

CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Place a jumper across Horizontal Frequency Coil (L17). Connect a clip lead from point Ⓢ to ground. Adjust Horizontal Hold Control (R7) until a single picture is attained. Remove the jumper from L17. Adjust the

Horizontal Frequency Slug (B1) until a single picture is attained, then turn B1 1/4 turn clockwise for final setting of the slug. Remove the clip lead from point Ⓢ to ground and the picture should snap into sync.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove all knobs.
2. Remove cabinet back held by 12 screws. Unsolder speaker leads from output transformer.
3. Unplug picture tube socket, high voltage lead, and remove yoke.
4. Remove 4 screws from bottom of chassis.

5. Remove 2 screws holding antenna terminal board, 4 nuts holding tuner and control assembly. Remove chassis and tuner.

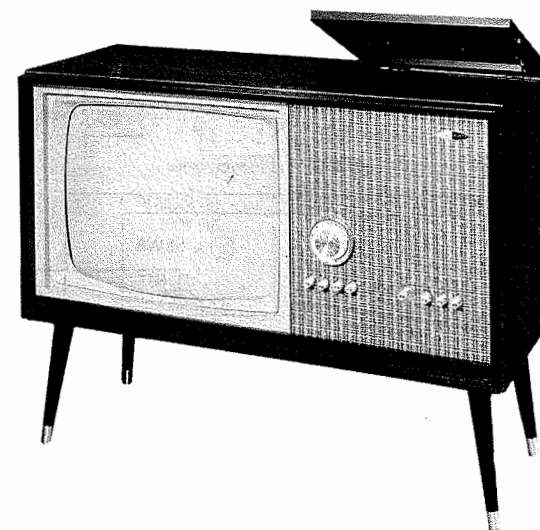
PICTURE TUBE REMOVAL

1. Follow steps 1 thru 5 of "Chassis Removal" instructions.
2. Remove 2 nuts from upper corners of picture tube and two bolts from lower corners of picture tube. Remove tube.

SET 646 FOLDER 1

CONCERTO or MUNTZ T37AA09/9U/11/11U, T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U, T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

PHOTOFACT® Folder



MODEL 23CP1B

CONCERTO or MUNTZ T37AA09/9U/11/11U, T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U, T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

IMPORTANT FILING NOTICE

Some models covered by this PHOTOFACT Folder employ chassis in addition to the TV chassis. PHOTOFACT Folders covering these additional chassis are packaged immediately behind this Folder and should be filed with this Folder in the yellow filing jacket provided. For specific coverage see index below.

INDEX

Amp Ch. AS-8028,
AM-FM Ch. AS-8029 . . . SET 646, FOLDER 1-A
AM-FM Ch. AS-8031 SET 646, FOLDER 1-B
AM Chassis AS-8030 SET 646, FOLDER 1-C

CAUTION

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	MUNTZ or CONCERTO	MODELS	CHASSIS	RADIO CHASSIS
23CP1B, M, W			T37AA09, T37AA11	AS-8030
23CP2B, M, W			T37AB09	AS-8030
23CP3B, M, W			T37AB11	AS-8031
19PS, PSX			T37AC09, T37AC11	
23CDM, CDW; 23LBB, LBM, LBW,				
23LBAM, LBAW, LBAMAP; 23LM, LMAP, LW			T37V09	
23CDB, EAX			T37V11	
23CAB, CAM, CAW, CB, CM, CW			T39W09	
23CSM, LTS, TB, TM, TW			T39W11	
23CP4B, M, W			T39W11	AS-8028
23CP5B, M, W			T39W11	AS-8028, AS-8029
19PD, PSA			T37X09, T37X11	
23CP8B, M, W			T37Y09	AS-8028, AS-8029
23CP10B, M, W			T37Y11	AS-8028, AS-8029
23CP1B/UHF, M/UHF, W/UHF			T37AA09U, T37AA11U	AS-8030
23CP2B/UHF, M/UHF, W/UHF			T37AB09U	AS-8030
23CP3B/UHF, M/UHF, W/UHF			T37AB11U	AS-8031
19PS/UHF, PSX/UHF			T37AC09U, T37AC11U	
23CDM/UHF, CDW/UHF, 23LBB/UHF, LBM/UHF, LBW/UHF,				
23LBAM/UHF, LBAW/UHF, 23LBAMAP/UHF,				
23LM/UHF, LMAP/UHF, LW/UHF			T37V09U	
23CDB/UHF, EAX/UHF			T37V11U	
23CAB/UHF, CAM/UHF, CAW/UHF, 23CB/UHF, CM/UHF, CW/UHF			T39W09U	
23CSM/UHF, LTS/UHF, 23TB/UHF, TM/UHF, TW/UHF			T39W11U	
23CP4B/UHF, M/UHF, W/UHF			T39W11U	AS-8028
23CP5B/UHF, M/UHF, W/UHF			T39W11U	AS-8028, AS-8029
19PD/UHF, PSA/UHF			T37X09U, T37X11U	
23CP8B/UHF, M/UHF, W/UHF			T37Y09U	AS-8028, AS-8029
23CP10B/UHF, M/UHF, W/UHF			T37Y11U	AS-8028, AS-8029
MANUFACTURER Muntz TV, Inc., 1020 Noel Ave., Wheeling, Illinois				
TYPE Television Receiver with Radio in some models				
TUBES VHF - Thirteen, UHF - Fourteen				
POWER SUPPLY 110-120 Volts AC, 60 Cycle				
TUNING RANGE Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Inter-carrier)				

SERVICING IN THE FIELD PAGE 5

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.
MA146 10987654321

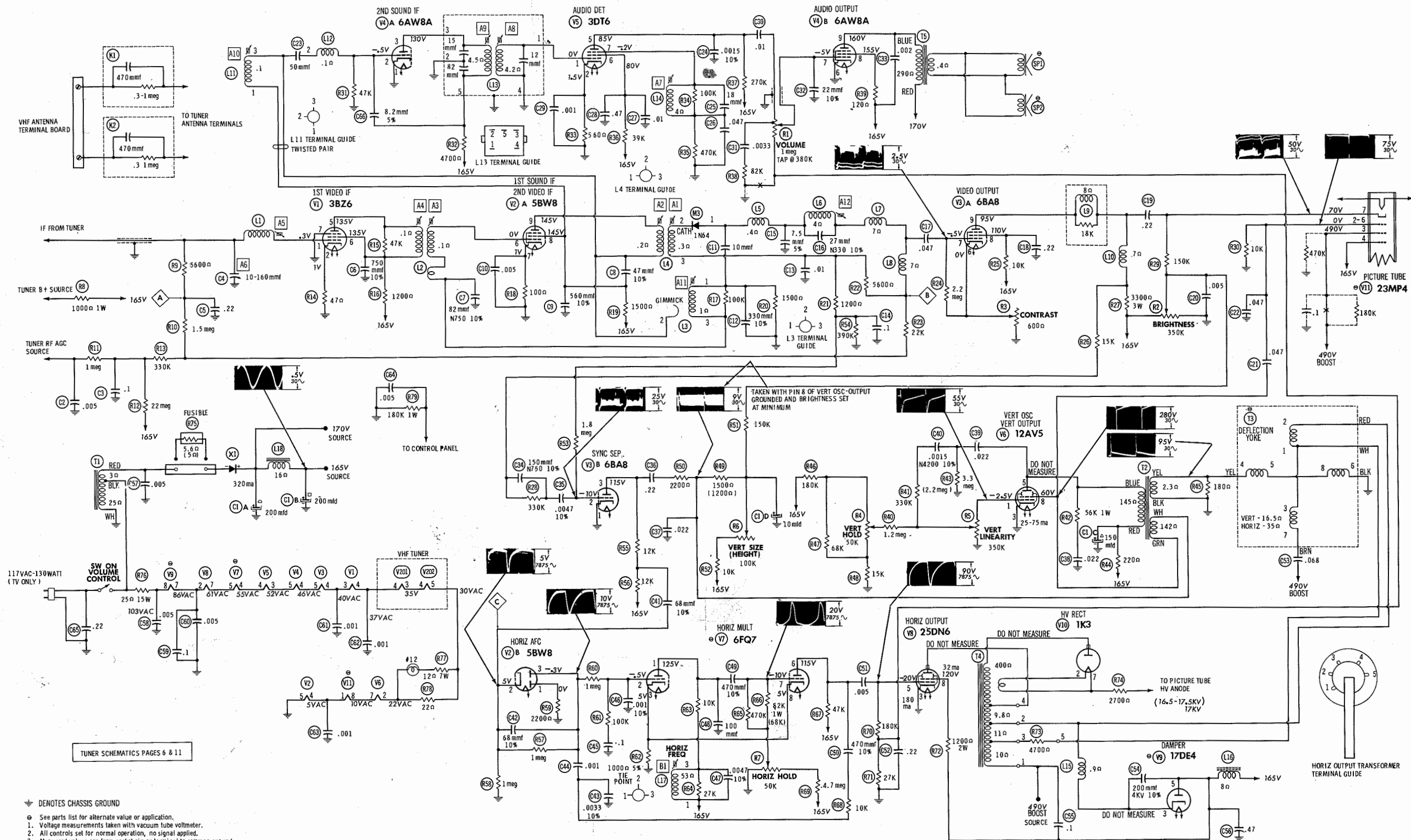
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DATE 7-63

