

CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

The Horizontal Hold is equipped with a stop which limits rotation to 270° with the knob on the shaft. To adjust, remove the knob and adjust by turning the shaft until the picture is synchronized to the point where

it is virtually impossible to disrupt horizontal synchronization when switching from channel to channel. Install knob with the pointer centered between the stops.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove all knobs and 1 screw on front of the cabinet. Remove 7 screws holding rear cover. Disconnect antenna leads and remove rear cover from the set.
2. Remove picture tube socket, yoke leads, high voltage anode lead, and speaker leads.
3. Loosen 4 screws holding tuner and controls to the cabinet. Lift tuner and control unit up and out. Lay tuner and control unit on the chassis.
4. Remove 2 rear feet and 8 screws holding chassis. remove tuner and control unit and chassis from the cabinet.

PICTURE TUBE REMOVAL

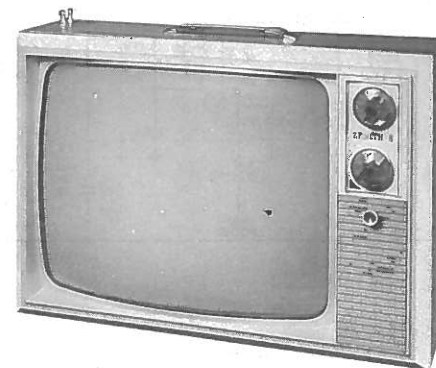
1. Follow "Chassis Removal" procedure. Lay set face down on a soft protective surface.
2. Remove yoke from the picture tube neck. Remove 4 screws holding picture tube mounting brackets.
3. Lift picture tube out. Do not lift picture tube by the neck of the tube.

SET 1030 FOLDER 3

PHOTOFACT® Folder



For Supplier Address See PHOTOFACT Index



MODEL T2694W

MODELS	CHASSIS	REMOTE CONTROL RECEIVER
A2010P1/W1	14Z36	
A2213W1, A2224P1/R1 ..	14Z36	
S2700L9	14Z37	CHASSIS
T2694W, T2695W1	14Z36	S-79943
Z2022P/P1/W/W1	14Z36	
Z2030W, Z2042W	14Z36	MODEL
Z2213W, Z2224W	14Z36	Z2042W

SAFETY PRECAUTIONS

Make sure line voltage does not exceed rating of set.

Check high-voltage regulation and adjust to correct value.

Be sure shields and rear cover are in place and secure.

Beware of shock from high voltage or AC line. Discharge high voltage to HV cage only.

Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain.

SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE OR FUSE DEVICE

A 1½" length of fuse wire is used for filament protection. (For location, see F2 in photo "Chassis - Bottom View.")

A Circuit Breaker is used for low voltage power supply protection and may be reset by depressing the reset button. (See photo "Cabinet - Rear View" for location.)

VHF OSCILLATOR ADJUSTMENT

The fine tuning mechanically engages osc. slug for adjustment (one slug for each channel. It may be necessary to adjust the over-all oscillator trimmer for best results.

AGC

The AGC may be varied by means of an AGC control. (See photo "Cabinet - Rear View" for location.)

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

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

WIDTH

The width may be varied by a Width control. (See photo "Cabinet - Rear View" for location.)

FOCUS

The focus may be varied by means of a Focus control. (See photo "Cabinet - Rear View" for location.)

BUZZ ADJUSTMENT

To eliminate intercarrier buzz, adjust the Buzz control for MINIMUM buzz and maximum sound. (See photo "Cabinet - Rear View" for location.)

CENTERING

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

REMEMBER TO ASK— "What else needs fixing?"

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206



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. UA219

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DATE 5-69 SET 1030 FOLDER 3

ZENITH CHASSIS
14Z36, 14Z37

SET 1030 FOLDER 3

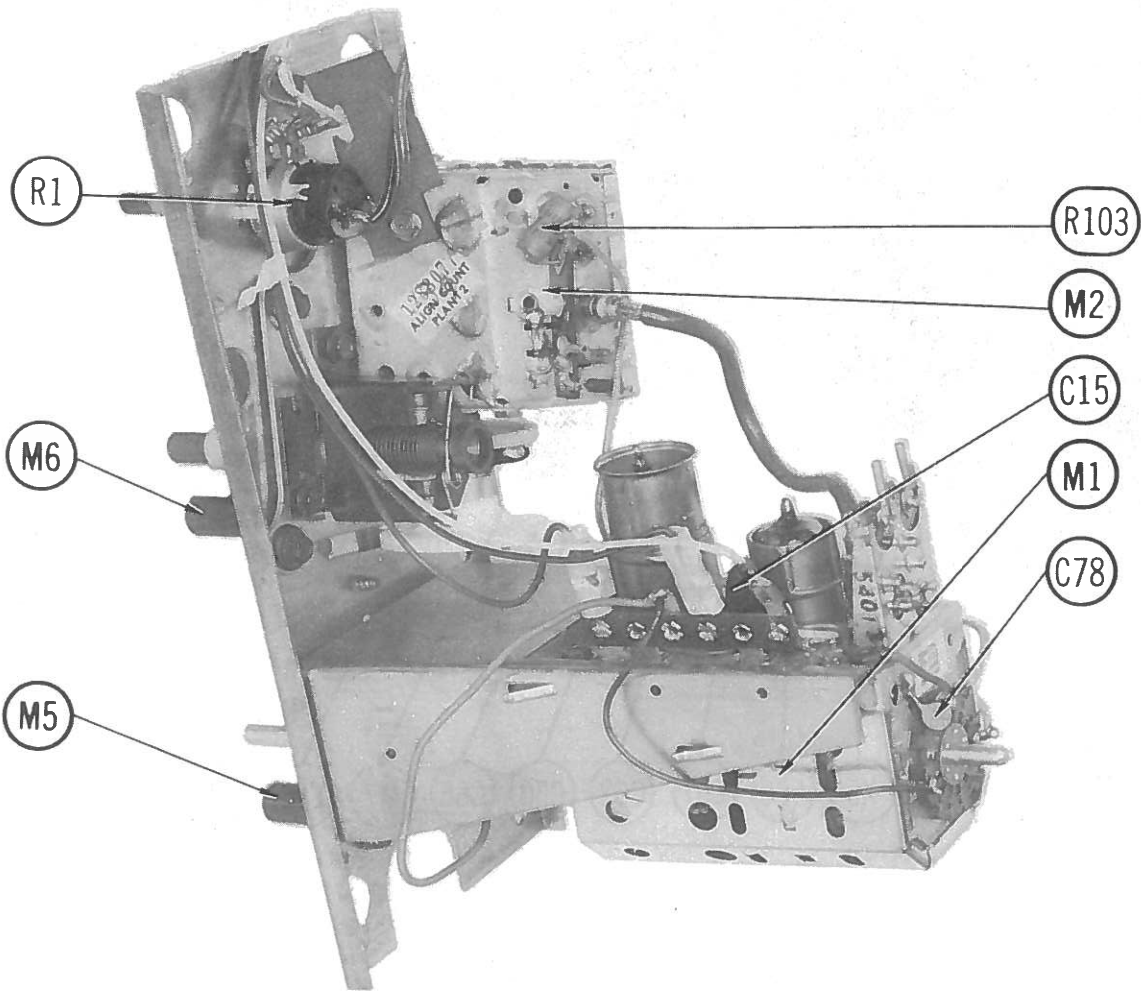
RESISTANCE MEASUREMENTS

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	TOP CAP
V1	6BZ6	1.2meg	1570Ω	FIL	FIL	470Ω ▲	470Ω ▲	1500Ω						
V2	6BZ6	24K	INFINITE	FIL	FIL	500Ω †	500Ω †	18Ω ▲						
V3	6BZ6	.1Ω	150Ω	FIL	FIL	6000Ω †	6000Ω †	0Ω						
V4	6JT8	0Ω	100K	680K †	FIL	FIL	10Ω	1400Ω *	26K †	6800Ω †				
V5	6Z10	FIL	1200Ω †	220Ω	470K †	3.2Ω	33K †	1Ω	260Ω	1550Ω †	TP	500K	FIL	
V6	6BA11	FIL	400K	12K †	24meg †	160K	80K †	8meg †	5000Ω	500K	32K *	7meg †	FIL	
V7	6GK6	280Ω	1meg	0Ω	FIL	FIL	NC	350Ω †	370Ω †	0Ω				
V8	6GH8A	100K †	100K	100K †	FIL	FIL	82K †	115Ω	0Ω	1.5meg				
V9	6HB5	FIL	17K †	NC	0Ω	NC	NC	8Ω †	NC	NC	NC	1meg	FIL	
V10	2AS2				PINS 1 THRU 12 HAVE INFINITE RESISTANCE									228Ω †
V11	6BE3	FIL	NC	NC	NC	NC	NC	340K	NC	NC	38Ω †	NC	FIL	
V12	22TP4	FIL	33K	220K †	1.5meg	NC	NC	150K	FIL					
V201	6HA5/EC900	3meg	0Ω	FIL	FIL	10K †	0Ω	0Ω						
V202	6EA8	33K	82K	150K †	FIL	FIL	32Ω	0Ω	0Ω	10K				
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	TOP CAP

* READING DEPENDS ON POLARITY OF METER CONNECTIONS.
† MEASURED FROM OUTPUT OF X2.

