

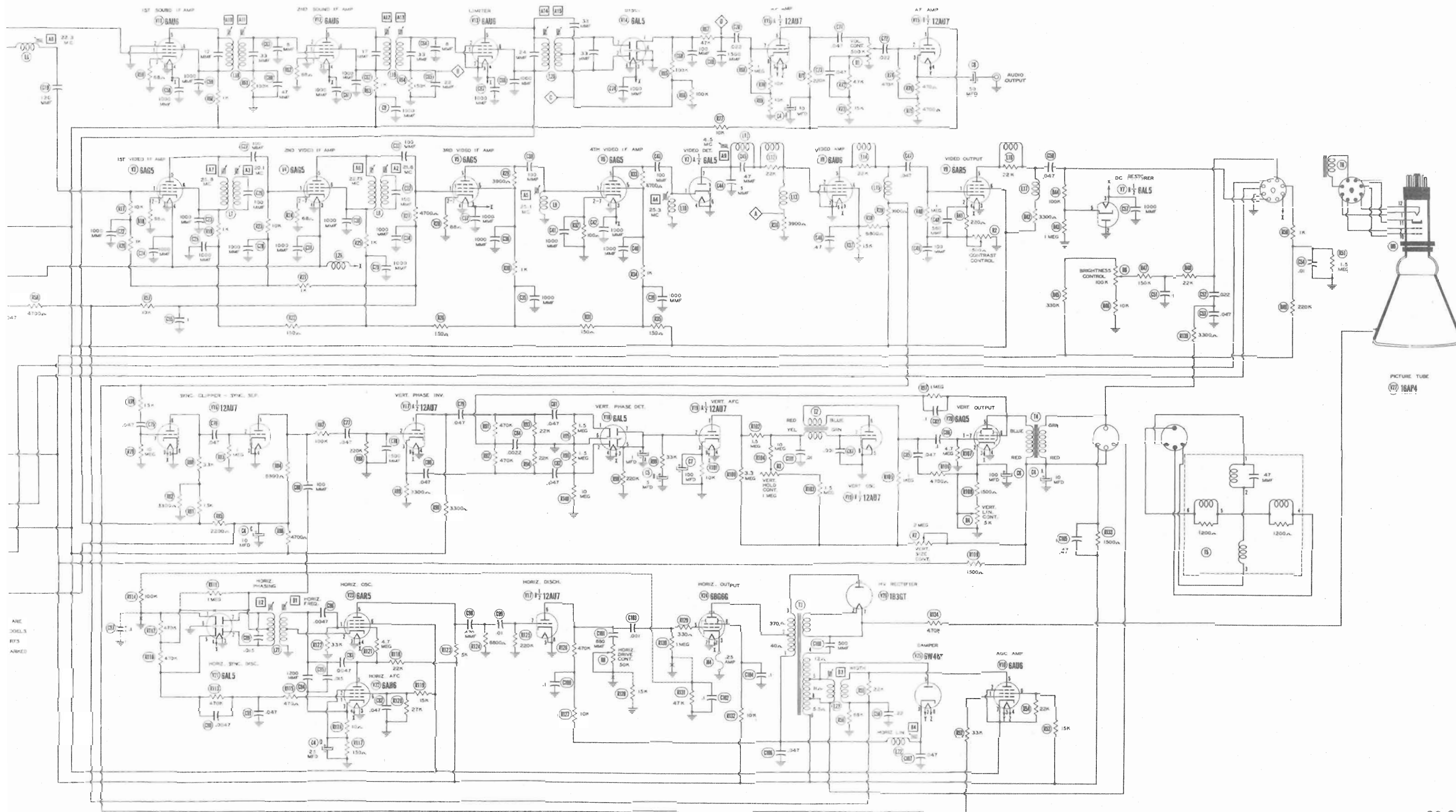
RADIO CRAFTSMEN
MODEL RC100

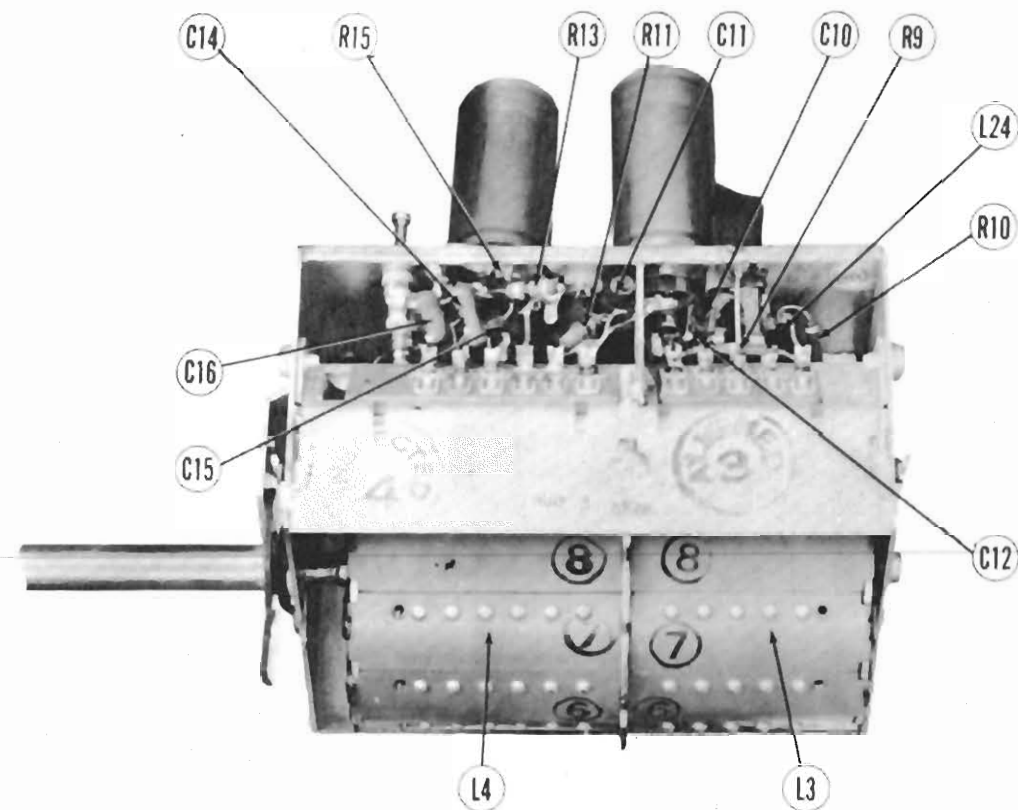
RADIO CRAFTSMAN MODEL RC100	
TRADE NAME	Radio Craftsman, Model RC100
MANUFACTURER	The Radio Craftsman Inc., 1341 S. Michigan Ave., Chicago 5, Illinois
TYPE SET	Television Receiver
TUBES	Twenty-Seven
