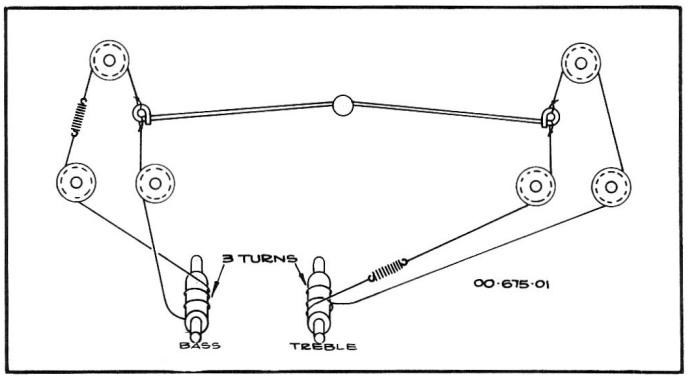
VIKING Service Information for Models RCS-372

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

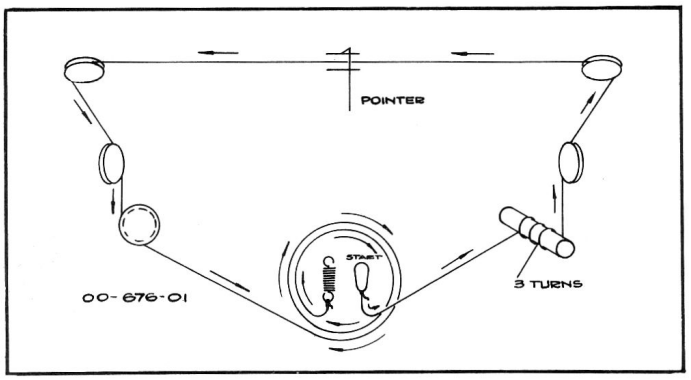
When writing for Service Information and/or parts, please quote model and Serial Number as found on the license label. Always order service parts by part number. Part numbers are positive identification which ensures fast service and avoids unnecessary delays.

STRINGING DETAILS

TONE INDICATOR



STATION INDICATOR



SPECIFICATIONS

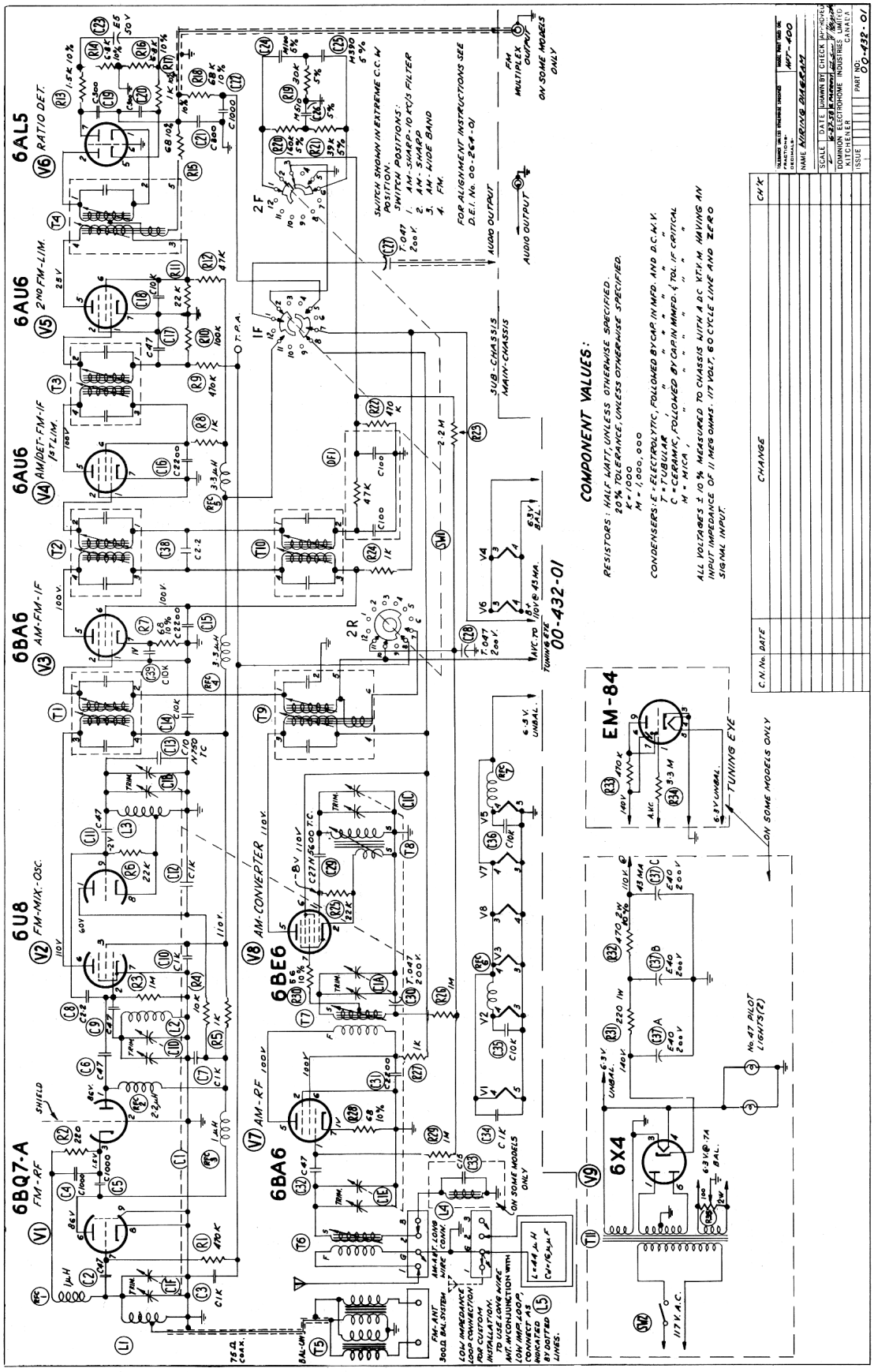
Frequency Range	– AM 535-1605 Kc.		FM 88-108 Mc.
I.F. Frequency	– AM 455 Kc.		FM 10.7 Mc.
Sensitivity	– AM 2 UV for 100 MV. at Detector FM 3 UV for 20 db quieting		
Selectivity 10X down	– AM Distant 16Kc/s.	Day 16Kc/s.	Hi-Fi 25Kc/s.
Audio Response	– AM Distant 2.2Kc/s.	Day 6Kc/s.	Hi-Fi 15Kc/s. (10X down)
FM Selectivity	– 300Kc/s. (10X down)		

