

R.C.A. Victor Co., Inc.

Model: 5T7

Chassis:

Year: Pre October 1937

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

[Riders Volume 8 - RCA 8-15](#)

[Riders Volume 8 - RCA 8-16](#)

[Riders Volume 8 - RCA 8-17](#)

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RCA MFG. CO., INC.

MODELS 5T6, 5T7, 5T8
Schematic, Socket
Trimmers, Trans. Data

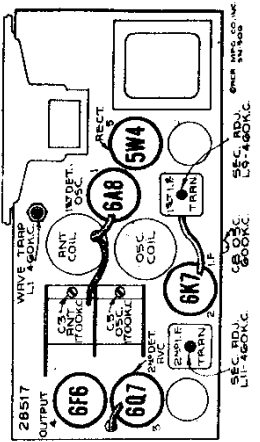
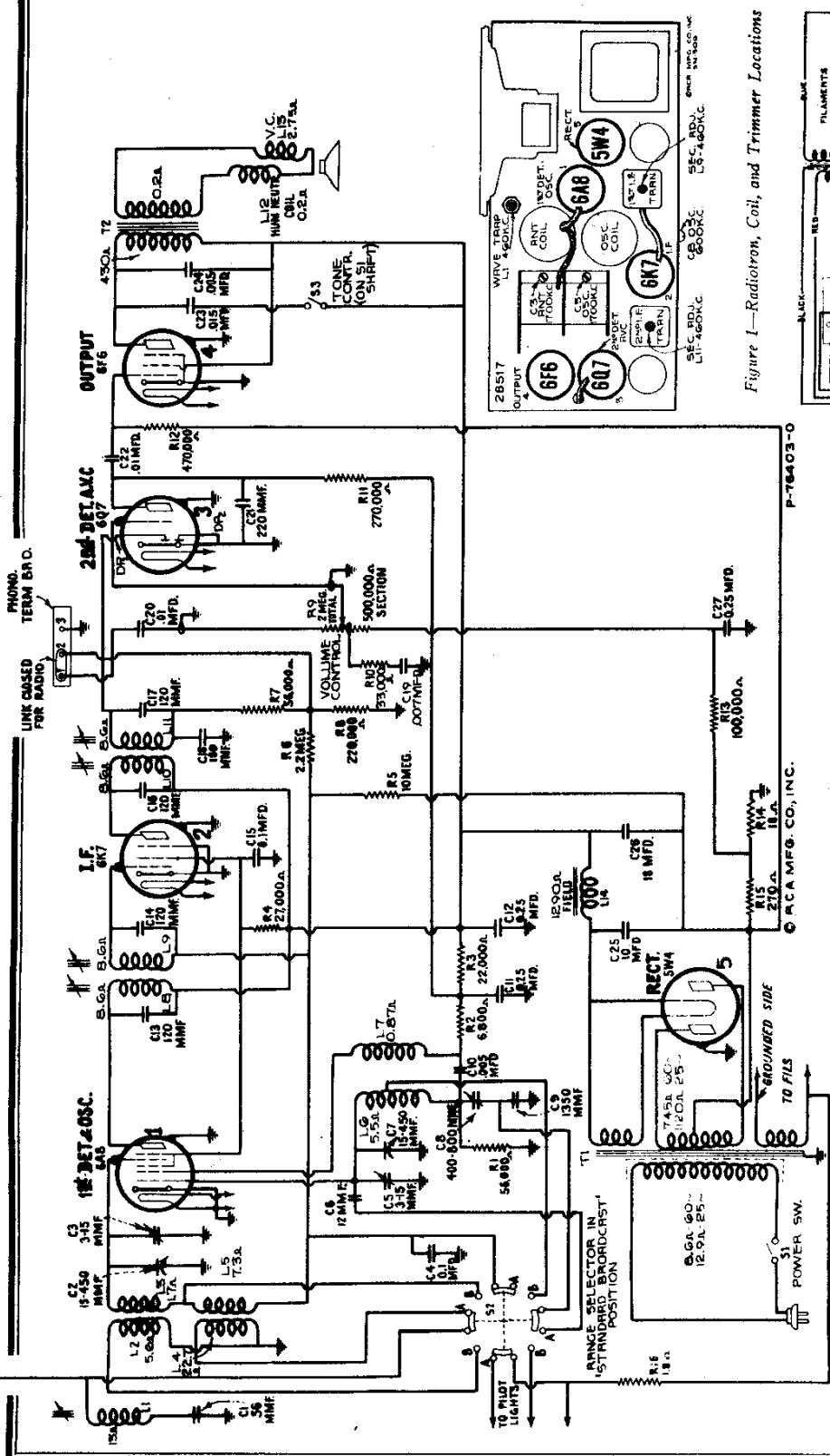
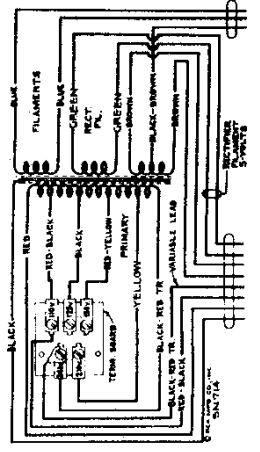