POWER SUPPLY	110-120 Volts AC-60 Cycles
TUNING RANGE	Channels 2 thru 13
RATING	1.7 Amp. at 117 Volts AC
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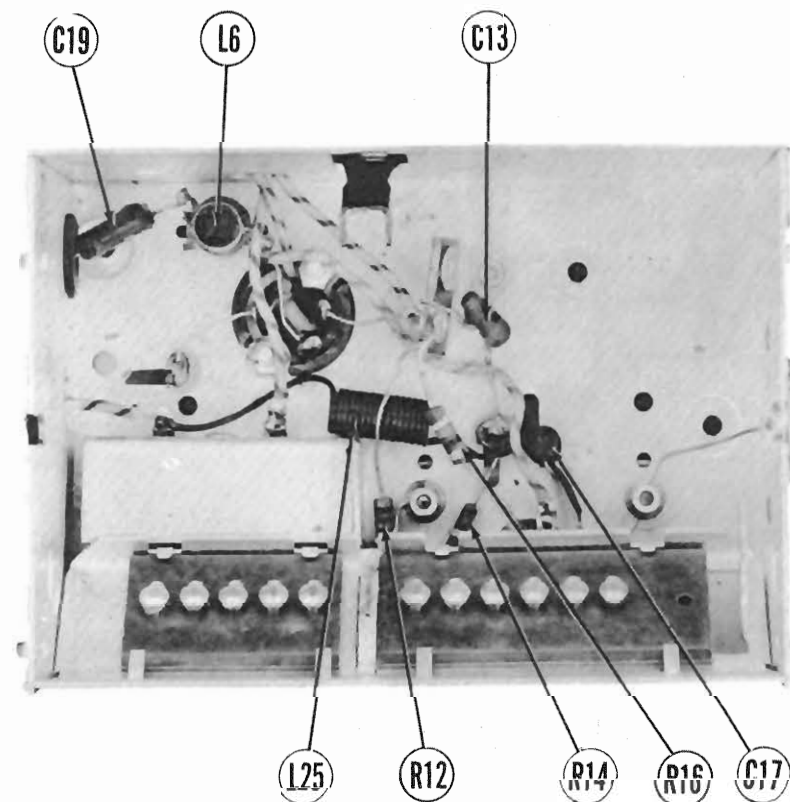
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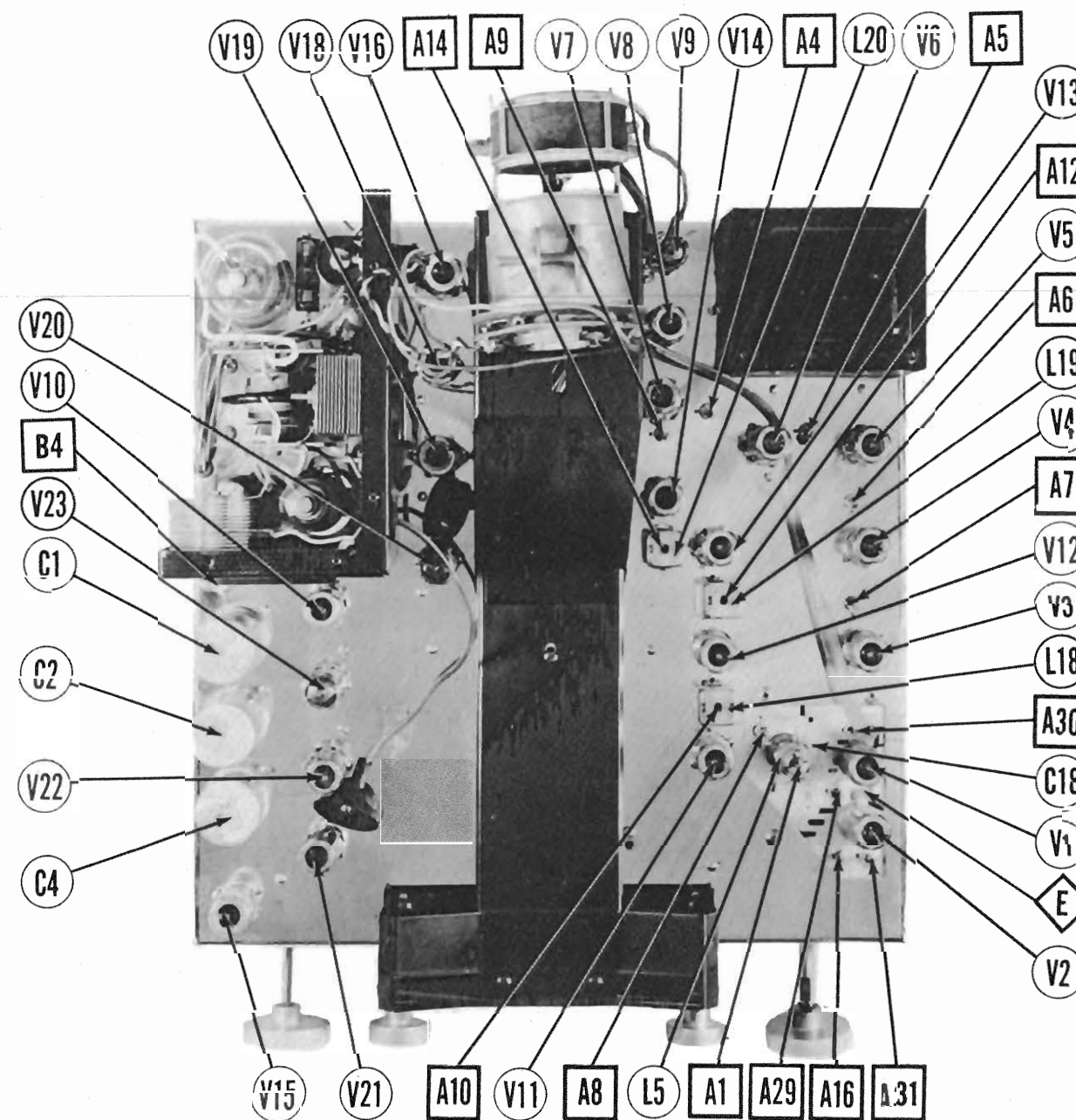




