

RCA VICTOR MODEL 9TC272

RCA VICTOR MODELS 8T270, 8TC270, 8TC271, 8TK320, 9T270, 9TC272, 9TC275

TRADE NAME	RCA Models 8T270, 8TC270, 8TC271 (Ch. KCS29, A), 8TK320 (Ch. KCS33A-1 and Radio chassis RK-135A-1) 9T270, 9TC272, 9TC275 (Ch. KCS29, C)
MANUFACTURER	RCA Victor Div., Radio Corp. of America, Camden, New Jersey
TYPE SET	AM-FM-Phono-TV Combination Receiver (Some Models "TV" only).
TUBES	Thirty Two (Combination Models) Twenty Seven ("TV" only Models)
POWER SUPPLY	110-120 Volts AC-60 Cycles
RATING	2.3 Amp. at 117 Volts AC (TV Operation)
TUNING RANGES	AM 540-1600KC FM 88-108MC TV Channels 2 thru 13

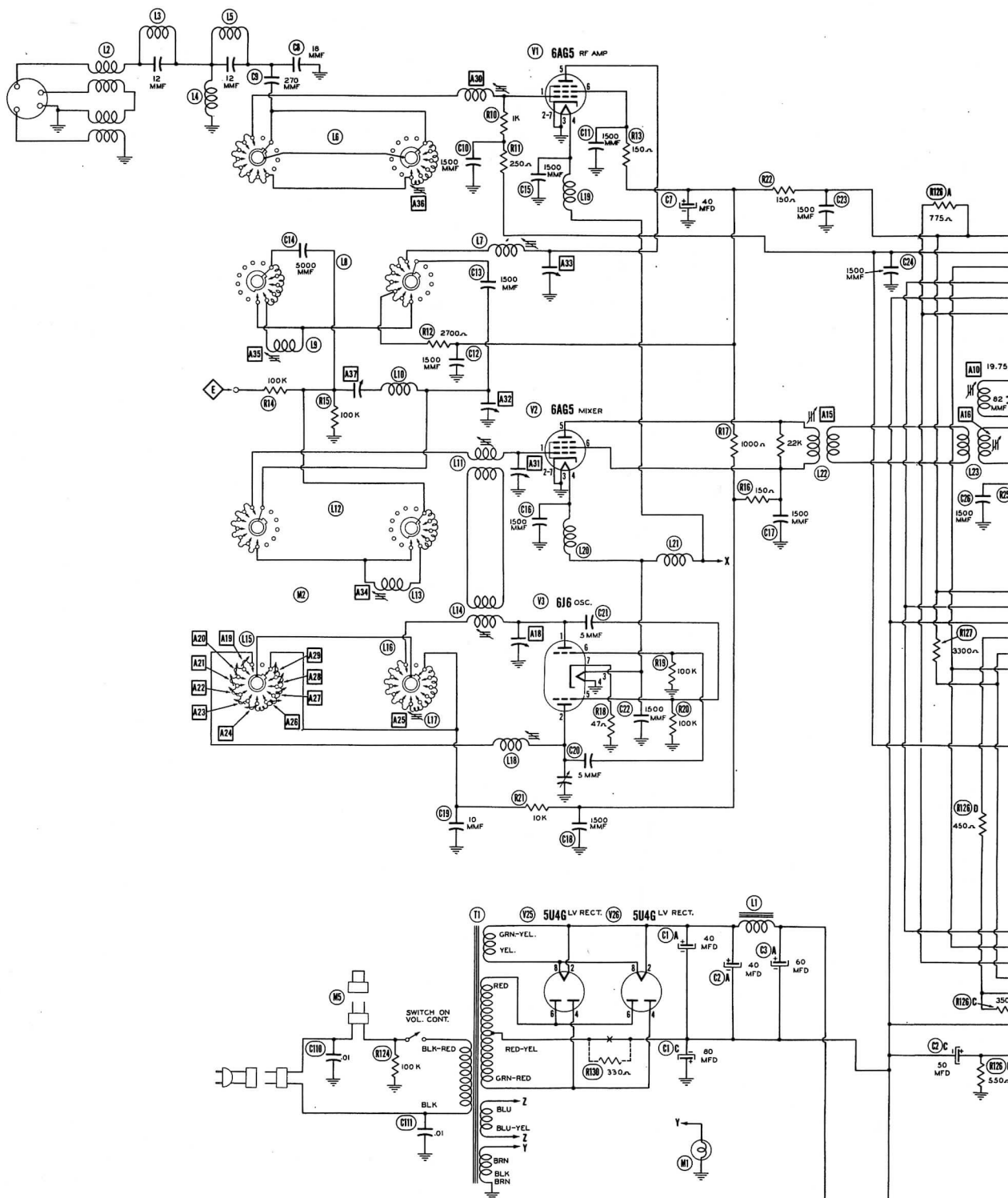
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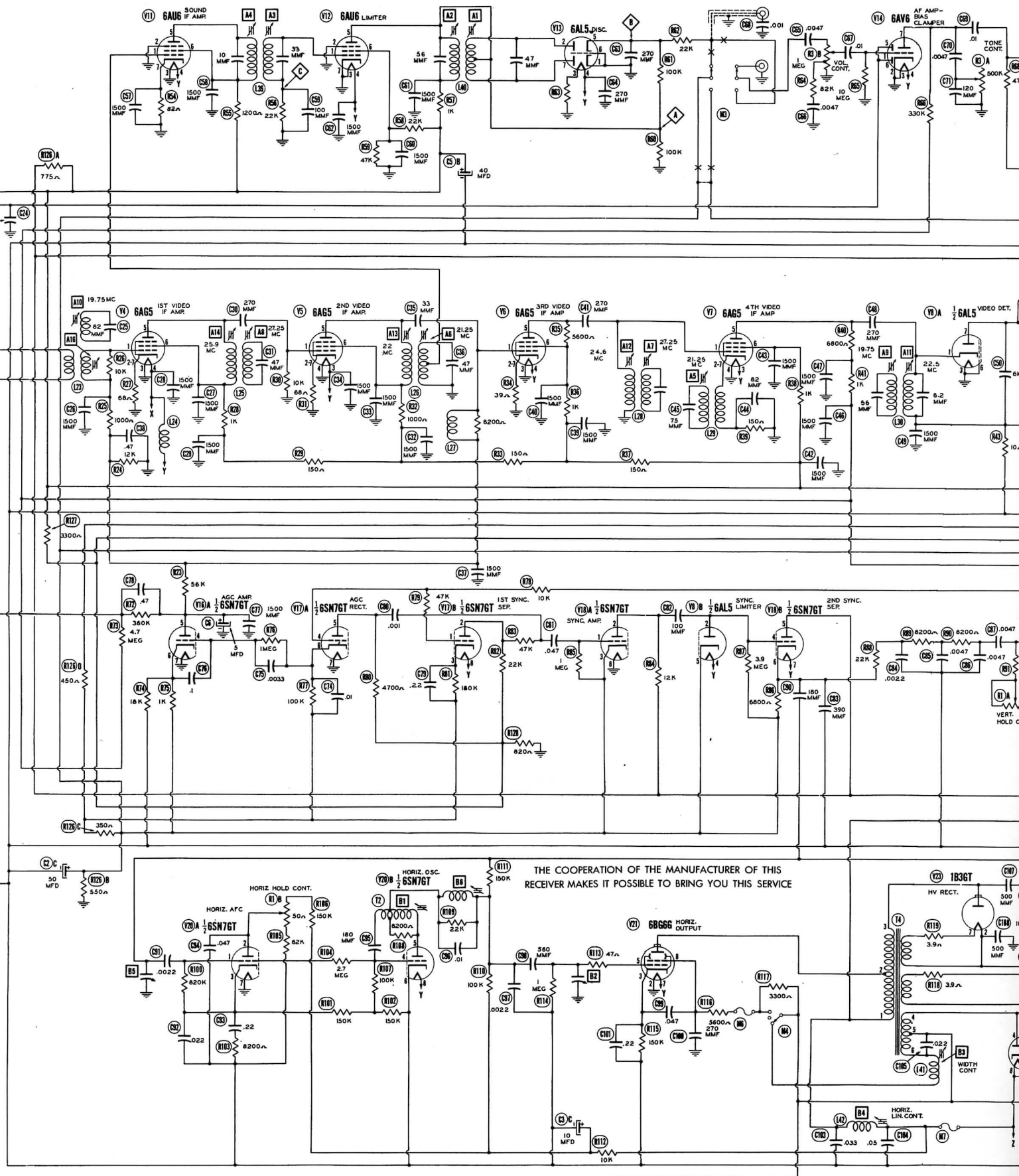
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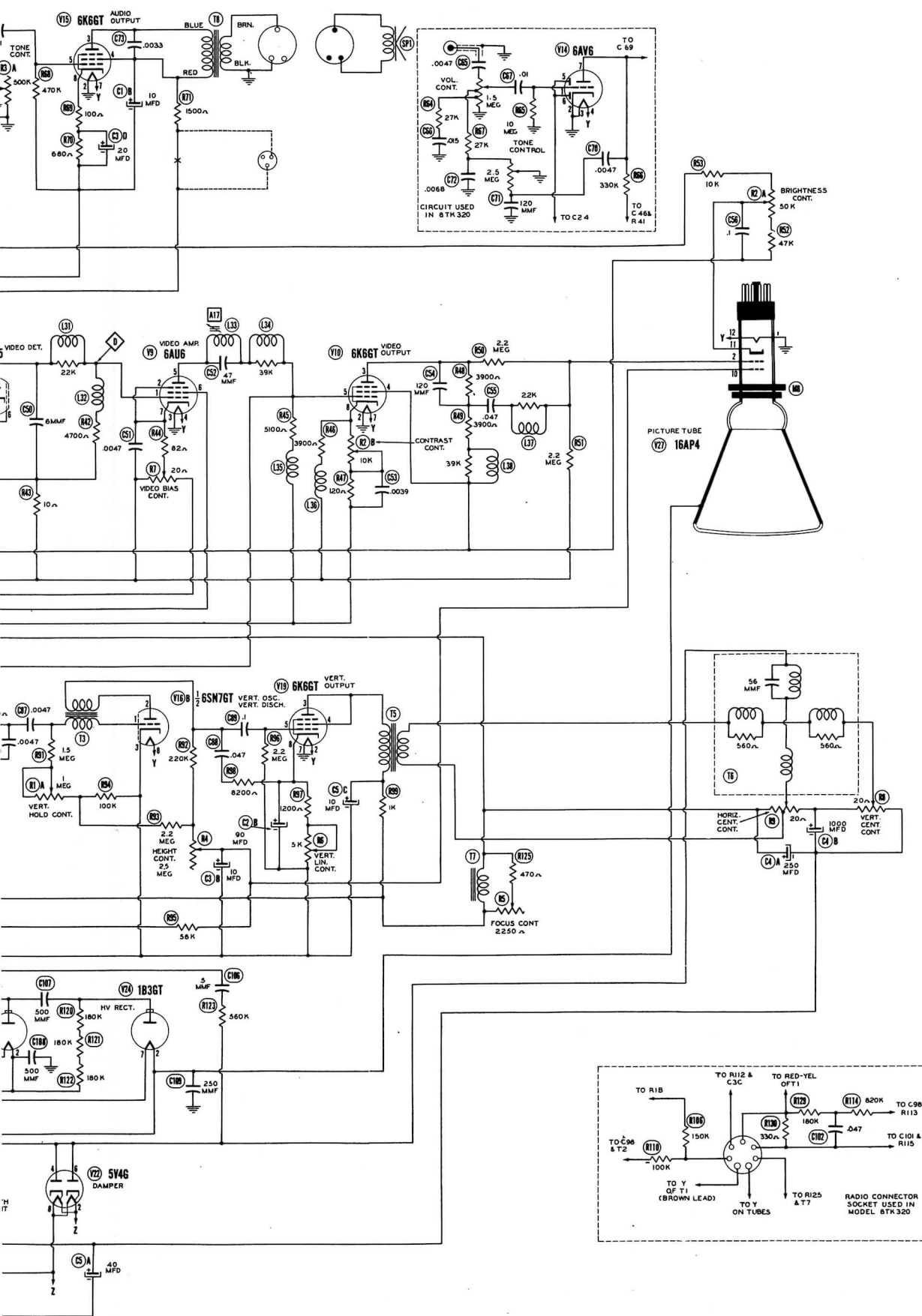
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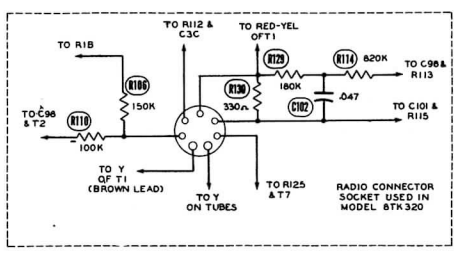
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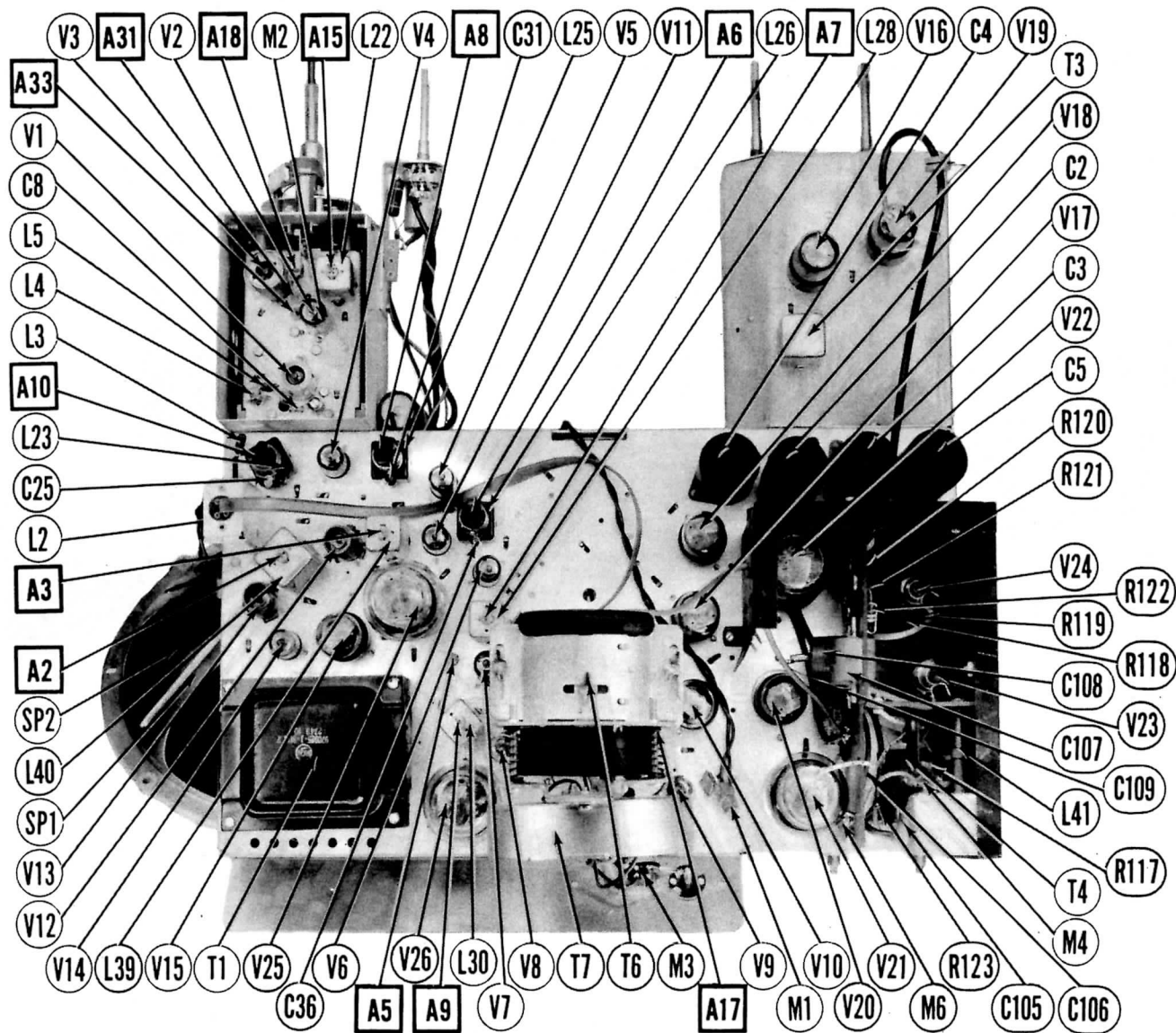


