VIKING Service Information for Models

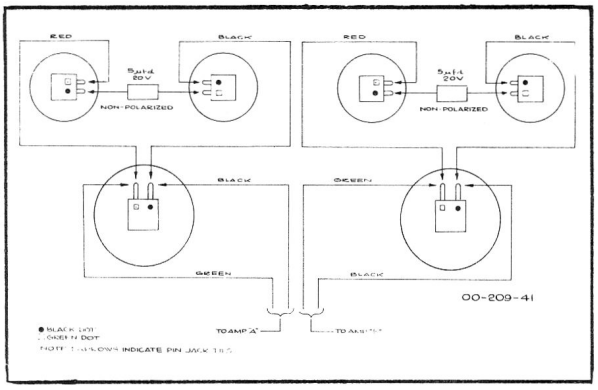
PCS-360

RCS-373

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.

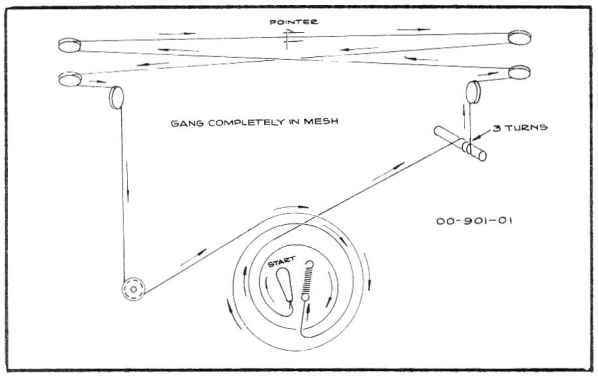
SPEAKER CONNECTIONS



PCS-360 PREAMP, SLAVE AMP, CHANGER

RCS -373 AM-FM TUNER, PREAMP, SLAVE AMP, CHANGER

STRINGING DETAIL RCS-373



AM – FM TUNER – RCS-373

A.M. Tuning Band - 535 to 1605 Kc.
F.M. Tuning Band - 88 to 108 Mc.
A.M. I.F. Frequency - 455Kc.
F.M. I.F. Frequency - 10.7 Mc.
Sensitivity - AM - 2uv. for 100 mv. at output jack
FM - 3uv. for 20db. quieting
Selectivity - AM - "Distant" Selector Switch Position
16 Kc. Bandwidth at 10X Down.
"Hi-Fi" Selector Switch Position
24 Kc. Bandwidth at 10X Down.
FM - "FM" Selector Switch Position
300 Kc. Bandwidth at 10X Down.

PREAMPLIFIER SELECTOR (Specifications per Channel)

Frequency Response – 30 cps to 15 000 cps at Tape Input.

Intermodulation Disrortion – (at Tape Input) Less Than .5% at 2 v Output.

Harmonic Distortion – At Tape Input .05% at 1 v Output

Hum and Noise – (at Tape Input) 80 db Below 2 volts Rated Output

Voltage Gain – 9.

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

SLAVE AMPLIFIER (Specifications per Channel)

Frequency Response - 30 cps. to 15,000 cps.

Intermodulation Distortion – Less than 1.5% at 1w output.

Hum and Noise – 80 db. below rated output.

Voltage Input Required for 5w Output .85 V AC Nominal.

Power Output – Nominal undistorted at 1000 cps.
6w ± 1 db
Maximum at 1000 cps. 9 w ± 1 db.

Contour Control Dual Element – Designed to provide 15 db. lift at 30 cps. when control is 60° removed from CCW position with reference to response at 1000 cps. and at the same time provide 11 db lift at 15,000 cps.

