VIKING Service Information for Models

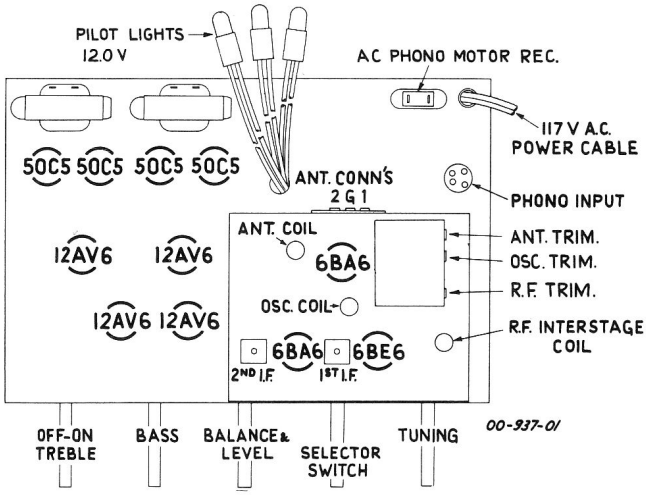
RCS-406
RCS-407
RCS-413
RCS-414

For Operation on 110-120 Volts A.C. Cycle as Marked.

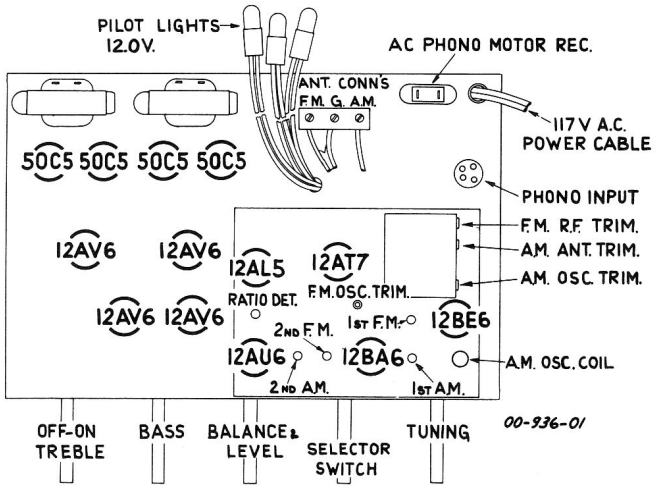
When writing for Service Information or Parts please quote Model Number, Serial Number and finish of cabinet.

ALL INFORMATION PRINTED IN THIS LEAFLET IS UP TO DATE AS OF JUNE 25/59. SUBSEQUENT CHANGES ARE COVERED BY BULLETIN.

