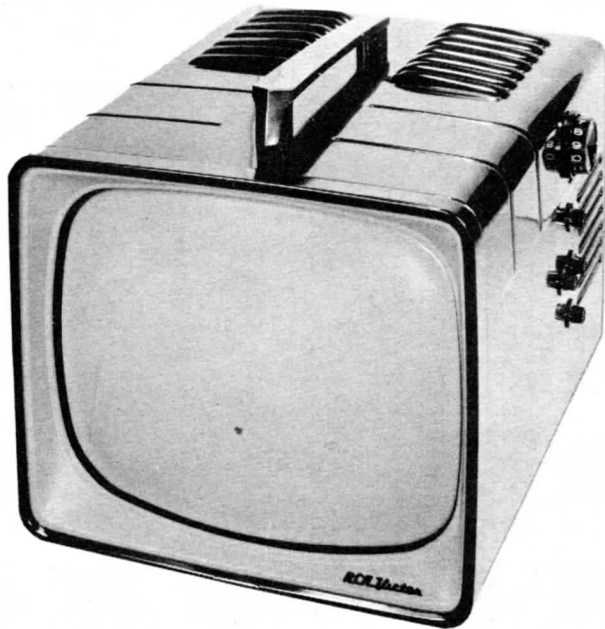




DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove 6 push-on type knobs from side of cabinet.
2. Remove 3 metal screws holding front trim and remove trim.
3. Bend 2 tabs at top of safety glass up and remove safety glass.
4. Remove 6 metal screws and remove rear cover.
5. Remove speaker leads.
6. Remove 1 metal screw holding chassis to brace at top.
7. Place receiver front down on a pad.
8. Remove 3 chassis screws from bottom.
9. Lift cabinet off of chassis.
10. Remove 2 speaker nuts and remove speaker.



MODEL
14-S-7052

CHASSIS
KCS102B

RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
14-S-7071, U, 14-S-7074, U, (Ch. KCS102B, D)

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustments of the VHF tuner oscillator circuit may be accomplished by removing the channel selector and fine tuning knobs.

PICTURE TUBE SAFETY GLASS CLEANING

1. Remove 3 metal screws from bottom holding front trim and remove trim.
2. Bend up tabs at top of safety glass and remove safety glass.
3. Caution: Use only a soft cloth and water to clean safety glass.

FOCUS

Adjust Ion trap for best focus consistent with maximum brightness.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

The horizontal frequency coil is located on the control panel of the chassis and is used as the horizontal hold control. Adjust the horizontal hold until the picture synchronizes horizontally.

FUSES

One fuse is used for horiz. sweep circuit protection. (For location see tube placement chart.)

CENTERING

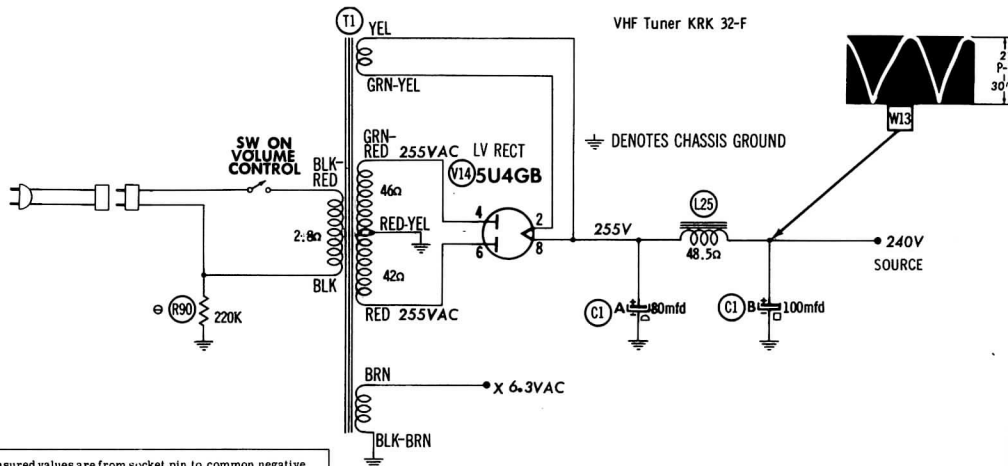
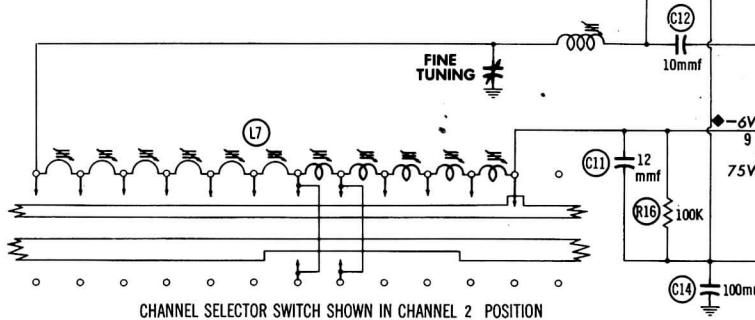
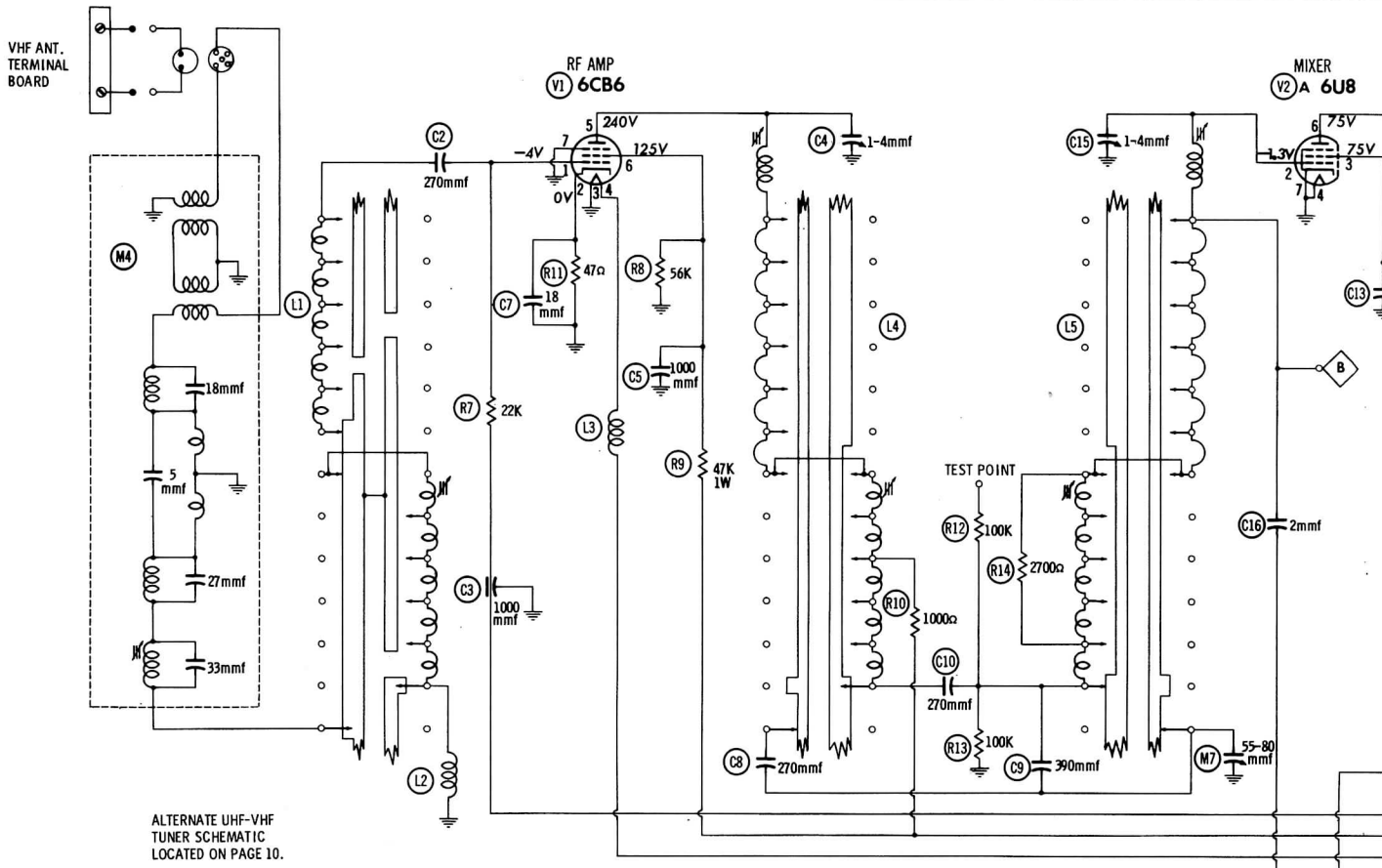
Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube. Rotate the two rings around the neck of the tube until the picture is properly centered.

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"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."

G794

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◆ MEASURED FROM PIN 8 OF V2.

