

**CABINET-REAR VIEW**

## DISASSEMBLY INSTRUCTIONS

### CHASSIS REMOVAL

1. Remove back and all knobs.
2. Disconnect speaker, remote control unit, anode lead, remote ground wire, and tuner ground strap.
3. Remove convergence panel, tuner, on-off switch, volume control, and channel selector switches.
4. Remove control panel held by 2 screws accessible from the front of the escutcheon.

5. Remove 4 bolts from bottom of cabinet. Slide chassis back slightly.

6. Remove convergence assemblies and yoke. Remove chassis.

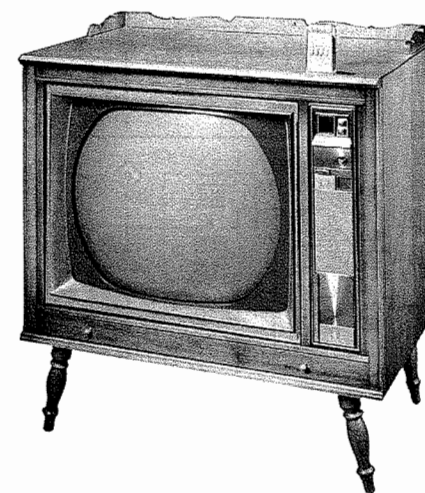
### PICTURE TUBE REMOVAL

1. Remove chassis and remote chassis. Place cabinet face down on a soft protective cloth.
2. Loosen clamp ring and remove 4 screws from corner clamps.
3. Remove clamp ring assembly. Remove picture tube.

SET 722 FOLDER 4

ZENITH  
CHASSIS 25LC30/U

## PHOTOFACT® Folder



MODEL 6126M

TRADE NAME	ZENITH	Models	Chassis
		5106Y, 5109L/R/W, 5111L/R/W, 5119R/W, 5126H/M/R/W, 5128R/W, 5131E/H/R/W, 5136M/R, 5535R/W, 5540R/W, 6119R/W, 6126H/M/R/W, 6128R/W, 6131E/H/R/W, 6136M/R, 6540R/W .....	25LC30
		5141WU, 5151WU, 5161HU, 5171WU, 5535RU/WU, 6141WU, 6151HU, 6161HU/XU, 6171WU, 6175VU/YU .....	25LC30U
SUPPLIER	For current address, see Master Index.		
TYPE SET	Color Television Receiver with Remote Control used in some models		
TUBES	VHF: Twenty-Four, UHF: Twenty-Five		
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 (Intercarrier)		
		RATING	345 Watts, 3.3 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

Two 2½" lengths of fuse wire are used for filament protection. (For location, see M1 and M2 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 "Tube Placement Chart" for location.)

### VHF OSCILLATOR ADJUSTMENT

The fine tuning mechanically engages osc. 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.)

### HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

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

### WIDTH

Width may be varied by connecting wire from HV cage to capacitor C71 on terminal board at rear of chassis.

### 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 pull strings located on yoke (one for vertical and one for horizontal).

## ZENITH CHASSIS 25LC30/U

### 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 CONTROLS S-63874, S-63954, S-64974  
..... SET 722, FOLDER 4A

ZENITH  
CHASSIS 25LC30/U

SET 722 FOLDER 4

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

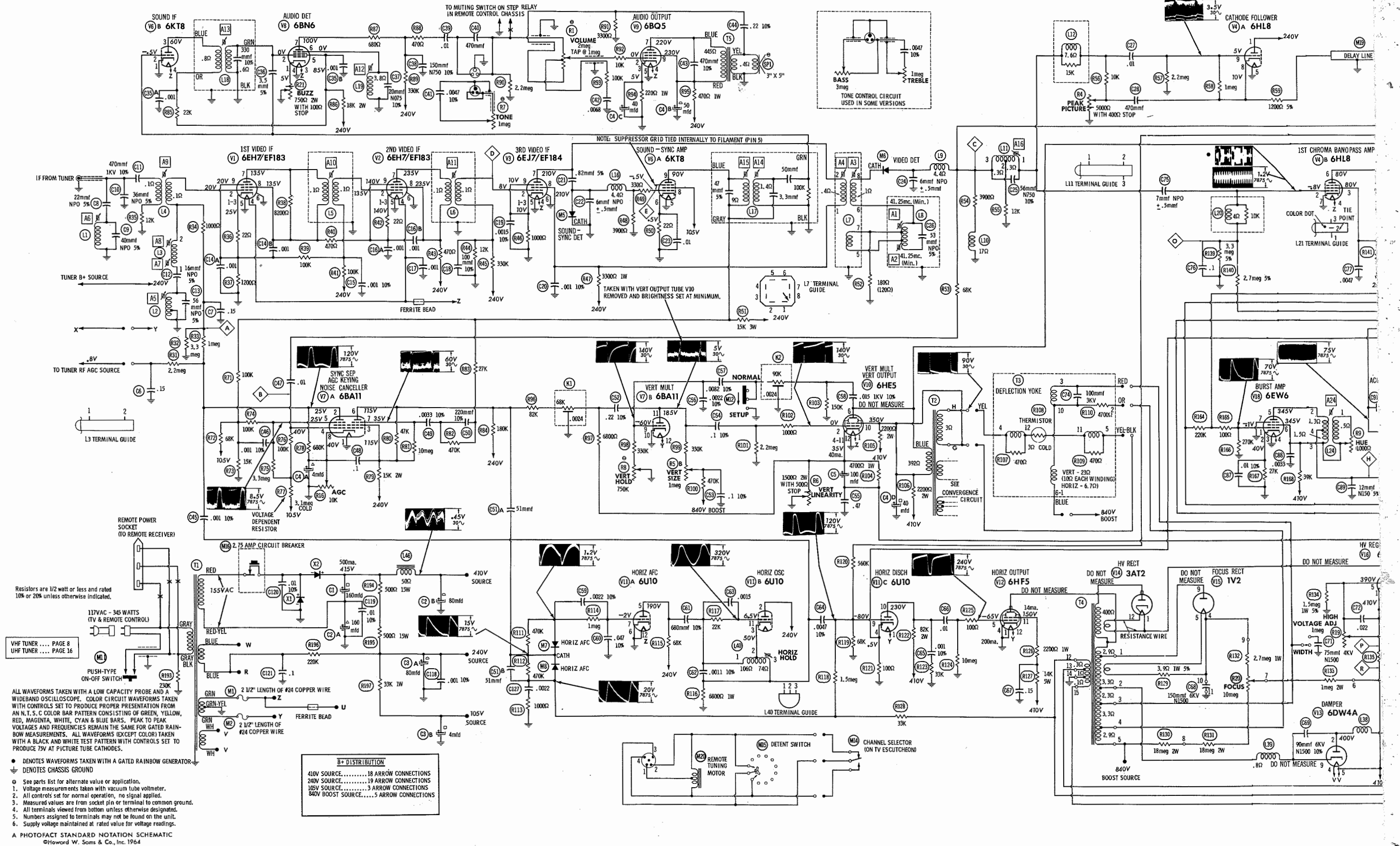


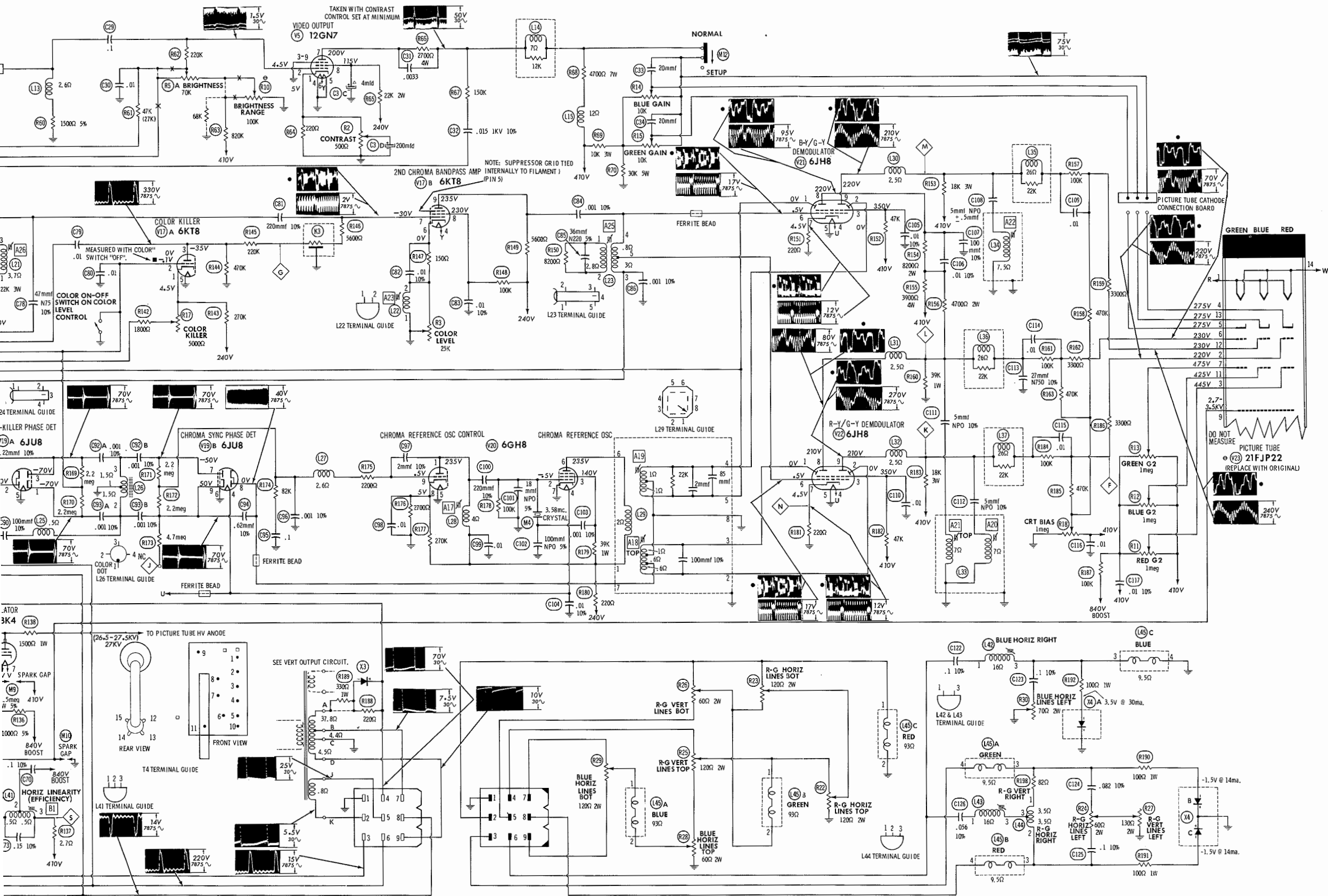
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. MB901

