

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

Model: 94BT

Chassis:

Year: Pre October 1938

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

Riders Volume 9 - RCA 9-89

Riders Volume 9 - RCA 9-90

RCA MFG. CO., INC.

MODELS 94BK, 94BT
Schematic, Socket
Trimmers, Voltage
Alignment, Lead Dress

Alignment Procedure

Cathode-ray Alignment is the preferable method. Connections for the meter across the voice coil, and turn the receiver volume control to maximum.

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 output as low as possible to avoid a-v-c action.

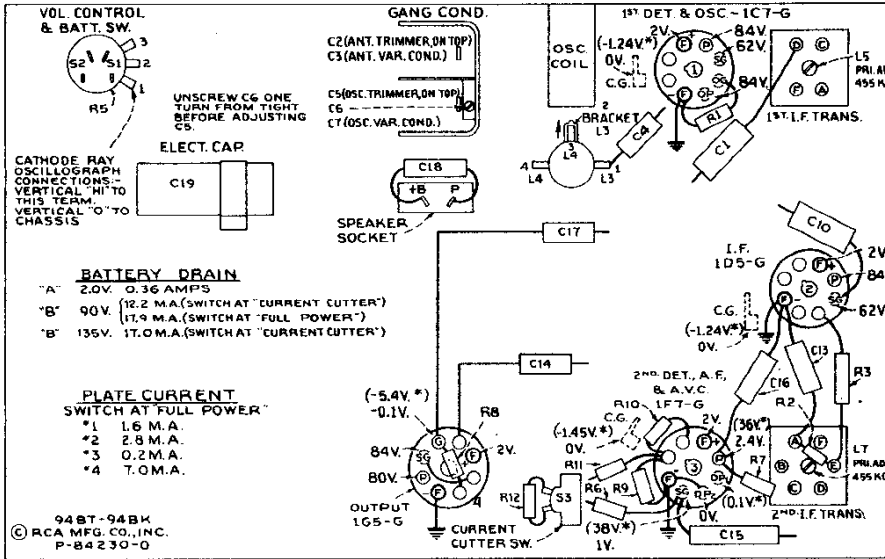
For additional details, refer to booklet "RCA Victor Receiver Alignment."

Pre-setting Dial.—With gang condenser in full mesh, the pointer should be horizontal.

Re-sealing I.F. Adjustment Screws.—After completion of alignment, seal the I.F. magnetite-core adjustment screws with a few drops of household cement.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output
No. 1	1D5-G I.F. grid cap, in series with .001 mfd.	455 kc	Quiet point between 550-750 kc	L7 and L8 (2nd I.F. transformer)
No. 2	1C7-G 1st det. grid cap, in series with .001 mfd.	455 kc		L5 and L6 (1st I.F. transformer)
No. 3	Antenna lead, in series with 200 mmfd.	1,500 kc	1,500 kc	C5* (oscillator) C2 (antenna)

