

SERVICE BULLETIN



Northern Electric RADIO

MODEL 5508

5-Tube Mantel Model AC Universal Superheterodyne SERVICE INFORMATION



SPECIFICATIONS

GENERAL:

5-Tube Superheterodyne A.C. Universal Radio Receiver housed in table model moulded plastic cabinet available in seven colours.

Green	Ivory
Brown	Gold
Red	Blue
White	

1. FREQUENCY RANGE:

Broadcast band — 525 to 1675 KC.

2. INTERMEDIATE FREQUENCY:

455 KC.

3. TUBES:

Type	Function
12BE6	Converter
12BA6	I.F. Amplifier
12AT6	Detector, A.V.C. and Audio Amplifier
50B5	Audio Output Amplifier
35W4	Rectifier

4. A.V.C.

On 12BE6 Converter and 12BA6 I.F. Amplifier.

5. POWER SUPPLY:

110-125 Volts, 25-60 Cycles — A.C.
110-125 Volts D.C. (Reverse plug if set does not operate when plug is connected.)

6. POWER CONSUMPTION:

30 Watts

7. AUDIO POWER OUTPUT:

1.9 Watts

8. ANTENNA:

High gain built-in loop renders an external antenna unnecessary in most installations. Should one be required, connect it to the wire at the rear of the set.

9. GROUND:

Ground must never be connected to this receiver.

10. AUDIO SYSTEM:

Audio portion of 12AT6 resistance — capacity coupled to 50B5.

11. LOUDSPEAKER:

4" Permanent Magnet. Alnico V — Shallow pot.

