VIKING Service Information for MODEL

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

RC-272

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

FOR ALIGNMENT AND SENSITIVITY DATA SEE SCHEMATIC

SPECIFICATIONS

Standard Broadcast Range	BC	540	1650	Kc.
	SW1	5.7	11.0	MC.
	SW2	10.0	18.0	MC.
Intermediate Frequency			455	KC.
Power Consumption (Radio Only)			155	Watts
Power Consumption (Radio and Phono)			170	Watts

With tone controls in flat position, level and contour controls fully clockwise, all measurements (nominal) taken at level control input and output transformer secondary.

AMPLIFIER

Frequency Response	1 W level $\pm$ 1 db. 20 cps. to 20,000 cps.
❖Harmonic Distortion	Less than 1% at normal operating levels.
❖Intermodulation Distortion	Less than 1% at normal operating levels (60 and 3000 cps. 4:1)
Hum and Noise	80 db. below rated output.
Maximum Power Output at 400 cps.	15 Watts
Undistorted Power Output at 400 cps.	10 Watts

❖With matched output Tubes $\pm$ 5%.

NOTE: When any readings are being taken or any adjustments are being made with the amplifier only, (i.e. with the tuner disconnected) connect a resistor to draw 40 Ma. from pin # 5 of connector socket to ground.

Hum Balance Control

Short out input to amplifier and with output properly loaded down, connect a voltmeter across output and adjust hum balance control for minimum output.

If this adjustment is made with the tuner connected turn contour control down and adjust amplifier hum balance control as above.

DC. Balance Control

Connect a D.C. Voltmeter across output transformer primary and adjust D.C. Balance control for zero voltage.

AC. Balance Control

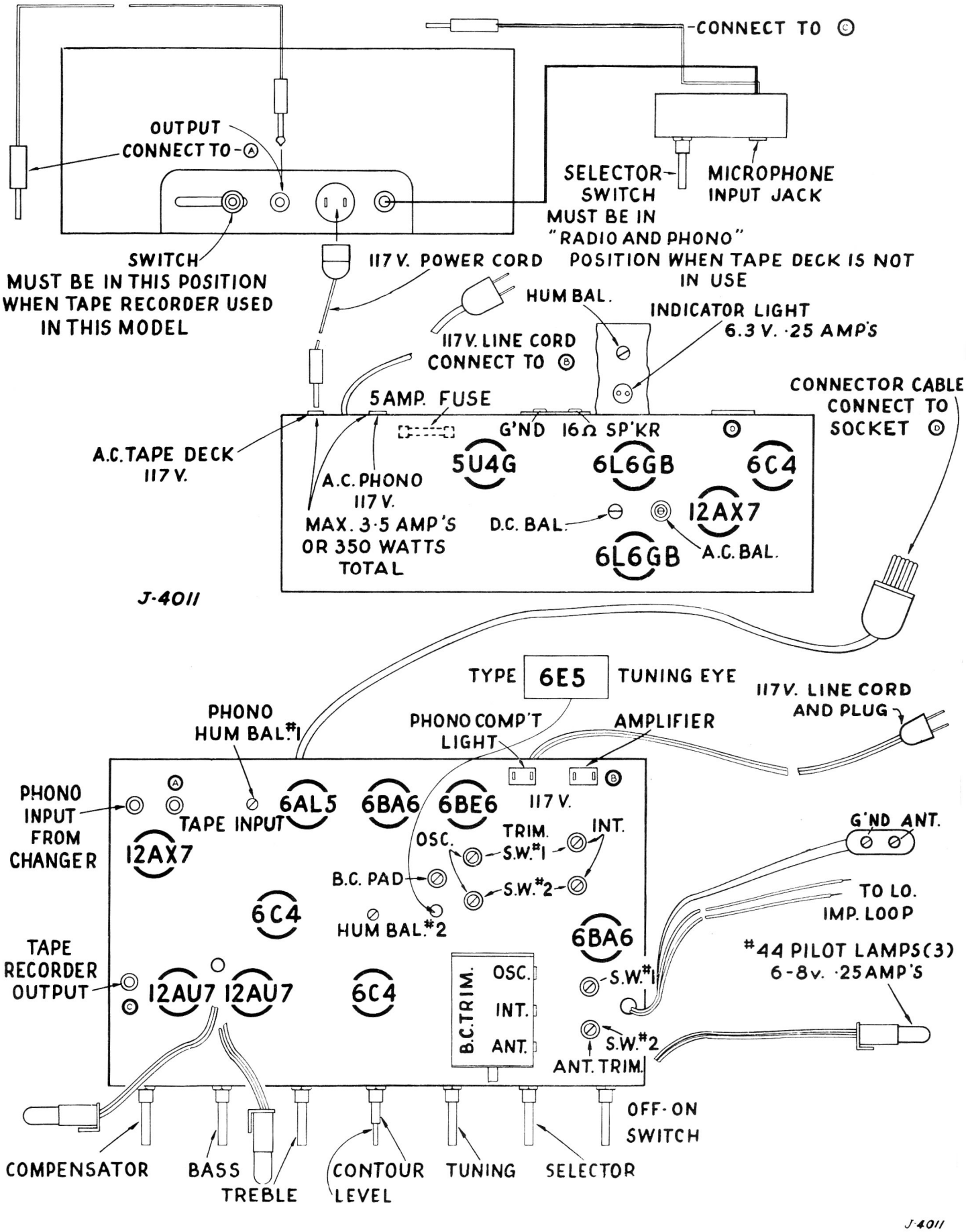
Adjust AC. Balance control for balanced voltage pin # 5 to ground for 6L6 output tubes.
(Use a Vacuum tube voltmeter)

