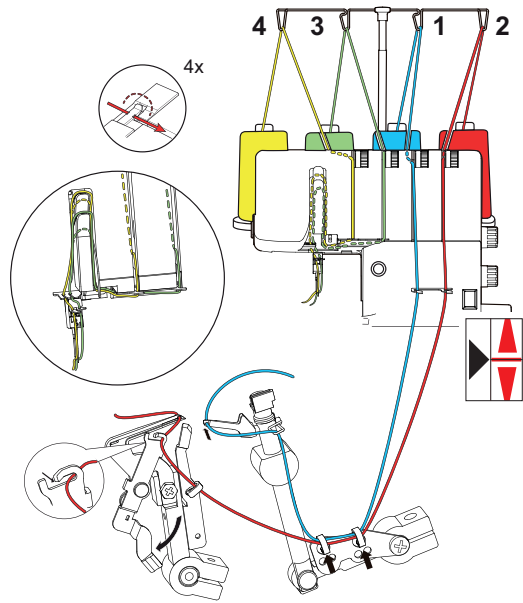


Threading the machine

Find more Information under
www.bernina.com



1		4-thread overlock	
LN	4	CW	6
RN	4	Rolled hem	▲
UL	4	UL Converter	-
LL	4	SL / \	2.5
		DF	1

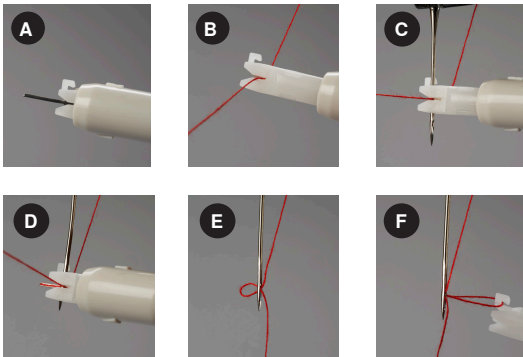
Threading preparation



Raise the needles by turning the handwheel counter-clockwise, until the red mark is aligned in the handwheel position indicator window.

Needle Threader

- Metal rod in Y-shaped threader
- Hold the needle threader with the triangle shaped mark upwards and guide the thread horizontally through the Y-shaped slot.
- While gently pulling the thread end, push the nose of the needle threader onto the needle shaft and start sliding down. Please Note: Push the Threader only gently towards the needle in order not to damage the metal rod.
- When having reached the needle eye, push, so that the metal rod slides through the eye, taking along the thread.
- By slowly retracting the needle threader, a thread loop will be left behind the needle.
- Pull the thread end completely through the eye and place the thread end under the presser foot.



L 460
L 450

	LN	RN	UL	LL	Rolled Hem	UL Converter	CW	SL	DF
1	4	4	4	4	▲	-	6	2.5	1
2	4.5	4	-	3	▲	☞	6	2.5	1
3	4	-	4	4	▲	-	6	2.5	1
4	-	3.5	4	4	▲	-	6	2.5	1
5	1.5	-	3.5	7	▲	-	6.5	2.5	1
6	-	2.5	4	7	▲	-	7	2.5	1
7	-	4	4	4.5	▽	-	7	2	1
8	-	3.5	4	7.5	▽	-	5	1	1
9	5	-	-	3	▲	☞	6	2.5	1
10	-	6.5	-	3.5	▲	☞	6	2.5	1
11	2	-	-	4	▲	☞	6.5	2.5	1
12	-	2	-	4	▲	☞	6	2.5	1
13	-	4	-	4	▽	☞	5	1	1
14	2	-	-	4	▲	☞	6	2.5	1
15	-	2	-	4.5	▲	☞	6	2.5	1
30	-	3.5	3.5	6.5	▽	-	6	2.5	1

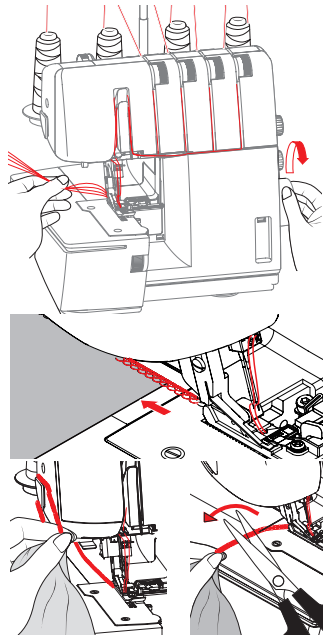
Test sewing



Make sure all covers are closed.



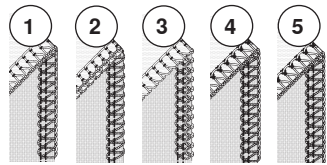
Maximum Material passage for your project is 6 mm.



After threading is completed, use a spare piece of the same fabric to be used to sew and do a test sewing.