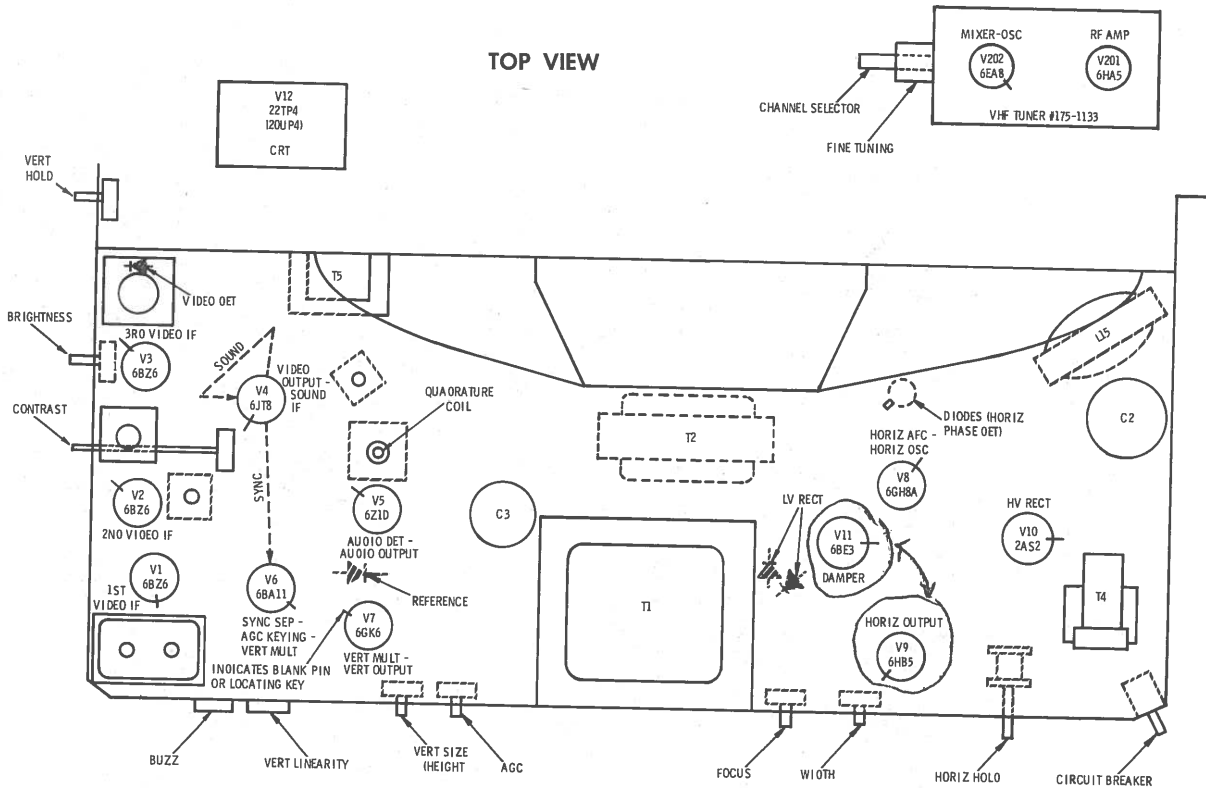
▲ MEASURED FROM PIN 2 OF V2.
‡ MEASURED FROM PIN 7 OF V11.

