length
- Join the pneumatic connection elements and hoses

10. Sticking on the code field:

- Stick the code field 8 on the transfer plate
- Stick the reflector tape 7 on the respective sections of the code field
- Stick the data field 6 on the transfer plate

- Stick on the sections that appear during programming

11. Connect the style kit with the machine

- See subject 4.4 of the operation manual, and at the same time adjust the switching rod 1 such that it has a distance of 0.5 mm to the switch "Inner slider in inner seam position"

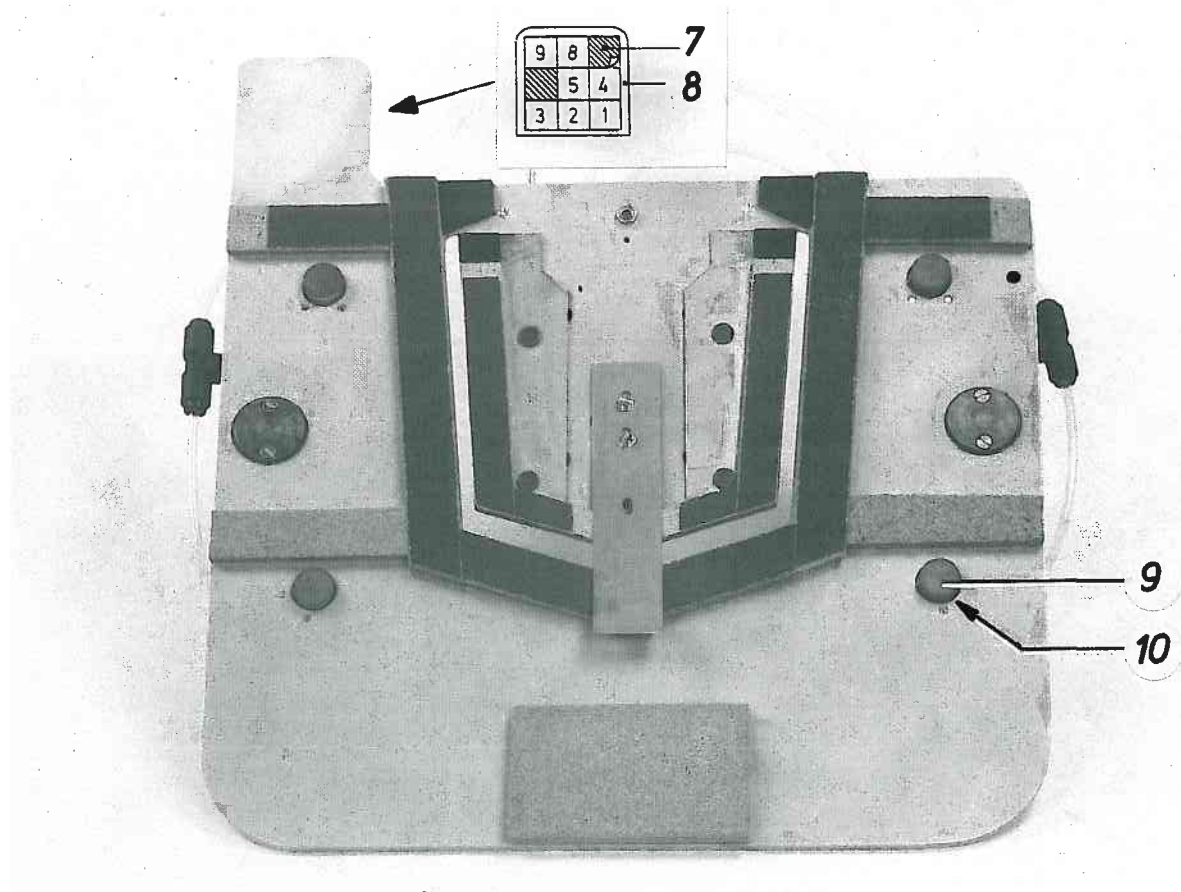
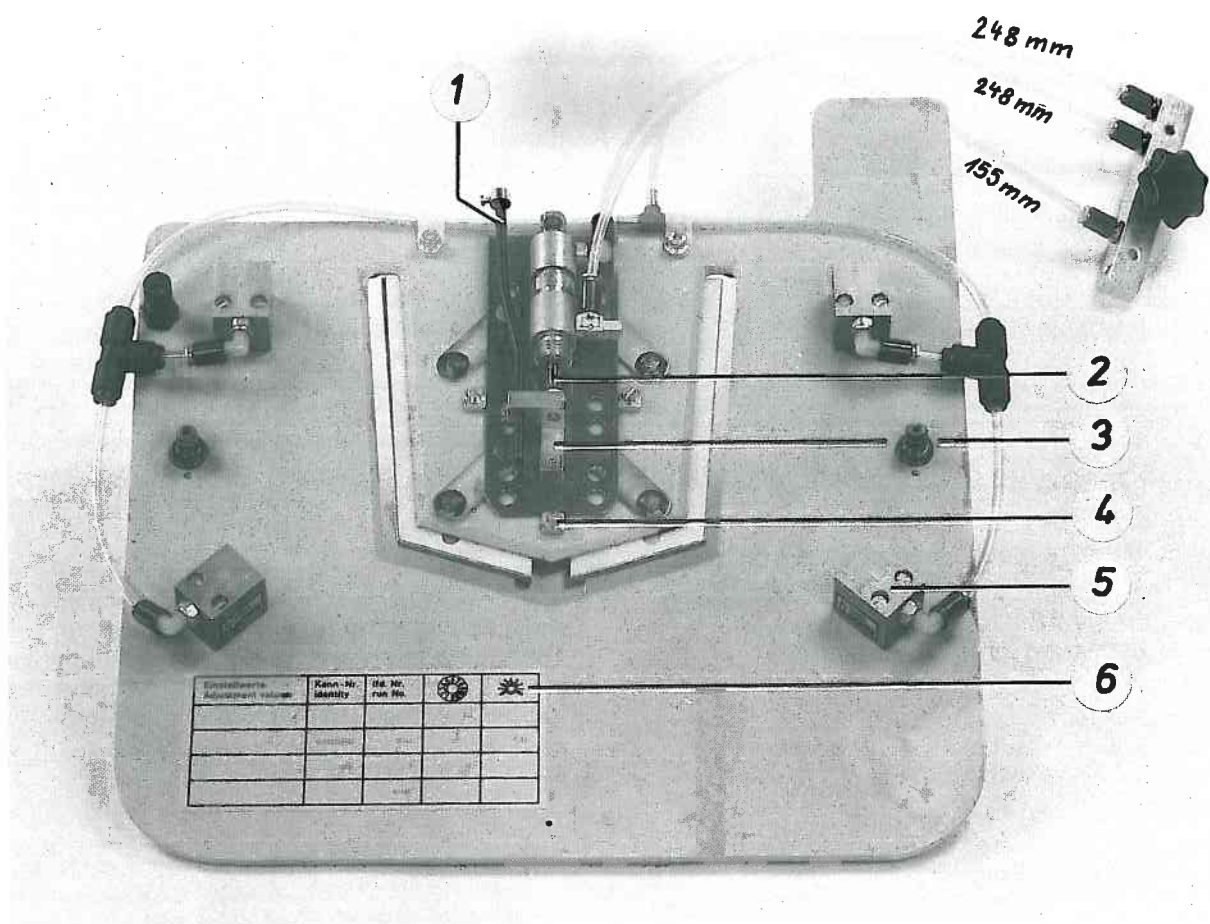
12. Checking the position "Inner seam" and "Outer seam" of the inner slider:

- Call up the process "Sewing without folding"
- Reduce the speed to 5%
- Insert the transfer plate
- Press key "Enter"
- Install the needle and sewing foot
- Start the sewing cycle and determine the distance between the sewing foot and inner slider plates

- See point 9.5.6 of the service manual

- BT:
Read identity code
Proceed with Enter
- The code of the transfer plate is read

