

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Disconnect leads from the antenna terminals and remove control knobs from the set. Remove five screws from the cabinet back. Remove two screws at the top of cabinet back near the handle, one screw on the back near antenna terminals and two screws located on the sides (at rear) of the cabinet body. Remove cabinet back from the front.

Printed circuit-board assembly may be removed from the cabinet front by removing three hex head screws holding it to the bottom. Remove one hex head screw holding high-voltage cage to the bottom. Remove six hex screws holding secondary control assembly and tuner bracket to the cabinet front.

Disconnect picture-tube socket, high-voltage anode lead, deflection-yoke wires, earphone-jack leads, degaussing leads, speaker leads, and clock-timer leads.

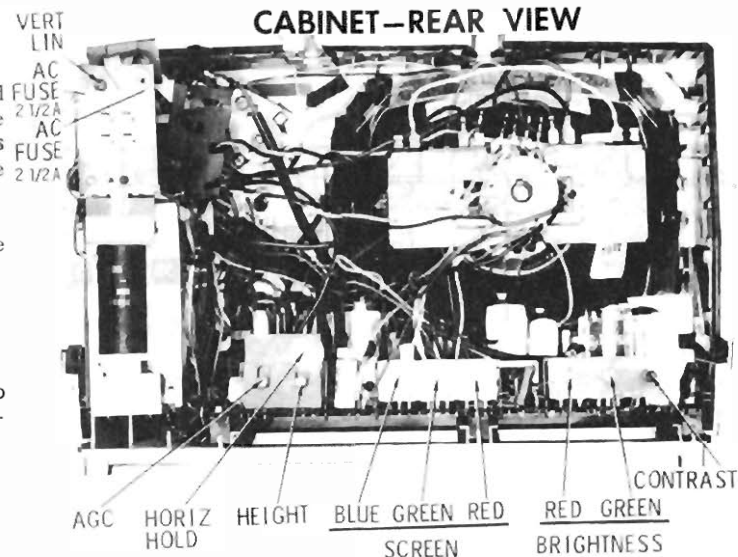
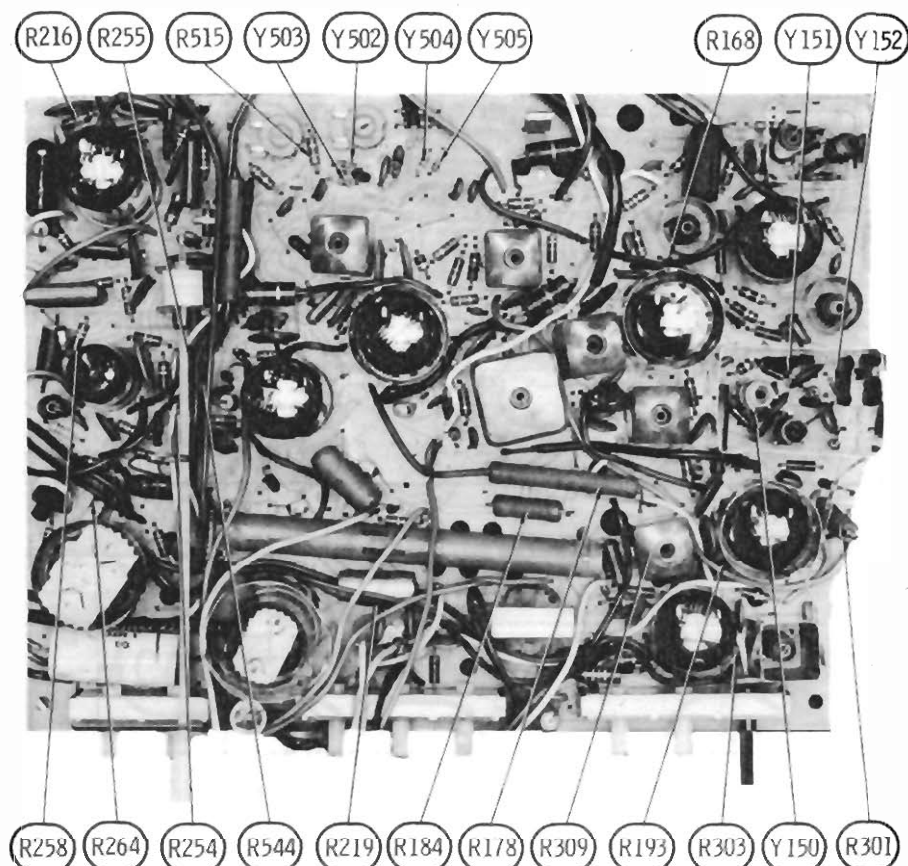
PICTURE TUBE REMOVAL

Remove cabinet back. (See Chassis Removal.)

Disconnect the high-voltage anode lead, picture tube socket, yoke leads, and convergence leads. Remove purity ring, convergence yoke and deflection yoke from the picture-tube neck.

Place set face down on a soft protective surface. Remove the eight hex head retaining screws from the shield brackets at each corner of the tube. Lift picture tube from the cabinet front. Do not lift picture tube by the neck.

PRINTED BOARD



HIGH VOLTAGE ADJUSTMENTS

Warm set up for fifteen minutes before adjusting high voltage. Set brightness to MINIMUM and adjust the high voltage adjust control for 17.2KV at high voltage anode with 120VAC line voltage. Increase line voltage to 130VAC and check that high voltage anode does not exceed 17.8KV.

SET 1312 FOLDER 2

TELEDYNE PACKARD BELL
MODEL 1C222WL

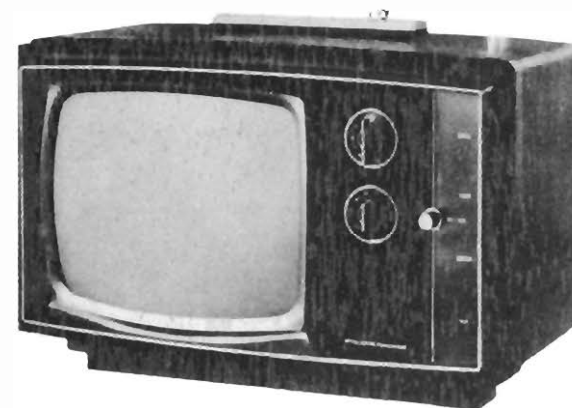
PHOTOFACT® Folder

with CIRCUITRACE®

For Supplier Address See PHOTOFACT Index

TELEDYNE PACKARD BELL
MODEL 1C222WL

COLOR TV



MODEL 1C222WL

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



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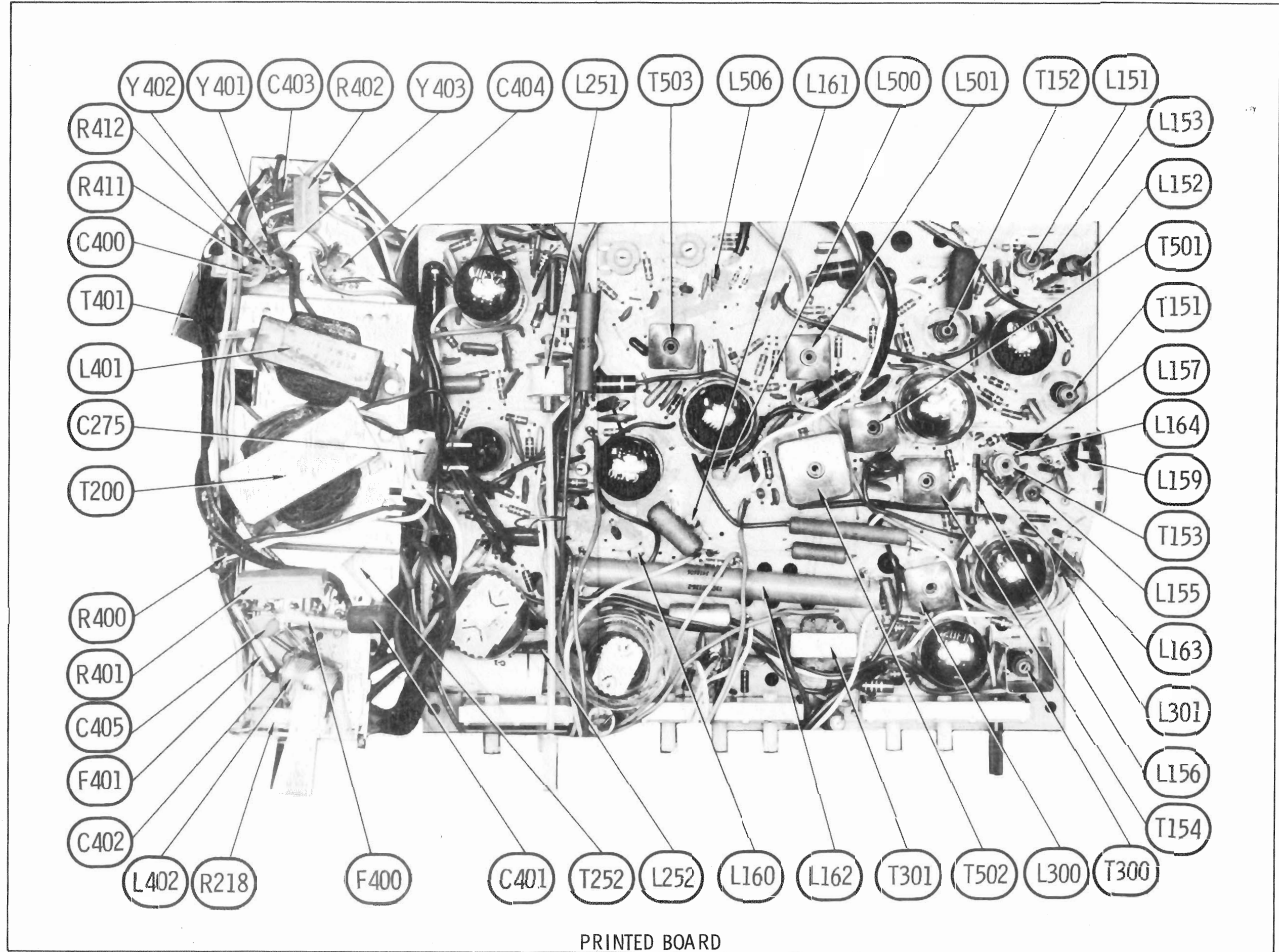
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DATE 4-73

SET 1312 FOLDER 2

TELEDYNE PACKARD BELL
MODEL 1C222WL

SET 1312 FOLDER 2



DISASSEMBLY INSTR

CHASSIS REMOVAL

Disconnect leads from the anode lead, deflection-yoke jack leads, degaussing leads and clock-timer leads.

