

SERVICE BULLETIN



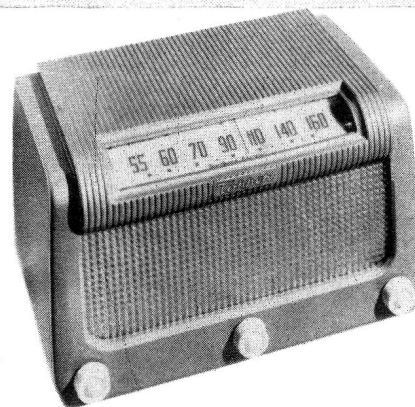
Northern Electric RADIO

Model 6302

6 Tube Mantel Model

AC Universal Superheterodyne

SERVICE INFORMATION



SPECIFICATIONS

GENERAL:

6 tube Superheterodyne A.C. Universal Radio Receiver housed in Mantel model moulded plastic cabinet available in four colors: Brown, Green, Sand and Ivory.

1. FREQUENCY RANGE:

Broadcast Band - 530 to 1600 KC.

2. INTERMEDIATE FREQUENCY

455 KC.

3. TUBES:

Type	Function
6BJ6	R.F. Amplifier
12BE6	Converter
6BJ6	I.F. Amplifier
6AQ6	Detector, AVC & Audio Amplifier
50B5	Audio Output Amplifier
35W4	Rectifier

4. A.V.C.

On type 6BJ6 R.F. Amplifier
12BE6 Converter
6BJ6 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.)

6. POWER CONSUMPTION:

35 watts

7. AUDIO POWER OUTPUT:

1.9 watts

8. ANTENNA:

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

9. GROUND:

Not required for operation of this set.

10. AUDIO SYSTEM:

Audio portion of 6AQ6 resistance-capacitance coupled to 50B5.

11. LOUDSPEAKER:

5-1/4" Permanent Magnet.

12. CONTROLS:

Left - Volume Control
Center - Tone Control & On-Off Switch
Right - Tuning Control