NC NO CONNECTION
TP TIE POINT



TUNER MOUNTING ASSEMBLY

TUBE PLACEMENT CHART



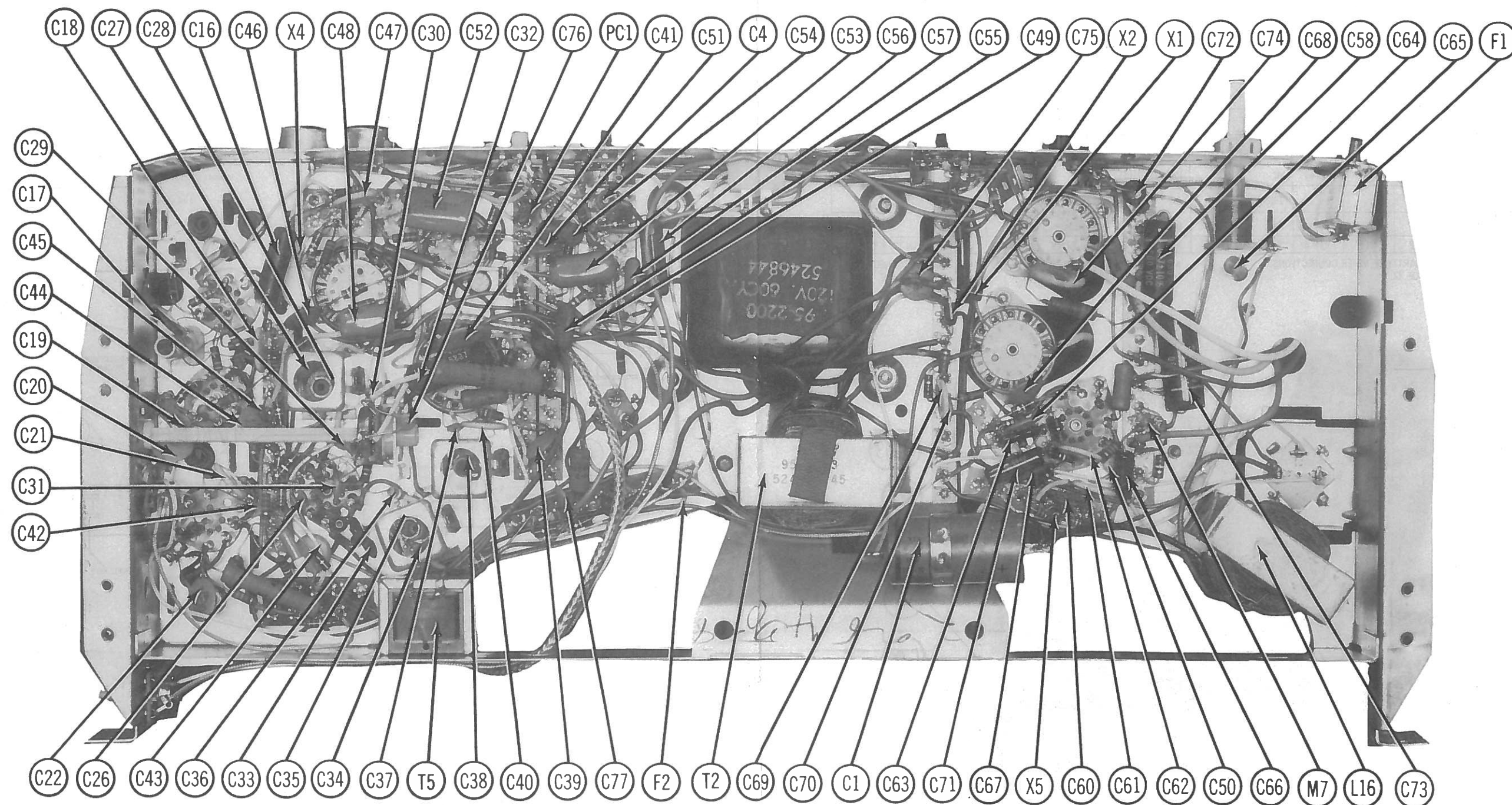
ZENITH CHASSIS
14Z36, 14Z37

TROUBLESHOOTING CHECK CHART

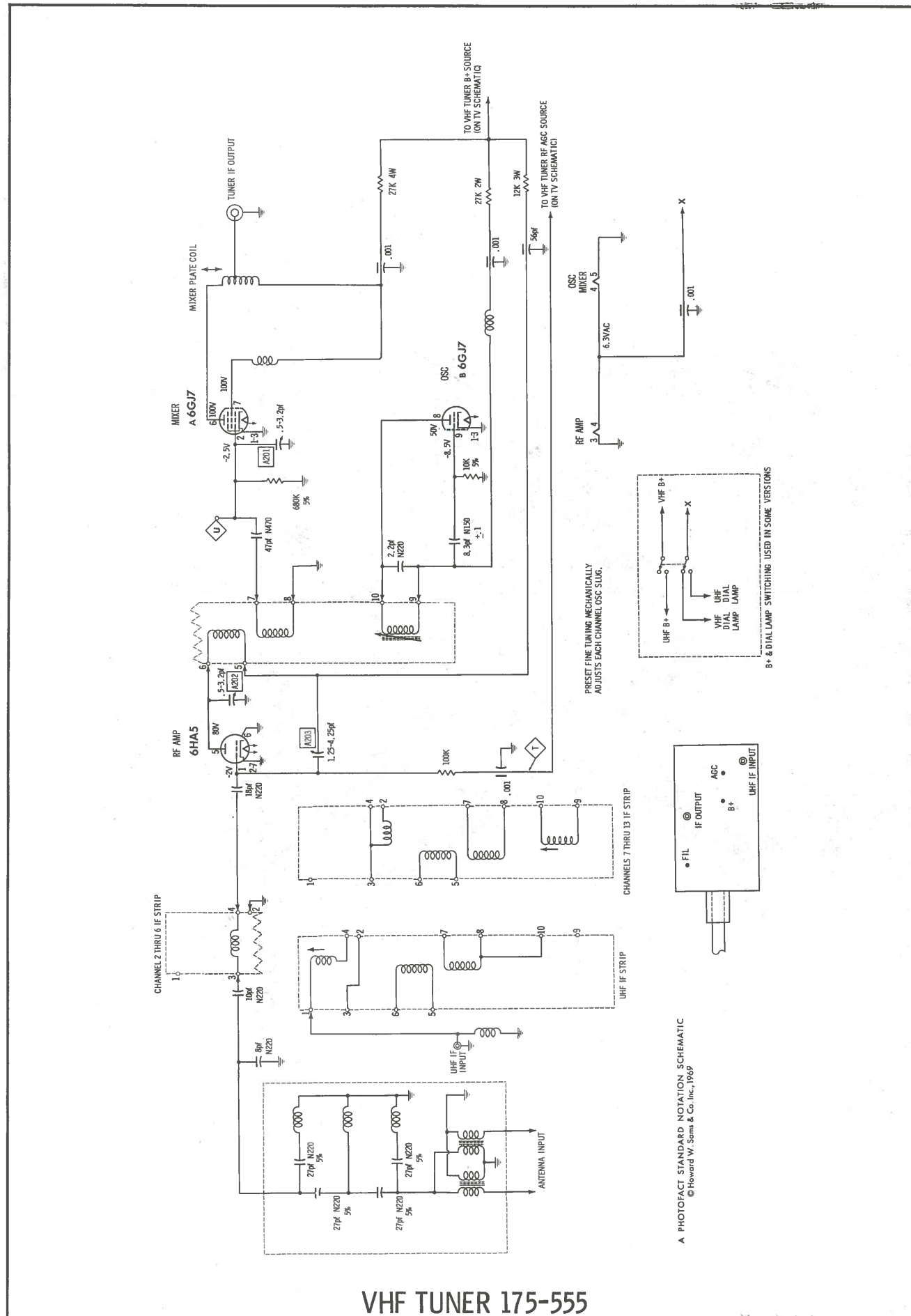
The following chart lists component failures most likely to produce indicated symptoms.

SWEEP No raster, has sound V8, V9, V10, V11 No vert. deflection V6, V7 Poor vert. lin. or foldover V8, V7 Poor horiz. lin. or foldover V8, V9, V11 Narrow picture X1, X2, V8, V9, V11 Vert. off freq. V6, V7 Horiz. off freq. X5, V8	PICTURE OR SOUND No pic, no sound, no raster F1, F2, X1, X2 No pic, no sound, has raster V201, V202, V1, V2, V3, V4 No pic, no sound, has snow V201, V202, V1 No pic, has sound, no raster V4, V12 No pic, has sound, has raster V4, V12 Has pic, no sound V4, V5 Overloaded picture V6	SYNC No vert. sync V8 No horiz. sync X5, V8 No vert. or horiz. sync V6
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FOLDER 3



CHASSIS - BOTTOM VIEW



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 A10 GENERAL CEMENT #8806, 8806L, 8869 ... WALSCO #2543, 2544, 2588
Mixer Plate Coil ... GENERAL CEMENT #9296, 9297, 9300 WALSCO #2510, 2546, 2547

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 A) 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 B. Common to ground.		39.75 MC 41.25 MC 47.25 MC	A1 A2 A3	Adjust for MINIMUM.
2.	Connect vertical input of a scope to point B. Low side to ground.	44MC (10MC Sweep)	42.17MC 44.00MC 45.75 MC	A4, A5	Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 1.
3.	Connect vertical input of a scope to point B. Low side to ground.	44MC (10MC Sweep)	39.75 MC 41.25 MC 42.17MC 44.00MC 45.75 MC	A6, A7, A8 and Mixer Plate Coil	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 A4 and A5.

SOUND IF ALIGNMENT

- Tune in a station and reduce the signal strength at the antenna terminals until a hiss is heard in the sound. Align for maximum undistorted sound with MINIMUM buzz by adjusting A10, A11, A12, and R5. If the hiss disappears during alignment, further reduce the signal strength.

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 A 9 for MINIMUM beat interference.



FIG. 1

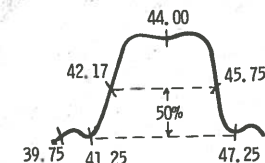
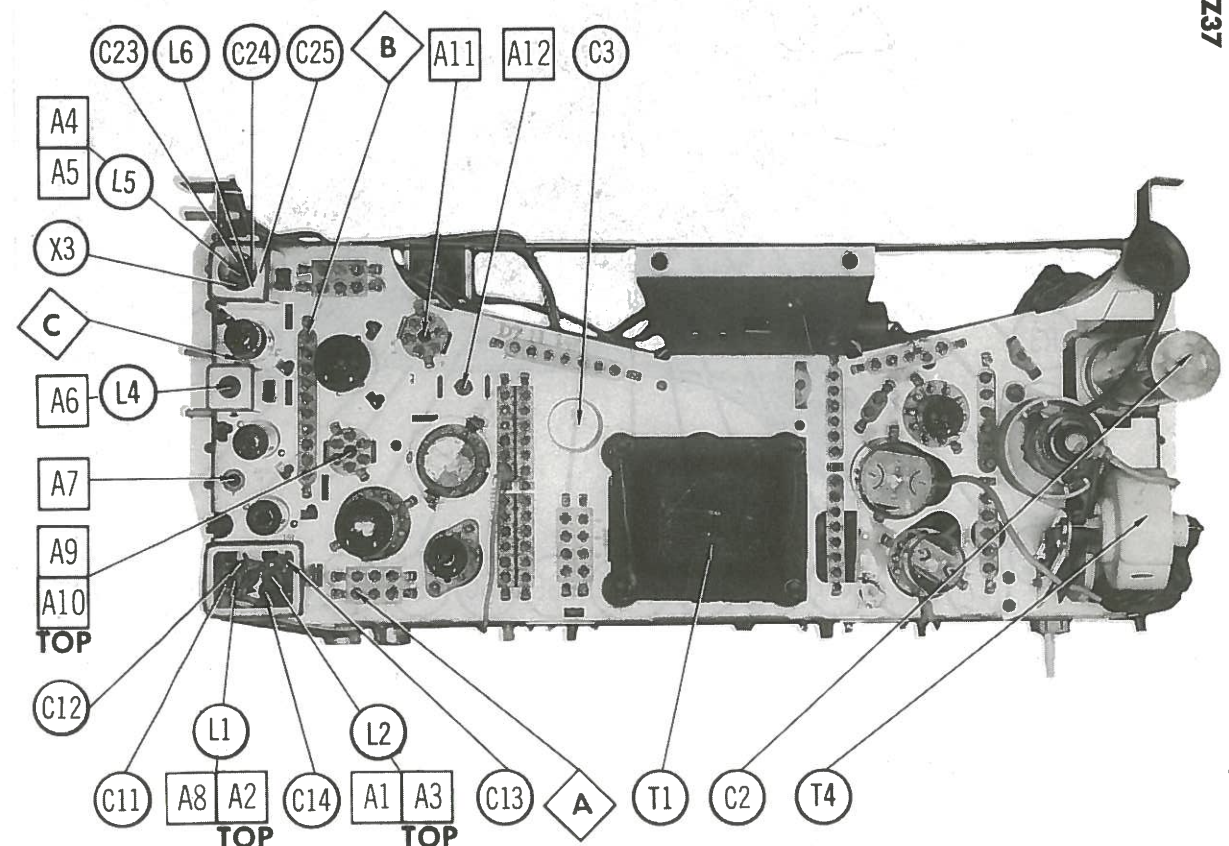


