

RCA VICTOR MODELS T8-18, C8-19, and C8-20

Eight-Tube, Three-Band, A-C, Superheterodyne Receivers

SERVICE NOTES

Electrical Specifications

FREQUENCY RANGES

Band A	540- 1,625 kc.
Band B	1,625- 5,700 kc.
Band C	5,700-18,000 kc.

Intermediate Frequency	460 kc.
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RADIOTRON COMPLEMENT

(1) RCA-6K7.....	Radio-Frequency Amplifier
(2) RCA-6A8.....	First Detector-Oscillator
(3) RCA-6K7.....	Intermediate Amplifier
(4) RCA-6H6.....	Second Detector-A.V.C.

POWER SUPPLY RATINGS

Rating A	105-125 Volts, 50-60 Cycles, 100 Watts
Rating B	105-125 Volts, 25-60 Cycles, 105 Watts
Rating C	100-130/140-160/195-250 Volts, 40-60 Cycles, 100 Watts

POWER OUTPUT

Undistorted	2.25 Watts
Maximum	5.0 Watts

ALIGNMENT FREQUENCIES

Band A...600 kc. (osc.), 1,400 kc. (osc., det., ant.)
Band B.....None required
Band C.....18,000 kc. (osc., det., ant.)

Intermediate Frequency	460 kc.
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(5) RCA-6F5.....	Audio Voltage Amplifier
(6) RCA-6F6.....	Audio Power Amplifier
(7) RCA-5Z4.....	Full-Wave Rectifier
(8) RCA-6E5.....	Tuning Indicator

POWER SUPPLY RATINGS

Rating A	105-125 Volts, 50-60 Cycles, 100 Watts
Rating B	105-125 Volts, 25-60 Cycles, 105 Watts
Rating C	100-130/140-160/195-250 Volts, 40-60 Cycles, 100 Watts

LOUDSPEAKER

Type	Electrodynamic
Voice Coil Impedance.....	2.25 ohms at 400 cycles

Mechanical Specifications

Tuning Drive Ratios	10-to-1 and 50-to-1
Chassis Base Dimensions	13 $\frac{7}{8}$ inches x 7 $\frac{5}{8}$ inches x 2 $\frac{1}{2}$ inches

	Model T8-18	Model C8-19	Model C8-20
Height	21 $\frac{1}{4}$ inches	39 inches	39 inches
Width	15 $\frac{3}{4}$ inches	25 $\frac{1}{4}$ inches	26 inches
Depth	9 $\frac{1}{8}$ inches	12 $\frac{1}{4}$ inches	12 $\frac{3}{4}$ inches
Weight (Net)	27 $\frac{1}{2}$ pounds	48 pounds	47 pounds
Weight (Shipping)	33 $\frac{1}{2}$ pounds	63 pounds	62 pounds
Operating Controls	(1) Volume, (2) Tuning, (3) Range Selector, (4) Power Switch-Tone		

General Description

These three models are similar to RCA Victor Models T7-5 and C7-6, except for the addition of an RCA-6E5 Tuning Indicator; and an RCA-5Z4 All-Metal Rectifier used in place of the RCA-80. An 8-inch dynamic speaker is used in the Table Model (T8-18), while the two Console Models (C8-19 and C8-20) each use a 12-inch dynamic speaker. The two Console Models differ only in cabinet design.

Service Data

All information contained in the Service Notes for

RCA Victor Models T7-5 and C7-6 is directly applicable to these instruments except the Schematic Diagram, Wiring Diagram, and Replacement Parts. Other differences are as follows:

Secondary resistance of universal transformer, 265 ohms total.

Tuning tube cable voltages:

Yellow	Brown	Red	Green
0 v.	6.3 v. a-c	258 v.	0 v.

