

CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

The Horizontal Hold is equipped with a stop which limits rotation to approximately 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 the knob with its pointer centered between the stops.

DISASSEMBLY INSTRUCTIONS

- TV CHASSIS AND PICTURE TUBE ASSEMBLY REMOVAL**

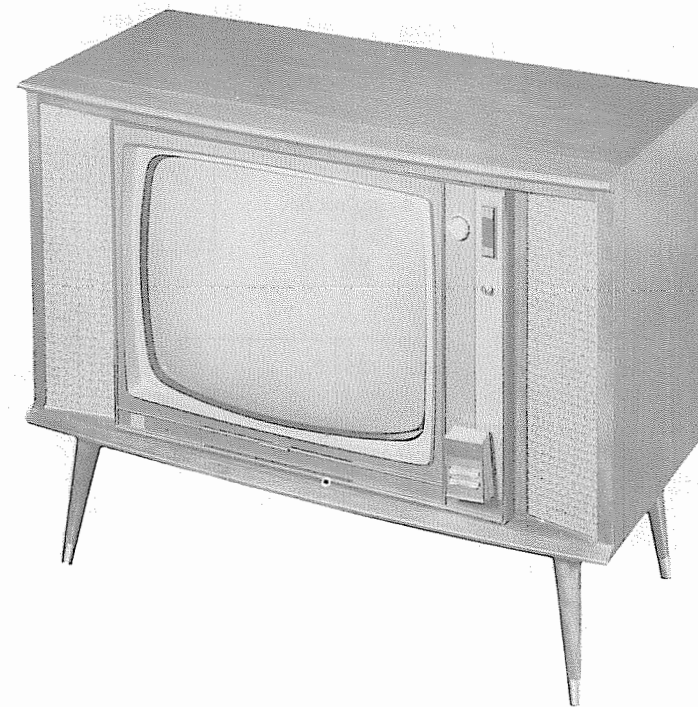
  1. Remove push-on type knobs from Volume Control and Horizontal Hold Control.
  2. Remove 4 chassis bolts.
3. Remove 4 screws holding picture tube brackets.
  4. Remove 2 screws at rear of tuner bracket and pull tuner out.
  5. Remove Channel Selector Switch, Volume Control, and Speaker leads.
  6. Pull chassis straight out.

FOLDER 2  
SET 557

ZENITH CHASSIS 16G23,  
16G23Q, 16G23U



ZENITH CHASSIS 16G23,  
16G23Q, 16G23U



MODEL G3350W

ZENITH CHASSIS 16G23,  
16G23Q, 16G23U

TRADE NAME	ZENITH	MODELS	TV Chassis	Remote Control Receiver			
	F2710YZ; F2712EZ, RZ, WZ; F2735E, R, W; F2738E, M, R, W; F2739E, W; F2740E, R, W; F2755H, M, R, W; F2756E, R, W; F2786E, R, W		16G23				
	F2710YZU; F2712EZU, RZU, WZU; F2735EU, RU, WU; F2738EU, MU, RU, WU; F2739EU, WU; F2740EU, RU, WU; F2755HU, MU, RU, WU; F2756EU, RU, WU; F2786EU, RU, WU		16G23U				
	F3342E, R, W		16G23Q	S-50153 or S-51773			
	F3348R, W; F3350E, R, W; F3353W; F3354M, R		16G23Q	S-50264 or S-51864			
	ZENITH	MODELS	TV Chassis	Remote Control Receiver	FM-AM Tuner	Audio Amp. Chassis	Record Changer
	G2705R, Y; G2707R, Y; G2730E, M, R, W; G2735L, R, W; G2737E, R, W; G2738E, M, R, W; G2740H, R, W; G2752R, W, Y		16G23				
	G2705RU, YU; G2707RU, YU; G2730EU, MU, RU, WU; G2735LU, RU, WU; G2737EU, RU, WU; G2738EU, MU, RU, WU; G2740HU, RU, WU; G2752RU, WU, YU		16G23U				
	G2780E, R, W		16G23		4G21		#169-144
	G2780EU, RU, WU		16G23U		4G21		#169-144
	G2786E, M, R, W; G2787W		16G23		7F20*	4G21	#169-145
	G2786EU, MU, RU, WU; G2787WU		16G23U		7F20*	4G21	#169-145
	G3341E, M, R, W		16G23Q	S-51773			
	G3346E, M, R, W		16G23Q	S-51774			
	G3348R, W; G3350E, R, W		16G23Q	S-51864			
MANUFACTURER TUBES	Zenith Radio Corp., 6001 Dickens Ave., Chicago 39, Illinois						
	TV: VHF - Sixteen, UHF - Seventeen Remote Control Receiver S-50153, S-51773: Six						
	Audio Amp. 4G21: Four Remote Control Receiver S-51864, S-51774, S-50264: Eight						
POWER SUPPLY	110-120 Volts AC, 60 Cycle RATING TV w/Remote S-51864: 180 Watts, 1.6 Amp. @ 117 Volts AC (230 Watts While Tuning)						
TUNING RANGE	TV - Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)						

\* FOR SERVICE INFORMATION ON FM-AM TUNER 7F20 - SEE PHOTOFACT SET 525 FOLDER 2

FOR SERVICING IN THE FIELD INFORMATION - SEE PAGE 21

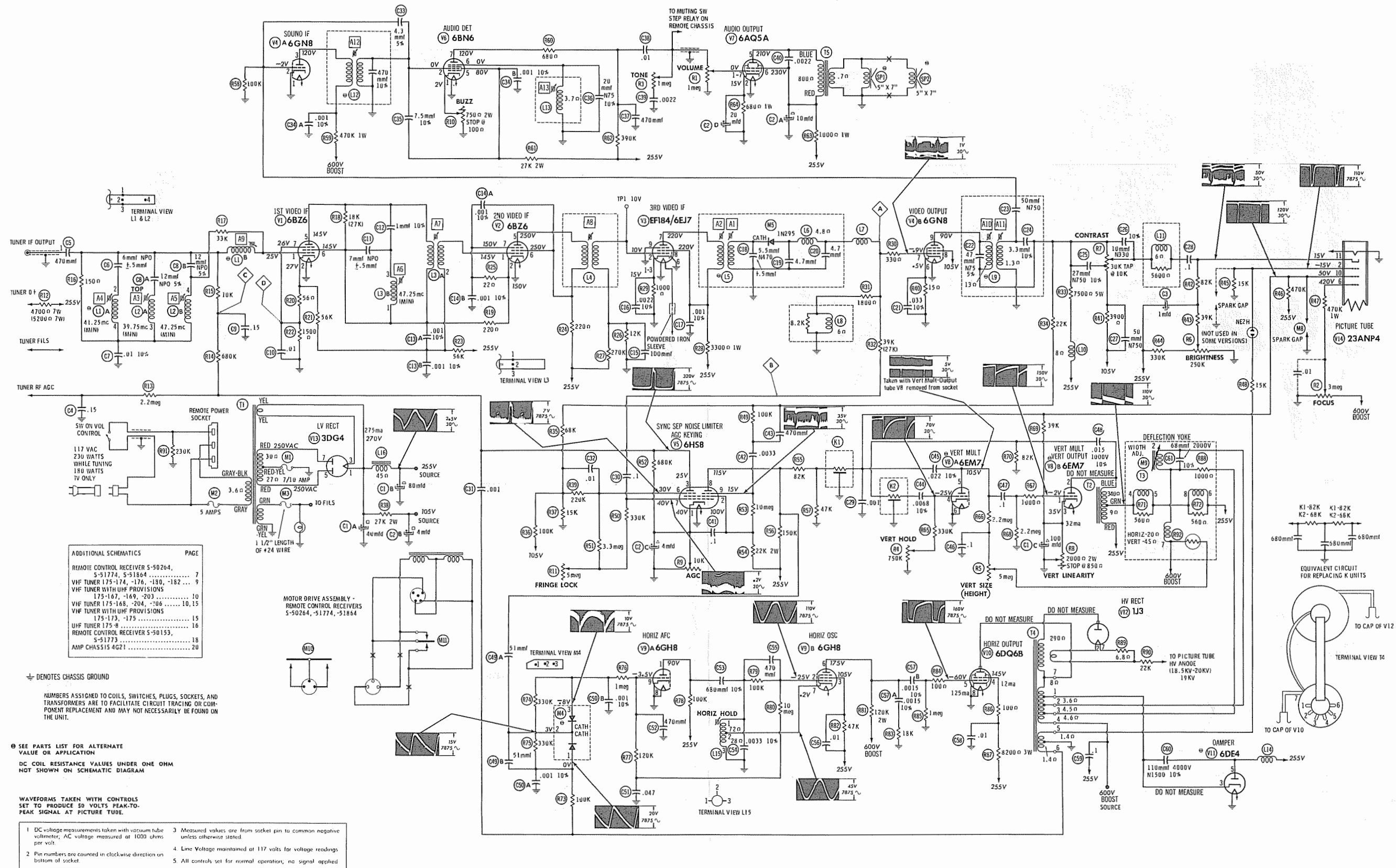
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



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SET 557  
FOLDER 2







ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

Allow a 20 minute warm-up period for the receiver and test equipment.  
Suggested Alignment Tools: A1 thru A13 .... GENERAL CEMENT #8282, 8606, 8608-L, 9295, 9440  
WALSCO #2526, 2543, 2544, 2545

VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	High side thru 470mmf to TP-1. Low side to chassis. Connect a 56Ω carbon resistor across sweep output.	44MC (10MC Swp.)	39.75MC 41.25MC 45.75MC	Between any two channels	Vert. Amp. thru 10K to point A. Low side to chassis. (Across Video Det. load.)	A1, A2	Set sweep generator output to produce 3 volts peak to peak on scope. Adjust A1 and A2 alternately for maximum gain and symmetry with the 45.75MC marker positioned as shown in Fig. 1. The 39.75MC marker can fall within ±.5MC of the specified frequency. If the desired response cannot be obtained, check to see that the cores are entering their respective windings from opposite ends of the coils.
2.	High side to ungrounded tube shield floating over Mixer-Osc. Low side to chassis.	"	39.75MC 41.25MC 47.25MC	"	"	A3, A4, A5, A6	Connect a clip lead from point B to chassis. Connect a clip lead from point C to point D. Use high scope gain and adjust A3 thru A6 for MINIMUM marker amplitudes as in Fig.2. A3 controls 39.75MC marker, A4 controls 41.25MC marker, and A5 and A6 control the 47.25MC marker.
3.	"	"	41.25MC 42.75MC 45.0MC 45.75MC	"	"	A7, A8, A9 and Mixer Plate Coil	Remove clip lead from point D and connect to chassis. Adjust for maximum gain and symmetry of response similar to Fig. 3 with markers as shown. A7 affects low side of curve and A8 affects the high side. Remove clip leads.

