

SERVICE NOTES

INTERMEDIATE FREQUENCY: 455 kc.

Two 1.5 volt Flashlight Cells

On batteries: "A" battery—150 milliamperes

"B" battery—8.5 milliamperes

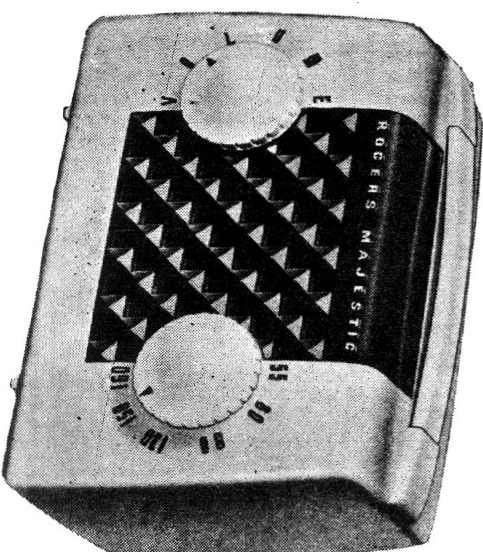
0.15 watt maximum

Diagram of the radio receiver circuit components and connections:

- Power Transformer (P.W.T. 3S4 AMP)** connected to the AC line.
- Rectifier Tube (6X4 AMP)** connected to the transformer.
- Tuning Indicator (T-1)** connected to the rectifier output.
- Converter Tube (1R5 CONV.)** connected to the rectifier output.
- Oscillator/IF Amplifier Tube (6C1)** connected to the converter.
- Tuning Indicator (T-2)** connected to the 6C1 tube.
- Loudspeaker (LS-1)** connected to the 6C1 tube.
- Speaker Amplifier Tube (6S1)** connected to the 6C1 tube.
- Speaker (S-1)** connected to the 6S1 tube.
- Frequency Labels:**
 - 4 - OSC. 1620 KC
 - 5 - LOOP 1400 KC

TO REMOVE THE CHASSIS

1. Pull off the two control knobs on the front of the cabinet.
2. Open the rear cover and remove the batteries.
3. Disconnect the two loop antenna leads from the chassis.
4. Remove the cord connecting the back cover to the chassis.
5. Remove the two hex head screws holding the chassis to the cabinet.
6. Slide the chassis out of the cabinet.



The back cover may be opened by inserting the fingertips into the slots in the top of the cabinet and pulling, or insert a coin and twist.

The chassis of this receiver is isolated from the AC power line circuit by a capacitor to eliminate the shock hazard when handling the receiver. However, as an additional precaution when aligning or servicing the receiver, from AC, an isolating transformer should be inserted between the power line and the chassis.

ALIGNMENT

Note: The receiver may be operated either from a battery or from the commercial power lines during alignment. If AC power is used, it is recommended that an isolation transformer be placed between the power line and the receiver. If an isolation transformer is not available, connect the low side of the signal generator to B—through a 1-mF capacitor.

1. Connect a low range output meter across the speaker voice coil.
2. Connect the low side of the signal generator to B—.
3. Set the signal generator for 400 cycle, 30 % modulation.
4. Turn the receiver volume control to maximum.
5. Use a small fibre screwdriver for aligning the IF and diode transformers.
6. As stages are brought into alignment, reduce the signal generator input to keep the output of the receiver at approximately .05 watt (.05 watt = .40 volts on the output meter) to avoid overloading the receiver.
7. See figure above for adjustment locations and the following chart for procedure.

Step	Dummy Antenna	Generator Connection	Generator Frequency	Gang Setting	Adjust	Remarks
IF ALIGNMENT						
1.	.1 mf	Grid. of conv. (pin 6, 1R5)	455 Kc	Fully open	1, 2 & 3	Adjust for maximum.
RF ALIGNMENT						
2.	—	Grid. of conv. (pin 6, 1R5)	1620 Kc	Fully open	4	Adjust for maximum.
3.	—	—	—	—	—	Install chassis in cabinet, leaving output meter connected to speaker. NOTE: Batteries should be in cabinet.
4.	—	Radiation loop**	1400 Kc	Tune for maximum	5	Adjust for maximum. Trimmer is reached through hole under plug button on side of cabinet.

**Connect generator output across 5" diameter, 5 turn loop and couple inductively to receiver loop. Keep loops at least 12" apart.

The following table shows some manufacturer's Part Numbers of batteries that may be used with this receiver:

Type	Burgess	Eveready	General	Ray-O-Vac
"A"	2	950	D	2
"B"	1734	467	W45A	P4367

Rogers Majestic R830

TUBES

- 1R5—Pentagrid Converter
1U4—I.F. Amplifier
1U5—Detector AVC and 1st AF Amplifier
3S4—Power Amplifier

