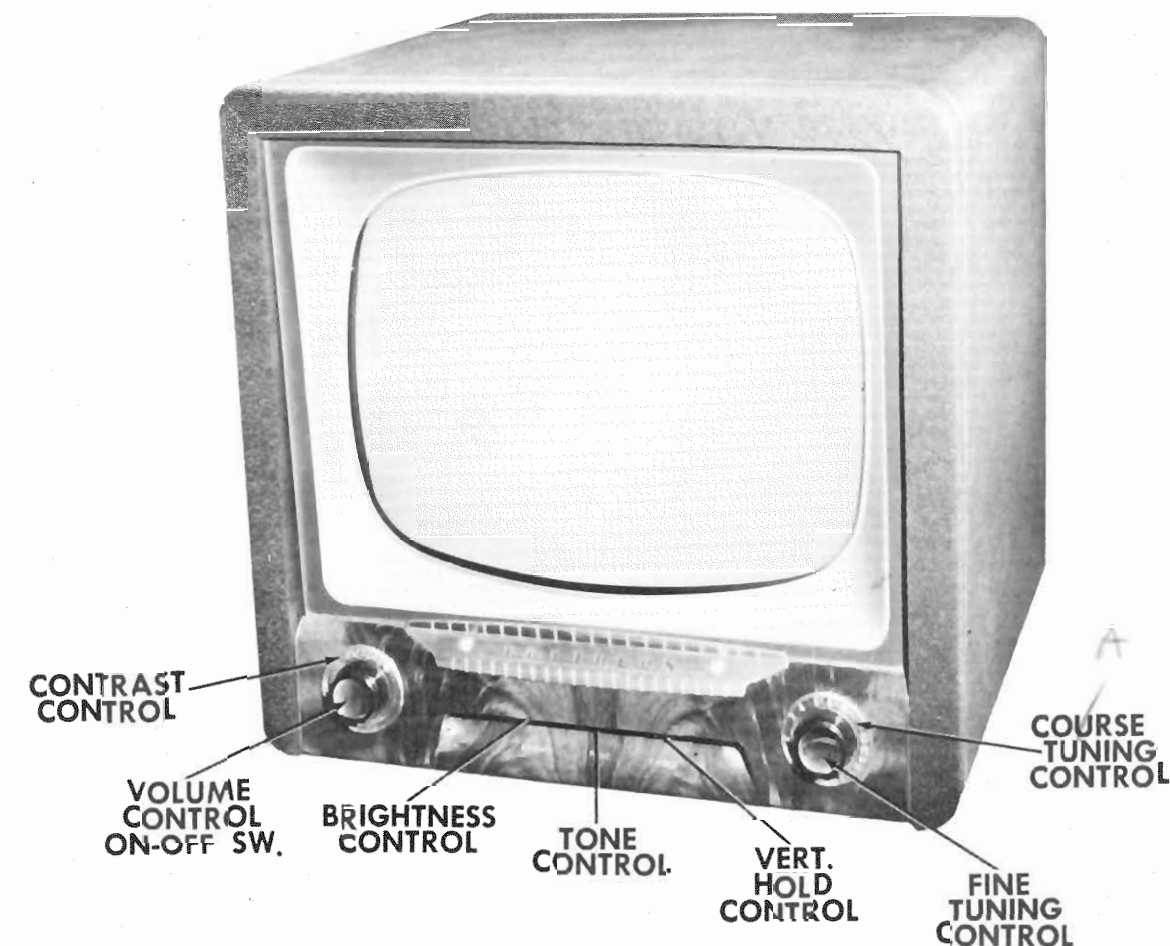


R AND INDUCTOR IDENTIFICATION



RAYTHEON MODELS
C-1729A, C-1731A, M-1726A, M-1728A

RAYTHEON M-1726A		
TRADE NAME	Raytheon Models C-1729A, C-1731A, M-1726A, M-1728A (C-1729A)	
MANUFACTURER	Belmont Radio Corp., 5921 W. Dickens Ave., Chicago 39, Ill.	
TYPE SET	Television Receiver	
TUBES	Twenty Two	
POWER SUPPLY	110-115 Volts AC-60 Cycle	RATING 1.9 Amp. @ 115 Volts AC
TUNING RANGE	Channels 2 thru 13 continuous tuning	
INDEX		
Alignment Instructions	6, 7	Photographs (Con't.)
Disassembly Instructions	11	RF Tuner
Horizontal Sweep Circuit Adjustments	11	Resistor and Inductor Identification
Parts List and Descriptions	12, 13, 14	Resistance Measurements
Photographs		Schematic
Cabinet - Rear View	11	Tube Failure Check Chart
Capacitor and Alignment Identification	4, 9	Tube Placement Chart (Bottom View)
Chassis - Top View	3	Tube Placement Chart (Top View)

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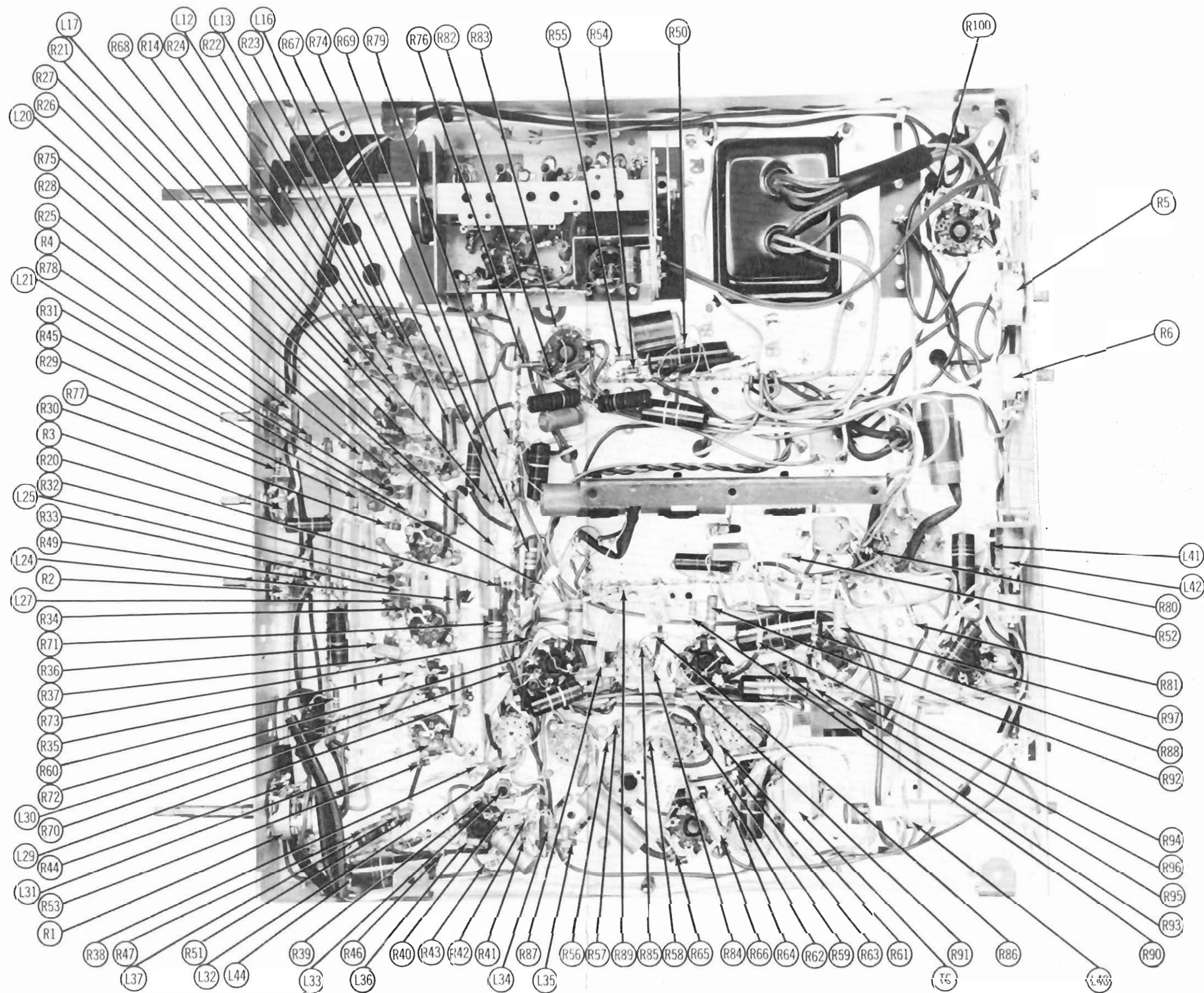
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DATE 8-52