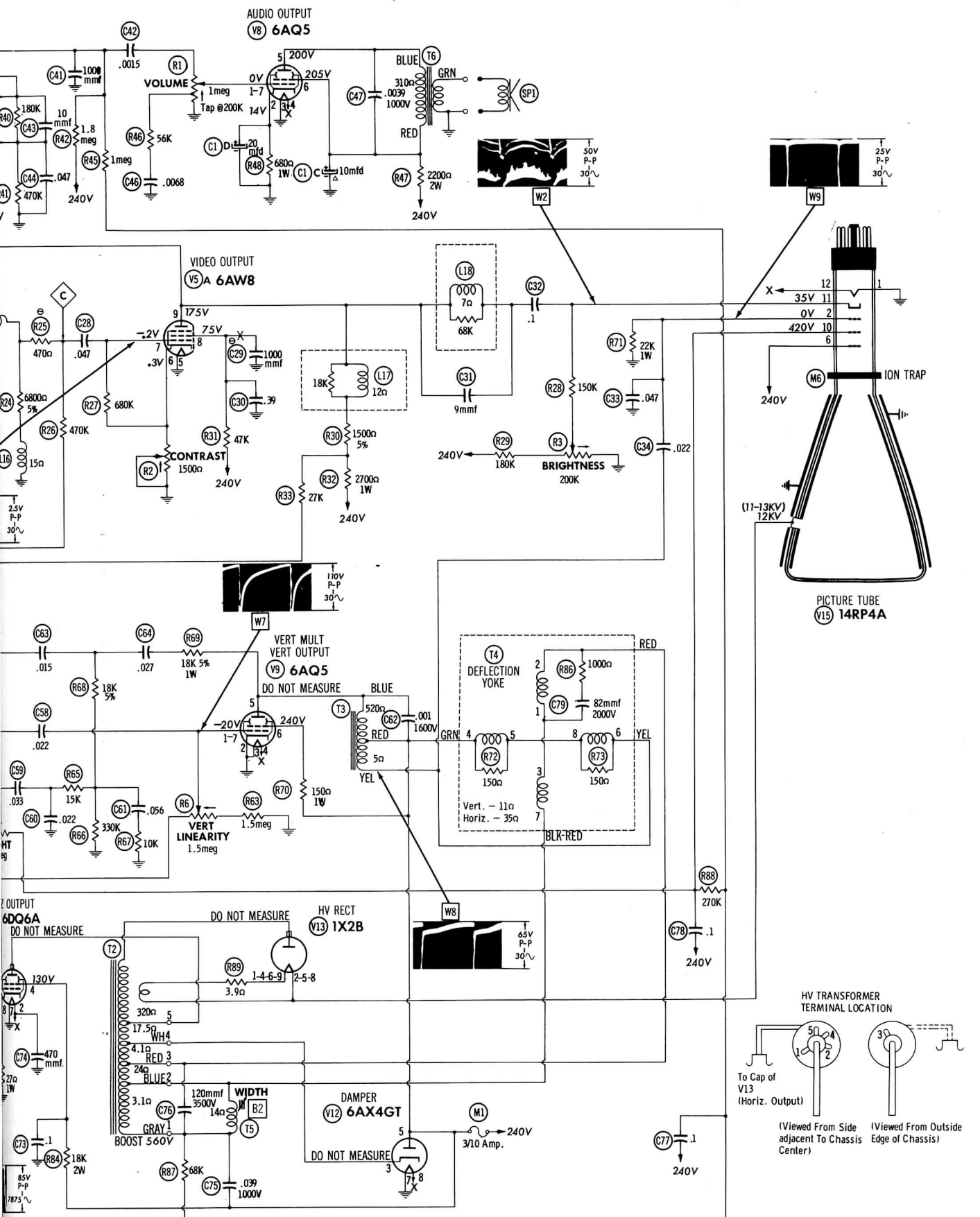
⊙ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM.

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

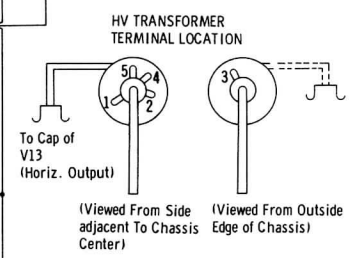
WAVE FORMS TAKEN WITH CONTROLS SET TO PRODUCE 50 VOLTS PEAK-TO-PEAK SIGNAL AT PICTURE TUBE

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltage measured at 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
5. All controls set for normal operation; no signal applied.