SET 646 FOLDER 1

CONCERTO or MUNTZ T37AA09/9U/11/11U, T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U, T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

SET 646 FOLDER 1



CONCERTO or MUNTZ T37AA09/9U/11/11U,
T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U,
T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

FOLDER 1

- ⚡ DENOTES CHASSIS GROUND
- See parts list for alternate value or application.
 - Voltage measurements taken with vacuum tube voltmeter.
 - All controls set for normal operation, no signal applied.
 - Measured values are from socket pin or terminal to common ground.
 - All terminals viewed from bottom unless otherwise designated.
 - Numbers assigned to terminals may not be found on the unit.
 - Supply voltage maintained at rated value for voltage readings.
 - Waveforms taken with controls set to produce 50 volts peak-to-peak signal at picture tube.

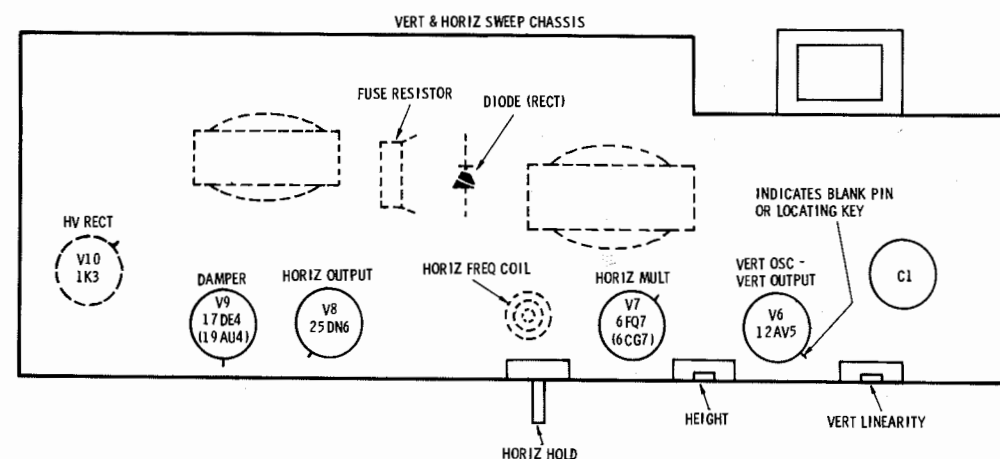
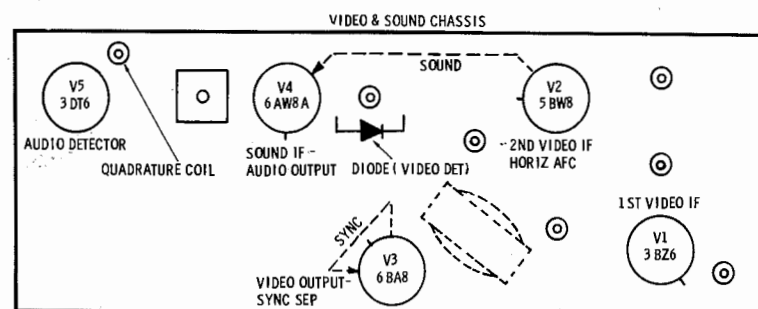
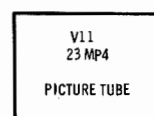
A PHOTOFAC STANDARD NOTATION SCHEMATIC
©Howard W. Soms & Co., Inc. 1963

CONCERTO or MUNTZ T37AA09/9U/11/11U,
T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U,
T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	3BZ6	2 meg	47Ω	15Ω	14.5Ω	†1200Ω	†1200Ω	0Ω		
V2	5BW8	2200Ω	1 meg	2 meg	1Ω	0Ω	1500Ω	100Ω	†1500Ω	†1500Ω
V3	6BA8	0Ω	390K	†24K	15Ω	16Ω	300Ω	2.2 meg	†10K	†3300Ω
V4	6AW8A	0Ω	47K	†4700Ω	16Ω	17Ω	0Ω	27K	†120Ω	†290Ω
V5	3DT6	4Ω	560Ω	17Ω	17.5Ω	†270K	†39K	470K		
V6	12AV5	1.6 meg	5Ω	0Ω	TP	†365Ω	NC	2.5Ω	†22K	
V7	6FQ7	†10K	3 meg	1000Ω	17.5Ω	18Ω	†47K	95K	1000Ω	0Ω
V8	25DN6	NC	20Ω	0Ω	NC	210K	NC	18Ω	†1200Ω	TOP CAP †410Ω
V9	17DE4	NC	NC	INF	NC	†21Ω	NC	20Ω	21Ω	
V10	1K3	PINS 1 THRU 8 HAVE INFINITE RESISTANCE								TOP CAP †9.8Ω
V11	23MP4	1Ω	10K	†20Ω	†21Ω	NC	NC	170K	2.5Ω	
V201	2CY5	1.8 meg	0Ω	14Ω	14.5Ω	†1000Ω	†8000Ω	0Ω		
V202	5CG8	15K	†11K	0Ω	14Ω	13Ω	†3200Ω	†11K	0Ω	
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9

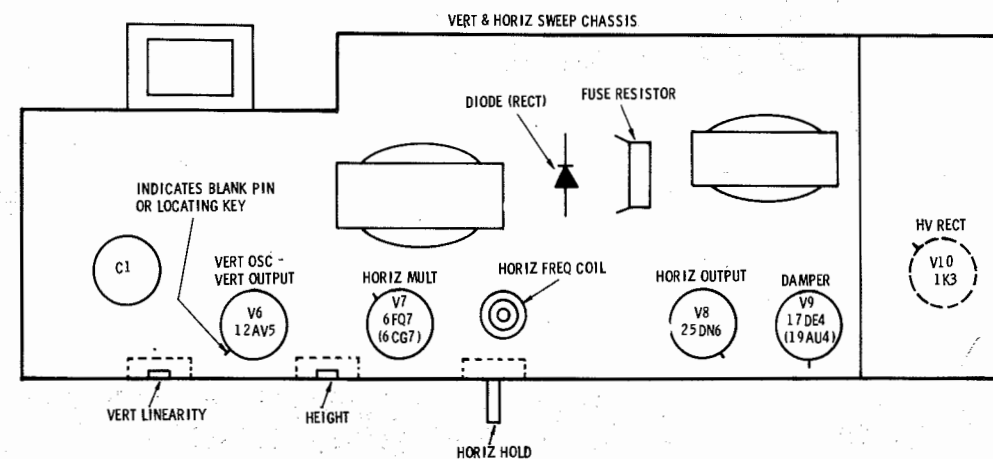
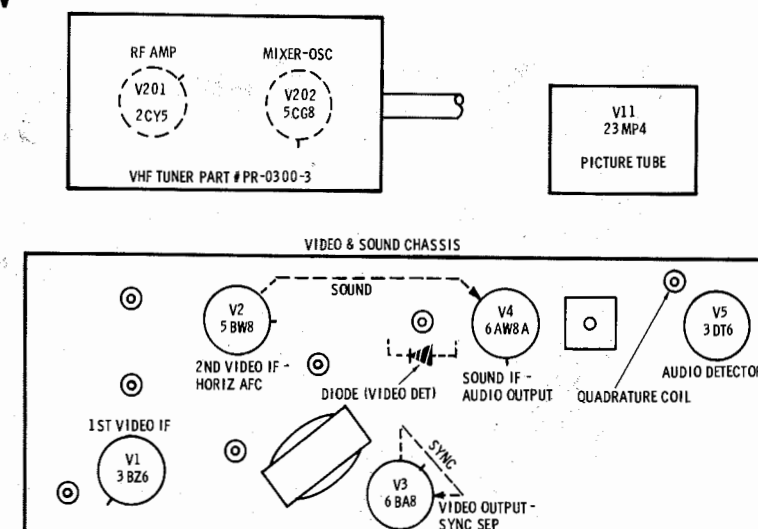
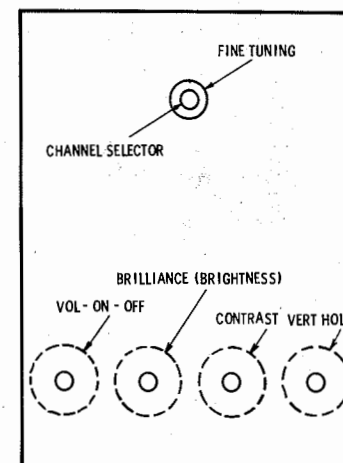
† MEASURED FROM OUTPUT OF X1.
 † MEASURED FROM PIN 3 OF V9.
 • VHF TUNER PR-0300-3
 NC NO CONNECTION
 TP TIE POINT



