

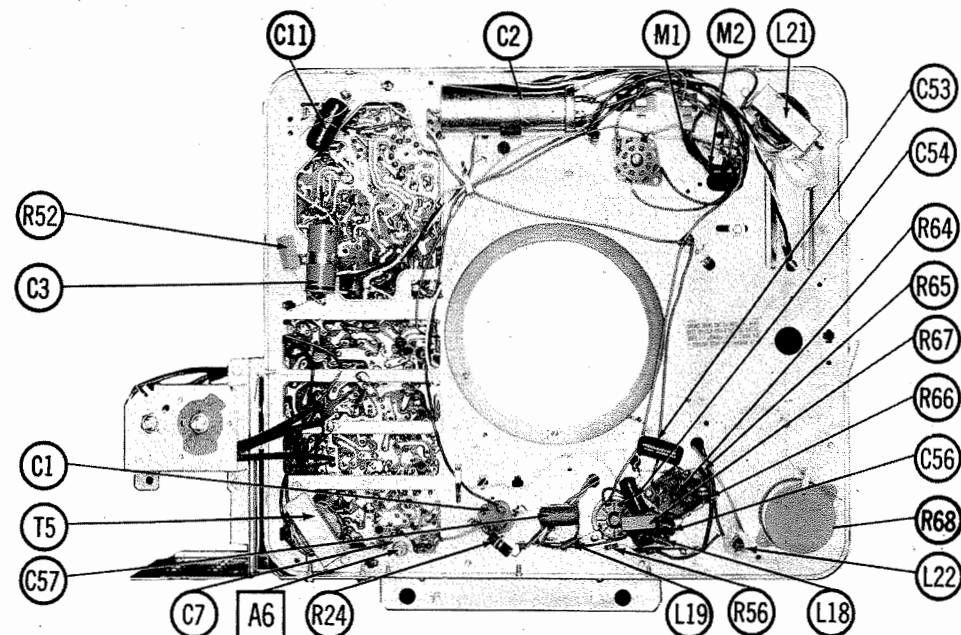
**CABINET—REAR VIEW**

## HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Before adjusting the Stabilizing slug (B1), the Horizontal Drive and the Width must be properly adjusted.

Set the Horizontal Hold to the pull-in point. Turn the Width slug (B2) fully counterclockwise and turn Horizontal Drive Trimmer (B3) counterclockwise until a bright vertical line appears near the center of the raster, then turn clockwise until the line just disappears. If no line appears, leave B3 fully counterclockwise. With the Brightness set to normal level, adjust the Width slug (B2) for an overscan of approximately 3/4" on each side of the screen at normal line voltage. Connect a short

jumper across the terminals of the Horizontal Stabilizing coil (L20B) short the grid (pin 2) of the 6CG7 (V10) to chassis with a small screwdriver. Adjust the Horizontal Hold for an upright picture (may appear to float back and forth across the screen). Remove the jumper from across L20B and adjust B1 to again obtain a picture in an upright position. When B1 is properly adjusted, alternately shorting and removing short should not cause the picture to lose sync, but instead cause a slight sideways shift of the picture. Remove the short from the grid of the 6CG7.

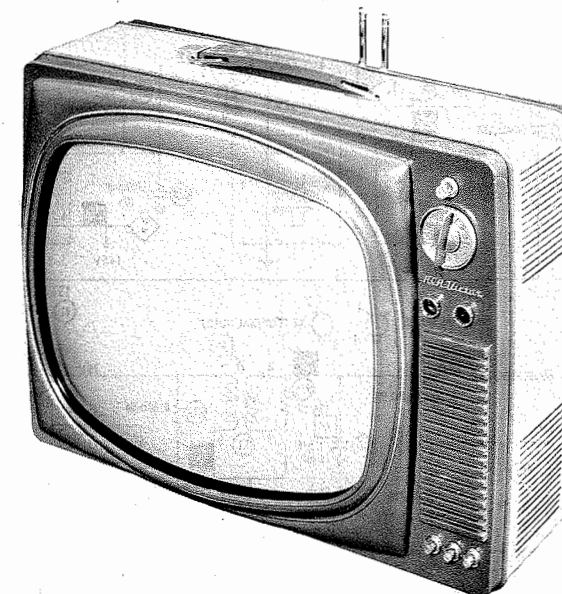


**CHASSIS—FRONT VIEW**

## DISASSEMBLY INSTRUCTIONS

### CHASSIS REMOVAL MODEL 170P048

1. Remove 8 screws holding rear cover. Remove the rear cover. Disconnect antenna leads.
2. Remove 7 push-on type knobs from the front.
3. Remove 3 screws under the bottom of the front mask.
4. Loosen 2 hex head bolts at upper inside corners of the cabinet.
5. Pull the bottom of the front mask out 1/2" to 3/4" and lift up and off.
6. Remove speaker leads, picture socket, yoke clamp, yoke and HV lead.
7. Remove 3 screws holding the small control bracket at the bottom.
8. Remove 2 nuts holding the top of the chassis at the top of the cabinet.
9. Remove 4 chassis bolts from the bottom of the cabinet.
10. Remove chassis.



MODEL 170P048 (Ch. KCS126A)

TRADE NAME	RCA Victor	MODELS	CHASSIS
		170P048, 170P049, 170P060, 170P061, 170P063, 170P064.....	KCS126A
		170P048U, 170P049U, 170P060U, 170P061U, 170P063U, 170P064U.....	KCS126B
MANUFACTURER	Radio Corporation of America, RCA Victor Tele. Div., Camden 8, N.J.		
TYPE SET	Television Receiver		
TUBES	VHF-Seventeen, UHF-Eighteen		
POWER SUPPLY	110-120 Volts AC, 60 Cycle		
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Inter-carrier)		
		RATING	190 Watts, 1.8 Amp. @ 117 Volts AC

## SERVICING IN THE FIELD

### SAFETY GLASS REMOVAL

See steps 1 thru 6 of "Chassis Removal Instructions".

### FUSE

Two fuse wires are used for filament protection. (For location, see M1 and M2 in photo "Chassis Bottom View".)

### FUSE DEVICE

A 6.5Ω fusible resistor (R72) is used for horizontal sweep circuit protection. (For location, see "Tube Placement Chart".)

### TUNER OSCILLATOR ADJUSTMENTS

To touch-up the VHF Oscillator, remove Channel Selector knob.

### AGC

The AGC may be varied by means of an AGC control. (For location, see "Tube Placement Chart".)

### FOCUS

The focus may be varied by connecting the lead from pin 4

of the picture tube to various voltage points. (For location, see photo "Cabinet-Rear View".)

### HORIZONTAL OSCILLATOR FIELD ADJUSTMENTS

Coarse adjustment of the Horizontal Hold is accomplished by the proper setting of the Horizontal Stabilizing slug. (For location, see "Tube Placement Chart".)

### WIDTH

The width may be varied by a Width coll. (For location, see "Tube Placement Chart".)

### HORIZONTAL DRIVE

The horizontal drive may be varied by a Horizontal Drive trimmer. (For location, see "Tube Placement Chart".)

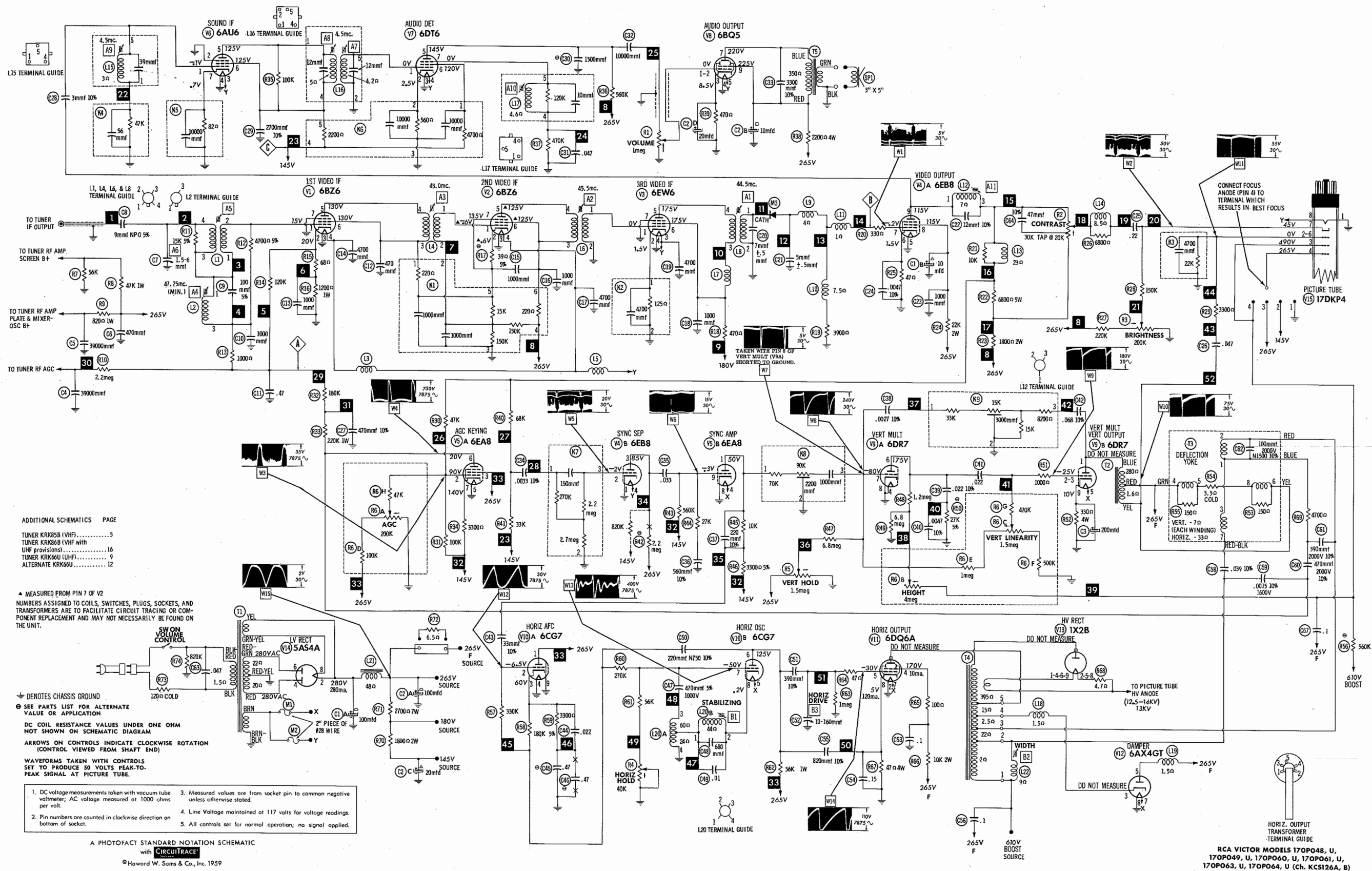
### CENTERING

Centering is accomplished by 2 magnetic rings, located behind the yoke, on the neck of the picture tube.

