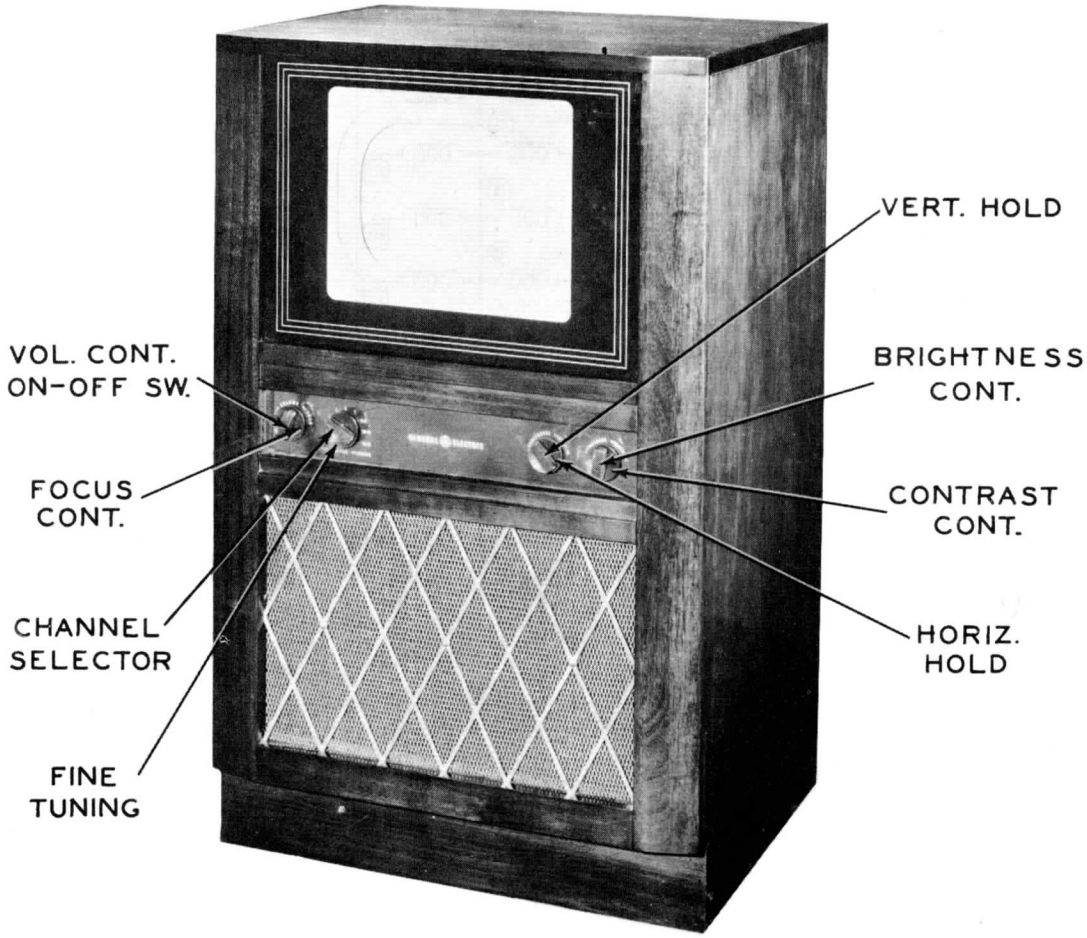
GENERAL ELECTRIC MODEL 811



GENERAL ELECTRIC MODEL 811

TRADE NAME	General Electric Model 811
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: 2.1 Amps @ 117 Volts
TUNING RANGE—Channels 2 through 13

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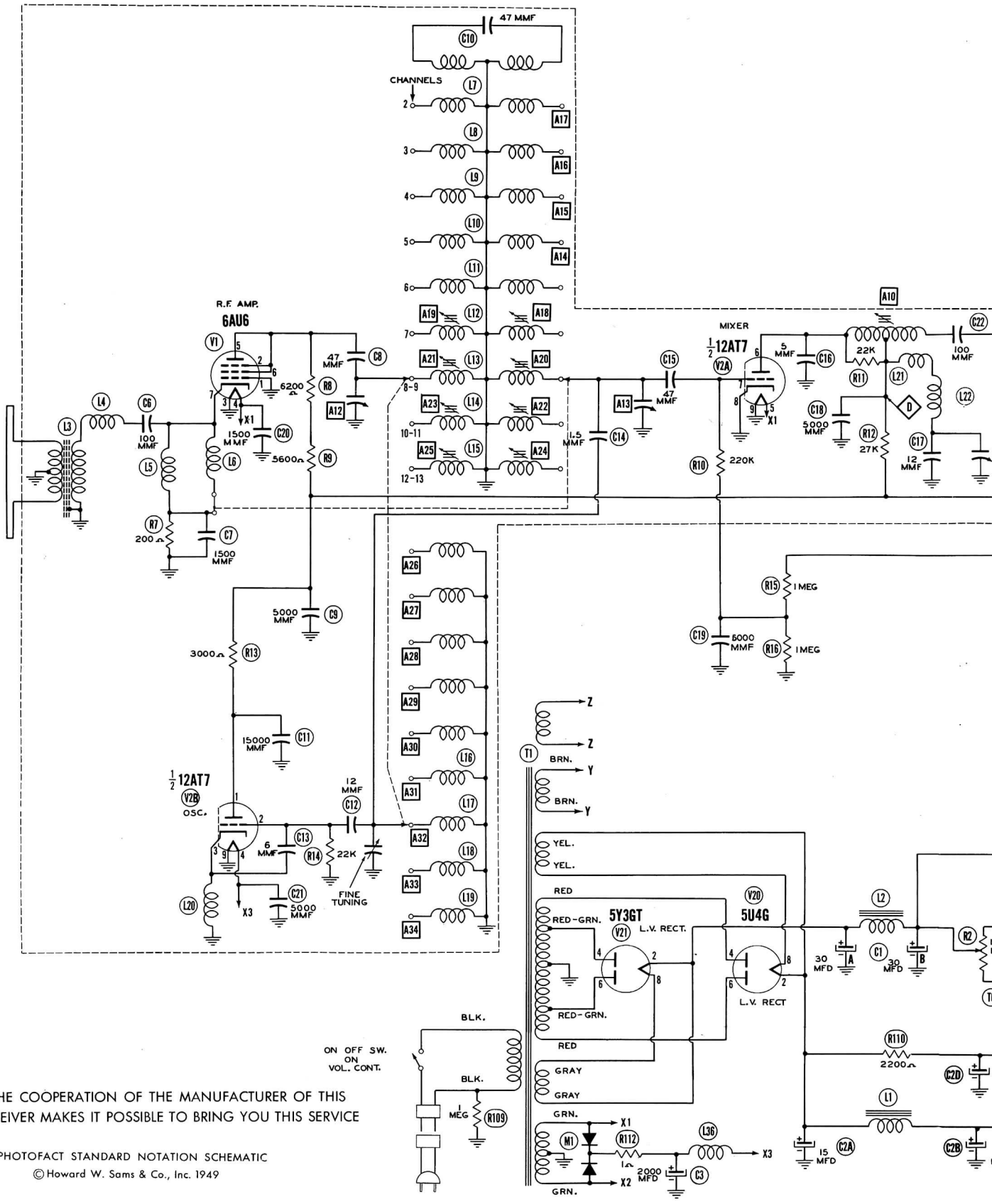
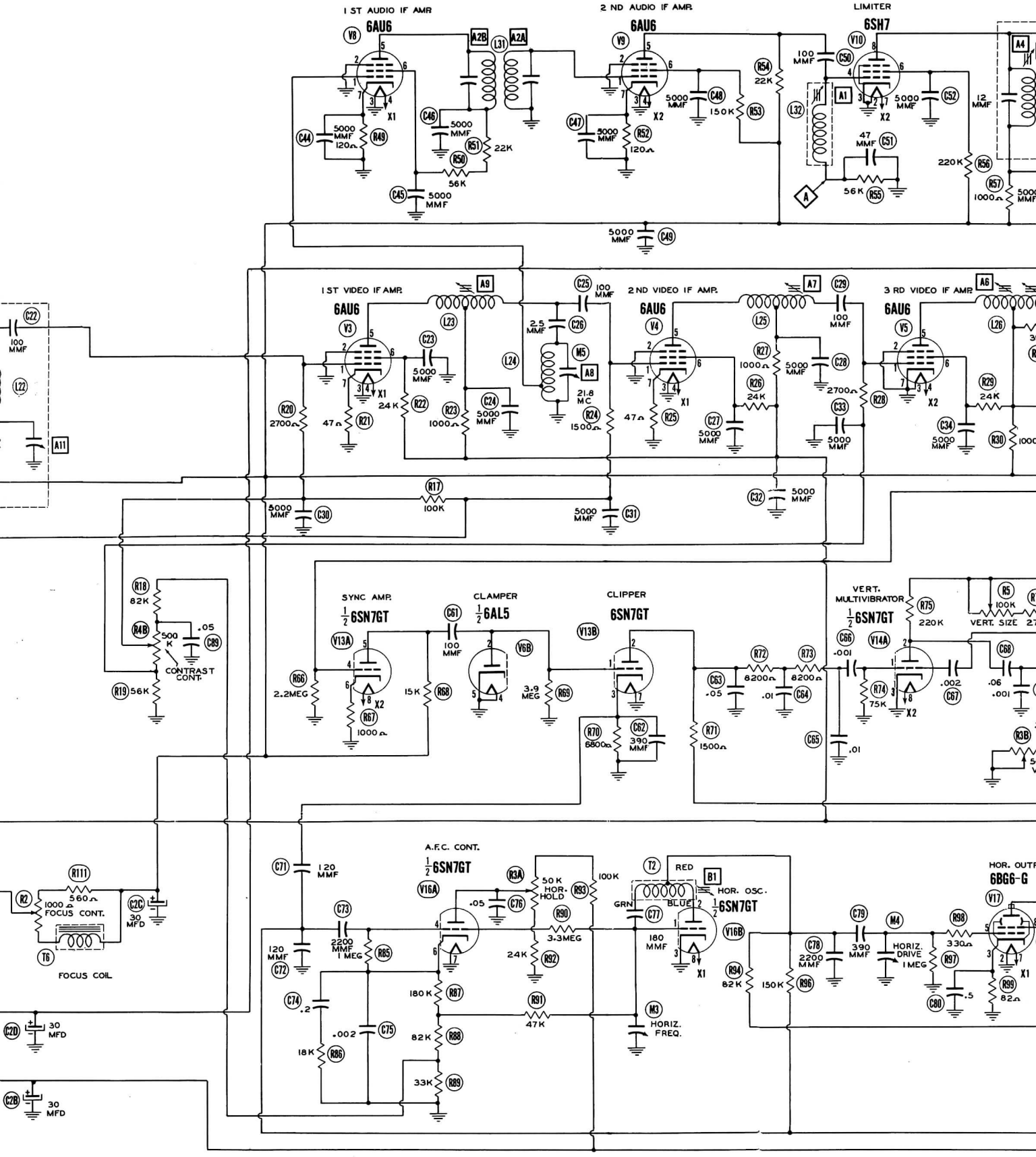
HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana

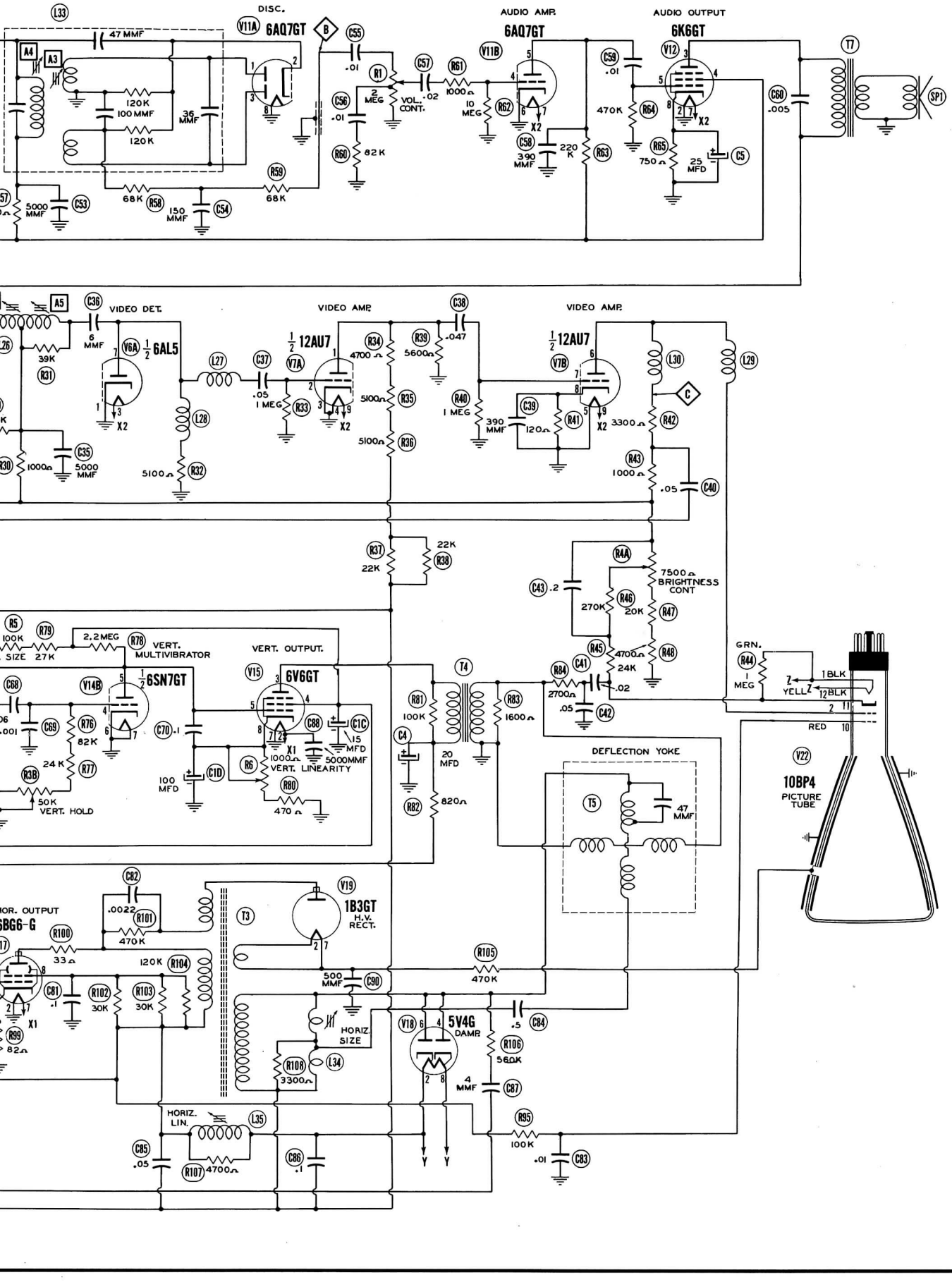
DATE 6/49 4911-9 SET #63 FOLDER 9

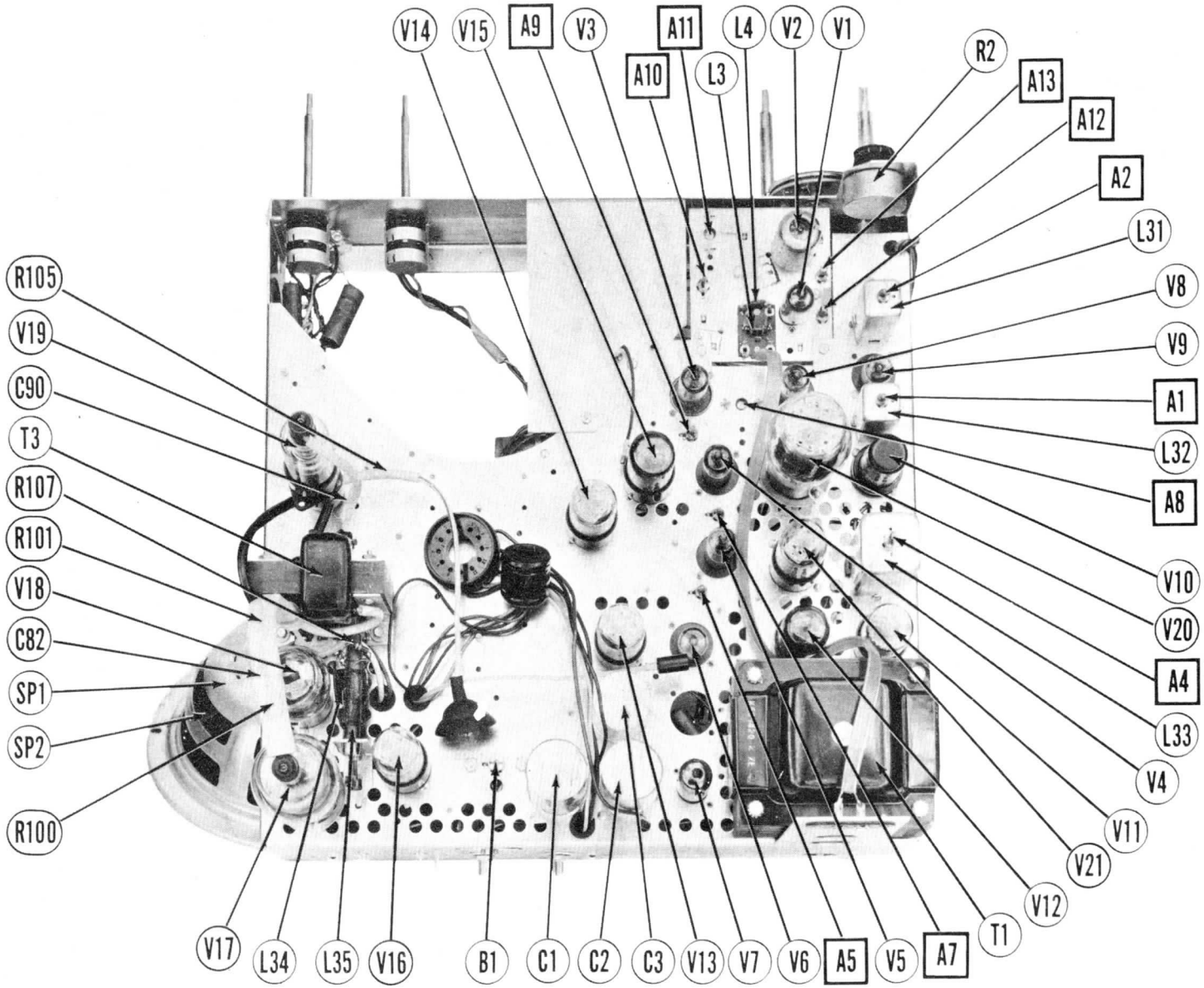


THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

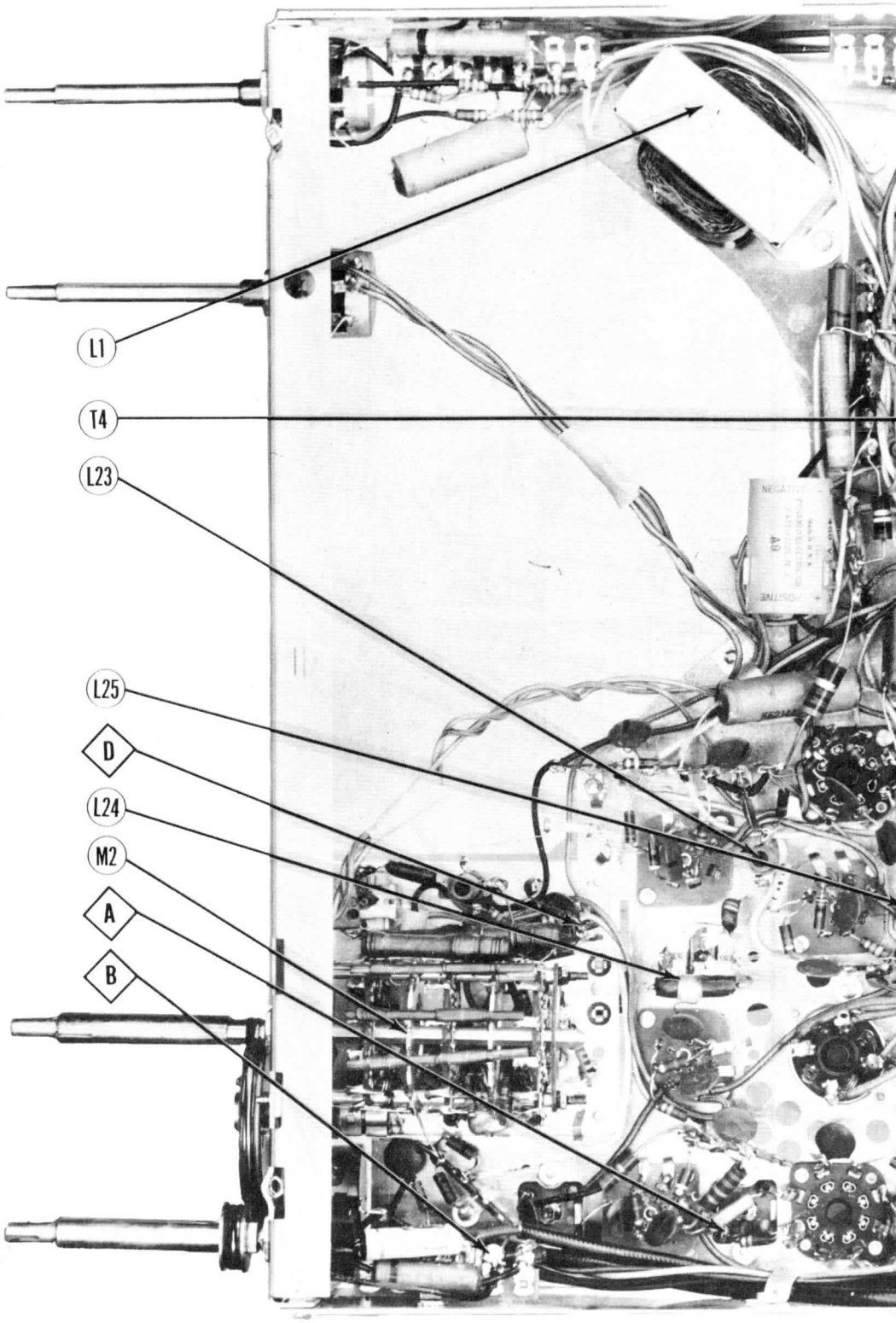
A PHOTOFACT STANDARD NOTATION SCHEMATIC


1 ST AUDIO IF AMP
6AU6
V8
A2B
A2A
L31
X1
C46 5000 MMF
C44 5000 MMF
R49 120Ω
R51 22K
R50 56K
C45 5000 MMF
2 ND AUDIO IF AMP
6AU6
V9
X2
C47 5000 MMF
R52 120Ω
C48 5000 MMF
R53 150K
R54 22K
LIMITER
6SH7
V10
A1
X2
C50 100 MMF
L32
C52 5000 MMF
C51 47 MMF
R55 56K
R56 220K
R57 1000Ω
12 MMF
A4
A
C49 5000 MMF
1 ST VIDEO IF AMP.
6AU6
V3
A9
L23
X1
C23 5000 MMF
R20 2700Ω
47Ω R21
24K R22
R23 1000Ω
C24 5000 MMF
C25 100 MMF
2.5 MMF C26
L24
M5
A8
21.8 MC
R24 1500Ω
2ND VIDEO IF AMP.
6AU6
V4
X1
47Ω R25
C27 5000 MMF
A7
L25
C29 100 MMF
R27 1000Ω
R26 24K
C28 5000 MMF
2700Ω R28
C33 5000 MMF
3 RD VIDEO IF AMP.
6AU6
V5
X2
A6
L26
R29 24K
C34 5000 MMF
R30
C22 100 MMF
L22
A11
C30 5000 MMF
R17 100K
C31 5000 MMF
C32 5000 MMF
R18 82K
R4B
500 K
.05 C89
CONTRAST CONT.
R19 56K
SYNC AMP.
1/2 6SN7GT
V13A
X2
R66 2.2MEG
R67 1000Ω
15K R68
CLAMPER
1/2 6AL5
C61 100 MMF
V6B
3.9 MEG R69
CLIPPER
6SN7GT
V13B
R70 6800Ω
C62 390 MMF
C63 .05
R72 8200Ω
.01 C64
R73 8200Ω
R71 1500Ω
C65 .01
VERT. MULTIVIBRATOR
1/2 6SN7GT
V14A
R75 220K
C66 .001
R74 75K
X2
.002 C67
C68 .06
.001
R5 100K
VERT. SIZE
R3B
R111 560Ω
R2 1000Ω FOCUS CONT.
C2C 30 MFD
T6
FOCUS COIL
C2D 30 MFD
C2B 30 MFD
A.F.C. CONT.
1/2 6SN7GT
V16A
C71 120 MMF
C73 2200 MMF 1 MEG
120 MMF C72
R85
C74 .2
.002 C75
18K R86
180K R87
82K R88
33K R89
R3A 50 K HOR. HOLD
100K R93
.05 C76
R90 3.3MEG
24K R92
R91 47K
T2
RED
B1
HOR. OSC.
GRN
BLUE
1/2 6SN7GT
V16B
X1
C77 180 MMF
M3 HORIZ. FREQ.
C79 390 MMF
M4 HORIZ. DRIVE 1 MEG
C78 2200 MMF
R94 82K
150K R96
R98 330Ω
R97
.5 C80
HOR. OUTP
6BG6-G
V17
X1
R99 82Ω

