

DUMONT
MODELS RA-105B, RA-108A

DUMONT MODEL RA-108A (BRADFORD)

TRADE NAME	Dumont, Models RA-105B (Sussex), RA-108A (Bradford or Mansfield)	
MANUFACTURER	Allen B. Dumont Laboratories, Inc., 2 Main Ave., Passiac, New Jersey	
TYPE SET	TV-FM Receiver	
TUBES	Thirty Six (Model RA-108A) Thirty Five (Model RA-105B)	
POWER SUPPLY	110-120 Volts AC-60 Cycle	RATING 4.2 Amp. at 117 Volts AC
TUNING RANGE	44 thru 216MC (Continuous Tuning)	

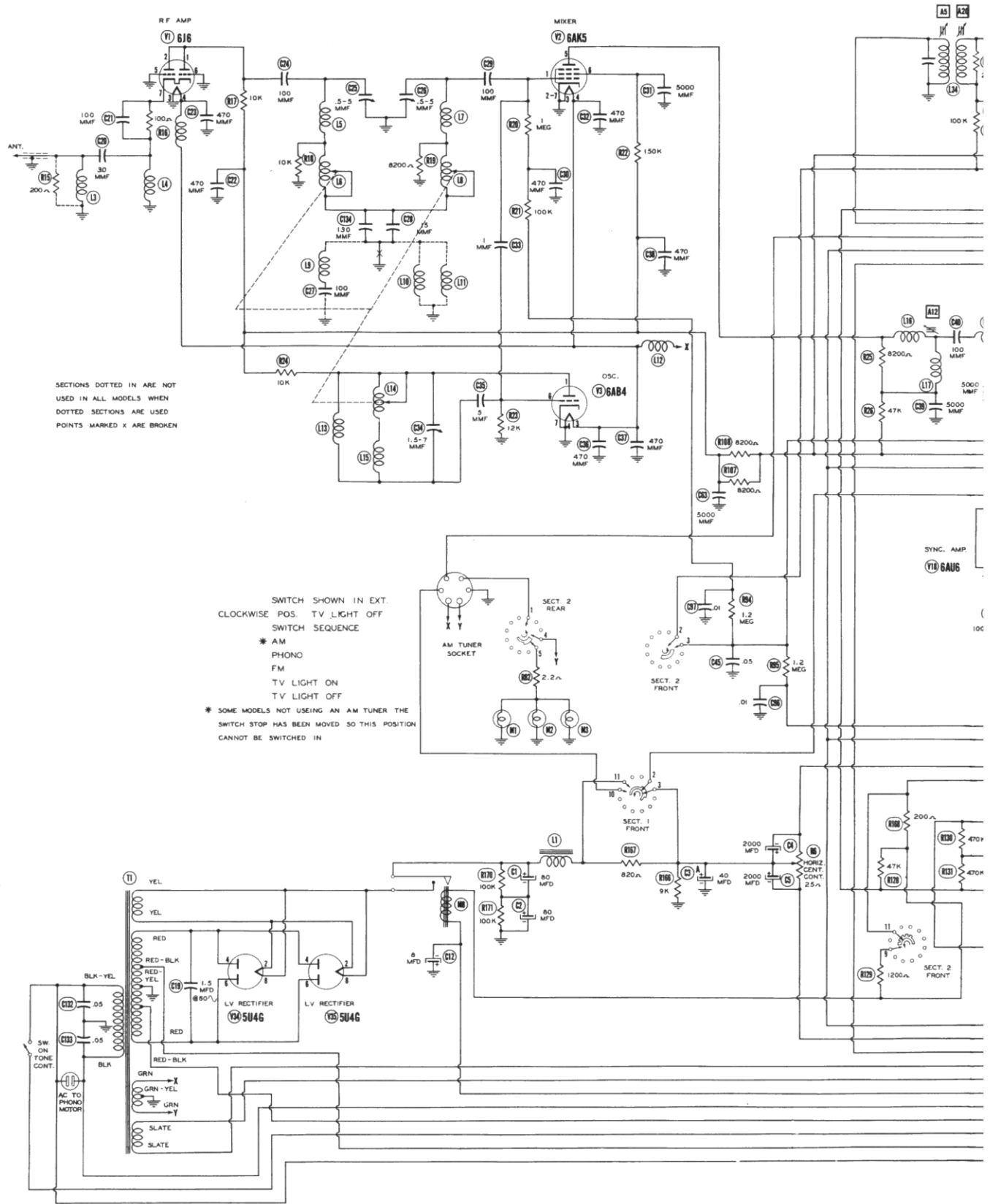
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HOWARD W. SAMS & CO., INC. • Indianapolis Indiana

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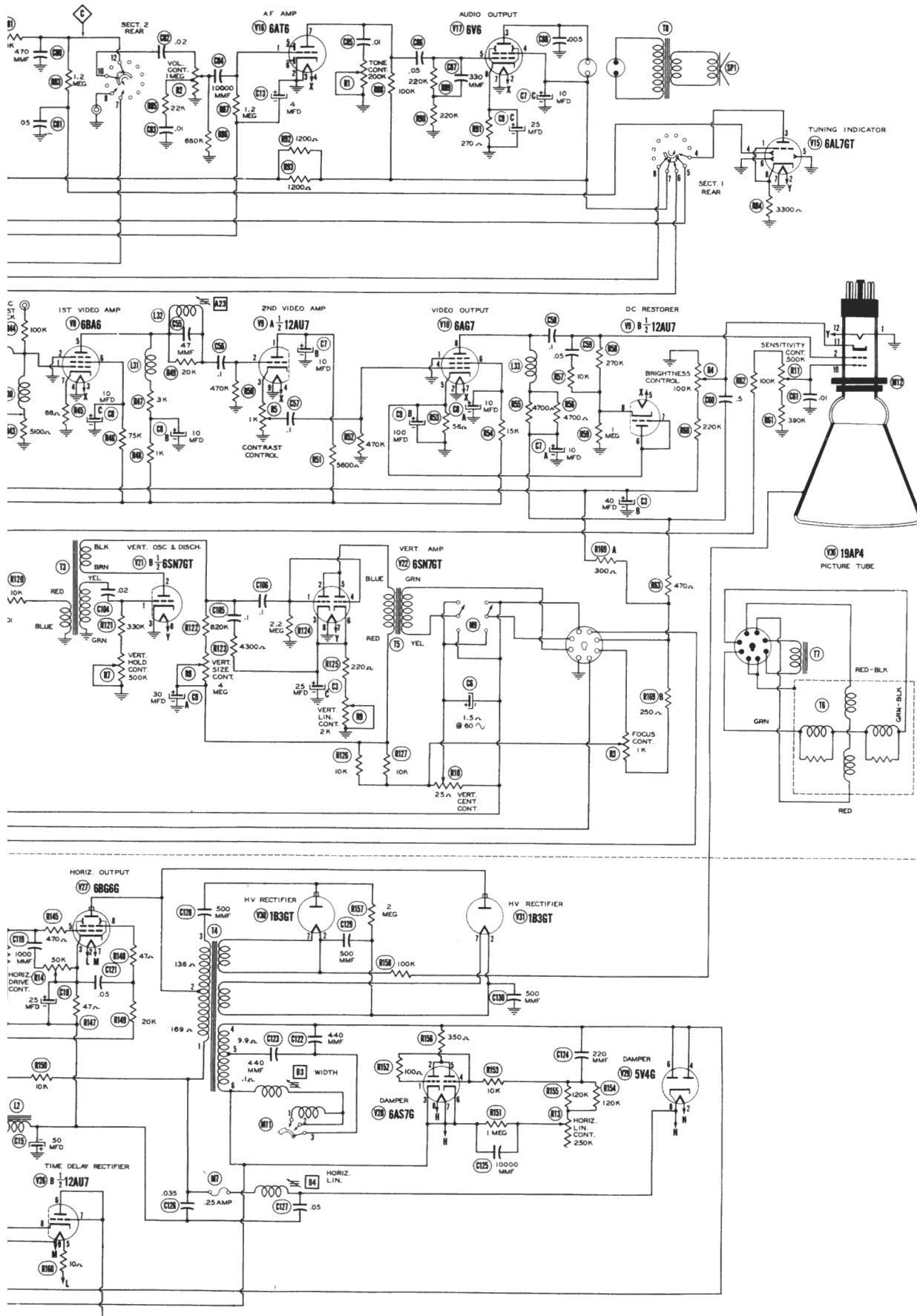
SECTIONS DOTTED IN ARE NOT USED IN ALL MODELS WHEN DOTTED SECTIONS ARE USED POINTS MARKED X ARE BROKEN

SWITCH SHOWN IN EXT. CLOCKWISE POS. TV LIGHT OFF SWITCH SEQUENCE

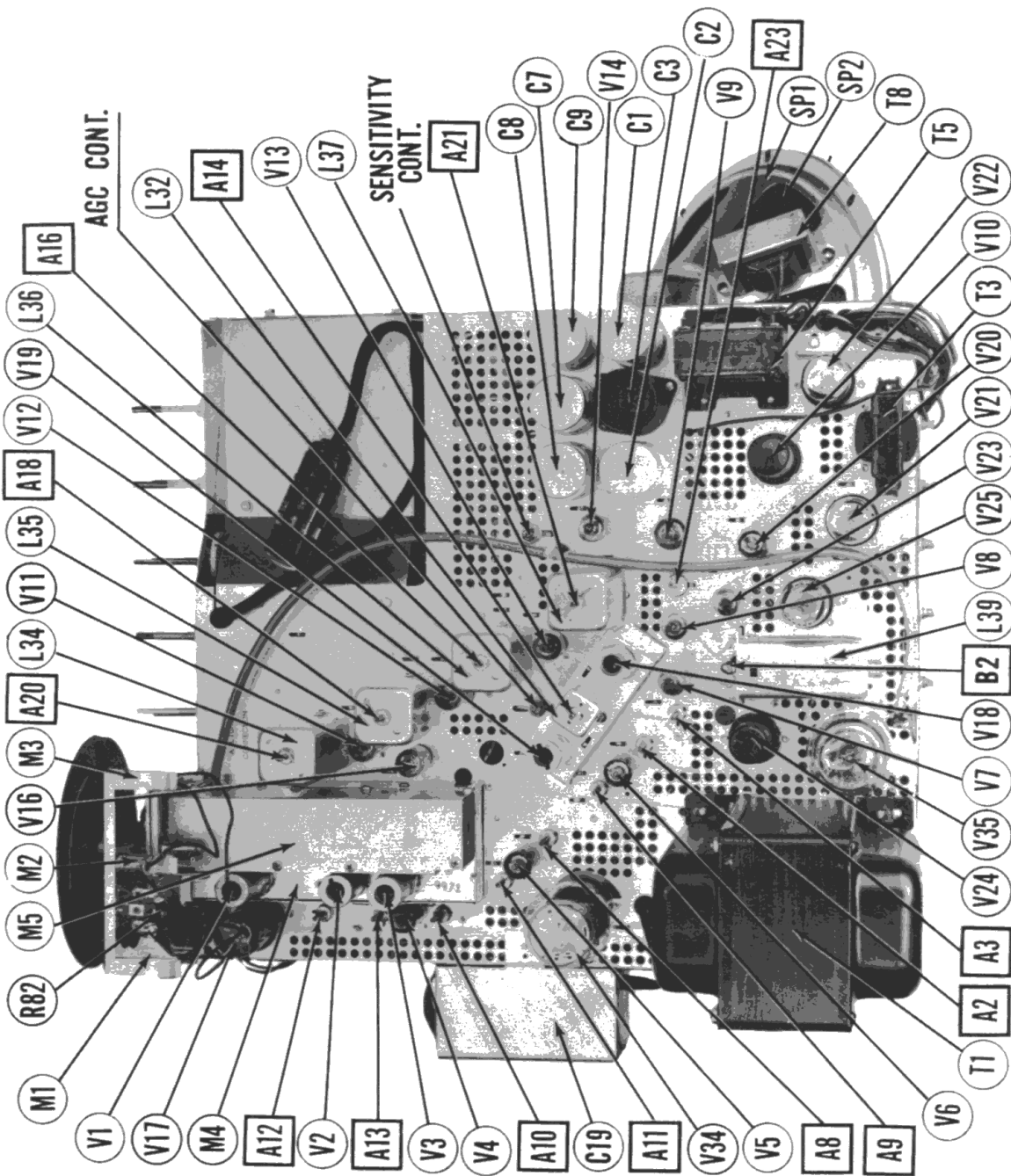
- * AM
- PHONO
- FM
- TV LIGHT ON
- TV LIGHT OFF

* SOME MODELS NOT USING AN AM TUNER THE SWITCH STOP HAS BEEN MOVED SO THIS POSITION CANNOT BE SWITCHED IN

A PHOTOFAC STANDARD NOTATION SCHEMATIC
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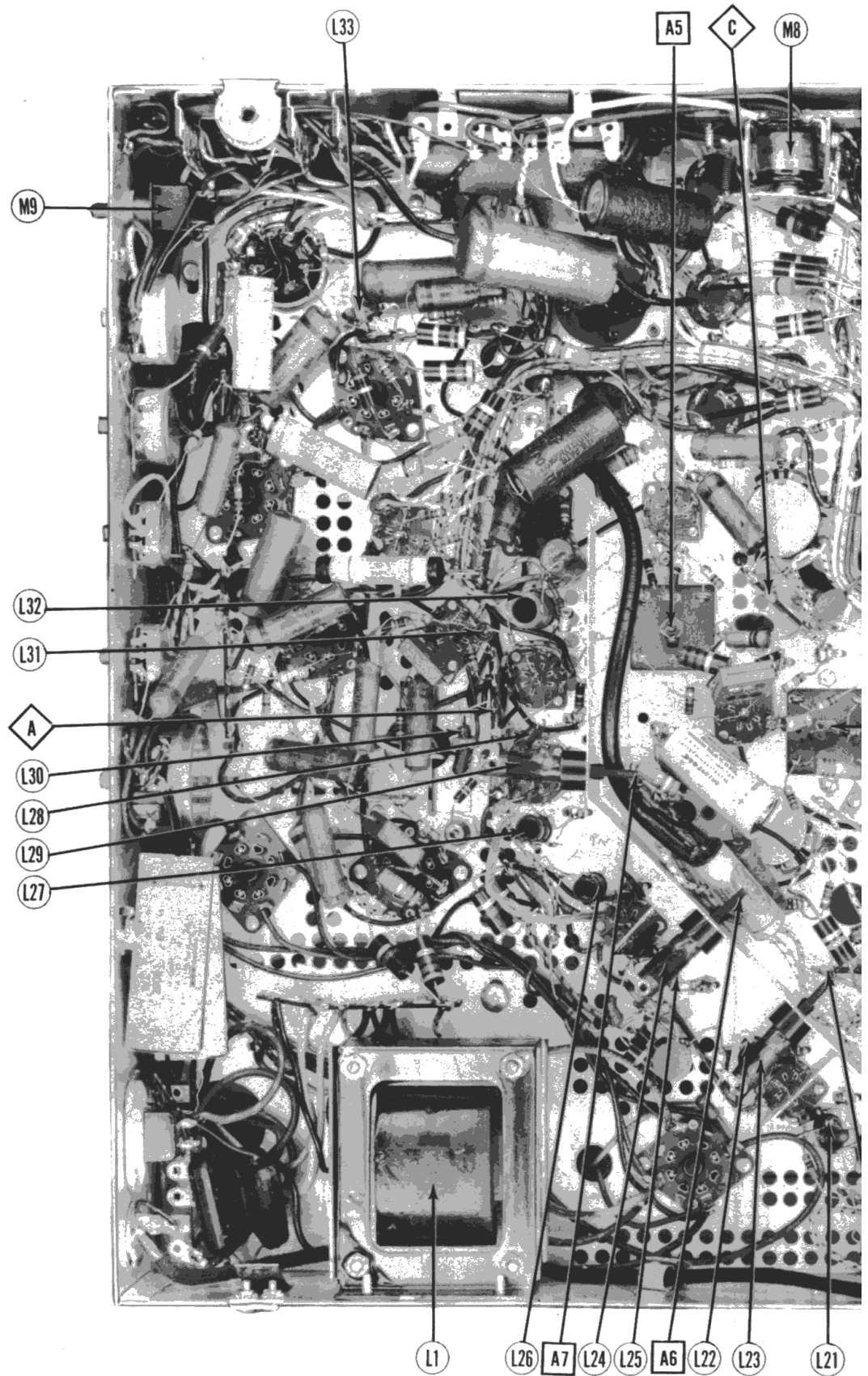