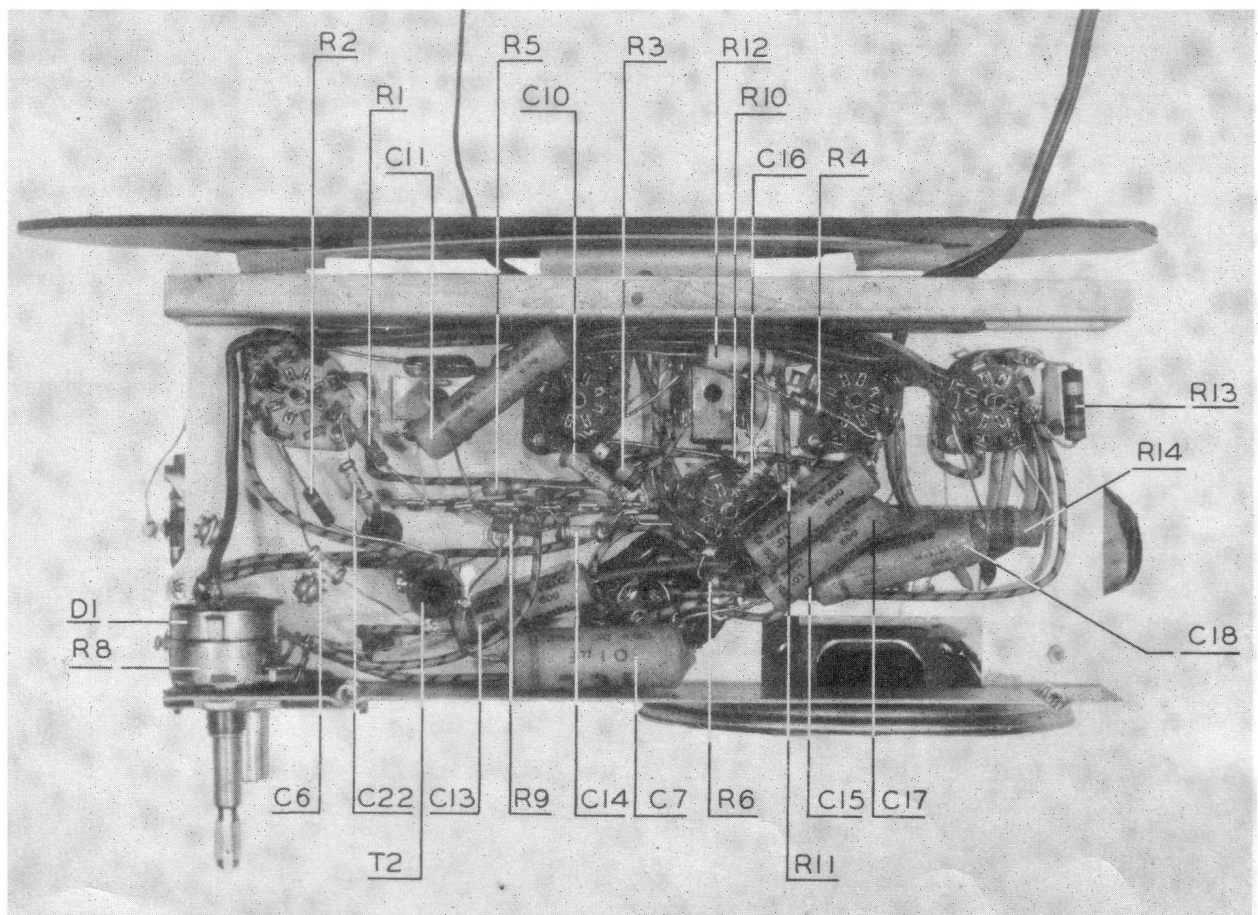
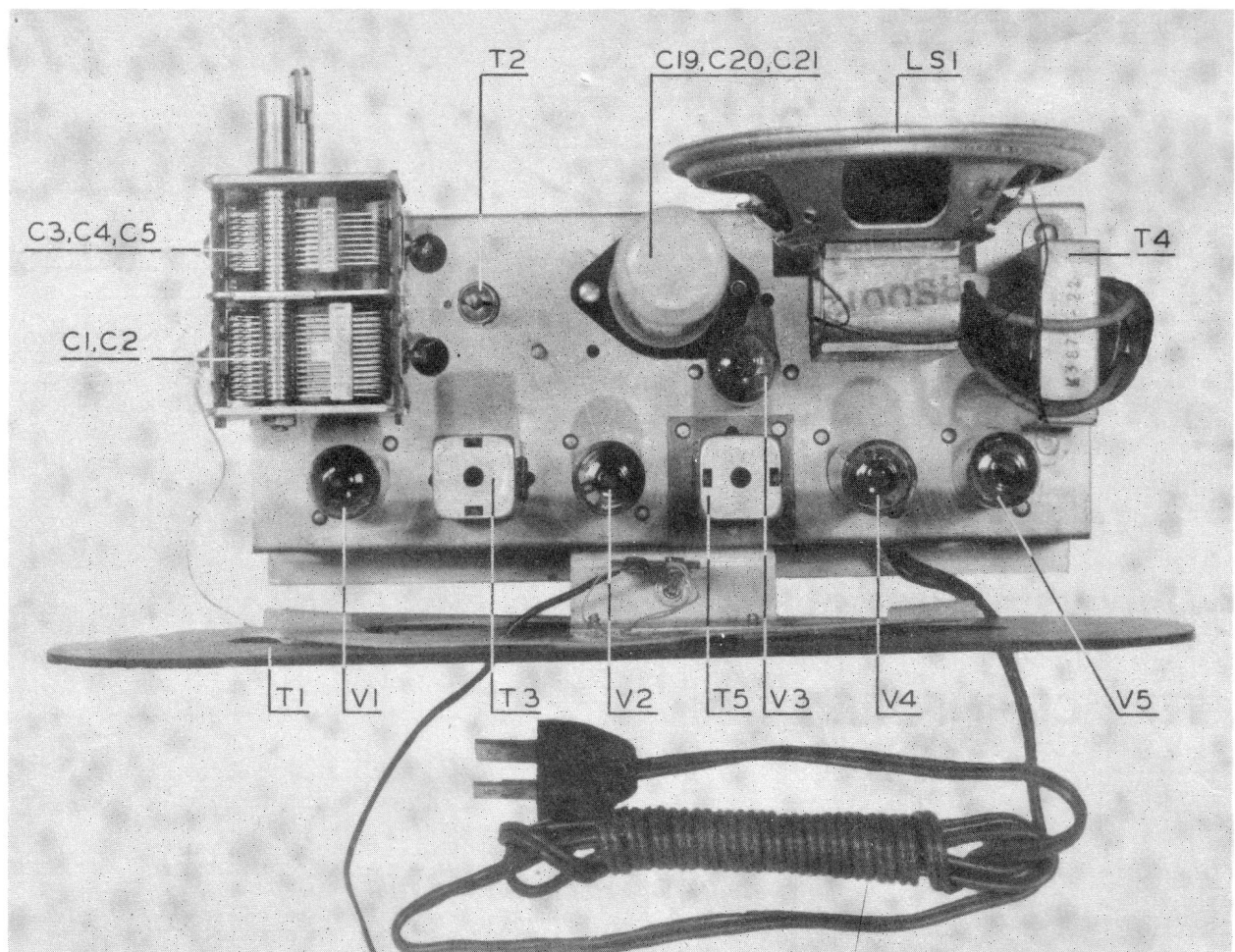
12. CONTROLS:

Upper — Tuning Control
Lower — Volume Control and ON-OFF Switch

13. DIMENSIONS:

Chassis, Assembled (excluding shafts)
Length 10-3/4", Width 4-1/2", Height 5-1/2".
Cabinet, Overall (including knobs)
Length 11-1/4", Width 5-1/2", Height 6".

