Owner's manual
### Parts of the coverstyle

1. Upper needle-thread tension
2. Upper needle-thread tension
3. Carry handle
4. Thread tension/upper looper thread
5. Thread tension/lower looper thread
6. Thread tension/two-thread chainstitch looper/cover stitch looper
7. Looper cover
8. Blade guard
9. Looper disengaging lever
10. Standard presser foot
11. Needle plate
12. Swivel plate
13. Adjusting knob for seam width
14. Seam width viewing window
15. Needle holder
16. Sewing light cover
17. Adjusting knob for presser foot pressure
18. Upper overedge looper
19. Lower overedge looper
20. Two-thread chainstitch looper
21. Threading aid for the two-thread chainstitch looper/cover stitch looper
22. Swiveling stitch width latch
23. Movable upper blade
24. Fixed lower blade
25. Clamp spring for serging thread chains
26. Needle plate disengaging lever
27. Handwheel for lowering the upper blade
Accessory box
Open the accessory box by gently pressing the bottom of the box inwards. The following accessories can be found in the box:

1. Overlock needle system EL X 705, cat. no. 2002
2. Thread unreeling discs (5)
3. Transparent presser foot (F) for cover stitch and two-thread chainstitch
4. Clip-on thread guide
5. Cleaning brush
6. Screw driver
7. Machine oil
8. Needle threader
9. Needle inserting tool
10. Wrench
11. Replacement upper blade
12. Edge guide
13. Tweezers
14. Allen key
15. Converter

Gathering/Shirring Foot G
The Gathering/Shirring Foot G is perfect for simultaneously stitching and gathering two layers of fabric. You can increase the gathering by setting a higher differential feed and adjusting the stitch length.

Sewing:
1. Set the machine for a 4-thread overlock seam. Differential feed: 2.
2. Snap on the Gathering Foot G.
3. Insert the bottom fabric layer between needle plate and Gathering Foot G all the way to the upper cutter, right sides together.
4. Insert the top fabric layer right side down into the opening of the Gathering Foot G, making sure it is even with the bottom layer.
5. Lower the presser foot and sew. Hold top layer taut while guiding lower layer with no tension. Sew the layers together as it gathers.

Tip: Increase the needle thread tension if needed.

Strap and Belt Loop Foot L
The Strap and Belt Loop Foot L is used to create straps and belt loops with a cover stitch. When properly positioned into the Strap and Belt Loop Foot L, the bias tape is folded under automatically.

Sewing:
1. Set the machine for a 2-needle coverhem wide or a 3-needle coverhem.
2. Cut a strip of bias fabric 1 1/8” (2.8 cm) wide (heavier-weight fabrics require the slightly narrower width strips), cutting one end at a 45 degree angle.
3. Insert cut angle into Strap and Belt Loop Foot right side of the fabric facing up. Pull the bias strip under and extend it behind the foot.
4. Attach the Strap and Belt Loop Foot L to the machine.
5. Sew the first few stitches. Stop and clip the needle and looper thread close to the presser foot. Sew at medium speed. Continue sewing, checking the fabric as you sew to ensure proper feeding.
This household sewing machine is designed to comply with IEC/EN 60335-2-28 and UL1594

**IMPORTANT SAFETY INSTRUCTIONS**

When using an electrical appliance, basic safety precautions should always be followed, including the following:
Read all instructions before using this household sewing machine.

**DANGER** - To reduce the risk of electric shock:
- A sewing machine should never be left unattended when plugged in. Always unplug this sewing machine from the electric outlet immediately after using and before cleaning.
- Always unplug before relamping. Replace bulb with same type rated 15 Watt.

**WARNING** - To reduce the risk of burns, fire, electric shock, or injury to persons:
- Do not allow to be used as a toy. Close attention is necessary when this sewing machine is used by or near children and infirm persons.
- Use this sewing machine only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- Never operate this sewing machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the sewing machine to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- Never operate the sewing machine with any air openings blocked. Keep ventilation openings of the sewing machine and foot controller free from the accumulation of lint, dust, and loose cloth.
- Keep fingers away from all moving parts. Special care is required around the sewing machine needle and blades.
- Always use the proper needle plate. The wrong plate can cause the needle to break.
- Do not use bent needles.
- Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- Switch the sewing machine off (“0”) when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, etc.
- Always unplug sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.
- Never drop or insert any object into any opening.
- Do not use outdoors.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administrated.
- To disconnect, turn all controls to the off (“0”) position, then remove plug from outlet.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.

SAVE THESE INSTRUCTIONS
We reserve the right to change the machine equipment and the assortment of accessories without prior notice, or make modifications to the performance or design.

Such modifications, however, will always be to the benefit of the user and the product.

**Intellectual property**

PFAFF® and coverstyle™ are registered trademarks or trademarks of VSM Group AB.

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**Specifications**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum sewing speed</td>
<td>1300 stitches/min.</td>
</tr>
<tr>
<td>Seam width</td>
<td>1.4 mm - 9.0 mm</td>
</tr>
<tr>
<td>Cover stitch width</td>
<td>5 mm</td>
</tr>
<tr>
<td>Stitch length</td>
<td>0.5 mm - 4 mm</td>
</tr>
<tr>
<td>Presser foot</td>
<td>exchangeable</td>
</tr>
<tr>
<td>Lubrication</td>
<td>manual</td>
</tr>
<tr>
<td>Presser foot height</td>
<td>4.5 mm</td>
</tr>
<tr>
<td>Overedge stroke</td>
<td>2.0 mm</td>
</tr>
<tr>
<td>Needle system</td>
<td>EL X 705, cat no. 2002</td>
</tr>
<tr>
<td>Needle size</td>
<td>80/12, 90/14</td>
</tr>
<tr>
<td>Number of threads</td>
<td>2, 3, 4, 5</td>
</tr>
<tr>
<td>Dimensions (width x height x depth)</td>
<td>355 x 290 x 300 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>8.6 kg</td>
</tr>
</tbody>
</table>

**Packing contents**

1 machine  
1 foot control  
1 instruction manual/guarantee card  
1 machine cover  
1 accessory box  
1 power table

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Please note that on disposal, this product must be safely recycled in accordance with relevant National legislation relating to electrical/electronic products. If in doubt please contact your retailer for guidance.

