



VERT. HORIZ. HOLD    BRIGHTNESS CONTRAST    BAND SW.    TUNING CONTROL    VOLUME TONE OFF-ON SW.    CHANNEL SELECTOR FINE TUNING

RCA VICTOR MODEL 8TR29

TRADE NAME	RCA Victor Models 8TK29, 8TR29 (Ch. KCS32, A, B, or C and Radio Tuner RK135 or RK135A)	
MANUFACTURER	RCA Victor Div., Radio Corp. of America, Camden, New Jersey	
TYPE SET	TV-AM-FM Receiver	
TUBES	Twenty Nine	
POWER SUPPLY	110-120 Volts AC-60 Cycle	RATINGS (TV) 2.05 Amp. at 117 Volts AC
TUNING RANGE	TV-Channels 2 thru 13 FM-88-108MC AM-540-1500KC	(Radio) .54 Amp. at 117 Volts AC

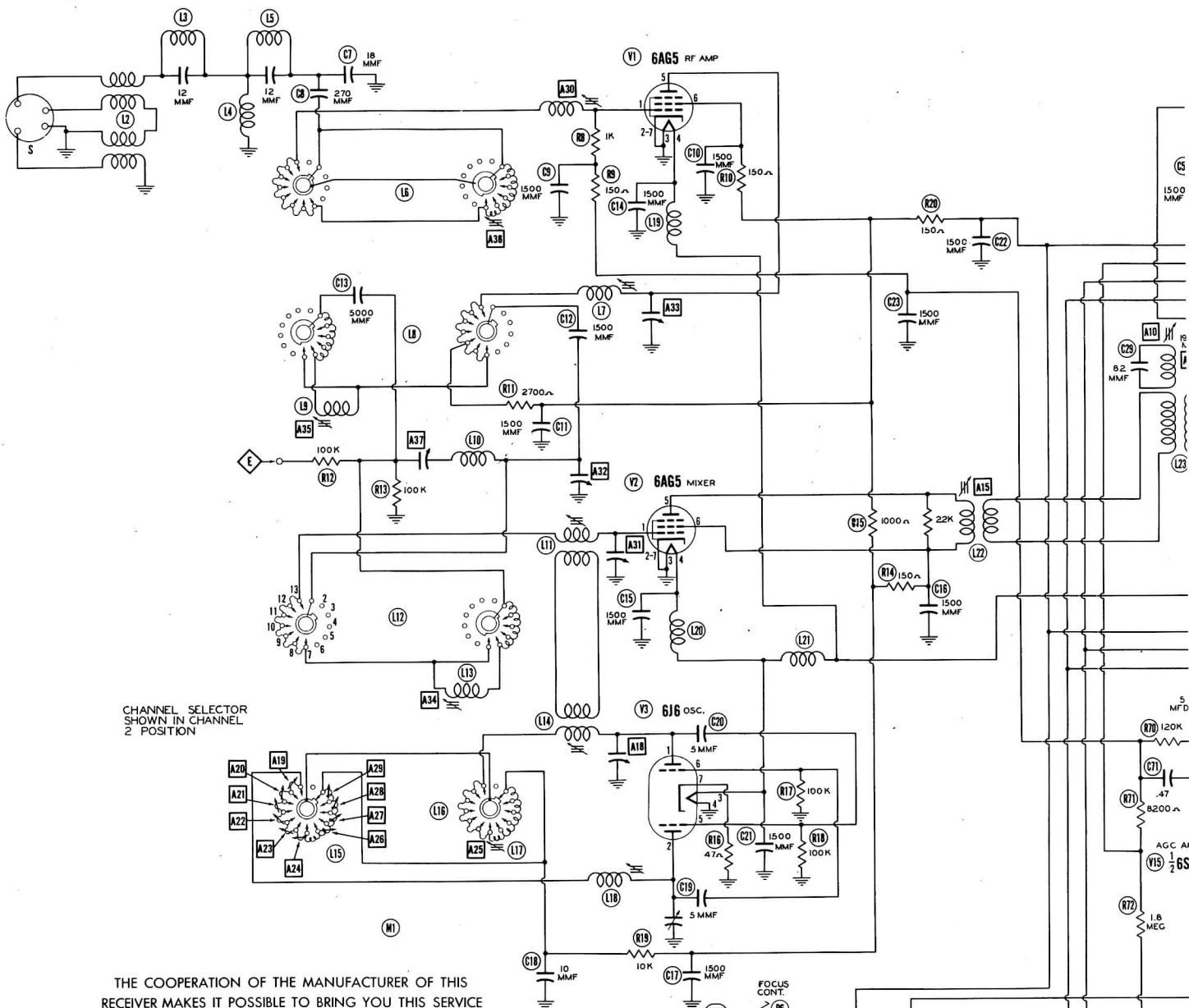
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RCA VICTOR MODELS 8TK29, 8TR29  
(Ch.KCS32, A, B, C, & Radio Ch. RK135, A)

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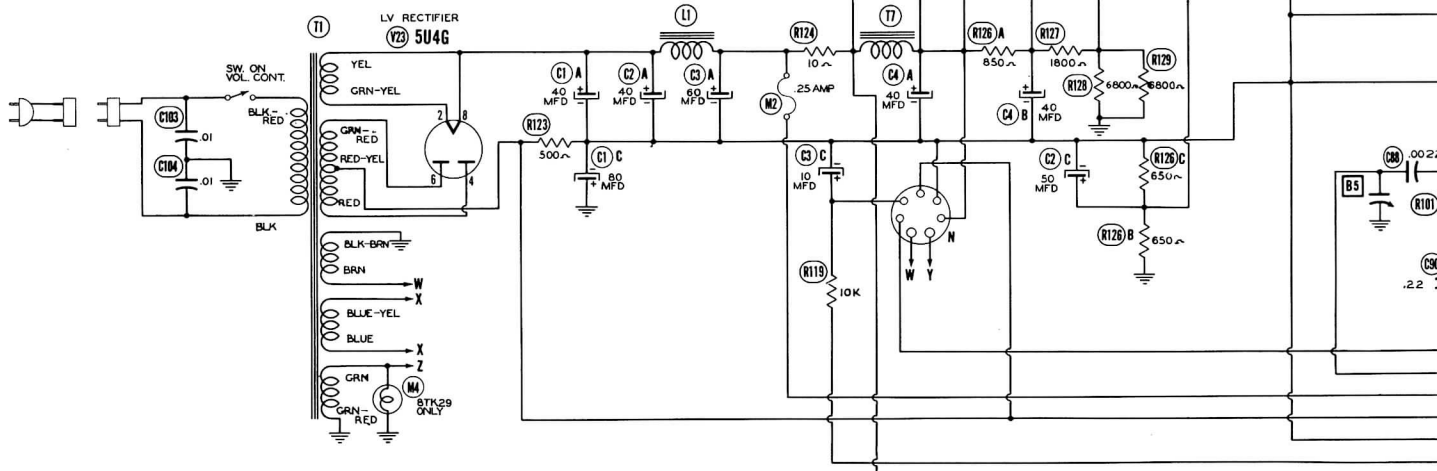
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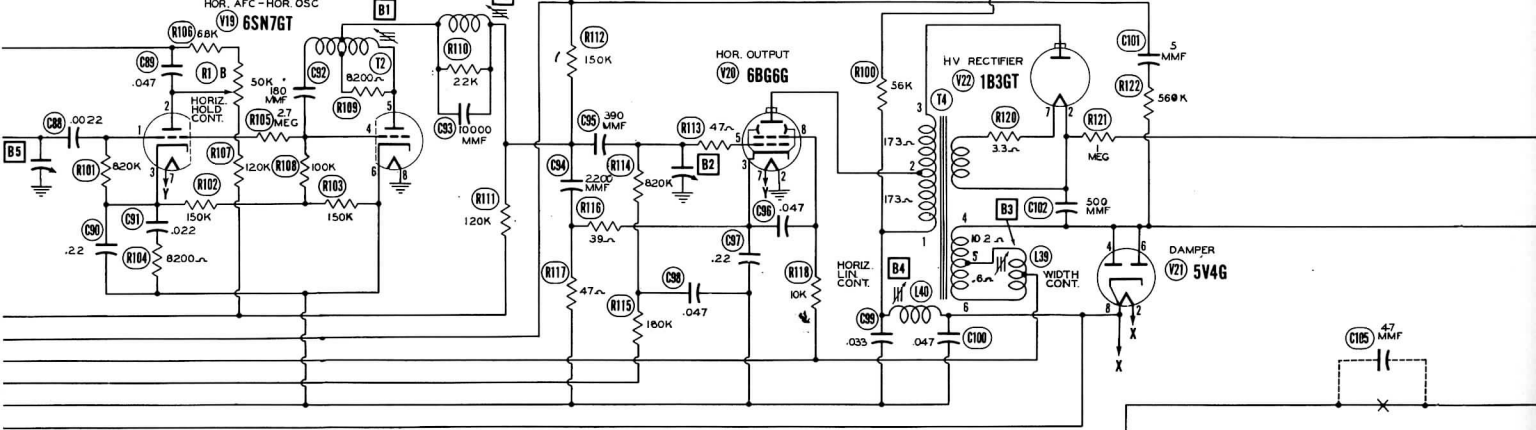
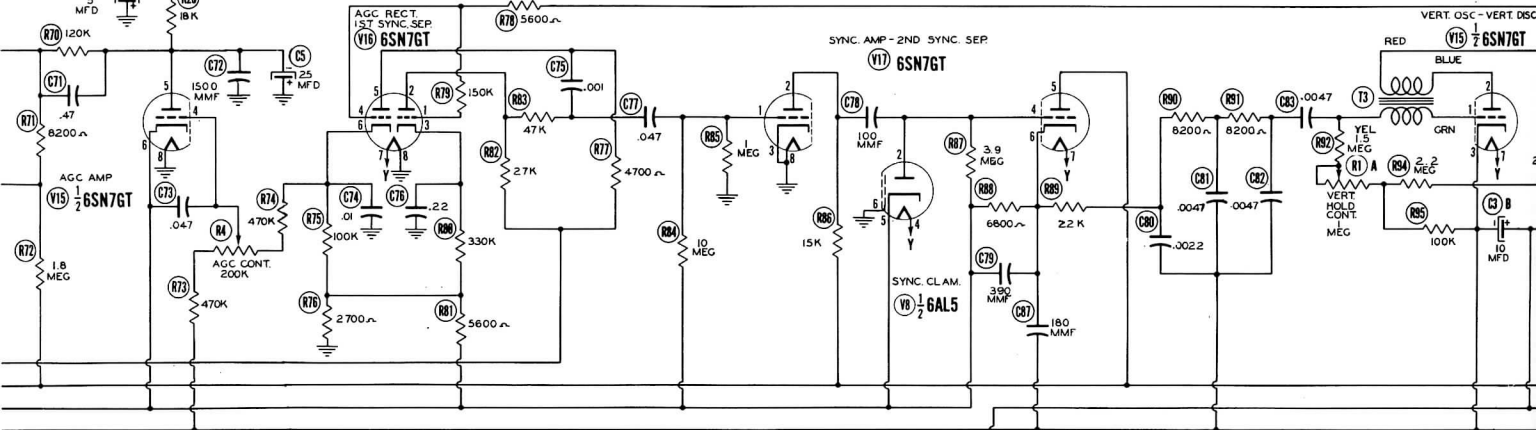
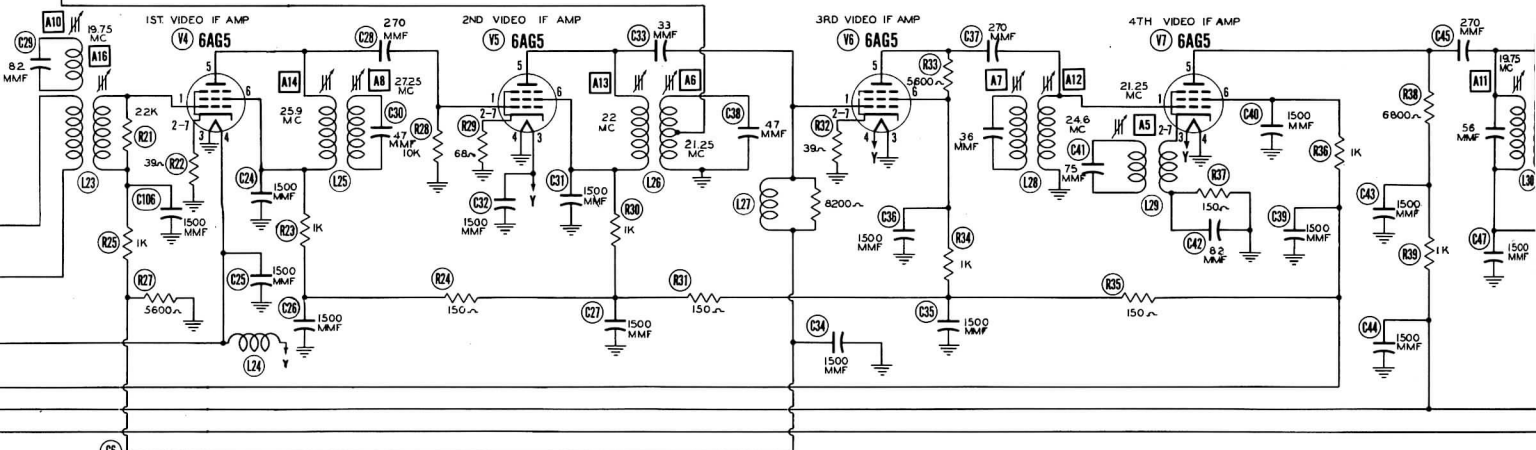
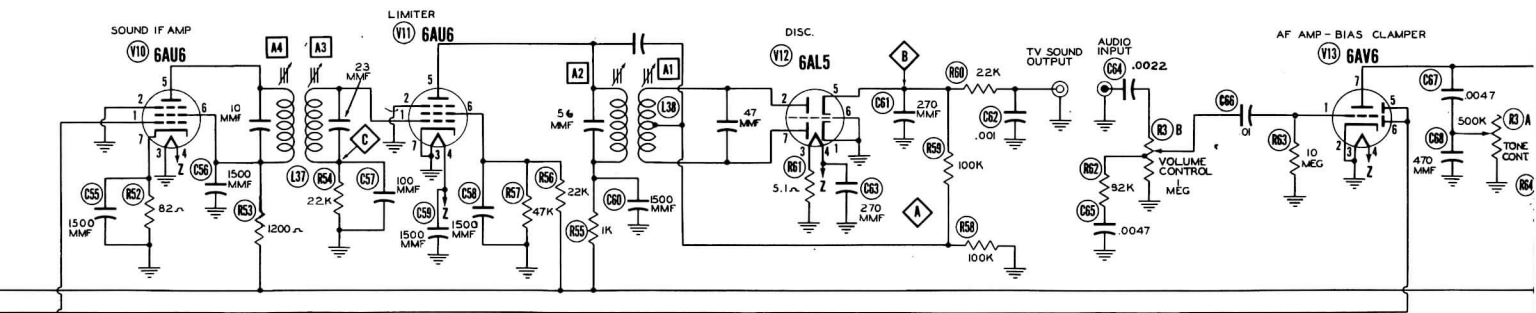