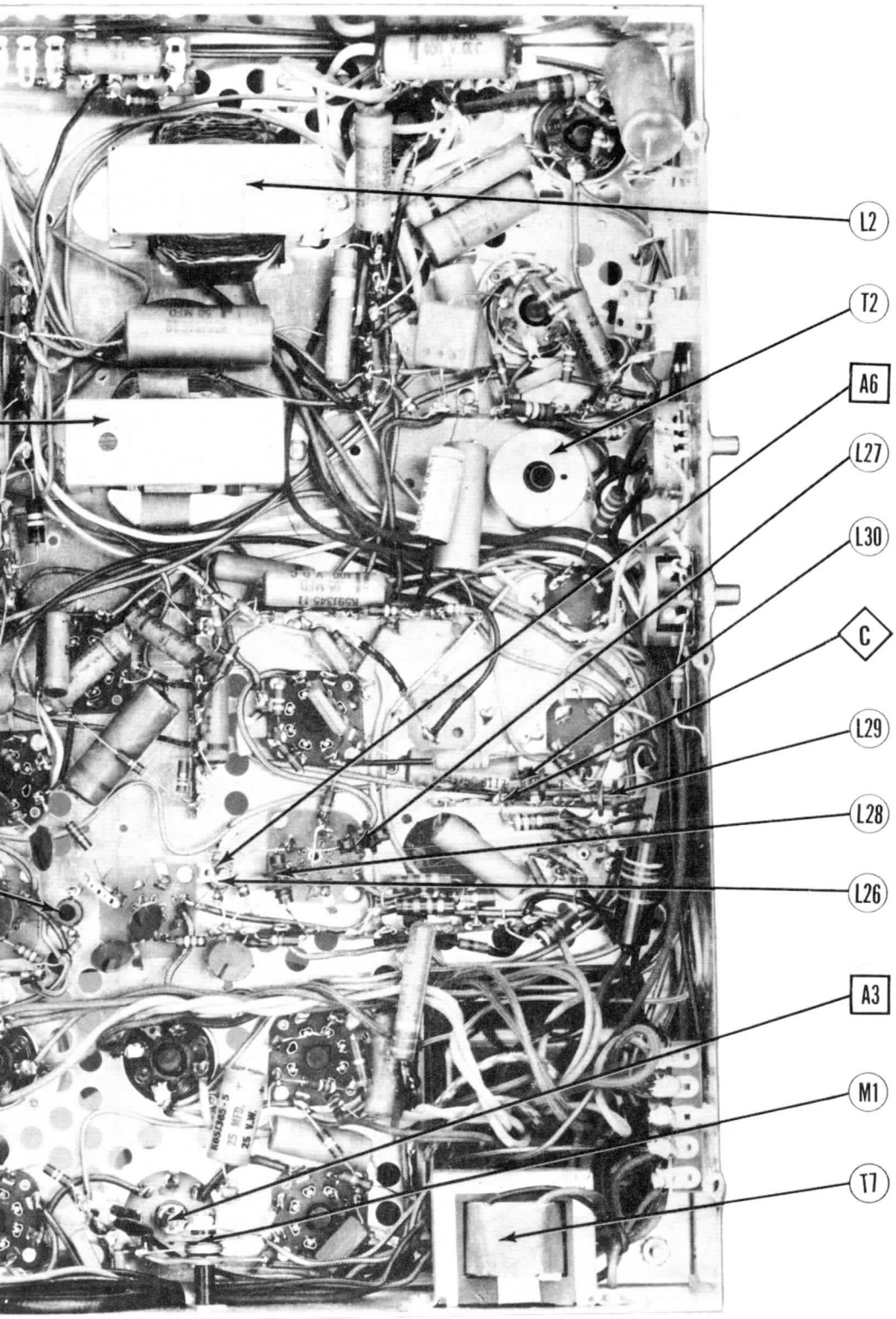

DISC.
AUDIO AMP.
6AQ7GT
AUDIO OUTPUT
6K6GT
VIDEO DET.
6AL5
VIDEO AMP.
12AU7
VIDEO AMP.
12AU7
VERT. MULTIVIBRATOR
6SN7GT
VERT. OUTPUT.
6V6GT
VOL. CONT.
VERT. LINEARITY
VERT. HOLD
HORIZ. SIZE
HORIZ. LIN.
1B3GT
H.V. RECT.
5V4G
DAMP
BRIGHTNESS CONT
DEFLECTION YOKE
10BP4
PICTURE TUBE
GRN.
YELL.
BLK
RED



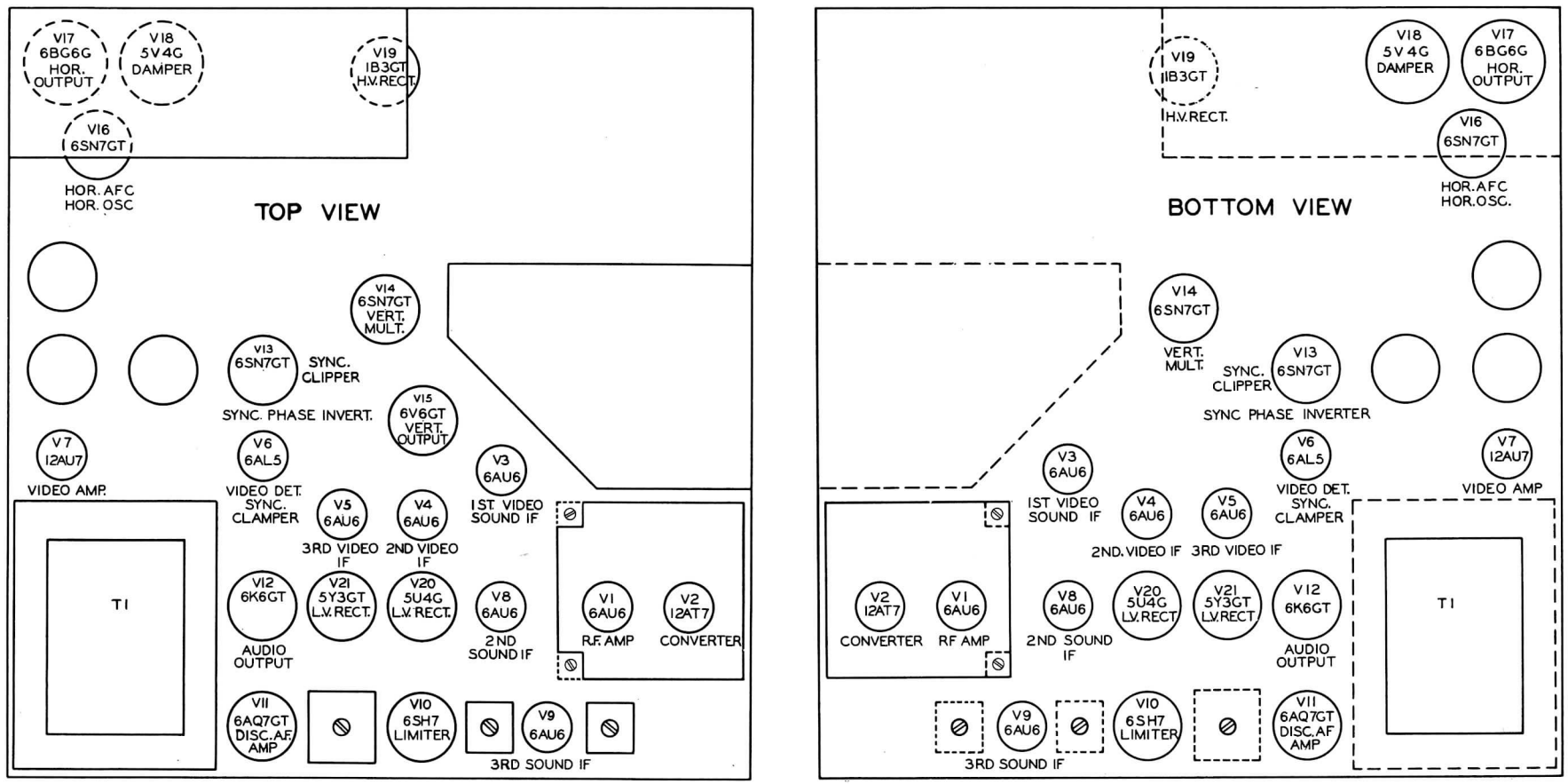
CHASSIS TOP VIEW



CHASSIS BOTTOM VIEW-TRANS., INDUC



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 V14.
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 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 Ⓐ through 100KΩ 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).	"	"	"	"	A2A, A2B	"
3	500 MMF.	"	"	21.8MC (400 ∿ Mod.)	"	High side to Point Ⓑ through 10KΩ 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.

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 Ⓒ through 10KΩ 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 ∿ (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 A11 to minimum. Adjust for maximum amplitude with pattern as shown in Fig. 5.
10	500 MMF	"	"	"	"	"	A11	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 deflective 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 Ⓓ. 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)	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	"

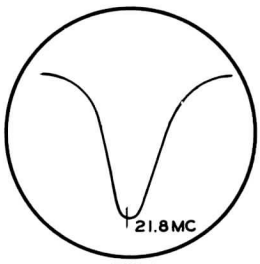


FIG.1

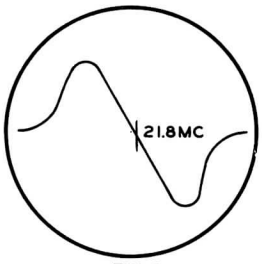


FIG.2

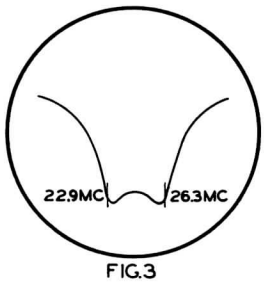


FIG.3

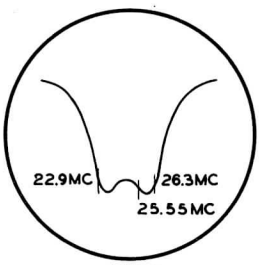


FIG.4

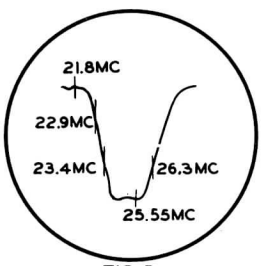


FIG. 5

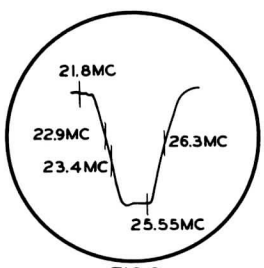


FIG.6

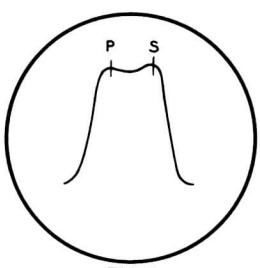


FIG.7

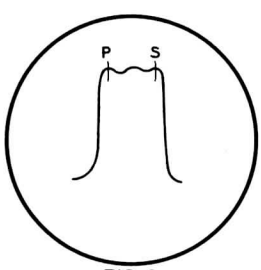


FIG. 8

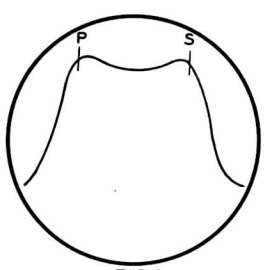


FIG.9

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 R18. 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.

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	0V	150VDC	0V	6.3VAC	150VDC	150VDC	1.8VDC		
V 2	12AT7	230VDC	§-6.4VDC	0V	6.8VDC	6.3VAC	160VDC	-6VDC	0V	0V
V 3	6AU6	-9VDC	0V	0V	6.3VAC	300VDC	300VDC	.1VDC		
V 4	6AU6	-6.8VDC	0V	0V	6.3VAC	300VDC	300VDC	0V		
V 5	6AU6	-1.2VDC	0V	0V	6.3VAC	235VDC	150VDC	0V		
V 6	6AL5	0V	-.8VDC	6.3VAC	0V	0V	0V	-.3VDC		
V 7	12AU7	50VDC	-.6VDC	0V	0V	0V	175VDC	0V	2VDC	6.3VAC
V 8	6AU6	0V	0V	0V	6.3VAC	120VDC	110VDC	1VDC		
V 9	6AU6	0V	0V	0V	6.3VAC	170VDC	70VDC	.6VDC		
V 10	6SH7	0V	0V	0V	-.5VDC	0V	50VDC	6.3VAC	250VDC	
V 11	6AQ7GT	0V	.7VDC	3.4VDC	-.5VDC	95VDC	0V	6.3VAC	0V	
V 12	6K6GT	0V	0V	330VDC	245VDC	0V	18.5VDC	6.3VAC	18.5VDC	
V 13	6SN7GT	-.8VDC	145VDC 260VDC	5.5VDC	0V	180VDC	6VDC	0V	6.3VAC	
V 14	6SN7GT	-.4VDC	26VDC	0V	-3.8VDC	5.2VDC 9.4VDC	0V	0V	6.3VAC	
V 15	6V6GT	0V	6.3VAC	280VDC	145VDC 260VDC	5.2VDC 9.4VDC	-1.2VDC	0V	9.5VDC 17.5VDC	
V 16	6SN7GT	-65VDC	195VDC	0V	-40VDC	45VDC	-35VDC	0V	6.3VAC	
V 17	6BG6G	0V	0V	9.5VDC	-3.4VDC	-3.4VDC	0V	6.3VAC	290VDC	TOP CAP †
V 18	5V4G	0V	450VDC	0V	360VDC	0V	360VDC	0V	450VDC	
V 19	1B3GT	† DO NOT MEASURE								
V 20	5U4G	0V	390VDC	0V	350VAC	0V	350VAC	0V	390VDC	
V 21	5Y3GT	0V	320VDC	0V	310VAC	0V	310VAC	0V	320VDC	
V 22	10BP4	*235VDC	180VDC	PIN 10 440VDC	PIN 11 245VDC	PIN 12 *235VDC				

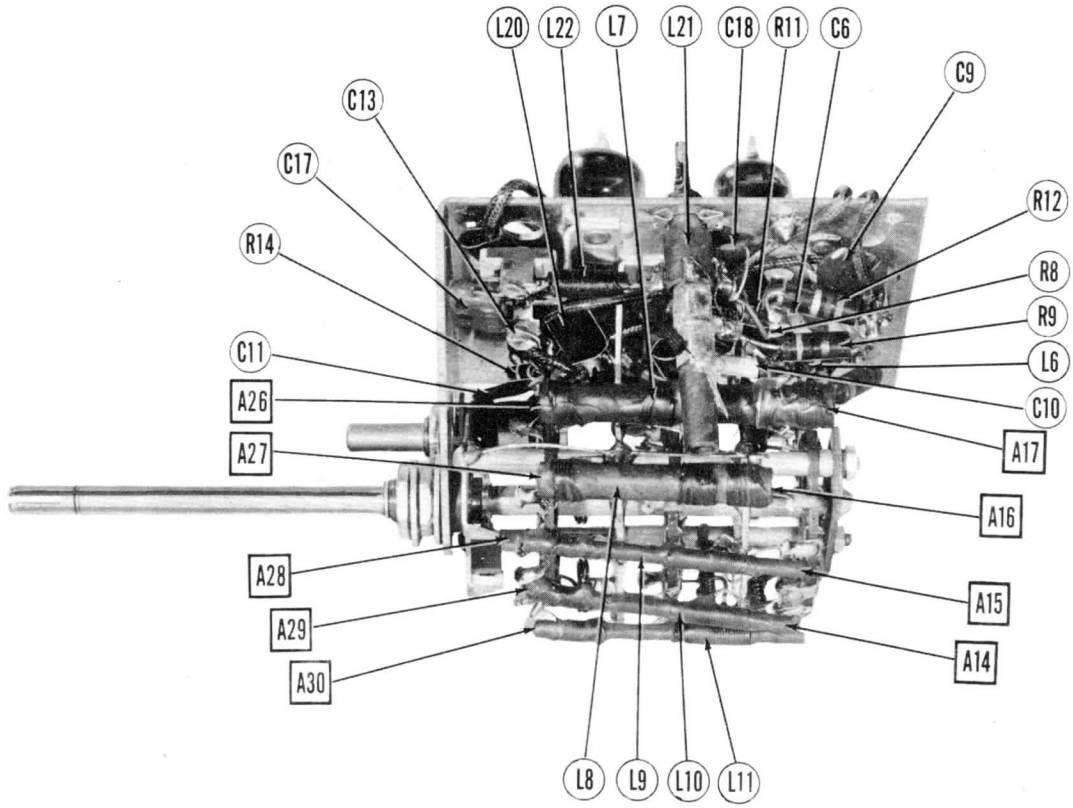
† Do not measure
* 6.3VAC measured between pins of socket.
§TAKEN WITH VACUUM TUBE VOLTMETER.

