

DISASSEMBLY INSTRUCTIONS

TV CHASSIS REMOVAL

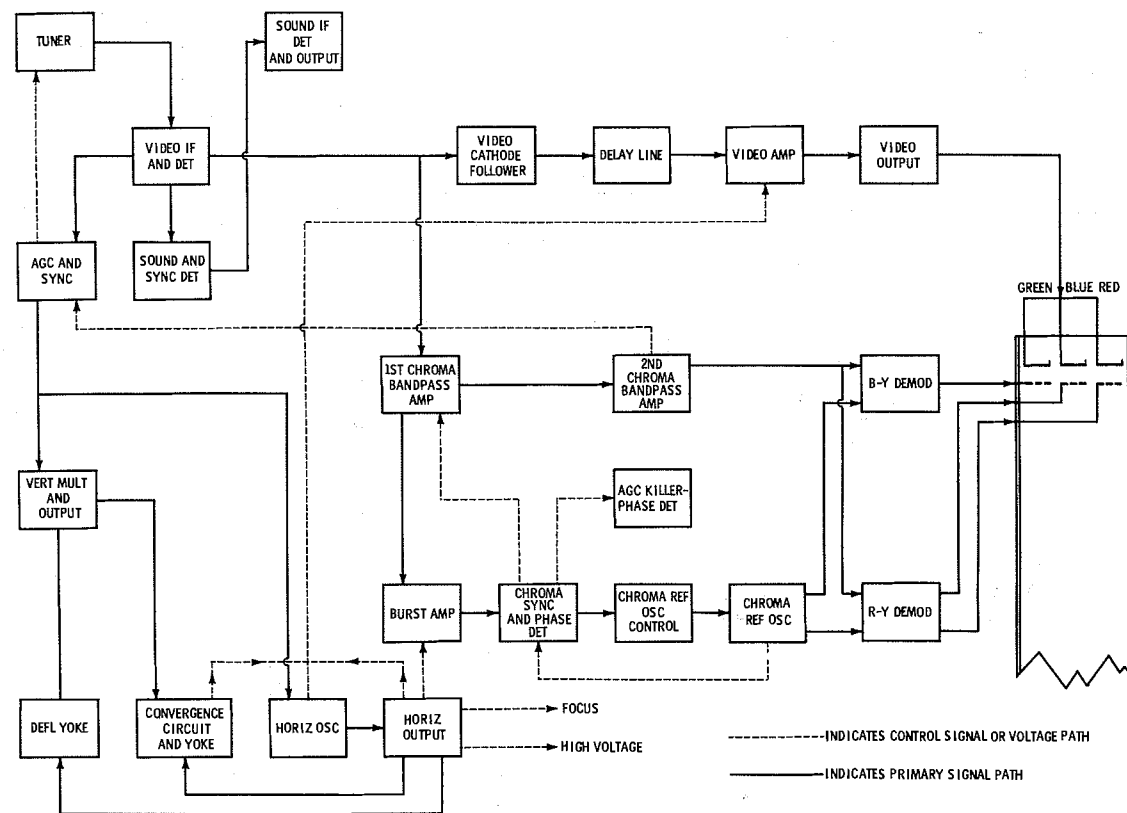
1. Remove 1 screw and 5 turn screws holding back cover and remove back cover. On some models it may be necessary to disconnect antenna leads. Remove all knobs. Do not remove On/Off, Higher or Lower levers.
2. Disconnect yoke plug, high voltage anode lead, picture tube socket, speaker leads, ground wire, and tuner connector.
3. Remove 6 screws holding chassis and 13 screws holding tuner and controls.

4. Lift out chassis and tuner.

NOTE: Most components may be serviced without removing chassis.

PICTURE TUBE REMOVAL

1. Follow "Chassis Removal" procedure. Lay set face down on a soft protective surface.
2. Remove 4 screws holding degaussing coil and 8 screws holding picture tube bracket. Lift out picture tube but not by the neck of tube.

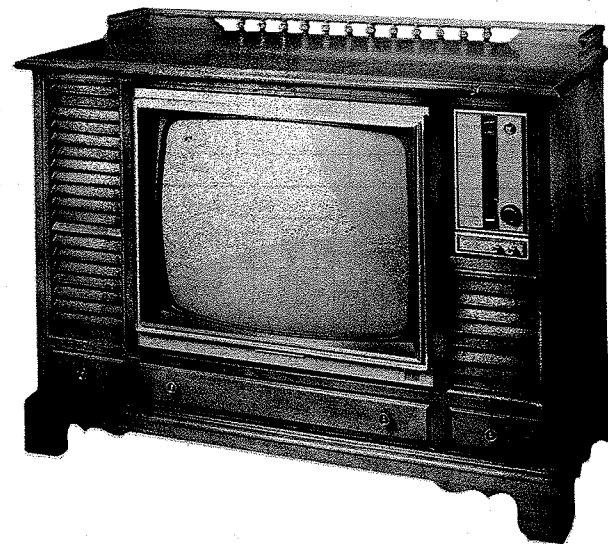


BLOCK DIAGRAM

SET 863 FOLDER 3

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

PHOTOFACT® Folder



MODEL 25X6547M

Master 28
ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

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

Remote Receivers S-69876, S-69886, S-72346 and
Transmitter S-68936 SET 863, FOLDER 3-A

TRADE NAME	ZENITH	MODELS	CHASSIS	REMOTE CONTROL
	25S2970W1, 25T2962W, 25T2964W, 25T2966H	.....	23XC36	
	25T2965H, 25T2968M, 25X4507L/Y, 25X4511W, 25I7R/W	.....	23XC38Z	
	25X4519W2, 25X4521W, 25X4525M, 25X4529H, 25X4531DE	.....	23XC38Z	
	25X4533W, 25X4535W, 25X4537M, 25X4539R/H	.....	23XC38Z	
	25X4541W, 25X43DE, 25X4545H, 25X4547M	.....	23XC36	
	25X6507L/Y, 25X6511W, 25X6517R/W, 25X6521W, 25X6525M	.....	23XC38Z	S-72346
	25X6541W, 25X6543DE, 25X6545H/X, 25X6547M, 25X6549H	.....	23XC36	S-69876
	25X8520W, 25X8530W, 25X8540M, 25X8550H, 25X8560H, 25X8580H	.....	23XC38Z	
	8304W7, 8308R7/W7, 8310W7, 8312M7, 8314R7/H7, 8316H7, 8750M7	.....	23XC38	
	9304W7, 9308R7/W7, 9310W7, 9312M7	.....	23XC38	S-72346

• Combination Models covering TV Chassis only.

SUPPLIER
TYPE SET
TUBES
POWER SUPPLY
TUNING RANGE

For current address, see Annual Index.
25" Color Television Receiver
VHF: Twenty-Four, UHF: One Transistor
110-120 Volts AC, 60 Cycles
Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)

RATING 300 Watts, 3.1 Amps. @ 117 Volts AC

SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE OR FUSE DEVICE

A 2-amp. fuse is used for low voltage power supply protection. (See "Tube Placement Chart" for location.)

Two 2½" lengths of fuse wire are used for filament protection. (For location, see F2 and F3 in "Chassis - Bottom View" photo.)

VHF OSCILLATOR ADJUSTMENT

The Fine Tuning mechanically engages oscillator slug for adjustment (one slug for each channel).

AGC

The AGC may be varied by means of an AGC control. (See "Tube Placement Chart" for location.)

WIDTH

Blue lead from the horizontal sweep transformer may be moved from blank terminal to adjacent terminal to vary the width.

FOCUS

The focus may be varied by means of a Focus control. (See "Tube Placement Chart" for location.)

BUZZ ADJUSTMENT

To eliminate intercarrier buzz, adjust the Buzz control for MINIMUM buzz and maximum sound. (See "Tube Placement Chart" for location.)

CENTERING

Centering is accomplished by 2 controls. (See "Cabinet - Rear View" photo.)

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. SB018

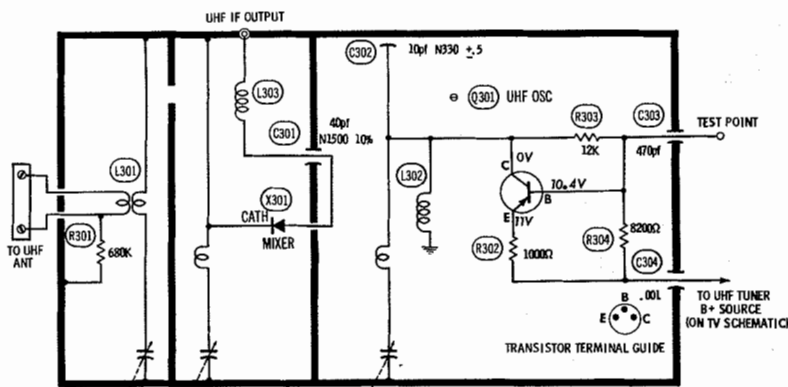
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SET 863 FOLDER 3

