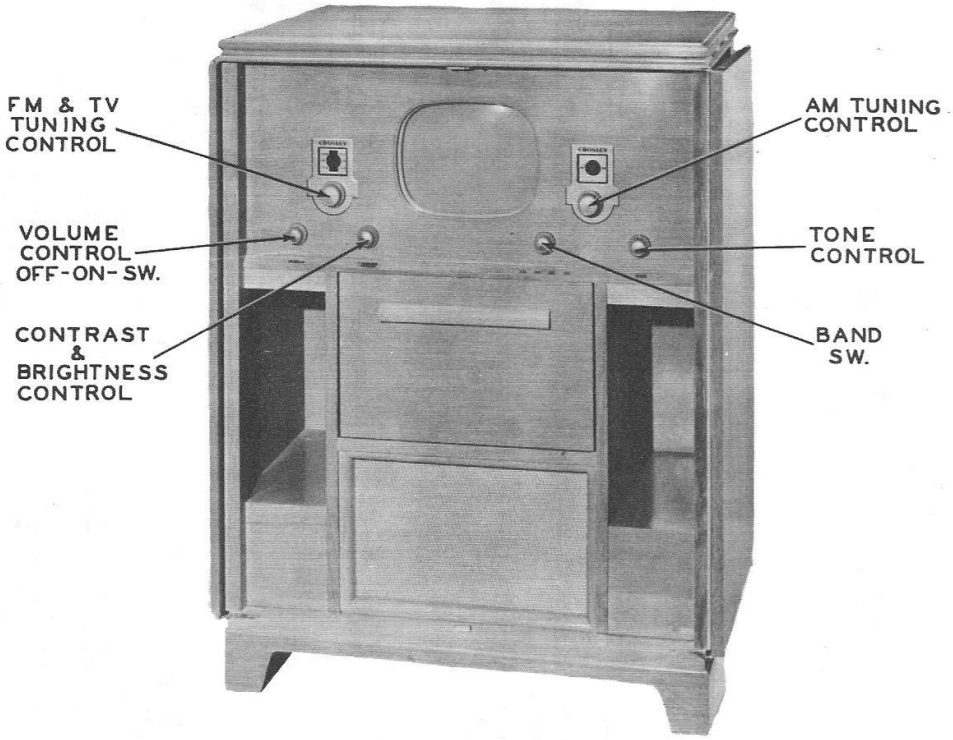
PHOTOFACT* Folder

*TRADE MARK

CROSLEY MODELS
9-403M, 9-403M-2, 9-404M, 9-413B, 9-413B-2, 9-414B, 9-420M, 9-424B



CROSLEY MODEL 9-414B

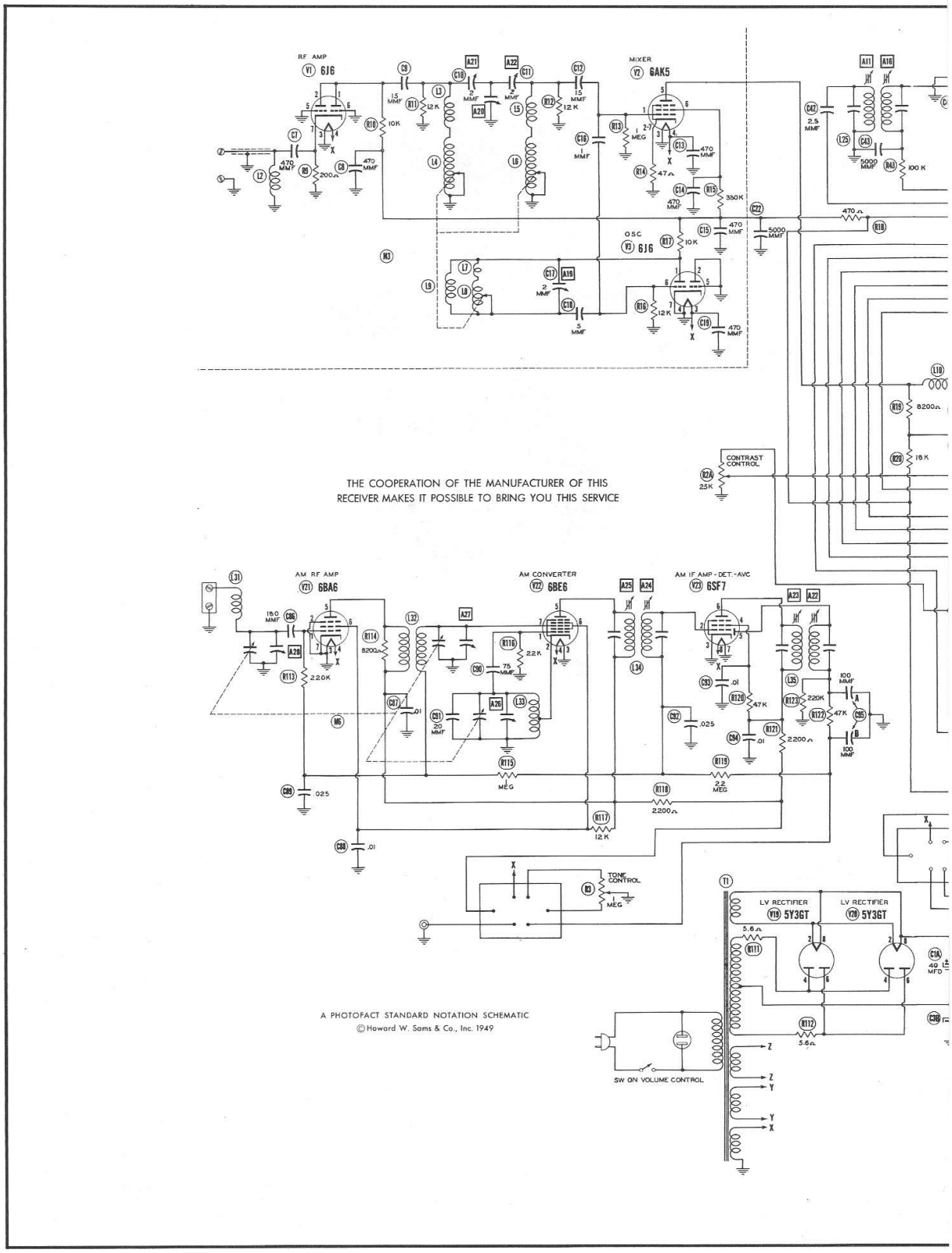
TRADE NAME	Crosley, Models 9-403M, 9-403M-2, 9-404M, 9-413B, 9-413B-2, 9-414B, 9-420M, 9-424B
MANUFACTURER	Crosley Div., Aveo Manufacturing Corp., Cincinnati 25, Ohio
TYPE SET	AM-FM-TV Receiver
TUBES	Twenty One (TV-FM only models) Twenty Four (TV-FM-AM models)
POWER SUPPLY	117 Volts-60 Cycle
TUNING RANGE	AM 540-1600KC, FM-TV 44-216MC (continuous tuning)
RATING	2 Amp. @ 117 Volts AC (TV), 1.5 Amp. @ 117 Volts AC (FM-AM)