SET 176

FOLDER 10



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

CONTRAST-
CONTROL

VOLU
CONT
ON-OFF

TRADE NAME
MANUFACTURER
TYPE SET
TUBES

POWER SUPPLY
TUNING RANGE

Alignment Instructions

Disassembly Instructions

Horizontal Sweep Circuits

Parts List and Description

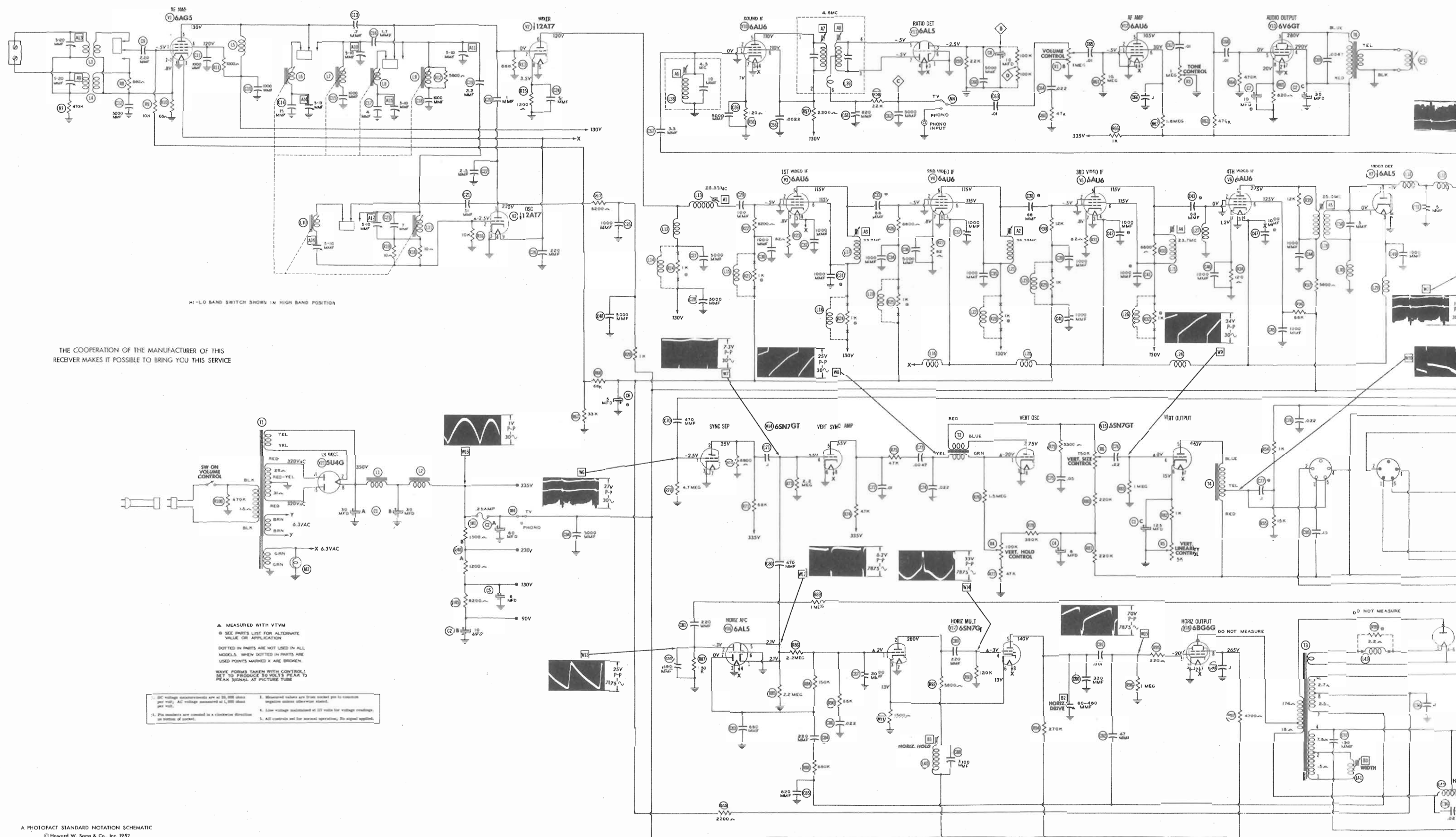
Photographs

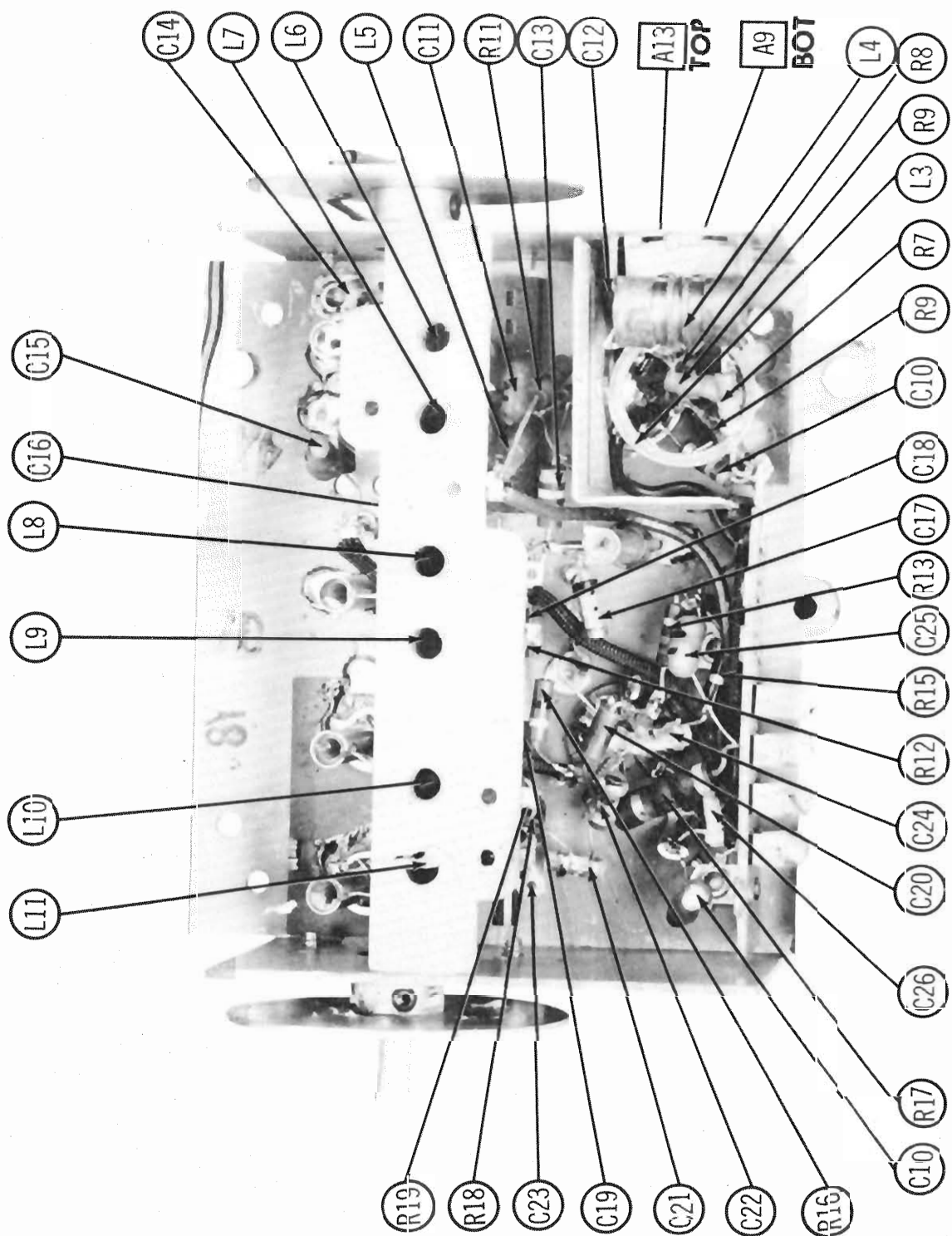
Cabinet - Rear View

Capacitor and Resistor Values

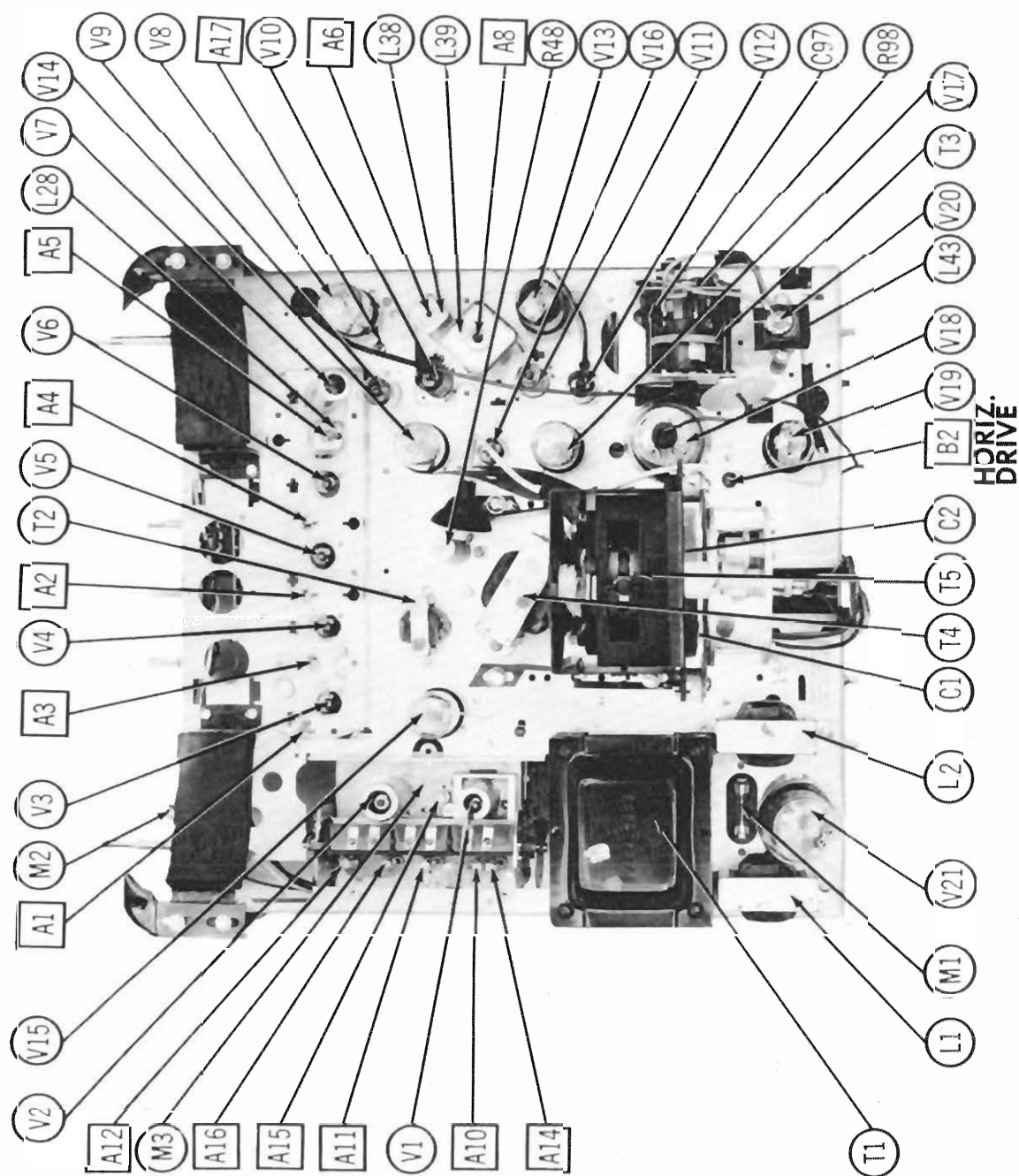
Chassis - Top View

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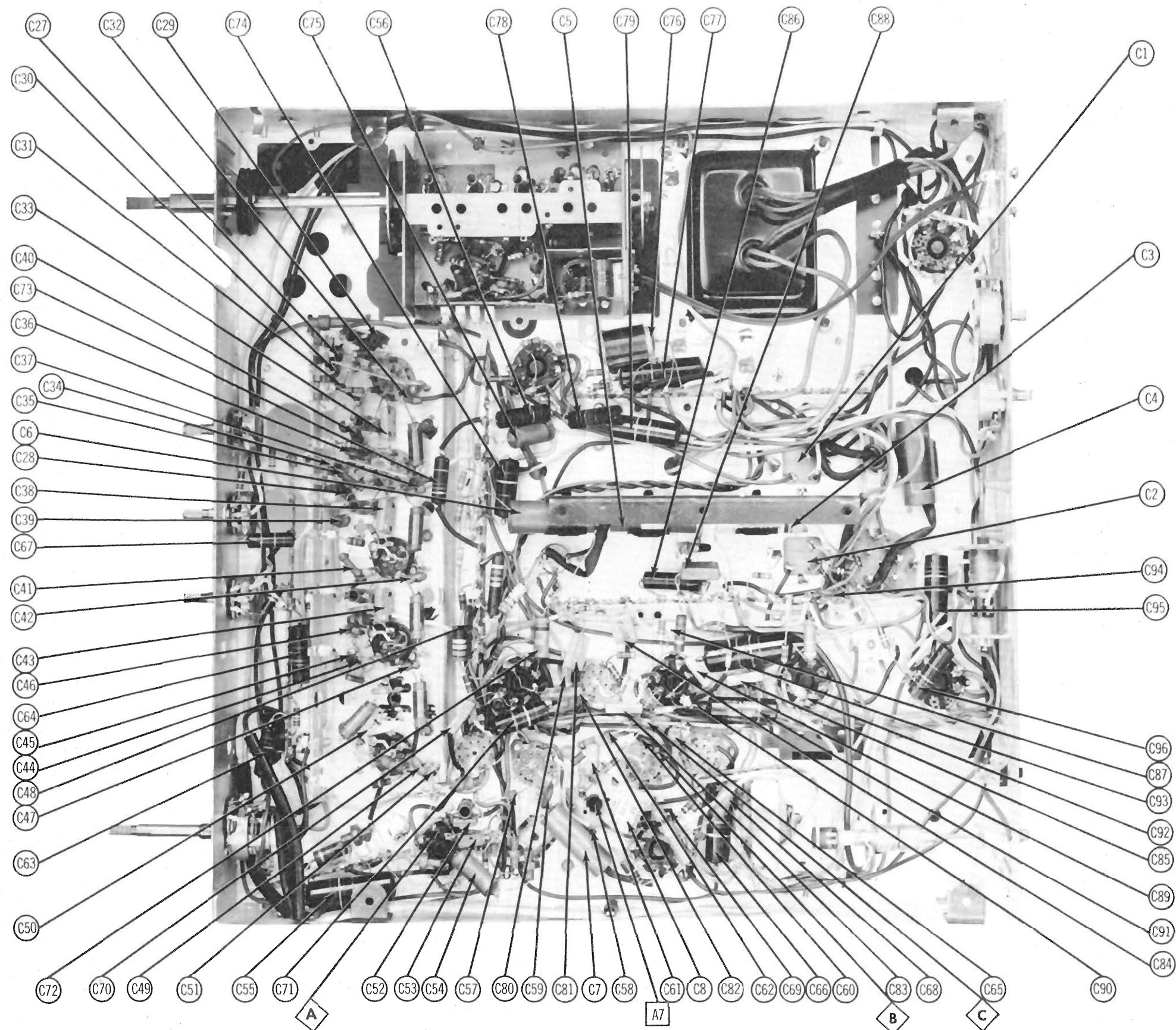




RF TUNER



RAYTHEON MODELS
C-1729A, C-1731A, M-1726A, M-1728A
