

RAYTHEON MODELS C-1104B,  
M-1105B, M-1106, M-1107

TRADE NAME	Raytheon Models C-1104B, M-1105B, M-1106, M-1107 (Ch. 12AX26, 12AX27)	
MANUFACTURER	Belmont Radio Corp., 5921 W. Dickens Ave., Chicago (39), Ill.	
TYPE SET	Television Receiver	
TUBES	Twenty One	
POWER SUPPLY	1 110-115 Volts AC-60 Cycle	RATING 1.8 Amp. @ 115 Volts AC
TUNING RANGE	Channels 2 Thru 13	
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**HOWARD W. SAMS & CO., INC. • Indianapolis Indiana**

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# PARTS LIST AND DESCRIPTIONS (Continued)



## SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	BELMONT PART No.	VIKING PART No.	QUAM PART No.	
SP1A B	PM PM	3Ω 3Ω	C18A-18745 C18A-18865	6J6 10J12	6A15 10A4A	
SP2A B	CONE DIA.	V. C. DIA.				
	5 7/8" 9 7/8"	9/16" 1"				

## FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	BELMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.250A	38Ω	1.3 Henries	B16A-17959	C-2326 ②	C-2991	TR3300 ②	② Drill one new mounting hole.
L2	.250A	38Ω	1.3 Henries	B16A-17959	C-2326 ②	C-2991	TR3300 ②	

## COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	BELMONT PART No.	MEISSNER PART No.	
L3	High Band Ant. Trans.	.1Ω	.1Ω	B-201-17143		
L4	Low Band Ant. Trans.	.1Ω	.1Ω			Part of L3
L5	RF Choke	.3Ω		A-16A-17128		High Band
L6	RF Coil Pri.	.1Ω		B-13E-17140		High Band
L7	RF Coil Sec.	.1Ω		B-13E-17140		Low Band
L8	RF Coil Pri.	.1Ω		B-13E-12046		Low Band
L9	RF Coil Sec.	.1Ω		B-13E-12046		High Band
L10	Osc. Coil	.1Ω		B-13E-17140		Low Band
L11	Osc. Coil	.1Ω		B-13D-12155		
L12	Conv. Plate Trap	11Ω		A-16A-18025		
L13	1st. Video IF	.4Ω		A-13M-18026		
L14	Fil. Choke	.3Ω		A-201-15609		
L15	2nd. Video IF	.2Ω		B-201-15612		
L16	3rd. Video IF	.2Ω		B-201-15612		
L17	4th. Video IF	.2Ω		B-201-15612		
L18	RF Choke	2.4Ω		A-201-15608		
L19	5th. Video IF	1.3Ω	1.3Ω	B-13B-18784		
L20	Fil. Choke	1.1Ω		A-16A-17837		
L21	Peaking	2.3Ω		A-16A-17961		
L22	4.5MC Trap	2.5Ω		A-201-18695		Includes C49
L23	Peaking	20Ω		A-16A-18685		
L24	Peaking	15Ω		A-16A-18685		
L25	Peaking	20Ω		A-16A-19486		
L26	1st. Sound IF	1Ω		B-13A-18783		
L27	Ratio Det. Trans.	4.2Ω	.2Ω	B-13M-17273		Tap. .6Ω
L28	Horiz. Osc.	60Ω		A-13D-16943		
L29	Horiz. Size	.2Ω		A-13M-18233		
L30	Horiz. Lin.	3.6Ω	Tap. 1Ω	A-13M-18961		

## FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				REMARKS
			BELMONT PART No.		LITTELFUSE PART No.		
			FUSE	HOLDER	FUSE	HOLDER	
M1	3AG	.250	A46B-18362	A55F-18024	312.250	357001	

## MISCELLANEOUS

ITEM No.	PART NAME	BELMONT PART No.	NOTES
M2	RF Tuner	A-20F-12108	Phono. (off-on)
M3	Switch	B-55P-18914	
M4	Focus Magnet	B-16M-17982	
M5	Ion Trap	A-BE-18508	
B2	Trimmer	A-5B-1878-56	80-480MMF (Horiz. Drive)
	Knob	A-5B-18781-76	Tuner (Models C-1104B, M-1105B, M-1106)
	Knob	B-5B-17761-76	Tuner (Models M-1107)
	Knob	B-5B-17761-56	Volume (Models C-1104B, M-1105B, M-1106)
	Knob	B-5B-17762-76	Volume (Models M-1107)
	Knob	B-5B-17762-56	Contrast (Models C-1104B, M-1105B, M11106)
	Knob	B-5B-18382-36	Contrast (Models M-1107)
	Knob	A-25M-18172	Antenna
	Knob	A-25M-18177	Rubber (White)
	Knob	A-25M-18178	Rubber (Red)
	Knob	A-25M-18178	Rubber (Blue)

VOLUME CONTROL ON-OFF SW

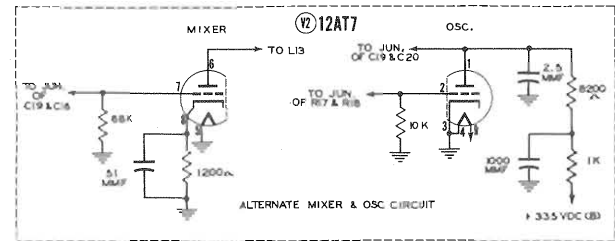
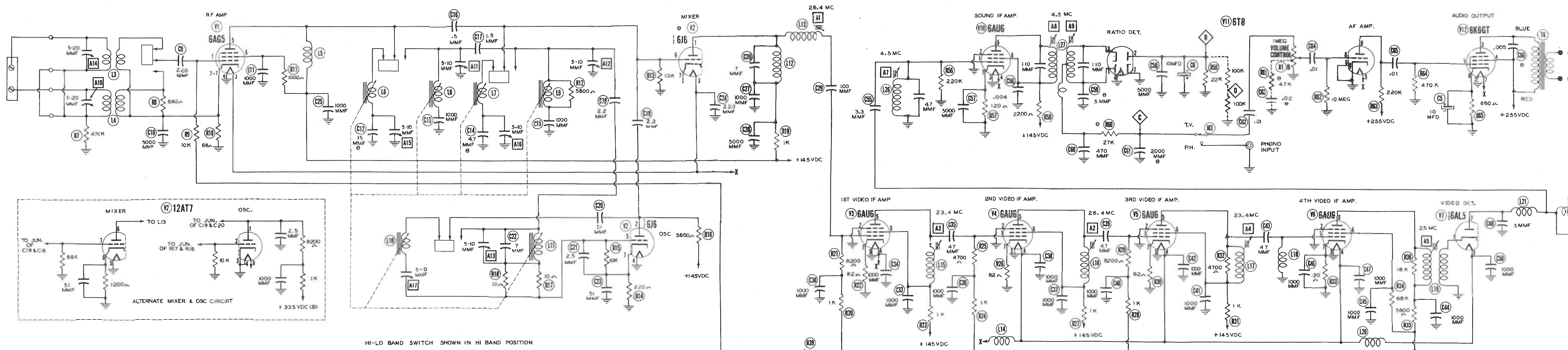
TRADE NAME Raytheon  
 MANUFACTURER Belmon  
 TYPE SET Televis  
 TUBES Twenty

POWER SUPPLY 110-115  
 TUNING RANGE—Channel

Alignment Instructions  
 Disassembly Instruction  
 Horizontal Sweep Circuit  
 Parts List and Description  
 Photographs  
 Cabinet - Rear View  
 Capacitor and Alignment