13. DIMENSIONS:

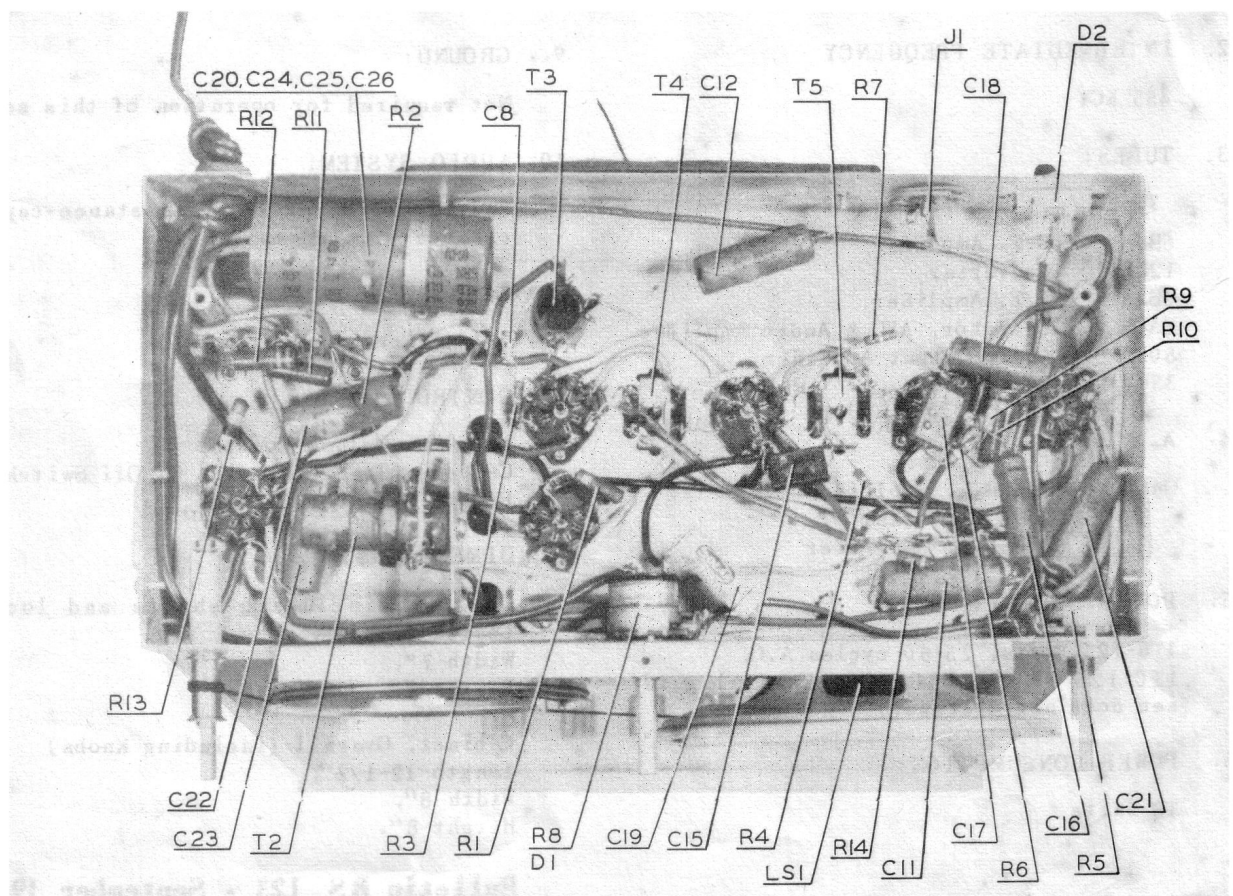
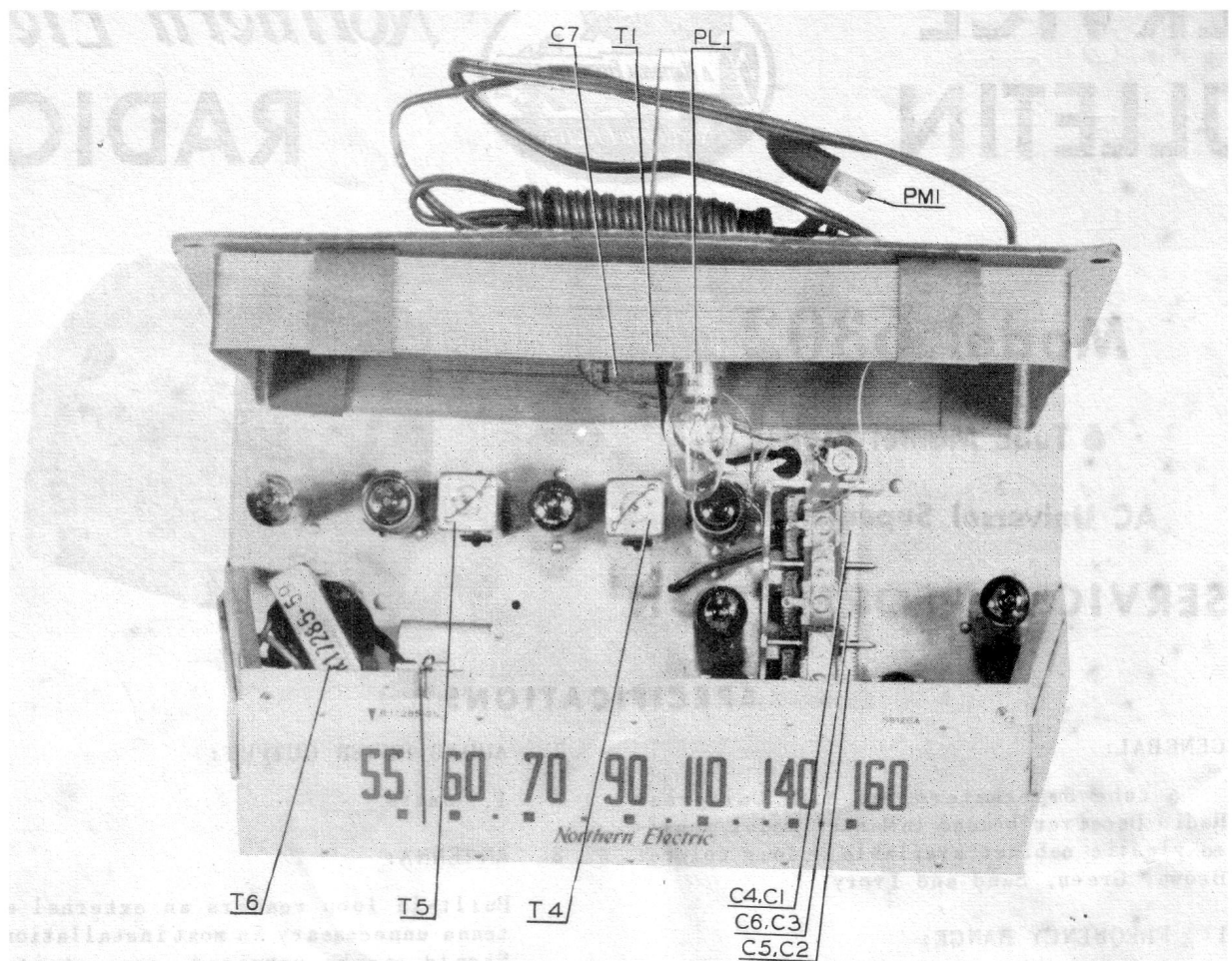
Chassis (including shafts and loop)
Length 11-3/4",
Width 7",
Height 7".