MAIN POL. SISSACH

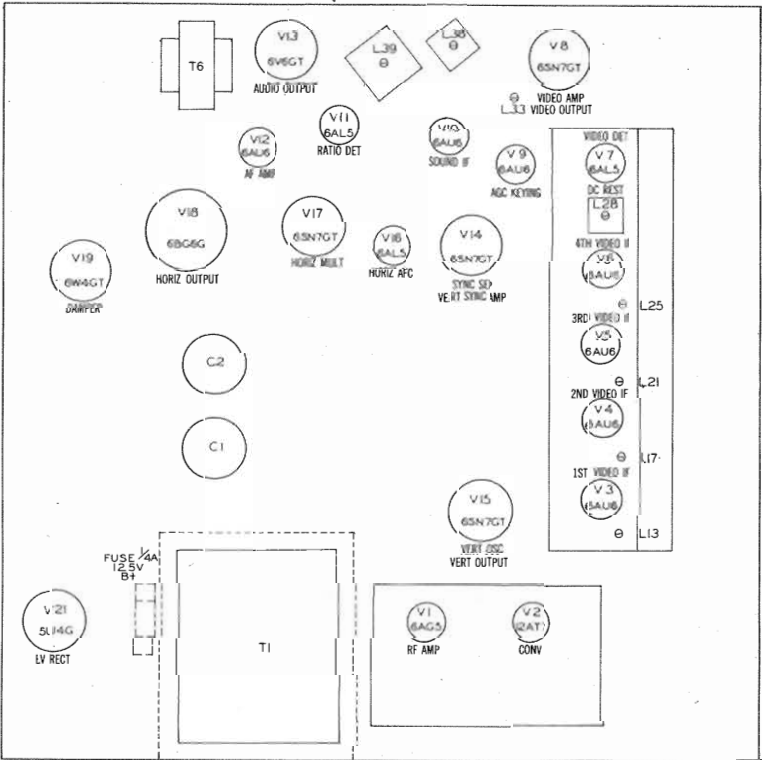


CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

RESISTANCE MEASUREMENTS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	43KΩ	68Ω	.1Ω	0Ω	†2.8KΩ	†3.8KΩ	68Ω		
V 2	12AT7	†9.3KΩ	10KΩ	0Ω	0Ω	0Ω	†3.8KΩ	68KΩ -	1.2KΩ	.1Ω
V 3	6AU6	100KΩ	0Ω	0Ω	.1Ω	†3.8KΩ	†3.8KΩ	82Ω		
V 4	6AU6	100KΩ	0Ω	0Ω	.1Ω	†3.8KΩ	†3.8KΩ	82Ω		
V 5	6AU6	105KΩ	0Ω	0Ω	.2Ω	†3.8KΩ	†3.8KΩ	82Ω		
V 6	6AU6	2.3Ω	0Ω	0Ω	.3Ω	†5.7KΩ	†68KΩ	120Ω		
V 7	6AL5	.8Ω	0Ω	.4Ω	0Ω	1Meg	0Ω	3.9KΩ		
V 8	6SN7GT	3.9KΩ	†15KΩ	0Ω	470KΩ	†4.6KΩ	850Ω	0Ω	.1Ω	
V 9	6AU6	†25KΩ	†11KΩ	∞0Ω	∞.1Ω	90KΩ	†76Ω	†11KΩ		
V 10	6AU6	3.6Ω	0Ω	0Ω	.1Ω	†5KΩ	†5KΩ	120Ω		