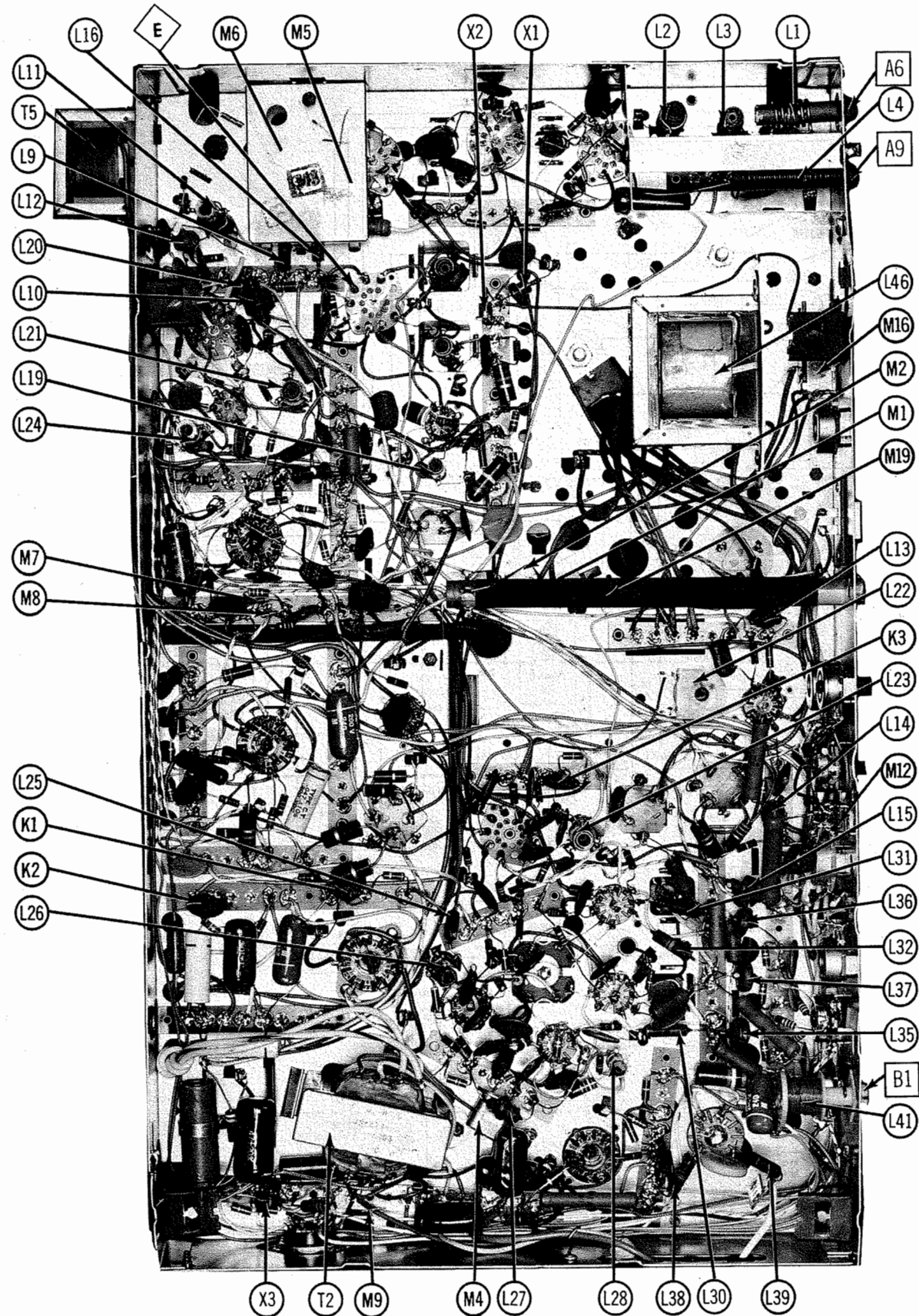
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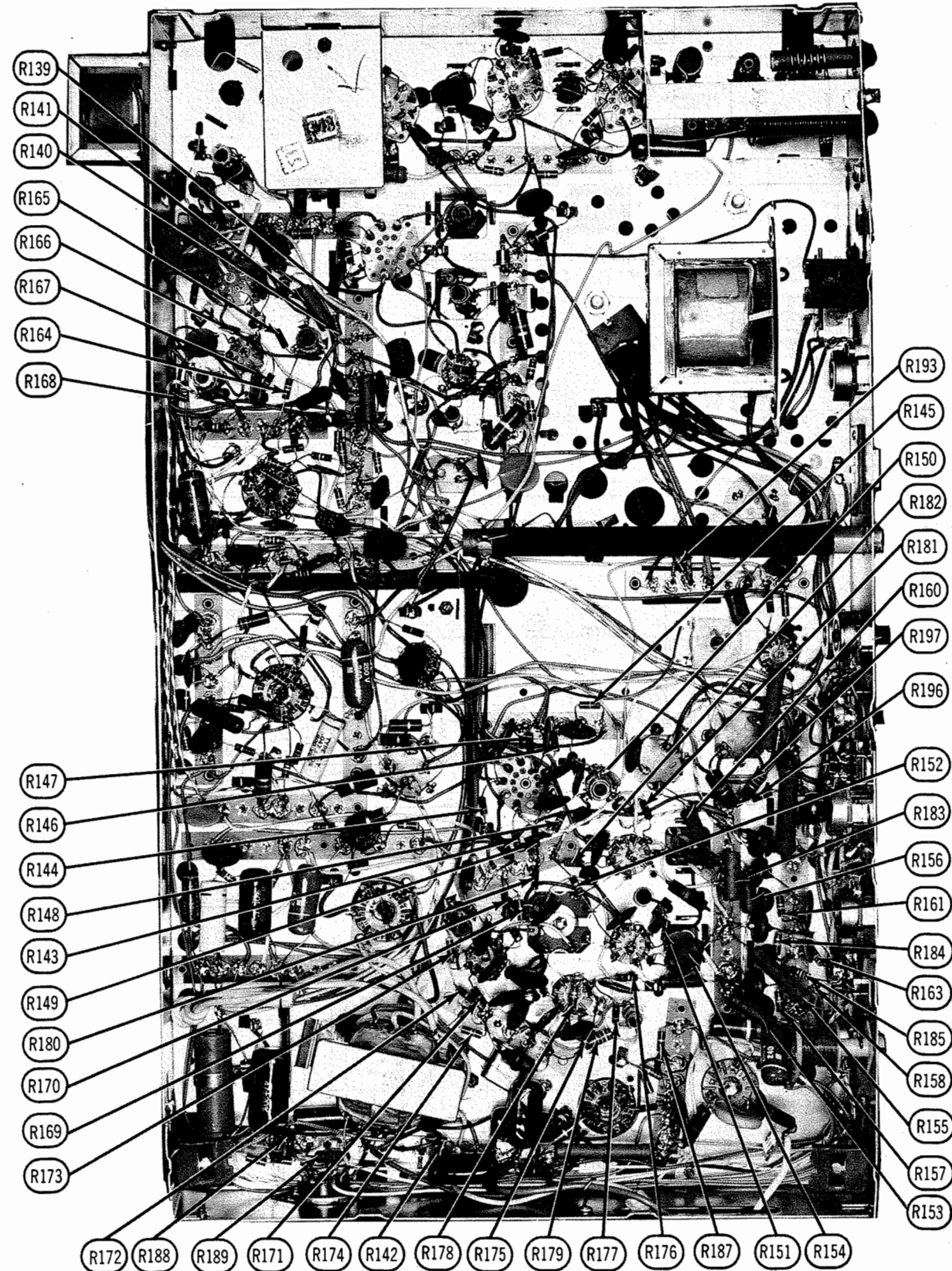
SET 722 FOLDER 4







CHASSIS — BOTTOM VIEW, RESISTOR, INDUCTOR, MISC. IDENT.

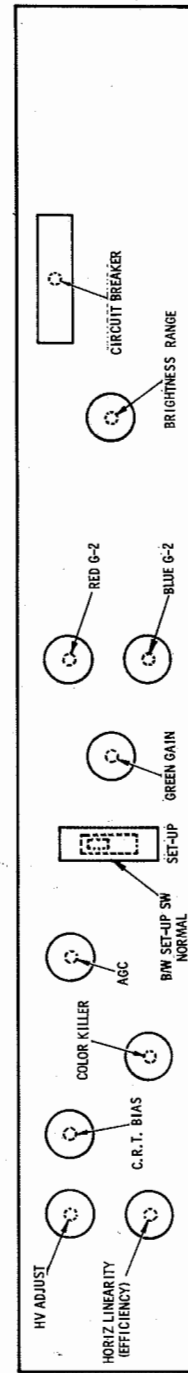
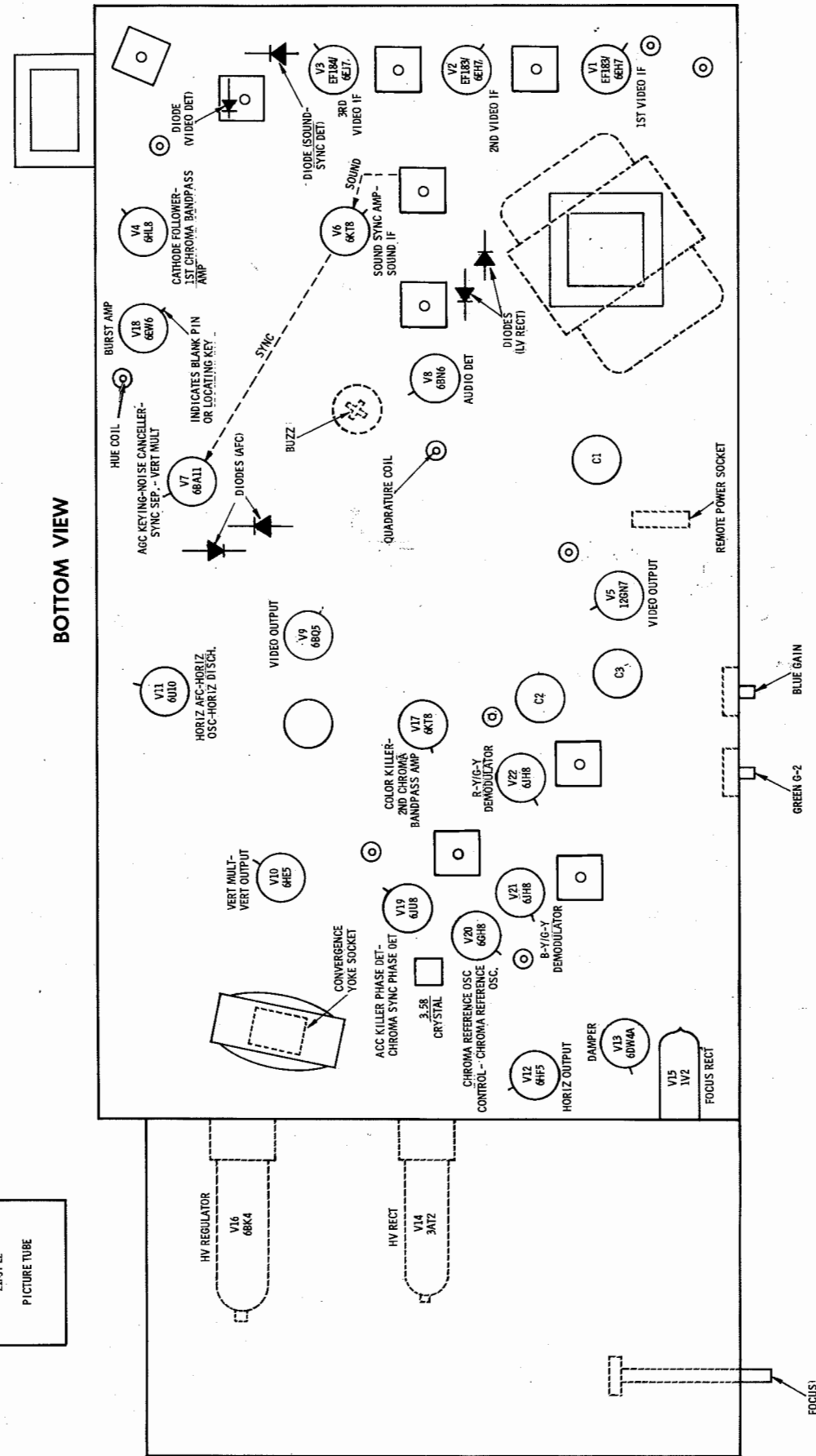


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CHASSIS 251C30/U

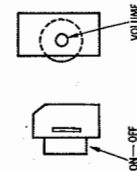
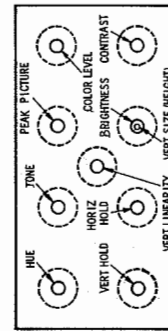
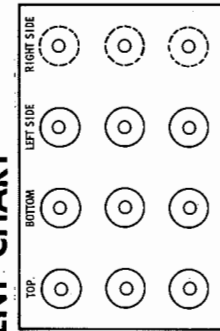
FOLDER 4

## TUBE PLACEMENT CHART

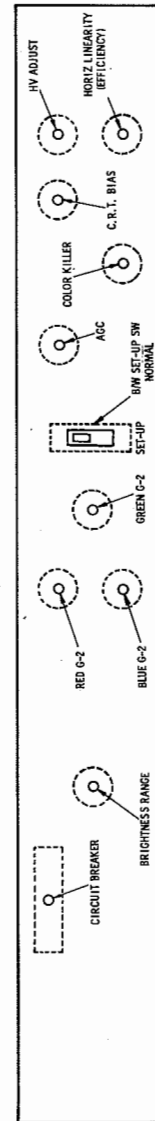
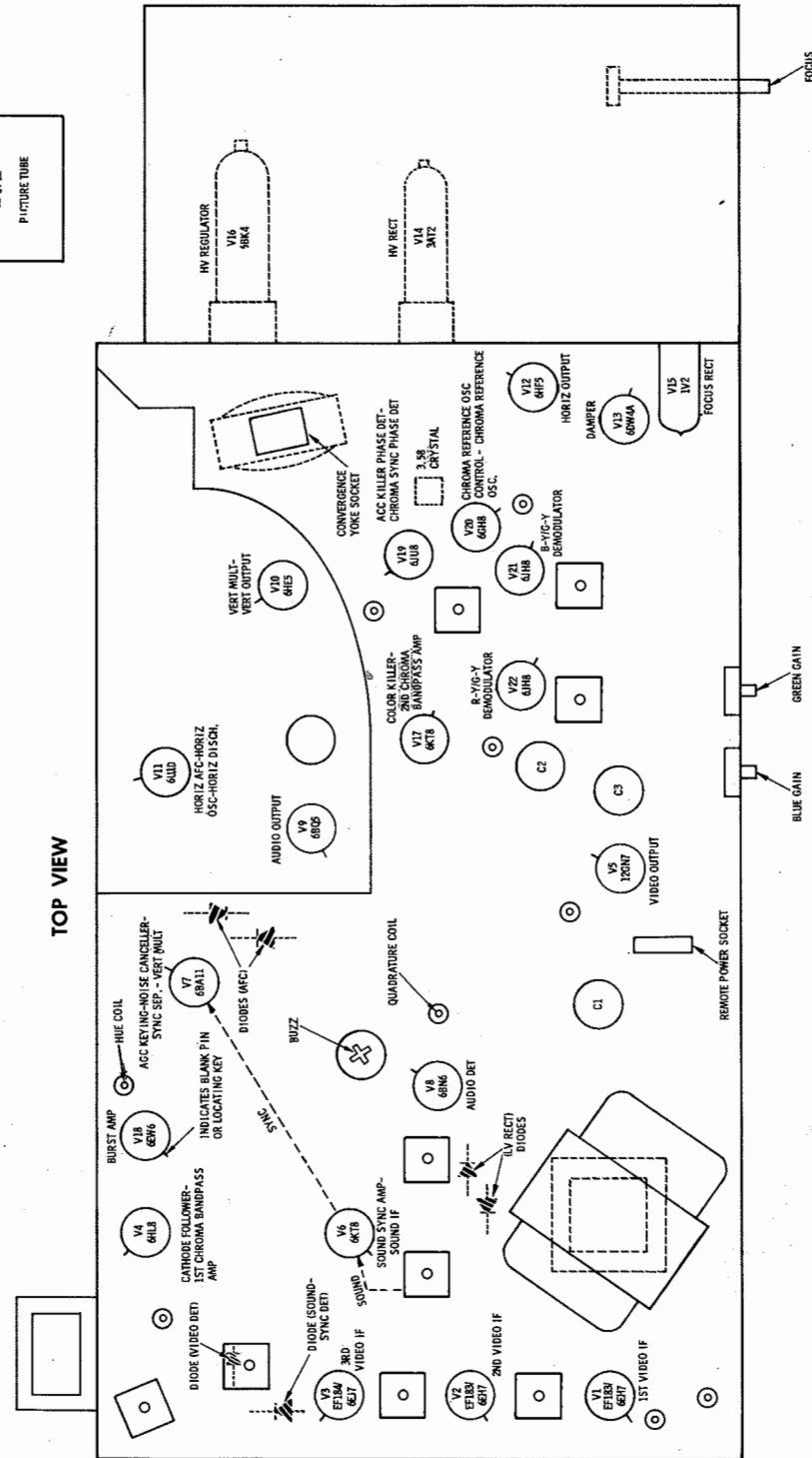
**PAGE 22**