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Intellectual property

PFAFF® and coverstyle™ are registered trademarks or trademarks of VSM Group AB.
Simple, up-to-date sewing

Congratulations! You have bought a high-quality product that provides unique advantages. Your new coverstyle™ can take any fabric in its stride and will sew through thick and thin.

To learn about your new coverstyle follow the instruction in this manual. Some pictures of the machine may be slightly different from your coverstyle.

Your PFAFF® coverstyle features the very latest in design and technology, and it is just as simple to operate as this instruction manual is to follow.

Before you start sewing, please take the time to read these instructions carefully. It is certainly time well spent and is the best way to find out just what your new coverstyle can do and make full use of all its features.

If you have any further questions, just ask your authorized PFAFF dealer. Your dealer is happy to be of service with any help or advice.

Lets get started! We wish you many enjoyable hours creating your very own fashions and projects!
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusting the machine to Prog. 01, 02</td>
<td>34, 35</td>
</tr>
<tr>
<td>Changing a spool on a threaded machine</td>
<td>24</td>
</tr>
<tr>
<td>Clamp spring</td>
<td>29</td>
</tr>
<tr>
<td>Cleaning the machine</td>
<td>58</td>
</tr>
<tr>
<td>Cone thread adapter</td>
<td>10</td>
</tr>
<tr>
<td>Converter, attaching</td>
<td>32</td>
</tr>
<tr>
<td>Cover stitch, important notes on sewing</td>
<td>44, 45</td>
</tr>
<tr>
<td>Differential feed</td>
<td>36, 37</td>
</tr>
<tr>
<td>Edge guide</td>
<td>45</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>7</td>
</tr>
<tr>
<td>Electrical power master switch</td>
<td>7</td>
</tr>
<tr>
<td>Foot control, connecting</td>
<td>7</td>
</tr>
<tr>
<td>Light bulb (sewing lamp), changing</td>
<td>60</td>
</tr>
<tr>
<td>Looper cover</td>
<td>8</td>
</tr>
<tr>
<td>Lubricating the machine</td>
<td>58</td>
</tr>
<tr>
<td>Machine cover</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance</td>
<td>58 - 60</td>
</tr>
<tr>
<td>Needle holder</td>
<td>13</td>
</tr>
<tr>
<td>Needle inserting tool</td>
<td>13</td>
</tr>
<tr>
<td>Needle plate disengaging lever</td>
<td>38</td>
</tr>
<tr>
<td>Needle plate, removing</td>
<td>38</td>
</tr>
<tr>
<td>Needle position</td>
<td>38</td>
</tr>
<tr>
<td>Needle threader</td>
<td>25</td>
</tr>
<tr>
<td>Needle, changing</td>
<td>13</td>
</tr>
<tr>
<td>Power table</td>
<td>35</td>
</tr>
<tr>
<td>Presser foot lifter</td>
<td>10</td>
</tr>
<tr>
<td>Presser foot pressure</td>
<td>28</td>
</tr>
<tr>
<td>Presser foot</td>
<td>11</td>
</tr>
<tr>
<td>Presser foot, changing</td>
<td>11</td>
</tr>
<tr>
<td>Program overview</td>
<td>40 - 43</td>
</tr>
<tr>
<td>Rubber feet, cleaning</td>
<td>58</td>
</tr>
<tr>
<td>Safety instructions</td>
<td>1, 2</td>
</tr>
<tr>
<td>Seam width adjusting knob</td>
<td>33</td>
</tr>
<tr>
<td>Seam width viewing window</td>
<td>33</td>
</tr>
<tr>
<td>Seam width, setting</td>
<td>33</td>
</tr>
<tr>
<td>Sewing light cover</td>
<td>60</td>
</tr>
</tbody>
</table>
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewing problems and their solutions</td>
<td>61</td>
</tr>
<tr>
<td>Spool disc</td>
<td>10</td>
</tr>
<tr>
<td>Spool holder</td>
<td>9</td>
</tr>
<tr>
<td>Stitch formation correction measures</td>
<td>46 - 56</td>
</tr>
<tr>
<td>Stitch length adjustment knob</td>
<td>38</td>
</tr>
<tr>
<td>Stitch length, adjusting</td>
<td>38</td>
</tr>
<tr>
<td>Stitch width latch, swivelling</td>
<td>31</td>
</tr>
<tr>
<td>Telescoping thread guide</td>
<td>9</td>
</tr>
<tr>
<td>Thread chain cutter</td>
<td>29</td>
</tr>
<tr>
<td>Thread chart</td>
<td>57</td>
</tr>
<tr>
<td>Thread guide, clip on</td>
<td>10</td>
</tr>
<tr>
<td>Thread net</td>
<td>9</td>
</tr>
<tr>
<td>Thread tensions, setting</td>
<td>39</td>
</tr>
<tr>
<td>Thread unreeling disc</td>
<td>9</td>
</tr>
<tr>
<td>Threading aid for the 2 thread chain stitch looped/cover stitch looped</td>
<td>19, 21</td>
</tr>
<tr>
<td>Threading paths/overview</td>
<td>26 - 28</td>
</tr>
<tr>
<td>Threading the 2 thread chain stitch looped/cover stitch looped (violet)</td>
<td>18 - 21</td>
</tr>
<tr>
<td>Threading the lower overedge looper (yellow)</td>
<td>16, 17</td>
</tr>
<tr>
<td>Threading the needle(s)</td>
<td>22, 23</td>
</tr>
<tr>
<td>Threading the upper overedge looper (pink)</td>
<td>15</td>
</tr>
<tr>
<td>Threading, important note</td>
<td>24</td>
</tr>
<tr>
<td>Threading/Thread guides</td>
<td>14</td>
</tr>
<tr>
<td>Upper blade, changing</td>
<td>59</td>
</tr>
<tr>
<td>Upper blade, disengaging</td>
<td>30</td>
</tr>
<tr>
<td>Upper blade, securing</td>
<td>39</td>
</tr>
<tr>
<td>Waste container</td>
<td>8</td>
</tr>
</tbody>
</table>
Machine cover
The machine cover protects the machine from dust and dirt. When the sewing process is finished, push the telescopic thread guide 32 together. The spool stand 34 must be pushed to its full extent into the machine, regardless of whether a spool is attached. Place the cover over the machine. The accessories should be stored in the accessory box.
Connecting the foot control
Connect the plug of the foot control to the connection socket 39 of the machine. The sewing speed is regulated by activating the foot control.

