

Lesson 2.8

How to thread an Overlocker

Threading an overlocker is complex and timely, for this reason the machine mechanism is usually always left threaded and new threads are tied and pulled through the carefully. Therefore, never remove threads from the looper and needle mechanisms, check thread before starting work, keep an eye on the thread feed whilst working, and if a cone of thread is coming to an end or if you must change colour or thread type follow the Option A instructions. If the machine is unthreaded and you need to completely rethread follow option B

A) TO PULL THREAD THROUGH:



1. Turn machine off and run out excess power

2. Clip the thread at the cone

3. Tie on the new thread and test the knot

4. Unthread the needles **only**



5. Lift the presser foot and pull the thread through slowly, tapping and easing it through the mechanism to ensure no breakage

6. When the knot reaches the needles, clip it off and re-thread the needles with the new thread back to front

B) TO RETHREAD AN OVERLOCKER FROM SCRATCH:



1. Turn machine off and run out excess power

2. Refer to the colour coded diagram inside the looper cover

3. Using tweezers thread the machine following the diagram. This indicates how to pass the threads through the upper thread guides, lower looper and upper looper in the right order



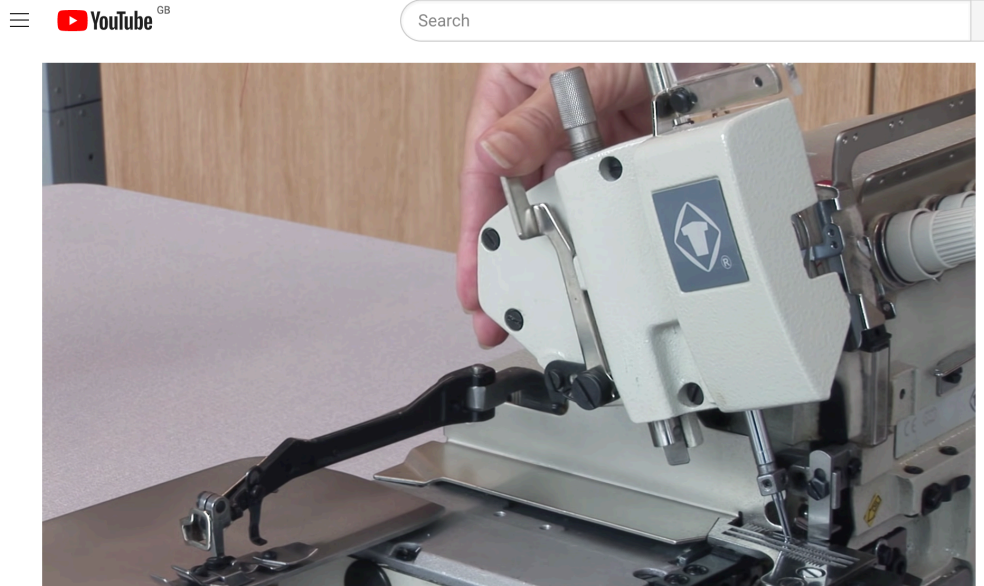
4. Always test the machine before returning to production to ensure correct stitch balance. If an overlocker is

threaded incorrectly, it will result in thread breakage or stitch skipping.

To see step by steps instructions on how to thread an overlocker using the 'Pull through' method watch the video below.



To see a clear, step by step guidance on the full threading method, of a four-thread overlocker see Derby Universities video below:



Threading the Overlock Machine

<https://youtu.be/ZANjBu7xp2Y>

Knowledge Challenge 2.17

The 'pull-through' overlocker threading method is the most used because it is easier and quicker. Below is a jumbled list of the stages involved. Put the 'pull-through' method into the correct order from 1 to 6

- Lift the presser foot and pull the thread through slowly, tapping and easing it through the mechanism
- When the knot reaches the needles, clip it off and re-thread the needles with the new thread from front to back
- Unthread the needles only
- Clip the thread at the cone
- Tie on the new thread and test the knot
- Turn machine off and run out excess power

Skill Challenge 2.18

After threading the overlocker correctly, I have achieved a...

