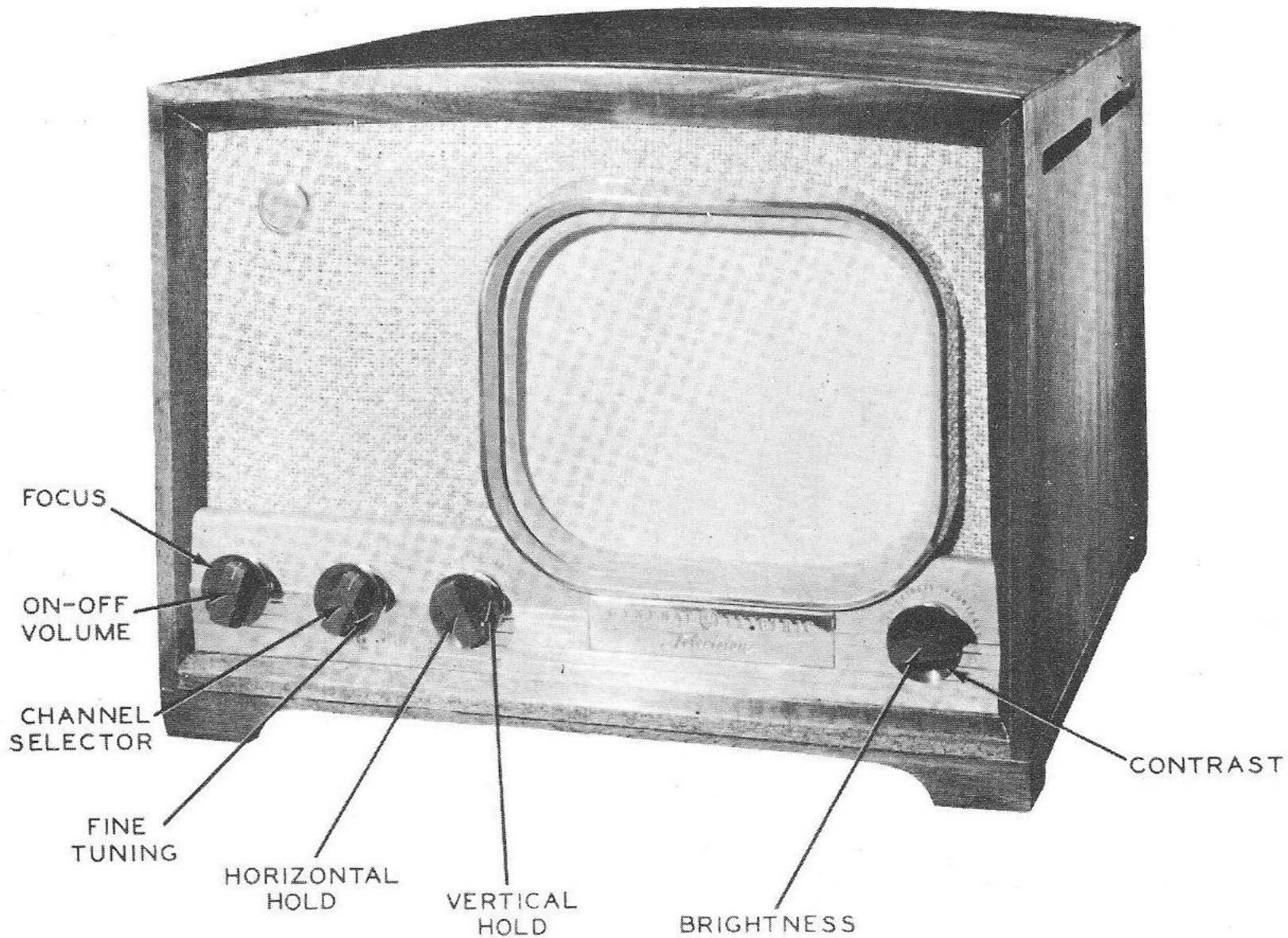


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GENERAL ELECTRIC
MODEL 810



GENERAL ELECTRIC MODEL 810

TRADE NAME	General Electric, Model 810		
MANUFACTURER	General Electric Co., Electronics Dept., Electronics Park, Syracuse, N. Y.		
TYPE SET	Television Receiver		
TUBES	Twenty-Two		
POWER SUPPLY	117 Volts, 60 Cycle AC	RATING	2 Amps. @ 117 Volts AC
TUNING RANGE-	Channels 2 through 13		

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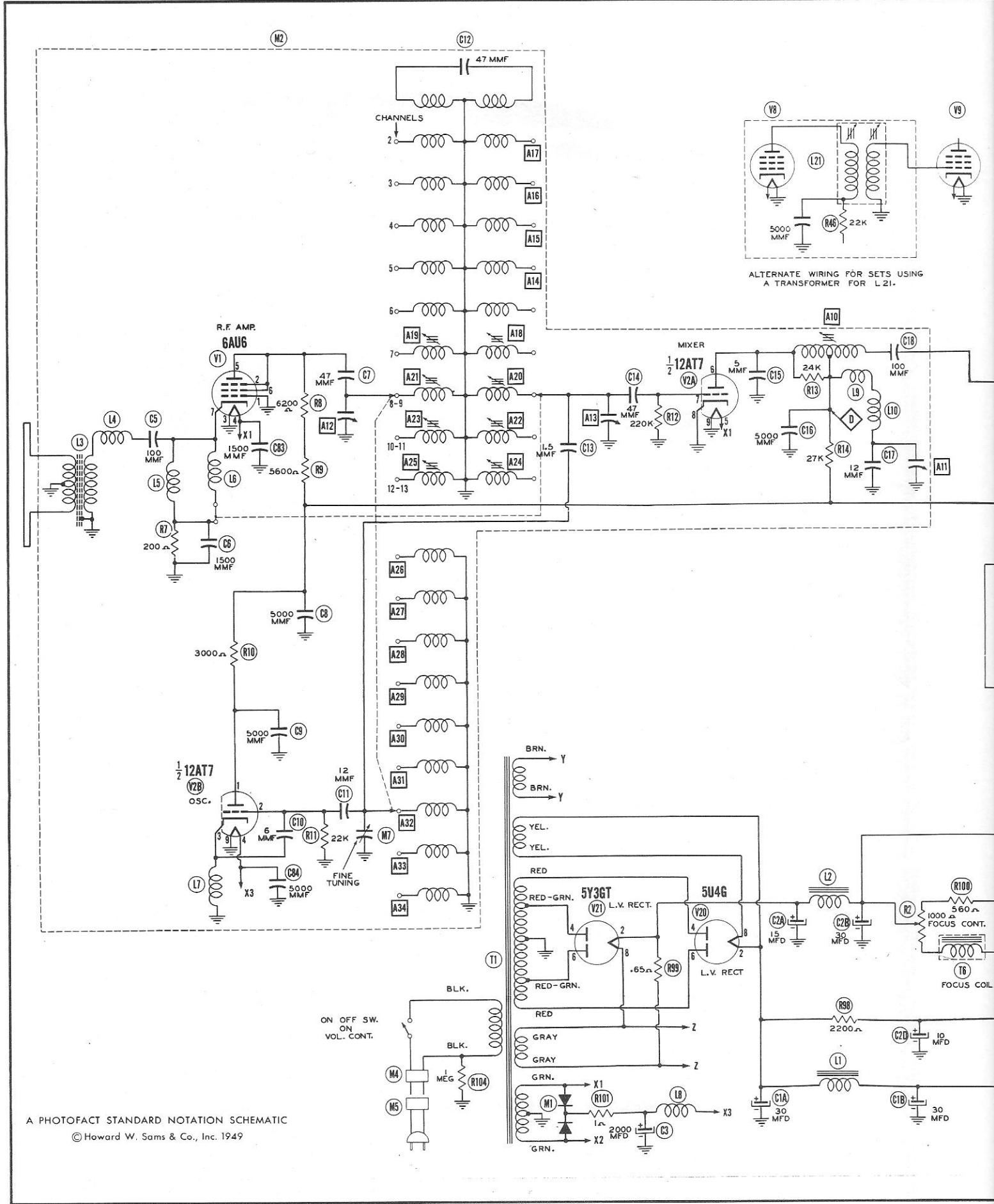
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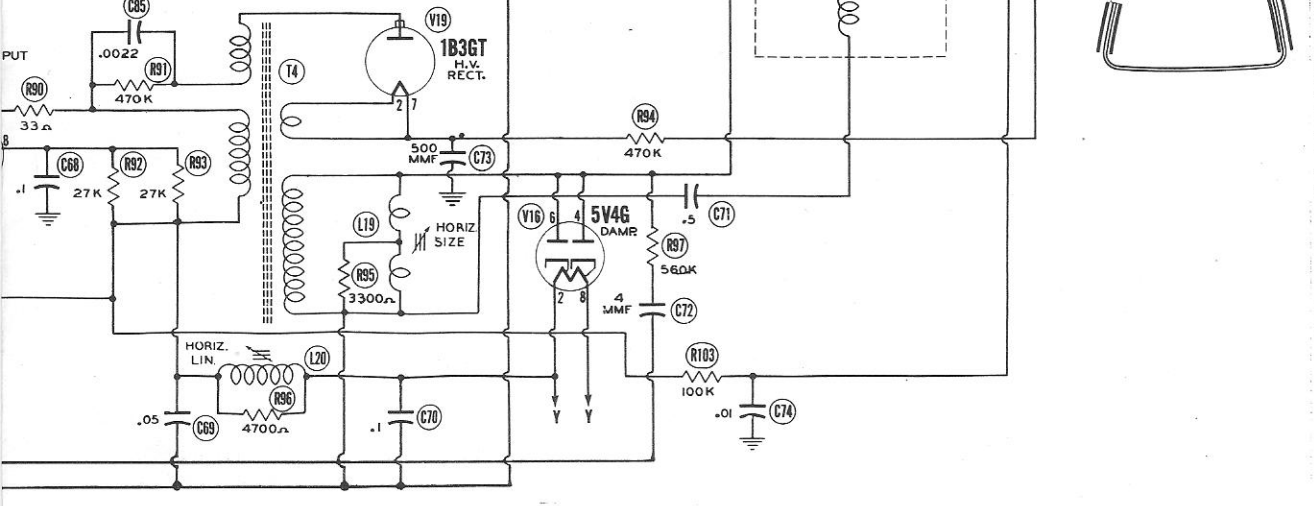
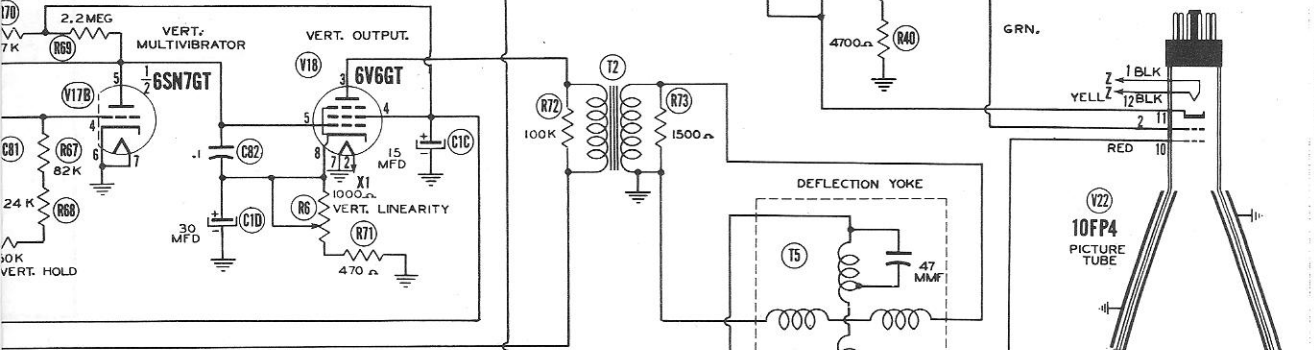
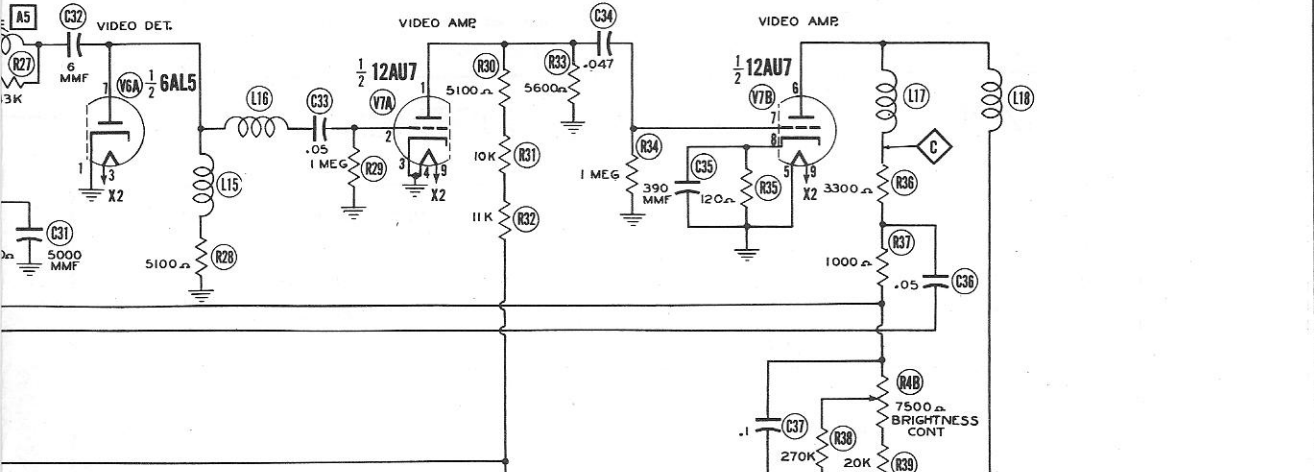
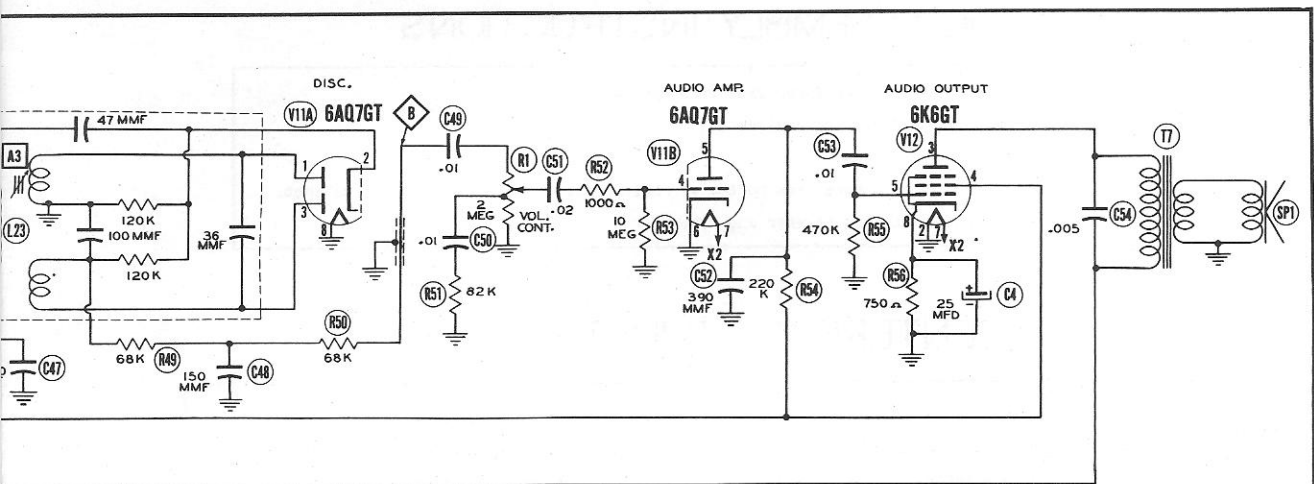
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DATE 1/49-#491-12 SET #53-FOLDER #12