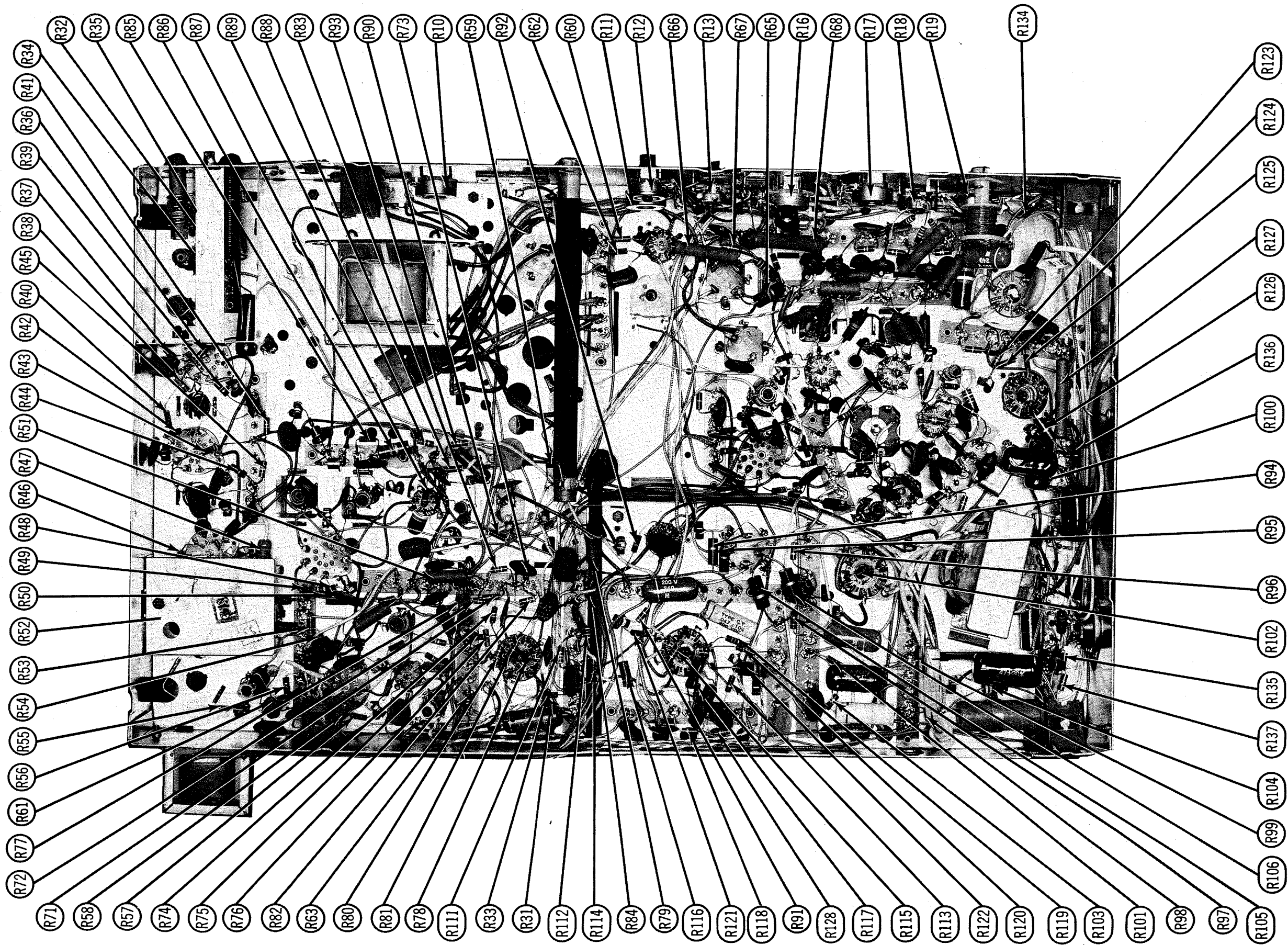
## TUBE PLACEMENT CHART



**TOP VIEW**

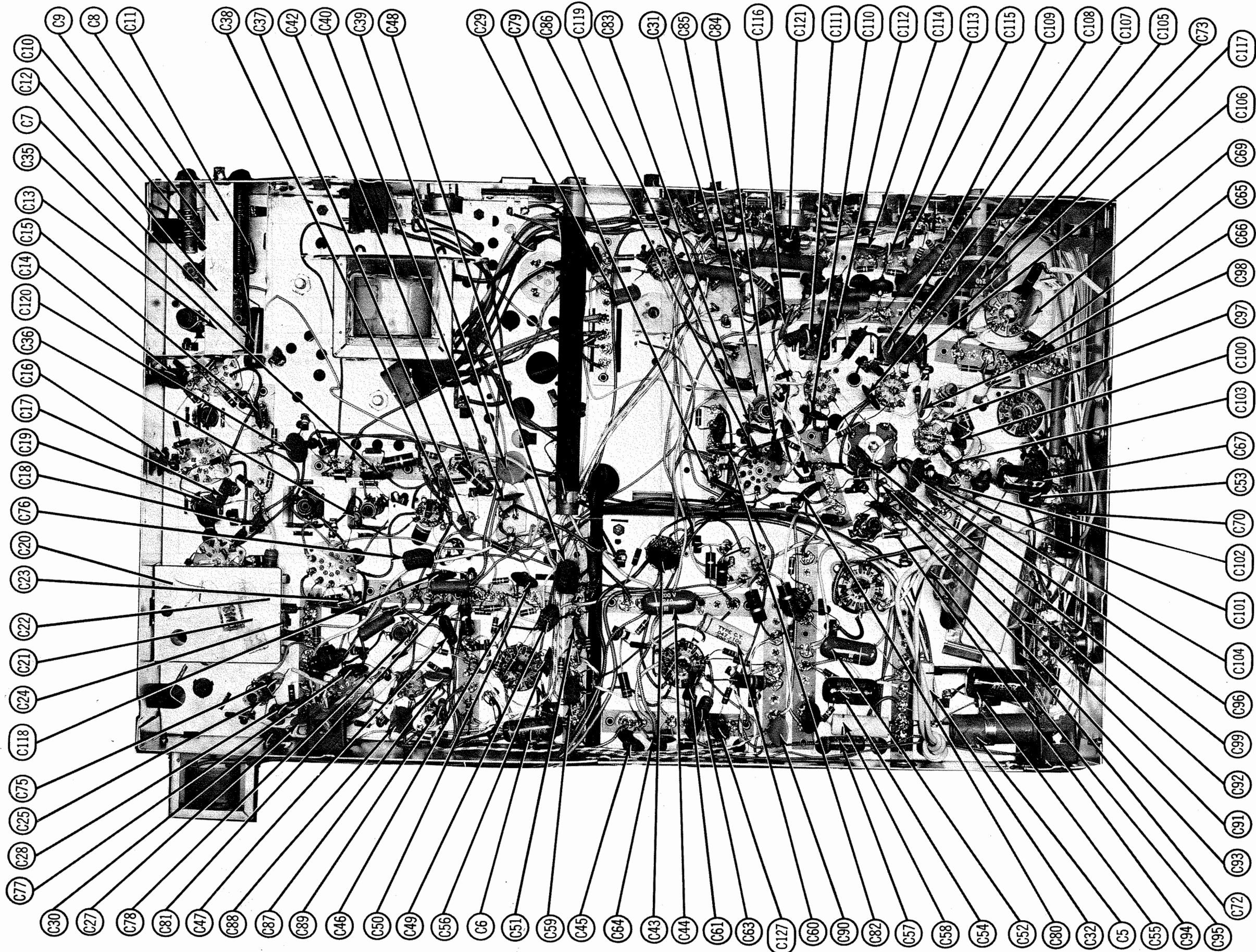


**ZENITH**  
**CHASSIS 25LC30/U**



CHASSIS BOTTOM — RESISTOR IDENT.

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CHASSIS — BOTTOM VIEW, CAPACITOR IDENT.

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FOLDER 4

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: A1 thru A26 ..... GENERAL CEMENT 8606, 8606L, 8869 ... WALSCO 2543, 2544, 2588 Mixer Plate Coil ... GENERAL CEMENT 9300, 9296, 9297 ..... WALSCO 2510, 2546, 2547

VIDEO IF ALIGNMENT

Connect a clip lead from point ④ to chassis. Connect a clip lead from point ⑤ to chassis. Disable oscillator section of Mixer-Osc. Use only enough generator output to provide a usable condition on indicator.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT INDICATOR	ADJUST	REMARKS
1.	High side to point ④, low side to chassis.	Not used	41.25MC	Any non-interfering channel	DC probe of VTVM to point ④, common to chassis.	A1, A2	Adjust for MINIMUM.
2.	"	44MC (10MC Sweep)	41.25MC 41.75MC 45.75MC	"	Vert. input of Scope to point ④, low side to chassis.	A3, A4	Adjust for response similar to Figure 1.
3.	High side to ungrounded tube shield over Mixer-Osc., low side to chassis.	Not used	39.75MC	"	DC probe of VTVM to point ④, common to chassis.	A5	Adjust for MINIMUM. It may be necessary to remove the jumpers from points ④ & ⑤ for trap alignment.
4.	"	"	41.25MC	"	"	A6	"
5.	"	"	47.25MC	"	"	A7, A8	Adjust for MINIMUM. Repeat steps 3 and 4.
6.	"	"	45.75MC	"	DC probe of VTVM to point ④, common to chassis.	A9, Mixer Plate Coil	Adjust for maximum. Reconnect jumpers.
7.	"	"	45.0MC	"	"	A10	Adjust for maximum.
8.	"	"	44.0MC	"	"	A11	"
9.	"	"	39.75MC 41.25MC 41.75MC 43.0MC 45.0MC 45.75MC 47.25MC	"	Vert. input of Scope to point ④, low side to chassis.		Check for maximum gain and symmetry of response similar to Figure 2. It may be necessary to retouch A9, A10, A11 and Mixer Plate Coil to obtain proper response curve.

SOUND IF AND 4.5MC TRAP

Tune in a strong 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 MINIMUM undistorted sound with MINIMUM buzz by adjusting A12, A13, A14, A15, and Buzz control. 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
10.	Not used	Not used	Not used	Any non-interfering channel	Vert. input to point ④, low side to chassis.	A16	Place Color switch in "On" position. Connect a clip lead from point ④ to chassis and adjust A16 for MINIMUM 900KC beat on scope.

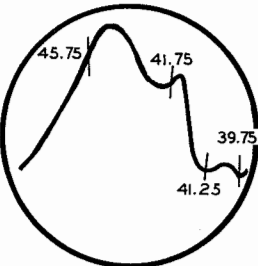


FIG. 1

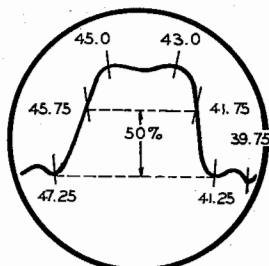


FIG. 2

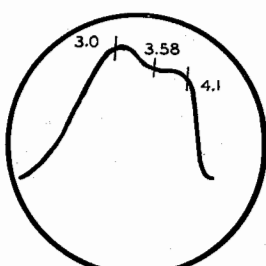


FIG. 3

ALIGNMENT CONTINUED ON PAGE 19

ALIGNMENT INSTRUCTIONS (cont)

COLOR SYNC AND DEMODULATION

Place Color Switch in the "On" position. Connect a Color Bar Generator (Color Bar Pattern) across antenna terminals. Connect a clip lead from point ④ to chassis. Connect a .01mfd capacitor from point ④ to chassis.