Figure 1—Radiotron, Coil, and Trimmer Locations



Primary resistance—518 ohms total
Secondary resistance—100 ohms total
Figure 5—Universal Transformer

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FREQUENCY RANGES	Standard broadcast (A)..... 540-1,820 kc
	"Short wave" (B)..... 1,820-6,600 kc
Intermediate Frequency	460 kc
Pilot Lamps (3)	Maada No. 46, 6.3 volts, 0.25 amperes
POWER SUPPLY RATINGS	
Rating A.....	105-125 volts, 50-60 cycles, 80 watts
Rating B.....	105-125 volts, 25-60 cycles, 80 watts
Rating C.....	100-130/140-160/195-250 volts, 40-60 cycles, 80 watts
POWER OUTPUT RATING	
Undistorted.....	2.0 watts
Maximum.....	4.5 watts
LOUDSPEAKER	
Type.....	Electrodynamic
Voice Coil Impedance.....	2 1/4 ohms at 400 cycles

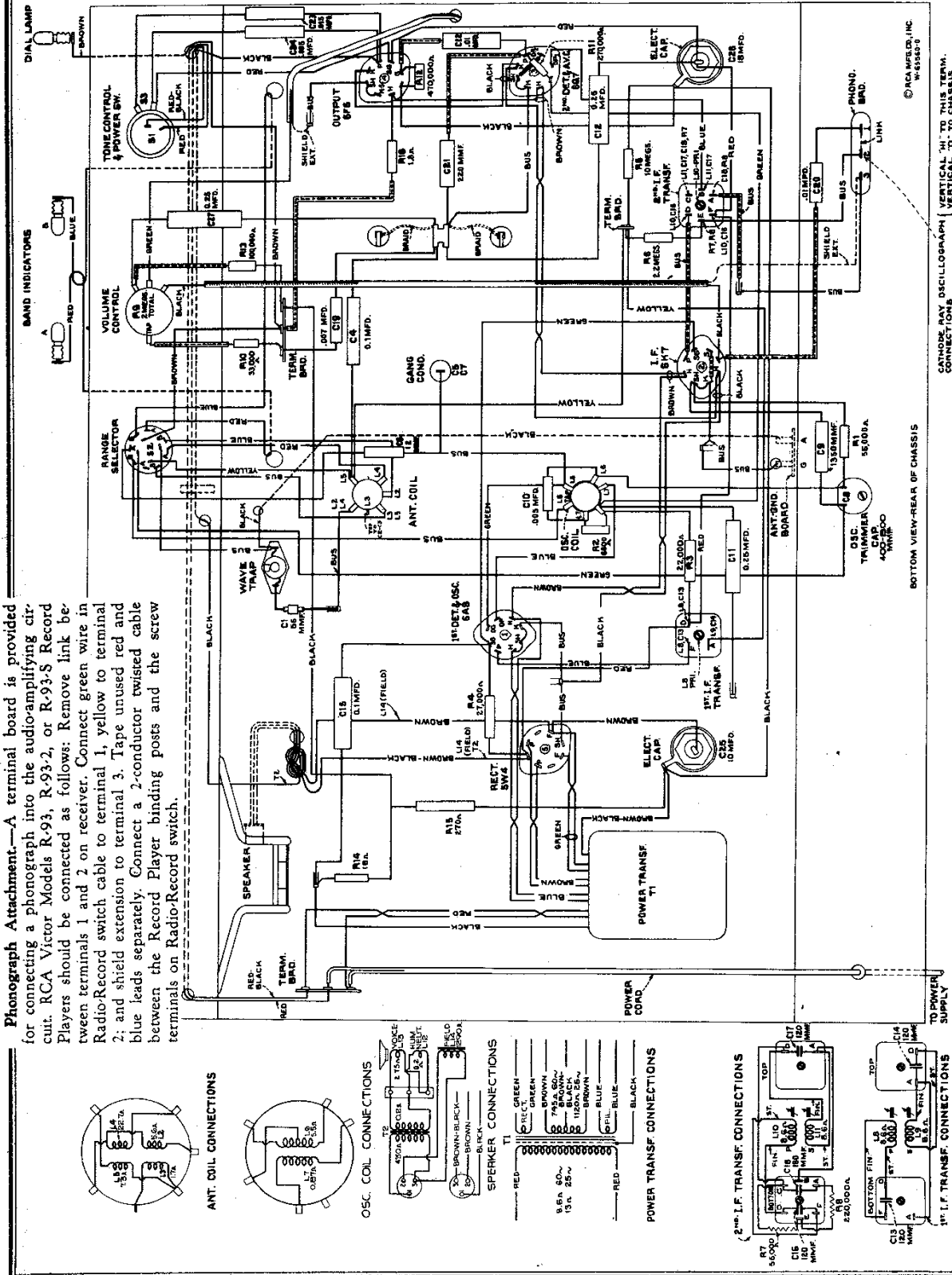
ALIGNMENT FREQUENCIES

"Standard broadcast" (A) 600 kc (osc.), 1,700 kc (osc., ant.)

"Short wave" (B)..... None required

MODELS 5T6, 5T7, 5T8
Chassis Wiring
Phono. Data

RCA MFG. CO., INC.



Phonograph Attachment.—A terminal board is provided for connecting a phonograph into the audio-amplifying circuit. RCA Victor Models R-93, R-93-2, or R-93-S Record Players should be connected as follows: Remove link between terminals 1 and 2 on receiver. Connect green wire in Radio-Record switch cable to terminal 1, yellow to terminal 2; and shield extension to terminal 3. Tape unused red and blue leads separately. Connect a 2-conductor twisted cable between the Record Player binding posts and the screw terminals on Radio-Record switch.

CATHODE RAY OSCILLOGRAPH VERTICAL 'OH' TO THIS TERM. CONNECTIONS

BOTTOM VIEW-REAR OF CHASSIS

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Alignment Procedure

Calibrate the tuning dial by adjusting dial pointer to the horizontal center line (between the two dial scales) with the two-gang tuning condenser in full-mesh position. Two screws are provided on the dial hub for this adjustment.

Perform alignment in proper order tabulated below, starting with No. 1 and following all operations across, then No. 2, etc.

Cathode-ray alignment is preferable; the connections to the chassis are shown on figure 3. If an output indicator is used, connect it across the loudspeaker voice-coil and advance the receiver volume control to full-volume position.

Connect the "low" output terminal of the test oscillator to the receiver chassis for all alignment operations. Regulate

the output of the test oscillator so that minimum signal is applied to the receiver to obtain an observable output indication. This will avoid a-v-c action.

