

How to set up a machine .

#1- Initial Starting point.

- a. Loosen pivot blocks, dash pot and stop bolt, as well as dash pot / VR (vertical rise) bracket.
- b. Place counting head in pivot blocks. Be sure to center head in block on right side and left side is in the keeper.

#2- Setting the Dash Pot / VR (Vertical Rise) bracket.

- a. As a starting point for the “depth of corner” so you can lock down the dash pot / VR switch bracket with the counting head in the machine. Looking at the machine from the rear, the right pivot block should be centered on the adjustment hole (holes in carriage base plate) with approx. 1/8” of the hole showing from the rear. The left pivot block (again to be centered on the adjustment hole) should be placed so the rear of the pivot block is touching the rear of the adjustment hole, giving the head a slight tilt to the left .
- b. Double check the VR switch to make sure it is in a location where the VR actuator is going to depress it. If it is not, move the rear of bracket accordingly.
- c. Remove counting head. Lock down bracket bolts and replace head.

#3- Level counting head to the machine (not floor).

- a. Place a small “level” on the bottom of the machine just to the right of the counting head motor under the carriage. Depending on the reading, either level the machine or mark on the level where the bubble is sitting.
- b. Place the level on the right side of the counting head.
- c. Move the dash pot up or down so it touches the counting head just below the Vacuum Block housing. Continue to move the dash pot so that the head’s level is in the same spot as it was with your 1st measurement as

- advised in “a”. Do not allow the head to push in to the dash pot, just touch it when its level. Tighten the dash pot (lock it in place).
- d. Now that the head is set to level, when it hit the dash pot, bring the stop bolt at the rear of the head either up or down so that there is a 1/16 - 1/8” gap from the stop bolt and bottom of the head (when the head leveled).

#4- setting the “Depth of Corner”.

- a. With all the above setting done, use a black sharpie marker to place a small dot on the suction blade on the back edge in the center **above** the hole in the suction blade.
- b. Open the top cover of the machine to the full open position so you can look down into the machine.
- c. Place a sheet of heavy stock paper in the throat of the machine. Material needs to have very clean and square corners.
- d. Turn the “Speed Control” all the way to the “Off” position and press the “Start” button. The clamp should come down and the head should rise up to meet the paper and remain there. Turn the machine off via the main power switch and pull up the clamp by hand.
- e. Keeping the right side of the counting head tilted towards the left (as explained above in #3) slightly move the head left, right, forward or backward so that the very corner of the paper meets the dot previously marked by the sharpie pen mark as stated in “a”, and that the vacuum hole in the suction blade is centered on the corner of the paper. To confirm this use a pencil and trace the paper on the blade. When the paper is removed there should be a perfect triangle on the counting blade with the vacuum hole in the center.

IMPORTANT: The head needs to be offset to work correctly; it needs to be angled to the left of the machine.

- f. With the depth of corner set, remove the paper, turn the power back on and let the head lower. Replace the paper in the throat of the machine,

but just enough to break the laser beam so the vacuum pump comes on. Place a soda can or block of wood under the clamp and press the start button. This will allow the head to rise. Once the head is high enough, you can tighten the bolts that hold the pivot blocks. Turn the machine off. Tighten the bolts, remove everything from the throat.

#5 Setting the speed:

- a. Take a small piece of scotch tape and place it over the hole on the suction blade.
- b. Open the front panel of the machine and locate the “Speed Control”. There are 3 pots (potentiometers) on the speed control. Looking left to right facing you, the pots are marked “50K” (high), “2M” (Not used), and “20K” (low). Make sure the center pot (2M) is off (turned counter clock wise all the way).
- c. With the “Speed Control” knob on the front of the faceplate at the “1” position and the “Tape Length” turned “Off” and the power turned “On”, insert paper into the throat of the machine. Press the “Start” button. The clamp will come down, the head should rise and the counting head motor should start to count. The wiper pin should just be rotating around the blade about 1 time per second. If not, adjust the “20K” pot (far right) to obtain this speed.
- d. With the machine still running and using a clock with a second hand or stop watch, turn the speed control knob all the way clockwise to full speed, and press the “Reset” on the totalizer and at the same time start timing for 15 seconds. At the 15 second mark the machine should have counted 450 – 500 sheets. If it did not, adjust the high speed pot (50K) until this is reached. Once the high speed is set, recheck the low speed. You may need to adjust both a few times to set speed correctly.

