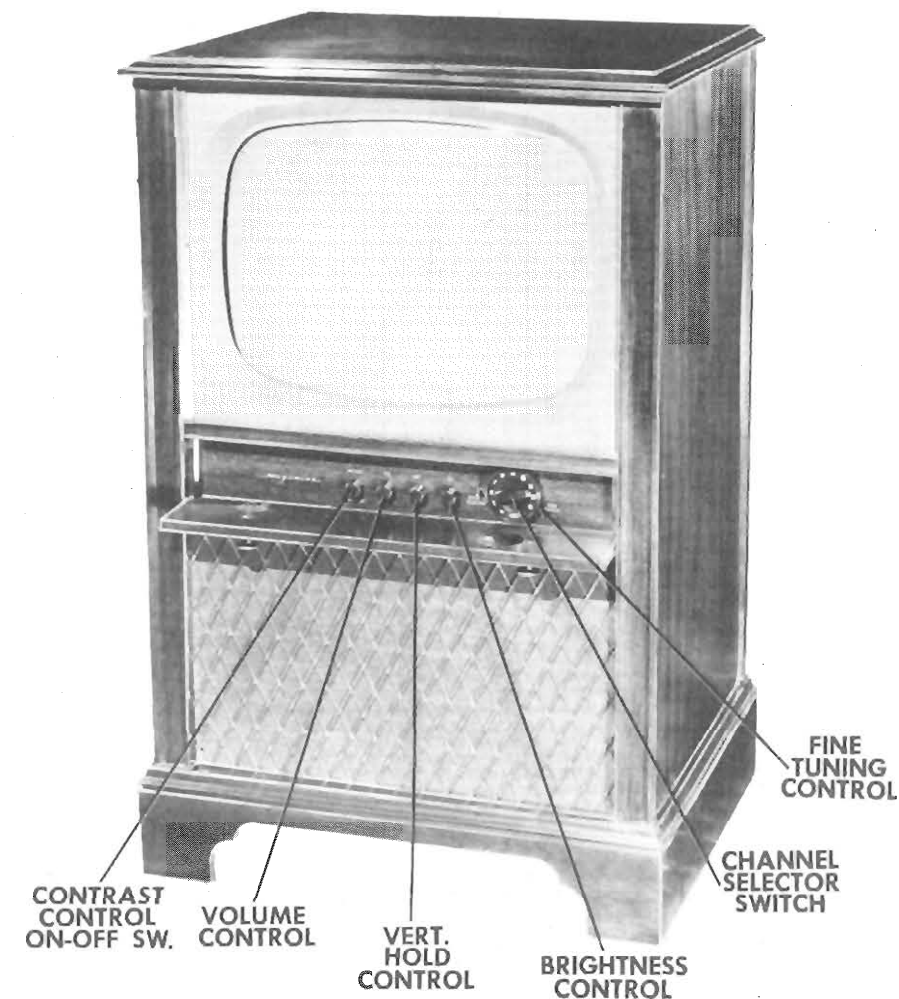


RESISTOR AND INDUCTOR IDENTIFICATION



MAGNAVOX
CHASSIS CT331 thru CT349 (105 Series)

Magnavox Chassis CT-331		
TRADE NAME	Magnavox Chassis CT-331 thru CT-349 (105 Series)	
MANUFACTURER	Magnavox Co., 2131 Bueter RD., Fort Wayne, Ind.	
TYPE SET	TV Radio Combination (Some Chassis T.V. Only)	
TUBES	Twenty-One	
POWER SUPPLY	110-120 Volts AC-60 Cycle	RATING 1.8 Amp. @117 Volts AC
TUNING RANGE	Channels 2 thru 13	

INDEX			
Alignment Instructions	6, 7	Photos (cont.)	
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Cabinet - Rear View	11	Schematic	2
Capacitor & Alignment Identification	4, 9	Tube Placement Charts	5

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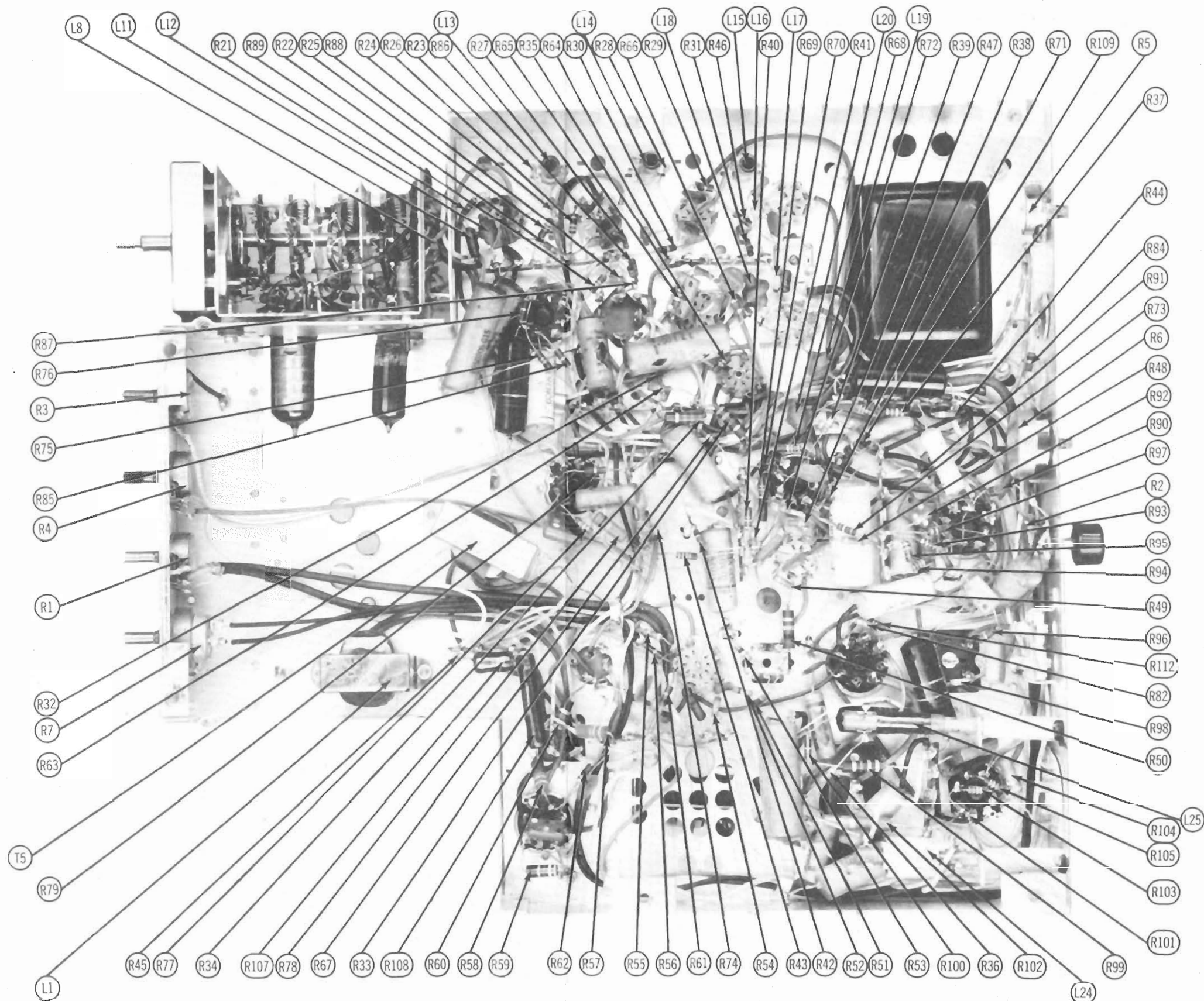
"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."
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CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