RESISTANCE READINGS

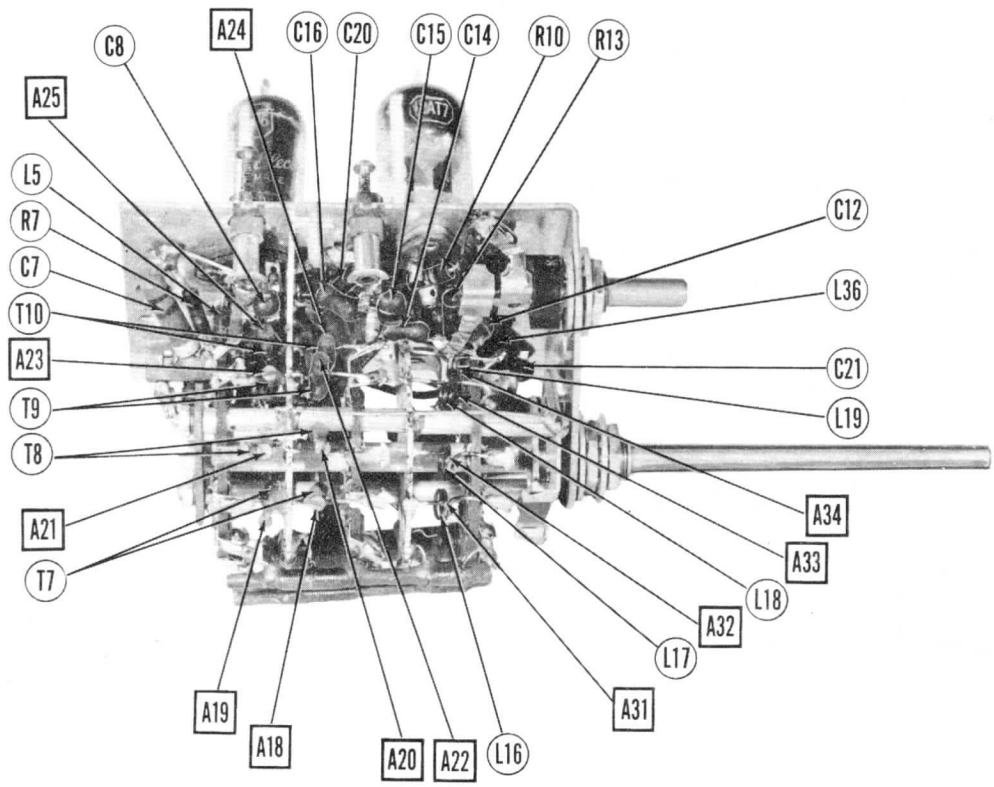
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AU6	0Ω	*12.5KΩ	0Ω	.2Ω	*12.5KΩ	*12.5KΩ	200Ω		
V 2	12AT7	*3.5KΩ	22KΩ	1.2Ω	.2Ω	.2Ω	*28KΩ	750KΩ	0Ω	0Ω
V 3	6AU6	100KΩ	0Ω	0Ω	.2Ω	*1200Ω	*24KΩ	47Ω		
V 4	6AU6	180KΩ	0Ω	0Ω	.2Ω	*1200Ω	*24KΩ	47Ω		
V 5	6AU6	56KΩ	0Ω	0Ω	.2Ω	*2KΩ	*26KΩ	0Ω		
V 6	6AL5	0Ω	3.9 Meg.	.2Ω	0Ω	0Ω	0Ω	5KΩ		
V 7	12AU7	†23KΩ	1 Meg.	0Ω	0Ω	0Ω	*5KΩ	1 Meg.	120Ω	.2Ω
V 8	6AU6	0Ω	0Ω	0Ω	.2Ω	*23KΩ	*60KΩ	120Ω		
V 9	6AU6	.2Ω	0Ω	0Ω	.2Ω	*23KΩ	*150KΩ	120Ω		
V 10	6SH7	0Ω	0Ω	0Ω	56KΩ	0Ω	*220KΩ	.2Ω	*1500Ω	
V 11	6AQ7GT	.2Ω	120KΩ	240KΩ	10 Meg.	*220KΩ	0Ω	.2Ω	0Ω	
V 12	6K6GT	Inf.	0Ω	†2.8KΩ	*640Ω	470KΩ	750Ω	.2Ω	750Ω	
V 13	6SN7GT	3.9 Meg.	†25KΩ †120KΩ	6.5KΩ	2.2 Meg.	*15KΩ	1000Ω	0Ω	.2Ω	
V 14	6SN7GT	75KΩ	†220KΩ	0Ω	140KΩ	†2.2Meg.	0Ω	0Ω	.2Ω	
V 15	6V6GT	Inf .	.2Ω	*1800Ω	†128KΩ †25KΩ	†2.2Meg.	50KΩ	0Ω	1400Ω 420Ω	
V 16	6SN7GT	160KΩ	‡82KΩ	0Ω	1 Meg.	†42KΩ	280KΩ	0Ω	.2Ω	
V 17	6BG6G	Inf.	0Ω	82Ω	1 Meg.	1 Meg.	Inf.	.2Ω	‡14KΩ	TOP CAP ‡100Ω
V 18	5V4G	Inf.	‡0Ω	Inf.	†170Ω	Inf.	†170Ω	Inf.	‡0Ω	
V 19	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP ‡470KΩ
V 20	5U4G	Inf.	26KΩ	Inf.	23Ω	Inf.	24Ω	Inf.	26KΩ	
V 21	5Y3GT	Inf.	32KΩ	Inf.	22Ω	Inf.	20Ω	Inf.	32KΩ	
V 22	10BP4	1.3 Meg.	*5KΩ	PIN 10 ‡100KΩ	PIN 11 *290KΩ	PIN 12 1.3 Meg.				

* Measured from pin 2 of V21
† Measured from pin 8 of V20
‡ Measured from pin 8 of V18

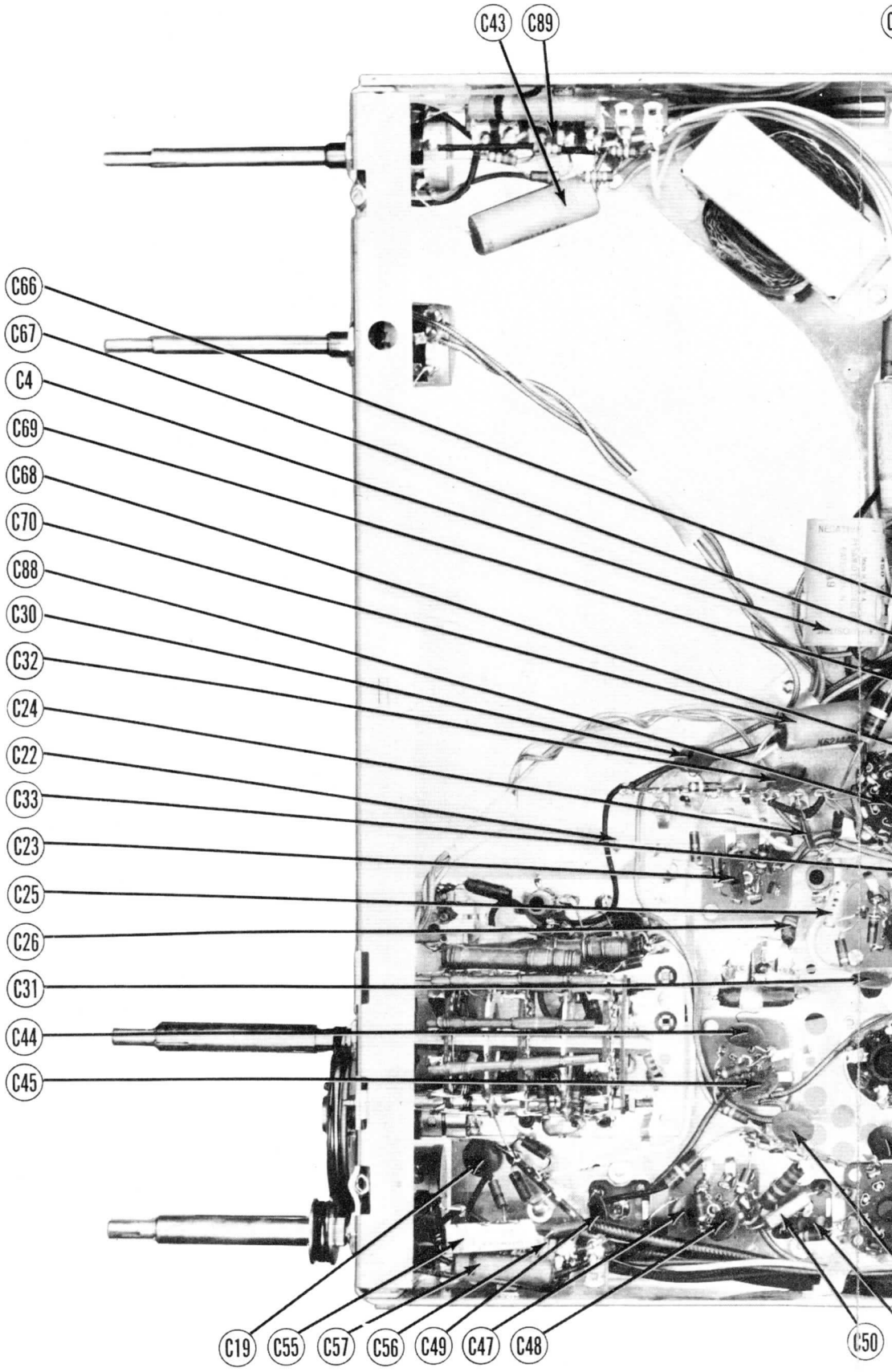
1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.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



