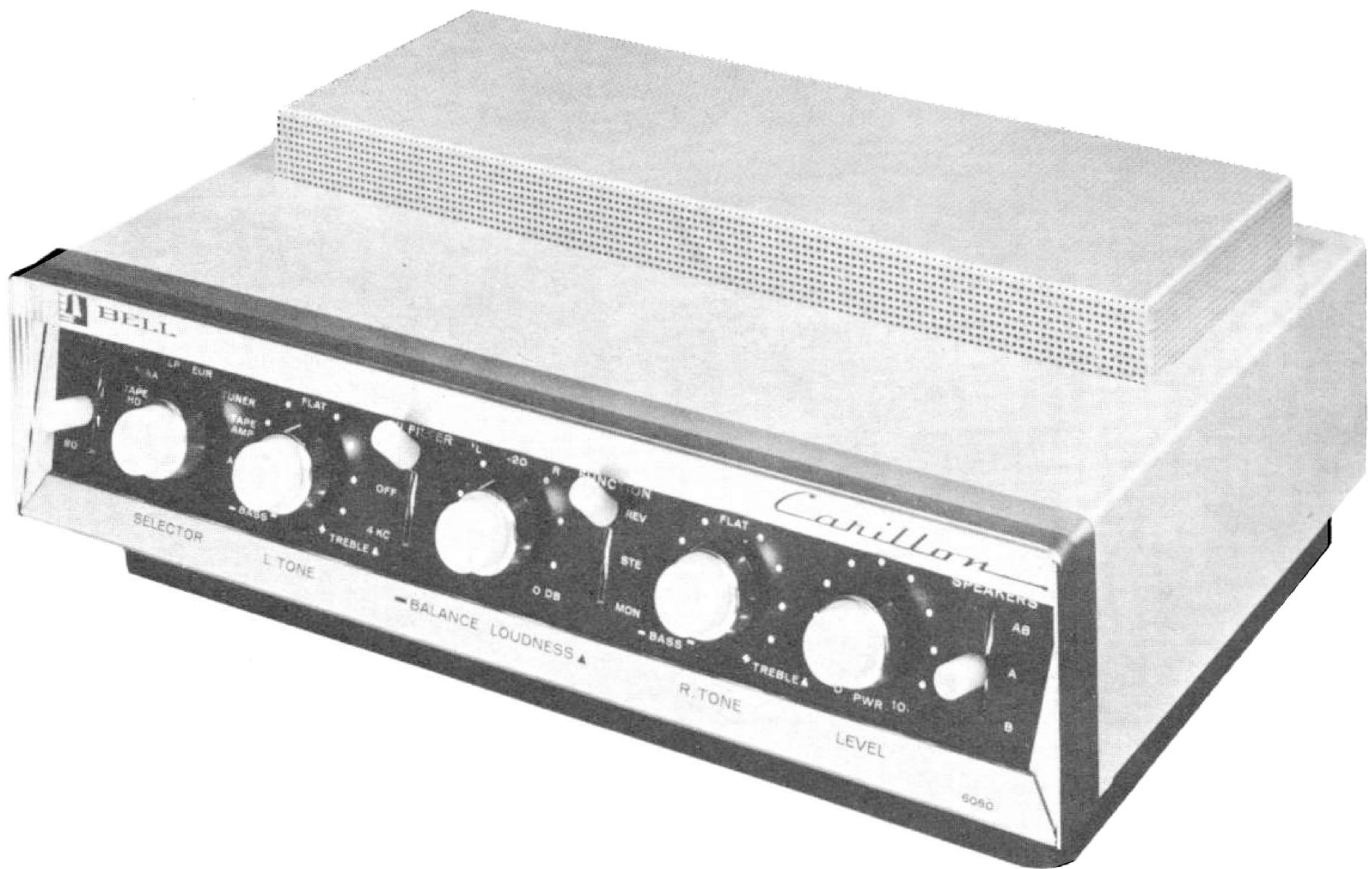
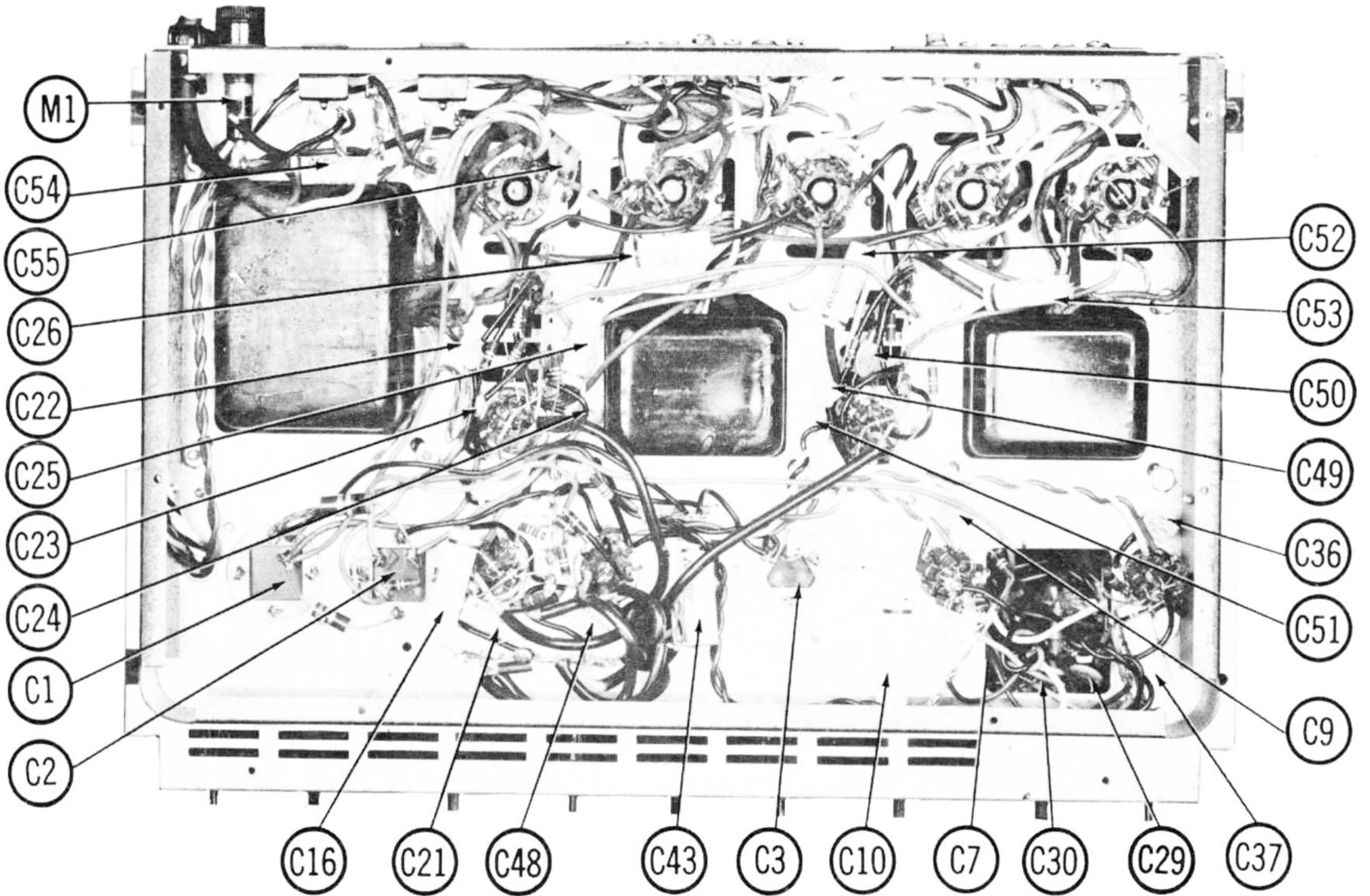


