

EMERSON
MODELS 571, 606, 611, 612, 619,
620, 624, 627

TRADE NAME	Emerson Models 571 and 606 (Ch. 120086B), 606, 611, 612 and 624 (Ch. 120087B-D), 619 (Ch. 120092D), 620 (Ch. 120091D), 620 (Ch. 120091QD), 627 (Ch. 120107B).		
MANUFACTURER	Emerson Radio and Phono Corp., 111 Eighth Ave., New York 11, New York		
TYPE SET	Television Receiver		
TUBES	Twenty Eight (Models using 25Z6 Rectifiers) Twenty Three (Models using Selenium Rectifiers)		
POWER SUPPLY	105-125 Volts AC 60 Cycle		
FREQ. RANGE	Channels 2 thru 13	RATING:	1.66 Amp. @ 117 Volts AC (Selenium Rect. Models).

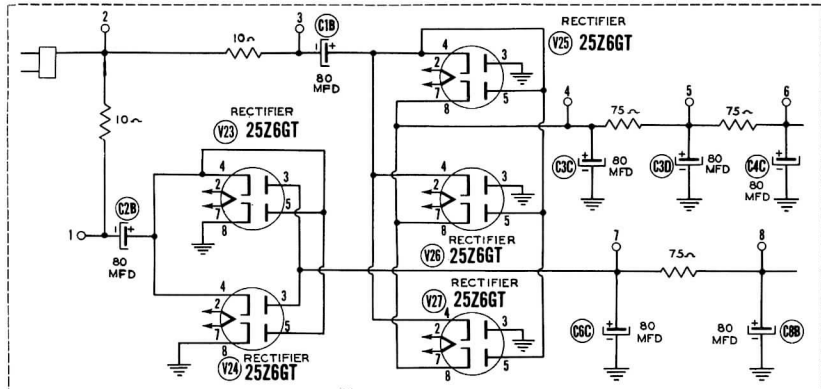
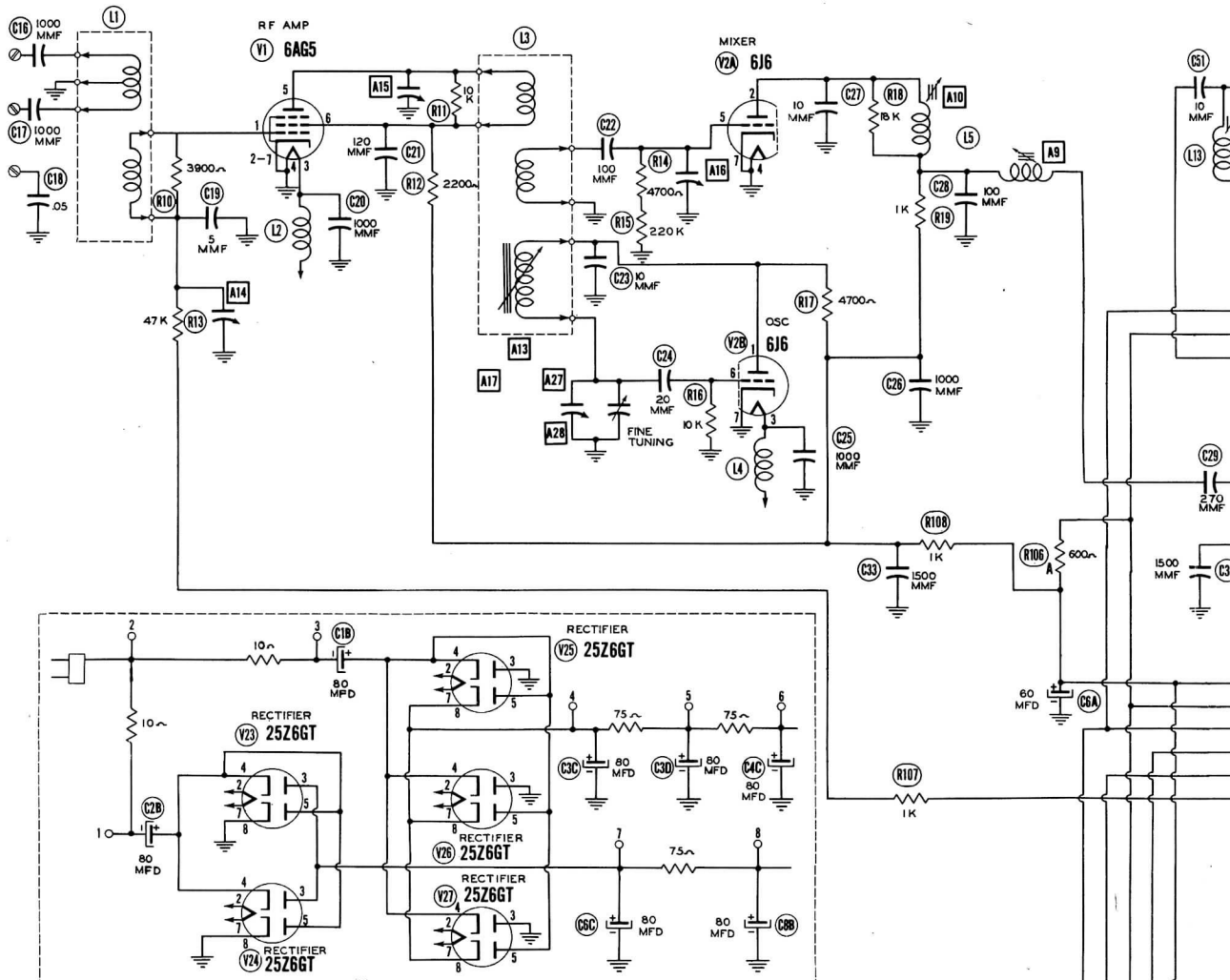
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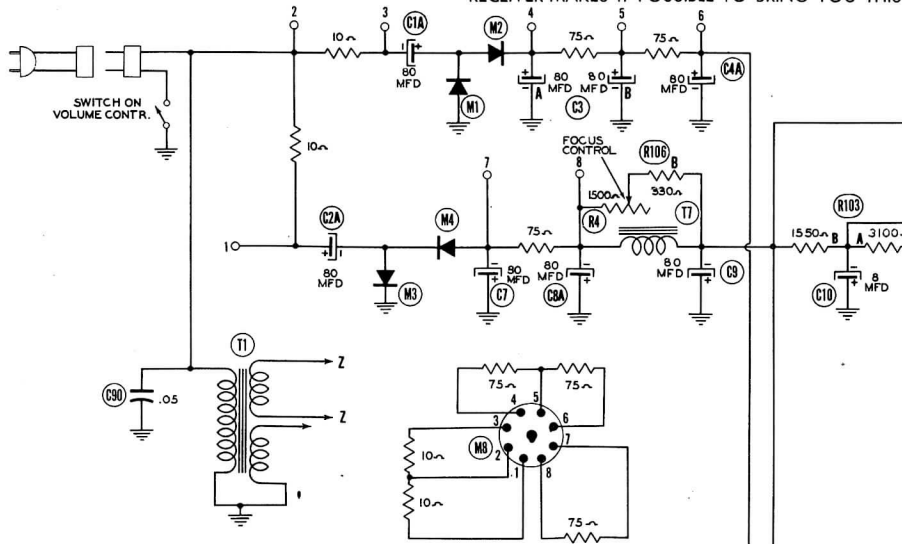
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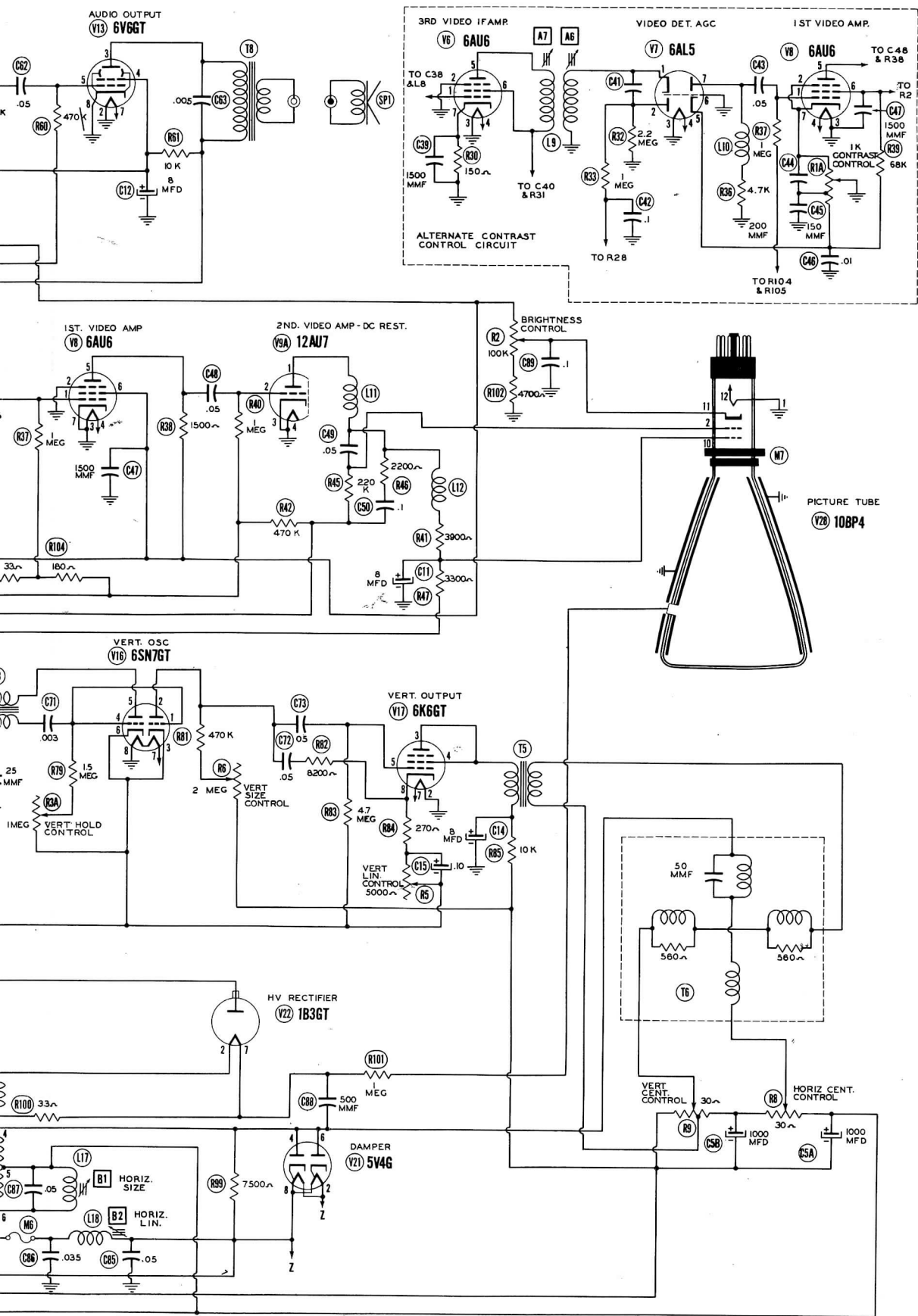
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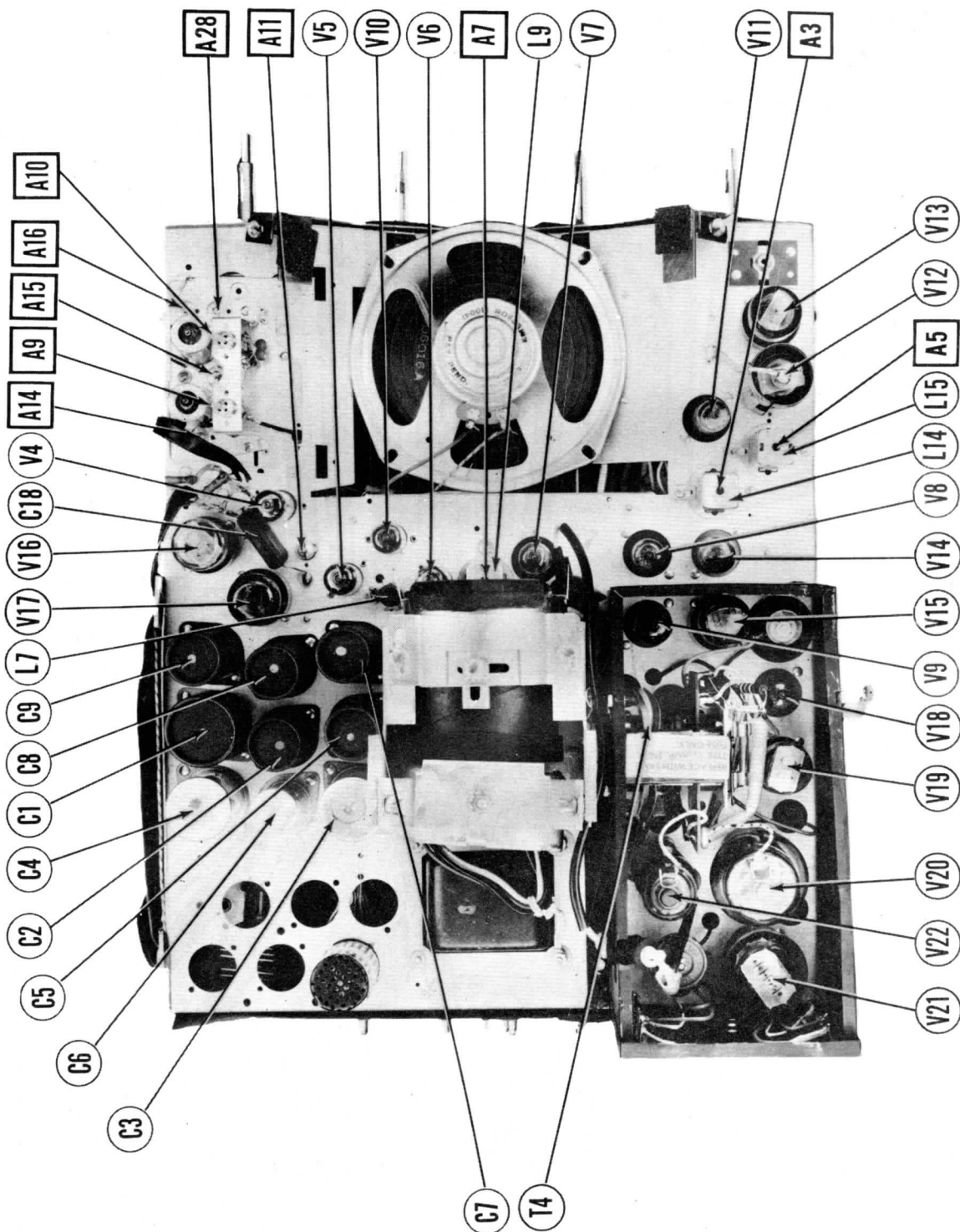


