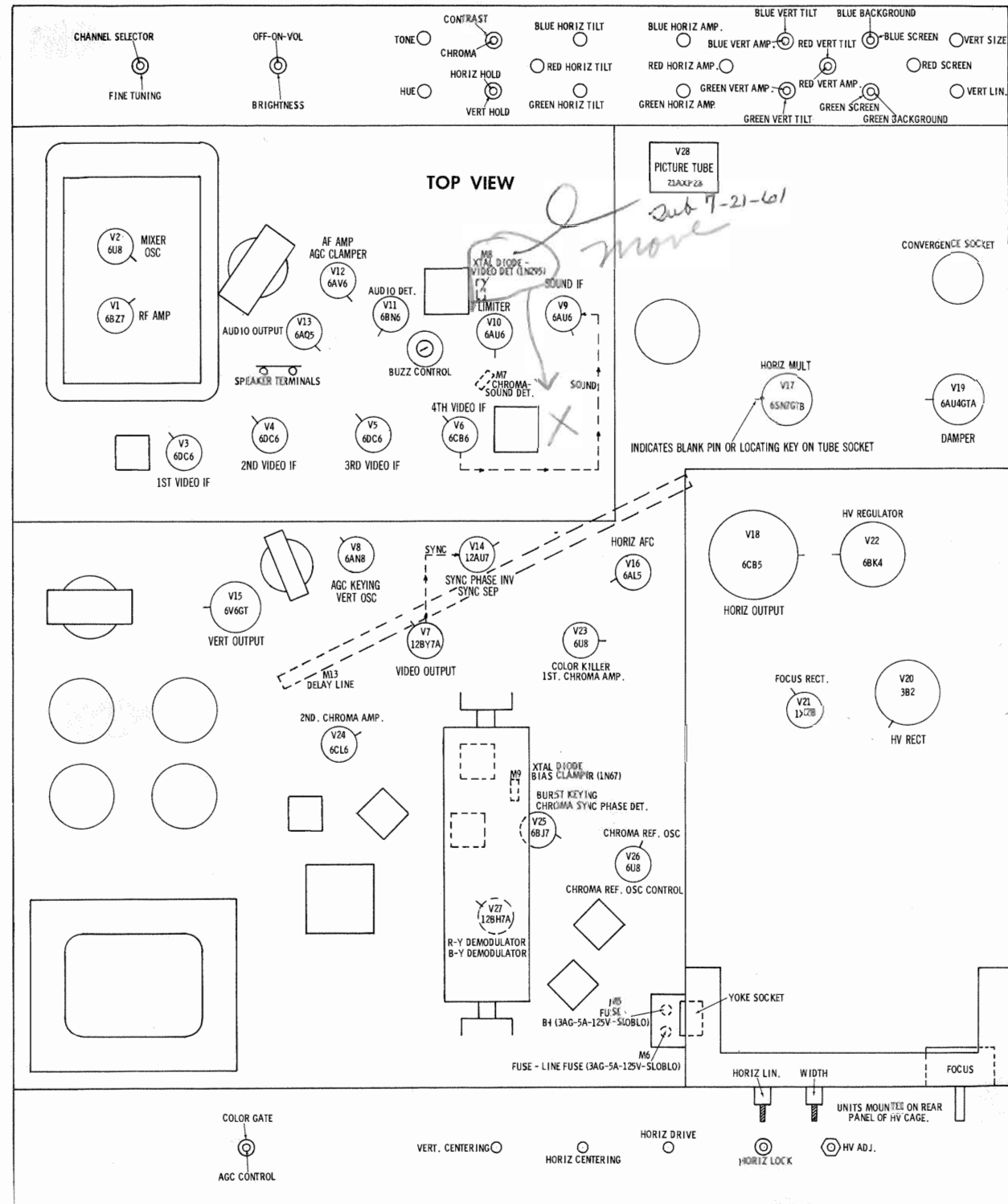


TUBE PLACEMENT CHART



PHOTOFACT* Folder



**SENTINEL
MODELS 1U-816, 1U-826**



**SENTINEL
MODELS 1U-816, 1U-826**

SENTINEL MODEL 1U-816	
TRADE NAME	Sentinel Models 1U-816, 1U-826
MANUFACTURER	Sentinel Radio Corp., 2100 W. Dempster St., Evanston, Illinois Sentinel Radio Co., Fort Wayne 4, Indiana
TYPE SET	Color Television Receiver
TUBES	Twenty-eight
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 3.35 Amp. @ 117 Volts AC

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SET 344

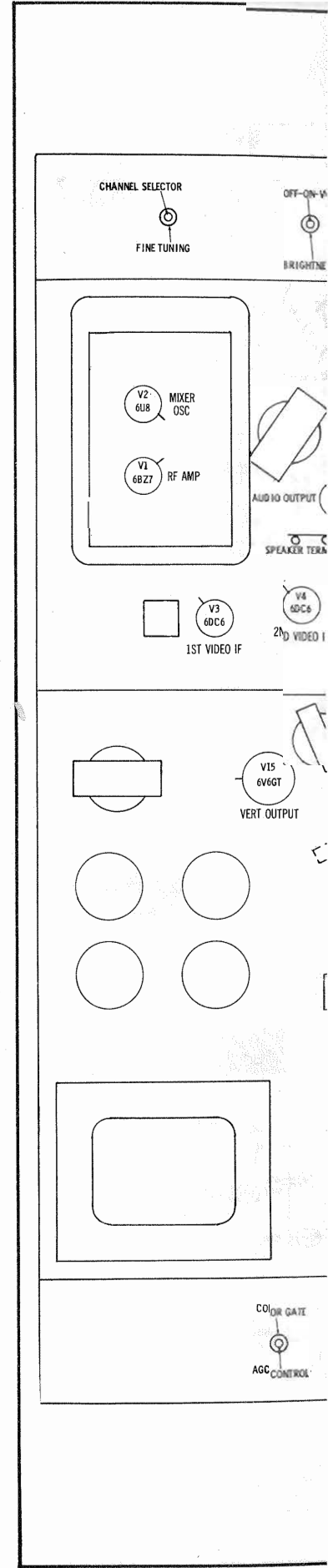
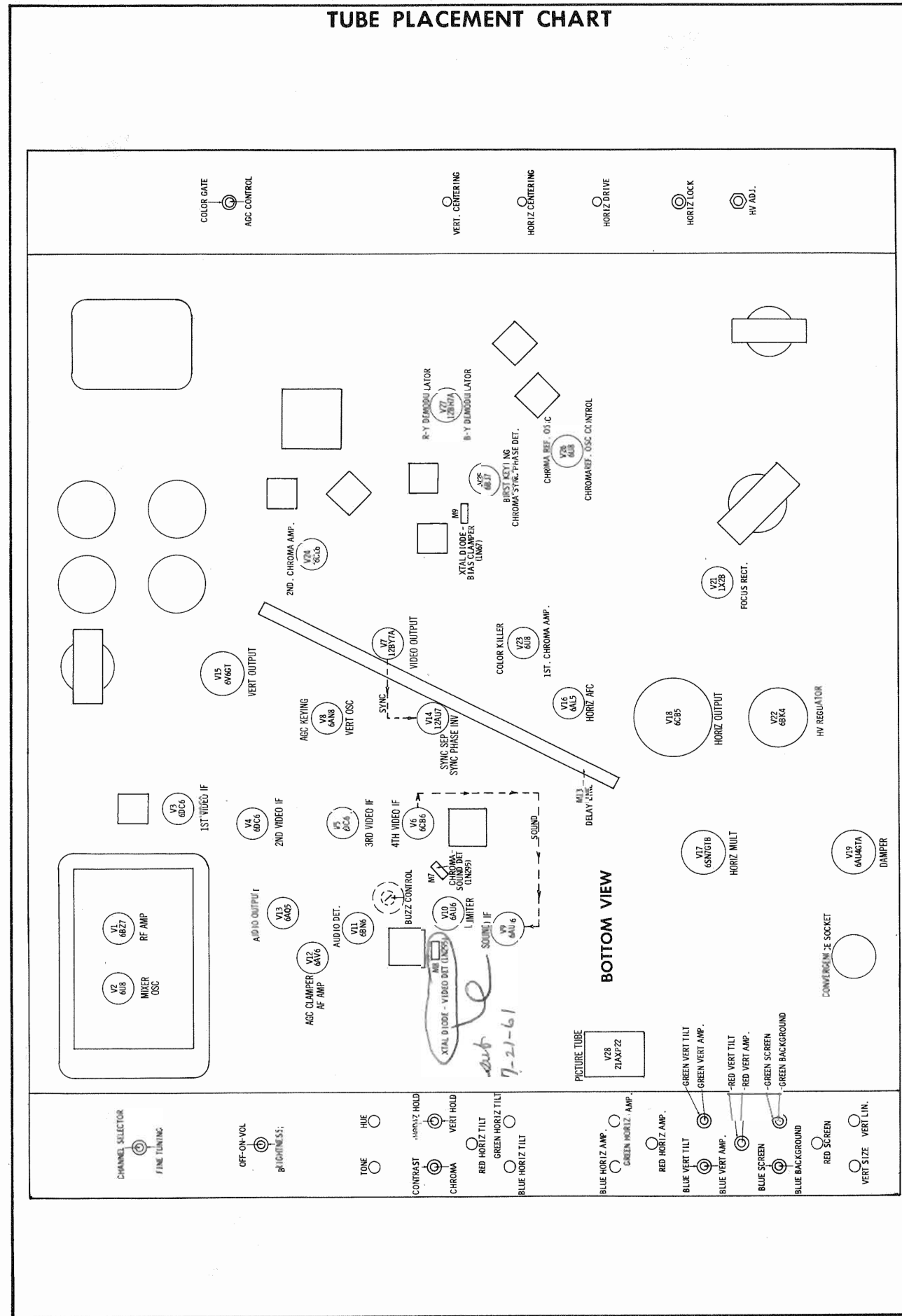
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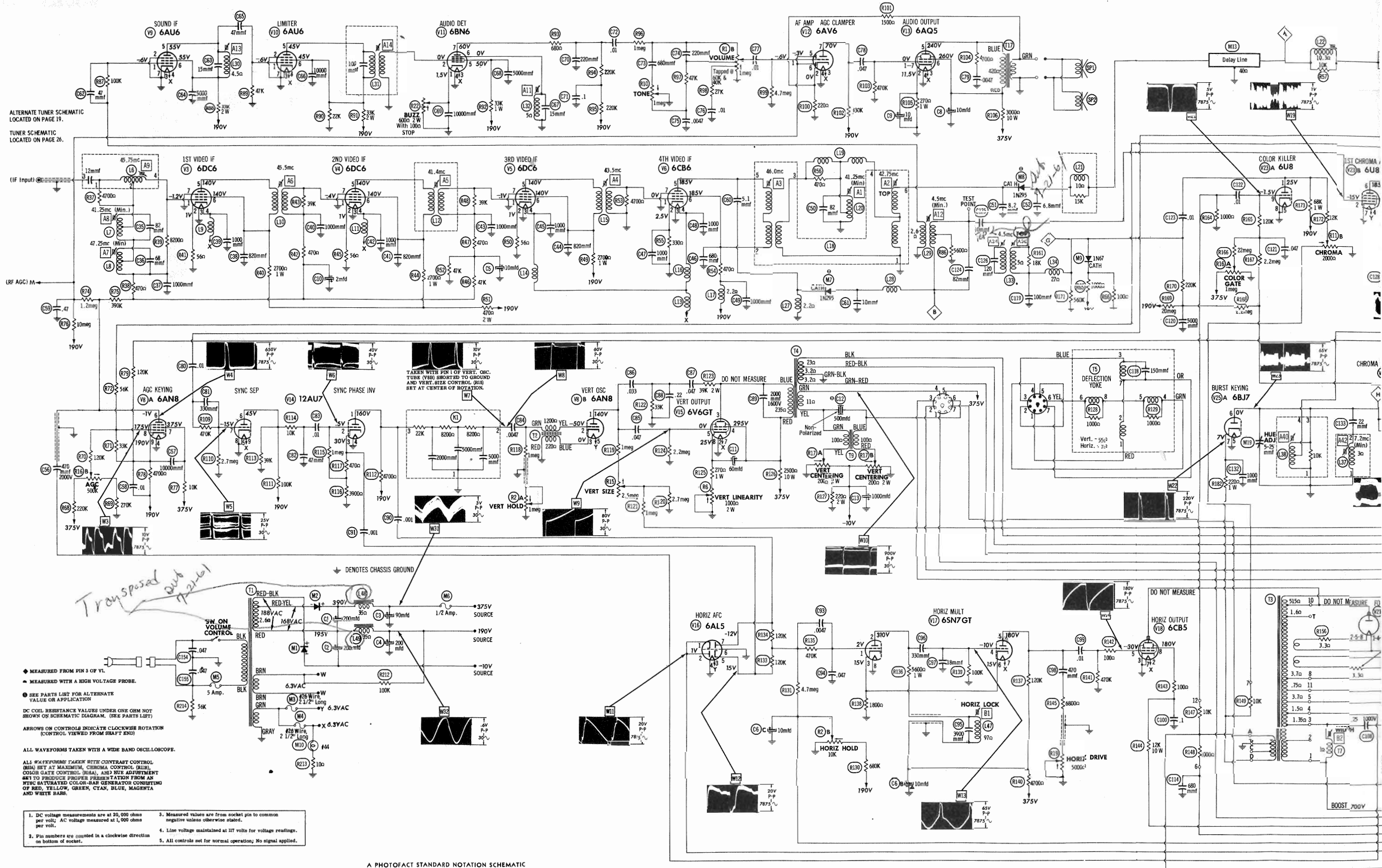
RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6BZ7	§ 505Ω	270K	INF	0Ω	.1Ω	INF	1.4Meg	0Ω	0Ω
V2	6U8	§13.5K	200K	§ 30K	.1Ω	0Ω	8500Ω	0Ω	0Ω	10K
V3	6DC6	94K	56Ω	0Ω	.1Ω	§ 3300Ω	§ 3300Ω	0Ω		
V4	6DC6	94K	56Ω	0Ω	.1Ω	§ 3300Ω	§ 3300Ω	0Ω		
V5	6DC6	47K	56Ω	0Ω	.1Ω	§ 2700Ω	§ 2700Ω	0Ω		
V6	6CB6	0Ω	330Ω	0Ω	.1Ω	§ 505Ω	§ 505Ω	0Ω		
V7	12BY7	147Ω	4100Ω	0Ω •	.1Ω	.1Ω	0Ω	§ 5600Ω	§ 3900Ω	0Ω
V8	6AN8	*2.5Meg	1.4Meg	220Ω	0Ω	.1Ω	420K	†10K	§ 40K	§4700Ω
V9	6AU6	100K	0Ω	0Ω	.1Ω	§ 33K	§ 33K	0Ω		
V10	6AU6	47K	0Ω	0Ω	.1Ω	§ 16K	§ 16K	0Ω		
V11	6BN6	340Ω	.5Ω	.1Ω	0Ω	§ 33K	5Ω	§ 450K		
V12	6AV6	4.7Meg	220Ω	.1Ω	0Ω	1.4Meg	1.4Meg	§ 330K		
V13	6AQ5	470K	270Ω	.1Ω	0Ω	†3400Ω	†3000Ω	470K		
V14	12AU7	§ 4700Ω	1Meg	4000Ω	0Ω	0Ω	§ 73K	2.7Meg	0Ω	.1Ω
V15	6V6GT	NC	0Ω	†2700Ω	†2500Ω	2.2Meg	NC	.1Ω	800Ω	
V16	6AL5	6200Ω	6200Ω	.1Ω	0Ω	4.7Meg	0Ω	4.7Meg		
V17	6SN7GT	5Meg	†10K	1800Ω	100K	†130K	1800Ω	.1Ω	0Ω	
V18	6CB5	NC	.1Ω	0Ω	TP	470K	NC	0Ω	†12K	TOP CAP *5Ω
V19	6AU4GTA	NC	NC	330K	NC	†40Ω	NC	.1Ω	0Ω	
V20	3B2	PINS 1 - 8 HAVE INF RESISTANCE								TOP CAP *52Ω
V21	1X2B	12Meg	NC	12Meg	12Meg	12Meg	12Meg	TP	12Meg	12Meg
V22	6BK4	†1000Ω	§ 100K	NC	NC	*360K	NC	§ 100K	NC	TOP CAP INF
V23	6U8	§ 68K	380K	§ 10.5K	.1Ω	0Ω	§ 560Ω	0Ω	0Ω	3.3Meg
V24	6CL6	0Ω	400Ω	†20K	0Ω	.1Ω	†4000Ω	0Ω	†20K	400Ω
V25	6BJ7	2.2Meg	1.6Ω	TP	.1Ω	0Ω	1.6Ω	220Ω	2.2Meg	1.6Ω
V26	6U8	§ 560Ω	100K	§ 10.5K	.1Ω	0Ω	§ 560Ω	0Ω	2700Ω	1.7Meg
V27	12BH7	†40K	17K	6500Ω	0Ω	0Ω	†22K	17K	6500Ω	.1Ω
V28	21AXP22	§ 100K	§ 100K	*420K	§ 47K	§ 47K	80K	†470K	PIN 9 10Meg	PIN 11 †470K
		PIN 12 †150K	PIN 13 †47K	PIN 14 § 100K						