Cabinet, Overall (including Knobs)
Length 12-1/2",
Width 8",
Height 8".

Bulletin RS 123 - September 1949

Mailing Classifications 12.3 & 28.17

Price 25¢



ALIGNMENT

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

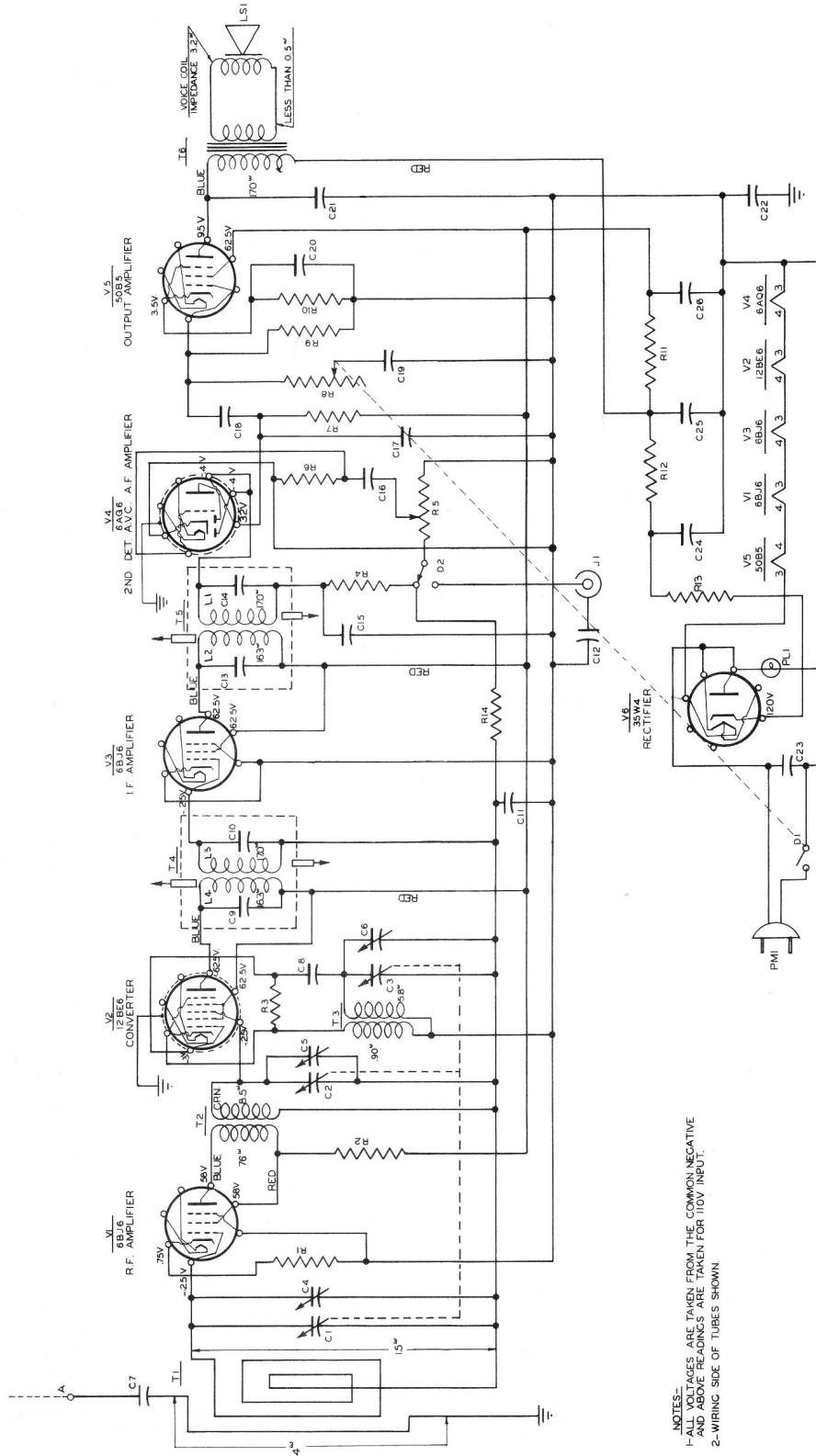
Align the pointer with gang fully closed on the calibration point at the left-hand side of the dial.

<i>Alignment Frequency</i>	<i>Dummy Antenna</i>	<i>Receiver Connection</i>	<i>Items to be adjusted for maximum output and their location.</i>
I.F. 455K C	.1 ufd (Paper)	R.F. Section Gang	Tuning slugs L1, L2, L3, L4 I.F. Transformers T5 and T4. Tuning gang fully open.
B.C. 1400 KC	1000 ohm	Antenna Lead	(a) Osc. Trimmer on gang C6. (b) R.F. Trimmer on gang C4. (c) Mixer Trimmer on Gang C5. Pointer set to 1400 KC on dial scale.