Printed circuit-board assembly from the cabinet front by releasing screws holding it to the one hex head screw holding it to the bottom. Remove six hex head screws holding the secondary control assembly and the cabinet front.

Disconnect picture-tube socket, anode lead, deflection-yoke jack leads, degaussing leads and clock-timer leads.

PICTURE TUBE REMOVAL

Remove cabinet back. (See C

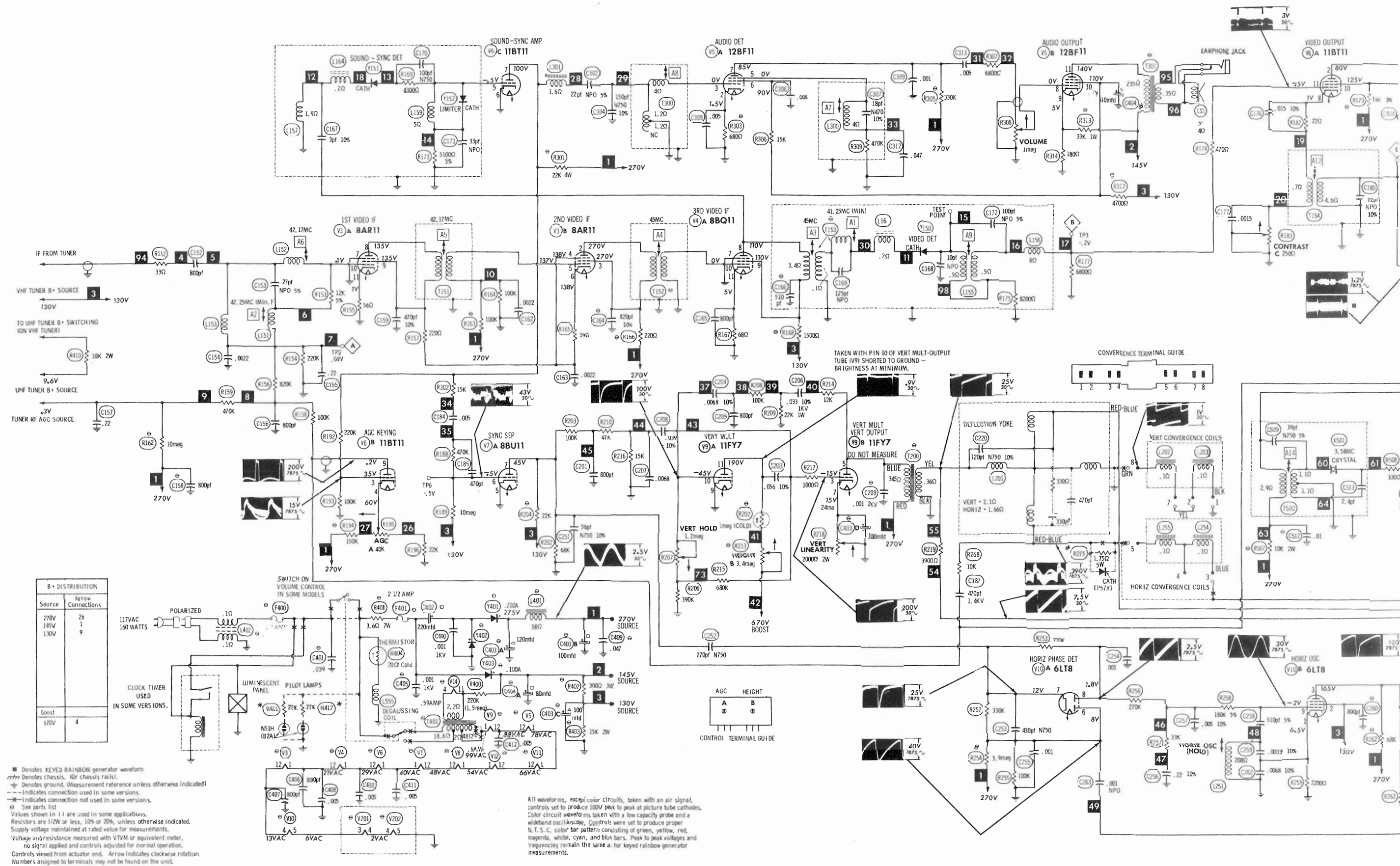
Disconnect the high-voltage tube socket, yoke leads, and Remove purity ring, converge deflection yoke from the picture

Place set face down on a soft surface. Remove the eight hex screws from the shield bracket of the tube. Lift picture tube front. Do not lift picture tube

TELEDYNE PACKARD BELL
MODEL 1C222WL

FOLDER 2





A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITRACE®

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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: F400, F401, Y401, Y402, Y403.

No pic, no sound, has raster: V202, V3, V4

No pic, no sound, has snow: V201, V202

No pic, has sound, no raster: V6, V14

No pic, has sound, has raster: Y151, Y152, V5, V6

Has pic, no sound: Y151, Y152, V5, V6

Overloaded picture: V6

SWEEP

No raster, has sound: V10, V11, V12, V13, V14

No vert deflection: V9

Poor vert lin or foldover: V9

Poor horiz lin or foldover: V10, V11, V12

Narrow picture: Y401, Y402, Y403, V10, V11, V12.

Vert off frequency: V9

Horiz off frequency: V10

SYNC

No vert sync: V9

No horiz sync: V10

No vert/horiz sync: V7

RASTER

Yellow (no blue): V8, V14

Cyan (no red): V8, V14

Magenta (no green): V8, V14

COLOR (B/W operating normally)

No color: V4, V7

Weak color: V7

No color sync: Y502, Y503, V8

No blue: Y504, Y505, V8

No red: Y504, Y505, V8.

Incorrect hue (tint): Y502, Y503, Y504, Y505 and V8.

A series filament circuit is used; an open filament in any tube will cause the set to be inoperative.

SERVICING IN THE FIELD

CRT IMPLOSION PROTECTION AND CLEANING

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

FUSE DEVICES

A 2.5-amp fuse is used for low-voltage power-supply protection. (See photo Cabinet-Rear View.)

A 4-amp fuse is used for AC line protection. (See Cabinet-Rear View photo.)

VHF TUNER

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

HORIZONTAL OSCILLATOR

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

WIDTH

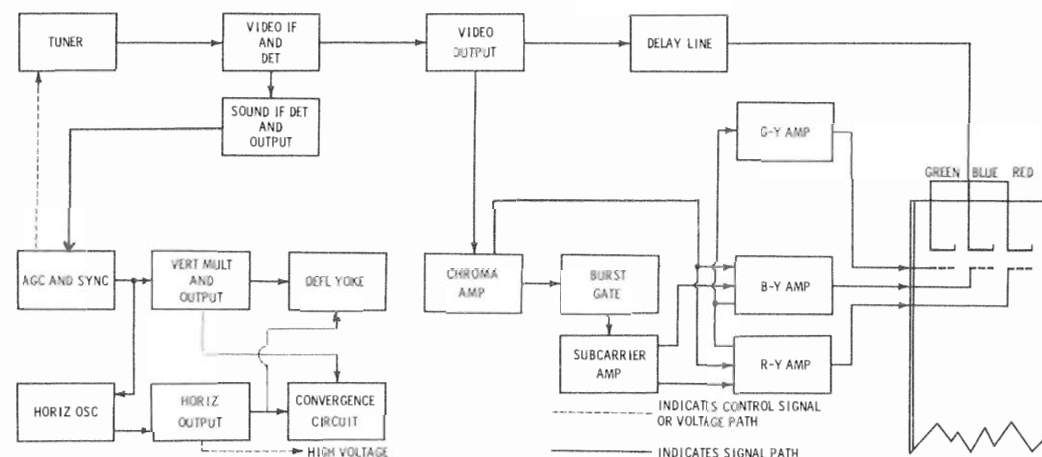
No provision is made to vary the width on this receiver.

FOCUS

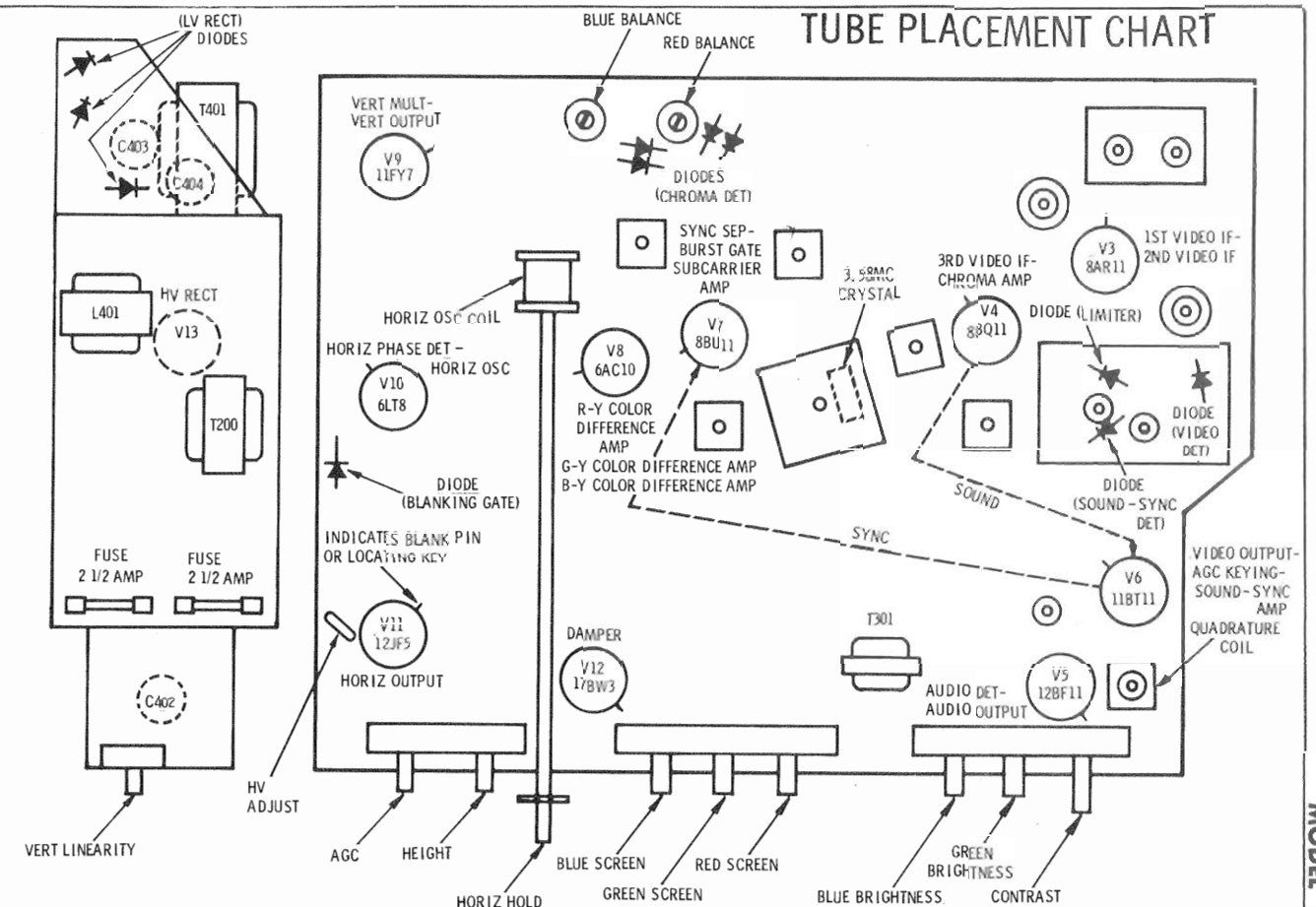
The focus may be varied by connecting the lead from R554 to various voltage points. (See Cabinet-Rear View photo.)