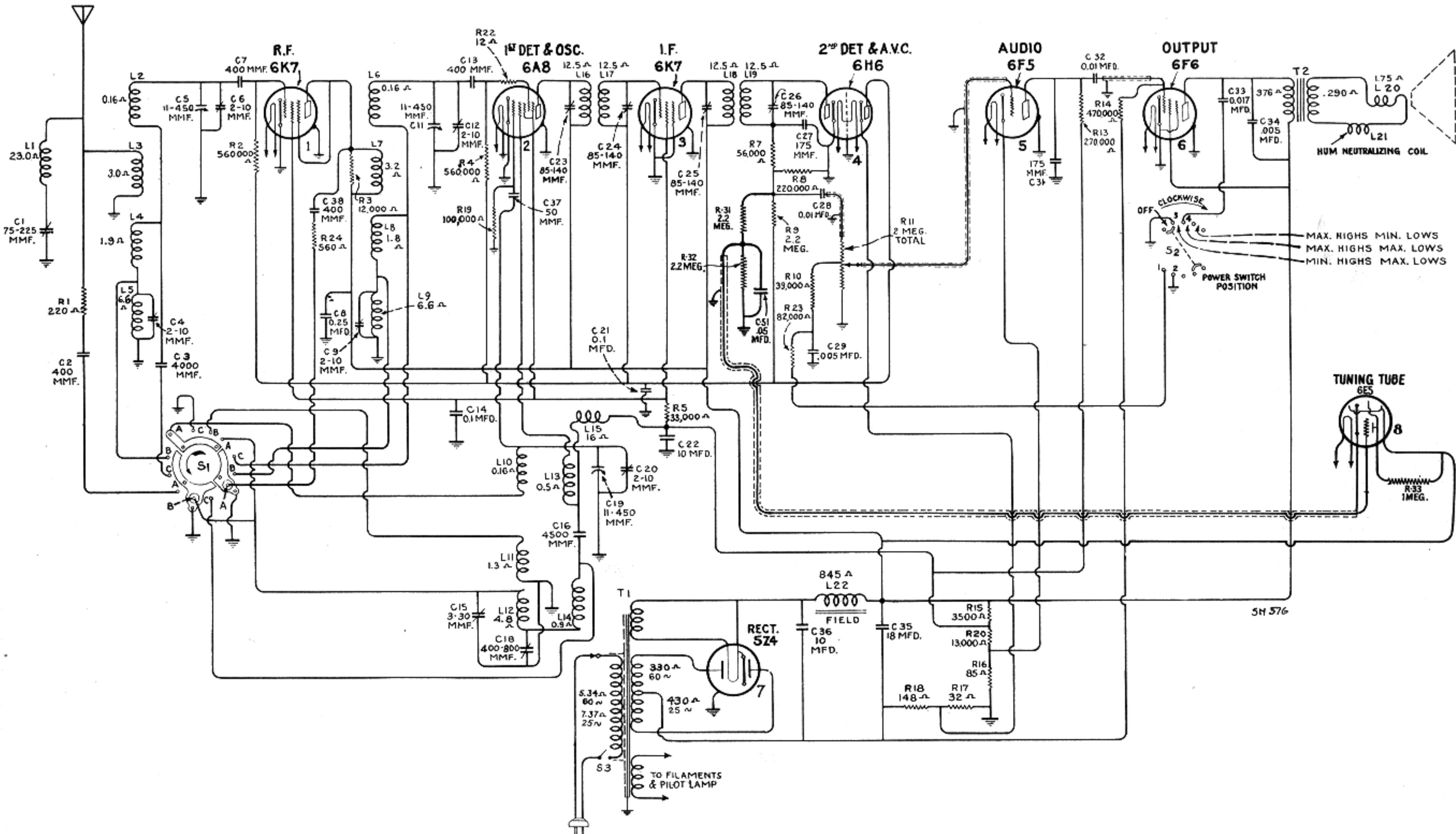


Figure 1—Schematic Circuit Diagram

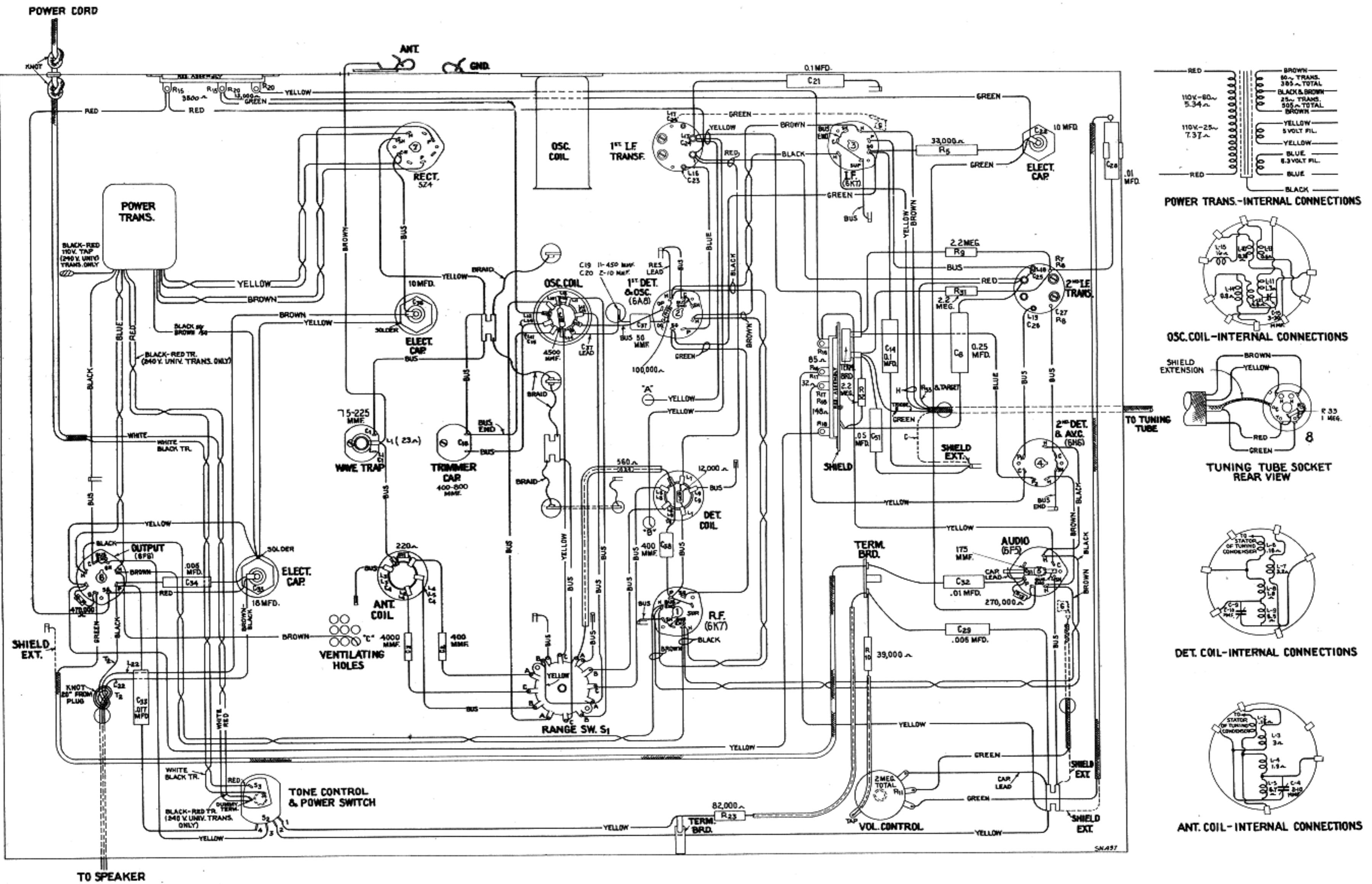


Figure 2—Chassis Wiring Diagram

REPLACEMENT PARTS

Insist on genuine factory tested parts, which are readily identified and may be purchased from authorized dealers