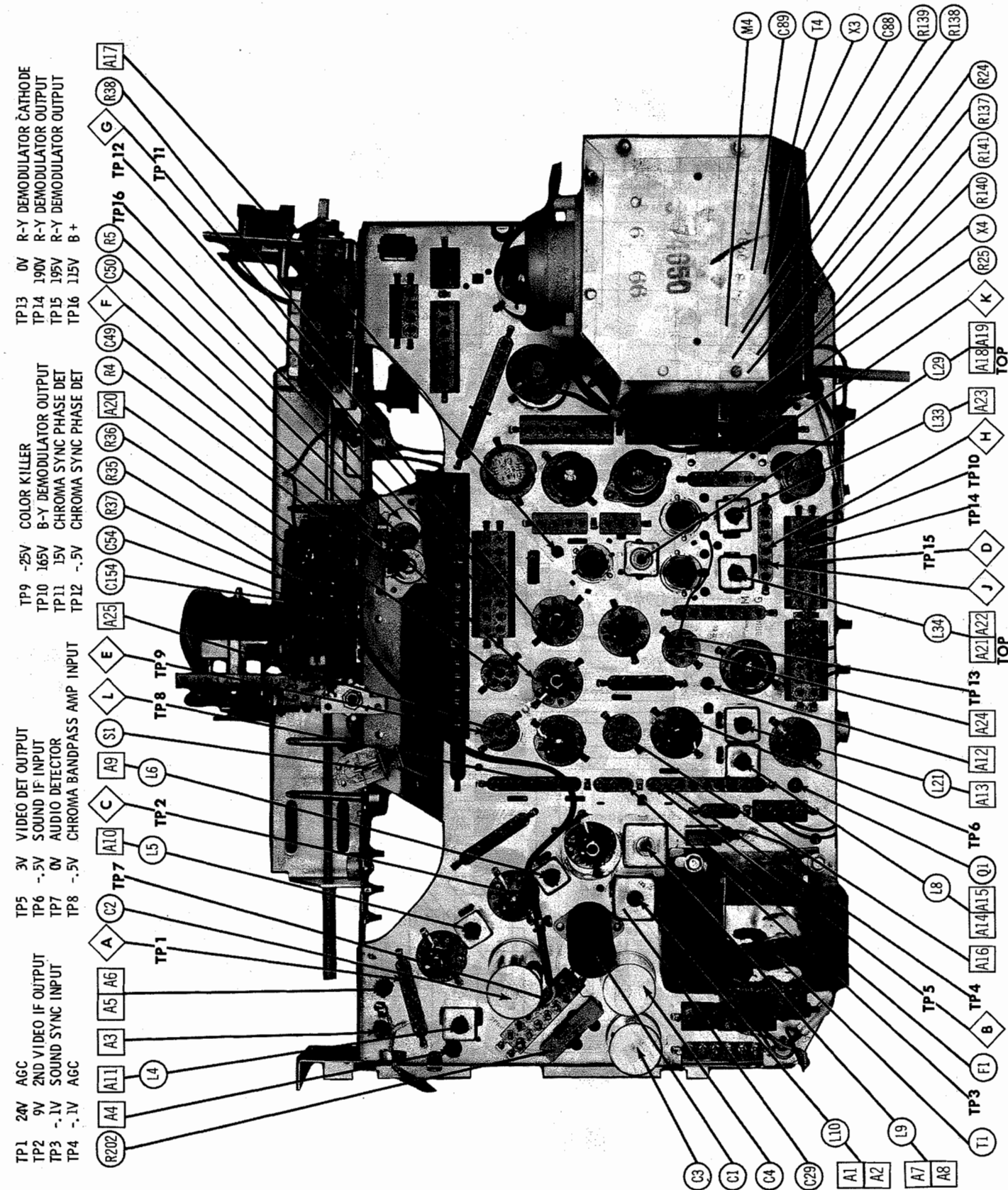
ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

SET 863 FOLDER 3



A PHOTOFAC STANDARD NOTATION SCHEMATIC
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UHF TUNER 175-34B-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 A16 GENERAL CEMENT #806, 806L, 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 \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 Mixer Grid test point \diamond on VHF Tuner. Low side to ground.	41.25MC 39.75MC 47.25MC	A1, A2, A4 A3 A5, A6	Adjust for MINIMUM. It may be necessary to remove bias supply from point A for trap alignment.
2.	Connect vertical input of a scope to point \diamond . Low side to ground.	Connect high side thru .001 mfd to point \diamond , pin 2 of V3. Low side to ground.	44MC (10MC Sweep) 41.25MC 41.75MC 45MC 45.75MC	A7 A8	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 to Mixer Grid test point \diamond on VHF Tuner. Low side to ground.	44MC (10MC Sweep) 39.75MC 41.25MC 42.75MC 45MC 45.75MC 47.25MC	A9, A10, A11 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 A 7 and A 8.

SOUND IF AND 4.5MC TRAP ALIGNMENT

Tune in a stron TV station and adjust for normal operation. Reduce the signal strength at the antenna terminals until a hiss is heard in the sound. Adjust for maximum undistorted sound with MINIMUM buzz by adjusting A12, A13, A14, A15, and Buzz control R14. If the hiss disappears during alignment, further reduce the signal strength.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4.	Not used	Not used	Any non-interfering channel	Vert. Input to point \diamond , low side to chassis.	A16	Place Color switch in "On" position. Connect a clip lead from point \diamond to chassis and adjust A16 for MINIMUM 900KC beat on scope.

COLOR SYNC AND DEMODULATION





Place Color switch in the "On" position. Connect a Color Bar generator (color bar pattern) across antenna terminals. Adjust for normal operation. Connect a clip lead from point \diamond to chassis. Connect a clip lead from point \diamond to ground.
Suggested Alignment Tools: A17 thru A25 .. GENERAL CEMENT #806, 806L, 8869 .. WALSCO #2543, 2544, 2588.

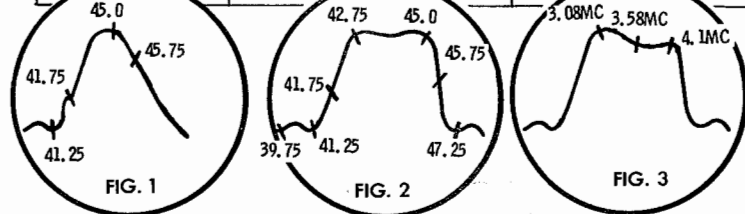
SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT INDICATOR	ADJUST	REMARKS
5.	Not used	Not used	Generator	Not used	A17	Adjust for zero beat as viewed on picture tube screen, minimum number floating bars on screen, at bottom end of coil.
6.				DC probe of VTVM to point \diamond , common to chassis.	A18, A19, A20	Adjust A18 for maximum indication and A19 for MINIMUM. Slugs should be positioned on outside end of coils. Remove the clip leads from points \diamond and \diamond . Adjust A20 for center indication on VTVM. Note: Positions of A18, A19 cores may be reversed. On models with "flat" top on coil, A18 is top slug. On models with "dome" top on coil, A19 is top.
7.				With low capacity probe, Vert. Input of Scope to point \diamond , low side to chassis.	A21 (Top)	Adjust for MINIMUM 3.58MC response.
8.				Vert. Input of Scope to point \diamond , low side to chassis.	A22	Adjust for MINIMUM 3.58MC response. Some interaction may exist. Repeat steps 7 and 8 as necessary.
9.				Vert. Input of Scope to point \diamond , low side to chassis.	A23	Adjust for MINIMUM 3.58MC response.

NOTE: Connect scope to point \diamond . Check for proper waveform with Color Bar generator being used. See waveform on schematic obtained from a standard N.T.S.C. signal. Check the range of the Hue control. The bars should move 30° either side of proper signal. If necessary, retouch A20 for proper range of the control.

CHROMA BANDPASS ALIGNMENT

Disable the oscillator of the Mixer-Osc. in tuner. Set the Color Level control to mid-position. Connect a -2 volt bias to point \diamond . Connect a clip lead from point \diamond to chassis. Place the Color switch in the "On" position.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10.	High side to point  , low side to chassis.	3.5MC	3.0MC 3.58MC 4.1MC	Any non-interfering channel	Vert. Input thru detector probe to point  , low side to ground.	A24	Adjust for MINIMUM 3.58MC response. Correct dip in response occurs with slug nearest chassis.
11.		"	"	"		A25	Adjust for symmetry of response similar to Figure 3 with markers as shown.



MISCELLANEOUS ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Connect a VTVM through a 30KV or higher probe to the picture tube anode connector. Turn on TV and set all controls for normal operation. Set Normal-Service switch to Service position. Adjust High Voltage control for 25KV on VTVM.

The Horizontal Hold control 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.

AGC ADJUSTMENT

Tune in the strongest TV station available and slowly turn AGC control to the right until the picture distorts and a buzz is heard in the sound. Turn control back to the left until picture distortion and buzz in the sound have cleared up.

COLOR KILLER

Tune in a weak snowy picture. Adjust Color Killer until color disappears. Check setting on a color program to be sure Color Killer is not eliminating color.

BRIGHTNESS RANGE ADJUSTMENT

Tune in a TV station. Set all controls for normal operation. Adjust Brightness and Contrast to maximum. Adjust Brightness Range control, R6, to the point just below where blooming occurs.

PURITY ADJUSTMENTS

Perform step I of "Convergence Adjustments". If the picture tube appears to be magnetized, use a degaussing coil to demagnetize tube and mounting brackets. Connect the Blue and Green grids of the picture tube through individual 100K resistors to ground. Loosen the deflection yoke and move it backward until it is against the convergence yoke assembly.

Adjust the tabs on the Purity magnet and rotate the assembly until a red spot appears at the center of the picture tube. Slide the deflection yoke forward to obtain a uniform red over entire picture tube face. A low power microscope is useful to observe the beam landings.

GRAY SCALE ADJUSTMENTS

Tune in a black and white picture or a color picture with the Color control set to "Minimum". Turn the CRT Bias control fully counter-clockwise. Turn the Red, Blue and Green Screen controls fully counter-clockwise. Move the BW switch to "Setup". Advance the screen controls one at a time until each produces a barely visible line on the screen. If any control fails to produce a line, leave that control at "Maximum" and turn the other two controls back to "Minimum". Advance the CRT Bias control until a barely visible line appears. Advance the remaining two controls one at a time until a barely visible line appears. Return the BW switch to "Normal". Adjust the Blue and Green Gain controls to eliminate coloring in the dark and bright areas of the picture.

CONVERGENCE ADJUSTMENTS

Step	Control	Use to Converge (or Straighten)	Remarks
1.			Perform center dot convergence using convergence magnets. If more range is needed, reverse magnet holder in clip. See Fig. A.
2.	Vertical Dynamic Pincushion, I41		Adjust for straight horizontal line at top and bottom of screen.
3.	R-G Vertical lines (Top)	Red and Green Vertical bars at top of screen.	Touch up both controls for best convergence from top to bottom along vertical center line (Fig. B).
4.	R-G Vertical lines (Bottom)	Red and Green Vertical bars at bottom of screen.	
5.	R-G Horizontal lines (Top)	Red and Green Horizontal bars at top of screen.	Touch up both controls for best convergence of horizontal bars along vertical center line (Fig. B).
6.	R-G Horizontal lines (Bottom)	Red and Green Horizontal bars at bottom of screen.	
7.	Blue Horizontal lines (Top)	Blue Horizontal bars at top of screen.	Touch up both controls for best convergence of horizontal bars along vertical center line (Fig. C).
8.	Blue Horizontal lines (Bottom)	Blue Horizontal bars at bottom of screen.	
9.			Perform center dot static convergence (Fig. A).
10.	Blue Horizontal lines (Right Side)	Blue Horizontal bars at right side of screen.	Touch up both controls for best convergence along horizontal center line (Fig. D).
11.	Blue Horizontal lines (Left Side)	Blue Horizontal bars at left side of screen.	
12.	R-G Vertical lines (Right Side)	Red and Green Vertical bars at right side of screen.	Fig. E
13.	R-G Horizontal lines (Right Side)	Red and Green Horizontal bars at right side of screen.	Use control to converge Blue bar with Red and Green bars on right side of screen (Fig. B).
14.	R-G Vertical lines (Left Side)	Red and Green Vertical bars at left side of screen.	
15.	R-G Horizontal lines (Left Side)	Red and Green Horizontal bars at left side of screen.	Use control to converge Blue bar with Red and Green bars on left side of screen (Fig. E).