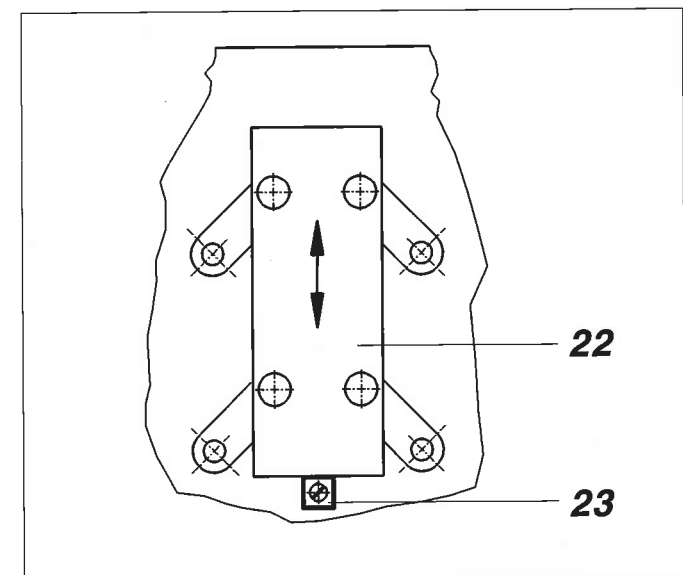
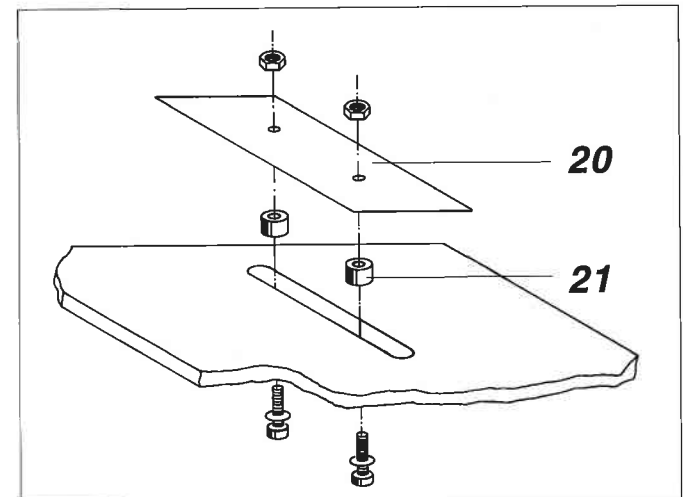
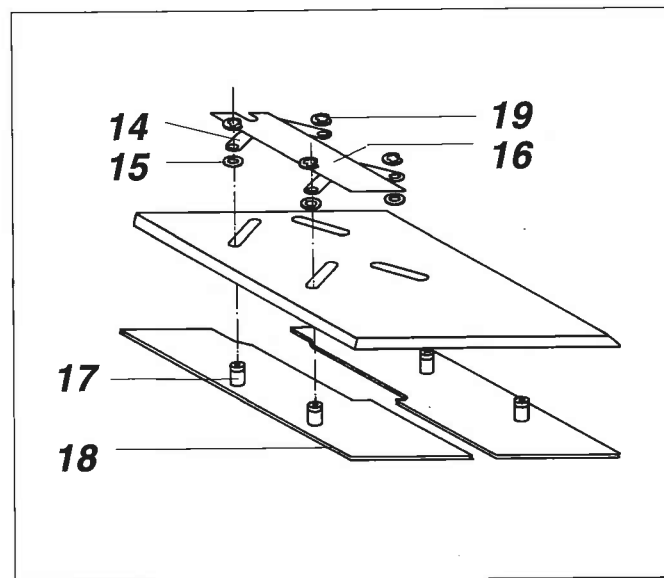
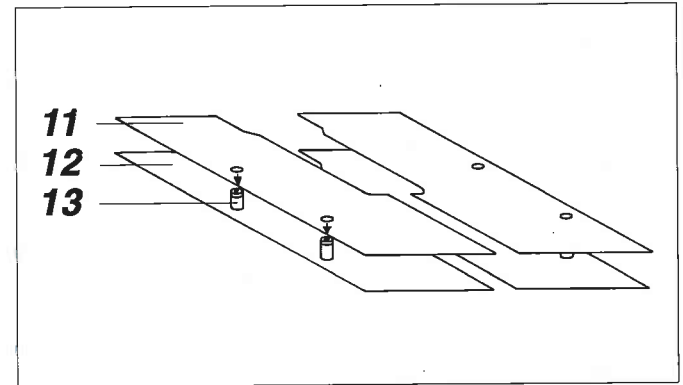
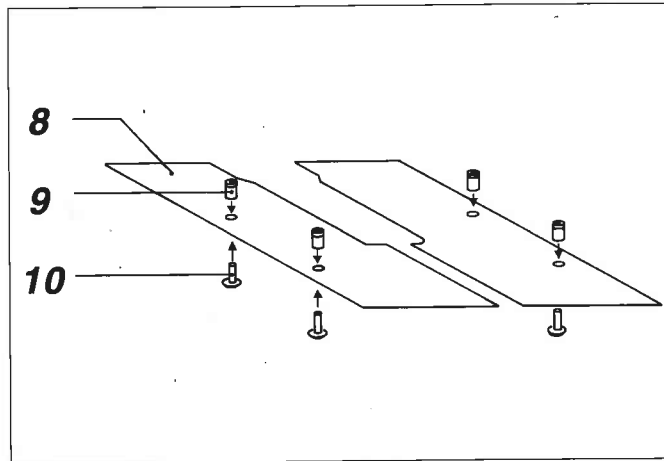
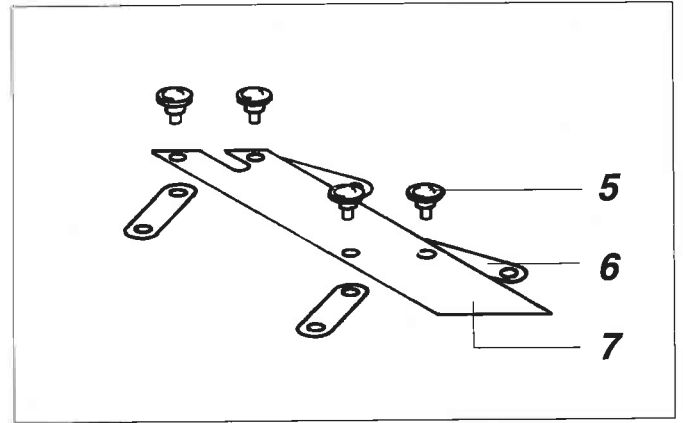
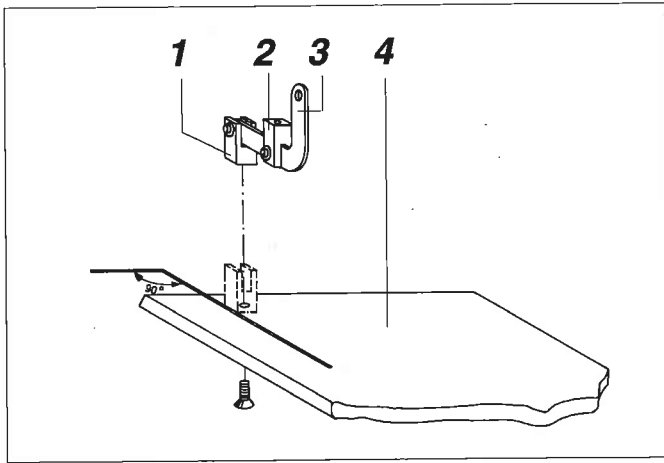
- If the distance is not 0.5 mm:
Change the position of the piston rod 2 in the block or change the position of the stopper 4



3.5.3 Assembling and gluing the transfer plate with inner slider for the 805-121

The transfer plate (see page 47) with inner slider is required for sewing two parallel double seams.

Process	Remarks
1. <u>Deburr the milled transfer plates</u>	
2. <u>Assemble the angle lever 3 and the fork 1 and 2 and then screw on the inner transfer plate 4</u>	– Make sure that the screwed-on forks are at a 90-angle with respect to the upper edge of the transfer plate. To adjust it is recommended to use a stop bracket.
3. <u>Assembling the slide plate, inner slider plates and Delrin plates</u>	
– Connect the slide plate 7 and the 4 coupling elements 6 using large-head rivets 5 – Connect the rivets 10 and bushings 9 with the 2 semi-finished inner slider plates 8 – Slip the semi-finished plastic plates 11 (0.5 mm Delrin) on the bushings 13 of the inner slider plates 12 – Connect the inner slider plates and Delrin plates with the slide plate	– If necessary, countersink the 4 holes from below. Then slide the rivets from below through the holes of the plates, and from the other side slip the bushings on the rivets and rivet them – <u>For this, use the Delrin plates with the smaller holes</u> Proceed as follows: – Slide the bushings 17 of the inner slider plates 18 through the grooves of the transfer plates – Slip the plastic discs 15 on the bushings – Slip the coupling elements 14 on the bushings and secure with the circlips 19
4. <u>Mounting the guide bushings and stopper:</u>	
– Fasten 2 guide bushings 21 on the slide plate 20 – Adjust the stopper 23 "Inner slider in position for the outer seam" and fasten with screw	To do this, proceed as follows: – Pull the slide plate 22 completely to the front – Pull back the slide plate by 0.7 mm – Place the stopper 23 against the slide plate and screw on



Process

Remarks

5. Trim the inner slider plates and Delrin plates:

- Mark the outer contour of the two plates 2

- For this process a milling program is being prepared
- Pull the slide plate against the stopper 23 (page 41), and then mark the contour at a distance to the outer edge of the inner frame, which corresponds to the distance between the double seams

- Trim and deburr the plates along the marked contour

6. Gluing the transfer plate:

- Cut to size the sponge rubber 3 (red, 3 mm) and stick it on the inner slider plates

- Cut into 12-mm-wide strips, provided that their distance to the inner edge of the plate exceeds 6 mm. Otherwise, the strip must be accordingly narrower

- Stick the semi-finished Delrin plates 4 (white) on the inner slider plates

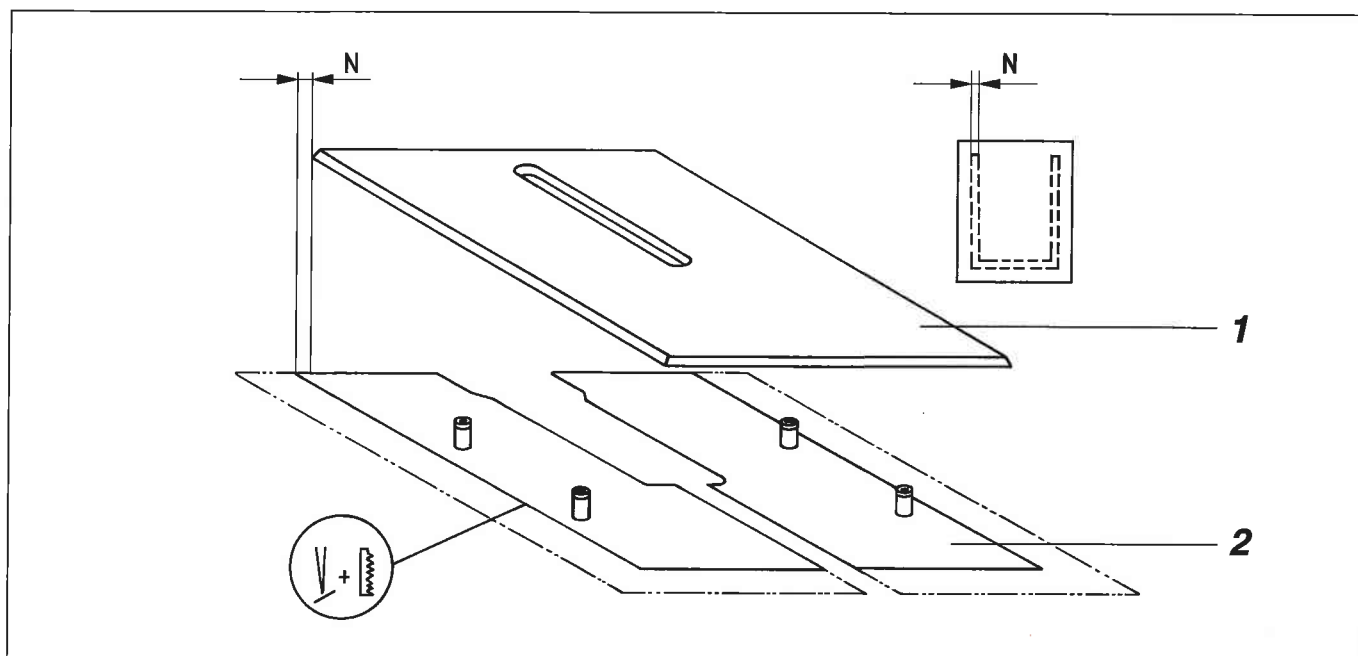
- For sticking use the double-sided adhesive tape

