

**ARVIN
MODEL 4080T (Ch. TE282)**

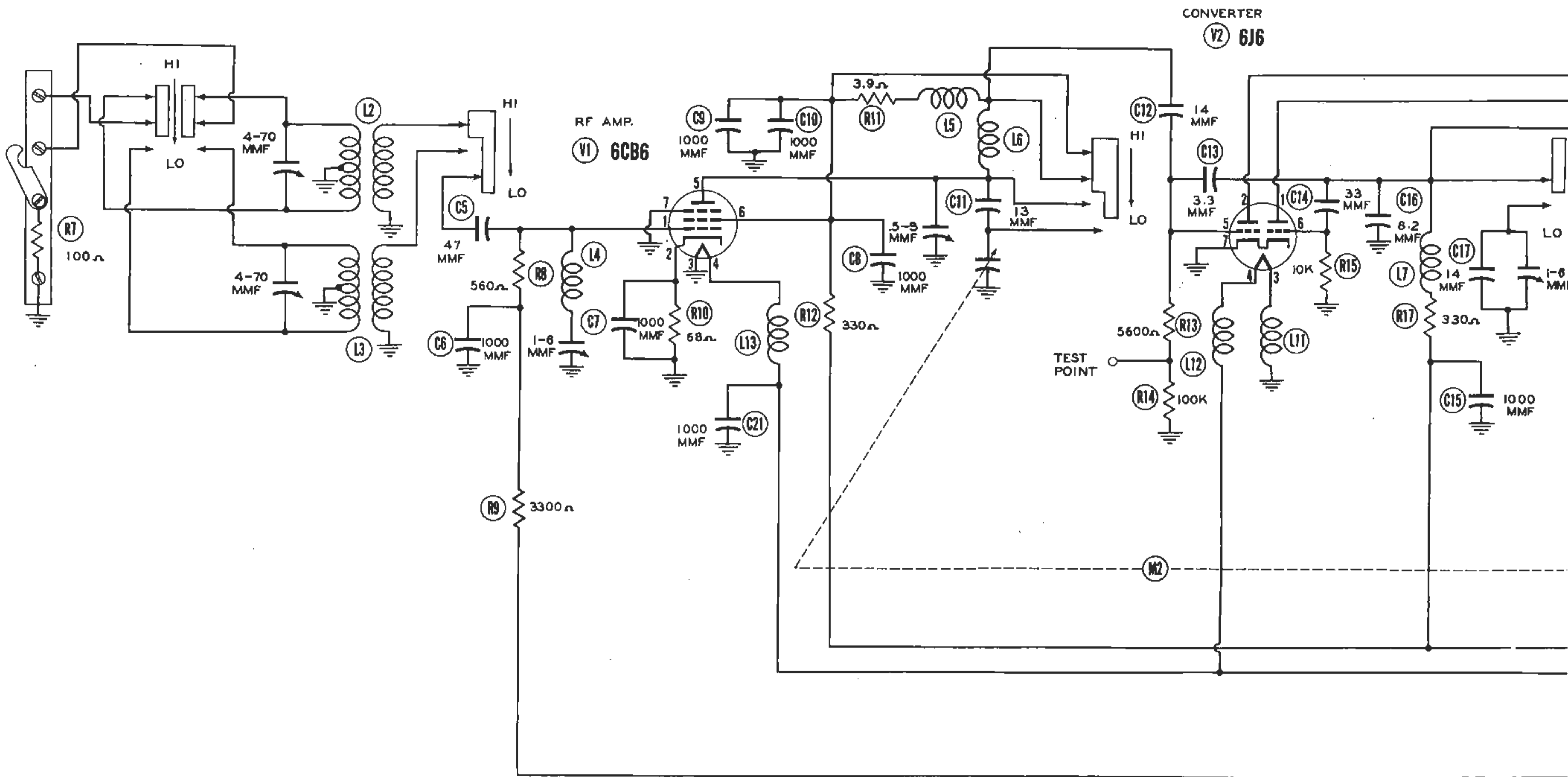
TRADE NAME	Arvin Model 4080T (Chassis TE282)	
MANUFACTURER	Noblitt-Sparks Industries, Columbus, Indiana	
TYPE SET	Television Receiver	
TUBES	Eighteen	
POWER SUPPLY	110-120 Volts AC-60 Cycle	RATING 1.2 Amp. at 117 Volts AC
TUNING RANGE	Channels 2 thru 13	

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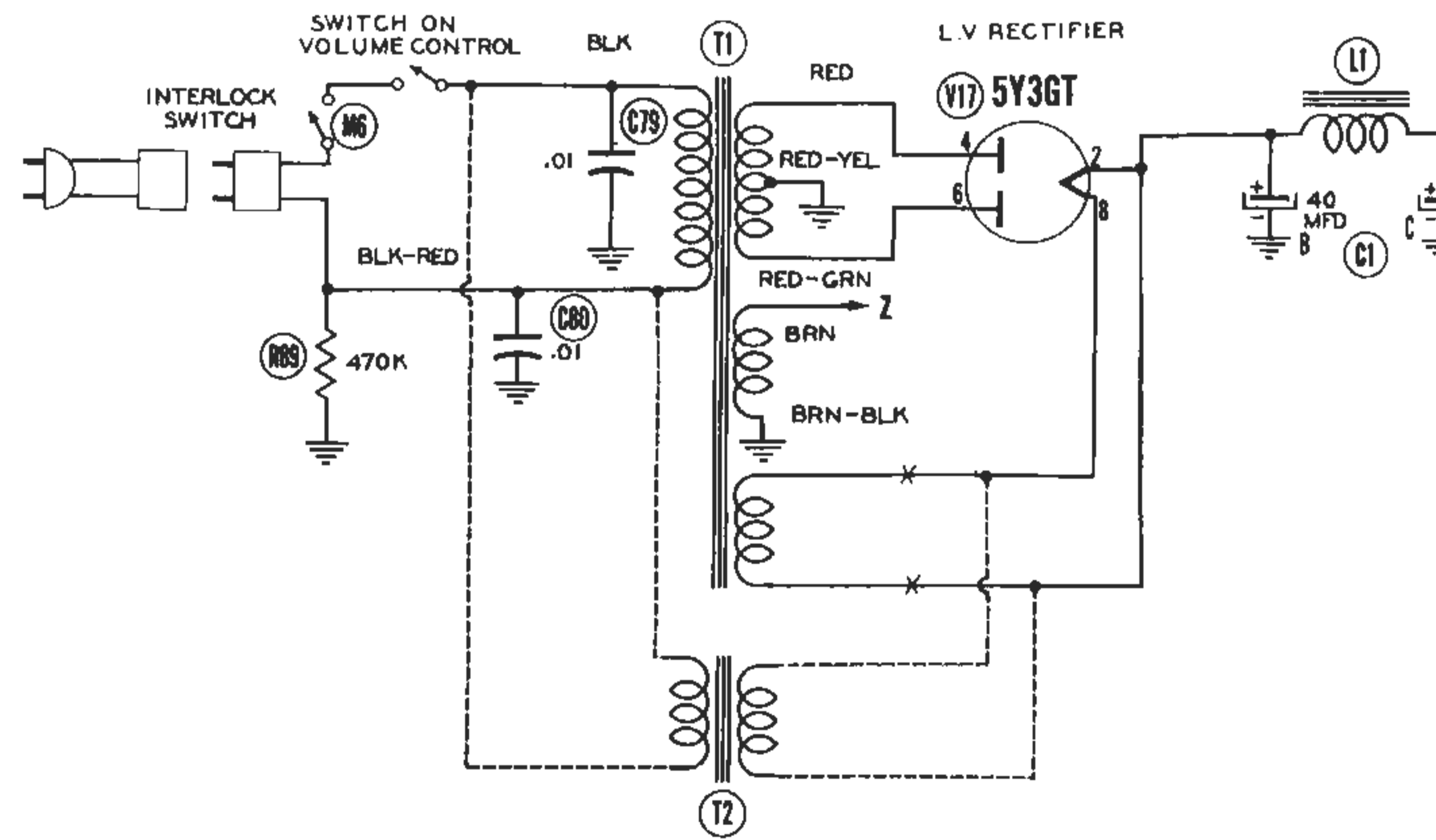
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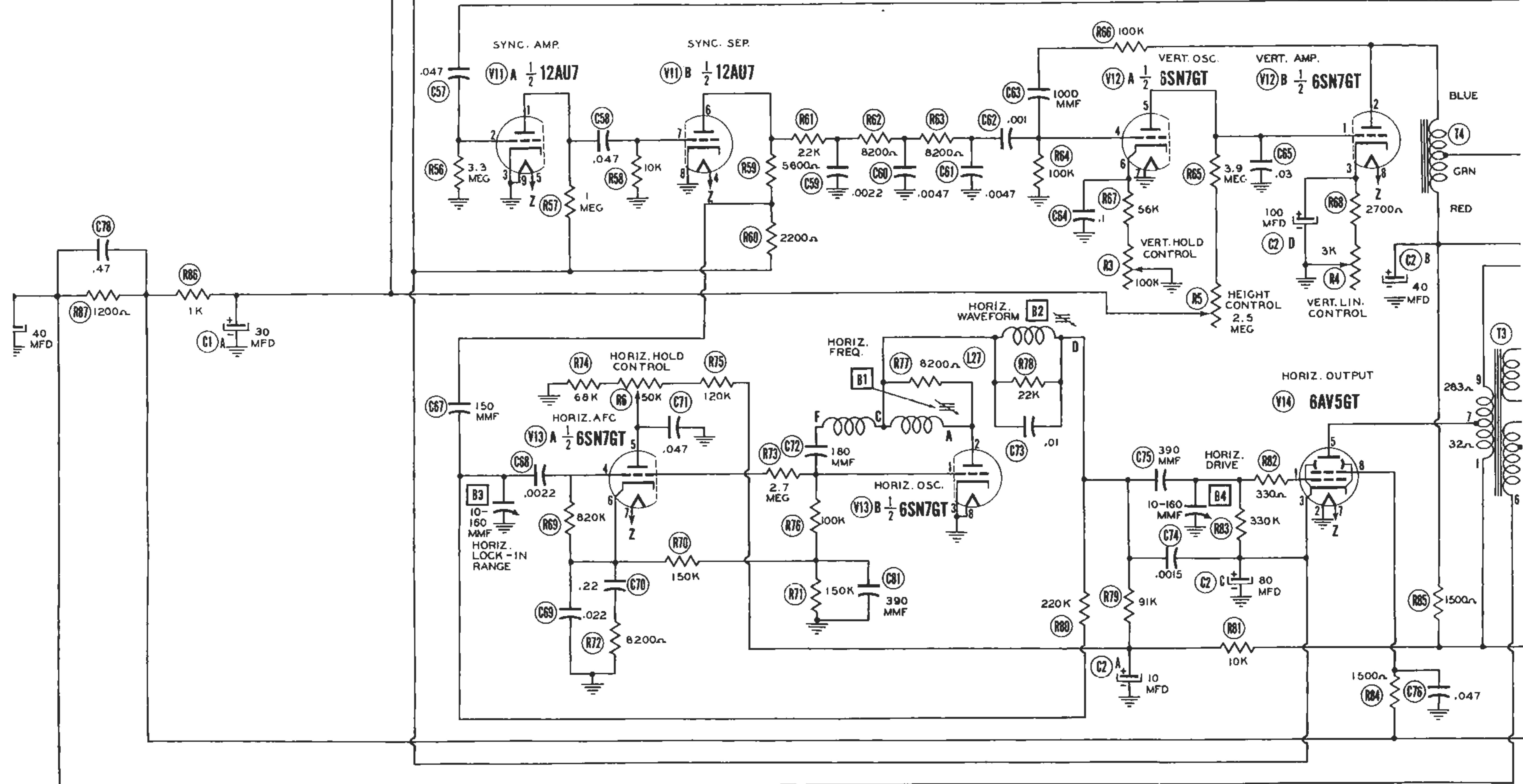
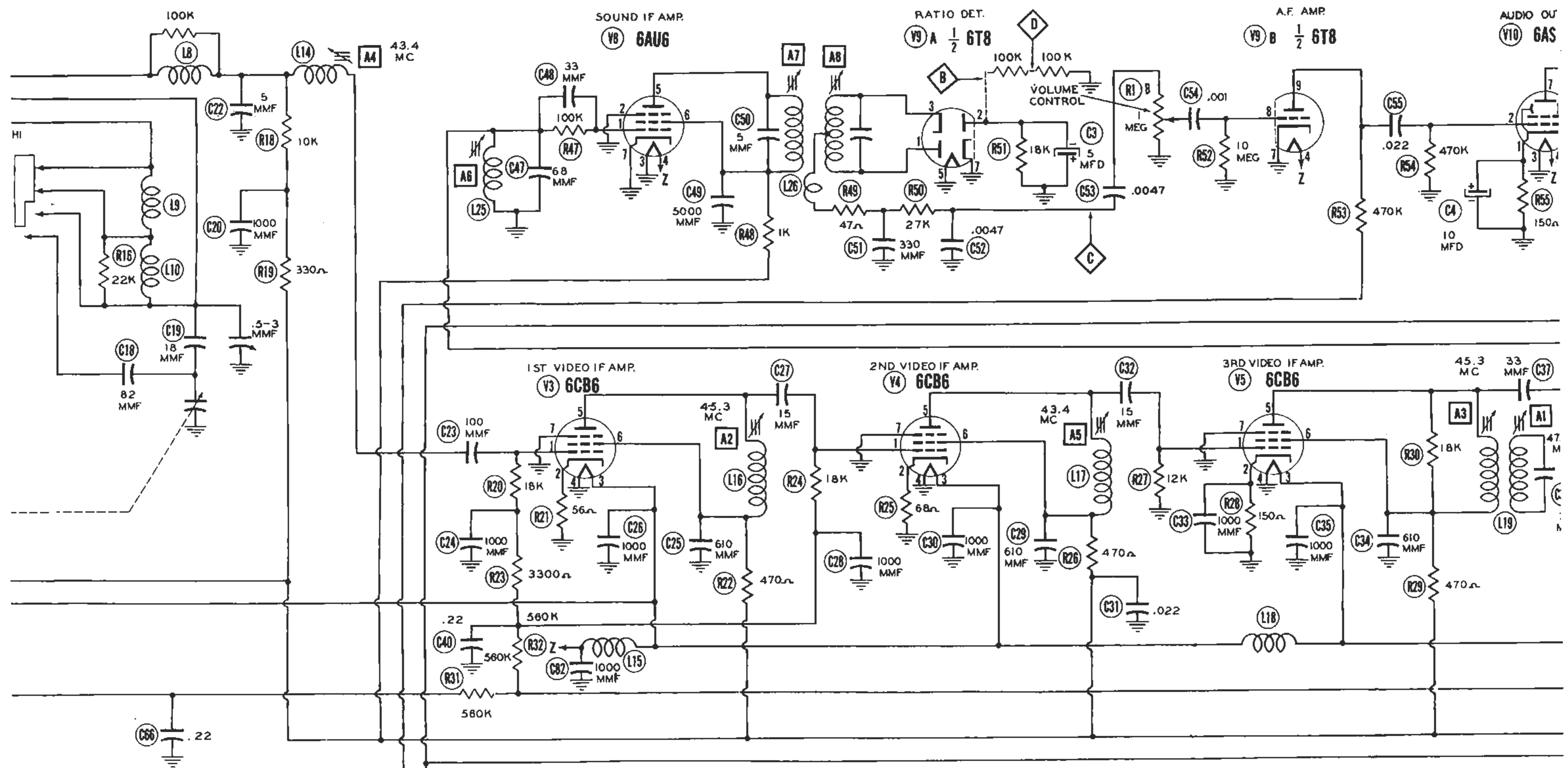
BAND SW. SHOWN IN HI BAND POSITION