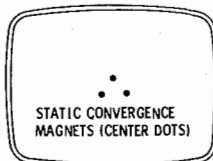


FIG. A

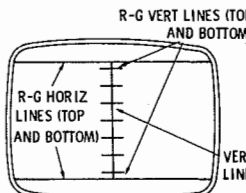


FIG. B
(RED AND GREEN ONLY)

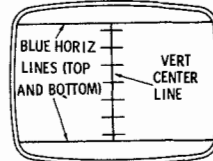


FIG. C
(BLUE BARS)

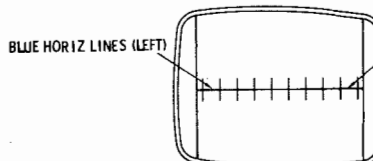


FIG. D
(BLUE BARS)

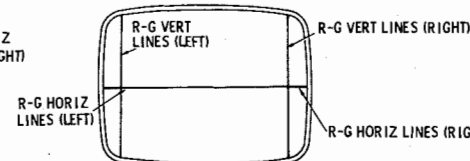


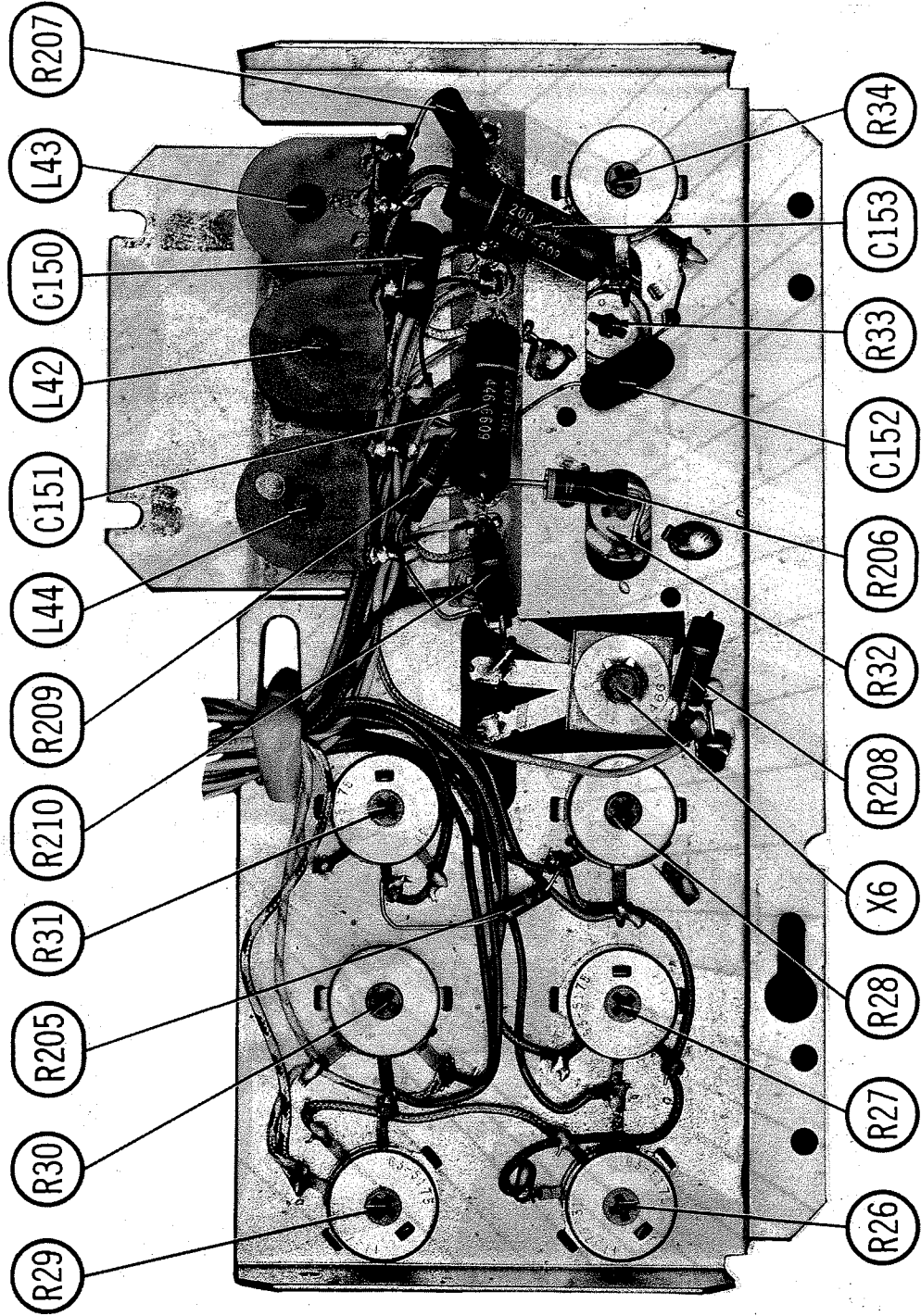
FIG. E

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

FOLDER 3

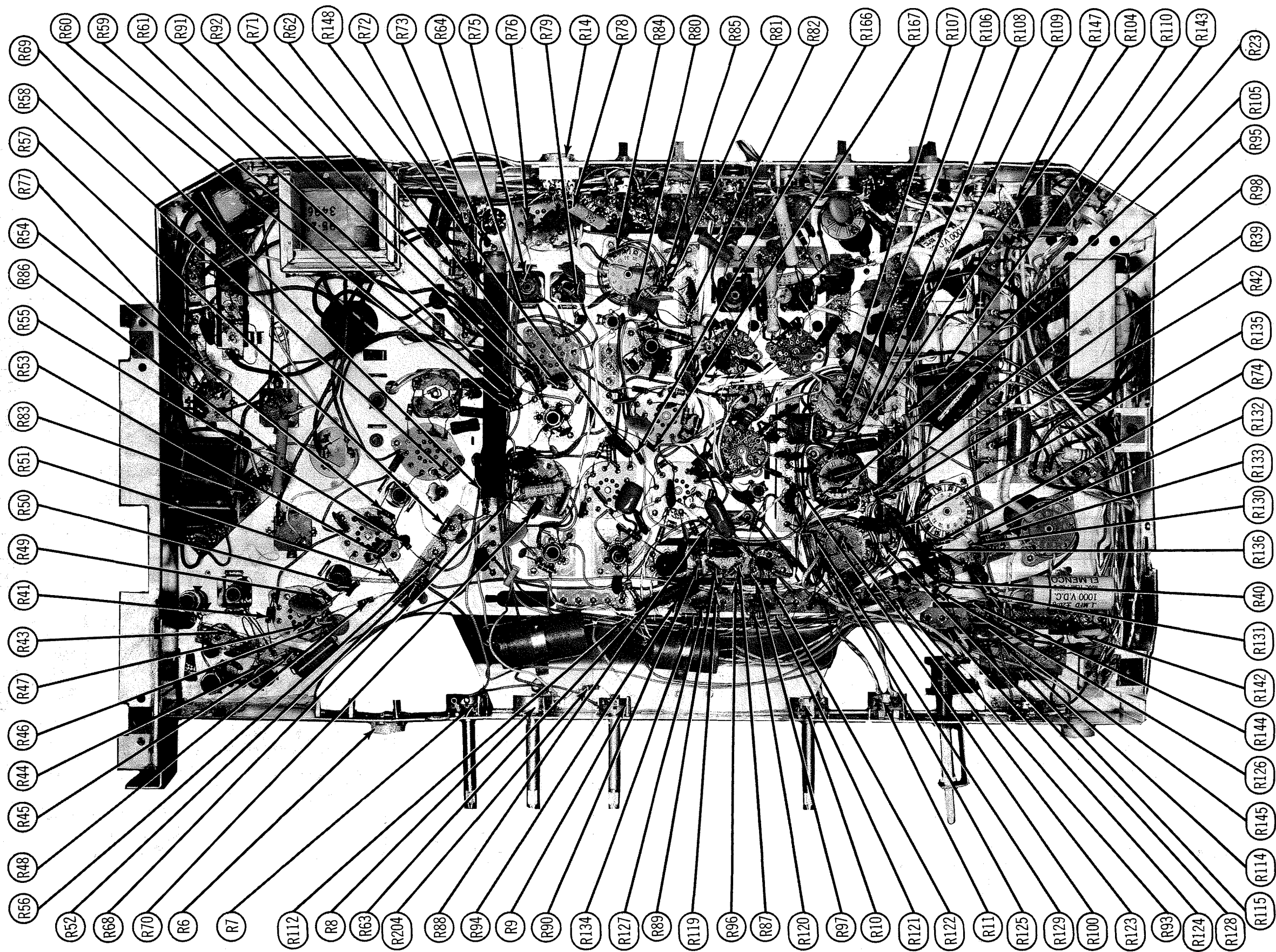
ITEM	PART NO.	MODELS
Knob-Volume	S-67090	25X6521W
Knob "	46-4959	25X6521W
Knob "	S-56479	25X6517R, W
Knob-Channel Selector	S-53116	25X6511W
Knob "	46-4880	25X6507L, Y
Knob "	46-4882	25X6547M
Knob "	46-4903	25X6545H
Knob "	46-4888	25X6543DE
Knob "	46-4889	25X6541W
Knob-UHF Dial	S-69162	25X65394, R
Knob "	46-5016	25X6537M
Knob-UHF Tuning	S-67316	25X6535W
Knob "	S-72392	25X6533W
Knob "	46-4930	25X6531DE
Knob-Fine Tuning	S-66511	25X6529H
Knob "	46-5091	25X6525M
Knob "	S-56911	25X6521W
Knob-Horiz. Hold	46-5227	25X6519W2
Knob "	46-4923	25X6517R, W
Knob-Brightness, Contrast	46-5228	25X6511W
Knob "	46-4922	25X6507L, Y
Knob-Tone	S-62244	25X6537M
Knob-Peaking	46-5226	25X6535W
Knob "	46-4924	25X6533W
Knob-Hue	46-5234	25X6531DE
Knob "	46-4906	25X6529H
Knob-Color Level	S-69188	25X6525M
Knob "	46-4923	25X6521W
Knob "	46-4905	25X6519W2
Knob-Focus	S-50935	25X6517R, W

