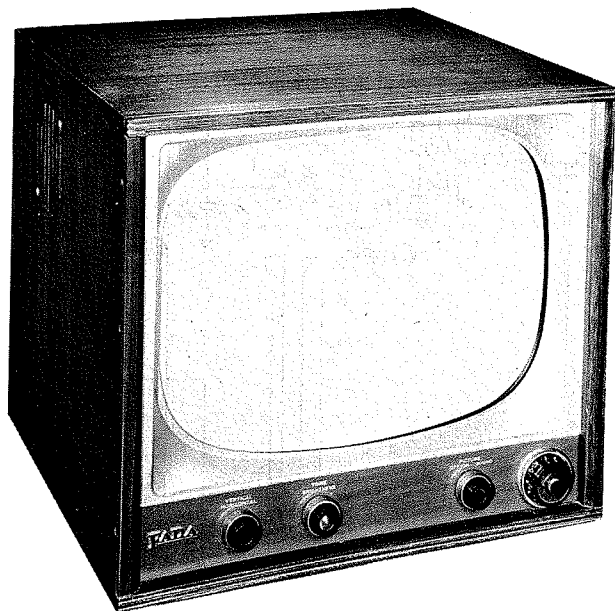




FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, -KLO, -LO, UPC17, -EB, -LO, UPC21, -EB, -K, -KD, KLO, -LO

DISASSEMBLY INSTRUCTIONS

- CHASSIS REMOVAL**
1. Remove 9 push-on type control knobs from front panel of cabinet.
  2. Remove 7 wood screws. Remove rear cover.
  3. Disconnect speaker leads, HV lead and ground strap.
  4. Remove picture tube socket, ion trap and centering magnet.
  5. Remove 4 chassis bolts. Remove chassis.
  6. Remove 2 wing nuts. Remove speaker.



MODELS  
PC17, PC17EB, PC17LO, PC21, PC21EB, PC21K, PC21KD, PC21KLO, PC21LO, UPC17, UPC17EB, UPC17LO, UPC21, UPC21EB, UPC21K, UPC21KD, UPC21KLO, UPC21LO

SERVICING IN THE FIELD

**TUNER OSCILLATOR ADJUSTMENTS**

For touch-up adjustment of VHF tuner oscillator adjustments, it is necessary to remove the chassis from the cabinet. (See disassembly instructions).

**PICTURE TUBE SAFETY GLASS CLEANING**

Remove 3 wood screws securing the molding strips to the cabinet sides. Hold the bottom edge of the safety glass and remove molding strips. Let safety glass slide gently down until free of top of cabinet and lift out. Use extreme caution when removing safety glass.

**PICTURE TUBE REMOVAL**

1. Remove safety glass as directed above.
2. Remove control knobs and insert fingers in the control shaft holes and gently push up and pull out mask.
3. Remove rear cover. Disconnect HV lead, remove picture tube socket, ion trap and centering magnet.
4. Remove 4 cradle mounting nuts and bolts.
5. Gently remove picture tube from cabinet front.

**SERVICE ADJUSTMENT LOCATION**

See tube placement chart on page 5.

**HORIZONTAL OSCILLATOR FIELD ADJUSTMENT**

Adjustment of the horizontal oscillator circuit can be made from the rear panel of the chassis. Set the horizontal hold control at its mid-range position and adjust the horizontal frequency slug (B1) until the picture synchronizes horizontally.

**SOUND IF DETECTOR BUZZ ADJUSTMENT**

To eliminate sound IF detector buzz, adjust the ratio detector secondary (A10) located on top of chassis.

**FUSES**

One fuse is used for horizontal sweep circuit protection. (For location see tube placement chart).

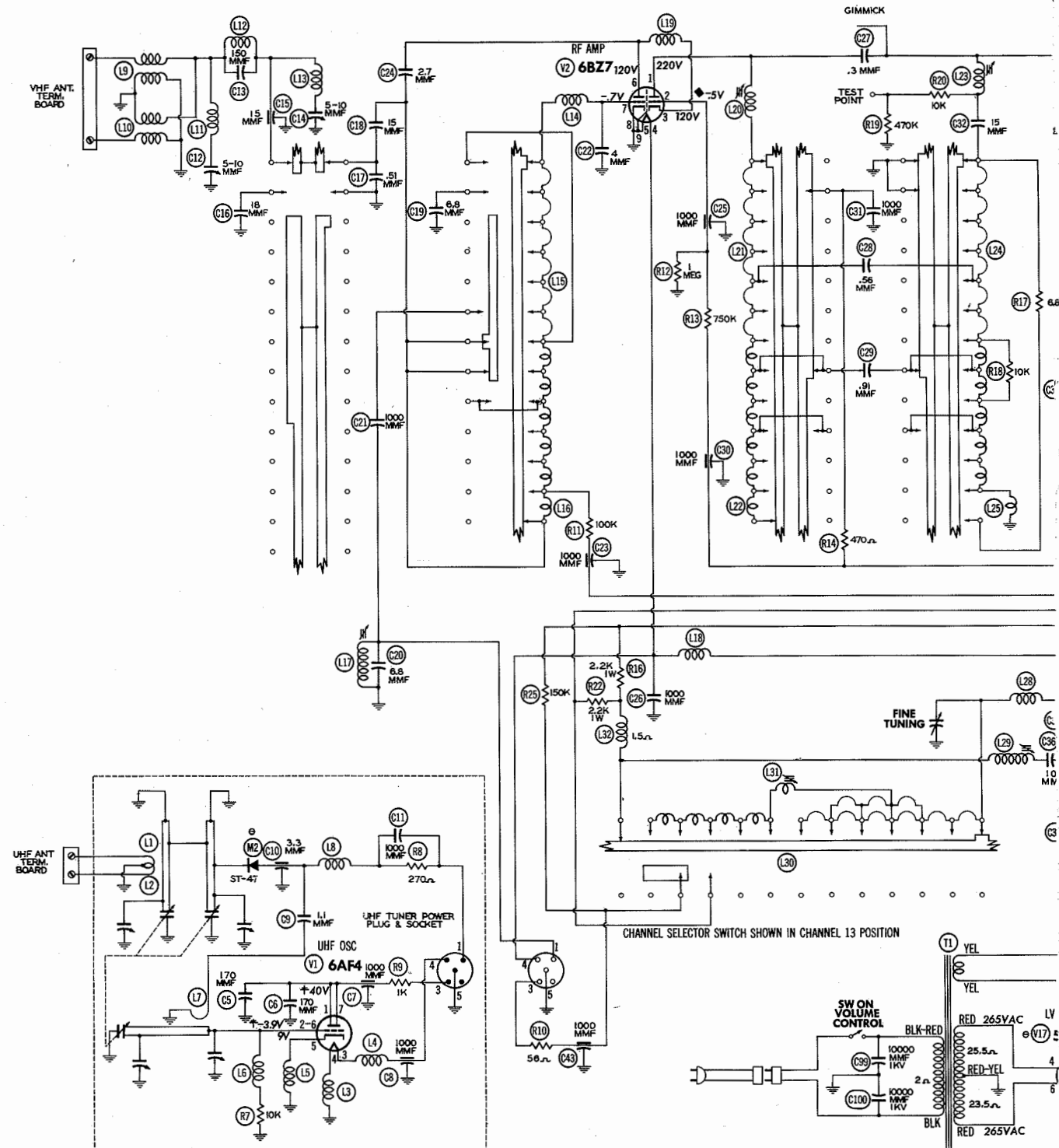
**CENTERING**

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube, located flush against the deflection yoke. Rotate the two rings around the neck of the tube until the picture is properly centered.

FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, -KLO, -LO, UPC17, -EB, -LO, UPC21, -EB, -K, -KD, KLO, -LO

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

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† MEASURED IN "UHF" POSITION.

◆ MEASURED FROM PIN 3 OF V2.

⊙ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

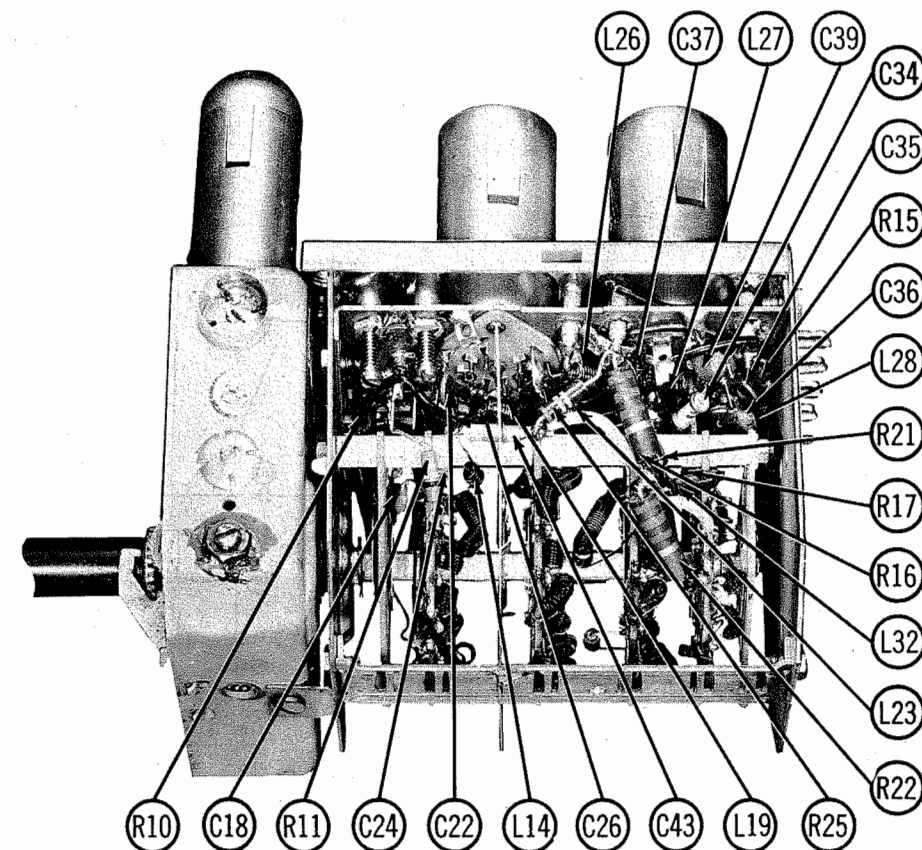
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM. (SEE PARTS LIST)