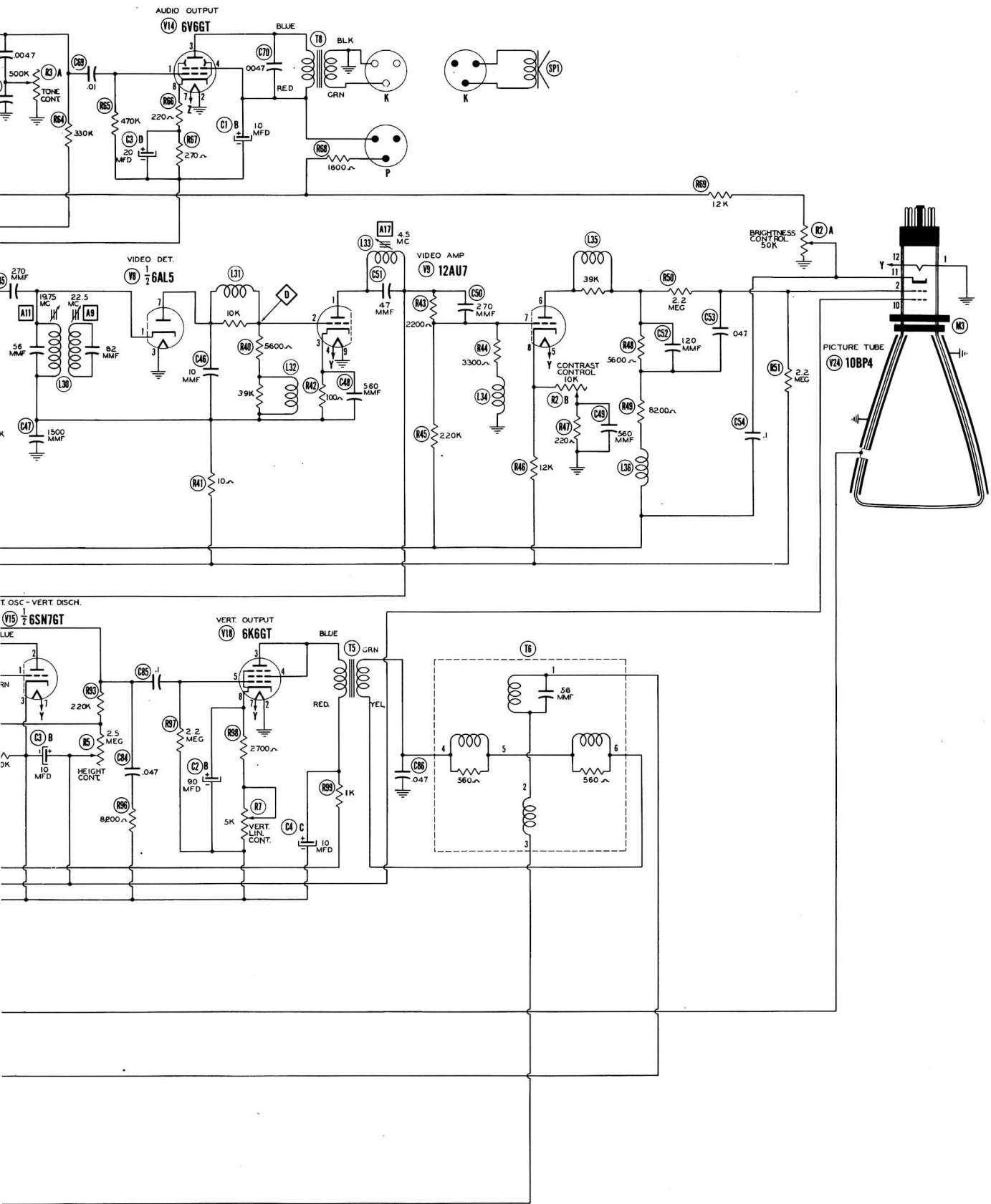
CHANNEL SELECTOR SHOWN IN CHANNEL 2 POSITION

THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

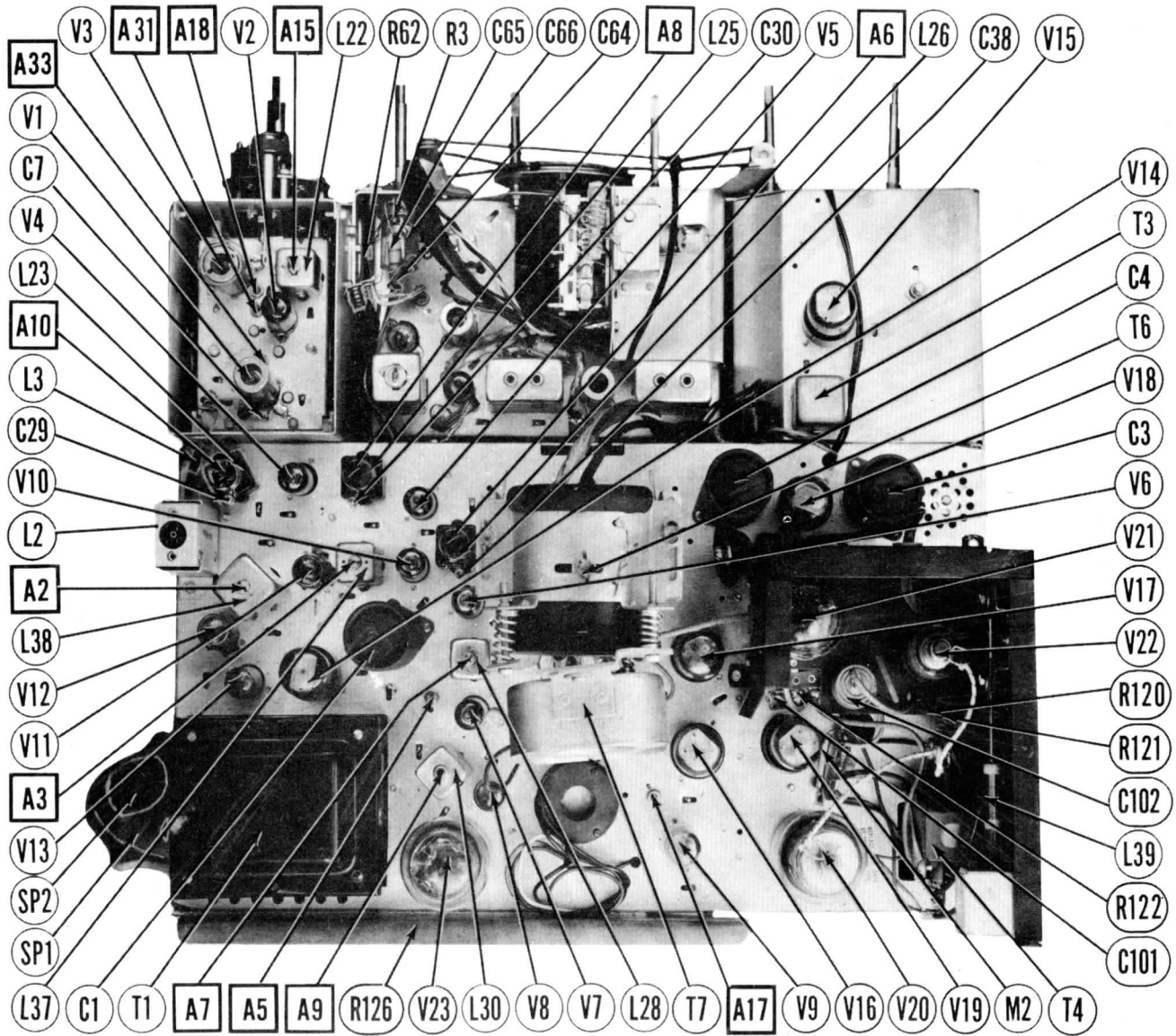


A PHOTOFAC STANDARD NOTATION SCHEMATIC  
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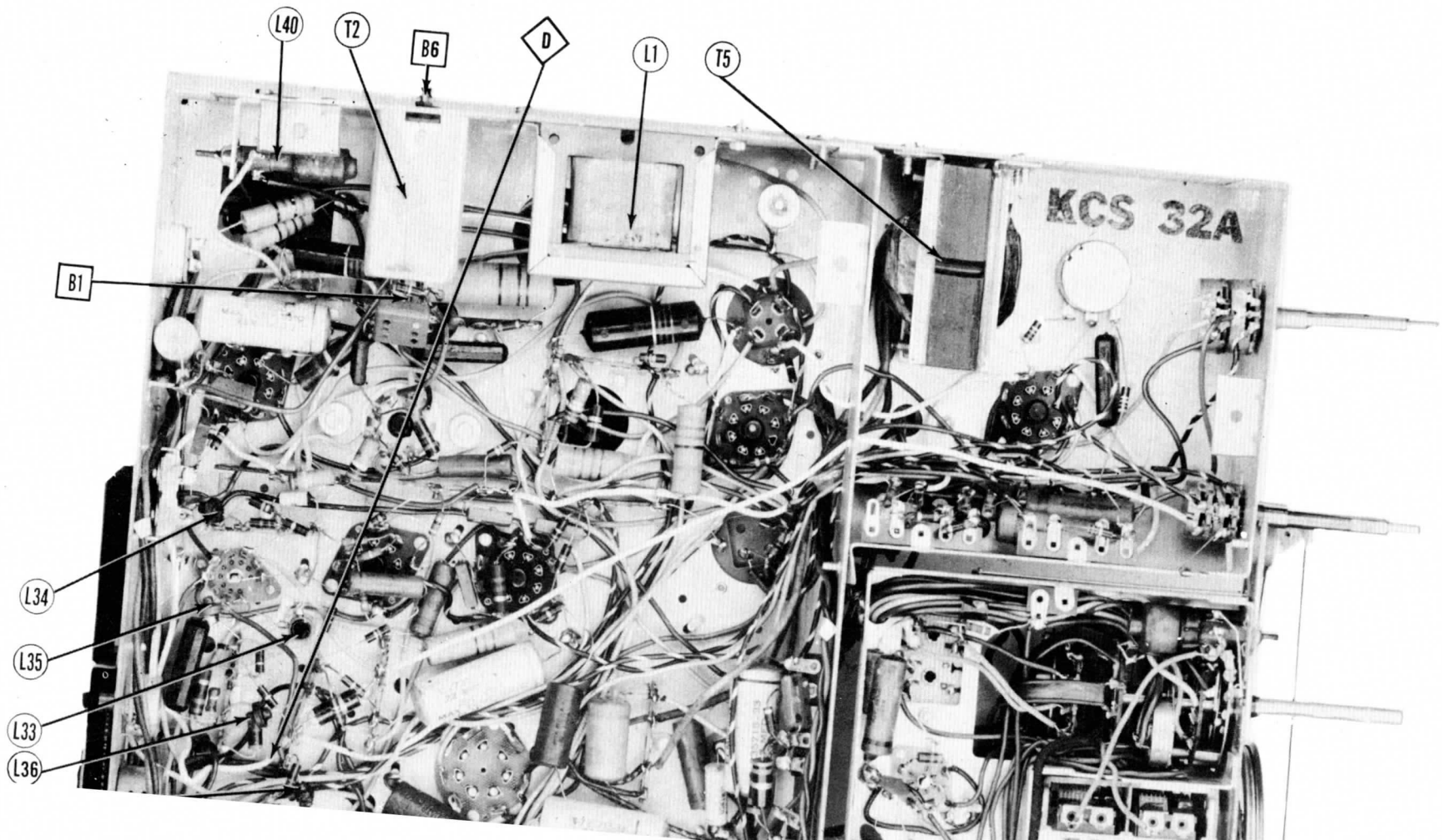


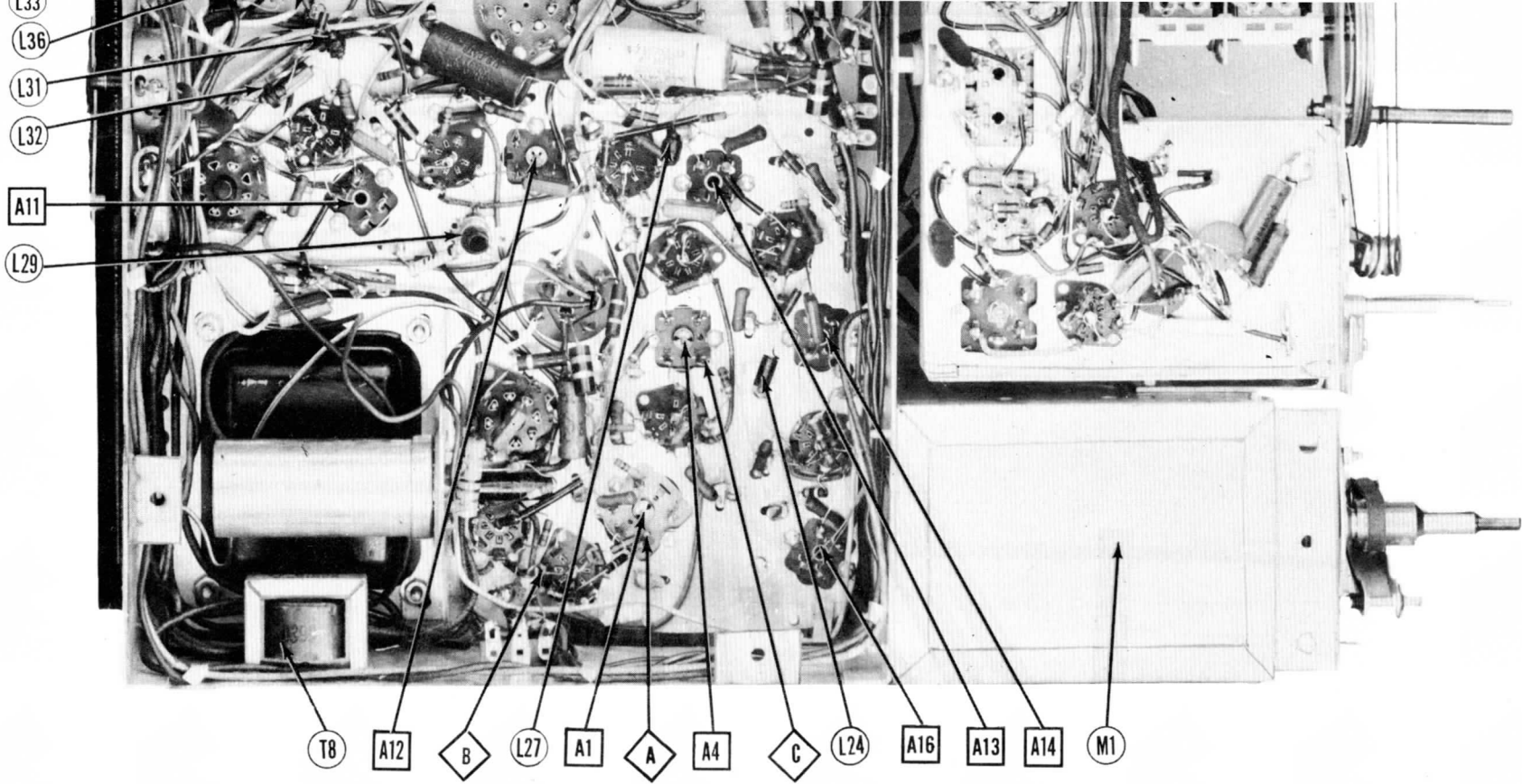
RCA VICTOR MODELS 8TK29, 8TR29  
 (Ch. KCS32, A, B, C, & Radio Ch. RK135, A)



CHASSIS TOP VIEW

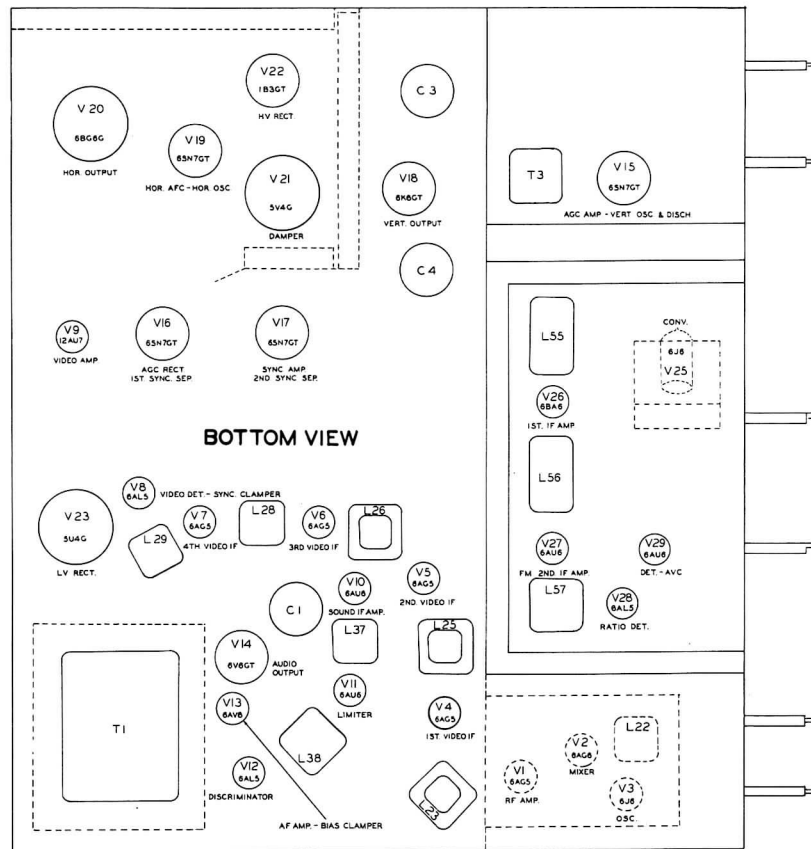
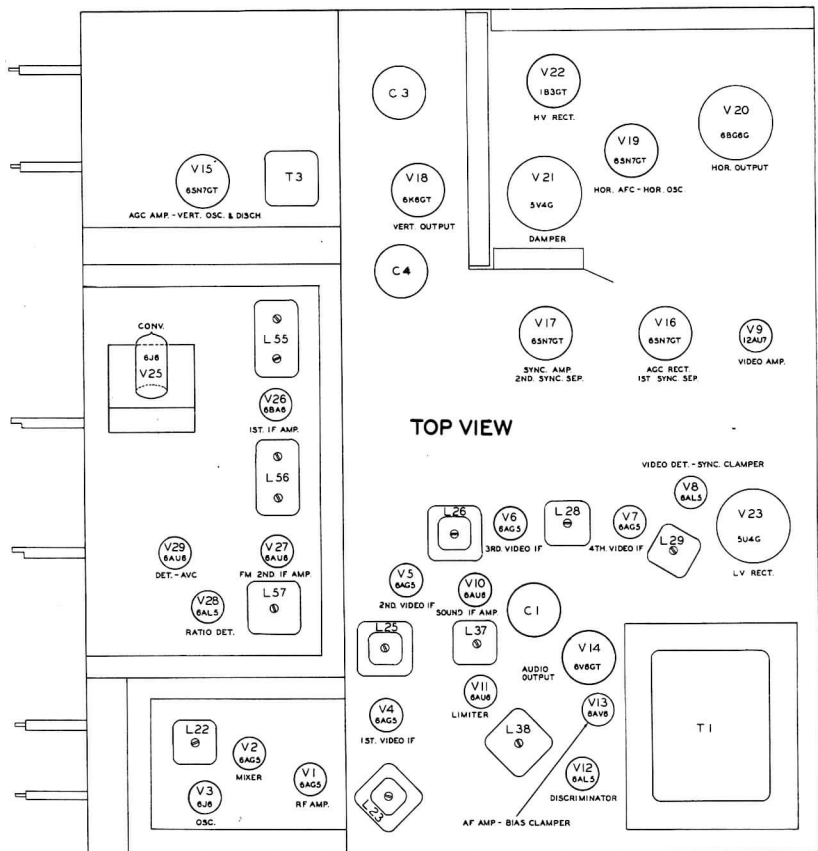
RCA VICTOR MODELS 8TK29, 8TR29  
(Ch.KCS32,A,B,C,& Radio Ch.RK135,A)