## 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 JA461

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1959 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U, 170P061, U, 170P063, U, 170P064, U (Ch. KCS126A, B)

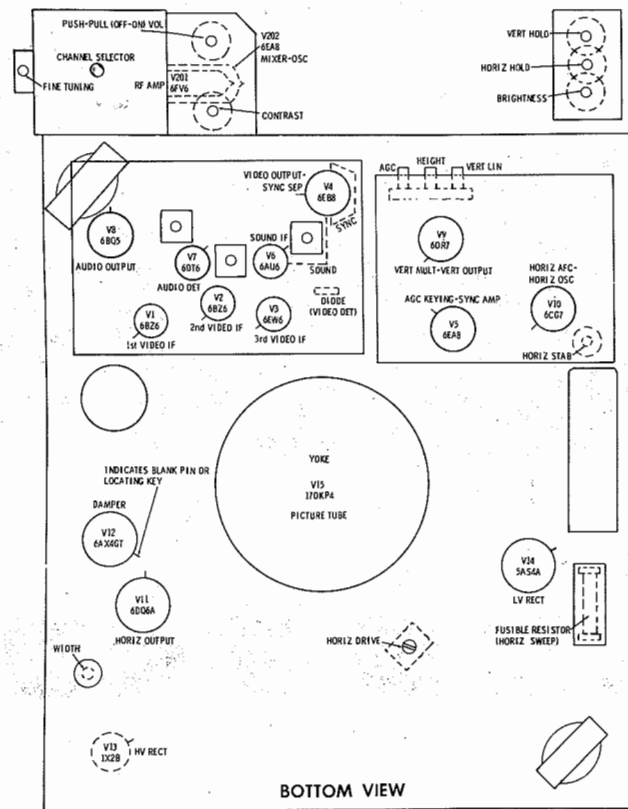
FOLDER 1

# RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6BZ6	120K	1200Ω	0Ω	.1Ω	220Ω	220Ω	0Ω		
V2	6BZ6	80K	90K	0Ω	.1Ω	220Ω	220Ω	80K		
V3	6EW6	.1Ω	125Ω	.1Ω	0Ω	3200Ω	3200Ω	0Ω		
V4	6EB8	0Ω	4.9meg	2.2meg	.1Ω	0Ω	47Ω	4100Ω	22K	7200Ω
V5	6EA8	17K	30K	0Ω	.1Ω	0Ω	550K	7800Ω	0Ω	565K
V6	6AU6	47K	0Ω	.1Ω	0Ω	6700Ω	6700Ω	82Ω		
V7	6DT6	4Ω	560Ω	0Ω	.1Ω	560K	9200Ω	470K		
V8	6BQ5	0Ω	0Ω	470Ω	0Ω	.1Ω	NC	2500Ω	NC	2200Ω
V9	6DR7	280Ω	1.3meg	1.3meg	0Ω	.1Ω	3meg	2.2meg	0Ω	330Ω
V10	6CG7	0Ω	680K	530K	0Ω	.1Ω	56K	65K	70Ω	0Ω
V11	6DQ6A	TP	0Ω	TP	10K	1meg	TP	.1Ω	47Ω	TOP CAP 15Ω
V12	6AX4GT	NC	NC	1meg	NC	8Ω	NC	.1Ω	0Ω	
V13	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE								TOP CAP 410Ω
V14	5AS4A	NC	9	NC	20Ω	NC	22Ω	NC	9	
V15	17DKP4	0Ω	22K	560K	0Ω	NC	TP	190K	.1Ω	
V201	6FV6	2.4meg	0Ω	0Ω	.1Ω	9000Ω	35K	56Ω		
V202	6EA8	3100Ω	150K	INF	0Ω	.1Ω	INF	0Ω	INF	INF

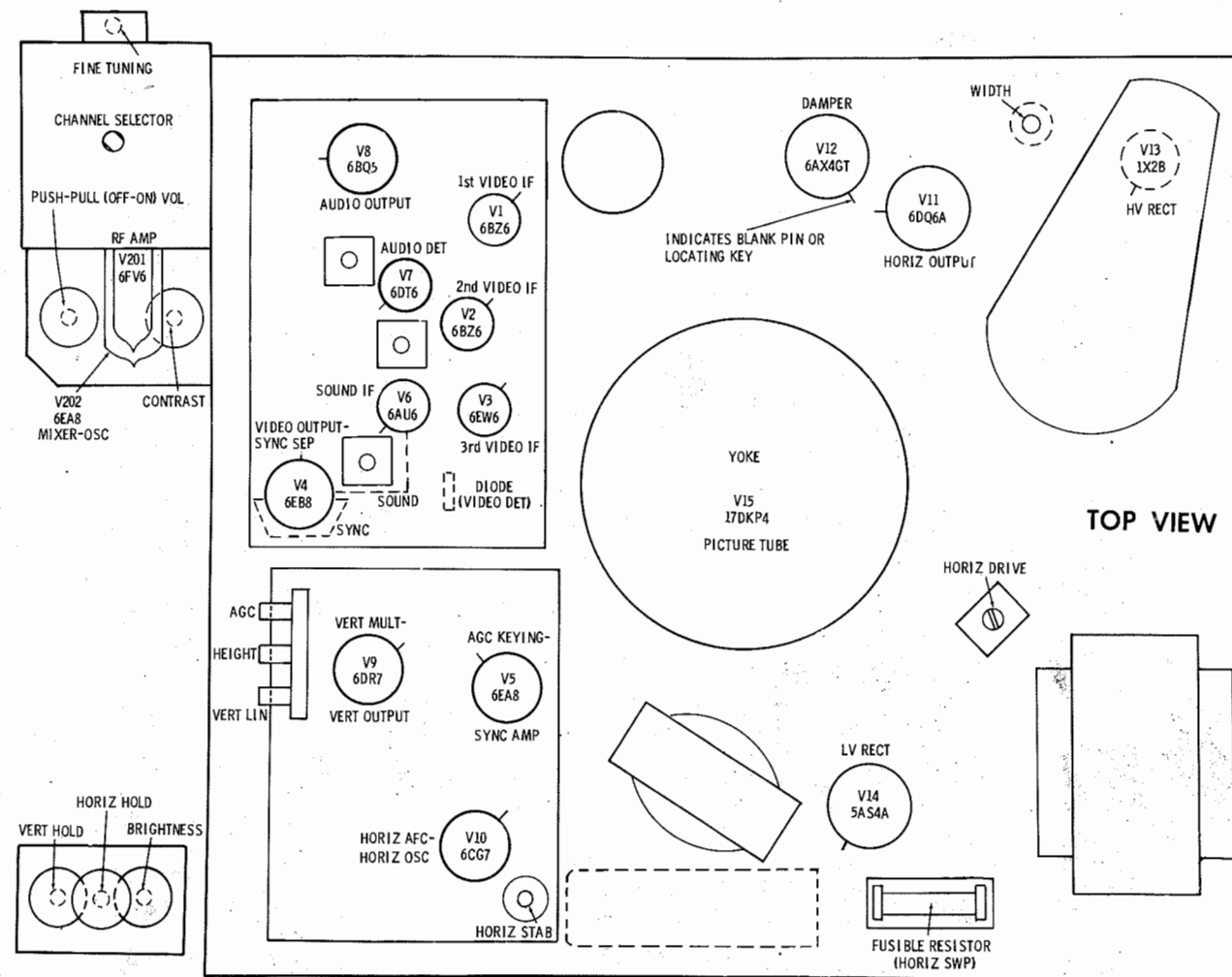
THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.  
 THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.  
 MEASURED FROM PIN 7 OF V2.  
 MEASURED FROM 265V SOURCE.  
 MEASURED FROM PIN 3 OF V12.

NC NO CONNECTION.  
 TP TIE POINT.



## TUBE PLACEMENT CHART

# TUBE PLACEMENT CHART



RCA VICTOR MODELS 170P048, U,  
 170P049, U, 170P060, U, 170P061, U,  
 170P063, U, 170P064, U (Ch. KC5126A, B)

# 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 V14, Fuse Wires (Fil.)

## SWEEP FAILURE

No raster, has sound Fusible Resistor (Horiz. Swp), V10, V11, V12, V13, V15,  
 No vertical deflection V9  
 Poor vert. linearity or foldover V9  
 Poor horiz. linearity or foldover V10, V11, V12  
 Narrow picture V4, V10, V11, V12  
 Vert. off freq. V9  
 Horiz. off freq. V10

## LOSS OF PICTURE OR SOUND

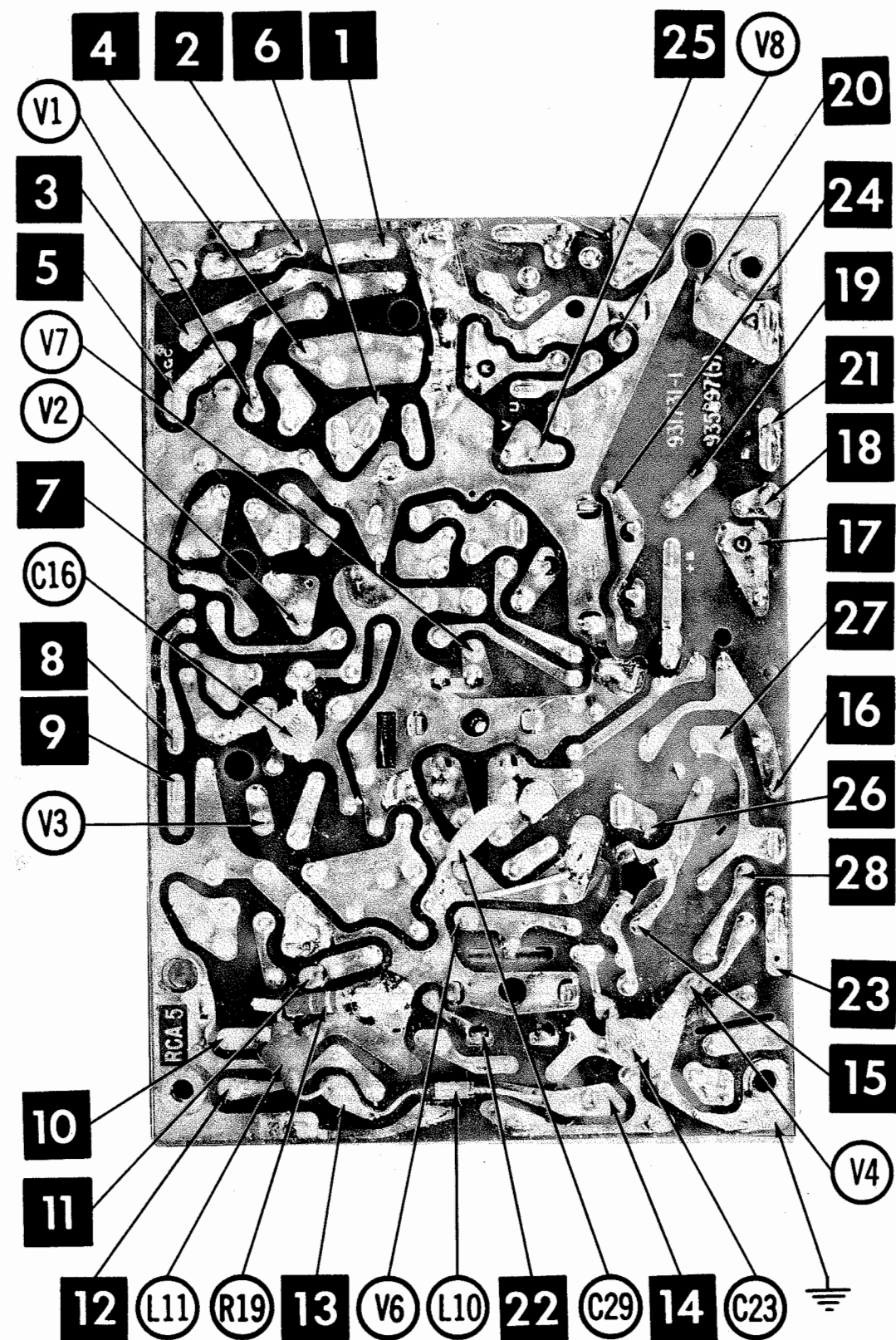
No pic, no sound, has raster V1, V2, V3, Diode (Video Det) V4, V15  
 No pic, no sound, has snow V201, V202, V1  
 No pic, has sound, has raster V4, V15  
 Has pic, no sound V6, V7, V8  
 Overloaded picture V5