CHASSIS LAYOUTS

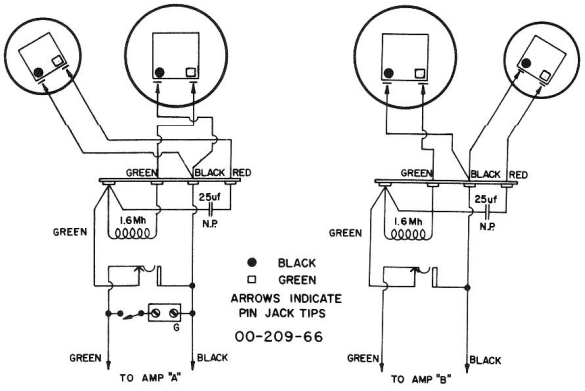


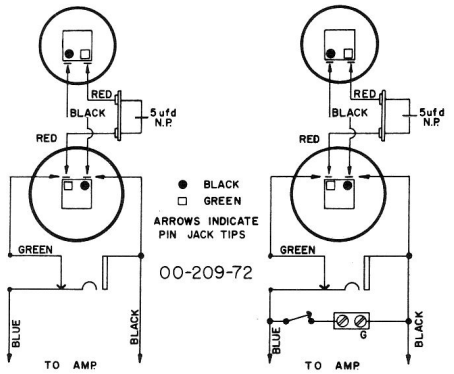
RCS-406, 413



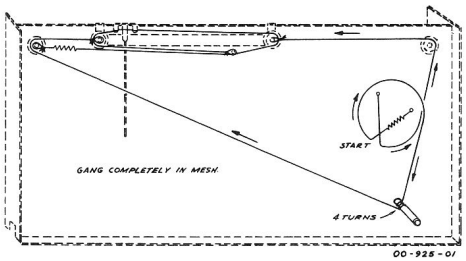
RCS-407, 414

SPEAKER CONNECTIONS





STRINGING DETAIL



SPECIFICATIONS

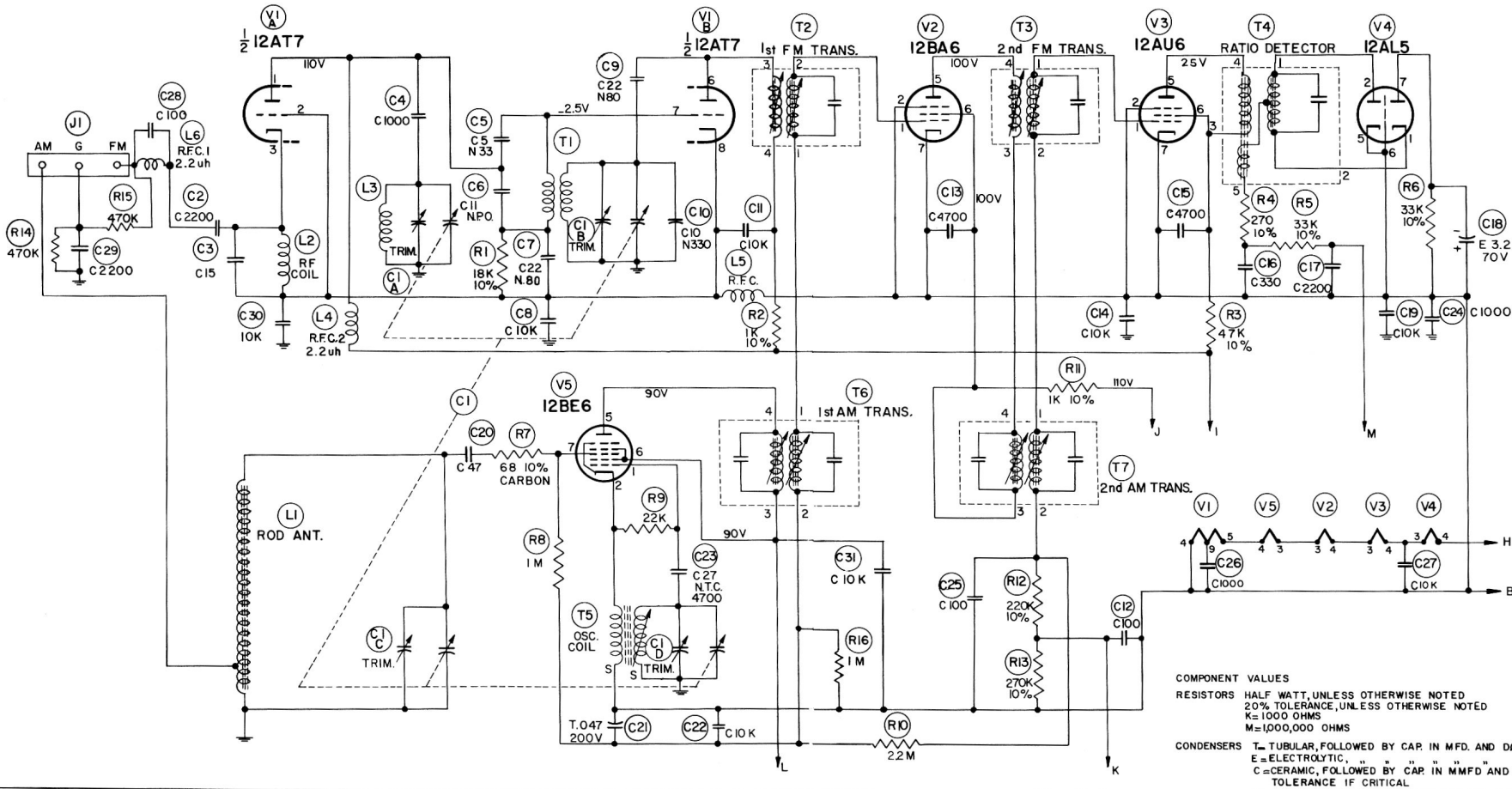
AM AND AM - FM TUNER

Standard Broadcast Range — 535 to 1605 Kc.
(Frequency Modulation Range — 88 to 108 Mc.)
I.F. Frequency AM — 455 Kc.
FM — 10.7 Mc.
Sensitivity AM 30 uv. for 100 mv. at Detector.
FM 5 uv. for 20 db. Quieting.

AMPLIFIER—Selector (Specifications per channel)
Frequency Response—50 cps. to 15,000 cps.
Peak Power Output — 3 watts.

THE T. EATON Co LIMITED
CANADA

AM-FM TUNER – RCS-407, 414



COMPONENT VALUES

RESISTORS HALF WATT, UNLESS OTHERWISE NOTED
20% TOLERANCE, UNLESS OTHERWISE NOTED
K = 1000 OHMS
M = 1,000,000 OHMS

CONDENSERS T = TUBULAR, FOLLOWED BY CAP. IN MFD. AND D.C.W.V.
E = ELECTROLYTIC, " " " " " " "
C = CERAMIC, FOLLOWED BY CAP. IN MMFD AND TOLERANCE IF CRITICAL
M = MICA, FOLLOWED CAP. IN MMFD. AND TOL. IF CRITICAL

00-440-01