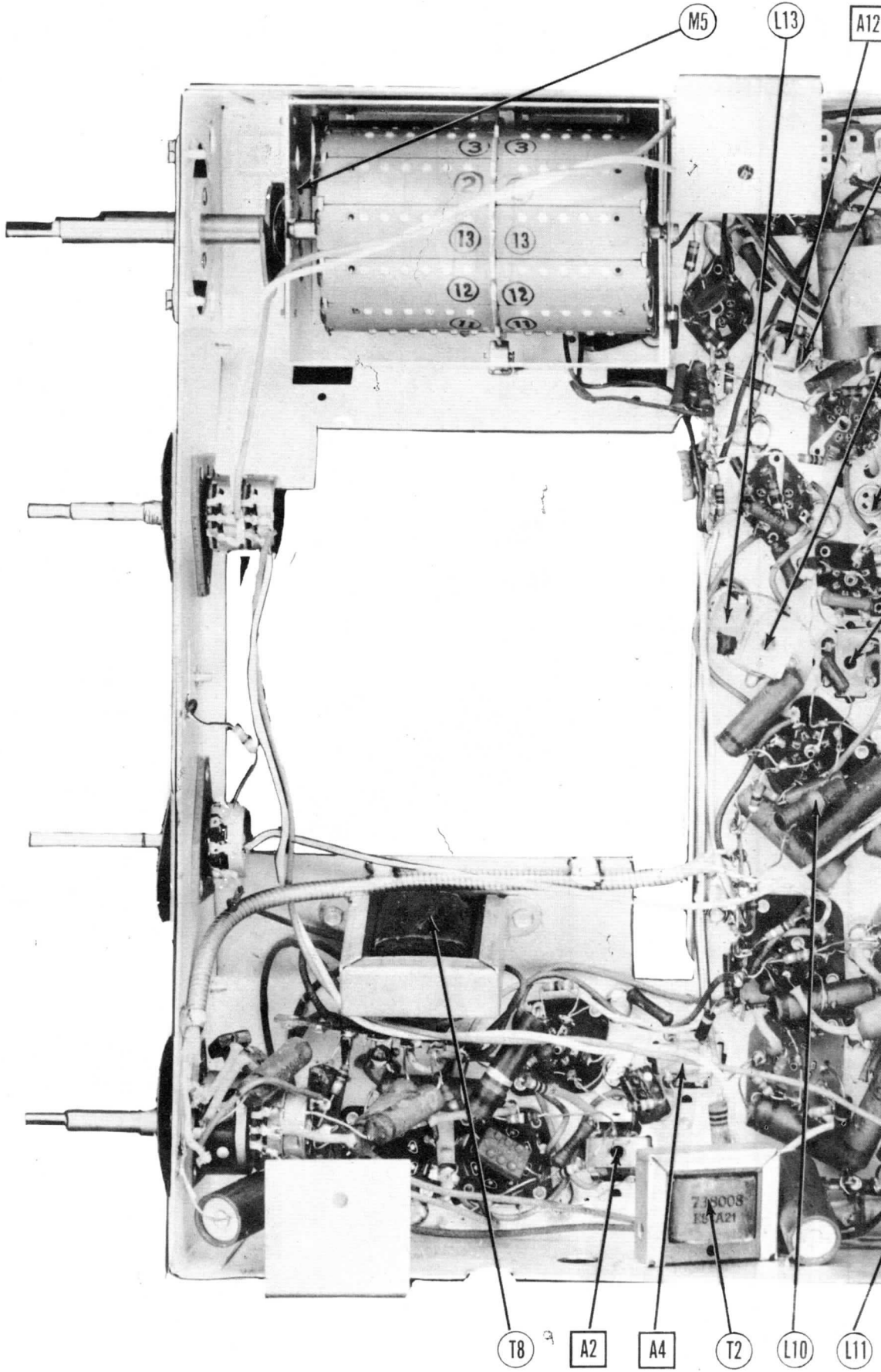
A PHOTOFAC STANDARD NOTATION SCHEMATIC
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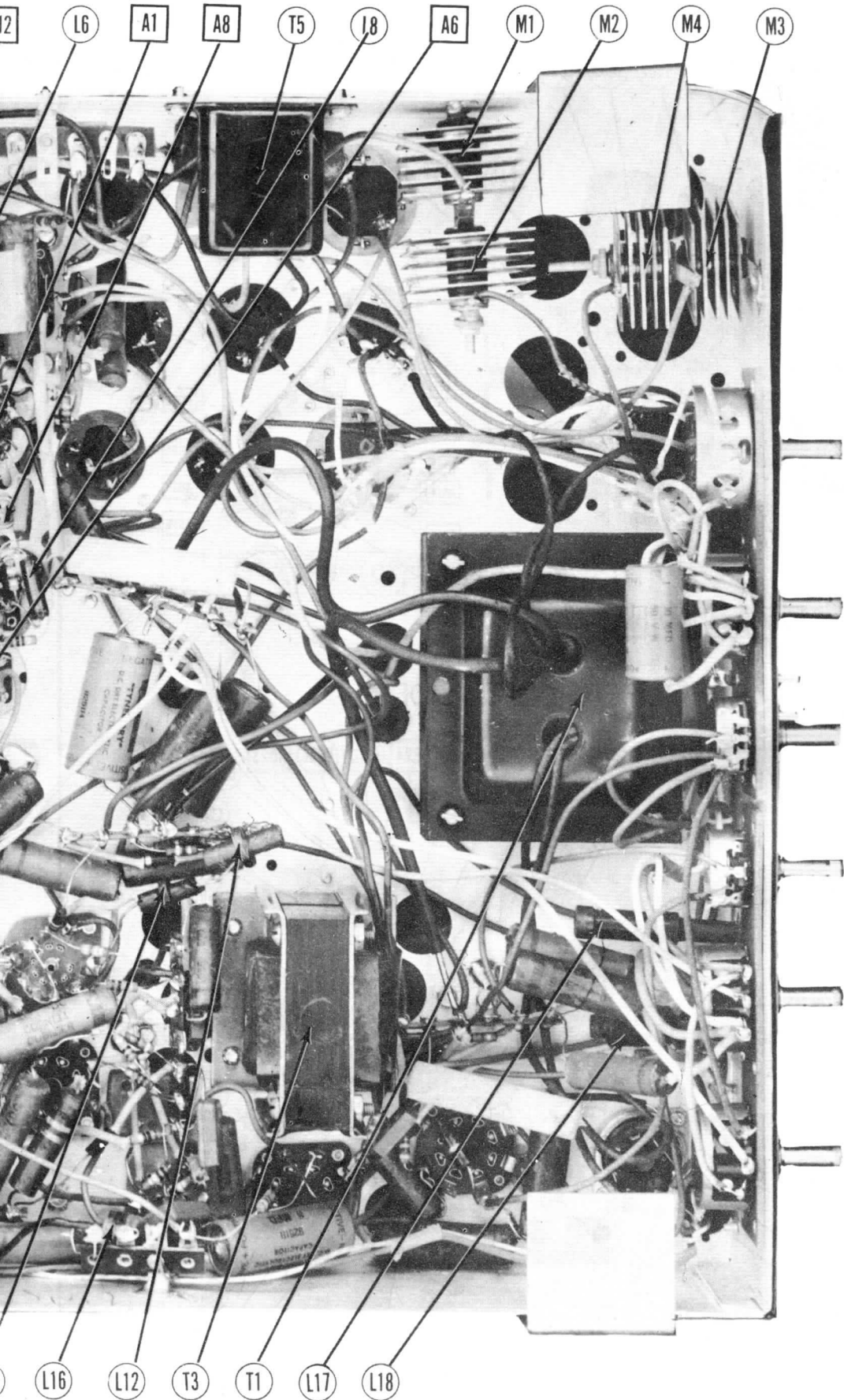
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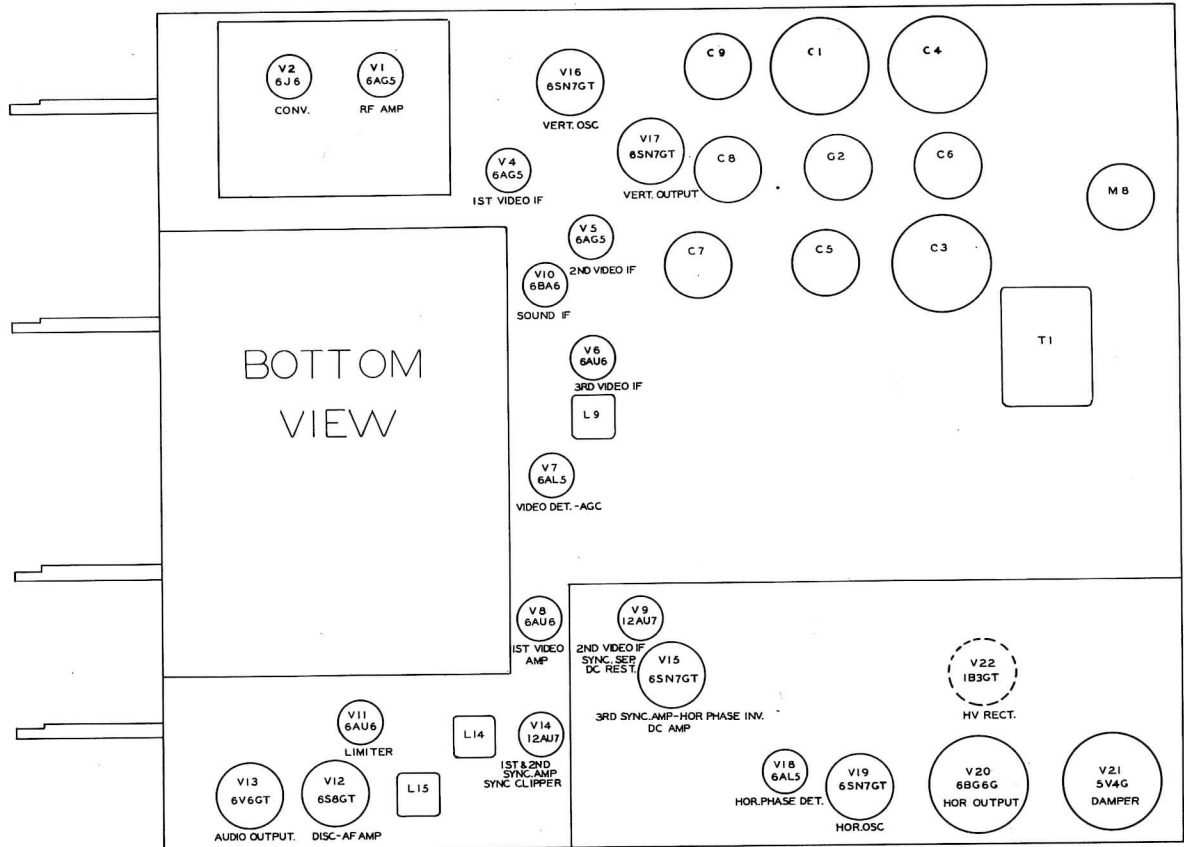
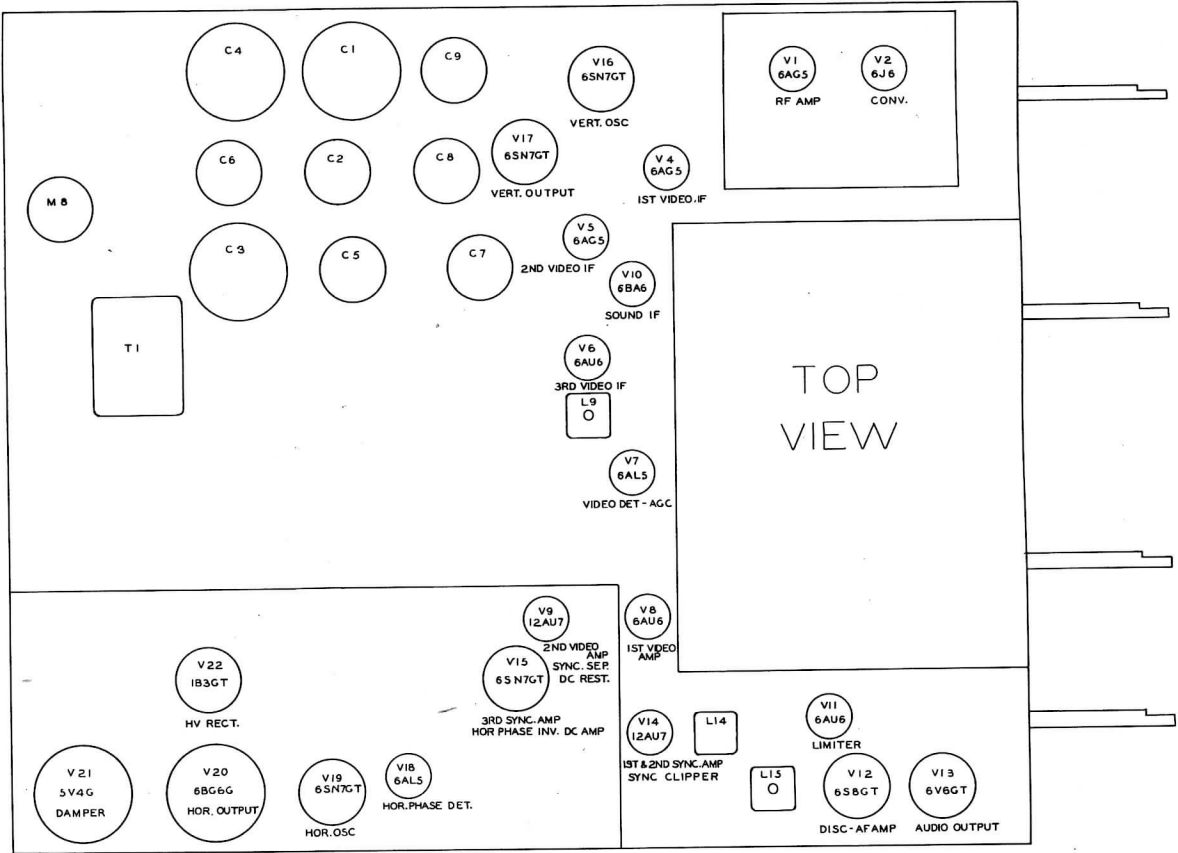