Bulletin RS-135 — April, 1951



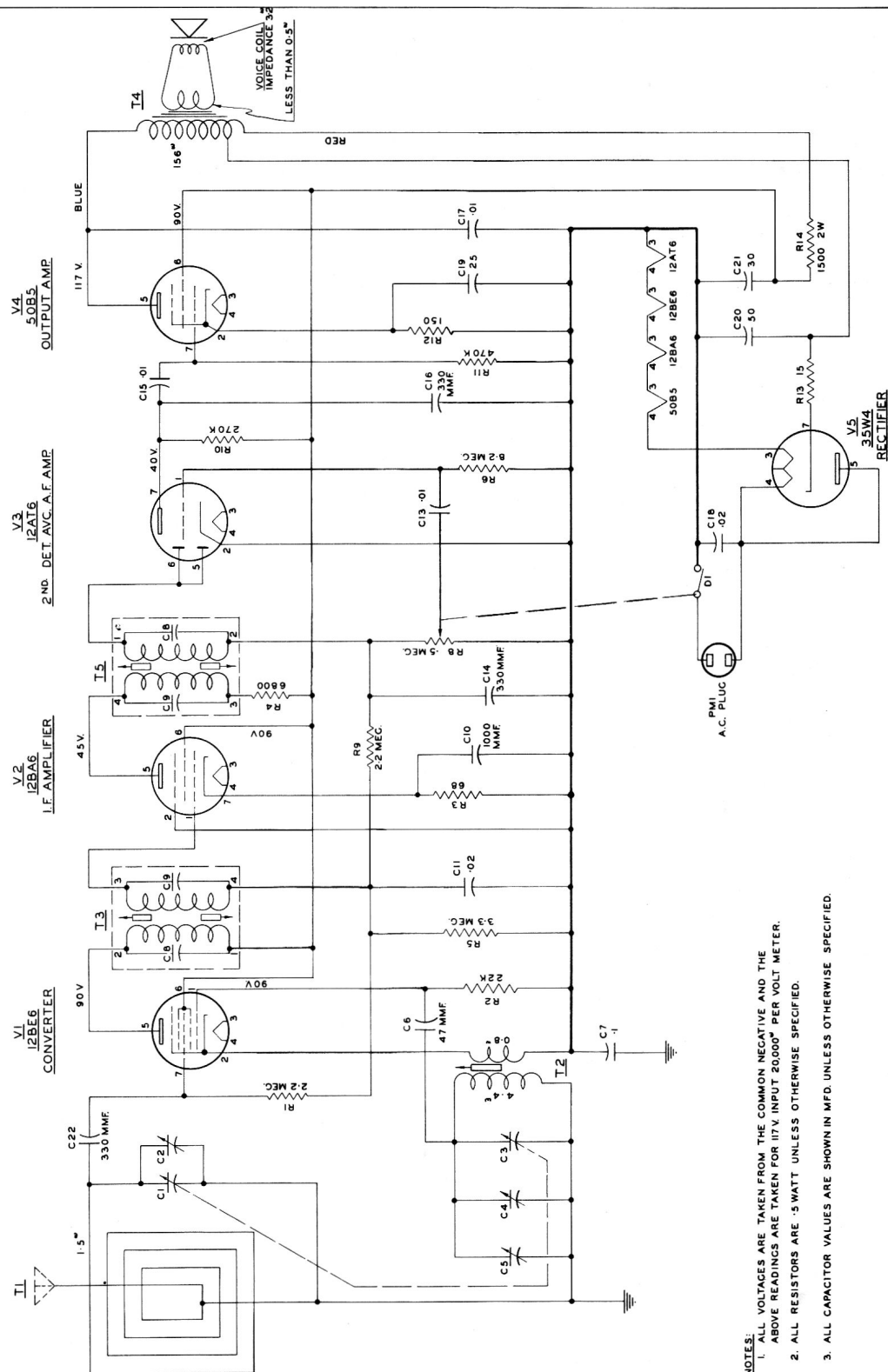
ALIGNMENT

Alignment procedure should be carried out according to the following table and in the order shown.

