

**TECHNICAL INFORMATION  
AND  
SERVICE DATA**



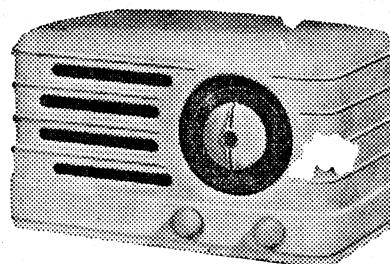
# **RADIOLETTE**

**Model 500-MY**

**FOUR VALVE BROADCAST  
A.C. OPERATED SUPERHETERODYNE**

**ISSUED BY**

**AMALGAMATED WIRELESS (A/SIA.) LTD.**



## **GENERAL DESCRIPTION.**

The Radiolette is a compact mantel receiver housed in an attractively designed moulded plastic cabinet which is produced in three colours—Ivory, Jade Green and Walnut.

Features of its design include: Tropic-proof construction, Automatic Volume Control, magnetite cores in I.F. transformers and oscillator coil, spiral-wound trimming capacitors.

Electrically, this receiver closely resembles the Radiolette model 500-m, differences being in frequency range and the use of back-bias on the 6V6GT output valve. For all other information, refer to the 500-M Service Manual.

### **POINTS OF DIFFERENCE FROM MODEL 500-M.**

Frequency Range .....	540-1600 kc/s (555-187.5M.)
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Volts across back bias resistors R9, R10 .....	12.5 V.
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Volts across resistor R9 .....	2.4 V.
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In alignment table, read 540 kc/s in place of 550 kc/s.

The 500-MY is fitted with spiral wound trimming capacitors mounted on top of the tuning gang instead of the air-dielectric capacitors shown in the 500-M Service Data Sheets.