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
5237	RECEIVER ASSEMBLIES Bushing—Variable tuning condenser mounting bushing assembly—Package of 3		11172	Resistor—470,000 ohms—Carbon type— $\frac{1}{4}$ watt—(R14)—Package of 5	1.00
11625	Cable—Radiotron tuning tube cable complete with socket	\$0.43	11397	Resistor—560,000 ohms—Carbon type— $\frac{1}{10}$ watt—(R2, R4)—Package of 5	.75
11350	Cap—Contact cap—Package of 5	.20	11626	Resistor—2.2 megohms—Carbon type— $\frac{1}{4}$ watt—(R9, R31, R32)—Package of 5	1.00
11465	Capacitor—Adjustable capacitor—(C18)	.48	11603	Shield—Antenna or detector coil shield	.26
11289	Capacitor—50 MMfd.—(C37)	.26	11604	Shield—Oscillator coil shield	.24
5116	Capacitor—175 MMfd.—(C31)	.18	11390	Shield—Intermediate frequency transformer shield	.25
11623	Capacitor—175 MMfd.—(C27)	.18	11199	Socket—Dial lamp socket	.14
11290	Capacitor—400 MMfd.—(C2, C7, C13, C38)	.25	11195	Socket—5-contact rectifier Radiotron socket	.15
11401	Capacitor—4000 MMfd.—(C3)	.38	11198	Socket—7-contact 6K7—6F5—or 6H6 Radiotron socket	.15
4868	Capacitor—.005 Mfd.—(C29, C34)	.20	11196	Socket—8-contact 6A8 or 6F6 Radiotron socket	.15
4906	Capacitor—.017 Mfd.—(C33)	.25	11386	Switch—Range switch—(S1)	1.16
11395	Capacitor—.01 Mfd.—(C28)	.18	11392	Switch—Tone control and power switch assembly—(S2, S3)	1.14
4858	Capacitor—.01 Mfd.—(C32)	.25	11388	Transformer—First intermediate frequency transformer—(L16, L17, C23, C24)	1.90
4839	Capacitor—.01 Mfd.—(C14)	.28	11389	Transformer—Second intermediate frequency transformer—(L18, L19, C25, C26, C27, R7, R8)	3.02
4841	Capacitor—.01 Mfd.—(C21)	.22	11803	Transformer—Power transformer—105-125 volts—50-60 cycles—(T1)	4.38
5170	Capacitor—.25 Mfd. (C8)	.25	11804	Transformer—Power transformer—105-125 volts—25-50 cycles	6.02
4886	Capacitor—.05 Mfd.—(C51)	.20	11805	Transformer—Power transformer—105-130, 140-160, 195-250 volts—40-60 cycles	7.95
11240	Capacitor—10 Mfd.—(C36)	1.08	11391	Trap—Wave trap—(L1, C1)	1.22
11387	Capacitor—10 Mfd.—(C22)	.86	11237	Volume control—(R11)	1.20
5212	Capacitor—18 Mfd.—(C35)	1.16			
5238	Clip—Antenna terminal board with clip, insulating strip and rivets	.14			
11600	Coil—Antenna coil—(L2, L3, L4, L5, C4, R1)	1.78			
11601	Coil—Detector coil—(L6, L7, L8, L9, C9, R3)	1.78			
11602	Coil—Oscillator coil—(L10, L11, L12, L13, L14, L15, C15, C16)	2.15			
11385	Condenser—Three-gang variable tuning condenser—(C5, C6, C11, C12, C19, C20)	5.02			
11892	Dial—Station selector dial scale	.78			
11613	Drive—Variable tuning condenser drive.	1.00			
11394	Foot—Chassis foot assembly—Package of 2	.70			
11893	Indicator—Station selector indicator pointer	.28			
5226	Lamp—Dial lamp—Package of 5	.70			
11393	Resistor—Voltage divider resistor—comprising one 3,500 ohm and one 13,000 ohm sections—(R15, R20)	.74			
11329	Resistor—Voltage divider resistor—comprising one 148 ohm, one 32 ohm and one 85 ohm sections—(R16, R17, R18)	.52			
11369	Resistor—12 ohms—Flexible type complete with contact cap—(R22)	.22			
11324	Resistor—560 ohms—Carbon type— $\frac{1}{4}$ watt—(R24)—Package of 5	1.00			
8072	Resistor—33,000 ohms—Carbon type— $\frac{1}{2}$ watt—(R5)—Package of 5	1.00			
11322	Resistor—39,000 ohms—Carbon type— $\frac{1}{4}$ watt—(R10)—Package of 5	1.00			
11365	Resistor—82,000 ohms—Carbon type— $\frac{1}{4}$ watt—(R23)—Package of 5	1.00			
3118	Resistor—100,000 ohms—Carbon type— $\frac{1}{4}$ watt—(R19)—Package of 5	1.00			
11323	Resistor—270,000 ohms—Carbon type— $\frac{1}{4}$ watt—(R13)—Package of 5	1.00	4982	Spring—Retaining spring for knobs, Stock No. 11347, No. 11582 and small knob in Stock No. 11610—Package of 5	.15
				Spring—Retaining spring for large knob in Stock No. 11610—Package of 10	.26

The prices quoted above are subject to change without notice.