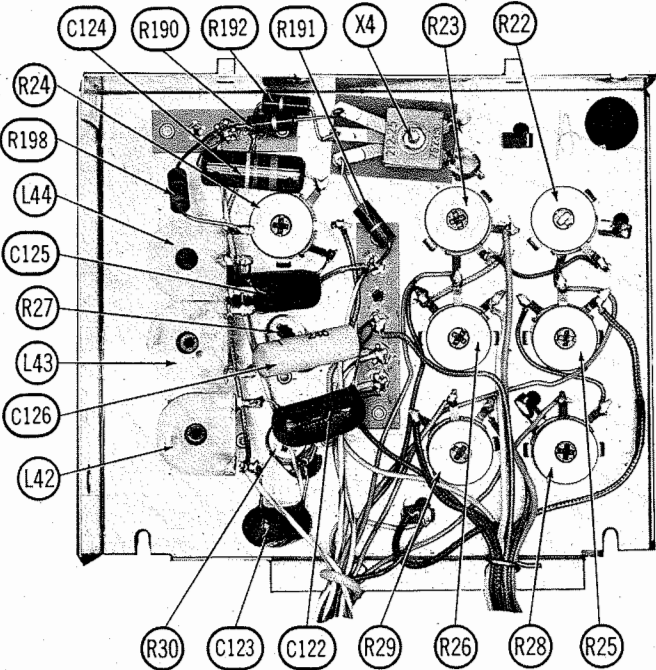
	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT INDICATOR	ADJUST	REMARKS
11.	Not used	Not used	Not used	Generator	Not used	A17	Adjust for zero beat as viewed on picture tube screen, minimum number floating bars on screen.
12.					DC probe of VTVM to point ④, common to chassis.	A18, A19	Adjust A18 for maximum indication and A19 for MINIMUM. Slugs should be positioned on outside end of coils. Remove the .01mfd capacitor from point ④. Adjust the Hue control for maximum indication on VTVM.
13.					With low capacity probe, Vert. Input of Scope to point ④, low side to chassis.	A20 (Bottom)	Adjust for MINIMUM 3.58MC response.
14.					Vert. Input of Scope to point ④, low side to chassis.	A21 (Top)	Adjust for MINIMUM 3.58MC response. Some interaction may exist. Repeat steps 13 and 14 if necessary.
15.					Vert. Input of Scope to point ④, low side to chassis.	A22	Adjust for MINIMUM 3.58MC response.
16.					Vert. Input of Scope to point ④, low side to ground.	A23	Tune in a Color pattern. and adjust for MINIMUM R-Y output.

Set Color Level and Hue Control to the center of their ranges. Connect the Vertical Input of Scope to point ④. Check for proper waveform with the Color Bar generator being used. See waveform on schematic for pattern obtained from a standard NTSC signal. Check range of the Hue Control. The bars should move 30° either side of the proper signal. If necessary, adjust A24 for proper range of control.

CHROMA BANDPASS

Disable the oscillator of the Mixer-Osc. in tuner. Set the Color Level control to mid-position. Connect a -8 volt bias to point ④. Connect a clip lead from point ④ to chassis. Place the Color switch in the "On" position.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
17.	High side to point ④, low side to chassis.	3.5MC	3.0MC 3.58MC 4.1MC	Any non-interfering channel	Vert. Input thru detector probe to point ④, low side to ground.	A25	Adjust for MINIMUM 3.58MC response. Correct dip in response occurs with slug nearest chassis. Remove Color bar generator.
18.	"	"	"	"	"	A26	Adjust for symmetry of response similar to Figure 3 with markers as shown.



CONVERGENCE PANEL

ZENITH  
CHASSIS 251C30/U

FOLDER 4

## RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
V1	6EH7/EF183	1222Ω	1.2meg	NC	FIL	FIL	0Ω	▲ 492Ω	▲ 492Ω	1200Ω			
V2	3EH7/EF183	INF	† 55K	NC	FIL	FIL	0Ω	† 1100	† 1100Ω	▲ 22Ω			
V3	6EJ7/EF184	1000Ω	12K	1000Ω	FIL	FIL	0Ω	† 4300Ω	† 4300Ω	1000Ω			
V4	6HL8	† 1000Ω	3.3meg	† 23K	FIL	FIL	† 23K	0Ω	2700Ω	750K			
V5	12GN7	145Ω	220K	0Ω	FIL	FIL	0Ω	† 6000Ω	† 23K	0Ω			
V6	6KT8	0Ω	100K	† 41K	FIL	FIL	22Ω	● 1600Ω	† 26K	† 16K			
V7	6BA11	FIL	650K	† 14K	3.2meg	† 100K	† 38K	† 10meg	4700Ω	650K	0Ω	† 1.5meg	FIL
V8	6BN6	360Ω	1Ω	FIL	FIL	† 10K	3.8Ω	† 331K					
V9	6BQ5	NC	900K	220Ω	FIL	FIL	NC	† 1915Ω	NC	† 1470Ω			
V10	6HE5	FIL	2.2meg	NC	750Ω	NC	† 1592Ω	NC	TP	NC	† 1150Ω	NC	FIL
V11	6U10	FIL	† 1000Ω	6900Ω	100Ω	† 69K	0Ω	2meg	NC	60K	† 82K	30K	FIL
V12	6HF5	FIL	NC	NC	0Ω	10meg	NC	NC	NC	NC	† 16K	FIL	TOP CAP † 7Ω
V13	6DW4A	NC	† 50Ω	NC	FIL	FIL	NC	NC	NC	400K			
V14	3AT2	PINS 1 THRU 12 HAVE INFINITE RESISTANCE											TOP CAP † 407Ω
V15	1V2	NC	NC	NC	† 46meg	† 46meg	NC	NC	NC	† 4.1Ω			
V16	6BK4	† 1000Ω	FIL	NC	NC	† 950K	NC	FIL					TOP CAP INF
V17	6KT8	4300Ω	* 6meg 0Ω	470K	FIL	FIL	150Ω	1meg	† 101K	† 6600Ω			
V18	6EW6	135K	27K	FIL	FIL	† 39K	† 39K	0Ω					
V19	6JU8	* 8.2meg 2.2meg	.8Ω	* 8.2meg 2.2meg	FIL	FIL	0Ω	INF	.4Ω	INF			
V20	6GH8	† 1200Ω	100K	† 40K	FIL	FIL	† 1200Ω	0Ω	2700Ω	INF			
V21	6JH8	.8Ω	.8Ω	† 47K	FIL	FIL	105Ω	220Ω	† 8600Ω	† 18K			
V22	6JH8	.8Ω	.8Ω	† 47K	FIL	FIL	105Ω	220Ω	† 12K	† 18K			
V23	21FJP22	FIL	† 110K	† 160K	† 3400Ω	† 3400Ω	† 105K	† 71K	NC	† 47meg	NC	† 130K	† 110K
							Pin 13 † 5500Ω	Pin 14 FIL					
V201	6HA5	2.7meg	0Ω	FIL	FIL	† 13K	0Ω	0Ω					
V202	6GJ7/ECF801	0Ω	680K	0Ω	FIL	FIL	† 28K	† 28K	† 28K	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

● READING DEPENDS ON POLARITY OF METER CONNECTIONS;  
† MEASURED FROM PIN 9 OF V13.  
▲ MEASURED FROM PIN 1 OF V2.  
\* MEASURED WITH COLOR SWITCH IN "OFF" POSITION.  
† MEASURED FROM OUTPUT OF X2.  
NC NO CONNECTION TP TIE POINT

## MISCELLANEOUS ADJUSTMENTS

## WITH SET TURNED OFF

Connect a 0-3MA meter across points ④ and ⑤, positive to point ④. Connect a VTVM across points ④ and ⑤, positive to ④. Connect a VTVM through 30KV or a higher voltage probe to picture tube anode lead.

## WITH SET TURNED ON

Tune in a TV station and adjust all controls for normal operation. Adjust B1 for "Minimum" deflection on VTVM connected across points ④ and ⑤. Turn the Brightness and Contrast controls to extinguish the raster. Set the High Voltage Adjust control for 25KV on meter connected to anode lead. Observe the reading on current meter across points ④ and ⑤. It should read between .85MA and 1.4MA. If less than .85MA, adjust High Voltage Adjust for .85MA.

## 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 has cleared up.

## COLOR KILLER

Set Color Killer control fully counterclockwise. Tune in a Color signal and adjust Color Killer control until color just appears on the screen and is normal. Switch to a black and white program and adjust for colorless noise.

## 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.

## PURITY ADJUSTMENTS

Perform step 1 of "Convergence Adjustments". If the picture appears to be magnetized, use a degaussing coil to demagnetize tube and mounting brackets. Turn Blue and Green screen controls to "Minimum". Loosen deflection yoke and move it backward until it is against the convergence yoke assembly. Be careful not to disturb the position of the convergence yoke assembly.

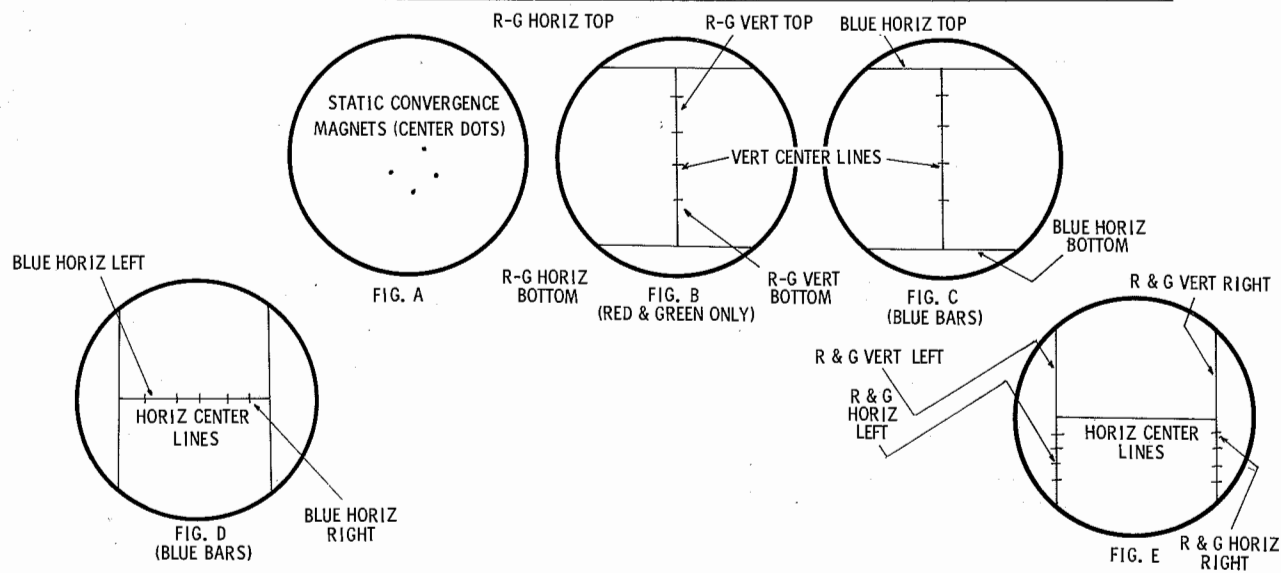
Adjust the tabs on the Purity magnet, and rotate the assembly until a Red spot appears at the center of the picture tube. Slide deflection yoke forward to obtain a uniform Red over entire picture tube face. A low power microscope is useful to observe the beam landings.

## 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 counterclockwise. Turn the Red, Blue and Green screen controls fully counterclockwise. 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

