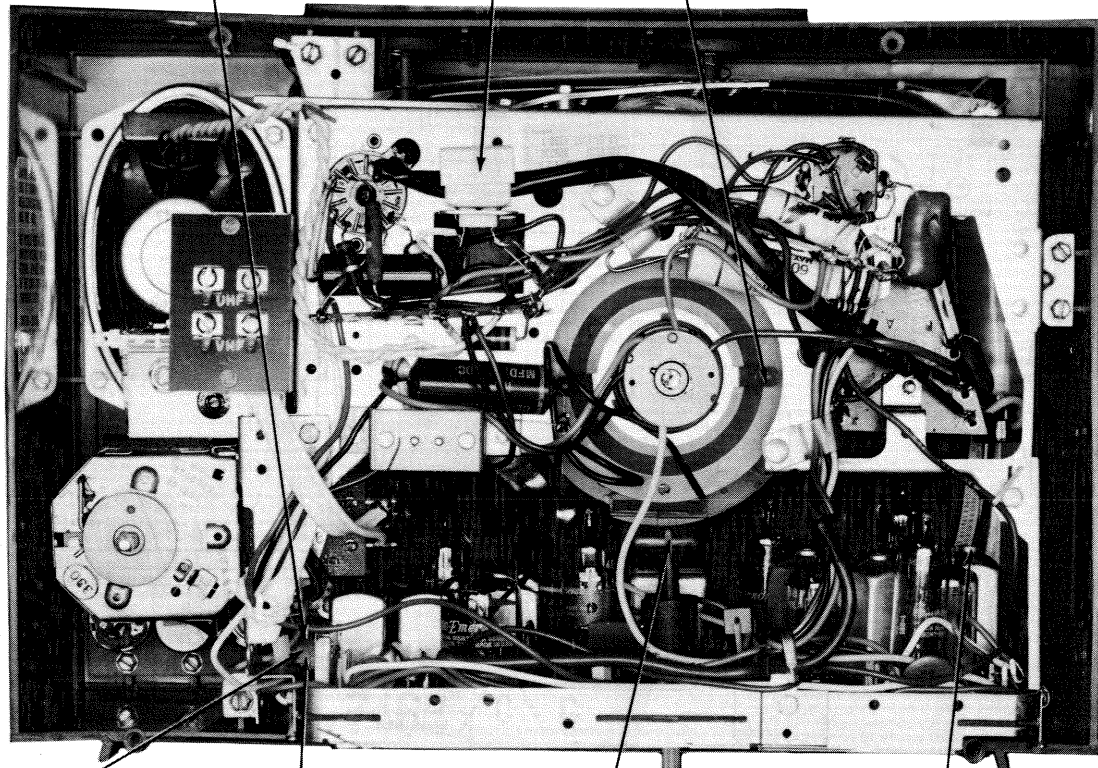


AGC (PICTURE OPTIMIZER) FUSE CENTERING



VERT SIZE VERT LINEARITY HORIZ HOLD QUADRATURE

CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Tune in a TV station and set all controls for normal operation. Adjust Horizontal Hold Control, L18 (Horizontal Oscillator Coil), until pic-

ture is in sync and cannot be disrupted when switching from channel to channel.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove the rear cover and all control knobs. Disconnect speaker wires, picture tube socket, and high voltage anode lead.
2. Loosen yoke. Remove 9 chassis screws from chassis brackets, 3 from rear of control panel and 6 from rear of chassis.

3. Remove chassis.

PICTURE TUBE REMOVAL

Follow "Chassis Removal" instructions, remove the 4 corner mounting screws, and remove picture tube.

SET 756 FOLDER 2

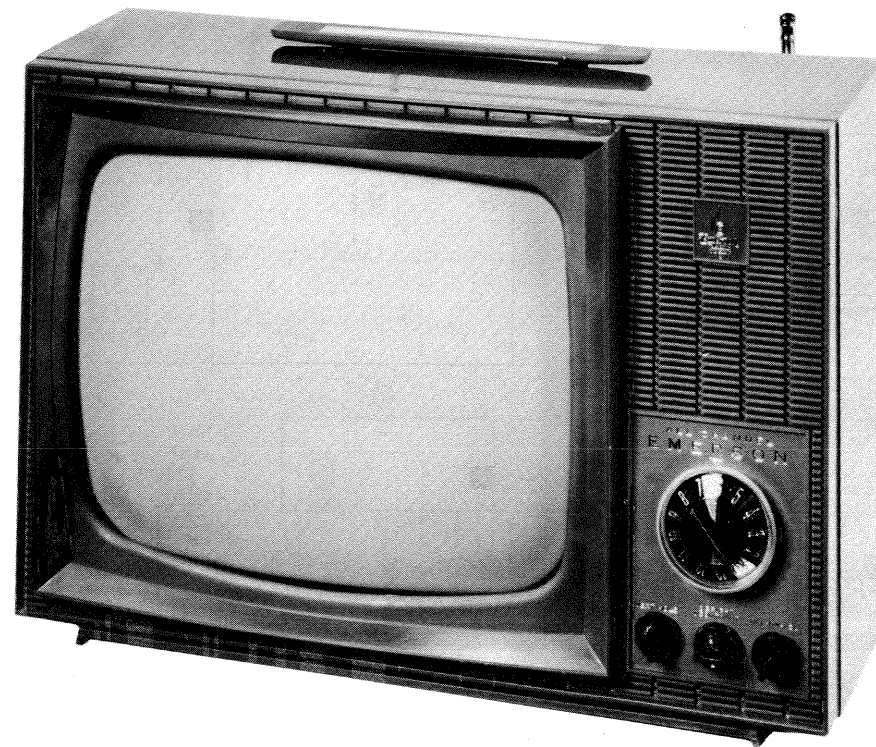
EMERSON
CHASSIS 120746B, 120788B

PHOTOFACT® Folder

with CIRCUITRACE®



EMERSON
CHASSIS 120746B, 120788B



MODEL 11P01

CAUTION

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	EMERSON Models 11P01, 11P02 .. Chassis 120746B, Model 11P03 .. Chassis 120788B
SUPPLIER	For current address, see Master Index
TYPE SET	Television Receiver
TUBES	VHF - Thirteen, UHF - One Transistor
POWER SUPPLY	110-120 Volts AC, 60 Cycles
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)

SERVICING IN THE FIELD

SAFETY GLASS

The safety glass is an integral part of the picture tube.

FUSE OR FUSE DEVICE

A 1.2 Amp. fuse is used for low voltage power supply protection. (See "Tube Placement Chart" for location.)

VHF OSCILLATOR ADJUSTMENT

Set fine tuning at the center of its range and adjust osc. slug (one for each channel) for best sound and picture.

AGC

The AGC may be varied by means of an AGC Control. (See

"Tube Placement Chart" for location.)

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

The Horizontal Frequency Slug is used for the horizontal hold. (See "Tube Placement Chart" for location.)

FOCUS

No provision is made to vary the focus on this receiver.

CENTERING

Centering is accomplished by 2 magnetic rings located on yoke rear cover.