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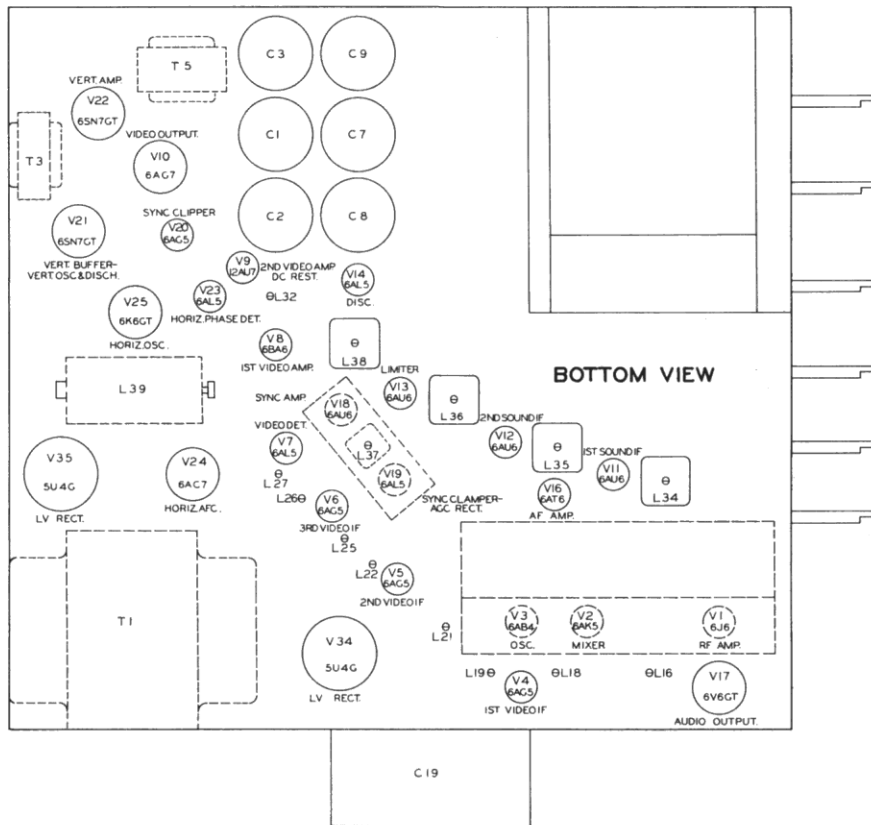
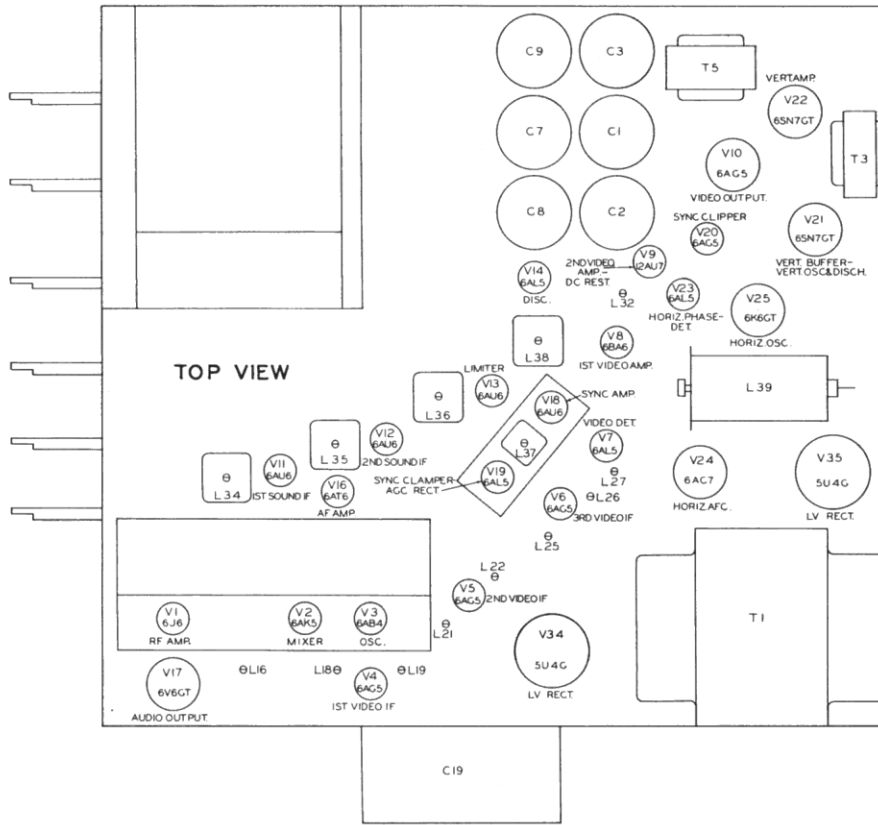
CHASSIS TOP VIEW

DUMONT
 MODELS RA-105B, RA-108A



CHASSIS BOTTOM VIEW-TRANS., INDUCT

DUMONT
MODELS RA-105B, RA-108A



TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

During alignment the high voltage connector should be securely taped.
Do not attempt to operate this set without all of the interconnecting cables in place.

VIDEO IF ALIGNMENT

Remove the local oscillator tube (V3) from its socket to prevent erroneous indications.
Connect the negative lead of a 3 volt battery to point ⓑ , connect the positive lead to chassis.
Turn the "LOCAL-DISTANCE" switch to "LOCAL".
Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. .005MFD	High side to pin 1 (Grid) of 6AG5 (V6). Low side to chassis.	24MC (10MC SWP)	21.9MC 25.65MC 26.4MC	Any	Vert. Amp. to Point ⓐ . Low side to chassis.	A1, A2, A3	Adjust for response curve similar to Fig. 2 with markers as shown. A1 effects the bandwidth, A2 and A3 effect the marker placement.
2. .005MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	Not used	21.9MC (400% AM Mod.)	"	"	A4, A5	Adjust for MINIMUM 400% indication on scope.
3. .005MFD	"	"	27.9MC (400% Mod.)	"	"	A6	"
4. .005MFD	"	"	20.4MC (400% Mod.)	"	"	A7	"
5. .005MFD	High side to pin 1 (Grid) of 6AG5 (V5). Low side to chassis.	24MC (10MC SWP)	22.4MC 22.9MC 25.65MC 26.4MC	"	"	A8, A9	Adjust for response curve similar to Fig 3 with markers as shown.
6. .005MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	"	21.9MC 22.9MC 26.4MC	"	Vert. Amp. thru probe detector (Fig. 1) to pin 5 (plate) of 6AG5 (V5). Low side to chassis.	A10, A11	Adjust for response curve similar to Fig. 4 with markers as shown.
7. .005MFD	"	"	22.4MC 22.9MC 25.65MC 26.4MC	"	Vert. Amp. to Point ⓐ . Low side to chassis.		Check for response curve similar to Fig. 5. If necessary SLIGHTLY retouch A10 and A11 for optimum response.
8. Direct	High side to an ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	"	22.4MC 22.9MC 25.65MC 26.4MC	"	"	A12, A13	Adjust for response curve similar to Fig 6 with markers as shown.
9. Direct	"	Not used	26.4MC (Unmod.)	"	Use VTVM. DC. Probe to point ⓑ . Common to chassis.	A14, A15	Adjust for maximum deflection.

SOUND IF ALIGNMENT

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. .005MFD	High side to pin 1 (Grid) of 6AU6 (V12). Low side to chassis.	21.9MC (1MC SWP)	21.9MC	Any	Vert. Amp. thru probe detector (Fig 1) to pin 5 (plate) of 6AU6 (V13). Low side to chassis.	A16, A17	Adjust for maximum amplitude and symmetry as per Fig. 7.
11. .005MFD	High side to pin 1 (Grid) of 6AU6 (V11). Low side to chassis.	"	"	"	"	A18, A19	"
12. .005MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	"	"	"	"	A20	"
13. .005MFD	"	"	"	"	Vert. Amp. to Point ⓐ . Low side to chassis.	A21, A22	Adjust A21 so 21.9MC marker occurs at center of diagonal line as per Fig 8. Adjust A22 for maximum amplitude and straightness of crossover lines.

4.5MC TRAP ADJUSTMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
14. .005MFD	High side to pin 1 (Grid) of 6BA6 (V8). Low side to chassis.	Not used	4.5MC (400% AM Mod.)	Any	Vert. Amp. thru probe detector (Fig. 1) to pin 2 (Grid) of picture tube.	A23	Adjust for MINIMUM 400% response on scope.

THE OSCILLATOR, RF AND MIXER CIRCUITS IN THIS RECEIVER ARE PRE-SET AT THE FACTORY AND ARE VERY STABLE, THEY SHOULD NOT REQUIRE ADJUSTMENT IN THE FIELD.

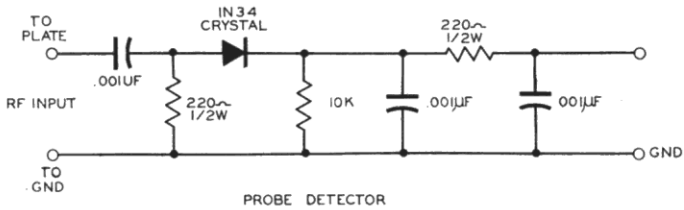
LOCAL DISTANCE TRIMMER ADJUSTMENT

Tune in a weak TV station and adjust the tuning control for best sound, if no weak station is available use an attenuator between the antenna receiver, adjust A24 for best picture.

AGC THRESHOLD CONTROL ADJUSTMENT

Turn the set on and tune in a local signal. Set the contrast control to the mid-position of its range. Adjust the AGC threshold control for a normal picture with the brightness control correctly set.

ALIGNMENT INSTRUCTIONS (CONT.)



PROBE DETECTOR
FIG. 1

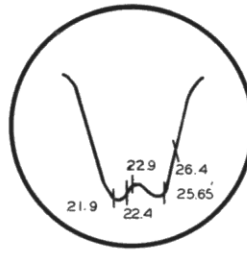


FIG. 2



FIG. 3

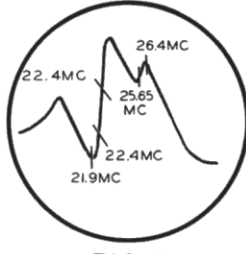


FIG. 4



FIG. 5

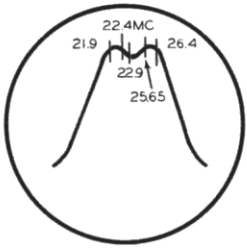


FIG. 6

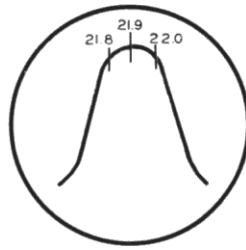


FIG. 7

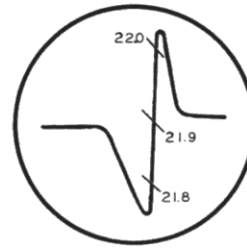


FIG. 8

DISASSEMBLY INSTRUCTIONS

1. Remove seven push-on type control knobs.
 2. Unscrew set screw in tuning knob and remove tuning knob.
 3. Remove eight screws holding rear cover, hinge cover upward.
 4. Remove picture tube base socket and disconnect HV at breaker connection.
 5. Disconnect deflection coil plug.
 6. Remove both plugs from power unit.
 7. Remove phono power and audio plugs from chassis.
 8. Disconnect speaker at breaker plug.
 9. Remove tuning indicator from snap type holder.
 10. Remove four 7/16" hex head bolts holding TV chassis. Remove chassis from cabinet.
 11. Remove four 7/16" hex head bolts holding power unit. Remove power unit from cabinet.
 12. Remove four 11/32" hex nuts holding speaker and remove speaker.
- NOTE:** Picture tube may be left mounted in cabinet.