AGC

The AGC may be varied by means of an AGC control. (See Cabinet-Rear View.)



BLOCK DIAGRAM



RESISTANCE MEASUREMENTS

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	
V3	4Ω	250Ω †	250Ω †	39Ω ▲	60K	1M	0Ω	259Ω ▲	259Ω ▲	235K	56Ω	2.5Ω		
V4	5.5Ω	6800Ω †	6800Ω †	0Ω	3Ω	150Ω	0Ω	1800Ω ■	1800Ω ■	0Ω	68Ω	4Ω		
V5	17Ω	680Ω	2.7Ω	0Ω	470K	20K ■	331K †	300K	180Ω	5000Ω ■	235Ω ■	15Ω		
V6	7Ω	9000Ω †	80K	38K	2800Ω ●	0Ω	22K †	100Ω	1.1meg	16K †	900Ω ●	5.5Ω		
V7	7Ω	1Ω	10K †	680K	0Ω	10meg ■	17K ■	2200Ω	400Ω ■	6200Ω †	100Ω	8Ω		
V8	9Ω	27K †	220Ω	220Ω	27K †	220Ω	35K	0Ω	0Ω	27K †	14K	8Ω		
V9	15Ω	NC	2.8meg	NC	370Ω †	NC	750Ω	NC	0Ω	1meg	3.8meg †	13Ω		
V10	2200Ω	300Ω ■	68K †	2.5Ω	1.5Ω	100K	430K	650K	1.1meg					
V11	13Ω	22K †	900K	0Ω	NC	NC	14.9Ω †	NC	NC	0Ω	900K	11Ω		
V12	9Ω	0Ω	0Ω	28Ω †	0Ω	NC	280K	NC	0Ω	28Ω †	NC	11Ω		
V13	PINS 1 THRU 8 HAVE INFINITE RESISTANCE													TOP CAP 343Ω †
V14	1.2meg †	320K †	1.3meg †	FIL	NC	280K †	300K †	NC	1meg †	NC	FIL	NC	1.2meg †	PIN 14 250K †
V201 VHF	0Ω	1.4meg	0Ω	1Ω	1600Ω	0Ω	0Ω							
V202 VHF	15K	5000Ω	0Ω	1Ω	1.5Ω	1300Ω	16.1K	0Ω	220K					

● READING DEPENDS ON POLARITY OF METER CONNECTIONS.

† MEASURED FROM OUTPUT OF Y401.

■ MEASURED FROM OUTPUT OF Y403.

▲ MEASURED FROM PIN 6 OF V3.

† MEASURED FROM PIN 7 OF V12.

NC NO CONNECTION

TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain line voltage at 117VAC. Allow a 20-minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools:
A1 thru A8 GC ELECTRONICS #8606, 8869, 9302
Mixer Plate Coil GC ELECTRONICS #9296, 9300, 9302

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 that shown. Connect a variable bias supply to the IF-AGC line (Point \diamond) 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 noninterfering channel.

INDICATOR	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
Vertical input of scope to Point \diamond , low side to ground.	High side to ungrounded tube shield over Mixer-Osc., low side to ground.	44MC (10MC Sweep)	41.25MC 47.25MC	A1 A2	Adjust for proper marker placement (See Fig. 1.)
Vertical input of scope to Point \diamond , low side to ground.	High side to ungrounded tube shield over Mixer-Osc., low side to ground.	44MC (10MC Sweep)	41.25MC 41.65MC 42.17MC 42.75MC 45.0MC 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.

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 the signal while aligning for undistorted output by adjusting A8.

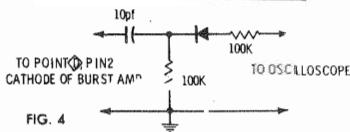
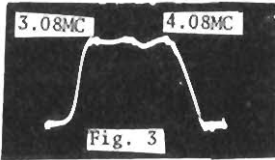
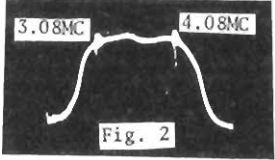
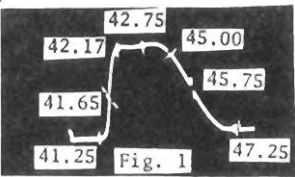
4.5MC TRAP ALIGNMENT

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 A9 for MINIMUM beat interference.

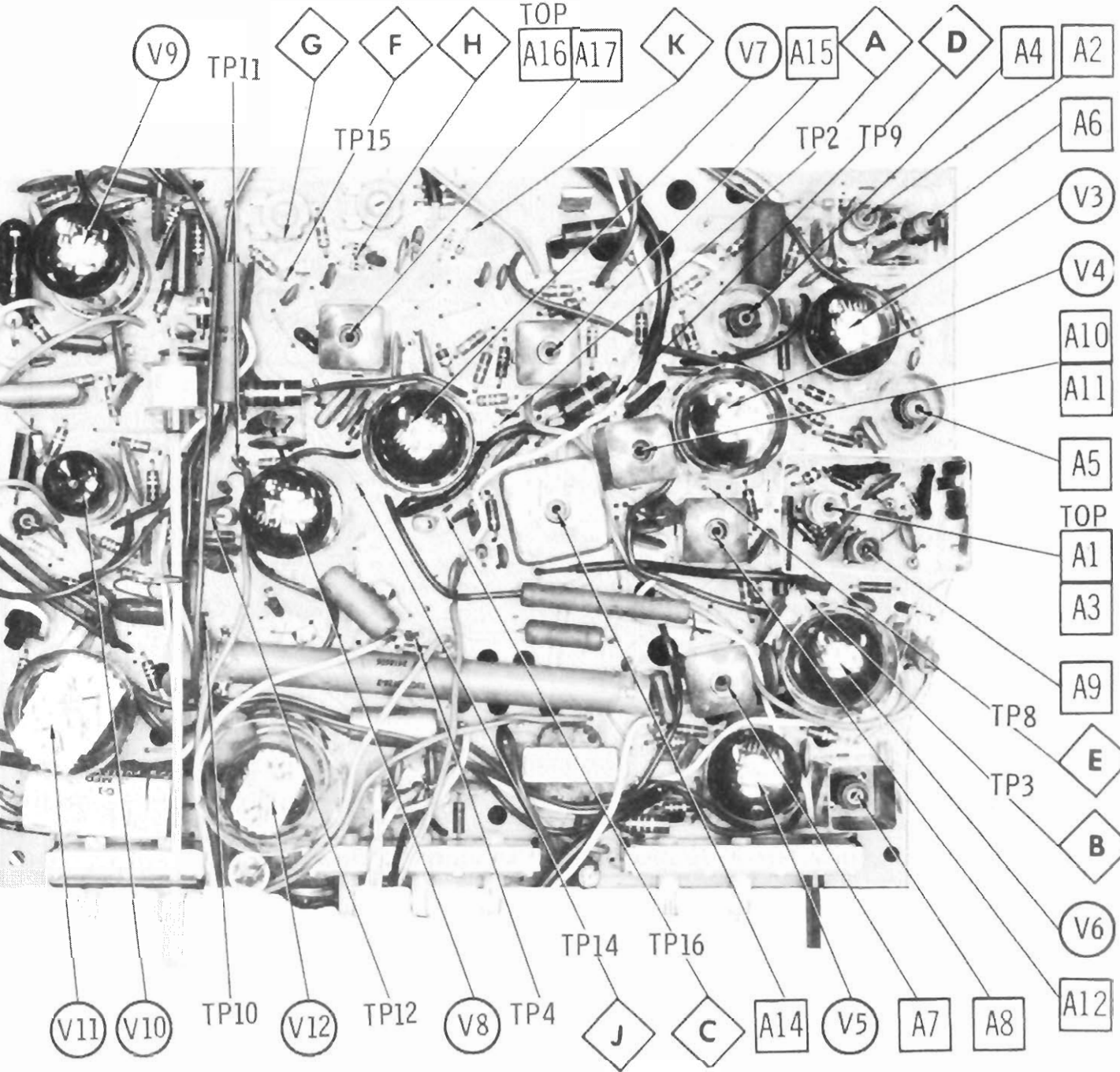
CHROMA BANDPASS ALIGNMENT

The following alignment will require the use of an RF Modulator (RCA WG304B or equivalent). Connect -4 volts bias to Point \diamond . Connect -20 volts bias to Point \diamond , off Pin 4 of Burst Gate, V7, positive lead of bias supplies to ground. Turn Contrast Control to maximum clockwise position and Color Control to center of its range.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CONNECT SCOPE	REMARKS
High side thru .1mfd to point \diamond , pin 5, grid of Chroma Amp., V4. Low side to ground.	3.58MC (3-5MC Sweep)	3.08MC 4.08MC	Vert. Amp. thru detector probe(see Fig.4) to point \diamond , Pin 2, cathode of Burst V7. Low side to ground.	Adjust A10,A11 for response curve similar to Fig. 2.
High side of sweep generator to Video Sweep Input of RF modulator. High side of signal generator to picture carrier input. Output of RF modulator across VHF Antenna terminals.	3.0MC	3.08MC 3.58MC 4.08MC	"	Adjust A12 for response curve similar to Fig.3. Make compromise adjustment of A10 and A11 if necessary.