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

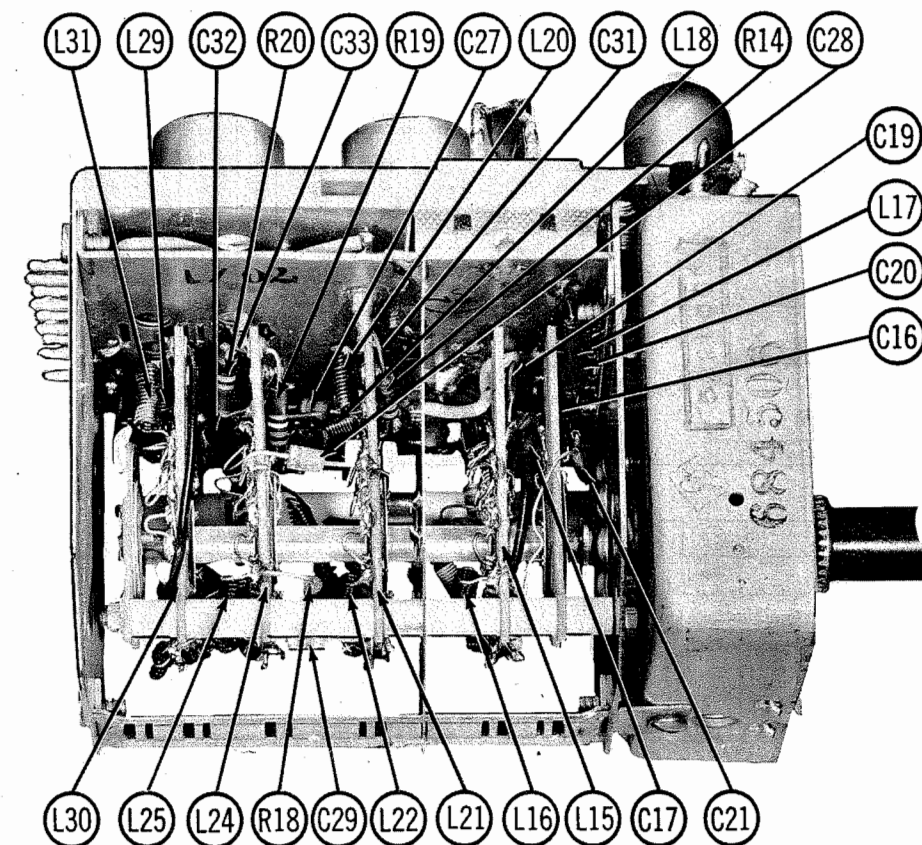
WAVE FORMS TAKEN WITH CONTROLS SET TO PRODUCE 45 VOLTS PEAK-TO-PEAK SIGNAL AT PICTURE TUBE

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltage measured at 1,000 ohms per volt.
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. All controls set for normal operation; no signal applied.

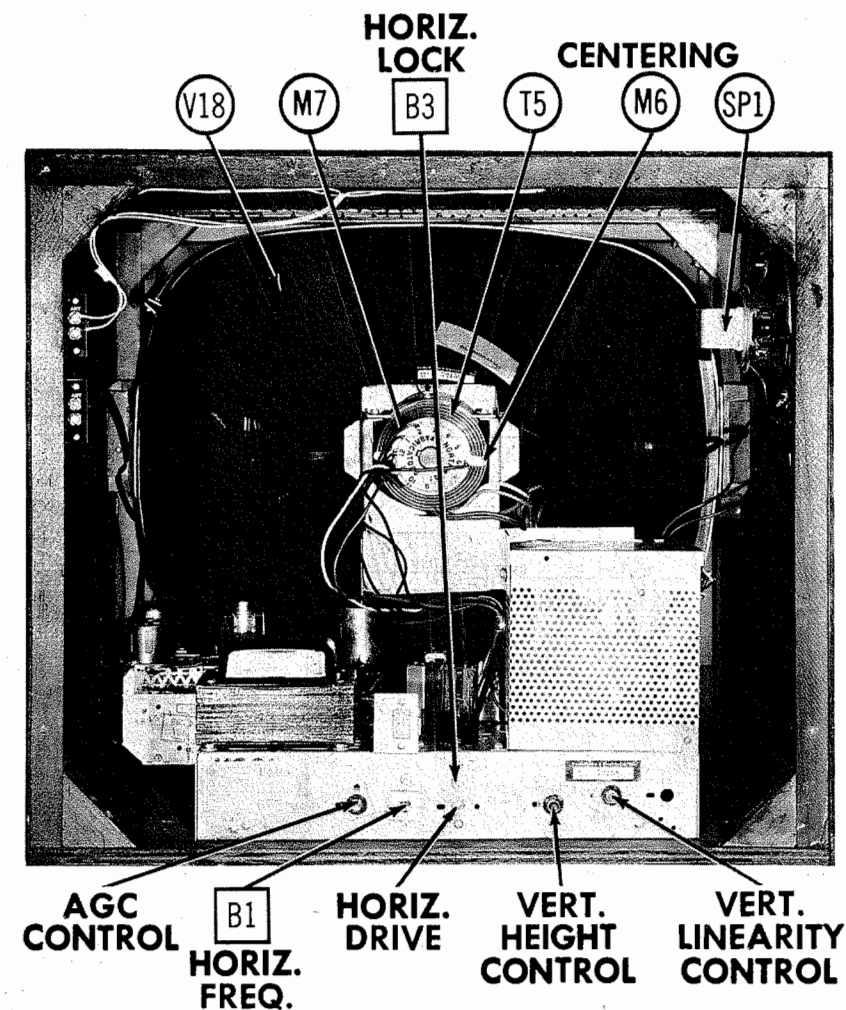
A PHOTOFACT STANDARD  
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UHF-VHF TUNER-RIGHT SIDE



UHF-VHF TUNER-LEFT SIDE



CABINET-REAR VIEW

## HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Pre-set horizontal lock trimmer (B3) one turn counter clockwise & tight and the horizontal drive trimmer (B4) two turns counter clockwise from tight. Turn the set on and tune in a TV station preferably a test pattern.

### HORIZONTAL FREQUENCY ADJUSTMENT

1. Rotate the horizontal hold control over its entire range. If picture does not remain in sync over most of its range, adjust the horizontal frequency slug (B1) for best sync.
2. If unable to adjust B1 for proper horizontal hold range, adjust the horizontal phase slug (B2) counter clockwise a few turns and repeat step 1. Picture should remain in horizontal sync, if not, continue with "Horizontal Phase Adjustment".

### HORIZONTAL PHASE ADJUSTMENT

1. Short together terminals "C" and "D" of the horizontal oscillator coil (L47).
2. Set the horizontal hold to its maximum counter clockwise position.
3. Adjust B1 until picture just locks in horizontally.
4. Remove short from terminals "C" and "D" of L47. If picture loses sync with short removed, adjust B2 clockwise until picture falls into sync.

5. Connect the vertical input lead of an oscilloscope to terminal "C" of L47. Adjust the phase slug (B2) until broad and narrow peaks are of equal amplitude as shown in Fig. 8. While adjusting B2 keep the picture in sync by turning the horizontal hold control clockwise. Disconnect scope from receiver.

### HORIZONTAL LOCK ADJUSTMENT

1. Turn the horizontal hold control maximum counter clockwise. Switch off channel and back again. If the picture does not lose sync, turn B1 counter clockwise until the picture loses sync when switching off channel and back again. Adjust B1 clockwise until the picture just pulls into sync.
2. Turn the horizontal hold control maximum clockwise. Switch off channel and back again. If the picture does not pull into sync, turn the horizontal lock (B3) clockwise until the picture pulls into sync.
3. Due to the reaction between B1 and B3 it may be necessary to repeat steps 1 and 2 several times before proper synchronization is obtained. When properly adjusted, the picture should remain in sync at both extreme settings of the horizontal hold control when switching off channel and back again.

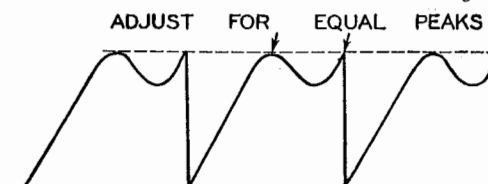


FIG. 9



## TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	REPLACEMENT DATA		NOTES
		FADA PART No.	STANDARD REPLACEMENT	
V1	UHF Oscillator	6AF4	6AF4	6K6GT may be used in some versions
V2	VHF RF Amplifier	6BZ7	6BZ7	
V3	VHF Mixer-Oscillator	6U8	6U8	
V4	1st. Video IF Amplifier	6CB6	6CB6	
V5	2nd. Video IF Amplifier	6CB6	6CB6	
V6	3rd. Video IF Amplifier	6CB6	6CB6	
V7	Video Output	12BY7	12BY7	
V8	AGC Keying-Sync Amplifier	6U8	6U8	
V9	Sound IF Amplifier-Sync Separator	6U8	6U8	
V10	Ratio Detector-AGC Clamper-AF Amplifier	6T8	6T8	
V11	Audio Output	6AR5	6AR5	5U4G may be used in some versions
V12	Vert. Oscillator-Vert. Output	12BH7	12BH7	
V13	Horiz. AFC-Horiz. Osc.	6BQ6GT	6BQ6GT	
V14	Horiz. Output	6AX4GT	6AX4GT	
V15	Damper	1B3GT	1B3GT	
V16	HV Rectifier	5U4GA	5U4GA	
V17	LV Rectifier			

## CATHODE-RAY TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	FADA PART No.	CBS PART No.	GENERAL ELECTRIC PART No.	SYLVANIA PART No.	
V18	21YP4A ①	21YP4A ①	21YP4A ①	21YP4A ②	① Aluminized ② Silver screen "85"
	17HP4/17RP4	17HP4/17RP4	17HP4/17RP4	17HP4/17RP4	

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	FADA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.
C1A	50	450	22.101	AFH3-45-50	D115	FP385.5	TM-3127	T-180
B	80	350				TC72		MT-3512
C	10	350	22.120	AFH4-87	D086	FP431.7	TM-4025	Q-415
C2A	40	350						
B	10	450						
C	40	450						
D	100	50						
C3	5	50	22.56	SRE50V5	RR550	TC30	TD-5-50	MMT-0505
C4	25	50	22.66	PRS50V25	RR255	TC36	TD-25-50	FM-0525

\* Unit must be ordered from Mfr.