REPLACEMENT PARTS LIST

<i>Item</i>	<i>Description</i>	<i>Part No.</i>	<i>Item</i>	<i>Description</i>	<i>Part No.</i>
R1	Resistor, 220 ohm 1/2 W	K10003C-221	D1	Switch, part of	R17185-2
R2	Resistor, 1000 ohm 1/2 W	K10000C-102	T1	Loop Back Assembly	R17285-23
R3	Resistor, 22000 ohm 1/2 W	K10000C-223	T2	Transformer, R.F.	R17285-58
R4	Resistor, 47000 ohm 1/2 W	K10000C-473	T3	Coil, Oscillator	R17285-38
R5	Resistor, Variable 500000 ohm	R17185-1	T4	Transformer, I.F.	R17267-1
R6	Resistor, 3.9 meg. 1/2 W	K10000B-395	T5	Transformer I.F.	R17267-1
R7	Resistor, 220000 ohm 1/2 W	K10000C-224	T6	Transformer, Output	R17285-59
R8	Resistor, Variable 500000 ohm	R17185-2	V1	Tube, 6BJ6	
R9	Resistor, 470000 ohm 1/2 W	K10000C-474	V2	Tube, 12BE6	
R10	Resistor, 150 ohm 1 W	K10004A-151	V3	Tube, 6BJ6	
R11	Resistor, 2200 ohm 1 W	K10001C-222	V4	Tube, 6AQ6	
R12	Resistor, 330 ohm 1 W	K10001C-331	V5	Tube, 50B5	
R13	Resistor, 33 ohm 1/2 W	K10003C-330	V6	Tube, 35W4	
R14	Resistor, 2.7 meg. 1/2 W	K10000B-275		Socket, Wafer	K10405-2
C1	Capacitor, Tuning - R.F. 420 uuf	R17114		Clip, Miniature I.F.	R17306
C2	Capacitor, Tuning - Mix. 420 uuf	R17114	LS1	Loudspeaker	R17289-38
C3	Capacitor, Tuning - Osc. 162 uuf	R17114	PL1	Pilot Lamp 10W, 110V	R17124
C4	Capacitor, Trimmer 2-15 uuf Part of	R17114		Pulley Dial	K10215-1
C5	Capacitor, Trimmer 2-15 uuf Part of	R17114		Clip Retaining	K10216
C6	Capacitor, Trimmer 2-15 uuf Part of	R17114		Dial Cord	K10301
C7	Capacitor, Paper .007 uf 600 V	K10128-702	D2	Switch, Slide	R17326
C8	Capacitor, Ceramicon 47 uuf 500 V	K10397C-470		Spring, Dial	R17338-1
C9	Capacitor, Part of	R17267-1		Dial Rivetting Assembly	R17285-50
C10	Capacitor, Part of	R17267-1		Dial Indicator	R17330-1
C11	Capacitor, Paper .05 uf 400 V	K10129-503	U1	Socket, Phono	K5893-1
C12	Capacitor, Paper .02 uf 600 V	K10128-203		Mini-shield	R17311
C13	Capacitor, Part of	R17267-1		Knob-Assembly, Ivory	R14958-3
C14	Capacitor, Part of	R17267-1		Knob Assembly, Brown	R14958-1
C15	Capacitor, Mica 100 uuf 500 V	K10134C-101		Cabinet Assembly, Brown	R17285-31A
C16	Capacitor, Paper .01 uf 600 V	K10128-103		Cabinet Assembly, Green	R17285-31B
C17	Capacitor, Mica 470 uuf 500 V	K10134C-471		Cabinet Assembly, Sand	R17285-31C
C18	Capacitor, Paper .01 uf 600 V	K10128-103		Cabinet Assembly, Ivory	R17285-31D
C19	Capacitor, Paper .005 uf 600 V	K10128-502			
C20	Capacitor, Electrolytic 20 ufd 25 V Part of	R17285-39			
C21	Capacitor, Paper .02 uf 600 V	K10128-203	PM1	Shaft, Tuning Cord & Plug Assembly	R17336-1 K10319-31
C22	Capacitor, Paper .05 uf 400 V	K10129-503			
C23	Capacitor, Paper .02 uf 600 V	K10128-203			
C24	Capacitor, Electrolytic 40 ufd 150 V Part of	R17285-39			
C25	Capacitor, Electrolytic 40 ufd 150 V Part of	R17295-39			
C26	Capacitor, Electrolytic 40 ufd 150 V. Part of	R17285-39			

RI7285-1



NOTES:-
1- ALL VOLTAGES ARE TAKEN FROM THE COMMON NEGATIVE
AND ABOVE READINGS ARE TAKEN FOR 110V INPUT.
2- WIRING SIDE OF TUBES SHOWN.

SCHEMATIC DIAGRAM MODEL 6302 A.C. UNIVERSAL

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

