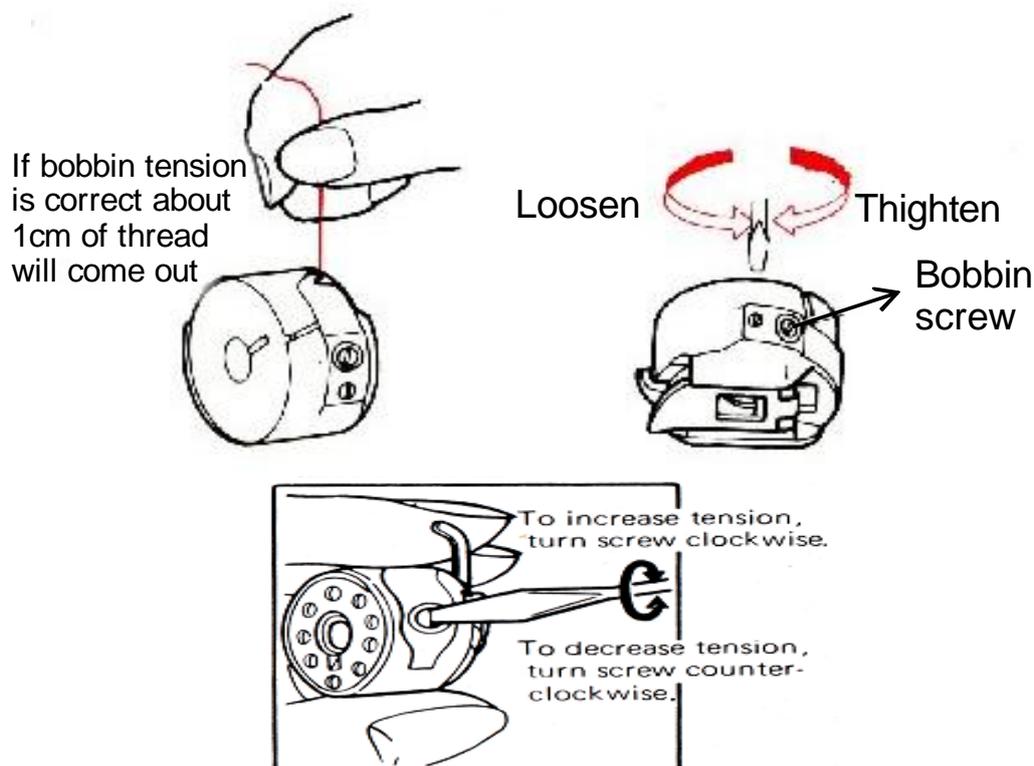


HOW TO ADJUST TENSION

- Make sure that bobbin case and bobbin case spring are clean before beginning this procedure. This is to ensure consistency once proper tension is set.
- Install a new bobbin of correct size into bobbin case.
- Slide the thread under the tension spring.
- Pull bobbin from under hole of tension spring. If bobbin case has a middle thread guide or pigtail, do not thread through at this time.
- Pull approx. 50mm of bobbin.
- Hold the bobbin by the thread hanging out of the case to check the tension. The ideal tension should be when the bobbin does not move, or is very slow releasing thread. If the bobbin falls to the ground, it is too loose and you will need to tighten the screw (on the tension spring). If the bobbin does not fall, loosen the screw until the bobbin is just barely holding its own weight. *Note: If a tension gauge is used, the correct bobbin tension is 20-25g.*
- Adjust the tension of the upper thread & bobbin thread for better balance when sewing. The industry standard assumes 1/3 of the bobbin thread is visible in the back of a sewout.



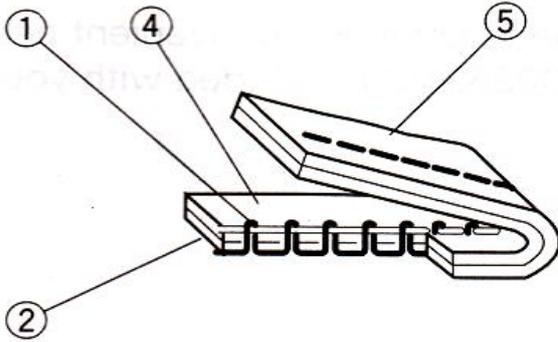
Measure the lower thread tension suspending the bobbin in the bobbin case by the end of the thread. Swing it lightly. If the thread comes out a little, the tension is about right.

Turning the tension screw clockwise will increase the tension - see sketch and turning the screw anti-clockwise will loosen the tension.

Usually it is sufficient to adjust only the upper thread tension with the upper thread tension dial.

UPPER THREAD IS TOO TIGHT

The lower thread shows on top, or the seam puckers



➔ Set the upper thread tension dial to a smaller number

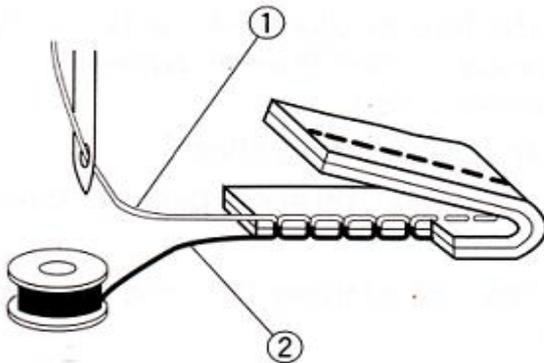
- 1. Needle thread
- 2. Bobbin thread

The bobbin thread shows through on the right side of the fabric and it feels bumpy

UPPER AND LOWER THREAD TENSION ARE BALANCED

The upper and lower threads cross each other in the middle of the fabric thickness and there is no thread slackening or seam shrinkage.

➔ Thread tensions are correct



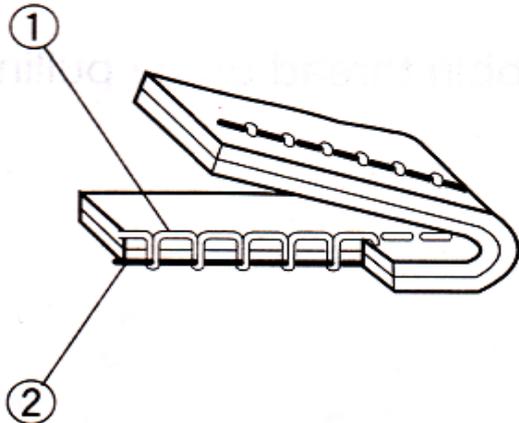
- 1. Needle thread
- 2. Bobbin thread

The ideal straight stitch has threads lock together between two layers of fabric

UPPER THREAD IS TOO LOOSE

The upper thread shows below, or the seam puckers.

➔ Set the upper thread tension dial to a larger number



- 1. Needle thread
- 2. Bobbin thread

The needle thread shows through on the wrong side of the fabric and it feels bumpy.