STARK 9-66 TUBE TESTER TEST AND CALIBRATION

LINE VOLTAGE CHECK

(a) Press "P7", rotate the "LINE VOLTAGE ADJUST" control from minimum to maximum, the meter should read from 1000 at the minimum setting to 1800 at the maximum setting.
(b) If incorrect readings are obtained change resistor R24 on the switch.

FILAMENT VOLTAGE CHECK

(a) Adjust line voltage.
(b) Place leads from the multimeter into pins 2 and 8 of the octal socket, adjust multimeter to read AC volts. Set "FIL" switches to H and R.
(c) Rotate the filament switch through all positions, check readings on each.

PILOT LIGHT TEST VOLTAGE CHECK

(a) Adjust line voltage.
(b) Place one test lead on the center pin of the pilot lamp test socket, place the other lead on the shell of the test socket.
(c) Rotate the filament switch from .6 volts to 12.6 volts checking readings at each setting.

PLATE AND CATHODE AC VOLTAGE CHECK

(a) Adjust line voltage.
(b) Set selector switch to "PLATE" = 7, "CATHODE" = 5 (all other switches set to 0).
(C) Place test leads from multimeter into pins 5 and 8 of octal socket.
(d) Push the following buttons and check the indicated voltages;

   P1 = 20 VAC, P2 = 300 VAC, P3 = 32 VAC, P4 = 20 VAC (220 VDC), P5 = 170 VAC, P6 = 0

BIAS AND MUTUAL CONDUCTANCE CALIBRATION

(a) Adjust line voltage.
(b) Set bias to 22.
(c) Set selector switches to "GRID" = 4, "CATHODE" = 5 (all other switches set to 0).
(d) Set multimeter to DC volts and place test leads into pins 4 and 5 of the octal socket with the positive lead in pin 5, check that the meter reads 3.4 volts DC.
   PROCEED WITH CALIBRATION ONLY IF ALL TESTS ABOVE PASS
(e) Set the selector switches for a 6J5 tube, plug in a 6J5* and re adjust line voltage.
(f) Set the semi-adjusts** to give a reading of 2000 micromhos on all three ranges.
(g) Set the micromho switch to "ENGLISH", check that the meter reads 2000.

* A reference 6J5 with confirmed gm of 2000 must be used.

** Semi-adjusts; R20 sets 15000 micromho range, R19 sets 6000 micromho range.