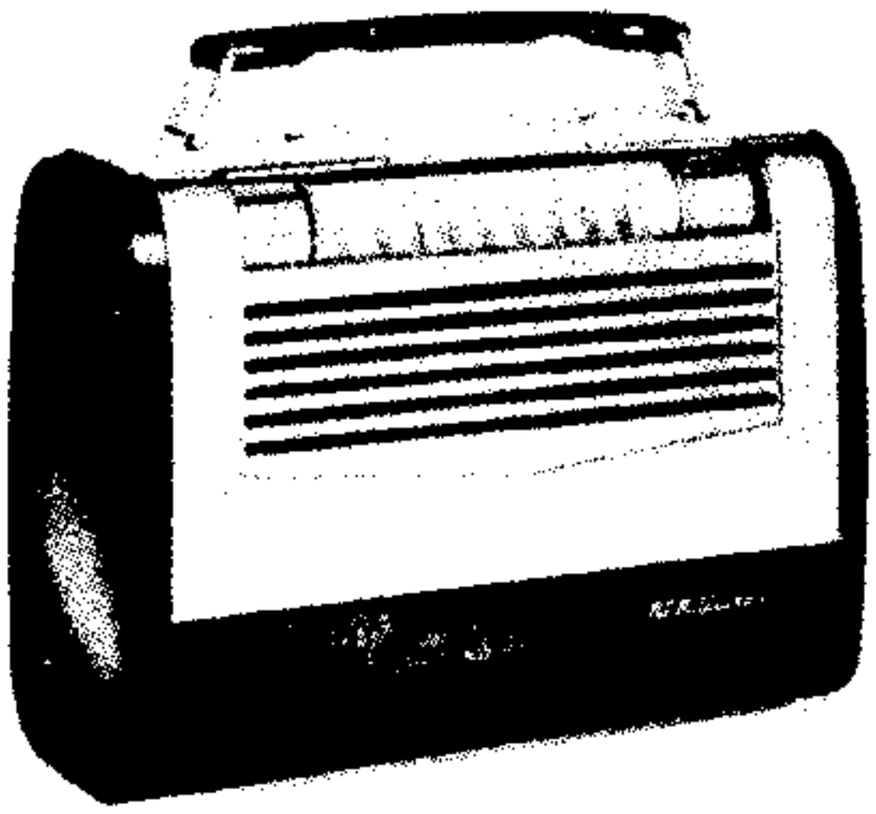
MODEL BX6,
Ch. RC-1082



Model BX6

Specifications

Tuning Range .....540-1,600 kc
Intermediate Frequency .....455 kc

Power Supply Rating
Power Line Operation
115 volts, d. c. or 50 to 60 cycles a. c. .....15 watts
or
Battery Operated .....using RCA VS 019 Battery
(Average battery life—125 hrs. intermittent service)

Battery current ....."A" 50 ma., "B" 13 ma.

Tube Complement
(1) RCA 1T4 .....R.F. Amplifier
(2) RCA 1R5 .....Converter
(3) RCA 1T4 .....I.F. Amplifier
(4) RCA 1U5 .....2nd Det.—AVC—1st A.F.
(5) RCA 3V4 .....Output
A selenium rectifier is used.

Weight (Approx.)
Without battery .....7 lbs. With battery .....10½ lbs.