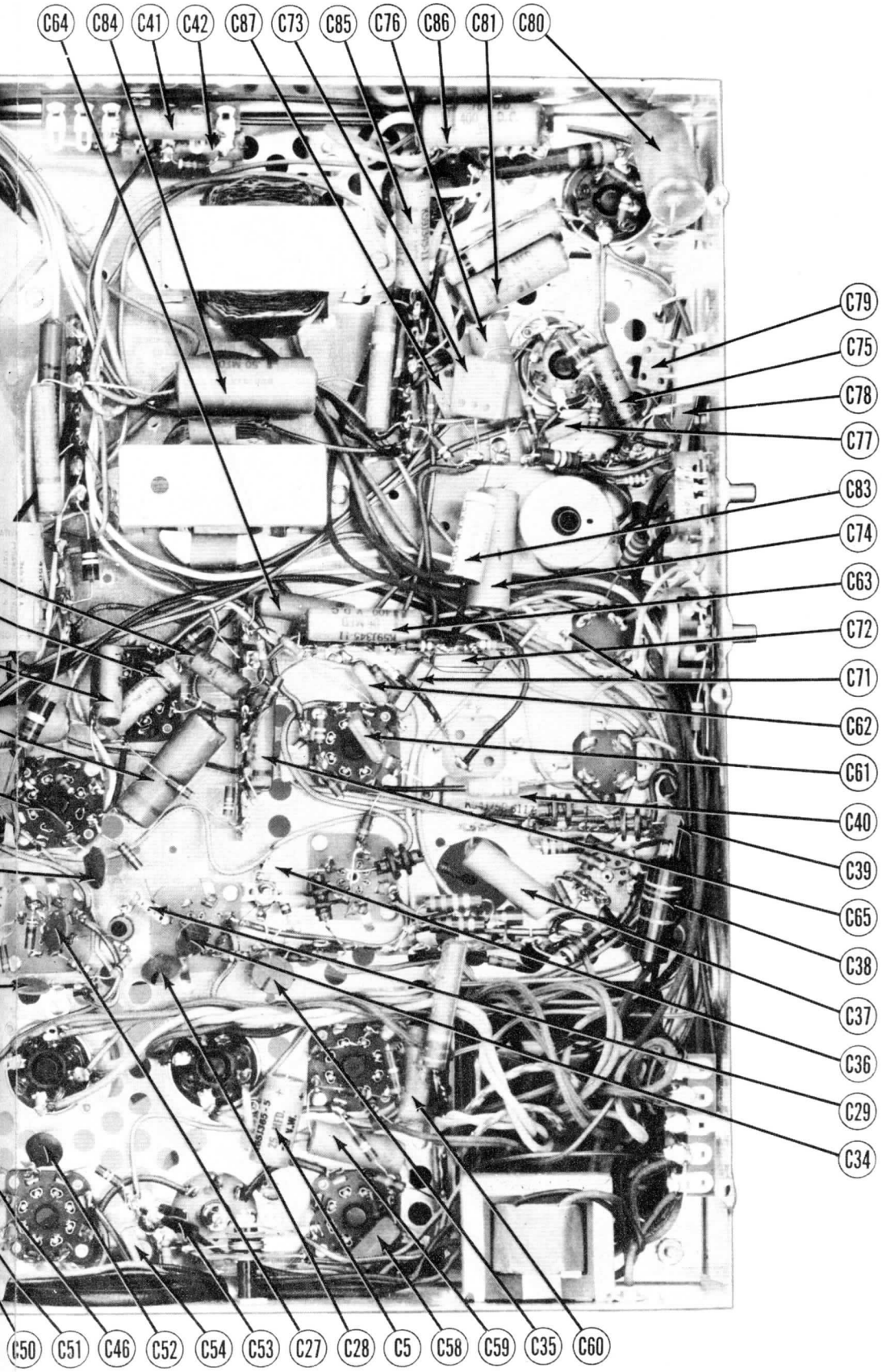
RF TUNER-RIGHT SIDE



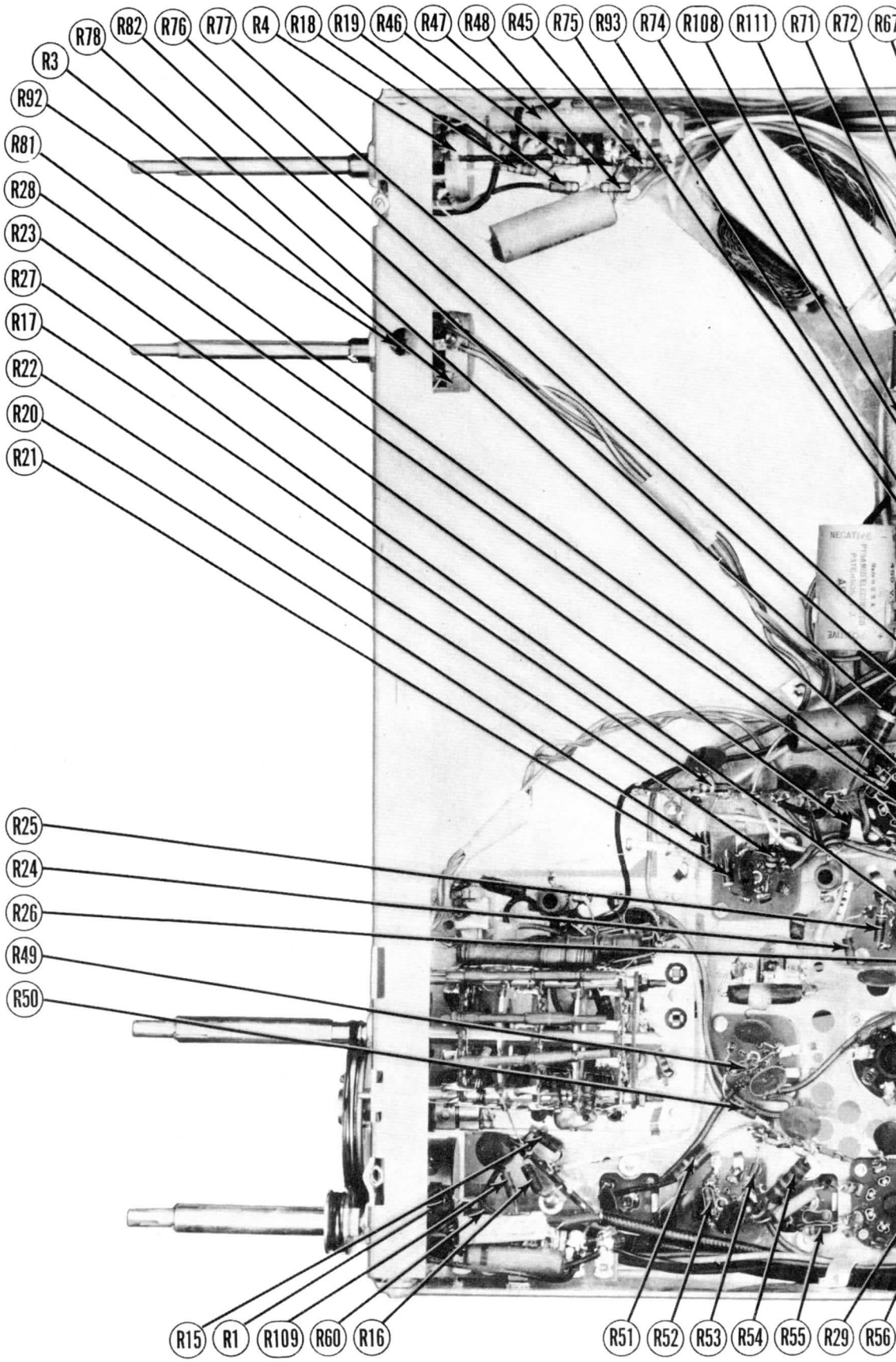
RF TUNER-LEFT SIDE



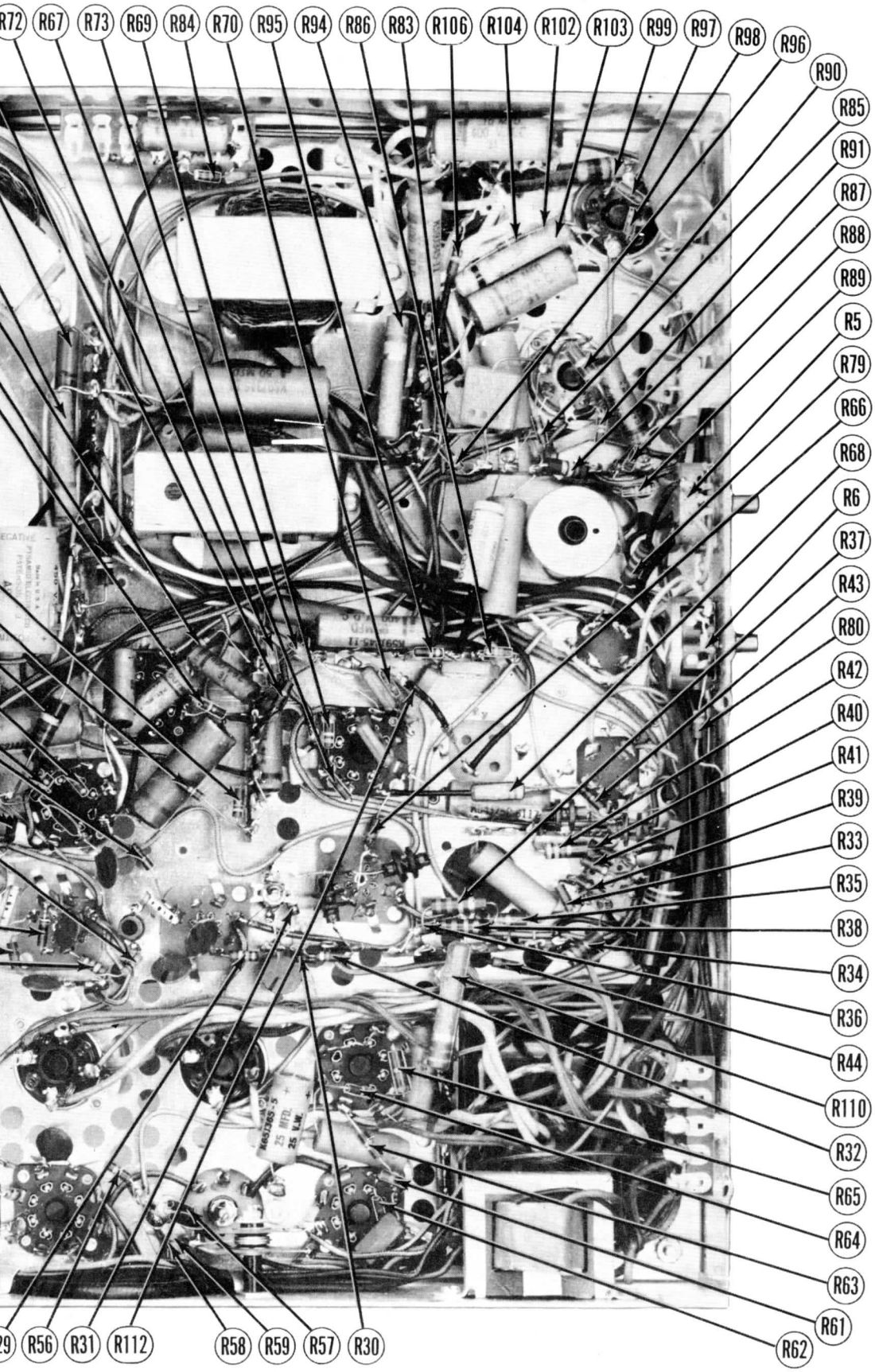
CHASSIS BOTTOM VIEW-CA



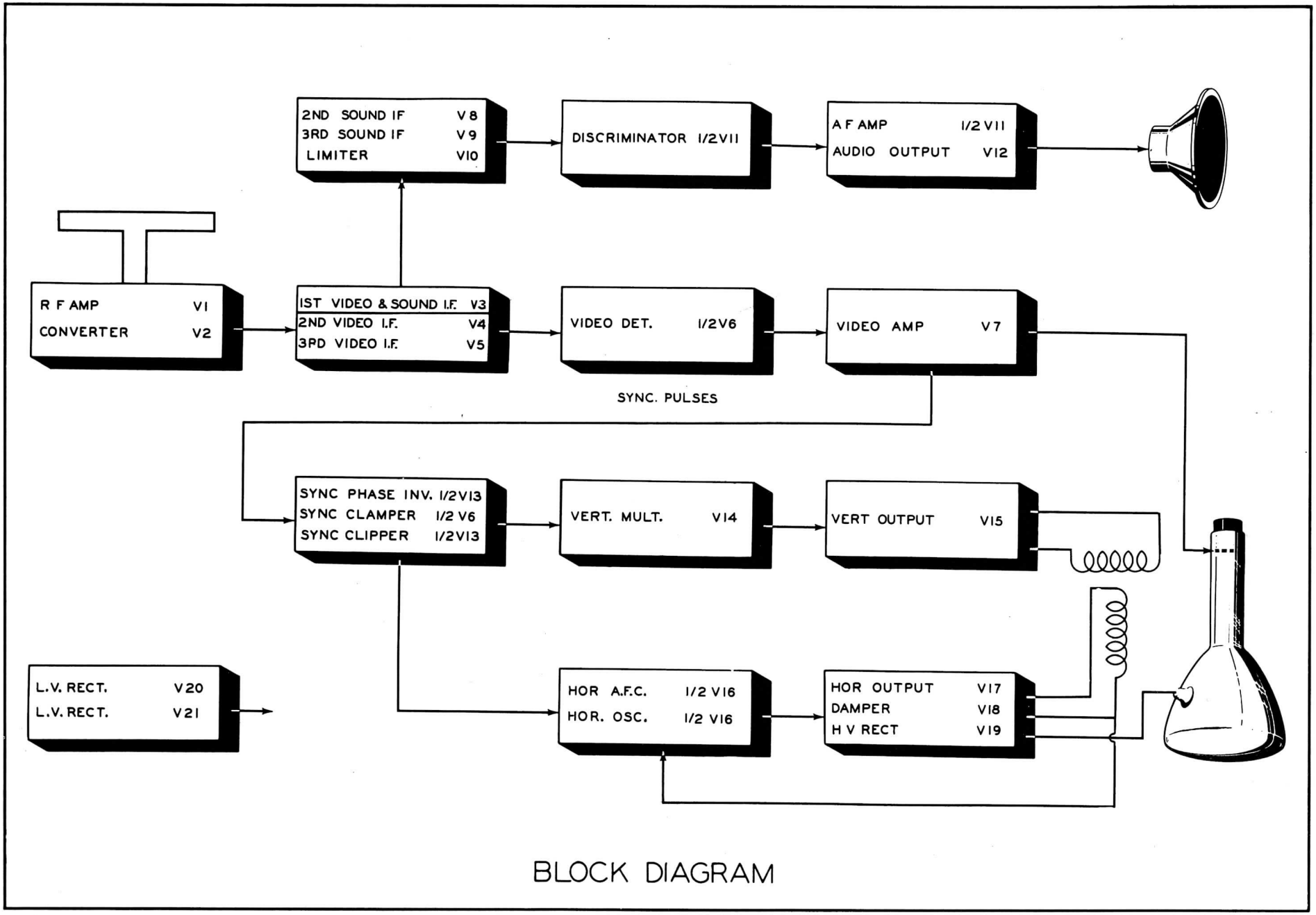
CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-RE



- RESISTOR IDENTIFICATION



BLOCK DIAGRAM

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: G. E. PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amp.	6AU6	6AU6	7BK	
V2	Converter	12AT7	12AT7		
V3	1st Video & Sound IF	6AU6	6AU6	7BK	
V4	2nd Video IF	6AU6	6AU6	7BK	
V5	3rd Video IF	6AU6	6AU6	7BK	
V6	Video Det.-Sync Clamper	6AL5	6AL5	6BT	
V7	Video Amp.	12AU7	12AU7	9A	
V8	2nd Sound IF	6AU6	6AU6	7BK	
V9	3rd Sound IF	6AU6	6AU6	7BK	
V10	Limiter	6SH7	6SH7	8BK	
V11	Disc.-AF Amp.	6AQ7GT	6AQ7GT	8CK	
V12	Audio Output	6K6GT	6K6GT	7S	
V13	Sync. Phase Inverter-Sync. Clipper	6SN7GT	6SN7GT	8BD	
V14	Vert. Mult.	6SN7GT	6SN7GT	8BD	
V15	Vert. Output	6V6GT	6V6GT	7AC	
V16	Hor. AFC-Hor. Oscillator	6SN7GT	6SN7GT	8BD	
V17	Hor. Output	6BG6G	6BG6G	5T	
V18	Damper	5V4G	5V4G	5L	
V19	HV Rect.	1B3GT	1B3GT	3C	
V20	LV Rect.	5U4G	5U4G	5T	
V21	LV Rect.	5Y3GT	5Y3GT	5T	
V22	Picture Tube	10BP4	10BP4		

