

## CABINET-REAR VIEW SERVICING IN THE FIELD

### CRT IMPLSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

### FUSE DEVICES

A circuit breaker is used for AC line protection. (See photo, Cabinet-Rear View.)

A .700-amp fuse is used for low-voltage power-supply protection. (See photo, Cabinet-Rear View.)

A 1.2-amp fuse is used for horizontal sweep circuit protection. (See photo, Cabinet-Rear View.)

A 1-1/2" length of No. 28 fuse wire is used for CRT filament protection. (See Transistor Placement Chart.)

### VHF TUNER

The fine tuning mechanically engages oscillator slug for adjustment (one slug for each channel).

### UHF TUNER

The UHF tuner employs a detent mechanism for

channel selection. Fine tuning is adjusted by rotating the fine tuning knob.

### HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horiz hold coil. (See photo, Cabinet-Rear View.)

### WIDTH

The width may be varied by adjusting the horiz size coil. (See photo, Cabinet-Rear View.)

### FOCUS

The focus may be varied by a focus control. (See photo, Cabinet-Rear View.)

### AGC

The AGC may be varied by IF AGC and RF AGC Delay controls. (See Transistor Placement Chart.)

### CENTERING

Horizontal centering is accomplished by selection of the horizontal centering taps. (See photo, Cabinet-Rear View.)

SET 1478 FOLDER 2

## PHOTOFACT® Folder

with CIRCUITRACE®

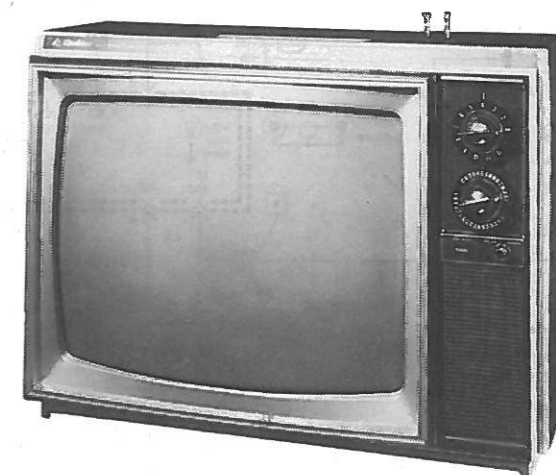
For Supplier Address See PHOTOFACT Index

QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/Y19TS-/YC19TS-/YE19TS-/17TS-/19TS-941

COLOR TV

MODEL	CHASSIS
WP4610LP	17TS-941
WP5530LN	C19TS-941
WP5532LW	C19TS-941
WP5534LW	E19TS-941
WP5536LP	19TS-941
WP5538LS	19TS-941
WP5540LP	19TS-941
YWP4610LP	Y17TS-941
YWP5532LW	YC19TS-941
YWP5534LW	YE19TS-941
YWP5536LP	Y19TS-941
YWP5538LS	Y19TS-941
YWP5540LP	Y19TS-941

Covering Chassis Coded  
Q01 thru Q04, X05 thru X12



MODEL WP5530LN

## SAFETY PRECAUTIONS

Make sure line voltage does not exceed rating of set. Check high-voltage regulation and adjust to correct value.

Be sure shields and rear cover are in place and secure.

Beware of shock from high voltage or AC line. Discharge high voltage to HV cage only.

Use extreme care when handling picture tube. Do not bump, scratch, or exert undue strain.

CAUTION: One side of AC line connected to chassis. Use isolation transformer for servicing. Make certain isolation networks are in place and exposed metal is safe to touch before returning set to customer.

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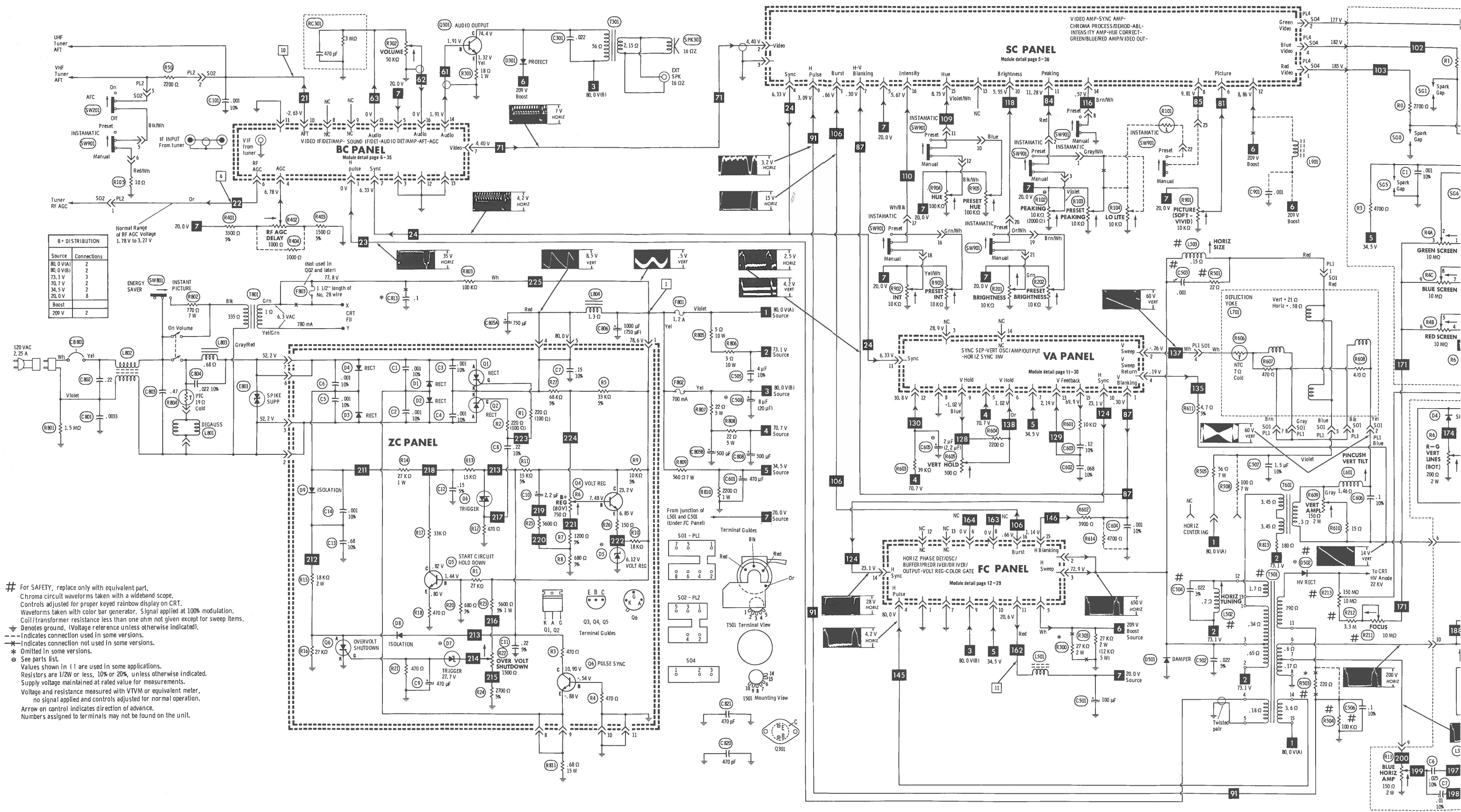
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DATE 4-75

SET 1478 FOLDER 2

QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/Y19TS-/YC19TS-/YE19TS-/17TS-/19TS-941

SET 1478 FOLDER 2



A PHOTOFAC STANDARD NOTATION SCHEMATIC  
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## RESISTANCE MEASUREMENTS

MEASUREMENTS BELOW TAKEN WITH METER HAVING .08V MAX BETWEEN PROBE TIPS															
ITEM	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8	PIN 9	PIN 10	PIN 11	PIN 12	PIN 13	PIN 14	
V1	FIL	30 K	5500	7.5 M	8 M	30 K	5500	NC	80 M	NC	30 K	5500	4.5 M	FIL	
BC PANEL															
IC1	8000	8000	0	0	2000	4500	800	900	1 M	2200	700	6000	1400	INF	
IC2	100 K	100 K	0	0	600	0	10 K	INF	7500	7500	INF	13 K	7000	60 K	
SC PANEL															
IC1	INF	2200	8000	45 K	INF	INF	0	4200	INF	7300	INF	2200	2200	650	
IC2	12 K	12 K	5700	720	1400	7500	1000	550	INF	0	3000	INF	3000	700	
													PIN 15 INF	PIN 16 3000	
ITEM	E	B	C		ITEM	E	B	C		ITEM	E	B	C		
BC PANEL					SC PANEL					VA PANEL					
Q1	470	1700	550		Q1	3300	3200	3700		Q1	INF	1600	0		
Q2	10 K	5000	0		Q2	450	INF	7000		Q2	INF	1600	1200	f	
Q3	56	10 K	460		Q3	4700	INF	300		Q3	1500	14 K	1200	f	
Q4	1000	6700	1300		Q4	0	1000	40 K		Q4	67	5500	10 K		
Q5	1000	1000	1300		Q5	2500	430	270		Q5	800	160 K	28 K		
FC PANEL					Q6	1000	850 K	17 K		Q6	0	1200	6000		
Q1	0	2200	21 K		Q7	3700	17 K	220		Q7	0	8500	1200	f	
Q3	180	90 K	1200	f	Q8	1800	12 K	10 K		ZC PANEL					
Q4	6800	3000	11 K		Q9	4000	0	12 K		Q3	.68	470	28 K		
Q5	1000	12 K	2500		Q11	500	3000	300		Q4	20 K	2300	12 K		
Q6	0	1000	2200	f	Q12	230	550	24 K		Q5	470	680	80 K		
Q7	0	.1	1200	f	Q13	500	3000	300		CHASSIS					
Q8	0	.8	1200	f	Q14	230	550	24 K		Q301	18	13 K	1200	f	
					Q15	500	3000	300							
					Q16	230	550	24 K							

f This reading will vary depending upon the condition of the electrolytic in the circuit.  
# Reading depends upon polarity of meter connections.

## TROUBLESHOOTING CHECK CHART

The following chart lists component failures most likely to produce the indicated symptoms.

### PICTURE or SOUND

No pic, no sound, no raster: Circuit Breaker, Fuse, LV Rects

No pic, no sound, has raster: Video IFs, Tuner Mixer

No pic, no sound, has snow: Tuner RF/Mixer/Osc

No pic, has sound, no raster: CRT

No pic, has sound, has raster: Video Amps

Has pic, no sound: Sound IF/Det, Audio Det/Amp/Output

Overloaded picture: AGC, Video Det

Low or excessive brightness: ABL

### SWEEP

No raster, has sound: Horiz Osc/Buffer/Predriver/Driver/Output, Damper, HV Rect, CRT

No vert deflection: Vert Osc/Amp/Output

Poor vert lin or foldover: Vert Osc/Amp/Output

Poor horiz lin or foldover: Horiz Output, Damper

Narrow picture: LV Rects, Horiz Osc/Buffer/Predriver/Driver/Output, Damper

Vert off frequency: Vert Osc

Horiz off frequency: Horiz Sync Inv/Phase Det/Osc

### SYNC

No vert sync: Vert Osc

No horiz sync: Horiz Sync Inv/Phase Det/Osc

No vert/horiz sync: Sync Amp/Sep

### RASTER

Yellow (no blue): Blue Video Out, CRT

Cyan (no red): Red Video Out, CRT

Magenta (no green): Green Video Out, CRT

### COLOR (B/W operating normally)

No color: Color Gate, Chroma Processor

Weak color: Chroma Processor, Int Amp

No color sync: Color Gate, Chroma Processor

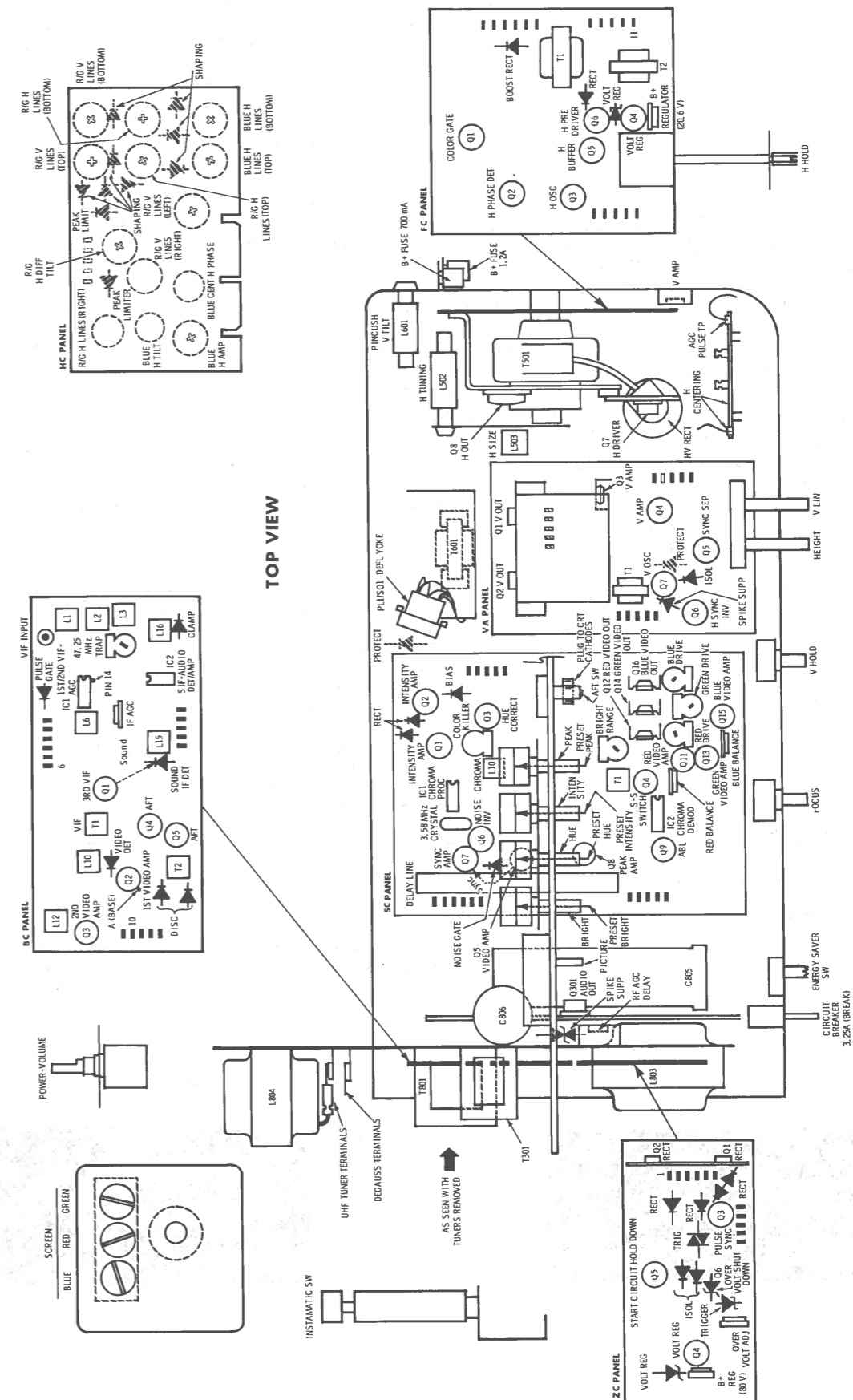
No green: Chroma Demod, Green Video

Amp/Out

No blue: Chroma Demod, Blue Video Amp/Out

No red: Chroma Demod, Red Video Amp/Out

Incorrect hue (tint): Color Gate, Chroma Processor



## TRANSISTOR PLACEMENT CHART

## TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain line voltage at 120VAC. Allow a 20-minute warm-up period for receiver and test equipment.

### Suggested Alignment Tools:

GC ELECTRONICS

BC Panel-L1, L2, L3, L6, T1, L10, L12 . . . . . 8606, 8606L, 8869  
BC Panel-L15, L16, L1 AFT . . . . . 9296, 9297, 9300  
Tuner IF Output Coil . . . . . 9296, 9297, 9300  
SC Panel-T1 and L10 . . . . . 9296, 9297, 9300  
L601 . . . . . 8606, 8606L, 8869

### PRELIMINARY INSTRUCTIONS

Set the channel selector to the highest unused channel. 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 that shown.

Connect a +5 volt bias supply to Pin 6 (BC Panel), connect a +3 volt bias to Pin 14 of IC1 (BC Panel), low side to ground.

### VIDEO IF ALIGNMENT

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to Point A, low side to ground.	Thru .001uF to TP-M on VHF tuner, low side to ground.	44MHz (10MHz Sweep)	39.75MHz 41.25MHz 47.25MHz	Adjust L6 for MINIMUM. Adjust L2 and L10 for MINIMUM. Adjust L3 and R4 for MINIMUM. See BC Panel and Figure 1.
"	"	"	39.75MHz 41.25MHz 42.17MHz 44.00MHz 45.75MHz 47.25MHz	Adjust L1, T1 (Top and Bottom) and Tuner IF Output Coil for maximum gain and symmetry of response. Adjust L1 for maximum 44.00MHz, affects overall response. Adjust T1 (Top and Bottom) for maximum 44.00MHz. T1 Top affects tilt of response. Tuner IF Output Coil affects overall response. See BC Panel and Figure 2.

### 4.5MHz 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 L12 (BC Panel) for MINIMUM beat interference.

### SOUND IF ALIGNMENT

Tune in a station and adjust L15 (BC Panel) for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting L16 (BC Panel).