- TP2 .04V
TP3 -0.2V
TP4 220V
TP6 -.5V
TP8 .0V
- IF AGC
VIDEO DET OUTPUT
VIDEO OUTPUT
SYNC SEP GRID
CHROMA AMP INPUT
- TP9 .0V
TP10 175V
TP11 175V
TP12 175V
TP13 1V
- CHROMA AMP OUTPUT
CRT GREEN GRID
CRT BLUE GRID
CRT RED GRID
B-Y AMP GRID



- TP14 6.2V R-Y AMP GRID
TP16 -85V BURST GATE GRID

PRINTED BOARD

MISCELLANEOUS ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Tune in a TV station and set all controls for normal operation. Adjust Horizontal Hold (Horizontal Stabilizer Coil, L251) until it is virtually impossible to lose the horizontal sync when switching from channel to channel.

AGC ADJUSTMENT

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

COLOR AFC ALIGNMENT

Connect a color-bar generator to the VHF Antenna terminals or tune in a color program and adjust receiver for normal color reception. Set Tint control fully clockwise and clip an 18pf capacitor across it. Be certain horizontal deflection circuits are operating and the AGC control is properly set.

Set Blue Balance control, R517, and Red Balance control, R524, to the center of their range, and adjust Color control fully counterclockwise. Connect a VTVM to Point ④. While making the following adjustments, maintain the Burst Amplitude at a low input level by turning the receiver fine tuning control slightly toward smear after each adjustment.

Adjust A14 and A15 for maximum deflection. Detune A17 by moving core away from printed circuit board. Adjust A16 and A17 for maximum deflection.

Connect VTVM DC probe to Point ④, common to Point ④ and adjust Blue Balance control, R517 for zero. Meter should show no deflection while turning fine tuning control from smear to crystallization.

Connect VTVM DC probe to Point ④, common to point ④, and adjust Red Balance control, R524, for zero. Meter should show no deflection while turning fine tuning control from smear to crystallization.

PURITY ADJUSTMENT

Check for correct positioning of Convergence Assembly and Purity Ring on the picture-tube neck. (The Convergence Assembly should be positioned 1-1/2 inch from the picture-tube base and the purity ring just in front of the convergence assembly.) Loosen screws on horizontal convergence sliders and move each slider to place core end 1/8 inch from neck of picture tube. Using a dot pattern, adjust static convergence magnets to produce center convergence. Set Blue Brightness control, R545, and Green Brightness control, R539, to MINIMUM. Set the Brightness control (Customer control) approximately 1/4 turn clockwise.

Loosen yoke clamp screw and slide yoke back as far as possible. Rotate Purity Ring Assembly and/or spread tabs for uniform red field in center of raster. Turn Blue and Green Brightness controls clockwise to produce three (3) color areas in the center of the raster. Reconverge at center of raster using static convergence magnets.

Repeat above procedure if necessary, to obtain best results. Move yoke forward until best overall pure red screen and proper leveling of picture is obtained. Check each color field for purity by rotating Blue and Green Brightness controls individually to maximum and back to MINIMUM. Tighten yoke clamp screw to hold yoke firmly in position.

GREY SCALE ADJUSTMENT

Tune in a black-and-white or a color picture with the Color control set to MINIMUM. Check for proper adjustment of Height, Vertical Linearity, and Horizontal Hold controls. Remove signal by shorting antenna terminals together and setting tuner on an unused channel. Set Contrast control to MINIMUM and the three (3) picture-tube screen controls to maximum. Adjust Brightness control (Customer control) to a point just short of defocusing raster. Adjust Blue and Green Brightness controls to eliminate color shading of the white raster. Adjust Brightness control (Customer control) to a point where raster is almost extinguished.

Adjust appropriate color screen controls to produce a dark grey raster. Check the raster from low lights to high lights, adjusting controls as necessary to maintain graduations from a grey to white raster throughout usable Brightness range. Repeat above procedure if necessary. Check positioning of the three (3) color screen controls to make certain at least one of the controls is set at maximum.

CONVERGENCE ADJUSTMENTS

Converge center of pattern using static convergence magnets. The Red and blue rasters are moved both horizontally and vertically to coincide with the Green. (See Fig. 5.)

Loosen Red and Blue horizontal slider screws. Switch generator to cross-hatch pattern.

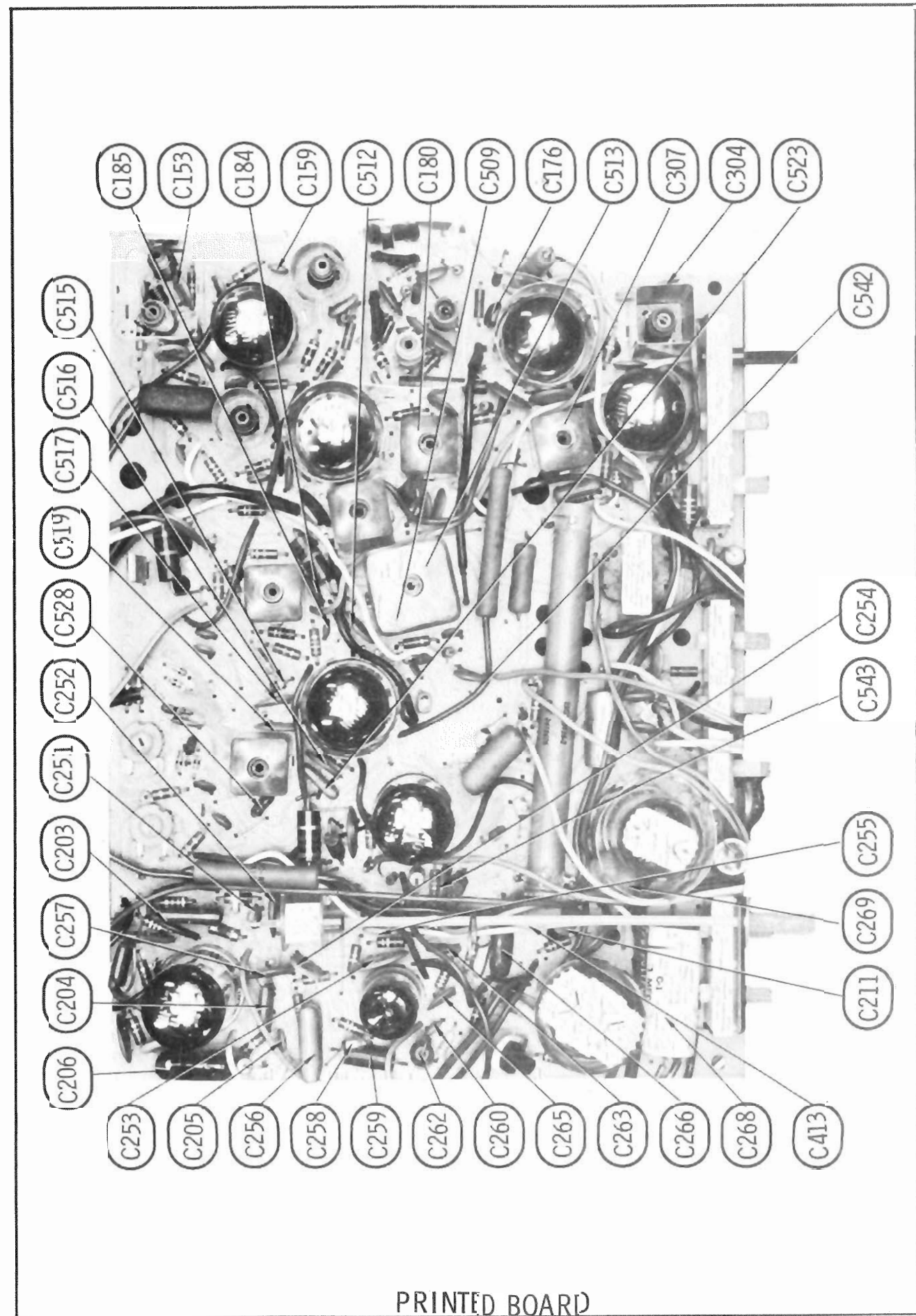
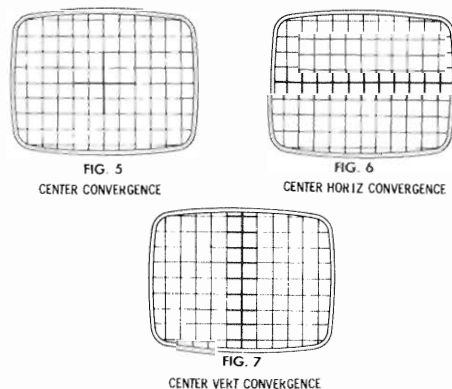
Move Red horizontal slider closer to, or away from, the picture-tube neck and rotate Red horizontal static magnet to converge Red and Green vertical lines at the center horizontal lines (See Fig. 6).

Move Blue horizontal slider closer to, or away from, the picture-tube neck and rotate Blue horizontal static magnet to converge the Blue lines with the previously converged Red and Green vertical lines at the center horizontal line. (See Fig. 6.)

Repeat Steps 3 and 4, if necessary, to obtain best center and edge convergence at center horizontal line. Lock horizontal slider in position.