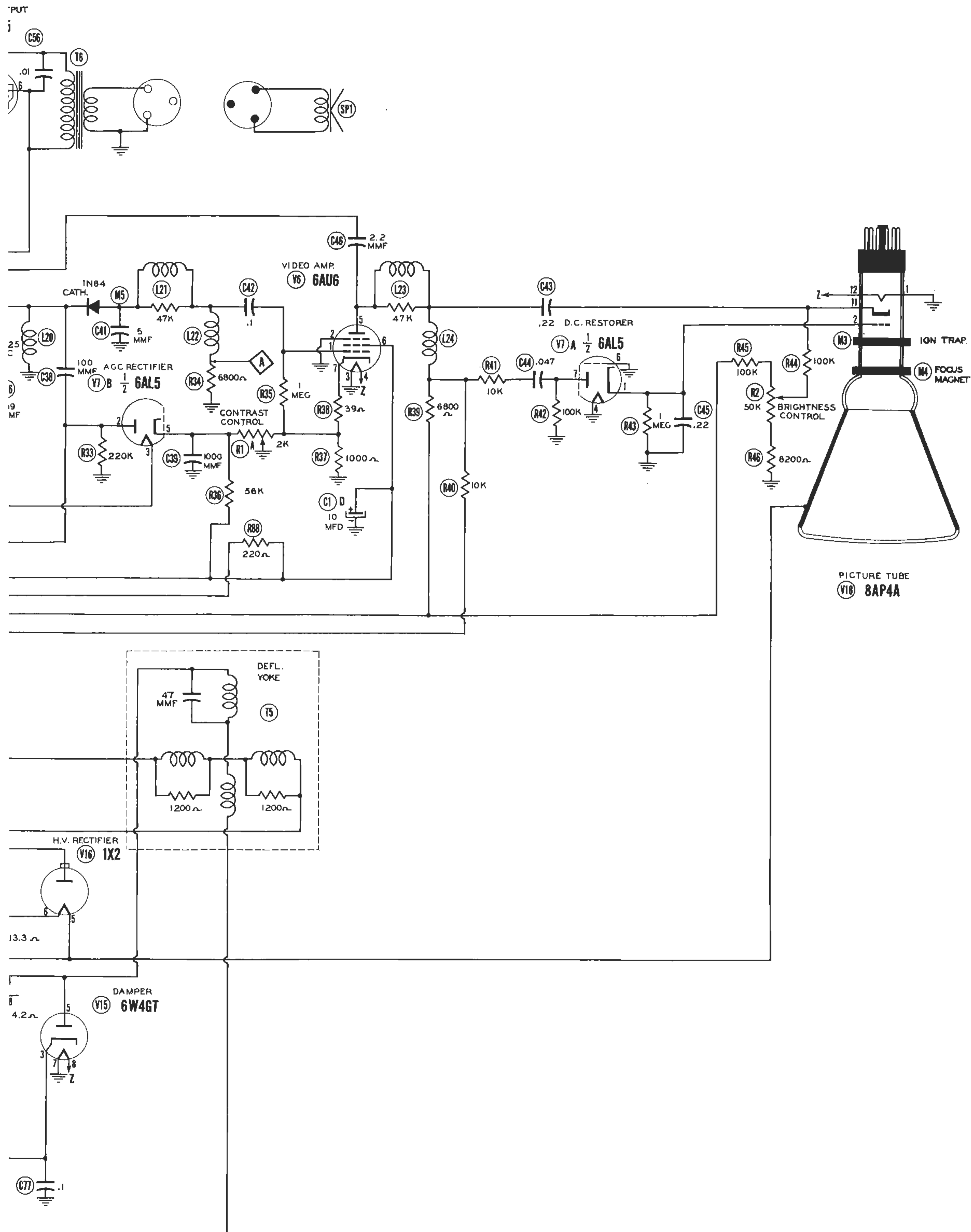
THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE



DOTTED IN PARTS NOT USED IN ALL MODELS.
WHEN DOTTED IN PARTS ARE USED POINTS
MARKED X ARE BROKEN.

A PHOTOFACIT STANDARD NOTATION SCHEMATIC
© Howard W. Sams & Co., Inc. 1950



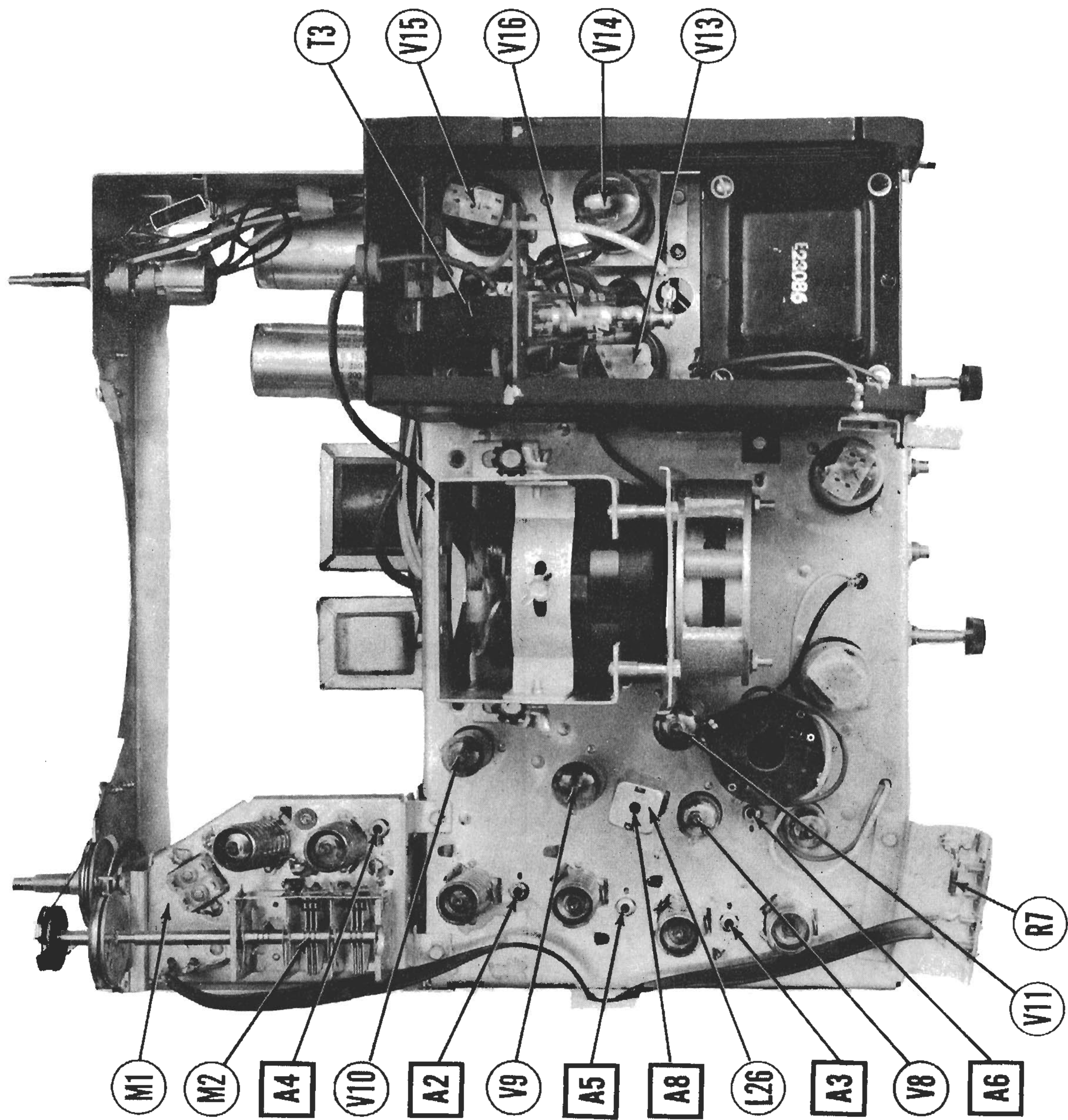


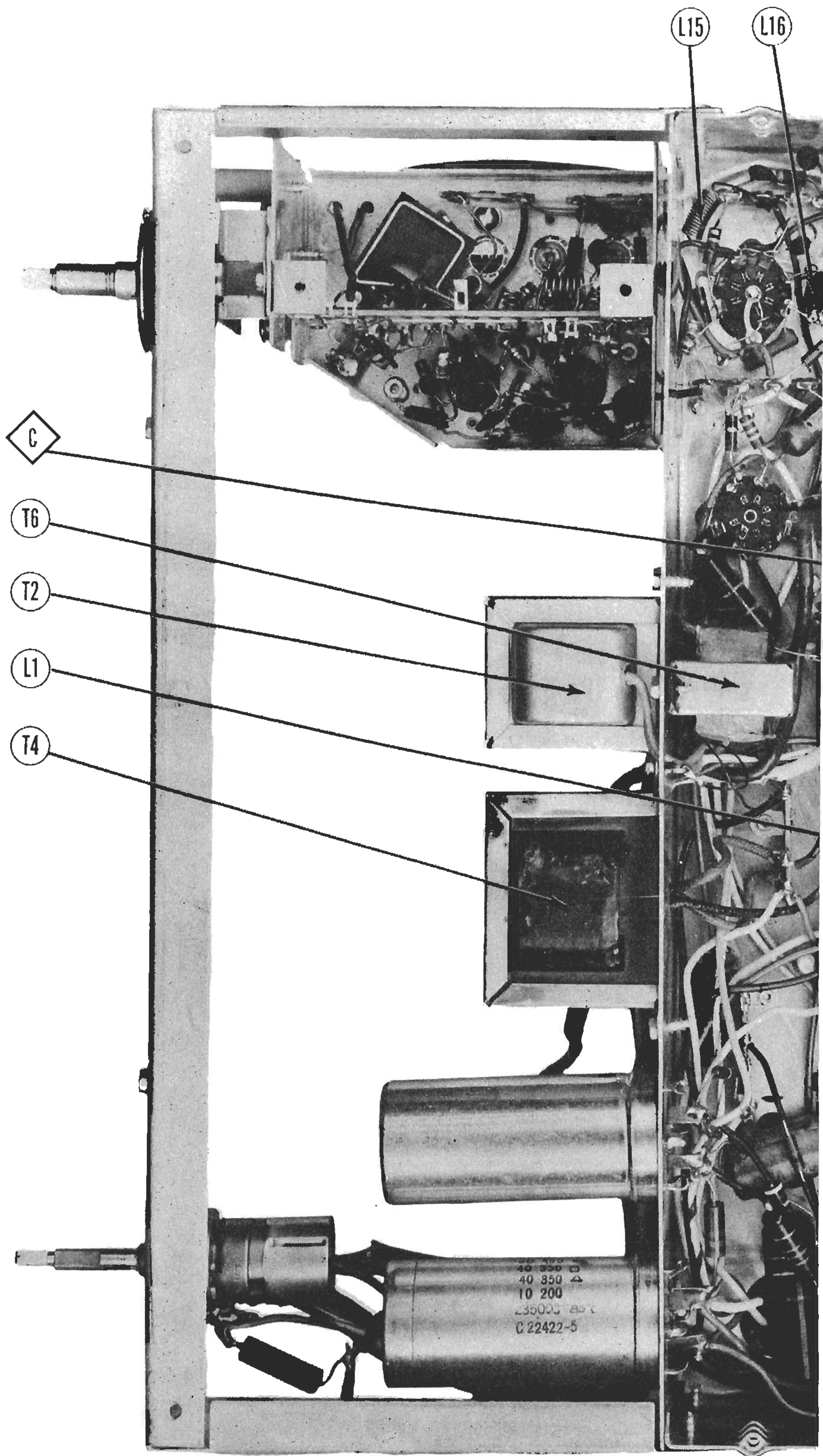
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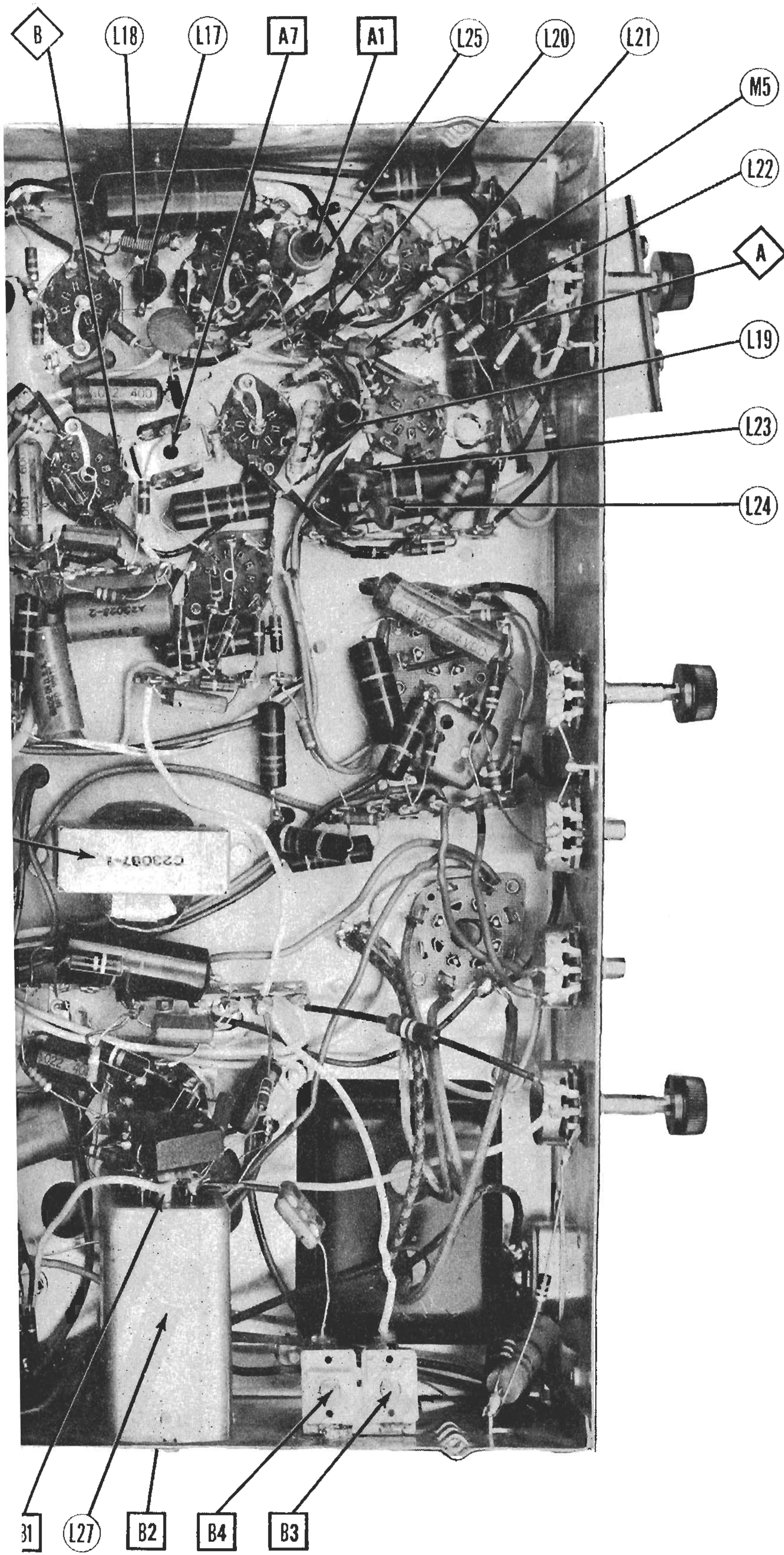
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MODEL 4080T (Ch. TE282)