GENERAL ELECTRIC
MODEL 810

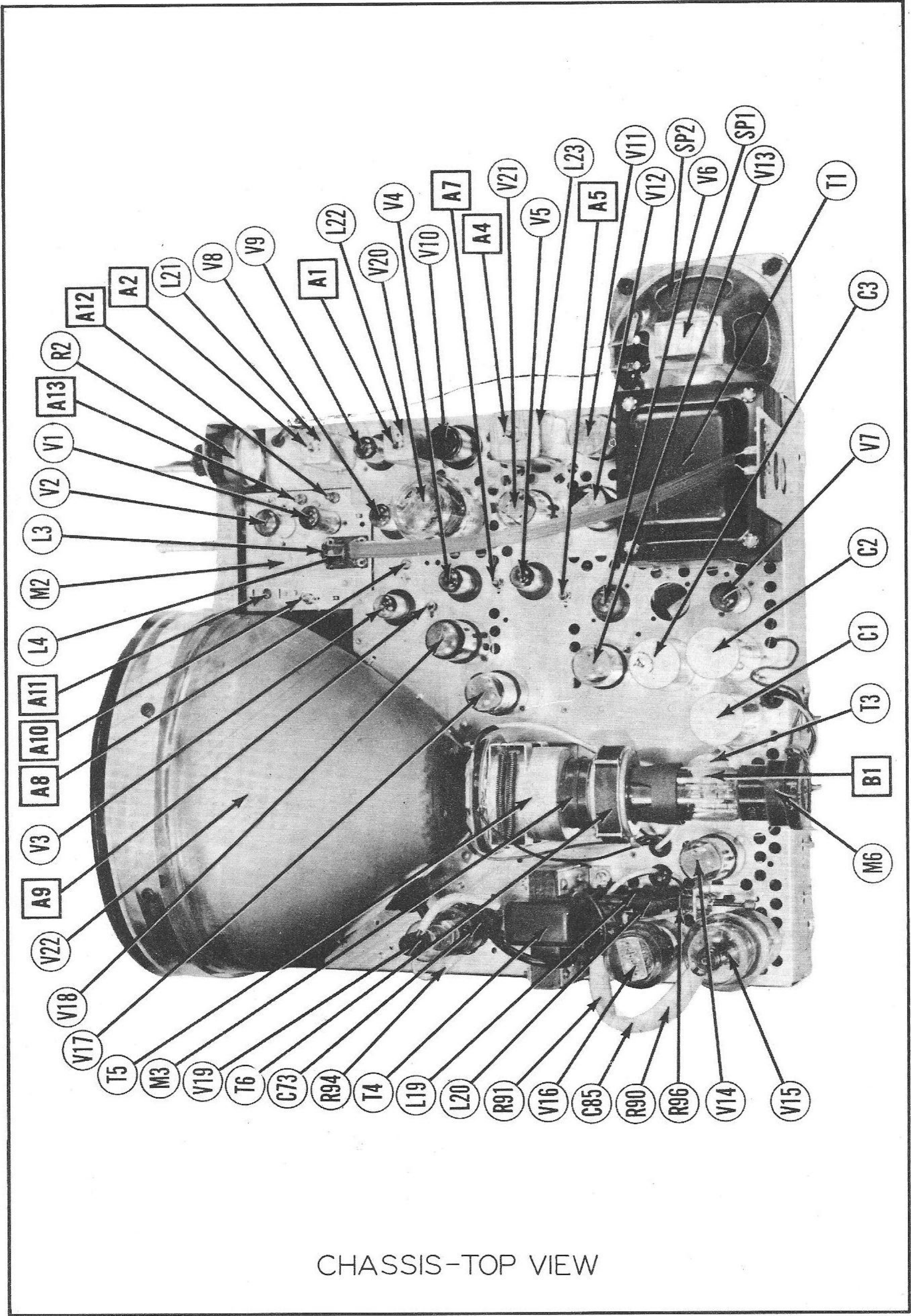


A PHOTOFAC STANDARD NOTATION SCHEMATIC
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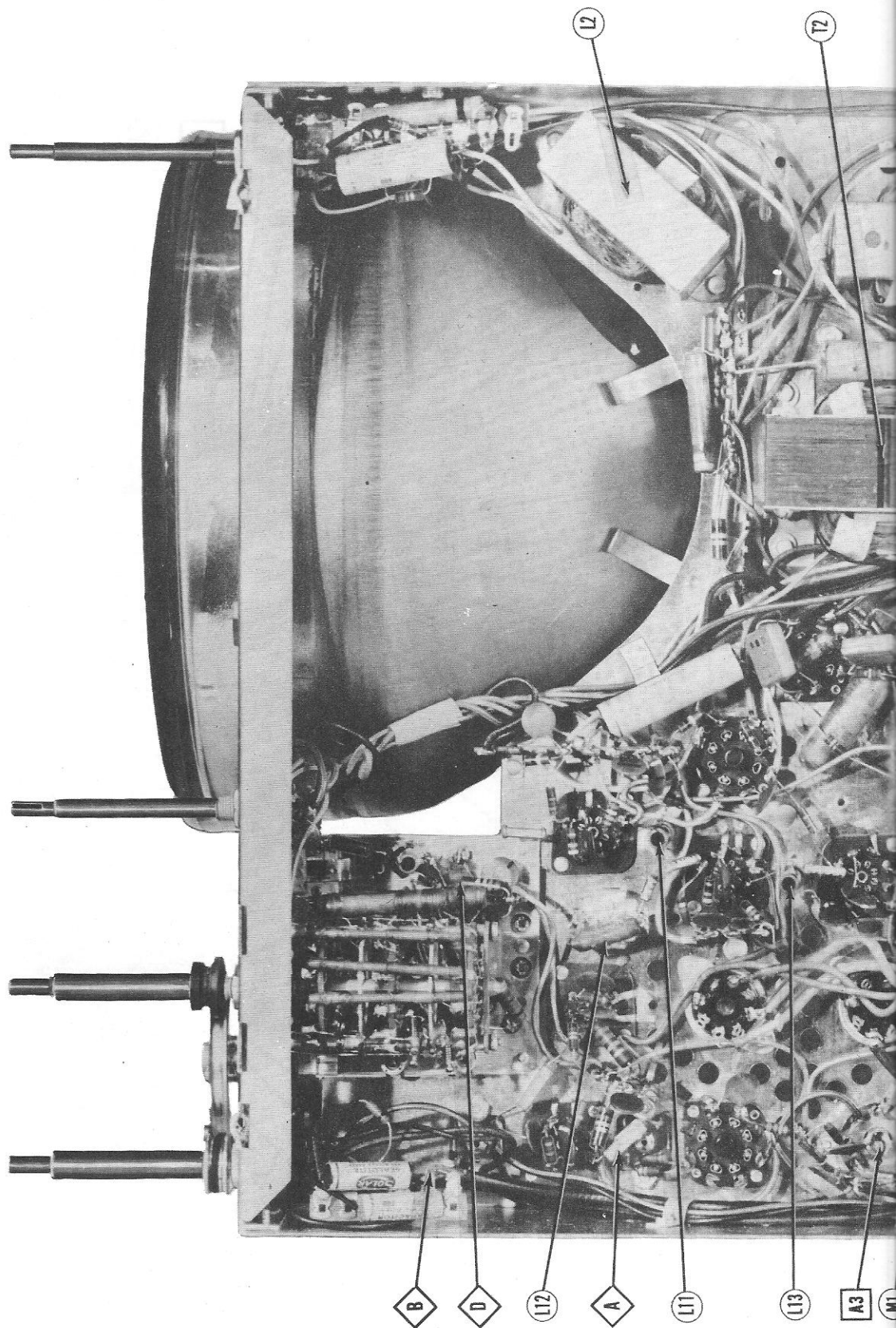


GENERAL ELECTRIC
MODEL 810

GENERAL ELECTRIC
MODEL 810



CHASSIS-TOP VIEW



GENERAL ELECTRIC MODEL 810

PARTS LIST AND DESCRIPTIONS

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		GENERAL ELECTRIC PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6AU6	6AU6	7BK	
V2	Fixer	12A77	12A77	9A	
V3	1st V. IF Amp.	6AU6	6AU6	7BK	
V4	2nd V. IF Amp.	6AU6	6AU6	7BK	
V5	3rd V. IF Amp.	6AU6	6AU6	7BK	
V6	Video Det.	6AL5	6AL5	6B7	
V7	Clammer	12AU7	12AU7	9A	
V8	Video Amp.	6AU6	6AU6	7BK	
V9	1st A. IF Amp.	6AU6	6AU6	7BK	
V10	2nd A. IF Amp.	6AU6	6AU6	7BK	
V11	Limiter	6SH7	6SH7	8BK	
V12	Disc.-Audio Amp.	6A47GT	6A47GT	7S	
V13	Audio Output	6K6GT	6K6GT	8BD	
V14	Sync. Amp.	6SN7GT	6SN7GT	8BD	
V15	Climper	6SN7GT	6SN7GT	8BD	
V16	AFC Cont.-Hor.	6SN7GT	6SN7GT	8BD	
V17	Osc.	6B36G	6B36G	5BT	
V18	Hor. Output	5V4G	5V4G	5L	
V19	Damping	6SN7GT	6SN7GT	8BD	
V20	Vert. Mult.	6V6GT	6V6GT	7AC	
V21	Vert. Output	1B3GT	1B3GT	3C	
V22	H. V. Rect.	5U4G	5U4G	5T	
V23	L. V. Rect.	5Y3GT	5Y3GT	5T	
V24	Pict. Tube	10P4	10P4		

