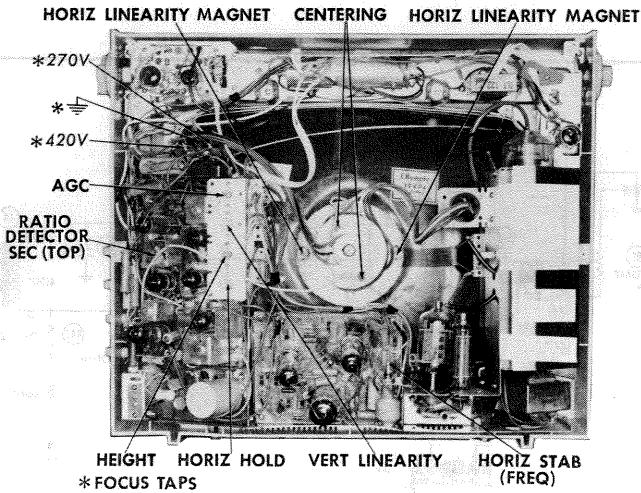


DISASSEMBLY INSTRUCTIONS

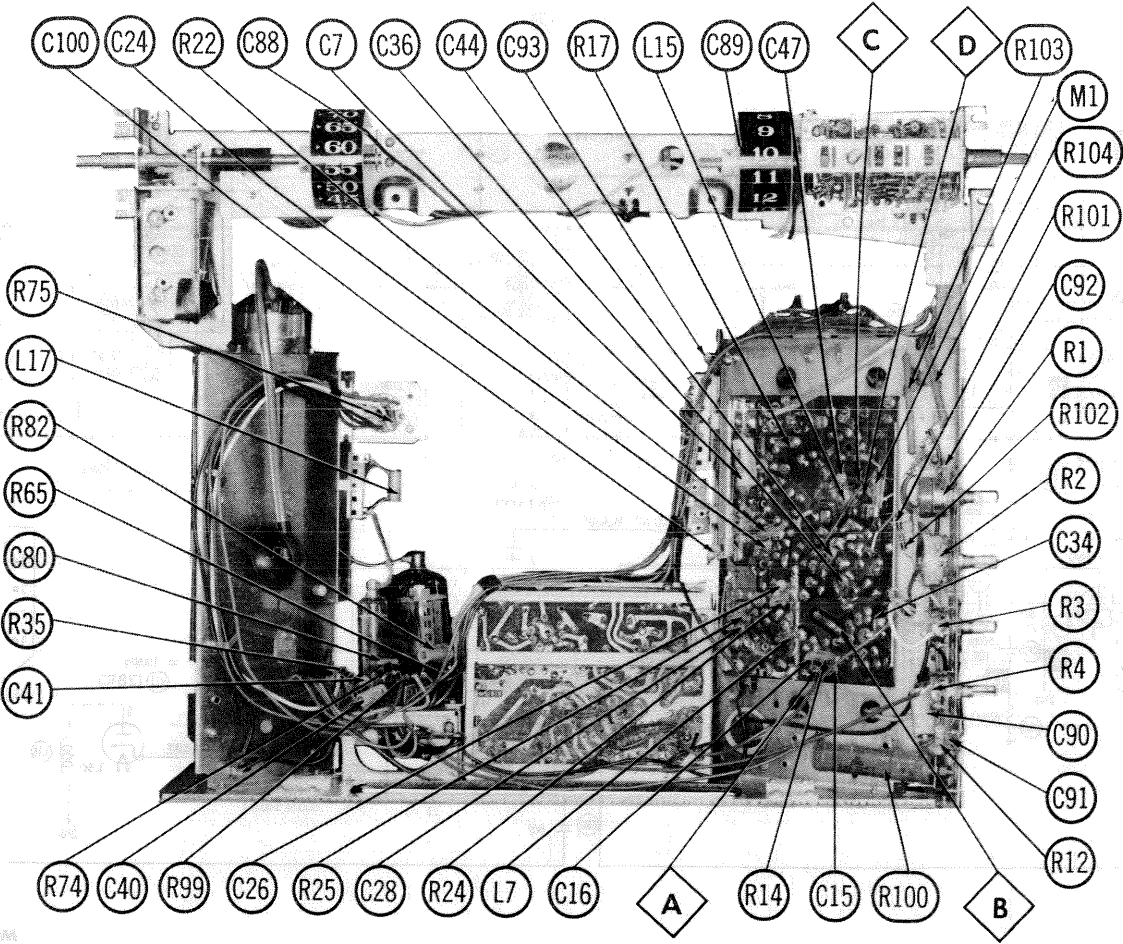
- CHASSIS REMOVAL**
- 1. Remove rear cover held by 4 screws, handle, and 2 bolts in bottom.
  - 2. Remove 6 knobs from left side and 2 from right.
  - 3. Disconnect picture tube socket, yoke, anode lead, and picture tube ground. Remove earphone jack and disconnect speaker.
  - 4. Remove 2 screws from top left of chassis and 2 screws from top right.
  - 5. Remove 2 screws at top of chassis near filter cans and remove 2 screws holding VHF tuner to center section.
  - 6. Remove 2 nuts holding tuners to bottom section and lay cabinet face down on a soft surface
  - 7. Remove 2 bolts from bottom of cabinet and remove chassis.
- PICTURE TUBE REMOVAL**
- 1. Remove chassis and lay cabinet face down on a soft surface. Remove grounding strap.
  - 2. Remove 12 nuts from corner brackets and remove picture tube assembly, placing it on a soft surface.
  - 3. Loosen screw in upper clamp ring and loosen screw in lower clamp ring.
  - 4. Remove mounting assembly.



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Tune to a TV station and set all controls for normal operation. Set the Horizontal Hold Control, R8, to the center of its range. Adjust the Horizontal Stabilizer Coil Slug, B1, until the picture is in proper horizontal sync. Interrupt signal momentarily to see if picture remains in sync.

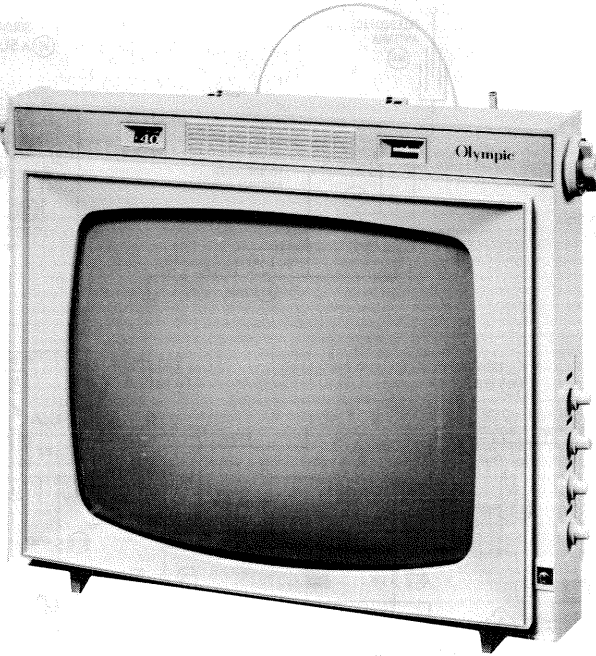


CHASSIS-FRONT VIEW

SET 740 FOLDER 3

PHOTOFACT® Folder with CIRCUITRACE®

OLYMPIC MODEL 9P40C



MODEL 9P40C

CAUTION  
ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	Olympic Model 9P40C
SUPPLIER	For current address, see Master Index
TYPE SET	Television Receiver
TUBES	VHF - Fifteen, UHF - Sixteen
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)
	RATING 160 Watts, 1.65 Amp. @ 117 Volts AC

SERVICING IN THE FIELD

<b>SAFETY GLASS</b> For picture tube and safety glass cleaning, it is necessary to remove the chassis. (See "Disassembly Instructions".)	by the proper setting of the Horizontal Stabilizer Coil, L21. (See "Tube Placement Chart" for location.)
<b>FUSE OR FUSE DEVICE</b> A 2 Amp. fuse is used for low voltage power supply protection.	<b>FOCUS</b> The focus may be varied by connecting the lead from pin 4 of the picture tube to various voltage points. (For location, see "Cabinet - Rear View".)
<b>VHF OSCILLATOR ADJUSTMENT</b> Set fine tuning at the center of its range and adjust osc. slug (one for each channel) for best sound and picture.	<b>BUZZ ADJUSTMENT</b> To eliminate intercarrier buzz, adjust the Ratio Detector secondary (A 9) located on top of chassis.
<b>AGC</b> The AGC may be varied by means of an AGC Control. (See "Tube Placement Chart" for location.)	<b>CENTERING</b> Centering is accomplished by 2 magnetic rings located on yoke rear cover.
<b>HORIZONTAL OSCILLATOR FIELD ADJUSTMENT</b> Coarse adjustment of the horizontal hold is accomplished	