master
file

EMERSON
CHASSIS 120746B, 120788B

SET 756 FOLDER 2

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

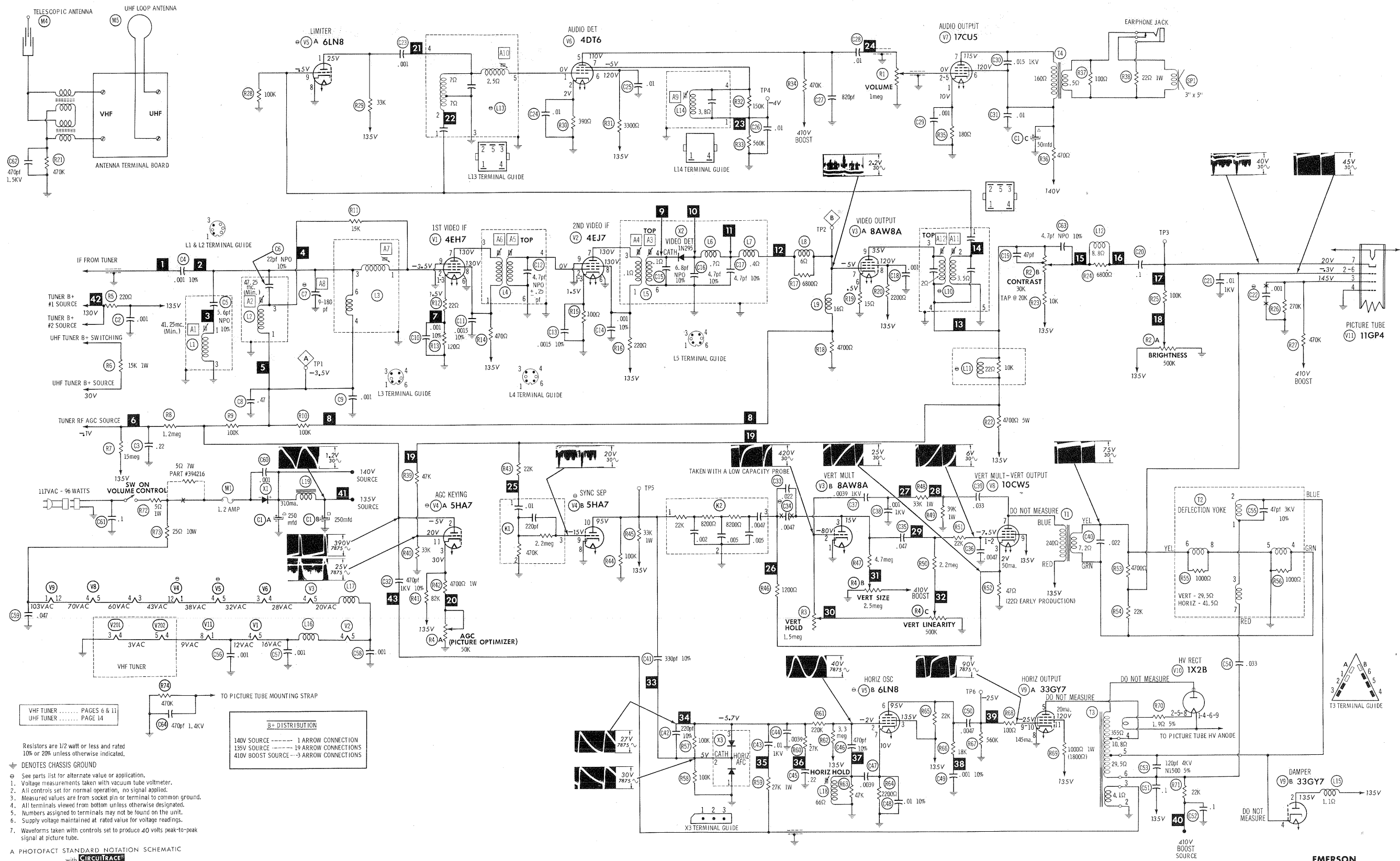


The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. NA288

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DATE 5 -65

SET 756 FOLDER 2



EMERSON
CHASSIS 120746B, 120788B

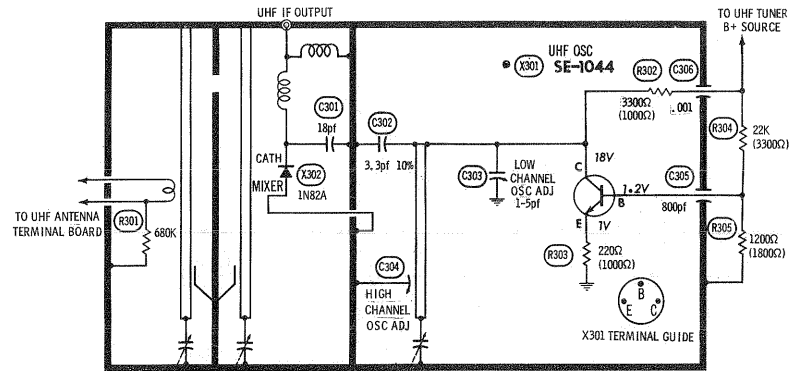
FOLDER 2

RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
V1	4EH7	142Ω	100K	142Ω	7Ω	9Ω	0Ω	488Ω †	488Ω †	0Ω			
V2	4EJ7	100Ω	0Ω	100Ω	9Ω	11Ω	0Ω	238Ω †	238Ω †	0Ω			
V3	8AW8	0Ω	1.3meg	5.5meg	15Ω	11Ω	15Ω	300Ω ●	2218Ω †	4500Ω †			
V4	5HA7	20Ω	200K	18K	0Ω	26K †	NC	NC	0Ω	2.2meg	24K †	22K	22Ω
V5	6LN8	33K †	375K	18.4Ω †	20Ω	17Ω	22K †	2200Ω	0Ω	100K			
V6	4DT6	14.5Ω	390Ω	17Ω	15Ω	492K †	3300Ω †	560K					
V7	17CU5	180Ω	NC	22Ω	30Ω	50K	488Ω †	648Ω †					
V8	10CW5	2.4meg	2.4meg	47Ω	35Ω	30Ω	NC	258Ω †	258Ω †	18.4Ω †			
V9	33GY7	51Ω	19.5Ω †	NC	650K	7.2Ω	NC	NC	0Ω	560K	NC	1018Ω	35Ω †
V10	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE											TOP CAP 247.2Ω †
V11	11GP4	7Ω	4000Ω	250K	0Ω	NC	NC	125K	4.5Ω				
V201	3GK5	0Ω	1.5meg	0Ω	1.5Ω	1438Ω †	0Ω	0Ω					
V202	6CG8	15K	12K †	0Ω	4.5Ω	1.5Ω	1238Ω †	12K †	0Ω	220K			
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12

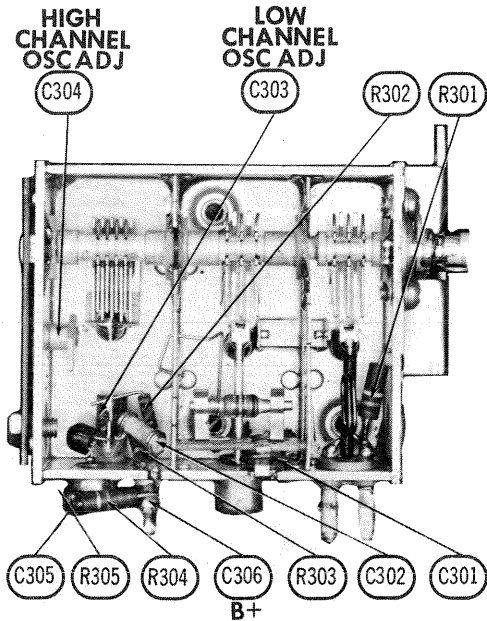
● READING DEPENDS ON POLARITY OF METER CONNECTIONS.
NC NO CONNECTION

† MEASURED FROM OUTPUT OF X1.
‡ MEASURED FROM PIN 4 OF V9.



