

PHOTOFACT® Folder

with CIRCUITRACE™

MAGNAVOX CHASSIS
T918/U918-01-AA/-BB thru T918/
U918-07-AA/-BB, T918/U918-08-AA/-BA

COLOR TV



CHASSIS U918-01-BB

TRADE NAME	Magnavox	Chassis:		Chassis:	
		T918-01-AA/-BB	T918-05-AA/-BB	U918-01-AA/-BB	U918-05-AA/-BB
		T918-02-AA/-BB	T918-06-AA/-BB	U918-02-AA/-BB	U918-06-AA/-BB
		T918-03-AA/-BB	T918-07-AA/-BB	U918-03-AA/-BB	U918-07-AA/-BB
		T918-04-AA/-BB	T918-08-AA/-BA	U918-04-AA/-BB	U918-08-AA/-BA
SUPPLIER	For current address, see Annual Index.				
TYPE SET	Color Television Receiver				
TUBES	VHF: Twenty-Five, UHF: One Transistor				
POWER SUPPLY	110-120 Volts AC, 60 Cycles				
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)				

SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE OR FUSE DEVICE

A 3" length of fuse wire is used for filament protection. For location, see F2 in photo."

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 oscillator slug for adjustment (one slug for each channel).

AGC

The AGC may be varied by means of an AGC control.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

Coarse adjustment of the horizontal hold is accomplished by the proper setting of the Horizontal Sine Wave coil. (See "Tube Placement Chart" for location.)

FOCUS

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

CENTERING

Centering is accomplished by the Vertical Centering control. (See "Tube Placement Chart" for location.)

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

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. SB060

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DATE 3 -67

SET 875 FOLDER 2

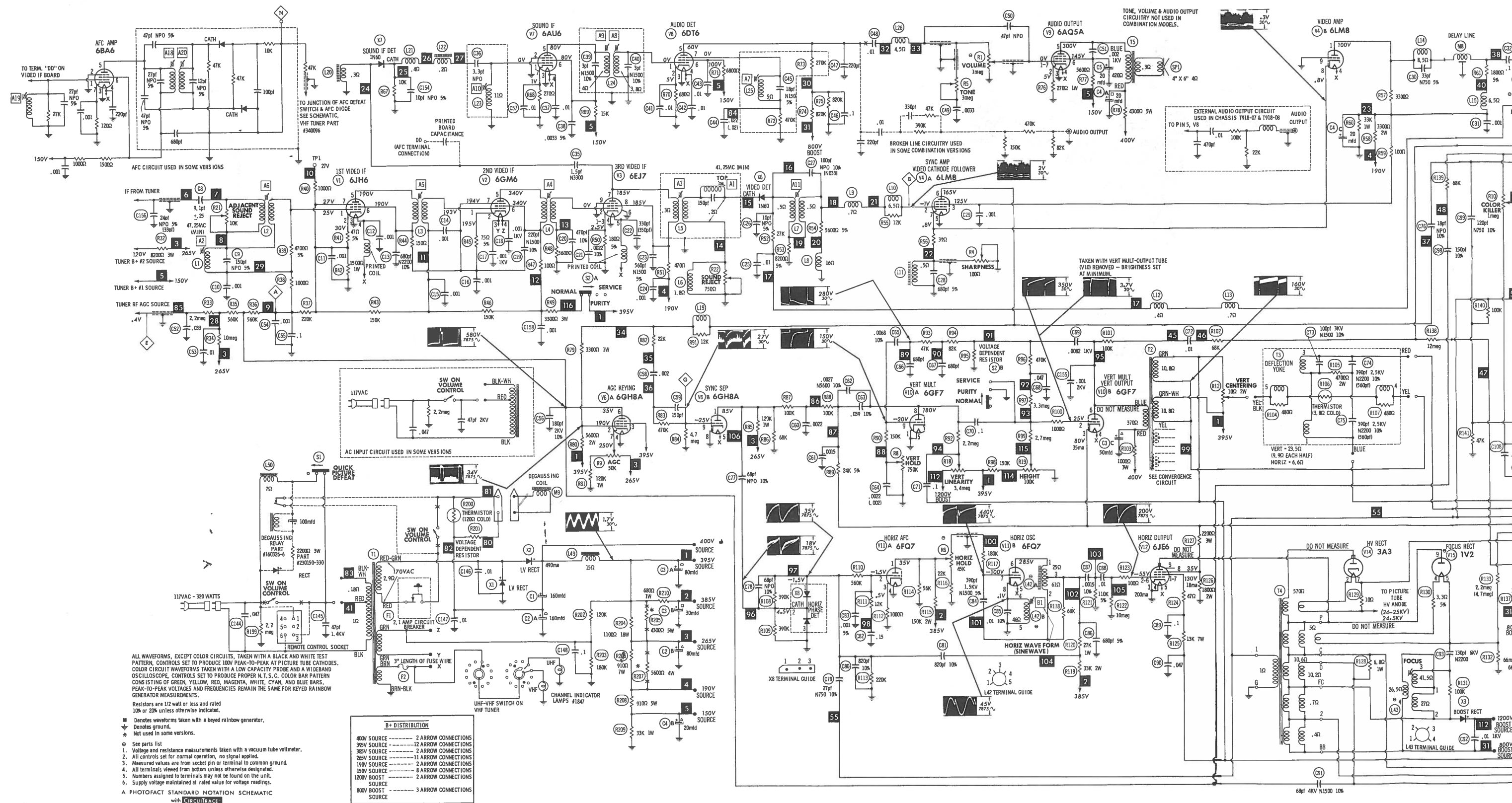
MAGNAVOX CHASSIS
T918/U918-01-AA/-BB thru T918/
U918-07-AA/-BB, T918/U918-08-AA/-BA

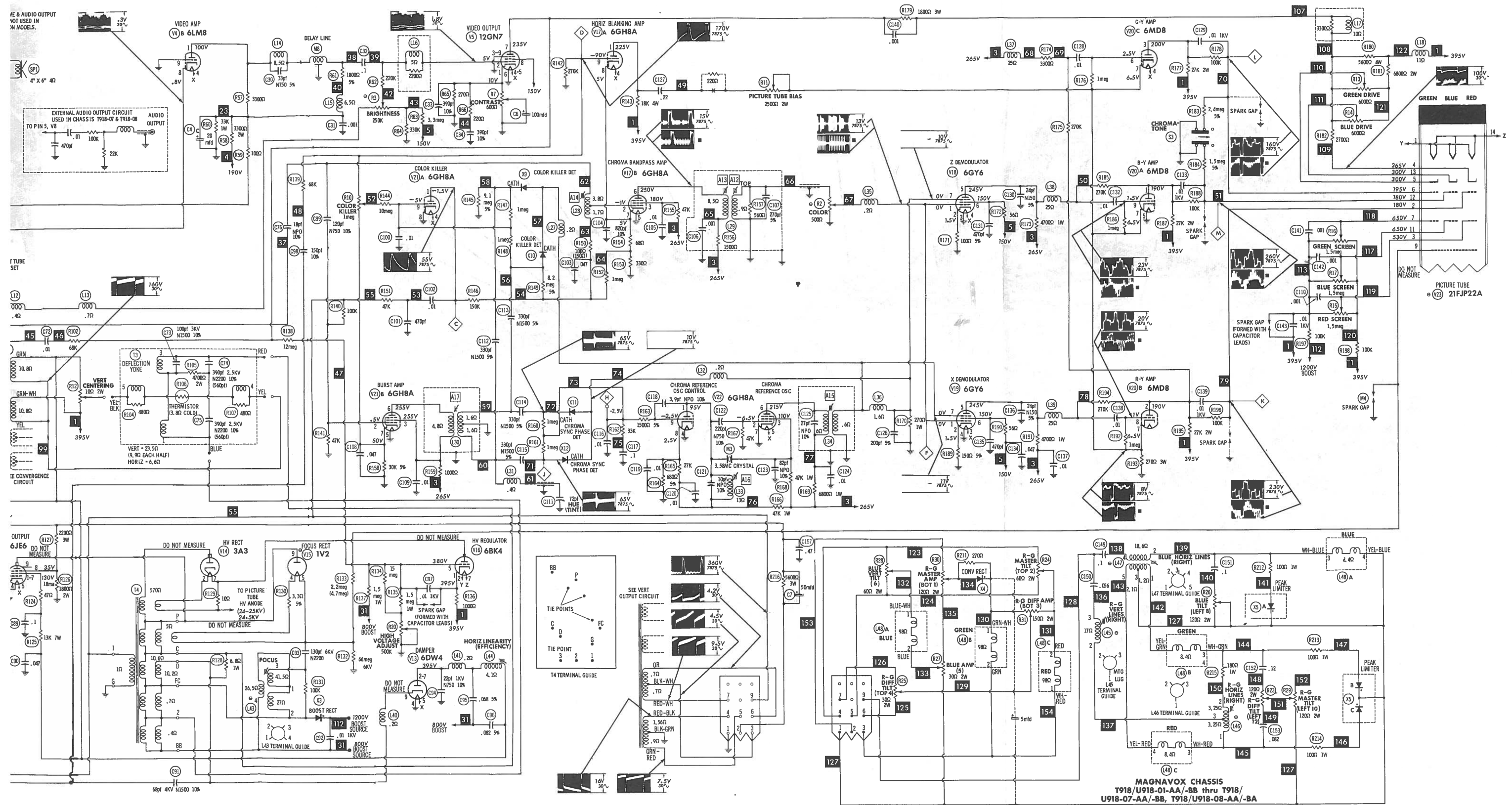
SET 875 FOLDER 2

MAGNAVOX CHASSIS
T918/U918-01-AA/-BB thru T918/
U918-07-AA/-BB, T918/U918-08-AA/-BA

SET 875 FOLDER 2



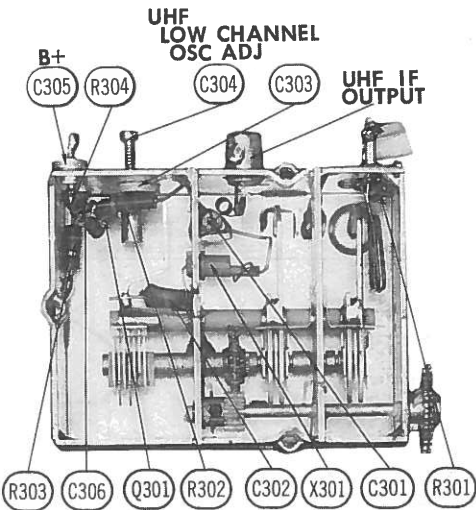
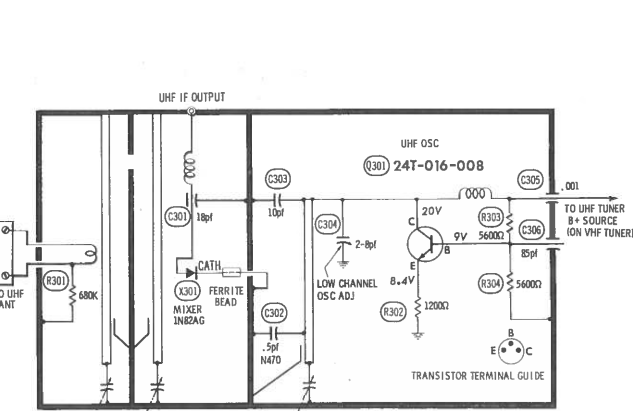