TUBE PLACEMENT CHART

TUBE PLACEMENT CHART

TOP VIEW



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.

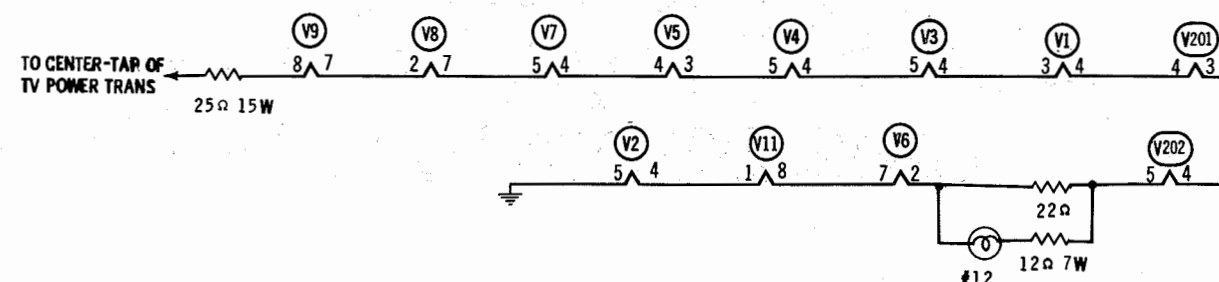
POWER SUPPLY FAILURE
 No raster, no sound Fuse Resistor R75, Selenium Rectifier X1

SWEEP FAILURE
 No raster, has sound V7, V8, V9, V10, V11
 No vertical deflection V8
 Poor vert. linearity or foldover V8
 Poor horiz. linearity or foldover V7, V8, V9
 Narrow picture V7, V8, V9, X1
 Vert. off freq. V8
 Horiz. off freq. V2, V9

LOSS OF PICTURE OR SOUND
 No pic, no sound, has raster V1, V2, Video Det., M3, V3
 No pic, no sound, has snow V201, V202, V1
 No pic, has sound, has raster V3, V11
 Has pic, no sound V4, V5
 Overloaded picture

SYNC FAILURE
 No vert. sync V3
 No horiz. sync V3
 No vert. or horiz. sync V3

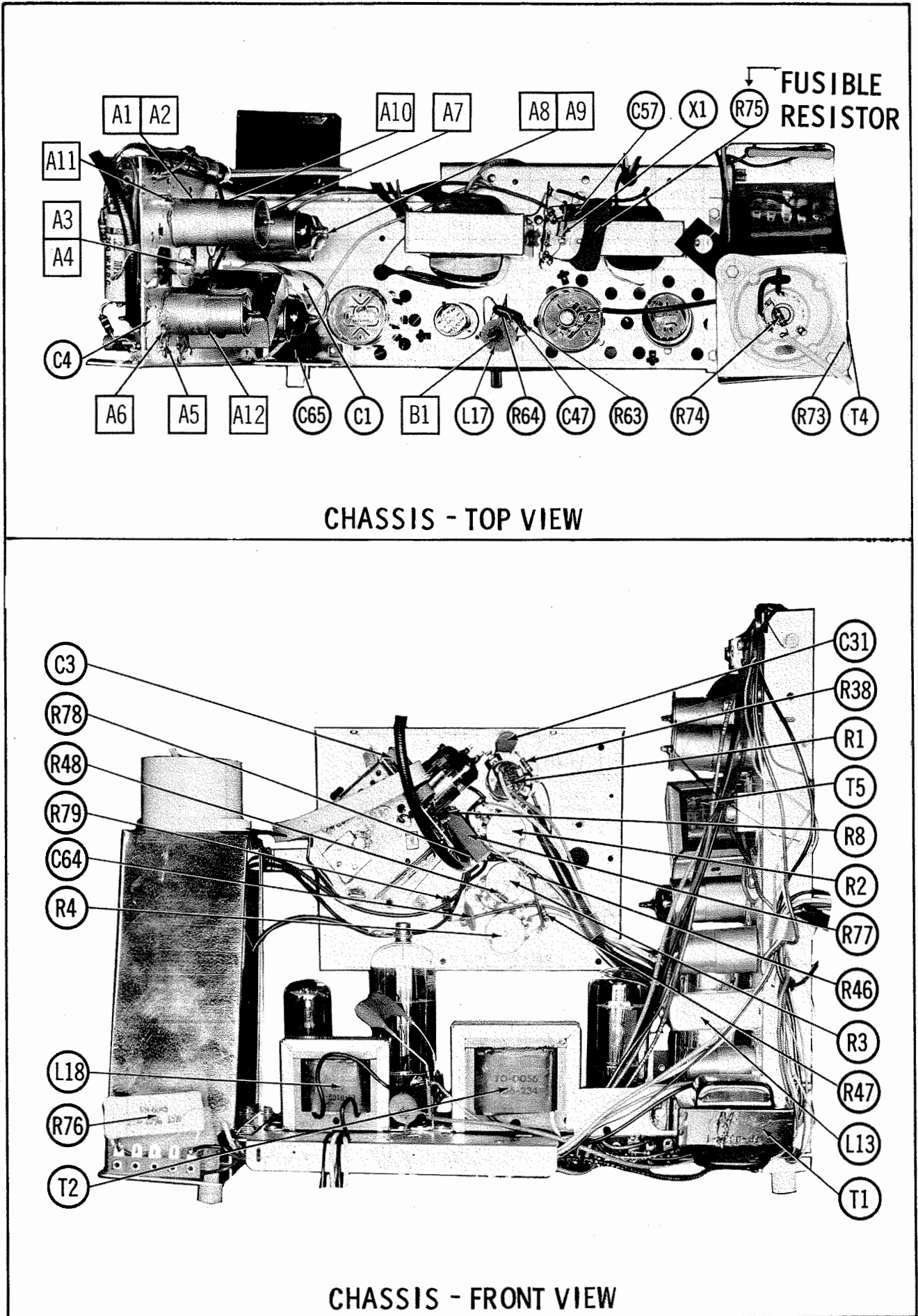
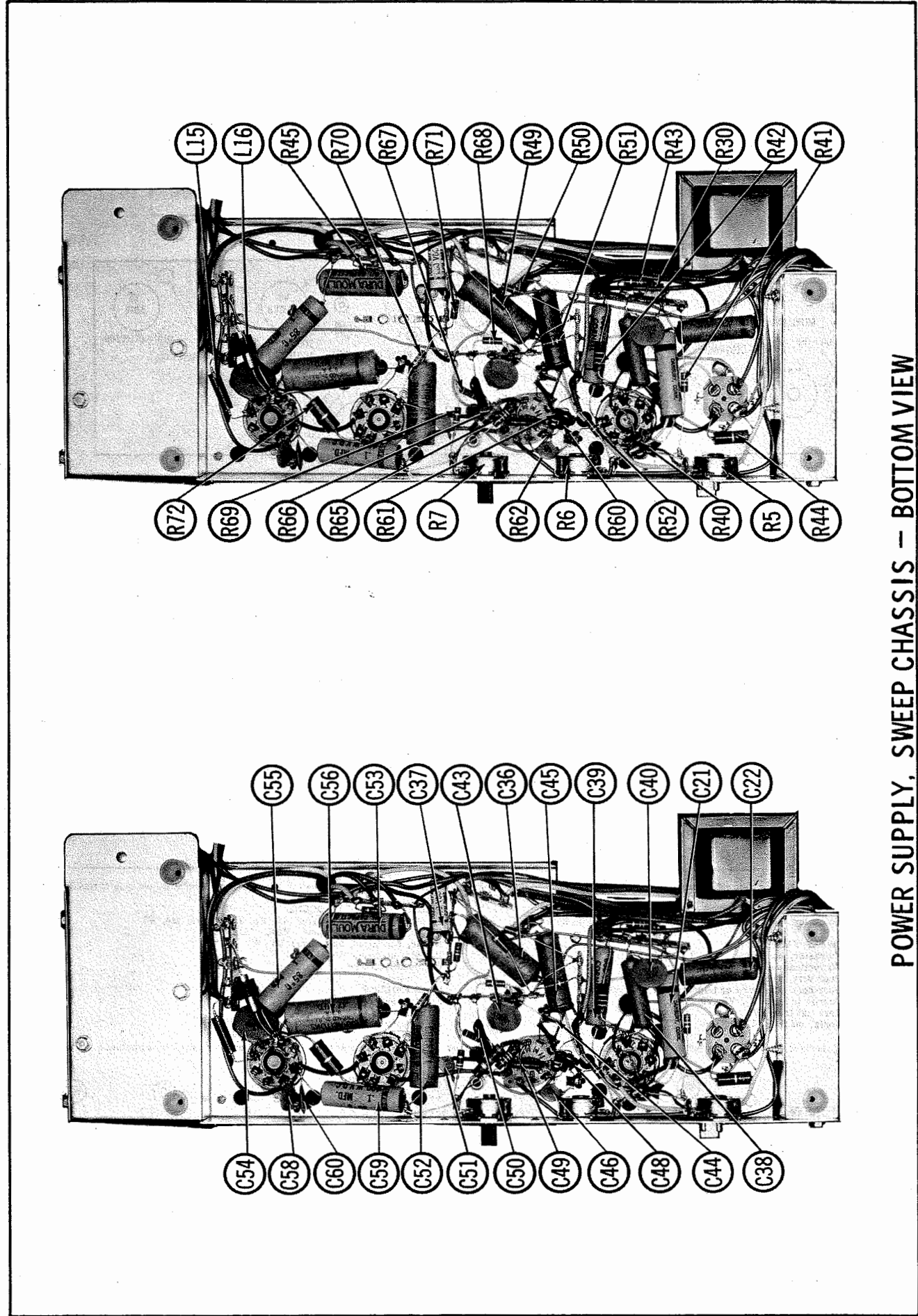
This receiver employs tubes used in a series filament network, an open filament in any tube will cause the set to be inoperative. (See circuit below.)