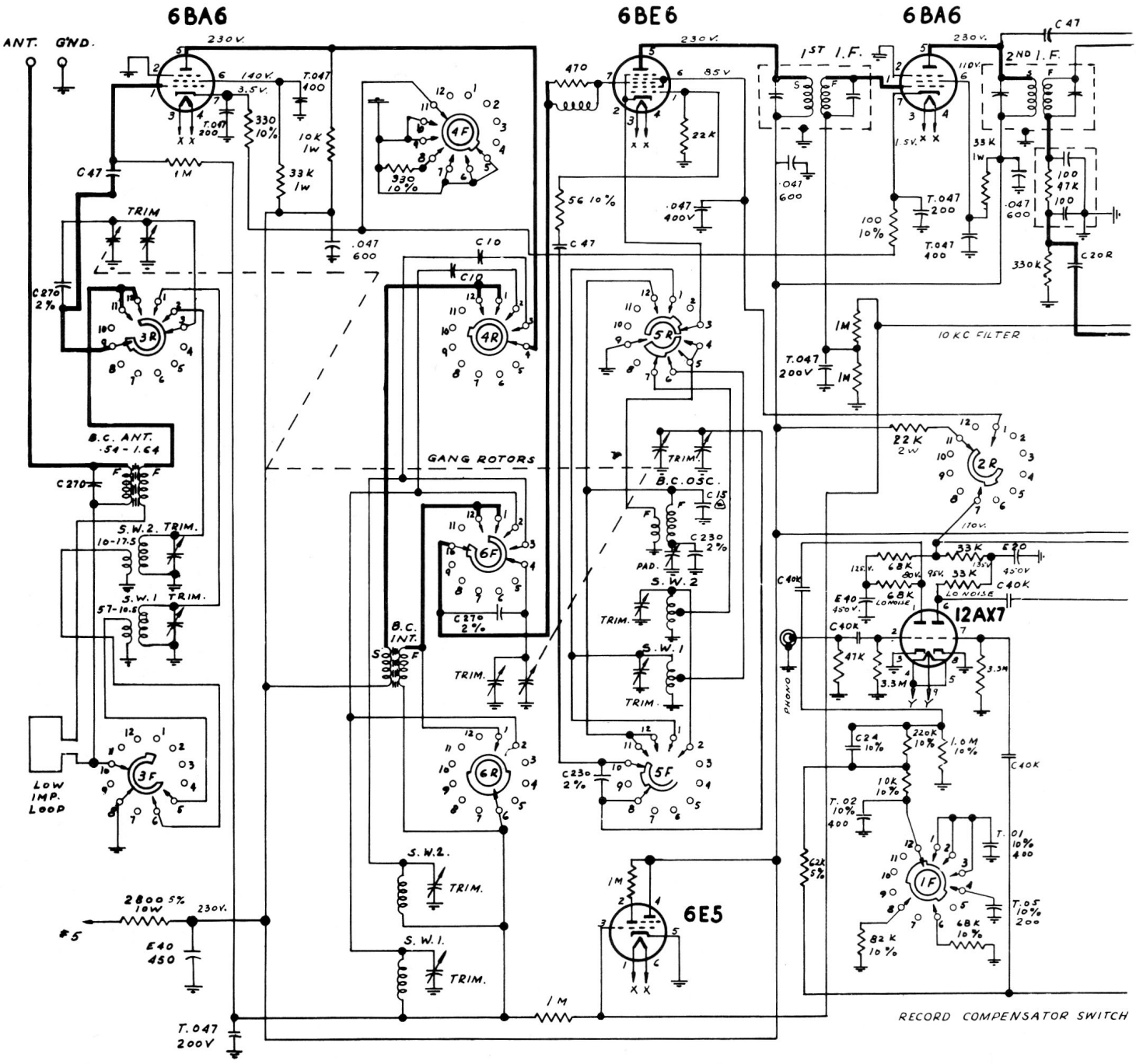
SEE SCHEMATIC FOR HUM BALANCE CONTROLS ON TUNER.