RESISTANCE MEASUREMENTS

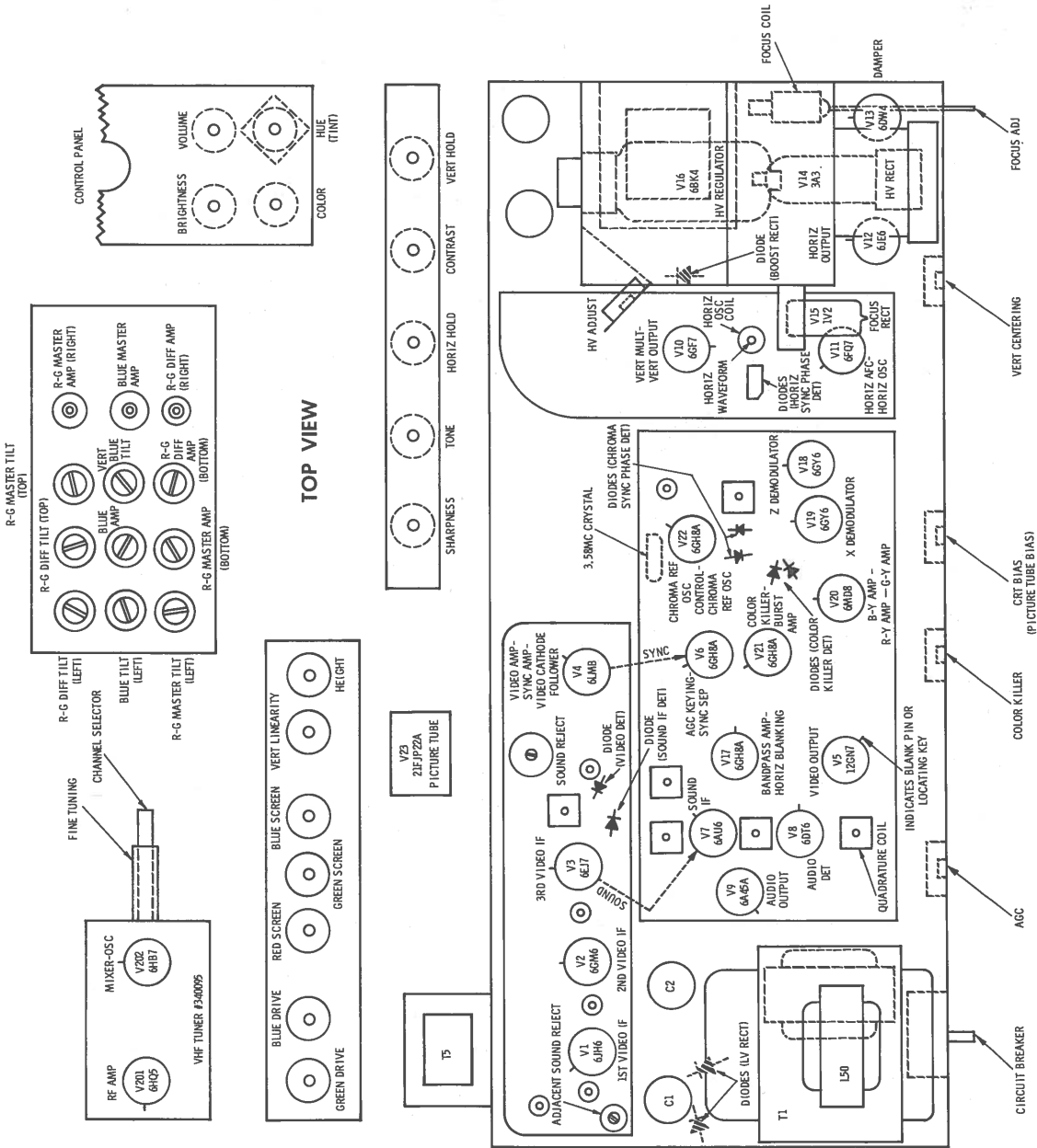
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
V1	6JH6	220K	1547Ω	FIL	FIL	225Ω ▲	225Ω ▲	1500Ω					
V2	6GM6	75K	1NF	FIL	FIL	3417Ω †	3417Ω †	75Ω ▲					
V3	6EJ7	180Ω	5600Ω	180Ω	FIL	FIL	0Ω	2143Ω †	2143Ω †	0Ω			
V4	6LM8	5148Ω †	1300Ω ●	5556Ω †	FIL	FIL	9806Ω †	46Ω	46Ω	0Ω			
V5	12GN7	187Ω	410K	0Ω	FIL	FIL	FIL	5518Ω †	2583Ω †	0Ω			
V6	6GH8	40K	6505Ω †	17Ω †	FIL	FIL	750K	1800Ω †	0Ω	4.7 meg			
V7	6AU6	11Ω	0Ω	FIL	FIL	17.6K †	17.6K †	270Ω					
V8	6DT6	3.8Ω	680Ω	FIL	FIL	950K †	9383Ω †	470K					
V9	6AQ5A	250K	270Ω	FIL	FIL	6090Ω †	8173Ω †	NC					
V10	6GF7	0Ω	2.8 meg	2400Ω †	FIL	FIL	1360Ω †	NC	4.2 meg †	305K			
V11	6FQ7	22K	800K	1000Ω	FIL	FIL	61K †	182K	1370Ω †	0Ω			
V12	6JE6	13K †	10 meg	0Ω	FIL	FIL	10 meg	13K †	1500Ω	NC			TOP CAP 26Ω †
V13	6DW4	NC	28Ω †	NC	FIL	FIL	NC	28Ω †	NC	1 meg			
V14	3A3	PINS 1 THRU 8 HAVE INFINITE RESISTANCE											TOP CAP 596Ω †
V15	1V2	NC	NC	NC	66 meg	66 meg	NC	NC	NC	10.5Ω †			
V16	6BK4	1017Ω †	FIL	NC	NC	1 meg †	NC	FIL	NC				TOP CAP INF
V17	6GH8	18K †	1 meg	48K †	FIL	FIL	2406Ω †	398Ω	398Ω	230K			
V18	6GY6	65Ω	100Ω	FIL	FIL	5606Ω †	2639Ω †	2.2Ω					
V19	6GY6	65Ω	150Ω	FIL	FIL	5606Ω †	2639Ω †	.7Ω					
V20	6MD8	26.5K †	26.5K †	27K †	FIL	FIL	1 meg	270Ω	1 meg	1 meg			
V21	6GH8	1.1 meg	33K	1906Ω †	FIL	FIL	1906Ω	30K	0Ω	1.1 meg			
V22	6GH8	21K †	47K	47K †	FIL	FIL	7706Ω †	0Ω	680Ω	1.5 meg			
V23	21FJP22A	FIL	130K †	115K †	6500Ω †	4700Ω †	130K †	460K †	NC	71 meg	NC	500K †	130K †
												Pin 13 4700Ω †	Pin 14 FIL
V201	6HQ5	2.7 meg	0Ω	FIL	FIL	10.3K †	0Ω	0Ω					
V202	6HB7	0Ω	220K	0Ω	FIL	FIL	3583Ω †	24.5K †	7283Ω †	3300Ω †			
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 2 OF V2.
† MEASURED FROM OUTPUT OF X2.
‡ MEASURED FROM PIN 9 OF V13.
NC NO CONNECTION



UHF TUNER 340037-1

TUBE PLACEMENT CHART



MAGNAVOX CHASSIS T918/U918-01-AA/-BB thru T918/U918-07-AA/-BB, T918/U918-08-AA/-BA

ALIGNMENT INSTRUCTIONS

Use an isolation transformer and maintain voltage at 117 volts. Allow a 20-minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: A1 thru A14 GENERAL CEMENT #8606, 8606L, 8869 ... WALSCO #2543, 2544, 2588
Mixer Plate Coil ... GENERAL CEMENT #9296, 9297, 9300 WALSCO #2510, 2511, 2547

VIDEO IF ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from those shown. Connect a variable bias supply to the IF AGC line (point Ⓢ) and adjust to obtain a response curve which shows no indication of overload. Disable Oscillator section of Mixer-Osc. Set the Channel Selector to any non-interfering channel.

INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
1. Connect DC probe of a VTVM thru a 47K resistor to point Ⓢ. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		41.25MC 47.25MC	A1, R22 A2, R21	Adjust for MINIMUM. Cores are correctly set at top end of coils.
2. Connect vertical input of a scope to point Ⓢ. Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	41.25MC 42.17MC 42.75MC 45.00MC 45.75MC 47.25MC	A3, A4, A5, A6, Mixer Plate Coil	Adjust for maximum gain and symmetry of response with markers as shown in Figure 1. Note: Correct position of A3 core is at bottom of coil. A4, A5, and A6 cores should be peaked at top end of coils.

4.5 MC TRAP ALIGNMENT

Tune in a strong TV signal and set the Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible on the screen. Adjust A11 for MINIMUM beat interference.

SOUND IF ALIGNMENT

Tune in a station and adjust A7 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce signal while aligning for undistorted output by adjusting A8, A9, and A10.

CHROMA BANDPASS ALIGNMENT

The following alignment will require the use of an RF Modulator (RCA WG304A or equivalent). Connect a -2 volt supply to point Ⓢ. Connect a -40 volt supply to point Ⓢ. Connect a -15 volt supply to point Ⓢ. Positive of all supplies to ground. Connect a jumper from point Ⓢ to ground. Turn the color intensity to maximum. Remove the Horizontal Output tube, V12.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
3. High side thru .1 mfd to grid of Bandpass Amp., V17. Low side to ground.	3.58MC (3-5MC Sweep)	3.08MC 4.08MC		Vert. Amp. thru Detector Probe to pin 1 of demodulators, point Ⓢ. Low side to ground.	A12, A13	Adjust for response curve similar to Fig. 2.
4. High side of sweep gen. to Video Sweep Input of RF modulator. High side of signal generator (set at 45.75MC) to picture carrier input. Output of RF modulator to Mixer Grid test point on tuner. Low side to ground.	Sweep Generator to 3MC (6MC Sweep)			"	A14	Adjust for response curve similar to Fig. 3. If necessary, retouch A12 to flatten top of response.

TUNER AFC ALIGNMENT (AFC is not used on all models)

Video IF and Chroma circuits must be aligned correctly before Tuner AFC is aligned.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. High side thru .001 mfd to point Ⓢ on VHF tuner, low side to ground.	44MC (10MC Sweep)	45.75MC 47.25MC		Vertical Input thru 10K resistor to point Ⓢ, low side to ground.	A19, A20	Detune AFC Discriminator secondary by turning A20 slug to top end of coil. Adjust A19 for maximum response between markers. Correct setting of A19 slug is at board end of coil.
6. "	"	45.75MC		"	A18	Adjust for maximum response at 45.75MC.
7. "	"	"		"	A20	Adjust A20 for "S" curve similar to Fig. 4. 45.75MC marker should fall at zero voltage crossover. If necessary, retouch A18 and A19 for maximum gain and symmetry of response.
8. Not used	Connect high side to point Ⓢ, low side to ground (set at 45.75MC).			Connect DC probe of VTVM to point Ⓢ, low side to ground.	A20	Adjust output of 45.75MC generator to obtain -1.5 volts at point Ⓢ. Readjust A20 to obtain 0 volts at point Ⓢ.

NOTE: Check Tuner AFC lockin on Color program by using tuner Fine Tuning adjustment. When tuner oscillator is set slightly above or below correct frequency, Tuner AFC should return oscillator to correct frequency for maximum color. Overall Video IF response should be rechecked after Tuner AFC has been aligned.



MISCELLANEOUS ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Connect:
A 0-500 ma meter in series with cathode lead of horizontal output tube.
A .47 mfd capacitor across meter.
A VTVM through a high voltage probe to picture tube anode connector.
Point Ⓢ to ground.
A short across Horizontal Sine Wave coil (pin 8 of V11 to ground).

Tune in a TV station and set all controls for normal operation. Adjust the Horizontal Hold control until the picture "floats" with the blanking bars vertical. Remove the short from the Horizontal Oscillator Cathode and adjust B1 until the picture "floats" horizontally. Remove the short from point Ⓢ. Adjust the Horizontal Linearity (Efficiency) coil for MINIMUM current in the horizontal output tube. (Current should not exceed 220 ma.)

Adjust the high voltage control for 25KV on picture tube anode with normal brightness. Adjust the Focus, Height, and Vertical Linearity controls.

AGC ADJUSTMENT

Tune in a strong TV station and advance the AGC control until instability appears in the picture (pulling, jitter, overload, etc.). Reduce the control to the point just below the instability and check all available stations for proper AGC action.

COLOR AFC ALIGNMENT

Suggested Alignment Tools:
A15, A16, A17 GENERAL CEMENT #8606, 8606L, 8869
WALSCO #2511, 2543, 2588

Set the Color Killer control to fully counterclockwise. Set the Tint control to the center of its range. Connect a color bar generator to the antenna terminals. Adjust receiver for normal color reception. Short pin 2 of Burst Amp., V21, to ground.

Connect DC probe of VTVM through 470K to point Ⓢ. Adjust A15 for maximum deflection on VTVM. If no reading is obtained, oscillator is not operating. Adjust A16 to start oscillator, then adjust A15 for maximum. Remove the short from pin 2 of Burst Amp. Adjust A17 for maximum deflection on VTVM. Make sure the oscillator is running and locked in.

Short point Ⓢ to ground. Remove VTVM. Adjust A16 until color bars stand still or drift slowly. Remove the short from point Ⓢ and check to see that the color bars will "sync" with a low level input signal. If necessary, retouch A16 for best hold.

COLOR AFC ALIGNMENT (CONTINUED)

Connect the vertical input of a scope to point Ⓢ. Check for proper waveform with the color bar generator being used. See waveform on schematic for pattern obtained from a standard NTSC signal. Check the range of the Tint control. The bars should move 30° either side of proper signal. If necessary, retouch A17 for proper range of control.

Check for proper waveform at G-Y and B-Y outputs (points Ⓢ and Ⓢ). Tune in a weak signal or reduce the signal at the antenna terminals to obtain a snowy picture. Adjust the Color Killer control to eliminate the color in the snow. Check with a color signal to make sure the killer is not eliminating picture coloring.

PURITY ADJUSTMENTS

Perform Step 1 of "Convergence Adjustments". If the picture tube appears to be magnetized, use a degaussing coil to demagnetize tube and mounting brackets.

Move Normal-Purity-Service switch to Purity position. Connect the Blue and Green grids of the picture tube through individual 100K resistors to ground. Loosen the deflection yoke and move it rearward until it is against the convergence yoke assembly.

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

GRAY SCALE ADJUSTMENTS

Tune in a black and white picture or a color picture with the Color control set at MINIMUM. Turn the Brightness and CRT Bias controls to MINIMUM (counterclockwise). Turn the Red, Blue and Green Screen controls to MINIMUM. Move the Normal-Purity-Service switch to the Service position. Turn Chromatone switch off. Advance the Screen controls one at a time until each produces a barely visible line.

If one or more controls fail to produce a line, leave that screen control at maximum and advance the Brightness control until a barely visible line appears. Then readjust the other two screen controls for a barely visible line. Return the Normal-Purity-Service switch to the Normal position. Adjust the Blue and Green Video-Drive controls to eliminate coloring in the light and dark areas of the picture.

Turn Brightness and Contrast controls to maximum (fully clockwise). Adjust the CRT Bias control until the picture blooms (distorts). Then reduce the control to the point just below where the picture returns to normal.

CONVERGENCE ADJUSTMENTS

Step	Control	Use to Converge (or Straighten)	Remarks
1.			Perform Center Dot Convergence using convergence magnets. See Fig. A.
2.	R-G Vertical Master Tilt, Top	Red and Green Vertical bars at top of screen.	Touch up both controls for best convergence from top to bottom along vertical center line (Fig. B).
3.	R-G Vertical Master Amp., Bottom	Red and Green Vertical bars at bottom of screen.	
4.	R-G Vertical Diff. Tilt, 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 Vertical Diff. Amp., Bottom	Red and Green Horizontal bars at bottom of screen.	
6.	Blue Vertical Tilt, 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 Vertical Amp., Bottom	Blue Horizontal bars at bottom of screen.	
8.			Perform Center Dot Static Convergence (Fig. A).
9.	Blue Horizontal Master Amp., Right	Blue Horizontal bars at right side of screen.	Touch up both controls for best convergence along horizontal center line (Fig. D).
10.	Blue Horizontal Master Tilt, Left	Blue Horizontal bars at left side of screen.	
11.	R-G Horizontal Master Amp., Right	Red and Green Vertical bars at right side of screen.	(Fig. E)
12.	R-G Horizontal Diff. Amp., Right	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 Horizontal Master Tilt, Left	Red and Green Vertical bars at left side of screen.	(Fig. E)
14.	R-G Horizontal Diff. Tilt, Left	Red and Green Horizontal bars at left side of screen.	Use control to converge blue bar with red and green bars at left side of screen (Fig. E).