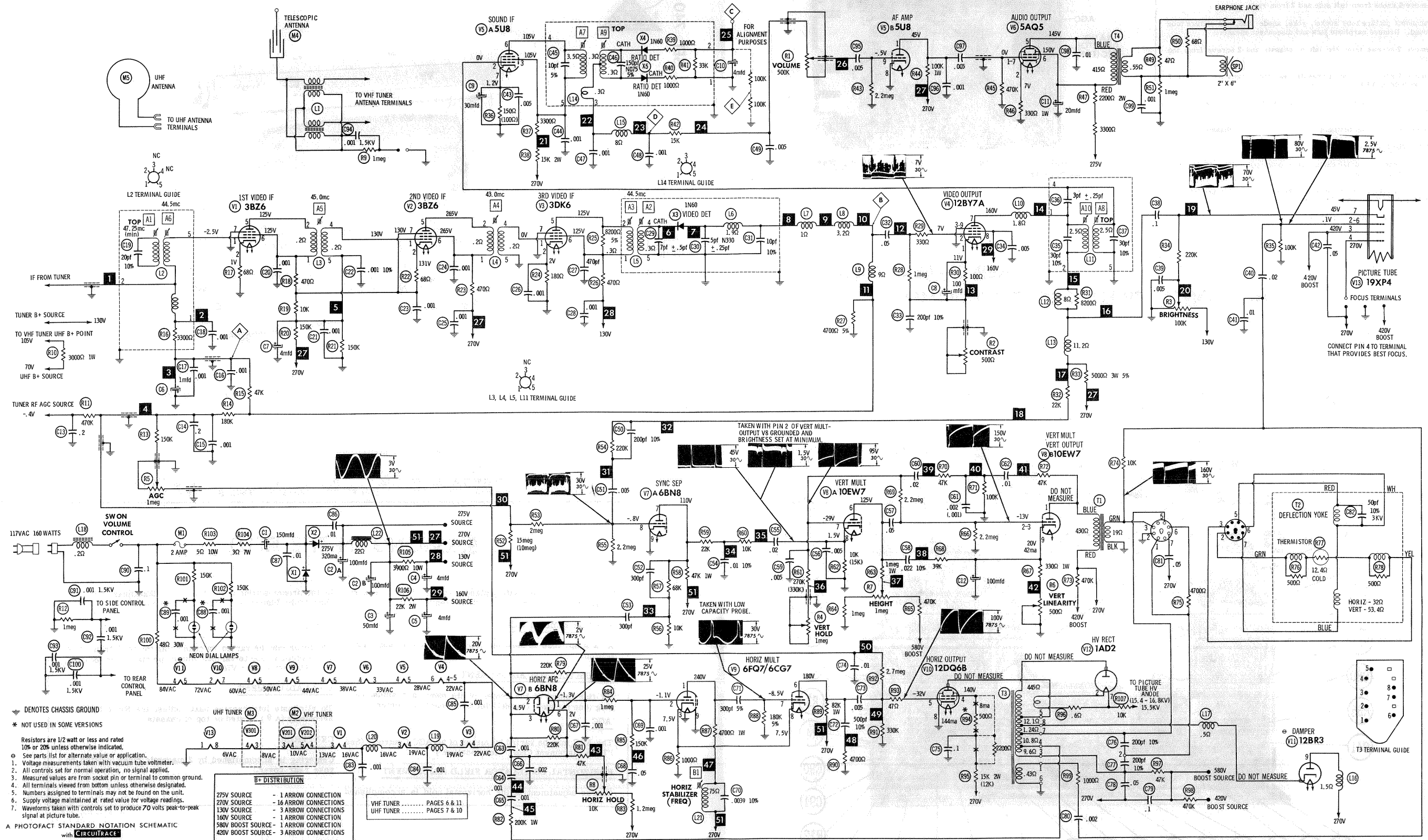
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