Hum Balancer (Preamp on tuner)

A Hum-Balancer has been incorporated in this receiver to balance out hum which may be present because of the high gain and wide frequency response of the audio portion of the receiver. It may be found necessary to re-adjust the hum-balancer for minimum hum reproduction when the 12AX7 tube is replaced. Set the tone control in its extreme left hand position, turn the selector switch to phono position, the volume control full on and adjust the hum-balancer for minimum hum level.

THE T. EATON CO LIMITED
CANADA


CONNECT TO Ⓒ
OUTPUT
CONNECT TO - Ⓐ
SELECTOR SWITCH
MICROPHONE INPUT JACK
MUST BE IN "RADIO AND PHONO" POSITION WHEN TAPE DECK IS NOT IN USE
SWITCH
MUST BE IN THIS POSITION WHEN TAPE RECORDER USED IN THIS MODEL
117 V. POWER CORD
HUM BAL.
INDICATOR LIGHT 6.3 V. ·25 AMP'S
117 V. LINE CORD CONNECT TO Ⓑ
CONNECTOR CABLE CONNECT TO SOCKET Ⓓ
5 AMP. FUSE
G'ND 16Ω SP'KR
A.C. TAPE DECK 117 V.
A.C. PHONO 117 V.
MAX. 3·5 AMP'S OR 350 WATTS TOTAL
5U4G
6L6GB
6C4
12AX7
D.C. BAL.
A.C. BAL.
6L6GB
J-4011
TYPE 6E5 TUNING EYE
117 V. LINE CORD AND PLUG
PHONO HUM BAL. #1
PHONO COMP'T LIGHT
AMPLIFIER
PHONO INPUT FROM CHANGER
TAPE INPUT
6AL5
6BA6
6BE6
117 V.
12AX7
OSC.
TRIM.
INT.
S.W. #1
S.W. #2
B.C. PAD
HUM BAL. #2
G'ND ANT.
TO LO. IMP. LOOP
6C4
6BA6
TAPE RECORDER OUTPUT
12AU7
12AU7
6C4
B.C. TRIM.
OSC.
INT.
ANT.
#44 PILOT LAMPS (3) 6-8 v. ·25 AMP'S
S.W. #1
S.W. #2
ANT. TRIM.
OFF-ON SWITCH
COMPENSATOR
BASS
TREBLE
CONTOUR LEVEL
TUNING
SELECTOR
J-4011



ALIGNMENT AND SENSITIVITY

SIGNAL GENERATOR MODULATED 30% AT 400 C.P.S.
TONE CONTROL SWITCHES IN NORMAL OR CENTER POSITION.
BROADCAST ALIGNMENT MADE WITH SELECTOR SWITCH AT "DISTANT."