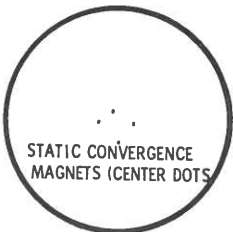


FIG. A

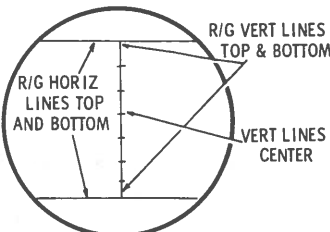


FIG. B

(RED & GREEN ONLY)

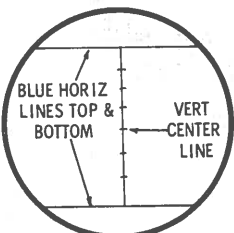


FIG. C
(BLUE BARS)

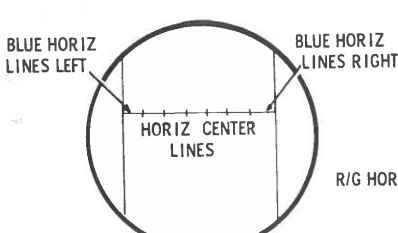


FIG. D
(BLUE BARS)

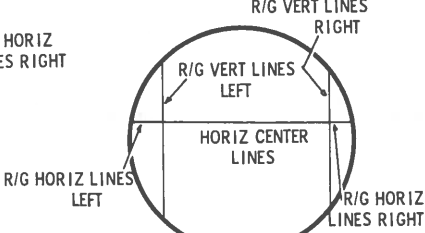
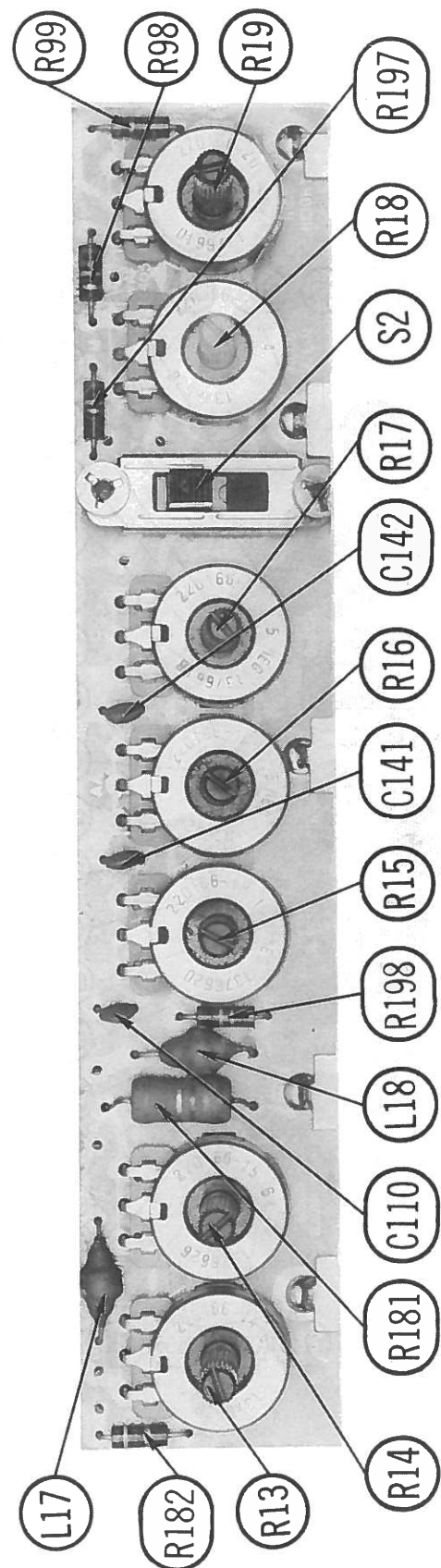
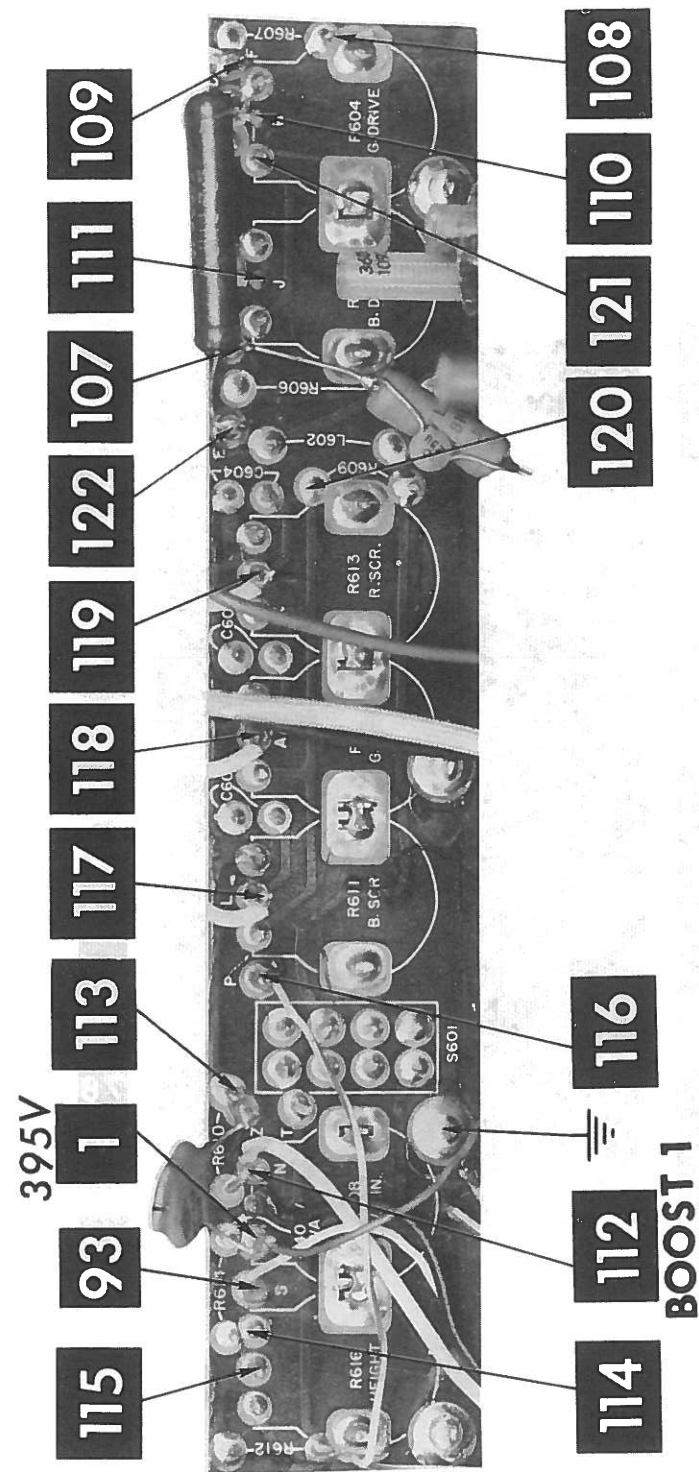
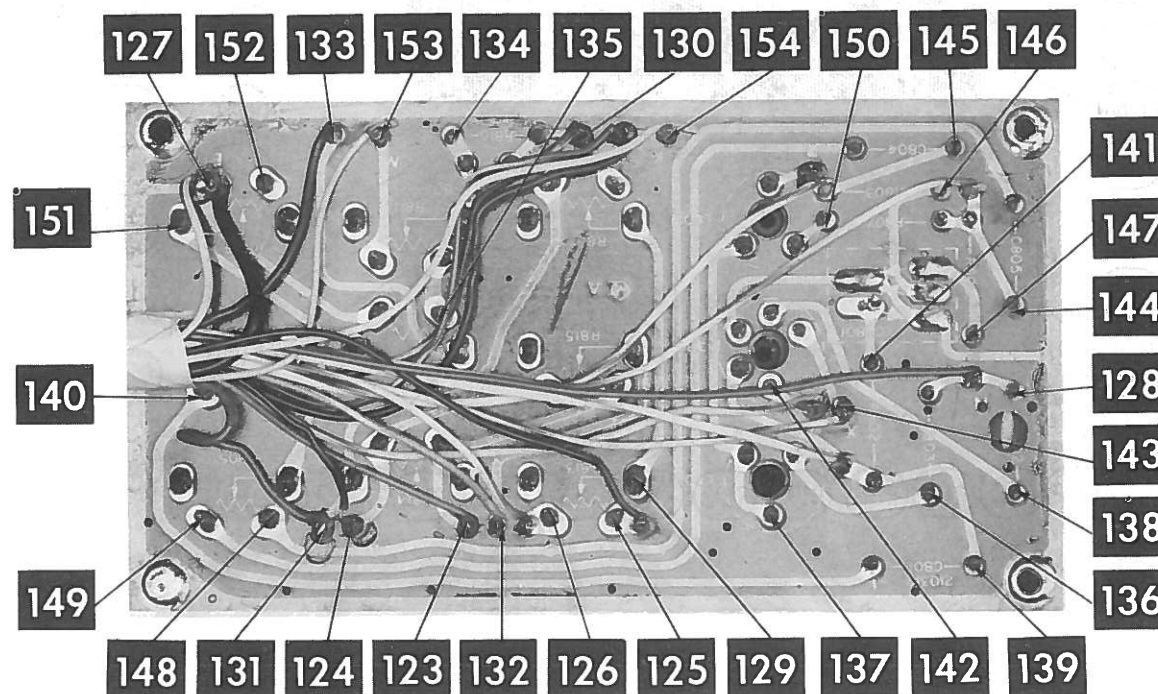


FIG. E



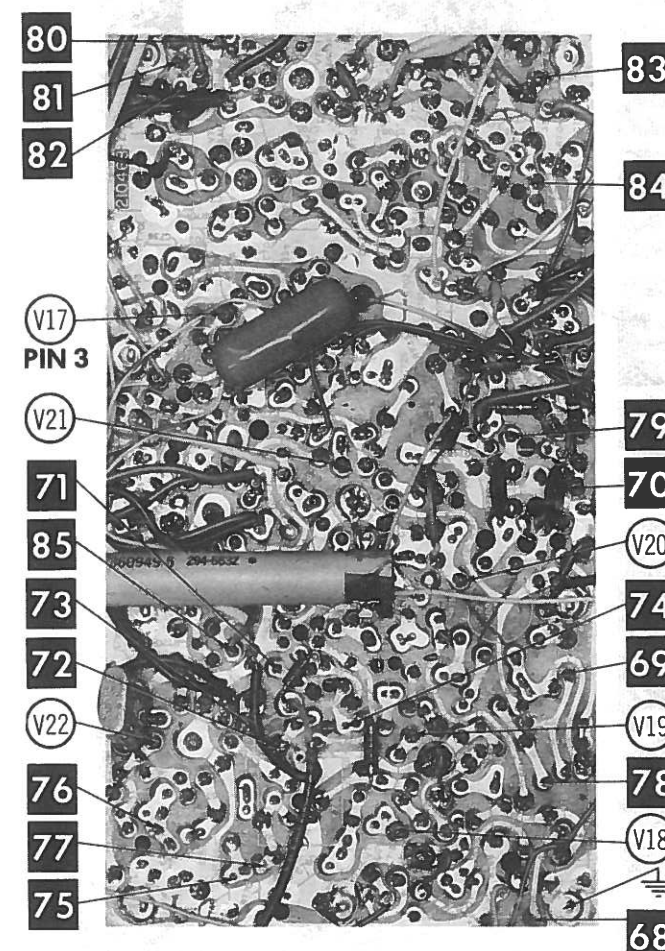
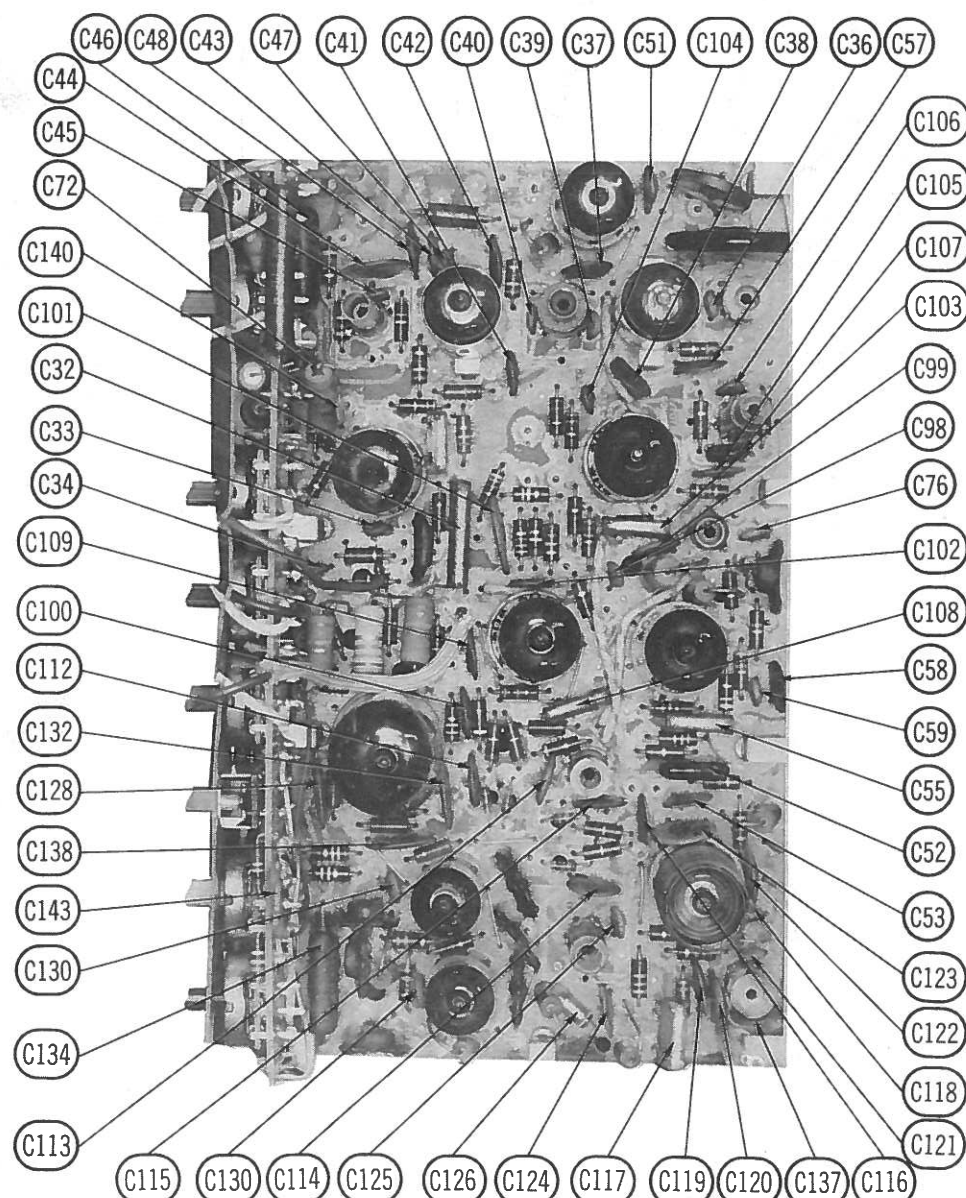
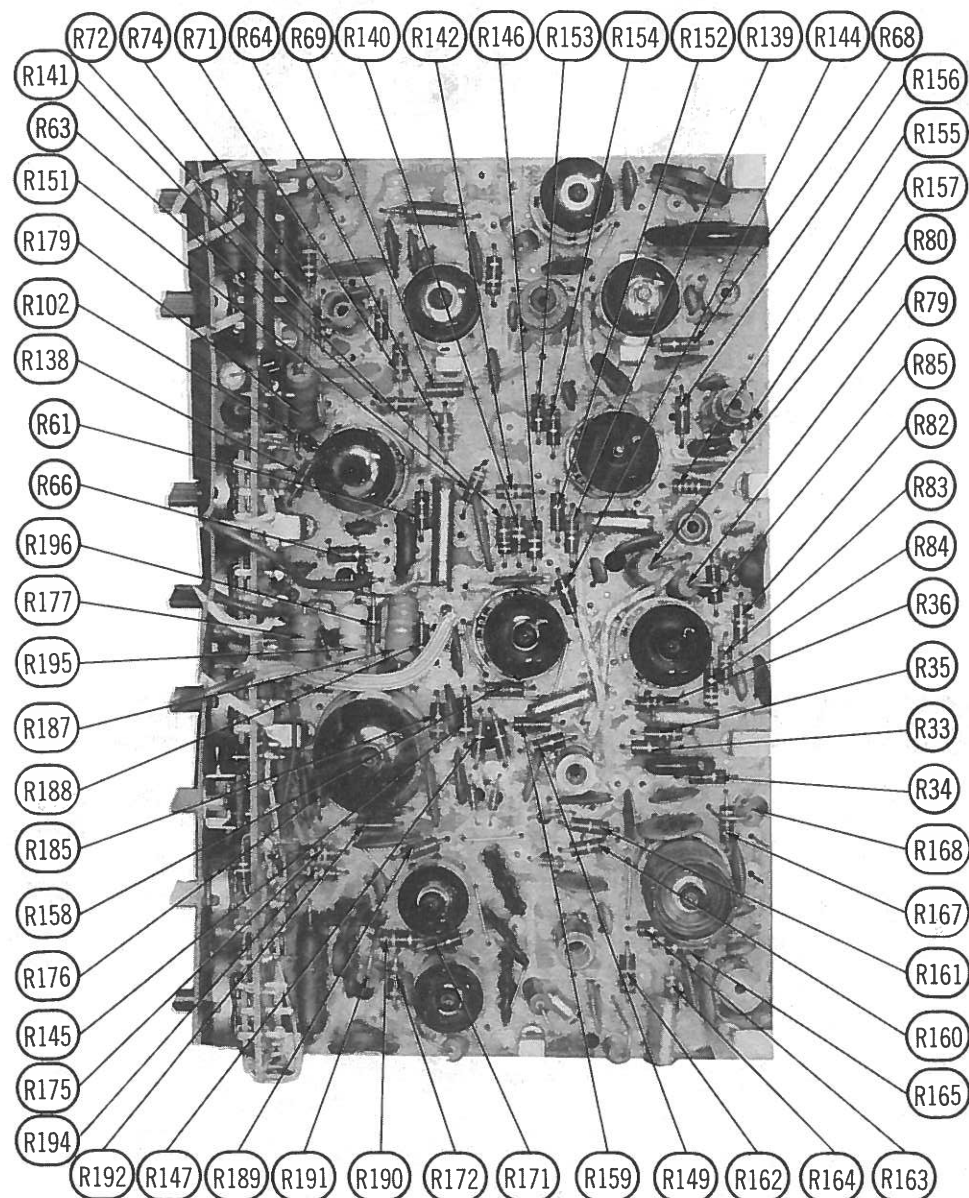
CONTROL CIRCUIT BOARD