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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	6J8	70VDC	0V.	6.3VAC	0V.	0V.	1.2VDC			
V 2	6AK5	0V.	0V.	6.3VAC	125VDC	55VDC	0V.			
V 3	6AB4	180VDC	0V.	6.3VAC	0V.	0V.	0V.			
V 4	6AG5	-2VDC	0V.	6.3VAC	115VDC	115VDC	0V.			
V 5	6AG5	-4VDC	0V.	6.3VAC	145VDC	145VDC	0VDC			
V 6	6AG5	0V.	1.2VDC	6.3VAC	0V.	115VDC	1.2VDC			
V 7	6AL5	0V.	0V.	6.3VAC	0V.	0V.	-2.7VDC			
V 8	6BA6	-4VDC	0V.	6.3VAC	0V.	215VDC	70VDC	0VDC		
V 9	12AU7	200VDC	2VDC	6.3VAC	2.3VDC	2.3VDC	2.8VDC	2.8VDC	0V.	
V 10	6AG7	0V.	0V.	6.3VAC	0V.	2.2VDC	135VDC	6.3VAC	205VDC	
V 11	6AU6	-2VDC	0V.	6.3VAC	0V.	230VDC	140VDC	8VDC		
V 12	6AU6	-2VDC	0V.	6.3VAC	0V.	230VDC	140VDC	8VDC		
V 13	6AU6	-4VDC	0V.	6.3VAC	0V.	195VDC	41VDC	1VDC		
V 14	6AL5	-7VDC	-5VDC	6.3VAC	0V.	0V.	0V.	-11VDC		
V 15	6AL7GT	1 VDC	6.3VAC	245VDC	0V.	0V.	0V.	1 VDC		
V 16	6AT6	-5VDC	0V.	6.3VAC	0V.	0V.	130VDC			
V 17	6V6GT	0V.	6.3VAC	205VDC	215VDC	0V.	0V.	11 VDC		
V 18	6AU6	0V.	0V.	6.3VAC	250VDC	250VDC	0V.			
V 19	6AL5	195VDC	0V.	6.3VAC	41VDC	41VDC	41VDC			
V 20	6AG5	-4VDC	0V.	6.3VAC	0V.	80VDC	0V.	80VDC		
V 21	6SN7GT	-40VDC	0V.	6.3VAC	20VDC	30VDC	0V.			
V 22	6SN7GT	-1 VDC	300VDC	19VDC	0V.	50VDC	10VDC	6.3VAC		
V 23	6AL5	-5VDC	-2VDC	6.3VAC	-1VDC	300VDC	3VDC	6.3VAC	0V.	
V 24	6AC7	0V.	6.3VAC	0V.	-1.2VDC	0V.	-2.4VDC			
V 25	6K6GT	0V.	0V.	170VDC	175VDC	70VDC	0V.	150VDC		
V 26	12AU7	170VDC	6.3VAC	115VDC	46.6VAC	-32VDC	-2.2VDC	6.3VAC	4VDC	
V 27	6BG6G	60V.	46.6VAC	115VDC	46.6VAC	-48VDC	-48VDC	-53VDC	40V.	TOP CAP
V 28	6AS7G	280VDC	330VDC	400VDC	400VDC	400VDC	400VDC	400VDC	400VDC	
V 29	5Y4G	0V.	540VDC	-35VDC	400VDC	400VDC	400VDC	540VDC		
V 30	1B3GT									
V 31	1B3GT									
V 32	6X4	-195VDC	0V.	6.3VAC	0V.	0V.	-195VDC	190VAC		
V 33	6X4	-195VDC	0V.	6.3VAC	0V.	0V.	-195VDC	190VAC		
V 34	5U4G	Inf.	440VDC	Inf.	460VAC	Inf.	460VAC	Inf.	440VDC	
V 35	5U4G	Inf.	440VDC	Inf.	460VAC	Inf.	460VAC	Inf.	440VDC	
V 36	19AP4	0V.	1.2VDC	PIN 10 140VDC	PIN 11 75VDC	PIN 12 6.3VAC				

* DO NOT MEASURE.
MEASURED FROM PIN 6 OF V33.

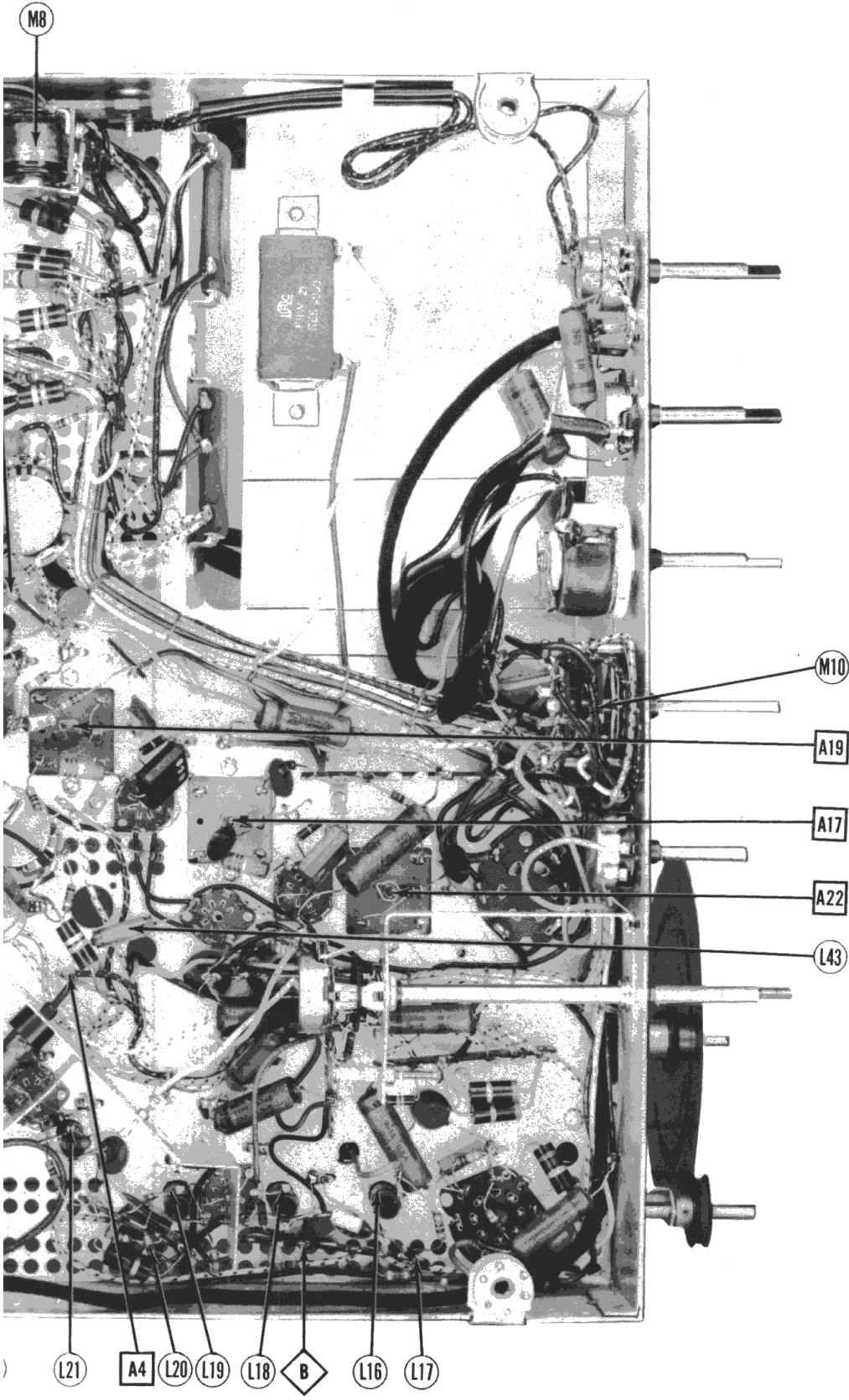
RESISTANCE READINGS (SEE NOTE #1)

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6J8	118KΩ	118KΩ	0Ω	.1Ω	0Ω	0Ω	100Ω		
V 2	6AK5	5 Meg.	0Ω	0Ω	.1Ω	150KΩ	118KΩ	0Ω		
V 3	6AB4	118KΩ	Inf.	.1Ω	0Ω	12KΩ	0Ω			
V 4	6AG5	3 Meg.	Inf.	.1Ω	0Ω	113KΩ	113KΩ	0Ω		
V 5	6AG5	3 Meg.	68Ω	.1Ω	0Ω	113KΩ	112KΩ	68Ω		
V 6	6AG5	.1Ω	100Ω	.1Ω	0Ω	113KΩ	113KΩ	100Ω		
V 7	6AL5	.1Ω	Inf.	0Ω	.1Ω	0Ω	Inf.	500Ω		
V 8	6BA6	500Ω	0Ω	.1Ω	0Ω	15KΩ	175KΩ	68Ω		
V 9	12AU7	17KΩ	470KΩ	1000Ω	.1Ω	.1Ω	56Ω	56Ω	1 Meg.	0Ω
V 10	6AG7	0Ω	0Ω	Inf.	470KΩ	56Ω	118KΩ	.1Ω	15.8KΩ	
V 11	6AU6	1.7 Meg.	0Ω	.1Ω	0Ω	12KΩ	135KΩ	82Ω		
V 12	6AU6	1.7 Meg.	0Ω	.1Ω	0Ω	11.7KΩ	138KΩ	82Ω		
V 13	6AU6	270KΩ	0Ω	.1Ω	0Ω	19KΩ	112.5KΩ	82Ω		
V 14	6AL5	200KΩ	100KΩ	.1Ω	0Ω	0Ω	0Ω	100KΩ		
V 15	6AL7GT	3.3KΩ	.1Ω	11.4KΩ	1.5 Meg.	0Ω	0Ω	0Ω	3.3KΩ	
V 16	6AT6	1.3 Meg.	0Ω	0Ω	.1Ω	Inf.	Inf.	110KΩ		
V 17	6V6GT	0Ω	.1Ω	11.7KΩ	11.4KΩ	440KΩ	220KΩ	0Ω	270Ω	
V 18	6AU6	0Ω	0Ω	0Ω	.1Ω	11.8KΩ	140KΩ	100Ω		
V 19	6AL5	54KΩ	470KΩ	.1Ω	0Ω	36KΩ	24KΩ	0Ω	24KΩ	
V 20	6AG5	1.5 Meg.	0Ω	0Ω	.1Ω	148KΩ	118KΩ	0Ω		
V 21	6SN7GT	330KΩ	1550KΩ	0Ω	1.2 Meg.	134KΩ	0Ω	0Ω	.1Ω	
V 22	6SN7GT	2.2 Meg.	19KΩ	2.2KΩ	2.2 Meg.	18KΩ	2.2KΩ	.1Ω	0Ω	
V 23	6AL5	1 Meg.	520KΩ	.1Ω	0Ω	48KΩ	Inf.	500KΩ		
V 24	6AC7	0Ω	.1Ω	0Ω	1.4 Meg.	10Ω	121KΩ	0Ω	124KΩ	
V 25	6K6GT	0Ω	0Ω	18KΩ	110KΩ	47KΩ	520KΩ	.1Ω	0Ω	
V 26	12AU7	480KΩ	4250KΩ	110KΩ	440	5.6KΩ	5.6KΩ	118KΩ	0Ω	TOP CAP F200Ω
V 27	6BG6G	Inf.	4.5Ω	400Ω	7KΩ	11.3 Meg.	11KΩ	40Ω	122KΩ	
V 28	6AS7G	11.3 Meg.	1440Ω	185Ω	11.3 Meg.	1440Ω	185Ω	185Ω	187Ω	
V 29	5Y4G	Inf.	Inf.	Inf.	190Ω	Inf.	190Ω	Inf.	Inf.	TOP CAP Inf.
V 30	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP Inf.
V 31	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP F200Ω
V 32	6X4	1.2 Meg.	Inf.	.1Ω	0Ω	Inf.	1.2 Meg.	2.5Ω		
V 33	6X4	1.2 Meg.	Inf.	.1Ω	0Ω	Inf.	1.2 Meg.	2.5Ω		
V 34	5U4G	Inf.	6KΩ	Inf.	5Ω	Inf.	6.5Ω	Inf.	6KΩ	
V 35	5U4G	Inf.	6KΩ	Inf.	5Ω	Inf.	6.5Ω	Inf.	6KΩ	
V 36	19AP4	0Ω	1.3 Meg.	PIN 10 1300KΩ	PIN 11 75KΩ	PIN 12 .1Ω				

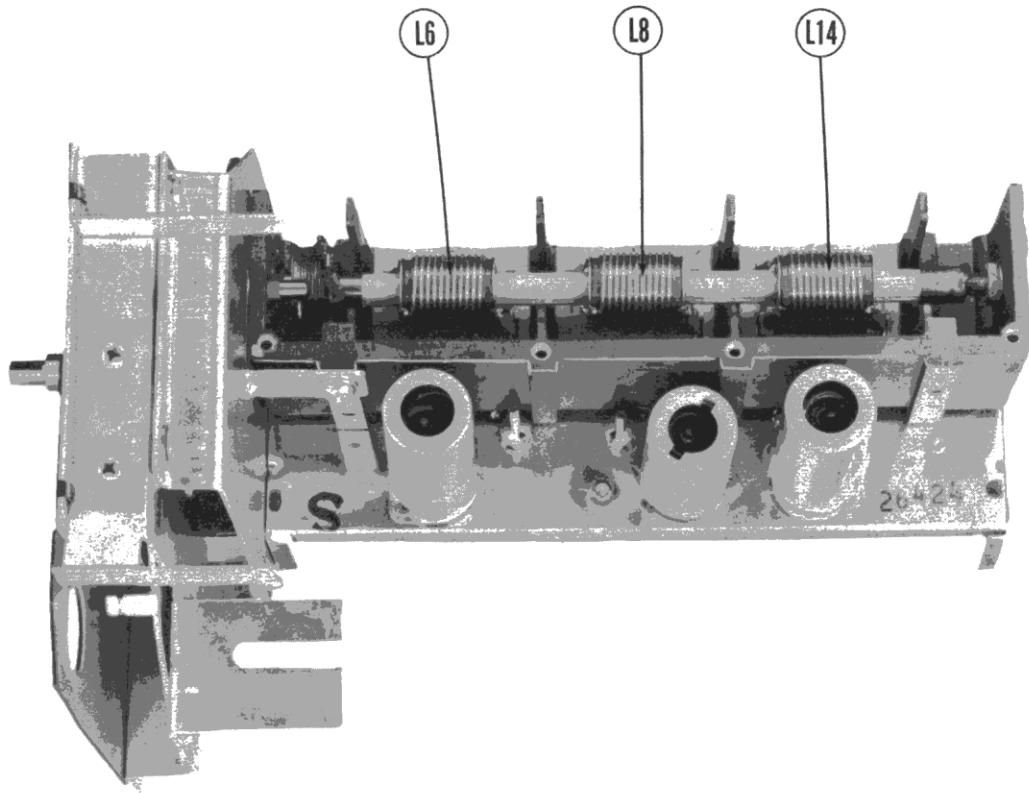
† MEASURED FROM PIN 2 OF V35.
‡ MEASURED FROM PIN 6 OF V33.
§ MEASURED FROM PIN 8 OF V28.

NOTE #1 : MEASURED WITH RELAY #8 CLOSED AND FUNCTION SELECTOR SWITCH IN THE "TV - DIAL LITE OFF" POSITION.