ALIGNMENT AND SENSITIVITY SIGNAL GENERATOR MODULATED 30% AT 400 CYCLES

STEP	SIGNAL APPLIED TO	FREQUENCY	BAND SWITCH SETTING	DIAL POINTER SETTING	OUTPUT INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	PIN *1 – 12BE6 .05uf DUMMY	455 KC/S 30% AT 400~	AM	GANG OPEN	AC V.T.V.M. AM DET. LOAD	AM. IF 1st AND 2nd	ADJUST FOR MAX. DEFLECTION	100 uv FOR 100 MV **
2	AM ANT. TERMINAL 400 OHM DUMMY	1460 KC/S 30% AT 400~	AM	1460 KC/S	"	AM OSC AND ANT. TRIM.	"	25 uv FOR 100 MV **
3	"	600 KC/S 30% AT 400~	AM	600 KC/S	"	AM OSC COIL	"	45uv FOR 100 MV **
4	FM ANT: TERMINAL	10.7 MC/S C.W.	FM	POINT OF NO INTERFERENCE	DC V.T.V.M. AM DET. LOAD	AM IF 1st AND 2nd	"	—
5	"	"	FM	"	DC V.T.V.M. PIN *7 12AL5	RATIO DET. PRIMARY	"	—
6	"	"	FM	"	* SEE BELOW	RATIO DET. SECONDARY	ADJUST FOR ZERO BETWEEN POS. AND NEG. READING	—
7	FM ANT. TERMINAL 270 OHM DUMMY	90 MC/S 400~ AT 75 KC/S DIV.	FM	90 MC/S	AC V.T.V.M. FM DET. OUTPUT	FM. RF AND OSC. COIL	ADJUST FOR MAX. DEFLECTION	30uv FOR 100 MV **
8	"	106 MC/S 400~ AT 75 KC/S	FM	106 MC/S	"	FM. RF AND OSC. COIL	"	"