SOUND IF ALIGNMENT

Connect an adjustable attenuator between the antenna and the receiver antenna terminals. Tune in a TV station and adjust the attenuator until the signal is below the limiting level of the Audio Detector as evidenced by a hiss similar to super-regeneration in the sound. Adjust A10, A11, A12, and A13 for maximum sound of best quality. Adjust the Buzz Control for MINIMUM buzz. If the hiss disappears during alignment, further reduce the signal level until the hiss returns.

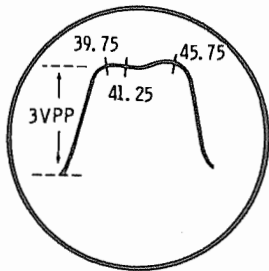


FIG. 1

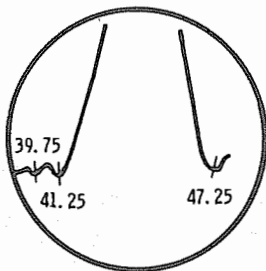


FIG. 2

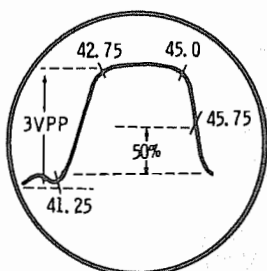
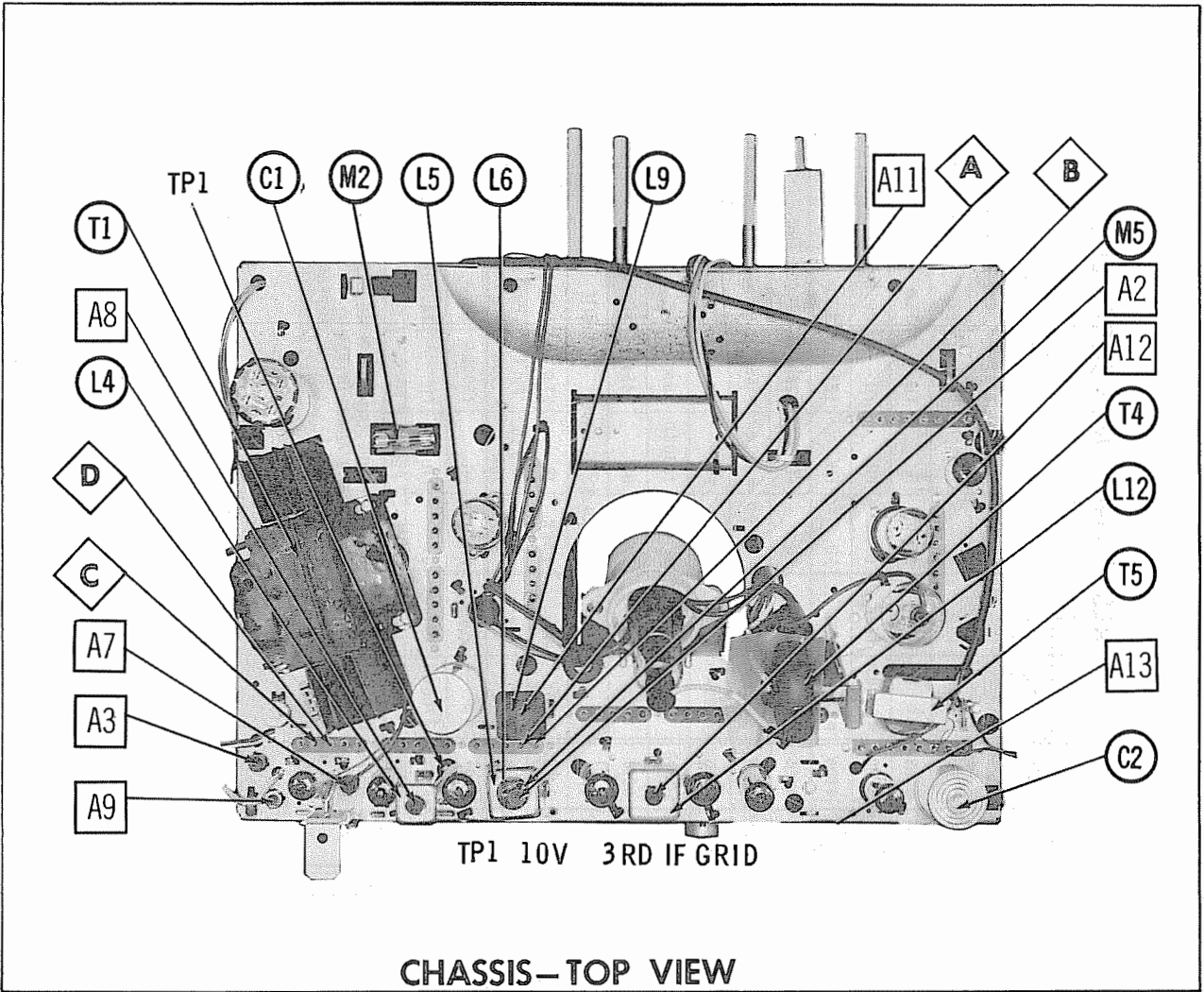


FIG. 3



SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE

LOCATION

TV: 5 Amp. S/B - AC Line - (See Tube Placement Chart)  
7/10 Amp. S/B-LV Supply - (See Tube Placement Chart)  
#24 Fuse Wire-Filament - (See M3 in photo "Chassis-Bottom View")

Remote Control Receiver: 3/4 Amp. - AC Line  
Amp. 4G21: 4 Amp. - AC Line

TUNER #175-180 OSCILLATOR ADJUSTMENT

To touch up the VHF Oscillator, remove Channel Indicator and Fine Tuning knob.

AGC

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

FOCUS

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

SYNC STABILITY

Sync stability may be varied by means of a Fringe Lock

control. (For location, see "Tube Placement Chart".)

HORIZONTAL OSCILLATOR

The horizontal oscillator coil slug is used for the Horizontal Hold.

WIDTH

The width may be varied by adjusting a metallic sleeve, located between the yoke and the picture tube neck, in or out of the yoke.