V 11	6AL5	0Ω	22KΩ	.1Ω	0Ω	INF	0Ω	INF		
V 12	6AU6	10Meg	0Ω	.1Ω	0Ω	†470KΩ	†1.8Meg	0Ω		
V 13	6V6GT	0Ω	0Ω	†1.5KΩ	†1.1KΩ	470KΩ	†76Ω	.1Ω	820Ω	
V 14	6SN7GT	4.7Meg	6.3KΩ	0Ω	2.2Meg	†47KΩ	0Ω	0Ω	.1Ω	
V 15	6SN7GT	1.5Meg	†1Meg	0Ω	1Meg	†700Ω	1.3KΩ	.1Ω	0Ω	
V 16	6AL5	2.2Meg	150KΩ	0Ω	.1Ω	2.2Meg	0Ω	4.5Meg		
V 17	6SN7GT	4.4Meg	†5.7KΩ	1.5KΩ	120KΩ	†270KΩ	1.5KΩ	0Ω	.1Ω	
V 18	6BG6G	∞Ω	0Ω	0Ω	1Meg	1Meg	100KΩ	.1Ω	†4.8KΩ	TOP CAP #23 Ω
V 19	6W4GT	INF	INF	†3.7KΩ	#10Ω	†76Ω	#5Ω	∞.1Ω	∞0Ω	
V 20	1X2A	PINS 1 - 9 HAVE INF RESISTANCE								TOP CAP #195Ω
V 21	5U4G	INF	30KΩ	INF	29Ω	470KΩ	31Ω	470KΩ	30KΩ	
V 22	17BF4A	0Ω	1Meg	PIN 10 #1KΩ	PIN 11 120KΩ	PIN 12 .1Ω				

