

PHOTOFACT* Folder



with CIRCUITRACE*

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove 4 push-on type knobs from side.
2. Remove 14 metal screws holding rear cover. Remove the rear cover.
3. Remove 2 bottom and 2 side metal screws holding the front. Remove the front.
4. Remove picture tube socket, yoke plug and speaker leads.
5. Remove 8 metal screws holding picture mask.
6. Partially remove picture tube, mask assembly and yoke.
7. Remove HV lead.
8. Remove picture tube mask assembly.
9. Remove 1 metal screw holding chassis brace (top left inside).
10. Remove 1 metal screw holding power transformer to cabinet.
11. Remove 2 bottom chassis bolts.
12. Remove 1 hex nut holding chassis (top inside).
13. Remove chassis from front of cabinet.



MODEL 17PD9074 (CH. KCS118C)

TRADE NAME	RCA Victor	MODELS	CHASSIS
		17PT9041, 17PT9042, 17PT9050, 17PT9054, 17PT9059	KCS118A
		17PT9041U, 17PT9042U, 17PT9050U, 17PT9054U, 17PT9059U	KCS118B
		17PD9062, 17PD9064, 17PD9070, 17PD9072, 17PD9074, 17PD9078, 17PD9079	KCS118C
		17PD9062U, 17PD9064U, 17PD9070U, 17PD9072U, 17PD9074U, 17PD9078U, 17PD9079U	KCS118D
MANUFACTURER	Radio Corporation of America, RCA Victor Tele. Div., Camden 8, N.J.		
TYPE SET	Television Receiver		
TUBES	Sixteen		
POWER SUPPLY	110-120 Volts AC, 60 Cycle		
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75 MC, Sound IF 41.25 MC (Intercarrier)		
		RATING	175 Watts, 1.7I Amp. @ 117 Volts AC

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustment of the VHF Oscillator is possible by removing the Channel Selector and Fine Tuning knobs. Set the Fine Tuning at the center of its range. The adjustments (located in a circle around the shaft) should be made in sequence from the highest to the lowest channel in the area. Channel 12 adjustment is located at 2 o'clock, proceed in a counter-clockwise direction adjusting for best picture and sound. Channel 13 adjustment is located on top front of tuner, next to mixer tube and should be adjusted first.

PICTURE TUBE SAFETY GLASS CLEANING

Remove 2 bottom and 2 side metal screws holding front bezel. Remove bezel and safety glass by pulling forward.

FOCUS

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

HORIZONTAL OSCILLATOR FIELD ADJUSTMENTS

The Horizontal Frequency coil is used as the Horizontal Hold control. Adjust the Horizontal Hold until the picture synchronizes horizontally. (For location, see tube placement chart.)

FUSE DEVICE

A thermal switch is used for LV power supply protection. A 10Ω fusible resistor is used for horizontal sweep circuit protection and 2 fuse wires for filament protection.

CENTERING

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube. Rotate the two rings around the neck of the tube until the picture is properly centered.

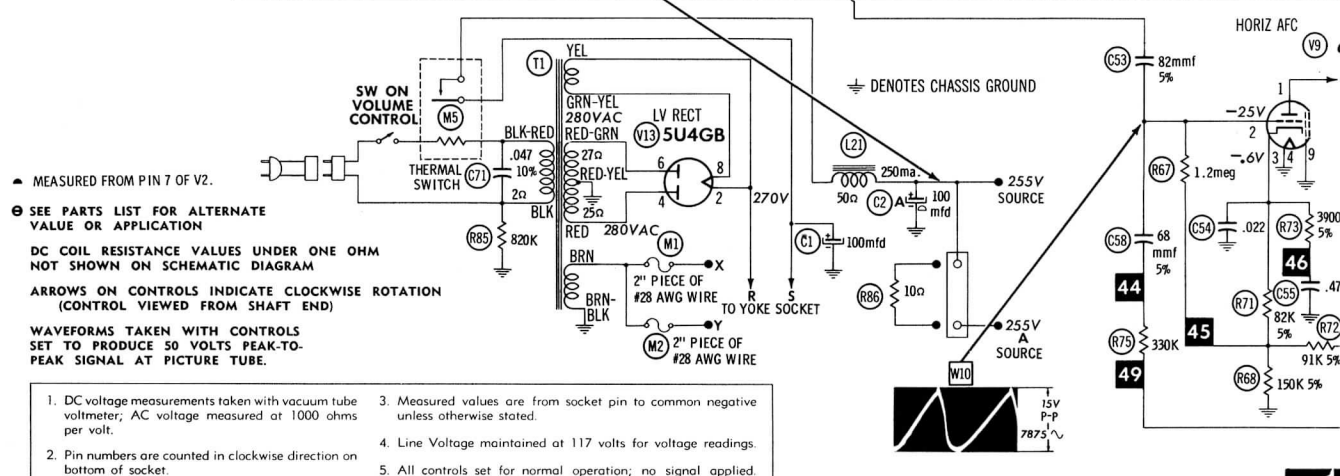
HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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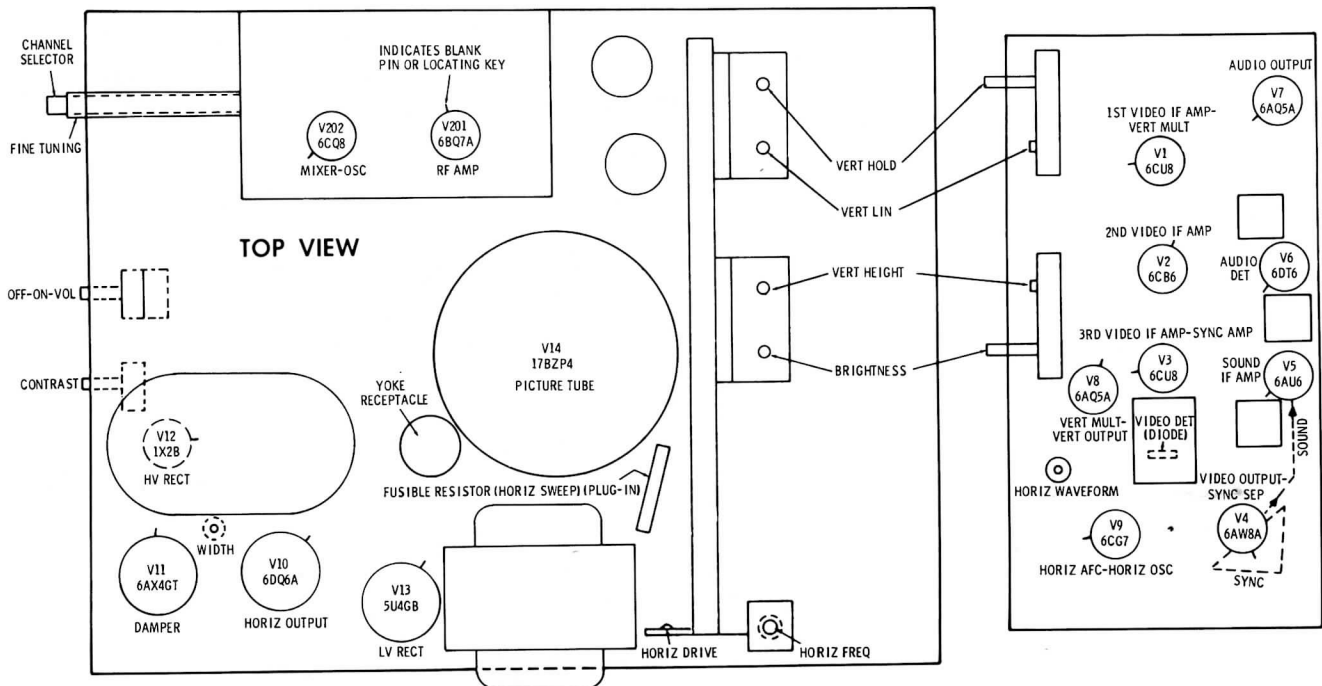
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RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)



TUBE PLACEMENT CHART



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 Thermal Switch (M5), Fuse (M1, M2), V13

SWEEP FAILURE

No raster, has sound Fusible Resistor (R86), V9, V10, V11, V12, V14

No vertical deflection V1, V8

Poor vert. linearity or foldover V1, V8

Poor horiz. linearity or foldover V9, V10, V11

Narrow picture V9, V10, V11, V13

Vert. off freq. V1, V8

Horiz. off freq. V9

LOSS OF PICTURE OR SOUND

No pic, no sound, has raster V1, V2, V3, Diode (M3), V4

No pic, no sound, has snow V201, V202, V1

No pic, has sound, has raster V4, V14

Has pic, no sound V5, V6, V7

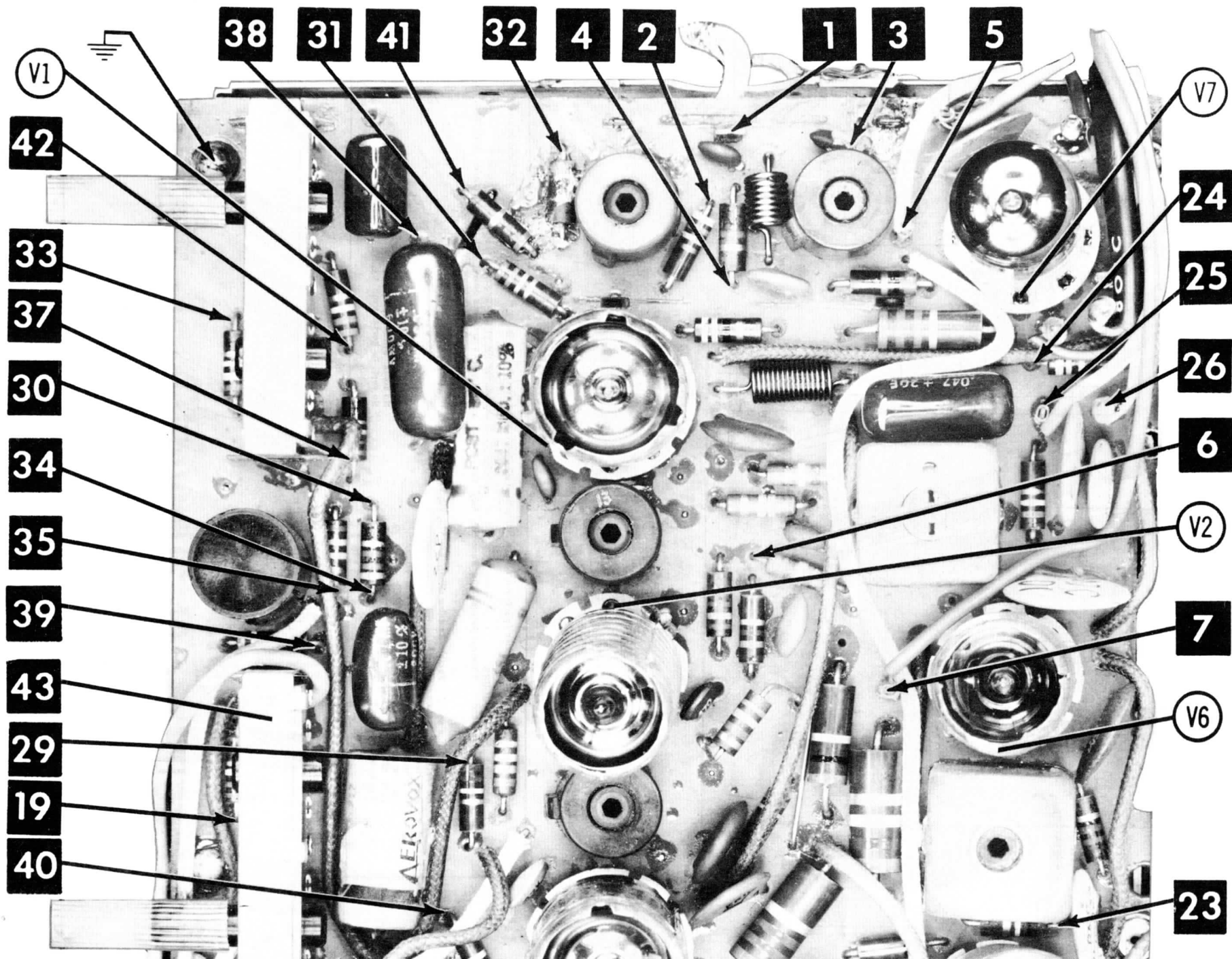
SYNC FAILURE

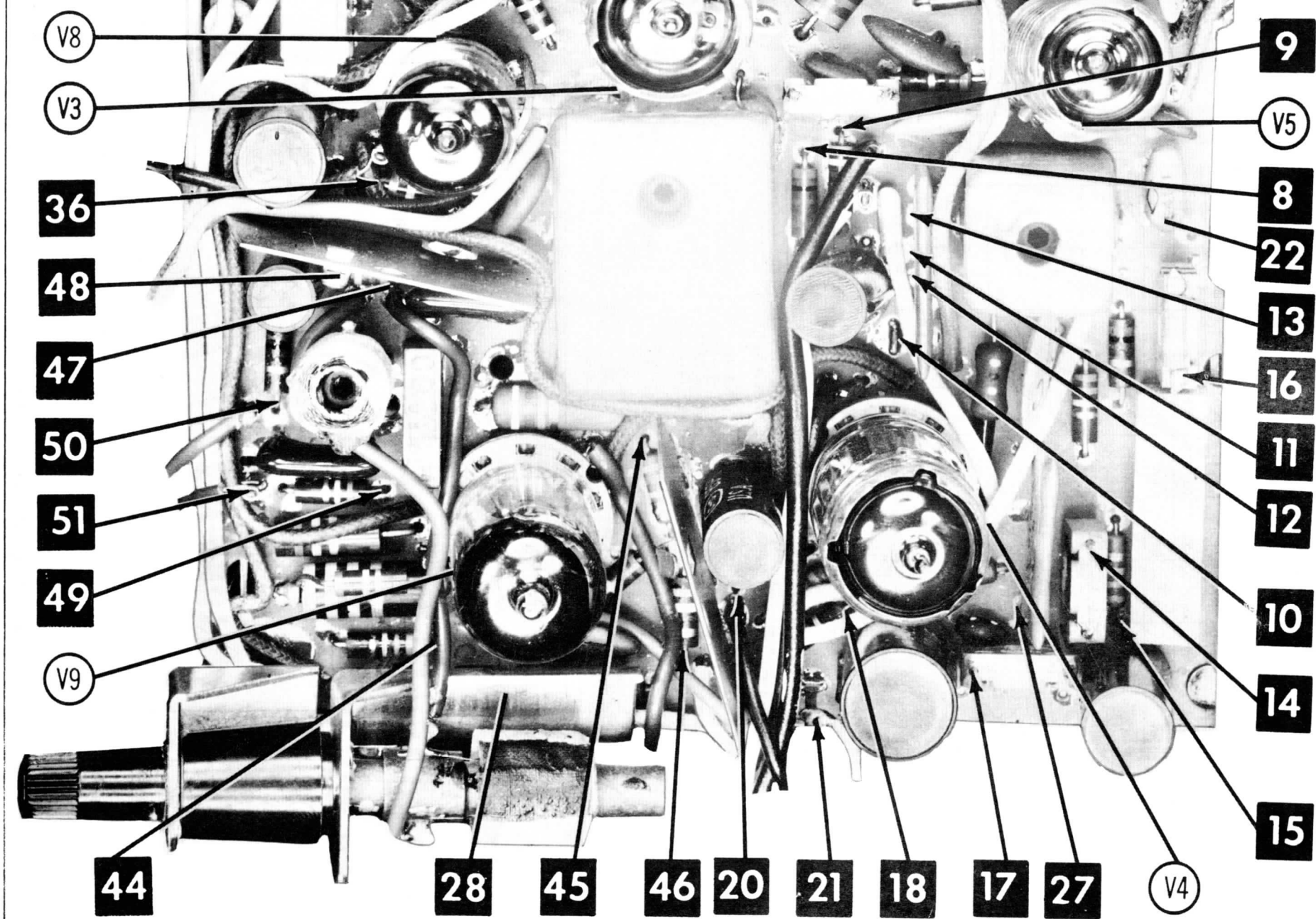
No vert. sync V4, V3

No horiz. sync V4, V3, V9

No vert. or horiz. sync V4, V3

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)





