

**BELMONT MODELS
22A21, 22AX21, 22AX22**

BELMONT MODEL 22A21

TRADE NAME	Belmont, Models 22A21, 22AX21, 22AX22		
MANUFACTURER	Belmont Radio Corp., 5921 W. Dickens Ave., Chicago 39, Ill.		
TYPE SET	Television Receiver		
TUBES	Twenty-Two		
POWER SUPPLY	105 - 125 Volts AC (60 Cycle)	RATING	1.55 Amps. @ 117 Volts AC
TUNING RANGE-	Channels 1 through 13		

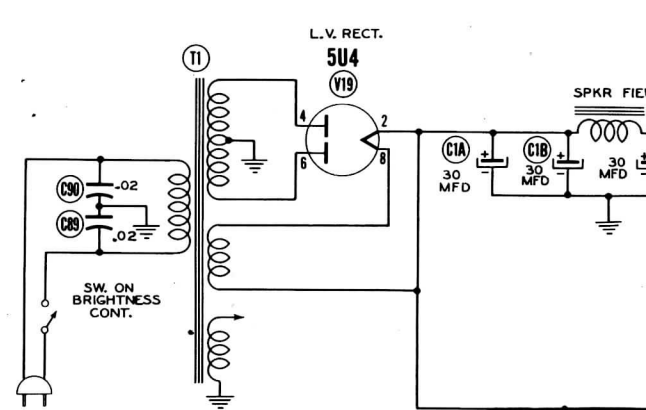
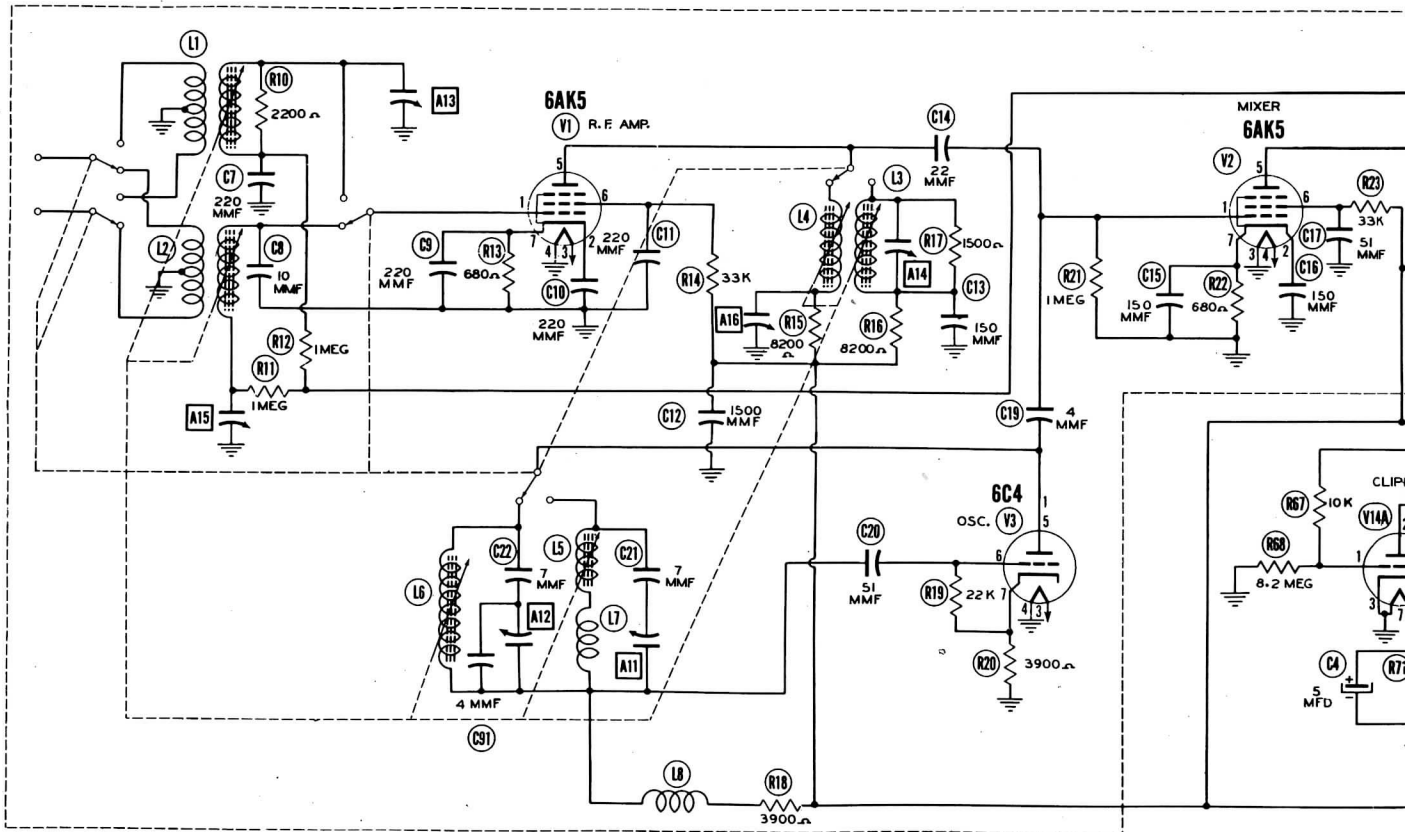