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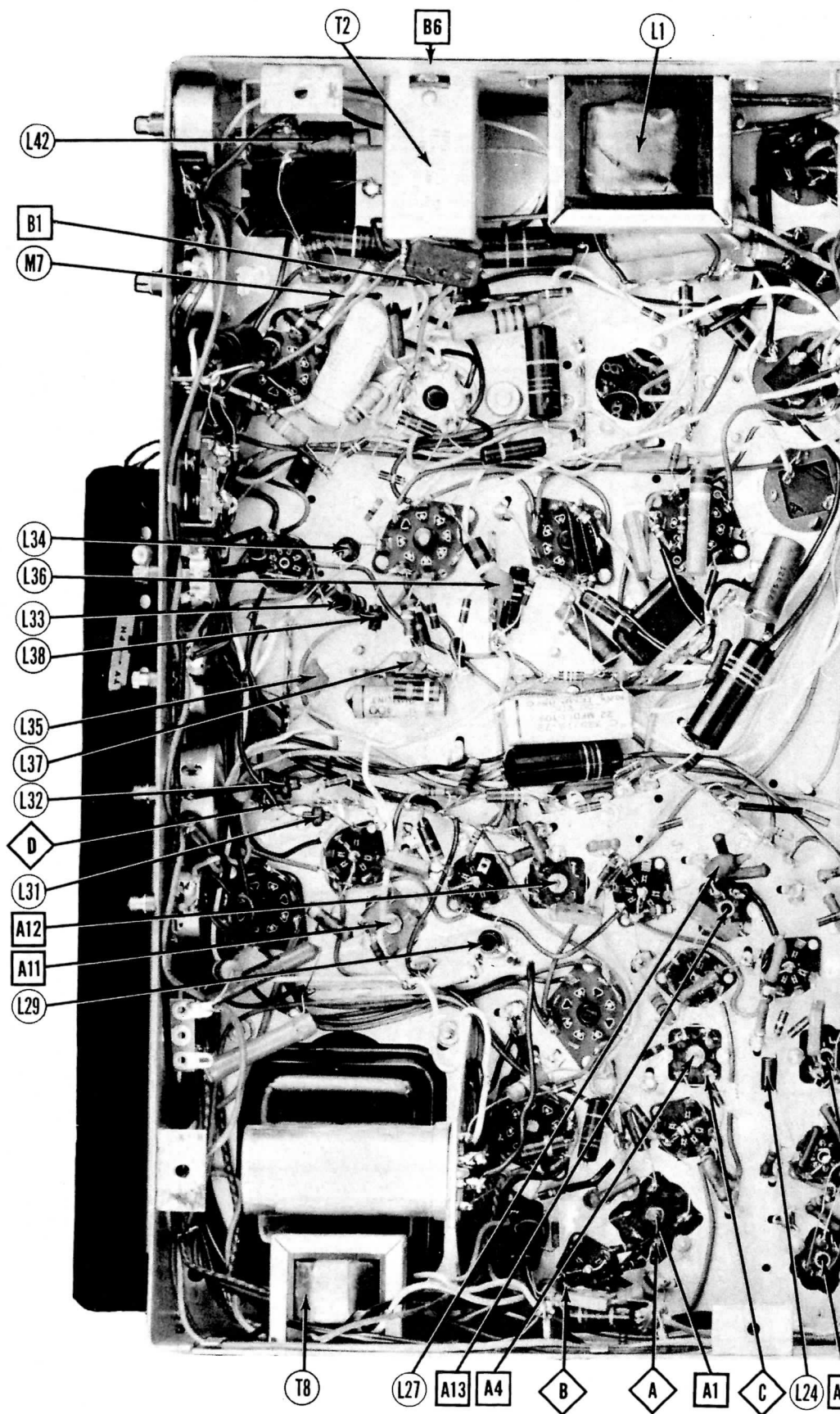
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8TC271, 8TK320, 9T270, 9TC272, 9TC275