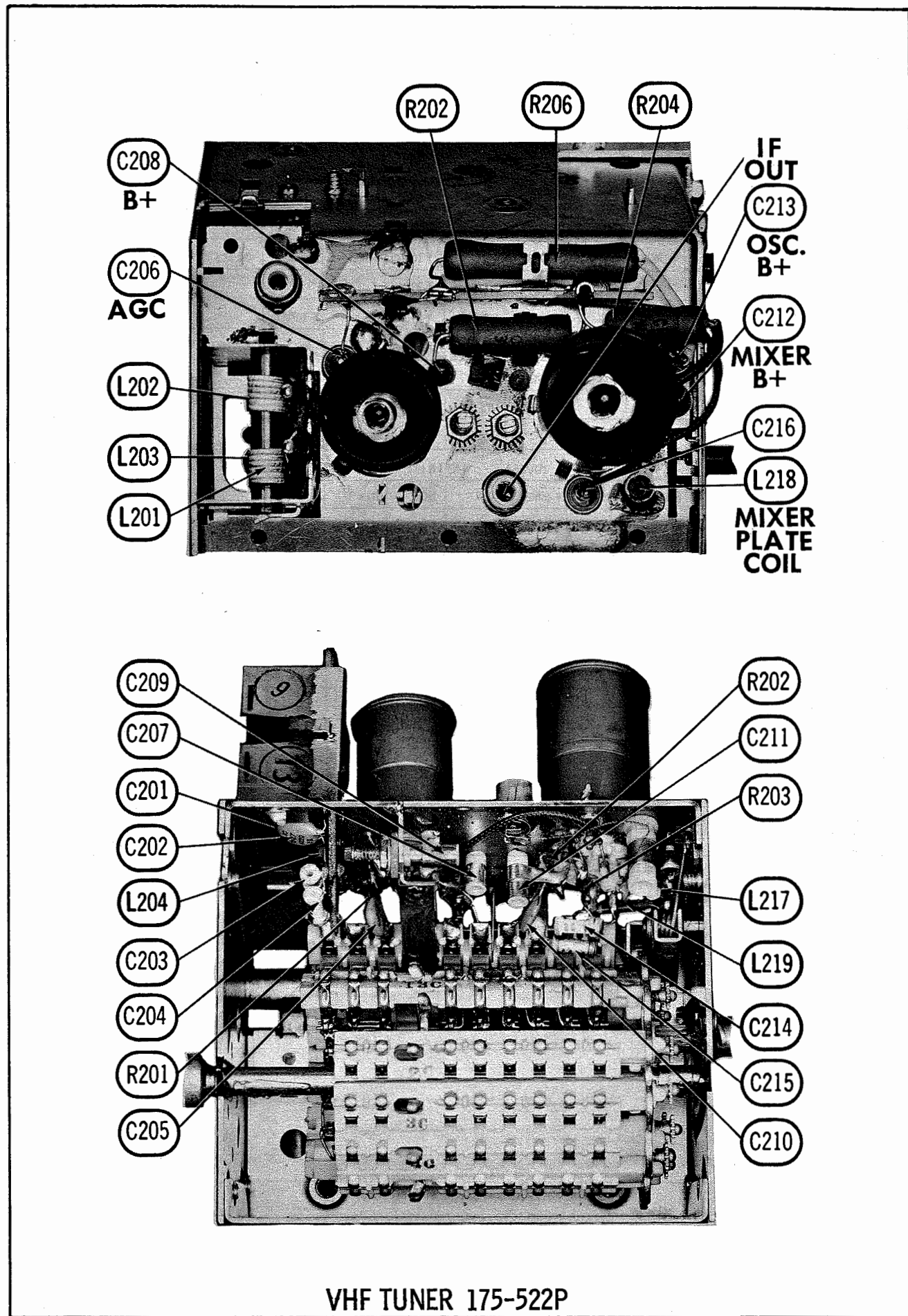
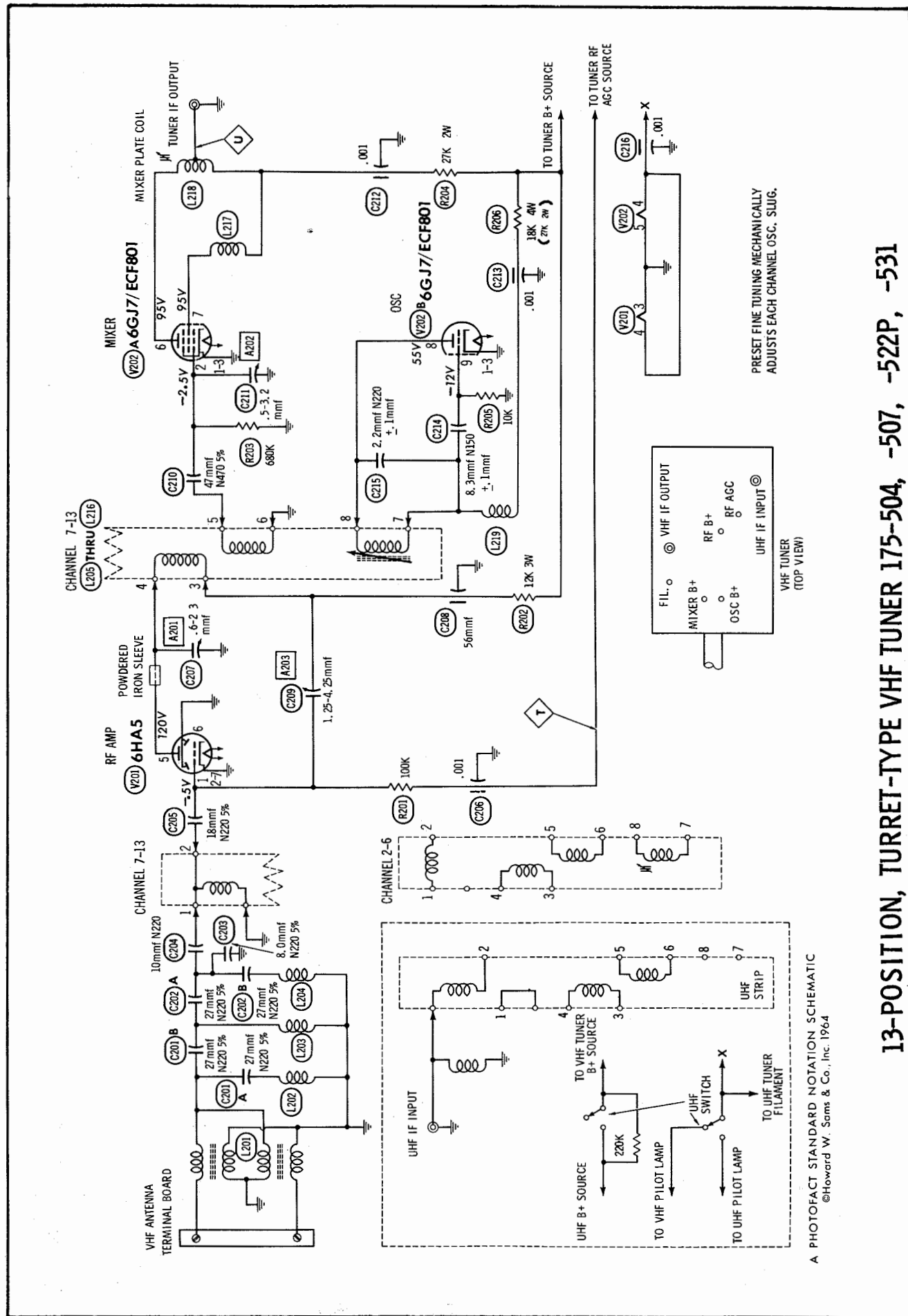
Step	Control	Use to Converge (or straighten)	Remarks
1.			Perform center dot convergence using convergence magnets. If more range is needed, reverse magnet holder in clip. See Fig. A.
2.	R-G Vert. lines (Top)	Red and Green Vertical bars at top of screen.	Touch up both controls for best convergence from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



SET 722 FOLDER 4

ZENITH  
CHASSIS 25LC30/U

FOLDER 4



# VHF TUNER 175-522P VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	R.F. Amp.	6BA5	V202	Mixer - Osc.	6X4/ECF801

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ELMENDO PART No.	MALORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%							10TCR-Q27
C201B	27 N220 5%							10TCR-Q27
C201C	27 N220 5%							10TCR-Q27
C202	27 N220 5%							10TCR-Q27
C203	8.0 N220 5%	#22-3816						10TCR-V82
C204	10 N220 5%	#22-3817						10TCR-Q18
C205	18 N220 5%	#22-3820						10TCR-Q18
C206	.001		EF-001	MFT-1000			CT280A	
C207	.6-2.3			829-3			CT585	
C208	56	#22-3488		829-8			CT552	
C209	1.25-4.25							
C210	47 N470 5%	#22-3822						
C211	.001	#22-3825	EF-001	MFT-1000			CT280A	
C212	.001		EF-001	MFT-1000			CT280A	
C213	.001							
C214	8.3 N150 ±1mmf	#22-3823						
C215	2.2 N220 ±1mmf	#22-3821						
C216	.001		EF-001	MFT-1000			CT280A	

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

# Zenith Part Number

## RESISTORS (Power and Special)

ITEM No.	RATING	REMARKS	WORKMAN PART No.	IRC PART No.	RATING	ITEM No.	REMARKS	WORKMAN PART No.	IRC PART No.
R202	12K 3W				3G-12K	R206	18K 4W		4G-18K

## COILS (RF-IF)

ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L201	Ant. Matching	S-49189	Part of Ass'y	L210	Ant., R.F. Mixer, Osc.	174-407	Chan. 7 IF Strip
L202	R.F. Choke	20-974	S-59297 All.	L211	"	174-408	Chan. 8 IF Strip
L203	R.F. Choke	20-798	20-1007 All.	L212	"	174-409	Chan. 9 IF Strip
L204	R.F. Choke	20-798	20-1008 All.	L213	"	174-410	Chan. 10 IF Strip
L205	Ant. R.F. Mixer, Osc.	174-402	Chan. 2 IF Strip	L214	"	174-411	Chan. 11 IF Strip
L206	"	174-403	Chan. 3 IF Strip	L215	"	174-412	Chan. 12 IF Strip
L207	"	174-404	Chan. 4 IF Strip	L216	R.F. Choke	20-2030	Chan. 13 IF Strip
L208	"	174-405	Chan. 5 IF Strip	L217	Mixer Plate	S-53280	
L209	"	174-406	Chan. 6 IF Strip	L219	R.F. Choke	S-48738	

## VHF TUNER 175-522P

## VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	R.F. Amp.	6BA5	V202	Mixer - Osc.	6X4/ECF801

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ELMENDO PART No.	MALORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%							10TCR-Q27
C201B	27 N220 5%							10TCR-Q27
C201C	27 N220 5%							10TCR-Q27
C202	27 N220 5%							10TCR-Q27
C203	8.0 N220 5%	#22-3816						10TCR-V82
C204	10 N220 5%	#22-3817						10TCR-Q18
C205	18 N220 5%	#22-3820						10TCR-Q18
C206	.001		EF-001	MFT-1000			CT280A	
C207	.6-2.3			829-3			CT585	
C208	56	#22-3488		829-8			CT552	
C209	1.25-4.25							
C210	47 N470 5%	#22-3822						
C211	.001	#22-3825	EF-001	MFT-1000			CT280A	
C212	.001		EF-001	MFT-1000			CT280A	
C213	.001							
C214	8.3 N150 ±1mmf	#22-3823						
C215	2.2 N220 ±1mmf	#22-3821						
C216	.001		EF-001	MFT-1000			CT280A	

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

# Zenith Part Number

## RESISTORS (Power and Special)

ITEM No.	RATING	REMARKS	WORKMAN PART No.	IRC PART No.	RATING	ITEM No.	REMARKS	WORKMAN PART No.	IRC PART No.
R202	12K 3W				3G-12K	R206	18K 4W		4G-18K

## COILS (RF-IF)

ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L201	Ant. Matching	S-49189	Part of Ass'y	L210	Ant., R.F. Mixer, Osc.	174-407	Chan. 7 IF Strip
L202	R.F. Choke	20-974	S-59297 All.	L211	"	174-408	Chan. 8 IF Strip
L203	R.F. Choke	20-798	20-1007 All.	L212	"	174-409	Chan. 9 IF Strip
L204	R.F. Choke	20-798	20-1008 All.	L213	"	174-410	Chan. 10 IF Strip
L205	Ant. R.F. Mixer, Osc.	174-402	Chan. 2 IF Strip	L214	"	174-411	Chan. 11 IF Strip
L206	"	174-403	Chan. 3 IF Strip	L215	"	174-412	Chan. 12 IF Strip
L207	"	174-404	Chan. 4 IF Strip	L216	R.F. Choke	20-2030	Chan. 13 IF Strip
L208	"	174-405	Chan. 5 IF Strip	L217	Mixer Plate	S-53280	
L209	"	174-406	Chan. 6 IF Strip	L219	R.F. Choke	S-48738	

## VHF TUNER 175-522P

## VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	R.F. Amp.	6BA5	V202	Mixer - Osc.	6X4/ECF801

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ELMENDO PART No.	MALORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%							10TCR-Q27
C201B	27 N220 5%							10TCR-Q27
C201C	27 N220 5%							10TCR-Q27
C202	27 N220 5%							10TCR-Q27
C203	8.0 N220 5%	#22-3816						10TCR-V82
C204	10 N220 5%	#22-3817						10TCR-Q18
C205	18 N220 5%	#22-3820						10TCR-Q18
C206	.001		EF-001	MFT-1000			CT280A	
C207	.6-2.3			829-3			CT585	
C208	56	#22-3488		829-8			CT552	
C209	1.25-4.25							
C210	47 N470 5%	#22-3822						
C211	.001	#22-3825	EF-001	MFT-1000			CT280A	
C212	.001		EF-001	MFT-1000			CT280A	
C213	.001							
C214	8.3 N150 ±1mmf	#22-3823						
C215	2.2 N220 ±1mmf	#22-3821						
C216	.001		EF-001	MFT-1000			CT280A	

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

# Zenith Part Number

## RESISTORS (Power and Special)

ITEM No.	RATING	REMARKS	WORKMAN PART No.	IRC PART No.	RATING	ITEM No.	REMARKS	WORKMAN PART No.	IRC PART No.
R202	12K 3W				3G-12K	R206	18K 4W		4G-18K

## COILS (RF-IF)

ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L201	Ant. Matching	S-49189	Part of Ass'y	L210	Ant., R.F. Mixer, Osc.	174-407	Chan. 7 IF Strip
L202	R.F. Choke	20-974	S-59297 All.	L211	"	174-408	Chan. 8 IF Strip
L203	R.F. Choke	20-798	20-1007 All.	L212	"	174-409	Chan. 9 IF Strip
L204	R.F. Choke	20-798	20-1008 All.	L213	"	174-410	Chan. 10 IF Strip
L205	Ant. R.F. Mixer, Osc.	174-402	Chan. 2 IF Strip	L214	"	174-411	Chan. 11 IF Strip
L206	"	174-403	Chan. 3 IF Strip	L215	"	174-412	Chan. 12 IF Strip
L207	"	174-404	Chan. 4 IF Strip	L216	R.F. Choke	20-2030	Chan. 13 IF Strip
L208	"	174-405	Chan. 5 IF Strip	L217	Mixer Plate	S-53280	
L209	"	174-406	Chan. 6 IF Strip	L219	R.F. Choke	S-48738	

