

# Engineering Data

## Stromberg-Carlson No. 60 Type Radio Receivers

STROMBERG-CARLSON TELEPHONE MANUFACTURING COMPANY  
Rochester, New York

### ELECTRICAL SPECIFICATIONS

Type of Circuit.....	Superheterodyne
Tuning Ranges.....	540—1570 k. c. and 5.5 to 15.5 mc.
Type and Number of Tubes.....	1 No. 6D6, 1 No. 6A7, 1 No. 6B7, 1 No. 37, 2 No. 41, 1 No. 80
Voltage Rating.....	105-125 volts
Frequency Rating.....	50-60 Cycles
Power Consumption Rating.....	80 Watts

### CIRCUIT DESCRIPTION

These receivers are seven tube A. C. operated Superheterodynes with two tuning ranges; standard broadcast and short-wave broadcast. See P-24418 Instructions for Installation and Operation to details of controls, installation and operating procedure.

The No. 6D6 tube is used as the R. F. amplifier. The No. 6A7 tube is used for the oscillator-mixer. The No. 6B7 tube serves as the I. F. amplifier, A. V. C., and demodulator. The No. 37 tube is the first audio amplifier and the two No. 41 tubes function as the power output stage. The No. 80 is the rectifier in the power supply circuit.

### NORMAL VOLTAGE READINGS

These voltage readings are obtained by measuring between the various tube socket contacts and the bases with the tubes and speaker plug in place. The set is therefore in operation when the measurements are made. Fig. 2 shows the terminal layout of the sockets with the proper terminal numbers. The terminals of each socket are numbered, starting with one heater or filament pin and proceeding around the pin circle clockwise to the other heater or filament pin. This is done looking at the bottom of the socket. Tune Receiver to 1500 k. c.

Voltages are given for a line voltage of 120 volts and allowance should be made for differences when the line voltage is higher or lower. A meter with a resistance of 1,000 ohms per volt should be used for measuring the D. C. voltages. The Volume Control should be set all "On" (clockwise) before measuring voltages. See page 2.