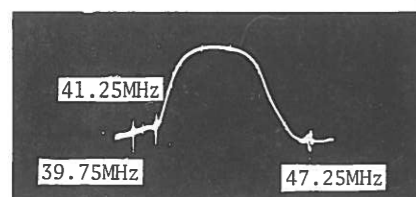


FIG. 1

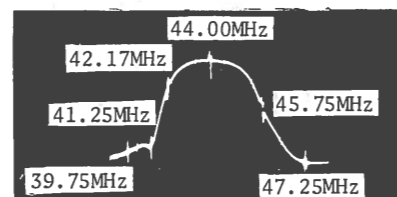


FIG. 2

## TV ALIGNMENT INSTRUCTIONS (Continued)

### AFT ALIGNMENT

Connect as explained in Preliminary Instructions. Depress Insta-Matic button and AFC Switch.

CONNECT	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input of scope to Pin 10 (BC Panel), low side to ground.	Thru .001uF to TP-M on VHF tuner, low side to ground.	44MHz (10MHz Sweep)	45.75MHz	Adjust T2 Top for maximum gain and symmetry of response. Adjust T2 Bottom for placement of 45.75MHz marker. See BC Panel and Figure 3.

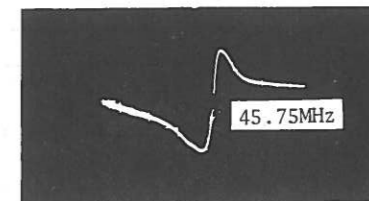
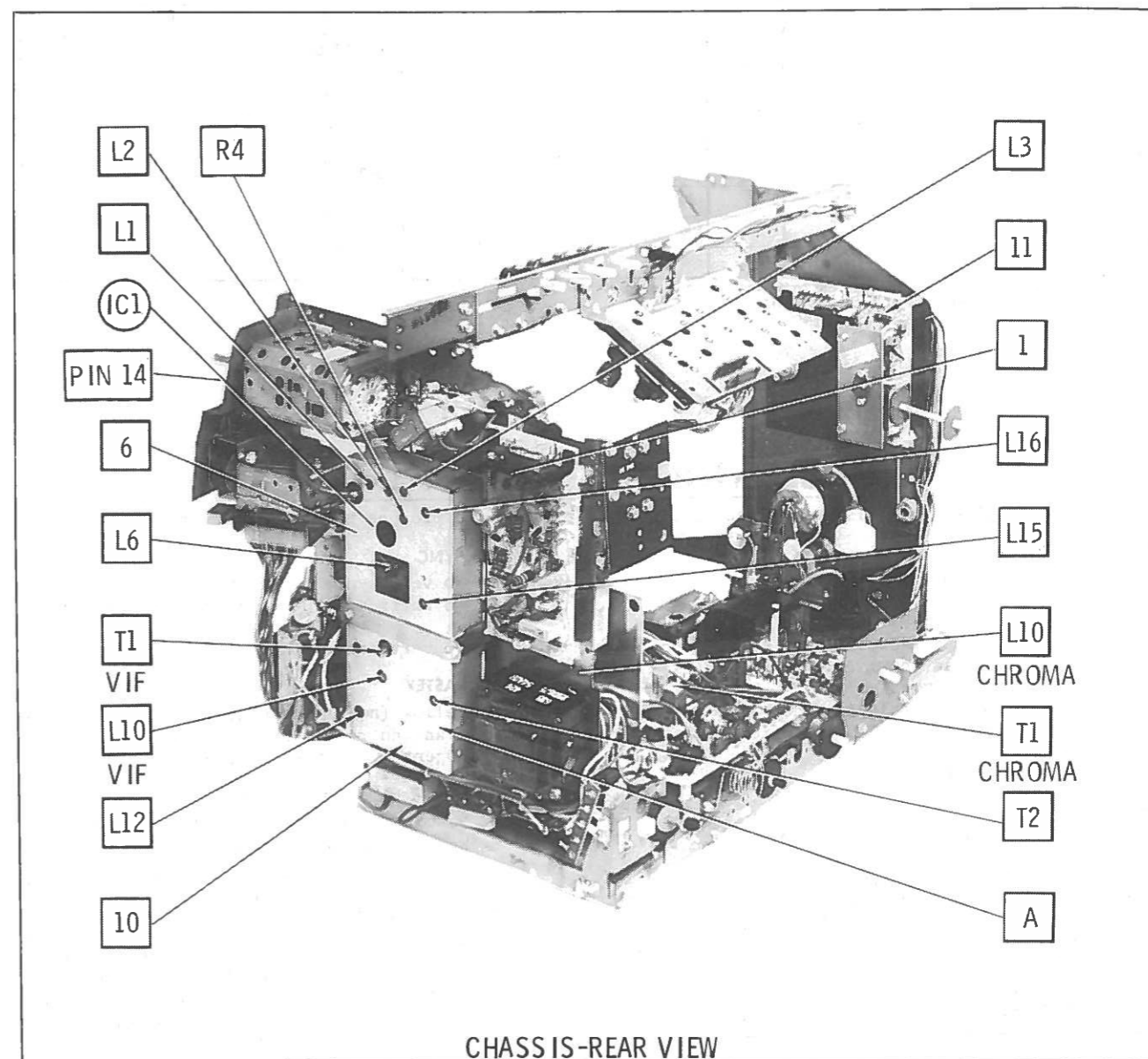
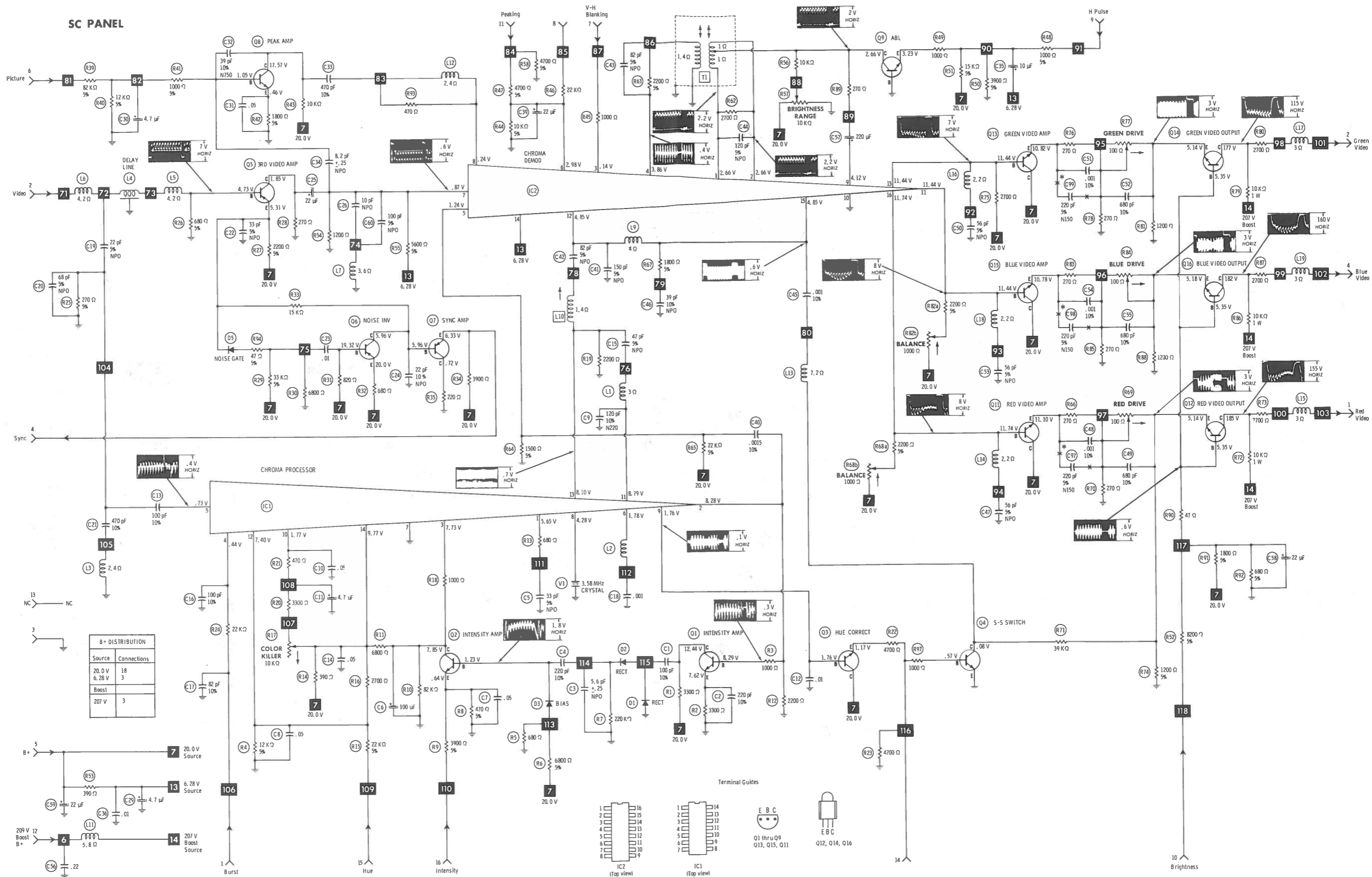