AM-FM TUNER
A.M. Tuning Band - 535 to 1605 Kc.
F.M. Tuning Band - 88 to 108 Mc.
A.M.I.F. Frequency - 455 KC.
F.M.I.F. Frequency - 10.7 Mc.
Sensitivity - AM 2uv. for 100mv. output at detector
FM 3uv. for 20db quieting
Selectivity - AM 12Kc. Bandwidth at 10X down
FM 200Kc. Bandwidth at 10X down

PREAMPLIFIER - SELECTOR
Frequency Response - 20 to 20,000cps.
Intermodulation Distortion - Less than .5% at 2 volts output.
Hum and Noise - 80db. below 2 volts rated output.
Voltage Gain - 5.
All measurements nominal taken at auxiliary input with tone controls in flat position, level and contour controls fully clockwise.

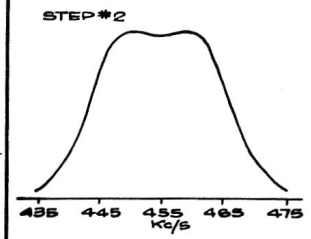
SLAVE AMPLIFIER
Frequency Response - 20 to 40,000 cps.
Intermodulation Distortion - 2% at 1db. below rated output.
Hum and Noise - 80db. below rated output - Input shorted.
Voltage Input Required for Rated Output - 0.5 V.A.C. Nominal.
Power Output - Nominal undistorted at 1000 cps. 20 W. ±1db.
Maximum at 1000 cps. 30 W. ±1db.
Feedback - 14 db. in output stage. 17 db. in input stage.