STEP	APPLY SIGNAL AT K.C.	APPLY SIGNAL TO	THRU SERIES DUMMY	SET GANG AT	ADJUST FOR MAX. OUTPUT	NOMINAL SENSITIVITY FOR 500 MW. OUTPUT
1	455	6BA6 #1 PIN	.05 μfd.		2ND I.F. IRON CORES	3000 μ v. DISTANT 9000 " " LOCAL
2	455	6BE6 #7 PIN	.05	MIN. CAP.	1&2 I.F. IRON CORES	100 400
3	1460	6BE6 #7 PIN	.05	1460 KC	B.C. OSC. TRIM.	—
4	1460	ANT.	400 Ω	1460	B.C. & ANT. & INTERSTAGE TRIMMERS	3 36
5	600	ANT.	400	600 KC	B.C. OSC. PADDER	8 80
6	16 MC.	ANT.	400	16 MC.	S.W.2 OSC. INTERSTAGE & ANT. TRIM.	10
7	10.5 MC	ANT.	400	10.5	S.W.2 CHECK POINT	16
8	10 MC.	ANT.	400	10	S.W.1. OSC. INTERSTAGE & ANT. TRIM.	4
9	6 MC.	ANT.	400	6	S.W.1. CHECK POINT	8

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. & D.C.W.V.
C = CERAMIC, FOLLOWED BY CAP. IN MMFD. & TOL. IF CRITICAL.
E = ELECTROLYTIC, FOLLOWED BY CAP. IN MFD. & D.C.W.V.
M = SILVER MICA, FOLLOWED BY CAP. IN MMFD & TOL. 10%

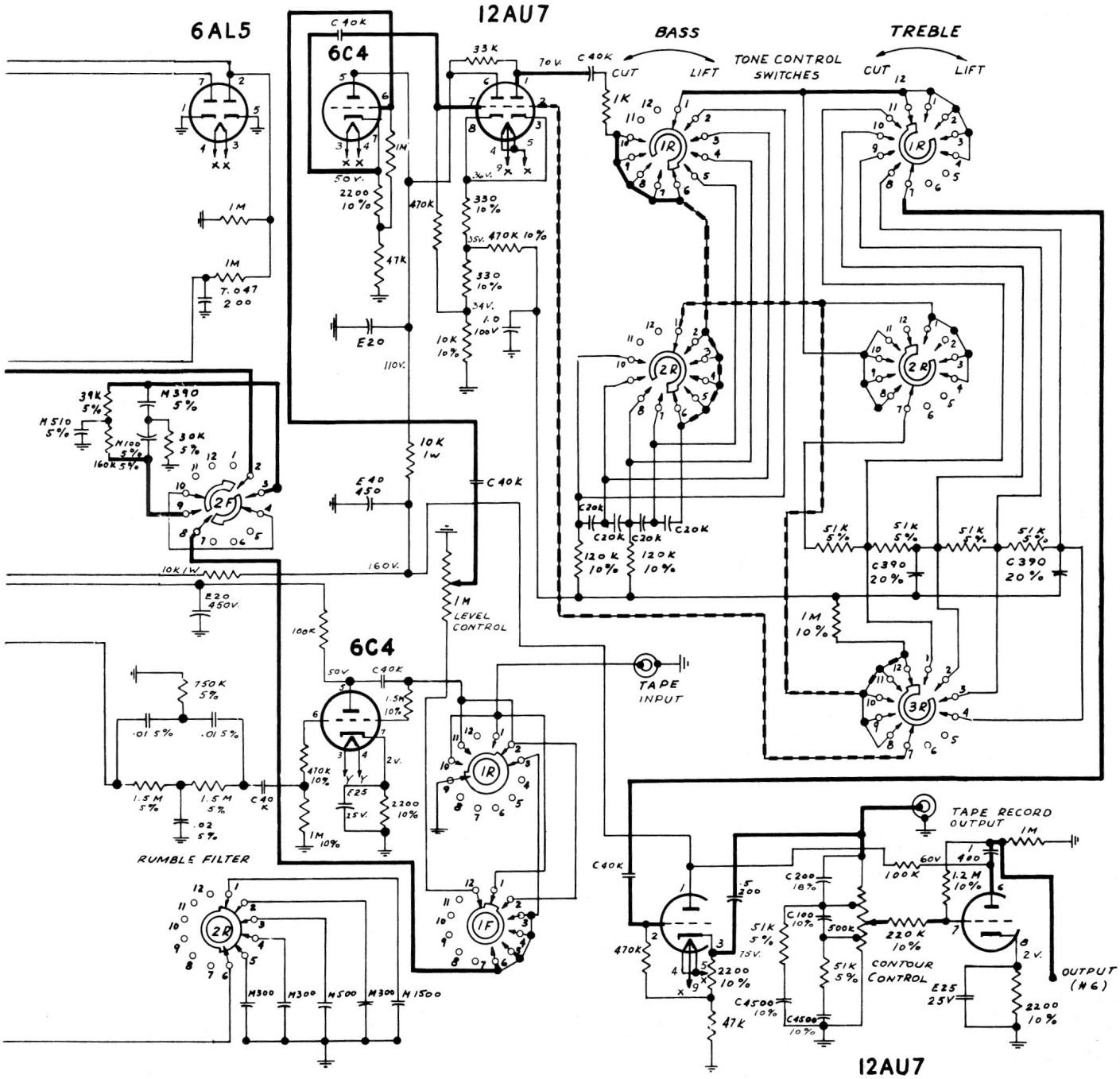
ALL VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHM/VOLT METER AT ZERO SIGNAL OUTPUT.