FIG. 3

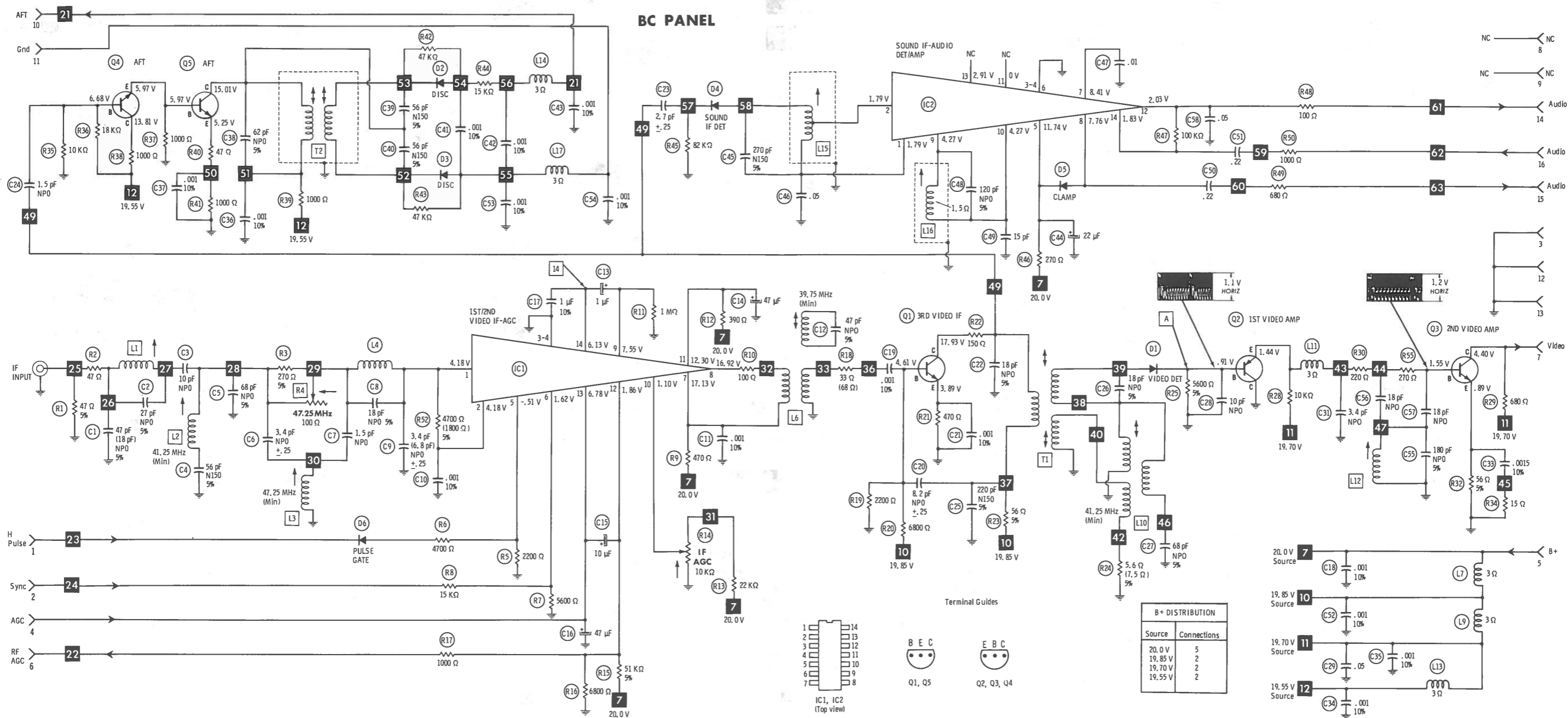


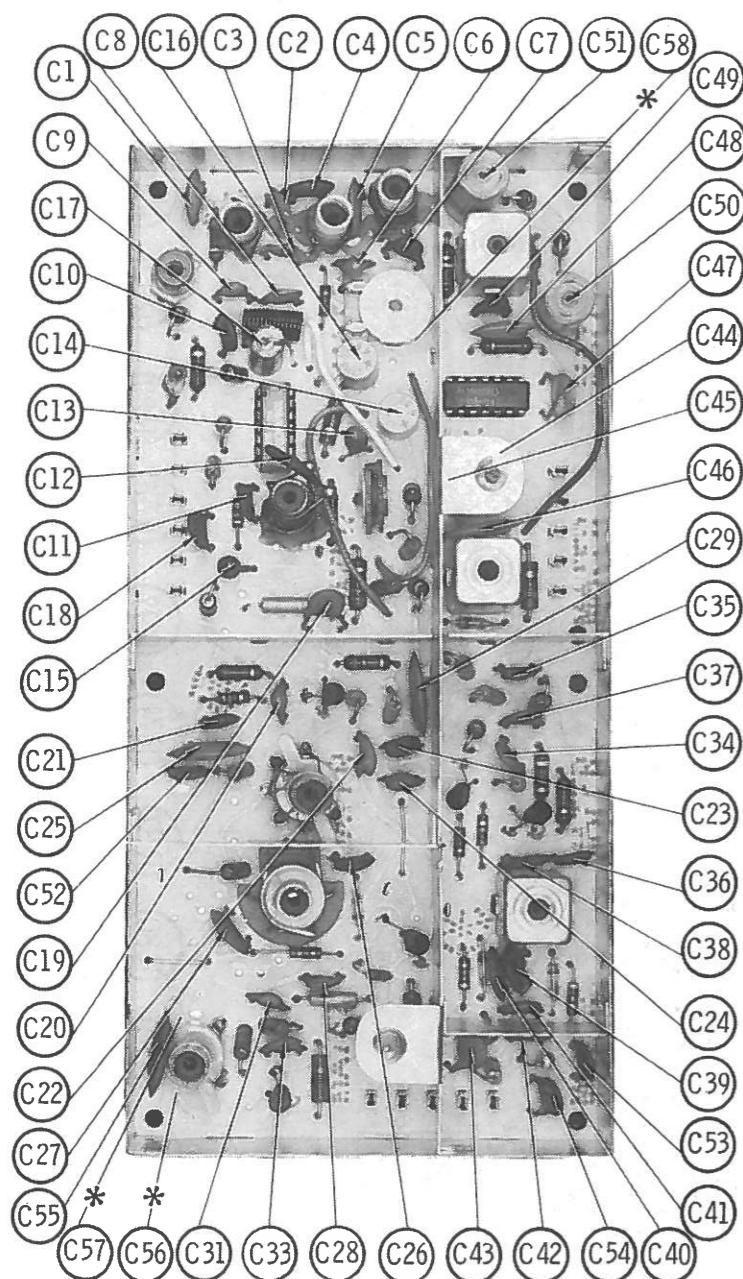
CHASSIS-REAR VIEW



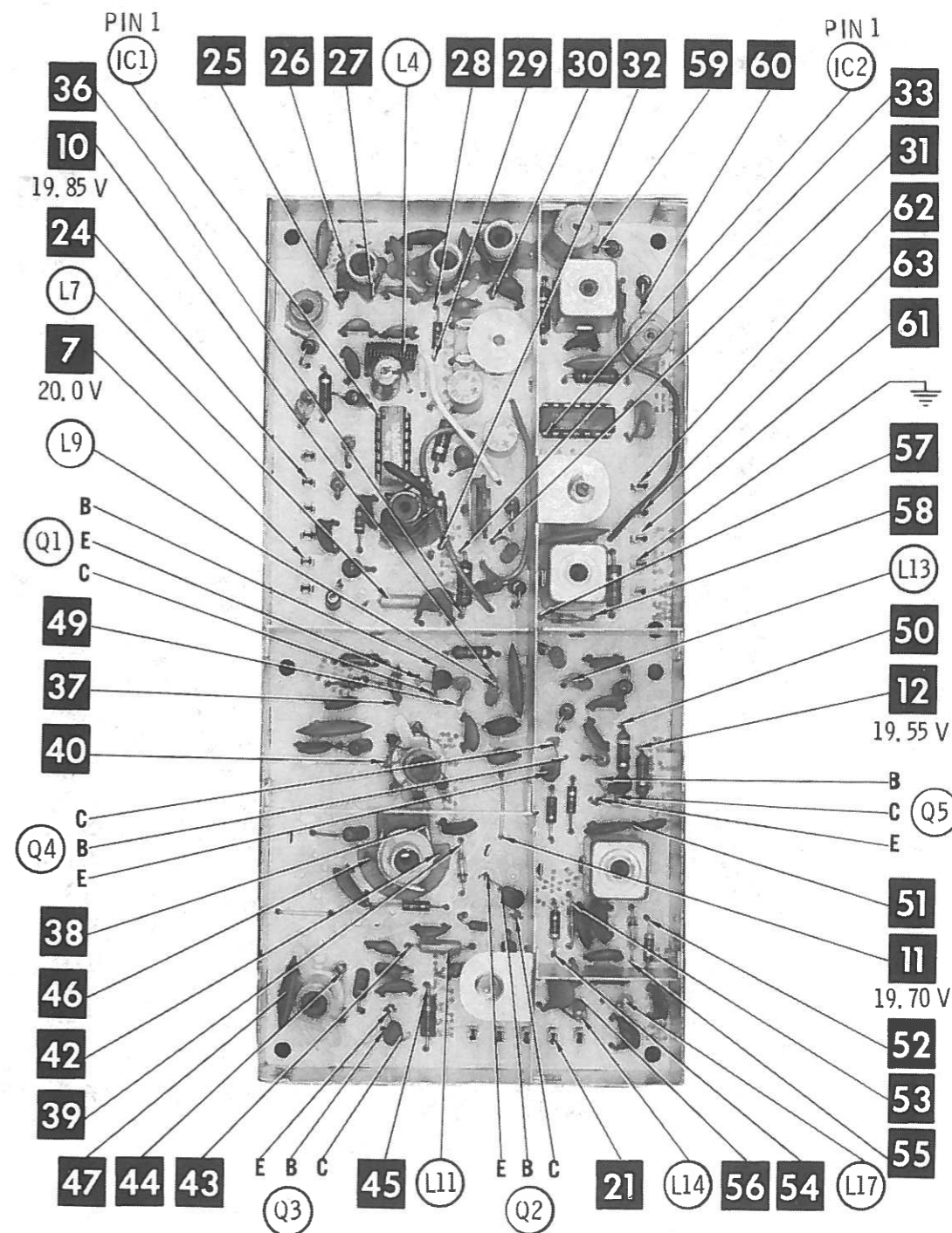
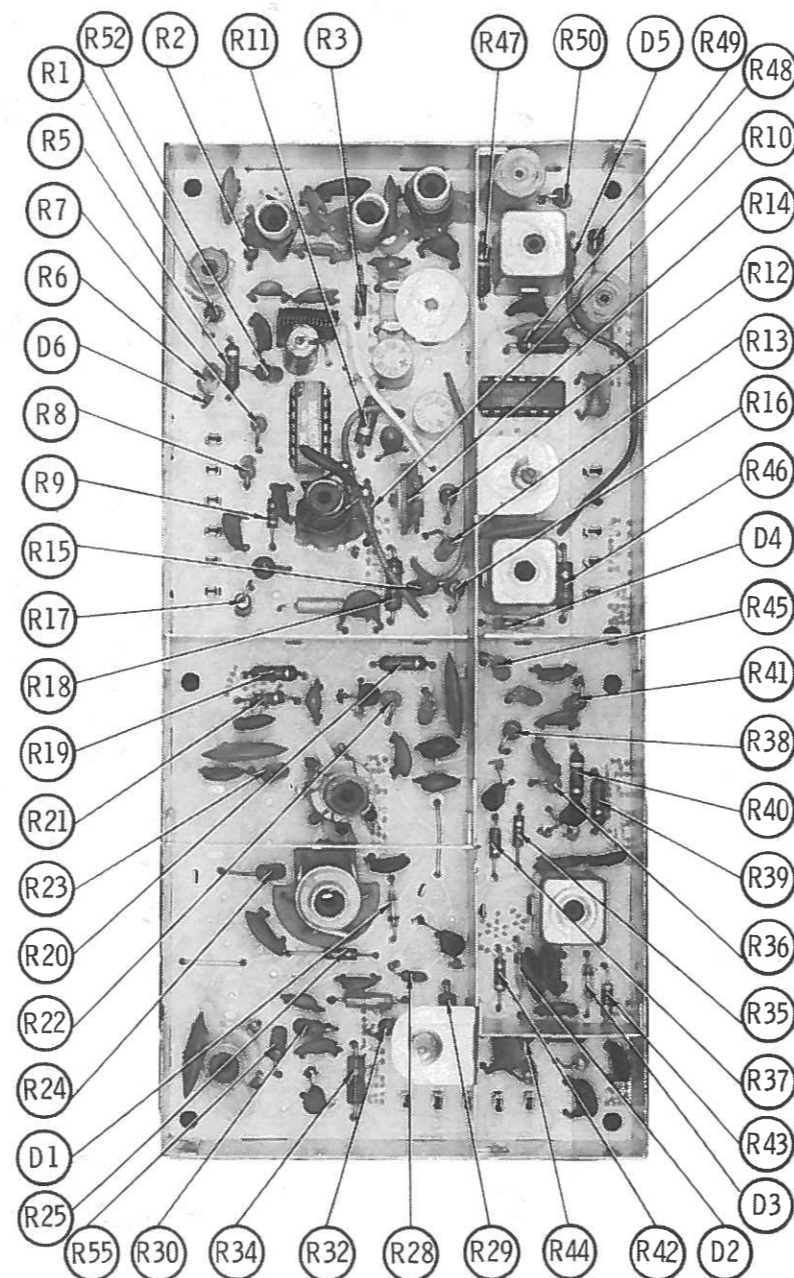
A PHOTOFAC STANDARD NOTATION SCHEMATIC  
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COLOR/VIDEO SC PANEL





\*LOCATED ON BOTTOM OF BOARD

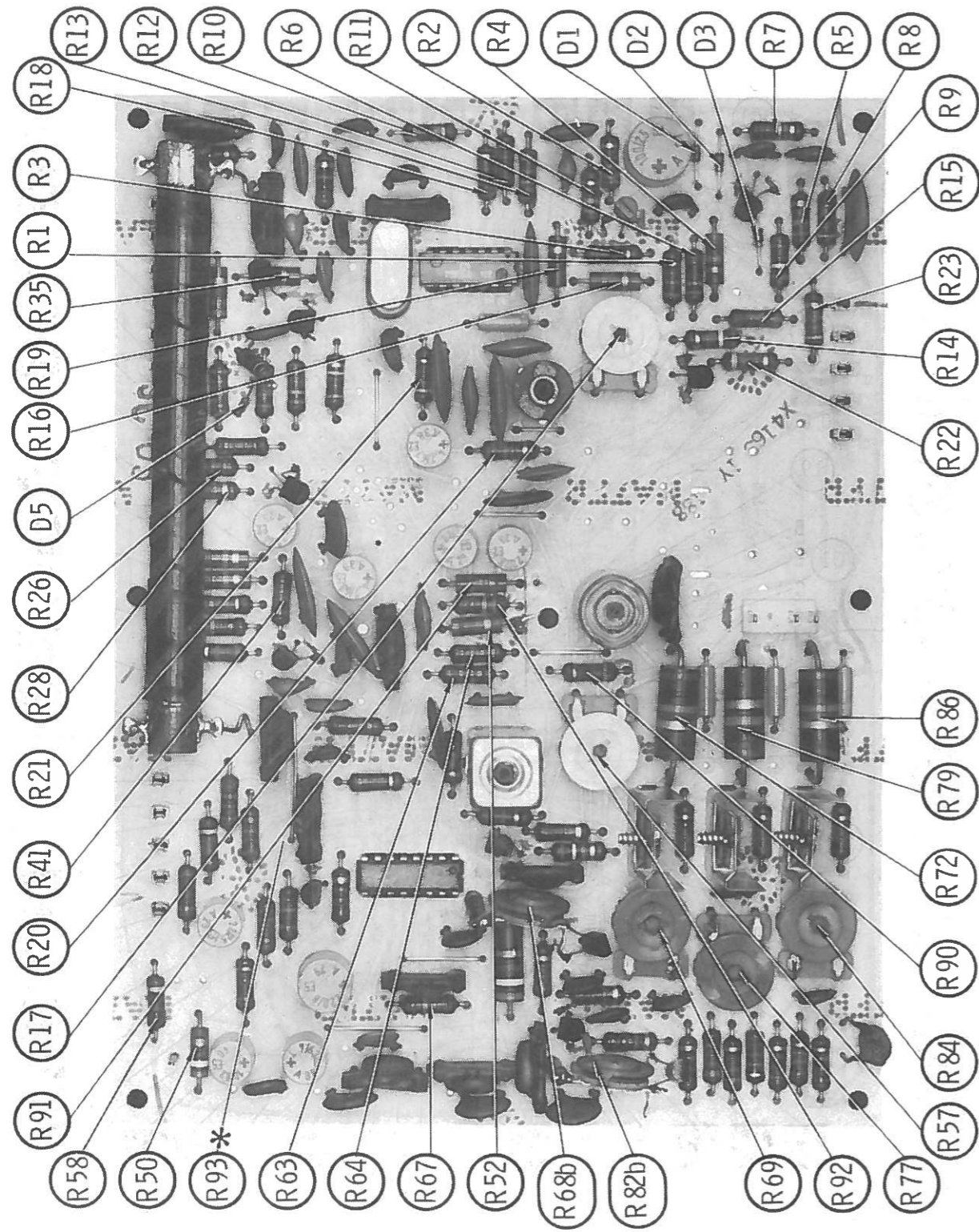


IF/AUDIO BC PANEL

A Howard W. Sams CIRCUITRACE® Photo

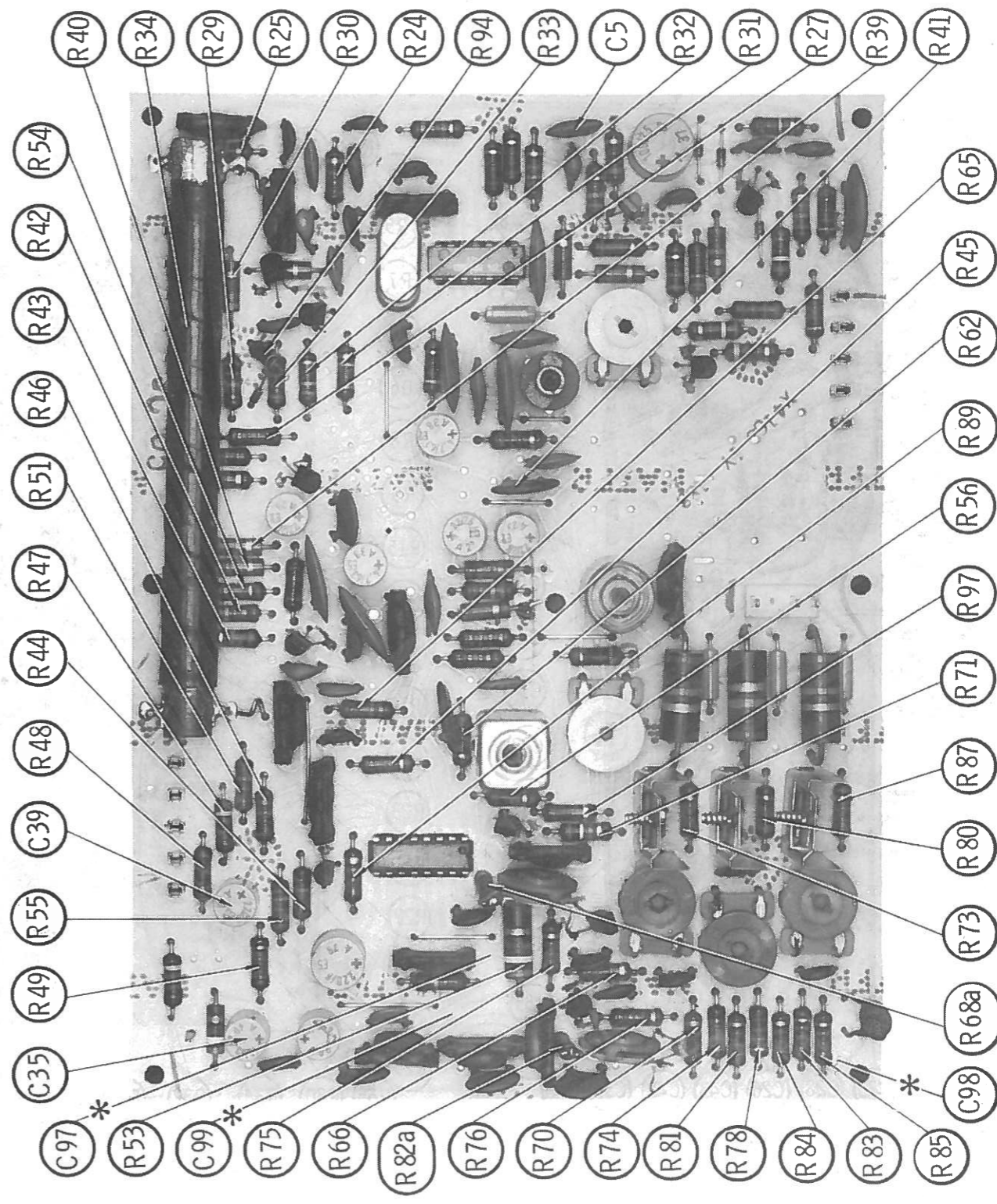
QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/Y19TS-/YC19TS-/YE19TS-/17TS-/19TS-941

FOLDER 2

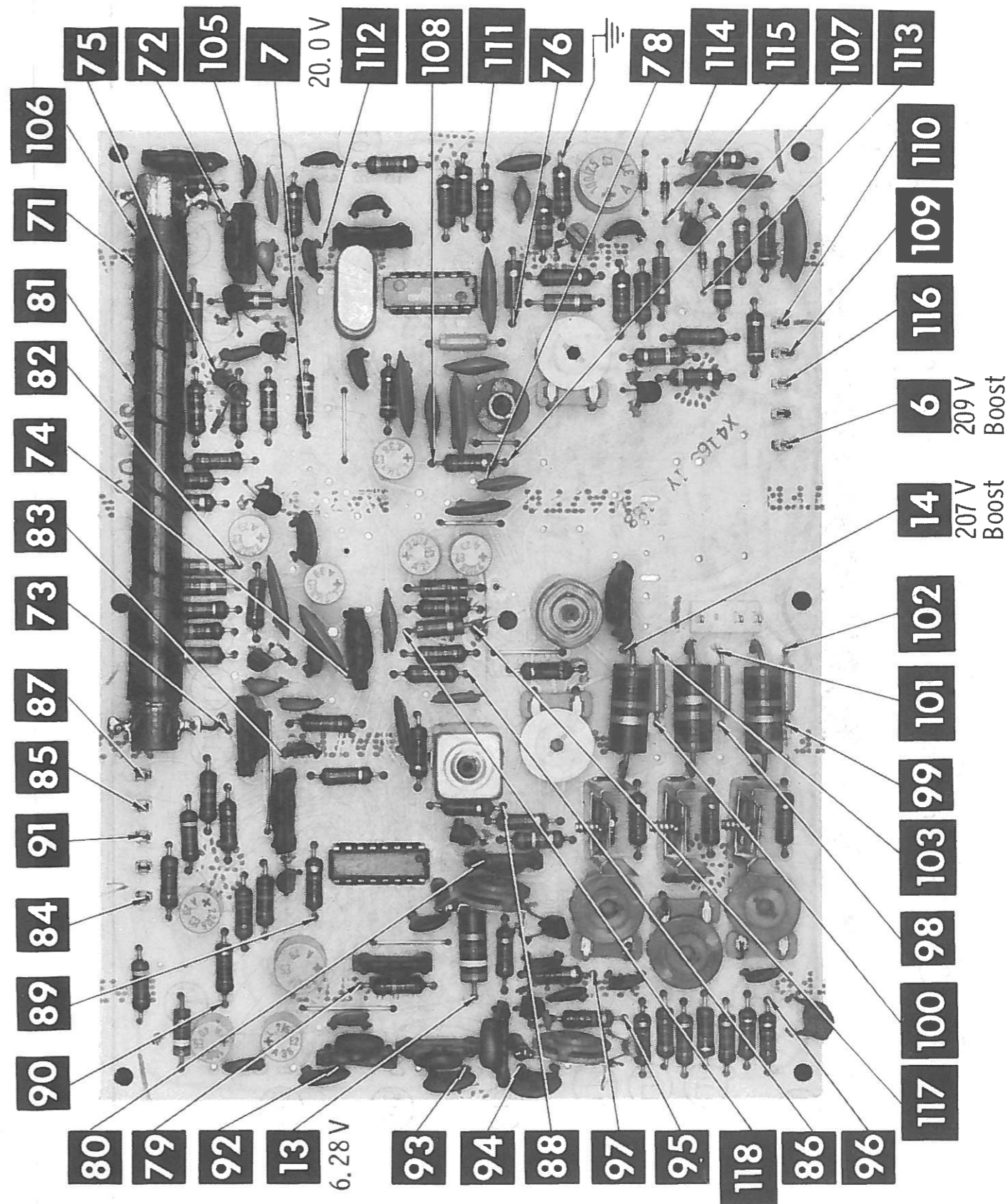
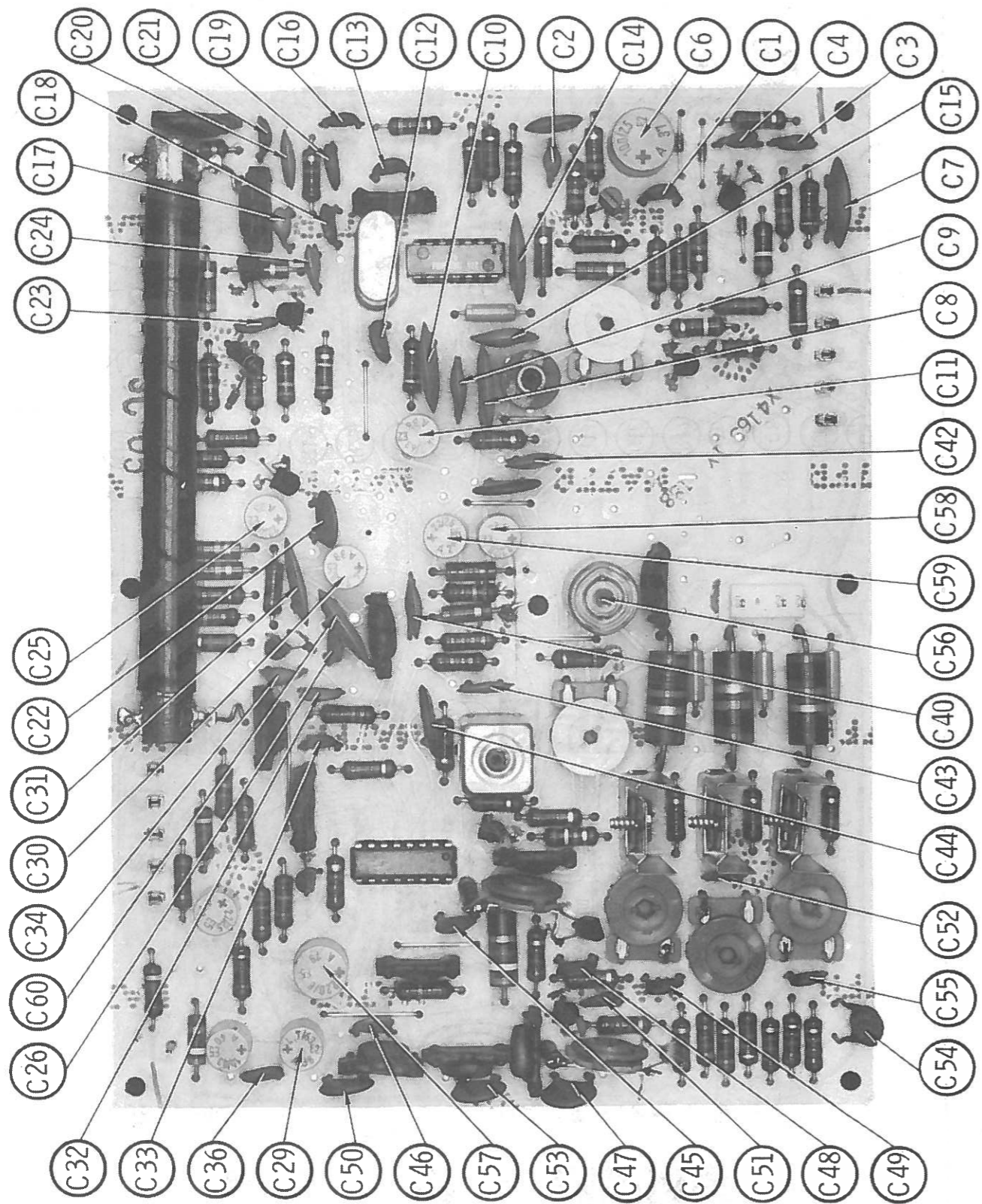