## VHF TUNER 175-522P

## VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	R.F. Amp.	6BA5	V202	Mixer - Osc.	6X4/ECF801

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ELMENDO PART No.	MALORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%							10TCR-Q27
C201B	27 N220 5%							10TCR-Q27
C201C	27 N220 5%							10TCR-Q27
C202	27 N220 5%							10TCR-Q27
C203	8.0 N220 5%	#22-3816						10TCR-V82
C204	10 N220 5%	#22-3817						10TCR-Q18
C205	18 N220 5%	#22-3820						10TCR-Q18
C206	.001		EF-001	MFT-1000			CT280A	
C207	.6-2.3			829-3			CT585	
C208	56	#22-3488		829-8			CT552	
C209	1.25-4.25							
C210	47 N470 5%	#22-3822						
C211	.001	#22-3825	EF-001	MFT-1000			CT280A	
C212	.001		EF-001	MFT-1000			CT280A	
C213	.001							
C214	8.3 N150 ±1mmf	#22-3823						
C215	2.2 N220 ±1mmf	#22-3821						
C216	.001		EF-001	MFT-1000			CT280A	

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

# Zenith Part Number

## RESISTORS (Power and Special)

ITEM No.	RATING	REMARKS	WORKMAN PART No.	IRC PART No.	RATING	ITEM No.	REMARKS	WORKMAN PART No.	IRC PART No.
R202	12K 3W				3G-12K	R206	18K 4W		4G-18K

## COILS (RF-IF)

ITEM No.	USE	ZENITH PART No.	NOTES	ITEM No.	USE	ZENITH PART No.	NOTES
L201	Ant. Matching	S-49189	Part of Ass'y	L210	Ant., R.F. Mixer, Osc.	174-407	Chan. 7 IF Strip
L202	R.F. Choke	20-974	S-59297 All.	L211	"	174-408	Chan. 8 IF Strip
L203	R.F. Choke	20-798	20-1007 All.	L212	"	174-409	Chan. 9 IF Strip
L204	R.F. Choke	20-798	20-1008 All.	L213	"	174-410	Chan. 10 IF Strip
L205	Ant. R.F. Mixer, Osc.	174-402	Chan. 2 IF Strip	L214	"	174-411	Chan. 11 IF Strip
L206	"	174-403	Chan. 3 IF Strip	L215	"	174-412	Chan. 12 IF Strip
L207	"	174-404	Chan. 4 IF Strip	L216	R.F. Choke	20-2030	Chan. 13 IF Strip
L208	"	174-405	Chan. 5 IF Strip	L217	Mixer Plate	S-53280	
L209	"	174-406	Chan. 6 IF Strip	L219	R.F. Choke	S-48738	

## VHF TUNER 175-522P

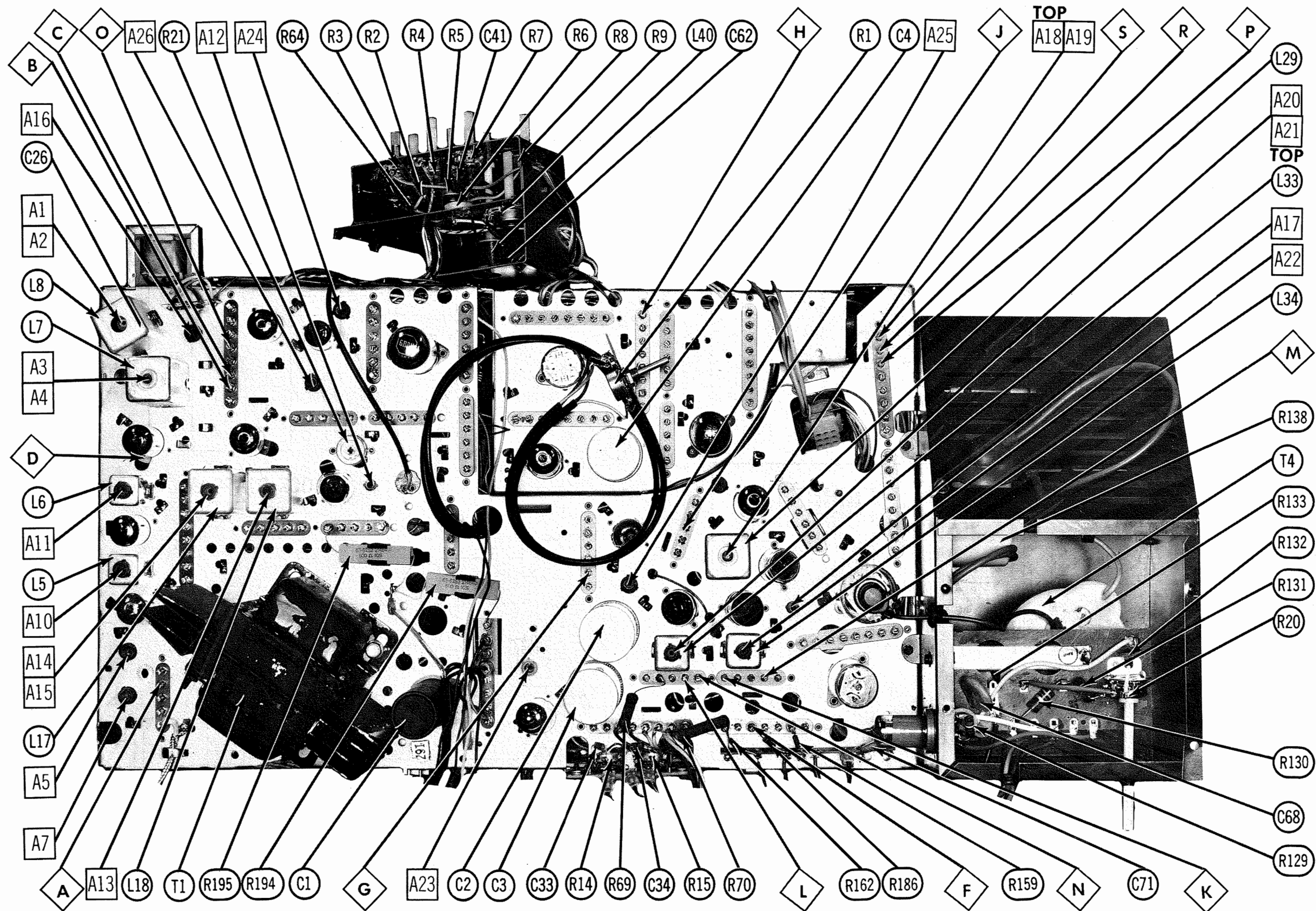
## VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	R.F. Amp.	6BA5	V202	Mixer - Osc.	6X4/ECF801

## FIXED CAPACITORS

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL DUBILIER PART No.	ELMENDO PART No.	MALORY PART No.	SPRAGUE PART No.
C201A	27 N220 5%							10TCR-Q27
C201B	27 N220 5%							10TCR-Q27
C201C	27 N220 5%							10TCR-Q27
C202	27 N220 5%							10TCR-Q27
C203	8.0 N220 5%	#22-3816						10TCR-V82



CHASSIS — TOP VIEW

ZENITH  
CHASSIS 251C30/U

FOLDER 4

## 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.

### \*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	95-2139 (95-2139-A)					
T3	Yoke (Horiz. 13MH) 70° (Vert. 39MH)†	95-2087		DY-90AC1			
T4	Horiz. Output	S-58518				YC-300-1	① Use original centering assembly. † Total, each half 15MH.

### \*COMPONENT CONNECTION DATA

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

▲ Duplicate Original Network.

### 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	7100Ω	3-4Ω	95-2190-X (95-2190)	A-3020	A-8092	28S48	S-18X	

### SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		ZENITH PART No.	QUAM PART No.	
SP1	3" x 5" PM 3-4Ω	49-1010	35A05	5108Y, 5109L/R/W, 5111L/R/W, 5119W/R, 5126H/M/R/W, 5126H/M/R/W, 5119R/W, 5128R/W, 5131E/H/R/W, 5171WU, 5535R/W, 5535RU/WU, 5128R/W, 5131E/H/R/W, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5540R/W, 5141WU, 5161HU/XU, 5540R/W, 5151HU.
	5" x 7" PM 3-4Ω	49-907	57A21	5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU.
	5" x 7" PM 6-8Ω	49-893	57A128	5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU.
	6" x 9" PM 6-8Ω	49-831	69A128	5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU.
	6" x 9" PM 3-4Ω	49-851	69A3	5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU.
	3½" Tweeter 12-14Ω	49-782	3A15T	5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU, 5141WU, 5151HU, 5161HU, 5171WU, 5175VU/YU, 5151HU.

### CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART NO.	MODEL																										
			5108Y	5109L	5109R	5109W	5111L	5111R	5111W	5119R	5119W	5126H	5126R	5126W	5128R	5128W	5131E	5131H	5131R	5131W	5136M	5136R	5136W	5138R	5138W	5139R	5139W	5141W
Knob-VHF Channel Selector	46-3753		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-VHF Channel Selector Assembly	S-59116																											
Knob-VHF Fine Tuning Assembly	S-56267		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-VHF Fine Tuning Assembly	S-63598																											
Knob-VHF Fine Tuning Assembly	S-56888																											
Knob-VHF Fine Tuning Assembly	S-58105																											
Knob-Hue	S-63361		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Color Intensity	S-63562		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Volume	S-63994		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Volume	S-63597																											
Knob-Volume	S-56479																											
Knob-Focus	S-59166		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Brightness	S-63561		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Peak Picture	S-63563		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Contrast, Vert. Hold	S-63564		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Horiz. Hold	46-3790		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Knob-Tone (2 Used)	S-53976																											
Knob-Tone	S-63564		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

### COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ZENITH PART No.	REPLACEMENT DATA
K1	Vertical Integrator	88K, .0024mfd	87-4	Aerovox PA-785 Centralab PC-408 Aerovox PA-784 Centralab PC-407
K2	Vertical Feedback	90K, .0024mfd	87-5	
K3	Pulse Filter		87-9	

### FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			ZENITH PART No.	LITTELFUSE PART No.	BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER
M1	2½"	length of #24 copper wire				
M2	2½"	length of #24 copper wire				

### MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M3	VHF Tuner	175-522 ①	① Used in Models 5535WU/RU, 5119R/W, 5126H/M/R/W, 5128R/W, 5131E/H/R/W, 5119R/W, 5138M/R, 5138W/R.
	VHF Tuner	175-504 ②	② Used in Models 5108Y, 5109L/R/W, 5111L/R/W, 5119R/W, 5126H/M/R/W, 5128R/W, 5131E/H/R/W, 5138M/R, 5138W/R.
	VHF Tuner	175-507 ③	③ Used in Models 5141WU, 5151HU, 5161HU, 5171WU, 5535WU/RU.
	VHF Tuner	175-531 ④	④ Used in Models 5141WU, 5151HU, 5161HU/XU, 5171WU, 5175VU/YU.
M4	UHF Tuner	175-14 ③ & ④	③ Used in Models 5141WU, 5151HU, 5161HU, 5171WU, 5535WU/RU.
M5	UHF Tuner	175-30 ③ & ④	④ Used in Models 5141WU, 5151HU, 5161HU/XU, 5171WU, 5175VU/YU.
M6	Crystal	103-71	3.58MC Oscillator
M7	Diode	103-23	Sound-Sync Detector
M8	Diode	103-51	Video Detector
M9	Diode	103-51	Horizontal AFC
M10	Spark Gap	52-957	Horizontal AFC
M11	Switch	85-748	Power (Push-Push Type)
M12	Switch	85-754	Normal-Setup
M13	Switch	85-790	UHF-VHF
M14	Switch		Program Selector
M15	Switch		Motor
M16	Circuit Breaker	85-783	2.75A
M17	Magnet Assembly	S-85082	Blue Lateral
M18	Magnet Assembly	S-53787	Static Convergence - 3 required
M19	Delay Line	S-62358	
M20	Motor	141-178	Remote Tuning

### WIRING DATA

High Voltage Lead	Use BELDEN No. 8889 (17KV) or 8885 (25KV)
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. 8230 or 8275
Antenna Rotor Cable	Use BELDEN No. 8484 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor

## 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

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	1st Video IF Amp.	6EH7/EF183	V12	Horiz. Output	6HF5
V2	2nd Video IF Amp.	6EH7/EF183	V13	Damper	6DW4A
V3	3rd Video IF Amp.	6EJ7/EF184	V14	HV Rectifier	3AT2
V4	Cathode Follower - 1st Chroma Bandpass Amp.	6HL8	V15	Focus Rectifier	1V2
V5	Video Output	12GN7	V16	HV Regulator	6BK4
V6	Sound-Sync Amp. - Sound IF	6KT8	V17	Color Killer - 2nd Chroma Bandpass Amp.	6KT8
V7	AGC Keying - Vert. Mult. Noise Canceller - Sync Sep.	6BA11	V18	Burst Amp.	6EW6
V8	Audio Detector	6BN6	V19	AGC - Killer Phase Det. - Chroma Sync Phase Det.	6J08
V9	Vert. Mult. - Vert. Output	6BQ5	V20	Chroma Ref. Osc. Control - Chroma Reference Osc.	6GH8
V10	Horiz. AFC - Horiz. Osc. - Horiz. Discharge	6HE5	V21	B-Y/G-Y Demodulator	6JH8
V11		6U10	V22	R-Y/G-Y Demodulator	6JH8

### PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	ZENITH PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
Y23	21FJP22 ① 21FBP22 ②	21FJP22 ① 21FBP22 ②	21FJP22 ① 21FBP22 ②	21FJP22 ① 21FBP22 ②	① Aluminized ② Silver screen "85"

③ Used in Models 5108Y, 5109L/R/W, 5111L/R/W, 5119R/W, 5535R/W, 5119R/W.