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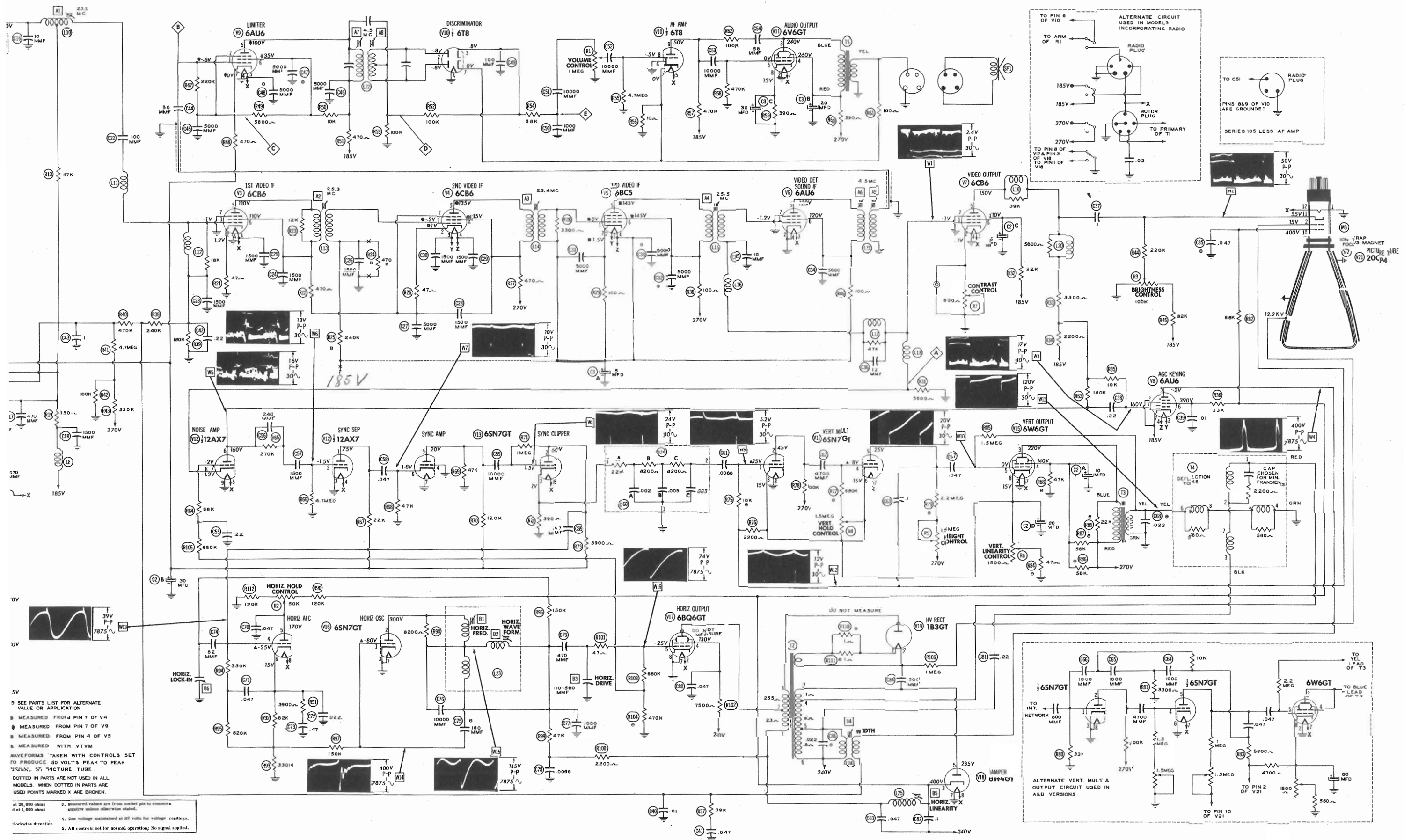
TRADE NAME	Magna
MANUFACTURER	Magna
TYPE SET	TV Ra
TUBES	Twent