† MEASURED FROM POSITIVE SIDE OF C1.
 § MEASURED FROM POSITIVE SIDE OF C2.
 • MEASURED FROM PIN 3 OF V19.

TUBE PLACEMENT CHART



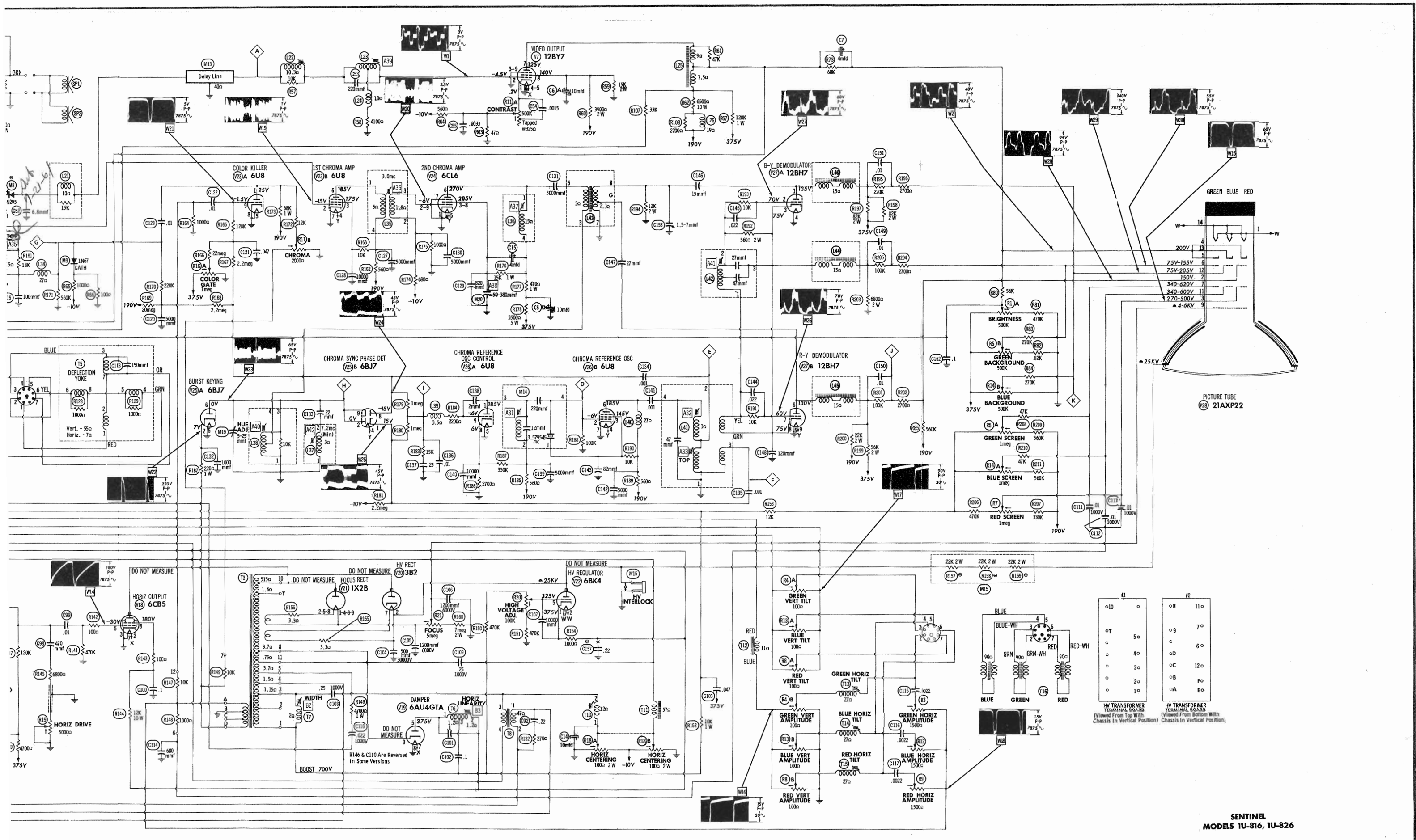


ALTERNATE TUNER SCHEMATIC
LOCATED ON PAGE 19.
TUNER SCHEMATIC
LOCATED ON PAGE 26.

MEASURED FROM PIN 3 OF V1.
MEASURED WITH A HIGH VOLTAGE PROBE.
SEE PARTS LIST FOR ALTERNATE
VALUE OR APPLICATION.
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT
SHOWN ON SCHEMATIC DIAGRAM. (SEE PARTS LIST)
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION
(CONTROL VIEWED FROM SHAFT END)
ALL WAVEFORMS TAKEN WITH A WIDE BAND OSCILLOSCOPE.
ALL WAVEFORMS TAKEN WITH CONTRAST CONTROL
(R10) SET AT MAXIMUM, CHROMA CONTROL (R11),
COLOR GATE CONTROL (R16A), AND HUE ADJUSTMENT
SET TO PRODUCE PROPER PRESENTATION FROM AN
RFG SATURATED COLOR-BAR GENERATOR CONSISTING
OF RED, YELLOW, GREEN, CYAN, BLUE, MAGENTA
AND WHITE BARS.

1. DC voltage measurements are at 20,000 ohms per volt; AC voltage measured at 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. All controls set for normal operation; No signal applied.

A PHOTOCOPY STANDARD NOTATION SCHEMATIC
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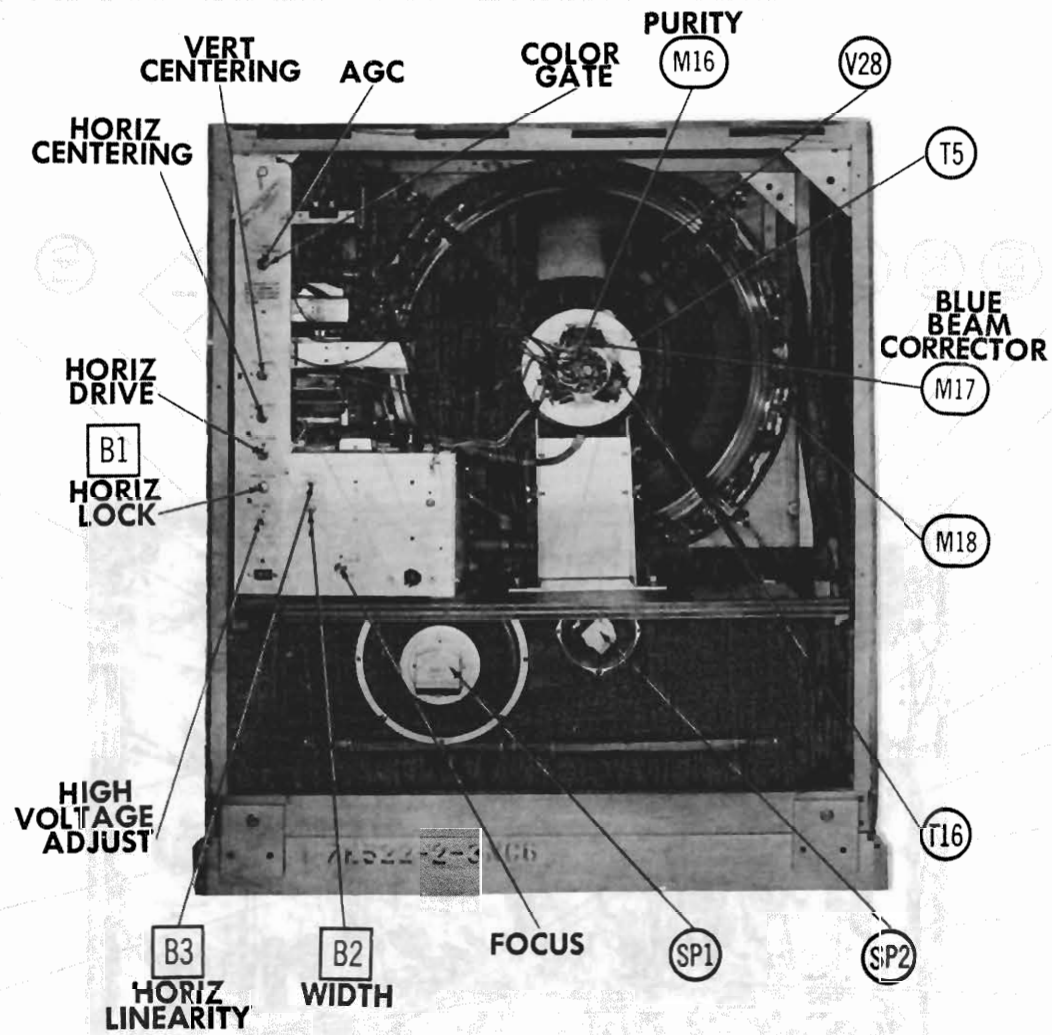


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#1		#2	
o10	o	o8	11o
oT	5o	o9	7o
o	4o	oD	6o
o	3o	oC	12o
o	2o	oB	Fo
o	1o	oA	Eo

