

**CROSLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**

**CROSLEY MODEL 9-407M-1**

<b>TRADE NAME</b>	Crosley Models, 9-407, 9-407M-1, 9-407M-2	
<b>MANUFACTURER</b>	Crosley Division, Aveco Manufacturing Corp., Cincinnati 25, Ohio	
<b>TYPE SET</b>	Television and FM receiver	
<b>TUBES</b>	Twenty-Eight	
<b>POWER SUPPLY</b>	117 Volts, 60 cycles AC	<b>RATING:</b> 2.6 Amps. @ 117 Volts
<b>TUNING RANGE</b>	44-216MC	

**INDEX**

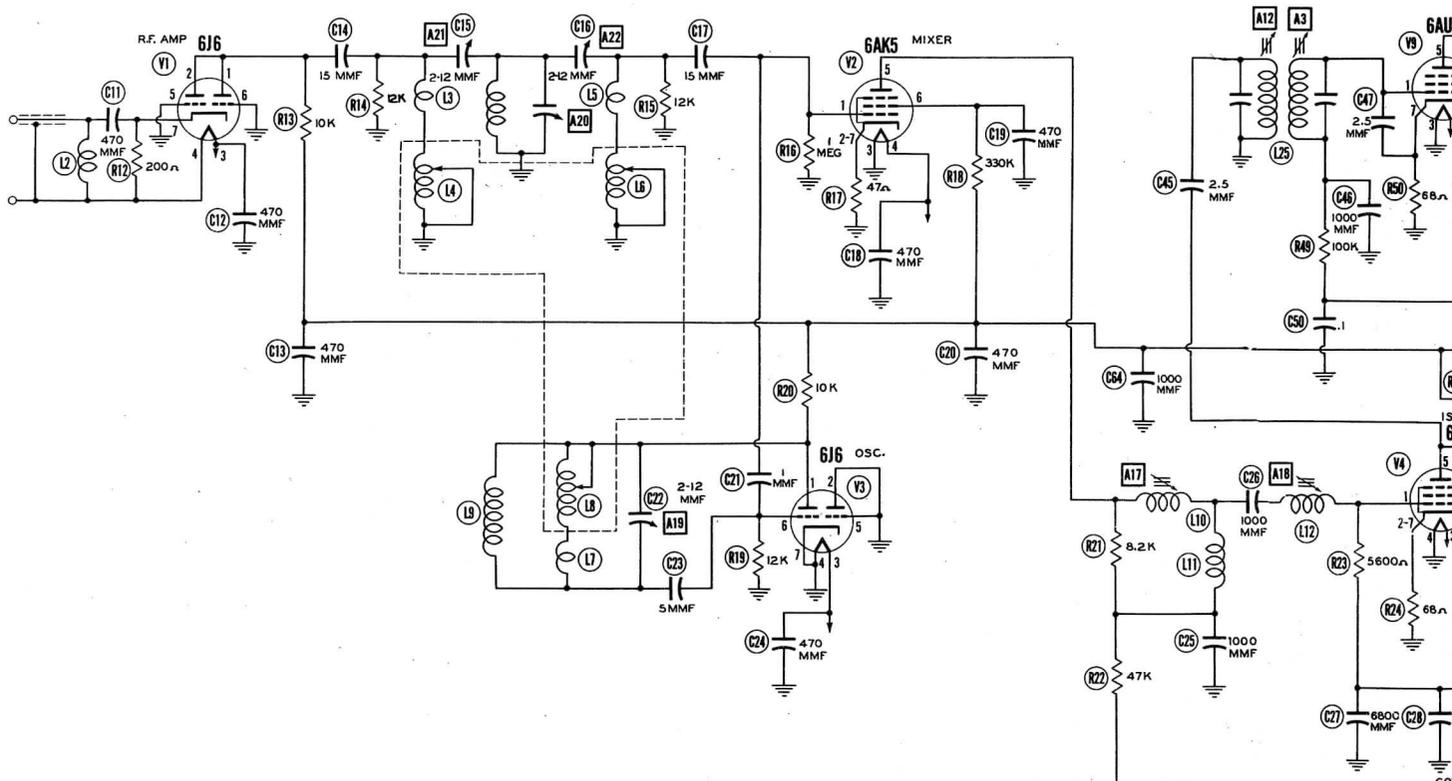
Alignment Instructions	6,7	Photographs (continued)	
Bias Control Adjustment	20	Chassis Top View	3,13
Disassembly Instructions	20	RF Tuner	10
Horizontal Frequency, Size and Linearity Adjustments	20	Resistor Identification	12,17
Parts List and Description	14,15,16,19	Trans., Inductor and Alignment Identification	4,9
Photographs		Schematic	2
Cabinet Rear View	19	Tube Placement Chart	5
Capacitor Identification	11,18	Voltage and Resistance Measurements	8

**HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana**

"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed."  
"Reproduction or use, without express permission, of editorial or pictorial con-

tent, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1949 by Howard W. Sams & Co., Inc., Indianapolis 7, Indiana, U. S. of America. Copyright under International Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc." Printed in U. S. of America

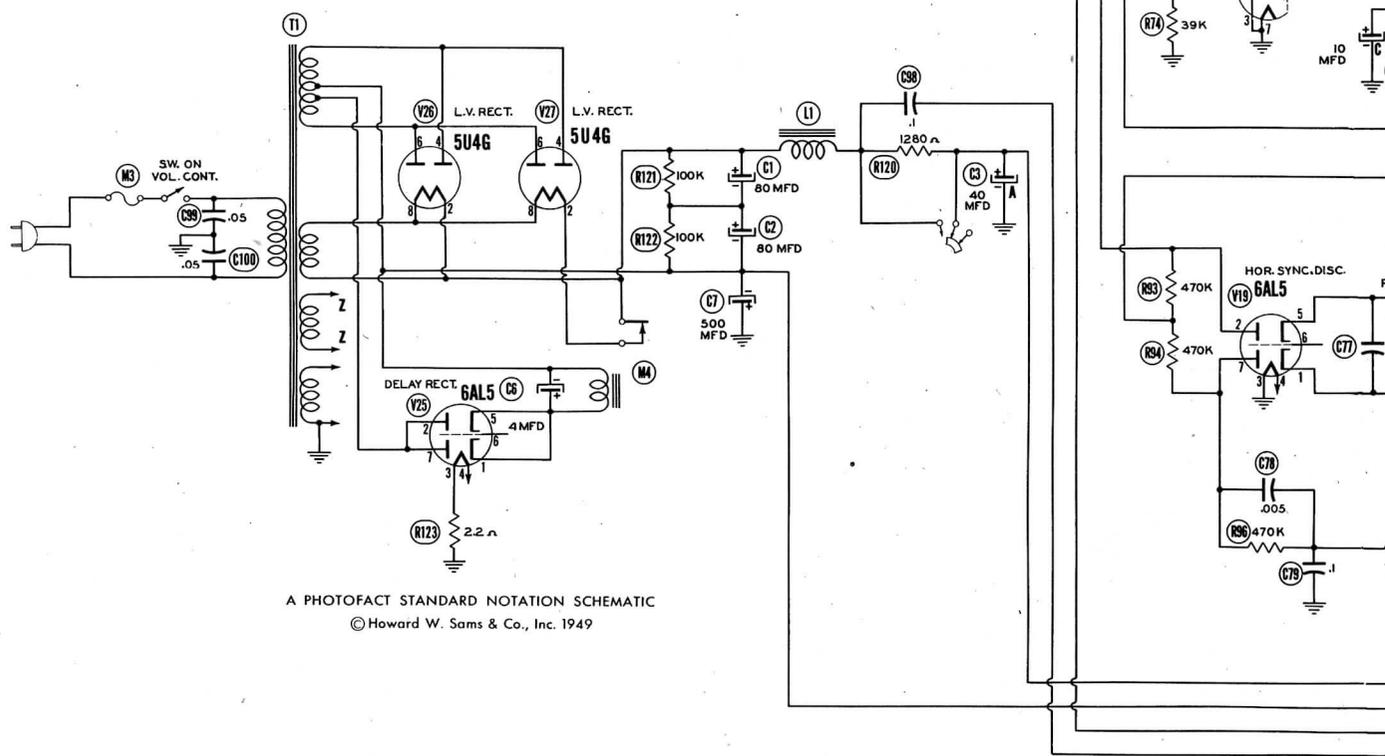
DATE 7/49 4914-6 SET #66 FOLDER #6



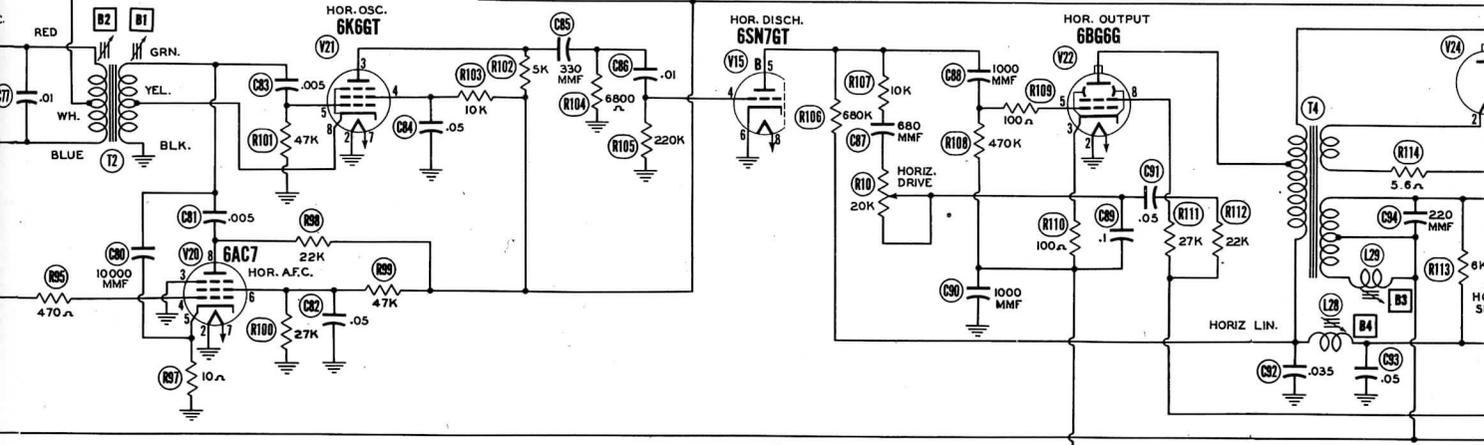
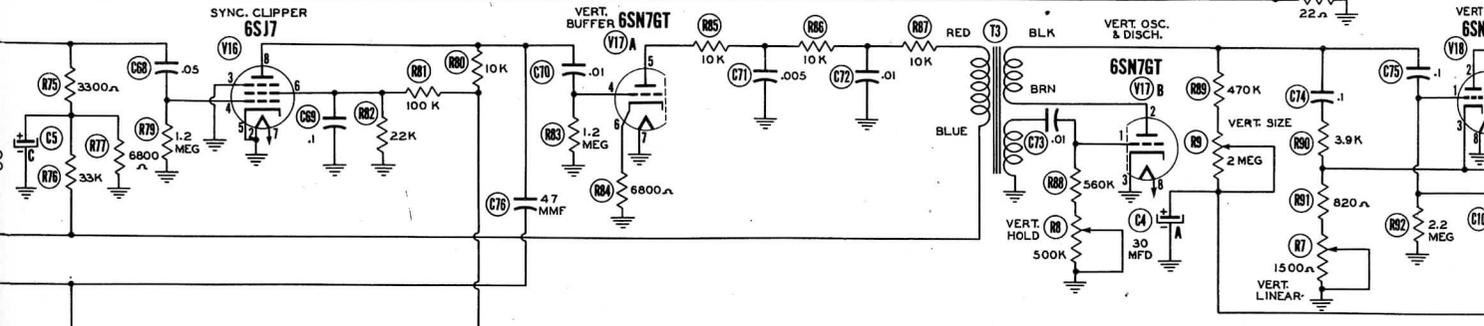
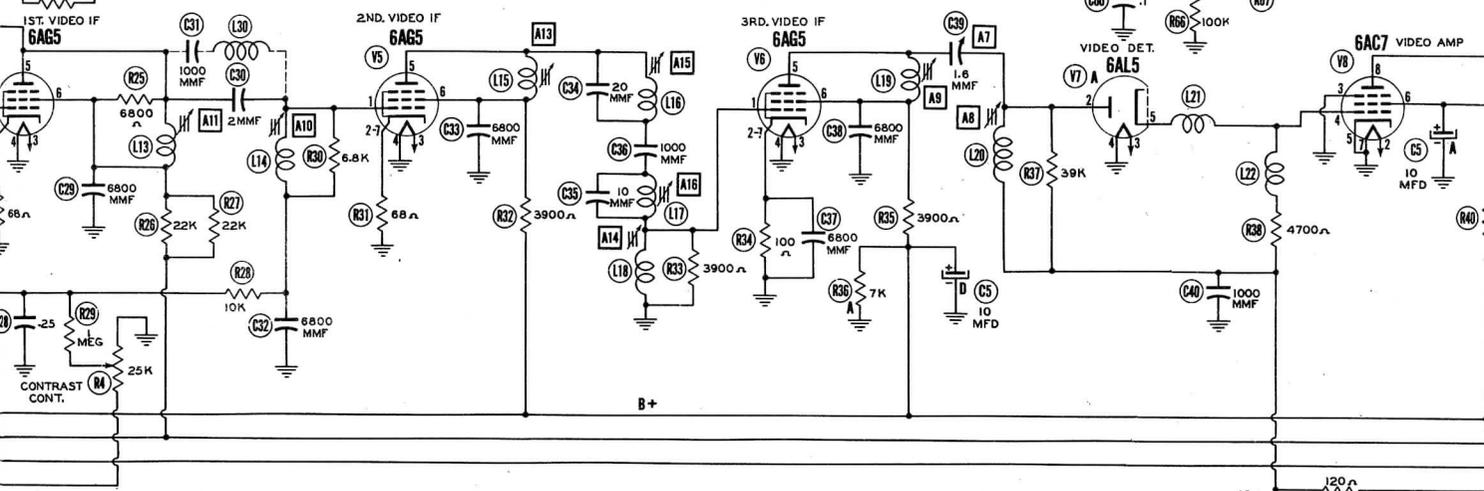
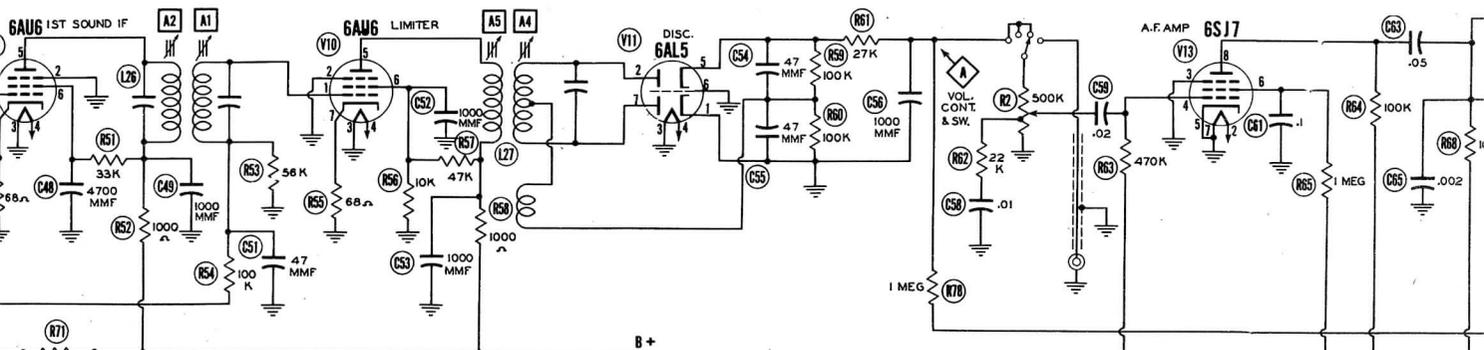
**SWITCH SEQUENCE**