MAIN TOP SISSACHD

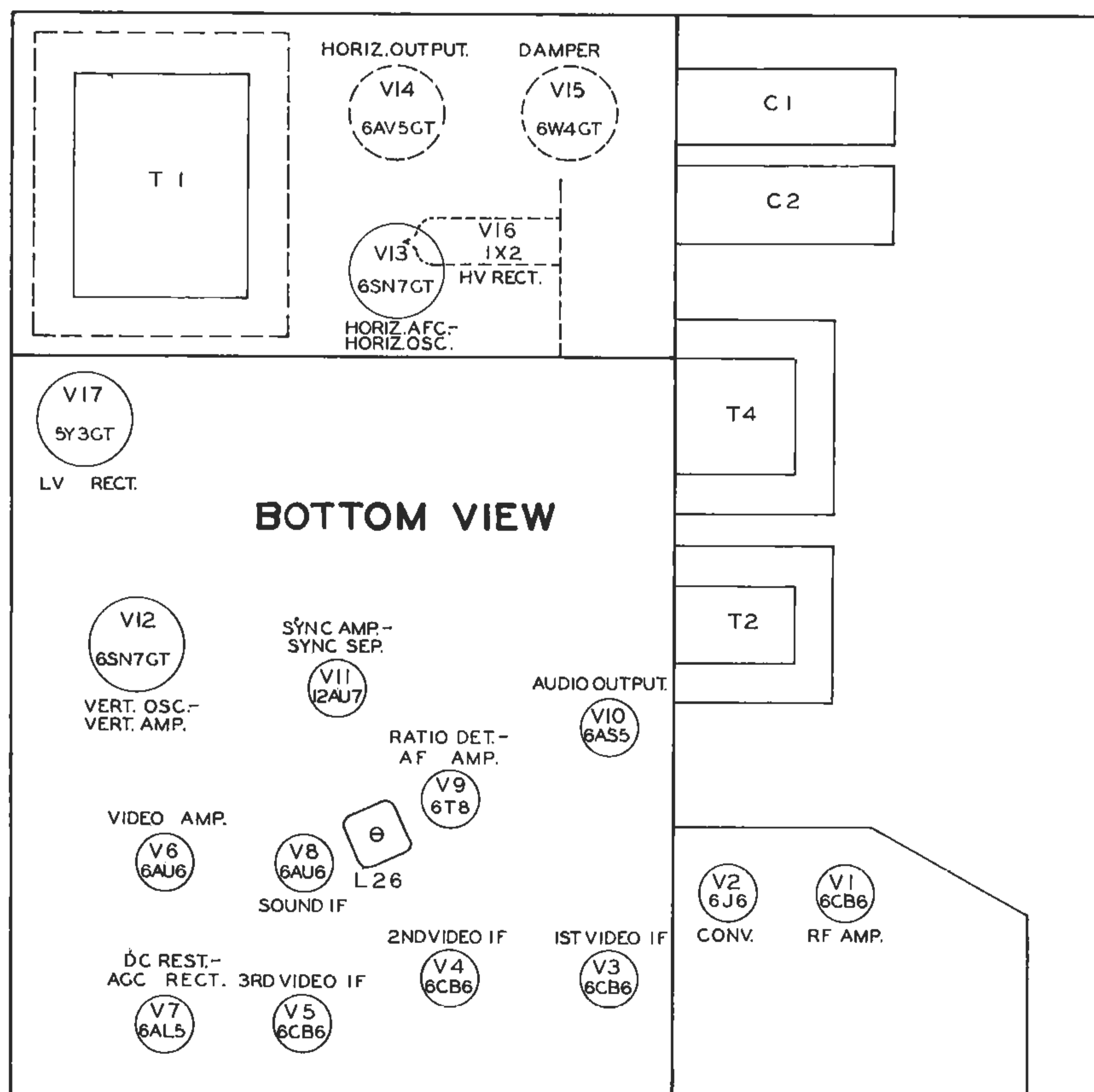
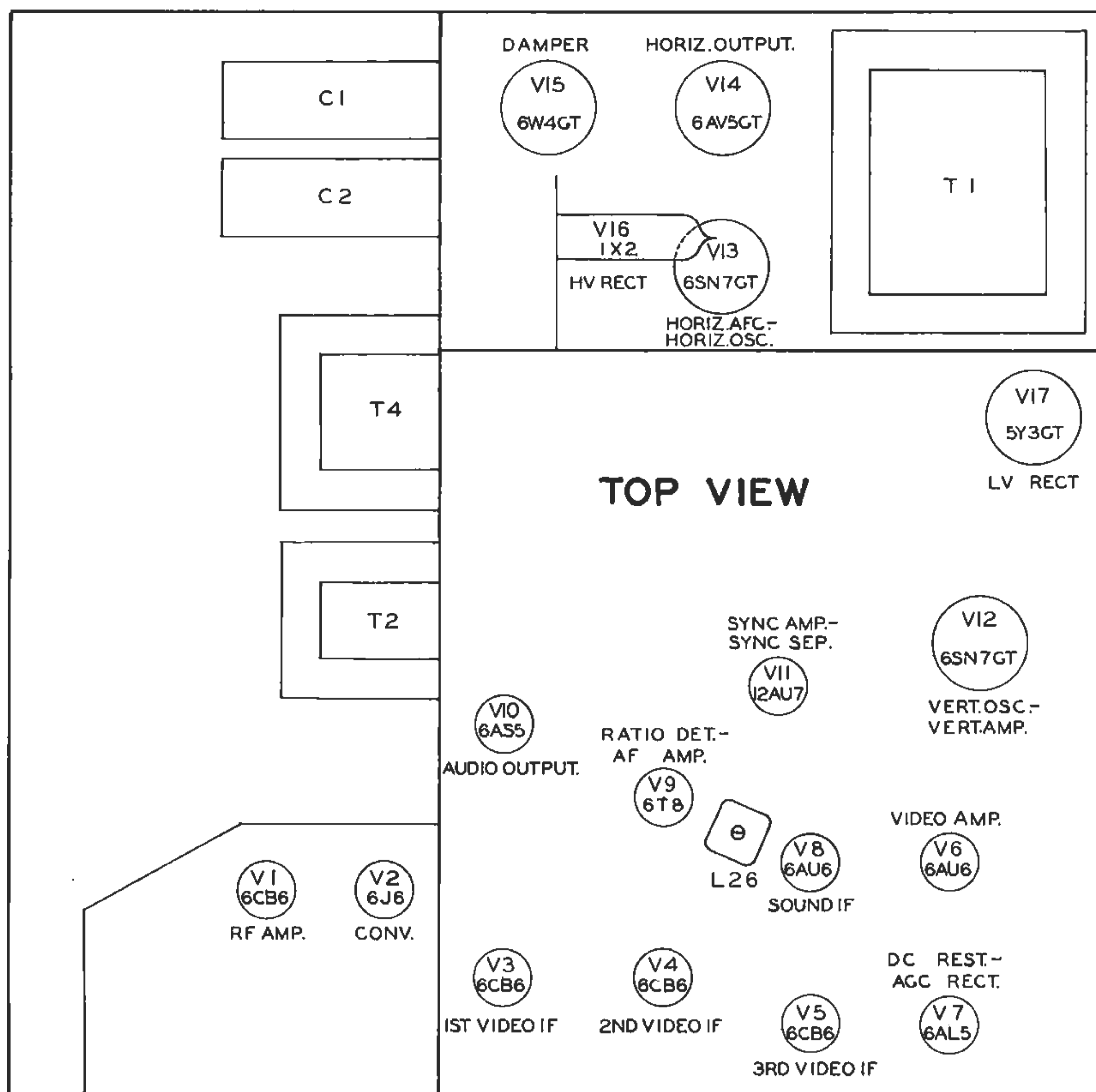




CHASSIS BOTTOM VIEW-TRANS., INDU



CTOR AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS--READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage shock hazard may be eliminated by removing the horizontal oscillator tube (V13) from its socket.

VIDEO IF ALIGNMENT

Connect the negative lead of a 2 volt battery to the junction of C28 and R24, connect the positive lead to chassis. Turn the contrast control to 3/4 maximum (clockwise). Remove the converter tube (V2) and replace it with a 6J6 which has pin 1 removed. This will disable the local oscillator and prevent erroneous indications.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1.	Direct	High side to ungrounded tube shield floating over dummy mixer tube (V2). Low side to chassis.	47.25MC (Unmod.)	Any	DC Probe to Point A . Common to chassis.	A1	Adjust for MINIMUM deflection.
2.	Direct	"	45.3MC	"	"	A2, A3	Adjust for maximum deflection.
3.	Direct	"	43.4MC	"	"	A4, A5	"

OVERALL VIDEO IF RESPONSE CHECK

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

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4.	Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	44MC (10MC SWP)	41.25MC 43.1MC 45.3MC 45.75MC	Any	Vert. Amp. to Point A . Low side to chassis.		Check for response curve similar to figure 1. If necessary retouch A2 thru A5 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100KΩ (± 1%) resistors in series from Point B to chassis. 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
5.	.01MFD	High side to pin 1 (Grid) of 6AU6 (V6). Low side to chassis.	4.5MC (Unmod.)	Any	DC Probe to Point B . Common to chassis.	A6, A7	Adjust for maximum deflection.
6.	.01MFD	"	"	"	DC Probe to Point C . Common to Point D .	A8	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

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

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5.	.01MFD	High side to pin 1 (Grid) of 6AU6 (V6). Low side to chassis.	4.5MC (450KC Sweep)	4.5MC	Any	Vert. Amp. to Point B . Low side to chassis.	A6, A7	Disconnect stabilizer capacitor C3. Adjust for maximum amplitude and symmetry as per figure 2.
6.	.01MFD	"	"	"	"	Vert. Amp. to Point C . Low side to chassis.	A8	Reconnect capacitor C3. Adjust A8 so 4.5MC occurs at center of crossover lines as per figure 3. SLIGHTLY retouch A7 for maximum amplitude and straightness of crossover lines.

THE ADJUSTMENTS ON THE TUNER PORTION OF THIS RECEIVER HAVE BEEN PROPERLY ALIGNED AT THE FACTORY AND ARE VERY STABLE. THEY SHOULD NOT REQUIRE ADJUSTMENT IN THE FIELD.