CAPACITORS

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

ITEM No.	RATING	GENERAL ELECT. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION AND INSTALLATION NOTES	RESISTORS (CONT.)					
									GEN. PART No.	GEN. PART No.	GEN. PART No.		
C1A	30	RCE-070	AR962J4A	UP9D919-1	DY-2000-15	D10308	Filter	URD-1059	BTS-2700	+5%	Red-V1.-Red	1st Video IF Grid	+5%
B	30						Vert. Out. Screen	URD-1017	BTS-24K	+5%	Y1.-V1.-Blk.	1st Video IF Cathode	+5%
C	15						Vert. Out. Cath.	URD-1082	BTS-1000	+5%	Br.-Blk.-Or.	1st Video Screen	+5%
D	30						Filter	URD-049	BTS-100K	+5%	Br.-Blk.-Yl.	1st Video IF Plate Decoup.	+20%
C2A	15	RCE-071		UP9D984-1		D10301	Filter	URD-1054	BTS-1600	+5%	Br.-Blue-Red	2nd Video IF Grid	+5%
B	30						Vert. Out. Cath.	URD-1017	BTS-24K	+5%	Y1.-V1.-Blk.	2nd Video IF Cathode	+5%
C	15						Vert. Out. Cath.	URD-1082	BTS-1000	+5%	Br.-Blk.-Or.	2nd Video Screen	+5%
D	30						Filter	URD-049	BTS-100K	+5%	Br.-Blk.-Yl.	2nd Video IF Plate Decoup.	+20%
C3	2000	RCE-083	PR86-2000				Audio Out. Cath. Byp.	URD-1067	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Grid	+5%
C4	25	UCE-065	PR825-25				RF Coupling	URD-1074	BTS-24K	+5%	Red-V1.-Or.	3rd Video IF Screen	+5%
C5	100	RCM-1047	1468-0001				RF Coupling	URD-1082	BTS-24K	+5%	Red-V1.-Or.	3rd Video IF Plate Decoup.	+20%
C6	1500	RCM-1026					RF Coupling	URD-1098	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Screen	+5%
C7	47	RCM-1052					RF Coupling	URD-1067	BTS-24K	+5%	Red-V1.-Or.	3rd Video IF Plate Decoup.	+20%
C8	5000	RCM-3014					Conv. Plate Decoup.	URD-1082	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Screen	+5%
C9	5000	RCM-2030					Osc. Plate Byp.	URD-1098	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Plate Decoup.	+20%
C10	6	RCM-2006					Osc. Feedback	URD-1067	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Screen	+5%
C11	12	RCM-2006					Osc. Grid	URD-1098	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Plate Decoup.	+20%
C12	47	RCM-2010					Fixed Trimmer	URD-1103	BTS-100K	+5%	Br.-Blk.-Or.	3rd Video IF Cathode	+5%
C13	1.5	RCM-1045					Osc. Coupling	URD-1098	BTS-100K	+5%	Br.-Blk.-Or.	3rd Video IF Screen	+5%
C14	4.7	RCM-1052					RF Coupling	URD-1067	BTS-24K	+5%	Red-V1.-Or.	3rd Video IF Plate Decoup.	+20%
C15	5	RCM-2035					Fixed Trimmer	URD-1082	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Screen	+5%
C16	5000	RCM-3014					Conv. Plate Decoup.	URD-1098	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Plate Decoup.	+20%
C17	12	UCU-1506					Fixed Padder	URD-1103	BTS-100K	+5%	Br.-Blk.-Or.	3rd Video IF Cathode	+5%
C18	100	RCM-1047					V. IF Coupl.	URD-1098	BTS-100K	+5%	Br.-Blk.-Or.	3rd Video IF Screen	+5%
C19	5000	RCM-3014					Bias Filter	URD-1067	BTS-24K	+5%	Red-V1.-Or.	3rd Video IF Plate Decoup.	+20%
C20	5000	RCM-3014					1st V. IF Screen Byp.	URD-1082	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Screen	+5%
C21	5000	RCM-3014					1st V. IF Plate	URD-1098	BTS-1000	+5%	Br.-Blk.-Red	3rd Video IF Plate Decoup.	+20%
C22	100	RCM-1047					Decoup.	URD-121	BTS-56K	+5%	Br.-Blk.-Gm.	3rd Video IF Plate Decoup.	+20%
C23	2.5	RCM-3017					Video IF Coupling	URF-1023	BTS-470K	+5%	Gray-Red-Blk.	Horiz. Output Limiting	+20%
C24	5000	RCM-3014					Sound IF Coupling	URF-013	BTS-270K	+5%	Or.-Or.-Blk.	Horiz. Output Cathode	+20%
C25	5000	RCM-3014					Bias Filter	URD-113	BTS-470K	+5%	Y1.-V1.-Yl.	Horiz. Output Plate Sup.	+20%
C26	5000	RCM-3014					2nd V. IF Screen Byp.	URF-083	BTS-270K	+5%	Red-V1.-Or.	Horiz. Output Screen	+20%
C27	5000	RCM-3014					2nd V. IF Plate	URF-093	BTS-270K	+5%	Red-V1.-Or.	Horiz. Output Screen	+20%
C28	100	RCM-1047					Decoup.	URD-113	BTS-470K	+5%	Y1.-V1.-Yl.	Ht. Volt. Filter	+20%
C29	5000	RCM-3014					Video IF Coupling						
C30	5000	RCM-3014					Bias Filter						
C31	5000	RCM-3014					3rd V. IF Screen Byp.						
C32	5000	RCM-3014					3rd V. IF Plate						

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

SOUND IF ALIGNMENT

High voltage may be disabled during alignment by removing V14.
 Keep signal generator output low enough to prevent overloading the amplifiers.
 Contrast control should be set at approximately half rotation for all IF adjustments.
 The signal generator lead should be terminated with a resistor equal to the impedance of the generator then connected with as short a lead as possible through a 500 MMF capacitor. Connect ground lead to chassis at the closest possible point.
 When aligning the Video IF, the tube preceding the one to which signal is applied should be removed. If this is not done, the previous coil will act as a trap and cause considerable change in the response pattern.
 If the response curve is peaked at the low frequency end and can not be connected by the slug, try changing the 6AU6 into which the signal is fed. Abnormally high plate capacity can cause this difficulty.
 Use insulated alignment tool for adjustments.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1 500 MMF.	Pin #1 (grid) of 6AU6 (V9).	21.8MC 1MC sweep	21.8MC	4	High side to Point \diamond through 100K Ω resistor. Low side to chassis.	A1	Adjust for maximum amplitude with marker at center of peak. See Fig. 1.
2 500 MMF.	Pin #1 (grid) of 6AU6 (V8).	"	"	"	"	A2	"
3 500 MMF.	"	"	21.8MC (400 \sim Mod.)	"	High side to Point \diamond through 10K Ω resistor. Low side to chassis.	A3	Adjust for symmetrical S curve. At proper frequency the modulation at the edges of the pattern will disappear. See Fig. 2.
4 500 MMF.	"	"	"	"	"	A4	Adjust for maximum amplitude and symmetry of S curve. Repeat Steps 3 and 4 for best results.

NOTE: On later production L21 has been changed to a transformer. Adjust both top and bottom slugs for maximum amplitude and symmetry.

VIDEO IF ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5 500 MMF.	Pin #1 (grid) of 6AU6 (V5).	25MC 10MC sweep	22.9MC 26.3MC	4	High side to Point \diamond through 10K Ω resistor. Low side to chassis.	A5, A6	Adjust for maximum amplitude with pattern as shown in Fig. 3. Remove V4 during this adjustment.
6 500 MMF.	Pin #1 (grid) of 6AU6 (V4).	"	22.9MC 25.55MC 26.3MC	"	"	A7	Adjust for maximum amplitude with pattern as shown in Fig. 4. Remove V3 during this adjustment.
7 500 MMF.	Pin #1 (grid) of 6AU6 (V3).	Not used	21.8MC 400 \sim (Mod.)	"	"	A8	Adjust for minimum amplitude.
8 500 MMF.	"	25MC 10MC sweep	22.9MC 23.4MC 25.55MC 26.3MC	"	"	A9	Remove V2 during this step. Adjust for maximum amplitude with pattern as shown in Fig. 5.
9 500 MMF.	Pin #7 (grid) of 12AT7.	"	"	"	"	A10	Turn All to minimum. Adjust for maximum amplitude with pattern as shown in Fig. 5.
10 500 MMF.	"	"	"	"	"	All	Adjust for 26.3MC at half amplitude as shown in Fig. 6.

RF ALIGNMENT

Terminate signal generator lead with a carbon resistor equal to generator impedance, then connect to antenna terminals through two equal resistances to make total equal approximately 300 ohms.

DO NOT ATTEMPT TO ALIGN THE RF SECTION UNLESS IT IS DEFINITELY KNOWN TO BE NECESSARY. Usually alignment will not be necessary unless a coil has been damaged or replaced. Since separate coils are used for each switch position it should be necessary to re-align only the defective channel. Adjustment of A12 and A13 may be necessary when tubes are replaced in the RF Tuner.

Adjustments are made by changing the inductance of the individual coils. Coupling is fixed except for channels #2 and #3. Coupling on channel #2 may be varied by sliding the copper rings on the coil form. Coupling on channel #3 may be adjusted if necessary by moving turns at the insides of the coils. Frequency adjustment is made in each case by expanding or compressing the coils. The upper three switch positions each cover two channels and must be sufficiently broad. The fine tuning control should be at center position during oscillator alignment.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11 Resistive (See above)	Antenna terminals.	85MC 15MC sweep	83.25MC 87.75MC	6	High side to Point \diamond . Low side to chassis. Disconnect C16.	A12, A13	Adjust for maximum amplitude and flat response. See Fig. 7.
12 "	"	79MC 15MC sweep	77.25MC 81.75MC	5	"	A14	"
13 "	"	69MC 15MC sweep	67.25MC 71.75MC	4	"	A15	"
14 "	"	63MC 15MC sweep	61.25MC 65.75MC	3	"	A16	"
15 "	"	57MC 15MC sweep	55.25MC 59.75MC	2	"	A17	Adjust for maximum. See Fig. 8.
16 "	"	177MC 15MC sweep	175.25MC 179.75MC	7	"	A18, A19	Adjust for maximum. See Fig. 7. Keep slugs approximately even.
17 "	"	186.5MC 25MC sweep	181.25MC 191.75MC	8-9	"	A20, A21	Adjust for maximum. See Fig. 9.
18 "	"	198.5MC 25MC sweep	193.25MC 203.75MC	10-11	"	A22, A23	"
19 "	"	210.5MC 25MC sweep	205.25MC 215.75MC	12-13	"	A24, A25	"

OSCILLATOR ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	ADJUST	REMARKS	
20	Resistive (see above)	Antenna terminals	59.75MC (Modulated)	2	A26	Set volume control and tuning control at mid-position. Use sound output as indicator. Squeeze or spread turns to adjust.
21	"	"	65.75MC (Modulated)	3	A27	"
22	"	"	71.75MC (Modulated)	4	A28	"
23	"	"	81.75MC (Modulated)	5	A29	"
24	"	"	87.75MC (Modulated)	6	A30	"
25	"	"	179.75MC (Modulated)	7	A31	"
26	"	"	188.75MC (Modulated)	8-9	A32	"
27	"	"	200.75MC (Modulated)	10-11	A33	"
28	"	"	212.75 (Modulated)	12-13	A34	"