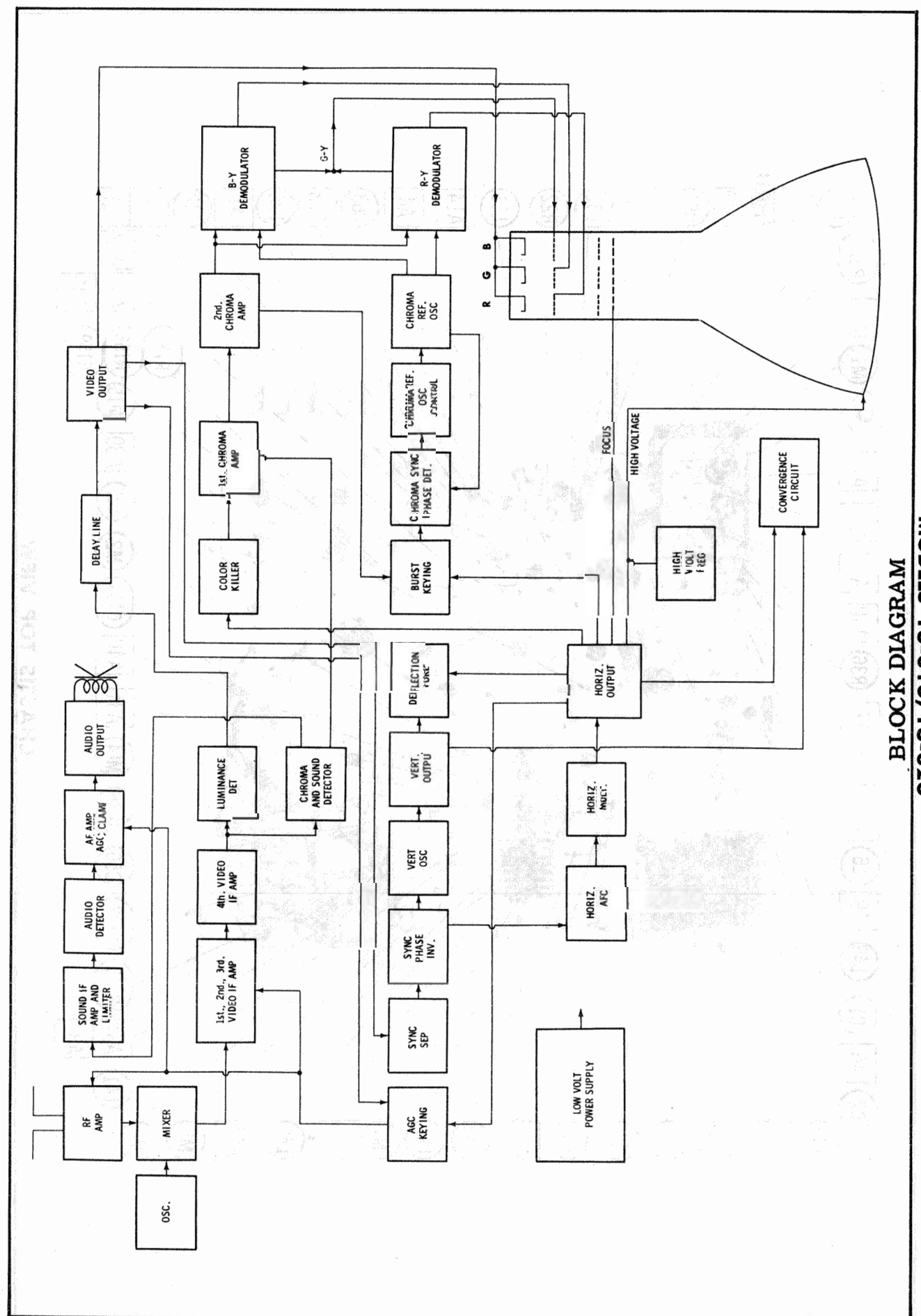
HV TRANSFORMER TERMINAL BOARD (Viewed From Top With Chassis in Vertical Position)
 HV TRANSFORMER TERMINAL BOARD (Viewed From Bottom With Chassis in Vertical Position)



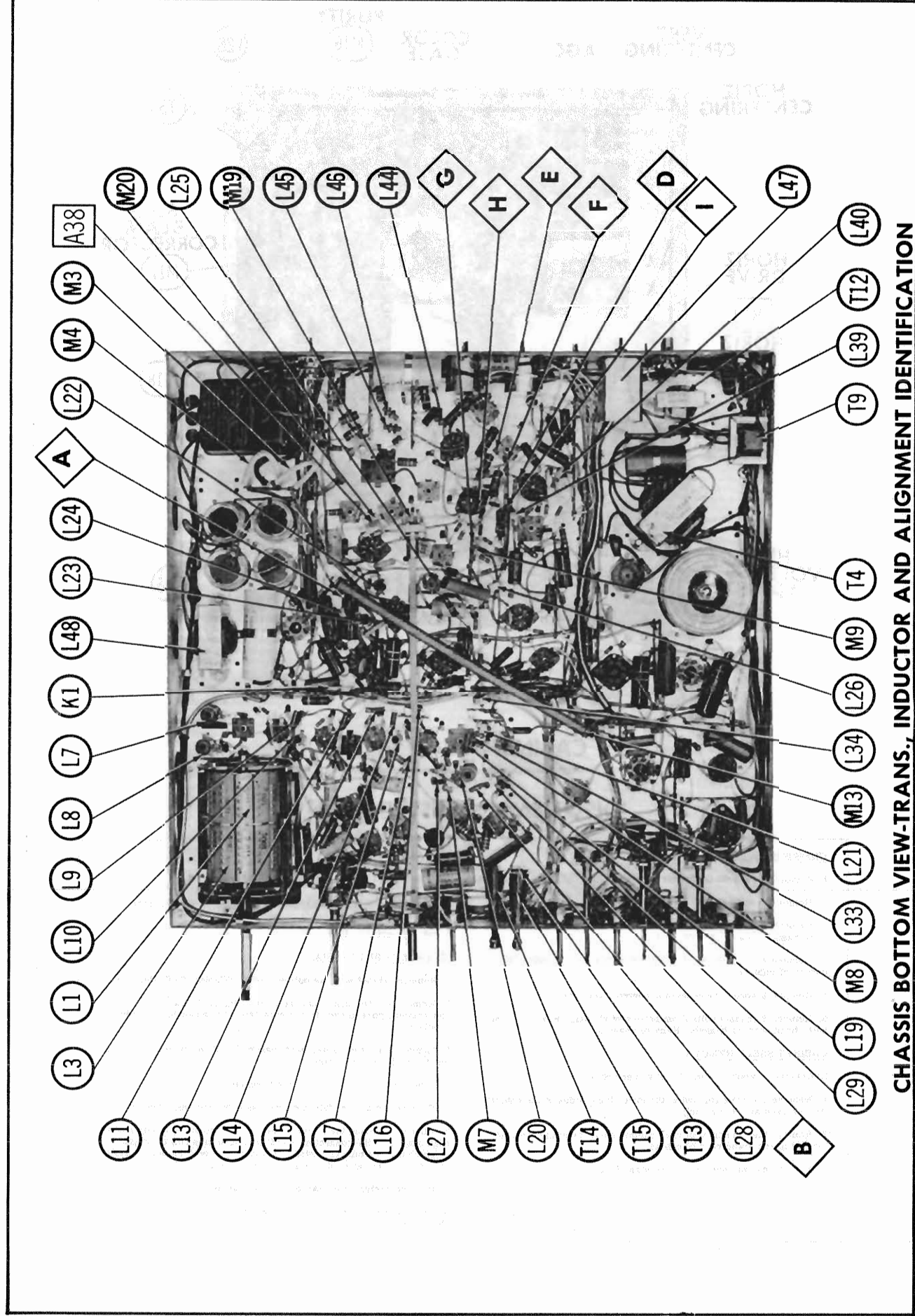
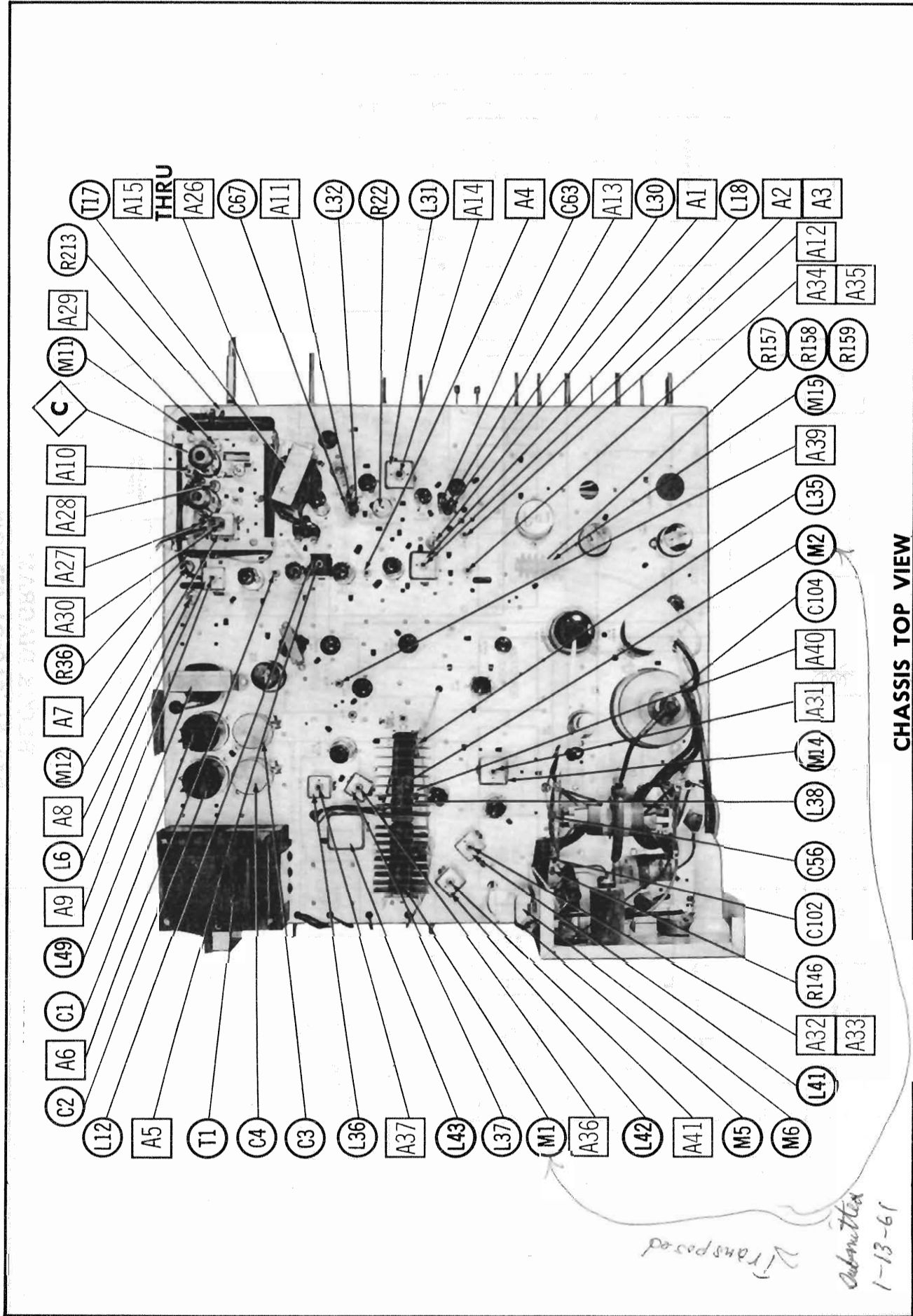
CABINET-REAR VIEW

DISASSEMBLY INSTRUCTIONS

<p>CHASSIS REMOVAL</p> <ol style="list-style-type: none"> 1. Remove 10 push-on type control knobs from front panel of cabinet. 2. Remove 14 wood screws. Remove rear cover. 3. Remove picture tube socket, yoke plug, HV lead, speaker leads, convergence plug and ground lead. 4. Remove 4 wood screws from corner bracket at the upper left corner of cabinet. 5. Remove 2 wood screws holding control panel cover. 6. Remove 3 chassis bolts from bottom of chassis. Remove 2 chassis bolts front front of chassis. Remove chassis. <p>CABINET SHELL REMOVAL</p> <ol style="list-style-type: none"> 1. Remove 14 wood screws. Remove rear cover. 2. Remove 4 screws located at the lower front sides of the cabinet (two on each side of cabinet). 3. Remove the top screw of each cabinet shell retaining bracket located at the lower rear of cabinet. 4. Remove cabinet shell by lifting straight up. 	<p>SPEAKER REMOVAL</p> <ol style="list-style-type: none"> 1. Remove speaker leads at audio output transformer. 2. Remove 4 hex nuts from larger speaker and 2 hex nuts from small speaker. 3. Remove speaker from cabinet. <p>PICTURE TUBE REMOVAL</p> <ol style="list-style-type: none"> 1. Remove cabinet shell as outlined under "Cabinet Shell Removal". 2. Remove the horizontal corrector magnet, purity magnet, convergence yoke assembly and complete yoke assembly including brackets. 3. Remove the safety glass panel assembly. Panel is held by 4 nuts located inside cabinet front. 4. Place cabinet face down on a soft surface. 5. Remove the picture tube harness assembly and insulating shield. 6. Before removing the picture tube, make note of the position of the edge magnets, HV connector, banding around tube and the depth in which picture tube is seated in cabinet. The picture tube, banding and edge magnet assembly are removed from the cabinet as a unit. 7. Remove picture tube assembly from cabinet. 8. Remove edge magnet assembly and the insulating band around picture tube.
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SENTINEL
MODELS 1U-816, 1U-826
BLOCK DIAGRAM



ALIGNMENT INSTRUCTIONS (cont)

CHROMA BANDPASS AMPLIFIER ALIGNMENT

Remove the chroma reference oscillator tube (6U8 - V26) from its socket. Connect a short clip lead from pin 9 of the color killer tube (V23) to chassis. Connect the negative lead of a 5 volt bias supply to point Ⓢ . Positive to chassis. Replace V17 in its socket. Remove 200 ohm, 10 watt resistor from pin 3 of V18 and reconnect V18 to chassis.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
23. 3900Ω carbon resistor	High side to point Ⓢ . Low side to chassis.	Not used.	4.5MC (unmod)	Any	Use VTVM DC probe to pin 1 (cathode) of chroma phase detector tube (V25). Common to chassis.	A34, A12	Attenuate signal generator output to maintain not more than 5 volts on VTVM. Adjust for MINIMUM deflection. Retouch A12 for MINIMUM deflection.
24. "	"	"	4.1MC	"	"	A35	Adjust for maximum deflection.
25. "	"	"	3.0MC	"	"	A36	"
26. Connect a .05MFD capacitor from pin 2 of 1st chroma amplifier V23B to chassis. Replace V26 in its socket. Connect vertical amplifier of scope to point Ⓢ . Low side to chassis. Adjust A37 for MINIMUM amplitude of hash on scope, then adjust the 2nd chroma amplifier screen by-pass trimmer (A38) for MINIMUM hash. Repeat adjustments of A37 and A38 until a position of A37 is found with MINIMUM hash. Remove .05MFD from pin 2 of V23B.							
27. 3900Ω carbon resistor	High side to point Ⓢ . Low side to chassis.	3MC (10MC Swp)	3.1MC 4.1MC 4.5MC	Any	Vert. amp. thru detector (Fig. 5) to pin 6 of R-Y de-modulator (V27B). Low side to chassis.		Couple a marker generator loosely to pin 2 of V23B (1st chroma amp. tube). Remove V25 from its socket. Check for response curve similar to Fig. 9. If necessary, SLIGHTLY retouch A35 and A36 for desired response.