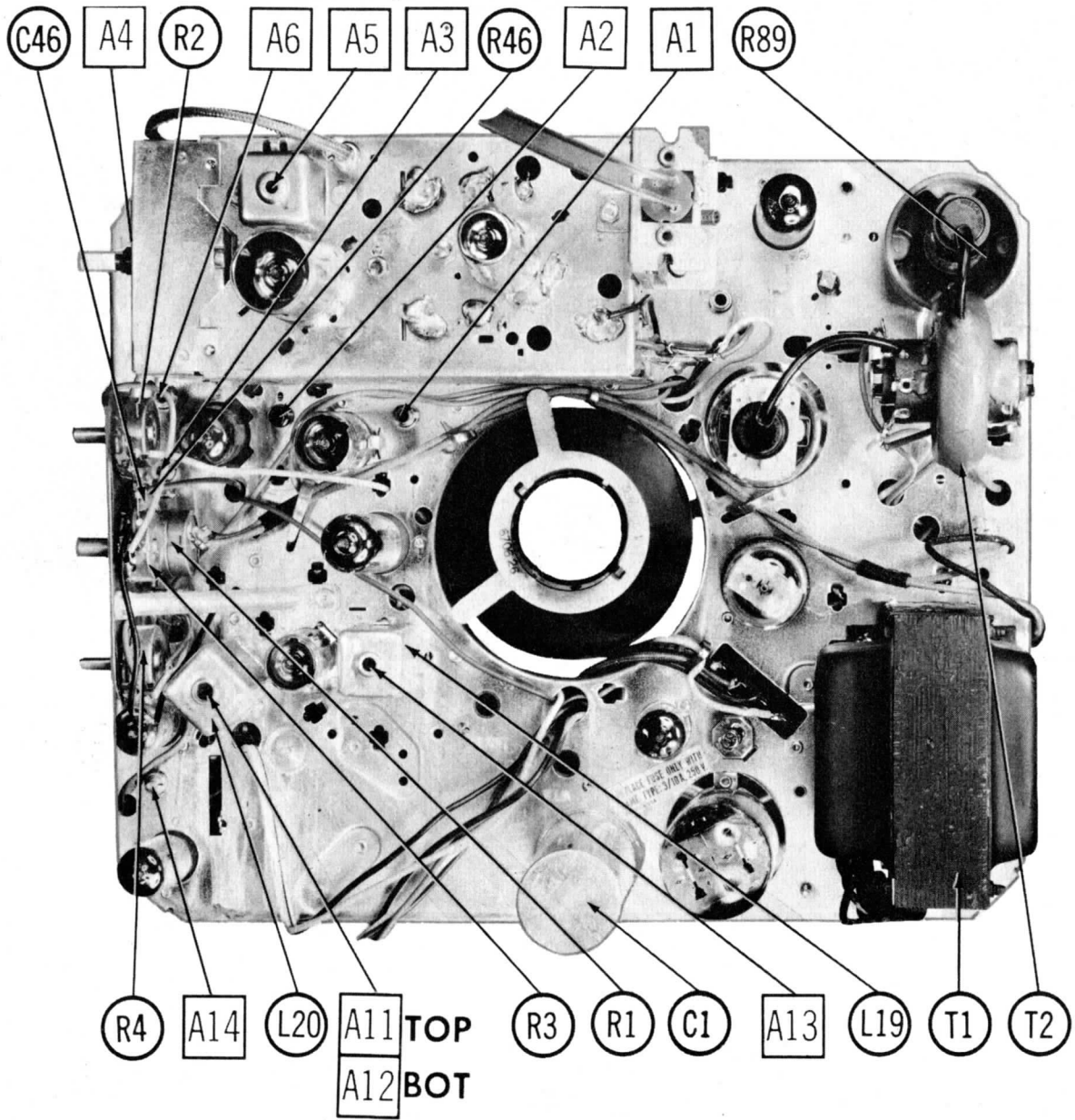


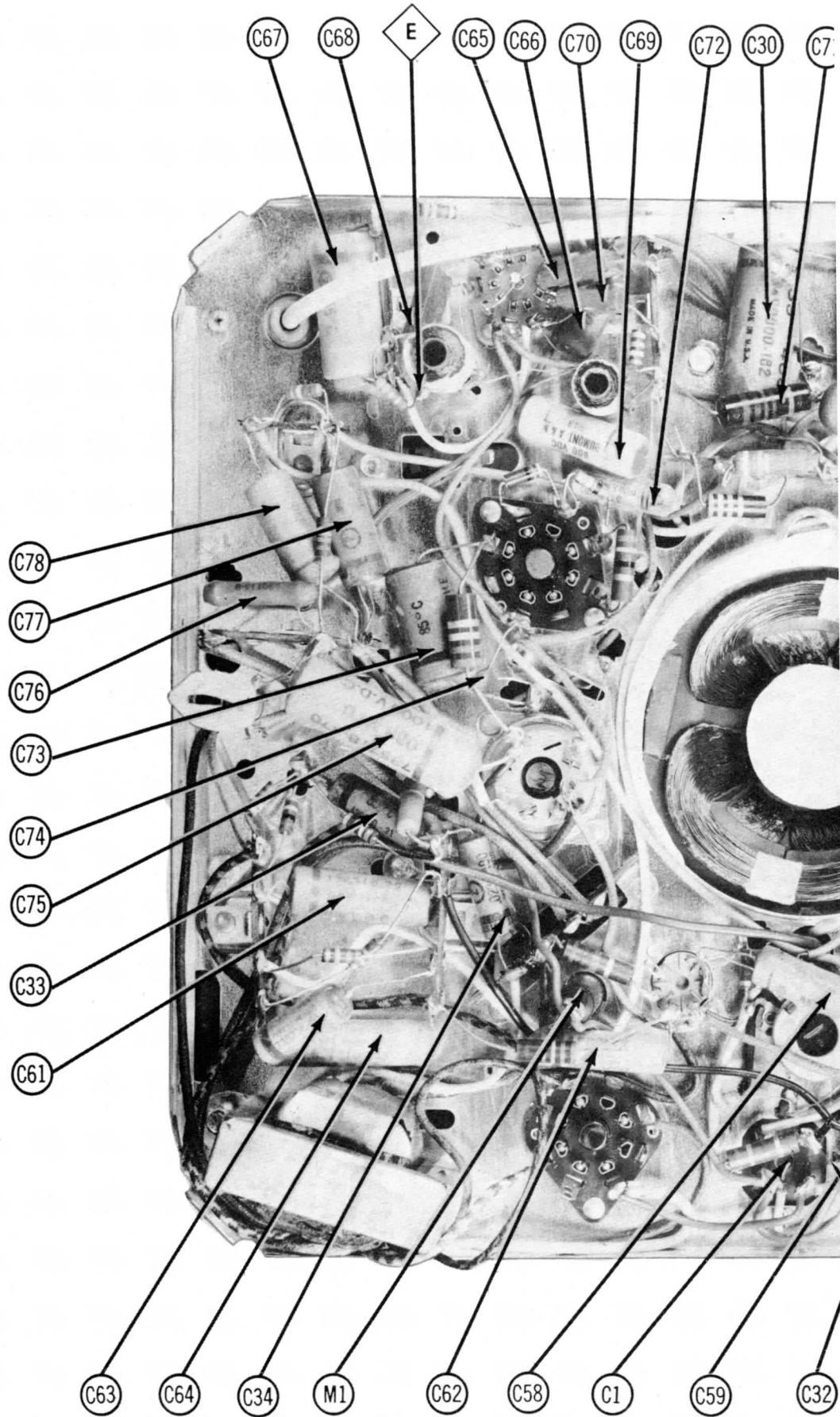
RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
 14-S-7071, U, 14-S-7074, U (Ch. KCS102B, D)

RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
 14-S-7071, U, 14-S-7074, U, (Ch. KCS102B, D)

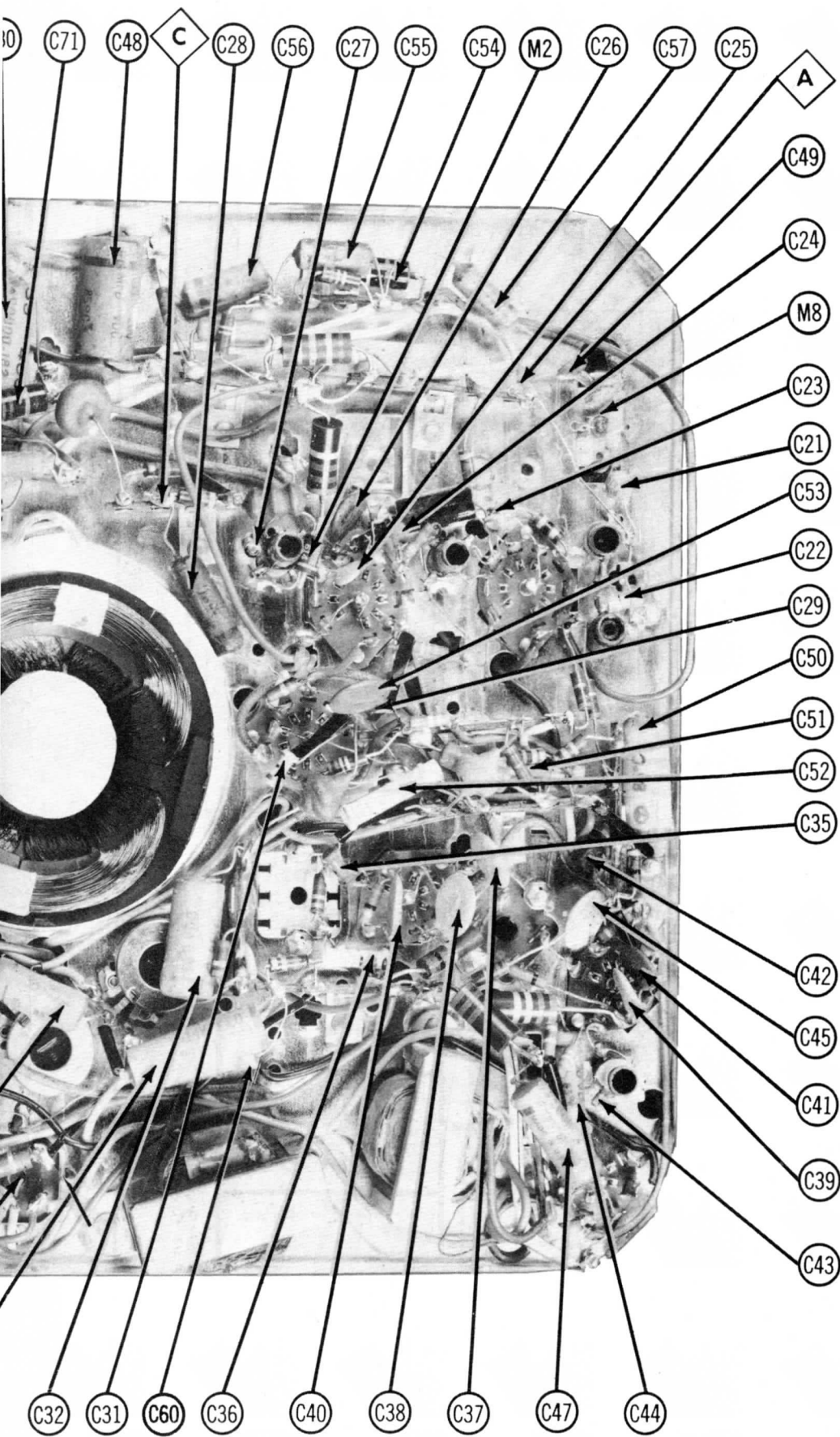


CHASSIS TOP VIEW



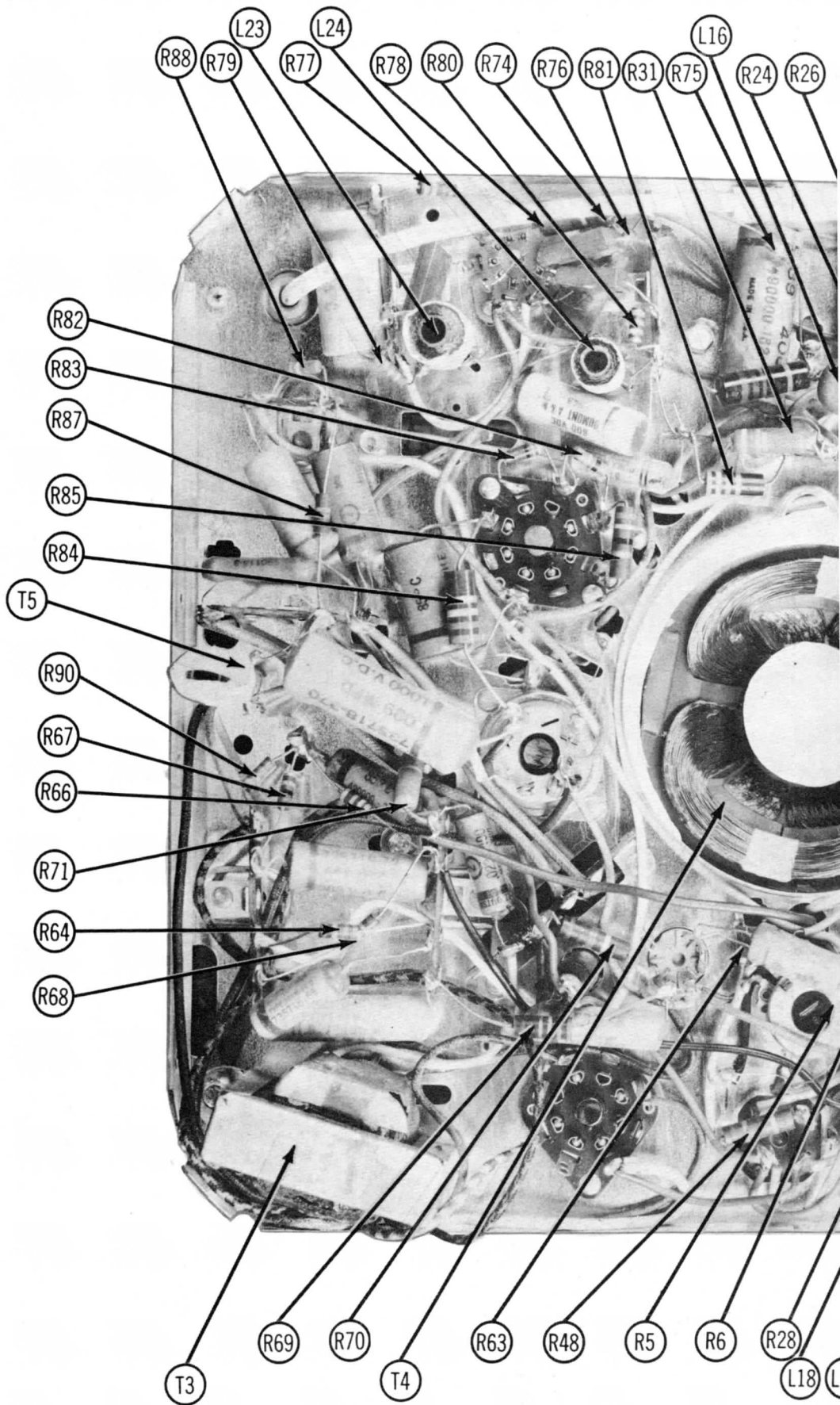


CHASSIS BOTTOM VIEW-CAPACITOR AND



RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
 14-S-7071, U, 14-S-7074, U (Ch. KCS102B, D)