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CONVERGENCE BOARD

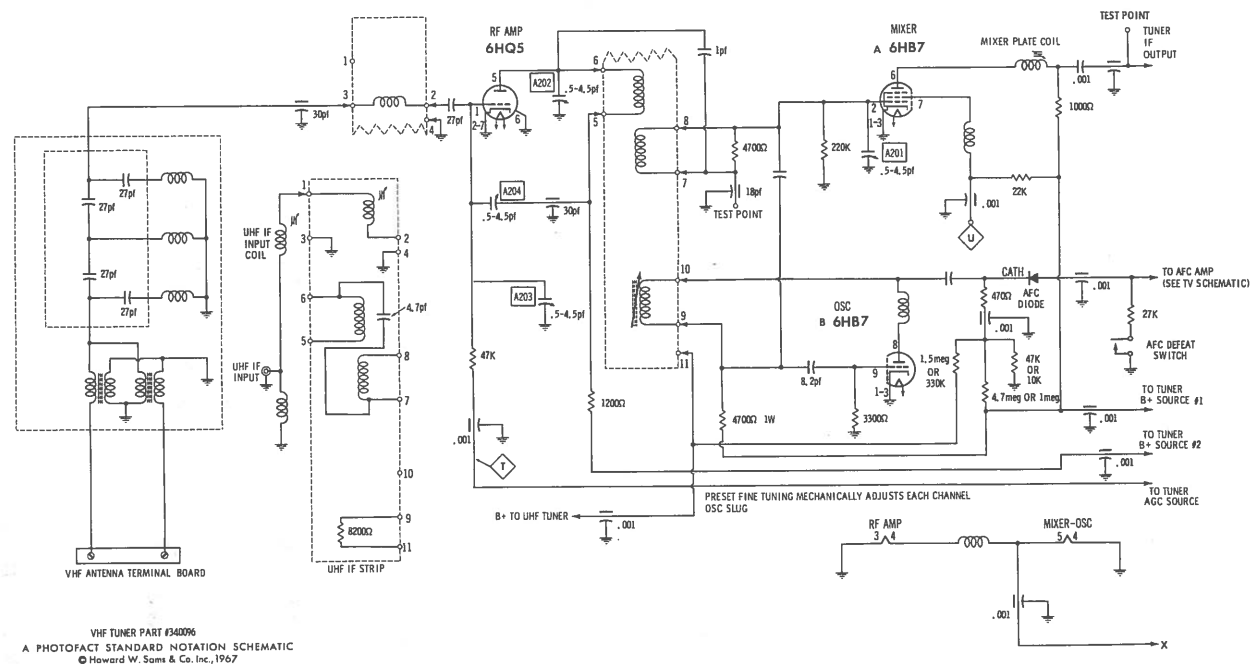
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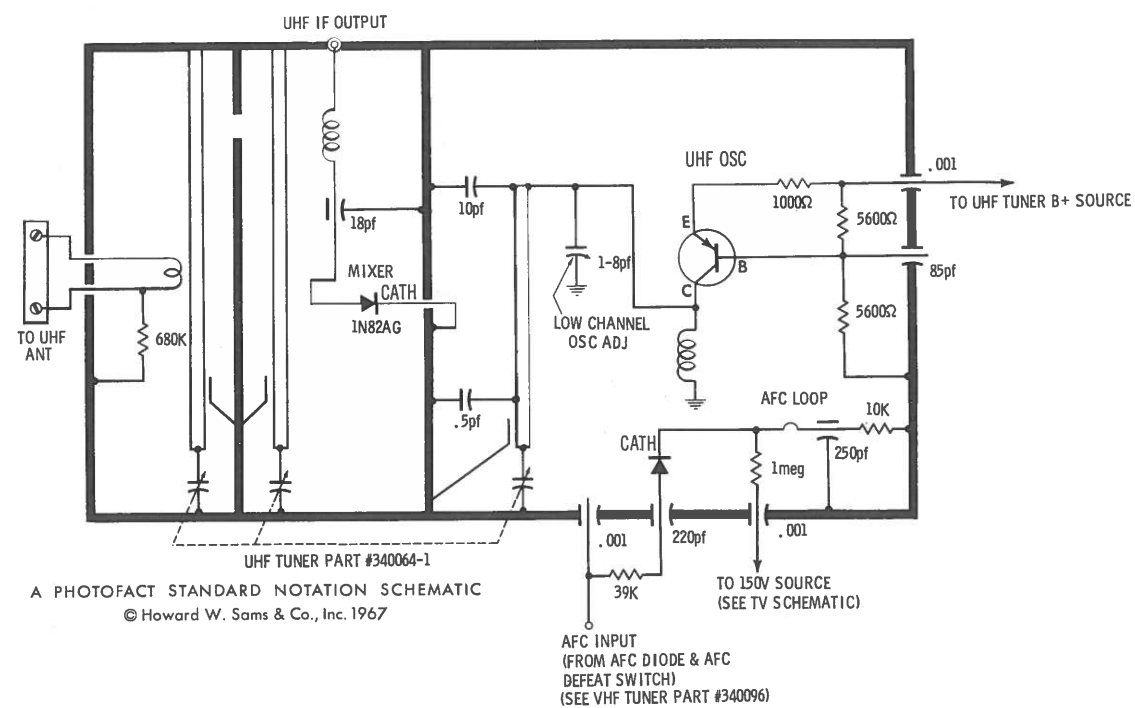
AGC - CHROMA - AUDIO - SYNC BOARD

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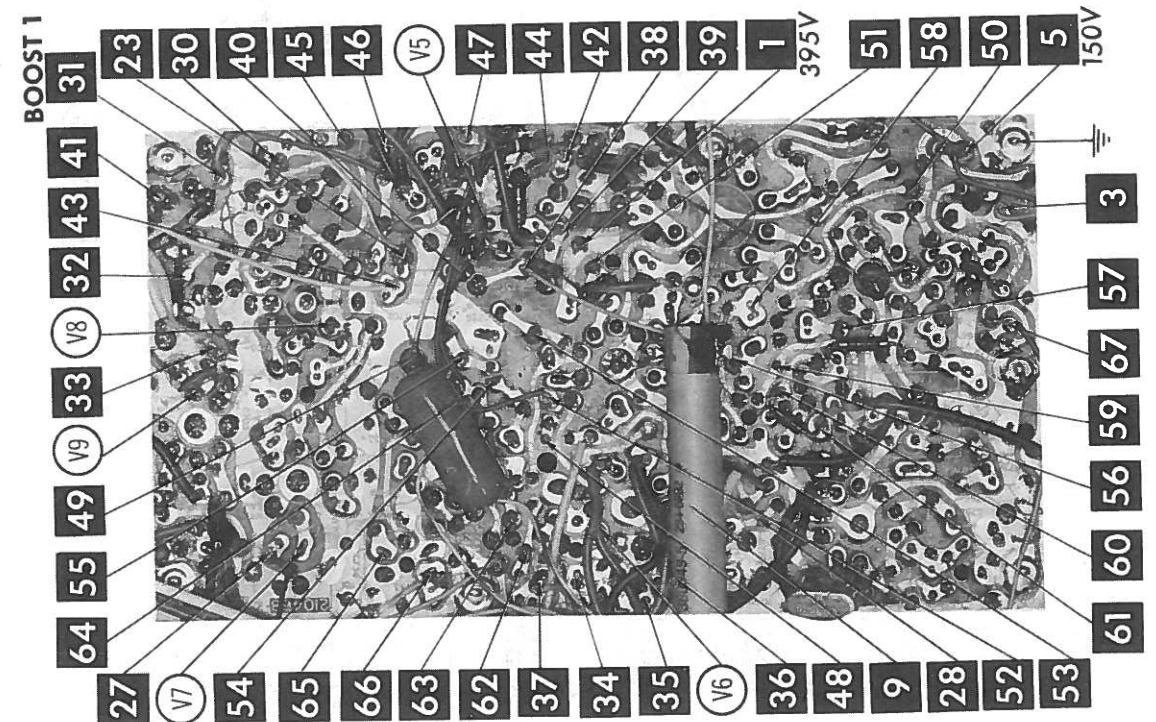
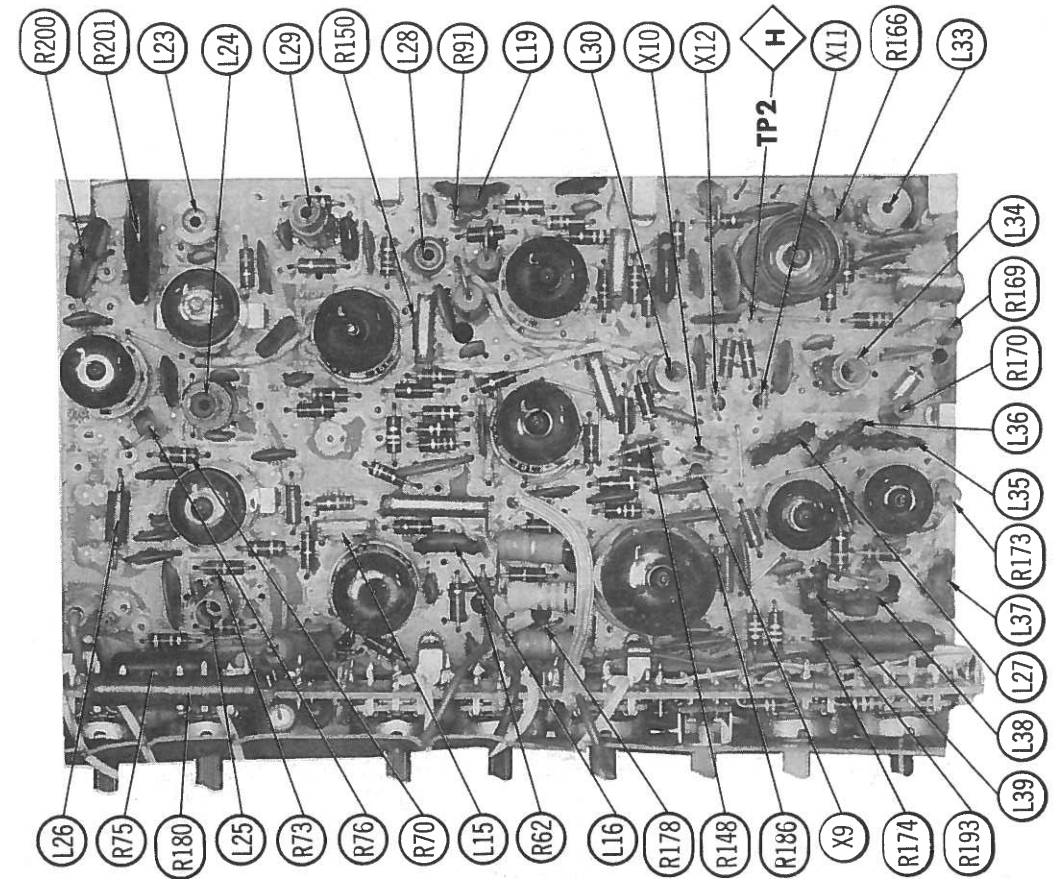
ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