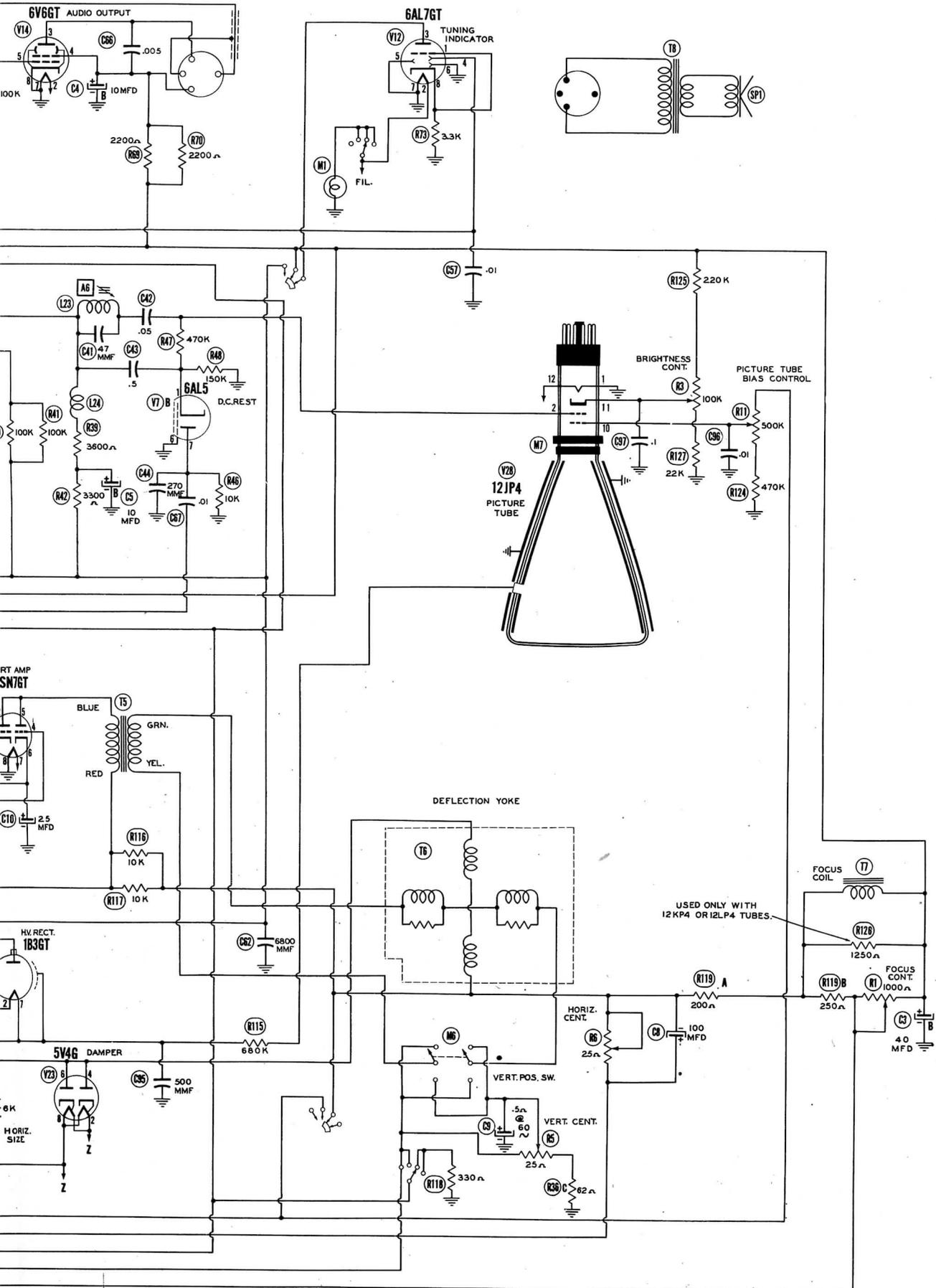
1. PHONO
2. FM
3. TV
4. TV (NO DIAL LIGHT)

SHOWN IN FM POSITION



A PHOTOFAC STANDARD NOTATION SCHEMATIC  
 © Howard W. Sams & Co., Inc. 1949

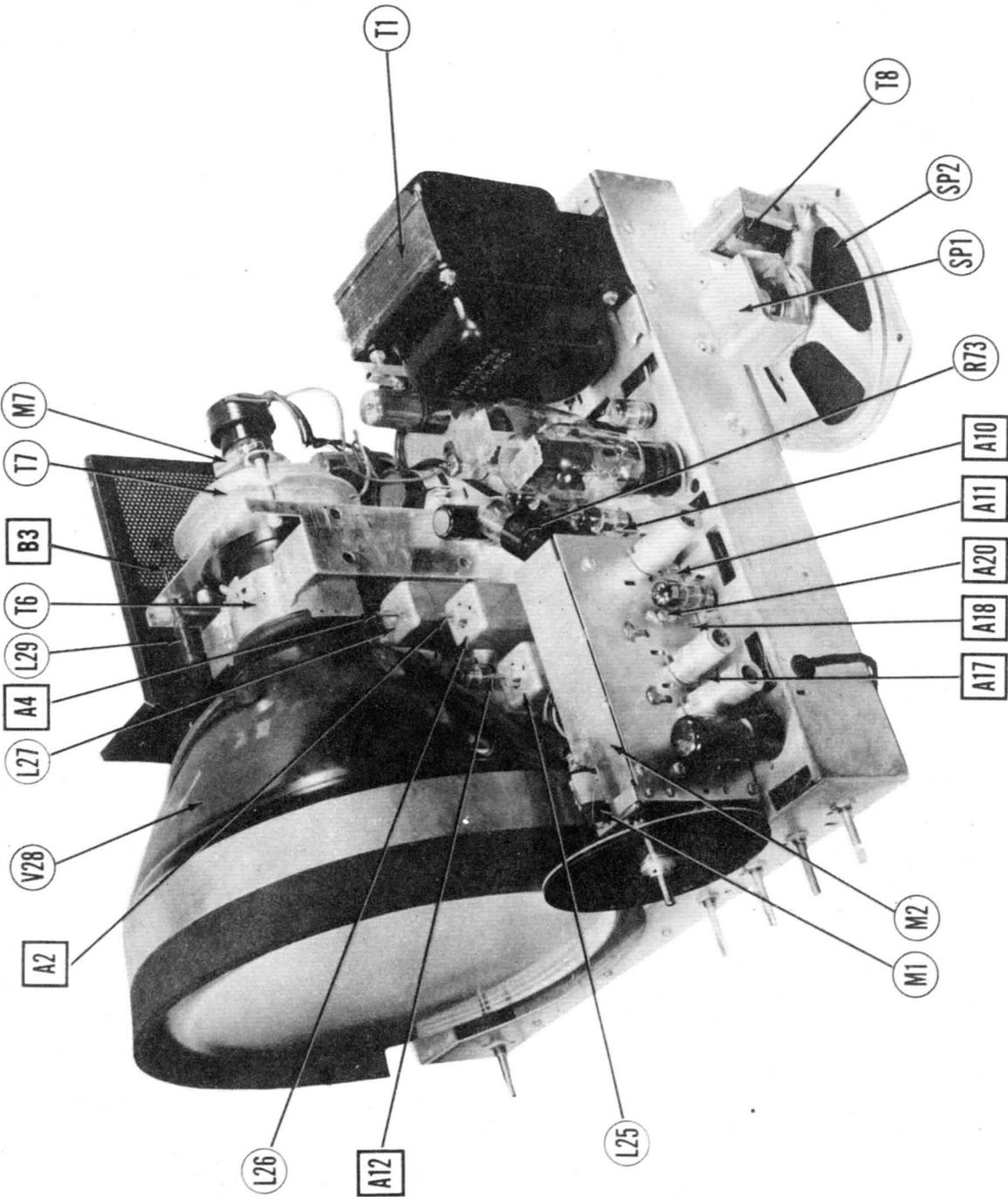


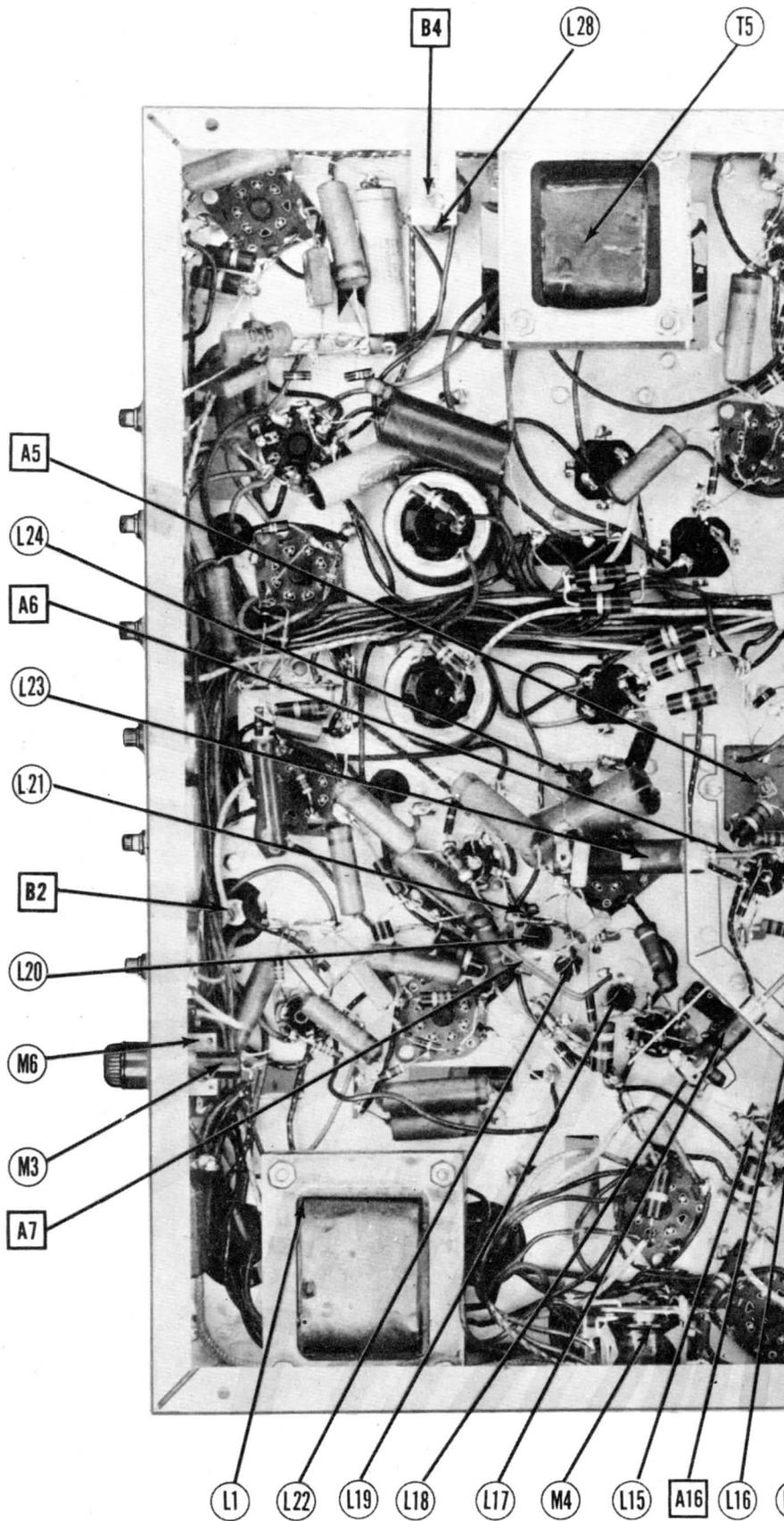


CROSLEY  
 MODELS 9-407, 9-407M-1, 9-407M-2

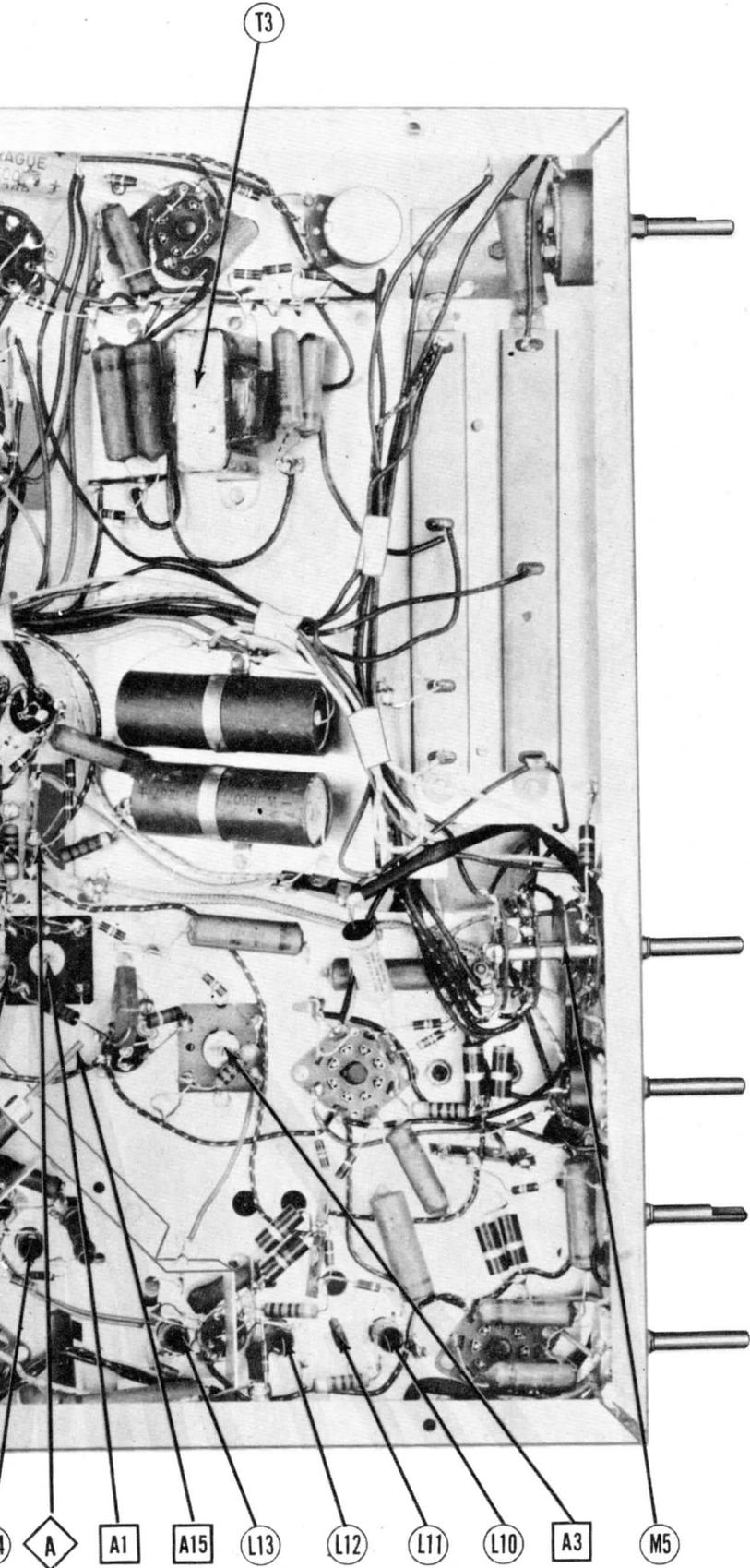
**CROSLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**