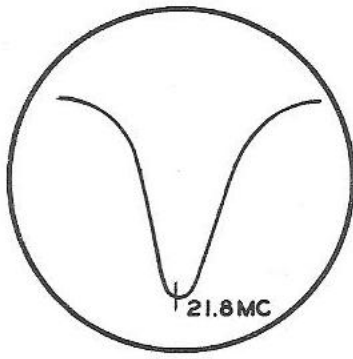


FIG. 1

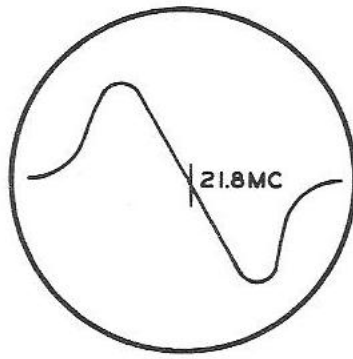


FIG. 2

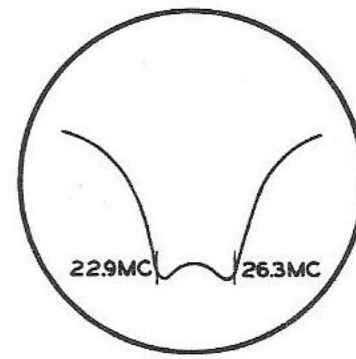


FIG. 3

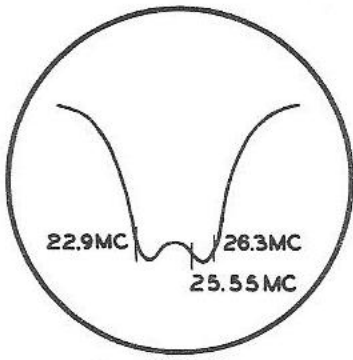


FIG. 4

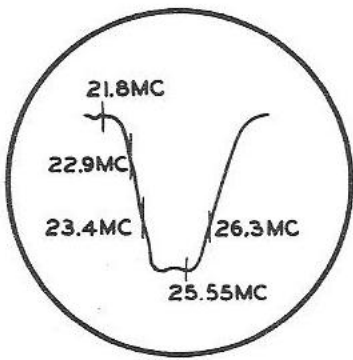


FIG. 5

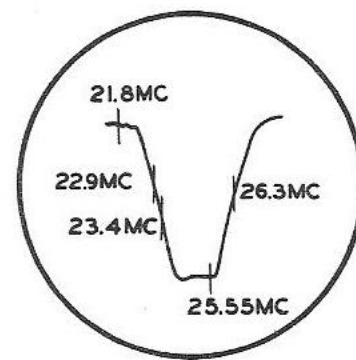


FIG. 6

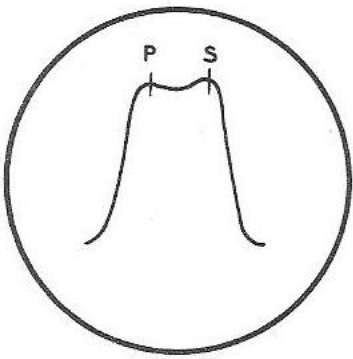


FIG. 7

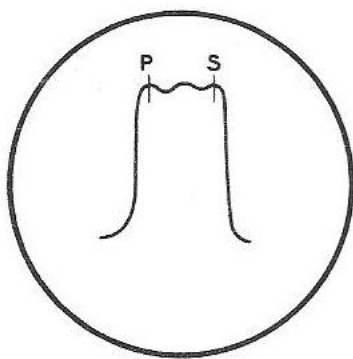


FIG. 8

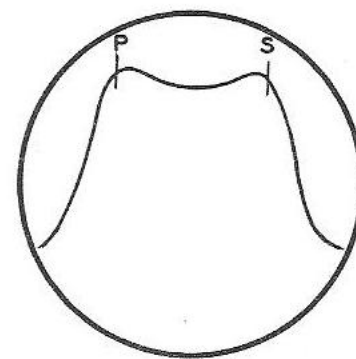


FIG. 9

GENERAL ELECTRIC
MODEL 810

HORIZONTAL FREQUENCY ADJUSTMENT

The horizontal frequency control is a coarse adjustment used to set the front panel horizontal hold control to obtain synchronization at approximately the center of its range. The core (B1) of the blocking oscillator transformer sets the natural frequency of the system.

Connect a VTVM to the junction of the contrast control and resistor R85. Tune in a television signal and adjust the front panel horizontal hold control to the center of its range. Alternately adjust the horizontal frequency control and slug B1 until synchronization is obtained with 12 volts indicated by the VTVM. The voltage must be within one volt of 12 volts at the correct adjustment.

The front panel horizontal hold control should cause the picture to fall out of synchronization at each end of its rotation.

ITEM No.	RATING	RESISTANCE	WATTS	GENERAL ELECTRIC PART No.	CLAROSTAT PART No.	IRC PART No.	NOTES
C33	.05	600	100	UCG-535		DT685	ST-6-05
C34	.047	600	100	RCN-014		DT685	ST-6-05
C35	.390	500	500	UCU-1542		SM5T4	MO-5-25
C36	.05	600	100	UCG-635		DT685	ST-6-05
C37	.1	600	100	UCG-640		DT6P1	ST-6-1
C38	5000	600	500	RCW-3014		ID5D5	MM-5-25
C39	5000	500	500	RCW-3014		ID5D5	MM-5-25
C40	100	500	500	UCU-1528		SM5T1	MO-5-31
C41	5000	500	500	RCW-3014		ID5D5	MM-5-25
C42	5000	500	500	RCW-3014		ID5D5	MM-5-25
C43	5000	500	500	RCW-3014		ID5D5	MM-5-25
C44	100	500	500	UCU-1528		SM5T1	MO-5-31
C45	47	500	500	RCW-1052		SM5Q5	MO-5-45
C46	5000	500	500	RCW-3014		ID5D5	MM-5-25
C47	5000	500	500	RCW-3014		ID5D5	MM-5-25
C48	150	500	500	UCU-1532		SM5T15	MM-5-25
C49	.01	600	100	UCG-630		DT6S1	ST-6-01
C50	.01	600	100	UCG-630		DT6S1	ST-6-01
C51	.02	600	100	UCG-631		DT6S2	ST-6-02
C52	.390	500	500	UCU-1542		SM5T4	MO-5-34
C53	.01	600	100	UCG-630		DT6S1	ST-6-01
C54	.005	600	100	UCG-625		DT6D5	ST-6-005
C55	.05	600	100	UCG-635		DT6S5	ST-6-05
C56	100	500	500	UCU-1528		SM5T1	MO-5-31
C57	390	500	500	UCU-1542		SM5T4	MO-5-34
C58	120	500	500	UCU-1530		SM5T4	MO-5-34
C59	120	500	500	UCU-1530		SM5T4	MO-5-34
C60	.002	600	100	UCG-621		DT6D2	ST-6-002
C61	.2	600	100	UCG-014		DT6P2	ST-6-2
C62	.002	600	100	UCG-621		DT6P2	ST-6-002
C63	.05	600	100	UCG-635		DT6S5	ST-6-05
C64	180	500	500	UCU-2534		DT6S5	ST-6-05
C65	2200	500	500	UCU-2534		DT6S5	ST-6-05
C66	390	500	500	UCU-1542		SM5T4	MO-5-34
C67	.5	200	200	RCG-016		DT6P5	ST-6-5
C68	.05	600	100	UCG-640		DT6P1	ST-6-1
C69	.05	600	100	UCG-635		DT6S5	ST-6-05
C70	.1	600	100	UCG-640		DT6P1	ST-6-1
C71	.5	200	200	RCG-016		DT6P5	ST-6-5
C72	4	800	800	RCN-020		DT6P5	ST-6-5
C73	500	2000	2000	RCN-011		DT6S1	ST-6-01
C74	.01	600	100	UCG-630		DT6S1	ST-6-01
C75	.05	600	100	UCG-635		DT6S5	ST-6-05
C76	.01	600	100	UCG-630		DT6S1	ST-6-01
C77	.01	600	100	UCG-630		DT6S1	ST-6-01
C78	.001	600	100	UCG-620		DT6D1	ST-6-001
C79	.002	600	100	UCG-621		DT6D2	ST-6-002
C80A	.062	600	100	RCG-095		DT6S5	ST-6-05
C81	.05	600	100	UCG-635		DT6S5	ST-6-05
C82	.001	600	100	UCG-620		DT6D1	ST-6-001
C83	.1	600	100	UCG-640		DT6P1	ST-6-1
C84	1500	500	500	RCM-026		ID5D15	MM-5-15
C85	.0022	1000	1000	RCN-019		ID5D5	MM-5-25

ITEM No.	RATING	RESISTANCE	WATTS	GENERAL ELECTRIC PART No.	CLAROSTAT PART No.	IRC PART No.	NOTES
R95	3300K	2	1	URF-061		BT-2-3300	Or.-Or.-Red
R96	4700K	2	1	URD-065		BT-2-4700	Yl.-Yl.-Red
R97	5600K	2	1	URD-115		BT-2-5600	Grn.-Blue-Yl.
R98	2200K	2	2	URF-1057		BT-2-2200	Red-Red-Red
R99	.65K	4	4	RRM-028		RRM-028	Filament Dropping
R100	560K	4	4	RRM-028		RRM-028	Filament Dropping
R101	1K	7	7	RRM-034		RRM-034	Filament Dropping
R102	100K	7	7	URD-091		URD-091	Filament Dropping
R103	100K	7	7	URD-097		URD-097	Acc. Anode Filter
R104	1M	7	7	URD-121		URD-121	Isolation

Note-R68 is either shorted out or left in the circuit when centering of vertical hold control R3A is checked at factory.

ITEM No.	RATING	RESISTANCE	WATTS	GENERAL ELECTRIC PART No.	CLAROSTAT PART No.	IRC PART No.	NOTES
R1	2 Neg.	1000K	1/4	RRC-091	10-1000		Volume & On-Off Switch-Tap @ 500K
R2	1000K	1/4	1/4	RRC-088			Vertical Hold
R3A	50K	1/4	1/4	RRC-090			Horizontal Hold
R3B	50K	1/4	1/4	RRC-089			Contrast
R4A	500K	1/4	1/4	RRC-089			Brightness
R4B	7500K	1/4	1/4	RRC-087			Vertical Size
R5A	100K	1/4	1/4	RRC-087			Attach to R5A per instructions
R5B	100K	1/4	1/4	RRC-086			Vertical Linearity
R6	1000K	2	2	RRC-086			Vertical Linearity

ITEM No.	RATING	DC RES.	GENERAL ELECTRIC PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.	INSTALLATION NOTES	
T7	7400K	3.2K	560K	.6K	RTO-052	A-3878	T22S47	A-2902