TUNER SCHEMATIC



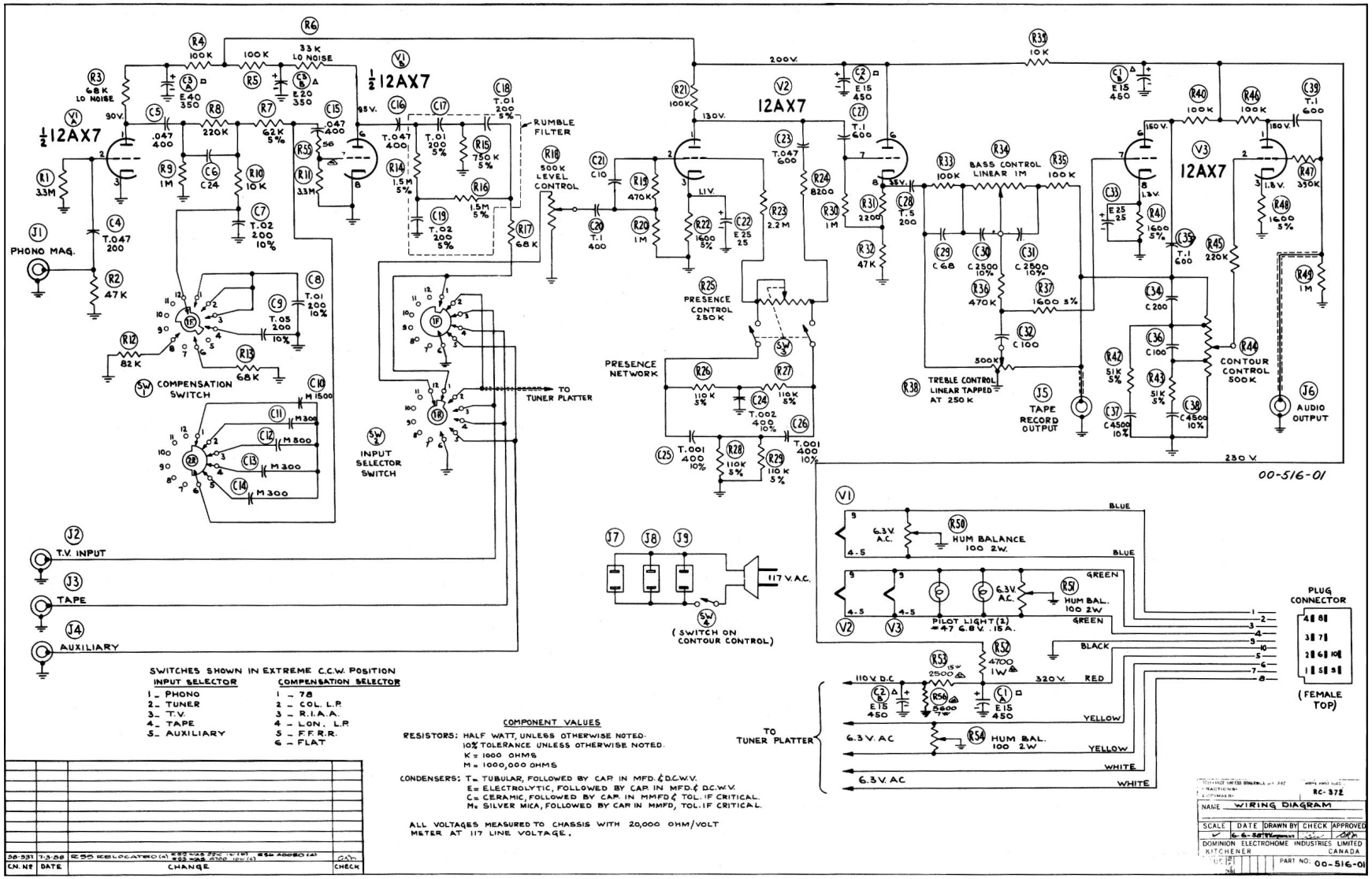
AM-FM ALLIGNMENT

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 MULTI PLEX 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

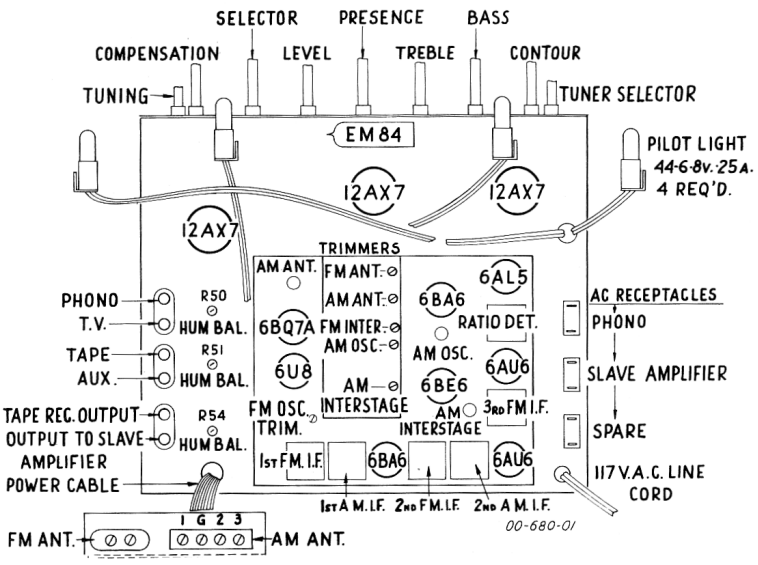


* 120 OHMS IN HOT LEAD AND 150 OHMS IN COLD LEAD FROM SIG. GENERATOR.