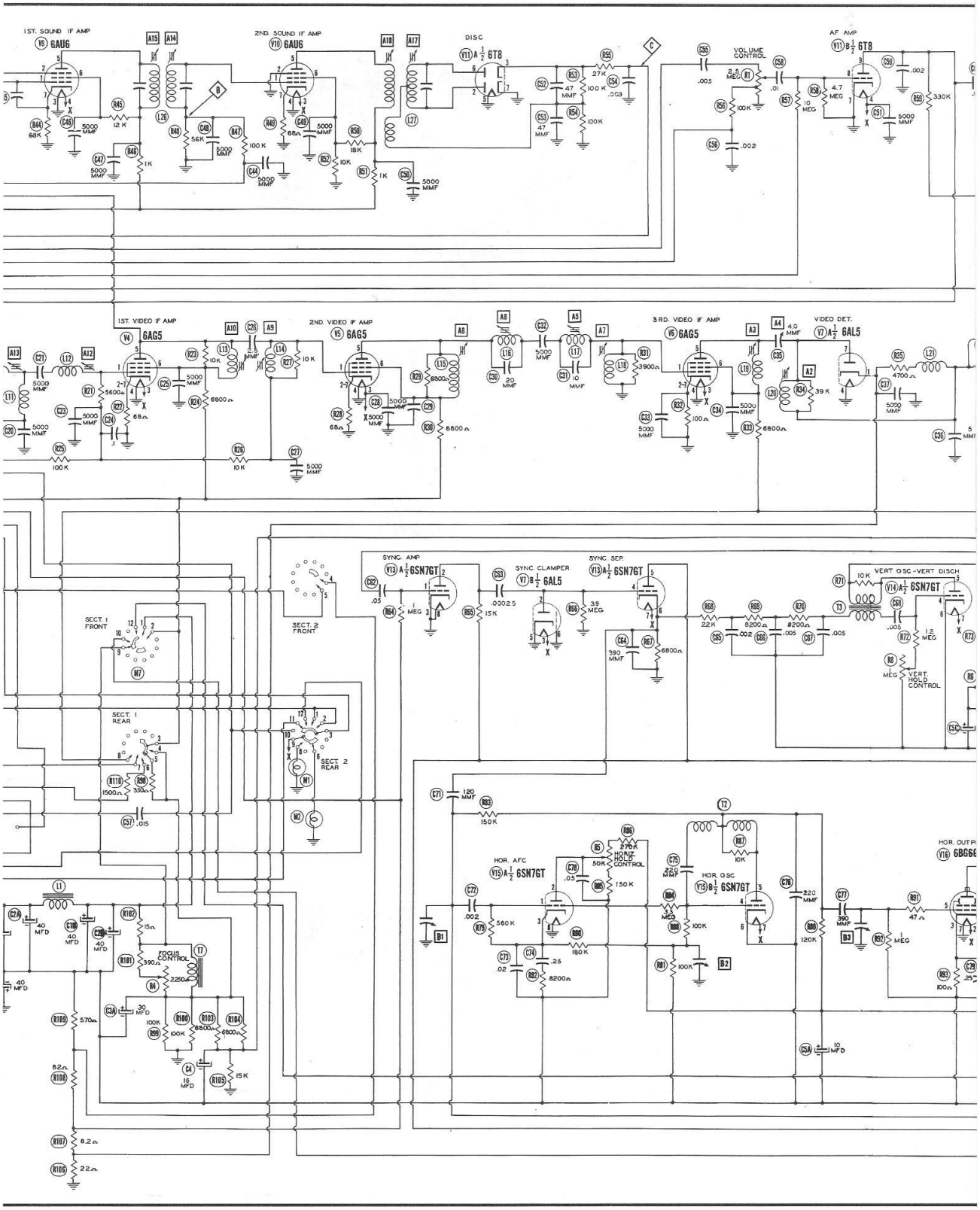
INDEX

CROSLEY MODELS
9-403M, 9-403M-2, 9-404M, 9-413B, 9-413B-2, 9-414B, 9-420M, 9-424B

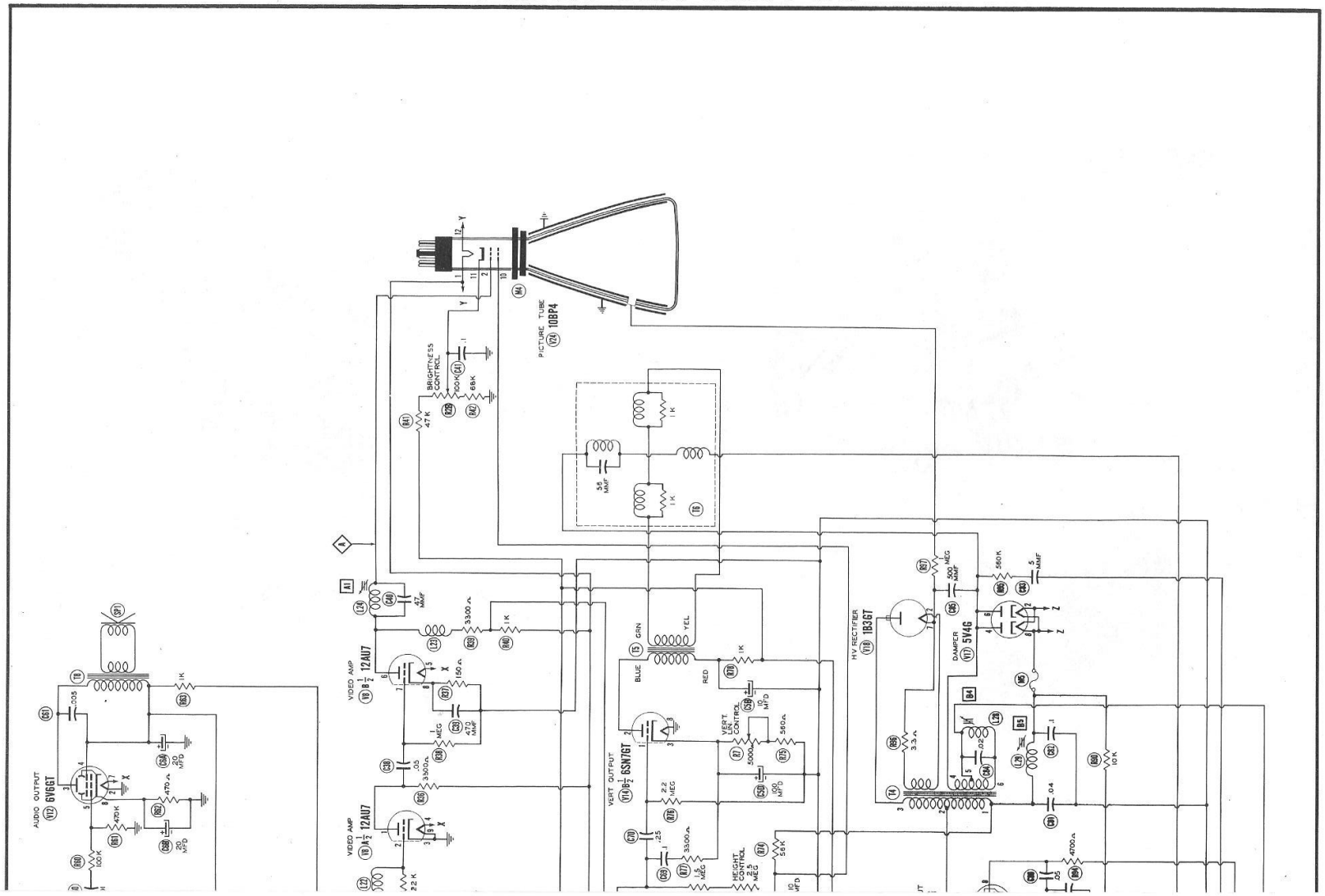
HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana

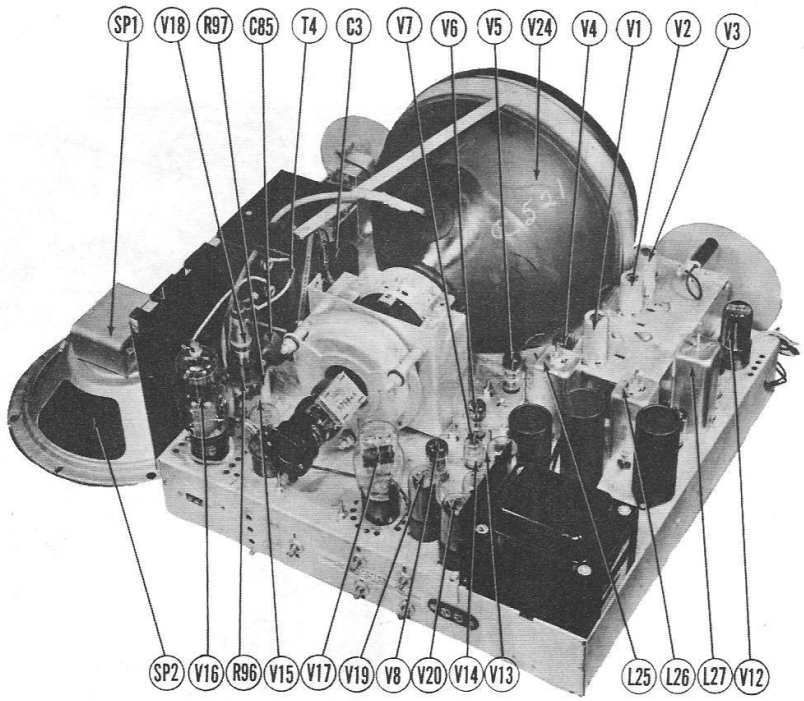
DATE 12/49 SET # 79 FOLDER # 4

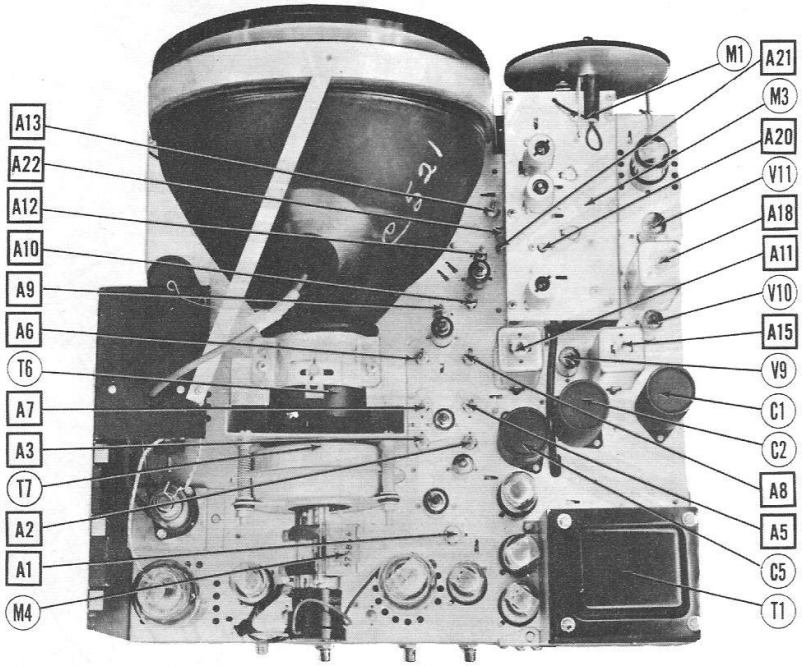

RF AMP
V1 6J6
MIXER
V2 6AK5
OSC
V3 6J6
CONTRAST CONTROL
R24 25K
THE COOPERATION OF THE MANUFACTURER OF THIS
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE
AM RF AMP
V21 6BA6
AM CONVERTER
V22 6BE6
AM IF AMP - DET. - AVC
V23 6SF7
TONE CONTROL
R3
MEG
LV RECTIFIER
V19 5Y3GT
LV RECTIFIER
V28 5Y3GT
SW ON VOLUME CONTROL
A PHOTOFACT STANDARD NOTATION SCHEMATIC
© Howard W. Sams & Co., Inc. 1949