3.58MC TRAP ALIGNMENT

Set brightness and contrast controls fully clockwise.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
28. .005MFD	High side to point Ⓢ . Low side to chassis.	Not used.	3.58MC (400% Mod)	Any	Vert. amp. thru detector (Fig. 5) to pin 5 (cathode) of picture tube. Low side to chassis.	A39	Adjust for MINIMUM 400% modulation on scope. Remove 200Ω, 2 watt resistor from pin 3 of V18 to chassis.

7.2MC TRAP ADJUSTMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
29. .01MFD	High side to pin 2 (grid) of 6CL6 (V24). Low side to chassis.	7.2MC (Unmod)	Any	DC probe to pin 8, plate of 6BJ7 (V25). Common to chassis.	A42	Adjust for MINIMUM deflection.

BURST COIL ADJUSTMENT

Connect a color bar generator across antenna terminals. Set the hue control at one half mesh position. Turn the contrast control fully counter clockwise. Turn the chroma control one half turn from its counter clockwise position. Connect DC probe of VTVM to pin 1 of color phase detector (V24). Common to chassis. Adjust the burst coil slug (A40) for maximum deflection on VTVM.

R-Y AND B-Y BALANCE ADJUSTMENT

Connect a color bar generator across antenna terminals. Connect the vertical amplifier of the scope through a low capacity probe to point Ⓢ . Low side to chassis. Set the hue control to one half mesh. Adjust A41 until the color bars appear in their proper ratios as in Fig. 10, B-Y. When the proper relationship is obtained move the scope probe to point Ⓢ . Adjust A41 until the color bars appear on the scope in their proper ratio as in Fig. 10, R-Y. When ratios cannot be brought within reasonable tolerance, slight corrections can be made with the hue and chroma controls.

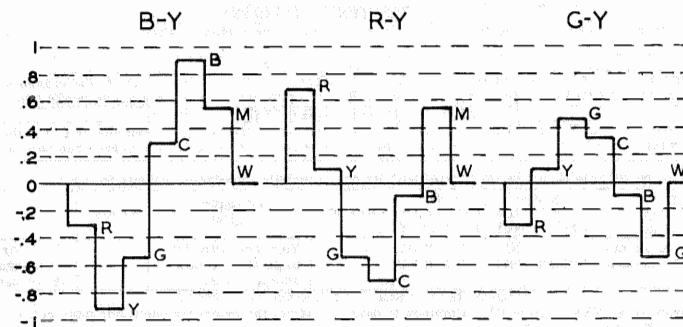


FIG. 10

MISCELLANEOUS ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Turn the set on and tune in a TV station, preferably with a test pattern. Turn the horizontal drive control (R19) as far clockwise as possible without the presence of vertical white lines or compression near the center of the picture. Adjust the horizontal centering control (R18) to center picture preferably while viewing a test pattern. Set the horizontal hold control (R2B) to its mid-range position. Adjust the horizontal lock slug (B1) counter clockwise while switching on and off channel until picture loses sync. Turn B1 clockwise and note the number of diagonal bars just before the picture pulls into sync. There should be less than two bars if the horizontal circuit is operating properly. Continue turning B1 clockwise while switching on and off channel until sync is again lost, then turn B1 counter clockwise and note the point where picture falls into sync. Turn B1 one more half turn counter clockwise. Adjust the horizontal width slug (B2) for a picture slightly wider than is necessary to fill the picture mask horizontally. Remove 400MA fuse and connect a 0-500MA meter across the 400MA fuse holder and adjust the horizontal linearity slug (B3) for MINIMUM reading on the meter.

HIGH VOLTAGE ADJUSTMENT

Connect DC voltmeter across cathode resistor (R154) between pin 1 of 6BK4 (V22) and 375 volt line. Adjust the "HV ADJUST" control for .7 volts on the low DC volt scale. Measure the high voltage at the plate cap of V22 using a 30,000 volt probe attached to the voltmeter. If voltage is higher than 25,000 volts, adjust "HV ADJUST" so that it does not exceed 25,000 volts.

COLOR PURITY ADJUSTMENT

Allow a 15 minute warm-up period for the receiver and equipment. Check the horizontal linearity with a cross hatch or vertical bar generator and readjust if necessary for good linearity. Set the horizontal and vertical hold controls for proper sync with an on the air signal. Switch to an unused channel and connect a dot generator to the receiver following instructions of generator manufacturer. Adjust dot generator for a stable pattern. Do not use vertical or horizontal hold controls on the receiver for this purpose. Turn all vertical and horizontal amplitude and vertical tilt controls to full counter clockwise position. Pull all edge magnets to full out position. These are located at the outer rim of the picture tube. Check position of Convergence Yoke Assembly which is located behind the deflection yoke assembly. The Blue magnet should be directly over the blue gun and the assembly should be located about 2 and 7/8 inches from the front of the picture tube base. By adjusting the knurled screws on the "Blue, Green and Red positioning magnets", converge the dots at the center of the screen. Do not use amplitude or tilt controls to converge the dots. Loosen the two screws at the base of the deflection yoke bracket and slide the assembly back from the bell of the picture tube. Remove the dot generator connection from the antenna terminals and connect a jumper across the terminals. Turn the contrast control fully counter clockwise. Turn the red screen control to the full clockwise position. Turn the brightness control up to a bright raster. Connect clip leads from the blue and green grids of the picture tube to the chassis. Rotate the purity magnet or each ring of the magnet until a pure red field is located at the center of the screen. Disregard color contamination at the edges of the screen. Slide the deflection yoke forward until the maximum overall red screen is obtained over the entire screen. Do not tilt the yoke. Readjust the purity magnet to obtain the best overall red screen. Tighten the yoke. To check the blue field, remove the clip lead from the blue grid and connect it to the red grid. Turn the "red screen" control down and the "blue screen" control up. The green field is checked by moving the clip lead from the "green grid to the blue grid", turning the "blue screen" control down and the "green screen" control up. If overall red, blue or green purity cannot

be obtained (disregarding slight edge contamination) the purity adjustments should be repeated. If overall red, blue and green purity is still unobtainable, a slight compromise of the colored field should be made with the red being favored slightly. Connect the blue and green grids of the picture tube to ground with clip leads. Turn the "red screen" control to the maximum clockwise position. Adjust the edge magnets to eliminate all color contamination from the edge of the picture screen. Adjust the receiver for a white raster. See "Screen and Background Control Adjustments".

DYNAMIC CONVERGENCE ADJUSTMENTS

Set all amplitude and vertical tilt controls fully counter clockwise. Set the horizontal tilt controls to center of their most effective ranges. Adjust the blue, green and red positioning magnets located on the Convergence Yoke Assembly to statically converge the dots at the center of the screen. The blue dot may be moved horizontally by adjusting the Blue Beam Corrector Magnet. Turn all amplitude and vertical tilt controls up one fourth turn. Adjust the "Red and Green horizontal amplitude and tilt controls" until the red and green dots are parallel to each other in a horizontal plane throughout the horizontal row of dots across the screen. Next, the Blue Horizontal amplitude and tilt controls are used to bring the blue dot into line with the red and green dots horizontally. The blue vertical amplitude and tilt controls are then adjusted to position the blue dot so that the separation between the three dots are equal in a vertical direction. These adjustments are made while concentrating on the center vertical line. The red and green vertical amplitude and tilt controls are then adjusted to position the red and green dots so that the center row of vertical dots are spaced equally apart and parallel to each other in a vertical direction. If necessary, readjust the horizontal amplitude and tilt controls so that they separate equally and parallel to each other in a horizontal direction. Carefully inspect all groups of dots as to separation and plane making slight adjustments if necessary. Using the Red, Blue and Green Positioning Magnets, converge the dots. Only very slight adjustment should be made to correct convergence.

BACKGROUND AND SCREEN CONTROL ADJUSTMENTS

Set the brightness control slightly above viewing level. Set Chroma, Contrast, Green screen and background, Blue screen and background, and Red screen control fully counter clockwise. Set the blue background, Green background and Red screen one fourth turn clockwise. Color of raster should now be red. If color is purplish, increase red screen and reduce blue background slightly. If color is yellowish, reduce green background. Rotate the blue screen one fourth clockwise until the color of the raster becomes a pale purple. If blue screen has no effect on the color of the raster, turn up the blue background just below the point where the screen starts to turn bluish. Advance the green screen control until the raster becomes white. If the green screen control has no effect on the color, turn up the green background control slightly. A slight readjustment of the Red, Green and Blue screen controls may be necessary to produce a good white picture. If the raster still has a color tint after making these adjustments, carefully reduce the screen control relating to the color of the picture color. If the color is a yellowish tint, turn the blue screen up slightly. If the color is cyan (greenish blue), turn up the red screen slightly. If the color is purplish, increase the green screen slightly. Rotate the contrast control clockwise one fourth turn, reduce the brightness until only the brightest portions of a telecast picture are visible. Do not readjust any screen controls. Adjust ONLY the blue and green background controls until the brightest portions of the picture become white. Turn the brightness control up to normal level. There should be no color tinting of the picture between low brightness setting and just above normal brightness setting. If tinting occurs at high settings of brightness, the screen controls must be readjusted slightly. If tinting occurs at low brightness setting, the Blue or Green background controls must be readjusted slightly. It is important that the green and background controls be adjusted properly for a black and white picture as this will affect the coloring of a color telecast.

MODELS 1U-816, 1U-826 SENTINEL

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
The high voltage shock hazard should be eliminated. This may be done by disconnecting pin 3 of the horizontal output tube (V18) from the chassis and inserting a 200Ω, 10 watt resistor from pin 3 of V18 to chassis. Then remove the horizontal multivibrator tube (V17) from its socket.							
VIDEO IF ALIGNMENT							
Connect the negative lead of a 3 volt battery to the ungrounded side of C10. Connect the positive lead to chassis. Use only enough signal generator output to provide usable indication on VTVM. The local oscillator may be disabled by removing the oscillator strip for an unused channel and switching the channel selector to that channel. This will reduce the possibility of erroneous indications during alignment.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS	
1. Direct	High side to an ungrounded tube shield floating over converter tube (V2). Low side to chassis.	41.25MC (unmod)	Any	DC probe thru 10K to point Ⓛ. Common to chassis.	A1	Adjust for MINIMUM deflection.	
2. "	"	42.75MC	"	"	A2	Attenuate signal generator output to maintain 1 volt at VTVM. Adjust for maximum deflection.	
3. "	"	46.0MC	"	"	A3	Adjust for maximum deflection. Repeat steps 1 thru 3 until no change is noted.	
4. "	"	43.5MC	"	"	A4	Attenuate signal generator output to maintain 1 volt at VTVM. Adjust for maximum deflection.	
5. "	"	41.4MC	"	"	A5	"	
6. "	"	45.5MC	"	"	A6	"	
7. "	"	47.25MC	"	"	A7	Adjust for MINIMUM deflection.	
8. "	"	41.25MC	"	"	A8	"	
9. "	"	45.75MC	"	"	A9	Attenuate signal generator output to maintain 1 volt at VTVM. Adjust for maximum deflection.	
10. "	"	42.75MC	"	"	A10	"	
OVERALL VIDEO IF RESPONSE CHECK							
Connect bias as under "Video IF Alignment". In steps 12 through 14 adjust for -4 volts bias. Remove bias to observe trap markers. If sweep generator has no built in marker, couple a separate marker loosely to sweep generator output. Attenuate sweep generator output to provide not more than 6 volts peak to peak on scope. Connect a 68 ohm carbon resistor across sweep generator output. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11. .0015MFD	High side thru .0015MFD capacitor to pin 5 (plate) of 3rd video IF amplifier tube (V5). Low side to chassis.	44.0MC (10MC Swp)	41.25MC 41.65MC 45.0MC 47.25MC	Any	Vert. amp. thru 10K to point Ⓛ. Low side to chassis.	A1, A2, A3	Adjust A2 and A3 for response curve similar to Fig. 1. If necessary, SLIGHTLY retouch A1 to place 41.25MC trap marker in trap notch as in Fig. 1.
12. "	High side to pin 1 (grid) of 1st video IF amplifier tube (V3). Low side to chassis near V3.	"	41.25MC 41.65MC 45.0MC 45.75MC 47.25MC	"	"	A4, A5, A6	Increase bias to -4 volts at ungrounded side of C10 and chassis. Attenuate sweep generator output to produce 6 volts peak to peak on scope. Adjust for response curve similar to Fig. 2. A4 affects tilt. A5 affects bandwidth on low frequency end. A6 affects high frequency side and position of 45.75MC marker.
13. Direct	High side to an ungrounded tube shield floating over converter tube (V2). Low side to chassis.	"	41.25MC 41.65MC 45.75MC 47.25MC	"	Vert. amp. thru detector (Fig. 5) to pin 5 (plate) of 1st video IF amplifier tube (V3). Low side to chassis.	A8, A9, A10	Connect a short clip lead across the 47.25MC trap coil (L8). Check for response curve similar to Fig. 3. If necessary, adjust A9 and A10 for desired response. SLIGHTLY retouch A8 to place 41.25MC marker in trap notch as in Fig. 3. Remove short from L8.
14. "	"	"	41.25MC 41.65MC 45.0MC 45.75MC 47.25MC	"	Vert. amp. thru 10K to point Ⓛ. Low side to chassis.	"	Check for overall IF response curve similar to Fig. 4. If necessary, SLIGHTLY retouch A4, A5 and A6 for desired response. Check position of 41.25MC and 47.25MC traps. If necessary, increase generator output and SLIGHTLY retouch A1 (41.25MC) and A7 (47.25MC) to place markers in trap notches as in Fig. 4.
SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR, AM SIGNAL GENERATOR AND OSCILLOSCOPE							
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Set volume control at low volume level.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
15. .01MFD	High side to point Ⓛ. Low side to chassis.	4.5MC (400% Mod) (50KC Swp)	4.5MC	Any non-interfering channel.	Across secondary of audio output trans. (T15).	All	Set buzz control (R22) 90° from maximum clockwise rotation. Adjust A11 for maximum 400% indication on scope.
16. "	"	"	"	"	"	A12, A13, A14	Attenuate generator output so that signal is below the limiting level of the 6BN6 as evidenced by background hiss in the speaker. Adjust A12, A13 and A14 for maximum 400% indication on scope.
17. "	"	Not used.	4.5MC (400% Mod)	"	"	R22	Use a high generator output and adjust R22 for MINIMUM 400% indication on scope.
18. "	"	"	4.5MC (400% Mod) (50KC Swp)	"	"	All	With volume control at low level, retouch All for maximum 400% indication on scope.