The term "Dummy antenna" means the device which must be connected between the "high" test-oscillator output and the point of connection to the receiver in order to obtain ideal alignment. "No signal, 550-750 kc" means that the receiver should be tuned to a point between 550 and 750 kc where no signal is received from a station or the local (heterodyne) oscillator.

For further details on alignment, refer to booklet "RCA Victor Receiver Alignment."

Order of Alignment	Test Oscillator			Receiver Dial Setting	Circuit to Adjust	Adjustment Symbols	Adjust to Obtain	Adjustment Location
	Connection to Receiver	Dummy Antenna	Frequency Setting					
1	6K7 i-f Grid Cap	.001 Mfd.	460 kc	No signal 550-750 kc	2nd i-f Trans.	L11 and L10	Max. (peak)	Figs. 1-4
2	6A8 Det. Grid Cap	.001 Mfd.	460 kc	No signal 550-750 kc	1st i-f Trans.	L9 and L8	Max. (peak)	Figs. 1-4
3	Ant. Post	200 Mmfd.	460 kc	No signal S. W. Band	Wave Trap	L1	Minimum Output	Fig. 1
4	Ant. Post	200 Mmfd.	600 kc	600 kc	L-F Osc.	C8	Max. (peak)	Fig. 1
5	Ant. Post	200 Mmfd.	1,700 kc	1,700 kc	H-F Osc.	C5	Max. (peak)	Fig. 1
6	Ant. Post	200 Mmfd.	1,700 kc	1,700 kc	Ant.	C3	Max. (peak)	Fig. 1
7	Ant. Post	200 Mmfd.	600 kc	Rock thru 600 kc	L-F Osc.	C8	Max. (peak)	Fig. 1
8	Ant. Post	200 Mmfd.	1,700 kc	1,700 kc	H-F Osc.	C5	Max. (peak)	Fig. 1
9	Ant. Post	200 Mmfd.	1,700 kc	1,700 kc	Ant.	C3	Max. (peak)	Fig. 1

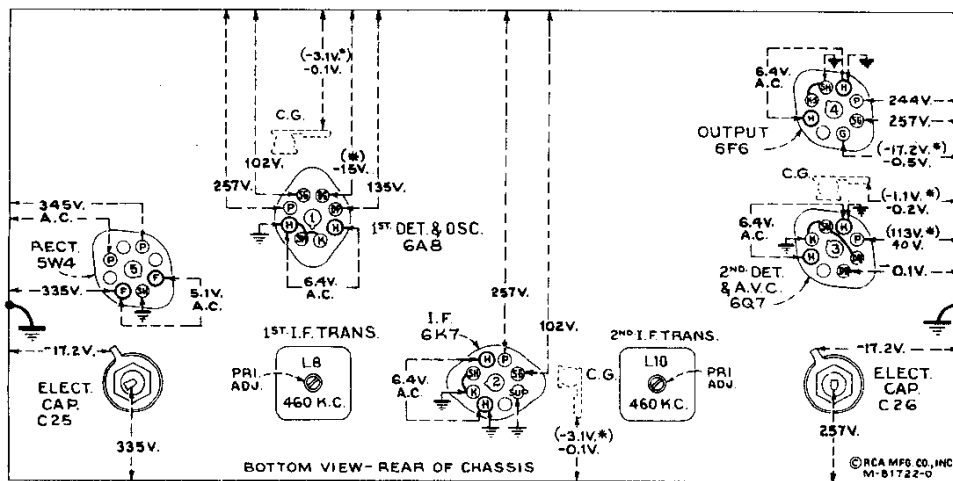


Figure 4—Radiotron Socket Voltages, Coil, and Trimmer Locations
Measured at 115 volts, 60-cycle supply—Tuned to approximately 1,000 kc ("Standard broadcast")—
No signal being received—Volume control minimum

Radiotron Socket Voltages Radiotron Cathode Current Readings

Note: Two voltage values are shown for some readings. The value shown in parentheses with asterisk (*) indicates operating conditions without voltmeter loading. The other value (generally lower) is the actual measured voltage and differs from the value shown in parentheses because of the additional loading of the voltmeter through the high series circuit resistance.