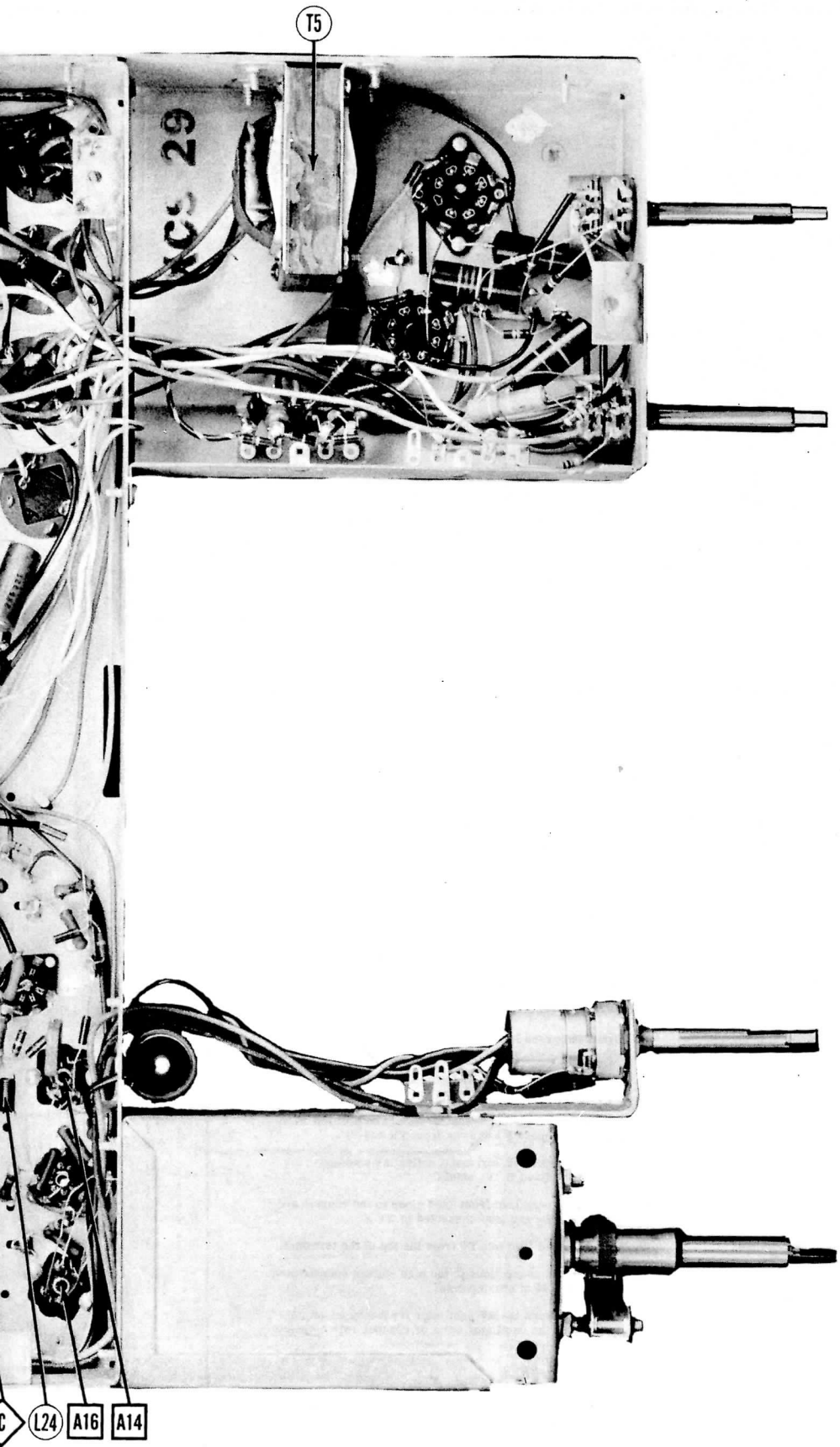
CHASSIS TOP VIEW

RCA VICTOR MODELS 81270, 81C270,
81C271, 81K320, 91270, 91C272, 91C275

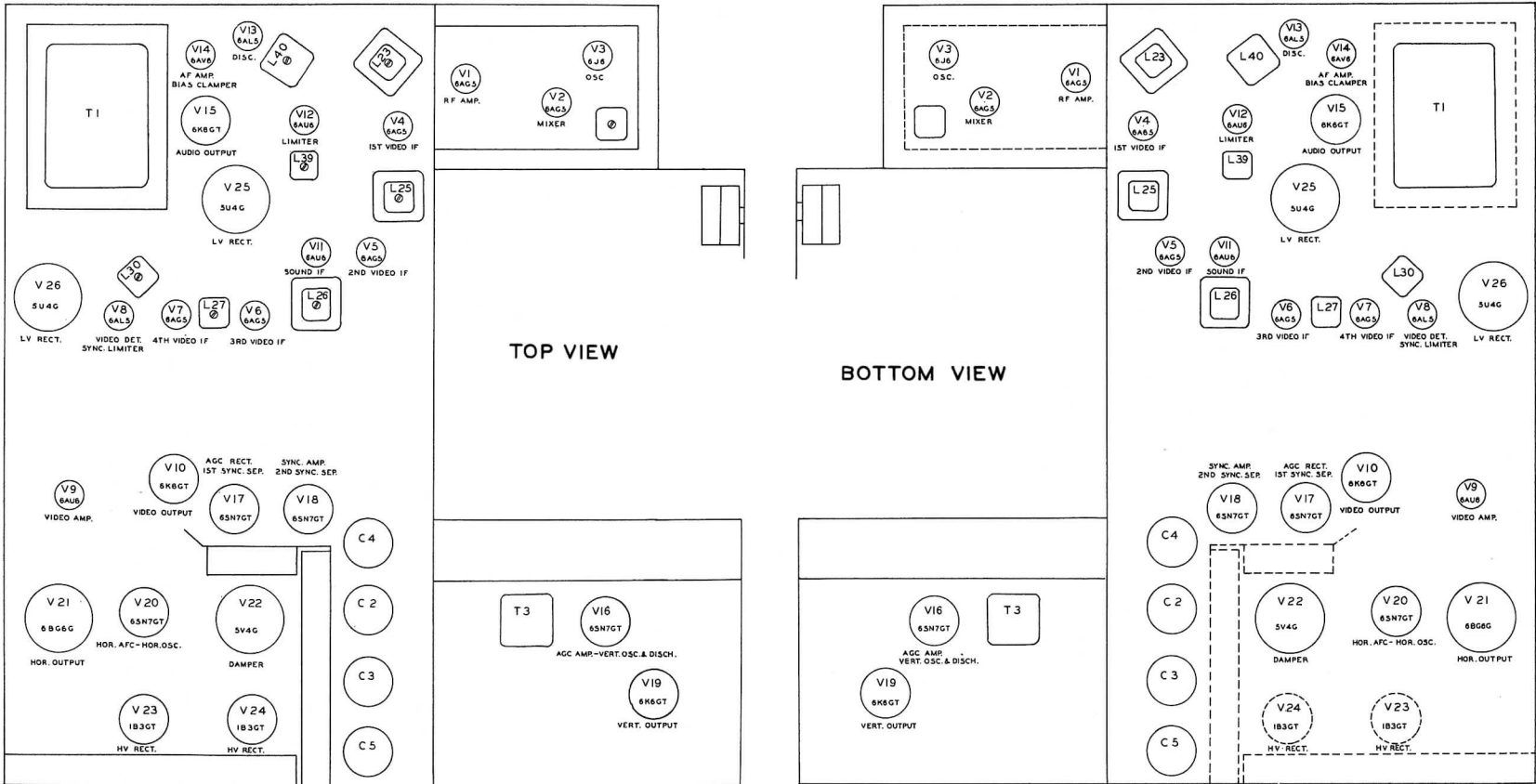


CHASSIS BOTTOM VIEW-TRANS.,INDUCT

RCA VICTOR MODELS 8T270, 8TC270,
8TC271, 8TK320, 9T270, 9TC272, 9TC275

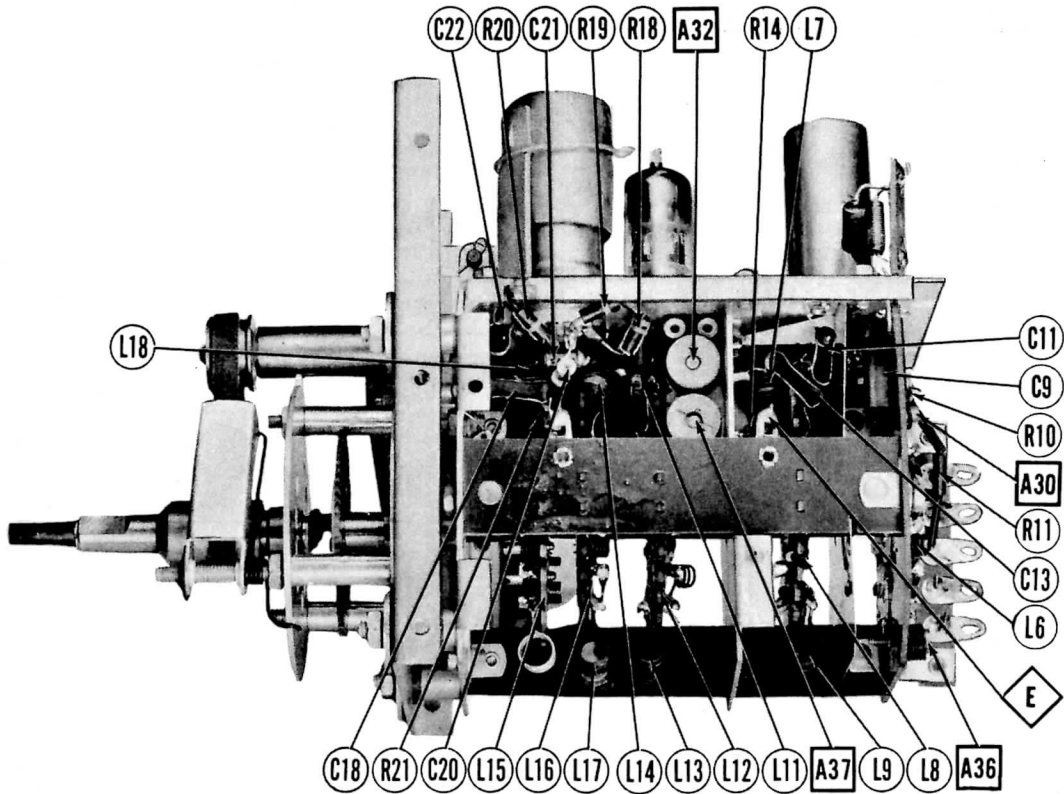


DUCTOR AND ALIGNMENT IDENTIFICATION

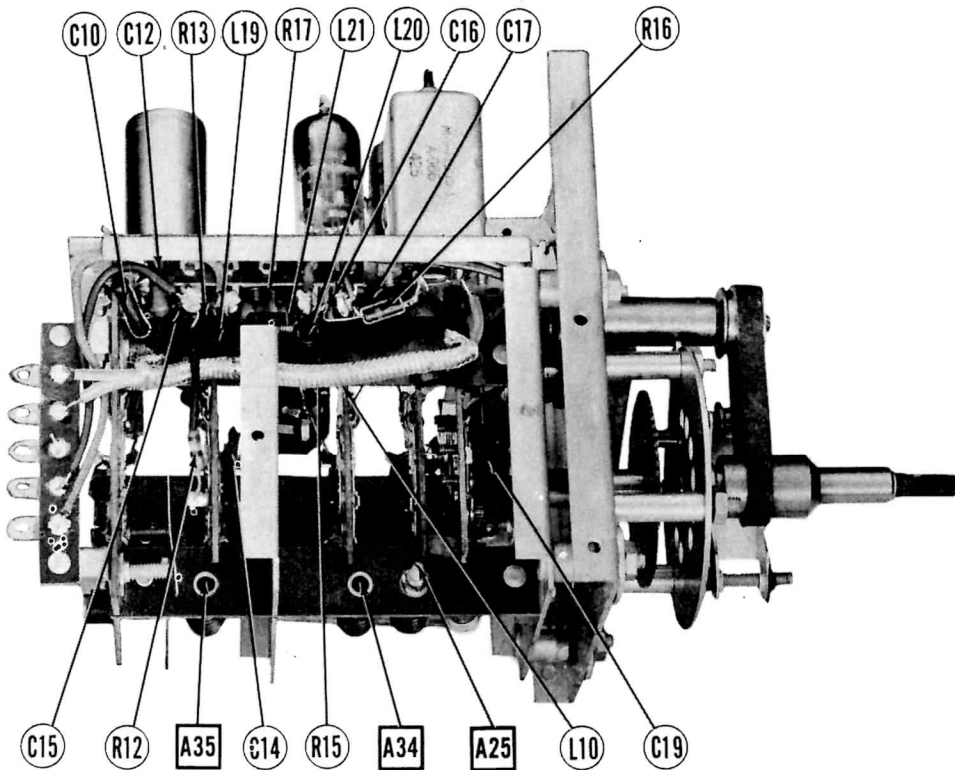


TUBE PLACEMENT CHART

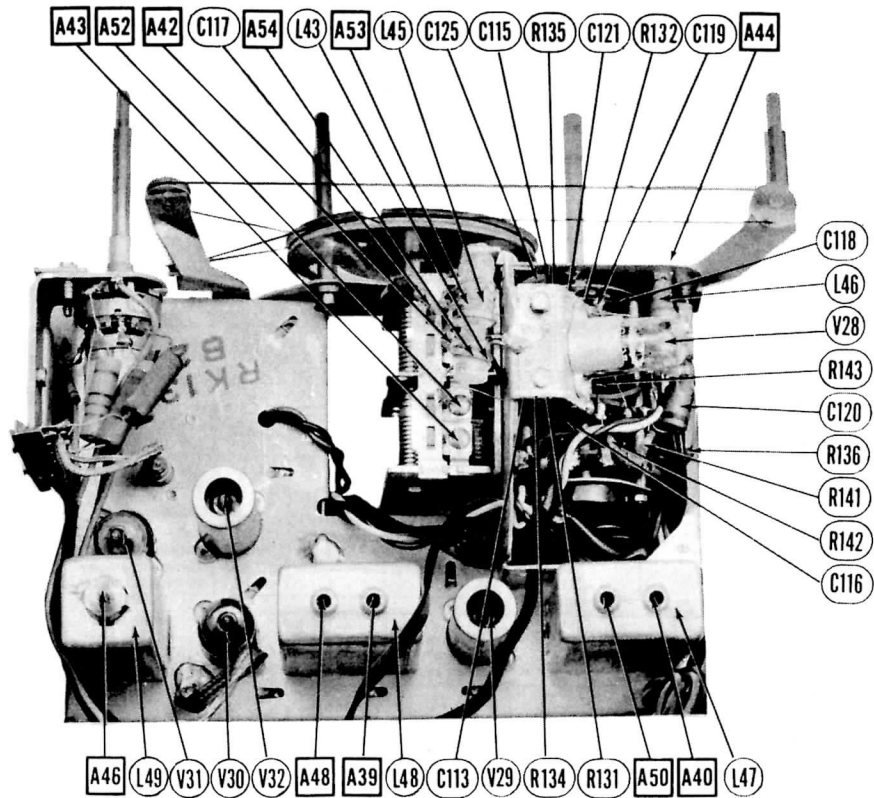
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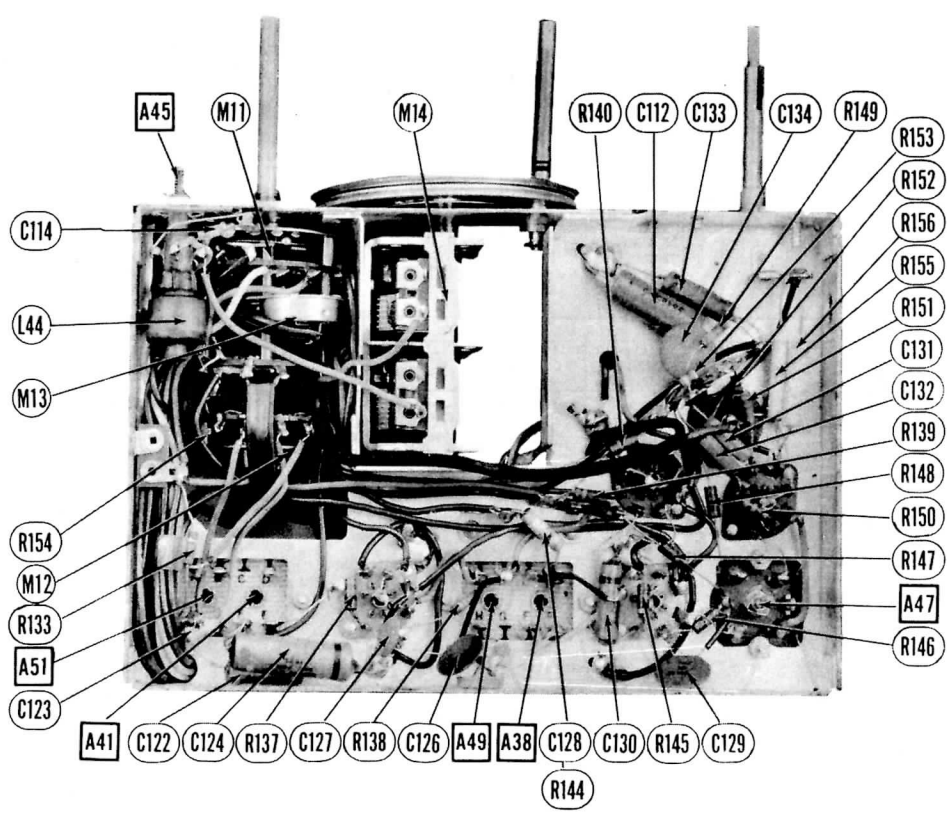
TV RF TUNER-RIGHT SIDE



TV RF TUNER-LEFT SIDE



AM-FM TUNER - TOP VIEW



AM-FM TUNER - BOTTOM VIEW

RCA VICTOR MODELS 8T270, 8TC270,
8TC271, 8TK320, 9T270, 9TC272, 9TC275

TV ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Turn the function selector switch to "television", (maximum counter-clockwise).
 The high voltage shock hazard may be eliminated by removing the horizontal oscillator tube (V20).
 When complete receiver alignment is to be performed, it can most conveniently be performed in the order given.
 Set the channel switch to the blank position between channels 2 and 13.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. .01MFD	High side to pin 1 (Grid) of 6AU6 (V12). Low side to chassis.	21.25MC (Unmod.)	See note under pre-alignment.	DC Probe thru 1 Meg. to Point \diamond Low side to chassis.	A1, A2	Detune A1 several turns counter-clockwise. Adjust A2 for maximum deflection.
2. .01MFD	"	"	"	DC Probe to Point \diamond Common to chassis.	A1	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
3. .01MFD	High side to pin 1 (Grid) of 6AU6 (V11). Low side to chassis.	"	"	DC Probe thru 1 Meg. to Point \diamond Common to chassis.	A3, A4	Adjust for maximum deflection.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60 ~ modulation and 450KC sweep. Use 120 ~ sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. .01MFD	High side to pin 1 (Grid) of 6AU6 (V11). Low side to chassis.	21.25MC (450KC Sweep)	21.25MC	See Note under pre-alignment	Vert. Amp. thru 33K Ω to Point \diamond Low side to chassis.	A3, A4	Adjust for maximum amplitude and symmetry as per Fig 1.
2. .01MFD	"	"	"	"	Vert. Amp. to Point \diamond Low side to chassis.	A1, A2	Adjust A1 so 21.25MC occurs at center of crossover lines as per Fig 2. Adjust A2 for maximum amplitude and straightness of crossover lines. Continue with step 4.

VIDEO IF ALIGNMENT

Remove V16 from its socket.
 Connect the negative lead of a 4.5 volt battery to pin 5 of the socket of V5, connect the positive lead to chassis.
 Note that during video IF alignment the common lead of VTVM is at -120 volts with respect to chassis. Avoid grounding or touching the VTVM case.
 Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4. Direct	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	21.25MC (Unmod.)	See note under pre-alignment	DC Probe and common leads across R42.	A5, A6	Adjust for MINIMUM deflection.
5. Direct	"	27.25MC	"	"	A7, A8	"
6. Direct	"	19.75MC	"	"	A9, A10	"
7. Direct	"	22.5MC	"	"	A11	Adjust for maximum deflection.
8. Direct	"	24.6MC	"	"	A12	"
9. Direct	"	22MC	"	"	A13	"
10. Direct	"	25.9MC	"	"	A14	"

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11. Direct	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	25MC (10MC Sweep)	21.95MC 24.8MC	See note under pre-alignment	Vert. Amp. to Point \diamond Low side to chassis.	A15, A16	Shunt the primaries of L25, L26, L28 and L30 (All thru A14) with 300 Ω carbon resistors. Adjust A15 and A16 for response curve similar to Fig 3 with markers as shown.
12. Direct	"	"	21.25MC 22.1MC 25MC 25.75MC 26.5MC	"	"	"	Remove all 300 Ω shunting resistors. Check for response similar to Fig 4 with markers as shown. If necessary retouch All thru A16 for proper response.

4.5MC TRAP ADJUSTMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
13. .01MFD	High side to pin 1 (Grid) of 6AU6 (V9). Low side to chassis.	4.5MC (400~ Mod.)	Not used	Any	Vert. Amp. to pin 2 (Grid) of picture tube. Low side to chassis.	A17	Adjust for minimum 400~ response on scope, If a wide band scope is not available a VTVM with suitable RF probe may be used. This trap may be adjusted for maximum vertical wedge definition while observing a test pattern from a TV station.

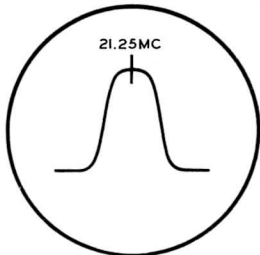


FIG. 1

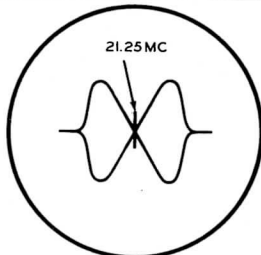


FIG. 2

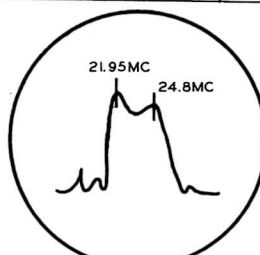


FIG. 3

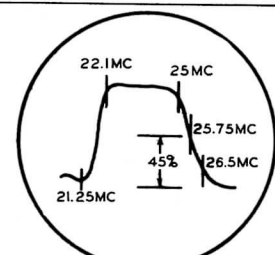



FIG. 4

TV ALIGNMENT INSTRUCTIONS (CONT.)


OSCILLATOR ALIGNMENT

The signal generator output lead should be terminated with its characteristic impedance, usually 50 ohms. Complete oscillator alignment may not be necessary, if all channels seem to be off frequency approximately the same amount, they may be corrected in one step using A18.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
14. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	215.75MC (Unmod.)	13	DC Probe to Point  Common to chassis.	A18	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
		209.75MC	12		A19	
		203.75MC	11		A20	
		197.75MC	10		A21	
		191.75MC	9		A22	
		185.75MC	8		A23	
		179.75MC	7		A24	
		87.75MC	6		A25	
		81.75MC	5		A26	
		71.75MC	4		A27	
		65.75MC	3		A28	
		59.75MC	2		A29	

ANTENNA AND RF ALIGNMENT

The antenna and RF section of this receiver is very stable and will not normally require alignment in the field. Alignment should not be attempted unless they are definitely known to be out of alignment. Remove the 4.5 volt battery used during video IF alignment and replace it with 3.5 volts battery. Remove the first video IF Amp. (V4).

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
15. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	177MC (10MC Sweep)	175.25MC 179.75MC	7	Vert. Amp. to Point  Low side to chassis.	A30, A31 A32, A33	Adjust for flat-topped response curve similar to Fig 5 with markers above 90%.
16. "	"	207MC (10MC SWP)	205.25MC 209.75MC	12	"	A30	Adjust A30 for maximum response and minimum slope of top of curve as shown in Fig 6.
17. "	"	177MC (10MC SWP)	175.25MC 179.75MC	7	"		Check for response similar to Figs. 5, 6, and 7. If markers are below 80% on any channel, make slight adjustment of A31 thru A34 with channel selector set for that channel. Recheck all high band channels to see that they have not been seriously effected.
		183MC (10MC SWP)	181.25MC 185.75MC	8			
		189MC (10MC SWP)	187.25MC 191.75MC	9			
		195MC (10MC SWP)	193.25MC 197.75MC	10			
		201MC (10MC SWP)	199.25MC 203.75MC	11			
		213MC (10MC SWP)	211.25MC 215.75MC	13			
		85MC (10MC SWP)	83.25MC 87.75MC	6			
18. "	"	85MC (10MC SWP)	83.25MC 87.75MC	6	"	A34, A35, A36, A37	Adjust for response curve similar to Fig 6 with markers above 90%.
19. "	"	79MC (10MC SWP)	77.25MC 81.75MC	5	"		Check for response similar to Fig 6. If markers are below 80% on any channel, make slight adjustment of A35 thru A38 with channel selector set for that channel. Recheck all low band channels to see that they have not been seriously effected.
		69MC (10MC SWP)	67.25MC 71.75MC	4			
		63MC (10MC SWP)	61.25MC 65.75MC	3			
		57MC (10MC SWP)	55.25MC 59.75MC	2			

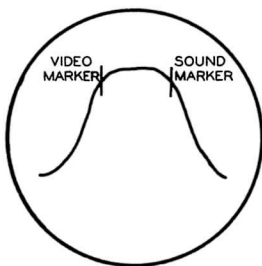
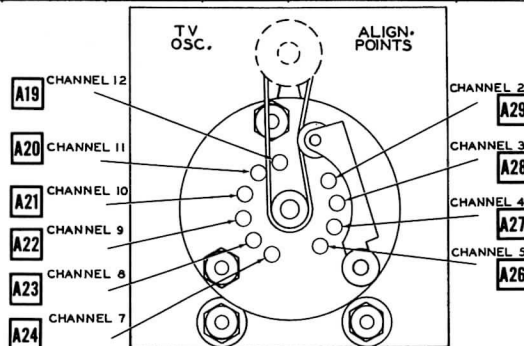


FIG. 5

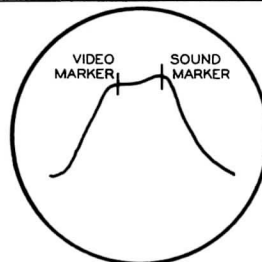


FIG. 6

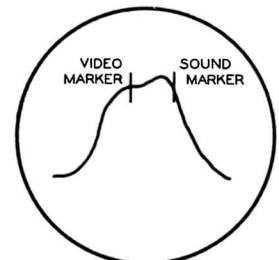


FIG. 7

RCA VICTOR MODELS 8T270, 8TC270, 8TC271, 8TK320, 9T270, 9TC272, 9TC275

RADIO ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

If any lead dress is required it should be performed before beginning alignment. (See page 14). The proper order of alignment is given. If any portion of the receiver is to be aligned, perform all steps after that portion. If the AM IF system is aligned, the FM IF portion will require alignment.

To set pointer turn tuning cap fully closed and set pointer to last reference mark at low frequency end of dial.

AM ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
20 .01MFD	High side to antenna terminal. Low side to chassis.	455KC (400~ Mod.)	AM (second pos. clock-wise)	Tuning gang fully closed	Across voice coil	A38, A39, A40, A41	Adjust for maximum output.
21 200MMF	"	1820KC	"	Tuning gang fully open	"	A42	"
22 200MMF	"	1400KC	"	Tune for max. output	"	A43	"
23 200MMF	"	600KC	"	600KC	"	A44, A45	Adjust for maximum output. Repeat steps 21, 22, and 23 until no further improvement can be made.

FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100KΩ (± 1%) resistors in series from point to \diamond to chassis. The junction of these two resistors is alignment point \diamond as shown on the schematic.

Alternate loading is used on the transformers during FM IF alignment, that is, the primary of each transformer is shunted with 680 ohms while the secondary of the same transformer is being adjusted. When the primary is to be adjusted, the 680Ω resistor is used to shunt the secondary. This process is repeated for each transformer.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
24 .01MFD	High side to pin 1 (Grid) of 6AU6 (V30). Low side to chassis.	10.7MC (Unmod.)	FM (third position CW)	Tuning gang fully open	DC Probe to Point \diamond Common to chassis.	A46	Adjust for maximum deflection.
25 .01MFD	"	"	"	"	DC Probe to Point \diamond Common to chassis.	A47	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
26 .01MFD	"	"	"	"	DC Probe to Point \diamond Common to chassis.	A48, A49, A50, A51	Use alternate loading as explained above. Adjust for maximum deflection.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120V sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
24 Direct	High side to ungrounded tube shield floating over convertor tube (V28). Low side to chassis.	10.7MC (450KC Sweep)	FM (third pos. CW)	Point of non-interference	Vert. Amp. to Point \diamond Low side to chassis.	A46, A48, A49, A50, A51	Disconnect stabilizer capacitor (C112). Adjust for maximum amplitude and symmetry as per Fig 9.
25 "	"	"	"	"	Vert. Amp. to Point \diamond Low side to chassis.	A47, A46	Reconnect capacitor (C112). Adjust A47 so 10.7MC occurs at center of crossover lines as per Fig 10. Slightly retouch A46 for maximum amplitude and straightness of crossover lines. Continue with step 27.

FM RF ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
27 270Ω carbon res.	High side thru 270Ω to ungrounded antenna terminal. Low side to chassis.	106MC (Unmod.)	FM	106MC	DC Probe to Point \diamond Low side to chassis.	A52, A53	Set A52 to maximum capacity. Expand or compress turns of A53 for maximum deflection, then adjust A52 for maximum deflection.
28 "	"	90MC	"	Tune for max. deflection.	"	A54	Expand or compress coil turns for maximum deflection. Repeat steps 27 and 28 until no further improvement can be made.