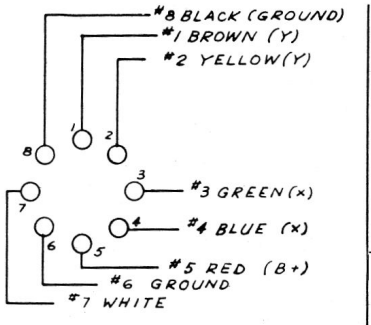
BAND SWITCH SHOWN IN TAPE (EXTREME COUNTER CLOCKWISE) POSITION
SWITCH SEQUENCE: TAPE - PHONO - B.C. "DISTANT" - B.C. "LOCAL" - S.W.1 - S.W.2.

TONE CONTROL SWITCHES SHOWN IN NORMAL (CENTER) POSITION.

RECORD COMPENSATOR SWITCH SHOWN IN EARLY 78 (EXTREME COUNTER CLOCKWISE) POSITION.
SWITCH SEQUENCE: EARLY 78 - COL. L.P. - RIAA - LON. L.P. - FFRR - FLAT

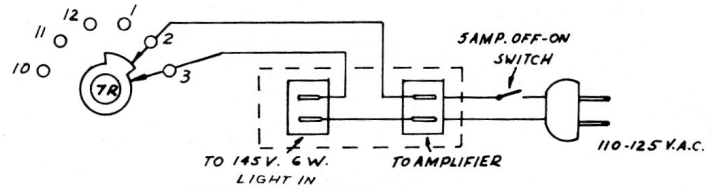
HEAVY LINE INDICATES SIGNAL PATH FOR BROADCAST "DISTANT" POSITION OF SELECTOR SWITCH.
BROKEN HEAVY LINE INDICATES FEEDBACK PATH IN TONE CONTROL.

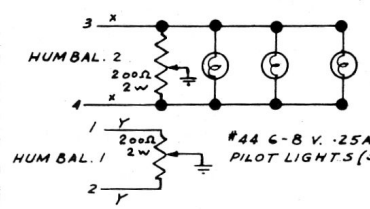




CONNECTOR PLUG
LEAD ENDS

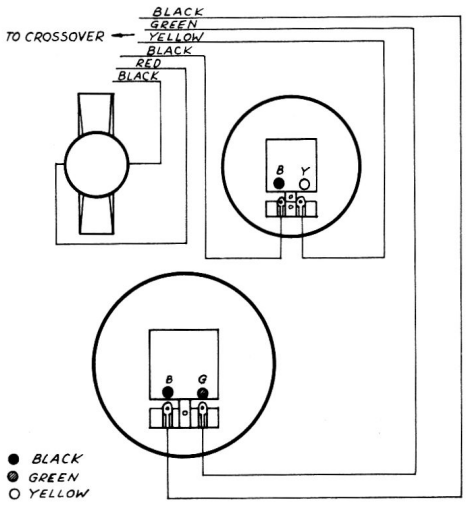
A.C. SWITCHING (ON BAND SELECTOR SWITCH)





SWITCH TO TAPE: ADJUST HUM BAL. 2 FOR MINIMUM HUM.
SWITCH TO PHONO: ADJUST HUM BAL. 1 FOR MINIMUM HUM.