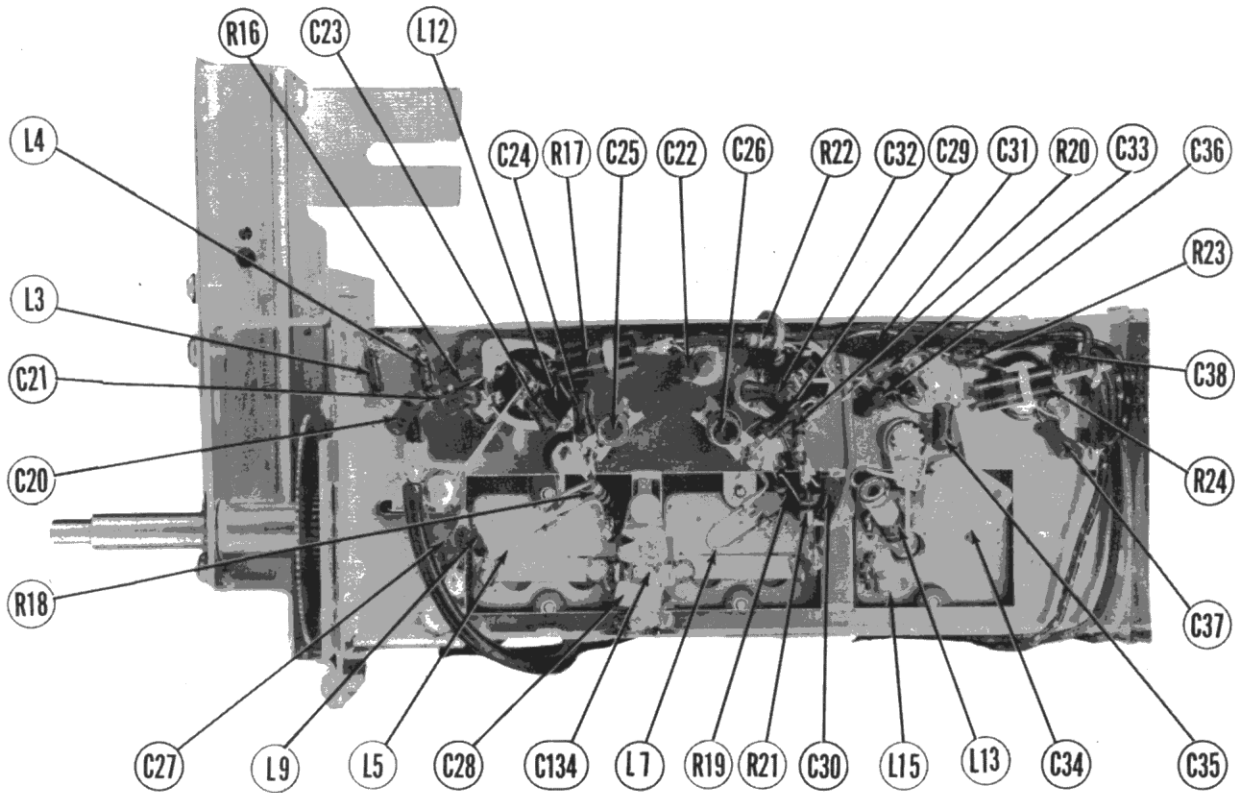
- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.
- Line voltage maintained at 117 volts for voltage readings.
- 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.



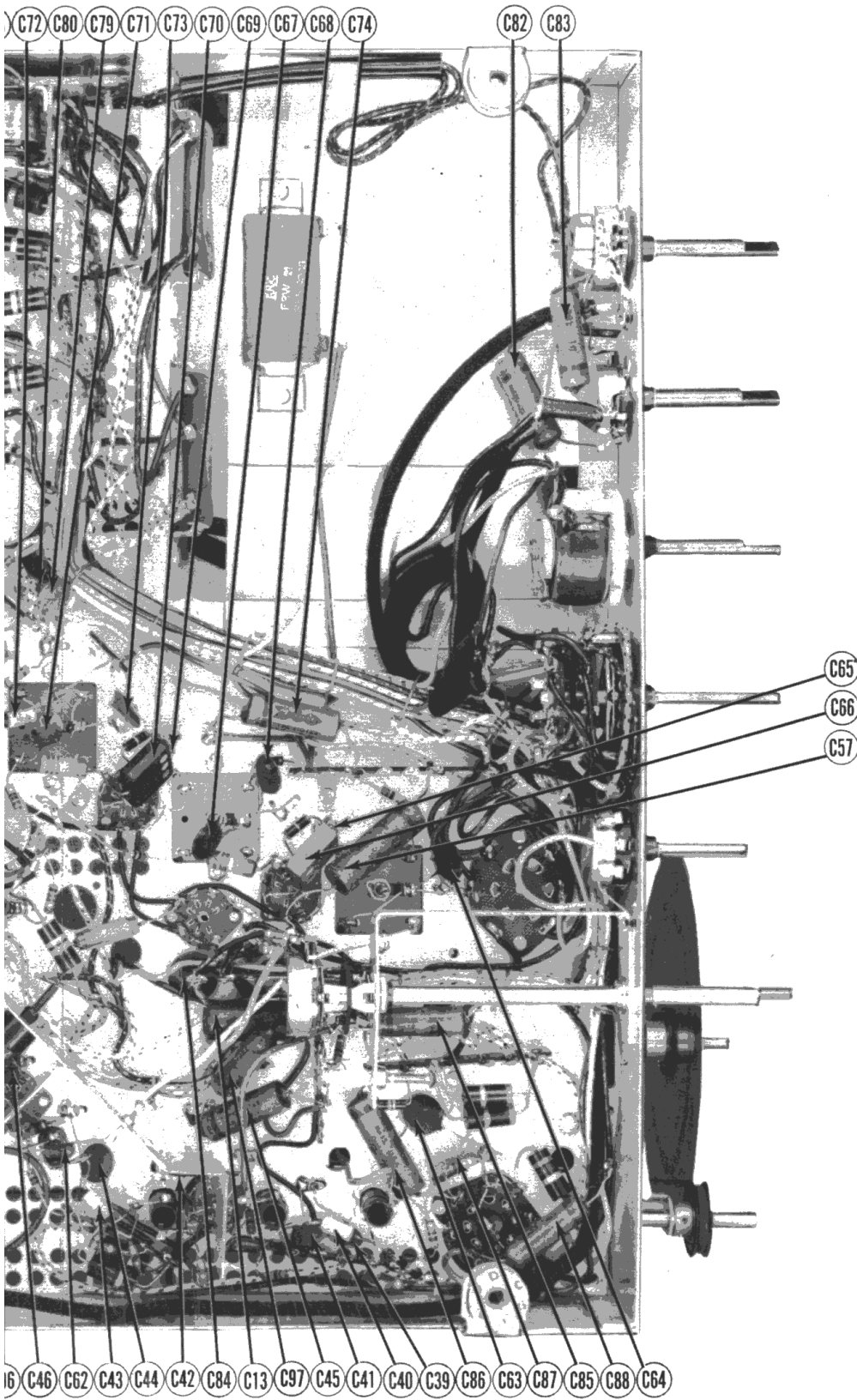
INDUCTOR AND ALIGNMENT IDENTIFICATION



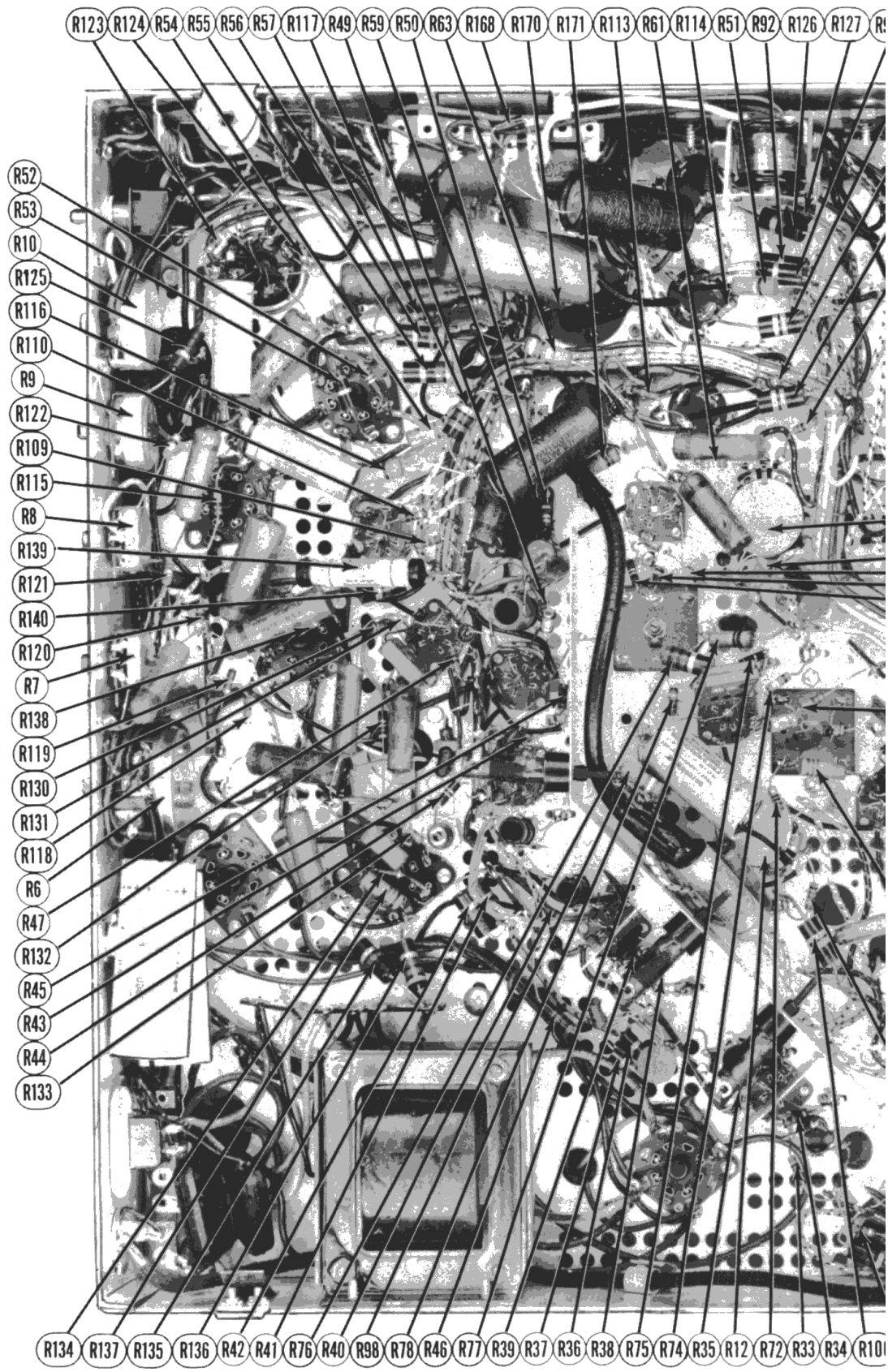
INDUCTUNER-TOP VIEW



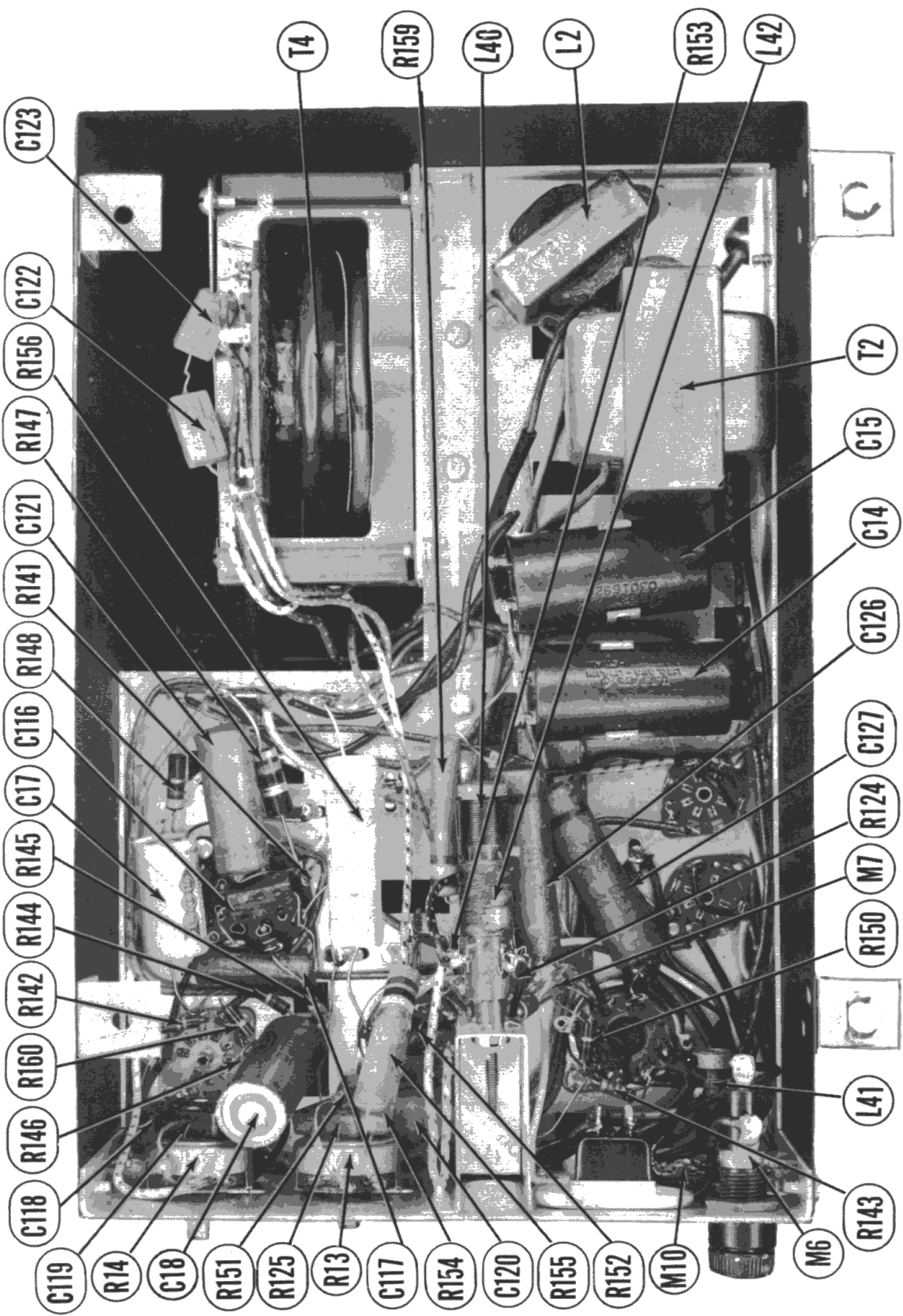
INDUCTUNER-BOTTOM VIEW



CAPACITOR IDENTIFICATION

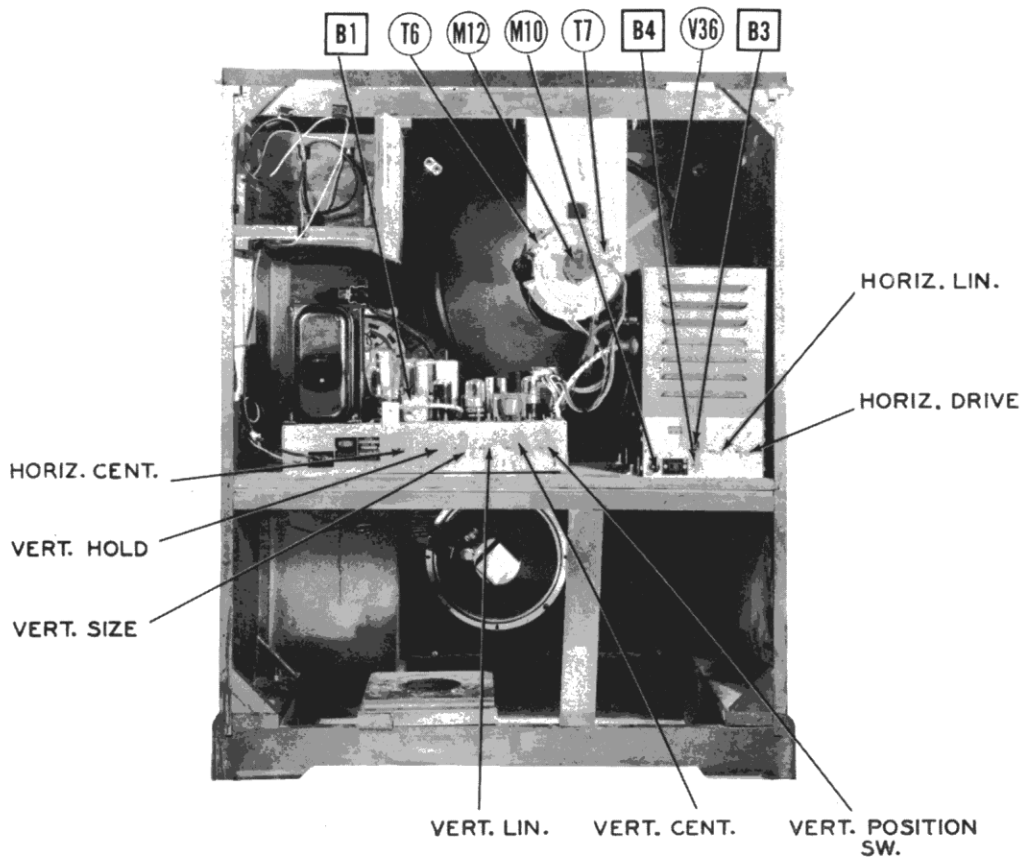


CHASSIS BOTTOM VIEW-RE



HIGH VOLTAGE COMPARTMENT - BOTTOM VIEW

DUMONT
 MODELS RA-105B, RA-108A



CABINET-REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL FREQUENCY ADJUSTMENTS