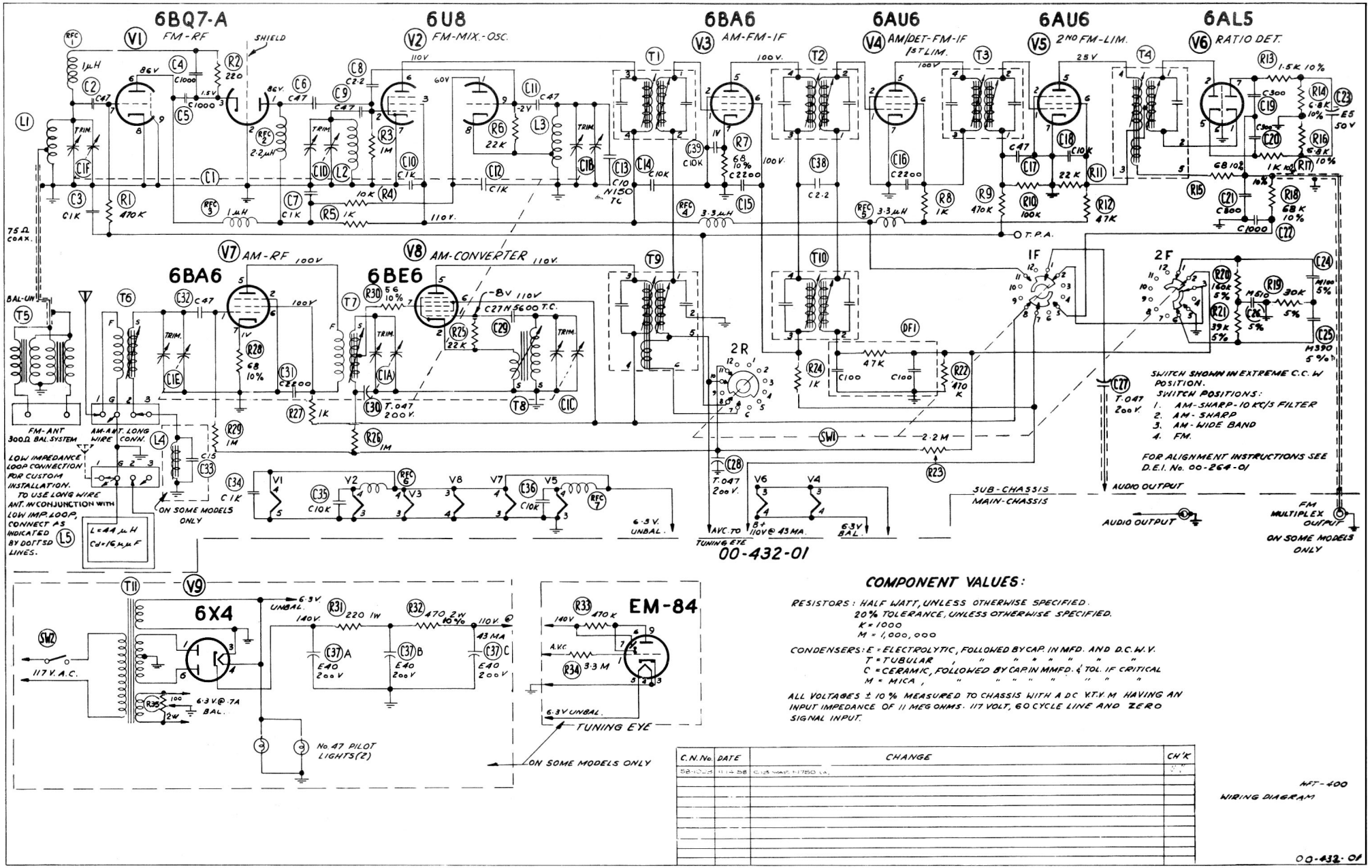
Bass Tone Control Dual Element – Designed to provide 15 db. cut or lift at 50 cps. Covers sound spectrum from 20 - 1000 cps.

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

THE T. EATON Co LIMITED
CANADA

54-1303-01 500 11/58 D.E.I.

AM-FM TUNER RCS-373



COMPONENT VALUES:

RESISTORS: HALF WATT, UNLESS OTHERWISE SPECIFIED.
20% TOLERANCE, UNLESS OTHERWISE SPECIFIED.
K = 1000
M = 1,000,000

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

ALL VOLTAGES ± 10% MEASURED TO CHASSIS WITH A D.C. V.T.V.M. HAVING AN INPUT IMPEDANCE OF 11 MEGOHMS. 117 VOLT, 60 CYCLE LINE AND ZERO SIGNAL INPUT.