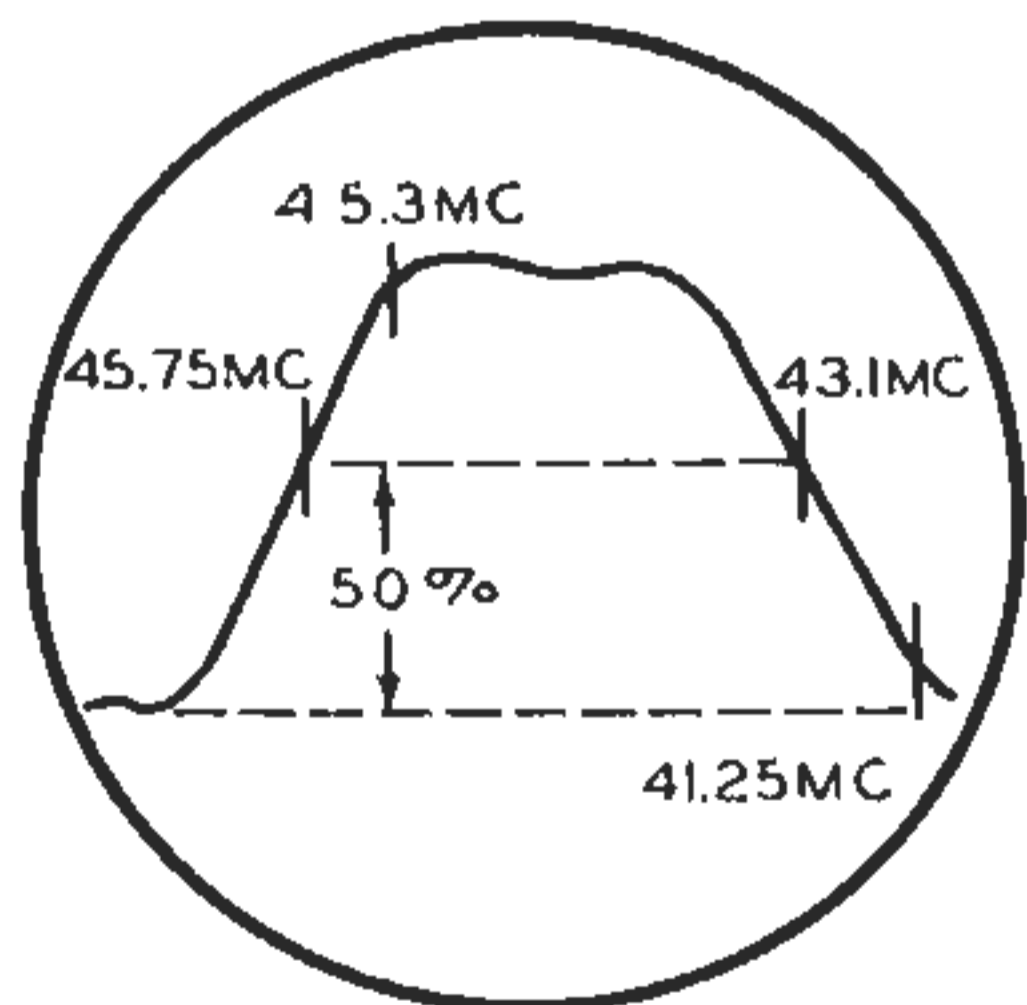


FIG. 1

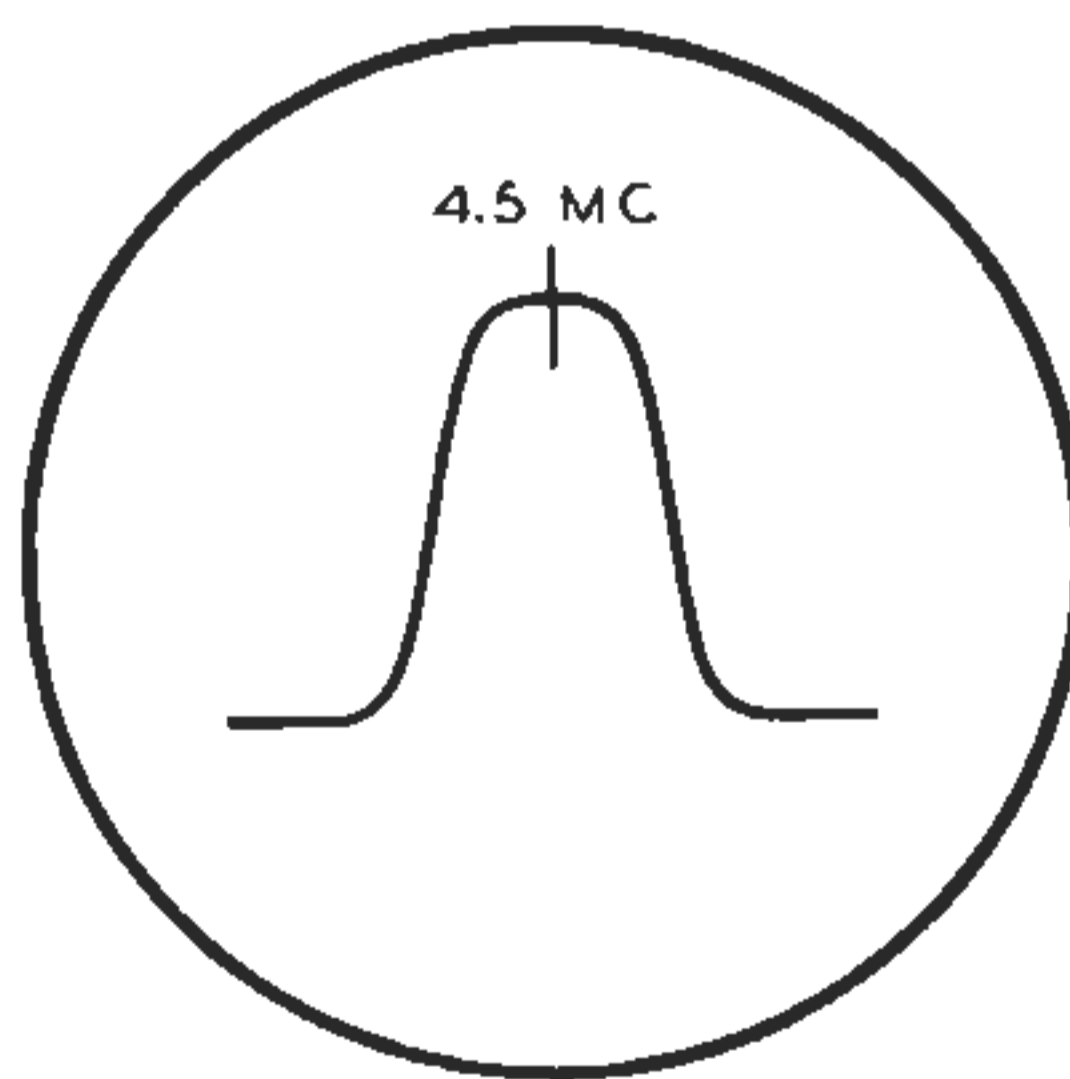


FIG. 2

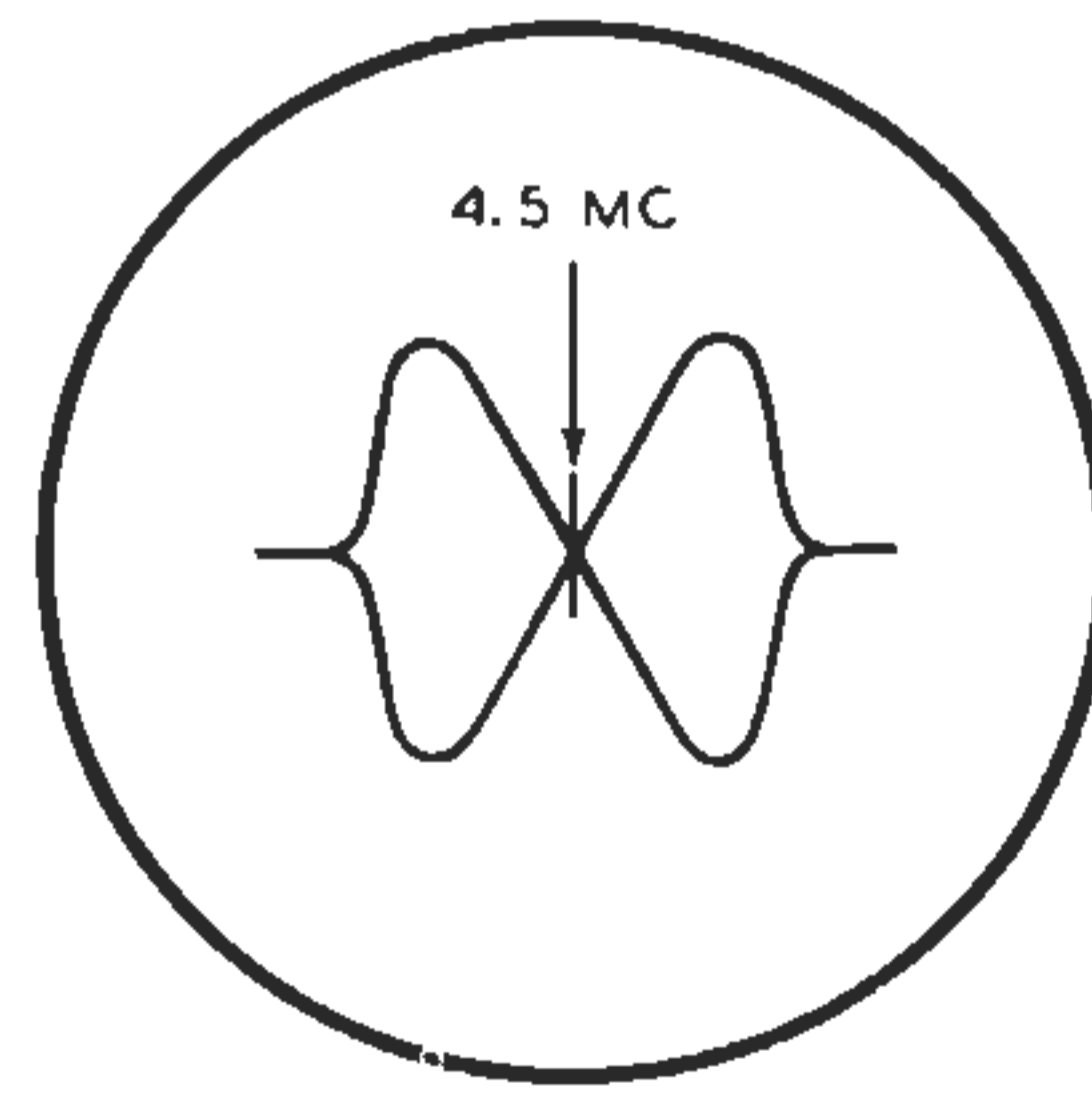
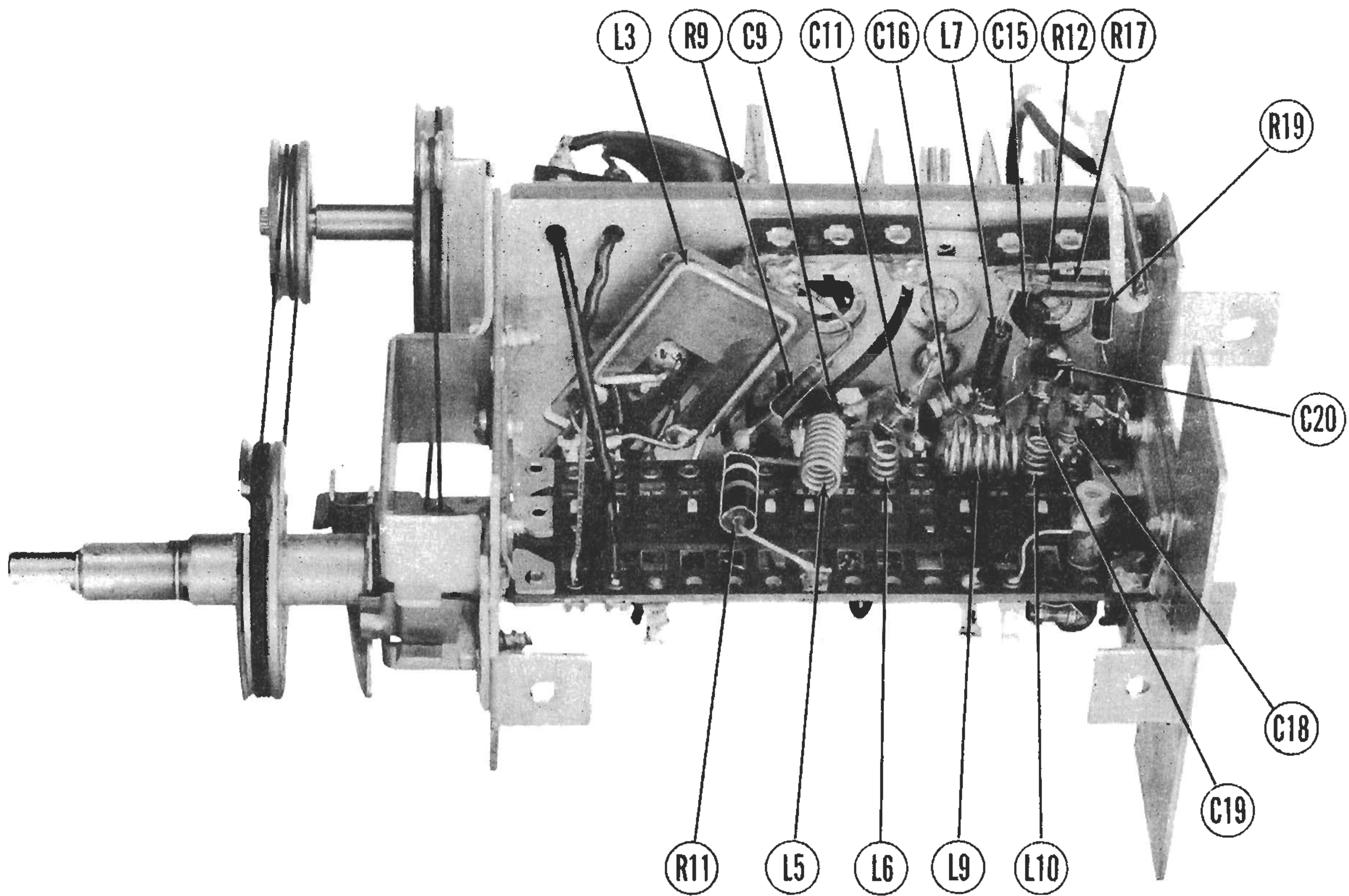
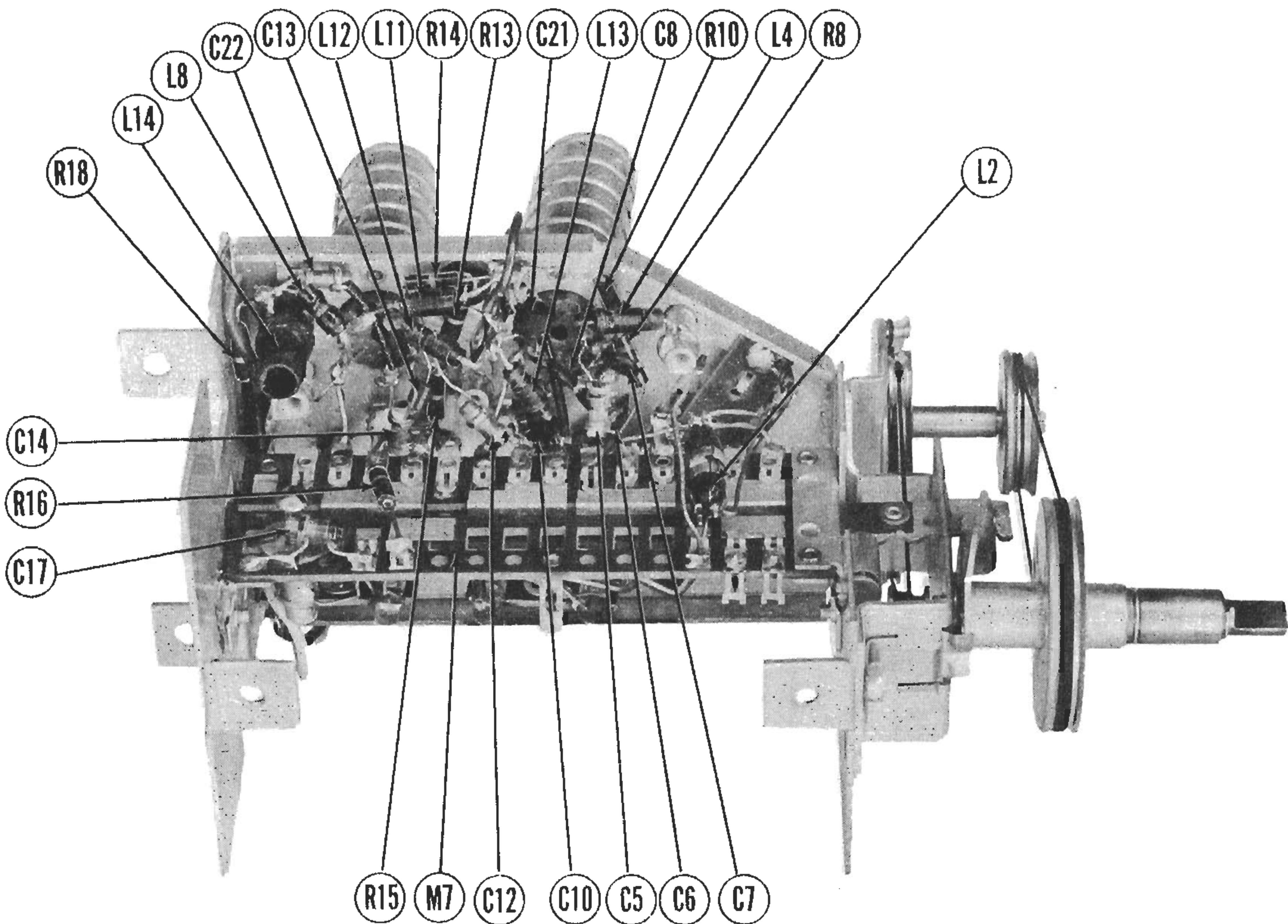


FIG. 3



RF TUNER-RIGHT SIDE



RF TUNER-LEFT SIDE

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	6CB6	-.7VDC	.4VDC	0V.	6.3VAC	110VDC	115VDC	0V.		
V 2	6J6	95VDC	70VDC	0V.	6.3VAC	-1.7VDC	8-6.8VDC	0V.		
V 3	6CB6	-.3VDC	.3VDC	6.3VAC	0V.	105VDC	115VDC	0V.		
V 4	6CB6	-.3VDC	.2VDC	6.3VAC	0V.	105VDC	115VDC	0V.		
V 5	6CB6	0V.	1.1VDC	6.3VAC	0V.	105VDC	115VDC	0V.		
V 6	6AU6	.4VDC	0V.	0V.	6.3VAC	250VDC	120VDC	7.2VDC		
V 7	6AL5	.3VDC	-.6VDC	6.3VAC	0V.	.1VDC	0V.	-.1VDC		
V 8	6AU6	-.6VDC	0V.	0V.	6.3VAC	105VDC	105VDC	0V.		
V 9	6T8	-.5VDC	-.7VDC	-.5VDC	6.3VAC	0V.	-1.2VDC	0V.	-.4VDC	75VDC
V 10	6AS5	8VDC	0V.	0V.	6.3VAC	0V.	130VDC	120VDC		
V 11	12AU7	11VDC	-.6VDC	0V.	6.3VAC	6.3VAC	75VDC	-.1VDC	0V.	0V.
V 12	6SN7GT	19VDC 11VDC	440VDC	36VDC 42VDC	-1.6VDC	19VDC 11VDC	4VDC 7VDC	0V.	6.3VAC	
V 13	6SN7GT	-31VDC	220VDC	0V.	-.8VDC	170VDC 110VDC	11VDC	6.3VAC	0V.	
V 14	6AV5GT	115VDC	0V.	125VDC	0V.	440VDC	0V.	6.3VAC	280VDC	
V 15	6W4GT	0V.	0V.	440VDC	0V.	290VDC	0V.	0V.	6.3VAC	
V 16	1X2	* DO NOT MEASURE.								
V 17	5Y3GT	0V	320VDC	6.3VAC	320VAC	0V	320VAC	0V	320VDC	
V 18	8AP4A	0V	.4VDC	15VDC	115VDC	PIN 11 6.3VAC				