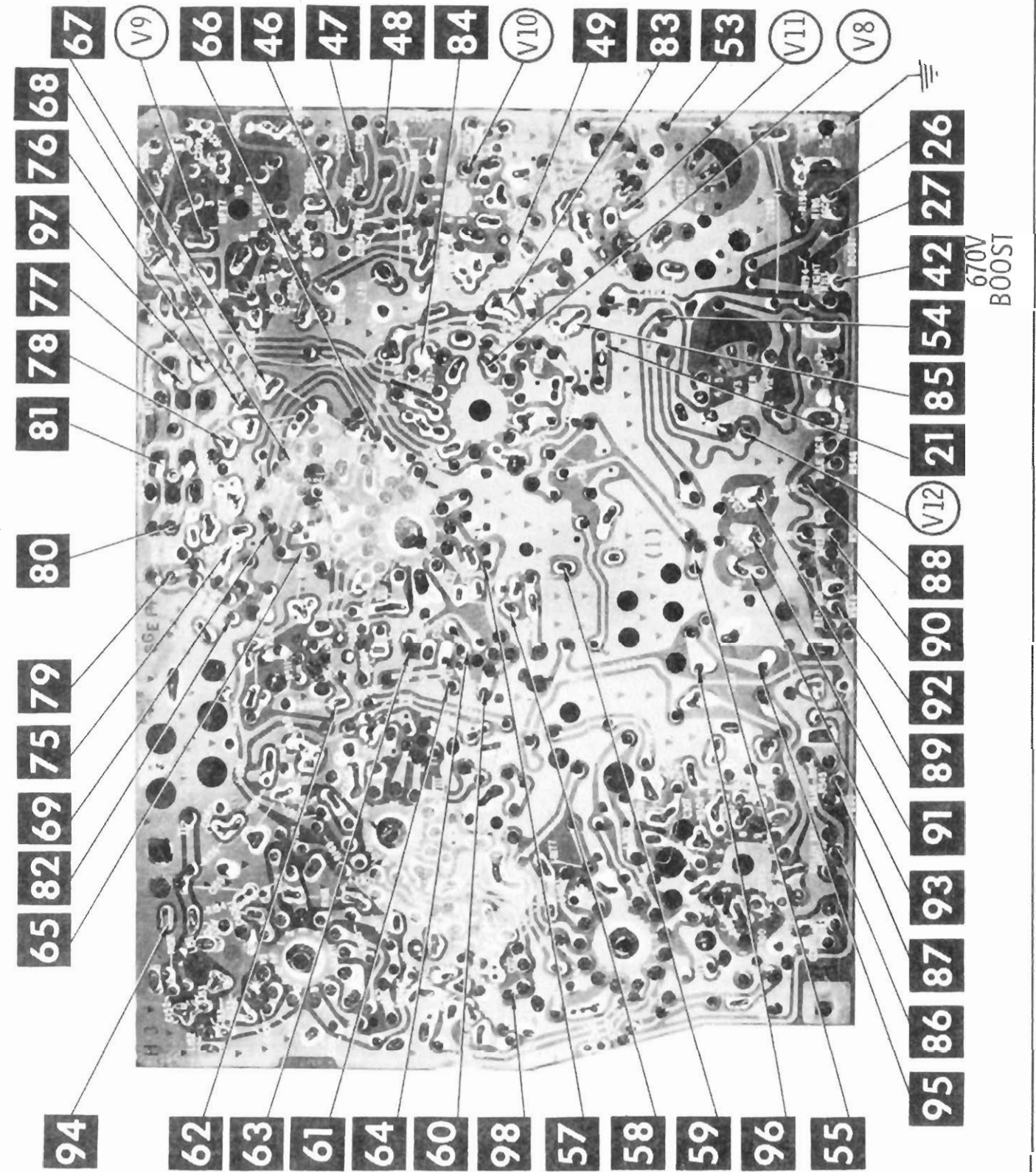
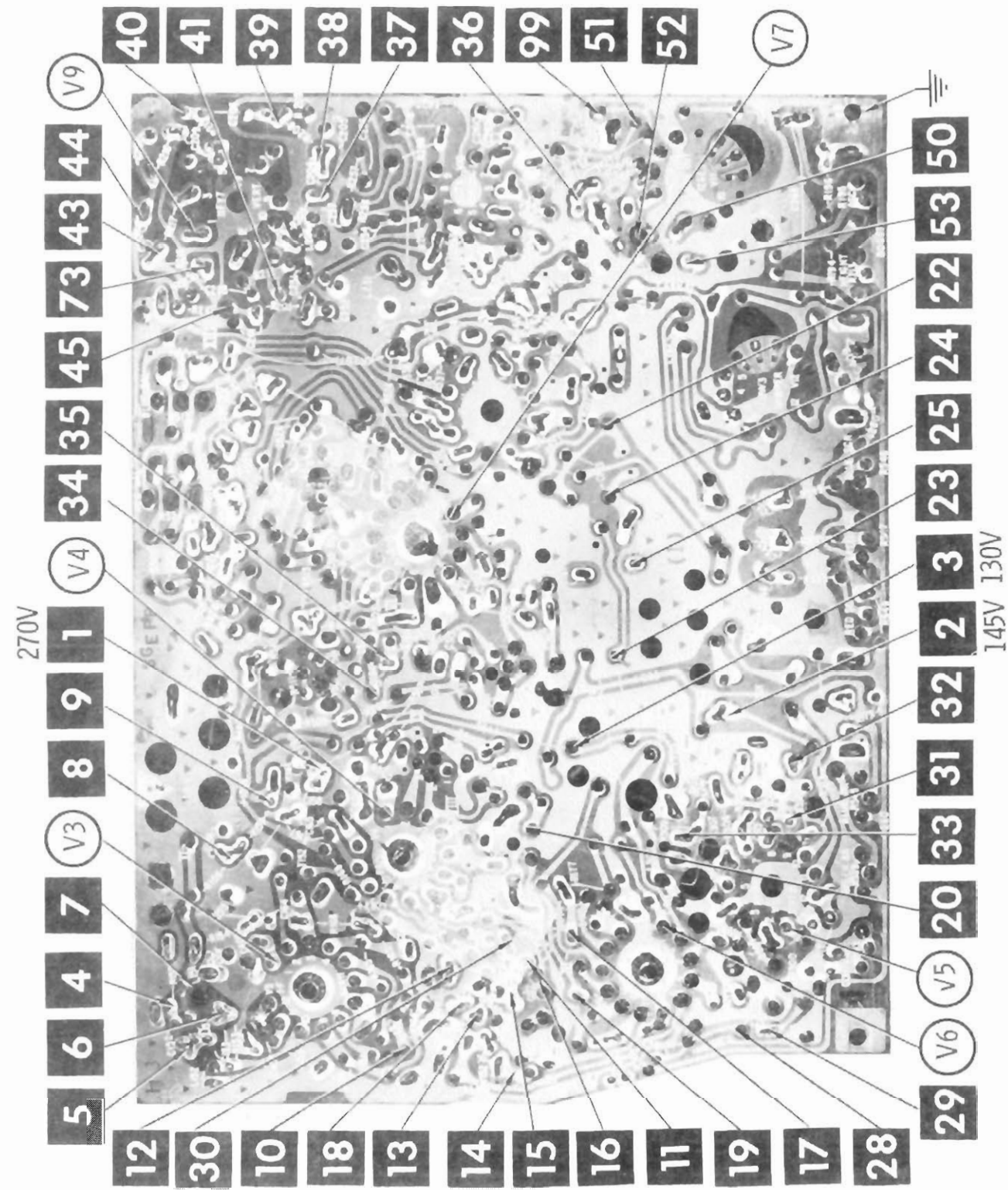
Check convergence of horizontal lines at center vertical line. (See Fig. 7.) If additional adjustment is necessary, the connections to each vertical dynamic convergence coil may be changed to either reverse its polarity or remove it from the circuit completely. Plugs and jacks are provided on the convergence assembly for this purpose.