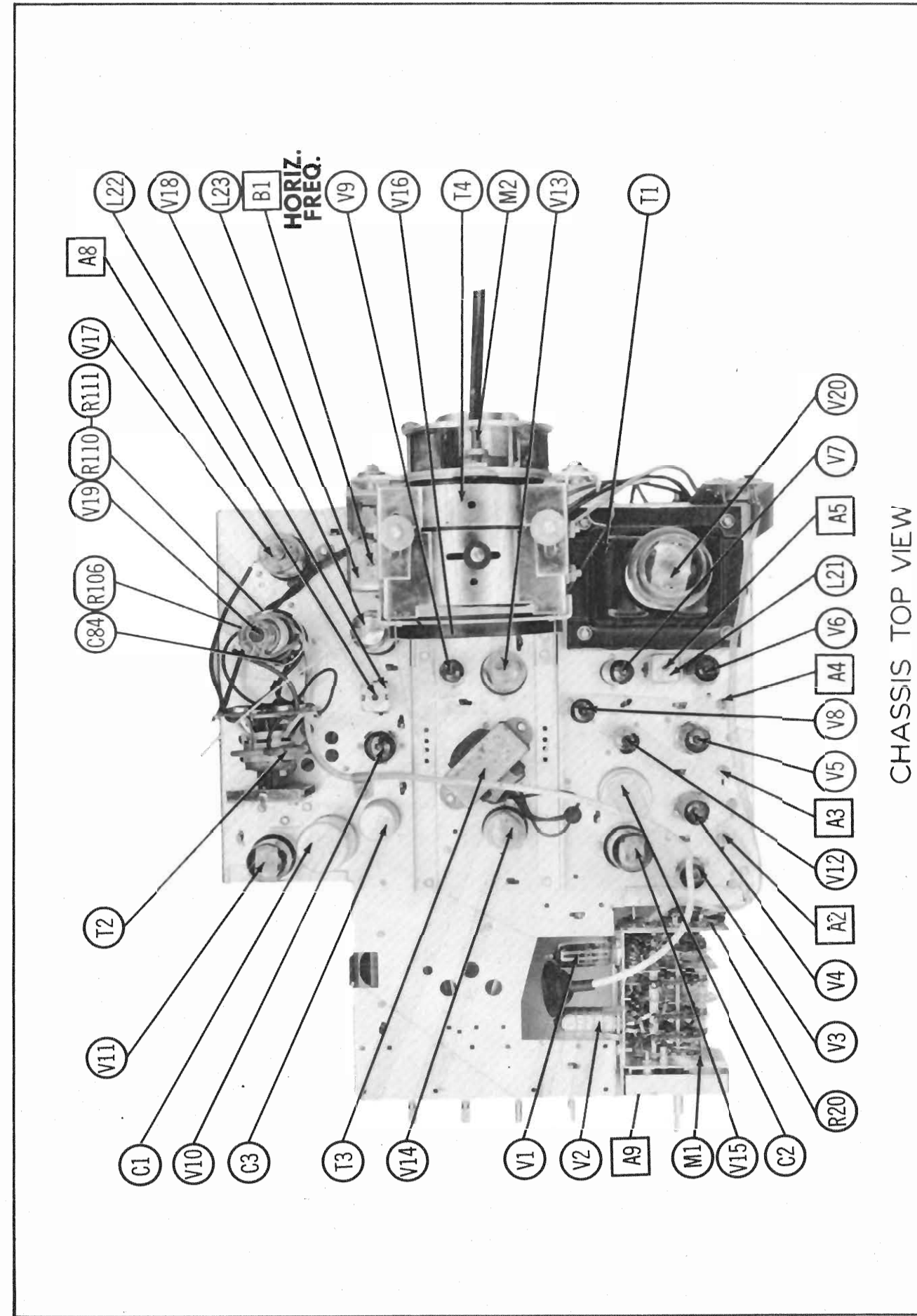
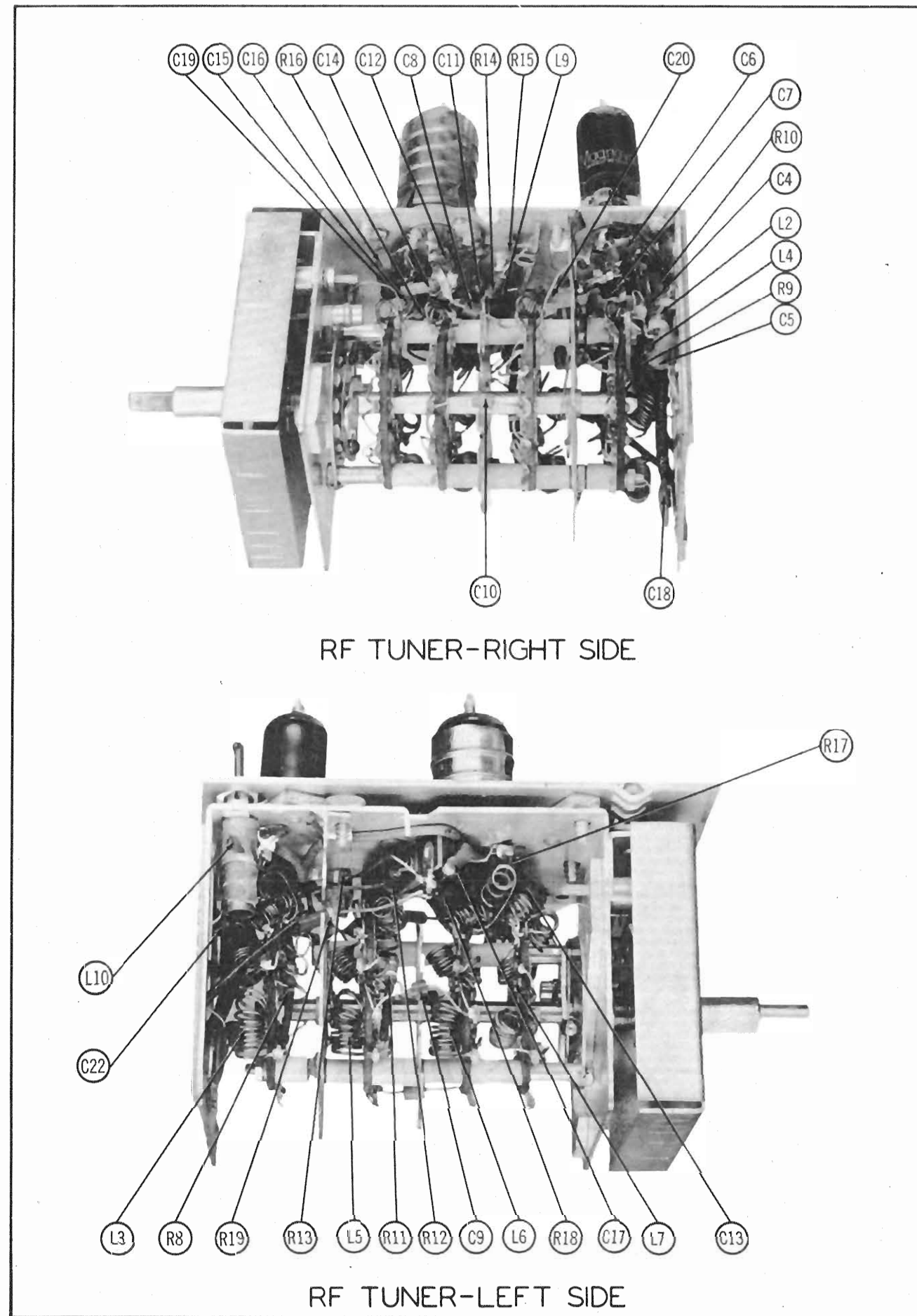
POWER SUPPLY 110-120
TUNING RANGE-Channels

