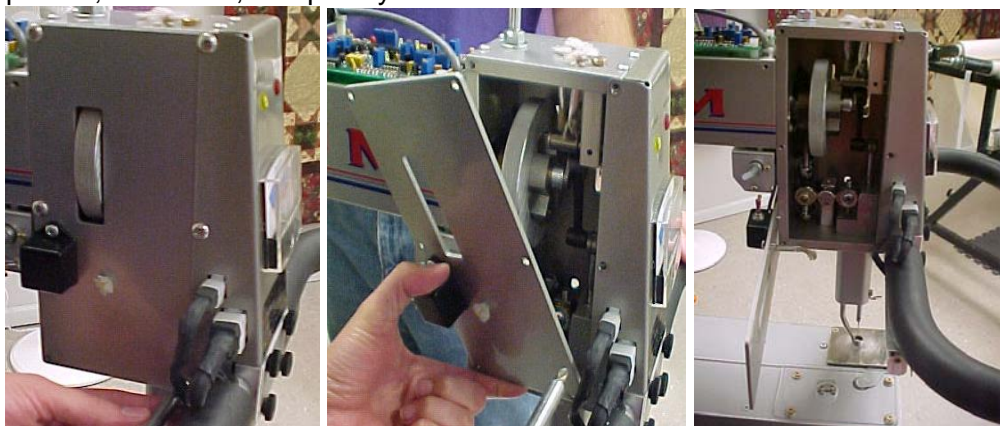
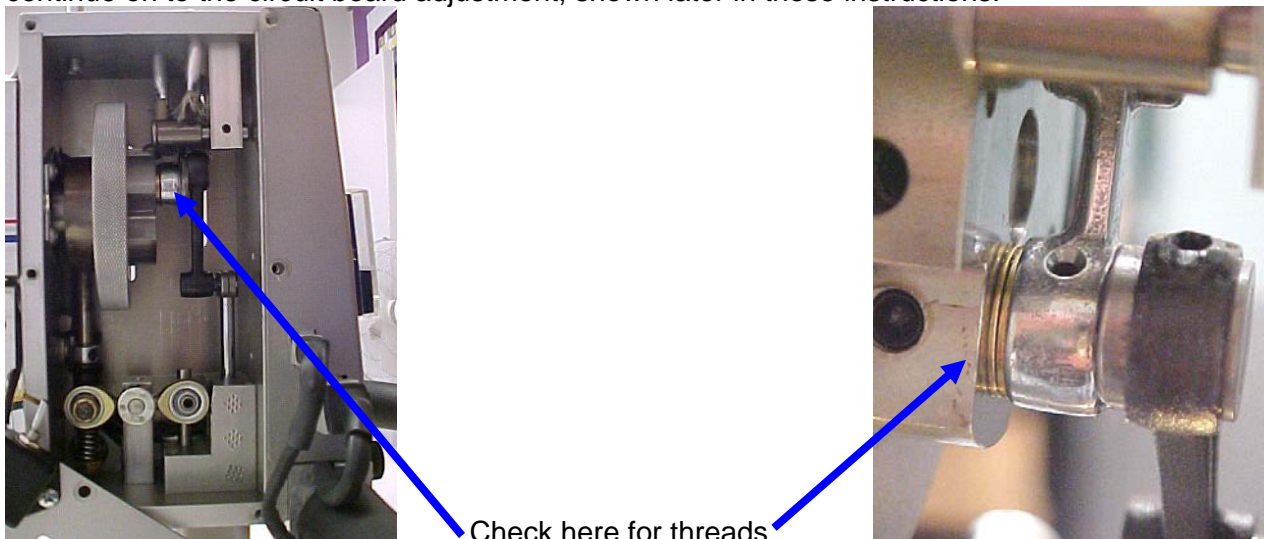


Needle Up/Down Adjustment

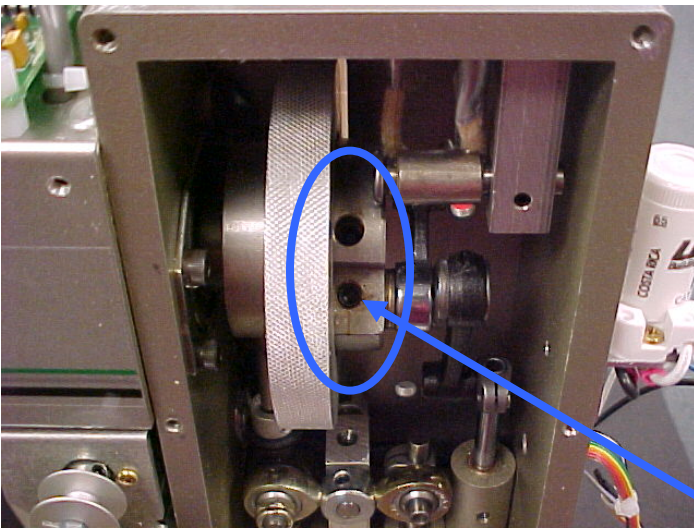
If you have trouble getting the needle to stop up or down accurately, remove the left side plate on the front of the machine. If you have a bobbin winder on your machine, the front cover can hang to the side as shown in the last picture; otherwise, completely remove the side cover.