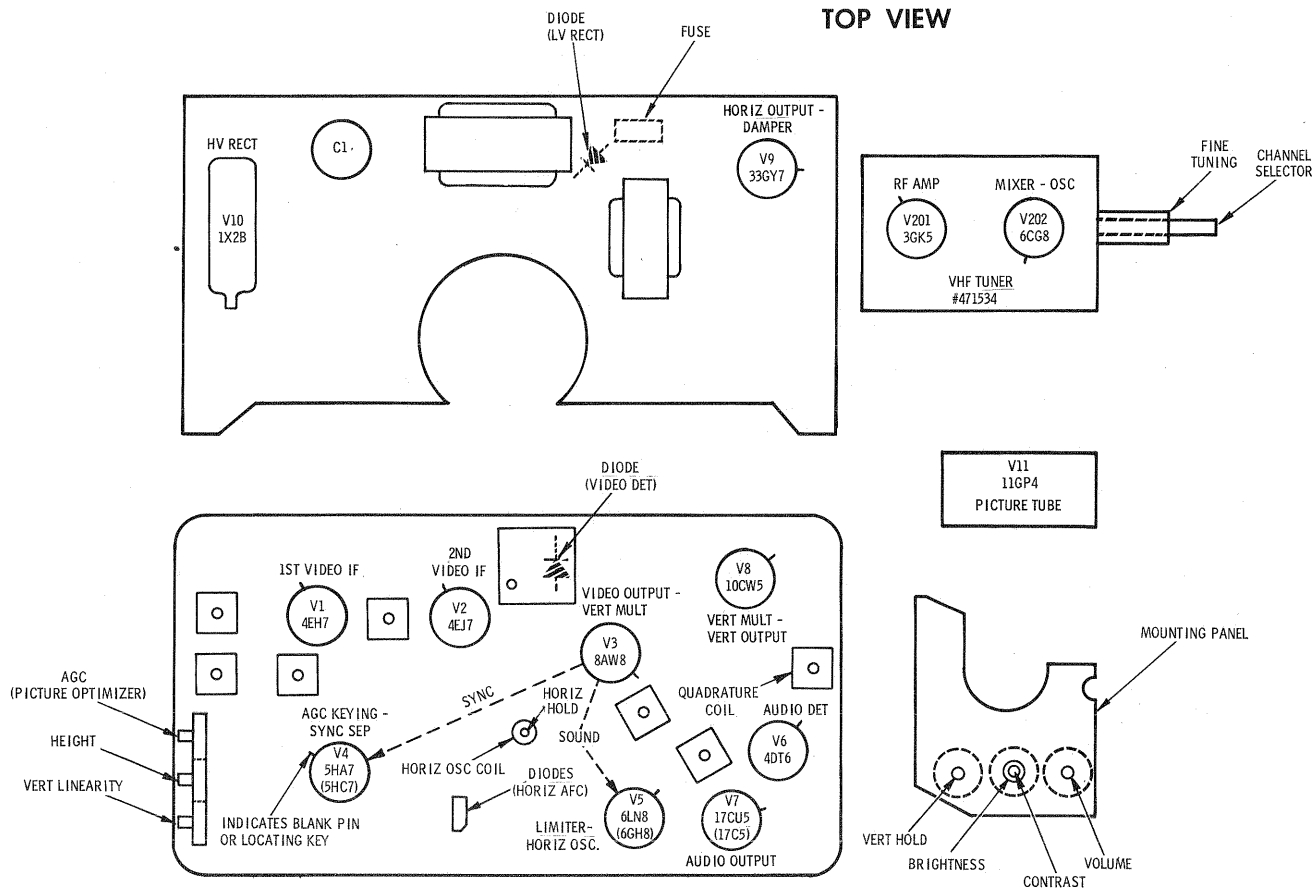
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● See parts list for alternate value or application.



UHF TUNER 471569

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

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

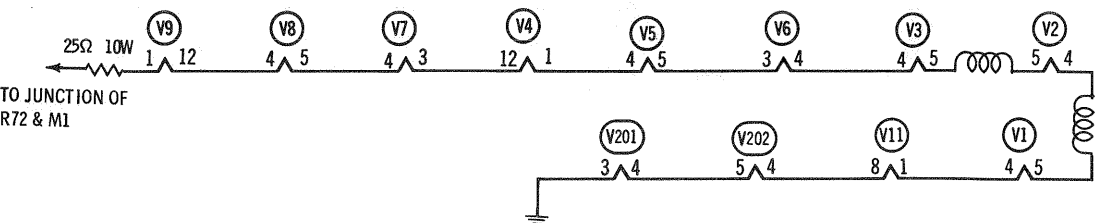
POWER SUPPLY FAILURE
No raster, no sound Line Fuse M1, Rectifier X1

SWEEP FAILURE
No raster, has sound V5, V9, V10, V11
No vertical deflection V3, V8
Poor vert. linearity or foldover V3, V8
Poor horiz. linearity or foldover V5, V9
Narrow picture V5, V8, X1
Vert. off freq. V3, V10
Horiz. off freq. AFC Diode X3, V5

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster V1, V2, Video Det. X2, V3
No pic, no sound, has snow V201, V202, V1
No pic, has sound, has raster V3, V11
Has pic, no sound V5, V6, V7
Overloaded picture V4

SYNC FAILURE
No vert. sync V4
No horiz. sync V4
No vert. or horiz. sync V4

This receiver employs tubes used in a series filament network, an open filament in any tube will cause the set to be inoperative. (See circuit below.)