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. NA081

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DATE 2-65 SET 740 FOLDER 3



OLYMPIC  
MODEL 9P40C

OLYMPIC  
MODEL 9P40C

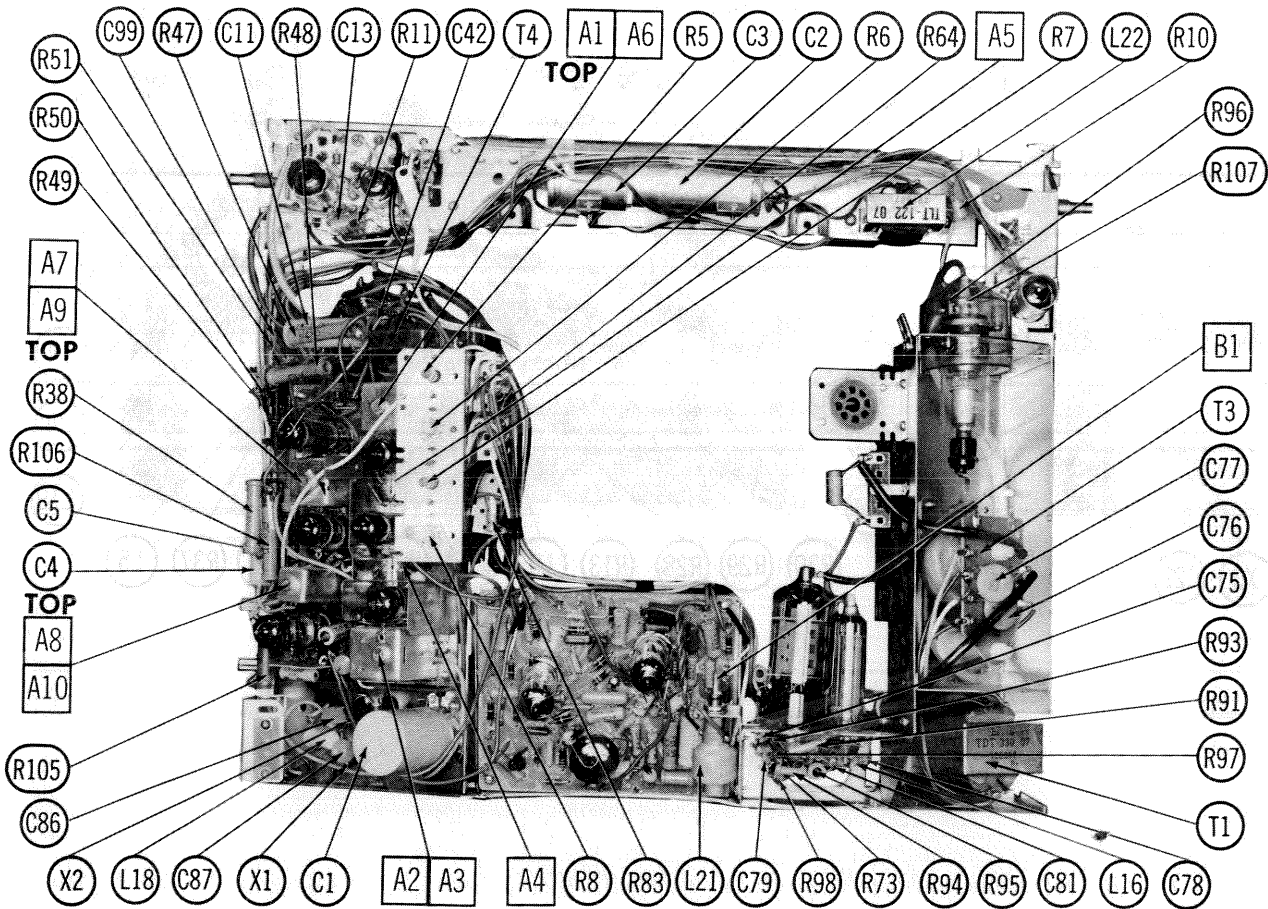
FOLDER 3



RESISTANCE MEASUREMENTS

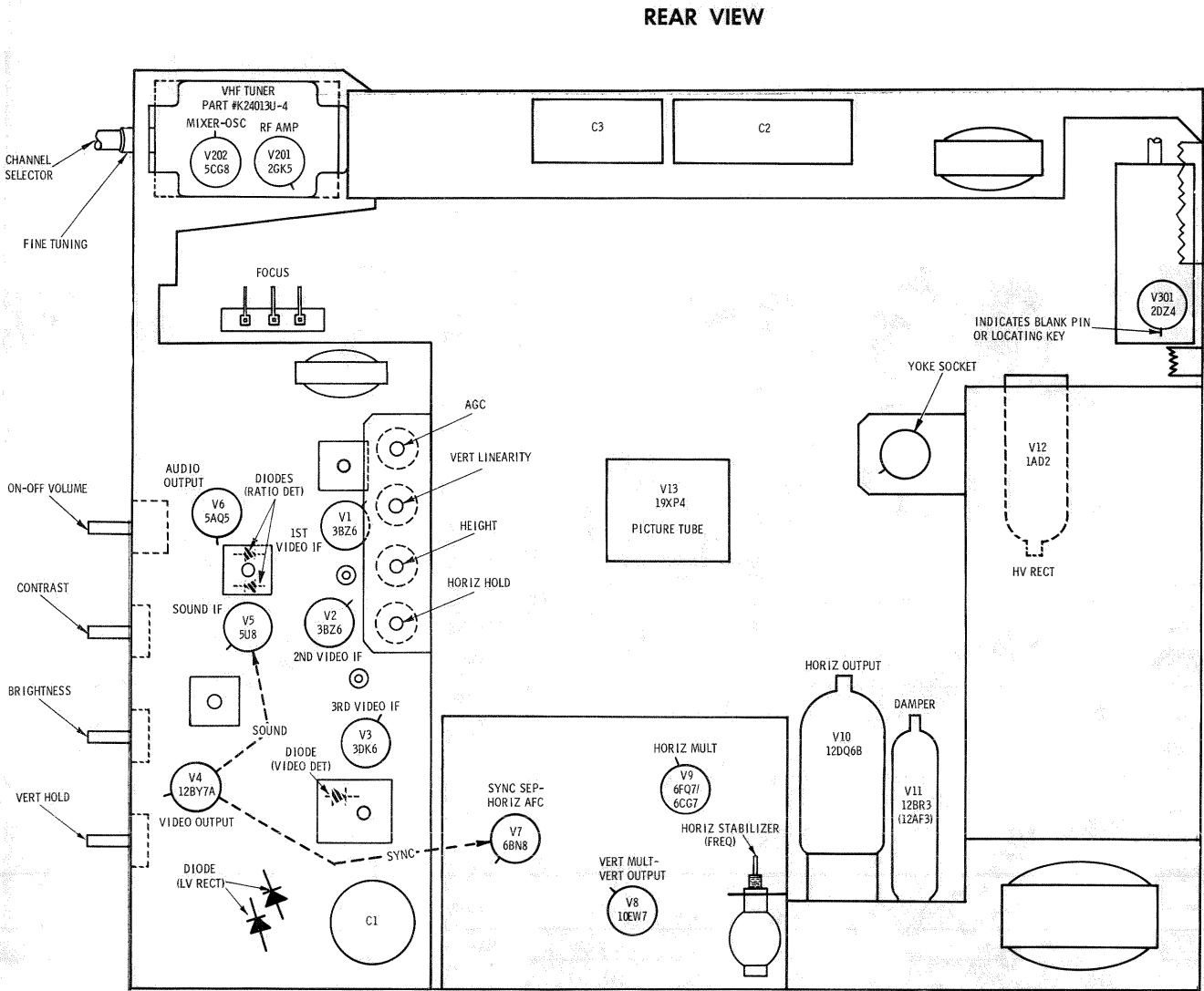
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	3BZ6	53K	68Ω	6Ω	7Ω	▲ 538Ω	▲ 538Ω	0Ω		
V2	3BZ6	65K	# 160K	7Ω	8Ω	† 490Ω	† 490Ω	▲ 68Ω		
V3	3DK6	.2Ω	180Ω	8Ω	9Ω	† 4400Ω	† 4400Ω	0Ω		
V4	12BY7A	410Ω	1meg	0Ω	0Ω	0Ω	11Ω	† 5400Ω	† 22K	0Ω
V5	5U8	† 100K	2.5Ω	† 18K	12Ω	11Ω	† 18K	150Ω	0Ω	2.2meg
V6	5AQ5	470K	330Ω	12Ω	13Ω	† 5900Ω	† 5500Ω	470K		
V7	6BN8	500K	250K	250K	15Ω	13Ω	56K	#† 33K	1.2meg	0Ω
V8	10EW7	† 452Ω	NC	1.4meg	20Ω	17Ω	# 2meg	460K	10K	550Ω
V9	6FQ7/6CG7	† 4700Ω	1.5meg	1000Ω	17Ω	15Ω	† 82K	180K	1000Ω	0Ω
V10	12DQ6B	TP	22Ω	NC	† 15K	320K	TP	20Ω	0Ω	
V11	12BR3	NC	NC	NC	26Ω	22Ω	NC	NC	NC	† 22Ω
V12	1AD2		PINS	1 THRU 12	HAVE	INFINITE	RESISTANCE			
V13	19XP4	0Ω	100K	# 520K	† 22Ω	NC	NC	240K	3Ω	
V201	2GK5	0Ω	560K	3.5Ω	4Ω	† 5100Ω	0Ω	0Ω		
V202	5CG8	10K	† 14K	0Ω	6Ω	4Ω	† 5100Ω	† 25K	0Ω	225K
V301	2DZ4	† 7000Ω	5600Ω	3.5Ω	3Ω	.8Ω	5600Ω	† 7000Ω		

# THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.  
† MEASURED FROM OUTPUT OF X2.  
▲ MEASURED FROM PIN 2 OF V2.  
# MEASURED FROM TOP CAP OF V11.  
NC NO CONNECTION TP TIE POINT



CHASSIS—REAR VIEW

TUBE PLACEMENT CHART



OLYMPIC  
MODEL 9P40C

TUBE FAILURE CHECK CHART

The following chart lists tubes whose failures are most likely to produce indicated symptoms. Refer to tube placement chart for location and type of tube.

**POWER SUPPLY FAILURE**  
No raster, no sound M1 (Line Fuse), X1, X2

**SWEEP FAILURE**  
No raster, has sound V9, V10, V11, V12, V13  
No vertical deflection V8  
Poor vert. linearity or foldover V8  
Poor horiz. linearity or foldover V9, V10, V11  
Narrow picture V9, V10, V11, X1, X2  
Vert. off freq. V8  
Horiz. off freq. V7, V9

**LOSS OF PICTURE OR SOUND**  
No pic, no sound, has raster V1, V2, V3, X3 (Video Det. Diode, V4  
No pic, no sound, has snow V201, V202, V1  
No pic, has sound, has raster V4, V13  
Has pic, no sound V5, V6

**SYNC FAILURE**  
No vert. sync V7  
No horiz. sync V7  
No vert. or horiz. sync V7

This receiver employs tubes used in a series filament network, an open filament in any tube will cause the set to be inoperative. (See circuit below.)