CHASSIS BOTTOM VIEW-TRANS., INDUCTOR AND ALIGNMENT IDENTIFICATION

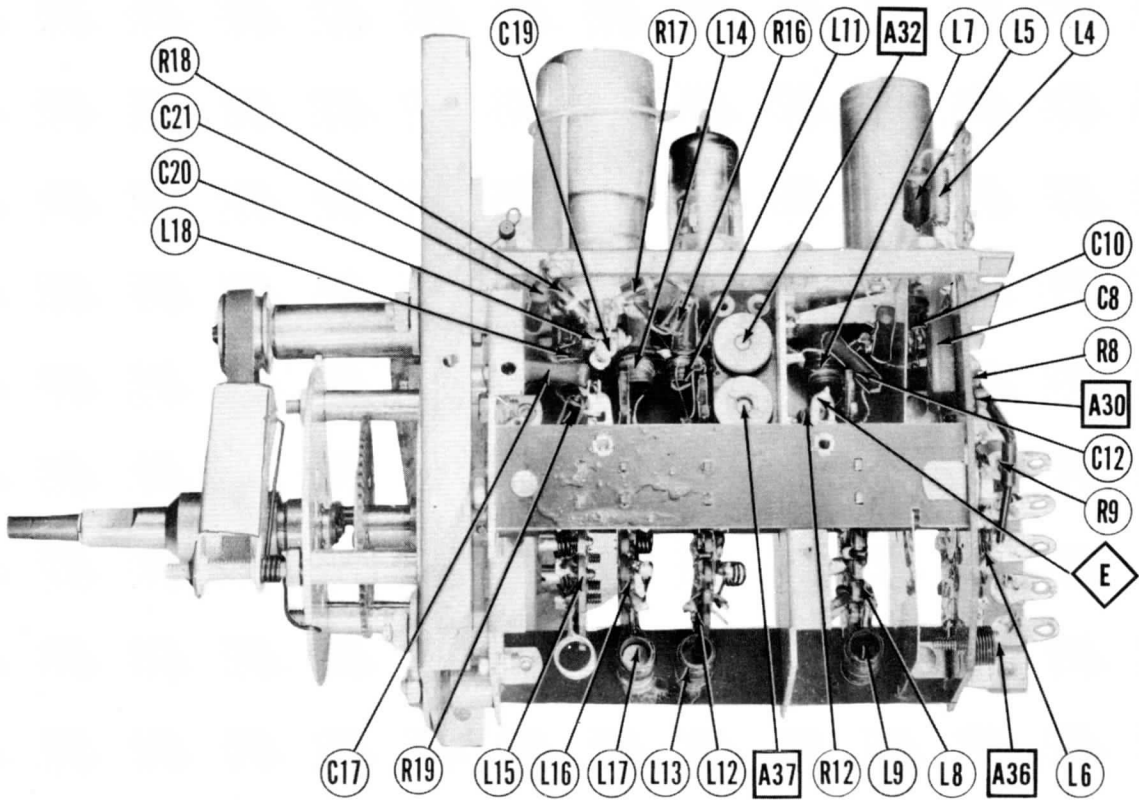
RCA VICTOR MODELS 8TK29, 8TR29  
(Ch. KCS32, A, B, C, & Radio Ch. RK135, A)



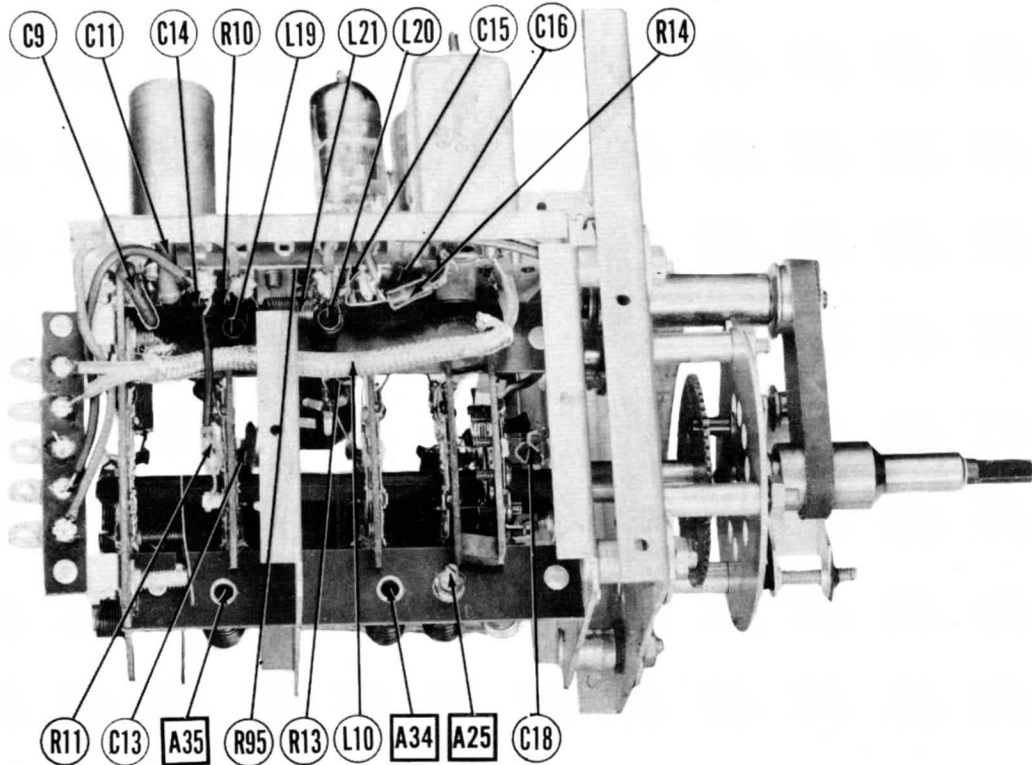
TUBE PLACEMENT CHART

(Ch.KCS32,A,B,C & Radio Ch.RK135,A)  
 RCA VICTOR MODELS 8TK29, 8TR29

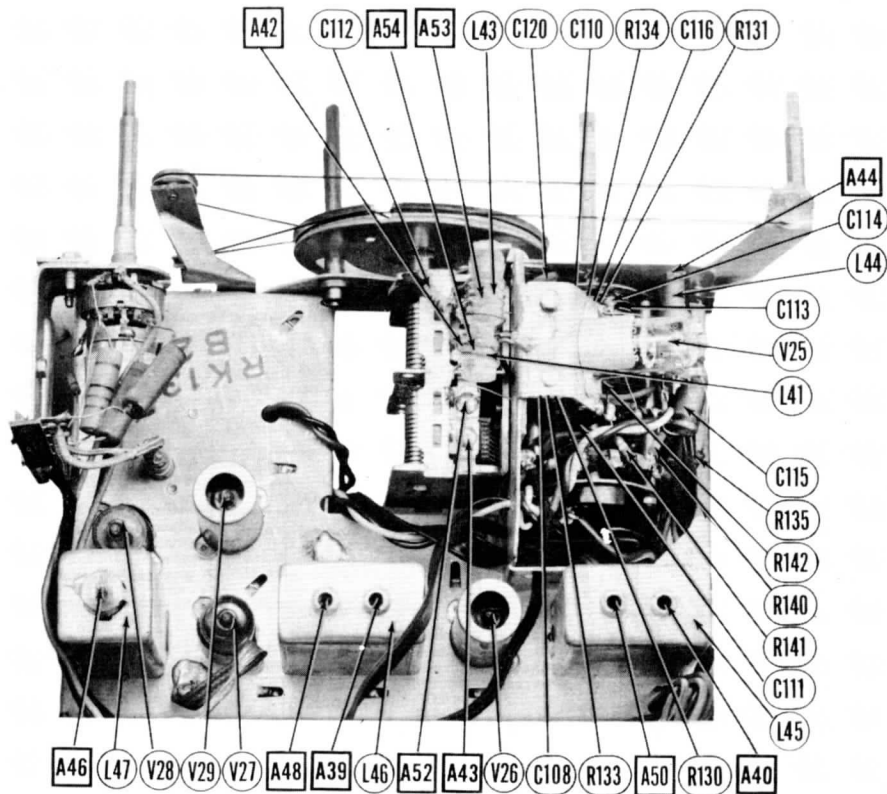




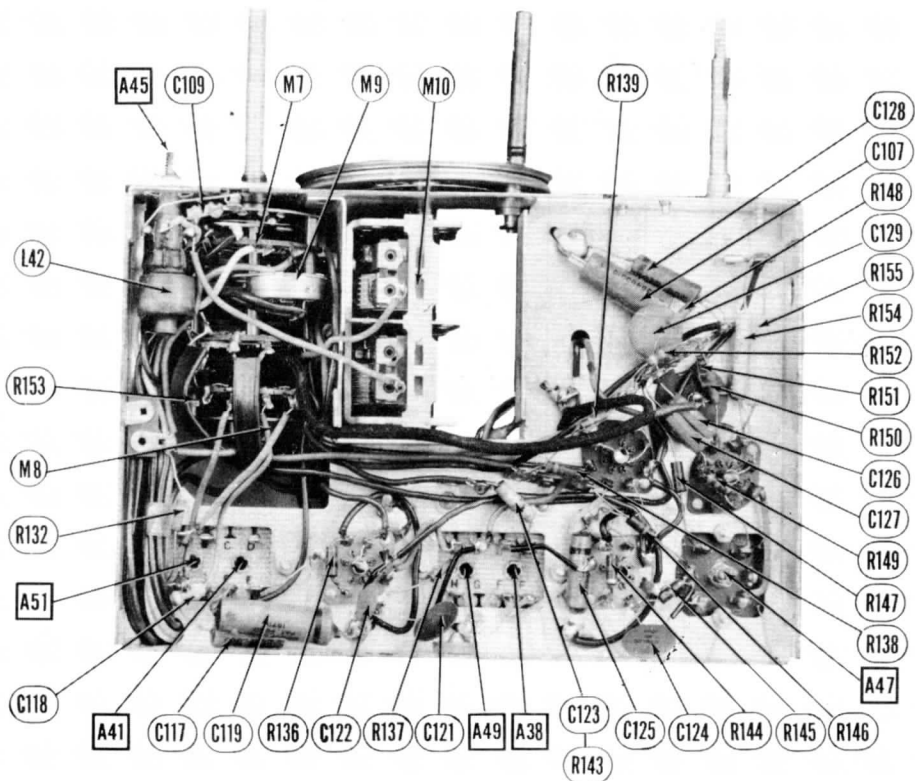
TV RF TUNER-RIGHT SIDE



TV RF TUNER-LEFT SIDE



AM-FM TUNER - TOP VIEW



AM-FM TUNER - BOTTOM VIEW

RCA VICTOR MODELS 8TK29, 8TR29  
(Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

# 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 (V19).  
 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 (V11). Low side to chassis.	21.25MC (Unmod.)	See note under pre-alignment.	DC Probe thru 1 Meg. to Point A Low side to chassis.	A1, A2	Detune A1 several turns counter-clockwise. Adjust A2 for maximum deflection.
2. .01MFD	"	"	"	DC Probe to Point B 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 (V10). Low side to chassis.	"	"	DC Probe thru 1 Meg. to Point C 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 (V10). Low side to chassis.	21.25MC (450KC Sweep)	21.25MC	See Note under pre-alignment	Vert. Amp. thru 33KΩ to Point D Low side to chassis.	A3, A4	Adjust for maximum amplitude and symmetry as per Fig 1.
2. .01MFD	"	"	"	"	Vert. Amp. to Point E 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 V15 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 R40.	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 D Low side to chassis.	A15, A16	Shunt the primaries of L25, L26, L28 and L30 (All thru A14) with 300Ω 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 300Ω 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 2 (Grid) of 12AU7 (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.

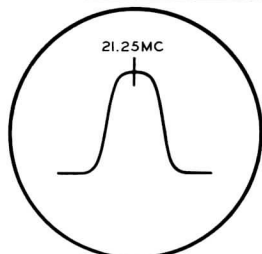


FIG. 1

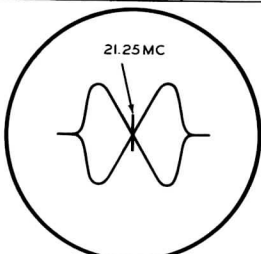


FIG. 2

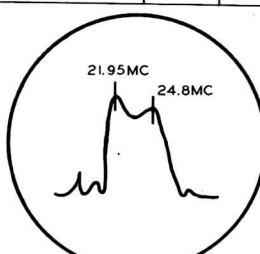


FIG. 3

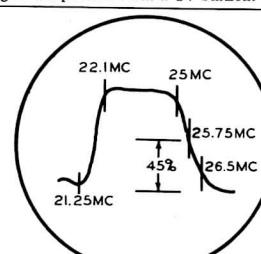


FIG. 4

# 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 $\diamond$ 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 $\diamond$ 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			
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			

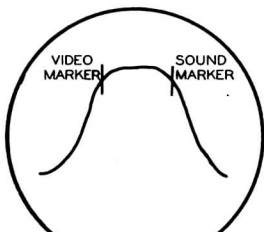
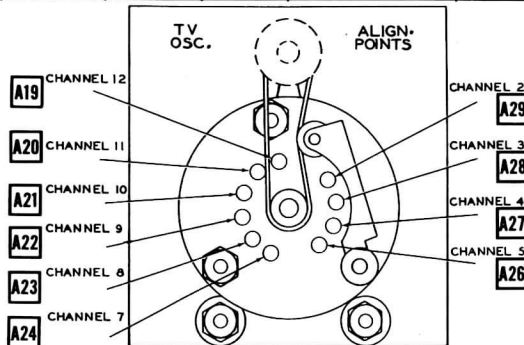


FIG. 5

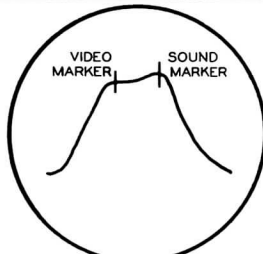


FIG. 6

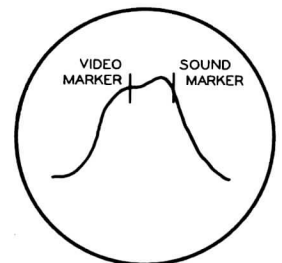


FIG. 7

RCA VICTOR MODELS 8TK29, 8TR29 (Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

# 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	"	1620KC	"	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 chassis. The junction of these two resistors is alignment point 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 (V27). Low side to chassis.	10.7MC (Unmod.)	FM (third position CW)	Tuning gang fully open	DC Probe to Point Common to chassis.	A46	Adjust for maximum deflection.
25 .01MFD	"	"	"	"	DC Probe to Point Common to Point	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 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 120~ 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 (V25). Low side to chassis.	10.7MC (450KC Sweep)	FM (third pos. CW)	Point of non-interference	Vert. Amp. to Point Low side to chassis.	A46, A48, A49, A50, A51	Disconnect stabilizer capacitor (C107). Adjust for maximum amplitude and symmetry as per Fig 9.
25 "	"	"	"	"	Vert. Amp. to Point Low side to chassis.	A47, A46	Reconnect capacitor (C107). 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 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.