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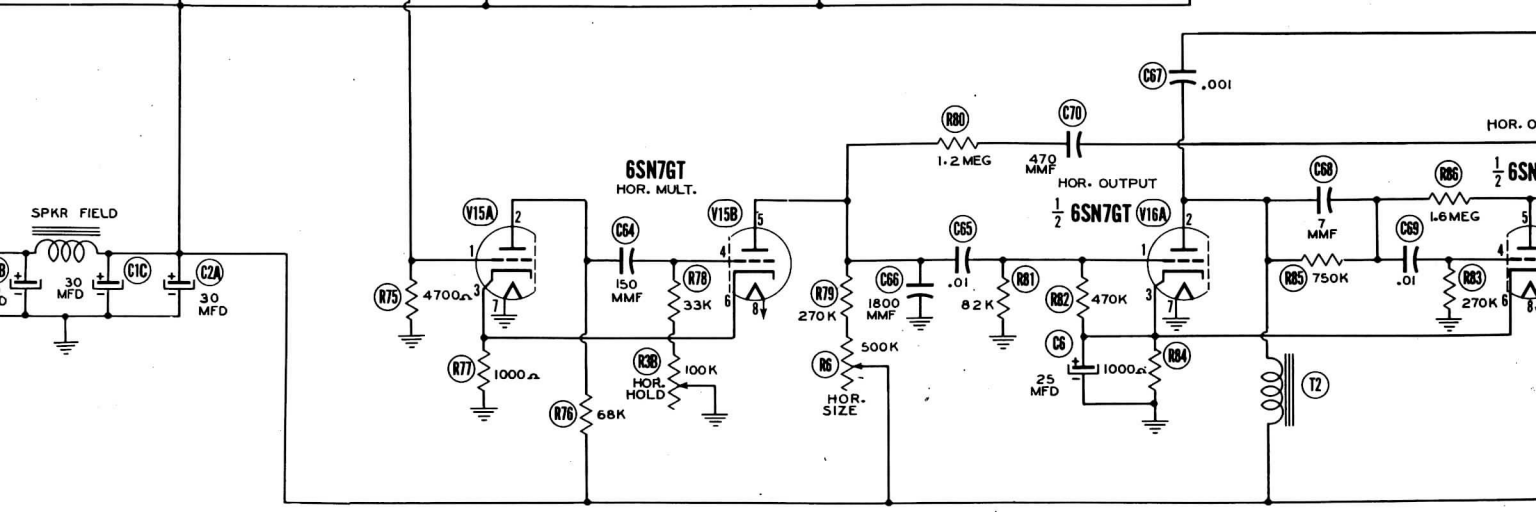
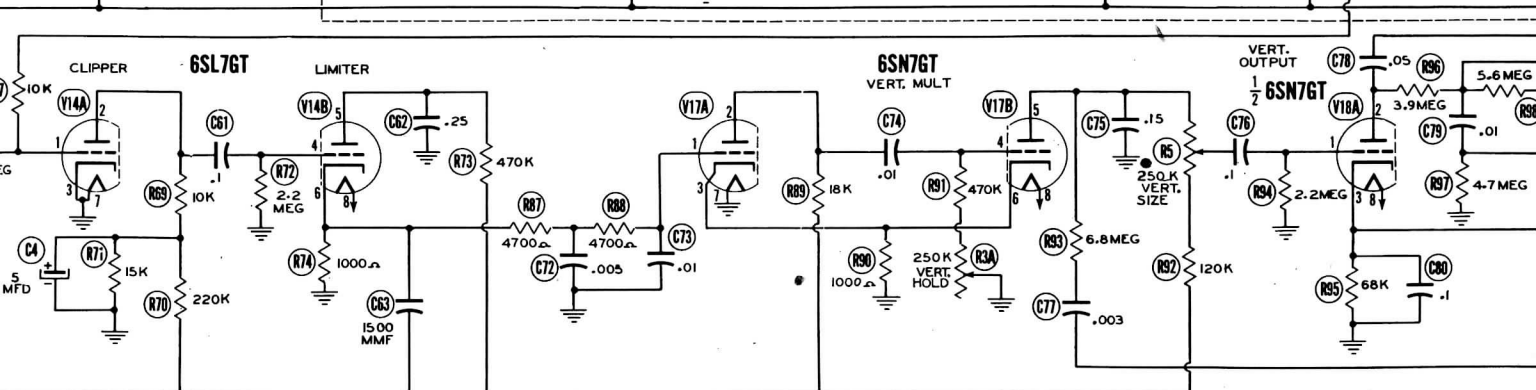
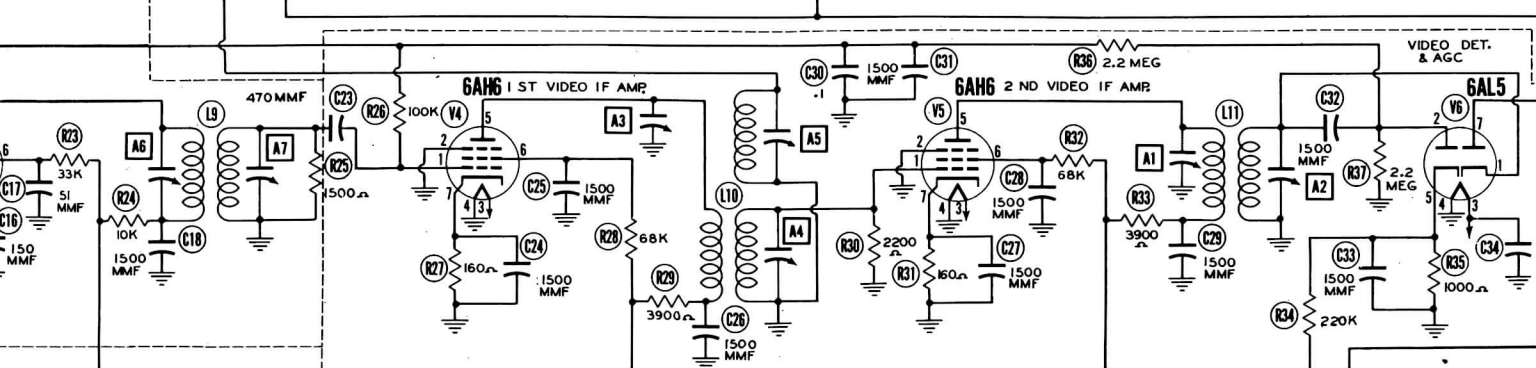
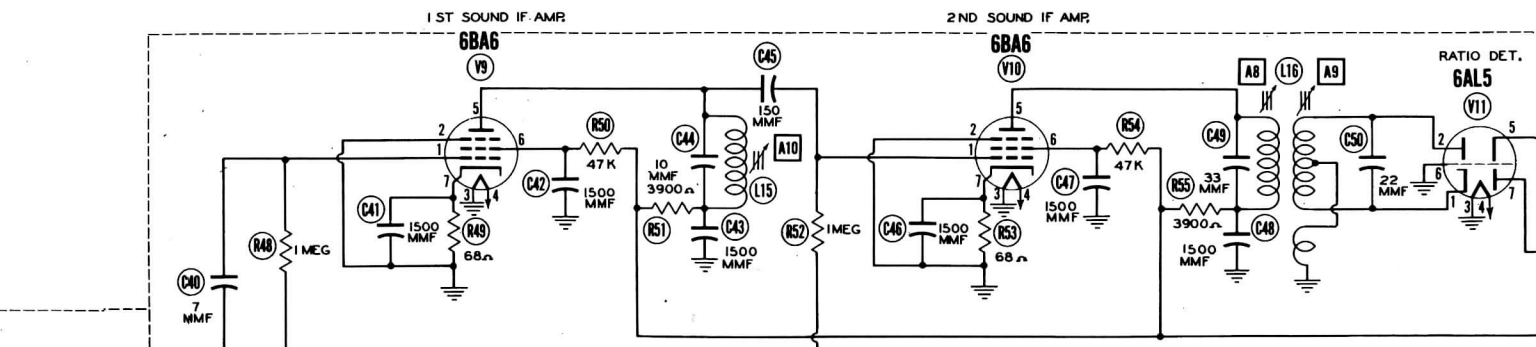
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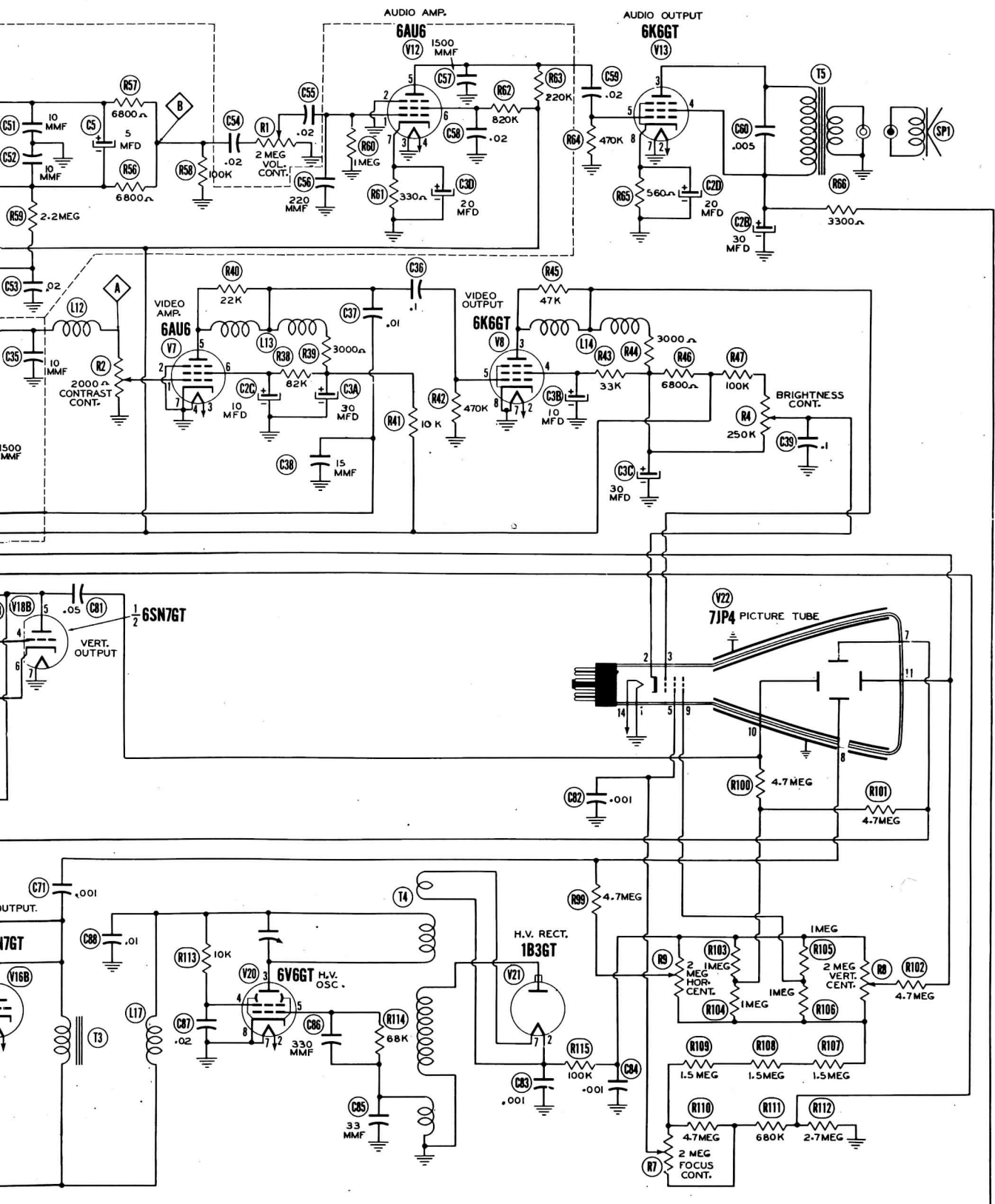
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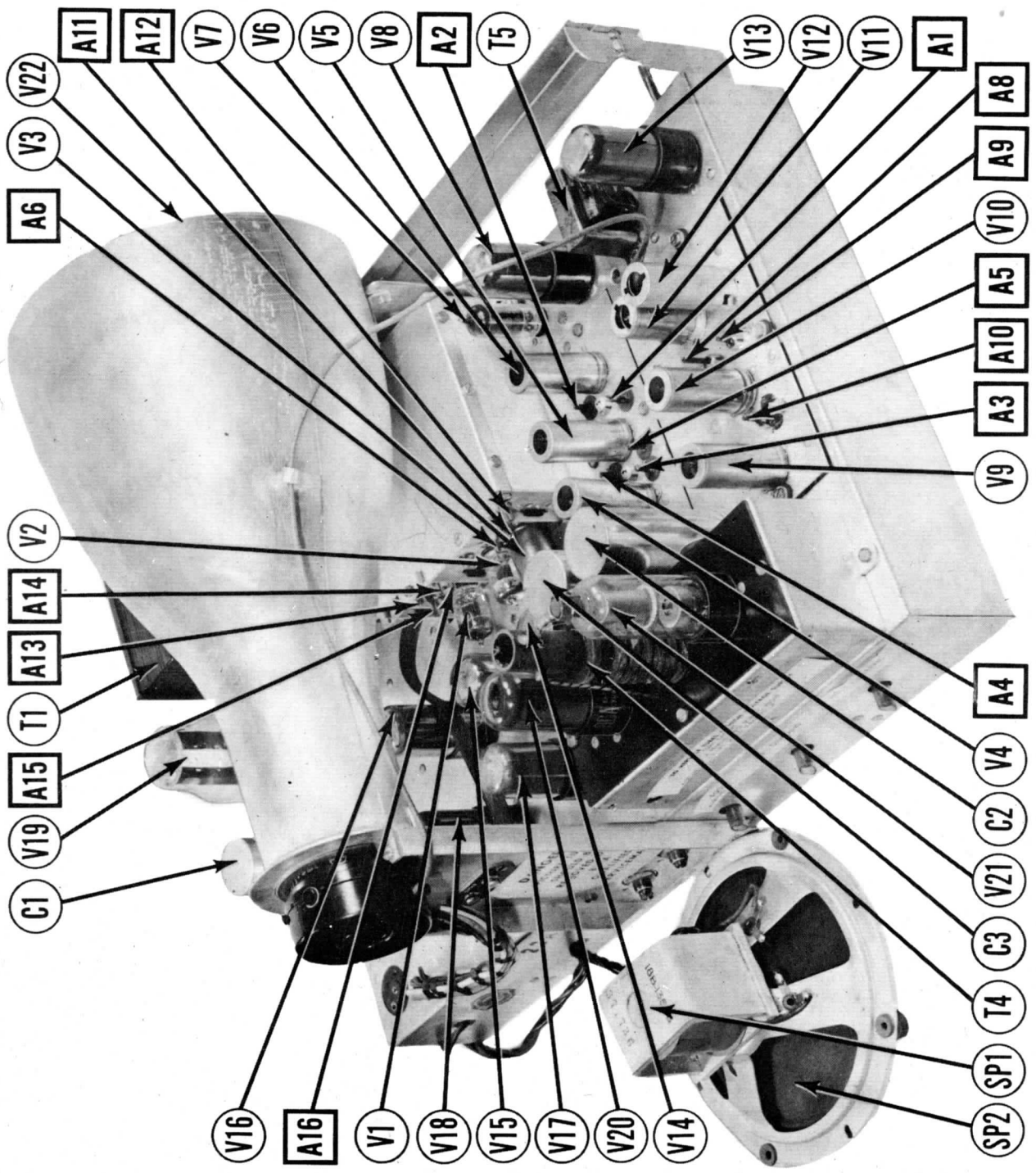


