

VOLUME CONTROL OFF-ON SW. FOCUS
 CHANNEL SELECTOR FINE TUNING
 HORIZ. VERT. HOLD
 BRIGHTNESS CONTRAST

GENERAL ELECTRIC
MODEL 814

TRADE NAME	General Electric Model 814	
MANUFACTURER	General Electric Co., Electronics Dept., Electronic Park, Syracuse, New York	
TYPE SET	Television Receiver	
TUBES	Twenty-Two	
POWER SUPPLY	117 Volts, 60 Cycles AC	RATING: 2.0 Amps @ 117 Volts
TUNING RANGE	Channels 2 through 13	

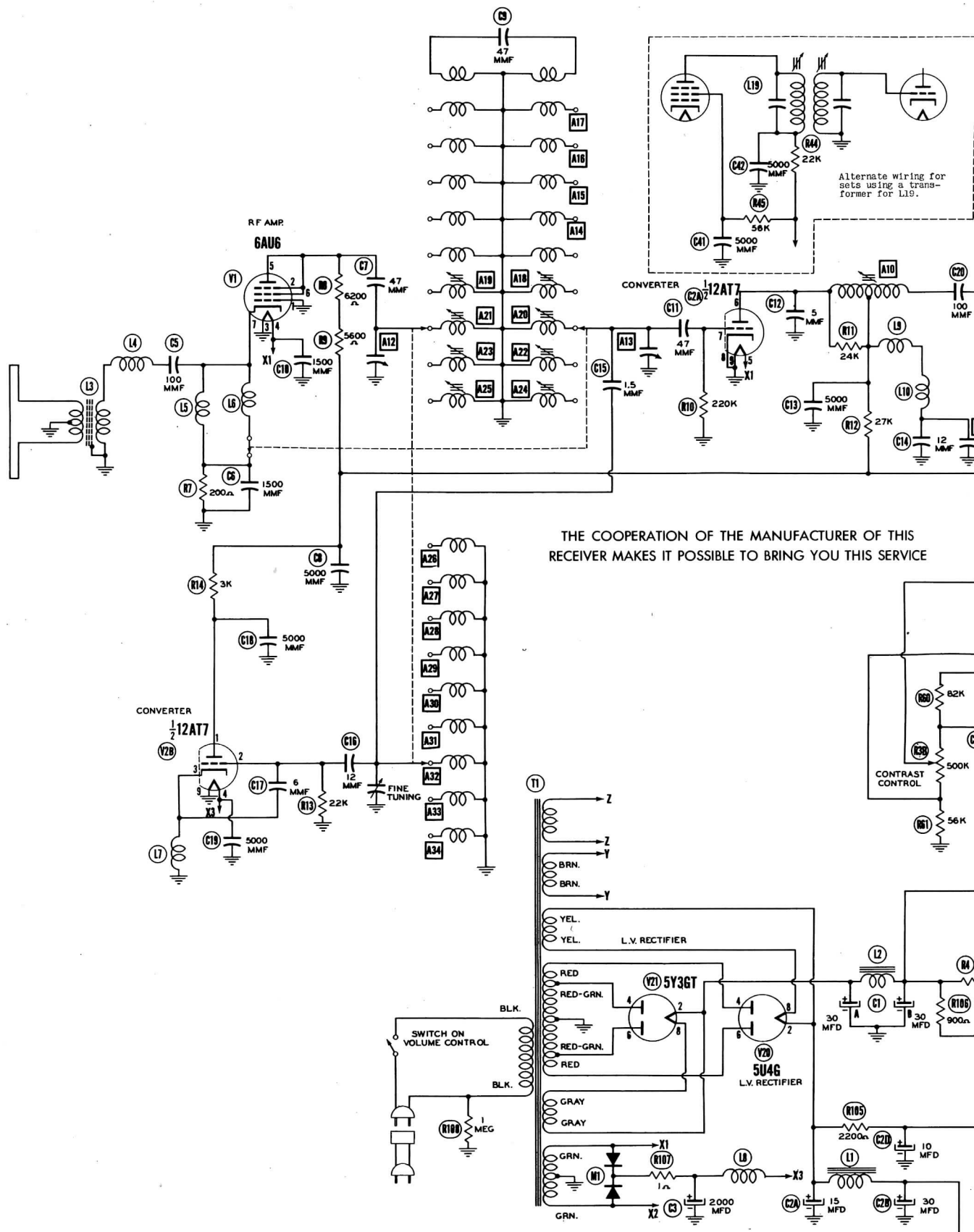
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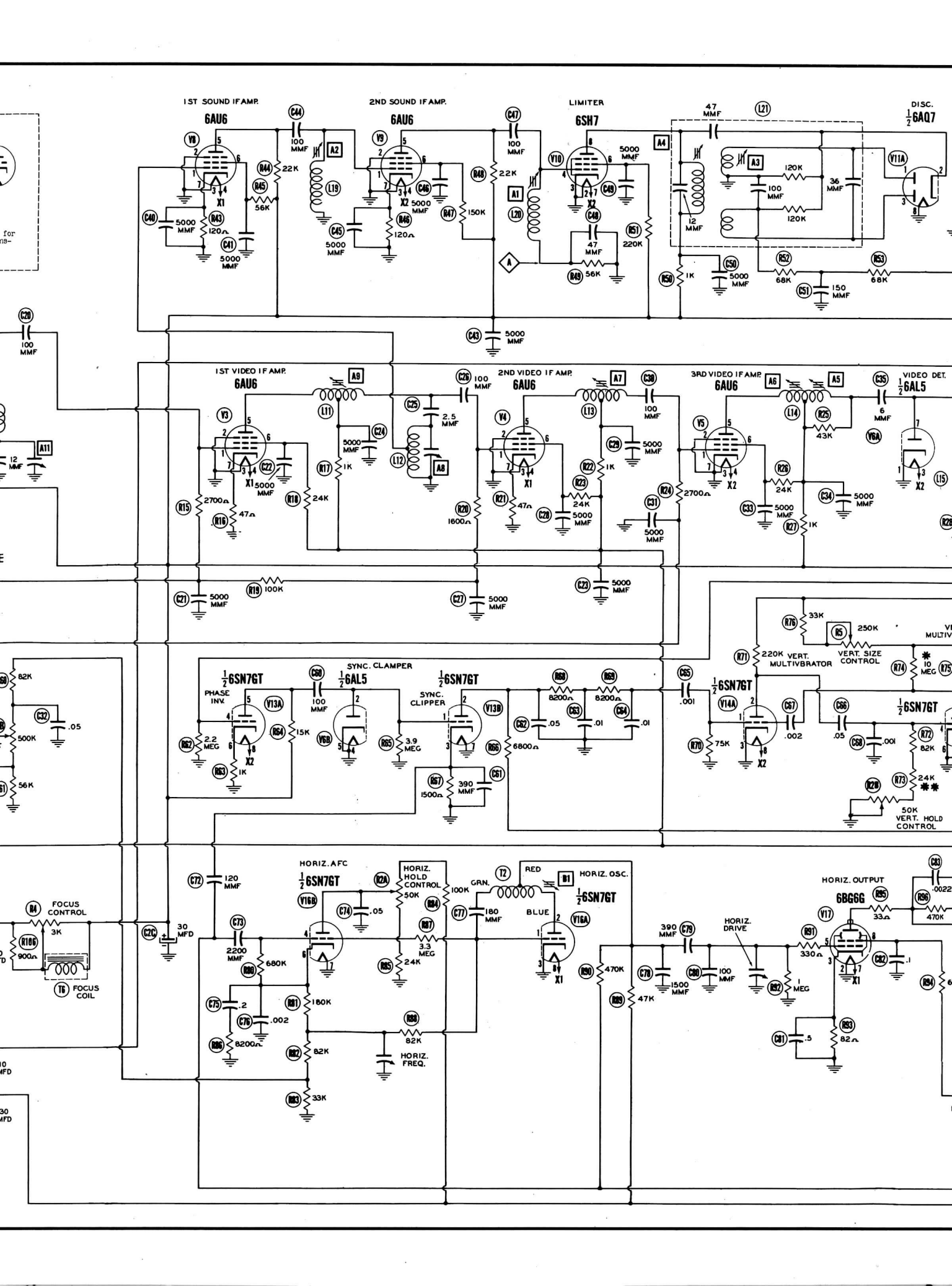
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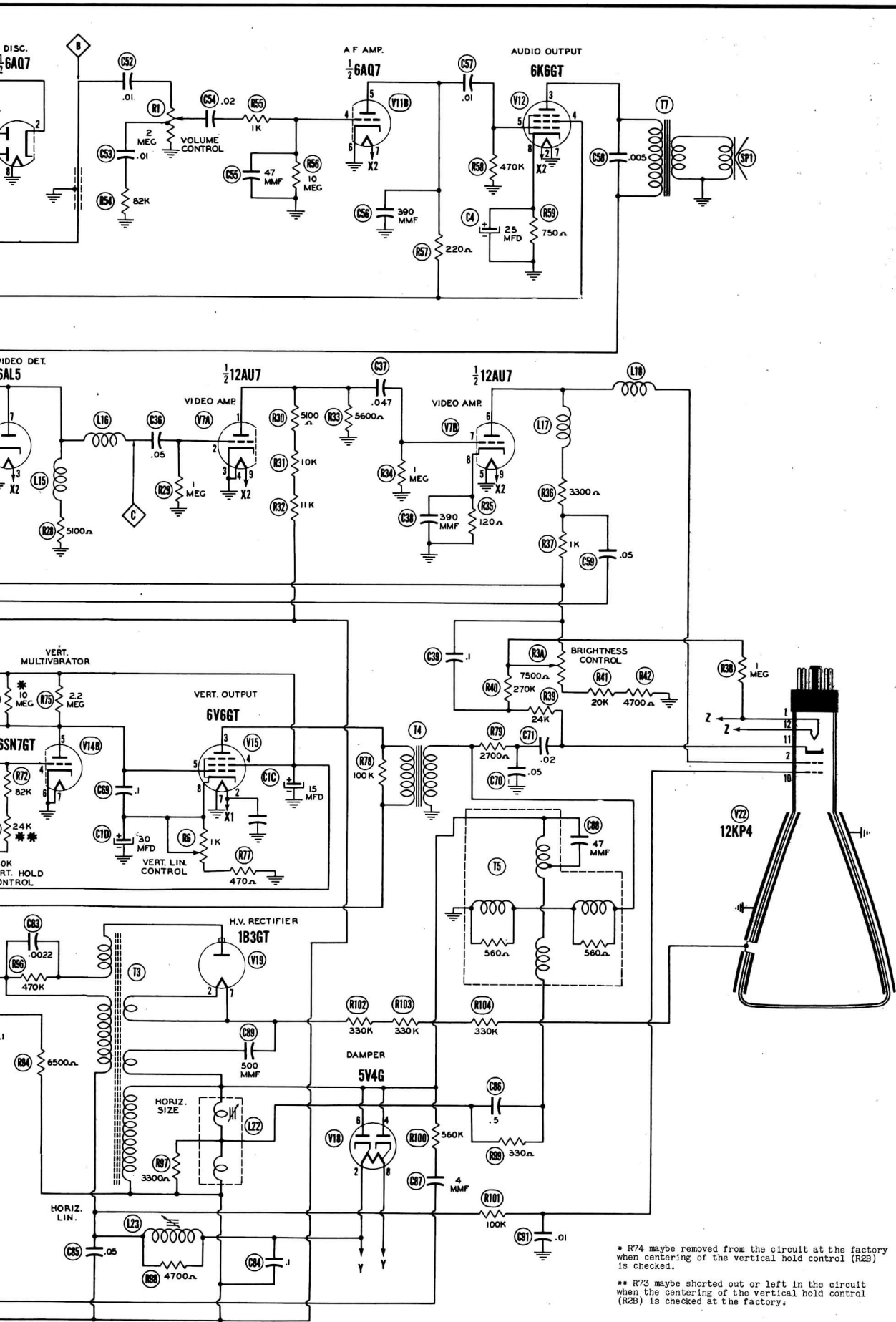
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THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFAC STANDARD NOTATION SCHEMATIC
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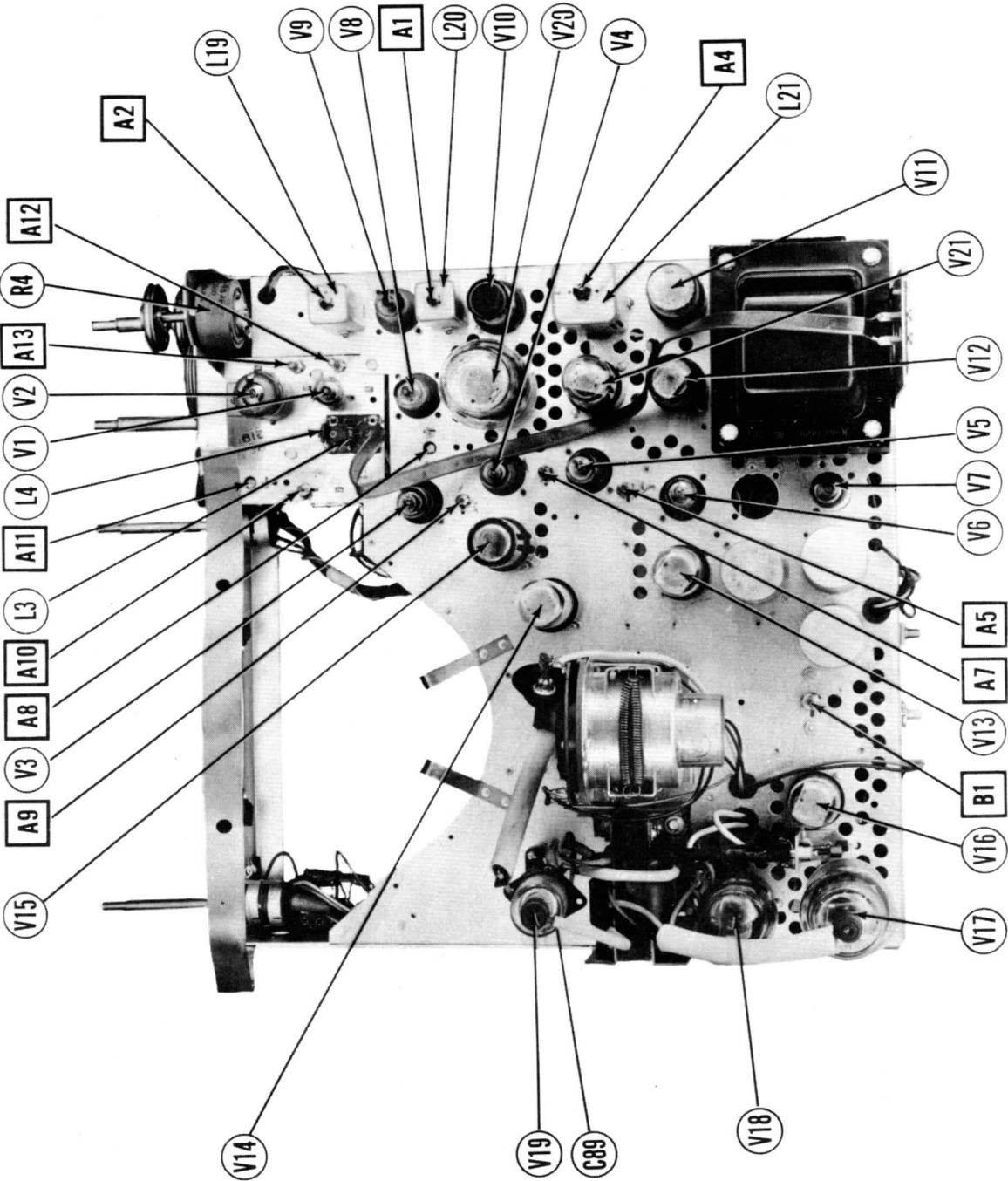