RF TUNER-RIGHT SIDE

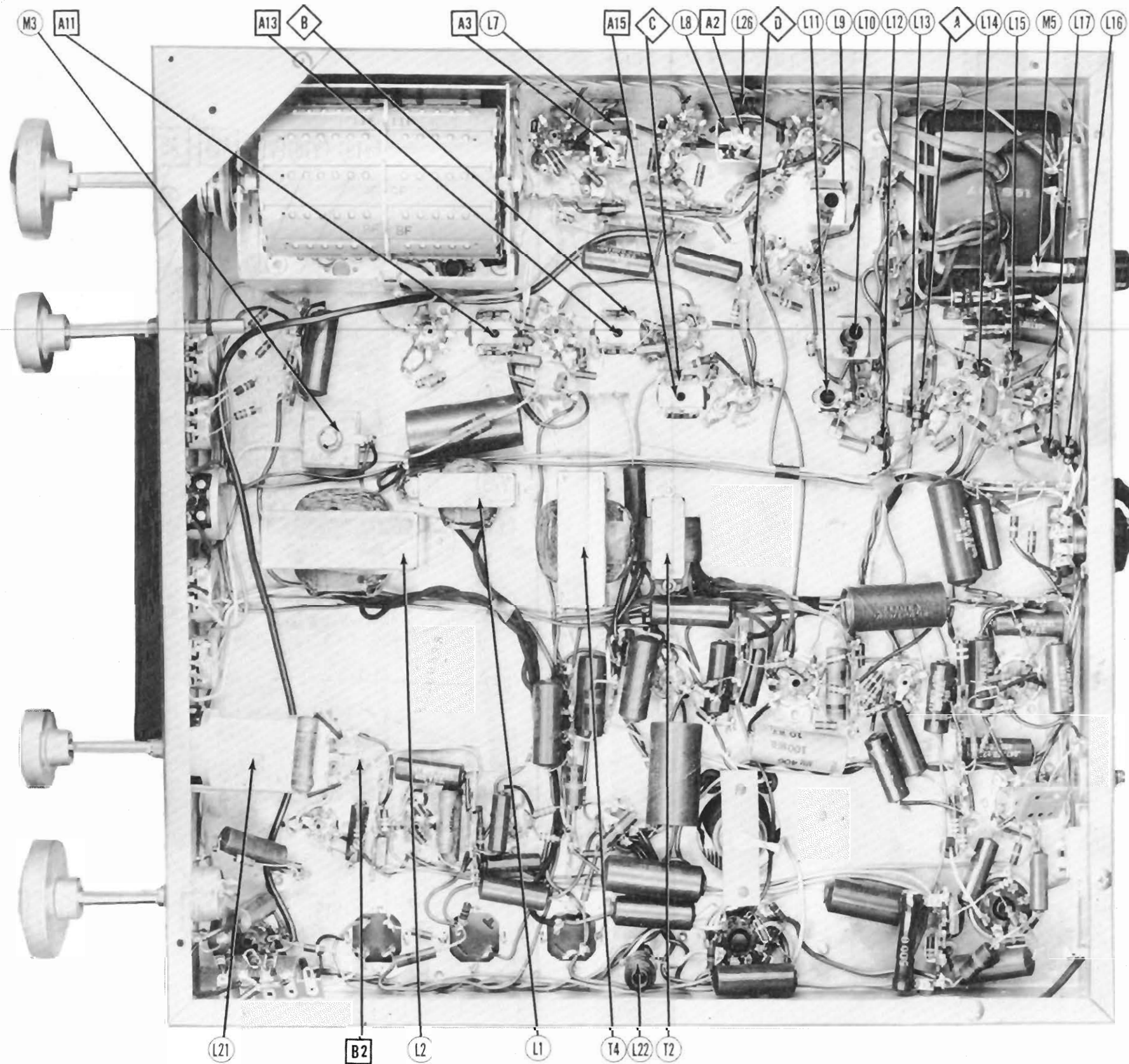


RF TUNER-BOTTOM VIEW



CHASSIS TOP VIEW

**RADIO CRAFTSMEN
MODEL RC100**



CHASSIS BOTTOM VIEW-TRANS., INDUCTOR AND ALIGNMENT IDENTIFICATION

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS									
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V 1	6AG5	-6VDC	0V.	6.3VAC	0V.	125VDC	125VDC	0V.	
V 2	6J6	110VDC	160VDC	6.3VAC	0V.	-3VDC	1-6.2VDC	0V.	
V 3	6AG5	-3.2VDC	-6VDC	0V.	6.3VAC	130VDC	130VDC	-6VDC	
V 4	6AG5	-6VDC	-6VDC	6.3VAC	0V.	130VDC	130VDC	-6VDC	
V 5	6AG5	-6VDC	-6VDC	6.3VAC	0V.	115VDC	130VDC	-6VDC	
V 6	6AG5	0V.	1.3VDC	6.3VAC	0V.	100VDC	135VDC	1.3VDC	
V 7	6AL5	0V.	0V.	6.3VAC	0V.	.9VDC	0V.	-4VDC	
V 8	6AU6	-4VDC	0V.	6.3VAC	0V.	125VDC	90VDC	0V.	
V 9	6AR5	2.6VDC	41VDC	0V.	6.3VAC	95VDC	150VDC	95VDC	
V 10	6AU6	4-20VDC	0V.	6.3VAC	0V.	4-160VDC	120VDC	40V.	
V 11	6AU6	0V.	0V.	6.3VAC	0V.	140VDC	140VDC	1 VDC	
V 12	6AU6	-1VDC	0V.	6.3VAC	0V.	140VDC	140VDC	.8VDC	
V 13	6AU6	-6VDC	0V.	6.3VAC	0V.	70VDC	70VDC	0V.	
V 14	6AL5	0V.	-8VDC	6.3VAC	0V.	0V.	0V.	-8VDC	
V 15	12AU7	115VDC	2.8VDC	22VDC	6.3VAC	55VDC	55VDC	3VDC	5.4VDC
V 16	12AU7	55VDC	-8VDC	0V.	0V.	15VDC	15VDC	-8VDC	0V.
V 17	12AU7	145VDC	0V.	6.5VDC	0V.	0V.	50VDC	-42VDC	0V.
V 18	6AL5	1 VDC	0V.	6.3VAC	0V.	-1VDC	0V.	-1VDC	
V 19	12AU7	5.3VDC	-1VDC	0V.	0V.	40VDC	40VDC	-4VDC	
V 20	6AQ5	0V.	35VDC	6.3VAC	0V.	340VDC	340VDC	0V.	
V 21	6AL5	0V.	-5.3VDC	0V.	6.3VAC	0V.	0V.	-5.3VDC	
V 22	6AH6	0V.	TVDC	0V.	6.3VAC	300VDC	85VDC	4VDC	
V 23	6AR5	-13VDC	.3VDC	0V.	6.3VAC	240VDC	150VDC	0V.	
V 24	6BQ6G	0V.	0V.	.2VDC	0V.	-20VDC	0V.	6.3VAC	300VDC
V 25	6W4GT	540VDC	520VDC	540VDC	310VDC	370VDC	370VDC	370VDC	TOP CAP
V 26	1B3GT	DO NOT MEASURE.				PIN 12	PIN 12		
V 27	16AP4	0V.	1.1VDC	320 VDC	80VDC	6.3VAC			

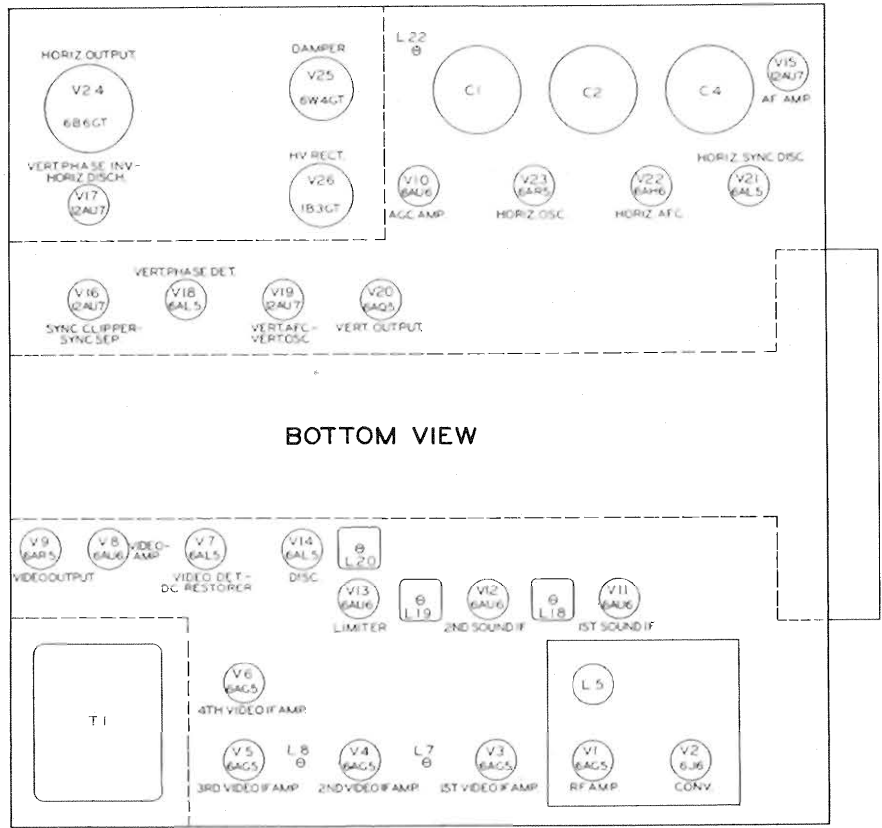
* DO NOT MEASURE.
MEASURED FROM PIN 7 OF V10.
MEASURED FROM PIN 8 OF V25.
† TAKEN WITH VACUUM TUBE VOLTMETER.