Electrical connection
Connect the foot control cord with the wall outlet.

For USA and Canada
This appliance has a polarized plug (one blade wider than the other).

To reduce the risk of electric shock, it is designed to fit into a polarized outlet only one way. If the plug does not fit correctly into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet.

Do not modify the plug in any way.

Foot controller type 4C-325G - 230V / 4C-335B - 110-125V / 4C-335G - 220 - 240V / YC-482M - 110-125V / YC-483-5 - 230V. has to be used with this overlock machine.

Master switch
When you turn on the master switch 38 the sewing lamp is illuminated. The machine is now operational.
Looper cover
Push the looper cover 7 fully to the right and then swivel it down. **Five types of stitches** and their threading paths are portrayed in color on the inside of the looper cover.

**Note:** The electricity supply of the machine is cut off as soon as the looper cover or swivel plate 12 is opened, for safety reasons, i.e. sewing with the machine is no longer possible.

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**Waste container**
*optional, Order No 2992499381111*

Insert the upper latch of the waste container 45 into the upper slot of the looper cover 7.

Apply pressure to the lower part of the container until the lower latches flick into place in the lower slots of the looper cover.

To remove the waste container, repeat this procedure in the reverse order.
Spool holder
Before placing thread cones/spools on machine you must pull the spool holder 34 fully away from the back of machine.

Telescopic thread guide
Pull the telescopic thread guide 32 upwards to its highest position.
To ensure optimum thread feed, turn the telescopic parts slowly until you hear the locking balls flick into place.

Thread unreeling disc
The thread unreeling disc (in the accessory box) is used for small spools/spools with notched or rough ends. Place the spool on the spool pin 35. Place the thread unreeling disc on top of the spool. Make sure the spool disc 37 is used under the spool.
Spool disc/cone thread adapter
It is advantageous to use the spool disc 37 when sewing with large spools (5,000 - 10,000 m). To do this, place the cone thread adapter 36 onto the spool pin 35. With synthetic threads, the spool discs help eliminate vibration of the cones/spools aiding in smoother feeding of the threads.

Clip on thread guide
Use the clip on thread guide accessory when sewing with decorative thread. Clip this onto the telescoping thread guide 32 and thread the machine as shown in the illustration. Use the thread net and/or the thread unreeling disc if needed.

Presser foot lifter
The presser foot can be raised and lowered using the presser foot lifter 43. The maximum vertical lift of 6.5 mm for the presser foot for particularly thick fabrics can be achieved by pressing the presser foot lifter towards the rear.

Once an initial thread chain has been created, the presser foot lifter no longer needs to be raised if you continue working with the same thread and presser foot. It is sufficient to gently lift the front part of the presser foot using your thumb. Slide the fabric under the raised part of the presser foot. The fabric is automatically taken up and fed into the machine when you activate the foot control.
**Presserfoot**

With standard presser foot 10 use setting “A” on the spring loaded presser foot latch for the cover stitch (Prog. 02), the 2 thread chainstitch (Prog. 01), the 5 thread safety stitch seam (Prog. 09) and the 4 thread safety stitch seam (Prog. 08).

Transparent presser foot F from the accessories can also be used for the cover stitch (Prog. 02).

For all other programs use standard presser foot 10 and setting “B” on the springloaded presser foot latch.

**Changing the presser foot**

⚠️ **Turn off the electrical power**

**To remove:** Raise the needle(s) to the highest position by turning the hand wheel towards you. Raise the presser foot and press lever A at the rear of the presser foot holder. The presser foot will be released automatically from the holder. Pivot the presser foot clockwise until the front half of presser foot clears holder and remove by sliding foot away from you towards back of machine.

**To attach:** Place the presser foot behind and perpendicular to the presser foot holder. Pivot the presser foot counterclockwise until the pin of the foot is directly under the presser foot holder clamp. Lower the presser foot lever and press lever A, if necessary, until the foot then clicks into place.

**Check:** Please lift the presser foot lever to ensure that the presser foot is properly locked into place.
Needle position
This machine has 4 needle positions and can sew with a maximum of two needles at any one time. The needle positions are L1, L2, R1 and R2. The fastening screw is located directly above the corresponding needle.

The different needle positions are depicted in a schematic drawing in the instruction manual. Also refer to the examples above and below. Insert the needle(s) as shown on the program overview (see pages 40-43).

Note: If the needles R2 and L1 have been inserted, the left needle will be somewhat higher than the right needle.

Note: If the needles L1 and L2 have been inserted, the left needle will be somewhat lower than the right needle.
Changing the needle

⚠️ Turn off the electrical power

**To remove:** Lower the presser foot and move the needle(s) to the highest position by turning the handwheel towards you. Push the needle inserting tool (from the accessory box 47) from below upward fully over the needle. Loosen the fastening screw of the needle (without removing it) with the Allen key (behind the swivel plate) and pull the needle down to remove.

**To insert:** Insert the needle into hole E of the needle inserting tool, so that the flat needle shank K faces the flat side L of the inserting tool. Insert the needle fully into the holder and tighten the fastening screws. Remove the needle inserting tool.

Overlock needles types EL X 705, cat. no. 2002 are required for this machine.
Threading the thread guides
Place the spools on the spool pins 35. You will find information on the thread net, thread unreeling disc, spool disc and cone thread adapter on pages 9 and 10. Thread through the thread guides 31 from the back to the front following the colored threading paths.

Lift the carry handle 3 upwards. Thread through the underside of the carrying handle and through the rear thread guides 44 using both hands to pull the thread down until it slips under the thread guide. Guide the thread through the tension discs and pull it down until it is positioned firmly between the tension discs. Return the carrying handle to its original position.

Note:
Thread in a sequence of 1 to 5.
Threading the upper overedge looper (pink)

Turn the handwheel towards you until the upper overedge looper 18 is in its highest position. Thread in a sequence of 1 to 8.

Thread through the thread guides 1 to 7, which are marked with a pink dot.