BUZZ ADJUSTMENT

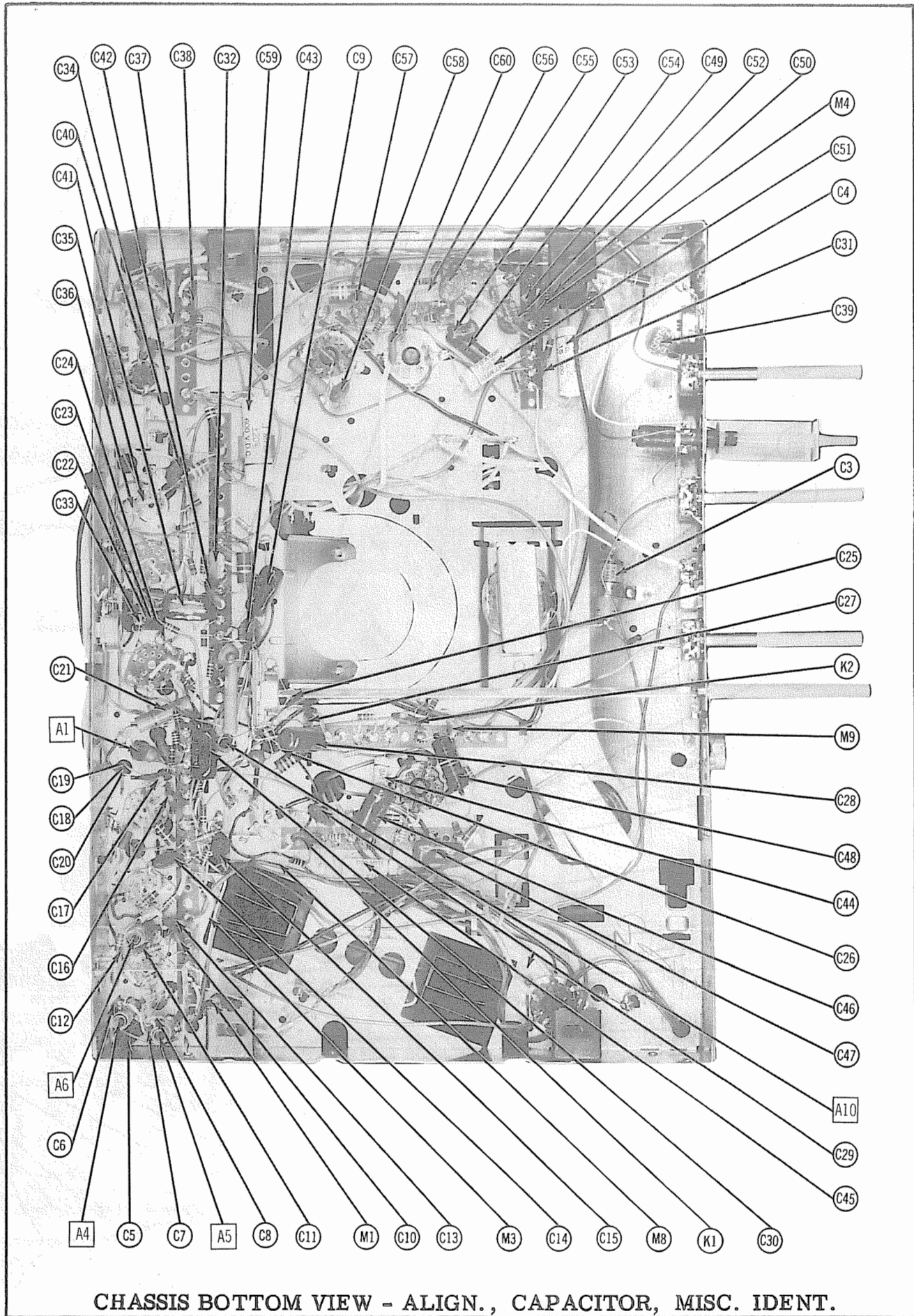
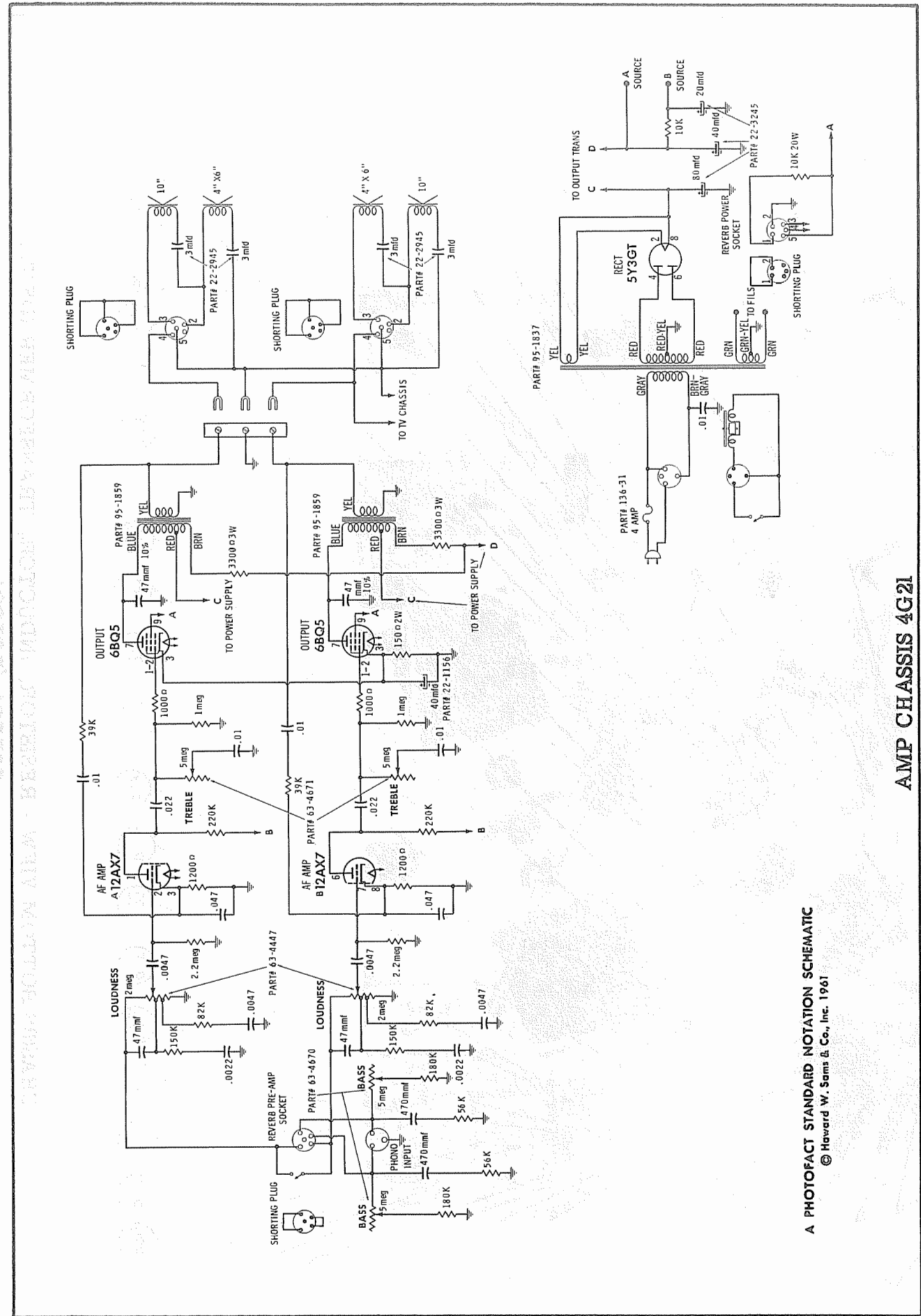
To eliminate intercarrier buzz, adjust the Buzz control for MINIMUM buzz and maximum sound. (For location, see "Tube Placement Chart".)

CENTERING

Centering is accomplished by 2 magnetic rings, located behind the yoke, on the neck of the picture tube.

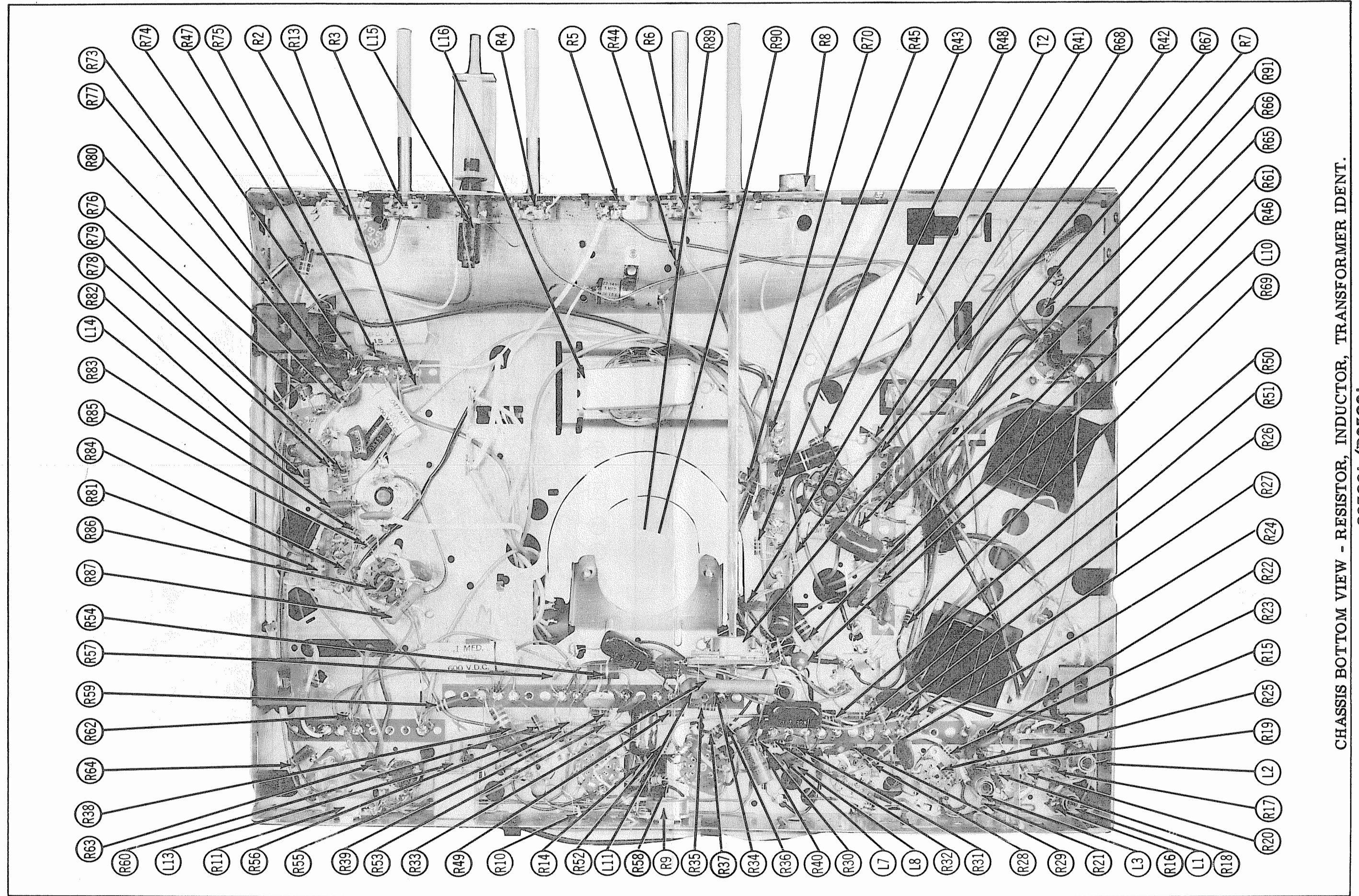
PINCUSHION CORRECTION

Reduce the picture size so that the sides of the raster are visible. Position the magnets so that all sides are straight.