RESISTANCE READINGS									
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
V 1	6AG5	130KΩ	0Ω	.1Ω	0Ω	12KΩ	12KΩ	0Ω	
V 2	6J6	14.7KΩ	1125Ω	.1Ω	0Ω	225KΩ	10KΩ	0Ω	
V 3	6AG5	100KΩ	68Ω	0Ω	.1Ω	1.6KΩ	1.6KΩ	68Ω	
V 4	6AG5	100KΩ	68Ω	.1Ω	0Ω	1.5KΩ	1.5KΩ	68Ω	
V 5	6AG5	92KΩ	60Ω	.1Ω	0Ω	14.5KΩ	1.3KΩ	60Ω	
V 6	6AG5	.2Ω	100Ω	.1Ω	0Ω	16KΩ	11.2KΩ	100Ω	
V 7	6AL5	0Ω	0Ω	.1Ω	0Ω	1 Meg.	0Ω	4KΩ	
V 8	6AU6	4KΩ	0Ω	.1Ω	0Ω	14KΩ	17KΩ	0Ω	
V 9	6AR5	1 Meg.	1000Ω	0Ω	.1Ω	13.5KΩ	123Ω	12KΩ	
V 10	6AU6	47KΩ	1125Ω	9KΩ	9KΩ	30KΩ	115KΩ	1125Ω	
V 11	6AU6	0Ω	0Ω	0Ω	.1Ω	1000Ω	1000Ω	68Ω	
V 12	6AU6	100KΩ	0Ω	0Ω	.1Ω	1000Ω	1000Ω	58Ω	
V 13	6AU6	150KΩ	0Ω	0Ω	.1Ω	12KΩ	12KΩ	0Ω	
V 14	6AL5	200KΩ	100KΩ	.1Ω	0Ω	0Ω	0Ω	100KΩ	
V 15	12AU7	110KΩ	500KΩ	4.7KΩ	9KΩ	1230KΩ	20KΩ	9KΩ	
V 16	12AU7	110KΩ	1 Meg.	0Ω	0Ω	138KΩ	10 Meg.	0Ω	
V 17	12AU7	13.5KΩ	220KΩ	3.3KΩ	0Ω	4500KΩ	220KΩ	0Ω	
V 18	6AL5	1.5 Meg.	1 Meg.	.1Ω	0Ω	220KΩ	0Ω	220KΩ	
V 19	12AU7	12 Meg.	220KΩ	10KΩ	0Ω	12 Meg.	4 Meg.	0Ω	
V 20	6AQ5	4.7 Meg.	1.5KΩ	.1Ω	0Ω	12KΩ	4.7 Meg.	0Ω	
V 21	6AL5	0Ω	400KΩ	0Ω	.1Ω	950KΩ	0Ω	400KΩ	
V 22	6AH6	1.4 Meg.	150Ω	0Ω	.1Ω	122KΩ	10KΩ	160Ω	
V 23	6AR5	33KΩ	11Ω	0Ω	.1Ω	15KΩ	125Ω	Inf.	
V 24	6BQ6G	1 Meg.	0Ω	0Ω	Inf.	1 Meg.	Inf.	10KΩ	TOP CAP
V 25	6W4GT	Inf.	Inf.	Inf.	Inf.	140Ω	120Ω	9KΩ	TOP CAP
V 26	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP
V 27	16AP4	0Ω	1 Meg.	1200KΩ	225KΩ	Inf.	Inf.	Inf.	TOP CAP

† MEASURED FROM OUTPUT OF M2.
‡ MEASURED FROM JUNCTION OF R138 AND M2.
• MEASURED FROM PIN 3 OF V25.

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 panel controls set at minimum.
6. Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.

RADIO CRAFTSMEN
MODEL RC100



TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

To disable the high voltage power supply, remove the fuse M4.

Connect a 22KΩ resistor in series with the oscilloscope vertical input lead, and shunt the vertical input terminals with a 1000MMF capacitor.

VIDEO IF ALIGNMENT

Remove the converter tube (V2) and connect a fine wire to pin 5 (oscillator grid). Connect the negative lead of a 45 volt battery to the wire; connect the positive lead to chassis. Replace the tube and remove the channel 13 segment of the converter section of the tuner turret and turn the channel switch to 13.

Remove the AGC tube (V10) from its socket. Connect the negative lead of a 3 volt battery to pin 5 of V10 socket, connect the positive lead to ground.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. .005MFD	High side to point E. Low side to chassis.	21.6MC (Unmod.)	Any	DC Probe to Point A Common to chassis.	A1, A2	Adjust for MINIMUM deflection.
2. .005MFD	"	20.1MC	"	"	A3	"
3. .005MFD	"	25.3MC	"	"	A4	Adjust for maximum deflection.
4. .005MFD	"	25.1MC	"	"	A5	"
5. .005MFD	"	22.75MC	"	"	A6	"
6. .005MFD	"	25.8MC	"	"	A7	"
7. .005MFD	"	22.3MC	"	"	A8	"
8. .005MFD	"	4.5MC	"	"	A9	Adjust for MINIMUM deflection.

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	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
9. .005MFD	High side to point E. Low side to chassis.	23MC (10MC SWP)	26.1MC 21.6MC	Any	Vert. Amp. to Point A Low side to chassis.		Check for response curve similar to Fig 1. If necessary retouch A1 thru A8 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .005MFD	High side to Point E. Low side to chassis.	21.6MC (Unmod.)	Any	DC Probe to Point B Common to chassis.	A10, A11, A12	Adjust for maximum deflection.
11. .005MFD	"	"	"	DC Probe to Point C Common to chassis.	A13, A14	"
12. .005MFD	"	"	"	DC Probe to Point D Common to chassis.	A15	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 into 60 % modulation and 450KC sweep. Use 120 v sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. 1000MMF	High side to Point E. Low side to chassis.	21.6MC (450KC SWP)	21.6MC	Any	Vert. Amp. to Point B Low side to chassis.	A10, A11, A12.	Adjust for maximum amplitude and symmetry as per Fig 2.
11. 1000MMF	"	"	"	"	Vert. Amp. to Point C Low side to chassis.	A13, A14	"
12. 1000MMF	"	"	"	"	Vert. Amp. to Point D Low side to chassis.	A15	Adjust A15 so 21.6MC marker occurs at center of crossover lines as per Fig 3. SLIGHTLY retouch A14 for maximum amplitude and straightness of crossover lines.

OSCILLATOR ALIGNMENT

Remove the wire and 45 volt bias from the local oscillator tube (V2), and replace the channel 13 segment of the tuner turret.

Complete oscillator alignment may not be necessary, if the oscillator seems to be off frequency for a majority of the channels, it may be possible to correct them in one step using A16. It should be noted that this is an all channel oscillator circuit adjustment, and should not be adjusted for any individual channel. If adjustment of A16 will not bring all channels within the range of the fine tuning control, it will be necessary to adjust the individual channel oscillator adjustment for each channel that is off frequency. The individual channel oscillator adjustments are reached through a hole just to the right of the channel switch shaft. The correct adjustment screw is accessible through this hole as the channel selector is turned to each channel.

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	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
13. Two 150Ω carbon res.	Across antenna terminals with 150Ω in each lead.	215.75MC (Unmod.)	13	DC Probe to Point A Common to chassis.	A17	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
		209.75MC	12		A18	
		203.75MC	11		A19	
		197.75MC	10		A20	
		191.75MC	9		A21	
		185.75MC	8		A22	
		179.75MC	7		A23	
		87.75MC	6		A24	
		81.75MC	5		A25	
		71.75MC	4		A26	
		65.75MC	3		A27	
		59.75MC	2		A28	

ALIGNMENT INSTRUCTIONS (CONT.)

RF ALIGNMENT

The RF and mixer circuits in this receiver are pre-set at the factory and are normally very stable. Alignment of these circuits should not be attempted unless they are definitely known to be out of alignment.