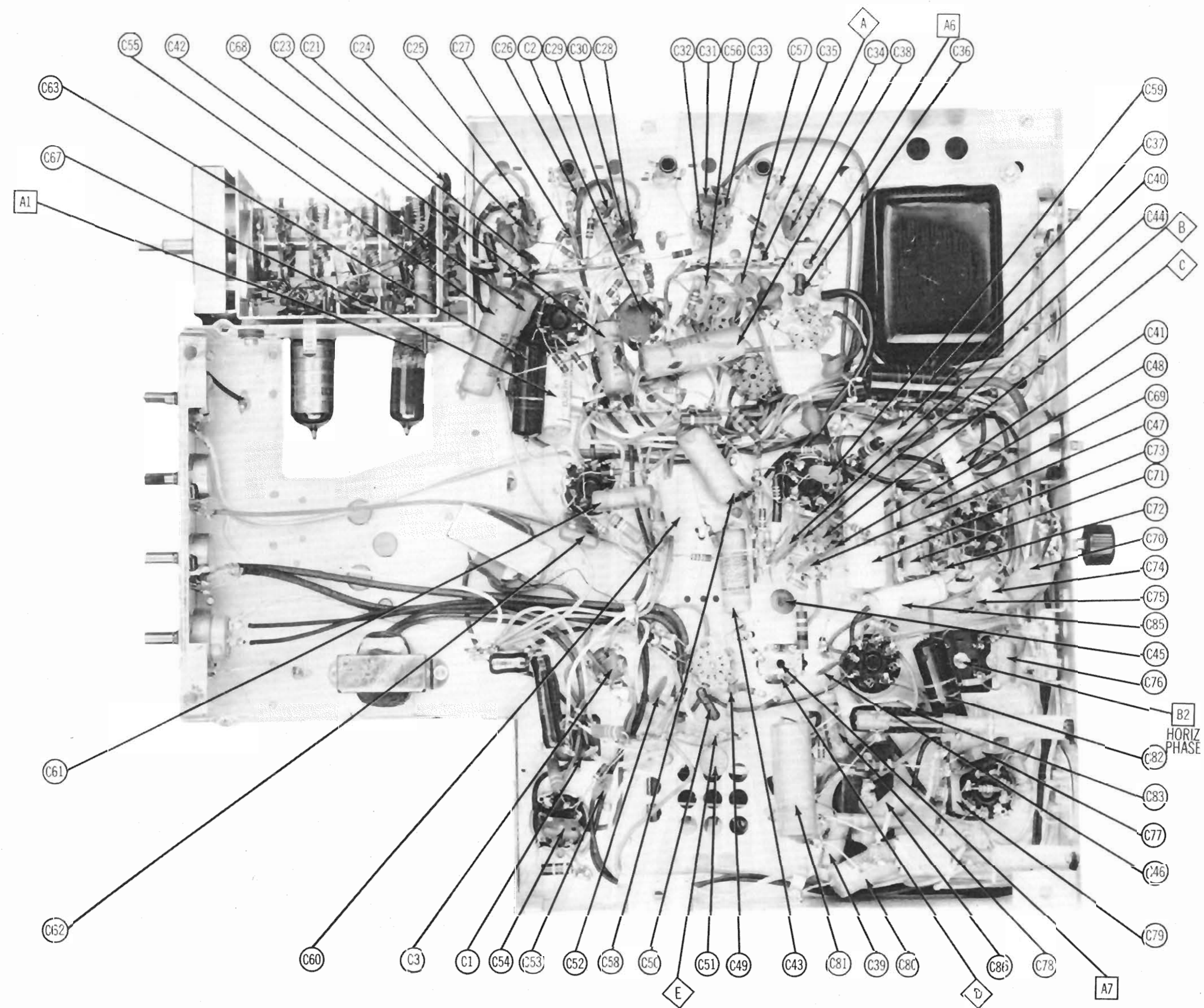
Alignment Instructions ..
Disassembly Instructions
Horizontal Sweep Circuit
Parts List and Descriptio
Photographs
Cabinet - Rear View
Capacitor & Alignment

HOW

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case a recommendation, warranty o
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MAGNAVOX
CHASSIS CT331 thru CT349 (10.5 Series)

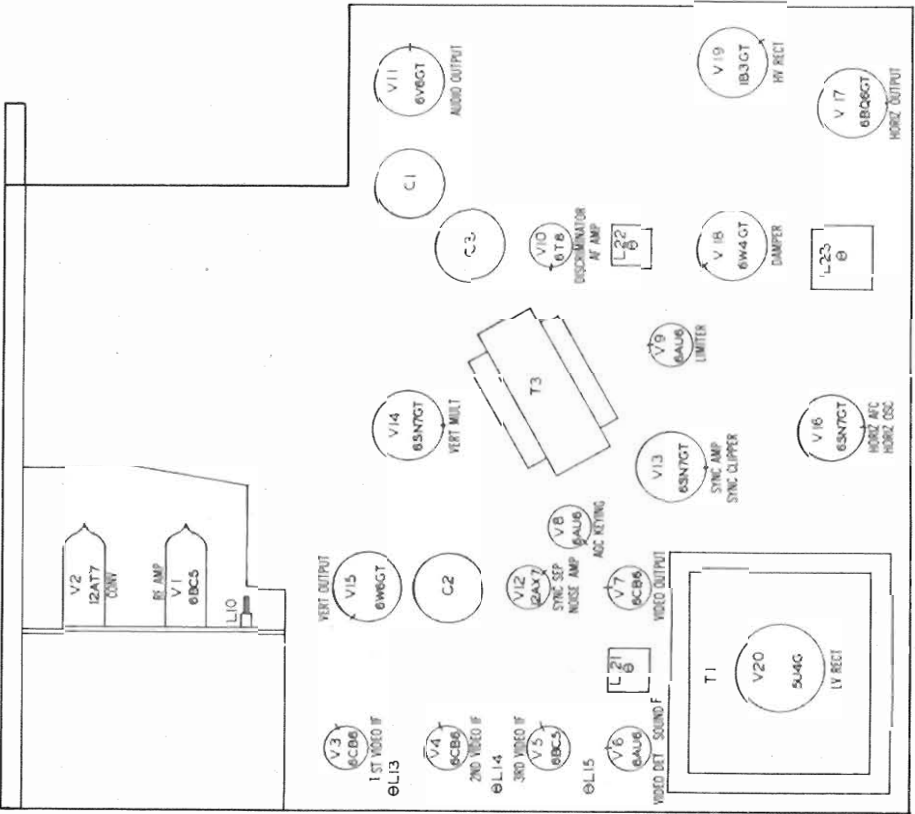
CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