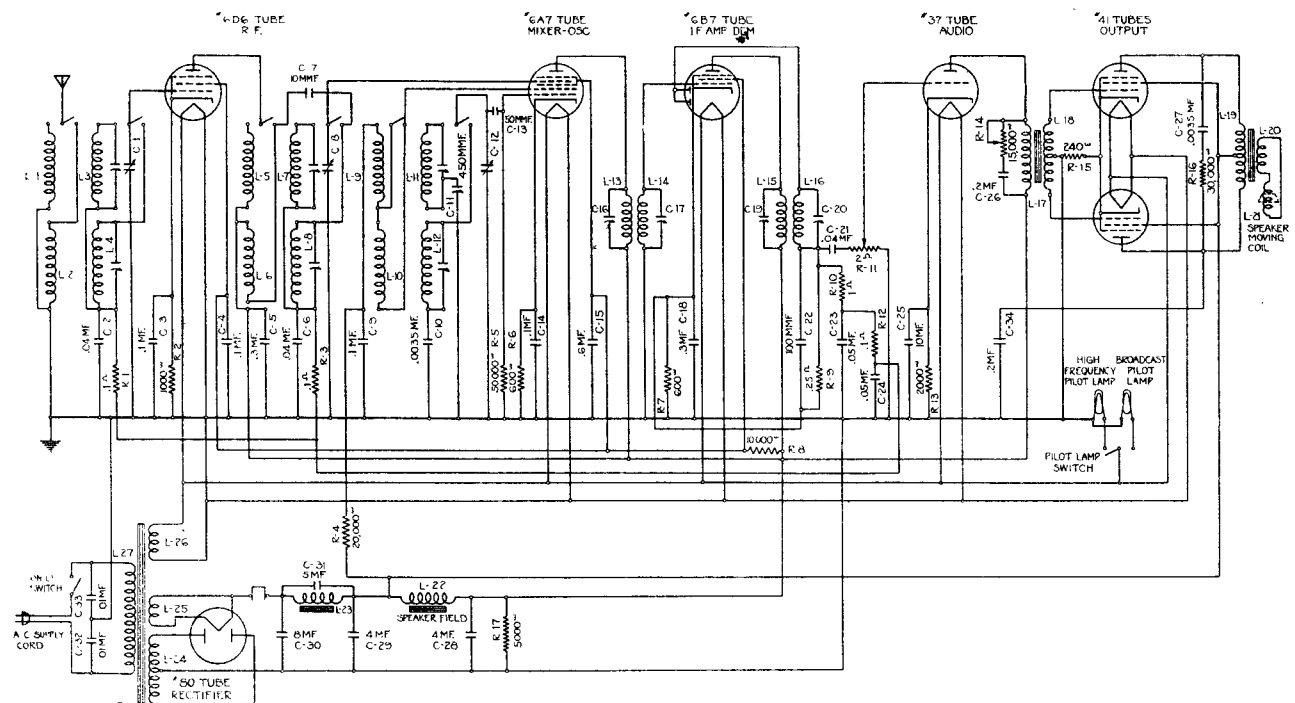


Fig. 1. Schematic Circuit

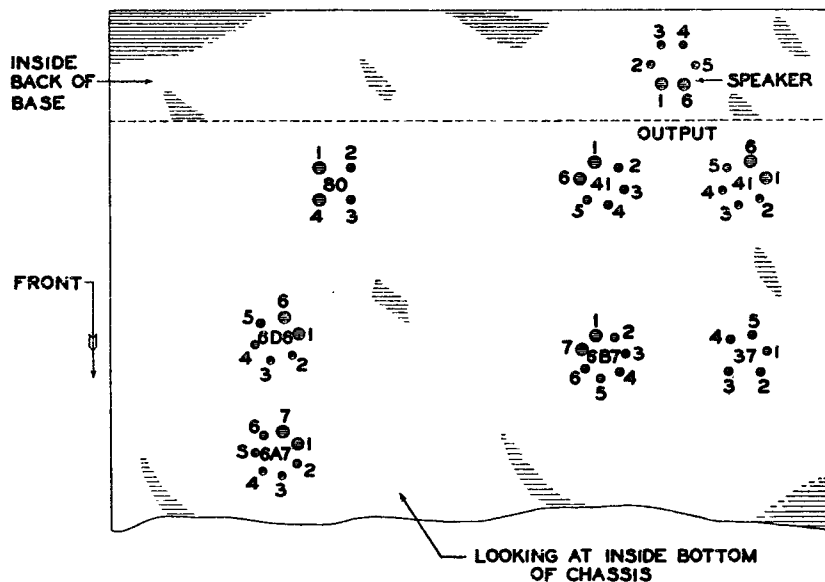


Fig. 2. Terminal Layout for Voltage Measurement Chart.

Tube	Circuit	Cap.	Terminals of Sockets							Heater Voltages Between Terminal Nos.
			1	2	3	4	5	6	7	
6D6	R. F. Amp.	G 0	H 0	P 145	S 85	Sup. 5.5	K 5.5	H 0	—	1-6—6.5 volts
6A7	Mixer-Osc.	Mix. G 0	H 0	Mix. P 145	S 85	Osc. P. 175	Osc. G —20	K 5.5	H 0	1-7—6.5 volts
6B7	I. F., Dem.	G 0	H 0	P 145	S 85	D 0	D 0	K 3	H 0	1-7—6.5 volts
37	1st Audio	—	H 0	P 140	G 0	K 8	H 0	—	—	1-5—6.5 volts
41's	Output	—	H 0	P 250	S 250	G 0	K 16	H 0	—	1-6—6.5 volts
80	Rectifier	—	F 270	P 298	P 298	F 270	—	—	—	1-4—4.9 volts
Speaker Socket			245	145	270	270	250	245		