FIG. 2



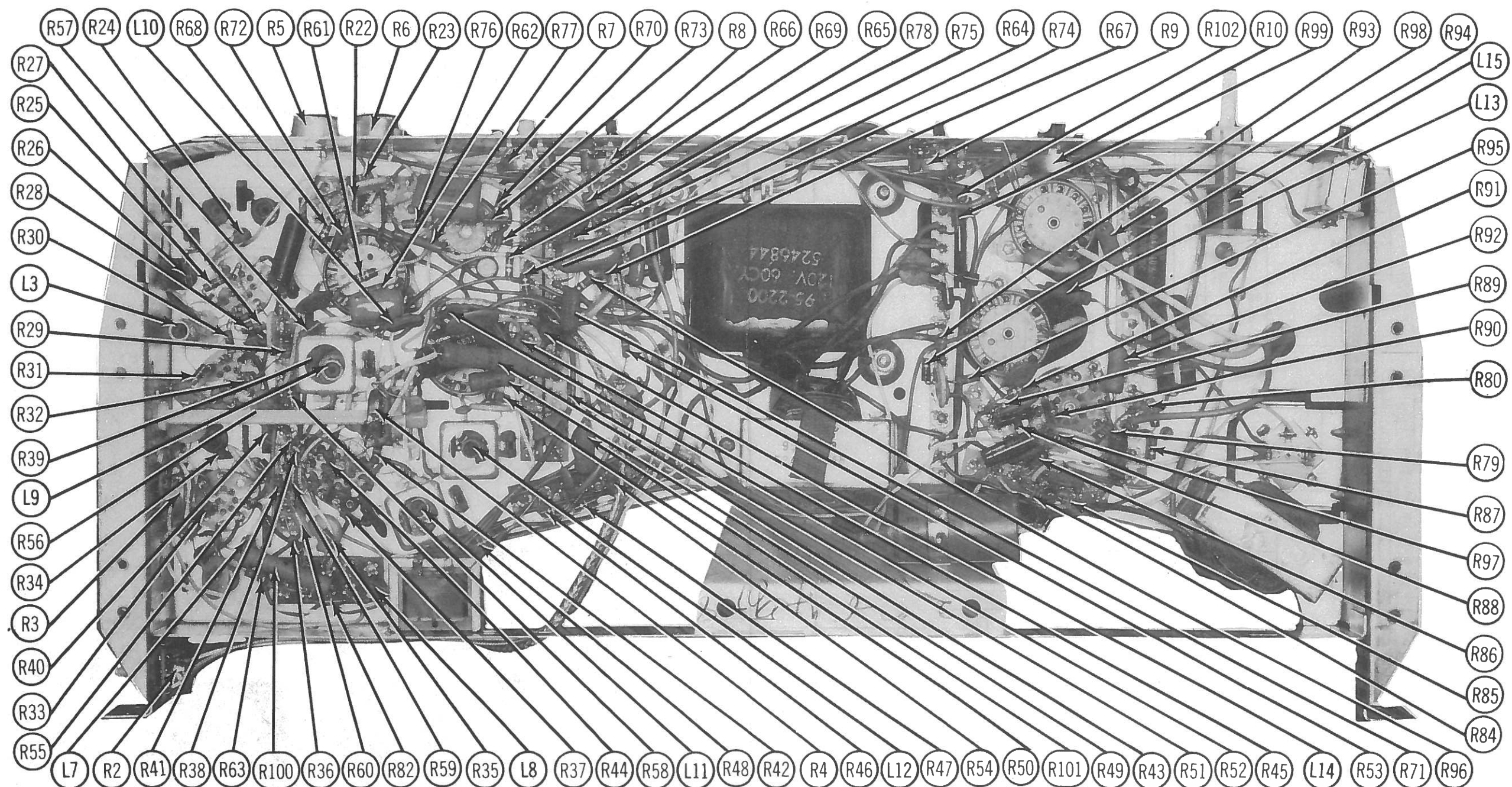
CHASSIS—TOP VIEW

SET 1030 FOLDER 3

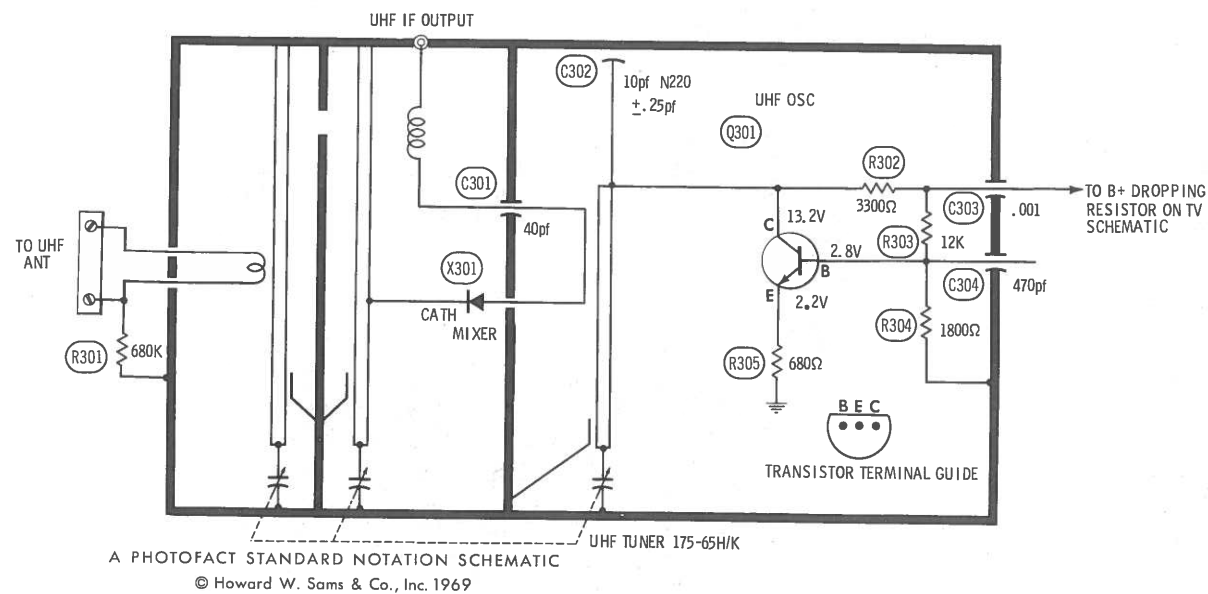
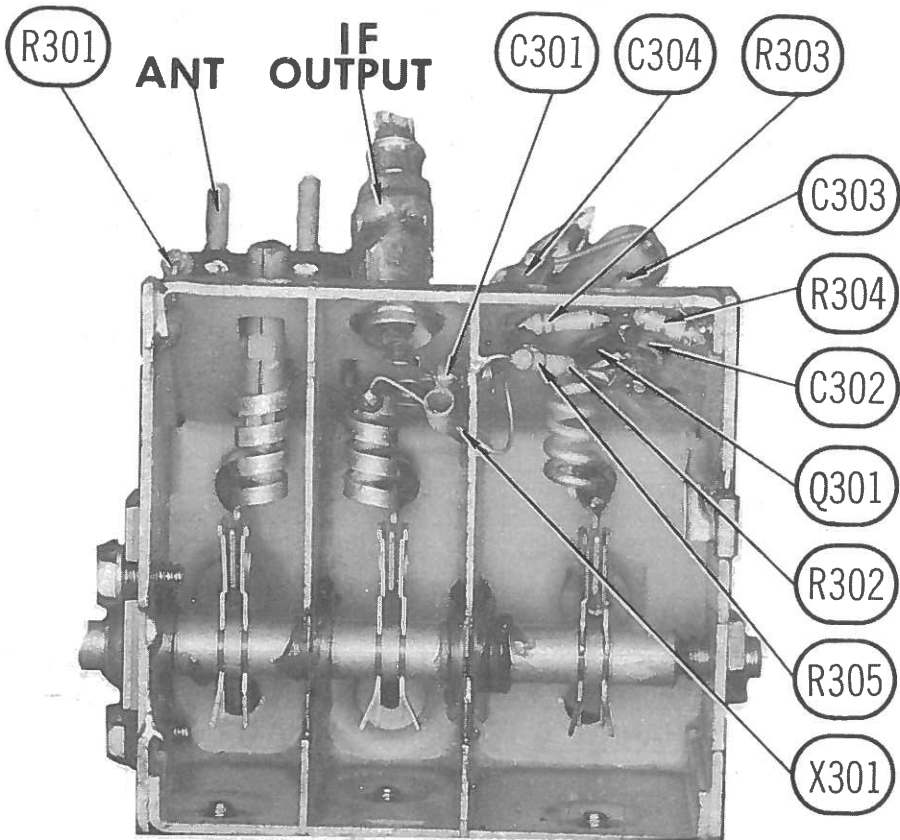
PAGE 5