Rotate the horizontal frequency adjustment (B1) until the picture falls out of "sync." Adjust the control to bring the picture back into sync and note the position where this occurs. Repeat the above procedure but in the opposite direction. The correct setting is mid-way between the two points where picture falls into synchronization.

HORIZONTAL PHASING ADJUSTMENT

Reduce the picture width until both edges are visible. Turn up the brightness control and reduce the contrast control so the normally blanked out edges of the picture are visible. Adjust the phasing adjustment (B2) until the normally blanked edges of the raster are of equal width.

HORIZONTAL SIZE AND LINEARITY ADJUSTMENTS

There are two size adjustments, a coarse adjustment which is a switch on the side of the fly-back power supply case, and a fine adjustment (B3). Set these two adjustments until picture fills the mask horizontally.

Adjust the horizontal drive control and horizontal linearity adjustment (B4) until the picture is linear in the horizontal plane.

PICTURE TUBE SENSITIVITY CONTROL ADJUSTMENT

If the picture tube is replaced, the picture tube sensitivity control (R11) should be adjusted as follows:

Turn the contrast control fully counter-clockwise.

Adjust the brightness control until a VTVM connected between the brightness control arm and chassis measures -45 volts. Adjust R11 until the raster on the screen just disappears.

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		DUMONT PART No.	STANDARD REPLACEMENT		
V1	RF Amplifier	25000190	6J6	7BF	
V2	Mixer	25000180	6AK5	7BD	
V3	Oscillator	25001760	6AB4	5CE	
V4	1st Video IF	25000010	6AG5	7BD	
V5	2nd Video IF	25000010	6AG5	7BD	
V6	3rd Video IF	25000010	6AG5	7BD	
V7	Video Det.	25000020	6AL5	6BT	
V8	1st Video Amp.	25000240	6BA6	7BK	
V9	2nd Video Amp. - DC Restorer	25000130	12AU7	9A	
V10	Video Output	25000580	6AG7	8Y	
V11	1st Sound IF	25000050	6AU6	7BK	
V12	2nd Sound IF	25000050	6AU6	7BK	
V13	Limiter	25000050	6AU6	7BK	
V14	Disc.	25000020	6AL5	6BT	
V15	Tuning Indicator	25000200	6AL7GT	8CH	
V16	RF Amp.	25000040	6AT6	7BT	
V17	Audio Output	25000090	6V6GT	7AC	
V18	Sync. Amp.	25000050	6AU6	7BK	
V19	Sync. Clamper - AGC Rectifier	25000020	6AL5	6BT	
V20	Sync. Clipper	25000010	6AG5	7BD	
V21	Vert. Buffer-Vert. Osc.-Vert. Disch.	25000110	6SN7GT	8BD	
V22	Vert. Amp.	25000110	6SN7GT	8BD	
V23	Hor. Phase Det.	25000020	6AL5	6BT	
V24	Hor. AFC	25000120	6AC7	8N	
V25	Hor. Osc.	25000100	6K6GT	7S	
V26	Hor. Disch. -Time Delay Rectifier	25000130	12AU7	9A	
V27	Hor. Output	25000140	6BG6G	5BT	
V28	Damper	25000290	6AS7G	8BD	
V29	Damper	25000160	5V4G	5L	
V30	HV Rectifier	25000150	1B3GT	3C	
V31	HV Rectifier	25000150	1B3GT	3C	
V32	Bias Rectifier	25000170	6X4	5BS	
V33	Bias Rectifier	25000170	6X4	5BS	
V34	LV Rectifier	25000060	5U4G	5T	
V35	LV Rectifier	25000060	5U4G	5T	
V36A	Picture Tube	25000870	19AP4	12D	
B	Picture Tube	25001560	15DP4	12D	

Used in model RA-108A 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	DUMONT PART No.	AEROVOX PART No.	CENTRALAB PART No.	ERIE PART No.		SPRAGUE PART No.
C1	80	350	03016620	E4A30			TVL-5	Filter
C2	80	350	03015320	E4A28A			TVL-5	Filter
C3A	40	475	03016170	AF8X815B			TVL-32	▲ Filter
B	40	400						■ Filter
C	25	50						▲ Vert. Output Cathode Bypass
C4	2000	6	03016910	PRS6/2000			TVA-2	Hor. Cent. Cont. Bypass
C5	2000	6	03016910	PRS6/2000			TVA-2	Hor. Cent. Cont. Bypass
C6	1.5Ω							
ⓐ	60V	4	03012250	PRS6/1000			TVA-2	Vert. Cent. Cont. Bypass
C7A	10	450	03015580	AF2222J			TVL-36	▲ Decoupling
B	10	450						■ 2nd V. Amp. Plate Byp.
C	10	450						▲ Output Decoupling
D	10	150						Sync. Clipper Plate Dec.
C8A	10	450	03015580	AF2222J			TVL-36	▲ 3rd V. Amp. Screen Byp.
B	10	450						■ 1st V. Amp. Plate Dec.
C	10	450						▲ 1st V. Amp. Screen Byp.
D	10	150						Sync. Clipper Screen Byp.
C9A	30	450	03015590	AF6J205A			TVL-26	▲ Decoupling
B	100	25						■ 3rd V. Amp. Cath. Byp.
C	25	25						▲ Output Cathode Byp.
C10	8	450	03001160	PRS450/8			TVA-21	Vert. Buffer Plate Dec.
C11	8	450	03001160	PRS450/8			TVA-21	Decoupling
C12	8	450	03001160	PRS450/8			TVA-21	Filter
C13	4	150	03013670	PRS150/4			UT-41	Bias Filter
C14	50	250	03016920	AF12F			TVL-3	Bias Filter
C15	50	250	03016920	AF12F			TVL-3	Bias Filter
C16	50	250	03016920	AF12F			TVL-3	Bias Filter †
C17	4	250	03017040	PRS250/4			UT-42	Hor. Disch. Cath. Dec.
C18	25	50	03000040	PRS50/25			TVA-15	Hor. Output Cath. Bypass
C19	1.5 MFD							
ⓐ	60V	950	*					Power Transformer Sec. Shunt
C20	30		03013070	SI30JNPO	D2-30	NPOL-33		RF Coupling
C21	100		03016700	GP100M	D6-101	GP1K-100		RF Cathode Bypass
C22	470		03016480	GP470M	D6-470	GP2K-470		RF Bypass
C23	470		03016480	GP470M	D6-470	GP2K-470		RF Filament Bypass
C24	100		03016700	GP100M	D6-101	GP2K-470		RF Coupling
C25	.5-5		03016650			532-08-.5-5		Variable Trimmer
C26	.5-5		03016650			532-08-.5-5		Variable Trimmer
C27	100		03016700	GP100M	D6-101	GP1K-100		Fixed Trimmer
C28	15		03014580	CI15JNPO	D2-15	GP1K-15		Fixed Trimmer
C29	100		03016700	GP100M	D6-101	GP1K-100		RF Coupling
C30	470		03016480	GP470M	D6-471	GP2K-470		AGC Filter
C31	5000		03016760	BPD-5	D6-502	811-005	29C1	Mixer Screen Bypass
C32	470		03016480	GP470M	D6-471	GP2K-470		Mixer Filament Bypass
C33	1		03012150		D2-1			Osc. Coupling
C34	1.5-7		03016870			TS2A-N300-1.5		Variable Trimmer
C35	5		03016860	SI5DN150		N150K-5		Osc. Grid Cap.
C36	470		03016480	GP470M	D6-471	GP2K-470		Osc. Filament Bypass
C37	470		03016480	GP470M	D6-471	GP2K-470		Filament Bypass
C38	470		03016480	GP470M	D6-471	GP2K-470		RF Bypass

DUMONT MODELS RA-105B, RA-108A

CAPACITORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	DUM(NT PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C39	5000		03015610	BPD-5	D6-502	811-005	29C1	Mixer Plate Decoupling
C40	100		03014380	GPI00M	D6-101	GPIK-100	1FM-31	IF Coupling
C41	5000		03015610	BPD-5	D6-502	811-005	29C1	AGC Filter
C42	5000		03015610	BPD-5	D6-502	811-005	29C1	1st V. IF Decoupling
C43	100		03014380	GPI00M	D6-101	GPIK-100	1FM-31	IF Coupling
C44	5000		03015610	BPD-5	D6-502	811-005	29C1	AGC Filter
C45	.05	200	03000950	P288-05			TM-15	2nd V. IF Decoupling
C46	5000		03015610	BPD-5	D6-502	811-005	29C1	AGC Filter
C47	20		03013800	SI20JNPO	D2-20	NPOK-20	MS-42	Fixed Trimmer
C48	10		03015270	SI10JNPO	D2-10	NPOK-10	MS-41	Fixed Trimmer
C49	5000		03015610	BPD-5	D6-502	811-005	29C1	IF Coupling
C50	5000		03015610	BPD-5	D6-502	811-005	29C1	3rd V. IF Cath. Bypass
C51	5000		03015610	BPD-5	D6-502	811-005	29C1	3rd V. IF Decoupling
C52	2.5		03002720				TM-11	IF Coupling
C53	20		03013800	SI20JNPO	D2-20	NPOK-20	MS-42	Fixed Trimmer
C54	10		03013080	GPI0K	D2-10	NPOK-10	MS-41	V. Diode Filter
C55	47		03012730	CN47KNPO	D2-47	NPOK-50	MS-45	Fixed Trimmer
C56	.1	400	03014040	P488-1			TM-1	Video Coupling
C57	.1	200	03013910	P288-1			TM-1	Video Coupling
C58	.1	600	03011380	P688-1			TM-1	Video Coupling
C59	.05	200	03000950	P288-05			TM-15	Video Coupling
C60	.5	400	03014260	484-5			TC-5	Pic. Tube Cath. Dec.
C61	.01	600	03012560	P688-01	D6-103		TM-11	Acc. Anode Bypass
C62	5		03014610	GP5K	D2-4.7	NPOK-5	MS-55	S. IF Coupling
C63	5000		03015610	BPD-5	D6-502	811-005	29C1	RF Bypass
C64	5000		03015610	BPD-5	D6-502	811-005	29C1	AVC Filter
C65	2.5		03002720				TM-15	Fixed Trimmer
C66	4700	500	03033060	1467-005	D6-472	811-005	1FM-25	1st S. IF Screen Bypass
C67	5000		03015610	BPD-5	D6-502	811-005	29C1	1st S. IF Decoupling
C68	5000		03015610	BPD-5	D6-502	811-005	29C1	AVC Filter
C69	2.5		03002720				TM-15	Fixed Trimmer
C70	4700	500	03033060	1467-005	D6-472	811-005	1FM-25	2nd S. IF Screen Bypass
C71	5000		03015610	BPD-5	D6-502	811-005	29C1	2nd S. IF Decoupling
C72	10		03013080	GPI0K	D6-100	GPIK-10	MS-41	S. IF Coupling
C73	5000		03015610	BPD-5	D6-502	811-005	29C1	AVC Filter
C74	.05	200	03000950	P288-05			TM-15	AVC Filter
C75	4700	500	03033060	1467-005	D6-472	811-005	1FM-25	Limiter Screen Bypass
C76	5000		03015610	BPD-5	D6-502	811-005	29C1	Limiter Decoupling
C77	47		03012730	GP47K	D6-470	GPIK-47	1FM-45	RF Bypass
C78	47		03012730	GP47K	D6-470	GPIK-47	1FM-45	RF Bypass
C79	5000		03015610	BPD-5	D6-502	811-005	29C1	RF Bypass
C80	470		03014420	GP470K	D6-471	GP2K-470	1FM-35	De-emphasis
C81	.05	200	03000950	P288-05			TM-15	Tuning Ind. Filter
C82	.02	400	03001460	P488-02			TM-12	Audio Coupling
C83	.01	400	03001450	P488-01	D6-103	811-01	TM-11	Tone Compensation
C84	10000		03015920	BPD-10	D6-103	811-01	36C1	Audio Coupling
C85	.01	400	03001450	P488-01	D6-103	811-01	TM-11	Tone Compensation
C86	.05	400	03014020	P488-05			TM-15	Audio Coupling
C87	330	500	03020180	1468-00035	D6-331	GP2K-330	1FM-335	Output Grid Bypass
C88	.005	600	03001570	P688-005	D6-502	811-005	TM-25	Output Plate Bypass
C89	1000		03013940	GP1000M	D6-102	GP2L-001	1FM-21	Sync. Amp. Screen Bypass
C90	.1	400	03003400	P488-1			TM-1	Sync. Amp. Screen Dec.
C91	1000		03013940	GP1000M	D6-102	GP2L-001	1FM-21	Sync. Amp. Plate Dec.
C92	5000		03015610	BPD-5	D6-502	811-005	29C1	RF Bypass
C93	5000		03015610	BPD-5	D6-502	811-005	29C1	Filament Bypass
C94	47		03012730	GP47K	D6-470	GPIK-47	1FM-45	RF Bypass
C95	1000		03013940	GP1000M	D6-102	GP2L-001	1FM-21	RF Bypass
C96	.01	400	03001450	P488-01	D6-103	811-01	TM-11	AGC Filter
C97	.01	400	03001450	P488-01	D6-103	811-01	TM-11	AGC Filter
C98	.01	400	03001450	P488-01	D6-103	811-01	TM-11	Sync. Coupling
C99	.1	400	03003400	P488-1			TM-1	Sync. Coupling
C100	82	500	03013540		D2-82		TM-1	Sync. Feedback
C101	.1	400	03003400	P488-1			TM-1	Sync. Coupling
C102	.005	600	03001570	P688-005	D6-502	811-005	TM-25	Integrator Net.
C103	.01	400	03001450	P488-01	D6-103	811-01	TM-11	Integrator Net.
C104	.02	400	03015940	P488-02			TM-12	Vert. Osc. Grid Cap.
C105	.1	400	03003400	P488-1			TM-1	Vert. Discharge
C106	.1	400	03014040	P488-1			TM-1	Vert. Sweep Coupling
C107	47		03012730	CN47KNPO	D6-470	GPIK-47	1FM-45	Hor. Sync. Coupling
C108	10000	300	03033090	1467-01	D6-103		1FM-11	Fixed Trimmer
C109	.005	600	03001570	P688-005	D6-502	811-005	TM-25	AGC Filter
C110	.1	200	03013910	P288-1			TM-1	AFC Filter
C111	.05	200	03000950	P288-05			TM-15	Hor. AFC Screen Bypass
C112	.005	600	03001570	P688-005	D6-502	811-005	TM-25	Hor. AFC Coupling
C113	10000	300	03003420	1467-01			1FM-11	Phase Shifter
C114	.005	600	03001570	P688-005	D6-502	811-005	TM-25	Hor. Osc. Grid Cap.
C115	.05	400	03014020	P488-05			TM-15	Hor. Osc. Screen Bypass
C116	330	500	03020180	1469-00035	D6-331	GP2K-330		Differentiator Net.
C117	.01	400	03001450	P488-01	D6-103	811-01	TM-11	Hor. Sweep Coupling
C118	.01	600	03012560	P688-01	D6-103	811-01	TM-11	Hor. Sweep Coupling
C119	1000	500	03029040	1467-001	D6-102	GP2L-001	1FM-21	Hor. Discharge
C120	.1	600	03011380	P688-1			TM-1	Hor. Discharge Decoupling
C121	.05	600	03015370	P688-05			TM-15	Hor. Output Screen Bypass
C122	440	1500	*					Fixed Trimmer †
C123	440	1500	*					Fixed Trimmer †
C124	220	500	03020160	1468-00025	D6-221	GP2K-220	1FM-325	Hor. Sweep Coupling †
C125	10000	300	03033090	1467-01	D6-103	811-01	1FM-11	Damper Grid Filter †
C126	.035	1000	03014060	PI088-033				Damper Filter
C127	.05	1000	03014070	PI088-05			TR-15	Damper Filter
C128	500	10000	03014410	HV-500		TV1-501		Voltage Doubler Cap.
C129	500	10000	03014410	HV-500		TV1-501		HV Filter
C130	500	10000	03014410	HV-500		TV1-501		HV Filter
C131	47	5000	03015930					Fixed Trimmer †
C132	.05	600	03016500	P688-05			TM-15	Line Filter
C133	.05	600	03016500	P688-05			TM-15	Line Filter
C134	130		03016660					Fixed Trimmer