### POWER RECTIFIERS

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS		
			MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1	.5A	212-37	1N1086 or 1N2071 or 1N3195	1N547 or 1N2884 or 1N3195	80H or F-6
X2	.5A	212-37	1N1086 or 1N2071 or 1N3195	1N547 or 1N2884 or 1N3195	80H or F-6
X3		212-27	1N639 or A300 or D300	1N1763 or 1N2862 or 1N3194	40H or F-4
X4A	.030A	212-25	A50 or D50	1N2858	S-420
B	.014A		A50 or D50	1N2858	
C	.014A		A50 or D50	1N2858	

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA							
	CAP.	VOLT.	ZENITH PART No.	AEROVOX PART No.	CORNELL- DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1	180	250	22-3901	AFH31-31-80 ①	AA0287-① BR30-250 ①	XC1-11 ① QT1-18	TMS-1550 ① TD-40-250	WP125.9A ①	TVL81539-①	
C2A	180	250	22-3895	AFH2-99-99	BB0489.5	XC1-9	TMD-2790	FP253	TVL8-2898 *	
C3A	80	475	22-3986	AFH4-94-25	BR30-350	QT1-28	TD-100-250	FP495A	TVL8-4823 *	
B	4	475				XC4-13	TMQ-4782	TC50025		
C	4	475				QT1-28	TD-250-25			
D	200	25								
C4A	4	150	22-3964	AFH4-112-80	CC0410	XC3-41.2	TMQ-4734	FP463A	TVL84820.4 *	
B	50	475			BR40-150	QT1-3	TD-30-500	TT150XA		
C	40	25								
D	40	475								
C5	100	50	22-3171	PRS1360	BR100-50	QT1-23	TD-100-50	TC3501	TVA-1207	

## 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.

## CONTROLS (cont)

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C40	470		BPD-00047	DD-471	BYA10T47	CCD-471	B847	10TS-747
C41	.0047		DI-4700	CF-472	JB6D47	CCD-472	JF247	10TS-D47
C42	.0068	200V	PR-6800J	DD-471	WMF4D68	CCD-471	PVC4268	6TM-D68
C43	470		DD-471	DD-471	JB6D47	CCD-471	GP347	10TS-T47
C44	.22	200V			WMF2P22	CCD-471	PVC1022	2TM-P22
C45	.001	10%			DD-1000	CCD-102	GP210	10TS-D10
C46	.001	10%			DD-1000	CCD-102	GP210	10TS-D10
C47	.01				BPD-01	CCD-103	B110	5HK-S10
C48	.1	400V			P488N-1	CCD-103	GEM401	4TM-P10
C49	.0033	10%			DI-3300	CCD-332	JF233	10TS-D33
C50	220	10%			DI-220	CCD-221	GP322	10TS-T22
C51A	51				DI-50	CCD-510	GP450	5GA-Q50
B	51				DI-50	CCD-510	GP450	5GA-Q50
C52	.22	200V			WMF2P22	CCD-510	PVC1022	2TM-P22
C53	.1	800V			BE6P1	CCD-510	GEM601	6TM-P10
C54	.1	800V			BE6P1	CCD-510	GEM601	6TM-P10
C55	.47	200V			WMF2P47	CCD-510	PVC1047	2TM-P47
C56	.0022	10%			BE6D22	CCD-222	GP222	10TS-D22
C57	.0022	200V			BE6D22	CCD-222	GP222	10TS-D22
C58	.015	1KV			PKM16S15	CCD-222	GP222	10TS-D22
C59	.0022	10%			DI-2200	CCD-222	GP222	10TS-D22
C60	.047	200V			BE6D47	CCD-472	GP222	10TS-D47
C61	680	10%			ADN-19-681	CCD-472	GP222	10TS-D47
C62	.0011	10%			ADN-19-112	CCD-472	GP222	10TS-D47
C63	.0015	400V			BE6D15	CCD-152	PVC6215	6TM-D15
C64	.0047	10%			DI-4700	CCD-472	JF247	10TS-D47
C65	.001	10%			DI-1000	CCD-103	GP210	10TS-D10
C66	.01				BE6D01	CCD-103	B110	5HK-S10
C67	.15	400V			P488N-15	CCD-103	PVC4015	4TM-P15
C68	150	8KV N1500	#22-3578					
C69	90	6KV N1500	#22-3852					
C70	.1	600V			WMF6P1	6DP-4-104	GEM401	6TM-P10
C71	75	4KV N1500	#22-3953		WMF6S22	6DP-2-223	GEM6122	6TM-S22
C72	.022	600V			WMF2P15	2DP-3-154	PVC1015	2TM-P15
C73	.15	200V						
C74	100	3KV 5%	#22-3890					
C75	7	NPO ±.5mmf						
C76	.1	200V						
C77	.0047							
C78	.47	N75						
C79	.01							
C80	.01							
C81	.220	10%						
C82	.01							
C83	.01							
C84	.001	10%						
C85	.36	N220 5%	#22-3259					
C86	.001	10%						
C87	.01							
C88	.0033							
C89	.12	N150 5%	#22-3169					
C90	100	10%						
C91	.22mmf	10%	#22-3401					
C92A	.001							
B	.001							
C93A	.001							
B	.001							
C94	.82mmf	10%	#22-3788					
C95	.1	200V						
C96	.001	10%						
C97	.2	10%	#22-2434					
C98	.01							
C99	.01							
C100	.220	10%						
C101	.18	NPO 5%						
C102	100	NPO 5%						
C103	.001	10%						
C104	.01							
C105	.01							
C106	.01							
C107	100	10%						
C108	5	NPO ±.5mmf						
C109	.01							
C110	.01							
C111	5	NPO 10%						
C112	5	NPO 10%						
C113	27	N750 10%						
C114	.01							
C115	.01							
C116	.01							
C117	.01	600V						
C118	.001							
C119	.01							
C120	.01							
C121	.1	600V						
C122	.1	200V						
C123	.1	200V						
C124	.082	200V						
C125	.1	200V						
C126	.056	200V						
C127	.0022							

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

# Zenith Part Number

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			ZENITH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume	2meg 1meg Tap	63-5284 ①	F11-2meg, SF5212 or (ABT-76, AK-33)	A47F3-2meg RS-3/16	B18-139X, SK9 or (BU2, CF57T, SS4, DC1) *	UA28T95, SD3500 or (RU26T16, SL35, IS1250) or (UT451, DS37)
R2	Contrast	500Ω	63-5164	F5-500, SN104 ②		B17-103, TM4 ② or (BU11, CF50, SS8 ②) *	UA52R, SL3500 or (U52R)
R3	Color Level, Switch	25K	63-5236				

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R4	Peak Picture	5000Ω 400Ω Stop	63-5220	F1-5000 ③, SN104 ② or (B-10 ③)	A47-5000-S ③ FS-3	B11-114 ③, TM4 ② or (BU11 CF8 ③, SS8 ②) *	TA531L ③ or (RU53L ③, SL37, SL3500) or (UA53L, SL3500 ③) † UE4462
R5A	Brightness	70K	63-5053	F1-75K, R1-1meg, FSB111 ④		† QJ-1645	
R6	Vert. Linearity	1500Ω 500Ω Stop 2W	63-5051	V-1000 ⑤ or WN-102 ⑤	U39-1000 ⑤	112-1000 ⑤ or WPS1000 ⑤ or (BU1, WF3 ⑤, SS8) *	FL1K ⑤ or (VW1K ⑤ or (RI00L ⑤)
R7	Tone	1meg	63-5174 ⑥	F2-1meg, SN104 ② or (B-70)	A47-1meg-Z FS-3	B13-137, TM4 ② or (BU11, CF26, SS8 ②) *	TA16A or (RU16A, SL37, SL3500) or (UA16A, SL3500)
R8	Vert. Hold	750K	63-5284	F1-750K, SN104 ② or (B-66)	A47-750K-S FS-3	B11-136, TM4 ② or (BU11, CF84, SS8 ②) *	TA16L or (RU754L, SL37, SL3500) or (UA16L, SL3500)
R9	Hue	1000Ω	63-5230	TT-40 or (F1-100K, SN10)	B47-100K-S	B11-128, TM4 or (BU11, CF13, SS8) *	PTA15L or (RU15L, SL37, SN1000) or (UA15L, SN1000)
R10	Brightness Control	100K	63-5323 ⑦	TT-40 or (F1-100K, SN10)	B47-100K-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R11	Red G2	1meg	63-5089	TT-69 or (F1-1meg, SN10)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R12	Blue G2	1meg	63-5088	TT-69 or (F1-1meg, SN10)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R13	Green G2	1meg	63-5087	TT-69 or (F1-1meg, SN10)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R14	Blue Gain	10K	63-5096	TT-14 or (F1-10K, SN10)	B47-10K-S	B11-116, TM4 or (BU11, CF9, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R15	Green Gain	10K	63-5097	TT-14 or (F1-10K, SN10)	B47-10K-S	B11-116, TM4 or (BU11, CF9, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R16	AGC	10K	63-5192	TT-14 or (F1-10K, SN10)	B47-10K-S	B11-116, TM4 or (BU11, CF9, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R17	Color Killer	5000Ω	63-5165	TT-10 or (F1-5000, SN10)	B47-5000-S	B11-114, TM4 or (BU11, CF8, SS8) *	PTA53L or (RU53L, SL37, SN1000) or (UA53L, SN1000)
R18	CRT Bias	1meg	63-3249	TT-69 or (F1-1meg, SN10)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R19	High Voltage Adjust	1meg	63-3249	TT-69 or (F1-1meg, SN10)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS8) *	TA16L or (RU16L, SL37, SN1000) or (UA16L, SN1000)
R20	Focus	10meg	63-5055				
R21	Buzz	750Ω 2W 100Ω Stop	63-3284	V-800 ⑧	U39-650 ⑧	112-650 ⑧	FL750 ⑧
R22	R & G Horiz. Lines (Top)	120Ω 2W	63-5175	V-120 ⑨	U39-125 ⑨	WPK100 or (BU1, WF19, SS8) *	VW100
R23	R & G Horiz. Lines (Bottom)	120Ω 2W	63-5175	V-120 ⑨	U39-125 ⑨	WPK100 or (BU1, WF19, SS8) *	VW100
R24	R & G Horiz. Lines (Left Side)	60Ω 2W	63-5176	V-60 ⑩	U39-75 ⑩	W11-060, SK4 or (BU1, WF8, SS8) *	VW60
R25	R & G Vert. Lines (Top)	120Ω 2W	63-5175	V-120 ⑨	U39-125 ⑨	WPK100 or (BU1, WF19, SS8) *	VW100
R26	R & G Vert. Lines (Bottom)	60Ω 2W	63-5176	V-60 ⑩	U39-75 ⑩	W11-060, SK4 or (BU1, WF8, SS8) *	VW60
R27	R & G Vert. Lines (Left Side)	130Ω 2W	63-5177	V-150	U39-150	112-150 or WPS140X70 10	FL150
R28	Blue Horiz. Lines (Top)	60Ω 2W	63-5176	V-60 ⑩	U39-75 ⑩	W11-060, SK4 or (BU1, WF8, SS8) *	VW60
R29	Blue Horiz. Lines (Bottom)	120Ω 2W	63-5175	V-120 ⑨	U39-125 ⑨	WPK100 or (BU1, WF19, SS8) *	VW100
R30	Blue Horiz. Lines (Left Side)	70Ω 2W	63-5178	V-100	U39-75	112-100 or (W11-084, SK5) or (BU1, WF19, SS8) *	FL100 or (VW100)

† "CONCENTRIK" Equivalent: K-15 Kit with Base Elements and Shafts: B11-126, P24-103 (Panel), B11-138, R15-005 (Rear).

"SNAPTROL" Equivalent: BU4, CF54, CR13, SF66, SR100.

† "STA-LOC" Equivalent: FA7531, RU1561, OFS1687 ④, IK625.

① Some versions use Part #63-5219 or 63-5231 or 63-5249.

② File flat.

③ Connect a 390Ω, 1/2 watt resistor in series with the left hand terminal of the control and the lead connected to the same terminal of the original control (control viewed from shaft end, terminals down).

④ Cut to proper length, per original, before assembly.

⑤ Connect a 470Ω, 2 watt resistor in series with the terminal.

⑥ Some versions use separate Bass and Treble controls, Bass, Part #63-4921 or 63-4860, Treble, Part #63-4920 or 63-4859.

⑦ Used in some versions.

⑧ Connect a 100Ω, 2 watt resistor in series with the terminal.

⑨ Insulate control from chassis and solder original center terminal lead to metal case of control.

