PROMATIC STEP BY STEP CALIBRATION

1) CARRIAGE STOP

The first adjustment made to calibration should be the carriage stop. The carriage stop prevents the cutter from hitting the jaw



To test/adjust this step, place a business card between the cutter and the jaw as shown in the illustration below.



Once the business card is lined up, push the brush UPWARD to see how close your cutter is to the jaw. If the business card **PUSHES UP AND OUT**, your carriage setting is too close and you must loosen the nut with the white cap on it and turn it to your **LEFT**. This moves the cap out which brings the cutter further away from the jaw. If your business card just falls out when testing the carriage stop, you are too far out and must bring the cap in by turning it to your **<u>RIGHT</u>**. The business card should just stay in place once all adjustments are made. Check to make sure your cutter is not touching the jaw to avoid cutting into it and damaging it.



** IMPORTANT REMINDER- THIS STEP DOES NOT MAKE YOUR MACHINE CUT ANY DEEPER. IF YOU NEED YOUR KEYS TO BE CUT DEEPER YOU WILL MAKE THAT CORRECTION WITH YOUR DEPTH ADJUSTMENT**



Looking at the image above, you can see that the tracer follows the cuts and is how you adjust how shallow/deep your machine cuts. You can see that the cap is not touching the carriage and will only touch the carriage once the key has finished cutting.



The image above is a jaw that has been cut into. This will cause keys to sit crooked or lopsided in the jaw. It is important to make sure this step is done correctly to preserve the life of the jaw as replacements are very costly.

2) <u>SPACING</u>

The 2nd step of Promatic Calibration is Spacing. The spacing determines the exact point of where the key will begin the cut. When you bring the tracer up to the shoulder of the customer's key, it is also bringing the shoulder of the blank key up to the cutter. The blade should be as close to the shoulder as possible without cutting into it. We test this step by placing <u>TWO KW1's UPSIDE</u> <u>DOWN IN THE JAWS ¾ OF THE WAY OVER AND LINING THE KEYS UP PERFECTLY. (SEE IMAGE BELOW)</u>



Once the keys are lined up, bring the <u>TIP</u> of the KW1 to the <u>SIDE</u> of the cutter. Apply a slight bit of pressure to the handle to keep the key in place and push the brush up to hear a very light scraping sound. If you cannot move the brush or hear a heavy scraping sound, you are too far to the right and must turn the dial on the <u>LEFT OF THE CALIBRATION TOWER TO YOUR LEFT</u>. If no noise is made, you are too far to the <u>LEFT AND MUST TURN THE DIAL TO THE RIGHT</u>. To make adjustments, you must loosen the screw on <u>THE TOP OF THE CALIBRATION TOWER</u>. (see image below)



Once you have loosened the screw you can then turn the dial on the left side of the tower. ****THE DIAL THAT SAYS IN/OUT IS USED FOR ADJUSTING THE DEPTH****



As you can see in the image above, the right and left image are reversed so when adjusting to the left, you will turn the dial towards you. When adjusting to the right you will turn the dial opposite of you. When turning the dial to the left, you are moving the blank key further away from the cutter. When turning to your right, you are bringing the shoulder of the key closer to the cutter.

3) <u>DEPTH</u>

The last adjustment made to the machine is the depth. Test the depth of your cuts by placing 2 <u>KW1 NORMAL SIDE UP</u> in the machine. Bring the cutter to the TOP of the KW1 and push the brush up to hear a consistent scraping sound. The sound should not be too Heavy but also not too light either. If you hear a heavy grinding sound or cannot move the brush, you are cutting too deep and must adjust the depth by loosening the screw on the left of the tower and turning the dial <u>OUT</u> on the top of the tower which is to the right. This pushes the tracer out and makes the cuts more shallow on the machine. If you do not hear any noise, you will turn the dial to your <u>LEFT</u> which brings the tracer <u>IN</u> and will make deeper cuts.

AFTER YOU HAVE COMPLETED CALIBRATION CUT A FEW TEST KEYS TO ENSURE THE MACHINE IS NOW CUTTING CORRECTLY.