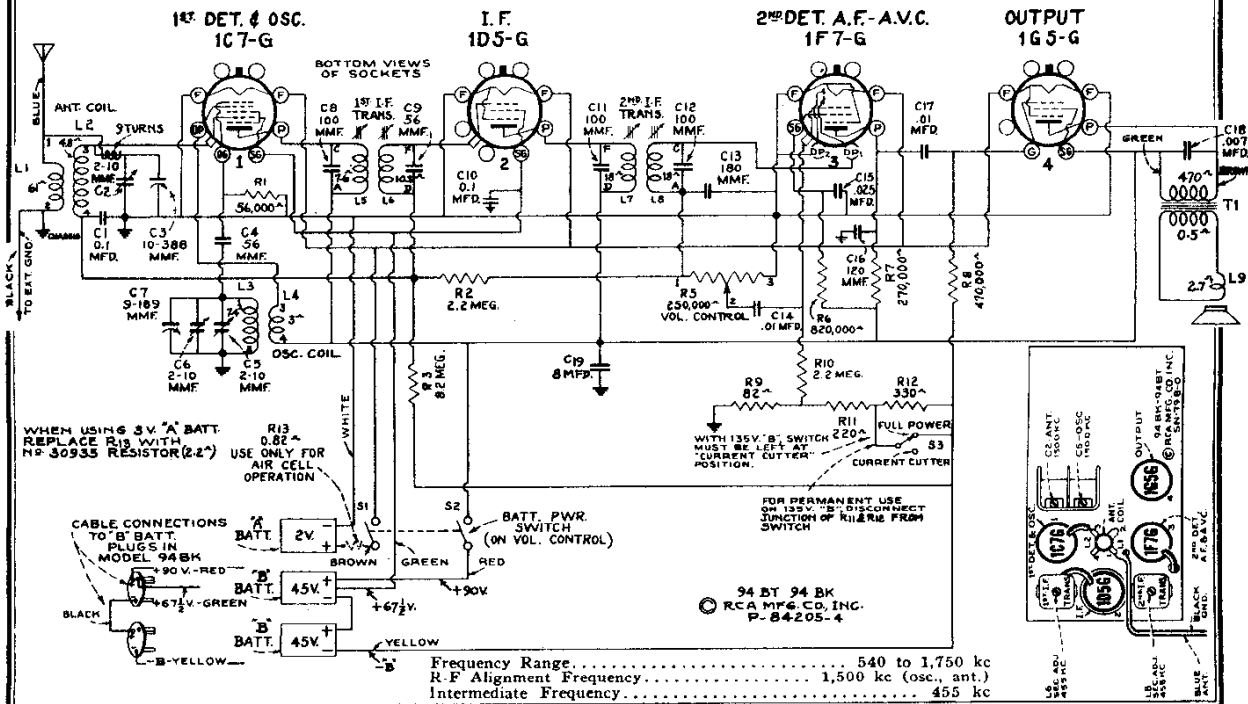
* Trimmer C6 on gang condenser should be unscrewed one complete turn from tight, before adjusting C5.



BOTTOM VIEW—REAR OF CHASSIS

Figure 2—Radiotron Socket Voltages, and Location of Parts

- Precautory Lead Dress**
- I.F. plate lead should be dressed close to and along edge of chassis.
 - Lead from antenna terminal should be wrapped (9 turns) around lead from ant. coil secondary to gang condenser (see schematic).
 - Antenna and ground leads should be arranged as shown in top view.
- BATTERIES REQUIRED
 "A" one 2½ volt air cell, or one 2-volt storage battery, or one 3-volt "dry" "A" battery (With filter, type No. 30935, 2.2-ohm resistor in series with positive "A" lead.)
 "B" two or three 45-volt heavy-duty "B" batteries.
- LOUDSPEAKER
 Type..... 94BT
 Diameter (94BK)..... 5in.
 Voice-coil Impedance..... 3 ohms at 400 cycles



MODELS 94BK, 94BT
MODEL 94BT6
Parts Lists

RCA MFG. CO., INC.