## SYNC FAILURE

No vert. sync V9  
 No horiz. sync V10  
 No vert. or horiz. sync V4, V5



# CircuiTrace Numbers 1 thru 28

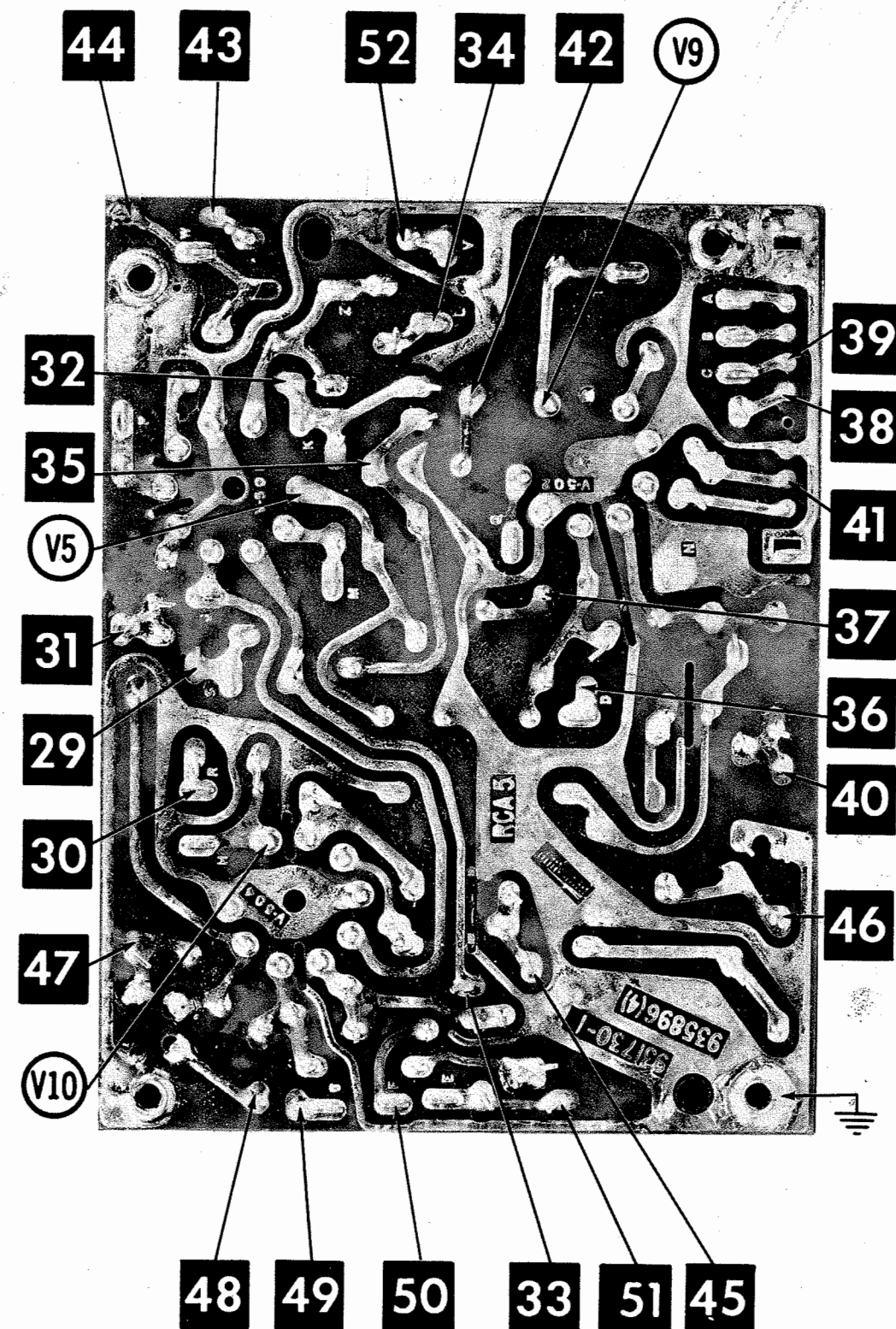


MAIN  
PRINTED BOARD

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

A Howard W. Sams **CIRCUITRACE** Photo

# CircuiTrace Numbers 29 thru 52



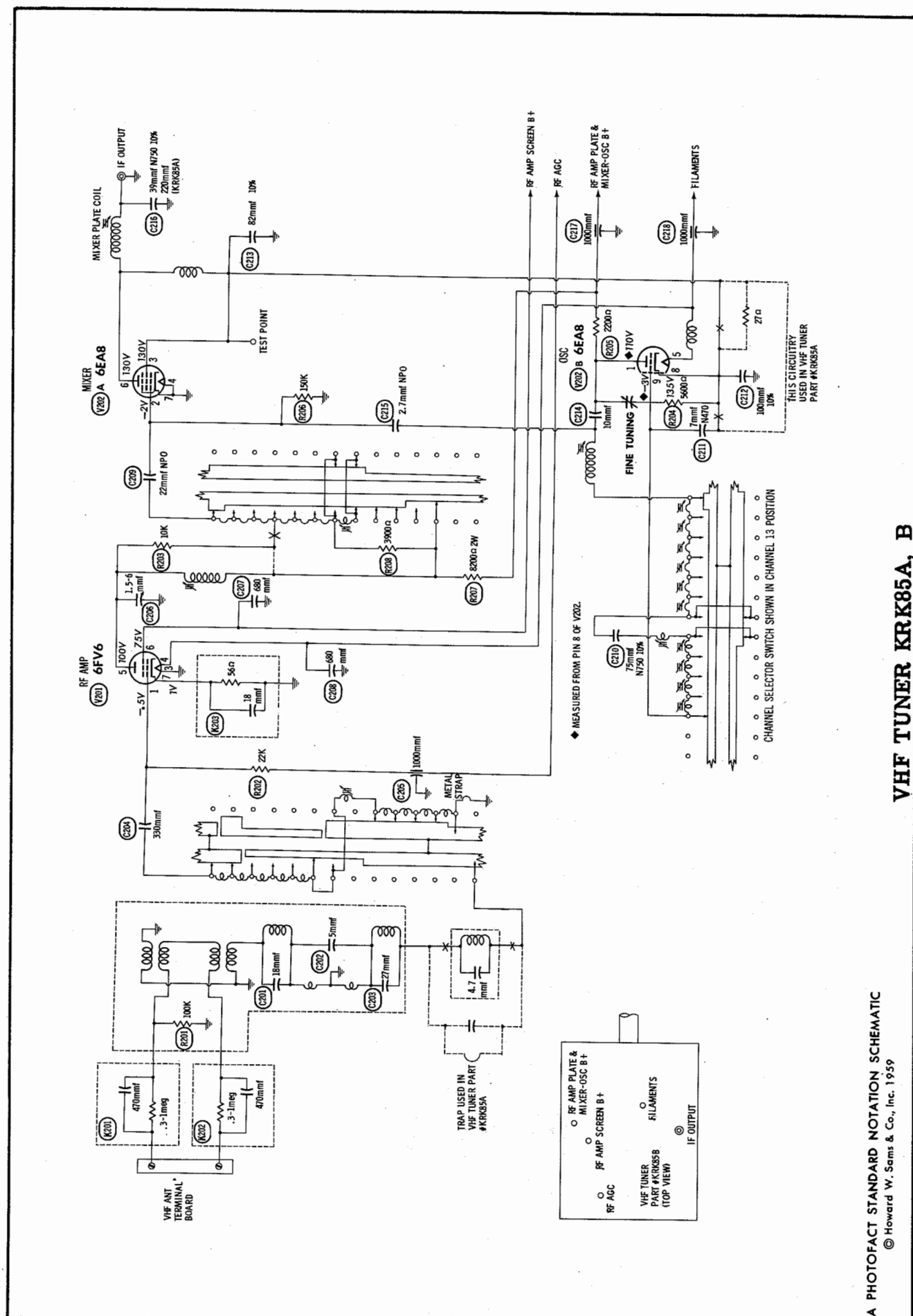
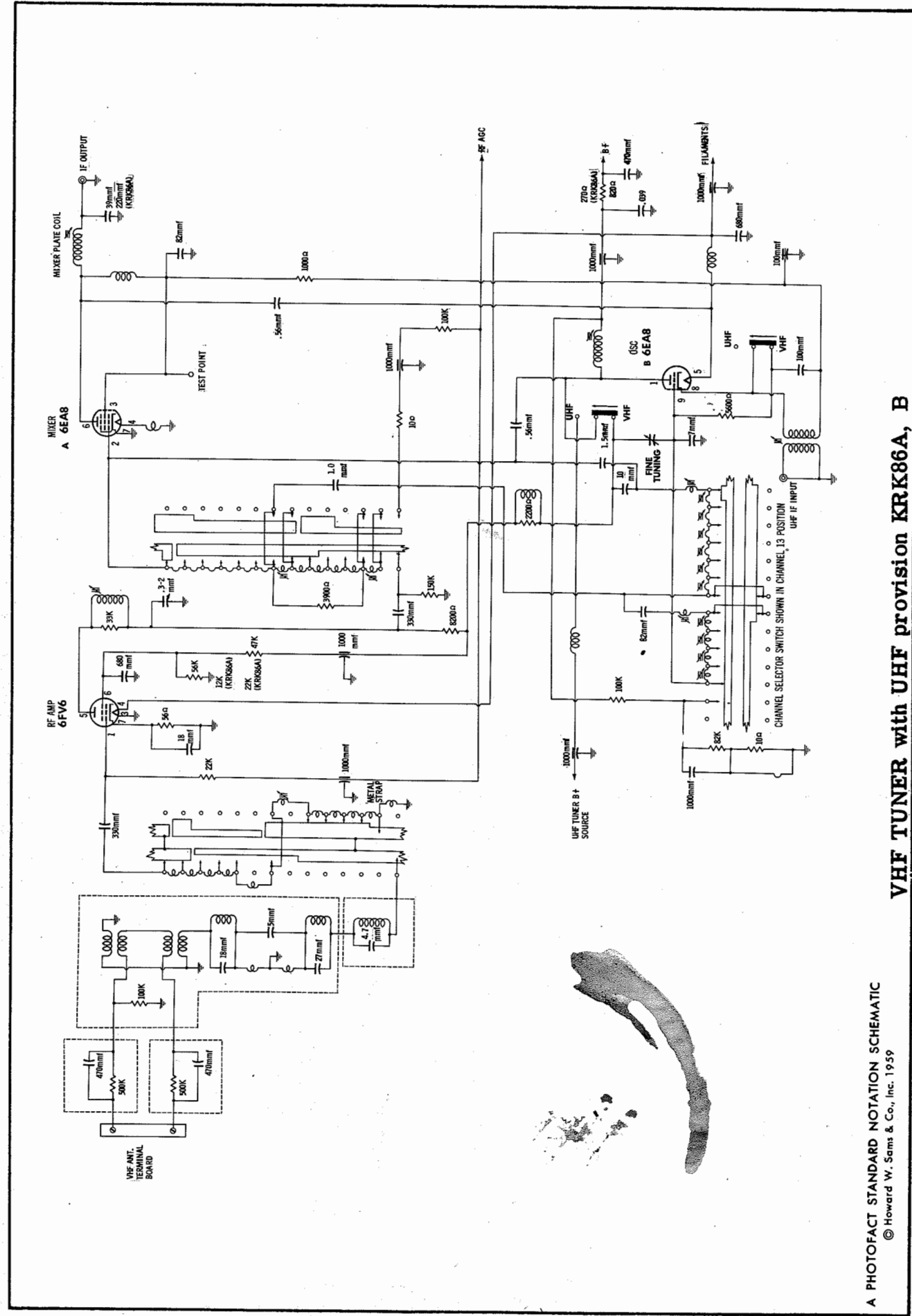
SWEEP  
PRINTED BOARD