SET 646 FOLDER 1

CONCERTO or MUNTZ T37A09/9U/11/11U,
 T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37VO9/9U/11/11U,
 T37MO9/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U.

FOLDER 1



ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:

A1 Thru A5, A7 Thru A12
GENERAL CEMENT #9302, 8869
WALSICO#2511, 2544, 2588
GENERAL CEMENT #9302, 9296, 9287
WALSICO#2511, 2546, 2547
A6
GENERAL CEMENT #9087, 8290, 8868
WALSICO#2525, 2528, 2587

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 Δ) 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.

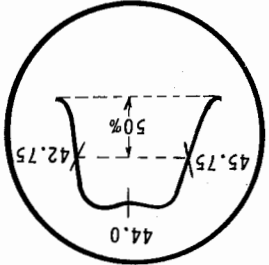
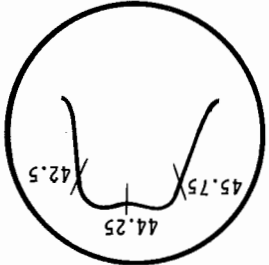
INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER FREQUENCY	ADJUST	REMARKS
1. Connect vertical input of a scope to pin 6 (grid of V 2. Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	42.5MC (45.75MC)	A1 Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 1.	
2. Connect vertical input of a scope to point Δ . Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	42.75MC (45.75MC)	A3, A4 Adjust for maximum gain and symmetry of response with markers as shown in Figure 2. In order to obtain a proper response, it may be necessary to slightly retouch A1 and A2.	

SOUND IF ALIGNMENT

Tune in a station and adjust A 7 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce signal while aligning for undistorted output by adjusting A 7, A8, A9, A10, A11.

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.



SERVICING IN THE FIELD

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Coarse adjustment of the horizontal stabilizer slug. (See "Tube Placement Chart" for location.)

FOCUS

No provision is made for focus adjustment on this receiver.

CENTERING

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

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

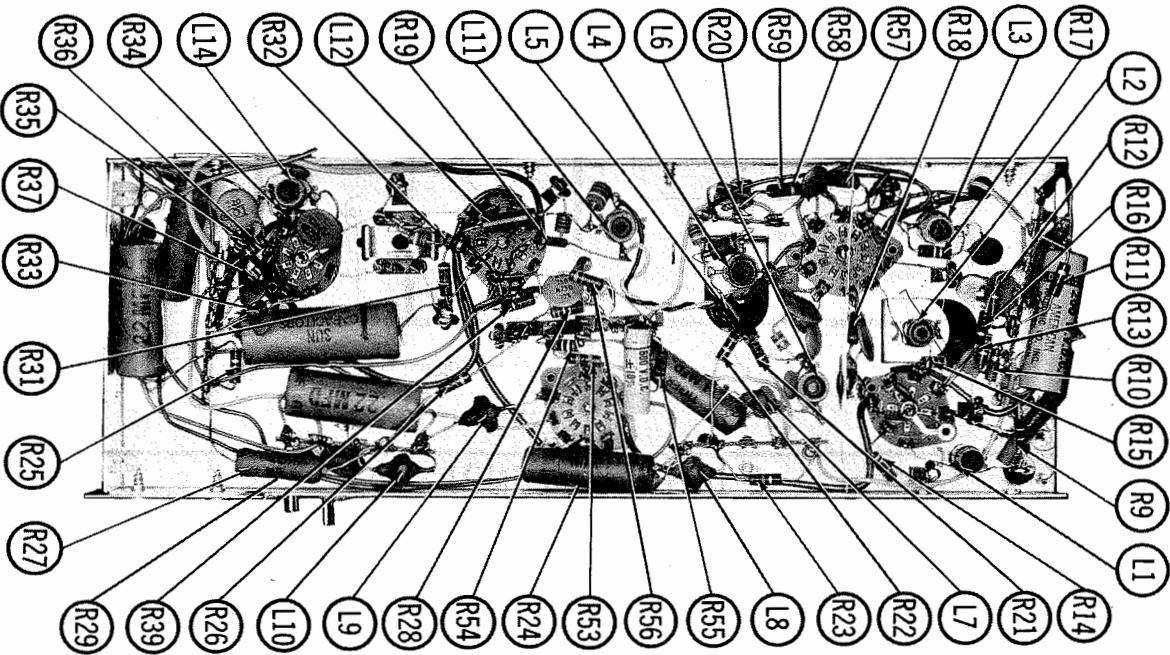
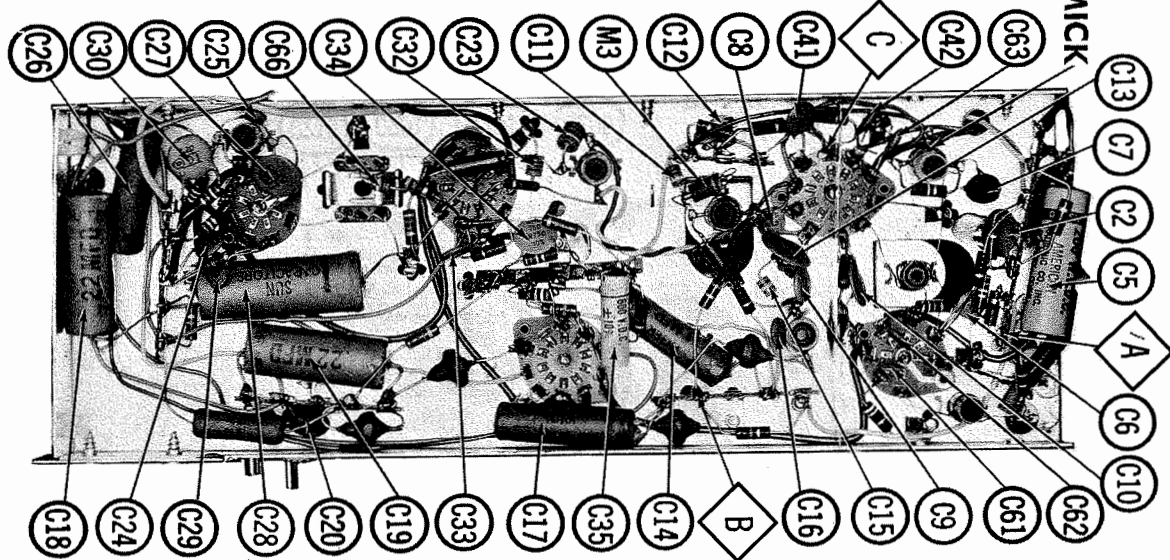
No provision is made to vary the AGC on this receiver.

