



Voltage rating 105-125 volts, 60 cycles, a.c.
 Power consumption 53 watts
 Frequency ranges 540 to 1780 kc and 5.6 to 18 megacycles

VOLTAGE ANALYSIS

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed are from point indicated to ground (chassis). All readings except cathodes, heaters, and B plus at rectifier were taken on 250 volt scale. Line voltage for these readings was 117.5 volts, 60 cycle, a.c.

Tube	Plate	Screen	Cathode	Osc. Plate	Fil.
6A7	227	78	0	165	6.3 a.c.
6D6	227	78	0	—	6.3 a.c.
6Q7G	105	—	0	—	6.3 a.c.
76	227	—	11.5	—	6.3 a.c.
6AC5G	213	—	0	—	6.3 a.c.

B plus at 80 filament—300 volts.

Voltage across field—75 volts.

Grid bias for all tubes is developed across resistors R10 and R11. The total voltage should be 11.5 volts. Voltage measured across R10 should be 2.25 volts. To check bias on 6A7 and 6D6 tubes, measure the values of R12, R13 and R14. See schematic.

⊗ THERE IS NO MICA CONDENSER CONNECTED TO LUG 6A

SCHEMATIC SHOWS ONE BUTTON DEPRESSED, AND SHOWS CONNECTIONS TO GIVE FREQUENCY RANGES INDICATED.

EMERSON MIRACLE TUNING UNIT

Tube Data

The tube complement is as follows:

- 1—6A7, oscillator-modulator
- 1—6D6, I.F. amplifier
- 1—6Q7G, diode detector, a.v.c., a.f. amplifier
- 1—76, audio amplifier
- 1—6AC5G, power output
- 1—80, full-wave rectifier.