A PHOTOFAC STANDARD NOTATION SCHEMATIC
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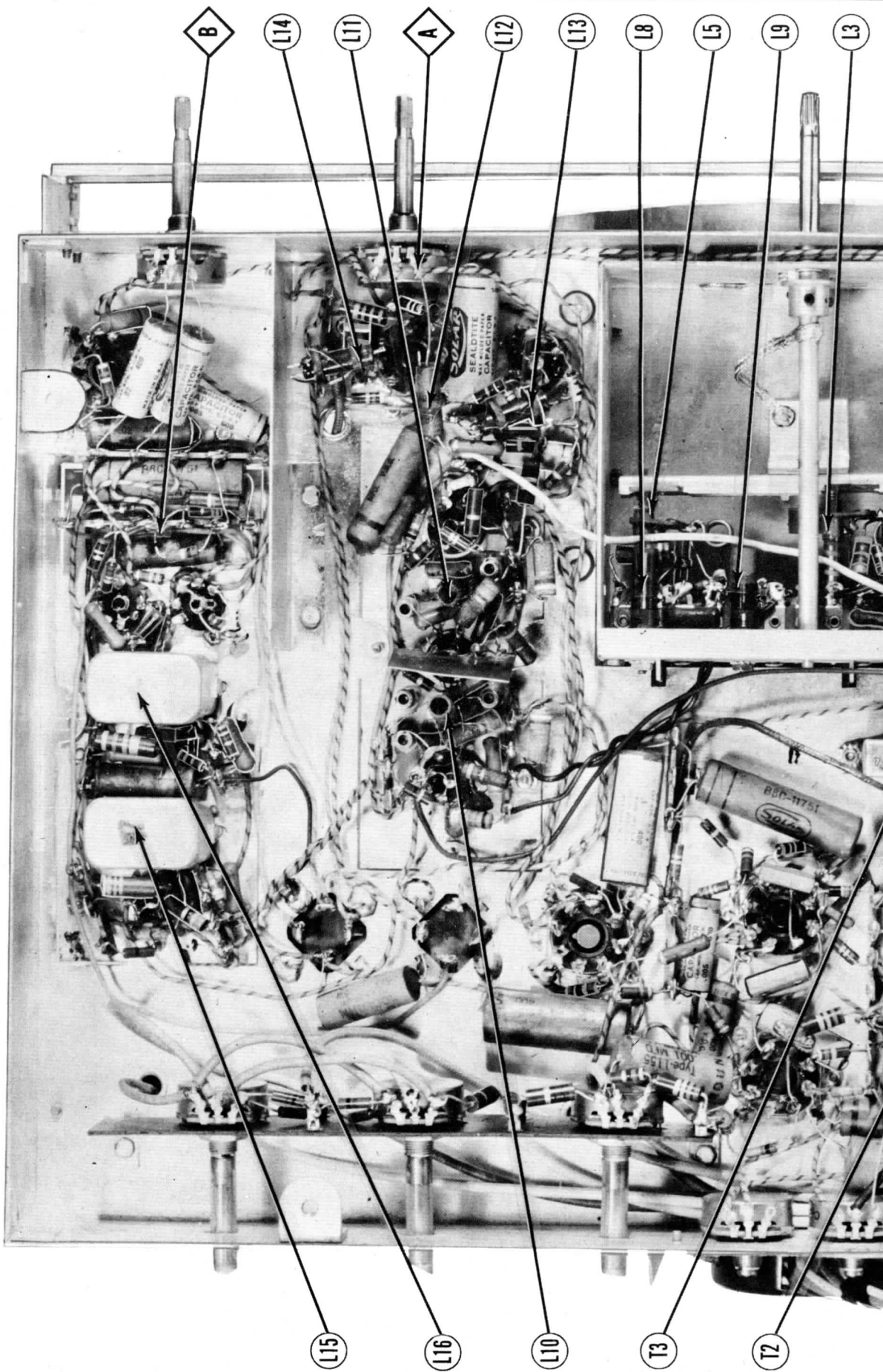