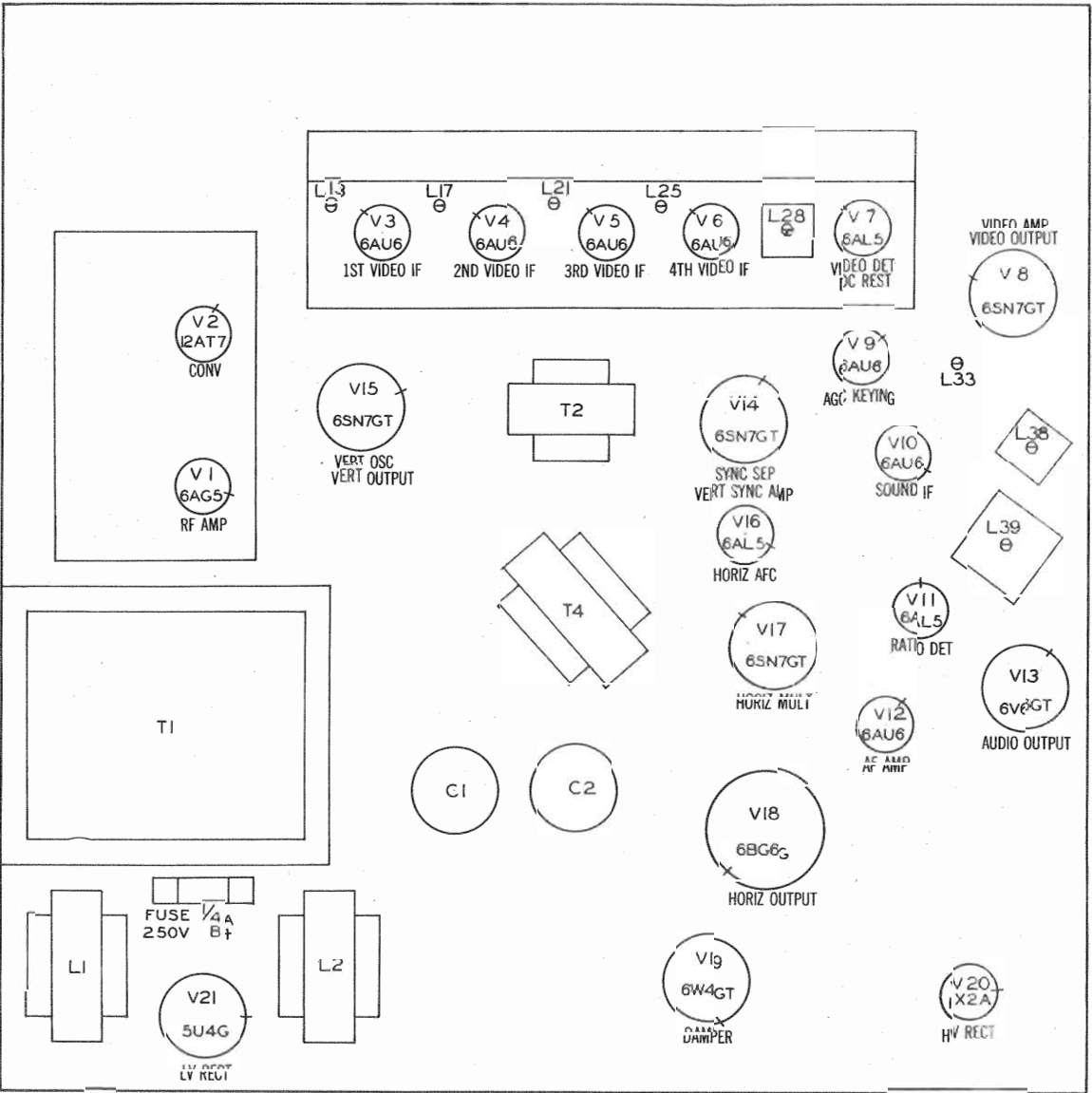
HI-LO SWITCH IN "LO" BAND POSITION
ALL CONTROLS SET FOR NORMAL OPERATION, NO SIGNAL APPLIED
† MEASURED FROM PIN 8 OF V21.
■ MEASURED FROM 90 VDC LINE
MEASURED FROM PIN 3 OF V19



BOTTOM VIEW

TUBE PLACEMENT CHART

TUBE PLACEMENT CHART



TOP VIEW

TUBE FAILURE CHECK CHART

The following chart lists tubes whose failures are most likely to produce the indicated symptoms. Refer to tube placement chart for location and type of tube.

- POWER SUPPLY FAILURE**
No Raster, No Sound - V21, Fuse (M1)
- LOSS OF PICTURE OR SOUND**
No Pic, No Sound, Has Raster - V2, V3, V4, V5, V6, V7
No Pic, No Sound, Has Snow - V1, V2, V3
No Pic, Has Sound, Has Raster - V7, V8, V22
Has Pic, No Sound - V10, V11, V12, V13
Overloaded Picture - V9
- SYNC FAILURE**
No Vert. Sync - V14, V15
No Horiz. Sync - V14, V16, V17
No Vert. or Horiz. Sync - V14
- SWEEP FAILURE**
No Raster, Has Sound - V17, V18, V19, V20, V22
No Vertical deflection - V15
Poor Vert. Linearity or Foldover - V15
Poor Horiz. Linearity or Foldover - V17, V18, V19
Narrow Picture - V17, V18, V19, V21
Vert. Off Freq. - V14, V15
Horiz. Off Freq. - V14, V16, V17

RATHEON MODELS
C-1729A, C-1731A, M-1726A, M-1728A

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis.
Do not remove the horizontal multivibrator tube to disable the high voltage.