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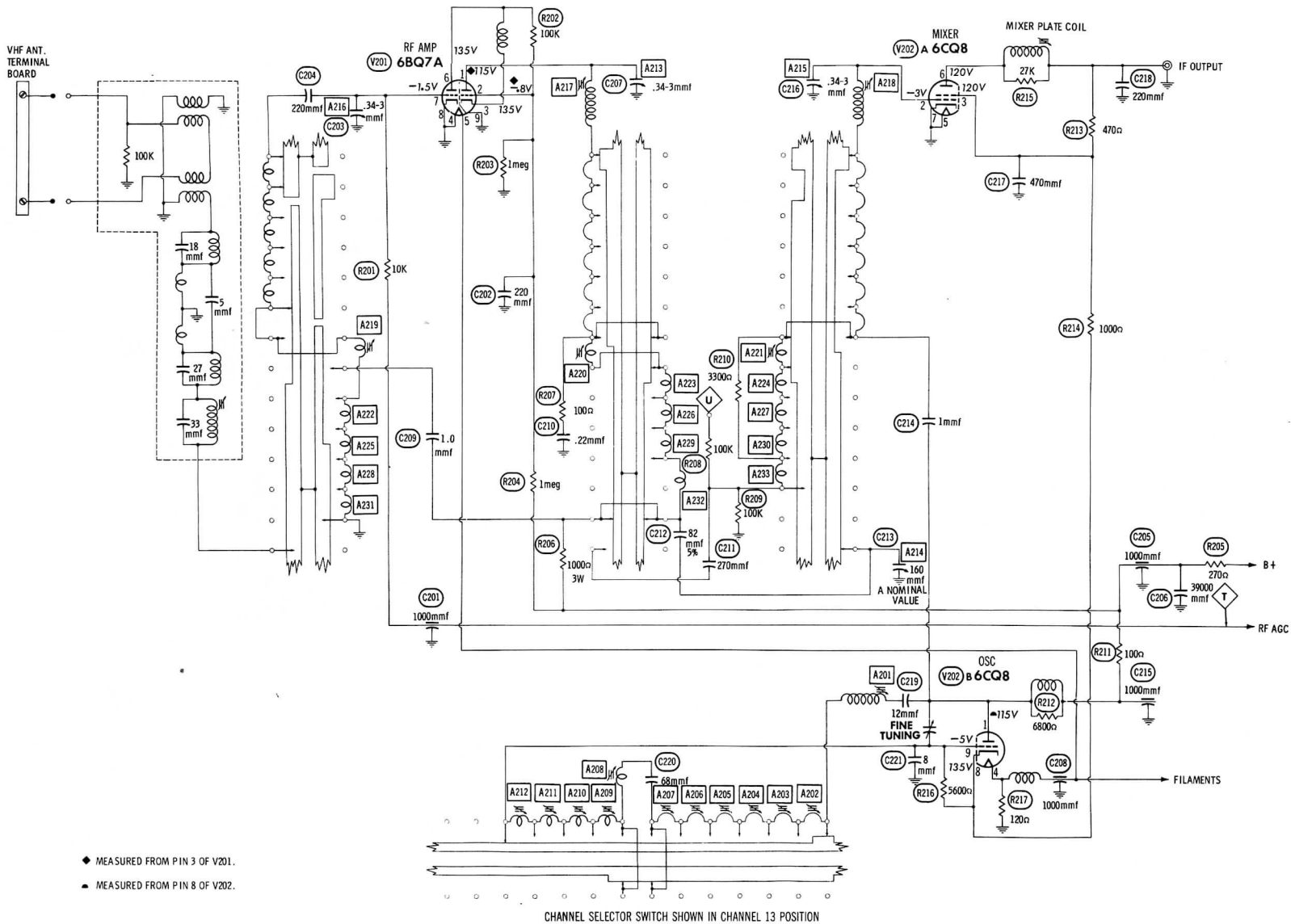
ARROWS INDICATING TUBE LOCATIONS ARE
POINTING TO PIN 1 UNLESS OTHERWISE INDICATED

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072,
17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U,
17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KC5118A, B, C, D)

VHF TUNER KRK46R

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- ◆ MEASURED FROM PIN 3 OF V201.
- ▲ MEASURED FROM PIN 8 OF V202.



TUNER PARTS LIST AND DESCRIPTIONS

KRK 46R

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V201	RF Amp.	6BQ7A	

ITEM No.	USE	TYPE	NOTES
V202	Mixer-Osc.	6CQ8	

FIXED CAPACITORS

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

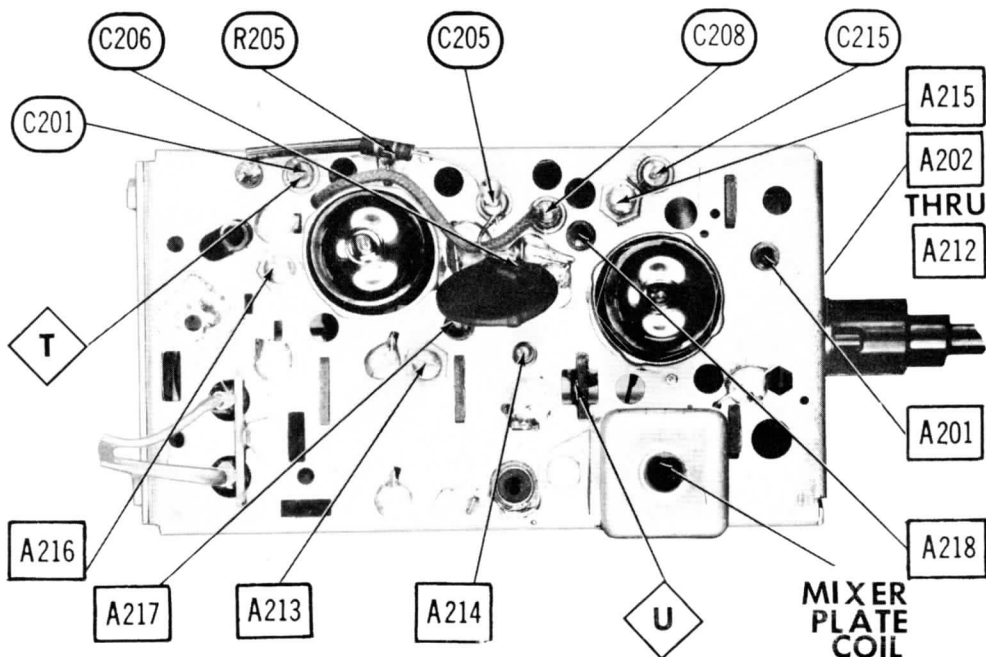
ITEM No.	RATING		RCA Victor PART No.	REPLACEMENT DATA					NOTES
	CAP.	VOLT		AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C201	1000			EF-001	MFT-1000			503C-D1	
C202	220			BPD-00022	DD-221	L10T22	UC-5322	5GA-T22	
C203	.34-3								
C204	220			BPD-00022	DD-221	L10T22	UC-5322	5GA-T22	
C205	1000			EF-001	MFT-1000			503C-D1	
C206	39000								
C207	.34-3								
C208	1000			EF-001	MFT-1000			503C-D1	
C209	1.0			NPO-SI 1.0					
C210	.22								
C211	270			SI 270	D6-271	LT6T27	UC-5327	5GA-T27	
C212	82			1469-000082		22R5Q82		MS-482	5%
C213	160								
C214	1.0			NPO-SI 1.0	TCZ-1				
C215	1000			EF-001	MFT-1000			503C-D1	
C216	.34-3								
C217	470			BPD-00047	DD-471	BYA10T47	UC-5347	5GA-T47	
C218	220			BPD-00022	DD-221	L10T22	UC-5322	5GA-T22	
C219	12			SI 12	D6-120	LT6Q12	UC-5412	5GA-Q12	
C220	68			DI-000068	DD-680	L10Q68	UC-5468	5GA-Q68	
C221	8								

RESISTORS

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

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R201	10K			
R202	100K			
R203	1meg			
R204	1meg			
R205	270Ω			
R206	1000Ω	3		
R207	100Ω			
R208	100K			
R209	100K			

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R210	3300Ω			
R211	1000Ω			
R212	6800Ω			
R213	470Ω			
R214	1000Ω			
R215	27K			
R216	5600Ω			
R217	120Ω			



TUNER KRK 46R TOP VIEW

TUNER KRK46, KRK47 ALIGNMENT INSTRUCTIONS

TUNER ALIGNMENT FOR TUNERS KRK46 & KRK47

Connect the negative lead of a 3 volt bias supply to point ∇ . Positive to chassis.
Unplug IF output cable from the tuner and connect a 39 Ω resistor across the socket.
Unplug UHF tuner (if used) and plug adaptor (shown in Fig. 203) in its place.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The Sweep Generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough Sweep Generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.
Coils not containing adjustable cores are adjusted by expanding or compressing coil turns.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Fig. 201	Across antenna terminals thru pad (Fig. 201).	Not used	257MC	13	Vert. Amp. thru diode probe to point ∇ . Low side to chassis.	A201	Adjust for zero beat on scope.
2. "	"	"	251MC	12	"	A202	"
3. "	"	"	245MC	11	"	A203	"
4. "	"	"	239MC	10	"	A204	"
5. "	"	"	233MC	9	"	A205	"
6. "	"	"	227MC	8	"	A206	"
7. "	"	"	221MC	7	"	A207	"
8. "	"	"	129MC	6	"	A208	"
9. "	"	"	123MC	5	"	A209	"
10. "	"	"	113MC	4	"	A210	"
11. "	"	"	107MC	3	"	A211	"
12. "	"	"	101MC	2	"	A212	"
13. "	"	183MC	181. 25MC 185. 75MC	8	"	A213, A214, A215, A216	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown. Adjust A213 for marker position, A214 for proper bandwidth, A215 for proper tilt and A216 for maximum gain.
14. "	"	213MC	211. 25MC 215. 75MC	13	"	A217, A218	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown. Adjust A217 for proper marker positions, A218 for proper tilt and retouch A214 for proper bandwidth.
15.	Repeat steps 13 and 14 for proper tracking and response on all channels from 13 to 7. Repeat step 1. Turn off generators and measure oscillator injection voltage at point ∇ with VTVM. The reading obtained should be between -2.5 to -5.5 volts for KRK46, and -1.5 to -4.75 for KRK47. If outside these limits, replace V202 and repeat steps 1 thru 14.						
16.	Repeat step 8.						
17. Fig. 201	Across antenna terminals thru pad (Fig. 201).	85MC	83. 25MC 87. 75MC	6	Vert. Amp. thru diode probe to point ∇ . Low side to chassis.	A219, A220, A221	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown. Adjust A219 for maximum gain, A220 for proper marker positions and A221 for proper tilt.
18. "	"	79MC	77. 25MC 81. 75MC	5	"	A222, A223, A224	If necessary, adjust appropriate coil for response similar to Fig. 202.
19. "	"	69MC	67. 25MC 71. 75MC	4	"	A225, A226, A227	"
20. "	"	63MC	61. 25MC 65. 75MC	3	"	A228, A229, A230	"
21. "	"	57MC	55. 25MC 59. 75MC	2	"	A231, A232, A233	"

UHF ALIGNMENT FOR TUNER KRK47

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
22. Fig. 203	High side thru adaptor (Fig. 203) to point ∇ . Low side to chassis.	44MC	41. 25MC 45. 75MC	UHF	Connect 330mmf capacitor in series with a 180 Ω resistor from plate of Mixer (V202) to chassis with resistor next to chassis. High side of scope thru diode probe to junction of capacitor and resistor. Low side to chassis.	A234, A235	Use only enough Sweep Generator output to provide a usable pattern on scope. Adjust A234 and A235 for response similar to Fig. 204.
23. Two 120 Ω Carbon Resistors	Across UHF antenna terminals with 120 Ω in each lead. Reconnect cable from UHF tuner to VHF tuner. Connect separate marker generator loosely to grid of 1st. Video IF Amp. (V1).	Tune over entire UHF range.	42. 5MC 45. 0MC 45. 75MC	Tune over entire UHF range	Across video detector load.		Use only enough Sweep Generator output to provide a usable pattern on scope. Check tracking across UHF band and if necessary, retouch A234 and A235 for response similar to Fig. 205.

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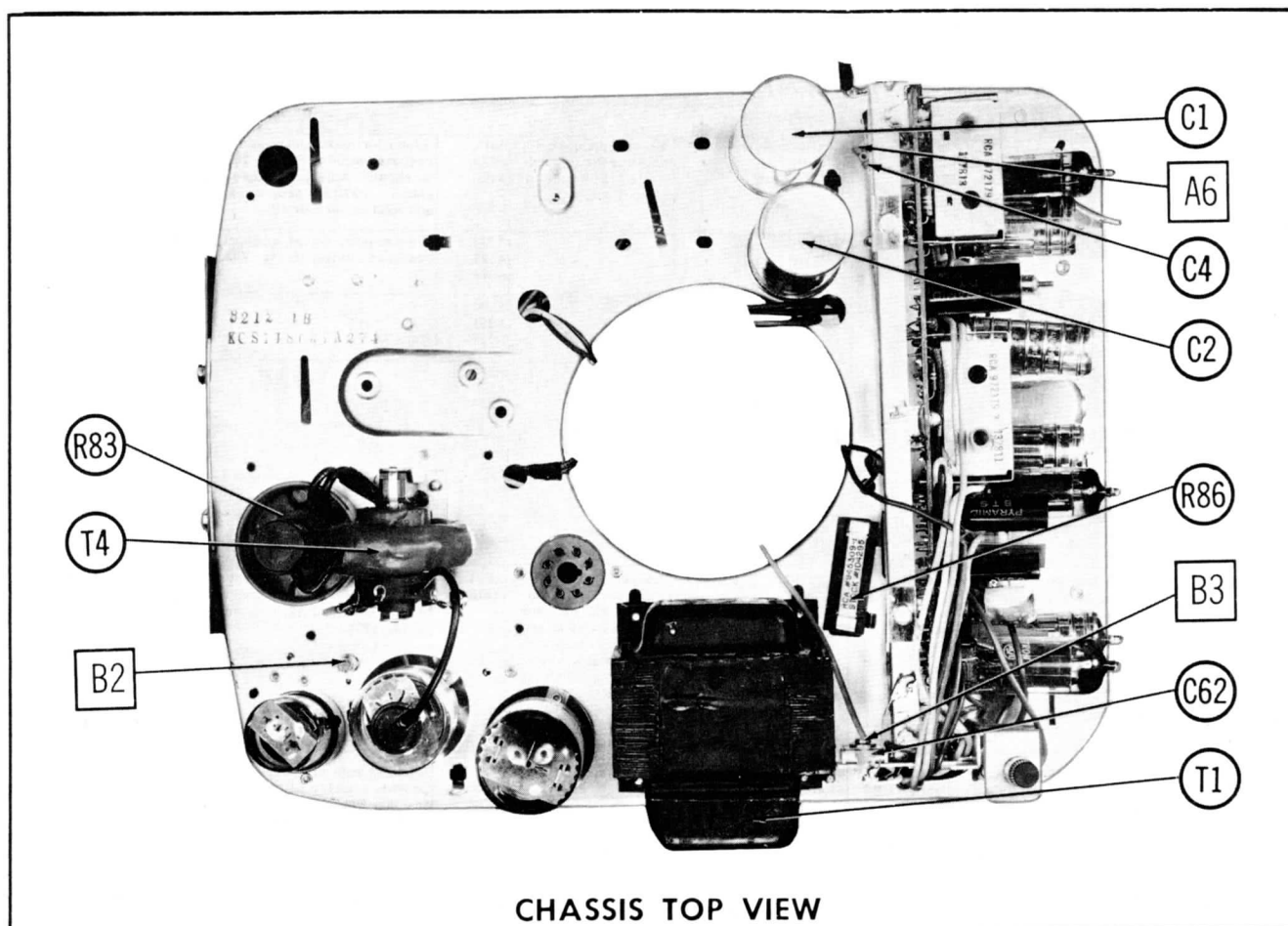
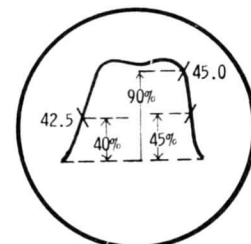
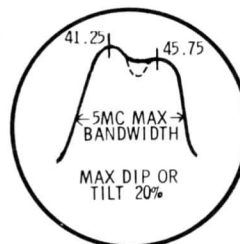
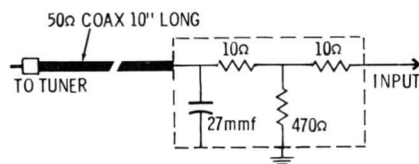
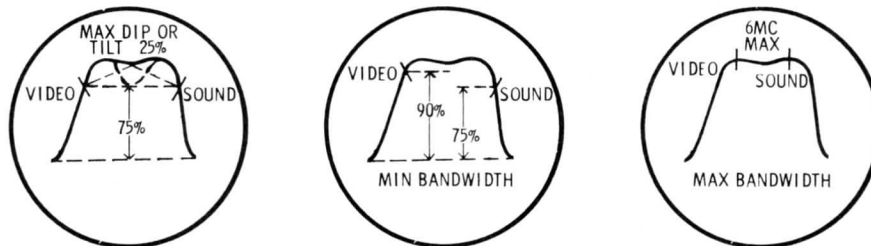
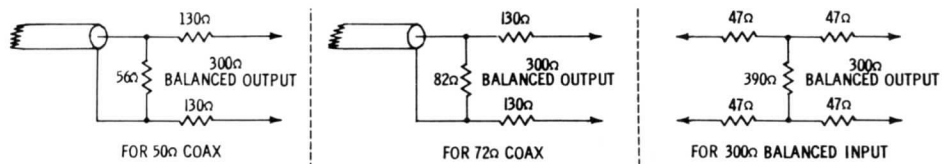
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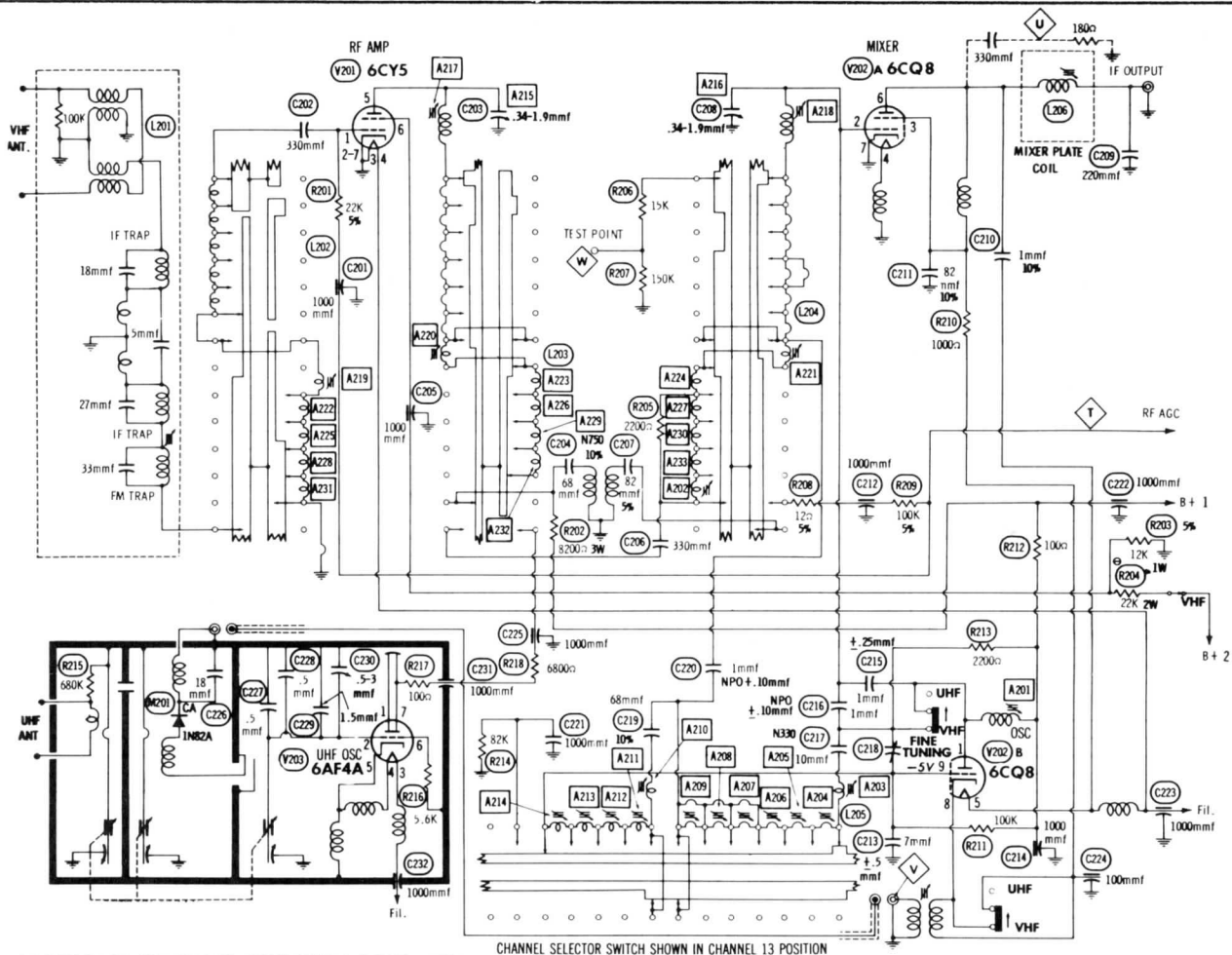
PAGE 7