## 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.	FADA PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C5	170									
C6	170									
C7	1000									
C8	1000									
C9	1.1									
C10	3.3									
C11	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C12	5-10									
C13	150									
C14	5-10									
C15	15									
C16	18				TCN-18	N022	N750K-180			
C17	.51									
C18	15			N750-D115	TCN-15	Z021	N750K-150		5TCU-Q15	
C19	6.8					N013				
C20	6.8					N013				
C21	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C22	4									
C23	1000			EF-001	MFT-1000					
C24	2.7									
C25	1000			EF-001	MFT-1000					
C26	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C27	.3									
C28	.58									
C29	.91									
C30	1000			EF-001	MFT-1000					
C31	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C32	15			NPO-D115	TCZ-15	Z021	NPOK-150		5TCC-Q15	
C33	1.2									
C34	1.5									
C35	10									
C36	10									
C37	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C38	1000			EF-001	MFT-1000					
C39	1000			BPD-001	DD-102	K069	811-102	DC-521	5HK-D1	
C40	5									
C41	82				TCZ-82	TZ28	NPO-337-820			
C42	1000			EF-001	MFT-1000					
C43	1000			EF-001	MFT-1000					
C44	.1	200	12.49	P288N-1	DF-104	CUB2S1	811-005	PT401	2TM-P1	
C45	5000		17.44	BPD-005	DD-502	K072	DC-525	DC-525	5HK-D5	
C46	.47	200	12.92	P288N-47		CUB2S47	PT4047	2TM-P47		
C47	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C48	82		17.161		TCZ-82	TZ28	NPO-337-820			
C49	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C50	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C51	600		17.141	S1560	D6-601	TP49	811-561	UC-5350	5GA-T9	
C52	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C53	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C54	.1	200	12.49	P288N-1	DF-104	CUB2P1	811-471	UC-5347	5GA-T47	
C55	470		17.142	S1470	D6-471	TP48	811-561	UC-5356	5GA-T6	
C56	600		17.141	S1680	D6-601	TP49	811-561	UC-5356	5GA-T6	
C57	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C58	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C59	1500		17.140	BPD-0015	DD-152	K071	801-0015	DC-5215	5HK-D15	
C60	6.8		17.180	NPO-S16.8	TCZ-6R8	TZ08	NPOA-6R8	ZT-5568	5TCCB-V88	
C61	10		17.71	D1000010	DD-100	G018	831-100	UC-541	5GA-Q1	
C62	6.8		17.88	NPO-S16.8	TCZ-6R8	TZ08	NPOA-6R8	ZT-5568	5TCCB-V88	
C63	.1	400	12.76	P468N-1	DF-104	CUB4P1	PT401			

## PARTS LIST AND CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT.	FADA PART No.	AEROVOX PART No.	CENTRALAB PART No.
C64	2		17.127	NPO-S12	TCZ-2R2
C65	39		17.105	S139	D6-390
C66	2		17.127	NPO-S12	TCZ-2R2
C67	1500		17.45	BPD-0015	DD-152
C68	330	500	17.89	1469-00033	D6-331
C69	.0039	600	12.71	BPD-004	D6-392
C70	.01	400	12.72	BPD-01	D6-103
C71	.0047	400	12.68	BPD-0047	D6-472
C72	.0047	400	12.88	BPD-0047	D6-472
C73	.02	1000	12.82	BPD-02	DF-203
C74	.0047	400	12.88	BPD-0047	D6-472
C75	10000		17.80	BPD-01	DD-103
C76	330		17.164	S1330	D6-331
C77	.01	400	12.72	BPD-01	D6-103
C78A	2000				
B	5000				
C	5000				
C79	.0047	400	12.68	BPD-0047	D6-472
C80	.047	400	12.67	BPD-05	DF-503
C81	.1	400	12.75	P488N-1	DF-104
C82	.1	400	12.75	P488N-1	DF-104
C83	82		17.149	S182	D6-820
C84	1000		17.153	BPD-001	DD-102
C85	68		17.152	N750-S188	TCN-68
C86	10		17.71	NPO-D110	TCZ-10
C87	.1	400	12.49	P488N-1	DF-104
C88	.022	400	12.82	BPD-02	DF-203
C89	.47	200	12.92	P288N-47	
C90	.047	400	12.87	BPD-05	DF-503
C91	330	500	17.69	1469-00033	D6-331
C92	.01	400	12.72	BPD-01	D6-103
C93	1000	500	17.11	1484-001	
C94	680	500	17.39	1484-00068	D6-681
C95	.1	400	12.75	P488N-1	DF-104
C96	.22	200	12.91	P288N-22	
C97	.1	400	12.75	P488N-1	DF-104
C98	50	2000	17.151	HVD-30-47	DD30-47
C99	10000	1000	17.144		DD-103
C100	10000	1000	17.144		DD-103

Note 1. Used in UHF-VHF receivers only.

Note 2. VHF receivers use a 68MMF unit (part #17.189) in this

Note 3. Some versions use a 600MMF unit (part #17.141) in this

Note 4. Some versions use a 470MMF unit (part #17.142) in this

Note 5. Not used in some versions.

† Items C78A, C78B, C78C, R73A, R73B and R73C are combi

CONT

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	FADA PART No.	CENTRALAB PART No.	CLAROST. PART No.
R1A	350Ω	2	52.80	F3-2	
B	500KΩ	2		R2-41	
C	Switch			KB-1	
R2A	500KΩ	1	52.81	F1-41	
B	1Meg	1		R2-51	
R3A	1Meg	1	52.88	SBB-510	RTV-110
B	50KΩ	2			
R4A	5000Ω	2	52.88	VK-135	A43-5000
B	Shaft		Not Req.	Not Req.	FKS-1/4
R5A	2.5Meg	1	52.24	AB-83	A47-2.5Meg
B	Shaft		Not Req.	AK-1	FKS-1/4
R6A	50KΩ	1	52.89	B-31	A47-50K
B	Shaft		Not Req.	Not Req.	FS-3

Note 1. Some versions will use an alternate control Part N

\* Concentrik Equivalent: K-2 Kit, Base Elements and Shaft

† Universal Replacement (Mallory Exact Duplicate Part No.)

†† Universal Replacement (Mallory Exact Duplicate Part No.)

\* Concentrik Equivalent: K-4 Kit, Base Elements and Shaft

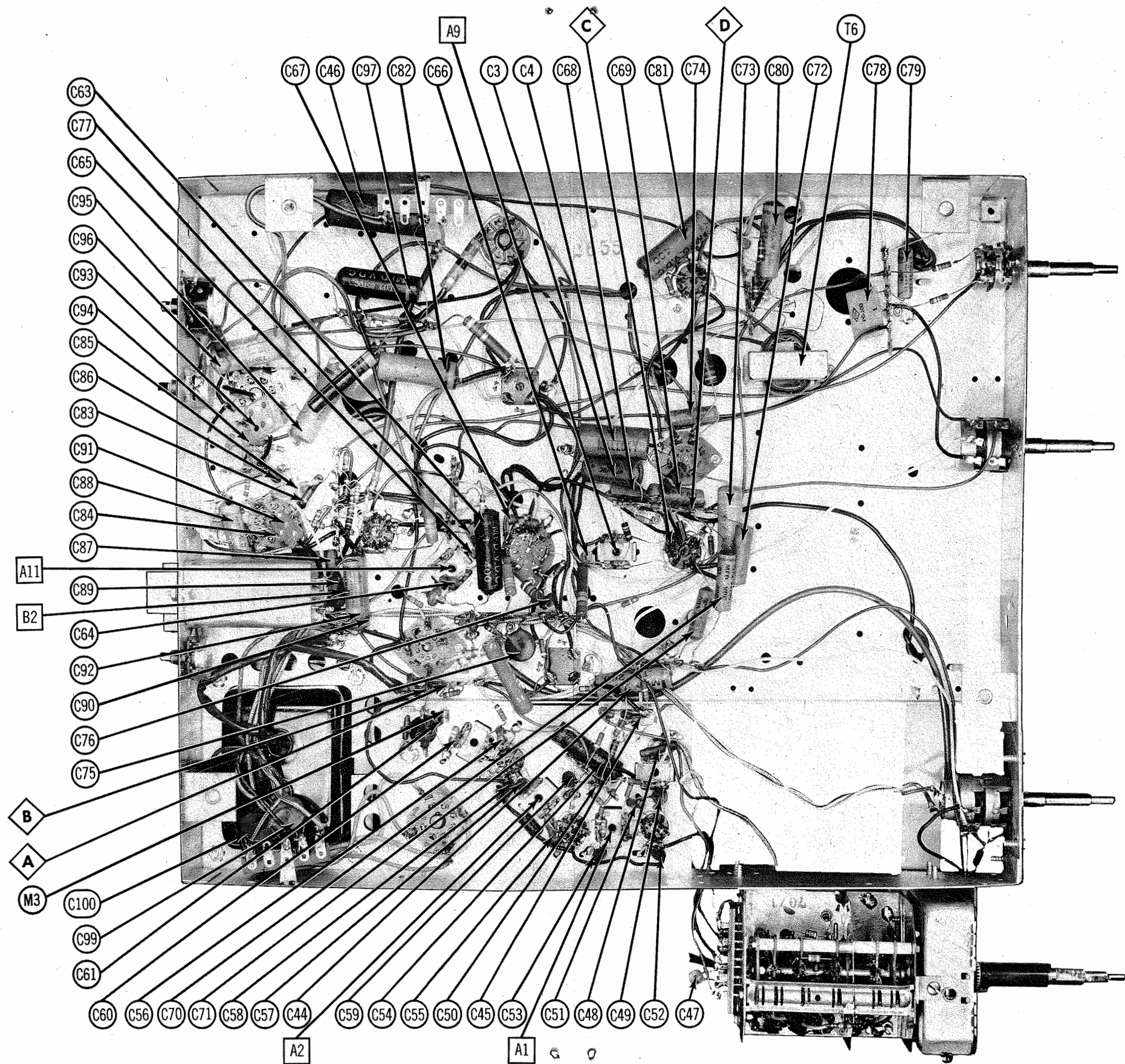
## RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	FADA PART No.	IRC PART No.	
R7	10KΩ	1			
R8	270Ω	1		BTS-270	
R9	1000Ω	1		BTS-1000	
R10	56Ω	1		BTS-56	
R11	100KΩ	1		BTS-100K	
R12	1Meg 5%	1		BTS-1Meg 5%	
R13	750KΩ 5%	1		BTS-750K 5%	
R14	470Ω	1		BTS-470	
R15	15KΩ	1			
R16	2200Ω	1		BTA-2200	
R17	6800Ω	1			
R18	10KΩ	1			
R19	470KΩ	1			
R20	10KΩ	1			
R21	10KΩ	1			
R22	2200Ω	1		BTA-2200	
R23	1000Ω	1		BTS-1000	
R24	100Ω	1		BTS-100	
R25	150KΩ	1		BTS-150K	
R26	470Ω	1	32.173	BTS-470	
R27	470Ω	1	32.173	BTS-470	
R28	62KΩ 5%	1	32.292	BTS-62K 5%	
R29	220KΩ	1	32.91	BTS-220K	
R30	220KΩ	1	32.91	BTS-220K	
R31	10KΩ	1	32.11	BTS-10K	
R32	470Ω	1	32.173	BTS-470	
R33	470Ω	1	32.173	BTS-470	
R34	47Ω	1	32.197	BTS-47	
R35	39KΩ	1	32.203	BTS-39K	
R36	470Ω	1	32.173	BTS-470	
R37	220KΩ	1	32.91	BTS-220K	
R38	470Ω	1	32.173	BTS-470	
R39	47Ω	1	32.197	BTS-47	
R40	22KΩ	1	32.13	BTS-22K	
R41	470Ω	1	32.173	BTS-470	
R42	220Ω	1	32.5	BTS-220	
R43	5600Ω	1	32.126	BTS-5600	
R44	82Ω	1	32.125	BTS-82	



