

# VIKING

RM 724

## SERVICE INFORMATION FOR MODEL

### 4 TUBE AM-FM MANTEL RADIO

For operation on 110-120 Volts A.C. Cycle as marked

When writing for Service Information and/or parts, please quote Model and Serial Number as found on the license label. Always order service parts by part number. Part numbers are positive identification which ensures fast service and correct replacement. When ordering installation items, please quote cabinet finish colour.

All information printed in this leaflet is up to date as of March 1965. Subsequent changes are covered by bulletin.

## SPECIFICATIONS

Standard Broadcast Range ..... 535 to 1650 Kc/s

Frequency Modulation Range ..... 88 to 108 Mc/s

Sensitivity - AM -.22 uv for 100 mv output at detector

FM - 10 uv for 20 db. quieting

I.F. Selectivity - AM - 11 Kc/s at 2X down

22 Kc/s at 10X down

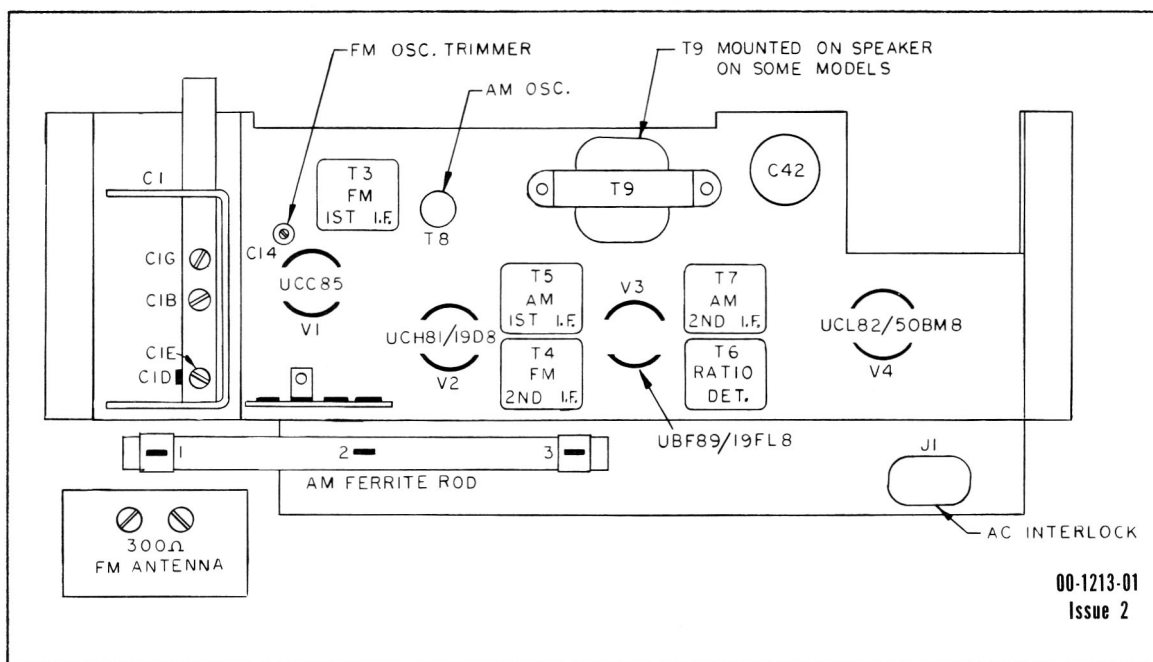
FM - 250 Kc/s at 10X down

I.F. Frequency - AM - 455 Kc/s

FM - 10.7 Mc/s

Power Output ..... 2 watts maximum