*CONNECT HIGHSIDE OF DC. VTVM TO FM DET. OUTPUT AND LOW SIDE TO JUNCTION OF TWO 100K Ω RESISTORS CONNECTED IN SERIES ACROSS RATIO DET. STABILIZING CAPACITOR
**AT DETECTOR LOAD

CN NO	DATE	CHANGE	CHK
		C2 CONDENSOR DESIGNATION ADDED	
59/612	7/1/59	ADDED R16, R12 & R13 CHANGED TO 270K	

MODEL FIGURE ENCORE

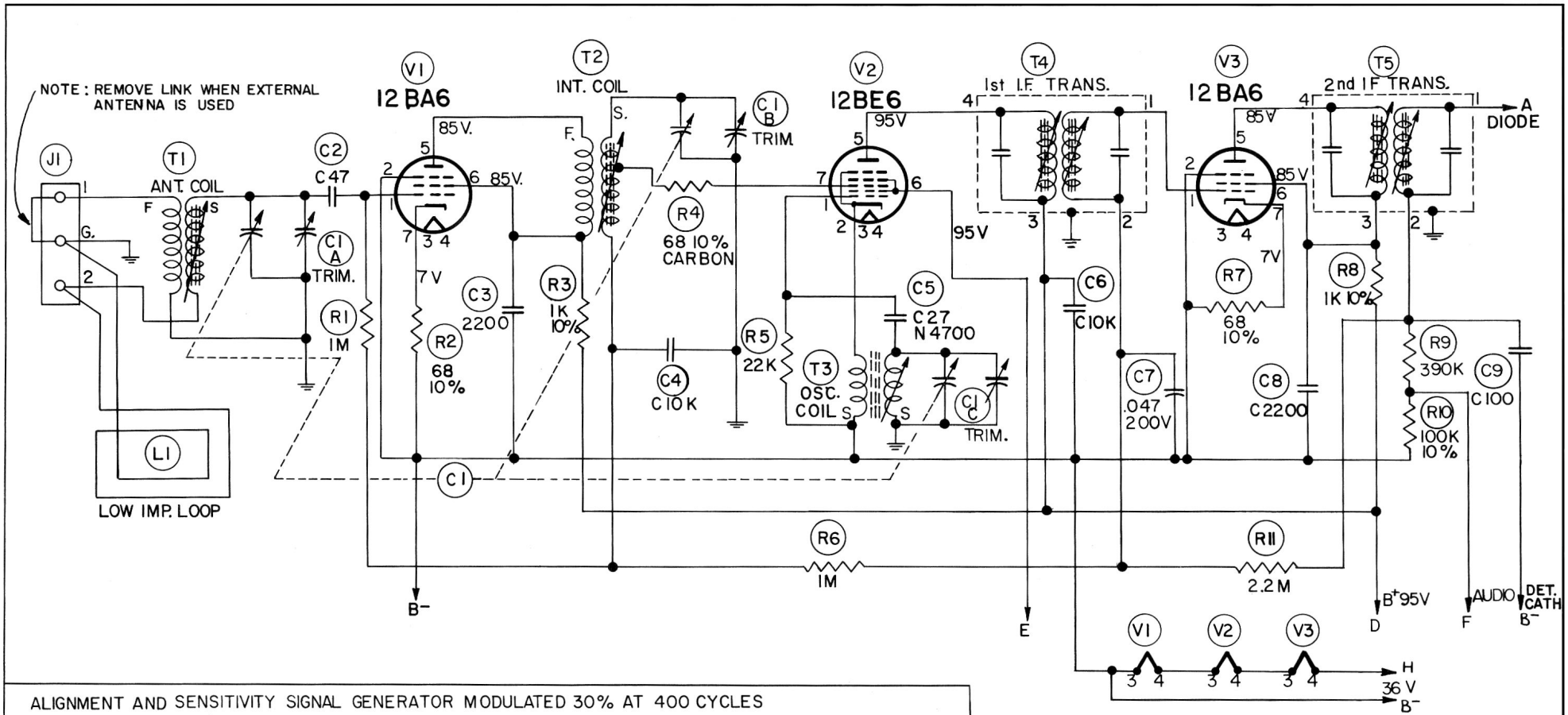
NAME WIRING DIAGRAM AM-FM TUNER PLATTER

SCALE	DATE	DRAWN BY	CHECK	APPROVED
	9-27-58			

DOMINION ELECTROHOME INDUSTRIES LIMITED
KITCHENER CANADA

ISSUE 1-2 PART NO: 00-440-01

AM TUNER RCS-406, 413



ALIGNMENT AND SENSITIVITY SIGNAL GENERATOR MODULATED 30% AT 400 CYCLES

STEP	APPLY SIGNAL AT KC	APPLY SIGNAL TO	THRU SERIES DUMMY	SET GANG AT K.C.	ADJUST FOR MAX. OUTPUT	NOMINAL SENSITIVITY FOR 500 MILLIWATTS OUTPUT	100 M.V. AT DIODE LOAD VOLUME CONTROL DOWN