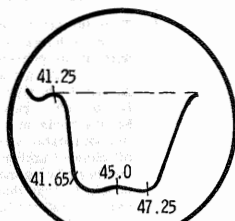


FIG. 1

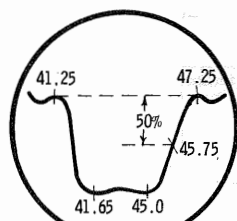


FIG. 2

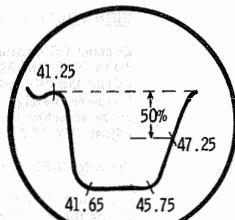


FIG. 3

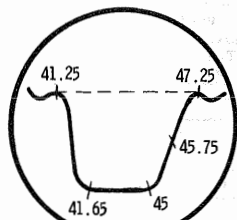


FIG. 4

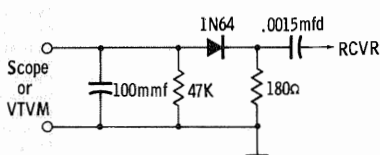


FIG. 5

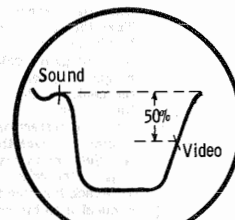


FIG. 6

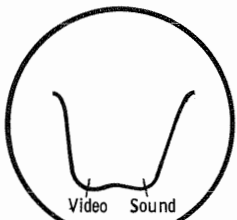


FIG. 7

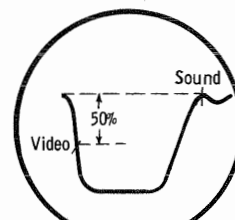


FIG. 8

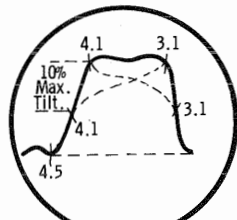


FIG. 9

OSCILLATOR ALIGNMENT

Replace the local oscillator strip back in tuner. The channel oscillator adjustment screws are reached thru a hole just to the left of the channel switch shaft. The correct adjustment screw is accessible through this hole as the channel switch is turned to each channel. Use only enough sweep generator output to provide usable pattern on scope. Leave bias connected as under "Overall Video IF Response Check" and connect a jumper from ungrounded side of C10 to the tuner AGC terminal. 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. Set the fine tuning control to the mid-position of its range.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
19. Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	213MC (10MC Swp)	211.25MC 215.75MC	13	Vert. amp. thru 10K to point Ⓛ. Low side to chassis.	A15	Adjust to place sound marker as in Fig. 6. Video marker should be at 50%.
		207MC (10MC Swp)	205.25MC 209.75MC	12		A16	
		201MC (10MC Swp)	199.25MC 203.75MC	11		A17	
		195MC (10MC Swp)	193.25MC 197.75MC	10		A18	
		189MC (10MC Swp)	187.25MC 191.75MC	9		A19	
		183MC (10MC Swp)	181.25MC 185.75MC	8		A20	
		177MC (10MC Swp)	175.25MC 179.75MC	7		A21	
		171MC (10MC Swp)	169.25MC 173.75MC	6		A22	
		165MC (10MC Swp)	163.25MC 167.75MC	5		A23	
		159MC (10MC Swp)	157.25MC 161.75MC	4		A24	
		153MC (10MC Swp)	151.25MC 155.75MC	3		A25	
		147MC (10MC Swp)	145.25MC 149.75MC	2		A26	
		141MC (10MC Swp)	139.25MC 143.75MC				
		135MC (10MC Swp)	133.25MC 137.75MC				
		129MC (10MC Swp)	127.25MC 131.75MC				
		123MC (10MC Swp)	121.25MC 125.75MC				
		117MC (10MC Swp)	115.25MC 119.75MC				
		111MC (10MC Swp)	109.25MC 113.75MC				
		105MC (10MC Swp)	103.25MC 107.75MC				

RF AND MIXER ALIGNMENT

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.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
20. Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	207MC (10MC Swp)	205.25MC 209.75MC	12	Vert. amp. thru 10K to point Ⓛ. Low side to chassis.	A27, A28, A29	Adjust for response similar to Fig. 7 with markers above 90%.
		213MC (10MC Swp)	211.25MC 215.75MC	13			
		201MC (10MC Swp)	199.25MC 203.75MC	11			
		195MC (10MC Swp)	193.25MC 197.75MC	10			
		189MC (10MC Swp)	187.25MC 191.75MC	9			
		183MC (10MC Swp)	181.25MC 185.75MC	8			
		177MC (10MC Swp)	175.25MC 179.75MC	7			
		171MC (10MC Swp)	169.25MC 173.75MC	6			
		165MC (10MC Swp)	163.25MC 167.75MC	5			
		159MC (10MC Swp)	157.25MC 161.75MC	4			
		153MC (10MC Swp)	151.25MC 155.75MC	3			
		147MC (10MC Swp)	145.25MC 149.75MC	2			
		141MC (10MC Swp)	139.25MC 143.75MC				
		135MC (10MC Swp)	133.25MC 137.75MC				
		129MC (10MC Swp)	127.25MC 131.75MC				
		123MC (10MC Swp)	121.25MC 125.75MC				
		117MC (10MC Swp)	115.25MC 119.75MC				
		111MC (10MC Swp)	109.25MC 113.75MC				
		105MC (10MC Swp)	103.25MC 107.75MC				

UHF TUNER ALIGNMENT

This portion of the receiver has been properly aligned at the factory and is very stable. Alignment of this portion should not be required in the field.

44MC TRAP ADJUSTMENT

The IF trap adjustment (A30) is for the purpose of eliminating interference in the IF range. Tune to the channel on which interference is noted and adjust A30 for MINIMUM interference. Check to see that reception on channel 2 has not been affected.

OVERALL VIDEO IF AND TUNER RESPONSE CHECK

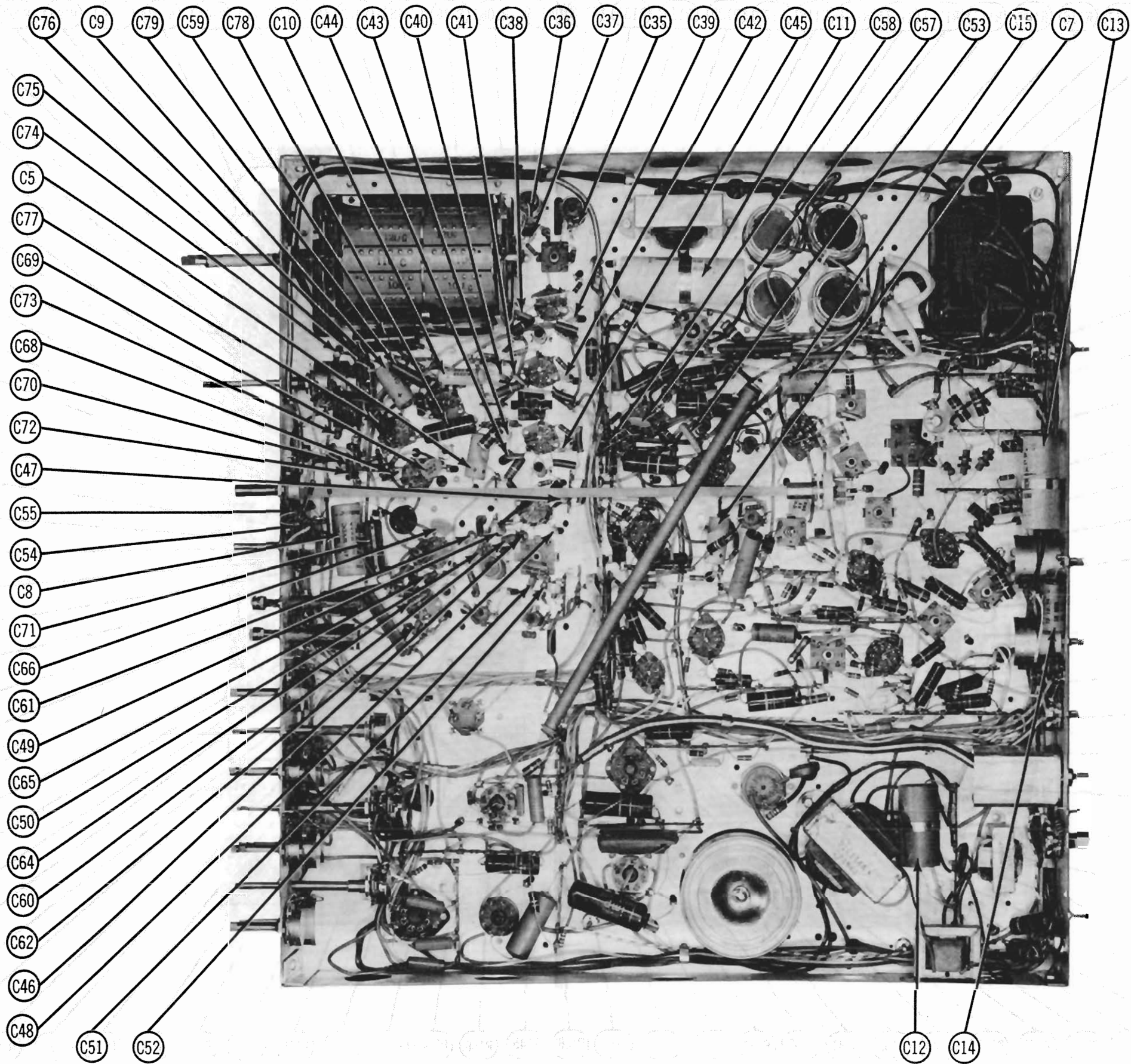
Connect bias as under "Overall Video IF Response Check" and connect jumper from ungrounded side of C10 to the tuner AGC terminal. Use only enough sweep generator output to provide usable pattern on scope. Connect a 68 ohm carbon resistor across the sweep generator output. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
22. Two 120Ω carbon resistors	Across antenna terminals with 120Ω in each lead.	207MC (10MC Swp)	205.25MC 209.75MC	12	Vert. amp. thru 10K to point Ⓛ. Low side to chassis.		Check for response curve similar to Fig. 8. If necessary, SLIGHTLY retouch A4, A5 and A8 for desired response.

CHROMA REFERENCE OSCILLATOR ALIGNMENT

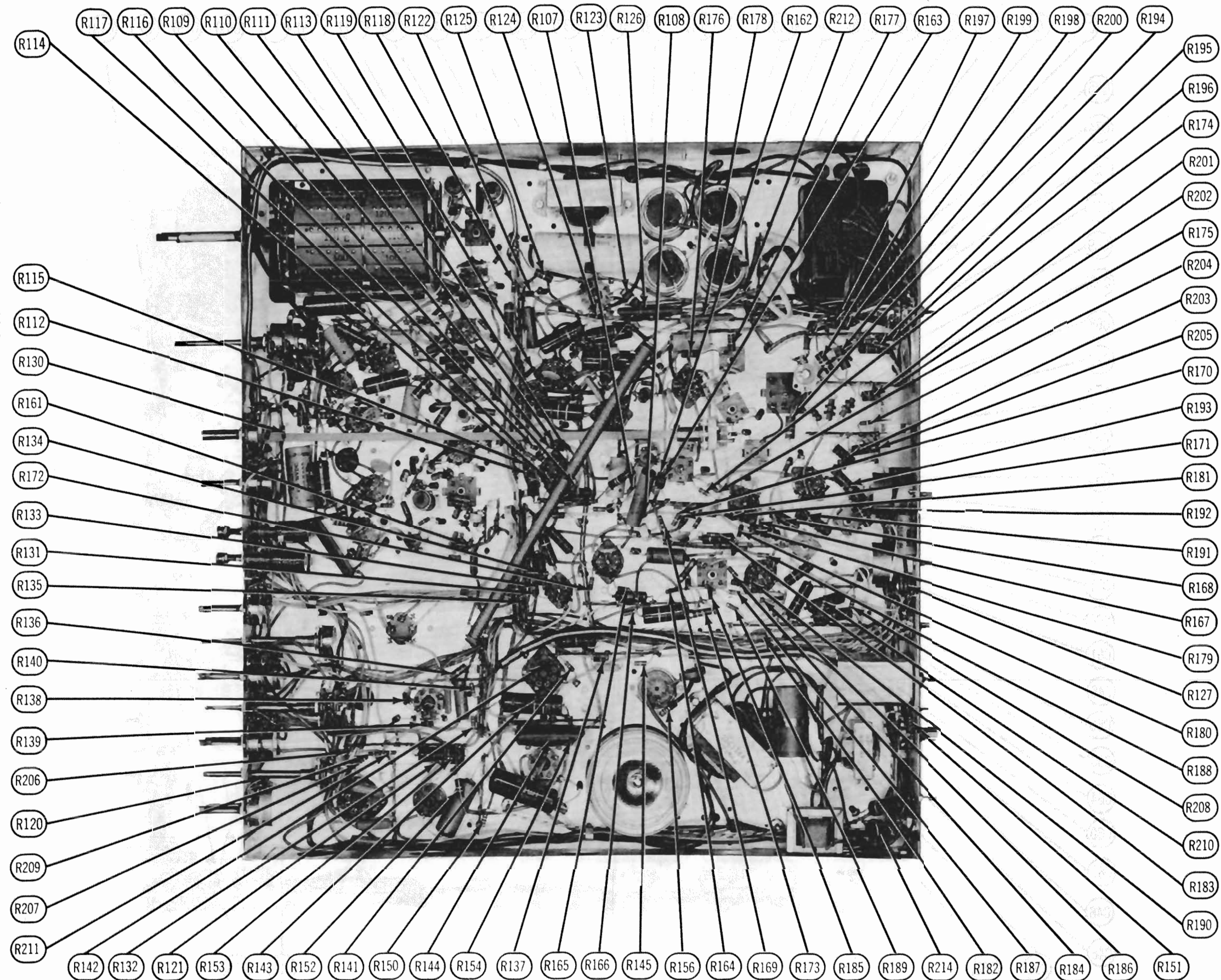
1. Connect the DC probe of a VTVM to point Ⓛ. Common to chassis. Adjust the reference oscillator plate coil slug (A31) for maximum negative reading on VTVM. Remove VTVM.
2. Connect the vertical amplifier of scope to point Ⓛ. Low side to chassis. Adjust the bottom slug of the chroma reference oscillator coil (A32) for maximum indication on scope. Turn the top slug of the chroma reference oscillator coil slug (A33) two turns in either direction. Readjust A32 again for maximum indication on scope. Continue adjusting A32 and A33 until a position of A33 is found that gives maximum indication on scope. Check peak to peak voltage on scope at point Ⓛ.
3. Connect the vertical amplifier of scope to point Ⓛ. Low side to chassis. Check the peak to peak voltage at point Ⓛ. It should be the same as at point Ⓛ. If necessary, repeat step 2. Remove scope.
4. Connect a color bar generator across antenna terminals. Connect a short clip lead from point Ⓛ to chassis. Check color oscillator sync. If necessary, adjust A31 until the color bars appear to move slowly from one side of the screen to the other. Remove short from point Ⓛ and chassis. Color bars should now be in sync.

