

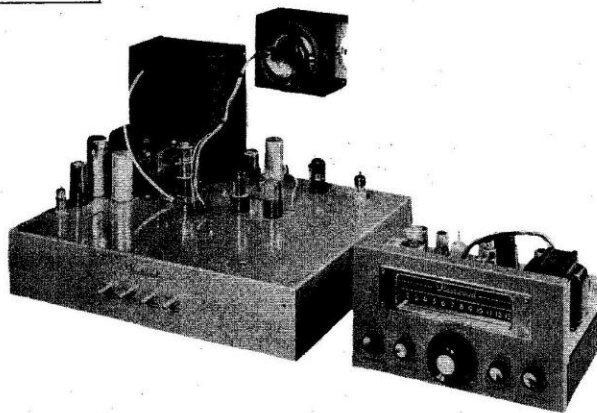
PHOTOFACT* Folder



FLEETWOOD
MODEL 800

DISASSEMBLY INSTRUCTIONS

This receiver is designed for custom installation and therefore, chassis removal is depended up on type and place of mounting employed.



FLEETWOOD MODEL 800

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustments of the VHF tuner oscillator circuit may be accomplished by removal of the channel selector and fine tuning knobs. The adjustments are accessible, one at a time, thru the small hole in the cabinet to the right of the channel selector shaft.

SERVICE ADJUSTMENT LOCATION

See tube placement chart on page 5.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

For adjustment of the horizontal oscillator, it is necessary to remove the rear cover and supply power to the chassis. Adjustment is located on top of the chassis. Set the horizontal hold control at the center of its range and adjust the horizontal oscillator slug (L27) until picture synchronizes horizontally.

SOUND IF DETECTOR BUZZ ADJUSTMENT

To eliminate sound IF detector buzz, adjust the ratio detector secondary (L23) located on top of the chassis.

FUSES

Two fuses are used. One for LV power supply protection (RF-IF Chassis), and one for LV power supply protection (Sweep Chassis) (For location see tube placement chart).

CENTERING

Centering is accomplished mechanically by means of a centering lever on the PM focusing assembly. Adjust the centering lever from side to side, and up and down until the picture is properly centered.

