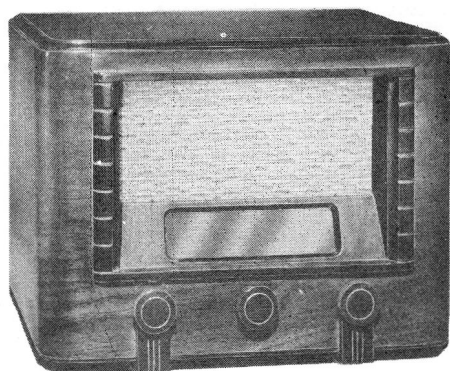




MODEL BT48



RCA VICTOR



BATTERY RECEIVER

MODEL BT48

SERVICE DATA

—1949 No. 22—

GENERAL SERVICE DIVISION  
RCA VICTOR COMPANY LIMITED  
MONTREAL, QUE.

## Electrical and Mechanical Specifications

## FREQUENCY RANGES

"Standard Broadcast" ----- 540 kcs. to 1600 kcs.  
"Short Wave Marine" ----- 1600 kcs. to 2900 kcs.  
"Short Wave" ----- 5.7 mcs. to 18 mcs.  
Intermediate Frequency ----- 455 kcs.

## RADIOTRON COMPLEMENT

(1) Type-1R5 ----- First Detector—Oscillator  
(2) Type-1T4 ----- Intermediate Amplifier  
(3) Type-1S5 ----- Second-Detector, A.V.C.,  
and A-F Amplifier  
(4) Type-3Q4 ----- Power Output

## POWER OUTPUT RATING

Undistorted ----- .15 watts  
Maximum ----- .35 watts

## Batteries Required

OR "A"—one 1.4 Volt Air Cell or 1.5 Dry Cell. "B"—two 45 Volt heavy duty "B" Batteries.

## LOUDSPEAKER

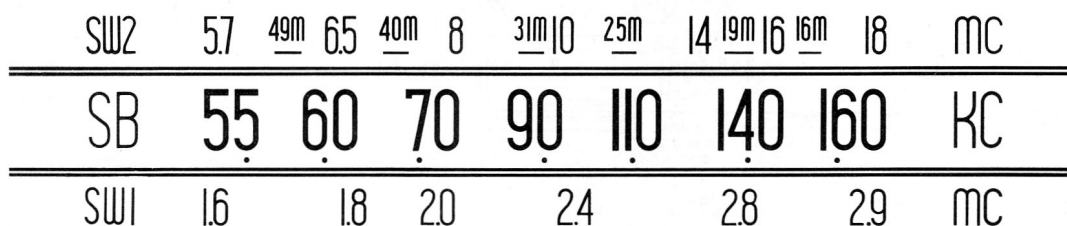
Type ----- 4" x 6" Elliptical P.M.  
Voice-Coil Impedance ----- 3.4 Ohms at 400 Cycles

## CABINET DIMENSIONS

Height ----- 9¼ inches  
Width ----- 12⅞ inches  
Depth ----- 8½ inches

## CURRENT CONSUMPTION

"A" at 1.4 Volts ----- 250 Ma.  
"B" at 90 Volts ----- 13 Ma.



The Dial Scale drawing shown is a full size reproduction. It can be used as a reference in alignment procedure.