SAFETY GLASS

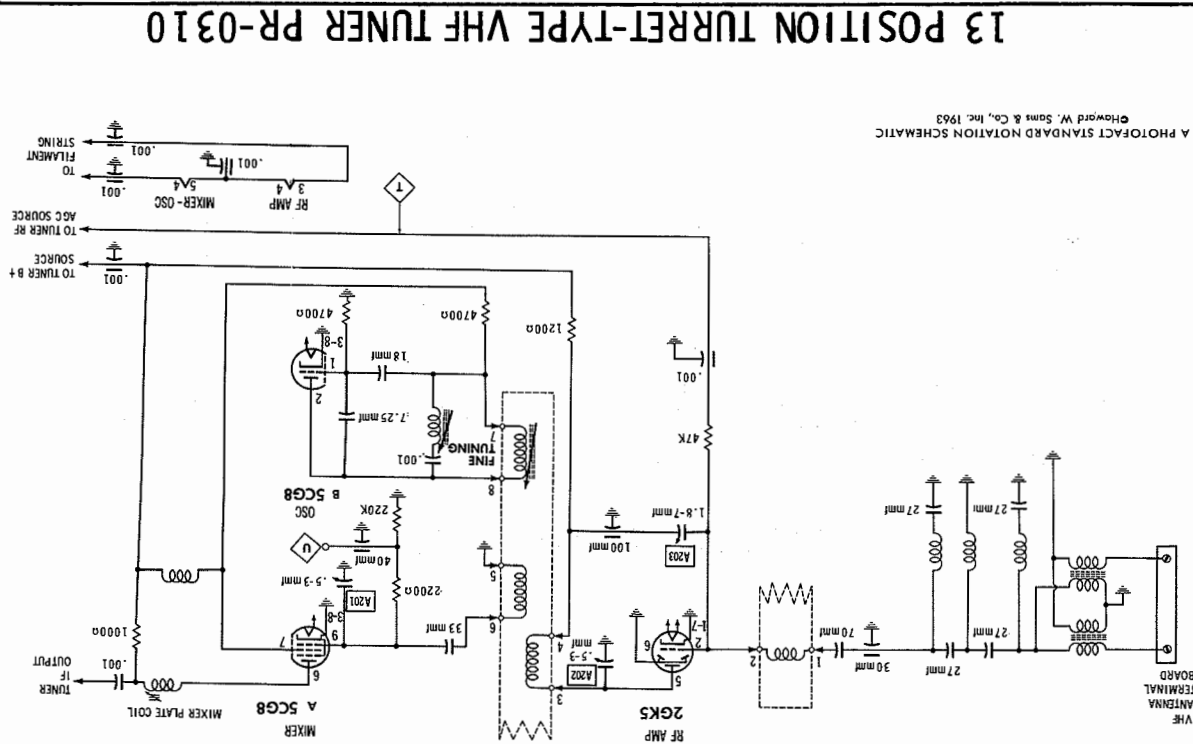
Remove 4 screws holding the trim strip at the top edge of the safety glass. Tilt glass out and remove.

FUSE OR FUSE DEVICE

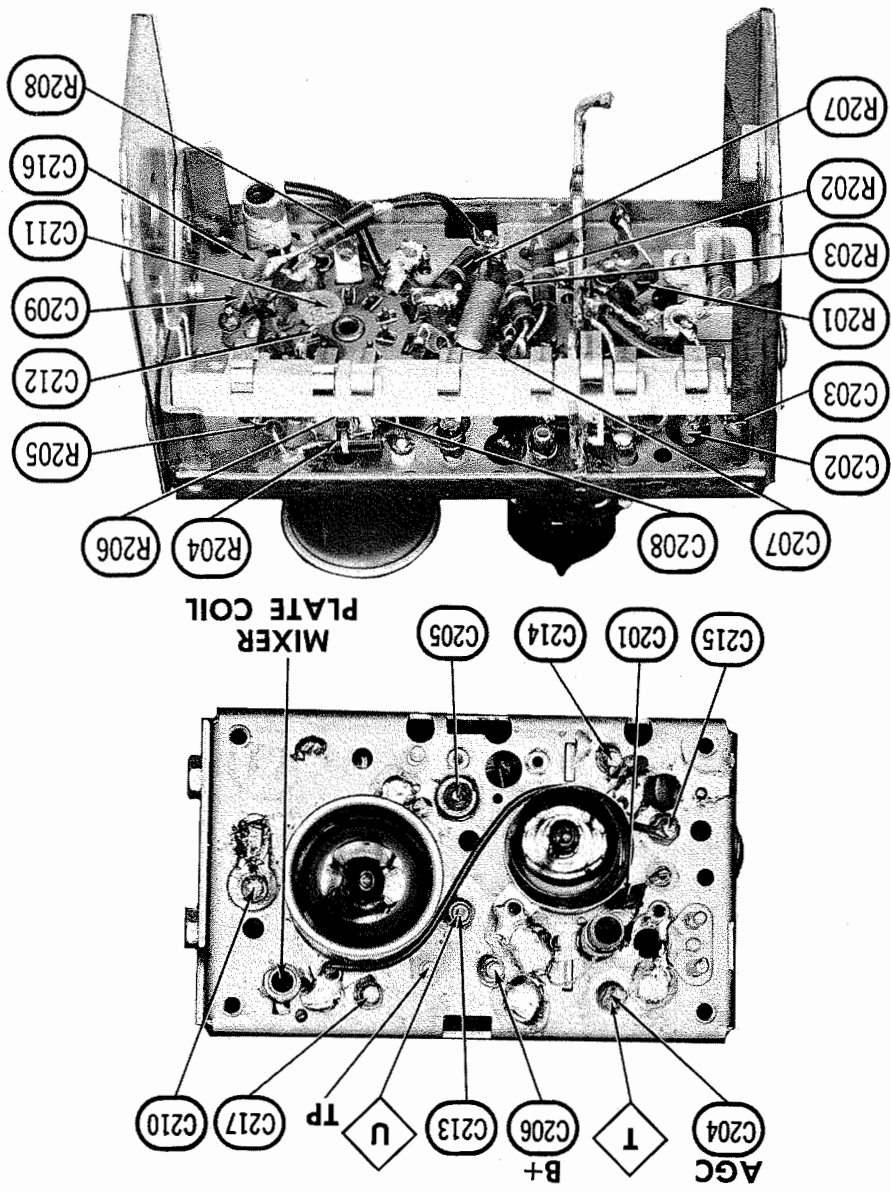
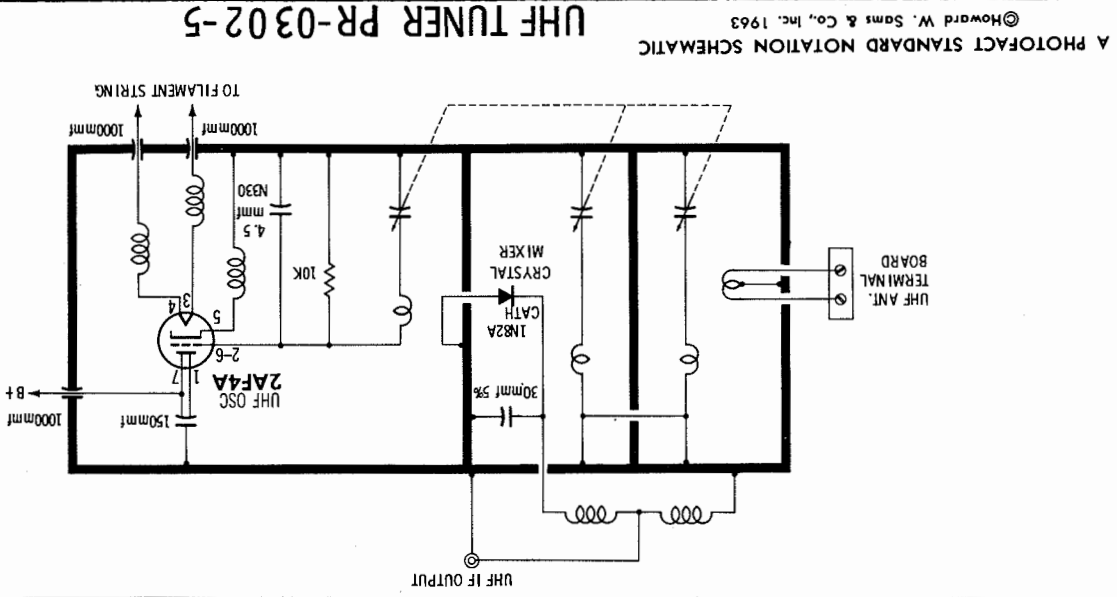
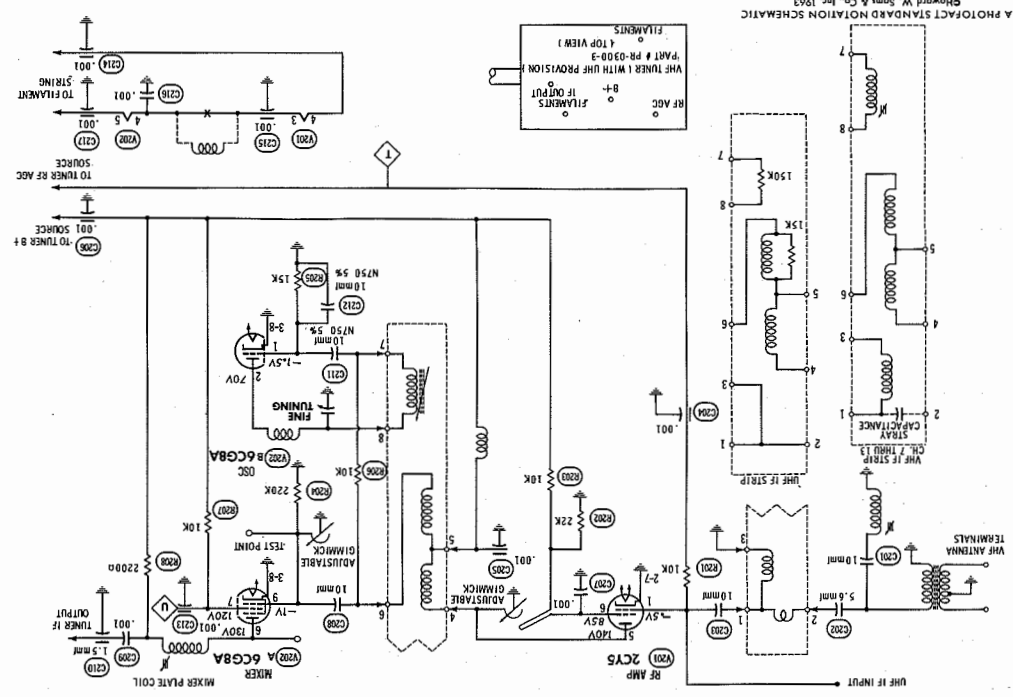
A 5.6A fusible resistor is used for low voltage power supply protection. (For location, see photo "Chassis - Top View".)