TO AC LINE 48Ω 30W

V11 4 5 V10 2 7 V8 4 5 V9 4 5 V7 4 5 V6 4 3 V5 4 5 V4 6 4-5

V13 1 8 V301 4 3 V201 3 4 V202 5 4 V1 3 4 V2 3 4 V3 3 4

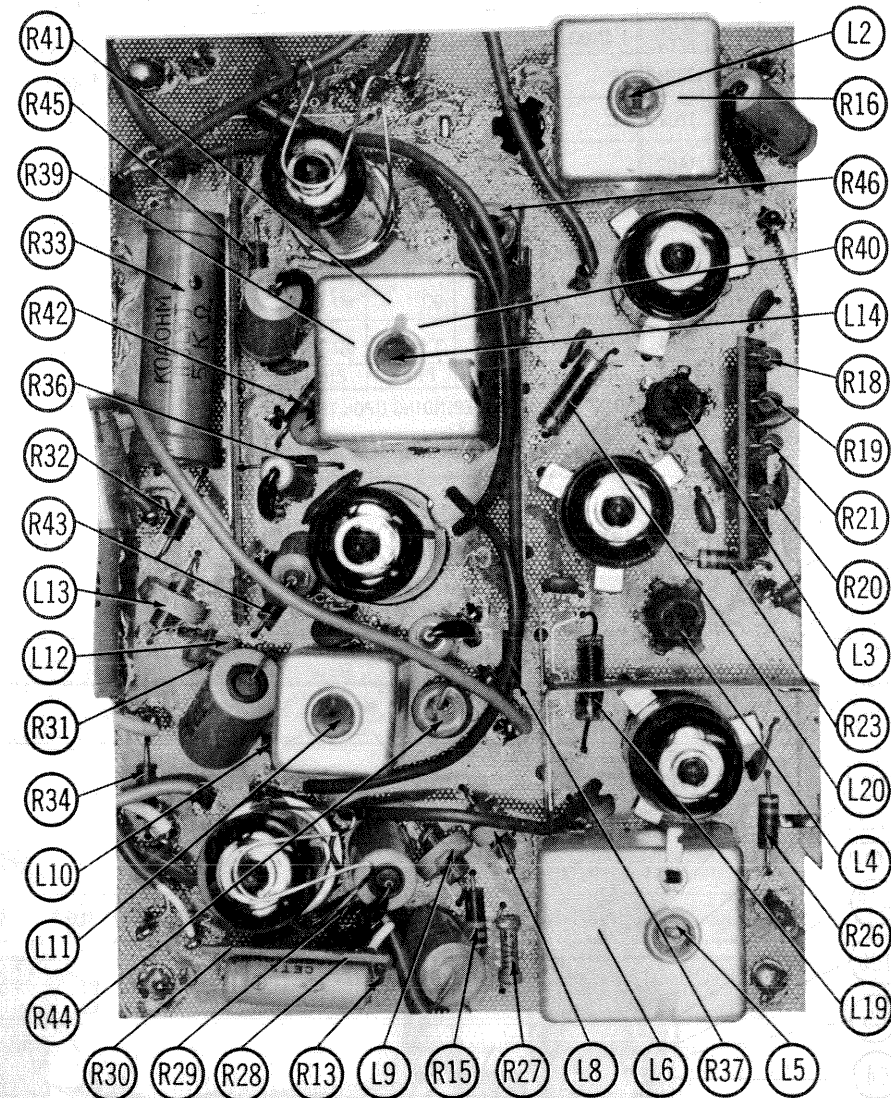
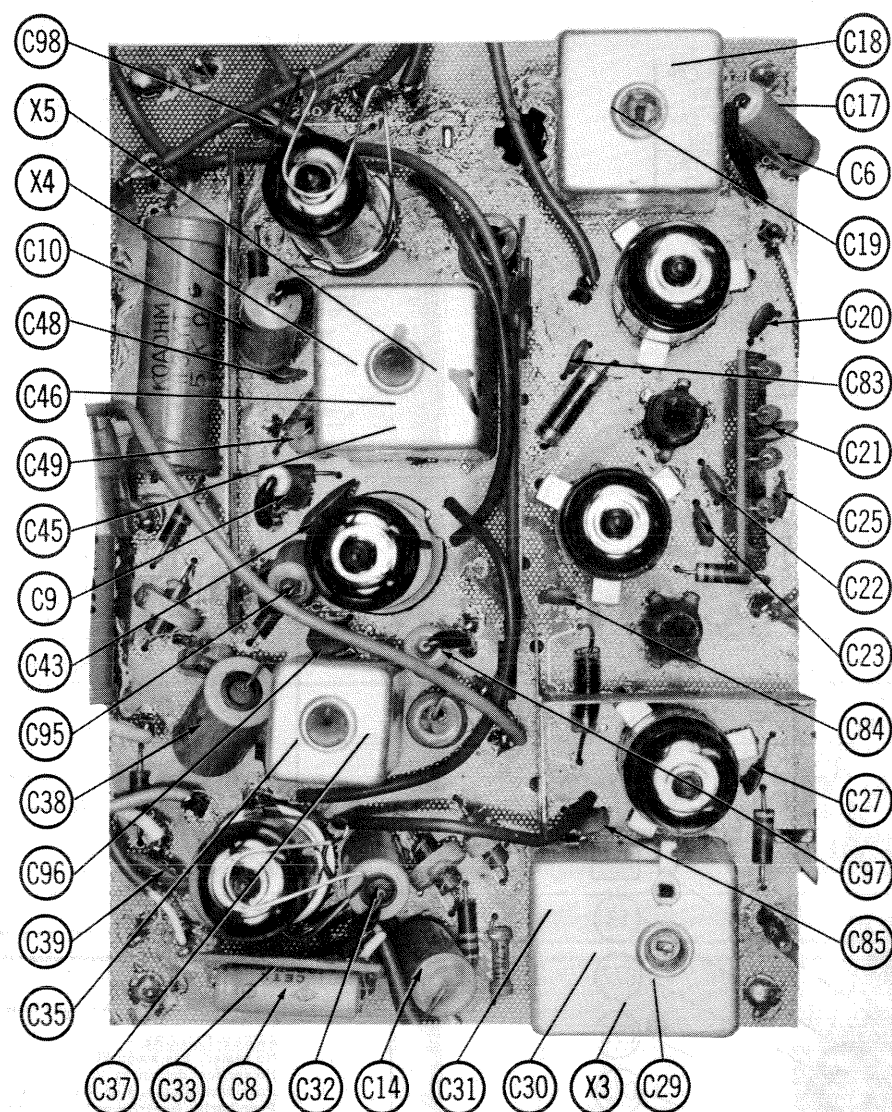
UHF TUNER VHF TUNER

FOLDER 3

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



\* SOURCE



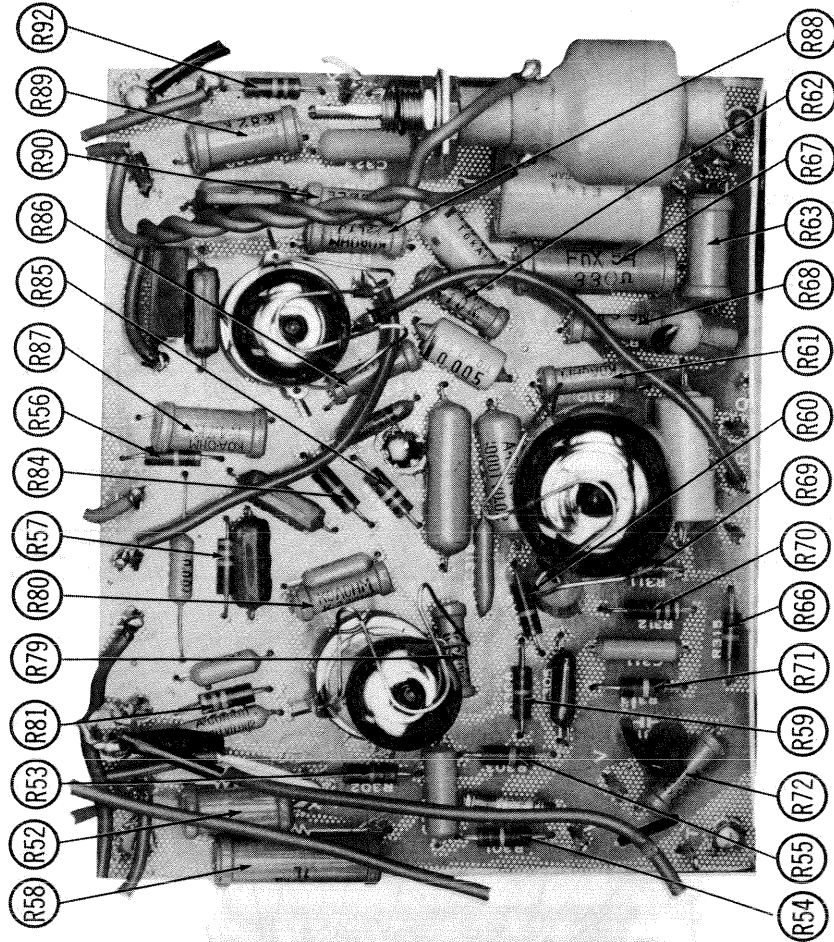
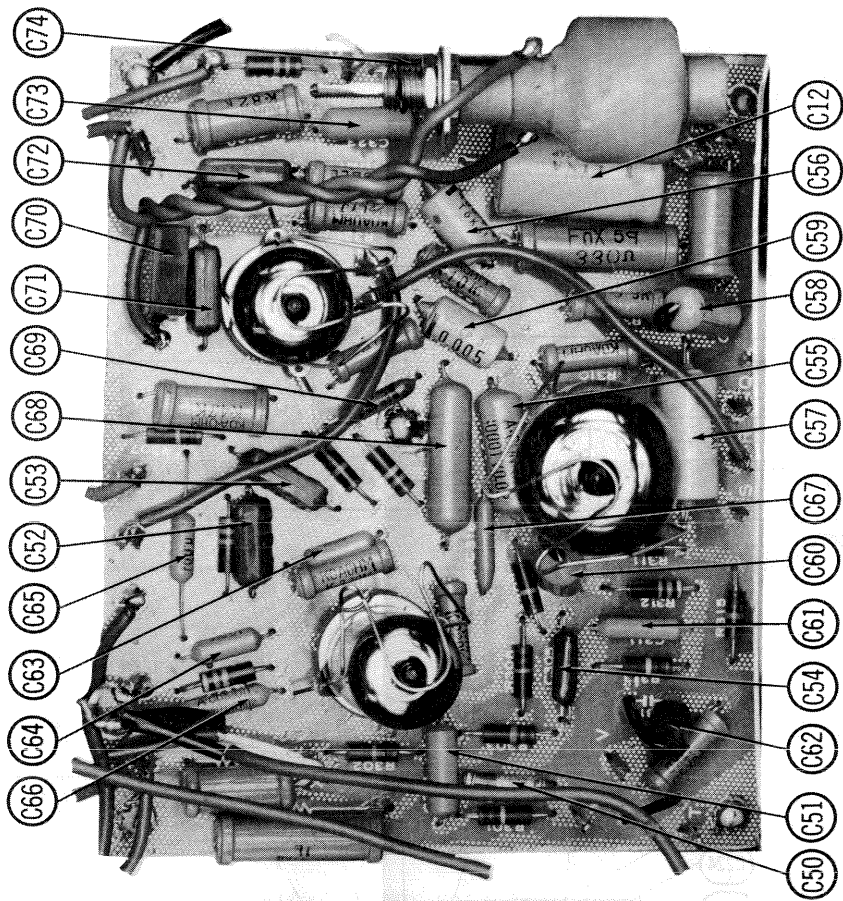
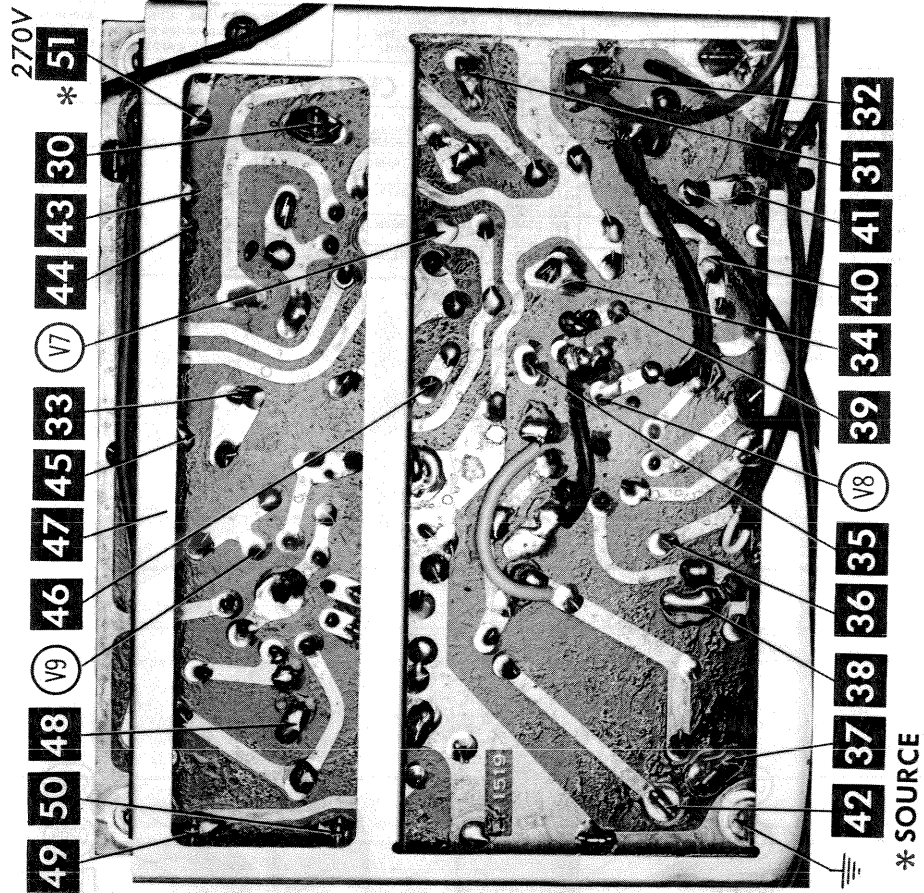
VIDEO, SOUND IF PRINTED BOARD