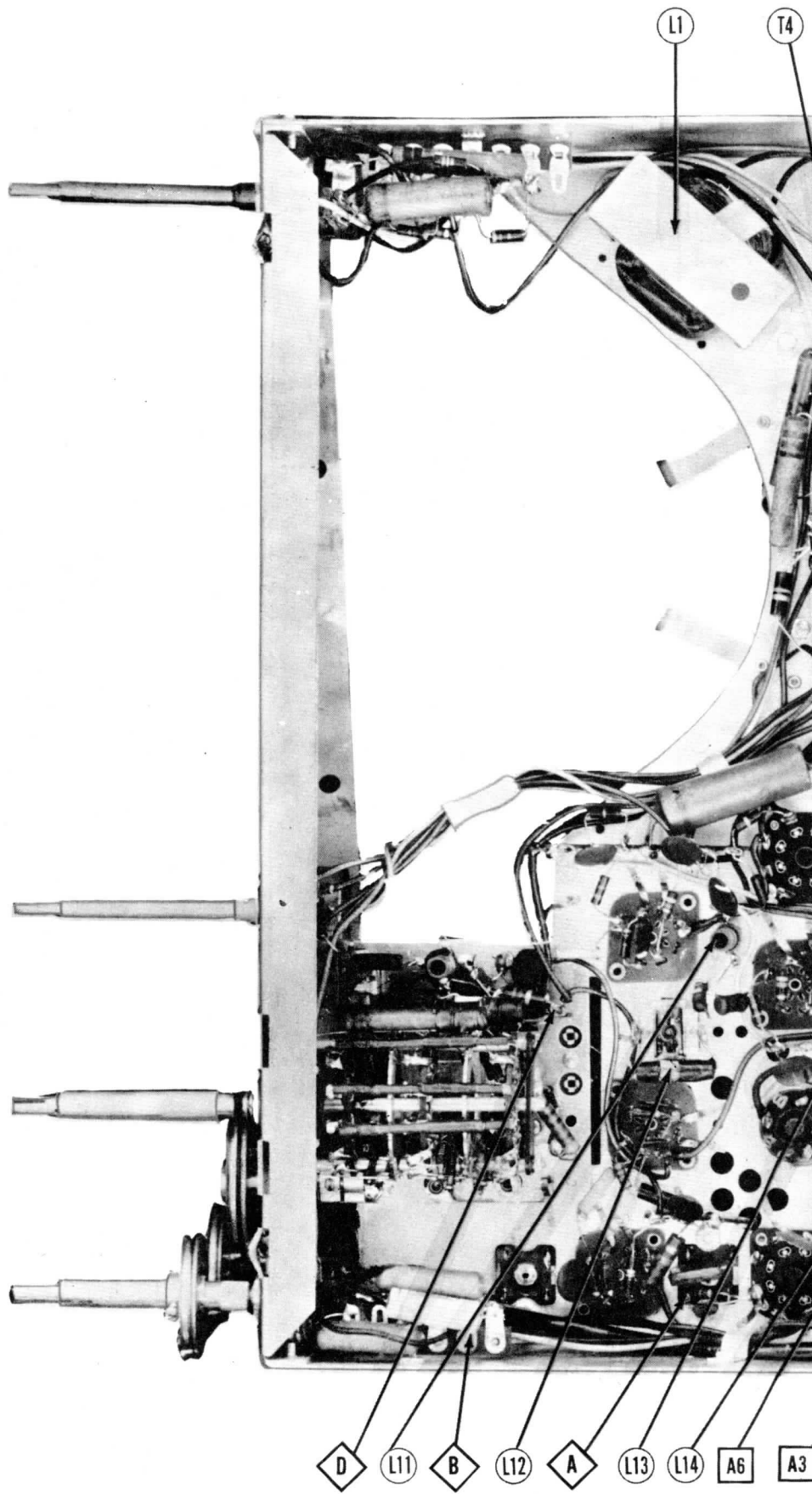
* R74 maybe removed from the circuit at the factory when centering of the vertical hold control (R28) is checked.

** R73 maybe shorted out or left in the circuit when the centering of the vertical hold control (R28) is checked at the factory.