MAIN TOP VIEW  
 CHASSIS TOP VIEW

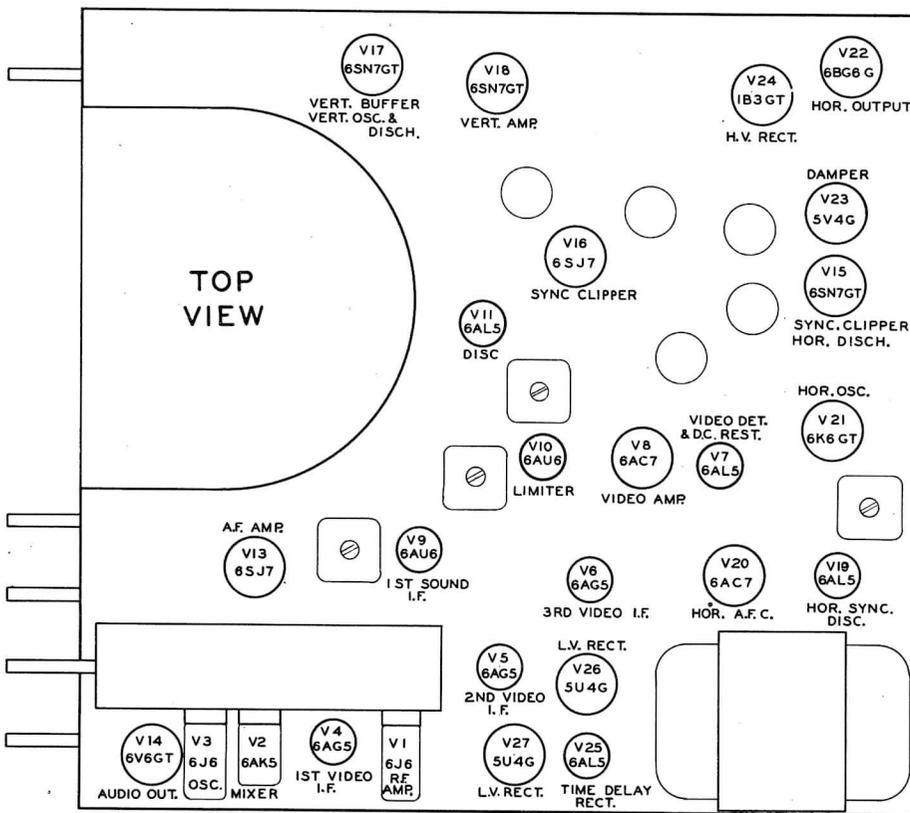
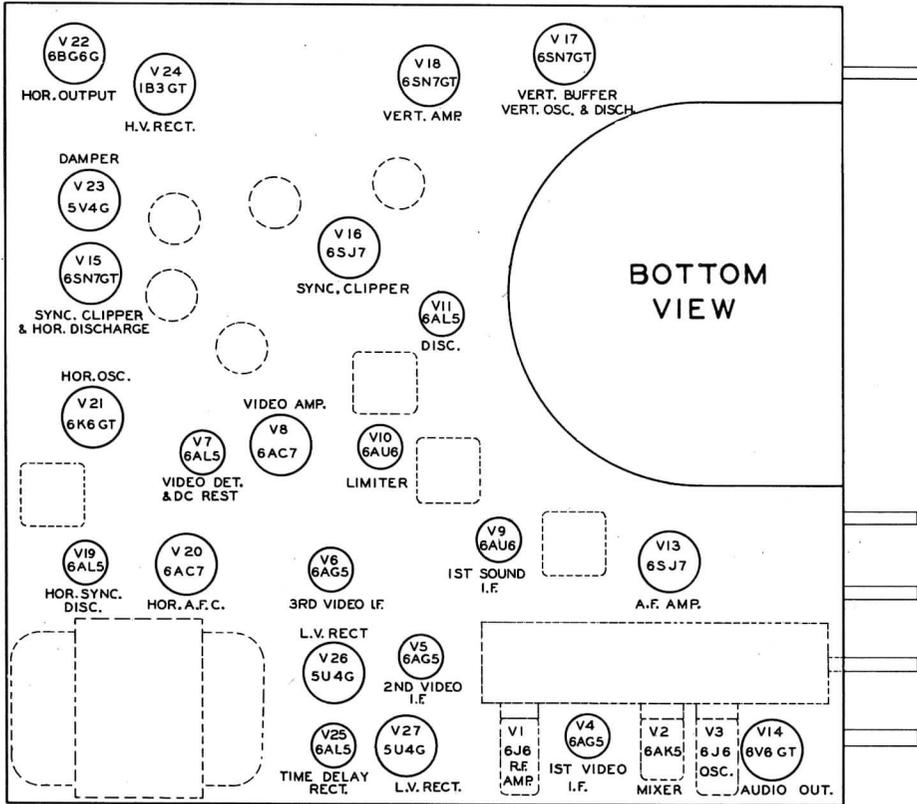




CHASSIS BOTTOM VIEW-TRANS., INDUC



RECEIVER AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART

# ALIGNMENT INSTRUCTIONS

**ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT**

Before attempting alignment, disable the high voltage to eliminate the shock hazard, by removing the 6K6GT horizontal oscillator (V21).  
Place all test equipment "ground" leads as close as possible to their respective "hot" leads.

## SOUND IF ALIGNMENT

Start the sound IF Alignment with the contrast control at maximum. As the alignment progresses, reduce the contrast control to prevent overloading.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. .05MFD	High side to pin 1 (Grid) of 6AU6 (V9). Low side to chassis.	22MC (1MC Sweep)	21.8MC 21.9MC 22.0MC	Any	Vert. Amp. to pin 6 (Screen Grid) of 6AU6 (V10). Low side to chassis.	A1, A2	Adjust for maximum amplitude and symmetry as per Fig 1 or 2.
2. .05MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	"	"	"	"	A3	Adjust for maximum amplitude and symmetry as per Fig 3 or 4.
3. .05MFD	"	"	"	"	Vert. Amp. to Point A. Low side to chassis.	A4, A5	Adjust A4 so 21.9MC marker is positioned at center of pattern as per Fig 5 or 6. Adjust A5 for maximum amplitude and straightness of the diagonal line going from peak to peak. Do not move the two green detector plate leads unless necessary to obtain the proper curve. Dress the left green lead against the chassis and the other clear of components and the chassis or vice versa. The dressing of these leads will determine the polarity of the curve as shown in Fig 5 and 6. Select curve with best symmetry and bandpass. Repeat steps 1 and 2.

## 4.5 MC TRAP ADJUSTMENT

See Figure 12 for the detector probe used in conjunction with the oscilloscope.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4. .05MFD	High side to pin 4 (Grid) of 6AC7 (V8). Low side to chassis.	Off	4.5MC (400V Mod.)	Any	Vert. Amp. thru detector probe to pin 2 of picture tube. Low side to chassis.	A6	Adjust for minimum 400V indication on scope.

## VIDEO IF ALIGNMENT

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. .05MFD	High side to pin 1 (Grid) of 6AG5 (V6). Low side to chassis.	24MC (10MC Sweep)	22.9MC 26.4MC	Any	Vert. Amp. direct to pin 2 of picture tube. Low side to chassis.	A7, A8, A9	If necessary, adjust A7 gimmick for proper width by changing space at the center of the leads. Adjust A8 and A9 for curve as per Fig 7. If dips are present in the curve, short the junction of C35, C36, and L17 to chassis during the adjustment of A8 and A9.
6. .05MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	"	21.9MC 22.9MC 26.4MC 27.9MC	"	Vert. Amp. thru detector probe to pin 5 (plate) of 6AG5 (V5).	A10, A11	Set contrast control and the oscilloscope for maximum gain. Adjust A10 and A11 for maximum gain and curve shape as per Fig 8.
7. .05MFD	"	"	21.9MC (Set to exact sound IF freq.)	"	"	A12	Adjust so 21.9MC marker drops into "notch". Increase marker amplitude for finite adjustment.
8. .05MFD	"	"	21.9MC 22.9MC 26.4MC 27.9MC	"	Vert. Amp. thru detector probe to pin 5 (plate) of 6AL5 (V6). Low side to chassis.	A13, A14	Reduce scope gain and set contrast control just below overload. Adjust for maximum gain and proper curve as per Fig 9.
9. .05MFD	"	"	21.9MC	"	"	A15	Adjust A15 so 21.9MC marker drops into "notch". Increase marker amplitude for finite adjustment.
10. .05MFD	"	"	27.9MC	"	"	A16	Adjust A16 so 27.9MC marker drops into "notch". Increase marker amplitude for finite adjustment.
11. .05MFD	"	"	"	"	Vert. Amp. direct to picture tube grid (pin 2). Low side to chassis.	A13, A14	Retouch A13 and A14 for curve as per Fig 10.
12. .05MFD	High side to pin 6 (Grid) of 6J6 (V3). Low side to chassis. Leave V3 out of socket.	"	22.9MC 26.4MC	"	"	A17, A18	Adjust for maximum gain and proper curve as per Fig 11.

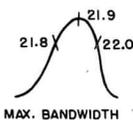


FIG. 1



FIG. 2



FIG. 3

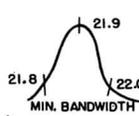


FIG. 4

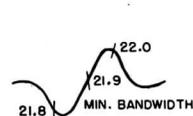


FIG. 5

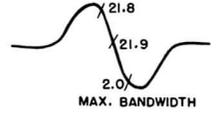


FIG. 6

OSCILLATOR ALIGNMENT

- (A). Unsolder the blue lead only from the lug on L10.
- (B). Remove the RF unit mounting screws.
- (C). Remove the bottom shield from the tuner and replace with dummy shield shown in Fig 13.
- (D). Remount the RF Tuner on the chassis.
- (E). Reconnect the blue lead which was disconnected in step 1.
- (F). Check the dial setting on the shaft. With the shaft in the full clockwise position, the top window of the rear dial and the No. 13 on the front dial are directly centered over the vertical centerline of the tuning shaft.
- (G). The sound IF channel must be accurately aligned before aligning the oscillator circuits.

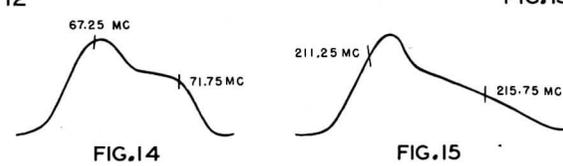
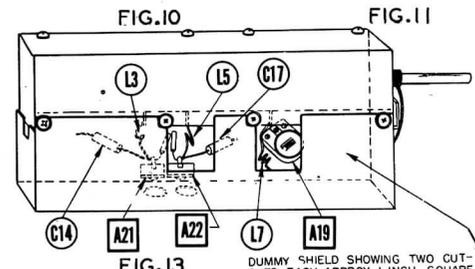
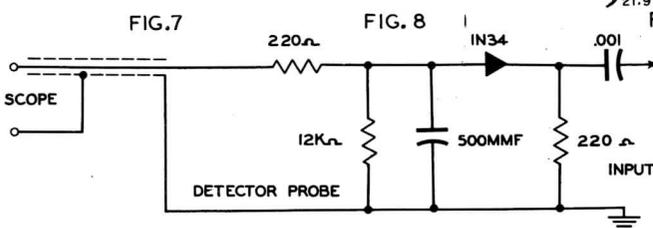
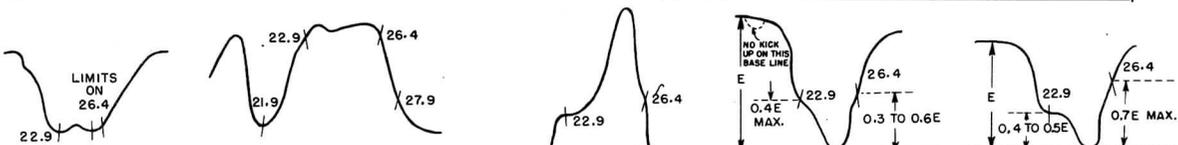
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
13. Two 125Ω carbon res.	Across antenna terminals with 125Ω resistor in each generator lead.	71.75MC	4	DC Probe to Point A Common to chassis.	A19	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
14. "	"	215.75MC	13	"	L7	Expand or compress the coil turns for zero reading as obtained in the step above.
15. "	"	209.75MC 203.75MC 197.75MC 191.75MC 185.75MC 179.75MC 87.75MC 81.75MC 65.75MC 59.75MC	12 11 10 9 8 7 6 5 3 2	"		Check all other channels to see that zero reading is obtained at the correct dial setting when the sound carrier signal is being fed to the receiver.