OLYMPIC  
MODEL 9P40C

FOLDER 3

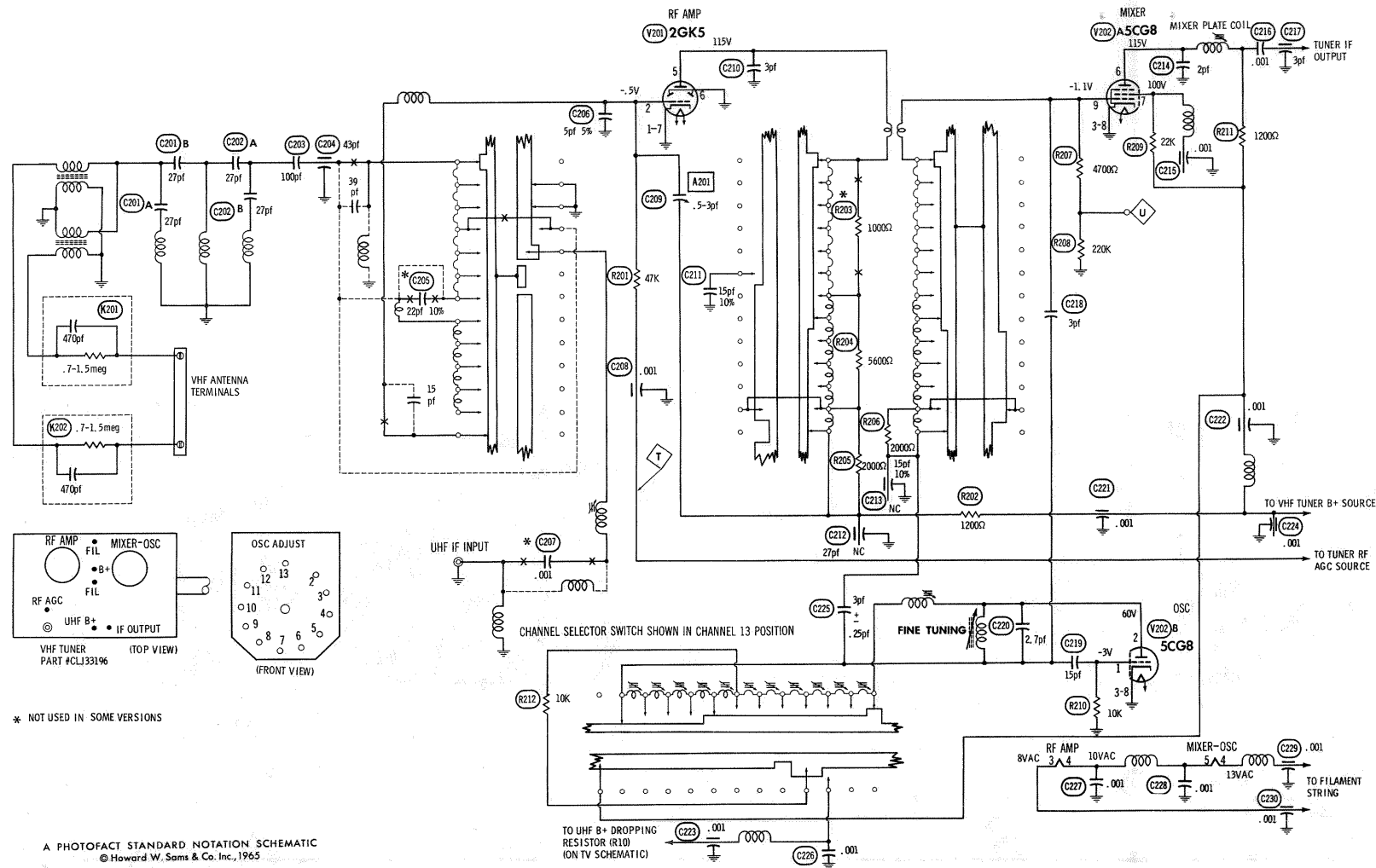


ARROWS INDICATING TUBE LOCATIONS ARE  
POINTING TO PIN 1 UNLESS OTHERWISE INDICATED



SYNC, AGC, SWEEP PRINTED BOARD

OLYMPIC  
MODEL 9P40C



## VHF TUNER ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: A201 ... GENERAL CEMENT #8868, 8987, 9089 ... WALSCO #2531-X, 2541, 2587

### OSCILLATOR ADJUSTMENTS

The individual oscillator slugs are accessible through a hole in the front of the tuner. Set the fine tuning to the center of its range. Starting with the highest channel in the area, adjust the appropriate oscillator slugs in descending order for best picture and sound.

### 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. Connect a variable bias to the RF AGC line at point (T). 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 (T), low side to ground.		Expand or compress appropriate coils 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.	A201	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.
3. "	See Chart	See Chart	12 thru 2	Vert. Input to Point (T), low side to ground.		Decrease bias. Check all channels and make compromise adjustments by expanding or compressing appropriate coils.