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: CAP.	RATING: VOLT	REPLACEMENT DATA: G.E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	30	450	RCE-070	AF862J4A	UP11DJ				◓ Filter
B	30	450		PRS50/100	991				■ Filter
C	15	450							▲ Decoupling
D	100	50							Vert. Output Cath. Byp. *
C2A	15	450	RCE-084	AFH3666J	UP11DJ				◓ Filter
B	30	450			1010				■ Filter
C	30	450							▲ Filter
D	30	450							Filter †
C3	2000	6	RCE-083	PRS6/2000	BRH-620		DY-2000-15	TVL-43	"
C4	20	450	RCE-093	PRS450/20	BR2045			TVA-22	Vert. Output Plate Dec.
C5	25	25	UCE-065	PRS25/25	BR252A			TVA-6	Output Cath. Bypass
C6	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	RF Coupling
C7	1500		RCW-026			GP2L-0015			RF Cath. Bypass
C8	47		RCW-1052			GP1K-50			RF Coupling
C9	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	RF Bypass
C10	47		RCW-2010			N750L-47			Fixed Trimmer
C11	1500		RCW- 026			GP2L-0015			Osc. Plate Bypass
C12	12		RCW-2006			GP1K-15			Osc. Grid Cap.
C13	6		RCW-2030						Osc. Feedback
C14	1.5		RCW-1045						Osc. Coupling
C15	47		RCW-1052			GP1K-50			RF Coupling
C16	5		RCW-2035			NP0K-5			Fixed Trimmer
C17	12	500	UCU-1056						Fixed Padder
C18	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Conv. Plate Decoupling
C19	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Bias Filter
C20	1500		RCW-026			GP2L-0015			RF Fil. Bypass
C21	5000		RCW-3014						Osc. Fil. Bypass
C22	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	IF Coupling
C23	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	1st V. IF Screen Byp.
C24	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	1st V. IF Plate Decoup.
C25	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	IF Coupling
C26	2.5		RCW-3017						S. IF Coupling
C27	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	2nd V. IF Screen Byp.
C28	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	2nd V. IF Plate Dec.
C29	100		RCW-1047	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	IF Coupling
C30	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Bias Filter
C31	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	" "
C32	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	RF Bypass
C33	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Bias Filter
C34	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	3rd V. IF Screen Byp.
C35	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	3rd V. IF Plate Dec.
C36	6		RCW-1002						IF Coupling
C37	.05	200	UCC-635	P288-05	GT2S5		ST-4-05	TM-15	Video Coupling
C38	.047	600	RCN-014	P688-047	GT6S5		ST-6-05	TM-15	" "
C39	390	500	UCU-1542	1468-0004	5W5T4	GP2K-500	MO5 -34	1FM-34	V. Amp. Cath. Byp.
C40	.05	600	UCC-635	P688-05	GT6S5		ST-6-05	TM-15	Sync. Coupling
C41	.02	600	UCC-631	P688-02	GT6S2		ST-6-02	TM-12	Retrace Blanking Coup.
C42	.05	400	UCC-635	P488-05	GT4S5		ST-4-05	TM-15	Voltage Divider
C43	.2	200	UCC-014	P488-22	GT4P2		ST-4-2	TC-2	Brightness Cont. Byp.
C44	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	2nd S. IF Cath. Byp.
C45	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	2nd S. IF Screen Byp.
C46	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	2nd S. IF Plate Dec.
C47	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	3rd S. IF Cath. Bypass
C48	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	3rd S. IF Screen Byp.
C49	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	RF Bypass
C50	100	500	UCU-1528	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	IF Coupling
C51	47		RCW-1047	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	Limiter Grid Filter
C52	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Limiter Screen Bypass
C53	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Limiter Plate Dec.
C54	150	500	UCU-1532	1468-00015	5W5T15	GP2K-150	MO.5-315	1FM-315	De-emphasis
C55	.01	200	UCC-630	P488-01	GT2S1	GP2-335-01	ST-4-01	TM-11	Audio Coupling
C56	.01	200	UCC-630	P488-01	GT2S1	GP2-335-01	ST-4-01	TM-11	Tone Comp.
C57	.02	200	UCC-631	P488-02	GT2S2		ST-4-02	TM-12	Audio Coupling
C58	390	500	UCU-1542	1468-0004	5W5T4	GP2K-300	MO.5-34	1FM-34	AF Plate Bypass
C59	.01	600	UCC-630	P688-01	GT6S1	GP2-335-01	ST-6-01	TM-11	Audio Coupling
C60	.005	600	UCC-625	P688-005	GT6D5		ST-6-005	TM-25	Output Plate Bypass
C61	100	500	UCU-1528	1468-0001	5W5T1	GP1K-100	MO.5-31	1FM-31	Sync. Coupling
C62	390	500	UCU-1542	1468-0004	5W5T4	GP2K-500	MO.5-34	1FM-34	Sync. Clipper Cath. Byp.
C63	.05	400	UCC-635	P488-05	GT6S5		ST-4-05	TM-15	Integrator Net.

CAPACI

ITEM No.	RATING: CAP.	RATING: VOLT	REPLACEMENT D: G.E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	P
C64	.01	400	UCC-630	P488-01	GT4S1	GP2
C65	.01	400	UCC-630	P488-01	GT4S1	GP2
C66	.001	400	UCC-620	P688-001	GT6D1	GP2
C67	.002	600	UCC-621	P688-002	GT6D2	GP2
C68	.06	600	RCC-095	684-06		
C69	.001	400	UCC-620	P688-001	GT6D1	GP2
C70	.1	600	UCC-640	P688-1	GT6P1	
C71	120	500	UCC-1530			
C72	120	500	UCC-1530			
C73	2200	500	UCU-2560	1467-002	1W5D2	
C74	.2	200	UCC-014	P488-22	GT4P2	
C75	.002	200	UCC-621	P688-002	GT6D2	GP2
C76	.05	600	UCC-635	P688-05	GT6S5	
C77	180	500	UCU-2534			
C78	2200	500	UCU-2560			
C79	390	500	UCU-1542	1468-0004	5W5T4	
C80	.5	200	RCC-016	P288-5	GT2P5	
C81	.1	600	UCC-640	P688-1	GT6P1	
C82	.0022	1000	RCN-019			
C83	.01	600	UCC-630	P688-01	GT6S1	GP2
C84	.5	200	RCC-016	P288-5	GT2P5	
C85	.05	400	UCC-635	P488-05	GT4S5	
C86	.1	400	UCC-640	P488-1	GT4P1	
C87	4	800	RCN-020			
C88	5000		RCW-3014	1467-005	1D5D5	GP2
C89	.05	200	UCC-635	P288-05	GT2S5	
C90	500	20000	RCN-011			

* Some models may use 50MFD in this application.

CONTI

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: G. E. PART No.	IRC PART No.	CLAROSTA PART No
R1	2 Meg.	½	RRC-091		
R2	1000Ω	4	RRC-088		58-1000
R3A	50KΩ	½	RRC-090		
B	50KΩ	½			
R4A	7500Ω	½	RRC-089		
B	500KΩ	½			
R5A	100KΩ	½	RRC-087	D11-128	M-49-S
B	Shaft		Not Req.	A	Not Req.
R6	1000Ω	2	RRC-086	W-1000	10-1000

RESIS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: G. E. PART No.	IRC PART No.	A
R7	200Ω	½	URD-1032		
R8	6200Ω	1	URE-1068		
R9	5600Ω	1	URE-1067		
R10	220KΩ	½	URD-1105		
R11	22KΩ	½	URD-1082		
R12	27KΩ	1	URE-083		
R13	3000Ω	1	URE-1060		
R14	22KΩ	½	URD-1081		
R15	1 Meg.	½	URD-121	BTS-1 Meg.	
R16	1 Meg.	½	URD-121	BTS-1 Meg.	
R17	100KΩ	½	URD-097	BTS-100K	
R18	82KΩ	½	URD-1095	BTS-82K	
R19	56KΩ	½	URD-091	BTS-56K	
R20	2700Ω	½	URD-1059	BTS-2700-5%	
R21	47Ω	½	URD-1017		
R22	24KΩ	½	URD-1082		
R23	1000Ω	½	URD-049	BTS-1000	
R24	1500Ω	½	URD-1054	BTS-1500	
R25	47Ω	½	URD-1017		
R26	24KΩ	½	URD-1082		
R27	1000Ω	½	URD-049	BTS-1000	
R28	2700Ω	½	URD-1059	BTS-2700-5%	
R29	24KΩ	½	URD-1082		
R30	1000Ω	½	URD-049	BTS-1000	
R31	39KΩ	½	URD-088	BTS-39K-5%	
R32	5100Ω	½	URD-1066		
R33	1 Meg.	½	URD-121	BTS-1 Meg.	
R34	4700Ω	1	URE-1066	BTA-4700-5%	
R35	5100Ω	1	URE-1066		
R36	5100Ω	1	URE-1066		
R37	22KΩ	1	URE-1081	BTA-22K-5%	
R38	22KΩ	1	URE-1081	BTA-22K-5%	
R39	5600Ω	½	URD-1067	BTS-5600-5%	
R40	1 Meg.	½	URD-1066	BTS-1 Meg.	
R41	120Ω	½	URD-1027		
R42	3300Ω	1	URE-1085	BTA-3300-5%	
R43	1000Ω	½	URD-1049	BTS-1000-5%	
R44	1 Meg.	½	URD-121	BTS-1 Meg.	
R45	24KΩ	½	URD-1082		
R46	270KΩ	½	URD-107	BTS-270K	
R47	20KΩ	2	URF-1080		
R48	4700Ω	½	URD-1065	BTS-4700-5%	
R49	120Ω	½	URD-1027		
R50	56KΩ	½	URD-091	BTS-56K	
R51	22KΩ	1	URE-1081	BTA-22K-5%	
R52	120Ω	½	URD-1027		
R53	150KΩ	½	URD-101	BTS-150K	
R54	22KΩ	1	URE-1081	BTA-22K-5%	
R55	56KΩ	½	URD-091	BTS-56K	
R56	220KΩ	½	URD-105	BTS-220K	
R57	1000Ω	½	URD-049	BTS-1000	
R58	68KΩ	½	URD-093	BTS-68K	
R59	68KΩ	½	URD-093	BTS-68K	
R60	82KΩ	½	URD-1095	BTS-82K-5%	
R61	1000Ω	½	URD-049	BTS-1000	
R62	10 Meg.	½	URD-145	BTS-10 Meg.	
R63	220KΩ	½	URD-105	BTS-220K	
R64	470KΩ	½	URD-113	BTS-470K	
R65	750Ω	1	URE-1046		

PARTS LIST AND DESCRIPTIONS

CAPACITORS

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA G.E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C64	.01	400	UCC-630	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Integrator Net.
C65	.01	400	UCC-630	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	" "
C66	.001	400	UCC-620	P688-001	GT6D1	GP2L-001	ST-6-001	TM-21	Vert. Sync. Coupling
C67	.002	600	UCC-621	P688-002	GT6D2	GP2M-002	ST-6-002	TM-22	Vert. M.V. Feedback
C68	.06	600	RCC-095	684-06			ST-6-06	TM-16	" " "
C69	.001	400	UCC-620	P688-001	GT6D1	GP2L-001	ST-6-001	TM-21	Vert. M.V. Grid Cap.
C70	.1	600	UCC-640	P688-1	GT6P1		ST-6-1	TM-1	Vert. Discharge
C71	120	500	UCC-1530						Hor. Sync. Coupling
C72	120	500	UCC-1530						Voltage Divider
C73	2200	500	UCU-2560	1467-002	1W5D2		MW.5-22	1FM-22	Sync. Coupling
C74	.2	200	UCC-014	P488-22	GT4P2		ST-4-2	TC-2	AFC Filter
C75	.002	200	UCC-621	P688-002	GT6D2	GP2M-002	ST-6-002	TM-22	" "
C76	.05	600	UCC-635	P688-05	GT6S5		ST-6-05	TM-15	AFC Plate Bypass
C77	180	500	UCU-2534						Hor. Grid Cap.
C78	2200	500	UCU-2560						Hor. Discharge
C79	390	500	UCU-1542	1468-0004	5W5T4		M0.5-34	1FM-34	Hor. Sweep Coupling
C80	.5	200	RCC-016	P288-5	GT2P5		ST-2-5	TC-5	Hor. Output Cath. Byp.
C81	.1	600	UCC-640	P688-1	GT6P1		ST-6-1	TM-1	Hor. Output Screen Byp.
C82	.0022	1000	RCN-019						Pulse Coupling
C83	.01	600	UCC-630	P688-01	GT6S1	GP2-335-01	ST-6-01	TM-11	ACC Anode Bypass
C84	.5	200	RCC-016	P288-5	GT2P5		ST-2-5	TC-5	Hor. Coupling
C85	.05	400	UCC-635	P488-05	GT4S5		ST-4-05	TM-15	Damper Filter
C86	.1	400	UCC-640	P488-1	GT4P1		ST-4-1	TM-1	"
C87	4	800	RCN-020						AFC Coupling
C88	5000		RCW-3014	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	Vert. Output Fil. Byp.
C89	.05	200	UCC-635	P288-05	GT2S5		ST-4-05	TM-15	Contrast Cont. Byp.
C90	500	20000	RCN-011						H.V. Filter

* Some models may use 50MFD in this application.

† Some models may use 10MFD in this application.