VIDEO, SOUND CHASSIS - BOTTOM VIEW



13 POSITION TURRET-TYPE VHF TUNER PR-0300-1, -3



VHF TUNER PARTS LIST AND DESCRIPTION

TUBES

* AMPEREX * GENERAL ELECTRIC * RCA * RAYTHEON * SYLVANIA *					
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	2CY5	V202	Mixer-Osc.	5CG8

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C201	10		DI-10	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C202	5.6							
C203	10		DI-10	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C204	.001		EF-001	MFT-1000		CCF-102	CT280A	
C205	.0001		EF-001	MFT-100				
C206	.001		EF-001	MFT-1000		CCF-102	CT280A	
C207								
C208	10		DI-10	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C209	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C210	1.5							
C211	10		DI-10	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C212	10	N750 5%		DTN-10	C10Q1U		CN7-410	10TCU-Q10
C213	.001		EF-001	MFT-1000		CCF-102	CT280A	
C214	.001		EF-001	MFT-1000		CCF-102	CT280A	
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216								
C217	.001		EF-001	MFT-1000		CCF-102	CT280A	

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ALIGNMENT: FOR TUNERS PR-0300-1, PR-0300-3, PR-0310

The individual oscillator slugs are accessible one at a time through a hole in the front of the tuner. Make sure that each channel is within range of the fine tuning. If any channel cannot be properly tuned in with the fine tuning, adjust respective oscillator slug for best picture and sound.

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 variable bias to 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	TUNER PR-0310
1.	Across antenna terminals with 120Ω in each lead.	213MC	211.25 MC 215.75 MC	13	Vert. Input to point ①, low side to ground.	A201 A202	Adjust for response curve similar to figure 201.
2.	"	195MC	193.25 MC 197.75 MC	10	Across Video Det. load resistor.	A203	Increase bias to 15V and adjust for minimum amplitude of response curve.
3.	"	207MC	205.25 MC 209.75 MC	12	Vert. Input to point ①, low side to ground.		Check response on all channels and make compromise adjustments of A201 and A202 if required.
	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	TUNERS PR-0300-1, PR-0300-3
1.	Across antenna terminals with 120Ω in each lead.	213MC	211.25 MC 215.75 MC	13	Vert. Input to point ①, low side to ground.		Adjust for response curve similar to figure A201. Adjust by expanding or compressing coil turns.
		207MC	205.25 MC 209.75 MC	12			
		201MC	199.25 MC 203.75 MC	11			
		195MC	193.25 MC 197.75 MC	10			
		189MC	187.25 MC 191.75 MC	9			
		183MC	181.25 MC 185.75 MC	8			
		177MC	175.25 MC 179.75 MC	7			
		171MC	169.25 MC 173.75 MC	6			
		165MC	163.25 MC 167.75 MC	5			
		159MC	157.25 MC 161.75 MC	4			
		153MC	151.25 MC 155.75 MC	3			
		147MC	145.25 MC 149.75 MC	2			

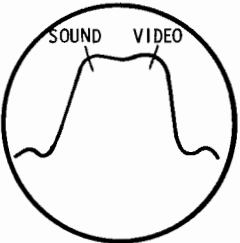


FIG. 201

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 * RAYTHEON * SYLVANIA *					
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	1st Video IF Amp.	3BZ6	V7	Horiz. Mult.	6FQ7 (6CG7)*
V2	2nd Video IF -	5BW8	V8	Horiz. Output	25DN6
V3	1st Sound IF - Horiz. AFC		V9	Damper	17DE4 (19AU4)*
V4	Video Output - Sync Sep.	6BA8	V10	HV Rect.	1K3
V5	2nd Sound IF - Audio Output	6AW8A			
V6	Audio Det.	3DT6			
	Vert. Osc. - Vert. Output	12AV5			

* Alternate

PICTURE TUBE

ITEM No.	REPLACEMENT DATA					NOTES
	MUNTZ PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
V11	23MP4	23MP4/MP4A/WP4 ①	23MP4 ①	23MP4	23MP4 ②	① Aluminized ② Silver Screen "85"
	23CP4	23CP4/CP4A/GP4/HP4 ①	23CP4 ①	23CP4	23CP4 ②	
	19XP4	19AVP4/XP4 ①	19AVP4 ①	19XP4	19XP4 ②	

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS			NOTES
			MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.	
X1	.32A	CX-0037	1N2070	1N1783	F4	Rectifier (Silicon)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MUNTZ PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A	200	200	CE-0042	AFHS4-39-TD			WP412.15	TVL-3490
C1B	200	200						TVA-1447
C1C	150	200						
C1D	10	150						