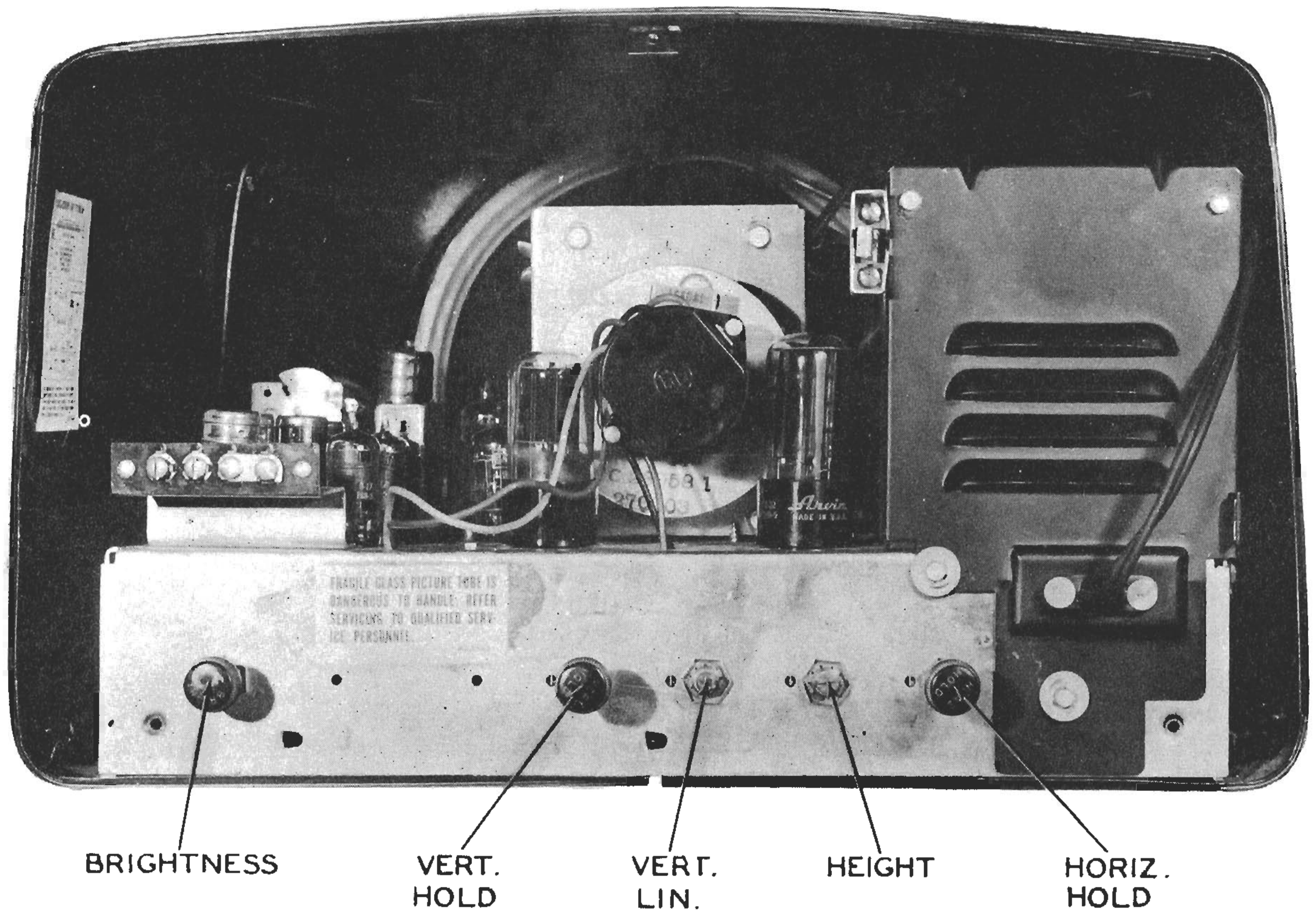
§ TAKEN WITH VACUUM TUBE VOLTMETER.
* DO NOT MEASURE.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6CB6	785KΩ	68Ω	0Ω	.1Ω	▲ 550Ω	▲ 550Ω	0Ω		
V 2	6J6	▲ 550Ω	▲ 10KΩ	0Ω	.1Ω	105KΩ	10KΩ	0Ω		
V 3	6CB6	800KΩ	56Ω	.1Ω	0Ω	▲ 690Ω	▲ 690Ω	0Ω		
V 4	6CB6	800KΩ	68Ω	.1Ω	0Ω	▲ 690Ω	▲ 690Ω	0Ω		
V 5	6CB6	12KΩ	150Ω	.1Ω	0Ω	▲ 690Ω	▲ 690Ω	0Ω		
V 6	6AU6	1 Meg.	0Ω	0Ω	.1Ω	† 8KΩ	▲ 220Ω	750Ω		
V 7	6AL5	1 Meg.	220KΩ	.1Ω	0Ω	25Ω	0Ω	100KΩ		
V 8	6AU6	100KΩ	0Ω	0Ω	.1Ω	▲ 1.2KΩ	▲ 1.2KΩ	0Ω		
V 9	6T8	Inf.	18KΩ	Inf.	.1Ω	0Ω	Inf.	0Ω	10 Meg.	† 470KΩ
V 10	6AS5	150Ω	470KΩ	0Ω	.1Ω	470KΩ	▲ 0Ω	▲ 234Ω		
V 11	12AU7	▲ 1 Meg.	3.3 Meg.	0Ω	.1Ω	.1Ω	▲ 7.8KΩ	10KΩ	0Ω	0Ω
V 12	6SN7GT	† 4 Meg. † 6.5 Meg.	▲ 1.6KΩ	5.7KΩ 2.7KΩ	100KΩ	† 4 Meg. † 6.5 Meg.	156KΩ 56KΩ	0Ω	.1Ω	
V 13	6SN7GT	250KΩ	▲ 100KΩ	0Ω	900KΩ	▲ 130KΩ ▲ 180KΩ	300KΩ	.1Ω	0Ω	
V 14	6AV5GT	▲ 330KΩ	0Ω	▲ 0Ω	Inf.	▲ 32Ω	Inf.	.1Ω	† 1.5KΩ	
V 15	6W4GT	Inf.	Inf.	▲ 0Ω	Inf.	† 150Ω	Inf.	0Ω	.1Ω	
V 16	1X2	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP ▲ 315Ω
V 17	5Y3GT	Inf.	100KΩ	.1Ω	65Ω	Inf.	70Ω	0Ω	100KΩ	
V 18	8AP4A	0Ω	1 Meg.	150KΩ	PIN 11 108KΩ	PIN 12 .1Ω				

† MEASURED FROM PIN 8 OF V17.
▲ MEASURED FROM PIN 3 OF V14.
■ MEASURED FROM PIN 3 OF V15.

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



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL OSCILLATOR ALIGNMENT

Connect a short circuit across terminals C and D of L27.

Turn the set on and tune in a TV station, preferably a test pattern. Adjust the vertical hold control to synchronize the picture vertically.

Turn the horizontal hold control to maximum clockwise.

Adjust the horizontal frequency slug (B1) until the picture just begins to tear out of synchronization.

Remove the short from L27.

Connect the low capacity vertical input cable from an oscilloscope to terminal C of L27 and chassis.

Adjust the horizontal waveform slug (B2) until the picture is synchronized horizontally and the waveform on the scope appears as shown in figure 4 with the broad and narrow peaks of equal height.

Turn the horizontal hold control to maximum counter-clockwise and momentarily interrupt the signal by switching to another channel and back again.

Slowly turn the hold control clockwise and note the least number of bars present just before the picture falls into synchronization.

If more than 3 bars are present at the pull in point, adjust the horizontal locking range trimmer (B3) slightly clockwise. If less than 3 bars are present at pull in, adjust B3 counter-clockwise. Repeat the check and adjustment of B3 until 3 bars are present at the pull in point.

HORIZONTAL DRIVE ADJUSTMENT

Adjust the horizontal drive trimmer (B4) for best compromise between horizontal linearity and sufficient horizontal width.

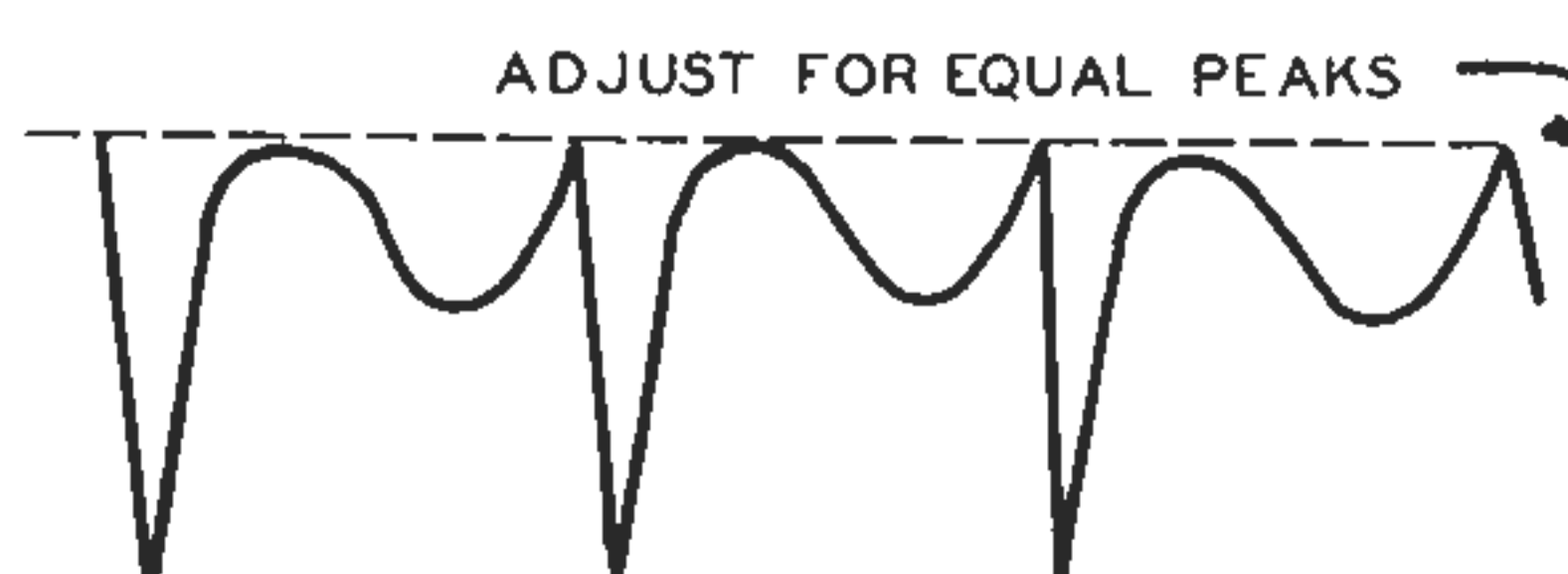
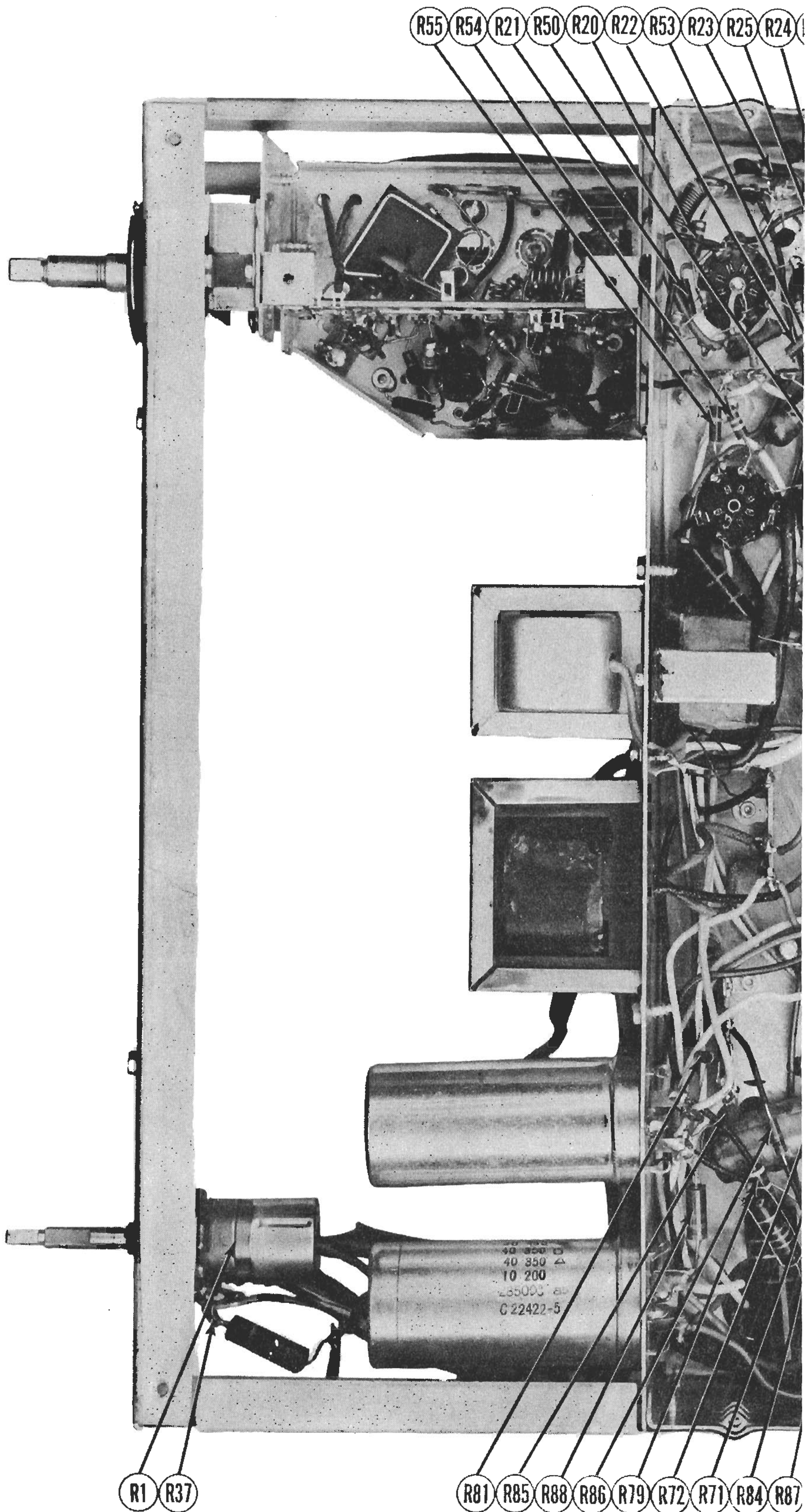
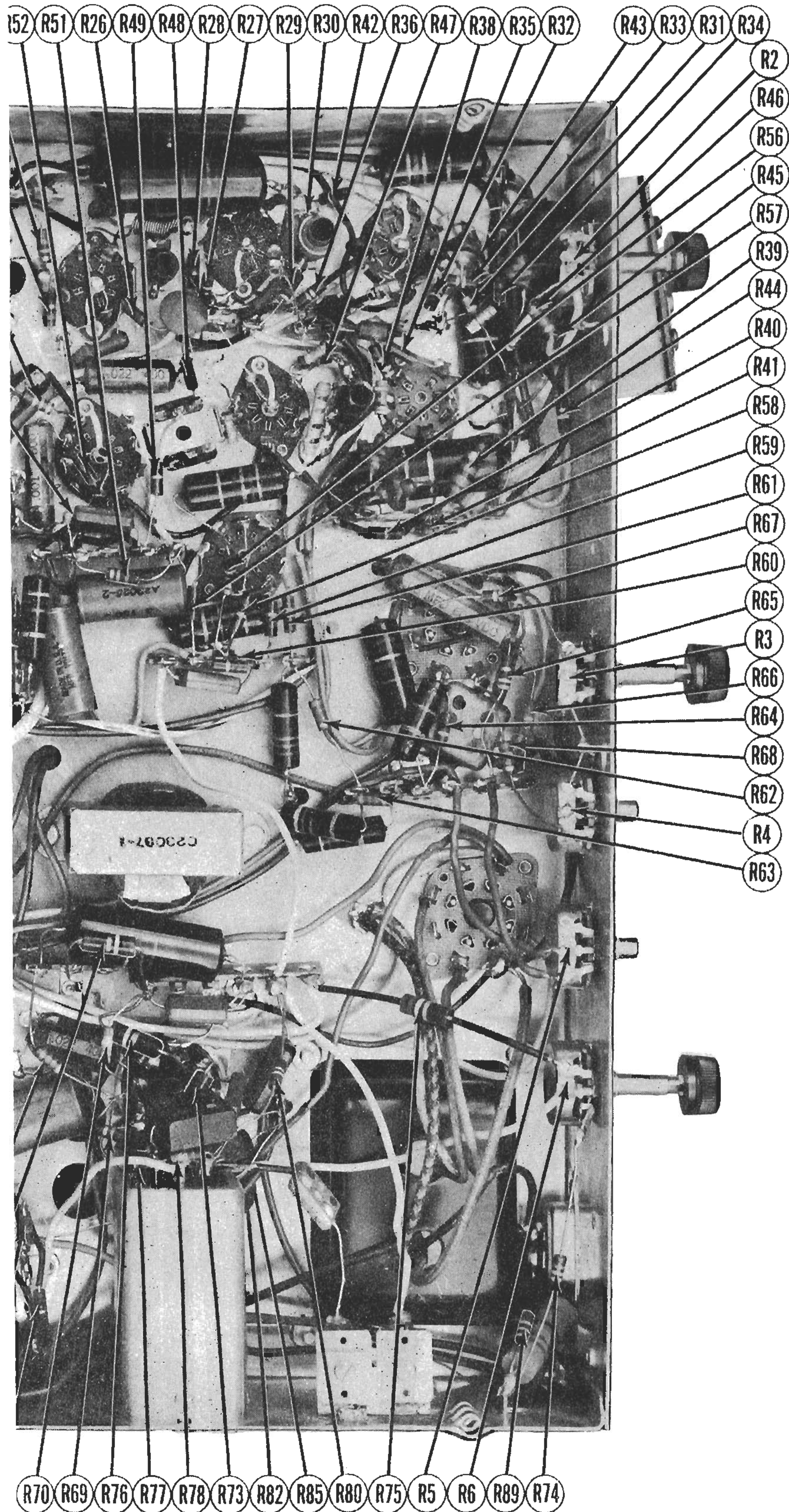


