

How to Adjust the Tension on Your Gammill Longarm Quilting Machine

Main Tension (Front)

Only about 1/8" of the shaft should be visible beyond the white knob.

Intermittent Tension

Only about 1/8" should be visible beyond the nut on the outside of the shaft. When you tighten it too much it actually forces the thread to come out, exactly the opposite of what you would think would happen. The majority of adjustments are made with the intermittent tension.

Bobbin Case

1. First thing you must do is make sure the bobbin case is set correctly. When you hold the case with the open side toward you, the thread must flow over the top of the bobbin from left to right, thru the split in the case and under the tension finger. By the way be sure that your finger is free of lint build-up.
2. Now put the bobbin case flat in your hand and pull on the thread. You should be able to right the case (stand it on edge) but not raise it from you hand. Once that is the way your case is, test the stitching. If that doesn't solve the problem, let's go to threading.

Threading

1. Come up off the thread holder and go thru the two thread guides on the lead off, then go forward to the small black thread guide with a hole in it, now go to the intermittent tension thru the thread guide and on the under side of the discs and back to the thread break alarm sensor on the back side of that then pull your thread forward to the bar with the three holes. From underneath bring up the thread in the first across the top of the bar and down in the third hole. Now come in front of the black bar (looks like a "L" on its back) and proceed in a clockwise motion around the main tension 1 1/2 times (be sure you are in the groove, the way you will know is that the rotary tension disk will spin) the second or half time around catch the tension spring and go under the black bar (looks like a fancy "L falling forward) then go up to the top to the take up lever, thread the eye from back to front then come down thru all the thread guides and then thru the needle from front to back.
2. Be sure to check bobbin case first and test stitches each time you make some adjustments otherwise we won't know what made it work. Once you are sure that the bobbin case and threading are correct test your stitches.
3. If the back is showing consistent loops and the bobbin thread is lying flat, it is telling you that either your bobbin case is too tight or the upper tension is too loose.

Upper Tension

1. Since you have checked the case the only answer left is the upper tension, adjust 1/4 turn at a time on the intermittent tension until stitches reach the desired quality. To tighten turn clockwise when you are standing in the front of the machine and to loosen turn counter-clockwise. If you are seeing the bottom thread on the top or the top thread is lying flat, that is telling you that the bobbin case tension is too loose or the upper is too tight, if you have checked the bobbin case, then the only answer is loosen your upper tension.