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C2	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C3	.1	200V	P288N-1	DP-104	CUB2P1	2DP-3-104	GEM-201	2TM-P10
C4	10-160							
C5	.22	200V	P288N-22		CUB2P22	2DP-4-224	GEM-2022	2TM-P22
C6	.750	10%	DI-750	DD-751		CCD-751	GP375	10TS-T75
C7	.82	N750 10%		TCN-82	C10Q82U	CCTN-820	CN7-482	10TCU-Q82
C8	.47	10%	DI-47	JD-470	L10Q47	CCD-470	GP447	10TS-Q47
C9	.560	10%	DI-560	DD-561		CCD-561	GP356	10TS-T56
C10	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C11	10							
C12	.330	10%	DI-330	DD-331	L10T33	CCD-331	GP333	10TS-T33
C13	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C14	.1	200V	P288N-1	DF-104	CUB2P1	2DP-3-104	GEM-201	2TM-P10
C15	7.5	5%						
C16	.27	N330 10%						10TCS-Q27
C17	.047	200V	P288N-047	DD-503	CUB2S47	4DP-3-473	GEM-2147	2TM-S47
C18	.22	200V	P288N-22		CUB2P22	2DP-4-224	GEM-2022	2TM-P22
C19	.22	200V	P288N-22		CUB2P22	2DP-4-224	GEM-2022	2TM-P22
C20	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C21	.047	600V	P688N-047	DD-503	CUB6S47	6DP-3-473	GEM-6147	6TM-S47
C22	.047	200V	P288N-047	DD-503	CUB2S47	4DP-3-473	GEM-2147	2TM-S47
C23	50							
C24	.0015	10%	DI-1500	DD-152		CCD-152	GP215	10TS-D15
C25	.18	N330 5%						10TCS-Q18
C26	.047	200V	P288N-047	DD-503	CUB2S47	4DP-3-473	GEM-2147	2TM-S47
C27	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C28	.47	200V	P288N-47		CUB2P47	2DP-5-474	GEM-2047	2TM-P47
C29	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-S20
C30	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C31	.0033		BPD-0033	DD-332	BYA10D33	CCD-332	B-233	5HK-D33
C32	.22	10%						
C33	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C34	150	N750 10%	N750-D1 150	DTN-150	C10T15U	CCTN-151	CN7-315	10TCU-T15
C35	.0047	800V 10%	BE6D47		PM6D47	6DP-1-472	PVC6247	6TM-D47
C36	.22	200V	P288N-22		CUB2P22	2DP-4-224	GEM-2022	2TM-P22
C37	.022	200V	P288N-022		CUB4S22	4DP-2-223	PVC2122	2TM-S22

SET 646 FOLDER 1

CONCERTO or MUNTZ T37A09/9U/11/11U, T37AC09/9U/11/11U, T37AB09/9U/11/11U, T37V09/9U/11/11U, T37W09/9U/11/11U, T37X09/9U/11/11U, T37Y09/9U/11/11U

FOLDER 1

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	.022 600V	#CC-0228	P688N-022		CUB6S22	6DP-2-223	GEM-6122	6TM-S22
C39	.022 600V		P688N-022		CUB6S22	6DP-2-223	GEM-6122	6TM-S22
C40	.0015 N4200 10%							
C41	68 10%		D1-68	DD-680	L10Q68	CCD-680	GP468	10TS-Q68
C42	68 10%		D1-68	DD-680	L10Q68	CCD-680	GP468	10TS-Q68
C43	.0033 10%		DI-3300	CF-332		CCD-332	IL-233	10TS-D33
C44	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C45	.1 200V		P288N-1	DF-104	CUB2P1	2DP-3-104	GEM-201	2TM-P10
C46	.001		DI-1000	DD-102	5R5D1	CCD-102	GP210	10TS-D10
C47	.0047 600V 10%		BE6D47		PMD47	6DP-1-472	PVC6247	6TM-D47
C48	100	#CC-0241	SI 100	D6-101	L10T1	4DP-3-104	GP310	5GA-T10
C49	470 10%		I469-00047	CPR-470J	5R5T47	DM-19-471K	MCJ244	MS-347
C50	470 10%		I469-00047	CPR-470J	5R5T47	DM-19-471K	MCJ244	MS-347
C51	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C52	.22 200V		P288N-22		CUB2P22	2DP-4-224	GEM-2022	2TM-P22
C53	.068 600V		P688N-068		CUB6S68	6DP-4-683	GEM-6168	6TM-S68
C54	200 4KV 10%							
C55	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C56	.47 200V		P288N-47		CUB2P47	2DP-5-474	GEM-2047	2TM-P47
C57	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C58	.005	400V	P488N-1	DF-104	BYA10D5	CCD-502	B-250	5HK-D50
C59	.1		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C60	.005		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C61	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C62	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C63	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C64	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C65	.22 600V		P688N-22		CUB6P22	6DP-5-224	GEM-6022	6TM-P22
C66	8.2 5%							

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

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA					
			MUNTZ PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	Volume, Switch	1meg 380K Tap	VC-8002	F12-1meg SU204, KR-1	A47F5-1meg KSS-3, SWE-12	Q19-137X, 76-1 or (BUL CF47T, SSI, GC)*	UA18T454, SK1000, US-41 or (RU18T45, SL38, SK1000, US-41 or (UT-443, US-26)	UA18T454, SK1000, US-41 or (RU18T45, SL38, SK1000, US-41 or (UT-443, US-26)
R2	Brightness	350K	VC-0068-1	B-59 or (F1-500K SU204, AK-38)	A47-500K-S KSS-3	Bill-132, TM5	TA55L or (RU45L, SL37, SK1000) or (UA55L, SK1000)	TA55L or (RU45L, SL37, SK1000) or (UA55L, SK1000)
R3	Contrast	600K	VC-0064-1	B-4 or (F1-750, SU204, AK-38)	A47-750-S KSS-3	Bill-105, TM5 or (BUL CF5, SSI, DCI)*	TA761L or (RU15L, SL37, SK1000) or (UA76L, SK1000)	TA761L or (RU15L, SL37, SK1000) or (UA76L, SK1000)
R4	Vert. Hold	50K	VC-0067-1	B-31 or (F1-50K, SU204, AK-38)	A47-50K-S KSS-3	Bill-123, TM5 or (BUL CF12, SSI, DCI)*	TA54L or (RU54L, SL37, SK1000) or (UA54L, SK1000)	TA54L or (RU54L, SL37, SK1000) or (UA54L, SK1000)
R5	Vert. Linearity	350K	VC-0065-1	TT-59 or (F1-500K, SN010, AK-38)	B47-500K-S	Bill-132, TM4	PTA55L, or (RU45L, SL37, SN1000) or (UA55L, SK1000)	PTA55L, or (RU45L, SL37, SN1000) or (UA55L, SK1000)
R6	Vert. Size	100K	VC-0068-1	TT-40 or (F1-100K, SN010, AK-38)	B47-100K-S	Bill-128, TM4 or (BUL CF13, SSI, DCI)*	PTA15L or (RU15L, SL37, SN1000) or (UA15L, SK1000)	PTA15L or (RU15L, SL37, SN1000) or (UA15L, SK1000)
R7	Horiz. Hold	50K	VC-0062-1	TT-31 or (F1-50K, SN010, AK-38)	B47-50K-S	Bill-123, TM4 or (BUL CF12, SSI, DCI)*	(RU54L, SL37, SN1000) or (UA54L, SK1000)	(RU54L, SL37, SN1000) or (UA54L, SK1000)

* "SNAPTROL"

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
R27	3300W 3W		3G3300		R77	12W 7W		7W-SQ-12	
R76	25W 15W		15W-SQ-25						

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	MUNTZ PART No.	REPLACEMENT DATA
K1	Antenna Isolation	.3-1meg, 470mmf	CC-0238	Centralab RC-471 Sprague ACI-1
K2	Antenna Isolation	.3-1meg, 470mmf	CC-0238	Centralab RC-471 Sprague ACI-1

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MUNTZ PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	1st Video IF	LC-0102	TV-131	6226	RTC-8626	T219	① Wound on 18K Res.
L2	2nd Video IF	LC-0103		6227			
L3	Sound Takeoff	LC-0105	TV-151	1469	RTC-8602	T249	
L4	3rd Video IF	LC-0104		6227			
L5	RF Choke (4, 7uh)	LC-0091	SW-431	4609	RTC-8518	T819	♦ Shunt with 18K Res.
L6	4.5MC Trap	LC-0107	TV-151	1469	RTC-9173	T840	
L7	Peaking (120uh)	LC-0101-1	TV-195	6153	RTC-8585	T307	
L8	Peaking (120uh)	LC-0101-1	TV-195	6153	RTC-8585	T307	
L9	Peaking (270uh)	LC-0101-2①	TV-198 ♦	6130 ♦	RTC-8576 ♦	T316 ♦	
L10	Peaking (120uh)	LC-0101-1	TV-195	6153	RTC-8585	T307	
L11	1st Sound IF	LC-0105					
L12	RF Choke (4, 7uh)	LC-0091	SW-431	4609	RTC-8518	T819	
L13	2nd Sound IF	LI-0059					
L14	Quadrature	LC-0107	TV-151	1469	RTC-9173	T840	
L15	RF Choke (10uh)	LC-0098	BC-568	4612	RTC-8522	T860	
L16	Choke (2000uh)	LC-0097	BC-551	6302	RTC-8535	T880	

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		MUNTZ PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
L17	Horiz. Stabilizer	LO-0077	TV-163	6210	RTC-8622 ①	HS-5		①Enlarge mtg. hole.