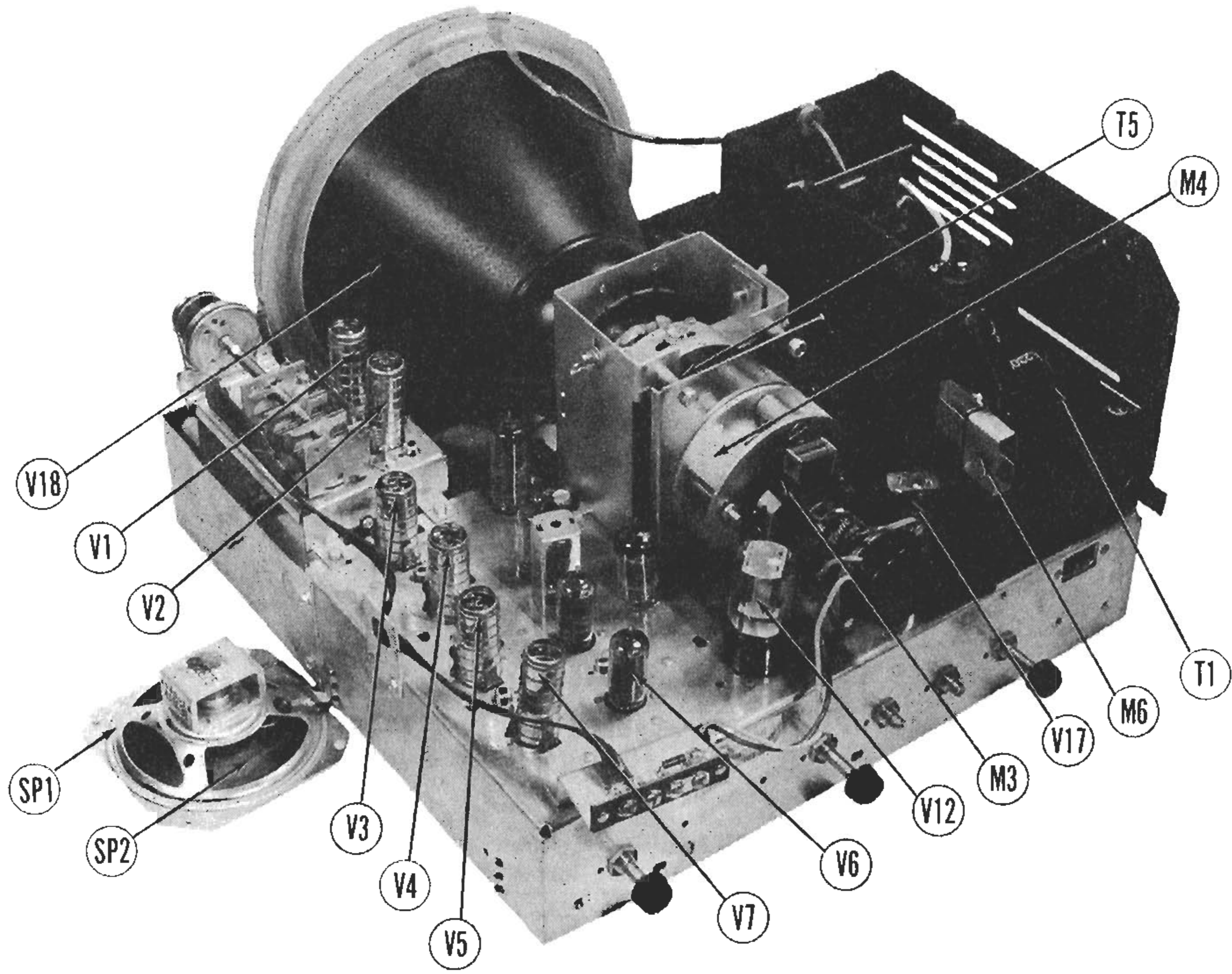
FIG. 4



CHASSIS BOTTOM VIEW-R



RESISTOR IDENTIFICATION



CHASSIS-TOP VIEW FOCUS AND CENTERING ADJUSTMENTS

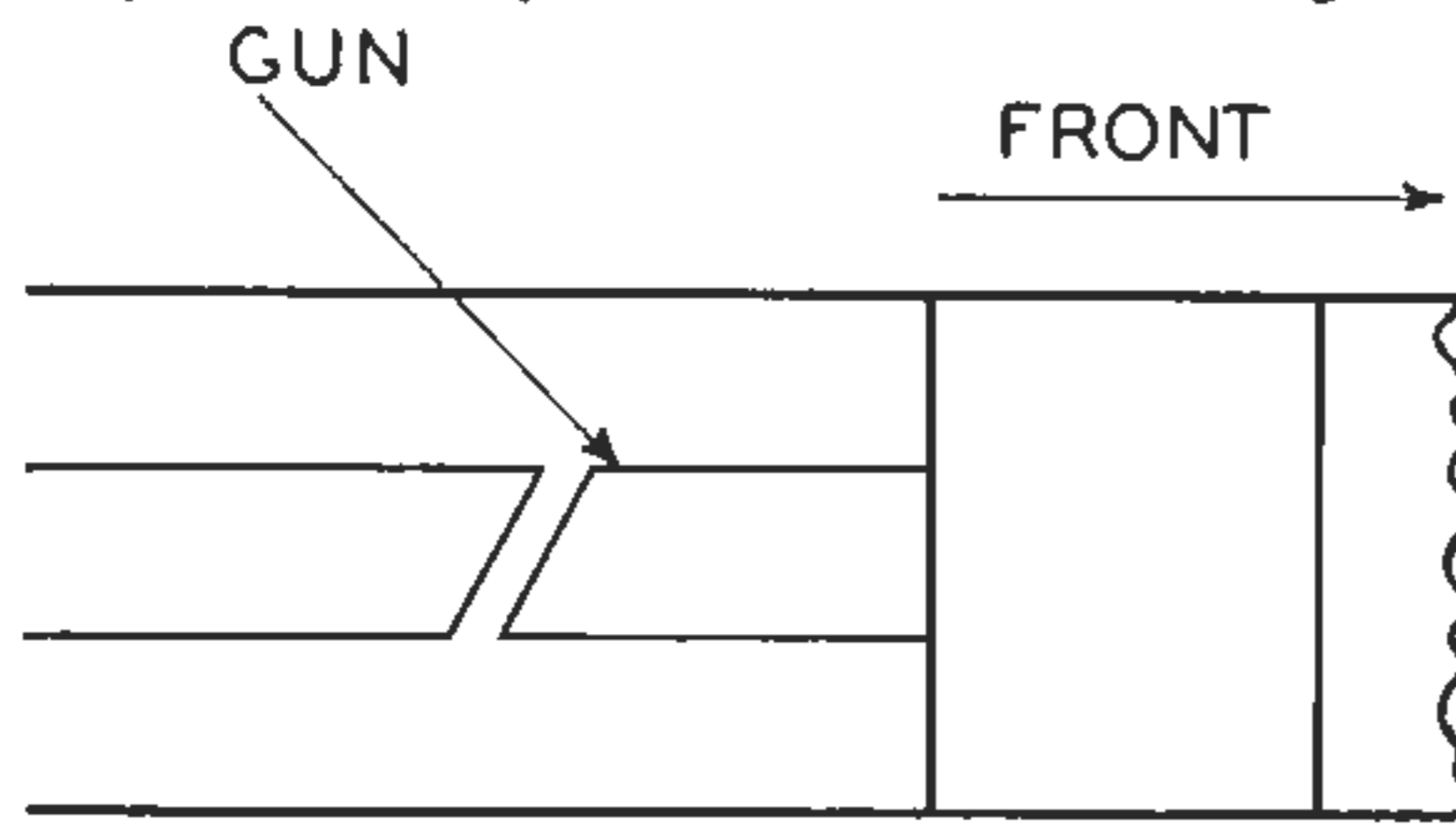
Turn the picture tube until the gun structure appears as shown in figure 5.

Turn the focalizer slug in until end of the flux screw is 1/16" from being against the front plate of the focalizer. Set the ion trap until it is approximately over the spotwelds on the gun structure.

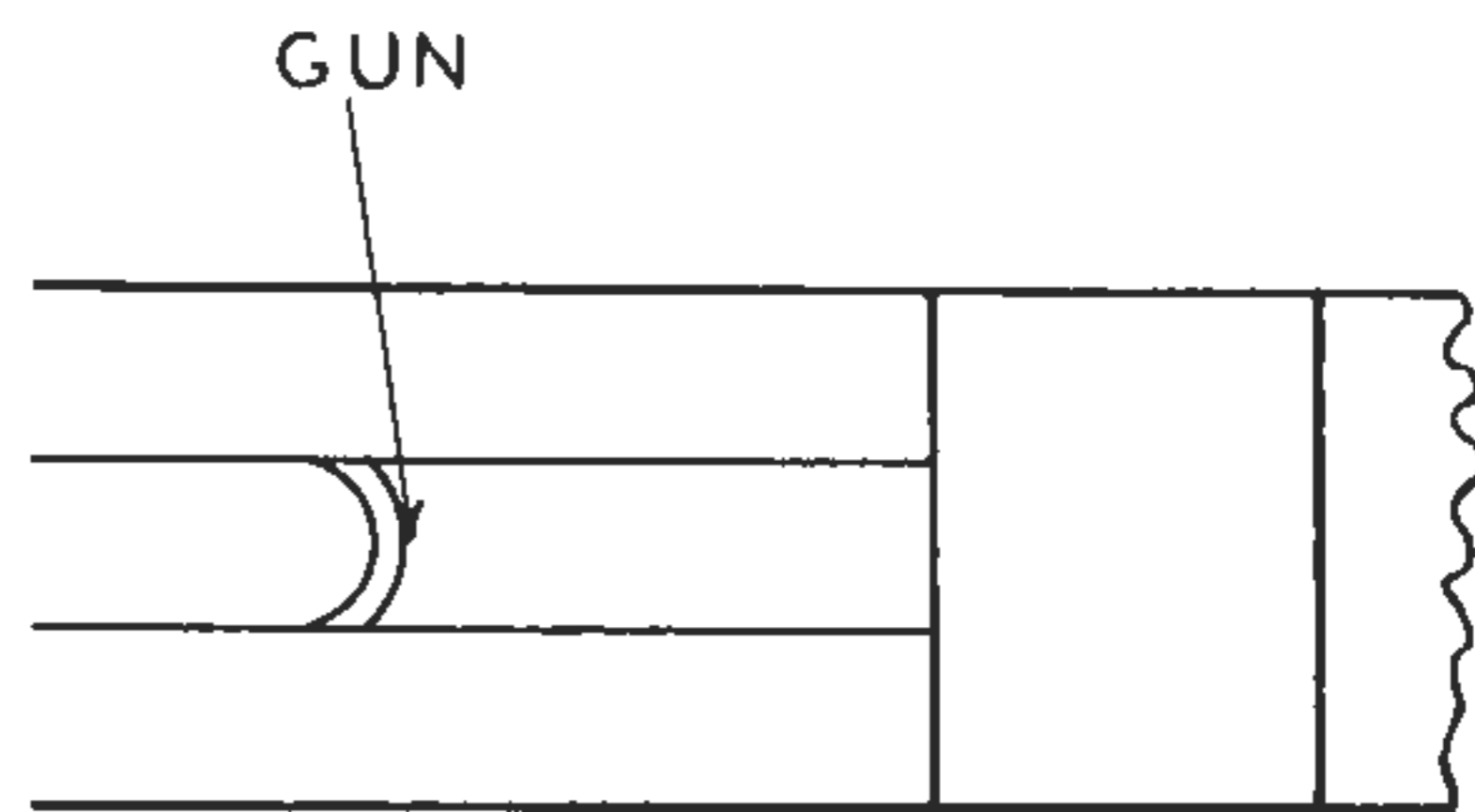
Turn the horizontal hold control to the mid-position of its range and adjust the ion trap and position the focalizer for maximum brightness and centering.

Adjust the horizontal drive trimmer B4 for best linearity and width.

Turn the contrast control for normal picture and adjust the focalizer slug for best focus. A slight adjustment of the ion trap and focalizer may be necessary to obtain correct centering.

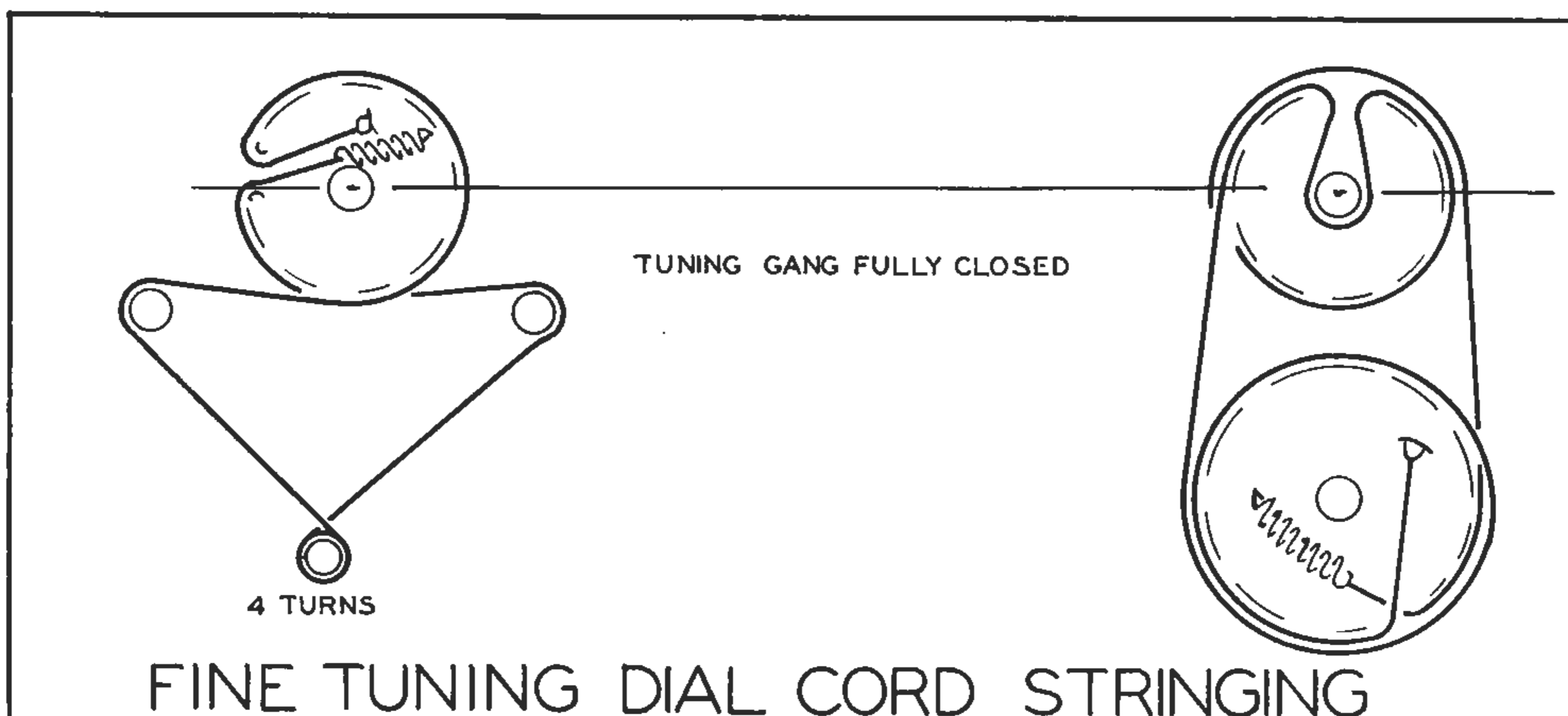


SIDE VIEW OF TUBE NECK



TOP VIEW OF TUBE NECK

FIG. 5



TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		ARVIN PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6CB6	6CB6	7CM	
V2	Converter	6J6	6J6	7BF	
V3	1st Video IF	6CB6	6CB6	7CM	
V4	2nd Video IF	6CB6	6CB6	7CM	
V5	3rd Video IF	6CB6	6CB6	7CM	
V6	Video Amp.	6AU6	6AU6	7BK	
V7	AGC Rect. -DC Rest.	6AL5	6AL5	6BT	
V8	Sound IF Amp.	6AU6	6AU6	7BK	
V9	Ratio Det. -AF Amp.	6T8	6T8	9E	
V10	Audio Output	6AS5	6AS5	7CV	
V11	Sync. Amp. -Sync. Sep.	12AU7	12AU7	9A	
V12	Vert. Osc. -Vert. Amp.	6SN7GT	6SN7GT	8BD	
V13	Hor. AFC -Hor. Osc.	6SN7GT	6SN7GT	8BD	
V14	Hor. Output	6AV5GT	6AV5GT	6CK	
V15	Damper	6W4GT	6W4GT	4CG	
V16	HV Rect.	1X2	1X2	7CB	
V17	LV Rect.	5Y3GT	5Y3GT	5T	
V18	Picture Tube	8AP4A	8AP4A	12H	