PREAMP SCHEMATIC



PREAMP WITH TUNER PLATTER



HUM BALANCE CONTROLS

It may be found necessary to adjust the Hum Balance controls for minimum hum reproduction when the 12AX7 or 12AU7 tubes 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 both controls for minimum hum level.

REPLACEMENT PARTS LIST

3 TUBE PREAMP. CHASSIS ASSEMBLY

27-2-01	Pilot Bulb 6.8V No. 47 (4)
30-59-01	Dial Scale

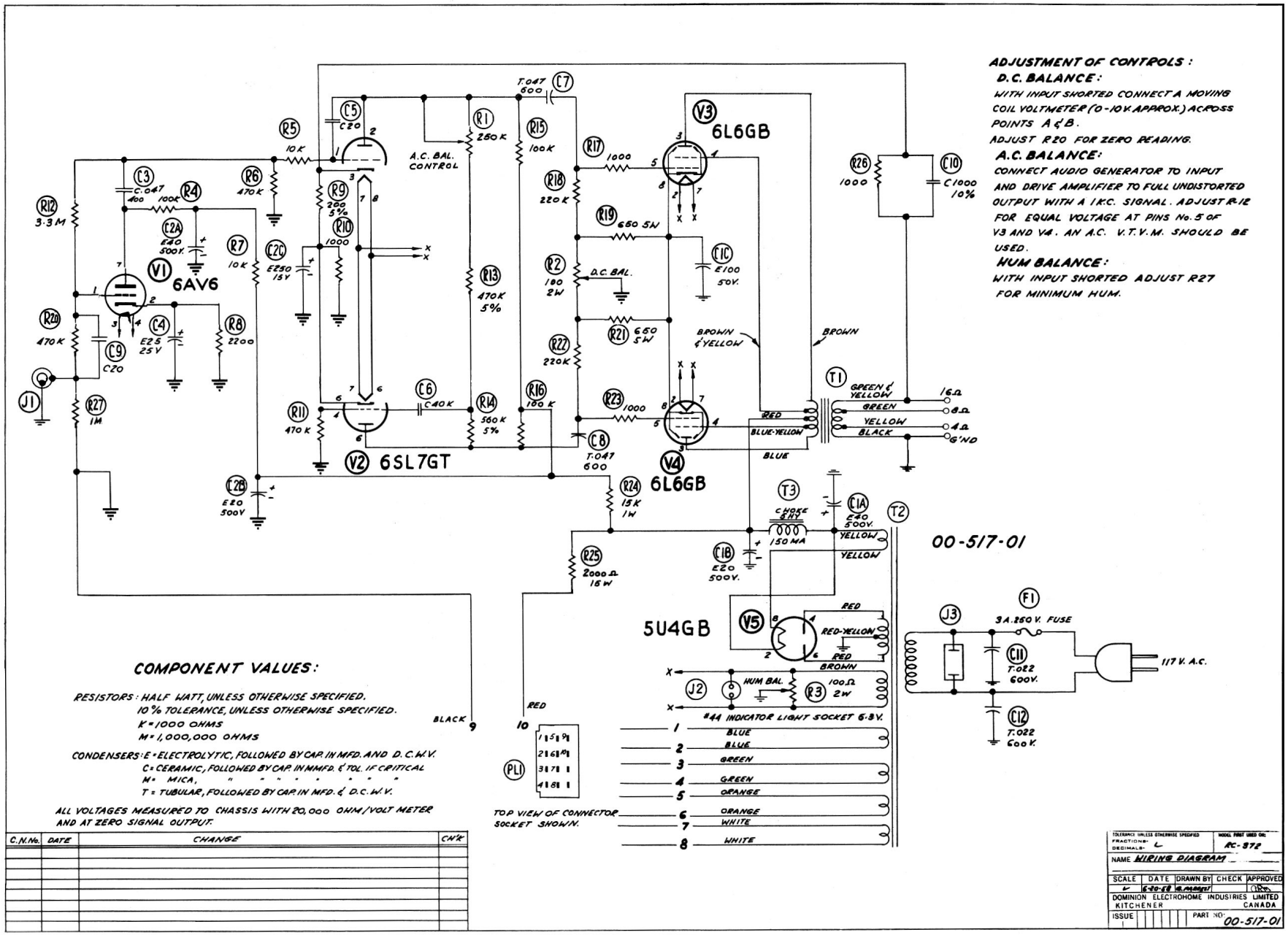
3TUBE PREAMP. INTEGRATED CHASSIS ASSEMBLY