FRONT AND ALIGNMENT IDENTIFICATION



CHASSIS BOTTOM VIEW-RESISTOR



RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
 14-S-7071, U, 14-S-7074, U (Ch. KCS102B, D)

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis.

VIDEO IF ALIGNMENT

Connect a 1000 ohm potentiometer across a 7.5 volt bias battery (capable of an appreciable current drain). Connect the potentiometer to point Ⓢ and the positive lead of the battery to chassis. Set the potentiometer arm to provide -3.5 volts at point Ⓢ . Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. 1500MMF	High side to point Ⓢ . Low side to tuner chassis.	Not used.	45.5MC	Any unused channel.	USE VTVM DC probe to point Ⓢ . Common to chassis.	A1	Use only enough generator output to provide usable indication on VTVM. Adjust for maximum deflection.
2. "	"	"	43.0MC	"	"	A2	"
3. "	"	"	47.25MC	"	"	A3	Increase generator output to maintain 3 volts on VTVM when this adjustment is made. Adjust A3 for MINIMUM deflection.
4. "	High side to point Ⓢ . Low side to chassis. Use shortest leads possible with no more than 1 inch exposed on end of hot lead.	44MC (10MC Swp)	43.0MC 45.75MC	"	Vert. amp. thru detector probe (Fig. 1) to pin 2 (plate) of 6CH8 (V3). Low side to chassis.	A4, A5, A6	Preset A4 approximately 4 full turns counter clockwise. Connect a 180Ω carbon resistor from pin 2 (plate) of 6CH8 (V3) to pin 3 (screen) of same tube. Adjust bias battery to obtain -3.5 volts at point Ⓢ . If a separate marker generator is used, couple loosely to detector probe (used for scope). Adjust A5 and A6 for maximum amplitude with 45.75MC marker at 45% on response curve. Adjust A4 clockwise to obtain response curve as shown in Fig. 2 with markers as indicated. Remove 180Ω carbon resistor from V3.
5. "	"	"	41.25MC 43.0MC 45.0MC 45.75MC	"	Vert. amp. thru 10K to point Ⓢ . Low side to chassis.	A1, A2, A3	Adjust sweep generator output to provide 5 volts peak to peak on scope. If separate marker generator is used, loosely couple to grid of first video IF amp. (V3). Retouch A1 and A2 to obtain response as shown in Fig. 3 with markers as shown. Increase the sweep generator output ten times and retouch A2 to place 41.25MC marker at approximately 5% on curve.

ADDITIONAL VIDEO IF ALIGNMENT FOR UHF MODELS

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6. 1500MMF ceramic capacitor and 1000Ω carbon resistor in series.	High side to front terminal of 1N82 crystal holder after removing crystal aperture cover. Use shortest leads possible and connect low side to tuner case.	44MC (10MC Swp)	41.25MC 45.75MC	UHF Between channels 68 and 69.	Connect a 220Ω carbon resistor in series with 1500MMF between pin 1 (plate) of 6BQ7A (RF Amp.) and ground with the resistor next to ground. This point is accessible through the hole in the left side of the tuner. Connect the vert. amp. of the scope to the junction of the resistor and the capacitor thru the detector probe (Fig. 1)	A7, A8	Adjust the bias for -3.5 volts at point Ⓢ . Set the sweep generator output to produce .5 volts peak to peak on scope. Adjust A7 and A8 for maximum gain with marker positioned as in Fig. 4.
7. "	"	"	"	"	Move the resistor-capacitor network along with the detector probe from the plate of the 6BQ7A to point Ⓢ .	A9, A10	Adjust A9 and A10 for maximum gain with markers as in Fig. 4. Remove the resistor, capacitor and detector probe from point Ⓢ .
8. Two 130Ω carbon resistors.	Across VHF antenna terminals with 130Ω in each lead.	See VHF freq. chart.	See VHF freq. chart.	All VHF channels.	Vert. amp. thru 10K to point Ⓢ . Low side to chassis.	A1, A2	Check for response similar to Fig. 5 on each VHF channel. Correct for any overall tilt that is essentially the same on all channels by retouching A1 and A2.
9. "	Across UHF antenna terminals with 130Ω in each lead.	See UHF freq. chart.	See UHF freq. chart.	All UHF channels.	"	A9, A10	Check for response similar to Fig. 5 on all UHF channels, retouching A9 and A10, if necessary, to correct for any overall tilt. Remove test equipment and bias battery. Do not retouch any adjustments other than A9 and A10.

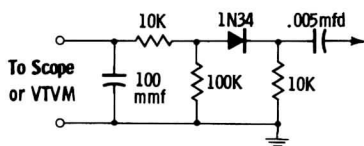


FIG. 1

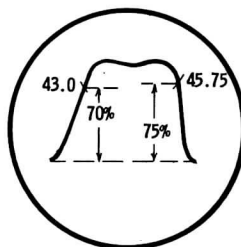


FIG. 2

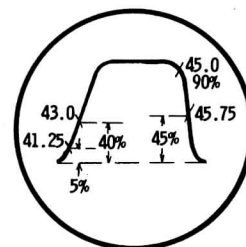


FIG. 3

ALIGNMENT INSTRUCTIONS (cont)

SOUND IF ALIGNMENT

Connect the negative lead of a 10 volt bias supply or battery to point A and positive to chassis.
Turn contrast control fully clockwise.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
10. .01MFD	High side to pin 7 (grid) of 6AW8 (V5). Low side to chassis.	4.5MC (unmod)	Any unused channel.	DC probe thru detector probe (Fig. 6) to pin 1 (grid) of 6DT6 (V7). Common to chassis.	All, A12, A13	Connect a short jumper from pin 7 (suppressor grid) of the 6DT6 (V7) to chassis. Preset All and A12 fully counter clockwise. Adjust All, A12 and A13 for maximum meter deflection. Adjust signal generator output to maintain between 1 and 2 volts on meter when adjustments are peaked. Remove the VTVM, detector probe and the short from pin 7 of V7.
11.	Remove the signal generator and tune in the strongest channel available in the area. Connect the scope leads across the speaker voice coil leaving the speaker connected. Turn A14 fully counter clockwise. While observing the scope and at the same time, listening to the speaker, adjust A14 clockwise until a peak is observed and heard. Continue turning clockwise until a second louder peak is obtained and adjust for a maximum indication on the scope. Remove the scope leads. Connect one end of a 1000 ohm potentiometer to chassis and the center arm to pin 1 (grid) of the 6AU6 (V6). Decrease the volume by running the center arm of the 1000 ohm potentiometer toward chassis until distortion is heard in the sound. With the distorted output, readjust All for maximum audio output. Use a voice signal only while making this adjustment. Remove the 1000 ohm potentiometer.					

ALTERNATE SOUND IF ALIGNMENT

Connect bias as under "Sound IF Alignment".
Turn Contrast control fully clockwise.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12. .01MFD	High side to pin 7 (grid) of 6AW8 (V5). Low side to chassis.	4.5MC (400% FM 15KC Swp.)	Not used.	Any unused channel.	Across the voice coil of speaker with speaker connected.	All, A12, A13, A14	Preset A14 fully counter clockwise. Adjust A14 to second peak turning clockwise. Volume control should be set for .7 volts peak to peak on scope when A14 is peaked. Reduce the output of the generator slowly and adjust All until oscillation occurs at each end of the modulation swing as in Fig. 7. Adjust A12 and A13 for maximum gain and symmetry as in Fig. 7.