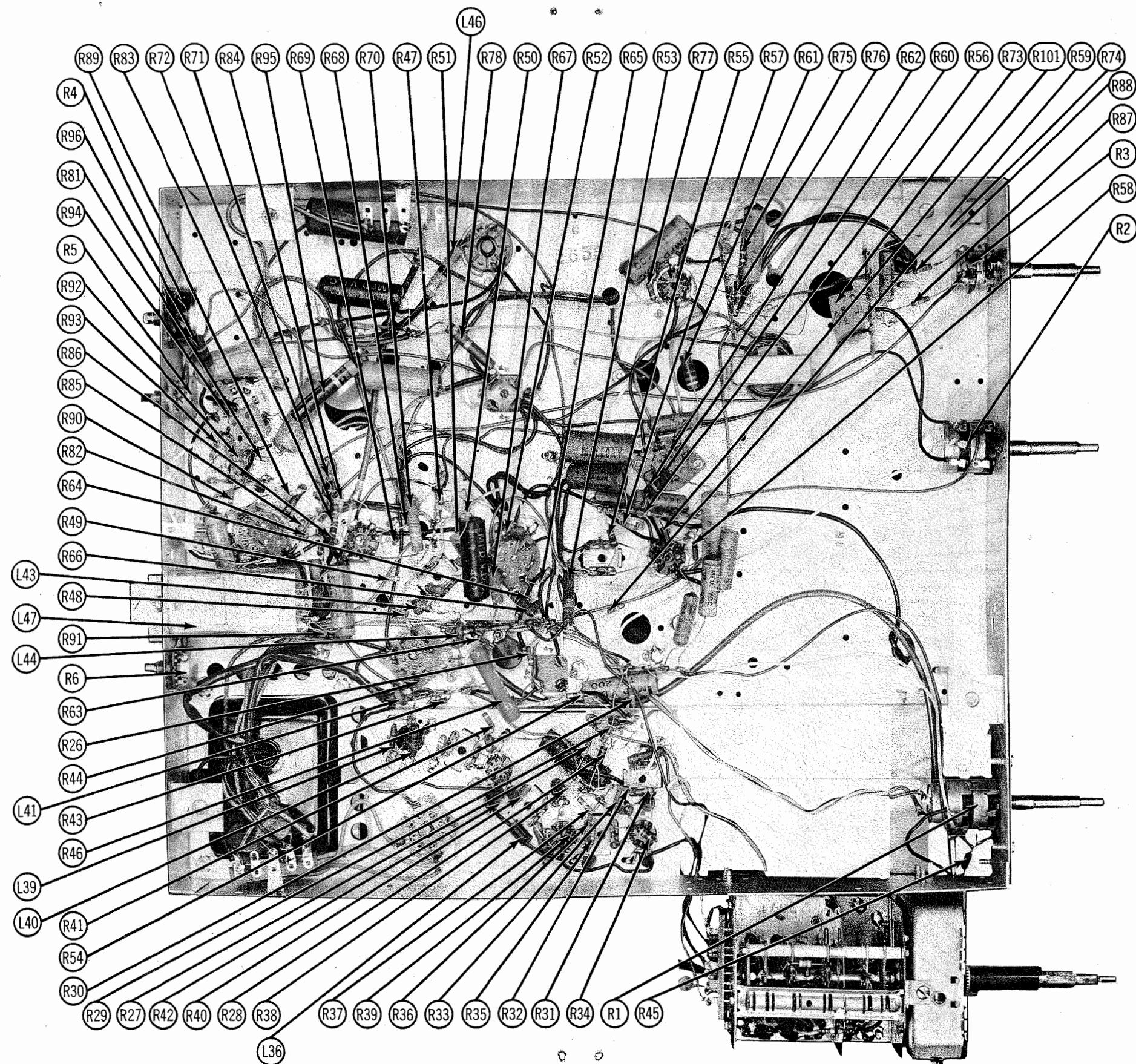


FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, -KLO, -LO,  
UPC17, -EB, -LO, UPC21, -EB, -K, -KD, -KLO, -LO



CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

SET 319 FOLDER 5



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

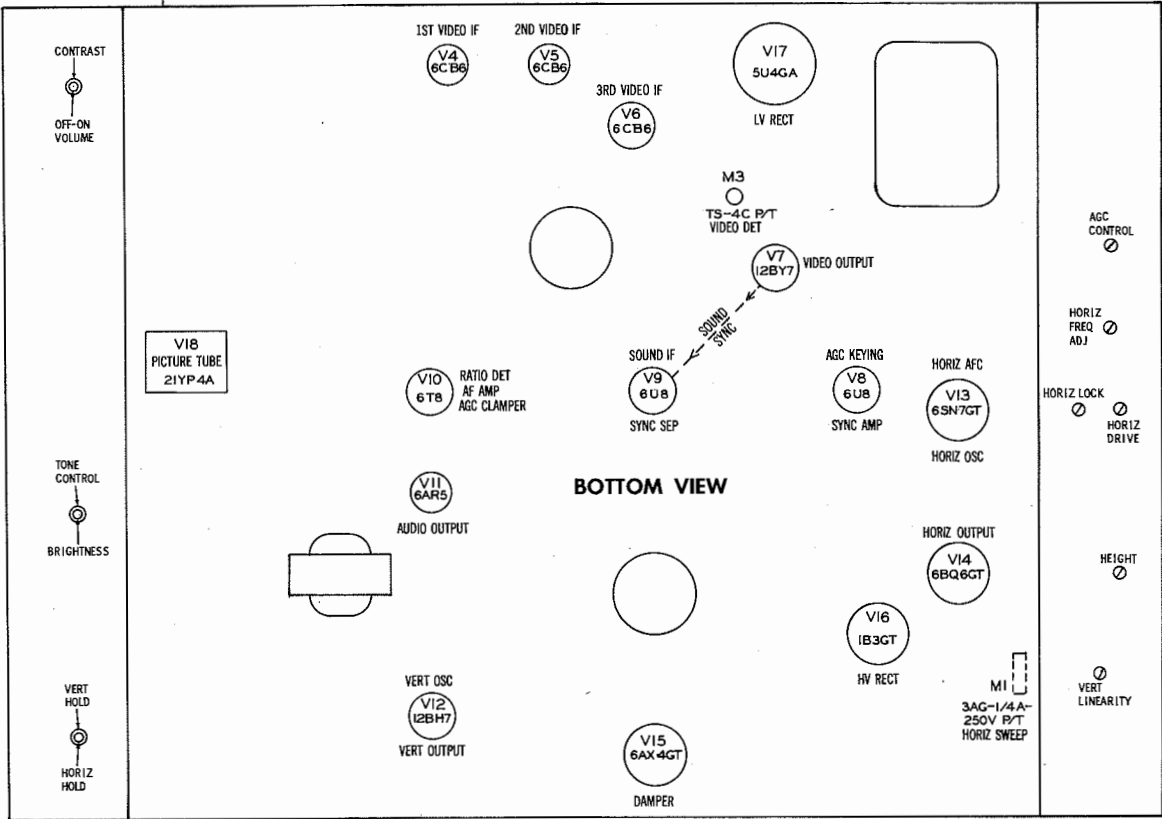
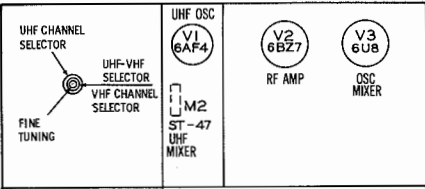
FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, -KLO, -LO,  
UPC17, -EB, -LO, UPC21, -EB, -K, -KD, -KLO, -LO