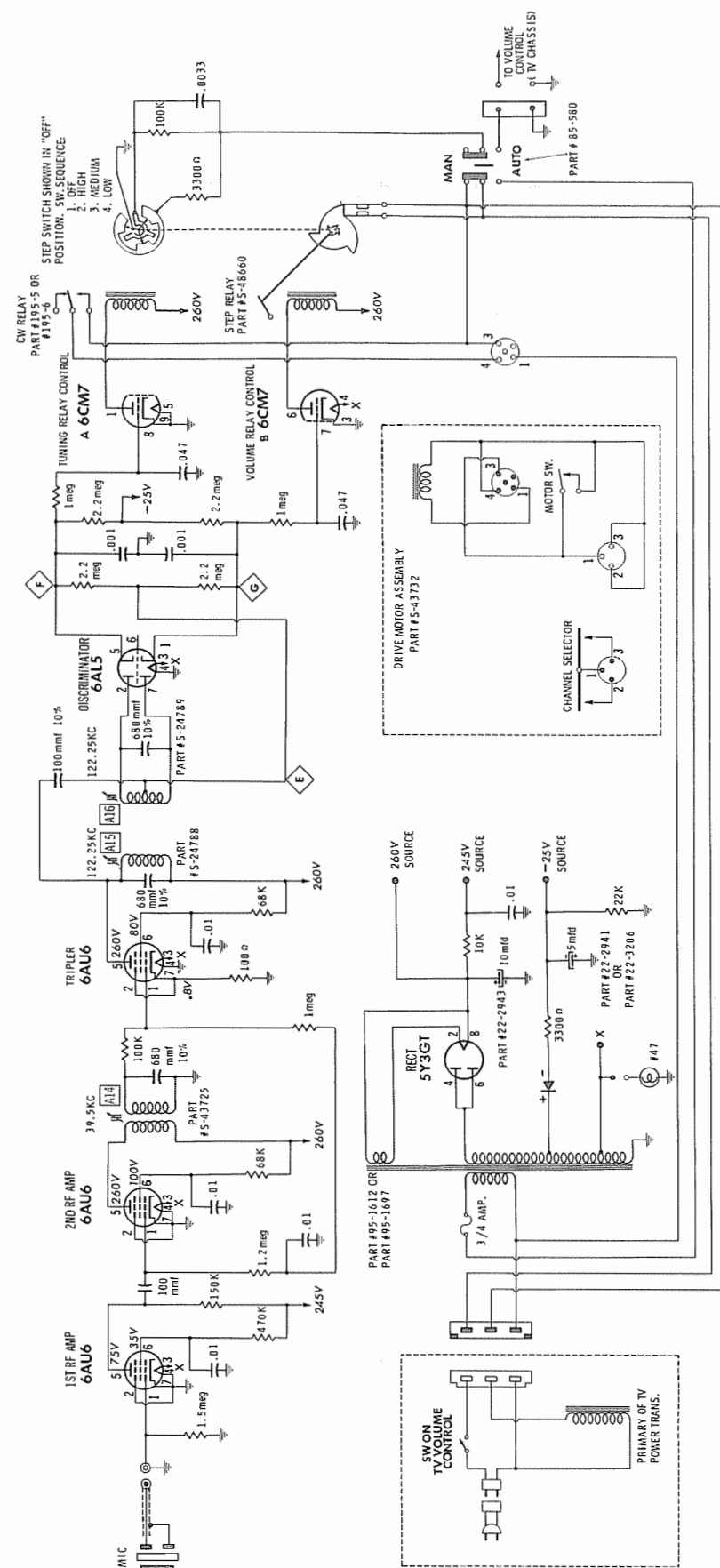
ZENITH CHASSIS 16G23,  
16G23Q, 16G23U





CHASSIS BOTTOM VIEW - RESISTOR, INDUCTOR, TRANSFORMER IDENT.

ZENITH CHASSIS 16G23,  
16G23Q, 16G23U



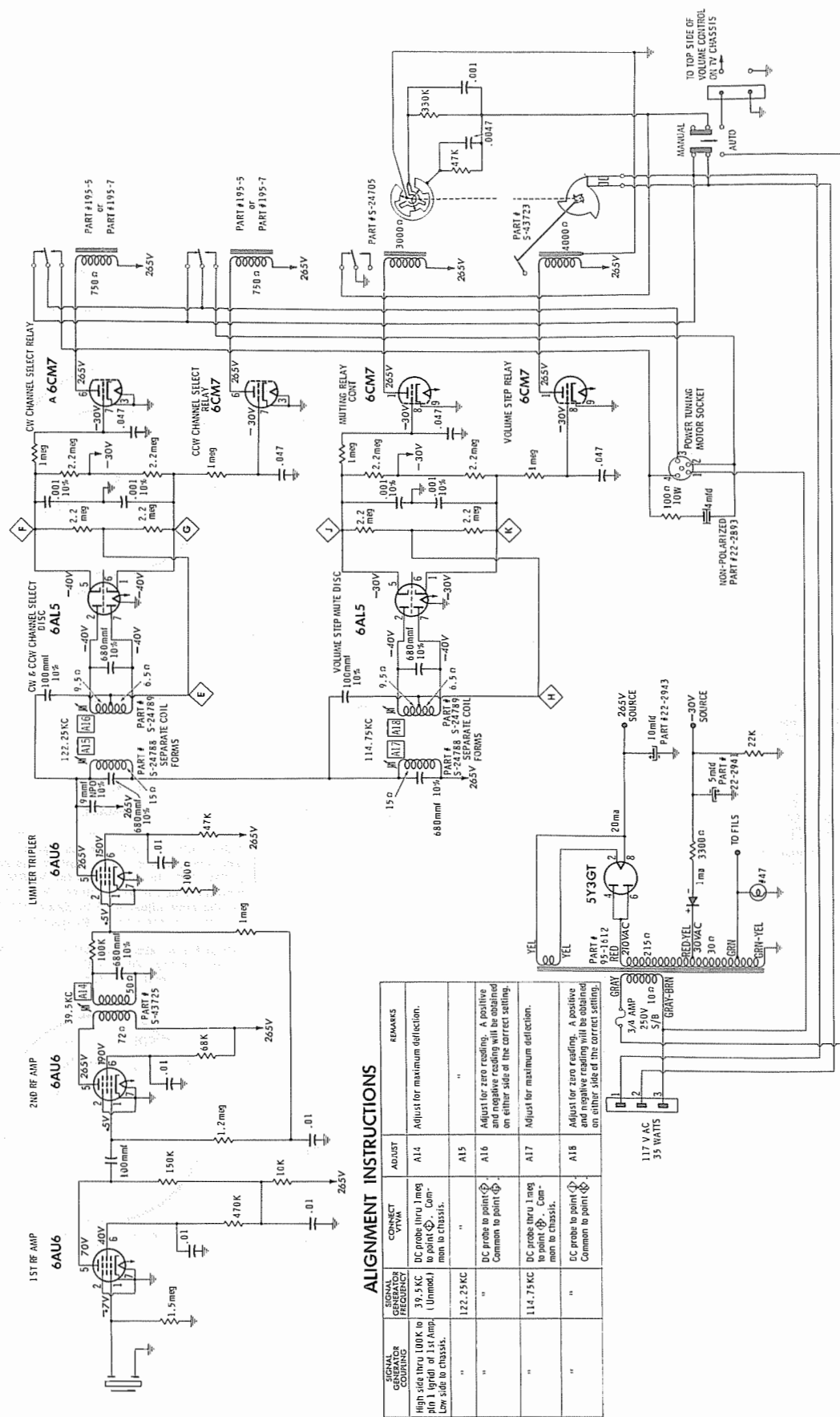
## ALIGNMENT INSTRUCTIONS

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CONNECTION	ADJUST	REMARKS
High side thru 100K to 100 ohm load. Amp. Low side to chassis.	49.5 KC (Unmod.)	DC probe thru 1 meg to 100 ohm load. Common to chassis.	A14	Adjust for maximum output.
	122.25 KC	"	A15	"
"	"	DC probe to point ①. Common to point ②.	A16	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

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REMOTE CONTROL RECEIVER - S-50153, S-51773



## ALIGNMENT INSTRUCTIONS

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CONNECT VITAL	ADJUST	REMARKS
	High side thru 100K to point 1 (Unmod.) Low side to chassis.	316.5 KC	DC probe thru 1 meg to point ①. Common to chassis.	A14	Adjust for maximum deflection.
	"	122.25 KC	"	A15	"
	"	"	DC probe to point ②. Common to point ①.	A16	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
	"	114.75 KC	DC probe thru 1 meg to point ②. Common to chassis.	A17	Adjust for maximum deflection.
	"	"	DC probe to point ②. Common to point ①.	A18	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

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REMOTE CONTROL RECEIVER S-50264, S-51774, S-51864

ZENITH CHASSIS 16G23,  
16G23Q, 16G23U

**FOLDER 2**



# VHF TUNER ALIGNMENT INSTRUCTIONS

175-173, -174, -175, -176, -180, -182

## PRE-ALIGNMENT INSTRUCTIONS

The High Voltage lead should be securely taped and kept away from the chassis.  
Allow a 20 minute warm-up period for the receiver and test equipment.  
Suggested Alignment Tools: A201 thru A212 ..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8278, 8987  
WALSCO #2531  
A213, A214, A215 ..... GENERAL CEMENT #5000, 5003, 8276, 8290  
WALSCO #2512, 2525

