

SUPERIOR THREADS



7/13

DIGITAL THREAD TENSION SENSOR

for LONGARM, SIT DOWN, MIDARM, and some INDUSTRIAL SEWING MACHINES

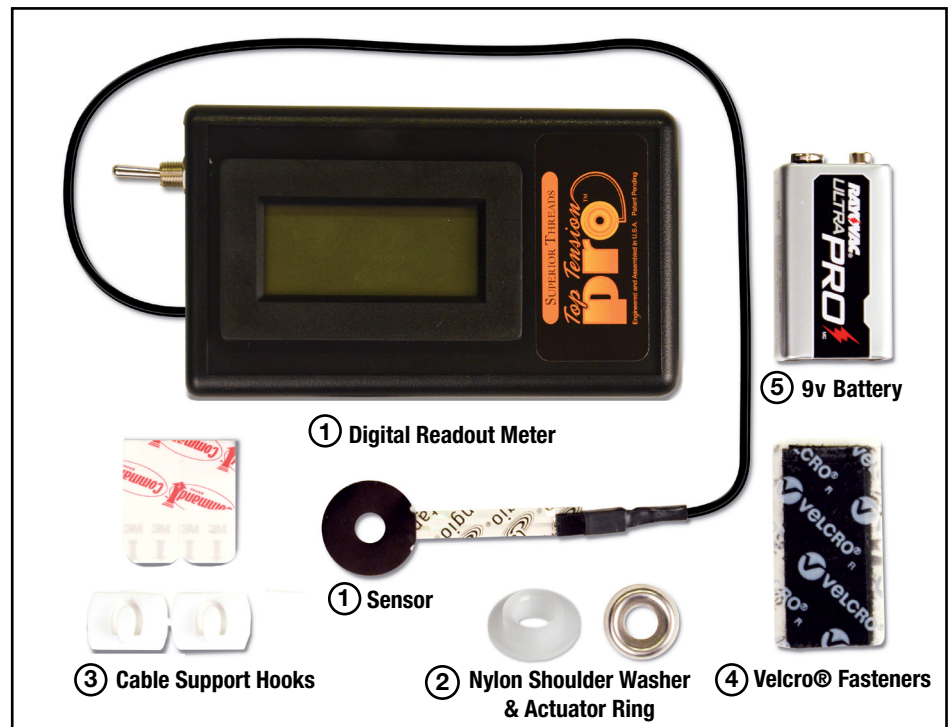
For video demonstration go to www.superiorthreads.com/top-tension-pro

Save these instructions.

INCLUDED IN PACKAGE

(See Photo at Right)

1. Digital readout meter with attached cable and sensor disc.
2. One actuator ring and nylon shoulder washer.
3. Two stick-on cable support hooks.
4. Self-sticking Velcro® fasteners.
5. One 9-volt battery.



INSTALLATION INSTRUCTIONS

STEP 1: Remove the battery compartment door on the back of the digital meter box and install the 9 volt battery (provided). Flip the on/off switch to the on position, and observe the meter screen. With no pressure on the sensor disc, the meter should display a reading of 000, or - 000. Place the sensor disc between your thumb and forefinger and press gently. The meter readout number should increase with applied pressure indicating proper operation. Turn the meter off and proceed with the installation.

STEP 2: Using the Velcro® fasteners provided, mount the digital readout meter onto the machine close to the tension guide where the sensor will be installed. (For machines with intermittent tension guides, this will be in the middle of the arm. For machines with only one tension guide assembly, this will be toward the head of the machine.) Make sure the sensor disc can easily reach the machine thread tension guide.

(step 3 continued on back)

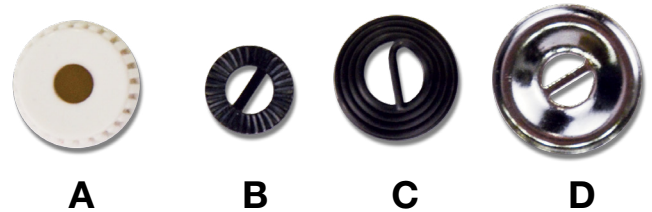
STEP 3: Remove the tension guide assembly from the machine.

Carefully line up the parts in the order that you remove them. (We suggest you photograph the order of assembly for future reference.)

1. Unscrew and remove the tension adjusting knob on the machine thread tension guide assembly (A).
2. Remove the adjusting knob knurled washer (B).
3. Remove the tension spring (C).
4. Remove the tension spring retaining washer (D).

Do not remove the remaining pads, thread guides, and other washers or spacers.

Step #4 for Gammill Machines: The Top Tension Pro™ will be attached onto the intermittent tension. If you have a Gammill longarm machine, replace the actuator ring (See item **(I)** in image at bottom of the page) with the nylon shoulder washer (item **(N)** at bottom of page). Slide the shoulder washer onto the tension guide shaft with the protruding edge facing away from your machine.



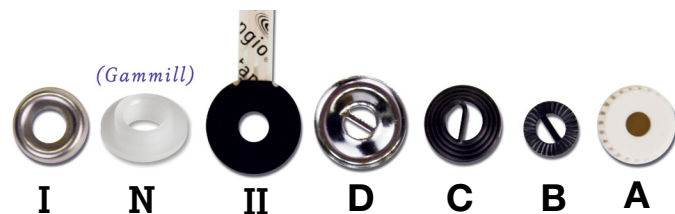
REASSEMBLE ACCORDING TO THE PHOTO BELOW

STEP 4: Slide the actuator ring (**I**), with the rounded side facing out, onto the machine tension guide shaft. *For Gammill machines, swap the actuator ring for the nylon shoulder washer (**N**), with the protruding edge facing away from the machine.*

STEP 5: While being careful not to stretch the meter cable, slide the thread sensor disc (**II**) located at the end of the cable onto the tension guide shaft with the black sensor side facing the actuator ring (or shoulder washer for Gammill machines) (**I** or **N**) and the white side facing out, taking care to route the cable so that it does not interfere with any of the machine's moving parts or the thread path.

STEP 6: Reassemble the parts of the thread tension guide assembly on the threaded shaft, making sure the parts are replaced in their original positions. Spring retaining washer (**D**), tension spring (**C**), knurled washer (**B**), and knob (**A**) *If you do not have a Tension Spring Retaining Washer (**D**), place the tension spring directly after the sensor.*

STEP 7: Attach the small cable support hooks to your machine so they will keep the cable away from any moving parts.



STEP 8: Thread the machine normally and route the thread in the open space between the cable and the machine. (See photo below)

Adjust the thread tension as you normally would until you achieve the perfect stitch. Turn on the Top Tension Pro™. The number which is now displayed on the Top Tension Pro™ digital readout is the proper top tension setting for the thread currently in use. For future reference, record the number on the included tension reference sheet. Once you have noted the tension number, turn the Top Tension Pro™ off until needed again.

Tension settings can differ depending on factors such as a change in the top thread, bobbin thread, needle size, fabric and/or batting. Every time one of these factors change, make adjustments until you achieve the perfect stitch, then record the top tension setting for future reference.