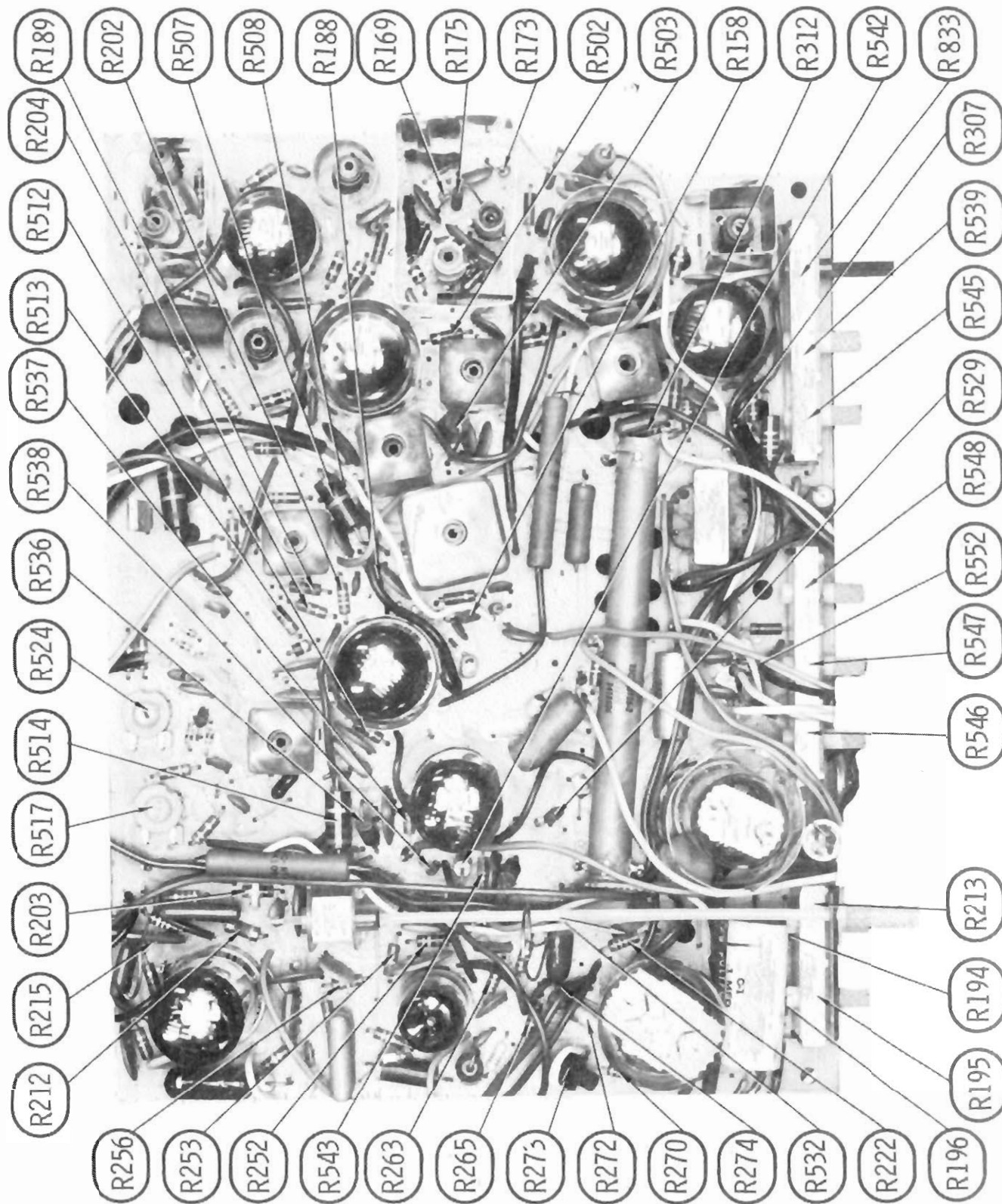
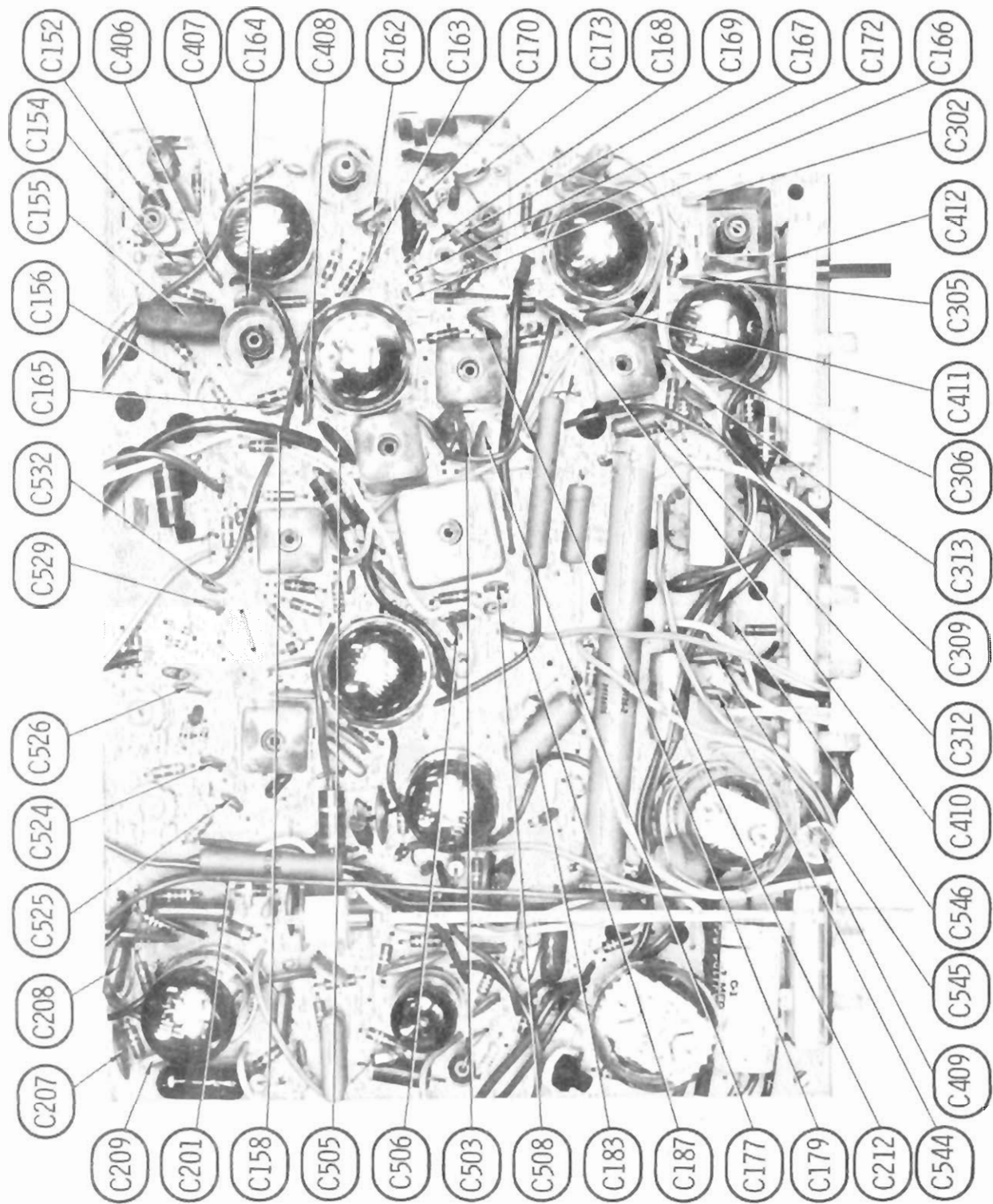
Lock static convergence magnets and purity rings in position with appropriate cement.



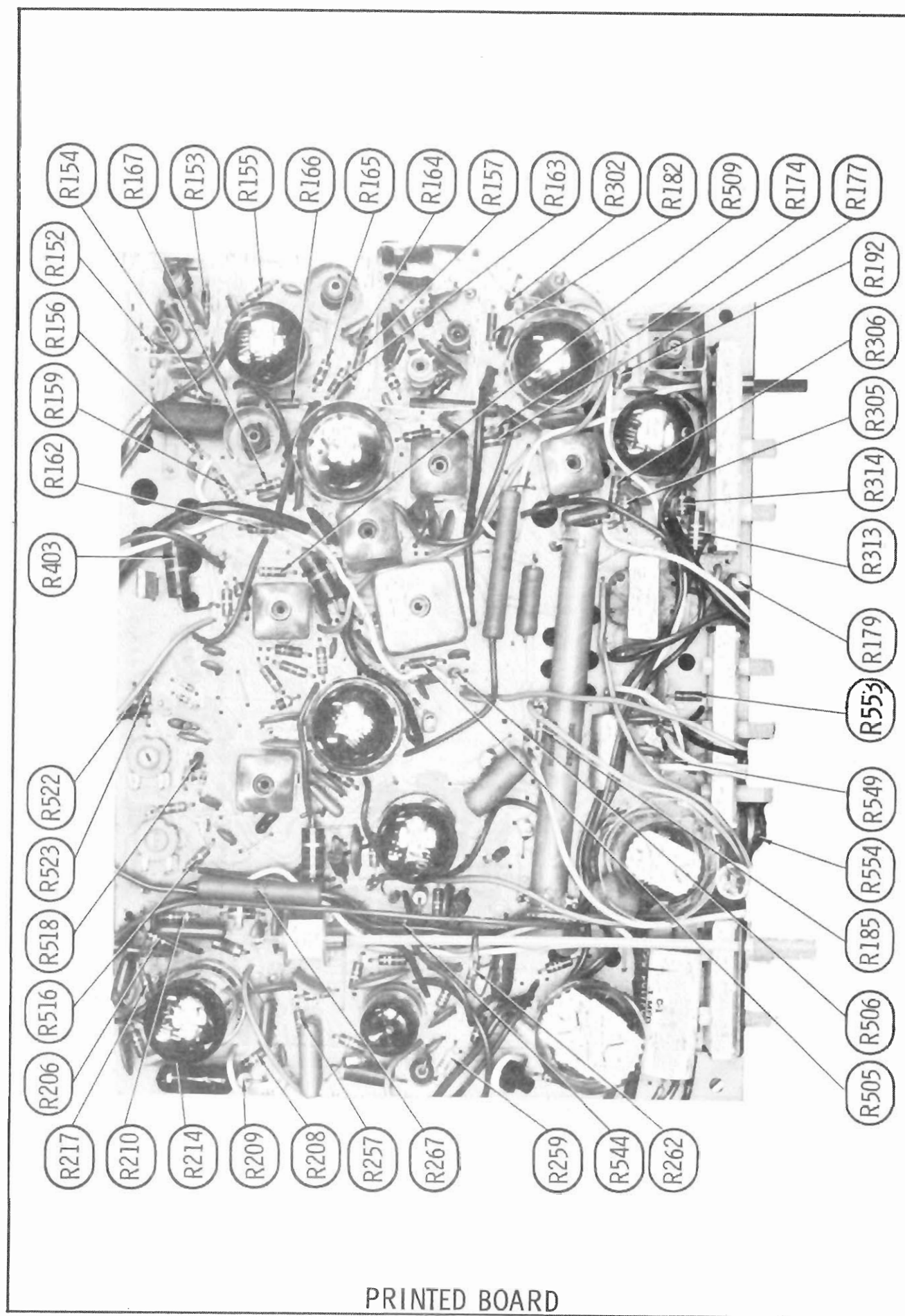
PRINTED BOARD

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





PRINTED BOARD



PRINTED BOARD

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.

WIRING DATA

High Voltage Lead	Use BELDEN No. 8868 (25KV)
Shielded Hook-up Wire	Use BELDEN No. 8885 (Single Conductor) 8738 (Two Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
300-Ohm Tuner Input Lead	Use BELDEN No. 3225
300-Ohm Antenna Lead-in	Use BELDEN No. 3275 (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

TUBES

AMPEREX			GENERAL ELECTRIC			RCA			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V3	1st Video IF - 2nd Video IF	8AR11	V9	Vert. Mult. - Vert. Output	11FY7						
V4	3rd Video IF - Chroma Amp.	8BQ11	V10	Horiz. Phase Detector -							
V5	Audio Det. - Audio Output	12BF11		Horiz. Oscillator	6LT8						
V6	Video Output - AGC Keying	11BT11	V11	Horiz. Output	12JF5						
V7	Sync Sep. - Burst Gate -		V12	Damper	17BW3						
	Sub-Carrier Amp.	8BU11	V13	HV Rectifier	1DG3A						
V8	G-Y Difference Amp. -										
	B-Y Difference Amp. -	6AC10									
	R-Y Difference Amp.										

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MFGR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V14	11WP22	11WP22	C11WP22 (1)	11WP22 (2)	(1) Colorama (2) Color Screen 85

SEMICONDUCTORS

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.
Y150	EU16X1	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
Y151	EU16X1	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
Y152	EP16X20	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
Y401	EP57X1	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO053	SK3016 or SK3031	RT214 or RT215	ECG 116 or ECG 117
Y402	EP57X1	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO053	SK3016 or SK3031	RT214 or RT215	ECG 116 or ECG 117
Y403	EP57X1	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO053	SK3016 or SK3031	RT214 or RT215	ECG 116 or ECG 117
Y502	EP16X21	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
Y503	EP16X21	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
Y504	EP15X21	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)
Y505	EP15X21	1N34AS (7)	1N34A (7)	PTC207 (7)	HEP134 (7)	SK3087 (7)		ECG 110 (6)

(6) Matched Pair.

(7) Two required - select matched pair.

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.
C402	220 200V	EP31X264	CTM1746		WBR225-250	XC1-21.5	TVL-1476 & HKT-4
C403a	120 350V	EP31X265	CTM4417		DD0970A		TVL-4604.15
C403b	100 300V						
C403c	100 150V						
C403d	100 75V						
C404a	80 175V	EP31X266	AFH3-165-50(1)				TVL-3560.21
C404b	10 150V						
C404c	4 300V						

(1) Indicates AEROVOX Part Supplied by ARCO.