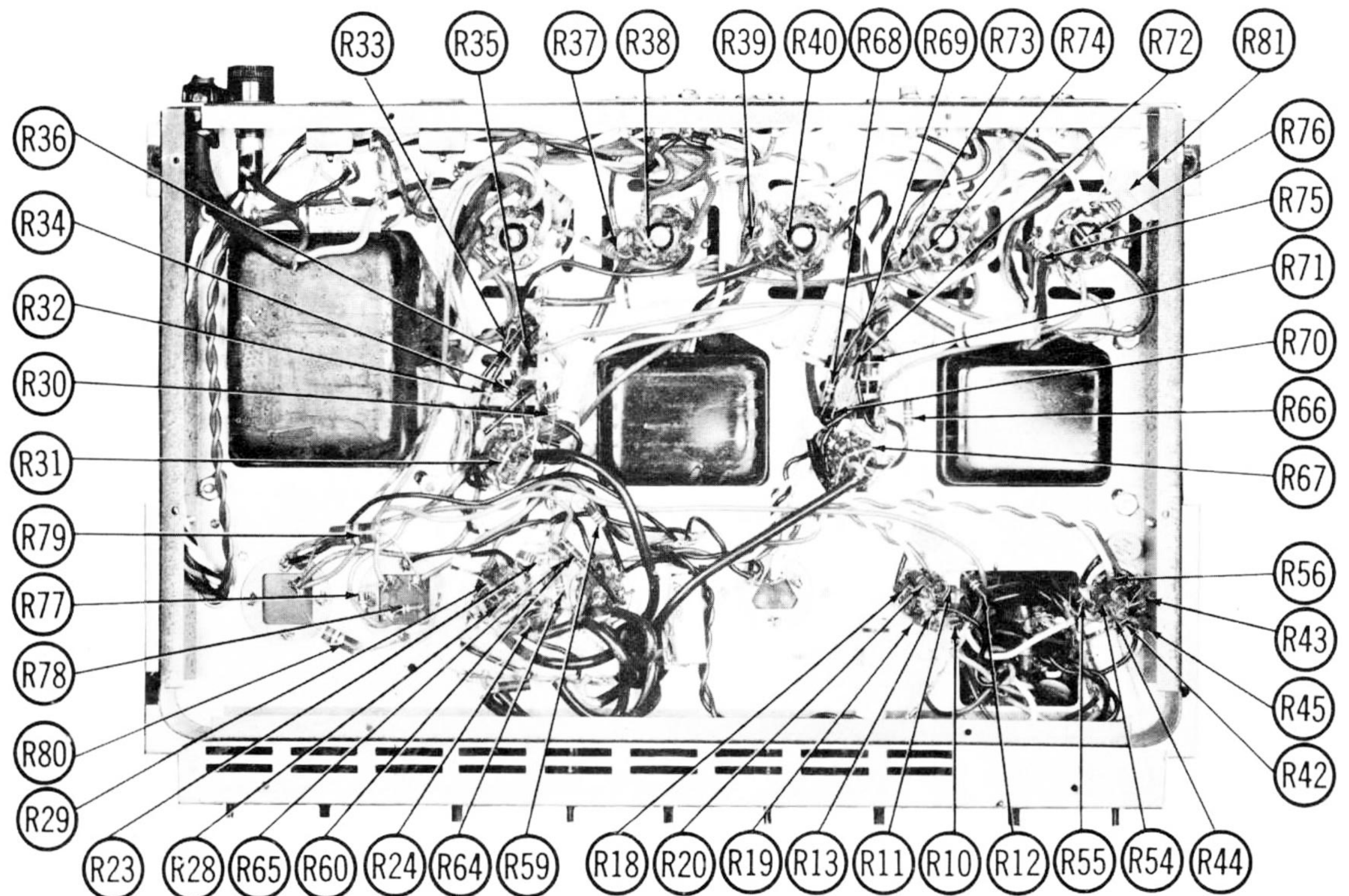
**BELL SOUND
MODEL 6060**



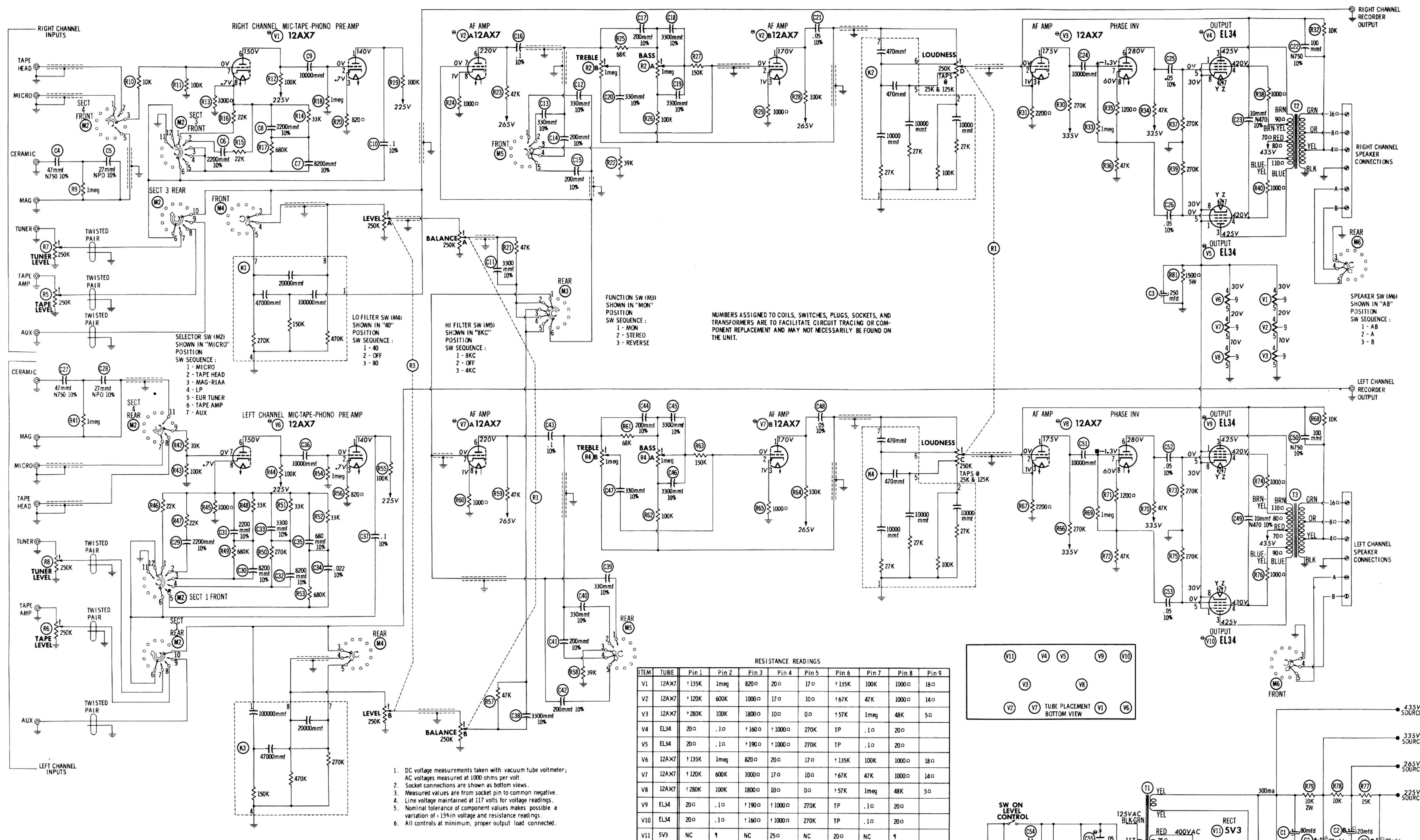
TRADE NAME	Bell Sound Model 6060		
MANUFACTURER	Bell Sound Div., Thompson Ramo Wooldridge Inc., 555 Marion Road, Columbus, Ohio		
TYPE SET	AC Operated 11 Tube Stereo Amplifier		
POWER SUPPLY	110-120 Volts AC, 60 Cycles	RATING	230 Watts, 2.2 Amp. @ 117 Volts AC



CHASSIS BOTTOM VIEW — CAPACITOR & MISC. IDENT.



CHASSIS BOTTOM VIEW — RESISTOR IDENT.



