

Technical Update

Model: ESG, ESG2, ESG3

RE: Calibrating tensions using the dial tension gauge

To calibrate the tensions of an ESG machine, use a dial tension gauge. Please note the pointer of the gauge rests on "0" and the first line represents 10 grams.

After removing the upper tension thread cover, check the black knurled knob to the right of the spring. This adjusting knob should not be free turning and have an approximate gap of 1.5mm from the right side of the knob to the left side of the bracket as a factory setting. If not, adjust the knob and lock the threads with loctite or finger nail polish using caution not to get the loctite or finger nail polish on the sliding shaft.

Open the 1-40 test mode screen by holding in both the Start/Stop and Reverse buttons while turning the power on the machine.

Select test mode #25 and by using the "Plus" or "Minus" keys reset the screen to "00"

Select "close" and turn the handwheel one full turn to reinitialize the tension motor.

Tie one end of an 18 inch length of the red thread found on bobbins supplied with Baby Lock embroidery machines to the eyelet of the dial tension gauge

Raise the presser foot lever and route the thread through the thread guides, under the pretension plate and around the post. Then lower the presser foot.

While pulling the tension gauge straight toward you, insuring the thread is not contacting the tension disc, you should have a tension reading of 11-14 grams. If not, adjust the brass phillips screw clockwise to increase, counterclockwise to decrease the gram pull. This will be a VERY sensitive adjustment.

Raise and lower the presser foot several times, rechecking the gram pull.

****OVER****



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Once the proper tension is achieved, raise the presser foot and retract the thread. Draw the thread down between the tension disc and lower the presser foot.

Pull the gram gauge down, the tension reading should be between 60-65 grams. If not select test mode #25

Select the "Plus" key to increase or the "Minus" key to decrease the gram pull.

Select "Close" and rotate the handwheel one full turn to reset the tension motor, and recheck the total gram pull of 60-65 grams.

TO CHECK PROPER TENSION OF THE BOBBIN CASE:

Position the bobbin case as it would be in the machine, draw the thread through the tension spring as you would when loading a bobbin.

Pull the gauge straight back, checking the gauge for 11-14 gram pull.

This gram value is preset from the factory and locked with paint. However if the screw has been adjusted, reset the gram pull to 11-14 grams and carefully lock the adjusting screw with loctite or fingernail polish. Then recheck with the tension gauge.