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

A Howard W. Sams **CIRCUITRACE** Photo

RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U,  
170P061, U, 170P063, U, 170P064, U (Ch. KCS126A, B)

FOLDER 1



RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U,  
170P061, U, 170P063, U, 170P064, U (Ch. KCS126A, B)

B '58KRKR TUNER FHA

FOLDER 1

# TUNER KRK85B

## TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V201	RF Amp.	6FV6	
V202	Mixer-Osc.	6EA8	

## FIXED CAPACITORS

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

ITEM No.	RATING			REPLACEMENT DATA						NOTES
	CAP.	VOLT	TOL.	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C201	18				DI-18	DD-180	L10Q18	CNO-418	5GA-Q18	
C202	5				NPO-DI 5	DD-050	L10V5	ZT-555	5GA-V5	
C203	27				DI-27	DD-270	L10Q27	CNO-427	5GA-Q27	
C204	330				BPD-00033	DD-331	L10T33	B-333	5GA-T33	
C205	1000				EF-001	MFT-1000			503C-D1	
C206	1.5-8					829-6		CT-552		
C207	680				BPD-00068	DD-681	L10T68	B-368	5GA-T68	
C208	680				BPD-00068	DD-681	L10T68	B-368	5GA-T68	
C209	22		NPO		NPO-DI 22	DTZ-22	C10Q22C	CNO-422	5TCC-Q22	
C210	75		N750 10%		N750-DI 75	DTN-75	C10Q75U		5TCU-Q75S 10%*	
C211	7		N470							
C212	100		10%		ADM-15-101	DD-101	22A5T1	CNO-310	MS-31	
C213	82		10%		ADM-15-820	DD-820	22A5Q82	CNO-482	MS-482	
C214	10				SI 10	DD-100	L10Q1	UC-541	5GA-Q1	
C215	2.7		NPO						5TCCB-V27S	
C216	39		N750 10%			TCN-39	C10Q39U	CN7-439	5TCU-Q39S 10%*	
C217	1000				EF-001	MFT-1000			503C-D1	
C218	1000				EF-001	MFT-1000			503C-D1	

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

## RESISTORS

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

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R201	100K			
R202	22K			
R203	10K			
R204	5600Ω			

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R205	2200Ω			
R206	150K			
R207	8200Ω	2		
R208	3900Ω			

## COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	RCA Victor PART No.	REPLACEMENT DATA
K201	Antenna Isolation	470mmf, .3-1meg	104328	Centralab RC-47I Sprague ACI-1
K202	Antenna Isolation	470mmf, .3-1meg	140328	Centralab RC-47I Sprague ACI-1
K203	RF Cath. Bypass	18mmf, 56Ω		

## PRE-ALIGNMENT INSTRUCTIONS

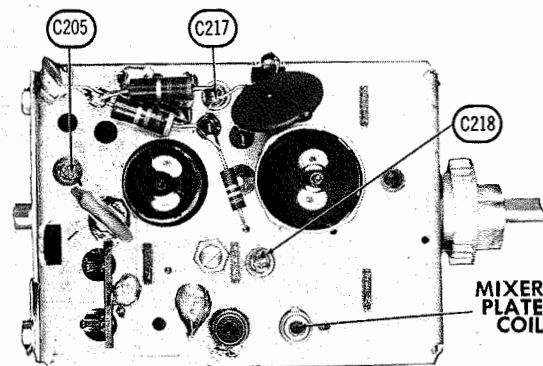
Suggested Alignment Tools: GENERAL CEMENT #8607, 9291  
WALSCO #2520, 2522, 2523, 2524, 2537

## OSCILLATOR ALIGNMENT

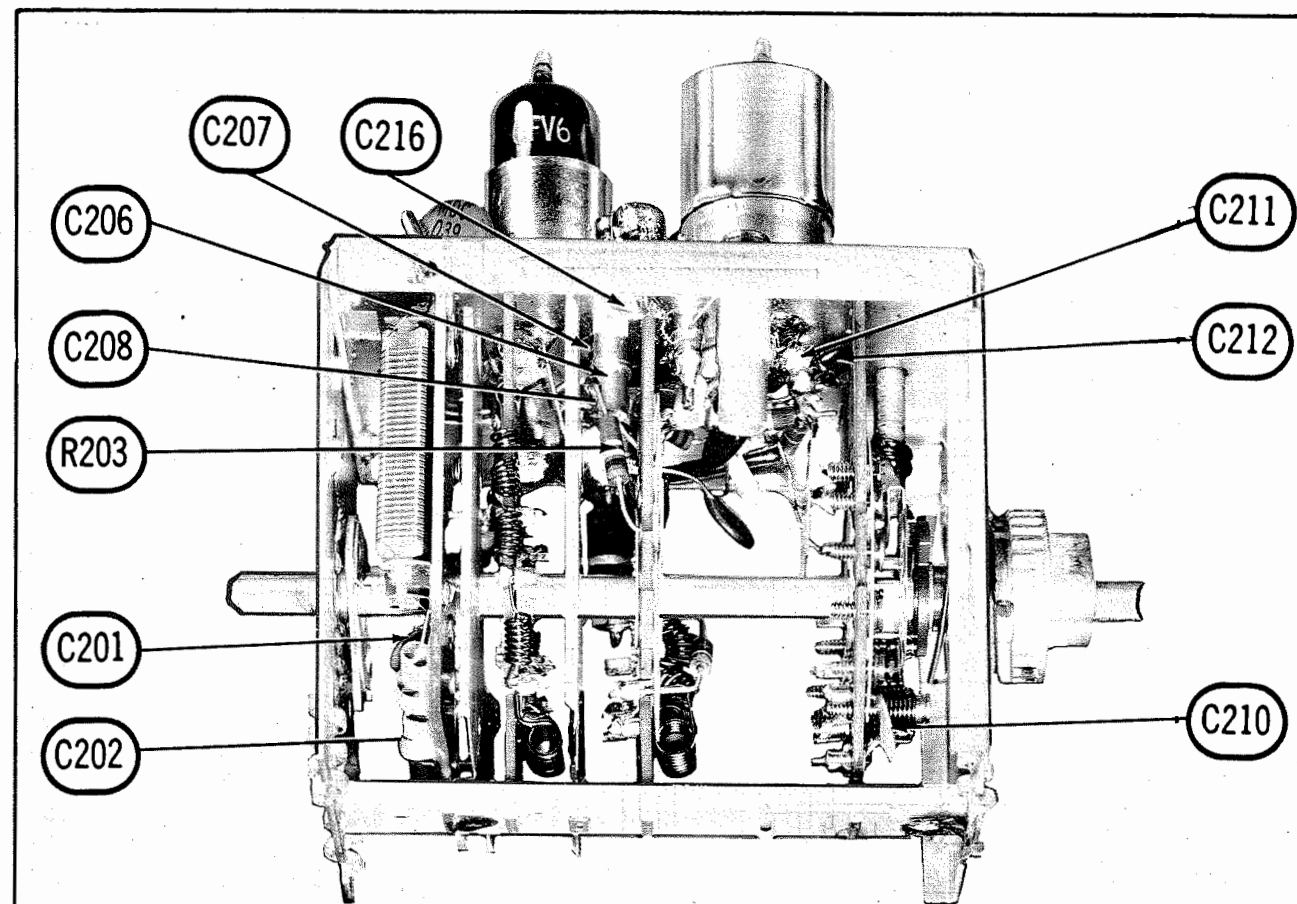
Set the Fine Tuning to the center of its range. Channel 13 slug is located on top of the tuner in front of the Oscillator tube. Channel 12 thru 2 adjustments are located on the front of the tuner in a circle around the shaft. The adjustments should be made in sequence from the highest to the lowest in the area. Channel 12 adjustment is located near top of tuner. Proceed in a counterclockwise direction adjusting for best picture and sound.