Fig. 1—Dial Scale

## REPLACEMENT PARTS FOR MODEL BT48

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 |
|------------------|--------------------------------------|------------|---------------------------|------------------------------|------------|
| Chassis Assembly |                                      |            | Chassis Assembly (Cont'd) |                              |            |
| S-5420           | Capacitor - trimmer assembly         |            |                           | Resistor - 1 Megohm ¼ watt   |            |
| 39608            | " - mica 15 MMF.                     |            |                           | " - 3.3 " " "                |            |
| S-5418           | " - ceramic 20 MMF.                  |            |                           | " - 10 " " "                 |            |
| 39628            | " - " 100 "                          |            | S-3533                    | Shaft - drive shaft          |            |
| 12724            | " - mica 120 "                       |            | S-5414                    | Switch - range switch        |            |
| S-5237           | " - " 180 "                          |            | S-3526                    | Transformer - 1st I.F.       |            |
| S-5419           | " - " 390 "                          |            | S-3527                    | " - 2nd I.F.                 |            |
| S-5238           | " - " 3,900 "                        |            | S-3530                    | Volume Control - 1 Meg.      |            |
|                  | " - paper .007 Mfd.                  |            | Speaker Assembly          |                              |            |
|                  | " - " .0025 "                        |            | S-3569                    | Cone - cone & voice assembly |            |
|                  | " - " .05 "                          |            | S-3531                    | Output transformer           |            |
| S-3221           | " - electrolytic 10 Mfd.             |            | Miscellaneous Assemblies  |                              |            |
| S-5232           | Condenser - variable                 |            | S-4313                    | Cord - drive cord (Standard) |            |
| S-3695           | Choke - filament choke               |            | S-5417                    | Decals                       |            |
| S-5415           | Coil - antenna coil                  |            | S-3534                    | Cable - battery cable        |            |
| S-5233           | Coil - S.W. oscillator coil          |            | S-5421                    | Dial Scale                   |            |
| S-5416           | Coil - "F" oscillator coil           |            | 35814                     | Knob                         |            |
| S-3528           | Coil - Oscillator coil "SB"          |            | 35775                     | "                            |            |
| S-3532           | Indicator - station selector pointer |            | 12827                     | Plug "A" battery cable plug  |            |
|                  | Resistor - 330 ohms ¼ watt           |            | S-2398                    | " "B" " " " "                |            |
|                  | " - 10,000 ohms ½ watt               |            |                           |                              |            |
|                  | " - 22,000 " " "                     |            |                           |                              |            |
|                  | " - 39,000 " " "                     |            |                           |                              |            |
|                  | " - 100,000 " " "                    |            |                           |                              |            |

Only items listed under stock numbers are available as Replacement Parts.

All parts subject to change or withdrawal without notice.

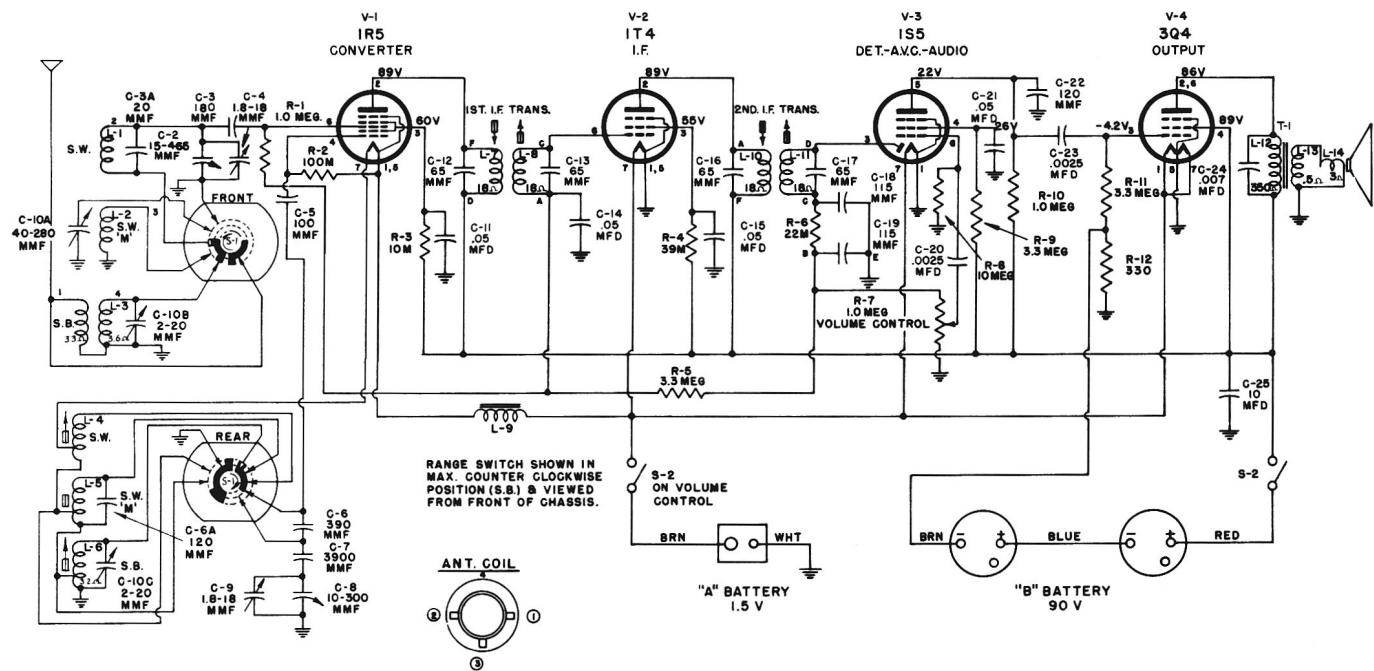
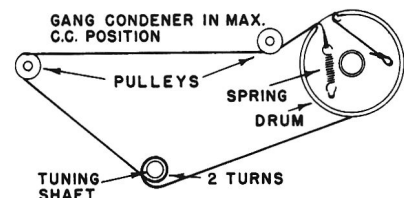
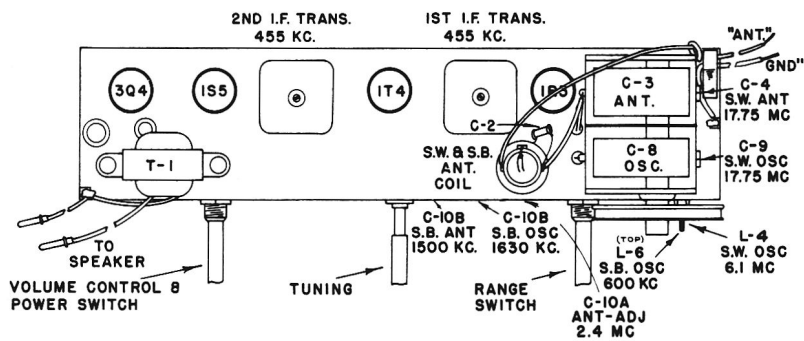