### 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 59.75MC	2	85MC	83.25MC 87.75MC	6	195MC	193.25MC 197.75MC	10
63MC	61.25MC 65.75MC	3	177MC	175.25MC 179.75MC	7	201MC	199.25MC 203.75MC	11
69MC	67.25MC 71.75MC	4	183MC	181.25MC 185.75MC	8	207MC	205.25MC 209.75MC	12
79MC	77.25MC 81.75MC	5	189MC	187.25MC 191.75MC	9	213MC	211.25MC 215.75MC	13

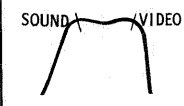
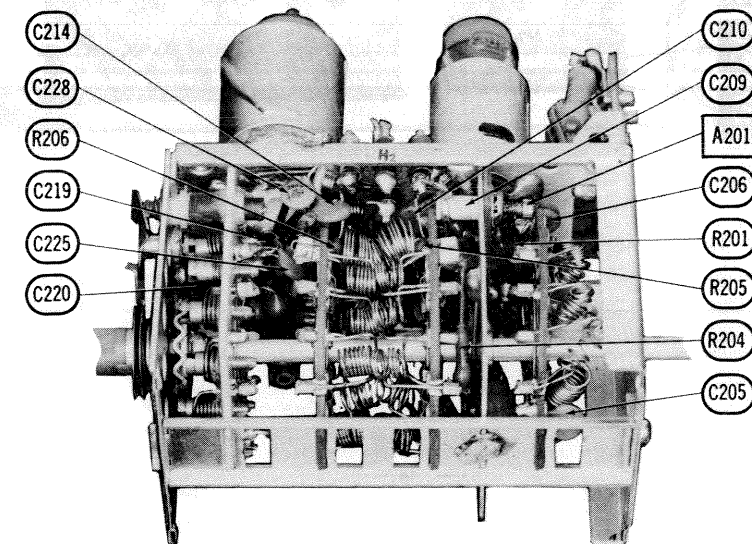
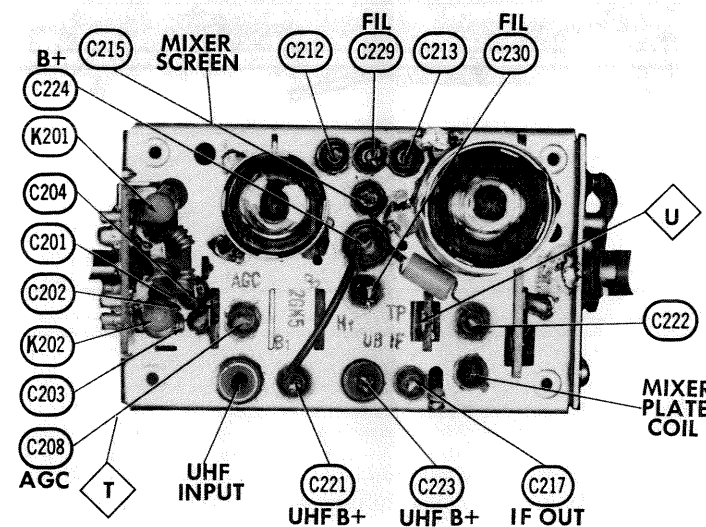
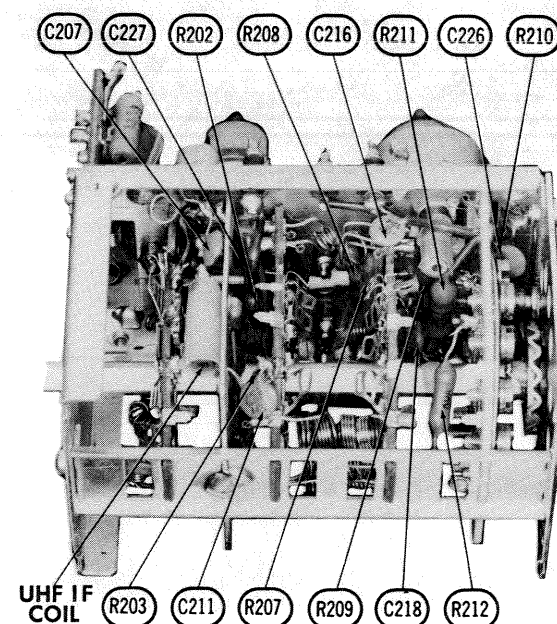


FIG. 201

Tune to a UHF station and adjust UHF IF Input Coil for best picture and sound.



13 POSITION SWITCH-TYPE VHF TUNER CLJ33196



## 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:

Mixer Plate Coil ... GENERAL CEMENT #9296, 9297, 9300 ... WALSCO #2510, 2546, 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 ②) 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 ②. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		47.25MC	A1	Adjust for MINIMUM.
2. Connect DC probe of a VTVM thru a 47K resistor to point ②. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		44.5MC 43.0MC 45.0MC	A2, A3, A6 A4 A5	Adjust for maximum.
3. Connect vertical input of a scope to point ②. Low side to ground.	Connect high side to pin 1 (grid) of V3. Low side to ground.	44MC (10MC Sweep)	42.75MC 45.75MC	A2, A3	Adjust for maximum amplitude and MINIMUM tilt with markers as shown in Figure 1.
4. Connect vertical input of a scope to point ②. Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	42.75MC 44.25MC 45.75MC 47.25MC	A4, A5, A6 Mixer Plate Coil	Adjust for maximum gain and symmetry of response with markers as shown in Figure 2. In order to obtain a proper response, it may be necessary to slightly retouch A2 and A3.

## 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 A10 for MINIMUM beat interference.

## SOUND IF ALIGNMENT

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
5. High side to point ②, low side to ground.	4.5MC (Unmod.)	Any non-interfering channel	DC Probe to point ②, low side to ground.	A7, A8	Adjust for maximum.
6. " " " "	" " " "	" " " "	DC Probe to point ②, low side to point ②.	A9	Adjust for zero. A positive or negative reading will be obtained on either side of the correct setting.

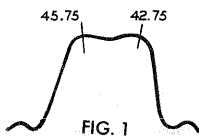


FIG. 1

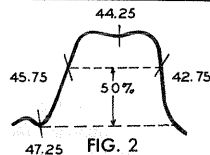


FIG. 2

## UHF TUNER PARTS LIST AND DESCRIPTION

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V301	UHF Osc.	2DZ4			

## POWER RECTIFIERS &amp; SIGNAL DIODES

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

## FIXED 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	39 10%	(100) ↑	DI-39 DD-390 820-6 LA10Q39-S3 CCD-390 CV-3 GP439 CT552 10TS-Q39
C302	1-5 137		
C303	1.5 NPO 5%	(15) ↑	
C304	1.5 NPO 5%		
C305	1.5 NPO 5%		
C306	1.5 NPO 5%		
C307	1.5 NPO 5%		
C308	1.5 NPO 5%		
C309	1.5 NPO 5%		

↑ Alternate Value

## VHF TUNER PARTS LIST AND DESCRIPTION

## TUBES

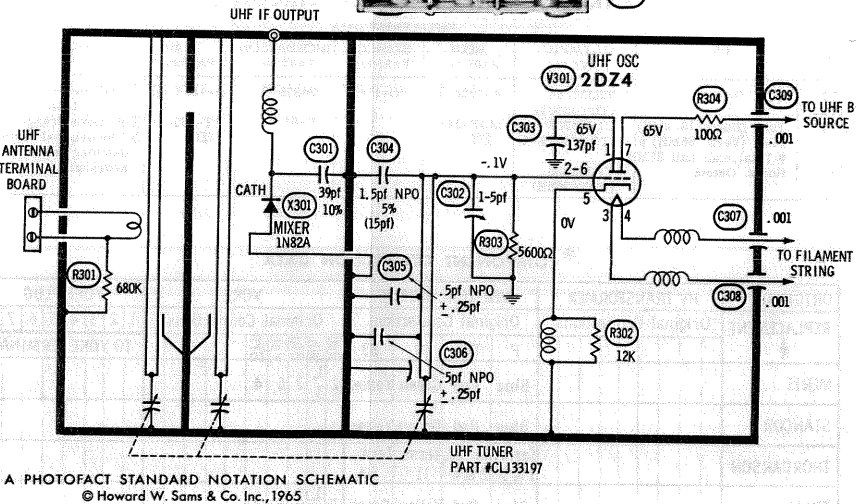
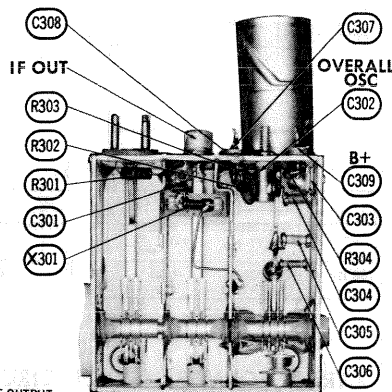
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	2GK5	V202	Mixer - Osc.	5CG8

## FIXED 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							
B	27							
C202A	27							
B	27							
C203	100		SI 100	D6-101	LA10T1-S3	CCD-101	GP310	10TS-T10
C204	43							
C205	22 10%		DI-22	DD-220	LA10Q22-SL	CCD-220	GP422	10TS-Q22
C206	5 5%						GP550	10TCC-V50
C207	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C208	.001		EF-001	MFT-1000		CCF-102	CT280A	
C209	.5-3			829-3		CV-1	CT565	
C210	3		DI-3.3	DD-3R3	LA10V33-SL	CCTO-3R3	GP533	10TCC-V30
C211	15 10%		DI-15	DD-150	LA10Q15-SL	CCD-150	GP415	10TS-Q15
C212	27							
C213	15 10%		DI-15	DD-150	LA10Q15-SL	CCD-150	GP415	10TS-Q15
C214	2 ±.25pf			TCZ-2R2			CNO522	10TCC-V22
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C217	3							
C218	3		DI-3.3	DD-3R3	LA10V33-SL	CCTO-3R3		
C219	15 10%		DI-15	DD-150	LA10Q15-SL	CCD-150	GP415	10TS-Q15
C220	2.7		NPO-DI 3					10TCC-V27
C221	.001		EF-001	MFT-1000		CCF-102	CT280A	
C222	.001		EF-001	MFT-1000		CCF-102	CT280A	
C223	.001		EF-001	MFT-1000		CCF-102	CT280A	
C224	.001		EF-001	MFT-1000		CCF-102	CT280A	
C225	3 ±.25pf			TCZ-3R3				10TCC-V30
C226	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C227	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C228	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10
C229	.001		EF-001	MFT-1000		CCF-102	CT280A	
C230	.001		EF-001	MFT-1000		CCF-102	CT280A	