## RF AND MIXER ALIGNMENT

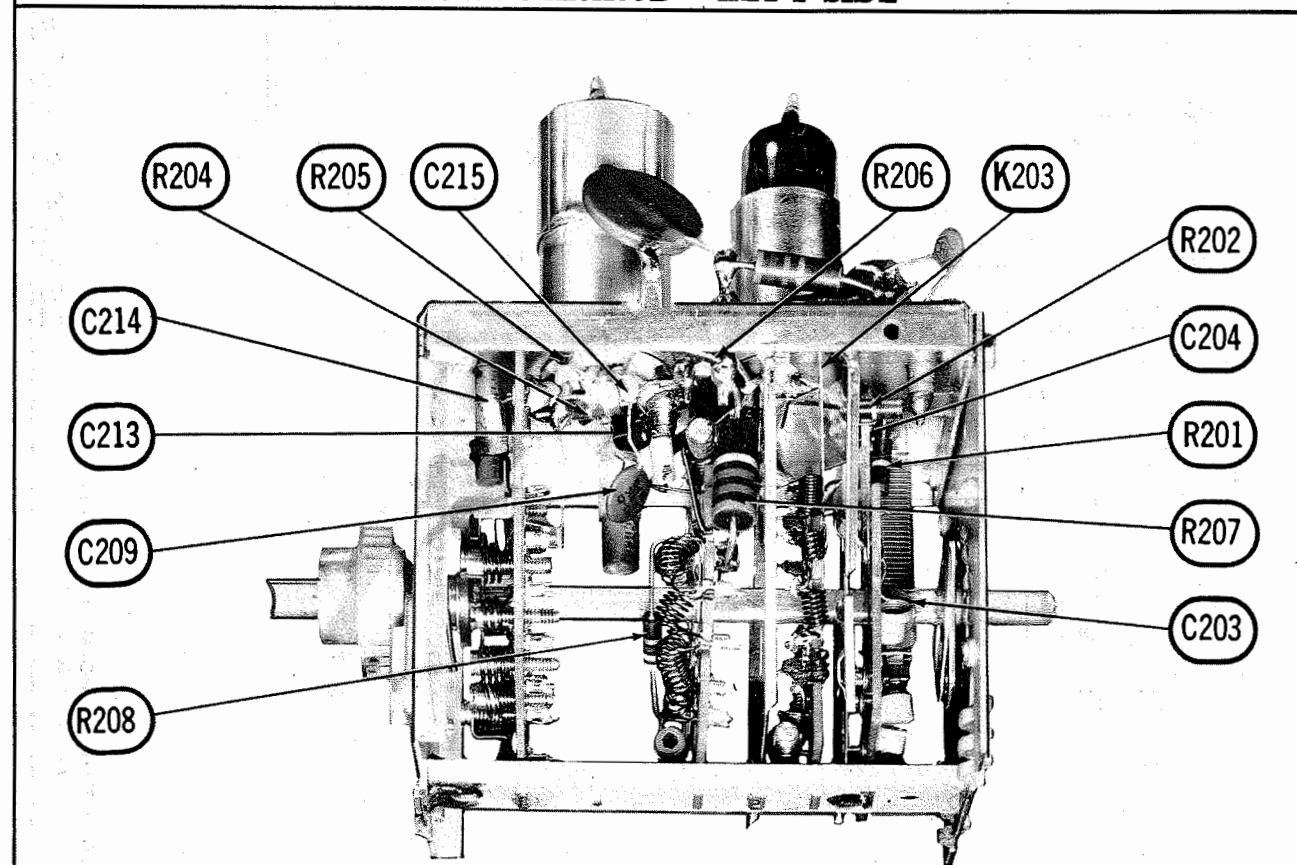
This portion of the tuner has been properly aligned at the factory and is very stable. Alignment of this portion should not be attempted in the field.



TOP VIEW



TUNER KRK85B - LEFT SIDE

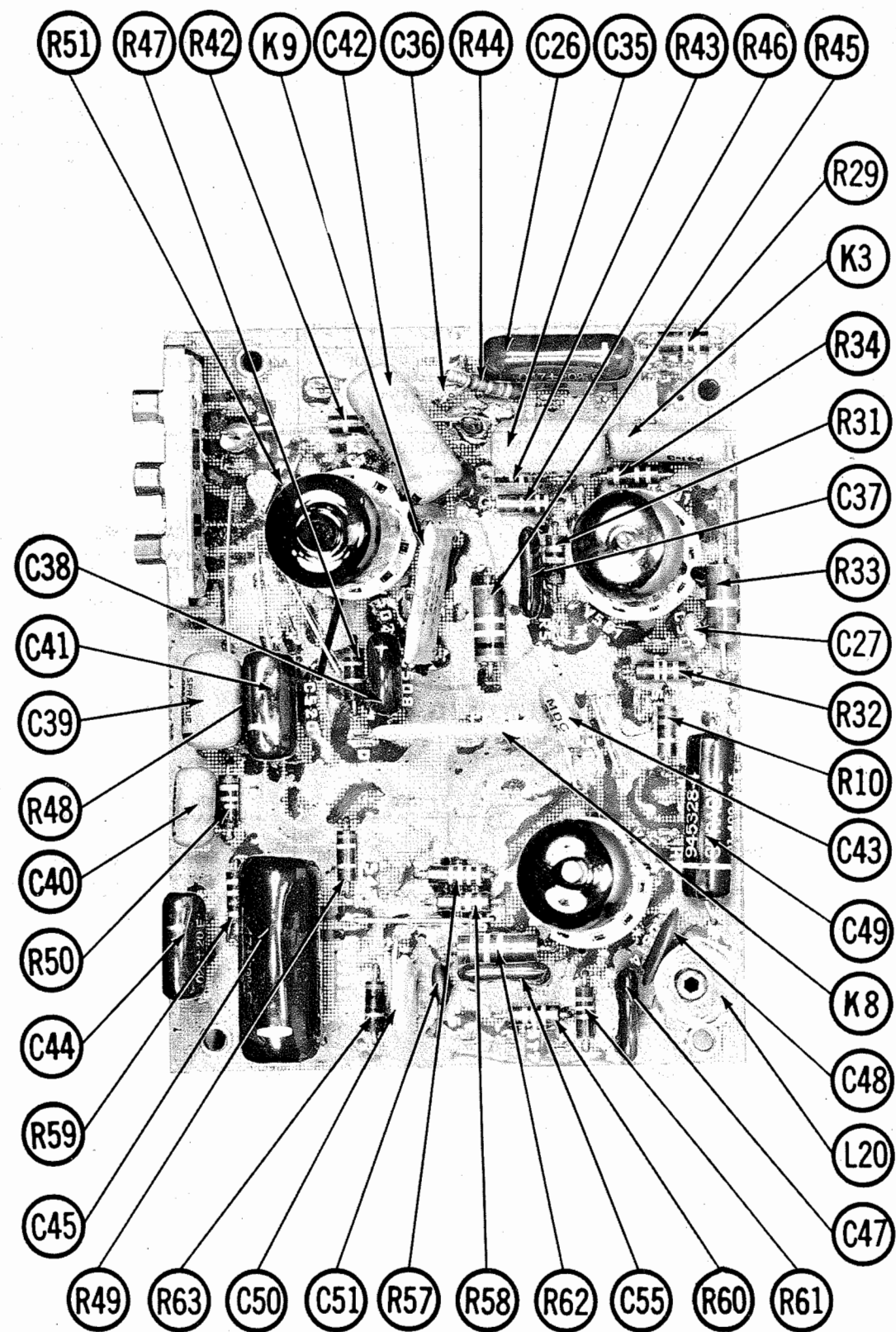


TUNER KRK85B - RIGHT SIDE

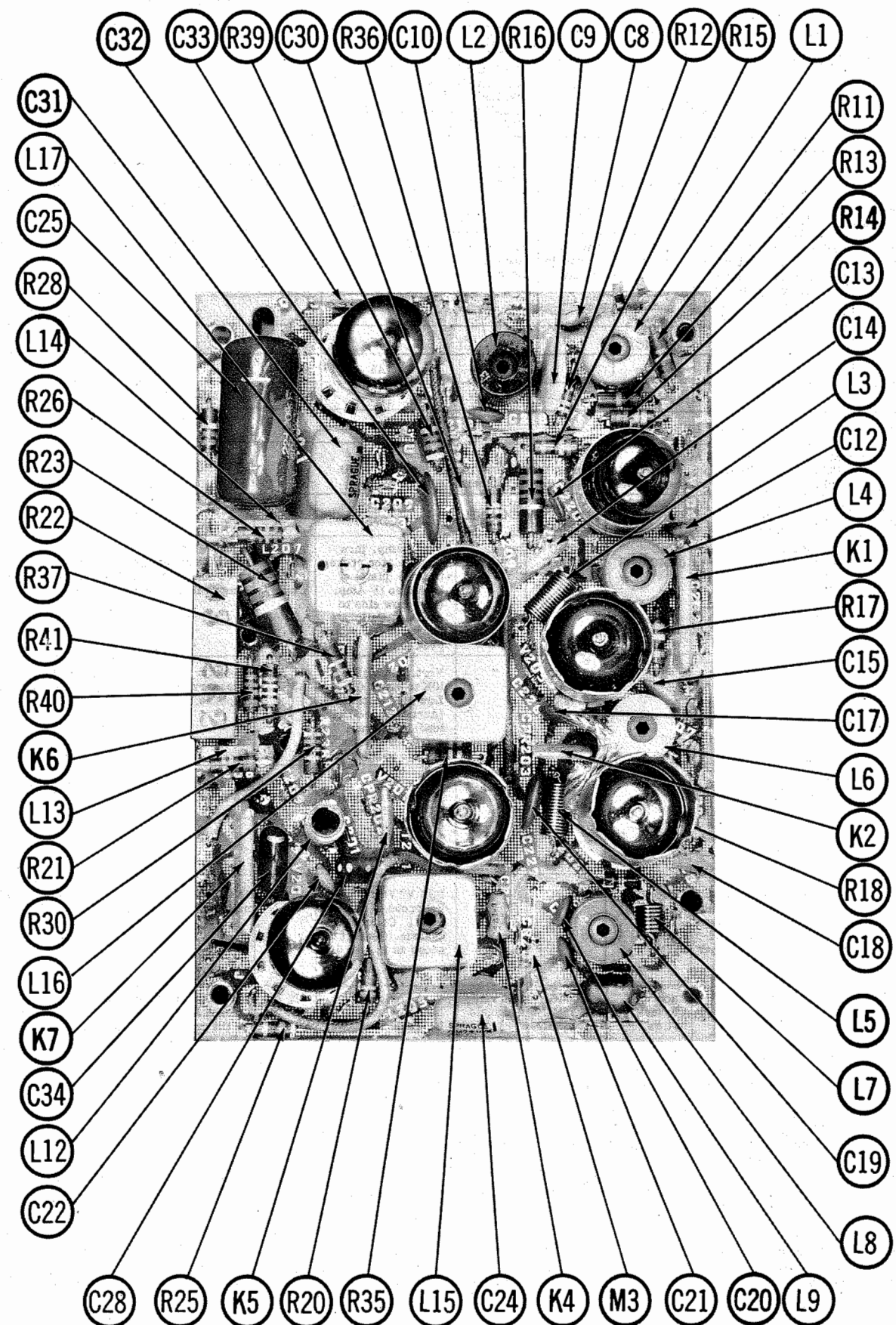
RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U, 170P061, U, 170P063, U, 170P064, U (Ch. KCS126A, B)