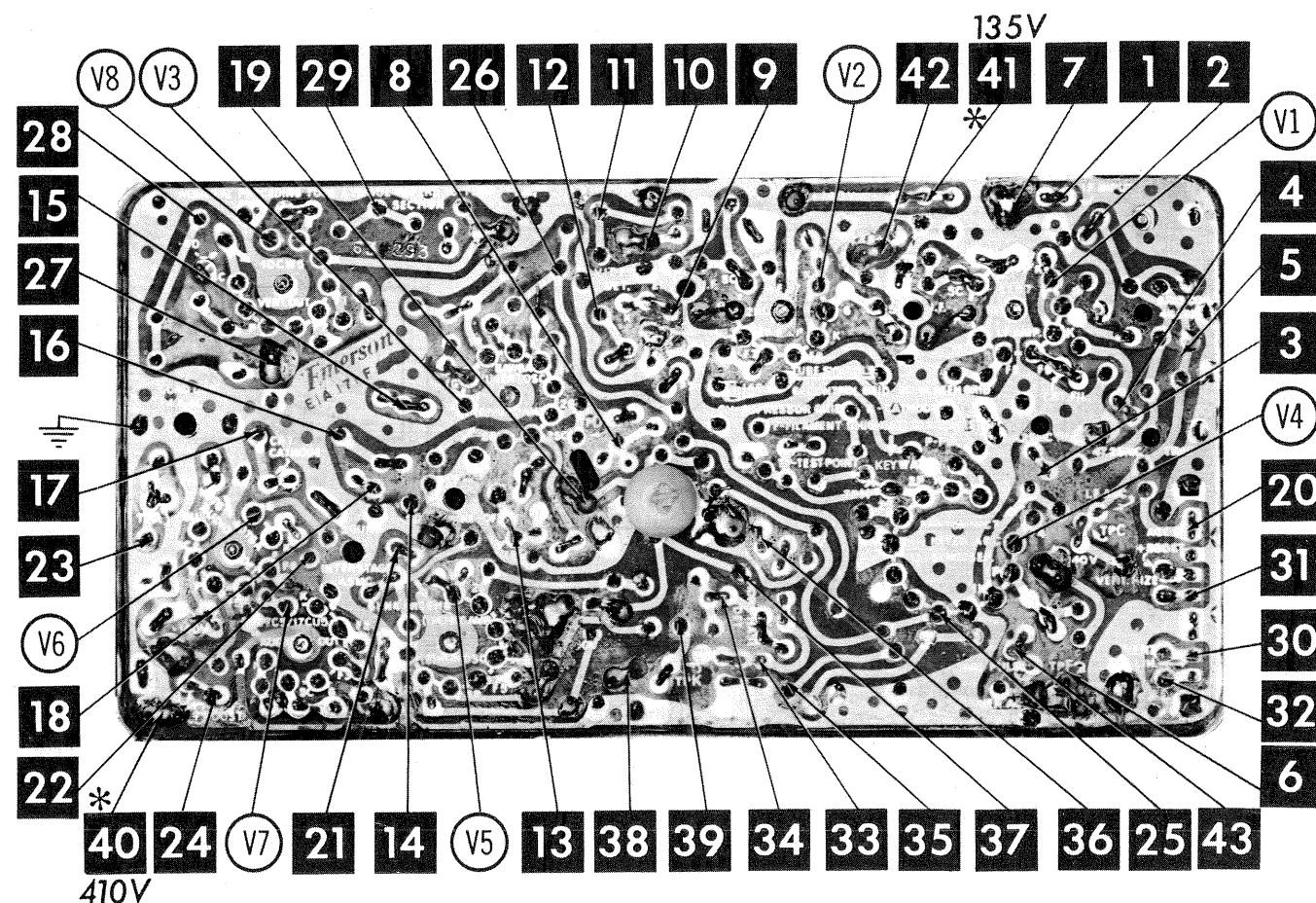


SET 756 FOLDER 2

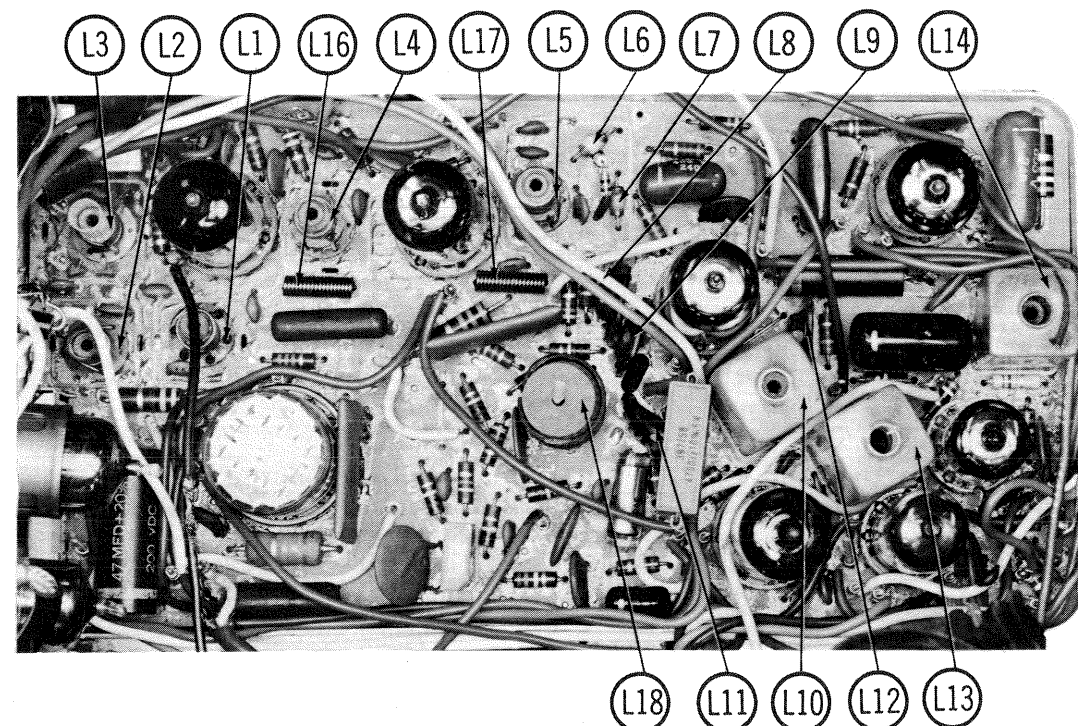
EMERSON
CHASSIS 120746B, 120788B

FOLDER 2

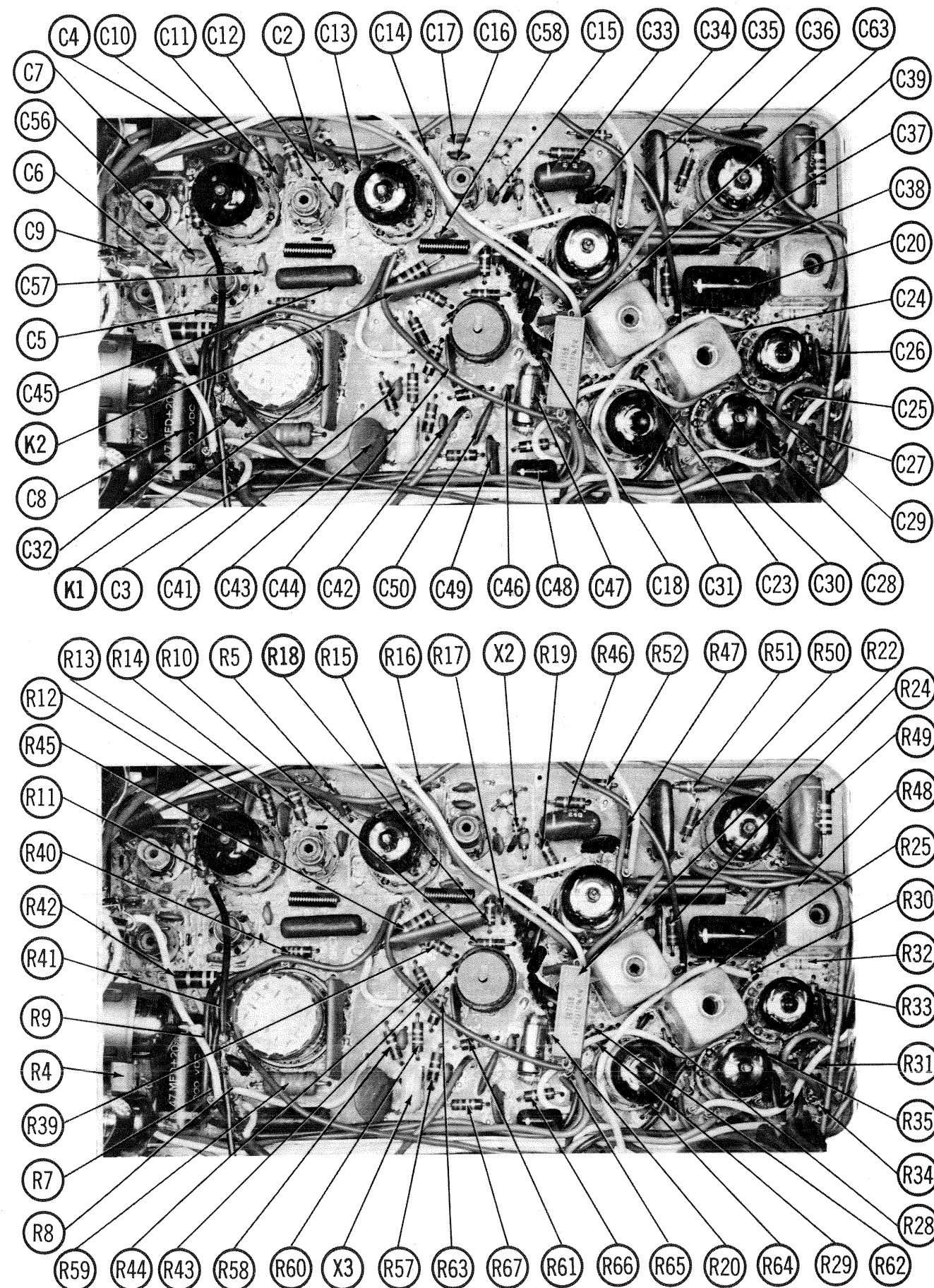
ARROWS INDICATING TUBE LOCATIONS ARE
POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