- A tight stitch that is casing the fabric to pucker
- A row of skipped uneven stitches
- An even, well balanced overlock stitch

Overlocker Adjustments



It is unlikely that you will be expected to adjust the overlocker settings. The machines are usually set to factory requirements and most adjustments are the responsibility of the machine mechanic. Minor adjustments that you may be required to do are listed below. **Remember:** Check with your supervisor

before carrying out any adjustments and if approved ensure the machine is off and power is run out before making the adjustment.

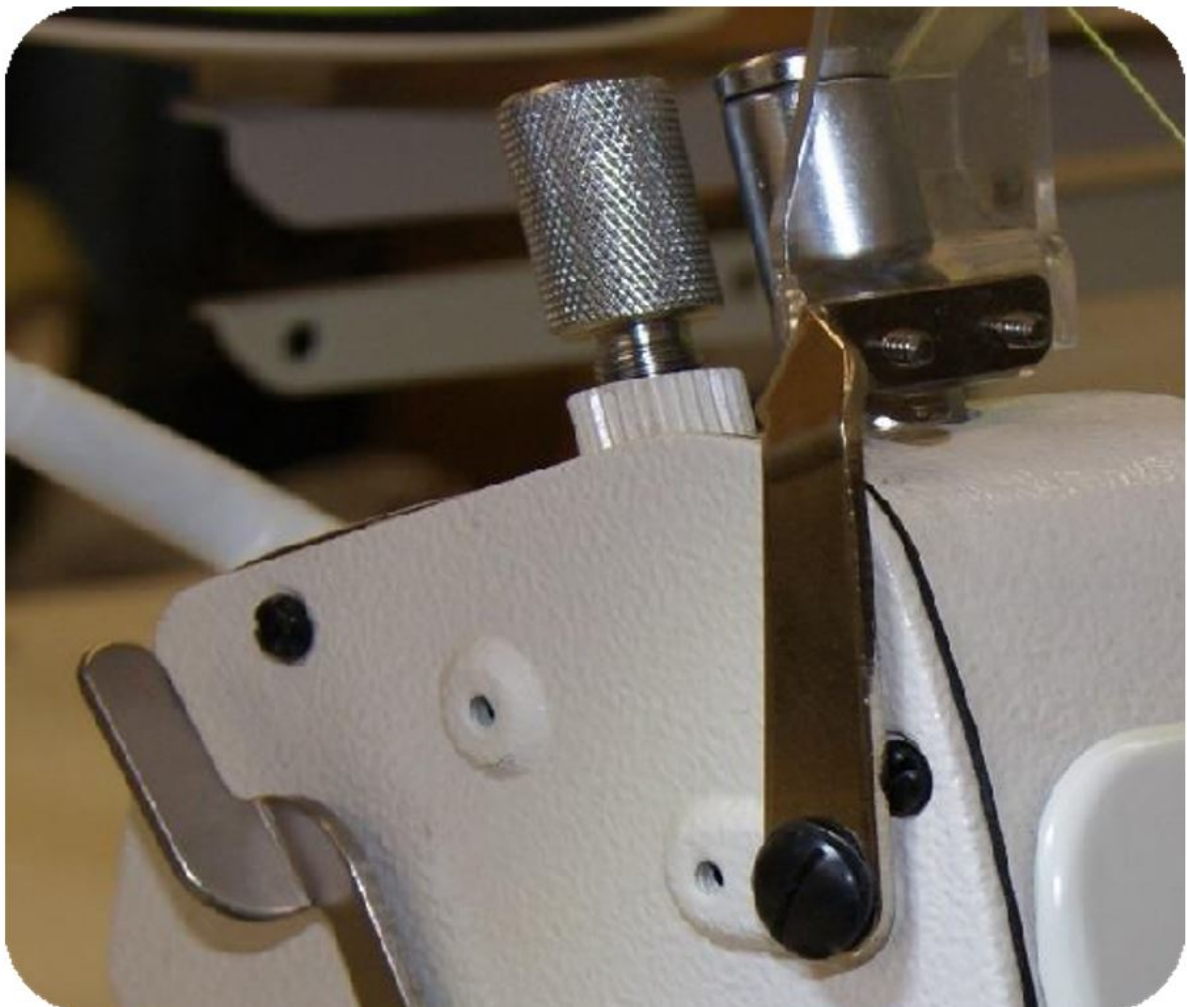
The adjustments listed below refer to the Juki, four thread overlocker, series MO- 6700. They are standard procedures, but different models vary so always check the make and model of your overlocker and refer to the manual if necessary.