94BK Replacement Parts 94BT

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

STOCK No.	DESCRIPTION	Unit List Price	STOCK No.	DESCRIPTION	Unit List Price			
RECEIVER ASSEMBLIES								
30954	Cable—Battery cable complete.....	1.35	30952	Shaft—Station selector knob shaft.....	.25			
30949	Capacitor—56 Mmfd. (C8).....	.25	3682	Shield—Radiotron shield.....	.22			
12723	Capacitor—56 Mmfd. (C4).....	.25	11196	Socket—Radiotron socket.....	.25			
30904	Capacitor—100 Mmfd. (C8, C11, C12).....	.25	30956	Socket—Speaker socket.....	.30			
12724	Capacitor—120 Mmfd. (C16).....	.25	14191	Spring—Drive cord tension spring.....	.04			
13003	Capacitor—180 Mmfd. (C13).....	.25	30953	Switch—Current-cutter switch (SS).....	.45			
5148	Capacitor—.007 Mfd. (C18).....	.20	30948	Transformer—First I.F. (L5, L6, C8, C9).....	2.00			
14393	Capacitor—.01 Mfd. (C14, C17).....	.30	30903	Transformer—Second I.F. (L7, L8, C11, C12).....	1.80			
4870	Capacitor—.025 Mfd. (C15).....	.20	30947	Volume control and on-off switch (R5, S1, S2).....	1.50			
30899	Capacitor—.01 Mfd. (C1, C10).....	.30	REPRODUCER ASSEMBLIES					
13610	Capacitor—.8 Mfd. (C19).....	1.00	Model 94BT (Speaker 84226-1)					
30950	Coil—Antenna coil (L1, L2).....	1.10	30970	Cone—Reproducer cone and voice coil (L9)...	1.25			
30895	Coil—Oscillator coil (L3, L4).....	1.05	30969	Reproducer complete.....	5.65			
30945	Condenser—2-gang variable tuning condenser (C2, C3, C5, C6, C7).....	2.70	30971	Transformer—Output transformer (T1).....	1.25			
30877	Cord—Drive cord.....	.20	Model 94BK (Speaker 84145-2)					
30905	Core—Adjustable core for I.F. transformers...	.35	30973	Cone—Reproducer cone and voice coil (L9)...	2.25			
30951	Dial—Dial scale and dial scale holder and bracket assembly.....	.70	30972	Reproducer complete.....	6.30			
30701	Drum—Tuning condenser drive cord drum with set screw.....	.40	30974	Transformer—Output transformer (T1).....	1.90			
14635	Indicator—Station selector indicator pointer.....	.20	MISCELLANEOUS ASSEMBLIES					
30955	Resistor—.82 ohm, flexible type (R13).....	.30	30975	Crystal—Station selector celluloid crystal.....	.45			
14074	Resistor—.82 ohms, 1/2 watt (R8).....	.20	14268	Knob—Station selector or volume control knob.....	.20			
14561	Resistor—.220 ohms, 1/2 watt (R11).....	.20	12827	Plug—3-contact male plug for battery cable—94BK only.....	.20			
30958	Resistor—.330 ohms, 1/2 watt (R12).....	.20	30935	Resistor—.22 ohms, flexible type to replace Stock No. 30955 when using 3-volt battery..	.30			
5029	Resistor—.56,000 ohms, 1/2 watt (R1).....	.20	30308	Screw—Chassis mounting screw and washer—94BT only—Package of 4.....	.25			
12199	Resistor—.270,000 ohms, 1/2 watt (R7).....	.20	30467	Screw—Chassis mounting screw and washer—94BK only—Package of 4.....	.25			
11172	Resistor—.470,000 ohms, 1/2 watt (R8).....	.20	14270	Spring—Retaining spring for knob.....	.05			
30963	Resistor—.820,000 ohms, 1/2 watt (R6).....	.20						
12679	Resistor—.2.2 meg., 1/2 watt (R2, R10).....	.20						
30962	Resistor—.8.2 meg., 1/2 watt (R3).....	.20						
14887	Retainer—Retainer for knob shaft.....	.01						

BATTERY REQUIRED
6-volt Storage "A" Battery.
POWER OUTPUT (6 volts "A")
Undistorted..... 0.45 watts
Maximum..... 0.7 watts

CURRENT CONSUMPTION
At 6 volts, 2.8 amperes.