Power Output
Undistorted ..... .150 watt
Maximum ..... .325 watt

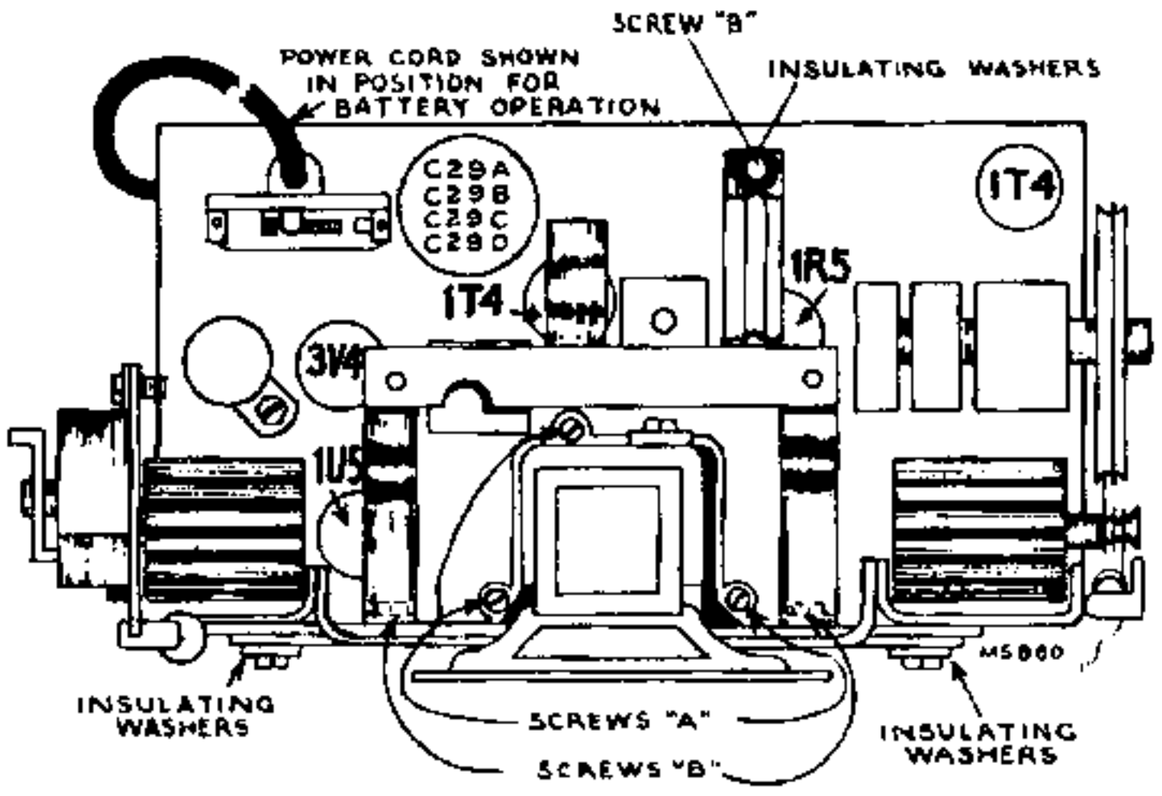
Loudspeaker .....4 in. P.M.

Voice coil impedance .....3.2 ohms at 400 cycles

Cabinet Dimensions
Height .....10 in. Width .....13 in. Depth .....5½ in.

CAUTION.—

1. **Do not remove any tubes from the chassis with the set operating and the plug connected to the power line. Damage to tubes may result.**
2. **When cleaning the aluminum portion of the case use soap and water or cleaning fluid. Do not use abrasive cleansers.**



Chassis Assembly

To Remove Chassis:

1. Loosen battery clamps, pull out battery and disconnect battery plug.
2. Unsolder the two loop antenna leads.
3. Remove the two large screws (under handle) in the top of the case (do not loosen small screws).
4. Lay receiver on table with face down.
5. Remove the two screws holding chassis to case sides.
6. The chassis may now be lifted from the case.

To Remove Speaker:

1. Remove chassis from case as described above.
2. Unsolder output transformer leads from speaker.
3. Un-hook dial cord tension spring.
4. Remove the two screws "B" holding dial bracket to chassis support bracket.
5. Remove the four screws holding dial bracket to chassis base.
6. Tilt dial bracket forward and remove three screws "A" holding speaker bracket to chassis base.

To Remove Back Cover:

Push the wire latch on the bottom of the case to the right. Open the back about 3" and remove by easily lifting and sliding the top edge of the cover out of the case.

To Replace Back Cover:

Insert the top edge of the back cover into the case. Hold the top edge in position with one hand and press the bottom edge in place with the other hand until it is latched.

Insulating Washers:

The mounting bracket and dial frame are insulated from the chassis with insulating washers. This serves to insulate the case from the chassis. In servicing make certain that these washers are in place and properly positioned.

