



The schematic diagram is drawn for the Model AB. Model X receivers differ from the schematic as follows:  
 R42 is omitted. R40 is changed to a 500,000 ohm resistor, part no. KR-56; and C54 (shown dotted) is added across R40.  
 In addition, the 6G5 tube and resistors R15 and R39 (shown dotted) are added for the Model X only.

### VOLTAGE ANALYSIS

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed below are from point indicated to ground (chassis) with the volume control turned on full and no signal. Line voltage for these readings was 117.5 volts, 60 cycles, a.c.

Tube	Plate	Screen	Cathode	Fil.
6K7 r-f amplifier	240	90	2	6.3 a.c.
6A8 modulator	240	90	2	6.3 a.c.
6J5 oscillator	80	—	—	6.3 a.c.
6K7 i-f amplifier	240	90	2	6.3 a.c.
6J5 diode detector	—	—	—	6.3 a.c.
6J5 1st a-f amplifier	125	—	5.6	6.3 a.c.
6J5 2nd a-f amplifier	140	—	5.6	6.3 a.c.
6J5 phase inverter	140	—	5.6	6.3 a.c.
6F6 output	280	300	18	6.3 a.c.
6F6 output	280	300	18	6.3 a.c.
6J5 symphonizer rectifier	—	—	—	6.3 a.c.
6J5 symphonizer amplifier	15 (symp. position—50 V. scale)	—	—	6.3 a.c.

Voltage across speaker field—75.  
 Voltage at 80 filament—375.

\*See production changes.

Voltage rating ..... 105-125 volts, 60 cycles, a.c.  
 Power consumption ..... 130 watts at 117.5 volts.  
 Frequency ranges ..... 540 to 1800 kc, 1800 to 6,250 kc  
 and 5.8 to 22.0 megacycles.

(See production changes for frequency ranges of early receivers)

### GENERAL NOTES

- In replacing chassis in cabinet do not tighten mounting screws so much that chassis will not float freely, and do not allow any part of the dial assembly to touch the cabinet. Do not push control knobs on so far that they touch the cabinet front panel. If these precautions are not observed the receiver may become microphonic.
- The color coding of the power transformer leads is as follows:  
 Primary—two black leads  
 High voltage sec.—two red leads  
 High voltage secondary center tap—red and yellow lead  
 6.3v sec.—two heavy green leads  
 5v sec.—two heavy yellow leads
- The tuning indicator (6G5 tube—used in Model X chassis only) is mounted in the cabinet above the dial. The color coding of the tuning indicator tube cable is as follows:  
 Black, white tracer—cathode  
 Red—target  
 Black—filament  
 Green—grid
- The phonograph motor has been adjusted at the factory to turn at a speed of 78 r.p.m. The speed may be checked by counting the turns per minute or by using a stroboscope disc and a neon light. (The stroboscope method will only work when neon bulb is lighted from a 60 cycle a.c. supply.) To readjust the speed of the motor, part No. 4BPM-11, remove the turn-table and turn the speed adjusting screw (located near the turn-table shaft). A clockwise rotation of the screw decreases the speed. The speed should be checked with the pick-up and record in playing position. The phonograph motor on part No. 3XZ-695 record changer, has the speed adjustment brought out to an indicator arm and escutcheon. The speed of this motor is adjusted by shifting the indicator arm to the right or left.