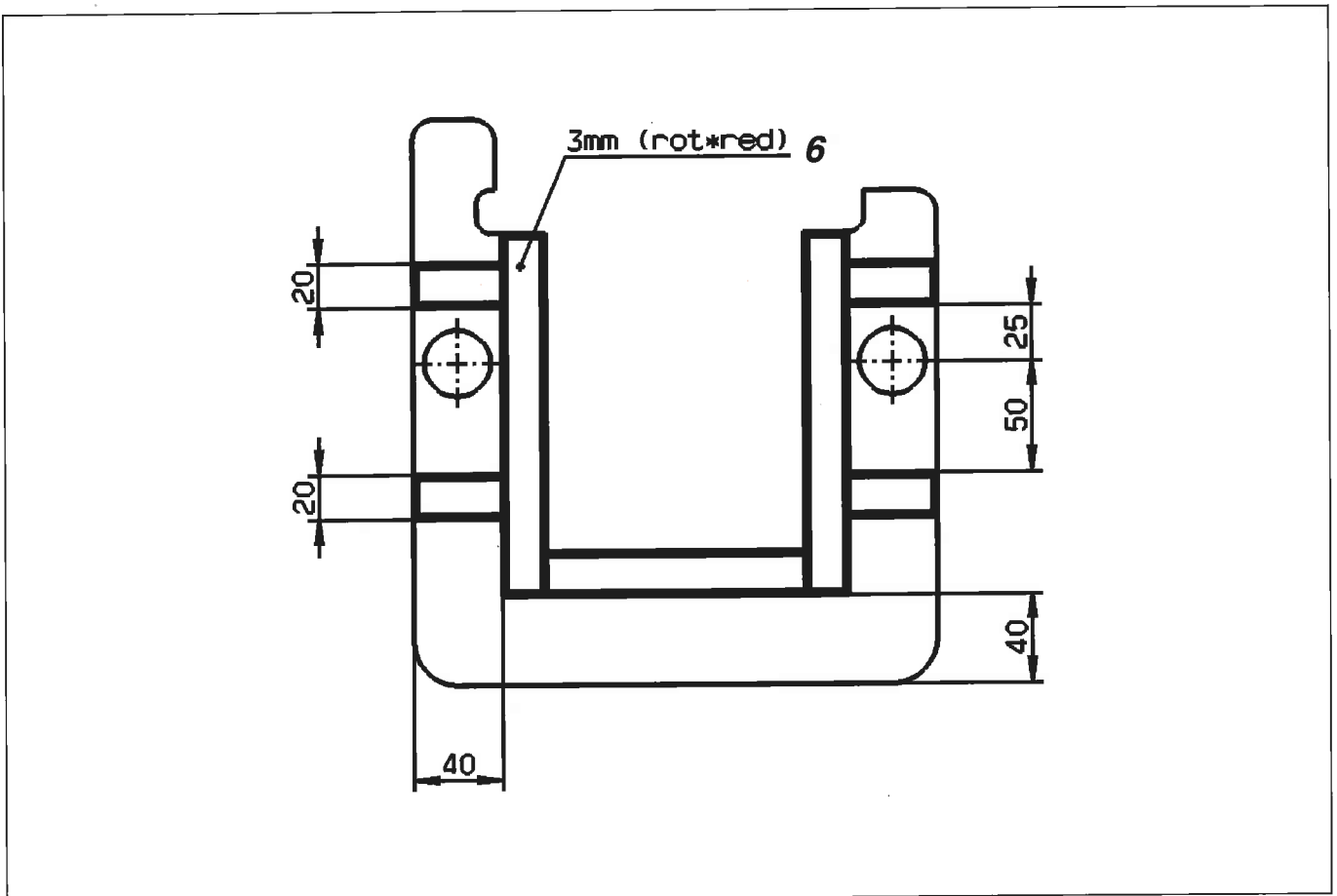
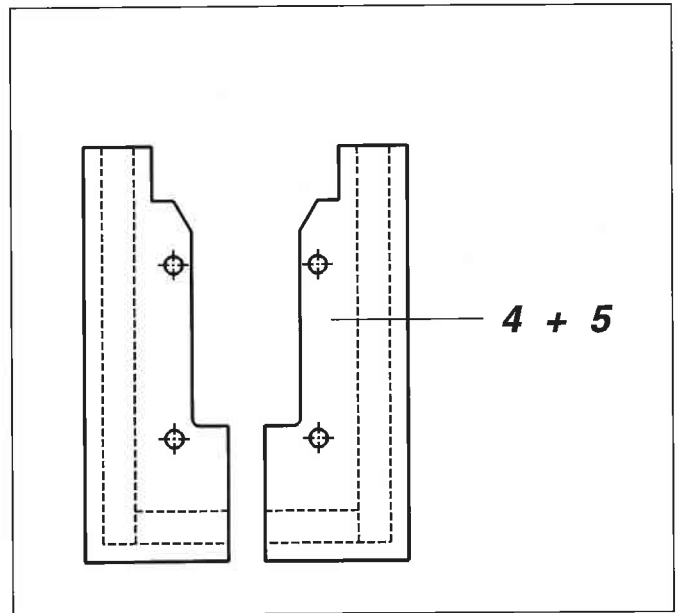
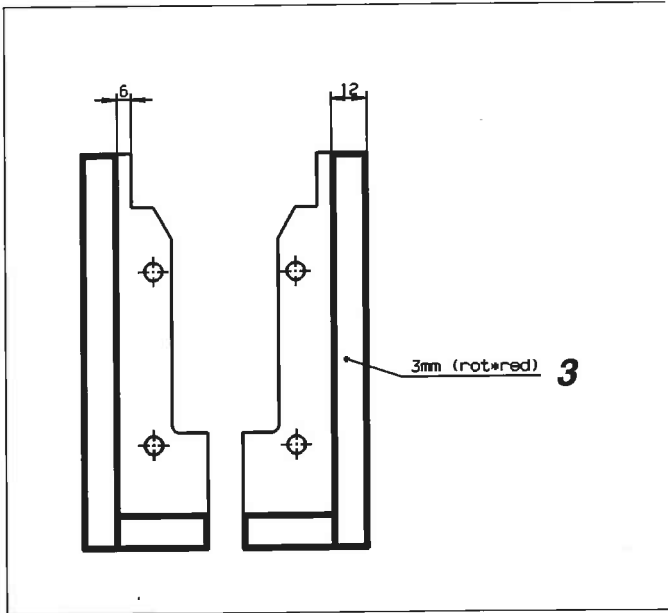
- To do this, use the special glue in accordance with the gluing instructions and apply the glue to the whole surface of the plates

- Stick the rough adhesive foil 5 on the Delrin plates

- Stick the sponge rubber 6 (red, 3 mm) on the outer transfer plate

- For sticking use the double-sided adhesive tape





7. Mounting the block, cylinder and switching rod

- Screw the bolt 12 into the transfer plate
- Turn the piston rod 7 into the thread of the block 8 – Turn the piston rod until its end is flush with the block
- Slip the cylinder 3 on the bolt in the transfer plate and secure with a circlip
- Screw the block 8 and the overlapping plate 10 on the slide plate 11
- Adjust the position "Inner slider back for inner seam"
 - To do this, retract the piston rod completely and then turn in the block 8, until the inner slider plates are flush with the inner transfer plate
 - Observe the following:
 - The ring 14 must be flush with the switching rod end
 - With retracted piston rod the switching rod should jut out from the upper edge of the inner transfer plate
- Screw the adjusting ring 14 on the switching rod 13 and fasten the latter in block 8
- Check the smooth motion of the inner slider

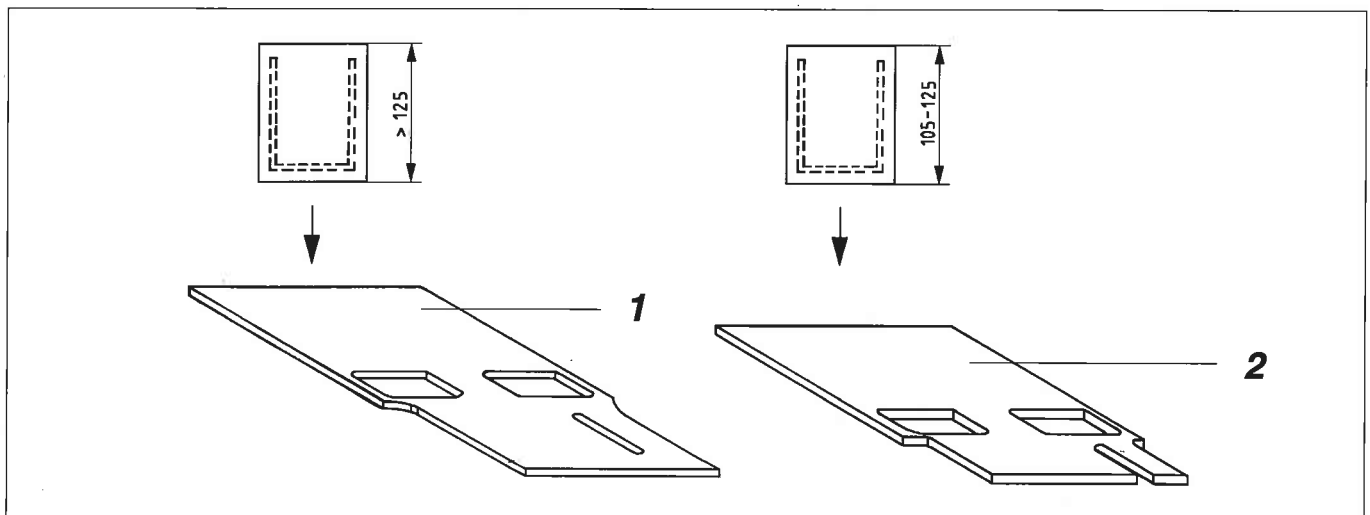
8. Mounting the connection pieces and connecting the hoses