SENTINEL
MODELS 1U-816, 1U-826



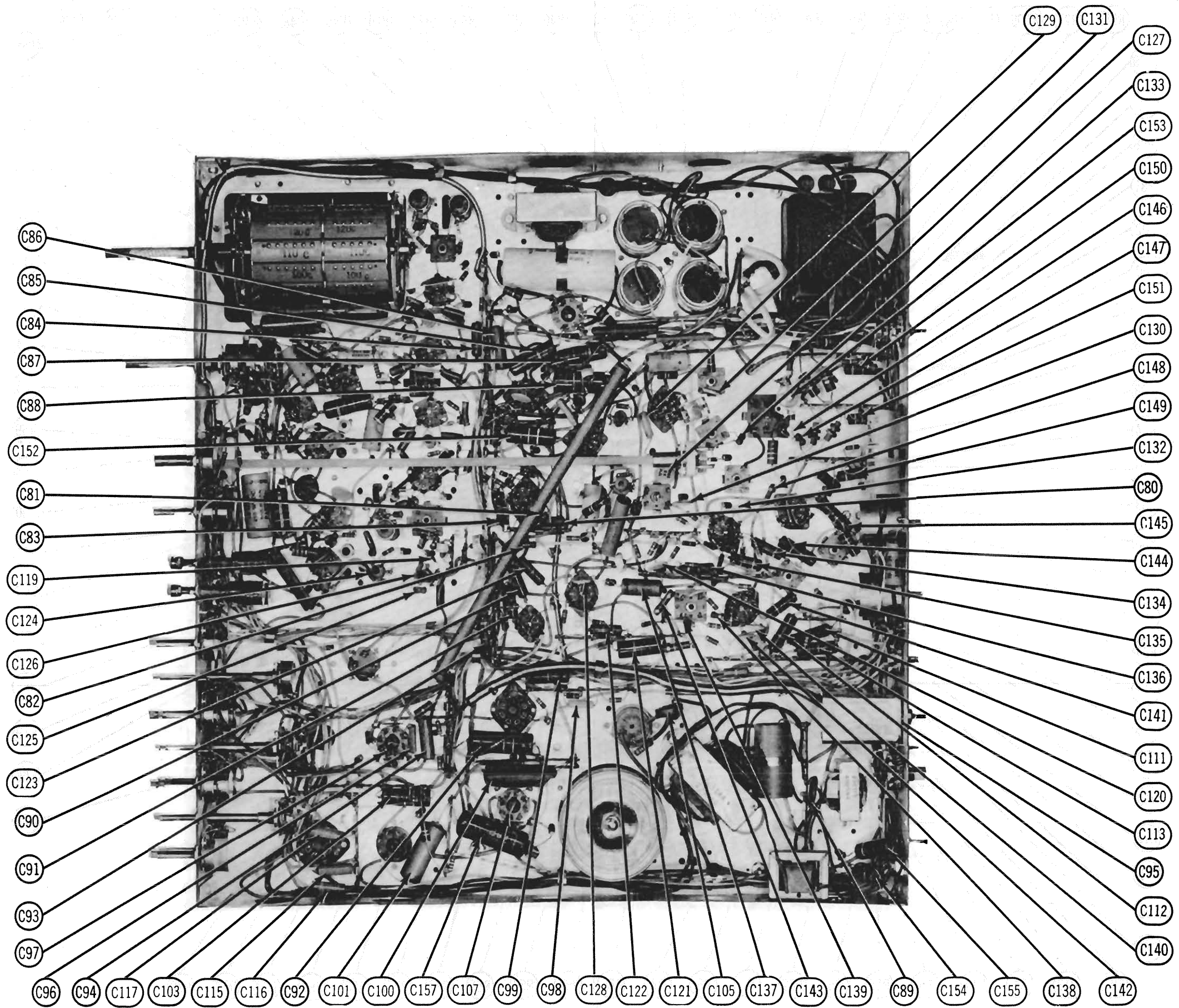
CHASSIS BOTTOM VIEW CAPACITOR IDENTIFICATION (C7-C79)

SENTINEL
 MODELS 1U-816, 1U-826



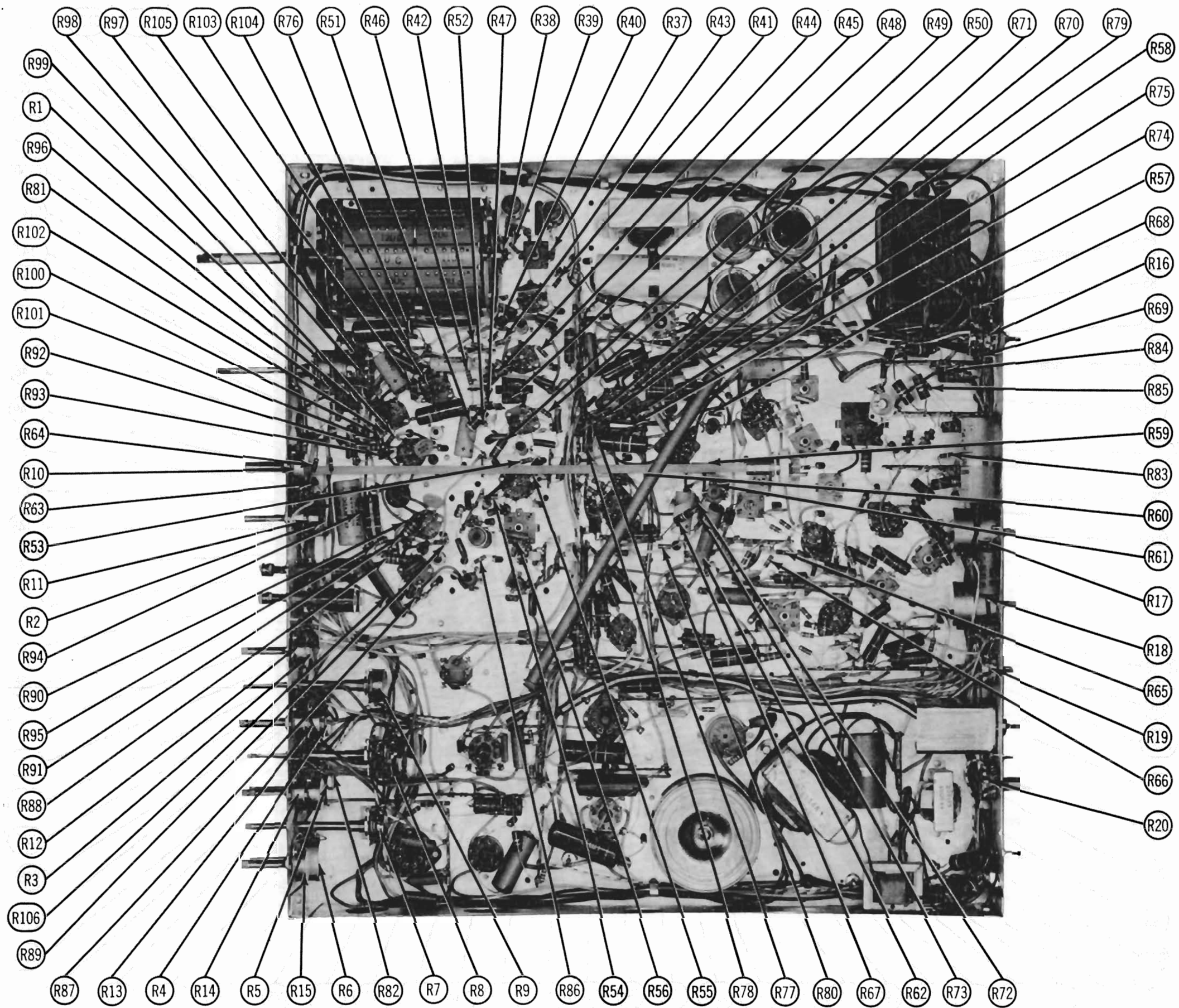
CHASSIS BOTTOM VIEW RESISTOR IDENTIFICATION (R107 - R212)