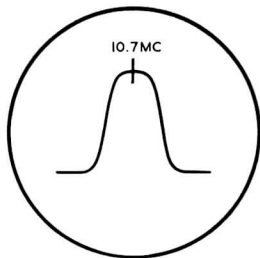


FIG. 9

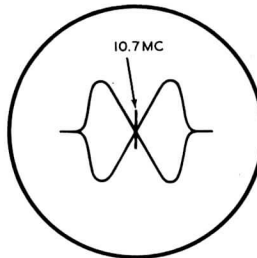
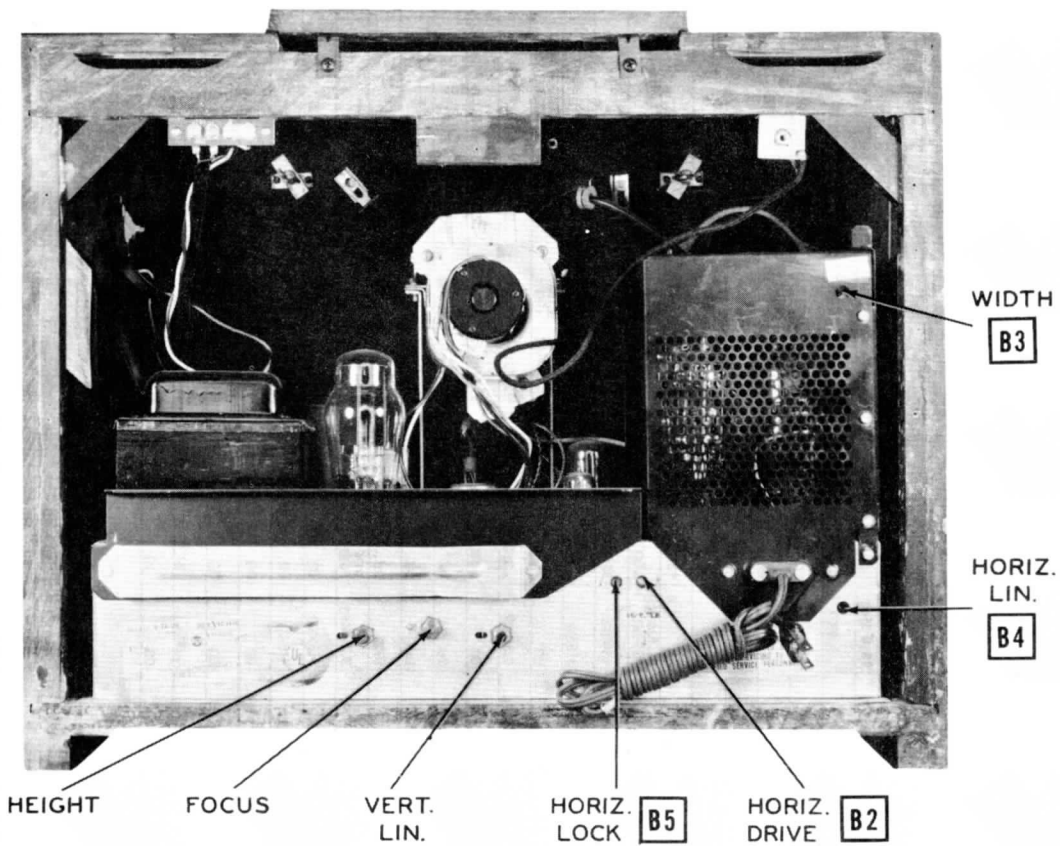


FIG. 10



## CABINET-REAR VIEW

## AGC THRESHOLD ADJUSTMENT

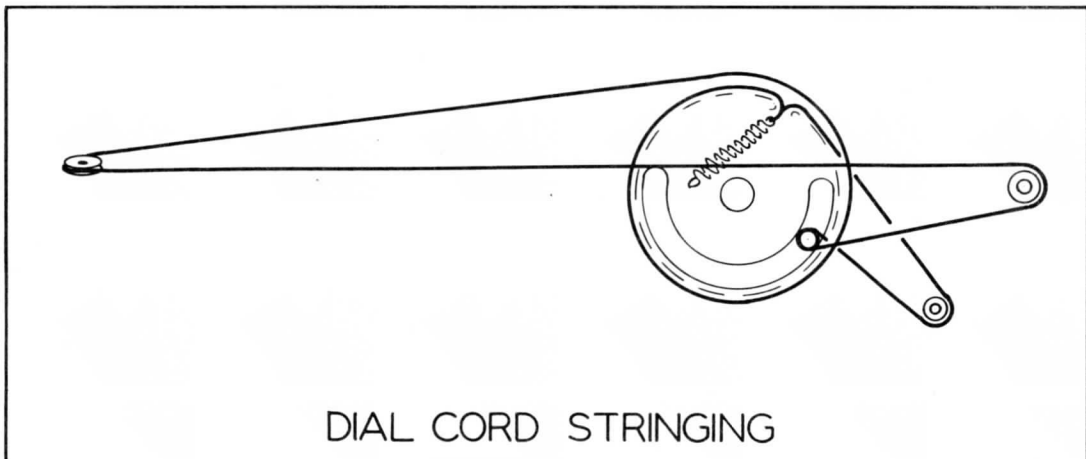
Turn the set on and tune in a local TV station.

Turn the contrast control to maximum clockwise.

Turn the AGC threshold control to maximum counter-clockwise, a bend may appear in the upper part of the picture.

Turn the AGC threshold control clockwise until there is a very slight bend, or slight change of the bend which may already be there. Then turn the AGC threshold control slowly counter-clockwise until the slight bend, or change of bend disappears.

Turn the contrast control to approximately the center of its range. The picture should be of proper contrast.



## VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

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	.5VDC	0V.	0V.	6.3VAC	145VDC	140VDC	0V.			
V 2	6AG5	0V.	0V.	0V.	6.3VAC	115VDC	115VDC	0V.			
V 3	6J6	68VDC	68VDC	6.3VAC	0V.	§-3.3VDC	§-3.6VDC	.2VDC			
V 4	6AG5	-.1VDC	.4VDC	0V.	6.3VAC	95VDC	95VDC	.4VDC			
V 5	6AG5	0V.	.6VDC	6.3VAC	0V.	100VDC	100VDC	.6VDC			
V 6	6AG5	0V.	.4VDC	0V.	6.3VAC	62VDC	100VDC	.4VDC			
V 7	6AG5	0V.	1.2VDC	6.3VAC	0V.	155VDC	115VDC	1.2VDC			
V 8	6AL5	▲.2VDC	¶-1.5VDC	0V.	6.3VAC	†0V.	0V.	▲-.1VDC			
V 9	12AU7	▲105VDC	▲-3.1VDC	▲.4VDC	6.3VAC	6.3VAC	▲200VDC	▲115VDC	▲115VDC	0V.	
V 10	6AU6	0V.	0V.	0V.	6.3VAC	105VDC	105VDC	.6VDC			
V 11	6AU6	-.3VDC	0V.	0V.	6.3VAC	110VDC	60VDC	0V.			
V 12	6AL5	0V.	-.6VDC	1.3VAC	6.3VAC	0V.	0V.	-.5VDC			
V 13	6AV6	-.6VDC	0V.	0V.	6.3VAC	.4VDC	.4VDC	80VDC			
V 14	6V8GT	0V.	0V.	▲190VDC	▲200VDC	▲0V.	▲112VDC	6.3VAC	▲11VDC		
V 15	6SN7GT	▲-55VDC	▲90VDC ▲320VDC	▲0V.	†-15VDC	†57VDC	†0V.	6.3VAC	0V.		
V 16	6SN7GT	†37VDC	†132VDC	†50VDC	†40VDC	†132VDC	†50VDC	6.3VAC	0V.		
V 17	6SN7GT	-1.1VDC	140VDC	0V.	†-1.5VDC	†270VDC	†1.8VDC	6.3VAC	0V.		
V 18	6K8GT	0V.	0V.	▲320VDC	▲320VDC	▲0V.	▲30VDC ▲0V	6.3VAC	▲45VDC ▲35VDC		
V 19	6SN7GT	▲-2.4VDC	▲100VDC	▲-17VDC	▲-42VDC	▲165VDC	▲0V.	6.3VAC	0V.		
V 20	6BG6G	0V.	0V.	▲8.8VDC	▲-.7VDC	▲0V.	▲8.8VDC	6.3VAC	▲260VDC	TOP CAP	
V 21	5V4G	0V.	290VDC	0V.	235VDC	0V.	235VDC	0V.	290VDC		
V 22	1B3GT		* DO NOT MEASURE.								
V 23	5U4G	0V.	250VDC	0V.	390VAC	0V.	390VAC	0V.	250VDC		
V 24	10BP4	0V.	▲80VDC	PIN 10 270VDC	PIN 11 90VDC	PIN 12 6.3VAC					
V25	6J6	105VDC	100VDC	0V.	6.3VAC	§-9.5VDC	0V.	0V.			
V25	6J6	90VDC	65VDC	0V.	6.3VAC	§-5.8VDC	0V.	0V.			
V26	6BA6	-.1VDC	0V.	0V.	6.3VAC	185VDC	105VDC	.6VDC			
V27	6AU6	0V.	0V.	0V.	6.3VAC	175VDC	140VDC	1.1VDC			
V28	6AL5	.1VDC	-.5VDC	6.3VAC	0V.	-.2VDC	0V.	-.2VDC			
V29	6AV6	0V.	0V.	6.3VAC	0V.	-.3VDC	-.3VDC	0V.			

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	150KΩ	0Ω	0Ω	.1Ω	†3.8KΩ	†1.3KΩ	0Ω		
V 2	6AG5	100KΩ	0Ω	0Ω	.1Ω	†2KΩ	†2KΩ	0Ω		
V 3	6J6	†11KΩ	†11KΩ	.1Ω	0Ω	100KΩ	100KΩ	47Ω		
V 4	6AG5	6.5KΩ	39Ω	0Ω	.1Ω	†2.5KΩ	†2.5KΩ	39Ω		
V 5	6AG5	10KΩ	68Ω	.1Ω	0Ω	†2.5KΩ	†2.5KΩ	68Ω		
V 6	6AG5	5.5KΩ	39Ω	0Ω	.1Ω	†8KΩ	†2KΩ	39Ω		
V 7	6AG5	.1Ω	150Ω	.1Ω	0Ω	†8KΩ	†2KΩ	150Ω		
V 8	6AL5	▲10Ω	†3.9 Meg.	0Ω	.1Ω	†0Ω	0Ω	▲5.6KΩ		
V 9	12AU7	5.5KΩ	▲5.6KΩ	▲100Ω	.1Ω	.1Ω	†14KΩ	3.3KΩ	▲12KΩ	0Ω
V 10	6AU6	.1Ω	0Ω	0Ω	.1Ω	†2.2KΩ	†2.2KΩ	82Ω		
V 11	6AU6	22KΩ	0Ω	0Ω	.1Ω	†2KΩ	†23KΩ	0Ω		
V 12	6AL5	0Ω	100KΩ	2Ω	.1Ω	200KΩ	0Ω	100KΩ		
V 13	6AV6	10 Meg.	0Ω	0Ω	.1Ω	150KΩ	150KΩ	†330KΩ		
V 14	6V8GT	Inf.	0Ω	†3KΩ	†2.6KΩ	▲470KΩ	10Ω	.1Ω	▲490Ω	
V 15	6SN7GT	▲2.5 Meg.	†1.5Meg. #270KΩ	▲0Ω	▲300KΩ	24KΩ	†0Ω	.1Ω	0Ω	
V 16	6SN7GT	160KΩ	†30KΩ	330KΩ	11KΩ	†7.5KΩ	100KΩ	.1Ω	0Ω	
V 17	6SN7GT	1 Meg.	†15KΩ	0Ω	†3.9Meg.	†220Ω	†6.8KΩ	.1Ω	0Ω	
V 18	6K8GT	Inf.	0Ω	†1.8KΩ	†1.8KΩ	▲2.2 Meg. ▲0Ω	.1Ω	.1Ω	▲7.7KΩ ▲2.7KΩ	
V 19	6SN7GT	▲1 Meg.	#180KΩ	▲300KΩ	▲250KΩ	†130KΩ	▲0Ω	.1Ω	0Ω	
V 20	6BG6G	Inf.	0Ω	▲86Ω	▲180KΩ	▲1 Meg.	▲86Ω	.1Ω	†10KΩ	TOP CAP #200Ω
V 21	5V4G	Inf.	200KΩ	Inf.	†560Ω	Inf.	†560Ω	Inf.	200KΩ	
V 22	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP #350Ω
V 23	5U4G	Inf.	6KΩ	Inf.	1.2KΩ	Inf.	1.2KΩ	Inf.	6KΩ	
V 24	10BP4	0Ω	2.2 Meg.	PIN 10 56KΩ	PIN 11 12KΩ	PIN 12 .1Ω				
V25	6J6	†27KΩ	†15KΩ	0Ω	.1Ω	18KΩ	6.5 Meg.	0Ω		
V25	6J6	†27KΩ	†15KΩ	0Ω	.1Ω	18KΩ	6.5 Meg.	0Ω		
V26	6BA6	2.5 Meg.	0Ω	0Ω	.1Ω	†1000Ω	†27KΩ	68Ω		
V27	6AU6	.2Ω	0Ω	0Ω	.1Ω	†1.6KΩ	†16KΩ	120Ω		
V28	6AL5	3.3KΩ	40KΩ	.1Ω	0Ω	Inf.	0Ω	Inf.		
V29	6AV6	0Ω	0Ω	.1Ω	0Ω	350KΩ	2.6 Meg.	0Ω		

§ TAKEN WITH VACUUM TUBE VOLTMETER.

▲ MEASURED FROM PIN 6 OF V19.

† MEASURED FROM PIN 6 OF V15.

♦ TAKEN IN AM POSITION.

‡ TAKEN IN FM POSITION.

NOTE: AGC THRESHOLD CONTROL SET AT MAXIMUM FOR THESE MEASUREMENTS.

- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.
- Line voltage maintained at 117 volts for voltage readings.
- Front panels controls set at minimum.
- Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.

† MEASURED FROM PIN 8 OF V23.

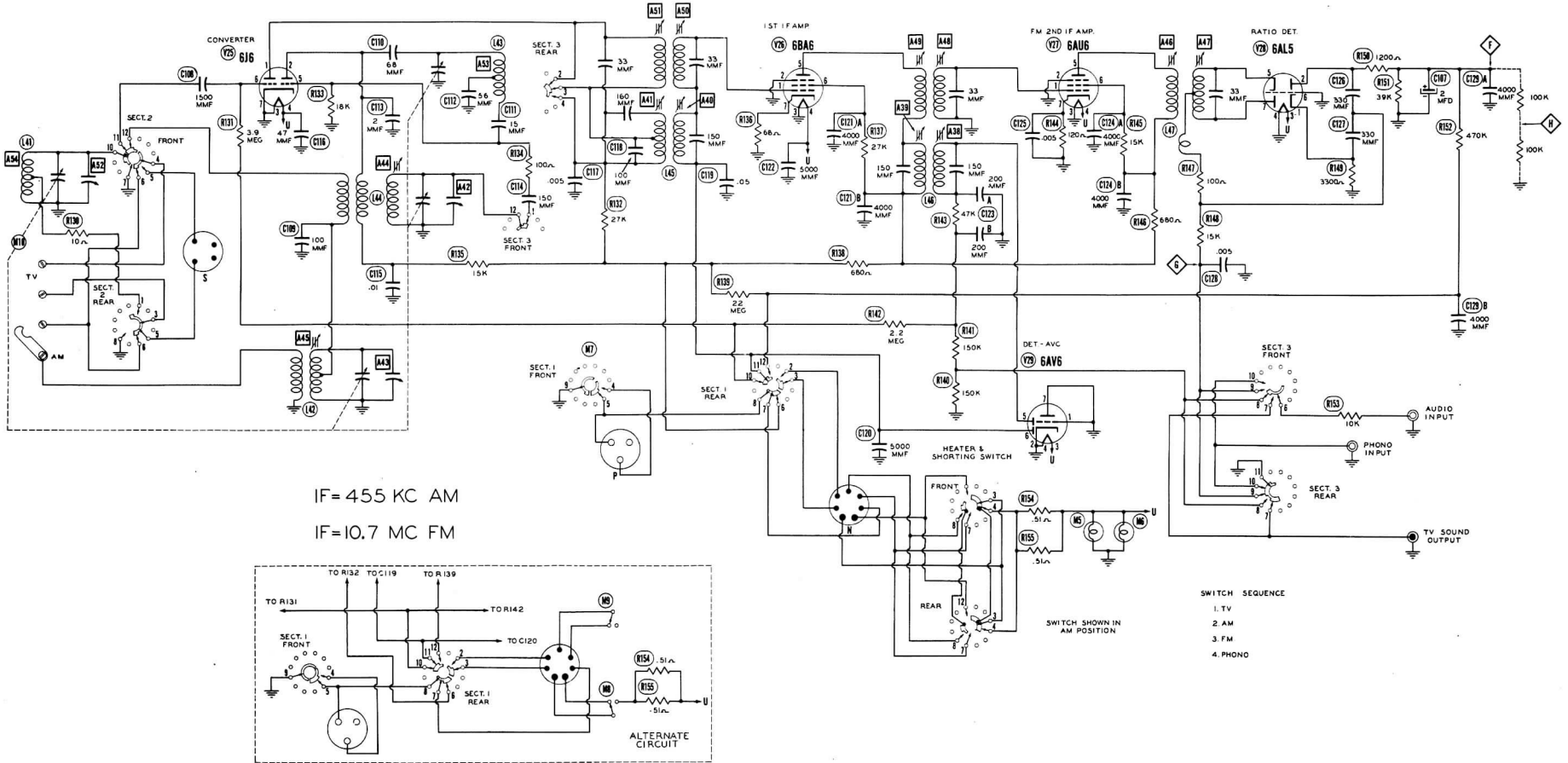
# MEASURED FROM PIN 8 OF V21.

▲ MEASURED FROM PIN 6 OF V19.

† MEASURED FROM PIN 6 OF V15.