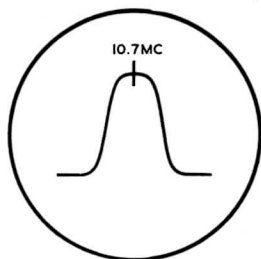


FIG. 9

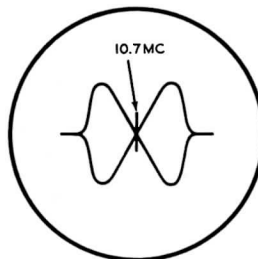
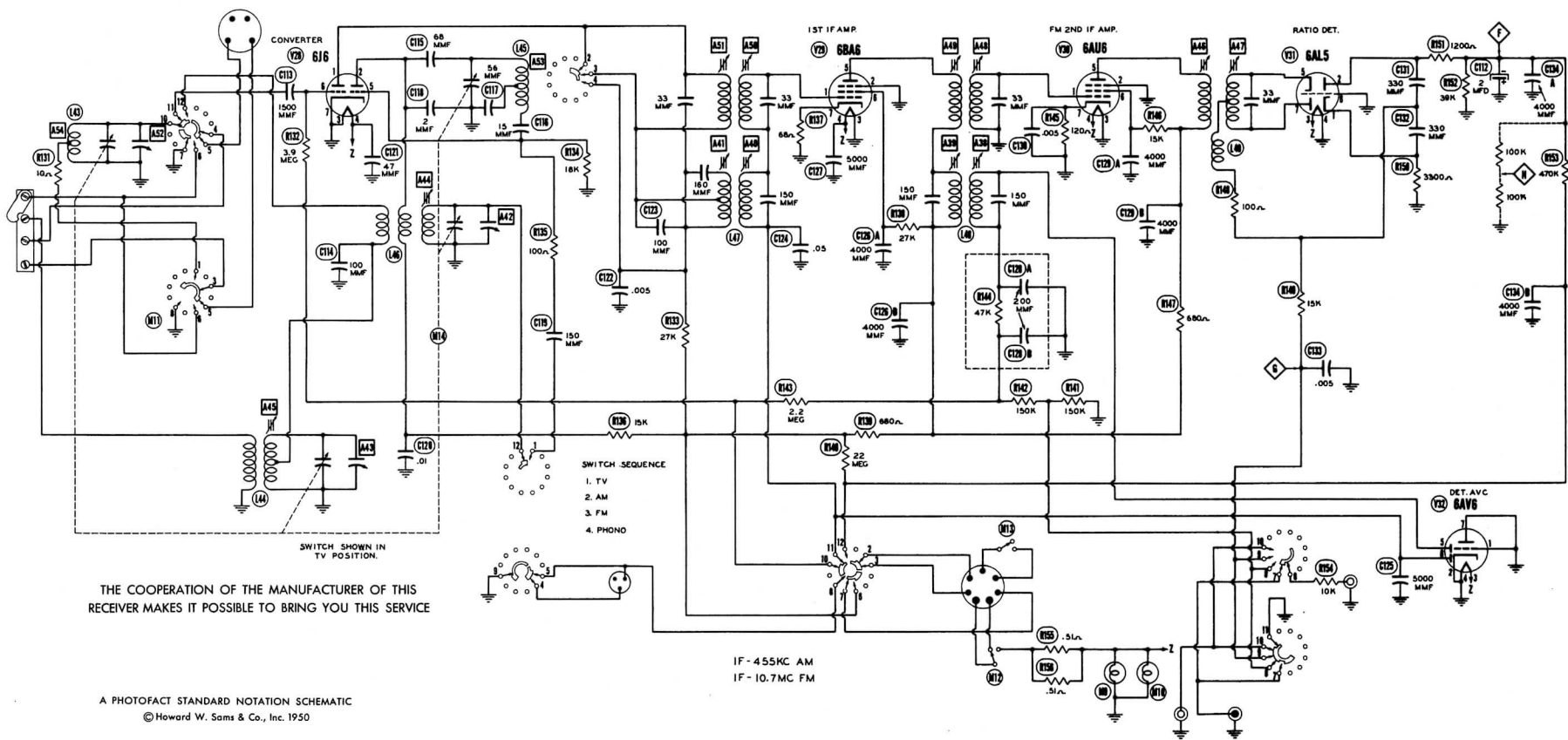


FIG. 10



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AM-FM TUNER SCHEMATIC
RCA VICTOR MODELS 81270, 81C270,
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VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	
V 1	6AG5	- .3VDC	0V.	0V.	6.3VAC	85VDC	110VDC	0V.			
V 2	6AG5	0V.	0V.	0V.	6.3VAC	120VDC	110VDC	0V.			
V 3	6J6	60VDC	80VDC	6.3VAC	0V.	\$-3.1VDC	\$-2.8VDC	.2VDC			
V 4	6AG5	-2.5VDC	.2VDC	0V.	6.3VAC	100VDC	100VDC	.2VDC			
V 5	6AG5	0V.	.6VDC	6.3VAC	0V.	105VDC	105VDC	.6VDC			
V 6	6AG5	-1.8VDC	.3VDC	0V.	6.3VAC	50VDC	100VDC	.3VDC			
V 7	6AG5	0V.	1.2VDC	6.3VAC	0V.	200VDC	115VDC	1.2VDC			
V 8	6AL5	10V.	\$-30VDC	0V.	6.3VAC	\$0V.	0V.	1-1.1VDC			
V 9	6AU6	11-2.4VDC	11.4VDC	0V.	6.3VAC	1165VDC	1155VDC	11.4VDC			
V 10	6K6GT	0V.	0V.	1155VDC	1250VDC	165VDC	165VDC	6.3VAC	175VDC		
V 11	6AU6	0V.	0V.	0V.	6.3VAC	105VDC	105VDC	.8VDC			
V 12	6AU6	- .4VDC	0V.	0V.	6.3VAC	115VDC	55VDC	0V.			
V 13	6AL5	0V.	-.1VDC	1.4VAC	6.3VAC	.1VDC	0V.	0V.			
V 14	6AV6	-.5VDC	0V.	0V.	6.3VAC	-.2VDC	85VDC				
V 15	6K6GT	0V.	0V.	1280VDC	1310VDC	10V.	1350VDC	6.3VAC	123VDC		
V 16	6SN7GT	1-24VDC	1100VDC 1400VDC	10V.	170VDC	1120VDC	175VDC	0V.	6.3VAC		
V 17	6SN7GT	117VDC	1105VDC	125VDC	119VDC	1110VDC	126VDC	0V.	6.3VAC		
V 18	6SN7GT	1-1.8VDC	1135VDC	10V.	1-30VDC	1260VDC	1.1VDC	6.3VAC	0V.		
V 19	6K6GT	0V.	6.3VAC	1320VDC	1320VDC	10V.	124VDC 140VDC	0V.	125VDC 141VDC		
V 20	6SN7GT	1-11VDC	1125VDC	1-18VDC	1-50VDC	1205VDC	10V.	0V.	6.3VAC		
V 21	6BG6G	1370VDC	0V.	118VDC	10V.	10V.	118VDC	6.3VAC	1310VDC	TOP CAP # 130Ω	
V 22	5V4G	0V.	380VDC	0V.	265VDC	0V.	265VDC	0V.	380VDC		
V 23	1B3GT		* DO NOT MEASURE								
V 24	1B3GT		* DO NOT MEASURE								
V 25	5U4G	0V.	280VDC	0V.	380VAC	0V.	380VAC	0V.	280VDC		
V 26	5U4G	0V.	280VDC	0V.	380VAC	0V.	380VAC	0V.	280VDC		
V 27	16AP4	0V.	-33VDC	PIN 10 360VDC	PIN 11 44VDC	PIN 12 6.3VAC					
* V28A	6J6	105VDC	100VDC	0V.	6.3VAC	\$-9.5VDC	0V.	0V.			
† V28B	6J6	90VDC	65VDC	0V.	6.3VAC	\$-5.8VDC	0V.	0V.			
* V29	6BA6	- .1VDC	0V.	0V.	6.3VAC	185VDC	105VDC	.6VDC			
† V30	6AU6	0V.	0V.	0V.	6.3VAC	175VDC	140VDC	1.1VDC			
† V31	6AL5	.1VDC	-.5VDC	6.3VAC	0V.	-.2VDC	0V.	-.2VDC			
* V32	6AV6	0V.	0V.	6.3VAC	0V.	-.3VDC	-.3VDC	0V.			

§ TAKEN WITH VACUUM TUBE VOLTMETER.

* DO NOT MEASURE.

†† MEASURED FROM CENTER TAP OF R7.

▲ MEASURED FROM JUNCTION OF R77 AND R81.

† MEASURED FROM PIN 6 OF V20.

♦ TAKEN IN AM POSITION.

‡ TAKEN IN FM POSITION.

▲ MEASURED FROM PIN 6 OF V8.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	400KΩ	0Ω	0Ω	.1Ω	14KΩ	11.5KΩ	0Ω		
V 2	6AG5	100KΩ	0Ω	0Ω	.1Ω	12.3KΩ	12.3KΩ	0Ω		
V 3	6J6	112.5KΩ	112.5KΩ	.1Ω	0Ω	100KΩ	100KΩ	47Ω		
V 4	6AG5	13KΩ	68Ω	0Ω	.1Ω	12.5KΩ	12.5KΩ	68Ω		
V 5	6AG5	10KΩ	68Ω	.1Ω	0Ω	12.4KΩ	12.4KΩ	68Ω		
V 6	6AG5	12KΩ	38Ω	0Ω	.1Ω	18KΩ	12.2KΩ	38Ω		
V 7	6AG5	.1Ω	150Ω	.1Ω	0Ω	18KΩ	12.2KΩ	150Ω		
V 8	6AL5	1 10Ω	4 Meg.	0Ω	.1Ω	\$0Ω	0Ω	14.7KΩ		
V 9	6AU6	14.7KΩ	182Ω	0Ω	.1Ω	\$5KΩ	14KΩ	182Ω		
V 10	6K6GT	Inf.	0Ω	19KΩ	1.2KΩ	\$5KΩ	\$15KΩ	.1Ω	13.5KΩ	
V 11	6AU6	0Ω	0Ω	0Ω	.1Ω	12.5KΩ	12.5KΩ	82Ω		
V 12	6AU6	22KΩ	0Ω	0Ω	.1Ω	12.2KΩ	118KΩ	0Ω		
V 13	6AL5	0Ω	100KΩ	2Ω	.1Ω	200KΩ	0Ω	100KΩ		
V 14	6AV6	10 Meg.	0Ω	0Ω	.1Ω	400KΩ	400KΩ	1390KΩ		
V 15	6K6GT	Inf.	0Ω	12.5KΩ	12KΩ	470KΩ	1380Ω	.1Ω	1800Ω	
V 16	6SN7GT	1 3 Meg.	# 1.6Meg. # 300KΩ	10Ω	1.1 Meg.	68KΩ	11.8KΩ	0Ω	.1Ω	
V 17	6SN7GT	\$63KΩ	125KΩ	180KΩ	\$15KΩ	19KΩ	100KΩ	0Ω	.1Ω	
V 18	6SN7GT	1 Meg.	112KΩ	\$0Ω	4 Meg.	1380Ω	\$ 6.8KΩ	.1Ω	0Ω	
V 19	6K6GT	Inf.	.1Ω	12KΩ	12KΩ	12.2 Meg.	115KΩ 110KΩ	0Ω	16KΩ 11.2KΩ	
V 20	6SN7GT	1900KΩ	#150KΩ	1300KΩ	1250KΩ	#110KΩ	10Ω	0Ω	.1Ω	
V 21	6BG6G	13.3KΩ	0Ω	1150Ω	10Ω	1 Meg.	1150Ω	.1Ω	19KΩ	TOP CAP # 130Ω
V 22	5V4G	Inf.	140KΩ	Inf.	155Ω	Inf.	155Ω	Inf.	140KΩ	
V 23	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP #160Ω
V 24	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP Inf.
V 25	5U4G	Inf.	5KΩ	Inf.	117.5Ω	Inf.	116Ω	Inf.	5KΩ	
V 26	5U4G	Inf.	5KΩ	Inf.	117.5Ω	Inf.	116Ω	Inf.	5KΩ	
V 27	16AP4	0Ω	1.2 Meg.	PIN 10 150KΩ	PIN 11 50KΩ	PIN 12 1Ω				
* V28A	6J6	127KΩ	115KΩ	0Ω	.1Ω	18KΩ	6.5 Meg.	0Ω		
† V28B	6J6	127KΩ	115KΩ	0Ω	.1Ω	18KΩ	6.5 Meg.	0Ω		
* V29	6BA6	2.5 Meg.	0Ω	0Ω	.1Ω	1000Ω	127KΩ	68Ω		
† V30	6AU6	.2Ω	0Ω	0Ω	.1Ω	1.6KΩ	116KΩ	120Ω		
† V31	6AL5	3.3KΩ	40KΩ	.1Ω	0Ω	Inf.	0Ω	Inf.		
* V32	6AV6	0Ω	0Ω	.1Ω	0Ω	350KΩ	2.6 Meg.	0Ω		

† MEASURED FROM PIN 8 OF V25.

MEASURED FROM PIN 8 OF V22.

† MEASURED FROM PIN 6 OF V20.

▲ MEASURED FROM PIN 5 OF V8.

♦ TAKEN IN AM POSITION.

‡ TAKEN IN FM POSITION.

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.

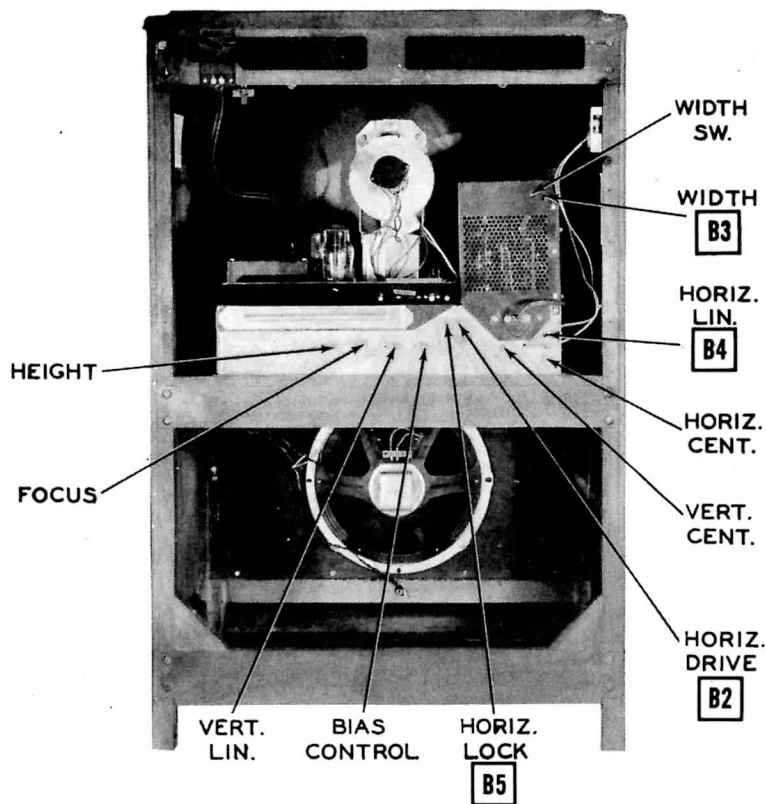
2. Pin numbers are counted in a clockwise direction on bottom of socket.

3. Measured values are from socket pin to common negative unless otherwise stated.

4. Line voltage maintained at 117 volts for voltage readings.

5. Front panels controls set at minimum.

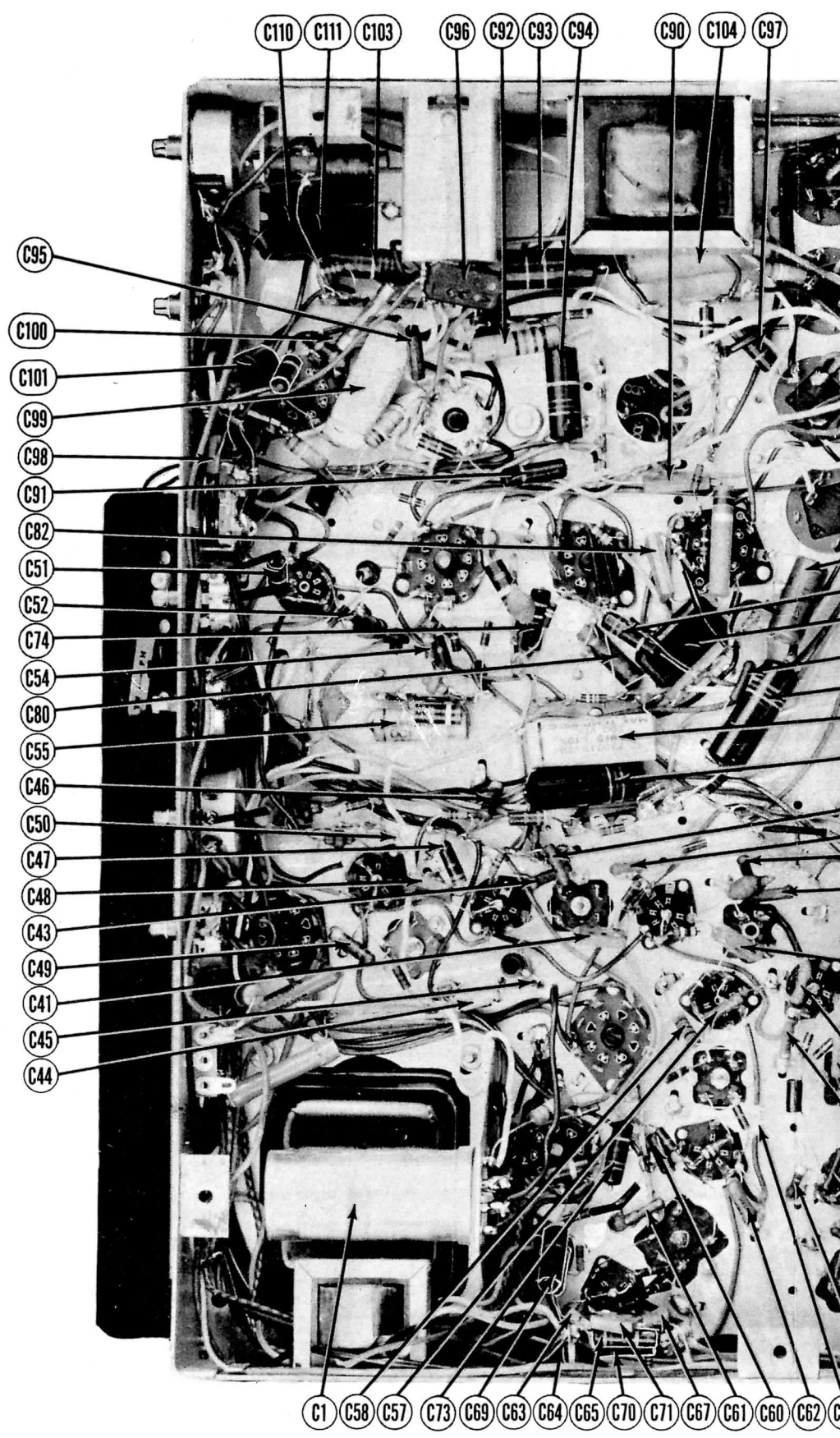
6. Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.