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
14. Two 150Ω carbon res.	Across antenna terminals with 150Ω in each lead.	213MC (10MC SWP)	211.25MC 215.75MC	13	Vert. Amp. thru 10KΩ to point A. Low side to chassis.	A29, A30, A31	Adjust for response curve similar to Fig 4 with markers above 70%.
15. "	"	207MC (10MC SWP) 201MC (10MC SWP) 195MC (10MC SWP) 189MC (10MC SWP) 183MC (10MC SWP) 177MC (10MC SWP) 171MC (10MC SWP) 165MC (10MC SWP) 159MC (10MC SWP) 153MC (10MC SWP) 147MC (10MC SWP) 141MC (10MC SWP) 135MC (10MC SWP) 129MC (10MC SWP) 123MC (10MC SWP) 117MC (10MC SWP) 111MC (10MC SWP) 105MC (10MC SWP) 99MC (10MC SWP) 93MC (10MC SWP) 87MC (10MC SWP) 81MC (10MC SWP) 75MC (10MC SWP) 69MC (10MC SWP) 63MC (10MC SWP) 57MC (10MC SWP)	205.25MC 209.75MC 203.75MC 197.75MC 191.75MC 185.75MC 179.75MC 173.75MC 167.75MC 161.75MC 155.75MC 149.75MC 143.75MC 137.75MC 131.75MC 125.75MC 119.75MC 113.75MC 107.75MC 101.75MC 95.75MC 89.75MC 83.75MC 77.75MC 71.75MC 65.75MC 59.75MC 53.75MC 47.75MC 41.75MC 35.75MC 29.75MC 23.75MC 17.75MC 11.75MC 5.75MC	12 11 10 9 8 7 6 5 4 3 2	"	"	Check all channels for response similar to fig 4. If markers fall below 70% on any channel, make slight adjustment of A29, A30, and A31 with selector switch set for that channel. Recheck all channels to see that they have not been seriously effected.

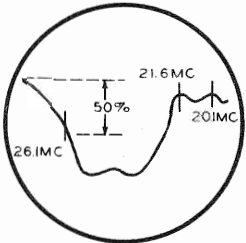


FIG. 1

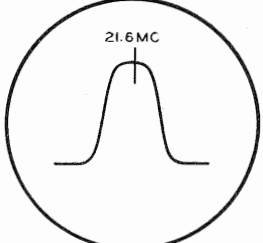


FIG. 2

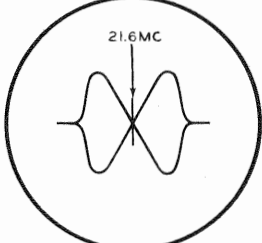


FIG. 3

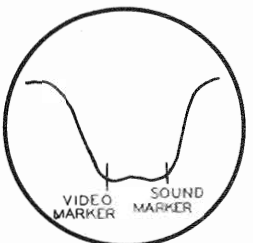
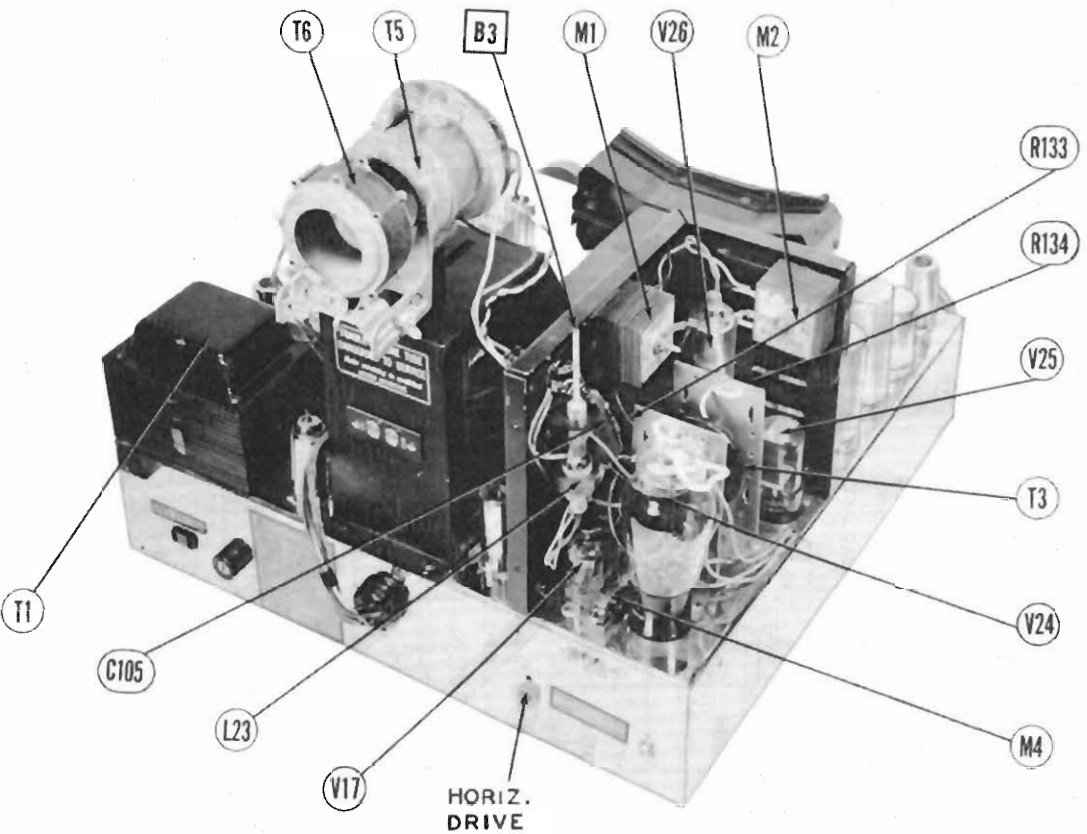