RF ALIGNMENT

- (A). Leave the dummy shield on the tuner as used during the oscillator alignment procedure.
- (B). Solder a 5 inch lead to the screen grid of the 6AK5 mixer tube (V2). Run this lead through the plate lead hole to the underside of the chassis.
- (C). Set the tuning control for the zero reading on VTVM with 71.75MC fed in at antenna. (Follow step 13 to obtain this dial setting). Do not change this dial setting for the low band alignment as outlined in step 16.
- (D). After this setting has been obtained unsolder the blue lead connecting to L10 and connect together with the 5 inch screen lead on the mixer tube and connect them to the vertical input of the oscilloscope.
- (E). After step 16 has been completed, reconnect the blue lead to L10 and adjust the tuner to give a zero reading on channel 13 with a 215.75MC signal being fed to the antenna (Follow step 14 to obtain this setting).
- (F). Disconnect the blue lead from L10 and, connected together with the 5 inch screen lead, connect to the vertical input of the oscilloscope.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
16. Two 125Ω carbon res.	Across antenna terminals with 125Ω in each generator lead.	69MC (10MC Sweep)	71.75MC 67.25MC	4 (See step "C" in RF alignment Instructions.)	See step "D" in RF Alignment Instructions.	A20, A21, A22	Adjust to give a bandpass of 4.5MC similar to Fig 14. The adjustment of A21, & A22 is correct when the rocking of A20 back and forth causes no appreciable change in the response curve amplitude. The dip between the two markers should not exceed 30%.
17. "	"	213MC (10MC Sweep)	215.75MC 211.25MC	13 (See step "E" in RF Alignment Instructions.)	See step "F" in RF Alignment Instructions.	L3, L5, C14, C17	Adjustment of the high band is accomplished by the positioning of L3, L5 C14 and C17 for curve similar to Fig 15. The bandwidth should not exceed 6MC or be less than 4.5MC on channel 13. If adjustments have been necessary for channel 13, it will be necessary to repeat step 16. Repeat 16 and 17 until no further improvement can be made.
18. CAUTION:	All other channels should be checked for calibration with only a signal generator connected to the antenna terminals using amplitude modulation in a point to point check to eliminate the possibility of error in impedance matching with various types of sweep equipment.						

CROSLEY  
MODELS 9-407, 9-407M-1, 9-407M-2



# 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	6J6	1.25VDC	1.25VDC	6.3VAC	0V	0V	0V	1.8VDC			
V 2	6AK5	- .8VDC	.1VDC	0V	6.3VAC	220VDC	60VDC	.1VDC			
V 3	6J6	80VDC	0V	6.3VAC	0V	0V	§-7.4VDC	0V			
V 4	6AG5	-5V	0V	6.3VAC	0V	300VDC	300VDC	0V			
V 5	6AG5	-5V	0V	6.3VAC	0V	130VDC	187VDC	0V			
V 6	6AG5	0V	1.2VDC	6.3VAC	0V	140VDC	140VDC	1.2VDC			
V 7	6AL5	.5VDC	-2.5VDC	6.3VAC	0V	-2.1VDC	0V	- .1VDC			
V 8	6AC7	0V	6.3VAC	0V	-2.1VDC	0V	170VDC	0V	180VDC		
V 9	6AU6	-1.1VDC	0V	0V	6.3VAC	295VDC	150VDC	.8VDC			
V 10	6AU6	-2.2VDC	0V	0V	6.3VAC	295VDC	42VDC	.2VDC			
V 11	6AL5	0V	- .3VDC	0V	6.3VAC	0V	0V	- .3VDC			
V12	6AL7GT	3.1VDC	6.3VAC	295VDC	0V	0V	0V	3.1VDC			
V 13	6SJ7	0V	6.3VAC	0V	- .6VDC	0V	45VDC	0V	195VDC		
V 14	6V6GT	0V	6.3VAC	235VDC	250VDC	-7.4VDC	-7.4VDC	0V	0V		
V 15	6SN7GT	- .4VDC	4VDC	0V	-35VDC	50VDC	0V	0V	6.3VAC		
V 16	6SJ7	0V	0V	0V	- .6VDC	0V	43VDC	6.3VAC	265VDC		
V 17	6SN7GT	70VDC -80VDC	195VDC 230VDC	0V	0V	150VDC	6VDC	0V	6.3VAC		
V 18	6SN7GT	0V	300VDC	1.1VDC 18VDC	0V	300VDC	1.1VDC 18VDC	6.3VAC	0V		
V 19	6AL5	1.2VDC	-1.5VDC	0V	6.3VAC	.2VDC	0V	- .7VDC	0V		
V 20	6AC7	0V	0V	0V	- .6VDC	0V	100VDC	6.3VAC	0V		
V 21	6K6GT	0V	0V	205VDC	225VDC	-55VDC	290VDC	6.3VAC	.1VDC		
V 22	6B6G	0V	0V	-1.1VDC	-1.3VDC	-13VDC	400VDC	6.3VAC	250VDC	TOP CAP *	
V 23	5V4G	82VDC	480VDC	290VDC	400VDC	400VDC	400VDC	360VDC	480VDC		
V 24	1B3GT	* DO NOT MEASURE									
V 25	6AL5	50VDC	-1.1VDC	.2VAC	6.3VAC	50VDC	0V	-1.1VDC			
V 26	5U4G	0V	430VDC	0V	400VAC	8.5VDC	400VAC	1.2VAC	450VDC		
V 27	5U4G	0V	430VDC	0V	400VAC	0V	400VAC	0V	430VDC		
V 28	12JP4	0V	0V	PIN 10 300VDC	PIN 11 85VDC	PIN 12 6.3VAC					

\* Do not measure.  
† Taken in FM position.  
§ Taken with VTVM

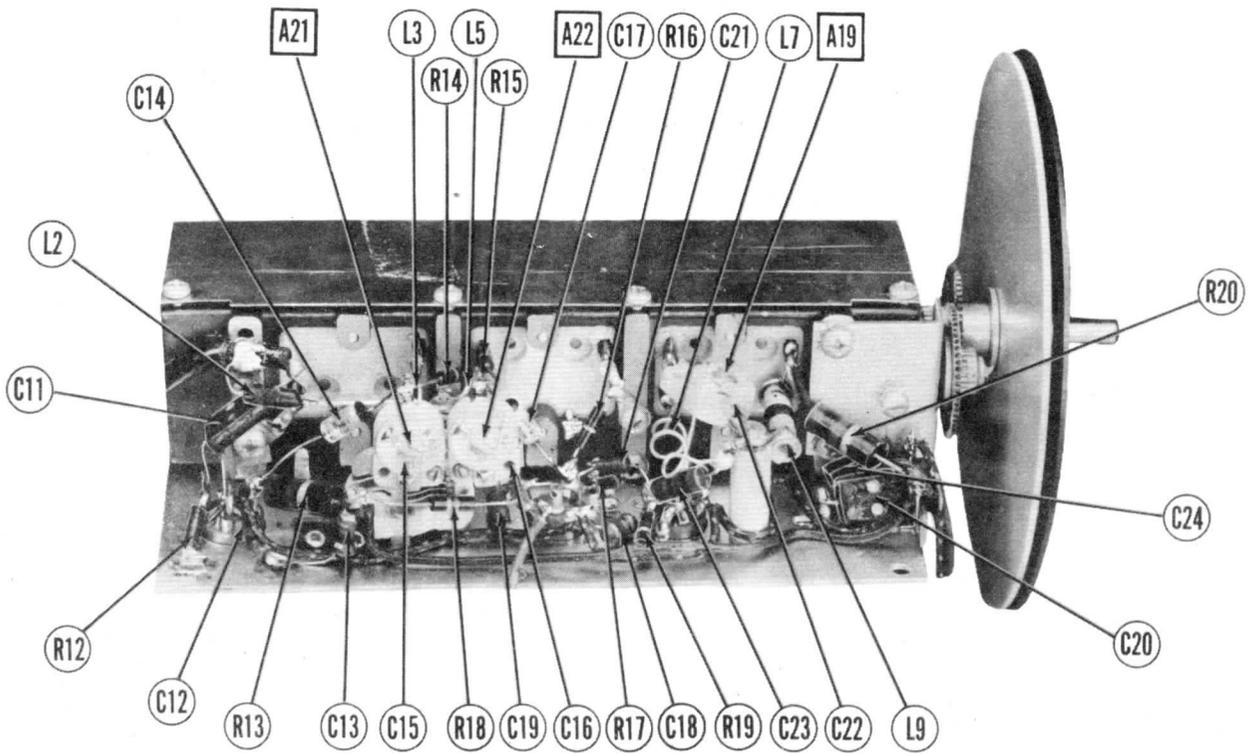
- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.

RESISTANCE READINGS

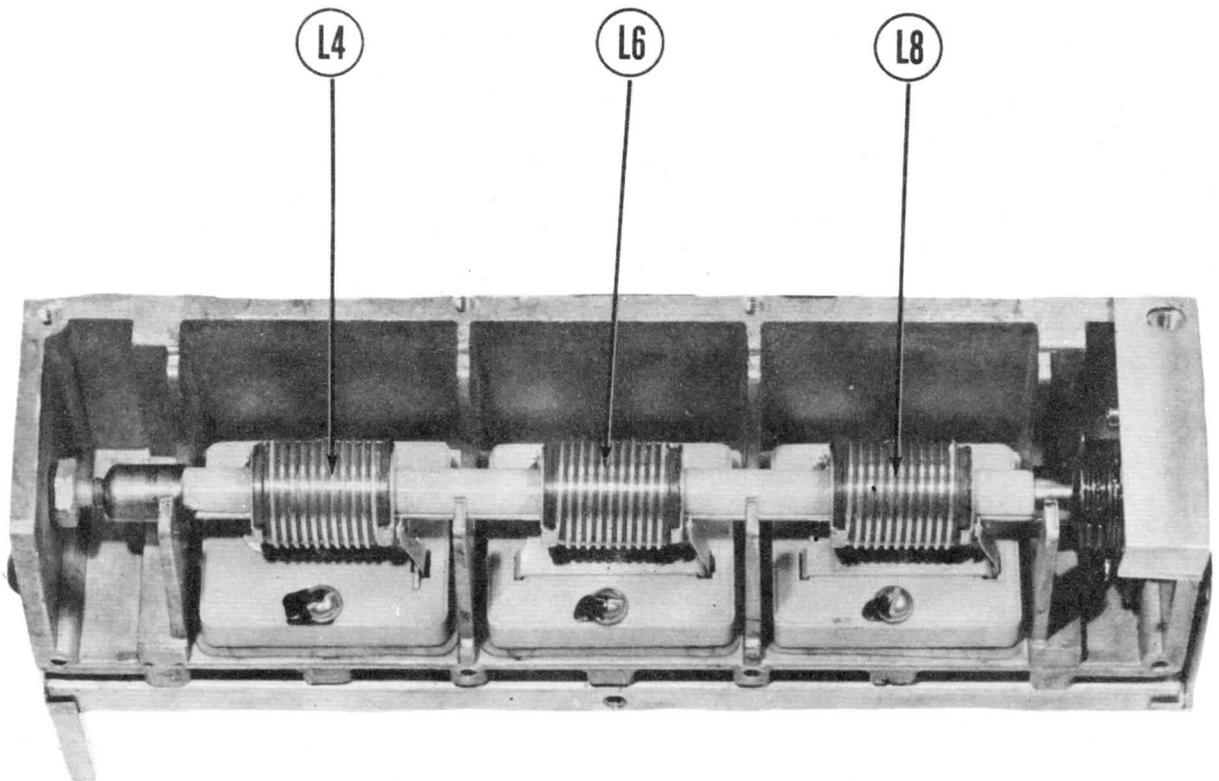
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6J6	115KΩ	115KΩ	.1Ω	0Ω	0Ω	0Ω	200Ω		
V 2	6AK5	1 Meg.	55Ω	0Ω	.1Ω	148KΩ	1350KΩ	55Ω		
V 3	6J6	118KΩ	0Ω	.1Ω	0Ω	0Ω	12KΩ	0Ω		
V 4	6AG5	1.2 Meg	68Ω	.1Ω	0Ω	114KΩ	114KΩ	68Ω		
V 5	6AG5	1.2 Meg	68Ω	.1Ω	0Ω	16KΩ	16KΩ	68Ω		
V 6	6AG5	.7Ω	100Ω	.1Ω	0Ω	16KΩ	16KΩ	100Ω		
V 7	6AL5	150KΩ	35Ω	.1Ω	0Ω	4.7KΩ	0Ω	10KΩ		
V 8	6AC7	0Ω	.1Ω	0Ω	4.7KΩ	0Ω	150KΩ	0Ω	17KΩ	
V 9	6AU6	260KΩ	0Ω	0Ω	.1Ω	11.5KΩ	138KΩ	68Ω		
V 10	6AU6	58KΩ	0Ω	0Ω	.1Ω	11.5KΩ	112KΩ	68Ω		
V 11	6AL5	0Ω	100KΩ	0Ω	.1Ω	200KΩ	0Ω	100KΩ		
V12	6AL7GT	3.3KΩ	.1Ω	1500Ω	1.5 Meg	3.3KΩ	0Ω	0Ω	3.3KΩ	
V 13	6SJ7	0Ω	.1Ω	0Ω	580KΩ	0Ω	11 Meg.	0Ω	1100KΩ	
V 14	6V6GT	0Ω	.1Ω	12KΩ	12KΩ	100KΩ	55Ω	0Ω	0Ω	
V 15	6SN7GT	39KΩ	114KΩ	0Ω	220KΩ	1700KΩ	0Ω	0Ω	.1Ω	
V 16	6SJ7	0Ω	0Ω	0Ω	1.2 Meg	0Ω	121KΩ	.1Ω	111KΩ	
V 17	6SN7GT	1.1 Meg 600KΩ	12.5 Meg 1470KΩ	0Ω	1.2 Meg	135KΩ	7KΩ	0Ω	.1Ω	
V 18	6SN7GT	2.2 Meg	16KΩ	2.2KΩ 820Ω	2.2 Meg	16KΩ	2.2KΩ 820Ω	.1Ω	0Ω	
V 19	6AL5	470KΩ	20Ω	0Ω	.1Ω	470KΩ	Inf.	950KΩ		
V 20	6AC7	0Ω	0Ω	0Ω	1.5 Meg	10Ω	27KΩ	.1Ω	122KΩ	
V 21	6K6GT	0Ω	0Ω	16.5KΩ	110KΩ	4.7KΩ	165Ω	.1Ω	21Ω	
V 22	6B6G	0Ω	0Ω	160Ω	570KΩ	470KΩ	90Ω	.1Ω	112.5KΩ	TOP CAP 16.5KΩ
V 23	5V4G	65KΩ	120KΩ	22KΩ	190Ω	180Ω	190Ω	1500Ω		
V 24	1B3GT	*	*	*	*	*	*	*	*	TOP CAP 16.5KΩ
V 25	6AL5	5KΩ	50Ω	2.2Ω	.1Ω	5KΩ	Inf.	50Ω		
V 26	5U4G	30Ω	6.5KΩ	Inf.	75Ω	55Ω	70Ω	6.5KΩ	6.5KΩ	
V 27	5U4G	Inf.	6.5KΩ	Inf.	75Ω	Inf.	70Ω	Inf.	6.5KΩ	
V 28	12JP4	0Ω	650KΩ	PIN 10 190KΩ	PIN 11 60KΩ	PIN 12 1Ω				

\* Do not measure.  
† Measured from pin 8 of V27.  
‡ Taken in FM position.