ZENITH CHASSIS
14Z36, 14Z37

FOLDER 3

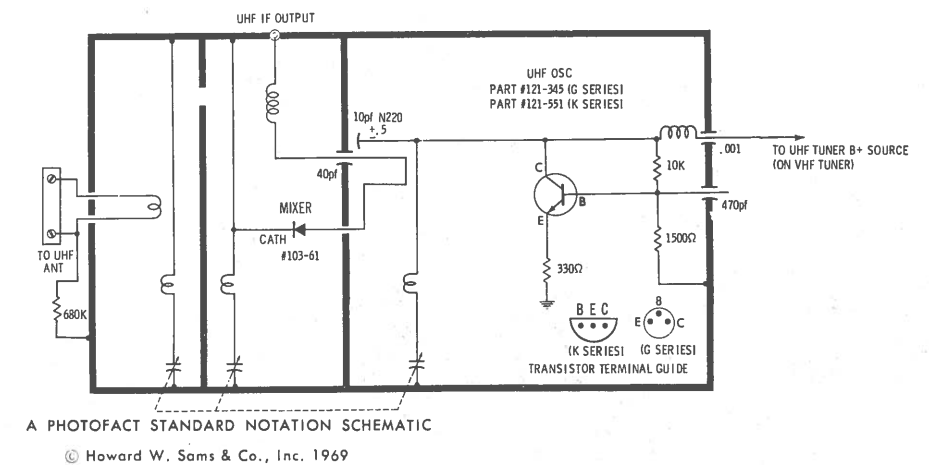
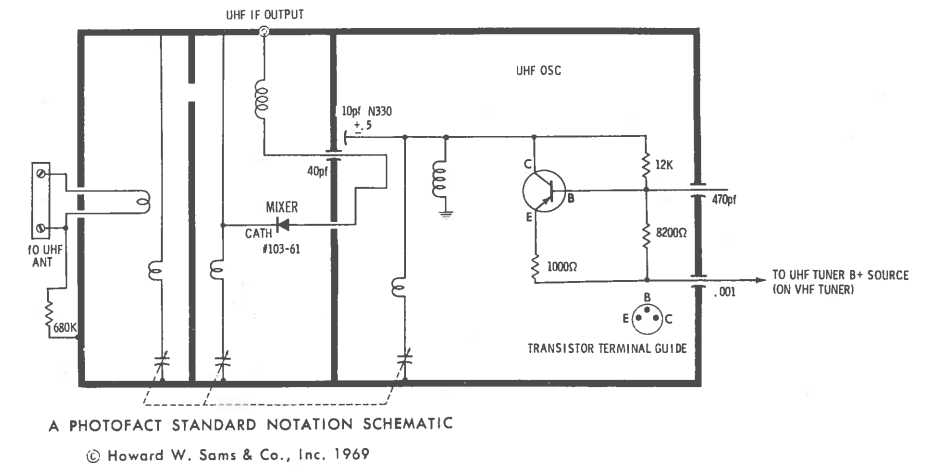