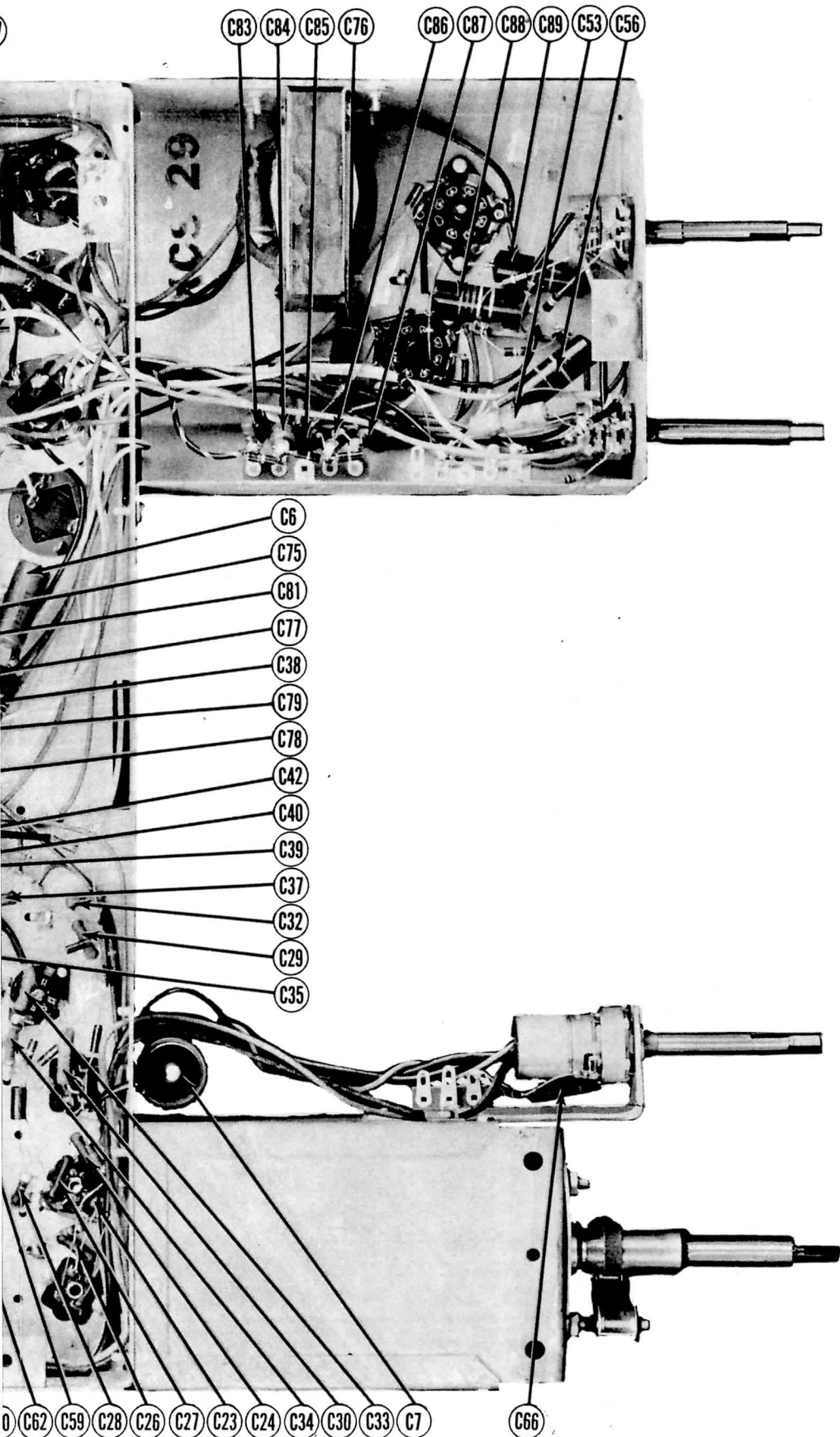
CABINET-REAR VIEW

CRITICAL LEAD DRESSING

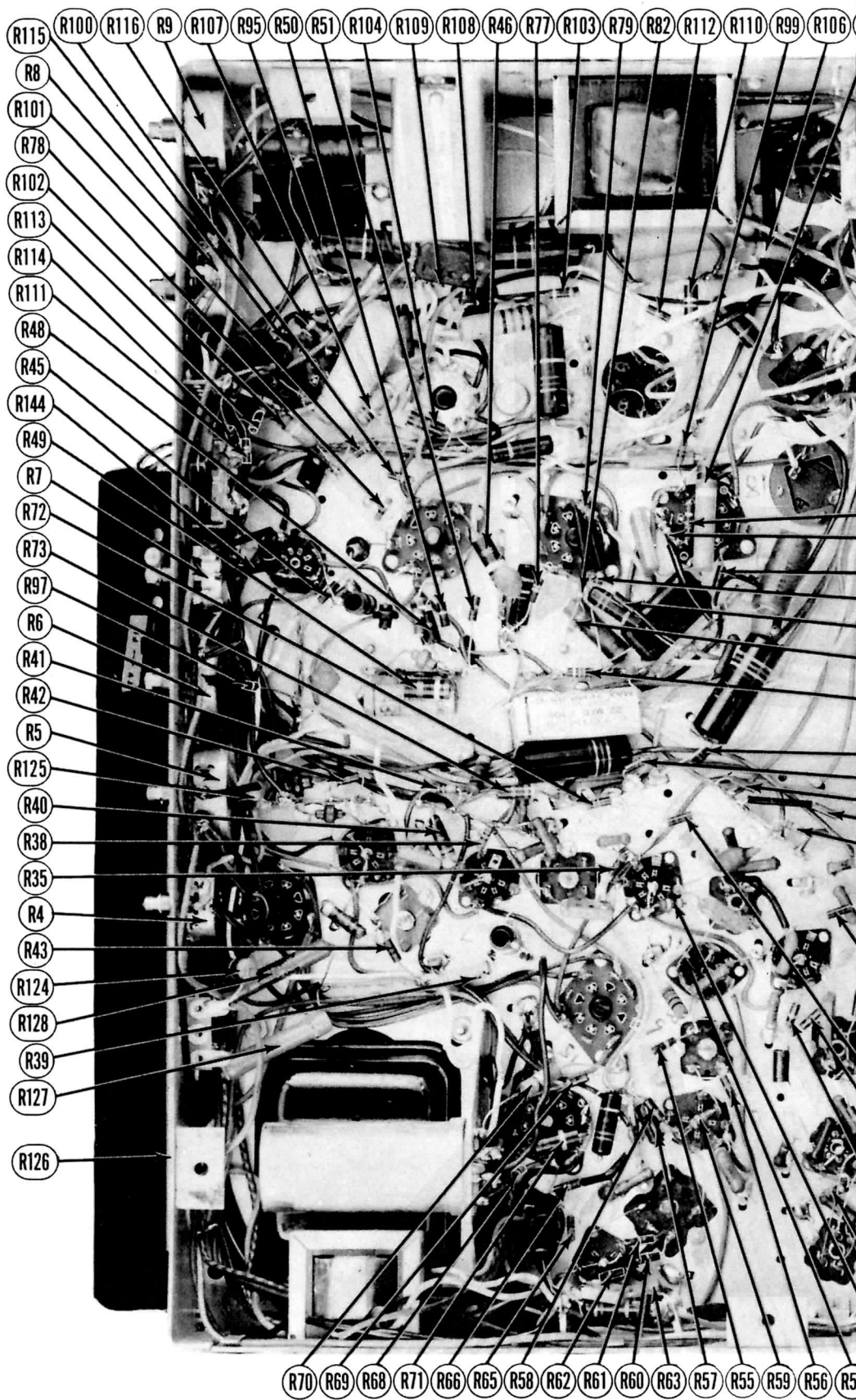
1. The ground bus from pin 2 and the center shield of V12 socket should not be shortened or rerouted.
2. Dress the body of R62 as close to tube pin as possible.
3. Do not change the dress of the filament leads or the bypass capacitors in the picture or sound IF circuits. The filament leads between V12, V13 and V14 should be down against the chassis and away from grid or plate leads.
4. Dress all leads crossing the IF circuits close to the chassis and held so they cannot move and change alignment.
5. If it is necessary to replace any of the 1500MMF capacitors in the picture IF circuit, the lead length must be kept as short as possible.
6. Picture IF coupling capacitors C30, C35, C41 and C48 should be up and away from the chassis and should be clear of the picture IF transformer adjustments by at least $\frac{1}{4}$ inch. If the dress of any of these capacitors is changes, the IF alignment should be rechecked.
7. Leads to L31 and L32 must be as short as possible.
8. Dress peaking coils L34, L35, L36, L37 and L38 up and away from the chassis.
9. Dress R13 away from L38.
10. Dress C63 and V13 tube pins 5 and 6 with leads not exceeding $\frac{3}{8}$ inch.
11. Dress the blue lead from pin 5 of V14 down against the chassis and under two shielded leads.
12. Dress C55 and C54 up and away from the chassis.
13. Dress the yellow lead from the picture control away from the chassis. Dress the yellow lead from pin 8 of V9 away from the chassis.
14. Dress the green lead from pin 8 of V10 away from the chassis.
15. Dress R101, R100, R104 and R102 up and away from the chassis.
16. The leads to the volume control should be dressed down against the chassis and away from V11 and V12.
17. Dress the yoke red horizontal deflection lead under the clips of the fixed H. V. shield.
18. Dress the green lead from C106 close to the chassis and away from the red lead connected to T4.
19. Insert the red lead into T4 from the top of the terminal.
20. All soldered connections in the high voltage compartment should be free of sharp points.
21. Contact between the RF oscillator frequency adjustment screws and the oscillator coils or channel switch eyelets must be avoided.



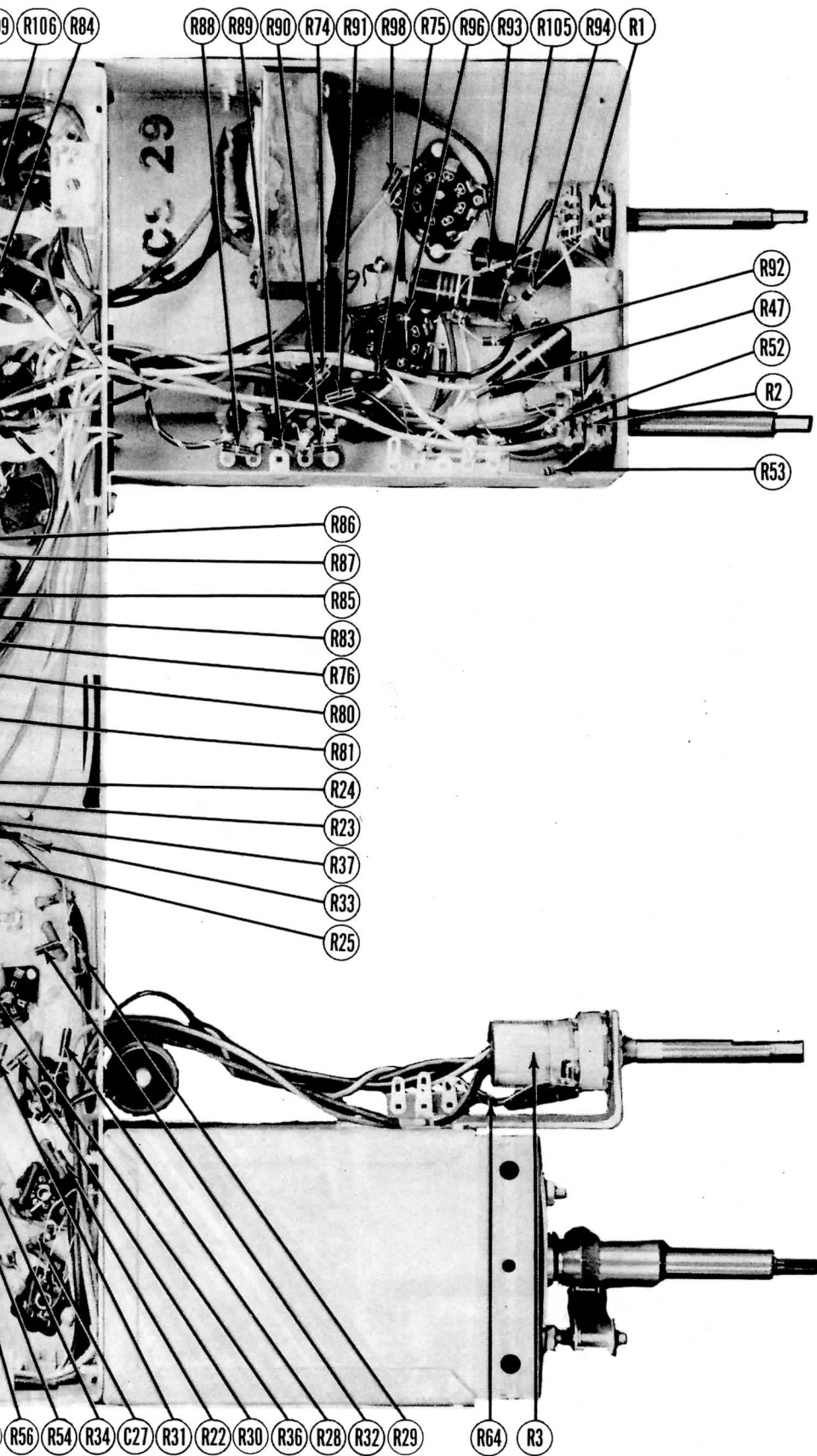
CHASSIS BOTTOM VIEW-CAF



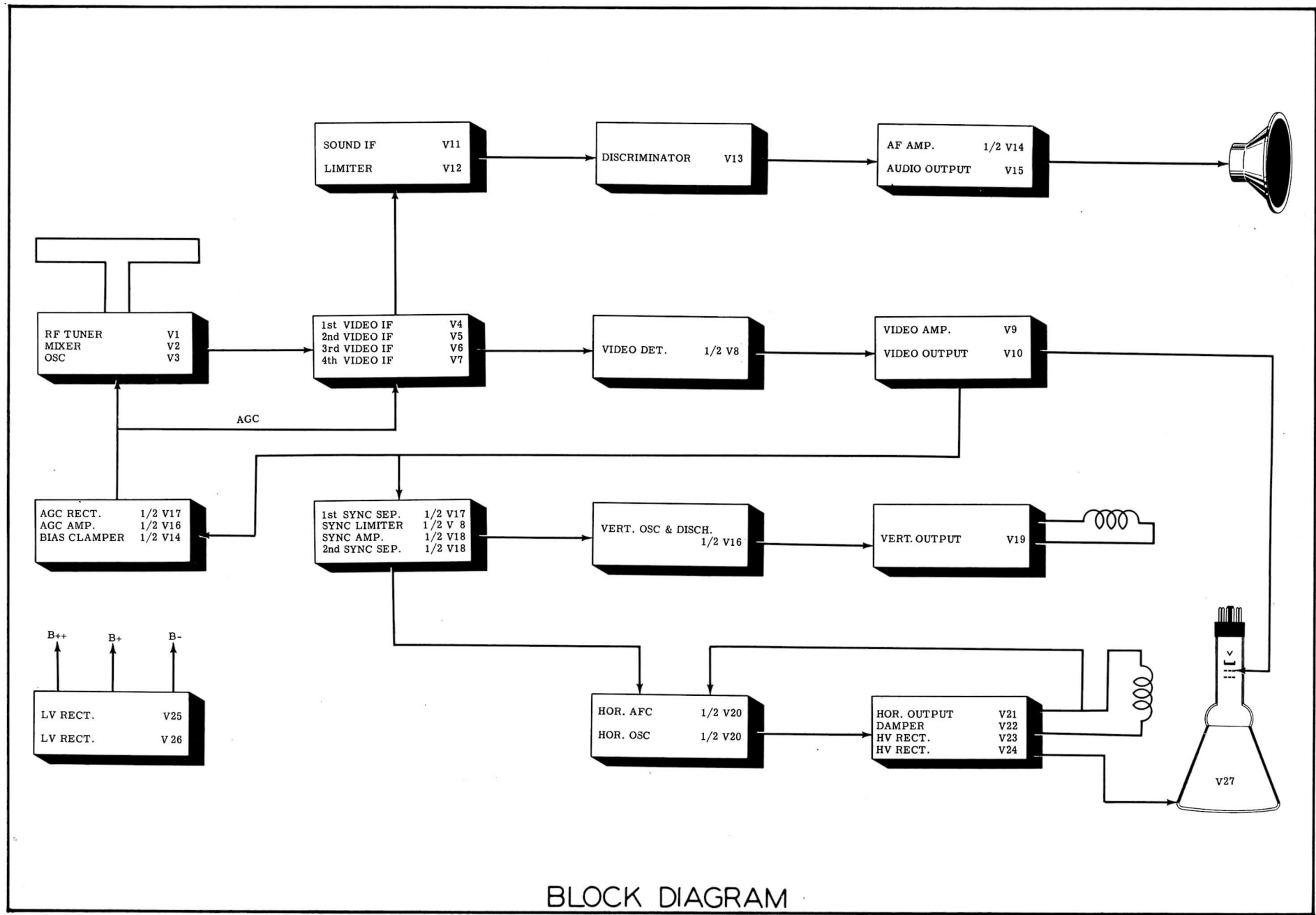
-CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-RES



