

VIKING SERVICE INFORMATION FOR MODELS

RCS-629
RCS-630
RCS-631
RCS-632

7 TUBE AM-FM RADIO PHONOGRAPH

FOR OPERATION ON 110-120V. A.C., CYCLE AS MARKED

When writing for Service Information or Parts, please quote Model Number, Serial Number, Cycle and Finish of Cabinet. Information in this leaflet is up to date as of August 20, 1963: Subsequent changes covered by bulletin.

SPECIFICATIONS

AM-FM TUNER

Standard Broadcast Range - 535 to 1650 Kc.

Frequency Modulation Range - 88 to 109 Mc.

I.F. FREQUENCY

AM - 455 Kc.

FM - 10.7 Mc.

SENSITIVITY

AM- 20 μ v. for 100 mv. at Detector

FM - 18 μ v. for 100 mv. at Detector

SELECTIVITY

AM- 18 Kc. Bandwidth at 10X down

FM - 250 Kc. Bandwidth at 2X down

AMPLIFIER

Frequency Response - 100 cps to 15,000 cps at Phono Input \pm 3 db.

Music Power Output - 3 W per channel \pm 1 db.

Peak Power Output - 6 W \pm 1 db.

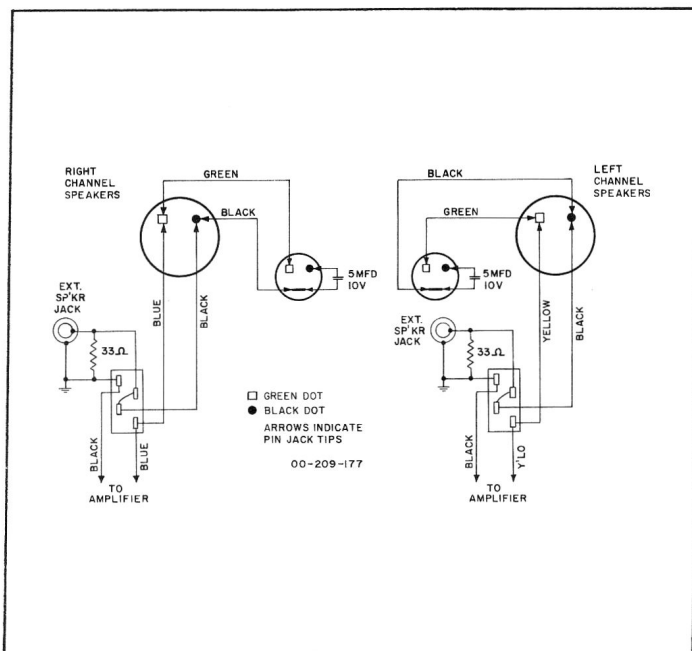
Measurements with tone controls in flat position, level and balance controls fully clockwise.

Level Balance Control..... Designed to provide 12 db. lift at 100 cps when control is 60° removed from CCW position with reference to response at 1000 cps.

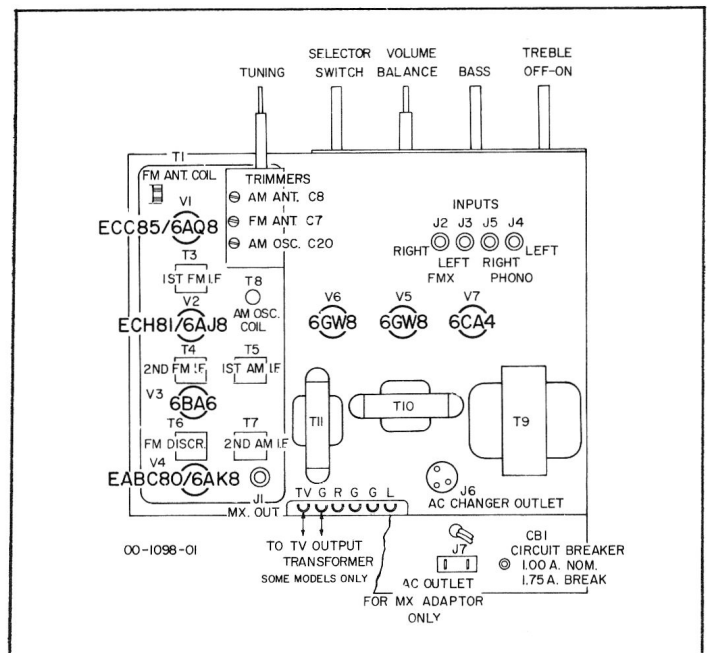
Bass Tone Control Dual Element..... Designed to provide 12 db. cut at 100 cps. Covers sound spectrum from 20 - 1000 cps.

Treble Tone Control Dual Element..... Designed to provide 15 db. cut at 10,000 cps. Covers sound spectrum from 1000 - 15,000 cps.