Operating Controls..... (1) Power Switch—Volume; (2) Tuning
Tuning Drive Ratio..... 8 to 1

Replacement Parts 94BTC

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

STOCK No.	DESCRIPTION	Unit List Price	STOCK No.	DESCRIPTION	Unit List Price			
RECEIVER ASSEMBLIES								
30959	Cable—Battery cable complete.....	1.35	11353	Resistor—.680 ohms, 1/2 watt (R10).....	.20			
30967	Cable—Shielded volume control cable.....	.45	6175	Resistor—5,600 ohms, 1/2 watt (R17).....	.20			
12723	Capacitor—56 Mmfd. (C8).....	.25	12759	Resistor—15,000 ohms, 1/2 watt (R3).....	.20			
30904	Capacitor—100 Mmfd. (C8, C10, C12, C13).....	.25	14284	Resistor—22,000 ohms, 1/10 watt (R15).....	.15			
12724	Capacitor—120 Mmfd. (C17).....	.25	5029	Resistor—56,000 ohms, 1/2 watt (R1).....	.20			
13003	Capacitor—180 Mmfd. (C14).....	.25	11172	Resistor—.470,000 ohms, 1/2 watt (R7, R11).....	.20			
30964	Capacitor—380 Mmfd. (C4).....	.25	12679	Resistor—.2.2 meg., 1/2 watt (R4, R6).....	.20			
30966	Capacitor—1,000 Mmfd. (C22).....	.30	30271	Resistor—.4.7 meg., 1/2 watt (R2).....	.20			
14393	Capacitor—.01 Mfd. (C16, C18, C19).....	.30	14887	Retainer—Retainer for knob shaft.....	.01			
4937	Capacitor—.01 Mfd. (C27).....	.25	30952	Shaft—Station selector knob shaft.....	.25			
4896	Capacitor—.05 Mfd. (C11).....	.20	3682	Shield—Radiotron shield.....	.22			
4859	Capacitor—.01 Mfd. (C16).....	.30	11196	Socket—Radiotron socket.....	.25			
30899	Capacitor—.01 Mfd. (C1).....	.30	30956	Socket—Speaker socket.....	.30			
30955	Capacitor—.025 Mfd. (C20).....	.30	14312	Socket—Vibrator socket.....	.25			
30961	Capacitor—Comprising 2 sections each 16 Mfd. (C23, C24).....	2.10	14191	Spring—Drive cord tension spring.....	.04			
30968	Coil—"A" filter choke coil (L10).....	.55	30957	Transformer—First I.F. transformer (L5, L6, C9, C10).....	1.80			
30950	Coil—Antenna coil (L1, L2).....	1.10	30903	Transformer—Second I.F. transformer (L7, L8, C12, C13).....	1.80			
30895	Coil—Oscillator coil (L3, L4).....	1.05	30960	Transformer—Vibrator transformer (T1, C21, L11).....	5.25			
30945	Condenser—2-gang variable tuning condenser (C2, C3, C5, C6, C7).....	2.70	14309	Vibrator—Plug in vibrator (L12).....	4.25			
30877	Cord—Drive cord.....	.20	30958	Volume control and on-off switch (R5, S1).....	1.50			
30905	Core—Adjustable core for I.F. transformers...	.35	REPRODUCER ASSEMBLIES (Speaker 84226-1)					
14289	Clips—Battery clips—1 marked "1" and 1 unmarked.....	.30	30970	Cone—Reproducer cone and voice coil (L9)...	1.25			
30951	Dial—Dial scale and dial scale holder and bracket assembly.....	.70	30969	Reproducer complete.....	5.85			
30701	Drum—Tuning condenser drive cord drum with set screw.....	.40	30971	Transformer—Output transformer (T2).....	1.25			
5140	Fuse—Battery cable fuse (F1).....	.10	MISCELLANEOUS ASSEMBLIES					
14635	Indicator—Station selector indicator pointer.....	.20	30975	Crystal—Station selector celluloid crystal.....	.45			
13220	Resistor—.56 ohms, 1/2 watt (R16).....	.20	14268	Knob—Station selector or volume control knob.....	.20			
14074	Resistor—.82 ohms, 1/2 watt (R9).....	.20	30308	Screw—Chassis mounting screw and washer—Package of 4.....	.25			
30498	Resistor—.390 ohms, 1/2 watt (R18).....	.20	14270	Spring—Retaining spring for knob.....	.05			
30681	Resistor—.470 ohms, 1 watt (R12).....	.22						

ALL PRICES ARE SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.