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	OLYMPIC PART No.	REPLACEMENT DATA
K201	Antenna Isolation	.7-1.5meg, 470pf		Centralab RC-471 Sprague AC1-1
K202	Antenna Isolation	.7-1.5meg, 470pf		Centralab RC-471 Sprague AC1-1



A PHOTOFAC STANDARD NOTATION SCHEMATIC  
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## UHF TUNER CLJ33197

## PARTS LIST 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

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	1st Video IF Amp.	3BZ6	V7	Sync Sep. - Horiz. AFC	6BN8
V2	2nd Video IF Amp.	3BZ6	V8	Vert. Mult. - Vert. Output	10EW7
V3	3rd Video IF Amp.	3DK6	V9	Horiz. Mult.	6FQ7/6CG7
V4	Video Output	12BY7A	V10	Horiz. Output	12DQ6-B
V5	Sound IF Amp.	5U8	V11	Damper	12BR3 (12AF3) *
V6	Audio Output	5A4Q5	V12	HV Rectifier	1AD2

\* Alternate Value

## PICTURE TUBE

ITEM No.	REPLACEMENT DATA	NOTES
	OLYMPIC PART No. GENERAL ELECTRIC PART No. RCA PART No. SYLVANIA PART No.	
V13	19XP4 19AVP4/XP4 ① 19AVP4 ① 19AVP4 ②	① Aluminized ② Silver Screen "85"

## POWER RECTIFIERS &amp; SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS	DIODES
			GENERAL ELECTRIC PART No. MALLORY PART No. RCA PART No. SARKES TARZIAN PART No.	GENERAL ELECTRIC PART No.
X1	.32A	RFJ31363	GE-504 or 1N1695	1N2070 or 1N1764 or 1N2094 ① 1N2863
X2	.32A	RFJ31363	GE-504 or 1N1695	1N2070 or 1N1764 or 1N2094 ① 1N2863
X3				1N80
X4				1N80
X5				1N80

① A dual unit, VB800, may be used for X1 and X2.

## ELECTROLYTIC CAPACITORS

RATING			REPLACEMENT DATA						
ITEM No.	CAP.	VOLT.	OLYMPIC PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	150	200		AFH81-37-25①	AA0315 ①	XC1-18 ①	TMS-1480 ①	FP140.6A①	TVL-1540①
C2A	100	350		AFHS2-41-50	BB0332	XC2-39	TMD-2435	FP227.7A	TVL-2641
C2B	100	350							
C3	50	350		AFH1-54	AA0401	XC1-7	TMS-1790	FP148	TVL-1730
C4	4	300		PR81600	BR4-350	Q11-2	TD-4-450	TC697	TVA-1601
C5	4	300		PR81600	BR4-350	Q11-2	TD-4-450	TC697	TVA-1601
C6	1	50		PTT87	NLW1-50	MT1-1	MLV1-150	TT50X1	TE-1300
C7	4	300		PR81600	BR4-350	Q11-2	TD-4-450	TC697	TVA-1601
C8	100	5		PTT30	NLW100-12	MT1-18	MLV100-6	TT6X100	TE-1102
C9	30	10		CRE413A	NLW30-15	MT1-16	BL1430	TT10X30	TE-1158
C10	4	50		CRE753A	NLW4-50	MT1-3	BL1370	TT50X4	TE-1302.1
C11	20	350		PR81735	BR20-350	Q11-9	TD-20-350	TC65	TVA-1608
C12	100	25		CRE623A	NLW100-25	MT1-20	MLV100-25	TT25X100	TE-1211

① Use insulating sleeve and mounting wafer.

## FIXED 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.
C13	.2 250V		P488N-2 PM4P22 4DP-5-204 PVC602 4TM-P20
C14	.2 250V		P488N-2 PM4P22 4DP-5-204 PVC602 4TM-P20
C15	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C16	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C17	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C18	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C19	.001	10%	DI-20 DD-200 LA10Q2-SL CCD-200 GP420 10TS-Q20
C20	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C21	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C22	.001	10%	DI-1000 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C23	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C24	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C25	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C26	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C27	.470		BPD-00047 DD-471 BYA10T47 CCD-471 B347 10TS-T47
C28	.001		BPD-001 DD-102 BYA10D1 CCD-102 B210 5HK-D10
C29	7	±.5pf	NPO-DI 6.8 DTZ-6R8 LA10V68-SL CNO568 10TCC-V68
C30	5 N330 ±.25pf		
C31	10 10%		DI-10 DD-100 LA10Q1-SL CCD-100 GP410 10TS-Q10
C32	.05 400V		P488N-05 DF-503 PM445S 4DP-3-503 GEM415 4TM-S50
C33	.200 10%		D6-201 LA10T2-S3 CCD-201 GP320 10TS-T2
C34	.005 10%		BPD-005 DD-502 BYA10D5 CCD-502 B250 5HK-D50
C35	30 10%		DI-30 DD-300 LA10Q3-SL CCD-300 GP430 10TS-Q30
C36	3 ±.25pf		
C37	30 10%		DI-30 DD-300 LA10Q3-SL CCD-300 GP430 10TS-Q30
C38	.1 400V		P488N-1 DF-104 PM4P1 4DP-3-104 GEM401 4TM-P10

## FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA						
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOPART No.	MALLORY PART No.	SPRAGUE PART No.	
C39	.005		BPD-005	DD-203	BYA10D5	CCD-502	B250	5HK-D50	
C40	.02	400V	P488N-02	DD-203	PM4S2	4DP-2-203	GEM412	4TM-S20	
C41	.01	400V	P488N-01	CPR-10000J	PM4S1	4DP-1-103	GEM411	4TM-S10	
C42	.05	400V	P488N-05	DF-503	PM4S5	4DP-3-503	GEM415	4TM-S50	
C43	.005		BPD-005	DD-502	BYA10D5	CCD-502	B250	5HK-D50	
C44	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C45	10		NPO-D1 10	DTZ-4R7	C10Q1C	CCTO-100	CNO410	10TCC-Q10	
C46	150	N075 5%							
C47	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C48	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C49	.005	600V	P688N-005	DD-502	PM6D5	6DP-1-102	GEM625	6TM-D50	
C50	200	10%		D6-201	LA10T2-S3	CCD-201	GP320	10TS-T20	
C51	.005	600V	P688N-005	DD-502	PM6D5	6DP-1-502	GEM625	6TM-D50	
C52	300	500V	ADM-15-301	CPR-300J	CD15F301J	DM-19-301J	GP330	MS-33	
C53	300	500V	ADM-15-301	CPR-300J	CD15F301J	DM-19-301J	GP330	MS-33	
C54	.01	400V 10%	B4S1	CPR-10000J	PM4S1	4DP-1-103	GEM411	4TM-S10	
C55	.02	600V	P688N-02	DD-203	DPMS6S2	6DP-2-203	GEM612	6TM-S20	
C56	.005	400V	P488N-005	CPR-5000J	PM4D5	6DP-1-502	GEM415	4TM-S50	
C57	.05	400V	P488N-05	DF-503	PM4S5	4DP-3-503	GEM415	4TM-S50	
C58	.022	600V 10%	B6S22		PM6S22	6DP-2-223	GEM6122	6TM-S22	
C59	.005	400V	P488N-005	CPR-5000J	PM4D5	6DP-1-502	GEM625	4TM-D50	
C60	.02	600V	P688N-02	DD-203	DPMS6S2	6DP-2-203	GEM612	6TM-S20	
C61	.002	600V	P688N-002	DD-202	DPMS6D2	6DP-1-202	GEM622	6TM-D20	
C62	.01	400V 10%	B4S1	CPR-10000J	PM4S1	4DP-1-103	GEM411	4TM-S10	
C63	.001	600V	P688N-001	DD-102	PM6D1	6DP-1-102	GEM621	6TM-D10	
C64	.001	600V	P688N-001	DD-102	PM6D1	6DP-1-102	GEM621	6TM-D10	
C65	.001	600V	P688N-001	DD-102	PM6D1	6DP-1-102	GEM621	6TM-D10	
C66	.002	600V	P688N-002	DD-202	DPMS6D2	6DP-1-202	GEM622	6TM-D20	
C67	.001	600V	P688N-001	DD-102	PM6D1	6DP-1-102	GEM621	6TM-D10	
C68	.05	400V	P488N-05	DF-503	PM4S5	4DP-3-503	GEM415	4TM-S50	
C69	.001	400V	P488N-001	CPR-1000J	WMF4D1	6DP-1-102	GEM415	4TM-S50	
C70	.0039	500V 10%	ADM-20-392	CPR-3900J	PM6D39	6DP-1-392	PVC6239	6PS-D39	
C71	300	500V 5%	ADM-15-301	CPR-300J	CD15F301J	DM-19-301J	JF350	MS-35	
C72	500	500V 10%	ADM-15-501	CPR-510J	CD15F301J	DM-19-501J	JF350	MS-35	
C73	.005	600V	P688N-005	DD-502	PM6D5	6DP-1-502	GEM625	6TM-D50	
C74	.01	400V	P488N-01	CPR-1000J	PM4S1	4DP-1-103	GEM411	4TM-S10	
C75	.1	400V	P488N-1	DF-104	PM4P1	4DP-3-104	GEM401	4TM-P10	
C76	200	2KV 10%							
C77	200	2KV 10%							
C78	.05	400V	P488N-05	DF-503	PM4S5	4DP-3-503	GEM415	4TM-S50	
C79	.1	400V	P488N-1	DF-104	PM4P1	4DP-3-104	GEM401	4TM-P10	
C80	.002	600V	P688N-002	DD-203	DPMS6D2	6DP-1-202	GEM622	6TM-D20	
C81	.05	400V	P488N-05	DF-503	PM4S5	4DP-3-503	GEM415	4TM-S50	
C82	50	3KV 10%							
C83	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C84	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C85	.001		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10	
C86	.01		BPD-01	DD-103	BYA10S1	CCD-103	B110	5HK-S10	
C87	.01		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C88	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C89	.001		P488N-1	DF-104	PM4P1	4DP-3-104	GEM401	4TM-P10	
C90	.1	400V	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	
C91	.001	1.5KV	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	
C92	.001	1.5KV	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	
C93	.001	1.5KV	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	
C94	.001	1.5KV	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	
C95	.005	400V	P488N-005	CPR-5000J	PM4D5	6DP-1-502	GEM625	4TM-D50	
C96	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C97	.005	400V	P488N-005	CPR-5000J	PM4D5	6DP-1-502	GEM625	4TM-D50	
C98	.01	400V	P488N-01	CPR-1000J	PM4S1	4DP-1-103	GEM411	4TM-S10	
C99	.001		BPD-001	DD-102	BYA10D1	CCD-102	B210	5HK-D10	
C100	.001	1.5KV	HVD-15-1000	DD30-102	HVB16D1	3CCD-102	UAC210	BL-D10	