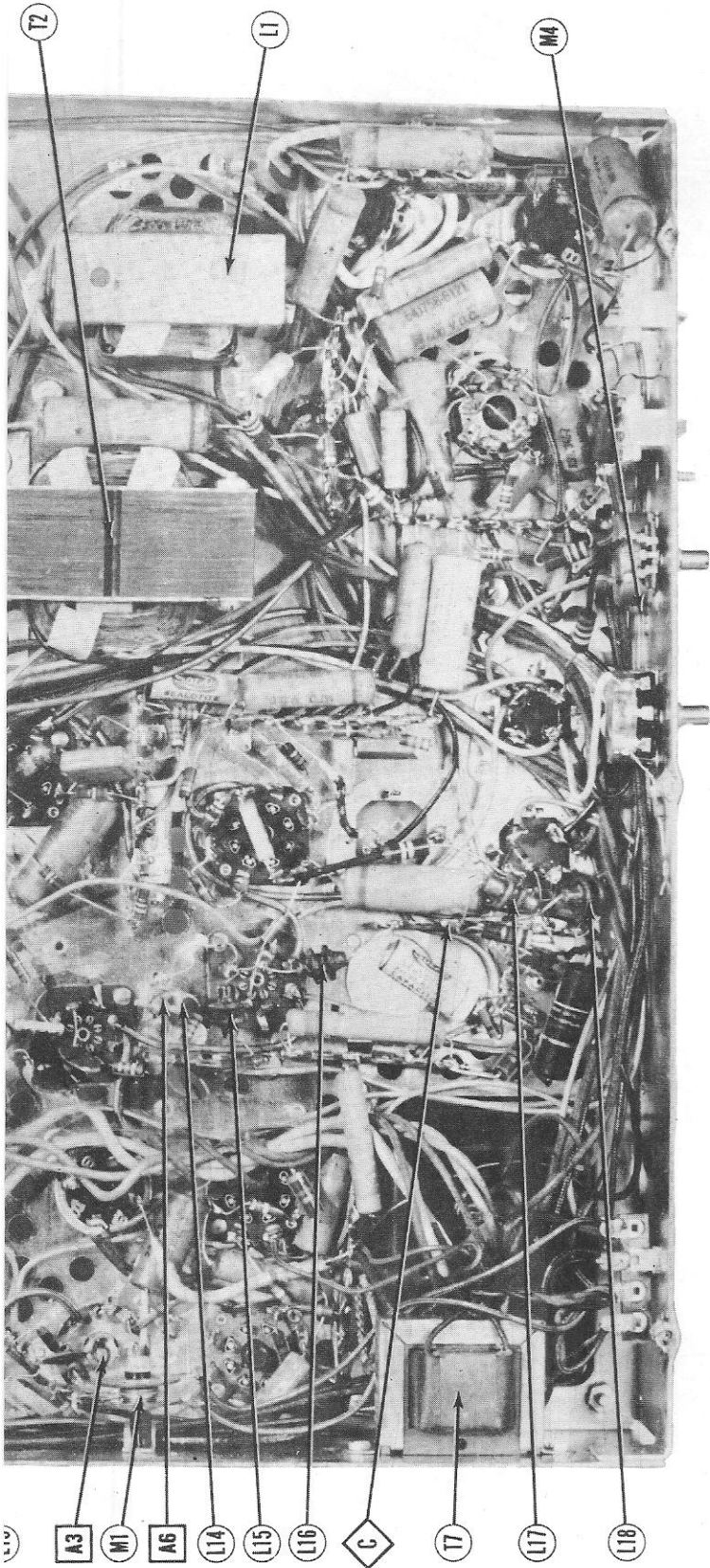
*May be used in some models.

ITEM No.	RATING	RESISTANCE	WATTS	GENERAL ELECTRIC PART No.	CLAROSTAT PART No.	IRC PART No.	NOTES
R7	200K	1/4	1/4	URD-1032			Red-Bk.-Br.
R8	6200K	1/4	1/4	URE-1068			Blue-Red-Red
R9	5600K	1/4	1/4	URE-1067			Grn.-Blue-Red
R10	3000K	1/4	1/4	URE-1060			Or.-Bk.-Red
R11	22K	1/4	1/4	URD-1081			Red-Red-Or.
R12	220K	1/4	1/4	URD-1105			Red-Red-Yl.
R13	24K	1/4	1/4	URD-1082			Red-Yl.-Or.
R14	27K	1/4	1/4	URE-083			Red-Vl.-Or.

ITEM No.	RATING	DC RES.	GENERAL ELECTRIC PART No.	STANCOR PART No.	THORDARSON PART No.	MERIT PART No.	INSTALLATION NOTES	
T7	7400K	3.2K	560K	.6K	RTO-052	A-3878	T22S47	A-2902

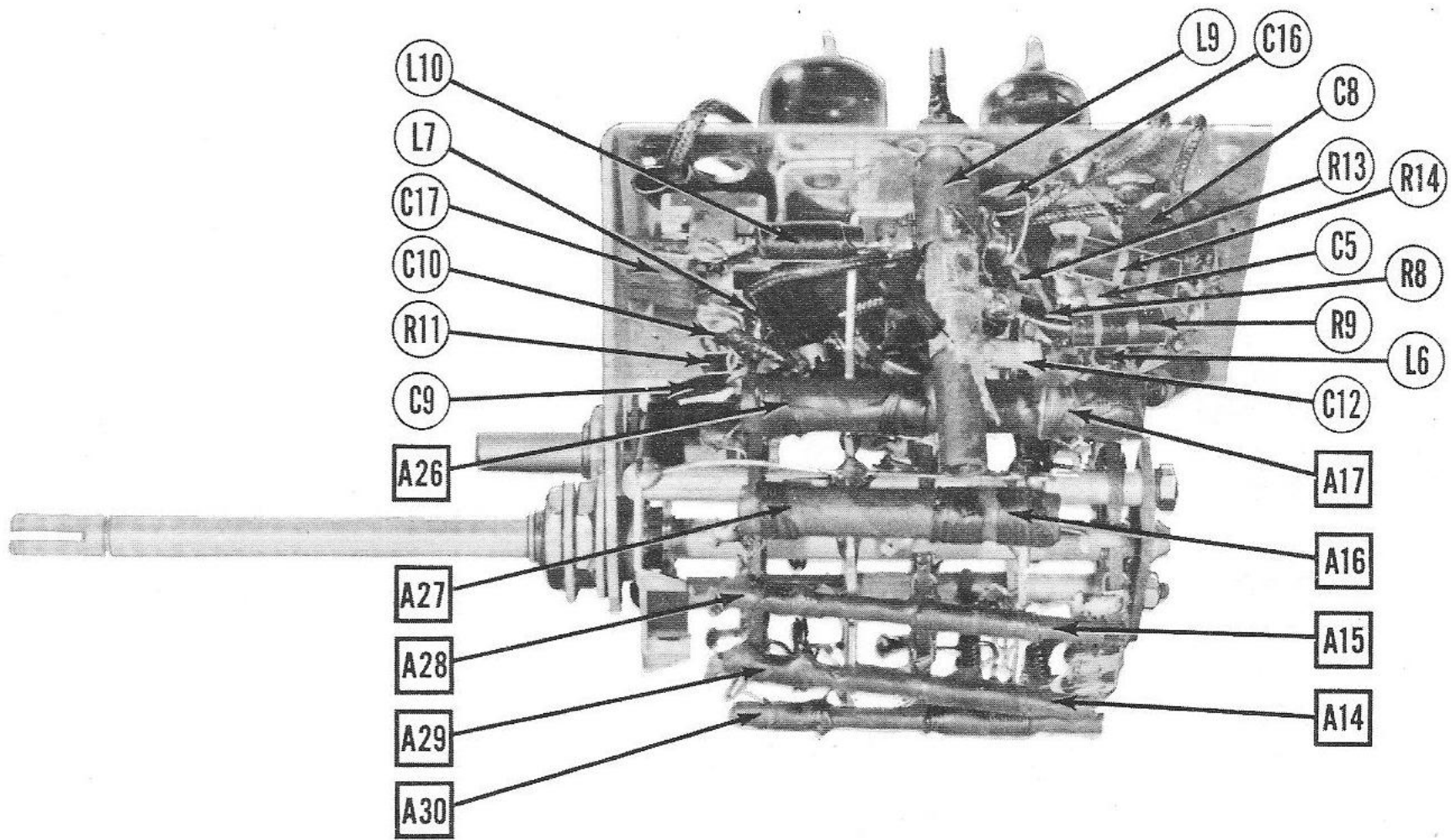
IDENTIFICATION CODES
All Resistors ±10% Tolerance Unless Otherwise Stated

PARTS LIST AND DESCRIPTION CONTINUED ON PAGE 11

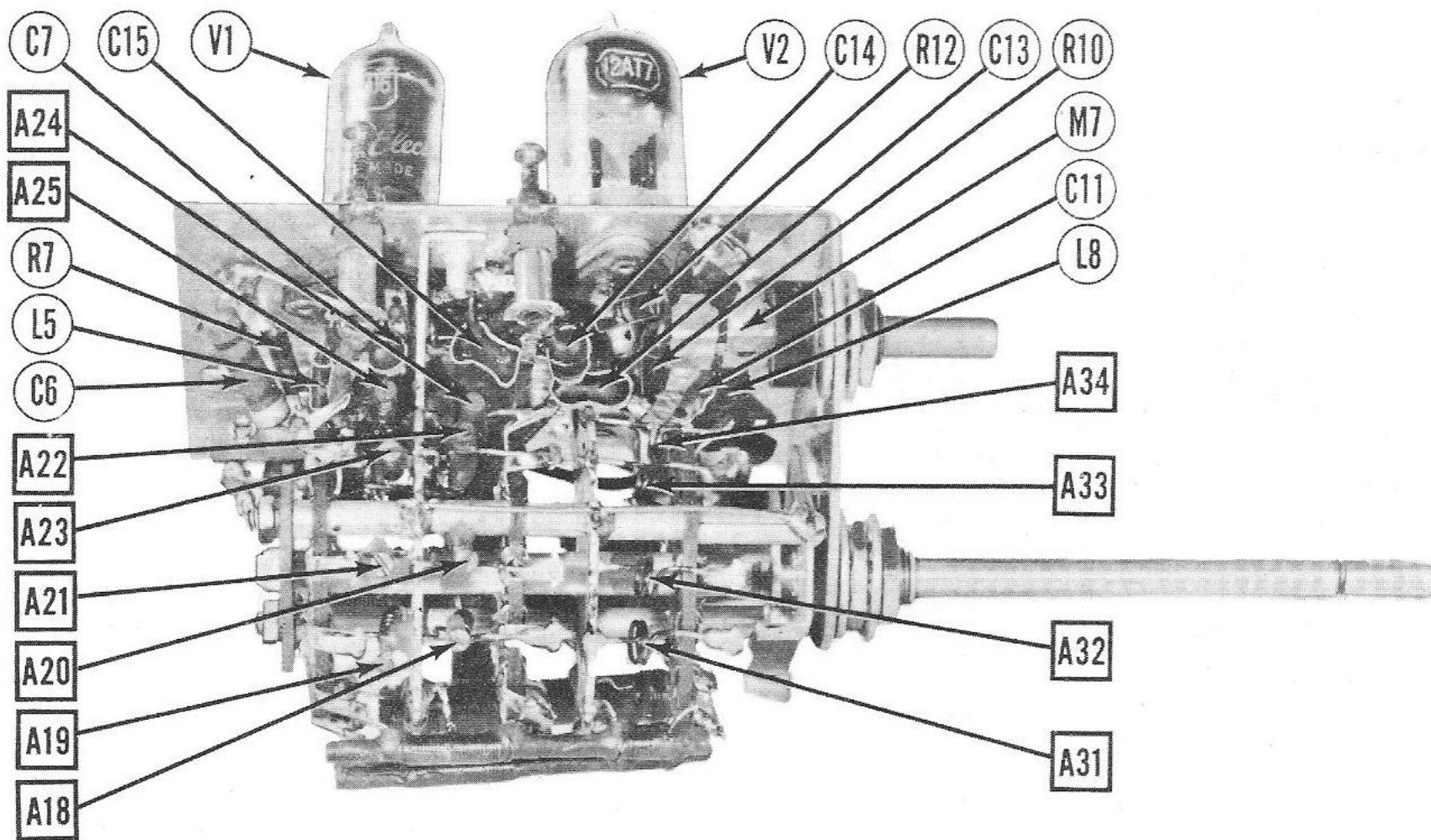


CHASSIS-BOTTOM VIEW-TRANS, INDUCTOR AND ALIGNMENT IDENTIFICATION

GENERAL ELECTRIC
MODEL 810



RF TUNER - RIGHT SIDE



RF TUNER - LEFT SIDE

GENERAL ELECTRIC MODEL 810

PARTS LIST AND DESCRIPTIONS (Continued) COILS (RF-IF)