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA G. E. PART No.	IRC PART No.	CLAROSTAT PART No.	INSTALLATION NOTES
R1	2 Meg.	½	RRC-091			Volume control and switch tapped @ 500KΩ
R2	1000Ω	4	RRC-088		58-1000	Focus control
R3A	50KΩ	½	RRC-090			Horiz. hold control
B	50KΩ	½				Vert. hold control — Dual concentric
R4A	7500Ω	½	RRC-089			Brightness control
B	500KΩ	½				Contrast control — Dual concentric
R5A	100KΩ	½	RRC-087	D11-128	M-49-S	Vert. Size control
B	Shaft		Not Req.	A	Not Req.	Attach to R5A Per Instructions
R6	1000Ω	2	RRC-086	W-1000	10-1000	Vert. Linearity control

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA G. E. PART No.	IRC PART No.	IDENTIFICATION CODES All resistors are ± 10% unless otherwise stated.	
R7	200Ω	½	URD-1032		RF Cathode	5%
R8	6200Ω	1	URE-1068		RF Plate	5%
R9	5600Ω	1	URE-1067		" "	5%
R10	220KΩ	½	URD-1105		Conv Grid	
R11	22KΩ	½	URD-1082		Conv. Plate Coil Shunt	5%
R12	27KΩ	1	URE-083		Conv. Plate Decoupling	
R13	3000Ω	1	URE-1060		Osc. Plate	5%
R14	22KΩ	½	URD-1081		Osc. Grid	
R15	1 Meg.	½	URD-121	BTS-1 Meg.	Bias Network	20%
R16	1 Meg.	½	URD-121	BTS-1 Meg.	" "	20%
R17	100KΩ	½	URD-097	BTS-100K	" "	
R18	82KΩ	½	URD-1095	BTS-82K	" "	
R19	56KΩ	½	URD-091	BTS-56K	" "	
R20	2700Ω	½	URD-1059	BTS-2700-5%	1st IF Grid	5%
R21	47Ω	½	URD-1017		1st IF Cathode	5%
R22	24KΩ	½	URD-1082		1st IF Screen	5%
R23	1000Ω	½	URD-049	BTS-1000	1st IF Plate Decoupling	20%
R24	1500Ω	½	URD-1054	BTS-1500	2nd Video IF Grid	
R25	47Ω	½	URD-1017		2nd Video IF Cathode	5%
R26	24KΩ	½	URD-1082		2nd Video IF Screen	5%
R27	1000Ω	½	URD-049	BTS-1000	2nd Video IF Plate Decoupling	20%
R28	2700Ω	½	URD-1059	BTS-2700-5%	3rd Video IF Grid	5%
R29	24KΩ	½	URD-1082		3rd Video IF Screen	5%
R30	1000Ω	½	URD-049	BTS-1000	3rd Video IF Decoupling	20%
R31	39KΩ	½	URD-088	BTS-39K-5%	3rd Video IF Trans. Shunt	5%
R32	5100Ω	½	URD-1066		Video Det. Load	5%
R33	1 Meg.	½	URD-121	BTS-1 Meg.	Video Amp. Grid	20%
R34	4700Ω	1	URE-1066	BTA-4700-5%	Video Amp. Plate	5%
R35	5100Ω	1	URE-1066		" " "	5%
R36	5100Ω	1	URE-1066		" " "	5%
R37	22KΩ	1	URE-1081	BTA-22K-5%	" " "	5%
R38	22KΩ	1	URE-1081	BTA-22K-5%	" " "	5%
R39	5600Ω	½	URD-1067	BTS-5600-5%	Voltage Divider	5%
R40	1 Meg.	½	URD-1066	BTS-1 Meg.	Video Amp. Grid	20%
R41	120Ω	½	URD-1027		Video Amp. Cathode	5%
R42	3300Ω	1	URE-1085	BTA-3300-5%	Video Amp. Plate	5%
R43	1000Ω	½	URD-1049	BTS-1000-5%	" " "	5%
R44	1 Meg.	½	URD-121	BTS-1 Meg.	Filament Isolation	20%
R45	24KΩ	½	URD-1082		Picture Tube Cathode	5%
R46	270KΩ	½	URD-107	BTS-270K	Bias Network	
R47	20KΩ	2	URF-1080		Voltage Divider	5%
R48	4700Ω	½	URD-1065	BTS-4700-5%	"	5%
R49	120Ω	½	URD-1027		2nd Sound IF Cathode	5%
R50	56KΩ	½	URD-091	BTS-56K	2nd Sound IF Screen	
R51	22KΩ	1	URE-1081	BTA-22K-5%	2nd Sound IF Plate Decoupling	5%
R52	120Ω	½	URD-1027		3rd Sound IF Cathode	5%
R53	150KΩ	½	URD-101	BTS-150K	3rd Sound IF Screen	
R54	22KΩ	1	URE-1081	BTA-22K-5%	3rd Sound IF Plate	5%
R55	56KΩ	½	URD-091	BTS-56K	Limiter Grid	
R56	220KΩ	½	URD-105	BTS-220K	Limiter Screen	
R57	1000Ω	½	URD-049	BTS-1000	Limiter Plate Decoupling	20%
R58	68KΩ	½	URD-093	BTS-68K	De-emphasis	20%
R59	68KΩ	½	URD-093	BTS-68K	Tone Compensation	20%
R60	82KΩ	½	URD-1095	BTS-82K-5%	" "	5%
R61	1000Ω	½	URD-049	BTS-1000	" "	20%
R62	10 Meg.	½	URD-145	BTS-10 Meg.	AF Grid	20%
R63	220KΩ	½	URD-105	BTS-220K	AF Plate	
R64	470KΩ	½	URD-113	BTS-470K	Output Grid	20%
R65	750Ω	1	URE-1046		Output Cathode	5%

ITEM No.	RATING RESISTANCE	RATING WATTS	RE G.E. PART
R66	2.2 Meg.	½	URD-12
R67	1000Ω	½	URD-04
R68	15KΩ	1	URE-07
R69	3.9 Meg.	½	URD-13
R70	6800Ω	½	URD-06
R71	1500Ω	½	URD-10
R72	8200Ω	½	URD-07
R73	8200Ω	½	URD-07
R74	75KΩ	½	URD-10
R75	220KΩ	½	URD-11
R76	82KΩ	½	URD-10
R77	24KΩ	½	URD-10
R78	2.2 Meg.	½	URD-11
R79	27KΩ	1	URE-08
R80	470Ω	½	URD-10
R81	100KΩ	½	URD-09
R82	820Ω	2	URF-04
R83	1600Ω	½	URD-10
R84	2700Ω	½	URD-10
R85	1 Meg.	½	URD-11
R86	18KΩ	½	
R87	180KΩ	1	URD-11
R88	82KΩ	½	URD-10
R89	33KΩ	½	URD-08
R90	3.3 Meg.	1	URE-13
R91	47KΩ	½	URD-08
R92	24KΩ	½	URD-10
R93	100KΩ	1	URE-09
R94	82KΩ	2	URF-10
R95	100KΩ	½	URD-09
R96	150KΩ	½	URD-10
R97	1 Meg.	½	URD-12
R98	330Ω	½	URD-03
R99	82Ω	2	URF-10
R100	33Ω	1	URE-01
R101	470KΩ	1	URD-11
R102	30KΩ	2	URF-08
R103	30KΩ	2	URF-08
R104	120KΩ	½	URD-09
R105	470KΩ	½	URD-11
R106	560KΩ	½	URD-11
R107	4700Ω	½	URD-06
R108	3300Ω	2	URF-06
R109	1 Meg.	½	URD-12
R110	2200Ω	2	URF-10
R111	560Ω	7	RRW-02
R112	1Ω	7	RRW-03

Note 1. Some models have th

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2
T1	117VAC @ 2.1A	750VCT @ .130 ADC & 670VCT @ .115 ADC	5VAC @ 3A SEC. 4 6.3VAC @ 2.6A

TR

ITEM No.	RATING DC RESISTANCE PRI.	RATING DC RESISTANCE SEC.	G. E. PART N
T2	120Ω Tap. @ 35Ω		RTM-003
T3	38Ω	SEC. 1 230Ω SEC. 2 1Ω SEC. 3 0Ω	RTO-067
T4	730Ω	11Ω	RTO-053
T5A	15Ω		RLD-006
B	28Ω		
T6	1000Ω		RLF-013

TR

ITEM No.	RATING IMPEDANCE PRI.	RATING IMPEDANCE SEC.	RATING DC RES. PRI.	RATING DC RES. SEC.
T7	7400Ω	3.2Ω	580Ω	.6Ω

ITEM No.	RATING FIELD RES.	RATING V. C. IMP.
SP1A	PM	3.2Ω
B	PM	3.2Ω
	CONE DIA.	V. C. DIA.
SP2A	9 3/4"	3/4"
B	7 5/8"	

NOTES

r Electrolytic
: Capacitors.

RAGUE RT No.	IDENTIFICATION CODES AND INSTALLATION NOTES
	◓ Filter
	■ Filter
	▲ Decoupling
	Vert. Output Cath. Byp. *
	◓ Filter
	■ Filter
	▲ Filter
	Filter †
L-43	"
A-22	Vert. Output Plate Dec.
A-6	Output Cath. Bypass
M-31	RF Coupling
	RF Cath. Bypass
	RF Coupling
M-25	RF Bypass
	Fixed Trimmer
	Osc. Plate Bypass
	Osc. Grid Cap.
	Osc. Feedback
	Osc. Coupling
	RF Coupling
	Fixed Trimmer
	Fixed Padder
M-25	Conv. Plate Decoupling
M-25	Bias Filter
	RF Fil. Bypass
	Osc. Fil. Bypass
M-31	IF Coupling
M-25	1st V. IF Screen Byp.
M-25	1st V. IF Plate Decoup.
M-31	IF Coupling
	S. IF Coupling
M-25	2nd V. IF Screen Byp.
M-25	2nd V. IF Plate Dec.
M-31	IF Coupling
M-25	Bias Filter
M-25	" "
M-25	RF Bypass
M-25	Bias Filter
M-25	3rd V. IF Screen Byp.
M-25	3rd V. IF Plate Dec.
	IF Coupling
-15	Video Coupling
-15	" "
M-34	V. Amp. Cath. Byp.
-15	Sync. Coupling
-12	Retrace Blanking Coup.
-15	Voltage Divider
-2	Brightness Cont. Byp.
M-25	2nd S. IF Cath. Byp.
M-25	2nd S. IF Screen Byp.
M-25	2nd S. IF Plate Dec.
M-25	3rd S. IF Cath. Bypass
M-25	3rd S. IF Screen Byp.
M-25	RF Bypass
M-31	IF Coupling
M-45	Limiter Grid Filter
M-25	Limiter Screen Bypass
M-25	Limiter Plate Dec.
M-315	De-emphasis
-11	Audio Coupling
-11	Tone Comp.
-12	Audio Coupling
M-34	AF Plate Bypass
-11	Audio Coupling
-25	Output Plate Bypass
M-31	Sync. Coupling
M-34	Sync. Clipper Cath. Byp.
-15	Integrator Net.

ESCRIPTIONS

RS

E No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
5-01	ST-4-01	TM-11	Integrator Net.
5-01	ST-4-01	TM-11	" "
01	ST-6-001	TM-21	Vert. Sync. Coupling
02	ST-6-002	TM-22	Vert. M.V. Feedback
	ST-6-06	TM-16	" " "
01	ST-6-001	TM-21	Vert. M.V. Grid Cap.
	ST-6-1	TM-1	Vert. Discharge
			Hor. Sync. Coupling
			Voltage Divider
	MW.5-22	1FM-22	Sync. Coupling
	ST-4-2	TC-2	AFC Filter
02	ST-6-002	TM-22	" "
	ST-6-05	TM-15	AFC Plate Bypass
			Hor. Grid Cap.
			Hor. Discharge
	MO.5-34	1FM-34	Hor. Sweep Coupling
	ST-2-5	TC-5	Hor. Output Cath. Byp.
	ST-6-1	TM-1	Hor. Output Screen Byp.
			Pulse Coupling
5-01	ST-6-01	TM-11	ACC Anode Bypass
	ST-2-5	TC-5	Hor. Coupling
	ST-4-05	TM-15	Damper Filter
	ST-4-1	TM-1	" "
			AFC Coupling
05	MW.5-25	1FM-25	Vert. Output Fil. Byp.
	ST-4-05	TM-15	Contrast Cont. Byp.
			H.V. Filter

† Some models may use 10MFD in this application.