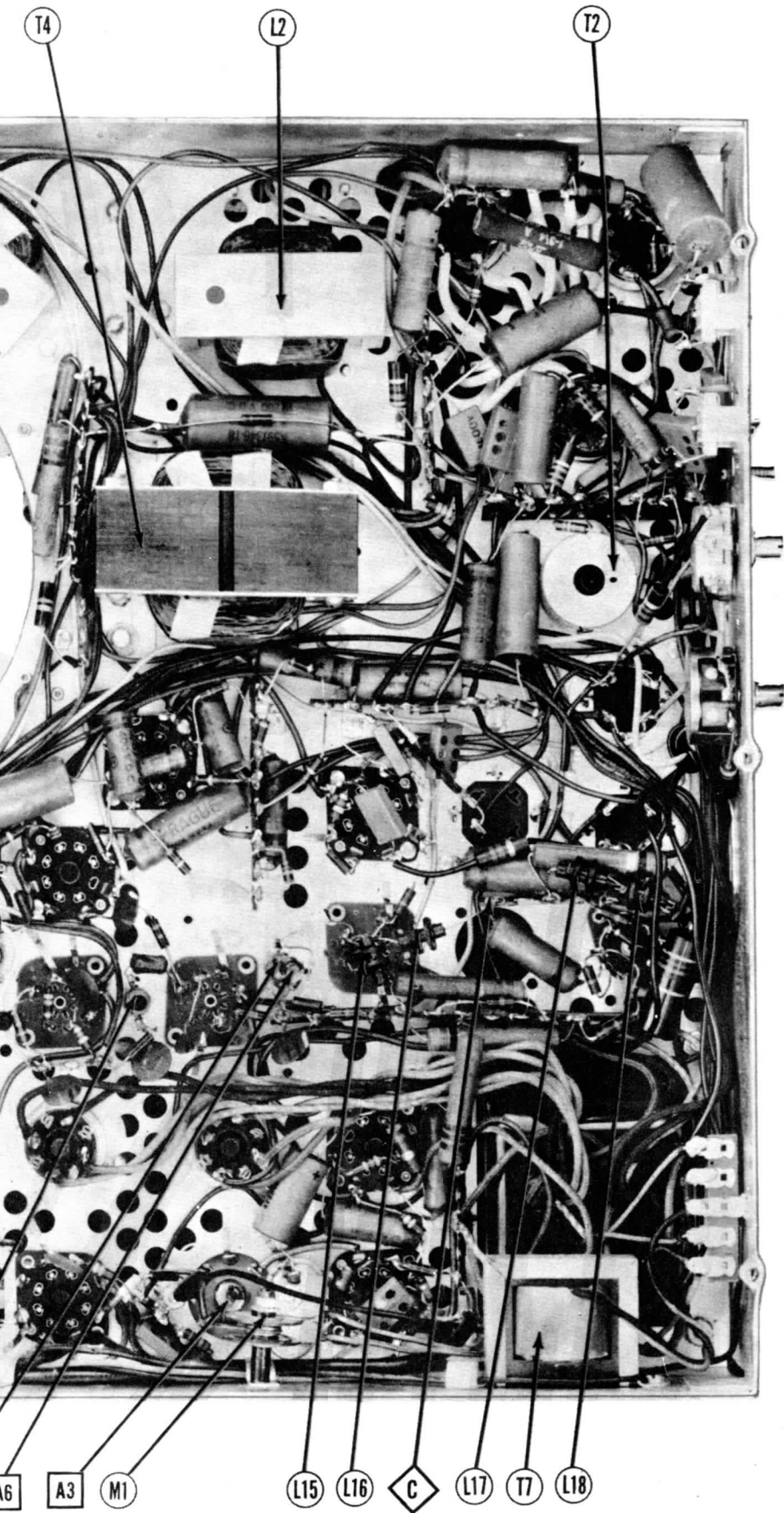
GENERAL ELECTRIC
MODEL 814

MAIN CHASSIS-TOP VIEW

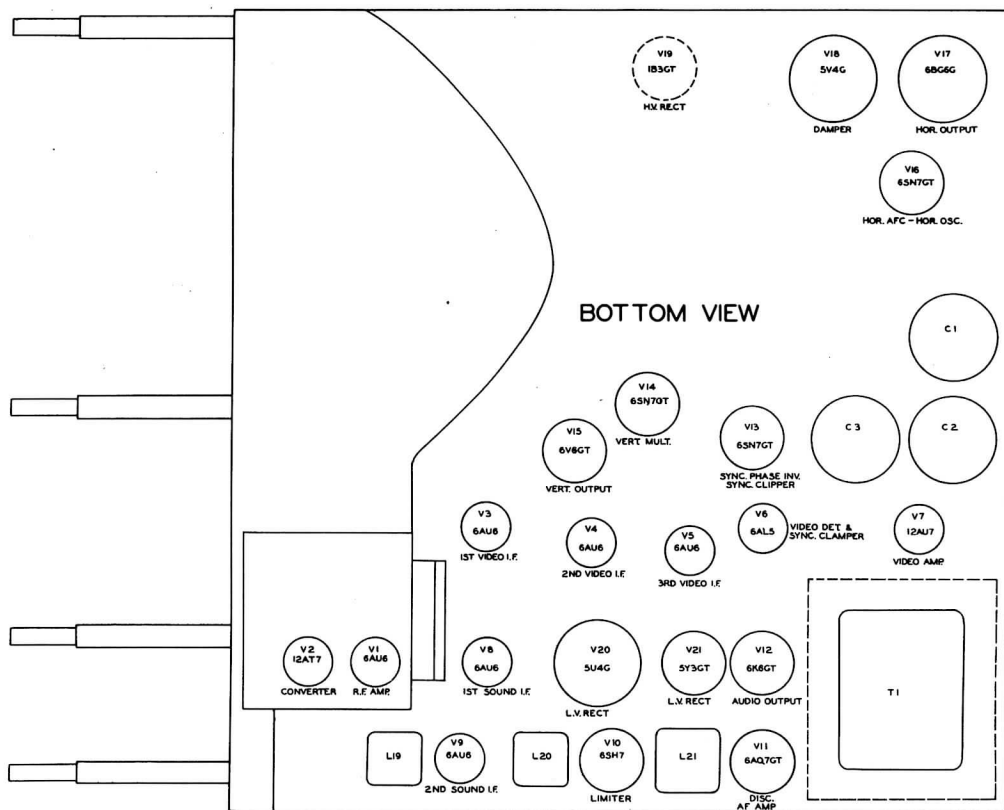
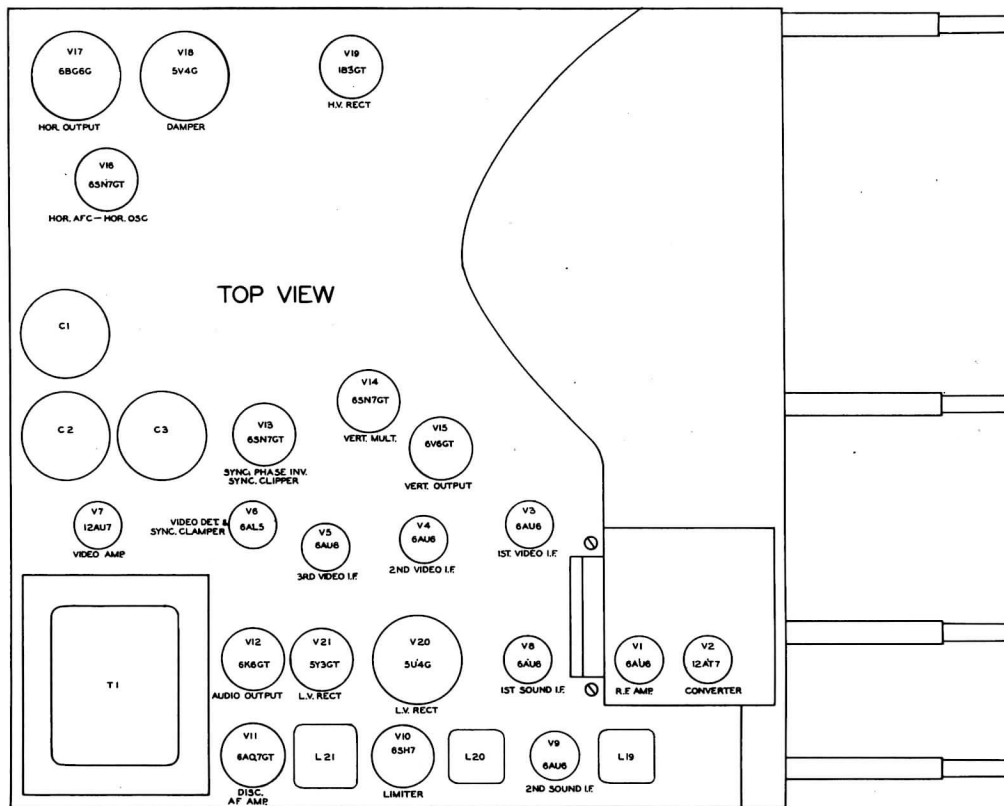




CHASSIS BOTTOM VIEW-TRANS., INDUCT



DUCTOR AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

SOUND IF ALIGNMENT

High voltage may be disabled during alignment by removing V16.
 Keep signal generator output low enough to give a 3/4 volt maximum peak reading.
 Contrast control should be set to give -4 volt bias reading.
 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 corrected 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	(See note below).
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: In some productions, L19 was changed to a transformer. Adjust both primary and secondary 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 C18.	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)	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	"

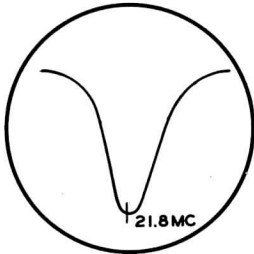


FIG. 1

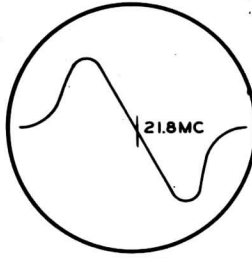


FIG. 2

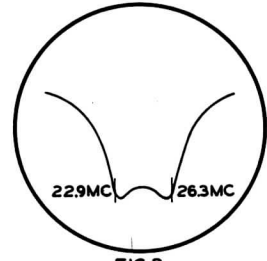


FIG. 3

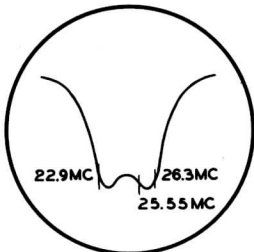


FIG. 4

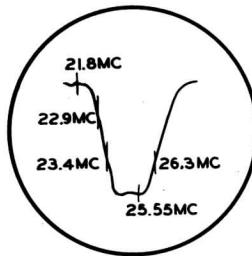


FIG. 5

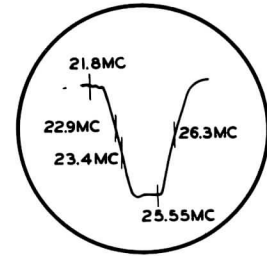


FIG. 6

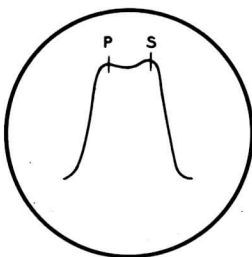


FIG. 7

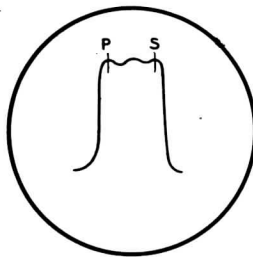


FIG. 8

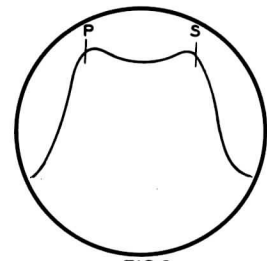


FIG. 9

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 R60. 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.

GENERAL ELECTRIC
MODEL 814

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AU6	OV	150VDC	OV	6.3VAC	150VDC	150VDC	1.5VDC		
V 2	12AT7	225VDC	3-3 VDC	OV	6.3VAC	145VDC	145VDC	-1.5VDC	OV	OV
V 3	6AU6	-6VDC	OV	OV	6.3VAC	260VDC	190VDC	-6VDC		
V 4	6AU6	-6VDC	OV	OV	6.3VAC	260VDC	190VDC	.6VDC		
V 5	6AU6	-8VDC	OV	OV	6.3VAC	250VDC	150VDC	OV		
V 6	6AL5	OV	-6VDC	OV	6.3VAC	OV	OV	-8.9VDC		
V 7	12AU7	50VDC	-4VDC	OV	OV	OV	170VDC	OV	1.6VDC	6.3VAC
V 8	6AU6	OV	OV	OV	6.3VAC	125VDC	110VDC	.8VDC		
V 9	6AU6	OV	OV	OV	6.3VAC	175VDC	65VDC	.4VDC		
V 10	6SH7	OV	OV	OV	-3VDC	OV	45VDC	6.3VAC	230VDC	
V 11	6AQ7GT	OV	.3VDC	OV	-4VDC	80VDC	OV	6.3VAC	OV	
V 12	6K6GT	OV	OV	320VDC	235VDC	OV	18VDC	6.3VAC	18VDC	
V 13	6SN7GT	-7VDC	105VDC	245VDC	OV	165VDC	5VDC	OV	6.3VAC	
V 14	6SN7GT	-2VDC	25VDC	OV	-8VDC	4.5VDC	OV	OV	6.3VAC	
V 15	6V6GT	OV	6.3VAC	265VDC	105VDC	250VDC	4.6VDC	OV	8VDC	
V 16	6SN7GT	-65VDC	145VDC	OV	-4.2VDC	45VDC	-27VDC	OV	6.3VAC	
V 17	6B96G	OV	OV	8.4VDC	-5.2VDC	OV	OV	6.3VAC	280VDC	*
V 18	5V4G	OV	450VDC	OV	355VDC	OV	340VAC	OV	375VDC	
V 19	1B3GT						300VAC	OV	285VDC	
V 20	5U4G	OV	375VDC	OV	OV	OV	OV	OV	OV	
V 21	5Y3GT	OV	285VDC	OV	300VAC	OV	OV	OV	OV	
V 22	12KP4	195VDC	145VDC							

* Do Not Measure.