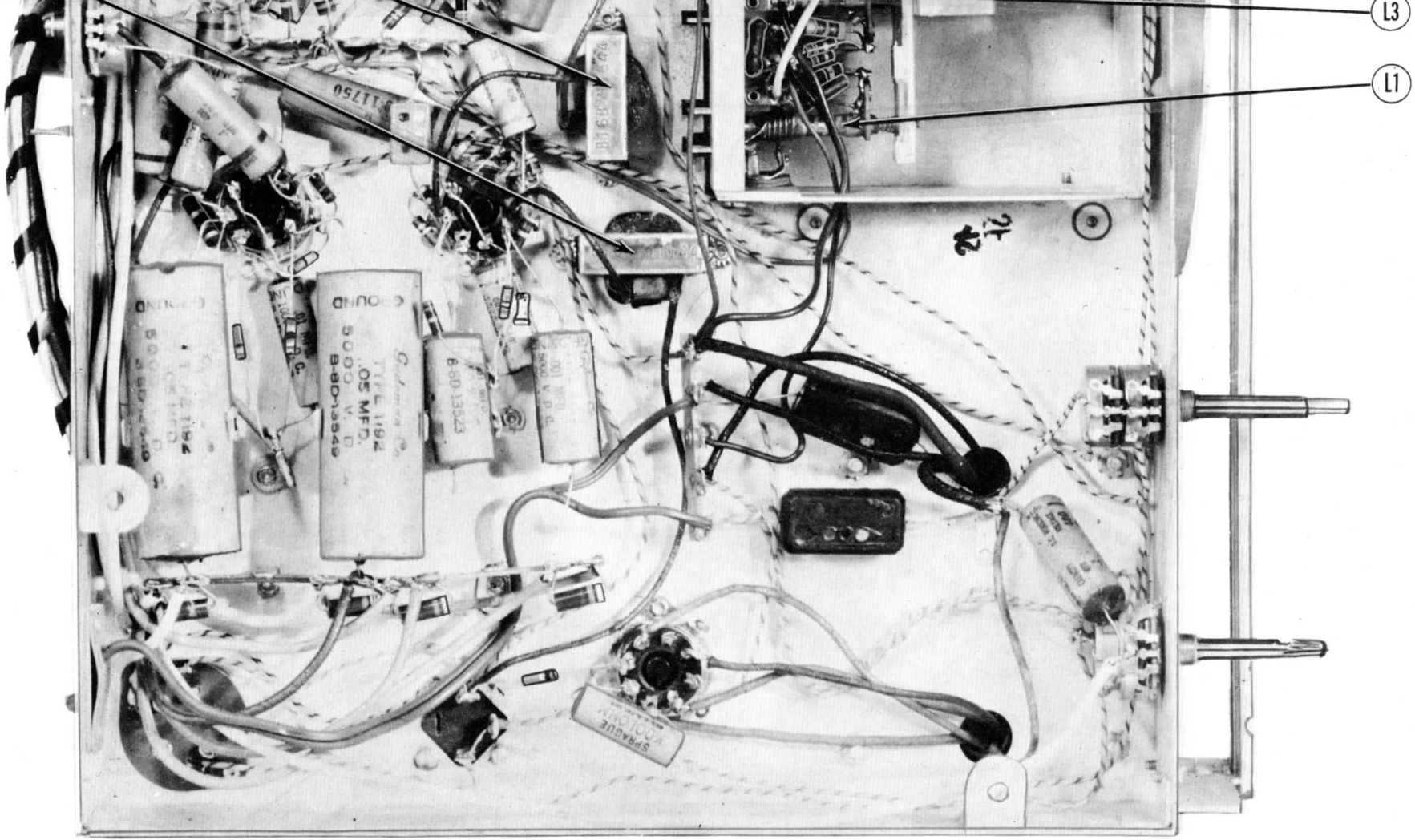


BELMONT MODELS
 22A21, 22AX21, 22AX22



CHASSIS-TOP VIEW





CHASSIS BOTTOM VIEW-TRANS., INDUCTOR AND ALIGNMENT IDENTIFICATION

**BELMONT MODELS
22A21, 22AX21, 22AX22**

ITEM No.	RATING	BELMONT PART No.	REPLACEMENT DATA	NOTES
RESISTANCE	WATTS	CAROSTAT PART No.	IRC PART No.	
C35	10	C-8D-11729	DM4P1	RF Bypass
C36	1.0	C-8D-10760	DM4S1	V40 Coupling
C37	.01	C-8D-10761	DM4S1	"
C38	15	C-8D-15017	DM4S1	Integrator
C39	1	C-8D-10760	DM4P1	Pic. Tube Cath.
C40	7	C-8D-11729	DM4S1	Sound IF Coupl.
C41	1500	C-8E-11723	1M5D15	1st S. IF Coupl. Byp.
C42	1500	C-8E-11721	1M5D15	2nd S. IF Coupl. Byp.
C43	1500	C-8E-11721	1M5D15	3rd S. IF Plate Decoupl.
C44	10	C-8E-11729	5M5T15	Vert. Trimmer
C45	150	C-8E-11723	1M5D15	Fixed Trimmer
C46	1500	C-8E-11721	1M5D15	Sound IF Coupling
C47	1500	C-8E-11721	1M5D15	2nd S. IF Scr. Byp.
C48	1500	C-8E-11721	1M5D15	3rd S. IF Plate Decoupl.
C49	42	C-8E-13909	DM4S2	Fixed Trimmer
C50	25	C-8E-11729	DM4S2	Diode Load Cap.
C51	10	C-8E-11729	DM4S2	"
C52	10	C-8D-10774	DM4S2	Avg. Filter
C53	.02	C-8D-10774	DM4S2	Audio Coupling
C54	.02	C-8D-10774	DM4S2	"
C55	.02	C-8E-11723	1M5D15	RF Bypass
C56	.220	C-8E-11723	1M5D15	AF Plate Bypass
C57	1500	C-8D-10774	DM4S2	AF Screen Bypass
C58	.02	C-8D-10774	DM4S2	Audio Coupling
C59	.02	C-8D-10774	DM4S2	Output Plate Bypass
C60	600	C-8D-10774	DM4S1	Sync. Coupling
C61	.005	C-8D-10760	DM4S1	Sync. Lim. Plate Byp.
C62	1.25	C-8E-11721	1M5D15	Feedback
C63	1500	C-8E-11721	5M5T15	Hor. Sweep Coupling
C64	180	C-8D-10761	DM4S1	Hor. Discharge
C65	.01	C-8E-11721	DM4S1	Hor. Sweep Coupl.
C66	1800	C-8E-11721	DM4S1	Hor. Sweep Coupl.
C67	.001	C-8D-13523	DM4S1	Hor. Sweep Coupl.
C68	.06	C-8D-11790	DM4S1	Feedback
C69	.01	C-8D-11729	DM4S1	Feedback
C70	470	C-8E-1121	DM4S1	Feedback
C71	.001	C-8D-13523	DM4S1	Hor. Sweep Coupling
C72	.005	C-8D-10925	DM4S1	Integrating Network
C73	.005	C-8D-10761	DM4S1	"
C74	.01	C-8D-10761	DM4S1	"
C75	.15	C-8D-14141	DM4S1	Feedback
C76	.1	C-8D-10760	DM4S1	Vert. Discharge
C77	.003	C-8D-13522	DM4S1	Vert. Sync. Coupl.
C78	.05	C-8D-13523	DM4S1	Feedback
C79	.01	C-8D-13523	DM4S1	Vert. Sweep Coupl.
C80	200	C-8D-10771	DM4P1	Vert. Sweep Coupl.
C81	.05	C-8D-13549	DM4S1	Vert. Out. Cath.
C82	.001	C-8D-11728	DM4S1	Vert. Sweep Coupl.
C83	.001	C-8D-13523	DM4S1	Focus Anode Bypass
C84	.001	C-8D-13523	DM4S1	H. V. Filter
C85	.33	C-8E-11721	DM4S1	H. V. Filter
C86	330	C-8E-11721	DM4S1	Fixed Trimmer
C87	.02	C-8D-10774	DM4S1	H. V. Osc. Grid
C88	.01	C-8D-10761	DM4S1	H. V. Osc. Screen
C89	.02	C-8D-11521	DM4S2	H. V. Osc. Plate Decoupl.
C90	.02	C-8D-11521	DM4S2	Line Filter
C91	4	C-8D-11521	DM4S2	Fixed Trimmer

CONTROLS

*Do not use bypass on UP capacitor.

ITEM No.	RATING	BELMONT PART No.	REPLACEMENT DATA	NOTES
RESISTANCE	WATTS	CAROSTAT PART No.	IRC PART No.	
R1A	2 Meg.	A-10B-13872	AM-66-2	Volume
R1B	2 Meg.	A-10B-13872	AM-66-2	Attach to R1A per instructions
R2A	2000Ω	C-10B-11621	AM-11-S	Attach to R2A per instructions
R2B	2000Ω	C-10B-11621	AM-11-S	Contrast
R3	200K & 100KΩ	B-10B-13529	KSS-3	Vert. Hold
R4	250KΩ	A-10A-13874	AM-55-S	Horiz. Hold. Dual Control
R5A	250KΩ	C-10B-3710	KSS-3	Brightness & On-Off Switch
R5B	250KΩ	C-10B-3710	SM-A	Attach to R4 per instructions
R6A	500KΩ	C-10B-11622	M-55-S	Vert. Size
R6B	500KΩ	C-10B-11622	M-55-S	Attach to R5a per instructions
R7	2 Meg.	B-10B-13540	M-55-S	Horiz. Size
R8	2 Meg.	B-10B-13540	M-55-S	Attach to R6a per instructions
R9	2 Meg.	B-10B-13540	M-55-S	Focus
**R10	Model 22AX22	this part number is	A-10B-15555	Vert. Centering
†	"	"	B-10B-15556	Horiz. Centering
‡	"	"	A-10A-15554	"
§	"	"	A-10B-15553	"
¶	"	"	B-10B-13540-1	"

Carostat & IRC replacements same as above.

ITEM No.	RATING	BELMONT PART No.	REPLACEMENT DATA	NOTES	
DC RESISTANCE	SEC.	SEC. 1	SEC. 2	SEC. 3	
T1A	1.5Ω	175 MΩ	3 amp.	7.8 amp.	0-12A-11640
T1B	1.17V4	650V	5 V.	6.3V.	C-12A-13590

*Do not use 6.3 V. 6 amp. secondary winding.
 †On Model #22AX21 only. ‡On Models #22AX21 and 22AX22.

TRANSFORMER (POWER)

ITEM No.	RATING	BELMONT PART No.	REPLACEMENT DATA	NOTES	
DC RESISTANCE	SEC.	SEC. 1	SEC. 2	SEC. 3	
T2	95Ω	B-16B-11644	BTA-660K	BTA-10K	Integrator
T3	95Ω	B-16B-11644	BTA-660K	BTA-10K	Vert. Multi. Plate
T4	1.5Ω	B-13D-13544	BTA-660K	BTA-10K	Vert. Multiplier Cathode

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING	BELMONT PART No.	REPLACEMENT DATA	NOTES	
DC RESISTANCE	SEC.	SEC. 1	SEC. 2	SEC. 3	
T5	780Ω	3.2Ω	700Ω	B-12C-10235-2	Horiz. Sweep Choke

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Ground the AGC & AVC networks during entire alignment. Attenuate signal from signal generator to produce a maximum of .5 volt peak-to-peak signal at the video detector to prevent overloading. Connect the scope to the video detector through network as shown in Fig. 6. Connect the synchronized sweep voltage from the sweep signal generator to the horizontal amplifier of the scope for horizontal deflection.

VIDEO IF ALIGNMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1 1000MMF	High side to Pin 1 6AH6 (V5). Low side to chassis.	25MC (10MC sweep)	23.75MC & 26.75MC	9	Vert. Amp. to Point \diamond . Low side to chassis.	A1, A2	Shunt primary of L10 with 1000 MMF. Turn A5 in. Adjust A1 & A2 for max. amplitude with marker placement per Fig. 1.
2 1000MMF	High side to Pin 1 6AH6 (V4). Low side to chassis.	"	23.75MC & 26.75MC	"	"	A3, A4	Remove shunt in Step 1. Disconnect C23 from Pin 1 of V4. Adjust for maximum amplitude with marker placement per Fig. 1.
3 1000MMF	"	OFF	22.25MC with 400V modulation	"	"	A5	Adjust for minimum amplitude.
4 1000MMF	High side to Pin 1 6AK5 (V2). Low side to chassis	25MC (10MC sweep)	22.25MC, 23.75MC & 26.75MC	"	"	A6, A7	Reconnect C23. Adjust for maximum amplitude with marker placement per Fig. 2.

SOUND IF ALIGNMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5 1000MMF	High side to Pin 1 6BA6 (V10). Low side to chassis.	22.25MC (1MC sweep)	22.0MC & 22.25MC & 22.5MC	9	Vert. Amp. to Point \diamond . Low side to chassis (Use network as shown in Fig. 6.)	A8, A9	Adjust for maximum amplitude and straightness of pattern between 22.0MC and 22.5MC markers as per Fig. 3. 22.25MC marker should be located at exact midpoint.
6 1000MMF	High side to Pin 1 6BA6 (V9). Low side to chassis.	"	"	"	"	A10	"
7 1000MMF	High side to Pin 1 6AK5 (V2). Low side to chassis.	"	"	"	"	A5	"

OSCILLATOR ALIGNMENT

Shunt signal generator output leads with 50 Ω carbon resistor and insert two 120 Ω carbon resistors in series with each lead.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8 2 - 120 Ω carbon res. (see prealignment instructions)	Antenna terminals	85MC (10MC sweep)	87.75MC with 400V modulation	6	Vert. Amp. to Point \diamond . Low side to chassis.	All	Adjust for minimum amplitude modulation at ends of pattern as per Fig. 4.
9 "	"	47MC	49.75MC	1	"	L7 (If necessary)	Tune dial so marker falls at center of straight line. The indicator should fall within mark indicating Channel 1. If not, expand or compress L7.
10 "	"	57MC	59.75MC	2	"	All, L7	Alternately adjust All & the compression of L7 to give the best tracking.
11 "	"	63MC	65.75MC	3	"	"	"
12 "	"	69MC	71.75MC	4	"	"	"
13 "	"	79MC	81.75MC	5	"	"	"
11 "	"	201MC (10MC sweep)	203.75MC with 400V modulation.	11	"	A12	Adjust for minimum amplitude modulation at ends of pattern as per Fig. 4.
12 "	"	177MC	179.75MC	7	"	A12 (If necessary)	Tune dial so marker falls at center of line. Dial should fall within mark indicating channel 7. If not, slightly re-adjust A12.
13 "	"	183MC	185.75MC	8	"	"	Check tracking. Slight adjust of A12 may be necessary to give best tracking.
		189MC	191.75MC	9			
		195MC	197.75MC	10			
		207MC	209.75MC	12			
		213MC	215.75MC	13			