1	455	PIN 1 12BA6	.05	MIN. CAP.	SLUGS T5		7000 uv
2	455	PIN 7 12BE6	.05	MIN. CAP.	SLUGS T4 AND REPEAT STEP 1		300 uv
3	1460	EXT. ANT. CONNECT.	200 uufd	1460 KC	C1c TRIMMER		
4	600	EXT. ANT. CONNECT.	200 uufd	600 KC	T3 SLUGS AND REPEAT STEPS 5&6		
5	1460	EXT. ANT. CONNECT.	200 uufd	1460 KC	C1A AND C1B TRIMMERS		2.5 uv
6	600	EXT. ANT. CONNECT	200 uufd	600 KC	SLUGS T1 AND T2 REPEAT STEPS 5&6		2.5 uv
7	535 950 1605	EXT. ANT. CONNECT	200 uufd	TUNE THRU	CHECK ONLY		

COMPONENT VALUES

RESISTORS HALF WATT, UNLESS OTHERWISE NOTED
20% TOLERANCE, UNLESS OTHERWISE NOTED
K= 1000 OHMS
M= 1000,000 OHMS

CONDENSERS T= TUBULAR, FOLLOWED BY CAP. IN MFD AND D.C.W.V.
E= ELECTROLYTIC, " " " " " " "
C= CERAMIC, FOLLOWED BY CAP. IN MMFD AND TOLERANCE IF CRITICAL

00-441-01

CN. No	DATE	CHANGE	CHECK
155-2	4-8-59	V1, V2, V3 WERE 6B.....	