1ST. SOUND IF AMP
V9 6AU6
2ND. SOUND IF AMP
V10 6AU6
DISC
V11 A 1/2 6T8
VOLUME CONTROL
AF AMP
V11 B 1/2 6T8
1ST. VIDEO IF AMP
V4 6AG5
2ND. VIDEO IF AMP
V5 6AG5
3RD. VIDEO IF AMP
V6 6AG5
VIDEO DET.
V7 A 1/2 6AL5
SYNC. AMP
V13 A 1/2 6SN7GT
SYNC. CLAMPER
V7 B 1/2 6AL5
SYNC. SEP.
V13 A 1/2 6SN7GT
VERT OSC-VERT DISCH
V14 A 1/2 6SN7GT
VERT. HOLD CONTROL
SECT. 1 FRONT
SECT. 2 FRONT
SECT. 1 REAR
SECT. 2 REAR
HOR. AFC
V15 A 1/2 6SN7GT
HORIZ. HOLD CONTROL
HOR. OSC
V15 B 1/2 6SN7GT
FOCUS CONTROL
HOR. OUTPUT
V16 6BG6G

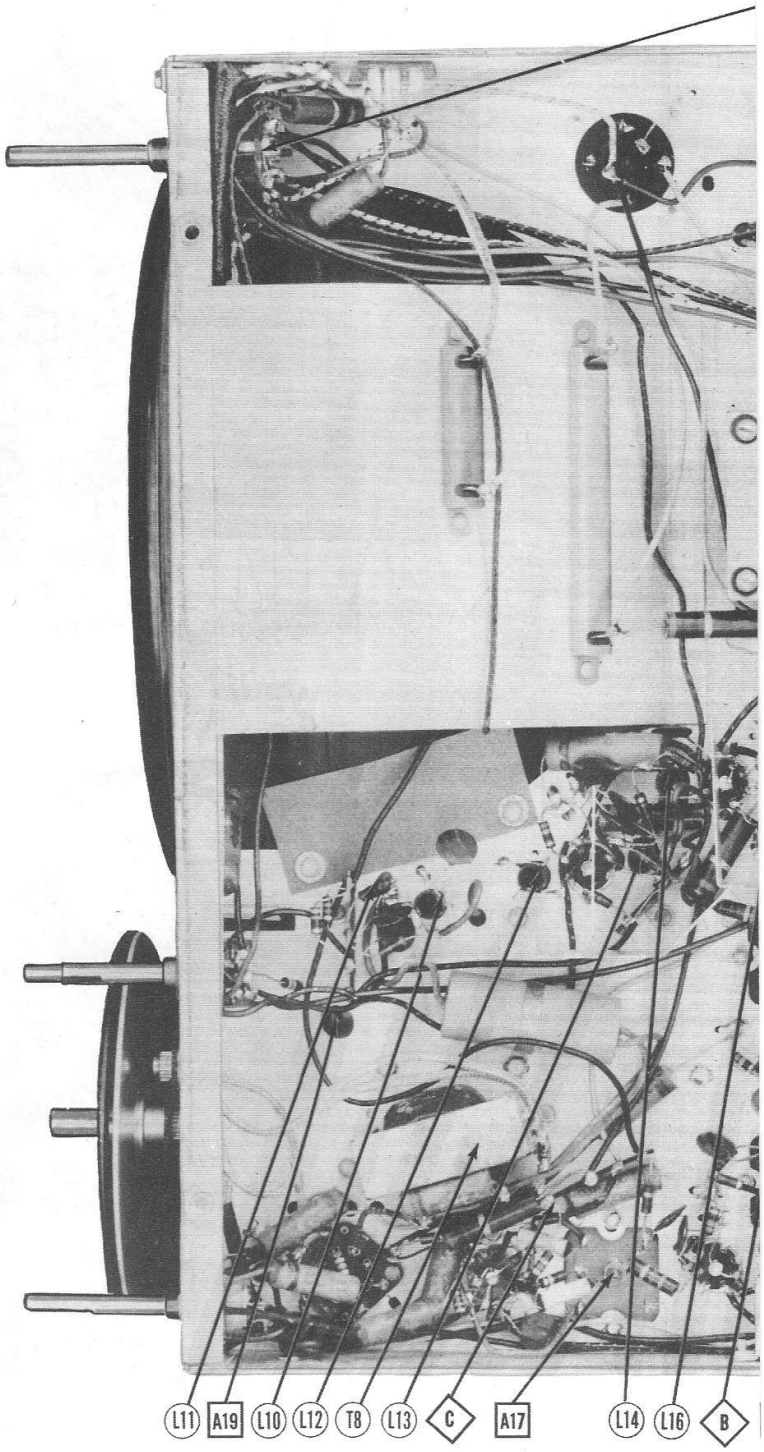
CROSLEY MODELS
9-403M, 9-403M-2, 9-404M, 9-413B, 9-413B-2, 9-414B, 9-420M, 9-424B