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT	ARVIN PART No.	AEROVOX PART No.	CENTRAL PART No.
C63	1000	500		1467-001	D6-102
C64	.1	200	C20291-104	P288-1	
C65	.03	600	C20295-333	P688-03	
C66	.22	200	C20291-224	P488-22	
C67	150	500	C20065-151	1468-00015	D6-151
C68	.0022	600	C20295-222	P688-0022	D6-222
C69	.022	400	C20292-223	P488-022	
C70	.22	200	C20291-224	P488-22	
C71	.047	600	C20295-473	P688-047	
C72	180	1000	A22412		
C73	.01	600	C20324-103	P688-01	
C74	.0015	600	C20324-152	P688-0015	D6-152
C75	390	500	C20290-391	1468-0004	D6-391
C76	.047	400	C20292-473	P488-047	
C77	.1	1000	C20329-104	1084-1	
C78	.47	200	C20291-474	P288-47	
C79	.01	600	C20358-103	P688-01	D6-103
C80	.01	600	C20358-103	P688-01	D6-103
C81	390	500	C20290-391	1468-0004	D6-391
C82	1000		A23078	GP1000M	D6-102

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	ARVIN PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C1A	30	450	C22422-5	AFH6J88H2E				TVL-304	▲ Filter
B	40	350						TVA-77	■ Filter
C	40	350							▲ Filter
D	10	200							Decoupling
C2A	10	450	C22422-6	AFH2J8H16E				TVL-310	▲ Decoupling
B	40	350		20B				TVA-17	■ Vert. Output Decoupl.
C	80	200							▲ Decoupling
D	100	50							Vert. Output Cath. Byp.
C3	5	150	A23025-2	PRS150/4		BR415		TVA-60	Stabilizing Cap.
C4	10	25	A23025-1	PRS25/10		BRI02A		TVA-5	Output Cathode Byp.
C5	47		C20204-470	GP47M	D6-470		GPIK-47		RF Coupling
C6	1000		A23078	GP1000M	D6-102		811-001	29C4	AGC Filter
C7	1000		A23078	GP1000M	D6-102		811-001	29C4	RF Cath. Bypass
C8	1000		A23078	GP1000M	D6-102		811-001	29C4	RF Decoupling
C9	1000		A23078	GP1000M	D6-102		811-001	29C4	RF Decoupling
C10	1000		A23078	GP1000M	D6-102		811-001	29C4	RF Decoupling
C11	13		C20205-10	CNI3JNPO			NPOK-13		Fixed Padder
C12	14		C20205-14	CNI4JNPO			NPOK-14		RF Coupling
C13	3.3		A20238-5	CN3.3DNPO	D2-3.3		NPOK-3.3		Osc. Coupling
C14	33		C20205-12	CN33KN220			N220K-33		Osc. Grid Cap.
C15	1000		A23078	GP1000M	D6-102		811-001	29C4	RF Bypass
C16	8.2		C20205-13	CN8.2DNPO			NPOK-8.2		Fixed Trimmer
C17	14		C20205-14	CNI4JNPO			NPOK-14		Fixed Trimmer
C18	82		C20204-820		D2-82		GPIK-82		Fixed Padder
C19	18		C20205-15	CNI8JNPO	D2-18		NPOK-18		Fixed Padder
C20	1000		A23078	GP1000M	D6-102		811-001	29C4	Conv. Plate Decoupl.
C21	1000		A23078	GP1000M	D6-102		811-001	29C4	Filament Bypass
C22	5		C20205-9	CN5FN150			NI50K-5		Fixed Trimmer
C23	100		C20204-101	GP100M	D6-101		GPIK-100		IF Coupling
C24	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	AGC Filter
C25	610		C20351-10	GP680M	D6-681	1W5T6	GP2K-680	1FM-37	1st V. IF Decoupl.
C26	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	1st V. IF Fil. Bypass
C27	15		C20205-8	GP15M	D6-150	5W5Q2	GPIK-15	MS-415	IF Coupling
C28	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	AGC Filter
C29	610		C20351-10	GP680M	D6-681	1W5T6	GP2K-680	1FM-37	2nd V. IF Decoupl.
C30	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	2nd V. IF Fil. Byp.
C31	.022	400	C20292-223	P488-022		PTE4S2		TM-12	RF Bypass
C32	15		C20205-8	GP15M	D6-150	5W5Q2	GPIK-15	MS-415	IF Coupling
C33	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	3rd V. IF Cath. Byp.
C34	610		C20351-10	GP680M	D6-681	1W5T6	GP2K-680	1FM-37	3rd V. IF Decoupl.
C35	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	3rd V. IF Fil. Byp.
C36	39	300		1469-00004	D2-39	5R5Q4	NPOL-39	MS-44	Fixed Trimmer
C37	33		C20205-12	GP33M	D6-330	5W5Q4	GPIK-33	MS-33	IF Coupling
C38	100		C20204-101	GP100M	D6-101	5W5T1	GPIK-100	1FM-31	IF Coupling
C39	1000		A23078	GP1000M	D6-102	1W5D1	811-001	29C4	DAGC Decoupling
C40	.22	200	C20292-224	P488-22		GT4P25		TC-2	AGC Filter
C41	5		C20205-9	GP5K	D2-4.7	5W5V5	GPIK-5	MS-55	V. Diode Filter
C42	.1	200	C20291-104	P288-1		PTE4P1		TM-1	Video Coupling
C43	.22	400	C20292-224	P488-22		GT4P25		TC-2	Video Coupling
C44	.047	400	C20292-473	P488-047		PTE4S5		TM-15	Video Coupling
C45	.22	200	C20291-224	P488-22		GT4P25		TC-2	Pic. Tube Grid Filter
C46	2.2		C20205-7	CN2.2CNPO	D2-2.2				S. IF Coupling
C47	68		C20205-11	CN68JN150			NI50L-68		Fixed Trimmer
C48	33		C20205-12	GP33K	D6-330	5R5Q3	GPIK-33	MS-43	S. IF Coupling
C49	5000		A21674	BPD-5	D6-502	1D5D5	811-005	29C1	S. IF Decoupling
C50	5		C20205-9	CN5FN150			NI50K-5		Fixed Trimmer
C51	330	500	C20290-331	1468-00035	D6-331	5W5T3	GP2K-330	1FM-335	Diode Load Cap.
C52	.0047	600	C20295-472	P688-0047	D6-472	PTE6D5	GP2M-0047	TM-25	De-emphasis
C53	.0047	600	C20295-472	P688-0047	D6-472	PTE6D5	GP2M-0047	TM-25	Audio Coupling
C54	.001	600	C20295-102	P688-001	D6-102	PTE6D1	GP2L-001	TM-21	Audio Coupling
C55	.022	400	C20292-223	P488-022		PTE4S2		TM-12	Audio Coupling
C56	.01	600	C20295-103	P688-01	D6-103	PTE6S1	811-01	TM-11	Output Plate Byp.
C57	.047	400	C20292-473	P488-047		PTE4S5		TM-15	Sync. Coupling
C58	.047	400	C20292-473	P488-047		PTE4S5		TM-15	Sync. Coupling
C59	.0022	600	C20295-222	P688-0022	D6-222	PTE6D2	GP2M-0022	TM-22	Integrator Net.
C60	.0047	600	C20295-472	P688-0047	D6-472	PTE6D5	GP2M-0047	TM-25	Integrator Net.
C61	.0047	600	C20295-472	P688-0047	D6-472	PTE6D5	GP2M-0047	TM-25	Integrator Net.
C62	.001	600	C20295-102	P688-001	D6-102	PTE6D1	GP2L-001	TM-21	Vert. Sync. Coupling

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	ARVIN PART No.	IRC PART No.	CLARIF PART
RIA	2000Ω		D22464-9		
B	1 Meg.				
R2A	50KΩ		D22464-14	Q11-123	AM-4
B	Shaft		Not Req.	Not Req.	KSS-3
R3A	100KΩ		D22464-11	Q11-128	AM-4
B	Shaft		Not Req.	Not Req.	KSS-3
R4A	3000Ω		D22464-12	Q11-112	AM-15
B	Shaft		Not Req.	Not Req.	FKS 1
R5A	2.5 Meg.		D22464-10	Q11-239	M-84
B	Shaft		Not Req.	Not Req.	FKS 1
R6A	50KΩ		D22464-13	Q11-123	AM-4
B	Shaft		Not Req.	Not Req.	KSS-3

Note 1. Some models use 1500Ω contrast control with 1 Me

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	ARVIN PART No.	IRC PART No.
R7	100Ω 20%		C20061-101	
R8	560Ω		C22381-561	BTS-560
R9	3300Ω 20%		C20061-332	BTS-3300
R10	68Ω 20%		C20061-680	
R11	3.9Ω		C20070-39	
R12	330Ω 20%		C20061-331	
R13	5600Ω		C22381-562	
R14	100KΩ 20%		C20061-104	
R15	10KΩ		C22381-103	
R16	22KΩ		C22381-223	BTS-22K
R17	330Ω 20%		C20061-331	
R18	10KΩ		C22381-103	
R19	330Ω 20%		C20061-331	
R20	18KΩ 5%		C22382-183	
R21	56Ω 5%		C22382-560	
R22	470Ω 20%		C20061-471	BTS-470
R23	3300Ω 20%		C20061-332	BTS-3300
R24	18KΩ 5%		C22382-183	
R25	68Ω		C22381-680	
R26	470Ω 20%		C20061-471	BTS-470
R27	12KΩ 5%		C22382-123	
R28	150Ω		C22381-151	
R29	470Ω 20%		C20061-471	BTS-150
R30	18KΩ 5%		C22382-183	
R31	560KΩ		C22381-564	BTS-560K
R32	560KΩ		C22381-564	BTS-560
R33	220KΩ		C22381-224	BTS-220K
R34	6800Ω		C22381-682	BTS-6800
R35	1 Meg. 20%		C20061-105	BTS-1 Meg.
R36	56KΩ		C22381-563	BTS-56K
R37	1000Ω 20%		C20061-102	BTS-1000
R38	39Ω		C22381-390	
R39	6800Ω		C20070-682	BTA-6800
R40	10KΩ 20%		C20061-103	BTS-10K
R41	10KΩ 20%		C20061-103	BTS-10K
R42	100KΩ		C22381-104	BTS-100K
R43	1 Meg. 20%		C20061-105	BTS-1 Meg.
R44	100KΩ 5%		C22382-104	BTS-100K-5%
R45	100KΩ 20%		C20061-104	BTS-100K
R46	8200Ω		C22381-822	BTS-8200
R47	100KΩ 20%		C20061-104	
R48	1000Ω 20%		C20061-102	BTS-1000
R49	47Ω		C22381-470	
R50	27KΩ		C22381-273	BTS-27K
R51	18KΩ 5%		C22382-183	BTS-18K-5%
R52	10 Meg. 20%		C20061-106	BTS-10 Meg.
R53	470KΩ 20%		C20061-474	BTS-470K
R54	470KΩ 20%		C20061-474	BTS-470K
R55	150Ω		C22381-151	BW-1/2-150
R56	3.3 Meg. 20%		C20061-335	BTS-3.3 Meg.
R57	1 Meg. 20%		C20061-105	BTS-1 Meg.
R58	10KΩ 20%		C20061-103	BTS-10K
R59	5600Ω		C22381-562	BTS-5600

COI

RESI

DESCRIPTIONS

ORS (CONT.)

PART DATA			IDENTIFICATION CODES AND INSTALLATION NOTES
CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
IW5D1	GP2L-001	1FM-21	Vert. Osc. Feedback Vert. Osc. Cath. Byp. Vert. Discharge AGC Filter Hor. Sync. Coupling Hor. Sync. Coupling AFC Filter AFC Filter Hor. AFC Plate Bypass Hor. Osc. Grid Cap. Fixed Trimmer Hor. Discharge Hor. Sweep Coupling Hor. Output Screen Byp. Dampner Filter Hor. Sweep Coupling Line Filter Line Filter AFC Filter Filament Bypass
PTE4P1		TM-1	
PTE6S3		TM-13	
GT2P25		TC-2	
5W5T15	GP2K-150	1FM-315	
PTE6D2	GP2M-0022	TM-22	
PTE4S2		TM-12	
GT2P25		TC-2	
PTE6S5		TM-15	
PTE6S1		TM-11	
IW5D15	GP2L-0015	1FM-215	
5W5T4	GP2K-390	1FM-34	
PTE4S5		TM-15	
GT16P1		TC-5	
GT2P5		TM-11	
PTE6S1	811-01	TM-11	
PTE6S1	811-01	TM-11	
5W5T4	GP2K-390	1FM-34	
IW5D1	811-001	29C4	

CONTROLS

STAT No.	CENTRALAB PART No.	INSTALLATION NOTES
	SBBT-622-S	Contrast control-front-See note 1 Volume control and switch-rear-See note 1
1-S	AN-31	Brightness control
1-S	AK-4	Attach to R2A per instructions
1-S	AN-40	Vert. hold control
1-S	AK-4	Attach to R3A per instructions
1-S	B-8	Vert. linearity control
1-S	Not Req.	Attach to R4A per instructions
1-S	AN-83	Height control
1-S	AK-1	Attach to R5A per instructions
1-S	AN-31	Horiz. hold control
1-S	AK-4	Attach to R6A per instructions

1. volume control and switch Part. No. D22464-16.