VIDEO IF ALIGNMENT

Tune to any point of non-interference in the high band channel.
Set the contrast control at maximum.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
Direct	High side to an un-grounded tube shield floating over Converter tube (V2). Low side to chassis.	26.35MC (unmod.)	See notes above.	DC probe to point \diamond . Common to chassis.	A1, A2	Adjust for maximum deflection. Attenuate signal generator to maintain approximately 1 volt reading at VTVM.
"	"	23.7MC	"	"	A3, A4	"
"	"	25MC	"	"	A5	"

OVERALL VIDEO IF RESPONSE CHECK

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

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Direct	High side to an un-grounded tube shield floating over converter tube (V2). Low side to chassis.	25 MC (10 MC Swp.)	23.3 MC 26.75 MC	See note under Video IF Align.	Vert. amp thru 10K Ω to point \diamond . Low side to chassis.		Check for response curve similar to Fig. 1. Adjust A5 for flat top response. If necessary adjust A1 thru A5 for desired response curve and marker placement.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100K Ω (\pm 1%) resistors in series from point \diamond to B-. The junction of these two resistors is alignment point \diamond as shown on the schematic.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
.001 Mfd.	High side to pin 1 (grid) of 6AU6 (V10). Low side to chassis.	4.5 MC (unmod.)	Any in high band.	DC probe to point \diamond . Common to Chassis.	A6, A7	Adjust for maximum deflection.
"	"	"	"	DC probe to point \diamond . Common to point \diamond .	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 120v sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
.001 Mfd.	High side to pin 1 (grid) of 6AU6 (V10). Low side to chassis.	4.5 MC (450 KC Swp.)	4.5 MC	Any in high band.	Vert amp to point \diamond . Low side to chassis.	A6, A7	Disconnect stabilizer capacitor C8. Adjust for maximum amplitude and symmetry as per Fig. 2.
"	"	"	"	"	Vert. amp to point \diamond . Low side to chassis.	A8	Reconnect capacitor C8. Adjust so that 4.5 MC occurs at center of crossover lines as per Fig. 3. SLIGHTLY retouch A7 for maximum amplitude and straightness of crossover lines.

RF TUNER ALIGNMENT


Preset the trimmers screws as shown in fig. 4.
Turn the tuner shaft to the top of its stroke in low band position.
Adjust all coil cores so the core projects 1.6 inches above the coil mounting strip.
Turn the core of L11 (low band oscillator) an additional four turns out of the coil.

LOW BAND ALIGNMENT

Turn the tuner to channel 6.
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.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Two 120 Ω carbon resistors	Across antenna terminals with 120 Ω in each lead.	85 MC (10 MC swp)	83.25 MC 87.75 MC	6	Vert. amp thru 10K Ω to point \diamond . Low side to chassis.	A9, A10 A11	Adjust for maximum amplitude of response curve.
"	"	"	"	"	"	A12	Adjust to place video marker at 50% on response curve as per Fig. 5.
"	"	79 MC (10 MC swp.) 89 MC (10 MC swp.) 83 MC (10 MC swp.) 57 MC (10 MC swp.)	77.25 MC 81.75 MC 71.75 MC 61.25 MC 65.75 MC 55.25 MC 59.75 MC	5 4 3 2	"		Adjust tuning control until response curve appears on scope with video marker at 50%. If necessary retouch A11 and A12 for compromise which will give the best overall response over the low band. If trimmer A10 reaches maximum capacity, turn L7 slug into coil.

ALIGNMENT INSTRUCTIONS (CONT.)

HIGH BAND ALIGNMENT							
Turn the tuner to channel 13.							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. Two 120 Ω carbon resistors	Across antenna terminals with 120 Ω in each lead.	213 MC (10 MC swp.)	211.25 MC 215.75 MC	13	Vert amp. to point  . Low side to chassis.	A13, A14 A15	Adjust for maximum amplitude of response curve.
11. "	"	"	"	"	"	A16	Adjust to place video marker at 50% on response curve as per Fig. 5
12. "	"	207 MC (10 MC swp.) 201 MC (10 MC swp.) 195 MC (10 MC swp.) 189 MC (10 MC swp.) 183 MC (10 MC swp.) 177 MC (10 MC swp.)	205.25 MC 209.75 MC 199.25 MC 203.75 MC 193.25 MC 197.75 MC 187.75 MC 191.75 MC 181.25 MC 185.75 MC 175.25 MC 179.75 MC	12 11 10 9 8 7			Adjust tuning control until response curve appears on scope with video marker at 50%. If necessary retouch A14 and A15 for compromise which will give the best overall response over the high band channels.
4.5 MC TRAP ADJUSTMENT							
Tune in a TV station and adjust the tuning control until 4.5mc beat interference appears. Turn A17 fully counter clockwise then clockwise until the 4.5mc interference disappears.							

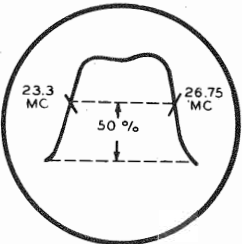


FIG. 1

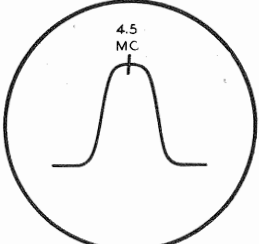


FIG. 2

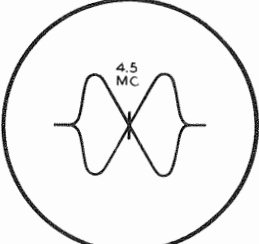


FIG. 3

ALIGNING TRIMMERS

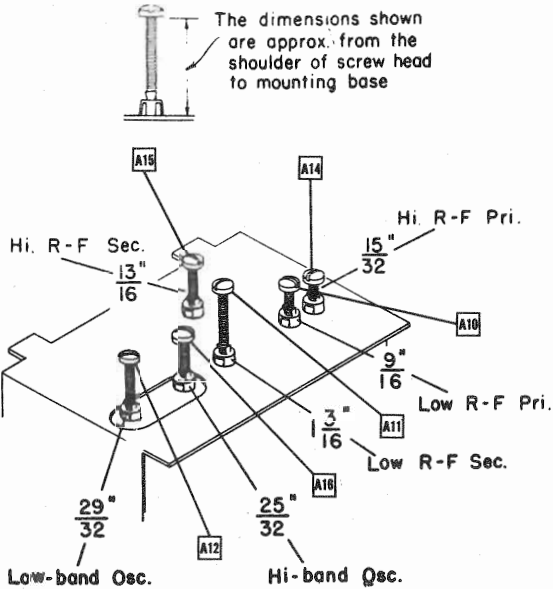


FIG. 4

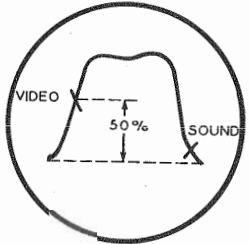


FIG. 5

C-1729A, C-1731A, M-1726A, M-1728A
RATHEON MODELS

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA					NOTES
	IMPEDANCE		DC RES.		RAYTHEON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.	
	PRI.	SEC.	PRI.	SEC.						
T6	6.9K Ω	3 Ω	480 Ω	.9 Ω	B12C-18743	A-3878	A-2931	RO-13 ②	S-7X	② Drill one new mtg. hole

SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
				RAYTHEON PART No.	JENSEN PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.				
SP1	6"	PM	3Ω	C-18A-19895	ST-108 Mod. P6-X	6A1	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	RAYTHEON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.
L1	.250A	3 Ω	1.3H μ	B16A-17959	C-2326 ③	C-2991		C-23X
L2	.250A	3 Ω	1.3H μ	B16A-17959	C-2326 ②	C-2991		C-23X