RESISTANCE MEASUREMENTS

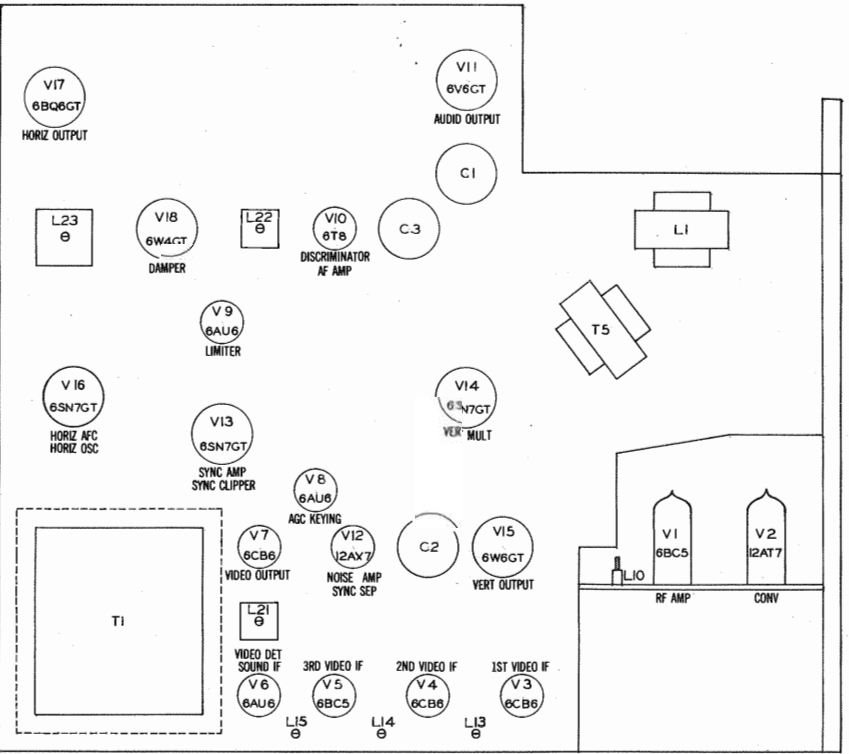
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BC5	600KΩ	0Ω	.3Ω	0Ω	12.7KΩ	118KΩ	0Ω		
V 2	12AT7	18.5KΩ	22KΩ	0Ω	.6Ω	.6Ω	148KΩ	95KΩ	0Ω	0Ω
V 3	6CB6	180KΩ	47Ω	.1Ω	0Ω	1470Ω	1470Ω	0Ω		
V 4	6CB6	170KΩ	147Ω	.2Ω	.0Ω	1505Ω	1505Ω	10Ω		
V 5	6BC5	.4Ω	100Ω	.2Ω	.0Ω	135Ω	135Ω	100Ω		
V 6	6AU6	5.6KΩ	0Ω	.1Ω	0Ω	100Ω	100Ω	0Ω		
V 7	6CB6	5.6KΩ	110Ω	.1Ω	0Ω	17KΩ	123KΩ	0Ω		
V 8	6AU6	14KΩ	11.5KΩ	.2Ω	.0Ω	420KΩ	433KΩ	11.5KΩ		
V 9	6AU6	1235KΩ	116KΩ	.1Ω	0Ω	12KΩ	112KΩ	116KΩ		
V 10	6T8	100KΩ	100K	200KΩ	0Ω	.1Ω	0Ω	10Ω	4.7Meg	1470KΩ
V 11	6Y6GT	0Ω	0Ω	1KΩ	1425Ω	470KΩ	1570KΩ	.1Ω	390Ω	
V 12	12AX7	136KΩ	4.7Meg	0Ω	.1Ω	.1Ω	1180KΩ	1.1Meg	5.6KΩ	0Ω
V 13	6SN7GT	11Meg	120KΩ	390Ω	0Ω	40KΩ	47KΩ	0Ω	.1Ω	
V 14	6SN7GT	13KΩ	1100KΩ	300Ω	1Meg	13Meg	300Ω	.1Ω	0Ω	
V 15	6W6GT	INF	0Ω	1700Ω	118KΩ	1.5Meg	2.5KΩ	.1Ω	300Ω	
V 16	6SN7GT	480KΩ	49KΩ	0Ω	1.5Meg	130KΩ	410KΩ	0Ω	.1Ω	
V 17	6BQ6GT	470KΩ	.1Ω	1.1Meg	17.7KΩ	1.1Meg	1.1Meg	0Ω	0Ω	TOP CAP #27Ω
V 18	6W4GT	68KΩ	120Ω	300KΩ	INF	1255Ω	INF	0Ω	.1Ω	
V 19	1B3GT	PINS 1 THRU 8 HAVE INF RESISTANCE								TOP CAP #280Ω
V 20	5U4G	INF	30KΩ	INF	29Ω	INF	26Ω	INF	30KΩ	
V 21	20CP4A	0Ω	2.5KΩ	0Ω	PIN 6 #68KΩ	PIN 10 240KΩ	PIN 11 240KΩ	PIN 12 .1Ω		

ALL CONTROLS SET FOR NORMAL OPERATION, NO SIGNAL APPLIED
† MEASURED FROM PIN 2 OF V20
MEASURED FROM PIN 3 OF V18
■ MEASURED FROM PIN 4 OF V5
† MEASURED FROM PIN 7 OF V4

MAGNAVOX
CHASSIS CT331 thru CT349 (105 Series)



TOP VIEW



BOTTOM VIEW

TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The end of the high voltage leads should be securely taped and kept away from the chassis. Do not remove the horizontal oscillator tube to disable the high voltage.

VIDEO IF ALIGNMENT

Remove the AGC keying tube V8 from its socket.

Connect the negative lead of a 1.5V battery to the ungrounded end of C43 and the positive lead to chassis.

Tune to channel which causes no interference.

To check for interference turn the fine tuning control and if the VTVM reading changes switch to another channel.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Direct	High side to ungrounded tube shield floating over converter tube V2. Low side to chassis.	23.1MC (unmod.)	See instructions above	DC probe to point A Common to chassis	A1	Adjust for maximum deflection.
2. "	"	25.3MC	"	"	A2	"
3. "	"	23.4MC	"	"	A3	"
4. "	"	25.5MC	"	"	A4	"

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

Tune to channel which causes no interference.

To check for interference turn the fine tuning control and if the response curve changes switch to another channel.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. Direct	High side to ungrounded tube shield floating over converter tube V2. Low side to chassis.	24MC (10MC Swp)	22.75MC 25.75MC	See instructions above.	Vertical amp. to point A Low side to chassis.		Check for response curve similar to fig. 1 if necessary retouch A1 through A4 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

During Step 6 the common lead of the VTVM is connected to a point approximately 80 Volts with respect to chassis. Avoid touching or grounding case of VTVM.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
6. .001MFD	High side to pin 1 (grid) of 6AU6 (V6). Low side to chassis.	4.5MC (Unmod.)	Any channel not used locally.	DC probe through 1Meg resistor to point B Common to point	A5, A6	Adjust for maximum deflection. Attenuate signal generator to maintain deflection at 5 volts or less.
7. .001MFD	High side to pin 1 (grid) of 6AU6 (V9). Low side to chassis.	"	"	DC probe through 1Meg resistor to point D Common to chassis	A7	Adjust for maximum deflection.
8. "	"	"	"	DC probe to point E Common to chassis.	A8	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6. .001MFD	High side to pin 1 (grid) of 6AU6 (V6). Low side to chassis.	4.5MC (450KC Swp)	4.5MC	Any channel not used locally.	Vertical amp. thru 47KΩ resistor to point B Low side to chassis.	A5, A6	Adjust for response curve of maximum amplitude and symmetry as in Fig. 2.
7. "	High side to pin 1 (grid) of 6AU6 (V9). Low side to chassis.	"	"	"	Vert. amp. to point E Low side to chassis.	A8, A7	Adjust A8 so 4.5 MC occurs at center of crossover lines as per fig. 3. Adjust A7 for maximum amplitude and straightness of crossover lines with symmetrical peaks. Continue with Step 9.