Measured with Milliammeter Connected at Tube Socket Cathode Terminals Under Conditions Similar to Those of Voltage Measurements

- (1) RCA-6A8—1st Det.—Osc. 11.7 ma.
- (2) RCA-6K7—I. F. Amp. 9.4 ma.
- (3) RCA-6Q7—2nd Det., A.V.C. and A. F. ... 0.3 ma.
- (4) RCA-6F6—Power Amp. 39.6 ma.
- (5) RCA-5W4—Rectifier. 61.0 ma.*

* Cannot be measured at socket.

RCA MFG. CO., INC.

MODELS 5T6, 5T7, 5T8

MODEL 6T5

Parts Lists

REPLACEMENT PARTS FOR MODEL 5T6, 5T7, 5T8

STOCK No.	DESCRIPTION
13098	Board—Antenna and ground terminal board
12717	Board—Phonograph terminal board
5237	Bushing—Variable condenser mounting bushing assembly
12611	Cap—Grid contact cap
11465	Capacitor—Adjustable capacitor (C8)
12609	Capacitor—12 Mmfd. (C5)
12661	Capacitor—120 Mmfd. (C13, C14, C16, C17)
12404	Capacitor—180 Mmfd. (C18)
12406	Capacitor—220 Mmfd. (C21)
13818	Capacitor—1,350 Mmfd. (C9)
12680	Capacitor—.005 Mfd. (C10, C24)
4868	Capacitor—.007 Mfd. (C19)
5148	Capacitor—.01 Mfd. (C20)
13138	Capacitor—.01 Mfd. (C22)
4858	Capacitor—.015 Mfd. (C23)
11315	Capacitor—.01 Mfd. (C4, C15)
4841	Capacitor—.025 Mfd. (C11, C27)
4840	Capacitor—.025 Mfd. (C12)
5170	Capacitor—10 Mfd. (C25)
11240	Capacitor—18 Mfd. (C26)
5212	Coil—Antenna coil—less shield (L2, L3, L4, L5)
12648	Coil—Oscillator coil—less shield (L6, L7)
12649	Condenser—2-gang variable tuning condenser (C2, C3, C5, C7)
5119	Connector—3-contact female speaker cable connector
12006	Core—Adjustable core and stud assembly for I.F. transformer, Stock Nos. 12652 and 12653
12664	Core—Adjustable core and stud assembly for wave trap, Stock No. 12654
13914	Dial—Station selector dial
13816	Disc—Station selector drive disc and lamp socket assembly
13815	Drive—Variable condenser drive shaft, spool and bearing
14301	Fuse—1 amp. resistor-fuse, 1.8 ohms (R16)
13817	Indicator—Station selector indicator
5298	Lamp—Dial lamp
13812	Range Switch (S2)
13674	Resistor—18 ohm, carbon type, 1/2 watt (R14)
13819	Resistor—270 ohm, wire wound, 1.1 watt (R15)
8070	Resistor—22,000 ohm, carbon type, 1/2 watt (R3)
12011	Resistor—27,000 ohm, carbon type, 1 watt (R4)
11364	Resistor—33,000 ohm, carbon type, 1/2 watt (R10)
11282	Resistor—56,000 ohm, carbon type, 1/10 watt (R7)
5029	Resistor—56,000 ohm, carbon type, 1 watt (R1)
11454	Resistor—6,800 ohm, carbon type, 1 watt (R2)
5146	Resistor—100,000 ohm, carbon type, 1/2 watt (R13)