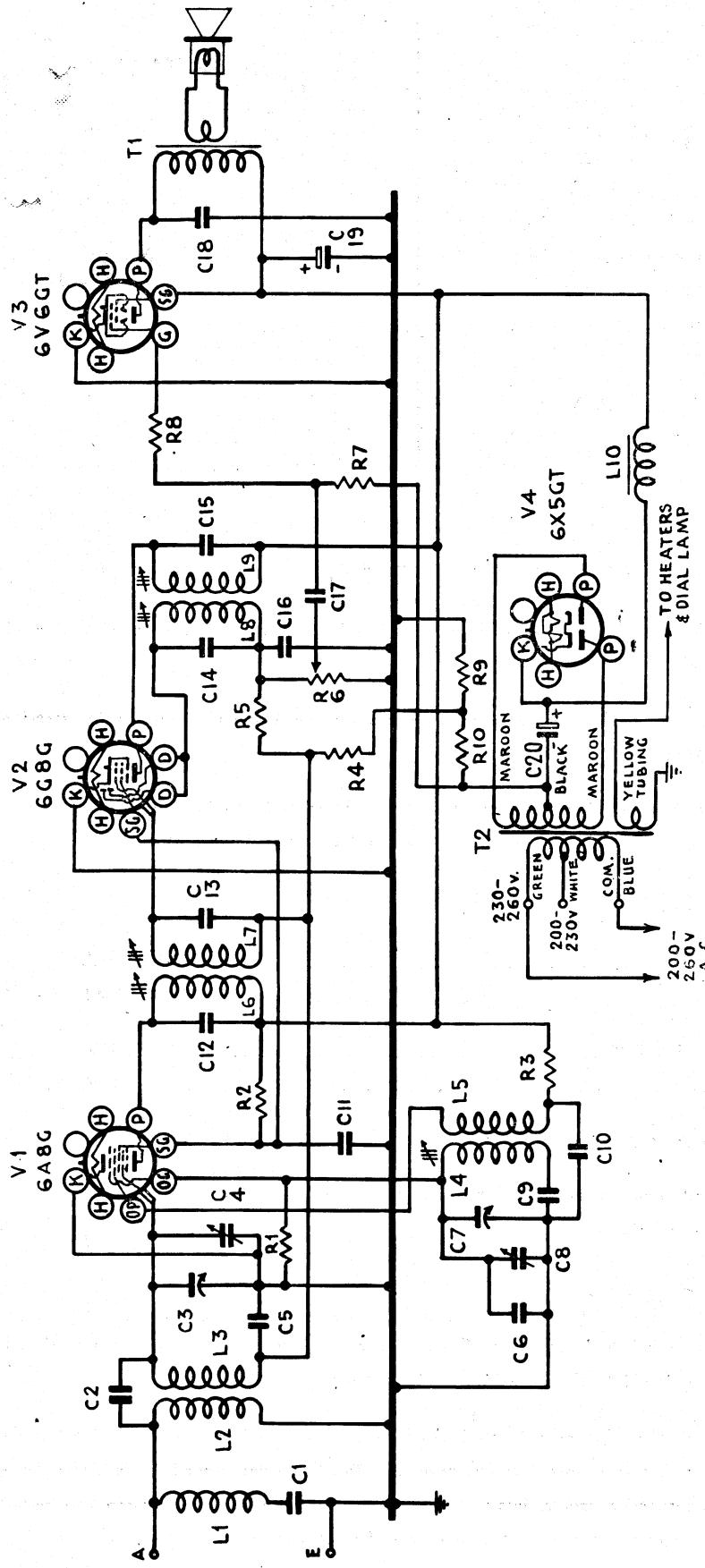
### **LOUDSPEAKER SERVICE.**

Repairs (other than transformer replacement) to loudspeakers fitted with Hawley cones and fabric spiders should be done only by Service Departments suitably equipped to do the work.

If a previous type speaker is in use, only the adjustment (centering) of the voice coil and replacement of the transformer should be attempted. To centre the voice coil, first remove the dust cover by carefully cutting around the inside of the voice coil former with a sharp knife. Loosen the suspension screws, insert three narrow paper "feelers" in the gap and re-tighten the suspension screws. The "feelers" should be approximately 3/16 inch wide and 0.006 inch thick.

NOTE: The coding of the 500-M and 500-MY circuits differ. (See back for diagram and code.)

## CIRCUIT DIAGRAM AND CODE



Circuit Code No.	Description	Stock Code or Part No.	Circuit Code No.	Description	Stock Code or Part No.	Circuit Code No.	Description	Stock Code or Part No.
<b>INDUCTORS.</b>								
L1	Filter Choke + C1	9382	R6	0.5 megohm volume control	C5	0.05 uF paper	C17	0.02 uF paper
L2, L3	Aerial coil 1600-540 k.c.	7647	R7	0.5 megohm, $\frac{1}{2}$ watt	C6	9 uuF mica	C18	0.02 uF paper
L4, L5	Oscillator coil 1600-540 kc.	7638	R8	50,000 ohms, $\frac{1}{2}$ watt	C7	12-430 uuF tuning (ganged)	C19	8 uF 525 P.V. electrolytic
L6, L7	1st I.F. transformer	17638	R9	40 ohms, 3 watt	C8	1-25 uuF air trimmer	C20	8 uF 525 P.V. electrolytic
L8, L9	2nd I.F. transformer	17643	R10	200 ohms, 3 watt	C9	440 uuF $\pm \frac{1}{2}\%$ mica (padder)		(NOTE: In some cases C2 is mounted as integral part of Aerial Coil, L2, L3.)
L10	Loudspeaker field 1,000 ohms		R11	100 ohms, $\frac{1}{2}$ watt	C10	0.05 uF paper		<b>TRANSFORMERS.</b>
			R12	100 ohms, $\frac{1}{2}$ watt	C11	0.1 uF paper	T1	Loudspeaker transformer
					C12	70 uuF silvered mica	T2	Power transformer 50 cycles
					C13	70 uuF silvered mica		Power transformer 40 cycles
					C14	70 uuF silvered mica		<b>LOUDSPEAKER.</b>
					C15	200 uuF silvered mica		5 inch Electromagnet
					C16	200 uuF mica		
* 100 ohm $\frac{1}{2}$ watt resistors incorporated in plate leads of 6X5GT Rectifier as Limiters.								