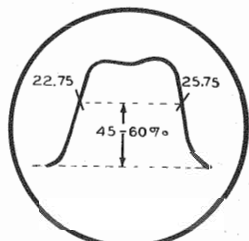


FIG. 1/

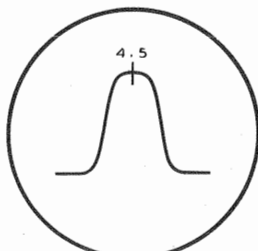


FIG. 2

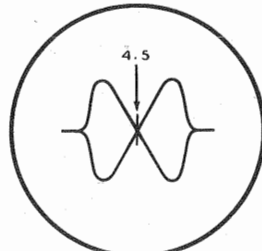


FIG. 3

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT

Connect the high side of a signal generator, through a 2 or 3 MMF capacitor, to pin 1 of 1st. Video IF Amp. (V3). Connect the low side to chassis. Set the signal generator at 25.75 MC. This is used to provide a reference marker on the response curve. Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms. Set the fine tuning control to the mid-position of its range.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
9. Two 120Ω carbon resistors	Across the antenna terminals with 120Ω in each lead.	213 MC (10MC Swp)	211.25MC	13	Vertical amp. to point A Low side to Chassis.	A9	Adjust A9 until video marker and reference marker coincide on response curve.
10. "	"	207MC (10MC Swp)	205.25MC	12	"		Check all high band channels to see if marker coincidence can be obtained near the center of the range of the fine tuning control. If not make compromise adjustment of A9.
		201MC (10 MC Swp)	199.25MC	11			
		195MC (10MC Swp)	193.25MC	10			
		189MC (10MC Swp)	187.25MC	9			
		183MC (10MC Swp)	181.25MC	8			
		177 MC (10MC Swp)	175.25MC	7			
11. "	"	85MC	83.25MC	6	"	A10	Expand or compress coil turns until video marker and reference marker coincide on response curve.
12. "	"	79MC	77.25MC	5	"		Check all low band channels to see if marker coincidence can be obtained near the center of the range of the fine tuning control. If not make compromise adjustment of A10.
The RF and mixer portion of this receiver has been properly aligned at the factory and is very stable. Alignment of this portion should not be required in the field.							

MAGNAVON
CHASSIS CT331 thru CT349 (105 Series)

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		MAGNAVOX PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.					
T2	280Ω Tapped ② 23Ω	10.8Ω Tapped ② .8Ω & 9.8Ω SEC. 2 0Ω	320061-1		HV0-7 MWC-1 ①		Horiz. Output Trans.
T3	670Ω	14Ω	320060-1	A-8113			Vert. Output Trans.
T4A	14Ω		360515-2	DY-8	MDF-70		Hor. Deflection Coils
B	46Ω						Vert. Deflection Coils

① Replace with coil with MWC-1

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		MAGNAVOX PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T5	5KΩ	3.6Ω	570Ω	.6Ω	320063-1	A-3823	A-3019	R0-303	

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	MAGNAVOX PART No.	VIKING PART No.	QUAM PART No.	
SPIA	P. M.	3.6Ω	583620	12J12	10A4A	
SPIB	CONE DIA. 12"	V. C. DIA. 1"				

FILTER CHOKE

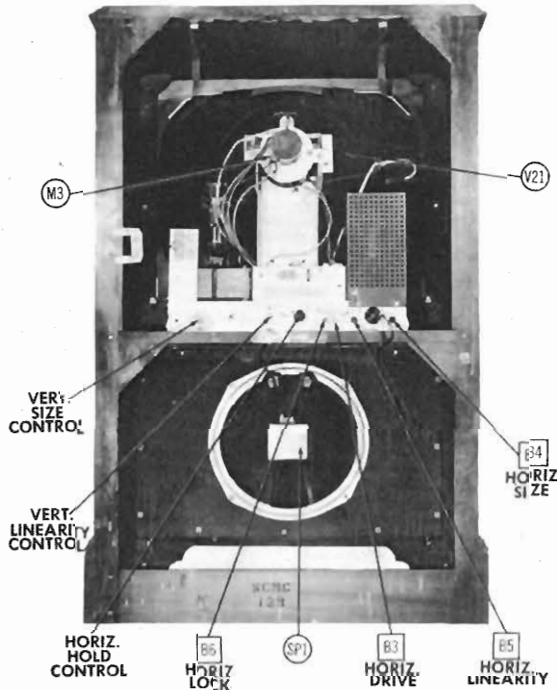
ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE IN CURRENT 1000 μ	MAGNAVOX PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	260ADC	35Ω	5 Henries	320058-1	C-2326 ②	C-2991 ②	TR-3300 ②	② Drill One New Mounting Hole.

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA			NOTES
		PRI.	SEC.	MAGNAVOX PART No.	MERIT PART No.	IRC PART No.	
L2	Ant. Trans.	.1Ω	0Ω				
L3	Ant. Coils	0Ω	0Ω				
L4	Fil. Choke	.22Ω				CLA	.47 Microhenries
L5	RF Coils	0Ω					
L6	Mixer Grid Coils	0Ω					
L7	Osc. Coils	0Ω					
L8	RF Choke	.22Ω				CLA	.47 Microhenries
L9	Fil. Choke	.22Ω				CLA	.47 Microhenries
L10	1st. Video IF	.7Ω					Tap ① .3Ω
L11	220MC Trap	0Ω					
L12	Grid Choke	2.6Ω		360443-16			Wound on 18KΩ Resistor
L13	2nd. Video IF	.4Ω	.4Ω	360461-1			
L14	3rd. Video IF	.4Ω	.4Ω	360461-1			
L15	4th. Video IF	.5Ω	.4Ω	360511-1			
L16	Peaking Coil	1Ω		360443-15			
L17	Peaking Coil	3.4Ω		360443-17	TV-151		Wound on 47KΩ Resistor
L18	Peaking Coil	10.5Ω		360443-6	TV-188		
L19	Peaking Coil	9Ω		360443-13	TV-185		Wound on 39K Resistor
L20	Peaking Coil	9.5Ω		360443-14	TV-185		Wound on 5.6K Resistor
L21	Sound IF	1.2Ω	1.2Ω	360519-1			
L22	Diser. Trans.	1.6Ω	1.5Ω	360512-1			Tap ① .7Ω
L23	Horiz. Osc.	75Ω	13Ω	360499-1	TV-162		Tap ② 21Ω
L24	Width Coil	1.1Ω	57Ω	360521-1			
L25	Horiz. Lin.	4.8Ω		360517-1	MVC-2		

MISCELLANEOUS

ITEM No.	PART NAME	MAGNAVOX PART No.	NOTES
M1	RF Tuner	700357-20	
M2	Focus Magnet		
M3	Ion Trap		
B3, B6	Trimmer	260106-G3	(Dual) Horiz. Drive-Horiz. Lock (110-560MMF)



CABINET-REAR VIEW
HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL FREQUENCY ADJUSTMENTS
Short out terminals C and D of L23.
Pre-set the horizontal lock trimmer, (B6) one turn from full clockwise position, and the horizontal drive trimmer (B3) to ½ turns from fully clockwise.
Turn the set on and tune in a TV station, preferably a test pattern.
Turn the horizontal hold control to full clockwise position and adjust the horizontal frequency slug, (B1), until the picture synchronizes horizontally. Check the horizontal drive, width and linearity as outlined under "HORIZONTAL DRIVE, WIDTH AND LINEARITY ADJUSTMENT". If proper frequency adjustment cannot be obtained, check the grid voltage on the noise triaxer tube (Pin 7, V12). (Use V-TVM). It should be between -9 and -13.5V and may be varied with the horizontal drive trimmer, B3.