TUNER ALIGNMENT

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

TELEVISION CHANNEL FREQUENCIES

Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier	Channel No.	Frequency Band (Mc)	Video Carrier	Sound Carrier
2	54-60	55.25	59.75	23	524-530	525.25	529.75	44	650-656	651.25	655.75	64	770-776	771.25	775.75
3	60-66	61.25	65.75	24	530-536	531.25	535.75	45	656-662	657.25	661.75	65	776-782	777.25	781.75
4	66-72	67.25	71.75	25	536-542	537.25	541.75	46	662-668	663.25	667.75	66	782-788	783.25	787.75
5	76-82	77.25	81.75	26	542-548	543.25	547.75	47	668-674	669.25	673.75	67	788-794	789.25	793.75
6	82-88	83.25	87.75	27	548-554	549.25	553.75	48	674-680	675.25	679.75	68	794-800	795.25	799.75
7	174-180	175.25	179.75	28	554-560	555.25	559.75	49	680-686	681.25	685.75	69	800-806	801.25	805.75
8	180-186	181.25	185.75	29	560-566	561.25	565.75	50	686-692	687.25	691.75	70	806-812	807.25	811.75
9	186-192	187.25	191.75	30	566-572	567.25	571.75	51	692-698	693.25	697.75	71	812-818	813.25	817.75
10	192-198	193.25	197.75	31	572-578	573.25	577.75	52	698-704	699.25	703.75	72	818-824	819.25	823.75
11	198-204	199.25	203.75	32	578-584	579.25	583.75	53	704-710	705.25	709.75	73	824-830	825.25	829.75
12	204-210	205.25	209.75	33	584-590	585.25	589.75	54	710-716	711.25	715.75	74	830-836	831.25	835.75
13	210-216	211.25	215.75	34	590-596	591.25	595.75	55	716-722	717.25	721.75	75	836-842	837.25	841.75
14	470-476	471.25	475.75	35	596-602	597.25	601.75	56	722-728	723.25	727.75	76	842-848	843.25	847.75
15	476-482	477.25	481.75	36	602-608	603.25	607.75	57	728-734	729.25	733.75	77	848-854	849.25	853.75
16	482-488	483.25	487.75	37	608-614	609.25	613.75	58	734-740	735.25	739.75	78	854-860	855.25	859.75
17	488-494	489.25	493.75	38	614-620	615.25	619.75	59	740-746	741.25	745.75	79	860-866	861.25	865.75
18	494-500	495.25	499.75	39	620-626	621.25	625.75	60	746-752	747.25	751.75	80	866-872	867.25	871.75
19	500-506	501.25	505.75	40	626-632	627.25	631.75	61	752-758	753.25	757.75	81	872-878	873.25	877.75
20	506-512	507.25	511.75	41	632-638	633.25	637.75	62	758-764	759.25	763.75	82	878-884	879.25	883.75
21	512-518	513.25	517.75	42	638-644	639.25	643.75	63	764-770	765.25	769.75	83	884-890	885.25	889.75
22	518-524	519.25	523.75	43	644-650	645.25	649.75								

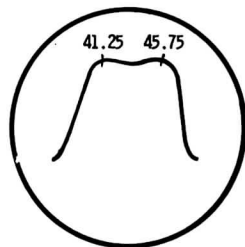


FIG. 4

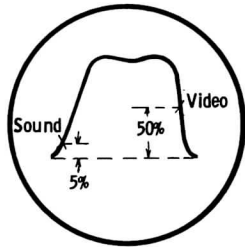


FIG. 5

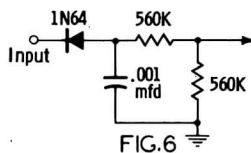


FIG. 6

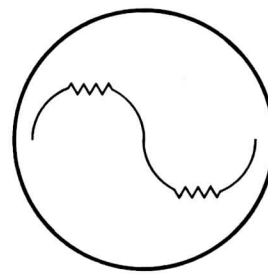
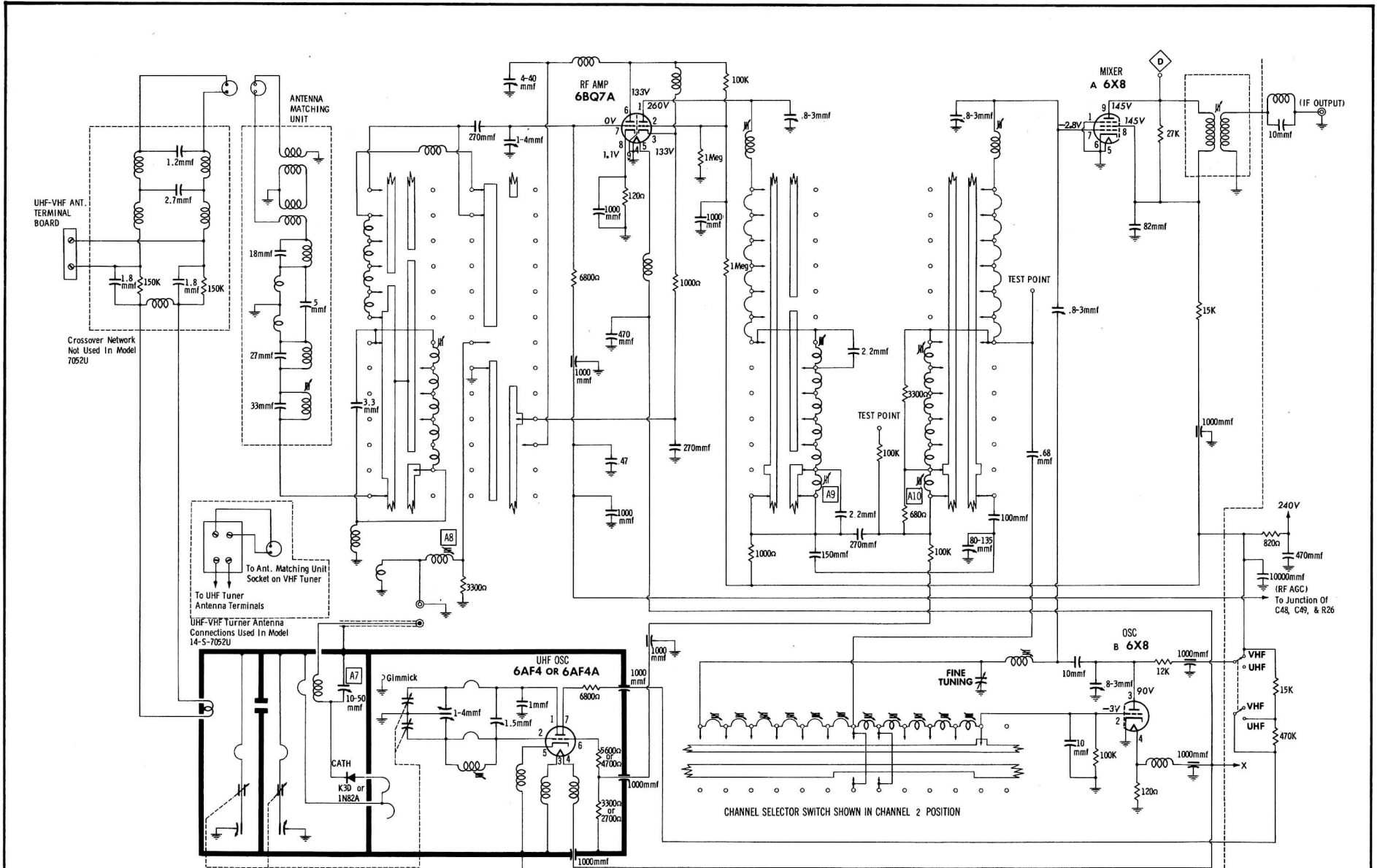


FIG. 7

RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U, 14-S-7071, U, 14-S-7074, U, (Ch. KC5102B, D)

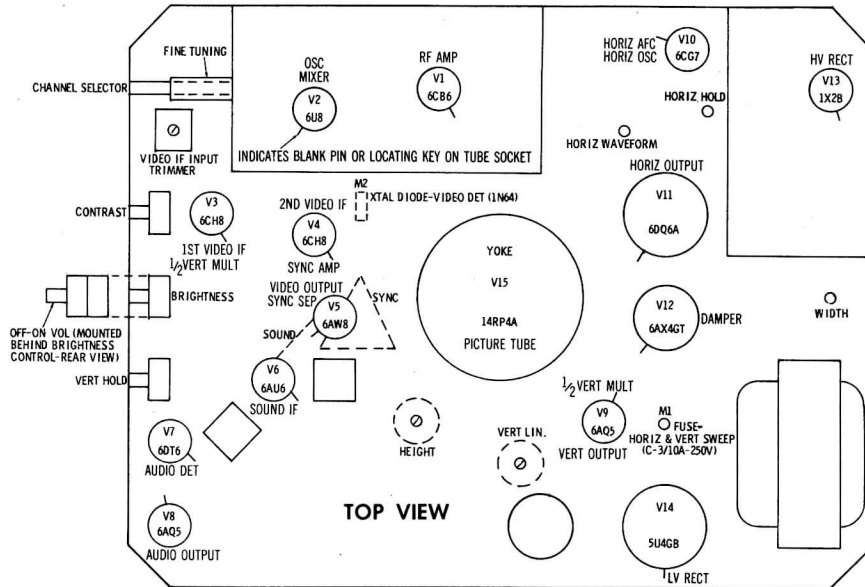


A PHOTOFAC STANDARD NOTATION SCHEMATIC
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UHF Tuner KRK 36-F, VHF Tuner KRK 29-D -- Used With Chassis KCS 102D