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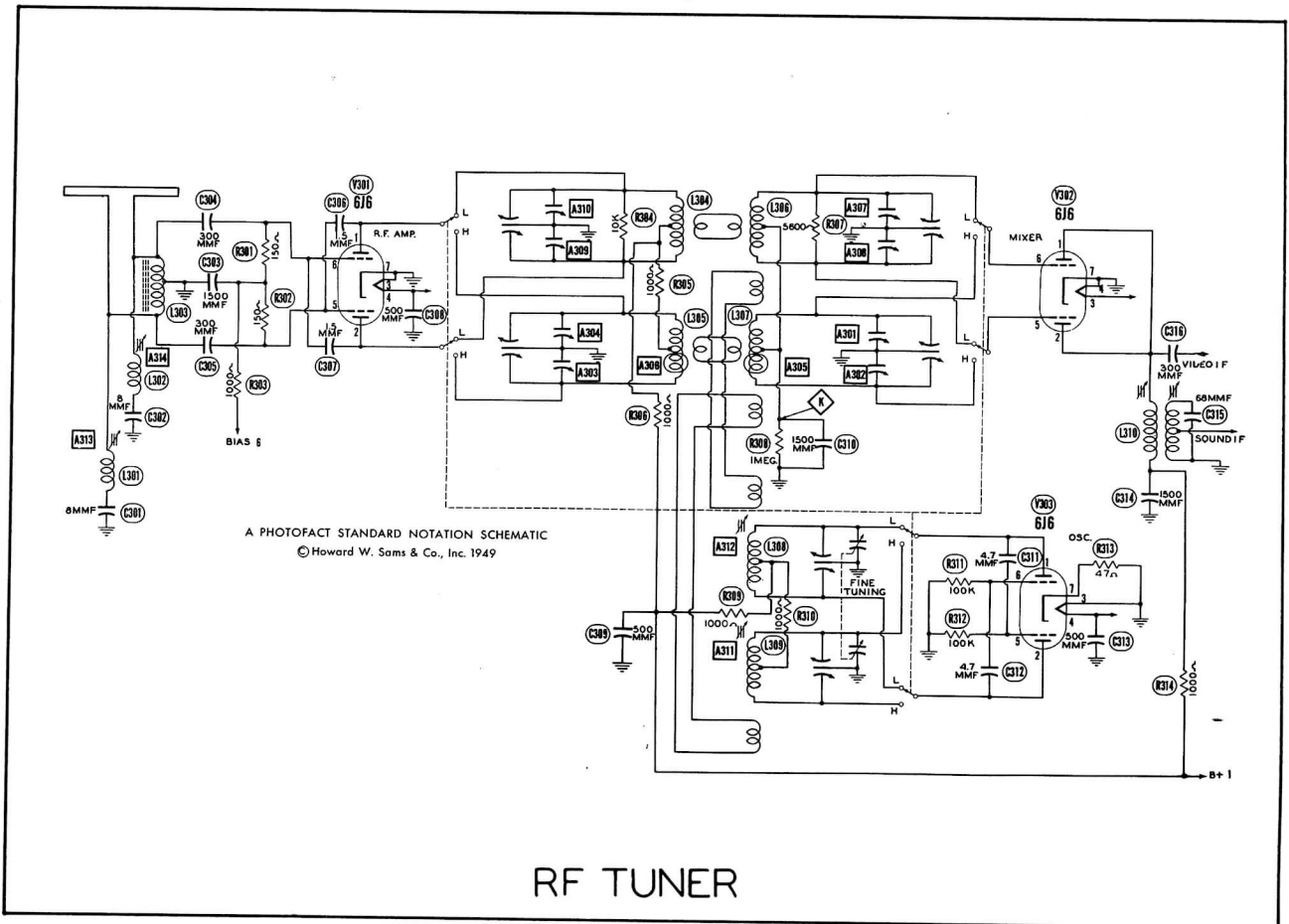


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...TOR AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART



PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA	
		STANDARD REPLACEMENT	RMA BASE TYPE
V301	RF Amp.	6J6	7BF
V302	Mixer	6J6	7BF
V303	Oscillator	6J6	7BF

RESISTORS

ITEM No.	RATING		IDENTIFICATION
	RESISTANCE	WATTS	
R301	150Ω	1/2	RF Grid
R302	150Ω	1/2	RF Grid
R303	1000Ω	1/2	Bias Filter
R304	10KΩ	1/2	RF Coil Shunt
R305	1000Ω	1/2	RF Plate
R306	1000Ω	1/2	RF Plate
R307	5600Ω	1/2	Mixer Coil Shunt
R308	1 Meg	1/2	Mixer Grid
R309	1000Ω	1/2	Osc. Plate
R310	1000Ω	1/2	Osc. Plate
R311	100KΩ	1/2	Osc. Grid
R312	100KΩ	1/2	Osc. Grid
R313	47Ω	1/2	Osc. Cathode
R314	1000Ω	1/2	Mixer Decoup.

CAPACITORS

ITEM No.	RATING		IDENTIFICATION
	CAP.	VOLT	
C301	8		Fixed Trimmer
C302	8		Fixed Trimmer
C303	1500		Bias Filter
C304	300		RF Coupling
C305	300		RF Coupling
C306	1.5		Neutralizing
C307	1.5		Neutralizing
C308	500		Filament Bypass
C309	500		RF Bypass
C310	1500		Mixer Grid Filter
C311	4.7		Osc. Feedback
C312	4.7		Osc. Feedback
C313	500		Filament Bypass
C314	1500		Mixer Decoupling
C315	68		Fixed Trimmer
C316	300		IF Coupling

COILS

ITEM No.	USE	DC RES.	
		PRI.	SEC.
L301	Interference Trap	0Ω	
L302	Interference Trap	0Ω	
L303	Ant. Input	0Ω	
L304	RF Low Band	0Ω	
L305	RF High Band	0Ω	
L306	Mixer Low Band	0Ω	
L307	Mixer High Band	0Ω	
L308	Osc. Low Band	0Ω	
L309	Osc. High Band	0Ω	
L310	IF Trans.	.2Ω	0Ω

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT								
If set is to be aligned with picture tube removed, unsolder the wire connected to pins 3 and 6 on the horizontal oscillator (V19) to remove high voltage shock hazard. Use an isolation transformer if available, if not connect a .1mf condenser in series with the low side of the signal generator and chassis. Connect a 40mf condenser, shunted by .005mf in series with ground side of oscilloscope and chassis, and a 100KΩ resistor in series with the common lead of the VTVM and chassis.								
SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM								
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS		
1.	.001MFD	High side to pin 7 (Plate) of 6AL5 (V7). Low side to chassis.	4.5MC (Unmod.)	3	DC Probe to Point \diamond Common to chassis.	A1	Adjust for maximum deflection.	
2.	.001MFD	"	"	"	"	A2,A3	"	
3.	.001MFD	"	"	"	DC Probe to Point \diamond Common to chassis.	A4	"	
4.	.001MFD	"	"	"	DC Probe to Point \diamond Common to chassis.	A5	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 60V 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	
1.	.001MFD	High side to pin 7 (Plate) of 6AL5 (V4). Low side to chassis.	4.5MC (450KC Sweep)	4.5MC	3	Vert. Amp. to Point \diamond Low side to chassis.	A1,A2, A3	Adjust for maximum amplitude and symmetry as per Fig 1.
2.	.001MFD	"	"	"	"	Vert. Amp. to Point \diamond Low side to chassis.	A4,A5	Adjust A5 so marker occurs at center of crossover lines as per Fig 2. Adjust A4 for maximum amplitude and straightness of crossover lines. Continue with step 5.
VIDEO IF ALIGNMENT								
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	
5.	.005MFD	High side to pin 1 (Grid) of 6AU6 (V6). Low side to chassis.	24.5MC (10MC Sweep)	25.75MC	3	Vert. Amp. to Point \diamond Low side to chassis.	A6,A7	Adjust for response curve as per Fig 3 with marker as shown.
6.	.005MFD	High side to pin 1 (Grid) of 6AG5 (V5). Low side to chassis.	"	"	"	"	A8	Adjust for response curve as per Fig 4 with marker as shown.
7.		High side to ungrounded tube shield floating over mixer tube. Low side to chassis.	"	"	13	Vert. Amp. to Point \diamond thru detector probe (Fig 5). Low side to chassis.	A9,A10	Adjust for response as per Fig 6 with marker as shown.
8.		"	"	13	Vert. Amp. to Point \diamond thru probe as above. Low side to chassis.	All, A12	Adjust All to place 22.8MC marker as shown in Fig 7. Adjust A12 to place 21.25MC marker as shown. If necessary, repeat step 7 for optimum results.	
9.		"	"	13	Vert. Amp. to Point \diamond Low side to chassis.	All,A8	Adjust for overall response curve as per Fig 8. All effects band pass. A8 positions 25.75MC marker.	

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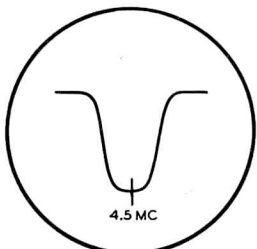


FIG. 1

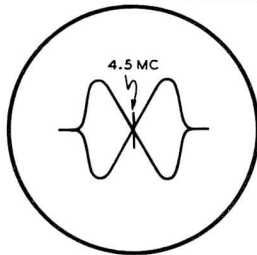


FIG. 2

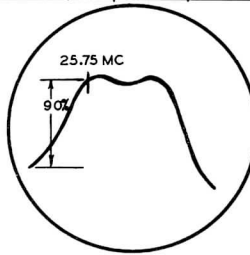


FIG. 3

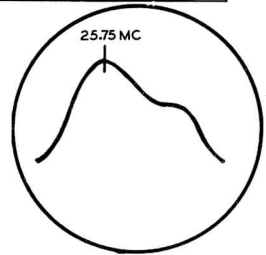


FIG. 4

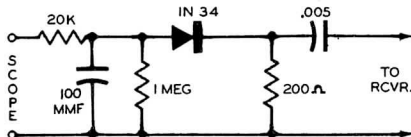


FIG. 5

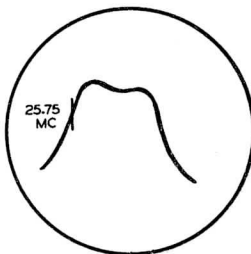


FIG. 6

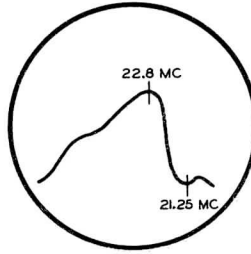


FIG. 7

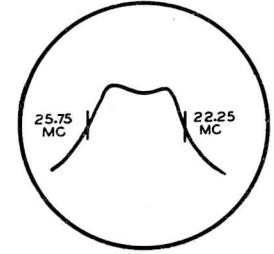


FIG. 8

OSCILLATOR AND RF ADJUSTMENTS

These receivers employ one of three tuners. Determine which tuner is in the set and use the alignment instructions for that tuner.


RF and OSCILLATOR ALIGNMENT (TUNER NO. 470452-8)

The RF and Mixer circuits of this tuner are pre-set at the factory and normally do not require adjustment in the field.

If the majority of the channels seem to need oscillator alignment this may sometimes be done in one operation- Step 23 by adjusting A28. It should be noted that this is an overall oscillator circuit adjustment and should not be adjusted for any one individual channel. If this adjustment will not bring all channel within the range of the fine tuning control, those channels which are off frequency should be adjusted separately as outlined in steps 10 thru 22.

Adjustments A13 and A17 through A27 are accessible through a hole in the front of the tuner as the channel switch is turned to corresponding channel.


Fine tuning control should be set at mid position for all adjustments.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. Two 150Ω carbon res.	To antenna terminals with 150Ω resistor in each lead.	207MC (10MC Sweep)	25.75MC	12	Vert. Amp. to Point  Low side to chassis.	A13	Adjust for response curve as per Fig 8 with 25.75MC marker as shown.
11. "	"	"	"	"	"	A14, A15, A16	Adjust all trimmers for maximum amplitude and bandwidth while maintaining best symmetry of overall response as per Fig 8.
12. "	"	216MC (10MC Sweep)	"	13	"	A17	Adjust for proper response curve with marker as shown in Fig 8.
13. "	"	201MC (10MC Sweep)	"	11	"	A18	"
14. "	"	195MC (10MC Sweep)	"	10	"	A19	"
15. "	"	189MC (10MC Sweep)	"	9	"	A20	"
16. "	"	183MC (10MC Sweep)	"	8	"	A21	"
17. "	"	177MC (10MC Sweep)	"	7	"	A22	"
18. "	"	85MC (10MC Sweep)	"	6	"	A23	"
19. "	"	79MC (10MC Sweep)	"	5	"	A24	"
20. "	"	69MC (10MC Sweep)	"	4	"	A25	"
21. "	"	63MC (10MC Sweep)	"	3	"	A26	"
22. "	"	57MC (10MC Sweep)	"	2	"	A27	"
23. "	"	See note above	"	See note above	"	A28	"

RF AND MIXER ALIGNMENT (TUNER NO. 470320)

To make adjustments on this tuner it may be necessary to remove the tuner and extend the leads.

It is recommended that the RF and Mixer circuits not be aligned unless definitely known to be out of adjustment and then only if proper test equipment is available.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. Two 150Ω carbon res.	To antenna terminals with 150Ω in each lead.	213MC (10MC Sweep)	211.25MC 217.75MC	13	Vert. Amp. to Point  Low side to chassis.	A301, A302, A303, A304	Adjust for approximately response shown in Fig 9 with markers appearing at more than 70% of peak amplitude. Keep RF and mixer trimmer pairs in approximately same relative position.
11. "	"	177MC (10MC Sweep)	175.25MC 179.75MC	7	"	A305, A306	Adjust rings for wave form as per Fig 9. Check response on all high-band channels. SLIGHT adjustments of A301, A302, A303, A304, A305 and A306 may be required to obtain optimum response on all channels.
		183MC (10MC Sweep)	181.25MC 185.75MC	8			
		189MC (10MC Sweep)	187.25MC 191.75MC	9			
		195MC (10MC Sweep)	193.25MC 197.75MC	10			
		201MC (10MC Sweep)	199.25MC 203.75MC	11			
		207MC (10MC Sweep)	205.25MC 209.75MC	12			
12. "	"	85MC (10MC Sweep)	83.25MC 87.75MC	6	"	A307, A308, A309, A310	Adjust for approximate response as shown in Fig 9.
13. "	"	79MC (10MC Sweep)	77.25MC 81.75MC	5	"		Check response on all low band channels. SLIGHT adjustments of A307, A308, A309 and A310 may be necessary to obtain optimum response on all channels.
		69MC (10MC Sweep)	67.25MC 71.75MC	4			
		63MC (10MC Sweep)	61.25MC 65.75MC	3			
		57MC (10MC Sweep)	55.25MC 59.75MC	2			

OSCILLATOR ALIGNMENT (TUNER NO. 470320)

Fine tuning control should be set at the mid position of its range.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
14. Two 150Ω carbon res.	To antenna terminals with 150Ω in each lead.	216MC (10MC Sweep)	25.75MC	13	DC Probe to Point \diamond Common to chassis.	A311	Adjust for zero reading.
15. "	"	88MC (10MC Sweep)	25.75MC	6	"	A312	"
16. "	"	82MC (10MC Sweep)	25.75MC	5	"		Check to see that all other channels are received well within the range of the fine tuning control. If not, compromise may be made using A311 for high channels and A312 for low channels.
		72MC (10MC Sweep)		4			
		66MC (10MC Sweep)		3			
		60MC (10MC Sweep)		2			
		210MC (10MC Sweep)		12			
		204MC (10MC Sweep)		11			
		198MC (10MC Sweep)		10			
		192MC (10MC Sweep)		9			
		186MC (10MC Sweep)		8			
		180MC (10MC Sweep)	7				