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

FOLDER 1

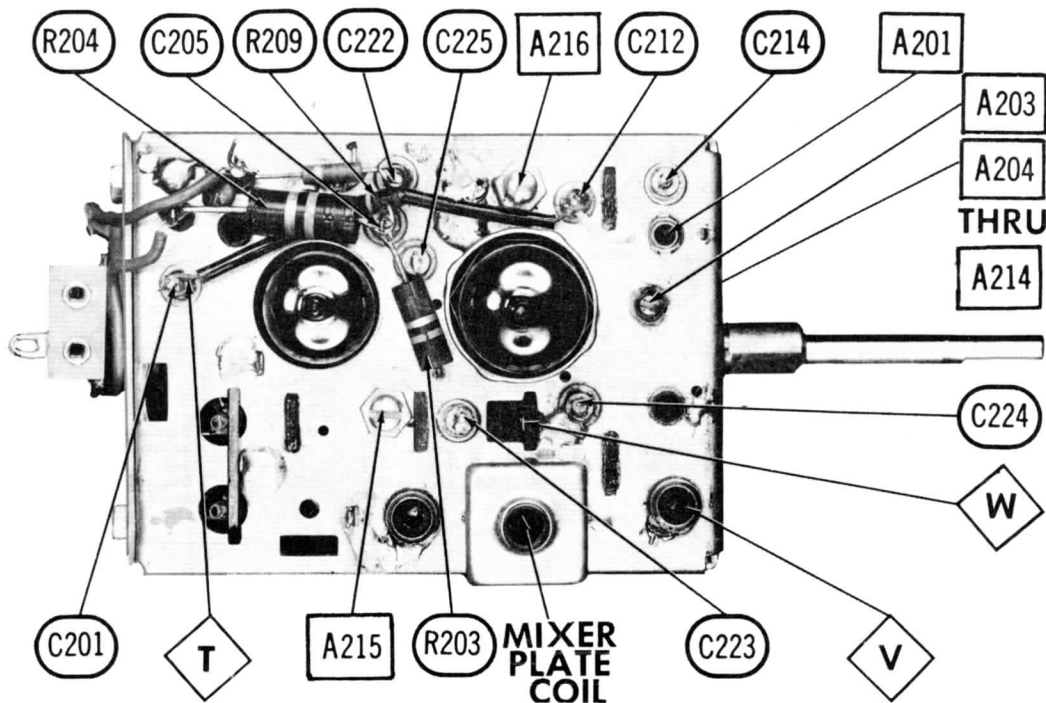
TUNER KRK46, KRK47 ALIGNMENT INSTRUCTIONS CONT'D





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VHF TUNER W/UHF PROVISIONS KRK71A, B, & UHF TUNER KRK66A



TUNER KRK71B - TOP VIEW

TUNER KRK 66-KRK 71 PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V201	RF Amp.	6CY5	
V202	Mixer-Osc.	6CQ8	

ITEM No.	USE	TYPE	NOTES
V203	UHF Osc.	6AF4A	

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	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C201	1000		105660	EF-001	MFT-1000			503C-DI	
C202	330		102089	BPD-00033	DD-331	Li0T33	UC-5333	5GA-T33	
C203	.34-1.9		104052						
C204	68		104224						
C205	1000		105660	EF-001	MFT-1000			503C-DI	N750 5%
C206	330		102089	BPD-00033	DD-331	Li0T33	UC-5333	5GA-T33	
C207	82		104214						5%
C208	.34-1.9		104052						
C209	220		102228		D6-221	Li0T22		MS-322	10%
C210	1		77690						10%
C211	82		106291	1469-000082		22R5Q82		MS-482	10%
C212	1000		105660	EF-001	MFT-1000			503C-DI	±.5mmf
C213	7		106254						
C214	1000		105660	EF-001	MFT-1000			503C-DI	±.25mmf
C215	1		106255						NPO ±.10mmf
C216	1		105781						N330
C217	10		103556						
C218									
C219	68		105855	NPO-DI 68	DD-680	Li0Q68		MS-468	10%
C220	1		105781						NPO ±.10mmf
C221	1000		77252	BPD-001	DD-102	BYA6DI	DC521	5HK-DI	
C222	1000		105660	EF-001	MFT-1000			503C-DI	
C223	1000		105660	EF-001	MFT-1000			503C-DI	
C224	100			EF-0001	MFT-100			503C-T1	
C225	1000		105660	EF-001	MFT-1000			503C-DI	
C226	18								
C227	.5								
C228	.5								
C229	1.5			NPO-SI 1.5	TCZ-1R5	CI0V15C	ZT-5515	5TCCB-V15	
C230	.5-3			829-3			CT565A		
C231	1000		105660	EF-001	MFT-1000			503C-DI	
C232	1000		105660	EF-001	MFT-1000			503C-DI	

RESISTORS

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

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R201	22K 5%		502322	
R202	8200Ω	3	106253	
R203	12K 5%	1	512312	
R204	22K	2	522322	①
R205	2200Ω		502222	
R206	15K		502315	
R207	150K		502415	
R208	12Ω 5%		502012	
R209	100K 5%		502410	

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R210	1000Ω		502210	
R211	100K		502410	
R212	100Ω		502110	
R213	2200Ω		502222	
R214	82K		502382	
R215	680K			
R216	5600Ω			
R217	100Ω			
R218	6800Ω			

① Tuner KRK71A use 27K in this application (Part #522327).

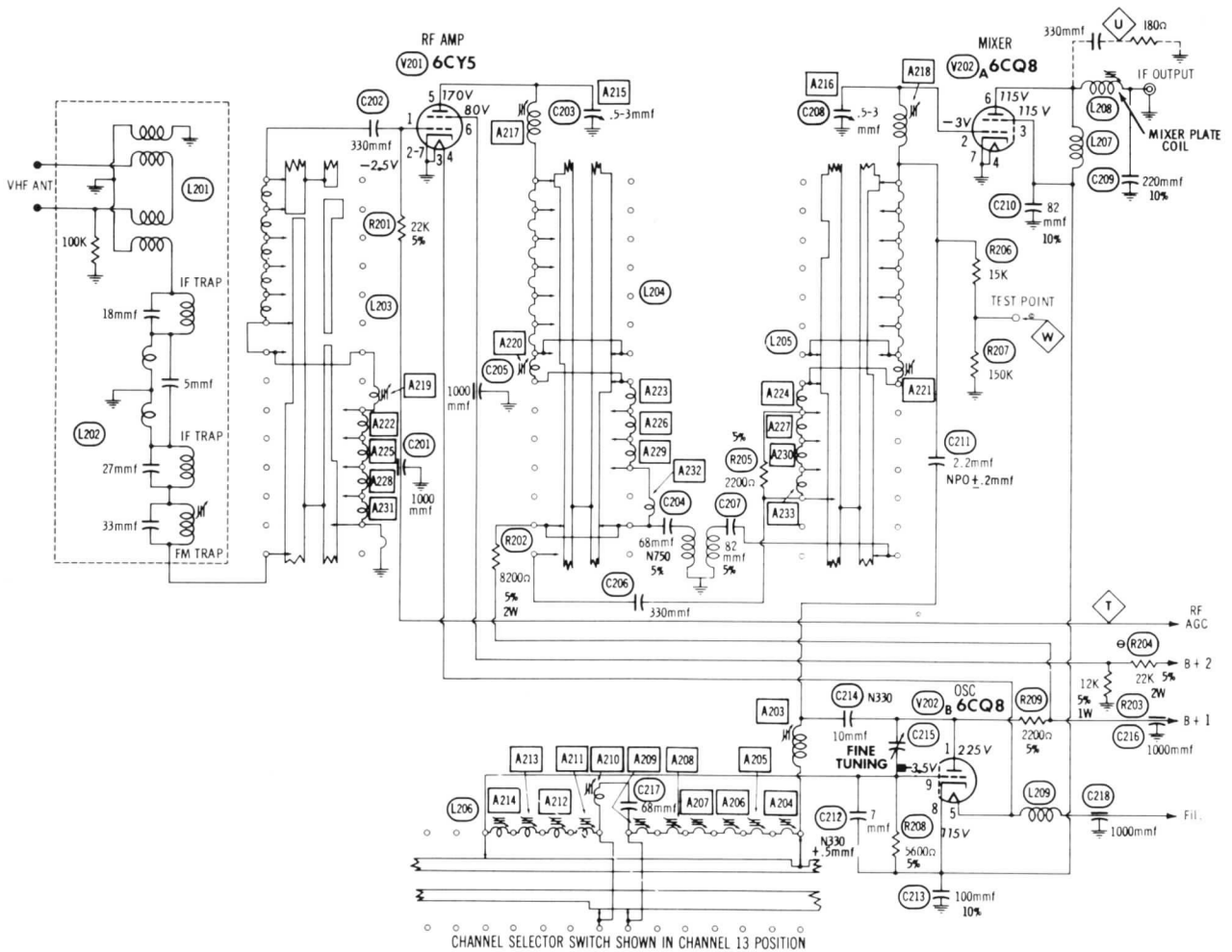
COILS (RF-IF)

ITEM No.	USE	RCA Victor PART No.	NOTES
L201	Ant. Trans.	105924	
L202	Ant. Coils	106247	Channel 2-13, Includes wafer assy.
L203	RF Coils	106252	Channel 2-13, Includes wafer assy.

ITEM No.	USE	RCA Victor PART No.	NOTES
L204	Mixer Grid Coils	106251	Channel 2-13, Includes wafer assy.
L205	Osc. Coils	106250	Channel 2-13, Includes wafer assy.
L206	RF Choke	106248	

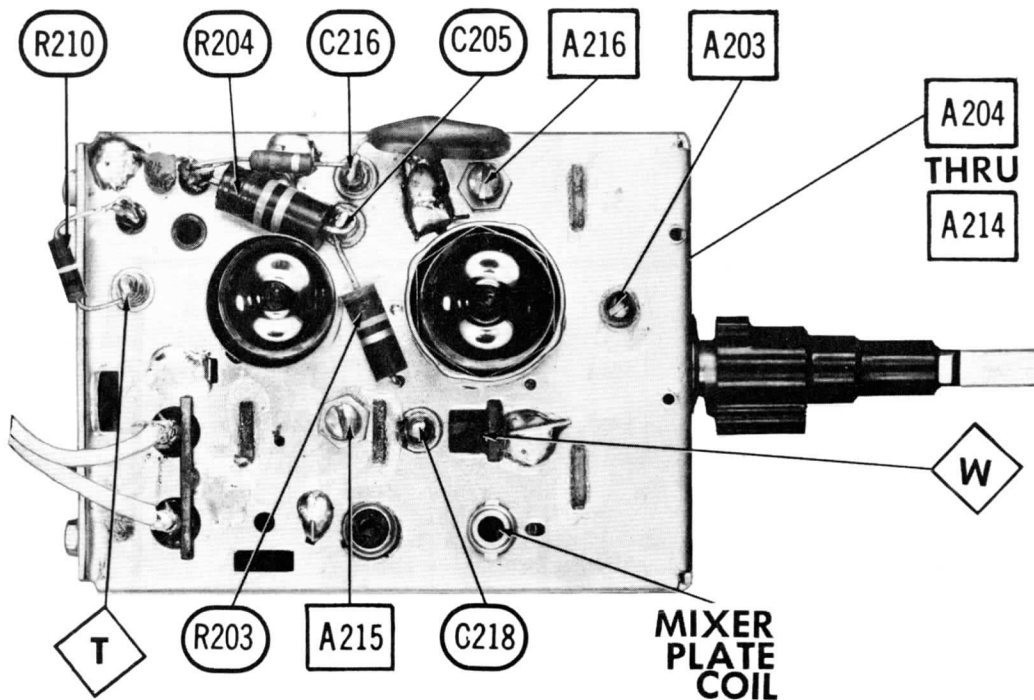
CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		RCA Victor PART No.	CBS PART No.	SYLVANIA PART No.	
M201	1N82A		1N82A	1N82A	UHF Mixer (Clip-in)



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VHF TUNER KRK70A, B



TUNER KRK70B - TOP VIEW

TUNER KRK 70 PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V201	RF Amp.	6CY5	

ITEM No.	USE	TYPE	NOTES
V202	Mixer-Osc.	6CQ8	

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	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C201	1000		105660	EF-001	MFT-1000			503C-D1	N750 5%
C202	330		102089	BPD-00033	DD-331	L10T33	UC-5333	5GA-T33	
C203	.5-3		104052		829-3		CT565A		
C204	68		104224						
C205	1000		105660	EF-001	MFT-1000			503C-D1	
C206	330		102089	BPD-00033	DD-331	L10T33	UC-5333	5GA-T33	
C207	82		104214						
C208	.5-3		104052		829-3		CT565A		
C209	220		102228		D6-221	L10T22		MS-322	
C210	82		106291	1469-000082		22R5Q82		MS-482	
C211	2.2		106241						10%
C212	7		103523						10%
C213	100		103856	1469-0001		22R5T1	MCB235	MS-31	NPO ±.2mmf
C214	10		103556						N330 ±.5mmf
C215									10%
C216	1000		105660	EF-001	MFT-1000			503C-D1	10%
C217	68		105855		DD-680	L10Q68		MS-468	
C218	1000		105660	EF-001	MFT-1000			503C-D1	

RESISTORS

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

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R201	22K 5%		502322	①
R202	8200Ω 5%	2	502282	
R203	12K 5%	1	512312	
R204	22K 5%	2	502322	
R205	2200Ω 5%		502222	

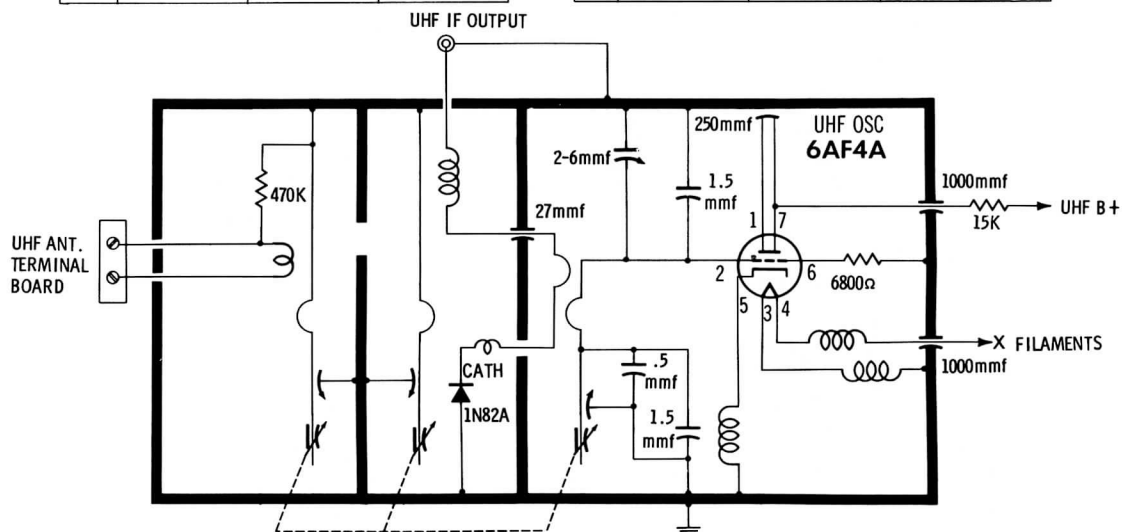
ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R206	15K		502315	
R207	150K		502415	
R208	5600Ω 5%		502256	
R209	2200Ω 5%		502222	

① Tuner KRK70A uses 27K in this application (Part #522327).