10 Do not use Tap.

\* "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
R51	15K 3W		3G-15K	#63-4458	R127	14K 5W		5G-14K	#63-5108
R52	2700Ω 4W		4G-2700	#63-5054	R128	22K 3W		3G-22K	#63-5055
R53	4700Ω 7W	PW5-2700 PW10-4700	7G-4700	#63-4886	R129	12K 3W		3G-12K	#63-5287
R54	10K 3W		5G-10K	#63-4097	R130	3900Ω 4W	PW5-3900	4G-3900	#63-4484
R55	30K 5W		5G-30K	#63-4857	R131	18K 3W		3G-18K	#63-5287
R56	3.1meg Cold			#63-4906	R132	500Ω 15W	PW15-500	15W-SQ-500	#63-5252
R57	V.D.R. ↑				R133	500Ω 15W	PW15-500	15W-SQ-500	#63-5252
R58	3Ω Cold Thermistor								

† Voltage Dependent Resistor # Zenith Part Number

## COILS (RF-IF)

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

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.	
C6	.0047		BPD-0047	DD-472	BYA10D47	CCD-472	B247	5HK-D47	
C7	.05 25V		TTD-05	DA-503	H5		TA150	TG-S50	
C8	.001 100V 10%		ADM-15-101	CPR-1000J	CD19F102K	DM-15-102K		MS-211	
C9	.05 25V		TTD-05	DA-503	H5		TA150	TG-S50	
C10	.05 25V		TTD-05	DA-503	H5		TA150	TG-S50	
C11	.05 25V		TTD-05	DA-503	H5		TA150	TG-S50	
C12	.05 100V		TTD-05	DA-503	H5		TA150	TH-S50	
C13	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10	
C14	820 100V 5%		ADM-19-821	CPR-820J	CD19F681J	DM-15-681J		MS-382	
C15	820 100V 5%		ADM-19-821	CPR-820J	CD19F681J	DM-15-681J		MS-382	
C16	820 100V 5%		ADM-19-821	CPR-820J	CD19F681J	DM-15-681J		MS-382	
C17	820 100V 5%		ADM-19-821	CPR-820J	CD19F681J	DM-15-681J		MS-382	
C18	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C19	.0047		BPD-0047	DD-472	BYA10D47	CCD-472	B247	5HK-D47	

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			ZENITH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Sensitivity	140Ω	83-5171	V-100 ①	U39-100 ①	112-100 ①	FL100 ①

① Connect A100Ω, 2 Watt resistor in series with the terminal.

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
R19	100Ω 4W	PW5-100	SW-SQ-100	#83-3210					

# Zenith part number.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ZENITH PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	39.5KC IF	S-54580					
L2	37.75KC Output	S-54575					
L3	38.75KC Output	S-54576					
L4	40.25KC Output	S-54577					
L5	41.25KC Output	S-54578					

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 @ .025A	23VAC @ .080ADC		95-2151					

MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M1	Switch	85-845	
M2	Relay	195-11	Manual-Automatic
M3	Relay	195-11	Tune Higher
M4	Relay	195-10	Tune Lower
M5	Relay	195-10	Pilot Relay
M6	Relay Assembly	S-80514	Pilot Relay
M7	Relay Assembly	S-80518	Sound B1-Stable (Mute)
M8	Transducer	S-83324	Step Volume Includes Cable

WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in 12 Colors  
8524 (Stranded) Available in 12 Colors  
Power Cord ..... Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft.  
17109 (Plastic) or 17129 (Rubber) - 9 Ft.  
Power Cord (Interlock Type) ..... Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)

PHOTOFACT® Folder

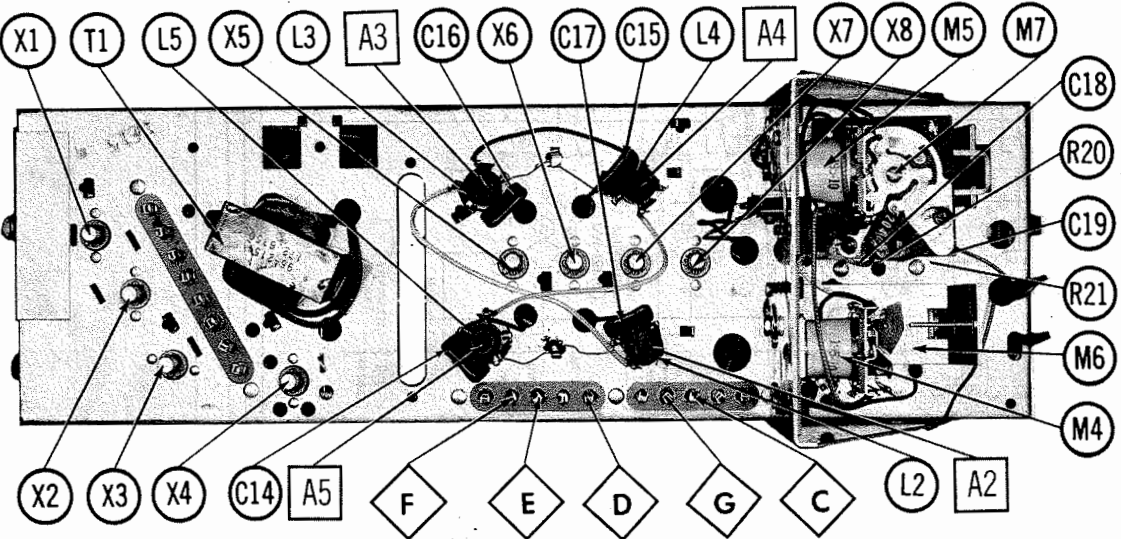
SET 722 FOLDER 4-A

ZENITH REMOTE CONTROL S-63874, S-63954, S-64974

ZENITH REMOTE CONTROL S-63874, S-63954, S-64974

IMPORTANT FILING NOTICE

This PHOTOFACT Folder covers equipment used with the TV chassis covered in PHOTOFACT SET 722 FOLDER 4 . File this Folder with the TV Folder in the yellow filing jacket provided.



TRADE NAME: Zenith Models S-63874, S-63954, S-64974  
SUPPLIER: For Current Address, See Master Index.  
TYPE SET: Remote Control Receiver  
TRANSISTOR: Eight  
POWER SUPPLY: 110-120 Volts AC, 60 Cycles RATING: 26 Watts, .025 Amps. @ 117 Volts AC

ALIGNMENT INSTRUCTIONS

REMOTE RECEIVER ALIGNMENT					
Alignment tools: A1 thru A5 GENERAL CEMENT: 8608, 8606L, 8869 WALSCO: 2543, 2544, 2588					
SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. High side to Point A, low side to ground.	39.5KC		DC Probe to Point A, low side to ground.	A1	Adjust for maximum.
2. "	37.75KC		DC Probe to Point C, low side to point G.	A2	Adjust for minimum.
3. "	38.75KC		DC Probe to Point D, low side to point G.	A3	"
4. "	40.25KC		DC Probe to Point E, low side to point G.	A4	"
5. "	41.25KC		DC Probe to Point F, low side to point G.	A5	"

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

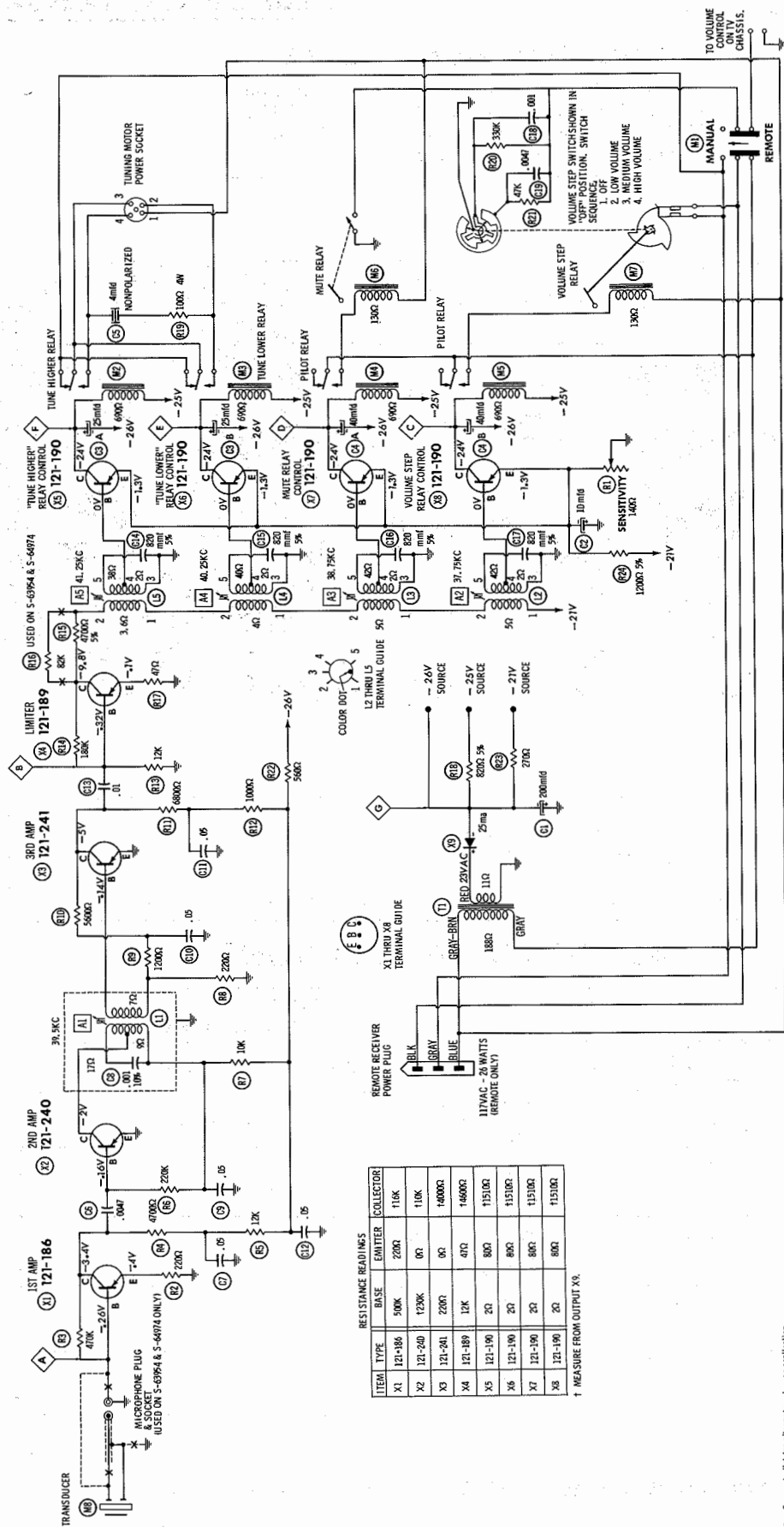
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. MB901

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DATE 11-64 SET 722 FOLDER 4-A

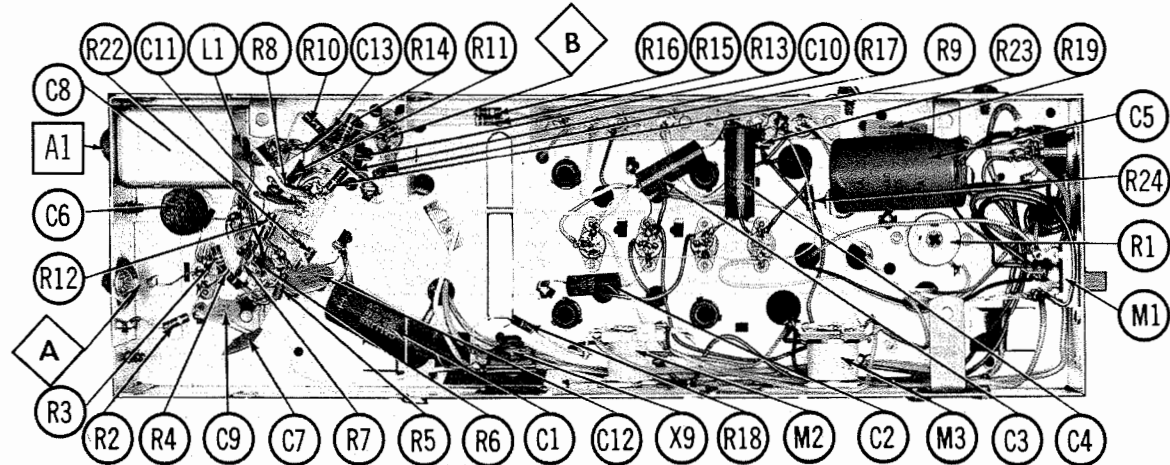
ZENITH REMOTE CONTROL S-63874, S-63954, S-64974

SET 722 FOLDER 4-A



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.  
 Minimum values are in parentheses.  
 Resistance values to terminals may not be found on the unit.  
 Supply voltage maintained at rated value for voltage readings.  
 PHOTOFACT STANDARD NOTATION SCHEMATIC  
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ZENITH REMOTE  
 CONTROL S-63874, S-63954, S-64974



## 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.

### TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	121-186	1st Amplifier	DS-25	GE-1	2N218	PNP
X2	121-240	2nd Amplifier	DS-25	GE-1	2N218	PNP
X3	121-241	3rd Amplifier	DS-25	GE-1	2N218	PNP
X4	121-189	Limiter	DS-25	GE-1	2N218	PNP
X5	121-190	Tune Higher Relay Control	DS-26	GE-2	2N218	PNP
X6	121-190	Tune Lower Relay Control	DS-26	GE-2	2N218	PNP
X7	121-190	Mute Relay Control	DS-26	GE-2	2N218	PNP
X8	121-190	Volume Stop Relay Control	DS-26	GE-2	2N218	PNP

### POWER RECTIFIERS

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS		
			MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X9	.025A	212-35	A50 or D50	2N2859 or 1N3754	Model 62AP or 10H

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	ZENITH PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.
C1	200	35	22-3721	PRS1380	BR250-50	QT1-31	TD-250-50	TC50025
C2	10	3	22-3705	PTT6	NLW10-3	MT1-5	MLV10-3	TT3X10
C3	25	30	22-3642	PRS2175	BBRD3315	QT2-9	TDLD-4	TCD47
C4	40	30	22-3643	PRS2195	BBRD4415	QT2-9	TDLD-7	TCD48
C5	4	200NP	22-2893	PRS7750		NPQT-2		TCN2550

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

ZENITH REMOTE  
 CONTROL S-63874, S-63954, S-64974