C.N.No.	DATE	CHANGE	SYMB.	CH'K
56-961	10-22-56	WAS C 10 ON B.C. OSC.	a	gb



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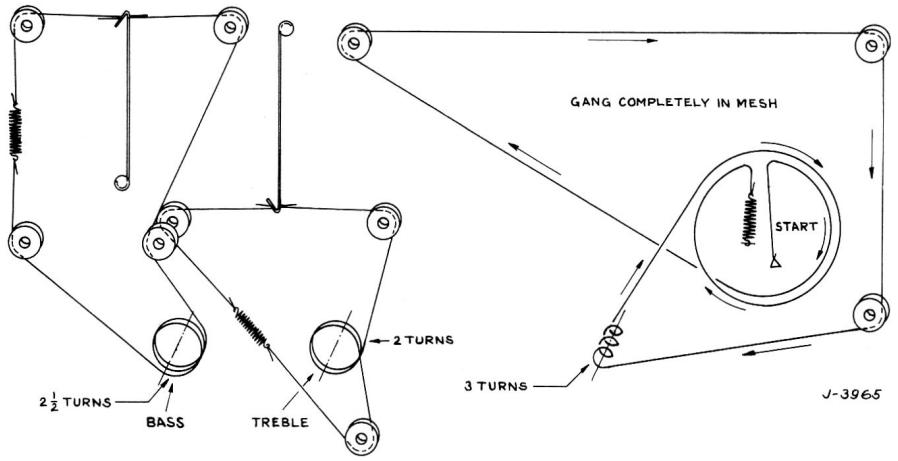