RESISTORS

IDENTIFICATION CODES	
ALL RESISTORS ARE $\pm 10\%$ UNLESS OTHERWISE STATED	
Ant. Isolation	
RF Grid	
AGC Network	
RF Cathode	
Parasitic Supp.	
RF Decoupling	
Conv. Grid	
Conv. Grid	
Osc. Grid	
Osc. Coil Shunt	
RF Plate Decoupling	
Conv. Plate	
Conv. Plate Decoupling	
1st Video IF Grid	
1st Video IF Cathode	
1st Video IF Decoupling	
AGC Network	
2nd Video IF Grid	
2nd Video IF Cathode	
2nd Video IF Decoupling	
3rd Video IF Grid	
3rd Video IF Cathode	
3rd Video IF Decoupling	
4th Video IF Transformer Shunt	
AGC Network	
AGC Network	
AGC Rect. Diode Load	
Video Det. Load	
Video Amp. Grid	
Delayed AGC Network	
Voltage Divider	
Video Amp. Cathode	
Video Amp. Plate	
Isolation	
Phase Correction	
DC Rest Diode Load	
Picture Tube Grid	
Voltage Divider	
Voltage Divider	
Voltage Divider	
Sound IF Grid	
Sound IF Decoupling	
Balancing	
De-emphasis	
Ratio Det. Diode Load	
AF Amp. Grid	
AF Amp. Plate	
Output Grid	
Output Cathode	
Sync. Amp. Grid	
Sync. Amp. Plate	
Sync. Sep. Grid	
Sync. Sep. Plate	

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	ARVIN PART No.	IRC PART No.	
R60	2200 Ω		C22381-222	BTS-2200	Sync. Sep. Plate
R61	22K Ω		C22381-223	BTS-22K	Integrator Network
R62	8200 Ω		C22381-822	BTS-8200	Integrator Network
R63	8200 Ω		C22381-822	BTS-8200	Integrator Network
R64	100K Ω 20%		C20061-104	BTS-100K	Vert. Osc. Grid
R65	3.9 Meg.		C22381-395	BTS-3.9 Meg.	Vert. Osc. Plate
R66	100K Ω		C22381-104	BTS-100K	Feedback
R67	56K Ω		C22381-563	BTS-56K	Vert. Osc. Cathode
R68	2700 Ω		C22381-272	BTS-2700	Vert. Amp. Cathode
R69	820K Ω 5%		C22382-824	BTS-820K-5%	Horiz. AFC Grid
R70	150K Ω		C22381-154	BTS-150K	Horiz. AFC Cathode
R71	150K Ω 5%		C22383-154	BTA-150K-5%	Horiz. AFC Cathode
R72	8200 Ω		C22381-822	BTS-8200	Horiz. AFC Filter Network
R73	2.7 Meg. 5%		C22383-275	BTA-2.7 Meg. 5%	Voltage Divider
R74	68K Ω		C22381-683	BTS-68K	Voltage Divider
R75	120K Ω		C20070-124	BTA-120K	Voltage Divider
R76	100K Ω 5%		C22383-104	BTA-100K-5%	Horiz. Osc. Grid
R77	8200 Ω		C22381-822	BTS-8200	Horiz. Osc. Transformer Shunt
R78	22K Ω		C22381-223	BTS-22K	Horiz. Osc. Transformer Shunt
R79	91K Ω 5%		C22383-913		Horiz. Osc. Plate
R80	220K Ω		C22381-224	BTS-220K	Horiz. AFC Filter Network
R81	10K Ω 20%		C20061-103	BTS-10K	Filter
R82	330 Ω 20%		C20061-331		Parasitic Supp.
R83	330K Ω 20%		C20061-334	BTS-330K	Horiz. Output Grid
R84	1500 Ω 20%		C20061-152	BTS-1500	Horiz. Output Screen
R85	1500 Ω 20%		C20061-152	BTS-1500	Decoupling
R86	1000 Ω 20%		C20061-102	BTS-1000	Filter
R87	1200 Ω		C22381-122	BTS-1200	Filter
R88	220 Ω 20%		C20103-221	BW-1-220	Filter
R89	470K Ω 20%		C20061-474	BTS-470K	Line Filter

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	ARVIN PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1A	117VAC ① 1.1A	620VCT .135ADC	6.3VAC ① 8A		E23086 ①			
B					E23541 ②			

- ① Used in early production models.
② Used in late production models.

TRANSFORMER (FILAMENT)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	ARVIN PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T2	117VAC ① .12A	5VAC ① 2A			①		P-3040 ③	

- ① Used in early production models.
③ Drill one new mounting hole.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	SEC.	ARVIN PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T3	315 Ω Tap ① 32 Ω	17.5 Ω Tap ① 4.2 Ω SEC. 2 0 Ω	E23089		HVO-6		Hor. Output Trans.
T4	1000 Ω Tap ① 13 Ω		C22905-1	A-8113	A-3037	TSO-5 ③	Vert. Output Trans.
T5A	25 Ω		AC23084-1	DY-1	MD-3		Hor. Deflection Coil Vert. Deflection Coil

- ③ Drill one new mounting hole.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE	DC RES.	ARVIN PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.			
T6	3400 Ω	3.3 Ω	234 Ω	.3 Ω	AC23090-1	A-3877 ③	A-2930 ④	RO-8	③ Drill one new mounting hole. ④ Drill new mounting holes and mount at right angle to original.

ARVIN
MODEL 4080T (Ch. TE282)

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	ARVIN PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	3.3Ω	C22875	ST-113 MOD. P4-X	4A07	
SP2	CONE DIA. 4"	V. C. DIA. 9/16"				

FILTER CHOKE

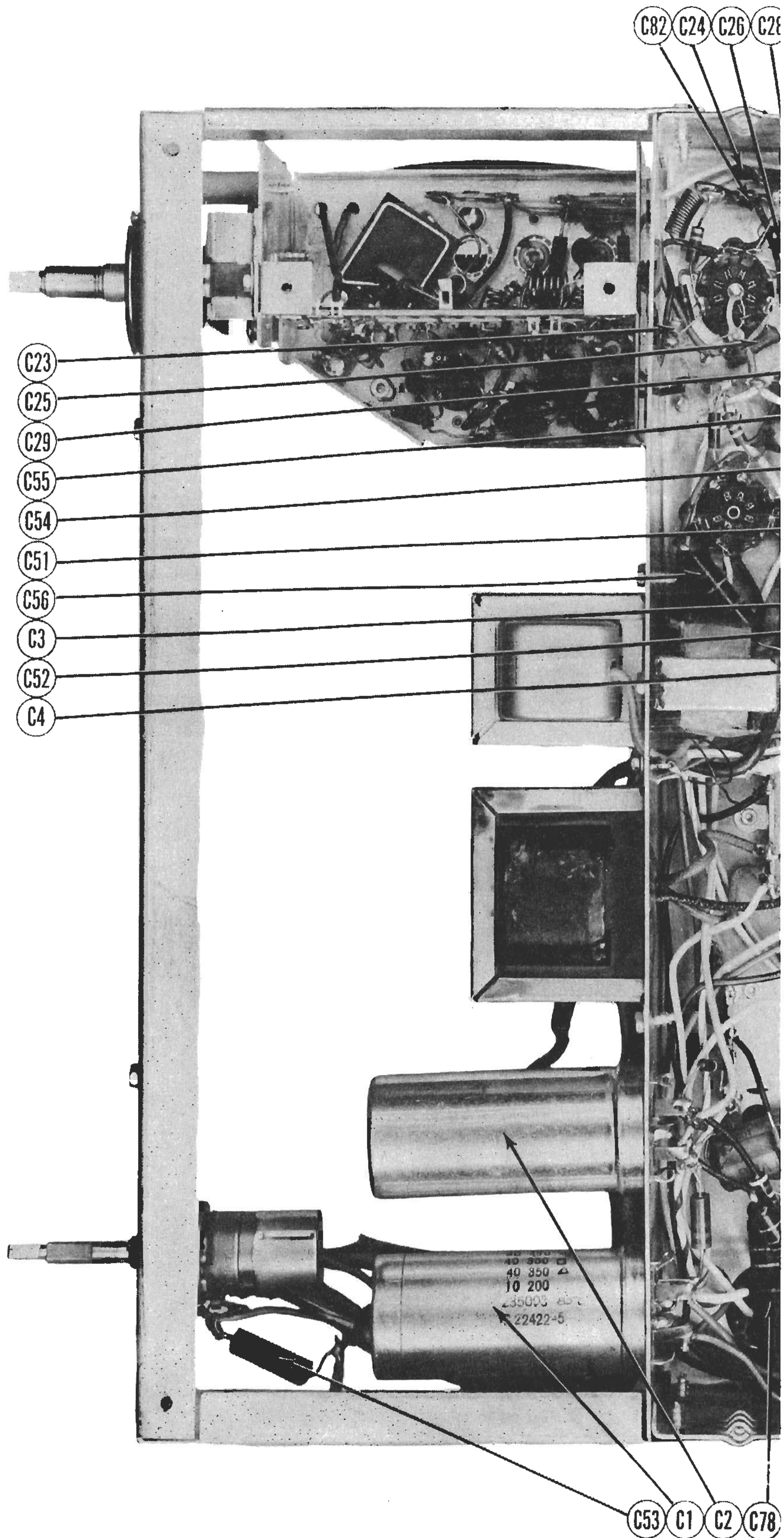
ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	ARVIN PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.135ADC	130Ω	3.3 Henries	C33087	C-2325 ③	C-2997 ③	TR-4200③	③ Drill one new mounting hole.

COILS (RF-IF)

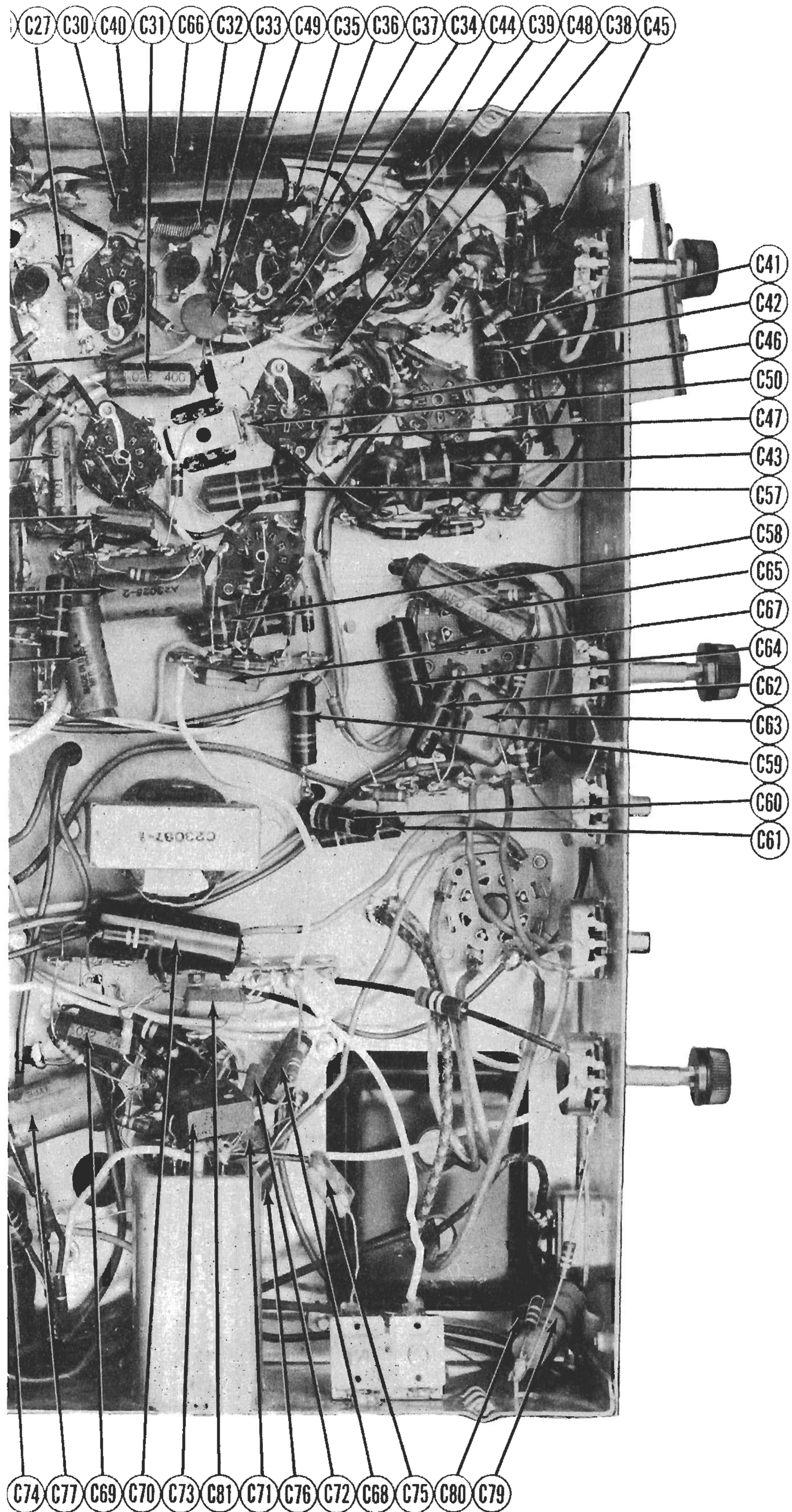
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	ARVIN PART No.	MEISSNER PART No.	
L2	Ant. Coil	0Ω	0Ω			Low-Band Part of tuner AE23054-1 High-Band Part of tuner AE23054-1
L3	Ant. Coil	0Ω	0Ω			
L4	RF Choke	.5Ω		AA21445-1		Low-Band Part of tuner AE23054-1 High-Band Part of tuner AE23054-1
L5	RF Coil	0Ω				
L6	RF Coil	0Ω				Wound on 100KΩ resistor Low-Band Part of tuner AE23054-1 High-Band Part of tuner AE23054-1
L7	RF Choke	.5Ω		AA21445-1		
L8	RF Choke	.1Ω		AA23257-1		
L9	Osc. Coil	0Ω				
L10	Osc. Coil	0Ω				
L11	Fil. Choke	0Ω		AA22334-1		
L12	Fil. Choke	0Ω		AA22334-1		
L13	Fil. Choke	0Ω		AA22334-1		
L14	1st Video IF	.1Ω		C23091-1		
L15	Fil. Choke	0Ω		A23095		
L16	2nd Video IF	.1Ω		C23091-2		
L17	3rd Video IF	.1Ω		C23091-2		
L18	Fil. Choke	0Ω		A23095		
L19	4th Video IF	.2Ω		C23092		
L20	Peaking	2Ω		C22500-6		20 microhenries, yellow identification dot
L21	Peaking	8.2Ω		C22500-9		Wound on 47KΩ resistor
L22	Peaking	8Ω		C22500-3	19-1922	250 microhenries, green identification dot
L23	Peaking	8.2Ω		C22500-9		Wound on 47KΩ resistor
L24	Peaking	8Ω		C22500-3	19-1922	250 microhenries, green identification dot
L25	Sound IF	1.2Ω		C23093		
L26	Ratio Det.					
	Trans.	6.2Ω	1.9Ω	C23094		
L27	Horiz. Osc. Trans.	125Ω	38Ω	D22563		

MISCELLANEOUS

ITEM No.	PART NAME	ARVIN PART No.	NOTES
M1	RF Tuner	AE23054-1	
M2	Tuning Capacitor	C23057	
M3	Ion Trap	C23378	
M4	Focus Magnet	C23058-1	
M5	Crystal	A23261	IN64 Video Detector
M6	Switch	A22868	AC Interlock
M7	Switch		Band Change
	Trimmer	[A23130	Horiz. Drive 10-160MMF
	Trimmer		Horiz. Range 10-160MMF
	Trimmer	[A23119	Antenna Coil High-Band 4-70MMF
	Trimmer		Antenna Coil Low-Band 4-70MMF
	Safety Glass	D23047	
	Knob	AA23022	Band Change
	Knob	A23020-1	Channel Tuning
	Knob	AA23023	Contrast
	Knob	A23021-1	Volume
	Knob	A22686-1	Vert. Hold
	Knob	A22686-2	Horiz. Hold
	Knob	A22686-3	Brightness



CHASSIS BOTTOM VIEW-(



CAPACITOR IDENTIFICATION