Thread from the front through the eye of the upper overedge looper 8. Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.
Threading the lower overedge looper (yellow)
Turn the handwheel towards you until the lower overedge looper 19 is on the extreme right.

Thread in a sequence of 1 to 10.
Thread through the thread guides 1 to 8, marked yellow.

Press lever A downwards and hook the thread into guide B. Please also refer to the drawing below.

**Note:**
The lever returns automatically to its position as soon as you start sewing.

Thread from the front through the eye of the lower overedge looper C (= threading point 10).

Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.
Threading the two-thread chainstitch looper and cover stitch looper (violet) for the chainstitch
Turn the handwheel towards you until the two-thread chainstitch looper 20 is on the extreme right.

Thread in a sequence of 1 to 11.
Thread the thread guides which are marked with a violet square in a sequence of 1 to 9.

Push lever A upward and hook the thread into slot B. Also refer to the drawing below.

**Note:**
The lever returns automatically to its position as soon as you start sewing.

Thread from the front through eye C of the two thread chainstitch looper and the cover stitch looper (= threading point 11).

Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.
Exception:
Threading the two-thread chainstitch looper and cover stitch looper for the cover stitch (violet) (prog. 02)

Turn the handwheel towards you until the two thread chainstitch looper 20 is on the extreme right.

Thread in a sequence of 1 to 10.
Thread the thread guides, as shown in the diagram, in a sequence of 1 to 8. Some of the threads guides are marked with a violet square.

Press lever A upward and hook the thread into slot B. Also refer to the drawing below.

**Note**: The lever returns automatically to its position as soon as you start sewing.

Thread from the front through eye C of the two-thread chainstitch looper and the cover stitch looper (= threading point 10).

Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.
Threading the needles
Thread in a sequence of 1 to 8.

The thread must be guided through the lower slot of thread guide 4.

Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.

**Note:**
For the cover stitch the thread must also be guided through the lower thread guide 7.
Exception:
Threading needle L2 when sewing a 5-thread safety-stitch seam (Prog. 09), a 4-thread safety-stitch seam (Prog. 08) and a 2-thread chainstitch (Prog. 01)

Thread in a sequence of 1 to 9.

The thread must be guided through the upper slot of thread guide 5.

Pull approximately 4” (10 cm) of thread through the looper and place it to the left under the presser foot.
Important note on threading
The needle(s) must always be threaded last so that the needle threads do not run under the looper thread as seen in drawing 1, but instead over the looper thread as depicted in drawing 2. Should this sequence not be followed, thread breakage or missed stitches can occur.

If the looper threads break, you must pull the needle threads out of the needle eye, rethread the loopier thread and then rethread the needle threads.

Changing a spool on a threaded machine
Cut the threads off close to the spool and replace with new spools. Tie together the threads which are still in the machine with the new threads, and pull the threads out of the needle eyes. Raise the presser foot. Pull on the needle threads until the knots are about 6 inches (15 cm) past the last thread guide in front of the needles. Cut the knots off and pull the threads through the respective needle eyes. The looper threads can be pulled continuously past the looper eye and placed to the left underneath the presser foot.
Needle threader
Move the needle(s) into the highest position and lower the presser foot. Place the thread from right to left in notch A of the needle threader (to be found in the accessory box). One of the two triangles must point upwards.

Place the needle threader onto the front groove of the needle. Slide the needle threader down to the needle eye and press it lightly against the needle.

A small metal pin is pushed through the needle eye and the needle is automatically threaded. Thread loops must be pulled to the back.
Overview of the threading paths and threading sequences

Program 01:
2-thread chainstitch

Program 02:
cover stitch

Program 03:
2-thread flatlock, narrow
Program 11:
2-thread serging, narrow
Program 12:
2-thread rolled hem
Program 13:
folded 2-thread rolled hem

Program 04
2-thread flatlock, wide
Overview of the threading paths and threading sequences

Program 05:
3-thread overedge, narrow

Program 14:
3-thread rolled hem

Program 15:
folded 3-thread rolled hem

Program 16
3-thread flatlock, narrow

Program 06:
3-thread overedge, wide

Program 17:
3-thread serging, wide

Program 18:
3-thread flatlock, wide

Program 07
4-thread overedge seam

Program 08:
4-thread safety-stitch seam
Overview of the threading paths and threading sequences

Program 09: 5-thread safety-stitch seam

Program 10: 2-needle 3-thread assembly seam

Presser foot pressure
The pre-set presser foot pressure on the machine is suitable for medium heavy fabrics. The presser foot pressure does not need to be adjusted for most fabrics. If you are working with light or heavy fabrics then you may need to adjust the pressure. In this case, 6 setting positions are available which you can select using the adjusting knob for the presser foot pressure 17. The standard setting is "N".
Thread chain cutter
After finishing the seam, sew an approx. 6” - 8” (15 - 20 cm) long thread chain. Pull the thread chain from the right to left over the thread chain cutter 33. This will cut off the thread chain.

Clamp spring for serging thread chain 25
Using this feature you can secure the thread chain at the start of the fabric by pulling it into the seam. Stitch off a minimum 4” (10 cm) long thread chain and raise the presser foot. Remove the thread chain carefully from the swiveling stitch width latch 22. Pull the thread chain forwards and clamp it under the spring.

Butt the fabric up against the front of the needle(s). If necessary, make an approx. 1.5” (3 cm) cut into the fabric along the cut line using a pair of scissors. Lower the presser foot and start sewing. The thread chain pulls automatically into the inside of the seam.

Note:
This feature cannot be used for either the 2-thread safety-stitch seam, the 4-thread safety-stitch seam, the 2-thread chainstitch or for the rolled hem.
Disengaging the upper blade

⚠ Turn off the electrical power

Move the movable upper blade 23 into its highest position by turning the handwheel towards you. Remove the waste container and open the looper cover and the swivel plate. Push the knob for lowering the upper blade 27 fully to the right.

To lower the upper blade turn the knob towards you until the upper blades clicks into place below. The upper blade is now disengaged.

Engaging the upper blade

Push the knob for lowering the upper blade to the right and swivel the blade back until it clicks into the operating position again. Close the looper cover and the swivel plate and reattach the waste container.
Swiveling stitch width latch
For standard overlock seams:
The swiveling stitch width latch 22 remains in the basic position when sewing all types of standard overlock seams (exception: Program 01, 02).