Alignment Frequency	Dummy Antenna	Receiver Connection	Items to be adjusted for max. output and their location
I.F. 455 kc	.1 uf	Rear Section of Gang	With gangs open (using a non-metallic alignment tool) adjust slugs in I.F. T5 then I.F. T3.
R.F. 600 kc	1000 ohm	Antenna Lead	Adjust tuning slug in oscillator coil T2.
R.F. 1400 kc	1000 ohm	Antenna Lead	Adjust trimmer C5 on front section of gang.
R.F. 600 kc	1000 ohm	Antenna Lead	Readjust tuning slug in oscillator coil T2.
R.F. 1400 kc	1000 ohm	Antenna Lead	Readjust trimmer C5 on front section of gang. Adjust trimmer C2 on rear section of gang.

Replacement Parts List

Item	Description	N.E. Part Number	Standard Replacement
C1	Capacitor, Variable R.F. Section 420 mmf _____ Part of	R 17356-3	Mallory FP 311
C2	Capacitor, Trimmer 17 mmf _____ Part of		
C3	Capacitor, Variable Osc. Section 162 mmf _____ Part of		
C4	Capacitor, Trimmer 17 mmf _____ Part of		
C5	Capacitor, Trimmer 17 mmf _____ Part of		
C6	Capacitor, Mica 47 mmf 500 V	R 17257-18	
C7	Capacitor, Paper .1 mf 600 V		
C8	Capacitor _____ Part of		
C9	Capacitor _____ Part of		
C10	Capacitor, Ceramic or mica 500 V 1000 mmf		
C11	Capacitor, Paper 600 V .02 mf		
C13	Capacitor, Paper 500 V .01 mf		
C14	Capacitor, Ceramic or mica 500 V 330 mmf		
C15	Capacitor, Paper 600 V .01 mf		
C16	Capacitor, Ceramic or mica 500 V 330 mmf		
C17	Capacitor, Paper 600 V .01 mf		
C18	Capacitor, Paper 600 V .02 mf		
C19	Capacitor, Electrolytic 25 V 20 mf _____		
C20	Capacitor, Electrolytic 150 V 30 mf _____		
C21	Capacitor, Electrolytic 150 V 50 mf _____		
C22	Capacitor, Ceramic or mica 500 V 330 mmf _____		
R1	Resistor 1/2 W. 2.2 meg.	R 17376-1	I.R.C. Type Q13-133 with Switch 76-1
R2	Resistor 1/2 W. 22000 ohms		
R3	Resistor 1/2 W. 68 ohms		
R4	Resistor 1/2 W. 6800 ohms		
R5	Resistor 1/2 W. 3.3 meg.		
R6	Resistor 1/2 W. 8.2 meg.		
R8	Resistor, Variable .5 meg. _____ Part of		
R9	Resistor 1/2 W. 2.2 meg.		
R10	Resistor 1/2 W. 270,000 ohms		
R11	Resistor 1/2 W. 470,000 ohms		
R12	Resistor 1/2 W. 150 ohms		
R13	Resistor 1/2 W. 15 ohms		
R14	Resistor 2 W. 1500 ohms		
T1	Loop Back Assembly _____ Part of	R 18514-23	
T2	Oscillator Coil _____ Part of	R 17357	
T3,T5	I.F. Transformer 455 kc _____ Part of	R 17257-18	
T4	Output Transformer Impedance Ratio 2500:3.2	R 18517	
LS1	Loudspeaker, 4" _____ Part of		
V1	12BE6 Tube		
V2	12BA6 Tube		
V3	12AT6 Tube		
V4	50B5 Tube		
V5	35W4 Tube		
D1	Switch, on-Off _____ Part of		R 8
	Knob Assembly, Tuning _____ Part of		R 17358-58
	Knob Volume _____ Part of		R 17358-52
	Dial Scale _____ Part of	R 18512	
	Cabinet, Brown _____ Part of	R 17358-32A	
	Cabinet, Ivory _____ Part of	R 17358-32B	
	Cabinet, Green _____ Part of	R 17358-32C	
	Cabinet, Blue _____ Part of	R 17358-32D	
	Cabinet, Red _____ Part of	R 17358-32E	
	Cabinet, Gold _____ Part of	R 17358-32F	
	Cabinet, White _____ Part of	R 17358-32G	



SCHEMATIC DIAGRAM MODEL 5508
A.C.-D.C. OPERATED RADIO RECEIVER

Northern Electric

COMPANY LIMITED

HALIFAX MONCTON QUEBEC CHICOUTIMI THREE RIVERS SHERBROOKE MONTREAL OTTAWA VAL D'OR
 KINGSTON TORONTO HAMILTON LONDON WINDSOR KIRKLAND LAKE TIMMINS SUDBURY
 FORT WILLIAM WINNIPEG REGINA LETHBRIDGE CALGARY EDMONTON VERNON VANCOUVER VICTORIA