C.N. No.	DATE	CHANGE	CH'K
58-1004	11-4-58	C13 WAS 1750 μμ.	

AFT-400
WIRING DIAGRAM

00-432-01

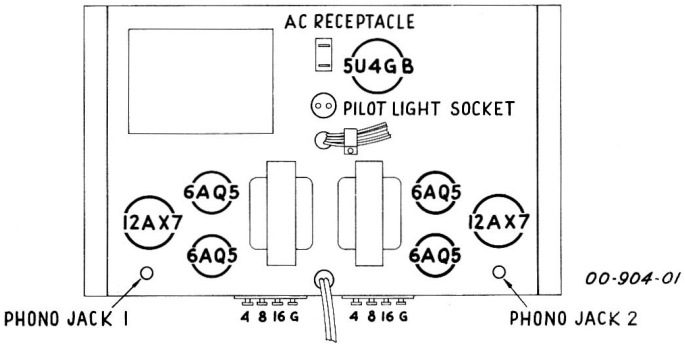
AM-FM TUNER ALIGNMENT

STEP	DUMMY ANTENNA	SIGNAL APPLIED TO	FREQ	MODULATION	BAND-SWITCH SETTING	DIAL POINTER SETTING	INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	.05 ufd	PIN #7 V8 (6BE6)	455 Kc/S	400 CPS AM AT 30%	#2 AM-SHARP (AM DAY)	600 Kc/S	AC-VTVM AUDIO OUTPUT	T9 & T10 1st & 2nd AM IF	ADJUST FOR MAXIMUM OUTPUT	300 uv FOR 100 mv OUTPUT
2	CHANGE BAND SWITCH SETTING TO POSITION #3-AM-WIDE BAND (AM-HI FI), TUNE SIGNAL GEN. ACROSS 440-470 Kc/S FREQ. RANGE AND CHECK FOR APPROXIMATE RESPONSE CURVE AS SHOWN THIS TEST CAN ALSO BE MADE WITH A PROPER SWEEP GEN. & SCOPE.									
3	200 uufd	AM ANT. TERM. STRIP #1	600 Kc/S	400 CPS AM AT 30%	#2 AM-SHARP (AM DAY)	600 Kc/S	AC-VTVM AUDIO OUTPUT	T6, T7 AND T8	CONNECT FOR LONG WIRE ANT. ADJUST FOR MAX. OUTPUT	2 uv FOR 100 mv OUTPUT
4	200 uufd	AM ANT. TERM. STRIP #1	1460 Kc/S	400 CPS AM AT 30%	#2 AM-SHARP (AM DAY)	1460 Kc/S	AC-VTVM AUDIO OUTPUT	CIA, CIE & CIC TRIMMERS	CONNECT FOR LONG WIRE ANT. ADJUST FOR MAX. OUTPUT	2 uv FOR 100 mv OUTPUT
5	**REPEAT STEPS 3 & 4 AND CHECK FOR TRACKING AT 950 Kc/S**									
6	UNGROUNDED TUBE SHIELD	V2 (6U8) FM MIX-OSC.	10.7 Mc/S	NONE	#4 FM	POINT OF NO INTERFERENCE	DC-VTVM TO TPA	T1, T2 & T3 1st, 2nd & 3rd FM IF	ADJUST FOR MAXIMUM METER DEFLECTION	
7	UNGROUNDED TUBE SHIELD	V2 (6U8) FM MIX-OSC.	10.7 Mc/S	NONE	#4 FM	POINT OF NO INTERFERENCE	DC-VTVM ACROSS C 23	T4 FM RATIO DET TRANS	ADJUST PRIMARY (BOTTOM SLUG) FOR MAX. DEFLECTION	
8	UNGROUNDED TUBE SHIELD	V2 (6U8) FM MIX-OSC.	10.7 Mc/S	NONE	#4 FM	POINT OF NO INTERFERENCE	DC-VTVM TO MULTIPLEX O.P.	T4 FM RATIO DET TRANS	ADJUST SECONDARY (TOP SLUG) FOR ZERO VOLTAGE	
9	*	FM ANT. TERM. STRIP	90 Mc/S	400 CPS FM 75 Kc/S DEVIATION	#4 FM	90 Mc/S	AC-VTVM AUDIO OUTPUT	EXPAND OR COMPRESS L1, L2 & L3	ADJUST FOR MAXIMUM OUTPUT	3 uv FOR 20 db QUIETING
10	*	FM ANT. TERM. STRIP	106 Mc/S	400 CPS FM 75 Kc/S DEVIATION	#4 FM	106 Mc/S	AC-VTVM AUDIO OUTPUT	CIB, CID & CIF TRIMMERS	ADJUST FOR MAXIMUM OUTPUT	3 uv FOR 20 db QUIETING
11	**REPEAT STEPS 9 & 10 UNTIL OUTPUT DROPS AT LEAST 20db WITH INDICATED INPUT, WHEN FM MODULATION IS TURNED OFF**									
12	NONE	INPUT SIDE OF 10Kc/S FILT.	1 Kc/S	NONE	#1 AM SHARP 10 Kc/S FILT. (AM. DIST)	REMOVE 6AU6 V4	AC-VTVM AUDIO OUTPUT	ADJUST 1 Kc/S LEVEL FOR 3 VOLTS ON OUTPUT METER AND CHANGE GEN. TO 10 Kc/S		ATTENUATION 40 db MIN