For rolled hems:
Pull knob (A) to the right and swivel the swiveling stitch width latch 22 downwards.

This setting allows you to sew all types of rolled hems.
Attaching the converter

⚠️ Turn off the electrical power

Position the upper overedge looper 18 right next to the needle by turning the handwheel towards you.

Push the tip of the converter into the back side of the upper overedge looper until it clicks into place and push the converter onto the overedge looper bracket.

To remove the converter, gently push the point of the converter from the eye of the upper overedge looper. You can now remove the converter by pulling it upwards from the overedge looper bracket.
Setting the seam width
The required seam width can be adjusted anywhere between 3.5 and 6 mm by turning the adjusting knob for seam width 13. The setting can be seen through the viewing window 14. The two thread chainstitch is sewn with a clearance of 6.5 to 9 mm.

Illustration A: Should loops project out of the workpiece, move the movable upper blade 23 to the right by turning the seam width adjusting knob upwards.

Illustration B: Should the stitching be too tight, move the movable upper blade 23 to the left by turning the seam width adjusting knob downwards.

Note:
The top row of numbers on the dial refers to the seam width of a standard 3 thread overedge seam. The width settings 3.5 mm through 6.0 mm are measured from needle R1 to the outer fabric edge. This width is decreased by 2.0 mm when only using needle R2, i.e. you have a seam width that is completely adjustable from 1.5 mm to 4.0 mm.
The bottom row of numbers refers to the seam of the 4 or 5 thread safety stitch seam. The width settings 6.5 mm through 9 mm are measured from needle L2 to the outer fabric edge.
Measurements are shown in metric and fractions.
Adjusting the machine to the cover stitch (Prog. 02) and two thread chainstitch (Prog. 01)
This is only necessary if you do not want to trim the fabric edge. Insert the needle(s) (see page 13) according to the overview of the threading paths and threading sequences (see page 26). Open the looper cover and remove the blade guard 8 by pulling it towards you. Lower the swiveleng stitch width latch (see page 31) and disengage the upper blade (see page 30). Ensure that the upper blade is disengaged by turning the handwheel towards you.

Disengage the upper overedge looper. Move the upper overedge looper 18 into its lowest position by turning the handwheel towards you.

Move the looper disengaging lever 9 to the left. Ensure that the looper is disengaged by turning the handwheel towards you.

Thread the two thread chainstitch looper and the cover stitch looper (see pages 18 to 21) and then the needle(s) (see page 22 and 23).
Press the power table 45 downwards into the designated slot on the looper cover. Close looper cover.

**Note:**
Please ensure that the upper overedge looper is disengaged before attaching the power table 45.

To return the machine to its previous settings after sewing with the cover stitch or two thread chainstitch:
Open the looper cover and remove the power table.

Move the looper disengaging lever to the right, thus re-engaging the upper overedge looper. Bring the swivelng stitch width latch into the basic position (see page 31) and engage the upper blade (see page 30). Push the blade guard into the looper cover and close the looper cover.
Differential feed

The differential feed consists of two feed dogs (A + B), one behind the other, which feed the fabric. The movement of the front feed dog (A) and thus the amount of material to be fed can be regulated using the regulator wheel 41. The setting range is between 0.5 and 2.0. The standard setting is 1.0, where the movement of the front feed dog (A) is synchronized with the rear feed dog (B). This means that the front feed dog feeds the same amount of fabric as the rear feed dog.

Note:
The function of the differential feed also depends on the set stitch length and the type of fabric being used.

Set the regulator wheel for the differential feed 41 to 0.5. At this setting the front feed dog feeds half as fast as the rear feed dog. This means that the front feed dog feeds only half as much fabric as the rear feed dog, causing the fabric to stretch.

Here you will avoid gathering/puckering of the seam when working with very light fabrics, such as silk and taffeta. Instead, a smooth seam (A) will be achieved. You can also achieve decorative effects with the differential feed dog. For example the wavelike effect when using a rib knit (B).
Set the regulator wheel for the differential feed to 2.0. Here the front feed dog feeds twice as fast as the rear feed dog. This means that the front feed dog feeds twice as much fabric as the rear feed dog, causing the material to gather.

Here you will avoid stretching in the seam when working with knitwear, such as jerseys or gathered fabrics. Instead, a smooth seam (A) will be achieved. You can also achieve decorative effects with the differential feed dog. For example the gathering effect when using very light fabrics (B).

The following table contains information on the differential feed settings. However, you should always test your setting first on a piece of scrap fabric.

<table>
<thead>
<tr>
<th>Type of fabric / effect</th>
<th>Differential feed setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gather &lt;2.0&gt;</td>
</tr>
<tr>
<td><strong>Very light fabrics:</strong></td>
<td>silk, satin, poplin, taffeta, linings.</td>
</tr>
<tr>
<td><strong>Normal fabrics:</strong></td>
<td>light and medium-heavy cottons, fine cords, thermal-wear.</td>
</tr>
<tr>
<td><strong>Light knitwear:</strong></td>
<td>jerseys, polo fabrics, cut-pile pullovers, tricot, fine knitwear and gathered fabrics.</td>
</tr>
<tr>
<td><strong>Heavy knitwear:</strong></td>
<td>sweatshirt fleece, heavy gathered fabrics, heavy knitwear.</td>
</tr>
<tr>
<td><strong>Stretch - wavelike effect:</strong></td>
<td>medium and light knitwear, jerseys, knitwear, ruffled sleeve and collar edges, skirt hems, dense stitch lengths.</td>
</tr>
<tr>
<td><strong>Gathering:</strong></td>
<td>ruffling light materials and lace, seam allowances for curves, arches on blouses, shirts, skirts, round pockets, flaps, stretching or gentle ruffling of arched sleeves (shoulders), sleeve widths for cuffs or gathered fabrics.</td>
</tr>
</tbody>
</table>
Adjusting the stitch length
You can set the desired stitch length between 0.5 mm to 4.0 mm by turning the stitch length adjustment knob (42).

Note:
For the two thread chainstitch, the setting should be 3.0 or higher.

Removing the needle plate
Raise the presser foot and move the needle(s) to the highest position. Remove the presser foot and open the swivel plate. Press down the needle plate disengaging lever 26. The needle plate 11 is raised out of its mount. The needle plate can be removed to the left.