* Use with transformer of matching color dot. Yellow dot Part No. 03018060, Red dot 03018050, white dot 03018070.
 † Used only in model RA-108A flyback power supply chassis.
 ‡ Used only in model RA-105B flyback power supply chassis.
 § Model RA-105B uses 2200MMF in this application. MFG's Part No. 03029080.
 * Some models use 220MMF 2000V in place of items C122 and C123. MFG's Part No. 03016940.

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	DUMONT PART No.	IRC PART No.	CLAROSTAT PART No.
R1	200KΩ		01007310		01007310
R2	1 Meg.		01007300	Q18-137X	T-103
R3	100KΩ	25	01007330	PR-25-1000	PW-25-1000
R4	100KΩ		01008230	Q11-128	M-49-S
R5A	Switch				
B	1000Ω		01025201		
R6	25Ω	4	01007800		10-25
R7A	500KΩ		01007930	Q11-133	M-58-S
B	Shaft		Not Req.	Not Req.	Not Req.
R8A	4 Meg.		01008570	Q11-141	M-85-S
B	Shaft		Not Req.	Not Req.	Not Req.
R9	2000Ω	2	01007640	W-2000	43-2000
R10	25Ω		01016910	W-25	43-25
R11A	500KΩ		01007400	Q11-133	AM-58-S
B	Shaft		Not Req.	RQ	KSS-3 *
R12A	25KΩ		01014020	Q11-120	AM-40-S
B	Shaft		Not Req.	RQ	KSS-3 *
R13	250KΩ	2	01007630		
R14	50KΩ	2	01018510		

* File slot in shaft to duplicate original.
 Note 1. Not used in model RA-105B.

RESISTOR!

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	DUMONT PART No.	IRC PART No.	ALL RI
R15	200Ω 5%		02030310		Ant. I
R16	100Ω 5%		02030240		RF C
R17	10KΩ		02037890		RF P
R18	10KΩ		02031890		RF P
R19	8200Ω		02031880		Mixer
R20	1 Meg.		02032130		Mixer
R21	100KΩ		02032010		AGC I
R22	150KΩ		02032050		Mixer
R23	12KΩ		02031900		Osc.
R24	10KΩ		02037890		
R25	8200Ω 5%		02030700	BTS-8200-5%	1st Vi
R26	47KΩ		02031970	BTS-47K	Mixer
R27	5600Ω 5%		02030660	BTS-5600	1st Vi
R28	68KΩ 5%		02030920	BTS-68K-5%	2nd V
R29	22KΩ		02037930		1st Vi
R30	22KΩ	2	02037930		1st Vi
R31	10KΩ 20%		02031890	BTS-10K	AGC I
R32	10KΩ		02031890	BTS-10K	AGC I
R33	3000Ω 5%		02030590		2nd V
R34	68Ω		02031630		2nd V
R35	7500Ω 5%		02030690		3rd V

DESCRIPTIONS (Continued)

CONTROLS

NT DATA	CLAROSTAT PART No.	CENTRALAB PART No.	INSTALLATION NOTES
X 1000	01007310		Tone control and switch
	T-103		Volume control, tapped @ 100KΩ
	PW-25-1000		Focus control-Wire Wound
	M-49-S	B-40	Brightness control
			Local-Distance switch
			Contrast control
	10-25		Horiz. centering control-Wire Wound
	M-58-S	AN-59	Vert. hold control
	Not Req.	AK-1	Attach to R7A per instructions
	M-85-S	AN-86	Vert. size control
1	Not Req.	AK-1	Attach to R8A per instructions
	43-2000	V-131	Vert. linearity control
	43-25	V-111	Vert. centering control-Wire Wound
	AM-58-S	AN-59	Sensitivity control
	KSS-3 *	AK-1	Attach to R11A per instructions
	AM-40-S	AN-26	AGC control
	KSS-3 *	AK-1	Attach to R12A per instructions
			Horiz. linearity control-See Note 1
			Horiz. drive control

RESISTORS

IRC PART No.	IDENTIFICATION CODES
	ALL RESISTORS ARE ± 10% UNLESS OTHERWISE STATED.
	Ant. Coil Shunt-See Note 2
	RF Cathode
	RF Plate
	RF Plate Coil Shunt
	Mixer Grid Coil Shunt
	Mixer Grid
	AGC Network
	Mixer Screen
	Osc. Grid
	Osc. Plate
BTS-8200-5%	1st Video IF Coil Shunt
BTS-47K	Mixer Plate Decoupling
BTS-5600	1st Video IF Grid
BTS-68K-5%	2nd Video IF Coil Shunt
	1st Video IF Decoupling
	AGC Network
BTS-10K	2nd Video IF Grid
BTS-10K	2nd Video IF Cathode
	3rd Video IF Coil Shunt
	2nd Video IF Decoupling
	2nd Video IF Decoupling
BTS-15K-5%	3rd Video IF Coil Shunt
	4th Video IF Cathode
BTS-10K-5%	4th Video IF Coil Shunt
	4th Video IF Decoupling
	4th Video IF Decoupling
BTS-100K	Video Det. Diode Load
	Series AGC Test Point
	1st Video Amp. Cathode
	1st Video Amp. Screen
	1st Video Amp. Plate
BTS-1000	1st Video Amp. Plate Decoupling
	Sound Trap Coil Shunt
	2nd Video Amp. Grid
BTA-5600	2nd Video Amp. Plate
BTS-470K	Video Output Grid
BW-1-56	Video Output Cathode
BTA-15K	Video Output Screen
BT-2-4700	Video Output Plate
BT-2-4700	Video Output Plate
BTS-10K	Isolation
BTS-270K	Picture Tube Grid
BTS-1 Meg.	DC Rest. Load
BTS-220K	Voltage Divider
BTS-390K	Voltage Divider
BTS-100K	Voltage Divider
BTA-470	Decoupling
BTS-22K	1st Sound IF Transformer Shunt
BTS-100K	1st Sound IF Grid
	1st Sound IF Cathode
BTA-33K	1st Sound IF Screen
BTS 1000	1st Sound IF Decoupling
	2nd Sound IF Grid
	2nd Sound IF Cathode
BTA 33K	2nd Sound IF Screen
BTS-1000	2nd Sound IF Decoupling
BTS-1.2 Meg.	AVC Network
BTS-270K	Limiting Grid
	Limiting Cathode
	Limiting Screen
BTA-8200	Limiting Decoupling
BTS-10K	Voltage Divider
BTS-100K	Disc. Diode Load
BTS-100K	Disc. Diode Load
BTS-100K	De-emphasis
BW-1-2.2	Series Dial Lamp
BTS-1.2 Meg.	Tuning Ind. Network
BTS-3300	Tuning Ind. Grid
BTS-22K	Tone Compensation
BTS-680K	Volume Control Shunt
BTS-1.2 Meg.	AF Amp. Grid
BTS-100K	AF Amp. Plate
BTS-220K	Output Grid
BTS-220K	Output Grid
BW-2-270	Output Cathode
BT-2-1200	Output Decoupling
BT-2-1200	Output Decoupling
BTS-1.2 Meg.	AGC Network

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	DUMONT PART No.	IRC PART No.	
R95	1.2 Meg.		02032140	BTS-1.2 Meg.	AGC Network
R96	100Ω		02031650	BW-1-100	Sync. Amp. Cathode
R97	1000Ω		02031770	BTS-1000	Sync. Amp. Screen
R98	39KΩ		02034960	BTA-39K	Sync. Amp. Screen Decoupling
R99	1000Ω		02031770	BTS-1000	Sync. Amp. Plate Decoupling
R100	100KΩ		02038010	BT-2-100K	Voltage Divider
R101	1000Ω		02031770	BTS 1000	Sync. Clamper Load
R102	1.2 Meg.		02032140	BTS-1.2 Meg.	AGC Network
R103	470KΩ		02032090	BTS-470K	AGC Rect. Diode Load
R104	18KΩ		02031920	BTS-18K	Sync. Clamper Load
R105	22KΩ		02031930	BTS-22K	Sync. Coupling
R106	27KΩ		02031940	BTS-27K	Voltage Divider
R107	8200Ω		02037880	BT-2-8200	Voltage Dropping
R108	8200Ω		02037880	BT-2-8200	Voltage Dropping
R109	1.5 Meg.		02032150	BTS-1.5 Meg.	Sync. Clipper Grid
R110	22KΩ		02031930	BTS-22K	Sync. Clipper Plate
R111	100KΩ		02038010	BT-2-100K	Sync. Clipper Plate Decoupling
R112	100KΩ		02038010	BT-2-100K	Sync. Clipper Screen
R113	15KΩ 5%		02030760	BTS-15K-5%	Voltage Divider
R114	27KΩ		02031940	BTS-27K	Voltage Divider
R115	1.2 Meg.		02032140	BTS-1.2 Meg.	Vert. Buffer Grid
R116	5600Ω		02034860	BTA-5600	Vert. Buffer Plate
R117	27KΩ		02037940	BT-2-27K	Vert. Buffer Plate Decoupling
R118	10KΩ		02031890	BTS-10K	Integrator Network
R119	10KΩ		02031890	BTS-10K	Integrator Network
R120	10KΩ		02031890	BTS 10K	Integrator Network
R121	330KΩ		02032070	BTS-330K	Vert. Osc. Grid
R122	820KΩ		02032120	BTS-820K	Vert. Osc. Plate
R123	4300Ω 5%		02030630		Vert. Peaking
R124	2.2 Meg.		02032170	BTS-2.2 Meg.	Vert. Amp. Grid
R125	220Ω		02034690	BW-1-220	Vert. Amp. Cathode
R126	10KΩ		02037890	BT-2-10K	Decoupling
R127	10KΩ		02037890	BT-2-10K	Decoupling
R128	47KΩ		02031970	BTS-47K	Bias Network
R129	1200Ω 5%		02030500	BTS-1200-5%	Bias Network
R130	470KΩ		02032090	BTS-470K	Horiz. Sync. Disc. Load
R131	470KΩ		02032090	BTS-470K	Horiz. Sync. Disc. Load
R132	470KΩ		02032090	BTS-470K	Horiz. AFC Filter Network
R133	470Ω		02021730	BTS-470	Horiz. AFC Grid
R134	10Ω		02031530		Horiz. AFC Cathode
R135	22KΩ	2	02037930	BT-2-22K	Horiz. AFC Plate
R136	47KΩ	2	02037970	BT-2-47K	Horiz. AFC Screen
R137	27KΩ	1	02034940	BTA-27K	Voltage Divider
R138	47KΩ	1	02031970	BTS-47K	Horiz. Osc. Grid
R139	5000Ω	10	02107960	AB-5000	Horiz. Osc. Plate-Wire Wound
R140	10KΩ	2	02037890	BT-2-10K	Horiz. Osc. Screen
R141	6800Ω		02037890	BTS-6800	Differentiator
R142	220KΩ		02032050	BTS-220K	Horiz. Discharge Grid
R143	470KΩ		02032090	BTS-470K	Horiz. Discharge Plate-See Note 3
R144	10KΩ		02031890	BTS-10K	Bias Network See Note 4
R145	470Ω		02031730		Parasitic Supp.
R146	1 Meg.		02032130	BTS-1 Meg.	Horiz. Output Grid
R147	47Ω	2	02037610	BW-2-47	Horiz. Output Cathode
R148	47Ω		02101050		Parasitic Supp. -Wire Wound
R149	20KΩ	10	02108160	AB 20, 000	Horiz. Output Screen-Wire Wound-See Note 5
R150	10KΩ		02031890	BTS-10K	Horiz. Discharge Decoupling-See Note 4
R151	1 Meg.		02032130	BTS-1 Meg.	Voltage Divider-See Note 4
R152	100Ω		02101130		Parasitic Supp. -Wire Wound-See Note 4
R153	10KΩ		02031890	BTS-10K	Damper Grid-See Note 4
R154	120KΩ 5%	2	02038020	BT-2-120K-5%	Damper Grid-See Note 4
R155	120KΩ 5%	2	02038020	BT-2-120K-5%	Damper Grid-See Note 4
R156	350Ω	20	02106540	DG-350	Damper Plate-Wire Wound-See Note 4
R157	2 Meg. 20%	5	02019500		HV Rect. Load-Wire Wound
R158	100KΩ	1	02035010		HV Filter
R159	18KΩ 5%	2	02036780	BT-2-18K-5%	Time Delay Rect. Cathode
R160	10Ω		02031530	BW-1-10	Time Delay Rect. Filament
R161	2200Ω		02031810	BTS-2200	Horiz. Peaking-See Note 6
R162	8500Ω	25	02018961		Damper Filter-Wire Wound-See Note 6 and 7
R163	4.7Ω		02100810		HV Rect. Filament-Wire Wound-See Note 6
R164	4.7Ω		02100810		HV Rect. Filament-Wire Wound-See Note 6
R165	600Ω	20	02110050		Bias Filter-Wire Wound-See Note 6
R166	9000Ω	30	02020720		Bleeder-Wire Wound
R167	820Ω	30	02020710		Filter-Wire Wound
R168	200Ω 5%	1/2	02030310		Bias Network
R169A	300Ω	15		DG-300	Filter-Wire Wound
B	250Ω	10	02114700	AB-250	Focus Coil Shunt-Wire Wound
R170	100KΩ 20%	1	02035540	BTA-100K	Bleeder
R171	100KΩ 20%	1	02035540	BTA-100K	Bleeder

Note 2. Used in early RA-108 models only.