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Alignment Procedure

Output Meter Alignment.—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

Test Oscillator.—For all alignment operations, connect the low side of the test oscillator to the receiver chassis and keep the oscillator output as low as possible to avoid AVC action.

Battery operation of the receiver is preferable during alignment; on AC operation an isolation transformer (117v./117v.) may be necessary for the receiver if the test oscillator is also AC operated.

Calibration Scale.—The calibrated dial scale is attached to the chassis. It can be used directly as a reference for alignment.

With the gang at full mesh set the dial pointer so that the pointer is ¼" to the left of the 55 calibration on the dial scale.

Alignment Tabulation

Step	Connect High Side of Sig. Gen. to—	Sig. Gen. Output	Dial Pointer Setting	Adjust for Max. Output
1	Pin #6 of 1T4 I.F. Amplifier thru .005 mf.	455 kc	Quiet point near 1600 kc	2nd I.F. Trans. T2 Top & Bottom
2	Pin #6 of 1R5 Converter thru .005 mf.			1st I.F. Trans. T1 Top & Bottom
3	Replace bottom cover. Install chassis in case, connect loop and battery. Place "Dummy"* back cover on case.			
4	Short wire placed near loop for radiated signal	1600 kc	1600 kc	C11 (osc.)
5		1400 kc	1400 kc	C10 (r. f.) C1 (loop)
6		600 kc	600 kc	L4 (osc.) L3 (r. f.) Alternately while rocking gang
7	Repeat steps 4, 5, and 6			

* A "dummy" back cover is one having holes provided to permit alignment with the cover in place. The battery and back cover affect loop alignment. The battery should be in place. If a "dummy" back cover is not available, an improvised cover should be made of sheet aluminum. It should not make contact with any metal portion of the case or chassis.

Critical Lead Dress

1. Dress all filament leads next to chassis.
2. Keep the leads short on the end of the three components, (R1, R2, C2) which connect to the grid terminal (#6) of the r.f. socket.
3. Dress tuning condenser leads direct and avoid excess lead length.
4. Dress loop leads away from tuning drum and battery.
5. Dress r.f. plate lead against chassis base.
6. Dress a.v.c. lead against chassis base.
7. Dress +B lead to output transformer against chassis base.
8. Dress 1st a.f. plate resistor (R13) up and away from other wiring.
9. Dress all leads away from the ballast resistor.
10. Dress ON-OFF switch leads clear of switch actuating lever and shutter.
11. Dress 1st a.f. grid resistor (R11) close to chassis.
12. Dress capacitor C4 in air between end apron and r.f. coil and away from selenium rectifier, with foil end to tuning condenser frame.