- RESISTOR IDENTIFICATION



RCA VICTOR MODELS 81270, 81C270,
81C271, 81K320, 91270, 91C272, 91C275

BLOCK DIAGRAM

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		RCA PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6AG5	6AG5	7BD	
V2	Mixer	6AG5	6AG5	7BD	
V3	Oscillator	6J8	6J8	7BF	
V4	1st Video IF	6AG5	6AG5	7BD	
V5	2nd Video IF	6AG5	6AG5	7BD	
V6	3rd Video IF	6AG5	6AG5	7BD	
V7	4th Video IF	6AG5	6AG5	7BD	
V8	Video Det. -Sync. Limiter	6AL5	6AL5	6BT	
V9	Video Amp.	6AU6	6AU6	7BK	
V10	Video Output	6K6GT	6K6GT	7S	
V11	Sound IF Amp.	6AU6	6AU6	7BK	
V12	Limiter	6AU6	6AU6	7BK	
V13	Disc.	6AL5	6AL5	6BT	
V14	AF Amp. -Bias Clamper	6AV6	6AV6	7BT	
V15A	Audio Output	6K6GT	6K6GT	7S	
B	Audio Output	6V6GT	6V6GT	7AC	
V16	AGC Amp. -Vert. Osc. -Vert. Disch.	6SN7GT	6SN7GT	8BD	
V17	AGC Rectifier-1st Sync. Sep.	6SN7GT	6SN7GT	8BD	
V18	Sync. Amp. -2nd Sync. Sep.	6SN7GT	6SN7GT	8BD	
V19	Vert. Output	6K6GT	6K6GT	7S	
V20	Hor. AFC-Osc.	6SN7GT	6SN7GT	8BD	
V21	Hor. Output	6BG6G	6BG6G	5BT	
V22	Damper	5V4G	5V4G	5L	
V23	HV Rectifier	1B3GT	1B3GT	3C	
V24	HV Rectifier	1B3GT	1B3GT	3C	
V25	LV Rectifier	5U4G	5U4G	5T	
V26	LV Rectifier	5U4G	5U4G	5T	
V27	Picture Tube	16AP4	16AP4	12D	
V28	Converter	6J8	6J8	7BF	Model 8TK320 only.
V29	1st IF Amp.	6BA6	6BA6	7BK	Model 8TK320 only.
V30	FM 2nd IF Amp.	6AU6	6AU6	7BK	Model 8TK320 only.
V31	Ratio Det.	6AL5	6AL5	6BT	Model 8TK320 only.
V32	DET. -AVC	6AV6	6AV6	7BT	Model 8TK320 only.

CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES	
	CAP.	VOLT	RCA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.		SPRAGUE PART No.
C1A	40	450	73582	AFH82J16E	UP9CJ915		TVL-25	▲ Filter
B	10	450						■ Output Decoupling
C	80	200						▲ Filter
C2A	40	450	73583	AFH8J1810D	UP9CJ913		TVL-27	▲ Filter
B	90	150						■ Vert. Output Cath. Bypass
C	50	150						▲ Filter
C3A	60	450	73581	AFH1222J4D	UP9DJ914		TVL-68	▲ Filter
B	10	450						■ Decoupling
C	10	450						▲ Decoupling
D	20	150						Output Cathode Bypass
C4A	250	10	71436	AF50R200S	UP7BJ808		TVL-66	▲ Hor. Cent. Cont. Bypass
B	1000	6						▲ Vert. Cent. Cont. Bypass
C5A	40	450	71432	AFH882J	UP9CJ897		TVL-30	▲ Filter
B	40	450						■ Filter
C	10	450						▲ Vert. Output Decoupling
C6	5	50	74106	PRS150/4	BR550		TVA-13	AGC Filter
C7	40	400	74266	PRS450/40	BR4045		TVA-24	Decoupling
C8	18		54207					Fixed Trimmer
C9	270	500	73091			GP2K-270		RF Coupling
C10	1500		71501			GP2L-0015		AGC Filter
C11	1500		71501			GP2L-0015		RF Screen Bypass
C12	1500		71501			GP2L-0015		RF Bypass
C13	1500		71501			GP2L-0015		RF Coupling
C14	5000		73473			811-005	29C1	RF Coupling
C15	1500		71501			GP2L-0015		RF Fil. Bypass
C16	1500		71501			GP2L-0015		Conv. Fil. Bypass
C17	1500		71501			GP2L-0015		Conv. Decoupling
C18	1500		71501			GP2L-0015		RF Bypass
C19	10		53511			NPOK-10		Fixed Trimmer
C20	5		74035			NPOK-5		Osc. Feedback
C21	5		74035			NPOK-5		Osc. Feedback
C22	1500		71501			GP2L-0015		Osc. Fil. Bypass
C23	1500		71501	1467-0015	IW5D15		IFM-215	RF Bypass
C24	1500		71501	1467-0015	IW5D15		IFM-215	AGC Filter
C25	82							Fixed Trimmer
C26	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	AGC Filter
C27	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	1st V. IF Decoupling
C28	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	1st V. IF Fil. Bypass
C29	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Decoupling
C30	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C31	47			1469-00005	5R5Q5	NPOM-50	MS-45	Fixed Trimmer
C32	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Decoupling
C33	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	2nd V. IF Decoupling
C34	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	2nd V. IF Fil. Bypass
C35	33	1000	74105	1468-00004	5W5Q4	GPIK-33	IFM-44	IF Coupling
C36	47			1469-00005	5R5Q5	NPOM-50	MS-45	Fixed Trimmer
C37	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	AGC Filter
C38	.47	200	73787	P288-47	GT2P5		TC-5	AGC Filter
C39	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Decoupling
C40	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	3rd V. IF Decoupling
C41	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C42	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	RF Bypass
C43	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	4th V. IF Screen Bypass
C44	82		64062	1468-0001	5W5T1	GPIK-100	IFM-31	4th V. IF Cath. Bypass

PARTS LIST AND DESCRIPTIONS (Continued)

CAPACITORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	RCA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C45	75			1469-00075		NPOM-75		Fixed Trimmer
C46	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	RF Bypass
C47	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	4th V. IF Decoupling
C48	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C49	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	RF Bypass
C50	6		74182	1468-00001	5W5Q1	NPOK-6.8	MS-41	V. Diode Filter
C51	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	1st V. Amp. Cath. Bypass
C52	47			1469-00005	5R5Q5	NPOM-50	MS-45	Fixed Trimmer
C53	.0039	600	73796	P688-004	GT6D4	GP2M-0047	TM-24	2nd V. Amp. Cath. Bypass
C54	120		73921	1468-00015	5W5T15	GP2K-120	IFM-315	Video Coupling
C55	.047	400	73553	P488-047	GT4S5		TM-15	Video Coupling
C56	.1	400	73551	P488-1	GT4P1		TM-1	Pic. Tube Cath. Dec.
C57	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	1st S. IF Cath. Bypass
C58	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	1st S. IF Decoupling
C59	100		39396	1468-0001	5W5T1	GPIK-100	IFM-31	Limiter Grid Filter
C60	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Limiter Screen Bypass
C61	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Limiter Plate Dec.
C62	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	Limiter Fil. Bypass
C63	270		73922	1468-00025	5W5T25	GP2K-270	IFM-325	Diode Load Cap.
C64	270		73922	1468-00025	5W5T25	GP2K-270	IFM-325	S. Discr. Fil. Bypass
C65	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Audio Coupling †
C66	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Tone Compensation ‡
C67	.01	400	73561	P488-01	GT4S1	GP2-335-01	TM-11	Audio Coupling
C68	.001	600	73801	P688-001	GT6D1	GP2L-001	TM-21	De-emphasis ‡
C69	.01	1000	73565	P1088-01	GT16S1		MB-11	Audio Coupling
C70	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Tone Compensation
C71	120	500	39630	1468-00015	5W5T15	GP2K-120	IFM-315	Tone Compensation
C72	.0068	400	73789	P488-0068	GT6D6	GP2-334-0068	TM-26	Tone Compensation ‡
C73	.0033	600	73795	P688-0033	GT6D3	GP2M-0033	TM-23	Output Plate Bypass †
C74	.01	400	73561	P488-01	GT4S1	GP2-335-01	TM-11	AGC Rect. Cath. Bypass
C75	.0033	600	73795	P688-0033	GT6D3	GP2M-0033	TM-23	AGC Coupling
C76	.1	200	73784	P288-1	GT2P1		TM-1	AGC Amp. Grid Filter
C77	1500		71501	1467-0015	IW5D15	GP2L-0015	IFM-215	AGC Filter
C78	.47	200	73787	P288-47	GT2P5		TC-5	AGC Filter
C79	.22	200	73560	P488-22	GT2P25		TE-2	1st Sync. Sep. Cath. Bypass
C80	.001	600	73801	P688-001	GT6D1	GP2L-001	TM-21	Sync. Coupling
C81	.047	600	73553	P688-047	GT6S5		TM-15	Sync. Coupling
C82	100	500	39628	1468-0001	5W5T1	GPIK-100	IFM-31	Sync. Coupling
C83	390	500	39642	1468-0004	5W5T4	GP2K-390	IFM-34	2nd Sync. Sep. Cath. Bypass
C84	.0022	600	73803	P688-0022	GT6D2	GP2M-0022	TM-22	Integrator Net.
C85	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Integrator Net.
C86	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Integrator Net.
C87	.0047	600	73550	P688-0047	GT6D5	GP2M-0047	TM-25	Vert. Sync. Coupling
C88	.047	600	73592	P688-047	GT6S5		TM-15	Vert. Discharge
C89	.1	400	73551	P488-1	GT4P1		TM-1	Vert. Sweep Coupling
C90	180	500	73102			GP2K-180		Hor. Sync. Coupling
C91	.0022	600	73803	P688-0022	GT6D2	GP2M-0022	TM-22	Hor. Sync. Coupling
C92	.022	400	73562	P488-022	GT6S2		TM-12	AFC Filter
C93	.22	400	73794	P488-22	GT4P25		TC-2	AFC Filter
C94	.047	600	73592	P688-047	GT6S5		TM-15	AFC Plate Bypass
C95	180	1000	73102			GP2-335-01	TM-11	Hor. Osc. Grid Cap.
C96	.01	400	73594	P488-01	GT4S1	GP2M-0022	TM-22	Fixed Trimmer
C97	.0022	600	73595	P688-0022	GT6D2	GP2M-0022	TM-22	Hor. Discharge
C98	560	500	73091			GP2K-560		Hor. Sweep Coupling
C99	.047	1000	73597	P1088-047	GT16S5		TR-15	Hor. Output Screen Bypass
C100	270	1000	73091					Hor. Output Screen Bypass
C101	.22	400	74250	P488-22	GT4P25		TC-2	Hor. Output Cath. Bypass
C102	.047	400	73553	P488-047	GT4S5		TM-15	Bias Filter ‡
C103	.033	1000	73596	P1088-033				Damper Filter
C104	.05	1000	73597	P1088-05	GT16S5		TR-15	Damper Filter
C105	.022	400	73562	P488-022	GT4S2		TM-12	Fixed Trimmer †
C106	5	1500	72809					Hor. Feedback
C107	500	20000	74153			410-500		Voltage Doubler Cap.
C108	500	20000	74153			410-500		HV Filter
C109	250	20000	74154					HV Filter
C110	.01	400	73561	P488-01	GT4S1		TM-11	Line Filter
C111	.01	400	73561	P488-01	GT4S1		TM-11	Line Filter
C112	2	50	73747	PRSI50/4	BBR2-50T		TVA-12	Stabilizing Cap.
C113	1500		73748	1467-0015	IW5D15	GP2L-0015	IFM-215	RF Coupling
C114	100		39396	1469-0001	5R5T1	N750L-100	MS-31	Fixed Trimmer
C115	68		33103			GPIK-68		Osc. Feedback
C116	15		31353			GPIK-15		Osc. Grid Cap.
C117	56		73867					Fixed Trimmer
C118	2		73866					Fixed Trimmer
C119	150		48125	1468-00015	5W5T15	GP2K-150	IFM-315	Osc. Grid Cap.
C120	.01	400	71925	P488-01	GT4S1	GP2-335-01	TM-11	Osc. Plate Decoupling
C121	47		39042	1468-00005	5W5Q5	GP1K-47	IFM-45	Conv. Filament Bypass
C122	.005	400	71553	P688-005	GT6D5	GP2M-005	TM-25	Conv. Plate Decoupling
C123	100		39396	1469-0001	5R5T1	N750L-100	MS-31	Fixed Trimmer
C124	.05	200	54859	P288-05	GT2S5		TM-15	AVC Filter
C125	5000		73473	1467-005	ID5D5	811-005	29C1	AVC Filter
C126A	4000		74009	1467-004	ID5D4	811-005	36C2	1st IF Screen Bypass
B	4000			1467-004	ID5D4	811-005		1st IF Decoupling
C127	5000		73473	1467-005	ID5D5	811-005	29C1	1st IF Fil. Bypass
C128A	200	*		1468-0002	5W5T2	GP2K-200	IFM-32	Diode RF Filter
B	200			1468-0002	5W5T2	GP2K-200	IFM-32	Diode RF Filter
C129A	4000		74009	1467-004	ID5D4	811-005	36C2	2nd IF Screen Bypass
B	4000			1467-004	ID5D4	811-005		2nd IF Decoupling
C130	.005	400	71553	P688-005	GT6D5	GP2M-005	TM-25	2nd IF Cath. Bypass
C131	330	500	39640	1468-0003	5W5T3	GP2K-330	IFM-325	Diode Load Cap. †
C132	330	500	39640	1468-0003	5W5T3	GP2K-330	IFM-325	Diode Load Cap. †
C133	.005	400	71553	P688-005	GT6D5	GP2M-005	TM-25	De-emphasis
C134A	4000		74009	1467-004	ID5D4	811-005	36C2	DAVC Decoupling
B	4000			1467-004	ID5D4	811-005		DAVC Decoupling

† Some models use .0022MFD in this application.

‡ Model 8TK320 uses .015MFD in this application.

Used only in model 8TK320.

♦ Some models use .0047MFD in this application.

† Not used in all models.

* Items C128A, C128B and R144 are combined into one unit, obtainable under MFRG'S #74011.

† When either item C131 or C132 are replaced, replace both with capacitors of equal value.

RCA VICTOR MODELS 8T270, 8TC270, 8TC271, 8TK320, 9T270, 9TC272, 9TC275

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			INSTALLATION NOTES
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.	CLAROSTAT PART No.	
RIA	1 Meg.			B11-137 §		Vert. hold control, front
B	50KΩ		72734	B11-123 §	P970111-24	
C	Shaft End			E187 §		Attach per instructions in "Concentrikit"
R2A	50KΩ			B11-123 §		
B	10KΩ		74047	B17-116 §	P970913-11	Brightness control, front
C	Shaft End			E187 §		
R3A	500KΩ			B13-133 §		Contrast control, rear
B	1 Meg.		74048	B13-137X §	P970913-10	
C	Shaft End			E187 §		Attach per instructions in "Concentrikit"
R3A	2.5 Meg.					
B	1.5 Meg.		74359			Tone control, front
R4	2.5 Meg.		71440	Q11-239	M-84-S	
R5	2250KΩ	4	72735		10-2500	Volume control, rear, tapped at 200KΩ
R6	5000KΩ		71441	Q11-114	M-19-S	
R7	20Ω	2	74146	W-20	43-20	Attach per instructions in "Concentrikit"
R8	20Ω	2	71443	W-20X10	43-20CT	
R9	20Ω	2	74146	W-20	43-20	Tone control, See Note 1
						Volume control and switch tapped at 500KΩ and 250KΩ
						Height control
						Focus control, Wire Wound
						Vert. linearity control
						Video bias control, Wire Wound
						Vert. centering control, tapped at 10Ω, Wire Wound
						Horiz. centering control, Wire Wound

§ Additional parts to be used with "Concentrikit".
Note 1. Used in model 8TK320 only.