HORIZONTAL WAVEFORM ADJUSTMENT
Remove the short from terminals C and D of L23.
Connect oscilloscope vertical amplifier through 15MMF capacitor to terminal C of L23. Adjust the horizontal waveform slug, B2, so that the rounded and sharp peaks of the curve are of equal amplitude as shown in Fig. 4. If necessary during adjustment of B2 adjust B1 to keep the picture synchronized.
Remove the oscilloscope. With the horizontal hold control in full clockwise position, adjust B1 until the picture is just out of sync as indicated by blanking bar appearing at left of picture.
Back off the frequency slug slightly until picture again locks in sync. Make this adjustment with the brightness control in full clockwise position.

HORIZONTAL DRIVE, WIDTH AND LINEARITY ADJUSTMENT
Adjust the horizontal drive trimmer, B3, by turning in a counter clockwise direction until the picture starts compressing in the center and vertical white lines appear. Then turn B3 in a clockwise direction until the compression and white lines just disappear. Minimum height occurs at this adjustment.
Adjust the horizontal size slug, (B4) and the horizontal linearity slug, (B5) for proper size and linearity of picture.

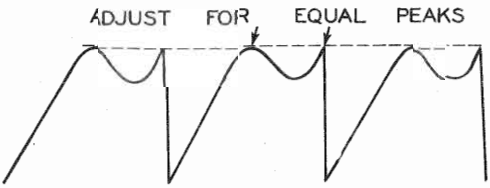


FIG. 4

DISASSEMBLY INSTRUCTIONS

1. Remove 6 Push On Type Control Knobs from front panel.
 2. Remove 5 wood screws holding rear cover. Remove rear cover.
 3. Disconnect Antenna and Speaker.
 4. Remove 4 nuts holding Speaker. Remove Speaker.
 5. Remove 2 wood screws. Remove 2 Picture Tube Bracket Supports.
 6. Remove 5 Chassis Bolts. Remove Chassis.
- NOTE: For Picture Tube Removal it is necessary to remove Chassis as outlined above.

MAGNAVOX
CHASSIS CT331 thru CT349 (105 Series)

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		MAGNAVOX PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	6BC5	6BC5	7BD	
V2	Converter	12AT7	12AT7	9A	
V3	1st Video IF Amp.	6CB6	6CB6	7CM	
V4	2nd Video IF Amp.	6CB6	6CB6	7CM	
V5A	3rd Video IF Amp.	6BC5	6BC5	7BD	
V6	3rd Video IF Amp.	6AG5	6AG5	7BD	
V7	Video Detector - Sound IF Amp.	6AU6	6AU6	7BK	
V8	Video Output	6CB6	6CB6	7CM	
V9	Keyed AGC	6AU6	6AU6	7BK	
V10	Limiter	6AU6	6AU6	7BK	
V11	Discriminator - AF Amplifier	6T8	6T8	9E	
V12	Audio Output	6V6GT	6V6GT	7AC	
V13	Noise Amplifier - Sync. Separator	12AX7	12AX7	9A	
V14	Sync. Amplifier - Sync. Clipper	6SN7GT	6SN7GT	8BD	
V15	Vert. Mult.	6SN7GT	6SN7GT	8BD	
V16	Vert. Output	6W6GT	6W6GT	7AC	
V17	Horiz. AFC-Horiz. Oscillator	6SN7GT	6SN7GT	8BD	
V18	Horiz. Output	6BQ6GT	6BQ6GT	6AM	
V19	Damper	6W4GT	6W4GT	4CG	
V20	HV Rectifier	1B3GT	1B3GT	3C	
V21	LV Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	MAGNAVOX PART No.	REPLACEMENT DATA		RTMA BASE TYPE	NOTES
		SYLVANIA PART No.			
V21A	20CP4A	20CP4A 20CP4A 20DP4A 20DP4A 20HP4A ① 20HP4A ② 17BP4A 17BP4A 17HP4A ① 17HP4A ②		12D	① Circuit Changes necessary - Low voltage focusing circuit required. ② Zero - Voltage Electrostatic focusing tube.
B	17BP4A			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		MAGNAVOX PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
		CAP.	VOLT.							
C1A	40	350		270021-43	AFH4-93					TVL-4720
B	35	350								
C	30	350								
D	30	350								
C2A	10	475		270021-45	AFH3-50					TVL-3718
B	30	350			PRS50/100					TVA-1810
C	5	350								
D	80	50								
C3A	5	350		270023-17	AFH3-137					TVL-3634
B	20	350								
C	30	25								
C4	15									
C5	470				SI15	D6-150		GP1K-150	SGA-Q15	
C6	470				SI470	D6-471		GP2K-471	SGA-T47	
C7	470				SI470	D6-471		GP2K-471	SGA-T47	
C8	68				TCZ-68	TCZ-68		NP0K-R68		
C9	6							NP0K-060		
C10	5				SI5NP0	TCZ-4.7		NP0K-050		
C11	68					TCZ-68		NP0K-333-680	STCC-Q68	
C12	1.2							NP0K-1R2		
C13	10				SI10N750	TCN-10		N750K-100	STCU-Q1	
C14	100							N150L-101		
C15	3							N750K-030		
C16	10							GP1K-100	SGA-Q1	
C17	470				SI10	D6-100		GP2K-471	SGA-T47	
C18	1500				BPD-0015	D6-152		801-0015	SHK-D15	
C19	470				SI470	D6-471		GP2K-471	SGA-T47	
C20	470				SI470	D6-471		GP2K-471	SGA-T47	
C21	1500				BPD-0015	D6-152		801-0015	SHK-D15	
C22	100				SI100	D6-101		801-0015	SHK-D15	
C23	1500				BPD-0015	DD-152		801-0015	SHK-D15	
C24	1500				BPD-0015	DD-152		801-0015	SHK-D15	
C25	1500				BPD-0015	DD-152		801-0015	SHK-D15	
C26	1500				BPD-0015	DD-152		801-0015	SHK-D15	
C27	5000				BPD-005	DD-502		801-0005	SHK-D5	
C28	1500				BPD-005	DD-152		801-0015	SHK-D15	
C29	1500				BPD-005	DD-152		801-0015	SHK-D15	
C30	1500				BPD-005	DD-152		801-0015	SHK-D15	
C31	5000				BPD-005	DD-502		801-0005	SHK-D5	
C32	5000				BPD-005	DD-502		801-0005	SHK-D5	
C33	5000				BPD-005	DD-502		801-0005	SHK-D5	
C34	5000				BPD-005	DD-502		801-0005	SHK-D5	
C35	10				SI10	D6-100		5W5Q1	GP1K-100	
C36	12					TCZ-12		NP0K-120		
C37	.1	600				DF-104		PTE6P1		
C38	.22	200						PTE6P1		
C39	.01	600						PTE6S1		
C40	.01	600						PTE6S1		
C41	.047	200						PTE6S1		
C42	.22	200						PTE6S1		
C43	.1	200						PTE6S1		

CAPACITORS (CONT.)