② Drill one new mtg. hole

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RAYTHEON PART No.	MERIT PART No.	
L3	Ant. Trans.	0Ω	0Ω	201-17143		
L4	Ant. Trans.	0Ω	0Ω	201-17143		
L5	RF Choke	0Ω		16A-17128		
L6	RF Coil Pri.	0Ω		13E-17140		High Band
L7	RF Coil Pri.	0Ω		13E-12046		Low Band
L8	RF Coil Sec.	0Ω		13E-17140		High Band
L9	RF Coil Sec.	0Ω		13E-12046		Low Band
L10	Osc. Coil	0Ω		13E-17140		High Band
L11	Osc. Coil	0Ω		13E-12155		Low Band
L12	RF Choke	10Ω		16A-18025		
L13	1st. Video IF	.3Ω		13M-19521	TV-112	
L14	RF Choke					1KΩ resistor may be used in this application.
L15	RF Choke					1KΩ resistor may be used in this application.
L16	Fl. Choke	.2Ω		201-15608		
L17	2nd. Video IF	.1Ω		201-15612	TV-103	
L18	RF Choke					1KΩ resistor may be used in this application.
L19	RF Choke					1KΩ resistor may be used in this application.
L20	Fl. Choke	.2Ω		16A-17937		
L21	3rd. Video IF	.2Ω		201-15652	TV-102	
L22	RF Choke					1KΩ resistor may be used in this application.
L23	RF Choke					1KΩ resistor may be used in this application.
L24	Fl. Choke	.2Ω		16A-17937		
L25	4th. Video IF	.1Ω		201-15652	TV-103	
L26	RF Choke					1KΩ resistor may be used in this application
L27	RF Choke	2.3Ω		201-15608		
L28	5th. Video IF	.8Ω	.8Ω	13E-19958		
L29	Fl. Choke	0Ω		16A-17937		
L30	RF Choke	0Ω		16A-17937		
L31	RF Choke	2.2Ω		201-15608		
L32	RF Choke	2.2Ω		16A-17937		
L33	4.5MC Trap	1.4Ω		201-20696		
L34	Peaking Coil	5.5Ω		16A-20021		130 Microhenries, Green Dot
L35	Peaking Coil	7Ω		16A-19485	TV-185	240 Microhenries, White Dot
L36	Peaking Coil	5.5Ω		16A-20020	TV-184	55 Microhenries, Yellow Dot
L37	Peaking Coil	7Ω		16A-19485		240 Microhenries, White Dot
L38	Sound IF	3.6Ω		13A-19514		
L39	Ratio Det.	6Ω	.7ΩCT.	13M-19843		Tertiary Winding .6Ω
L40	Horiz. Osc.	75Ω		13D-19540	TV-163	
L41	Horiz. Size	.5Ω		13M-18233		
L42	Horiz. Lin.	5.5Ω		201-20186		
L43	Fl. Choke	2.2Ω				Tap @ 3.6Ω 2.2Ω resistor used in some application.

FUSES

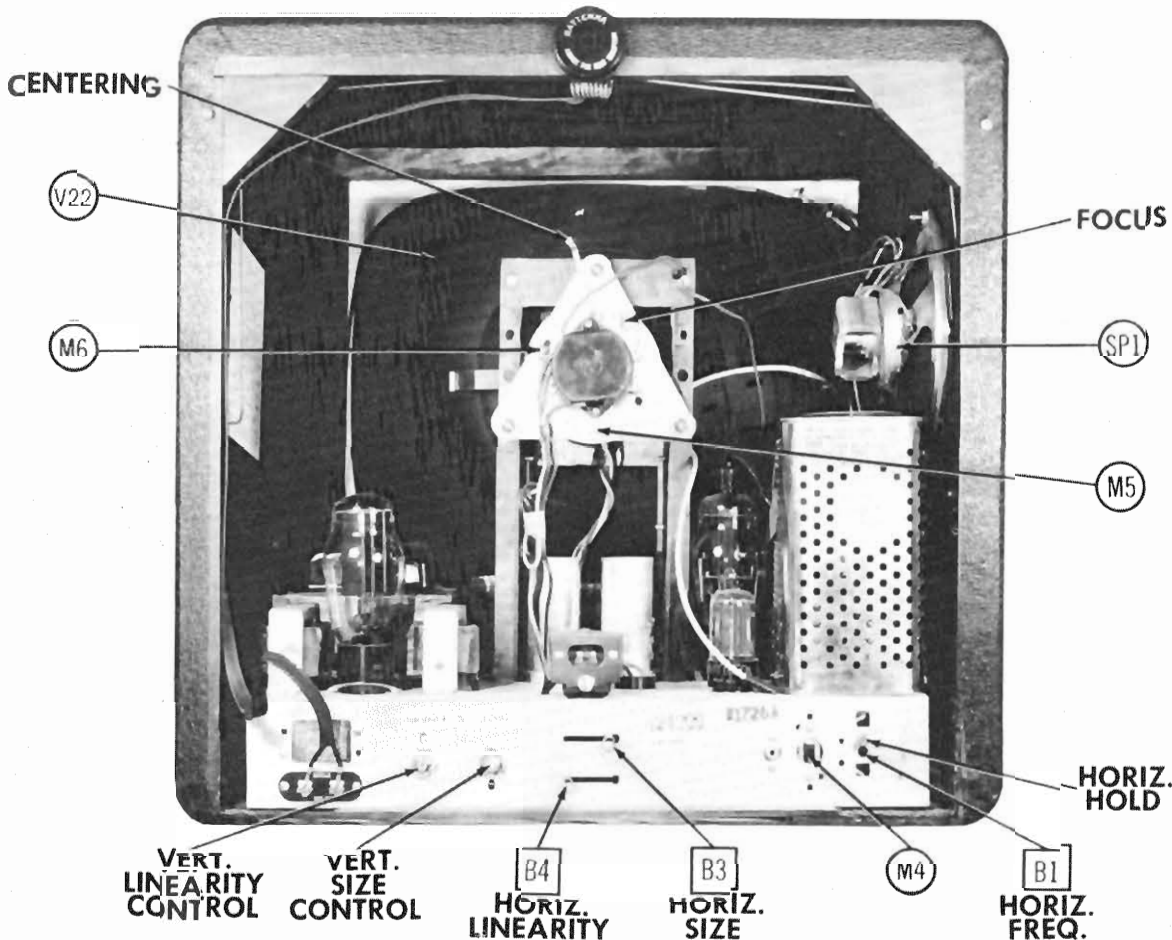
ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			RAYTHEON PART No.		LITTELFUSE PART No.	
			FUSE	HOLDER	FUSE	HOLDER
M1	3AG Slo-Blo	1/4 A 125 V.			311-250	350126
					MDL-471	4405

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					RAYTHEON PART No.		
M2	Bayonet	6-8	.15	Brown			Type #47

MISCELLANEOUS

ITEM No.	PART NAME	RAYTHEON PART No.	NOTES
M3	RF Tuner		
M4	Switch		
M5A	Focus Magnet	55P-19600-1	TV-Phono
M5B	Focus Magnet	55P-20068	Alternate
M6	Ion Trap	16M-19906	
B2	Trimmer	8E-18508	Horiz. Drive (80-480MMF)



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Turn the set on and tune in a TV station, preferably a test pattern.

Set the contrast control at its normal operating position.

Turn the horizontal hold thumb screw clockwise until it reaches its stop, then turn two complete turns counter-clockwise. This is mid-position of its range.