SPEAKER CONNECTIONS

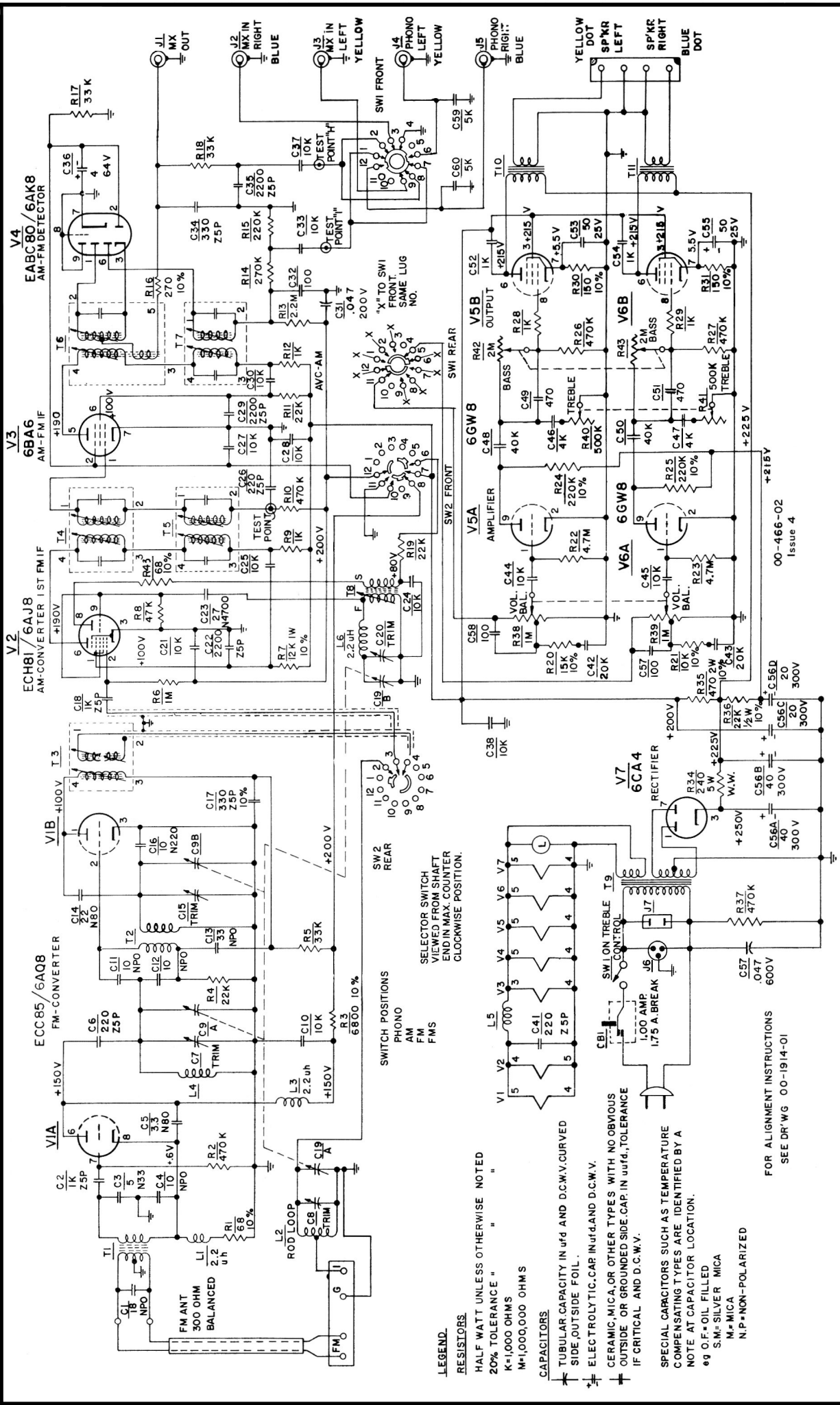


TUBE LAYOUT



EATON'S OF CANADA

AM-FM TUNER & AMPLIFIER



LEGEND.

RESISTORS

- HALF WATT UNLESS OTHERWISE NOTED
- 20% TOLERANCE "
- K=1,000 OHMS
- M=1,000,000 OHMS

CAPACITORS

- TUBULAR CAPACITY IN μ F AND D.C.W.V. CURVED SIDE, OUTSIDE FOIL.
- ELECTROLYTIC CAP IN μ F AND D.C.W.V.
- CERAMIC, MICA, OR OTHER TYPES WITH NO OBVIOUS OUTSIDE OR GROUNDED SIDE, CAP IN μ F, TOLERANCE IF CRITICAL AND D.C.W.V.