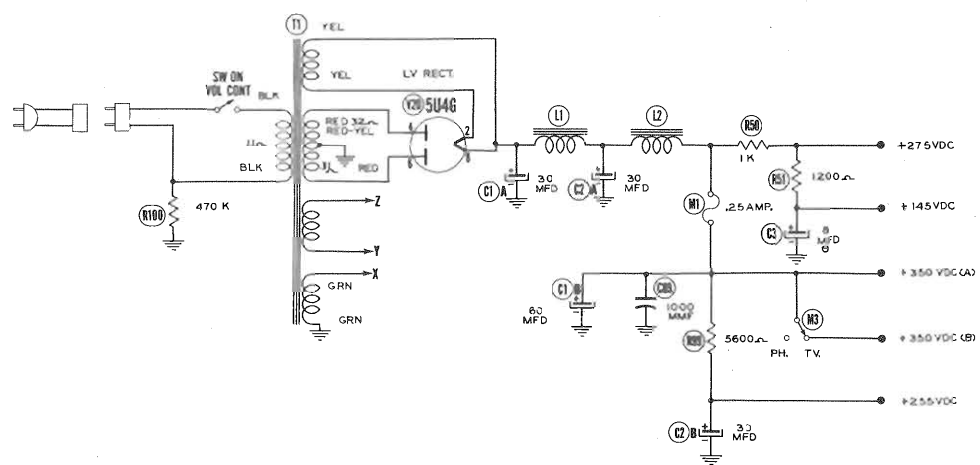
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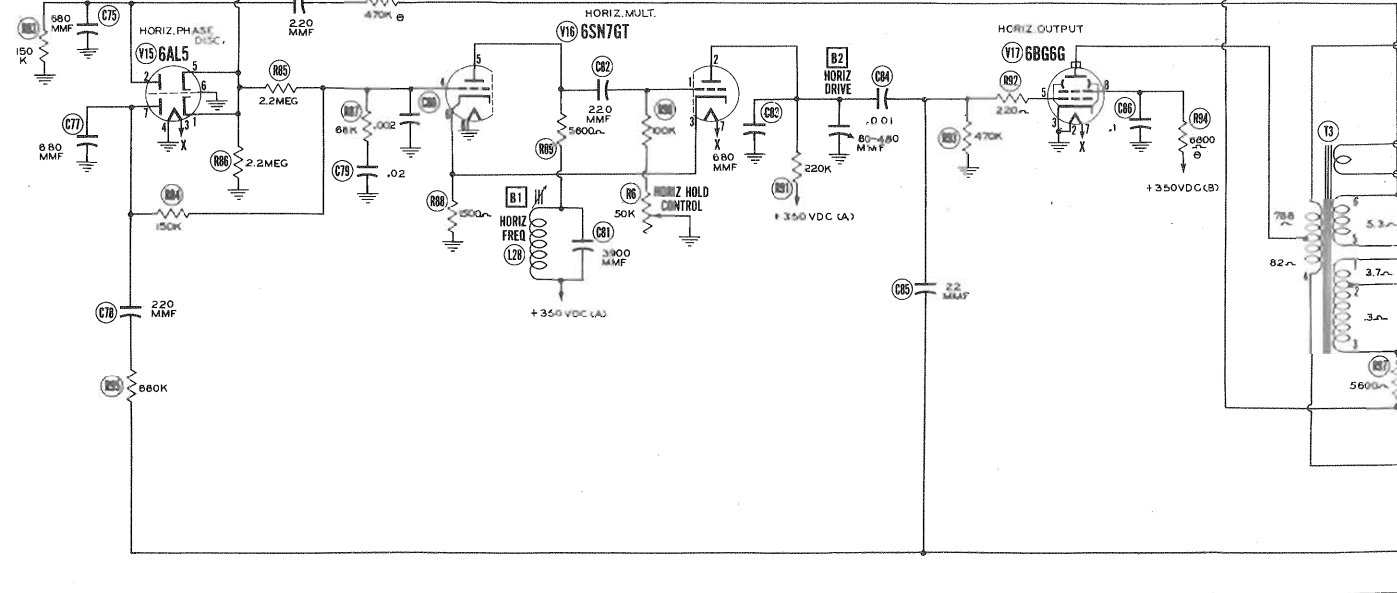
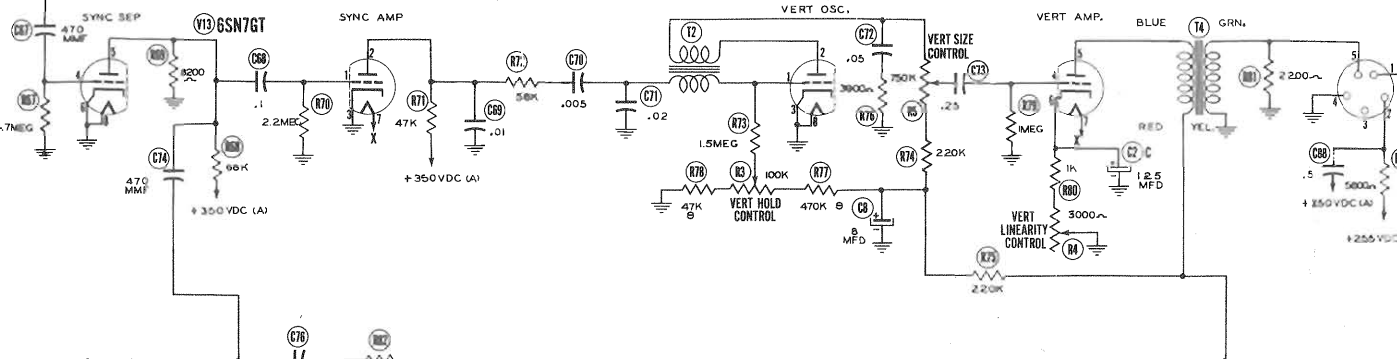
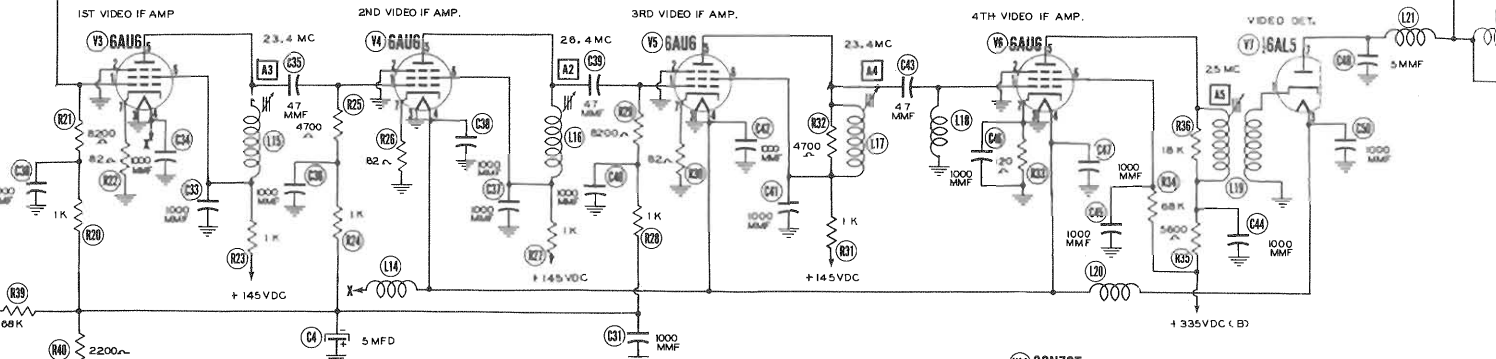