RESISTANCE MEASUREMENTS

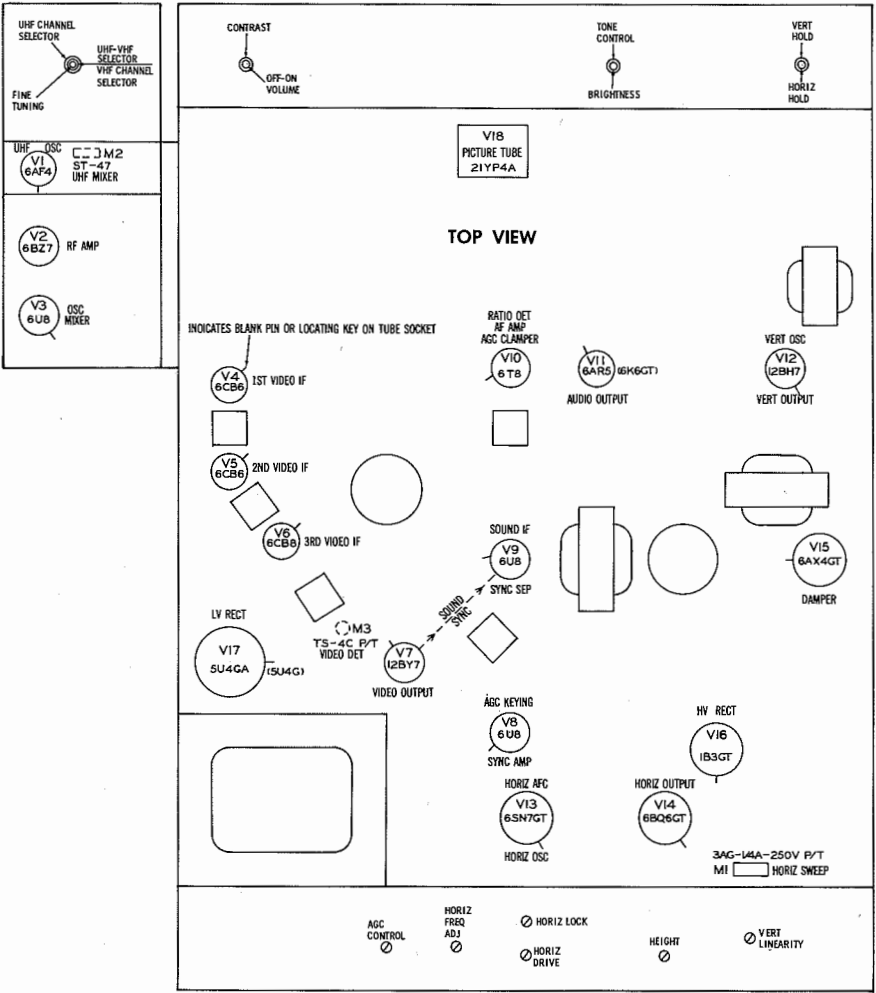
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AF4	*† 8KΩ	10KΩ	.1Ω	0Ω	0Ω	10KΩ	*† 8KΩ		
V 2	6BZ7	† 1KΩ	400KΩ	INF	.1Ω	0Ω	INF	500KΩ	0Ω	0Ω
V 3	6U8	† 4.5KΩ	480KΩ	† 17KΩ	.1Ω	0Ω	† 3.5KΩ	0Ω	0Ω	15KΩ
V 4	6CB6	60KΩ	47Ω	.1Ω	0Ω	† 2.3KΩ	† 2.3KΩ	0Ω		
V 5	6CB6	280KΩ	47Ω	.1Ω	0Ω	† 2.3KΩ	† 2.3KΩ	0Ω		
V 6	6CB6	.2Ω	220Ω	.1Ω	0Ω	† 2.3KΩ	† 2.3KΩ	0Ω		
V 7	12BY7	55Ω	5.6KΩ	0Ω	.1Ω	.1Ω	0Ω	† 5KΩ	† 1.8KΩ	0Ω
V 8	6U8	† 12KΩ	† 22KΩ	† 81Ω	.1Ω	0Ω	280KΩ	† 1.8KΩ	0Ω	200KΩ
V 9	6U8	† 20KΩ	47KΩ	† 10KΩ	.1Ω	0Ω	† 10KΩ	0Ω	0Ω	2.2Meg
V 10	6T8	INF	22KΩ	INF	.1Ω	0Ω	500KΩ	0Ω	10Meg	† 220KΩ
V 11	6AR5	470KΩ	680Ω	0Ω	.1Ω	† 900Ω	† 550Ω	NC		
V 12	12BH7	▲ 3.5Meg	1.8Meg	0Ω	.1Ω	.1Ω	▲ 5.7KΩ	2.2Meg	1KΩ	0Ω
V 13	6SN7GT	480KΩ	† 47KΩ	0Ω	1.5Meg	† 25KΩ	350KΩ	.1Ω	0Ω	
V 14	6BQ6GT	NC	0Ω	NC	† 8.2KΩ	470KΩ	TP	.1Ω	100Ω	TOP CAP ▲ 53Ω
V 15	6AX4GT	NC	NC	200KΩ	NC	† 70Ω	NC	.1Ω	0Ω	
V 16	1B3GT		PINS 1-8	HAVE	INF	RESISTANCE				TOP CAP ▲ 53Ω
V 17	5U4GA	NC	11KΩ	NC	28Ω	NC	24Ω	NC	11KΩ	
V 18	21YP4A	0Ω	0Ω	PIN 6 † 1.8KΩ	PIN 10 ▲ 4.7KΩ	PIN 11 † 160KΩ	PIN 12 † .1Ω			

\* MEASURED IN "UHF" POSITION.  
† MEASURED FROM PIN 8 OF V17.  
▲ MEASURED FROM PIN 3 OF V15.  
NC-NO CONNECTION.  
TP-TIE POINT.



TUBE PLACEMENT CHART

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 - V17

LOSS OF PICTURE OR SOUND

No pic, no sound, has raster - V3, V4, V5, V8, V7 (V1 UHF only)  
No pic, no sound, has snow - V2, V3, V4  
No pic, has sound, has raster - V7, V8, V18  
Has pic, no sound - V8, V10, V11  
Overloaded picture - V8, V10

SYNC FAILURE

No vert. sync - V8, V12  
No horiz. sync - V8, V13  
No vert. or horiz. sync - V8, V9

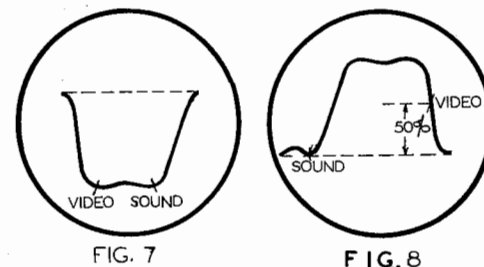
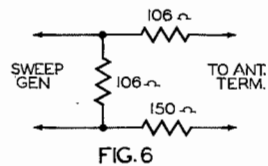
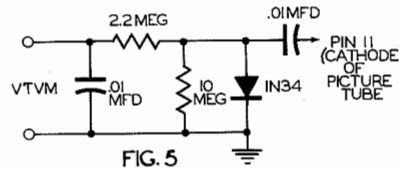
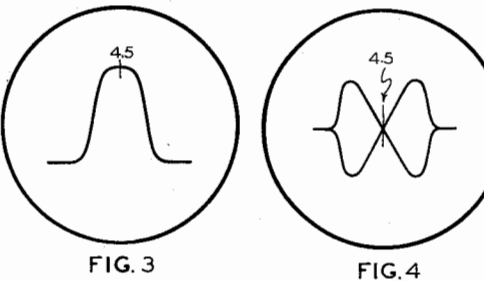
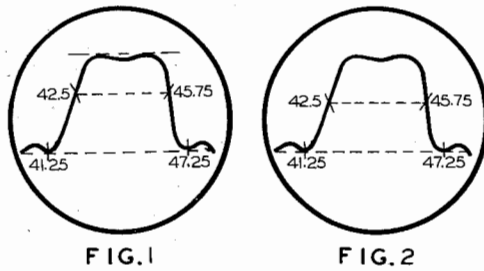
SWEEP FAILURE

No raster, has sound - V13, V14, V15, V16, V18, Fuse (M1)  
No vertical deflection - V12  
Poor vert. linearity or foldover - V12  
Poor horiz. linearity or foldover - V13, V14, V15  
Narrow picture - V13, V14, V15, V16, V17  
Vert. off freq. - V8, V12  
Horiz. off freq. - V8, V13

FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, K10, -LO, -LO, UPC17, -EB, -LO, UPC21, -EB, -K, -KD, K10, -LO

## ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
The high voltage lead should be securely taped and kept away from chassis. Do not remove the horizontal oscillator tube (V13) to disable the high voltage.							
VIDEO IF ALIGNMENT							
Remove the converter tube (V3) from its socket and replace with a 6U8 which has pin 1 removed. This will disable the local oscillator and reduce the possibility of erroneous indications. Set the contrast control for minimum contrast. Connect the negative lead of a 4.5 volt bias supply to the ungrounded side of C50. Connect the positive lead to chassis. Connect a .001MFD capacitor across the vertical input lead of the oscilloscope. If a separate marker generator is used, connect its high side to the chassis across the first video IF stage. Leave the low side disconnected. In steps 6 and 7, if necessary, reduce bias from 4.5 volts to 3 volts. 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
.001MFD	High side to pin 1 (grid) of 6CB6 (V4). Low side to chassis.	Not used	42.9MC (Unmod)	Any	USE VTVM. DC probe thru 47KΩ to point Ⓐ. Common to chassis.	A1	Attenuate generator output to maintain approximately 2.5 volts on VTVM. Adjust for maximum deflection.
"	"	"	45.5MC	"	"	A2	"
"	"	"	44.2MC	"	"	A3	"
"	"	"	41.25MC	"	"	A4	Increase generator output for usable reading on VTVM. Adjust for MINIMUM deflection.
"	"	"	47.25MC	"	"	A5	Adjust for MINIMUM deflection. Repeat steps 1 thru 5 until readings do not change.
"	"	44MC (10MC Swp)	42.5MC 45.75MC	"	Vert. Amp. thru 15KΩ to point Ⓐ. Low side to chassis.	A1, A2	Use only enough sweep generator output to produce usable pattern on scope. Retouch A2 to place 45.75MC at 75% on response curve as in Fig. 1. Check position of 42.5MC marker, if necessary SLIGHTLY retouch A1 to place 42.5MC marker. Retouch A3 to correct tilt. (Fig. 1).
Direct	High side to ungrounded tube shield floating over converter tube. Low side to chassis.	"	41.25MC 42.5MC 45.75MC 47.25MC	"	"	A6, A7	Adjust A6 and A7 for maximum response similar to Fig. 2 with correct 42.5MC and 45.75MC marker positions. Increase sweep and marker output to observe trap markers. If necessary, retouch A4 (41.25MC) and A5 (47.25MC) for correct trap marker positions.
SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM							
Connect two matched 100KΩ (±5%) resistors in series from point Ⓒ to chassis. The junction of these two resistors is alignment point Ⓒ as shown on the schematic.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS	
.001MFD	High side to point Ⓒ. Low side to chassis.	4.5MC (Unmod)	Any	DC probe thru 47KΩ to point Ⓒ. Common to chassis.	A8, A9	Adjust for maximum deflection.	
"	"	"	"	DC probe thru 47KΩ to point Ⓒ. Common to point Ⓓ.	A10	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 50% 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
.01MFD	High side to point Ⓒ. Low side to chassis.	4.5MC (450KC Swp)	4.5MC	Any	Vert. Amp. thru 47KΩ to point Ⓒ. Low side to chassis.	A8, A9	Disconnect stabilizing capacitor (C3). Adjust for curve of maximum amplitude and symmetry similar to Fig. 3.
"	"	"	"	"	Vert. Amp. thru 47KΩ to point Ⓒ. Low side to chassis.	A10	Reconnect stabilizing capacitor (C3). Adjust so that 4.5MC occurs at center of crossover lines as in Fig. 4. SLIGHTLY retouch A9 for maximum amplitude and straightness of crossover lines.
4.5MC TRAP ALIGNMENT							
Set the contrast control fully clockwise.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS	
.01MFD	High side to point Ⓒ. Low side to chassis.	4.5MC (Unmod)	Any	DC probe thru detector A11 (Fig. 5) to pin 11 (cathode) of picture tube. Common to chassis.	All	Adjust for MINIMUM deflection.	
VHF OSCILLATOR ALIGNMENT FOR TUNER 42.98							
Loosely couple a separate RF signal generator to the grid of the first video IF amplifier (V4) and tune it accurately to 45.75MC. 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 50Ω. 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
Fig. 6	Thru matching network (Fig. 6) to VHF antenna terminals.	213MC (10MC Swp.)	211.25MC 215.75MC	13	Vert. amp. thru 10KΩ to point Ⓐ. Low side to chassis.	A12	Adjust so that video RF and video IF markers coincide on response curve.
"	"	207MC (10MC Swp.) 209.75MC 201MC (10MC Swp.) 203.75MC 195MC (10MC Swp.) 197.75MC 189MC (10MC Swp.) 191.75MC 183MC (10MC Swp.) 185.75MC 177MC (10MC Swp.) 179.75MC	205.25MC 209.75MC 203.75MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC	12 11 10 9 8 7	"	A13 A14 A15 A16 A17 A18	Adjust position of loops so that video RF and video IF markers coincide on response curve. Adjustments are made by compressing or expanding coil turns.
"	"	85MC (10MC Swp.)	83.25MC 87.75MC	6	"	A19	Adjust A19 (slug) so that video RF and video IF markers coincide on response curve.



VHF OSCILLATOR ALIGNMENT FOR TUNER 42.98 (Cont)							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
14. Fig. 6	Thru matching network (Fig. 6) to VHF antenna terminals.	79MC (10MC Swp.) 81.75MC 69MC (10MC Swp.) 71.75MC 63MC (10MC Swp.) 65.75MC 57MC (10MC Swp.) 59.75MC	77.25MC 81.75MC 87.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	5 4 3 2	Vert. amp. thru 10KΩ to point (A). Low side to chassis.	A20 A21 A22 A23	Adjust (compress or expand coils) so that video RF and video IF markers coincide on response curve.

VHF RF AND MIXER ALIGNMENT FOR TUNER 42.98							
The RF tuner has been properly aligned at the factory and is very stable. Alignment of this portion should not be required unless tubes are replaced in the tuner. Careful selection of the replacement tubes should eliminate the necessity of tuner realignment. The antenna coils are mounted on the front wafer, RF coils on the second wafer from the front and the mixer coils on the third wafer from the front. The RF wafer has B+ on it and should not be touched with the hands or metal tools. The oscillator coils (rear wafer) have been aligned under "Oscillator Alignment" and should not be touched. 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 50Ω. 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
15. Fig. 6	Thru matching network (Fig. 6) to VHF antenna terminals.	213MC (10MC Swp.)	211.25MC 215.75MC	13	Vert. amp. thru 10KΩ to point (A). Low side to chassis.	A24, A25, A26	Adjust in that order to obtain response similar to Fig. 7. A24 is adjusted by expanding or compressing coil turns.
16. "	"	207MC (10MC Swp.) 209.75MC 201MC (10MC Swp.) 203.75MC 195MC (10MC Swp.) 197.75MC 189MC (10MC Swp.) 191.75MC 183MC (10MC Swp.) 185.75MC 177MC (10MC Swp.) 179.75MC	205.25MC 209.75MC 203.75MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC	12 11 10 9 8 7	"	A27, A28, A29 A30, A31, A32 A33, A34, A35 A36, A37, A38 A39, A40, A41 A42, A43, A44	Adjust loops in order given to obtain response similar to Fig. 7.
17. "	"	85MC (10MC Swp.) 87.75MC 79MC (10MC Swp.) 81.75MC 69MC (10MC Swp.) 71.75MC 63MC (10MC Swp.) 65.75MC 57MC (10MC Swp.) 59.75MC	83.25MC 87.75MC 77.25MC 81.75MC 87.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	6 5 4 3 2	"	A45, A46, A47 A48, A49, A50 A51, A52, A53 A54, A55, A56 A57, A58, A59	Compress or expand coil turns for response similar to Fig. 7.

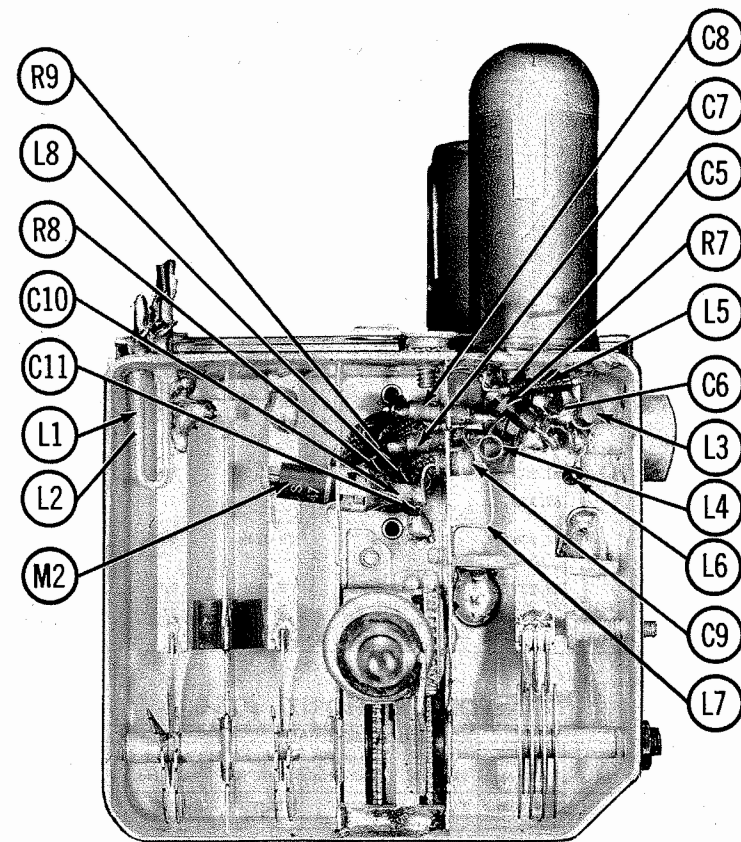
UHF IF ALIGNMENT							
Connect the bias as under "Video IF Alignment". Remove the UHF plug from socket at VHF tuner. Connect a 56Ω carbon resistor across the sweep generator output. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep generator output lead should be terminated with its characteristic impedance, usually 50Ω.							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
18. 270Ω Carbon Resistor	High side to UHF socket pin 1 on VHF tuner. Low side to chassis.	43.5MC (10MC Swp.)	41.25MC 45.75MC	UHF Position	Vert. amp. thru 10KΩ to point (A). Low side to chassis.	A60, A61, A62	Adjust for response similar to Fig. 7 with markers above 90%. Replace UHF plug in socket.