Check the take-up lever assembly for loose threads that may have become lodged in the rotating parts. The threads will cause the machine to be difficult to rotate smoothly. This can cause the motor to be unable to position the needle correctly either up or down. The gold washers **MUST** be able to spin freely on the shaft! Using a blade or a flat blade screwdriver, try to spin the washers. If they spin freely, and the machine still positions slowly, continue on to the circuit board adjustment, shown later in these instructions.

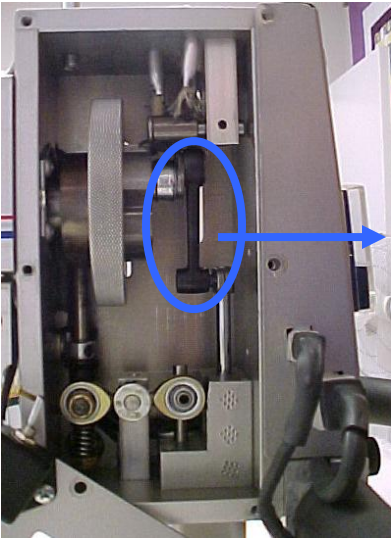


If you are unable to completely remove all threads between the washers so they spin freely, you can, as a last resort, loosen the flywheel mechanism. Rotate the flywheel until you see 2 set screws next to each other. Using a 1/8" allen wrench, loosen the lower of the two set screws (it is on the 'step-down' in the metal collar in front of the flywheel). Once this set screw is loosened, **DO NOT ROTATE THE FLYWHEEL!!** Rotating the flywheel at this point can cause the pick up lever timing to be thrown off.



Loosen this screw

Once the set screw is loosened, gently pull the black arm that connects the flywheel to the needlebar away from the flywheel. You should be able to get enough room to separate the washers and pick the rest of the thread from between the washers. Using WD-40 in this area can assist in breaking down the thread fibers, making it easier to remove the thread.



Once the washers are cleaned of thread, gently push the black arm back towards the flywheel. Before tightening the set screw on the flywheel, check to be sure the black arm isn't pushed back so far that the gold washers can't spin on the shaft. Tighten the set screw once a satisfactory position has been attained. If you used WD-40 to help loosen the thread, be sure to put a drop of oil on the washers to lubricate the area before running the machine.

If the take-up lever assembly is clean (no loose threads), there is an adjustment screw located on the circuit board that may need adjusting.



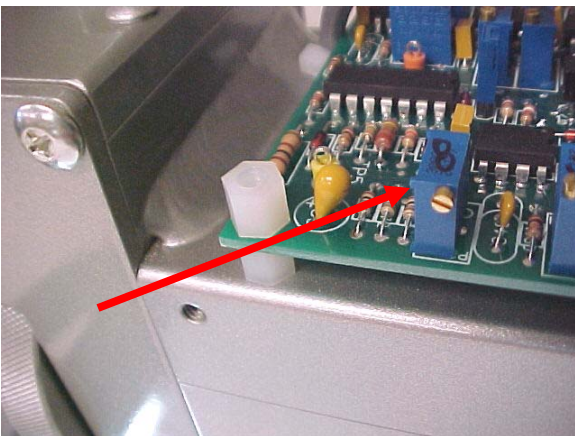
Remove the 2 front screws on each side of the top cover as shown.



Loosen the 3rd screw on each side, do not remove. Start the machine in manual mode at about ½ speed and let it warm-up for 5-7 minutes before proceeding.



Turn off main power switch on the back of the machine. Gently lift the front of the cover about 1 inch to expose the adjustment screw. Do not force the cover open too far, only enough to access the screw.



Gently turn the screw on #8 clockwise (right) to slow down the positioning speed. Counterclockwise (left) will increase the positioning speed. Note: If the speed is set too slow, the needle will not position correctly or may not move at all. **If the speed is set too fast, the needle may continue to move up and down and not stop at all.** You may need to rotate the adjusting screw 1 – 2 revolutions as needed. Only adjust #8 **do not** adjust any other screws.

After making an adjustment, slide the top cover back in position (do not install any screws yet), turn on the machine and operate the needle up/down function and confirm that the needle is stopping correctly. **Do not operate the machine with the top cover pulled up.**

Re-install screws on the top cover. **Do not completely tighten screws until all screws are started!!!**