FLEETWOOD
MODEL 800

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

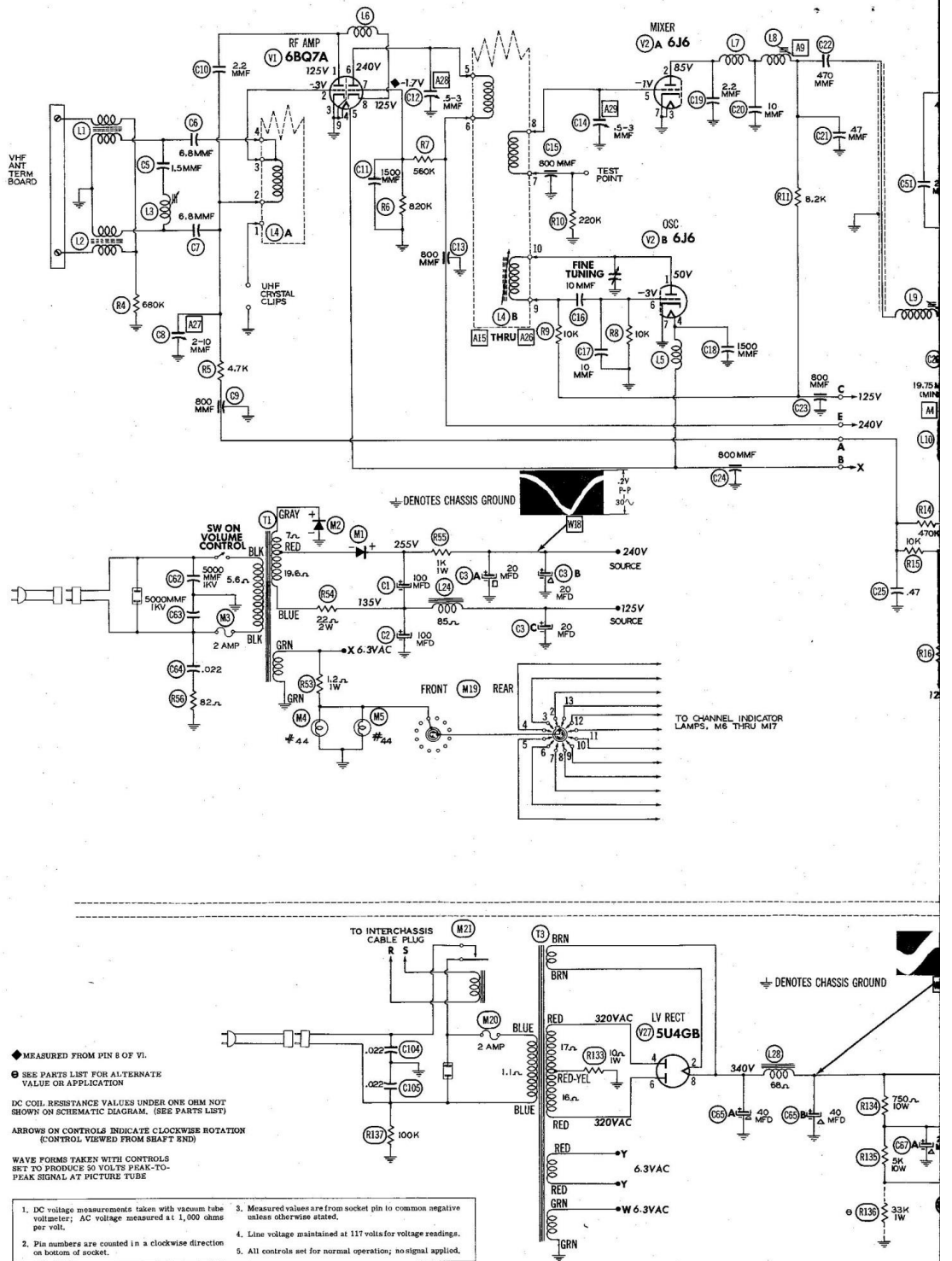
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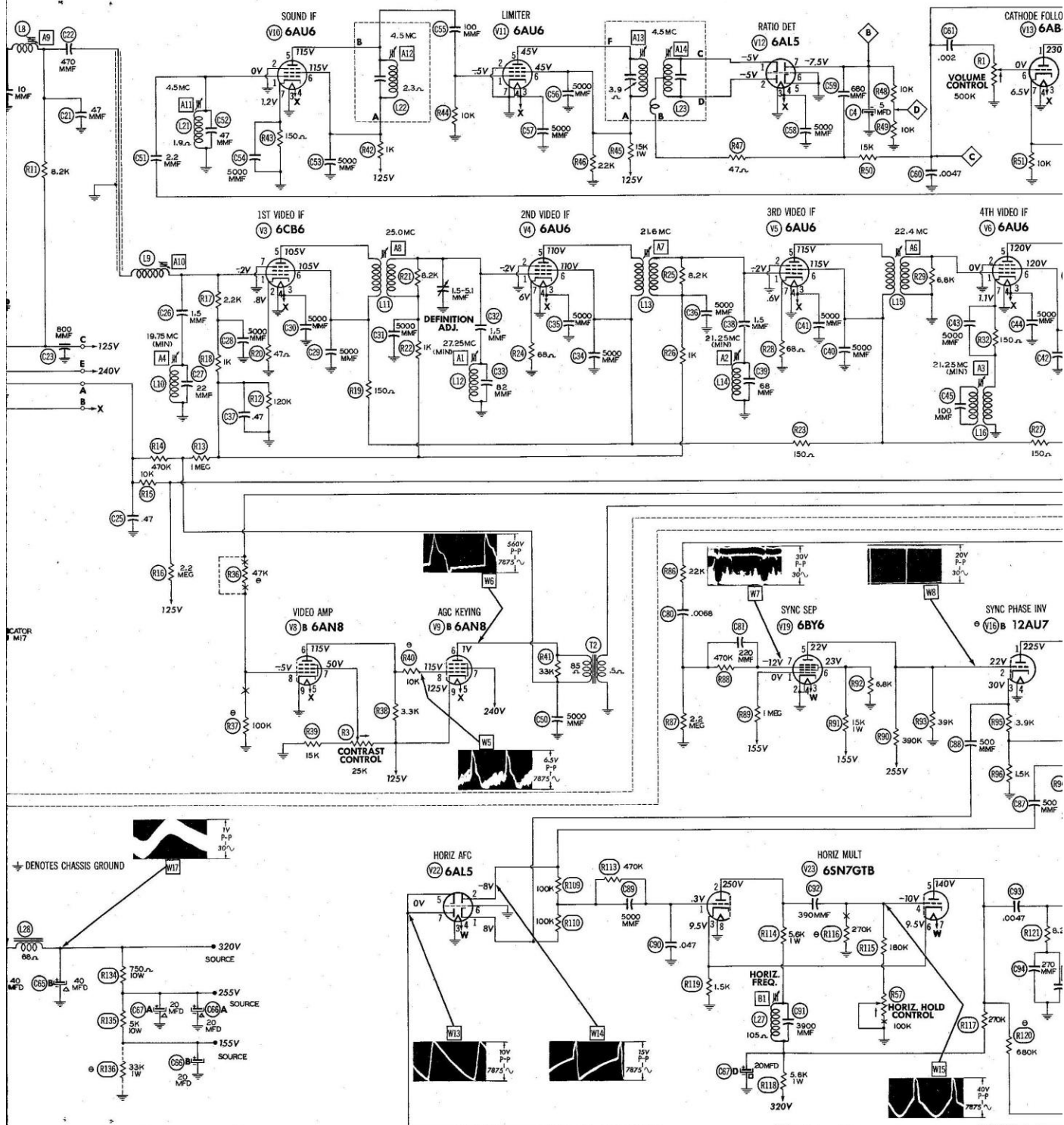
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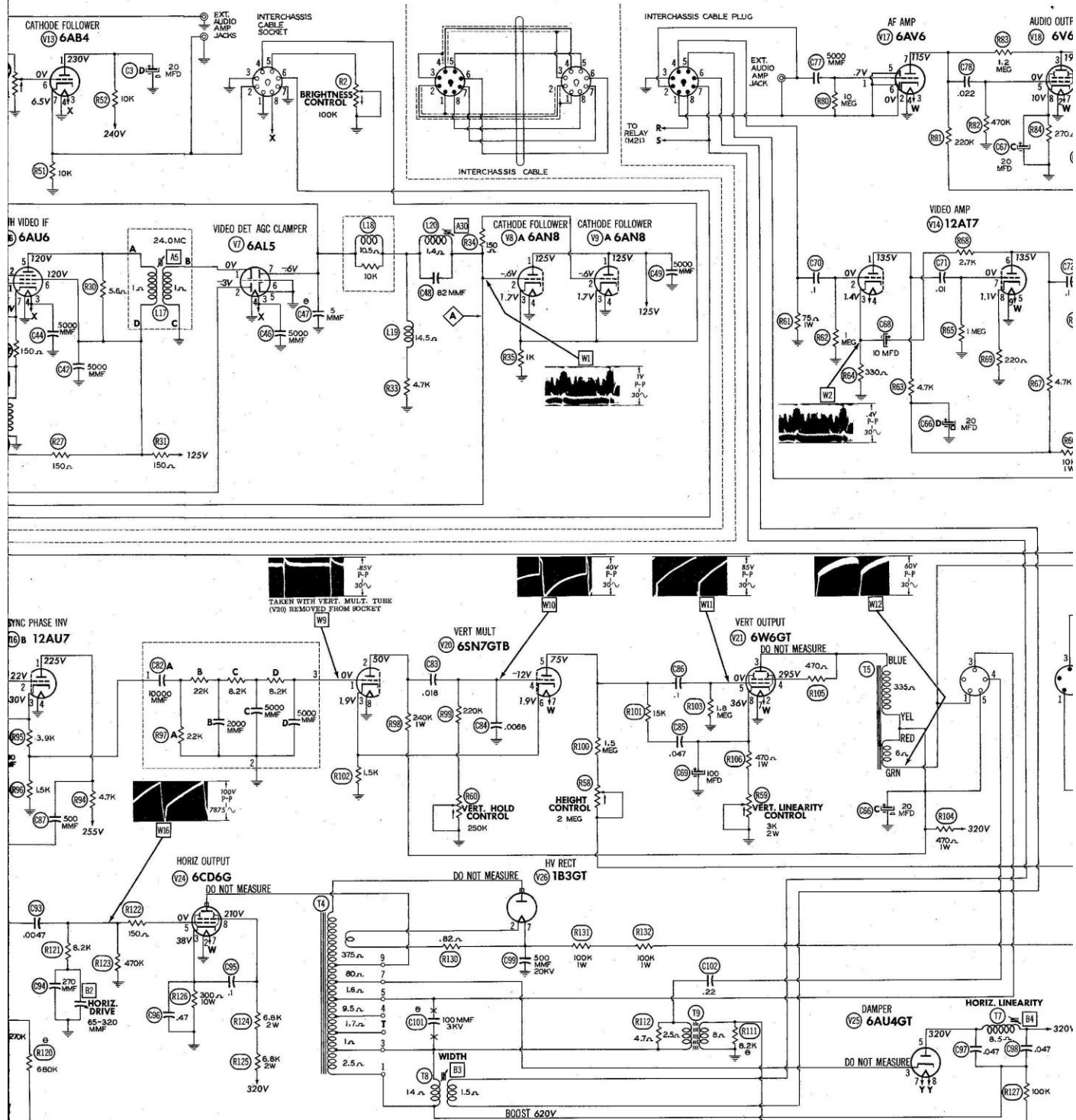
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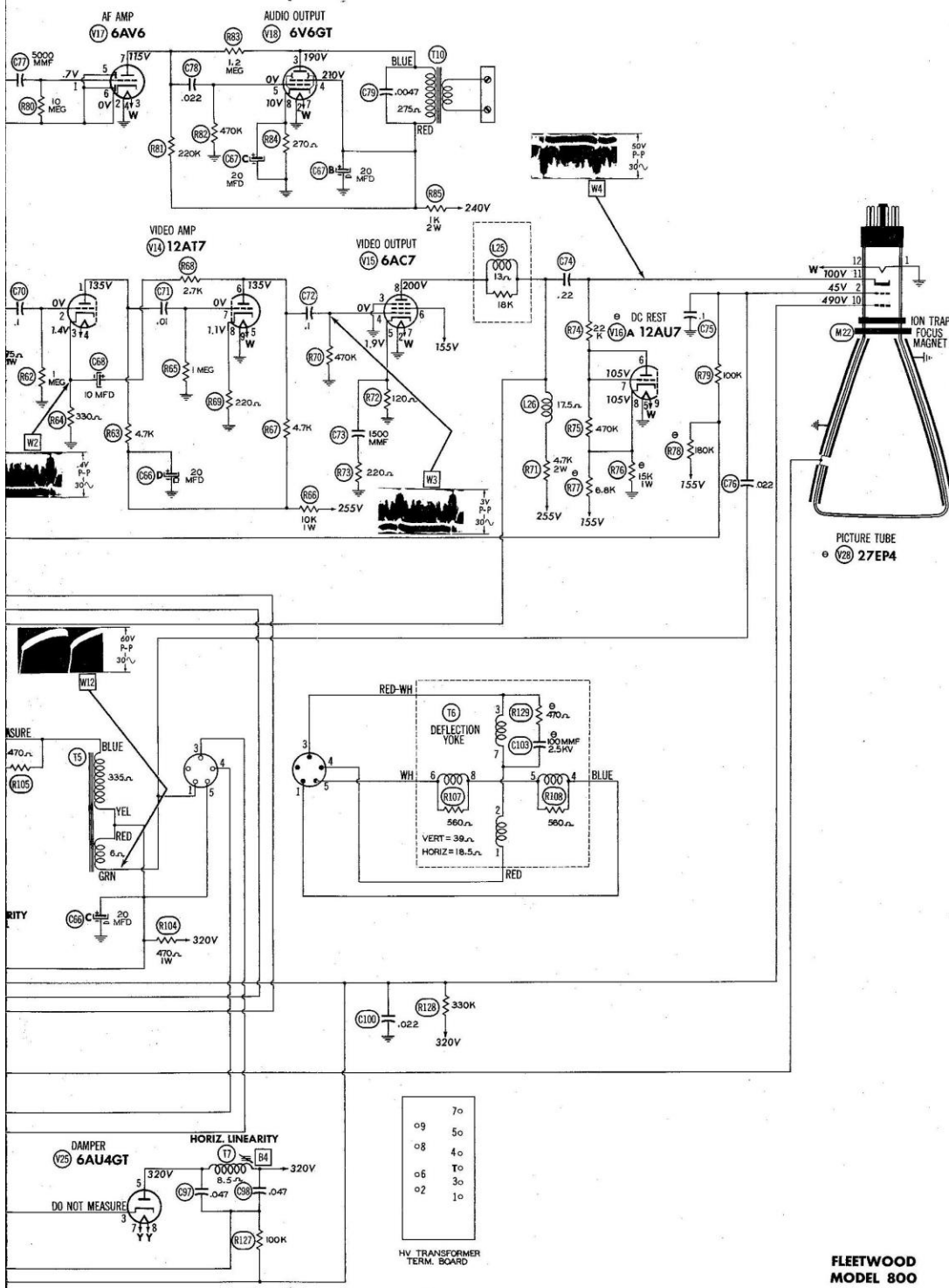
FOLDER 5