Adjust the stitch length

- 1.** Remove the throat plate cover located on the Left side of the machine.
- 2.** Pressing the push button located on the left lower side with the left thumb, turn the hand wheel. The machine will click when the push button reaches the correct depth
- 3.** Pressing the button, align the number on the Hand wheel with the mark. EG if the mark is aligned with "3", the stitch length is approx. 3mm (differential feed ratio = 1:1).

Adjust the pressure of the presser foot

1. Turn the presser spring regulator clockwise to increase the pressure and turn anticlockwise to decrease the pressure.
2. The standard pressure is approximately 5kg adjust the pressure to decrease the pressure for the light-weight materials and increase it for heavy-weight materials.
3. When moving the presser foot sideways, lower the presser foot lifting lever. When returning the presser foot to the home position, be sure to raise the presser foot lever, and ensure the presser foot is positioned correctly.





Adjust the thread tension

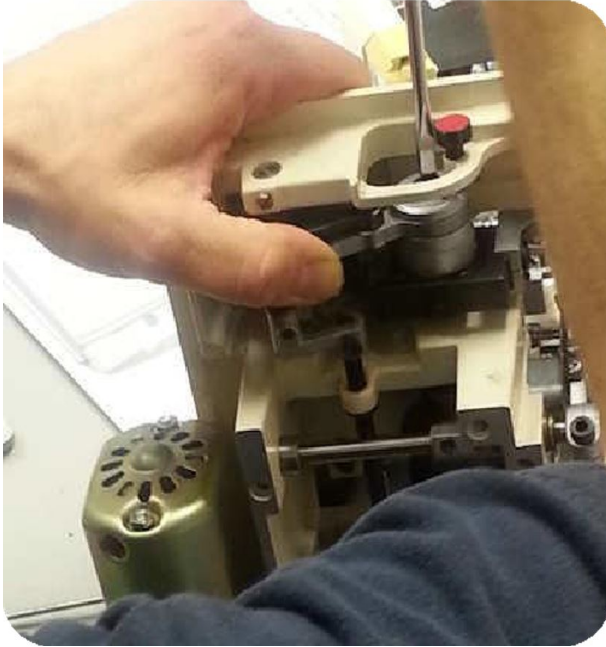
Thread tension will vary in accordance with the thickness of materials, thickness/weight/type of thread, stitch length and width.

To adjust the thread tension of needle thread, upper looper thread and lower looper thread, turn the thread tension discs/dials located at the front of the machine, following the instructions below:

1. Ensure the thread is firmly threaded between the tension discs
2. When the stitches are not tight enough, turn the dials clockwise
3. When the stitches are excessively tight, turn the dials anticlockwise

The aim is to achieve needle thread and looper threads balance, with both threads interlacing with one another at the centre section of the material creating an even, balanced stitch. This can be down to trial and error; no two machines are the same and older machines can become temperamental. Always test the stitch on scrap fabric before continuing to production.

More advanced adjustments are usually not the responsibility of a production sewing machinist, they are carried out by a trained sewing machine mechanic and may include:



- Adjusting the needle height
- Positioning the throat plate
- Installing position of the needle clamp
- Adjusting/positioning loopers
- Adjusting the needle guard
- Adjusting the height/ tilt of the feed dog
- Adjusting the differential feed
- Adjusting the presser foot
- Positioning the knife arm
- Re-sharpening of the knife
- Adjusting the feed mechanism

Knowledge Challenge 2.19

The overlocker is usually set to factory requirements and most adjustments are the responsibility of the machine mechanic. Identify three adjustments that a sewing machinist could be responsible for.

- Adjust pressure
- Adjust tension
- Adjust the knife position
- Adjust feed dog height
- Adjusting the feed mechanism
- Adjust stitch length

Knowledge Challenge 2.20

1. In what two circumstances might the tension on an overlocker need to be adjusted
 - When having to increase sewing speed
 - When switching work from lightweight fabric to a heavy weight fabric
 - When changing thread colours
 - When changing thread type/thickness

Now let look at how to maintain the overlocker and keep it in good working order.