- Preset the basic thread tension, position of the Rolled Hem Selection lever, the Cutting Width, Stitch Length, Differential Feed and the Upper Loooper Converter as required. „Stichübersicht“ see page 23
- Pull all the threads behind the Presser Foot, to the left.
- Lower the presser foot.
- Turn the handwheel several times counter-clockwise to see if a chain is formed.
- Position the test fabric under the front of the presser foot (with most fabric this can be done when the presser foot is lowered) and sew slowly.
- Guide the fabric gently as the machine feeds the material automatically.
- Check the stitch formation and optimize if necessary. Depending on the result adjust following settings:
 - „Adjusting thread tensions“ see page 32
 - „mtc Thread control (Micro Thread Control)“ see page 21
 - „Presser foot pressure“ see page 21
 - „Differential Feed adjustment“ see page 22
 - „Cutting width“ see page 20
 - „Stitch length“ see page 20
- At the fabric end, carry on running machine at low speed, gently pulling the fabric towards the back, until an extra chain of stitches is produced without fabric.
- Pull the threads from the back over the thread cutter (1) or cut with scissors (2).

Adjusting thread tensions

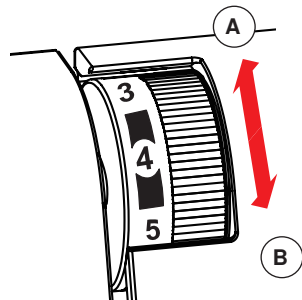



- 1 Balanced thread tension.
- 2 Upper looper thread is pulled to the wrong side.
 - Increase the thread tension of the upper looper thread or decrease the thread tension of the lower looper thread.
- 3 Upper looper thread is pulled to the wrong side.
 - Increase the thread tension of the lower looper thread or decrease the thread tension of the upper looper thread.
- 4 Left needle thread is loose and visible on the under side of the fabric.
 - Increase the thread tension of the left needle thread and/or decrease the thread tension of either one or both looper threads.
- 5 Right needle thread is loose and visible on the under side of the fabric.
 - Increase the thread tension of the right needle thread.

The thread tension for each thread can be altered by turning the thread tension adjustment dial.

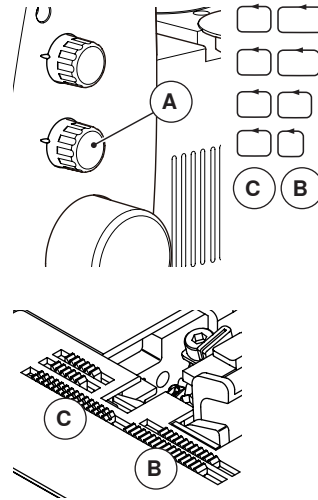
- Turning the dial upwards increases the tension.
- Turning the dial downwards decreases the thread tension.
- Test the thread tension on a spare piece of fabric.

- A** Increasing the thread tension
B Decreasing the thread tension

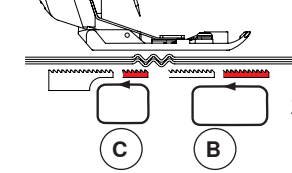


 **Informationen on further stitch adjustments can be found in the instruction manual.**

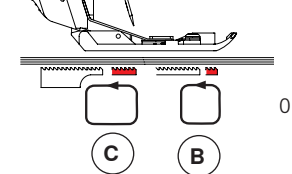
Differential Feed adjustment



Differenzialtransport 1-2



Differential feed 0.7-1

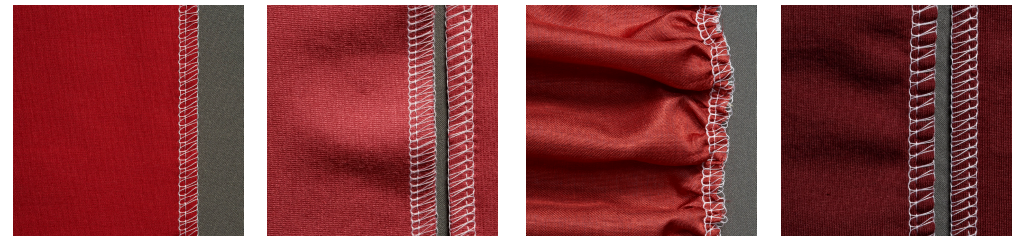


The differential feed dial (A) is infinitely variable.

The adjustment can be made in the range of 0.7 (stretching effect) to 2 (gathering effect).

Start with dial set to neutral (=1).

Adjustments can be made while sewing.



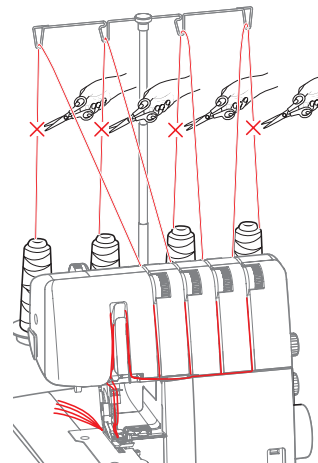
Differential feed at default setting for flat and even seams.

Set the differential feed at 1-2 to prevent loose knitware from stretching out and distorting.

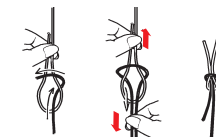
Required gathering can be achieved easily by setting the differential feed dial at 1-2. You will get more volume with a longer stitch length.

Set differential feed at 0.7-1 to avoid puckering of woven fabrics.

Replacing thread spools



- Cut off the existing threads near the spools and replace the cones.
- Tie ends to new spools.
- Raise the presser foot to release the tensions.
- Cut the needle threads above the needle eyes and pull the needle threads carefully through.
- Pull the thread chain carefully so that the looper threads are pulled until the new colour has passed through the looper eyes.
- At the end, re-thread the needle eyes and lower the presser foot.



Needles could be damaged when trying to pull the knots through the needle eyes.