FUNCTION SW (M3) SHOWN IN "MON" POSITION SW SEQUENCE:
 1 - MON
 2 - STEREO
 3 - REVERSE

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

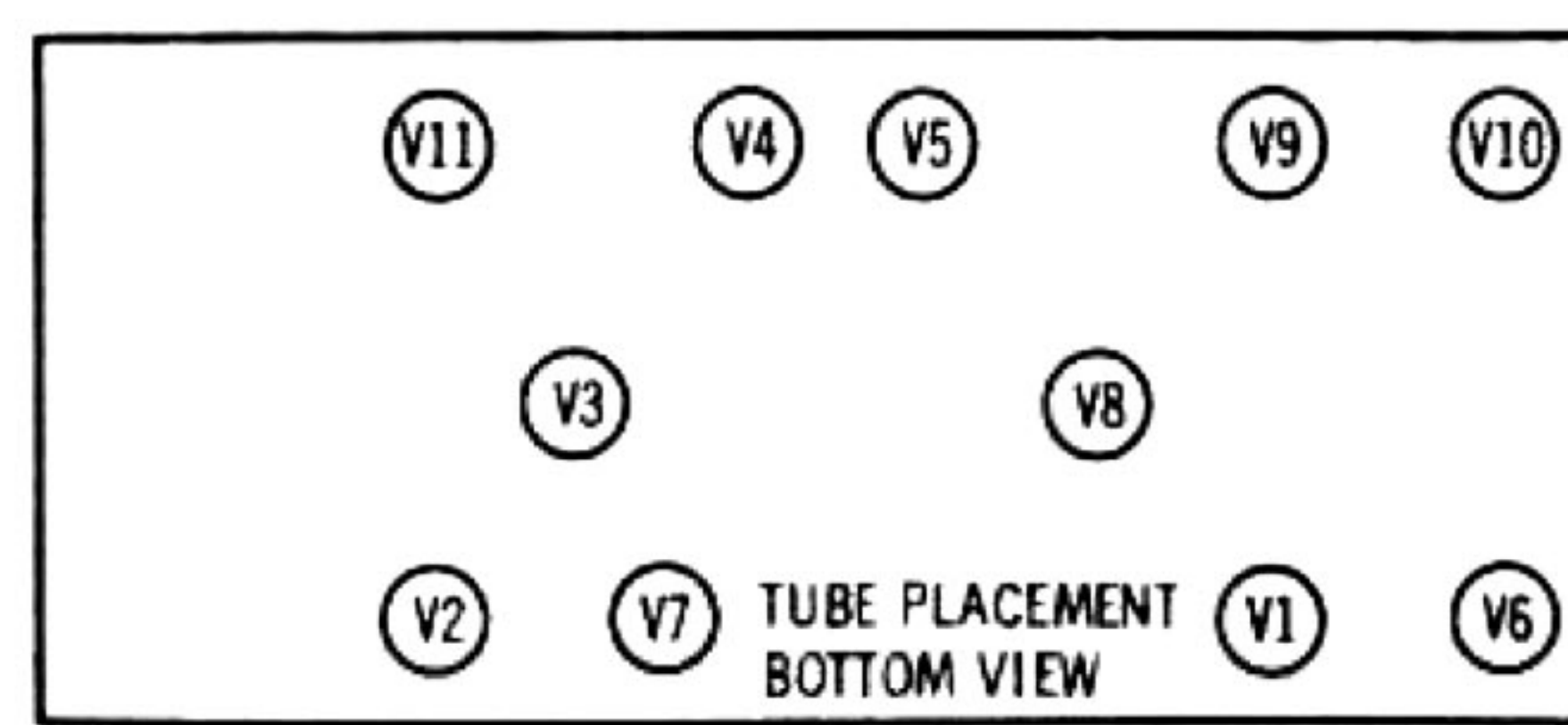
SELECTOR SW (M2) SHOWN IN "MICRO" POSITION SW SEQUENCE:
 1 - MICRO
 2 - TAPE HEAD
 3 - MAG-RIAA
 4 - LP
 5 - EUR TUNER
 6 - TAPE AMP
 7 - AUX

HI FILTER SW (M5) SHOWN IN "8K" POSITION SW SEQUENCE:
 1 - 8K
 2 - OFF
 3 - 4K

RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12AX7	+135K	1meg	820Ω	20Ω	17Ω	+135K	100K	1000Ω	18Ω
V2	12AX7	+120K	600K	1000Ω	17Ω	10Ω	+67K	47K	1000Ω	14Ω
V3	12AX7	+280K	100K	1800Ω	10Ω	0Ω	+57K	1meg	48K	5Ω
V4	EL34	20Ω	.1Ω	+160Ω	+1000Ω	270K	TP	.1Ω	20Ω	
V5	EL34	20Ω	.1Ω	+190Ω	+1000Ω	270K	TP	.1Ω	20Ω	
V6	12AX7	+135K	1meg	820Ω	20Ω	17Ω	+135K	100K	1000Ω	18Ω
V7	12AX7	+120K	600K	1000Ω	17Ω	10Ω	+67K	47K	1000Ω	14Ω
V8	12AX7	+280K	100K	1800Ω	10Ω	0Ω	+57K	1meg	48K	5Ω
V9	EL34	20Ω	.1Ω	+190Ω	+1000Ω	270K	TP	.1Ω	20Ω	
V10	EL34	20Ω	.1Ω	+160Ω	+1000Ω	270K	TP	.1Ω	20Ω	
V11	5V3	NC	1	NC	25Ω	NC	20Ω	NC	1	

1 THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
 † MEASURED FROM PIN 8 OF V1.
 ‡ MEASURED FROM PIN 8 OF V3.
 * MEASURED FROM PIN 8 OF V8. NC NO CONNECTION TP TIE POINT