COILS (RF-IF)

ITEM No.	USE	RCA Victor PART No.	NOTES
L201	Ant. Input Trans.	102576	Includes L201 Channel 2-13, Includes wafer assy.
L202	Ant. Input Assy.	105924	
L203	Ant. Coils	106247	
L204	RF Coils	106246	Channel 2-13, Includes wafer assy.

ITEM No.	USE	RCA Victor PART No.	NOTES
L205	Mixer Grid Coils	106245	Channel 2-13, Includes wafer assy.
L206	Osc. Coils	106244	
L207	RF Choke	106249	
L208	Mixer Plate Coil	106248	



TUNER ALIGNMENT INSTRUCTIONS

TUNER IF ALIGNMENT FOR UHF/VHF MODELS ONLY

KRK 70-71

Connect the negative lead of a 3 volt bias supply to point $\diamond$. Positive to chassis.
Connect a 330mmf capacitor and a 180 Ω resistor in series from pin 6 plate of the mixer (V202) to chassis (with the capacitor next to the tube and the resistor next to chassis.) The junction of this capacitor and resistor is alignment point $\diamond$ as shown on the schematic.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Fig. 201	High side thru tuner IF input head (Fig. 201) to point $\diamond$. Low side to chassis.	44MC (10MC Swp)	41.25MC 45.75MC	UHF	Vert. Amp. thru detector probe to point $\diamond$. Low side to chassis.	A201, A202	Adjust for maximum gain and symmetry of response similar to Fig. 202 with markers as shown.
2. Direct	Across UHF antenna terminals. Connect high side of signal generator to pin 7 (grid) of 1st. IF Amp. (V1). Low side to chassis.	Tune entire UHF range.	42.5MC 45.0MC 45.75MC	"	Across Video Detector load.		Check for response similar to Fig. 203. If necessary, retouch A201 and A202 for proper overall response. Use 5 volts peak to peak on scope. Remove 330mmf capacitor and 180 Ω resistor.

VHF OSCILLATOR ALIGNMENT

Connect the negative lead of a 3 volt bias supply to point $\diamond$. Positive to chassis.
Couple RF output cable of the signal generator loosely to the sweep cable to provide markers.
Disconnect link cable from the IF output jack at the tuner and connect a 39 Ω resistor across the IF output jack.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Set the Fine Tuning to the center of its range.
Use only enough sweep generator output to provide a usable pattern on scope.
Coils not containing adjustable cores are adjusted by expanding or compressing coil turns.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
3. Fig. 204	Across antenna terminals thru matching network (Fig. 204).	Not used	257MC	13	Vert. Amp. thru detector probe to point $\diamond$. Low side to chassis.	A203	Adjust for zero beat with signal generator. (See Fig. 205 for osc. adjustments location.)
4. "	"	"	251MC	12	"	A204	"
5. "	"	"	245MC	11	"	A205	"
6. "	"	"	239MC	10	"	A206	"
7. "	"	"	233MC	9	"	A207	"
8. "	"	"	227MC	8	"	A208	"
9. "	"	"	221MC	7	"	A209	"
10. "	"	"	129MC	6	"	A210	"
11. "	"	"	123MC	5	"	A211	"
12. "	"	"	113MC	4	"	A212	"
13. "	"	"	107MC	3	"	A213	"
14. "	"	"	101MC	2	"	A214	"

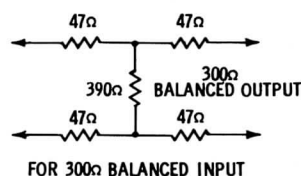
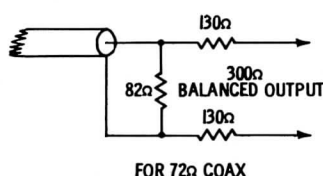
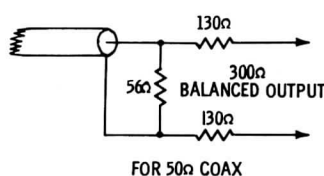
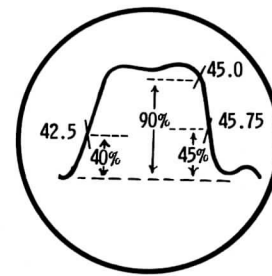
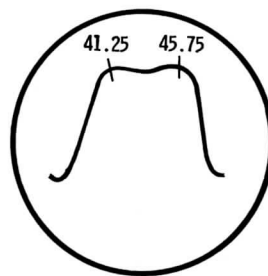
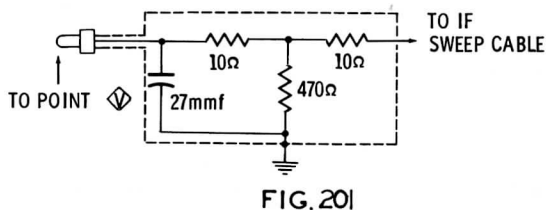


FIG. 204

CONTINUED PAGE 20

SET 418 FOLDER 1

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

FOLDER 1

ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

Allow a 20 minute warm-up period for the receiver and test equipment.

Suggested Alignment Tools :

A1, A2, A3, A4, A5, A7, A8, A9, A10 General Cement #8282, 8806, 8806L, 9295
Walsco #2543, 2544, 2545
A6 General Cement #9291
Walsco #2520, 2522
A10 General Cement #8721, 8722
Walsco #2519

VIDEO IF ALIGNMENT

Connect the negative lead of a 4 volt bias supply to point $\diamond A$. 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 $\diamond B$. Common to chassis. (Across Video Detector load)	A1	Adjust for maximum gain. 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 180 Ω resistor from pin 2 (plate) to pin 3 (screen) of the 1st. Video IF Amplifier tube (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 on left side of tuner shield. Low side to chassis.	45MC (10MC Swp)	42.5MC 45.75MC 47.25MC	4	Vert. Amp. thru detector probe to pin 2 (plate) of 1st. Video IF Amp. (V1). Low side to chassis. Calibrate scope for .5 volts peak to peak.	A5, A6, & Mixer Plate Coil	Use only enough sweep generator output to provide a usable pattern on scope. Adjust Mixer Plate Coil and A5 for maximum gain, using A6 to obtain curve shape with markers as shown in Fig. 1. Remove 180 Ω resistor from V1.
6.	"	"	"	"	"	Vert. Amp. thru 10K to point $\diamond B$. 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 $\diamond B$. 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 $\diamond B$. 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. 4 or Fig. 5.
9.	Fig. 6	Across antenna terminals thru matching network (Fig. 6).	Each VHF Channel in turn	42.5MC 45.75MC 47.25MC	All VHF Channels	Vert. Amp. thru 10K to point $\diamond B$. Low side to chassis.	A1, A2	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 $\diamond A$. Positive to chassis.

Set Contrast Control fully clockwise.

Set VTVM for negative voltage readings.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10.	.001mfd	High side to point $\diamond B$. Low side to chassis.	4.5MC (Unmod)	Any non-interfering channel	DC probe thru diode detector (Fig. 7) to pin 7 (grid 3) of 6DT8 (V8). Common to chassis.	A7, A8, A9	Adjust for maximum negative DC on meter. Attenuate generator for a reading between 1 and 1.5 volts on meter when finally peaked. Peak A7 and A8 with maximum core separation. Adjust A9 for maximum.
11.	Remove VTVM and diode detector. 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 19

ALIGNMENT INSTRUCTIONS (cont)

ALTERNATE SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR

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

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .001mfd	High side to point Δ . Low side to chassis.	4.5MC (400v FM Mod. 15KC Swp)	Any non- interfering channel	DC probe thru diode detector (Fig. 7) to pin 7 (grid 3) of 6DT6 (V6). Common to chassis.	A7, A8, A9	Adjust for maximum negative DC on meter. Attenuate generator output for a reading between 1 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 volume control.	A10	Adjust for maximum 400v indication on scope. Adjust volume control for .7 volt 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.

TUNER ALIGNMENT INSTRUCTIONS LOCATED ON PAGES 7, 8, 13 & 20

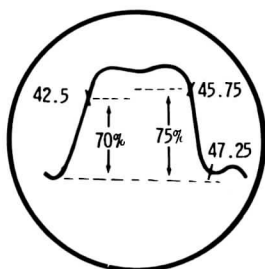


FIG. 1

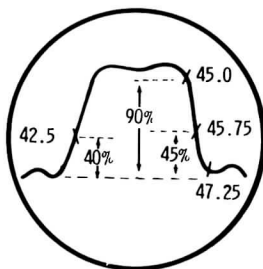


FIG. 2

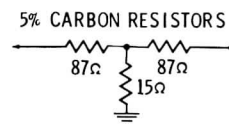


FIG. 3

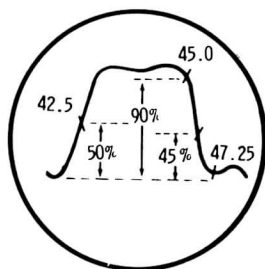


FIG. 4

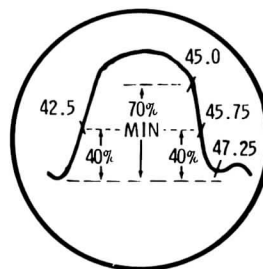
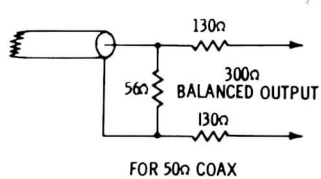
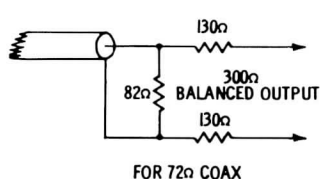


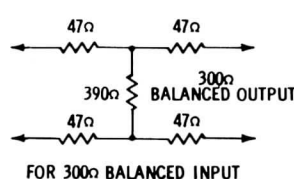
FIG. 5



FOR 50 Ω COAX



FOR 72 Ω COAX



FOR 300 Ω BALANCED INPUT

FIG. 6

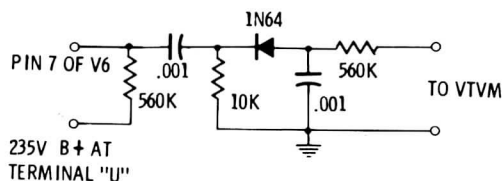


FIG. 7

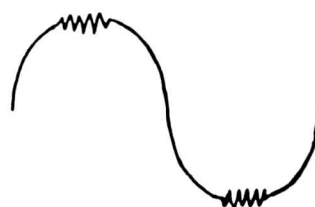


FIG. 8

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

TUNER ALIGNMENT INSTRUCTIONS (cont)

KRK 70-71

VHF RF AND MIXER ALIGNMENT

Connect the negative lead of a 3 volt bias supply to point Ⓢ . Positive to chassis.
 Couple RF output cable of the signal generator loosely to the sweep cable to provide markers.
 Disconnect link cable from the IF output jack at the tuner and connect a 39 Ω resistor across the IF output jack.
 Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
 Set the Fine Tuning to the center of its range.
 Use only enough sweep generator output to provide a usable pattern on scope.
 Use 10MC sweep unless otherwise noted.
 Coils not containing adjustable cores are adjusted by expanding or compressing coil turns.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
15. Fig. 204	Across antenna terminals thru matching network (Fig. 204).	183MC	181.25MC 185.75MC	8	Vert. Amp. thru detector probe to point Ⓢ . Low side to chassis.	A215, A216, & High Band Coupling	Adjust for maximum gain and symmetry of response similar to Fig. 206 with markers as shown. A215 adjusts freq., A216 controls tilt. Adjust High Band Coupling coil for proper bandwidth.
16. "	"	213MC	211.25MC 215.75MC	13	"	A217, A218	Adjust for response similar to Fig. 206 with marker within limits. A217 controls frequency and A218 controls tilt.
17.	Repeat channels 8 and 13 adjustments for proper tracking and response on all channels from 13 to 7. Turn off generators, check oscillator injection voltage by connecting DC probe of VTVM thru diode probe to point Ⓢ . Common to chassis. Injection voltage should be between -1.5 to 4.5V. If not within these limits replace 6CQ8 (V202). Repeat steps 3 thru 16.						
18. Fig. 204	Across antenna terminals thru matching network (Fig. 204).	Not used	129MC	6	Vert. Amp. thru detector probe to point Ⓢ . Low side to chassis.	A210	Retouch for zero beat.
19. "	"	85MC	83.25MC 87.75MC	"	"	A219, A220, A221	Adjust in numerical order for response similar to Fig. 206 with markers as shown. First adjustment is for amplitude, second is for frequency and the third controls tilt. Recheck for injection limits as in step 17.
20. "	"	79MC	77.25MC 81.75MC	5	"	A222, A223, A224	"
21. "	"	69MC	67.25MC 71.75MC	4	"	A225, A226, A227	"
22. "	"	63MC	61.25MC 65.75MC	3	"	A228, A229, A230	"
23. "	"	57MC	55.25MC 59.75MC	2	"	A231, A232, A233	"

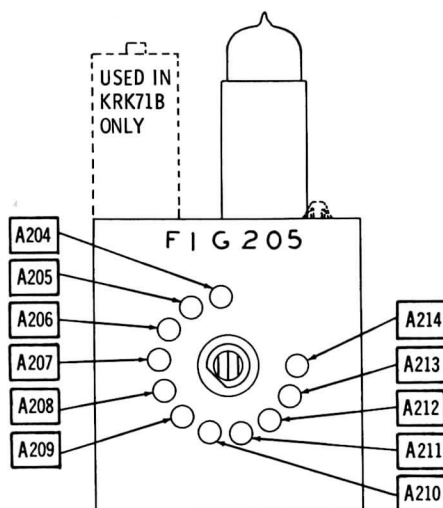


FIG. 206A

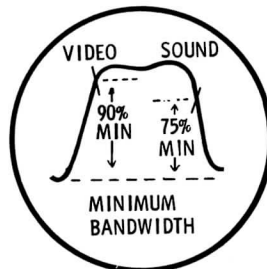


FIG. 206B

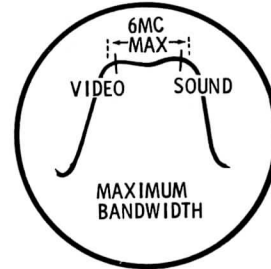
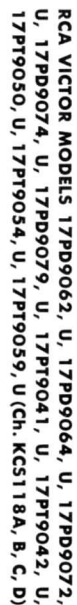


FIG. 206C



FOLDER 1

PAGE 15

PARTS LIST AND

CONT

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	1st. Video IF Amp. - Vert. Mult.	6CU8	
V2	2nd. Video IF Amp.	6CB6	
V3	3rd. Video IF Amp. - Sync Amp.	6CU8	
V4	Video Output-Sync Sep.	6AW8A	
V5	Sound IF Amp.	6AU6	
V6	Audio Det.	6DT6	