TOLERANCE UNLESS OTHERWISE SPECIFIED
FRACTIONS-
DECIMALS-

MODEL FIRST USED ON: RCS-406

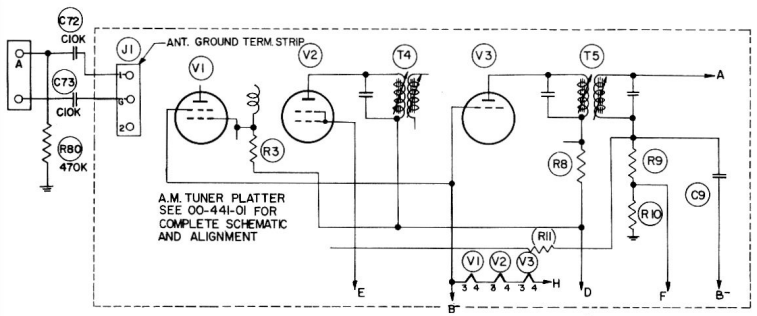
NAME WIRING DIAGRAM
AC-DC AM PLATTER

SCALE	DATE	DRAWN BY	CHECK	APPROVED
V	3-24-59			

DOMINION ELECTROHOME INDUSTRIES LIMITED
KITCHENER CANADA

ISSUE 2 PART NO: 00-441-01

AMPLIFIER

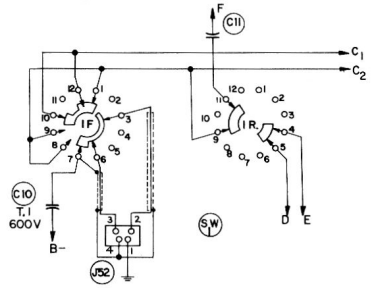


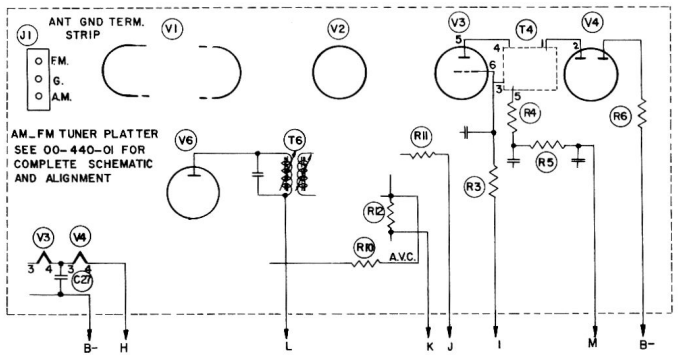
AM PHONO RADIO SWITCH

SWITCH SHOWN IN EXTREME COUNTERCLOCKWISE POSITION

POSITIONS

1 – AM
2 – MONO
3 – STEREO
4 – STEREO REV.