UHF OSCILLATOR ALIGNMENT							
Connect bias 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 50Ω. 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
19. Two 120Ω Carbon Resistors	Across UHF antenna terminals with 120Ω in each lead.	473MC (10MC Swp.)	476MC	14 (Fully clockwise)	Vert. amp. thru 10KΩ to point (A). Low side to chassis.	A63	Adjust gain so that the sound notch is visible on the scope. Adjust to place sound marker in trap notch as in Fig. 8.
20. "	"	887MC (10MC Swp.)	490MC	83 (Fully counter clockwise)	"	A64	"

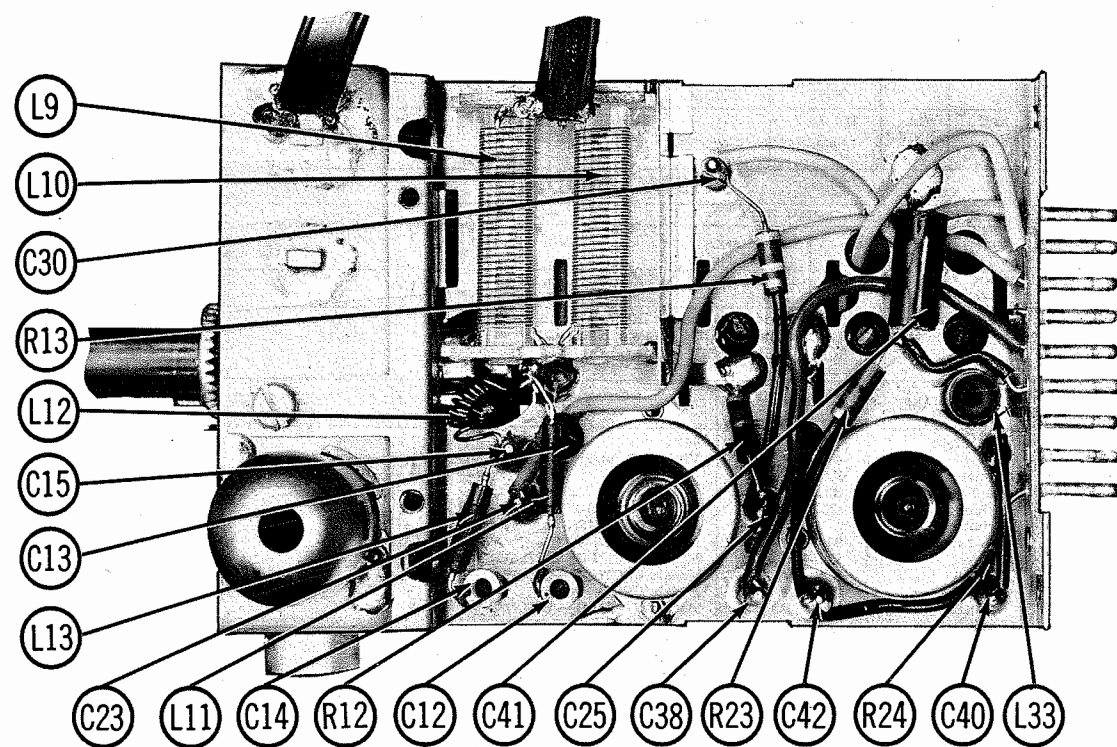
UHF PRESELECTOR ALIGNMENT							
Connect bias as under "Video IF Alignment". Set the UHF tuning shaft fully counter clockwise. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. The sweep generator output lead should be terminated with its characteristic impedance, usually 50Ω.							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
21. Two 120Ω Carbon Resistors	Across UHF antenna terminals with 120Ω in each lead.	887MC (10MC Swp.)	890MC	83 (Fully counter clockwise)	Vert. amp. to point (A). Low side to chassis.	A65, A66	Adjust by bending tabs in or out for response curve similar to Fig. 7.
To track the antenna and RF sections, start at the high end (the UHF shaft fully counter clockwise) and slowly rotate the UHF shaft clockwise. Keep the response curve on the scope by rotating the sweep generator simultaneously with the tuner shaft. Adjust the rotor blades on the antenna and RF sections by bending them to obtain satisfactory response curves all the way across the UHF band. To determine which way the blades should be bent, hold a metal soldering pick close to (but not touching) the stator. If this added capacity moves the response in the direction desired, the rotor blades should be bent nearer the stator blade. If the response moves in the wrong direction, less capacity is needed and the blades should be bent away from the stator blades. The bending should be done where the rotor enters the stator and with the blunt end of the pick. Make sure that the rotor blades do not short to the stator at any point during the complete rotation.							

IF TRAP ADJUSTMENTS							
The IF wave traps (A67 and A68) should be tuned to minimize interference caused by signals which fall within the Video IF band (40-48MC). Tune in a TV station on which the interference is noted and adjust for minimum interference in the picture. If no interference is noted, set A67 and A68 fully clockwise.							

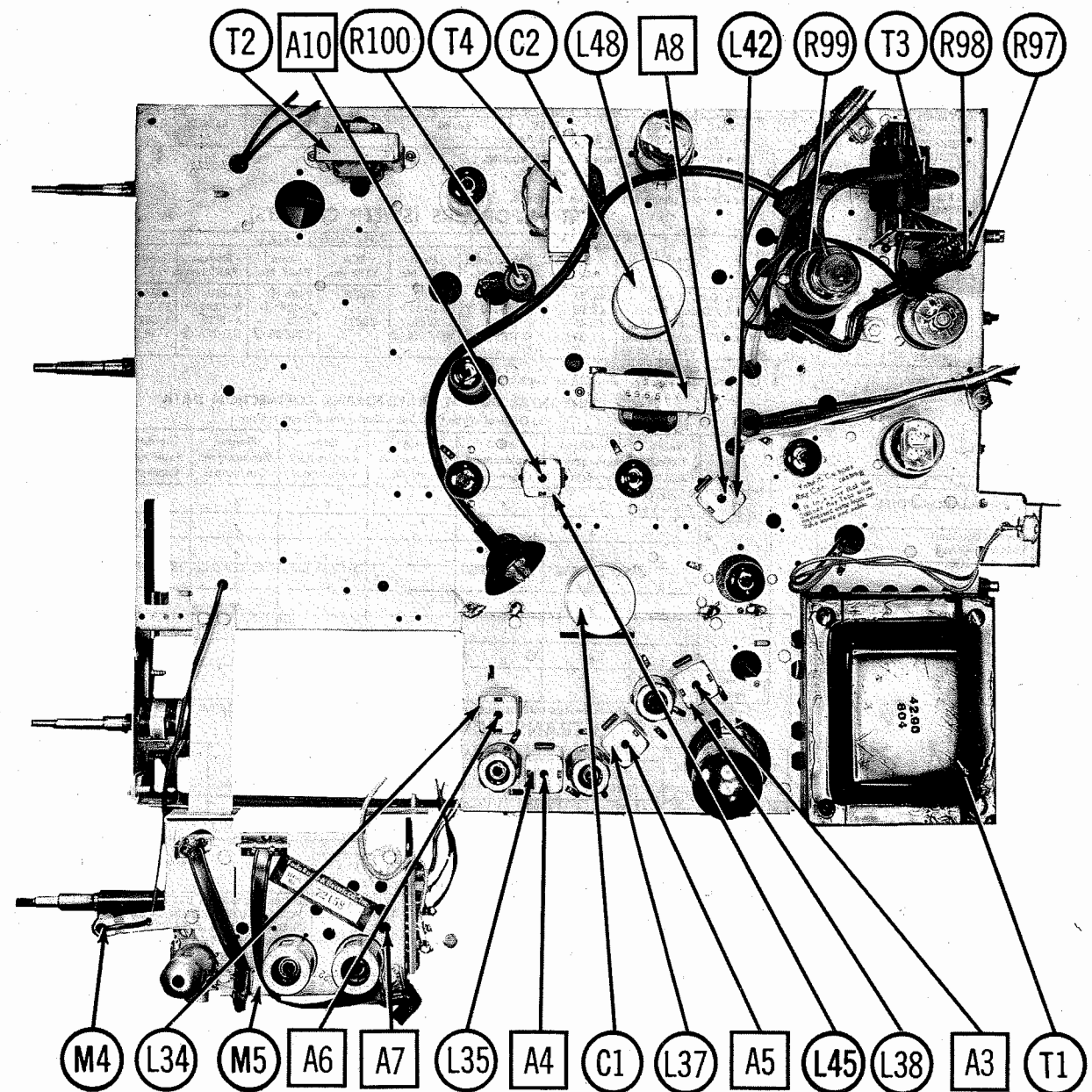
FADA MODELS PC17, -EB, -LO, PC21, -EB, -K, -KD, -KLO, -LO, UPC17, -EB, -LO, UPC21, -EB, -K, -KD, -KLO, -LO



UHF TUNER FRONT VIEW



VHF-UHF TUNER TOP VIEW



CHASSIS TOP VIEW



## DESCRIPTIONS (cont)

ITEM No.	REPLACEMENT DATA			NOTES
	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
Z005	NP0A-2R2	UC-5439	5TCCB-V22	
Z006	GP1K-390		5GA-Q39	
Z005	NP0A-2R2	DC-5215	5TCCB-V22	
K071	8H1-0015		5HK-D15	
5R5T33	811-331		MS-333	
CUB6D4	GP2-333-402	PT624	6TM-D4	
CUB4S1	GP3-333-103	PT411	4TM-S1	
CUB6D47	GP2-333-472	PT6247	6TM-D47	
CUB6D47	GP2-333-472	PT6247	6TM-D47	
CUB4S2	817-02	PT412	4TM-S2	
CUB6D47	GP2-333-472	PT6247	6TM-D47	
K082	811-01	DC-511	5HK-S1	
TP43	GP2K-331	UC-5333	5GA-T33	
CUB4S1	GP3-333-103	PT411	4TM-S1	
†115TMI	801-002	DC-522		†V-1
	811-005	DC-525		
	811-005	DC-525		
CUB6D47	GP2-333-472	PT6247	6TM-D47	
CUB4S47		PT4147	4TM-S47	
CUB4P1		PT401	4TM-P1	
CUB4P1		PT401	4TM-P1	
TZ28	GP1K-820	DC-521	5GA-Q82	
K069	801-001		5HK-D1	
TN18	N750L-680		5TCU-Q68	
Z018	NP0A-100	ZT-541	5TCC-Q1	
CUB4P1		PT401	4TM-P1	
CUB4S22	817-02	PT4122	4TM-S22	
CUB2P47		PT4047	2TM-P47	
CUB4S47		PT4147	4TM-S47	
5R5T33	811-331		MS-333	
CUB4S1	GP3-333-103	PT411	4TM-S1	
IR5D1	811-102	MCB255	MS-21	
IR5T68	811-681	UC-5368	MS-368	
CUB4P1		PT411	4TM-P1	
CUB2P22		PT4022	2TM-P22	
CUB4P1		PT401	4TM-P1	
V2Q47	3KV-470	DC30447	20GA-Q47	
			10HK-S1	
			10HK-S1	

application.  
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ed in one unit.

ITEM No.	REPLACEMENT DATA		INSTALLATION NOTES
	IRC PART No.	MALLORY PART No.	
		UE46S	Contrast (Panel) Volume (Rear) Attach to RIB.
* QJ-878	UF55A	†	Tone (Panel)
* QJ-168	UR16L	††	Brightness (Rear)
	UR16L		Vert. Hold (Panel)
	UR54L		Horiz. Hold (Rear)
WPD-5000	R5000L		Vert. Linearity (Wire Wound)
Not Req.	Not Req.		Attach to R4A.
AB-93	SU-565		Height
AK-1	Not Req.		Attach to R5A.
Q11-123	U-35		AGC-Note 1
Not Req.	Not Req.		Attach to R6A.