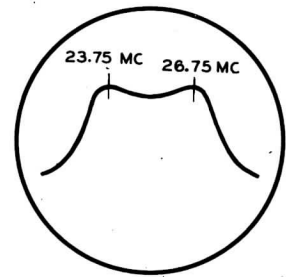


FIG. 1



FIG. 2

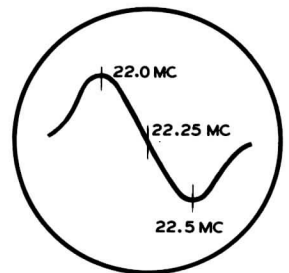


FIG. 3

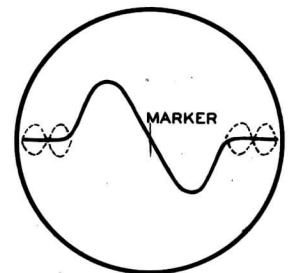


FIG. 4

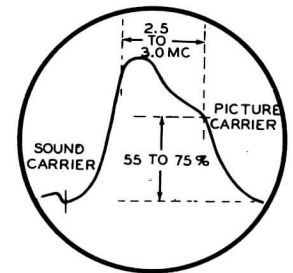


FIG. 5

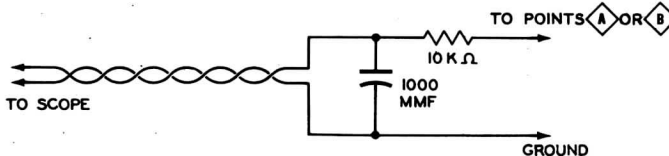


FIG. 6

ALIGNMENT INSTRUCTIONS (CONT.)

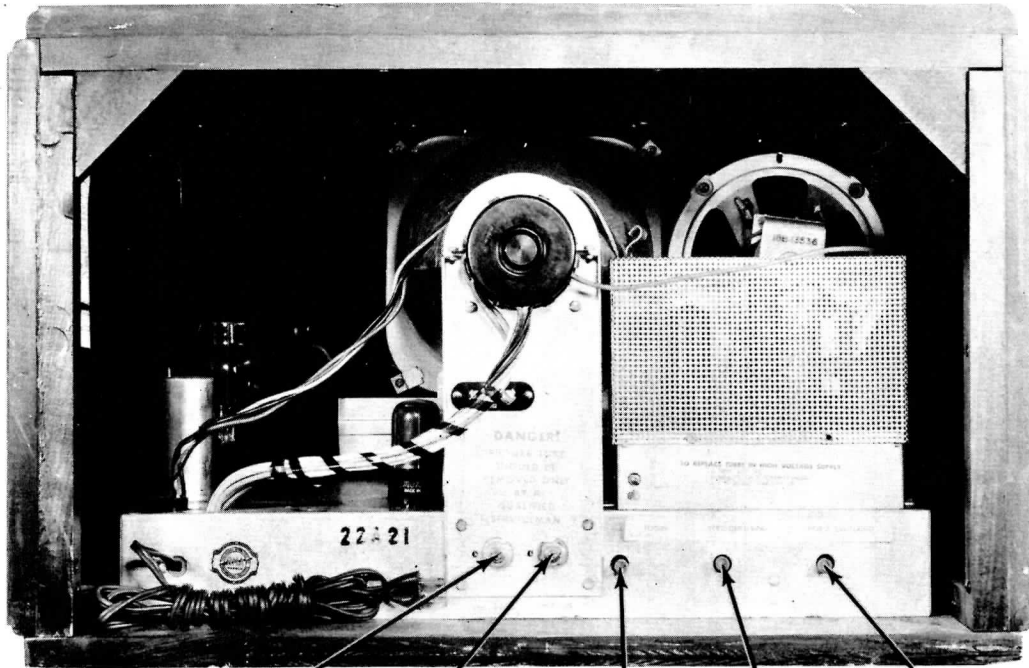
RF AMPLIFIER ALIGNMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
14 2-120Ω carbon res.	Antenna terminals.	85MC	87.75MC	6	Vert. Amp. to Point \diamond .Low side to chassis.	A13, A14	Tune for placement of sound marker in sound notch on each channel as shown in Figure 5. Adjust A13 & A14 for maximum amplitude and response across the low band with picture carrier marker placement as shown in Fig. 5.
		(10MC sweep) & 79MC	83.25MC & 81.75MC	5			
			& 77.25MC	4			
			71.75MC & 67.25MC	3			
			63MC & 59.75MC	2			
			57MC & 55.25MC	1			
15 "	"	213MC	215.75MC	13	"	A15, A16	Tune for placement of sound marker in sound notch on each channel as shown in Figure 5. Adjust A15 & A16 for maximum amplitude and response across the high band with picture carrier marker placement as shown in Fig. 5.
		(10MC sweep) & 207MC	& 211.25MC	12			
			209.75MC & 205.25MC	11			
			201MC & 199.25MC	10			
			195MC & 197.75MC	9			
			189MC & 187.25MC	8			
			183MC & 181.25MC	7			
			177MC & 175.25MC				

ADJUSTMENT OF TUNING STOPS AND DIAL INDICATOR

The tuning shaft should make 12½ revolutions from stop to stop. The stops may be reset by loosening with a #6 Allen wrench and rotating them to give the proper travel of the tuning slugs.

In order to set the position of the red dial indicator, remove the dial scale. Turn the tuning control fully counter-clockwise and set the left end of the indicator at the marker near the left end of the dial backplate. Replace dial scale so that the ends butt up against the stops.



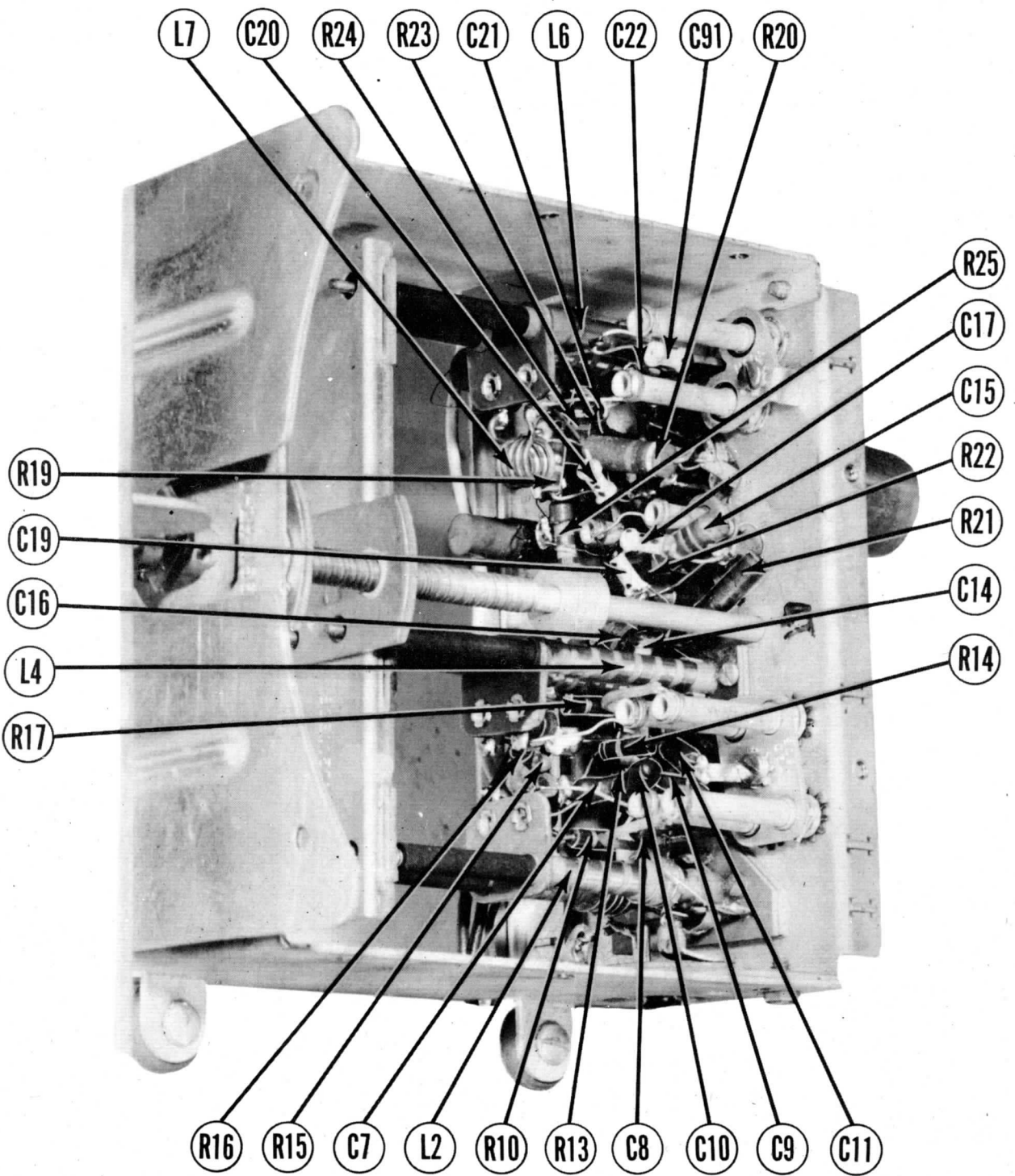
VERT. SIZE HORIZ. SIZE FOCUS VERT. CENT. HORIZ. CENT.

CABINET-REAR VIEW

DISASSEMBLY INSTRUCTIONS

1. Remove 7 push on type knobs.
2. Unplug speaker cable.
3. Remove 4 chassis bolts from bottom of cabinet.
4. Slide chassis out to rear.
5. Remove 4 screws and washers holding speaker and remove.