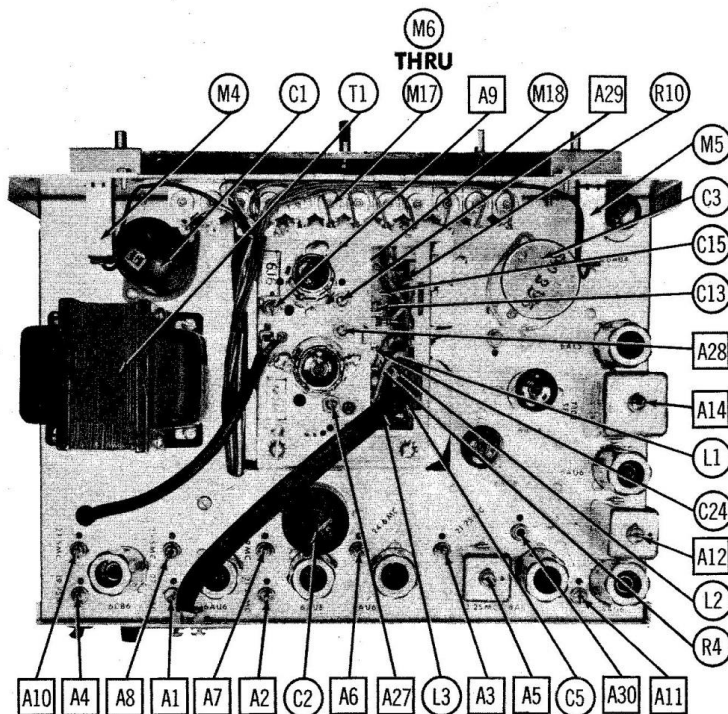




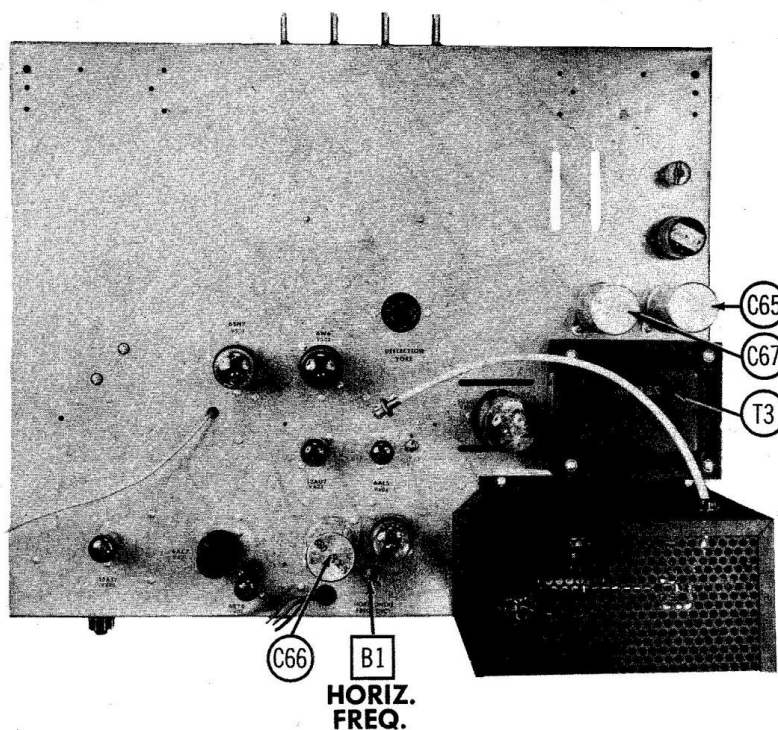
FLEETWOOD MODEL 800



**FLEETWOOD
MODEL 800**

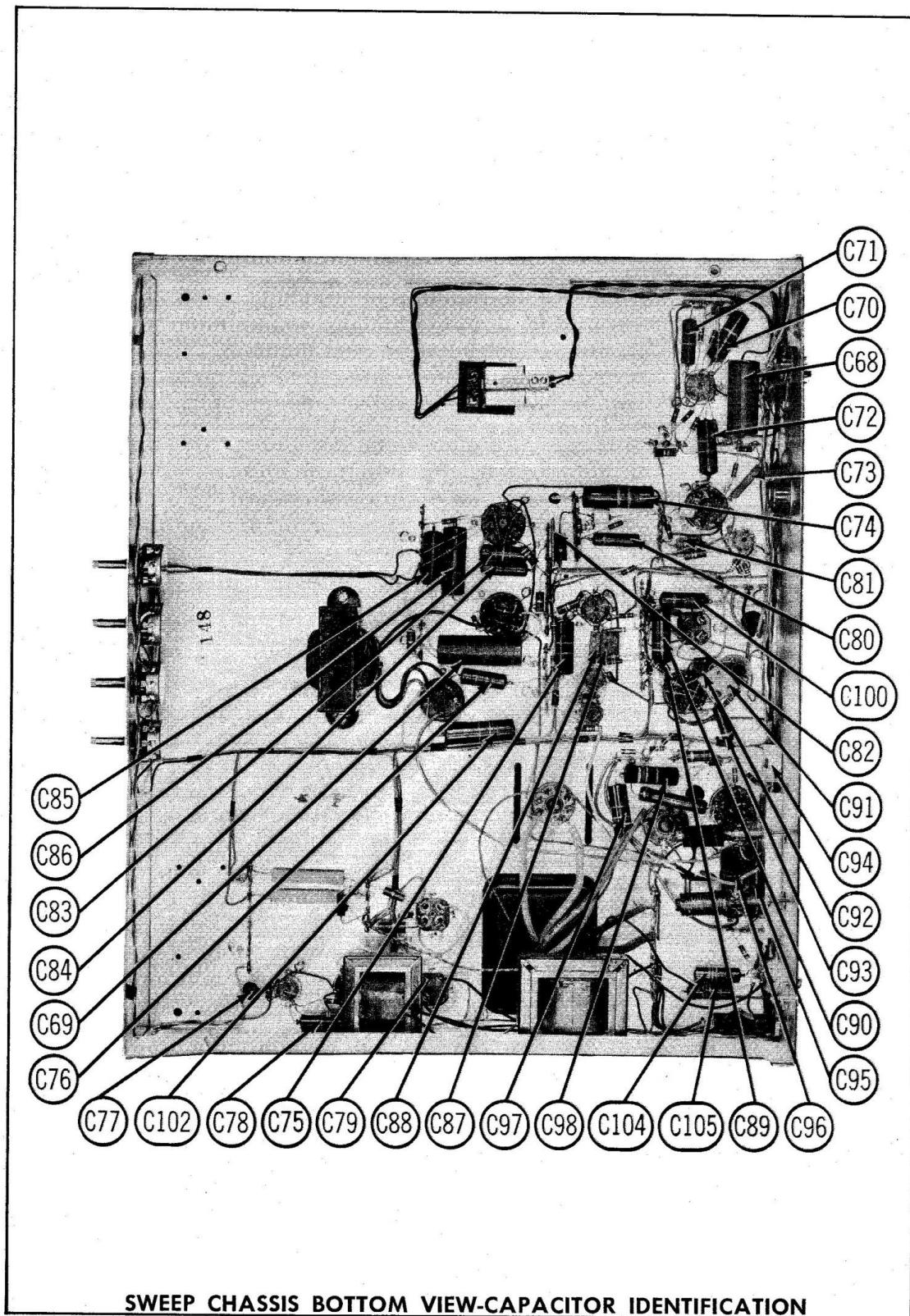


RF-IF CHASSIS-TOP VIEW

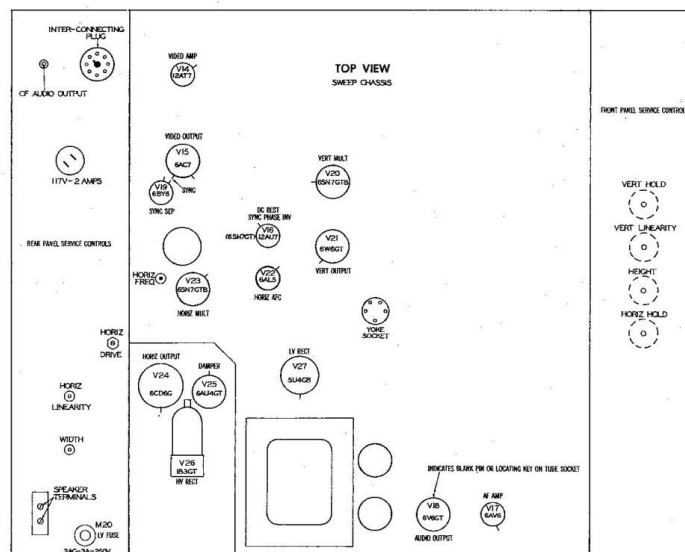
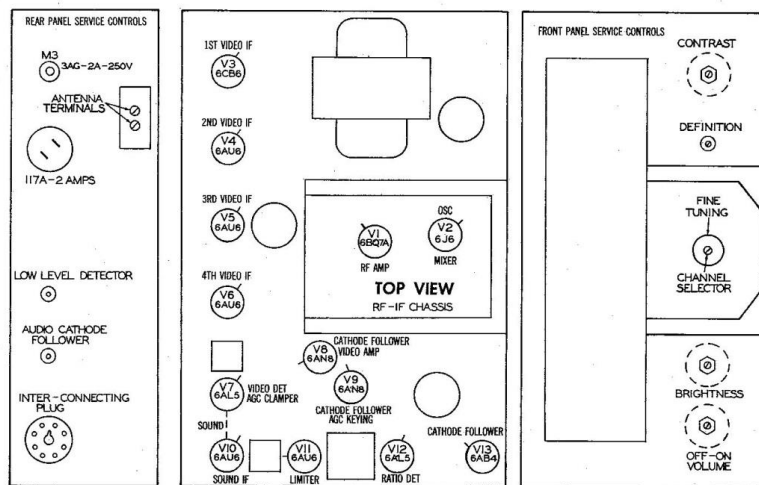


SWEEP CHASSIS-TOP VIEW

SET 311 FOLDER 5



TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

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

POWER SUPPLY FAILURE

No raster, no sound - Selenium Rectifiers (M1 & M2), V27, Fuses (M3 & M20), Relay (M21)

LOSS OF PICTURE OR SOUND

No pic, no sound, has raster - V2, V3, V4, V5, V6, V7

No pic, no sound, has snow - V1, V2, V3

No pic, has sound, has raster - V8, V9, V14, V15, V28

Has pic, no sound - V10, V11, V12, V13, V17, V18

Overloaded picture - V9

SYNC FAILURE

No vert. sync - V16, V20

No horiz. sync - V16, V22, V23

No vert. or horiz. sync - V16, V19

SWEEP FAILURE

No raster, has sound - V23, V24, V25, V26, V28

No vertical deflection - V20, V21

Poor vert. linearity or foldover - V20, V21

Poor horiz. linearity or foldover - V23, V24, V25

Narrow picture - V23, V24, V25, V26, V27

Vert. off freq. - V16, V20

Horiz. off freq. - V16, V22, V23

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

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

VIDEO IF ALIGNMENT

Remove the converter tube (V2) from its socket and replace with a 6J6 which has had pin 1 removed. This will disable the local oscillator and reduce the possibility of erroneous indications. Connect the negative lead of a 3 volt bias supply to the ungrounded side of C37. Connect the positive lead to chassis.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Direct	High side to ungrounded tube shield floating over dummy converter tube. Low side to chassis.	27.25MC	Any	DC probe to point $\odot$. Common to chassis.	A1	Adjust for MINIMUM deflection.
2. "	"	21.25MC	"	"	A2	"
3. "	"	21.25MC	"	"	A3	"
4. "	"	19.75MC	"	"	A4	"
5. "	"	24MC	"	"	A5	Adjust for maximum deflection. Attenuate generator output to maintain not more than -1.5 volts at VTVM.
6. "	"	22.4MC	"	"	A6	"
7. "	"	21.6MC	"	"	A7	"
8. "	"	25MC	"	"	A8	"