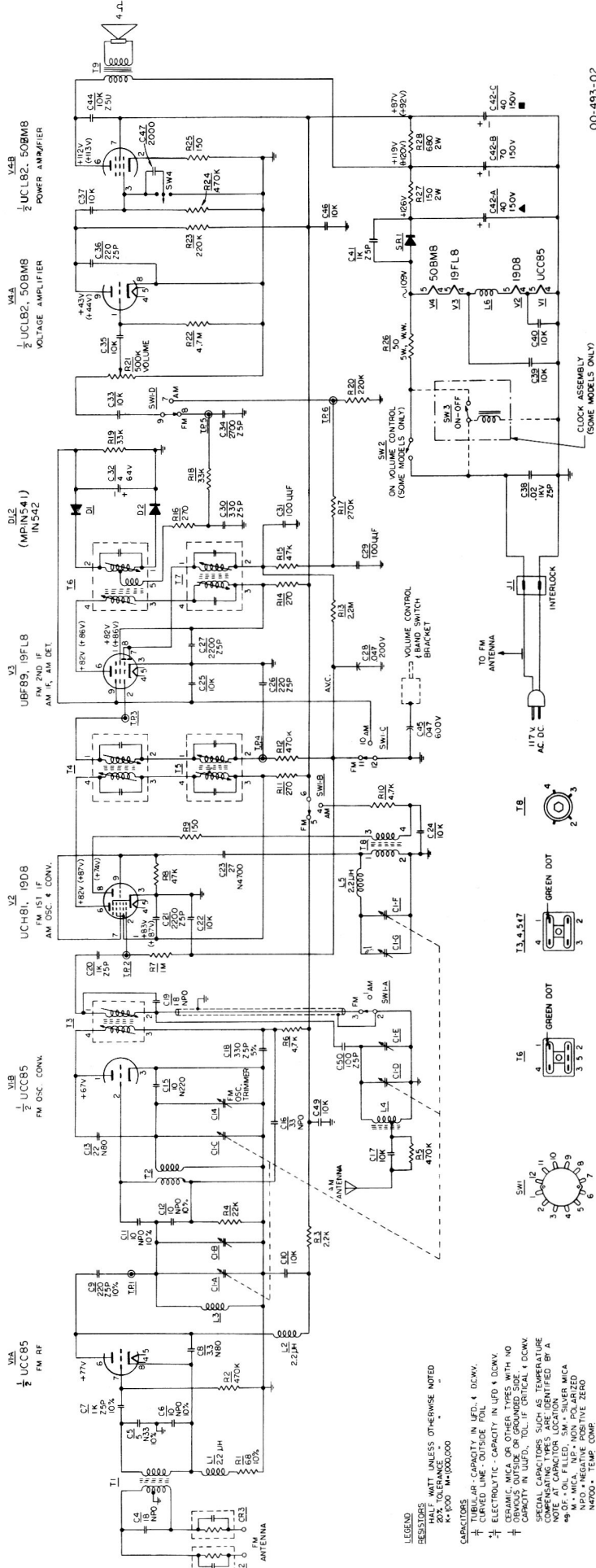
## CHASSIS LAYOUT



# EATON'S OF CANADA

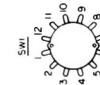
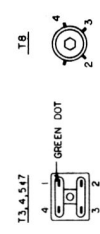


# AMPLIFIER SCHEMATIC



OO-493-02  
Issue 2

- LEGEND**
- RESISTORS: HALF WATT UNLESS OTHERWISE NOTED
  - 20% TOLERANCE
  - NPO - NIPERD5000
- CAPACITORS**
- CAP. - CAPACITY IN PFD. & DCWV.
  - CURVED LINE - OUTSIDE POL.
  - ELECTROLYTIC - CAPACITY IN UFD. & DCWV.
  - CERAMIC, MICA OR OTHER TYPES WITH NO CAPACITY OUTLINE.
  - POLYMER MICA OR OTHER TYPES WITH NO CAPACITY OUTLINE.
  - POLYMER MICA OR OTHER TYPES WITH NO CAPACITY OUTLINE.
- SPECIAL CAPACITORS SUCH AS TEMPERATURE COMPENSATING TYPES ARE IDENTIFIED BY A NOTE AT CAPACITOR LOCATION.**
- M - MICA, NP - NON POLARIZED
  - NPO - NEGATIVE POSITIVE ZERO
  - N4700 - TEMP. COMP.
- NOTES**
- VOLTAGES WITH RESPECT TO GROUND TAKEN WITH X-METER - NO SIGNAL
  - VOLTAGES IN BRACKETS TAKEN WITH SW1 IN AM POSITION
  - FOR ALIGNMENT INSTRUCTIONS SEE DRAWING NP-00-2079-01.