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		INSTALLATION NOTES
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.	
R85	1 Meg. 20%				BTS-1 Meg.
R86	6800KΩ				BTS-6800
R87	3.9 Meg.				BTS-3.9 Meg.
R88	22KΩ				BTS-22K
R89	8200KΩ				BTS-8200
R90	8200KΩ				BTS-8200
R91	1.5 Meg. 5%				BTS-1.5 Meg. 5%
R92	220KΩ				BTS-220K
R93	2.2 Meg.				BTS-2.2 Meg.
R94	100KΩ				BTS-100K
R95	56KΩ				BTS-56K
R96	2.2 Meg.				BTS-2.2 Meg.
R97	1200KΩ				BTS-1200
R98	8200KΩ 5%				BTS-8200-5%
R99	1000KΩ 20%				BTS-1000
R100	820KΩ 5%				BTS-820K-5%
R101	150KΩ				BTS-150K
R102	150KΩ 5%				BTA-150K-5%
R103	8200KΩ				BTS-8200
R104	2.7 Meg. 5%				BTA-2.7 Meg. 5%
R105	82KΩ				BTS-82K
R106	150KΩ 5%				BTA-150K-5%
R107	100KΩ 5%				BTA-100K-5%
R108	8200KΩ 5%				BTS-8200-5%
R109	22KΩ				BTS-22K
R110	100KΩ				BTA-100K
R111	150KΩ				BTS-150K
R112	10KΩ				BTS-10K
R113	47Ω 20%				
R114	1 Meg.				BTS-1 Meg.
R115	150Ω				BW-2-150
R116	5600KΩ				BTA-5600
R117	3300KΩ				BTS-3300
R118	3.9Ω				
R119	3.9Ω		74156		
R120	180KΩ				
R121	180KΩ				
R122	180KΩ				
R123	560KΩ				BTS-560K
R124	100KΩ 20%				BT-2-100K
R125	470Ω		74197		AB-450
R128A	775Ω	9.5			
B	550Ω	5	74155		AB-350
C	350Ω	5			AB-450
D	450Ω	3			AB-3500
R127	3300KΩ	10			AB-800
R128	820Ω	10			DG-350
R129	180KΩ				
R130	330Ω	20	74285		
R131	10KΩ				BTS-3.9 Meg.
R132	3.9 Meg.				BTS-27K
R133	27KΩ				BTS-18K
R134	18KΩ				BTS-15K
R135	100Ω				
R136	15KΩ				BTS-27K
R137	68Ω				BTS-680
R138	27KΩ				BTS-22 Meg.
R139	680Ω				BTS-150K
R140	22 Meg.				BTS-150K
R141	150KΩ				BTS-2.2 Meg.
R142	150KΩ				BTS-47K
R143	47KΩ				
R144	2.2 Meg.				BTS-15K
R145	120Ω				BTS-680
R146	15KΩ				BTS-15K
R147	680Ω				BTS-680
R148	100Ω				
R149	15KΩ				BTS-15K
R150	3300KΩ 5%				BTS-3300-5%
R151	1200KΩ				BTS-1200
R152	39KΩ 5%				BTS-39K-5%
R153	470KΩ				BTS-470K
R154	10KΩ				BTS-10K
R155	.5Ω		74023		
R156	.5Ω		74023		

Note 2. Not used in all models.
Note 3. Model 8TK320 uses 27KΩ resistor in this appl.
Note 4. Used in model 8TK320 only.
Note 5. Model 8TK320 uses 820KΩ resistor in this appl.
Note 6. Items C128A, C128B and R144 are combined in

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.	
R10	1000KΩ			BTS-1000	RF Grid
R11	150Ω 20%				AGC Network
R12	2700KΩ			BTS-2700	RF Plate Decoupling
R13	150Ω 20%				RF Screen Decoupling
R14	100KΩ 20%			BTS-100K	Series Test Point
R15	100KΩ 20%				Mixer Grid
R16	150Ω 20%				Mixer Decoupling
R17	1000KΩ 20%			BTS-1000	Decoupling Network
R18	47Ω 20%				Osc. Cathode
R19	100KΩ 20%				Osc. Grid
R20	100KΩ 20%				Osc. Grid
R21	10KΩ 20%				Osc. Plate
R22	150Ω				Decoupling Network
R23	56KΩ 5%			BTS-56K-5%	AGC Network
R24	12KΩ 5%			BTS-12K-5%	AGC Network
R25	1000KΩ 20%			BTS-1000	AGC Network
R26	10KΩ 5%				1st Video IF Transformer Shunt See Note 2
R27	68Ω				1st Video IF Cathode
R28	1000KΩ 20%			BTS-1000	1st Video IF Decoupling
R29	150Ω 20%				Decoupling Network
R30	10KΩ 5%				2nd Video IF Grid
R31	68Ω				2nd Video IF Cathode
R32	1000KΩ 20%			BTS-1000	2nd Video IF Decoupling
R33	150Ω 20%				Decoupling Network
R34	39Ω				3rd Video IF Cathode
R35	5600KΩ 5%				3rd Video IF Plate
R36	1000KΩ 20%			BTS-1000	3rd Video IF Decoupling
R37	150Ω 20%				Decoupling Network
R38	1000KΩ 20%			BTS-1000	4th Video IF Decoupling
R39	150Ω				4th Video IF Cathode
R40	6800KΩ 5%				4th Video IF Plate
R41	1000KΩ 20%			BTS-1000	4th Video IF Plate Decoupling
R42	4700KΩ 5%			BTS-4700-5%	Video Det. Diode Load
R43	10Ω 20%			BW-½-10	Bias Network
R44	82Ω 5%				Video Amp. Cathode
R45	5100KΩ 5%				Video Amp. Plate
R46	3900KΩ 5%			BT-2-3900-5%	Voltage Divider
R47	120Ω				Video Output Cathode
R48	3900KΩ 5%			BT-2-3900-5%	Video Output Plate
R49	3900KΩ 5%			BT-2-3900-5%	Video Output Plate
R50	2.2 Meg.			BTS-2.2 Meg.	Voltage Divider
R51	2.2 Meg.			BTS-2.2 Meg.	Picture Tube Grid
R52	47KΩ			BTS-47K	Voltage Divider
R53	10KΩ			BTS-10K	Voltage Divider
R54	82Ω				Sound IF Cathode
R55	1200KΩ			BTS-1200	Sound IF Decoupling
R56	22KΩ 20%				Limiter Grid
R57	1000KΩ 20%			BTS-1000	Limiter Plate Decoupling
R58	22KΩ 20%				Limiter Screen
R59	47KΩ 20%			BTS-47K	Voltage Divider
R60	100KΩ 5%			BTS-100K-5%	Disc. Diode Load
R61	100KΩ 5%			BTS-100K-5%	Disc. Diode Load
R62	22KΩ 20%			BTS-22K	De-emphasis
R63	5.Ω		72067		Disc. Filament, Wire Wound
R64	82KΩ			BTS-82K	Tone Compensation See Note 3
R65	10 Meg. 20%			BTS-10 Meg.	AF Grid
R66	330KΩ			BTS-330K	AF Plate
R67	27KΩ			BTS-27K	Tone Compensation See Note 4
R68	470KΩ			BTS-470K	Output Grid
R69	100Ω 5%			BW-½-100-5%	Output Cathode
R70	680Ω			BTA-680	Output Cathode
R71	1500KΩ			BW-2-1500	Filter
R72	360KΩ 5%				AGC Network
R73	4.7 Meg. 5%			BTA-4.7 Meg. 5%	Voltage Divider
R74	18KΩ			BTS-18K	Bias Network
R75	1000KΩ			BTS-1000	Bias Network
R76	1 Meg.			BTS-1 Meg.	AGC Amp. Grid
R77	100KΩ			BTS-100K	AGC Rect. Cathode
R78	10KΩ			BTS-10K	AGC Rect. Grid
R79	47KΩ			BTS-47K	1st Sync. Sep. Grid
R80	4700KΩ			BTS-4700	AGC Rect. Plate
R81	180KΩ			BTS-180K	1st Sync. Sep. Cathode
R82	22KΩ			BTS-22K	1st Sync. Sep. Plate
R83	47KΩ			BTS-47K	Isolation
R84	12KΩ			BT-2-12K	Sync. Amp. Plate

SP

ITEM No.	RATINGS		REPLACEMENT DATA	
	FIELD	V. C. IMP.	RCA PART No.	JENSEN PART No.
SP1A	PM	4Ω	73635 ②	ST-101
B	PM	4Ω	74355 ③	MOD. P
C	PM	4Ω	74169 ④	MOD. P
SP2A	CONE DIA.		V. C. DIA.	
	B	11 3/4"	1"	73934 ⑤
	C	8"	1"	73934 ⑥
				73912 ④

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA			IDENTIFICATION CODES
	RESISTANCE	WATTS	RCA	IRC		
			PART No.	PART No.		
R85	1 Meg. 20%			BTS-1 Meg.		Sync. Amp. Grid
R86	6800Ω			BTS-6800		2nd Sync. Sep. Cathode
R87	3.9 Meg.			BTS-3.9 Meg.		2nd Sync. Sep. Grid
R88	22KΩ			BTS-22K		Integrator
R89	8200Ω			BTS-8200		Integrator
R90	8200Ω			BTS-8200		Integrator
R91	1.5 Meg. 5%			BTS-1.5 Meg. 5%		Vert. Osc. Grid
R92	220KΩ			BTS-220K		Vert. Osc. Plate
R93	2.2 Meg.			BTS-2.2 Meg.		Voltage Divider
R94	100KΩ			BTS-100K		Voltage Divider
R95	56KΩ			BTS-56K		Filter
R96	2.2 Meg.			BTS-2.2 Meg.		Vert. Output Grid
R97	1200Ω			BTS-1200		Vert. Output Cathode
R98	8200Ω 5%			BTS-8200-5%		Vert. Peaking
R99	1000Ω 20%			BTS-1000		Vert. Output Decoupling
R100	820KΩ 5%			BTS-820K-5%		Horiz. AFC Grid
R101	150KΩ			BTS-150K		Horiz. AFC Cathode
R102	150KΩ 5%			BTA-150K-5%		Horiz. AFC Cathode
R103	8200Ω			BTS-8200		Horiz. AFC Filter Network
R104	2.7 Meg. 5%			BTA-2.7 Meg. 5%		Voltage Divider
R105	82KΩ			BTS-82K		Voltage Divider
R106	150KΩ 5%			BTA-150K-5%		Voltage Divider
R107	100KΩ 5%			BTA-100K-5%		Horiz. Osc. Grid
R108	8200Ω 5%			BTS-8200-5%		Horiz. Osc. Transformer Shunt
R109	22KΩ			BTS-22K		Horiz. Osc. Transformer Shunt
R110	100KΩ			BTA-100K		Horiz. Osc. Plate
R111	150KΩ			BTS-150K		Horiz. AFC Filter Network
R112	10KΩ			BTS-10K		Filter
R113	47Ω 20%					Parasitic Supp.
R114	1 Meg.			BTS-1 Meg.		Horiz. Output Grid See Note 5
R115	150Ω			BW-2-150		Horiz. Output Cathode
R116	5600Ω			BTA-5600		Horiz. Output Screen
R117	3300Ω			BTS-3300		Horiz. Output Screen
R118	3.9Ω		74156			HV Rect. Filament-Wire Wound
R119	3.9Ω		74156			HV Rect. Filament-Wire Wound
R120	180KΩ					HV Rect. Load
R121	180KΩ					HV Rect. Load
R122	180KΩ					HV Rect. Load
R123	560KΩ			BTS-560K		Feedback
R124	100KΩ 20%			BT-2-100K		Isolation
R125	470Ω		74197	AB-450		Focus Coil Shunt-Wire Wound
R126 A	775Ω	9.5				Voltage Divider-Wire Wound
B	550Ω	5				Voltage Divider-Wire Wound
C	350Ω	3	74155	AB-350		Bias Network-Wire Wound
D	450Ω	5		AB-450		Bias Network-Wire Wound
R127	3300Ω	10	48207	AB-3500		Bleeder Network-Wire Wound
R128	820Ω	10	74213	AB-800		Bleeder Network-Wire Wound
R129	180KΩ					Horiz. Output Grid See Note 4
R130	330Ω	20	74265	DG-350		Bias Network, Wire Wound-See Note 4
R131	10Ω					Parasitic Supp.
R132	3.9 Meg.			BTS-3.9 Meg.		Conv. Grid
R133	27KΩ			BTS-27K		Conv. Plate Decoupling
R134	18KΩ			BTS-18K		Osc. Grid
R135	100Ω					Parasitic Supp.
R136	15KΩ			BTS-15K		Osc. Plate Decoupling
R137	68Ω					1st IF Cathode
R138	27KΩ			BTS-27K		1st IF Screen
R139	680Ω			BTS-680		Decoupling
R140	22 Meg.			BTS-22 Meg.		Delayed AVC
R141	150KΩ			BTS-150K		Diode Load
R142	150KΩ			BTS-150K		AVC Network
R143	2.2 Meg.			BTS-2.2 Meg.		AVC Network
R144	47KΩ			BTS-47K		Diode Filter See Note 6
R145	120Ω					2nd FM IF Cathode
R146	15KΩ			BTS-15K		2nd FM IF Screen
R147	680Ω			BTS-680		2nd FM IF Decoupling
R148	100Ω					Balancing
R149	15KΩ			BTS-15K		De-emphasis
R150	3300Ω 5%			BTS-3300-5%		Ratio Det. Diode Load
R151	1200Ω			BTS-1200		Balancing
R152	39KΩ 5%			BTS-39K-5%		Ratio Det. Diode Load
R153	470KΩ			BTS-470K		AVC Network
R154	10KΩ		74023	BTS-10K		De-emphasis
R155	5Ω		74023			Filament Dropping-Wire Wound
R156	.5Ω		74023			Filament Dropping-Wire Wound

- Note 2. Not used in all models.
 Note 3. Model 8TK320 uses 27KΩ resistor in this application.
 Note 4. Used in model 8TK320 only.
 Note 5. Model 8TK320 uses 820KΩ resistor in this application.
 Note 6. Items C128A, C128B and R144 are combined into one unit obtainable under MFGR'S Part No. 74011.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
	FIELD	V. C. IMP.	RCA	JENSEN	QUAM	
			PART No.	PART No.	PART No.	
SP1A	PM	4Ω	73635 ②	ST-101 ⑤	12A31A	⑤ Replace output transformer to match 6-8Ω voice coil. ② Used in models 9TC272 and 9TC275.
B	PM	4Ω	74355 ③	MOD. P12-T ST-101 ⑤	12A31A	
C	PM	4Ω	74169 ④	MOD. P12-T		③ Used in model 8TK320. ④ Used in model 9T270.
SP2A		CONE DIA.				
B	1 3/4"	1"	73934 ②			
C	1 3/4"	1"	73934 ③			
	8"		73912 ④			

ITEM No.	RATING		
	PRI.	SEC. 1	SEC. 2
T1	117VAC at 2.3A	760VCT .270ADC	5VAC at 6A

① Rewire heater circuit

ITEM No.	RATING		R
	DC RESISTANCE		
	PRI.	SEC.	
T2	125Ω Tap at 90Ω	36Ω	735
T3	165Ω	1310Ω	741
T4	112Ω Tap at 87Ω	SEC. 1 8.4Ω SEC. 2 .6Ω SEC. 3 0Ω	741
T5	52Ω	6.9Ω	735
T6 A	13Ω		741
B	64Ω		
C	13.5Ω		742
D	64.6Ω		
T7 A	420Ω		741
B			742

- ⑥ Drill one new mounting hole
 ⑦ Drill new mounting holes.
 ⑧ Used in models 9T270, 272
 ⑨ Used in model 8TK320.

ITEM No.	RATING			
	IMPEDANCE		DC RES.	
	PRI.	SEC.	PRI.	SEC.
T8 A	8KΩ	4Ω	650Ω	.5Ω
B	5.8KΩ	4.2Ω	500Ω	.26Ω
C				

ITEM No.	RATINGS		
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	IN (Ω)
L1	.270A	43Ω	1.