COLOR/VIDEO SC PANEL

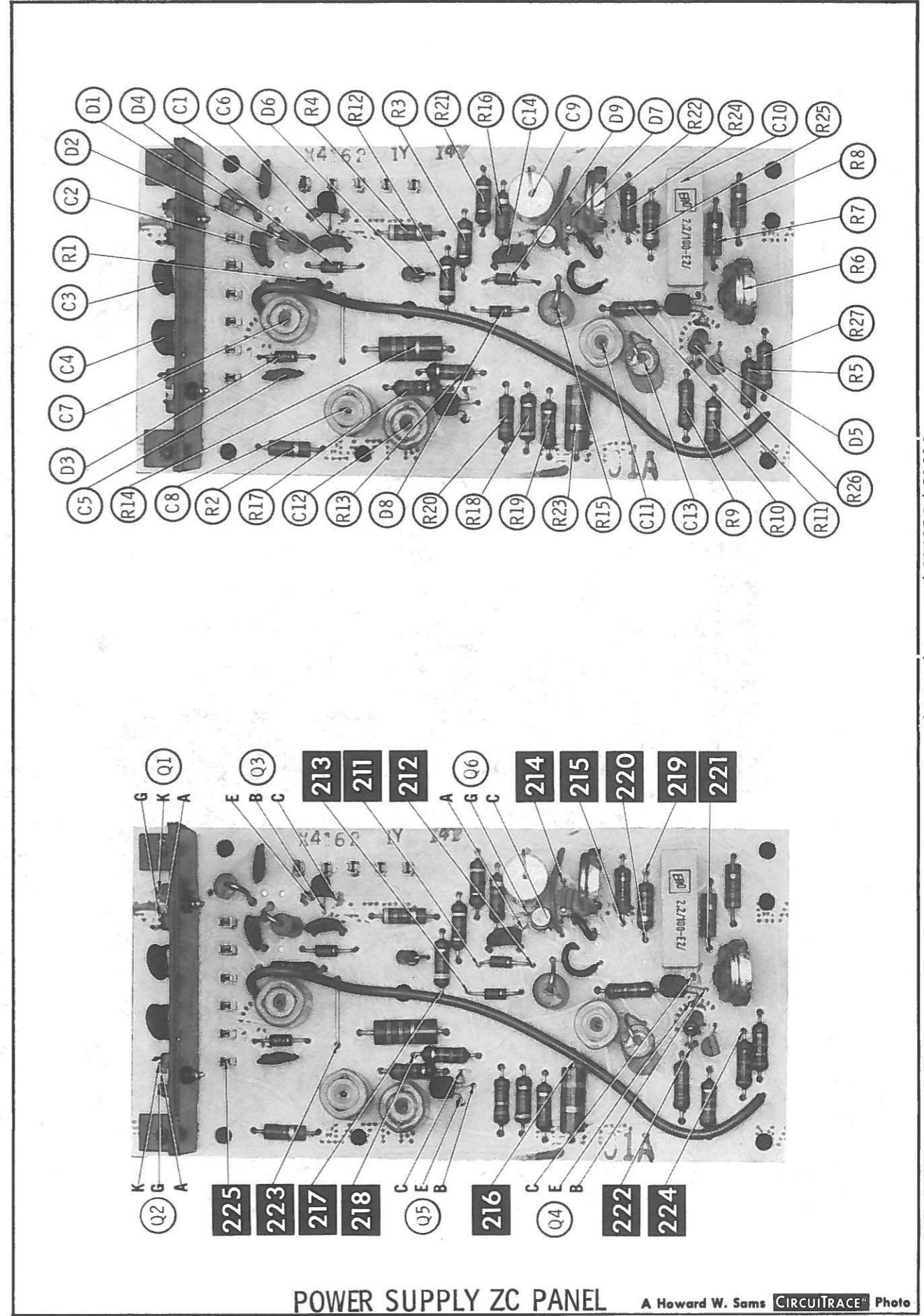
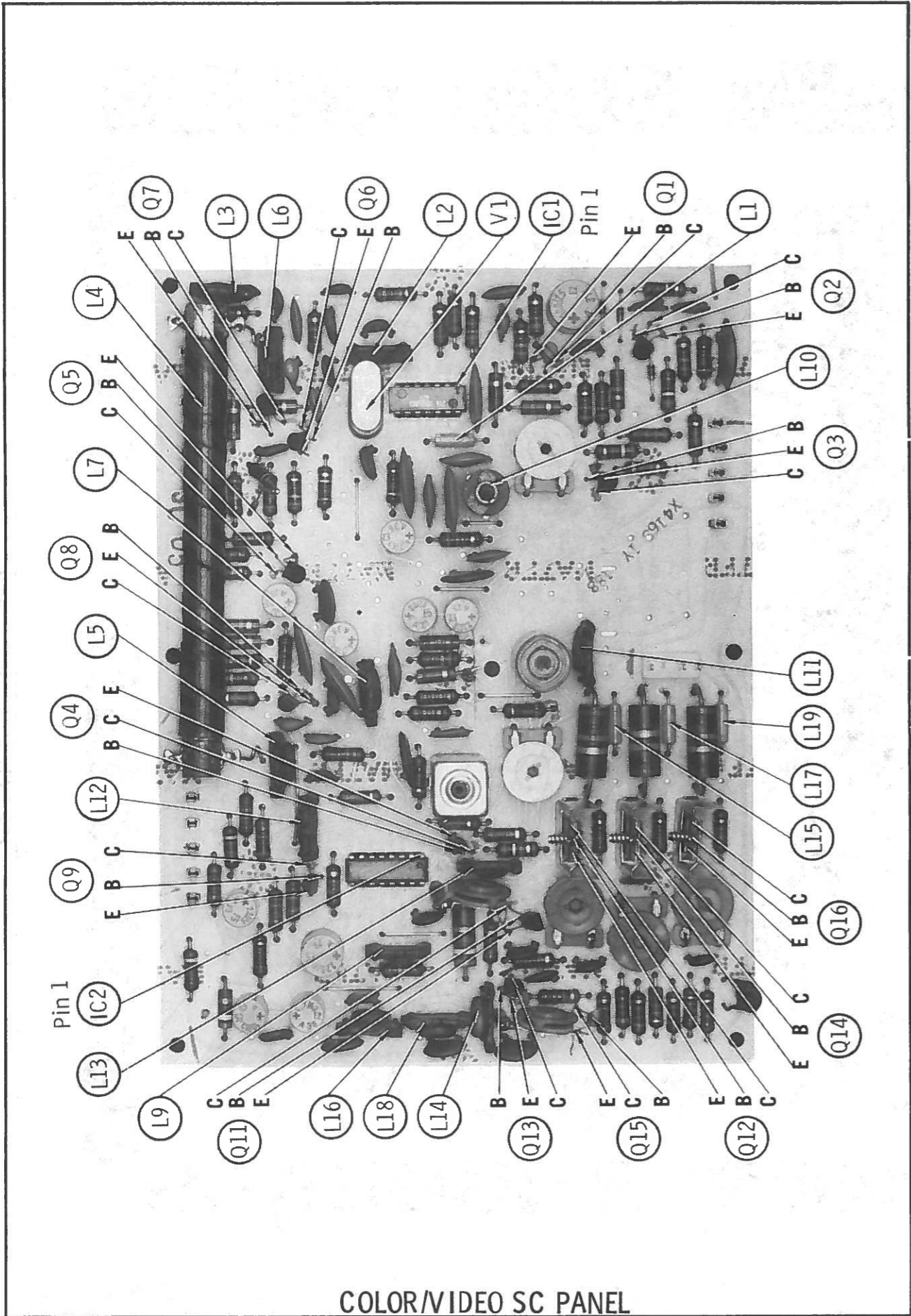
\* Located on bottom of board.



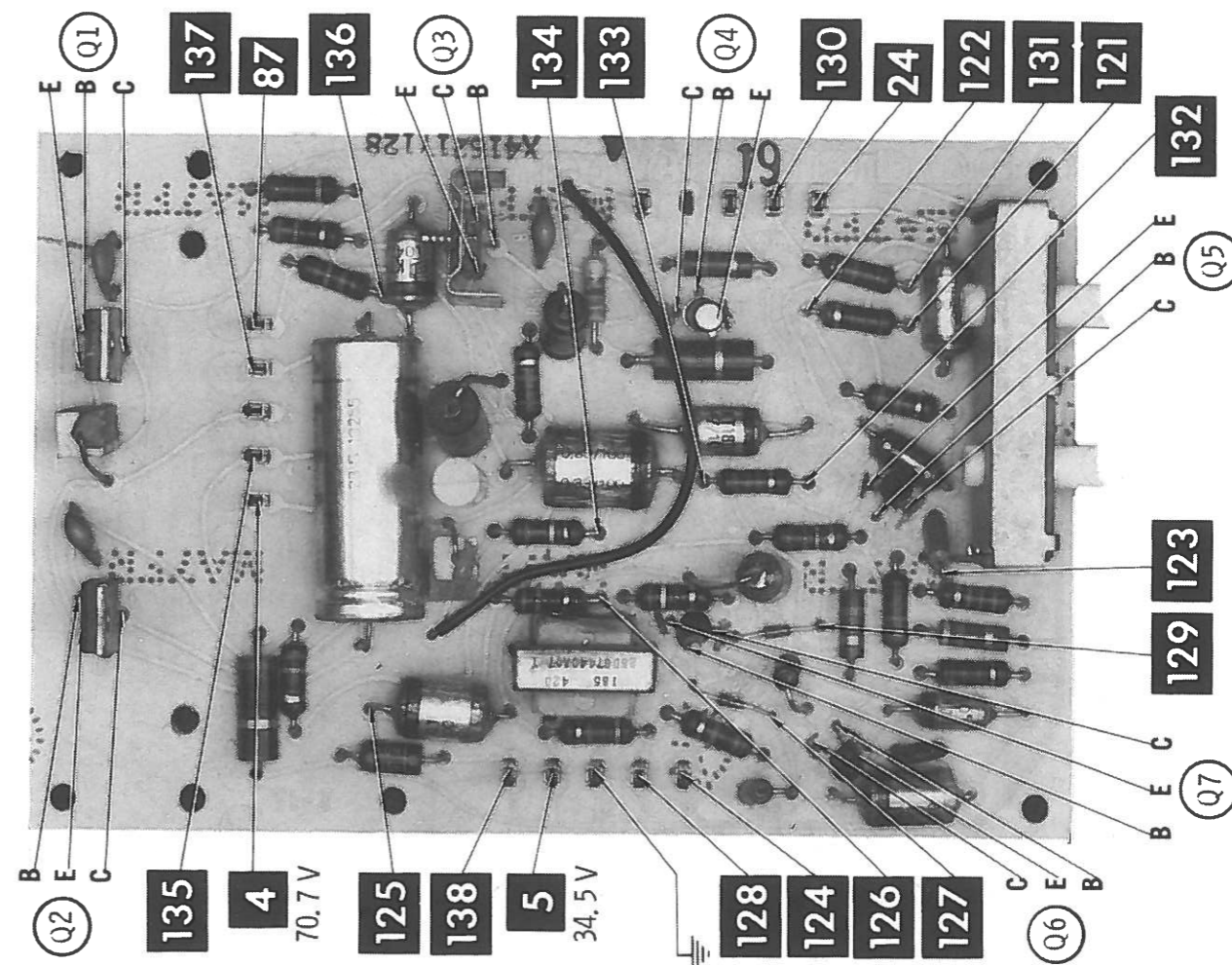
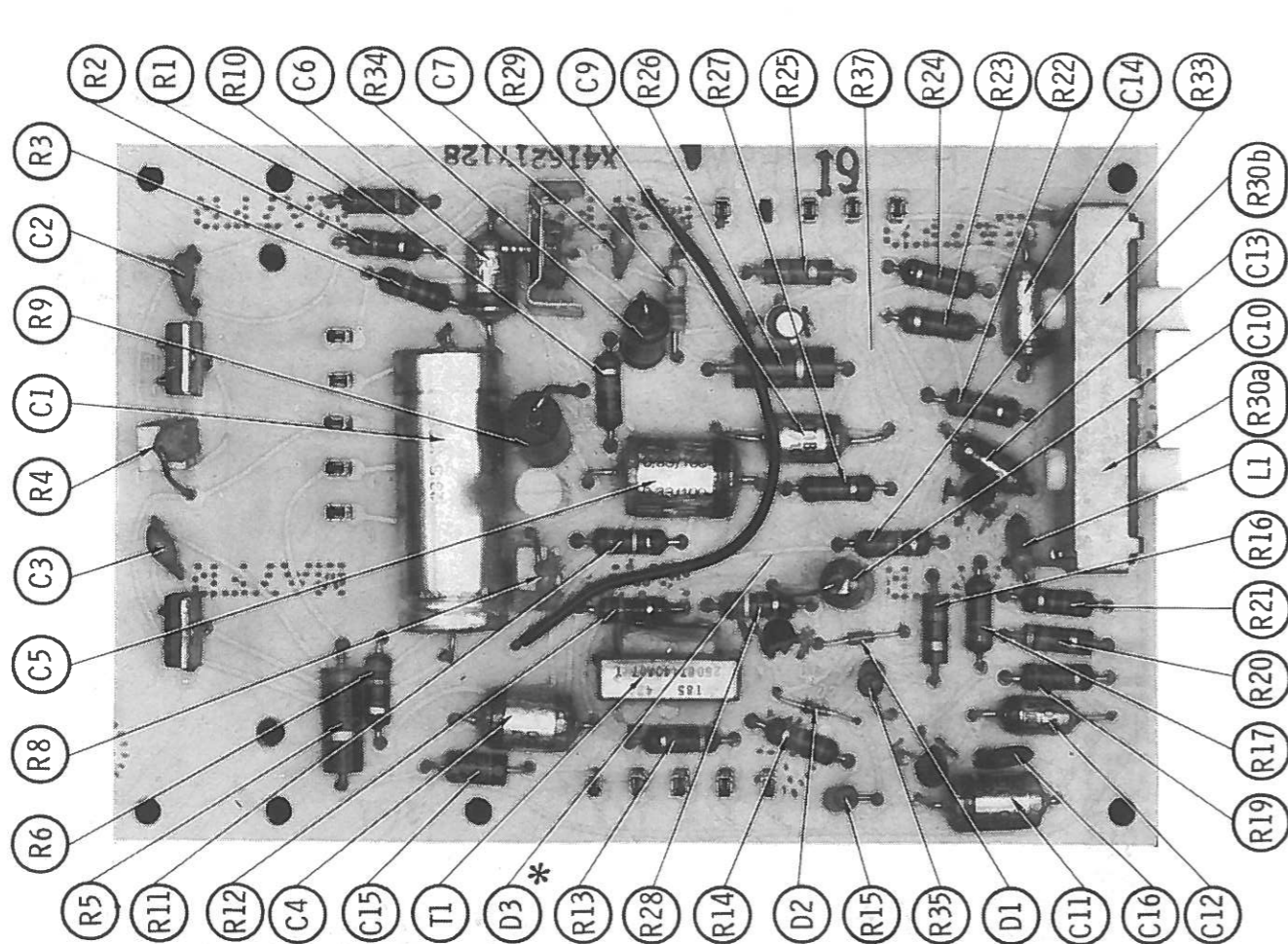
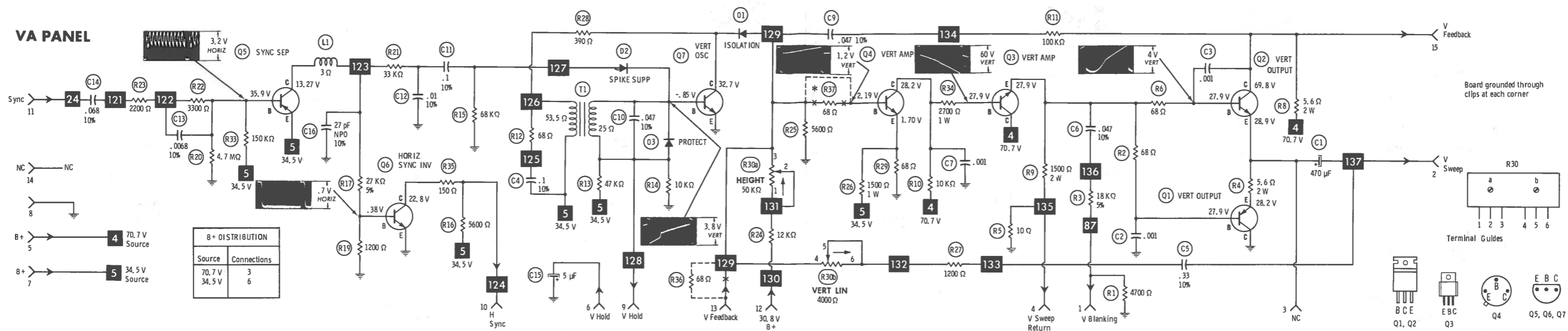
\* Located on bottom of board