ITEM No.	USE	TYPE	NOTES
V7	Audio Output	6AQ5A	
V8	Vert. Mult. -Vert. Output	6AQ5A	
V9	Horiz. AFC-Horiz. Osc.	6CG7	
V10	Horiz. Output	6DQ8A	
V11	Damper	6AX4GT	
V12	HV Rect.	1X2B	
V13	LV Rect.	5U4GB	

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	RCA Victor PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V14	17BZP4		17BZP4 ①	17BZP4 ② 17BZP4/ 17CAP4 ②	① "Silverama" ③ 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.	SANGAMO PART No.
C1	100	400	79700	AFH1-55-20	A0512	FP150	TMS-61	S-241
C2A	100	400	106146	AFH3-122-30	C0894	FP333.95	TMT-186	Q-242
B	20	400			BR1045		TD-10-450	
C	20	50						

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.	RCA Victor PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C3	.47	200	104393	P288N-47		CUB2P47	GEM-2047	2TM-P47	①
C4	15-145		106150						
C5	470		77293	BPD-00047	DD-47I	BYA10T47	UC-5347	5GA-T47	
C6	18		103133						
C7	1000		102234-A	BPD-001	DD-102	BYA6S1	DC521	5HK-D1	5%
C8	1000		102234-A	BPD-001	DD-102	BYA6S1	DC521	5HK-D1	
C9	4700		73473	BPD-0047	DD-472	BYA10D47	UC-5247	5HK-D47	
C10	1000		77252	BPD-001	DD-102	BYA6D1	DC521	5HK-D1	
C11	1000		77252	BPD-001	DD-102	BYA6D1	DC521	5HK-D1	
C12	470		78622	BPD-00047	DD-47I	BYA10T47	UC-5347	5GA-T47	
C13	1000		102234-A	BPD-001	DD-102	BYA6D1	DC521	5HK-D1	
C14	4700		73473	BPD-0047	DD-472	BYA10D47	UC-5247	5HK-D47	
C15	4700		73473	BPD-0047	DD-472	BYA10D47	UC-5247	5HK-D47	
C16	.7		104177						±.5mmf
C17	5		104178						±.5mmf
C18	.047	200	104210	P288N-047		BC2847J	ACE6147	2SE-S47	
C19	1000		77252	BPD-001	DD-102	BYA6D1	DC521	5HK-D1	
C20	.39	400	103034-A						10%
C21	9		104211						±.5mmf
C22	.1	400	104212	P488N-1		BC4PLJ	ACE401	4SE-P10	
C23	.047	200	105775	P288N-047	DF-503	CUB2S47	GEM-4147	4TM-S47	
C24	.022	400	103351-A	P488N-022	DD-203	CUB2S22	GEM-4122	2TM-S22	
C25	3	1000	104204						N750 ±1mmf
C26	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C27	680		104135	BPD-00068	DD-68I	BYA10T68	UC-5368	5GA-T68	
C28	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C29	470		77293	BPD-00047	DD-47I	BYA10T47	UC-5347	5GA-T47	
C30	3300		104205						10%
C31	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C32	.047	200	106107	P288N-047	DF-503	CUB2S47	GEM-4147	2TM-S47	
C33	.068	1000	73815	P1088N-068		CUB10S68	GEM-10168	10TM-S68	
C34	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C35	1500		104207	BPD-0015	DD-152	BYA10D15	DC5215	5HK-D15	
C36	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C37	3300	1000	104208	HVD-15-3300	DD-332	BYA10D33	5GA-D33		
C38	.033	600	104213	P688N-033		BC6S33J	6SE-S33		
C39	10000		73960	BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C40	47		102882	NPO-DI 47	DD-470	L10Q47		5TCC-Q47	10%
C41	.01	400	10220 A				GEM-1611	MS-256	10%
C42	5600		104495			IDR5D56	GEM-16247		10%
C43	.0047	600	73920				GEM-16247	5TCC-Q47	10%
C44	47		102882	NPO-DI 47	DD-470	L10Q47	UC-5347	5GA-T47	10%
C45	470		77293	BPD-00047	DD-47I	BYA10T47			10%
C46	.039	600	106188						10%
C47	.012	400	106186						10%
C48	.15	200	104494						10%
C49	.022	600	104145	P688N-022	DD-203	CUB6S22	GEM-6122	6TM-S22	10%
C50	.027	600	104220						10%
C51	.01	400	106185				GEM-1611		10%
C52	1000	2000	104222						10%
C53	82		104214						5%
C54	.022	400	104223	P488N-022		BC6S22J	4SE-S22		
C55	.47	200	104393	P288N-47		CUB2P47	GEM-2047	2TM-P47	5%
C56	330	1000	104225						10%
C57	.01	600	104227						10%
C58	68		104224	NPO-DI 68	DTZ-68	C10Q68C	5TCC-Q68		5%
C59	1000		104226	1464-001		IR5DI	MCE255	MS-21	5%
C60	330	1000							②
C61	.47	200	104393	P288N-47		CUB2P47	GEM-2047	2TM-P47	
C62	10-160		102412						
C63	.1	600	105235	P688N-1	DF-104	CUB6P1	GEM-601	6TM-P1	10%
C64	.1	400	105764	P488N-1	DF-104	CUB4P1	GEM-401	4TM-P1	10%
C65	.1	400	105764	P488N-1	DF-104	CUB4P1	GEM-401	4TM-P1	10%
C66	.1	600	73557				GEM-1601		10%
C67	.039	400	104907						10%
C68	120	2500	103536						10%
C69	390	2000	104891						10%
C70	390	2000	104891						10%
C71	.047	600	73592						10%

① Chassis KCS118A, B use .33mfd ② 200V in this application (Part #105671).
② Some versions use 560mmf 10% in this application (Part #105673).

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	RCA Victor PART No.	CENTRALAB PART No.	CLAROSTAR PART No.
R1A	1meg	1/2	104195	AK-7	A47-1meg-2
B	Shaft			Not Req.	F8-3
C	Switch			KB-1 or KR-1*	SWE-12
R2A	3000Ω	1/2	104484	B-705	
B	Shaft			Not Req.	
R3A	1.5meg		104203		
B	1.5meg				
R4A	200K		104202		
B	5meg				

* Use KR with CRL "red label" controls and KB with "blue label"

RESIS

All wattages 1/2 watt, or less

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R5	1meg		502510	
R6	47K 5%		502347	
R7	220Ω		502122	
R8	1000Ω		502210	
R9	680Ω		502168	
R10	5600Ω 5%		502256	
R11	150K 5%		502415	
R12	47Ω		502047	
R13	68K		502368	
R14	680Ω		502168	
R15	47Ω 5%		502047	
R16	150K 5%		502415	
R17	6200Ω	2	522282	
R18	1800Ω 5%		502218	
R19	3900Ω 5%		502239	
R20	1000Ω		502210	
R21	680K		502468	
R22	18K 5%		502318	
R23	5100Ω	5	104490	
R24	2200Ω		502222	
R25	330Ω		502133	
R26	47K	1	512347	
R27	2200Ω		502222	
R28	68K	2	522368	
R29	22K		502322	
R30	220K		502422	
R31	150K 5%		502415	
R32	1000Ω		502210	
R33	15K		522315	
R34	100K		502410	
R35	10K	1	512310	
R36	82Ω		502082	
R37	100K		502410	
R38	470K		502447	
R39	560Ω		502156	
R40	560K		502456	
R41	680Ω	1	512168	
R42	2200Ω	2	522222	
R43	33K		502333	
R44	8.2meg		502582	
R45	880K		502468	

① Some versions may use 18Ω in the

COILS (H)

ITEM No.	USE	REPLACEMENT DATA	
		RCA Victor PART No.	Meissner PART No.
L1	47.25MC Trap	104141	
L2	Grid Coil		
L3	1st. Video IF	104232	
L4	2nd. Video IF	104233	
L5	3rd. Video IF	104233	
L6	Fl. Choke	73477	19-4215
L7	4th. Video IF	104233	
L8	RF Choke		
L9	Series Peaking Coil	101819	19-3036
L10	Shunt Peaking Coil	104229	19-3125
L11	Series Peaking Coil	105456	19-3125
L12	Shunt Peaking Coil	104230	19-3300
L13	Shunt Peaking Coil	104230	19-3300
L14	1st. Sound IF	104136	
L15	2nd. Sound IF	104137	
L16	Quadrature Coil	105795	
L17	RF Choke	76510	
L18	RF Choke	76510	

① IRC Part #CL-1.

TRANSFORMER

ITEM No.	DC RES.		REPLACEMENT DATA		
	PRI.	SEC.	RCA Victor PART No.	Meissner PART No.	Marit PART No.
L19	65Ω		103570		
L20	48Ω		102195		TV-165

FILTER C

ITEM No.	RATINGS			RCA Victor PART No.	Halldorson PART No.
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000 Hz)		
L21	.250A	50Ω	.9 Hy.	100286	C5037 ①

① Drill new mounting hole.

PARTS LIST AND DESCRIPTIONS

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	RCA Victor PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1A	1meg	$\frac{1}{2}$	104195	AK-7	A47-1meg-Z	Q13-137	TA16A	Volume
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	
C	3000 Ω	$\frac{1}{2}$	104484	KB-1 or KR-1*	SWE-12	T6-1	US-26	Contrast
R2A	B			B-705		Q17-112	U9	
R3A	1.5meg	$\frac{1}{2}$	104203	Not Req.		Not Req.	Not	Vert. Hold
B	1.5meg							Vert. Lin.
R4A	200K	$\frac{1}{2}$	104202					Brightness
B	5meg							Height

* Use KR with CRL "red label" controls and KB with "blue label" controls.

ITEM No.	USE	RCA Victor PART No.
L22	Width Coil (1.5-12MH)	104086

① Do not use tap.

ITEM No.	RATING		
	PRI.	SEC. 1	SEC. 2
T1	117V @1.71A	540V CT @.250A	5V @2.65A
	SEC. 3	SEC. 4	SEC. 5
	6.3V @7.5A		

ITEM No.	USE	RCA Victor PART No.
T2	Vert. Output	10487
T3A	Yoke-Horiz. (17MH)	10814
B	(110V)-Vert. (12.6MH)	
	Rear Cover & Centering Device	10448
T4	Yoke Clamp	10440
	Horiz. Output	10814

① Includes R63, R64 and C68.

* HORIZ.

	ORIGINAL TERMINAL CONNECTIONS	Halldorson Replacement Connections
	5	5
	4	4
	3	3
	2	2
	1	1
Connect Width Coil Across	2 & 1	2 &

ITEM No.	IMPEDANCE		RCA Victor PART No.
	PRI.	SEC.	
T5	7600 Ω	3-4 Ω	100037

ITEM No.	TYPE		
	SIZE	FIELD	V. C. IMP.
SPI	5"	PM	3-4 Ω

ITEM No.	USE
K1	AGC Circuit
K2	Sound IF Grid
K3	Sync Coupling

① Not used in Ch. KCSU8A, B.
② Ch. KCSU8A, B uses 330mmf.

RESISTORS

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

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R5	1meg		502510	
R6	47K 5%		502347	
R7	220 Ω		502122	
R8	1000 Ω		502210	
R9	680 Ω		502168	
R10	5600 Ω 5%		502256	
R11	150K 5%		502415	
R12	47 Ω		502047	
R13	68K		502368	
R14	680 Ω		502168	
R15	47 Ω 5%		502047	
R16	150K 5%		502415	
R17	8200 Ω	2	522282	
R18	180 Ω 5%		502118	
R19	3900 Ω 5%		502239	
R20	1000 Ω		502210	
R21	680K		502468	
R22	18K 5%		502318	
R23	5100 Ω	5	104490	
R24	2200 Ω		502222	
R25	330 Ω		502133	
R26	47K	1	512347	
R27	2200 Ω		502222	
R28	68K	2	522368	
R29	22K		502322	
R30	220K		502422	
R31	150K 5%		502415	
R32	1000 Ω		502210	
R33	15K		522315	
R34	100K		502410	
R35	10K	1	512310	
R36	82 Ω		502082	
R37	100K		502410	
R38	470K		502447	
R39	560 Ω		502156	
R40	560K		502456	
R41	680 Ω	1	512168	
R42	2200 Ω	2	522222	
R43	33K		502333	
R44	1.2meg		502582	
R45	680K		502468	
R46	1meg		502510	
R47	18K 5%		502318	
R48	33K	2	522333	
R49	150K 5%		502415	
R50	22K		502322	
R51	18K 5%		502318	
R52	6.8meg		502568	
R53	270K		502427	
R54	22K		502322	
R55	3900 Ω 5%		502239	
R56	470K		502447	
R57	1.5meg		502515	
R58	680K		502468	
R59	22K 5%		512322	
R60	18K 5%		502318	
R61	8200 Ω		502282	
R62	150 Ω	1	512115	
R63	150 Ω		502115	
R64	150 Ω		502115	
R65	22K 5%	1	512322	
R66	5600 Ω 5%		502256	
R67	1.2meg		502512	
R68	150K 5%		502415	
R69	56K	1	512356	
R70	560K		502456	
R71	82K 5%		502382	
R72	91K 5%	1	512391	
R73	3900 Ω 5%		502239	
R74	47K 5%		502347	
R75	330K		502433	
R76	1meg		502510	
R77	10meg		502810	
R78	10meg		502810	
R79	47 Ω		502047	
R80	8200 Ω	2	522282	
R81	270K		502427	
R82	68K		502368	
R83	5.1 Ω		72067	
R84	4700 Ω		502247	
R85	820K		502482	
R86	10 Ω		104295	

① Some versions may use 18 Ω in this application (Part #502018).

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		RCA Victor PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	47.25MC Trap	104141					
L2	Grid Coil						
L3	1st. Video IF	104232					
L4	2nd. Video IF	104233					
L5	3rd. Video IF	104233					
L6	Flt. Choke	73477	19-4215	BC-537	4609		
L7	4th. Video IF	104233					
L8	RF Choke						
L9	Series Peaking Coil	101819	19-3036	TV-180	6176	VP-1	36 Microhenries
L10	Shunt Peaking Coil	104229	19-3125	TV-195	6153	VP-4	120 Microhenries
L11	Series Peaking Coil	105456	19-3125	TV-195	6153	VP-4	120 Microhenries
L12	Shunt Peaking Coil	104230	19-3300	TV-199	6155		300 Microhenries
L13	Shunt Peaking Coil	104230	19-3300	TV-199	6155		300 Microhenries
L14	1st. Sound IF	104136					Includes Cap.
L15	2nd. Sound IF	104137					
L16	Quadrature Coil	105795					
L17	RF Choke	76510					4.7 Microhenries ①
L18	RF Choke	76510					4.7 Microhenries ①

① IRC Part #CL-1.

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA					NOTES
	PRI.	SEC.	RCA Victor PART No.	Meissner PART No.	Merit PART No.	Ram PART No.	Thordarson PART No.	
L19	65 Ω		103570		TV-165		HS-7	Tapped @ 450, Horiz. Freq.
L20	48 Ω		102195					Horiz. Waveform

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000 $\sim$)	RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.
L21	.250A	50 Ω	.9 Hy.	100286	C5037 ①	C-2996 ①		C-2326 ①	26C44 ①

① Drill new mounting hole.

IA)

	TYPE	NOTES
Output Osc.	6AQ5A 6AQ5A 6CG7 6DQ6A 6AX4GT 1X2B 5U4GB	

NOTES
Gamma" B r Screen 85"

MID No.	SANGAMO PART No.	SPRAGUE PART No.
36 450	S-241 Q-242	TVL-1679 TVL-3685

for Paper
capacitors.

	SPRAGUE PART No.	NOTES
2TM-P47		①
5GA-T47		5%
5HK-D1		
5HK-D1		
5HK-D47		
5HK-D1		
5GA-T47		
5HK-D1		
5HK-D47		
5HK-D47		
		$\pm .5\text{mmf}$
		$\pm .5\text{mmf}$
2SE-S47		
5HK-D1		10%
		$\pm .5\text{mmf}$
4SE-P10		
4TM-S47		
2TM-S22		
5HK-S1		N750 $\pm 1\text{mmf}$
5GA-T68		
5GA-T47		10%
5HK-S1		
5TM-Q47		10%
MS-256		10%
5TM-Q47		10%
5GA-T47		10%
6TM-S22		10%
		10%
		10%
		10%
4SE-S22		5%
2TM-P47		
5TCC-Q68		5%
MS-21		5%
2TM-P47		②
6TM-P1		
4TM-P1		
4TM-P1		
		10%
		10%
		10%
		10%
		10%

OLS

A		INSTALLATION NOTES
IRC PART No.	MALLORY PART No.	
QJ3-137 Not Req. 76-1 QJ7-112 Not Req.	TA16A Not Req. US-26 U9 Not	Volume Contrast Vert. Hold Vert. Lin. Brightness Height

controls.

ORS

unless otherwise listed.