CHASSIS - BOTTOM VIEW

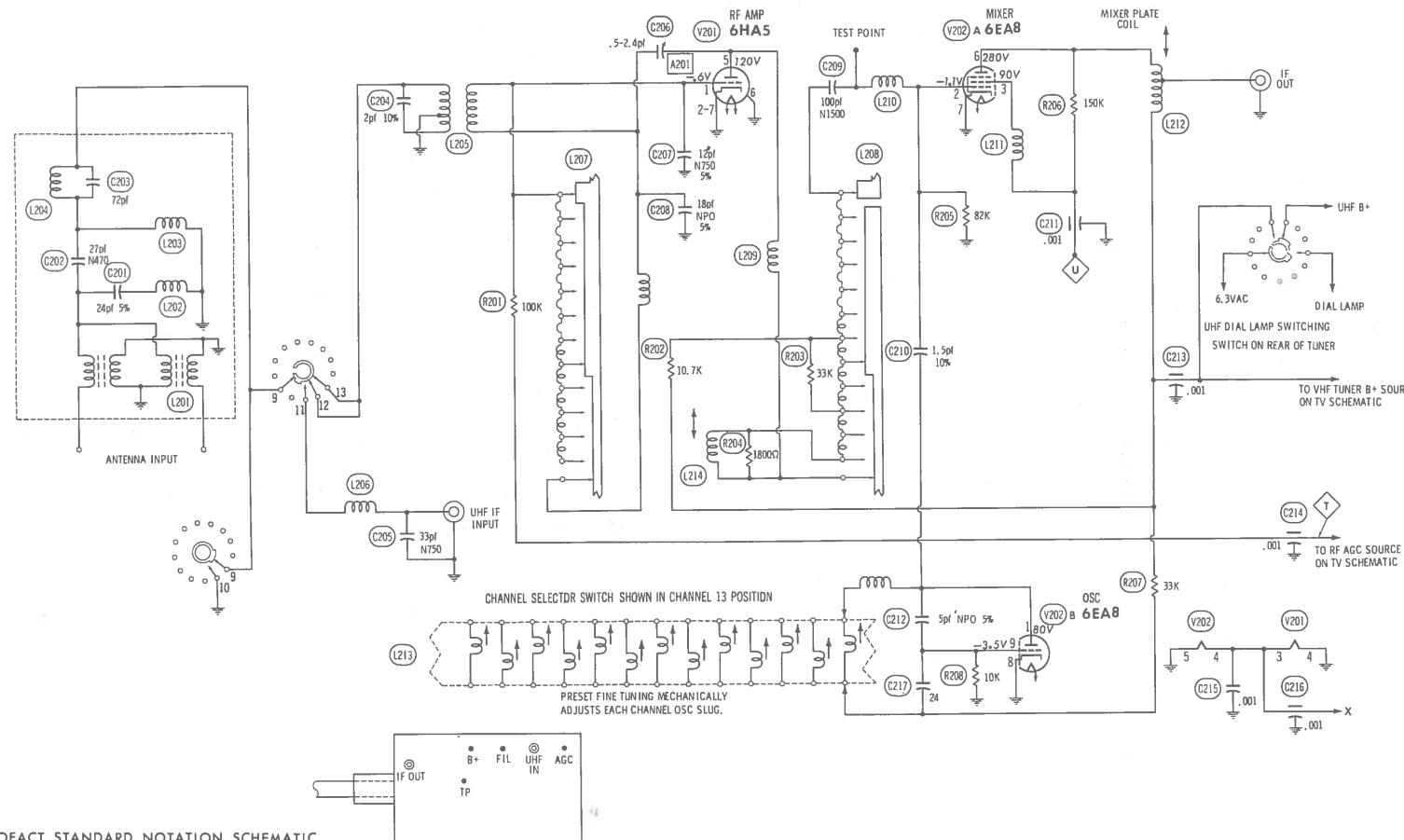


UHF TUNER 175-65H/K

UHF TUNER 175-53B/J

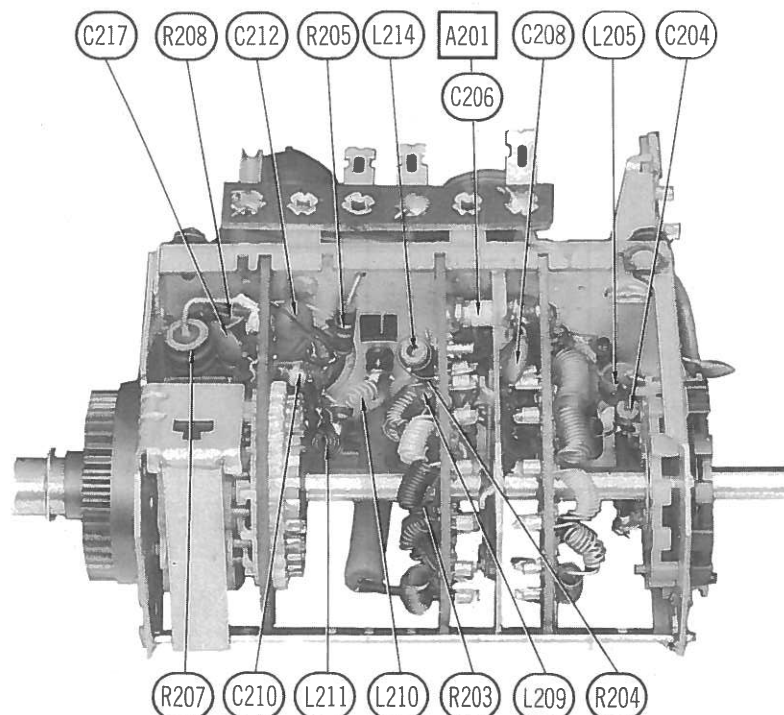
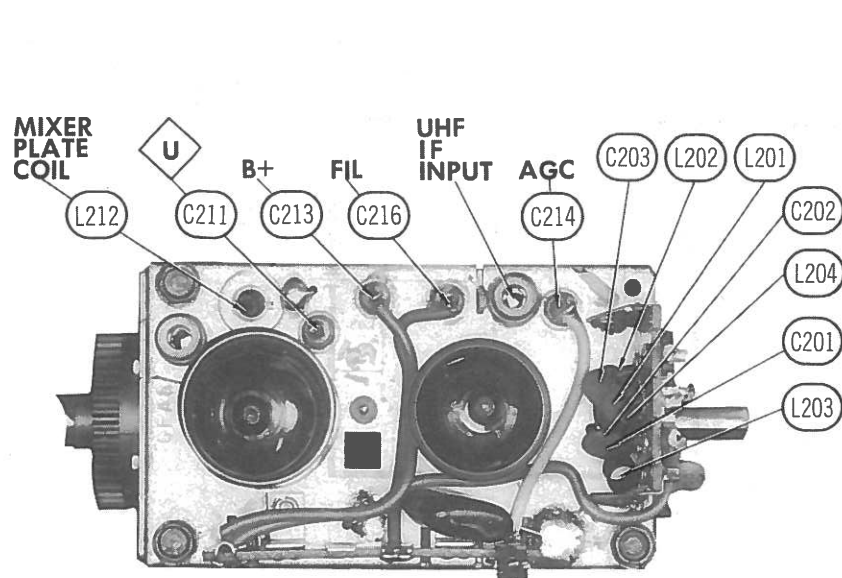


UHF TUNER 175-53G/K, 175-55G/K



A PHOTOFACT STANDARD NOTATION SCHEMATIC

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VHF TUNER 175-1131 THRU 175-1148

VHF TUNER ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: A201, A202, A203 ... GENERAL CEMENT #8868, 8987, 9089 ... WALSCO #2531-X, 2541, 2587
UHF Input Coil GENERAL CEMENT #2926, 9297, 9300 ... WALSCO #2510, 2546, 2547

OSCILLATOR ADJUSTMENTS VHF TUNER 175-1131 Thru -1148

The oscillator for each channel is preset by means of the fine tuning control. Adjust fine tuning for best picture and sound on each channel.

OSCILLATOR ADJUSTMENTS VHF TUNERS 175-690, 175-555

The oscillator for each channel is preset by means of the fine tuning control. Adjust fine tuning for best picture and sound on each channel. If any channel cannot be properly tuned in with the fine tuning, adjust overall oscillator adjustment and recheck all available channels.

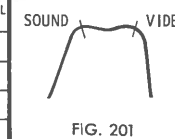
RF AND MIXER ALIGNMENT

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 \diamond . 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. Across antenna terminals with 120 Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to Point \diamond , low side to ground		TUNER 175-1131 Thru -1148 Expand or compress appropriate coils for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2. "	195MC	193.25MC 197.75MC	10	Across Video Det. load resistor.	A201	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.
3. "	See Chart	See Chart	12 thru 2	Vert. Input to Point \diamond , low side to ground.		Decrease bias. Check all channels and make compromise adjustments by expanding or compressing appropriate coils if required.
SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Across antenna terminals with 120 Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to Point \diamond , low side to ground	A201, A202	TUNERS 175-690, 175-555 Adjust for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2. "	195MC	193.25MC 197.75MC	10	Across Video Det. load resistor.	A203	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.
3. "	See Chart	See Chart	12 thru 2	Vert. Input to Point \diamond , low side to ground.		Decrease bias. Check response of all available channels. Make compromise adjustments of A201 and A202 if required.

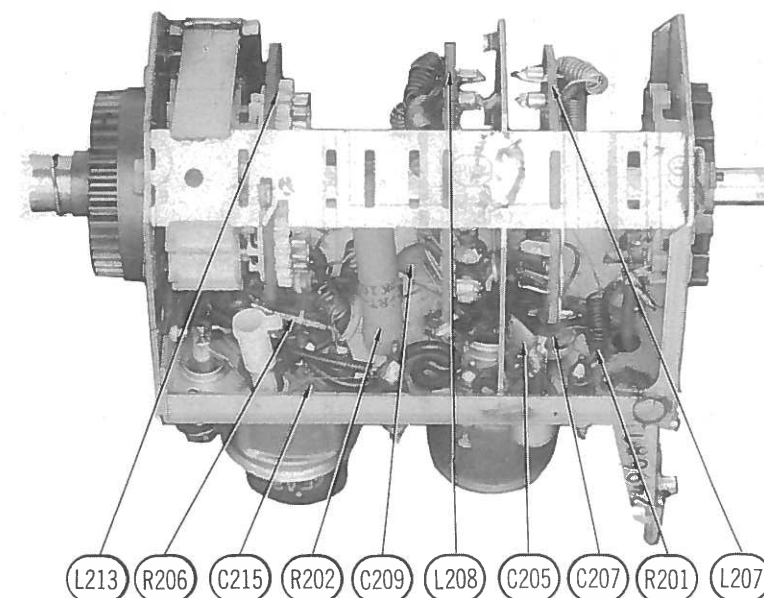
CHANNEL & FREQUENCY CHART

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



UHF TUNER ALIGNMENT INSTRUCTIONS

Tune to a UHF station and adjust UHF IF Input Coil for best picture and sound.



VHF TUNER PARTS LIST

VHF TUNER 175-1133

TUBES

AMPEREX			GENERAL ELECTRIC			RCA			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	6HA5	V202	Mixer - Oscillator	6EA8						

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.
C201	24	5%		DD-240		CCTO-240		10TCT-Q27
C202	27	N470		DD-750		CCD-750		10TS-Q75
C203	72			DTZ-2R2		CCTO-2R2		10TCC-V22
C204	2	10%		DTN-33		CCTN-330		10TCU-Q33
C205	33	N750						
C206	.5-2.4							
C207	12	N750 5%		TCN-12				
C208	18	NPO 5%		TCZ-18				
C209	100	N1500		TCL-100				
C210	1.5			DTZ-1R5				
C211	.001			MFT-1000				
C212	5	NPO 5%						
C213	.001							
C214	.001							
C215	.001							
C216	.001							
C217	24	N330 5%						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
 ① Part of Antenna Balun and Filter Assembly, Part #S-74546. # Zenith Part Number

COILS (RF-IF)

ITEM No.	USE	MFR. PART No.	NOTES
L201	Balun Assembly	S-74413 ①	① Part of Ant., Balun and Filter Assembly, Part #S-74546.
L202	Filter		
L203	Filter		
L204	Filter		
L205	Ant. Transformer	S-64259	
L206	UHF IF Input	20-1185	
L207	Antenna Wafer	S-79753	Channels 2 - 13.

ITEM No.	USE	MFR. PART No.	NOTES
L208	RF Wafer	S-75890	Channels 2 - 13.
L209	RF Choke		Part of Wafer.
L210	RF Choke		
L211	RF Choke		
L212	Mixer Plate	S-75825	
L213	Oscillator Wafer	S-79797	Channels 2 - 13.