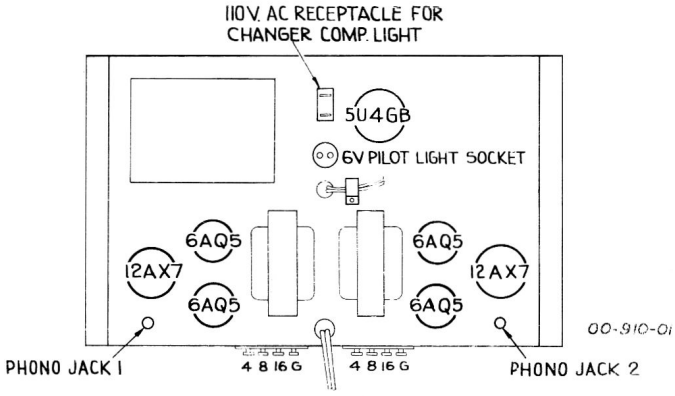
* 120 OHMS IN HOT LEAD AND 150 OHMS IN COLD LEAD FROM SIG GENERATOR.

SLAVE AMPLIFIER

RCS-373



PCS-360



6 Watt Dual Slave Amplifier 7 Tube

24-10040-01 . Power Transformer 60 Cycle RCS-373 Only
24-10041-01 . Power Transformer 60 Cycle PCS-360 Only
24-80031-01 . Audio Output Transformer

44-67-01 ..... Electrolytic 40–20–20 ufd X 450 volt
44-68-01 ..... Electrolytic 100–100 ufd X 100 volt

FINAL ASSEMBLY

Final Assembly PCS-360 - RCS-373 Changer

03-160022-01 Garrard 121 Mk 2 Complete Changer
16-120022-05 Plug in Pickup Case & Hardware
16-250011-01 Astatic 13TB Cartridge
26-2-01 ..... S.P.S.T. Slider Switch
53-268-01 .... Stereo Monaural Plate.
34-143-01 .... Switch Cover

Final Assembly PCS-360 Only

19-30003-01.. 3½" PM Tweeter 3.2 ohm 4 Used
19-80006-01 . 8" PM Woofer 8 ohm 2 Used
27-1-01 ..... No. 44 6-8 volt .25 amp Pilot Lamp
27-4-01 ..... No. 6W 145 volt Clear Pilot Lamp
30-74-01 ..... Control Panel

53-112-03 .... Glass Retaining Strip
53-44-08 ..... Knob - 6 Used
53-142-01 .... Viking Ship Medallion