*SOURCE

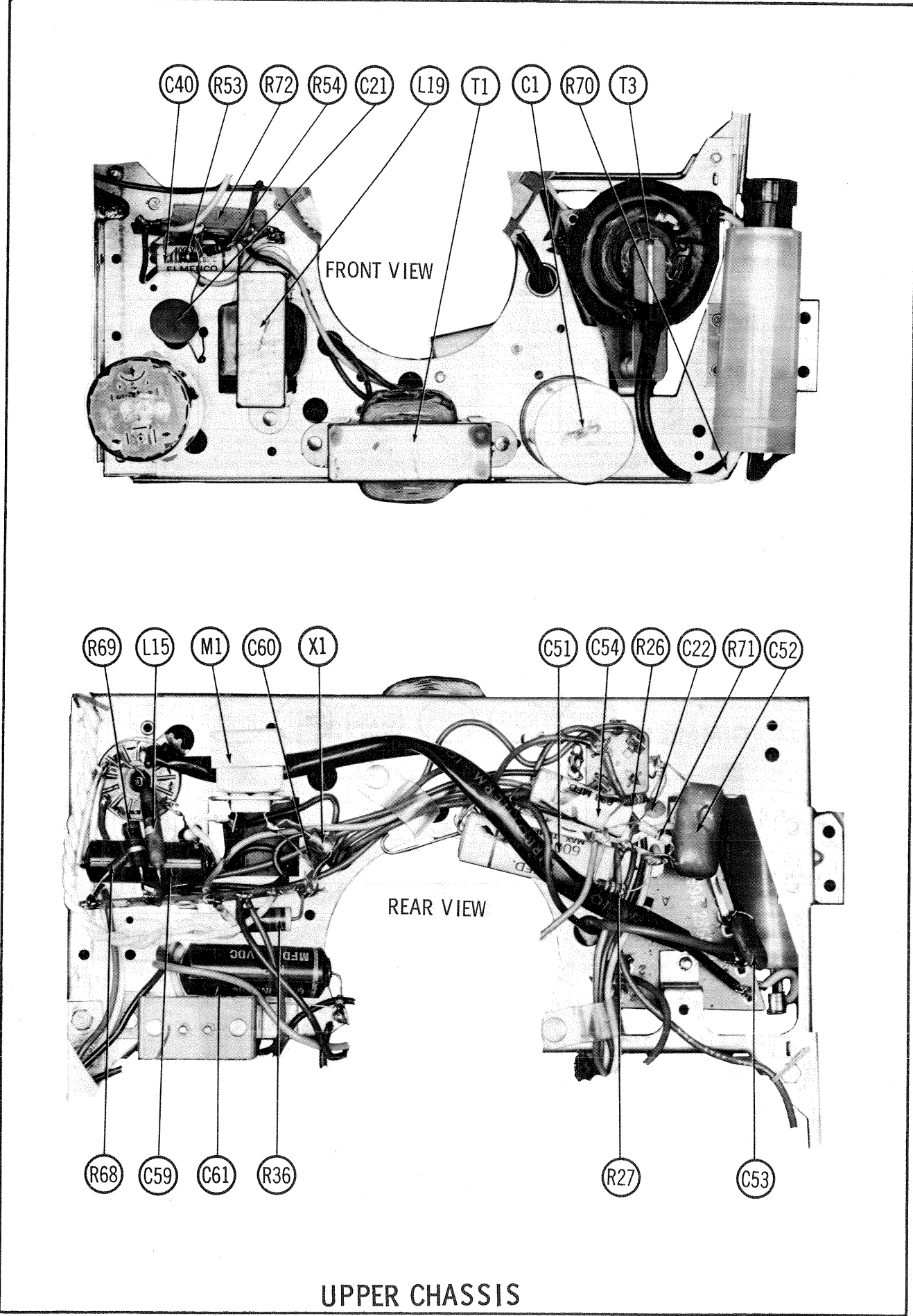


PRINTED BOARD



EMERSON
CHASSIS 120746B, 120788B

FOLDER 2



ALIGNMENT INSTRUCTIONS

Use an isolation transformer and maintain voltage at 117 Volts. Allow a 20-minute warm-up period for the receiver and test equipment.
 Suggested Alignment Tools: A1 thru A7, A9 thru A12 .. GENERAL CEMENT #8606, 8869, 9302 .. WALSCO #2511, 2543, 2588.
 Mixer Plate Coil GENERAL CEMENT #9296, 9300, 9302 .. WALSCO #2510, 2511, 2547.
 A8 GENERAL CEMENT #5009, 8195, 8282 .. WALSCO #2513, 2526, 2531-X.

VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from those shown. Connect a variable bias supply to the IF AGC line (point \diamond) and adjust to obtain a response curve which shows no indication of overload. Disable Oscillator section of Mixer-Osc. Set the Channel Selector to any non-interfering channel.

INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
1. Connect DC probe of a VTVM thru a 47K resistor to point \diamond . Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		41.25MC 47.25MC	A1 A2	Adjust for MINIMUM.
2. Connect vertical input of a scope to point \diamond . Low side to ground.	Connect high side to pin 2 (grid) of V 2. Low side to ground.		42.5MC 45.75MC	A3, A4	Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 1.
3. Connect vertical input of a scope to point \diamond . Low side to ground.	Connect high side thru a .001 mfd capacitor, pin 2 (grid) of V1. Low side to ground.	44MC (10MC Sweep)	42.5MC 45.75MC	A5, A6	Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 2.
4. Connect vertical input of a scope to point \diamond . Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	41.25MC 42.6MC 44.0MC 45.75MC 47.25MC	A7, A8 and Mixer Plate Coil	Adjust for maximum gain and symmetry of response with markers as shown in Figure 3. In order to obtain a proper response, it may be necessary to slightly retouch A3, A4, A5 and A6.

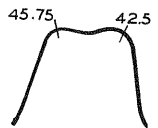


FIG. 1



FIG. 2

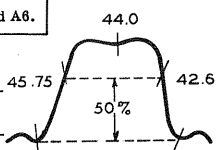


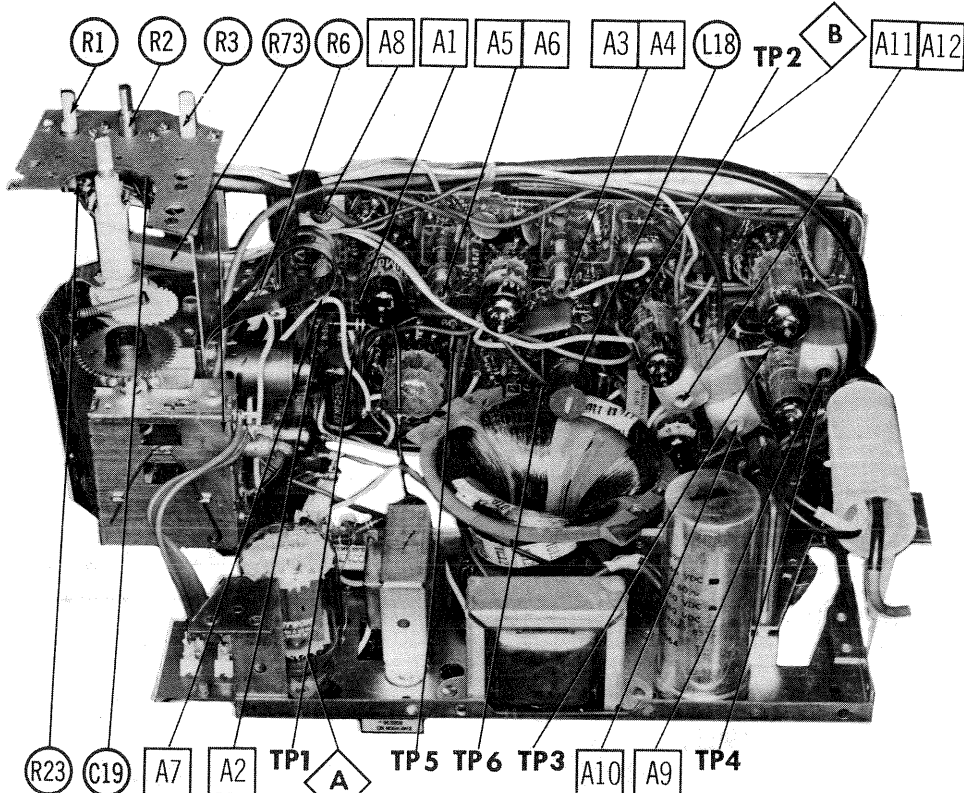
FIG. 3

4.5 MC TRAP ALIGNMENT

Tune in a strong TV signal and set the Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible on the screen. Adjust A12 for MINIMUM beat interference.

SOUND IF ALIGNMENT

Tune in a station and adjust A 8 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce signal while aligning for undistorted output by adjusting A10 and A11.



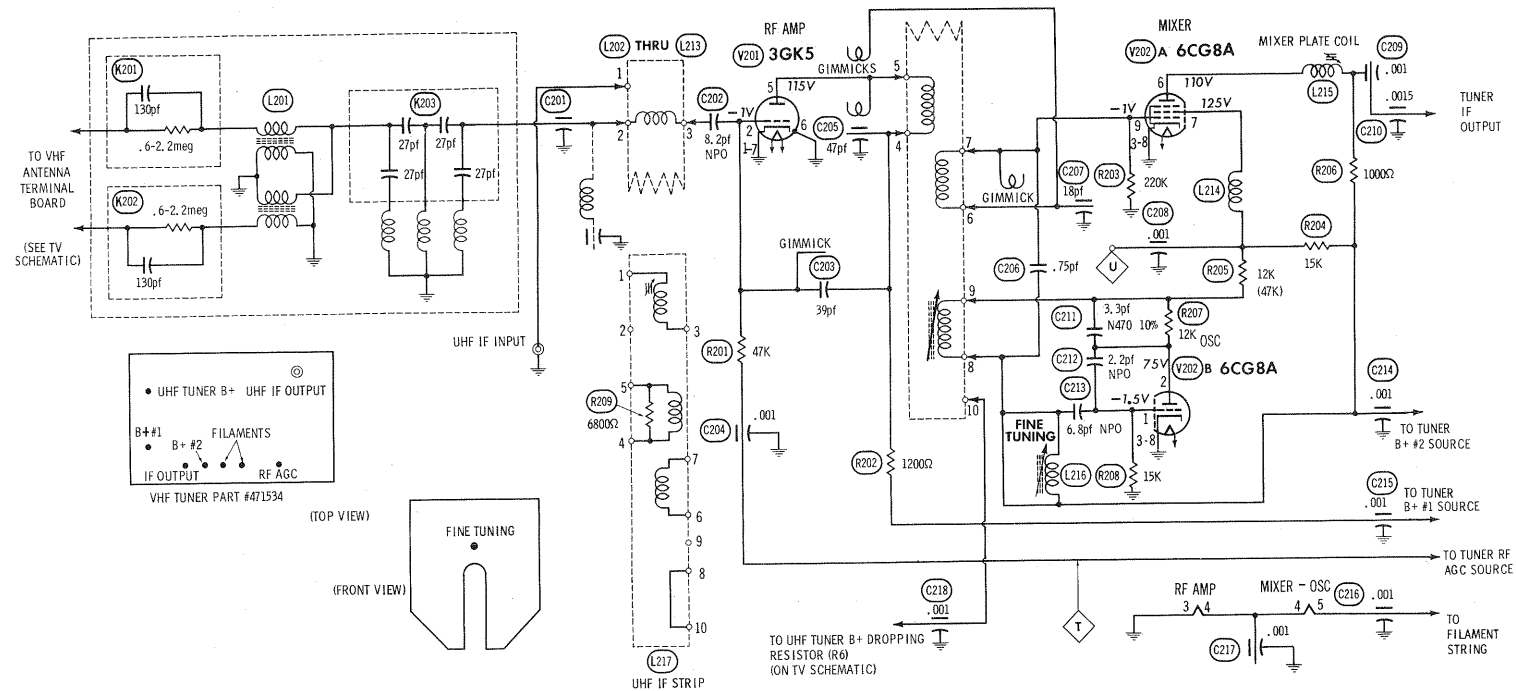
TP1 -3.7V AGC TP2 -2V DET OUTPUT TP3 20V PICTURE TUBE CATH
 TP4 -4V QUAD COIL TP5 95V SYNC TP6 -24V HORIZ OSC PLATE