A. C. voltages are indicated by italics

### REPLACEMENT PARTS

Piece Number	List Prices	Piece Number	List Prices
P-24187	Power Transformer, 105-125 volts, 50-60 cycles . . . . . \$ 6.35	P-24201	Volume Control Potentiometer . . . . . .85
P-24429	Power Transformer, 210-250 volts, 50-60 cycles . . . . . 10.00	P-24202	Treble Control and On-Off Switch . . . . . 1.15
P-24245	Dial Assembly . . . . . 1.00	P-24317	Pilot Lamp Socket . . . . . .15
P-24249	Drive Assembly . . . . . .15	P-24272	Range Switch Assembly . . . . . 4.15
P-23687	Washer . . . . . .01	P-21535	Capacitor Assembly, .2-.01 Mfd. . . . . .80
P-24255	Escutcheon Assembly . . . . . 1.20	P-22411	Capacitor Assembly, .04 Mfd. . . . . .80
P-24189	By-Pass Capacitor Assembly . . . . . 3.55	P-24402	Capacitor, .1 Mfd. . . . . .45
P-24191	Transformer Assembly, 1st I. F. . . . . 2.15	P-24405	Capacitor, .04 Mfd. . . . . .45
P-24192	Transformer Assembly, 2nd I. F. . . . . 2.15	P-24190	Electrolytic Capacitor, 8 Mfd., 4 Mfd., 4 Mfd. 3.40
P-22679	Ant. and Ground Binding Post Assembly . . . . . .15	P-24207	Electrolytic Capacitor, 10 Mfd. . . . . .80
P-24268	Power Cord . . . . . .75	P-22898	Resistor, 600 Ohms, Type D . . . . . .37
P-22991	Tube Shield Base . . . . . .05	P-24316	Resistor, 1,000 Ohms, Type D . . . . . .37
P-24197	Tube Shield . . . . . .17	P-23571	Resistor, 50,000 Ohms, Type D . . . . . .37
P-24023	Tube Socket, 4 Pin . . . . . .17	P-22333	Resistor, .1 Megohm, Type D . . . . . .37
P-23039	Tube Socket, 5 Pin . . . . . .17	P-22334	Resistor, .25 Megohm, Type D . . . . . .37
P-23040	Tube Socket, 6 pin . . . . . .17	P-22561	Resistor, 1 Megohm, Type D . . . . . .37
P-23648	Tube Socket, 7 pin . . . . . .17	P-21521	Resistor, 2,000 Ohms, Type C . . . . . .37
P-24198	Audio Transformer Assembly . . . . . 3.70	P-22330	Resistor, 10,000 Ohms, Type C . . . . . .37
P-24199	Choke Coil Assembly . . . . . 1.80	P-24315	Resistor, 30,000 Ohms, Type C . . . . . 4.75
P-24200	Voltage Divider Resistor . . . . . .60	P-19614	Resistor, 20,000 Ohms, Type B . . . . . .55
		P-24288	Moulded Capacitor, 3,500 MMFD . . . . . 4.75
		P-24416	Knob (Large) . . . . . .30
		P-24417	Knob (Small) . . . . . .20