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	ARCO/ELMENDO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C152	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C153	27 NPO	5%			TCZ-27	CND427		10TCC-Q27
C154	.0022		GPD X5F222K	CCD-222	DD-222	GP2200	GP222	10TS-D22
C155	.22	200V	DBE6P22	4DP-5-224		DPMS4P22	PVC4022	4PS-P22
C156	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C157	.22	400V	DBE6P22	4DP-5-224		DPMS4P22	PVC4022	4PS-P22
C158	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C159	470	10%	GPD X5F471K	CCD-471	DD-471	GP470	GP347	10TS-T47
C162	.0022		GPD X5F222K	CCD-222	DD-222	GP2200	GP222	10TS-D22
C163	.0022		GPD X5F222K	CCD-222	DD-222	GP2200	GP222	10TS-D22
C164	820	10%	GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C165	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C166	510	10%	GPD X5F501K	CCD-501	DD-501	GP500	GP350	10TS-T50
C167	3		NPO-DI 3.0					10TCC-V30
C168	10 NPO	5%			DTZ-10	CZ601CG100J	CND410	10TCC-Q10
C169	130 NPO	5%						
C170	100 N750		N750-DI 100	CCTN-101	DTN-100	CX601UJ101K	CN7310	10TCU-T10
C172	100 NPO	5%			DTZ-100		CND310	10TCC-T10
C173	33 NPO				DTZ-33	NPO33	CND433	10TCC-Q33
C176	.015	200V 10%	DBE6S15	CCT0-330		DPMS6S15	PVC6115	4PS-S15
C177	.0015		GPD X5F152K	CCD-152	DD-152		GP215	10TS-D15
C179	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C180	22 NPO	10%	NPO-DI 20	CCT0-200	DTZ-20	NPO20	CND420	10TCC-Q20
C183	.47	200V	DBE2P47	2DP-5-474		DMF2P47	PVC2047	2PS-P47
C184	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C185	470	10%	GPD X5F471K	CCD-471	DD-471	GP470	GP347	10TS-T47
C187	470	1.4KV			DD-471		UAC347	
C201	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C203	.056	600V 10%	DBE6S56	6DP-3-563		DPMS6S56	PVC6156	6PS-S56
C204	.0068	10%	GPD X5R682K	CCD-682	DD-682	GP820	JF268	10TS-D68
C205	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C206	.033	1KV 10%	BE10S33	16DP-5-333		DPMS16S33	PVC16133	
C207	.0068		GPD X5R682K	CCD-682	DD-682		JF268	10TS-D68
C208	.039	600V 10%	DBE6S39	6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C209	.001	2KV	HVD-30100	3CCD-102	DD30-102	HVX302ZU102P	3HV210	30GA-D10
C211	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C212	.1	400V	DBE4P1	4DP-3-104		DPMS4P1	PVC401	4PS-P10
C220	120 N750	10%		CCTN-121	TCN-120		CN7312	10TCU-T12
C251	56 N750	10%		CCTN-560	TCN-56		CN7456	10TCU-Q56
C252	270 N750	10%		CCTN-271	TCN-270		CN7327	10TCU-T27
C253	430 N750		N750-DI 430		TCN-430			
C254	.0011 NPO	#EP22X1						
C255	.0011 NPO	#EP22X1						
C256	.22	200V	DBE6P22	4DP-5-224		DPMS4P22	PVC4022	4PS-P22
C257	.005	10%	GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C258	510	5%		DM-16-511J	CPR-510J	CD15F511J500	SX351	MS-351
C259	.0033	100V 10%	V1614D33	5DP-1-332	CPR-3300J	WMF1D33	PVC6233	22SP33291
C260	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C261	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C262	.0068	100V 10%	V1612D68	1DP-1-682	CPR-6800J	WMF1D68	PVC6268	22SP68291
C263	.0011	500V 10%						
C264	.1	400V	DBE4P1	4DP-3-104		DPMS4P1	PVC401	4PS-P10
C265	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C266	.033	400V	DBE6S33	4DP-2-333		DPMS6S33	PVC6133	4PS-S33
C268	.1	1KV	BE10P1					
C269	130 N1500 4KV	#ET18X498						
C270	.01	1.4KV						
C302	22 NPO	10%	NPO-DI 20	CCT0-200	CI-103	ACT142ZU103P	JAC110	12SL-S10
C304	150 N750	10%	N750-DI 150	CCTN-151	DTN-150		CND420	10TCC-Q20
C305	.005		GPD X5R502K	CCD-502	DD-502	GP5000	CN7315	10TCU-T15
C306	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C307	18 N470						JF250	10TS-D50
C309	.001	10%	GPD X5F102K	CCD-102	DD-102	GP1000	SP210	10TCT-Q18
C312	.047	50V	TTP-05	CCD-503	CK-503	MSP05	TA150	10TS-D10
C313	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	TGL-S50
C400	.001	2KV	HVD-30-1000	3CCD-102	DD30-102	HVX302ZU102P	3HV210	10TS-D50
C401	.039	600V	DBE6S39	6DP-3-393		DPMS6S39	PVC6139	30GA-D10
C405	.001	2KV	GPD X5F102K	CCD-102	DD-102	GP1000	SP210	6PS-S39
C406	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-D10
C407	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C408	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-T82
C409	.047	400V	DBE6S47	4DP-3-473		DPMS6S47	PVC4147	10TS-D50
C410	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	4PS-S47
C411	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C412	.005	1KV	GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C413	.005	1KV	GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C503	.005		GPD X5R502K	CCD-502	DD-502	GP5000	JF250	10TS-D50
C505	330 N750	10%	GPD X5F331K	CCD-331	DD-331	GP330	GP333	10TCU-T33
C506	36 N750	10%	N750-DI 33	CCTN-390	TCN-39	CZ601UJ330K	CN7439	10TCU-Q39
C508	800		GPD X5F821K	CCD-821	DD-821	GP820	GP382	10TS-T82
C509	39 N750	10%		CCTN-390	TCN-39		CN7439	10TCU-Q39
C512	.01		GPD X5S103K	CCD-103	DD-103	GP10000	JF110	10TS-S10
C513	2.4		NPO-DI 2.2		DTZ-2R2	NPO2P2	CND522	10TCC-V22
C515	.1		NPO-DI 1.0		TCZ-1		CND510	10TCC-V10
C516	.01		GPD X5S103K	CCD-103	DD-103	GP10000	JF110	10TS-S10
C517	.01		GPD X5S103K	CCD-103	DD-103	GP10000	JF110	10TS-S10
C519	68 NPO	10%			DTZ-68		CND468	10TCC-Q68
C523	.015	400V	DBE6S15	4DP-1-153		DPMS6S15	PVC6115	4PS-S15

VHF TUNER PARTS LIST AND DESCRIPTION

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

TUBES

AMPEREX		GENERAL ELECTRIC		RCA		SYLVANIA	
ITEM No.	USE	TYPE		ITEM No.	USE	TYPE	
V201	RF Amp	2GK5		V202	Mixer - Oscillator	4LJ8	

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C201a	27pf	#EU33X63						
b	27pf							
c	27pf							
d	27pf							
C202	6.8pf N330	5% #EP18X604						
C203	47pf	#EU23X28						
C204	3.3pf	5% #EP18X605	NPO-DI 3.0	DTZ-3R3		CCT0-3R3	CND533	10TCS-V68
C205	.001	#ET18X414						10TCC-V30
C206	.001	#ET23X7						
C207	8.2pf N080	#EU22X76						
C208	2.2pf N330	#EU23X4						
C209	15pf N330	#EU23X51						
C210	.001		GPD X5F102K	DD-102	GP1000	CCD-102	GP210	10TCU-V82
C211	.001							10TCR-Q15
C212	.001							10TS-D10
C213	1.5pf N750/P100							
C214	.001							
C215	.001							
C216	.001							
C217	.001							

TELEDYNE PACKARD BELL PART NUMBER

COILS (RF-IF)

ITEM No.	USE	MFGR. PART No.	NOTES	ITEM No.	USE	MFGR. PART No.	NOTES
	Transformer Ass'y	EP62X288	Includes Filter		Ant,RF,Mixer,Osc.	EP62X295	Channel 6
	IF Output Ass'y	EU36X832			Ant,RF,Mixer,Osc.	EP62X296	Channel 7
	Ant,RF,Mixer,Osc.	EP62X289	Channel 1		Ant,RF,Mixer,Osc.	EP62X297	Channel 8
	Ant,RF,Mixer,Osc.	EP62X291	Channel 2		Ant,RF,Mixer,Osc.	EP62X298	Channel 9
	Ant,RF,Mixer,Osc.	EP62X292	Channel 3		Ant,RF,Mixer,Osc.	EP62X299	Channel 10
	Ant,RF,Mixer,Osc.	EP62X293	Channel 4		Ant,RF,Mixer,Osc.	EP62X300	Channel 11
	Ant,RF,Mixer,Osc.	EP62X294	Channel 5		Ant,RF,Mixer,Osc.	EP62X301	Channel 12
					Ant,RF,Mixer,Osc.	EP62X302	Channel 13

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
PC201	Antenna Isolation	(1)	2-4meg, 130pf (includes Spark Gap) AEROVOX Replacement PA-821.
PC202	Antenna Isolation	(1)	2-4meg, 130pf (includes Spark Gap) CENTRALAB " RC-428.

(1) Alternate 600K-2meg, 130pf, Part #ET33X64.