CHASSIS—TOP VIEW

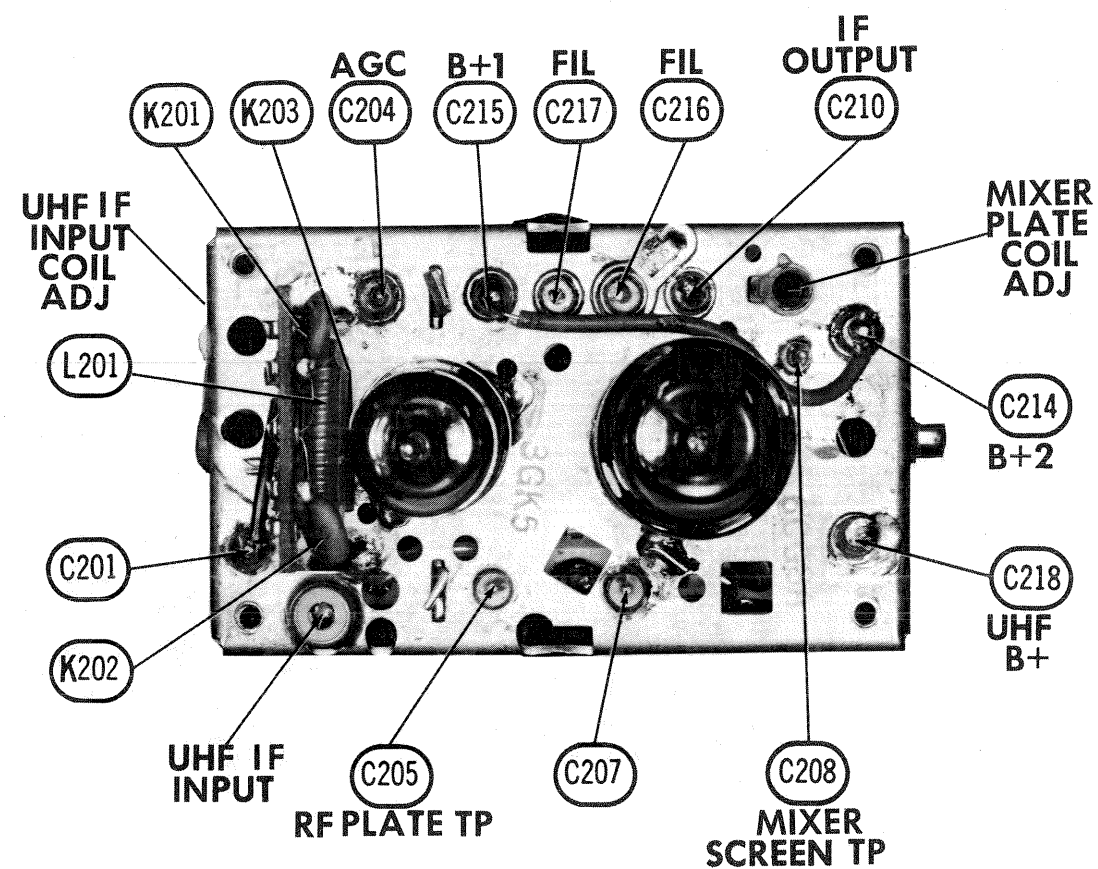
SET 756 FOLDER 2

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 CHASSIS 120746B, 120788B

FOLDER 2



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13 POSITION TURRET-TYPE VHF TUNER 471534

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ADJUSTMENTS

The individual oscillator slugs are accessible one at a time through a hole in the front of the tuner. Set the Fine Tuning to the center of its range and adjust oscillator for best picture and sound on each active channel.

RF AND MIXER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use 10MC sweep unless otherwise noted.

Connect a variable bias to the RF AGC line at point ①. Adjust bias to obtain response curve which shows no indication of overloading.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	"	195MC	193.25MC 197.75MC	10	Across Video Det. load resistor.	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.

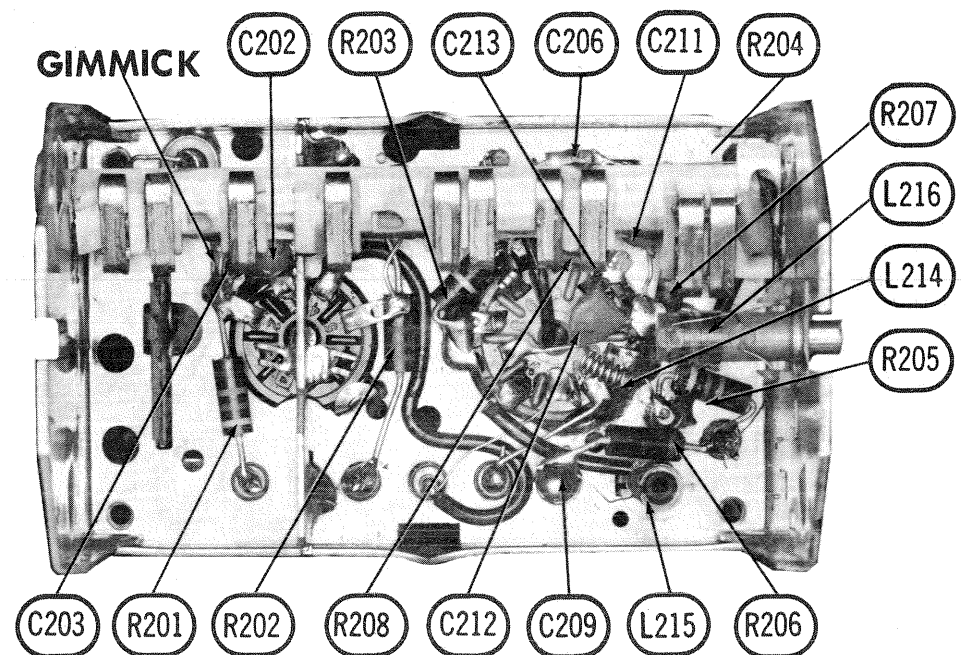
CHANNEL & FREQUENCY CHART

SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL
57MC	55.25MC	2	85MC	83.25MC	6	195MC	193.25MC	10
	59.75MC			87.75MC			197.75MC	
63MC	61.25MC	3	177MC	175.25MC	7	201MC	199.25MC	11
	65.75MC			179.75MC			203.75MC	
69MC	67.25MC	4	183MC	181.25MC	8	207MC	205.25MC	12
	71.75MC			185.75MC			209.75MC	
79MC	77.25MC	5	189MC	187.25MC	9	213MC	211.25MC	13
	81.75MC			191.75MC			215.75MC	



FIG. 201

Tune to a UHF station and adjust UHF IF Input Coil for best picture and sound. Tune UHF Channel Selector to the lowest UHF channel (low end of dial) operating in the area. Adjust UHF Low Channel Oscillator Trimmer for best picture and sound. Tune to the highest channel (high end of dial) in the area and adjust UHF High Channel Oscillator Trimmer for best picture and sound. Repeat steps until no further improvement can be made.