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the sweep 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. Direct	High side to ungrounded tube shield floating over dummy converter tube. Low side to chassis.	24MC (10MC Swp.)	19.75MC 21.25MC 22MC 23.7MC 25.75MC 27.25MC	Any	Vert. Amp. thru 10K Ω to point $\odot$. Low side to chassis.	A9, A10	Check for response similar to Fig. 1. Adjust A9 until dip in response curve is centered about the 23.7MC marker. If necessary, retouch A5 thru A8 to obtain desired response. Adjust A10 for maximum amplitude.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .01MFD	High side to pin 1 (grid) of 6AU6 (V10). Low side to chassis.	4.5MC (Unmod.)	Any	DC probe to point $\odot$. Common to chassis.	A11, A12, A13	Adjust for maximum deflection.
11. "	"	"	"	DC probe to point $\odot$. Common to point $\odot$.	A14	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 120% sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. .01MFD	High side to pin 1 (grid) of 6AU6 (V10). Low side to chassis.	4.5MC (450KC Swp.)	4.5MC	Any	Vert. Amp. to point $\odot$. Low side to chassis.	A11, A12, A13	Disconnect stabilizer capacitor C4. Adjust for curve of maximum amplitude and symmetry similar to Fig. 2.
11. "	"	"	"	"	Vert. Amp. to point $\odot$. Low side to chassis.	A14	Reconnect stabilizing capacitor C4. Adjust A13 so that 4.5MC marker occurs at center of crossover lines as in Fig. 3. SLIGHTLY retouch A12 for maximum amplitude and straightness of crossover lines.

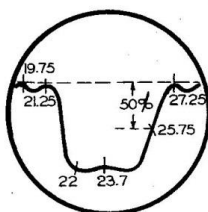


FIG. 1

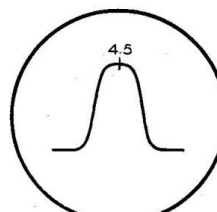


FIG. 2

ALIGNMENT INSTRUCTIONS (cont)

OSCILLATOR ALIGNMENT

Remove the dummy converter tube and replace the original 6J6 in its socket. Leave the bias connected as under "Video IF Alignment". The channel oscillator adjustment screws are reached through a hole above and slightly to the left of the channel selector shaft. The correct adjustment screw is accessible thru this hole as the channel switch is turned to each channel. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms. Set the fine tuning control to the mid-position of its range.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	207MC (10MC Swp.)	205.25MC	12	Vert. Amp. thru 10KΩ to point $\diamond$. Low side to chassis.	A15	Adjust to place sound marker in trap notch as in Fig. 4. Video marker should be at 50%.
		213MC (10MC Swp.)	209.75MC	13		A16	
		201MC (10MC Swp.)	215.75MC	11		A17	
		195MC (10MC Swp.)	189.25MC	10		A18	
		189MC (10MC Swp.)	203.75MC	9		A19	
		183MC (10MC Swp.)	183.25MC	8		A20	
		177MC (10MC Swp.)	197.75MC	7		A21	
		171MC (10MC Swp.)	187.25MC	6		A22	
		165MC (10MC Swp.)	191.75MC	5		A23	
		159MC (10MC Swp.)	181.25MC	4		A24	
		153MC (10MC Swp.)	185.75MC	3		A25	
		147MC (10MC Swp.)	175.25MC	2		A26	
		141MC (10MC Swp.)	179.75MC				
		135MC (10MC Swp.)	83.25MC				
		129MC (10MC Swp.)	87.75MC				
		123MC (10MC Swp.)	77.25MC				
		117MC (10MC Swp.)	81.75MC				
		111MC (10MC Swp.)	87.25MC				
		105MC (10MC Swp.)	71.75MC				
		99MC (10MC Swp.)	61.25MC				
		93MC (10MC Swp.)	65.75MC				
		87MC (10MC Swp.)	55.25MC				
		81MC (10MC Swp.)	59.75MC				

RF AND MIXER ALIGNMENT

Leave the bias connect as under "Video IF Alignment". Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
13. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	207MC (10MC Swp.)	205.25MC	12	Vert. Amp. to point $\diamond$. Low side to chassis.	A27, A28, A29	Adjust for maximum amplitude and MINIMUM tilt with markers in proper positions as in Fig. 4.

4.5MC TRAP ALIGNMENT

Tune in a TV station and turn the fine tuning control clockwise until 4.5MC beat appears in the picture. Adjust A30 for MINIMUM 4.5MC beat interference.

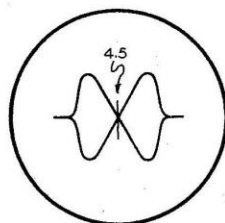


FIG. 3

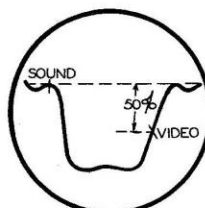


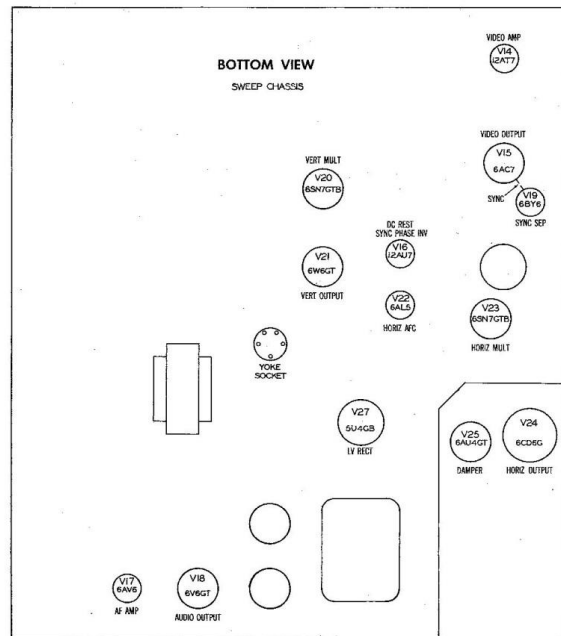
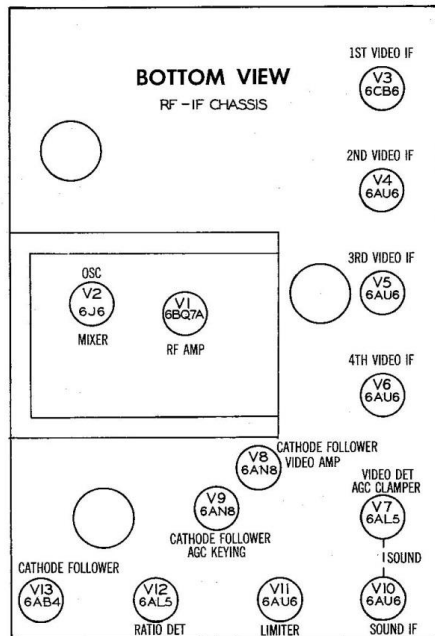
FIG. 4