- SPECIAL CAPACITORS SUCH AS TEMPERATURE COMPENSATING TYPES ARE IDENTIFIED BY A NOTE AT CAPACITOR LOCATION.
- eg O.F.-OIL FILLED
- S.M.=SILVER MICA
- M.=MICA
- N.P.=NON-POLARIZED

FOR ALIGNMENT INSTRUCTIONS
SEE DR'WG 00-1914-01

00-466-02
Issue 4

AM-FM TUNER ALIGNMENT

STEP	SERIES DUMMY ANTENNA	SIGNAL APPLIED TO	FREQ.	MODULATION	BAND SWITCH SETTING	DIAL POINTER SETTING	INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	.05 uf	Pin #1 V3 6BA6	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "H"	T7 2nd AM-IF	Adjust for maximum output	2500 uv. for 40 Mv. output
2	.05 uf	Pin #2 V2 6AJ8	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "H"	T5 1st AM-IF	Adjust for maximum output	25 uv. for 40 Mv. output
3	47 uuf	AM Ant. Term. Strip #1	600 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "H"	T8 SLUG AM-Osc.	Adjust for Max. output.	-
4	47 uuf.	AM Ant. Term. Strip #1	1400 Kc/s	400 C.P.S. AM at 30%	AM	1400 Kc/s	AC-VTVM To Point "H"	C20 and C8 Trimmers	Adjust for Max. 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	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point of no Inter- ference	DC-VTVM Pin #2 T5	T4 2nd. FM-IF	Adjust for maximum meter deflection	-
7	-	C9A FM Gang	10.7 Mc/s	-	FM	Point of no Inter- ference	DC-VTVM Pin #2 T5	T3 1st. FM-IF	Adjust for maximum meter deflection	-
8	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point of no Inter- ference	DC-VTM Junction R16 & C34	T6 Primary Bottom Wdg.	Adjust for maximum meter deflection	-
9	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point of no Inter- ference	DC-VTM Junction R16 & C34 Note-2	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 "H"	L4 and T2 FM-RF and Osc. Coils	Adjust for maximum output	40 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 "H"	C7 and C15 trimmers	Adjust for maximum output	50 uv. for 100 Mv.
12	Repeat steps 10 and 11 and check for 20 db. quieting sensitivity.									

NOTES:

1. For FM Dummy antenna connect one 150 ohms 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.

2. With ground lead of DC-VTVM connected to junction of two 100K ohm resistors, which are to be connected across C36.

SERVICE REPLACEMENT PARTS LIST

RCS-629, RCS-630, RCS-631, RCS-632

FINAL ASSEMBLY

Part No.	Description
16-120047-01	45 R.P.M. Inserts
19-40015-02	Speaker 4" P.M. - 8 ohm V.C.
19-80007-03	Speaker - 8" P.M. - 8 ohm V.C.
27-7-03	Pilot Lamp 12V .12A # 1892
30-278-01	Control Panel
53-617-04	Knob - Pointer - Level Balance
53-699-03	Knob - Level Balance
53-699-02	Knob - Selector, Treble, Bass
53-699-04	Knob - Tuning
53-547-04	Knob - Tuning Indicator

AMPLIFIER CHASSIS ASSEMBLY

Symbol	Part No.	Description
T9	24-10034-01	Power Transformer - 50/60 cycle
T9	24-20034-01	Power Transformer - 25 cycle (25 cycle models only)
T10,T11	24-80035-04	Output Transformer - 8 ohm V.C.
CB1	26-65-02	Circuit Breaker - 1.75 Amp
SW2	26-106-01	Selector Switch
R38,39	41-122-07	Control - Dual - Level Balance - 1 meg
R42,R43	41-121-07	Control - Dual - Bass - 2 meg
R40,R41,SW1	41-120-08	Control - Dual - Treble, with off-on switch
R34	42-21-68	Resistor - W.W. - 240 ohm \pm 10% 5W
C53,55	44-40-04	Electrolytic - 50 ufd x 25V
C56	44-71-01	Electrolytic - 40,40,80,40 ufd x 350V

TUNER PLATTER CHASSIS ASSEMBLY

Symbol	Part No.	Description
L5	21-300-01	Heater Choke
T8	21-421-01	BC Oscillator Coil
T5,T7	21-432-02	AM IF Transformer - first and second
T4	21-433-02	FM IF Transformer - second
T3	21-433-05	FM IF Transformer - first
L1,L3,L6	21-439-02	RF Choke 2.2 uh
T2	21-445-01	FM Feedback Coil
T2	21-476-01	FM Oscillator Coil
L4	21-477-01	FM RF Coil
T1	21-471-01	FM Antenna Matching Transformer
	21-485-01	Ratio Detector
C36	44-88-01	Electrolytic - 4 ufd x 64V
C15	45-36-01	FM Trimmer
	45-52-03	AM-FM Gang Condenser
L6	51-40-01	Rod Antenna and Bracket Assembly

CHANGER ASSEMBLY

Part No.	Description
16-90024-09	Garrard Autoslim Changer
16-250017-09	Astatic 86TSB Cartridge
16-220002-03	Phono Motor Alliance - 25 cycle (25 cycle models only)
16-120028-02	78 Replacement Stylus - Astatic N8-3S
16-120028-03	LP Replacement Stylus - Astatic N7-7S