EMERSON
CHASSIS 120746B, 120788B

FOLDER 2

VHF TUNER PARTS LIST AND DESCRIPTION

TUBES					
* AMPEREX *		GENERAL ELECTRIC		RCA * SYLVANIA *	
ITEM No.	USE	TYPE		ITEM No.	USE
					TYPE
V201	RF Amp.	3GK5		V202	Mixer - Osc.
					6CG8

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.
C201	8.2 NPO	#964628	NPO-DI 8.2	MFT-1000		CCF-102	CT280A
C202	30		EF-001				
C203	.001						
C204	47						
C205	.75						
C206	18						
C207	.001		EF-001				
C208	.001		EF-001				
C209	.001		EF-001				
C210	.0015		EF-001				
C211	3.3 N470 10%	#964613	NPO-DI 2.2	DTZ-2R2	C10V22C	CCTO-2R2	CNO522
C212	2.2 NPO		NPO-DI 6.8				
C213	6.8 NPO		DTZ-6R8				
C214	.001		EF-001				
C215	.001		EF-001				
C216	.001		EF-001				
C217	.001		EF-001				
C218	.001		EF-001				
C219	.001		EF-001				

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
Emerson Part Number

COILS (RF-IF)							
ITEM No.	USE	EMERSON PART No.	NOTES	ITEM No.	USE	EMERSON PART No.	NOTES
L201	Ant. Input Ass'y	964496		L210	Ant., RF, Mixer, Osc.	964492	Chan.10, IF Strip
L202	Ant., RF, Mixer, Osc.	964484	Chan. 2, IF Strip	L211	"	964493	" 11 "
L203	"	964485	" 3 "	L212	"	964494	" 12 "
L204	"	964486	" 4 "	L213	"	964495	" 13 "
L205	"	964487	" 5 "	L214	RF Choke		
L206	"	964488	" 6 "	L215	Mixer Plate	964611	
L207	"	964489	" 7 "	L216	Fine Tuning	964500	
L208	"	964490	" 8 "	L217	UHF IF Strip	964629	Ant., RF, Mixer
L209	"	964491	" 9 "				

COMPONENT COMBINATIONS				
ITEM No.	USE	DESCRIPTION	EMERSON PART NO.	REPLACEMENT DATA
K201	Antenna Isolation	.6-2.2meg, 130pf		
K202	Antenna Isolation	.6-2.2meg, 130pf		
K203	Antenna Network	27pf, 27pf, 27pf, 27pf		

UHF TUNER PARTS LIST AND DESCRIPTION

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X301	SE-1044 SE-3002	UHF Oscillator UHF Oscillator				NPN, Emerson Part #964713 Emerson Part #964034 ① ① Used in UHF Tuner 471532.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS				DIODES GENERAL ELECTRIC PART No.
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X302		964158					1N82A

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.
C301	18	#964196	DI-18	DD-180	LA10Q18-SL	CCD-180	GP418
C302	3.3 10%						
C303	1-5						
C304							
C305	800						
C306	.001		EF-001				

Emerson Part Number

PARTS LIST AND DESCRIPTION

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

TUBES					
* AMPEREX *		GENERAL ELECTRIC		RCA * SYLVANIA *	
ITEM No.	USE	TYPE		ITEM No.	USE
					TYPE
V1	1st Video IF Amp.	4EH7		V6	Audio Detector
V2	2nd Video IF Amp.	4EJ7		V7	Audio Output
V3	Video Output - Vert. Mult.	8AW8		V8	Vert. Mult. - Vert. Output
V4	AGC Keying - Sync Sep.	5HA7 (5HC7,6LX8)		V9	Horiz. Output - Damper
V5	Limiter - Horiz. Osc.	6LN8 (6GH8) *		V10	HV Rectifier

* Alternates

ITEM No.	REPLACEMENT DATA				NOTES
	EMERSON PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V11	11GP4			11GP4 ①	① Silver Screen "85"

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS				DIODES GENERAL ELECTRIC PART No.
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X1	.31A	817068	GE-504 or 1N1695	1N540 or 1N2070	1N1763 or 1N2862	40H or F-4	
X2		817077					1N295
X3		817074					6GC1

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	EMERSON PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	250	160	925599	AFH3-13-68	CC0129.5	XC4-77	TMD-2195	FP318.85
B	250	160			BR40-250		TD-60-250	
C	50	160						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C2	.001	#900227 ①	BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C3	.22 200V		P288N-22		PM2P22	2DP-4-224	PVC2022	2PS-P22
C4	.001 10%		DI-1000	DD-102	JB6D1	CCD-102	GP210	10TS-D10
C5	5.6 NPO 10%							10TCC-V56
C6	22 NPO 10%		NPO-DI 22	DTZ-22	C10Q22C	CCTO-220	CNO422	10TCC-Q22
C7	9-180							
C8	.47 200V		P288N-47		PM2P47	2DP-5-447	PVC2047	2PS-P47
C9	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C10	.001 10%		DI-1000	DD-102	JB6D1	CCD-102	GP210	10TS-D10
C11	.0015 10%		DI-1500	DD-152	CF-152	CCD-152	JF215	10TS-D15
C12	4.7 NPO ±.25pf	②	TCZ-4R7				CNO547	10TCC-V47
C13	.0015 10%		DI-1500	DD-152	CF-152	CCD-152	JF215	10TS-D15
C14	.001 10%		DI-1000	DD-102	JB6D1	CCD-102	GP210	10TS-D10
C15	6.8 NPO 10%		NPO-DI 6.8	DTZ-6R8	C10V68C	CCTO-6R8	CNO568	10TCC-V68
C16	4.7 10%		NPO-DI 4.7	DTZ-4R7	C10V47C	CCTO-4R7	CNO547	10TCC-V47
C17	4.7 10%		NPO-DI 4.7	DTZ-4R7	C10V47C	CCTO-4R7	CNO547	10TCC-V47
C18	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C19	.47		DI-47	DD-470	LA10Q47-S3	CCD-470	GP447	10TS-Q47
C20	.1 400V		P488N-1	DF-104	PM4P1	4DP-3-104	GEM401	4TM-P10
C21	.01 1KV		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C22	.001	②	BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C23	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C24	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C25	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C26	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C27	.820		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C28	.01		DI-820	DD-821	LA10T82-C4	CCD-821	B382	10TS-T82
C29	.001		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C30	.015 1KV		BPD-015	DD-153	BYA10D1	CCD-102	B210	5HK-D10
C31	.01		BPD-01	DD-103	LA10S15-C4	CCD-153	GP115	5HK-S15
C32	470 1KV 10%	②	BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C33	.022 400V		DI-470	DD-471	CD-471	CCD-471	JF347	10TS-T47
C34	.0047		P488N-022	DD-203	PM4S22	4DP-2-223	GEM4122	4TM-S22
C35	.047 400V		BPD-0047	DD-472	BYA10D47	CCD-472	B247	5HK-D47
C36	.0047		P488N-047	DD-503	PM4S47	4DP-3-473	GEM4147	4TM-S47
C37	.0039 1KV		BPD-0047	DD-472	BYA10D47	CCD-472	B247	5HK-D47
			P1088N-4000			16DP-2-402	GEM1624	10TM-D40

PARTS LIST AND DESCRIPTION (CONTINUED)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C38	.001 1KV 10%		DI-1000	DD-102	PM6S33	CCD-102	JF210	10TS-D10
C39	.033 600V		P688N-033			6DP-3-333	PVC6133	6PS-S33
C40	.022 400V		P488N-022	DD-203	PM4S22	4DP-2-223	GEM4122	4TM-S22
C41	330 10%		DI-330	DD-331	LA10T33-C4	CCD-331	GP333	10TS-T33
C42	220 10%		DI-220	DD-221	LA10T22-S3	CCD-221	GP322	10TS-T22
C43	.01 1KV		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10
C44	.0039 10%		DI-3900	CF-392	JB6D39	CCD-392	JF239	10TS-D39
C45	.22 200V		P288N-22		PM2P22	2DP-4-224	PVC2022	2TM-P22
C46	.470 10%		DI-470	DD-471	JB6T47	CCD-471	GP347	10TS-T47
C47	.0039 500V 10%			CPR-3900J	PM6D39	6DP-1-392	PVC6239	6PS-D39
C48	.01 400V 10%		BE4S1	CPR-10000J	PM4S1	4DP-1-103	PVC411	4PS-S10
C49	.001 10%		DI-1000	DD-102	JB6D1	CCD-102	GP210	10TS-D10
C50	.0047		BPD-0047	DD-472	BYA10D47	CCD-472	B247	5HK-D47
C51	.1 600V		P688N-1	DF-104	PM6P1	6DP-4-104	GEM601	6TM-P10
C52	.1 600V		P688N-1	DF-104	PM6P1	6DP-4-104	GEM601	6TM-P10
C53	120 4KV N1500 5%	#929142						
C54	.033 400V		P488N-033		PM4S33	4DP-2-333	PVC4133	4PS-S33
C55	.47 3KV 10%							
C56	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C57	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C58	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C59	.047 600V		P688N-047	DD-503	PM6S47	6DP-3-473	GEM6147	6TM-S47
C60	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C61	.1 600V		P688N-1	DF-104	PM6P1	6DP-4-104	GEM601	6TM-P10
C62	.470 1.5KV		HVD-15-470	DD30-471	HVB20T47	3CCD-471	2HV347	30GA-T47
C63	4.7 NPO 10%		NPO-DI 4.7	DTZ-4R7	C10V47C	CCTO-4R7	CNO547	10TCC-V47
C64	.470 1.4KV							

① Part #900221 may be used in some versions.
② Added in Late Production Models.