RESISTANCE MEASUREMENTS

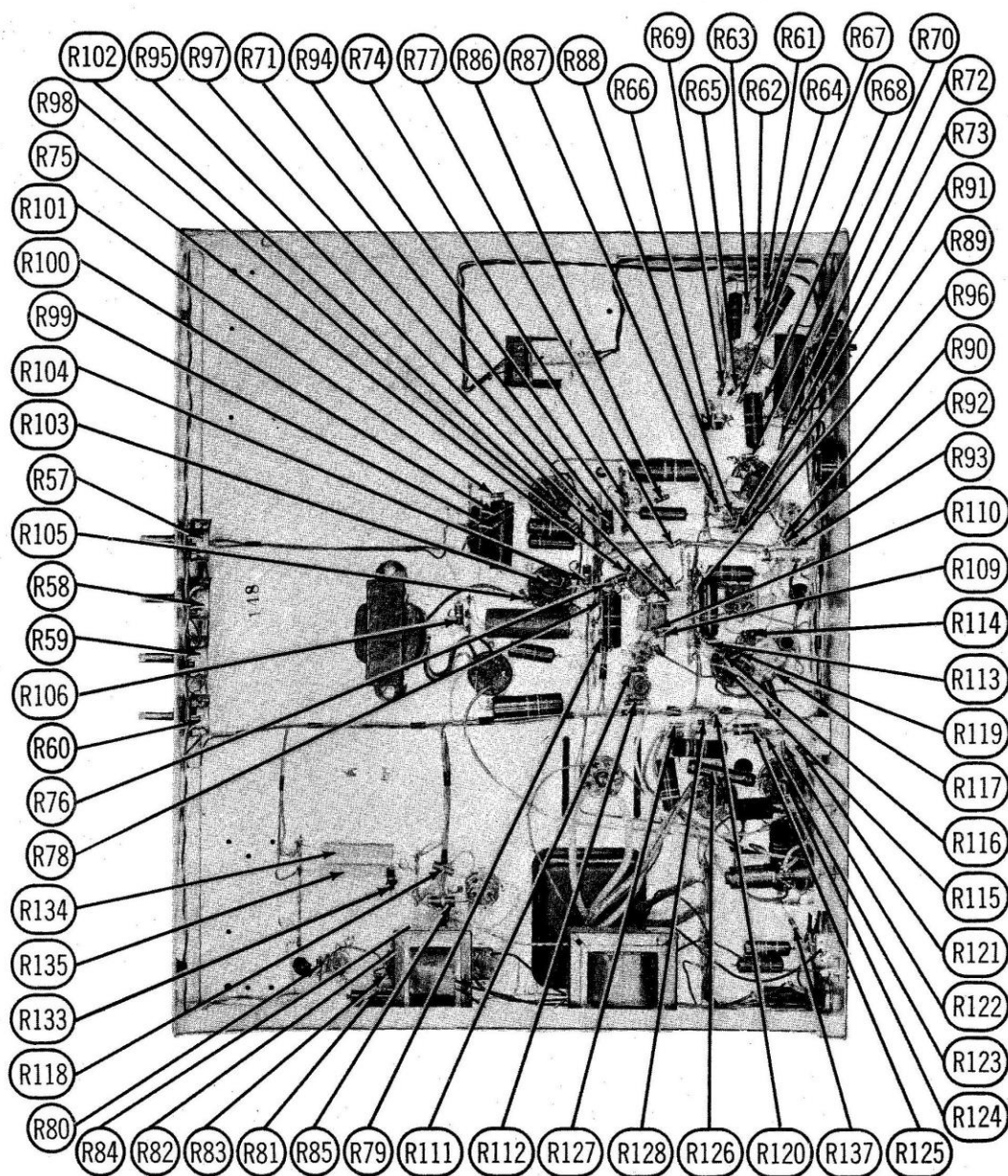
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BQ7A	INF	850KΩ	0Ω	0Ω	.1Ω	± 1KΩ	350KΩ	INF	0Ω
V 2	6J6	§ 10KΩ	§ 8.2KΩ	0Ω	.1Ω	220KΩ	10KΩ	0Ω		
V 3	6CB6	120KΩ	47Ω	.1Ω	0Ω	§ 700Ω	§ 700Ω	0Ω		
V 4	6AU6	120KΩ	0Ω	.1Ω	0Ω	§ 550Ω	§ 550Ω	68Ω		
V 5	6AU6	120KΩ	0Ω	.1Ω	0Ω	§ 400Ω	§ 400Ω	68Ω		
V 6	6AU6	.9Ω	0Ω	.1Ω	0Ω	§ 250Ω	§ 250Ω	150Ω		
V 7	6AL5	1Ω	850KΩ	.1Ω	0Ω	0Ω	0Ω	4.7KΩ		
V 8	6AN8	§ 85Ω	4.7KΩ	75Ω	0Ω	.1Ω	§ 3.3KΩ	§ 8.5KΩ	30KΩ	0Ω
V 9	6AN8	§ 85Ω	4.7KΩ	75Ω	0Ω	.1Ω	750KΩ	± 1KΩ	§ 14KΩ	§ 85Ω
V 10	6AU6	1.9Ω	0Ω	0Ω	.1Ω	§ 1.1KΩ	§ 1.1KΩ	150Ω		
V 11	6AU6	10KΩ	0Ω	.1Ω	0Ω	§ 11KΩ	§ 11KΩ	0Ω		
V 12	6AL5	INF	INF	0Ω	.1Ω	0Ω	0Ω	20KΩ		
V 13	6AB4	± 11KΩ	NC	.1Ω	0Ω	NC	200KΩ	10KΩ		
V 14	12AT7	† 16KΩ	1Meg	330Ω	.1Ω	.1Ω	† 16KΩ	1Meg	220Ω	0Ω
V 15	6AC7	0Ω	0Ω	0Ω	470KΩ	120Ω	† 5.8KΩ	.1Ω	† 5.5KΩ	
V 16	12AU7	† 5.5KΩ	† 45KΩ	5.4KΩ	0Ω	0Ω	† 470KΩ	† 470KΩ	† 11KΩ	.1Ω
V 17	6AV6	10Meg	0Ω	.1Ω	0Ω	0Ω	0Ω	† 170KΩ		
V 18	6Y6GT	TP	0Ω	† 2.4KΩ	† 1.8KΩ	470KΩ	NC	.1Ω	270Ω	
V 19	6BY6	1Meg	0Ω	.1Ω	0Ω	† 45KΩ	† 15KΩ	2.7Meg		
V 20	6SN7GTB	60KΩ	† 240KΩ	1.5KΩ	300KΩ	▲ 2.3Meg	1.5KΩ	.1Ω	0Ω	
V 21	6W6GT	NC	.1Ω	† 900Ω	† 1.4KΩ	1.8Meg	NC	0Ω	1.4KΩ	
V 22	6AL5	INF	INF	.1Ω	0Ω	8Ω	0Ω	8Ω		
V 23	6SN7GTB	INF	† 11KΩ	1.5KΩ	120KΩ	† 200KΩ	1.5KΩ	.1Ω	0Ω	
V 24	6CD6G	NC	0Ω	300Ω	NC	470KΩ	NC	.1Ω	† 14KΩ	TOP CAP ▲ 80Ω
V 25	6AU4GT	NC	NC	350KΩ	NC	† 80Ω	NC	INF	INF	
V 26	1B3GT		PINS	1-8	HAVE	INF	RESISTANCE			TOP CAP ▲ 455Ω
V 27	5U4GB	NC	15KΩ	NC	27Ω	NC	26Ω	NC	15KΩ	
V 28	27EP4A	0Ω	† 150KΩ	PIN 10 ▲ 100KΩ	PIN 11 † 500KΩ	PIN 12 .1Ω				

‡ MEASURED FROM OUTPUT OF M1.
§ MEASURED FROM OUTPUT OF C2.
† MEASURED FROM PIN 8 OF V27.

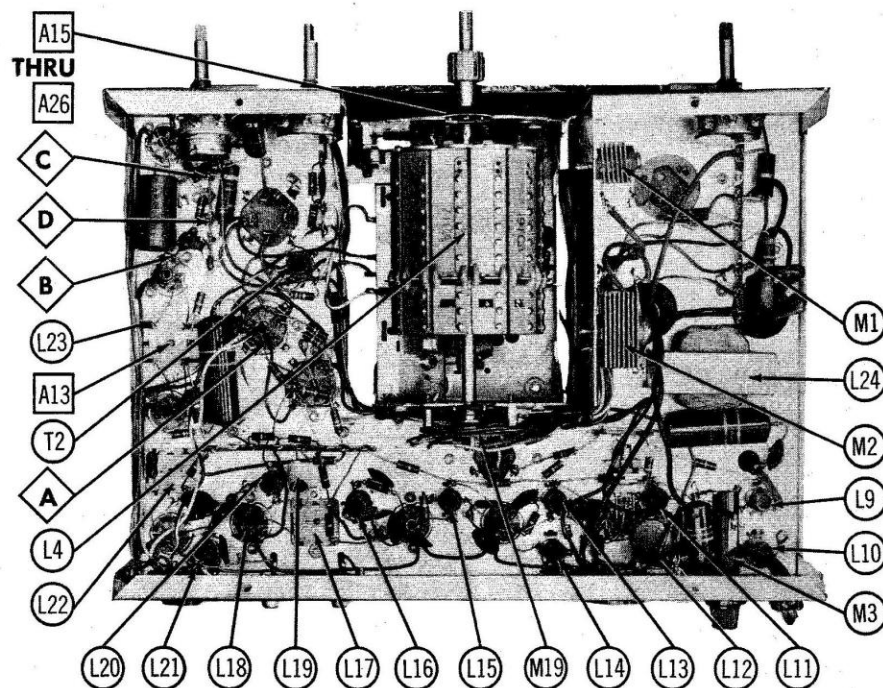
▲ MEASURED FROM PIN 3 OF V25.
TP-TIE POINT.
NC-NO CONNECTION.



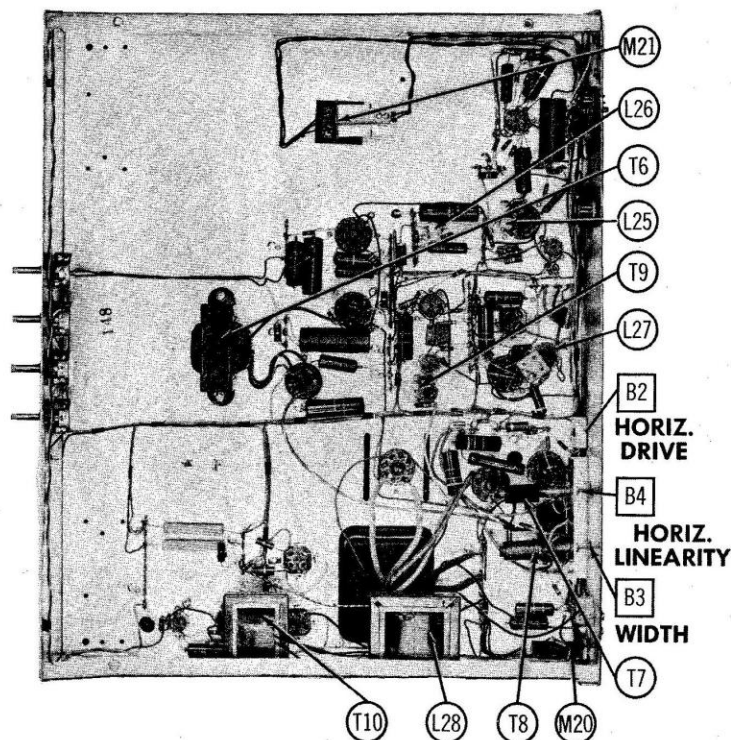
TUBE PLACEMENT CHART



SWEEP CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION



RF-IF CHASSIS BOTTOM VIEW-TRANS., INDUCTOR & ALIGNMENT IDENT.



SWEEP CHASSIS BOTTOM VIEW-TRANS., INDUCTOR & ALIGNMENT IDENT.