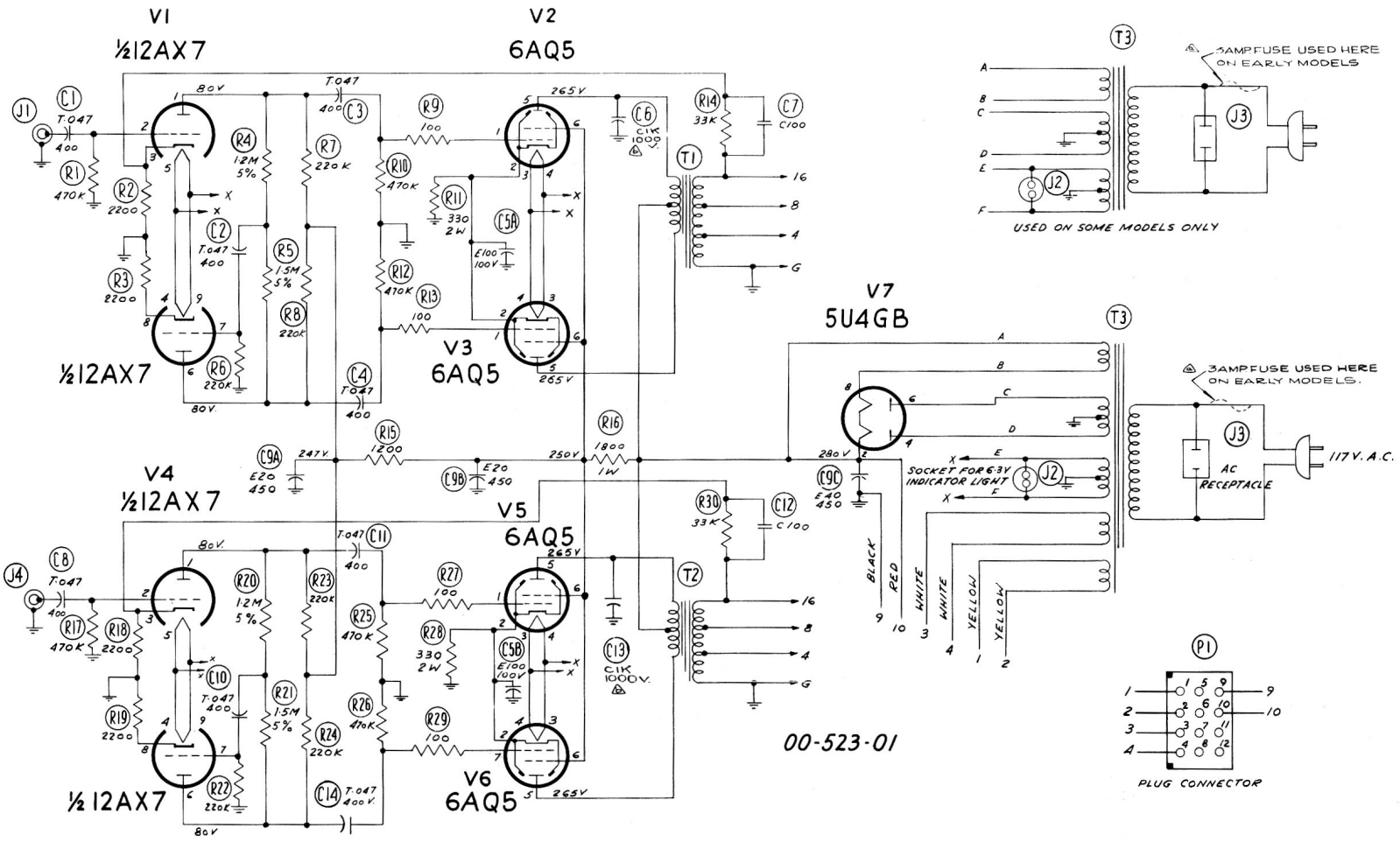
Final Assembly RCS-373 Only

19-30003-01 3½" PM Tweeter 3.2 ohm 4 Used
19-80006-01 8" PM Woofer 8 ohm 2 Used

27-1-01 ..... 6-8 volt .25 amp No. 44 Pilot Lamp
27-4-01 ..... 6S6 145 volt 6W Clear Pilot Lamp