RF AND MIXER ALIGNMENT (TUNER NO. 470233)

It is recommended that the RF and Mixer circuits not be aligned unless definitely known to be out of adjustment and then only if proper test equipment is available. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms. Keep the RF and Mixer slug pairs at approximately the same relative position.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	213MC (10MC Sweep)	211.25MC 215.75MC	13	Vert. Amp. thru 10KΩ to Point \diamond Low side to chassis.	A601, A602, A603, A604	Adjust for response curve as per Fig 9 with markers above 70%.
11. "	"	207MC (10MC Sweep)	205.25MC 209.75MC	12	"		Check all high band channels for response curve similar to Fig 9. If markers are below 70% on any channel make slight adjustment of A601, A602, A603, and A604 with channel selector set to that channel. Recheck all other high band channels to see that they have not been seriously affected.
		201MC (10MC Sweep)	199.25MC 203.75MC	11			
		195MC (10MC Sweep)	193.25MC 197.75MC	10			
		189MC (10MC Sweep)	187.25MC 191.75MC	9			
		183MC (10MC Sweep)	181.25MC 185.75MC	8			
		177MC (10MC Sweep)	175.25MC 179.75MC	7			
12. "	"	85MC (10MC Sweep)	83.25MC 87.75MC	6	"	A605, A606, A607, A608	Adjust for response curve as per Fig 9 with markers above 70%.
13. "	"	79MC (10MC Sweep)	77.25MC 81.75MC	5	"		Check all other low band channels for response similar to Fig 9. If markers are below 70% on any channel make slight adjustment of A605, A606, A607, A608 with channel selector on that channel. Recheck all low band channels to see that they have not been seriously affected.
		69MC (10MC Sweep)	67.25MC 71.75MC	4			
		63MC (10MC Sweep)	61.25MC 65.75MC	3			
		57MC (10MC Sweep)	55.25MC 59.75MC	2			

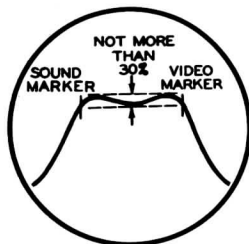


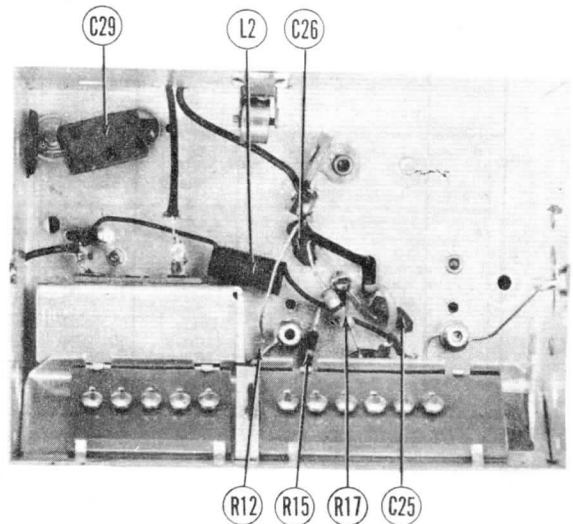
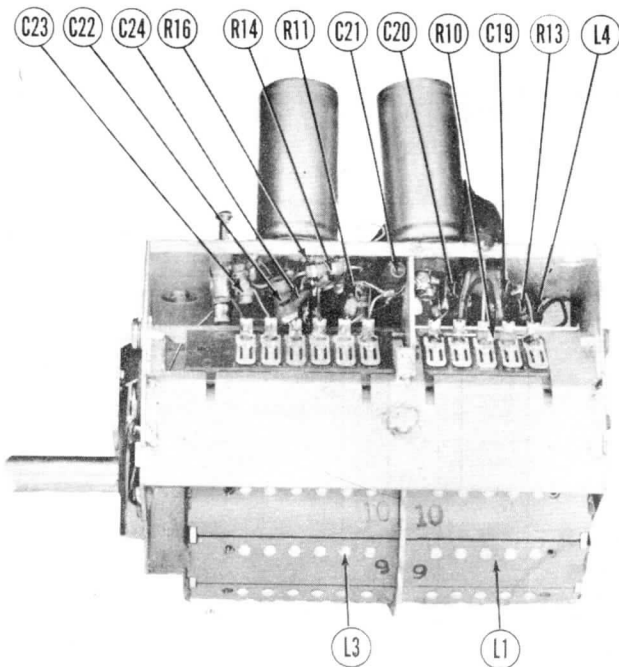
FIG. 9

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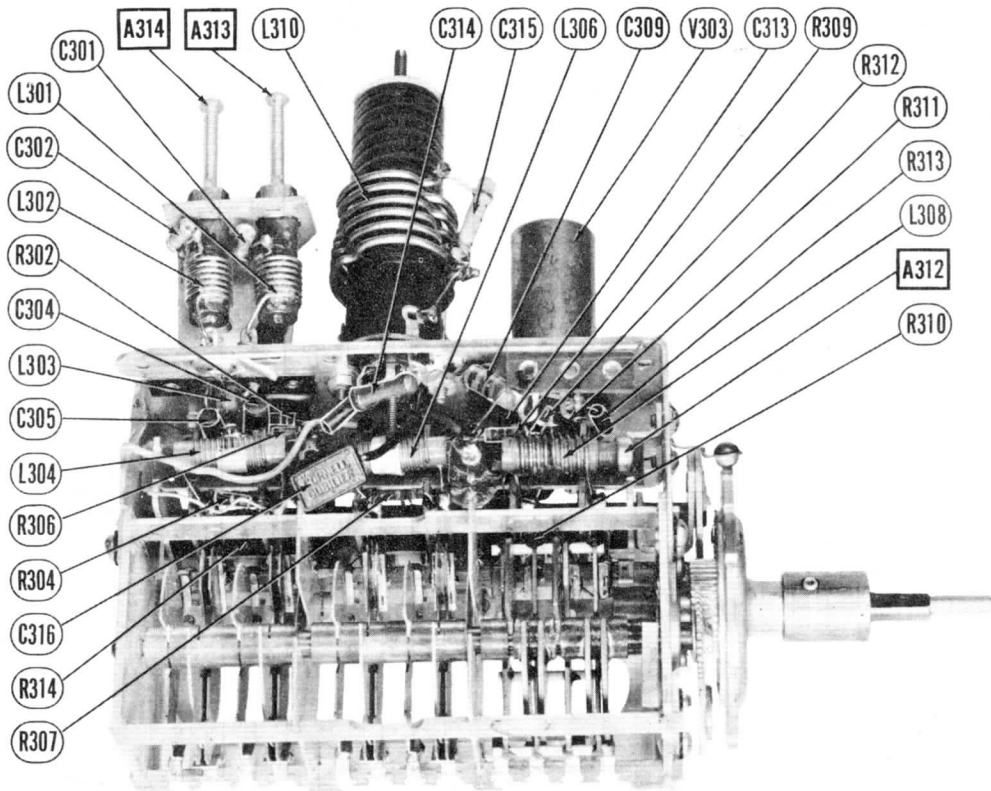
OSCILLATOR ALIGNMENT (TUNER NO. 470233)

Set the fine tuning control approximately 140° from its fully counter-clockwise position. This aligns the holes in drive disc with the adjustment screws on the oscillator wafer of the channel switch. Do not change this setting during oscillator alignment.

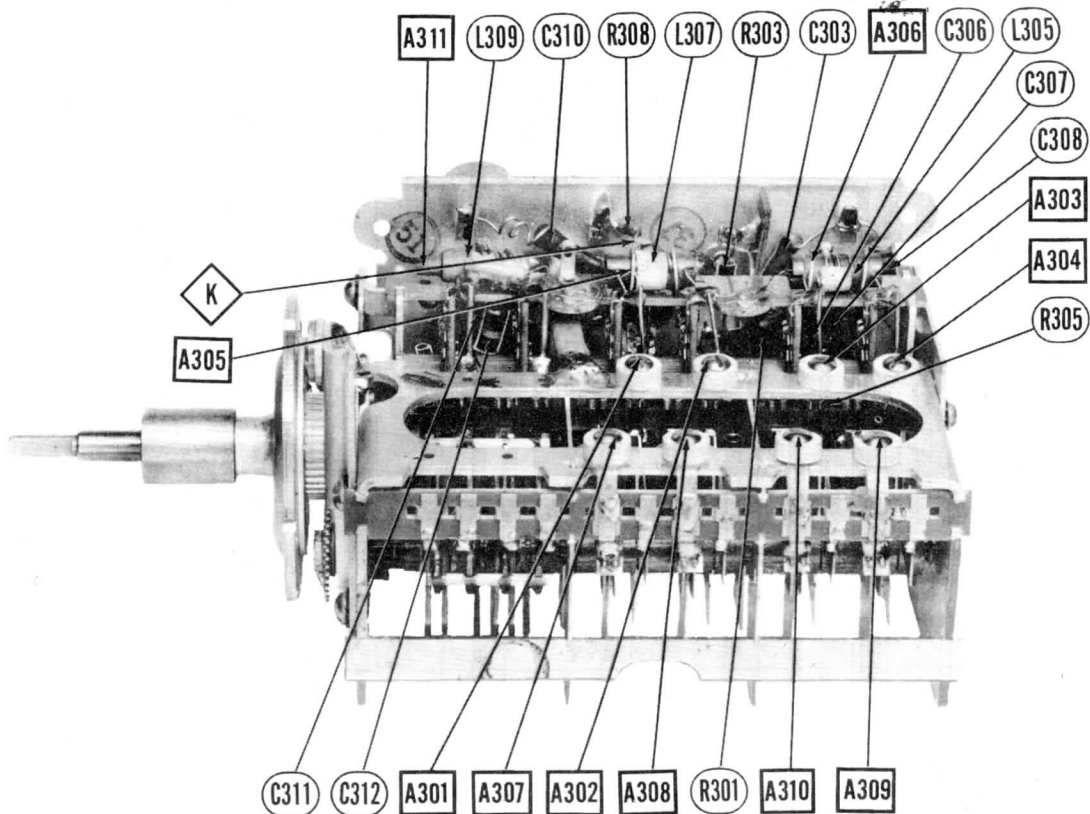
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
14. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	216MC (10MC Sweep)	25.75MC	13	DC Probe to Point Common to chassis.	A609, A610	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. Keep oscillator slug pairs at approximately the same relative position.
15. "	"	210MC (10MC Sweep)	"	12	"	A611	Adjust for zero reading as outlined on step 14.
16. "	"	204MC (10MC Sweep)	"	11	"	A612	"
17. "	"	198MC (10MC Sweep)	"	10	"	A613	"
18. "	"	192MC (10MC Sweep)	"	9	"	A614	"
19. "	"	186MC (10MC Sweep)	"	8	"	A615	"
20. "	"	180MC (10MC Sweep)	"	7	"	A616	"
21. "	"	88MC (10MC Sweep)	"	6	"	A617, A618	Adjust for zero reading as outlined in step 14. Keep oscillator slug pairs at approximately the same relative position.
22. "	"	82MC (10MC Sweep)	"	5	"	A619	Adjust for zero reading as outlined in step 14.
23. "	"	72MC (10MC Sweep)	"	4	"	A620	"
24. "	"	66MC (10MC Sweep)	"	3	"	A621	"
25. "	"	60MC (10MC Sweep)	"	2	"	A622	"



RF TUNER



RF TUNER-LEFT SIDE



RF TUNER-RIGHT SIDE

EMERSON MODELS 571, 606,
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VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	-.4VDC	OV	6.3VAC	OV	87VDC	87VDC	OV		
V 2	6A16	70VDC	105VDC	6.3VAC	OV	-1.9VDC	§-3.4VDC	OV		
V 4	6AG5	-.4VDC	.5VDC	OV	6.3VAC	120VDC	120VDC	.5VDC		
V 5	6AG5	-.4VDC	.3VDC	OV	6.3VAC	120VDC	120VDC	.3VDC		
V 6	6AU6	OV	OV	OV	6.3VAC	160VDC	160VDC	1.6VDC		
V 7	6AL5	OV	-.4VDC	OV	6.3VAC	OV	OV	-.3VDC		
V 8	6AU6	-.2VDC	2VDC	OV	6.3VAC	125VDC	125VDC	2VDC		
V 9	12AU7	225VDC	-1.4VDC	OV	OV	OV	42VDC	OV	3.5VDC	6.3VAC
V 10	6BA6	OV	OV	OV	6.3VAC	115VDC	125VDC	1.2VDC		
V 11	6AU6	-.4VDC	OV	OV	6.3VAC	125VDC	41VDC	OV		TOP CAP
V 12	6S82T	-.4VDC	OV	-.9VDC	-.5VDC	-.2VDC	75VDC	6.3VAC	OV	-.6VDC
V 13	6Y6GT	OV	OV	165VDC	150VDC	-2.4VDC	-8.4VDC	6.3VAC	OV	
V 14	12AU7	100VDC	-1.5VDC	OV	OV	OV	45VDC	-.7VDC	OV	6.3VAC
V 15	6SN7GT	#.2VDC	#.240VDC	#.2VDC	#.2VDC	#.47.5VDC	#.8VDC	6.3VAC	OV	
V 16	6SN7GT	-.135VDC	#.220VDC	OV	-.135VDC	#.280VDC	OV	6.3VAC	OV	
V 17	6Y6GT	OV	OV	OV	OV	OV	OV	6.3VAC	OV	
V 18	6AL5	#.9VDC	#.9VDC	OV	6.3VAC	OV	OV	#.1.3VDC		
V 19	6SN7GT	#.50VDC	#.260VDC	OV	#.50VDC	#.260VDC	OV	6.3VAC	OV	
V 20	6Y6GT	OV	OV	OV	OV	OV	OV	6.3VAC	OV	TOP CAP
V 21	5Y4G	OV	270VDC	OV	175VDC	OV	175VDC	OV	270VDC	
V 22	1B3GT	* DO NOT MEASURE								
V 28	10BP4	OV	2.7VDC	PIN 10 240VDC	PIN 11 180VDC	PIN 12 6.3VAC				
V 29										
V 30										