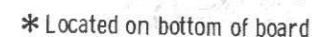
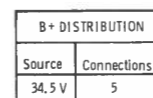
COLOR VIDEO SC PANEL A Howard W. Sams CIRCUITRACE® Photo

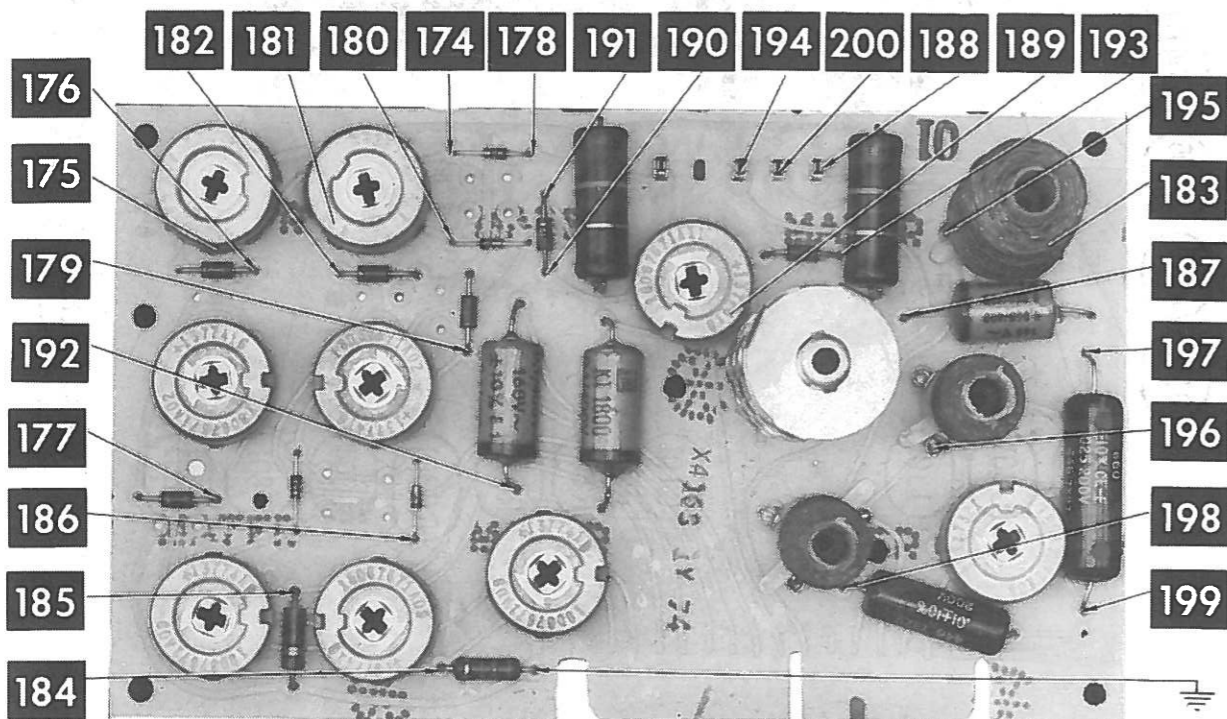
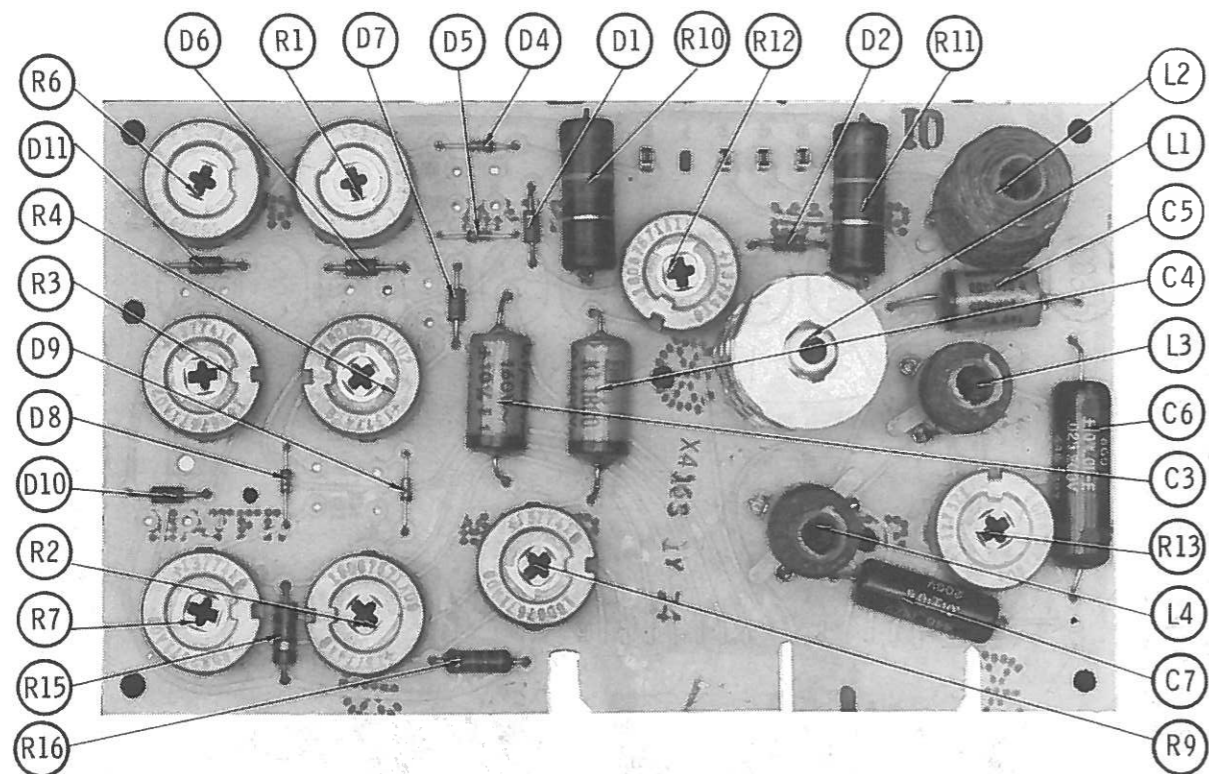


## VA PANEL



SYNC/VERTICAL VA PANEL A Howard W. Sams CIRCUITRACE™ Photo





CONVERGENCE HC PANEL

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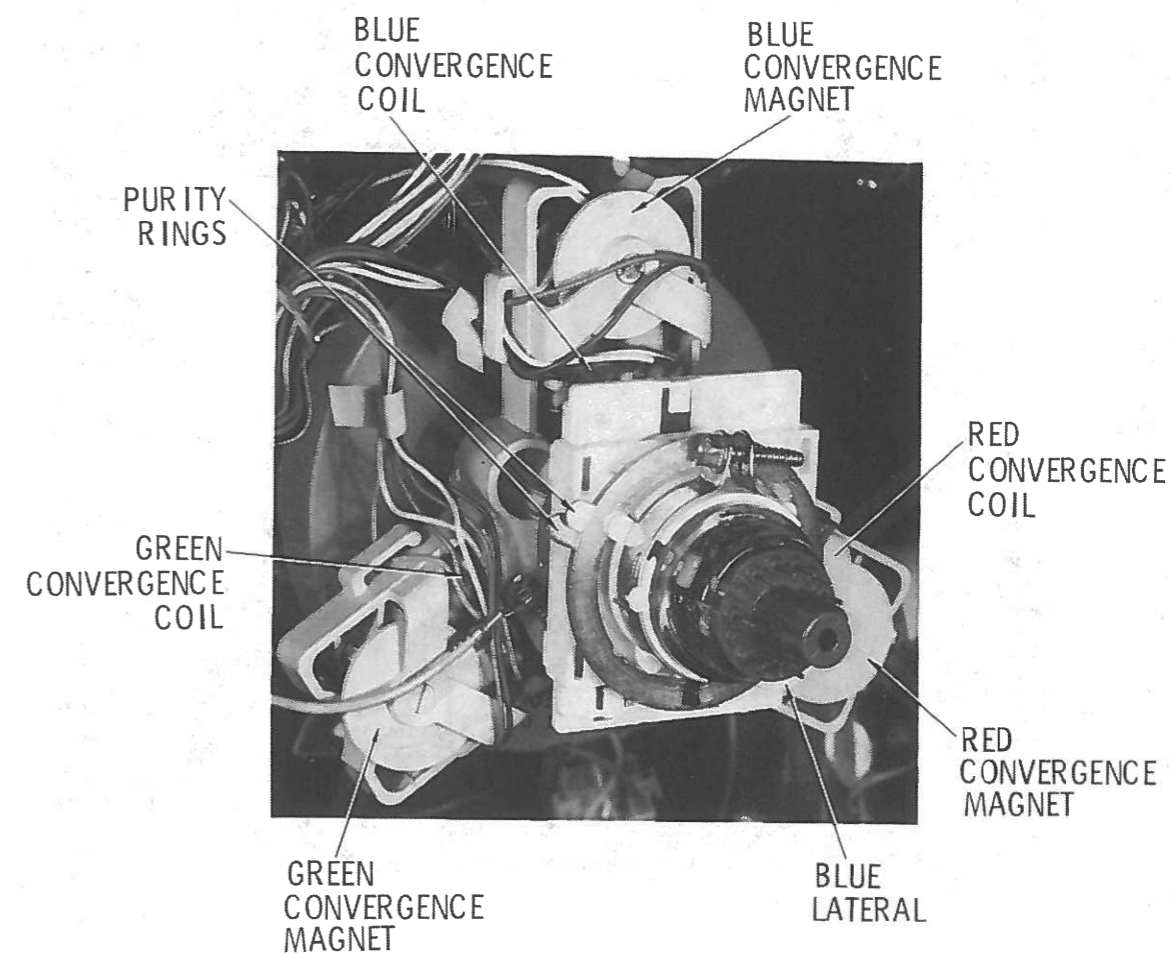
## CONVERGENCE ADJUSTMENTS

Miscellaneous Adjustments should be made before proceeding to Convergence Adjustments. Connect dot/crosshatch generator to antenna terminals. Use dot pattern for center dot convergence. Use crosshatch pattern for all other adjustments. View pattern as displayed on TV screen.  
NOTE: Maintain center convergence throughout setup procedure.

Perform center dot convergence using convergence magnets.

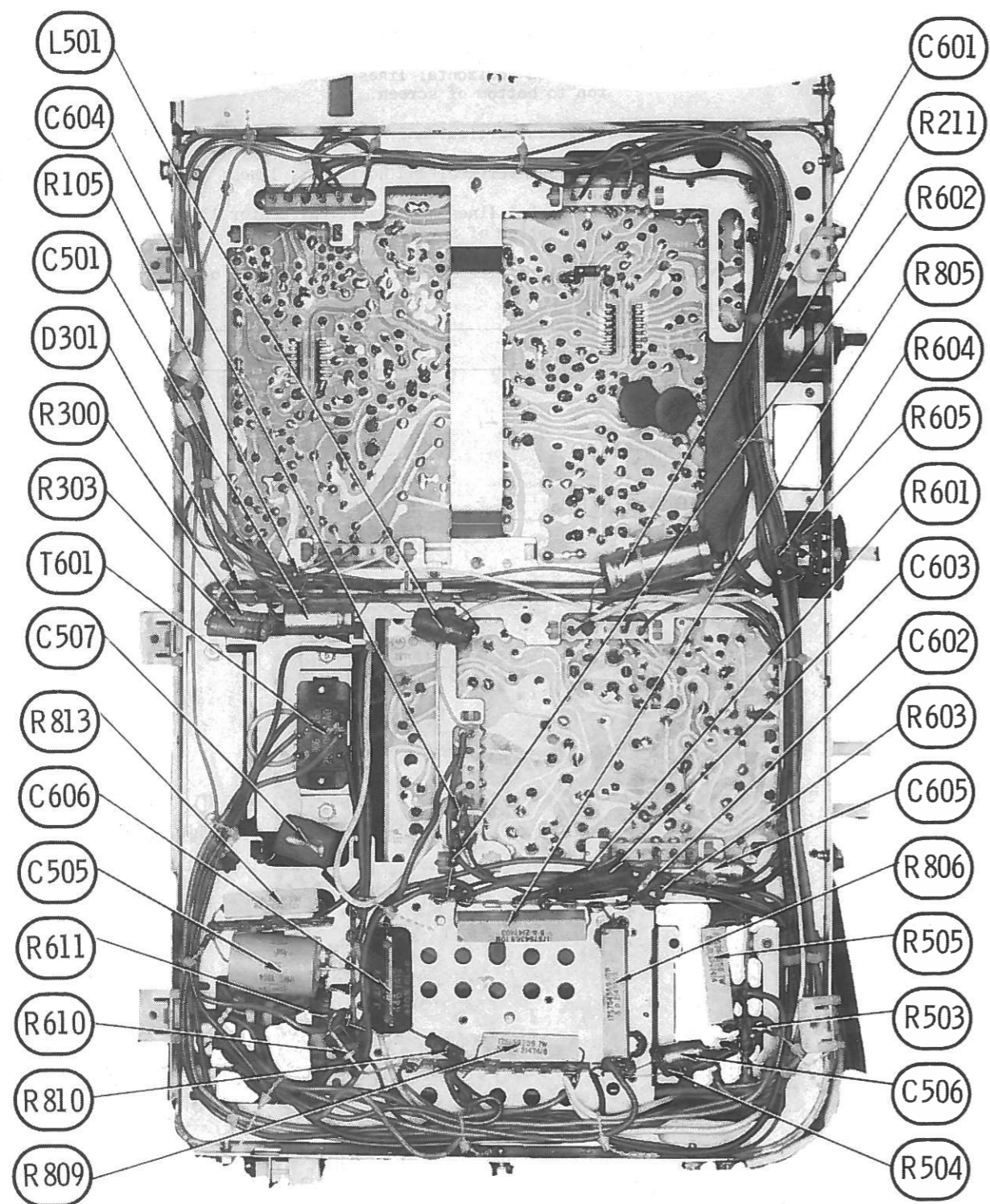
- Adjust R2 and R7 to converge red and green vertical center line from top to bottom of screen.
- Adjust R3 and R4 to converge red and green horizontal lines along vertical center line from top to bottom of screen.
- Adjust R9 and R12 to converge red and green vertical and horizontal lines, left side of screen.
- Adjust L1 and L2 to converge red and green vertical and horizontal lines, right side of screen.
- Adjust R1 and R6 to converge blue horizontal lines along vertical center line from top to bottom of screen.
- Adjust R13 and L3 to converge blue horizontal lines, left and right sides of screen.
- Adjust L4 For Straight Horizontal Blue Lines.

Touch up appropriate controls if necessary.

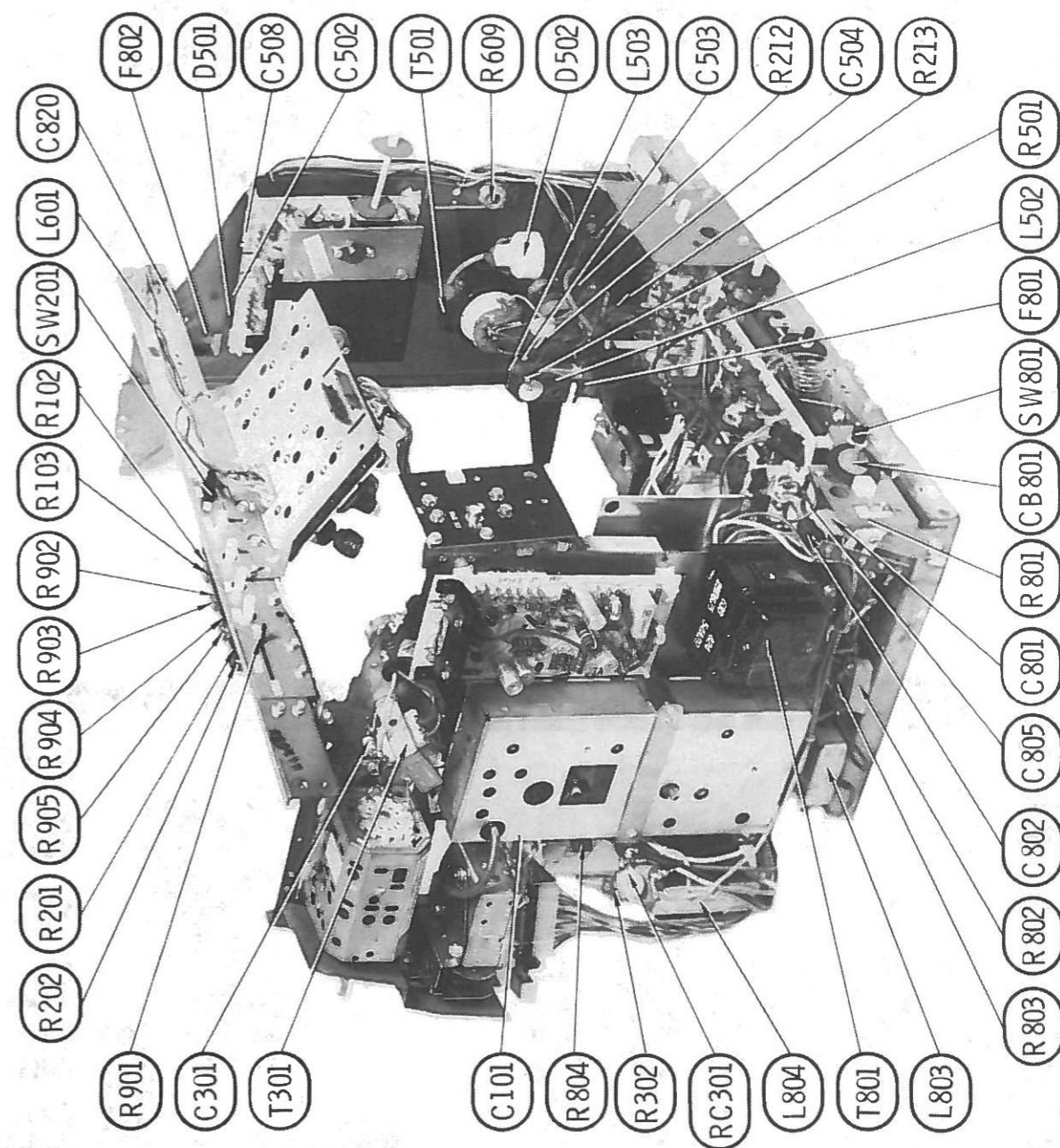


QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/Y19TS-/YC19TS-/YE19TS-/17TS-/19TS-941

FOLDER 2



CHASSIS-BOTTOM VIEW



CHASSIS-REAR VIEW

## MISCELLANEOUS ADJUSTMENTS

### B+ ADJUSTMENT

R6 and R22 (ZC Panel) are factory preset and sealed. If adjustment of R6 is required, connect VTVM to Pin 1 (ZC Panel) and low side to ground. Adjust R6 for +80 volts.