SENTINEL
 MODELS 1U-816, 1U-826



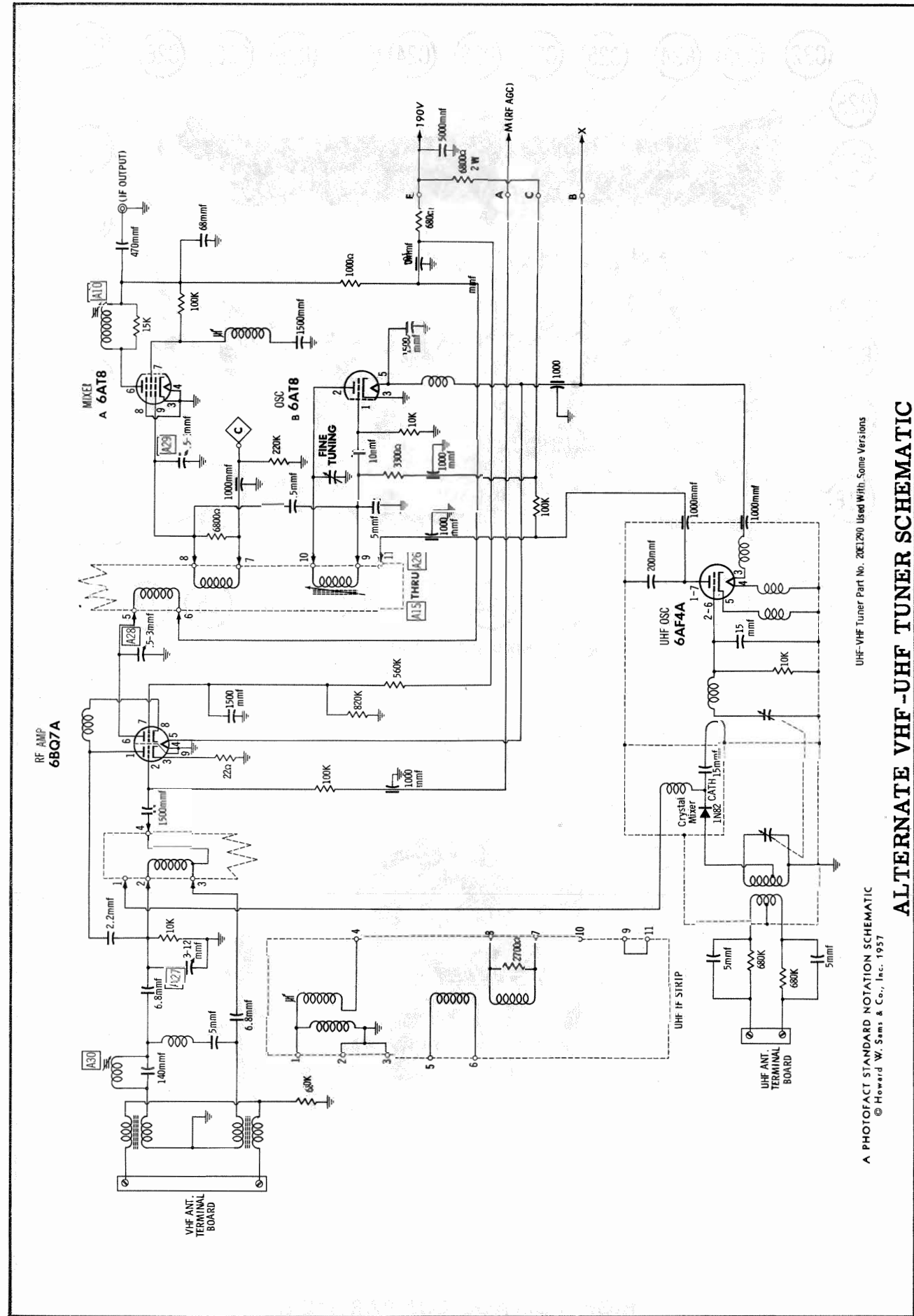
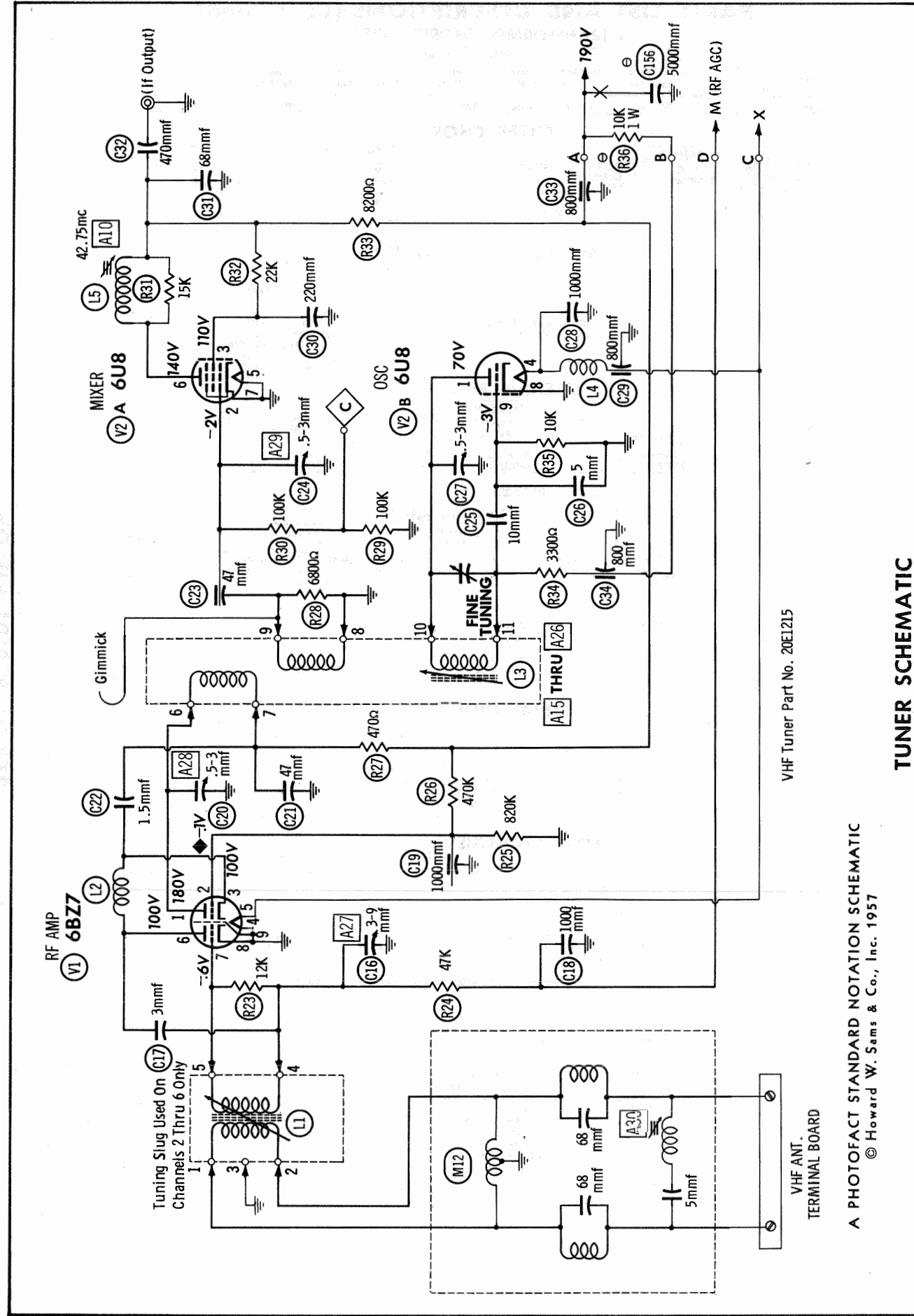
CHASSIS BOTTOM VIEW CAPACITOR IDENTIFICATION (C80 - C155)

SENTINEL
 MODELS 1U-816, 1U-826



CHASSIS BOTTOM VIEW RESISTOR IDENTIFICATION (R1 - R106)

SENTINEL
 MODELS 1U-816, 1U-826



PARTS LIST AND DESCRIPTIONS (Continued)
TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA						NOTES	
	PRI.	SEC.	SENTINEL PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	RCA TYPE No.	Ram PART No.		Thordarson PART No.
L47	97Ω		20E831	19-1576	TV-163	6210			HS-5	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 C.)	SENTINEL PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
L48	.110A	35Ω	1.2 HY	22E109	C5040 ①	C-2974	C-2327①	26C41 ①	C-21X
L49	.400A	35Ω	1.1 HY	22E109					

① Drill one new mounting hole.

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	SENTINEL PART No.	REPLACEMENT DATA
K1	Vertical Integrator	22K, 8200Ω, 8200Ω, 2000MMF, 5000MMF, 5000MMF	23E2023-5	Aerovox PA-110 Centralab PC-100 Cornell-Dublier 115TMI Erie 1405-01 Sprague V-1

SELENIUM RECTIFIER

ITEM No.	RATING		REPLACEMENT DATA					NOTES
	CURRENT		SENTINEL PART No.	FEDERAL	INTERNATIONAL PART No.	MALLORY PART No.	RADIO RECEPTOR PART No.	
M1	.510A		57E16-3C		9RS800SL	9S750		609
M2	.400A		57E16-2C		9RS500SL	8S500		509

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA							
			SENTINEL PART No.		LITTELFUSE PART No.		BUSS PART No.			
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER		
M3			#26 Wire 2½" Long							
M4			#26 Wire 2½" Long							
M5	3AG S/B P/T	5A 125V	40E7-7		315005. (3AG S/B P/T 5A)			MDV 5		
M6	3AG S/B P/T	½A 125V	40E7-8		315.500 (3AG S/B P/T ½A)			MDV½		

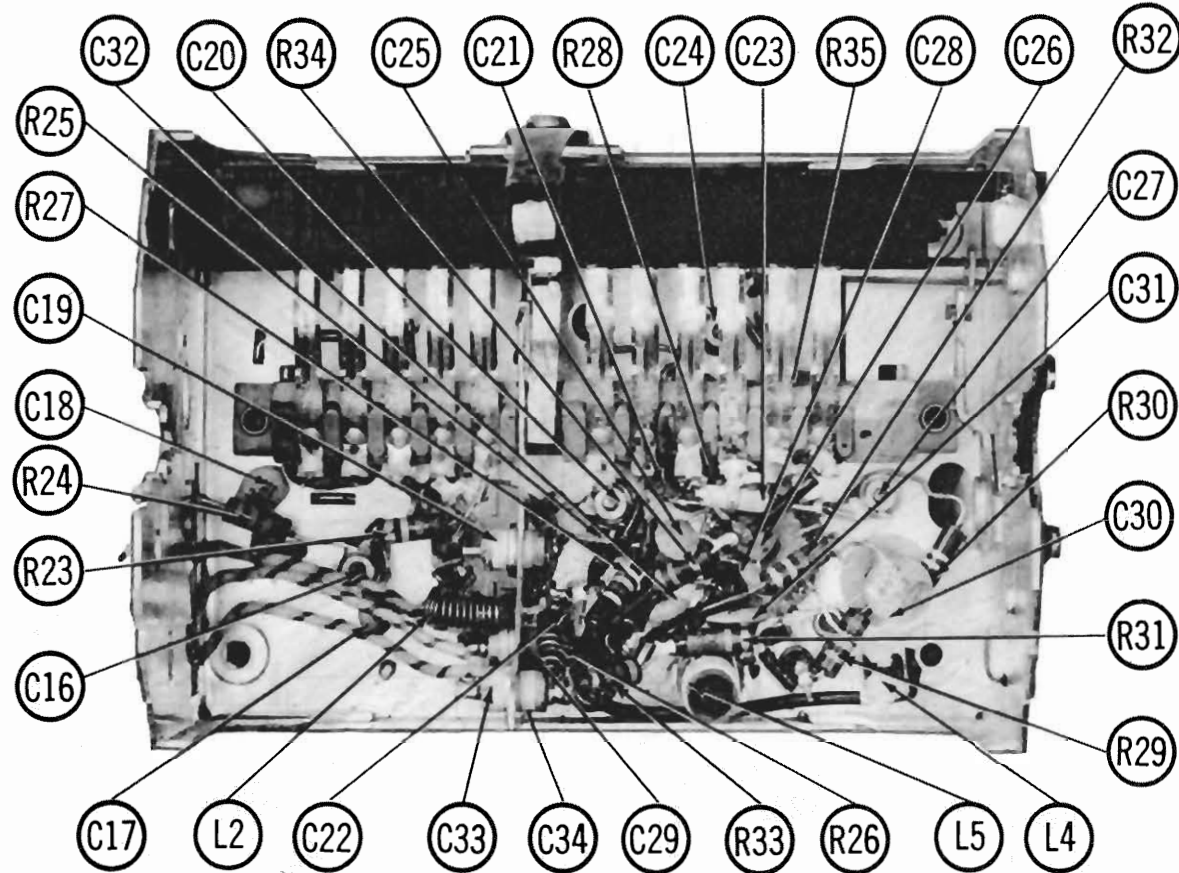
CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA		NOTES
		SENTINEL PART No.	SYLVANIA PART No.	
M7	1N295		1N80	Chroma-Sound Det. (Pigtail) Note 1
M8	1N295		1N80	Video Det. (Pigtail) Note 1
M9	1N67	95E4	1N355	Bias Clamper (Pigtail)

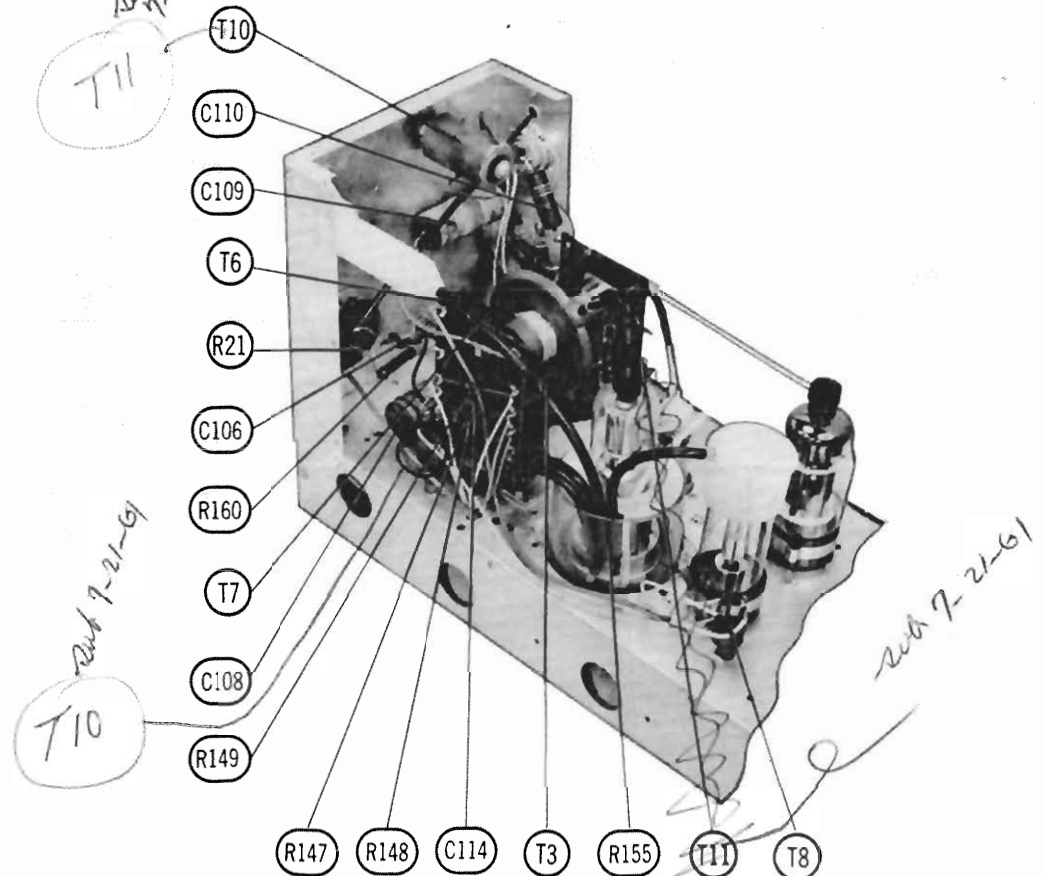
Note 1. CK-706A used in some versions.