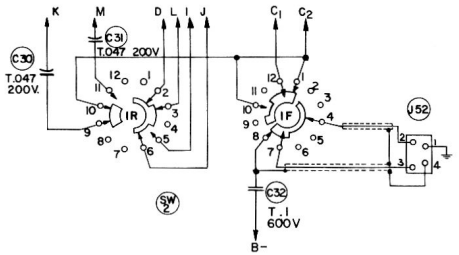


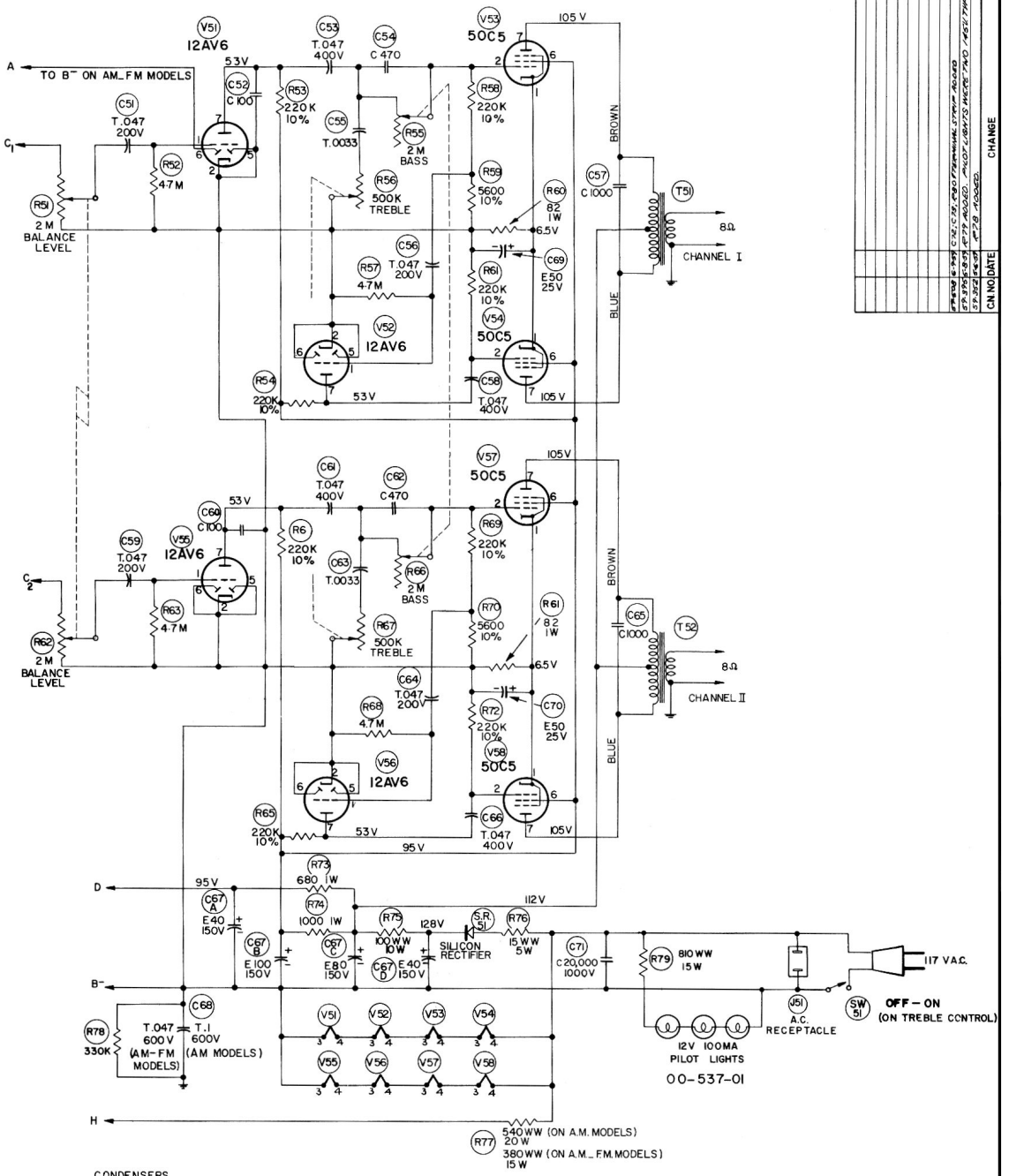
AM-FM PHONO RADIO SWITCH

SWITCH SHOWN IN EXTREME COUNTERCLOCKWISE POSITION

POSITIONS

1 – AM
2 – FM
3 – MONO
4 – STEREO
5 – STEREO REV.





RESISTORS
HALF WATT UNLESS OTHERWISE NOTED
20% TOLERANCE ,, ,, ,,
K = 1000 OHMS
M = 1,000,000 OHMS

CONDENSERS
T = TUBULAR, FOLLOWED BY CAP. IN MFD AND D.C.W.V
E = ELECTROLYTIC, ,, ,, ,, ,, ,, ,,
C = CERAMIC, FOLLOWED BY CAP. IN MMFD AND TOL. IF CRITICAL
M = MICA ,, ,, ,, ,, ,, ,, ,, ,,

ALL VOLTAGES MEASURED WITH 20,000 OHMS ..T METER

CN. NO.	DATE	CHANGE	CHK
6-95	6-95	CN 15.38, PC TERMINAL STRIP ADDED	
SP 1295	5-95	CP 1294 ADDED, PILOT LAMPS WERE PAID	
SP 1252	5-95	CP 1251 ADDED	

SCALE	DATE	DRAWN BY	CHECK	APPROVED

NAME WIRING DIAGRAM

DOMINION ELECTROHOME INDUSTRIES LIMITED CANADA

PART NO: 00-537-01

SERVICE REPLACEMENT PARTS

VIKING MODELS RCS-406, 407, 413, 414

FINAL ASSEMBLY

Changer for RCS-406, RCS-407

16-90015-01.....Garrard RC121 Mk II Changer
16-120022-06.....Plug in Pickup Case and Hardware
16-250013-02.....BSR TC8SD Diamond Stereo Cartridge
16-120036-03..... .7 mil Diamond Needle
16-120017-02.....3 Mil Sapphire Needle
16-120021-01.....45 rpm Spindle

