

SERVICE INSTRUCTIONS

3-WAY PORTABLE RADIO

MODEL S-103 (MARK I)

SPECIFICATIONS

- Tubes and Rectifiers . . . 4 tubes and 1 selenium rectifier
- Power Supply . . . 105-120 volts DC/50-60 cycle AC or 90 and 7½ volt batteries
- Frequency Coverage . . . BC - 535 to 1620 KC SW - 5.8 to 18.3 MC
- Intermediate Frequency 455 KC
- Speaker 4-inch PM
- Voice Coil Impedance 3.2 ohms
- Antenna BC - Built-in stick loop SW - Terminals for single wire or doublet

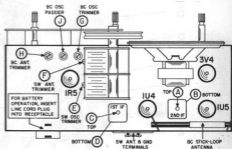


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Fig. 1. Model S-103

REPLACEMENT BATTERIES

- 7½ Volt "A" - Hallicrafters P13, General 31, RCA VS065, Burgess C5, Eveready 717, Ray-O-Vac P751
- 90 Volt "B" - Hallicrafters P231, General 132, RCA VS090, Burgess N60, Eveready 490, Ray-O-Vac 4390



* See Note 4B on Page 2.

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Fig. 2. Alignment Adjustments and Tube Location

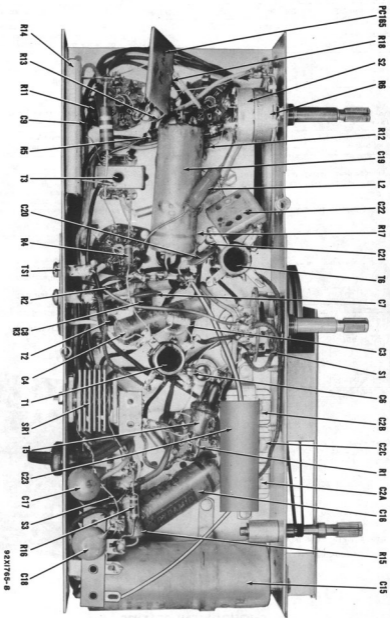
ALIGNMENT PROCEDURE

- Connect output meter across voice coil.
- Set volume control at maximum.
- Use a non-metallic alignment tool.
- Stick loop antenna must be connected.
- Refer to Fig. 2 for location of alignment adjustments.
- Generator must have modulated output and cover 455 KC, 600 KC, 1400 KC and 14 MC.
- To avoid AVC action, use lowest output setting of signal generator that gives satisfactory reading on meter.

Step	Signal Generator Connections	Generator Frequency	Band Switch Setting	Receiver Dial Setting	Adjust for Maximum Output
1	High side thru .01 mfd capacitor to green lead of stick loop antenna. Low side to B- (pin 1 of IU5).	455 KC	BC	1000 KC	A and B (2nd IF) C and D (1st IF)
2	High side thru 300 ohm carbon resistor to terminal A on back of set. Low side to B-.	14 MC	SW	14 MC	E (SW osc. trimmer) F (SW ant. trimmer)
3	Place generator lead close to stick loop antenna. No actual connection.	1400 KC	BC	1400 KC	G (BC osc. trimmer) H (BC ant. trimmer)
4	Same as Step 3.	600 KC	BC	600 KC	J (BC osc. padder)

the hallicrafters co.

MANUFACTURERS OF RADIO, TELEVISION AND ELECTRONIC EQUIPMENT, CHICAGO 26, U. S. A.



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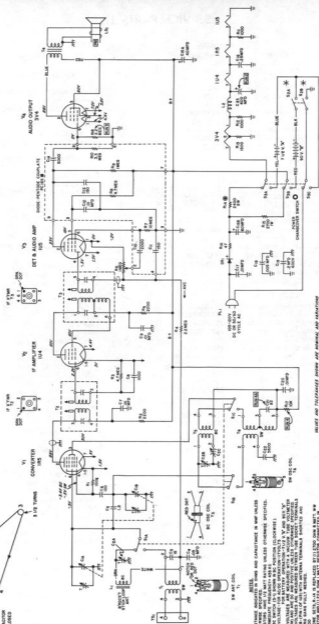
MODELS S-103 MARK 1

(See Production Changes Page 2)



NOTE:
TUNING CAPACITOR
FULLY CLOSED

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1. REORDERING INDICATED AND COMPONENTS IN NEW ORDER
2. OVERHAUL INSTRUCTIONS
3. INTERMEDIATE PREPARATION INSTRUCTIONS
4. PREPARATION INSTRUCTIONS
5. LINE VOLTAGE FOR AUDIO OPERATION (SPEAKER)
6. ALL VOLTAGES ARE RELATED TO THE CENTER TAP OF THE AUDIO TRANSFORMER
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