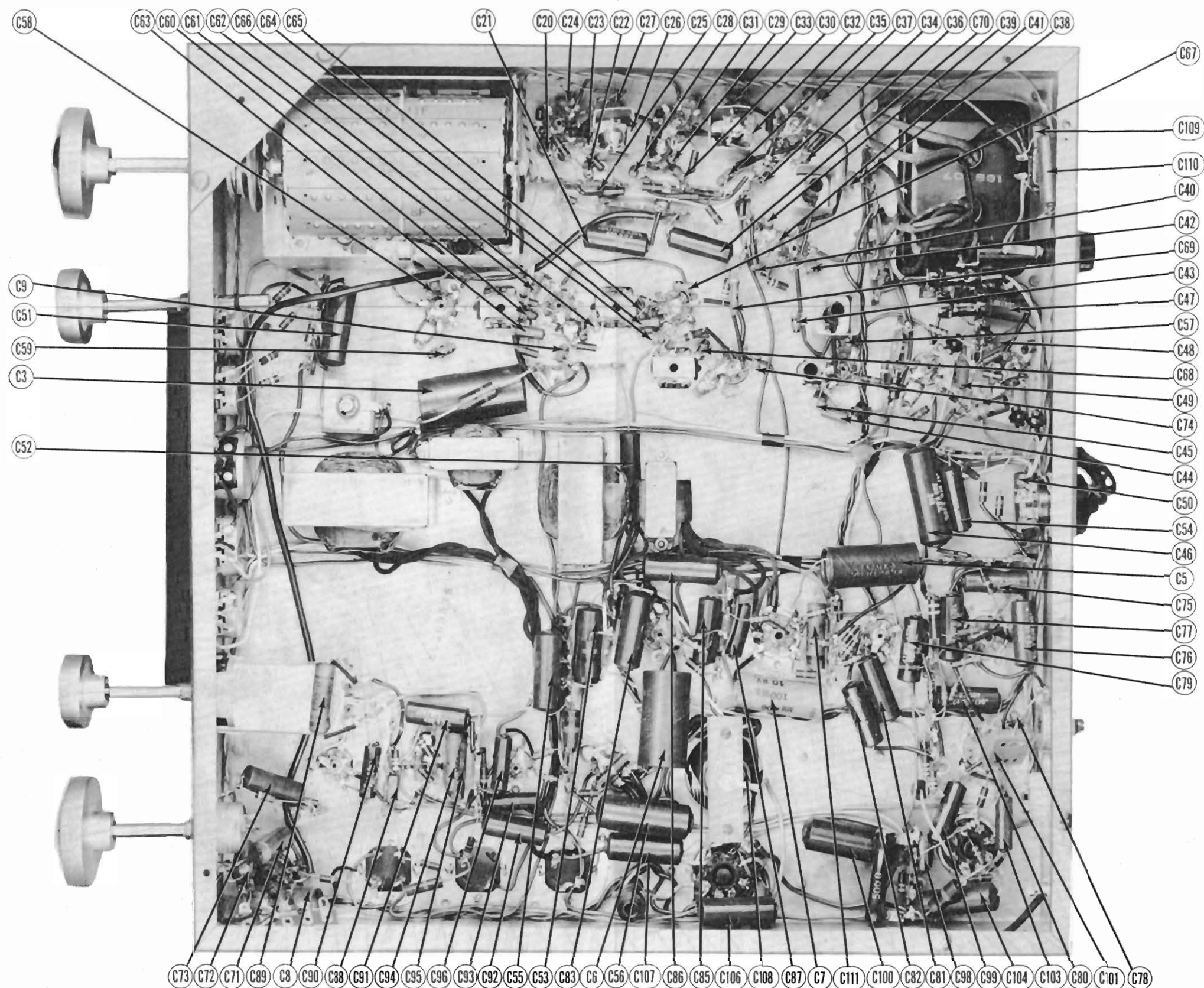
FIG. 4



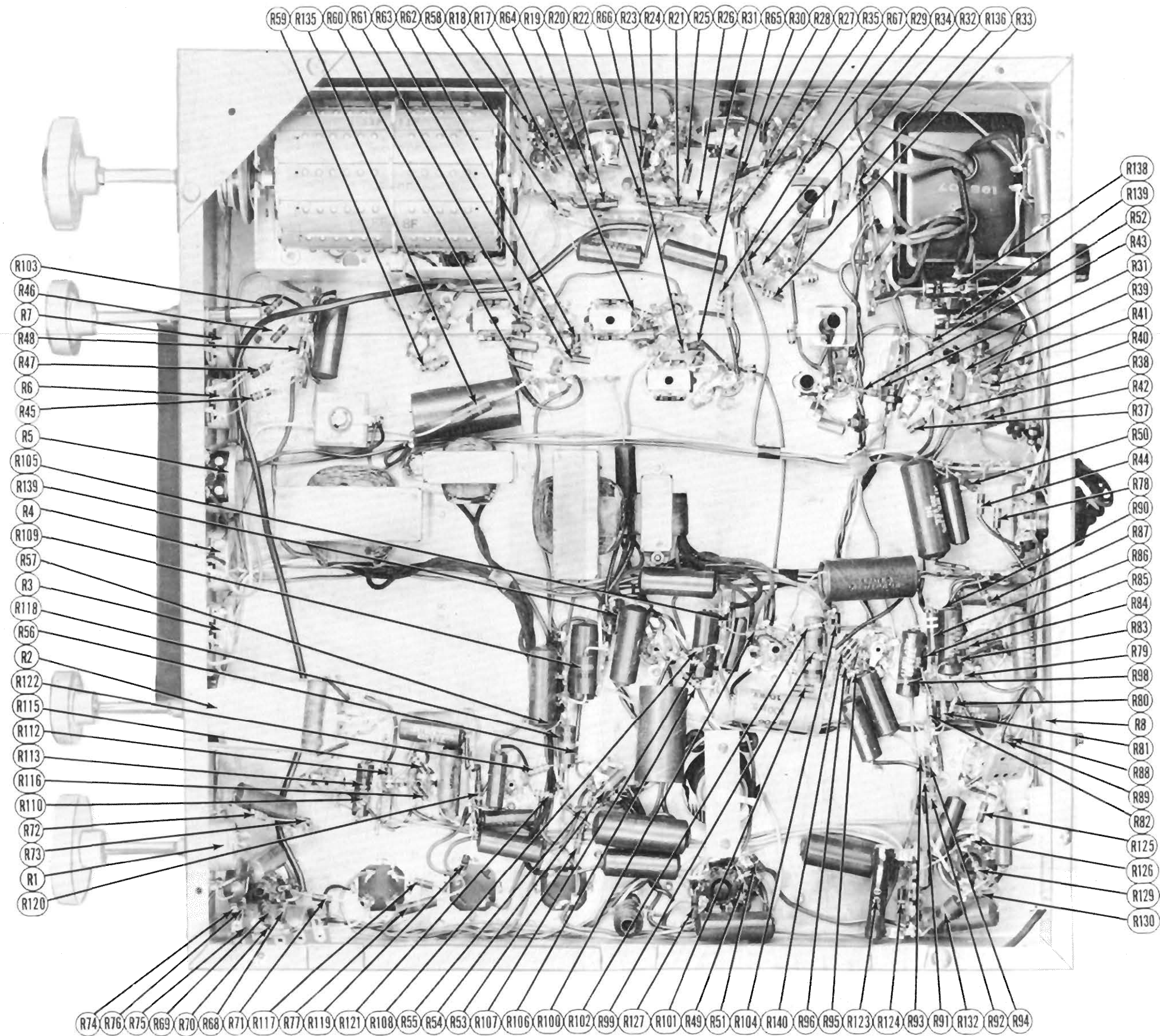
CHASSIS-TOP VIEW

RADIO CRAFTSMEN
MODEL RC100

**RADIO CRAFTSMEN
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CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION

RADIO CRAFTSMEN
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PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	RADIO CRAFT. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC ① 1.7A	340VAC ② .145 ADC CT ③ .165 ADC & 80VAC ④ .057 ADC			19S207			

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		RADIO CRAFT. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T2	240Ω	1350Ω	19S601	A-8111 ①	A-3000 ①	TBO-1 ①	Vert. Block Osc. Trans. Hor. Output Trans.
T3	410Ω Tap ② 370Ω	23Ω Tap ③ 11Ω & 5.5Ω SEC. 2 0Ω	19X006		HVO-6		
T4	1300Ω	9.8Ω	19S007	A-8112	A-3037	TSO-5	Vert. Output Trans. Hor. Deflection Coil Vert. Deflection Coil Focus Coil
T5A	16.8Ω		5X801				
T6	65Ω 1200Ω		5X802				

① Drill one new mounting hole.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (D. C. CURRENT 1000 mA)	RADIO CRAFT. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.145A	21.5Ω	.4 Henries	19S404				
L2	.165A	95Ω	5 Henries	19S403	C-2309	C-2996	TR-4200	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RADIO CRAFT. PART No.	MEISSNER PART No.	
L3	Ant. Coil	0Ω	0Ω			Part of tuner.
L4	RF Mixer Grid and Osc. Coils	0Ω	0Ω			Part of tuner.
L5	Conv. Trans. & Sound Take Off	0Ω	0Ω			
L6	1st Video IF	3.5Ω		5X008		
L7	2nd Video IF	.2Ω		5A010		
L8	3rd Video IF	.2Ω		5A011		
L9	4th Video IF	.2Ω		5A012		
L10	5th Video IF	.2Ω		5A012		
L11	4.5MC Trap	1.8Ω		5A407		
L12	Peaking	6.5Ω		5X404	19-1921	Blue identification dot. 120μh.
L13	Peaking	10Ω		5X405		
L14	Peaking	6.5Ω		5X404	19-1921	Blue identification dot. 120μh.
L15	Peaking	6Ω		5X403	19-1920	93μh.
L16	Peaking	6.5Ω		5X404	19-1921	Blue identification dot. 120μh.
L17	Peaking	6Ω		5X403	19-1920	Red identification dot. 93μh.
L18	1st Sound IF	.2Ω	.2Ω	5X006		
L19	2nd Sound IF	.2Ω	.2Ω	5X006		
L20	Disc. Trans.	.2Ω	.2Ω	5X007		
L21	Horiz. Sync. Disc. Trans.	52Ω	44Ω	5X805		
L22	Horiz. Lin. Width	28Ω		5A803		
L23	Fill. Choke	5Ω		5A804		
L24	Fill. Choke	.1Ω		5X406		
L25	Fill. Choke	.1Ω		5X406		
L26	Fill. Choke	.1Ω		5X406		

SELENIUM RECTIFIER

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	CURRENT		RADIO CRAFT. PART No.	SYLVANIA PART No.	
M1	.145ADC		13X001	NE-5 ②	② Connect two in series
M2	.145ADC		13X001	NE-5 ②	
M3	.057ADC		13X002	NB-5	

MISCELLANEOUS

ITEM No.	PART NAME	RADIO CRAFT. PART No.	NOTES
M4	RF Tuner		
M5	Fuse	34X011	1 1/2 type 3AG .25A
M6	Fuse	34X012	1 1/2 type 3AG 3A
M7	Ion Trap		

HORIZONTAL OSCILLATOR ALIGNMENT

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

Adjust the horizontal hold slug (B1) to the center of the range over which the picture synchronizes horizontally.