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MUNTZ PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
L18	.32ADC	16K	.46Hy	LC-0100-3	C-4084	C-2343①	26C78 ①	C-28X ①Drill new mtg. hole(s).

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MUNTZ PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC ① 1.4A	140VAC ② .32ADC		TP-0034-1					

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MUNTZ PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	Vert. Osc. & Output Trans.	TO-0056					† Used with 23CP4 Crt. only ①Remove all damping networks.
T3	Yoke (Horiz. 17.5 MHZ (14.7) Vert. 18MHZ)	LC-0108	MDF-112①	DY-27A①	Y-52①	Y-60①	
T4	Horiz. Output Trans.	LC-0106-1	HYO-211		F LY-198	D-177	

* COMPONENT CONNECTION DATA

ORIGINAL →	HV TRANSFORMER				VERTICAL OUTPUT				YOKE				YOKE PLUG							
	Original Connections				Original Connections				Original Connections				1	2	3	4	5	6	7	8
REPLACEMENT ↓	4	2	3	1					4	6	2	3	7							
MERIT	4	2	3	1					4	6	2	3	7							
STANCOR									4	6	2	3	7							
THORDARSON	4	2	3	1					4	6	2	3	7							
TRIAD	4	2	3	1					4	6	2	3	7							

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MUNTZ PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T5	7500W	S-4W	TO-0049-3	A-3020	A-3849	26848	S-18X	

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MUNTZ PART No.	QUAM PART No.	
SP1	5" PM	3-4Q	SK-0025-1	23CP1 Series and 23CP3 Series/One of each used. 23CP1 Series and 23CP3 Series/One of each used. 23CP5 Series/Two of each used. 23CP5 Series/Two of each used.
SP2	5" PM	3-4Q	SK-0025-1	
	3 1/2" PM	3-4Q	SK-0031	
	8" PM	6-8Q	SK-0023-3	

PHONO CARTRIDGE & NEEDLES

*NEEDLE LISTINGS SHOWN ARE FOR RESPECTIVE REPLACEMENT CARTRIDGES ONLY.

ITEM No.	REPLACEMENT DATA								NOTES
	MUNTZ PART No.		ASTATIC PART No.		ELECTRO-VOICE PART No.		SONOTONE PART No.		
	CARTRIDGE	NEEDLE*	CARTRIDGE	NEEDLE*	CARTRIDGE	NEEDLE*	CARTRIDGE	NEEDLE*	
M1			133	N50	26	2604 (L.P) 2605 (78)	9TAF5	N9916SF	

MISCELLANEOUS

ITEM No.	PART NAME	MUNTZ PART No.	NOTES
M2	VHF Tuner	PR-0300-3	
	VHF Tuner	PR-0310	
	VHF Tuner	PR-0300-1	
	VHF Tuner	PR-0302-5	
M3	Diode	CX-0036	UHF Piggyback Video Detector (IN64)

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Safety Glass-Tinted, 19PD Series	WG-0030	Knob-Off-On, Tone, White, 23CP1, CP2 Series	KB-0086-11
Safety Glass-Clear, 19PS Series	WG-0030-1	Knob-Off-On, Tone, Maroon, 23CP1, CP2 Series	KB-0086-14
Safety Glass-Clear, All 23" Models	WG-0031-1	Knob-Contrast, White, All Models	KB-0086-1
Mask-Grey, All Models	ES-0098	Knob-Contrast, Maroon, All Models	KB-0086-5
Mask-Tan, 23CP6, 23CD, LB, EA Series	ES-0087	Knob-Brightness, White, All Models	KB-0086-2
Mask-Brown and Tan, Alternate for above Models	ES-0087-1	Knob-Brightness, Maroon, All Models	KB-0086-6
Knob-Channel Selector, 19PD, 23CD, CP2, CP3, CP8 Series	KB-0088	Knob-Vertical Hold, White, All Models	KB-0086-3
Knob-Channel Selector, 23LTS, CSM Series	KB-0088-1	Knob-Vertical Hold, Maroon, All Models	KB-0086-7
Knob-Channel Selector White, 19PD, PS, 23CD, EAX, CP2, CP8 Series	KB-0100	Knob-Service Control, Maroon, 23CP3 Series	KB-0086-9
Knob-Channel Selector White, 23CSM, LTS, Series	KB-0100-1	Knob-Service Control, White, 23LTS, 23CP3 Series	KB-0086-8
Knob-Channel Selector White, 23CP1, CP4, CP5 Series	KB-0100-2	Knob-Balance, White, 23CP1, CP2 Series	KB-0086-12
Knob-Channel Selector Gold, 23CP1, CP4, CP5, 19PSA Series	KB-0100-3	Knob-Balance, Maroon, 23CP1, CP2 Series	KB-0086-15
Knob-Fine Tuning, Aluminum, 19PD, 23EAX, CD, CP1, CP2, CP3, CP8 Series	KB-0087	Knob-Balance, White, 23CP3 Series	KB-8021
Knob-Fine Tuning, Aluminum, 23LTS, CSM, CP4, CP5 Series	KB-0087-1	Knob-Radio Volume, Maroon, 23CP1, CP2 Series	KB-8021-1
Knob-Fine Tuning, Gold, 19PD, 23EAX, CD, CP1, CP2, CP3, CP8 Series	KB-0087-2	Knob-Radio Volume, White, 23CP1, CP2 Series	KB-0086-10
Knob-Fine Tuning, Gold, All models that do not use pilot lamp.	KB-0087-3	Knob-Radio Volume, White, 23CP3 Series	KB-0093
Knob-UHF Channel Indicator, White, 23LTS, CSM Series	KB-0090	Knob-Radio Volume, Maroon, 23CP3 Series	KB-0093-1
Knob-UHF Channel Indicator, Mahogany, 23LTS, CSM Series	KB-0090-1	Knob-A-M Tuning, White, 23CP1 Series	KB-0091
Knob-UHF Channel Indicator, White, 23CD EAX, CPl, CP2, CP3, CP4, CP5, CP6, 19PD, 19PS Series	KB-0090-2	Knob-A-M Tuning, Mahogany, 23CP1 Series	KB-0091-1
Knob-UHF Channel Indicator, Mahogany	KB-0090-3	Knob-A-M Tuning, White, 23CP2 Series	KB-0092
Knob-UHF Tuning, Maroon, All UHF Models	KB-0089-1	Knob-A-M Tuning, Mahogany, 23CP2 Series	KB-0092-1
Knob-UHF Tuning, White, All UHF Models	KB-0089	Knob-Control, Clear, 23CP4, CP5, CP8, CP10 Series	KB-8017
Knob-Off-On, White, All Models	KB-0086	Knob-A-M F M Selector, Clear 23CP3 Series	KB-8018
Knob-Off-On, Maroon, All Models	KB-0086-4	Knob-A-M F M Tuning, White, 23CP3 Series	KB-8019
		Knob-A-M F M Tuning, Maroon, 23CP3 Series	KB-8019-1
		Knob-Function, White, 23CP3 Series	KB-8020
		Knob-Function, Maroon, 23CP3 Series	KB-8020-1
		Plastic Cabinet Front, (Specify Color of Grille) 19PS, PD Series	ES-0088
		Plastic Cabinet Back, 19PS, PD Series	BP-0180