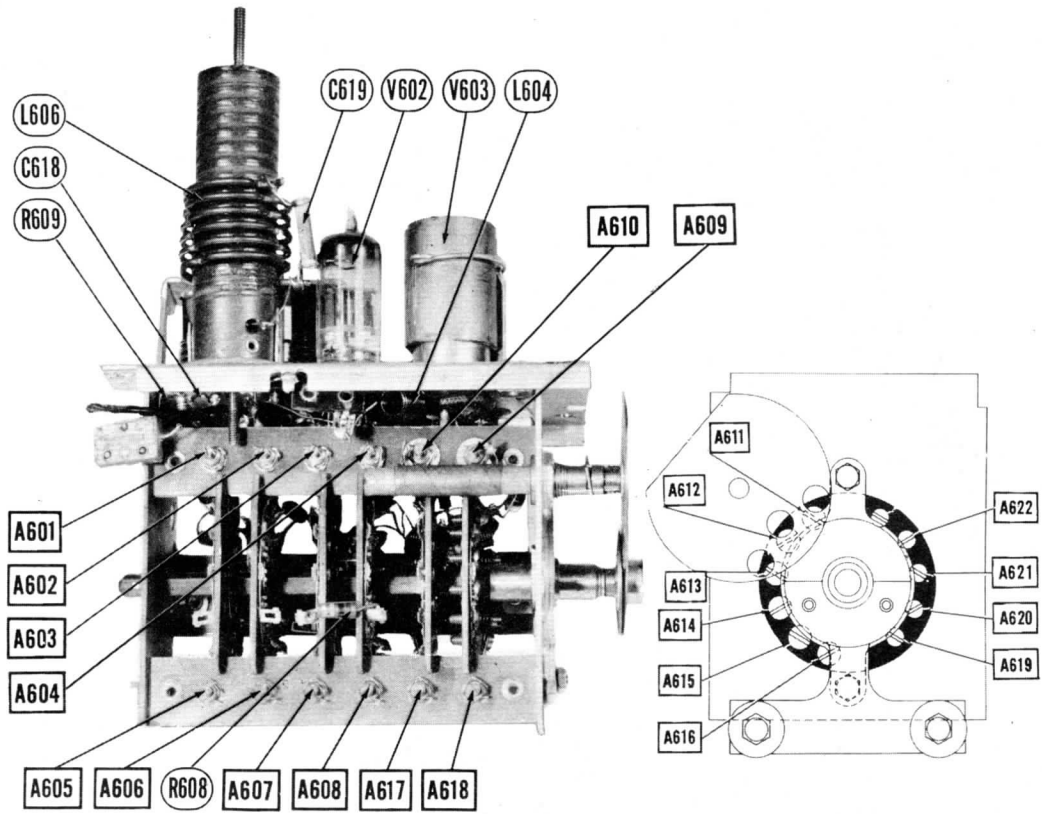
§ Taken with vacuum tube voltmeter.
Measured from pin 6 of V18
▲ Measured from pin 6 of V16

RESISTANCE READINGS

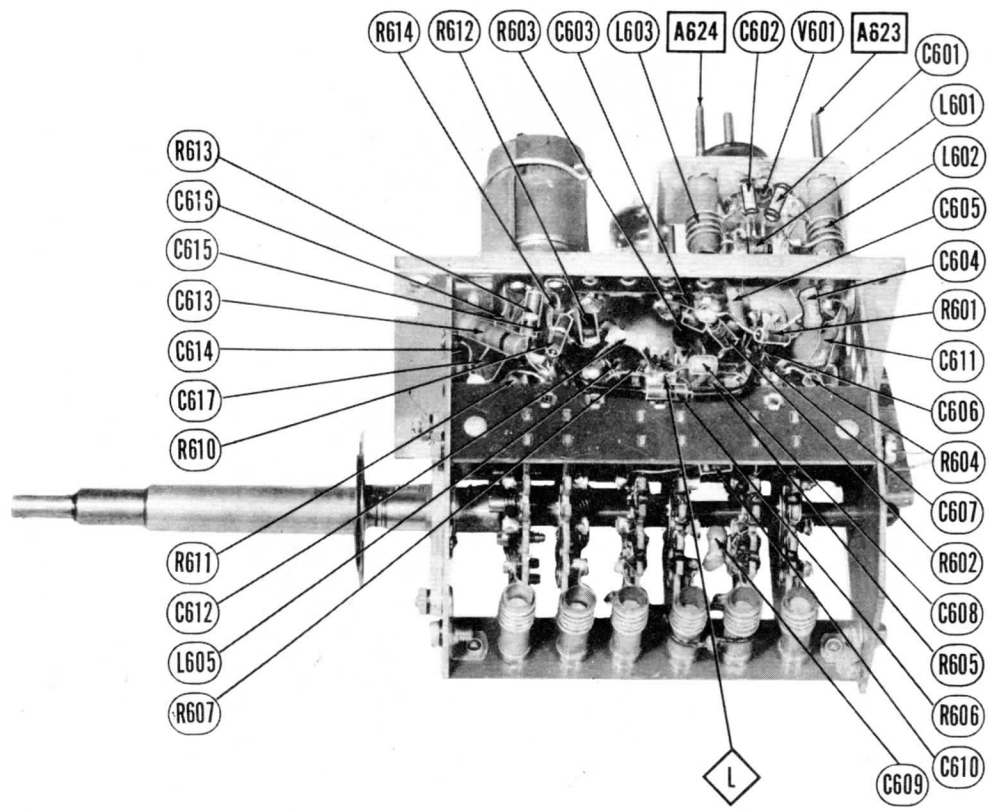
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	3.2 Meg. Ω	Ω	.1Ω	Ω	14KΩ	14KΩ	Ω		
V 2	6A16	16KΩ	13KΩ	.1Ω	Ω	220KΩ	10KΩ	Ω		
V 4	6AG5	3.2 Meg. Ω	68Ω	Ω	.1Ω	11.6KΩ	11.6KΩ	68Ω		
V 5	6AG5	3.2 Meg. Ω	33Ω	Ω	.1Ω	11.6KΩ	11.6KΩ	33Ω		
V 6	6AU6	2.5Ω	Ω	Ω	.1Ω	1100Ω	1100Ω	150Ω		
V 7	6AL5	1Ω	2.2 Meg. Ω	Ω	.1Ω	.5Ω	Ω	4.7KΩ		
V 8	6AU6	1 Meg. Ω	1000Ω	Ω	.1Ω	12KΩ	1600Ω	1000Ω		
V 9	12AU7	114.5KΩ	1 Meg. Ω	Ω	Ω	Ω	118KΩ	Ω	470KΩ	.1Ω
V 10	6BA6	4Ω	Ω	Ω	.1Ω	11.6KΩ	11.6KΩ	68Ω		
V 11	6AU6	100KΩ	Ω	Ω	.1Ω	11.6KΩ	16.5KΩ	Ω		TOP CAP
V 12	6S82T	100KΩ	Ω	100KΩ	Inf.	200KΩ	1470KΩ	.1Ω	Ω	15 Meg. Ω
V 13	6Y6GT	Ω	Ω	1500Ω	111KΩ	470KΩ	200Ω	.1Ω	Ω	
V 14	12AU7	111KΩ	180KΩ	Ω	Ω	Ω	118KΩ	1 Meg. Ω	Ω	.1Ω
V 15	6SN7GT	1 Meg. Ω	17KΩ	4.5KΩ	Inf.	1100KΩ	4.5KΩ	.1Ω	Ω	
V 16	6SN7GT	1.5Meg. Ω	1470KΩ	4200Ω	1.5Meg. Ω	1100KΩ	4200Ω	.1Ω	Ω	
V 17	6Y6GT	Inf. Ω	Ω	110KΩ	110KΩ	4.7Meg. Ω	17KΩ	.1Ω	10KΩ	4.5KΩ
V 18	6AL5	Inf. Ω	Inf. Ω	Ω	.1Ω	150KΩ	150Ω	150KΩ		
V 19	6SN7GT	150KΩ	14.7KΩ	150Ω	150KΩ	1470KΩ	150Ω	.1Ω	Ω	TOP CAP
V 20	6Y6GT	Inf. Ω	Ω	4300Ω	Inf.	470KΩ	4200Ω	.1Ω	110KΩ	17.5KΩ
V 21	5Y4G	Inf. Ω	17.5KΩ	Inf.	1150Ω	Inf.	1150Ω	Inf.	17.5KΩ	TOP CAP
V 22	1B3GT	Inf. Ω	Inf. Ω	PIN 10 43.5KΩ	Inf. Ω	Inf. Ω	Inf. Ω	Inf. Ω	Inf. Ω	4660Ω
V 28	10BP4	Ω	1700KΩ	Ω	8KΩ	Ω	Ω	Ω	Ω	Ω
V 29										
V 30										

1 Measured from pin 4 of M8
2 Measured from pin 8 of V21.
3 Measured from pin 7 of M8.

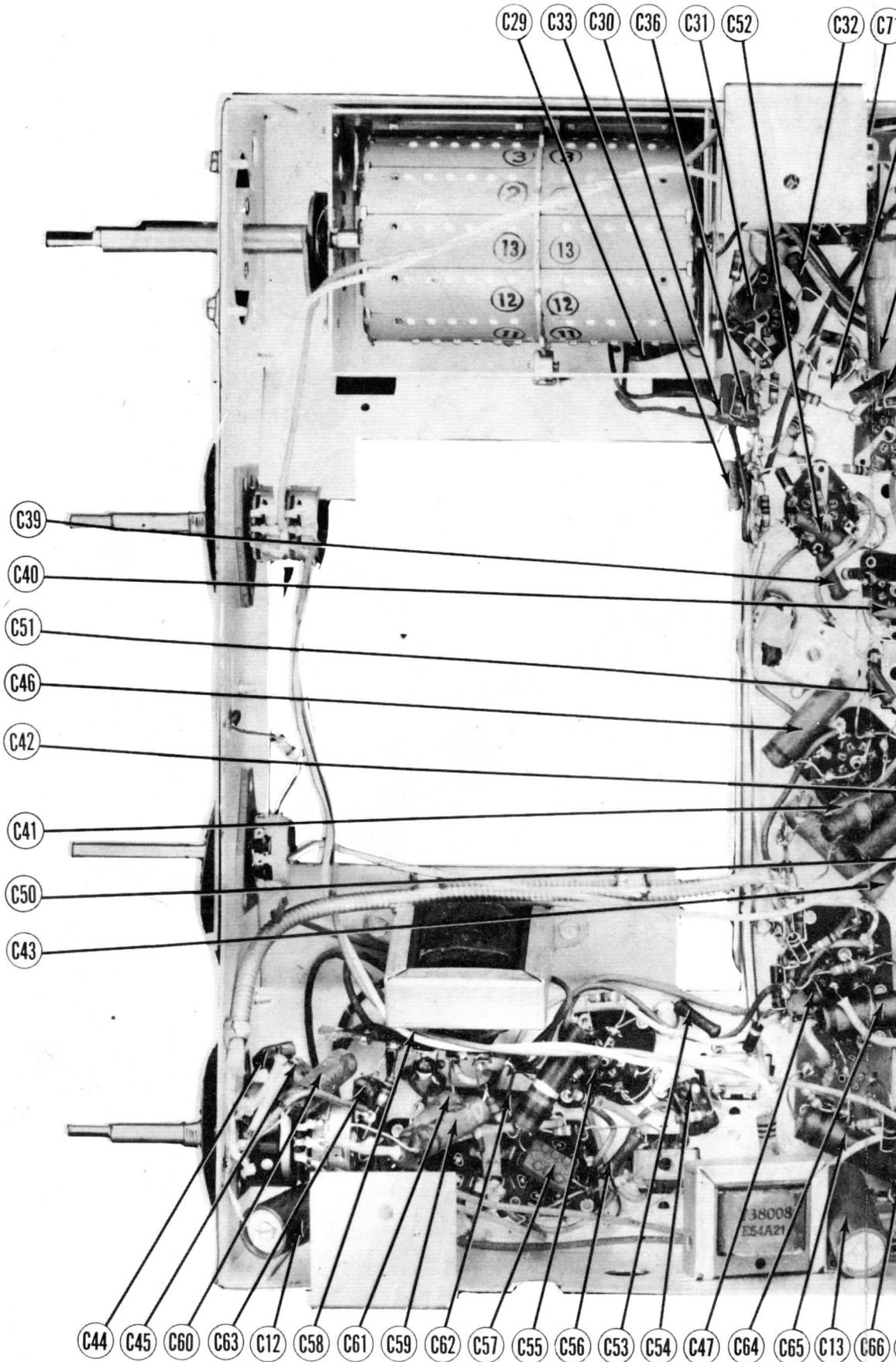
- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.
- Line voltage maintained at 117 volts for voltage readings.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