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

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			OLYMPIC PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	500K	PTJ-33038	F2-500K, SSK100, KR-1 or (B-60-S)	A47-500K-Z, KSS-3, SWE-12	Q13-133, 76-1 or (BU1, CF25, SS1, GC) *	RU55A, SL36, SL3250, US41 or (UA55A, SK1000, US41) or (U48, US26)
R2	Contrast	500Ω	PTJ-31378	F5-500, SSK100 or (B-415)		B17-103, SK1 or (BU1, CF50, SS1, DC1) *	UA52R, SK1000 or (U52R)
R3	Brightness	100K	PTJ-31381	F1-100K, SSK100 or (B-40)	A47-100K-S, KSS-3	Q11-128 or (BU1, CF13, SS1, DC1) *	RU15L, SL36, SL3250 or (UA15L, SK1000) or (U41)
R4	Vert. Hold	1meg	PTJ-31380	F1-1meg, SSK100 or (B-69)	A47-1meg-S, KSS-3	Q11-137 or (BU1, CF17, SS1, DC1) *	RU16L, SL36, SL3250 or (UA16L, SK1000) or (U54)
R5	AGC	1meg	PTJ-33019	TT-69 (F1-1meg, SN104)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS6) *	PTA1254L or (RU16L, SL37, SN1000) or (UA16L, SK1000)
R6	Vert. Linearity	500Ω	PTJ-33018	F1-500, SSK100 or (B-4)	A47-500, FKS-1/2	Q11-103 or (BU1, CF4, DC1) *	RU52L, SL36, SL3250 or (UA52L, SK750) or (U2)
R7	Height	1meg	PTJ-33019	TT-69 or (F1-1meg, SN104)	B47-1meg-S	B11-137, TM4 or (BU11, CF17, SS6) *	PTA1254L or (RU16L, SL37, SN1000) or (UA16L, SK1000)
R8	Horiz. Hold	10K	PTJ-31379	F1-10K, SSK100 or (B-14)	A47-10K-S, KSS-3	Q11-118 or (BU1, CF9, DC1) *	RU14L, SL36, SL3250 or (UA14L, SK1000) or (U20)

\* "SNAPTROL"

## PARTS LIST AND DESCRIPTION (CONTINUED)

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			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R33	5000Ω, 3W, 5%	PW5-5000	3G-5000		R100	48Ω	30W	4D-50	151 #REJ-33210
R77	12.4Ω, Cold Thermistor		FR 12.9		R103	5Ω	10W	PW10-5	10W-SQ-5 #REJ-33209
R96	.6Ω ½W BWH-.62				R104	3Ω	7W	PW10-3	10W-SQ-3 #REJ-33208
# Olympic Part Number					R105	3900Ω	10W	PW10-3900	10W-SQ-3900 #REJ-33207

### COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		OLYMPIC PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Balun	CLJ31358					
L2	1st Video IF / 47.25MC Trap	TRJ33011					
L3	2nd Video IF	CLJ33012					
L4	3rd Video IF	CLJ33012					
L5	4th Video IF	CLJ33013					
L6	RF Choke (18uh)		TV-192	72F185AP	RTC-8584	T300	
L7	RF Choke (5uh)		SW-631	74F476AP	RTC-8519	T819	
L8	Peaking (50uh)		TV-193	72F475AP	RTC-8573	TG248	
L9	Peaking (30uh)		TV-198	6130	RTC-8576	T316	
L10	RF Choke (15uh)		BC-566	72F155AP	RTC-8584	T862	
L11	Sound Takeoff						
L12	Peaking (220uh)		TV-197	72F224AP	RTC-8586	T312	
L13	Peaking (450uh)		TV-202	6136	RTC-8579	T322	
L14	Radio Detector						
L15	Peaking (220uh)		TV-197	72F224AP	RTC-8586	T312	
L16	RF Choke (10uh)		BC-566	72F105AP	RTC-8522	T860	
L17	RF Choke (6.5uh)		BC-565	4610	RTC-8520	T859	
L18	Line Choke (450uh)						
L19	Fil. Choke (14 turns)						
L20	Fil. Choke (14 turns)						

### COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					
		OLYMPIC PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON PART No.	WORKMAN PART No.
L21	Horiz. Stabilizer (Freq.)	CLJ31375 (TDT-276)	TV-165 ②	6319	RTC-8629	HS-5	T111 ①

① Enlarge mounting hole.

② Disregard Tap.

### FILTER CHOKE

ITEM No.	CURRENT (Measured)	REPLACEMENT DATA						NOTES
		DC RES.	INDUCTANCE (0 CURRENT 1000~)	OLYMPIC PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	
L22	.30 ADC	22Ω	.56 Hy.	CKJ33014 (TLT-122)	C-4125	C-2343	26C77	C-27X

### \* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		OLYMPIC PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	Vert. Output	TRJ31364 (TDT33007)	A-2622 ①	VO-114 ①	26S75 ①	A-135X ①	① Drill new mounting holes.
T2	Yoke (Horiz. 19.4MH) 114 (Vert. 66MH) †	CLJ33206 (TDT335JE-1)	MDF-143 ②③		Y-91	YT-103-1 ②③	② Remove Orange lead. ③ Use original damping network if necessary.
T3	Horiz. Output	TRJ33205 (TDT-366H)					

### \* COMPONENT CONNECTION DATA

ORIGINAL →	HV TRANSFORMER	VERTICAL OUTPUT	YOKE	YOKE PLUG
REPLACEMENT	Original Connections	Original Connections	Original Connections	1 2 3 4 5 6 7 8
↓		P B2 G B3	② ③ ④ ⑤ ⑥ ⑦ ⑧	TO YOKE TERMINAL
MERIT		Blue Red Green Yellow	2 1 3 7 6 4	
STANCOR		Blue Red Green Yellow		
THORDARSON		Terms Terms Term. 1 & 3 2 & 4 11 5 ▲		
TRIAD		Blue Red Yellow Green	2 1 3 7 6 4	

▲ Jumper terminals #1 and #3 and terminals #2 and #4. Use 5.5 to 6.9 to 1 Turns Ratio.

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	OLYMPIC PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T4	6800Ω	4-6Ω	TRJ33025 (TLT-128H)	A-2931	A-3878	22S33	S-49X	

### SPEAKER