

# VIKING SERVICE INFORMATION FOR MODELS

RCS-603

RCS-602

## 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.

### 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 uv. for 100 mv. at Detector

FM - 18 uv. 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 at Phono Input  $\pm$  3 db.

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

Peak Power Output - 6 W  $\pm$  1 db.

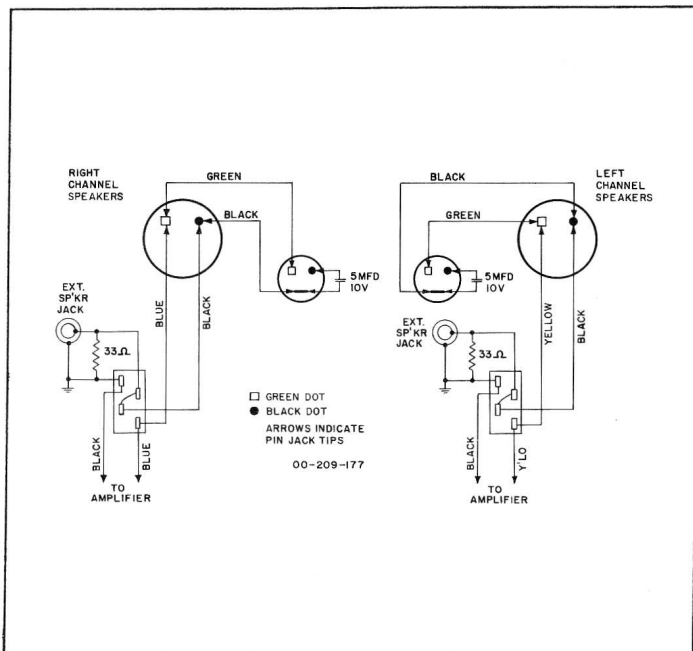
Measurements with tone controls in flat position, level and balance controls fully clockwise.

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

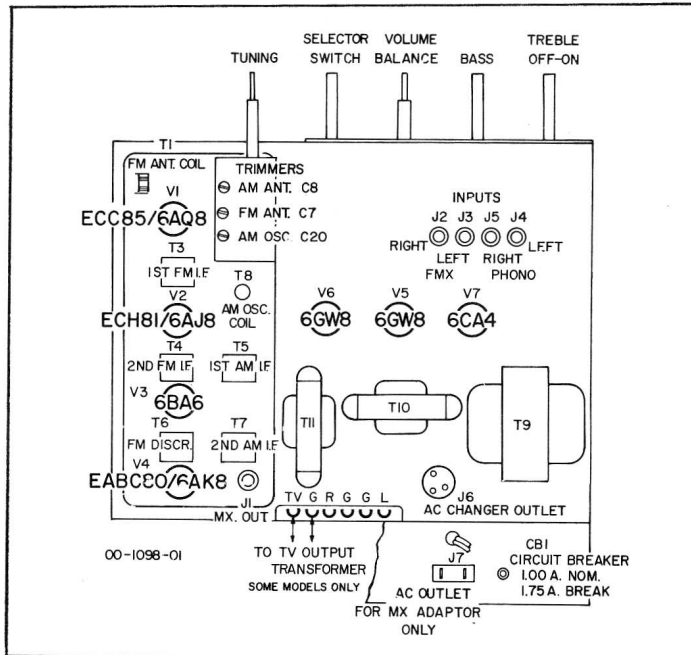
**Bass Tone Control Dual Element.....** Designed to provide 12 db. cut at 100 cps. Covers sound spectrum from 20 - 1000 cps.