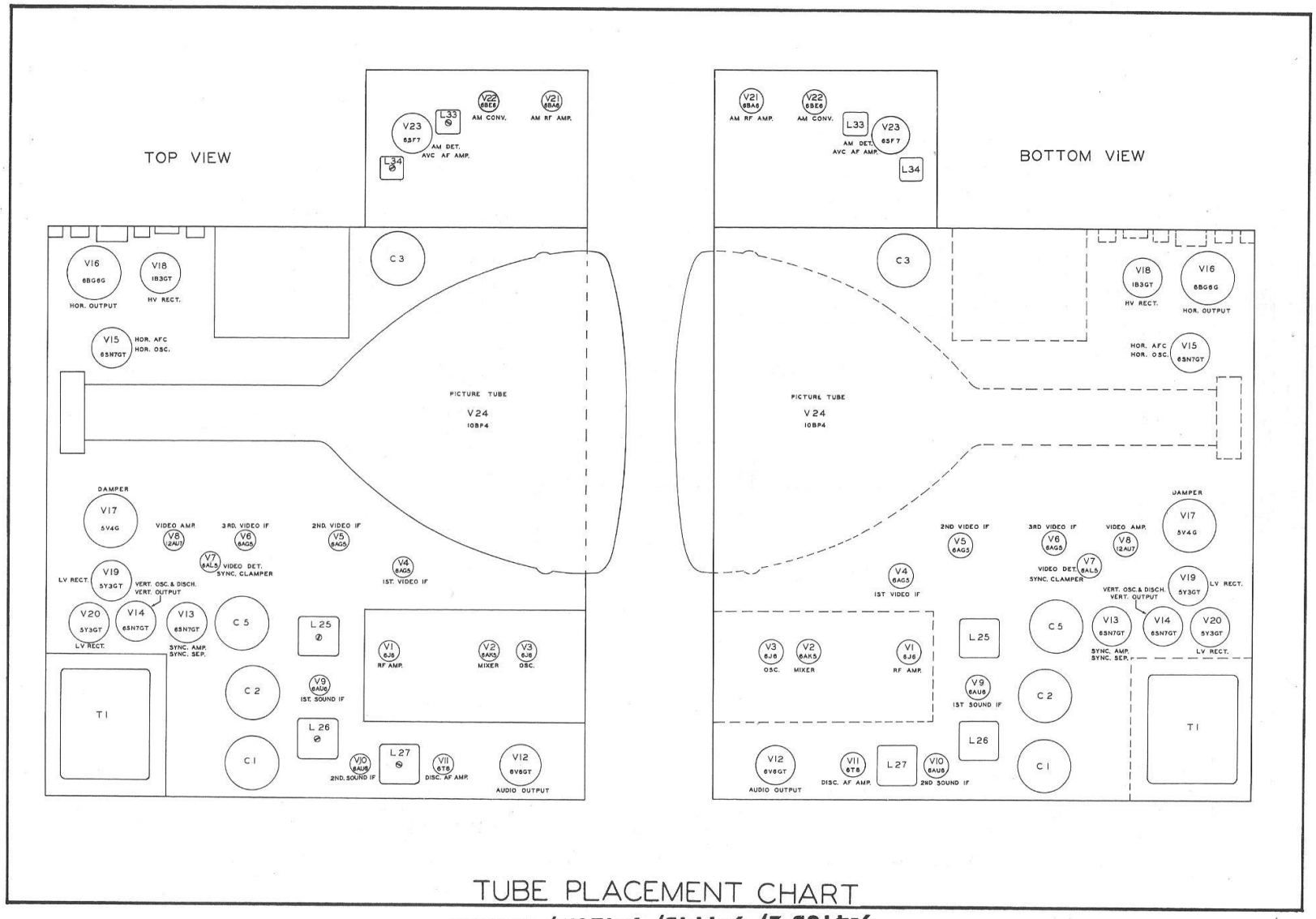




CHASSIS TOP VIEW



CHASSIS BOTTOM VIEW-TRANS., INDUC



TUBE PLACEMENT CHART

CROSLEY MODELS
9-403M, 9-403M-2, 9-404M, 9-413B,
9-413B-2, 9-414B, 9-420M, 9-424B

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

If set is to be aligned with the picture tube removed, remove the horizontal oscillator tube V15 to remove high voltage shock hazard.
Remove the vertical oscillator tube V14 to prevent erratic indications.
During Video and Sound IF Alignment remove the local oscillator tube V3 to prevent erroneous indications.

VIDEO IF ALIGNMENT

Set the selector switch to TV (maximum clockwise).
During video IF alignment keep contrast control low enough to prevent overloading. This will be noted by a change in the response curve as contrast control is turned clockwise.

	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 6AG5 (V6). Low side to chassis.	4.5MC (400~ Mod.)		Any	Vert. Amp. thru crystal probe (Fig 7) to Point (A) Low side to chassis.	A1	Adjust for MINIMUM 400~ response on scope.
2.	.05MFD	High side to pin 1 (Grid) of 6AG5 (V6). Low side to chassis.	24MC (10MC Sweep)	22.9MC 26.4MC	"	Vert. Amp. to Point (A) Low side to chassis.	A2,A3 A4	Adjust for response curve as per Fig 1. Adjust band pass by adjusting spacing of wires on gimmick A4.
3.	.05MFD	High side to pin 1 (Grid) of 6AG5 (V5). Low side to chassis.	"	21.9MC 22.9MC 26.4MC 27.9MC	"	"	A5,A6, A7,A8	Adjust for response as per Fig 2. A7 and A8 are 21.9MC and 27.9MC traps respectively and should be adjusted for MINIMUM response at the points shown on Fig 2. Turn marker output to MAXIMUM for these adjustments.
4.	.05MFD	High side to pin 1 (Grid) of 6AG5 (V4). Low side to chassis.	"	21.9MC 22.9MC 26.4MC	"	"	A9,A10, A11	Adjust for response per Fig 2. Adjust A11 for minimum response at 21.9MC. Obtain straightest slope on 26.4MC side of curve.
5.	.05MFD	High side to pin 6 of oscillator tube (V3) socket. Low side to chassis. Use a piece of stiff wire inserted in pin 6 hole of oscillator tube socket.	"	21.9MC 22.9MC 26.4MC 27.9MC	"	"	A12, A13	Adjust for response as per Fig 2. Obtain straightest slope on 26.4MC side of response curve. If necessary, slightly retouch all IF adjustments for optimum results.