30-72-01 ..... Control Panel
51-1-02 ..... Loop Antenna Assembly
53-112-03 .... Glass Retaining Strip
53-44-07 ..... Knob - 1 Used
53-44-08 ..... Knob - 7 Used
53-142-01 .... Viking Ship Medallion

SLAVE AMPLIFIER



COMPONENT VALUES:

K = 1000 M = 1,000,000

RESISTORS: HALF WATT, UNLESS OTHERWISE NOTED
10% TOLERANCE, UNLESS OTHERWISE NOTED

CONDENSERS: T = TUBULAR, FOLLOWED BY CAPACITY IN MFD. AND DCWV
E = ELECTROLYTIC, FOLLOWED BY CAP. IN MFD AND DCWV.
C = CERAMIC, FOLLOWED BY CAP. IN MMFD AND TOLERANCE IF CRITICAL.

ALL VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHM/VOLT METER AT 117 V. LINE VOLTAGE.

E.C. No.	DATE	CHANGE	CH'K
58 864	11-2 58	F1 FUSE DELETED. NOTE ADDED (A)	
58-945	10-20 58	C6 & C13 WERE T.001 600V (b)	

TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTIONAL ± DECIMAL ±

MODEL FIRST USED ON: CHORALE & CANTERBURY

NAME WIRING DIAGRAM

SCALE	DATE	DRAWN BY	CHECK	APPROVED
E	8-28-58	GAMBRELL		

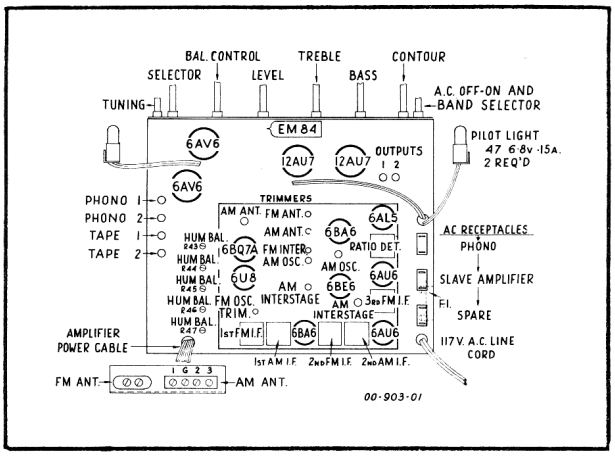
DOMINION ELECTROHOME INDUSTRIES LIMITED
KITCHENER CANADA

ISSUE 2 3

PART NO. 00-523-01

AM-FM TUNER & PREAMPLIFIER

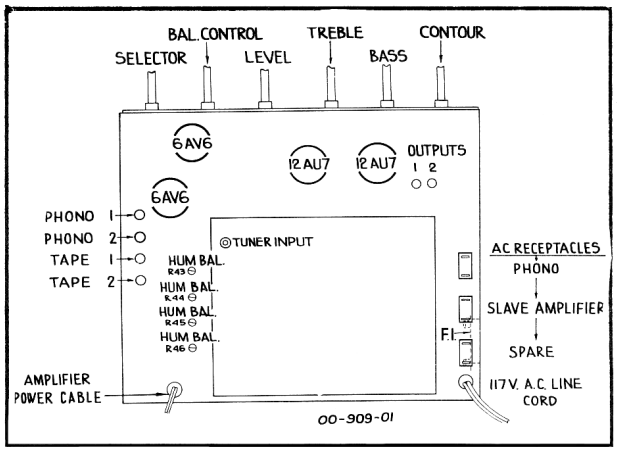
RCS-373



HUM BALANCE CONTROLS

It may be found necessary to adjust the Hum Balance controls for minimum hum reproduction when the 12AU7 tubes on the preamp or the 6AV6 and 6AL5 tubes on the tuner are replaced. Set the Bass and Treble tone controls in their extreme right hand positions, the Selector Switch in one of the Phono positions the Level and Contour controls fully clockwise and adjust controls for minimum hum level.

