

# 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.