Note:
The machine should be unthreaded when removing the needle plate.

Inserting the needle plate
Place the needle plate to the rear on the guide pin (A) and press down at the front until you hear it click into place.
Securing the upper blade

⚠️ Turn off the electrical power

It is recommended to secure the movable upper blade 23 before sewing heavy fabrics. Raise the needle(s) to its highest position and open the swivel plate. Tighten the screw fully using the Allen key. This screw should always be slightly loosened again after sewing heavy fabrics.

**Note:**
The seam width can no longer be adjusted once the upper blade is secured.

---

Setting thread tension

The following pages contain directions for setting thread tensions for all programs. Adjust the tension by turning the tensioning wheel until the dot marker is at the desired setting. The settings for adjusting thread tension are recommendations. Fabric type, thread quality and needle gauge will influence seam results. Always sew off a test seam onto a piece of scrap fabric and check the thread loops. Adjust the thread tension if necessary.

Adjusting the tension settings is described on pages 46 to 56.
<table>
<thead>
<tr>
<th>Program</th>
<th>Application</th>
<th>Needle position</th>
<th>Stitch length</th>
<th>Stitch width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program 01</td>
<td>Joining fabric layers where a traditional pressed open seam is required. Also works well as a basting stitch for test fitting garments.</td>
<td><img src="image1.jpg" alt="Image" /></td>
<td>3-4</td>
<td>3.5</td>
</tr>
<tr>
<td>Program 02</td>
<td>Sewing hems and fancy stitches.</td>
<td><img src="image2.jpg" alt="Image" /></td>
<td>3-4</td>
<td>3.5</td>
</tr>
<tr>
<td>Program 03</td>
<td>Serging light fabrics. Joining stretch fabrics with a flatlock seam.</td>
<td><img src="image3.jpg" alt="Image" /></td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 04</td>
<td>Serging medium heavy fabrics. Joining stretch fabrics with a flatlock seam.</td>
<td><img src="image4.jpg" alt="Image" /></td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 05</td>
<td>Serging light (easily frayed) fabrics.</td>
<td><img src="image5.jpg" alt="Image" /></td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 06</td>
<td>Serging tightly woven (easily frayed) fabrics.</td>
<td><img src="image6.jpg" alt="Image" /></td>
<td>3</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 07</td>
<td>Joining and simultaneous serging of all fabrics, in particular stretchy fabrics.</td>
<td><img src="image7.jpg" alt="Image" /></td>
<td>2.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 08</td>
<td>Joining and simultaneous serging of tightly woven fabrics.</td>
<td><img src="image8.jpg" alt="Image" /></td>
<td>3</td>
<td>8.5</td>
</tr>
<tr>
<td>Program 09</td>
<td>Joining and simultaneous serging of tightly woven fabrics.</td>
<td><img src="image9.jpg" alt="Image" /></td>
<td>3</td>
<td>8.5</td>
</tr>
<tr>
<td>Stitch width latch 22</td>
<td>Looper disengaging level 9</td>
<td>Power table 50</td>
<td>Converter 28</td>
<td>Thread tension</td>
</tr>
<tr>
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</tr>
<tr>
<td>■ = top □ = bottom</td>
<td>■ = with ▲ = without</td>
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<td>blue green pink yellow violet</td>
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<td>□</td>
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<td>□</td>
<td>5.0</td>
</tr>
</tbody>
</table>

The value refer to medium-heavy fabrics and normal polyester thread.
<table>
<thead>
<tr>
<th>Program</th>
<th>Application</th>
<th>Needle position</th>
<th>Stitch length</th>
<th>Stitch width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program 10</td>
<td>2-needle, 3-thread assembly seam Joining and simultaneous serging of light, very stretchy fabrics.</td>
<td>L R 1 2 1 2</td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 11</td>
<td>2-thread serging, narrow Serging light fabrics.</td>
<td>L R 1 2 1 2</td>
<td>1.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 12</td>
<td>2-thread rolled hem Serging very light fabrics. Decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>1-2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 13</td>
<td>Folded 2-thread rolled hem Serging very light fabrics. Decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>1-2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 14</td>
<td>3-thread rolled hem Serging light to medium-heavy fabrics. Decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>1-2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 15</td>
<td>Folded 3-thread rolled hem Serging light to medium-heavy fabrics. Decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>1-2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 16</td>
<td>3-thread flatlock, narrow Serging medium heavy fabrics. Joining stretch fabrics with a flatlock seam and decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>1.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 17</td>
<td>3-thread serging, wide Serging tightly woven (non-fraying) fabrics.</td>
<td>L R 1 2 1 2</td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Program 18</td>
<td>3-thread flatlock, wide Joining stretch fabrics with a flatlock seam and decorative edges.</td>
<td>L R 1 2 1 2</td>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>Stitch width latch</td>
<td>Looper disengaging level 9</td>
<td>Power table 50</td>
<td>Converter 28</td>
<td>Thread tension</td>
</tr>
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<td>5.0 4.0 1.0</td>
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<td>4.0 4.0</td>
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<td>5.0 4.0 3.0</td>
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<td>5.0 2.5 7.5</td>
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<td></td>
<td>■</td>
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<td>1.5 2.0 6.0</td>
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<tr>
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<td>7.0 0.5 8.0</td>
</tr>
<tr>
<td></td>
<td>■</td>
<td>▲</td>
<td>□</td>
<td>1.0 2.0 7.0</td>
</tr>
</tbody>
</table>

The value refer to medium-heavy fabrics and normal polyester thread.
Important notes on sewing with the cover stitch

The power table is marked with various units of measurement. The upper figures are in cm. The lower figures are in inches. **Note:** The hemmer guide H2 is available as an optional accessory. With this optional accessory you can hem your fabric effortlessly without having to press under the hem edge prior to sewing the cover stitch.

Preparing the fabric:

When not using the H2 optional accessory guide, it is useful to press under the fabric edge before hemming it. The width of fabric to be pressed under must be 0.5 cm wider than the finished hem width. **Example:** Press under a one inch (2.5 cm) fabric width to sew a finished hem of 3/4 inch (2 cm). **Note:** Set the seam width at 3.5 cm.

