

SERVICE BULLETIN



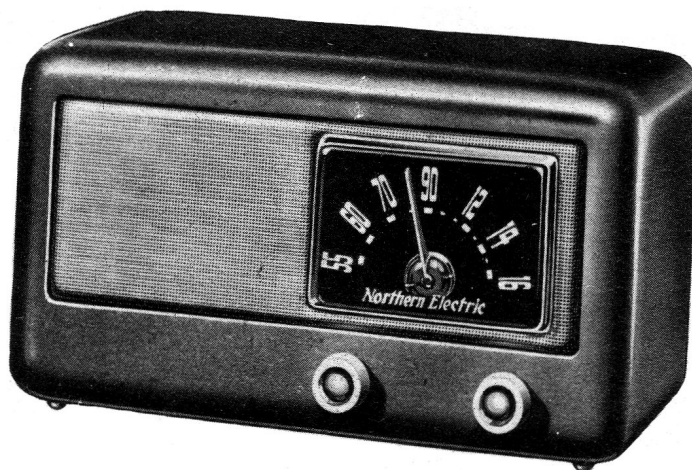
Northern Electric RADIO

MODEL 5200

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 six colours.

Sea Grass Green
Tortoise Brown
Delft Blue

Tusk Ivory
Desert Sand
Alpine Rose

FREQUENCY RANGE

Broadcast band--530 to 1600 KC

INTERMEDIATE FREQUENCY

455 K.C.

TUBES

Type	Function
12SA7	Converter
12SK7	I.F. Amplifier
12SQ7	Detector, A.V.C. and Audio Amplifier
50L6	Audio Output Amplifier
35Z5	Rectifier

A.V.C.

On 12SA7 Mixer and 12SK7 I.F. Amplifier

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

2.1 Watts

8. ANTENNA

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

9. GROUND

No ground is necessary for operation of this set.

10. AUDIO SYSTEM

Audio portion of 12SQ7 resistance -- capacity coupled to 50L6.