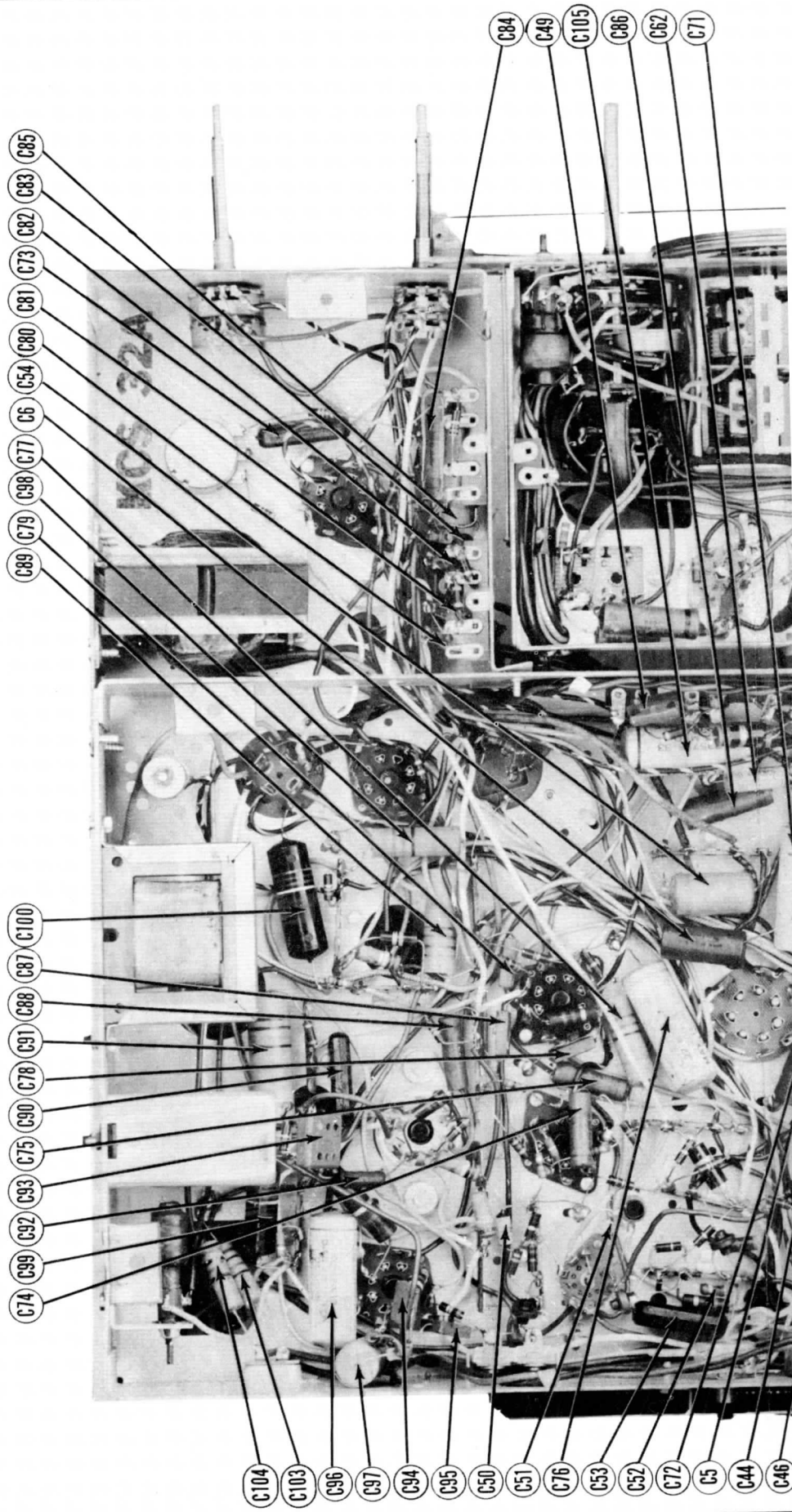
♦ TAKEN IN AM POSITION.

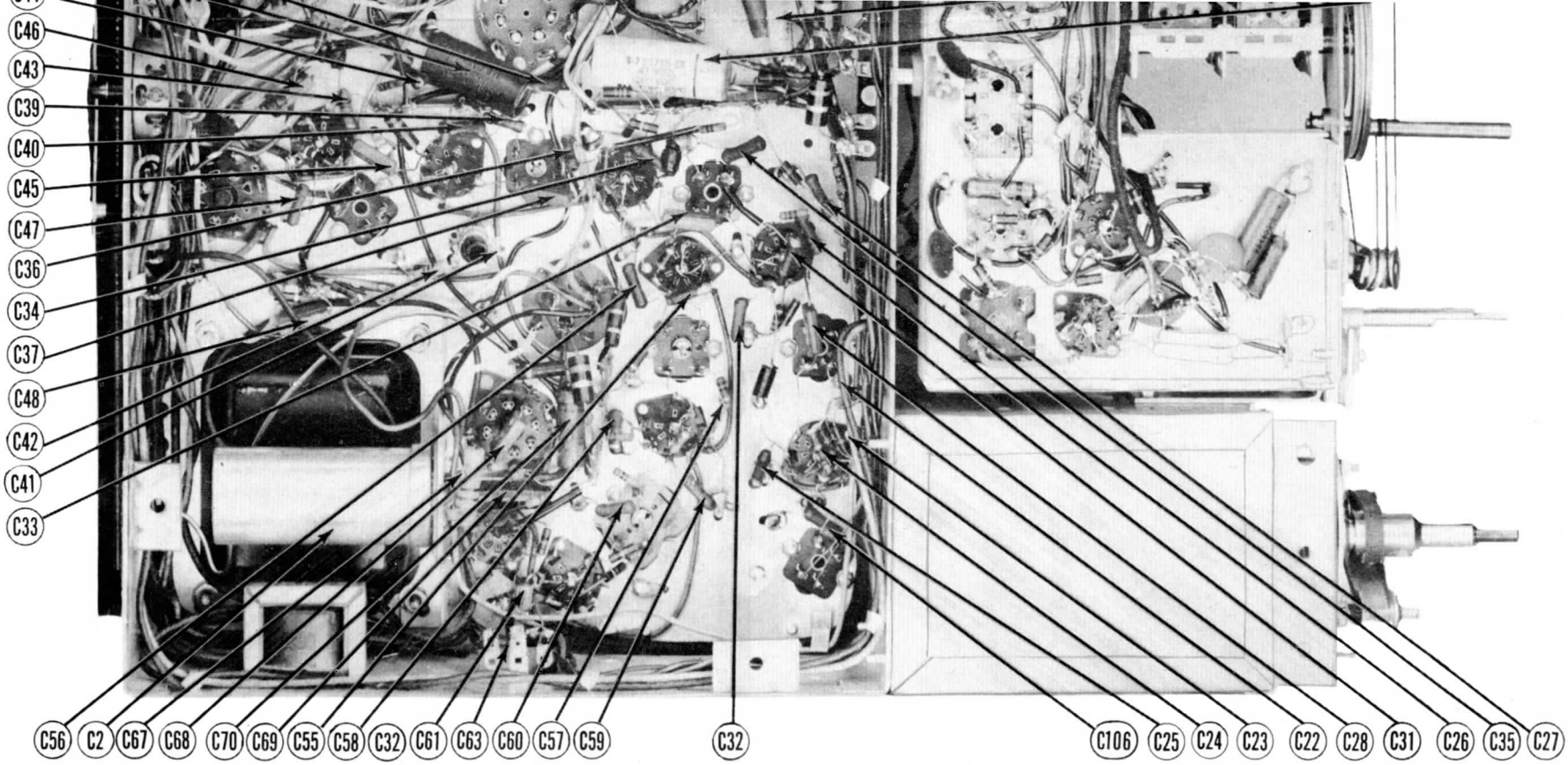
‡ TAKEN IN FM POSITION.



AM-FM TUNER SCHEMATIC

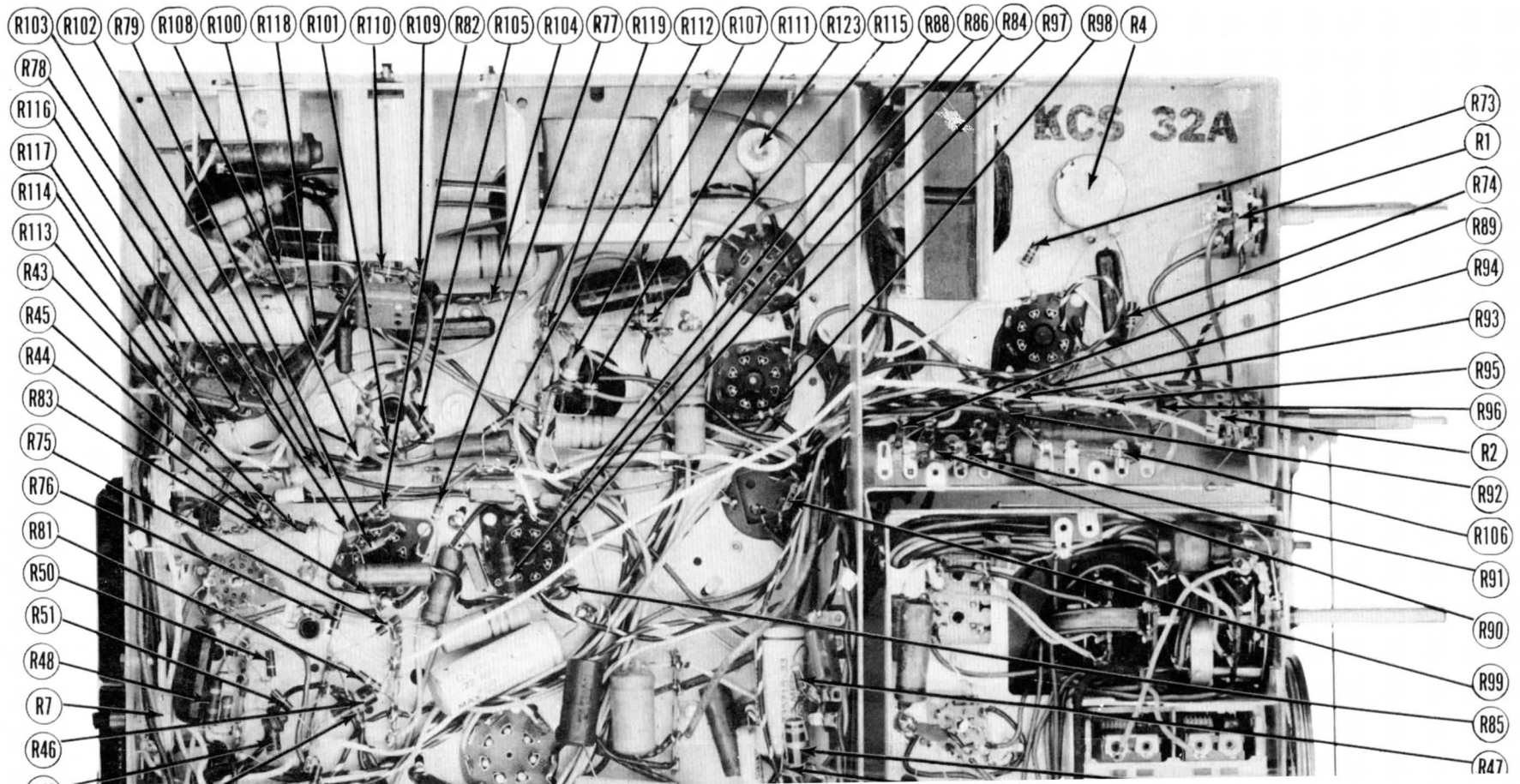


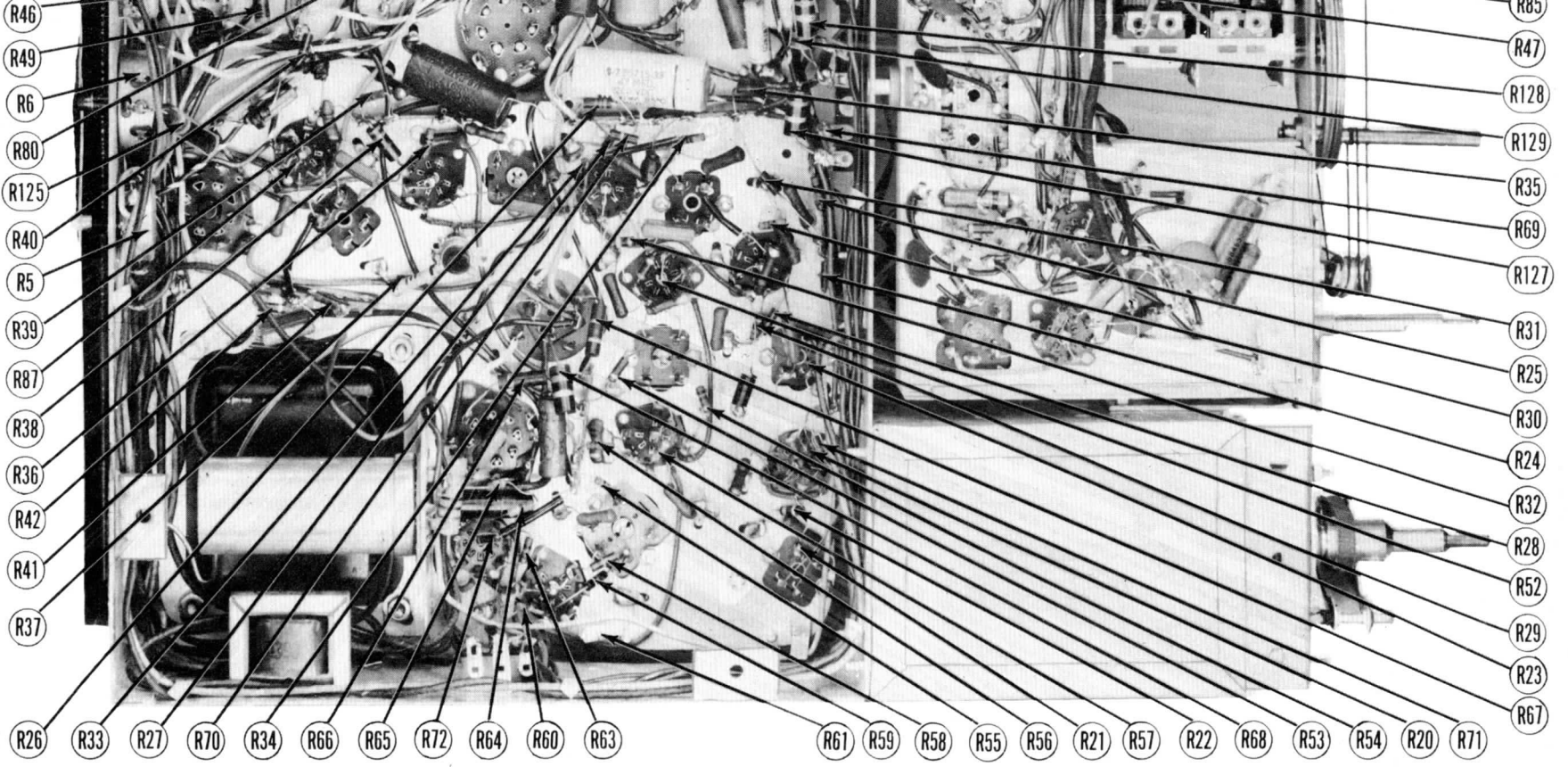




CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION

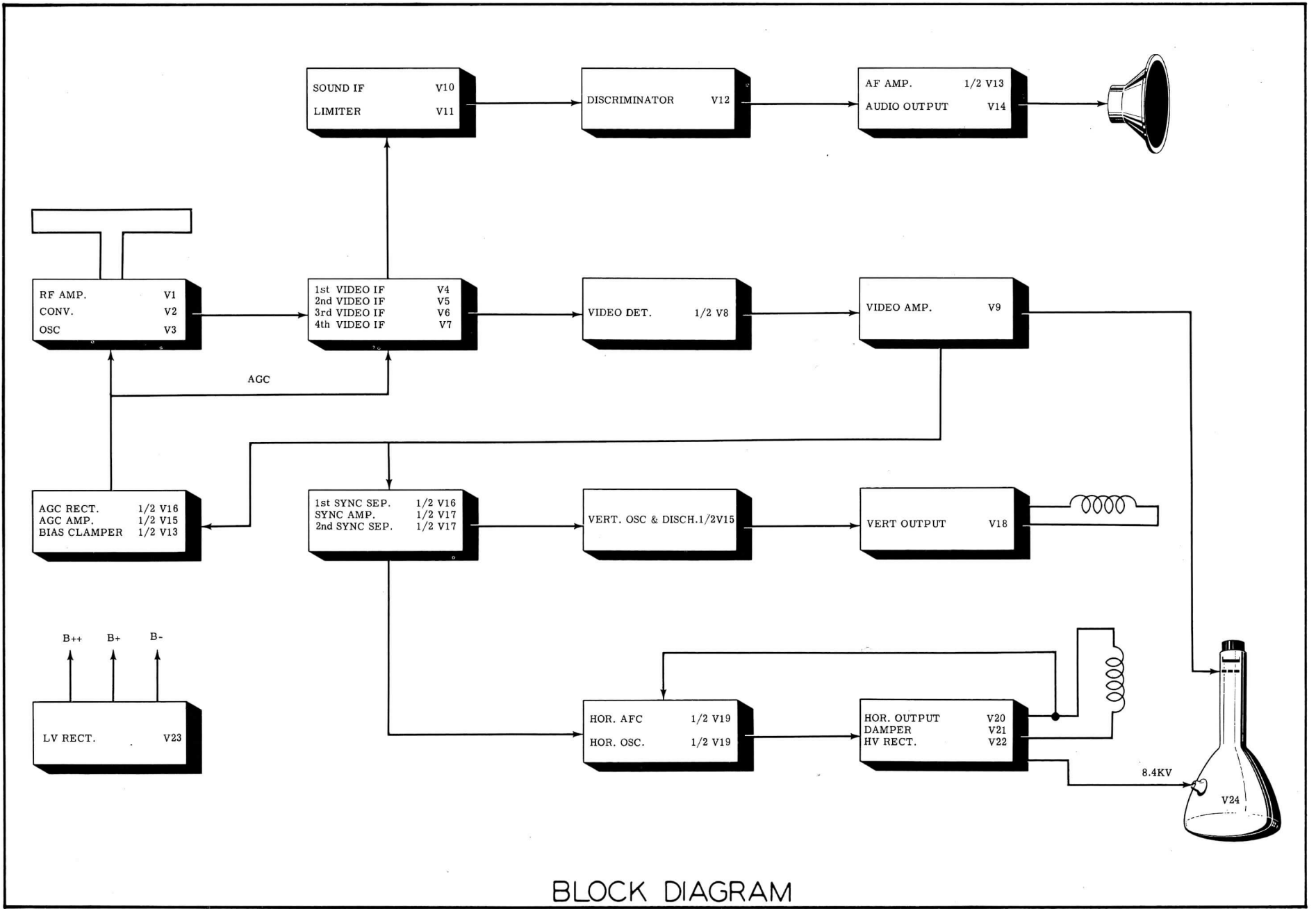
RCA VICTOR MODELS 8TR29, 8TR29  
(Ch. KCS32, A, B, C, & Radio Ch. RK135, A)





CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION

RCA VICTOR MODELS 8TK29, 8TR29  
(Ch.KCS32,A,B,C,& Radio Ch.RK135,A)



BLOCK DIAGRAM

RCA VICTOR MODELS 8TK29, 8TR29  
(Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

# HORIZONTAL OSCILLATOR ADJUSTMENTS

## HORIZONTAL FREQUENCY ADJUSTMENT

Connect a jumper across terminals "C" and "D" of the horizontal oscillator transformer T3. Tune in a station and, if possible, sync the picture and proceed as follows:

1. Turn horizontal hold control fully clockwise. Adjust the Frequency Adjustment (B1) so picture is just out of sync and the horizontal blanking appears as a vertical bar.
2. Turn the hold control approximately a quarter of a turn from the fully clockwise position and notice the picture width and linearity. If the width and linearity is incorrect, adjust the horizontal drive (B2), width (B3) and horizontal linearity (B4) controls until the picture is correct. If B2, B3, or B4 required adjustment repeat step 1 above.