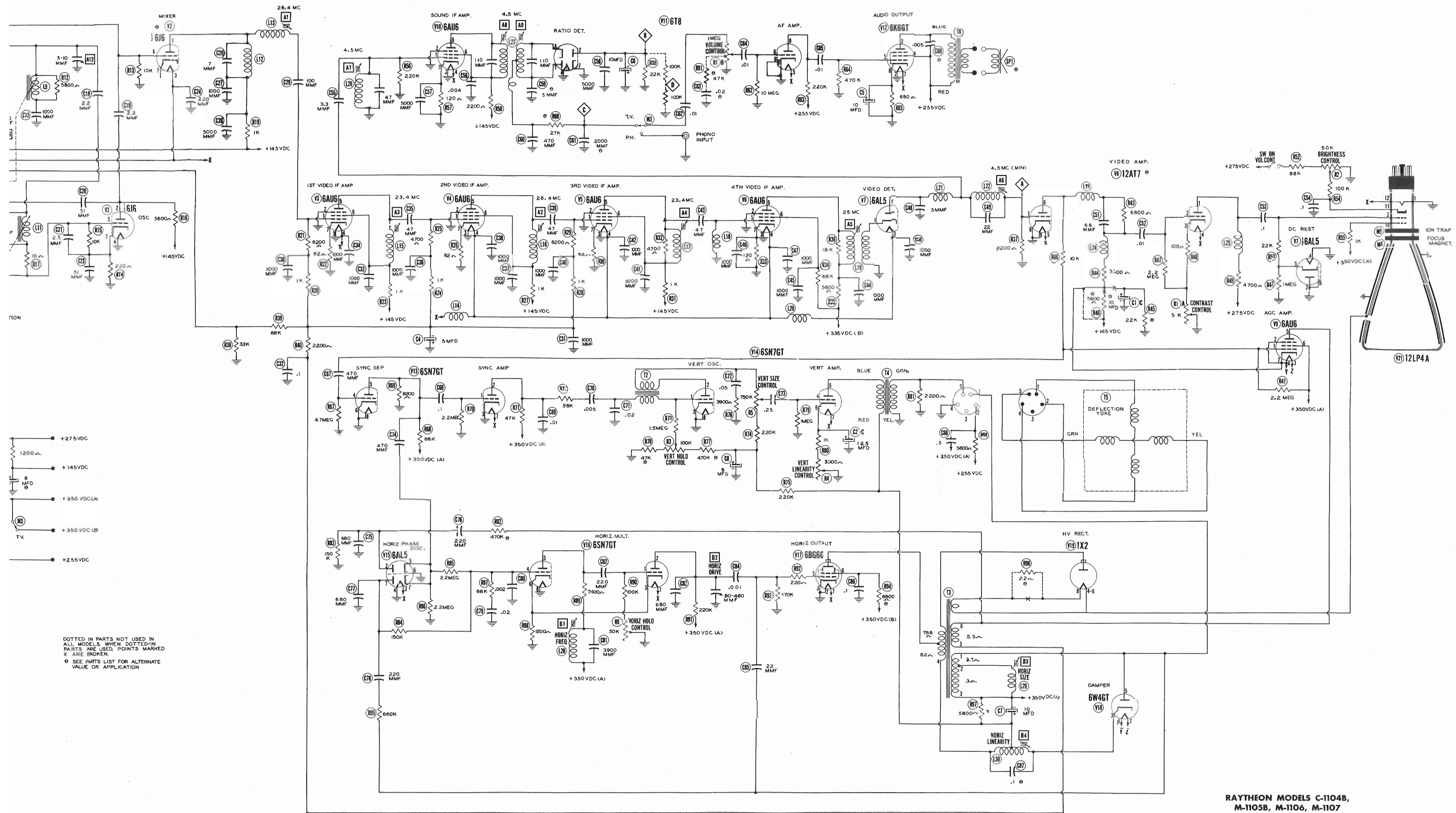
HI-LO BAND SWITCH SHOWN IN HI BAND POSITION

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



DOTTED IN PARTS NOT USED IN ALL MODELS. WHEN DOTTED IN PARTS ARE USED POINTS MARKED X ARE BROKEN.  
 Ø SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION



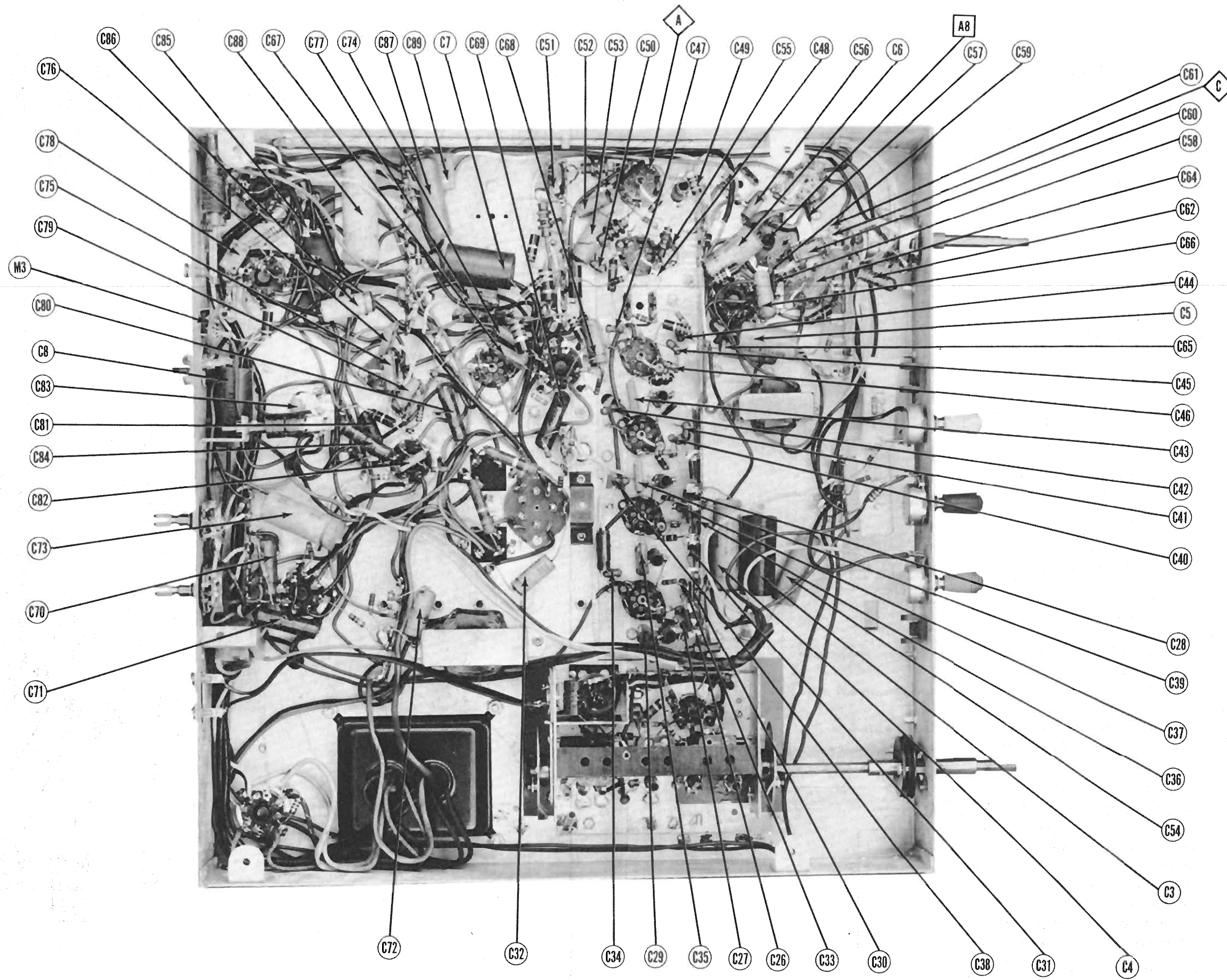


DOTTED IN PARTS NOT USED IN ALL MODELS WHEN DOTTED-IN PARTS ARE USED POINTS MARKED X ARE BROKEN.  
 0 SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