FOLDER 1





**SWEEP PRINTED BOARD**



**MAIN PRINTED BOARD**

# ALIGNMENT INSTRUCTIONS

## PRE-ALIGNMENT INSTRUCTIONS

Allow a 20 minute warm-up period for the receiver and test equipment.  
Disable the Horizontal Output circuit by connecting a 150Ω 10W resistor in series with the plate lead of the 6DQ6A (V12). Connect the negative lead of a 12.5 volts bias supply to pin 5 of V12. Connect positive to chassis.  
Suggested Alignment Tools: A1 thru A5, A7, A8, A9 ..... GENERAL CEMENT #8806, 8806L, 8282, 9295  
WALSCO #2526, 2543, 2544, 2545  
A8 ..... GENERAL CEMENT #5004, 5008, 5009  
WALSCO #2520  
A10, A11 ..... GENERAL CEMENT #8721, 8722  
WALSCO #2519

## VIDEO IF ALIGNMENT

Connect the negative lead of a 4 volt bias supply to point  $\diamond$ . Positive to chassis.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. 1500mmf Ceramic Capacitor	High side to Mixer Grid wafer contact thru access hole (adjacent to Mixer Grid wafer) located in left side of tuner shield. Low side to chassis.	44.5MC (Unmod)	Any non-interfering channel	DC probe to point $\diamond$ . Common to chassis. (Across Video Det. load)	A1	Adjust for maximum deflection. Adjust generator output for 3 volts on meter when finally peaked.
2. "	"	45.5MC	"	"	A2	"
3. "	"	43.0MC	"	"	A3	"
4. "	"	47.25MC	"	"	A4	Adjust for MINIMUM deflection.

## OVERALL VIDEO IF RESPONSE CHECK

Connect bias as under "Video IF Alignment".  
Connect a 180Ω resistor from pin 5 (plate) to pin 6 (screen) of the 1st Video IF Amplifier (V1).  
Couple signal generator loosely to sweep output cable to provide markers.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. 1500mmf Ceramic Capacitor	High side to Mixer Grid wafer contact thru access hole (adjacent to Mixer Grid wafer) located in left side of tuner shield. Low side to chassis.	45MC (10MC Swp)	42.5MC 45.75MC	4	Vert. Amp. thru demodulator probe to pin-5 (plate) of 1st Video IF Amp. (V1). Low side to chassis. Calibrate scope for 0.5 volts peak to peak.	A5, A6, A8	Adjust Mixer Plate Coil and A5 for maximum gain, using A8 to obtain curve shape with markers as shown in Fig. 1. Remove 180Ω resistor from V1.
6. "	"	"	42.5MC 45.0MC 45.75MC	"	Vert. Amp. thru 10K to point $\diamond$ . Low side to chassis. (Across Video Det. load). Calibrate scope for 5 volts peak to peak.	A1, A2, A3	Check for response similar to Fig. 2. If necessary, retouch A1, A2 and A3 for desired response.
7. Fig. 3	High side thru pad (Fig. 3) to Mixer Grid wafer contact thru access hole (adjacent to Mixer Grid wafer) located in left side of tuner shield. Low side to chassis.	Not used	45.75MC	"	USE VTVM DC probe to point $\diamond$ . Common to chassis.		Adjust generator output to provide exactly 1.5 volts on VTVM.
8. 1500mmf Ceramic Capacitor	Remove pad. High side to Mixer Grid wafer contact thru access hole (adjacent to Mixer Grid wafer) located in left side of tuner shield. Low side to chassis.	45MC (10MC Swp)	41.25MC		USE VTVM. DC probe to point $\diamond$ . Common to chassis. Connect scope as in step 6.	A1, A3	Retouch for 1.0 to 1.5 volts on VTVM while maintaining response similar to Fig. 2.
9. Fig. 6	Across antenna terminals thru matching network (Fig. 4).	Each VHF Channel in turn	42.5MC 45.75MC 47.25MC	All VHF Channels	Vert. Amp. thru 10K to point $\diamond$ . Low side to chassis.	A1, A2	Check for response similar to Fig. 2. Retouch A1 and A2 SLIGHTLY to correct for tilt or other condition that is approximately the same on all channels.

## SOUND IF ALIGNMENT

Connect the negative lead of a 10 volt bias supply to point  $\diamond$ . Positive to chassis.  
Set Contrast fully clockwise.  
Set VTVM for negative voltage readings.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .001mf	High side to point $\diamond$ . Low side to chassis.	4.5MC (Unmod)	Any non-interfering channel	DC probe thru diode probe (Fig. 5) to pin 7 (grid 3) of 6DT6 (V7). Common to chassis.	A7, A8, A9	Adjust for maximum negative DC on meter. Attenuate generator for a reading between 1.0 and 1.5 volts on meter when finally peaked. Peak A7 and A8 with maximum core separation. Adjust A9 for maximum deflection.
11. Remove VTVM and diode probe. Connect scope across Volume control. Turn off signal generator and tune in the strongest signal in the area adjusting Volume control for normal volume. Preset coil slug (A10) flush with top of coil form. While observing scope and listening to sound output adjust A10 clockwise to a peak. Continue turning clockwise to a second louder peak and adjust for maximum on this second peak.						

CONTINUED PAGE 13

# ALIGNMENT INSTRUCTIONS (cont)

## ALTERNATE SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR

Connect the negative lead of a 10 volt bias supply to point  $\diamond$ . Positive to chassis.  
Set Contrast fully clockwise.  
Set VTVM for negative voltage readings.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .001mf	High side to point $\diamond$ . Low side to chassis.	4.5MC (400v FM Mod. 15KC Swp)	Any non-interfering channel	DC probe thru diode probe (Fig. 5) to pin 7 (grid 3) of 6DT6 (V7). Common to chassis.	A7, A8, A9	Adjust for maximum negative DC on meter. Attenuate generator output for a reading between 1.0 and 1.5 volts on meter when finally peaked. Peak A7 and A8 with maximum core separation. Adjust A9 for maximum.
11. "	"	"	"	USE SCOPE Connect across speaker voice coil	A10	Adjust for maximum 400v indication on scope. Adjust Volume control for 0.7 volts peak to peak on scope when peaked.
12. "	"	"	"	"		Decrease input signal to MINIMUM usable level and retouch A7, A8 and A9 for symmetrical breakout similar to Fig. 8.

## 4.5MC TRAP ALIGNMENT

Set Contrast fully clockwise.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
13. .01mf	High side to point $\diamond$ . Low side to chassis.	4.5MC (400v 30% AM)	Any non-interfering channel	Vert. Amp. thru demodulator probe to pin 7 (cathode) of picture tube. Low side to chassis.	A11	Adjust for MINIMUM 400v indication on scope.

TUNER ALIGNMENT INSTRUCTIONS LOCATED ON PAGE 6

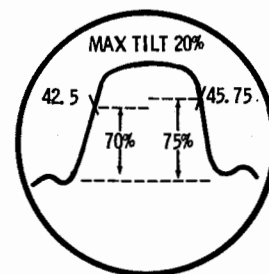


FIG. 1

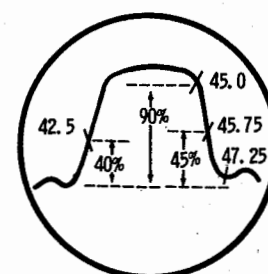


FIG. 2

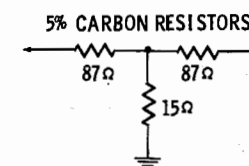
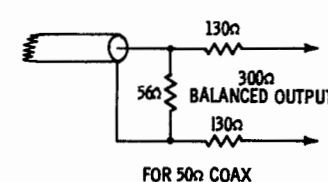
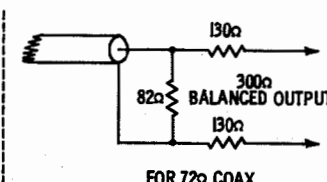


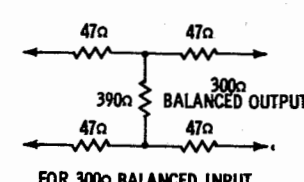
FIG. 3



FOR 50Ω COAX



FOR 72Ω COAX



FOR 300Ω BALANCED INPUT

FIG. 4

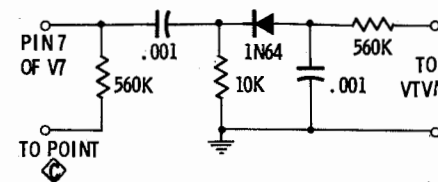


FIG. 5

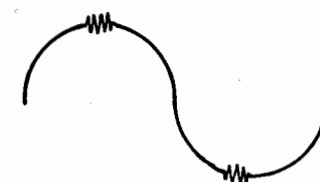


FIG. 6

RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U, 170P061, U, 170P063, U, 170P064, U (Ch. KCS126A, B)

FOLDER 1



# PARTS LIST AND DESCRIPTIONS (Continued)

## MISCELLANEOUS

ITEM No.	PART NAME	RCA Victor PART No.	NOTES
M4	Tuner	KRK85B	VHF Ch. KCSI28A
	Tuner	KRK86B	VHF with UHF provisions Ch. KCSI28B
	Printed Board	KRK86U	UHF, Ch. KCSI28B
	Printed Board	107208	Main (Less Tubes)
	Printed Board	107209	AGC, Sync, Sweep (Less Tubes)