PARTS LIST AND DESCRIPTIONS **RF-IF CHASSIS** **TUBES (GENERAL ELECTRIC, SYLVANIA)**

ITEM No.	USE	REPLACEMENT DATA		NOTES
		FLEETWOOD PART No.	STANDARD REPLACEMENT	
V1	RF Amplifier	6BQ7A	6BQ7A	
V2	Mixer-Oscillator	6J7	6J7	
V3	1st. Video IF Amplifier	6CB6	6CB6	
V4	2nd. Video IF Amplifier	6AU6	6AU6	
V5	3rd. Video IF Amplifier	6AU6	6AU6	
V6	4th. Video IF Amplifier	6AU6	6AU6	
V7	Video Detector-AGC Rectifier	6AL5	6AL5	
V8	Cathode Follower-Video Amplifier	6AN8	6AN8	
V9	Cathode Follower-AGC Keying	6AN8	6AN8	
V10	Sound IF Amplifier	6AU6	6AU6	
V11	Limiter	6AU6	6AU6	
V12	Ratio Detector	6AL5	6AL5	
V13	Cathode Follower	6AB4	6AB4	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	FLEETWOOD PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	100	150		AFH1-21	XA003	FP116	TM-100-150	S-090	TVL-1423
C2	100	150		AFH1-21	XA003	FP116	TM-100-150	S-090	TVL-1423
C3A	200	450		AFH4-14	DO13	FP444	TM-Q20-450	Q-040	TVL-4763
B	20	450							
C	20	450							
D	20	450							
C4	5	50		PRS150V4	BR550	TC30	TD-4-50	MMT-0505	TVA-1203

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA							NOTES	
	CAP.	VOLT	FLEETWOOD PART No.	AEROVOX PART No.	CENTRALAS PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.		
C5	1.5	200		NP0-SIL.5	TCZ-IR5	Z004	NP0A-IR5	ZT-5515	5TCCB-V15		
C6	6.8			NP0-D18.8	TCZ-6R8	Z013	NP0A-6R8	ZT-5568	5TCCB-V68		
C7	6.8			NP0-D18.8	TCZ-6R8	Z013	NP0A-6R8	ZT-5568	5TCCB-V68		
C8	2-10					829-10					
C9	800										
C10	2.2				NP0-SIL.2	TCZ-2R2	Z006	NP0A-2R2		5TCCB-V22	
C11	1500				BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C12	5-3					829-3		3115-01-0R5	CT565A		
C13	800										
C14	5-3					829-3		3115-01-0R5	CT565A		
C15	800										
C16	10										
C17	10										
C18	1500				BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C19	2.2				NP0-SIL.2	TCZ-2R2	Z006	NP0A-2R2		5TCCB-V22	
C20	10				N750-D10	TCN-10	N018	N750A-100	NT-541	5TCU-Q1	
C21	47				N750-D147	TCN-47	N033	N750K-470	NT-5447	5TCU-Q47	
C22	470				BPD-00047	DD-471	K060	831-471	UC-5347	5GA-T47	
C23	800										
C24	800										
C25	.47	200		P288N-47	TCZ-IR5	CUB2P47	NP0A-IR5	PT4047	2TM-P47		
C26	1.5			NP0-SIL.5	TCZ-IR5	T204	NP0A-IR5	ZT-5515	5TCCB-V15		
C27	22			NP0-D122	TCZ-22	Z024	NP0K-220	ZT-5422	5TCC-Q22		
C28	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C29	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C30	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C31	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C32	1.5			NP0-SIL.5	TCZ-IR5	T204	NP0A-IR5	ZT-5515	5TCCB-V15		
C33	82			1469-000082	TCZ-82	5R5Q82	NP0-337-820		MS-482		
C34	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C35	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C36	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C37	.47			P288N-47	TCZ-IR5	CUB2P47	NP0A-IR5	PT4047	2TM-P47		
C38	1.5			NP0-SIL.5	TCZ-IR5	T204	NP0A-IR5	ZT-5515	5TCCB-V15		
C39	68			NP0-D168	TCZ-68	Z038	NP0-337-680		5TCC-Q68		
C40	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C41	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C42	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C43	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C44	5000			BPD-005	DD-502	K080	811-005	DC-525	5HK-D5		
C45	100		NP0-D100	TCZ-100	T230	NP0-337-101	ZT-531	5TCC-T1			
C46	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C47	5		S15	D6-050	TP06	GP1K-050	ZT-555	5GA-V5			
C48	82		1469-000082	D6-820	5R5Q82	801-820		MS-482			
C49	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C50	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C51	2.2		NP0-SIL.2	TCZ-2R2	T205	NP0A-2R2		5TCCB-V22			
C52	47		NP0-D147	TCZ-47	Z033	NP0-338-470	ZT-5447	5TCC-Q47			
C53	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C54	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C55	100		S100	D6-101	TP34	GP1K-101	UC-531	5GA-T1			
C56	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C57	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C58	5000		BPD-005	DD-502	K080	811-005	DC-525	5HK-D5			
C59	880		S1880	D6-881	TP50	GP2K-881	UC-5368	5GA-T68			
C60	.0047	800	S14700	D6-472	CUB6D47	GP2-333-472	PT6247	6TM-D47			
C61	.022	600	BPD-02	DF-203	CUB6S22	817-02	PT6122	6TM-S22			
C62	5000	1000	HVD-15-5000	DD-502	VD47	IR5KV-472		10HK-D47			
C63	5000	1000	HVD-15-5000	DD-502	VD47	IR5KV-472		10HK-D47			
C64	.022	600	BPD-02	DF-203	CUB6S22	817-02	PT6122	6TM-S22			

Note 1. Some versions use 5.6MMF in this application.

**FLEETWOOD
MODEL 800**

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	FLEETWOOD PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1A	500KΩ		1092	AB-60	A47-500K-Z	Q13-133	U-48	Volume
B	Shaft		Not Req.	AK-3	FS-3	Not Req.	Not Req.	Attach to R1A.
C	Switch		Not Req.	KB-1	SWE-12	76-1	US-26	Attach to R1A.
R2A	100KΩ		1109	B-40	A47-100K-S	Q11-128	U-41	Brightness
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R2A.
R3A	25KΩ		1086	B-26	A47-25K-S	Q11-120	U-29	Contrast
B	Shaft		Not Req.	Not Req.	FS-3	Not Req.	Not Req.	Attach to R3A.

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		NOTES	ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	FLEETWOOD PART No.	IRC PART No.			OHMS	WATT	FLEETWOOD PART No.	IRC PART No.	
R4	800KΩ			BTS-4700		R31	150Ω		BTS-150		
R5	4700Ω			BTS-820K		R32	150Ω		BTS-150		
R6	820KΩ			BTS-500K		R33	4700Ω		BTS-4700		
R7	560KΩ					R34	150Ω		BTS-150		
R8	10KΩ					R35	1000Ω		BTS-1000		
R9	10KΩ					R36	47KΩ		BTS-47K		Note 1
R10	220KΩ					R37	100KΩ		BTS-100K		
R11	8200Ω					R38	3300Ω		BTS-3300		
R12	120KΩ			BTS-120K		R39	15KΩ		BTS-15K		
R13	1Meg			BTS-1Meg		R40	10KΩ		BTS-10K		Note 2
R14	470KΩ			BTS-470K		R41	33KΩ		BTS-33K		
R15	10KΩ			BTS-10K		R42	1000Ω		BTS-1000		
R16	2.2Meg			BTS-2.2Meg		R43	150Ω		BTS-150		
R17	2200Ω					R44	10KΩ		BTS-10K		
R18	1000Ω			BTS-1000		R45	15KΩ		BTA-15K		
R19	150Ω			BTS-150		R46	22KΩ		BTS-22K		
R20	47Ω			BTS-47		R47	47Ω		BTS-47		
R21	8200Ω					R48	10KΩ		BTS-10K		
R22	1000Ω			BTS-1000		R49	10KΩ		BTS-10K		
R23	150Ω			BTS-150		R50	15KΩ		BTS-15K		
R24	68Ω			BTS-68		R51	10KΩ		BTS-10K		
R25	8200Ω					R52	10KΩ		BTS-10K		
R26	1000Ω			BTS-1000		R53	1.2Ω		BW1-1.2		
R27	150Ω			BTS-150		R54	22Ω		BTA-1000		
R28	68Ω			BTS-68		R55	1000Ω		BTS-82		
R29	6800Ω					R56	82Ω				
R30	5600Ω										

Note 1. Not used in some versions.
Note 2. Some versions use a 47KΩ 1/2W resistor in this application.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA					
	PRI.	SEC. 1	SEC. 2	SEC. 3	FLEETWOOD PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T1	117VAC 65A	130VAC ② .098A Tap ③ 97VAC ④ .07A	6.3VAC ⑤ 5.1A		1043B					

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						
		FLEETWOOD PART No.	Haldorson PART No.	Merit PART No.	RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.
T2	AGC Keyer Trans. Pri. (1.04-12MH) Sec. (8-33MH)	1085						