ITEM No.	RATING		RCA Victor PART No.	NOTES
	OHMS	WATT		
R48	1meg		502510	
R47	18K 5%		502318	
R48	33K	2	522333	
R49	150K 5%		502415	
R50	22K		502322	
R51	18K 5%		502318	
R52	6.8meg		502568	
R53	270K		502427	
R54	22K		502322	
R55	3900Ω 5%		502239	
R56	470K		502447	
R57	1.5meg		502515	
R58	680K		502468	
R59	22K 5%		512322	
R60	18K 5%		502318	
R61	8200Ω		502282	
R62	150Ω	1	512115	
R63	150Ω		502115	
R64	150Ω		502115	
R65	22K 5%	1	512322	
R66	5600Ω 5%		502256	
R67	1.2meg		502512	
R68	150K 5%		502415	
R69	56K	1	512556	
R70	560K		502456	
R71	82K 5%		502382	
R72	91K 5%	1	512391	
R73	3900Ω 5%		502239	
R74	47K 5%		502347	
R75	330K		502433	
R76	1meg		502510	
R77	10meg		502610	
R78	10meg		502610	
R79	47Ω		502047	
R80	8200Ω	2	522282	
R81	270K		502427	
R82	68K		502368	
R83	5.1Ω		72067	
R84	4700Ω		502247	
R85	820K		502482	
R86	10Ω		104295	

application (Part #502018).

-IF)

DATA			
Merit RT No.	Miller PART No.	Ram PART No.	NOTES
C-537	4009		
V-180	6176	VP-1	36 Microhenries
V-195	6153	VP-4	120 Microhenries
V-195	6153	VP-4	120 Microhenries
V-199	6155		300 Microhenries
V-199	6155		300 Microhenries
			Includes Cap.
			4. 7 Microhenries ①
			4. 7 Microhenries ①

HORIZ. OSC.)

DATA			NOTES
Miller PART No.	Ram PART No.	Thordarson PART No.	
		HS-7	Tapped @ 450, Horiz. Freq. Horiz. Waveform

LOKE

REPLACEMENT DATA				
Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
C-2996 ①		C-2326 ①	26C44 ①	C-17X ①

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA								
		RCA Victor PART No.	Halldorson 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 (1.5-12MH)	104086		MWC-8 ①	6322	20IR15	QRC-109	WC-8	WC-22	WLC-6

① Do not use tap.

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA						
	PRI.	SEC. 1	SEC. 2	RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
TI	117V @ 1. 71A	540V CT @ . 250A	5V @ 2. 65A	108145						
	SEC. 3	SEC. 4	SEC. 5							
	6. 3V @ 7. 5A									

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							
		RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Rogers PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T2	Vert. Output	104877			V318				
T3A	Yoke-Horiz. (17MH)	106142 ①	DF-614		Y-110		DY-27A	Y-48	A-115X
B	(110°)-Vert. (12.6MH)	104460							Y-68-2
	Rear Cover & Centering Device	104409							
T4	Yoke Clamp	106144	FB491 *		X168		HO-290 *	FLY-100 *	
	Horiz. Output								

① Includes R63, R64 and C68.

* HORIZONTAL OUTPUT TRANSFORMER CONNECTION DATA

Use Original Width Coil Unless Replacement Type Is Listed

	ORIGINAL TERMINAL CONNECTIONS	Halldorson Replacement Connections	Merit Replacement Connections	Ram Replacement Connections	Rogers Replacement Connections	Stancor Replacement Connections	Thordarson Replacement Connections	Triad Replacement Connections
	5	5				5	5	
	4	4				4	4	
	3	3				3	3	
	2	2				2	2	
	1	1				1	1	
Connect Width Coil Across 	2 & 1	2 & 1				2 & 1	2 & 1	

TRANSFORMER (AUDIO OUTPUT)

ITEM NO.	IMPEDANCE		REPLACEMENT DATA							NOTES
			RCA Victor PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triod PART No.	
	PRI.	SEC.								
T5	7600Ω	3-4Ω	100037	21003	A-3020	AU-804	A-3849	26S48	S-9Z	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				RCA Victor PART No.	QUAM PART No.	
SP1	5"	PM	3-4Ω	106155	5A07	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	RCA Victor PART No.	REPLACEMENT DATA
K1	AGC Circuit	680K, 1.2meg, 220K, 82K, 820K	104331 ①	
K2	Sound IF Grid	56mmf 10%, 47K	104329	Centralab RC-421 Sprague PRC-1
K3	Sync Coupling	330mmf, 330mmf, 2.2meg, 560K, 270K	104332 ②	

① Not used in Ch. KCSU18A. B.

② Ch. KCS118A, B uses 330mmf, 330mmf, 2.2meg, 270K, 1meg in this application (Part #104330).

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072
U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U,
17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

FOLDER 1

PARTS LIST AND DESCRIPTIONS (Continued)

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			RCA Victor PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M1	#28 AWG 2" Length							
M2	#28 AWG 2" Length							

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		RCA Victor PART No.	CBS PART No.	SYLVANIA PART No.	
M3	1N60	105517	1N60	1N295	Video Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	RCA Victor PART No.	NOTES
M4	Tuner	KRK46R	VHF Ch. KCS118C
	Tuner	KRK70A	VHF Ch. KCS118A
	Tuner	KRK71A	VHF, with UHF provisions, Ch. KCS118B
	Tuner	KRK47R	VHF, with UHF provisions, Ch. KCS118D
	Tuner	KRK86A	UHF Ch. KCS118B, D
M5	Thermal Switch	106542	

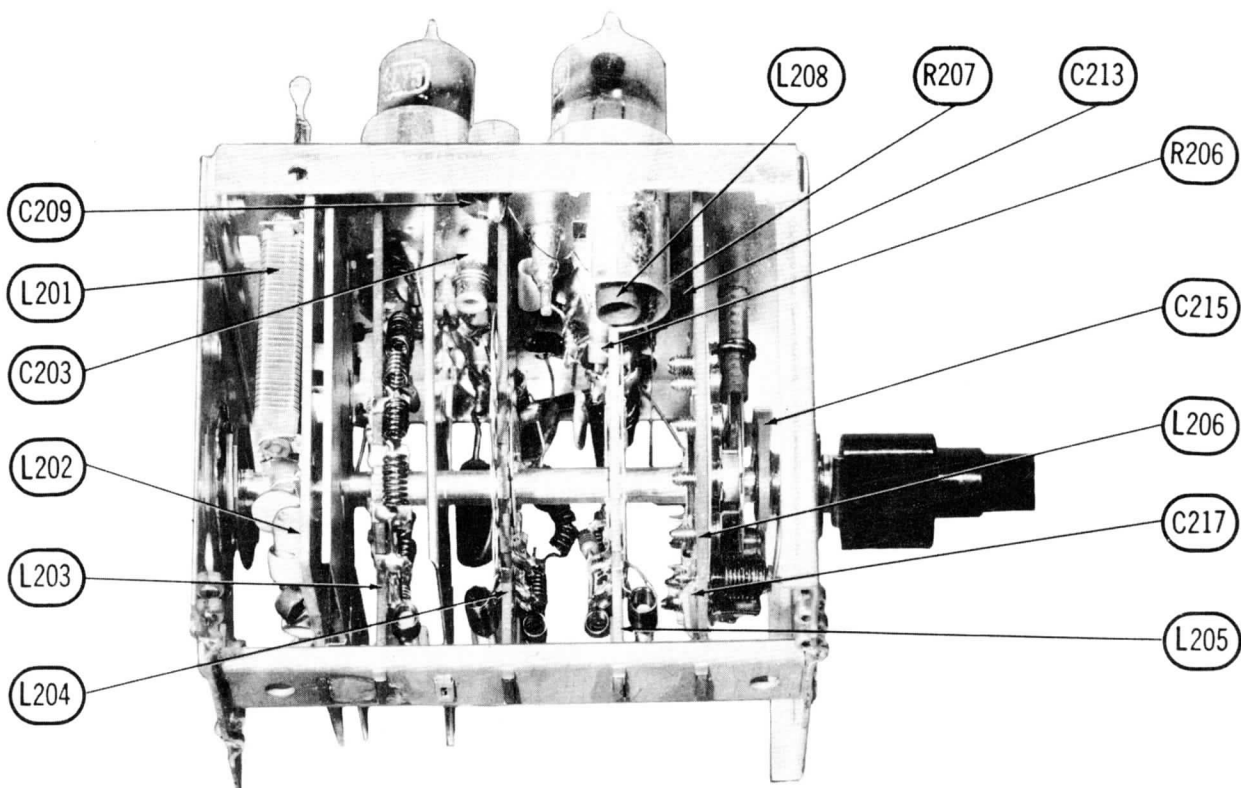
CABINETS & CABINET PARTS

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

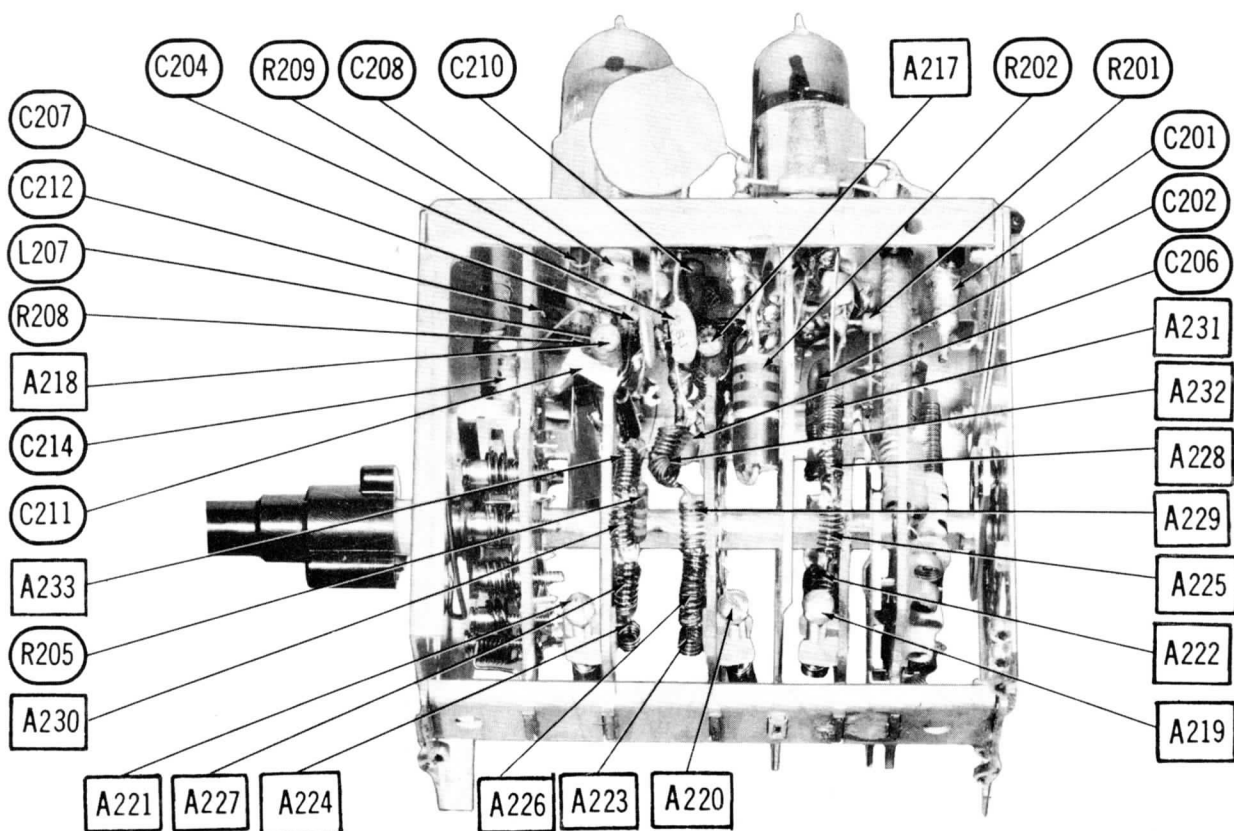
NAME	PART NO.	DESCRIPTION
Safety Glass	106128	
Mask	106127	
Knob	103064	Fine Tuning, Models 17PD9074, U, 17PT9041, U
Knob	103065	Fine Tuning, Models 17PD9072, U, 17PD9079, U, 17PT9042, U
Knob	104473-A	VHF Channel Selector, Models 17PD9074U, 17PT9041U
Knob	104471	VHF Channel Selector, Models 17PD9072U, 17PD9079U, 17PT9042U
Knob	104470-A	VHF Channel Selector, Models 17PD9074, 17PT9041
Knob	104468	VHF Channel Selector, Models 17PD9072, 17PD9079, 17PT9042
Knob	103068	UHF Channel Selector, Models 17PD9074U, 17PT9041U
Knob	103069	UHF Channel Selector, Models 17PD9072U, 17PD9079U, 17PT9042U
Knob	106141	UHF Dial, Models 17PD9072U, 17PD9079U, 17PT9042U
Knob	106140	UHF Dial, Models 17PD9074U, 17PT9041U
Knob	79533	Horiz. Hold
Knob	103078	Contrast, Volume-On-Off, Models 17PD9072, U, 17PD9079, U, 17PT9042, U
Knob	103077	Contrast, Volume-On-Off, Models 17PD9074, U, 17PT9041, U
Handle	106134	Models 17PD9072, U, 17PD9074, U, 17PD9079, U
Handle	104372	Models 17PT9041, U, 17PT9042, U
Cabinet	Z4344	Models 17PD9074, U
Cabinet	Z4343	Models 17PD9072, U
Cabinet	Z4350	Models 17PD9079, U
Antenna	104457	VHF
Antenna	104458	UHF, Ring Type

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869
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. 8464 (Flat) or 8484 (Round) - 4 Conductor
	8485 (Round) - 5 Conductor
	8488 (Round) - 8 Conductor



