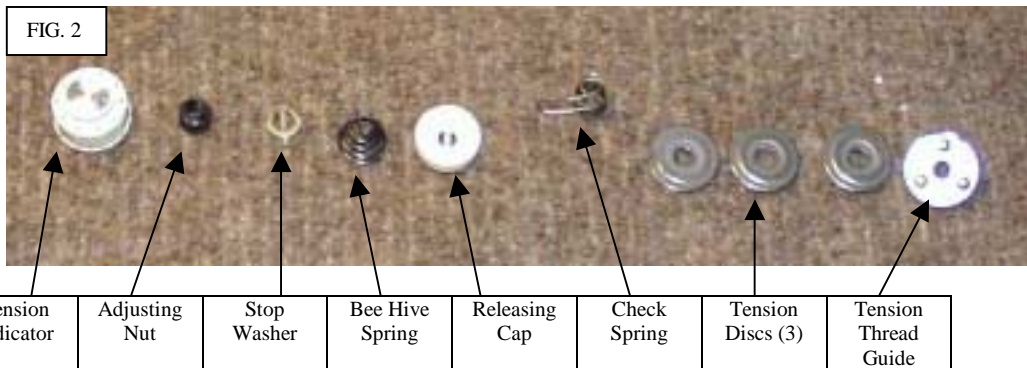


## Clean & Adjusting The Tension on most 600 Series machines.

Typical 600 series Tension unit:



Tension Caps are either held on with a tiny setscrew, or are a Pull Off type. The Pull Off type has a pressure clip that secures it to the Adjusting Nut.

Disassemble: NOTE- Lay your parts out in order!!

1. Set the Dial to 0, and loosen the setscrew, but don't remove it. Or, simply pull the Tension Indicator off. A good indicator of a pull off cap is that they are made of plastic. The setscrew type is metal.
2. Remove the Adjusting Nut
3. Remove the Stop Washer. Pay attention to which way the stop tab is facing. Either up or down.
4. Remove the Bee Hive Spring
5. Remove the Releasing Cap
6. Remove the Check Spring, Tension Discs and Tension Thread Guide as a unit
7. Remove the Check Spring from the unit, and separate the 3 Tension Discs

Clean the components and check for broken or damaged parts. Typically, the Releasing Cap will be cracked inside where the Releasing Pin pushes on it, and the Tension Stud will be cracked in the geared area. See figure 3 below.

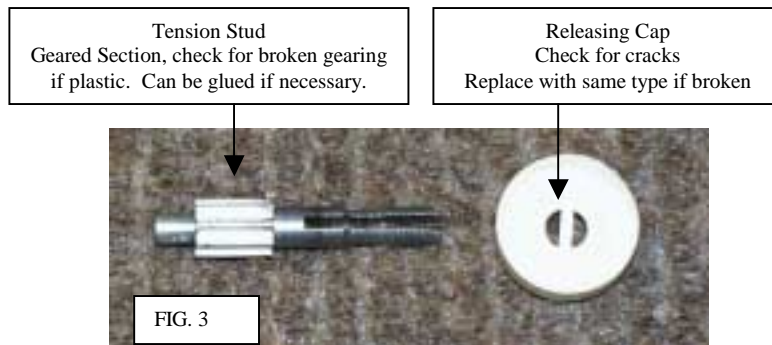


FIG. 4



Assemble the unit in your hand, and then slide onto the Stud. Face Check Spring downward, and slide all the way into place.

Place the Take Up Lever at its highest point when threading.

Reassemble in the reverse order:

1. Assemble the 3 Tension Discs, Tension Thread Guide and Check Spring. See figure 4.
2. Slide the above unit onto the Tension Stud, and place the Check Spring facing down. See figure 4.
3. Install the Tension Releasing Cap
4. Install the Bee Hive Spring
5. Install the Stop Washer. Ensure the tab is facing either up or down.
6. Install the Adjusting Nut
7. Thread the machine to the Take Up Lever and stop at that point
8. Make sure the Take Up Lever is at its highest position. See bottom of figure 4.
9. Set the Presser Foot down
10. Slowly pull on the thread and tighten the Adjusting Nut until the Check Spring is coming up to the thread loop on the Tension Thread Guide unit. See figure 5.
11. Install the Tension Indicator at the zero mark. See figure 6.



FIG. 6

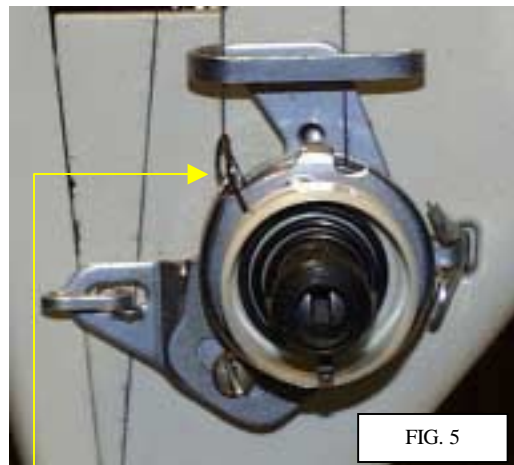
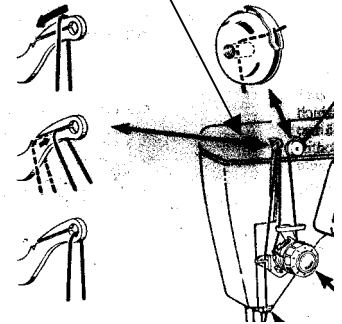


FIG. 5

The Check Spring should rise to this point when pulling the thread from the Take Up Lever. At this point install the Tension Indicator at the Zero mark.



That's it, your top tension should be in good working order now. Normal position for sewing is usually about 3 on the indicator. If the machine continues to experience tension related problems, then the bobbin case area and lower thread guide could be suspect. I hope you've found this guide useful, and consider purchasing the entire manual, or other sections when they become available.

Kind Regards to all,  
Terry