## VHF OSCILLATOR ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope.  
Use 10MC sweep unless otherwise noted.  
Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.  
Set the Fine Tuning to the center of its range.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213MC	211. 25MC 215. 75MC	13	Vert. Amp. thru 47K across Video Det. load.	A201	Adjust to place sound marker in trap notch as in Fig. 201. Video marker should fall at 50%.
		207MC	205. 25MC 209. 75MC	12		A202	
		201MC	199. 25MC 203. 75MC	11		A203	
		195MC	193. 25MC 197. 75MC	10		A204	
		189MC	187. 25MC 191. 75MC	9		A205	
		183MC	181. 25MC 185. 75MC	8		A206	
		177MC	175. 25MC 179. 75MC	7		A207	
		85MC	83. 25MC 87. 75MC	6		A208	
		79MC	77. 25MC 81. 75MC	5		A209	
		69MC	67. 25MC 71. 75MC	4		A210	
		63MC	61. 25MC 65. 75MC	3		A211	
		57MC	55. 25MC 59. 75MC	2		A212	

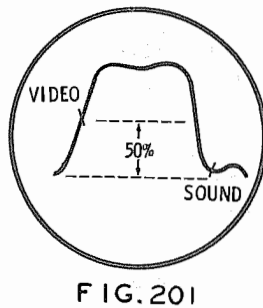


FIG. 201

## VHF RF AND MIXER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope.  
Use 10MC sweep unless otherwise noted.  
Coils not containing adjustable cores are adjusted by expanding or compressing coil turns.  
Connect the negative lead of a 4.5 volt bias supply to point Ⓢ. Positive to chassis.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
2. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	195MC	193. 25MC 197. 75MC	10	Vert. Amp. thru 10K to point Ⓢ. Low side to chassis.	A213, A214, A215	Adjust A213 and A214 for maximum amplitude and symmetry with markers as shown in Fig. 202. Increase bias for MINIMUM amplitude of response curve. Without changing the bias adjust A215 to obtain MINIMUM response on the scope. Restore bias.
3. "	"	213MC	211. 25MC 215. 75MC	13	"	A216	Adjust for maximum amplitude of response similar to Fig. 202. Adjust by compressing or expanding coil turns.
		207MC	205. 25MC 209. 75MC	12		A217	
		201MC	199. 25MC 203. 75MC	11		A218	
		195MC	193. 25MC 197. 75MC	10		A219	
		189MC	187. 25MC 191. 75MC	9		A220	
		183MC	181. 25MC 185. 75MC	8		A221	
		177MC	175. 25MC 179. 75MC	7		A222	
		85MC	83. 25MC 87. 75MC	6		A223	
		79MC	77. 25MC 81. 75MC	5		A224	
		69MC	67. 25MC 71. 75MC	4		A225	
		63MC	61. 25MC 65. 75MC	3		A226	
		57MC	55. 25MC 59. 75MC	2		A227	

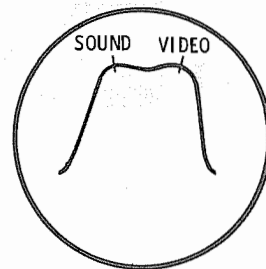


FIG. 202

# VHF TUNER ALIGNMENT INSTRUCTIONS

175-167, -168, -169, -203, -204, -206

## PRE-ALIGNMENT INSTRUCTIONS

Allow a 20 minute warm-up period for the receiver and test equipment.

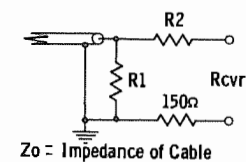
## VHF OSCILLATOR ALIGNMENT

Set the Fine Tuning to the center of its range by turning the Fine Tuning shaft until the small index hole in the drive cam is directly over the small hole just below the channel 13 oscillator adjustment screw. Starting with the highest channel operating in the area, adjust the appropriate oscillator adjustment screw for best picture and sound for each channel available.

## VHF RF AND MIXER ALIGNMENT

Connect the negative lead of a 2 volt bias supply to point Ⓢ. Positive to chassis.  
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.  
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.  
Use only enough sweep generator output to provide a usable pattern on scope.  
Use 10MC sweep unless otherwise noted.  
Coils not containing adjustable cores are adjusted by expanding or compressing coil turns.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Fig. 201	Across antenna terminals thru matching network (Fig. 201).	213MC	211. 25MC 215. 75MC	13	Vert. amp. thru 10K to point Ⓢ. Low side to chassis.	A201	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown.
2. "	"	207MC	205. 25MC 209. 75MC	12	"	A202	"
3. "	"	201MC	199. 25MC 203. 75MC	11	"	A203	"
4. "	"	195MC	193. 25MC 197. 75MC	10	"	A204	"
5. "	"	189MC	187. 25MC 191. 75MC	9	"	A205	"
6. "	"	183MC	181. 25MC 185. 75MC	8	"	A206	"
7. "	"	177MC	175. 25MC 179. 75MC	7	"	A207	"
8. "	"	85MC	83. 25MC 87. 75MC	6	"	A208, A209	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown. Adjust first coil for proper marker position and second coil for maximum gain and symmetry.
9. "	"	79MC	77. 25MC 81. 75MC	5	"	A210, A211	"
10. "	"	69MC	67. 25MC 71. 75MC	4	"	A212, A213	"
11. "	"	63MC	61. 25MC 65. 75MC	3	"	A214, A215	"
12. "	"	57MC	55. 25MC 59. 75MC	2	"	A216, A217	"



Zo = Impedance of Cable

Zo	R1	R2
50Ω	56Ω	120Ω
75Ω	82Ω	110Ω

FIG. 201

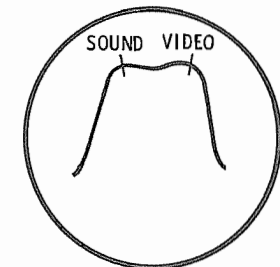
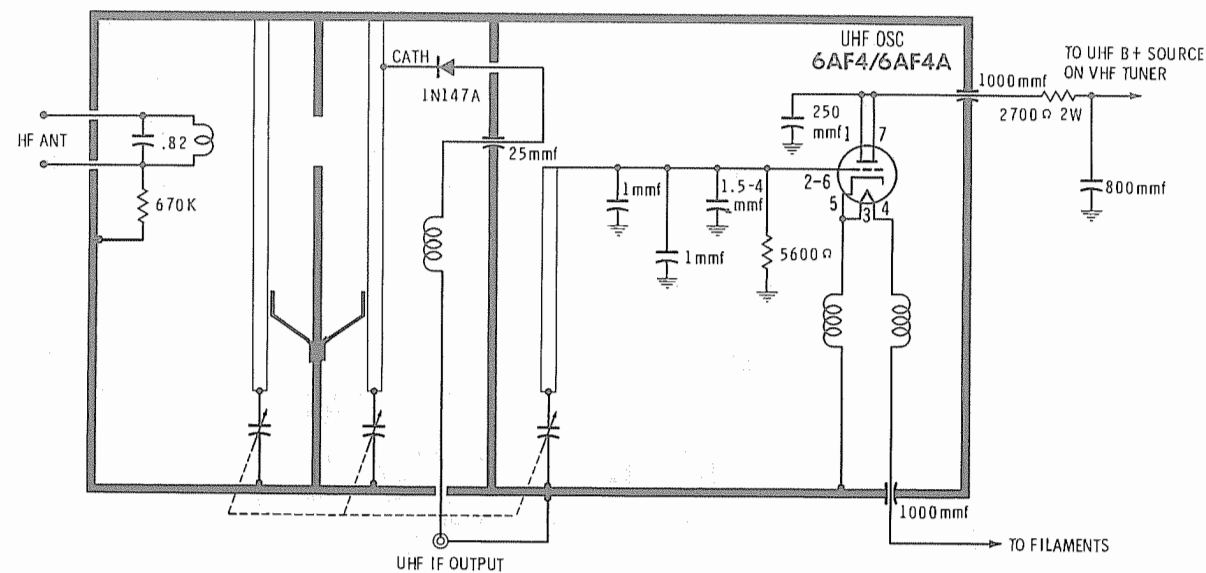