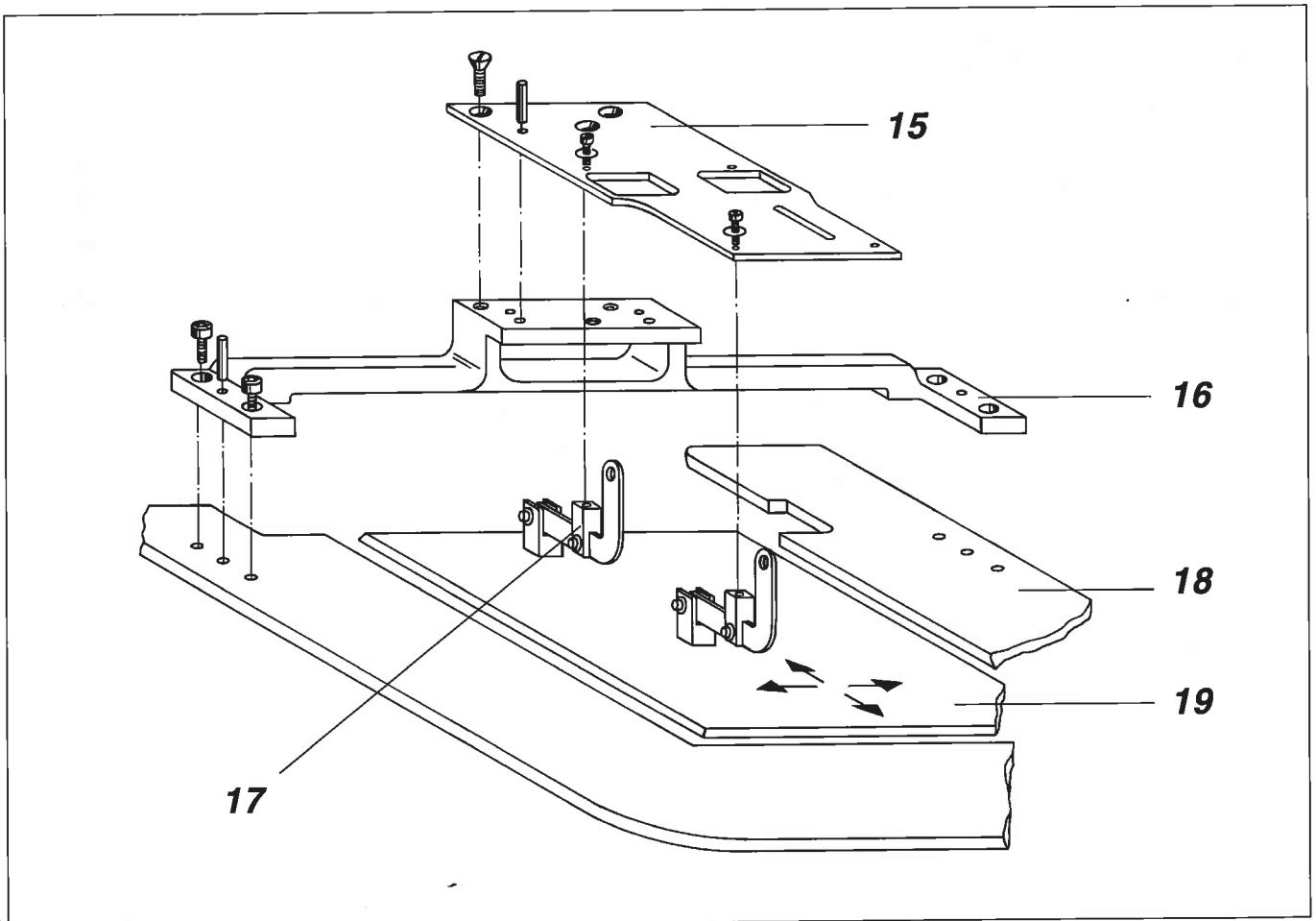
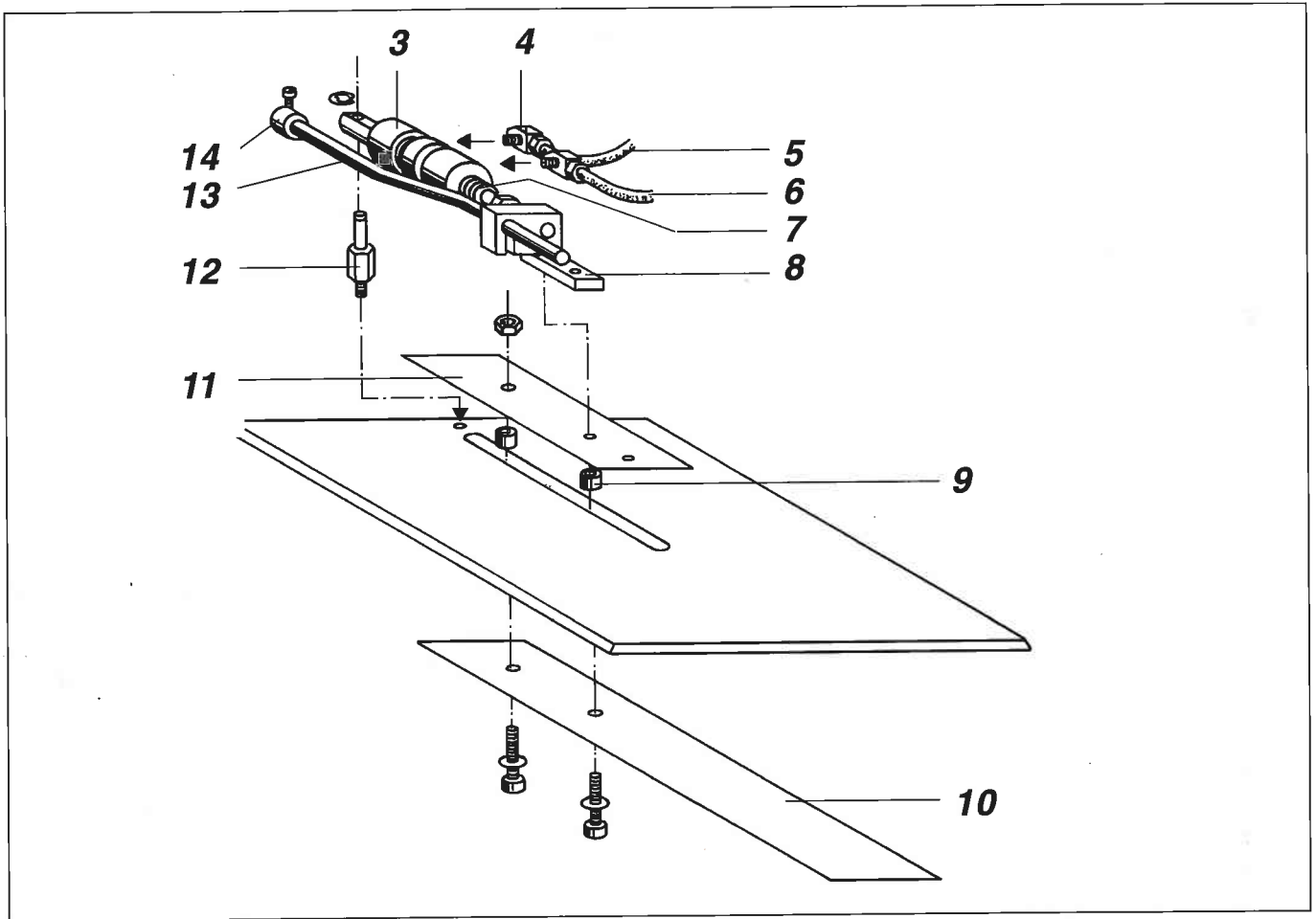
- Screw the connection pieces 4 on the cylinder
- Join the 350-mm-long hose 6 to the corresponding cylinder connection piece
- Join the 370-mm-long hose 5 to the corresponding cylinder connection piece

9. Mounting the carrier plate and bridge:

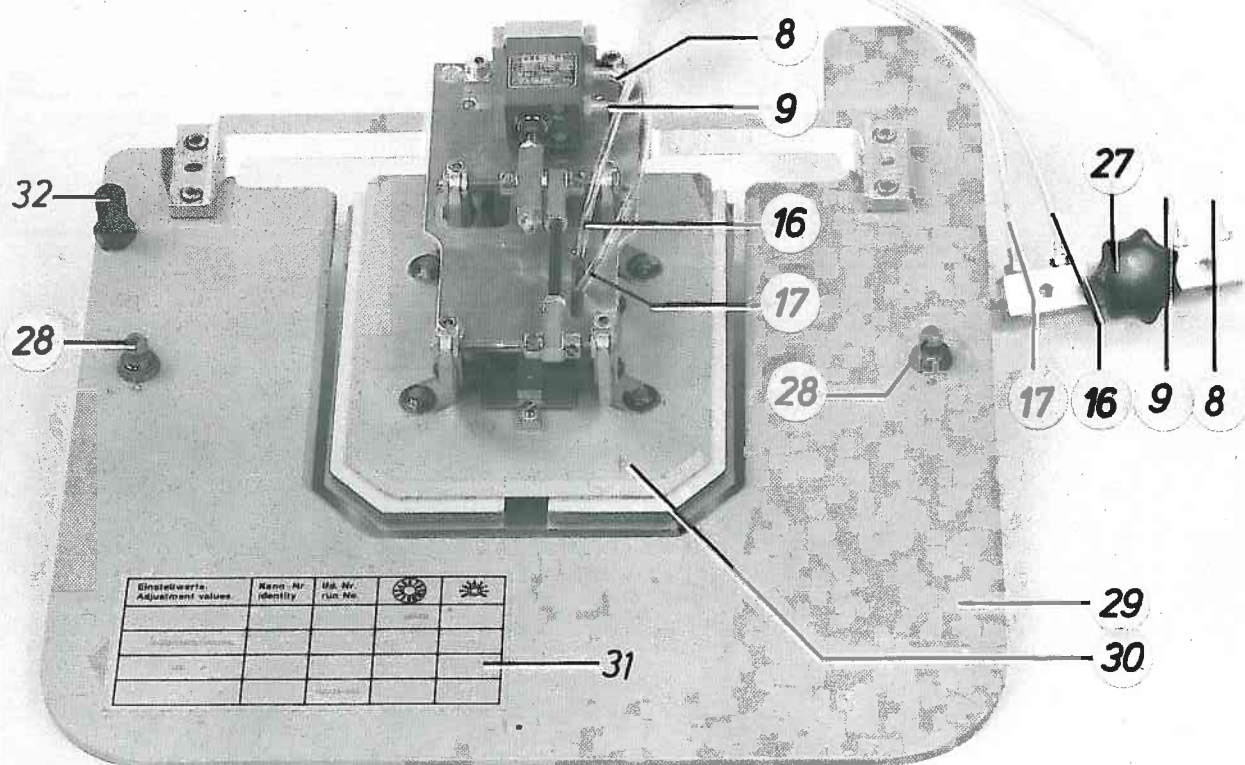
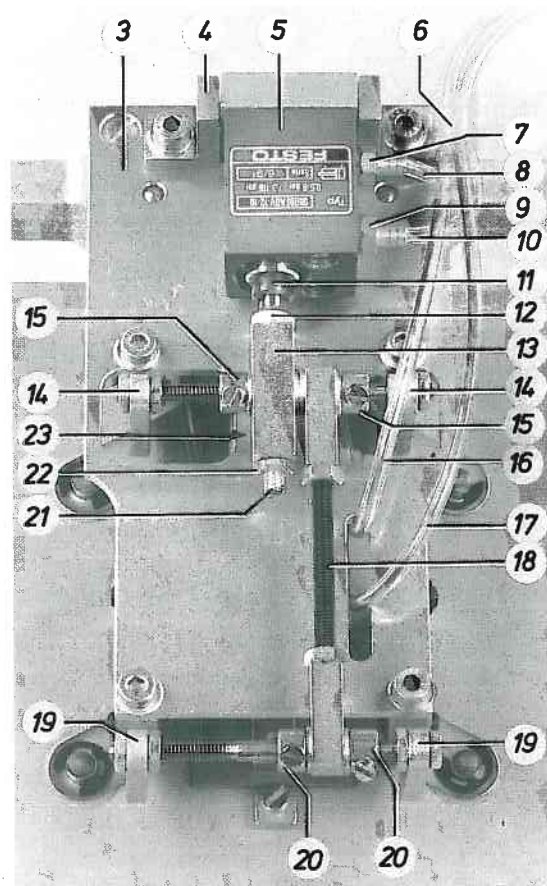
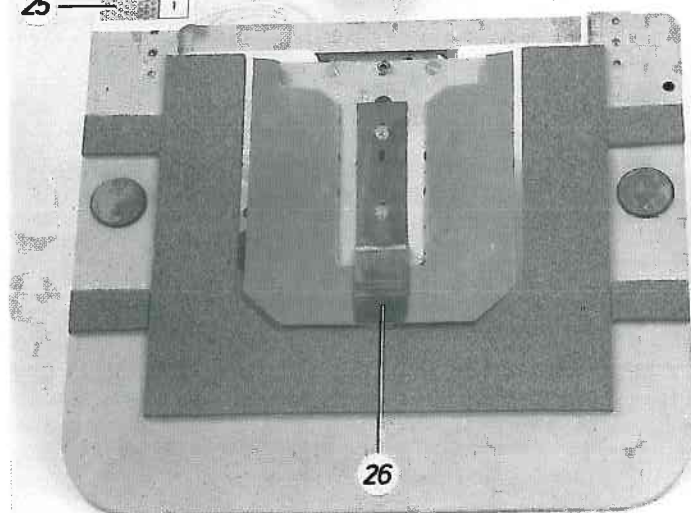
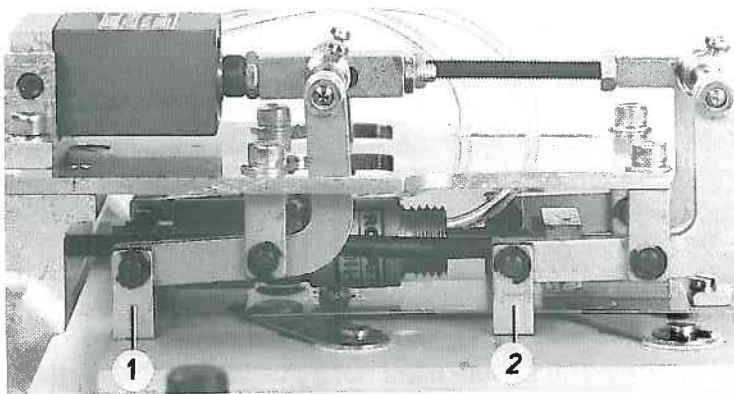
- Select the suitable carrier plate