UHF TUNER PARTS LIST

UHF TUNER 175-65H, K

TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA					
			MFR. PART No.	DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	SYLVANIA PART No.
Q301		UHF Oscillator	121-551		GE-11	TR-24	HEP56	SK3019

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFR. PART OR TYPE No.	REPLACEMENT RECTIFIERS & DIODES			REPLACEMENT RECTIFIERS	NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.		
X301	103-61	1N82A	1N82AG	ECG 112		

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.
C301	40	N1500 10%						
C302	10	N220 ±.25						
C303	.001							
C304	470	N220						

Zenith Part Number

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, 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.

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869 (17KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8738 (Two Conductor)
Power Cord (Interlock Type)	Use BELDEN No. 8530 (Solid) Available in 12 Colors
300Ω Tuner Input Lead	Use BELDEN No. 8524 (Stranded) Available in 12 Colors
300Ω Antenna Lead-in	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
Antenna Rotor Cable	Use BELDEN No. 8235
	Use BELDEN No. 8230 or 8275
	Use BELDEN No. 8464 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor

TUBES

AMPEREX			GENERAL ELECTRIC			RCA			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
Q301	UHF Osc. (Transistor)	121-551	V6	Sync Sep. - AGC Keying - Vert. Mult. - Noise Canceller	6BA11						
V201	RF Amp.	6HA5	V7	Vert. Mult. - Vert. Output	6GK8						
V202	Mixer - Oscillator	6EA8	V8	Horiz. AFC - Horiz. Osc.	6GH8A						
V1	1st Video IF	6BZ6	V9	Horiz. Output	6H5						
V2	2nd Video IF	6BZ6	V10	HV Rectifier	2A52						
V3	3rd Video IF	6BZ6	V11	Damper	6BE3						
V4	Video Output - Sound IF	6JT8									
V5	Audio Det. - Audio Output	6Z10									

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MFR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V12	22TP4 †			20UP4 ①	① Silver Screen "85"

† Models A2213W1, A2224P1/R1, T2694W, T2695W1, Z2213W, Z2224W
 † Models A2010P1/W1, S2700L9, Z2022P1/W1, Z2030W, Z2042W.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFR. PART OR TYPE No.	REPLACEMENT RECTIFIERS & DIODES			REPLACEMENT RECTIFIERS	NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.		
X1	212-71	GE-504A	8D4 or 9DD6A ①	ECG 116 or ECG 117	SK-3031 or SK0317A	① A single unit replacement for both rectifiers.
X2	212-71	GE-504A	8D4 or 9DD6A ①	ECG 116 or ECG 117	SK-3031 or SK-3017A	
X3	103-23	1N80	1N80	ECG 109		
X4	103-51	1N80	1N80	ECG 109		
X5	103-101	6GC1	DD04	ECG 113		

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1	80	200V	PR81780		BR80-250	QT1-21	TC80A
C2A	80	200V	AFH3-170-80		BB0356 & BR250-25	XC2-34 & QT1-28	FP420.43
C2B	80	400V					
C2C	200	25V					
C3A	4	350V	AFH4-49		CC0910	XC3-1	FP368.68A
C3B	20	25V					
C3C	10	400V					
C4	4	150V	CRE953A		NLW4-150	MT1-4	TT150X4

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.
C11	470		GPD X5F471K	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C12	5	NPO	NPO-DI 5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CNO547	10TCC-V50
C13	.01		GPD X5S103K	DD-103	BYX601ZU103P	CCD-103	JF110	10TS-S10
C14A	10	NPO 5%		DTZ-10	CZ601CG100J		CNO410	10TCC-Q10
C14B	10	NPO 5%		DTZ-10	CZ601CG100J		CNO410	10TCC-Q10
C15	.15	100V					PVC1015	2PS-P15
C16	.15	100V					PVC1015	2PS-P15
C17A	.001		V1812P15		DMF1P15	1DP-3-154		
C17B	.001		V1812P15		DMF1P15	1DP-3-154		
C18	.001		GPD X5F102K	DD-102	JBZ601YP102K	CCD-102	GP210	10TS-D10
C19	.001		GPD X5F102K	DD-102	JBZ601YP102K	CCD-102	GP210	10TS-D10
C20	270	N750 10%		DD-102	JBZ601YP102K	CCD-102	GP210	10TS-D10
C21	470	10%		DD-102	JBZ601YP102K	CCD-102	GP210	10TS-D10
C22	470	N1500		DD-102	JBZ601YP102K	CCD-102	GP210	10TS-D10
C23	5.5	N470 ±.5		TCN-270		CCD-102	CNT327	10TCC-T27
C24	4.7			DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C25	4.7							
C26	150							
C27	47	N75 5%						
C28	4.3	10%						
C29	50							
C30	33	10%						
C31	75	N1500						
C32	.1	400V						
C33	220	10%						
C34	.001							
C35	100							
C36	1.8	5%						
C37	.001							
C38	20	N220 10%						

VHF TUNER 175-690

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, 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.

CAPACITORS (cont)

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.
C39	.01		GPD X5S103K	DD-103	BYX601ZUI03P	CCD-103	JF110	10TS-S10
C40	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C41	.0068 1KV		GPD X5R682K	DD-682	BYX601ZU682P	CCD-682	JF268	10TS-D88
C42	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C43	.01		GPD X5S103K	DD-103	BYX601ZUI03P	CCD-103	JF110	10TS-S10
C44	.01		GPD X5S103K	DD-103	BYX601ZUI03P	CCD-103	JF110	10TS-S10
C45	470 1KV		GPD X5F471K	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C46	.0033		GPD X5R332K	DD-332	JBV601YP332K	CCD-332	JF233	10TS-D33
C47	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C48	.1 400V		DBE4PI		DMF4PI	4DP-3-104	PVC401	4PS-P10
C49A	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C50	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C51	7 NPO 10%		NPO-DI 6.8	DTZ-6R8	CZ601CH6R8D	CCD-6R8	CNO568	10TCC-V68
C52	.01		GPD X5S103K	DD-103	BYX601ZUI03P	CCD-103	JF110	10TS-S10
C53	.068 600V 10%		DBE6PI		DMF6PI	6DP-4-104	PVC601	6PS-P10
C54	.039 400V 10%		DBE6S88		DMF6S88	6DP-4-683	PVC6168	6PS-S68
C55	.0022 600V 10%		DBE6S39		PKM4S39	6DP-3-393	PVC6139	6PS-S39
C56	.022 400V		DBE6D22		DMF6D22	6DP-1-222	PVC6222	6PS-D22
C57	.047 200V		DBE6S22		DMF4S22	4DP-2-223	PVC6122	4PS-S22
C58	.047 600V		V1612S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C59	56 N750/3KV/10%		DBE6S47		DMF6S47	6DP-3-473	PVC6147	6PS-S47
C60A	.51		GPD X6F500K	DD-510	JBZ601YP500K	CCD-510	GP450	10TS-Q50
C61	.001		GPD X5F500K	DD-510	JBZ601YP500K	CCD-510	GP450	10TS-Q50
C61A	.001		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C62	470 1KV		GPD X5F102K	DD-102	JBS601YPI02K	CCD-102	GP210	10TS-D10
C63	470 N2200		GPD X5F471K	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C64	.0015 500V 10%		GPD X5F471K	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C65	.0022 400V 10%							
C66	.0022 400V 10%							
C67	.0033							
C68	.01							
C69	.0033 10%							
C70	.0015 10%							
C71	.047 100V							
C72	.033 400V							
C73	.15 600V							
C74	110 N1500 4KV							
C75	.01							
C76	10 N330							
C77	.001 1KV 10%							
C78	.001							

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

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFGR. PART No.			IRC PART No.	WORKMAN PART No.	MFGR. PART No.
R43	6800Ω TW	PW10-7000	7G-6.8K	63-5338	R98	15K 3W	3G-15K	63-7260	
R60	V.D.R. †			63-5327	R100	18K 3W	3G-18K	63-7447	
R77	V.D.R. †			63-7447		6000Ω 4W	5W-SQ-6K	63-3579	
R83	Thermistor (750K Cold)		FS-301	63-5187					

† Voltage Dependent Resistor

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1A	41.25MC Trap	S-75344			TC204
B	1st Video IF				
L2A	39.75MC Trap	S-72871			TC232
B	47.25MC Trap				
L3	2nd Video IF	S-80253	17-4524	6219	T234
L4	3rd Video IF	S-57624	17-4523	6224	T217
L5	4th Video IF	S-58824		6227	TC237
L6	Peaking (90uh)	20-2013		6177	T368
L7	RF Choke (6uh)	20-2004		4610	T922
L8	Peaking (170uh)	20-2014		72F184AP	T397
L9	Sound Takeoff/4.5MC Trap	S-74446			
L10	Peaking (118uh)	20-2527 ①		72F124AP *	T307 *
L11	Sound Interstage	S-74445			
L12	Quadrature	S-75409			
L13	RF Choke (10uh)	20-2005	20-1005 †	1470 A †	TG288 †
L14	Peaking (730uh)	20-2003	19-1005	72F105AP	T860

① Includes 10K Resistor.