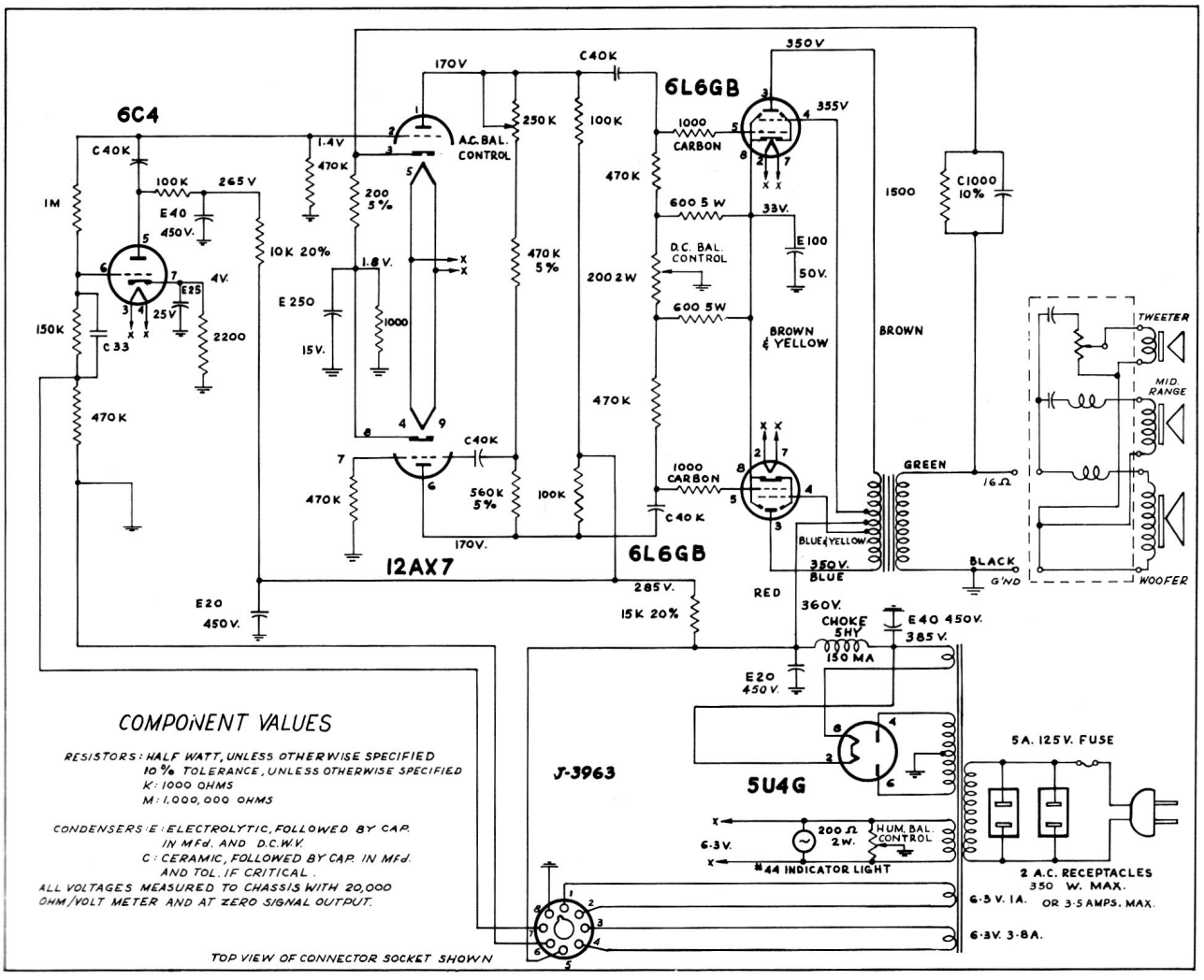

COMPONENT VALUES

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 MFd. AND TOL. IF CRITICAL.

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

REPLACEMENT PARTS LIST

TUNER

A-3065	Dial Scale
B-4406-3	Drive Shaft
B-4632	Flywheel
G-504	Electrolytic 40, 20 ufd x 450 DC WV
G-528-1	" 25 ufd x 25 DC WV
G-537	" 40 ufd x 450 DC WV
G-668	" 40, 40, 20 ufd x 450 DC WV
K-771A	Pilot Lamp 6 - 8 V .25 Amp. # 44
K-1394	Filpec
MP-1204-45	Pointer and Slider Assembly
P-1778	BC Oscillator Coil
P-1779	SW 1 Antenna Coil
P-1781	SW 1 Oscillator Coil
P-1782	SW 2 Antenna Coil
P-1784	SW 2 Oscillator Coil
P-2279-1	BC Int. Coil
P-2499-1	BC Antenna Loading Coil
P-2923	1st and 2nd IF Transformer
P-2981	SW 1 Interstage Coil
P-2982	SW 2 " "
P-2998	RF Choke
Q-290-5	Selector Switch, Bass Tone
Q-291-5	" " , Treble Tone
Q-334-3	Equalizer Switch
Q-337-1	Off-On Switch
Q-345-1	Selector Switch
R-391-2	Potentiometer 200 ohm, Hum Balance No. 1 and 2
R-456-1	Level and Contour
V-263-1	Trimmer
V-335	Dual Trimmer
V-399-1	Gang Condenser

AMPLIFIER

G-528-1	Electrolytic, 25 ufd x 25 DC WV
G-666	" , 100 ufd x 50 DC WV, 40 & 20 ufd x 450 DC WV
G-667	" , 250 ufd x 15 DC WV, 40 & 20 ufd x 450 DC WV
H-536-17	Resistor, Wirewound 600 ohm $\pm$ 10% 5W
K-1463-6	Fuse, 5A, 125V. Slow-Blow
LK-554-2	Filter Choke
LK-615-1	Power Transformer, 25 cycle
LK-616-1	" " 60 "
LK-625-1	Output Transformer
R-391-2	Potentiometer, 200 ohm, Hum Balance & DC Balance
R-424	Control — AC Balance

INSTALLATION

A-3066	Control Panel
K-771A	Pilot Lamp 6-8V, .25A # 44
K-1546	Speaker, 8" P.M. Mid-range
K-1549	" , 12" " RSP
K-1561	" , Tweeter
N-379-1	Knob—High-frequency Speaker Control
N-484-1	" —Level
N-485-1	" —Contour
N-486-1	" —Tuning
N-486-7	" —Off-on, Selector, Treble, Bass, Compensator
P-3000-2	Garrard RC-88 Changer 60 cycle 4 Speed
P-3001-2	Garrard RC-88 Changer 25 cycle 4 Speed
K-1529-1	G.E. Cartridge

Replacement Needles
LP RPJ-01S (Sapphire)
❖RPJ-01D (Diamond)
78 RPJ-03S (Sapphire)

❖This is not supplied in original equipment, it may be procured at extra cost as a replacement for RPJ-01S needle if a diamond stylus is preferred.