RAYTHEON MODELS C-1104B, M-1105B, M-1106, M-1107

RAYTHEON MODELS C-1104-B, M-1105B, M-1106, M-1107





CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

RAYTHEON  
 MODELS C-1104-B, M-1105B, M-1106, M-1107

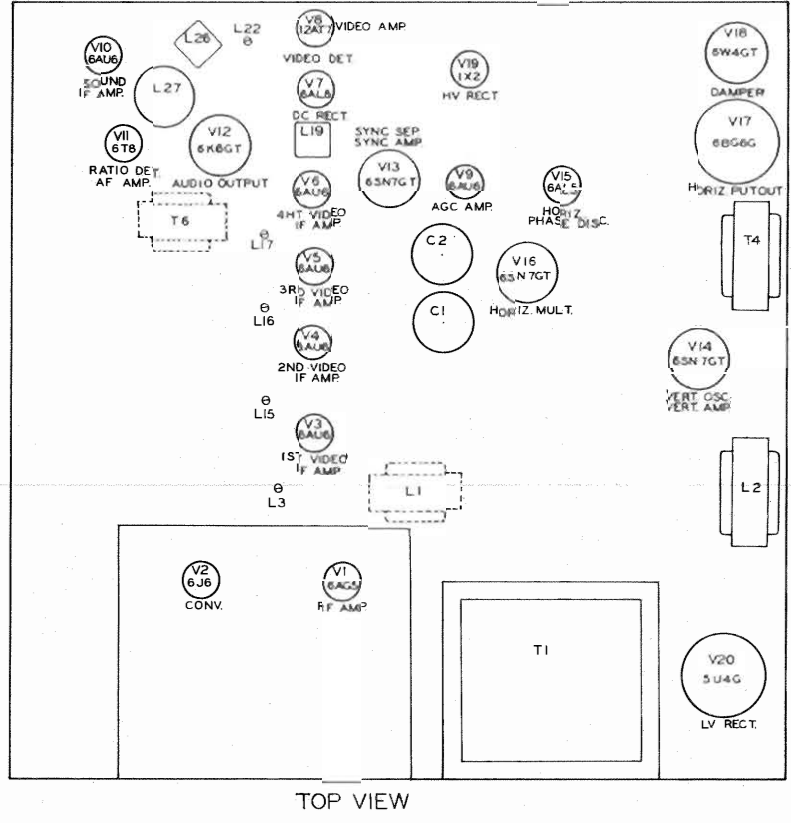
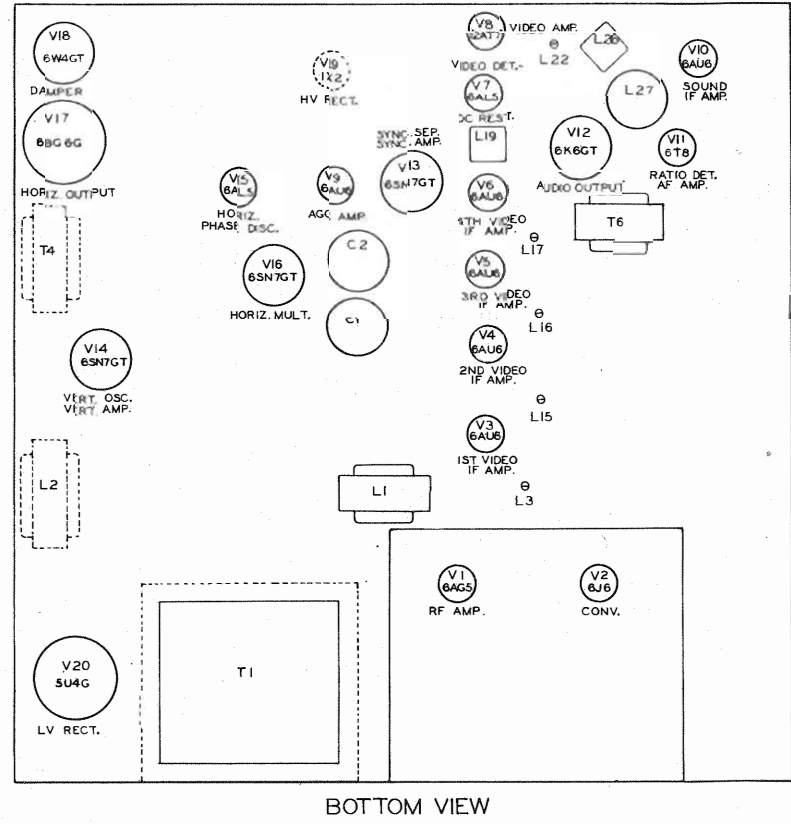
VOLTAGE AND RESISTANCE MEASUREMENTS