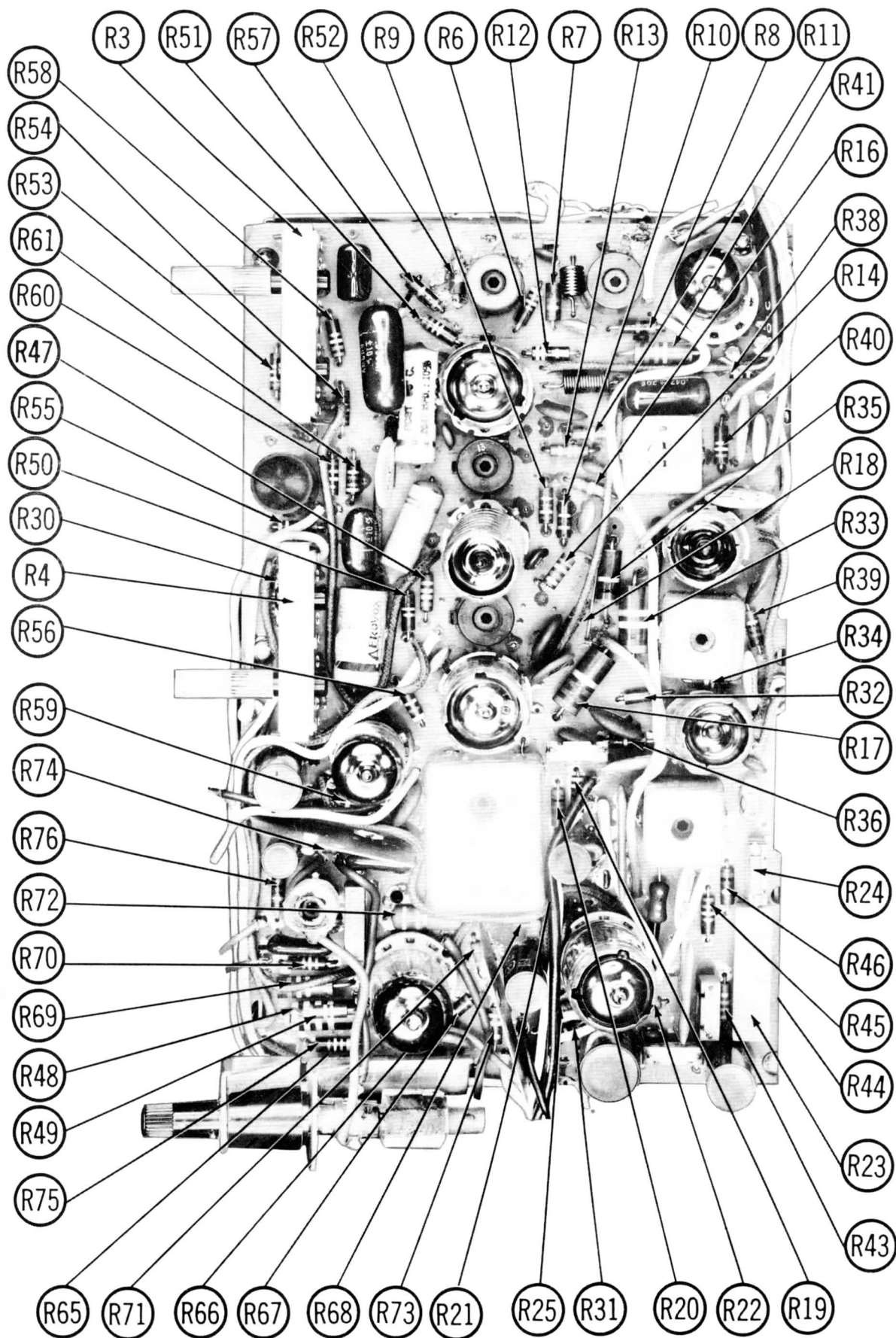
TUNER KRK 70B - LEFT SIDE



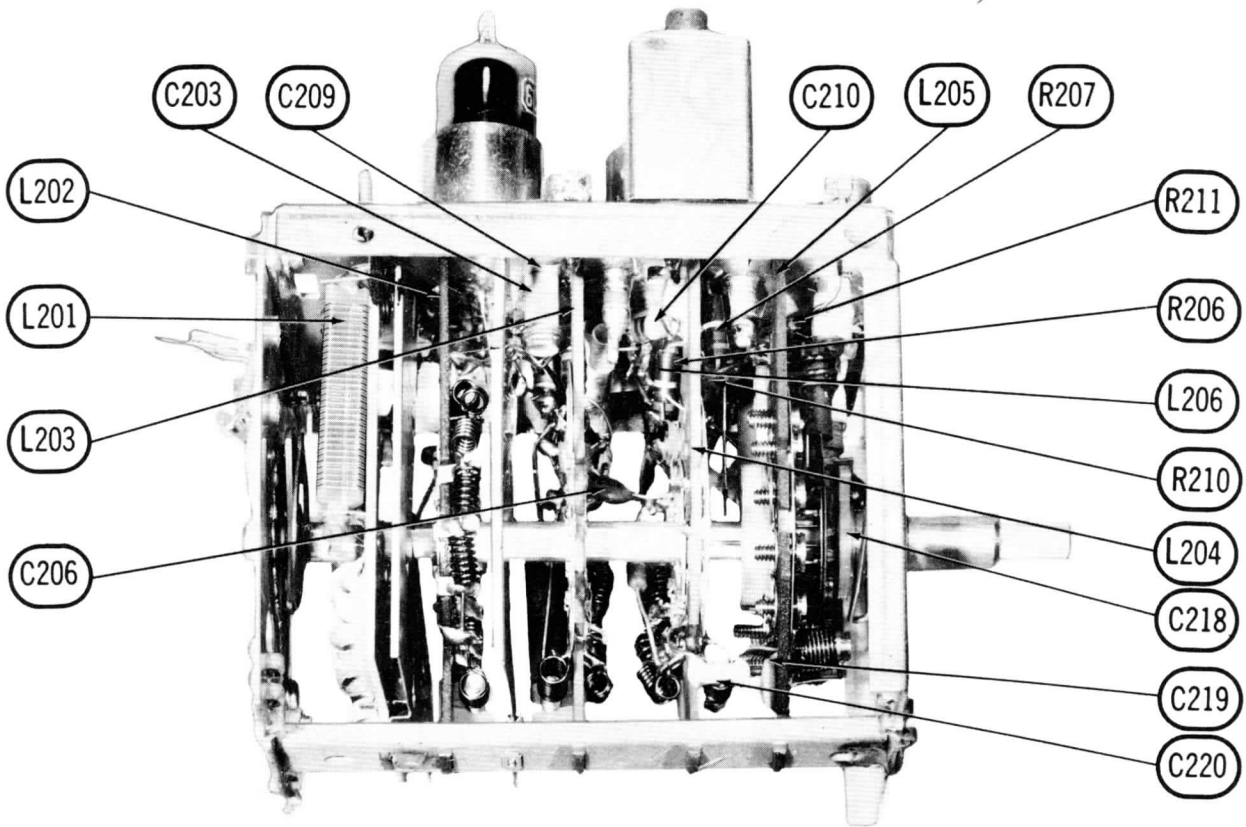
TUNER KRK 70B - RIGHT SIDE

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17P19041, U, 17P19042, U, 17P19050, U, 17P19054, U, 17P19059, U (Ch. KCS118A, B, C, D)

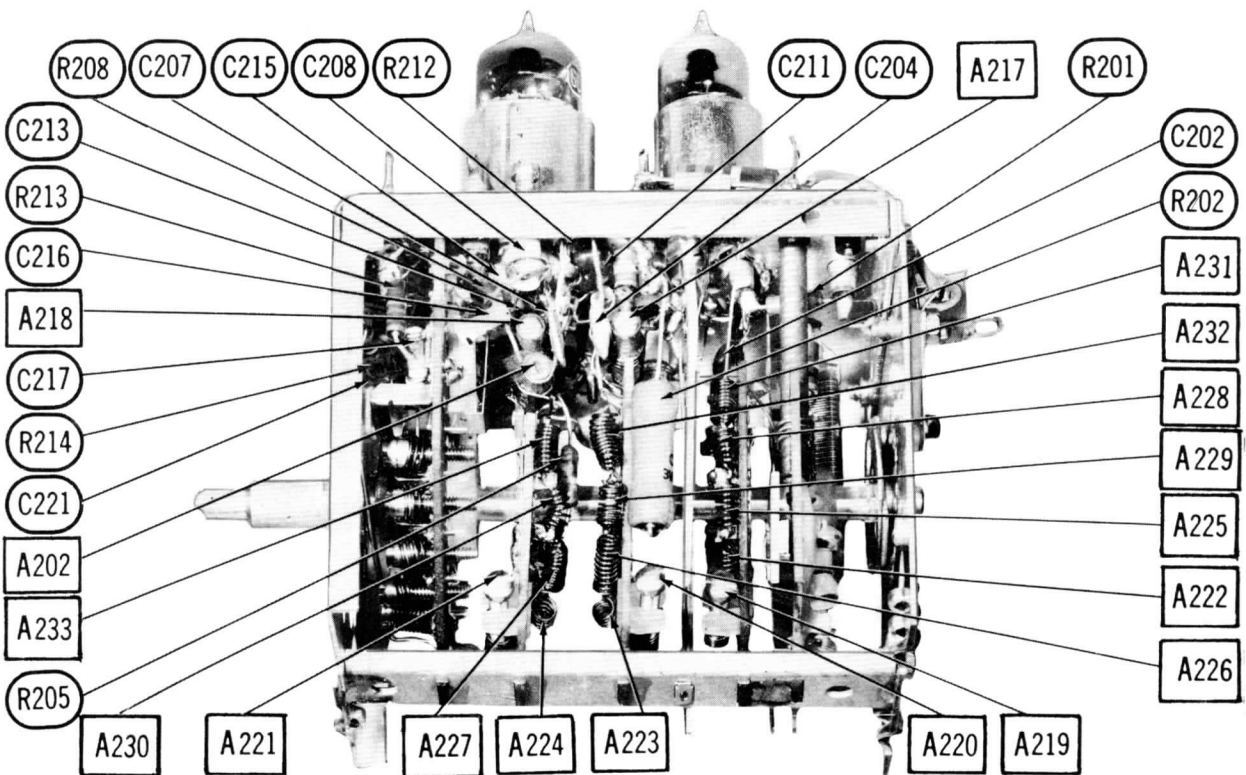
FOLDER 1



RESISTOR IDENTIFICATION



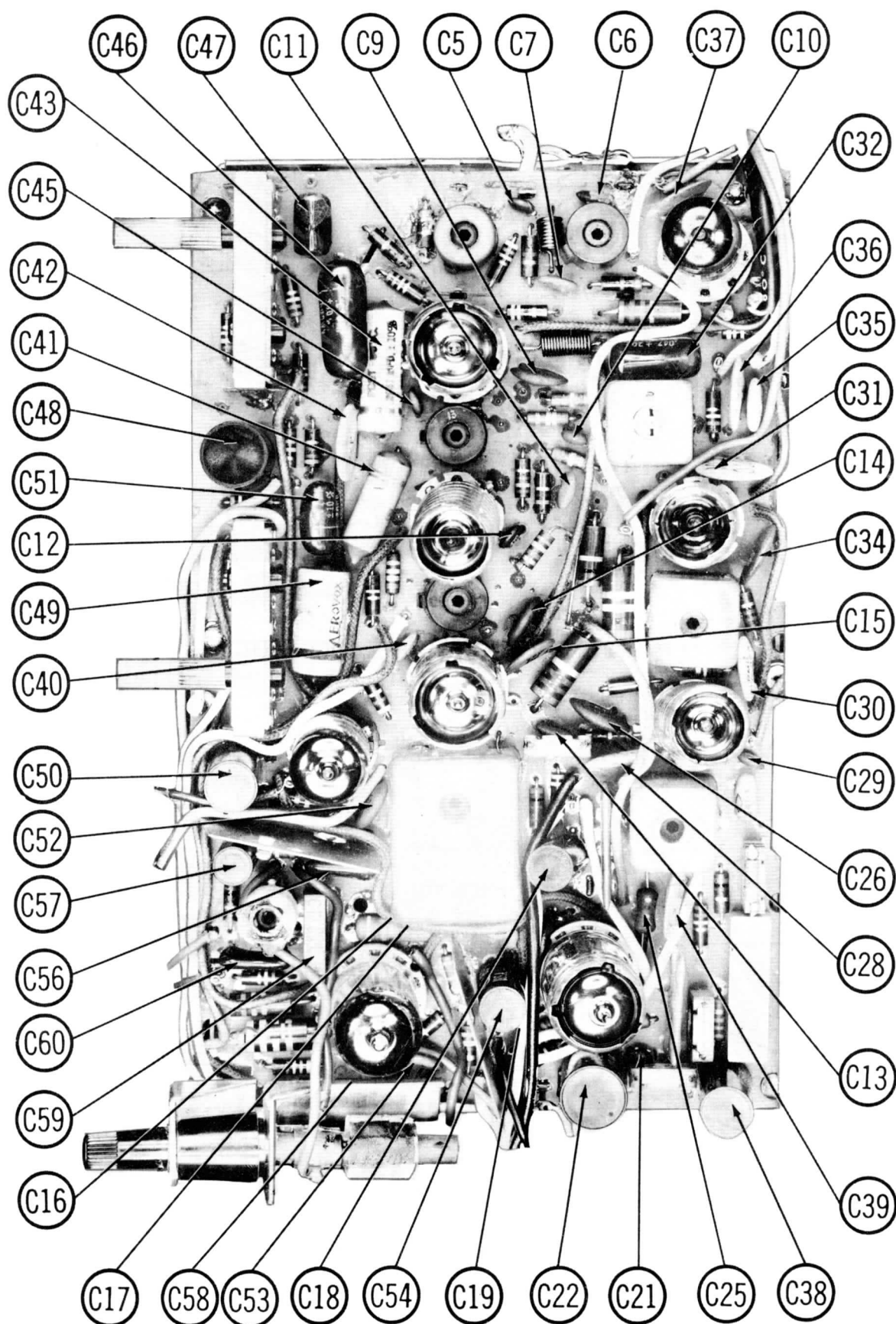
TUNER KRK 71B - LEFT SIDE



TUNER KRK 71B - RIGHT SIDE

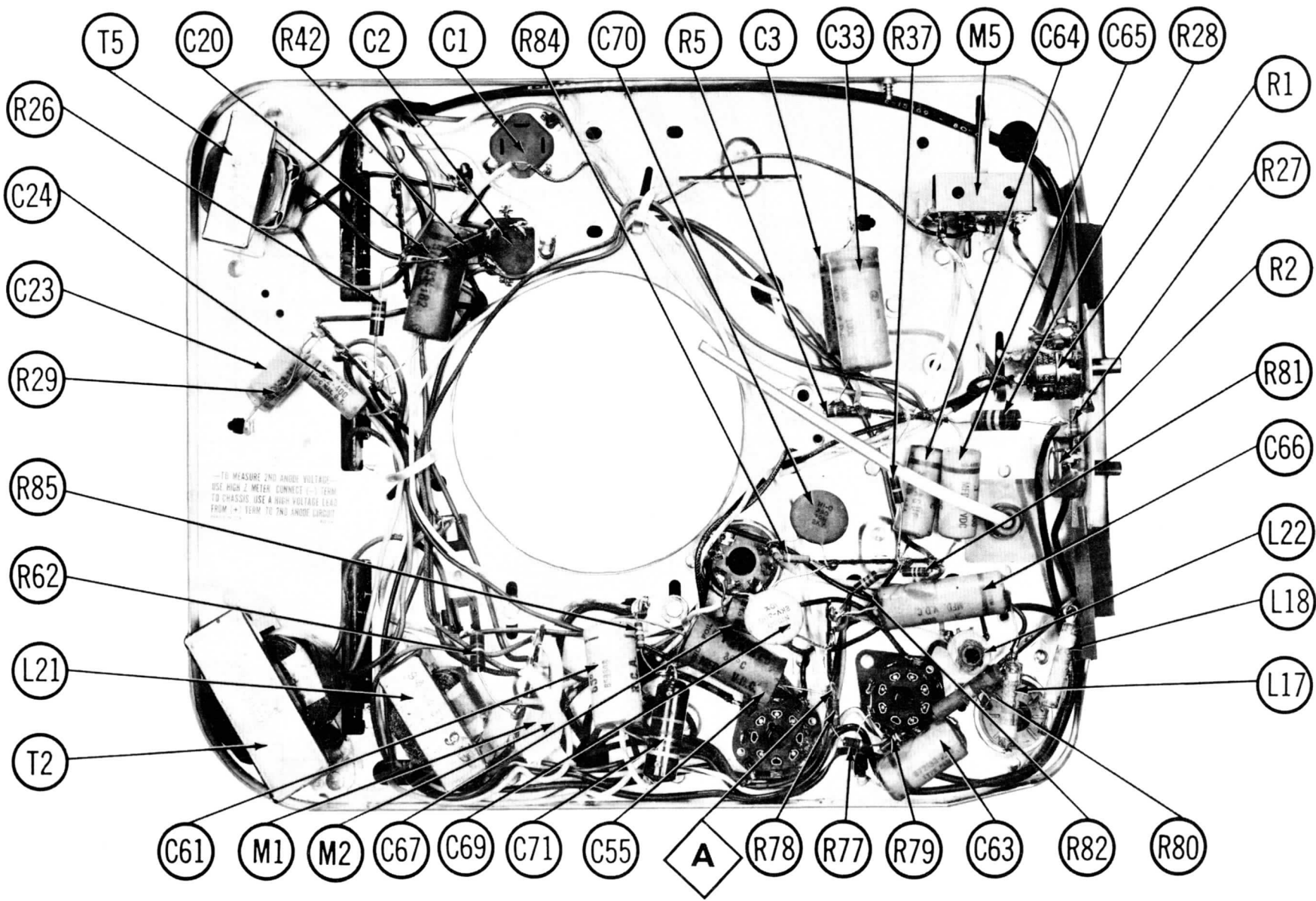
RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KCS118A, B, C, D)

FOLDER 1

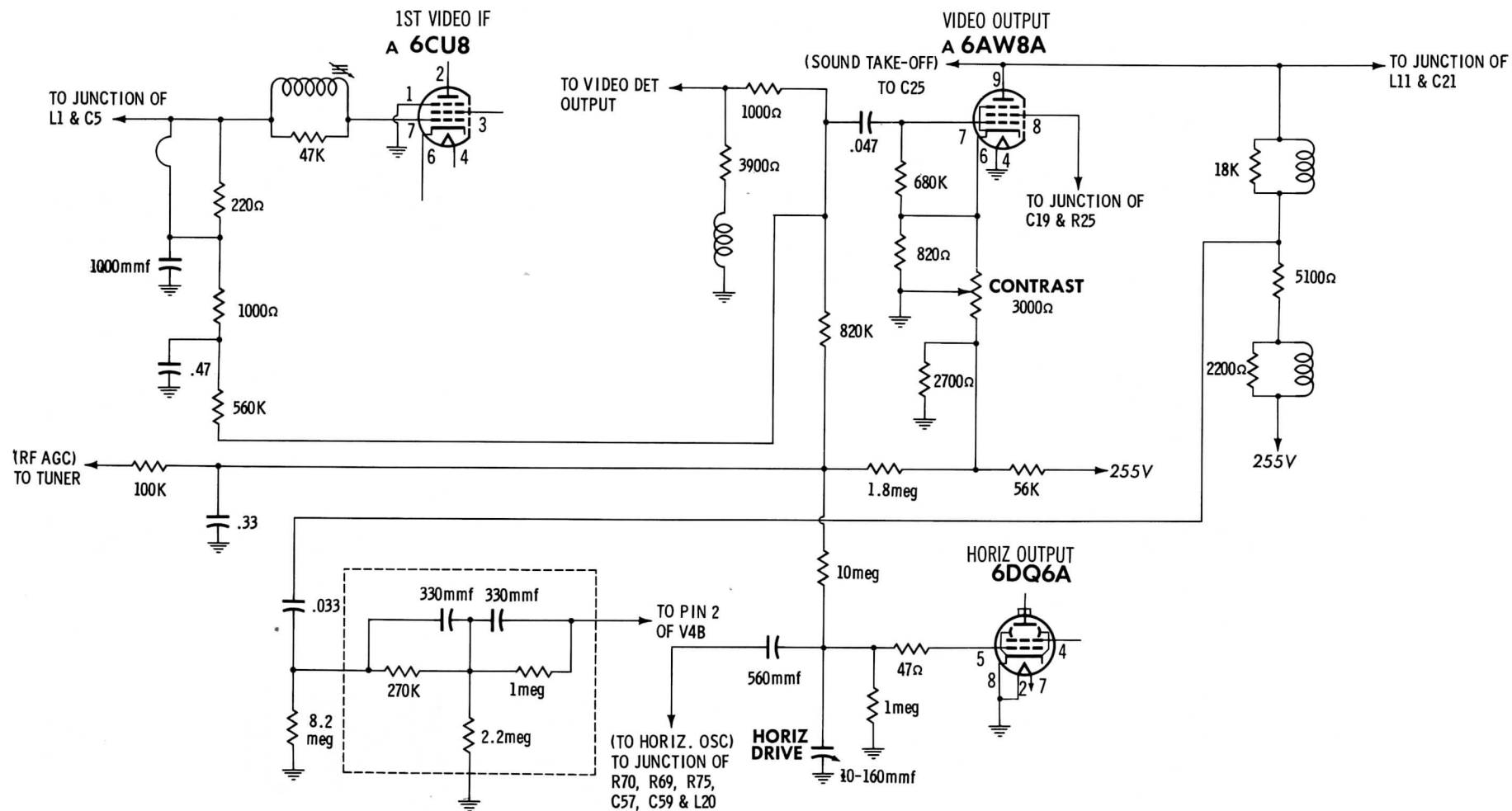


CAPACITOR IDENTIFICATION

RCA VICTOR MODELS 17PD9062, U, 17PD9064, U, 17PD9072, U, 17PD9074, U, 17PD9079, U, 17PT9041, U, 17PT9042, U, 17PT9050, U, 17PT9054, U, 17PT9059, U (Ch. KC5118A, B, C, D)