Changer RCS-413, RCS-414

16-90010-07.....BSR UA8 Changer — Grey
16-250013-02.....BSR TC8SD Diamond Stereo Cartridge
16-120036-03..... .7 mil Diamond Needle
16-120017-02.....3 Mil Sapphire Needle
16-120030-01.....45 rpm Spindle

Crossover Network for RCS-406, RCS-407

24-130001-05.....Crossover Inductance
44-5-03.....Electrolytic 25 ufd x 25 volt

Speakers

19-50001-03.....5" PM Speaker 8 ohm — RCS-413, 414, — 2 used
19-60003-02.....6" PM Speaker Whizzer 8 ohms — RCS-406, 407, — 2 used
19-80006-02.....8" PM Speaker 8 ohm — 2 used — All Models

Control Panel

30-99-01.....Control Panel — RCS-406, 407
30-104-01.....Control Panel — RCS-413, 414
51-1-04.....Loop Antenna — RCS-413
51-1-01.....Loop Antenna — RCS-406
53-427-02.....Knob — Rear Section — RCS-413, 414
53-427-01.....Knob — Rear Section — RCS-406, 407
53-407-01.....Disc — Tuning — All Models
53-407-02.....Disc — Bass-Tone-Treble Tone — 2 per model
53-407-03.....Disc — Selector AM — RCS-406, 413
53-407-04.....Disc — Selector AM-FM — RCS-407, 414
53-407-05.....Disc — Level Balance — All Models
53-411-01.....Knob — RCS-406, 407, — 4 used
53-411-02.....Knob — RCS-413, 414, — 4 used
53-411-03.....Knob — RCS-406, 407
53-411-04.....Knob — RCS-413, 414

8 Tube 6 Watt Amplifier Section — All Models

24-80041-01.....Output Transformer — 2 used
26-44-01.....Selector Switch RCS-406, RCS-413
26-45-01.....Selector Switch RCS-407, RCS-414
27-7-01.....Pilot Lamp 12 volt — 3 per chassis
28-10-01.....Silicon Rectifier

RCS-406, 407, 413, 414

41-120-01.....Dual Control — Treble — On-Off
41-121-01.....Dual Control — Bass
41-108-03.....Dual Control — Level — Balance
42-1-51.....100 ohm 10 watt wire wound Resistor
42-1-50.....15 ohm 5 watt wire wound Resistor
44-87-01.....Four Section Electrolytic 40-40-80-100 ufd x 150 volts
44-40-04.....Electrolytic 50 ufd x 25 volts
51-25-01.....Rod Antenna — RCS-407, RCS-414

Chassis Riveted

34-13-01.....AC Receptacle
42-14-05.....540 ohm 20 watt wire wound Resistor — AM models only
42-14-04.....380 ohm 15 watt wire wound Resistor — FM models only
42-14-07.....810 ohm 15 watt wire wound Resistor

5 Tube AM-FM Tuner Platter RCS-407, RCS-414

21-300-03.....FM-RF Peaking Coil L2, L5
21-421-01.....BC Oscillator Coil T5
21-432-02.....AM I.F. Transformer 1st and 2nd
21-433-01.....FM I.F. Transformer T2
21-433-02.....FM I.F. Transformer T3
21-439-02.....RF Choke 2.2 uh L4, L6
21-441-01.....Ratio Detector T4
21-444-01.....FM Oscillator Coil T1
21-445-01.....FM Oscillator Feedback Coil T1
21-449-01.....FM RF Coil L3
44-88-01.....Miniature Electrolytic 3.2 ufd x 70 volts
45-36-01.....FM Trimmer C1B
45-38-01.....AM-FM Gang Condenser C1

3 Tube AM Tuner Platter RCS-406, RCS-413

21-410-03.....BC Antenna Coil
21-421-01.....BC Oscillator Coil
21-428-01.....BC Interstage Coil
21-432-01.....AM I.F. Transformer 1st and 2nd
45-33-01.....AM Gang Condenser