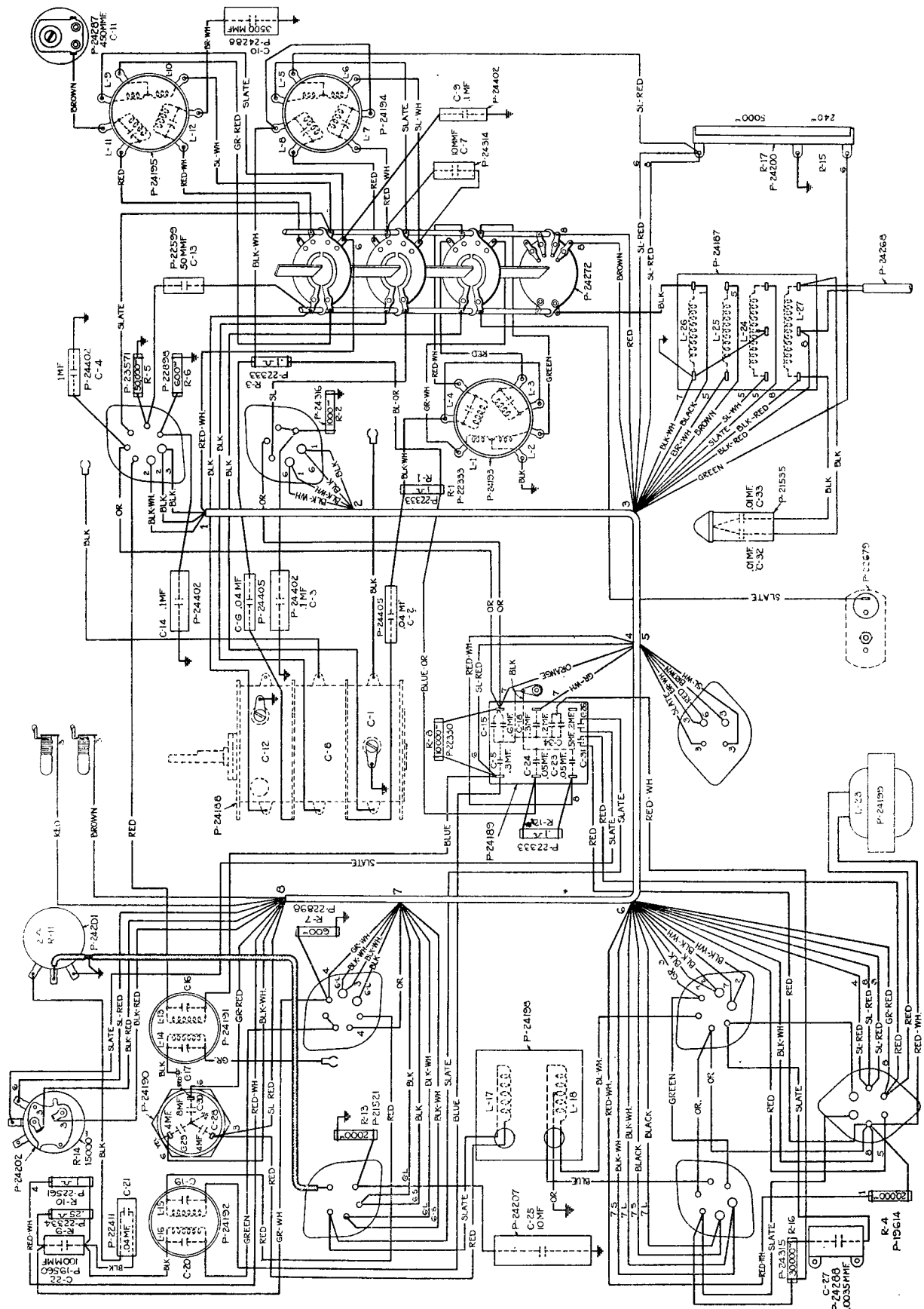


Fig. 3. Wiring Diagram.



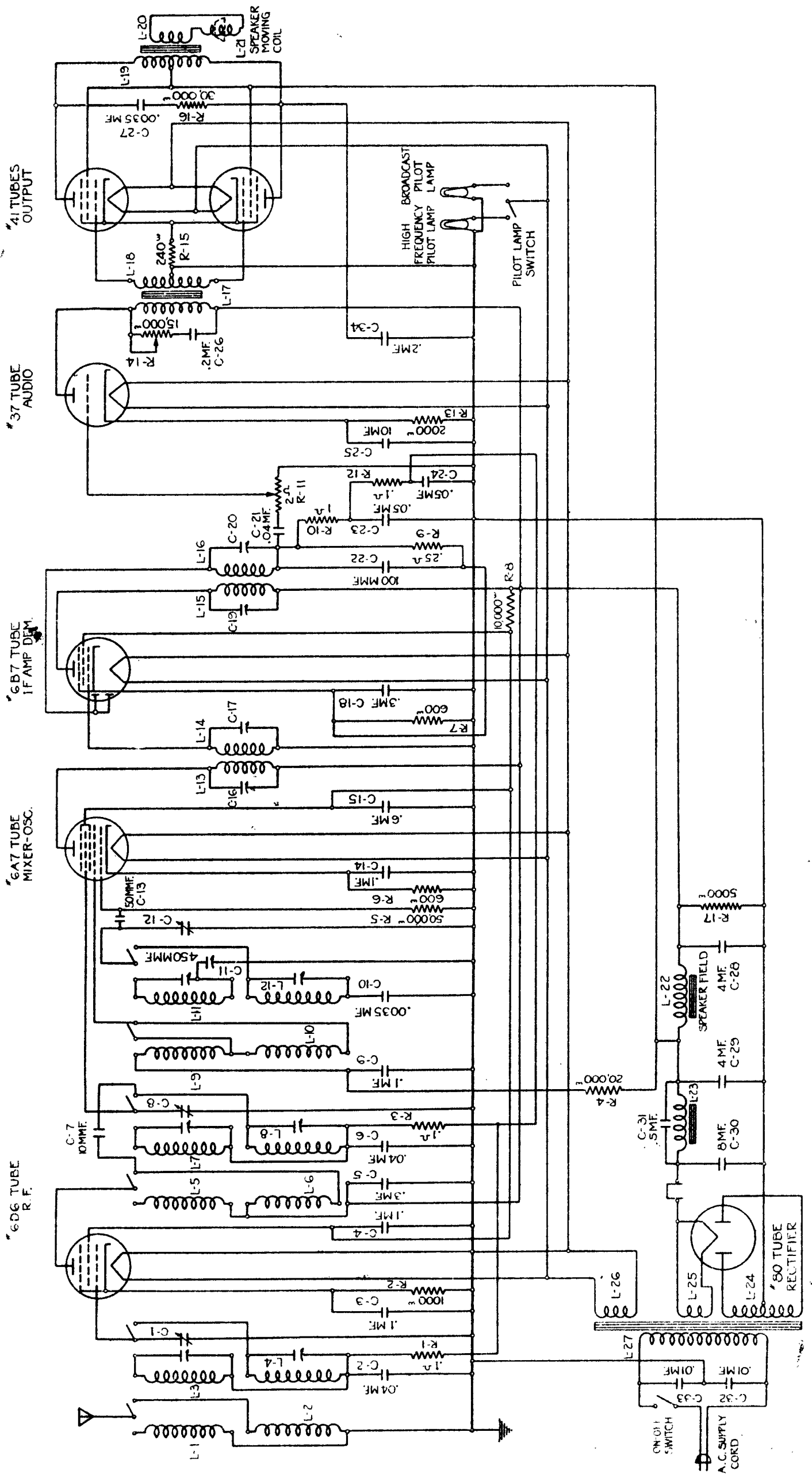


Fig. 1. Schematic Circuit