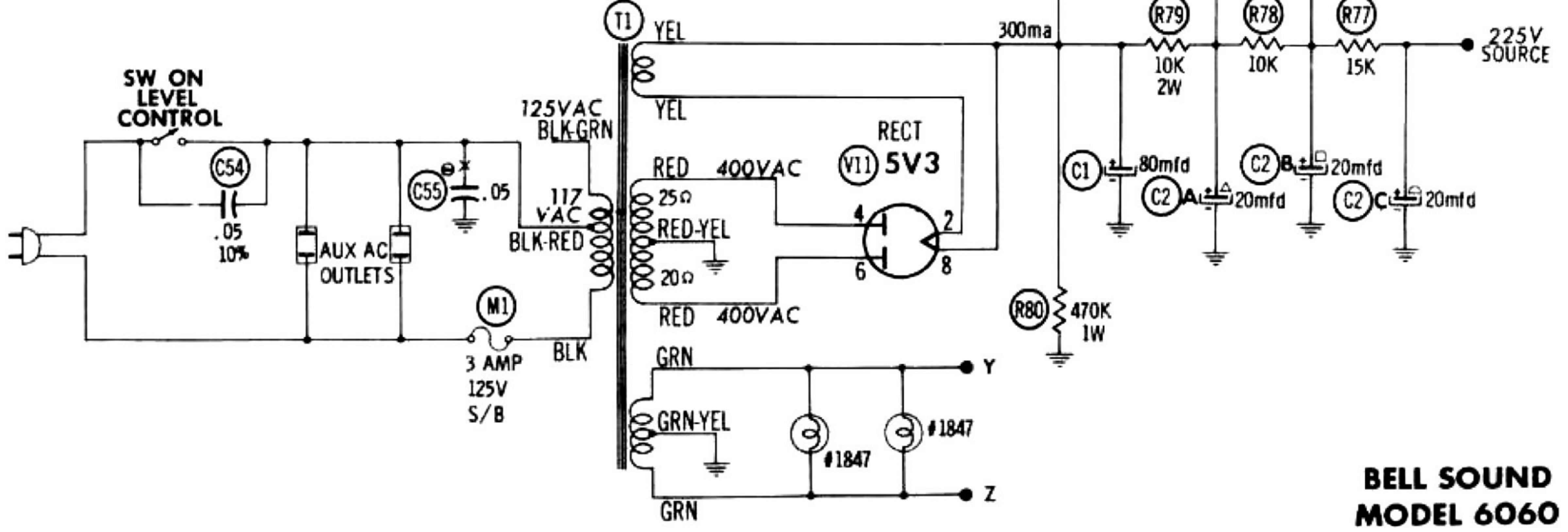


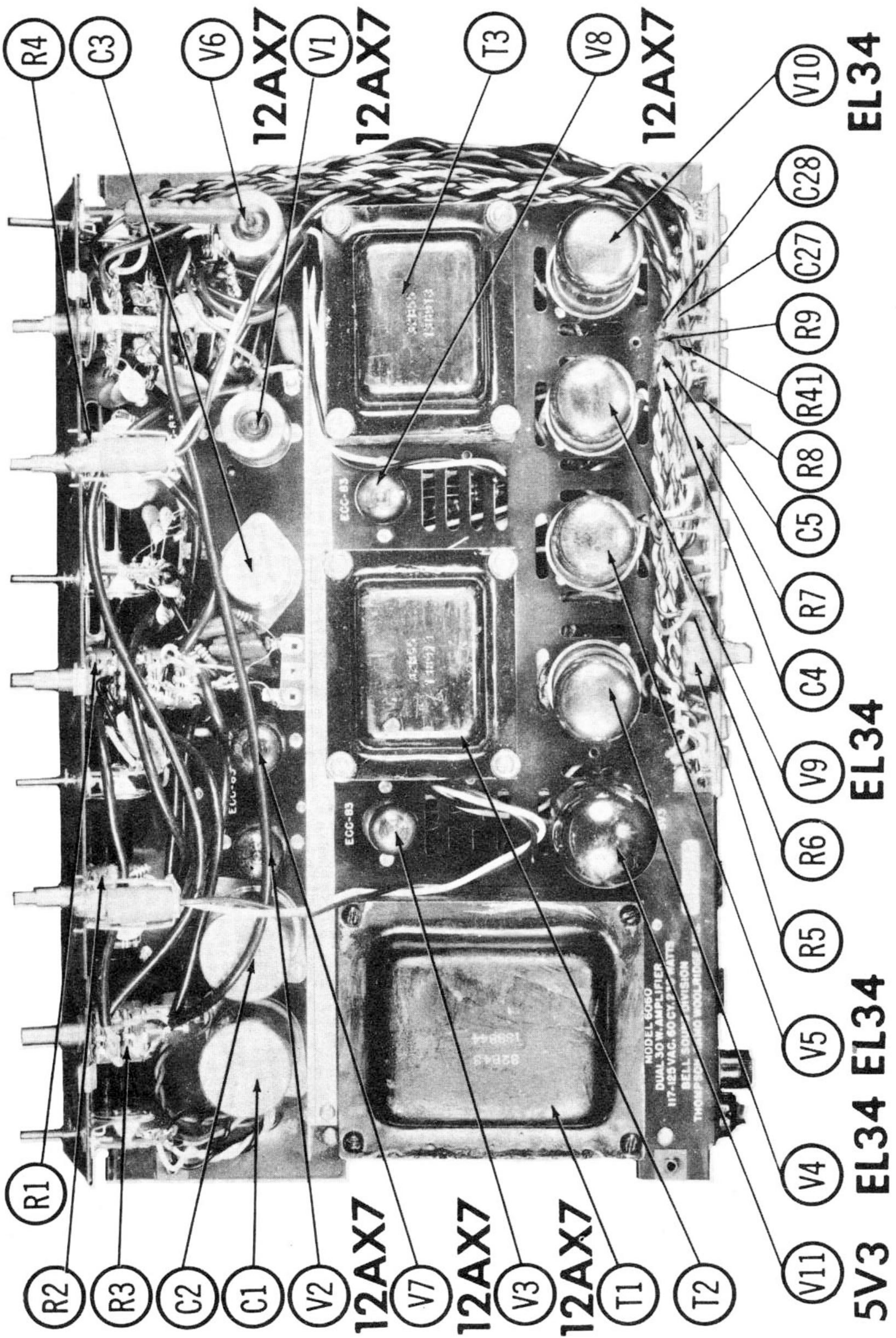
- DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
- Socket connections are shown as bottom views.
- Measured values are from socket pin to common negative.
- Line voltage maintained at 117 volts for voltage readings.
- Nominal tolerance of component values makes possible a variation of ±15% in voltage and resistance readings.
- All controls at minimum, proper output load connected.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