Note 3. Model RA-105B uses 180KΩ resistor in this application.

Note 4. Not used in RA-105B models.

Note 5. Model RA-105B uses 12KΩ, 5 watt resistor in this application, Part No. 02111030.

Note 6. Used in model RA-105B only.

Note 7. This resistor is tapped at 7,500Ω, and 5,500Ω.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	DUMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC ④ 3.9A	930VCT .380ADC	5VAC ④ 6A	5VAC ④ 2A	20004251 ①			
		400VCT .103ADC		SEC. 4 12.6VCT ④ 5A				

① Includes C19.

TRANSFORMER (FILAMENT)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	DUMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T2	117VAC ④ .25A	6.3VAC ④ 1.15A	6.3VAC ④ 2.5A		20004341			

DUMONT
MODELS RA-105B, RA-108A

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		DUMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.					
T3	300Ω	600Ω	20003931				Block Osc. Trans.
T4	305Ω Tap ④ 169Ω	600Ω SEC. 2 770Ω 10Ω Tap ④ .1Ω SEC. 2 0Ω SEC. 3 0Ω	2004361	A-8119	HVO-5	TFB-4	Hor. Output Trans.
T5	520Ω	5.1Ω	20003942	A-8115	A-3035	TSO-1	Vert. Output Trans.
T6A	14Ω		21004971 ②	DY-1	MD 1		Hor. Deflection Coil
T6A B	62Ω						Vert. Deflection Coil
T6A B	14Ω		21004241 ③				Hor. Deflection Coil
T6A B	60Ω						Vert. Deflection Coil
T7	410Ω		21004251				Focus Coil

② Used in model RA-108A only.
③ Used in model RA-105B only.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		DUMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
	PRI.	SEC.	PRI.	SEC.					
T8	4.7KΩ	3.6Ω	410Ω	.5Ω	Part of SPKR.	A 3825 †	A-3019	RO-9	† Drill one new mounting hole.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
	FIELD	V. C. IMP.	DUMONT PART No.	JENSEN PART No.	QUAM PART No.	
	SP1A B	PM PM	3.6Ω	18002792 18002771	ST-119 ② MOD. P10-T ST-102 ② MOD. P12-S	
SP2A B	CONE DIA. 9 9/16" 11 1/2"	V. C. DIA. 3/4"				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 cps)	DUMONT PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
L1	.380A	85Ω	5 Henrys	21004023			TR-3300	④ Drill one new mounting hole.
L2	.103A	54Ω	1 Henry	21004721				

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	DUMONT	MEISSNER	
				PART No.	PART No.	
L3	Ant. Coil	0Ω		21004571		
L4	Ant. Coil	0Ω		21004571		
L5A	RF End Inductor	0Ω		21004931		
B	RF End Inductor	0Ω		21004641		Used in early production models. Part of inductuner 21004291
L6A	RF Plate	0Ω				Used in early production models. Part of inductuner 21004561.
B	RF Plate	0Ω				
L7A	RF End Inductor	0Ω		21004921		
B	RF End Inductor	0Ω		21004631		Used in early production models. Part of inductuner 21004291
L8A	Mixer Grid	0Ω				Used in early production models. Part of inductuner 21004561.
B	Mixer Grid	0Ω				
L9A	Bandpass Coupling	0Ω		21004941		
B	Bandpass Coupling	0Ω		21004581		Used in early production models.
L10	Inductor					
L10	Ground Strap	0Ω		21004951		Not used in early production models.
L11	Bandwidth	0Ω		21004601		
L12	Fil. Choke	.1Ω		21004571		
L13A	Osc. Shunt	0Ω		21004041		
B	Osc. Shunt	0Ω		21004591		Used in early production models. Part of inductuner 21004291.
L14A	Osc. Coil	0Ω				Used in early production models. Part of inductuner 21004561.
B	Osc. Coil	0Ω				
L15A	Osc. End Inductor	0Ω		21004891		
B	Osc. End Inductor	0Ω		21004051		Used in early production models. Violet identification dot.
L16	1st Video IF	.1Ω		21004137		Brown identification dot.
L17	RF Choke	.5Ω		21004144		
L18	1st Video IF Coupling	.1Ω		21004136		Blue identification dot.
L19	2nd Video IF	.8Ω		21004138		Grey identification dot.
L20	2nd Video IF	.5Ω		21004144		Brown identification dot.
L21	2nd Video IF Coupling	.1Ω		21004135		Green identification dot.
L22	3rd Video IF	.8Ω		21004138		Grey identification dot.
L23	21.9MC Sound Trap	.1Ω		21003971		Orange identification dot.
L24	Adj. Channel Sound Trap	.1Ω		21003971		Orange identification dot.
L25	3rd Video IF	.1Ω		21004135		Green identification dot.
L26	4th Video IF	.1Ω		21004137		Violet identification dot.
L27	4th Videc. IF	.1Ω		21004135		Green identification dot.
L28	Peaking	1.2Ω		21004465		Orange identification dot.

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF) CONT.

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES	
		PRI.	SEC.	DUMONT PART No.	MEISSNER PART No.		
L29	21.9MC Sound Trap	.1Ω		21003971		Orange identification dot. Yellow identification dot. Red and Blue identification dot.	
L30	Peaking	9.9Ω		21004467			
L31	Peaking	3.2Ω		21004655			
L32	4.5MC Sound Trap	1.5Ω		21004121			
L33	Peaking	5.1Ω		21004653			
L34	1st Sound IF	.1Ω	.1Ω	20003911			Red and Grey identification dot.
L35	2nd Sound IF	.1Ω	.1Ω	20003911			
L36	3rd Sound IF	.1Ω	.1Ω	20003911			
L37	Sync. Coupling Trans.	.2Ω	.2Ω	20004391			
L38	Disc. Trans.	.8Ω	.8Ω	20003901			
L39	Horiz. Osc. Trans.	65Ω	65Ω	20003921			
L40A	Width Cont.	.3Ω		21004711		Model RA108 Model RA105B	
L40B	Width Cont.	.3Ω		21004711			
L41A	Width Coil	.2Ω		21004763		Fixed. Model RA108 Fixed. Model RA105B	
L41B	Width Coil	.2Ω		21004762			
L42A	Horiz. Lin.	41Ω		21004751		Model RA108 Model RA105B. 5.5/20MH	
L42B	Horiz. Lin.	50Ω		21004350			
L43	Fil. Choke	.1Ω					

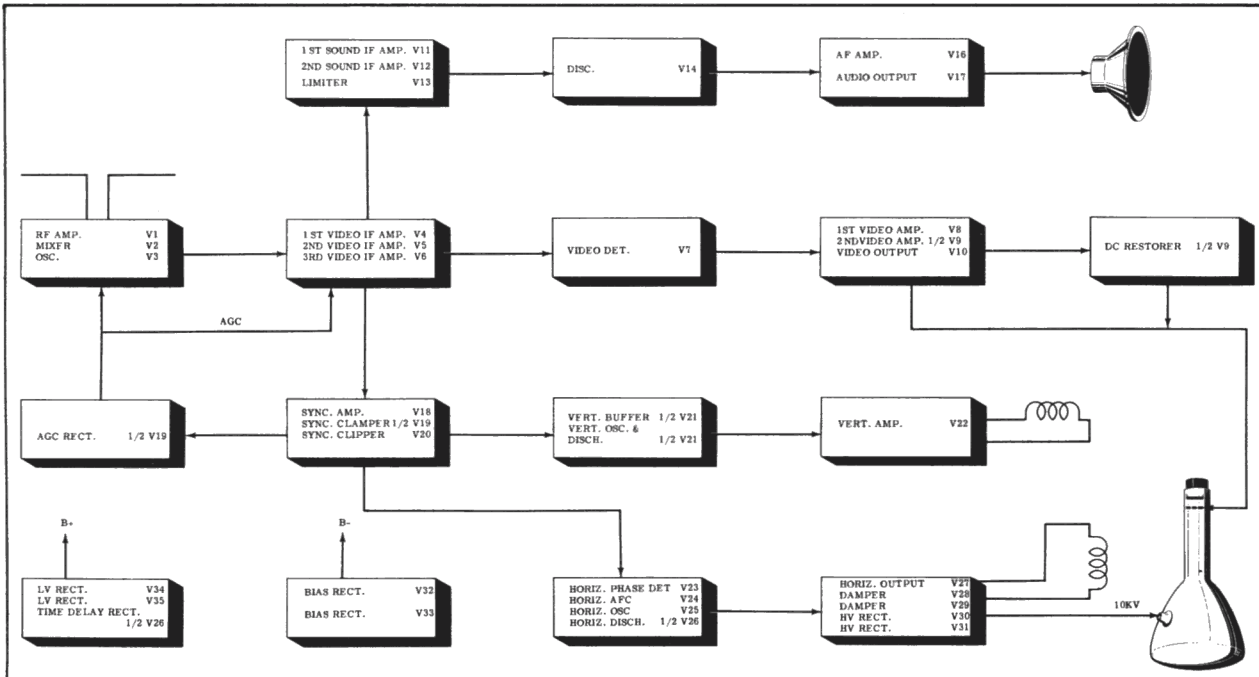
DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					DUMONT PART No.	MEISSNER PART No.	
M1	Bayonet	6-8	.15	Brown	12001310		Type #47
M2	Bayonet	6-8	.15	Brown	12001310		Type #47
M3	Bayonet	6-8	.15	Brown	12001310		Type #47

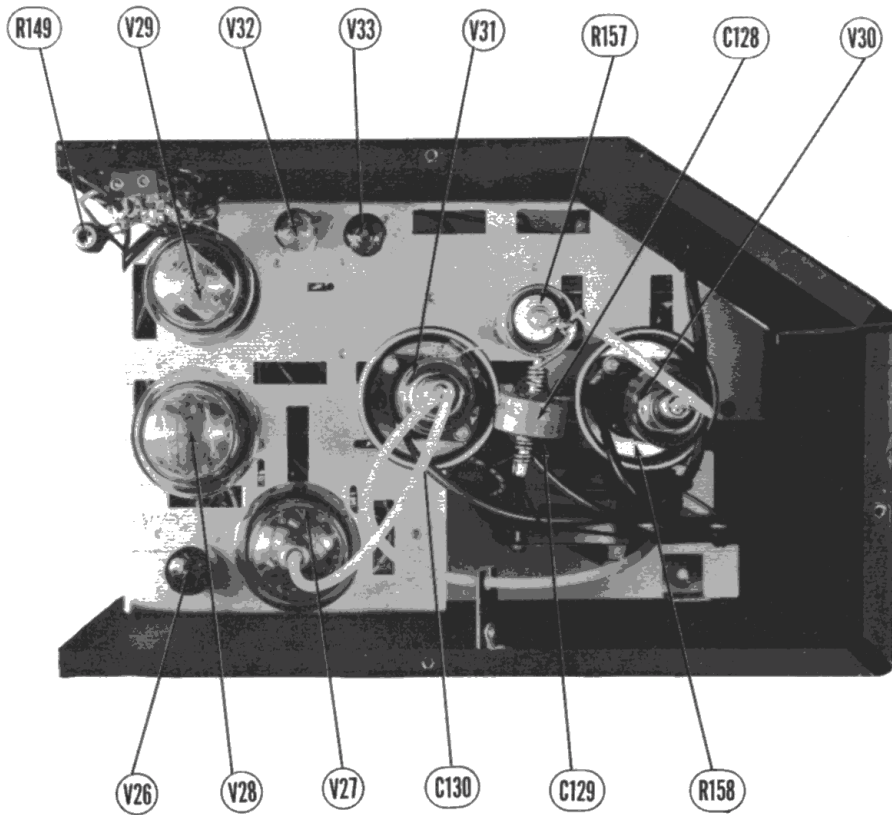
MISCELLANEOUS

ITEM No.	PART NAME	DUMONT PART No.	NOTES
M4A	Tuner	89001502	RF Assembly
M4B	Tuner	89001501	RF Assembly
M5A	Tuner	89002302	Inputuner and dial assembly
M5B	Tuner	81000601	Inputuner and dial assembly
M6	Fuse	11000830	Type 3AG 6A. 250V
M7	Fuse	11001100	Type 3AG .25A 250V
M8A	Relay	05002410	SPST
M8B	Relay	05003260	SPST
M9A	Switch	05000120	Vert. position, DPDT toggle
M9B	Switch	05003050	Vert. position, DPDT toggle
M10A	Switch	05003351	Function. 2 deck wafer
M10B	Switch	05003641	Function. 2 deck wafer
M11	Switch	05002981	Width range. 3 position wafer
M12	Ion Trap	21004473	
	Knob	45000032	Tuner