ITEM	PART NO.	MODELS
Knob-Volume	S-67184	25S 2970M1
Knob "	46-4959	25T2962W
Knob "	S-63995	25T2964W
Knob "	S-56479	25T2965H
Knob-Channel Selector	46-4387	25T2968M
Knob "	46-5093	25X6507L, Y
Knob "	46-4207	25X6511W
Knob "	S-53116	25X6517R, W
Knob "	46-4084	25X6521W
Knob "	46-4888	25X6525M
Knob-UHF Dial	S-69126	25X6529H
Knob "	S-69111	25X6531DE
Knob "	46-5016	25X6533W
Knob-UHF Tuning	S-69125	25X6535W
Knob "	S-72392	25X6537M
Knob "	S-69155	25X65394, R
Knob "	S-67736	25X6541W
Knob "	46-4930	25X6543DE
Knob-Fine Tuning	46-5089	25X6545H
Knob "	46-5091	25X6547M
Knob "	S-67181	25X6549H
Knob "	S-66511	25X6550L, Y
Knob "	S-56911	25X6552M
Knob-Horiz. Hold	46-5227	25X6554W
Knob "	46-4923	25X6556W
Knob-Brightness, Contrast	46-5228	25X6558W
Knob "	46-4922	25X6560W
Knob-Tone	S-62244	25X6562W
Knob-Peaking	46-5226	25X6564W
Knob "	46-4924	25X6566W
Knob-Hue	46-5233	25X6568W
Knob "	46-4906	25X6570W
Knob "	S-69188	25X6572W
Knob-Color Level	46-5233	25X6574W
Knob "	46-4905	25X6576W
Knob "	S-69188	25X6578W
Knob-Focus	S-50935	25X6580W



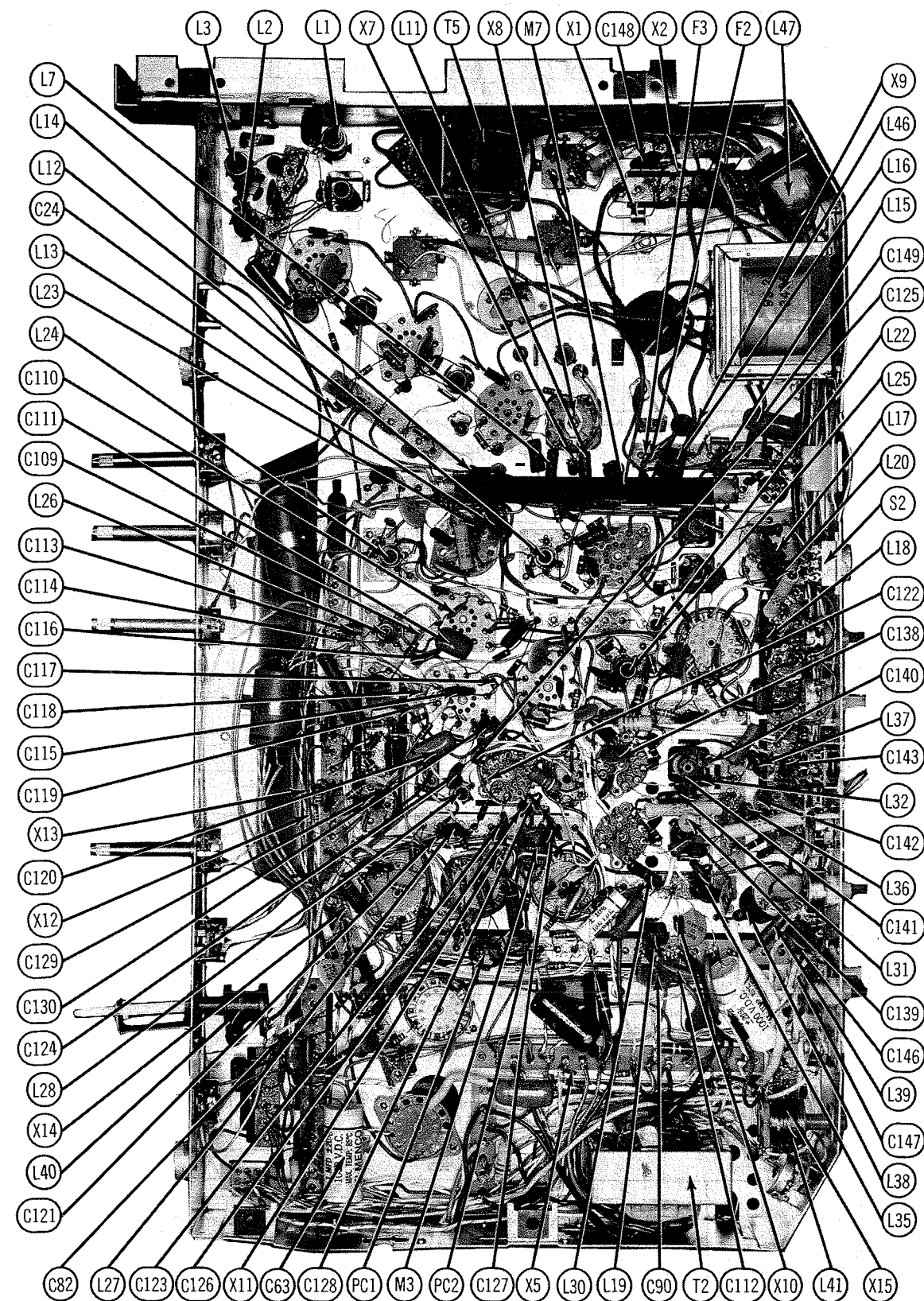
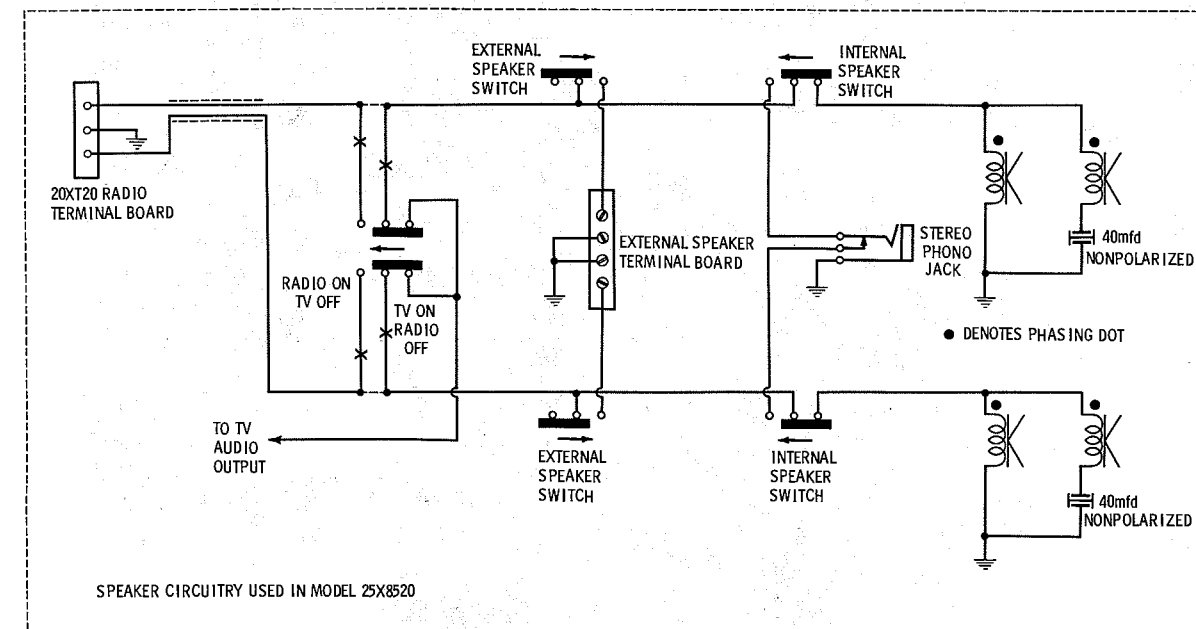
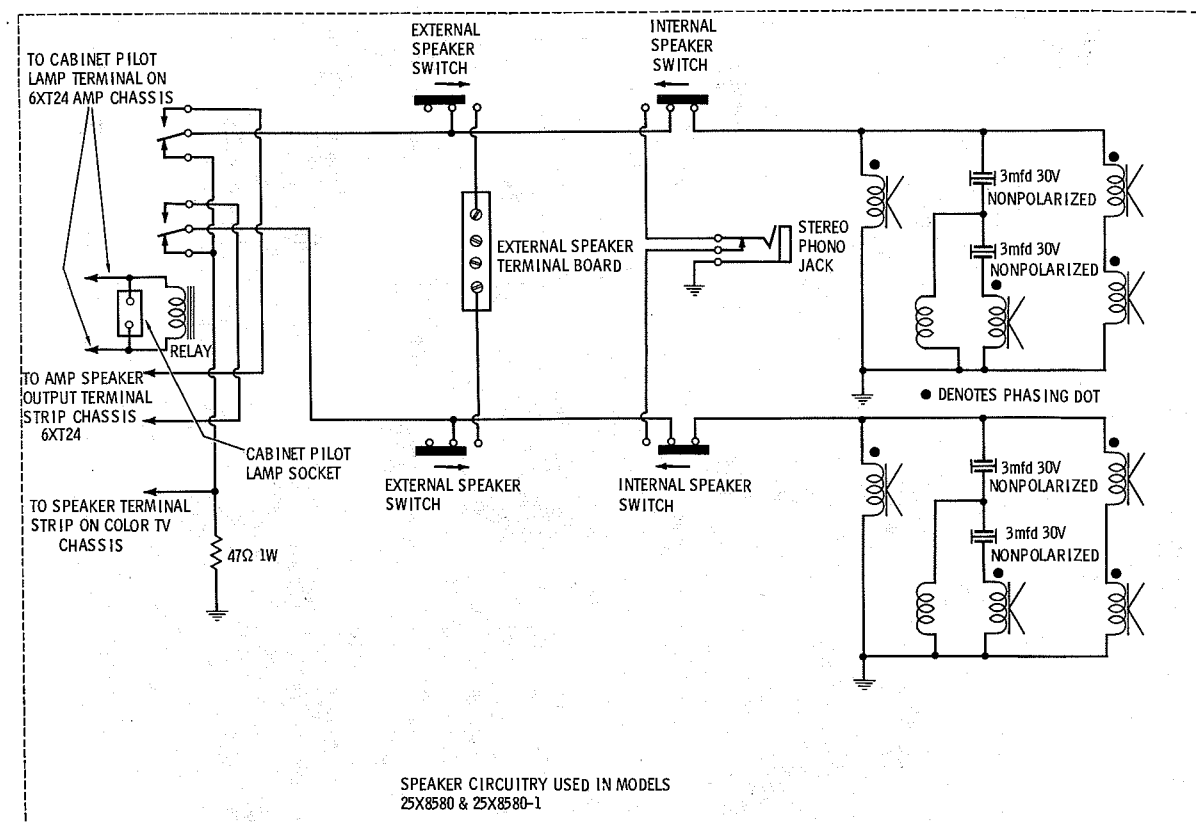
CONVERGENCE CHASSIS