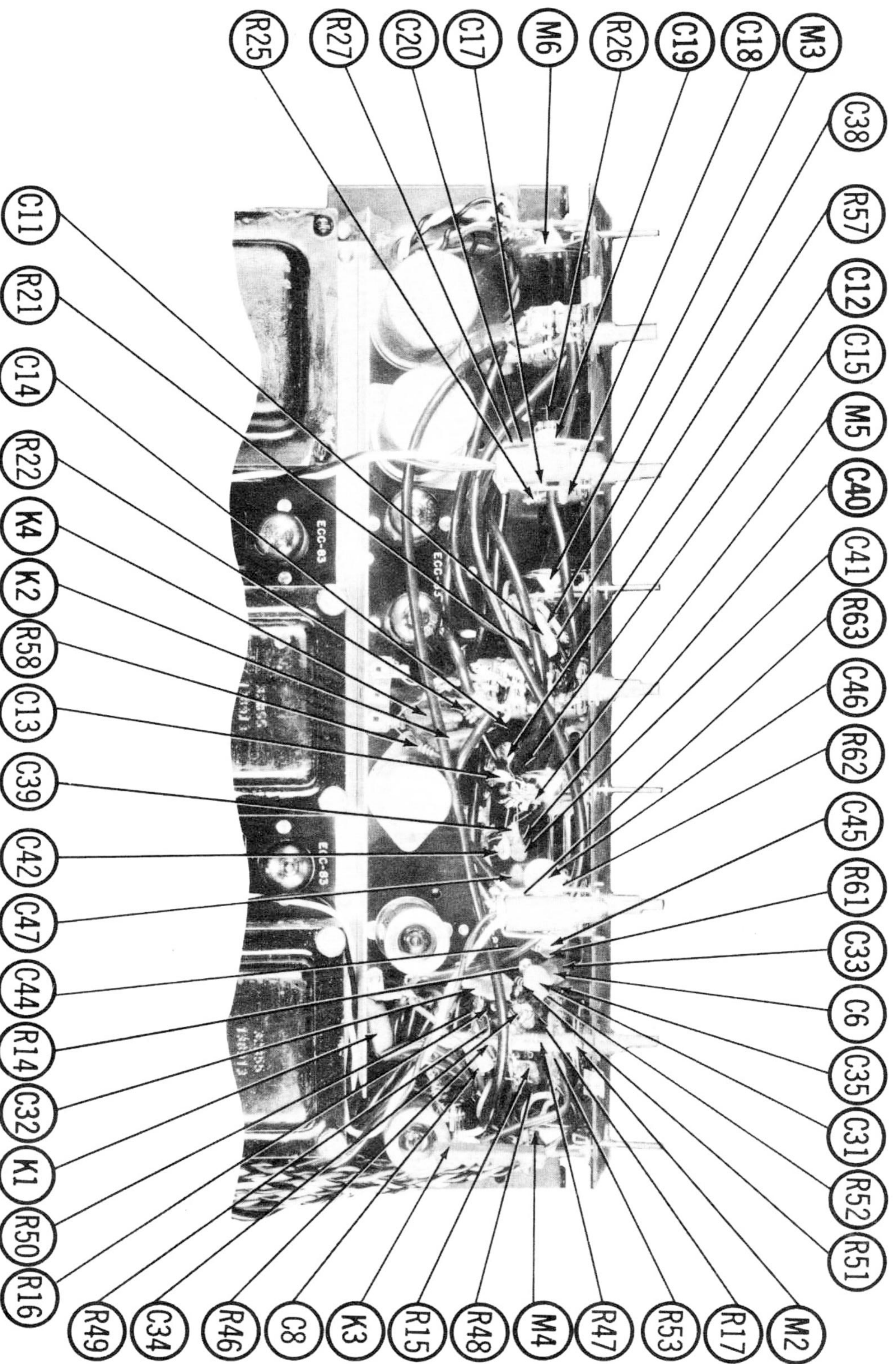
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)





CHASSIS-TOP VIEW



CHASSIS TOP VIEW - CONTROL PANEL REAR

PARTS LIST AND DESCRIPTIONS

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
 8524 (Stranded) Available in Ten Colors
 Power Card Use BELDEN No. 1765-B (6 Ft. Length)
 Use BELDEN No. 1725-K (7 1/2 Ft. Length)

TUBES

CBS		GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	TYPE
V1	Right Channel Mic-Tape-Phono Preamp.	12AX7 ECC83*	V6	Left Channel Mic-Tape-Phono Preamp.	12AX7 ECC83*		
V2	Right Channel AF Amp.	12AX7 ECC83*	V7	Left Channel AF Amp.	12AX7 ECC83*		
V3	Right Channel AF Amp. - Right Channel Phase Inv.	12AX7 ECC83*	V8	Left Channel AF Amp. - Left Channel Phase Inv.	12AX7 ECC83*		
V4	Right Channel Output	EL34 6CA7*	V9	Left Channel Output	EL34 6CA7*		
V5	Right Channel Output	EL34 6CA7*	V10	Left Channel Output	EL34 6CA7*		
			V11	Rectifier	5V3		