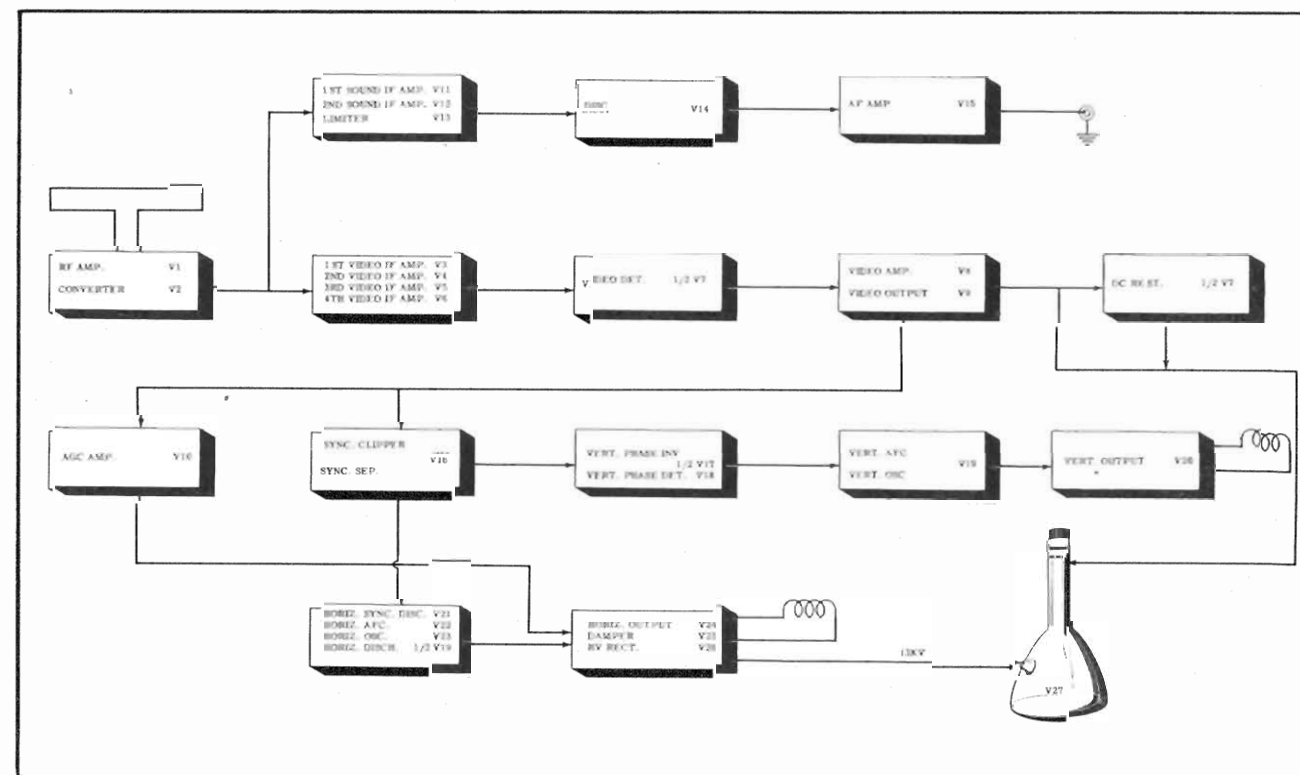
If the horizontal blanking bar appears in the picture, or if ripples occur in the raster, adjust the horizontal phasing slug (B2) until the unstable condition is removed.

HORIZONTAL LINEARITY ADJUSTMENT

Turn the horizontal drive control clockwise as far as possible without crowding the right half of the picture.

Adjust the horizontal size slug (B3) until the picture is of proper width.

Adjust the horizontal linearity slug (B4) until the picture is symmetrical from left to right. Slight readjustment of the horizontal drive control may be necessary.



BLOCK DIAGRAM

RADIO CRAFTS MEN
MODEL RC100

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		RADIO CRAFT. PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6AG5	6AG5	7BD	
V2	Converter	6J6	6J6	7BF	
V3	1st Video IF	6AG5	6AG5	7BD	
V4	2nd Video IF	6AG5	6AG5	7BD	
V5	3rd Video IF	6AG5	6AG5	7BD	
V6	4th Video IF	6AG5	6AG5	7BD	
V7	Video Det.-DC Restorer	6AL5	6AL5	6BT	
V8	Video Amp.	6AU6	6AU6	7BK	
V9	Video Output	6AR5	6AR5	6CC	
V10	AGC Amp.	6AU6	6AU6	7BK	
V11	1st Sound IF	6AU6	6AU6	7BK	
V12	2nd Sound IF	6AU6	6AU6	7BK	
V13	Limiter	6AL5	6AL5	6BT	
V14	Disc.	12AU7	12AU7	9A	
V15	AF Amp.	12AU7	12AU7	9A	
V16	Sync. Clipper-Sync. Sep.	12AU7	12AU7	9A	
V17	Vert. Phase Inv.-Hor. Disch.	12AU7	12AU7	9A	
V18	Vert. Phase Det.	6AL5	6AL5	6BT	
V19	Vert. APC-Vert. Osc.	12AU7	12AU7	9A	
V20	Vert. Output	6AQ5	6AQ5	7BZ	
V21	Hor. Sync. Disc.	6AL5	6AL5	6BT	
V22	Hor. AFC	6AH6	6AH6	7BK	
V23	Hor. Osc.	6AR5	6AR5	6CC	
V24	Hor. Output	6BG6G	6BG6G	5BT	
V25	Damper	6W4GT	6W4GT	4CG	
V26	HV Rectifier	1B3GT	1B3GT	3C	
V27A	Picture Tube	16AP4	16AP4	12D	
B	Picture Tube	16GP4	16GP4	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 CAP. VOLT	REPLACEMENT DATA		RADIO CRAFT. PART No.	AEROVOX PART No.	CENTRALAB PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
		RADIO CRAFT. PART No.	STANDARD REPLACEMENT						
C1A	40 400	18S010	AF88J						TVL-64
C2A	100 200	18S011	AF2020E						UT 101
C3A	100 200	18X019	PRSI50/20-40						TVL-16
C4A	10 450	18S012	AF4J33H4A						TVL-36
C5A	10 200								TVL-5
C6A	10 150								TVL-11
C7A	25 25	18X014	PRSI50/4						TVL-12
C8A	1 6	18X013	PRSI50/100						TVL-17
C9A	100 50	18X016	PRSI50/50						TVL-8
C10A	100 50	18X016	PRSI50/50						TVL-16
C11A	100 100	18X019	PRSI50/20-40						TVL-16
C12A	100 100	18X019	PRSI50/20-40						TVL-16
C13A	100 100	18X019	PRSI50/20-40						TVL-16
C14A	100 100	18X019	PRSI50/20-40						TVL-16
C15A	100 100	18X019	PRSI50/20-40						TVL-16
C16A	100 100	18X019	PRSI50/20-40						TVL-16
C17A	100 100	18X019	PRSI50/20-40						TVL-16
C18A	100 100	18X019	PRSI50/20-40						TVL-16
C19A	100 100	18X019	PRSI50/20-40						TVL-16
C20A	100 100	18X019	PRSI50/20-40						TVL-16
C21A	100 100	18X019	PRSI50/20-40						TVL-16
C22A	100 100	18X019	PRSI50/20-40						TVL-16
C23A	100 100	18X019	PRSI50/20-40						TVL-16
C24A	100 100	18X019	PRSI50/20-40						TVL-16
C25A	100 100	18X019	PRSI50/20-40						TVL-16
C26A	100 100	18X019	PRSI50/20-40						TVL-16
C27A	100 100	18X019	PRSI50/20-40						TVL-16
C28A	100 100	18X019	PRSI50/20-40						TVL-16
C29A	100 100	18X019	PRSI50/20-40						TVL-16
C30A	100 100	18X019	PRSI50/20-40						TVL-16
C31A	100 100	18X019	PRSI50/20-40						TVL-16
C32A	100 100	18X019	PRSI50/20-40						TVL-16
C33A	100 100	18X019	PRSI50/20-40						TVL-16
C34A	100 100	18X019	PRSI50/20-40						TVL-16
C35A	100 100	18X019	PRSI50/20-40						TVL-16
C36A	100 100	18X019	PRSI50/20-40						TVL-16
C37A	100 100	18X019	PRSI50/20-40						TVL-16
C38A	100 100	18X019	PRSI50/20-40						TVL-16
C39A	100 100	18X019	PRSI50/20-40						TVL-16
C40A	100 100	18X019	PRSI50/20-40						TVL-16
C41A	100 100	18X019	PRSI50/20-40						TVL-16
C42A	100 100	18X019	PRSI50/20-40						TVL-16
C43A	100 100	18X019	PRSI50/20-40						TVL-16
C44A	100 100	18X019	PRSI50/20-40						TVL-16
C45A	100 100	18X019	PRSI50/20-40						TVL-16
C46A	100 100	18X019	PRSI50/20-40						TVL-16
C47A	100 100	18X019	PRSI50/20-40						TVL-16
C48A	100 100	18X019	PRSI50/20-40						TVL-16
C49A	100 100	18X019	PRSI50/20-40						TVL-16
C50A	100 100	18X019	PRSI50/20-40						TVL-16
C51A	100 100	18X019	PRSI50/20-40						TVL-16
C52A	100 100	18X019	PRSI50/20-40						TVL-16
C53A	100 100	18X019	PRSI50/20-40						TVL-16
C54A	100 100	18X019	PRSI50/20-40						TVL-16
C55A	100 100	18X019	PRSI50/20-40						TVL-16
C56A	100 100	18X019	PRSI50/20-40						TVL-16
C57A	100 100	18X019	PRSI50/20-40						TVL-16
C58A	100 100	18X019	PRSI50/20-40						TVL-16
C59A	100 100	18X019	PRSI50/20-40						TVL-16
C60A	100 100	18X019	PRSI50/20-40						TVL-16
C61A	100 100	18X019	PRSI50/20-40						TVL-16
C62A	100 100	18X019	PRSI50/20-40						TVL-16