Pocket depth	Version
105-125 mm	2
from 125 mm	1
- Connect the carrier plate 15 with the bridge 16
- Screw the carrier plate 15 on the 4 forks 17 on the inner transfer plate
- Connect the bridge 15 with the outer transfer plate 18
- Align the inner transfer plate 19 and screw on securely
- The pins secure both elements
- Tighten screws only lightly
- The pins secure both elements
- All sides of the inner transfer plate must have the same distance to the outer transfer plate





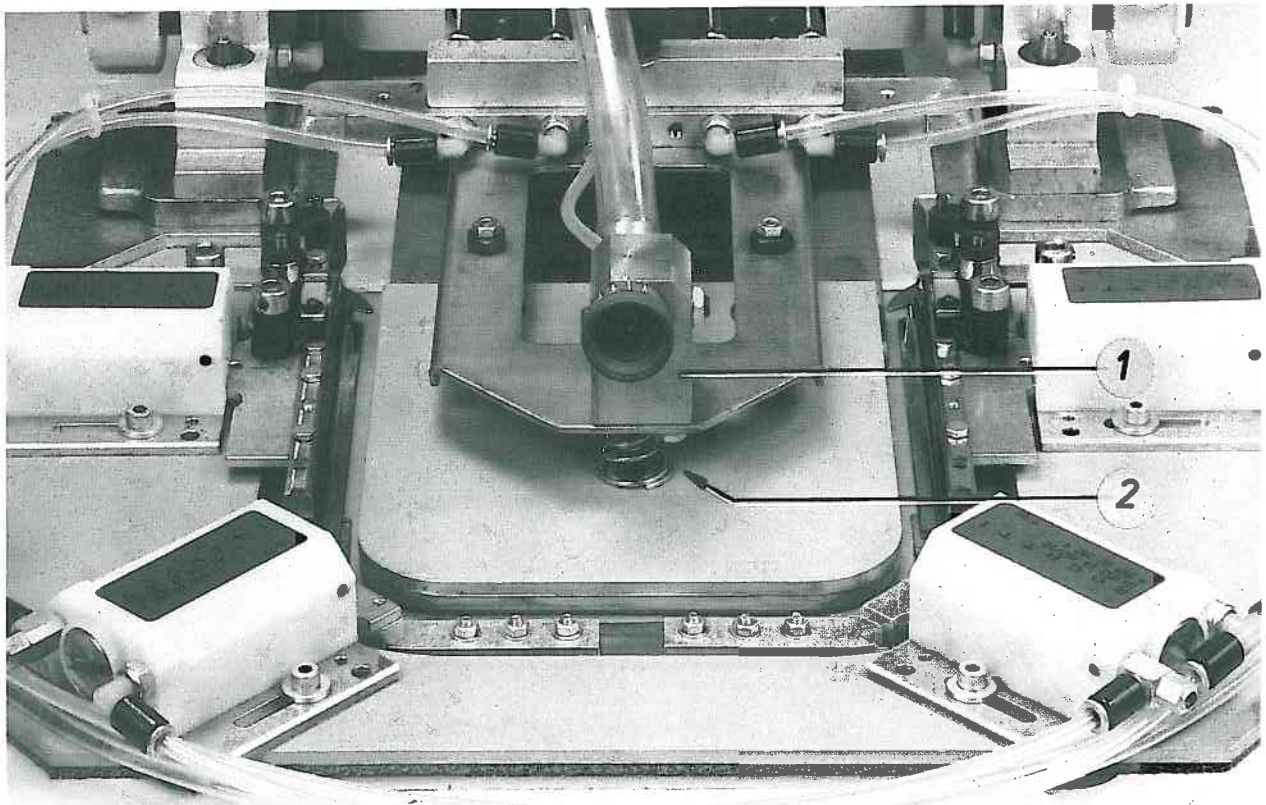
Process	Remarks
10. <u>Assembling the cylinder and connection elements:</u>	
- Connect the holder 4 and the clip 6 with the cylinder 5 - Join the connection pieces 7 and 9 and the hoses 8 and 10 - Mount the ring 11, lock nut 12 and coupling element 13 - Screw the cylinder assembly on the carrier plate 3 - Mount the connection elements between the cylinder 5 and the 4 angle levers 14 and 19	- Hose 8 = 200 mm long - Hose 10 = 230 mm long
- Mount the spring 23 - Adjust the height of the lowered inner transfer plate 30 - Check the smooth motion of the opening mechanism	Proceed as shown in the figure and observe the following: - The distance between the angle levers must be equal to the distance between their forks 1 and 2 on the inner transfer plate. Adjust the length of the threaded bolt 18 accordingly. - Position the adjusting rings 15 and 20 such that the mechanism can be moved smoothly - Adjust the threaded pin 21 for the adjustment of the spring pressure such that the threaded pin is flush with the lock nut 22 - When the piston rod of the cylinder 5 is completely retracted, the inner transfer plate 30 should be level with the outer transfer plate 29. To check, lay eg a ruler across both plates. To correct, change the position of the piston rod in the connecting rod 13 accordingly - When the motion is sluggish, remedy the causes for this
11. <u>Connect the coupling bar with the hoses:</u>	
- Screw the hose connection pieces on the coupling bar 27 - Connect the hoses 8, 9, 16 and 17 of the cylinders with the coupling bar	Make sure that the hoses 16 and 17 of the cylinder "Inner slider" must be located in the slot of the carrier plate
12. <u>Screw the take-up element 28 and the switching element 32 on the transfer plate</u>	Screw on the two take-up elements 28 with the countersunk head screws, screw the switching element 32 into the threaded hole
13. <u>Sticking on the code field:</u>	
- Stick the code field 24 on the transfer plate - Stick reflector tape 25 on the corresponding sections of the code field - Stick the data field 31 on the transfer plate	- The field must be positioned as shown in the figure - Stick on the sections that are displayed during programming
14. <u>Connect the style kit with the machine:</u>	See subject 4.4 of the operation manual, and at the same time adjust the switching rod such that it has a distance of 0.5 mm to the switch "Inner slider retracted". Besides, the switching rod should be "centred" with respect to the switch.



Process	Remarks
15. <u>Mark the seam contour on the Delrin:</u>	
– Call up the process "Sewing without folding"	– See subject 9.5.6 of the service manual
– Reduce the speed to 5% using the key ←	
– Start the process and stop it, when the sewing head has lowered	
– Press key "0"	– For "Safety stop" of the motors
– Install a shortened needle	
– Check the height of the needle and correct, if necessary	– The needle must not penetrate the Delrin too deeply, otherwise the Delrin might break
– Press key "I"	
– Proceed with the process to the cycle end	
– Remove the transfer plate	
16. <u>Trim and file the edges of the Delrin:</u>	
– Trim the Delrin along the marked contour	
– File the edges of the Delrin	– File or emery the Delrin such that it has the minimum distance to the needle, without touching the needle
17. <u>Bend the overlapping plate 26 (page 47) and cut off its front edge</u>	
	– The plate should lie evenly on the rough adhesive foil
	– The front edge of the plate should be flush with the Delrin
18. <u>Check the distance between the Delrin and the needle:</u>	
– Insert the transfer plate	– BT: Read identity code Proceed with Enter
– Press key "Enter"	– The code of the transfer plate is read
– Install a needle	
– Start the sewing cycle and determine the distance	– Should the needle be deflected, file or emery the edges of the Delrin where necessary

3.6 Making fine adjustments on miscellaneous parts

Process	Remarks
1. <u>Checking the "folding position" of the inner frame, and, if necessary, correcting:</u>	
– Call up the process "Single step mode"	– See subject 9.5.5 of the service manual
– Set the dials at "0"	
– Press key b1 so often until the inner frame is in the "Folding position"	– At this position the centre slider is under the inner frame as well
– Move the depressurized side, front and corner sliders under the centre slider	
– Determine the distance between the centre slider and the "outer" sliders	– The Z-plates should be set as closely as possible under the centre slider, without touching it
– If the distance is not correct: Change the inner frame height	– To do this, loosen the lock nut 2 and turn the screw of the adjusting element 1 accordingly
2. <u>Adjusting the position of the advanced side, front and corner sliders:</u>	
– Press the key b1 "Start" so often until the side and front slider are in front	– The lateral distance of the sliders to the centre slider should correspond to the thinnest material
– Adjust the lateral distance to the centre slider	
– Press the key b1 "Start" again and adjust the distance of the corner slider	– To do this, loosen the screws and change the position of the cylinder accordingly
– Check the length and position of the Z-bars	– Same as for the side and front slider
	– A collision of the Z-bars must be impossible.