ITEM No.	RATING	REPLACEMENT DATA		MAGNAVOX PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
		CAP.	VOLT.							
C44	56	500			SI56	D6-560		GP1K-560		Sound IF Coupling
C45	5000				BPD-005	DD-502		801-0005	SHK-D5	Decoupling
C46	5000				BPD-005	DD-502		801-0005	SHK-D5	Limiter Plate Dec.
C47	5000				BPD-005	DD-502		801-0005	SHK-D5	Limiter Screen Bypass
C48	5000				BPD-005	DD-502		801-0005	SHK-D5	Limiter Fil. Bypass
C49	100				SI100	D6-101		5GA-T1		RF Bypass
C50	1000				SI1000	D6-102		5GA-T1		De-Emphasis
C51	10000				BPD-01	DD-103		801-001	SHK-D1	Audio Coupling
C52	10000				BPD-01	DD-103		801-001	SHK-D1	Audio Coupling
C53	10000				BPD-01	DD-103		801-001	SHK-D1	Audio Coupling
C54	56	500			SI56	D6-560		GP1K-560		Audio Feedback
C55	.22	200			P488-22			PJ2P25		Bias Filter
C56	240	500			1469-00025			5R5T25		Sync. Coupling
C57	1500				BPD-0015	DD-152		801-0015	SHK-D15	Sync. Coupling
C58	.047	600			PTE6S47	DF-503		PTM-547		Sync. Coupling
C59	10000				BPD-01	DD-103		801-001	SHK-D1	Sync. Coupling
C60A	.002				PTE6D2			GP2-333-202		Vert. Integrator Net.
B	.005				PTE6D5			GP2-333-502		Vert. Integrator Net.
C	.005				PTE6D5			GP2-333-502		Vert. Integrator Net.
C61	.0068	600			PTE6D68			6TM-D68		Vert. Osc. Grid Cap.
C62	4700	500			1464-005			MS-25		Vert. MV Feedback
C63	.1	600			PTE6P1	DF-104		6TM-P1		Vert. Discharge
C64	.001	600			PTE6D1	D6-102		6TM-D1		Vert. Feedback Net.
C65	.001	600			PTE6D1	D6-102		6TM-D1		Vert. Feedback Net.
C66	.001	600			PTE6D1	D6-102		6TM-D1		Vert. Feedback Net.
C67	.047	600			PTE6S47	DF-503		PTM-547		Vert. Sweep Coupling
C68	.022	600			PTE6S22			6TM-S22		Fixed Trimmer
C69	.47	500			1469-00005			MS-45		Horiz. Sync. Coupling
C70	.047	600			PTE6S47	DF-503		PTM-547		Horiz. AFC Filter
C71	.047	200			PTE6S47	DF-503		PTM-547		Horiz. AFC Filter
C72	.022	200			PTE6S22			4TM-S22		Horiz. AFC Filter
C73	.47	200			PTE6S47			2TM-P47		Horiz. Feedback
C74	82	500			250159-81					Horiz. Osc. Grid Cap. ††
C75	160	500			250161-47					Fixed Trimmer
C76	10000	500			250160-64					Horiz. Discharge
C77	1000	500			250203-6					Horiz. Osc. Dec.
C78	.0068	600			PTE6D68			6TM-D68		Horiz. Sweep Coupling
C79	470	500			1469-00005			MS-35		Horiz. Output Screen
C80	.047	600			PTE6S47	DF-503		PTM-547		Horiz. Sweep Coupling
C81	.22	400			PTE6S22			6TM-P22		Damper Filter
C82	.1	600			PTE6S1			6TM-P1		Damper Filter
C83	.047	600			PTE6S47			6TM-S47		HV Filter
C84	500	20000			HY20C			6TM-S47		Acc. Anode Dec.
C85	.047	600			PTE6S47	DF-503		PTM-547		Fixed Trimmer
C86	.022	400			PTE6S22			4TM-S22		

* Not used in all models.

† Some models use 1.5MMF in this application

†† Some models use 4000MMF in this application

††† Some models use .047 MFD in this application (Part #250203-11)

†††† Some models use 180MMF in this application (Part #250159-53)

††††† Some models use 560MMF in this application (Part #250159-130)

* Items C60A, C60B, C60C, R74A, R74B, R74C are combined in one unit.

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA		MAGNAVOX PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	INSTALLATION NOTES
		RESISTANCE	WATTS					
R1A	1Meg			220076-19	Q13-137	AG-63-Z	B-70	Volume Control - See Note 1
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R1A per instructions
R2A	50KΩ			220076-44	Q11-123	AG-44-S	B-31	Horiz. Hold Control
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R2A per instructions
R3A	100KΩ			220126-5	Q11-128	AG-49-S	B-40	Brightness Control
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R3A per instructions
R4A	1.5Meg			220076-12	Q11-138	AG-83-S	B-75	Vert. Hold Control - See Note 2
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R4A per instructions
R5A	1.5Meg			220076-5	Q11-138	AG-83-S	AN-75	Height Control
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R5A per instructions
R6	1500Ω			220126-4	WK-1500	AK-130	VK-130	Vert. Linearity Control - Wire Wound
R7A	600Ω			220126-7	AM-8-S	B-4-S	B-4-S	Contrast Control
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	Attach to R7A per instructions
C	Switch			Not Req.	SWA	Not Req.	Not Req.	Attach to R7A per instructions

Note 1. Some Models use Volume Control & SW (Part No. 220118-1)

Note 2. Some Models use Vert. Hold Control (Part No. 220076-28)

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	MAGNAVOX PART No.	IRC PART No.	
R8	3300Ω			BTS-330K	Antenna Coil Shunt
R9	22KΩ				RF Amp. Grid
R10	1000Ω			BTS-1000	RF Amp. Screen
R11	3900Ω			BTS-390K	RF Coil Shunt
R12	1000Ω			BTS-1000	RF Amp. Plate Decoupling
R13	47KΩ			BTS-47K	Mixer Plate
R14	27KΩ			BTS-27K	Mixer Grid
R15	68KΩ			BTS-68K	Mixer Grid
R16	22KΩ			BTS-22K	Osc. Coil Shunt
R17	22KΩ				Osc. Grid
R18	6800Ω	1			Osc. Plate
R19	150Ω			BTS-150	Decoupling
R20	10KΩ			BTS-10K	AGC Network
R21	47Ω		230104-46		1st. Video IF Amp. Cathode
R22	470Ω		230104-58	BTS-470	1st. Video IF Amp. Decoupling
R23	12KΩ				2nd. Video IF Coil Shunt
R24	470KΩ		230104-94	BTS-470K	2nd. Video IF Amp. Grid
R25	240KΩ				Voltage Divider - See Note 2
R26	47Ω		230104-46		2nd. Video IF Amp. Cathode
R27	470Ω		230104-58	BTS-470	2nd. Video IF Amp. Decoupling
R28	3300Ω		230104-68	BTS-3300	2nd. Video IF Coil Shunt
R29	100Ω		230104-50	BTS-100	3rd. Video IF Amp. Cathode
R30	100Ω		230104-50	BTS-100	3rd. Video IF Amp. Decoupling
R31	5600Ω		230104-71	BTS-5600	Video Det. Load
R32	22KΩ	1	230105-78	BTA-22K	Video Amp. Screen