PARTS LIST AND DESCRIPTIONS

CAPACITORS (CONT.)

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA		RADIO CRAFT. PART No.	AEROVOX PART No.	CENTRALAB PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
		RADIO CRAFT. PART No.	STANDARD REPLACEMENT						
C63	8	18X616	C18DN080						Fixed Trimmer
C64	8	18X616	C18DN080						Fixed Trimmer
C65	22	18X603	GP22M						Limiter Grid Filter
C66	1000	18X614	GP1000M						Limiter Decoupling
C67	1000	18X614	GP1000M						Limiter Fil. Bypass
C68	100	18X605	GP100M						RF Bypass
C69	1500	18X607	GP1500M						De-emphasis
C70	.022 400	18Z244	P488-022						Audio Coupling
C71	.047 400	18Z254	P488-047						Audio Coupling
C72	.022 400	18Z244	P488-022						Audio Coupling
C73	.047 400	18Z254	P488-047						Tone Compensation
C74	1000	18X614	GP1000M						Disc. Filament Bypass
C75	.047 400	18Z254	P488-047						Sync. Coupling
C76	.047 400	18Z254	P488-047						Sync. Coupling
C77	.047 400	18Z254	P488-047						Vert. Sync. Coupling
C78	1500	18X607	GP1500M						Vert. Phase Inv. Grid Bypass
C79	.047 400	18Z254	P488-047						Vert. Sync. Coupling
C80	.047 400	18Z254	P488-047						Vert. Sync. Coupling
C81	.047 400	18Z254	P488-047						Vert. Sync. Coupling
C82	.047 400	18Z254	P488-047						Vert. Sync. Coupling
C83	.1 400	18Z264	P488-1						Vert. Sweep Coupling
C84	.0022 400	18Z214	P688-0022						Voltage Divider
C85	.047 400	18Z254	P488-047						Vert. Discharge
C86	.1 400	18Z264	P488-1						Vert. Sweep Coupling
C87	.001 600	18Z206	P688-001						Vert. Osc. Grid Cap.
C88	100 300	18X402	P488-0001						Hor. Sync. Coupling
C89	.015 400	18X301	P488-015						Fixed Trimmer
C90	.0047 400	18X224	P688-0047						AFC Filter
C91	.0047 400	18X224	P688-0047						AFC Filter
C92	.047 400	18Z254	P488-047						Hor. AFC Screen Bypass
C93	.0047 400	18Z224	P688-0047						Hor. AFC Coupling
C94	1200	18X614	P488-015						Phase Shifter
C95	.015 400	18X301	P488-015						Phase Shifter
C96	.0047 400	18Z224	P688-0047						Hor. Osc. Grid Cap.
C97	.1 400	18Z264	P488-1						Voltage Divider
C98	.470 500	18X403	P488-0005						Differentiator Net.
C99	.01 600	18Z234	P688-01						Hor. Sweep Coupling
C100	.1 600	18Z264	P488-1						Hor. Discharge Plate D.C.
C101	.680 500	18X406	P688-001						Hor. Discharge
C102	.1 400	18Z264	P488-1						Hor. Sweep Coupling
C103	.001 600	18Z206	P688-001						Hor. Output Screen Bypass
C104	.1 400	18Z264	P488-1						Hor. Sweep Coupling
C105	.47 200	18Z282	P288-47						Hor. Sweep Coupling
C106	.047 600	18Z256	P688-047						Damper Filter
C107	.047 600	18Z256	P688-047						Damper Filter
C108	500 20000	18X613	P688-01						HV Filter
C109	.01 600	18Z236	P688-01						Line Filter
C110	.01 600	18Z236	P688-01						Line Filter
C111	.01 400	18Z234	P488-01						Integrator Net.

* Not used in all models.
† Some models use 25MFD, 25 Volts in this application. MFGR'S Part No. 18X008.
‡ Some models use 220MMF in this application. MFGR'S Part No. 18X401.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS	Radio Craft. PART No.	IFC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	
R1A	500KΩ	1	23S706	Q13-133X	T-78	BT-67-S	Volume control tapped 150KΩ
R1B	Switch	Not Req.	76-1	SW-A	Not Req.	Not Req.	Attach to R1A per instructions
R2	1500Ω	2	23S714				Contrast control-Wire Wound
R3A	1 Meg.	1	23S711	Q11-137	AM-61-S	AN-69	Vert. hold control
R4A	5000Ω	1	23S712	Q11-14	AM-19-S	AK-1	Attach to R3A per instructions
R5	500Ω	2	23S713	Q11-14	AM-19-S	AK-1	Vert. linearity control
R6A	100KΩ	1	23S707	W-5000 *	AM-49-S	V-135 *	Attach to R4A per instructions
R7A	2 Meg.	1	23S709	Q11-128	AM-49-S	V-135 *	Focus control-Wire Wound
R8A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Brightness control
R9A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Attach to R6A per instructions
R10A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Vert. size control
R11A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Attach to R7A per instructions
R12A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Horiz. drive control
R13A	50KΩ	1	23S708	Q11-139	AM-49-S	AK-1	Attach to R8A per instructions