11. LOUDSPEAKER

5" Permanent Magnet

12. CONTROLS

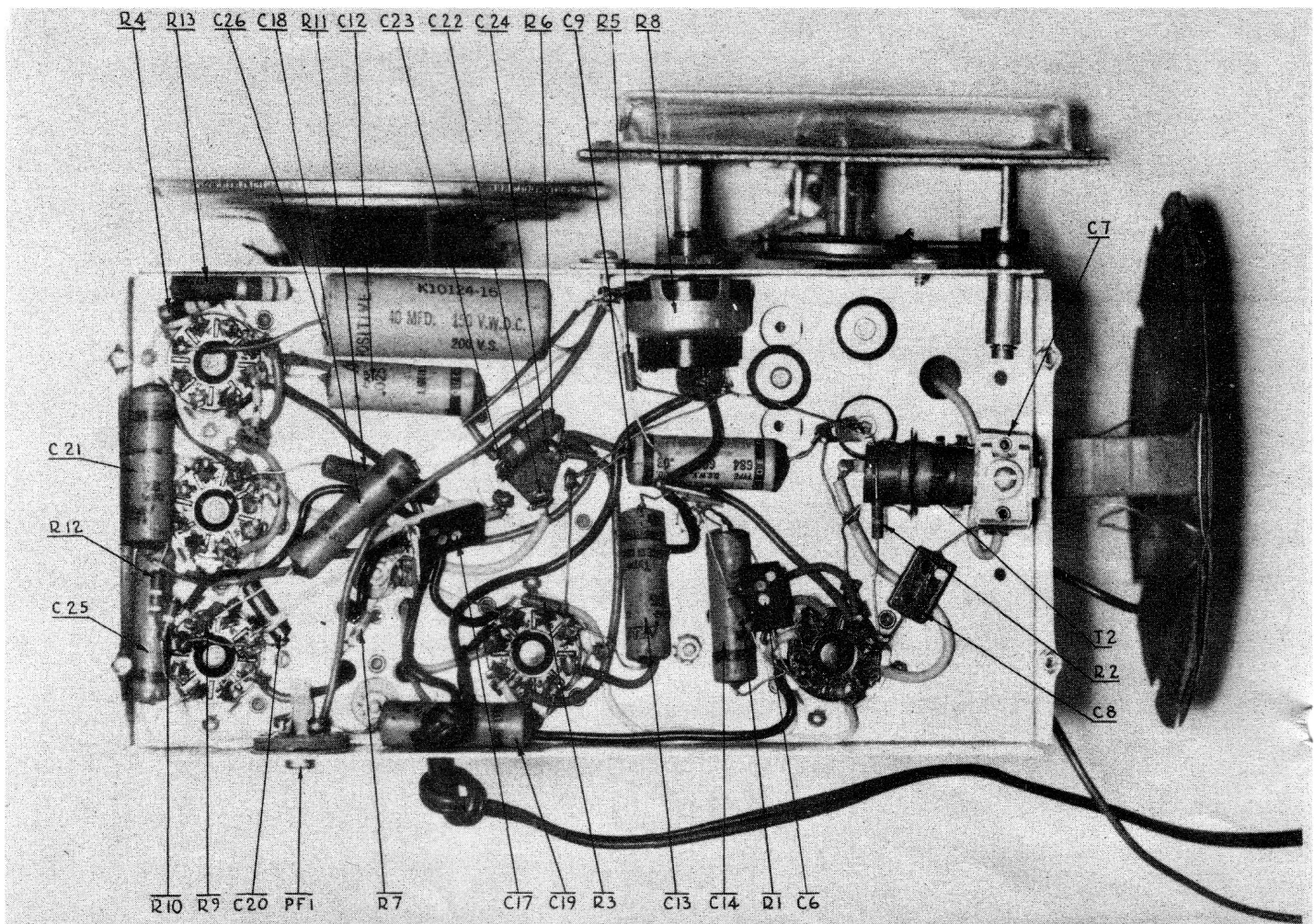
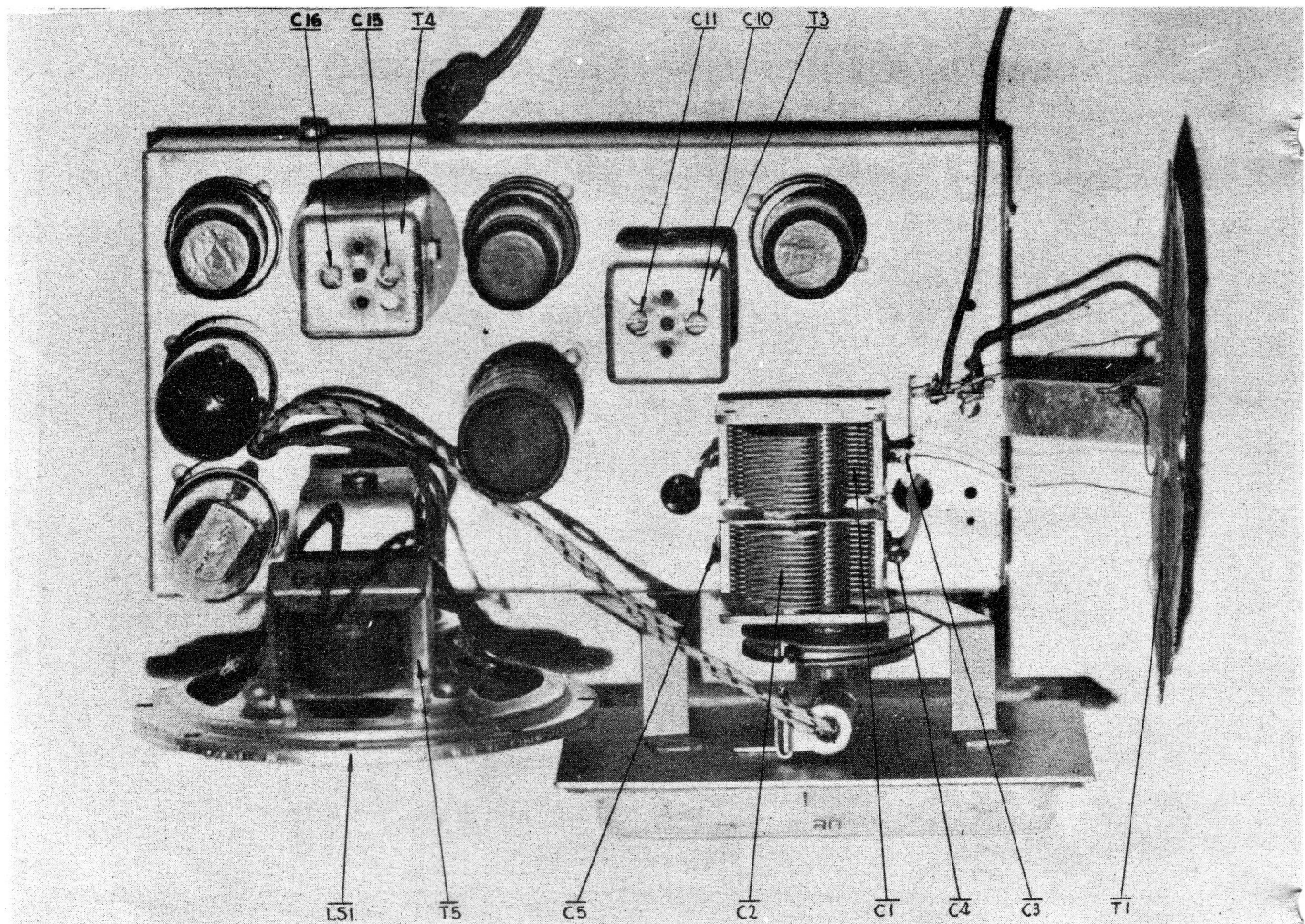
Left - Volume Control and ON-OFF Switch.
Right- Tuning Control.

13. DIMENSIONS

Chassis, Assembled (excluding shafts).