Power Line Operation.—

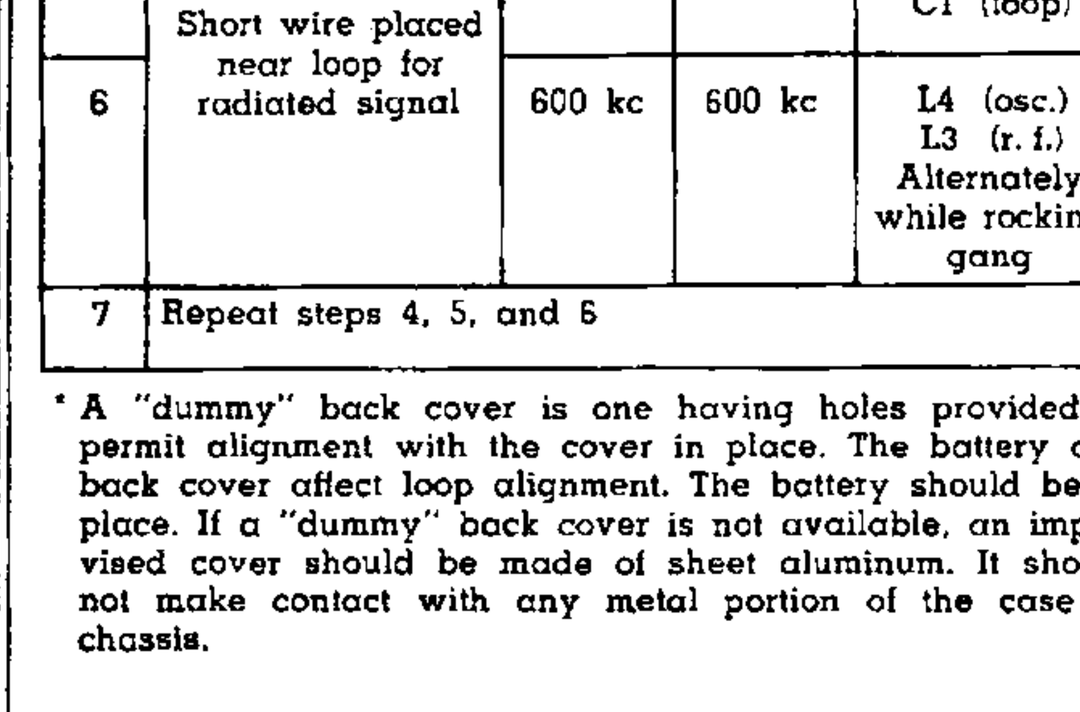
A power cord is stored in the fiber tube which is clamped above the chassis inside the cabinet. To open the cabinet, push the wire latch on the bottom of the case to the right, and lift the back cover up and off. Then pull the power cord plug out of the socket on the top of the chassis as shown, and take out and unroll the power cord. A slot in the bottom of the cabinet allows the closing of the cabinet with the power cord passing through. Replace the back cover with the cord extending through the slot and insert the plug into a convenient electrical outlet.

When returning to battery operation, be sure to replace the power plug in its socket inside the case with the cord stored in the fiber tube.

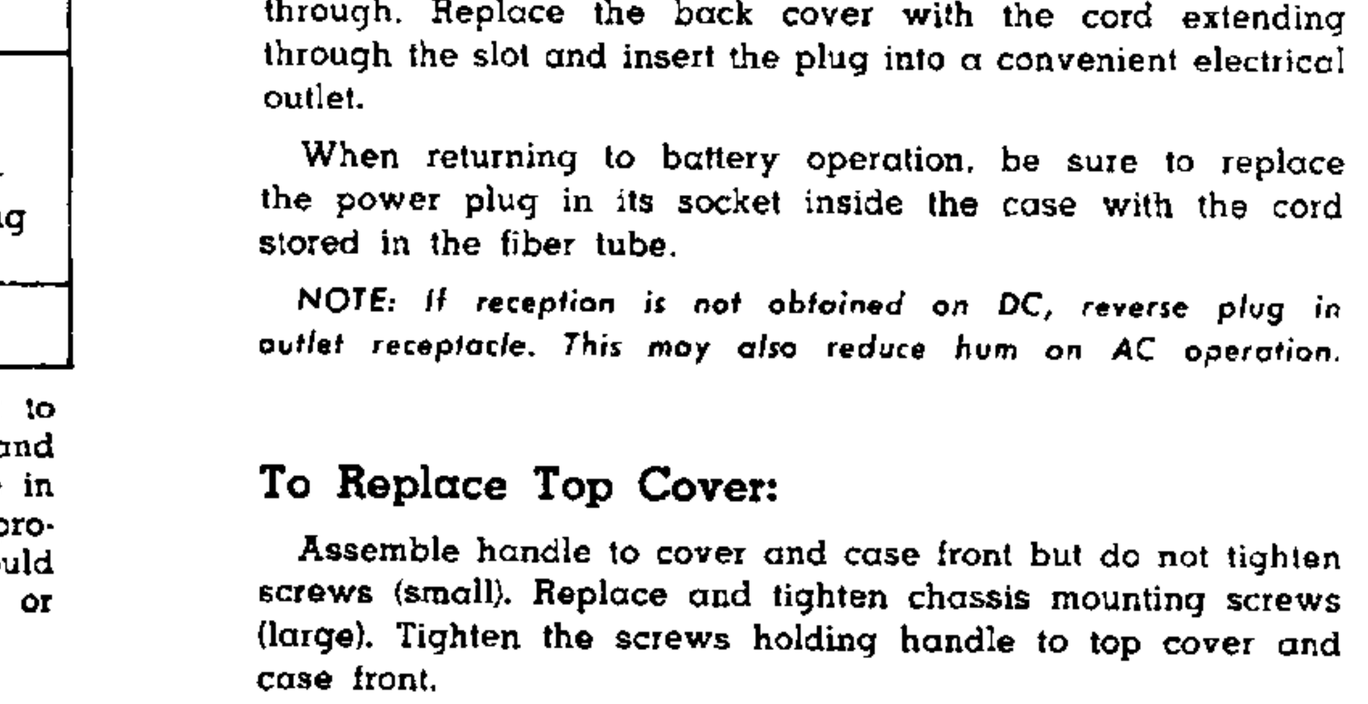
NOTE: If reception is not obtained on DC, reverse plug in outlet receptacle. This may also reduce hum on AC operation.