ALTERNATE UHF-VHF TUNER SCHEMATIC

TUBE PLACEMENT CHART



**RCA VICTOR MODELS 14-S-7052, U, 14-S-7070, U,
 14-S-7071, U, 14-S-7074, U, (Ch. KC5102B, D)**

TUBE FAILURE CHECK CHART

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

POWER SUPPLY FAILURE

No raster, no sound - V14

LOSS OF PICTURE OR SOUND

No pic, no sound, has raster - V3, V4, Diode (M2), V5

No pic, no sound, has snow - V1, V2

No pic, has sound, has raster - V5, V15

Has pic, no sound - V6, V7, V8

SYNC FAILURE

No vert. sync - V3, V4, V5, V9

No horiz. sync - V4, V5, V10

No vert. or horiz. sync - V4, V5

SWEEP FAILURE

No raster, has sound - V10, V11, V12, V13, V15, Fuse (M1)

No vertical deflection - V3, V9

Poor vert. linearity or foldover - V3, V9

Poor horiz. linearity or foldover - V10, V11, V12

Narrow picture - V10, V11, V12, V14

Vert. off freq. - V3, V4, V5, V9

Horiz. off freq. - V4, V5, V10

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	1/2	103105	BT-72 Not Req.	A47F-1Meg FS-3		UT440 Not Req.	Volume - Tap @ 200K	
B	Shaft			KB-1	SWE-12		US-26		
C	Switch						TA152L		
R2A	1500Ω	1/2	103106	B-6 Not Req.	A47-1500-S FS-3	Q17-109	TA152L	Contrast	
B	Shaft					Q11-129	U43		
R3A	200K	1/2	103108	B-46 Not Req.	A47-200K-S FS-3	Not Req.	TA155L	Brightness	
B	Shaft					Q11-138	TA155L		
R4A	1.5Meg	1/2	103107		A47-1.5Meg-S FS-3	Not Req.	PTA56L	Vertical Hold	
B	Shaft					BU-141	PTA56L		
R5A	5Meg	1/2	103110	AB-87 AK-1	A47-5Meg-S FKS-1/4	TM1-KIT	TA155L	Height	
B	Shaft					BU-138	TA155L		
R6A	1.5Meg	1/2	103109	BX-842 Not Req.	A47-1.5Meg-S FKS-1/4	TM1-KIT	TA155L	Vertical Linearity	
B	Shaft								

ITEM No.	ORIGINAL TERMINAL CONNECTIONS	Haldorson Replacement Connections
	5	
	4	
	3	
	2	
	1	
Connect Width Coil Across	1 & 2	

RESISTORS

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

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	OHMS	WATT	RCA Victor PART No.	IRC PART No.			
R7	22K		502322	BTS-22K			
R8	56K		502356	BTS-56K			
R9	47K	1	512347	BT-A-47K			
R10	1000Ω		502210	BTS-1000			
R11	47Ω		502047	BTS-47			
R12	100K		502410	BTS-100K			
R13	100K		502410	BTS-100K			
R14	2700Ω		502227	BTS-2700			
R15	5600Ω		502256	BTS-5600			
R16	100K		502410	BTS-100K			
R17	27K 5%		502327	BTS-27K 5%			
R18	120Ω		502112	BTS-120			
R19	470Ω			BTS-470			Note 1
R20	27Ω		502027	BTS-27			
R21	820Ω		502182	BTS-820			
R22	6800Ω	7	102171				
R23	8200Ω	2	522282	BTB-8200			
R24	6800Ω 5%		502268	BTS-6800 5%			Note 1
R25	470Ω			BTS-470			
R26	470K		502447	BTS-470K			
R27	680K		502468	BTS-680K			
R28	150K		502415	BTS-150K			
R29	180K		502418	BTS-180K			
R30	1500Ω 5%		502215	BTS-1500			
R31	47K	1	512347	BT-A-47K			
R32	2700Ω	1	512227	BT-A-2700			
R33	27K		502327	BTS-27K			
R34	180Ω		502118	BTS-180			
R35	47K		502347	BTS-47K			
R36	56K		502356	BTS-56K			
R37	1000Ω		502210	BTS-1000			
R38	82Ω		502082	BTS-82			
R39	10K	1	512310	BT-A-10K			
R40	180K		502418	BTS-180K			
R41	470K		502447	BTS-470K			
R42	1.8Meg		502518	BTS-1.8Meg			
R43	18K	2	522318	BTB-18K			
R44	560Ω		502156	BTS-560			
R45	1Meg		502510	BTS-1Meg			
R46	56K		502356	BTS-56K			
R47	2200Ω	2	522222	BTB-2200			
R48	680Ω	1	512168	BT-A-680			

Note 1. A 1000Ω @ 1/2 W Resistor Used In Some Versions (Part #502210).
 Note 2. A 100K @ 1/2 W Resistor Used In Some Versions (Part #502410).

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA					
	PRI.	SEC. 1	SEC. 2	SEC. 3	RCA Victor PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T1	117VAC @ 1.38A	500VCT @ .220A	5V @ 3A	6.3V @ 7.2A	10309L					

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							
		RCA Victor PART No.	Haldorson PART No.	Merit PART No.	RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
T2	Horiz. Output Trans.	103092							
T3	Vert. Output Trans.	103093							
T4A	Yoke (90°)	103114	21807①	A-2824①	V315①	HO-272* VO-103	FLY-100* 26S75②③	A-109X③④	
B	Yoke (11.3MH) Vert (1.3MH)	103115				DY-24A④			
T5	Width Coll (2-1TMH)	103104	RF800③	MWC-11	201R15	WC-11④⑩	WC-18④	WC-12⑩	

- Cut and tape blanking lead.
- Use 15 to 1 turns ratio.
- Connect as auto transformer.
- Drill new mtg. hole(s).
- Includes resistors R72, R73, R86 and capacitor C79.
- Yoke rear cover and centering device.
- Yoke mounting clamp.
- Use original rear cover and centering device.
- Use terminals 1 and 2.
- Use black and white terminals.
- Use red and blue terminals.

ITEM No.	IMPEDANCE		RCA Victor PART No.
	PRI.	SEC.	
T6	8.1K	3-4Ω	103094

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

ITEM No.	USE	RCA Victor PART No.
L1	VHF Ant. Coils	79724
L2	RF Choke	77859
L3	Fil. Choke	79720
L4	VHF RF Coils	79726

ITEM No.	USE	RCA Victor PART No.
L9	47.25MC Trap	
L10	1st Video IF	
L11	Fil. Choke	
L12	2nd Video IF	
L13	3rd Video IF	
L14	Shunt Peaking Coil	
L15	Series Peaking Coil	
L16	Shunt Peaking Coil	
L17	Shunt Peaking Coil	
L18	Series Peaking Coil	
L19	1st Sound IF	
L20	2nd Sound IF	
L21	Quadrature Coil	
L22	RF Choke	

* Parallel with 18K resistor.
 ▲ Parallel with 68K resistor.
 ■ Use adaptor plate.
 Note 1: Not used in some versions.

ITEM No.	DC RES.		RCA Victor PART No.
	PRI.	SEC.	
L23	90Ω		103103
L24	43Ω		103102

ITEM No.	RATINGS		
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	IMPEDANCE
L25	.220A	48.5Ω	

① Drill one new mounting hole.

ITEM No.	TYPE	RATING	RCA Victor PART No.
			FUSE
M1	C	3/10A 250V	102164

DESCRIPTIONS

IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
-109 Req.	UT440 Not Req.	Volume - Tap @ 200K
-129 Req.	TA152L Not Req.	Contrastr
-138 Req.	TA155L Not Req.	Brightness
-141	PTA56L Not Req.	Vertical Hold
-138	TA155L Not Req.	Height
-1KIT	TA155L Not Req.	Vertical Linearity

*HORIZONTAL OUTPUT TRANSFORMER CONNECTION DATA

Use Original Width Coil Unless Replacement Type Is Listed

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

otherwise listed.

ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	RCA Victor	IRC	
			PART No.	PART No.	
270K			502427	BTS-270K	
2.2Meg			502522	BTS-2.2Meg	
1Meg			502510	BTS-1Meg	
680K			502468	BTS-680K	
1Meg			502510	BTS-1Meg	
18K			502318	BTS-18K	
22K			512322	BTA-22K	
5600Ω			502256	BTS-5600	
27K			522327	BTB-27K	
220K			502422	BTS-220K	
22K			502322	BTS-22K	
18K			502318	BTS-18K	
6.8Meg			502568	BTS-6.8Meg	
1.5Meg			502515	BTS-1.5Meg	
1.5Meg			502515	BTS-1.5Meg	
22K			502322	BTS-22K	
15K			502315	BTS-15K	
330K			502433	BTS-330K	
10K			502310	BTS-10K	
18K 5%			502318	BTS-18K 5%	
18K 5%			512318	BTA-18K 5%	
150Ω			512115	BTA-150	
22K			502322	BTA-22K	
150Ω					
1.2Meg			502512	BTS-1.2Meg	
150K 5%			502415	BTS-150K 5%	
82K 5%			502382	BTS-82K 5%	
3900Ω			502239	BTS-3900	
120K 5%			512412	BTA-120K 5%	
33K			502333	BTS-33K	
330K			502433	BTS-330K	
39K			512339	BTS-39K	
1Meg			502510	BTS-1Meg	
47Ω			502047	BTS-47Ω	
18K			522318	BTB-18K	
27Ω			512027	BTA-27	
1000Ω			502210	BTS-1000	
68K			502368	BTS-68K	
270K			502427	BTS-270K	
3.9K			103030	BW 1/2-3.9	
22K			502422	BTS-22K	Note 2

Some Versions (Part #502210).
Some Versions (Part #502410).