Length 11", Width 6 1/2"
Height 6 1/2"

Cabinet, Overall (including knobs)
Length 13", Width 7"
Height 7 1/2"



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 maximum output and their location.
I.F. 455 KC	.1 Mfd (Paper)	Antenna Section Gang	I.F. Trimmers, items C10, C11, C15 and C16 on I.F. Transformers (tuning gang open)
B.C. 1400 KC	100 Mmf (Mica)	Antenna Wire	(a) Oscillator trimmers on gang, C4 and C5 (b) Antenna trimmer on gang C3.
B.C. 600 KC	100 Mmf (Mica)	Antenna Wire	Oscillator lag trimmer C7 Recheck at 1400 KC.

Replacement Parts

Item	Description	Part No.	Item	Description	Part No.
C1	Antenna, 420 mmf, Part of	R17111	R10	Resistor, .22 meg, $\frac{1}{2}$ W	K10000C-224
C2	Oscillator, 420 mmf, Part of	R17111	R11	Resistor, 150 ohms, 1W	K10004B-151
C3	Trimmer Antenna, 1.5-20 mmf, Part of	R17111	R12	Resistor, .47 meg, $\frac{1}{2}$ W	K10000C-474
C4	Trimmer Oscillator, 1.5-20 mmf, Part of	R17111	R13	Resistor, 330 ohms, 1W	K10004C-331
C5	Trimmer Oscillator, 1.5-20 mmf, Part of	R17111	T1	Loop Assembly	R8234-23
C6	Capacitor, Mica, 390 mmf, 500V	K10134C-391	T2	Oscillator Coil	R18104
C7	Trimmer, 225-750 mmf, Part of	R13472	T3	1st I.F. Transformer	R17113
C8	Capacitor, Mica 51 mmf, 500V	K10134B-510	T4	2nd I.F. Transformer	R17103-2
C9	Capacitor, Paper .03 mfd, 600V	R17183	T5	Output Transformer	K3873-9
C10	Trimmer, 20-150 mmf, Part of T3		PL1	Pilot Light	K2589-3
C11	Trimmer, 20-150 mmf, Part of T3		V1	Tube, 12SA7	
C12	Capacitor, Paper .025 mfd, 600V,	K10128-253	V2	Tube, 12SK7	
C13	Capacitor, Paper, .05 mfd, 400V	K10129-503	V3	Tube, 12SQ7	
C14	Capacitor, Paper, .05 mfd, 400V	K10129-503	V4	Tube, 50L8GT	
C15	Trimmer, 20-150 mmf, Part of T4		V5	Tube, 35Z5GT	
C16	Trimmer, 20-150 mmf, Part of T4		D1	Switch, ON-OFF, Part of R8	
C17	Capacitor, Mica, 390 mmf, 500V	K10134C-391	PM1	A.C. Plug & Cord Assembly	K10319-1
C18	Capacitor, Paper, .01 mfd, 600V	K10128-103	D2	Phone Switch	
C19	Capacitor, Paper, .02 mfd, 600V	K10128-203	PF1	and Plug, Female	R17112
C20	Capacitor, Mica, 390 mmf, 500V	K10134C-391	LS1	Loudspeaker	R17242
C21	Capacitor, Paper, .02 mfd, 600V	K10128-203		Dial Plate	R8234-32
C22, C23, C24,	Capacitor, Electrolytic, 20-40-40, mfd			Dial Scale	R8234-25
	25V, 150V, 150V	R12730		Dial Indicator	R18334
C25	Capacitor, Paper, .01 mfd, 600V	K10128-103		Speaker Mtg. Block	R17109
C26	Capacitor, Electrolytic, 40mfd, 150V	K10124-16		Tuning Shaft	K10296-3
R1	Resistor, 1 meg, $\frac{1}{2}$ W	K10000C-105		Dial Cord	K10301
R2	Resistor, 22000 ohms, $\frac{1}{2}$ W	K10000C-223		Dial Spring	R13898
R3	Resistor, 2.2 meg, $\frac{1}{2}$ W	K10000C-225		Pilot Light Socket	K5517
R4	Resistor, 33 ohms, $\frac{1}{2}$ W	K10003C-330		Cabinet, Brown (See Note)	R16400-2
R5	Resistor, 2.2 meg, $\frac{1}{2}$ W	K10000C-225		Cabinet, Ivory	R17116-1
R6	Resistor, 2700 ohms, 1W	K10001C-272		Cabinet, Red	R17116-2
R7	Resistor, 4700 ohm, $\frac{1}{2}$ W	K10000C-473		Cabinet, Green	R17116-3
R8	Volume Control, .5 meg.	R17184-1		Cabinet, Blue	R17116-4
R9	Resistor, 3.3 meg, $\frac{1}{2}$ W	K10000C-335		Cabinet, Sand	R17116-5
				Knobs, Brown	R16037-1
				Knobs, Ivory	R16037-3

NOTE: - Baffle, & 1 Escutcheon are mounted on Spare Cabinets.