Item	Tube	VOLTAGE READINGS									RESISTANCE READINGS								
		Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 5	Pin 7	Pin 8	Pin 9
V 1	6AG5	-1VDC	.8VDC	6.3VAC	0V	145VDC	145VDC	.6VDC				45KΩ	68Ω	.1Ω	12.4KΩ	13.4KΩ	68Ω		
V 2	6J6	160VDC	100VDC	6.3VAC	0V	8-.8VDC	0V	3VDC				13.2KΩ	19KΩ	.1Ω	10KΩ	10KΩ	220Ω		
V 3	6AU6	0V	0V	0V	6.3VAC	135VDC	135VDC	.9VDC				80KΩ	0Ω	0Ω	13.6KΩ	13.6KΩ	82Ω		
V 4	6AU6	0V	0V	0V	6.3VAC	135VDC	135VDC	.9VDC				75KΩ	0Ω	0Ω	13.6KΩ	13.6KΩ	82Ω		
V 5	6AU6	0V	0V	0V	6.3VAC	135VDC	135VDC	.9VDC				80KΩ	0Ω	0Ω	13.6KΩ	13.6KΩ	82Ω		
V 6	6AU6	0V	0V	0V	6.3VAC	140VDC	140VDC	1.2VDC				2Ω	0Ω	0Ω	15.8KΩ	168KΩ	120Ω		
V 7	6AL5	0V	0V	0V	.8VDC	.3V	-2.2VDC					1Ω	0Ω	0Ω	1Meg	0Ω	8.2KΩ		
V 8	12AT7	200VDC	0V	6.3VAC	39VDC	33VDC	-.3VDC	0V	0V			15.8KΩ	2.2Meg	4.5KΩ	1.8KΩ	1.8KΩ	6.2KΩ	0Ω	0Ω
V 9	6AU6	85VDC	100VDC	100VDC	6.3VAC	330VDC	100VDC	0V				17.5KΩ	17.5KΩ	1.1Ω	70KΩ	180Ω	17.5KΩ		
V 10	6AU6	0V	0V	0V	6.3VAC	125VDC	125VDC	1VDC				1Ω	0Ω	0Ω	14.5KΩ	14.5KΩ	120Ω		
V 11	6T8	-2VDC	-.3VDC	-.2VDC	6.3VAC	0V	0V	-.3VDC	83VDC			Inf.	22KΩ	Inf.	0Ω	0Ω	10Meg	1220KΩ	
V 12	6K6GT	0V	0V	250VDC	255VDC	0V	0V	6.3VAC	18VDC			Inf.	0Ω	13.2KΩ	470KΩ	Inf.	.1Ω	68Ω	
V 13	6SN7GT	-2VDC	85VDC	0V	-1VDC	33VDC	14VDC	6.3VAC	0V			2.2Meg	147KΩ	0Ω	4.7Meg	130KΩ	0Ω	0Ω	
V 14	6SN7GT	-7.3VDC	112VDC	0V	430VDC	22VDC	6.3VAC	0V	0V			1.5Meg	1Meg	0Ω	100Ω	1KΩ	.1Ω	0Ω	
V 15	6AL5	2.8VDC	-.2VDC	6.3VAC	0V	2.8VDC	0V	-.2VDC	0V			2.2Meg	150KΩ	.1Ω	0Ω	2.2Meg	0Ω	4.5Meg	
V 16	6SN7GT	-1.6VDC	125VDC	11VDC	-2VDC	290VDC	11VDC	6.3VAC	0V			100KΩ	1220KΩ	1.5KΩ	4.5Meg	1.5KΩ	.1Ω	.1Ω	
V 17	6BG6G	-2VDC	0V	0V	310VDC	-14VDC	-14VDC	6.3VAC	250VDC			4.5Meg	0Ω	0Ω	680KΩ	470KΩ	.1Ω	16.8KΩ	Top Cap 4.88Ω
V 18	6W4GT	330VDC	0V	445VDC	0V	330VDC	0V	100VDC	100VDC			180Ω	Inf.	200KΩ	180Ω	70KΩ	1.1Ω	10Ω	Top Cap 850Ω
V 19	1X2	* DO NOT MEASURE									ALL PINS ARE INF. RESISTANCE								
V 20	5U4G	0V	350VDC	0V	340VAC	0V	340VAC	330VDC	350VDC			Inf.	20KΩ	500KΩ	32Ω	500KΩ	31Ω	20KΩ	20KΩ
V 21	12LP4A	0V	6VDC	340VDC	95VDC	6.3VAC	6.3VAC					12LP4A	0Ω	1Meg	1.2KΩ	150KΩ	.1Ω		

ALL MEASUREMENTS TAKEN WITH PICTURE TUBE REMOVED  
 \* DO NOT MEASURE  
 † 6.3 VAC MEASURED ACROSS FILAMENTS

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

- DC Voltage measurements are at 20,000 ohms per volt, AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.



RAYTHEON  
 MODELS C-1104-B, M-1105B, M-1106, M-1107

# ALIGNMENT INSTRUCTIONS

**ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT**

The end of the high voltage lead 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 converter tube, (V2), from its socket and replace it with a 6J6 which has pin 1 removed. This will disable the local oscillator and prevent the possibility of erroneous indications.

Note: In later productions the 6J6, converter, has been replaced with a 12AT7. In that event use a 12AT7 with pin 1 removed.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Direct	High side to an ungrounded tube shield floating over dummy converter tube, (V2). Low side to chassis.	26.4MC	Any	DC probe to Point A, Common to chassis.	A1, A2	Adjust for maximum deflection. Attenuate signal gen. to maintain 1 volt reading.
2. "	"	23.4MC	"	"	A3, A4	"
3. "	"	25MC	"	"	A5	"

## OVERALL VIDEO IF RESPONSE CHECK

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4. Direct	High side to an ungrounded tube shield floating over dummy converter tube, (V2). Low side to chassis.	24MC (10MC SWP)	23MC 26.75MC	Any	Vert. Amp. to Point A, Low side to chassis.		Check for response curve similar to fig. 1. If necessary retouch A1 thru A5 for proper response.

## 4.5MC TRAP ADJUSTMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. .01MFD.	High side to pin 1 (cathode of 6AL5, (V7). Low side to chassis.	Not used	4.5MC (400v Mod.)	Any	Vert. Amp. to pin 2 of picture tube. Low side to chassis.	A6	Adjust for MINIMUM 400v indication on scope.

## SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100KΩ (± 1%) resistors in series from Point B to B-. The junction of these two resistors is alignment Point D as shown on the schematic.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
6. .01MFD.	High side to pin 1 (cathode of 6AL5, (V7). Low side to chassis.	4.5MC (unmod.)	Any	DC probe to Point B, Common to chassis.	A7, A8	Adjust for maximum deflection.
7. "	"	"	"	DC probe to Point C, Common to chassis.	A9	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
6. .01MFD.	High side to pin 1 (cathode of 6AL5, (V7). Low side to chassis.	4.5MC (450KC SWP)	4.5MC	Any	Vert. Amp. to Point B, Low side to chassis.	A7, A8	Disconnect stabilizer capacitor C6. Adjust for maximum amplitude and symmetry as per fig. 2.
7. "	"	"	"	"	Vert. Amp. to Point C, Low side to chassis.	A9	Reconnect capacitor C6. Adjust A9 so 4.5MC occurs at center of crossover lines as per fig. 3. SLIGHTLY retouch A8 for maximum amplitude and straightness of crossover lines.

## TUNER ALIGNMENT

Remove the dummy converter tube and replace the original tube in its socket.

Pre-set the trimmer screws as shown in figure 5.

With the switch in low band position, turn the tuner core carriage to the extreme top of its travel.

Check to see that the cores project 1.6mm. out of the coils, then turn the low band oscillator core on additional four turns out of the coil, (counter-clockwise).

## LOW BAND ALIGNMENT

Move carriage bar down 7/64 inch, from extreme top, by turning tuning control clockwise. This is the proper position for 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
8. Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	85MC (10MC SWP)	83.25MC 87.75MC	6 (see note above)	Vert. Amp. to Point A, Low side to chassis.	A10, A11, A12	Adjust for maximum response with symmetrical peak.
9. "	"	"	"	"	"	A13	Adjust to place video marker at 50% on response curve as shown in fig. 4.
10. "	"	63MC (10MC SWP)	61.25MC 65.75MC	3	"		Turn the tuning control until the video marker appears at 50% on the response curve for each of the low band channels, and check for proper response curve. If necessary retouch A11 and A12 for compromise adjustment which will give best response over the low band channels.
		69MC (10MC SWP)	67.25MC 71.75MC	4			
		79MC (10MC SWP)	77.25MC 81.75MC	5			
		87MC (10MC SWP)	85.25MC 89.75MC	2			

## HIGH BAND ALIGNMENT

Move the carriage bar down 7/64 inch, from extreme top, by turning tuning control counter-clockwise. This is the proper position for channel 13.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11. Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	213MC (10MC SWP)	211.25MC 215.75MC	13 (see note above)	Vert. Amp. to Point A, Low side to chassis.	A14, A15, A16	Adjust for maximum amplitude of response with symmetrical peak.
12. "	"	"	"	"	"	A17	Adjust to place video marker at 50% on response curve as shown in fig. 4.
13. "	"	207MC (10MC SWP)	205.25MC 209.75MC	12	"		Turn tuning control to place video marker at 50% for each of the high band channels, and check for proper response curve. If necessary retouch A15 and A16 for compromise adjustment which will give the best response over the high band channels.
		201MC (10MC SWP)	199.25MC 203.75MC	11			
		195MC (10MC SWP)	193.25MC 197.75MC	10			
		189MC (10MC SWP)	187.25MC 191.75MC	9			
		183MC (10MC SWP)	181.25MC 185.75MC	8			
		177MC (10MC SWP)	175.25MC 179.75MC	7			