* Alternate

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	BELL SOUND PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	80	500	23B40	AFH1-62	A0560	FP187	TMS-70	TVL-1958	
C2A	20	450	23B11	AFH3-36	C0270	FP376.5	TMT-34	TVL-3780	
C3	250	50	23B42	AFHS1-24-24		FP117	TMS-14	TVL-1324	

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	BELL SOUND PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
C4	47	N750	24B55	N750-DI 47	DTN-47	C10Q47U	CN7-447	5TCU-Q47S 10%*	
C5	27	NPO	24B72	DI-2200	TCZ-27	C10Q27C	CNO-427	5TCC-Q27S 10%*	
C6	2200	10%	24B17	DI-2200			JL-222	5GA-D22S 10%*	
C7	8200	10%	24B57	DI-2200			JL-222	5GA-D22S 10%*	
C8	2200	10%	24B17	DI-2200			JL-222	5GA-D22S 10%*	
C9	10000	10%	24B61	DI-10000	MD-103	BYA10S1	B-110	5HK-S1 10%*	
C10	.1	400	28B6	V84C4P1		PM4P1	GTM-401	4TM-P1 10%*	
C11	3300	10%	24B22	DI-3300		L10T33	JL-233	5GA-D33S 10%*	
C12	330	10%	24B75	DI-330		L10T33	JL-333	5GA-T33S 10%*	
C13	330	10%	24B75	DI-330		L10T33	JL-333	5GA-T33S 10%*	
C14	200	10%	24B76	DI-200		L10T2	JL-333	5GA-T33S 10%*	
C15	200	10%	24B76	DI-200		L10T2	JL-333	5GA-T33S 10%*	
C16	.1	400	28B6	V84C4P1		PM4P1	GTM-4P1	4TM-P1 10%*	
C17	200	10%	24B76	DI-200	MD-201	L10T2	JL-233	5GA-T2S 10%*	
C18	3300	10%	24B22	DI-3300		L10T2	JL-233	5GA-D33S 10%*	
C19	3300	10%	24B22	DI-3300		L10T2	JL-233	5GA-D33S 10%*	
C20	330	10%	24B75	DI-330		L10T33	JL-333	5GA-T33S 10%*	
C21	.05	400	28B4	V84C4S47		PM4S5	GTM-4147	4TM-S5 10%*	

† "STA-LOC" equivalent: FA16L, RU16L, OS750A, IS1062

* Taps @ 25K and 125K.

■ "Concentrik" Equivalent: K-2 Kit with base elements and shafts: B11-137, P1-024 (Panel) B11-137, R1-103 (Rear)
 Not available as a factory assembled unit.

CAPACITORS (cont)

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	BELL SOUND PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
C22	100	N750	24B20	N750-DI 100	DTN-100	C10T10	CN7-310	5TCU-T1S 10%*	
C23	10	N470	24B71	DI-10000		BYA10S1	B-110	5HK-S1 10%*	
C24	10000	10%	24B61	V84C4S47	MD-103	PM4S5	GTM-4147	4TM-S5 10%*	
C25	.05	400	28B4	V84C4S47		PM4S5	GTM-4147	4TM-S5 10%*	
C26	.05	400	28B4	N750-DI 47	DTN-47	C10Q47U	CN7-447	5TCU-Q47S 10%*	
C27	47	N750	24B55	DI-2200	TCZ-27	C10Q27C	CNO-427	5TCC-Q27S 10%*	
C28	27	NPO	24B72	DI-2200			JL-222	5GA-D22S 10%*	
C29	8200	10%	24B17	DI-2200			JL-222	5GA-D22S 10%*	
C30	2200	10%	24B57	DI-2200			JL-222	5GA-D22S 10%*	
C31	2200	10%	24B17	DI-2200			JL-222	5GA-D22S 10%*	
C32	8200	10%	24B57	DI-3300			JL-233	5GA-D82S 10%*	
C33	3300	10%	24B22	DI-3300			JL-233	5GA-D82S 10%*	
C34	.022	50	28B7	V84C2S22	MD-681	PM4S22	GTM-1122	2TM-S22 10%*	
C35	680	10%	24B56	DI-680	MD-103	BYA10S1	B-110	5HK-S1 10%*	
C36	10000	10%	24B61	DI-10000		PM4P1	GTM-401	4TM-P1 10%*	
C37	.1	400	28B6	V84C4P1		PM4P1	GTM-401	4TM-P1 10%*	
C38	3300	10%	24B22	DI-3300		L10T33	JL-233	5GA-D33S 10%*	
C39	330	10%	24B75	DI-330		L10T33	JL-333	5GA-T33S 10%*	
C40	330	10%	24B75	DI-330		L10T33	JL-333	5GA-T33S 10%*	
C41	200	10%	24B76	DI-200	MD-201	L10T2	JL-333	5GA-T2S 10%*	
C42	200	10%	24B76	DI-200	MD-201	L10T2	JL-333	5GA-T2S 10%*	
C43	.1	400	28B6	V84C4P1		PM4P1	GTM-401	4TM-P1 10%*	
C44	200	10%	24B76	DI-200	MD-201	L10T2	JL-233	5GA-T2S 10%*	
C45	3300	10%	24B22	DI-3300		L10T2	JL-233	5GA-D33S 10%*	
C46	3300	10%	24B22	DI-3300		L10T2	JL-233	5GA-D33S 10%*	
C47	330	10%	24B75	DI-330	MD-331	L10T33	JL-333	5GA-T33S 10%*	
C48	.05	400	28B4	V84C4S47		PM4S5	5GTM-4147	4TM-S5 10%*	
C49	10	N470	24B71	DI-10000			GEM-415	4TM-S5 10%*	
C50	100	N750	24B20	N750-DI 100	DTN-100	C10T10	CN7-T1	5TCU-T1S 10%*	
C51	10000	10%	24B61	DI-10000	MD-103	BYA10S1	B-110	5HK-S1 10%*	
C52	.05	400	28B4	V84C4S47		PM4S5	GTM-4147	4TM-S5 10%*	
C53	.05	400	28B4	V84C4S47		PM4S5	GTM-4147	4TM-S5 10%*	
C54	.05	400	28B4	V84C4S47		PM4S5	GTM-4147	4TM-S5 10%*	
C55	.05	400	28B4	P488N-05	DF-503	CUB4S5	GEM-415	4TM-S5 10%*	

