

Trouble Shooting Guide – Nolting Longarm

Tension Problems		
Observations	Possible Causes	Solution
Big loops on the bottom of quilt	Machine not threaded properly	Re-thread top of machine
Bobbin thread loops on top of quilt	Top tension too tight or bobbin tension too loose	Loosen top tension or tighten bobbin tension
Top thread loops on the bottom of the quilt	Bobbin tension too tight or top tension too loose	Tighten top tension or loosen bobbin tension
Skipped Stitches	Possible Causes	Solution
Observations		
The needle penetrates the fabric but does not leave a stitch.	Needle is flexing by out running the machine, using a too small needle, dull needle	Use proper needle size, replace with new needle,
Working from the needle end of the machine, skipped stitches when pushing the machine away from yourself	Needle flexing pulling the needle away from the hook point	Slow down, loosen the quilt a couple of notches
Skipped stitches	Needle out of square with the hook	Reposition the needle with the groove directly facing front
Skipped stitches	Hopping foot height not adjusted correctly	Check height and adjust to correct height
Skipped stitches	The hook point is not timed correctly to pick up the top thread.	Re-time hook

Skipped stitches	Hook point has become rounded	Replace hook with Nolting replacement parts
Skipped stitches	As the machine gets older, with use the hook shaft bushing may wear allowing 1/16" or more of play when you push or pull on the hook assembly.	Adjust the lock collar on the hook assembly
Skipped stitches noticed when pushing the machine toward the back of the table	After quilting many hundreds or thousands of quilts, bushing wear in the needle bar.	Needle bar replacement by a qualified Nolting repair person
Skipped stitches	Tightly woven, high thread count fabric such as polyester, bed sheets, or batik	Slow down. Replace needle with an industrial ball point needle
Top Thread Breakage Observations	Possible Causes	Solutions
Top thread breaking	Poor quality thread	Use good quality strong thread to sew at the fast speed of Longarm machines
Stress break - Top thread breaking looking like it was pulled apart	Thread caught somewhere on the machine under the thread cone, around a pin, the tension dial, etc.	Follow thread path and look for place thread jumped around or got caught on something. Re-thread the machine.
Stress break - Top thread breaking looking like it was pulled apart	Top tension is too tight	Loosen the top tension. Bobbin tension may need to be loosened to balance the stitch.
Clean cut break - Top thread cut off with a clean cut like cut with a pair of scissors	Bur or sharp edge in the needle hole or on the hook shield	Find the bur and remove with fine sand paper or emery cloth. Do not get any of the grit particles into the hook assembly.

Hook break - Top thread breaks with a few fibers hanging straight and the rest bunched up a little higher on the thread.	Hook point is too far away from the needle almost missing the top thread loop causing it to shred.	*Slow down *Use correct needle size *Check hook timing and adjust, if necessary
Hook break - Top thread breaks with a few fibers hanging straight and the rest bunched up a little higher on the thread.	Burr on the hook point caused by needle deflection (most hook breaks are caused by needle deflection)	*Slow down. *Check for loose or worn needle bar bushings. *Loosen the top tension
Top thread shredding	Burr along the top thread path in a thread guide, tension disc, or eye of needle.	*Check thread guides and tension discs for rough or worn areas – smooth with emery cloth or replace the part (easier). *Replace needle
Bottom Thread Breakage Observations	Possible Causes	Solution
Bobbin thread breaking right at the tensioner of the bobbin case	Too many stitches in one hole, usually happens at pauses or starting without moving the machine	In standard stitch mode (not regulated), be prepared to move the machine when pressing the start button. To pause quilting, press the start-stop button to stop the machine.
Bobbin thread breaking close to the bobbin case	Bobbin tension too high	Loosen the bobbin tension
Bobbin thread knotting and breaking, lots of loose threads in bobbin case	Backlash, the bobbin continues to spin after stopping or when slowing down.	Install backlash spring in the bobbin case. These exert slight pressure or are magnetic and slow the bobbin spin down.
Bobbin thread may break or sews with inconsistent tension.	Bobbin wound inconsistently, too loose, or is spongy	Use quality thread, make sure thread is `securely in tension disks on winder and winds with even speed.