FIG. 2 — SCHEMATIC DIAGRAM



*Fig. 4—Dial Cord Stringing*

*Fig. 3—Chassis Layout & Alignment Adj*

## Alignment Chart

| Order of Alignment    |    | TEST OSCILLATOR          |                      |               |                   | RECEIVER       |              |                   |                      |           |
|-----------------------|----|--------------------------|----------------------|---------------|-------------------|----------------|--------------|-------------------|----------------------|-----------|
|                       |    | Connect "HI" Side to     | Connect "LO" Side to | Dummy Antenna | Frequency Setting | Range Selector | Dial Setting | Circuit to Adjust | Adjustment Symbols   | Notes     |
| I.F. ALIGN.           | 1  | IR5 Grid Pin #6          | Gnd                  | .1 Mfd        | 455 Kc            | S.B.           | "HI" End     | 1st & 2nd I.F.    | L-7, L-8, L-10, L-11 | Max. Out. |
| S.W. ALIGNMENT        | 2  | "Ant." Lead              | Gnd                  | 300 Ohm       | 6.1 Mc            | S.W.           | 6.1 Mc       | Osc.              | L-4 (Rock 'In)       | Max. Out. |
|                       | 3  | Same                     | Same                 | Same          | 17.75 Mc          | Same           | 17.75 Mc     | Osc.              | C-9                  | Same      |
|                       | 4  | Same                     | Same                 | Same          | Same              | Same           | Same         | Ant.              | C-4                  | Same      |
|                       | 5  | Repeat Steps 2, 3 and 4. |                      |               |                   |                |              |                   |                      |           |
| S.W. MARINE ALIGNMENT | 6  | "Ant." Lead              | Gnd                  | 300 Ohm       | 2.44 Mc           | S.W. Marine    | 2.44 Mc      | Ant.              | C-10A                | Max. Out. |
| S.B. ALIGNMENT        | 7  | "Ant." Lead              | Gnd                  | 220 Mmf       | 600 Kc            | S.B.           | 600 Kc       | Osc.              | L-6                  | Max. Out. |
|                       | 8  | Same                     | Gnd                  | Same          | 1630 Kc           | Same           | 1630 Kc      | Osc.              | C-10C                | Same      |
|                       | 9  | Same                     | Same                 | Same          | 1500 Kc           | Same           | 1500 Kc      | Ant.              | C-10B                | Same      |
|                       | 10 | Repeat Steps 7, 8 and 9. |                      |               |                   |                |              |                   |                      |           |