# ALIGNMENT INSTRUCTIONS (CONT.)

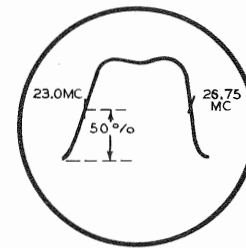


FIG. 1

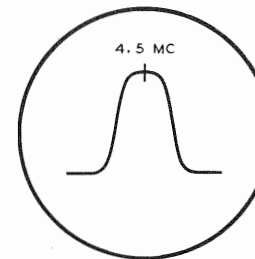


FIG. 2

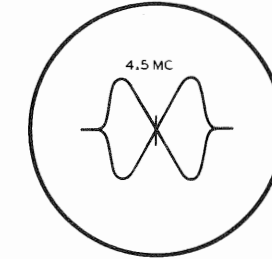


FIG. 3

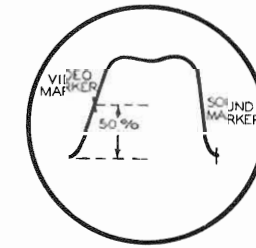


FIG. 4

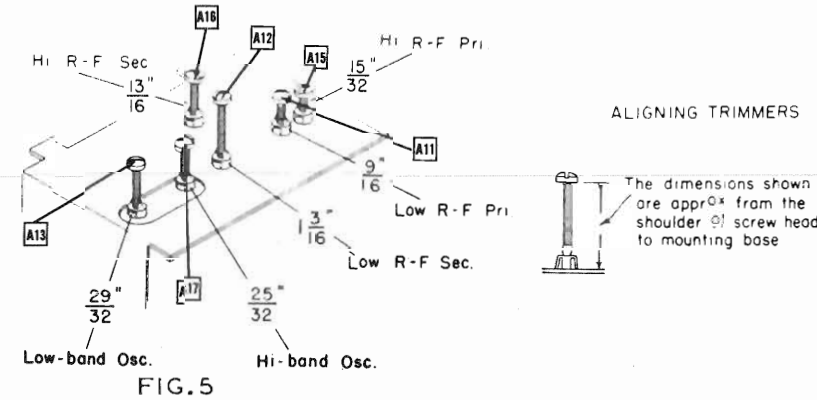
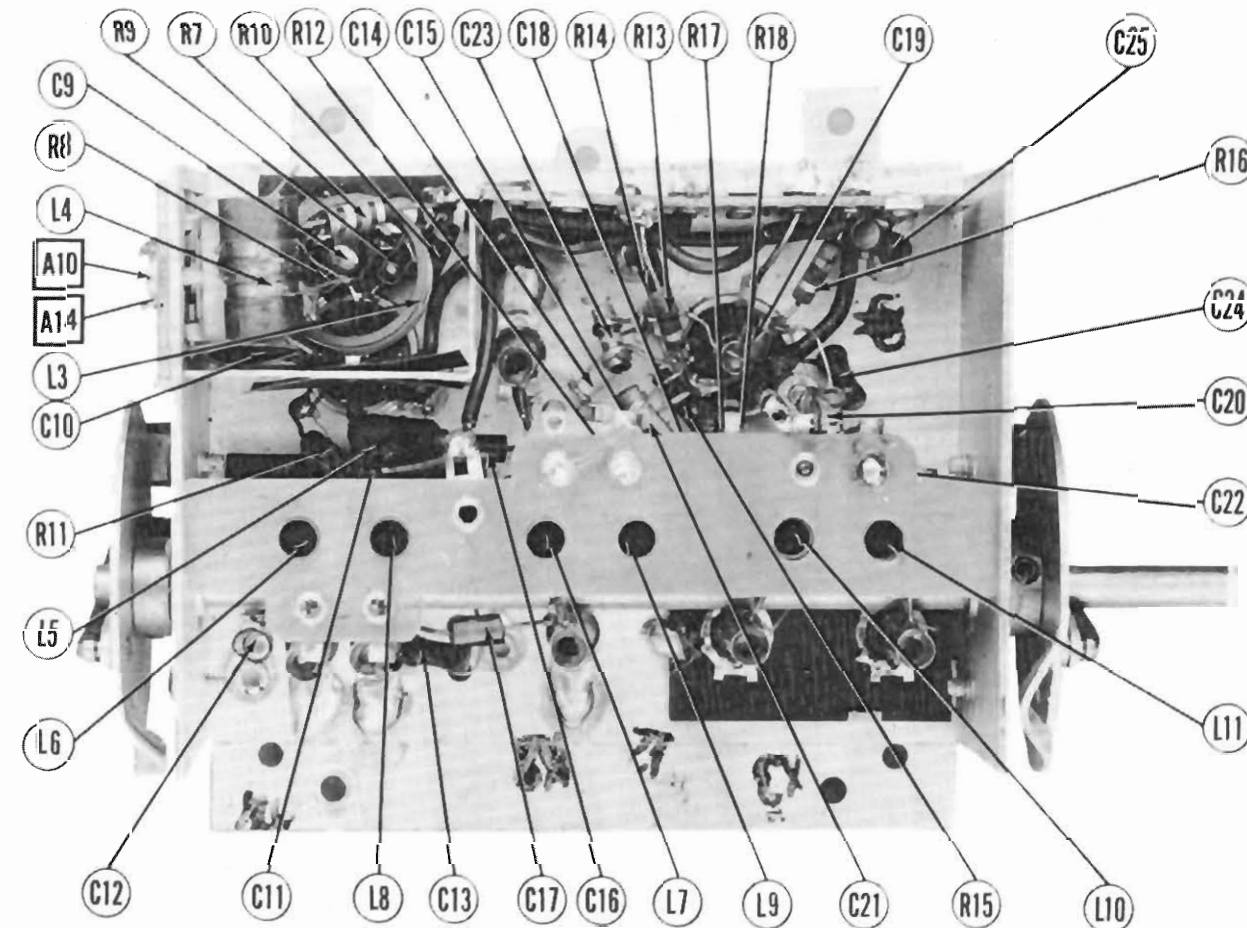