## HORIZONTAL LOCKING RANGE ADJUSTMENT

Turn the horizontal hold control fully counterclockwise. Remove signal momentarily by turning channel switch to another channel and back again. Slowly turn the hold control clockwise and note the number of diagonal bars that appear just before the picture "syncs".

If more than 9 bars are present just before synchronization, turn the horizontal locking range trimmer (B5) slightly clockwise. If less than 7 bars are present, turn B5 slightly counterclockwise.

Turn the hold control counterclockwise and momentarily interrupt the signal and check the number of bars present at the pull-in point. Repeat this procedure until 7 to 9 bars are present.

## HORIZONTAL OSCILLATOR WAVEFORM ADJUSTMENT

Remove the jumper across terminals "C" and "D" of T3. Turn the horizontal hold control fully counterclockwise. Adjust B6 with a non-metallic screwdriver until the horizontal blanking bar is present on the raster.

Connect the low capacity probe of an oscilloscope to terminal "C" of T3. Turn the horizontal hold control one quarter of a turn from the clockwise position until the picture syncs. The pattern on the scope should be similar to Fig 8. Adjust B6 until the broad and narrow peaks are of the same amplitude (If necessary, while making this adjustment turn the hold control to keep the picture in synchronization).

This adjustment must be carefully made to assure correct circuit operation. If the broad peak is lower in amplitude than the sharp peak, the oscillator drift becomes greater and the circuit has greater susceptibility to noise pluses. However, if the broad peak is greater in amplitude than the sharp peak, the oscillator is overstabilized, the pull-in range inadequate, and there is the possibility of double triggering of the oscillator as the horizontal hold control approaches the extreme clockwise position.

## HORIZONTAL OSCILLATOR ADJUSTMENTS CHECK

Turn the horizontal hold control fully counterclockwise. Momentarily remove the signal and then slowly turn the hold control clockwise and note the number of bars present just before the picture synchronizes.

If more than 3 bars are present, turn B5 slightly clockwise. If less than 3 bars are present, turn B5 slightly counterclockwise. Momentarily remove the signal and recheck the number of bars present at the pull-in point. Repeat this procedure until 3 bars are present just before synchronization occurs.

Turn the horizontal hold control fully clockwise. The picture should be just out of synchronization to the extent that the horizontal blanking bar appears as a single vertical or diagonal bar in the picture. Retouch B6 until this condition exists.

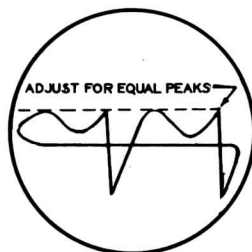


FIG. 8

# TV 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	6J6	6J6	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. Clamper	6AL5	6AL5	6BT	
V9	Video Amp.	12AU7	12AU7	9A	
V10	Sound IF Amp.	6AU6	6AU6	7BK	
V11	Limiter	6AU6	6AU6	7BK	
V12	Disc.	6AL5	6AL5	6BT	
V13	AF Amp. -Bias Clamper	6AV6	6AV6	7BT	
V14A	Audio Output	6V6GT	6V6GT	7AC	Used in chassis KCS32B or C.
B	Audio Output	6K6GT	6K6GT	7S	Used in chassis KCS30 or A.
V15	AGC Amp. -Vert. Osc. & Disch.	6SN7GT	6SN7GT	8BD	
V16	AGC Rectifier - 1st Sync. Sep.	6SN7GT	6SN7GT	8BD	
V17	Sync. Amp. -2nd Sync. Sep.	6SN7GT	6SN7GT	8BD	
V18	Vert. Output	6K6GT	6K6GT	7S	
V19	Hor. AFC-Hor. Osc.	6SN7GT	6SN7GT	8BD	
V20	Hor. Output	6BG6G	6BG6G	5BT	
V21	Damper	5V4G	5V4G	5L	
V22	HV Rectifier	1B3GT	1B3GT	3C	
V23	LV Rectifier	5U4G	5U4G	5T	
V24	Picture Tube	10BP4	10BP4	12D	

## 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 Cath. Bypass
C4A	40	450	71432	AFH882J	UP9CJ897		TVL-30	Filter
B	40	450						Filter
C	10	450						Vert. Output Decoupling
C5	25	50	53147	PRS50/25	BR255		TVA-15	AGC Filter
C6	5	50	74106	PRS150/4	BR550		TVA-13	AGC Filter
C7	18		54207					Fixed Trimmer
C8	270	500	73091			GP2K-270		RF Coupling
C9	1500		53494	GP1500M		GP2L-0015		AGC Filter
C10	1500		53494	GP1500M		GP2L-0015		RF Screen Bypass
C11	1500		53494	GP1500M		GP2L-0015		RF Bypass
C12	1500		53494	GP1500M		GP2L-0015		RF Coupling
C13	5000		73473	BPD-5		811-005	29C1	RF Coupling
C14	1500		53494	GP1500M		GP2L-0015		RF Filament Bypass
C15	1500		53494	GP1500M		GP2L-0015		Conv. Filament Bypass
C16	1500		53494	GP1500M		GP2L-0015		Conv. Decoupling
C17	1500		53494	GP1500M		GP2L-0015		RF Bypass
C18	10		53511	CI10JNPO		NP0K-10		Fixed Trimmer
C19	5		74035	CN5DNPO		NP0K-5		Osc. Feedback
C20	5		74035	CN5DNPO		NP0K-5		Osc. Feedback
C21	1500		53494	GP1500M		GP2L-0015		Osc. Filament Bypass
C22	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C23	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	AGC Filter
C24	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	1st V. IF Decoupling
C25	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	1st V. IF Fil. Bypass
C26	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C27	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C28	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C29	82							Fixed Trimmer
C30	47			CI47KNPO	5R5Q5	NP0M-50	MS-45	Fixed Trimmer
C31	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	2nd V. IF Decoupling
C32	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	2nd V. IF Fil. Bypass
C33	33	1000	74105	1468-00004	5W5Q4	GPIK-33	IFM-44	IF Coupling
C34	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	AGC Filter
C35	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C36	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	3rd V. IF Decoupling
C37	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C38	47			CI47JNPO	5R5Q5	NP0M-50	MS-45	Fixed Trimmer
C39	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C40	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	4th V. IF Screen Bypass
C41	75			CN75J75		NP0M-75		Fixed Trimmer
C42	82		64062	GP100M	5W5T1		IFM-31	4th V. IF Cath. Bypass
C43	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	4th V. IF Plate Dec.
C44	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C45	270	1000	73091	1468-00025	5W5T25	GP2K-270	IFM-325	IF Coupling
C46	10	500	72615	1468-00001	5W5T1	GPIK-10	MS-41	V. Diode Filter
C47	1500		53494	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Bypass
C48	560	500	39646	1468-0005	IW5T6	GP2K-560	IFM-35	1st V. Amp. Cath. Bypass
C49	560	500	39646	1468-0005	IW5T6	GP2K-560	IFM-35	2nd V. Amp. Cath. Bypass
C50	270		73922	GP270M		GP2K-270		Video Coupling
C51	47			CN47JNPO	5R5Q5	NP0M-50	MS-45	Fixed Trimmer
C52	120		73921	GP120M		GP2K-120		Video Coupling
C53	.047	400	73553	P488-047	PTE485		TM-15	Video Coupling

RCA VICTOR MODELS 8TK29, 8TR29 (Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

## 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.	
C54	.1	600	73557	P688-1	PTE6P1			Pic. Tube Cath. Dec.
C55	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	1st S. IF Cath. Bypass
C56	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	1st S. IF Decoupling
C57	100		39396	GP100M	5W5T1	GP1K-100	IFM-31	Limiter Grid Filter
C58	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	Limiter Screen Bypass
C59	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	Limiter Filament Bypass
C60	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	Limiter Plate Bypass
C61	270		73922	GP270M	5W5T25	GP2K-270	IFM-325	RF Bypass
C62	.001	600	73801	P688-001	PTE6D1		TM-21	De-emphasis
C63	270		73922	GP270M	5W5T25	GP2K-270	IFM-325	Disc. Filament Bypass
C64	.0022	600	73803	P688-0022	PTE6D2	GP2M-0022	TM-22	Audio Coupling
C65	.0047	600	73550	P688-0047	PTE6S1	GP2M-0047	TM-25	Tone Compensation
C66	.01	400	73561	P488-01	PTE4S1	GP2-335-01	TM-11	Audio Coupling
C67	.0047	600	73550	P688-0047	PTE6D5	GP2M-0047	TM-25	Tone Compensation
C68	470	500	39644	1468-0005	5W5T5	GP2K-470	IFM-35	Tone Compensation
C69	.01	1000	73565	P1088-01	PTE16S1		MB-11	Audio Coupling
C70	.0047	600	73550	P688-0047	PTE6D5	GP2M-0047	TM-25	Output Plate Bypass
C71	.47	200	73787	P288-47	GT2P5		TC-5	AGC Filter
C72	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	AGC Filter
C73	.047	200	73558	P288-047	PTE4S5		TM-15	AGC Amp. Grid Filter
C74	.01	400	73561	P488-01	PTE4S1	GP2-335-01	TM-11	AGC Rect. Cath. Bypass
C75	.001	600	73801	P688-001	PTE6D1	GP2L-001	TM-21	Sync. Coupling
C76	.22	200	73560	P488-22	GT2P25		TC-2	1st Sync. Sep. Cath. Bypass
C77	.047	400	73553	P488-047	PTE4S5		TM-15	Sync. Coupling
C78	100	500	39628	1468-0001	5W5T1	GP1K-100	IFM-31	Sync. Coupling
C79	390	500	39642	1468-0004	5W5T4	GP2K-390	IFM-34	2nd Sync. Sep. Cath. Bypass
C80	.0022	600	73803	P688-0022	PTE6D2	GP2M-0022	TM-22	Integrator Net.
C81	.0047	600	73550	P688-0047	PTE6D5	GP2M-0047	TM-25	Integrator Net.
C82	.0047	600	73550	P688-0047	PTE6D5	GP2M-0047	TM-25	Integrator Net.
C83	.0047	600	73920	P688-0047	PTE6D5	GP2M-0047	TM-25	Vert. Osc. Grid Cap.
C84	.047	600	73592	P688-047	PTE6S5		TM-15	Vert. Discharge
C85	.1	400	73551	P488-1	PTE4P1		TM-1	Vert. Sweep Coupling
C86	.047	200	73558	P288-047	PTE4S5		TM-15	Isolation
C87	180	500	51416	1468-0002	5W5T2	GP2K-180	IFM-32	Hor. Sync. Coupling
C88	.0022	600	73803	P688-0022	PTE6C2	GP2M-0022	TM-22	Hor. Sync. Coupling
C89	.047	600	73592	P688-047	PTE6S5		TM-15	Hor. AFC Plate Bypass
C90	.22	400	73794	P488-22	GT4P25		TC-2	AFC Filter
C91	.022	400	73562	P488-022	PTE4S2		TM-12	AFC Filter
C92	180	1000	73102					Hor. Osc. Grid Cap.
C93	10000	500	73594	1467-01	1D3S1	GP2-335-01	IFM-11	Fixed Trimmer
C94	2200	500	73595			GP2M-0022		Hor. Discharge
C95	390	500	39642	1468-0004	5W5T4	GP2K-390	IFM-34	Hor. Sweep Coupling
C96	.047	1000	73564	P1088-047	GT16S5		TR-15	Hor. Output Screen Bypass
C97	.22	400	73794	P288-22	GT4P25		TC-2	Hor. Output Cath. Bypass
C98	.047	400	73553	P488-047	PTE4S5		TM-15	Bias Filter
C99	.033	1000	73596	P1088-033				Damper Filter
C100	.047	1000	73597	P1088-047	GT16S5		TR-15	Damper Filter
C101	5	1500	72809					Hor. Feedback
C102	500	20000	71450				410-500	HV Filter
C103	.01	400	73561	P488-01	PTE4S1	GP2-335-01	TM-11	Line Filter
C104	.01	400	73561	P488-01	PTE4S1	GP2-335-01	TM-11	Line Filter
C105	.47	200	73787	P288-47	GT2P5		TC-5	Hor. Sweep Coupling †
C106	1500		53494	GP1500M	1W5D15	GP2L-0015	IFM-215	AGC Filter

† Not used in all models.

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			INSTALLATION NOTES
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.	CLAROSTAT PART No.	
R1A	1 Meg.		72734	B11-137 *	970111-24	Vert. hold control, front
B	50KΩ			B11-123 *		
C	Shaft End			E187 *		
R2A	50KΩ		74047	B11-123 *	970913-11	Brightness control, front
B	10KΩ			B17-116 *		
C	Shaft End			E187 *		
R3A	500KΩ		74048	B13-133 *	970913-10	Contrast control, rear
B	1 Meg.			B13-137X *		
C	Shaft End			E187 *		
R4	200KΩ		73579	Q11-130	M-52-S	Volume control, rear tapped at 200KΩ
R5	2.5 Meg.		71440	Q11-239	M-84-S	
R6A	5000KΩ	4	74442		10-5000	Attach per instructions in "Concentrikit".
B	2250KΩ	4	72735		10-2500	Attach per instructions in "Concentrikit".
R7	5000KΩ		71441	Q11-114	M-19-S	AGC Threshold control

\* Additional parts to be used with "Concentrikit".

NOTE - Used only on chassis KCS-32 and KCS-32A.

## RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.	
R8	1000Ω				ALL RESISTORS ARE ± 10% UNLESS OTHERWISE STATED.
R9	150Ω	20%		BTS-1000	RF Grid
R10	150Ω	20%			AGC Network
R11	2700Ω			BTS-2700	RF Screen Decoupling
R12	100KΩ	20%		BTS-100K	RF Plate
R13	100KΩ	20%			Series Test Connection
R14	150Ω	20%			Mixer Grid
R15	1000Ω	20%		BTS-1000	Mixer Decoupling
R16	47Ω	20%			Decoupling Network
R17	100KΩ	20%		BTS-100K	Osc. Cathode
R18	100KΩ	20%		BTS-100K	Osc. Grid
R19	10KΩ	20%		BTS-10K	Osc. Grid
R20	150Ω	20%			Osc. Plate
R21	22KΩ	20%		BTS-22K	Decoupling Network
R22	39Ω				1st Video IF Transformer Shunt See Note 1
R23	1000Ω	20%		BTS-1000	1st Video IF Cathode
R24	150Ω	20%			1st Video IF Decoupling
R25	1000Ω	20%		BTS-1000	Decoupling Network
R26	18KΩ	5%		BTS-18K-5%	AGC Network
R27	5600Ω	5%		BTS-5600-5%	AGC Network
R28	10KΩ	5%			Voltage Divider
R29	68Ω				2nd Video IF Grid
R30	1000Ω	20%		BTS-1000	2nd Video IF Cathode
R31	150Ω	20%			2nd Video IF Decoupling

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	RCA PART No.	IRC PART No.
R32	39Ω			
R33	5600Ω	5%		
R34	1000Ω	20%		BTS-1000
R35	150Ω	20%		
R36	1000Ω	20%		BTS-1000
R37	150Ω			
R38	6800Ω	5%		
R39	1000Ω	20%		BTS-1000
R40	5600Ω	5%		BTS-5600-5%
R41	10Ω	20%		BW- $\frac{1}{2}$ -10
R42	10Ω			BW- $\frac{1}{2}$ -100
R43	2200Ω			BTS-2200
R44	3300Ω	5%		BTS-3300-5%
R45	220KΩ			BTS-220K
R46	12KΩ			BT-2-12K
R47	220Ω			BW- $\frac{1}{2}$ -220
R48	5600Ω			BTA-5600
R49	8200Ω	5%		BTA-8200-5%
R50	2.2 Meg.			BTS-2.2 Meg.
R51	2.2 Meg.			BTS-2.2 Meg.
R52	82Ω			
R53	120Ω			BTS-120
R54	22KΩ			BTS-22K
R55	1000Ω	20%		BTS-1000
R56	47KΩ	20%		BTS-47K
R57	47KΩ	20%		BTS-47K
R58	100KΩ	5%		BTS-100K-5%
R59	100KΩ	5%		BTS-100K-5%
R60	22KΩ	20%		BTS-22K
R61	5.1Ω		72067	BW- $\frac{1}{2}$ -4.7
R62	82KΩ			BTS-82K
R63	10 Meg. 20%			BTS-10 Meg.
R64	330KΩ			BTS-330K
R65	47KΩ	20%		BTS-47K
R66	22Ω			BW-1-220
R67	270Ω			BW-1-270
R68	1800Ω			BT-2-1800
R69	12KΩ			BTS-12K
R70	120KΩ			BTS-120K
R71	8200Ω	5%		BTS-8200-5%
R72	1.8 Meg. 5%			BTS-1.8 Meg.
R73	47KΩ			BTS-47K
R74	470KΩ			BTS-470K
R75	100KΩ			BTS-100K
R76	2700Ω			BTS-2700
R77	4700Ω			BTS-4700
R78	5600Ω			BTS-5600
R79	150KΩ			BTS-150K
R80	330KΩ			BTS-330K
R81	5600Ω			BTS-5600
R82	27KΩ			BTS-27K
R83	47KΩ			BTS-47K
R84	10 Meg.			BTS-10 Meg.
R85	1 Meg.			BTS-1 Meg.
R86	15KΩ			BTA-15K
R87	3.9 Meg.			BTS-3.9 Meg.
R88	6800Ω			BTS-6800
R89	22KΩ			BTS-22K
R90	8200Ω			BTS-8200
R91	8200Ω			BTS-8200
R92	1.5 Meg. 5%			BTS-1.5 Meg.
R93	220KΩ			BTS-220K
R94	2.2 Meg.			BTS-2.2 Meg.
R95	100KΩ			BTS-100K
R96	8200Ω	5%		BTS-8200-5%
R97	2.2 Meg.			BTS-2.2 Meg.
R98	2700Ω			BTS-2700
R99	1000Ω	20%		BTS-1000
R100	56KΩ			BTS-56K
R101	820KΩ	5%		BTS-820K-5%
R102	150KΩ			BTS-150K
R103	150KΩ	5%		BTA-150K-5%
R104	8200Ω			BTS-8200
R105	2.7 Meg. 5%			BTA-2.7 Meg.
R106	68KΩ			BTS-68K
R107	120KΩ			BTA-120K
R108	100KΩ	5%		BTA-100K-5%
R109	8200Ω	5%		BTS-8200-5%
R110	22KΩ			BTS-22K
R111	120KΩ			BTA-120K
R112	150KΩ			BTS-150K
R113	47Ω	20%		
R114	820KΩ			BTS-820K
R115	180KΩ			BTS-180K
R116	39Ω			BW-1-39
R117	47Ω			BW-1-47
R118	10KΩ			BT-2-10K
R119	10KΩ			BTS-10K
R120	3.3Ω			
R121	1 Meg. 20%		71513	
R122	5600Ω			BTS-5600
R123	500Ω		74049	DG-500
R124	10Ω			
R125	390Ω			
R126	850Ω		73588	BW-2-390
R126A	850Ω			DG-850
B	650Ω	6		
C	650Ω	6		
R127	1800Ω	2		BT-2-1800
R128	6800Ω	2		BT-2-6800
R129	6800Ω	2		BT-2-6800

Note 1. Some models use 10KΩ resistor in this application.  
 Note 2. Used only on chassis KCS32B and KCS23C.  
 Note 3. Some models use 5600Ω resistor in this application.  
 Note 4. Some models use 6800Ω resistor in this application.  
 Note 5. Not used in all models.  
 Note 6. Some models use 330Ω resistor in this application.



# TV PARTS LIST AND DESCRIPTIONS (Continued)

## RESISTORS (CONT.)

ITEM No.	IDENTIFICATION CODES AND INSTALLATION NOTES

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	RCA	IRC	
			PART No.	PART No.	
R32	39Ω				3rd Video IF Cathode
R33	5600Ω 5%				3rd Video IF Plate
R34	1000Ω 20%			BTS-1000	3rd Video IF Decoupling
R35	150Ω 20%				Decoupling Network
R36	1000Ω 20%			BTS-1000	4th Video IF Screen Decoupling
R37	150Ω				4th Video IF Cathode
R38	6800Ω 5%				4th Video IF Plate
R39	1000Ω 20%			BTS-1000	4th Video IF Plate Decoupling
R40	5600Ω 5%			BTS-5600-5%	Video Det. Diode Load
R41	10Ω 20%			BW- $\frac{1}{2}$ -10	Bias Network
R42	100Ω			BW- $\frac{1}{2}$ -100	Video Amp. Cathode
R43	2200Ω			BTS-2200	Video Amp. Plate
R44	3300Ω 5%			BTS-3300-5%	Video Amp. Plate
R45	220KΩ			BTS-220K	Voltage Divider
R46	12KΩ			BT-2-12K	Video Amp. Cathode
R47	220Ω			BW- $\frac{1}{2}$ -220	Voltage Divider
R48	5600Ω			BTA-5600	Video Amp. Plate
R49	8200Ω 5%			BTA-8200-5%	Video Amp. Plate
R50	2.2 Meg.			BTS-2.2 Meg.	Voltage Divider
R51	2.2 Meg.			BTS-2.2 Meg.	Picture Tube Grid
R52	62Ω				Sound IF Cathode
R53	1200Ω			BTS-1200	Sound IF Decoupling
R54	22KΩ			BTS-22K	Limiter Grid
R55	1000Ω 20%			BTS-1000	Limiter Plate Decoupling
R56	22KΩ 20%			BTS-22K	Limiter Screen
R57	47KΩ 20%			BTS-47K	Voltage Divider
R58	100KΩ 5%			BTS-100K-5%	Disc. Load
R59	100KΩ 5%			BTS-100K-5%	Disc. Load
R60	220KΩ 20%			BTS-22K	De-emphasis
R61	5.1Ω		72067	BW- $\frac{1}{2}$ -4.7	Disc. Filament-Wire Wound
R62	82KΩ			BTS-82K	Tone Compensation
R63	10 Meg. 20%			BTS-10 Meg.	AF Grid
R64	330KΩ			BTS-330K	AF Plate
R65	470KΩ 20%			BTS-470K	Output Grid
R66	220Ω			BW-1-220	Output Cathode See Note 2
R67	270Ω			BW-1-270	Output Cathode
R68	1800Ω			BT-2-1800	Filter
R69	12KΩ			BTS-12K	Voltage Divider
R70	120KΩ			BTS-120K	AGC Network
R71	8200Ω 5%			BTS-8200-5%	Voltage Divider
R72	1.8 Meg. 5%			BTS-1.8 Meg. 5%	Voltage Divider
R73	470KΩ			BTS-470K	AGC Amp. Grid
R74	470KΩ			BTS-470K	Voltage Divider See Note 3
R75	100KΩ			BTS-100K	AGC Rect. Cathode
R76	2700Ω			BTS-2700	Voltage Divider
R77	4700Ω			BTS-4700	AGC Rect. Plate
R78	5600Ω			BTS-5600	Isolation
R79	150KΩ			BTS-150K	1st Sync. Sep. Grid
R80	330KΩ			BTS-330K	1st Sync. Sep. Cathode
R81	5600Ω			BTS-5600	1st Sync. Sep. Cathode
R82	27KΩ			BTS-27K	1st Sync. Sep. Plate
R83	47KΩ			BTS-47K	Isolation
R84	10 Meg.			BTS-10 Meg.	Voltage Divider
R85	1 Meg.			BTS-1 Meg.	Sync. Amp. Grid
R86	15KΩ			BTA-15K	Sync. Amp. Plate
R87	3.9 Meg.			BTS-3.9 Meg.	2nd Sync. Sep. Grid
R88	6800Ω			BTS-6800	2nd Sync. Sep. Cathode
R89	22KΩ			BTS-22K	Integrator
R90	8200Ω			BTS-8200	Integrator
R91	8200Ω			BTS-8200	Integrator
R92	1.5 Meg. 5%			BTS-1.5 Meg. 5%	Vert. Osc. Grid
R93	220KΩ			BTS-220K	Vert. Osc. Plate
R94	2.2 Meg.			BTS-2.2 Meg.	Voltage Divider
R95	100KΩ			BTS-100K	Voltage Divider
R96	8200Ω 5%			BTS-8200-5%	Vert. Peaking
R97	2.2 Meg.			BTS-2.2 Meg.	Vert. Output Grid
R98	2700Ω			BTS-2700	Vert. Output Cathode
R99	1000Ω 20%			BTS-1000	Vert. Output Plate Decoupling
R100	56KΩ			BTS-56K	Filter
R101	820KΩ 5%			BTS-820K-5%	Horiz. AFC Grid
R102	150KΩ			BTA-150K	Horiz. AFC Cathode
R103	150KΩ 5%			BTA-150K-5%	Horiz. AFC Cathode
R104	8200Ω			BTS-8200	Horiz. AFC Filter Network
R105	2.7 Meg. 5%			BTA-2.7 Meg. 5%	Voltage Divider
R106	68KΩ			BTS-68K	Voltage Divider
R107	120KΩ			BTA-120K	Voltage Divider
R108	100KΩ 5%			BTA-100K-5%	Horiz. Osc. Grid
R109	8200Ω 5%			BTS-8200-5%	Horiz. Osc. Transformer Shunt
R110	22KΩ			BTS-22K	Horiz. Osc. Transformer Shunt
R111	120KΩ			BTA-120K	Horiz. Osc. Plate
R112	150KΩ			BTS-150K	Horiz. AFC Filter Network
R113	47Ω 20%				Parasitic Supp.
R114	820KΩ			BTS-820K	Horiz. Output Grid
R115	180KΩ			BTS-180K	Horiz. Output Grid
R116	39Ω			BW-1-39	Horiz. Output Cathode
R117	47Ω			BW-1-47	Bias Network
R118	10KΩ			BT-2-10K	Horiz. Output Screen See Note 4
R119	10KΩ			BTS-10K	Filter
R120	3.3Ω		71513		HV Rect. Filament
R121	1 Meg. 20%				HV Filter
R122	560KΩ			BTS-560K	Feedback
R123	500Ω	20	74049	DG-500	Bias Network-Wire Wound
R124	10Ω				Filter Network See Note 5
R125	390Ω	2	72325	BW-2-390	Focus Coil Shunt-Wire Wound See Note 6
R126A	850Ω	12	73588	DG-850	Filter-Wire Wound
B	650Ω	6			Voltage Divider-Wire Wound
C	650Ω	6			Bias Network-Wire Wound
R127	1800Ω	2		BT-2-1800	Voltage Divider
R128	6800Ω	2		BT-2-6800	Bleeder
R129	6800Ω	2		BT-2-6800	Bleeder

- Note 1. Some models use 10KΩ resistor in this application.  
 Note 2. Used only on chassis KCS32B and KCS23C.  
 Note 3. Some models use 560KΩ resistor in this application.  
 Note 4. Some models use 6800Ω resistor in this application.  
 Note 5. Not used in all models.  
 Note 6. Some models use 330Ω resistor in this application.

ITEM No.	RATING		
	PRI.	SEC. 1	SEC. 2
		DC RESISTANCE	DC RES.
T1	117VAC at 2.05A	750VCT .250ADC	5VAC at 3A
		SEC. 4	SEC. 5
		6.3VAC at 7.4A	6.3VAC at 1.6A

② Redrill mounting holes.

ITEM No.	RATING		RCA PART
	DC RESISTANCE	DC RES.	
T2	125Ω Tap at 90Ω	36Ω	73576
T3	165Ω	1310Ω	73569
T4	33Ω Tap at 173Ω	SEC. 1 10.8Ω Tap at .6Ω	73570
		SEC. 2 0Ω	
T5	52Ω	6.9Ω	73568
T6A	13.5Ω		71420
B	64.6Ω		
T7	364Ω		73566

① Drill one new mounting hole.

ITEM No.	RATING			
	IMPEDANCE		DC RES.	
	PRI.	SEC.	PRI.	SEC.
T8	5.8KΩ	4.2Ω	500Ω	.28Ω

ITEM No.	RATINGS	
	FIELD RES.	V. C. IMP.
	PM	PM
SP1A		4.2Ω
B		
	CONE DIA.	
SP2A	4 3/4" x 7"	3/4"
B	12"	

ITEM No.	RATINGS		
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTIVE REACTANCE
	PRI.	SEC.	INDUCTIVE REACTANCE
L1	.250A	43Ω	1.3

ITEM No.	USE	DC RES.	
		PRI.	SEC.
		PRI.	SEC.
L2	Ant. Input		
	Trans.	.5Ω	.2Ω
L3	IF Trap	.5Ω	
L4	IF Trap Shunt	.5Ω	
L5	IF Trap	.5Ω	
L6	RF Grid	0Ω	
L7A	RF Plate		
	Trimmer	0Ω	
B	RF Plate	0Ω	
	Trimmer	0Ω	
L8	RF Plate	0Ω	
L9	RF Plate	0Ω	
L10	RF Coupling	0Ω	
L11A	Mixer Grid		
	Trimmer	0Ω	
B	Mixer Grid		
	Trimmer	0Ω	
L12	Mixer Grid	0Ω	
L13	Mixer Grid	0Ω	
L14A	Osc. Plate		
	Trimmer	0Ω	
B	Osc. Plate		
	Trimmer	0Ω	
L15	Osc. Plate	0Ω	
L16	Osc. Plate	0Ω	
L17	Osc. Plate	0Ω	
L18A	Osc. Plate		
	Trimmer	0Ω	
B	Osc. Plate		
	Trimmer	0Ω	
L19	Fil. Choke	0Ω	
L20	Fil. Choke	0Ω	
L21	Fil. Choke	0Ω	
L22	Conv. Trans.	.5Ω	0Ω
L23	1st Video IF	.1Ω	0Ω
L24	Fil. Choke	0Ω	
L25	2nd Video IF	.1Ω	
L26	3rd Video IF & Sound Take Off	.1Ω	

# DESCRIPTIONS (Continued)

IDENTIFICATION CODES

Video IF Cathode  
 Video IF Plate  
 Video IF Decoupling  
 Decoupling Network  
 Video IF Screen Decoupling  
 Video IF Cathode  
 Video IF Plate  
 Video IF Plate Decoupling  
 Video Det. Diode Load  
 as Network  
 Video Amp. Cathode  
 Video Amp. Plate  
 Video Amp. Plate  
 Voltage Divider  
 Video Amp. Cathode  
 Voltage Divider  
 Video Amp. Plate  
 Video Amp. Plate  
 Voltage Divider  
 Picture Tube Grid  
 Sound IF Cathode  
 Sound IF Decoupling  
 Limiter Grid  
 Limiter Plate Decoupling  
 Limiter Screen  
 Voltage Divider  
 Disc. Load  
 Disc. Load  
 e-emphasis  
 Disc. Filament-Wire Wound  
 Disc. Compensation  
 F Grid  
 F Plate  
 Output Grid  
 Output Cathode See Note 2  
 Output Cathode  
 Filter  
 Voltage Divider  
 GC Network  
 Voltage Divider  
 Voltage Divider  
 GC Amp. Grid  
 Voltage Divider See Note 3  
 GC Rect. Cathode  
 Voltage Divider  
 GC Rect. Plate  
 Isolation  
 1st Sync. Sep. Grid  
 1st Sync. Sep. Cathode  
 2nd Sync. Sep. Cathode  
 1st Sync. Sep. Plate  
 Isolation  
 Voltage Divider  
 Sync. Amp. Grid  
 Sync. Amp. Plate  
 2nd Sync. Sep. Grid  
 2nd Sync. Sep. Cathode  
 Integrator  
 Integrator  
 1st. Osc. Grid  
 1st. Osc. Plate  
 Voltage Divider  
 Voltage Divider  
 1st. Peaking  
 1st. Output Grid  
 1st. Output Cathode  
 1st. Output Plate Decoupling  
 Filter  
 1st. AFC Grid  
 1st. AFC Cathode  
 1st. AFC Cathode  
 1st. AFC Filter Network  
 Voltage Divider  
 Voltage Divider  
 Voltage Divider  
 1st. Osc. Grid  
 1st. Osc. Transformer Shunt  
 1st. Osc. Transformer Shunt  
 1st. Osc. Plate  
 1st. AFC Filter Network  
 Parasitic Supp.  
 1st. Output Grid  
 1st. Output Grid  
 1st. Output Cathode  
 Bias Network  
 1st. Output Screen See Note 4  
 Filter  
 V Rect. Filament  
 V Filter  
 Feedback  
 Bias Network-Wire Wound  
 Filter Network See Note 5  
 Focus Coil Shunt-Wire Wound See Note 6  
 Filter-Wire Wound  
 Voltage Divider-Wire Wound  
 Bias Network-Wire Wound  
 Voltage Divider  
 Feeder  
 Feeder

## TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	RCA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC at 2.05A	750VCT .250ADC	5VAC at 3A	5VAC at 2A	74046	P-8153 ②		TP-355
		SEC. 4	SEC. 5					
		6.3VAC at 7.4A	6.3VAC at 1.6A					

② Redrill mounting holes.