BELMONT MODELS
22A21, 22AX21, 22AX22



TUNER

**BELMONT MODELS
22A21, 22AX21, 22AX22**

PARTS LIST AND DESCRIPTIONS (Continued)

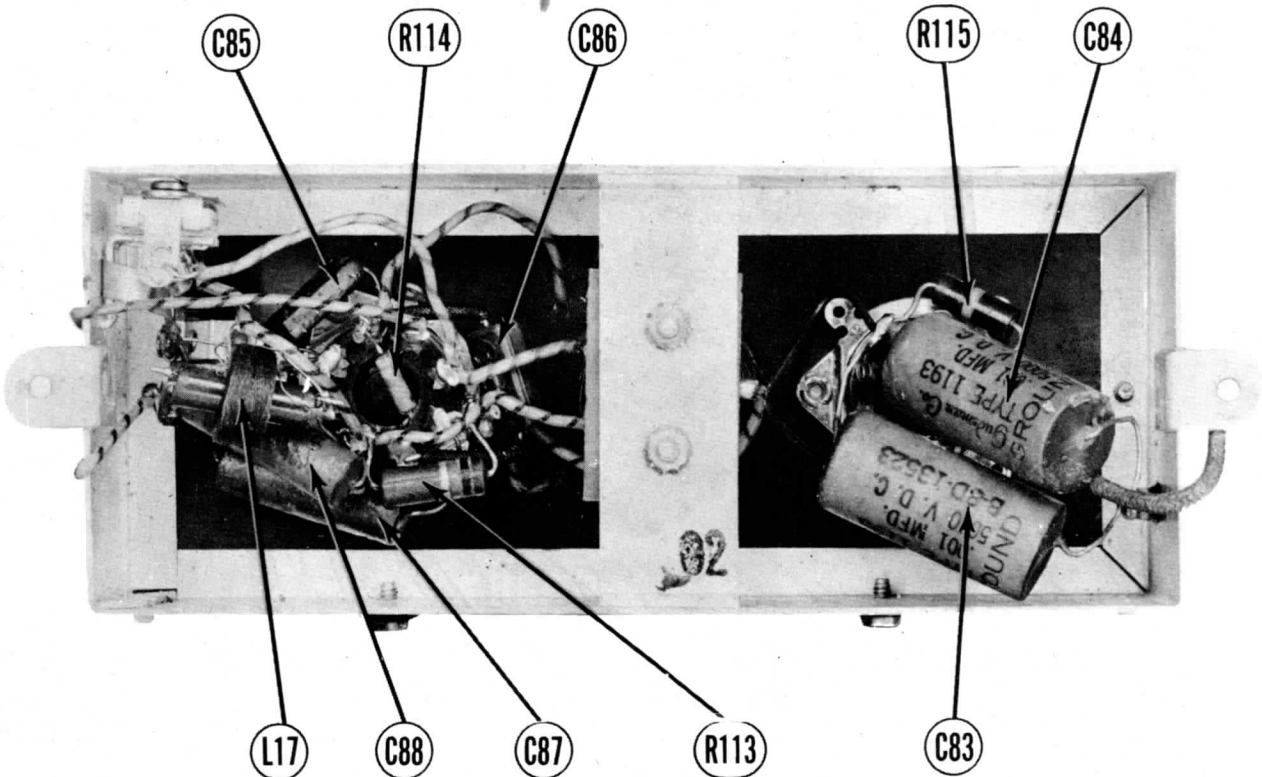
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PR1.	SEC.	BELMONT PART No.	MAESSNER PART No.	
L1A	Art. Input Coil Low	02		A-130-11939		L1A thru L9 complete in Tuner Assembly
B	RP Coil Low	02		B-13E-12046		
L2A	Art. Input Coil High	02		A-130-11938		
B	RP Coil High	02		B-13E-12048		
L3	RP Coil Low	02		B-13E-12046		
L4	RP Coil High	02		B-13E-12048		
L5	OSC. Coil,	02		B-13D-12155		
L6	OSC. Coil,	02		A-13D-12045		
L7	OSC. High	02		A-130-12043		
L8	RF Choke	.20		A-16A-11919		
L9	1st Video IF	.20	.20	A-13A-11610		
L10	2nd Video IF	.20	.12	B-13A-11684		
L11	3rd Video IF	.20	.12	B-13A-11685		
L12	Stru Video Cgd	3.53MCT	.12	B-16A-13532		
L13	Peaking Cgd	3.53MCT	.12	B-16A-13530		
L14	"	142 CT	.12	B-16A-13530-1		
L15	Sound IF	.12	.12	B-15B-13547		
L16A	Ratio Dev.	.12	.12	B-15B-13549		
L17	RF Choke	.182	.12	B-16A-13534		

SPEAKER

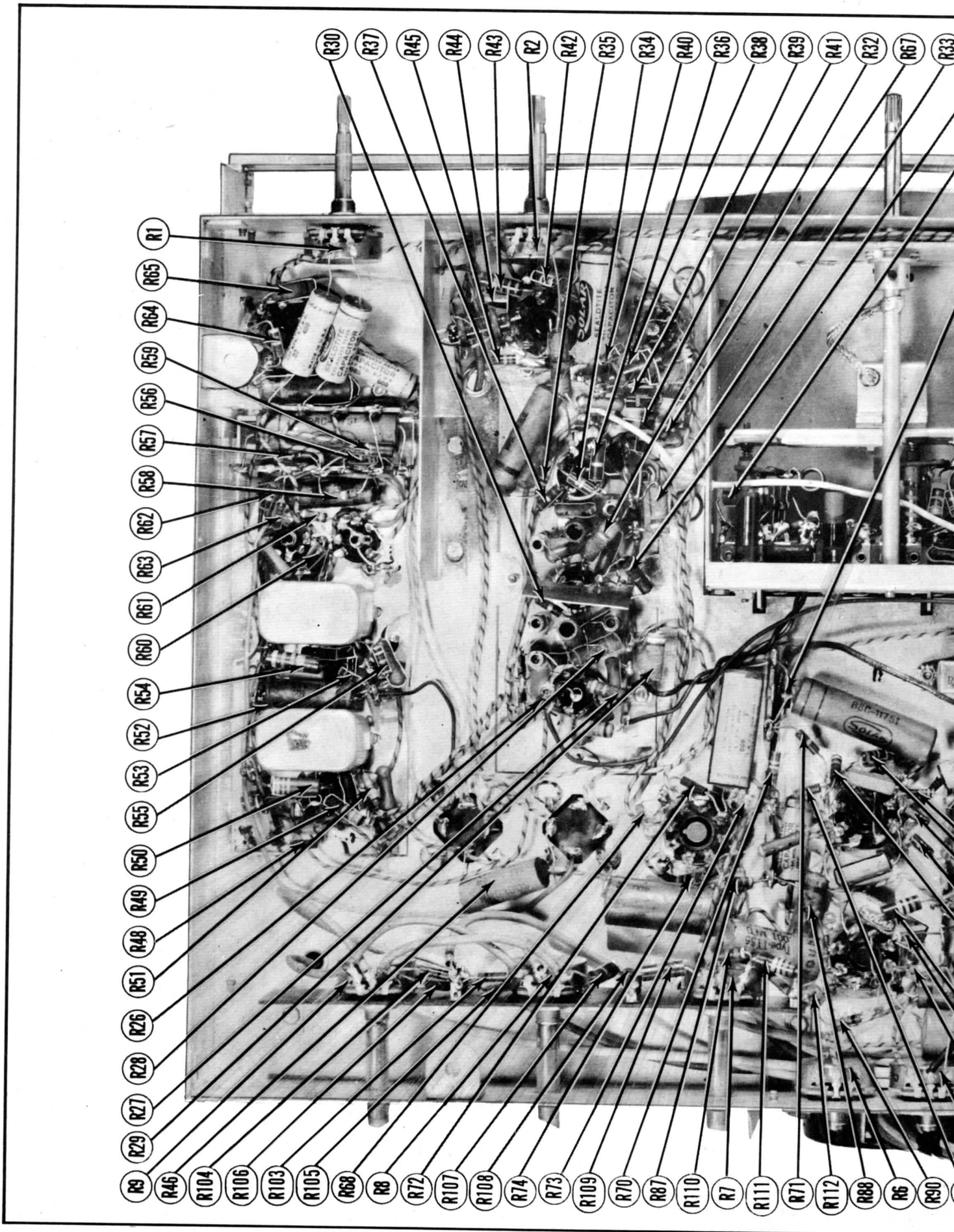
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		BELMONT PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	FIELD RES. VC IMP. 210Ω	C-15B-13536			6" speaker used in Models 22A21 & 22AX21 only.
B	CONN. DIA. 5-7/8"	VC DIA. C-15B-15371			8" speaker used in Model 22AX22 only.
SP2					

MISCELLANEOUS

ITEM No.	PART NAME	BELMONT PART No.	NOTES
	Socket	A-19B-11974	Antenna
	"	A-15B-11539	Speaker
	Dial Indicator Tape	B-2C-11555	Used in Models #22A21 & 22AX21 only.
	Dial Scale High Band	B-5D-11705	"
	Dial Scale Low Band	B-5D-11705-1	"
	Protective Glass	B-5A-13546	Picture Tube used on Models #22A21 & 22AX21 only. Model #22AX22 obtainable under Part #B-5B-12279-41
	Knob	B-5B-12279-41	
	"	A-5B-13565-41	Vertical Hold used on Models #22A21 & 22AX21 only.
	Socket & Cable Assy.	C-15B-11719-1	Model #22AX22 obtainable under Part #A-5B-13565-61.
		C-5C-12246-40	Picture Tube used on Models #22A21 & 22AX21 only. Model #22AX22 obtainable under Part #C-15B-11719-2.
	Resistor		Used on Models #22A21 & #22AX21 only.