• 6.3VAC Measured Across Filament.

Note 1: Contrast Control Set At Maximum For These Readings.

RESISTANCE READINGS

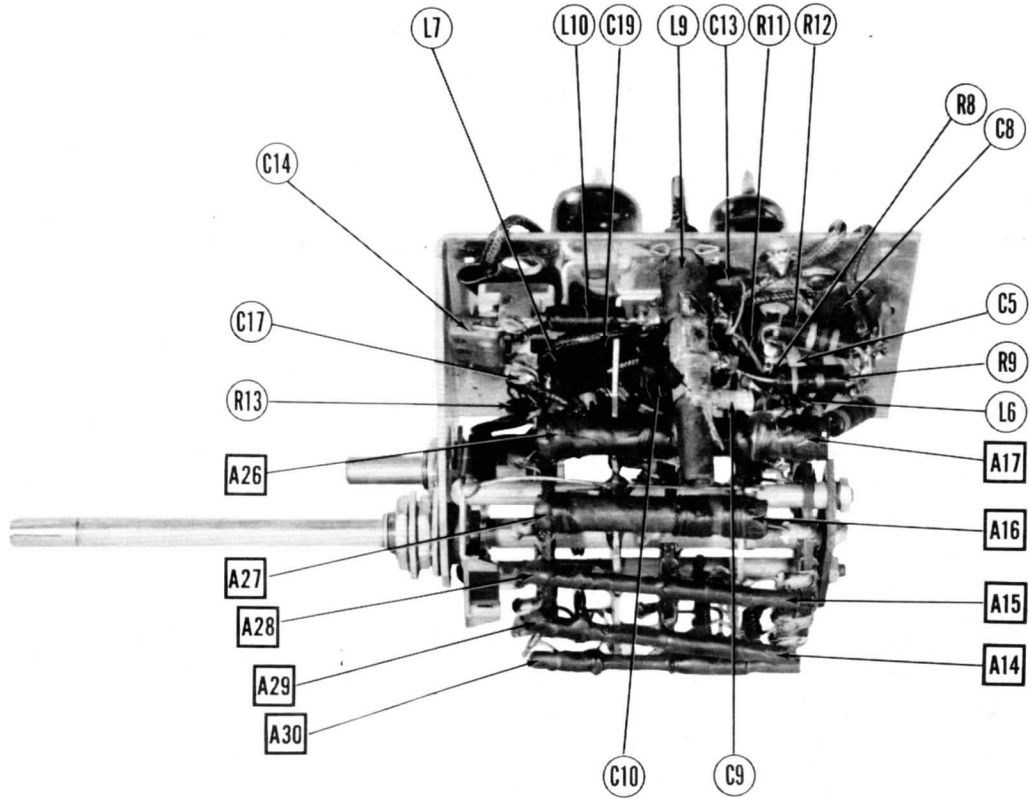
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AU6	OV	#12.5KΩ	OV	.1Ω	#12.5KΩ	#12.5KΩ	200Ω		
V 2	12AT7	#4KΩ	22KΩ	OV	.1Ω	.1Ω	#27KΩ	220KΩ	OV	OV
V 3	6AU6	100KΩ	OV	OV	.1Ω	#1000Ω	#24KΩ	47Ω		
V 4	6AU6	200KΩ	OV	OV	.1Ω	#1000Ω	#24KΩ	47Ω		
V 5	6AU6	56KΩ	OV	OV	.1Ω	#2KΩ	#26KΩ	OV		
V 6	6AL5	OV	4 Meg.	.1Ω	OV	OV	OV	5KΩ		
V 7	12AU7	123KΩ	1 Meg.	OV	OV	OV	#5KΩ	1 Meg.	120Ω	.1Ω
V 8	6AU6	OV	OV	OV	.1Ω	#23KΩ	#56KΩ	120Ω		
V 9	6AU6	OV	OV	OV	.1Ω	#23KΩ	#150KΩ	120Ω		
V 10	6SH7	OV	OV	OV	OV	OV	#220KΩ	.1Ω	#2KΩ	
V 11	6AQ7GT	OV	120KΩ	240KΩ	10 Meg.	#220KΩ	OV	.1Ω	OV	
V 12	6K6GT	Inf.	OV	13KΩ	#1000Ω	470KΩ	750Ω	.1Ω	750Ω	
V 13	6SN7GT	4 Meg.	1300KΩ	7KΩ	2.2 Meg	#15KΩ	1000Ω	OV	.1Ω	
V 14	6SN7GT	75KΩ	1220KΩ	OV	125KΩ	12.2 Meg	OV	OV	.1Ω	
V 15	6V6GT	Inf.	.1Ω	#1000Ω	1300KΩ	12.2 Meg	55KΩ	OV	1.5KΩ	500Ω
V 16	6SN7GT	200KΩ	147KΩ	OV	900KΩ	140KΩ	300KΩ	OV	.1Ω	
V 17	6B96G	Inf.	OV	82Ω	1 Meg.	1 Meg.	Inf.	.1Ω	17KΩ	TOP CAP #100Ω
V 18	5V4G	Inf.	Inf.	Inf.	25KΩ	Inf.	25KΩ	Inf.	Inf.	
V 19	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP #470KΩ
V 20	5U4G	Inf.	25KΩ	Inf.	26Ω	Inf.	25Ω	Inf.	25KΩ	
V 21	5Y3GT	Inf.	30KΩ	Inf.	22Ω	Inf.	23Ω	Inf.	30KΩ	
V 22	12KP4	1 Meg.	#5KΩ	PIN 10 #100KΩ	PIN 11 300KΩ	PIN 12 1 Meg.				

† Measured From Pin 8 Of V20.

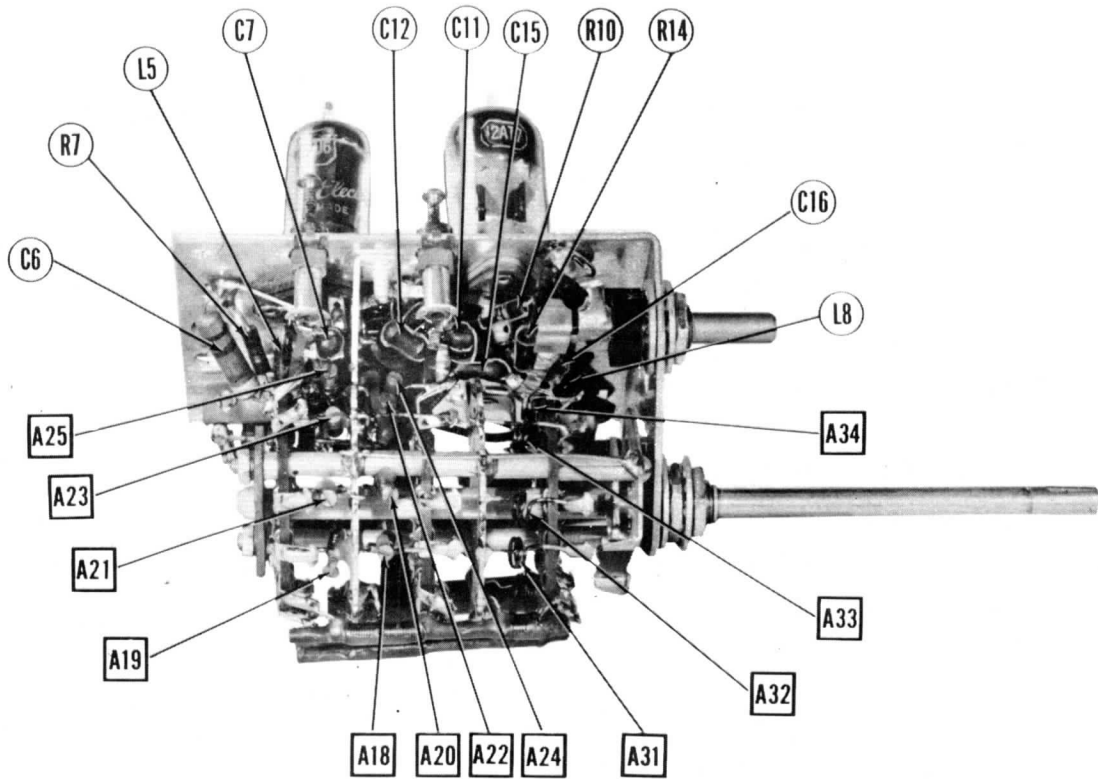
Measured From Pin 8 Of V21.

♦ Measured From Pin 8 Of V18.

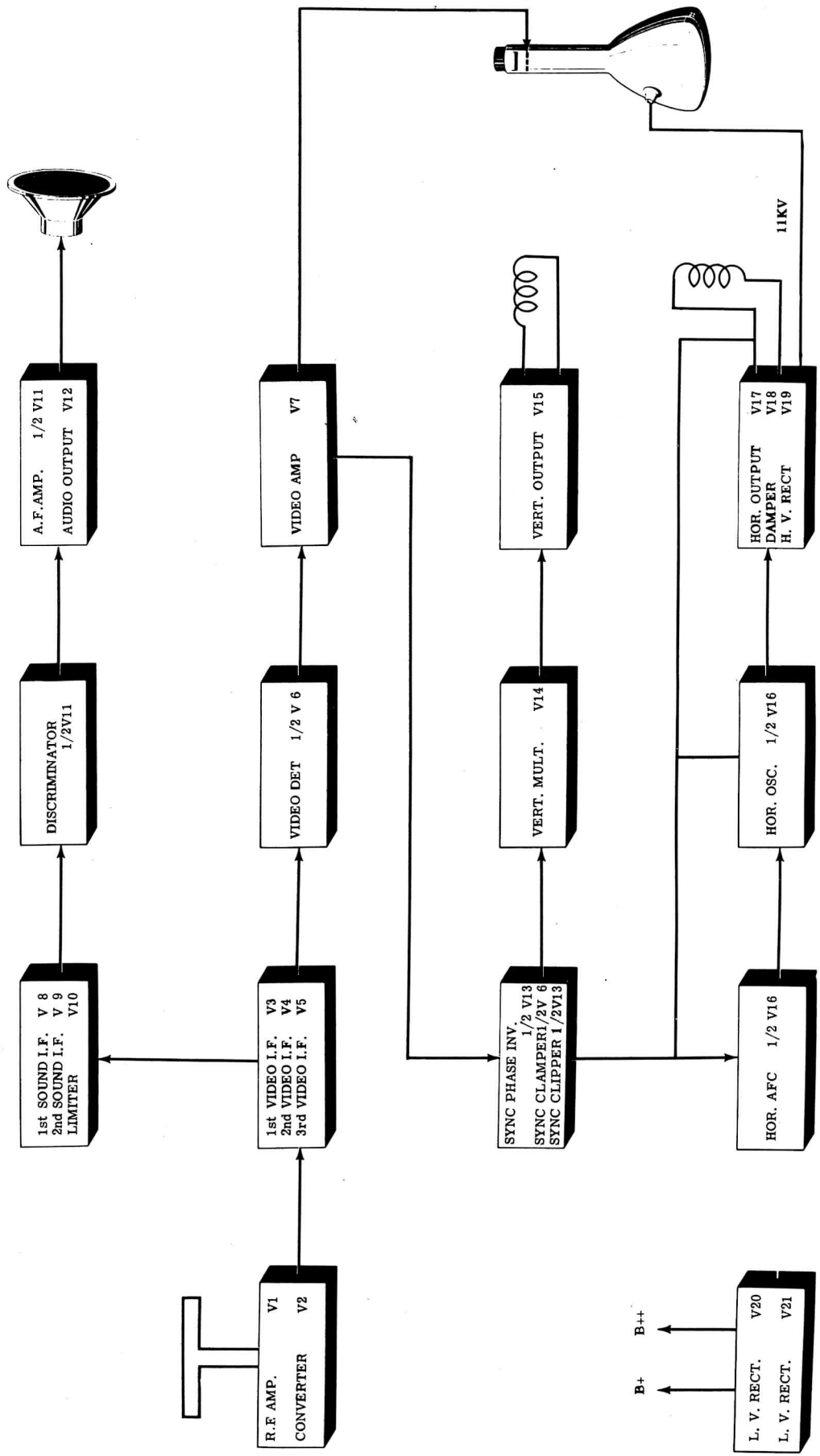
- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.
- Line voltage maintained at 117 volts for voltage readings.
- Front panels controls set at minimum.
- Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.