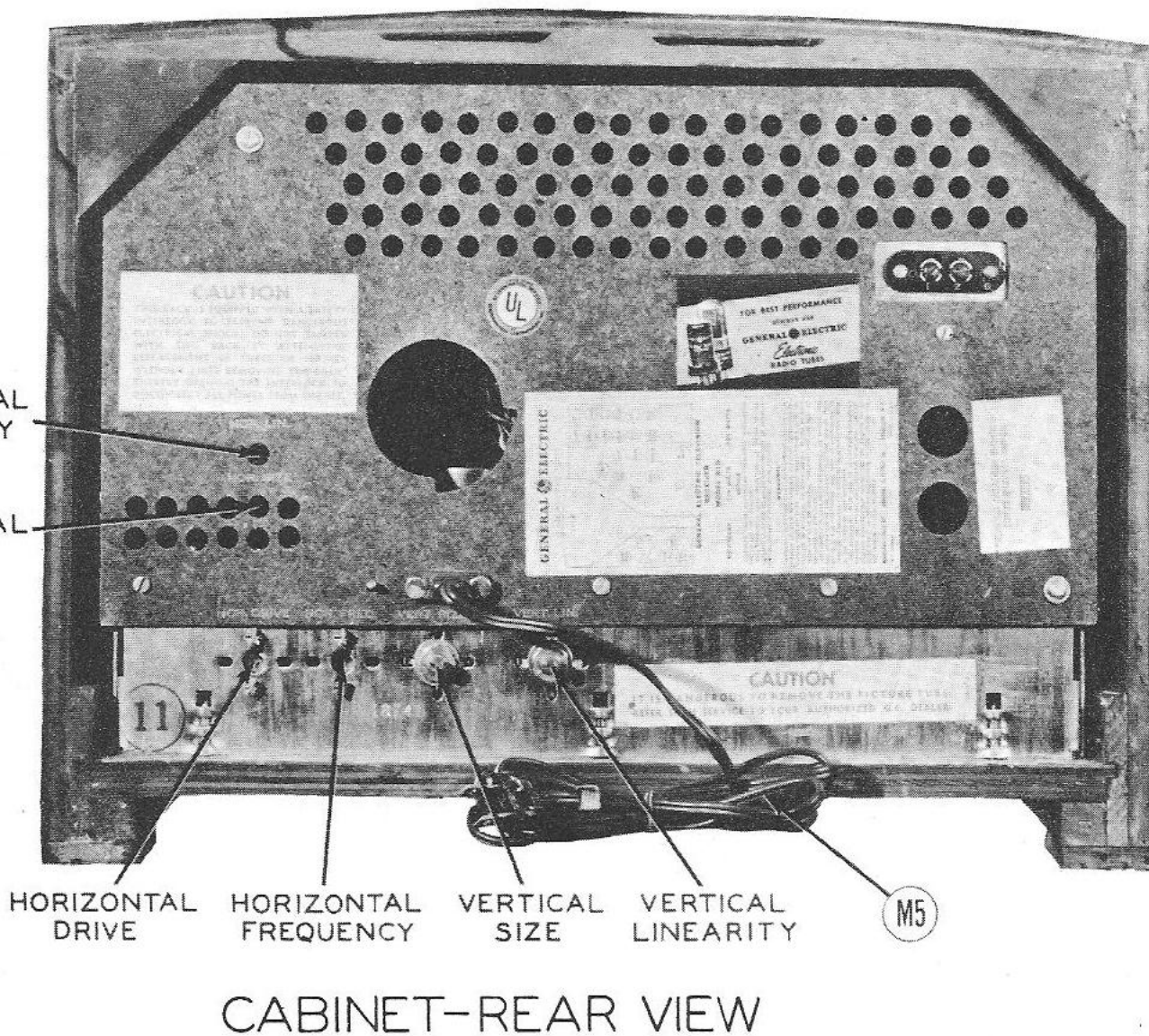
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	GENERAL ELECTRIC PART No.	MEISSNER PART No.	
L3	Ant. Trans.	0Ω	0Ω	RLA-031		Low Band High Band Only
L4	Compensating	0Ω	0Ω	RLI-006		
L5	RF Cathode	0Ω	0Ω	RLI-003		
L6	"	0Ω	0Ω	RLI-006		
L7	Osc. Cath.	1.5Ω		RLI-019		
L8	Osc. Fil.	0Ω		RLI-005		
L9	1st IF	.5Ω	.2Ω	RTL-081		
L10	Video Trap	.2Ω	.2Ω	RLI-005		
L11	2nd IF	.2Ω	.2Ω	RTL-082		
L12	Sound Trap	.5Ω		RLI-061		
L13	3rd Video					
L14	IF	.2Ω	.2Ω	RTL-083		
L15	4th Video					
L16	IF	.2Ω	.2Ω	RTL-089		
L17	Stunt Peak.	7.5Ω		RLI-038		
L18	Series	7.5Ω		RLI-038		
L19	Peakng	7.5Ω		RLI-038		
L20	Hor. Line-arity	2.4Ω	1.25Ω	RLD-004		
L21A	3rd Sound IF	33Ω		RLD-005		
L22	3rd Sound IF	1.Ω		RTL-085		
L23	4th Sound IF	1.Ω		RTL-090		
	Discriminat- or	.1Ω	.1Ω	RTL-085		
				RTD-007		Late Production (See inset on schematic)

SELENIUM RECTIFIER

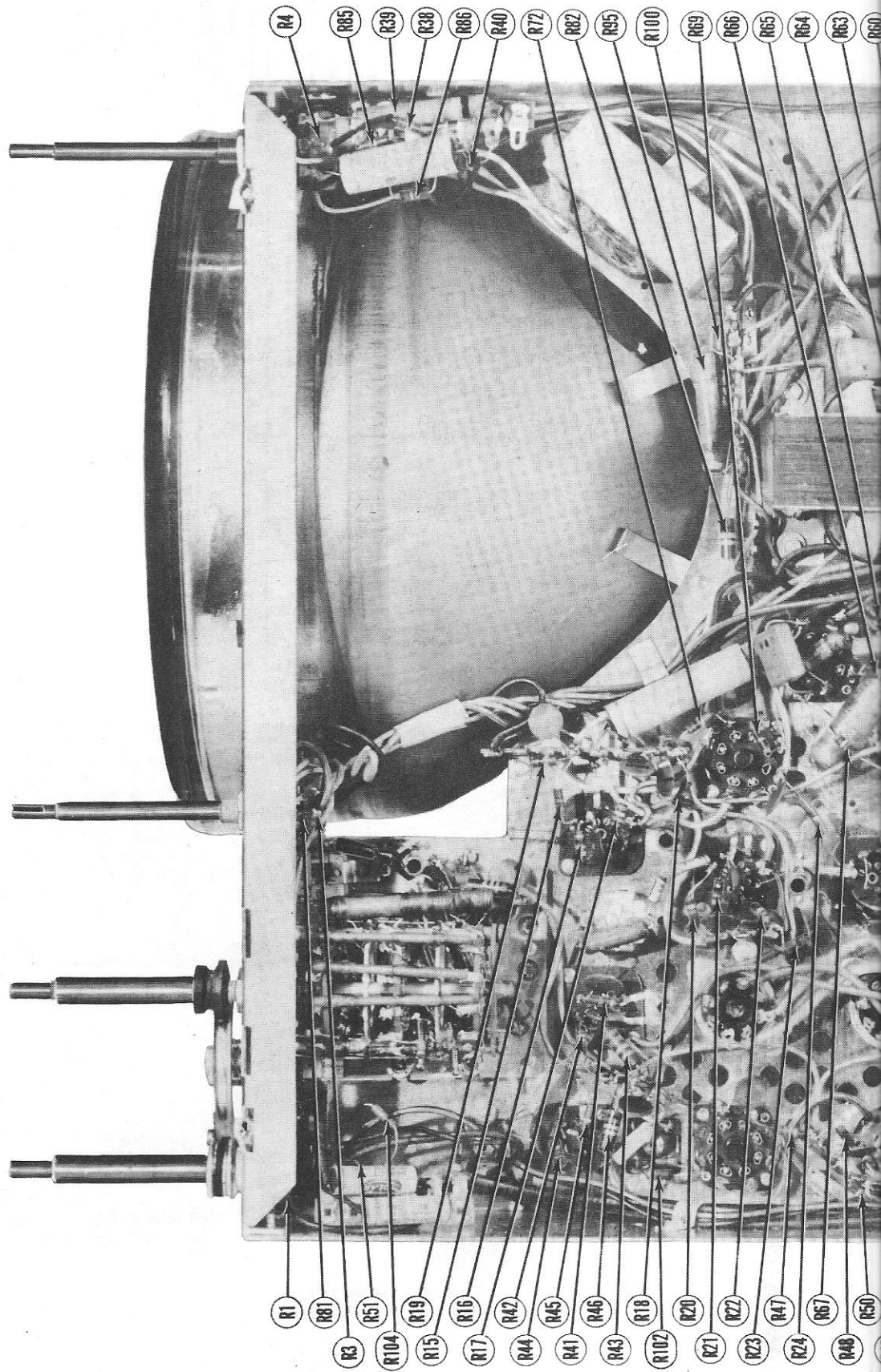
ITEM No.	REPLACEMENT DATA		NOTES
	RATING	GENERAL ELECTRIC PART No.	
M1	150V _{DC}	REB-003	

MISCELLANEOUS

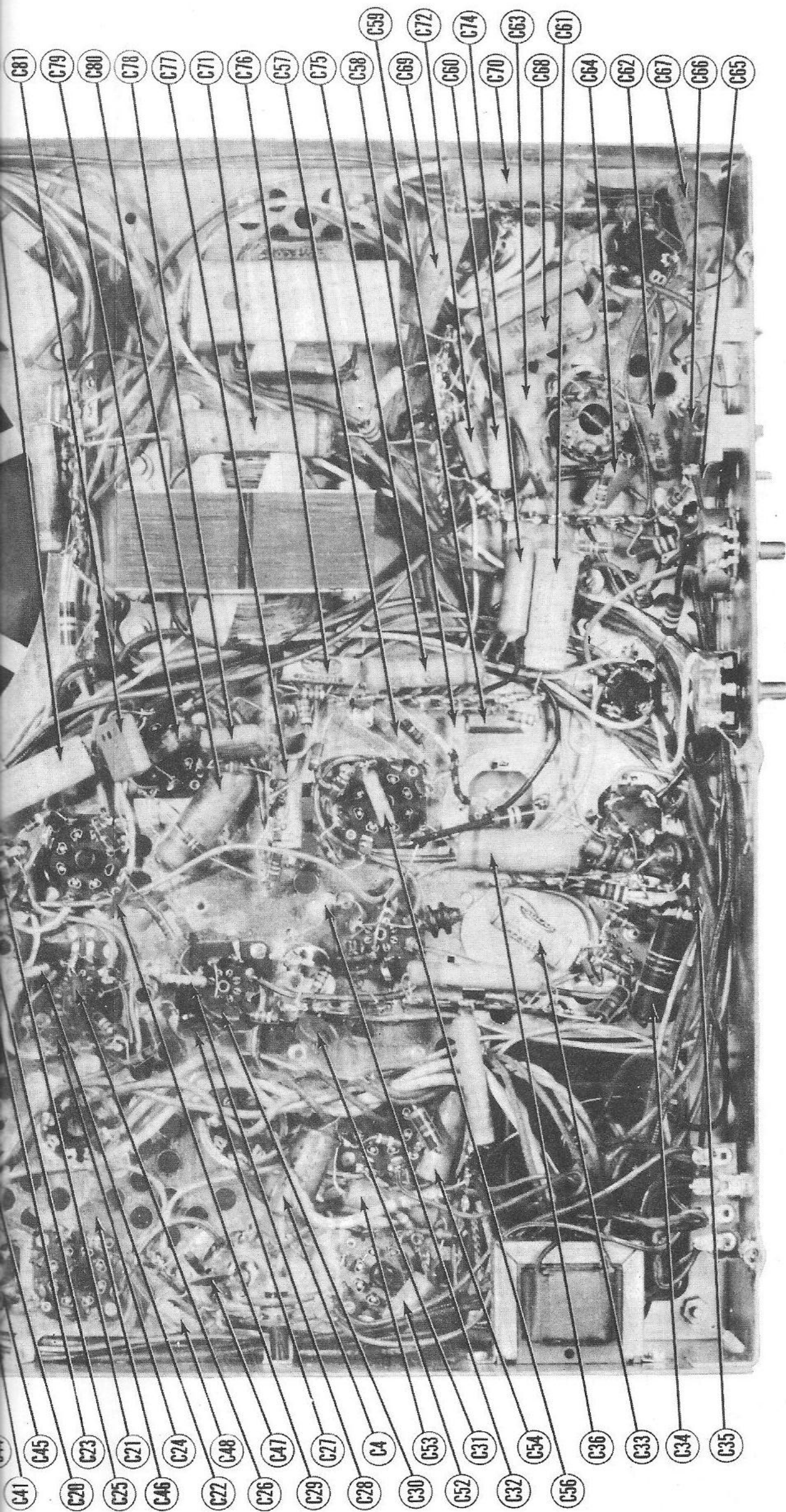
ITEM No.	PART NAME	GENERAL ELECTRIC PART No.	NOTES
M2	RF Tuner Complete	RJX-023	
M3	Centering Assembly	RAX-024	
M4	AC Receptacle	RJ1-007	
M5	Power Cord and Plug	RWL-016	
M6	Picture Tube Socket	RJS-119	
M7	Fine Tuning	RCY-046	
M8	Sound Trap Trimmer	RCY-047	Variable Capacitor 1.25 M _F
M9	Video Carrier Set	RCY-048	Mica Trimmer 1.5-15 M _F
M10	RF Trimmer	RE1-015	" "
M11	Mixer Trimmer	RE1-016	" "
M12	"	RE1-017	" "
M13	"	RE1-018	" "
M14	"	RE1-019	" "
M15	"	RE1-026	" "
M16	"	RE1-014	" "
M17	Horizontal Frequency Control	RCY-045	Horizontal Osc. Adjustment
M18	Horizontal Drive	RCY-045	IF Adjustments
M19	Safety Glass	RDM-010	Horizontal Linearity Adjustment
M20	Knob	RDK-152	Horizontal Size Control
M21	"	RDK-153	Discriminator Adjustment
M22	"	RDK-154	L14 Primary
M23	"	RDK-155	High Band RF Adjustments
M24	"	RAV-059	Trimmer - 25-150 M _F
M25	"	RAB-077	Trimmer - 25-150 M _F
M26	"	RHM-054	Vertical Hold and Contrast
M27	Cabinet Back Cover		Horizontal Hold and Brightness
M28	"		Focus and Tuning
M29	"		Volume and Channel Selector
M30	"		
M31	Cabinet Sleeve		Fiber Centering Sleeve