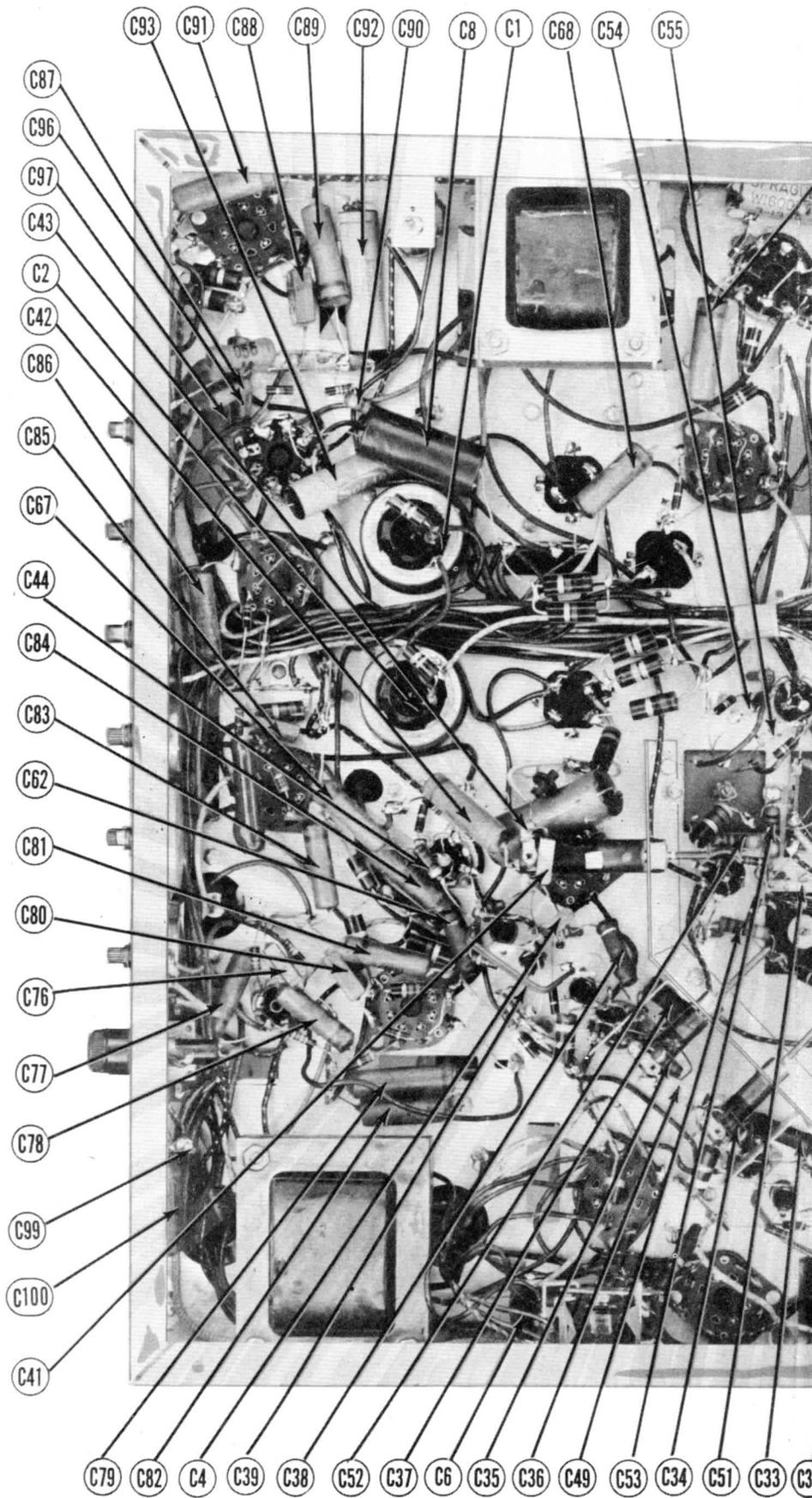
- Line voltage maintained at 117 volts for voltage readings.
- Front panels controls set at minimum.
- Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.



