



## Understanding and adjusting the Bobbin Case Backlash spring

Because of the speed of the Innova; up to 3000 spi and the inherent starting and stopping of the quilt process; there is a rapid speed build up and slow down as the quilting process proceeds. When you rapidly make a loop; the bobbin spins fast and then at a point the bobbin stops.. this jerking action is similar to starting and stopping a car rapidly with you getting thrown into the windshield and then back into the seat. Without some control, the bobbin will unravel a large amount of thread causing a jam or thread break.

### **Visual issues:**

You will see top thread pulled to the bottom sometimes in a clump; sometimes just a group of top thread stitches. This is caused by the top thread getting pulled down because it can't pull the bobbin thread up.

You will also sometimes see the top thread break and snap up back to the tension. This occurs because the top thread can't pull the bobbin thread up and stretches like a rubber band before it breaks.



### **How do you check and adjust:**

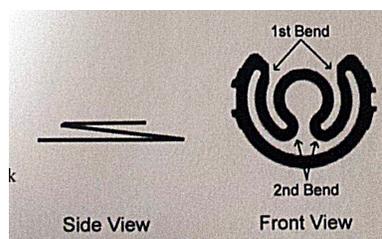
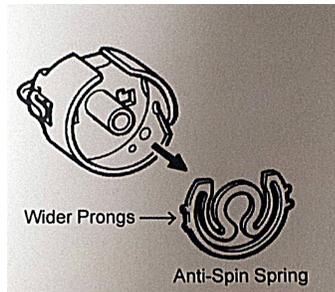
Install a brand new FULL RED bobbin shell .

Hold the bobbin case level with the open side up as shown. The bobbin should be .8mm (approx. 1/16") above the case. If you push it down, it should bounce back up.



### **Adjusting the Backlash spring:**

Remove the spring by taking it out with a small slotted screwdriver. Watch how you take it out as the backlash spring will go in properly only one way.



You will need to bend the spring in two places so that the spring will be even against the bobbin as shown. Re-insert the spring and re-check your adjustment. Try to make the elevation of the Red Bobbin even all the way around the case. You may need to repeat to get it right.