SOUND IF ALIGNMENT

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

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6.	.05MFD	High side to pin 1 (Grid) of 6AU6 (V9) Low side to chassis.	21.9MC (450KC Sweep)	21.9MC	Any	Vert. Amp. to Point (B) Low side to chassis.	A14, A15	Adjust for maximum amplitude and symmetry as per Fig 3.
7.	.05MFD	High side to pin 1 (Grid) of 6AG5 (V5). Low side to chassis.	"	"	"	"	A16	"
8.	.05MFD	"	"	"	"	Vert. Amp. to Point (C) Low side to chassis.	A17, A18	Adjust A17 so 21.9MC marker occurs at center of crossover lines as per Fig 4. Adjust A18 for maximum amplitude and straightness of crossover lines.

TUNER ALIGNMENT

The tuner adjustments are pre-set at the factory and are normally very stable. The adjustments are critical and should not be attempted unless tuner is definitely known to be out of alignment.
If tuner has been tampered with and is badly out of alignment, replacement of entire tuner is recommended.

OSCILLATOR ALIGNMENT

Check the dial setting on the shaft. With the dial in the maximum clockwise position the No. 13 and the small mark above the window on the back dial plate, should be centered on the vertical centerline of the tuning shaft.
The sound IF channel must be properly aligned before attempting oscillator alignment.
The coil L7 is located behind capacitor A19 and is accessible thru the same hole. Use care when adjusting L7 so not to change it too much, and not to disturb anything else in the tuner.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
9.	Two 125Ω carbon res.	Across antenna terminals with 125Ω in each lead.	71.75MC (Unmod.)	4	DC Probe to Point (C) Common to chassis.	A19	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
10.	"	"	215.75MC (Unmod.)	13	"	L7	SLIGHTLY expand or compress coil turns for zero reading as in step 9. This coil is accessible thru the hole in the bottom of the tuner. Use a thin insulated tool.
11.	"	"	209.75MC	12	"		Check all other channels to see that zero reading is obtained at the correct setting when the sound carrier signal is being fed into receivers.
			203.75MC	11			
			197.75MC	10			
			191.75MC	9			
			185.75MC	8			
			179.75MC	7			
			87.75MC	6			
			81.75MC	5			
			65.75MC	3			
			59.75MC	2			

ALIGNMENT INSTRUCTIONS (CONT.)

RF & MIXER ALIGNMENT

To properly align the RF and Mixer circuits, laboratory type precision equipment is necessary. Ordinary type service signal generator and oscilloscope will not give satisfactory results.

(a) Set the dial to channel 4 by feeding a 71.75MC signal into the receiver and tuning dial for zero output at the discriminator. (See step 9 of oscillator alignment).

(b) Locate the blue lead coming from the tuner, this lead comes thru the hole in the right side of the tuner and connects to coil L10 and R19.

(c) Unsolder the blue lead from L10 and connect it thru a 5600Ω resistor to the end of R19 opposite where the blue lead was removed.

(d) Connect the oscilloscope vertical input to the junction of the blue lead and the 5600Ω resistor. Connect the low side of the scope to chassis.

(e) After step 12 is completed reconnect the blue lead to L10 and set the dial to channel 13 by feeding a 215.75MC signal into the receiver and tuning the dial for zero discriminator output. (See step 10 of oscillator alignment)

(f) Reconnect the blue lead as in step "C" above. Continue with alignment step 13.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12.	Two 125Ω carbon res.	Across antenna terminals with 125Ω in each lead.	69MC (10MC Sweep)	71.75MC 67.25MC	4 (See step "a" above)	See step "d" above.	A20, A21, A22	Adjust for a band pass of 4.5MC similar to Fig 5. The adjustment of A21 and 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%.
13.	"	"	213MC (10MC Sweep)	215.75MC 211.25MC	13 (See step "e" above)	"	L3, L5 C9, C12	Adjust of high band is accomplished by the positioning of L3, L5, C9 & C13. If the band width exceeds 6MC or is less than 4.5MC it will be necessary to remove the tuner and replace the bottom shield with a dummy shield with a 1 inch square cutout to gain access to L3, L5, C9 and C12. If bandwidth is very much over 6MC. tuner should be replaced.

CAUTION

14. 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.

AM ALIGNMENT

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

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
15	.05MFD	High side to stator of center section of tuning gang. Low side to chassis.	455KC (400~ Mod.)	AM (second pos. clockwise)	Tuning gang fully open	Across voice coil	A22, A23, A24, A25	Adjust for maximum output.
16	200MMF	High side to ungrounded loop antenna terminal. Low side to chassis.	1400KC (400~ Mod.)	"	1400KC	"	A26, A27	"
17		Loop	1400KC (400~ Mod.)	"	"	"	A28	Replace chassis in cabinet. Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.