Adjust the horizontal hold (B1) until the picture synchronizes horizontally.

Adjust the horizontal drive trimmer (B2) counter clockwise until bright vertical lines appear in the raster.

Turn B2 clockwise 1/8 turn past the point where the lines just disappear.

Adjust the horizontal size slug (B3) until the picture is slightly wider than enough to fill the mask horizontally.

Adjust the horizontal linearity slug (B4) until the picture is symmetrical from left to right.

Adjustment of the horizontal drive trimmer will affect the horizontal size and linearity. Check the setting of B3 and B4 after adjustment of B2.

DISASSEMBLY INSTRUCTIONS

1. Remove 4 push on type control knobs from front panel.
 2. Remove 3 screws. Remove rear cover.
 3. Disconnect built-in antenna and speaker.
 4. Remove 2 speaker nuts. Remove speaker.
 5. Remove 5 chassis bolts. Remove chassis.
- NOTE: FOR PICTURE TUBE REMOVAL IT IS NECESSARY TO REMOVE CHASSIS AS OUTLINED ABOVE.

RAYTHEON MODELS
C-1729A, C-1731A, M-1726A, M-1728A

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		RAYTHEON PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	6AG5	6AG5	7BD	
V2	Converter	12AT7	12AT7	8A	
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	4th. Video IF Amp.	6AU6	6AU6	7BK	
V7	Video Detector-DC Restorer	6AL5	6AL5	8BT	
V8	Video Amplifier-Video Output	6SN7GT	6SN7GT	8BD	
V9	AGC Keying	6AU6	6AU6	7BK	
V10	Sound IF Amp.	6AL5	6AL5	7BK	
V11	Ratio Detector	6AU6	6AU6	7BK	
V12	AF Amplifier	6V6GT	6V6GT	7AC	
V13	Audio Output	6V6GT	6V6GT	7AC	
V14	Sync Separator	6SN7GT	6SN7GT	8BD	
V15	Vert. Sync Amp. Vert. Oscillator	6SN7GT	6SN7GT	8BD	
V16	Vert. Output	6SN7GT	6SN7GT	8BD	
V17	Horiz. AFC	6AL5	6AL5	8BT	
V18	Horiz. Mott.	6SN7GT	6SN7GT	8BD	
V19	Horiz. Output	6V6GT	6V6GT	7AC	
V20	Damper	6V6GT	6V6GT	7AC	
V21	HY Rectifier	1X2	1X2	9Y	
V22	HY Rectifier	1X2	1X2	9Y	
V23	LY Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA		RMA BASE TYPE	NOTES
	RAYTHEON PART No.	SYLVANIA PART No.		
V22	17BP4A	17BP4A 17BP4B 17HP4A 17HP4B	12D 12D 12C 12C	1. Circuit changes necessary.

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						NOTES
		RAYTHEON PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	
C1A	100 450	8C-18487	AFH4-105		UPT409	FP237	TVL-2759	
C1B	100 450	8C-18487	AFH4-105		UPT409	TC495	TVA-1207	
C2A	100 450	8C-17845	AFH3-45		UPT36145	FP431.4	TVL-3790	
C3	100 150	8C-19546	PRS150/20		BR2015A	TC45	TVA-1410	
C4	100 450	8C-12453	PRS450/8		BR843A	TC71	TVA-1704	
C5	100 450	8C-12453	PRS450/8		BR843A	TC71	TVA-1704	
C6	100 450	8C-12453	PRS450/8		BR843A	TC71	TVA-1704	
C7	100 150	8C-19546	PRS150/20		BR2015A	TC45	TVA-1410	
C8	100 75	8C-19546	PRS150/20		BR2015A	TC45	TVA-1410	
C9	220	8G-16045	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C10	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C11	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C12	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C13	100	8G-12495-1	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C14	15	8G-13017	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C15	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C16	1.7	8G-12495-8	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C17	4	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C18	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C19	2.2	8G-12495-2	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C20	1	8G-12495-2	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C21	51	8G-11891	TCN-51					
C22	2.5	8G-19568	TCN-51					
C23	7	8G-19572	TCN-51					
C24	51	8G-11891	TCN-51					
C25	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C26	220	8G-16045	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C27	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C28	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C29	100	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C30	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C31	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C32	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C33	68	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C34	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C35	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C36	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C37	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C38	68	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C39	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C40	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C41	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C42	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C43	68	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C44	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C45	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C46	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C47	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C48	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C49	1000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C50	5	8G-12166	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C51	5	8G-12166	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C52	100	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C53	100	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C54	.05	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	

CAPACITORS (CONT.)

ITEM No.	RATING	REPLACEMENT DATA						NOTES
		RAYTHEON PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	
C55	1	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C56	1	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C57	3.3	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C58	.0022	8F1-113	1468-0001	D6-101	5W5T1	GP1K-101	MC235	
C59	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C60	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C61	820	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C62	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C63	.01	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C64	.022	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C65	.01	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C66	.1	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C67	.01	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C68	.01	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C69	.0047	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C70	470	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C71	.1	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C72	.01	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C73	.0047	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C74	.022	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C75	.05	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C76	.22	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C77	.1	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C78	.022	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C79	.1	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C80	470	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C81	220	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C82	680	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C83	680	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C84	220	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C85	820	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C86	.022	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C87	2500	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C88	3500	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C89	220	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C90	330	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C91	.001	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C92	.47	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C93	.1	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C94	5000	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C95	.15	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C96	.022	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	
C97	150	8G-13201	SI1000	D6-102	TM5D1	GP2L-102	UC-521	

Note 1. Some models use 50 V. unit in this application. (Part #6C-20557)
 Note 2. Some models use 50 V. unit in this application. (Part #6C-19918)
 Note 3. Some models use 47MMF in this application. (Part #6C-109)
 Note 4. Some models use .047MMF in this application. (Part #6C-20601)
 Note 5. Some models use 5000MMF in this application. (Part #6G-13962)
 Note 6. Not used in all models.

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA						INSTALLATION NOTES
		RAYTHEON PART No.	IRC PART No.	CLANOSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.		
R1A	5000Ω	A-10A-18441	QJ-28*			UF53R	U18-12153	Contrast - Panel Volume - Tapped @ 100KΩ-Rear
R1B	1Meg					US-28		Attach to R1B
R2	Switch	Not Req.				U-35		Brightness
R2A	50KΩ	A-10B17764	QJ-123	AG-44-S	AB-31	Not Req.		Attach to R2A
R2B	1Meg	A-10B19542	QJ-137	AG-43-Z	BSK-70	Not Req.		Attach to R2B
R3	Switch	Not Req.				U-53		Tone
R4A	100K	A-10B17275	QJ-128	AG-49-S	AB-40	Not Req.		Attach to R3A
R4B	Switch	Not Req.				U-41		Vert. Hold
R5A	5000Ω	A-10B19218	QJ-114	AG-19-S	AK-10	Not Req.		Attach to R4A
R5B	Switch	Not Req.				SV-14		Vert. Linearity
R6A	750KΩ	A-10B19220	QJ-136	AG-81-S	AK-69	Not Req.		Attach to R5A
R6B	Switch	Not Req.				AK-1		Vert. Size

* CONCENTRIK EQUIVALENT - KIT K-2, BASE ELEMENTS & SHA