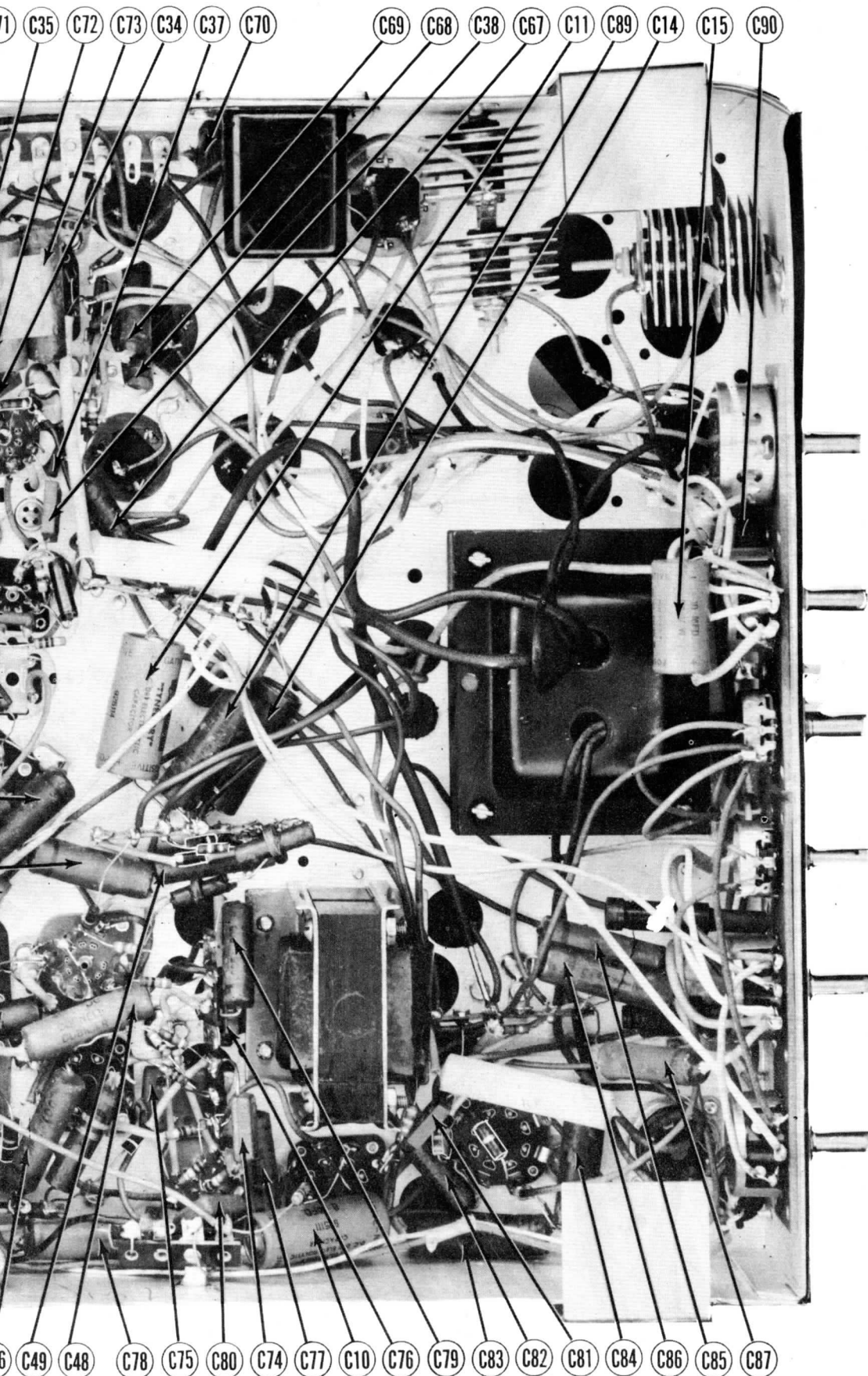
RF TUNER-LEFT SIDE



RF TUNER-RIGHT SIDE

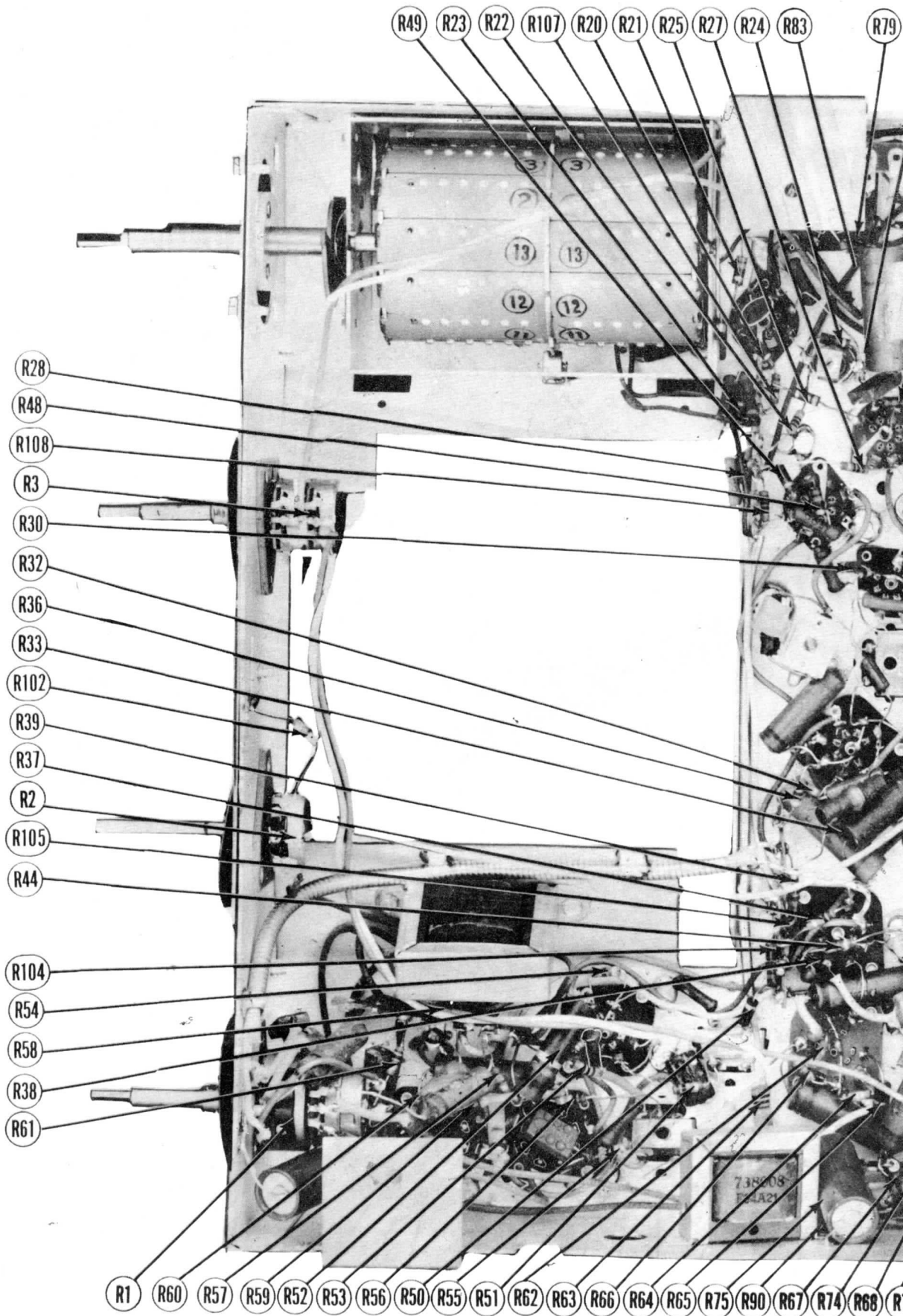


CHASSIS BOTTOM VIEW-CA

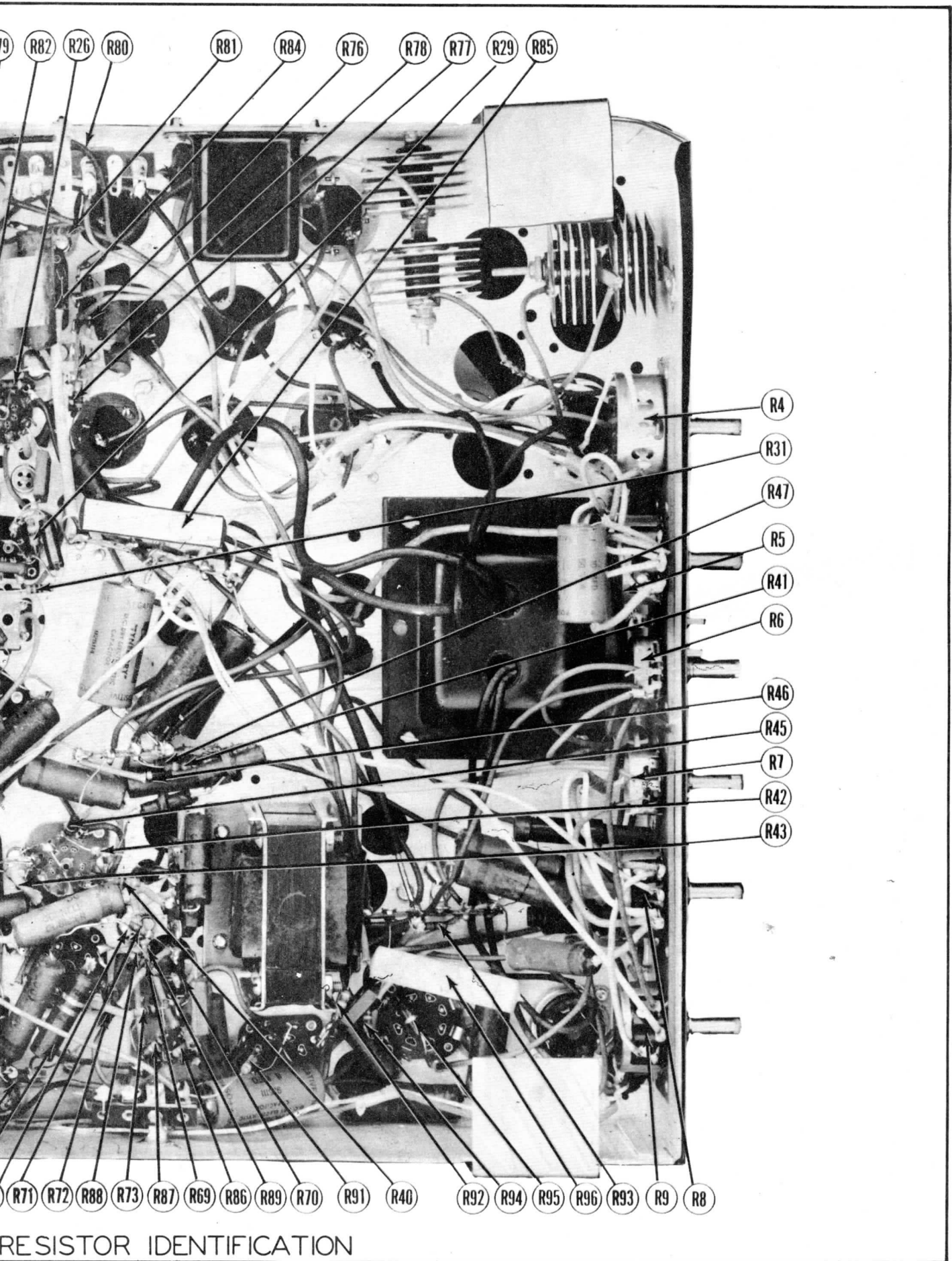


EMERSON MODELS 571, 606, 611,
612, 619, 620, 624, 627

CAPACITOR IDENTIFICATION

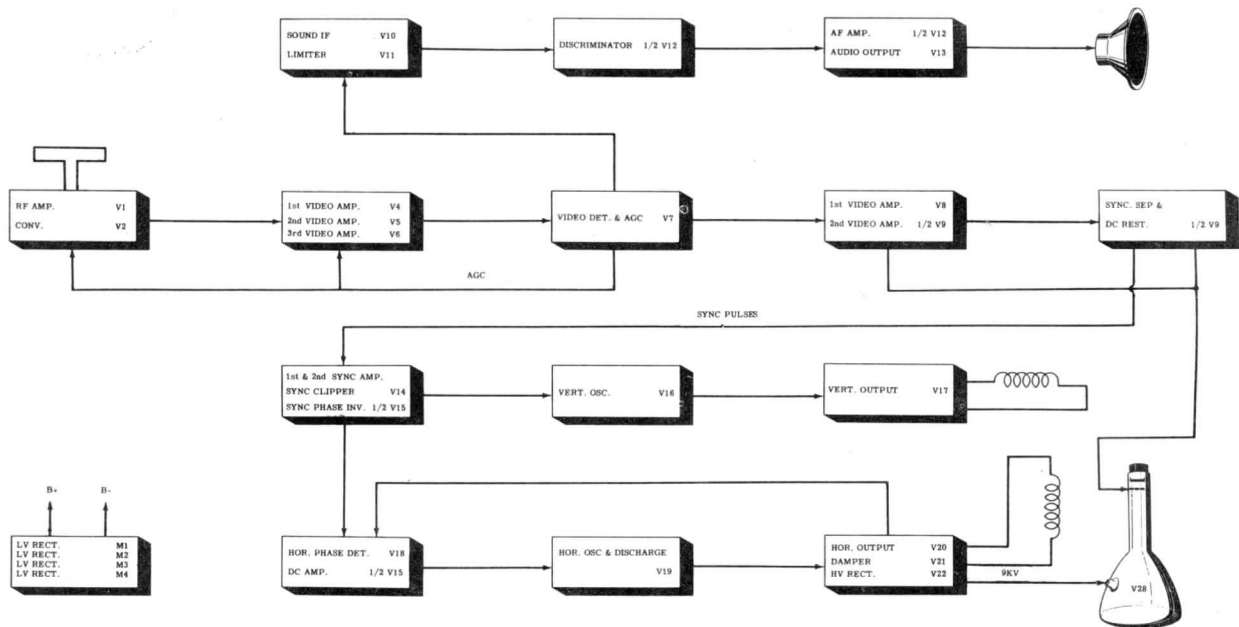


CHASSIS BOTTOM VIEW-RE

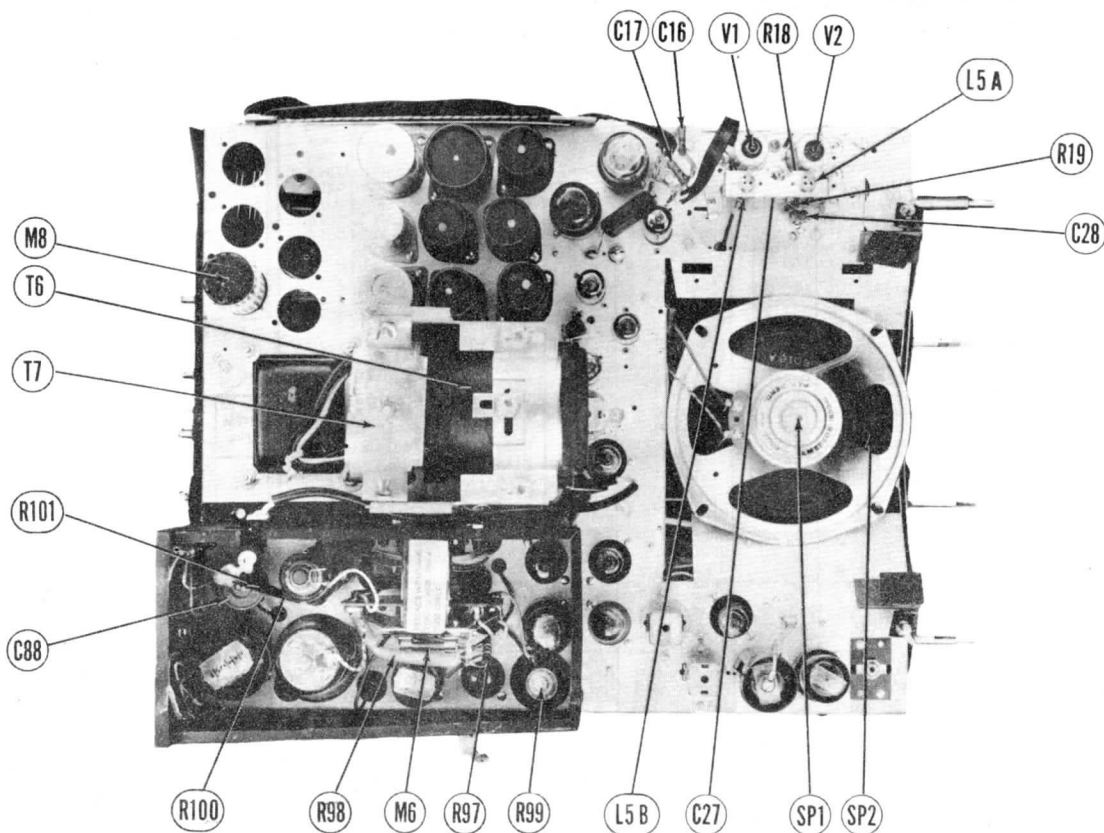


EMERSON MODELS 571, 606, 611,
612, 619, 620, 624, 627

RESISTOR IDENTIFICATION



BLOCK DIAGRAM



CHASSIS-TOP VIEW

PARTS LIST AND

TUBES (SYLVANIA or Equivalent)

CAPACITORS

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	NOTES
		EMERSON PART No.	STANDARD REPLACEMENT			
V1	RF Amp.	800535	6AG5	7BD		
V2	Converter	800536	6J6	7BF		
V4	1st Video IF	800535	6AG5	7BD		
V5	2nd Video IF	800535	6AG5	7BD		
V6	3rd Video IF	800533	6AU6	7BK		
V7	Video Det.-AGC Rect.	800541	6AL5	6BT		
V8	1st Video Amp.	800533	6AU6	7BK		
V9	2nd Video Amp.-Sync. Sep.-DC Restorer	800026	12AU7	9A		
V10	Sound IF Amp.	800531	6BA6	7BK		
V11	Limiter	800533	6AU6	7BK		
V12	Disc.-AF Amp.	800015	6S8GT	8CB		
V13	Audio Output	800270	6V6GT	7AC		
V14	1st and 2nd Sync. Amp.-Sync. Clipper	800026	12AU7	9A		
V15	3rd Sync. Amp.-Hor. Phase Inv. DC Amp.	800380	6SN7GT	8BD		
V16	Vert. Osc.	800380	6SN7GT	8BD		
V17	Vert. Output	800016	6K6GT	7S		
V18	Hor. Phase Det.	800541	6AL5	6BT		
V19	Hor. Osc. and Disch.	800380	6SN7GT	8BD		
V20	Hor. Output	800004	6BG6G	5BT		
V21	Damper	800011	5V4G	5L		
V22	HV Rectifier	800450	1B3GT	3C		
V23	Rectifier	800480	25Z6GT	7Q		
V24	Rectifier	800480	25Z6GT	7Q		
V25	Rectifier	800480	25Z6GT	7Q	Chassis 120086B only.	
V26	Rectifier	800480	25Z6GT	7Q		
V27	Rectifier	800480	25Z6GT	7Q		
V28A	Picture Tube	810000	10BP4	12D	Chassis 120086B, 120087B-D, 120092D only.	
V28B	Picture Tube		12LP4	12D	Chassis 120091D, 120107B only.	
V28C	Picture Tube		12QP4	12D	Chassis 120091QD only.	