CABINET-REAR VIEW



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	6AU6	OV.	1.40VDC	OV.	6.3VAC	1.40VDC	1.40VDC	1.7VDC	-	-
V 2	12AT7	215VDC	-.5VDC	.05VDC	6.2VDC	150VDC	150VDC	-5.2VDC	OV.	Pin #9 OV.
V 3	6AU6	-1.2VDC	OV.	OV.	6.3VAC	265VDC	165VDC	.7VDC	-	-
V 4	6AU6	-.3VDC	OV.	OV.	6.3VAC	265VDC	158VDC	.8VDC	-	-
V 5	6AU6	-.4VDC	OV.	OV.	6.3VAC	230VDC	120VDC	OV.	-	-
V 6	6AL5	OV.	-.4VDC	6.3VAC	OV.	OV.	OV.	-11VDC	-	-
V 7	12AU7	45VDC	-.6VDC	OV.	OV.	165VDC	165VDC	OV.	2VDC	Pin #9 6.3VAC
V 8	6AU6	OV.	OV.	OV.	6.3VAC	117VDC	100VDC	1.0VDC	-	-
V 9	6AU6	OV.	OV.	OV.	6.3VAC	165VDC	55VDC	.6VDC	-	-
V 10	6SH7	OV.	OV.	OV.	-.4VDC	OV.	42VDC	6.3VAC	235VDC	-
V 11	6AQ7GT	OV.	.4VDC	.1VDC	-.6VDC	90VDC	OV.	6.3VAC	OV.	-
V 12	6K6GT	OV.	OV.	305VDC	110VDC	OV.	18VDC	6.3VAC	18VDC	-
V 13	6SN7GT	-1.2VDC	170VDC 250VDC	5.3VDC	OV.	160VDC	5.3VDC	OV.	6.3VAC	-
V 14	6SL7GT	-75VDC	200VDC	OV.	-45VDC	44VDC	-38VDC	OV.	6.3VAC	-
V 15	6E6GT	OV.	OV.	7.3VDC	-10VDC	-10VDC	OV.	6.3VAC	300VDC	#
V 16	5Y4G	OV.	440VDC	OV.	350VDC	OV.	350VDC	OV.	440VDC	-
V 17	6SN7GT	-.4VDC	24VDC	OV.	-3.2VDC	3.1VDC 4.9VDC	OV.	OV.	6.3VAC	-
V 18	6V6GT	OV.	6.3VAC	270VDC	170VDC 250VDC	3.1VDC 4.9VDC	-.3VDC	OV.	13VDC 21VDC	-
V 19	1B3GT		D O N O T M E A S U R E .							
V 20	5U4G	OV.	380VDC	OV.	315VAC	OV.	315VAC	OV.	380VDC	-
V 21	5Y3GT	OV.	300VDC	OV.	295VAC	OV.	295VAC	OV.	300VDC	-
V 22	10FP4	300VDC	165VDC	Pin #10 435VDC	Pin #11 200VDC	Pin #12 300VDC				

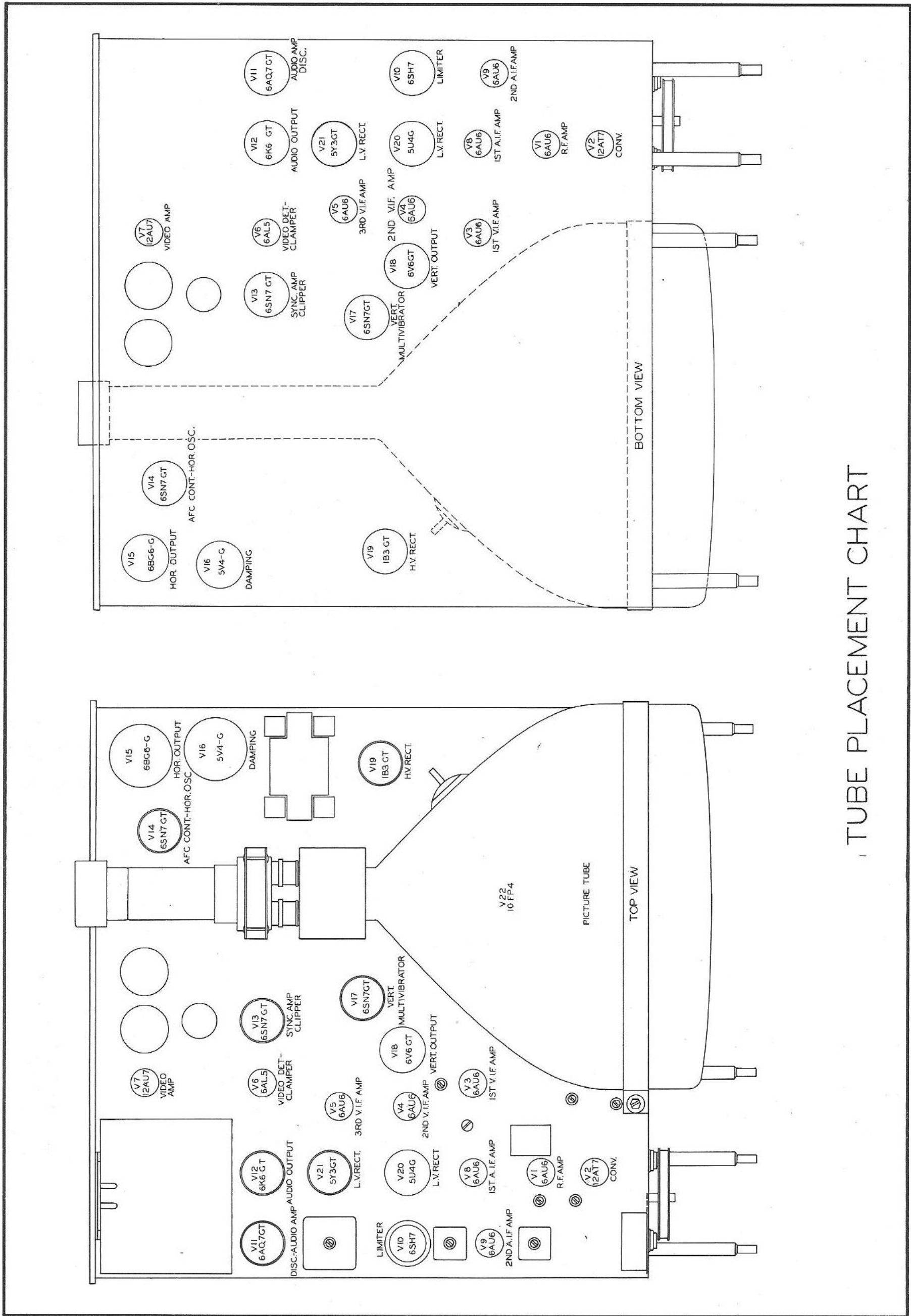
#DO NOT MEASURE.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Cap
V 1	6AU6	OV.	12KΩ	OV.	.1Ω	12KΩ	12KΩ	200Ω	-	-
V 2	12AT7	3.5KΩ	22KΩ	1Ω	.1Ω	.1Ω	30KΩ	220KΩ	OV.	Pin #9 OV.
V 3	6AU6	60KΩ	OV.	OV.	.1Ω	13KΩ	25KΩ	47Ω	-	-
V 4	6AU6	160KΩ	OV.	OV.	.1Ω	13KΩ	25KΩ	47Ω	-	-
V 5	6AU6	60KΩ	OV.	OV.	.1Ω	15KΩ	25KΩ	OV.	-	-
V 6	6AL5	OV.	3.5 Meg.	.1Ω	OV.	OV.	OV.	5KΩ	-	-
V 7	12AU7	20KΩ*	900KΩ	OV.	OV.	OV.	48KΩ	850KΩ	120Ω	Pin #9 .1Ω
V 8	6AU6	.1Ω	OV.	OV.	.1Ω	23KΩ	60KΩ	120Ω	-	-
V 9	6AU6	.1Ω	OV.	OV.	.1Ω	23KΩ	150KΩ	120Ω	-	-
V 10	6SH7	OV.	OV.	OV.	60KΩ	OV.	240KΩ	.1Ω	17KΩ	-
V 11	6AQ7GT	.2Ω	120KΩ	240KΩ	10 Meg.	230KΩ	OV.	.1Ω	OV.	-
V 12	6K6GT	INF.	OV.	3KΩ*	550Ω	500KΩ	750Ω	.1Ω	750Ω	-
V 13	6SN7GT	3.5 Meg.	30KΩ* 110KΩ*	7KΩ	2.5 Meg.	14KΩ	1000Ω	OV.	.1Ω	-
V 14	6SN7GT	160KΩ	INF.	OV.	850KΩ	50KΩ*	280KΩ	OV.	.1Ω	-
V 15	6E6GT	INF.	OV.	80Ω	1 Meg.	1 Meg.	INF.	.1Ω	INF.	INF.
V 16	5Y4G	INF.	INF.	INF.	180Ω*	INF.	180Ω*	INF.	INF.	-
V 17	6SN7GT	80KΩ	220KΩ*	OV.	80KΩ	2.2 Meg.*	OV.	OV.	.1Ω	-
V 18	6V6GT	INF.	.1Ω	900Ω	30KΩ* 110KΩ*	2.2 Meg.*	50KΩ	OV.	470Ω 1500Ω	-
V 19	1B3GT	INF.	INF.	INF.	INF.	INF.	INF.	INF.	INF.	INF.
V 20	5U4G	INF.	25KΩ	INF.	15Ω	INF.	16Ω	INF.	25KΩ	-
V 21	5Y3GT	INF.	35KΩ	INF.	13Ω	INF.	14Ω	INF.	35KΩ	-
V 22	10FP4	35KΩ	48KΩ	Pin #10 INF.	Pin #11 28KΩ	Pin #12 35KΩ				

*MEASURED FROM PIN 2 OF V20. †MEASURED FROM PIN 2 OF V21.