VHF TUNER 340096-2



UHF TUNER 340064-1



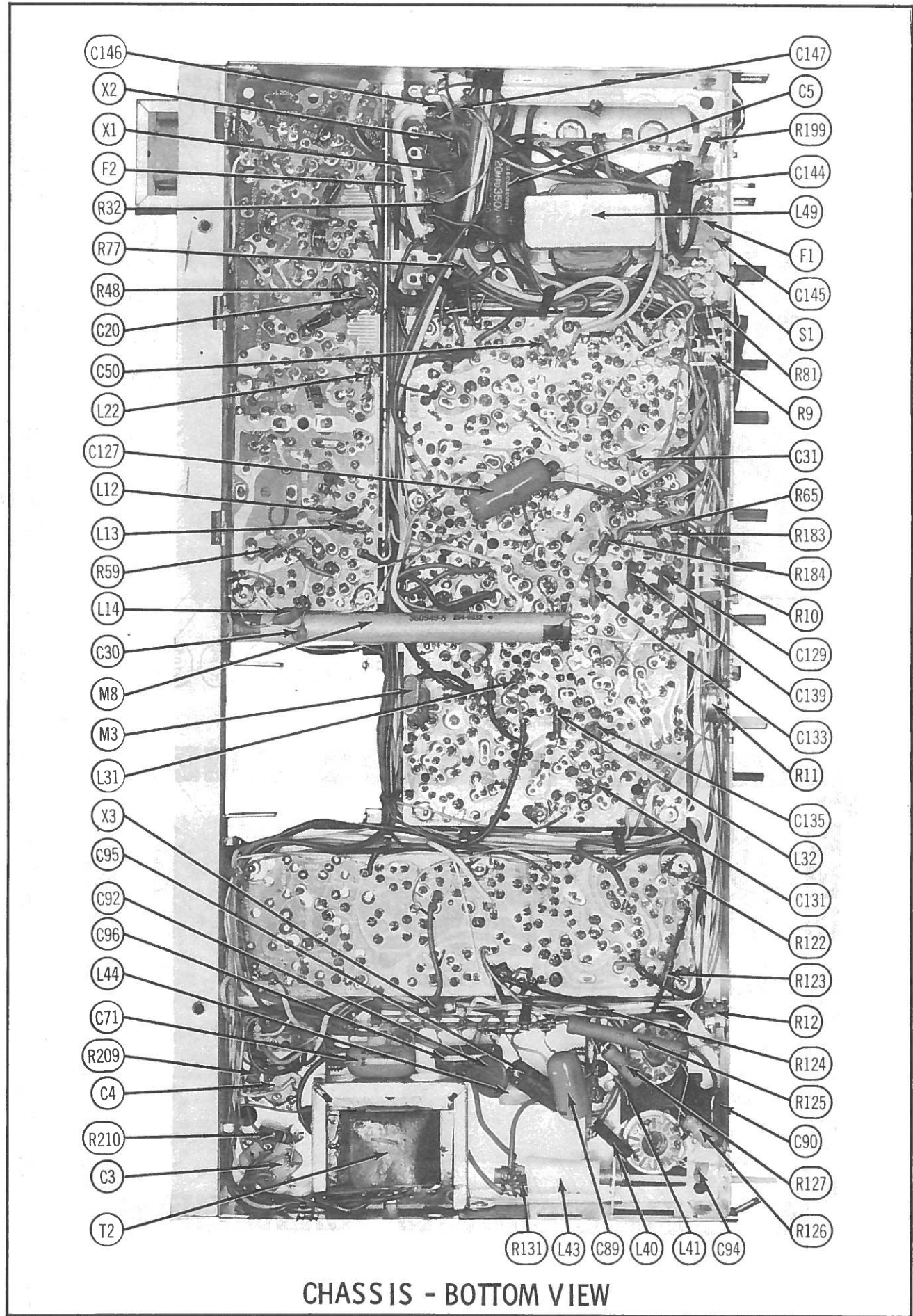
ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED

AGC - CHROMA - AUDIO - SYNC BOARD

MAGNAVOX CHASSIS T918/U918-01-AA/-BB thru T918/U918-07-AA/-BB, T918/U918-08-AA/-BB

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FOLDER 2



CHASSIS - BOTTOM VIEW

VHF TUNER PARTS LIST

TUBES

◆ AMPEREX ◆			◆ GENERAL ELECTRIC ◆			◆ RCA ◆			◆ SYLVANIA ◆		
ITEM No.	USE	TYPE		ITEM No.	USE	TYPE					
V201	RF Amp.	6HQ5		V202	Mixer - Oscillator	6HB7					

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.
C201A	27		DI-27	DD-270		CCD-270	GP427	10TS-Q27
B	27		DI-27	DD-270		CCD-270	GP427	10TS-Q27
C	27		DI-27	DD-270		CCD-270	GP427	10TS-Q27
D	27		DI-27	DD-270		CCD-270	GP427	10TS-Q27
C202	30							
C203	27	5%		TCZ-27		CC-TO-270	CNO427	10TCC-Q27
C204	.5-4.5							
C205	30							
C206	.5-4.5							
C207	.001		EF-001	MFT-1000		CCF-102	CT280A	
C208	.5-4.5							
C209	1.2	10%						10TCC-V12
C210	18							
C211	15	5%	NPO-DI 15	DTZ-15	CZ601CG150J	CC-TO-150	CNO415	10TCC-Q15
C212	1.8	±.25						10TCC-V18
C213	.5-4.5							
C214	.001		EF-001	MFT-1000		CCF-102	CT280A	
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216	.001		EF-001	MFT-1000		CCF-102	CT280A	
C217	.001		EF-001	MFT-1000		CCF-102	CT280A	
C218	.001		EF-001	MFT-1000		CCF-102	CT280A	
C219	.001		EF-001	MFT-1000		CCF-102	CT280A	
C220	4.7	10%	NPO-DI 4.7	DTZ-4R7		CC-TO-4R7	CNO547	10TCC-V47
C221	1.2	10%						10TCC-V12
C222	1	10%	NPO-DI 1.0	TCZ-1			CNO510	10TCC-V10

† Alternate Value used in some versions.

UHF TUNER PARTS LIST

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	
Q301	24T-016-008	UHF Oscillator		GE-11		SK-3019	NPN

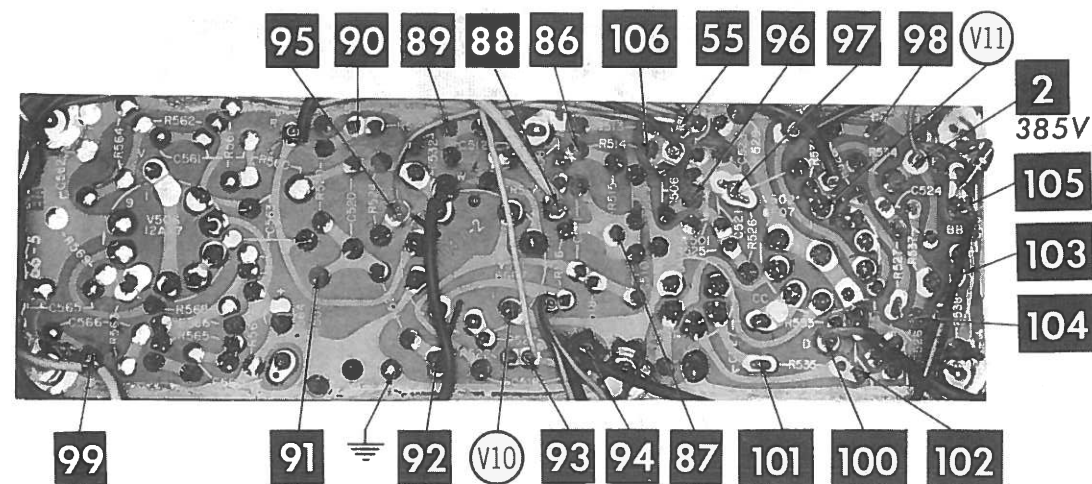
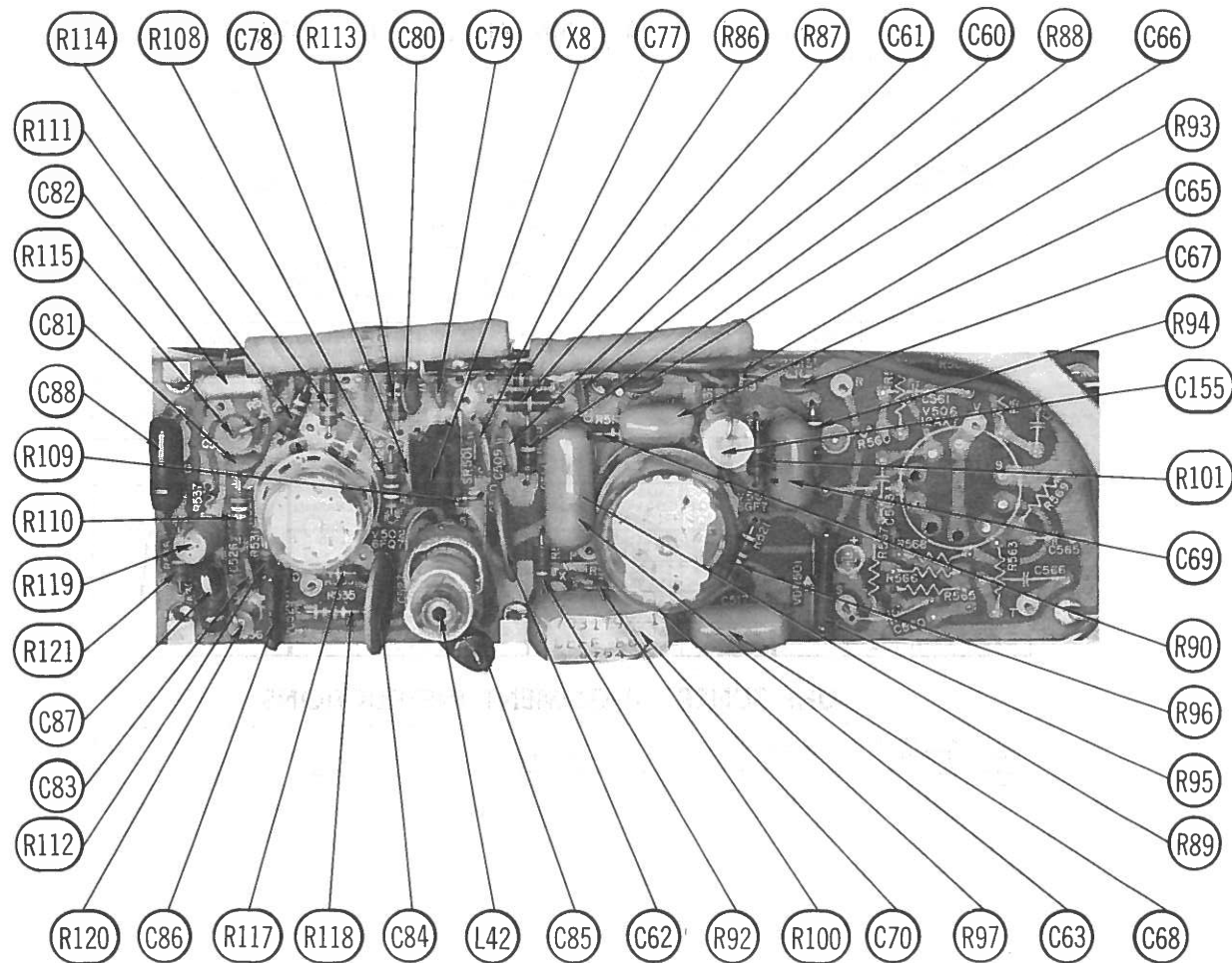
POWER RECTIFIERS & SIGNAL DIODES