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z



CHASSIS - BOTTOM VIEW

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z



CHASSIS - BOTTOM VIEW

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

FOLDER 3

VHF TUNER PARTS LIST

VHF TUNER 175-535-1

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 - Osc.	6GJ7						

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%	#22-3553				*	*	10TCR-Q27
B	27 N220 5%	#22-3553				*	*	10TCR-Q27
C202A	27 N220 5%	#22-3553				*	*	10TCR-Q27
B	27 N220 5%	#22-3553				*	*	10TCR-Q27
C203	8 N220 ±.5	#22-3816				*	*	10TCR-V82
C204	10 N220 ±.25	#22-3817				*	*	10TCR-Q10
C205	18 N220 5%	#22-3820				*	*	10TCR-Q18
C206	1.25-4.25	#22-5348						
C207	.001		EF-001	MFT-1000		CCF-102	CT280A	
C208	.5-3.2	#22-4510						
C209	56 7 1/2	#22-3488						
C210	2.2 N220 ±.1	#22-3821				*	*	10TCP-V82
C211	8.3 N150 ±.1					*	*	
C212	47 N470 5%	#22-3822				*	*	
C213	.5-3.2	#22-4510						
C214	.001		EF-001	MFT-1000		CCF-102	CT280A	
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216	.001		EF-001	MFT-1000		CCF-102	CT280A	

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

COILS (RF-IF)

ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L201	Antenna Balun	S-49189	Part of M201	L210	Ant., RF, Osc., Mixer	174-407	Channel 7 Strip
L202	IF Filter	20-874 or 20-1009	" " "	L211	"	174-408	" 8 "
L203	IF Filter	20-799 or 20-1007	" " "	L212	"	174-409	" 9 "
L204	IF Filter	20-798 or 20-1006	" " "	L213	"	174-410	" 10 "
L205	Ant., RF, Osc., Mixer	174-402	Channel 2 Strip	L214	"	174-411	" 11 "
L206	"	174-403	" 3 "	L215	"	174-412	" 12 "
L207	"	174-404	" 4 "	L216	"	174-413	" 13 "
L208	"	174-405	" 5 "	L217	Osc. Plate Choke	S-49738	
L209	"	174-406	" 6 "	L218	Mixer Screen Coil	20-1030	
				L219	Mixer Plate Coil	S-69280	
				L220	RF, Osc., Mixer	174-401	UHF Strip
				L221	UHF Mixer	20-1056	DC Return

MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M201	Antenna Filter Ass'y	S-59297	Includes C201, C202, C203, C204, L201, L202, L203 and L204.
S201	Change-over Switch	85-771	Used in Tuners 175-507 and 175-517
	Change-over Switch	85-790	Used in Tuner 175-535.

UHF TUNER PARTS LIST

UHF TUNER 175-34B-2

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES ZENITH
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q301	121-304	UHF Oscillator				PNP 121-304
	121-336 ①	UHF Oscillator				PNP 121-336

① Used in Tuners with "J" suffix.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X301		103-61 or 103-60	1N82A	1N82AG			

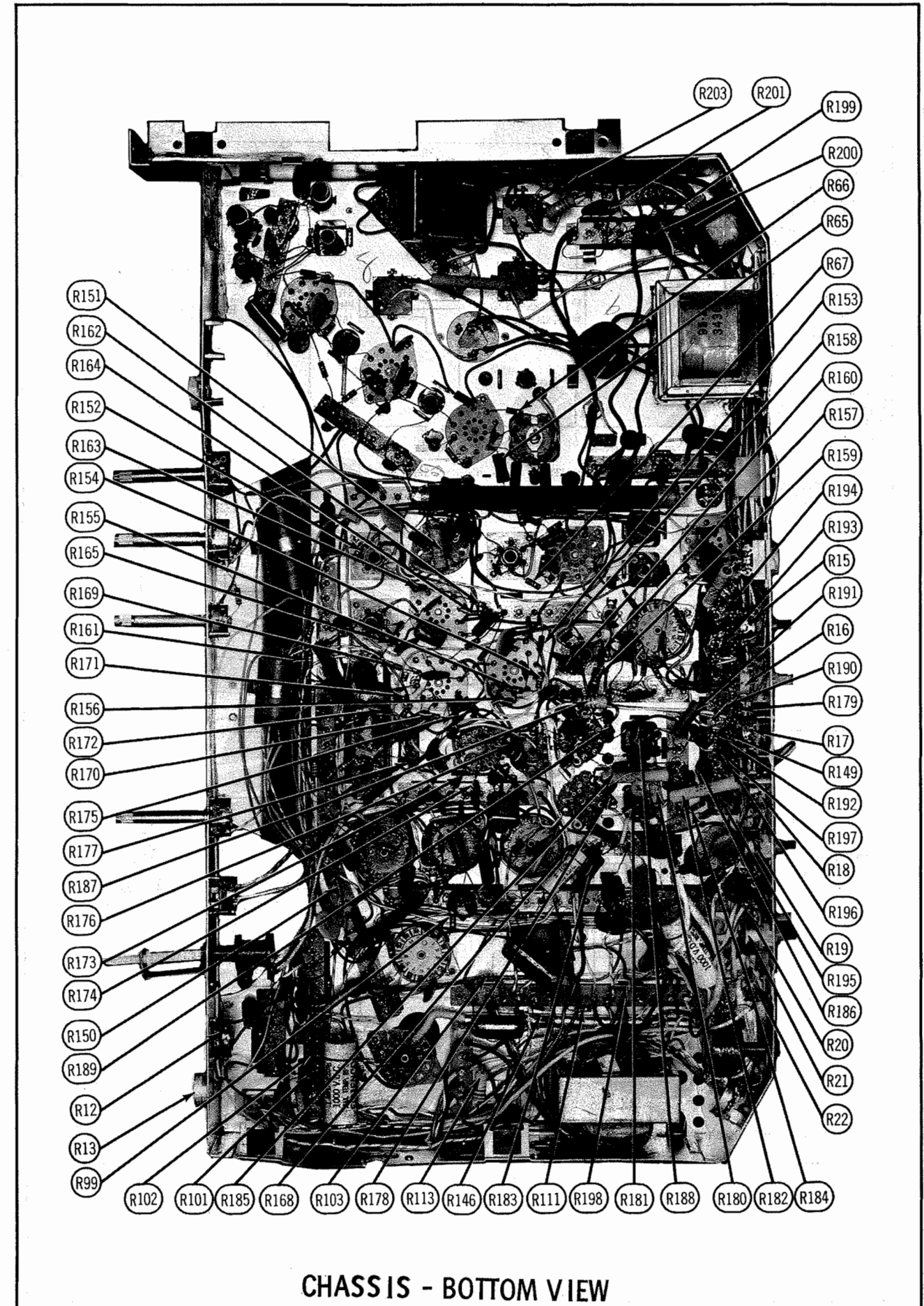
CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C301	40 N1500 10%	#22-5060				*	*	10TCS-Q10
C302	10 N330 ±.5	#22-4508		TCA-10		*	*	
C303	470	#22-5062						
C304	.001		EF-001	MFT-1000		CCF-102	CT280A	

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

COILS (RF-IF)