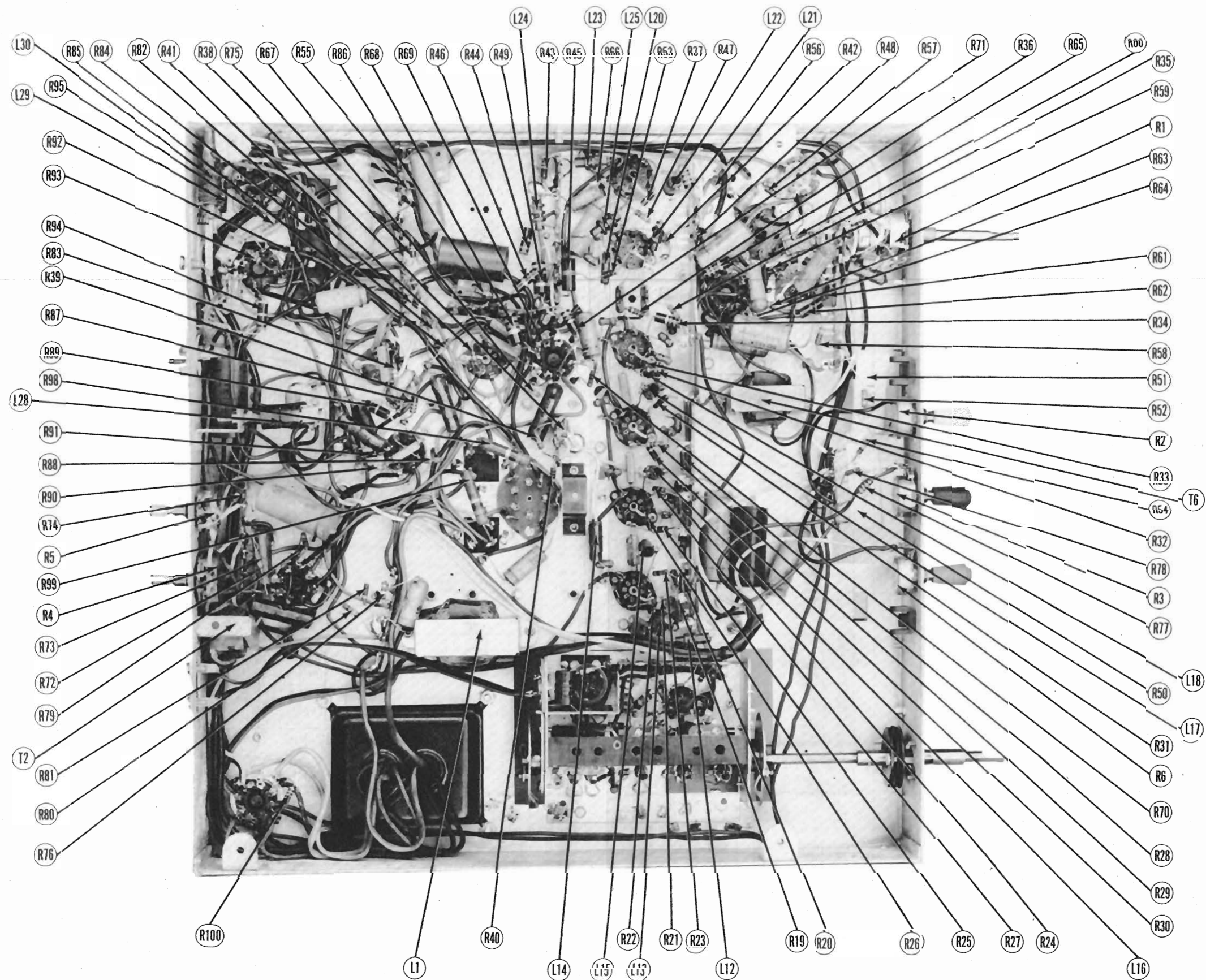
FIG. 5



RF TUNER - BOTTOM VIEW

RAYTHEON MODELS C-1104B,  
 M-1105B, M-1106, M-1107





CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

RAYTHEON  
 MODELS C-1104-B, M-1105B, M-1106, M-1107

## PARTS LIST AND DESCRIPTIONS

### TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	NOTES
		BELMONT PART No.	STANDARD REPLACEMENT			
V1	RF Amplifier	6AG5	6AG5	7BD		
V2A	Converter	6E6	6E6	7BF		
V3	1st. Video IF Amp.	12AT7	12AT7	9A		
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					
V8	DC Restorer	6AL5	6AL5	6BT		
V9	Video Amplifier	12AU7	12AU7	9A		
V10	AGC Amplifier	6AU6	6AU6	7BK		
V11	Sound IF Amplifier	6AU6	6AU6	7BK		
V12	Ratio Detector					
V13	AF Amplifier	6T8	6T8	9E		
V14	Audio Output	6K6GT	6K6GT	7S		
V15	Sync. Separator	6SN7GT	6SN7GT	8BD		
V16	Vert. Amplifier					
V17	Vert. Oscillator	6SN7GT	6SN7GT	8BD		
V18	Horiz. Phase Discr.	6AL5	6AL5	6BT		
V19	Horiz. Mult.	6SN7GT	6SN7GT	8BD		
V20	Horiz. Output	6BQ6G	6BQ6G	5BT		
V21	Damper	6W4G	6W4G	4CG		
V22	HV Rectifier	1X2	1X2	7CB		
V23	LV Rectifier	5U4G	4U4G	5T		

### CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA			RMA BASE TYPE	NOTES
	BELMONT PART No.	SYLVANIA PART No.	THOMAS PART No.		
V 21	12LP4A	12LP4A	12LP4A		Use single magnet ion trap.

### 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. VOLT	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
		BELMONT PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	
C1A	30 450	A-8C-17845	AFH3066J		UPT36145	TVL-3790	Filter
B	60 450						Filter
C	10 450						Decoupling **
C2A	30 450	A-8C-18487	AF644J		UPT409	TVL-3741	Filter
B	30 450		FRS25/100			TVA-1207	Audio Output Dec.
C	125 25						Vert. amp. Cathode
C3	8 450	A-8C-13453	PRS450/8		ER845A	TVA-1704	Decoupling †
C4	5 50	A-8C-11751	PRS150/4		ER550	TVA-1303	AGC Filter
C5	10 50	A-8C-17183	PRS150/10		BR105	TVA-1304	Audio Output cathode
C6	10 50	A-8C-17183	PRS50/10		BR105	TVA-1304	Stabilizing Cap.
C7	10 150	A-8C-14455	PRS150/12		BR1015	TVA-1406	Decoupling
C8	8 450	A-8C-13453	PRS450/8		BR845A	TVA-1704	Decoupling
C9	220	A-8G-16045	S1220	D6-221	GP2K-221	5GA-T22	RF Coupling
C10	500K	A-8G-13962	BPD-005	DD-502	SHK-D5	5HK-D5	RF Amp. Cathode
C11	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	RF Amp. Screen
C12	15	A-8G-13201	SI1000	TCZ-15	NP0K-150	5TCC-Q15	Fixed Trimmer †
C13	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	RF Bypass
C14	4.7	A-8G-13201	SI1000	TCZ-4.7	NP0K-4R7		Fixed Trimmer †
C15	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	RF Bypass
C16	5	A-8G-12495-7	SI1.5NP0	TCZ-5	NP0K-0R5		RF Coupling
C17	1.5	A-8G-12495-4	SI1.5NP0	TCZ-1.5	NP0K-1R5		RF Coupling
C18	2.2	A-8G-12495-4	SI1.5NP0	TCZ-2.2	NP0K-2R2		RF Coupling
C19	2.2	A-8G-12495-4	SI1.5NP0	TCZ-2.2	NP0K-2R2		RF Coupling
C20	51	A-8G-11861	SI1000	TCN-51	NP0K-2R2	N750K-510	AGC Filter
C21	2.5	A-8G-15737	SI10.8NP0	TCZ-6.8	NP0K-6R8		AGC Filter
C22	7	A-8G-15224	SI1	TCZ-6.8	NP0K-6R8		AGC Filter
C23	51	A-8G-11861	SI1000	TCN-51	NP0K-2R2		AGC Filter
C24	220	A-8G-16045	SI220	D6-221	GP2K-220	5GA-T22	Conv. Fil.
C25	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	RF Bypass
C26	7	A-8G-15224	SI10.8NP0	TCZ-6.8	NP0K-6R8		Fixed Trimmer
C27	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	Conv. Plate Dec.
C28	5000	A-8G-13962	BPD-305	DD-502	ISD55	811-005	RF Bypass
C29	100	A-8G-13962	1468-0001	DD-101	IWS71	IFM-21	IF Coupling
C30	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	AGC Filter
C31	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	AGC Filter
C32	1	A-8D-10770	P288-1	DF-104	PTE4P1	2TM-F1	AGC Filter
C33	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	1st. Video IF Dec.
C34	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	1st. Video IF Fil.
C35	47	A-8F3-109	1469-00005	D6-470	SR5Q5	MS-45	IF Coupling
C36	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	AGC Filter
C37	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	2nd. Video IF Dec.
C38	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	2nd. Video IF Fil.
C39	47	A-8F3-109	1468-00005	D6-470	SR5Q5	MS-45	IF Coupling
C40	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	AGC Filter
C41	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	3rd. Video IF Dec.
C42	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	3rd. Video IF Fil.
C43	47	A-8F3-109	1468-00005	D6-470	SR5Q5	MS-45	IF Coupling
C44	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	4th. Video IF Plate
C45	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	4th. Video IF Screen
C46	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	4th. Video IF Cathode
C47	1000	A-8G-13201	SI1000	D6-102	GP2L-102	5HK-D1	4th. Video IF Fil.
C48	5	A-8G-12166	SI5NP0	TCZ-5	NP0K-050	5TCC-Q22	Video Diode Filter
C49	22	A-8G-13201	SI1000	TCZ-22	NP0K-220		Fixed Trimmer
C50	1000	A-8G-13201	SI1000	D6-102	IWS51	5HK-D1	Video Det. Fil.
C51	68	A-8F3-111	1469-00007	D6-680	SR5Q7	GP1K-680	Video Coupling
C52	0.1	A-8D-10761	P488-01	DF-103	PTE4S1	4TM-S1	Video Coupling
C53	0.1	A-8D-10760	P488-01	DF-104	PTE4P1	4TM-P1	Video Coupling
C54	0.1	A-8D-10760	P488-01	DF-104	PTE4P1	4TM-P1	Video Coupling
C55	3.3	A-8G-12495-5	SI3.3NP0	TCZ-3.3	NP0K-3R3	6TM-D4	Picture Tube Cathode
C56	0.04	A-8D-17958	P688-004	DD-402	IPD55	811-005	Sound IF Coupling
C57	5000	A-8G-13962	BPD-005	DD-502	ISD55	811-005	Sound IF Decoupling