To Replace Top Cover:

Assemble handle to cover and case front but do not tighten screws (small). Replace and tighten chassis mounting screws (large). Tighten the screws holding handle to top cover and case front.



Tube and Trimmer Locations



Dial-Indicator and Drive Mechanism

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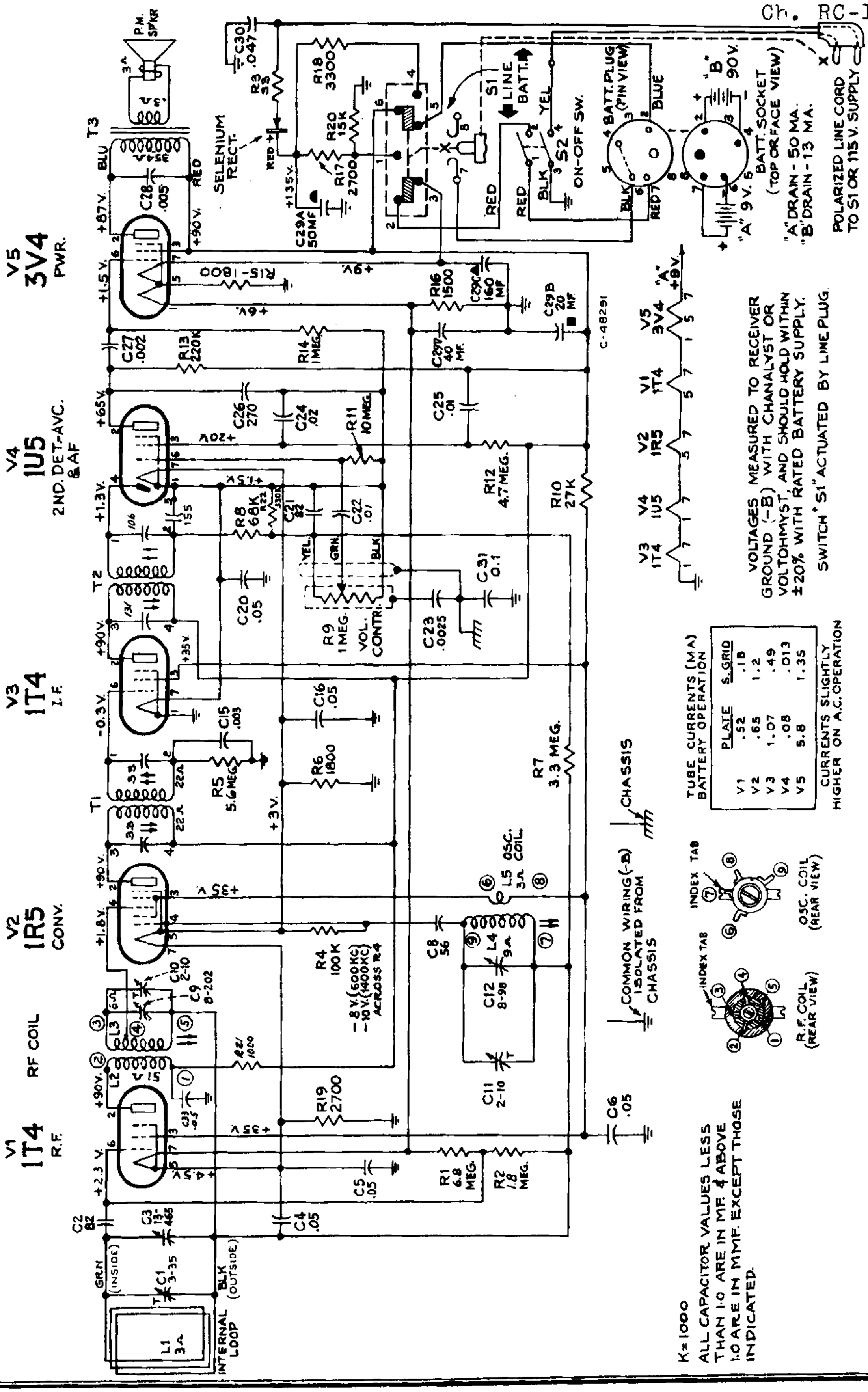