PCS-360



RCS-373 8 Tube AM – FM Tuner

21-300-02 .... R.F. Heater Choke
21-326-11 ... R.F. Choke 3.3 uh
21-415-01 .... F.M. I.F. Transformer
21-421-01 .... B.C. Oscillator Coil
21-429-02 .... B.C. Interstage Coil
21-410-03 .... B.C. Antenna Coil
21-431-01 .... AM I.F. Transformer 1st
21-432-01 .... AM I.F. Transformer 2nd
21-436-01 .... FM R.F. Coil
21-437-01 .... FM Interstage Coil
21-438-01 .... FM Oscillator Coil
21-439-01 .... RF Choke 1 uh
21-439-02 .... RF Choke 2.2 uh
21-440-01 .... Balun
21-441-01 .... Ratio Detector

26-30-01 ..... Band Selector Switch

44-11-01 ..... Electrolytic 5 ufd X 50 volt

45-15-01 ..... AM – FM Gang Condensor
45-13-01 ..... FM Trimmer Tubular

50-5-01 ..... Diode Filter

4 Tube Preamp Model RCS – 373

14-115-02 .... Tuning Eye AM 84 6.3 volt

26-39-01 ..... Push - Pull Switch

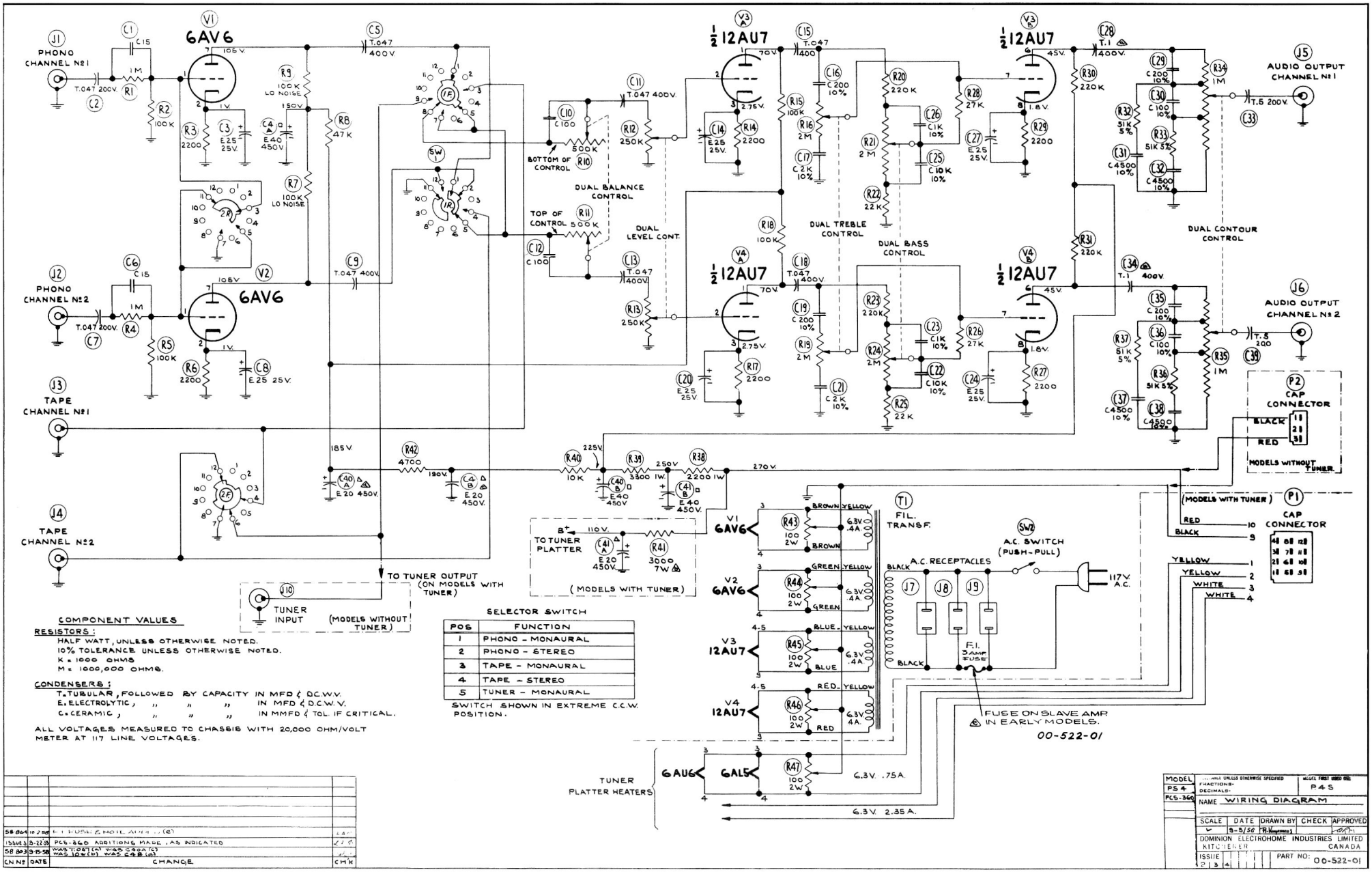
27-2-01 ..... No. 47 6-8 volt .15 amp Pilot Lamp