52.82.  
B11-137 & P1-126 (Panel)  
B11-123 & R1-212 (Rear)  
E1484).  
E1601).  
B13-133 & P6-125 (Panel)  
B11-137 & R1-209 (Rear)

## RESISTORS (cont)

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	FADA PART No.	IRC PART No.	
R45	22Ω	1/2	32.165	BTS-22	
R46	5000Ω	10	117.89	PW10-5000	
R47	103KΩ 5%	1/2	32.89	BTS-100K	
R48	27KΩ	1/2	32.85	BTS-27K	
R49	47KΩ	1/2	32.15	BTS-47K	
R50	100KΩ	1/2	32.89	BTS-100K	
R51	47KΩ	1/2	32.15	BTS-47K	
R52	33KΩ	1/2	32.14	BTS-33K	
R53	12KΩ	2	32.654	BTS-12K	
R54	3.3Meg 5%	1/2	32.328	BTS-3.3Meg5%	
R55	47Ω	1/2	32.197	BTS-47	
R56	15KΩ	1/2	32.12	BTS-15K	
R57	22KΩ	1/2	32.13	BTS-22K	
R58	10Meg	1/2	32.99	BTS-10Meg	
R59	220KΩ	1/2	32.18	BTS-220K	
R60	470KΩ	1/2	32.92	BTS-470K	
R61	470Ω	1	32.360	BTA-470	
R62	680Ω	1	32.115	BTA-680	
R63	22KΩ	1/2	32.13	BTS-22K	
R64	470KΩ	1/2	32.92	BTS-470K	
R65	2.2Meg	1/2	32.34	BTS-2.2Meg	
R66	47KΩ	1/2	32.158	BTA-47K	
R67	18KΩ	1/2	32.82	BTA-18K	
R68	220KΩ	1/2	32.18	BTS-220K	
R69	1Meg	1/2	32.33	BTS-1Meg	
R70	18KΩ	2	32.656	BTS-18K	
R71	4700Ω	1/2	32.9	BTS-4700	
R72	10KΩ	1/2	32.11	BTS-10K	
R73A	22KΩ	1/2	† 167.1	BTS-8200	
	B 8200Ω			BTS-8200	
	C 8200Ω			BTS-8200	
R74	1.8Meg	1/2	32.208	BTS-1.8Meg	
R75	2.7Meg	1/2		BTS-2.7Meg	
R76	10KΩ	1/2	32.11	BTS-10K	
R77	2.2Meg	1/2	32.34	BTS-2.2Meg	
R78	4700Ω	2	32.649	BTS-4700	
R79	560Ω	1/2	32.68		
R80	560Ω	1/2	32.68		

Note 2

## RESISTORS (cont)

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	FADA PART No.	IRC PART No.	
R81	150KΩ	1/2	32.90	BTS-150K	
R82	330KΩ	1/2	32.205	BTS-330K	
R83	820KΩ	1/2	32.22	BTS-820K	
R84	330KΩ	1/2	32.205	BTS-330K	
R85	82KΩ	1/2	32.144	BTS-82K	
R86	3900Ω	1/2	32.202	BTS-3900	
R87	68KΩ	1/2	32.16	BTS-68K	
R88	27KΩ	1/2	32.85	BTS-27K	
R89	150KΩ	1/2	32.90	BTS-150K	
R90	1.8Meg	1/2	32.208	BTS-1.8Meg	
R91	18KΩ	1/2	32.81	BTS-18K	

Note 1. When L37 is Part No. 37.278, a 39KΩ 1/2W resistor is used in this application.  
Note 2. Some versions use a 2.2Meg 1/2W resistor in this application (Part No. 32.34).  
Note 3. Some versions use a 6.8K 2W resistor in this application.  
† Items R73A, R73B, R73C, C78A, C78B, C78C are combined in one unit.

## TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA						NOTES
	PRI.	SEC. 1	SEC. 2	SEC. 3	FADA PART No.	Holldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.	
T1	117VAC ① L 48A	525VCT ② .180A	5V ③ 3A	6.3V ④ 8.3A	42.90		P2830③④	P8334 ③	26R33①②	R-51BC ② ③	

① Tape high HV winding, tape 5V ③ 3A winding.  
② Parallel and phase 6.3V ④ 5A windings.  
③ Tape 6.3V ④ 1.2A winding.  
④ Parallel and phase 6.3V ④ 8A windings.

## TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							
		FADA PART No.	Holldorson PART No.	Merit PART No.	RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.
T2	Vert. Osc. Trans.	42.53	B6700	A-3000	209T1	V405 ①	A-8111	24A87	A-95X
T3	Horiz. Output Trans.	42.96	FB460 *	HVO-38 *	X-129*①	X-129*①	A-8254 *	FLY-75 *	D-49 * ①
T4	Vert. Output Trans.	42.93	Z1804	A-3037	222T1	V313	A-8123	26S52	A-102X
T5A	Yoke (70°) Horiz. (24MH)	37.286	DF608 ②	MDF-75 ②	Y70F25 ②	Y70F25 ②	DY-15A ②	Y-18 ②	Y-19-1 ②
T5B	Vert. (44MH)								

① Drill new mounting hole(s).  
② Use original horizontal damping network.

## \*HORIZONTAL OUTPUT TRANSFORMER CONNECTION DATA

Use Original Width Coil Unless Replacement Type Is Listed

ORIGINAL TERMINAL CONNECTIONS	Holldorson Replacement Connections	Merit Replacement Connections	RCA Replacement Connections	Ram Replacement Connections	Stancor Replacement Connections	Thordarson Replacement Connections	Triod Replacement Connections
Horiz. Out Plate Lead	5	5		5	5	5	5
8	4	4		4	4	4	6
7	4	4		4	4	4	6
6	NC-See Note ③	NC-See Note ③		NC-See Note ③	NC-See Note ③	NC-See Note ③	NC-See Note ③
1	3	3		2	3	3	2
3	1	1		8	1	1	4
5	2	2		7	2	2	3
Special Notes →	③	③		③	③	③	③

③ Connect resistor R98 in series with capacitor C98 across yoke terminals 3 and 7. Adjust values if necessary.

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES
	PRI.	SEC.	FADA PART No.	Holldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.	
T6	6.2KΩ	3-4Ω	42.57	Z1004	A-2930	A-3877	24D51	S-8X	

## SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	SIZE	FIELD	V. C. IMP.	FADA PART No.	QUAM PART No.	RCA TYPE No.	
SP1	6 1/2"	PM	3-4Ω	107.56 ①	6A1	229S1	① Used in models UPC21L, PC21L, UPC21L0, PC21L0, UPC21RB and PC21ES ② Used in models UPC17, PC17, UPC17L0, PC17L0, UPC17EB and PC17EB ③ Used in models UPC21K, PC21K, UPC21KL0, PC21KL0, UPC21KD and PC21KD

## COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	FADA PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	UHF Ant. Coil	0Ω						
L2	UHF Ant. Coil	0Ω						
L3	IF Choke	0Ω						
L4	IF Choke	0Ω						
L5	Cathode Choke	0Ω						
L6	RF Choke	0Ω						
L7	UHF Osc. Coupling Coil	0Ω						
L8	UHF IF Coil	0Ω						
L9	VHF Ant. Matching Trans.	.5Ω	.5Ω					
L10	VHF Ant. Matching Trans.	.5Ω	.5Ω					
L11	IF Trap Coil	.2Ω						
L12	FM Trap Coil	0Ω						
L13	IF Trap Coil	.2Ω						
L14	VHF Ant. Coil	0Ω						
L15	VHF Ant. Coils	0Ω						
L16	UHF IF Coil	0Ω						
L17	UHF IF Coil	1.5Ω						
L18	IF Choke	0Ω						
L19	Neut. Coil	0Ω						
L20	VHF RF Coil	0Ω						
L21	VHF RF Coils	0Ω						
L22	UHF IF Coil	0Ω						

Channel 13.

Channel 13.

## PARTS LIST AND DESCRIPTIONS (Continued)

### COILS (cont)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	FADA PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L23	VHF Mixer Grid Coil	0Ω						Channel 13.
L24	VHF Mixer Grid Coils	0Ω						
L25	UHF IF Coil	0Ω						
L26	Flt. Choke	0Ω						
L27	RF Coil	0Ω						
L28	RF Coil	0Ω						Channel 13.
L29	VHF Osc. Coil	0Ω						
L30	VHF Osc. Coils	0Ω						
L31	VHF Osc. Coil	0Ω						Channel 6.
L32	RF Coil	1.5Ω						
L33	Conv. Plate	.1Ω						
L34	1st. Video IF	0Ω	.1Ω	37.276	17-5001	TV-125	6234	
L35	2nd. Video IF	.2Ω	.2Ω	37.277	17-5002	TV-127	6232	Includes 41.25MC Trap.
L36	Flt. Choke	0Ω		37.69	19-3001	TV-189	6175	.6 Microhenries.
L37	3rd. Video IF	.2Ω	.2Ω	37.299*	17-5003	TV-128	6233	Includes 47.25MC Trap.
L38	4th. Video IF	.2Ω	.2Ω	37.279	17-5004	TV-125	6234	
L39	Series Peaking Coil	1.3Ω		37.300				12 Microhenries.
L40	Series Peaking Coil	4.6Ω		37.234	19-3125		6153	120 Microhenries.
L41	Shunt Peaking Coil	18Ω		37.235	19-3660		6146	600 Microhenries.
L42A	4.5MC Trap	1.8Ω		37.252				
L43	B Sound IF Series Peaking Coil	6.5Ω		37.236	19-3180	TV-184	6180	190 Microhenries; Wound On 18KΩ Resistor.
L44	Shunt Peaking Coil	11Ω	1.9Ω CT	37.237	19-3250	TV-185	6181	245 Microhenries.
L45	Ratio Det.	5.5Ω		37.253	17-3497	TV-115	6205	Tertiary Winding .5Ω
L46	RF Choke	8.2Ω		37.288	19-1005		4612	10 Microhenries; IRC Part #CL-1.