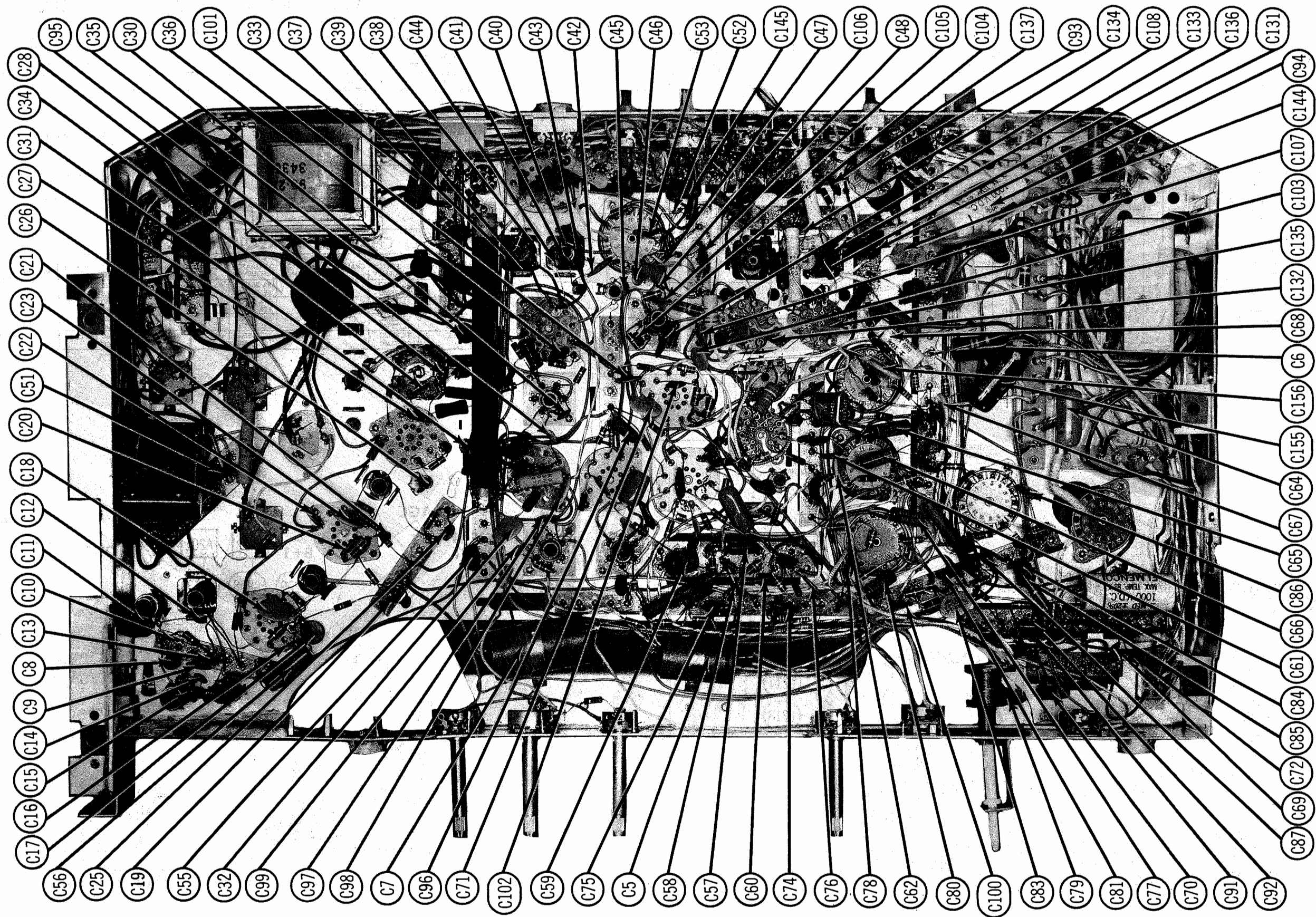
ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L301	Antenna Coupling	20-1373		L303	Diode Output	20-1261	
L302	Collector Choke	20-1253					



CHASSIS - BOTTOM VIEW

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

FOLDER 3



CHASSIS - BOTTOM VIEW

ZENITH CHASSIS
23XC36, 23XC38, 23XC38Z

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.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					
		ZENITH PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.	
L1	41.25MC Trap	S-71330	20-1044	TV-153	6226	T219	
L2	47.25MC Trap	S-58047	17-4538		6225	TM244	
L3	39.75MC Trap	S-68316	17-4538		6219	TM244	
L4	1st Video IF	S-71357			6219	T217	
L5	2nd Video IF	S-69594			6219	T217	
L6	3rd Video IF	S-61623			6219	T217	
L7	RF Choke (27.2uh)	20-2007	19-6033	TV-192	72F275AP	T316	
L8	Sound Take-off/4.5MC Trap	S-64003			7115-Z		
L9	4th Video IF	95-2372			72F275AP	T316	
L10	41.25MC Trap	S-66302	19-6033	TV-192	72F275AP	T316	
L11	RF Choke (27.2uh)	20-2007			72F184AP	T368	
L12	4.5MC Trap	S-69563			6148	T327	
L13	Peaking (170uh)	20-2014	19-3180	TV-184	72F104AP	T305	
L14	Peaking (696uh)	20-2014	19-3660	TV-206	6148	T315	
L15	Peaking (100uh)	20-2021	19-3100	TV-194	72F104AP	T315	
L16	Peaking (250uh)	20-2012	19-3250	TV-185	6148	T345	
L17	Peaking (220uh)	20-2517	19-2027	BC-673	72F224AP	T322	
L18	Peaking (402uh)	20-2001	19-4400	TV-202	72F394AP	T322	
L19	Peaking (15uh)	20-2710			72F394AP	T322	
L20	Peaking (402uh)	20-2001	19-4400	TV-202	72F394AP	T322	
L21	Sound Interstage	S-68705			6177	T304	
L22	Quadrature	S-68788	19-3093	TV-181	6177	T304	
L23	Peaking (93uh)	20-2521			6148	T327	
L24	Chroma Take-off	S-73043			6148	T327	
L25	Chroma Bandpass	S-72418			6148	T327	
L26	Burst Phase	S-69564	19-7047	TV-180	72F395AP	TA323	
L27	Peaking (42uh)	20-2008			72F185AP	T300	
L28	Chroma Osc. Control	S-69567			72F185AP	T300	
L29	3.58MC Oscillator	95-2421	19-6022	TV-192	72F185AP	T300	
L30	RF Choke (18uh)	20-2006	19-6022	TV-192	72F185AP	T300	
L31	RF Choke (18uh)	20-2006	19-6022	TV-192	72F185AP	T300	
L32	RF Choke (18uh)	20-2006	19-6022	TV-192	72F185AP	T300	
L33	3.58MC Trap	S-72324			6148	T327	
L34	Dual 3.58MC Trap	S-72325			6148	T327	
L35	Peaking (696uh)	20-2506	19-3660	TV-206	6148	T327	
L36	Peaking (696uh)	20-2506	19-3660	TV-206	6148	T327	
L37	Peaking (696uh)	20-2506	19-3660	TV-206	6148	T327	
L38	RF Choke (10uh)	20-2005	19-1005	BC-566	72F105AP	T860	
L39	RF Choke (10uh)	20-2005	19-1005	BC-566	72F105AP	T860	

- ① Wound on 22K Resistor. ② Part of Assembly #S-69572. * Shunt with 22K Resistor. † Drill new mounting hole.
③ Includes 12K Resistor. ④ Part of Assembly #S-74633. ** Add 100K Resistor. ‡ Disregard Tap.
⑤ Wound on 4.7K Resistor. ⑥ Part of Assembly #S-69566. † Shunt with 12K Resistor. ‡ Use original shield.
⑦ Wound on 22K Resistor. ⑧ Part of Assembly #S-69570. † Shunt with 4.7K Resistor. ‡ Remove original 59pf capacitor.

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							
		ZENITH PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON PART No.	MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L40	Horiz. Osc. (Hold)	S-73780							
	Alternate Shaft, Horiz. Hold	S-73700							
	Iron Core	76-1490							
L41	Pincushion Alternate	149-359							
L42	Dynamic Convergence Right R/G Vert. Lines (2.25mh-5.9mh)	S-72254	MWC-6	6322	WC-8A	WC-52		WLC-25	T107
L43	Dynamic Convergence Right R/G Horiz. Lines (1.4mh-5.7mh)	S-58041		H-162		WC-51			
L44	Dynamic Convergence Right Blue Horiz. Line (2mh-6.6mh)	S-73854	MWC-6	6322	WC-8A	WC-22		WLC-25	T107
L45	Convergence Yoke Assembly	S-74507							
	A Blue Section	S-72527							
	B Green Section	S-72528							
	C Red Section	S-72529							

† May be used in some versions.

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA						NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	ZENITH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L46	.53ADC	15Ω	.7 H	95-2392					

CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA						NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	ZENITH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L47	3.1ADC	1.5Ω	.035 H	95-2347					

TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	PRI.	SEC. 1	SEC. 2	ZENITH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ 3.1A	140VAC @ .53A DC	6.3VAC @ 1.3A	94-2412					
		SEC. 3							
		12.6VAC @ 6.5A							

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ZENITH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	Vert. Output	95-2374(-K)					
T3	Yoke (Horiz. 11.5mh) 90° (Vert. 24mh)	95-2286		DY-91AC	Y-108	YC-310-2	
T4	Horiz. Output	S-72520					

* COMPONENT CONNECTION DATA

ORIGINAL →	REPLACEMENT ↓	HV TRANSFORMER		VERTICAL OUTPUT		YOKE		YOKE PLUG	
		Original Connections		Original Connections		Original Connections		1 3 5 7 9 10 11 12	TO YOKE TERMINAL
MERIT									
STANCOR						EXACT REPLACEMENT		EXACT REPLACEMENT	
THORDARSON						EXACT REPLACEMENT		EXACT REPLACEMENT	
TRIAD						EXACT REPLACEMENT		EXACT REPLACEMENT	

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	ZENITH PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T5	7000Ω	3-4Ω	95-2406 ①	A-3020	A-3823	26S48	S-18X	① #95-2444 used in Chassis 23XC38Z; #95-2346 used in Chassis 23XC38.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		ZENITH PART No.	JENSEN PART No.	QUAM PART No.	
SP1	6" x 9" PM 6-8Ω	49-1060 ①	P6X9U8	69A3Z8	① Models 25X4541W/43DE/45H/47M, 25X6541W/43DE/45X/47M/49H.
SP2	6" x 9" PM 6-8Ω	49-1060 ①	P6X9U8	69A3Z8	② Model 25X8580H.
SP3	3 1/2" PM 35-40Ω	49-1094 ① ② ③		3A15T240	③ Models 25X8530W/40M/50H/60H. ④ Model 25S2970W1. ⑤ Model 25T2962W. ⑥ Models 25T2964W/66H/68M, 25X4533W/35W/37M/39R/39H, 8750M7. ⑦ Models 25T2965H, 25X4507Y/07L/11W/17W/17R/19W2/21W/25M/29H/31DE, 25X6507L/07Y/11W/17R/17W/21W/25M, 8304W7, 8308W7, 8308R7, 8310W7, 8312M7, 8314H7, 8314R7, 8316H7, 9304W7, 9308W7, 9308R7, 9310W7, 9312M7. ⑧ Models 25T2968M, 25X4533W/35W/37M/39H/39R, 8750M7. ⑨ Model 25X8520W.