MISCELLANEOUS

ITEM No.	PART NAME	SENTINEL PART No.	NOTES
M10	Lamp		#44
M11	Tuner	20E1215	VHF
	Tuner	20E1079	VHF
	Tuner	20E1290	UHF-VHF Combination
M12	Trap	31K-225-02	Antenna input-Includes 5MMF, 68MMF, 68MMF fixed caps.
M13	Delay Line	20E1119	
M14	Reference Osc. Coil Assy.	20E1114	Includes 3.579545MC crystal (Sentinel Part #95E3-2. (Male)Includes resistors R157, R158, R159
M15	HV Connector	20E1197	
M16	Magnet	62E10	Purity
M17	Magnet	62E11	Blue Beam Positioning
M18	Magnet	P1081	Edge Purifying (8 used)
M19	Variable Cap.	24E69	Hue Adj. (5-25MMF)
M20	Trimmer Cap.	24E71	50-380MMF
	Safety Glass	9E45-16	
	Mask	36E106	Includes rubber gasket
	Knob	37E89	Fine tuning -VHF models
	Knob	37E90-5	Channel selector - VHF models
	Knob	37E113	Hue and tone
	Knob	37E113-2	Horiz. Hold and chroma
	Knob	37E114	Vert. Hold and contrast
	Knob	37E86-5	Brightness
	Knob	37E85-7	On-off - volume
	Knob Assy.	20E1289	Fine tuning - UHF-VHF models
	Knob	37E109	VHF channel selector - UHF-VHF models
	Knob	37E108	UHF channel selector - UHF-VHF models



RF TUNER-BOTTOM VIEW



HIGH VOLTAGE COMPARTMENT

SENTINEL
 MODELS 1U-816, 1U-826

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	SENTINEL PART No.	NOTES
L1A	Ant. Coil	31M-012-2UC	Channel 2
B	Ant. Coil	31M-012-3UC	Channel 3
C	Ant. Coil	31M-012-4UC	Channel 4
D	Ant. Coil	31M-012-5UC	Channel 5
E	Ant. Coil	31M-012-6UC	Channel 6
F	Ant. Coil	31M-012-7UC	Channel 7
G	Ant. Coil	31M-012-8UC	Channel 8
H	Ant. Coil	31M-012-9UC	Channel 9
I	Ant. Coil	31M-012-10UC	Channel 10
J	Ant. Coil	31M-012-11UC	Channel 11
K	Ant. Coil	31M-012-12UC	Channel 12
L	Ant. Coil	31M-012-13UC	Channel 13
L2	Neut. Coil	31B-727	
L3A	RF, Mixer Grid, Osc. Coils	31M-112-1UC	Channel 2
B	RF, Mixer Grid, Osc. Coils	31M-112-2UC	Channel 3
C	RF, Mixer Grid, Osc. Coils	31M-112-3UC	Channel 4

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA				NOTES
		PRI.	SEC.	SENTINEL PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L6	1st. Video IF	30CT		20E1085				
L7	4l. 25MC Trap	0Ω		20E1084				Tapped
L8	47. 25MC Trap	0Ω		20E1083				Tapped
L9	Fil. Choke	0Ω		20E1092	19-1001		4604	1.4 Microhenries
L10	2nd. Video IF	.1Ω	.1Ω	20E1080	17-4524	TV-130	6219	
L11	Fil. Choke	0Ω		20E1092	19-1001		4604	1.4 Microhenries
L12	3rd. Video IF	.1Ω	.1Ω	20E1081		TV-130	6219	
L13	Fil. Choke	0Ω		20E1092	19-1001		4604	1.4 Microhenries
L14	Fil. Choke	0Ω		20E1092	19-1001		4604	1.4 Microhenries
L15	4th. Video IF	.1Ω	.1Ω	20E1088	17-4524	TV-130	6219	
L16	Fil. Choke	0Ω		20E1092	19-1001		4604	1.4 Microhenries
L17	RF Choke	2.2Ω		20E1086				7.3 Microhenries
L18	Luminance Detector	.3Ω	.1Ω	20E1219				Tertiary winding -.2Ω
L19	Luminance Det. Coupling Coil	.1Ω		20E1220				Tapped
L20	4l. 25MC Trap	0Ω		20E1089				Tapped
L21	Series Peaking Coil	10Ω		20E363-12	19-4201		6154	210 Microhenries, wound on 15K resistor
L22	Adj. Series Peaking Coil	10.3Ω		20E1108				
L23	4. 5MC Trap	.8ΩCT		20E1109				
L24	Shunt Peaking Coil	10Ω		20E363-23	19-3250	TV-185	6181	260 Microhenries
L25A	Series Peaking Coil	9Ω						588 Microhenries
B	Shunt Peaking Coil	7.5Ω		20E1245				505 Microhenries
L26	Shunt Peaking Coil	19Ω		20E363-26			6156	800 Microhenries
L27	RF Choke	2.2Ω		20E1086				7.3 Microhenries
L28	Series Peaking Coil	.9Ω		20E1087	19-1004		4610	5.8 Microhenries
L29A	4. 5MC Trap	.9ΩCT		20E1221				
B	1st. Sound IF	2.6Ω						
L30	2nd. Sound IF	4.5Ω		20E1088	20-1004		1480	
L31	3rd. Sound IF	.6Ω	.6Ω	20E1242				
L32	Quadrature Coil	5Ω		20E1037			1470	
L33A	4. 5MC Trap	5Ω		20E1091				
B	4. 1MC Trap	.9Ω						
L34	Shunt Peaking Coil	27Ω		20E363-6			4642	1070 Microhenries
L35	Chroma Interstage Transformer	5Ω	1.8Ω	20E1103				
L36	2nd. Chroma Amp. Plate Coil	15Ω		20E1110				
L37	7. 2MC Trap	3Ω		20E1140				
L38	Burst Take-off Coil	1.6ΩCT		20E1112				
L39	Series Peaking Coil	3.5Ω		20E363-27	19-3036	TV-180	6176	40 Microhenries
L40	Shunt Peaking Coil	27Ω		20E363-6				1070 Microhenries
L41	Chroma Reference Osc. Plate Coil	3.6Ω*		20E1105				* Tapped @ .6Ω tertiary winding -.4Ω & .8Ω
L42	Phase Shift Coil	1.1ΩCT		20E1115				
L43	Demodulator Driven Transformer	3Ω	3.1Ω	20E1104				▲ Tapped @ 2.3Ω
L44	Series Peaking Coil	15Ω		20E1111			4612	1040 Microhenries
L45	Series Peaking Coil	15Ω		20E1111			4612	1040 Microhenries
L46	Series Peaking Coil	15Ω		20E1111			4612	1040 Microhenries

* Parallel with 15K resistor.

PARTS LIST AND DESCRIPTIONS TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	RF Amplifier	6BZ7	
V2	Mixer Oscillator	6U8	
V3	1st. Video IF Amplifier	6DC6	
V4	2nd. Video IF Amplifier	6DC6	
V5	3rd. Video IF Amplifier	6DC6	
V6	4th. Video IF Amplifier	6CB6	
V7	Video Output	12BY7	
V8	AGC Keying-Vert. Osc.	6AN8	
V9	1st. Sound IF Amplifier	6AU6	
V10	Limiter	6AU6	
V11	Audio Detector	6BN6	
V12	AF Amp. -AGC Clamper	6AV6	
V13	Audio Output	6AQ5	
V14	Sync Sep. -Sync Phase Inverter	12AU7	
V15	Vert. Output	6V8GT	

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	SENTINEL PART No.	CBS PART No.	GENERAL ELECTRIC PART No.	SYLVANIA PART No.	
V26	21AXP22			21AXP22 21AXP22A	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	SENTINEL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	200	250	25E94	AFHSL-37-30	KA0318	FP126	TMS-75	S-160	TVL-1647
C2	200	250	25E94	AFHSL-37-30	KA0318	FP126	TMS-75	S-160	TVL-1647
C3	90	450	25E95	AFHSL-57	A0570	FP187	TMS-71	S-305	TVL-1850
C4	200	250	25E96	AFHSL-37-30	KA0318	FP126	TMS-75	S-160	TVL-1647
C5	10	25	25E8	PRS25V10	BR102	TC22	TD-10-25	FM-0210	TVA-1204
C6A	10	450	25E97	AFH4-10	D0480	FP434	TMQ-80	Q-330	TVT-1723
B	10	450							
C	10	25							
D	10	450							
C7	4	150	25E99	PRS150V4	BR415	TC40	TD-4-150	FM-1504	TVA-1402
C8	10	450	25E70	PRS450V10	BR1045	TC72	TD-10-450	FM-4510	TVA-1705
C9	10	25	25E8	PRS25V10	BR102	TC22	TD-10-25	FM-0210	TVA-1204
C10	2	25	25E88	PRS50V2	BR2-50	TC302	TD-2-25	MT-0502	TVA-1201
C11	60	450	25E104	PRS450V60	BR6045	TC79	TD-50-450	FMD-4530	TVA-1714
C12	500	3	25E89 (Note 1)	NP-PRS6V	BRH610	TC412		MTH-06100 MTH-06100†	R2243 *
C13	1000	15	25E90	PRS150V1000	BR1510	TC1501	TD-1000-15	S-020	TVA-1163
C14	10	25	25E8	PRS25V10	BR102	TC22	TD-10-25	FM-0210	TVA-1204
C15	4	150	25E99	PRS150V4	BR415	TC40	TD-4-150	FM-1504	TVA-1402

Note 1. Non-polarized unit.
† Connect negative leads together.
* Non-catalog item.

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in μmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA							NOTES
	CAP.	VOLT.	SENTINEL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C16	3-9		31B-207	NP0-DI3	TCZ-10					
C17	3		13L8C03K	BPD-001	TCZ-3R3	Z007	TCO-3	ZT-553	5TCCB-V33	
C18	1000		13L8X102Z		DD-102	K069	ED-001	DC-521	5HK-D1	
C19	1000		13M-28N1027-02							
C20	.5-3		31B-206		829-3		3115-D	CT565A		
C21	47		13L8Q470K							
C22	1.5		13L8C1R5C							
C23	47		13M20U470K-R							
C24	.5-3		31B-206		829-3		3115-D	CT565A		
C25	10		13L8UA100A							
C26	5		13L8UA050C							
C27	.5-3		31B-206				3115-D	CT565A		
C28	1000		13L8X102Z	BPD-001	DJ-102	K069	ED-001	DC-521	5HK-D1	
C29	800		13M-28N1027-03							
C30	220		13L12D22K	DI-00022	DD-221	G051	ED-221	UC-5322	5GA-T22	
C31	68		13L12U680H	N750-D168	TCN-68	N038	TC7-68	5TCU-Q68	5GA-T47	
C32	470		13L8X471Z	BPD-00047	DD-471	K060	ED-470			
C33	800		13M-28N1027-03							
C34	800		13M-28N1027-03							
C35	82	500		1469-000082	TCZ-82	22R5Q82	TCO-82	MS-482		
C36	68	500		1469-000068	TCZ-68	22R5Q68	TCO-68	MS-482		
C37	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C38	820		23E4000-32	S1820	DD-820	G067	ED-820	5GA-T82		
C39	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C40	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C41	820		23E4000-32	S1820	DD-820	G067	ED-820	5GA-T82		
C42	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C43	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C44	820		23E4000-32	S1820	DD-820	G067	ED-820	5GA-T82		
C45	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C46	680		23E4000-28	S1860	DD-680	TP50	GP-680	UC-5368	5GA-T68	
C47	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C48	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C49	1000		23E4004-5	BPD-001	DD-102	K069	ED-001	DC-521	5HK-D1	
C50	82	500		1469-000082	TCZ-82	22R5Q82	TCO-82	MS-482		
C51	8.2		23E4001-30	NP0-S18.2		Z016	TCO-8.2			
C52	6.8		23E4001-17	NP0-S16.8	TCZ-6R8	Z013	TCO-6.8	ZT-5568	5TCCB-V68	
C53	220		23E4001-28	NP0-S1220	DD-221	TZ38	ED-221	5TCC-T22		
C54	.0015	400	23E3405	DI-0015	D6-152	CUB8D15	GP-1500	GEM-6215	6TM-D15	
C55	.0033	400	23E3407	DI-0033	D6-332	CUB8D33	GP-3300	GEM-6233	6TM-D33	
C56	470	2000	23E4003-6	HD-30-470	DD30-471	VZT47	HD3-470	DC30347	20GA-T47	
C57	10000		23E4004-17	BPD-01	DD-103	K082	ED-01	DC-511	5HK-S1	

CAPACITORS (cont)

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (cont)

Table with columns: ITEM No., RATING (CAP., VOLT), SENTINEL PART No., AEROVOX PART No., CENTRALAB PART No., CORNELL-DUBILIER PART No., ERIE PART No., MALLORY PART No., SPRAGUE PART No., NOTES. Contains capacitor specifications and part numbers.

Table with columns: ITEM No., RATING (RESISTANCE, WATTS), SENTINEL PART No., CENTRALAB PART No., CLAROSTAT PART No., IRC PART No., MALLORY PART No., INSTALLATION NOTES. Contains resistor specifications and part numbers.

Table with columns: ITEM No., RATING (OHMS, WATT), SENTINEL PART No., IRC PART No., NOTES. Contains resistor specifications and part numbers.

Note 1. Part of M15 (HV connector). Note 2. A 6800Ω @ 2W (part #27E682K-2) used in models using UHF tuner.

TRANSFORMER (POWER)

Table with columns: ITEM No., RATING (PRI., SEC. 1, SEC. 2, SEC. 3), SENTINEL PART No., Halldorson PART No., Merit PART No., Stancor PART No., Thordarson PART No., Triad PART No.

TRANSFORMERS (SWEEP CIRCUITS)

Table with columns: ITEM No., USE, SENTINEL PART No., Halldorson PART No., Merit PART No., Stancor PART No., Thordarson PART No., Triad PART No.

- ① Drill new mounting hole(s). ② Includes capacitor C18, resistors R128 and R129. ③ Adjust to maximum inductance. ④ Use terminals #1 and #2. ⑤ Use red and blue terminals. ⑥ Enlarge mounting hole. ⑦ Magnet only. (Part of convergence yoke assembly).

TRANSFORMER (AUDIO OUTPUT)

Table with columns: ITEM No., IMPEDANCE (PRI., SEC.), SENTINEL PART No., Halldorson PART No., Merit PART No., Stancor PART No., Thordarson PART No., Triad PART No., NOTES.

SPEAKER

Table with columns: ITEM No., RATINGS (SIZE, FIELD, V. C. IMP.), SENTINEL PART No., QUAM PART No., RCA TYPE No., NOTES.

* Concentrik Equivalent K-15, Base Elements & Shafts B11-116, P17-024 (Panel) B11-137, R1-108 (Rear)

RESISTORS

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

Table with columns: ITEM No., RATING (OHMS, WATT), SENTINEL PART No., IRC PART No., NOTES. Contains resistor specifications and part numbers.