03-340026-01	Plug and Cable Assembly (female)
26-31-01	Selector Switch (compensator)
26-28-01	Selector Switch (input)
41-51-03	Control - Base Tone
41-52-02	Control - Treble
41-53-02	Control - On-Off-Contour
41-54-02	Control - Level
41-55-02	Control - Presence With DPST Switch
44-47-01	Electrolytic 15 & 15 MFD X 450 V (2)
44-48-01	Electrolytic 40 & 20 MFD X 350 V (1)
44-11-04	Electrolytic 25 MFD X 25 V (2)
41-6-01	Potentiometer (3)

8 TUBE AM-FM TUNER PLATTER CHASSIS

21-300-02	R.F. Heater Choke
21-326-11	R.F. Choke 3.3UH
21-415-01	FM I.F. Transformer
21-421-01	B.C. Oscillator Coil
21-428-02	B.C. Int. Coil
21-410-03	B.C. Ant. 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 Int. Coil
21-438-01	FM Osc. Coil
21-439-01	R.F. Choke 1 UH
21-439-02	R.F. Choke 2.2 UH
21-440-01	Balun
21-441-01	Ratio Detector
26-30-01	Band Selector Switch
44-11-01	Electrolytic
45-15-01	Gang Condenser AM FM
45-13-01	FM Trimmer (tubular)
50-5-01	Diode Filter

SLAVE AMP. SCHEMATIC



ADJUSTMENT OF CONTROLS:

D.C. BALANCE:

WITH INPUT SHORTED CONNECT A MOVING COIL VOLTMETER (0-10 V. APPROX.) ACROSS POINTS A & B.

ADJUST R20 FOR ZERO READING.

A.C. BALANCE:

CONNECT AUDIO GENERATOR TO INPUT AND DRIVE AMPLIFIER TO FULL UNDISTORTED OUTPUT WITH A 1 K.C. SIGNAL. ADJUST R12 FOR EQUAL VOLTAGE AT PINS No. 5 OF V3 AND V4. AN A.C. V.T.V.M. SHOULD BE USED.

HUM BALANCE:

WITH INPUT SHORTED ADJUST R27 FOR MINIMUM HUM.

COMPONENT VALUES:

RESISTORS: HALF WATT, UNLESS OTHERWISE SPECIFIED.
10 % TOLERANCE, UNLESS OTHERWISE SPECIFIED.
K = 1000 OHMS
M = 1,000,000 OHMS

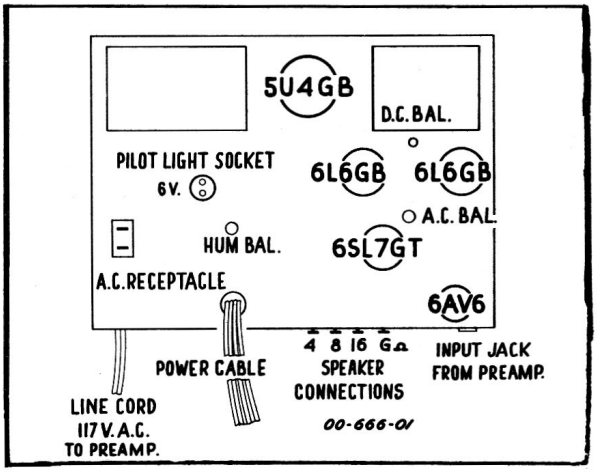
CONDENSERS: E = ELECTROLYTIC, FOLLOWED BY CAP. IN MFD. AND D.C.W.V.
C = CERAMIC, FOLLOWED BY CAP. IN MMFD. & TOL. IF CRITICAL
M = MICA, " " " " " " "
T = TUBULAR, FOLLOWED BY CAP IN MFD. & D.C. W.V.

ALL VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHM/VOLT METER AND AT ZERO SIGNAL OUTPUT.