### COLOR AFC ALIGNMENT

Place Super-Insta-Matic Switch at Manual position. Tune in a station and adjust all controls for normal color reception.

Set Hue Control to mid-range. Adjust L10 (SC Panel) for correct flesh tone.

T1 (SC Panel) is factory adjusted and should not be adjusted unless necessary.

If necessary, connect scope to the base of Q11 (SC Panel). Adjust T1 top and bottom for maximum while maintaining 6th bar zero. Adjust Red Balance Control (R68) and Blue Balance Control (R82) (SC Panel) for best color bar condition.

### ACC AND COLOR KILLER

Turn Intensity Control (R902) fully clockwise and turn Channel Selector to an unused channel.

Adjust Color Killer (R17) (SC Panel) until colored snow just disappears. Tune in a color program. If color is weak, readjust R17 slightly to increase color.

### AGC ADJUSTMENTS

With AFC Switch (SW201) at Off position, tune in a strong station and advance AGC Control (R14) (BC Panel) 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. Readjust if needed.

### RF AGC DELAY ADJUSTMENT

Tune in a medium or weak station. Turn RF AGC Delay Control (R402) clockwise for a snowy picture and then counterclockwise until snow just disappears.

### BRIGHTNESS RANGE ADJUSTMENT

Tune in a station and adjust Brightness Control and Peaking Control (R901) for maximum. Adjust Brightness Range Control (R57) (SC Panel) for maximum brightness, but below the point of blooming. Turn Peaking and Brightness Controls to MINIMUM. Raster should extinguish; if it does not, reduce Brightness Range Control.

### INSTA-MATIC ADJUSTMENT

Push Insta-Matic button to Preset. Set Preset Intensity Control to MINIMUM. Adjust Preset Peaking Control (R901) to mid-range and Preset Brightness Control for best picture. Adjust Preset Color Intensity and Preset Hue Controls for best color and flesh tones.

### 20V ADJUSTMENT

R22 (FC Panel) is factory set and sealed. If adjustment becomes necessary, connect VTVM to Pin 11 (FC Panel) and low side to ground. Adjust R22 for +20.6V.

### PINCUSHION ADJUSTMENT

Connect a crosshatch generator to the antenna terminals. Adjust Pincushion Coil (L601) to place bow in lines at center. Adjust Pincushion Control (R609) to straighten lines.

### PURITY ADJUSTMENTS

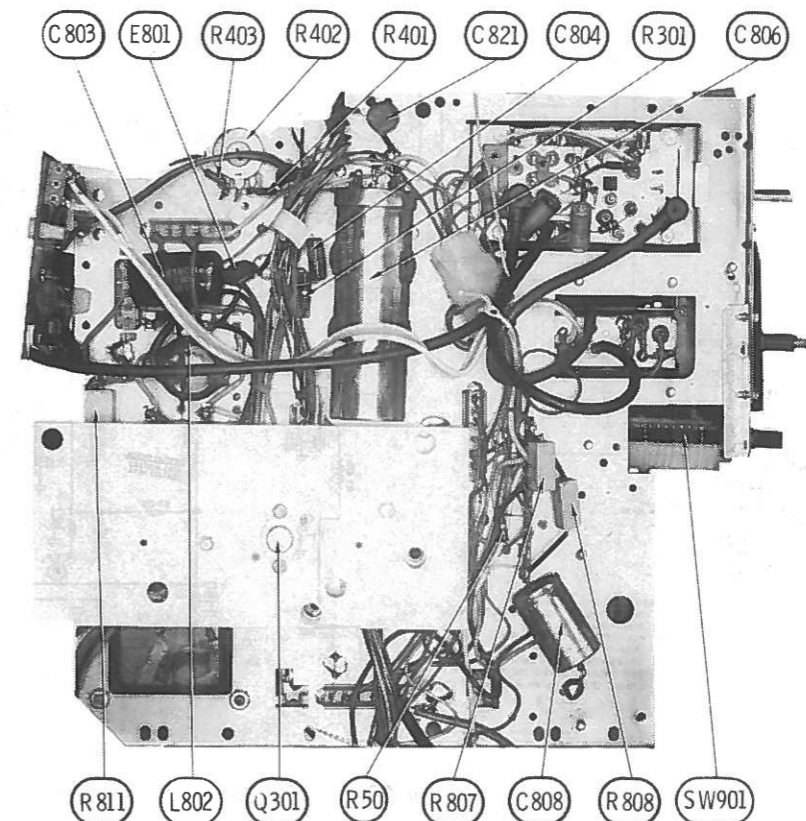
Perform center dot convergence using convergence magnets. If the picture tube appears to be magnetized, use a degaussing coil to demagnetize tube and mounting brackets. Turn Brightness Control to normal brightness. Turn Contrast Control fully counterclockwise. Set Channel Selector between channels (snow-free raster).

Turn the Blue and Green Screen Controls fully counterclockwise. Loosen the deflection yoke and move it rearward against the convergence assembly. Rotate the tabs on the purity magnet 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.

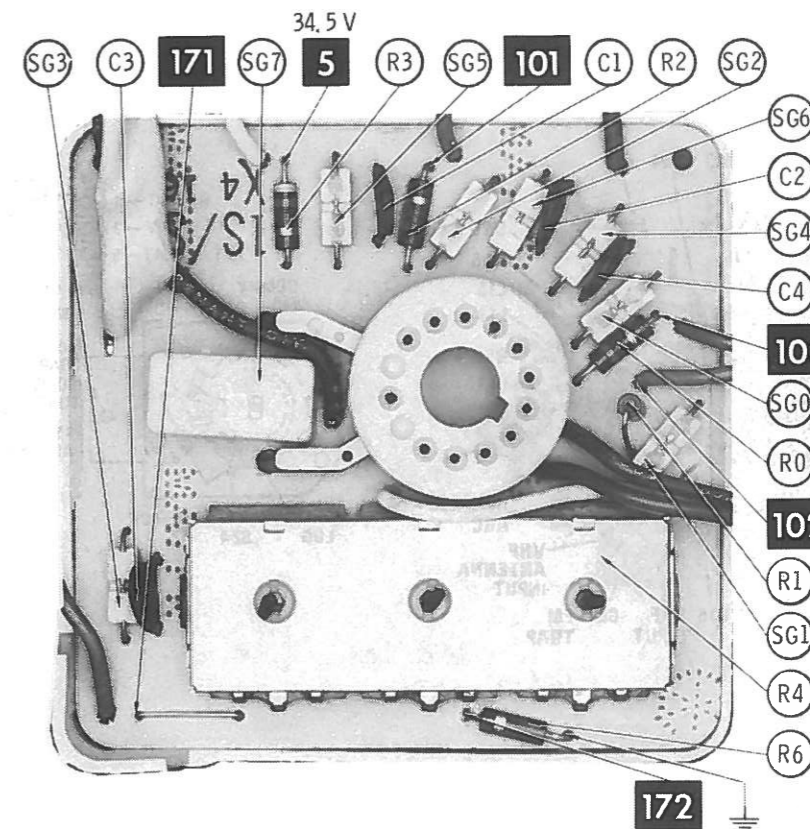
### GRAY SCALE ADJUSTMENTS

Tune in a color picture and set Color Control at MINIMUM. Turn screen controls to MINIMUM and Contrast Control to mid-range. Turn Brightness Control and all three drive controls (located on SC Panel) to maximum position. Adjust Brightness Range Control (SC Panel) to point of high-light blooming. Turn Brightness Control for a low-brightness level. Increase one or two screen controls as needed for a gray raster, predominant color at MINIMUM.

Turn Brightness Control to maximum and reduce Red, Blue and Green Drive Controls to eliminate coloring in the bright areas of the picture. Leave drive control of weakest color at maximum. Check for gray scale tracking at low- and high-brightness settings and readjust as needed.

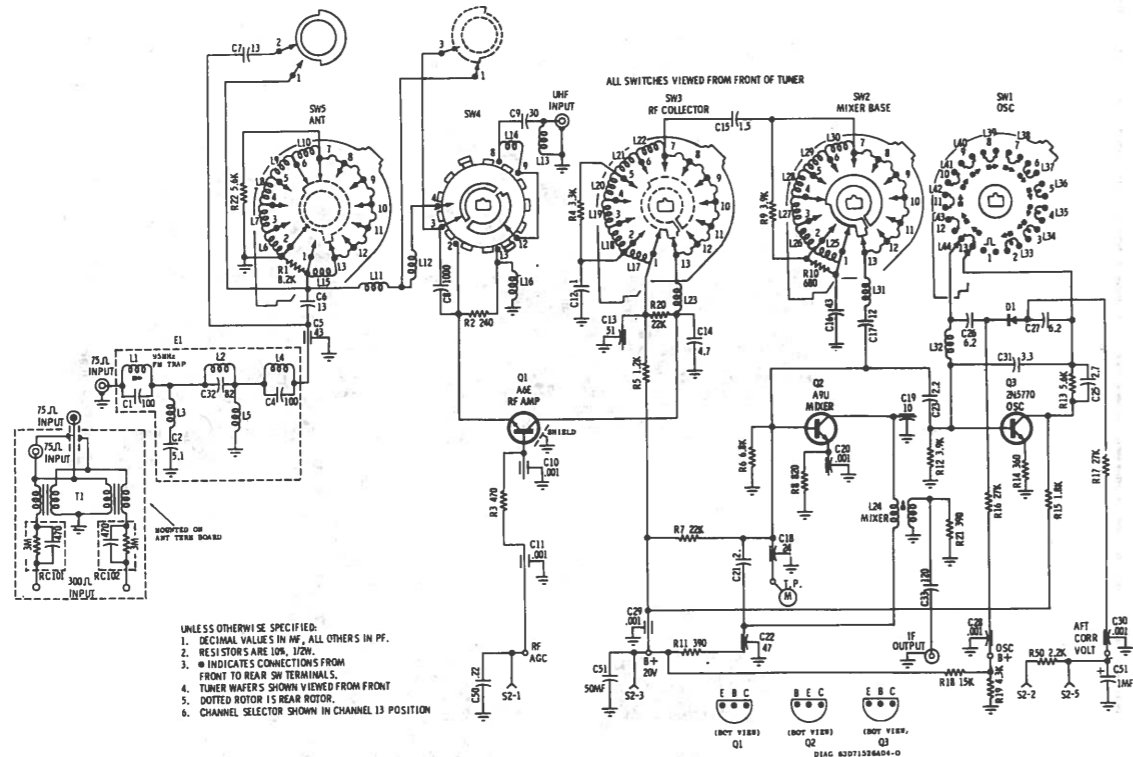


CHASSIS VIEW

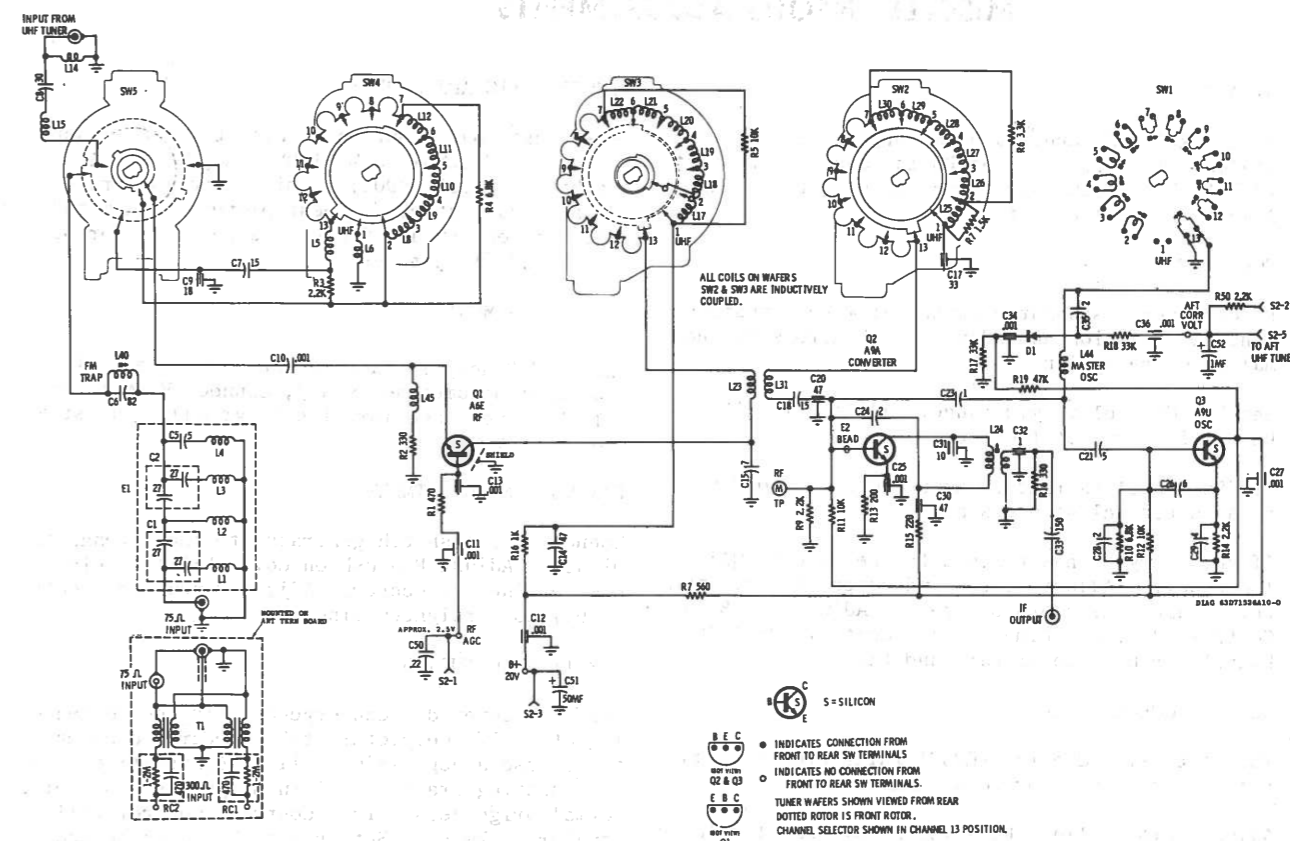


CRT SOCKET BOARD

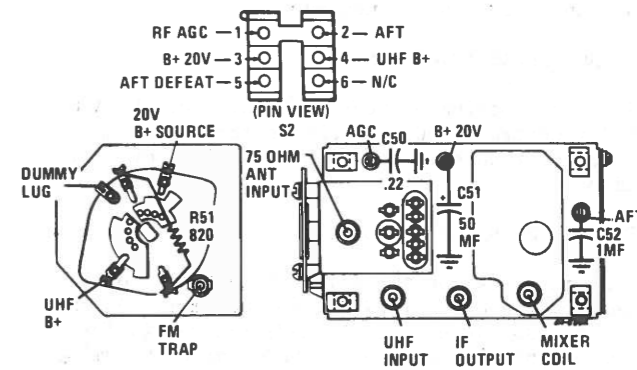
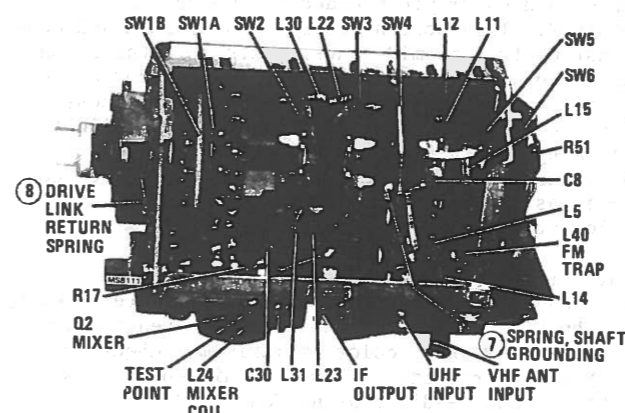
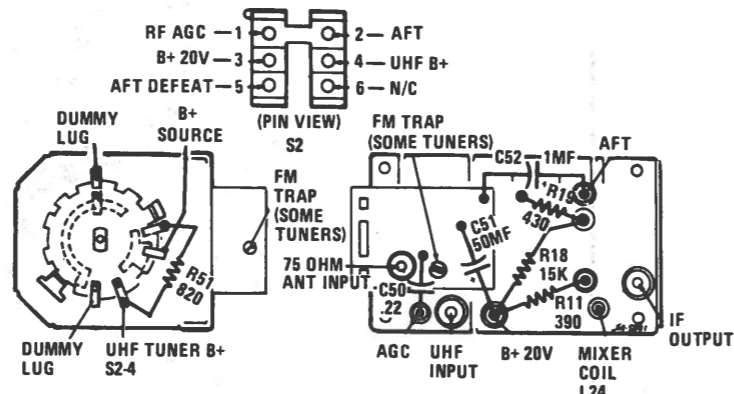
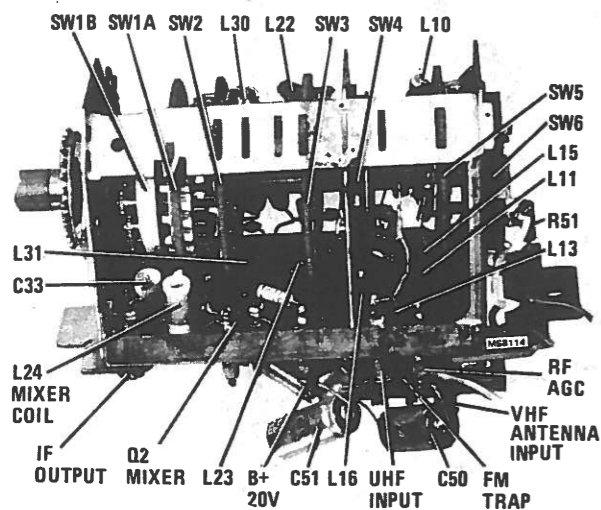
A Howard W. Sams CIRCUITRACE Photo



