

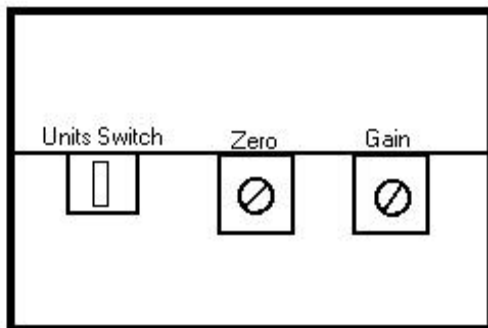


**Key International Inc. 480 Rt. 9 Englishtown, NJ 07726**  
**(732) 536-9700 Phone (732) 972-2630 Fax**  
**www.keyinternational.com**

### **HT-300 Calibration Procedure**

Old Style units with no display, just START/STOP buttons

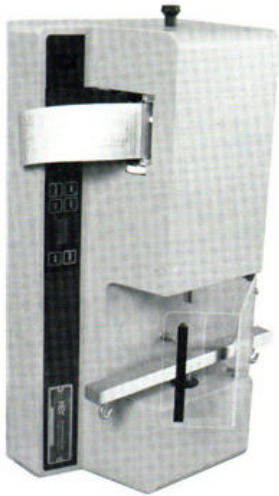
- 1.) Remove long jaw, pedestal, short jaw and rubber grommet sequentially.
- 2.) Stand unit upright on it's right side.
- 3.) Place the numbered "restart" switch on zero (0).
- 4.) Press and hold the STOP button, then press START. Release both buttons, a message should print on the printer "PTB-300 xx.xx".
- 5.) Place the restart switch on one (1).
- 6.) Press the STOP button. A number should be printed on the printer each time the STOP button is pressed. This number is known as the "Zero Point". The Zero Point should be between twenty (20) and sixty (60). Ideally, the number should be forty (40) +/- 2. If this number is out of tolerance, please adjust by turning the "Zero" potentiometer, then pressing STOP, until it is in tolerance. Shown below is a diagram of the potentiometer, it is located on the back side of the machine, behind a small cover plate, where the broken tablet receptacle is mounted.



- 7.) Place the restart switch on two (2).
- 8.) Press the STOP button.
- 9.) Place the restart switch on three (3).
- 10.) Place the 10 Newton bar on the short jaw mounting socket.
- 11.) Press the STOP button. A message will be printed "xxxx N". This number should be equal to the weight placed on the load cell, in this case "0010 N". See Figure 1.
- 12.) Remove the bar weight.
- 13.) Return to Step 7, following the same procedure, except when you reach step 10, this time place the 10 Newton bar and two (2) 5 Newton weights, for a total of 20 Newtons. The corresponding printout should now show "0020 N".
- 14.) Keep repeating this procedure, incrementing the weight by 10 Newtons each time; 10, 20, 30, 40, 50, 60, 70, 80 & 98. See Figures 2, 3 & 4.
- 15.) Once all weight ranges have been tested, review the results and determine if they are within the unit's  $\pm 1$  Newton tolerance. If they are within tolerance, mark the date on it and retain this printout as proof of calibration. If they are not within the  $\pm 1$  Newton tolerance, please retain the results as "readings before calibration" and make an adjustment to the potentiometer "Gain". Once an adjustment is made to the "Gain" potentiometer, please test all weight ranges again by removing all weights and starting at Step 7. Continue to make the necessary adjustments to "Gain" until all readings obtained are within tolerance.



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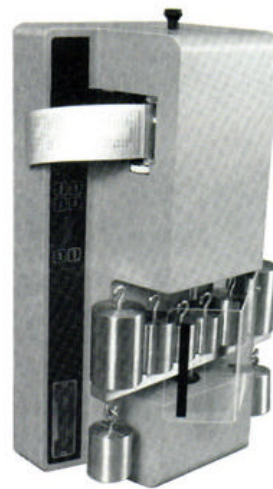
**FIGURE 1.**



**FIGURE 2.**



**FIGURE 3.**



**FIGURE 4.**