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			PART No.		LITTELFUSE PART No.		BUSS PART No.	
F1	Bel Fuse	2 Amp.	136-66	62-41	313002.	357001	MDL 2	4405
F2	2 1/2" length of #24 copper wire		91-2061					
F3	2 1/2" length of #24 copper wire		91-2061					

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ZENITH PART No.	REPLACEMENT DATA
PC1	Vertical Integrator	68K, .0024	87-4	Aerovox PA-765 Centralab PC-408
PC2	Vertical Feedback	90K, .0024	87-5	Aerovox PA-764 Centralab PC-407

MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M1	VHF Tuner	175-535-1	
M2	UHF Tuner	175-34B-2	
M3	Crystal	103-89	3.58MC
M4	Spark Gap		
M5	Magnet	S-72221	Purity Ring Assembly
M6	Magnet	S-71500 or S-67856 S-69565	Blue Lateral Magnet Assembly
M7	Delay Line		
M8	Degaussing Coil	S-61174 or S-61674	
M9	Motor	63-6383	Tuning Motor Assembly
M10	Motor	85-718	Hue Control Motor
S1	Switch	85-754	Off/On
S2	Switch		Setup/Normal

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) 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. 8275 (Foam Core) or 8285 (Foam Jacketed)
Antenna Rotor Cable	Use BELDEN No. 8464 (Flat) or 8484 (Round) - 4 Conductor 8485 (Round) - 5 Conductor 8488 (Round) - 8 Conductor

TUBES

ITEM No.	USE	TYPE	REPLACEMENT DATA		NOTES
			AMPEREX	GENERAL ELECTRIC	
V201	RF Amp.	6HA5			
V202	Mixer-Osc.	6GJ7			
V1	1st Video IF	6EH7			
V2	2nd Video IF	6EH7			
V3	3rd Video IF	6EJ7			
V4	Cathode Follower - 1st Chroma Bandpass Amp.	6KT8			
V5	Video Output	12HL7			
V6	Sound/Sync Amp.-Sound IF	6KT8			
V7	Audio Detector-Audio Output	6Z10			
V8	Sync Sep.-AGC Keying-Noise Canceller-Vert. Mult.	6BA11			
V9	Vert. Mult.-Vert. Output	6HE5			
V10	Pincushion Correction - 2nd Chroma Bandpass Amp.	6KT8			
V11	Horiz. AFC - Horiz. Osc. - Horiz. Discharge				
V12	Horiz. Output	6U10			
V13	Damper	6J56			
V14	HV Rectifier	6DW4 (6CJ3) *			
V15	HV Regulator	3A3 (3AT2) *			
V16	Burst Amp.	6HE5			
V17	ACC Killer - Color Phase Detector - Chroma Sync Phase Det.	6J58			
V18	Chroma Ref. Osc. Control - Chroma Reference Osc.	6GH8			
V19	B-Y Demodulator	6ME8			
V20	R-Y Demodulator	6ME8			

* Used in some versions.

PICTURE TUBE

ITEM No.	USE	REPLACEMENT DATA			NOTES
		ZENITH PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
V21	25GP22A/25AP22A	25AP22A	25AP22A ①	RE25AP22A ②	① Aluminized ② Color Bright "85"

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
Q301	121-304	UHF Oscillator	DS-74			
Q1		Video Amp.				NPN

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MAILORRY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1	.530A	212-37	GE-504A	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016	F-6 or S-5960-2 ①
X2	.530A	212-37	GE-504A	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016	F-6 or S-5960-2 ①
X3		212-48	GE-504A	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016	F-6 or S-5960-2 ①
X4		212-68	GE-504A	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016	F-6 or S-5960-2 ①
X5	.010A	103-79	GE-504A	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016	F-6 or S-5960-2 ①
X6A	.055A	212-72	GE-504A or GE-505	SD600 or 5A6-D	1N1096 or V6000 ①	SK-3016 or SK-3017	S-54

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C8	30 N75 10%	#22-3327	DI-370	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C9	470 1KV		NPO-DI 22	DTZ-22	CY601CG180J	CCTO-220	CNO422	10TCC-Q22
C11	36 5%			TCZ-36				
C12	6 ±.5	#22-2376						
C13	47 N705 10%							
C14	16 NPO 5%		NPO-DI 15	DTZ-15	CZ801CG150J	CCTO-150	CNO415	10TCC-Q15
C15	59 NPO 5%	#22-5081						
C16	30 N75 10%	#22-3327						
C17	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C18	470 1KV 10%		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C19	.001 1KV 10%		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C20	47 N75 10%	#22-2376						
C21	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C22	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C23	470 10%		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C24	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C25	100 10%		DI-100	DD-101	JBZ801Y101K	CCD-101	GP210	10TS-T10
C26	.001		EF-001	MFT-1000		CCF-102	CT280A	10TS-D10
C27	.001 1KV 10%	#22-4552	DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TCC-V56
C28A	6 NPO ±.5							10TCC-V56
C29	53 NPO 5%	#22-3170						
C30	56 N750			TCN-56	CY601CG180J	CCTN-560	CN7456	10TCU-Q56
C31	18 NPO 10%			TCZ-18				
C32	470 10%		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C33	100 10%		DI-100	DD-101	JBZ801Y101K	CCD-101	GP310	10TS-T10
C34	.82 5%	#22-3724						
C35	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C36	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C37	47 N75 5%	#22-2467						
C38	3.3		NPO-DI 3.0	DTZ-3R3		CCTO-3R3	CNO533	10TCC-V30
C39	50 N750			TCN-50				10TCU-Q50
C40	180 10%		ADM-15-181	CPR-180J	CD15F181J500	DM-15-181	SK318	MS-318
C41	.001 1KV 10%		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C42	470 N1500 10%							
C43	100 10%		ADM-15-101	CPR-100J	CD15F101J500	DM-15-101	SK310	MS-31
C44	2.2 5%	#22-3139	NPO-DI 2.2	DTZ-2R2	CZ801CJ2R2D	CCTO-2R2	CNO522	10TCC-V22
C45	20 N220 10%							10TCR-Q20
C46	220 10%		DI-220	DD-221	JBZ801Y221K	CCD-221	GP322	10TS-T22
C47	150 N750		N750-DI 150	DTN-150		CCTN-151	CN7315	10TCU-T15
C48	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C49	.0047 10%		DI-4700	DD-472	JBZ801Y1472K	CCD-472	GP247	10TS-D47
C50	470 1KV 10%		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP247	10TS-T47
C51	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C52	220 10%		DI-220	DD-221	JBZ801Y221K	CCD-221	GP322	10TS-T22
C53	.0022 1KV		DI-2200	DD-222	JBZ801Y222K	CCD-222	GP222	10TS-D22
C54	.15 100V				DMF1P15	1DP-3-154	PVC1015	10TS-T47
C55	470 1KV		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C56	.15 100V				DMF1P15	1DP-3-154	PVC1015	10TS-T47
C57	.033 200V		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C58	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C59	.1 400V		DI-220	DD-221	JBZ801Y221K	CCD-221	GP322	10TS-T22
C60	220 10%		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C61	.01		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C62	.001 1KV 10%		BE10P15		PKM10P1		GEM1001	
C63	.1 1KV		DBE6P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C64	.1 600V 10%		DBE4S33		DMF4S33	4DP-2-333	PVC6133	4PS-S33
C65	.033 200V 10%		DBE6D82		DMF6D82	6DP-2-622	GP247	10TS-D47
C66	.0082 200V		DI-4700	DD-472	JBZ801Y1472K	CCD-472	GP247	10TS-T47
C67	.0047 10%		DI-4700	DD-472	JBZ801Y1472K	CCD-472	GP247	10TS-T47
C68	.01 1KV 10%		DI-100	DD-101	JBZ801Y101K	CCD-101	GP310	10TS-T10
C69	100 1KV 10%		DI-100	DD-101	JBZ801Y101K	CCD-101	GP310	10TS-T10
C70	.033 200V 10%		DI-3300	DD-332	JBZ801Y332K	CCD-332	GP233	10TS-D33
C71	.0033		DI-680	DD-681	JBZ801Y681K	CCD-681	GP368	10TS-T68
C72	680 1KV 10%							
C73	100 3KV 5%		DI-50	DD-510	JBZ801Y500K	CCD-500	GP450	10TS-Q50
C74A	51		DI-50	DD-510	JBZ801Y500K	CCD-500	GP450	10TS-Q50
C75	.0022 10%		DI-2200	DD-222	JBZ801Y222K	CCD-222	GP222	10TS-D22
C76	.0022 10%		DI-2200	DD-222	JBZ801Y222K	CCD-222	GP222	10TS-D22
C77	.047 100V		DI-2200	DD-222	JBZ801Y222K	CCD-222	GP222	10TS-D22
C78	680 10%		ADM-20-681	CPR-680J	CD19F681J500	DM-16-681	SK368	MS-368
C79	.0011 400V 10%		DBE6D1	CPR-1000J	DMF6D1	6DP-1-102	PVC621	6PS-D12
C80	.0015 400V 10%		DBE6D15	CPR-1500J	DMF6D15	6DP-1-152	PVC6215	6PS-D15
C81	470 1KV		DI-470	DD-471	JBZ801Y1471K	CCD-471	GP347	10TS-T47
C82	68 N750 10%		N750-DI 68	DTN-68	CS801UJ80K	CCTN-680	CN7468	10TCU-Q68
C83	.0047 10%		DI-4700	DD-472	JBZ801Y1472K	CCD-472	GP247	10TS-D47
C84	.001 1KV 10%		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C85	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C86	150 N750		N750-DI 150	DTN-150		CCTN-151	CN7315	10TCU-T15
C87	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C88	150 N1500 6KV	#22-3578						
C89	75 N1500 4KV	#22-3953						
C90	.01 1.5KV							
C91	.047 400V		DBE4S47	DTN-150	DMF4S47	4DP-3-473	PVC4147	4PS-S47
C92	150 N750		N750-DI 150	DTN-150		CCTN-151	CN7315	10TCU-T15
C93	45 N1500 5KV 10%	#22-4632						
C94	.1 1KV		BE10P15		PKM10P1		GEM1001	
C95	7 NPO ±.5		NPO-DI 6.8	DTZ-6R8	CZ601CH8R8D	CCTO-6R8	CNO568	10TCC-V68
C96	.1 200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C97	47 N75							
C98	.0047 10%		DI-4700	DD-472	JBZ801Y1472K	CCD-472	GP247	10TS-D47
C99	220 10%		DI-220	DD-221	JBZ801Y221K	CCD-221	GP322	10TS-T22
C100	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C101	.01		DI-100	DD-101	JBZ801Y101K	CCD-101	GP310	10TS-T10
C102	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C103	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C104	36 N220 5%	#22-3259						
C105	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C106	.001		DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C107	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C108	120 10%		DI-120	DD-102	JBZ801Y121K	CCD-120	GP212	10TS-T12
C109	12 N1500 5%	#22-5197						
C110	.047		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C111	.047 600V		DBE6S47		DMF6S47	6DP-3-473	PBC6147	6PS-S47
C112	.01 1KV				HTT162ZV103D	30GA-10	SGA-10	
C113	.01		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C114	.47	#22-3409						
C115A	.001		DI-1000	DD-102G	DD2-102	CCD-102	B2X210	10TS-D10
C116	.001		DI-1000	DD-102G	DD2-102	CCD-102	B2X210	10TS-D10
C117	.22	#22-3401						
C118	.82	#22-3768						
C119	100 10%		DI-100	DD-101	JBZ801Y101K	CCD-101	GP310	10TS-T10