RF TUNER-RIGHT SIDE



RF TUNER-LEFT SIDE



GE 814

BLOCK DIAGRAM

GENERAL ELECTRIC
MODEL 814

PARTS LIST AND CAPACITORS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	NOTES
		GEN. ELECTRIC PART No.	STANDARD REPLACEMENT	CORNELL DUBILIER PART No.		
V1	RF Amp.	6AU6	6AU6	7BK		
V2	Converter	12AT7	12AT7	9A		
V3	1st Video IF Amp	6AU6	6AU6	7BK		
V4	2nd Video IF Amp	6AU6	6AU6	7BK		
V5	3rd Video IF Amp	6AU6	6AU6	7BK		
V6	Video Det.-Sync Clamper	6AL5	6AL5	6BT		
V7	Video Amp.	12AU7	12AU7	9A		
V8	1st Sound IF Amp.	6AU6	6AU6	7BK		
V9	2nd Sound IF Amp.	6AU6	6AU6	7BK		
V10	Limiter	6SH7	6SH7	8BK		
V11	Disc.-AF Amp.	6AQ7GT	6AQ7GT	8CK		
V12	Audio Output Sync Phase Inverter-Sync. Clipper	6K6GT	6K6GT	7S		
V14	Vertical Multi-vibrator	6SN7GT	6SN7GT	8BD		
V15	Vertical Output	6V6GT	6V6GT	7AC		
V16	Hor. AFC Hor.-Osc.	6SN7GT	6SN7GT	8BD		
V17	Hor. Output	6BG6G	6BG6G	5BT		
V18	Damper	5V4G	5V4G	5L		
V19	FV Rectifier	1B3GT	1B3GT	3C		
V20	LV Rectifier	5U4G	5U4G	5T		
V21	LV Rectifier	5Y3GT	5Y3GT	5T		
V22	Picture Tube	12KP4	12KP4	12D		

CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES	
	CAP.	VOLT	G. E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.		SPRAGUE PART No.
C1A	30	450	RCE-076	AF663J6B	UP9DJ 674			TVL-58	Filter
B	30	450						TVA-15	Filter
C	15	50							Decoupling
D	30	450							Vert. Output Cath. Byp.
C2A	15	450	RCE-077	AF3662J	UP9DJ 984			TVL-58	Filter
B	30	450							Filter
C	30	450							Filter
D	10	450							Filter
C3	2000	6	RCE-083	AF400P	UP7AJ 231			TVL-43	Filter
C4	25	25	RCE-086	PRS25/25	BBR25-25T			TVA-6	Output Cath. Bypass
C5	100		RCW-1047						RF Coupling
C6	1500		RCW-026			GP1K-100			RF Cath. Bypass
C7	47		RCW-1052			GP2L-0015			RF Coupling
C8	5000		RCW-3014			GP1K-50			RF Bypass
C9	47		RCW-2010						RF Coupling
C10	1500		RCW-026			GP2L-0015			RF Fil. Bypass
C11	47		RCW-1052			GP1K-50			RF Coupling
C12	5		RCW-2035			NPOK-5			Fixed Trimmer
C13	5000		RCW-3014						Conv. Plate Dec.
C14	12	500	UCU-1506						Fixed Trimmer
C15	1.5		RCW-1045			NPOK-1.5			Osc. Coupling
C16	12		RCW-2006						Osc. Grid Cap.
C17	6		RCW-2030						Osc. Feedback
C18	5000		RCW-3014						Osc. Plate Bypass *
C19	5000		RCW-3014						Osc. Fil. Bypass
C20	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	IF Coupling
C21	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	Bias Filter
C22	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	1st V. IF Screen Bypass
C23	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	RF Bypass
C24	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	1st V. IF Plate Dec.
C25	2.5		RCW-3017						S. IF Coupling
C26	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	IF Coupling
C27	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	Bias Filter
C28	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	2nd V. IF Screen Bypass
C29	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	2nd V. IF Plate Decoupl.
C30	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	IF Coupling
C31	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	Bias Filter
C32	.05	200	UCC-635	P288-05	GT2S5		ST-4-05	TM-15	Bias Filter
C33	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	3rd V. IF Screen Bypass
C34	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	3rd V. IF Decoupling
C35	6		RCW-1002						IF Coupling
C36	.05	200	UCC-635	P288-05	GT2S5		ST-4-05	TM-15	Video Coupling
C37	.047	600	RCN-014	P688-047	GT6S5		ST-6-05	TM-15	
C38	390	500	UCU-1542	1468-0004	5W5T4		MO.5-34	LFM-34	V. Amp. Cath. Bypass
C39	1	400	UCC-640	P488-1	GT4P1		ST-4-1	TM-1	Pic. Tube Cath. Dec. †
C40	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	1st S. IF Cath. Bypass
C41	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	1st S. IF Screen Bypass
C42	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	1st S. IF Plate Dec.
C43	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	RF Bypass
C44	100	500	UCU-1528	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	S. IF Coupling
C45	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	2nd S. IF Cath. Bypass
C46	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	2nd S. IF Screen Bypass
C47	100	500	UCU-1528	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	S. IF Coupling
C48	47		RCW-1043	1468-0005	5W5Q5	GP1K-50	MO.5-45	LFM-45	Limiter Grid Filter
C49	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	LFM-25	Limiter Screen Bypass
C50	5000		UCU-1532	1468-00015	5W5T15	GP2M-005	MW.5-25	LFM-25	Limiter Plate Decoupling
C51	150	500	UCC-630	P488-01	GT2S1		MO.5-315	LFM-315	RF Bypass
C52	.01	200	UCC-630	P488-01	GT2S1		SP-2-35-01	TM-11	Audio Coupling
C53	.01	200	UCC-630	P488-01	GT2S1		ST-4-01	TM-11	Tone Compensation
C54	.02	200	UCC-631	P488-02	GT2S2		ST-4-02	TM-12	Audio Coupling
C55	.47		RCW-1043	1468-0005	5W5Q5	GP1K-50	MO.5-45	LFM-45	RF Bypass
C56	390	500	UCU-1542	1468-0004	5W5T4	GP2K-300	MO.5-34	LFM-34	AF Plate Bypass
C57	.01	600	RCC-040	P688-01	GT6S1	GP2-335-01	ST-6-01	TM-11	Audio Coupling
C58	.005	600	RCC-039	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	Output Plate Bypass

ITEM No.	RATING		REPLACEMENT DATA			
	CAP.	VOLT	G. E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.
C59	.05	600	UCC-635	P688-05	GT6S5	
C60	100	500	UCU-1528	1468-0001	5W5T1	GP1K-
C61	390	500	UCU-1542	1468-0004	5W5T4	
C62	.05	400	UCC-635	P488-05	GT4S5	
C63	.01	400	UCC-630	P488-01	GT4S1	GP2-
C64	.01	400	UCC-630	P488-01	GT4S1	GP2-
C65	.001	400	UCC-018	P688-001	GT6D1	GP2L
C66	.05	600	UCC-635	P688-05	GT6S5	
C67	.002	600	RCC-095	P688-02	GT6D2	GP2M
C68	.001	400	UCC-018	P688-001	GT6D1	GP2L
C69	.1	600	UCC-640	P688-1	GT2P1	
C70	.05			P688-05	GT6S5	
C71	.02			P688-02	GT6S2	
C72	120	500	UCU-1530			
C73	2200	500	UCU-2560			
C74	.05	600	UCC-635	P688-05	GT6S5	
C75	.2	200	UCC-014	P488-2	GT4P2	
C76	.002	600	UCC-621	P688-002	GT6D2	GP2M
C77	180	500	UCU-2534			
C78	1500	500	RCU-285	1467-0015	1W5D15	GP2L
C79	390	500	UCU-1542	1468-0004	5W5T4	
C80	100			1468-0001	5W5T1	GP1K-
C81	.5	200	RCC-016	P288-5	GT2P5	
C82	.1	600	UCC-640	P688-1	GT6P1	
C83	.0022	1000	RCN-019	P1088-0022		
C84	.1	400	UCC-640	P488-1		
C85	.05	400	UCC-635	P488-05	GT4P1	
C86	.5	200	RCC-016	P288-5	GT2P5	
C87	4	1600	RCN-020			
C88	47	500	RCN-021			
C89	500	2000	RCN-023			
C90	5000		RCW-3014	1467-005	1D5D5	GP2M
C91	.01	600	RCC-040	P688-01	GT6S1	

* Some models use 1500MFD in this application.
 † Some models use .2 MFD in this application.
 ‡ Not used in all models.
 § Some models use .02MFD (MFGR'S Part No. RCC-095)
 ◆ Parallel sections to obtain desired capacity.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	G. E. PART No.	IRC PART No.	CLAROSTAT PART No.
R1	2 Meg.		RCR-091		
R2A	50KΩ	1	RCC-090		K68J87-1
B	50KΩ				
R3A	7500Ω	2	RRC-089		K68J86-1
B	5000Ω				
R4	3000Ω	4	RRW-033	Q11-130	M76J807
R5	250KΩ				
R6	1000Ω	2	RRC-086	W-1000	M-55-S 43-1000