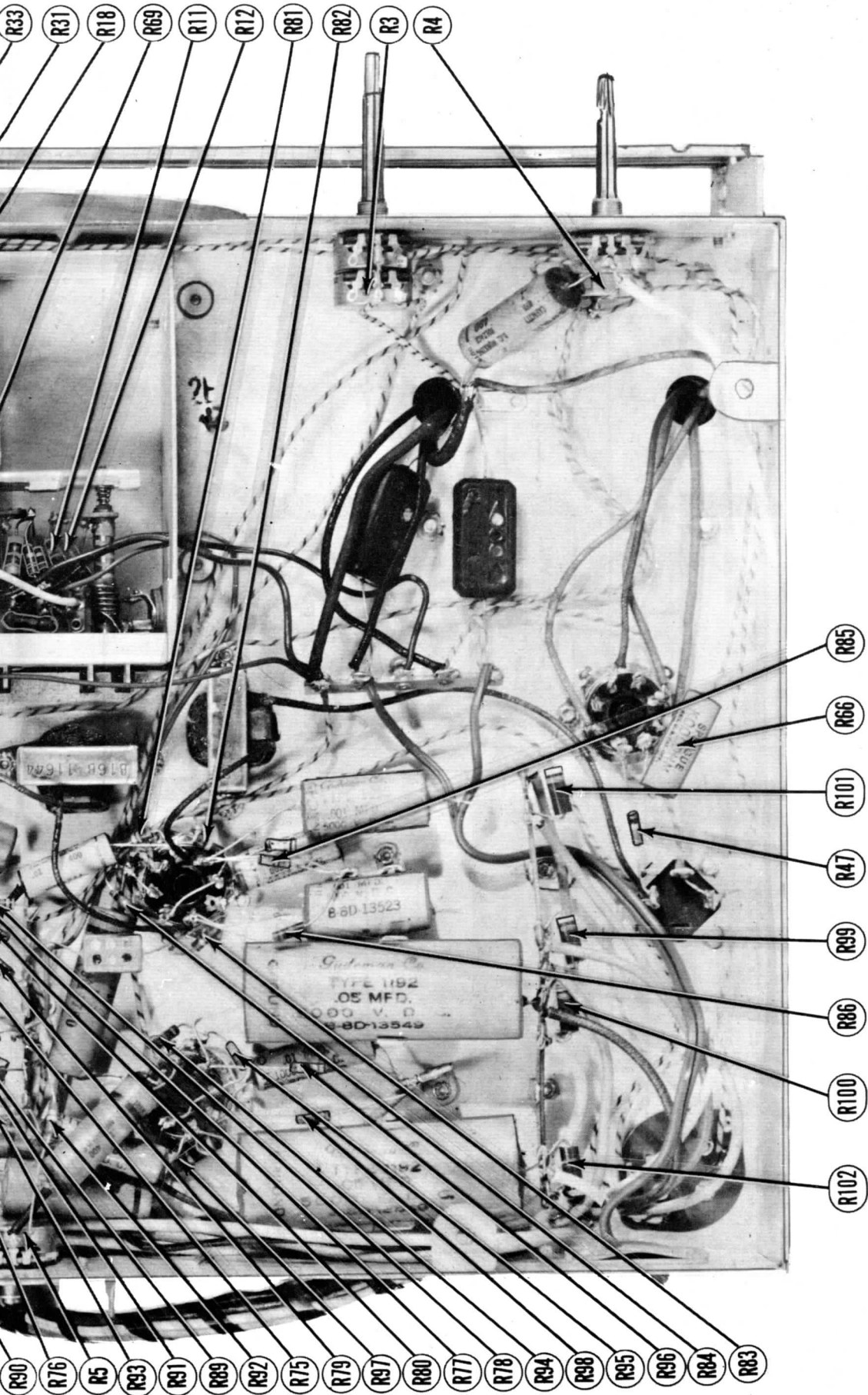


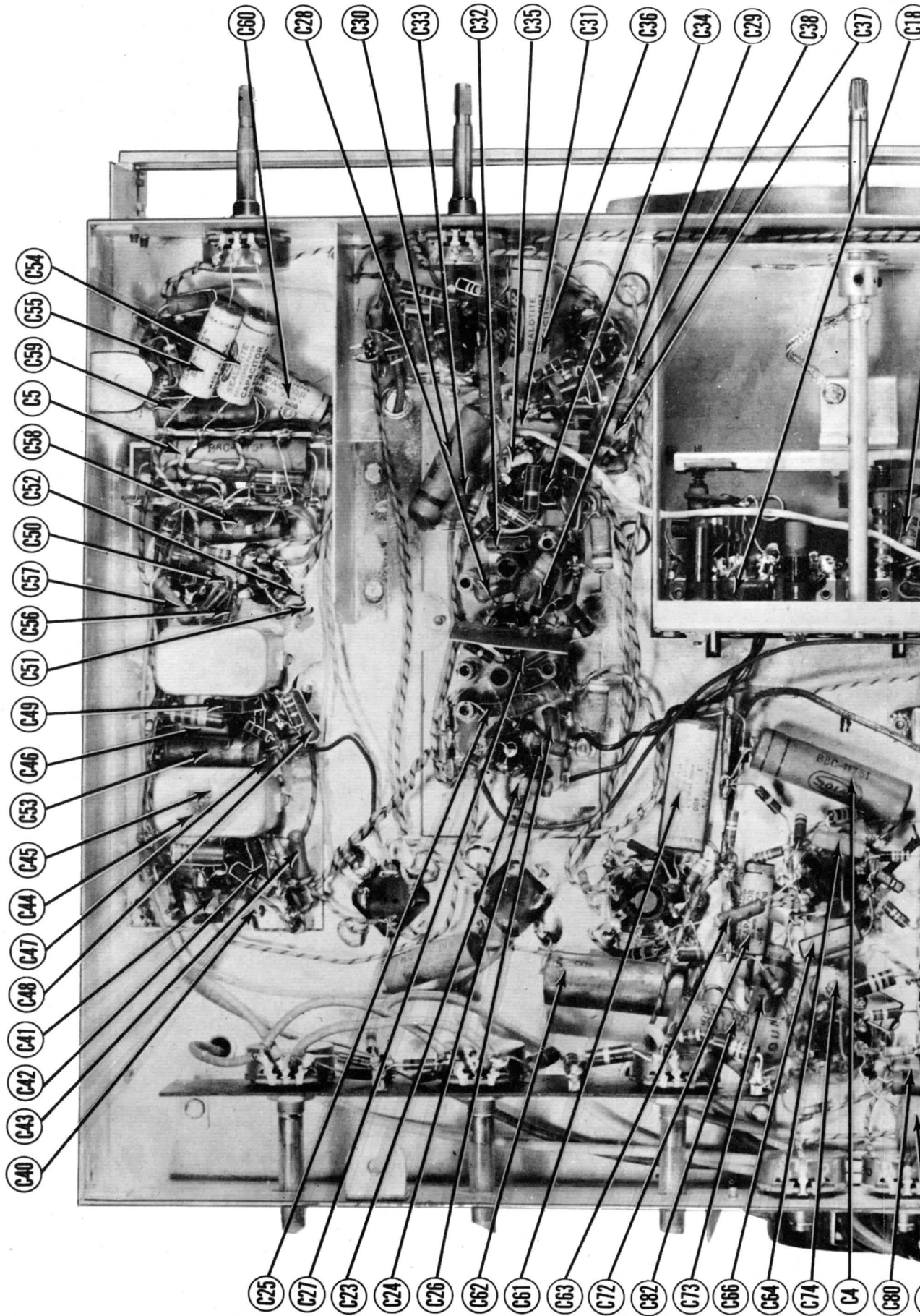
H.V. POWER SUPPLY-BOTTOM VIEW



**BELMONT MODELS
22A21, 22AX21, 22AX22**

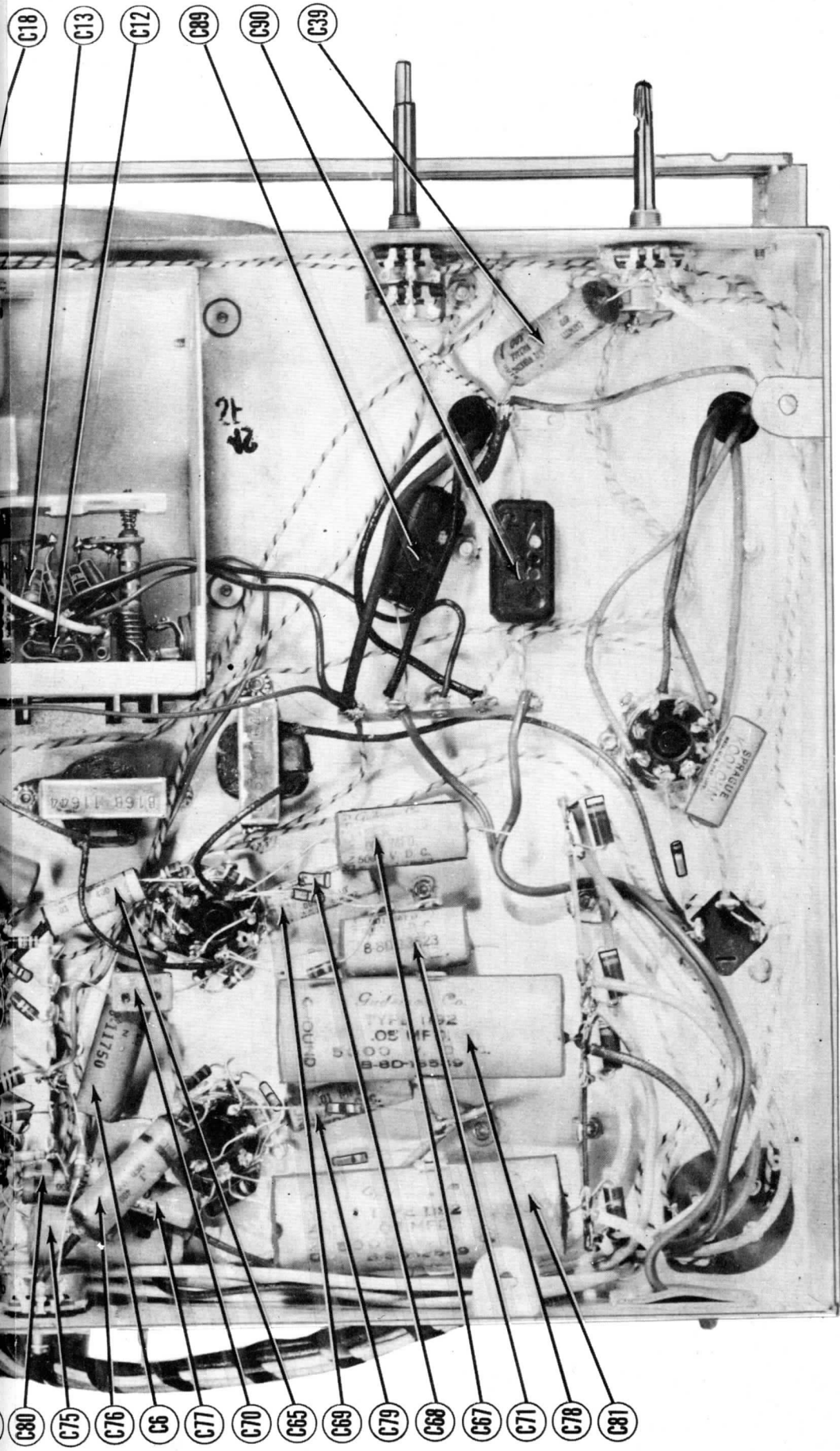
CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION