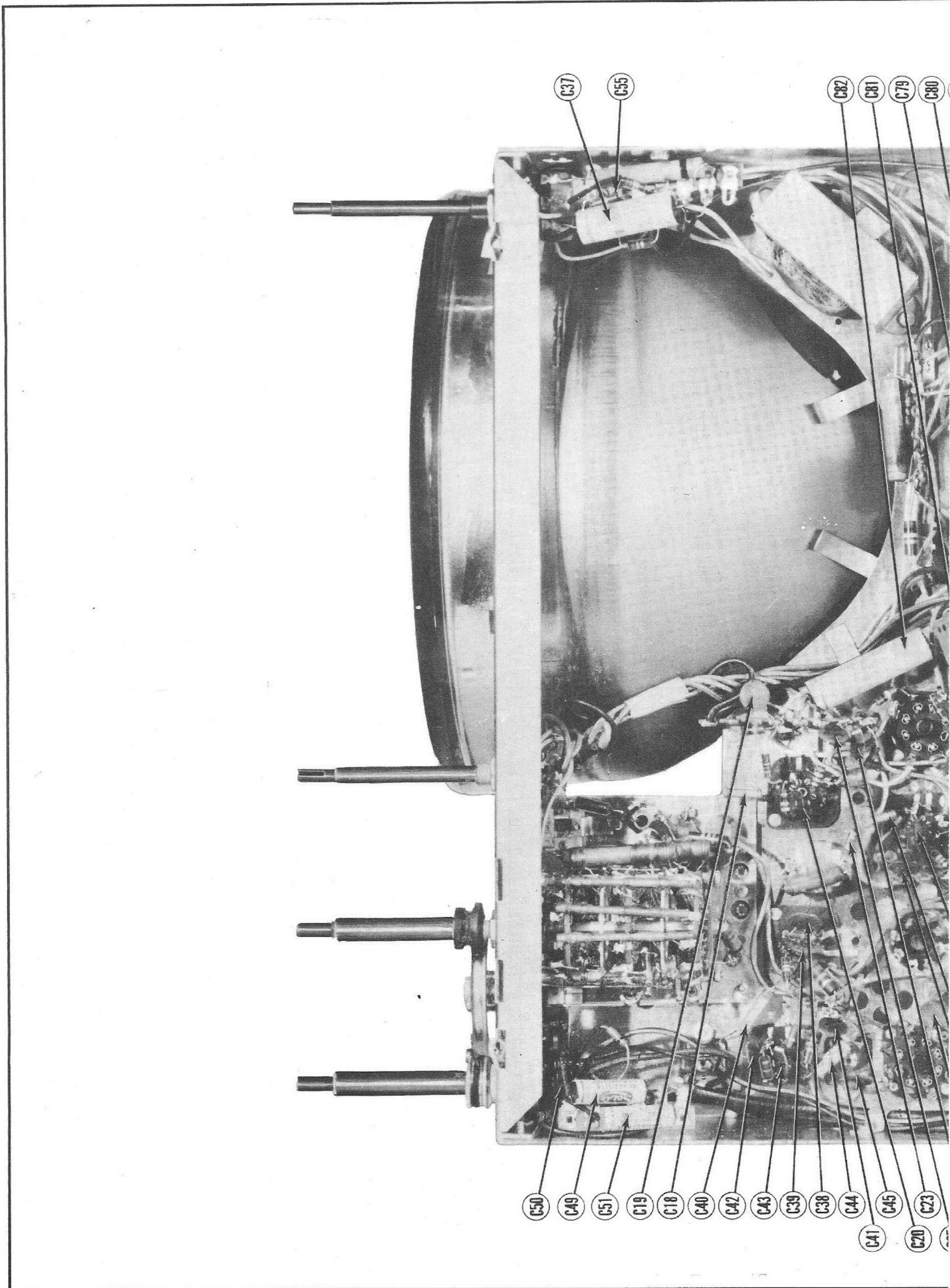
- 1 - DC Voltage measurements are at 20,000 ohms per volt; AC Voltages measured at 1000 ohms.
- 2 - Socket connections are shown as bottom views.
- 3 - Measured values are from socket pin to common negative unless otherwise stated.
- 4 - Line voltage maintained at 117 volts for voltage readings.
- 5 - 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.

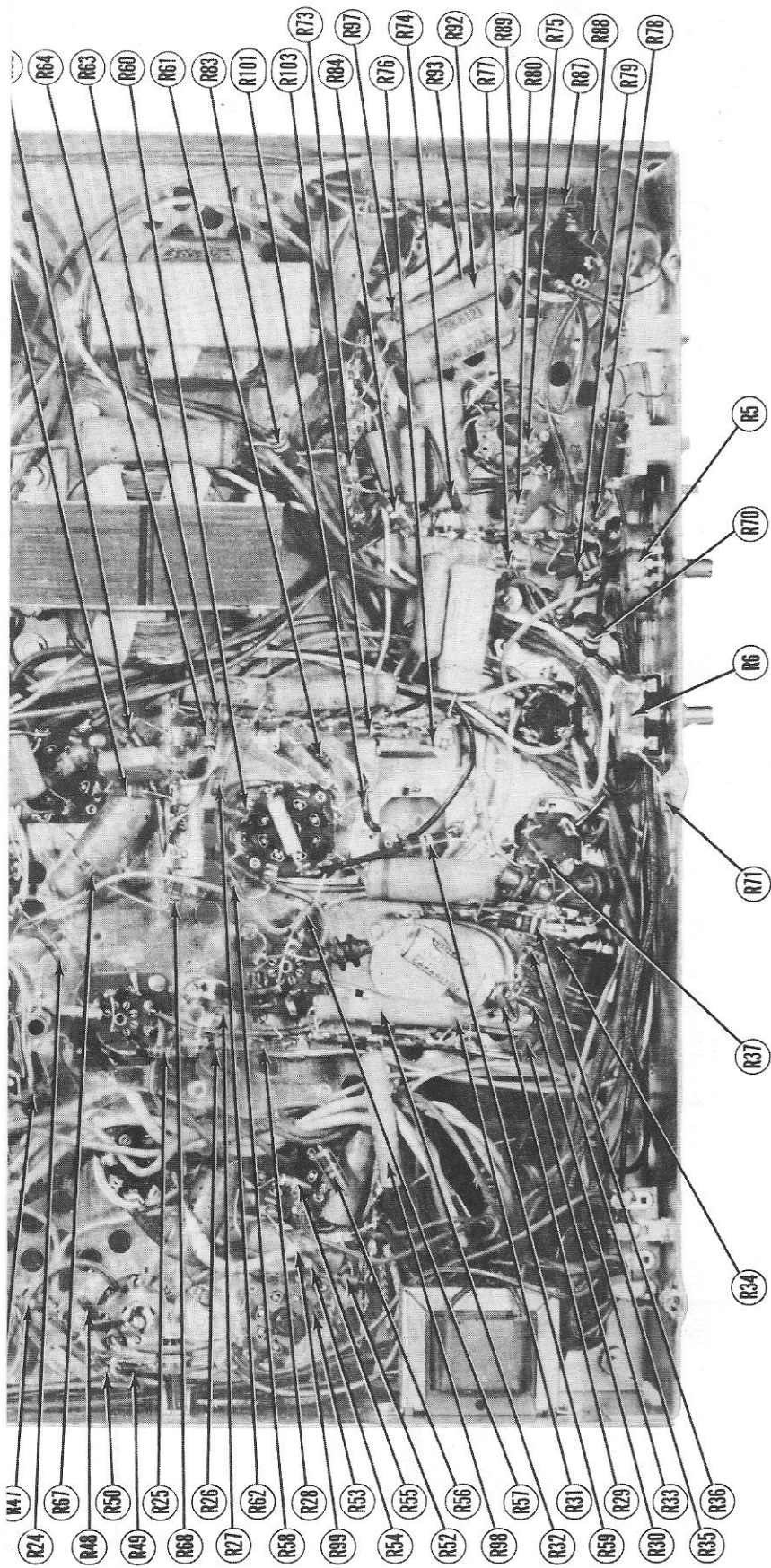


TUBE PLACEMENT CHART

GENERAL ELECTRIC
MODEL 810

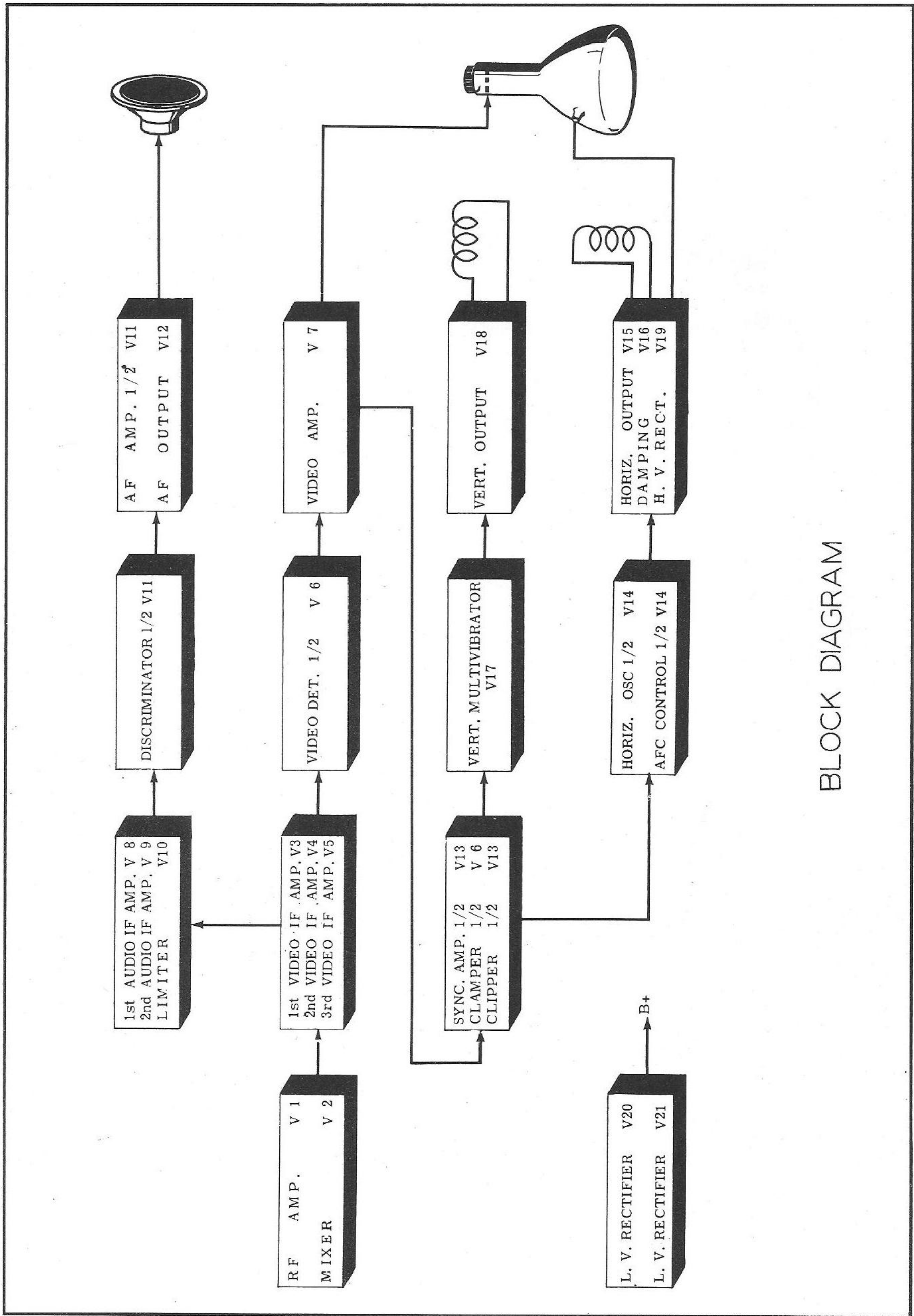
1-10357 (4/11/53)
076-DYON





CHASSIS-BOTTOM VIEW-RESISTOR IDENTIFICATION

GENERAL ELECTRIC
MODEL 810



BLOCK DIAGRAM

DISASSEMBLY INSTRUCTIONS

1. Remove eight push-on type knobs from from panel.
2. Remove six screws from back and remove.
3. Disconnect speaker leads.
4. Remove four chassis screws from bottom of cabinet and slide chassis out of cabinet.
5. Remove four nuts holding speaker and remove.

CENTERING ADJUSTMENTS

Centering adjustments are made by means of two circular magnets mounted on the focus and deflection assembly. The assembly may be turned the necessary direction, and the amount of correction may be changed by rotating the large magnet with respect to the smaller one and by sliding the two magnets together or apart. Maximum effect is with the two magnets close together and aligned. Minimum effect is achieved by turning the large magnet to oppose the small one.

HORIZONTAL LINEARITY ADJUSTMENT

The horizontal drive control should first be set to minimum capacity. With the horizontal size control at approximately its correct position adjust the horizontal linearity control for best linearity. If this does not give good linearity turn the horizontal drive control slightly clockwise and repeat the adjustments. If there is a foldover of the pattern, turn the horizontal drive control clockwise until the fold disappears.

**GENERAL ELECTRIC
MODEL 810**