To start sewing:

Raise the presser foot and place the fabric under the presser foot so the needles pierce the fabric for the first stitch. Position the fabric at the desired width using the marked guidelines on the power table. When starting to sew, pull the fabric taut towards the rear and sew slowly. The speed may be increased as you sew further along the fabric.

Finishing sewing:

1. When sewing to the end of the fabric: Tightly hold the threads at the end of the seam. Sew slowly off the fabric while lightly pulling the threads toward the rear of the machine. **Note:** The differential feed may need to be adjusted slightly to allow your fabric to lie perfectly smooth. Test your settings first on a piece of scrap fabric.
2. If sewing on a tubular item, i.e. pant or sleeve hem:
Sew around tubular item, oversewing 4-5 stitches at the beginning of your seam. After the last stitch, turn the hand wheel towards you until the needles pierce the fabric and you have heard each needle “click” (just before the needles are in the lowest position).

Edge guide
Push the edge guide (included in your accessory box) into the guide holder A from the left. The edge guide can be set as required by sliding it to the left or right.

After the second “click” turn the handwheel away from you until the needles are in their highest position. Raise the presser foot (this will release the tension on the threads). Hold the threads tightly at the end of the seam and pull the fabric from the machine. Cut the threads. Pull the threads through to the back of the fabric and knot them.

The edge guide is useful for serging seam at regular intervals with the cover stitch or two thread chainstitch.
Stitch formation correction measures
cover stitch
Program 02
When all tensions are correctly set, the needle threads (green and blue) are just slightly visible on the underside of the fabric. The looper thread (violet) is situated loosely in between.

The right needle thread (green) is too loose, causing large loops on the underside of the fabric.
Set the green thread tension to a higher value.

The needle threads (green and blue) are set too tightly causing folds in the fabric.
Set the green and blue thread tension to a lower value.
5-thread safety-stitch seam
Program 09
Since the 5-thread safety stitch seam consists of the 2-thread chainstitch and the 3-thread overedge seam, you can refer to the correction possibilities of these seam below and on page 49.

4-thread safety-stitch seam
Program 08
Since the 4-thread safety stitch seam consists of the 2-thread chainstitch and the 2-thread flatlock, you can refer to the correction possibilities of these seam below and on page 51.
Note: Attach the converter (see page 32), when sewing a 4-thread safety stitch seam.

2-thread chainstitch
Program 01
When all tensions are correctly set, the needle thread (blue) is just slightly visible on the underside of the fabric.

The needle thread (blue) is too loose, causing larger needle thread loops on the underside of the fabric.
Set the blue thread tension to a higher value.
**4-thread overedge seam**

**Program 07**

When all tensions are correctly set, the loops of both looper threads (pink and yellow) are directly on the edge of the fabric.

The needle threads (blue and green) are too loose, causing larger loops of needle thread on the underside of the fabric. Set the blue and green thread tension to a higher value.

The upper looper thread (pink) appears on the underside of the fabric. Set the pink thread tension to a higher value and/or the yellow thread tension to a lower value.

The lower looper thread (yellow) appears on the top side of the fabric. Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.
3-thread overedge seam
narrow and wide
Program 05 and 06
When all tensions are correctly set, the loops of both looper threads (pink and yellow) are directly on the edge of the fabric.

The upper looper thread (pink) appears on the underside of the fabric. Set the pink thread tension to a higher value and/or the yellow thread tension to a lower value.

The needle thread is too loose, causing loops on the underside of the fabric. Set the relevant needle thread tension to a higher value.

The lower looper thread (yellow) appears on the top side of the fabric. Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.
3-thread flatlock narrow and wide Program 16 and 18

The **needle thread** is too tight. Set the needle thread tension (blue) to a lower value.

The upper looper thread (pink) appears on the underside of the fabric. Set the pink thread tension to a higher value.

The **lower looper thread** (yellow) is too loose. Set the yellow thread tension to a higher value.
2-thread flatlock
narrow and wide
Program 03 and 04

When all tensions are correctly set, the loops of both threads are directly on the underside of the fabric.

**Note:** The converter (see page 32) must be attached to sew the 2-thread flatlock seam.

---

The needle thread is too loose or the lower looper thread (yellow) is too tight.
Set the relevant needle thread tension to a higher value and/or the yellow thread tension to a lower value.

---

The **lower looper thread** (yellow) is too loose and/or the needle thread is too tight.
Set the yellow thread tension to a higher value and/or the relevant needle thread tension to a lower value.
**3-thread rolled hem**

Program 14

The **upper needle thread** (green) is too loose. Set the green thread tension to a higher value.

The **upper looper thread** (pink) appears on the underside of the fabric. Set the pink thread tension to a higher value and/or the yellow thread tension to a lower value.

The **lower looper thread** (yellow) appears on the top side of the fabric. Set the yellow thread tension to a higher value and/or the pink thread tension to a lower value.
3-thread rolled hem (folded)  
Program 15

The upper looper thread (pink) only partly loops around the fabric edge.  
Set the pink thread tension to a lower value and/or the yellow thread tension to a higher value.

The upper needle thread (green) is too loose.  
Set the green thread tension to a higher value.

The lower looper thread (yellow) appears on the top side of the fabric.  
Set the yellow thread tension to a higher value and/or the pink one to a lower value.
2-thread rolled hem
Program 12
Note: The converter (see page 32) must be attached to sew the 2 thread rolled hem.

The upper needle thread (green) is too tight. Set the green thread tension to a lower value and/or the yellow thread tension to a higher value.

The lower looper thread (yellow) is too tight. Set the yellow thread tension to a lower value and/or the green thread tension to a higher value.
2-thread rolled hem (folded)
Program 13
Note: The converter (see page 32) must be attached to sew the 2 thread rolled hem.

The upper needle thread (green) is too loose. Set the green thread tension to a higher value and/or the yellow thread tension to a lower value.

The lower looper thread (yellow) is too loose. Set the yellow thread tension too a higher value.
2-needle 3-thread assembly seam
Program 10

Note: The converter (see page 32) must be attached to sew the 2-needle 3-thread assembly seam.

The upper needle thread (green) is too loose. Set the green thread tension to a higher value.

The lower needle thread (blue) is too loose. Set the blue thread tension to a higher value.