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

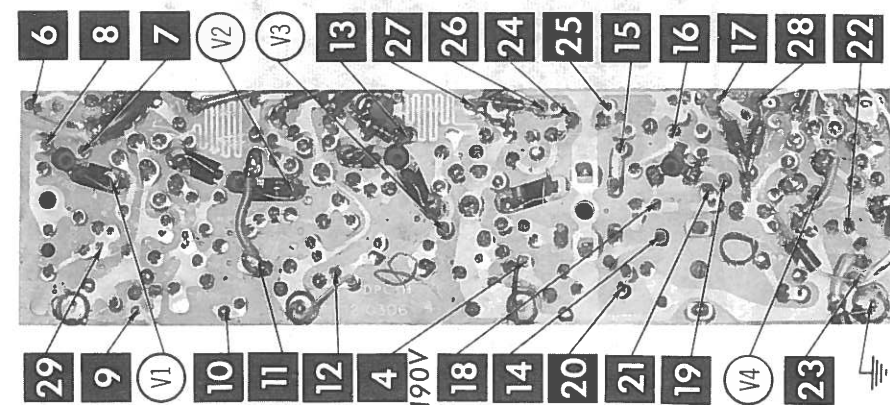
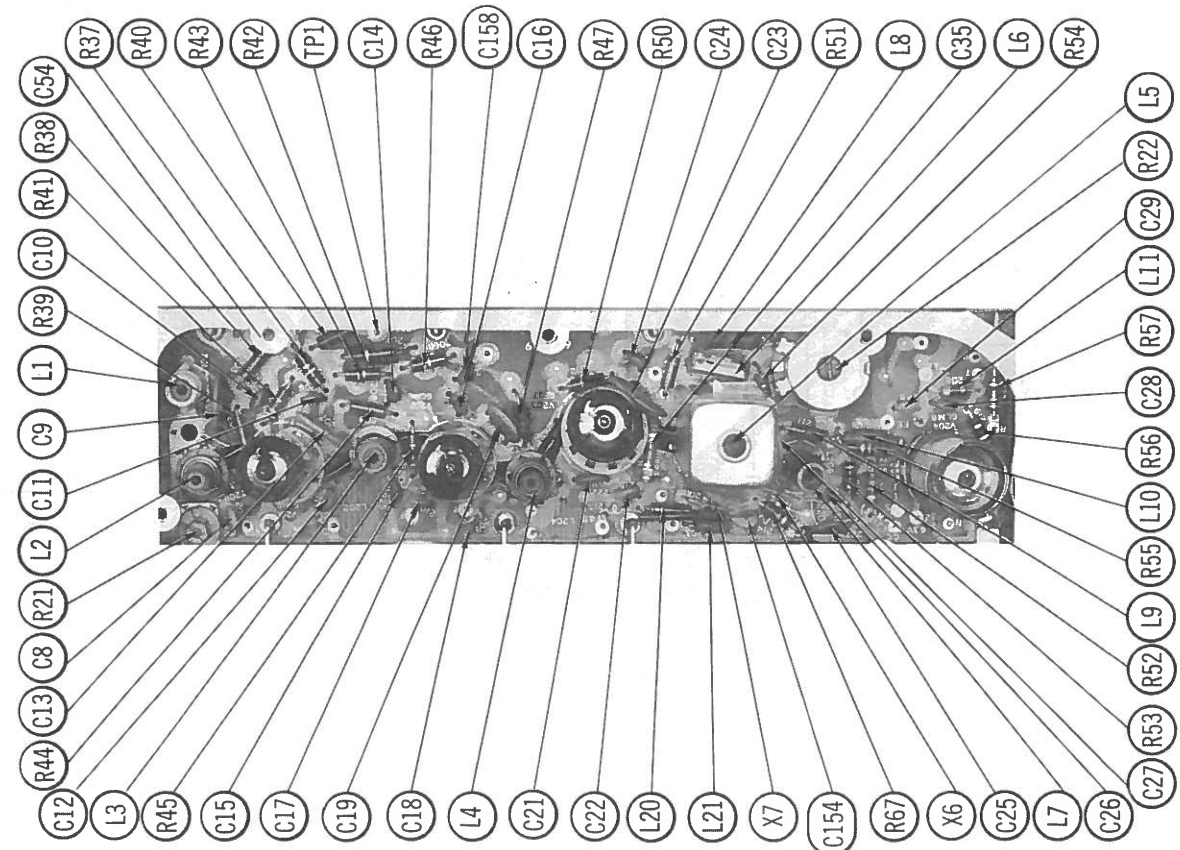
CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C301	18	N470						
C302	.5pf							
C303	10		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	CNO410	10TCC-Q10
C304	2-8							
C305	.001		EF-001	MFT-1000		CCF-102	CT280A	
C306	85							

MAGNAVOX CHASSIS
T918/U918-01-AA/-BB thru T918/
U918-07-AA/-BB, T918/U918-08-AA/-BA



A Howard W. Sams **CIRCUITRACE** Photo **SWEEP PRINTED BOARD** ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



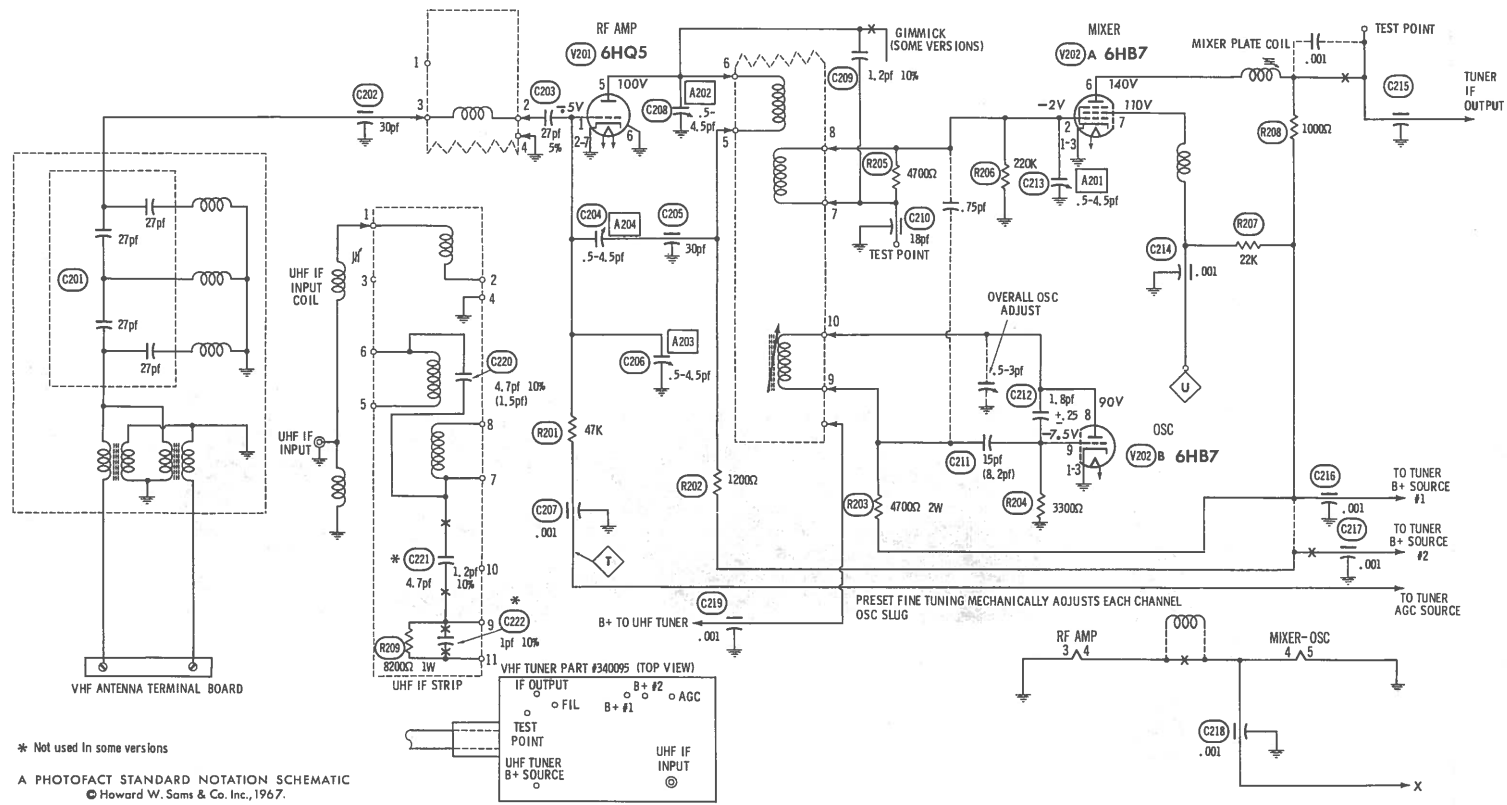
ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED

VIDEO PRINTED BOARD

MAGNAVOX CHASSIS T918/U918-01-AA/-BB
thru T918/U918-07-AA/-BB, T918/U918-08-AA/-BA

A Howard W. Sams **CIRCUITRACE** Photo

FOLDER 2



* Not used in some versions
 A PHOTOFAC STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co. Inc., 1967.

VHF TUNER ALIGNMENT INSTRUCTIONS

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

RF AND MIXER ALIGNMENT
 Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use 10MC sweep unless otherwise noted. On models with Tuner AFC, disable AFC before alignment. Connect a variable bias to the RF AGC line at point ∇ . Adjust bias to obtain response curve which shows no indication of overloading.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Across antenna terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to Point ∇ , low side to ground.	A201, A202, A203	Adjust for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2. "	195MC	193.25MC 197.75MC	10	Across Video Det. load resistor.	A204	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.
3. "	See Chart	See Chart	12 thru 2	Vert. Input to Point ∇ , low side to ground.		Reduce bias. Check all channels for response similar to Fig. 201. Make compromise adjustments of A201, A202 and A203.

CHANNEL & FREQUENCY CHART

SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL
57MC	55.25MC	2	85MC	83.25MC	6	195MC	193.25MC	10
63MC	61.25MC	3	177MC	175.25MC	7	201MC	199.25MC	11
69MC	67.25MC	4	189MC	187.25MC	8	207MC	205.25MC	12
75MC	73.25MC	5	195MC	193.25MC	9	213MC	211.25MC	13

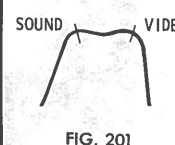
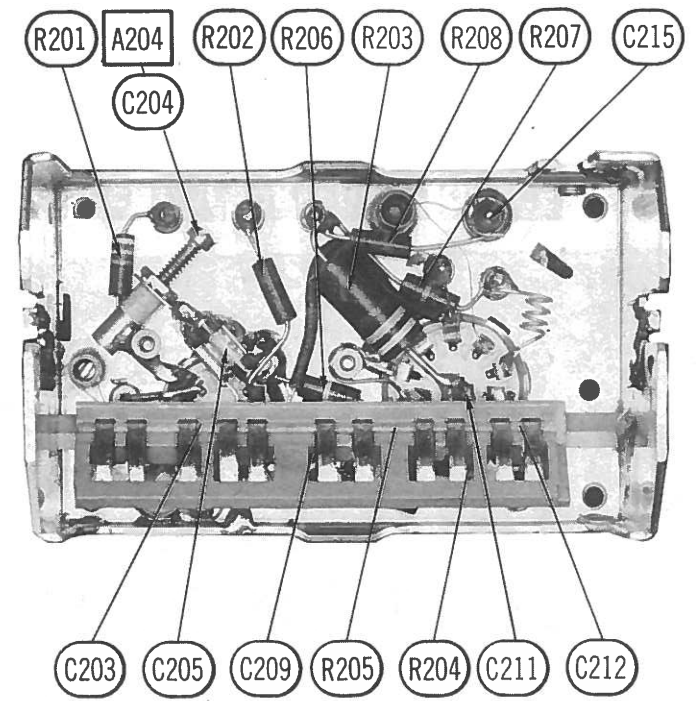
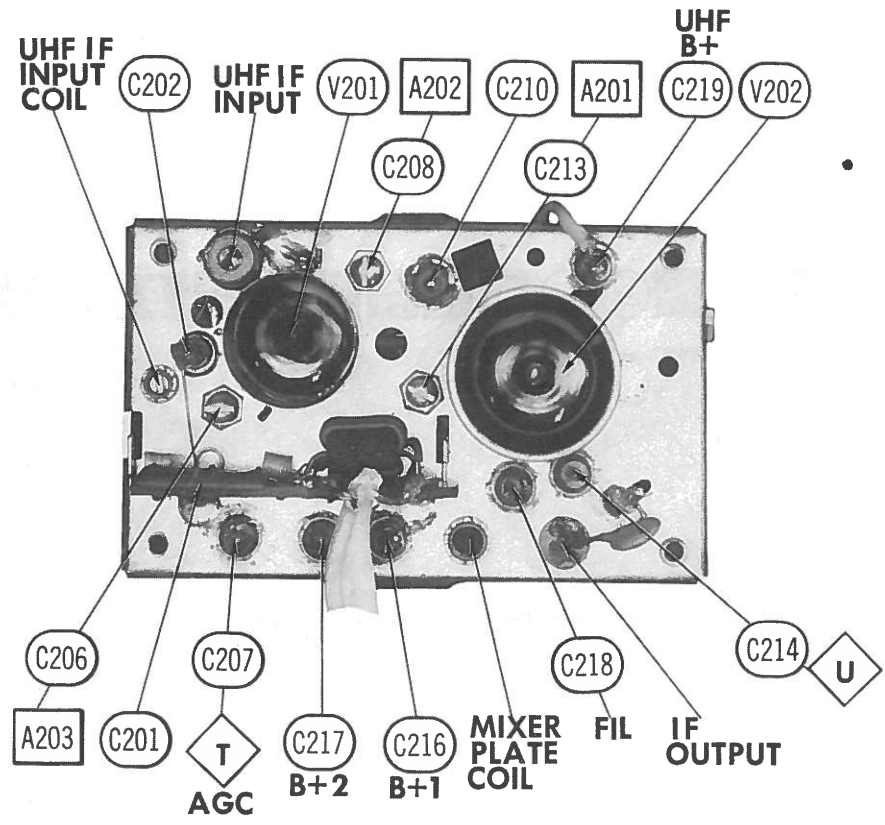


FIG. 201

UHF TUNER ALIGNMENT INSTRUCTIONS

NOTE: On models with AFC, disable AFC before alignment. Tune to a UHF station and adjust UHF IF Input coil for best picture and sound. Tune UHF Channel Selector to the lowest UHF channel operating in the area (low end of the dial). Adjust UHF Low Channel Oscillator Trimmer for best picture and sound.



VHF TUNER 340095-1

MAGNAVOX CHASSIS T918/U918-01-AA/-BB thru T918/U918-07-AA/-BB, T918/U918-08-AA/-BA

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						
		MAGNAVOX PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L42A	Horiz. Osc. (Freq.)	360980-3D						
B	Waveform (Sine Wave)							
L43	Focus	360980-2		6349				TV177
	Alternate	360957-5		6350 ①		FC-5 ①		TC289 ①
L44	Horiz. Linearity (Effic.)	360957-5		6350 ①		FC-5 ①		
L45	Dynamic Convergence R/G Master Amp.	361092-3		6347				T149
	(Right R/G Vert. lines)							
L46	Dynamic Convergence R/G Diff. Amp.	361092-3		6348				
	(Right R/G Horiz. lines)							
L47	Dynamic Convergence Blue Master Amp.	361092-2						
	(Right Blue Horiz. line)							
L48	Convergence Yoke							
A	Blue Section	360948-4						
B	Green Section	360948-4						
C	Red Section	360948-4						

① Install plastic sleeve on adjustment screw.

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MAGNAVOX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L49	.43A DC	15Ω	.45 H	320124-4	C-4125	C-2343	26C79	C-34X	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MAGNAVOX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L50	.62A AC	7Ω	.25 H	320232-3					

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MAGNAVOX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ 3.1A AC with 128V Tap	170VAC @ .49A DC	6.3VAC @ 2.75A AC	300238-1					
		SEC. 3							
		6.3VAC @ 10AAC							

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		MAGNAVOX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	Vert. Output	320111-6	A-4140C	VO-700C	26S86	A-305X	
T3	Yoke (Horiz. 12mh) 70° (Vert. 40mh)	(C)360947-1	MDF-144C ①	DY-90AC ②	Y-107 ①	YC-300-1 ①	
T4	Horiz. Output	361241-1(B)					

① Remove two (2) 580Ω resistors from vertical damping network.
② Remove two (2) 270Ω resistors from vertical damping network.