FIG. 202

ZENITH CHASSIS 16G23, 16G23Q, 16G23U

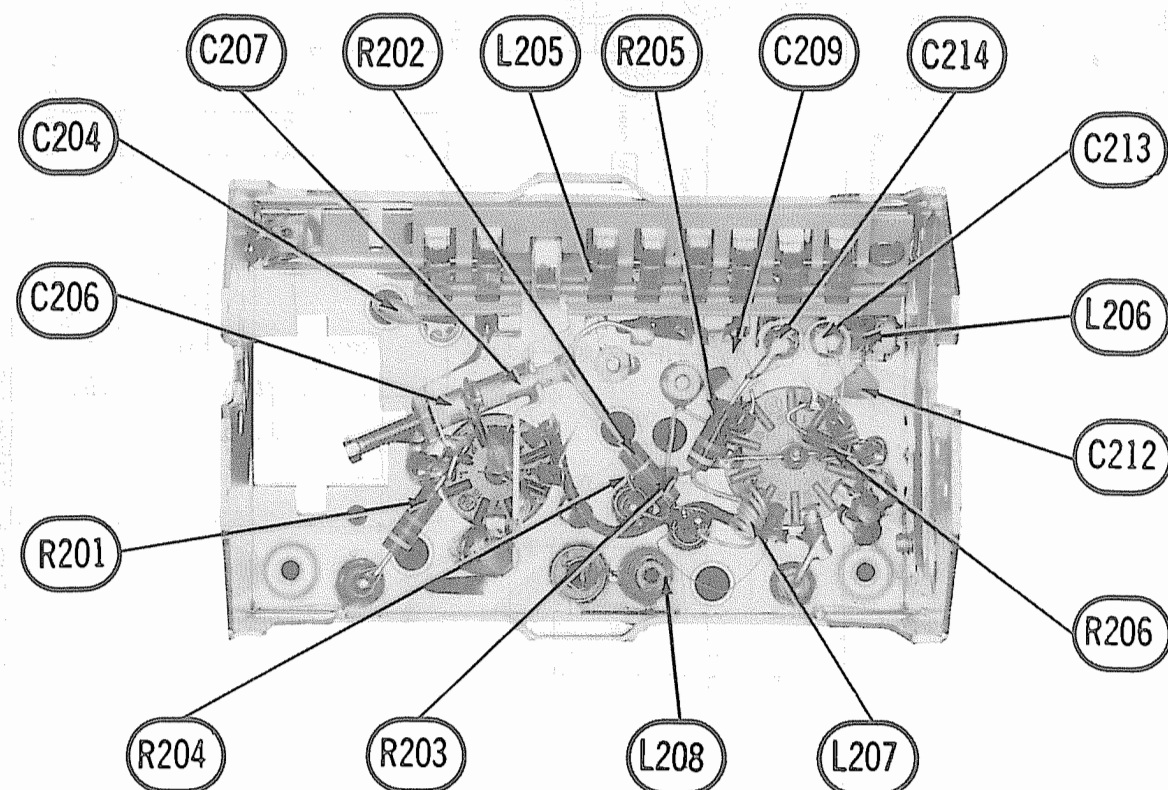
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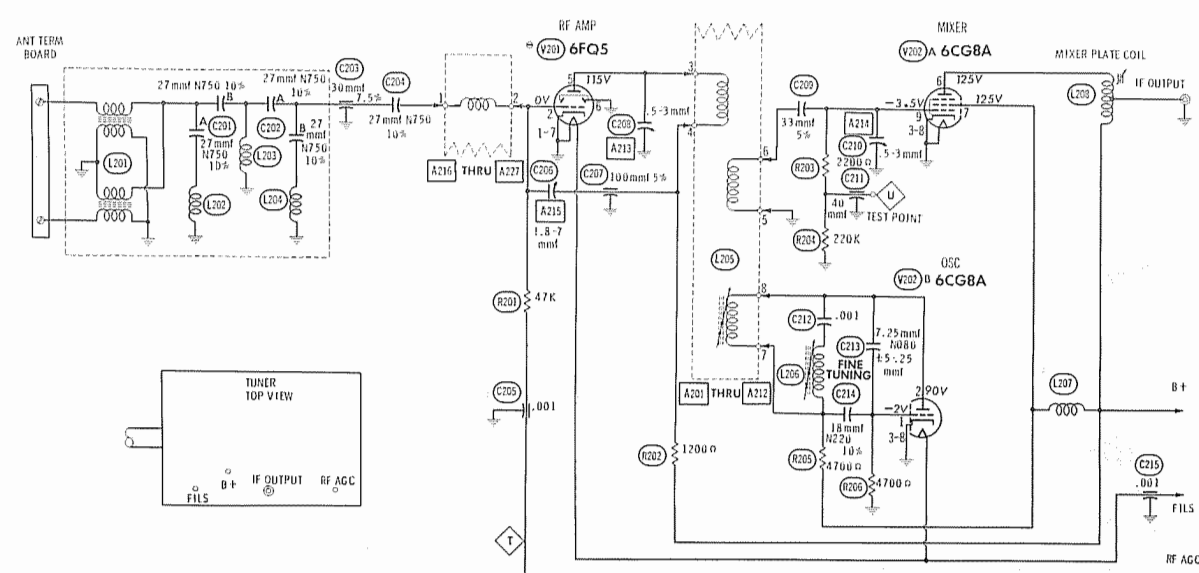


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UHF TUNER 175-8

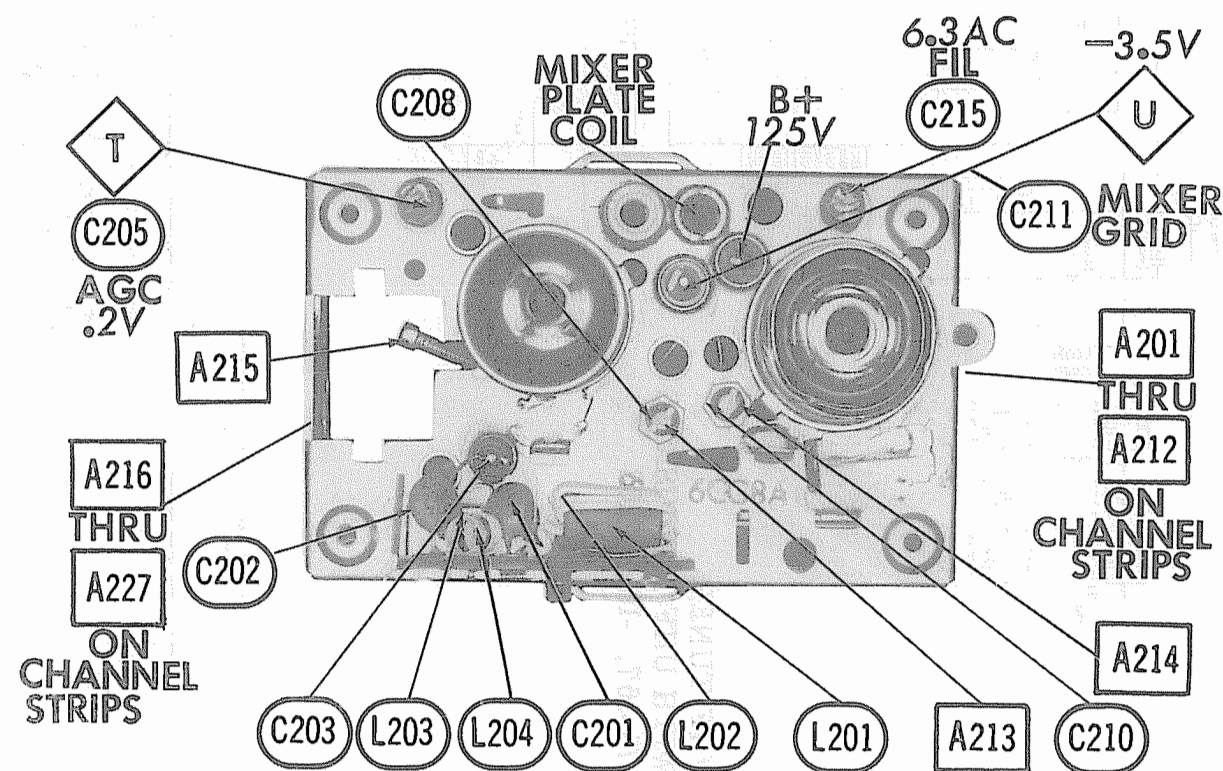


VHF TUNER 175-180 - BOTTOM VIEW



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VHF TUNER 175-174, -176, -180, -182



VHF TUNER 175-180 - TOP VIEW

SET 557 FOLDER 2

ZENITH CHASSIS 16G23,  
16G23Q, 16G23U

FOLDER 2



VHF TUNER  
175-168, -204, -206



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[illegible]

		MODEL NO.																																																	
		G2705R, RU	G2705Y, YU	G2707R, RU	G2707Y, YU	G2730E, EU	G2730R, RU	G2730W, WU	G2730M, MU	G2735L, LU	G2735R, RU	G2735W, WU	G2737E, EU	G2737R, RU	G2737W, WU	G2738E, EU	G2738M, MU	G2738R, RU	G2738W, WU	G2740H, HU	G2740R, RU	G2740W, WU	G2755R, RU	G2755W, WU	G2757Y, YU	G2760E, EU	G2760R, RU	G2760W, WU	G2768E, EU	G2768M, MU	G2768R, RU	G2768W, WU	G2767W, WU	G3341E	G3341M	G3341W	G3346E	G3346R	G3346W	G3348R	G3348W	G3350E	G3350R	G3350W							
DESCRIPTION		PART NO.																																																	
Knob-VHF Channel Selector		46-2530			X	X																																													
Knob- "		46-2510						X	X	X	X	X	X	X	X	X									X	X	X																								
Knob- "		5-50517																																			X	X	X	X	X	X									
Knob- "		46-2695															X	X	X	X	X	X	X				X	X	X	X	X	X	X	X																	
Knob- "		46-2703					X	X																																											
Knob- "		46-2551 and 5-47420																																																	
Knob-UHF Channel Selector		5-48229			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	X	X	X	X	X							X	X	X	X	X					
Knob-UHF Channel Indicator		5-48228			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	X	X	X	X	X																
Knob-Fine Tuning		5-49930						X	X	X	X	X	X	X	X	X										X	X	X																							
Knob- "		46-2035																																			X	X	X	X	X	X	X	X							
Knob- "		5-51107			X	X																																													
Knob- "		5-51956					X	X																																											
Knob- "		5-51893															X	X	X	X	X	X	X				X	X	X	X	X	X																			
Knob- "		5-52893																																																	
Knob- "		5-51867																																																	
Knob-Volume		5-45716			X	X	X	X	X	X	X	X	X	X	X	X																																			
Knob- "		5-46726																																																	