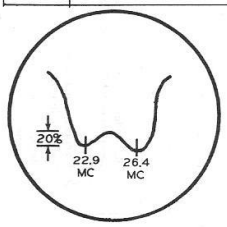


FIG. 1

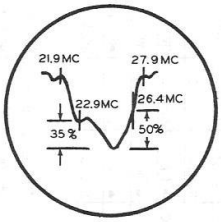


FIG. 2

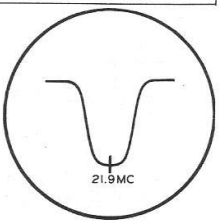


FIG. 3

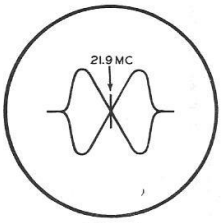


FIG. 4

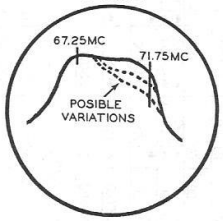


FIG. 5

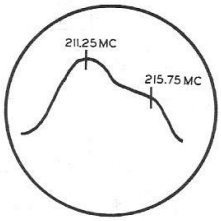


FIG. 6

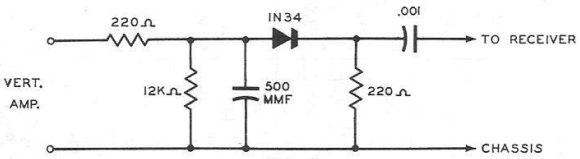


FIG. 7

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	235VDC	235VDC	0V	6.3VAC	0V	0V	1.9VDC		
V 2	6AK5	§-1.1VDC	.1VDC	0V	6.3VAC	210VDC	45VDC	.1VDC		
V 3	6J6	230VDC	0V	6.3VAC	0V	0V	0V	0V		
V 4	6AG5	0V	1.1VDC	6.3VAC	0V	150VDC	150VDC	1.1VDC		
V 5	6AG5	0V	.9VDC	6.3VAC	0V	145VDC	145VDC	.9VDC		
V 6	6AG5	0V	.9VDC	6.3VAC	0V	165VDC	170VDC	.9VDC		
V 7	6AL5	-3.1VDC	-.6VDC	6.3VAC	0V	0V	0V	-3.1VDC		
V 8	12AU7	112VDC	-3.3VDC	0V	6.3VAC	6.3VAC	☁ 185VDC	☁ 0V	☁ 2.2VDC	0V
V 9	6AU6	-.7VDC	0V	0V	6.3VAC	210VDC	150VDC	.8VDC		
V 10	6AU6	-.2VDC	0V	0V	6.3VAC	215VDC	65VDC	.4VDC		
V 11	6T8	0V	-1VDC	.3VDC	6.3VAC	0V	-1VDC	0V	-.7VDC	87VDC
V 12	6V6GT	0V	0V	210VDC	225VDC	0V	-.2VDC	6.3VAC	13VDC	
V 13	6SN7GT	-.6VDC	137VDC	0V	-.6VDC	230VDC	9.6VDC	6.3VAC	0V	
V 14	6SN7GT	☁ -.1VDC	☁ 300VDC	☁7VDC ☁17.5VDC	☁-2VDC ☁-5VDC	☁55VDC ☁110VDC	☁ 0V	6.3VAC	0V	
V 15	6SN7GT	☁ -.6VDC	☁ 142VDC	☁ 13VDC	☁ -32VDC	☁ 145VDC	☁ 0V	6.3VAC	0V	
V 16	6BG6G	☁ 0V	6.3VAC	☁ 10VDC	☁ 0V	☁ 0V	☁ 0V	0V	☁270VDC	TOP CAP *
V 17	5V4G	0V	300VDC	130VDC	250VDC	0V	250VDC	0V	300VDC	
V 18	1B3GT	* DO NOT MEASURE								
V 19	5Y3GT	65VDC	250VDC	130VDC	300VAC	13VDC	300VAC	-92VDC	250VDC	
V 20	5Y3GT	0V	250VDC	0V	300VAC	0V	300VAC	0V	250VDC	
▲ V 21	6BA6	-.8VDC	0V	0V	6.3VAC	185VDC	77VDC	0V		
▲ V 22	6BE6	§ -7.4VDC	0V	0V	6.3VAC	185VDC	77VDC	-.4VDC		
▲ V 23	6SF7	0V	-.4VDC	0V	70VDC	-.4VDC	192VDC	0V	6.3VAC	
V 24	10BP4	♦130VDC	70VDC	PIN 10 280VDC	PIN 11 400VDC	PIN 12 ♦130VDC				

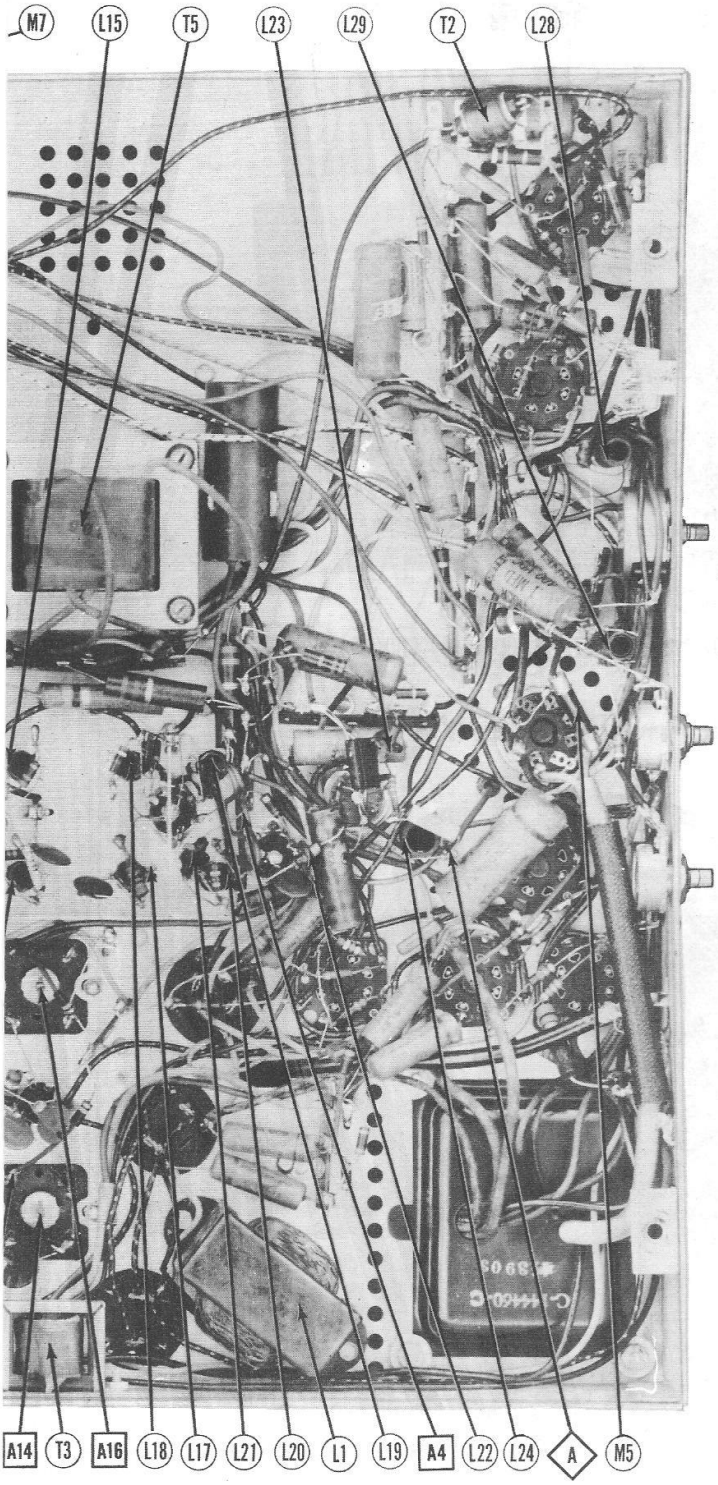
* Do not measure.
§ Taken with vacuum tube voltmeter.
▲ Measured in AM position.
☁ Measured from pin 6 of V15
♦ 6.3VAC measured across filaments.
Note: These measurements taken with contrast control set at maximum.