	PLATE	S.GRID
V1	.52	.18
V2	.65	1.2
V3	1.07	.49
V4	.08	.013
V5	5.8	1.35

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Replacement Parts

STOCK No.	DESCRIPTION
	CHASSIS ASSEMBLIES
	RC 1082
71044	Bracket—Power switch bracket complete with actuating lever less switch
71056	Bracket—Drive cord pulley bracket complete with pulley (volume control side)
74995	Bracket—Drive cord pulley bracket complete with 2 pulleys
74991	Capacitor—Variable tuning capacitor complete with drum C3, C9, C10, C11, C12
71924	Capacitor—Ceramic, 56 mmf. C8
71514	Capacitor—Ceramic, 82 mmf. C2, C21
73922	Capacitor—Ceramic, 270 mmf. C26
73113	Capacitor—Electrolytic, comprising 1 section of 50 mfd., 150 volts, 1 section of 20 mfd., 150 volts, 1 section of 160 mfd., 25 volts and 1 section of 40 mfd., 25 volts C29A, C29B, C29C, C29D
73750	Capacitor—Tubular, paper, .002 mfd., 200 volts .. C27
70602	Capacitor—Tubular, paper, .0025 mfd., 400 volts .. C23
73961	Capacitor—Tubular, paper, .003 mfd., 200 volts C15
71553	Capacitor—Tubular, paper, .005 mfd., 400 volts .. C28
71923	Capacitor—Tubular, paper, .01 mfd., 200 volts C22, C25
71928	Capacitor—Tubular, paper, .02 mfd., 200 volts C24
75071	Capacitor—Tubular, moulded paper, .047 mfd., 400 volts C30
71551	Capacitor—Tubular, paper, .05 mfd., 200 volts C5, C16, C20
73553	Capacitor—Tubular, paper, .05 mfd., 400 volts C4, C6, C33
70617	Capacitor—Tubular, paper, 0.1 mfd., 400 volts C31
73935	Clip—Mounting clip for I.F. transformer
73114	Coil—Oscillator coil complete with adjustable core L4, L5
74992	Coil—R.F. coil complete with adjustable core .. L2, L3
71041	Connector—4 contact male connector for battery cable
71057	Control—Volume control R9
†72953	Cord—Drive cord (approx. 38" overall length required)
70022	Cord—Power cord
74998	Dial—Dial scale and window assembly
74838	Grommet—Power cord strain relief grommets (1 set)
72283	Grommet—Rubber grommet to mount tuning capacitor
71031	Holder—Power cord holder (fibre tube)
73111	Indicator—Station selector indicator
74994	Knob—Tuning or volume control knob (roller type)
18469	Plate—Bakelite mounting plate for electrolytic capacitor
72602	Pulley—Drive cord pulley (removable)
74322	Rectifier—Selenium rectifier
73237	Resistor—Wire wound, fuse type, 33 ohms, 150 MA R3
74993	Resistor—Molded ceramic, 2700 ohms, 10 watts .. R17
	Resistor—Fixed, composition:—
	1000 ohms, ±10%, ½ watt R21
	1500 ohms, ±10%, ½ watt R16
	1800 ohms, ±10%, ½ watt R6, R15
	2700 ohms, ±10%, ½ watt R19
	3300 ohms, ±10%, 1 watt R18
	15,000 ohms, ±20%, ½ watt R20
	27,000 ohms, ±10%, ½ watt R10
	68,000 ohms, ±20%, ½ watt R8
	100,000 ohms, ±20%, ½ watt R4
	220,000 ohms, ±20%, ½ watt R13
	330,000 ohms, ±10%, ½ watt R22
	1 megohm, ±20%, ½ watt R14
	1.8 megohm, ±10%, ½ watt R2
	3.3 megohm, ±10%, ½ watt R7
	4.7 megohm, ±20%, ½ watt R12
	5.6 megohm, ±10%, ½ watt R5
	6.8 megohm, ±10%, ½ watt R1
	10 megohm, ±20%, ½ watt R11