The lower looper thread (yellow) is too tight. Set the yellow thread tension to a lower value.
<table>
<thead>
<tr>
<th>Fabric</th>
<th>Thread</th>
<th>Stitch length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light fabrics: organdy, fine knitwear, taffeta, silk, lining fabrics</td>
<td>Cotton no. 50 - 70, Synthetic thread no. 70 - 140</td>
<td>2.0 - 4.0 mm</td>
</tr>
<tr>
<td>Medium heavy fabrics: cotton, tricot, linen, dress fabrics</td>
<td>Cotton no. 40 - 60, Synthetic thread no. 70 - 140</td>
<td>2.0 - 4.0 mm</td>
</tr>
<tr>
<td>Heavy fabrics: tweed, suit fabrics, denim, heavy cloth</td>
<td>Cotton no. 30 - 50, Synthetic thread no. 70 - 140</td>
<td>2.0 - 4.0 mm</td>
</tr>
<tr>
<td>Knitwear:</td>
<td>Cotton no. 40 - 60, Synthetic thread no. 70 - 140</td>
<td>2.0 - 4.0 mm</td>
</tr>
<tr>
<td>2- or 3-thread rolled hems</td>
<td>Polyester thread no. 120 - 140, Mercerized thread (bulk thread)</td>
<td>1.0 - 2.0 mm</td>
</tr>
</tbody>
</table>
Machine maintenance
Cleaning the machine

⚠️ Turn off the electrical power

Remove the waste container and open the looper cover and swivel plate. Disengage the upper blade (see page 30) and remove the presser foot and the needle plate. Use the accessory brush provided to remove any waste thread from the upper and lower blades, the differential feed and the looper area.

Lubricating the machine

⚠️ Turn off the electrical power

Move the upper looper into its highest position. Lubricate the points shown above with recommended sewing machine oil every time you clean the machine. Use only one or two drops. All other parts are manufactured from special materials and do not require any lubrication.

Cleaning the rubber feet

Clean the rubber feet from time to time with alcohol. This ensures good stability.
Changing the upper blade

⚠️ Turn off the electrical power

To remove: Set the adjusting knob for seam width to 3.5 mm. Fasten the upper blade (see page 39) before loosening the fastening screw (A) with the wrench provided in the accessory box. Then remove the upper blade.

To insert: Attach the new upper blade and gently tighten the fastening screw. Then turn the handwheel until the upper blade is in the lowest position.

In this position the front edge of the upper blade must be 0.5 to 1.0 mm lower than the cutting edge of the lower blade. When the upper blade has been properly inserted you can fully tighten the fastening screw. Loosen the screw to the movable upper blade.
Changing the light bulb

⚠️ Turn off the electrical power

Using the screw driver in the accessory box loosen the fastening screw to the sewing light cover 16 until the cover can be removed. Push the light bulb fully into its socket. Rotate counter clockwise through half a turn and remove.

Guide the new light bulb (max. 15 W) into the socket and twist until both pins on the bulb click into place. Press the bulb right into the socket, twisting it clockwise until it is securely fixed.

Replace the sewing light cover and tighten the fastening screw.
## Sewing problems and their solutions

This machine has been developed with ease of operation in mind. No difficult or tricky set tings need to be made. Sewing problems of the kind described below may occur as a result of minor adjustment and operating errors. They can be easily adjusted by following the in structions.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle breakage</td>
<td>The needle was bent or the point damaged. The needle was not fully inserted. The fabric was pulled too firmly.</td>
<td>Insert new needle (see page 13). Insert needle fully (see page 13). Do not pull on the fabric when sewing.</td>
</tr>
<tr>
<td>Thread breaks</td>
<td>Incorrectly threaded. Thread has caught. Thread tension is too tight. Needle not fully inserted. Incorrect needle used.</td>
<td>Thread properly (see page 14 - 23). Check if the thread is caught on the spool stand etc. Correct the tension (see page 46 - 56). Insert needle correctly (see page 13). Use needle system EL X 705.</td>
</tr>
<tr>
<td>Skipping stitches</td>
<td>Needle bent or point damage. Needle not fully inserted. Incorrectly threaded.</td>
<td>Insert new needle (see page 13). Insert needle correctly (see page 13). Use needle system EL X 705. Thread properly (see page 14 - 23).</td>
</tr>
<tr>
<td>Stitch formation faulty</td>
<td>Incorrect setting of thread tension. The converter is attached.</td>
<td>Re-set thread tensions (see page 46 - 56). The converter must be removed (see page 32).</td>
</tr>
<tr>
<td>3- or 4-thread overedge seam has an irregular appearance and the upper looper thread has not interlocked in the seam.</td>
<td>The converter is attached.</td>
<td>The converter must be removed (see page 32).</td>
</tr>
<tr>
<td>Machine will not operate although master switch is on.</td>
<td>Power supply interrupted.</td>
<td>Close looper cover (see page 8).</td>
</tr>
<tr>
<td>Fabric not neatly trimmed</td>
<td>Waste thread between upper and lower blade Upper blade is blunt.</td>
<td>Clean blades. Replace upper blade (see page 59).</td>
</tr>
<tr>
<td>Puckered seams</td>
<td>Thread tension too tight. Incorrect setting of differential feed. Thread has caught due to incorrect threading</td>
<td>Reduce thread tension. Re adjust differential feed (see pages 36, 37). Thread correctly (see pages 14 - 23).</td>
</tr>
<tr>
<td>Fabric not fed through evenly</td>
<td>Stitches too short. Sewing foot pressure too low for heavy fabrics. Sewing foot pressure too high for lightweight fabrics.</td>
<td>Increase stitch length (see page 38). Increase sewing foot pressure (see page 28). Reduce sewing foot pressure (see page 28).</td>
</tr>
</tbody>
</table>
Parts of the coverstyle

31 Thread guides with color coding
32 Telescoping thread guide
33 Thread chain cutter
34 Thread spool stand
35 Thread spool pin
36 Cone thread adapter
37 Spool disc
38 Electrical power master switch
39 Machine socket, foot control
40 Handwheel
41 Regulator wheel for differential feed
42 Stitch length adjustment knob
43 Presser foot lifter
44 Rear thread guides

45 Power table
46 Foot control
47 Accessory box