Emerson Part Number

CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			EMERSON PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	1meg	390820	F2-1meg, SN100, KR-1	A47-1meg-Z RN-3 ①, SWE-12	(BU11, CF26, SS6 ①, GC) *	RU18A, SL37, SN1000 ①, US41 or (UA16A, SN1000 ①, US41) * UE4572
R2A B	Brightness Contrast	500K 30K 20K Tap 1.5meg	390822			† QJ-1883	
R3	Vert. Hold		390821	F1-1.5meg, SN100 or (AB-742, AK-19 AK-19 ①)	A47-1.5meg-S RN-3 ①	B11-138, TM4 ① or (BU11, CF18, SS6 ①) *	PTA1254L ① or (RU155L, SL37, SN1000 ①) or (UA155L, SN1000 ①)
R4A B C	AGC (Picture Optimizer) 50K Vert. Size 2.5meg Vert. Linearity 500K		390823				

† "CONCENTRIKIT" Equivalent: K-8 Kit with Base Elements and Shafts: B11-133, P22-015 (Panel), B20-121X, R1-028 (Rear) R5

* "STA-LOC" Equivalent: FB55L, RU34T24, OS437, IS875.

* "SNAPTROL"

① File Flat.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R22 R72	4700Ω 5W 5Ω 7W	MR4-4.7K PW10-5	7G-4700 10W-SQ-5	#397158 #394216	R73	25Ω 10W	PW10-25	10W-SQ-25	#394278

Emerson Part Number

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					
		EMERSON PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.
L1	41.25MC Trap	720453					
L2	47.25MC Trap	720452					
L3	1st Video IF	720451					
L4	2nd Video IF	720454					
L5	3rd Video IF	720455					
L6	RF Choke (4.4uh)	705040	19-1003	BC-564	7514-E	RTC-8518	TB298
L7	RF Choke (1.6uh)	705041	19-1001	BC-562	74F476AP	RTC-8518	TA248
L8	Peaking (90uh)	708408	19-3093	BC-869	74F156AP	RTC-8518	T859
L9	Peaking (530uh)	708404	19-2029	BC-678	6177	RTC-8594	T868
L10	Sound Takeoff - 4.5MC Trap	720448 ①			6144 *	RTC-8581	T340
L11	Peaking (530uh)	708418 ②	19-2029 *	BC-678 *	6144 *	RTC-8581 *	T354 *
L12	Peaking (180uh)	708401	19-3180	BC-672	61801	RTC-8597	T344
L13	Sound Interstage	720449 ③					
L14	Quadrature	720404					
L15	RF Choke (10uh)	705021	19-1005	TV-234	7137	RTC-8522	T269
L16	Filament Choke (18 turns)	705031		BC-566	72F105AP		T860
L17	Filament Choke (18 turns)	705031					

① May be 720512 in some versions.
② Wound on 10K resistor.

③ May be 720513 in some versions.
* Shunt with 10K resistor.

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						
		EMERSON PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L18	Horiz. Osc. (Hold) Shaft, Horiz. Hold Washer, Horiz. Shaft Retaining	(E)718151 416990 277087						

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	EMERSON PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L19	.27A	18Ω	.33 Hy.	737056	C-4125				

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		EMERSON PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1 T2	Vert. Output Yoke (Horiz. 24.5MH) 114° (Vert. 66MH) Yoke Clamp	738198 708452	MDF-143		Y-105	YT-103-1	
T3	Horiz. Output	587245 738199(A)					

* COMPONENT CONNECTION DATA

ORIGINAL → REPLACEMENT ↓	HV TRANSFORMER		VERTICAL OUTPUT		YOKE								YOKE PLUG			
	Original Connections		Original Connections		Original Connections								1	2	3	4
MERIT																
STANCOR																
THORDARSON																
TRIAD																

† Remove White lead and horizontal damping capacitor (82pf). Install original horizontal damping capacitor (47pf) between yoke terminals #1 and #2.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	EMERSON PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T4	2200Ω	3-4Ω	AT2941 †	A-3025	A-3332	24S53	S-12X	† Part of SP1

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		EMERSON PART No.	QUAM PART No.	
SP1	3" x 5" PM	180285	35A05	Includes Output Transformer

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	EMERSON PART No.	REPLACEMENT DATA
K1 K2	Sync Takeoff Vertical Integrator	470K, 2.2meg, 220pf, .01mfd 8200Ω, 8200Ω, 22K, .002mfd, .0047mfd, .005mfd, .005mfd	923059 923159	Centralab PC-420

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			EMERSON PART No.		LITTELFUSE PART No.		BUSS PART No.	
M1	Chemical	1.2A	808236	808235	31301.2 (3AG, 1.2A, 125V, S/B)	357001	MPL 1.2	4405

MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
M2 M3	VHF Tuner UHF Tuner	471534 471569	STANDARD KOLLSMAN Replacement 41S13 (450MA Rating)
M4 M5	UHF Tuner VHF Antenna UHF Antenna	471532 471539A 700195A	JFD Replacement TA450 TA489

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	MODELS			
		101T	201T	301T	401T
Cabinet Front-Medium Grey	141599	X			
Cabinet Front-Alabaster	141637		X		
Cabinet Front-Sand	141637A		X		
Cabinet Front-Ivory	141637C		X		
Cabinet Front-Red	141637L		X		
Cabinet Front-Sand	141637M		X		
Cabinet Front-White	141637F		X		
Cabinet Front-Blue	141637N		X		
Cabinet Front-Grey	141637P		X		
Cabinet Back-Medium Grey	462093C	X			
Cabinet Back-Charcoal Grey	462093		X		
Cabinet Back-Fawn	462093B		X		
Cabinet Back-Alabaster	462093E		X		
Cabinet Back-Ivory	462093F		X		
Cabinet Back-Red	462093J		X		
Cabinet Back-Deep Fawn	462093B		X		
Cabinet Back-White	462093E		X		
Cabinet Back-Blue	462093K		X		
Cabinet Back-Grey	462093		X		
Handle-Medium Grey	461989C	X			
Handle-Charcoal Grey	461989		X		

ITEM	PART No.	MODELS			
		101T	201T	301T	401T
Handle-Fawn	461989B			X	
Handle-Alabaster	461989E			X	
Handle-Ivory	461989F			X	
Handle-Red	461989J			X	
Handle-Deep Fawn	461989B			X	
Handle-White	461989E			X	
Handle-Blue	461989K			X	
Handle-Grey	461989			X	
Knob-VHF Channel Selector	461973C	X			
Knob "	461973B		X	X	
Knob-VHF/UHF Fine Tuning	461972		X	X	X
Knob-UHF Indicator	461971		X	X	X
Knob-Volume, Vert. Hold	461974		X		
Knob- "	461974D		X		
Knob- "	461974C		X		X
Knob-Contrast	961975		X		
Knob "	961975D		X		
Knob- "	961975C			X	
Knob-Brightness	961976	X	X		
Knob-Brightness	961976C			X	

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869 (17KV) or 8868 (25KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor) 8738 (Two Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
300Ω Tuner Input Lead	Use BELDEN No. 8225
300Ω Antenna Lead-in	Use BELDEN No. 8230 or 8275
Antenna Rotor Cable	Use BELDEN No. 8465 (Round) - 5 Conductor 8488 (Round) - 8 Conductor