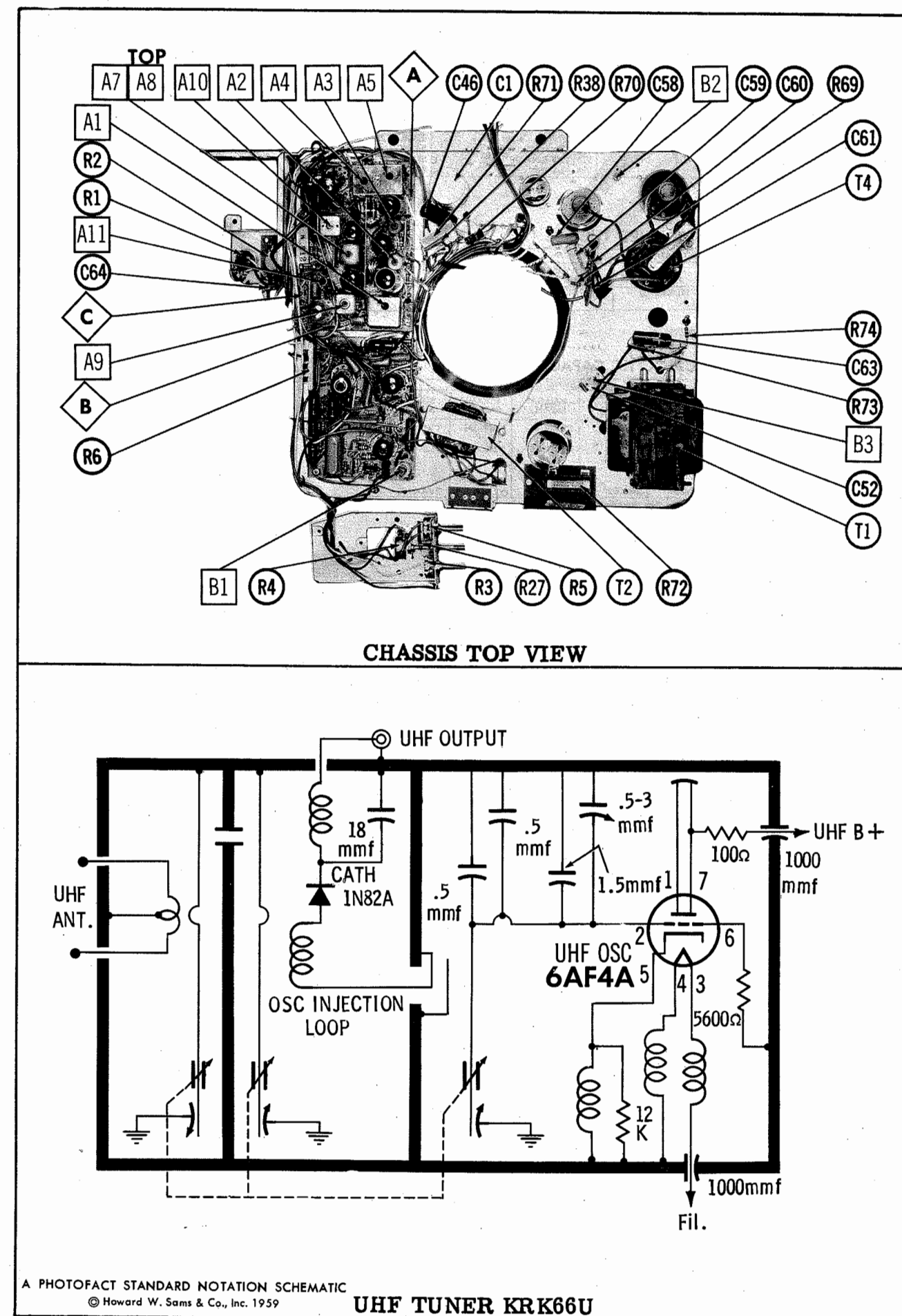
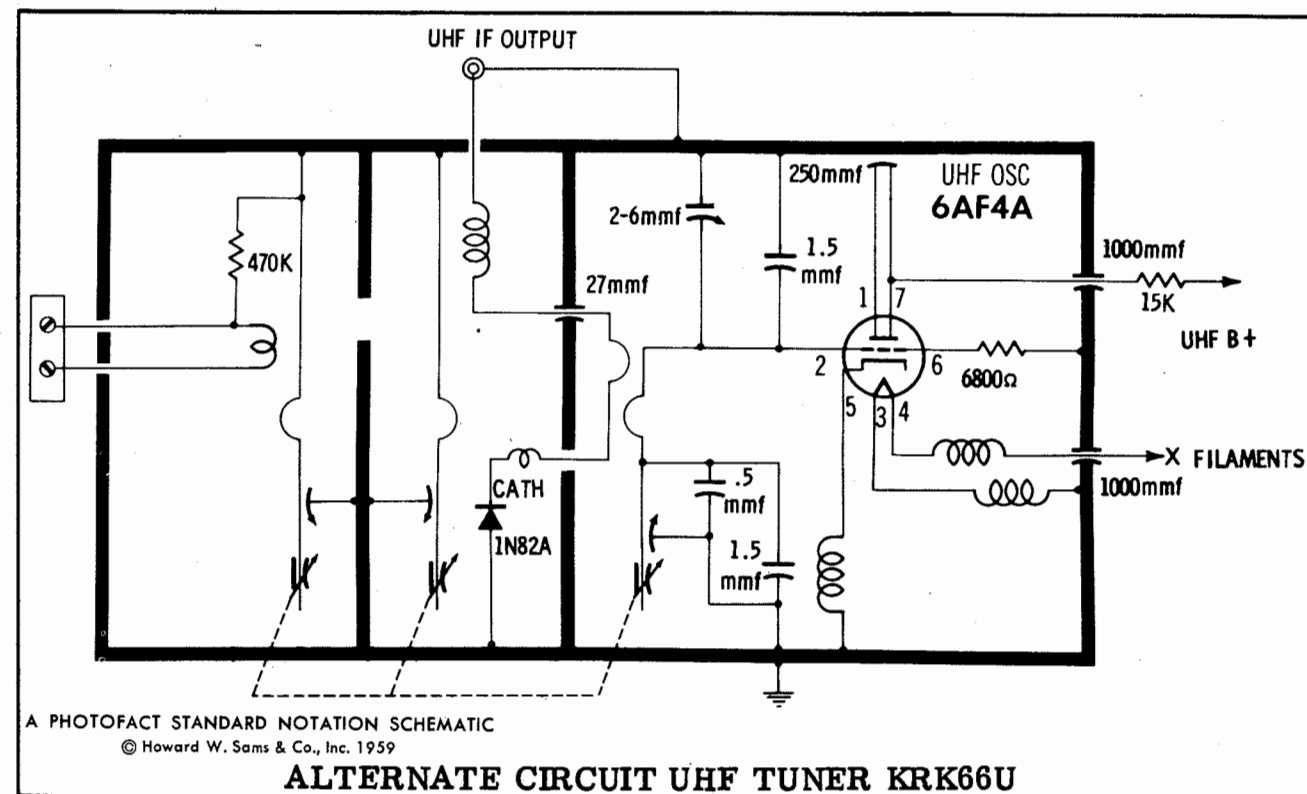
## CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Safety Glass	107253	Model 170P048
Mask	107246	Model 170P080
Mask	107244	Model 170P080U
Mask	107245	Model 170P080U
Mask	107247	Model 170P048U
Mask	107238	Model 170P081U
Mask	107239	Model 170P081U
Mask	107242	Model 170P083
Mask	107243	Model 170P083U
Mask	107240	Model 170P084
Mask	107241	Model 170P084U
Mask	107248	Model 170P049
Mask	107249	Model 170P049U
Knob	107270	Channel Selector, Models 170P060, 1, 3, 4, 170P060U, 1U, 3U, 4U
Knob	107269	Channel Selector, Models 170P048, 9, 170P048U, 9U
Knob	107283	Fine Tuning
Knob	107284	Volume, Contrast
Knob	107285	Brightness, Horiz. Hold, Vert. Hold
Dial	107287	Channel Indicator, Models 170P060, 1, 3, 4, 170P060U, 1U, 3U, 4U
Dial	107272	Channel Indicator, Models 170P048, 9, 170P048U, 9U
Dial	107286	UHF Channel Indicator
Cabinet	Z4551	Models 170P064, U
Cabinet	Z4548	Models 170P048, U
Cabinet	Z4553	Models 170P080, U
Cabinet	Z4549	Models 170P049, U
Cabinet	Z4552	Models 170P063, U
Cabinet	Z4550	Models 170P081, U
Handle	107285	Models 170P048, 9, 170P048U, 9U
Handle	107255	Models 170P060, 1, 3, 4, 170P060U, 1U, 3U, 4U
Antenna	107260	Telescoping, VHF
Antenna	107261	Ring, UHF

## WIRING DATA

High Voltage Lead .....	Use Belden No. 8889
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 Ten Colors
	8524 (Stranded) Available in Ten Colors
Power Cord (Interlock Type) .....	Use Belden No. 8874
300Ω Tuner Input Lead .....	Use Belden No. 8225
300Ω Antenna Lead-in .....	Use Belden No. 8230 or 8275
Antenna Rotor Cable .....	Use Belden No. 8484 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor



RCA VICTOR MODELS 170P048, U, 170P049, U, 170P060, U, 170P061, U, 170P063, U, 170P064, U (Ch. KCSI28A, B)

## TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	1st Video IF Amp.	6BZ6		V8	Audio Output	6BQ5	
V2	2nd Video IF Amp.	6BZ6		V9	Vert. Mult. - Vert. Output	6DR7	
V3	3rd Video IF Amp.	6EW6		V10	Horiz. AFC-Horiz. Osc.	6CG7	
V4	Video Output-Sync Sep.	6EB8		V11	Horiz. Output	6DQ6A	
V5	AGC Keying-Sync Amp.	6EA8		V12	Damper	6AX4GT	
V6	Sound IF Amp.	6AU6		V13	HV Rect.	1X2B	
V7	Audio Det.	6DT6		V14	LV Rect.	5AS4A	

## PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	RCA Victor PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V15	17DKP4		17DKP4 ①	17DKP4 ②	① Aluminized ② Silver Screen "85"

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	RCA Victor PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	NOTES
CLA	100	400	107190	AFH3-122-30	C0894	FP230. 6	TMT-186	TVL-3685	
B	10	350							
C2A	100	400	102411	AFH4-103-40	D0805	FP421. 3	TMQ-196	TVLS-4666. 2*	
B	10	400							
C	20	350							
D	20	50							
C3	200	25	107298	PRS1530	BR2502	WS342		TVA-1480	