PART NO.	MODEL NO.	PART NO.	MODEL NO.
14-2931	F2710YZ, YZU	14-3282	F2755W, WU
14-2930	F2711EZ, EZU	14-3347	F2756E, EU
14-2929	F2711EZ, RZU	14-3346	F2756R, RU
14-2928	F2712WZ, WZU	14-3345	F2756W, WU
14-2336	F2735E, EU	14-3269	F2786E, EU
14-2335	F2735R, RU	14-3268	F2786R, RU
14-3234	F2735W, WU	14-3267	F2786W, WU
14-2339	F2738E, EU	14-3257	F3342E
14-3245	F2738M, MU	14-3256	F3342R
14-3238	F2738R, RU	14-3255	F3342W
14-2337	F2738W, WU	14-3349	F3348R
14-3308	F2739E, EU	14-3348	F3348W
14-3390	F2739W, WU	14-3248	F3350E
14-2288	F2740E, EU	14-3374	F3350R
14-3287	F2740R, RU	14-3373	F3350W
14-3286	F2740W, WU	14-3353	F3353W
14-3284	F2755H, HU	14-3356	F3354M
14-3285	F2755M, MU	14-3354	F3354R
14-3283	F2755R, RU		

PART NO.	MODEL NO.	PART NO.	MODEL NO.
14-1932	G2705R, YU	14-3491	G2752Y, YU
14-2936	G2705Y, RU	14-3665	G2780C, EU
14-3463	G2707R, RU	14-3664	G2780R, RU
14-3464	G2707Y, YU	14-3663	G2780W, WU
14-3572	G2730C, EU	14-3643	G2786C, EU
14-3571	G2730R, RU	14-3644	G2786M, MU
14-3570	G2730W, WU	14-3642	G2786R, RU
14-3573	G2730M, MU	14-3641	G2786W, WU
14-3609	G2735L, LU	14-3648	G2787W, WU
14-3235	G2735R, RU	14-3677	G3341E
14-3234	G2735W, WU	14-3678	G3341M
14-3704	G2737E, EU	14-3676	G3341R
14-3703	G2737R, RU	14-3675	G3341W
14-3702	G2737W, WU	14-3677	G3346E
14-3707	G2738C, EU	14-3676	G3346R
14-3708	G2738M, MU	14-3675	G3346W
14-3706	G2738R, RU	14-3678	G3346M
14-3705	G2738W, WU	14-3551	G3348R
14-3523	G2740H, HU	14-3550	G3348W
14-3522	G2740R, RU	14-3504	G3350E
14-3521	G2740W, WU	14-3503	G3350R
14-3490	G2752R, RU	14-3502	G3350W
14-3489	G2752W, WU		

• GENERAL ELECTRIC •			• RAYTHEON •		• SYLVANIA •	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	
V1	1st Video IF Amp.	6BZ6	V7	Audio Output	6AQ5A	
V2	2nd Video IF Amp.	6BZ6	V8	Vert. Mult. - Vert. Output	6EM7 (6EAT) *	
V3	3rd Video IF Amp.	EF184/6EJ7	V9	Horiz. AFC - Horiz. Osc.	6GH8	
V4	Video Output - Sound IF Amp.	6GN8	V10	Horiz. Output	6DQ8B	
V5	AGC Keying - Sync Sep. - Noise Limiter	6HS8	V11	Damper	6DE4 (6DA4A) * (6AX4GTB) *	
V6	Audio Detector	6BN6	V12	HV Rectifier	LJ3	
			V13	LV Rectifier	3DG4	

ITEM No.	REPLACEMENT DATA					NOTES
	ZENITH PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
V14	23ANP4	23ANP4/ATP4 ①	23ANP4 ①		23ANP4 ②	① Aluminized ② Silver Screen "85"

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	ZENITH PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1A	□40	400	22-3137	AFH54-57-93	C0890	XC3-41	FP333.2	TMT-3480	TVL-4663.4
B	△80	400							
C	△100	50							
C2A	□10	400	22-3457	AFH4-59	D0480	XC4-1	FP434.5	TMQ-4505	TVL-4652
B	□4	350							
C	△4	150							
D	20	25							
C3	1	350	22-3495	PRSL700	BR145	QTI-1	TC595	TD-2-450	TVA-1700

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELEMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.	
C4	.15	200V	P288N-15			CUB2P15	2DP-3-154	GEM-2015	2TM-P15
C5	.470		DI-470	DD-47I		BYA10T47	CCD-47I	B-347	10TS-T47
C6	.6	NPO ±.5mmf	DI-10000			C10V6C			
C7	.01	10%				PM6S1	CCD-103	GEM-1611	10TS-S10
C8A	.12	NPO 5%		TCZ-12		C10Q2C	CCTO-120	CNO-412	10TCC-Q12
B	.12	NPO 5%		TCZ-12		C10Q2C	CCTO-120	CNO-412	10TCC-Q12
C9	.15	200V	P288N-15			CUB2P15	2DP-3-154	GEM-2015	2TM-P15
C10	.01		BPD-01	DD-103		BYA10S1	CCD-103	B-110	5HK-S10
C11	.7	NPO ±.5mmf	NPO-DI 6.8	DTZ-6R8		C10V7C	CCTO-6R8	CNO-568	10TCC-V68
C12	.1	10%	NPO-SI 1.0	TCZ-1				CNO-510	10TCC-V10
C13A	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
B	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
C14	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
B	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
C15	.100		DI-100	DD-101		L10T1	CCD-101	GP310	10TS-T10
C16	.0022	10%	DI-2200			PM6D22	CCD-222	GP222	10TS-D22
C17	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
C18	5.5	N470 ±.5mmf	NPO-SI 4.7						
C19	4.7			TCZ-4B7		C10V47C	CCTO-47	CNO-547	10TCC-V47
C20	4.7			TCZ-4B7		C10V47C	CCTO-47	CNO-547	10TCC-V47
C21	.033	200V 10%		V84C2S33-10		PM6S33	4DP-2-333	GEM-1613	6TM-S33
C22	47	N75 5%	N750-DI 47	TCN-50		C10Q5U	CCTN-47U	CN7-447	10TCU-Q47
C23	50	N750 10%		TCZ-3R3		C10V33C	CCTO-3R3	CNO-533	10TCC-V33
C24	3.3	10%		TCN-27		C10Q27U	CCTN-270	CN7-427	10TCU-Q27
C25	27	N750 10%							
C26	10	N330 10%	N750-DI 25	TCN-50		C10Q5U	CCTO-470	CN7-447	10TCU-Q47
C27	50	N750 10%		DF-104		CUB4P1	4DP-3-104	GEM-401	4TM-P10
C28	.1	400V		BPD-001		BYA10D1	CCD-102	B-210	5HK-D10
C29	.001			DF-104		CUB4P1	4DP-3-104	GEM-401	4TM-P10
C30	.1	400V	P488N-1	DD-102		PM6D1	CCD-102	GP210	10TS-D10
C31	.001	10%	DI-1000	DD-102		PM6D1	CCD-102	B-110	5HK-S10
C32	.01		BPD-01	DD-103		BYA10D1			
C33	4.3	5%	DI-1000	DD-102		PM6D1	CCD-102	GP210	10TS-D10
C34A	.001	10%		DD-102		PM6D1	CCD-102	GP210	10TS-D10
B	.001	10%		DD-102		PM6D1	CCD-102	GP210	10TS-D10
C35	7.5	10%		DD-102		PM6D1	CCD-102	GP210	10TS-D10
C36	20	N75 10%	DI-470	DD-47I		BYA10T47	CCD-47I	B-347	10TS-T47
C37	.470			DD-103		BYA10S1	CCD-103	B-110	5HK-S10
C38	.01			BPD-0022		BYA10D22	CCD-222	B-222	5HK-D22
C39	.0022			BPD-0022		BYA10D22	CCD-222	B-222	5HK-D22
C40	.0022		P488N-1	DF-104		CUB4P1	4DP-3-104	GEM-401	4TM-P10
C41	.1	400V	BPD-0033	DD-332		BYA10D33	CCD-332	B-233	5HK-D33
C42	.0033		DI-470	DD-47I		BYA10T47	CCD-47I	B-347	10TS-T47
C43	.470								

**FOLDER 2**

## FOLDER 2



## TV PARTS LIST AND DESCRIPTIONS (Continued)

## FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.
C60	110 4000V 15000 10%	#22-2694			HVA20Q68		2DY-468
C81	68 2000V 10%						

# Zenith Part Number.

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

## CONTROLS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					INSTALLATION NOTES
			ZENITH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
RIA	1meg		63-4881	APL-697	C478-1meg-S	B11-137 *	PPI6L	Volume
B	Shaft			AK-33	RS-3/16	Not Req.	DS-37	Push-Pull Off-On
C	Switch			TT-84	Not Req.	SK6 *	Not Req.	Focus
R2	3meg		63-4455	B-70	B47-3meg-S	HLC-3	SU-59	Tone
R3A	1meg		63-4488	B-70	A47-1meg-Z	Q13-137	U53	
B	Shaft			Not Req.	KSS-3	Not Req.	Not Req.	
R4A	750K		63-4488	B-68	A47-750K-S	Q11-136	U54	Vert. Hold
B	Shaft			Not Req.	KSS-3	Not Req.	Not Req.	
R5	5meg		63-4860	TT-87	B47-5meg-S	HLC-5	PTA56L	Vert. Size (Height)
R6A	250K		63-4487	B-51	A47-250K-Z	Q13-130	U44	Brightness
B	Shaft			Not Req.	KSS-3	Not Req.	Not Req.	
R7	30K		63-4489					Contrast
R8	10K Tap							
R8A	2000Ω		63-4784	WN-152		112-1500	FL-1K	Vert. Linearity
B	850Ω Stop							
R9A	10K		63-4095	TT-14	B47-10K-S	B11-118	TAL4L	AGC
B	Shaft			Not Req.	Not Req.	TM4	Not Req.	
R10	750Ω		63-3284	WN-75L	39-800	112-850	FL-750	Buzz
B	100Ω Stop							
R11A	5meg		63-4012	TT-87	B47-5meg-Z	B13-141	PTA56L	Fringe Lock (Sync Stab.)
B	Shaft			Not Req.	Not Req.	TM4	Not Req.	