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	G. E. PART No.	IRC PART No.
R7	200Ω	1	URD-1032	RF
R8	6200Ω	1	URE-1068	RF
R9	5600Ω	1	URE-1067	RF
R10	220KΩ	1	URD-1105	Con
R11	24KΩ	1	URD-1082	Con
R12	27KΩ	1	URD-083	Con
R13	22KΩ	1	1st V. IF Screen Bypass	Osc
R14	3000Ω	1	URE-1060	Osc
R15	2700Ω	1	URD-1059	1st
R16	47Ω	1	URD-1017	1st
R17	100Ω	1	URD-049	1st
R18	24KΩ	1	URD-1082	1st
R19	100KΩ	1	URD-097	Bias
R20	1600Ω	1	URD-1054	2nd
R21	47Ω	1	URD-1017	2nd
R22	1000Ω	1	URD-049	2nd
R23	24KΩ	1	URD-1082	2nd
R24	2700Ω	1	URD-1059	2nd
R25	43KΩ	1	URD-1088	3rd
R26	24KΩ	1	URD-1082	3rd
R27	1000Ω	1	URD-049	3rd
R28	5100Ω	1	URD-1066	3rd
R29	1 Meg.	1	URD-121	Vid
R30	5100Ω	1	URE-1066	BTA-47K-5%
R31	10KΩ	2	URF-1073	BT-2-10K-5%
R32	11KΩ	2	URF-1074	BT-2-10K-5%
R33	5600Ω	1	URD-1067	BTS-5600-5%
R34	1 Meg.	1	URD-121	BTS-1 Meg.
R35	120Ω	1	URD-1027	SW-1-120-5%
R36	3300Ω	2	URF-061	BT-2-3300-5%
R37	1000Ω	1	URD-1049	BTS-1000-5%
R38	1 Meg.	1	URD-121	BTS-1 Meg.
R39	24KΩ	1	URD-1082	BTS-24K
R40	270KΩ	1	URD-1072	BTS-270K
R41	20KΩ	2	URF-1080	BT-2-22K-5%
R42	4700Ω	1	URD-1065	BTS-4700-5%
R43	120Ω	1	URD-1027	
R44	22KΩ	1	URE-1081	
R45	56KΩ	1	URD-091	
R46	120Ω	1	URD-1027	
R47	150KΩ	1	URD-101	
R48	22KΩ	1	URE-1081	
R49	56KΩ	1	URD-091	
R50	1000Ω	1	URD-049	

DESCRIPTIONS

CONT.)

RESISTORS (CONT.)

E. No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES	ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES	
					RESISTANCE	WATTS	G. E. PART No.	IRC PART No.		
100	ST-6-05	TM-15	Video Coupling	R51	220KΩ	1	URD-105	BTS-68K	Limiter Screen	10%
	MO.5-31	IFM-31	Sync. Coupling	R52	68KΩ	1	URD-093	BTS-68K	Balancing	20%
	MO.5-34	IFM-34	Sync. Clipper Cath. Byp	R53	68KΩ	1	URD-093	BTS-68K	De-emphasis	20%
	ST-4-05	TM-15	Integrator Net.	R54	82KΩ	1	URD-093	BTS-82K	Tone Compensation	10%
35-01	ST-4-01	TM-11	"	R55	1000Ω	1	URD-049	BTS-1000	"	10%
35-01	ST-4-01	TM-11	"	R56	10 Meg.	1	URD-145	BTS-10 Meg.	AF Grid	20%
001	ST-6-001	TM-21	Vert. Sync. Coupling	R57	220KΩ	1	URD-105	BTS-220K	AF Plate	10%
	ST-6-05	TM-15	Vert. Multi. Feedback	R58	470KΩ	1	URD-113	BTS-470K	Output Grid	10%
002	ST-6-002	TM-22	Vert. Multi. Feedback	R59	750Ω	1	URE-1046	BTA-680-5%	Output Cathode	20%
001	ST-6-001	TM-21	Voltage Divider	R60	82KΩ	1	URD-095	BTS-82K-5%	Voltage Divider	5%
	ST-6-1	TM-1	Vert. Discharge	R61	56KΩ	1	URD-091	BTS-56K	"	5%
	ST-6-05	TM-15	Voltage Divider +	R62	2.2 Meg.	1	URD-129	BTS-2.2 Meg.	Phase Inv. Grid	10%
	ST-6-02	TM-12	Vert. Sweep Coupling +	R63	1000Ω	1	URD-049	BTS-1000	Phase Inv. Cathode	20%
			Hor. Sync. Coupling	R64	15KΩ	1	URE-077	BTA-15K	Phase Inv. Plate	10%
				R65	3.9 Meg.	1	URD-135	BTS-3.9 Meg.	Sync. Clipper Grid	10%
	ST-6-05	TM-15	AFC Plate Bypass	R66	6800Ω	1	URD-069	BTS-6800	Sync. Clipper Cathode	10%
	ST-4-2	TC-2	AFC Filter	R67	1500Ω	1		BTS-1500	Sync. Clipper Plate	10%
	ST-6-002	TM-22	"	R68	8200Ω	1	URD-071	BTS-8200Ω	Integrator	10%
			Hor. Osc. Grid Cap.	R69	8200Ω	1	URD-071	BTS-8200	"	10%
0015	MM.5-215	IFM-215	Hor. Discharge	R70	75KΩ	1	URD-1094	BTS-82K-5%	Vert. MV Grid	5%
100	MO.5-34	IFM-34	Hor. Sweep Coupling	R71	220KΩ	1	URD-1105	BTS-220K-5%	Vert. MV Plate	5%
	MO.5-31	IFM-31	Voltage Divider +	R72	82KΩ	1	URD-1095	BTS-82K	Vert. MV Grid	10%
	ST-2-5	TC-5	Hor. Output Cath. Bypass	R73	24KΩ	1	URD-1082	BTS-22K-5%	Vert. MV Grid	5%
	ST-6-1	TM-1	Hor. Output Screen Bypass	R74	10 Meg.	1	URD-145	BTS-10 Meg.	Vert. MV Plate See Note 2	10%
			Pulse Coupling	R75	2.2 Meg.	1	URD-1129	BTS-2.2 Meg.	"	10%
			Damper Filter							
				R76	33KΩ	1	URE-085	BTA-33K	Voltage Divider	5%
			Hor. Sweep Coupling	R77	470Ω	1	URE-041	BTA-470	Vert. Output Cathode	10%
			AFC Feedback	R78	100KΩ	1	URD-097	BTS-100K	Vert. Output Transformer Shunt	20%
			Fixed Trimmer	R79	2700Ω	1	URD-1059	BTS-2700-5%	Integrator See Note 2	5%
			HV Filter	R80	680KΩ	1	URE-1117	BTA-680K	Horiz. AFC Grid	10%
			Acc. Anode Bypass	R81	180KΩ	1	URD-1103	BTS-180K-5%	Horiz. AFC Cathode	5%
				R82	82KΩ	1	URD-1095	BTS-82K	Voltage Divider	10%
				R83	33KΩ	1		BTS-33K-5%	"	
				R84	100KΩ	1	URE-097	BTA-100K	Horiz. AFC Plate	10%
				R85	24KΩ	1	URD-1082	BTS-22K-5%	Voltage Divider	5%
				R86	8200Ω	1	URD-071	BTS-8200Ω	Horiz. AFC Filter Network	10%
				R87	3.3 Meg.	1	URE-133	BTA-3.3 Meg.	Voltage Divider	10%
				R88	82KΩ	1	URD-1095	BTS-82K	Horiz. Osc. Grid	10%
				R89	47KΩ	1	URE-1089	BTA-47K	Horiz. Osc. Plate	10%
				R90	470KΩ	1	URD-113	BTS-470K	Feedback	20%
				R91	330Ω	1	URD-037	URD-037	Parasitic Supp.	20%
				R92	1 Meg.	1	URD-121	BTS-1 Meg.	Horiz. Output Grid	20%
				R93	82Ω	2	URF-1023	BW-2-82-5%	Horiz. Output Cathode (Wire Wound)	20%
				R94	6500Ω	10	AB-7000	AB-7000	Horiz. Output Screen Decoupling (Wire Wound)	5%
									See Note 1	
				R95	33Ω	1	URE-013	URE-013	Parasitic Supp.	
				R96	470KΩ	1	URD-113	URD-113	Current Limiting	
				R97	3300Ω	2	URF-061	BT-2-3300	Horiz. Size Control Coil Shunt	20%
				R98	4700Ω	1	URD-065	BTS-4700	Horiz. Linearity Coil Shunt	20%
				R99	330Ω	1	URD-037	BW-1-330-5%	Feedback	
				R100	560KΩ	1	URD-115	BTS-560K	Feedback	
				R101	100KΩ	1	URD-097	BTS-100K-5%	Acc. Anode Load	10%
				R102	330KΩ	1	URE-109	URE-109	HV Filter	10%
				R103	330KΩ	1	URE-109	URE-109	"	10%
				R104	330KΩ	1	URE-109	URE-109	"	10%
				R105	2200Ω	2	URF-1057	BW-2-2200-5%	Filter	10%
				R106	900Ω	7	RRW-035	AB-900	Focus Coil Shunt (Wire Wound)	
				R107	1Ω	1	RRW-034	RRW-034	Surge Limiter (Wire Wound)	
				R108	1 Meg.	1	URD-121	BTS-1 Meg.	Isolation	20%

in this application.

LS

INSTALLATION NOTES

Volume control, tapped @ 500KΩ, and switch.
 Horiz. hold control (Dual Concentric)
 Vert. hold control
 Brightness control (Dual Concentric)
 Contrast control
 Focus control (Wire Wound)
 Vert. size control
 Vert. linearity control (Wire Wound)

RS

IDENTIFICATION CODES

RESISTORS ARE ± 5% UNLESS OTHERWISE STATED.

athode	
ate	
ate	
. Grid	
. Plate Transformer Shunt	10%
. Plate Decoupling	
. Grid	
. Plate	
Video IF Grid	
Video IF Cathode	20%
Video IF Plate Decoupling	
Video IF Screen Decoupling	20%
Network	
Video IF Grid	
Video IF Cathode	
Video IF Plate Decoupling	20%
Video IF Screen Decoupling	
Video IF Grid	
Video IF Transformer Shunt	
Video IF Screen	
Video IF Decoupling	20%
b Det. Diode Load	
amp. Grid	20%
amp. Plate	5%
"	5%
"	5%
ge Divider	5%
Output Grid	5%
Output Cathode	5%
Output Plate	5%
ge Divider	10%
"	10%
"	10%
"	5%
"	5%
ound IF Cathode	
ound IF Plate	10%
ound IF Screen	
ound IF Cathode	10%
ound IF Screen	
ound IF Plate	10%
er Grid	10%
er Plate Decoupling	20%

Note 1. Some models use two resistors in parallel to obtain correct resistance and wattage.