VHF Tuner CPTT-462 - Schematic Diagram



VHF Tuner CPTT-463 - Schematic Diagram



Courtesy of the Manufacturer

## UHF TUNER CTT660

### ELECTRICAL PARTS

D1	48P65193A55	DIODE, 1S750
Q2	48X90233A08	DIODE, AFT: 1S2085
Q1	48P65194A92	TRANSISTOR, osc: 2SC684

### MECHANICAL PARTS

*77P65199A93	UHF TUNER, complete
*9S10587A05	CONNECTOR, cinch

## VHF TUNER CPTT462

### ELECTRICAL PARTS

#### CAPACITORS

C5	*21X90303A56	FEED-THRU 43 pf 5%
C10	21X90303A05	FEED-THRU 1000 pf
C11	21X90303A06	FEED-THRU 1000 pf
C13	*21X90303A59	FEED-THRU 51 pf 5%
C18	*21X90303A58	FEED-THRU 24 pf 5%
C19	*21X90303A57	FEED-THRU 10 pf 5%
C20	21X90303A05	FEED-THRU 1000 pf
C22	21X90303A11	FEED-THRU 47 pf 5%
C28	21X90303A06	FEED-THRU 1000 pf
C29	21X90303A06	FEED-THRU 1000 pf
C30	21X90303A06	FEED-THRU 1000 pf

#### MISCELLANEOUS ELECTRICAL PARTS

D1	*48X90233A11	DIODE, silicon: BB105G
E1	*24X90243A71	ANT INPUT ASSY.
L24	*24P71540A50	UHF B+ SWITCH
L24	*24P71540A50	COIL, mixer

#### TRANSISTORS

Q1	48S137158	TRANSISTOR, RF: A6E
Q2	48S137436	TRANSISTOR, mixer: A9U
Q3	*48X90232A25	TRANSISTOR, osc: 2N5770

### MECHANICAL PARTS

77V71619A93	VHF TUNER, complete: incl mntg brkt, plugs, converter cable, and all other outboard component parts
9S10587A04	CONNECTOR, cinch: UHF input & IF output

9	*44X90277A14	DRIVE LINK & GEAR ASSY.
4	*44X90277A15	GEAR, fine tune drive
	*4X90259A06	RETAINER, "C" washer
8	3P65142A61	SCREW, fine tuning
6	*47X90276A42	SHAFT, fine tuning
7	*47X90276A41	SHAFT AND PRESET COIL ASSY.
3	*41X90271A23	SPRING, biasing
5	*41X90271A25	SPRING, clutch
1	*41X90271A24	SPRING, drive link return
11	41X90271A11	SPRING, shaft grounding
2	41X90271A12	SPRING, spiral detent
10	*59X90285A06	STATOR WAFER & CONTACTS

## VHF TUNER CPTT463

### ELECTRICAL PARTS

#### CAPACITORS

C9	21X90303A53	FEED-THRU 18 pf 10% 500V
C11	21X90303A54	FEED-THRU 1000 pf +100-0% 500V
C12	21X90303A54	FEED-THRU 1000 pf +100-0% 500V
C17	21X90264A41	FEED-THRU 33 pf 10% 500V
C20	21X90303A55	FEED-THRU 47 pf 10% 500V
C25	21X90303A54	FEED-THRU 1000 pf +100-0% 500V
C27	21X90303A54	FEED-THRU 1000 pf +100-0% 500V
C30	21X90264A40	FEED-THRU 47 pf 10% 500V
C31	21X90264A51	FEED-THRU 10 pf 10% 500V
C32	21X90264A45	FEED-THRU 1 pf +0.25 pf 500V
C34	21X90303A54	FEED-THRU 1000 pf +100-0% 500V
C36	21X90303A52	FEED-THRU 1000 pf +100-0% 500V

#### MISCELLANEOUS ELECTRICAL PARTS

D1	48S90233A08	DIODE, AFC: 1S2085
E1	24X90243A70	ANT. INPUT ASSY.
F2	76X90301A01	FERRITE BEAD
F2	40X90313A02	UHF B+ SWITCH

#### COILS & CHOKES

L24	24X90243A67	COIL, mixer
L40	24X90243A68	FM TRAP ASSY.
L44	24X90243A66	COIL, master osc

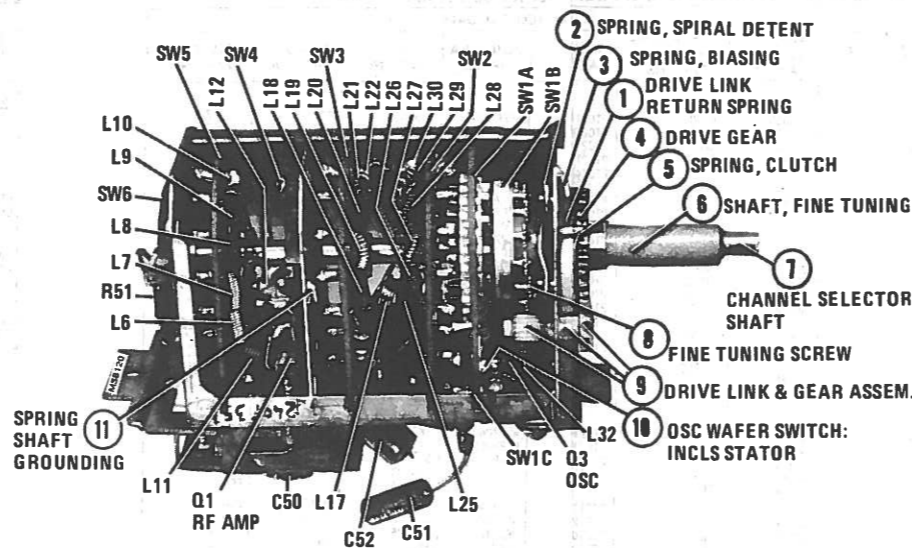
#### TRANSISTORS

Q1	48S137158	TRANSISTOR, RF: A6E
Q2	48S137388	TRANSISTOR, mixer: A9A
Q3	48S137436	TRANSISTOR, osc: A9U

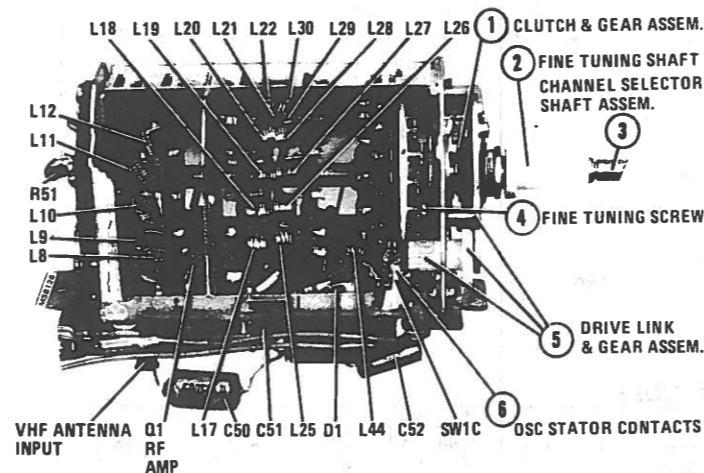
### MECHANICAL PARTS

77V71619A93	VHF TUNER, complete: incl mntg brkt, plugs, converter cable, and all other outboard component parts
9S10587A04	CONNECTOR, cinch: UHF input & IF output

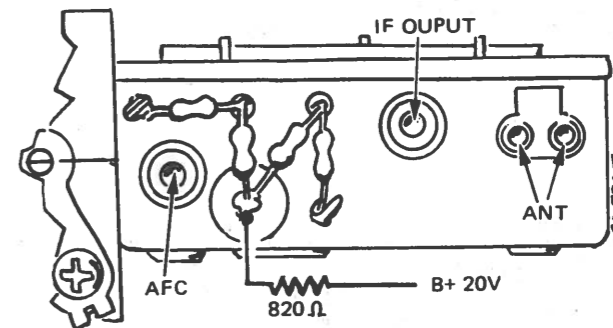
1	42X90275A02	CLIP, preset retainer
5	*44X90277A13	DRIVE GEAR & CLUTCH ASSY.
5	7X90272A07	DRIVE LINK & GEAR ASSY.
6	59X90285A05	OSC WAFER ASSY.
	24X90243A69	PRESET SCREW & COIL ASSY.
	4X90259A12	RETAINER "C" WASHER: channel selector shaft
	*4X90259A11	RETAINER "C" WASHER: fine tuning shaft
4	3P65142A61	SCREW, fine tuning
3	*47X90276A39	SHAFT, channel selector assy.
2	47X90276A36	SHAFT, fine tuning
	41X90271A08	SPRING, drive link return
7	41X90271A07	SPRING, shaft grounding
	43X90306A02	STEEL BALL



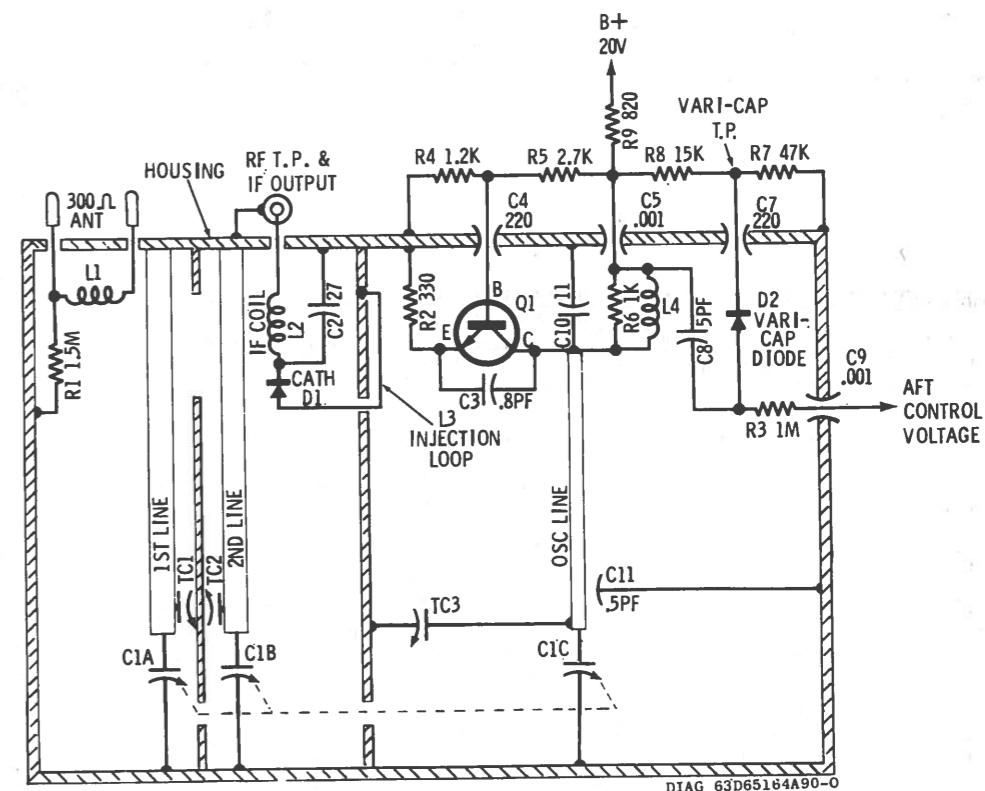
VHF Tuner CPTT-462



VHF Tuner CPTT-463



UHF Tuner CTT-660-Terminal Detail



UHF Tuner CTT-660-Schematic Diagram

## 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.

## MODULES/PLUG-IN BOARDS

ITEM No.	PART NAME	MFGR. PART No.	NOTES
BC	Panel	1Y71677A25	IF Audio (KT347LM)
FC	Panel	1Y71677A26	Horizontal Output (KT348LM)
HC	Panel	1Y71677A27	Dynamic Convergence (KT349LM)
SC	Panel	1Y71677A28	Color-Video (KT350LM)
VA	Panel	1Y68665A33	Sync & Vertical Deflection (KT241HM)
ZC	Panel	1Y71677A31	Power Supply (KT353LM)

## PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MFGR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V1	19VBRP22 #	AN19VDQP22	H-19VBRP22 (1) or H-19VCTP22 (1) or H-19VEDP22 (1) or C-19VCTP22 (2)	XR19VBRP22	Used in Models: WP5530LN, Y/WP5532LW.
	19VCTP22 #	AN19VDQP22	H-19VBRP22 (1) or H-19VCTP22 (1) or H-19VEDP22 (1) or C-19VCTP22 (2)	XR19VCTP22	Used in Models: Y/WP5534LW, Y/WP5536LP, Y/WP5538LS, Y/WP5540LP.
	17VAEP22 #			XR17VAEP22	Used in Models Y/WP4610LP.

# For SAFETY, replace only with equivalent part.

- (1) Hi-Lite Matrix.  
(2) Colorama Matrix.

## SEMICONDUCTORS (Select replacement transistor for best results)

		REPLACEMENT DATA						
ITEM No.	TYPE / MFGR. No./PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
BC PANEL								
D1		1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D2		1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D3		1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D4		1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D5	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D6	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
IC1	10655C05			PTC746				
IC2	10655B13			PTC726				
Q1	A1U	GE-60	TR-24	PTC121	HEP56	SK3018	RT113	ECG 233
Q2	P25	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q3	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q4	A1Z	GE-10	TR-24	PTC136	HEP718	SK3018	RT113	ECG 108
Q5	A1U	GE-60	TR-24	PTC121	HEP56	SK3018	RT113	ECG 233
FC PANEL								
D2	D86	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
D3	D56	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
E1	D6.2	6.2V Zener	GEZD-6.2	PTC503	HEPZ0408	SK3058	RT237	ECG 137
Q1	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q2	OTC	GE-300 (7)	D200MP (6)	PTC215 (6)	HEPR0602 (7)	SK3100 (7)	RT218 (7)	ECG 178MP (6)
Q3	A35	GE-20	TR-24	PTC121	HEP713	SK3018	RT102	ECG 123A
Q4	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q5	P25	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q6	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q7	B1Y	GE-12	TR-23	PTC104	HEP240	SK3131	RT128	ECG 124
Q8	B1T	GE-36	TR-93	PTC129	HEP740	SK3115	RT149	ECG 163
HC PANEL								
D1	91A08	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D2	91A08	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D4	12011	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D5	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D6	91A02	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
D7	91A02	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
D8	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D9	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D10	91A02	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
D11	91A02	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117

## SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE / MFGR. No./PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
SC PANEL								
D1	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D2	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D3	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D5	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
IC1	10655A03			PTC741				ECG 738
IC2	10655B14							
Q1	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q2	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q3	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q4	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q5	P25	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q6	P25	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q7	P25	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q8	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q9	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q11	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q12	B1E	GE-27	TR-74		HEPS3021		RT135	ECG 191
Q13	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q14	B1E	GE-27	TR-74		HEPS3021		RT135	ECG 191
Q15	A6H	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q16	B1E	GE-27	TR-74		HEPS3021		RT135	ECG 191
VA PANEL								
D1	120A02	GE-300	D200	PTC214	HEPRD602	SK3100	RT218	ECG 177
D2	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D3	120A11	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
Q1	P3U (9)	GE-69	TR-77	PTC111	HEP715	SK3054	RT154	ECG 153
Q2	A8E (9)	GE-66	TR-76	PTC110	HEP715	SK3054	RT154	ECG 152
Q3	A5F		TR-72	PTC110	HEP714	SK3534	RT154	ECG 190
Q4	A8Z	GE-20	TR-24	PTC121	HEPS0001	SK3018	RT102	ECG 194
Q5	P2W	GE-21	TR-30	PTC103	HEP716	SK3025	RT115	ECG 159
Q6	A6J	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q7	A6J	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
ZC PANEL								
D1	91A11	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D2	91A11	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D3	91A05	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D4	91A05	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D5	06.2 6.2V Zener	GEZD-6.2	Z-1204	PTC503	HEPZ0408	SK3058	RT237	ECG 137
D6	D8H	GEZD-33	Z-1222	PTC512	HEPZ0408	SK3095	RT250	ECG 5084
D7	B33	GEZD-33	Z-1222	PTC512	HEPZ0408	SK3095	RT250	ECG 5084
D8	33V Zener							
D8	91A05	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D9	91A05	GE-504A	804 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
Q1	W1W				HEPR1221			
Q2	W1W				HEPR1221			
Q3	A6J	GE-18	TR-24	PTC123	HEP728	SK3040	RT109	ECG 123A
Q4	B2D	GE-20	TR-24	PTC121	HEP736	SK3018	RT102	ECG 123A
Q5	B2D	GE-20	TR-24	PTC121	HEP736	SK3018	RT102	ECG 123A
Q6	W1R				HEPR1005			
CHASSIS								
D301	91A02/48S191A02	GE-504A	806 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT214	ECG 116 or ECG 117
D501	DBL/48S137546	GE-511	D172	PTC216	HEPR3012	SK3130		ECG 506
D502	D6C/48S137397(3) #	GE-513	TV215		HEPR3100			ECG 513
E801	48D69723A02 (2)	GE-513	TV215		HEPR3100			ECG 513
	6510729A01 (4)							
	V150CA10A (5)							
Q301	B1Z/48S137535		TR-81	PTC104	HEP241	SK3538	RT128	ECG 175
			TR-81	PTC104	HEP241	SK3538	RT128	ECG 175

# For SAFETY, replace only with equivalent part.

- (2) Used in some versions.  
(3) When ordering, manufacturer suggests using this number.  
(4) Thyrector  
(5) Number on unit.  
(6) Matched Pair.  
(7) Two required - select matched pair.  
(9) Half of Complementary Pair (Q1 and Q2; VA Board).

