# HT-300/500 Calibration Procedure – Bulletin 693

# Valid for units with serial number 4500 and above

## **PREPARATION**

- 1.) Remove long jaw, pedestal, short jaw and rubber grommet sequentially.
- 2.) Stand unit upright on it's right side, then turn power on.
- 3.) Press and hold the STOP key, then press START. Release both keys. A message will be printed "PTB 301 xx.xx/x" This signifies the year(xx).month(xx)/day(x) of the unit's software.

### **VALIDATION**

- 1.) Press the CLEAR key. A message will be printed "OFFSET = xxD". The number (xx) printed should be between 10 and 20. If it is not, please contact Key International, Inc. for further instruction.
- 2.) Press the X,O key. The word "CALIBRATION" will be printed, followed by five additional lines showing the new functions of the keypad keys.
- 3.) Press the X,O key. Two messages will be printed "CAL 0KP = xxD" and "CAL 10KP = xxD". These numbers (xx and xx) are the currently stored calibration values and should be retained for reference.
- 4.) Place the 10 Newton bar weight into the short jaw mounting sleeve as shown in Figure 1. Press the START key. A message will be printed "VALIDATE = xx.x N".
- 5.) Simultaneously add two (2) 5 Newton weights, atop and equidistant from the center of the bar. Press the START key. A message will be printed "VALIDATE = xx.xN"
- 6.) Continue to add and subtract weights on top of the bar at 10 Newton increments; 30, 40, 50 ... 98, as shown in Figures 2 4. At each interval press the START key. Each time a message will be printed "VALIDATE = xx.x N".
- 7.) When all weight range validations have been completed, review the results obtained. If any results are out of tolerance (+/- 1 Newton) proceed to the CALIBRATION Section below and retain these results to be referred to as "readings before calibration". If all values are within the +/- 1 Newton tolerance, your unit should be considered calibrated and the results should be retained and dated as proof of calibration. Next, press the STOP key two (2) times to exit the Calibration Program.
- 8.) Turn unit off, then reassemble unit.

### **CALIBRATION**

- 1.) Confirm that all weights (total of 98 Newtons) are mounted on the HT-300/500.
- 2.) Press the DATA key. A message will print "CAL 10KP = 98N".
- 3.) Remove all weights, including the bar weight, from the HT-300/500.
- 4.) Press the CLEAR key. A message will print "CAL 0KP = 0N".
- 5.) Resume the VALIDATION Section procedure beginning at Step 3.



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FIGURE 1.



FIGURE 3.



FIGURE 2.



FIGURE 4.