* Shunt with 10K Resistor.

† Use original shield.

▲ Disregard Tap.

COILS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA						
		MFGR. PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L15	Horiz. Osc. (Hold)	S-56876	TV-169 ①	6324 ①		HS-6 ①		T106 ①

① Install plastic sleeve over adjustment screw.

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
L16	.32A DC	37.5Ω	.8 H	95-2189	C-4084	C-2347	26C78	C-28X

TRANSFORMER (Power)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ 1.5A AC	117VAC @ .32A DC	6.3VAC @ 6.5A AC	95-2200	P-4083 ①		26R106 ①	R-124BC	① Drill new mounting holes.

TRANSFORMERS (Sweep Circuits)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	Vert. Output	95-2523					
T3	Yoke (Horiz. 15.4mh) 1140 (Vert. 55mh)	95-2391(C)	MFD-143 ① ② ③	DY-58AT ① ② ③	Y-105 ① ② ③	YT-103-1 ① ② ③	† Alternate Part No. S-80212.
T4	Horiz. Output	S-81957 †	HVO-208 ⑥		FLY-327 ⑥ ⑦	D-221 ⑥	

① Use original damping network if necessary.

② Remove Orange and White lead.

③ Remove Black lead.

④ See Hook-up Data Sheet.

⑤ Remove Red/Yellow and Black lead.

⑥ Use original mounting bracket.

⑦ Use original high voltage rectifier tube socket and high voltage lead.

SWEEP COMPONENT CONNECTION DATA

ORIGINAL	HORIZONTAL OUTPUT					YOKE					YOKE PLUG				
	Original Connections					Original Connections					1	2	3	4	5
REPLACEMENT	Purple	Green	Red/Wh	Yellow	White	Yellow	Black	White	Blue	Red					
MERIT						2	7	†	6	4					
STANCOR						1	3	†	6	4					
THORDARSON						2	7	†	6	4					
TRIAD						2	7	†	6	4					

† Use original 1meg Thermistor and connect from Yoke Terminal #7 to original White lead.

† Use original 1meg Thermistor and connect from Yoke Terminal #3 to original White lead.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MFGR. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T5	4867Ω	3-4Ω	95-2659	A-3026 ①	A-3309 ①	24S48 ①	S-8Z	① Drill new mounting hole.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		MFGR. PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" PM 3.2Ω 3" x 5" PM 3.2Ω	49-1011 ① 49-1022 ②	P4W3 P3X5X3	4A07 35A03	① Models A2010P1/W1, A2213W1, A2224P1/R1, T2694W, T2695W1, Z2213W, Z2224W. ② Models Z2022P/P1/W/W1, Z2030W, Z2042W.

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
F1	Circuit Breaker Break Current 3.1 Amp. Hold Current 2.1 Amp. 1½" length of #26 copper wire	85-972				8153.25	FA 3.5
F2							

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M1	VHF Tuner	175-1133	
	VHF Tuner	175-1136	
	VHF Tuner	175-549	
	VHF Tuner	175-555	
	VHF Tuner	175-690	
M2	VHF Tuner	175-1148	
	UHF Tuner	175-65H,K	
	UHF Tuner	175-53B,G,J,K	
	UHF Tuner	175-55G,K	
M3	VHF Antenna	1-205	JFD Replacement TA511, Models A2213W1, A2224P1/R1, T2694W, T2695W1, Z2030W, Z2042W, Z2213W, Z2224W. JFD Replacement TA499 (Two used), Models Z2022P/P1, W/W1. JFD Replacement TA499, Models Z2010P1/W1. JFD Replacement TA544.
M4	VHF Antenna	1-119 (2)	
M5	VHF Antenna	1-204	
M5	VHF Indicator Lamp	100-368 or 100-365	
M6	VHF Indicator Lamp	100-368 or 100-365	
M7	Neon Lamp	100-397 (NE2H)	
PC1	Vertical Integrator	87-4	AEROVOX Replacement PA-765, CENTRALAB Replacement PC-408, SPRAGUE V-14.

A2010P1/W1

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS—IRC PART No.	MALLORY PART No.
R1	Volume/Switch	1meg	63-7468 ⑤	F2-1meg, SP212, KR-8	C47S-1meg-Z, RS-3/16 or (NP-1meg-Z, UPP-H-300, PPAP, NWG-18)	B13-137, SK8 or (PPQ13-137, SK8) or (BU2, CF26, SS11A, K) *	PP16A, DS37 or (RUP16A, SL35) or (P16A, 3038, FPP-1)
	Volume	1meg	63-7186 ⑥	F2-1meg, SNF100	A47-1meg-Z, RS-3/16 or (NP-1meg-Z, SE-F-400)	B13-137, SK9 or (BU1, CF26, SS4, DC1) *	UA16A, SD875 or (RUI16A, SL35, IS875) or (U53, DS37)
	Audio Range	1meg	63-4833 ⑦	TT-69 or (F1-1meg, SNK010)	B47-1meg-S or (NP-1meg-S, NML-A-300, TT-2)	B11-137, TM4 or (BU11, CF17, SS6) *	PTA1254L or (RUI6L, SL37, SN1000) or (UA16L, SN1000)
R2	Vert. Hold	750K	63-7185	F1-750K, SNF100	A47-750K-S, RS-3/16, TT-2 or (NP-750K-S, NMS-A-300, TT-2)	B11-136, TM10 or (BU11, CF64, SS16, DC1) *	RU754L, SL37, SD875 or (UA16L, SD875) or (TA16L, DS37)
R3	Brightness	250K	63-5380	F1-250K, SNF100	A47-250K-S, RS-3/16, TT-2 or (NP-250K-S, NMS-A-300, TT-2)	B11-130, TM10 or (BU11, CF15, SS16, DC1) *	RU254L, SL37, SD875) or (UA254L, SD875) or (TA254L, DS37)
R4	Contrast	15K, 5000Ω Tap	63-6491	F55-15K ①, SNK108, AK-16 ②, AK-40		B17-118X, TM9, C3 ② or (BU11, CF102T, SS6, DC2, C3 ②) *	TR153D, TT14 ①, SP2000 ③
R5	Buzz	750Ω, 2W	63-3284, C	V-800 or (WN-751)	U39-800 or (NPW-750, NML-A-300)	112-800 or (W11-105, SK5) or (BU1, WF2, SS6) *	MR750F or (VW750) or (R750L)
R6	Vert. Linearity	800Ω, 2W 100Ω Stop	63-5312, B	V-500 or (WN501 ④)	U39-500-100 or (NPW-500 ④, NML-A-300)	112-500-100 or (117R501A ④) or (BU1, WF20 ④, SS6) *	MR600SF or (VW500 ④) or (R500L ④)
R7	Height	10meg	63-7110	F1-10meg, SNK010	A47-10meg-S, RN-3, TT-2 or (NP-10meg-S, NML-A-300, TT-2)	B11-143, TM4 or (BU1, CF70, SS6) *	UA17L, SN1000
R8	AGC	10K	63-6432	TT-14 or (F1-10K, SNK010)	B47-10K-S or (NP-10K-S, NML-A-300, TT-2)	B11-116, TM4 or (BU11, CF9, SS6) *	RU14L, SL37, SN1000 or (UA14L, SN1000) or (TA14L)
R9	Focus	3meg	63-6467	TT-84 or (F1-3meg, SNK010)	B47-3meg-S or (NP-3meg-S, NML-A-300, TT-2)	HL3C	RU36L, SL37, SN1000 or (UA36L, SN1000) or (PTA355L)
R10	Width	3000Ω	63-5031, C	TT-8 or (F1-5000, SNK010)	B47-3000-S or (NP-3000-S, NML-A-300, TT-2)	B11-112, TM4 or (BU11, CF59, SS6) *	PTA352L or (RU252L, SL37, SN1000) or (UA33L, SN1000)