Note 2. Not used in all models.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T1	117VAC @ 2A	750VCT @ .125 ADC	5VAC @ 3A	5VAC @ 2A	RTP-066			
		650VCT @ .098 ADC						
		SEC. 4	SEC. 5	SEC. 6				
		5VAC @ 2A	12.6VAC @ 3.5A	6.3VAC @ .6A				

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	PRI.	G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
T2	120Ω Tap @ 35Ω		RTM-003				Hor. Osc. Transformer
T3	38Ω		RTO-058				Hor. Output Trans.
		SEC. 1					
		230Ω					
		SEC. 2					
		71Ω					
		SEC. 3					
		1Ω					
		SEC. 4					
		0Ω					
T4	730Ω	11Ω	RTO-053		TSO-4	A-3035	Vert. Output Trans.
T5A	17Ω		RLD-007				Hor. Deflection Coil
T6	820Ω		RLF-017				Vert. Deflection Coil Focus Coil

GENERAL ELECTRIC
MODEL 814

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.	PRI.	SEC.					
T7	8K Ω	3.4 Ω	600 Ω	.6 Ω	RT0-052	A-3823	RO-301	A-2901	

SPEAKER

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	G. E. PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	3.4 Ω	ROP-017		46A15	
SP2	4" x 6"	3/4"				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.125A	160 Ω	7 Henries	RL1-059	C-2309	R-8120	C-2993#	# Drill new mounting holes.
L2	.098A	160 Ω	7 Henries	RL1-060	C-2309	R-8120	C-2993#	

COILS (RF-IF)

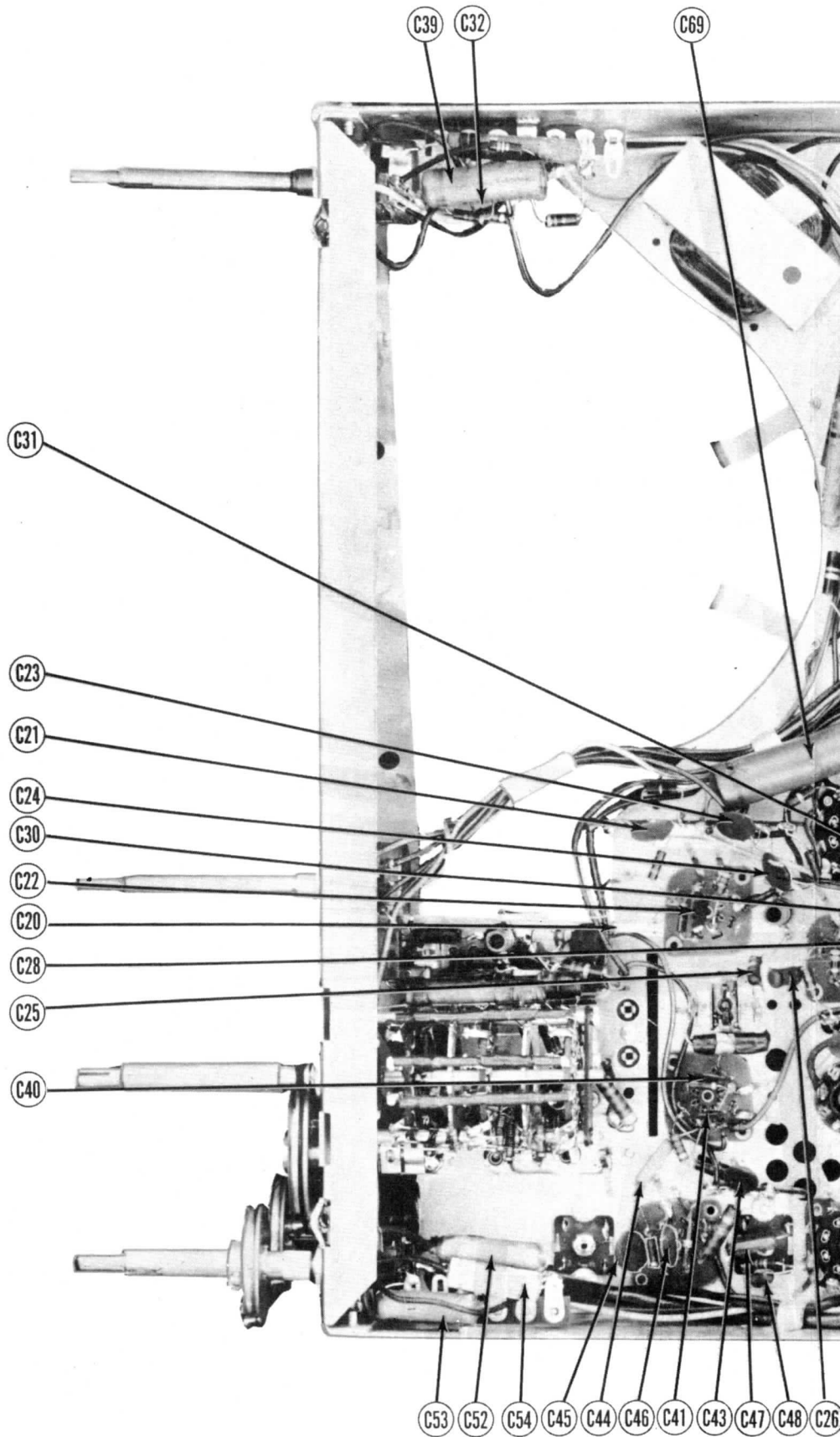
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES	
		PRI.	SEC.	G. E. PART No.	MEISSNER PART No.		
L3	Ant. Input	0 Ω	0 Ω	RLA-031		Low Band High Band Only	
L4	Comp.Choke	0 Ω		RLI-006			
L5	RF Cath.	0 Ω		RLI-003			
L6	RF Cath.	0 Ω		RLI-006			
L7	Osc. Cath.	1.5 Ω		RLI-019			
L8	Osc. Fil.	0 Ω		RLI-005			
L9	1st Video IF	.5 Ω	.2 Ω	RTL-081			
L10	Video Trap	.2 Ω		RLI-005			
L11	2nd Video IF	.5 Ω		RTL-082			
L12	Sound Take Off Trap	.5 Ω		RLI-061			
L13	3rd Video IF	.5 Ω		RTL-083			
L14	4th Video IF	.5 Ω		RTL-089			
L15	Peaking	7 Ω		RLI-038			165 Microhenries
L16	Peaking	7 Ω		RLI-038			165 Microhenries
L17	Peaking	7 Ω		RLI-038			165 Microhenries
L18	Peaking	7 Ω		RLI-038			165 Microhenries
L19	1st Sound IF	0 Ω		RTL-085			
L20	2nd Sound IF	0 Ω		RTL-085			
L21	Disc.Trans.	.1 Ω		RTD-007			
L22	Hor. Size	9 Ω		RLD-004			
L23	Hor.Line.	30 Ω		RLD-005			

SELENIUM RECTIFIER

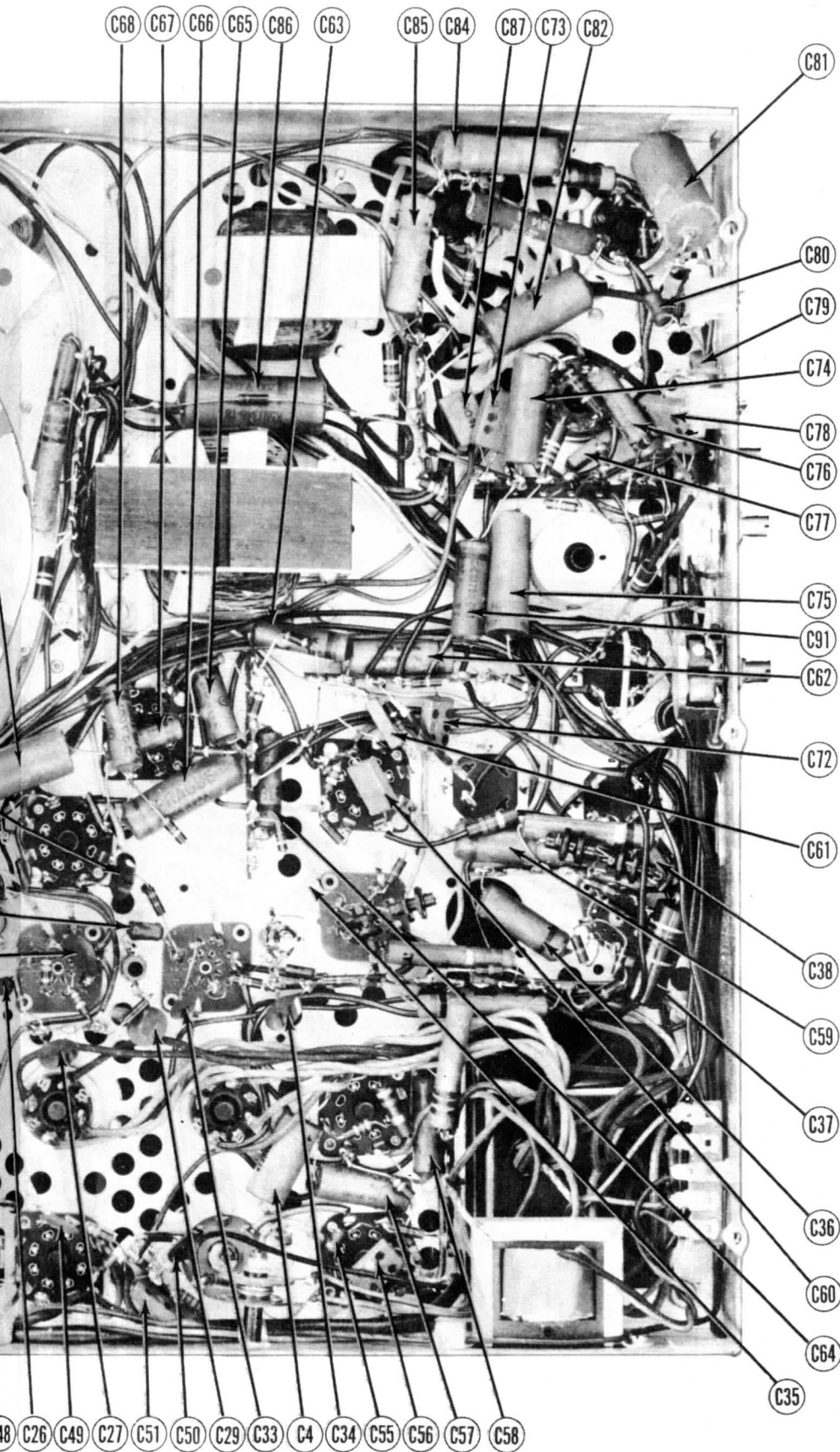
ITEM No.	RATING	REPLACEMENT DATA			NOTES
	CURRENT	G. E. PART No.			
M1	.150A	REF-003			