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

## FIXED CAPACITORS

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

ITEM No.	RATING			REPLACEMENT DATA					NOTES	
	CAP.	VOLT	TOL	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.		SPRAGUE PART No.
C4	39000			105479		DD-403	CUB684	GEM-614	5HK-840	
C5	39000			105479		DD-403	CUB684	GEM-614	5HK-840	
C6	470			77283	BPD-00047	DD-471	BYA10T47	B-347	5GA-T47	
C7	1.5-6			107177		829-6				
C8	9				NPO-DI 10		C10V8C		10TCC-Q10	
C9	100				DI-100	DTZ-100	C10TIC	CNO-310	10TCC-T10	
C10	1000			105300	BPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C11	.47	200		77252	P288N-47		CUB2P47	GEM-2047	2TM-P47	
C12	470			78622	BPD-00047	DD-471	BYA10T47	B-347	5GA-T47	
C13	1000			77252	BPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C14	4700			73473	BPD-0047	DD-472	BYA10D47M	B-247	5HK-D47	
C15	1000			102234A	BPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C16	1000			102234A	EPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C17	4700			73473	BPD-0047	DD-472	BYA10D47M	B-247	5HK-D47	
C18	1000			102234A	BPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C19	4700			73473	BPD-0047	DD-472	BYA10D47M	B-247	5HK-D47	
C20	7		±.5mmf	104177	NPO-DI 6.8	DTZ-6R8	C10V7C	CNO-568	10TCC-V68	
C21	5		±.5mmf	10478	NPO-DI 5	DTZ-4R8	C10V5C	CNO-547	10TCC-V50	
C22	12		10%	103245		TCZ-12	C10Q2C	CNO-412	10TS-Q12	
C23	1000			102234A	BPD-001	DD-102	BYA10DIM	B-210	5HK-D10	
C24	.0047	600	10%		V84C6D4710%		PM6D47	GTM-6247	6TM-D47	
C25	.22	600			P688N-22		CUB6P22	GEM-6022	6TM-P22	
C26	.047	400			P488N-047	DF-503	GEM4S47	GEM-4147	4TM-447	
C27	470		10%	102230	DI-470	DD-471		J1L-347	10TS-T47	
C28	3		10%	104204	NPO-SI 3	TCZ-3R3	C10V3C	CNO-533	10TS-V33	
C29	2700		10%	104131	DI-8700		PM6D33	GTM-613	10TS-D27	
C30	1500				BPD-0015	DF-152	BYA10D15	B-215	5HK-15	
C31	.047	200			P288N-47	DD-503	CUB2S47	GEM-4147	2TM-S47	
C32	10000			73960	BPD-01	DD-103	BYA10SI	B-110	5HK-SI	
C33	3300		10%	104208	DI-3300		PM6D33	GTM-6233	10TS-D33	
C34	.0033	600	10%		V84C6D3310%		PM6D33	GTM-6233	6TM-D33	
C35	.033	400			P488N-033	DF-303	CUB4S33	GEM-4133	4TM-S33	
C36	560		10%		DI-560	DD-561		J1L-356	10TS-T56	
C37	220		10%	104144	1468-00022K	D6-221	22R5T22	J1L-322	MS-322	
C38	.0027	800	10%				PM6D3		6TM-D27	
C39	.022	600	10%		V84C-6S2210%		PM6S22	GTM-6122	6TM-S22	
C40	.0047	600	10%		V84C-6D4710%		PM6D47	GTM-6247	6TM-D47	
C41	.022	600			P688N-022		CUB6S22	GEM-6122	6TM-S22	
C42	.068	400	10%		V84C4S6810%		PM4S68	GTM-4168	4TM-S68	
C43	33		10%	105348	DI-33	DTZ-33	LIQ33	CNO-433	10TS-Q33	
C44	.022	200			P288N-022		CUB4S22	GEM-4122	4TM-S22	
C45	.47	200			P288N-47		CUB2P47	GEM-2047	2TM-P47	
C46	.47	200			P288N-47		CUB2P47	GEM-2047	2TM-P47	
C47	470	1000	5%	105672	1469-00047J		22R5T47		5GA-T47S 5% *	
C48	680			105518	BPD-00068	DD-681	BYA10T68	B-368	5GA-T68	
C49	.01	400			P488N-01	D6-103	CUB4SI	GEM-411	4TM-SI	
C50	220		N750 10%	105245	N750-DI 220	DTN-220	C10T22U	CNT-422	10TCU-T22	
C51	390		10%	105675	DI-390	DD-391	L10T39		10TS-T39	
C52	10-160			102412						
C53	.1	600			P688N-1	DF-104	CUB6P1	GEM-601	6TM-P1	
C54	.15	200			P288N-15		CUB2P15	GEM-2015	2TM-P15	
C55	820		10%	106800	1468-0008K	DD-821	IR5T82	J1L-382	MS-382	
C56	.1	600			P688N-1	DF-104	CUB6P1	GEM-601	6TM-P1	
C57	.1	400			P488N-1	DF-104	CUB4P1	GEM-401	4TM-P1	
C58	.039	1600	10%		P84CM039		PM684	GTM-414	5BF-S39	
C59	.0015	1600	10%						MB-D15 10%	
C60	470	2000	10%	104383					30GA-T47S 10% *	
C61	390	2000	10%	104091					30GA-T39S 10% *	
C62	100	2000	N1500 10%	105418						
C63	.047	600			P688N-047	DF-503	CUB6S47	GEM-6147	6TM-S47	

① Some versions may use 1000mmf in this application (Part #102234A).

② Some versions may use a single .33mfd @ 200V to replace C45 and C46.

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

## PARTS LIST AND DESCRIPTIONS

### CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESIST- ANCE	WATTS	RCA Victor PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1A	1meg	1/2	107212					Volume Push-Pull Off-On Contrast, Tap @ 20K Brightness
B	Switch							
R2	30K	1/2	107216					
R3A	200K	1/2	107214	AB-46	A47-200K-S	Q11-129	U43	Horiz. Hold Vert. Hold
B	Shaft			AK-8	RS-3/16	NQ	DS-37	
R4	40K	1/2	107215					
R5A	1.5meg	1/2	107213	AB-742	A47-1.5meg-S	Q11-138	U155	AGC Height Vert. Lin. AGC B+ Coupling Vert. Lin. Coupling Vert. Lin. Limiter Vert. Output Grid Coupling AGC Grid Coupling
B	Shaft			AK-8	RS-3/16	NQ	DS-37	
R6A	200K	1/4	107280					
B	4meg	1/4						
C	1.5meg	1/4						
D	100K	1/4						
E	1meg	1/4						
F	500K	1/4						
G	470K	1/4						
H	47K	1/4						

### RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA	NOTES
OHMS	WATT	RCA Victor PART No.	
R7	56K		
R8	47K		
R9	820Ω		
R10	2.2meg		
R11	15K 5%		
R12	4700Ω 5%		
R13	1000Ω		
R14	120K		
R15	68Ω		
R16	1200Ω		
R17	39Ω 5%		
R18	470Ω		
R19	3900Ω		
R20	330Ω		
R21	10K		
R22	6800Ω		
R23	1800Ω		
R24	22K		
R25	47Ω		
R26	6800Ω		
R27	220K		
R28	150K		
R29	3300Ω		
R30	47K		
R31	100K		
R32	180K		
R33	220K		
R34	3300Ω		
R35	100K		
R36	560K		
R37	470K		
R38	2200Ω		
R39	470Ω		
R40	68K		
R41	33K		
R42	2.2meg		
R43	560K		
R44	27K		
R45	10K		
R46	3300Ω 5%		
R47	6.8meg		
R48	1.2meg		
R49	6.8meg		
R50	27K 5%		
R51	1000Ω		
R52	330Ω		
R53	150Ω		
R54	3.5Ω Cold		
R55	150Ω		
R56	560K		
R57	330K		
R58	180K 5%		
R59	3300Ω		
R60	270K		
R61	56K		
R62	56K		
R63	1meg		
R64	47Ω		
R65	100Ω		
R66	10K		
R67	47Ω		
R68	4.7Ω		
R69	4700Ω		
R70	1800Ω		
R71	2700Ω		
R72	6.5Ω		
R73	120Ω Cold		
R74	820K		

Note 1. Not used in some versions.

Note 2. Some versions may use 22K 5% in this application.

Note 3. Some versions may use 820K in this application.

Note 4. Some versions may use 33Ω in this application.

### COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	RCA Victor PART No.	REPLACEMENT DATA
K1	Video IF Decoupling	1000mmf, 1000mmf, 15K, 150K, 150K, 220Ω, 220Ω	107277	
K2	Video IF Cathode Bypass	4700mmf, 125Ω	107279	
K3	Vert. Blanking	4700mmf, 22K	107283	
K4	Sound IF Grid	56mmf, 47K	104329	
K5	Sound IF Cathode	10000mmf, 82Ω	107278	
K6	Sound IF Decoupling	10000mmf, 10000mmf, 2200Ω, 4700Ω, 560Ω	107276	
K7	Sync Sep. Grid Coupling	150mmf, 270K, 2.2meg, 2.7meg	107290	
K8	Vert. Integrator	1000mmf, 2200mmf, 70K, 90K	107281	
K9	Vert. Feedback	3000mmf, 8200Ω, 15K, 15K, 33K	107282	

### COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		RCA Victor PART No.	Gromer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	1st Video IF	107202						
L2	47.25MC Trap	107203						
L3	Fil. Choke							
L4	2nd Video IF	104233						
L5	Fil. Choke							
L6	3rd Video IF	107204						
L7	RF Choke							
L8	4th Video IF	104233						
L9	Series Peaking Coil	101819	19-3036	19-3036	TV-180	6176	VP-1	36uh
L10	Shunt Peaking Coil	105668	19-3250	19-3250	TV-185	6181	VP-6	250uh
L11	RF Choke	107463			SW-630			2.7uh
L12	4.5MC Trap	104903						
L13	Series Peaking Coil	105516	19-3500	19-3500	TV-204	6174	VP-8	510uh
L14	Series Peaking Coil	104230	19-3300	19-3300	TV-199	6155		300uh
L15	1st Sound IF	104136						①
L16	2nd Sound IF	107201						②
L17	Quadrature Coil	105795						③
L18	RF Choke	76510	19-1009	19-1009		4611		8.2uh
L19	RF Choke	76510	19-1009	19-1009		4611		8.2uh

① Includes 39mmf cap.

② Includes two 12mmf caps.

③ Includes 10mmf cap. and 120K resistor.

### TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA						NOTES
			RCA Victor PART No.	Holldorson PART No.	Merit PART No.	Miller PART No.	Ram PART No.	Thordarson PART No.	
	PRI.	SEC.							
L20A	84Ω		107284						Horiz. Osc. tapped @24Ω Horiz. Stabilizer
B	44Ω								

### FILTER CHOKE

	RATINGS			REPLACEMENT DATA						
ITEM No.	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000 ~)	RCA Victor PART No.	Holldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.
L21	.280A	48Ω	.9 H y.	100286	26C44 ①				26C44 ①	C-28X

① Drill new mounting hole.

### COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA								
		RCA Victor PART No.	Holldorson PART No.	Merit PART No.	Miller PART No.	Ram PART No.	Rogers PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
L22	Width Coil (1.6-12MH)	105522	WC-22	MWC-6	6322	20IR15	QRC109	WC-8	WC-22	WLC-12 ①

① Do not use tap.

### TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA						
	PRI.	SEC. 1	SEC. 2	RCA Victor PART No.	Holldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
	SEC. 3	SEC. 4	SEC. 5							
T1	117V @ 1.8A	560VCT @ .280A	5V 3A	107233						
	8.3V @ 8.3A									

### TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA
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