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	FLEETWOOD PART No.	MEISSNER PART No.	Merit PART No.	MILLER PART No.	
L1	Ant. Matching Trans.	0Ω	0Ω					
L2	Ant. Matching Trans.	0Ω	0Ω					
L3	IF Trap	0Ω						
L4	Ant., RF, Mixer Grid & Osc. Coils	0Ω						
L5	Fill. Choke	0Ω						
L6	Neut. Coil	0Ω						
L7	RF Coil	0Ω						
L8	Conv. Plate	.8Ω						
L9	1st. Video IF	.2Ω		1200	17-1063	TV-112	6249 *	
L10	18.75MC Trap	.2Ω		1203	20-1021			
L11	2nd. Video IF	.9Ω		1104	17-1062	TV-116	6249	
L12	27.25MC Trap	0Ω		1201	20-1006			
L13	3rd. Video IF	.9Ω		1164	17-1066	TV-116	6249	
L14	21.25MC Trap	0Ω		1202	20-1021	TV-150		
L15	4th. Video IF	.9Ω		1164	17-1064	TV-116	6249	
L16	Cathode Trap	0Ω		1161	20-1021	TV-150	6247	
L17	8th. Video IF	1Ω		1160	17-1063			
L18	Series Peaking Coil	10.5Ω		1204	19-3160		6120	150 Microhenries, wound on 10KΩ resistor
L19	Shunt Peaking Coil	14.5Ω		1039	19-3300		6132	315 Microhenries
L20	4.5MC Trap	1.4Ω		1042	20-1004	TV-151	1469	
L21	1st. Sound IF	1.9Ω		1079	20-1004	TV-151	1469	
L22	2nd. Sound IF	2.3Ω		1078	16-3445 *	TV-113 *	6203 *	
L23	Ratio Detector	3.3Ω	.6Ω	956	17-1033	TV-110	1498	Tertiary winding -.3Ω

* Use one winding only.
* Parallel with 10KΩ resistor.
* Use one winding only and use adaptor plate.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 CY)	FLEETWOOD PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.
L24	.098ADC	85Ω	2.1HY	1044B	C5040	C2994	C2327	28C41

PARTS LIST AND DESCRIPTIONS SELENIUM RECT

ITEM No.	RATING		REPLACEMENT DATA		
	CURRENT		FLEETWOOD PART No.	FEDERAL PART No.	INTERNATIONAL PART No.
M1	.017ADC			1263A	RS050
M2	.098ADC			1014A	BR5100

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA		LITTELFUSE PART No.
			FUSE	HOLDER	
M3	3AG	2A 250V			312002. (3AG 2A)

MISCELLANEOUS

ITEM No.	PART NAME	FLEETWOOD PART No.	NOTES
M4	Dial Light		#44
M5	Dial Light		#44
M6	Channel Light		#44 - Channel 2
M7	Channel Light		#44 - Channel 3
M8	Channel Light		#44 - Channel 4
M9	Channel Light		#44 - Channel 5
M10	Channel Light		#44 - Channel 6
M11	Channel Light		#44 - Channel 7
M12	Channel Light		#44 - Channel 8
M13	Channel Light		#44 - Channel 9
M14	Channel Light		#44 - Channel 10
M15	Channel Light		#44 - Channel 11
M16	Channel Light		#44 - Channel 12
M17	Channel Light		#44 - Channel 13
M18	Tuner	1153	
M19	Switch	5M11	Channel light selector Definition (1.5-5.1MMF)

SWEEP CH TUBES (GENERAL ELECTRIC)

ITEM No.	USE	REPLACEMENT DATA		
		FLEETWOOD PART No.	STANDARD REPLACEMENT	
V14	Video Amplifier	12A7T	12A7T	
V15	Video Output	6AC7	6AC7	
V16	DC Restorer-Sync Phase Inverter	12A7T	12A7T	
V17	AF Amplifier	6AV6	6AV6	
V18	Audio Output	6V6GT	6V6GT	
V19	Sync Separator	6BY6	6BY6	
V20	Vertical Mult.	6SN7GTB	6SN7GTB	
V21	Vertical Output	6W6GT	6W6GT	
V22	Horiz. AFC	6AL5	6AL5	
V23	Horiz. Mult.	6SN7GTB	6SN7GTB	
V24	Horiz. Output	6CD6G	6CD6G	
V25	Damper	6AU4GT	6AU4GT	
V26	HV Rectifier	1B5GT	1B5GT	
V27	LV Rectifier	5U4GB	5U4GB	

CATHODE-RAY TU

ITEM No.	REPLACEMENT DATA			
	FLEETWOOD PART No.	CBS PART No.	GENERAL ELECTRIC PART No.	SYLVANIA PART No.
V28	27EP4 ① 27RP4 ② 24CP4A ③ 24TP4 ④ 21AMP4 21ACP4A ①	27EP4 ① 27RP4 ② 24CP4A ③ 24TP4 ④ 21AMP4 21ACP4A ①	27EP4 ① 27RP4 ② 24CP4A ③ 24TP4 ④ 21AMP4 21ACP4A ①	27EP4 ② ③ 27RP4 ③ ④ 24CP4A ② 24TP4A ② 21AMP4A ②

ELECTROLYTIC CAPA

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT.	FLEETWOOD PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.
C65A	.40	475		AFH2-72	B053
C66A	.20	450		AFH4-14	D013
C	.20	450			
D	.20	450			
C67A	.20	450		AFH4-87	D052
B	.20	450			
C	.20	25			
C68	10	450		PRS450V10	BR1045
C69	100	50		PRS50V10	BRH501

FIXED CA

Capacity values given in the rating
Capacitors, and in mmfd. for Mica

ITEM No.	RATING		REPLACEMENT DATA			
	CAP.	VOLT.	FLEETWOOD PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.
C70	.1	400		P488N-1	DF-104	CUB4P
C71	.01	600		BPD-01	DF-103	CUB8S
C72	.1	400		P488N-1	DF-104	CUB4P
C73	1500	500		SI1500	DF-152	1W5D15
C74	.22	400		P488N-22		CUB4P
C75	.1	400		P488N-1	DF-104	CUB4P
C76	.022	600		BPD-02	DF-203	CUB8S
C77	5000			BPD-005	DD-503	K080
C78	.022	600		BPD-02	81T-02	CUB8S
C79	.0047	600		SI4700	DF-472	CUB8D
C80	.0068	600		SI5800	DF-682	CUB8D
C81	220	500		SI220	DF-221	5W522

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							
		FLEETWOOD PART No.	Halldorsen PART No.	Merit PART No.	RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T4	Horiz. Output Trans.	1082	FB419 *	HVO-36 *	235T1 *	X094 *	A-8253 ① *	FLY-16 *	D-50 *
T5	Vert. Output Trans.		Z1900 ②	A-2823		V307	A-8142	26S72	A-108X
T6A	Yoke (90°) Horiz. (12MH)		DF806 ③	MDP-91 ④	237D1 ⑤	Y90F12/47 ⑥	DY-13A ④	Y-14 ③	Y-40-1 ④
T7	Vert. (40MH)								
T7	Horiz. Lin. Coil (1.4-11MH)	1134	RF800 ⑤	MWC-6 ⑤	213R1	201R15	WC-8	WC-22	WC-12 ⑦
T8	Width Coil (3.75-22.5MH) With AGC Sec. (3-12MH)								
T9	Horiz. AFC Trans. Pri. (.14-71MH) Sec. (.79-2.85MH)	1037 849							

- ① Drill new mounting hole(s).
 ② Use 8 to 1 turns ratio.
 ③ Connect horiz. damping network to terminals #3 & #7. Use original network if necessary.
 ④ Use original horiz. damping network if necessary.
 ⑤ Enlarge mounting hole.
 ⑥ Use terminals #3 & #4.
 ⑦ Use red & blue terminals.

* HORIZONTAL OUTPUT TRANSFORMER CONNECTION DATA

Use Original Width Coil Unless Replacement Type is Listed

	ORIGINAL TERMINAL CONNECTIONS	Halldorsen Replacement Connections	Merit Replacement Connections	RCA Replacement Connections	Ram Replacement Connections	Stancor Replacement Connections	Thordarson Replacement Connections	Triad Replacement Connections
	9	9	9	9	9	8	9	9
	7	7	7	7	7	1	7	7
	5	5	5	5	5	2	5	5
	3	3	3	3	3	3	3	3
	1	1	1	1	1	4	1	1
Connect Width Coil Across	3 & 1	3 & 1	3 & 1	3 & 1	3 & 1	6 & 7	3 & 1	3 & 1
Special Notes						③		

③ Ground term #6.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA						NOTES
		FLEETWOOD PART No.	Halldorsen PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T10	7.7KΩ 3.4Ω	857	Z1003	A3020	A3849	24561	S-9Z	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	FLEETWOOD PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L25	Series Peaking Coil	13Ω		1217	19-4201 A		6154 A	228 Microhenries, wound on 18KΩ resistor
L26	Shunt Peaking Coil	17.5Ω		1216	19-4400		6136	430 Microhenries

A Parallel with 18KΩ resistor.