* COMPONENT CONNECTION DATA

ORIGINAL →	HV TRANSFORMER					VERTICAL OUTPUT					YOKE				
	Original Connections					Original Connections					Original Connections				
REPLACEMENT ↓						Blue	Red	Green	Green/White	Yellow	Orange	Black/White	Red/White	Red/Black	Green/Red
MERIT															
STANCOR															
THORDARSON															
TRIAD															

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MAGNAVOX PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T5	19000Ω	3-4Ω	320130-3	A-2999 ①		24S08 ①		① Drill new mounting holes.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		MAGNAVOX PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 6" PM 3-4Ω	584601-1	P4X6W3	46A2C	

FUSE DEVICES

ITEM No.	TYPE	RATING	REPLACEMENT DATA				
			PART No.		LITTELFUSE PART No.		BUSS PART No.
F1	Circuit Breaker	2.1A					
F2	3" length of fuse wire						

MISCELLANEOUS

ITEM No.	PART NAME	MAGNAVOX PART No.	NOTES
M1	VHF Tuner	340095-1	
M2	VHF Tuner	340096-2	
M3	UHF Tuner	340037-1	
M4	UHF Tuner	340064-1	
M5	Crystal	530089-2	3.58MC
M6	Spark Gap	180832-1	
M7	Magnet	703090-1	Blue Lateral Magnet Assembly
M8	Magnet	360999-1	Pole Piece (3 used)
M9	Magnet	361011-1	Purity Ring
M10	Delay Line	360949-5	
M11	Degaussing Coil	361128-1	(4 used)
S1	Switch	160370-6	Quick Picture
S2	Switch	160370-2	Service-Purity-Normal
S3	Switch	160370-6	Chromatone

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869 (17KV) or 8868 (25KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
300Ω Tuner Input Lead	Use BELDEN No. 8225
300Ω Antenna Lead-in	Use BELDEN No. 8275 (Foam Core) or 8285 (Foam Jacketed)
Antenna Rotor Cable	Use BELDEN No. 8464 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.
Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

TUBES

* AMPEREX		* GENERAL ELECTRIC		* RCA		* SYLVANIA	
ITEM No.	USE	TYPE		ITEM No.	USE	TYPE	
Q301	UHF Osc. (Transistor)	24T-016-008		V12	Horiz. Output	6JE6	
V201	RF Amp.	6HQ5		V13	Damper	8DW4	
V202	Mixer - Osc.	6HB7		V14	HV Rectifier	3A3	
V1	1st Video IF	6JH6		V15	Focus Rectifier	1V2 (2AV2) *	
V2	2nd Video IF	6GM6		V16	HV Regulator	6BK4	
V3	3rd Video IF	6EJ7		V17	Chroma Bandpass Amp. -		
V4	Video Amp. - Sync Amp. -			V18	Horiz. Blanking Amp.	6GH8A	
V5	Video Cathode Follower	6LM8		V19	Z Demodulator	6GY6	
V6	AGC Keying - Sync Sep.	12GN7		V20	X Demodulator	6GY6	
V7	Sound IF	6AU6		V21	B-Y Amp. - R-Y Amp. -		
V8	Audio Detector	6DT6		V22	Color Killer - Burst Amp.	6MD8	
V9	Audio Output	6AQ5A			Chroma Ref. Osc. Control -	6GH8A	
V10	Vert. Mult. - Vert. Output	6GF7			Chroma Reference Osc.		
V11	Horiz. AFC - Horiz. Osc.	6FQ7					

* Alternate

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MAGNAVOX PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V23	21FJP22A 21FJP22 21FBP22 RE21FBP22 RE21FJP22	21FJP22A ① 21FJP22 21FBP22 21FBP22 21FJP22	21FJP22A ① 21FJP22 21FBP22 21FBP22 21FJP22	RE21FJP22 ② RE21FJP22 ② RE21FBP22 ② RE21FBP22 ② RE21FJP22 ②	① Aluminized ② Color Bright "85"

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1	.49A	530088-1	GE-504A	8D6 or 5A6-D	1N2071 or VB600	SK-3016 or SK-3017	60C or S-5960-2 ①
X2	.49A	530088-1	GE-504A	8D6 or 5A6-D	1N2071 or VB600 ①	SK-3016 or SK-3017	60C or S-5960-2 ①
X3		530097-3	GE-505	61-8968	A50 or 1N536	SK-3016 or SK-3017	S-879
X4		530098-1	GE-504A or GE-505	8D4 or 5A4-D	A50 ② or 1N536 ②	SK-3016 or SK-3017	40C or F-4
X5		530087-2	GE-504A ② or GE-505 ②	8D4 ② or 5A4-D ②	1N536 ②	SK-3016 ② or SK-3017 ②	S-5544 or 40C ②
X6		530085-2 (1N60)	1N60	1N60			
X7		530085-2 (1N60)	1N60	1N60			
X8		530093-1	6GC1	DD04			
X9		170733-1 ①	1N60	1N542 ①			
X10		170733-1 ①	1N60	1N542 ①			
X11		170733-1 ①	1N60	1N542 ①			
X12		170733-1 ①	1N60	1N542 ①			

① A single unit replaces X1 and X2.

② Three (3) required.

③ Matched Pair

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	MAGNAVOX PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	160	250	270071-3	AFHS1-37-25	AA0316	XC1-19	WP131.5	TVL-1541
C2A	160	250	270071-6	AFH2-99-95	AA0357	XC1-19	FP253	TVL-2808
C3A	80	450	270071-7	AFH3-46	BR80-550	QT1-21	FP378.4	TVL-3793.3
C3B	80	450			CC0370	XC3-32		
C4A	20	450	270023-42	AFH3-152-50	BBRT16T45		FP343.4	TVL-3724.12
C5	20	350						
C6	100	25	270027-20	PRSL1735	BR20-350	QTI-9	TC65	TVA-1608
C7	50	150	270082-617	CRE823A	NLW100-25	MT1-20	TT25X100	TE-1211
			270027-39	PRSL480	BR50-150	QTI-17	TC49	TVA-1414

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C8	9.1	±.25	#250373-9197					
C9	150	NPO 5%						
C10	.001		NPO-DI 150	DDT-150	JBS801YP102K	CCD-102	CNO315	10TCC-T15
C11	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C12	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C13	.001							
C14	.001	N2200 10%	#250236-56					
C15	.001							
C16	.001							
C17	.001	1KV						
C18	.001	1KV						
C19	.220	N1500 10%	#250236-59					
C20	.470	10%						
C21	.0022	10%						
C22	.330		(350) ↑					
C23	.560	N1500 5%	#250236-58					
C24	.001							
C25	.01							
C26	10	NPO 5%						
C27	100	NPO 10%						
C28	.680	5%						
C29	.001							
C30	.33	N750 5%						
C31	.001							
C32	.1	200V						
C33	.390	10%						

CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C34	390	1.5% N3300	DI-390	DD-391	BYX801ZU103M	CCD-391	GP339	10TS-T39
C35	1.5	N3300	NPO-DI 3.0	DTZ-3R3	BYX801ZU103M	CCD-391	CNO633	10TCC-V30
C36	3.3	NPO	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C37	.01							
C38	.0033	5%						
C39	3	N1500 10%	#250529-3099					
C40	3	N1500 10%	#250529-3099					
C41	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C42	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C43	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C44	.022		BPD-02	DD-203	BYT801ZU203Z	CCD-203	GP120	10TS-S20
C45	18	N150 5%						
C46	.1	400V						
C47	220		DBE4P1	DD-221	DMF4P1	4DP-3-104	PVC601	10TCP-Q18
C48	.01		DI-220	DD-103	JBY801Y P221K	CCD-221	GP322	10TS-T22
C49	.0033		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C50	47	NPO	DI-3300	DD-332	BYX801Y P332K	CCD-332	GP110	10TS-S10
C51	.002	1KV	NPO-DI 47	DTZ-47	CX801C470K	CCD-470	CNO447	10TCC-Q47
C52	.033	100V	DI-2200	DD-222	JBY801Y P222K	CCD-222	GP222	10TS-D22
C53	.01		DBE4S33	DD-222	DMF4S33	4DP-2-333	PVC6133	4PS-S33
C54	.001		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C55	.1	100V	DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C56	180	2KV 10%	DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C57	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C58	.002		DI-150	DD-151		CCD-151	GP315	10TS-T15
C59	150		DI-2200	DD-222	JBX801Y P222K	CCD-222	GP222	10TS-D22
C60	.0022		DI-1500	DD-152		CCD-152	GP215	10TS-D15
C61	.0015							
C62	.0027	N5600 10%	DBE6S39	DD-222	DPMS6S39	6DP-3-393	PVC6139	6PS-S39
C63	.039	600V 10%	DI-2200	CPR-6800J	JBX801Y P222K	CCD-222	GP222	10TS-D22
C64	.0022		DBE6D68	DD-681	DMF6D68	6DP-1-682	PVC6268	6PS-D68
C65	.0068	400V 10%	DI-680	DD-681	JBY801Y P681K	CCD-681	GP368	10TS-T68
C66	.680		DBE2S47	DD-681	JBY801Y P681K	CCD-681	GP368	10TS-T68
C67	.047	200V			DMF2S47	4DP-3-473	PVC2147	2PS-S47
C68	.0082	1KV			FKM16D62	16DP-3-822	GP61628	6PS-D80
C69	.1	800V	DBE6P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C70	.1	800V	DBE6P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C71	.1	800V	DBE6P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C72	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C73	100	N1500 3KV 10%	(5%) †					
C74	390	N2200 10%	(560) †					
C75	390	N2200 10%	(560) †					
C76	18	NPO 10%		TCZ-18	CY801CG180J	CCD-180	CNO418	10TCC-Q18
C77	68	NPO 10%	NPO-DI 68	DTZ-68	CX801CG680K	CCD-680	CNO468	10TCC-Q68
C78	68	NPO 10%	NPO-DI 68	DTZ-68	CX801CG680K	CCD-680	CNO468	10TCC-Q68
C79	27	N750 10%		TCN-27	JBY801Y P821K	CCD-270	GP382	10TCC-Q27
C80	820	10%	DI-820	DD-821	JBY801Y P821K	CCD-821	GP382	10TS-T82
C81	820	10%	DI-820	DD-821	JBY801Y P821K	CCD-821	GP382	10TS-T82
C82	.15	75V	DBE4P15		DMF4P15	4DP-4-154	PVC6015	4PS-P15
C83	.001	5%						
C84	390	N1500 5%	#250236-63					
C85	.01	400V 10%	DBE6S1	CPR-10000J	DMF6S1	6DP-1-103	PVC611	6PS-S10
C86	.680	500V 5%	ADM-20-681	CPR-680J	DMF6S1J500	DM-16-681	MS-368	
C87	.0015	600V 10%	DBE6D15	CPR-1500J	DMF6D15	6DP-1-152	PVC6215	6PS-D15
C88	.01	600V	DBE6S1	CPR-10000J	DMF6S1	6DP-1-103	PVC611	6PS-S10
C89	.1	600V	DBE6P1		DMF6P1	6DP-4-104	PVC601	6PS-P10
C90	.047	600V	DBE6S47		DMF6S47	6DP-3-473	PVC6147	6PS-S47
C91	68	N1500 4KV 10%	#250475-24					
C92	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C93	130	N2200 6KV	#250475-11					
C94	22	N750 1KV 10%		DTN-22	CZ801UJ220K	CCTN-220	CN7422	10TCC-Q22
C95	.068	600V 5%						
C96	.082	600V 5%						
C97	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C98	150	N750 10%	DI-150	DD-151		CCD-151	GP315	10TS-T15
C99	120	N750 10%	TCN-120			CCTN-120	GP312	10TCC-T12
C100	.470		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C101	470	N750	TCN-470			CCTN-470	GP110	10TCC-T47
C102	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C103	.047	100V	DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C104	820	10%	DI-820	DD-821	JBY801Y P821K	CCD-821	GP382	10TS-T82
C105	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C106	.001		DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C107	270	5%	ADM-15-271	CPR-270J	CD15 P271J500	DM-15-271	MS-327	
C108	.047	100V	DBE2S47		DMF2S47	4DP-3-473	PVC2147	2PS-S47
C109	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C110	.001		DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C111	72							
C112	330	N1500 5%	#250529-3312					
C113	330	N1500 5%	#250529-3315					
C114	330	N1500 5%	#250529-3315					
C115	330	N1500 5%	#250529-3315					
C116	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C117	.1	100V	DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C118	3.9	NPO 10%	#250546-3999					
C119	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C120	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C121	10	NPO 10%	NPO-DI 10	DTZ-10	CZ801CG100J	CCD-100	CNO410	10TCC-Q10
C122	220	N750 10%	DTN-220			CCTN-220	CN7322	10TCC-T22
C123	82	NPO 10%	DTZ-82			CCTO-820	CNO482	10TCC-Q82
C124	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C125	27	NPO 10%	TCZ-27			CCTO-270	CNO427	10TCC-Q27
C126	200	5%	CPR-200J			DM-15-201	MS-32	
C127	.22	400V	DBE4P22		DMF4P22	4DP-5-224	PVC4022	4PS-P22
C128	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C129	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C130	24	N150 5%	#250527-2405					
C131	470		DI-470	DD-471	JBY801Y P471K	CCD-471	GP347	10TS-T47
C132	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C133	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C134	.047	400V	DBE4S47		DMF4S47	4DP-3-473	PVC4147	4PS-S47
C135	470		DI-470	DD-471	JBY801Y P471K	CCD-471	GP347	10TS-T47
C136	24	N150 5%	#250527-2405					
C137	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C138	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C139	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C140	.001		DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C141	.001		DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C142	.001		DI-1000	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C143	.01	1KV	DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C144	.047	800V	DBE6S47		DMF6S47	6DP-3-473	PVC6147	6PS-S47
C145	47	1.4KV						

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C146	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C147	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C148	.1	400V	DBE4P1		DMF4P1	4DP-3-104	PVC601	4PS-P10
C149	.1	400V	DBE4P1		DMF4P1	4DP-3-104	PVC601	4PS-P10
C150	.056	400V	DBE6S46		DMF6S46	4DP-3-563	PVC4056	4PS-S56
C151	.1	200V	DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C152	.12	200V	DBE6S82		DMF6S82	6DP-4-823	PVC4082	6PS-S82
C153	.082	200V	NPO-DI 10	DTZ-10	CZ801CG100J	CCD-100	CNO410	10TCC-Q10
C154	10	NPO 5%						
C155	.001	2KV						
C156	24	NPO 5%		TCZ-24	DMF2P47	2DP-5-474	PVC2047	2PS-P47
C157	.47	200V	DBE2P47	DD-102	JBS801Y P102K	CCD-102	GP210	10TS-D10
C158	.001		DI-1000					