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES
	PRI.	SEC.	RCA Victor	Hollandson	Merit	Stancor	Thordarson	Triad	
			PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	
T6	8.1K	3-4Ω	103094	Z1115	A-2927 ①	A-8114	24S52	S-8X ①	① Drill one new mtg. hole.

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	RCA Victor	QUAM	
				PART No.	PART No.	
SP1	4"	PM	3-4Ω	79696	4A07	

COILS (RF-IF)

ITEM No.	USE	RCA Victor PART No.	NOTES	ITEM No.	USE	RCA Victor PART No.	NOTES
L1	VHF Ant. Coils	79724	Stator complete with rotor, Includes C7.	L5	VHF Mixer Coils	79723	Stator complete with rotor. Includes C16, C19, C22, R6, R7 & R9.
L2	RF Choke	77859		L6	Fil. Choke	79720	
L3	Fil. Choke	79720		L7	VHF Osc. Coils	79722	
L4	VHF RF Coils	79726	Stator complete with rotor. Includes C15 and R5.	L8	Conv. Plate	103048	Stator complete with rotor.

ITEM No.	USE	REPLACEMENT DATA				NOTES
		RCA Victor PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L9	47.25MC Trap	103100	20-1049	TV-153	6225	5.4 Microhenries .22 Microhenries 36 Microhenries 390 Microhenries 300 Microhenries; Wound on 18K resistor. 120 Microhenries; Wound on 68K resistor.
L10	1st Video IF	103099		TV-131	6225	
L11	Fil. Choke	73477	19-4215	BC-537	4610	
L12	2nd Video IF	103097	17-4524	TV-130	6224	
L13	3rd Video IF	103098	17-4524	TV-130	6224	
L14	Shunt Peaking Coil					
L15	Series Peaking Coil	101819	19-3036	TV-180	6176	
L16	Shunt Peaking Coil	103037	19-4400		6134	
L17	Shunt Peaking Coil	103039	19-3300*		6155*	
L18	Series Peaking Coil	103038	19-3125▲		6153▲	
L19	1st Sound IF	103098	17-1031		1481	
L20	2nd Sound IF	103095	16-3445	TV-113■	6203■	
L21	Quadrature Coil	103101	20-1005		1480	
L22	RF Choke					

* Parallel with 18K resistor.
▲ Parallel with 68K resistor.
■ Use adaptor plate.
Note 1: Not used in some versions.

POWER

REPLACEMENT DATA				
Hollandson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.

EP CIRCUITS)

REPLACEMENT DATA				
RCA TYPE No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
V315 ①			FLY-100* 26S75 ② ③	A-109X ③ ④
201R15	WC-11 ④ ⑤	WC-18 ④		WC-12 ⑤

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA						NOTES	
	PRI.	SEC.	RCA Victor	MEISSNER	MERIT	MILLER	RCA	Ram		Thordarson
			PART No.	PART No.	PART No.	PART No.	TYPE No.	PART No.		PART No.
L23	90Ω		103103			6211			HS-7	Tapped @ 60Ω
L24	43Ω		103102			6314			HS-8	Horiz. Osc. Horiz. Waveform

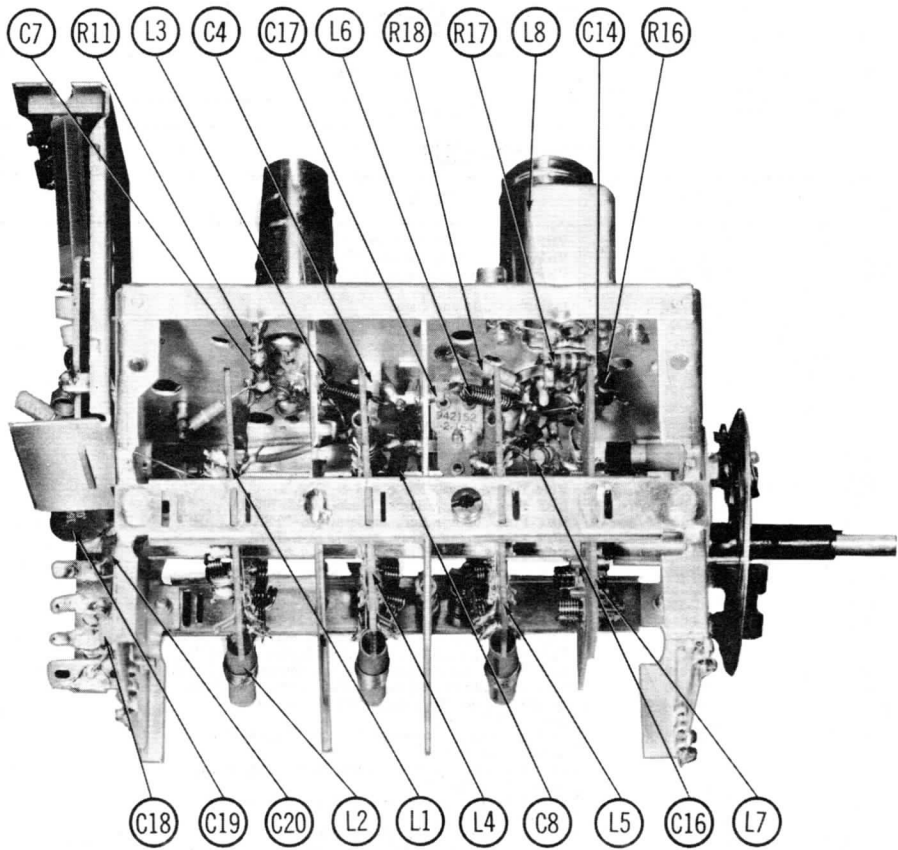
FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA					
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ~)	RCA Victor PART No.	Hollandson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.
L25	.220A	48.5Ω	.89HY	100286	C5037 ①	C-2998 ①	C-2326 ①	28C44 ①	C-17X ①

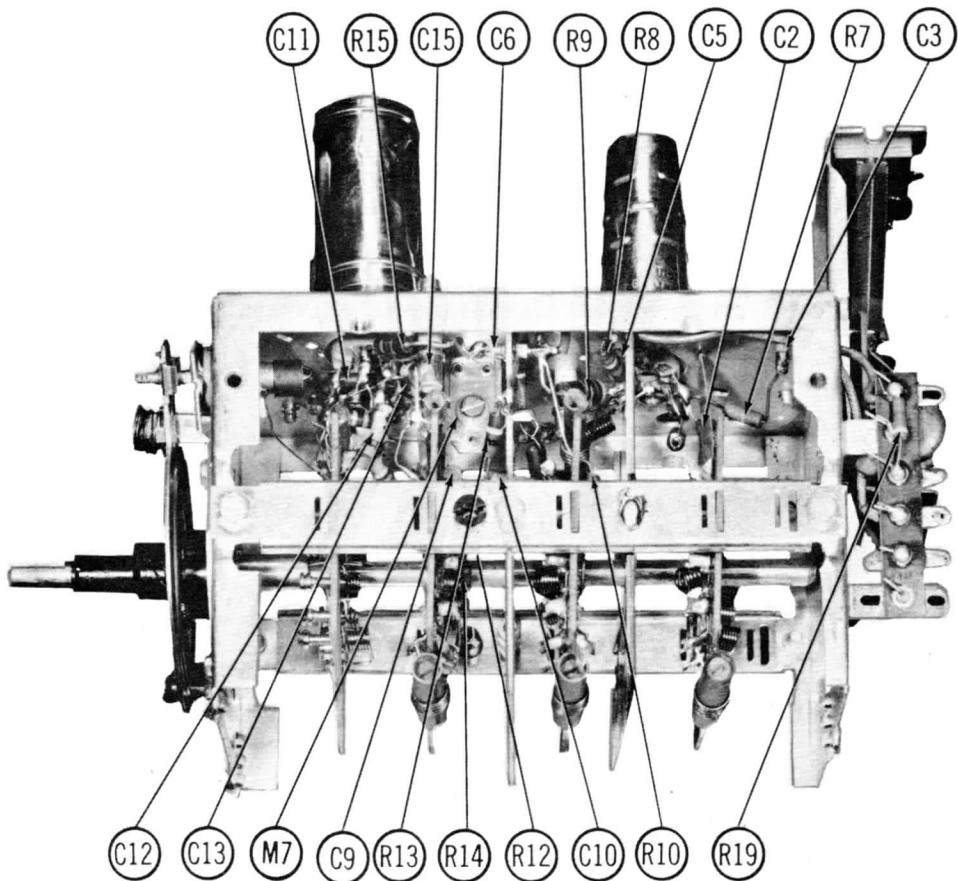
① Drill one new mounting hole.