UHF TUNER PARTS LIST AND DESCRIPTION

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

SEMICONDUCTORS

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.
Q301	/EU15X2	GE-11	1RTR-83	PTC133	HEP720	SK3019	RT108
X301	1N82A/ET16X14	1N82A	1N82AG	PTC217	HEP700	SK3089	ECG 108

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C301	33pf NPO	5%						
C302	10pf N220	5%	#EU18X11					
C304	100pf		#EU2313					
C305	470pf		#EU2315					

TELEDYNE PACKARD BELL PART NUMBER

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.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
LS1	3" PM, 3.2 ohms	EP95X52	30A05	

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	
F400	510-B10 2-1/2 Amp Pigtail	(1)							
F401	Quick-Acting, 2-1/2 Amp Pigtail	EP10X47				31802.5			

(1) A 4 Amp., #ES10X52, may be used in some versions.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
X501 L162 L555	VHF Antenna	EP83X6	JFD Replacement TA493 (2 used)
	UHF Antenna	EP83X1	JFD Replacement TA433
	VHF Tuner	EP86X8	
	UHF Tuner	EP85X2	
	Crystal	EU41X47	3.58MC
	Delay Line	EP36X809	
	Degaussing Coil	EP36X75	
	Magnet	EP42X52	Convergence
	Clock Assembly	EP81X1	Used in some versions.
	Socket	ET34X167	HV Rectifier

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

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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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.	ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C524	36 N750 5%	#EU18X588	ADM-15-271	DM-15-271J	CPR-270J	CD15F271J500	SX327	MS-327
C525	36 N750 5%	#EU18X588						
C528	270 5%	#EU18X588						
C529	36 N750 5%	#EU18X588						
C532	36 N750 5%	#EU18X588						
C542	.0068		GPD X5R682K	CCD-682	DD-682	DMF4P22	JF268 JF268 UAC347 UAC347 PVC4022	IOTS-D68 IOTS-D68
C543	.0068		GPD X5R682K	CCD-682	DD-682			
C544	470 1.4KV				CI-471			
C545	470 1.4KV				CI-471			
C546	470 1.4KV				CI-471			
C555	.22 400V		DBE6P22	4DP-5-224				4PS-P22

#TELEDYNE PACKARD BELL PART NUMBER

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R183	Contrast	250 "c"	EP49X592(3)	F1-100K, SNK010	B47-100K-S or [NP-100K-S, NML-A-300, TT-2]	H4(1) [A-E17, A1] [B-E17, A1] [C-E2, A1]	PTA15L or [RU15L, SL37, SN1000] or [UA15L, SN1000]
R539	Green Brightness	500K "b"	(73C180085-2)				
R545	Blue Brightness	500K "a"	EP49X20				
R186	Brightness	100K	(73B140362-30)				
R195	AGC	40K "a"	EP49X593(4)	F1-1.5meg SNK010	B47-1.5meg-S or [NP-1.5meg-S, NML-A-300, TT-2]	H3(1), [A-E10, A1] [B-E22, A1] [B11-138, TM or [BU11, CF18, SS6A]*	PTA1254L or [FU1155L, SL37, SN1000] or [UA155L, SN1000] MR2000F, MRS1250
R213	Height	3.4meg "b"	(73C180085-4)				
R207	Vertical Hold	1.2meg	EP49X23				
			(73B140362-31)				
R218	Vertical Linearity	2000, 2W	EP49X590	WF-2K, WSK104, or V-2000	U39-2000	117R252A, P115-117-1 or 112-2000 X201R5048	MTCS55L1
R273	High Voltage Adjust	500K	EP49X42	TSV-500K or T-500K	C-504		
R308	Volume, Switch	1meg	(73B140411-3)	F2-1meg, SNK200, KR-1	A47-1meg-Z, RN-3, SWE-12, TT-2 or [NP-1meg-Z, NMLA-300, NWE-12, TT-2]	B13-137, TM5, 76-1, C3(6) or [BU11, CF26, SS6A, GC]*	RU16A, SL37, SN2000, US41 or [UA16A, SN2000, US41]
R504	Color	500	EP49X24	F1-500, SNK010	B47-500-S or [NP-500-S, NML-A-300, TT-2]	B11-103, TM or [BU11, CF4, SS6A]*	PTA52L or [RU52L, SL37, SN1000 or [UA52L, SN1000]
R521	Tint	25K	EP49X102	F3-25K, SNK010	A47-25K-V, RN-3, TT-2	B17-120, TM or [BU11, CF91, SS6A]*	RU253R, SL37, SN1000 or [UA253R, SN1000]
R517	Blue Balance	2000	EP49X594	TSV-2.5K(2) or T-2500	C-252(2)	U201R252B	MTC23L4
R524	Red Balance	2000	(73C180110-4)	TSV-2.5K(2) or T-2500	C-252(2)	U201R252B	MTC23L4
R546	Blue Screen	1meg "a"	EP49X594	EP49X591(5) (73C180085-1)		H4(1), [A-E19, A1] [B-E19, A1] [C-E19, A1]	
R547	Green Screen	1meg "b"	(73C180110-4)				
R548	Red Screen	1meg "c"	(73C180085-1)				

* "SNAPTROL"

- 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".
- For horizontal mount, bend the two outside terminals to fit "PC" board. Use jumper wire to connect center terminal to "PC" board.
- Includes R183, R539 and R545.
- Includes R195 and R213.
- Includes R546, R547 and R548.
- Use coupler with part-on of original shaft to obtain desired length.

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.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R162	10meg, 1/2W, 10%	CA-2-10.0meg	
R163	100K 1/2W, 5%		
R166	220 1/2W, 10%	CA-2-220	
R168	1500 1/2W, 10%	CA-2-1500	
R178	10K 10W, 10%	10W-SQ-10K	
R179	16K 3W, 10%	3G-16K	EP14X205
R184	3600 3W, 10%	4G-3.6K	ES14X202
R194	150K 1/2W, 10%	CA-2-150000	
R202 (2)	Thermistor (1meg Cold)		EP14X206
R204	22K 1/2W, 10%	CA-2-22000	
R214	6800 1/2W, 10%	CA-2-6800	
R254	3.9meg 1/2W, 10%	CA-2-3.9meg	
R259	2200 1/2W, 10%		
R262	68K 1/2W, 10%	CA-2-68000	
R267	7500 5W, 10%	5G-7.5K	
R270	4.7meg 1/2W, 10%	CA-2-4.7meg	
R272	VDR * (1ma @ 850V +15%)		EP13X2
R274	10K 1/2W, 10%	CA-2-10000	
R275	1.75 5W, 10%		ET14X211 (1)

* Voltage Dependent Resistor (2) R212 in some versions.

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R301	22K 4W, 10%	4G-22K	EU14X172
R305	330K 1/2W, 10%	CA-2-33000C	
R306	15K 1/2W, 10%	CA-2-15000	
R312	4700 1/2W, 10%	CA-2-4700	
R313	33K 1W, 10%	CB-2-33000	
R401	3.6 7W	10W-SQ-4	
R402	300 3W	5W-SQ-300	
R403	15K 2W, 10%	C2-2-15000	
R404	Thermistor (20 Cold)		
R410	10K 2W, 10%	5W-SQ-10K	
R411	27K 1/2W, 10%	CA-2-27000	(1)
R412	27K 1/2W, 10%	CA-2-27000	(1)
R503	6800 2W, 10%	CC-2-6800	
R507	10K 1/2W, 10%	CA-2-10000	
R513	100 1/2W, 10%	CA-2-100	
R514	1200 2W, 10%	CC-2-1200	
R532	27K 1W, 10%	CB-2-27000	
R536	27K 1/2W, 10%	CA-2-27000	
R542	27K 1W, 10%	CB-2-27000	
R554	1meg 1/2W, 10%	CA-2-1.0meg	

(1) May not be used in some versions.

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.

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.	
L401	.220ADC	35.5	.7 H	EP63X4 (M128J181-9)	C-2343	26C77	C-27X	

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T401	117VAC @ .630AAC Tap @ 105VAC @ .600AAC (1)	12.6VAC @ .600AAC	EP64X12 (2) (73C180652-1) EP64X13 (3)				(1) Stand by Tap. (2) Use in "Insta-View" Model. (3) Use in No "Insta-View" Model.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L151	47.25MC Trap	ET36X742			
L152	1st Video IF	ET36X807		7537 (3)	TA284
L153	RF Choke (7 Turns)	ET36X725			
L155	4.5MC Trap	EU61X121	20-1057	7142	TA261
L156	Peaking (36uh)	EU36X583	19-3036	6176	T301
L157	RF Choke (27uh)	EP36X808		72F275AP	T904
L159	Peaking (120uh)	ET36X410	19-3125	72F124AP	T307
L160	Peaking (330uh)	ES36X5	19-3330	72F334AP	T319
L161	Peaking (330uh)	ES36X5	19-3330	72F334AP	T319
L163	RF Choke (2.5uh)	EP36X1	19-1002	4606	T857
L164	RF Choke (2.5uh)	EP36X1	19-1002	4606	T857
L252	RF Choke (10uh)	EU36X105	19-2016	72F105AP	T823
L300	Quadrature	ET36X814	20-1051	7117-A (3)	TA291
L301	Peaking (56uh)	EP36X812		74F565A1	
L402	Dual Line Choke	EU36X856		5250 (1)	
L500	3.58MC Trap (56uh)	EP36X812		74F685A1	
L501	3.58MC Oscillator Control	EP36X20		CO-1004	
L502	RF Choke (56uh)	EP36X812		74F565A1	
L506	Peaking (1000uh)	ES36X843		73F103AF	
T151	2nd Video IF	EP61X169			TA285
T152	3rd Video IF	EP61X170			
T153	4th Video IF/41.25MC Trap	EP61X171		7513-P	
T154	Chroma Takeoff	EP61X177		CO-1005	
T300	Sound Interstage	EP36X813	17-1051	SI-132 (2)	TB248
T501	Chroma Bandpass	EP61X173	17-6027	CO-1001	TA179
T502	Burst Amp./Osc. Control	EP61X174		CO-1001	
T503	Chroma Demodulator	EP61X175		6092	

(1) 2 required. (2) May require shunt cap change. (3) Clip unused pin.

COILS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA					
		MFGR. PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.	WORKMAN PART No.
L202	Convergence Assembly	EP62X19 (1)					
L203	Vert. Conv. Winding	(1)					
L251	Horiz. Osc. (Hold)	ET35X52					
	Rod (Hold Adjust)	EP69X362					
L254	Horiz. Conv. Winding	(1)					
L255	Horiz. Conv. Winding	(1)					

(1) Part of Convergence Assembly, Part #EP62X19.

TRANSFORMERS (Sweep Circuits)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L201	Yoke (Horiz. - 7mh) 90° (Vert. - 1mh) Clamp (Yoke Mounting)	EP76X4 (3)				(1) Drill new mounting hole(s).
T200	Vert. Output	EP2X349 EP64X14 (23B210061-3)	A-8140 or V0-88 (1)	26S57 (1)		(2) Alternate used in some versions.
T252	Horiz. Output Horiz. Output Core Half	EP77X10 EP77X4 (2) EP12X84 (2)				(3) Part Number is complete Yoke Assembly.

SWEEP COMPONENT CONNECTION DATA

ORIGINAL →	VERTICAL OUTPUT					YOKE					YOKE PLUG				
	Original Connections					Original Connections									
REPLACEMENT ↓	Blue	Red	Yellow	Green											
STANCOR	Blue	Red	Yellow	Green											
THORDARSON	Blue	Red	Yellow	Green											
TRIAD															

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	2500	3.2	ET64X105 (73B140037-1)				