3. Checking the position of the Z-bars to the table top and, if necessary, correcting:

- Press key b1 so often until the advanced side, front and corner sliders are again at their initial position
- Check the position of the Z-bars

- The Z-bars should rest on the table top without pressure
- To correct, bend the Z-bars accordingly

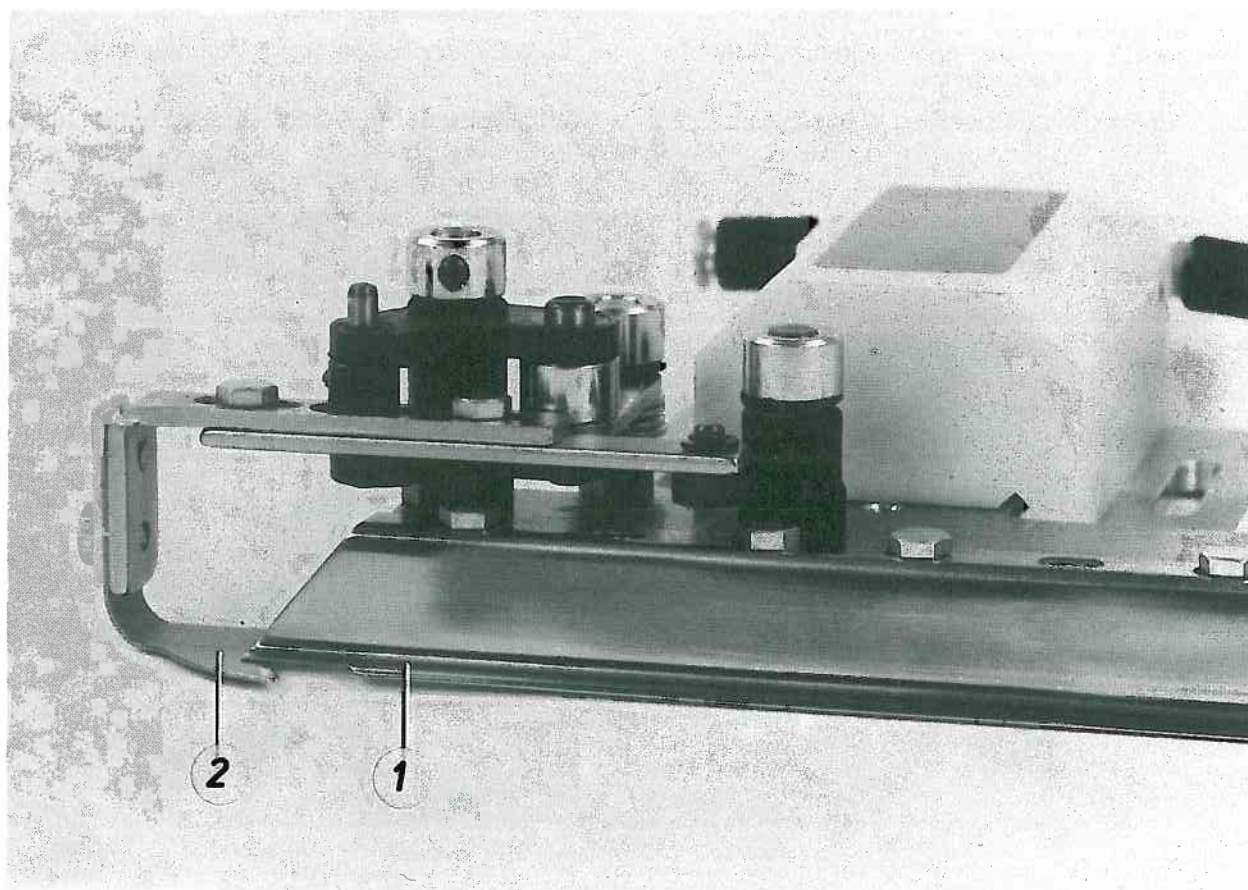
4. Check the function of the folding device with loaded material, and, if necessary, correct the adjustments

- Make the check in the "Single step mode"

5. Mounting and adjusting the slider plate of the corner slider:

- Screw the slider plate 2 on the holder
- Adjust the height of the slider plate 2
- Adjust the amount of overlapping of the slider plate 2 and the side slider 1

- The distance to the side slider should correspond to the average fabric thickness
- Depending on the type of fabric, they should overlap by 1-3 mm.
To adjust, change the position of the holder accordingly



4. Correcting the program

4.1 General information

The table gives the following information:

- Which corrections can only be made in the basic program (processes 1, 2 and 4)
- For which corrections or entries it is necessary to form a program variant (processes 5 and 6)
- Which corrections in the basic program also have an effect on the belonging program variants (processes 1, 2 and 4). This is represented by an arrow.

Processes in the menu "Program correction"	Basic program	Program variant
1: Corner correction	x →	
2: Tack correction	x →	
3: Adjust seam	x	x
4: Stitch length correction	x →	
5: Folding correction		x
6: Foot lift adjustment		x

4.2 Correcting the position of the corner stitches

The position of the corner stitches in the tack area can be changed with the "Tack correction". The position of all other corner stitches can be changed with "Corner correction". In all cases a correction in the basic program of up to 0.8 mm can be made in X- and Y-direction.

This correction also has an effect on all program variants.

Entry sequence

Remarks / On-screen text (BT)

Prerequisite:

- Correction values have been determined by sewing tests with all fabric types
- Menu "Service technician" called up

- BT:
2: Program correction

1. Call up menu "2":

- Press key "2"

- BT:
1: Corner correction
2: Tack correction

2. Select menu "1" or "2":

- Press key "1" or "2"

- Besides the listing of the available pockets the following BT appears:
Should a program be corrected: Yes

3. Answer the question:

- Press the key "Yes"

- BT:
Enter the running no. of the program to be corrected

4. Enter the running no.:

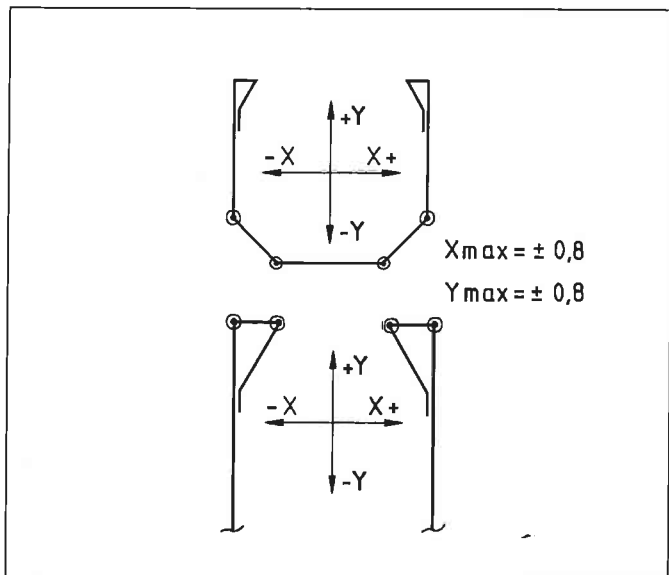
- Enter the no.
- Press key "Enter"

- BT:
Correct the displayed corner stitches by max.
0.8 mm in X- and Y-direction
X:0 Y:

5. Enter the correction values of the corner stitches:

- Enter the X- and Y-values of all corner stitches and confirm with the key "Enter"

- The entries apply to the corner stitch marked with a cross
- When the position of the shown point does not have to be changed, just press the key "Enter"
- After the last value has been entered, the menu "Service technician" appears



4.3 Correcting the stitch length

The stitch length can only be changed within the determined range.

A correction can only be made in the basic program, but, however, has an effect on all belonging program variants.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" called up	– BT: 2: Program correction
1. <u>Call up menu "2":</u> Press key "2"	– BT: 4: Stitch length correction
2. <u>Select the process "4":</u> Press key "4"	– BT: Besides the listing of available pockets the following BT appears: Should a program be corrected: Yes
3. <u>Answer the question:</u> Press key "Yes"	– BT: Enter the running number of the program
4. <u>Enter the running no.:</u> – Enter the no. – Press key "Enter"	– Of the basic program "00" – BT: Stitch length: X
5. <u>Correct the stitch length:</u> – Enter the stitch length – Press key "Enter"	– The menu "Service technician" is called up

4.4 Changing the position of the seam pattern

In all basic programs and program variants the position of the whole seam pattern can be changed in X- and Y-direction by up to 0.5 mm. It should, however, be taken into account that a correction in the basic program does not have an effect on the belonging program variants or vice versa.

Entry sequence

Remarks / On-screen text (BT)

Prerequisites:

- Correction values have been determined by sewing tests
- Menu "Service technician" called up

- BT:
2: Program correction

1. Call up menu "2":

Press key "2"

- BT:
3: Adjust seam

2. Select the process "2":

Press key "3"

- Besides the listing of the available pockets the following BT appears:
Should a program be corrected?