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

† Magnavox Part Number

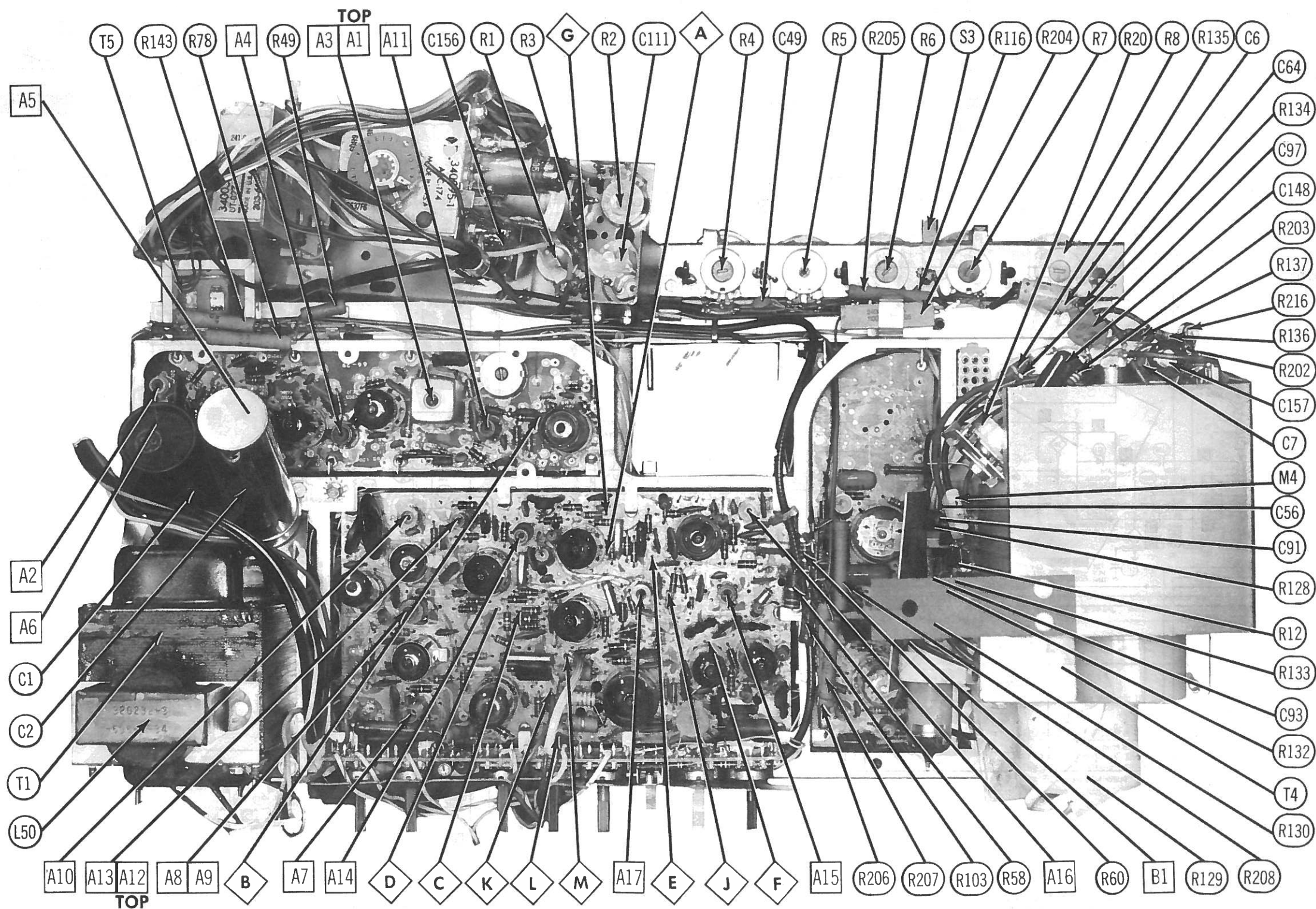
‡ Alternate Value used in some versions.

① Includes Spark Gap.

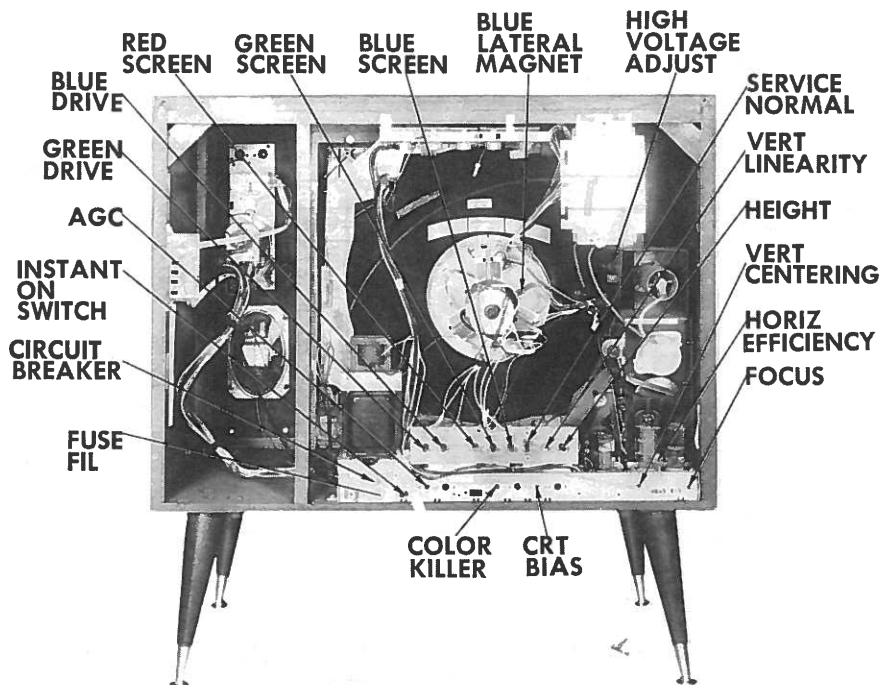
CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA					
			MAGNAVOX PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1 R2	Volume/Switch Color	1meg 500Ω	220135-14 ② 220126-91 ③	F4-500, SF102				UA751A, SL3500
R3	Brightness	250K	220126-82 ④	F1-250K, SF102	A47-250K-S, FS-3 or (NP-250K-S, UP-B-400)	Q11-130 or (BU1, CF15, SS1, DC1) *		UA254L, SL3500 or (RU254L, SL38 SL3500) or (U46)
	Brightness/Switch	250K	220135-13 ⑤	F1-250K, SPU304, KR-8	C475-250K-S, FS-3 or (NP-250K-S, UPP-B-400, PPAP, NWG-18)	B11-130, SK7 or (BU1, CF15, SS10, K) *	PP25L	
R4	Sharpness	100Ω	220146-82	F1-100, SNK010		B11-084, TM4 or (BU11, CF1, SS8) *		RUI2L, SL37, SN1000 or (UA12L SN1000) or (U1)
R5	Tone	3meg	220146-26 (D220146-26)	F2-3meg, SNK010	A47-3meg-Z, RN-3, TT-2 or (NP-3meg-Z, NML-A-300, TT-2)	B13-140, TM4 or (BU11, CF28, SS8) *		RT36A, SL37, SN1000 or (UA36A SN1000) or (U57)
R6	Horiz. Hold	45K	220146-69	TT-31 or (F1-50K, SNK010)	B47-50K-S or (NP-50K-S, NML-A-300, TT-2)	B11-123, TM4 or (BU11, CF12, SS8) *	PTA54L or (RU54L, SL37, SN1000) or (UA54L, SN1000)	
	Horiz. Hold	35K	220146-48 ⑥	TT-31 or (F1-50K, SNK010)	B47-50K-S or (NP-40K-S, NML-A-300, TT-2)	B11-122, TM4 or (BU11, CF12, SS8) *	PTA54L or (RU54L, SL37, SN1000) or (UA54L, SN1000)	
R7	Contrast	800Ω	220146-29	TT-411 or (F1-750, SNK010)	B47-750-S or (NP-750-S, NML-A-300, TT-2)	B11-105, TM4 or (BU11, CF5, SS8) *	PTA751L or (RU751L, SL37, SN1000) or (UA131L, SN1000)	
R8	Vert. Hold	750K	220146-50	TT-68 or (FL-750K, SNK010)	A47-750K-S, RN-3, TT-2 or (NP-750K-S, NML-A-300, TT-2)	B11-136, TM4 or (BU11, CF64, SS8) *	PTA754L or (RU754L, SL37, SN1000) (UA16L, SN1000)	
R9	AGC	50K	220208-33	TT-31 or (F1-50K, SNK010)	B47-50K-S or (NP-50K-S, NML-A-300, TT-2)	B11-123, TM4 or (BU11, CF12, SS8) *	PTA54L or (RU54L, SL37, SN281) or (UA54L, SN281)	
R10	Color Killer	1meg	220208-34	TT-69 or (F1-1meg, SNK010)	B47-1meg-S or (NP-1meg-S, NML-A-300, TT-2)	B11-137, TM4 or (BU11, CF17, SS8) *	PTA1254L or (RU16L, SL37, SN281) or (UA16L, SN281)	
R11	CRT Bias	2500Ω, 2W	220181-11 (C220181-11)	V-3000 ①	U39-3000 ①	B115R252A or (BU1, WF6, SS8) *	MR2500T or (VW2P5K)	
R12	Vert. Centering	10Ω 2W	220181-1 (C220181-1)	V-10 ① or (WN-10)	U39-10 ①	B115R100A or (W11-010, SK5) or (BU1, WF16, SS8) *	MR10T or (VW10)	
R13	Green Drive	6000Ω	220166-14	F1-7500, SNK104, AK-40	NP-7000-S, UP-N-102, TT-3	B11-115, TM9 or (BU11, CF8, SS8, DC2) *	TRS53L	
R14	Blue Drive	6000Ω	220166-15	F1-7500, SNK104, AK-40	NP-7000-S, UP-N-102, TT-3	B11-115, TM9 or (BU11, CF8, SS8, DC2) *	TRS53L	
R15	Red Screen	1.5 meg	220166-18	F1-1.5 meg, SNK104, AK-40		B11-138, TM9 or (BU11, CF18, SS6, DC2) *	TRS26L	
R16	Green Screen	1.5 meg	220166-16	F1-1.5 meg, SNK104, AK-40		B11-138, TM9 or (BU11, CF18, SS6, DC2) *	TRS26L	
R17	Blue Screen	1.5 meg	220166-17	F1-1.5 meg, SNK104, AK-40		B11-138, TM9 or (BU11, CF18, SS6, DC2) *	TRS26L	
R18	Vert. Linearity	3.4 meg	220166-19	F1-3 meg, SNK104, AK-40		B11-140, TM9 or (BU11, CF21, SS6, DC2) *	TRS36L	
R19	Height	100K	220166-20	F1-100K, SNK104, AK-40	NP-100K-S, UP-N-102, TT-3	B11-128, TM9 or (BU11, CF13, SS6, DC2) *	TRS15L	



CHASSIS - TOP VIEW



CABINET-REAR VIEW

DISASSEMBLY INSTRUCTIONS

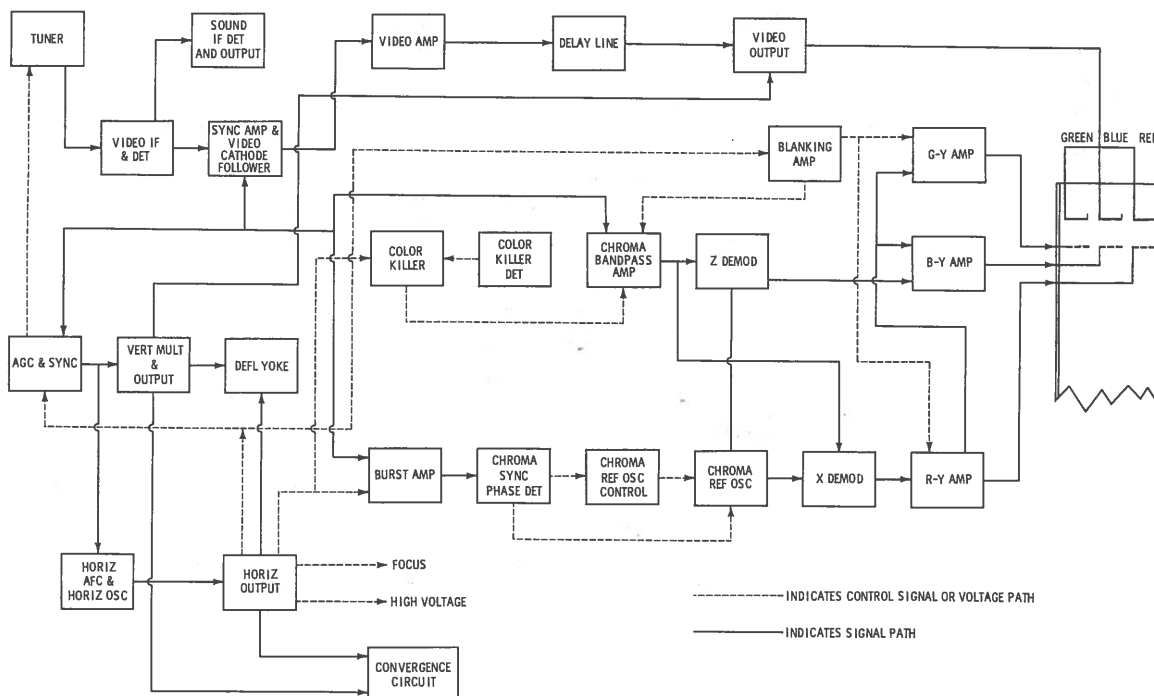
TV CHASSIS REMOVAL

1. Remove 12 screws holding back cover and remove back cover. It is necessary to disconnect antenna leads. Remove all knobs.
2. Disconnect yoke plugs, high voltage anode lead, picture tube socket, and speaker leads.
3. Remove 6 screws holding chassis. Remove 2 screws at front of cabinet, 2 at back of cabinet, and 2 screws holding controls.
4. Lift out chassis and tuner.

NOTE: Most components may be serviced without removing chassis.

PICTURE TUBE REMOVAL

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



BLOCK DIAGRAM