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

① Not used in some versions.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA						INSTALLATION NOTES
	RESIST-ANCE	WATTS	BELL SOUND PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.		
RIA	250K		15B42					Balance, Right Channel	
B	250K							Balance, Left Channel	
C	250K *							Loudness, Left Channel	
D	250K *							Loudness, Right Channel	
R2A	1meg		15B33			■ QJ-1111R	UE4031	Bass, Right Channel	
R3A	1meg		15B43					Treble, Right Channel	
C	Switch							Level, Right Channel	
R4A	1meg		15B33			■ QJ-1111R	UE4031	Level, Left Channel	
B	1meg		15B47					Push Pull, Off-On	
R5A	250K		15B47					Bass, Left Channel	
B	Shaft		15B47					Treble, Left Channel	
R6A	250K		15B47					Tape Level, Right Channel	
B	Shaft		15B47					Tape Level, Left Channel	
R7A	250K		15B47					Tuner Level, Right Channel	
B	Shaft		15B47					Tuner Level, Left Channel	
R8A	250K		15B47					Tuner Level, Left Channel	
B	Shaft		15B47					Tuner Level, Left Channel	

† "STA-LOC" equivalent: FA16L, RU16L, OS750A, IS1062

* Taps @ 25K and 125K.

■ "Concentrik" Equivalent: K-2 Kit with base elements and shafts: B11-137, P1-024 (Panel) B11-137, R1-103 (Rear)
 Not available as a factory assembled unit.

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R9	1meg		R34	47K		R59	47K	
R10	10K		R35	1200Ω		R60	1000Ω	
R11	100K		R36	47K		R61	68K	
R12	100K		R37	270K		R62	100K	
R13	1000Ω		R38	1000Ω		R63	150K	
R14	33K		R39	270K		R64	100K	
R15	22K		R40	1000Ω		R65	1000Ω	
R16	22K		R41	1meg		R66	270K	
R17	680K		R42	10K		R67	2200Ω	
R18	1meg		R43	100K		R68	10K	
R19	100K		R44	100K		R69	1meg	
R20	820Ω		R45	1000Ω		R70	47K	
R21	47K		R46	22K		R71	1200Ω	
R22	39K		R47	22K		R72	47K	
R23	47K		R48	33K		R73	270K	
R24	1000Ω		R49	680K		R74	1000Ω	
R25	68K		R50	270K		R75	270K	
R26	100K		R51	33K		R76	1000Ω	
R27	150K		R52	33K		R77	15K	
R28	100K		R53	680K		R78	10K	
R29	1000Ω		R54	1meg		R79	10K 2W	
R30	270K		R55	100K		R80	470K 1W	
R31	2200Ω		R56	820Ω		R81	1500Ω 5W	
R32	10K		R57	47K				
R33	1meg		R58	39K				

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	BELL SOUND PART No.	REPLACEMENT DATA
K1	Preamp. Tone Comp. Right Channel	20000mmf, 47000mmf, 100000mmf, 150K, 270K, 470K	91A200	
K2	Loudness Control Tone Comp. -Right Channel	470mmf, 470mmf, 10000mmf, 10000mmf, 100000mmf, 27K, 27K, 27K, 100K	91A198	
K3	Preamp. Tone Comp. Left Channel	20000mmf, 47000mmf, 100000mmf, 150K, 270K, 470K	91A200	
K4	Loudness Control Tone Comp. -Left Channel	470mmf, 470mmf, 10000mmf, 10000mmf, 100000mmf, 27K, 27K, 27K, 100K	91A198	

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA						
	PRI.	SEC. 1	SEC. 2	BELL SOUND PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T1	125V Tap ④ 117V ③ 2.2A	800VCT ④ .300A	5V ④ 3.8A	32B43						R-24B ①
	SEC. 3 6.3VCT ③ 6.3A	SEC. 4	SEC. 5							

① 117VAC Primary only.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES	
	PRI.	SEC.	BELL SOUND PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
T2	5000Ω	16Ω	32B55							
	CT Taps Screen 8Ω, 4Ω									
T3	5000Ω	16Ω	32B55							
	CT Taps Screen 8Ω, 4Ω									

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA							
			BELL SOUND PART No.	LITTELFUSE PART No.	FUSE	HOLDER				
M1	3AG	3A 125V S/B	53A7	53B5	312003. (3AG 3A 125V S/B)	342001	MDX-3	HOLDER	HOLDER	BUSS PART No.
										HKP

MISCELLANEOUS

ITEM No.	PART NAME	BELL SOUND PART No.	NOTES
M2	Switch	43B39	Selector (Rotary Wafer Type)
M3	Switch	43B42	Function (DPTT Lever Type)
M4	Switch	43B47	Lo Filter (DPTT Lever Type)
M5	Switch	43B46	Hi Filter (DPTT Lever Type)
M6	Switch	43B41	Speaker (DPTT Lever Type)

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	84A28	Large Inner Concentric
Knob	84A27	Small Outer Concentric
Knob	84A26	Integral
Knob	84A29	Push-On, Lever
Front Panel	94C28	