

Sewing Machine Tension Notes

Many repair issues reported when a machine is brought in for service can be fixed by attention to “TNT” (thread/needle/tension). When we Clean/Oil/Adjust a machine technicians return the machine to “standard.” For this, we use a standard fabric, a new standard needle, standard thread, and a few standard stitch patterns. Any subsequent change to thread, needle, fabric and/or stitch pattern may require tension adjustments by the user to account for these changes. When we service a machine, we set the bobbin and top tensions so that a standard straight stitch is as close to perfect as possible on that machine. The definition of perfect is that both top and bottom threads meet in the exact center of the fabric and only slight “pinpricks” of top thread are showing on the bottom of the fabric and no bottom thread is showing on the top of the fabric for straight stitches. We then test several other types of stitches, zigzag, decorative, etc., depending on what the machine is capable of. Stitches other than straight may pull more top thread down to the bottom of the fabric.

For certain changes to thread/needle/fabric/stitch, the user will need to adjust the tension so that the stitch being used is as close to perfect as possible. This may require several top tension adjustments followed by a test sew, repeated as many times as necessary to obtain a perfect stitch. In the majority of instances, the bobbin tension should not need to be adjusted. Increasing the top tension will pull the bobbin thread up toward the top of the fabric, while decreasing top tension will pull the top thread down toward the bottom of the fabric.

Now, a note about “free motion” or “darning” mode. This is when you lower the feed dogs which lets you move the fabric in a random fashion. By its very nature, free motion or darning mode require the most attention to detail and technique from the user and takes the most control away from that which is normally controlled by the machine. Devices such as an automatic stitch regulator can be added to some machines which will alter the motor speed to accommodate the user’s changing speed of movement of the fabric. If you do not have such a device, there are a couple of things that will help you get a good result when doing free motion quilting:

- Run the motor at a higher speed (i.e., stitch as fast as you comfortably can)
- Be as smooth with your movements as possible
- Consider using a Supreme Slider (available at CQC) under your fabric to reduce friction

The staff at Cortez Quilt Company is always ready to help you with your sewing machine issues. Please let us help you make the most of your sewing experience.

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