



THE QUILTING EXPERTS

Troubleshooting Stitch Quality Issues

- **Skipped Stitches**
 - **Are they really skipped stitches or long stitches?**
 - **If there are needle holes, the needle went down into the quilt but did not complete the stitch. THIS IS NOT AN ENCODER ISSUE.**
 - Check to make sure the needle is pushed all the way up into the needle bar and is oriented in the correct direction
 - You may need a new needle
 - Is the quilt thicker than usual? Like denim or a T-shirt quilt- this can cause needle deflection. Try a bigger needle and/or slow way down.
 - Needle deflection can also occur if your quilt tension is too tight. (not to be confused with thread tension)
 - Your quilt may be too high off the bed of the machine or may be too low and dragging.
 - Hopping foot may be too high.
 - As a last resort, your machine may need to be re-timed, however this is rarely the case.
- **Long stitches**
 - **If there are no needle holes, the needle did not go down. Therefore, this is an issue with the encoders used for stitch regulation**
 - Which direction is the skip happening? This will tell you which encoder is not working.
 - Check to make sure the belts are engaged
 - Check the encoders for cracked o-rings
 - Check the track – clean any lint or debris. The wheels can also accumulate gunk. Clean thoroughly.
- **Loops on the back**
 - Bobbin not wound nicely
 - Be sure to clean bobbin area thoroughly of lint. (We do not suggest canned air!)
 - Oil bobbin basket on rotating hook
 - If you are seeing loops on the back, this means then the top thread is being pulled to the bottom. This can be the top thread tension needs tightening.
 - Bobbin tension may be too tight
 - If tightening tension doesn't work, you may need the check spring replaced.
- **Eyelashing on top**
 - Top tension is too tight
 - Top thread is caught or snagging somewhere along the thread path. Check the thread path for any burrs or snags
- **Eyelashing on bottom**
 - Bottom thread too tight
 - Top thread too loose

- Often we find that this is caused because the thread is not securely flossed between the tension discs. It must be way down in the tension discs, not laying on top. Hold on to each end of the thread and floss it in tight into the discs
 - Bobbin is nearly empty which can sometimes cause it to get tangled up in case
- **Thread is breaking**
 - Quilt tension too tight
 - Thread tension too tight
 - Poor thread quality
 - Thread can sometimes get dry and/or brittle, usually in the winter months- this can sometimes be fixed by spritzing the thread cone with water and/or thread conditioner
 - Poor fabric quality-can sometimes act like sandpaper
 - Poor batting quality
 - Tension is too tight
 - Hopping foot is too high
- **Wobbly stitches, especially going backwards**
 - Turn the needle slightly. Using a needle magnet, face the needle (left) at about 6:32 is a good setting. Your machine may be a little different.