**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

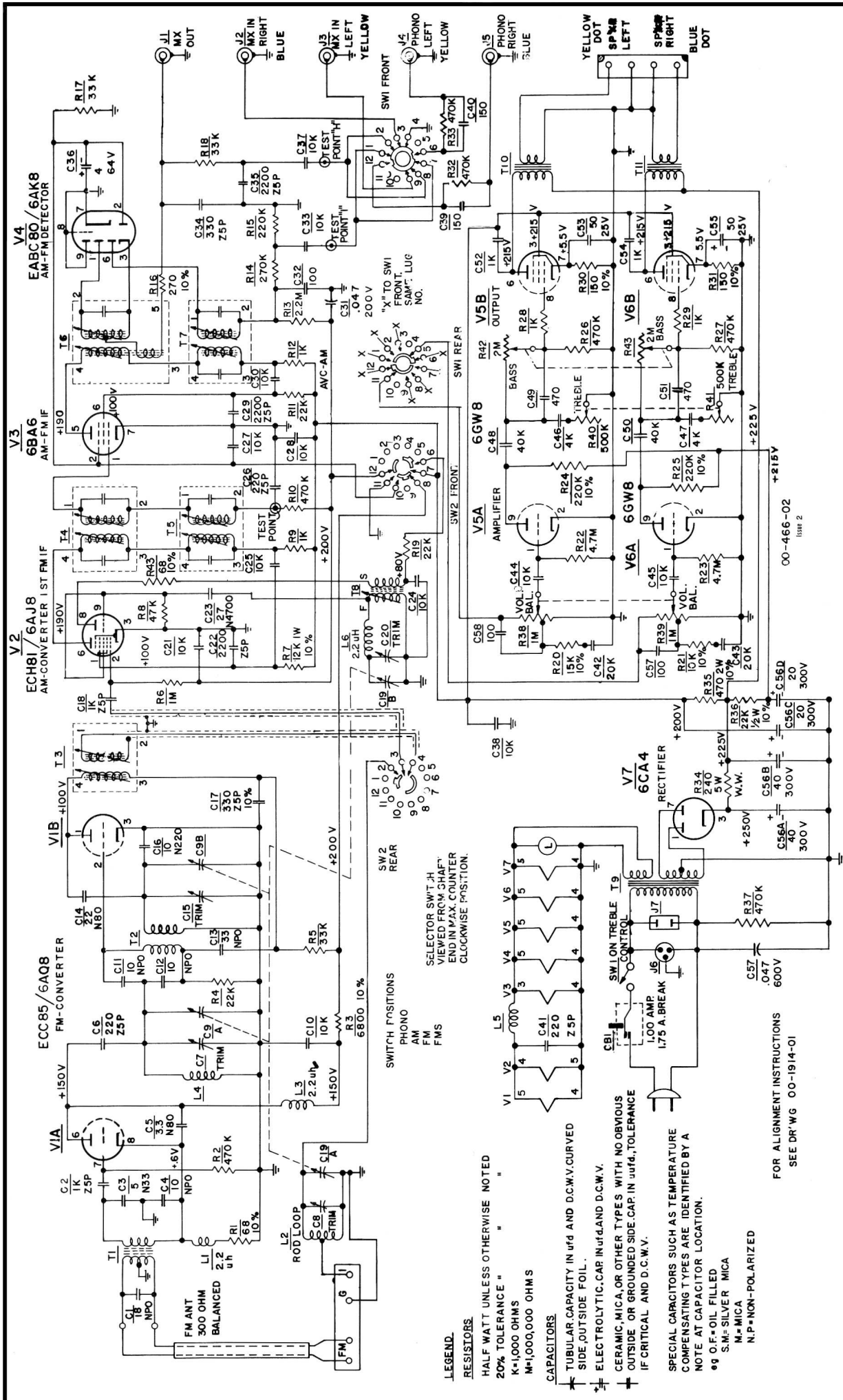


### TUBE LAYOUT



**THE T. EATON CO. LIMITED**  
CANADA

# AM-FM TUNER & AMPLIFIER



# 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-VTVM 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-VTVM 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-602, 603

### FINAL ASSEMBLY

Part No.	Description
16-120047-01	45 R.P.M. Inserts
19-40015-02	Speaker - 4½" P.M. 8 ohm VC
19-80007-03	Speaker - 8" P.M. - 8 ohm VC
26-2-06	Slider Switch SPTT
27-7-03	Pilot Lamp 12V .12A No. 1892
30-234-03	Control Panel
53-433-03	Switch Knob - Level Balance
53-496-01	Knob - Volume Balance
53-496-02	Knob - Selector, Treble, Bass
53-424-10	Knob - Tuning
53-547-03	Knob - Tuning Indicator

### AMPLIFIER CHASSIS ASSEMBLY

Symbol	Part No.	Description
T9	24-20034-01	Power Transformer (25 cycle models only)
T9	24-10034-01	Power Transformer 50/60 cycle
T10,11	24-80035-04	Output Transformer 8 ohm VC
CB1	26-65-02	Circuit Breaker 1.75A
SW2	26-106-01	Selector Switch
R38,39	41-122-07	Control - Dual - Level Balance - 1 meg
R42,43	41-121-07	Control - Dual Bass - 2 meg
R40,41,SW1	41-120-08	Control - Dual Treble with Off-On Switch
R34	42-21-68	Resistor - W.W., 5W 240 ohm ± 10%
C53,55	44-40-04	Electrolytic - Single Tubular 50 ufd x 25V
C56	44-71-01	Electrolytic - Quadruple - Can 40,40,80,40 ufd x 350V

### TUNER PLATTER 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 - 1st and 2nd
T4	21-433-02	FM IF Transformer - 2nd
T3	21-433-05	FM IF Transformer - 1st
L1,3,6	21-439-02	RF Choke 2.2 uh
T6	21-441-01	Ratio Detector
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
C36	44-88-01	Electrolytic - Single Tubular 4 ufd x 64V
C15	45-36-01	FM Trimmer
C9,C19	45-52-03	AM FM Gang Condenser

### CHANGER ASSEMBLY

Part No.	Description
16-120050-02	50 cycle Hub (50 cycle models only)
16-90024-05	Garrard Autoslim Changer
16-220002-03	25 cycle Motor Alliance
16-120028-02	78 Replacement Stylus - Astatic N8-3S
16-120028-04	LP Replacement Stylus - Astatic N7-7S
16-250017-09	Astatic 86TSB Cartridge