## 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	36Ω	73576				Hor. Osc. Trans.
T3	165Ω	1310Ω	73569	A-8121 ①	A-4000 ①	TBO-2	Vert. Block Osc. Trans.
T4	331Ω Tap at 173Ω	SEC. 1	73570	A-8117		TFB-1	Hor. Output Trans.
		10.8Ω Tap at .6Ω					
		SEC. 2					
		0Ω					
T5	521Ω	6.9Ω	73568	A-8116	A-3035	TSO-4	Vert. Output Trans.
T6A	13.5Ω		71420	DY-1			Hor. Deflection Coil
T6B	64.6Ω						Vert. Deflection Coil
T7	364Ω		73566				Focus Coil

① Drill one new mounting hole.

## 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.				
T8	5.8KΩ	4.2Ω	500Ω	.26Ω	71419	A-3877	A-2930	RO-9 ①

① Drill one new mounting hole

## SPEAKER

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.		RCA PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	PM	4.2Ω		73993		57A15	
B	PM			73635			
	CONE DIA.		V. C. DIA.				
SP2A	4 3/4" x 7"		3/4"				
B	12"			73934			

## FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 √)	RCA PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.250A	43Ω	1.3 Henries	73154	C-2325 ①	C-2991	TR-3300 ①	

① Drill one new mounting hole.

## COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RCA PART No.	MEISSNER PART No.	
L2	Ant. Input Trans.	.5Ω	.2Ω	73578		Includes mounting bracket and socket.
L3	IF Trap	.5Ω		73476		Includes 12MMF capacitor.
L4	IF Trap Shunt	.5Ω		73475		
L5	IF Trap	.5Ω		73476		
L6	RF Grid	0Ω		73633		Includes 12MMF capacitor.
L7A	RF Plate	0Ω				Complete with stator, rotor, coils and segments.
	Trimmer	0Ω		73446		Channel #13. Smooth bushing type with screw adjustments.
B	RF Plate	0Ω				Channel #13. Threaded bushing type with screw adjustments.
	Trimmer	0Ω		74110		
L8	RF Plate	0Ω		73471		Includes stator, rotor, coils and segments.
L9	RF Plate	0Ω		73460		Channel 6
L10	RF Coupling	0Ω		73462		
L11A	Mixer Grid	0Ω				Channel #13. Threaded bushing type with screw adjustment.
	Trimmer	0Ω		74109		
B	Mixer Grid	0Ω				Channel #13. Smooth bushing type with screw adjustment.
	Trimmer	0Ω		73444		
L12	Mixer Grid	0Ω		73470		Includes stator, rotor, coils and segments.
L13	Mixer Grid	0Ω		73874		Channel 6
L14A	Osc. Plate	0Ω				Channel #13. Smooth bushing type with screw adjustment.
	Trimmer	0Ω		73444		
B	Osc. Plate	0Ω				Channel #13. Threaded bushing type with screw adjustment.
	Trimmer	0Ω		74109		
L15	Osc. Plate	0Ω		73468		Includes stator, rotor, coils and segments.
L16	Osc. Plate	0Ω		73469		Includes stator, rotor, coils and segments.
L17	Osc. Plate	0Ω		73874		Channel #6
L18A	Osc. Plate	0Ω				Channel #13. Threaded bushing type with plunger adjustment.
	Trimmer	0Ω		74108		
B	Osc. Plate	0Ω				Channel #13. Smooth bushing type with plunger adjustment.
	Trimmer	0Ω		73443		
L19	Fil. Choke	0Ω		73477		
L20	Fil. Choke	0Ω		73477		
L21	Fil. Choke	0Ω		73477		
L22	Conv. Trans.	.5Ω	0Ω	73448		
L23	1st Video IF	.1Ω	0Ω	73571		Includes C29 and R21
L24	Fil. Choke	0Ω		73477		
L25	2nd Video IF	.1Ω		73572		Includes C30
L26	3rd Video IF & Sound Take Off	.1Ω		73573		Includes C38

RCA VICTOR MODELS 8TK29, 8TR29 (Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

# TV PARTS LIST AND DESCRIPTIONS (Continued)

COILS(RF-IF) CONT.

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RCA	MEISSNER	
				PART No.	PART No.	
L27	Peaking	2.3Ω		74170		36 microhenries. Wound on 8.2KΩ resistor. Includes 36MMF capacitor. Includes C41 Includes 56MMF and 8.2MMF capacitor. 93 microhenries. Wound on 10KΩ resistor . Orange identification dot. 180 microhenries. Wound on 39KΩ resistor. White identification dot. Includes C51 250 microhenries. Green identification dot. 180 microhenries. Wound on 39KΩ resistor. White identification dot. 250 microhenries. Green identification dot.
L28	4th Video IF	.1Ω	0Ω	73574		
L29	Sound Trap	0Ω		71778		
L30	5th Video IF	.1Ω	0Ω	73575		
L31	Peaking	4.1Ω		72619		
L32	Peaking	6Ω		71528		
L33	4.5MC Trap	2.5Ω		73577		
L34	Peaking	7.2Ω		71526		
L35	Peaking	6Ω		71528		
L36	Peaking	6.2Ω		71526		
L37	Sound IF	0Ω	0Ω	71424		
L38	Disc. Trans.	0Ω	0Ω	71427		
L39	Width Cont.	.2Ω		71429		
L40	Hor. Linearity	34Ω		71449		

## MISCELLANEOUS

ITEM No.	PART NAME	RCA PART No.	NOTES
M1	RF Tuner	KRK5	Type GJV .25A Permanent magnet type Model 8TK29 Model 8TR29  Channel selector Fine tuning Tone, Vert. hold, Brightness Volume, Contrast, Hor. hold Channel selector Fine tuning Tone, Brightness, Vert. hold Volume, contrast, Hor. hold Channel marker (Walnut or mahogany models) Channel marker (Toasted mahogany models.) Hor. locking range (10-160MMF), Hor. drive cont. (40-370MMF)
M2	Fuse	73600	
M3	Ion Trap	73301	
	Cabinet Back	74058	
	Cabinet Back	74053	
	Safety Glass	73863	
	Knob	73224	
	Knob	73222	
	Knob	73226	
	Knob	73228	
	Knob	73225	
	Knob	73223	
	Knob	73227	
	Knob	73229	
	Escutcheon	73642	
	Escutcheon	73740	
	Trimmer Strip	73580	

# RADIO PARTS LIST AND DESCRIPTIONS

## TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		RCA PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	
V25	Converter	6J6	6J6	7BF	
V26	1st IF Amp.	6BA6	6BA6	7BK	
V27	FM 2nd IF Amp.	6AU6	6AU6	7BK	
V28	Ratio Det.	6AL5	6AL5	6BT	
V29	DET. -AVC	6AV6	6AV6	7BT	

## 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.	
C107	2	50	73747	PRS150/4	BBR2-50T			Stabilizing Cap.
C108	1500		73748	GP1500M	IW5D15	GP2L-0015	IFM-215	RF Coupling
C109	100		39396	CNI00KN750	5R5T1	N750L-100	MS-31	Fixed Trimmer
C110	68		33103	GP68M		GP1K-68		Osc. Feedback
C111	15		31353	GP15M		GP1K-15		Osc. Grid Cap.
C112	56		73867					Fixed Trimmer
C113	2		73866					Fixed Trimmer
C114	150		48125	GP150M	5W5T15	GP2K-150	IFM-315	Osc. Grid Cap.
C115	.01	400	71925	P488-01	PTE4S1	GP2-335-01	TM-11	Osc. Plate Decoupling
C116	47		39042	GP47M	5W5Q5	GP1K-47	IFM-45	Conv. Filament Bypass
C117	.005	400	71553	P688-005	PTE6D5	GP2M-005	TM-25	Conv. Plate Dec.
C118	100		39396	CNI00JN750	5R5T1	N750L-100	MS-31	Fixed Trimmer
C119	.05	200	54859	P288-.05	PTE4S5		TM-15	AVC Filter
C120	5000		73473	BPD-5	1D5D5	811-005	29C1	AVC Filter
C121A	4000		74009	GP4000M	1D5D4	811-005	36C2	1st IF Screen Bypass
B	4000			GP4000M	1D5D4	811-005		1st IF Decoupling
C122	5000		73473	BPD-5	1D5D5	811-005	29C1	1st IF Fil. Bypass
C123A	200		*	GP200M	5W5T2	GP2K-200	IFM-32	Diode RF Filter
B	200			GP200M	5W5T2	GP2K-200	IFM-32	Diode RF Filter
C124A	4000		74009	GP4000M	1D5D4	811-005	36C2	2nd IF Screen Bypass
B	4000			GP4000M	1D5D4	811-005		2nd IF Decoupling
C125	.005	400	71553	P688-005	PTE6D5	GP2M-005	TM-25	2nd IF Cath. Bypass
C126	330	500	39640	1468-0003	5W5T3	GP2K-330	IFM-335	Diode Load Cap. †
C127	330	500	39640	1468-0003	5W5T3	GP2K-330	IFM-335	Diode Load Cap. †
C128	.005	400	71553	P688-005	PTE6D5	GP2M-005	TM-25	De-emphasis
C129A	4000		74009	GP4000M	1D5D4	811-005	36C2	DAVC Decoupling
B	4000			GP4000M	1D5D4	811-005		DAVC Decoupling

\* Items C123A, C123B and R143 are combined into one unit, obtainable under MFRG'S part No. 74011.

† When either item C126 or C127 are replaced, replace both with capacitors of equal value.

# RADIO PARTS LIST AND DESCRIPTIONS (Continued)

## RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	RCA	IRC	
			PART No.	PART No.	
R130	10Ω	1			Parasitic Supp.
R131	3.9 Meg.			BTS-3.9 Meg.	Conv. Grid
R132	27KΩ			BTS-27K	Conv. Plate Decoupling
R133	18KΩ			BTS-18K	Osc. Grid
R134	100Ω				Parasitic Supp.
R135	15KΩ			BTS-15K	Osc. Plate Decoupling
R136	68Ω				1st IF Cathode
R137	27KΩ			BTS-27K	1st IF Screen
R138	680Ω			BTS-680	Decoupling
R139	22 Meg.			BTS-22 Meg.	Delayed AVC
R140	150KΩ			BTS-150K	Diode Load
R141	150KΩ			BTS-150K	AVC Network
R142	2.2 Meg.			BTS-2.2 Meg.	AVC Network
R143	47KΩ			BTS-47K	Diode Filter See Note 7
R144	120Ω				2nd FM IF Cathode
R145	15KΩ			BTS-15K	2nd FM IF Screen
R146	680Ω			BTS-680	2nd FM IF Decoupling
R147	100Ω				Balancing
R148	15KΩ			BTS-15K	De-emphasis
R149	3300Ω 5%			BTS-3300-5%	Ratio Det. Diode Load
R150	1200Ω		BTS-1200	Balancing	
R151	39KΩ 5%		BTS-39K-5%	Ratio Det. Diode Load	
R152	470KΩ		BTS-470K	AVC Network	
R153	10KΩ		BTS-10K	De-emphasis	
R154	.51Ω			Filament Dropping-Wire Wound	
R155	.51Ω			Filament Dropping-Wire Wound	

Note 7. Items C123A, C123B and R143 are combined into one unit, obtainable under MFGR'S part No. 74011.

## COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	RCA	MEISSNER	
				PART No.	PART No.	
L41	FM Ant.	0Ω		74024		No. 16 buss tinned, 8 turns per inch, 2 1/2 turns L. H.
L42	AM Ant.	24Ω	2Ω	74020		No. 16 buss tinned, 9 turns per inch, 4 7/8 turns L. H. Pick-up coil 2Ω
L43	FM Osc.	0Ω		74025		
L44	AM Osc.	1Ω	6.5Ω	73744		
L45	1st IF FM	.3Ω	.3Ω	73745		
	AM	8Ω	8Ω			
L46	2nd IF FM	.8Ω	.8Ω	74019		
	AM	7Ω	7Ω			
L47	Ratio Det. Trans.	.9Ω	.3Ω	73743		

## DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					RCA		
					PART No.		
M4	Bayonet	7.5	.2	White	11765		Type #51
M5	Bayonet	7.5	.2	White	11765		Type #51
M6	Bayonet	7.5	.2	White	11765		Type #51 (Jewel lamp used in model 8TK29 only.)

## MISCELLANEOUS

ITEM No.	PART NAME	RCA PART No.	NOTES
M7A	Function Switch	74280	Used with RK135A tuner. Complete with heater SW and shorting SW.
B	Function Switch	74018	
M8	Heater Switch	74031	Used with RK135 tuner. Complete with heater SW and shorting SW.
M9	Shorting Switch	74032	
M10	Tuning Cap.	74017	(20-392MMF) (17-197MMF) (W/T) Radio tuning, selector switch (Walnut and mahogany models) Radio tuning, selector switch (Toasted mahogany models) Lucite bezel and dial scale assembly
	Knob	74056	
	Knob	74057	
	Bezel	74052	

RCA VICTOR MODELS 8TK29, 8TR29 (Ch. KCS32, A, B, C, & Radio Ch. RK135, A)

# DISASSEMBLY INSTRUCTIONS-MODEL 8TR29

1. Remove six push-on type control knobs.
2. Remove five screws holding rear cover. Remove cover.
3. Loosen two screws holding antenna terminal strip. Free strip.
4. Loosen two screws holding audio plug. Free plug.
5. Remove two screws holding top panel. Remove panel.
6. Remove two screws on bottom holding front of cabinet.
7. Loosen two wing nuts on back of front panel. Remove front panel. Remove two panel lamp assemblies from front panel.
8. Remove picture tube base socket, HV cap, and beam bender.
9. Loosen picture tube front mounting clamps. Remove picture tube.
10. Remove speaker plug.
11. Free antenna leads from clamp.
12. Remove six 3/8" hex head bolts holding chassis in cabinet. Remove chassis.
13. Remove four 11/32" hex nuts holding speaker. Remove speaker.

## CRITICAL LEAD DRESS (TV CHASSIS)

1. The ground bus from pin 2 and the center shield of V11 socket should not be shortened or rerouted.
2. Do not change the dress of the filament leads or the by-pass capacitors in the picture or sound IF circuits. The filament leads between V11, V12, V13 should be down against the chassis and away from grid or plate leads.
3. 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.
4. Picture IF coupling capacitors C28, C33, C37 and C45 should be up and away from the chassis and should be clear of the pix IF transformer adjustments by at least 1/4 inch. If the dress of any of these capacitors is changed, the IF alignment should be rechecked.
5. Leads to L32 and L31 must be as short as possible.
6. Dress peaking coils L35, L34 and L36 up and away from the chassis.
7. Dress C61 across tube pins 5 and 6 with leads not exceeding 3/8 inch.
8. Dress the blue lead from pin 5 of V13 down against the chassis.
9. Dress C52 and C53 up and away from the chassis.
10. Dress the yellow lead from the picture control away from the chassis. Dress the yellow lead from pin 8 of V9 of V9 away from the chassis.
11. Dress the green lead from pin 2 of V9 away from the chassis.
12. Dress R102, R101, R105, R108 and R103 up and away from the chassis.
13. The leads to the volume control should be dressed down against the chassis and away from V11 and V12.
14. Contact between the RF oscillator frequency adjustment screws and the oscillator coils or channel switch eyelets must be avoided.
15. Dress leads from L39 (width control coil) away from the transformer frame.

## CRITICAL LEAD DRESS (AM-FM CHASSIS)

1. Ground lead on pin 2 of V26 and V27 should be dressed down flat on chassis.
2. Dual .005MFD capacitors and diode filter should be dressed to clear the bottom of the cabinet.
3. Dress C122 across V26 sockets with short and direct leads.
4. Dress V26 plate lead from pin 5 down to the chassis.
5. Dress AVC lead from R152 to switch down to chassis and against back of gang mounting plate.
6. Dress lead from pin 6 of V29 down to chassis and against back of gang mounting plate.
7. Dress AVC lead from 1st IF to switch against chassis and against gang mounting plate.
8. Dress lead from switch to pin 1 of V25 against plate supporting gang.
9. Dress all insulated FM leads down to chassis.
10. Connect C108 with short lead to pin 6 of V25 keeping body of cap away from plate lead and switch terminals.
11. The coupling between L41 and L43 should be adjusted to give proper injection voltage to the mixer grid. This has been found to be correct when the distance between adjacent end turns is 3/8" to 7/16" measured at top of the form.
12. Dress cabled leads away from antenna transmission lines.
13. Dress all uninsulated bus wire so as to avoid short circuits.