**BELMONT MODELS
22A21, 22AX21, 22AX22**

CHASSIS BOTTOM VIEW - CAPACITOR IDENTIFICATION



VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Cap
V 1	6AK5	OV.	7VDC	6.3VAC	OV.	220VDC	225VDC	7VDC	-	-
V 2	6AK5	OV.	7.8VDC	OV.	6.3VAC	220VDC	210VDC	7.8VDC	-	-
V 3	6C4	235VDC	OV.	6.3VAC	OV.	235VDC	65VDC	50VDC	-	-
V 4	6AH6	1VDC	OV.	6.3VAC	OV.	250VDC	110VDC	2.5VDC	-	-
V 5	6AH6	OV.	OV.	6.3VAC	OV.	265VDC	175VDC	1.7VDC	-	-
V 6	6AL5	1.5VDC	-3VDC	6.3VAC	OV.	OV.	OV.	-3VDC	-	-
V 7	6AU6	-3VDC	OV.	6.3VAC	OV.	205VDC	67VDC	OV.	-	-
V 8	6K6GT	OV.	6.3VAC	118VDC	83VDC	-4VDC	OV.	OV.	OV.	-
V 9	6BA6	OV.	OV.	6.3VAC	260VDC	260VDC	110VDC	1VDC	-	-
V 10	6BA6	OV.	OV.	6.3VAC	260VDC	260VDC	110VDC	8VDC	-	-
V 11	6AL5	OV.	OV.	6.3VAC	26VDC	26VDC	OV.	-2VDC	-	-
V 12	6AU6	-3VDC	OV.	6.3VAC	120VDC	37VDC	4VDC	-	-	-
V 13	6K6GT	OV.	6.3VAC	230VDC	245VDC	OV.	OV.	OV.	16VDC	-
V 14	6SL7GT	-7VDC	20VDC	OV.	-2VDC	70VDC	5VDC	OV.	6.3VAC	-
V 15	6SN7GT	OV.	105VDC	3.5VDC	-2VDC	32VDC	45VDC	OV.	6.3VAC	-
V 16	6SN7GT	1.5VDC	300VDC	12VDC	OV.	300VDC	12VDC	OV.	6.3VAC	-
V 17	6SN7GT	4VDC	190VDC	6.8VDC	-17VDC	127VDC	6.8VDC	OV.	6.3VAC	-
V 18	6SN7GT	1VDC	230VDC	15VDC	OV.	190VDC	15VDC	OV.	6.3VAC	-
V 19	5U4	240VDC	340VDC	255VDC	350VAC	OV.	350VAC	OV.	340VDC	-
V 20	6V6GT	OV.	6.3VAC	310VDC	220VDC	-100V	OV.	OV.	OV.	-
V 21	1B5GT	DO NOT MEASURE								
PINS 1 2 3 4 5 6 7 8 9 10 11 12 13 14										
V 22	70P4	OV.	170VDC	120VDC	OV.	OV.	OV.	OV.	OV.	OV. 16.3VAC
V 22	10HP4	OV.	OV.	OV.	OV.	OV.	OV.	OV.	OV.	OV. 16.3VAC

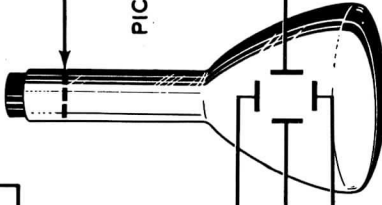
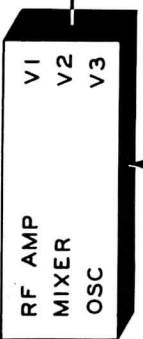
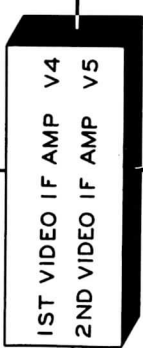
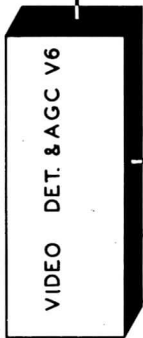
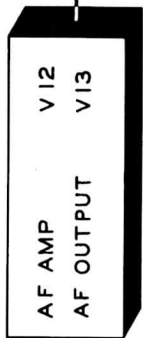
#DO NOT MEASURE. ACCURATE MEASUREMENTS CAN NOT BE MADE DUE TO HIGH IMPEDANCE OF THE CIRCUIT.

RESISTANCE READINGS

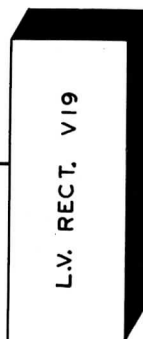
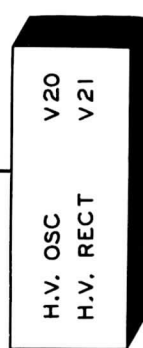
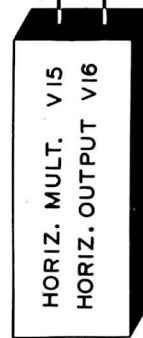
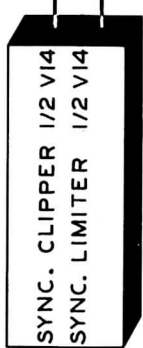
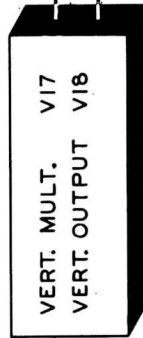
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Cap	
V 1	6AK5	6 Meg.	680Ω	.1Ω	0Ω	8.2KΩ*	33KΩ*	680Ω	-	-	
V 2	6AK5	1 Meg.	680Ω	0Ω	.1Ω	10KΩ*	33KΩ*	680Ω	-	-	
V 3	6C4	3.9KΩ*	INF.	.1Ω	0Ω	3.9KΩ*	26KΩ	3.9KΩ	-	-	
V 4	6AH6	5 Meg.	0Ω	.1Ω	0Ω	4KΩ*	75KΩ*	150Ω	-	-	
V 5	6AH6	.1Ω	0Ω	.1Ω	0Ω	4KΩ*	70KΩ*	150Ω	-	-	
V 6	6AL5	1KΩ	2KΩ	.1Ω	0Ω	.2Ω	INF.	2.2 Meg.	-	-	
V 7	6AU6	2KΩ	0Ω	.1Ω	0Ω	13KΩ*	90KΩ*	0Ω	-	-	
V 8	6K6GT	INF.	.1Ω	10KΩ*	36KΩ*	450KΩ	INF.	0Ω	0Ω	-	
V 9	6BA6	3.5 Meg	0Ω	0Ω	.1Ω	4KΩ*	47KΩ*	70Ω	-	-	
V 10	6BA6	3.5 Meg	0Ω	0Ω	.1Ω	4KΩ*	50KΩ*	68Ω	-	-	
V 11	6AL5	.1Ω	.1Ω	0Ω	.1Ω	110KΩ	0Ω	110KΩ	-	-	
V 12	6AU6	1 Meg.	0Ω	0Ω	.1Ω	220KΩ*	600KΩ*	330Ω	-	-	
V 13	6K6GT	.5Ω	.1Ω	4KΩ*	3.3KΩ*	470KΩ	INF.	0Ω	550Ω	-	
V 14	6SL7GT	8 Meg.	110KΩ*	0Ω	2.2 Meg.	520KΩ*	1KΩ	0Ω	.1Ω	-	
V 15	6SN7GT	4.7KΩ	65KΩ*	1KΩ	1.45KΩ	800KΩ*	250KΩ*	0Ω	.1Ω	-	
V 16	6SN7GT	70KΩ	95Ω*	1KΩ	270KΩ	95Ω*	1KΩ	0Ω	.1Ω	-	
V 17	6SN7GT	11KΩ	18KΩ*	1KΩ	470KΩ	350KΩ*	1KΩ	0Ω	.1Ω	-	
V 18	6SN7GT	2.2 Meg	6 Meg.	68KΩ	4.7 Meg.	8 Meg.	68KΩ	0Ω	.1Ω	-	
V 19	5U4	90KΩ	90KΩ	170KΩ	40Ω	INF.	40Ω	90KΩ	-	-	
V 20	6V6GT	30Ω	.1Ω	200Ω*	10KΩ*	68KΩ	0Ω	0Ω	0Ω	-	
V 21	1B5GT	INF.	10 Meg.	INF.	10 Meg.	INF.	INF.	10 Meg.	200Ω	-	
PINS 1 2 3 4 5 6 7 8 9 10 11 12 13 14											
V 22	70P4	0Ω	200KΩ	100KΩ	INF.	5 Meg.	INF.	10 Meg.	10 Meg.	10 Meg.	INF. 1.1Ω
V 22	10HP4	0Ω	200KΩ	100KΩ	INF.	5 Meg.	INF.	10 Meg.	10 Meg.	10 Meg.	INF. 1.1Ω

*MEASURED FROM PIN 2 5U4.

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. Front panels controls set at maximum.
6. Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.



PICTURE TUBE
V 22



B+

5KV

AGC

BLOCK DIAGRAM