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.	REPLACEMENT DATA						NOTES
		FLEETWOOD PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	RCA TYPE No.	Ram PART No.	
L27	105Ω	994	19-1576	TV-163	6210			HS-5

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT)	FLEETWOOD PART No.	Halldorsen PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.
L28	.270ADC	68Ω	3.2HY	1056		C5037	C2996	C2334 ①

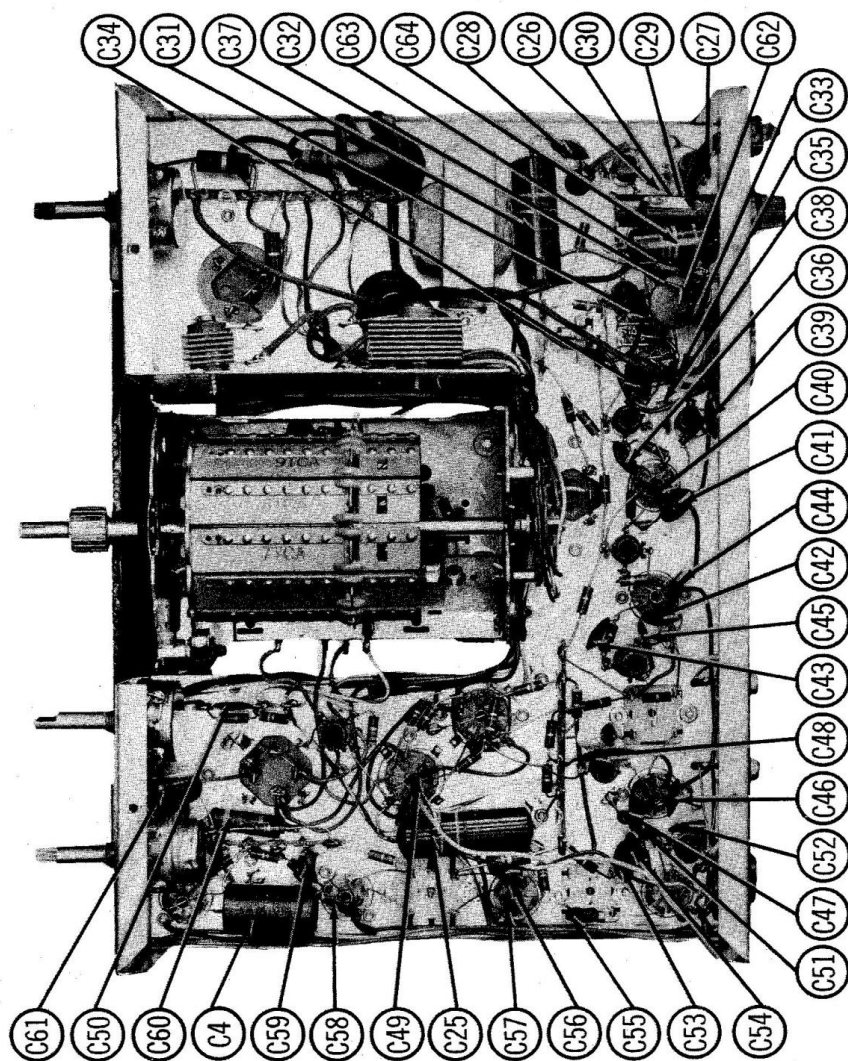
① Drill one new mounting hole.

FUSES

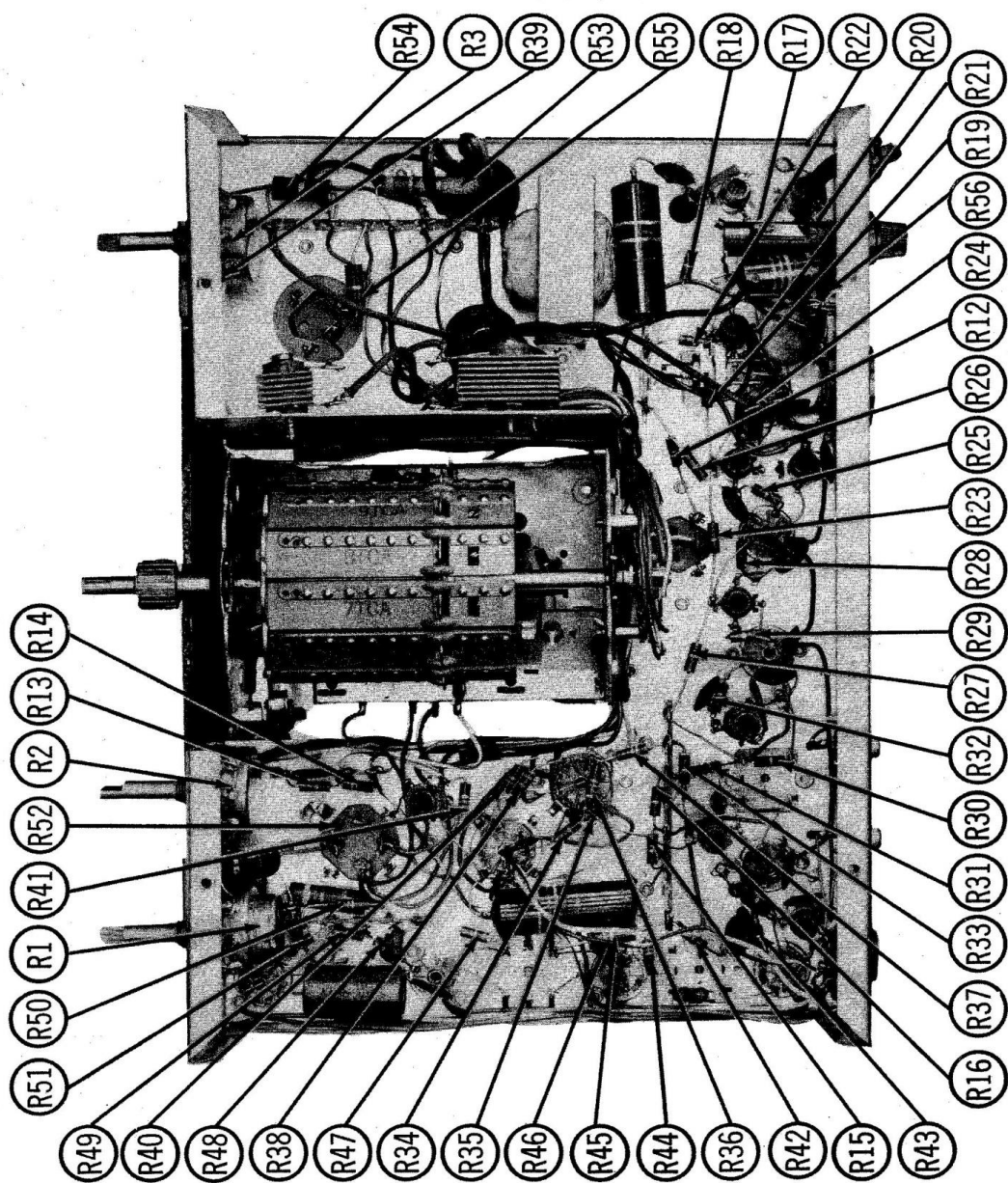
ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			FLEETWOOD PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M20	3AG	3A 250V			312003. (3AG 3A)	342001	AGC 3	HKP

MISCELLANEOUS

ITEM No.	PART NAME	FLEETWOOD PART No.	NOTES
M21	Relay	1021-UL	On-off (power) deflection chassis
M22	Focus Magnet	82640	Includes centering device
B2	Trimmer Cap.	1186	Horiz. Drive (65-320MMF)



RF-IF CHASSIS-BOTTOM VIEW-CAPACITOR IDENTIFICATION



RF-IF CHASSIS-BOTTOM VIEW-RESISTOR IDENTIFICATION

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

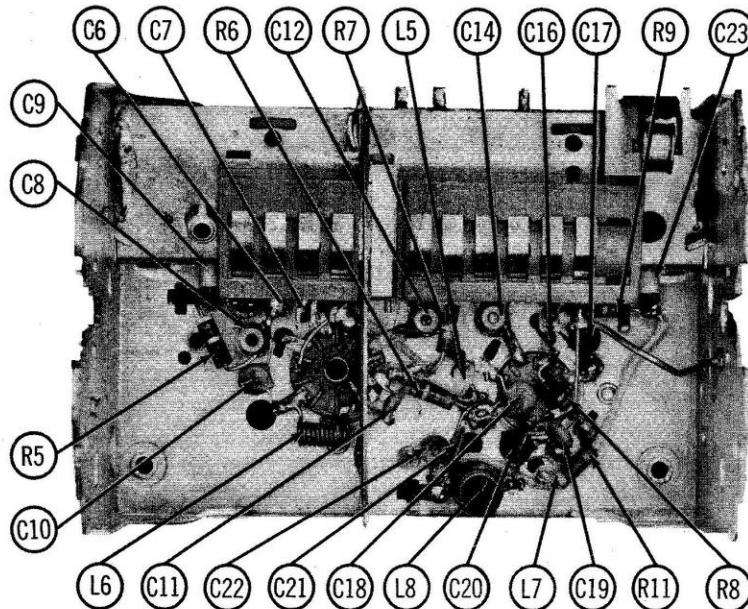
Turn the set on and tune in a TV station, preferably with a test pattern. Set the horizontal hold control to its mid-range position. Ground pin 1 (grid) of the horizontal multivibrator (V23) to chassis.

Adjust the horizontal oscillator slug (B1) until the picture is almost in sync. Remove short from pin 1 of V23. Check pull-in action by switching off channel and back again. If necessary retouch B1 for proper pull-in action.

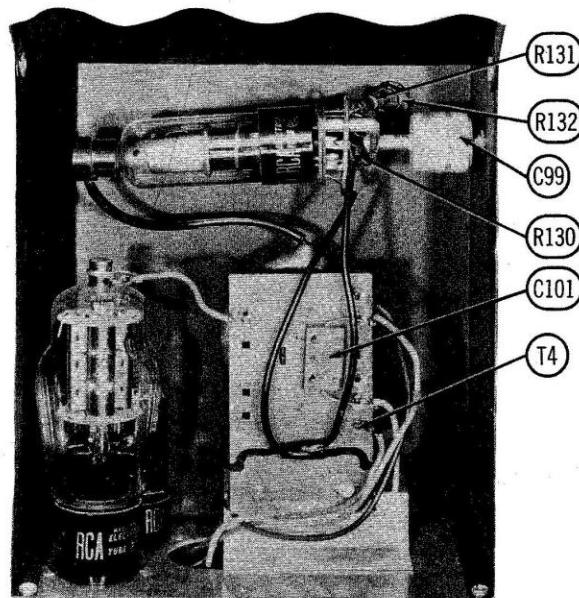
Turn the horizontal drive trimmer (B2) clockwise as far as possible without the presence of vertical white lines or compression near the center of the picture or without having the picture fall out of sync horizontally.

Adjust the width slug (B3) for a picture that is slightly wider than necessary to fill the picture mask horizontally.

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



RF TUNER BOTTOM VIEW



HIGH VOLTAGE COMPARTMENT