LS

INSTALLATION NOTES	
Volume control and switch tapped @ 500KΩ	
Focus control	
Horiz. hold control	
Vert. hold control	Dual concentric
Brightness control	
Contrast control	Dual concentric
Vert. Size control	
Attach to R5A Per Instructions	
Vert. Linearity control	

RS

IDENTIFICATION CODES	
resistors are ± 10% unless otherwise stated.	
Cathode	5%
Plate	5%
"	5%
v Grid	
v. Plate Coil Shunt	5%
v. Plate Decoupling	
. Plate	5%
. Grid	
s Network	20%
"	20%
"	
"	
"	
IF Grid	5%
IF Cathode	5%
IF Screen	5%
IF Plate Decoupling	20%
Video IF Grid	
Video IF Cathode	5%
Video IF Screen	5%
Video IF Plate Decoupling	20%
Video IF Grid	5%
Video IF Screen	5%
Video IF Decoupling	20%
Video IF Trans. Shunt	5%
eo Det. Load	5%
eo Amp. Grid	20%
eo Amp. Plate	5%
" "	5%
" "	5%
" "	5%
" "	5%
tage Divider	5%
eo Amp. Grid	20%
eo Amp. Cathode	5%
eo Amp. Plate	5%
" "	5%
ament Isolation	20%
cure Tube Cathode	5%
s Network	
tage Divider	5%
"	5%
Sound IF Cathode	5%
Sound IF Screen	
Sound IF Plate Decoupling	5%
Sound IF Cathode	5%
Sound IF Screen	
Sound IF Plate	5%
iter Grid	
iter Screen	
iter Plate Decoupling	20%
emphasis	20%
e Compensation	20%
"	5%
"	20%
Grid	20%
Plate	
out Grid	20%
out Cathode	5%

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA G.E. PART No.	REPLACEMENT DATA IRC PART No.	IDENTIFICATION CODES	
R66	2.2 Meg.	½	URD-129	BTS-2.2 Meg.	Sync. Phase Inv. Grid	20%
R67	1000Ω	½	URD-049	BTS-1000	Sync. Phase Inv. Cathode	20%
R68	15KΩ	1	URE-077	BTA-15K	Sync. Phase Inv. Plate	
R69	3.9 Meg.	½	URD-135	BTS-3.9 Meg.	Sync. Clipper Grid	
R70	6800Ω	½	URD-069	BTS-6800	Sync. Clipper Cathode	
R71	1500Ω	½	URD-1054	BTS-1500	Sync. Clipper Plate	
R72	8200Ω	½	URD-071	BTS-8200	Integrator	
R73	8200Ω	½	URD-071	BTS-8200	Integrator	
R74	75KΩ	½	URD-1094		Vert. Multi. Grid	5%
R75	220KΩ	½	URD-1105	BTS-220K-5%	Vert. Multi. Plate	5%
R76	82KΩ	½	URD-1095	BTS-82K-5%	Vert. Multi. Grid	5%
R77	24KΩ	½	URD-1082		" " See Note 1	
R78	2.2 Meg.	½	URD-1129	BTS-2.2Meg-5%	Vert. Multi. Plate	5%
R79	27KΩ	1	URE-083	BTA-27K	Voltage Dropping	
R80	470Ω	½	URD-1041	BTS-470	Vert. Output Cathode	
R81	100KΩ	½	URD-097	BTS-100K	Vert. Output Trans. Shunt	
R82	820Ω	2	URF-047	BT-2-820	Filter	
R83	1600Ω	½	URD-1054		Vert. Output Trans. Shunt	5%
R84	2700Ω	½	URD-1059	BTS-2700	Integrator Network	
R85	1 Meg.	½	URD-1121	BTS-1 Meg-5%	Horiz. AFC Grid	5%
R86	18KΩ	½		BTS-18K	Horiz. AFC Filter	
R87	180KΩ	1	URD-1103	BTA-180K	Horiz. AFC Cathode	
R88	82KΩ	½	URD-1095	BTS-82K-5%	Voltage Divider	5%
R89	33KΩ	½	URD-085	BTS-33K-5%	" "	5%
R90	3.3 Meg.	1	URE-133	BTA-3.3 Meg.	" "	
R91	47KΩ	½	URD-089	BTS-47K	Horiz. Osc. Grid	
R92	24KΩ	½	URD-1082		Voltage Divider	
R93	100KΩ	1	URE-097	BTA-100K	" "	
R94	82KΩ	2	URF-1095	BT-2-82K	Horiz. Osc. Plate	
R95	100KΩ	½	URD-097	BTS-100K	Filter	
R96	150KΩ	½	URD-101	BTS-150K	AFC Feedback	
R97	1 Meg.	½	URD-121	BTS-1 Meg.	Horiz. Output Grid	
R98	330Ω	½	URD-037	BTA-330	Parasitic Suppressor	
R99	82Ω	2	URF-1023		Horiz. Output Cathode	
R100	33Ω	1	URE-013		Parasitic Suppressor	
R101	470KΩ	1	URD-113		Current Limiting	
R102	30KΩ	2	URF-083	BT-2-27K-5%	Horiz. Output Screen	5%
R103	30KΩ	2	URF-083	BT-2-27K-5%	" " "	5%
R104	120KΩ	½	URD-099	BTS-120K-5%	" " "	5%
R105	470KΩ	½	URD-113		HV Filter	
R106	560KΩ	½	URD-115	BTS-560K-5%	Feedback Network	5%
R107	4700Ω	½	URD-065	BTS-4700-5%	Linearity Coil Shunt	20%
R108	3300Ω	2	URF-061	BT-2-3300	Horiz. Size Coil Shunt	20%
R109	1 Meg.	½	URD-121	BTS-1 Meg.	Isolation	20%
R110	2200Ω	2	URF-1057	BT-2-2200	Filter	
R111	560Ω	7	RRW-028		Focus Coil Shunt	
R112	1Ω	½	RRW-034	BW-½-1	Filament Dropping	

Note 1. Some models have this resistor shorted out.

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	RATING SEC. 3	REPLACEMENT DATA G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T1	117VAC @ 2.1A	750VCT @ .130 ADC & 670VCT @ .115 ADC	5VAC @ 3A SEC. 4 6.3VAC @ 2.6A	5VAC @ 2A SEC. 5 12.6VAC @ 3.6A	RTP-300			

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING DC RESISTANCE PRI.	RATING DC RESISTANCE SEC.	REPLACEMENT DATA G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	NOTES
T2	120Ω Tap. @ 35Ω		RTM-003				Hor. Block. Osc. Trans.
T3	38Ω	SEC. 1 230Ω SEC. 2 1Ω SEC. 3 0Ω	RTO-067				Hor. Output Trans.
T4	730Ω	11Ω	RTO-053	A-8115	TSO-1	A-3035	Vert. Output Trans.
T5A	15Ω		RLD-006				Hor. Deflection Yoke
B	28Ω						Vert. Deflection Yoke
T6	1000Ω		RLF-013				Focus Coil

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING IMPEDANCE PRI.	RATING IMPEDANCE SEC.	RATING DC RES. PRI.	RATING DC RES. SEC.	REPLACEMENT DATA G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	INSTALLATION NOTES
T7	7400Ω	3.2Ω	580Ω	.6Ω	RTO-052	A-3878	RO-13	A-2902	

SPEAKER

ITEM No.	RATING FIELD RES.	RATING V. C. IMP.	REPLACEMENT DATA G. E. PART No.	JENSEN PART No.	QUAM PART No.	NOTES
SP1A	PM	3.2Ω	ROP-018#	ST-120* MOD.P10-S	10A31	* Replace output trans. to match 6-8Ω voice coil. # Used in early production. Ø Used in late production.
B	PM	3.2Ω	UOP-867Ø			
	CONE DIA.	V. C. DIA.				
SP2A	9 3/4"	3/4"				
B	7 5/8"					

PARTS LIST AND DESCRIPTIONS (Continued)

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ~)	G. E. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.130A	160Ω	7 Henry	RLI-059	C-2309	R-8120	C-2993	
L2	.115A	160Ω	7 Henry	RLI-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	0Ω	0Ω	RLA-031		
L4	RF Choke	0Ω		RLI-006		
L5	RF Choke	.2Ω		RLI-003		
L6	RF Choke	0Ω		RLI-006		
L7	RF Plate, Conv. Grid & Osc. Coil	0Ω		RLC-069		Channel 2
L8	RF Plate, Conv. Grid & Osc.Coils	0Ω		RLC-070		Channel 3
L9	RF Plate, Conv. Grid & Osc.Coils	0Ω		RLC-071		Channel 4
L10	RF Plate, Conv. Grid & Osc.Coils	0Ω		RLC-072		Channel 5
L11	RF Plate, Conv. Grid & Osc.Coils	0Ω		RLC-073		Channel 6
L12	RF Plate & Conv. Grid Coils	0Ω		RLA-032		Channel 7
L13	RF Plate & Conv. Grid Coils	0Ω		RLA-032		Channel 8 -9
L14	RF Plate & Conv. Grid Coils	0Ω		RLA-032		Channel 10-11
L15	RF Plate & Conv. Grid Coils	0Ω		RLA-032		Channel 12-13
L16	Osc. Coil	0Ω		RLC-074		Channel 7
L17	Osc. Coil	0Ω		RLC-075		Channel 8-9
L18	Osc. Coil	0Ω		RLC-076		Channel 10-11
L19	Osc. Coil	0Ω		RLC-077		Channel 12-13
L20	RF Choke	1.2Ω		RLI-032		
L21	1st Video IF	.5Ω CT		RTL-081		
L22	RF Choke	.2Ω		RLI-005		Video Carrier-Set Trap
L23	2nd Video IF	.5Ω CT		RTL-082		
L24	Sound Take-Off Coil	.5Ω		RLI-061		
L25	3rd Video IF	.5Ω CT		RTL-083		
L26	4th Video IF	.6Ω CT		RTL-084		
L27	Peaking	6.3Ω		RLI-038		Inductance-165 Microhenries
L28	Peaking	7Ω		RLI-038		" " "
L29	Peaking	7Ω		RLI-038		" " "
L30	Peaking	7Ω		RLI-038		" " "
L31	1st Sound IF	.2Ω	.2Ω	RTL-090		Not used in early productions
L32	2nd Sound IF	.2Ω		RTL-085		
L33	Sound Disc. XFMR	.2Ω	.2Ω	RTD-007		
L34	Horiz. Size Control	2.5Ω	11Ω	RLD-004		
L35	Horiz. Linearity Control	30Ω		RLD-005		
L36	Fil. Choke	.2Ω				

MISCELLANEOUS

ITEM No.	PART NAME	G. E. PART No.	NOTES
M2	RF Coil & Switch Assy.	RJX-023	
	Trimmer	RCY-045	Horiz. Freq. 25-150MMF
	Trimmer	RCY-045	Horiz. Drive 25-150MMF
	Trimmer	RCY-047	Sound IF Take-Off Trap, 1.5-15MMF
	Trimmer	RCY-047	Video Carrier-Set Trap, 1.5-15MMF
	Cabinet	RAV-059	
	Safety Glass	RDW-010	
	Tuning Slug	REI-014	RF and Conv. Slugs for L12, 13, 14, and 15
	Core	REI-015	Adjustments Core for T2
	Core	REI-016	Tuning Core for L21, 23, 25, 26 and L32
	Core	REI-017	Adjustment Core for L35
	Core	REI-018	Adjustment Core for L34
	Core	REI-019	Tuning Core for L33
	Antenna Terminal Strip	RJB-020	
	Receptacle	RJJ-007	AC Power
	Socket	RJS-119	Picture Tube
	Knob	RDK-012	Vert. Speed, and Contrast Controls
	Knob	RDK-104	Horiz. Speed, and Brightness Controls
	Knob	RDK-139	Focus, and Tuning Control
	Knob	RDK-140	On-Off Switch, and Volume, Channel Selector Controls

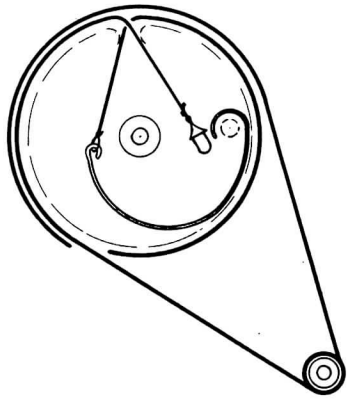
CENTERING ADJUSTMENTS

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

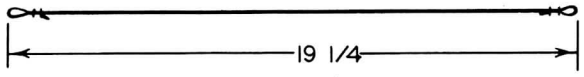
The horizontal drive control should first be set to minimum capacity. With the horizontal size control at approximately its correct position adjust the horizontal linearity control for best linearity. If this does not give good linearity turn the horizontal drive control slightly clockwise and repeat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

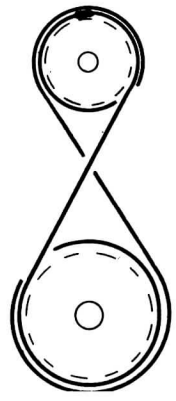
DIAL CORD STRINGING



CONTROL EXTREME CLOCKWISE

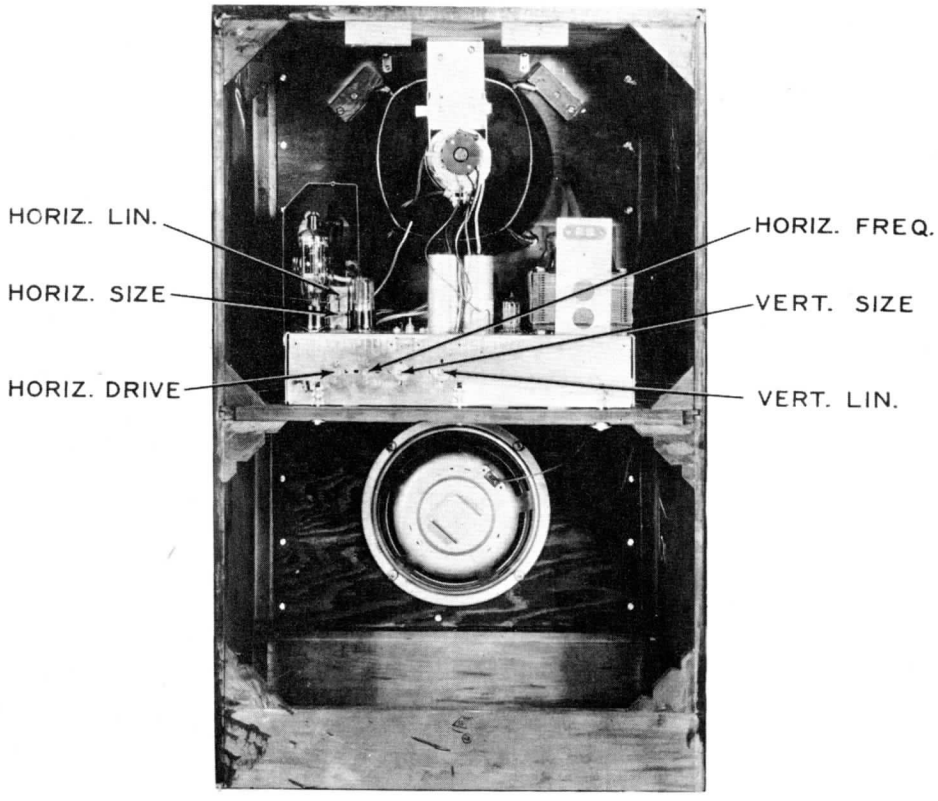
FINE TUNING CONTROL





CONTROL EXTREME COUNTER-CLOCKWISE

FOCUS CONTROL



CABINET-REAR VIEW