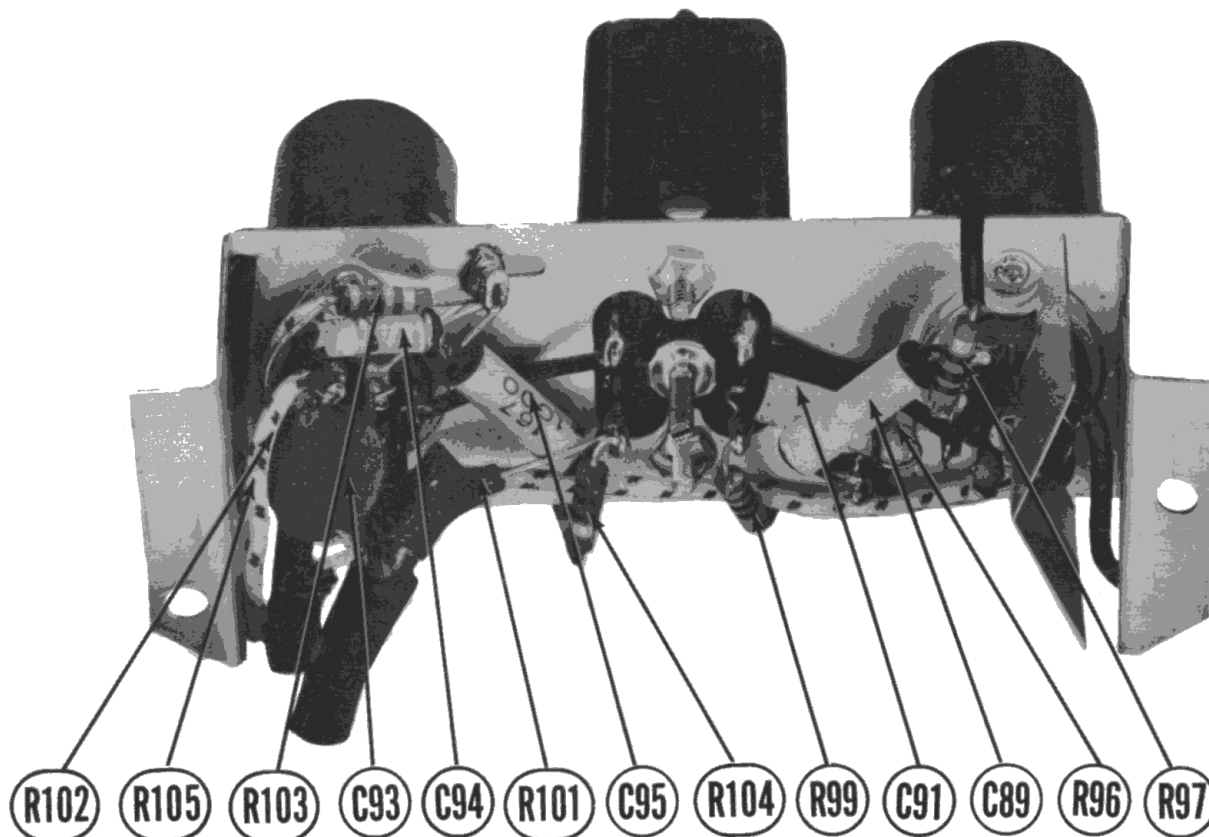
DUMONT
MODELS RA-105B, RA-108A



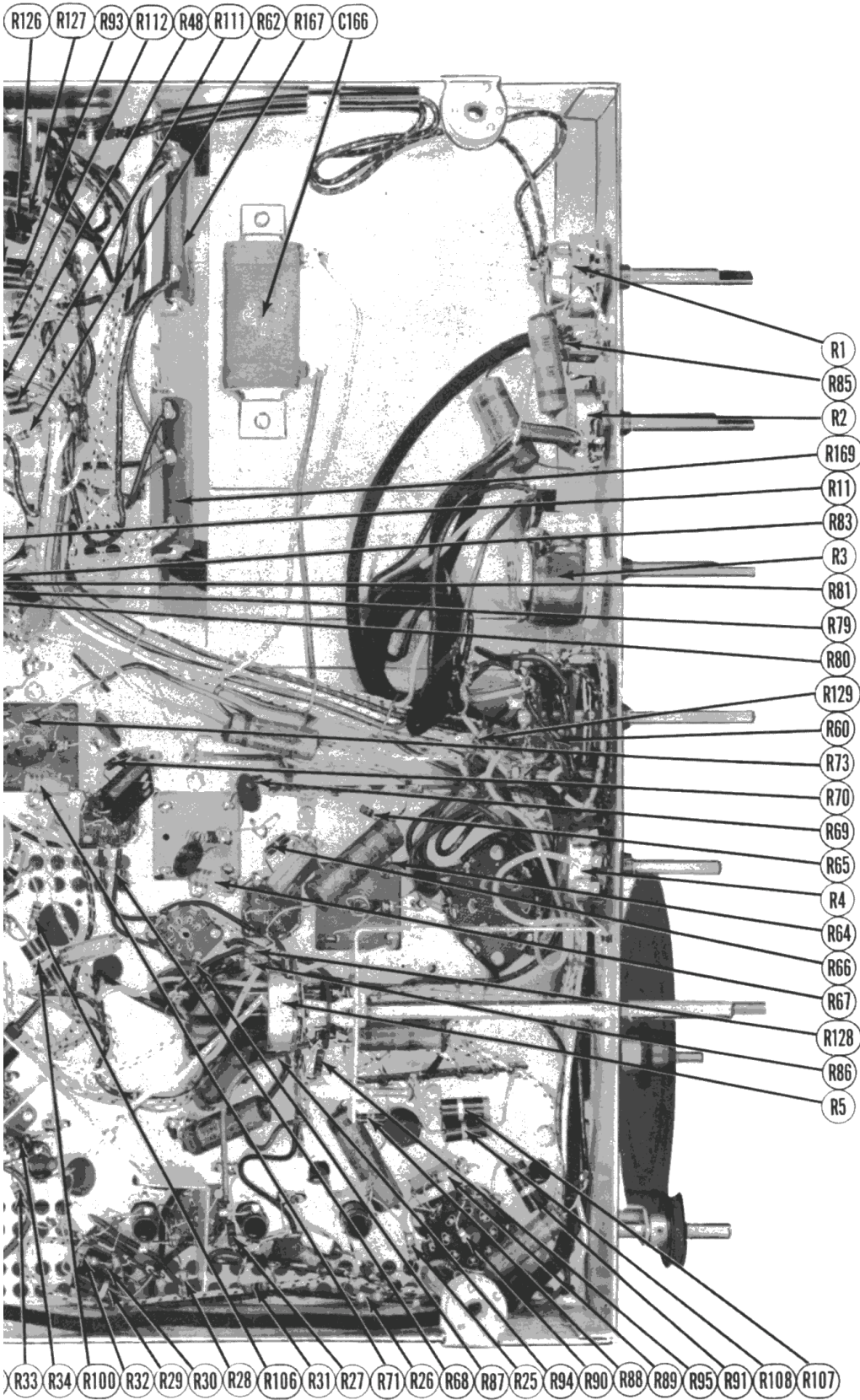
BLOCK DIAGRAM



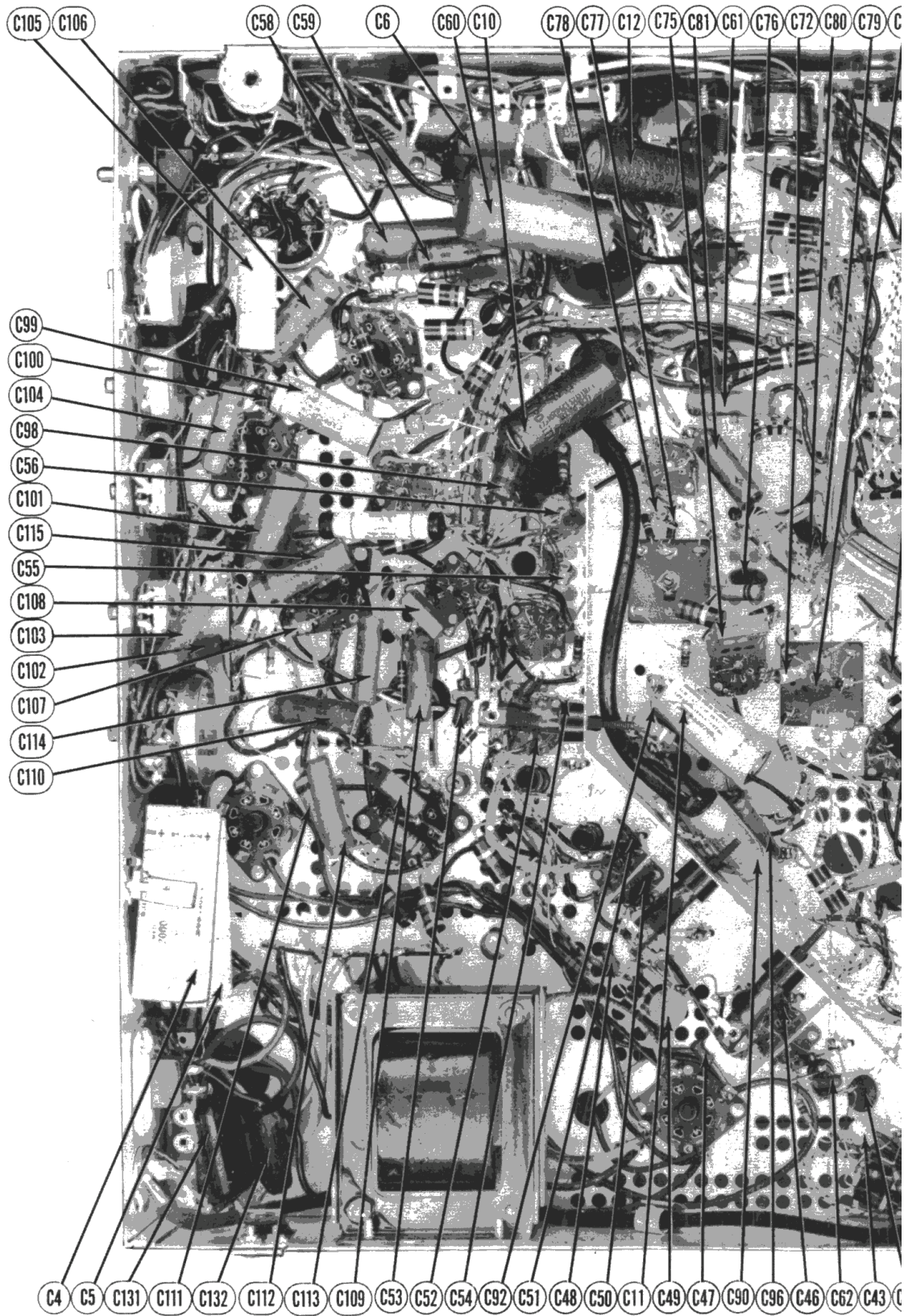
HIGH VOLTAGE COMPARTMENT



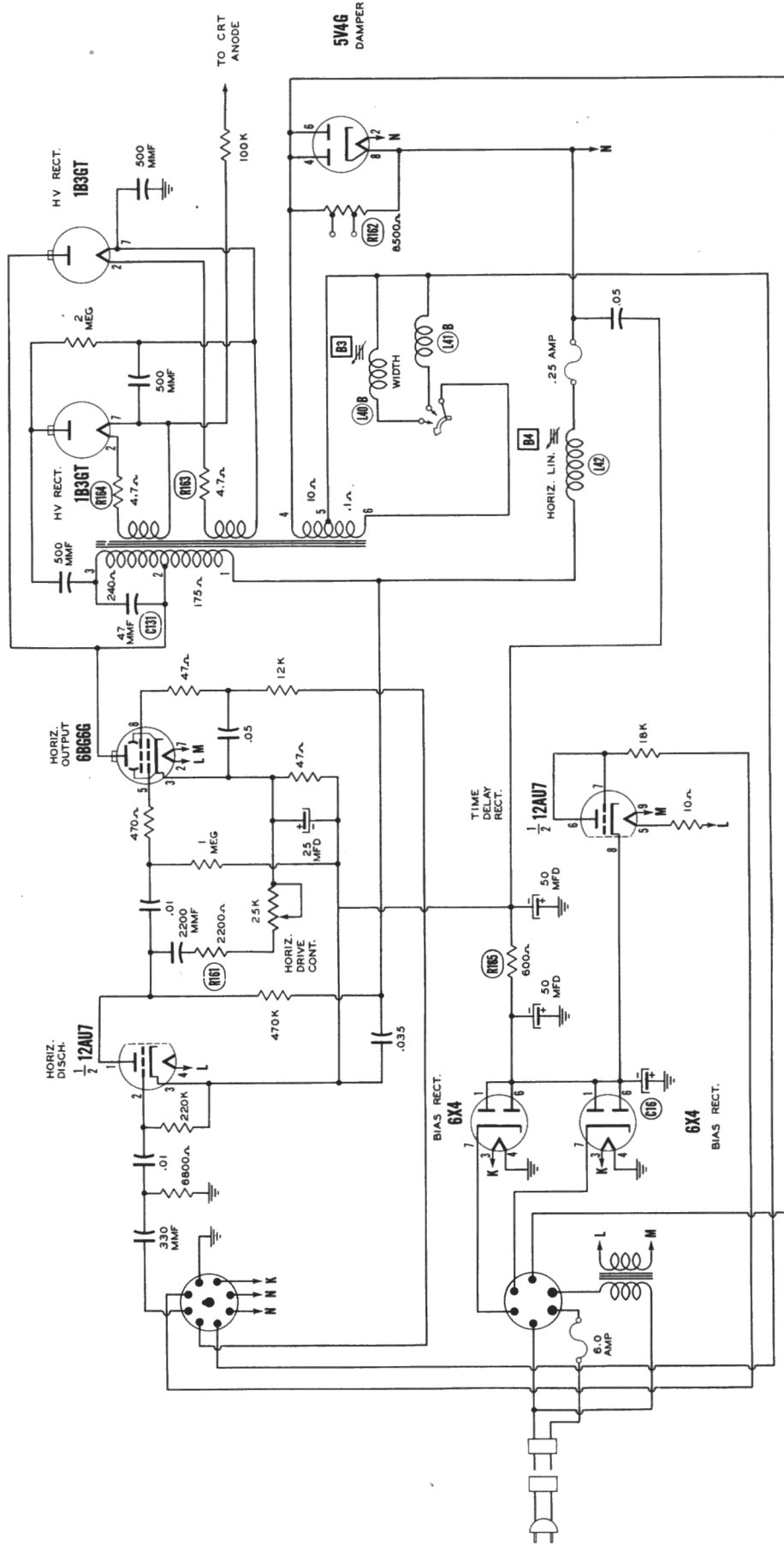
AGC AMP. SUB-CHASSIS



W-RESISTOR IDENTIFICATION



CHASSIS BOTTOM VIEW-CAPACIT



A PHOTOFAC STANDARD NOTATION SCHEMATIC
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HIGH VOLTAGE SUPPLY - RA-105B