STOCK No.	DESCRIPTION
11398	Resistor—220,000 ohm, carbon type, 1/10 watt (R8)
11323	Resistor—270,000 ohm, carbon type, 1/2 watt (R11)
11172	Resistor—470,000 ohm, carbon type, 1/2 watt (R12)
11826	Resistor—2.2 megohm, carbon type, 1/2 watt (R6)
13673	Resistor—10 megohm, carbon type, 1/2 watt (R5)
4669	Screw—No. 8-32x5/32 set screw for drive disc, Stock No. 13616
12656	Shield—Antenna coil shield
12735	Shield—Dial lamp shield
12607	Shield—First I.F. transformer shield top
12008	Shield—First or second I.F. transformer shield
12651	Shield—Oscillator coil shield
12581	Shield—Second I.F. transformer shield top
11195	Socket—5-contact 5W4 Radiotron socket
11196	Socket—8-contact 6A5, 6F6, 6K7 or 6Q7 Radiotron socket
11199	Socket—Dial lamp socket
12007	Spring—Retaining spring for core, Stock Nos. 12006 and 12664
13813	Tone Control and Power Switch (S1, S3)
13106	Transformer—First I.F. transformer, complete (L8, L9, C13, C14)
13107	Transformer—Second I.F. transformer, complete (L10, L11, C16, C17, C18, R7, R8)
12644	Transformer—Power transformer, 115 volt, 60 cycle (T1)
12645	Transformer—Power transformer, 115 volt, 25 cycle (T1)
12646	Transformer—Power transformer, 240-210, 150-125-110 volts, 60 cycle (T1)
12654	Trap—Wave trap (L1)
13144	Volume Control (R9)
REPRODUCER ASSEMBLIES	
13822	Coil—Field coil (L14)
13821	Cone—Reproducer cone and dust cap (L13)
5118	Connector—3-contact male speaker cable connector
9776	Reproducer, complete
13823	Transformer—Output transformer (T2)
MISCELLANEOUS ASSEMBLIES	
13824	Escutcheon—Station selector escutcheon
12673	Knob—Station selector or volume control knob
13825	Knob—Tone control or range switch knob
11586	Screw—Chassis mounting screw No. 14x1 in.
13885	Screw—No. 8-32x1/2 in. headless set screw for knob, Stock No. 13825
4119	Screw—No. 8-32x1/2 in. headless set screw for knob, Stock No. 12673

REPLACEMENT PARTS FOR MODEL 6T5

STOCK No.	DESCRIPTION
RECEIVER ASSEMBLIES	
13216	Board—Antenna and ground terminal board
12717	Board—Phonograph terminal board
5237	Bushing—Variable condenser mounting bushing assembly
13670	Cable—Tuning tube cable and socket
12718	Cap—Grid contact cap
12714	Capacitor—Adjustable trimmer (C8)
12607	Capacitor—Adjustable trimmer (C5)
12723	Capacitor—56 Mmfd. (C1)
12629	Capacitor—56 Mmfd. (C16)
13394	Capacitor—82 Mmfd. (C7)
12724	Capacitor—120 Mmfd. (C24)
12404	Capacitor—120 Mmfd. (C15, C17, C18)
12406	Capacitor—180 Mmfd. (C9)
12812	Capacitor—450 Mmfd. (C11)
12811	Capacitor—3,500 Mmfd. (C9)
4868	Capacitor—.005 Mfd. (C28)
5148	Capacitor—.007 Mfd. (C21)
11315	Capacitor—.015 Mfd. (C27)
4858	Capacitor—.01 Mfd. (C10, C22, C25)
4841	Capacitor—.01 Mfd. (C2, C14, C26)
4840	Capacitor—.025 Mfd. (C23)
5170	Capacitor—.025 Mfd. (C13)
11240	Capacitor—10 Mfd. (C29)
5212	Capacitor—18 Mfd. (C12, C30)
12797	Coil—Antenna coil and shield (L2, L3, L4, L5)
12798	Coil—Oscillator coil and shield (L6, L7, L8, L9)
13679	Condenser—2-gang variable tuning condenser (C3, C4, C6)
5119	Connector—3-contact female connector for speaker cable
12006	Core—Adjustable core and stud for Stock Nos. 12653 and 12801
12664	Core—Adjustable core and stud for Stock No. 12654
13868	Dial—Station selector dial
13680	Drive—Vernier drive for variable condenser
13314	Indicator—Station selector indicator pointer
5226	Lamp—Dial lamp, 6.3 volts
13674	Resistor—18 ohms, carbon type, 1/2 watt (R17)
13819	Resistor—270 ohms, wire wound, 1.1 watts (R16)
12759	Resistor—15,000 ohms, carbon type, 1/2 watt (R2)
12011	Resistor—27,000 ohms, carbon type, 1 watt (R3)
11364	Resistor—33,000 ohms, carbon type, 1/2 watt (R9)
5029	Resistor—56,000 ohms, carbon type, 1/2 watt (R1)
11282	Resistor—56,000 ohms, carbon type, 1/10 watt (R8)
11365	Resistor—82,000 ohms, carbon type, 1/2 watt (R13)
5145	Resistor—100,000 ohms, carbon type, 1/2 watt (R10)
11398	Resistor—220,000 ohms, carbon type, 1/10 watt (R6)
11323	Resistor—270,000 ohms, carbon type, 1/2 watt (R12)
11847	Resistor—390,000 ohms, carbon type, 1/2 watt (R14)
12013	Resistor—1 meg., carbon type, 1/10 watt (R15)
11626	Resistor—2.2 meg., carbon type, 1/2 watt (R5, R7)