OO-493-02  
Issue 2

# AM-FM TUNER ALIGNMENT INSTRUCTIONS

STEP	SERIES DUMMY ANTENNA	SIGNAL APPLIED TO	FREQ.	MODULATION	BAND SWITCH SETTING	DIAL POINTER SETTING	INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	.05 uf	Point "TP3"	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "TP6"	T7 2nd AM-IF	Adjust for maximum output	5800 uv. for 100 Mv. output
2	.05 uf	Point "TP2"	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "TP6"	T5 1st AM-IF	Adjust for maximum output	82 uv. for 100 Mv. output
3	390 ohm	AM Ant. Term.	600 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "TP6"	T8 SLUG AM-Osc.	Adjust for Max. output.	64 uv. for 100 Mv. output
4	390 ohm	AM Ant. Term.	1400 Kc/s	400 C.P.S. AM at 30%	AM	1400 Kc/s	AC-VTVM To Point "TP6"	CIG and CIE Trimmers	Adjust for Max. output.	36 uv. for 100 Mv. output
5	Repeat steps 3 and 4, check band coverage at 535 Kc/s - 1650 Kc/s and for tracking at 950 Kc/s.									
6	-	Point "TP2"	10.7 Mc/s	-	FM	Point of no interference	DC-VTVM To Point "TP4"	T4 2nd. FM-IF	Adjust for maximum meter deflection	-
7	-	Point "TP1"	10.7 Mc/s	-	FM	Point of no interference	DC-VTVM To Point "TP4"	T3 1st. FM-IF	Adjust for maximum meter deflection	-
8	-	Point "TP2"	10.7 Mc/s	-	FM	Point of no interference	DC-VTVM To Point "TP5"	T6 Primary Bottom Wdg.	Adjust for maximum meter deflection	-
9	-	Point "TP2"	10.7 Mc/s	-	FM	Point of no interference	DC-VTVM To Point "TP5"	T6 Secondary Top Wdg.	Adjust for zero voltage	-
10	Note 1	FM-Ant. Term.	90 Mc/s	22.5 Kc/s Dev. 400 C.P.S.	FM	90 Mc/s	AC-VTVM To Point "TP5"	L3 and T2 FM-RF and Osc. Coils	Adjust turn spacing for maximum output	70 uv. for 100 Mv.
11	Note 1	FM-Ant. Term.	106 Mc/s	22.5 Kc/s Dev. 400 C.P.S.	FM	106 Mc/s	AC-VTVM To Point "TP5"	C14 and C1B trimmers	Adjust for maximum output	110 uv. for 100 Mv.
12	Repeat steps 10 and 11 and check for 20 db. quieting sensitivity.									

**NOTES:**

- For FM Dummy antenna connect one 150 ohm carbon resistor from grounded side of sig. gen. to ant. term. and one 120 ohm carbon resistor from hot side of sig. gen. to ant. term.
- With ground lead of DC-VTVM connected to junction of two 100K ohm resistors, which are to be connected across C32 4 uf capacitor.
- The chassis is directly connected to the AC line, and isolation transformer must be used for alignment and testing.

# SERVICE REPLACEMENT PARTS LIST

## FINAL ASSEMBLY

Part No.	Description
19-40017-16	Speaker - 4" PM - 4 ohm VC
30-355-01	Speaker Grille
30-356-01	Control Trim Strip
53-868-03	Indicator Disk
53-877-01	Trim Strip
53-820-04	Knob - Off-volume
53-617-02	Lever - AM - FM
30-357-01	Control Panel Inlay
53-821-05	Knob - Tuning

## CHASSIS ASSEMBLY

Symbol	Part No.	Description
D1, D2	14-510-01	Diode - 1N542
L6	21-300-01	Heater Choke
T8	21-421-01	BC Oscillator Coil
T5, T7	21-432-02	AM IF Transformer - 1st and 2nd
T4	21-433-02	FM IF Transformer - 2nd
T3	21-433-05	FM IF Transformer - 1st
L1, L2, L5	21-439-02	RF Choke - 2.2 uh
T2	21-445-01	FM Feedback Coil
T1	21-471-01	FM Antenna Matching Transformer
T2	21-476-01	FM Oscillator Coil
L3	21-477-01	FM RF Coil
T6	21-485-01	Ratio Detector
SR1	28-6-01	Silicon Rectifier
R21, SW1, SW2	41-224-16	Control - Volume (500K) AC and Band Switch
R26	42-21-88	Resistor - Power - 5W - 50 ohm $\pm$ 20%
C32	44-205-04	Electrolytic - 4 uf 64 V
C42	44-203-04	Electrolytic - 40, 40, 40 ufd 150 V
C14	45-36-01	FM Trimmer
C1	45-52-09	AM-FM Gang Condenser
CR2, CR3	49-5-01	Capristor
L4	51-40-01	Rod Loop Antenna
T9	24-80074-02	Audio Output Transformer - 4 ohm VC
	26-2-17	Slider Switch