MISCELLANEOUS

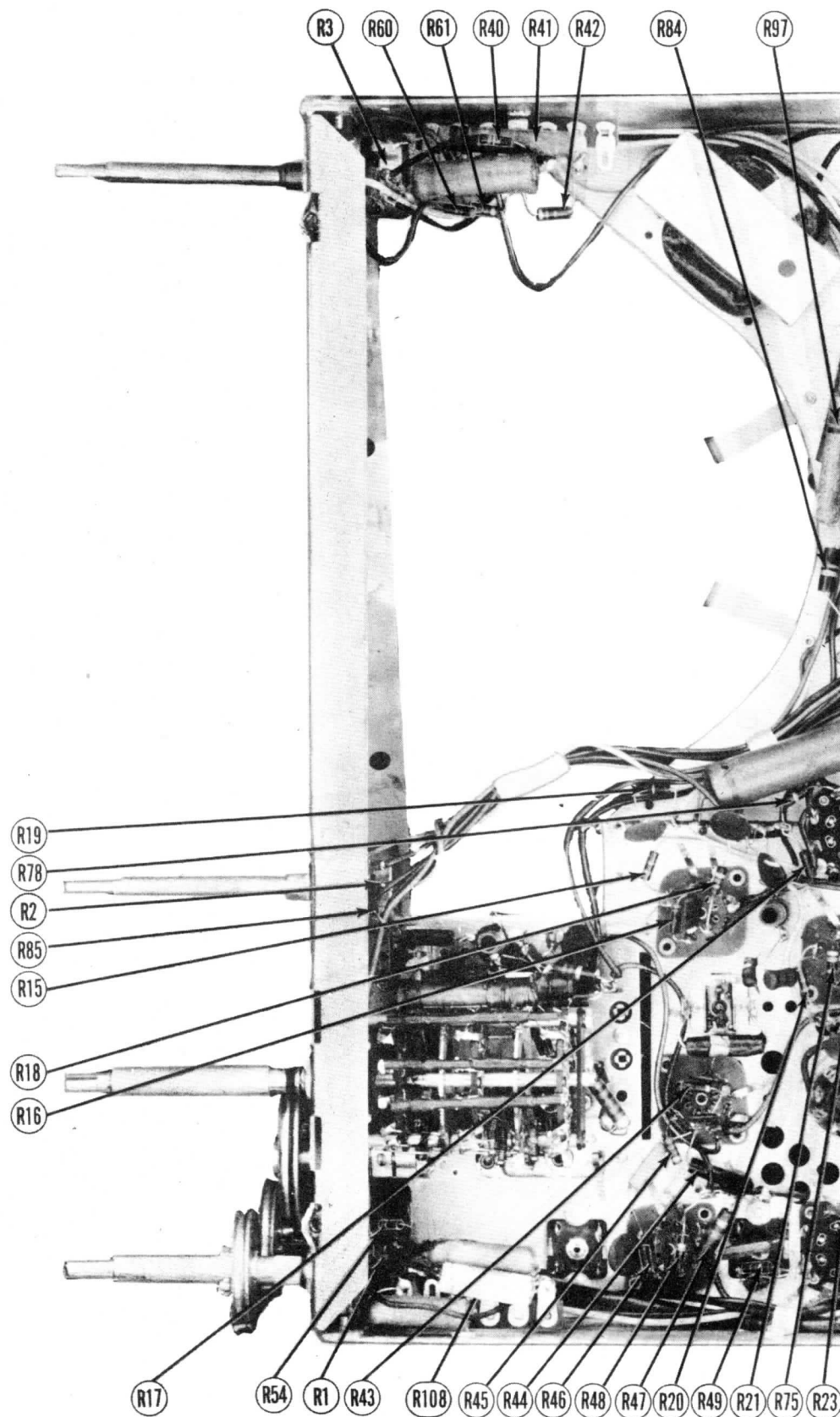
ITEM No.	PART NAME	G. E. PART No.	NOTES
M2	RF Tuner	RFX-023	Complete Vert. Hold and Contrast Hor. Hold and Brightness On-Off-Volume and Channel Selector For T2 For L9, L11, L13, L19, L20 and Secondary of L14 For L23 For L22 For L21 For Primary of L14
	Safety Glass	RDW-012	
	Cabinet	RAV-061	
	Back Cover	RAB-083	
	Knob	RDK-152	
	Knob	RDK-153	
	Knob	RDK-155	
	Core	REI-015	
	Core	REI-016	
	Core	REI-017	
	Core	REI-018	
	Core	REI-019	
	Core	REI-026	
	Core		
	Core		



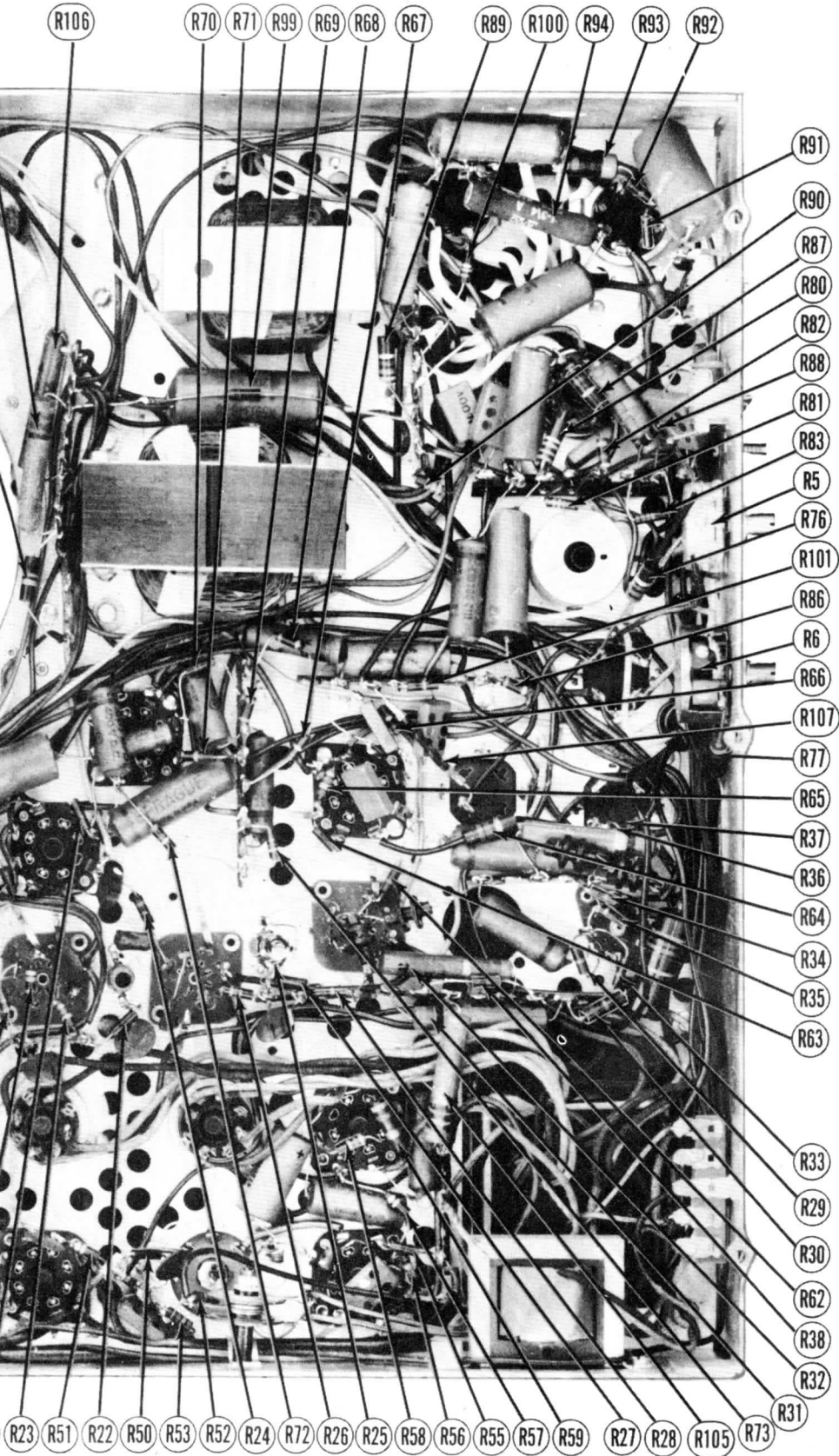
CHASSIS BOTTOM VIEW-CA



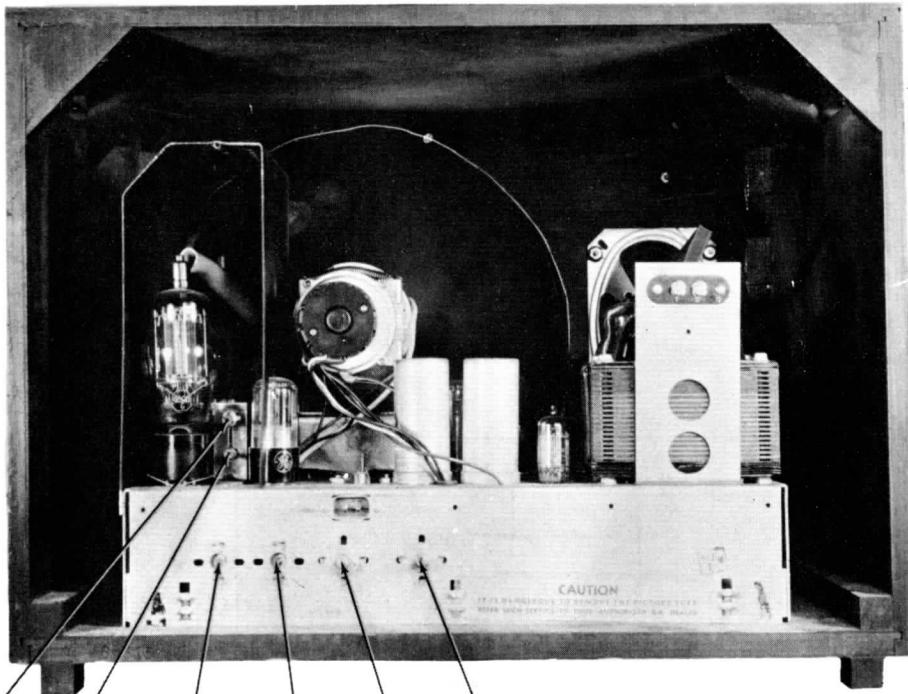
CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-R

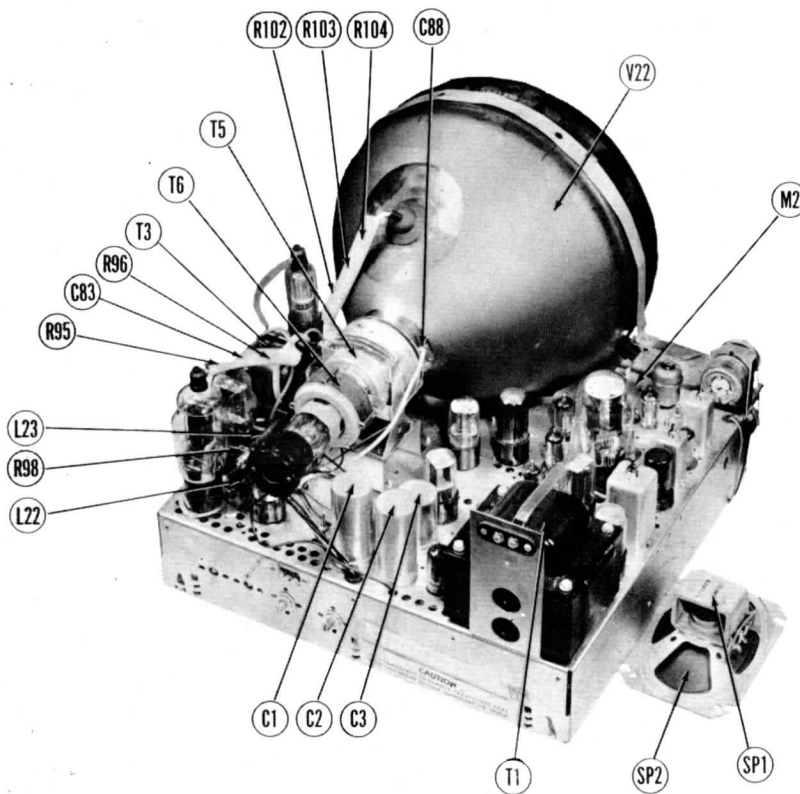


RESISTOR IDENTIFICATION



HORIZ. LIN. HORIZ. SIZE HORIZ. DRIVE HORIZ. FREQ. VERT. SIZE VERT. LIN.

CABINET-REAR VIEW



CHASSIS TOP VIEW