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT	EMERSON PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.
C45	150	500	910029	1468-00015	5W5T1
C46	.01	400	923061	P488-01	GT451
C47	1500		928006	1467-0015	1W5D1
C48	.05	400	923062	P488-05	GT455
C49	.05	400	923062	P488-05	GT455
C50	.1	400	923064	P488-1	GT4P1
C51	10	400	910130	1468-00001	5W5Q1
C52	1500		928006	1467-0015	1W5D1
C53	1500		928006	1467-0015	1W5D1
C54	68	500	910031	1468-000075	5W5Q7
C55	1500		928006	1467-0015	1W5D1
C56	1500		928006	1467-0015	1W5D1
C57	110	500	910010	1468-0001	5W5T1
C58	.001	600	923079	P688-001	GT6D1
C59	.01	400	923061	P488-01	GT451
C60	.005	400	923078	P688-005	GT6D5
C61	.01	400	923061	P488-01	GT451
C62	.05	400	923062	P488-05	GT455
C63	.005	400	923078	P688-005	GT6D5
C64	.01	400	923061	P488-01	GT451
C65	.05	400	923062	P488-05	GT455
C66	.05	400	923062	P488-05	GT455
C67	.01	600	923075	P688-01	GT6S1
C68	.005	400	923078	P688-005	GT6D5
C69	.005	400	923078	P688-005	GT6D5
C70	.25	400	923068	P488-25	GT4P2
C71	.003	400	923075	P688-003	GT6D3
C72	.05	600	923073	P688-05	GT6S5
C73	.05	600	923073	P688-05	GT6S5
C74	1000	500	910027	1468-001	1W5D1
C75	1000	500	910027	1468-001	1W5D1
C76	110	500	910010	1468-0001	5W5T1
C77	.05	200	923068	P288-05	GT2S5
C78	.25	200	923080	P488-25	GT2P2
C79	.005	600	923077	P688-005	GT6D5
C80	780	500	910023	1468-0005	5W5T5
C81	470	500	910017	P688-001	GT6D1
C82	.001	600	923079	P288-1	GT2P1
C83	.1	200	923067	P288-05	GT6S5
C84	.05	600	923073	P688-05	GT6S5
C85	.05	600	923073	P688-05	GT6S5
C86	.035	600	923074	P688-033	GT6S5
C87	.05	400	923062	P488-05	GT455
C88	500	10000	923003	P488-05	GT4P1
C89	.1	400	923064	P488-1	GT455
C90	.05	400	922101	P488-05	GT455

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					IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	EMERSON PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C1A	80	150	925128	AFN16D	UP7AJ474		TVL-61	Voltage Doubler Cap. †
B	80	175	925099	AFN16D	UP4AJ	1005	TVL-1	Voltage Doubler Cap. *
C2A	80	150	925099	AFN16D	UP4AJ	1005	TVL-1	Voltage Doubler Cap. †
B	80	150	925098					Voltage Doubler Cap. *
C3A	80	300	925129	AFH1616G	UP8830		TVL-14	Voltage Doubler Cap. *
B	80	300						▲ Filter †
C	80	300	925086					▲ Filter †
D	80	300						▲ Filter *
C4A	80	300	925131	AFH1616G	UP8830		TVL-14	▲ Filter †
B	80	300						▲ Filter †
C	80	350	925096					▲ Filter *
D	80	350						▲ Filter *
C5A	1000	15	925097	AF200200P	UP10BJ	1059	TVL-13	▲ Hor. Cent. Cont. Byp.
B	1000	15						▲ Vert. Cent. Cont. Byp.
C6A	60	300	925134	AF10J	UP8030		TVL-4	Filter †
B	60	350	925091					Filter *
C	80	250						Filter *
C7	80	300	925132	AFH16G	UP8030		TVL-5	Filter †
C8A	80	300	925133	AFH16G	UP8030		TVL-5	Filter †
B	80	250	925093					Filter *
C9A	80	300	925133	AFH16G	UP8030		TVL-5	Filter †
B	80	250	925093					Filter *
C10	8	250	925111	PRS250/8	BR825		UT-82	Decoupling
C11	8	350	925114	PRS350/8	BR835		UT-82	Low Pass Filter
C12	8	250	925111	PRS250/8	BR825		UT-82	Output Decoupling
C13	8	250	925111	PRS250/8	BR825		UT-82	Decoupling
C14	8	250	925111	PRS250/8	BR825		UT-82	Vert. Output Dec.
C15	10	50	925072	PRS50/10	BR105		TVA-14	Vert. Output Cath. Byp.
C16	1000		928006	1468-001	1W5D1	GP2L-001	1FM-21	Ant. Coupling
C17	1000		928006	1468-001	1W5D1	GP2L-001	1FM-21	Ant. Coupling
C18	.05	400	922101	P488-05	GT485		TM-15	Ext. Ground Isolation
C19	5							Fixed Trimmer
C20	1000							RF Fil. Bypass
C21	120							RF Decoupling
C22	100							RF Coupling
C23	10							Fixed Trimmer
C24	20							Fixed Trimmer
C25	1000							Osc. Grid Cap.
C26	1000							Mixer Fil. Bypass
C27	10	300						RF Bypass
C28	100							Fixed Trimmer
C29	270	500	910015	1468-00025	5W5T25	GP2K-270	1FM-325	Mixer Plate Dec.
C30	1500		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	IF Coupling
C31	5000			1467-005	1D5D5	GP2M-005	29C1	AGC Filter
C32	15000		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	1st V. IF Cath. Bypass
C33	15000		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	1st V. IF Dec.
C34	270	500	910015	1468-00025	5W5T25	GP2K-270	1FM-325	Decoupling †
C35	75			1469-000075		NPOM-75		IF Coupling
C36	1500		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	Fixed Trimmer
C37	1500		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	AGC Filter
C38	270	500	910015	1468-00025	5W5T25	GP2K-270	1FM-325	2nd V. IF Decoupling
C39	1500		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	IF Coupling
C40	1500		928006	1467-0015	1W5D15	GP2L-0015	1FM-215	3rd V. IF Cath. Bypass
C41	30		910290					3rd V. IF Decoupling
C42	.1	200	923067	P288-1	5W5Q3	NO80-338-33	MS-43	IF Coupling
C43	.05	400	923062	P488-05	GT455		TM-1	AGC Filter
C44	200	500	910028	1468-0002	5W5T2	GP2K-200	1FM-32	Video Coupling
								1st V. Amp. Cath. Byp.

* Used only in chassis 120086
 † Used only in chassis 120087B,-D
 ‡ Not used in all models.

CON

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	EMERSON PART No.	IRC PART No.	CLAROS PART No.
R1A	1000Ω	2	390068		390068
B	1 Meg.	1/2			
C	10KΩ	1/2			
D	1 Meg.	1/2	390034		
R2	100KΩ	1/2			
R3A	1 Meg.	1/2	390032	Q11-128	M-49-S
B	50KΩ	1/2			
R4	1500Ω	4	390037		
R5	5000Ω	2	390039	W-5000	43-5000
R6	2 Meg.	1/2	390038	Q11-139	M-83-S
R7	20KΩ	2	390035	Q11-119	M-36-S
R8	30Ω	2	390054	W-30	43-30
R9	30Ω	2	390033	W-30X15	43-30C

* Used only in chassis 120087B

RESI

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	EMERSON PART No.	IRC PART No.
R10	3900Ω	1/2		
R11	10KΩ	1/2		
R12	2200Ω	1/2		
R13	47KΩ	1/2		
R14	4700Ω	1/2		
R15	220KΩ	1/2		
R16	10KΩ	1/2		
R17	4700Ω	1/2		
R18	18KΩ	1/2		
R19	1000Ω	1/2	340492	BTS-1000
R20	5600Ω	1/2	340672	
R21	68Ω	1/2	340212	
R22	1000Ω	1/2	340492	BTS-1000
R23	1000Ω	1/2	340492	BTS-1000
R24	10KΩ	1/2	340732	
R25	4700Ω	1/2	340652	
R26	33Ω	1/2	340132	
R27	1000Ω	1/2	340492	BTS-1000
R28	1000Ω	1/2	340492	BTS-1000
R29	3900Ω	1/2	340632	BTS-3900
R30	150Ω	1/2	340292	
R31	1000Ω	1/2	340492	BTS-1000
R32	2.2 Meg.	1/2	341292	BTS-2.2 Meg.
R33	1 Meg.	1/2	341212	BTS-1 Meg.
R34	100KΩ	1/2	340972	BTS-10K
R35	10KΩ	1/2	340732	BTS-10K
R36	4700Ω	1/2	340652	BTS-4700
R37	1 Meg.	1/2	341212	BTS-1 Meg.

DESCRIPTIONS

(CONT.)

RESISTORS (CONT.)

ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES	ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
				RESISTANCE	WATTS	EMERSON	IRC	
						PART No.	PART No.	
GP2K-150	1FM-315	1st V. Amp. Cath. Byp.	R38	1500Ω	1/4	330532	BTS-1500	1st Video Amp. Plate
GP2-335-01	TM-11	AGC Diode Filter	R39	68KΩ	1/4	340932	BTS-68K	Voltage Divider
GP2L-0015	1FM-215	RF Bypass	R40	1 Meg.	1/4	341212	BTS-1 Meg.	2nd Video Amp. Grid
	TM-15	Video Coupling	R41	3900Ω	1/4	340632	BTS-3900	2nd Video Amp. Plate
	TM-15	Video Coupling	R42	470KΩ	1/4	341132	BTS-470K	Voltage Divider
	TM-1	Video Coupling	R43	22KΩ	1/4	340812	BTS-22K	Voltage Divider
GP1K-10	MS-41	S. IF Coupling	R44	47KΩ	1/4	340892	BTS-47K	Sync. Sep. Plate
GP2L-0015	1FM-215	1st S. IF Screen Byp.	R45	220KΩ	1/4	341052	BTS-220K	Picture Tube Grid
GP2L-0015	1FM-215	1st S. IF Plate Dec.	R46	2200Ω	1/4	340572	BTS-2200	Phase Correction
GP1K-68	1FM-475	Limiter Grid Filter	R47	3300Ω	1/4	340612	BTS-3300	Filter
GP2L-0015	1FM-215	Limiter Screen Byp.	R48	68Ω	1/4	340212		Sound IF Cathode
GP2L-0015	1FM-215	Limiter Plate Dec.	R49	1000Ω	1/4	340492	BTS-1000	Sound IF Screen Decoupling
GP2K-120	1FM-31	RF Bypass	R50	1000Ω	1/4	340492	BTS-1000	Sound IF Plate Decoupling
GP2L-001	TM-21	De-emphasis	R51	100KΩ	1/4	340972	BTS-100K	Limiter Grid
GP2-335-01	TM-11	Audio Coupling	R52	10KΩ	2	397014		Limiter Screen Decoupling
GP2M-005	TM-25	Vol. Cont. Isolation	R53	1000Ω	1/4	340492	BTS-1000	Limiter Plate Decoupling
GP2-335-01	TM-11	Audio Coupling	R54	4700Ω	1/4	340652	BTS-4700	Voltage Divider
	TM-15	Audio Coupling	R55	100KΩ 5%	1/4	330972	BTS-100K-5%	Disc. Diode Load
	TM-25	Output Plate Bypass	R56	100KΩ	1/4	340972	BTS-100K	Disc. Diode Load
GP2-335-01	TM-11	Sync. Coupling	R57	68KΩ	1/4	340932	BTS-68K	De-emphasis
	TM-15	Sync. Coupling	R58	15 Meg. 20%	1/4	351492	BTS-15 Meg.	AF Grid
	TM-15	Sync. Coupling	R59	470KΩ	1/4	341132	BTS-470K	AF Plate
GP2-335-01	TM-11	Vert. Sync. Coupling	R60	470KΩ	1/4	341132	BTS-470K	Output Grid
GP2M-005	TM-25	Integrator Net.	R61	10KΩ	1/4	340732	BTS-10K	Filter See Note 3
GP2M-005	TM-25	Integrator Net.	R62	1 Meg.	1	341212	BTS-1 Meg.	1st Sync. Amp. Grid
	TC-2	Vert. Osc. Plate Dec.	R63	22KΩ	1/4	370512	BTA-22K	1st Sync. Amp. Plate
	TM-23	Vert. Osc. Grid Cap.	R64	180KΩ	1/4	341032	BTS-180K	2nd Sync. Amp. Grid
GP2M-003	TM-15	Vert. Discharge	R65	10KΩ	1	370732	BTA-10K	2nd Sync. Amp. Plate
	TM-15	Vert. Sweep Coupling	R66	47KΩ	1/4	340892	BTS-47K	Voltage Divider
GP2L-001	1FM-21	Hor. Sync. Coupling	R67	1000Ω	1/4	340492	BTS-1000	2nd Sync. Amp. Plate
GP2L-001	1FM-21	Hor. Sync. Coupling	R68	1 Meg.	1/4	341212	BTS-1 Meg.	3rd Sync. Amp. Grid
GP1K-120	1FM-31	AFC Filter	R69	1000Ω 5%	1/4	330492	BTS-1000-5%	3rd Sync. Amp. Cathode
	TM-15	Diode Load Cap.	R70	150Ω	1/4	340292	BW-150	3rd Sync. Amp. Cathode
	TC-2	Phase Shift Cap.	R71	4700Ω 5%	1/4	330652	BTS-4700-5%	3rd Sync. Amp. Plate
GP2M-005	TM-25	Hor. AFC Feedback	R72	2200Ω 5%	1/4	330572	BTS-2200-5%	3rd Sync. Amp. Plate
	TM-25	Hor. Osc. Grid Cap.	R73	1000Ω	1/4	340492	BTS-1000	Horiz. Phase Inv. Cathode
GP2K-470	1FM-35	Hor. Discharge	R74	100KΩ	2	397029	BT-2-100K	Horiz. Phase Inv. Plate
GP2L-001	TM-21	Hor. Sweep Coupling	R75	47KΩ	1/4	340892	BTS-47K	Phase Shifter
	TM-1	Hor. Output Cath. Byp.	R76	22KΩ	1/4	340812	BTS-22K	Differentiator
	TM-15	Hor. Output Screen Byp.	R77	22KΩ	1/4	340812	BTS-22K	Integrator
	TM-15	Damper Filter	R78	4700Ω	1/4	340652	BTS-4700	Integrator
	TM-15	Damper Filter	R79	1.5Meg. 5%	1/4	331252	BTS-1.5Meg. 5%	Vert. Osc. Grid
410-500	TM-15	Fixed Trimmer	R80	100KΩ	1	370972	BTA-100K	Vert. Osc. Plate Decoupling
	TM-1	HV Filter	R81	470KΩ	1/4	341132	BTS-470K	Vert. Osc. Plate
	TM-15	Line Filter	R82	8200Ω	1/4	340712	BTS-8200	Vert. Peaking
			R83	4.7 Meg.	1/4	341372	BTS-4.7 Meg.	Vert. Output Grid
			R84	270Ω	1/4	340352	BW-270	Vert. Output Cathode
			R85	10KΩ	3	392043	AB-10K	Filter
			R86	220KΩ	1/4	341052	BTS-220K	Horiz. Phase Det. Load
			R87	220KΩ	1/4	341052	BTS-220K	Horiz. Phase Det. Load
			R88	100KΩ 5%	1/4	330972	BTS-100K-5%	Horiz. Phase Det. Load
			R89	100KΩ 5%	1/4	330972	BTS-100K-5%	Horiz. Phase Det. Load
			R90	4700Ω	1	370652	BTA-4700	Filter
			R91	47KΩ	1/4	340892	BTS-47K	Horiz. Osc. Grid
			R92	470KΩ 5%	1/4	331132	BTS-470K-5%	Horiz. Osc. Plate
			R93	18KΩ	1/4	340792	BTS-18K	Horiz. Peaking
			R94	470KΩ	1/4	341132	BTS-470K	Horiz. Output Grid
			R95	100Ω	1	370252	BW-1-100	Horiz. Output Cathode
			R96	10KΩ	4	397044	AB-10K	Horiz. Output Screen
			R97	470KΩ	1	371132	BTA-470K	Feedback
			R98	470KΩ	1	371132	BTA-470K	Feedback
			R99	7500Ω	25	394007	EP-7500	Damper Filter Wire Wound
			R100	3.5Ω	1	397041		HV Filament Wire Wound
			R101	1 Meg.	1	371212		HV Filter
			R102	4700Ω	1	340652	BTS-4700	Voltage Divider
			R103A	3100Ω	7		AB-3000	Bias Network Wire Wound
			B	1550Ω	7	394043	AB-1500	Bias Network Wire Wound
			R104	180Ω	1	370312	BW-1-180	Bias Network
			R105	33Ω	1/4	340132	BW-1-33	Bias Network
			R106A	600Ω	6	394035	AB-600	Filter Wire Wound
			B	330Ω	3		AB-350	Focus Coil Shunt Wire Wound
			R107	1000Ω	1/4	340492	BTS-1000	AGC Network
			R108	1000Ω	1/4	340492	BTS-1000	Decoupling