\* Factory Assembled Part #PPQ13-137 (SK8).

\*\* Use 520Ω, 2W Resistor in series with terminal.

† Use 100Ω, 2W Resistor in series with terminal.

## RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA		ITEM No.	RATING	REMARKS	REPLACEMENT DATA	
			IRC PART No.	WORKMAN TV PART No.				IRC PART No.	WORKMAN TV PART No.
R12	4700Ω 7W		PW7-4700	7W-SQ-4700	Note 1	R52	680K		
R13	2.2meg					R53	10meg		
R14	680K					R54	22K 2W		
R15	10K					R55	82K		
R16	150Ω					R56	150K		
R17	33K					R57	47K		
R18	18K				(27K) *	R58	100K		
R19	220Ω					R59	470K 1W		
R20	58Ω					R60	680Ω		
R21	56Ω					R61	27K 2W		
R22	1500Ω					R62	390K		
R23	56K					R63	1000Ω 1W		
R24	220Ω					R64	680Ω 1W		
R25	22Ω					R65	330K		
R26	12K					R66	2.2meg		
R27	270K					R67	1000Ω		
R28	3300Ω 1W					R68	2.2meg		
R29	1000Ω					R69	39K		
R30	330Ω					R70	82K		
R31	1800Ω					R71	560Ω		
R32	39K					R72	560Ω		
R33	7500Ω 5W		PW5-7500	7W-SQ-7500	(27K) *	R73	100K		
R34	22K					R74	330K		
R35	68K					R75	330K		
R36	100K					R76	1meg		
R37	15K					R77	120K		
R38	27K 2W					R78	100K		
R39	220K					R79	100K		
R40	15Ω					R80	10meg		
R41	3900Ω					R81	120K 2W		
R42	82K					R82	47K		
R43	39K					R83	18K		
R44	330K					R84	100Ω		
R45	15K					R85	1meg		
R46	470K					R86	100Ω		
R47	470K 1W					R87	8200Ω 3W	PW3-8200	3W-SQ-8200
R48	15K					R88	1000Ω		
R49	100K					R89	6.8Ω		
R50	330K					R90	22K 1W		
R51	3.3meg					R91	230K		
						R92			#63-4726

Note 1. Some versions may use 5200Ω 7W or 4700Ω 7W (Value depends on B+ Source Voltage).

\* Alternate Value

# Zenith Part Number

## COILS (RF-IF)

ITEM No.	USE	REMARKS	REPLACEMENT DATA					NOTES
			ZENITH PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1A	1st Video IF		S-52410 ①	TV-132	6228	RTC-8626	T218	① Complete Assembly, Part #S-49594.
B	41.25MC Trap				6226	RTC-8626	T218	② Complete Assembly, Part #S-47967.
L2A	39.75MC Trap		S-41883	TV-152	6225	RTC-8556	T218	③ Wound on 8200Ω Resistor.
B	47.25MC Trap				6225	RTC-8556	T218	④ Complete Assembly, Part #S-49592.
L3A	2nd Video IF		S-41889		6222	RTC-8553	T225	⑤ Wound on 5600Ω Resistor.
B	47.25MC Trap							⑥ Complete Assembly, Part #S-43717.
L4	3rd Video IF		S-51643	TV-130	6224	RTC-8555	T217	⑦ Parallel with 8200Ω Resistor.
L5	4th Video IF		S-47968					⑧ Parallel with 5600Ω Resistor.
L6	Peaking (90uh)		S-41879	TV-181	6177	RTC-8594	T304	
L7	RF Choke (6uh)		S-21888	BC-585	4610	RTC-8520	T859	
L8	Peaking (175uh)		S-52645 ③	TV-184 †	6180 †	RTC-8579 †	T310	
L9A	4.5MC Trap		S-50341 ④	TV-120	1482 1FT	RTC-9056	T253	
B	1st Sound IF							
L10	Peaking (250uh)		S-16011	TV-185	6181	RTC-8598	T315	
L11	Peaking (170uh)		S-43618	TV-184 *	6180 *	RTC-8597 *	T310 *	
L12	2nd Sound IF		S-41899	TV-149				
L13	Quadrature		S-47702	TV-121	1480	RTC-8605	T251	
L14	RF Choke (10uh)		S-22777	BC-586	4612	RTC-8522	T860	

## COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ZENITH PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Thordarson PART No.	
L15	Horiz. Osc. (Horiz. Hold)	S-45878				HS-7	T104

## FILTER CHOKE

ITEM No.	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000 Ω)	REPLACEMENT DATA				NOTES
				ZENITH PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
L16	.270A	45Ω	1.3 Hy.	95-1681	C-2998	C-2343	26C44	C-28X

## TRANSFORMER (POWER)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					NOTES
			ZENITH PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	117V @ 1.6A	500VCT @ .275A DC	95-1816				R-92A	
	SEC. 3	SEC. 4	SEC. 5					
	6.3V @ 8.1A							

## 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 Yoke (Horiz. 13MH)	95-1856	A-282L	A-8149	26875 ①	A-131X	
T3	(92%) (Vert. 45MH)	95-1768 †	MDF-124	DY-39A ②	Y-39 ②	Y-82-1	
	Rear Cover and Centering Device	S-23237					
T4	Horiz. Output	S-50095	HVO-188			D-201	

① Use 8 to 1 Turns Ratio; connect as autotransformer.

② Connect same as original. (Use original 1K ½ watt Resistor and Thermal Resistor).

† Includes R92

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA					NOTES
		ZENITH PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T5	8600Ω	3-4Ω	95-1560	A-2900	A-3850	24852	S-1TX

## SPEAKER

ITEM No.	TYPE	SIZE	FIELD	V. C. IMP.	REPLACEMENT DATA		NOTES
					ZENITH PART No.	QUAM PART No.	
SP1	5" x 7"	PM	6-8Ω		49-893 ①	57A1Z8.5	① Used in Models G3350R, W, E.
SP2	5" x 7"	PM	6-8Ω		49-893 ①	57A1Z8.5	② Used in Models G2705R, RU, Y, YU; G2730E, EU, M, MU, R, RU, W, WU.
		PM			49-943 ②		③ Used in Models G2707R, RU, Y, YU.
		PM			49-945 ③		④ Used in Models G2735L, LU, R, RU, W, WU.
		PM			49-907 ④		⑤ Used in Models G2737E, EU, R, RU, W, WU; G2738E, EU, M, MU, R, RU, W, WU; G3341E, M, R, W; G3346E, M, R, W.
	6" x 9"	PM	3-4Ω		49-886 ⑤	69A3	⑥ Used in Models G2740H, HU, R, RU, W, WU; G2752R, RU, Y, YU, W, WU; G3348R, W.
		PM			49-851 ⑥		⑦ Two used in Models G2780E, EU, R, RU, W, WU.
		PM			49-948 ⑦		⑧ Two used in Models G2788E, EU, M, MU, R, RU, W, WU; G2787W, WU.
	3½" 10"	PM	10-12Ω		49-949 ⑧	3A15T212	
		PM	6-8Ω		49-782 ⑨	10A4A26.4	
		PM			49-914 ⑨		

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ZENITH PART No.	REPLACEMENT DATA
K1	Vert. Integrator		87-8	
K2	Vert. Feedback		87-7	

## FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			ZENITH PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M1	N	7/10A 250V S/B	136-38	62-21	333.700 (N 7/10 250V S/B)	348010	N 7/10	HN ½ - 3/4
M2	3AG	5A 125V S/B	130-46	83-3575	313005 (3AG 5A 125V S/B)	357001	MDX5	4405
M3	1½"	length	#24 wire					

## SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		ZENITH PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
M4		103-32 *	6GCI		
M5	1N295	103-23		1N295	Dual Selenium, Common Cathode Type, Horiz. AFC Video Detector
					* Alternate Pt. #103-20.

## MISCELLANEOUS

ITEM No.	PART NAME	ZENITH PART No.	NOTES
M6	Tuner	175-180	VHF, Complete, Used in Models G3341E, M, R, W; G3346E, M, R, W. STANDARD COIL REPLACEMENT #GG-4220A (Use original tuner shaft).

## MISCELLANEOUS (cont)

ITEM No.	PART NAME	ZENITH PART No.	NOTES
	Tuner	175-174	VHF Complete, Used in Models G2738E, M, R; G2740E, R, W; G2788E, M, R, W, G2787W, G2780E, R, W.
	Tuner	175-182	VHF Complete, Used in Models G3348R, W; G3350E, R, W.
	Tuner	175-178	VHF Complete, Used in Models G2730E, R, W, M; G2735L, R, W; G2737E, R, W; G2752R, W, Y.
	Tuner	175-175	VHF with UHF Provisions, Models G2730E, RU, WU, MU; G2735LU, RU, WU; G2737EU, RU, WU; G2752RU, WU, YU.
	Tuner	175-173	VHF with UHF Provisions, Models G2738E, MU, RU, WU; G2740HU, RU, WU; G2780EU, RU, WU; G2786EU, MU, RU, WU; G2787WU