STOCK No.	DESCRIPTION
73122	Shaft—Tuning knob shaft
74996	Shield—End shield for dial—L.H.
74997	Shield—End shield for dial—R.H.
73117	Socket—Tube socket
74038	Spring—Drive cord spring
30900	Spring—Retaining spring for knob
71039	Switch—"Line-Battery" change switch S1
71045	Switch—Power switch less cover and actuating lever S2
73129	Transformer—First I.F. transformer T1
73037	Transformer—Second I.F. transformer T2
71047	Transformer—Output transformer T3
73332	Washer—Insulating washer (flat) for mounting base holder bracket (1 req'd) and dial support to chassis (4 req'd)
73333	Washer—Insulating washer (extruded) for mounting base holder bracket (1 req'd) and dial support to chassis (4 req'd)
71081	Washer—Spring washer to hold removable drive cord pulley
	SPEAKER ASSEMBLIES
	92577-3W
71059	Gasket—Speaker gasket (black tubing)
73123	Speaker—4" P.M. speaker complete with cone and voice coil
	MISCELLANEOUS
71074	Arm—Shutter arm lever
74999	Back—Case back complete with latch
71073	Bracket—Bearing bracket for shutter arm lever
71070	Bracket—Mounting bracket for #71069 adjustable capacitor
71069	Capacitor—Adjustable trimmer capacitor 3-35 mmf. C1
75001	Clip—Clip to hold battery (2 req'd)
75005	Clip—"C" clip (threaded) for battery holder clip (2 req'd)
75009	Clip—Clip to hold chassis to case (end plates) (2 req'd)
75010	Clip—"C" clip and screw for fastening case front (4 req'd)
71080	Clip—Case side spring clip and screw (2 req'd)
75013	Clip—Spring clip with tab for fastening case front to case sides (4 req'd)
75011	Emblem—"RCA Victor" emblem
75006	Front—Case front complete with insulating strip and support feet—less shutter
75016	Handle—Carrying handle—less links
75004	Latch—Spring latch for back cover
75018	Link—Carrying handle link—less mounting plate
71079	Loop—Antenna loop L1
75003	Nut—Speed nut to mount carrying handle
75015	Pin—Pivot pin (stud) for case shutter
75000	Plate—Case top plate—less handle
75017	Plate—Mounting plate for carrying handle (2 req'd)
75002	Screw—#4 x 3/8" round head cross recessed self-tapping screw to mount carrying handle
71066	Screw—#8-32 x 5/8" cross recessed binder head screw to hold chassis to top plate (2 req'd)
75014	Screw—#4 x 1/4" pan head screw for #75013 spring clip (4 req'd) or capacitor bracket (2 req'd)
71071	Shutter—Case shutter
75012	Side—Case side only—less pivot pin
71072	Spring—Case shutter compression spring
75007	Strip—Case front insulating strip complete with latch plate
75008	Support—Moulded support foot for case (2 req'd)
74353	Washer—Spring washer for shutter shafts

†Stock No. 72953 is a reel containing 250 feet of cord.