EMERSON MODELS 571, 606, 611, 612, 619, 620, 624, 627

OLS

INSTALLATION NOTES
Contrast control, tapped @ 750Ω, Wire Wound *
Volume control and switch (Dual Concentric)
Contrast control
Volume control and switch (Dual Concentric)
Brightness control
Vert. hold control
Horiz. hold control (Dual Concentric)
Focus control (Wire Wound)
Vert. linearity control (Wire Wound)
Vert. size control
Horiz. drive control
Horiz. centering control (Wire Wound)
Vert. centering control, tapped @ 15Ω (Wire Wound)

ORS

IDENTIFICATION CODES
nt. Coil Shunt
F Coil Shunt
F Decoupling
GC Network
onv. Grid
onv. Grid
sc. Grid
sc. Plate
onv. Plate Coil Shunt
onv. Plate Decoupling
1st Video IF Grid See Note 2
1st Video IF Cathode
1st Video IF Decoupling
GC Network
1st Video IF Transformer Shunt
2nd Video IF Grid
2nd Video IF Cathode
2nd Video IF Decoupling
GC Network
3rd Video IF Grid Coil Shunt
3rd Video IF Cathode
3rd Video IF Decoupling
GC Diode Load
GC Network
Delayed AGC Network See Note 1
Video Det. Diode Load See Note 1
Video Det. Diode Load
1st Video Amp. Grid

Note 1. Used only in chassis 120087B.
 Note 2. Models using RF tuner 470320, 403 use 15KΩ resistor in this application. Models using RF tuner 470233 use 10KΩ resistor in this application.
 Note 3. Some models use 470KΩ resistor in this application.

TRANSFORMER (FILAMENT)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	EMERSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1A	117VAC @ .63A	5VAC @ 2A	6.3VAC @ 8.1A		730015			
T1B					730007**			

** Used in some models.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	SEC.	EMERSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T2	3Ω	1.3Ω	738008	A-8110	A-3002		Hor. Block Osc. Trans Vert. Block Osc. Trans Hor. Output Trans.
T3	150Ω	1400Ω	738004	A-8121	A-4000	TB0-3	
T4A	340Ω	SEC. 1	738015 §				
	Tap @ 175Ω	8.4Ω					
	Tap @ .7Ω	SEC. 2					
		0Ω					
B			738000 or 738009	A-8117		TFB-1	Hor. Output Trans.

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (SWEEP CIRCUITS) (CONT.)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		EMERSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.					
T5	575Ω	7Ω	738010 or 738011 708130	A-8116 DY-1	A-3035	TS0-2	Vert. Output Trans.
T6A	14Ω						Hor. Deflection Coil
B	63Ω						Vert. Deflection Coil
T7A	250Ω		708141 708027	FC-10			Focus Coil Focus Coil (Chassis 120091QD only.)

§ Used with chassis 120087D, 120091D, 120091QD, 120092D, 120107B for extended operation.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		EMERSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T8	4800Ω	3.2Ω	320Ω	.6Ω	734018	A-3849	A-2902	RO-9 #	# Drill one new mounting hole.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
	FIELD	V. C. IMP.	EMERSON PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	PM	3.2Ω	180041	ST-110 MOD.P6-V	6A15	Models 619 and 620 (chassis 120091QD) Ⓛ Replace output transformer to match 6-8Ω voice coil.
B	PM	3.2Ω	180050	ST-101 Ⓛ MOD.P12-T	12A4A	
SP2A	CONE DIA.	V. C. DIA.				
B	5 7/8"	3/4"				
	12"	1"				

COILS (RF-IF)

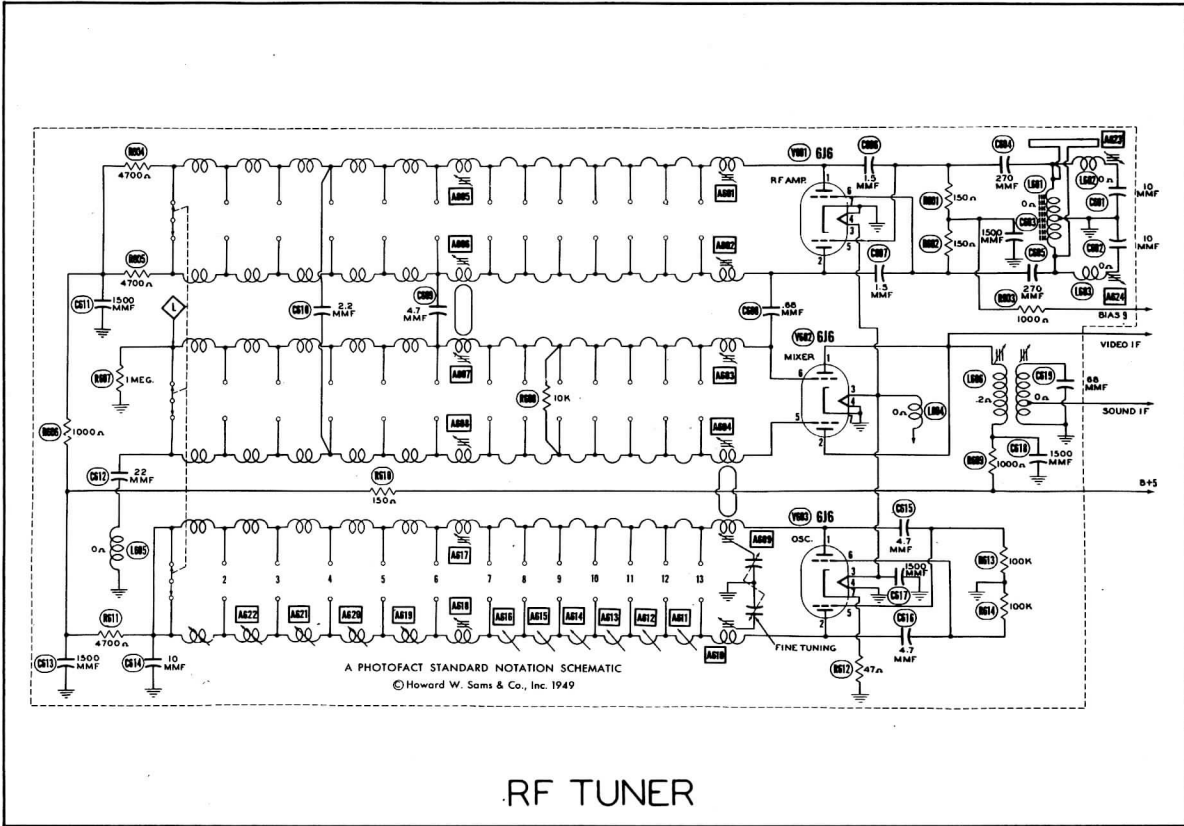
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES	
		PRI.	SEC.	EMERSON PART No.	MEISSNER PART No.		
L1	Ant. Coil	0Ω				L1 and L3 are ordered by referring to tuner part number and channel number stamped on each section of turret.	
L2	Fil. Choke	.1Ω					
L3	RF Mixer Grid & Osc.	0Ω					
L4	Fil. Choke	0Ω					
L5A	1st Video IF	.5Ω					
B	1st Video IF	.5Ω					
C	1st Video IF	.2Ω	.2Ω	720056			Not used in all models.
L6	2nd Video IF	.5Ω	.1Ω	720042			
L7	3rd Video IF	.5Ω		720073			
L8	IF Grid	2.5Ω		705014			Inductance-20 microhenries
L9	4th Video IF	.1Ω		720057			
L10	Peaking	5.4Ω		708096			Inductance-75 microhenries
L11	Peaking	9.5Ω		708095			Inductance-180 microhenries
L12	Peaking	10Ω		708095		Inductance-180 microhenries	
L13	Sound Take-Off	4.5Ω		708097		Inductance-45 microhenries	
L14	Sound IF	2Ω	.2Ω	720081			
L15	Disc. Trans.	1.9Ω	1.9Ω	708017		Alternate part No. 708018	
L16	RF Choke	5Ω		705009		Inductance-3 millihenries	
L17	Hor. Size	.5Ω		708082			
L18	Horiz. Linearity	35Ω		708003			

SELENIUM RECTIFIER

ITEM No.	RATING	REPLACEMENT DATA			NOTES
	CURRENT	EMERSON PART No.	SYLVANIA PART No.		
M1	.215A	817004	NF-5		
M2	.215A	817004	NF-5		
M3	.136A	817005	ND-5		
M4	.136A	817005	ND-5		

MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
M5	RF Tuner	470452	
M6	Fuse	808050	Type AGC .25A
M7	Ion Trap	708084	PM Alternate Part No. 708075
M8	Ballast Tube	397023	
	Cabinet	140205	Models 606 and 571
	Cabinet	140234	Model 606 Mahogany
	Cabinet	140264	Model 611 blonde
	Cabinet	140240A	Model 612
	Cabinet	140281	Model 624 Mahogany
	Cabinet Back	560059	Model 606
	Cabinet Back	560071	Model 611
	Cabinet Back	560072	Model 612
	Cabinet Back	560083	Model 624
	Safety Glass	635010	Model 606
	Safety Glass	635011	Model 611
	Safety Glass	635018	Model 612
	Knob	450036	Fine Tuning
	Knob	450037	Channel Selector with Hole
	Knob	450031	Channel Selector
	Knob	450032	Dual Large
	Knob	450034	Dual Small
	Knob	450035	Dual Small



RF TUNER

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE
		STANDARD REPLACEMENT		
V601	R. F. Amp.	6J6		7BF
V602	Mixer	6J6		7BF
V603	Oscillator	6J6		7BF

CAPACITORS

ITEM No.	RATING		IDENTIFICATION
	CAP.	VOLT	
C601	10		Fixed Trimmer
C602	10		Fixed Trimmer
C603	1500		RF Bypass
C604	270		RF Coupling
C605	270		RF Coupling
C606	1.5		Neutralizing
C607	1.5		Neutralizing
C608	.68		RF Coupling
C609	4.7		RF Coupling
C610	2.2		RF Coupling
C611	1500		RF Decoupling
C612	22		Fixed Trimmer
C613	1500		Osc. Decoupling
C614	10		Fixed Trimmer
C615	4.7		Osc. Feedback
C616	4.7		Osc. Feedback
C617	1500		Filament Bypass
C618	1500		Mixer Decoupling
C619	68		Fixed Trimmer

RESISTORS

ITEM No.	RATING		IDENTIFICATION
	RESISTANCE	WATTS	
R601	150Ω	1/4	RF Grid
R602	150Ω	1/4	RF Grid
R603	1000Ω	1/4	Bias Filter
R604	4700Ω	1/4	RF Plate
R605	4700Ω	1/4	RF Plate
R606	1000Ω	1/4	RF Decoupling
R607	1 Meg.	1/4	Mixer Grid
R608	10KΩ	1/4	Mixer Grid Shunt
R609	1000Ω	1/4	Mixer Decoupling
R610	150Ω	1/4	Decoupling
R611	4700Ω	1/4	Osc. Plate
R612	47Ω	1/4	Osc. Cathode
R613	100KΩ	1/4	Osc. Grid
R614	100KΩ	1/4	Osc. Grid

COILS

ITEM No.	USE	DC RES.	
		PRI.	SEC.
L601	Ant. Input	0Ω	
L602	Interference Trap	0Ω	
L603	Interference Trap	0Ω	
L604	Filament Choke	0Ω	
L605	Mixer Grid Trap	0Ω	
L606	1st. Video IF and Sound Trap	.2Ω	0Ω