STOCK No.	DESCRIPTION
13732	Resistor—10 meg., carbon type, 1/4 watt (R4)
12651	Shield—Antenna coil shield
13111	Shield—Chassis end shield and rubber mounting foot assembly
12607	Shield—First I. F. transformer shield top
12008	Shield—I. F. transformer shield
12799	Shield—Oscillator coil shield
12581	Shield—Second I. F. transformer shield top
3682	Shield—6A7 or 75 Radiotron shield
2950	Shield—6D6 Radiotron shield
13871	Socket—Tuning tube socket and cover
4794	Socket—4-contact 80 Radiotron socket
4786	Socket—6-contact 6D6, 42 or 75 Radiotron socket
4787	Socket—7-contact 6A7 Radiotron socket
11199	Socket—Dial lamp socket
12007	Spring—Retaining spring for Stock Nos. 12006 and 12664
12796	Switch—Range switch (S2)
13309	Switch—Tone control and power switch (S1, S3)
12801	Transformer—First I. F. transformer complete (L10, L11, C15, C16)
12653	Transformer—Second I. F. transformer complete (L12, L13, C17, C18, C19, R6, R8)
12644	Transformer—Power transformer, 105-125 volts, 50-60 cycles (T1)
12645	Transformer—Power transformer, 105-125 volts, 25-60 cycles (T1)
13869	Transformer—Power transformer, 110 and 220 volts, 50-60 cycles (T1)
12654	Trap—Wave-trap complete (L1)
13144	Volume control (R11)
REPRODUCER ASSEMBLIES	
12641	Board—3-contact reproducer terminal board
12640	Bracket—Output transformer mounting bracket
12012	Coil—Field coil (L16)
11469	Coil—Neutralizing coil (L14)
12642	Cone—Reproducer cone and dust cap (L15)
5118	Connector—3-contact male speaker cable connector
9699	Reproducer—Complete
11253	Transformer—Output transformer (T2)
11886	Washer—Spring washer to hold field coil securely
MISCELLANEOUS ASSEMBLIES	
12038	Band—Rubber band for tuning tube
13615	Bracket—Tuning tube mounting bracket and clamp
12785	Crystal—Station selector escutcheon and crystal
12742	Escutcheon—Tuning tube escutcheon
12699	Knob—Large station selector knob
12700	Knob—Small (vernier) station selector knob
11347	Knob—Volume control, tone control or range switch knob
11377	Screw—Chassis mounting screw and washer assembly
4982	Spring—Retaining spring for knob, Stock No. 12699
11349	Spring—Retaining spring for knob, Stock Nos. 11347 and 12700

Prices quoted above are subject to change without notice.