3. Answer the question:

Press the key "Yes"

- BT:
Enter the running number of the program

4. Enter the running no.:

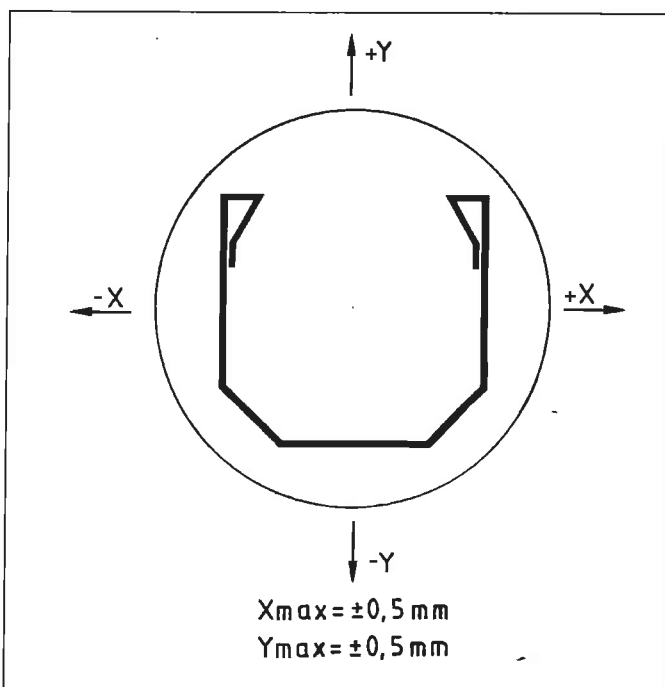
- Enter the no.
- Press the key "Enter"

- BT:
Move the sewing contour to the fold by max. 0.5 mm in X-direction:

5. Enter the "shifting values" of the whole pocket contour:

- Enter the X-value and press key "Enter"
- Enter the Y-value and press key "Enter"

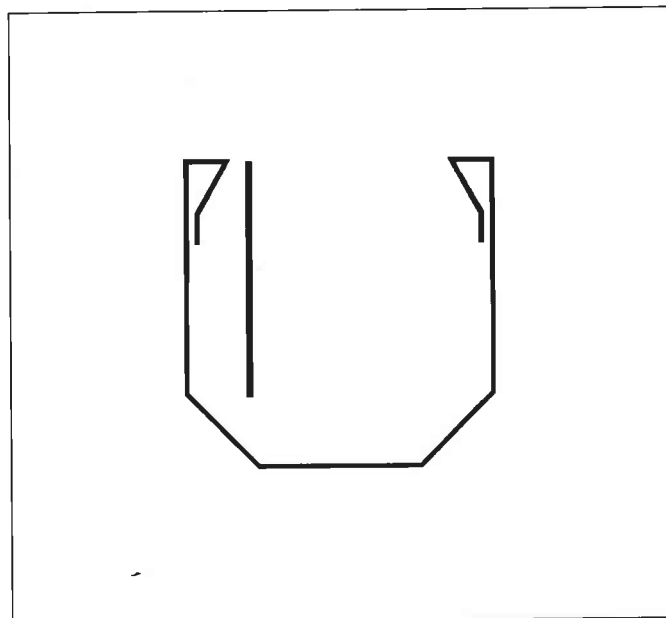
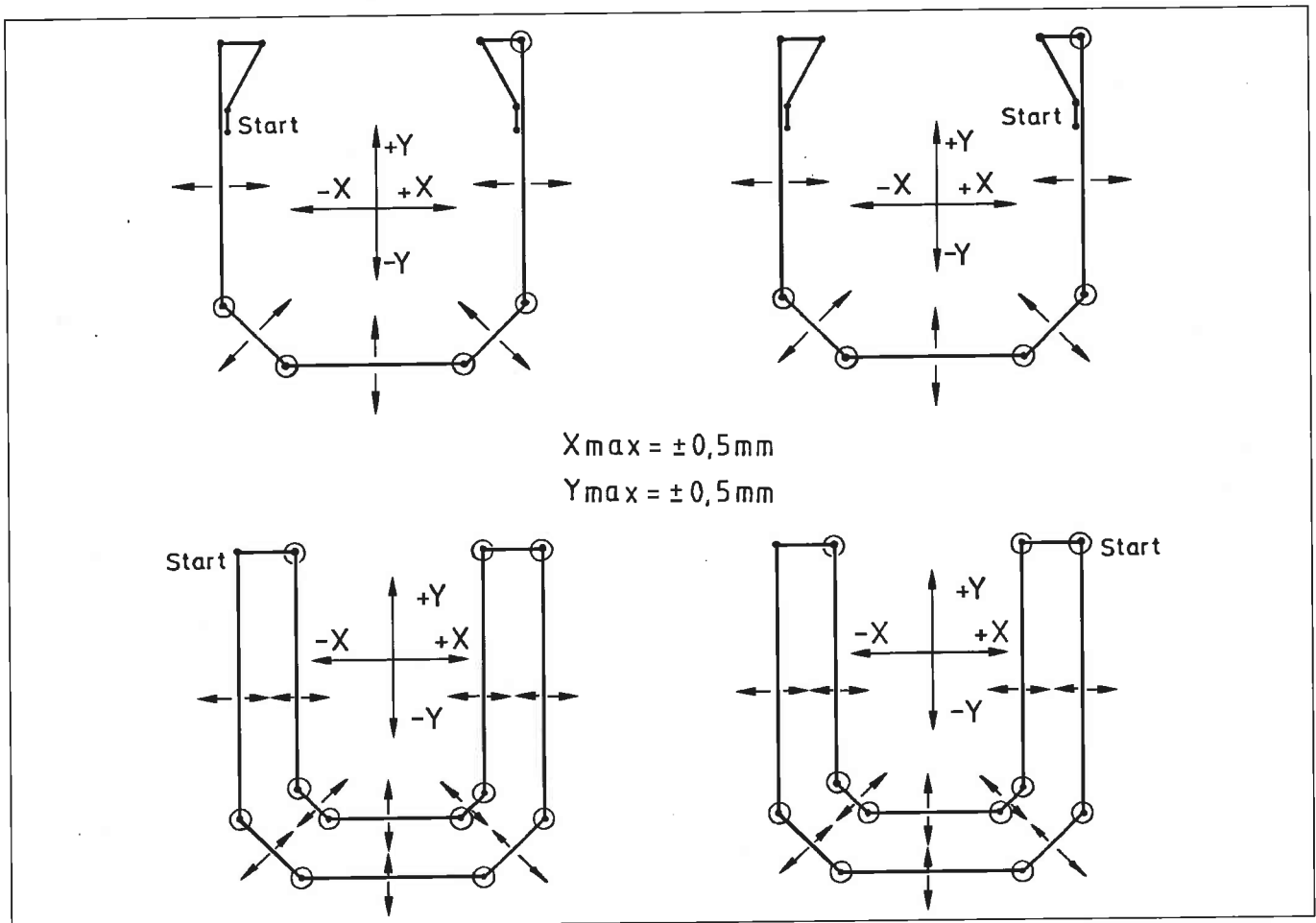
- BT: same as point 4
- BT:
Service technician



4.5 Changing the position of the seam contours and forming additional seams

The "Folding correction" to be selected for this process that leads to the formation of a variant, offers the following possibilities:

- Changing the position of the seam sections by "shifting" their end points
The position of these points can be changed by up to 0.5 mm in X- and Y-direction.
- Forming an additional seam parallel to the left or right side seam.
Here, there's a choice between a "zigzag seam" and a "straight seam".



Entry sequence

Remarks / On-screen text (BT)

Prerequisites:

- Correction values have been determined by a sewing test
 - Menu "Service technician" called up
-
1. Call up menu "2":
Press key "2"
 2. Select the process "5":
Press key "5"
 3. Answer the question:
Press key "Yes"
 4. Enter the running no.:
 - Enter the no.
 - Press key "Enter"
 5. Enter the no. of the variant:
 - Enter the no.
 - Press key "Enter"
 6. Enter the "shifting values" of the corner points:
 - Enter the values of all points and each time confirm with "Enter"
 7. Question "Additional seam":
 - If no additional seam is desired:
Press key "1"
 - If an additional seam is desired:
Press key "2", "3" or "4"
Enter the data of the additional seam

Press key "Enter"
Re-mill the transfer plate

- BT:
2: Program correction
- BT:
5: Folding correction
- Besides the listing of available pockets the following BT appears:
Should a program be corrected?
- BT:
Enter the running no. of the program
- BT:
Enter the number of the variant
- BT:
Move the ends of the seams by max. 0.5 mm in X- and Y-direction:
X: Y:
- When the position of the shown point does not need to be changed, just press the key Enter
- After the last value was entered the following text appears, when pockets with parallel side seams are sewn:
1: without additional seam
2: additional seam zigzag
3: free contour
4: additional seam straight.
In all other cases the menu "Service technician" appears
- The menu "Service technician" appears
- After the last value has been entered the following BT appears:
Mill the transfer plate
Proceed with Enter
- The menu "Service technician" appears
- As described in subject 2

4.6 Programming the signal points for the stroke position adjustment

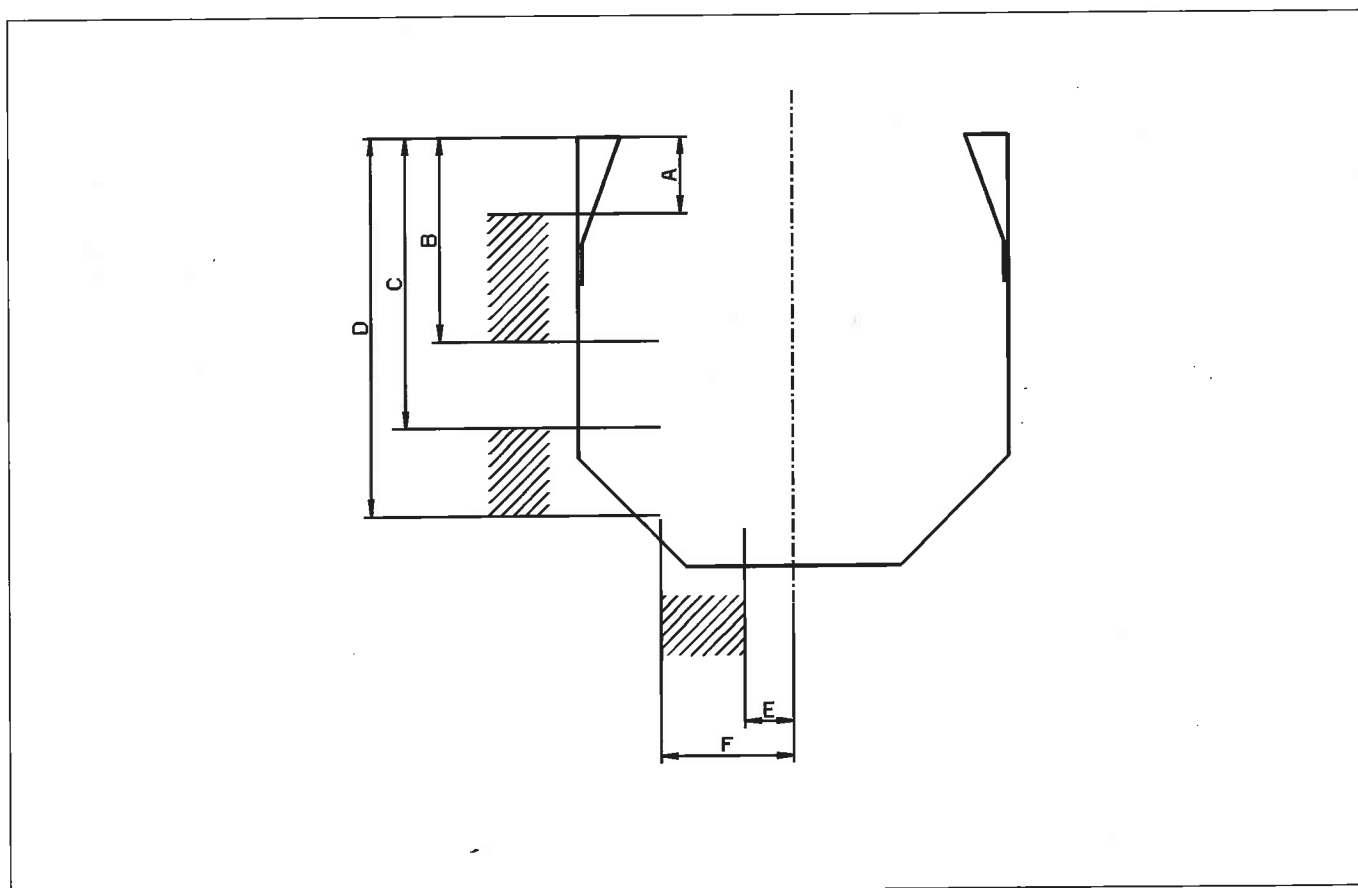
- When pockets with varying material levels are to be set with one program, a program variant with a higher foot stroke position of the sewing foot in the desired seam sections can be formed. In the tack area this function always takes place. For this area the signal points must thus not be programmed.
- When defining the signal points the following needs to be observed:
The signal "Top stroke position" must be given just before the higher material level, and the signal "Bottom stroke position" must be given just before leaving the higher level. As the foot stroke position is changed while the machine is operating, the reaction paths must be taken into account when defining the signal points.