## ELECTROLYTIC CAPACITORS

ITEM No.		RATING	REPLACEMENT DATA					
			MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
BC PANEL								
C13	1	16V		RME-E-E-050	EP15-50	PC50-16	TDC105M035EL	SD35-19
C14	47	16V					MTV50C815	EV-1226
C15	10	25V		RME-E-E-050	EP15-50	PC50-16	TDC106M035FL	SD35-109
C16	47	16V					MTV50C815	EV-1226
C44	22	25V		ME-3-G-020	EA30-25	WBR25-25	MTV20C850	EV-1324
FC PANEL								
C5	8	50V		RME-D-J-010	EP50-10	PC10-50	MTV10C850	EV-1622
C20	470	40V		ME-J500	EA50-500	WBR500-50	MTA500650	TVA-1315
C21	10	300V		CTA-1370		WBR10-450	TC62B	TVA-1547
SC PANEL								
C6	100	25V		RME-G-G-100	EP30-100	PC100-25	MTV1000825	EV-1330
C11	4.7	63V		ME-3-M-005	EA150-5	PC5-100	MTV50C8100	TVA-1334
C25	22	25V		ME-3-M-005	EA30-25	WBR25-25	MTV20C850	EV-1324
C29	4.7	63V		ME-3-M-005	EA150-5	PC5-100	MTV50C8100	TVA-1334
C30	4.7	63V		ME-3-M-005	EA150-5	PC5-100	MTV50C8100	TVA-1334
C35	10	63V		ME-4-M-010	EA150-10	WBR10-150	MTV100C050	TVA-1337
C39	22	25V		ME-3-G-020	EA30-25	WBR25-25	MTV20C850	EV-1324
C57	220	63V			EA30-25	WBR275-75	MTA250675	EV-1640
C58	22	25V		ME-3-G-020	EA30-25	WBR25-25	MTV20C850	EV-1324
C59	22	25V				WBR25-25	MTV20C850	EV-1324
VA PANEL								
C1	470	63V				WBR500-75	TC75501A	TVA-1319.5
C15	5	15V					TDC475M035FL	S035-4R79

## ELECTROLYTIC CAPACITORS (cont)

ITEM No.	RATING	REPLACEMENT DATA					
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
ZC PANEL							
C9	470 16V		ME-G500	EA15-500	WBR500-16	MTA500G25	TVA-1162
C10	2.2 100V		ME-2-M-002		PC2-100	MTV2C8100	TVA-1331
CHASSIS							
C501	100 63V	23S10255A60	CTA-1265	EA150-10	WBR100-150	MTA100G75	TVA-1346
C508	8 100V		ME-4-M-010		WBR10-150	MTA10E100	TVA-1337
	22 160V	23S10255A74	CTA-1325		WBR20-250	TC558	TVA-1442.2
	20 100V	23S1325SA01	ME-7-M-020		WBR500-75	MTA20F100	TVA-1339
	470 63V	23S10255A64			PC2-100	TC5501A	TVA-1319.5
C601	2 100V		ME-2-M-002		MTV2C8100	TVA-1331	
C605	2.2 160V	23S10255B25	ME-3-R-002		TT350K2	TVA-1435	
C805A	750 125V	23S10255B24					
	500 125V						
C806	1000 125V	23S10255B36			DD0018.4A (1)	PPP216.43 (1)	
C808	500 100V	23S10255A82			WBR500-150	TC10501A	TVA-1376

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

## MISCELLANEOUS

**CABINETS & CABINET PARTS** (When ordering specify model, chassis & color)

## WIRING DATA

**BOLD LISTING INDICATES LOCATION OF PART**

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

## CAPACITORS (cont)

\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.  
# For SAFETY, replace only with equivalent part.

**QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/**

**FOR**

**BOLD LISTING INDICATES LOCATION OF PART**

## 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.

## CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
BC PANEL							
R4	47.25MHz Trap	100	18D66401A22	TSV-100 (3) or T-100 (3) TSV-10K or T-10K	C-103	MTC12L4	U201R1018
R14	IF AGC	10K	18D66401A36			MTC14L1	X201R1038
FC PANEL							
R22	B+ Regulator 20.6 Volt	2500	18D66401A47	TSV-2.5K or T-2500	C-252	MTC23L1	X201R2528
CRT BOARD							
R4"A"	Green Screen	10meg	18D67678A16(7)				
"B"	Red Screen	10meg					
"C"	Blue Screen	10meg					
HC PANEL							
R1	R/G Vert Lines (Top)	200 2W	18D67671A07	V-200	U39-200	MRC120P	110-300
R2	Blue Horiz Lines(Top)	120 2W	18D67671A09	WCP-120 or V-120	U39-125		110C120
R3	R/G Horiz Lines (Bottom)	60 2W	18D67671A02	WCP-60 or V-60	U39-75	MRC60P	110C60
R4	R/G Horiz Lines (Top)	60 2W	18D67671A02	WCP-60 or V-60	U39-75	MRC60P	110C60
R6	R/G Vert Lines (Bottom)	200 2W	18D67671A07	V-200	U39-200		110-300
R7	Blue Horiz Lines (Bottom)	120 2W	18D67671A09	WCP-120 or V-120	U39-125	MRC120P	110C120
R9	R/G Vert Lines (Left)	120 2W	18D67671A09	WCP-120 or V-120	U39-125	MRC120P	110C120
R12	R/G Horiz Diff. Tilt	150 2W	18D67671A11	WCP-150 or V-150	U39-150	MRC150P	110C150
R13	Blue Horiz Amp	150 2W	18D67671A04	WCP-150 or V-150	U39-150	MRC150P	110C150
SC PANEL							
R17	Color Killer	10K	18D66401A49	TSV-10K (3) or T-10K (3)	C-103 (3)	MTC14L4	U201R1038
R57	Brightness Range	10K	18D66401A49	TSV-10K (3) or T-10K (3)	C-103 (3)	MTC14L4	U201R1038
R68b	Red Balance	1000	18D66401A64	TSV-1K or T-1000	C-102	MTC13L1	X201R1028
R69	Red Drive	100	18D66401A40	TSV-100 or T-100		MTC12L4	U201R1018
R77	Green Drive	100	18D66401A41	TSV-100 or T-100		MTC12L4	U201R1018
R82b	Blue Balance	1000	18D66401A64	TSV-1K or T-1000	C-102	MTC13L1	X201R1028
R84	Blue Drive	100	18D66401A42	TSV-100 or T-100		MTC12L4	U201R1018
VA PANEL							
R30	"A" Height "B" Vert Linearity	50K 4000	18D67678A13(7)				
ZC PANEL							
R6	B+ Regulator 80 Volt	750		T-750		MTC751L1	X201R7518
R22	Over Voltage Shut-down	1500		T-1500		MTC152L1	X201R1528
CHASSIS							
R102	Video Peaking (Front)	10K	18D65082A51 (18)	F1-10K,R1-10K, FK105,RS005	NP-10K-S, NR-10K-S, UPC-C-104, UR-D-006	P14L,3014,RU14L, OK1250,1K625	QJ-2855,BU4,CF9, CR5,SF55,SR100
R103	Preset Video Peaking (Rear)	10K					
	Video Peaking	2000	18D65082A50 (23)				
	Preset Video Peaking Lo-Lite	10K	18D67559B89 (19)				
R201	Brightness (Front)	10K	18D65082A51 (20)	F1-10K,R1-10K, FK105,RS005	NP-10K-S, NR-10K-S, UPC-C-104, UR-D-006	P14L,3014,RU14L, OK1250,1K625	QJ-2855,BU4,CF9, CR5,SF55,SR100
R202	Preset Brightness (Rear)	10K					
R211	Focus	10meg	18D67502A20 #	FTT-15Meg		FCT17L	FC-1 BU1,CF63,SS10, K (9)
R302	Volume/Switch	50K	18D68021C14				BU11,CF6,SS6A
R402	RF AGC Delay	1000	18D67858A06	F1-1000,SNK010	B47-1000-S or [NP-1000-S, NML-A-300,TT-2]	RU13L,SL37,SN281 or [UA13L,SN281]	BU11,CF6,SS6A
R605	Vert Hold	500	18D67559A84	F1-500,SNK100, AK-38 or TT-4	B47-500-S or [NP-500-S, NML-A-300,TT-2]	PTA52L or [RU52L, SL37,SN1000]	BU11,CF4,SS6A
R609	Vert Amplitude	150 2W	18D67671A11	WCP-150 or V-150	U39-150	MRC150P	110C150
R901	Peaking (Soft-Vivid)	10K	18D68443A22				US103L
R902	Intensity (Front)	10K	18D65082A51 (21)	F1-10K,R1-10K, FK105,RS005	NP-10K-S, NR-10K-S, UPC-C-104, UR-D-006	P14L,3014,RU14L, OK1250,1K625	QJ-2855,BU4,CF9, CR5,SF55,SR100
R903	Preset Intensity (Rear)	10K					
R904	Hue (Front)	100K	18D65082A52 (22)	F1-100K, R1-100K,FK105, RS005	NP-100K-S, NR-100K-S, UPC-C-104, UR-D-006	P15L,3014,RU15L, OK1250,1K625	QJ-2856,BU4, CF13,CB8,SF55, SR100
R905	Preset Hue (Rear)	100K					

# For SAFETY, replace only with equivalent part.

(3) For horizontal mounting, bend the two outside terminals to fit PC board. Use jumper to connect center terminal to PC board.

(6) Alternate part, may be used in some versions.

(7) To establish section identification of side-by-side controls, view controls with shaft ends facing you, terminals down.

On 3-section controls, left-hand section is "A", middle section is "B", right-hand section is "C".

On 2-section controls, left-hand section is "A", right-hand section is "B".

(9) Switch must be CTS type 080.

(18) Includes R102 and R103.

(19) May be used in some models.

(20) Includes R201 and R202.

(21) Includes R902 and R903.

(22) Includes R904 and R905.

(23) Used in models using Chassis 177S941, 197S941 and E197S941.

## RESISTORS (Power and Special)

ITEM No.		RATING	REPLACEMENT DATA		ITEM No.		RATING	REPLACEMENT DATA	
			WORKMAN PART No.	MFGR. PART No.				WORKMAN PART No.	MFGR. PART No.
FC PANEL					R503	220 10% 1/2W Carbon	CA220	65127099 #	
R28	.82 3W WW				R504	100K 10% 1/2W Carbon	CA100K	65125534 #	
CHASSIS					R505	56 10% 7W WW		175744656	
R101	L.O.R.*			6510727A01	R606	7 Cold NTC		6P65147A39	
R212	3.3Meg 10% 1/2W Carbon	CA3.3Meg		65127538 #	R802	770 10% 7W WW		175135047	
R213	Focus, 160Meg Tap @ 10Meg			6068703A03 #	R804	19 Cold PTC		6C69717A02	
R501	22 10% 1/2W Carbon	CA22		65131842 #	R805	5 10% 10W WW	10W-SQ-5	175754369	
					R806	5 10% 10W WW	10W-SQ-5	175754369	
					R807	22 10% 5W WW		175544530	
					R808	22 10% 5W WW		175544530	
					R809	560 10% 7W WW		175139209	
					R811	.68 10% 15W WW		175139210	
					R813	180 10% 7W WW		175132414	

# For SAFETY, replace only with equivalent part.

\* Light Dependent Resistor.

## COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
BC PANEL					
L1	Video Input IF				
L2	41.25MHz Trap				
L3	47.25MHz Trap				
L4	RF Choke				
L6	Video IF/39.75MHz Trap				
L7	RF Choke				
L9	RF Choke				
L10	41.25MHz Trap				
L11	RF Choke				
L12	RF Choke				
L13	RF Choke				
L14	RF Choke				
L15	Sound Input IF				
L16	Quadrature				
L17	RF Choke				
T1	Video/Sound Take-Off				
T2	Discriminator				
FC PANEL					
L2	RF Choke				
SC PANEL					
L1	RF Choke (7.5uH)				
L2	RF Choke (1.5uH)				
L3	RF Choke (1.5uH)				
L5	RF Choke (12uH)				
L6	RF Choke (12uH)				
L7	RF Choke (18uH)				
L9	Peaking (50uH)				
L10	Hue Range Control				
L11	Peaking (180uH)				
L12	RF Choke (15uH)				
L13	Peaking (150uH)				
L14	RF Choke (8.2uH)				
L15	RF Choke (7.5uH)				
L16	RF Choke (8.2uH)				
L17	RF Choke (7.5uH)				
L18	RF Choke (8.2uH)				
L19	RF Choke (7.5uH)				
T1	Chroma Bandpass				
VA PANEL					
L1	RF Choke (7.5uH)				
CHASSIS					
L501	RF Choke	24067534A26			
L802	Line Choke	24071230A16			
L803	RF Choke	25D67554A28			
L901	RF Choke	24D66772A24			
T1	Balun	24C68848A02			

## COILS &amp; TRANSFORMERS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA				
		MFGR. PART No.	OTHER IDENTIFICATION	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.
FC PANEL			25D71898A01 25D67440A12			
L1	Horiz. Osc. (Hold)					
T1	Horiz. Driver					
T2	Horiz. Pre-driver					
HC PANEL		24D71869A01				
L1	R/G Vert. Lines (Right)					
L2	R/G Horiz. Lines (Right)					
L3	Blue Horiz. Tilt					
L4	Blue Cent. Horiz. Phase					
	Convergence Yoke					
L702	Red Coil					
L703	Green Coil					
L704	Blue Coil					
VA PANEL						
T1	Vertical Osc.		25D67440A07			

## COILS &amp; TRANSFORMERS (Sweep Circuits) (cont)

ITEM No.	FUNCTION	REPLACEMENT DATA				
		MFGR. PART No.	OTHER IDENTIFICATION	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.
CHASSIS						
L502	Horiz. Tuning	Part of T501 #				
L503	Horiz. Size	24D71435A08 #				
L601	Pincushion Vert. Tilt	24C70169A06				
L701	Yoke 92° Horiz = 565uH Vert = 24mH	24D70165A06				
T501	Horiz. Output	24D70809A10 #				
T601	Pincushion Reactor	25G10574B05	25G10574A05			

# For SAFETY, replace only with equivalent part.

## FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L804	1.2A DC	1.3	49mH	25D67554A29				

## TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T801	120V AC @ .06A AC	6.3V AC @ .78A AC	25D68548A26 25D68548A28 (1)				(1) Used in Chassis 177S-941.

## TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	600	16	25D67552B33				

## SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SPK301	3" x 5" PM, 16 Ohms	50D69062A04	35A05216	Used in Models: WP5530LN, Y/WP5532LW, Y/WP5534LW, Y/WP5536LP, Y/WP5538LS, Y/WP5540LP.
	3-1/2" PM, 16 Ohms	50D61398B05		Used in Model WP4610LP.

## FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA							
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	
C8801	Circuit Breaker Break: 3.25A Hold: 2.11A	80C66390A27				B15005		FA5	
F801	Chemical Fuse 1.2A 125V	65S1040A07							
F802	Chemical Fuse .7A 125V	65S1040A05							
F803	1-1/2" Length of Number 28 Fuse Wire	(1)							

(1) Not used in Chassis coded Q-02 and Later.

# DISASSEMBLY INSTRUCTIONS

## CHASSIS REMOVAL

Remove all knobs and lay set face down on a soft protective surface. Disconnect antenna leads. Remove six screws holding cabinet back and remove back.

NOTE: Most components can now be serviced.

Disconnect CRT socket, HV anode lead, speaker leads, deflection yoke plug, degaussing coil leads, and ground wires.

Remove blue lateral magnet assembly and convergence yoke.

Remove two screws holding volume control. Remove fourteen screws holding chassis and lift chassis from cabinet front.

## PICTURE TUBE REMOVAL

Follow "Chassis Removal" procedure. Remove deflection yoke and clamp. Remove four springs holding degaussing shield and remove shield. Loosen bolt holding CRT retaining wire. Remove four screws holding retaining wire clamps, and remove retaining wire and clamps. Lift picture tube from cabinet front. Do not lift picture tube by the neck.

QUASAR CHASSIS C19TS-/E19TS-/Y17TS-/  
Y19TS-/YC19TS-/YE19TS-/17TS-/19TS-941

FOLDER 2