

Bottom Thread Breakage

Just when things are working perfectly, we return to our Longarm and know for sure that the little gremlins have been having fun messing things up for us. A few months ago we talked about top thread breakage, this newsletter we will address the issues that might cause bottom (bobbin) thread breakage.

Several possible causes for the bobbin thread to break include (1) bobbin tension too high, (2) backlash of the bobbin in the bobbin case, and (3) bobbin wound inconsistently or too loose. In the non-regulated mode, the most common cause of bobbin thread breakage is forgetting to start moving the machine as soon as the stop/start button is pressed, or pausing in one spot without stopping the machine. It is almost 100% sure that the bobbin thread will be chopped off if you do not keep the machine head moving in the non-regulated mode.

Solutions for the breakage issues:

1. If you have a PRO, there is a feature called “Constant Speed with Motion Detector” p. 8 that engages the use of the encoders while using the non-regulated mode. You have the best of both worlds; the non-regulated feature, but when the encoders detect no motion, the needle stops. When the encoder detects 1/16” in any direction, the machine will start. When the machine does not move for 1/10th of a second, the machine stops. It is a simple programming step to set your PRO into this mode. Give it a try, you might like it.
2. Bobbin tension too high. Some thread combinations are more difficult to adjust. If you are hesitant to touch your bobbin tension, get over it. Longarm tension adjustment requires a familiarity and ease with adjusting bobbin tension. If the bobbin tension is too high, loosen the adjusting screw on the bobbin case by turning slightly counterclockwise. The best method is to use a Towa Bobbin Gauge to set our bobbin tension consistently at about the same setting regardless of the thread type you are using.
3. Backlash occurs when the bobbin continues to spin after the machine is stopped or when slowing down. If you like to sew fast, there is more backlash when stopping – momentum of the bobbin to keep going. All Nolting bobbin cases have a check spring installed in them. This magnetic check spring is to help prevent/reduce backlash by (1) magnetic attraction to the Nolting steel based bobbins and by (2) exerting slight pressure on the bobbin to slow it down. If you are having an issue with a lot of backlash, make sure you have the check spring in your bobbin case and slow down.
4. Inconsistent, too loose or spongy winding will always lead to problems, thread breakage and even poor tension. Always use a quality thread. Always wind bobbins on the commercial bobbin winder and make sure that the thread is securely between the tension disks of the bobbin winder. Threads that might be a problem winding are slippery threads. Place a thread net over the cone to keep the thread from puddling. Be attentive when winding to make sure the thread is constantly seated between the tension discs.

Take heart. Bottom thread breakage is not as common as top thread breakage; however, when it happens it is annoying, but usually easy to solve.