### CAPACITORS (CONT.)

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
		BELMONT PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	
C58	5000	A-8G-13962	BPD-005	DD-502	ISD55	811-005	RF Bypass
C59	5		IS15		5WSV5	GP1K-050	Balancing Cap. †
C60	470	500	C-8F3-121	1469-0005	D6-471	SR5T5	Diode Load Cap.
C61	2000		SI2000		IWS02	GP2K-201	De-emphasis ††
C62	0.1	200	C-8D-17738	P488-01	D6-103	PTE4S1	Audio Coupling
C63	0.2	200	C-8D-17268	P488-02	DF-203	PTE4S2	Tone Comp. *
C64	0.1	200	C-8D-17738	P488-01	D6-103	PTE4S1	Audio Coupling
C65	0.1	400	C-8D-10761	P488-01	D6-103	PTE4S1	Audio Coupling
C66	0.005	600	C-8D-10925	P488-005	D6-502	PTE6D5	Audio Output Plate††
C67	470	500	C-8F3-121	1469-0005	D6-471	SR5T5	Sync. Coupling
C68	1	200	C-8D-10770	P288-1	DF-104	PTE4P1	Sync. Coupling
C69	0.1	400	C-8D-10761	P488-01	D6-103	PTE4S1	Sync. Sep. Plate
C70	0.005	600	C-8D-10925	P688-005	D6-502	PTE6D5	Veri. Sync. Coupling
C71	0.2	400	C-8D-10774	P488-02	DF-203	PTE4S2	Integrator Net.
C72	0.5	400	C-8D-14461	P488-05	DF-503	PTE4S5	Vert. Discharge
C73	25	400	C-8D-13439	P488-25	GT4P25	4TM-P25	Veri. Sweep Coupling
C74	470	500	C-8F3-121	1469-0005	D6-471	SR5T5	Horiz. Sync. Coupling
C75	680	500	C-8F3-123	1479-0007	D6-681	2R5T7	Volume Divider
C76	220	500	C-8F3-117	1469-00025	D6-221	SR5T25	Horiz. Feedback
C77	680	500	C-8F3-123	1479-0007	D6-681	2R5T7	Volume Divider
C78	220	500	C-8F3-117	1469-00025	D6-221	SR5T25	Horiz. Feedback
C79	0.2	600	C-8D-17268	P688-02	DF-203	PTE6S2	AFC Filter
C80	0.002	600	C-8D-10778	P688-002	D6-202	PTE6D2	AFC Filter
C81	3900	500	C-8F1-132	1464-004	D6-402	IDR5D4	Fixed Trimmer
C82	220	500	C-8F3-117	1469-00025	D6-221	SR5T25	Horiz. MV Feedback
C83	680	500	C-8F3-123	1479-0007	D6-681	2R5T7	Horiz. Discharge
C84	0.001	400	C-8D-10203	P688-001	D6-102	PTE6D1	Horiz. Sweep Coupling
C85	22	400	C-8G-11892		TCN-22	N750K-220	Horiz. Feedback
C86	1	400	C-8D-17990	P488-1	DF-104	PTE4P1	Horiz. Output Screen
C87	1	200	C-8D-10770	P288-1	DF-104	PTE4P1	Fixed Trimmer **
C88	5	200	C-8D-11270	P288-5	GT2P5	2TM-P5	Horiz. Sweep Coupling
C90	1000	500	C-8F6-125	1468-001	D6-102	IWS01	RF Bypass

† Some models use 4.7MMF Mfgs. Part # A-8G-12495-6 in this application.  
 †† Some models use 12MMF Mfgs. Part # C-8G-17305 in this application.  
 \* Some models use 4MMF Mfgs. Part # C-8G-11893 in this application.  
 ††† Some models use 470MMF Mfgs. Part # C-8F3-12 in this application.  
 †††† Some models use .01MF Mfgs. Part # C-8D-10761 in this application.  
 \*\* Some models use .05MF Mfgs. Part # C-8D-10770 in this application.  
 \* \* Not used in all models.  
 ††††† Replace C6 in chassis 12AX26.  
 ††††† Not used in chassis 12AX26 and is replaced by CIC.

### CONTROLS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA			INSTALLATION NOTES
		BELMONT PART No.	IRC PART No.	CENTRALAB PART No.	
R1A	5000Ω	A-10A-18441		RTV-218	Contrast Control - Front
B	1Meg			SBBT-617-S	Volume Control and SW - Tapped ④
R2A	50KΩ	A-10B-17764	Q11-123	AG-44-S	Brightness Control
B	Shaft	Not req.	Not req.	KSS-3	Attach to R2A per instructions
R3A	100KΩ	A-10B-17275	Q11-128	AG-49-S	Vert. Hold Control
B	Shaft	Not req.	Not req.	KSS-3	Attach to R3A per instructions
R4A	500Ω	A-10B-17766	Q11-114	AM-19-S	Vert. Linearity Control
B	Shaft	Not req.	Not req.	FKS-1/4	Attach to R4A per instructions
R5A	750KΩ	A-10B-18240	Q11-114	AG-61-S	Vert. Size Control
B	Shaft	Not req.	Not req.	FKS-1/4	Attach to R5A per instructions
R6A	50KΩ	A-10B-17764	Q11-123	AG-44-S	Horiz. Hold Control
B	Shaft	Not req.	Not req.	KSS-3	Attach to R6A per instructions

### RESISTORS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
		BELMONT PART No.	IRC PART No.	
R7	470KΩ 5%			BTS-470K-5%
R8	680Ω	C-9B1-60		BTS-680
R9	10KΩ	C-9B1-7		