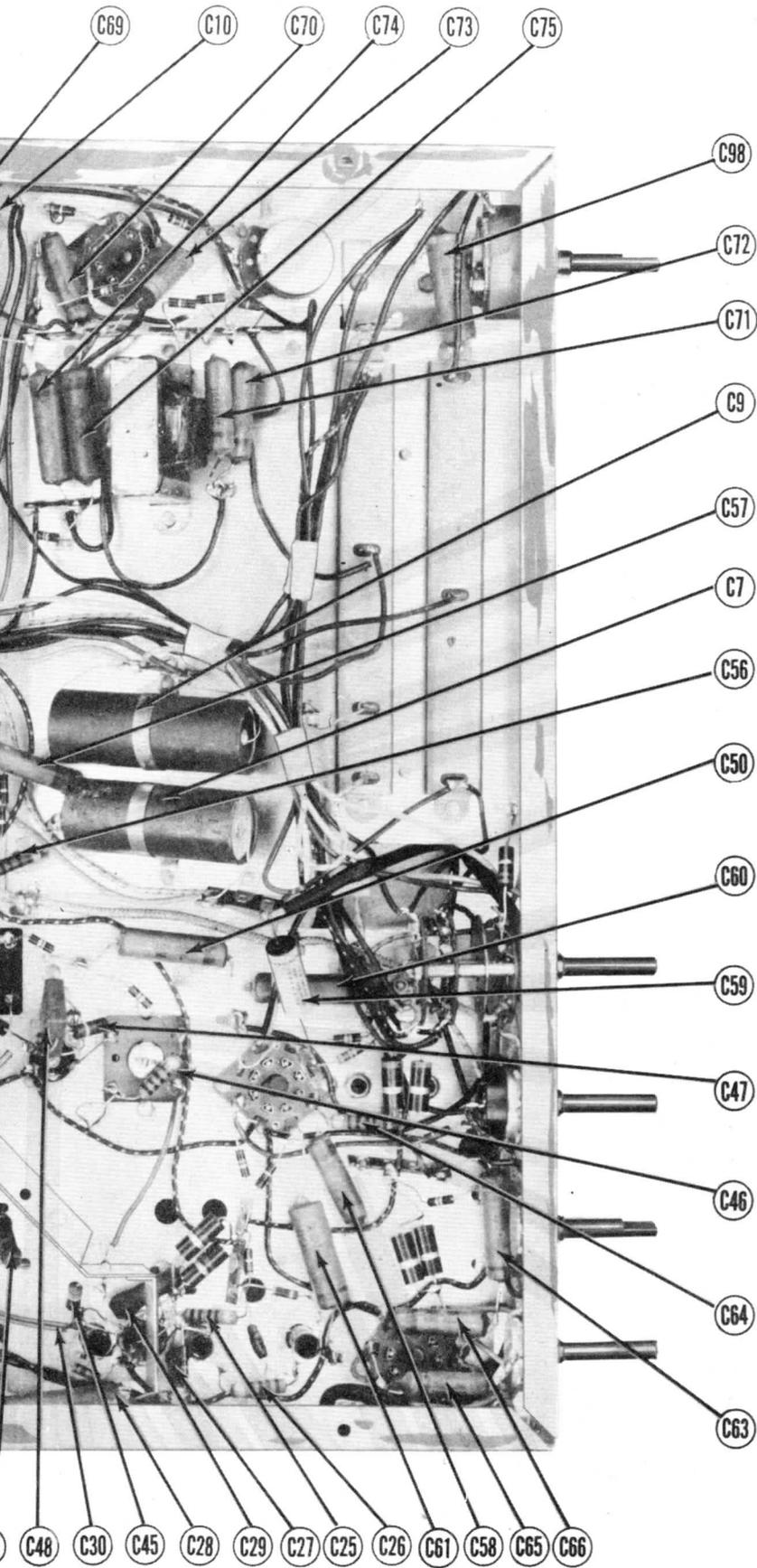
RF TUNER-LEFT SIDE



INDUCTUNER-TOP VIEW



CHASSIS BOTTOM VIEW-CA

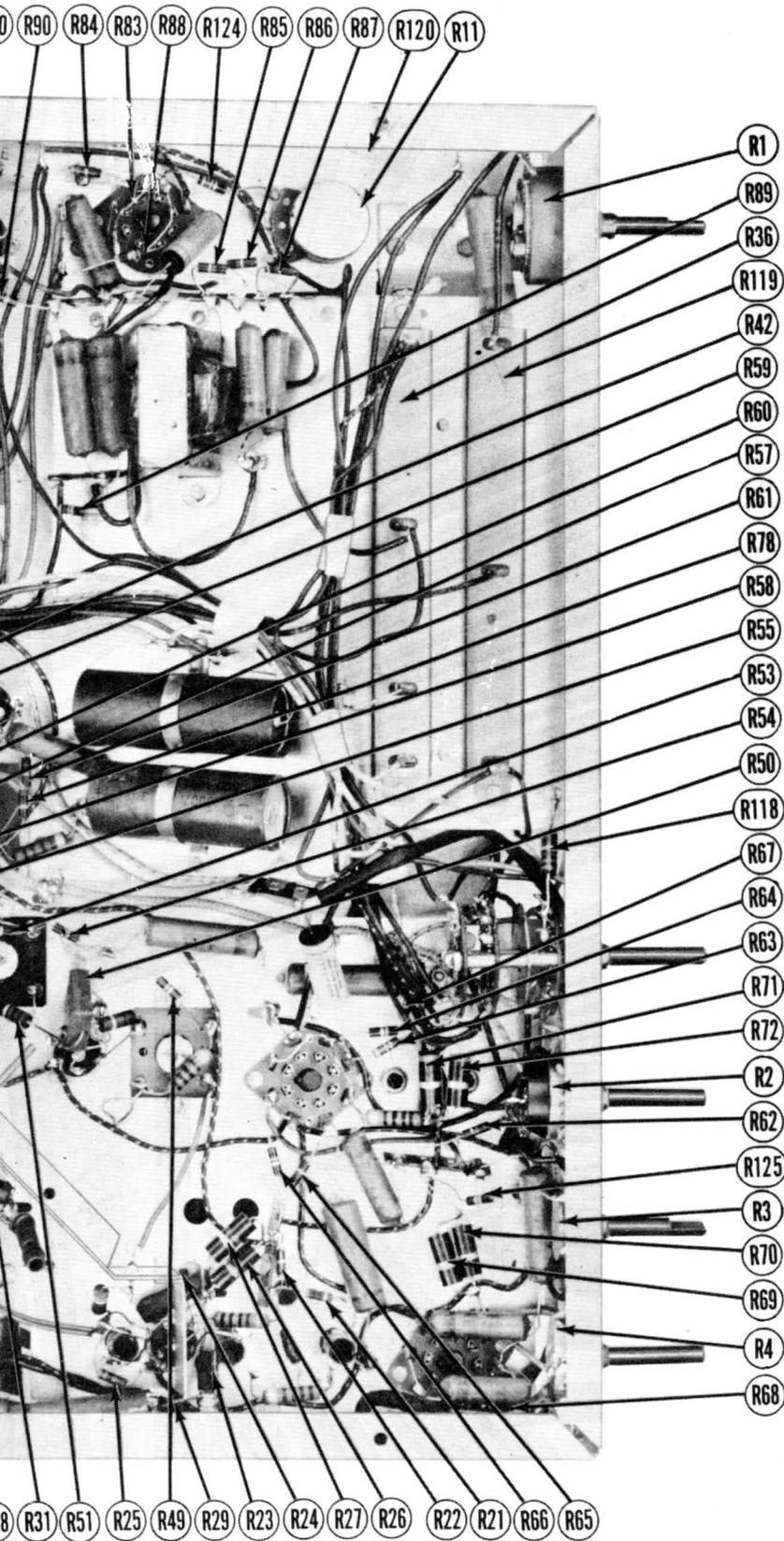


**CROSLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**

PACITOR IDENTIFICATION



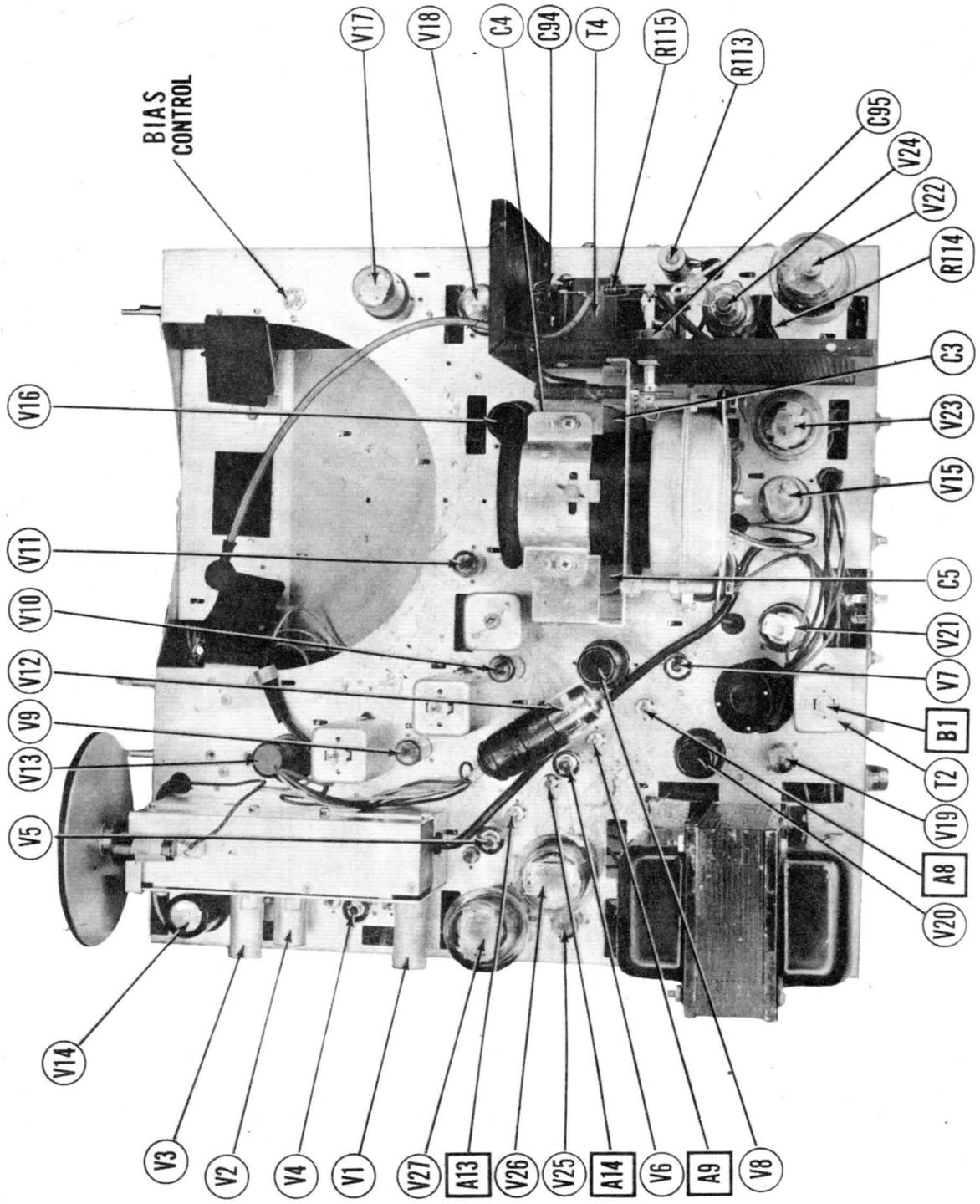
CHASSIS BOTTOM VIEW-F



RESISTOR IDENTIFICATION

**CROSLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**

MAIN POL-SISSAHC



**TUBES (SYLVANIA or Equivalent)**

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		CROSLEY PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6J6	6J6	7BF	
V2	Mixer	6AK5	6AK5	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	Video Det.-DC Rest.	6AL5	6AL5	6BT	
V8	Video Amp.	6AC7	6AC7	8N	
V9	1st Sound IF	6AU6	6AU6	7BK	
V10	Limitter	6AU6	6AU6	7BK	
V11	Discriminator	6AL5	6AL5	6BT	
V12	Tuning Indicator	6AL7GT	6AL7GT	3CH	
V13	AF Amp.	6SJ7	6SJ7	8N	
V14	Audio Output	6V6GT	6V6GT	7AC	
V15	Sync. Clipper-Hor. Disch.	6SN7GT	6SN7GT	8BD	
V16	Sync. Clipper-Vert. Buffer-Vert. Osc. & Disch.	6SJ7	6SJ7	8N	
V18	Vert. Amp.	6SN7GT	6SN7GT	8BD	
V19	Hor. Sync. Disc.	6AL5	6AL5	6BT	
V20	Hor. AFC	6AC7	6AC7	8N	
V21	Hor. Osc.	6K6GT	6K6GT	7S	
V22	Hor. Output	6BG6G	6BG6G	5BT	
V23	Damper	5V4G	5V4G	5L	
V24	HV Rect.	1B3GT	1B3GT	3C	
V25	Time Delay Rect.	6AL5	6AL5	6BT	
V26	LV Rect.	5U4G	5U4G	5T	
V27	LV Rect.	5U4G	5U4G	5T	
V28A	Picture Tube	12JP4	12JP4	12D	Used in model 9-407
B	Picture Tube	12KP4	12KP4	12D	Used in model 9-407M-2
C	Picture Tube	12LP4	12LP4	12D	Used in model 9-407M-1

**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	CROSLEY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.		SPRAGUE PART No.
C1	80	350	W-160039	AF16J	UP8045			TVL-64T	Filter
C2	80	350	W-160039	AF16J	UP8045			TVL-64T	Filter
C3A	40	475	B-160549	AFH8K8I	UP9BJ			TVL-20	Filter
B	40	400			955				Filter
C4A	30	450	W-160074	AF2222J1	UP1111			TVL-69	Vert. Osc. Plate Dec.
B	10	450			451				Output Decoupling
C5A	10	350	W-160076	AF2222J	UP1111			TVL-34	V. Amp. Screen Bypass
B	10	350			45				Low Pass Filter
C	10	300							Sync. Clip Plate Dec.
D	10	300							3rd V. IF Decoupling
C6	4	150	W-160036	PRS150/4	BR415			UT-41	Filter
C7	500	25	W-160071	PRS25/500	BRH255			TVA-10	Bias Filter
C8	100	25	W-160073	PRS25/100	BRH251A			TVA-8	Hor. Cent. Cont. Bypass
C9	1.5Ω	4	W-160070	PRS4/2000	BRH620			TVL-43	Vert. Cent. Cont. Bypass
C10	25	50	W-160075	PRS50/25	BR255			TVA-15	Vert. Output Cath. Byp.
C11	470	500	W-160633-20	1468-0005	5W5T6	GP2K-500	MO.5-35	LFM-35	RF Coupling
C12	470		W-160082	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	RF Fil. Bypass
C13	470		W-160082	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	RF Bypass
C14	15		W-160080		5W5T5	GP1K-15		MS-415	RF Coupling
C15	2-12		W-160247			TS2A-N500-2-12			Fixed Padder
C16	2-12		W-160247			TS2A-N500-2-12			Fixed Padder
C17	15		W-160080			GP1K-15		MS-415	RF Coupling
C18	470		W-160082	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	Mixer Fil. Bypass
C19	470		W-160082	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	Mixer Screen Bypass
C20	470	500	W-160633-20	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	RF Bypass
C21	1		W-137398-2	1468-000001					Osc. Coupling
C22	2-12		W-160247			TS2A-N500-2-12			Fixed Trimmer
C23	5		W-160084	1468-000005	5W5V5	NPOK-5	MO.5-55	MS-55	Osc. Grid Cap.
C24	470	500	W-160633-20	1468-0005	5W5T5	GP2K-500	MO.5-35	LFM-35	Osc. Fil. Bypass
C25	1000		W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	LFM-21	Mixer Plate Decoup.
C26	1000		W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	LFM-21	IF Coupling
C27	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	Bias Filter
C28	.25	200	39001-87	P488-25	GT2P25		ST-2-25	TC-2	" "
C29	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	1st V. IF Screen Byp.
C30	2		AW-160518						IF Coupling
C31	1000		W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	LFM-21	IF Coupling *
C32	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	Bias Filter
C33	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	2nd V. IF Screen Byp.
C34	20		W-160037		5R5Q2	NPOK-20	MO.5-42	MS-42	Fixed Trimmer
C35	10		W-160034	1468-00001	5R5Q1	NPOK-10	MO.5-45	MS-41	" "
C37	1000		W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	LFM-21	IF Coupling
C37	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	3rd IF Cath. Bypass
C38	6800		W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	LFM-27	3rd IF Screen Bypass
C39	1.6		AW-160402						IF Coupling
C40	1000		W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	LFM-21	Diode Filter
C41	47		W-160081	1469-00005	5R5Q5	NPOM-50	MO.5-45	MS-45	Fixed Trimmer
C42	.05	400	39001-17	P488-05	GT4S5		ST-4-05	TY-15	Video Coupling
C43	.5	400	39001-23	484-5	GT4P5		ST-4-5	TC-5	" "
C44	270		W-160079	1468-00025	5W5T25	GP2K-250	MO.5-325	LFM-325	DC Res. Diode Filter

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT	CROSLEY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.
C45	2.5		W-160078		
C46	1000		W-160034	1468-001	1W5D1
C47	2.5		W-160068		
C48	4700	500	W-160634-14	1467-005	1D5D5
C49	1000		W-160034	1468-001	1W5D1
C50	.1	200	39001-19	P288-1	GT2P1
C51	47		W-160109	1468-00005	5W5Q5
C52	1000		W-160034	1468-001	1W5D1
C53	1000		W-160034	1468-001	1W5D1
C54	47		W-160109	1468-00005	5W5Q5
C55	47		W-160109	1468-00005	5W5Q5
C56	1000		W-160034	1468-001	1W5D1
C57	.01	400	39001-13	P488-01	GT4S1
C58	.01	400	39001-13	P488-01	GT4S1
C59	.02	400	39001-80	P488-02	GT4S2
C60	.1	200	39001-19	P288-1	GT2P1
C61	.1	400	39001-19	P488-1	GT4P1
C62	6800		W-160067	1467-008	1D3D7
C63	.05	400	39001-17	P488-05	GT4S5
C64	1000		W-160034	1468-001	1W5D1
C65	.002	600	W-160643-3	P688-002	GT6D2
C66	.005	600	39001-11	P688-005	GT6D5
C67	.01	400	39001-13	P488-01	GT4S1
C68	.05	200	39001-17	P288-05	GT2S5
C69	.1	200	39001-19	P288-1	GT2P1
C70	.01	600	39001-13	P688-01	GT6S1
C71	.005	600	39001-11	P688-005	GT6D5
C72	.01	400	39001-13	P488-01	GT4S1
C73	.01	400	160643-4	P488-01	GT4S1
C74	.1	400	160643-5	P488-1	GT4P1
C75	.1	400	39001-19	P488-1	GT4P1
C76	.47		W-160035	1468-00005	5W5Q5
C77	.01	400	W-160643-4	P488-01	GT4S1
C78	.005	600	39001-11	P688-005	GT6D5
C79	.1	200	39001-19	P288-1	GT2P1
C80	10000	300	W-160635-18	1467-01	1D3S1
C81	.005	600	39001-11	P688-005	GT6D5
C82	.05	200	39001-17	P288-05	GT2S5
C83	.005	600	39001-11	P688-005	GT6D5
C84	.05	400	39001-17	P488-05	GT4S5
C85	330	500	W-160632-26		
C86	.01	400	39001-13	P488-01	GT4S1
C87	680	500	W-160634-3	1479-0007	2R5T7
C88	1000	500	W-160634-5	1468-001	1W5D1
C89	.1	200	39001-19	P288-1	GT2P1
C90	1000		W-160034	1468-001	1W5D1
C91	.05	400	39001-17	P488-05	GT4S5
C92	.035	1000	W-160643-1	P1088-033	
C93	.05	1000	W-160643-2	P1088-05	GT16S5
C94	220	1500	W-160111		
C95	500	10000	B-137477-1		
C96	.01	600	39001-13	P688-01	GT6S1
C97	.1	200	39001-19	P288-1	GT2P1
C98	.1	400	39001-19	P488-1	GT4P1
C99	.05	600	39001-17	P688-05	GT6S5
C100	.05	600	39001-17	P688-05	GT6S5

\* Not used in all models.  
† Parallel section to obtain desired capacity.

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	CROSLEY PART No.	IRC PART No.	CLARKE PART No.
R1	1000Ω	.25	W-160091-2		FW25-
R2A	500KΩ	½	W-160031	Q19-133X	AT-82
B	Shaft			Not Req.	RS-2
C	Switch			76-1	SW-A
R3A	100KΩ	½	W-160092-2	Q11-123	AM-49
B	Shaft			Not Req.	KS-2
R4A	25KΩ	½	W-160032	Q11-120	AM-40
B	Shaft			Not Req.	RS-2
R5	25Ω	2	W-160095-1	W-25	43-25
R6	25Ω	4	W-160089		10-25
R7	1500Ω	2	W-160087		43-150
R8A	500KΩ	½	W-160094-2	Q11-133	M-58-
B	Shaft			SQ	Not Req.
R9A	2 Meg.	½	W-160094-3	Q11-139	M-83-
B	Shaft			Not Req.	Not Req.
R10A	20KΩ	½	W-160094-1	Q11-119	M-36-
B	Shaft			Not Req.	Not Req.
R11A	500KΩ	½	W-160088	Q11-133	M-58-
B	Shaft			SQ	Not Req.

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	CROSLEY PART No.	IRC PART No.
R12	200Ω	½	39375-32	
R13	10KΩ	½	39374-213	
R14	12KΩ	½	39374-38	
R15	12KΩ	½	39374-38	
R16	1 Meg.	½	39374-61	
R17	47Ω	½	39374-9	
R18	330KΩ	½	39374-55	
R19	12KΩ	½	39374-38	
R20	10KΩ	½	39374-213	
R21	6200Ω	½	39375-71	
R22	47KΩ	½	39374-45	
R23	5600Ω	½	39375-67	
R24	68Ω	½	39374-11	
R25	6800Ω	½	39375-69	
R26	22KΩ	½	39374-217	

# PARTS LIST AND DESCRIPTIONS

## CAPACITORS (CONT.)

ITEM No.	RATING	CROSLLEY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C45	2.5	W-160078	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	S. IF Coupling
C46	1000	W-160034						AVC Filter
C47	2.5	W-160068						Fixed Trimmer
C48	4700 500	W-160634-14	1467-005	1D5D5	GP2M-005	MW.5-25	1FM-25	1st S. IF Screen Byp.
C49	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	1st S. IF Decoupling
C50	.1	39001-19	P288-1	GT2P1		ST-2-1	TM-1	AVC Filter
C51	.47	W-160109	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	"
C52	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	Limiter Screen Byp.
C53	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	Limiter Decoupling
C54	.47	W-160109	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	RF Bypass
C55	.47	W-160109	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	RF Bypass
C56	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	De-emphasis
C57	.01 400	39001-13	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Tuning Ind. Filter
C58	.01 400	39001-13	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Tone Comp.
C59	.02 400	39001-80	P488-02	GT4S2		ST-4-02	TM-12	Audio Coupling
C60	.1 200	39001-19	P288-1	GT2P1		ST-2-1	TM-1	Bias Filter
C61	.1 400	39001-19	P488-1	GT4P1		ST-4-1	TM-1	AF Screen Bypass
C62	6800	W-160067	1467-008	1D3D7	GP2-335-0075	MW.3-27	1FM-27	RF Bypass
C63	.05 400	39001-17	P488-05	GT4S5		ST-4-05	TM-15	Audio Coupling
C64	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	Decoupling
C65	.002 600	W-160643-3	P688-002	GT6D2	GP2M-002	ST-6-002	TM-22	Output Grid Bypass *
C66	.005 600	39001-11	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	Output Plate Bypass
C67	.01 400	39001-13	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Sync. Coupling
C68	.05 200	39001-17	P288-05	GT2S5		ST-4-05	TM-15	Sync. Coupling
C69	.1 200	39001-19	P288-1	GT2P1		ST-2-1	TM-1	Sync. Clip. Screen Byp.
C70	.01 600	39001-13	P688-01	GT6S1	GP2-335-01	ST-6-01	TM-11	Sync. Coupling
C71	.005 600	39001-11	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	Integrator Net.
C72	.01 400	39001-13	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	"
C73	.01 400	160643-4	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Vert. Osc. Grid Cap.
C74	.1 400	160643-5	P488-1	GT4P1		ST-4-1	TM-1	Vert. Discharge
C75	.1 400	39001-19	P488-1	GT4P1		ST-4-1	TM-1	Vert. Coupling
C77	.01 400	W-160035	1468-00005	5W5Q5	GP1K-50	MO.5-45	1FM-45	Sync. Coupling
C78	.005 600	W-160643-4	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Fixed Trimmer
C79	.1 200	39001-19	P288-1	GT2P1		ST-2-1	TM-1	AF Filter
C80	10000 300	W-160635-18	1467-01	1D3S1	GP2-335-01	MW.3-11	1FM-11	Phase Shifter
C81	.005 600	39001-11	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	APC Coupling
C82	.05 200	39001-17	P288-05	GT2S5		ST-4-05	TM-15	Hor. APC Screen Byp.
C83	.005 600	39001-11	P688-005	GT6D5	GP2M-005	ST-6-005	TM-25	Hor. Osc. Grid Cap.
C84	.05 400	39001-17	P488-05	GT4S5		ST-4-05	TM-15	Hor. Osc. Screen Byp.
C85	330 500	W-160632-26						Differentiator Net.
C86	.01 400	39001-13	P488-01	GT4S1	GP2-335-01	ST-4-01	TM-11	Hor. Sync. Coupling
C87	680 500	W-160634-3	1479-0007	2R5T7		MWS.5-37	NS-37	Hor. Discharge
C88	1000 500	W-160634-5	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	Hor. Coupling
C89	.1 200	39001-19	P288-1	GT2P1		ST-2-1	TM-1	Hor. Amp. Cath. Byp.
C90	1000	W-160034	1468-001	1W5D1	GP2L-001	MW.5-21	1FM-21	Bias Filter
C91	.05 400	39001-17	P488-05	GT4S5		ST-4-05	TM-15	Hor. Amp. Screen Byp.
C92	.035 1000	W-160643-1	P1088-033					Damper Filter
C93	.05 1000	W-160643-2	P1088-05	GT16S5		STM-10-05	TR-15	"
C94	220 1500	W-160111						Fixed Trimmer
C95	500 10000	B-137477-1			410-500			HV Filter
C96	.01 600	39001-13	P688-01	GT6S1		ST-6-01	TM-11	Acc. Anode Bypass
C97	.1 200	39001-19	P288-1	GT2P1		ST-2-1	TM-1	Pic. Tube Cath. Dec.
C98	.1 400	39001-19	P488-1	GT4P1		ST-4-1	TM-1	Hor. Cent. Bypass
C99	.05 600	39001-17	P688-05	GT6S5		MPH-6-05	TM-15	Line Filter
C100	.05 600	39001-17	P688-05	GT6S5		MPH-6-05	TM-15	"

