Top Thread Tension Adjustment

Sewing machines are factory preset to have the top and bottom thread form even stitches. If the top and bottom threads are identical in fiber and weight, adjustments should not be necessary. However, if we use cotton on top and poly underneath, or metallic on top and poly underneath, or a heavy thread on top and a thin thread underneath, it is necessary to adjust the tension settings. It is fine to use different thread types and weights on the top and bottom.

Think of the top and bottom thread as having a tug of war. If the threads are identical and you are sewing on a single layer of fabric, both sides have equal strength and the result will be a draw. The sewing should therefore produce perfectly even stitches with no top thread showing underneath and no bobbin thread showing on top. However, in the real world, the teams are rarely equal. One team will be stronger or bigger or faster than the other. We use decorative threads on top. We often use different fibers for the top and bottom threads. We also add stabilizer or batting. Sometimes we might use a cotton bobbin thread and other times we use a polyester bobbin thread. All these factors make it necessary to adjust the tension for each project. By adjusting the top tension either up or down, we are able to add or take away strength on the top thread team to equalize the tug of war battle.

How much you tighten or loosen your tension is individual to your machine. Simply test it at either a decreased or increased tension depending on what problem you are having until you achieve an even stitch. Don’t be afraid to change the settings!

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**Correct**

Top Thread

Bobbin Thread

(only top thread visible)

(only bobbin thread visible)

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**Problem A**

Tension too tight

(bobbin thread visible on top)

**Solution A**

Loosen top tension

(lower number)

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**Problem B**

Top tension too loose

(top thread visible on bottom)

**Solution B**

Tighten top tension

(increase number)