30-73-01 ..... Dial Scale

4 Tube Preamplifier (Integrated) Chassis Assembly

24-50001-01 . Filament Transformer
26-38-01 ..... Selector Switch
27-6-06 ..... Fuse 3AG 250 volt
41-68-01 ..... Dual Control - Balance
41-66-01 ..... Dual Control - Level
41-71-01 ..... Dual Control - Contour & Switch - RCS-373 only
41-100-01 .... Dual Control - Treble Bass
41-111-01 .... Dual Control - Contour & Switch - PCS-360 only
41-6-01 ..... Potentiometer 100 ohm
44-70-01 ..... Electrolytic 6 Used 25 ufd X 25 volt
44-69-01 ..... Electrolytic 20–40–X450 volt
44-60-01 ..... Electrolytic 40 ufd X 450 volt PCS-360 only

PREAMPLIFIER SCHEMATIC



COMPONENT VALUES

RESISTORS:
HALF WATT, UNLESS OTHERWISE NOTED.
10% TOLERANCE UNLESS OTHERWISE NOTED.
K = 1000 OHMS
M = 1000,000 OHMS.

CONDENSERS:
T. TUBULAR, FOLLOWED BY CAPACITY IN MFD & D.C.W.V.
E. ELECTROLYTIC, " " " IN MFD & D.C.W.V.
C. CERAMIC, " " " IN MMFD & TOL. IF CRITICAL.

ALL VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHM/VOLT METER AT 117 LINE VOLTAGES.

SELECTOR SWITCH

POS	FUNCTION
1	PHONO - MONAURAL
2	PHONO - STEREO
3	TAPE - MONAURAL
4	TAPE - STEREO
5	TUNER - MONAURAL

SWITCH SHOWN IN EXTREME C.C.W. POSITION.

CN No	DATE	CHANGE	CH'K
58 864	10-2-58	F1 FUSE & HOLE ADDED (B)	LAT
ISSUE 3	5-22-58	PCS-360 ADDITIONS MADE AS INDICATED	LAT
58 803	9-15-58	WAS 10 DT (DT WAS C42A/C) WAS 10K (2R) WAS C4B (2R)	LAT

MODEL	DIMS. UNLESS OTHERWISE SPECIFIED FRACTIONS= DECIMALS=			MODEL FIRST USED ON:	
PS 4				P 4 S	
PCS-360	NAME WIRING DIAGRAM				
	SCALE	DATE	DRAWN BY	CHECK	APPROVED
	—	9-5-58	[illegible]		
	DOMINION ELECTROHOME INDUSTRIES LIMITED KITCHENER CANADA				
	ISSUE 2 3 4		PART NO: 00-522-01		