Entry sequence

Remarks / On-screen text (BT)

Prerequisite:

- Menu "Service technician" selected
 - BT:
2: Program correction
- 1. Call up menu "2":
Press key "2":
 - BT:
6: Foot lift adjustment
- 2. Select the process "6":
Press key "6"
 - Besides the listing of available pockets the following BT appears:
Should a program be corrected:
Yes
- 3. Answer the question:
Press key "Yes"
 - BT:
Enter the running no. of the program to be corrected



Process	Remarks / On-screen text (BT)
4. <u>Enter the running number:</u>	
– Enter the number	
– Press key "Enter"	– BT: Number of the variant is: eg 50 Proceed with Enter
– Press key "Enter"	– The following graphics appear on the screen: 1: Pocket style 2: Zones for the foot stroke position adjustment 3: Dimensioning of zones with letters
5. <u>Program the "signal points" for the stroke position adjustment:</u>	
Enter the length of the segments marked with letters and press key "Enter"	– When the stroke position is not to be changed in the shown zone, enter a "0"

4.7 Changing the activation timing of the transfer plate inner slider

The signal "Move the inner slider into the position for the inner seam" should be given as late as possible, so that the pocket is not distorted, while the last stitches of the outer seam are being sewn. On the other hand, the sewing machine should not stop for a short moment. Sometimes, however, this cannot be avoided when soft, supple and thin fabrics are sewn.

Process	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
– Sewing tests have shown that a correction is necessary.	
– Menu "Service technician" called up	– BT: 2: Program correction
1. <u>Call up menu "2":</u>	
– Press key "2"	– BT: 7: Switch point double seam
2. <u>Select process "7":</u>	
	– BT: Switch point for inner slider with double seam 9 stitches before the top of the tack (min. 2, max. 16)
3. <u>Change the switch point</u>	
– Enter the stitches	
– Press key "Enter"	

5. Processes during disk operation

5.1 Formatting the disks

A disk needs to be formatted in the following cases:

- If the program data is to be transferred to a brand-new disk.
- If the data of all programs on a disk is to be deleted.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
- Disk drive with disk is in the machine	
- Menu "Disk operation" called up (via "Service technician")	- BT: 1: Formatting disk
1. <u>Select process "1":</u> Press key "1"	- BT: Enter the desired disk number
2. <u>Enter any number:</u>	
- Enter the no.	
- Press key "Enter"	- BT: Please wait, disk is being formatted
- Wait	- Until the menu "Disk operation" reappears

5.2 Calling up the contents of a disk

This enables the user to call up the listing of all programs memorized on a disk.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
- Disk drive with the disk is in the machine	
- Menu "Disk operation" called up (via "Service technician")	- BT: 2: Directory
1. <u>Select process "2":</u> Press key "2"	- Besides the directory the following BT appears: New page with ← → Back with menu key

5.3 Deleting a program from a disk

- All programs can also be deleted by formatting the disk.
- If a basic program is deleted, all belonging program variants are deleted as well.

Entry sequence

Remarks / On-screen text (BT)

Prerequisites:

- | | |
|---|---|
| <ul style="list-style-type: none">- Disk drive with the disk is in the machine- Running no. of the program to be deleted is known- Menu "Disk operation" called up (via "Service technician") | <ul style="list-style-type: none">- BT:
3: Delete program |
|
 | |
| <ol style="list-style-type: none">1. <u>Call up process "3":</u>
Press key "3" | <ul style="list-style-type: none">- BT:
Should a program be deleted "Yes" |
| <ol style="list-style-type: none">2. <u>Answer the question:</u>
Press key "Yes" | <ul style="list-style-type: none">- BT:
Enter the running number of the program |
|
 | |
| <ol style="list-style-type: none">3. <u>Enter the running no:</u><ul style="list-style-type: none">- Enter the no.- Press key "Enter" | <ul style="list-style-type: none">- The called up menu "Disk operation" shows that the program is deleted |

5.4 Transferring a program from the machine to a disk

This process enables to "save" the program data on a disk. Besides, the programs formed on a machine can be transferred via the disk to other machines. See subject 5.5.

Entry sequence

Remarks / On-screen text (BT)

Prerequisites:

- Disk drive with the disk is in the machine
- Running no. of the program to be transferred is known
- Menu "Disk operation" called up (via "Service technician")

- BT:
4: Save program

1. Call up process "4":

Press key "4"

- Besides the directory the following BT appears:
Should a program be saved to disk: "Yes"
New page with ← →

2. Answer the question:

Press key "Yes"

- BT:
Enter the running number of the program to be saved

3. Enter the running no.:

- Enter the no.
- Press key "Enter"
- Wait

- Until the display of the menu "Disk operation" signals the end of the process

5.5 Transferring a program from the disk to a machine

The data of a program can be transferred from the disk to any machine. It should, however, be noted that the program transferred to the machine memory will get another running number.

Process	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
– Disk drive with disk is in the machine – Menu "Disk operation" called up (via "Service technician")	– BT: 5: Read program
1. <u>Call up process "5":</u> Press key "5"	– BT: Should a program be read: "Yes"
2. <u>Answer the question:</u> Press key "Yes"	– Besides the directory the following BT appears: Enter the running number of the program
3. <u>Enter the running no.:</u> – Enter the no. – Press key "Enter"	– The display of the menu "Disk operation" signals the end of the process

6. Calling up, printing and deleting data from the machine memory

6.1 Deleting a program from the memory

When a basic program is deleted, all belonging program variants are deleted as well.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" selected	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 1: Delete program
2. <u>Select process "1":</u> Press key "1"	– Besides the listing of all programs the following BT appears: Should a program be deleted: "Yes" New page
3. <u>Answer the question:</u> Press key "Yes"	– BT: Enter the running number of the program to be deleted
4. <u>Enter the running no.:</u> – Enter the no. – Press key "Enter"	– When the number of a basic program was entered that also contains program variants, the following BT appears: Should the program no. X be deleted with all its variants? – In all other cases the following BT appears: Should the program with the no. X be deleted? (Yes/No)
5. <u>Delete the program</u> Press key "Yes"	– BT: Should a program be deleted: "Yes" New page
6. <u>To delete other programs:</u> Proceed as described from point 3 onwards	

6.2 Calling up the geometry, data and code

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" selected	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 2: Display pocket parameters
2. <u>Select process "2":</u> Press key "2"	– Besides the listing of all programs the following BT appears: Should a pocket be displayed "Yes" New page
3. <u>Answer the question:</u> Press key "Yes"	– BT: Enter the running no. of the pocket to be displayed
4. <u>Enter the running no.:</u> – Enter the no. – Press key "Enter"	On the screen the following information appears: – Pocket geometry – Parameter values – Transfer plate code – BT: Back with menu key

6.3 Printing the pocket parameters

This process is only possible when the machine has an appropriate interface or a printer is available.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
– Desired pocket parameters are displayed on the screen	– See subject 6.2
– Printer connected and operational	
– Menu "Service technician" called up	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 3: Print pocket parameters
2. <u>Select process "3":</u> Press key "3"	– Besides the listing of programs the following BT appears: Print pocket parameters "Yes"
3. <u>Answer the question:</u> Press key "Yes"	– Enter the running number of the pocket parameters to be printed
4. <u>Enter the running no. of the program:</u> – Enter the no. – Press key "Enter"	– The data are printed

6.4 Calling up the available pockets

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisites:</i>	
– Menu "Service technician" called up	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 4: Call up the available pockets
2. <u>Select process "4":</u> – Press key "4"	– Besides the listing of programs the following BT appears: New page

6.5 Joining programs

When programs for pockets with only slightly differing geometry (eg by another tack) are joined, these pockets can be folded and sewn with one style kit.

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" called up	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 5: Join programs
2. <u>Select process "5":</u> Press key "5"	– BT: Enter the running number of the program to be joined
3. <u>Enter the running number of the program to be joined:</u> – Enter the no. – Press key "Enter"	– BT: Enter the running number of the basic program
4. <u>Enter the running no. of the basic program:</u> – Enter the no. – Press key "Enter"	

6.6 Delete the joining of programs

The joining of programs described in subject 6.5 can be cancelled as follows:

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" called up	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 6: Delete joining
2. <u>Select process "6":</u> Press key "6"	– BT: Enter the running number of the program, which should no longer be joined
3. <u>Enter the running number of the corresponding program:</u> – Enter the no. – Press key "Enter"	– BT: Should the joining between program X and Y be deleted YES/NO
4. <u>Delete the joining:</u> Press key "Yes"	

6.7 Changing the identity code of a program

Programs cannot be read and saved, when programs with the same identity code are already on the disk or in the memory. In this case the program concerned must be renamed as follows:

Entry sequence	Remarks / On-screen text (BT)
<i>Prerequisite:</i>	
– Menu "Service technician" called up	– BT: 5: Data management
1. <u>Call up menu "5":</u> Press key "5"	– BT: 7: Rename program
2. <u>Call up process "7":</u> Press key "7"	– BT: Enter the running number of the program to be renamed.
3. <u>Enter the running no. of the corresponding program:</u> – Enter the no. – Press key "Enter"	– BT: Enter the new identity code
4. <u>Enter the new identity code:</u> – Enter the no. – Press key "Enter"	