ITEM No.	RATING	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
		CROSLLEY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	
R27	22KΩ						39374
R28	10KΩ						39374
R29	1 Meg.						39373
R30	6800Ω						39375
R31	68Ω						39374
R32	3900Ω						39374
R33	3900Ω						39375
R34	100Ω						39374
R35	3900Ω						39374
R36A	7000Ω						39374
R36B	2500Ω						W-160034
R37	39KΩ						39375
R38	4700Ω						39375
R39	3600Ω						39375
R40	100KΩ						39374
R41	100KΩ						39374
R42	3300Ω						39374
R43	120Ω						39374
R44	15Ω						39374
R45	22Ω						39374
R46	10KΩ						39374
R47	470KΩ						39374
R48	150KΩ						39374
R49	100KΩ						39374
R50	68Ω						39374
R51	33KΩ						39374
R52	1000Ω						39374
R53	56KΩ						39374
R54	100KΩ						39374
R55	68Ω						39374
R56	10KΩ						39374
R57	47KΩ						39374
R58	1000Ω						39374
R59	100KΩ						39374
R60	100KΩ						39374
R61	27KΩ						39374
R62	22KΩ						39374
R63	470KΩ						39374
R64	100KΩ						39374
R65	1 Meg.						39374
R66	100KΩ						39374
R67	470KΩ						39374
R68	100KΩ						39374
R69	2200Ω						39374
R70	2200Ω						39374
R71	8200Ω						39374
R72	8200Ω						39374
R73	3300Ω						39374
R74	39KΩ						39374
R75	3300Ω						39374
R76	33KΩ						39374
R77	6800Ω						39374
R78	1 Meg.						39374
R79	1.2 Meg.						39374
R80	10KΩ						39374
R81	100KΩ						39374
R82	2.2KΩ						39374
R83	1.2 Meg.						39374
R84	6800Ω						39374
R85	10KΩ						39374
R86	10KΩ						39374
R87	10KΩ						39374
R88	560KΩ						39374
R89	470KΩ						39374
R90	3900Ω						39374
R91	820Ω						39374
R92	2.2 Meg.						39374
R93	470KΩ						39374
R94	470KΩ						39374
R95	470Ω						39374
R96	470KΩ						39374
R97	10Ω						39374
R98	22KΩ						39374
R99	47KΩ						39374
R100	27KΩ						39374
R101	47KΩ						39374
R102	5000Ω						W-160034
R103	10KΩ						39374
R104	6800Ω						39374
R105	220KΩ						39374
R106	680KΩ						39374
R107	10KΩ						39374
R108	470KΩ						39374
R109	100Ω						39374
R110	100Ω						W-160034
R111	27KΩ						39374
R112	22KΩ						39374
R113	6KΩ						W-160034
R114	5.6Ω						39374
R115	680KΩ						39374
R116	10KΩ						39374
R117	10KΩ						39374
R118	330Ω						39374
R119A	200Ω						W-160034
R119B	250Ω						W-160034
R120	1280Ω						W-160034
R121	100KΩ						39374
R122	100KΩ						39374
R123	2.2Ω						39304
R124	470KΩ						39374
R125	220KΩ						39374
R126	1250Ω						B-138
R127	2						

# DESCRIPTIONS

(CONT.)

# RESISTORS (CONT.)

No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
01	MW.5-21	LFM-21	S. IF Coupling
			AVC Filter
05	MW.5-25	LFM-25	Fixed Trimmer
			1st S. IF Screen Byp.
01	MW.5-21	LFM-21	1st S. IF Decoupling
	ST-2-1	TM-1	AVC Filter
0	MO.5-45	LFM-45	"
01	MW.5-21	LFM-21	Limiters Screen Byp.
	MO.5-21	LFM-21	Limiters Decoupling
0	MO.5-45	LFM-45	RF Bypass
	MO.5-45	LFM-45	RF Bypass
01	MW.5-21	LFM-21	De-emphasis
5-01	ST-4-01	TM-11	Tuning Ind. Filter
5-01	ST-4-01	TM-11	Tone Comp.
	ST-4-02	TM-12	Audio Coupling
	ST-2-1	TM-1	Bias Filter
	ST-4-1	TM-1	AF Screen Bypass
	MW.3-27	LFM-27	RF Bypass
01	ST-4-05	TM-15	Audio Coupling
02	MW.5-21	LFM-21	Decoupling
05	ST-6-002	TM-22	Output Grid Bypass *
5-01	ST-6-005	TM-25	Output Plate Bypass
	ST-4-01	TM-11	Sync. Coupling
	ST-4-05	TM-15	Sync. Coupling
	ST-2-1	TM-1	Sync. Clip. Screen Byp.
5-01	ST-6-01	TM-11	Sync. Coupling
5-01	ST-6-005	TM-25	Integrator Net.
5-01	ST-4-01	TM-11	"
5-01	ST-4-01	TM-11	Vert. Osc. Grid Cap.
	ST-4-1	TM-1	Vert. Discharge
	ST-4-1	TM-1	Vert. Coupling
0	MO.5-45	LFM-45	Sync. Coupling
5-01	ST-4-01	TM-11	Fixed Trimmer
05	ST-6-005	TM-25	AF Filter
	ST-2-1	TM-1	"
5-01	MW.3-11	LFM-11	Phase Shifter
05	ST-6-005	TM-25	AFC Coupling
05	ST-4-05	TM-15	Hor. AFC Screen Byp.
	ST-6-005	TM-25	Hor. Osc. Grid Cap.
	ST-4-05	TM-15	Hor. Osc. Screen Byp.
			Differentiator Net.
5-01	ST-4-01	TM-11	Hor. Sync. Coupling
	MMS.5-37	MS-37	Hor. Discharge
01	MW.5-21	LFM-21	Hor. Coupling
01	ST-2-1	TM-1	Hor. Amp. Cath. Byp.
	MW.5-21	LFM-21	Bias Filter
	ST-4-05	TM-15	Hor. Amp. Screen Byp.
			Damper Filter
0	STM-10-05	TR-15	Fixed Trimmer
			HV Filter
	ST-6-01	TM-11	Acc. Anode Bypass
	ST-2-1	TM-1	Pic. Tube Cath. Dec.
	ST-4-1	TM-1	Hor. Cent. Bypass
	MPH-6-05	TM-15	Line Filter
	MPH-6-05	TM-15	"

LS

### INSTALLATION NOTES

Focus control (Wire Wound)
Volume control
Attach to R2A per instructions
Brightness control
Attach to R3A per instructions
Contrast control
Attach to R4A per instructions
Vertical centering control (Wire Wound)
Horiz. centering control (Wire Wound)
Vert. linearity control (Wire Wound)
Vert. hold control
Attach to R8A per instructions
Vert. size control
Attach to R9A per instructions
Horiz. drive control
Attach to R10A per instructions
Picture Tube Bias Control
Attach to R11A per instructions

### IDENTIFICATION CODES

RESISTORS ARE ± 10% UNLESS OTHERWISE STATED	
Cathode	5%
Plate	
Coil Shunt	
Coil Shunt	
Grid	
Cathode	
Screen	
Grid	
Plate	
Plate Transformer Shunt	5%
Plate Decoupling	
Video IF Grid	
Video IF Cathode	
Video IF Transformer Shunt	5%
Video IF Plate	

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	CROSLEY PART No.	IRC PART No.	
R27	22KΩ	2	39374-217		1st Video IF Plate
R28	10KΩ	2	39374-37	BTS-10K	Bias Network
R29	1 Meg.	2	39373-92	BTS-1 Meg.	Bias Network
R30	6800Ω	2	39375-69		2nd Video IF Coil Shunt
R31	68Ω	2	39374-11		2nd Video IF Cathode
R32	3900Ω	2	39374-208	BT-2-3900	2nd Video IF Decoupling
R33	3900Ω	2	39375-63		3rd Video IF Coil Shunt
R34	100Ω	2	39374-13		3rd Video IF Cathode
R35	3900Ω	2	39374-208	BT-2-3900	3rd Video IF Decoupling
R36A	7000Ω	7	W-160195	AB-7000	Bleeder (Wire Wound)
B	2500Ω	10		AB-2500	Filter (Wire Wound)
C	62Ω	2		BW-2-62	Voltage Divider (Wire Wound)
R37	39KΩ	2	39375-87		Video Det. Coil Shunt
R38	4700Ω	2	39375-65	BTS-4700-5%	Video Amp. Grid
R39	3600Ω	2	39375-358	BTS-3900-5%	Video Amp. Plate
R40	100KΩ	2	39374-225	BT-2-100K	Video Amp. Screen
R41	100KΩ	2	39374-225	BT-2-100K	Video Amp. Screen
R42	3300Ω	2	39374-207	BW-2-3300	Filter
R43	120Ω	2	39374-190	BW-2-120	Voltage Divider
R44	15Ω	2	39374-5	BW-1-15	"
R45	22Ω	2	39374-5	BW-1-22	"
R46	10KΩ	2	39374-37	BTS-10K	DC Restorer Diode Load
R47	470KΩ	2	39374-57	BTS-470K	Picture Tube Grid
R48	150KΩ	2	39374-51	BTS-150K	Voltage Divider
R49	100KΩ	2	39374-49		1st Sound IF Grid
R50	68Ω	2	39374-11		1st Sound IF Cathode
R51	33KΩ	1	39374-131	BTA-33K	1st Sound IF Screen
R52	1000Ω	2	39374-25	BTS-1000	1st Sound IF Decoupling
R53	56KΩ	2	39374-46		2nd Sound IF Grid
R54	100KΩ	2	39374-49	BTS-100K	1st Sound IF Grid Filter
R55	68Ω	2	39374-11		2nd Sound IF Cathode
R56	10KΩ	2	39374-37	BTS-10K	Voltage Divider
R57	47KΩ	2	39374-221	BT-2-47K	2nd Sound IF Screen
R58	1000Ω	2	39374-25	BTS-1000	2nd Sound IF Decoupling
R59	100KΩ	2	39374-49	BTS-100K	Discriminator Load
R60	100KΩ	2	39374-49	BTS-100K	"
R61	27KΩ	2	39374-42	BTS-27K	De-emphasis
R62	22KΩ	2	39374-41	BTS-22K	Tone Compensation
R63	470KΩ	2	39374-57	BTS-470K	1st AF Grid
R64	100KΩ	2	39374-49	BTS-100K	1st AF Plate
R65	1 Meg.	2	39374-61	BTS-1 Meg.	1st AF Screen
R66	100KΩ	2	39374-49	BTS-100K	Voltage Divider
R67	470KΩ	2	39374-57	BTS-470K	Bias Network
R68	100KΩ	2	39374-49	BTS-100K	Output Grid
R69	2200Ω	2	39374-205	BW-2-2200	Filter
R70	2200Ω	2	39374-205	BW-2-2200	Filter
R71	8200Ω	2	39374-212	BT-2-8200	Voltage Dropping
R72	8200Ω	2	39374-212	BT-2-8200	"
R73	3300Ω	2		BTS-3300	Tuning Ind. Grid
R74	39KΩ	2	39374-44	BTS-39K	Sync. Clipper Grid
R75	3300Ω	2	39374-31	BTS-3300	Sync. Clipper Plate
R76	33KΩ	2	39374-219	BT-2-33K	Filter
R77	6800Ω	2	39374-35	BTS-6800	Voltage Divider
R78	1 Meg.	2	39374-61	BTS-1 Meg.	Tuning Indicator Network
R79	1.2 Meg.	2	39374-63	BTS-1.2 Meg.	Sync. Clipper Grid
R80	10KΩ	2	39374-37	BTS-10K	Sync. Clipper Plate
R81	100KΩ	1	39374-137	BTA-100K	Sync. Clipper Screen
R82	22KΩ	2	39374-41	BTS-22K	Voltage Divider
R83	1.2 Meg.	2	39374-63	BTS-1.2 Meg.	Vert. Buffer Grid
R84	6800Ω	2	39374-35	BTS-6800	Vert. Buffer Cathode
R85	10KΩ	2	39374-37	BTS-10K	Integrator
R86	10KΩ	2	39374-37	BTS-10K	"
R87	10KΩ	2	39374-37	BTS-10K	Vert. Buffer Plate
R88	560KΩ	2	39374-58	BTS-560K	Vert. Osc. Grid
R89	470KΩ	2	39374-57	BTS-470K	Vert. Osc. Plate
R90	3900Ω	2	39374-32	BTS-3900	Vert. Peaking
R91	820Ω	1	39374-112	BTA-820	Vert. Amp. Cathode
R92	2.2 Meg.	1	39374-69	BTS-2.2 Meg.	Vert. Amp. Grid
R93	470KΩ	2	39374-57	BTS-470K	Sync. Disc. Load
R94	470KΩ	2	39374-57	BTS-470K	"
R95	470Ω	2	39374-21	BTS-470	Horiz. AFC Grid
R96	470KΩ	2	39374-57	BTS-470K	AFC Filter
R97	10Ω	2	39374-1	BW-1-10	Horiz. AFC Cathode
R98	22KΩ	2	39374-217	BT-2-22K	Horiz. AFC Plate
R99	47KΩ	2	39374-221	BT-2-47K	Horiz. AFC Screen
R100	27KΩ	1	39374-130	BTA-27K	Voltage Divider
R101	47KΩ	2	39374-45	BTS-47K	Horiz. Osc. Grid
R102	5000Ω	10	W-160104-16	AB-5000	Horiz. Osc. Plate (Wire Wound)
R103	10KΩ	1	39374-125	BTA-10K	Horiz. Osc. Screen
R104	6800Ω	2	39374-35	BTS-6800	Differentiator
R105	220KΩ	2	39374-53	BTS-220K	Horiz. Discharge Grid
R106	680KΩ	2	39374-59	BTS-680K	Horiz. Discharge Plate
R107	10KΩ	2	39374-37	BTS-10K	Horiz. Peaking
R108	470KΩ	2	39374-57	BTS-470K	Horiz. Output Grid
R109	100Ω	2	39374-13		Parasitic Suppressor
R110	100Ω	5	W-160097-3	AB-100	Horiz. Output Cathode (Wire Wound)
R111	27KΩ	2	39374-218	BT-2-27K	Horiz. Output Screen
R112	22KΩ	2	39374-217	BT-2-22K	"
R113	6KΩ	25	W-160258		Damper Filter See Note 3 (Wire Wound)
R114	5.6Ω	1	39305-17	BW-1-5.6	HV Filament
R115	680KΩ	2	39374-141		HV Filter
R116	10KΩ	2	39374-213	BT-2-10K	Filter
R117	10KΩ	2	39374-213	BT-2-10K	"
R118	330Ω	1	39374-107	BTA-330	Bias Network
R119A	200Ω	12	W-160194	AB-200	Series Focus Coil Wire Wound
B	2500Ω	8		AB-2500	Focus Coil Shunt
R120	1280Ω	24	W-160199	DRA-1250	Filter (Wire Wound)
R121	100KΩ	1	39374-137	BTA-100K	Filter
R122	100KΩ	1	39374-137	BTA-100K	"
R123	2.2Ω	1	39304-8	BW-1-2.2	Time Delay Rect. Filament Wire Wound
R124	470KΩ	2	39374-57	BTS-470K	Voltage Divider
R125	220KΩ	2	39374-53	BTS-220K	"
R126	1250Ω	10	B-138201-6	AB-1250	Focus Coil Shunt See Note 1
R127	22KΩ	2	39374-41	BTS-22K	Voltage Divider See Note 2

Note 1. Used only when using 12KP4 or 12LP4 picture tubes.  
 Note 2. Used only when using 12LP4 picture tube.  
 Note 3. Tap at 5000Ω not used.

**CROSLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**

## PARTS LIST AND DESCRIPTIONS (Continued) TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	CROSLLEY PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T1	117VAC @ 2.6A	760VCT @ .320 ADC 55VAC Tap. SEC. 4 6.3VAC @ 9.0A	5VAC 6A	5VAC 2A	D-160011	P-8152#		

# Drill new mounting holes. Use dropping resistor to obtain 55V from one side of HV winding.

### TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		CROSLLEY PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
PRI.	SEC.						
T2	68Ω Tap @ 38Ω	68Ω Tap @ 21Ω	AC-160009-1				Hor. Osc. Trans.
T3	290Ω	740Ω SEC. 2 600Ω	D-160015-2				Vert. Block Osc. Trans.
T4	430Ω Tap @ 180Ω	SEC. 1 10.5Ω Tap @ .5Ω SEC. 2 0Ω 7Ω	W-160201	A-8117	TFB-1		Hor. Output Trans.
T5	575Ω		W-160200	A-8115	TSO-1	A-3035	Vert. Output Trans.
T6A	15Ω		AB-160455	DY-1			Hor. Deflection Coil
T6B	62Ω						Vert. Deflection Coil
T7	525Ω		AB-160365				Focus Coil

### TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		CROSLLEY PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.	PRI.	SEC.					
T8	5000Ω	3.1Ω	315Ω	.4Ω	138131-2	A-3849	RO-303	A-2902	

### FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ <sup>2</sup> )	CROSLLEY PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.310A	88Ω	4 Henry	C-160014	C-2326#			# Drill new mounting holes.

### COILS (RF-IF)

ITEM No.	USE	DC-RÉS.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	CROSLLEY PART No.	MEISSNER PART No.	
L2	Ant. Input	0Ω		AW-160018		
L3	RF End Inductor	0Ω		AW-160218		
L4	RF Plate	0Ω				Part of C-160308
L5	Mixer End Inductor	0Ω		AW-160225		
L6	Mixer Grid	0Ω				Part of C-160308
L7	Osc. End Inductor	0Ω		AW-160217		
L8	Oscillator	0Ω				Part of C-16038
L9	Osc. Shunt	0Ω		AW-160054		
L10A	1st Video					Used in sets having molded type miniature tube socket.
B	1st Video	.7Ω		AW-160512		Used in sets having wafer type miniature tube socket.
L11	RF Choke	0Ω		AW-160155		
L12A	1st Video			AW-160020		
B	1st Video	.7Ω		AW-160513		Used in sets having molded type miniature tube socket.
B	1st Video			AW-160155		Used in sets having wafer type miniature tube socket.
L13A	2nd Video			AW-160512		Used in sets having molded type miniature tube sockets.
B	2nd Video	.7Ω		AW-160512		Used in sets having wafer type miniature tube sockets.
L14A	2nd Video			AW-160163		
B	2nd Video	.7Ω		AW-160513		Used in sets having molded type miniature tube sockets.
B	2nd Video			AW-160155		Used in sets having wafer type miniature tube sockets.
L15A	3rd Video			AW-160155		
B	3rd Video	.7Ω		AW-160512		Used in sets having molded type miniature tube sockets.
B	3rd Video			AW-160163		Used in sets having wafer type miniature tube sockets.
L16	21.9MC Sound Trap	0Ω		AW-160159		
L17	Adjacent Channel Sound Trap	.1Ω		AW-160159		
L18A	3rd Video			AW-160159		
B	3rd Video	.7Ω		AW-160513		Used in sets having molded type miniature tube sockets.
B	3rd Video			AW-160161		Used in sets having wafer type miniature tube sockets.
L19A	4th Video			AW-160161		
B	4th Video	.7Ω		AW-160512		Used in sets having molded type miniature tube sockets.
B	4th Video			AW-160163		Used in sets having wafer type miniature tube sockets.
L20A	4th Video			AW-160163		
B	4th Video	.7Ω		AW-160512		Used in sets having molded type miniature tube sockets.
B	4th Video			AW-160163		Used in sets having wafer type miniature tube sockets.
L21	Peaking	15.5Ω		AW-160023-3		
L22	Peaking	18.5Ω		AW-160023-2		
L23	4.5MC Trap	1.5Ω		AW-160160		
L24	Peaking	10Ω		AW-160023-1		

PARTS LIST CONTINUED ON PAGE 19

COILS (RF-IF) CONT.

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	CROSLLEY	MEISSNER	
				PART No.	PART No.	
L25	1st Sound IF Trans.	0Ω	0Ω	AC-160008		Used in early production sets.
L26	2nd Sound IF Trans.			AC-160008		
L27	Disc. Trans.	.5Ω	0Ω	AC-160010		
L28	Hor. Linearity Control	37Ω		AW-160281		
L29	Hor. Size Control	.2Ω		AW-160238		
L30	Coupling Choke					

SPEAKER

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	CROSLLEY	JENSEN	QUAM	
			PART No.	PART No.	PART No.	
SP1	PM	3.1Ω	145087		57A15	
SP2	CONE DIA.	V. C. DIA.				
	4 3/4" x 7"	3/4"				

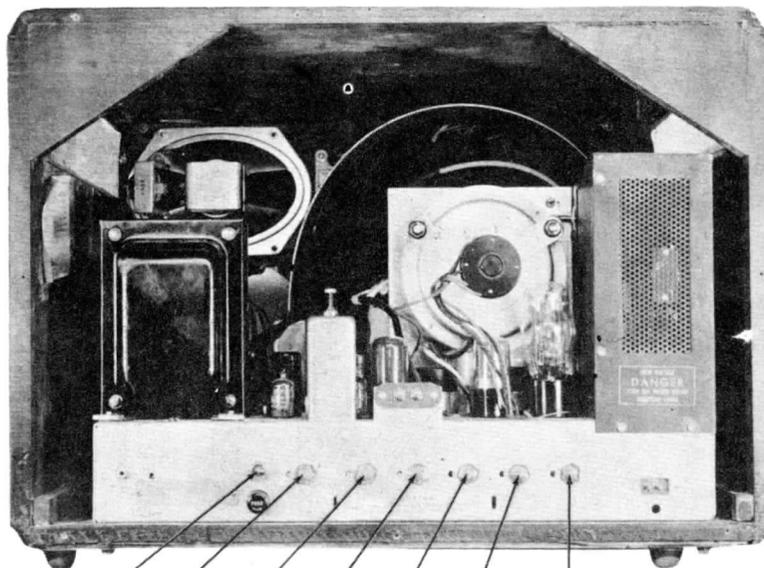
DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					CROSLLEY		
					PART No.		
M1	Bayonet	6-8V	.25	Blue			Type #44

MISCELLANEOUS

ITEM No.	PART NAME	CROSLLEY PART No.	NOTES
M2	Tuner Assembly	AW-160025	Complete
M3	Fuse	W-160117-10	3 Amp.
M4	Relay	W-160044	Armature, SPST.
M5	Band SW	B-160022	
M6	Vertical Positioning SW.	W-160196	Toggle, DPDT.
M7	Ion Trap	W-144315	Model 9-407M-1
	Iron Core	39012-94	For L209, L222
	Iron Core	39012-93	For L219
	Iron Core	39012-92	For L220
	Iron Core	39013-91	For L216
	Iron Core	W-160426	For L204, L207, L210, L212, L208, L201, L203, L206,
	Iron Core	39012-85	For Z201, Z202, Z203.
	Iron Core	39012-95	For Z204
	Magnet	W-135723	Hor. Output Oscillation Damping magnet.
	High Voltage Cable and Connector	AW-160510	Includes Power Cable, For Models 9-407, 9-407M-2
Bank Panel	AD-160392	Includes Power Cable, For Models 9-407M-1	
Back Panel	AD-160504		
Knob	B-160488-1	Small (Plain)	
Knob	B-160488-2	Small (With Indicator Line)	
Knob Assembly	AB-160391	Large	
Mask	R-160050-2	For Models 9-407	
Mask	R-160473	For Models 9-407M-1, 9-407M-2	
Safety Glass	B-150166-1		

**CROSLLEY**  
**MODELS 9-407, 9-407M-1, 9-407M-2**



VERT. BAND SW.    VERT. CENT.    HORIZ. CENT.    VERT. LIN.    VERT. SIZE    VERT. HOLD    HORIZ. DRIVE

CABINET-REAR VIEW

# DISASSEMBLY INSTRUCTIONS

1. Remove six push-on type control knobs.
2. Disconnect speaker plug.
3. Remove tuning indicator tube from holder.
4. Remove four 7/16" hex head bolts holding chassis. Remove chassis.
5. Remove four 11/32" hex nuts holding speaker. Remove speaker.

## HORIZONTAL FREQUENCY ADJUSTMENT

If the picture does not remain in "sync" horizontally turn the horizontal hold adjustment (B1) and determine the two extreme positions where the picture drops into "sync"—not out of synchronization. Set B1 midway between these two positions.

Turn the horizontal centering control until the raster is positioned correctly horizontally. Decrease the contrast control and increase the brightness so the entire raster is visible including the area to the right which usually is blanked out. Adjacent to the right edge of the picture there should be a vertical gray strip about 1/4" wide at the right edge of the raster. Further to the right a darker strip may or may not be present. If this strip is over 3/16" wide or if the first lighter gray strip is not present the phasing is incorrect. If so, turn the phasing control (B2) until the left edge of the darker strip is at the extreme right edge of the raster almost to the disappearing point.

## HORIZONTAL LINEARITY AND SIZE ADJUSTMENT

Adjust the horizontal size control (B3) so the picture width is the same as the picture frame opening.

Adjust the horizontal drive control for the best linearity of pattern on the right side of the picture. (This control is pre-set at the factory and normally should not require adjustment in the field.)

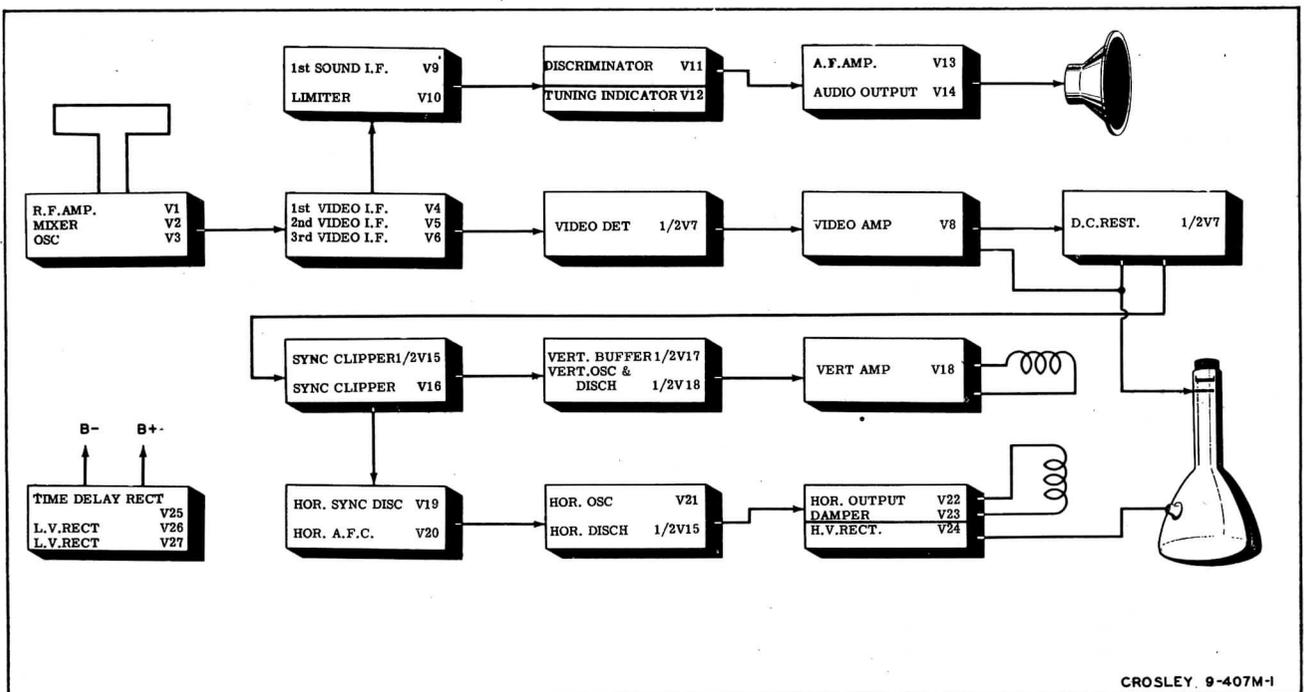
The horizontal linearity control (B4) affects the middle portions of the picture. Readjust the horizontal size control (B3) after the horizontal drive and linearity controls have been adjusted, if necessary.

## BIAS CONTROL ADJUSTMENT

If the picture tube has been replaced, turn the contrast control fully counter-clockwise.

Turn the brightness control to the point where a VTVM reading of 50 volts is obtained between the brightness control "arm" and chassis.

Advance the bias control to the point where the raster just disappears.



BLOCK DIAGRAM