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA					
			RCA Victor PART No.		LITTELFUSE PART No.		BUSS PART No.	
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER
M1	C	3/10A 250V	102164	102162	332.300 (C-3/10A)	346001	C 3/10	HC 0 to 3/10



RF TUNER-LEFT SIDE

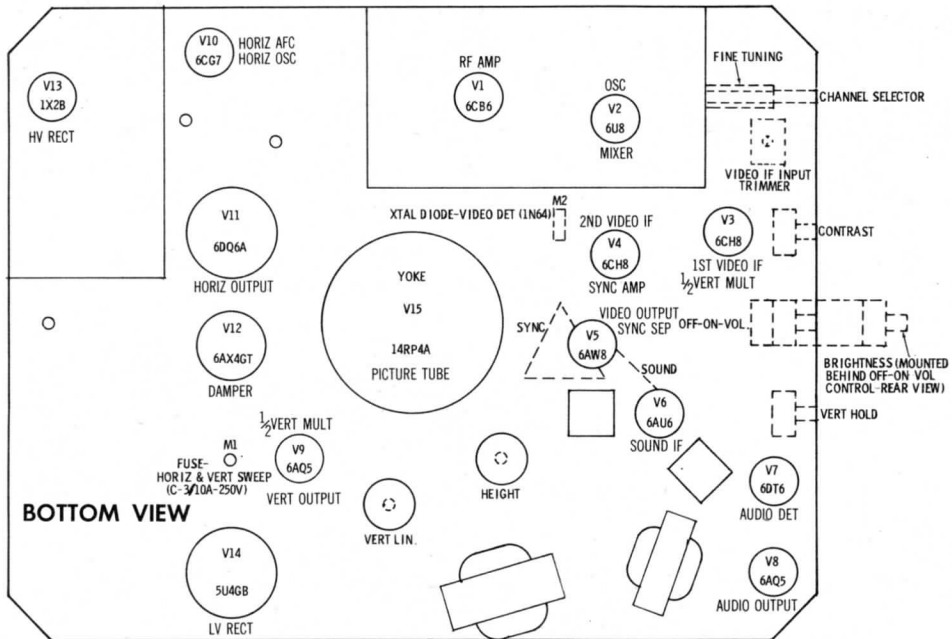


RF TUNER-RIGHT SIDE

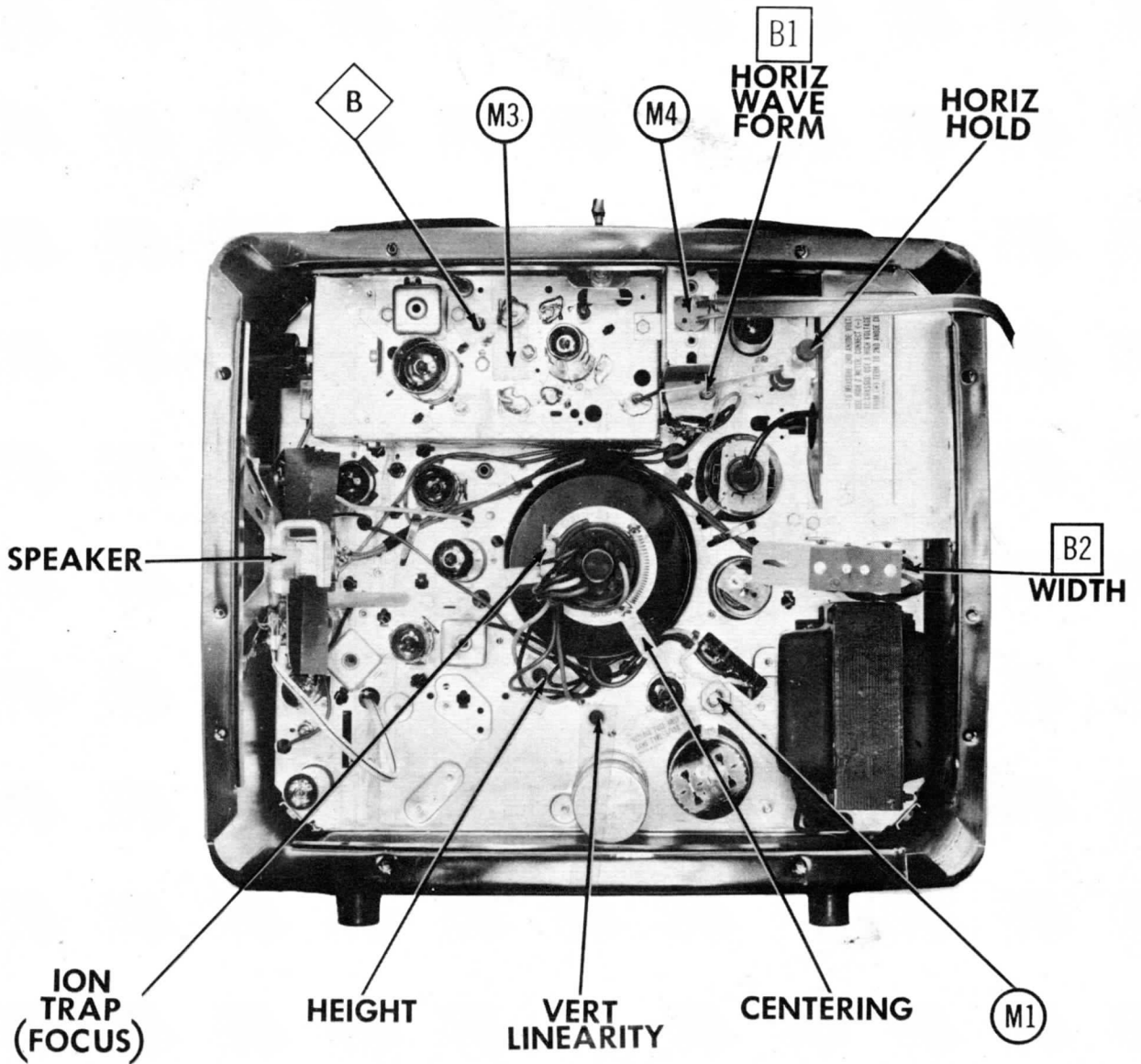
RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6CB6	460K	47 Ω	0 Ω	.1 Ω	†1500 Ω	†30K	0 Ω		
V2	6U8	†6000 Ω	100K	INF	0 Ω	.1 Ω	INF	0 Ω	INF	INF
V3	6CH8	0 Ω	†7500 Ω	†7500 Ω	.1 Ω	0 Ω	27 Ω	440K	●3.5Meg	●†500K
V4	6CH8	0 Ω	†8200 Ω	†8200 Ω	.1 Ω	0 Ω	180 Ω	.3 Ω	18K	†20K
V5	6AW8	0 Ω	3.2Meg	†680K	.1 Ω	0 Ω	●50 Ω	680K	†47K	†4200 Ω
V6	6AU6	47K	0 Ω	0 Ω	.1 Ω	†10K	†20K	82 Ω		
V7	6DT6	4.1 Ω	560 Ω	0 Ω	.1 Ω	†1Meg	†18K	470K		
V8	6AQ5	45K	680 Ω	0 Ω	.1 Ω	†2500 Ω	†2200 Ω	45K		
V9	6AQ5	●1.7Meg	0 Ω	0 Ω	.1 Ω	†600 Ω	†200 Ω	●1.7Meg		
V10	6CG7	†50 Ω	1.3Meg	330K	.1 Ω	0 Ω	†39K	270K	0 Ω	0 Ω
V11	6DQ6A	NC	.1 Ω	NC	†18K	1Meg	TP	0 Ω	27 Ω	TOP CAP †17.5 Ω
V12	6AX4GT	NC	NC	1.8Meg	NC	†50 Ω	NC	0 Ω	.1 Ω	
V13	1X2B	PINS 1 THRU 9 HAVE INFINITE RESISTANCE								TOP CAP †337.5 Ω
V14	5U4GB	NC	25K	NC	46 Ω	NC	42 Ω	NC	25K	
V15	14RP4A	0 Ω	22K	Pin 6 †50 Ω	Pin 10 †340K	Pin 11 ●170K	Pin 12 .1 Ω			

† MEASURED FROM PIN 8 OF V14.
 ‡ MEASURED FROM PIN 3 OF V12.
 ● THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.
 NC NO CONNECTION
 TP TIE POINT



TUBE PLACEMENT CHART



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Connect a clip lead across the horizontal waveform coil (L24) and adjust the horizontal hold until the picture synchronizes horizontally. Remove the clip lead from across L24. Connect the vertical amplifier of the oscilloscope to point (⊕) thru a low capacity probe. Connect the low side to chassis. Turn the horizontal hold clockwise until the picture just falls out of sync, then counter clockwise until the picture just falls into sync. Adjust the horizontal waveform slug (B1) until the waveform on the scope appears similar to Fig. 8 with the round peak and the sharp peaks of equal amplitude. Adjust the width slug (B2) for a picture SLIGHTLY wider than necessary to fill the picture mask horizontally.

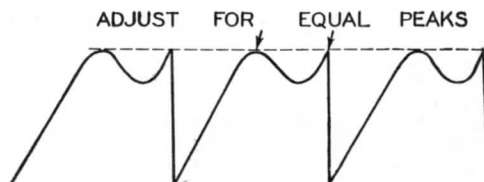


FIG. 8