#6- Setting the “spring blade” and “table flap”.

- a. The table flap needs to be level with the table. The table flap can be bent upwards or down using a rag or with a glove on (flap is sharp and can cut you) bend accordingly.
- b. The spring blade needs to have a very, very slight downward bend to it.
- c. If either the table flap or spring blade are bent other than instructed the machine will not operate correctly and may cause chipping of the material or loss of vacuum.

#7 - Setting the “vertical rise” and “counter poise spring”

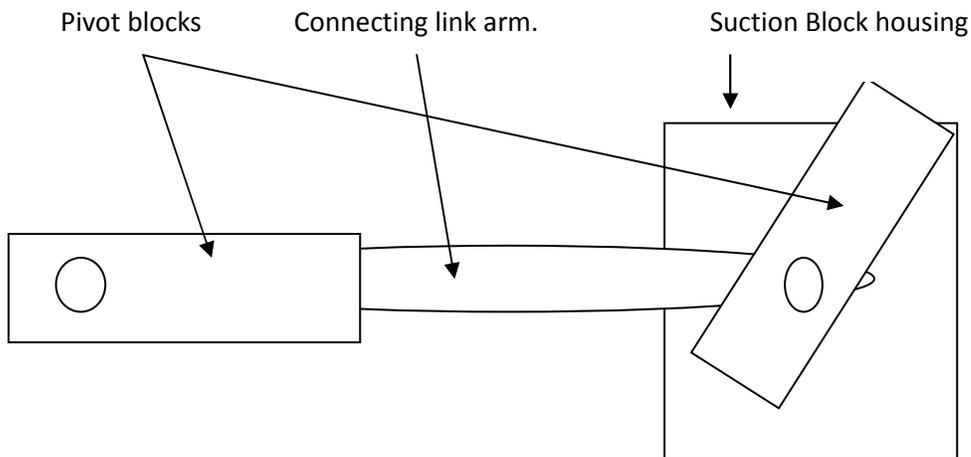
- a. The “Vertical Rise” switch (VR switch) setting is adjusted by the VR actuator (upside down carriage bolt with locking nut on right side of head). The VR switch needs to be set so that it opens (tips off the switch) when the counting head is level and just touches the tip of the dash pot. The head should rotate or tilt forward no more than 1/8” of an inch before the VR switch opens. If not, adjust the VR actuator bolt accordingly and lock it in place by the locking nut.
- b. There is no actual “setting” for the counter poise spring. However, depending on the material being counted you may need to put “more” or “less” tension on the spring. The initial setting for the spring is where the tensioner bolts threads are 50% above and 50% below the “L” bracket that holds it in place. For thick stock more tension is needed on the spring to help hold the angle of the head while counting through the stock. On thinner stock, too much tension on the spring will cause the counting head to push upwards too hard and chip or tear the corners of the material. If too little tension is on the spring, the counting head may shake while counting, causing the loss of vacuum.

Other settings:

#1 - Reset position: the reset position of the suction blade and wiper pin needs to be set so that the wiper pin is just in front and slightly below the suction blade. If this is not the case then adjust the magnetic carrier forward or backwards to set this position.

#2- Count Reed position. The Count reed switch needs to be set so that when the wiper pin is just above, in front and just over the suction blade the switch closes.

#3 - Setting the connecting link and suction blade. (See picture below)



Above is the setting for the connecting link arm and how it should look with the below setting of the suction blade and wiper pin in the below position. Note: the blade should have a very, very slight upwards angle in the rear of the blade. .