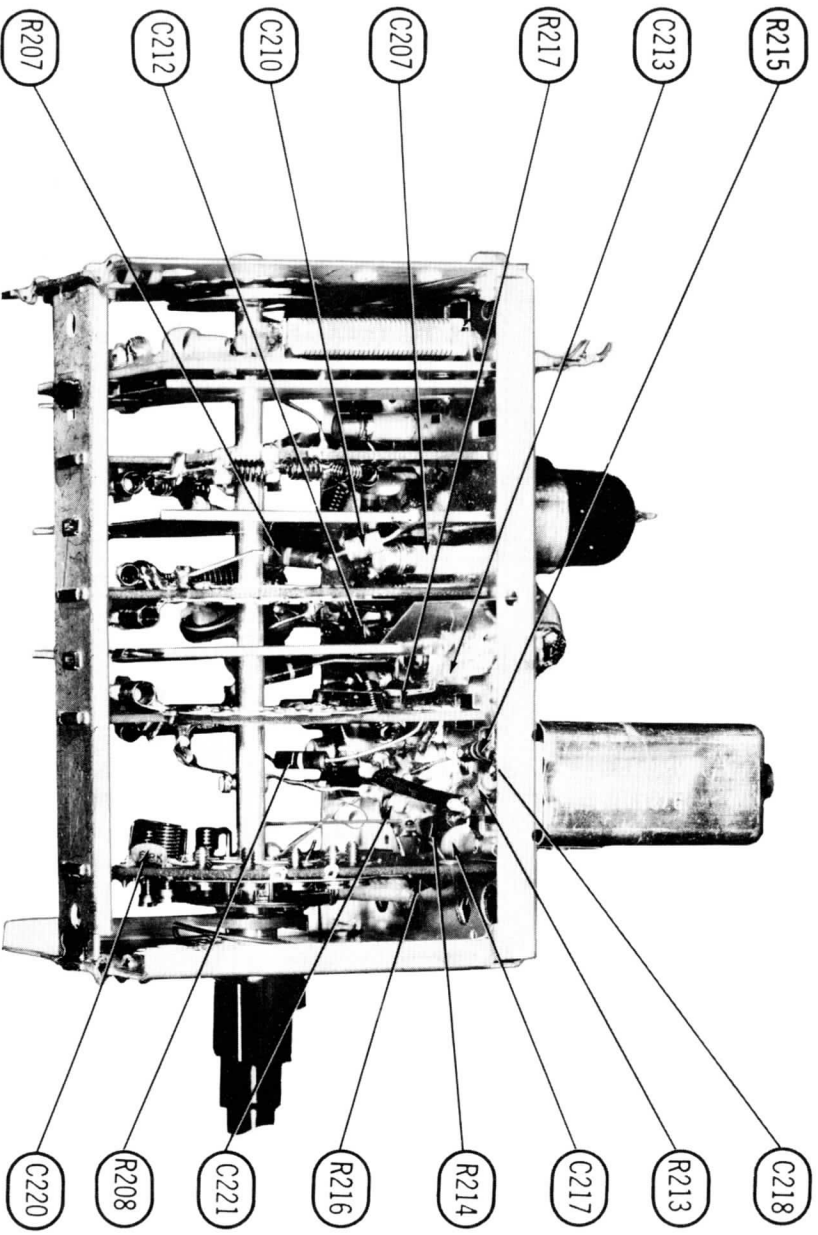


CHASSIS-BOTTOM VIEW

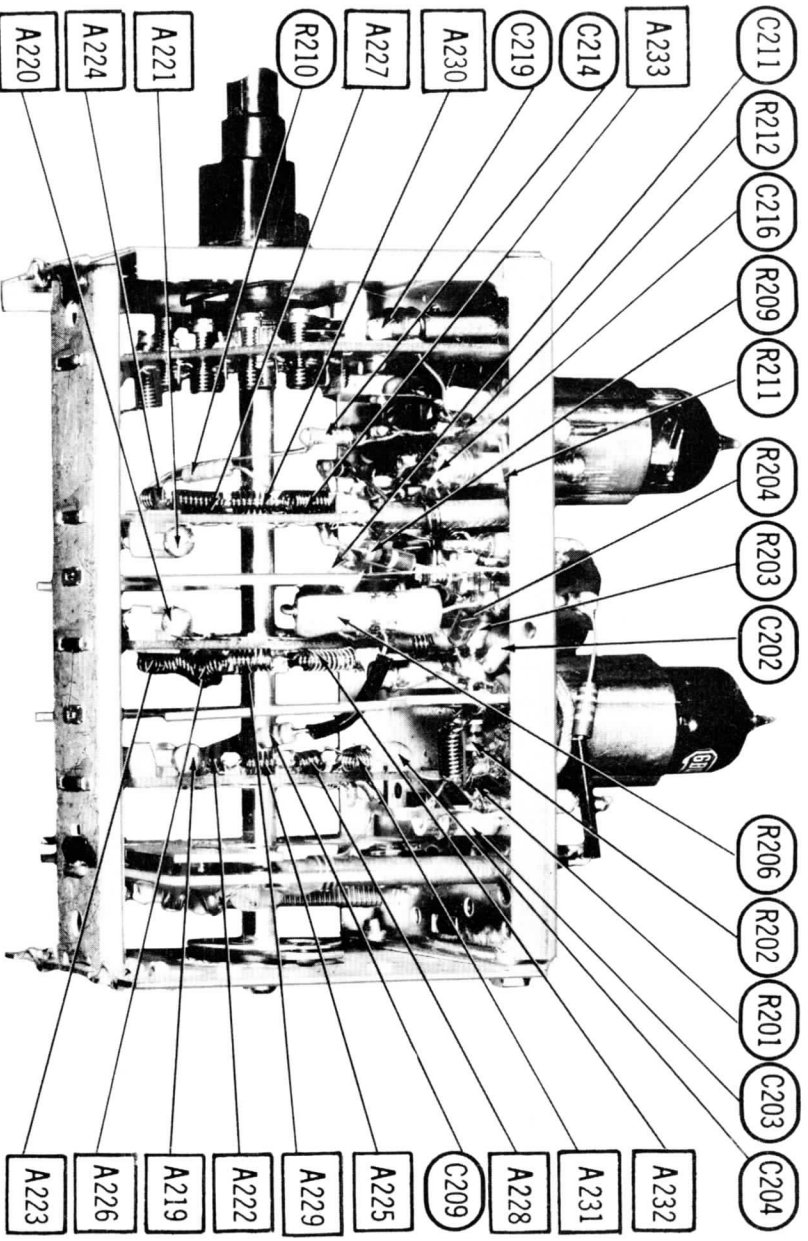


A PHOTOFAC STANDARD NOTATION SCHEMATIC
 © Howard W. Sams & Co., Inc. 1958

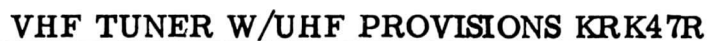
ALTERNATE CIRCUITS USED IN CH. KCS118A & KCS118B



TUNER KRK46R - LEFT SIDE



TUNER KRK46R - RIGHT SIDE



RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6CU8	0Ω	††680Ω	††680Ω	.1Ω	0Ω	47Ω	500K	•2.3meg	•†1.8meg
V2	6CB6	75K	47Ω	.1Ω	0Ω	†680Ω	†680Ω	75K		
V3	6CU8	0Ω	†8200Ω	†8200Ω	0Ω	.1Ω	180Ω	.1Ω	18K	†18K
V4	6AW8A	0Ω	2meg	†680K	.1Ω	0Ω	•80Ω	680K	†47K	†5100Ω
V5	6AU6	47K	0Ω	.1Ω	0Ω	†10K	†16K	82Ω		
V6	6DT6	4Ω	560Ω	.1Ω	0Ω	†720K	†15K	470K		
V7	6AQ5A	0Ω	680Ω	.1Ω	0Ω	†2500Ω	†2200Ω	0Ω		
V8	6AQ5A	•1.2meg	0Ω	0Ω	.1Ω	†495Ω	†150Ω	1.2meg		
V9	6CG7	†0Ω	1.3meg	230K	0Ω	.1Ω	†56K	240K	0Ω	0Ω
V10	6DQ6A	NC	.1Ω	NC	†8200Ω	1meg	TP	0Ω	0Ω	TOP CAP †17Ω
V11	6AX4GT	NC	NC	†700K	NC	†12.3Ω	NC	0Ω	.1Ω	
V12	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE								TOP CAP †317Ω
V13	5U4GB	NC	†	NC	25Ω	NC	27Ω	NC	†	
V14	17BZP4	0Ω	22K	†270K	†0Ω	NC	NC	•220K	.1Ω	
V201	6BQ7A	†1300Ω	500K	600K	0Ω	.1Ω	600K	1.1meg	0Ω	0Ω
V202	6CQ8	†370Ω	100K	INF	.1Ω	0Ω	INF	0Ω	INF	INF
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9

† THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC CAPACITOR CONNECTED IN THE ASSOCIATED CIRCUIT.

• THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.

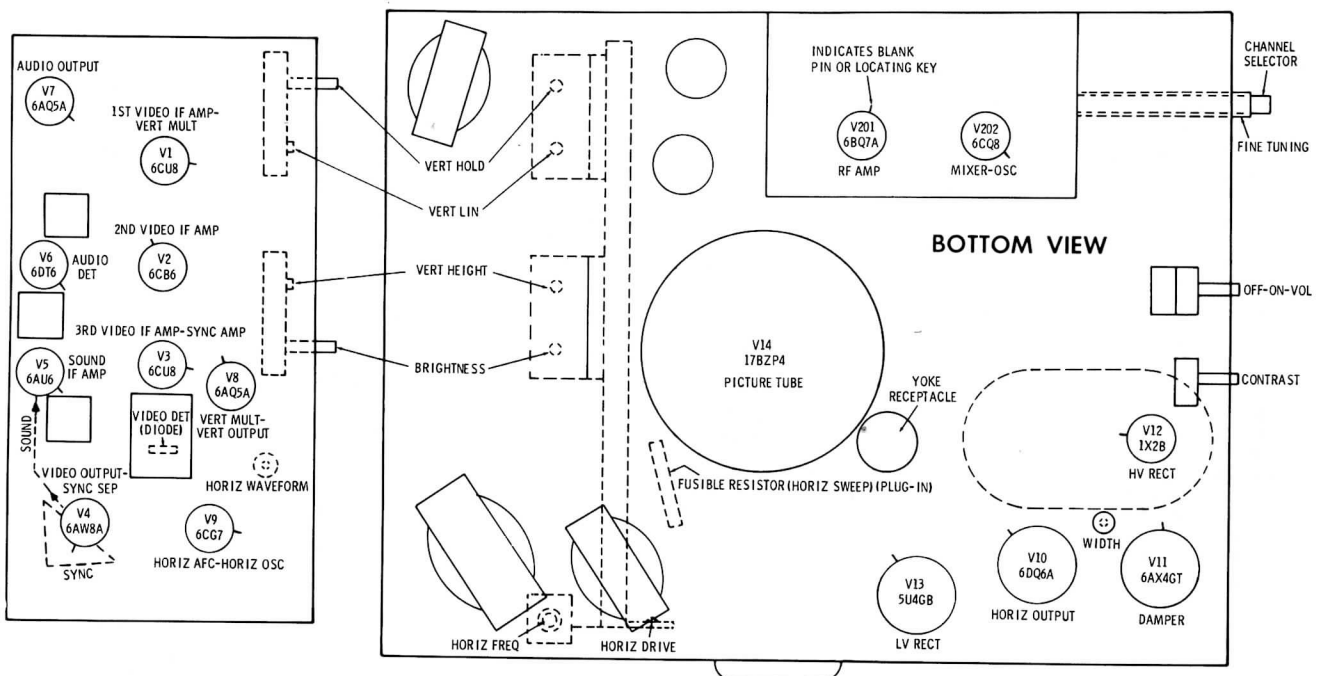
† MEASURED FROM 255V SOURCE.

†† MEASURED FROM PIN 7 OF V2.

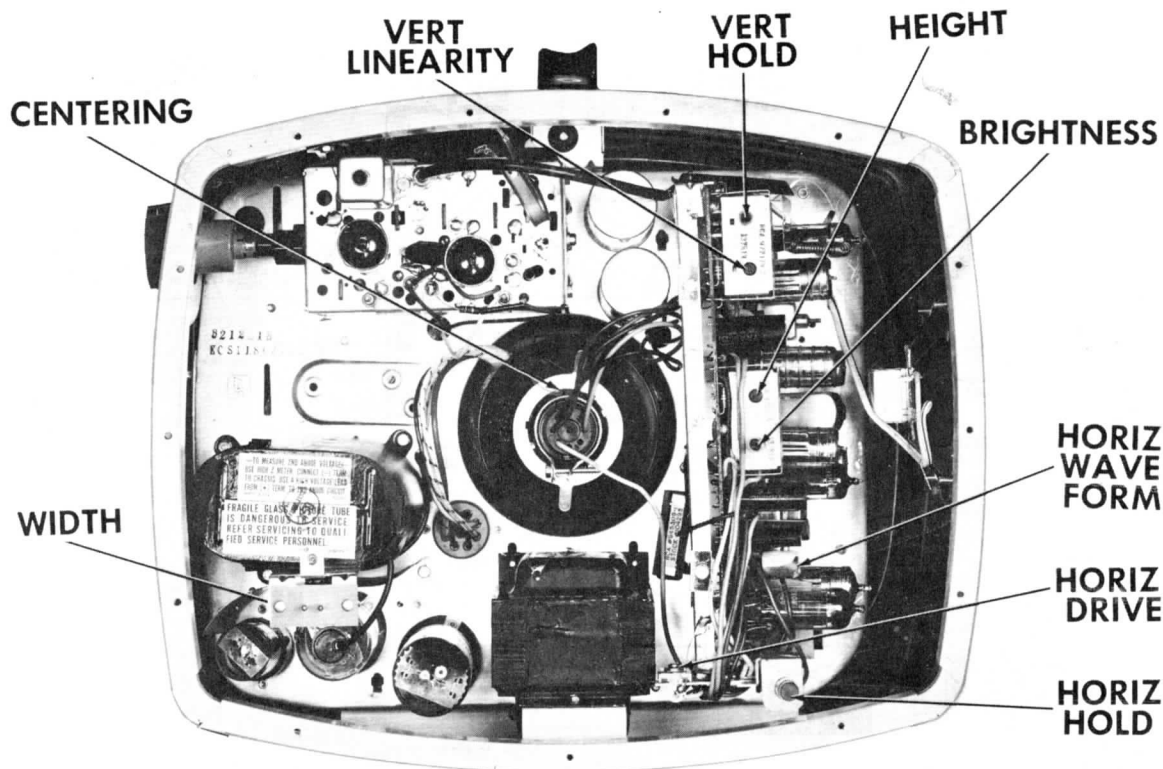
NC NO CONNECTION.

† MEASURED FROM PIN 3 OF V11.

TP TIE POINT.



TUBE PLACEMENT CHART



CABINET—REAR VIEW

HORIZONTAL OSCILLATOR ADJUSTMENTS

Before adjusting the Waveform slug (B1), the Horizontal Drive and 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 overcan of approximately 3/4 inch on each side of the screen at normal line voltage.

Connect a short jumper across the terminal of the Horizontal Waveform coil (L20) and short the grid (pin 2) of the 6CG7 (V9) to chassis with a small screw driver.

Adjust the Horizontal Hold for an upright picture (may appear to float back and forth across the screen). Remove the jumper from across L20 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.