C.N. No.	DATE	CHANGE	CH'K

TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTIONS- DECIMALS-	MODEL PRINT USED ON RC-372
NAME WIRING DIAGRAM	
SCALE	DATE 6-10-58
DRAWN BY a.maggi	CHECK
APPROVED	
DOMINION ELECTROHOME INDUSTRIES LIMITED KITCHENER CANADA	
ISSUE	PART NO. 00-517-01

SLAVE AMPLIFIER



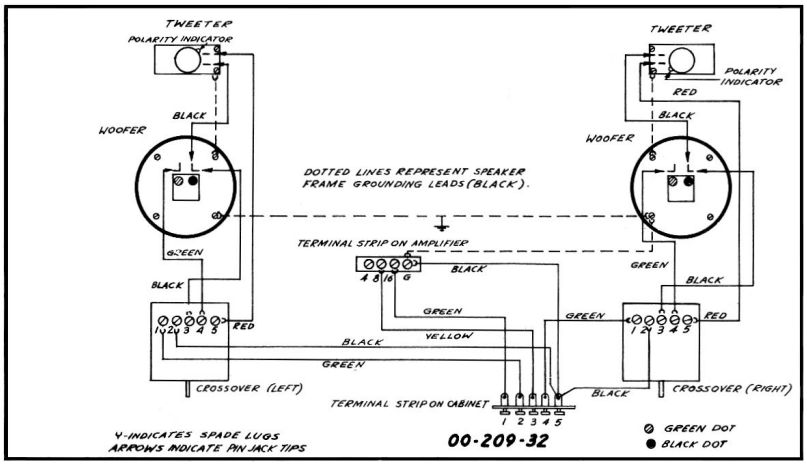
DC Balance, Hum Balance

These controls are adjusted at the factory when tubes are installed and the unit is tested. Varying line voltages, aging of components or replacement of tubes may require that the controls be readjusted. See schematic for procedure.

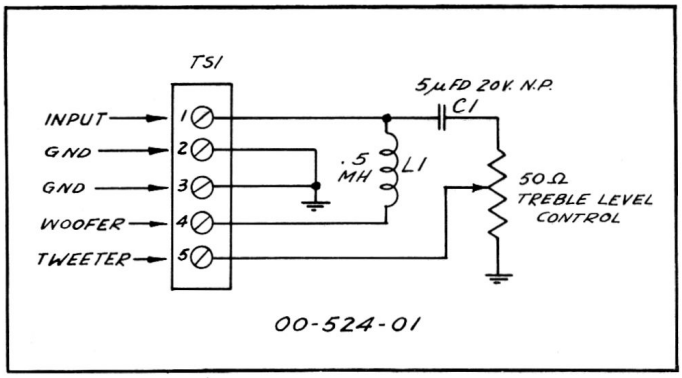
20 WATT SLAVE AMPLIFIER

24-80018-03	Outout Transformer
24-10036-01	Power Transformer 60 Cycle
24-110006-03	Choke Filter
27-6-06	Fuse 3AG - 3amp - 250V
34-50-01	Fuse Holder
41-50-01	Control AC Balance 250K
44-25-01	Electrolytic 25 MFD X 25 V
44-36-01	Electrolytic 40 & 20 MFD X 500 V 100 MFD X 50 V
44-37-01	Electrolytic 40 MFD 20 MFD X 500 V 250 MFD X 15 V
41-6-01	Potentiometer - 100 OHM Hum Balance (2)

SPEAKER CONNECTIONS



CROSSOVER NETWORK



FINAL ASSEMBLY

Part No.	Description
16-90001-01	RC-88-4- Garrard Changer 60 Cy. Brown (Wired For Stereo Adaption)
16-250006-01	G.E. Cartridge VR11
16-250010-01	G.E. Cartridge Diamond Stylus Stereo Cart.
03-500007-01	2 Way Crossover Network (2)
16-120006-06	Garrard Plug In Pick-up Head RC88-4& RC121D
16-120004-01	Garrard RC88-4 -- 45 Spindle
19-10002-01	Tweeter Speaker - 16 OHM (2)
10-120004-01	Woofer Speaker - 12'' - 16 OHM (2)
27-1-01	Pilot Bulb 6.8 V No. 44
27-4-01	Pilot Bulb 145 V Clear
30-62-01	Control Panel - Tuner
51-1-04	Low Impedance Loop
52-35-01	W.P. Back
53-9-06	Glass Retainer Strip
53-18-02	Knob (2)
53-44-01	Knob (6)
53-120-01	Knob (2)
53-44-07	Knob (1)
53-142-01	Viking Ship Medallion Medallion
03-340004-02	Connecting Cable Assembly