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.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C120	.1	200		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C121	.001			DI-1000	DD-102	JBZ801Y102K	CCD-102	GP210	10TS-D10
C122	2			NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CNO522	10TCC-V22
C123	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C124	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C125	220	10%		DI-220	DD-221	JBZ601Y221K	CCD-221	GP322	10TS-T22
C126	18	NPO 5%		TCZ-18		CY601CG180J	CCTO-180	CNO418	10TCC-Q18
C127	100	NPO 5%		NPO-DI 100	DTZ-100	CY601CG101K	CCTO-101	CNO310	10TCC-Q10
C128	.001	1KV		DI-1000	DD-102	JB8601Y102K	CCD-102	GP210	10TS-D10
C129	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C130	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C131A	.0015			DI-1500	DD-152G		CCD-152		10TS-D15
B	.0015			DI-1500	DD-152G	DD2-152	CCD-152	B2X215	10TS-D15
C132	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C133	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C134	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C135	100	10%		DI-150	DD-151	JBZ801Y101K	CCD-151	GP310	10TS-T15
C136	10	NPO 10%		DI-100	DD-101	JBZ601Y101K	CCTO-101	CNO410	10TCC-Q10
C137	.01			NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100		
C138	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C139	68	N750 10%		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C140	10	NPO 10%		N750-DI 68	DTN-68	C8601JUB68K	CCTN-680	CN7468	10TCU-Q68
C141	10	NPO 10%		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C142	.01			NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C143	.01			DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C144	.01	1KV		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C145	.1	200V		DI-10000	DD-103	BYX601ZU103M	CCD-103	GP110	10TS-S10
C146A	.001			DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
B	.001			DI-1000	DD-102G	DD2-102	CCD-102	B2X210	10TS-D10
C147	.001	1KV		DI-1000	DD-102G		CCD-102		10TS-D10
				DI-1000	DD-102	JB8601Y102K	CCD-102	GP210	10TS-D10
C148A	.001			DI-1000	DD-102G		CCD-102		10TS-D10
B	.001			DI-1000	DD-102G		CCD-102	B2X210	10TS-D10
C149	.1	600V		DBE2P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C150	.056	200V		DBE8556		PKM4556	4DP-3-563	PVC4056	4PS-S56
C151	.1	200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C152	.082	200V		DBE8582		DPMS8582	6DP-4-583	PVC601	6PS-S82
C153	.1	200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C154	.001			DI-1000	DD-102	JB8601Y102K	CCD-102	GP210	10TS-D10
C155	.47	200V		DBE2P47		DMF2P47	2DP-5-474	PVC2047	2PS-P47
C156	.001	1KV		DI-1000	DD-102	JB8601Y102K	CCD-102	GP210	10TS-D10
C157	.47	400V				PM4P47	4MPD-5-474	PVC4047	6PS-P47

REMOTE CONTROL RECEIVER PARTS LIST AND DESCRIPTION CONTROLS

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

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	
X1	121-106	1st AF Amp.	DS-26	GE-2	PNP
X2	121-240	2nd AF Amp.	DS-26	GE-2	PNP
X3	121-241	3rd AF Amp.	DS-26	GE-2	PNP
X4	121-169	Limiter	DS-26	GE-2	PNP
X5	121-180	Relay Control			PNP
X6	121-180	Relay Control			PNP
X7	121-180	Relay Control			PNP
X8	121-180	Relay Control			PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.
X9	.025A	212-35	GE-504A or GE-305	5A4-D or SD500	SE-3016 or SE-3017

When replacing selenium rectifier with silicon type, add series resistance to obtain original output voltage.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLTS.	REPLACEMENT DATA			
			AEROVOX PART No.	CORNELL-DUBIER PART No.	GENERAL ELECTRIC PART No.	SPRAGUE PART No.
C1	200	35	PRS1530	BR250-50	QT1-31	TVAS-1223 *
C2	20	3	PTT6	NLW10-3	MT1-5	TE-1063
C3A	25	30	PRS2175	BRD3315	QT2-9	TVA-2434
C4A	40	30	PRS2185	BRD4415	QT2-9	TVA-2445
C5	40	30	NP-PR27750	BRP5-400	NFQT-2	TCN9550
C6	200NP	22-2893				TVANS-1438 *

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

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBIER PART No.	ELWENCO PART No.
C6	.0047		BPD-0047	DD-472	BYX601ZU472P	CCD-103
C7	.05	25V	TTD-05		HOV101ZV503Z	B247 5HK-D47
C8	.05	100V	TTD-05		HOV101ZV503Z	TA150 TH-S50
C9	.05	25V	TTD-05		HOV101ZV503Z	TA150 TH-S50
C10	.05	25V	TTD-05		HOV101ZV503Z	TA150 TH-S50
C11	.01		BPD-01	DD-103	HOV102ZU103M	B110 5HK-S10
C12	.05	25V	TTD-05		HOV101ZV503Z	TA150 TH-S50
C13	820	100V 5%	ADM-19-321	CPR-820J	CD19 F821J500	DM-15-321 SK382 MS-382
C14	820	100V 5%	ADM-19-321	CPR-820J	CD19 F821J500	DM-15-321 SK382 MS-382
C15	820	100V 5%	ADM-19-321	CPR-820J	CD19 F821J500	DM-15-321 SK382 MS-382
C16	820	100V 5%	ADM-19-321	CPR-820J	CD19 F821J500	DM-15-321 SK382 MS-382
C17	.0047		BPD-0047	DD-472	BYX601ZU472P	B247 5HK-D47
C18	.001			DD-102	HVX162KX102M	B210 5HK-D10



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. SB018

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DATE 1 -67 SET 863 FOLDER 3-A

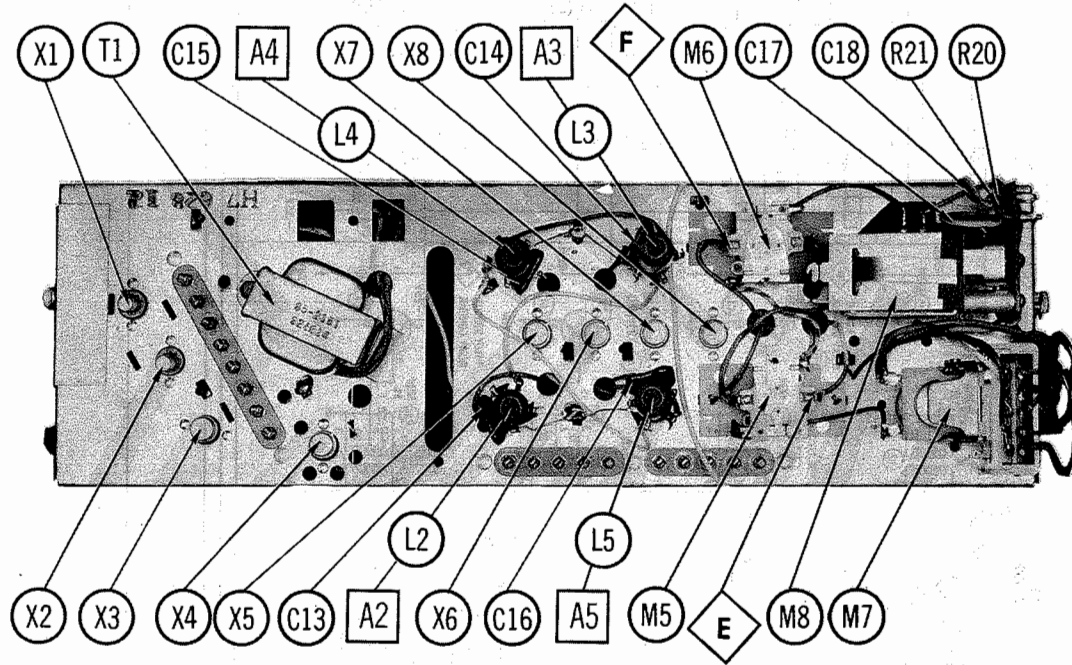
ZENITH REMOTE CONTROL S-69876, S-72346

SET 863 FOLDER 3-A

PHOTOFACT® Folder

IMPORTANT FILING NOTICE

This PHOTOFACT Folder covers equipment used with the TV chassis covered in PHOTOFACT SET 863 FOLDER 3. File this Folder with the TV Folder in the yellow filing jacket provided.



TRADE NAME Zenith
SUPPLIER For current address, see Annual Index.
TYPE SET Remote Control Receivers S-69876, S-69886, S-72346 and Transmitter S-68936
POWER SUPPLY 110-120 Volts AC, 60 Cycles

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: A1 thru A5 .. GENERAL CEMENT #8606, 8606L, 8869 ... WALSCO #2543, 2544, 2588					
SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Connect high side thru 100K to base of point A, low side to ground	39.5KC (Unmod.)		DC probe to point A, common to ground.	A1	Adjust for maximum.
2. "	37.75KC (Unmod.)		DC probe to point A, common to point A.	A2	Adjust for maximum.
3. "	38.75KC (Unmod.)		DC probe to point A, common to point A.	A3	Adjust for maximum.
4. "	40.25KC (Unmod.)		DC probe to point A, common to point A.	A4	Adjust for maximum.
5. "	41.25KC (Unmod.)		DC probe to point A, common to point A.	A5	Adjust for maximum.

SENSITIVITY CONTROL

Use a transmitter known to operate properly. Adjust Sensitivity control, R1, for proper operation.

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

ZENITH REMOTE CONTROL S-69876, S-72346

ZENITH REMOTE CONTROL S-69876, S-72346

SET 863 FOLDER 3-A