ITEM No.	USE	DC RES.	
		PRI.	SEC.
L2	Ant. Input Trans.	0Ω	
L3	IF Trap	0Ω	
L4	IF Trap Shunt	0Ω	
L5	IF Trap	0Ω	
L6	RF Grid Coils	0Ω	
L7A	RF Plate	0Ω	
B	Trimmer Coil	0Ω	
B	RF Plate	0Ω	
B	Trimmer Coil	0Ω	
L8	RF Plate Coils	0Ω	
L9	RF Plate	0Ω	
L10	RF Coupling	0Ω	
L11A	Mixer Grid	0Ω	
B	Trimmer Coil	0Ω	
B	Mixer Grid	0Ω	
L12	Trimmer Coil	0Ω	
L13	Mixer Grid	0Ω	
L14 A	Mixer Grid	0Ω	
B	Osc. Plate	0Ω	
B	Trimmer Coil	0Ω	
B	Osc. Plate	0Ω	
L15	Trimmer Coil	0Ω	
L16	Osc. Plate Coils	0Ω	
L17	Osc. Plate	0Ω	
L18A	Coils	0Ω	
B	Fine Tuning	0Ω	

PTIONS (Continued)

T.)

IDENTIFICATION CODES	
c. Amp. Grid	
Sync. Sep. Cathode	
Sync. Sep. Grid	
grator	
grator	
t. Osc. Grid	
t. Osc. Plate	
tage Divider	
tage Divider	
ter	
t. Output Grid	
t. Output Cathode	
t. Peaking	
t. Output Decoupling	
iz. AFC Grid	
iz. AFC Cathode	
iz. AFC Filter Network	
tage Divider	
tage Divider	
tage Divider	
iz. Osc. Grid	
iz. Osc. Transformer Shunt	
iz. Osc. Transformer Shunt	
iz. Osc. Plate	
iz. AFC Filter Network	
ter	
rasitic Supp.	
iz. Output Grid See Note 5	
iz. Output Cathode	
iz. Output Screen	
iz. Output Screen	
Rect. Filament-Wire Wound	
Rect. Filament-Wire Wound	
Rect. Load	
Rect. Load	
Rect. Load	
edback	
lation	
ocus Coil Shunt-Wire Wound	
tage Divider-Wire Wound	
tage Divider-Wire Wound	
is Network-Wire Wound	
is Network-Wire Wound	
eder Network-Wire Wound	
eder Network-Wire Wound	
riz. Output Grid See Note 4	
is Network, Wire Wound-See Note 4	
rasitic Supp.	
nv. Grid	
nv. Plate Decoupling	
c. Grid	
rasitic Supp.	
c. Plate Decoupling	
IF Cathode	
IF Screen	
coupling	
layed AVC	
ode Load	
C Network	
C Network	
ode Filter See Note 6	
FM IF Cathode	
FM IF Screen	
FM IF Decoupling	
lancing	
-emphasis	
io Det. Diode Load	
lancing	
io Det. Diode Load	
C Network	
-emphasis	
ament Dropping-Wire Wound	
ament Dropping-Wire Wound	

ut obtainable under MFGR'S Part No. 74011.

QUAM PART No.	INSTALLATION NOTES
IA31A	⑤ Replace output transformer to match 8-8Ω voice coil.
IA31A	② Used in models 9TC272 and 9TC275.
	③ Used in model 8TK320.
	④ Used in model 9T270

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	RCA	STANCOR	MERIT	CHICAGO
					PART No.	PART No.	PART No.	PART No.
T1	117VAC at 2.3A	760VCT .270ADC	5VAC at 6A	5VAC at 2A SEC. 4 6.3VAC at 8.9A	74143	P-8156 ①	P-3061	

① Rewire heater circuits as required.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		RCA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.					
T2	125Ω Tap at 90Ω	38Ω	73576				Hor. Osc. Trans.
T3	165Ω	1310Ω	74144	A-8121 ⑥	A-4000 ⑥	TBO-2 ⑥	Vert. Block Osc. Trans Hor. Output Trans.
T4	112Ω Tap at 87Ω	SEC. 1 8.4Ω Tap at .6Ω SEC. 2 0Ω SEC. 3 0Ω	74145	A-8119		TFB-4	
T5	521Ω	6.9Ω	73568	A-8116	A-3035 ⑦	TSO-4	
T6A	13Ω		74141 ⑧	DY-1			Vert. Output Trans. Hor. Deflection Coil Vert. Deflection Coil Hor. Deflection Coil Vert. Deflection Coil Focus Coil Focus Coil
B	84Ω						
C	13.5Ω		74262 ⑨	DY-1			
D	64.6Ω		74142 ⑧				
T7A	420Ω		74263 ⑨				

- ⑥ Drill one new mounting hole.
- ⑦ Drill new mounting holes.
- ⑧ Used in models 9T270, 272 and 275.
- ⑨ Used in model 8TK320.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		RCA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T8A	8KΩ	4Ω	650Ω	.5Ω	74600 ①	A-3849	A-2931 ⑥	RO-13 ⑥	⑧ Drill one new mounting hole. ⑩ Used in chassis KCS29C. ⑪ Used in chassis KCS29. ⑫ Used in model 8TK320.
B	5.8KΩ	4.2Ω	500Ω	.26Ω	74119 ①	A-3877	A-2930	RO-9 ⑥	
C					74358 ②				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	RCA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.270A	43Ω	1.3 Henries	73154	C-2326	C-2991	TR-3300C	⑬ Drill one new mounting hole.

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RCA	MEISSNER	
				PART No.	PART No.	
L2	Ant. Input Trans.	0Ω		73578		Stator complete with rotor and coils. Channel #13. Includes core and trimmer. (Threaded bushing type with screw adjustment) Channel #13. Includes core and trimmer. (Smooth bushing type with screw adjustment) Stator, complete with rotor and coils.
L3	IF Trap	0Ω		73476		
L4	IF Trap Shunt	0Ω		73475		
L5	IF Trap	0Ω		73476		
L6	RF Grid Coils	0Ω		73633		
L7A	RF Plate	0Ω		74110		
B	Trimmer Coil					
	RF Plate	0Ω		73446		
	Trimmer Coil					
	RF Plate Coils	0Ω		73471		
L8	RF Plate Coils	0Ω		73460		
L9	RF Plate	0Ω		73462		
L10	RF Coupling	0Ω		73462		
L11A	Mixer Grid	0Ω		74109		
B	Trimmer Coil					
	Mixer Grid	0Ω		73444		
	Trimmer Coil	0Ω		73470		
L12	Mixer Grid	0Ω		73874		
L13	Mixer Grid	0Ω		73874		
L14A	Osc. Plate	0Ω		74108		
B	Trimmer Coil					
	Osc. Plate	0Ω		73444		
	Trimmer Coil	0Ω		73468		
L15	Osc. Plate	0Ω		73468		
L16	Osc. Plate	0Ω		73469		
	Coils					
L17	Osc. Plate	0Ω		73874		
L18A	Fine Tuning	0Ω		74108		
B	Fine Tuning	0Ω		73443		

RCA VICTOR MODELS 8T270, 8TC270, 8TC271, 8TK320, 9T270, 9TC272, 9TC275

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF) CONT.

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
				RCA	MEISSNER	
		PRI.	SEC.	PART No.	PART No.	
L19	Fil. Choke	0Ω		73477		
L20	Fil. Choke	0Ω		73477		
L21	Fil. Choke	0Ω		73477		
L22	Conv. Trans.	0Ω	0Ω	73448		Includes 22KΩ resistor.
L23	1st Video IF	0Ω	.1Ω	73571		Includes 10KΩ resistor and 82MMF capacitor.
L24	Fil. Choke	0Ω		73477		
L25	2nd Video IF	.1Ω		73572		Includes 47MMF capacitor.
L26	3rd Video IF and Sound	.1Ω		73573		Includes 47MMF capacitor.
L27	Take-Off Peaking	3Ω		74170		36 microhenries. Wound on 8.2KΩ resistor.
L28	4th Video IF	.1Ω		73574		Includes 36MMF capacitor.
L29	Sound Trap	0Ω	0Ω	71778		Includes 75MMF capacitor.
L30	5th Video IF	.1Ω		73575		Includes 56MMF and 8.2MMF capacitor.
L31	Peaking	5Ω		71529		120 microhenries. Wound on 22KΩ resistor.
L32	Peaking	9.5Ω		71526		250 microhenries.
L33	4.5MC Trap	2.6Ω		73577		Includes 47MMF capacitor.
L34	Peaking	7.5Ω		71528		180 microhenries. Wound on 39KΩ resistor.
L35	Peaking	4.5Ω		74214		180 microhenries.
L36	Peaking	6.5Ω		71527		93 microhenries.
L37	Peaking	8Ω		71529		120 microhenries. Wound on 22KΩ resistor.
L38	Peaking	5Ω		71528		180 microhenries. Wound on 39KΩ resistor.
L39	Sound IF	0Ω	0Ω	71424		Includes 10MMF and 33MMF capacitors.
L40	Disc. Trans.	0Ω	0Ω	71422		Includes 56MMF, 47MMF and 56MMF capacitors.
L41	Width Cont.	.2Ω		71429		
L42	Hor. Linearity	36Ω		71449		
L43	FM Ant.	0Ω		74024		No. 16 buss tinned, 8 turns per inch 2 1/2 turns L. H.
L44	AM Ant.	24Ω	2Ω	74020		
L45	FM Osc.	0Ω		74025		No. 16 buss tinned, 9 turns per inch, 4 7/8 turns L. H.
L46	AM Osc.	1Ω	6.5Ω	73744		Pick-up coil 2Ω
L47	1st IF FM	.3Ω	.3Ω			
L48	2nd IF FM	.8Ω	.8Ω	73745		
L49	Ratio Det. Trans.	.9Ω	.3Ω	73743		

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					RCA	MEISSNER	
					PART No.	PART No.	
M1	Bayonet	6-8	.2	White	11765		Type #51 (Cabinet lamp, models 9TC272, 9TC275)
M9	Bayonet	6-8	0.2A	White	11765		Type #51 Model 8TK320.
M10	Bayonet	6-8	0.2A	White	11765		Type #51 Model 8TK320.

MISCELLANEOUS

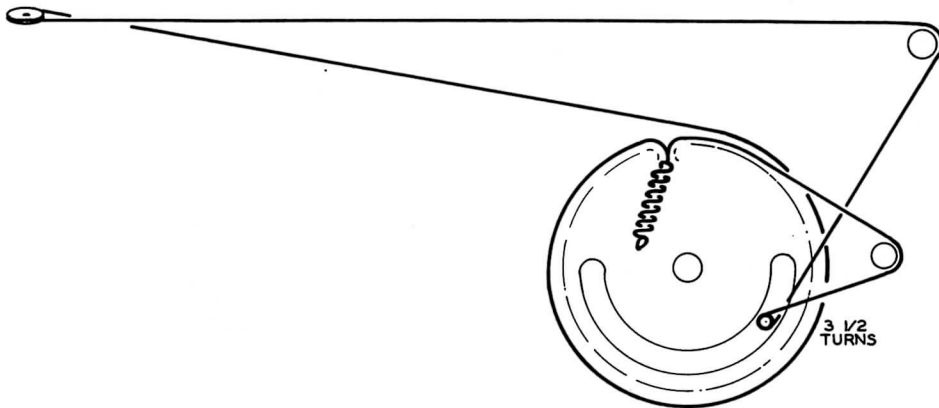
ITEM No.	PART NAME	RCA PART No.	NOTES
M2	RF Tuner	KRK5A	
M3	Switch	74147	Width
M4	Switch	74157	Cabinet Interlock
M5	Switch		TV-Phono
M6	Fuse	73600	Type GJV .25A
M7	Fuse	73600	Type GJV .25A
M8	Ion Trap	74148	Permanent Magnet Type
	Core	74187	L17
	Cord	74457	Power Cord and Plug
	Socket	74251	Picture Tube
	Cabinet Back	74261	Model 8TK320
	Cabinet Back	74158	Model 9T270
	Cabinet Back	74603	Models 9TC272, 9TC275
	Escutcheon	73642	Channel Marker (Mahogany and Walnut Models) Models 9T270, 9TC272, 9TC275, 8TK320
	Escutcheon	73740	Channel Marker (Toasted Mahogany and Oak Models) Models 9T270, 9TC272, 9TC275, 8TK320
	Safety Glass	74606	Model 9TC270
	Safety Glass	74609	Model 9TC272, 9TC275
	Safety Glass	74252	Model 8TK320
	Mask	74605	Picture Tube, Models 9T270, 9TC272, 8TC275
	Mask	74126	Picture Tube, Model 8TK320
	Knob	73994	Fine Tuning
	Knob	73996	Channel Selector
	Knob	73998	Vert. Hold, Brightness, Tone
	Knob	74000	Hor. Hold, Contrast, Volume
	Knob	73995	Fine Tuning
	Knob	73997	Channel Selector
	Knob	73999	Vert. Hold, Brightness, Tone
	Knob	74001	Hor. Hold, Contrast, Volume
	Knob	73224	Channel Selector
	Knob	73222	Fine Tuning
	Knob	74361	Tone Cont.
	Knob	73226	Vert. Hold, Brightness
	Knob	73228	Volume, Hor. Hold, Contrast
	Knob	73225	Channel Selector
	Knob	73223	Fine Tuning
	Knob	74362	Tone Cont.
	Knob	73227	Vert. Hold, Brightness
	Knob	73229	Volume, Hor. Hold, Contrast
	Trimmer	73580	Hor. Locking Range(10-160MMF)
M11A	Selector Switch	74260	Hor. Drive Cont. (40-370MMF)
B	Selector Switch	74018	Used with RK135A Tuner. Complete with Heater Switch and Shorting Switch.
M12	Switch	74031	Used with RK135 Tuner. Complete with Heater Switch and Shorting Switch.
M13	Switch	74032	Heater
M14	Tuning Cap.	74017	Shorting
	Knob	74056	(20-392MMF) (17-197MMF) (W/T)
	Knob	74057	Radio Tuning, Selector Switch (Walnut and Mahogany Models)
	Bezel	74052	Radio Tuning, Selector Switch (Toasted Mahogany Models)
			Lucite Bezel and Dial Scale Assembly.

DISASSEMBLY INSTRUCTIONS

(MODEL 9TC272)

1. Remove four push-on type control knobs.
2. Remove seven screws holding rear cover. Remove cover.
3. Remove picture tube base socket and beam bender.
4. Loosen two wing nuts holding front panel. Remove panel.
5. Loosen lower two phillips head screws holding picture tube mounts. Remove picture tube.
6. Remove HV lead clip from lower left picture tube mount.
7. Remove two screws holding antenna terminal strip, or remove antenna lead in plug.
8. Remove three screws holding power interlock.
9. Disconnect speaker plug.
10. Remove panel lamp socket.
11. Remove six 3/8" hex head bolts holding chassis. Remove chassis.
12. Remove four 5/16" hex nuts holding speaker. Remove speaker.

RCA VICTOR MODELS 81270, 81C270,
81C271, 81K320, 91270, 91C272, 91C275



DIAL CORD STRINGING

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL OSCILLATOR CHECK

Turn the horizontal hold control to the extreme counter-clockwise position, the picture should remain in synchronization. Momentarily remove the signal by switching to another channel and back again. Normally the picture will be out of sync. Turn the horizontal hold control slowly clockwise until there are three sloping bars in the picture. The picture should then pull into sync. upon slight additional clockwise rotation of the hold control. The picture should synchronize with the hold control approximately 90° from maximum counter-clockwise, and should remain synchronized for an additional 90° of clockwise rotation. With the hold control at maximum clockwise, the picture should be out of synchronization and show one vertical or diagonal black bar.

HORIZONTAL OSCILLATOR ALIGNMENT

If the picture failed the above check it will be necessary to align the horizontal oscillator as follows: Connect a short across terminals C and D of T3. Turn the horizontal hold control to the extreme clockwise position. Adjust the horizontal frequency slug (B1) until the picture is just out of sync and shows a single vertical or sloping black bar.

Turn the horizontal hold control fully counter-clockwise. Momentarily remove the signal by switching to another channel and back again. Slowly turn the hold control clockwise and note the least number of bars present just before the picture falls into synchronization. If more than three bars are present just before the picture synchronizes, adjust the horizontal lock trimmer (B5) slightly clockwise. If less than three bars are present, turn B5 slightly counter-clockwise. Repeat the above procedure until three bars are present just before synchronization.

HORIZONTAL LINEARITY ADJUSTMENTS

These adjustments should be made while receiving a test pattern from a TV station. Adjust the horizontal drive trimmer (B2) clockwise as far as possible without crowding the right side of the picture. Set the width switch to position No. 1. Adjust the width slug (B3) until the picture fills the mask horizontally. If insufficient width cannot be obtained, switch the width to position No 2 or 3. Note that in positions 2 and 3 the width control is disconnected. Adjust the horizontal linearity slug (B4) until the picture is symmetrical from left to right. Readjustment of (B2) may be necessary for best results.

WAVEFORM ADJUSTMENT

Remove the short from terminals C and D of T3. Connect a low capacity oscilloscope probe to terminal "C" of T3. Adjust the waveform adjustment slug (B6) until the broad and sharp peaks of the waveform on the oscilloscope are of equal height as shown in figure 8. If necessary, keep picture synchronized with the horizontal hold control. Repeat the horizontal oscillator check and retouch B5, if necessary.

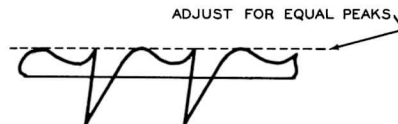


FIG. 8