RESISTANCE READINGS

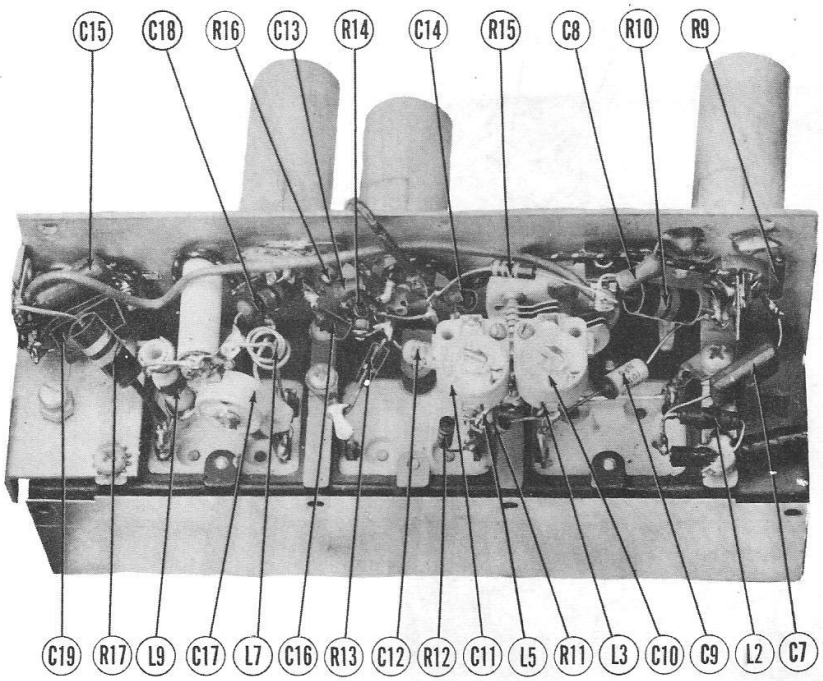
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6J6	†12KΩ	†12KΩ	0Ω	.1Ω	0Ω	0Ω	200Ω		
V 2	6AK5	1 Meg.	47Ω	0Ω	.1Ω	†20KΩ	†330KΩ	47Ω		
V 3	6J6	†12KΩ	0Ω	.1Ω	0Ω	0Ω	12KΩ	0Ω		
V 4	6AG5	100KΩ	68Ω	.1Ω	0Ω	†7KΩ	†7KΩ	68Ω		
V 5	6AG5	120KΩ	68Ω	.1Ω	0Ω	†7KΩ	†7KΩ	68Ω		
V 6	6AG5	.7Ω	100Ω	.1Ω	0Ω	†7KΩ	†7KΩ	100Ω		
V 7	6AL5	22Ω	4 Meg.	.1Ω	0Ω	0Ω	0Ω	4.7KΩ		
V 8	12AU7	†6.5KΩ	4.7KΩ	0Ω	.1Ω	.1Ω	†8KΩ	1 Meg.	☁150Ω	0Ω
V 9	6AU6	250KΩ	0Ω	0Ω	.1Ω	†1.2KΩ	†14KΩ	68Ω		
V 10	6AU6	56KΩ	0Ω	0Ω	.1Ω	†1.2KΩ	†12KΩ	68Ω		
V 11	6T8	Inf.	100KΩ	200KΩ	.1Ω	0Ω	100KΩ	0Ω	4 Meg.	†330KΩ
V 12	6V6GT	470KΩ	0Ω	†1.7KΩ	†1.2KΩ	470KΩ	250KΩ	.1Ω	470Ω	
V 13	6SN7GT	1 Meg.	†15KΩ	0Ω	4 Meg.	†250Ω	6.8KΩ	.1Ω	0Ω	
V 14	6SN7GT	2.2Meg.	†2KΩ	☁5KΩ ☁600Ω	☁3.2Meg. ☁1.2Meg.	#4 Meg. #1.5Meg.	700Ω	.1Ω	0Ω	
V 15	6SN7GT	840KΩ	☁150KΩ	280KΩ	200KΩ	#130KΩ	700Ω	.1Ω	0Ω	
V 16	6BG6G	700Ω	.1Ω	☁100Ω	700Ω	1 Meg.	1 Meg.	0Ω	†5KΩ	TOP CAP #240Ω
V 17	5V4G	Inf.	150KΩ	9KΩ	†50Ω	Inf.	†50Ω	Inf.	150KΩ	
V 18	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP #440Ω
V 19	5Y3GT	500KΩ	10KΩ	10KΩ	700Ω	2.5Meg.	750Ω	720Ω	10KΩ	
V 20	5Y3GT	Inf.	10KΩ	Inf.	750Ω	Inf.	750Ω	Inf.	10KΩ	
▲ V 21	6BA6	3.5 Meg.	0Ω	0Ω	.1Ω	†4.5KΩ	†17KΩ	0Ω		
▲ V 22	6BE6	22KΩ	1Ω	0Ω	.1Ω	†4.5KΩ	†17KΩ	3.5Meg.		
▲ V 23	6SF7	0Ω	2.3Meg.	0Ω	†50KΩ	250KΩ	†4.5KΩ	0Ω	.1Ω	
V 24	10BP4	†3KΩ	†8KΩ	PIN 10 #56KΩ	PIN 11 44KΩ	PIN 12 †3KΩ				

† Measured from pin 8 of V19
# Measured from pin 8 of V17
☁ Measured from pin 6 of V15
▲ Measured in AM position.

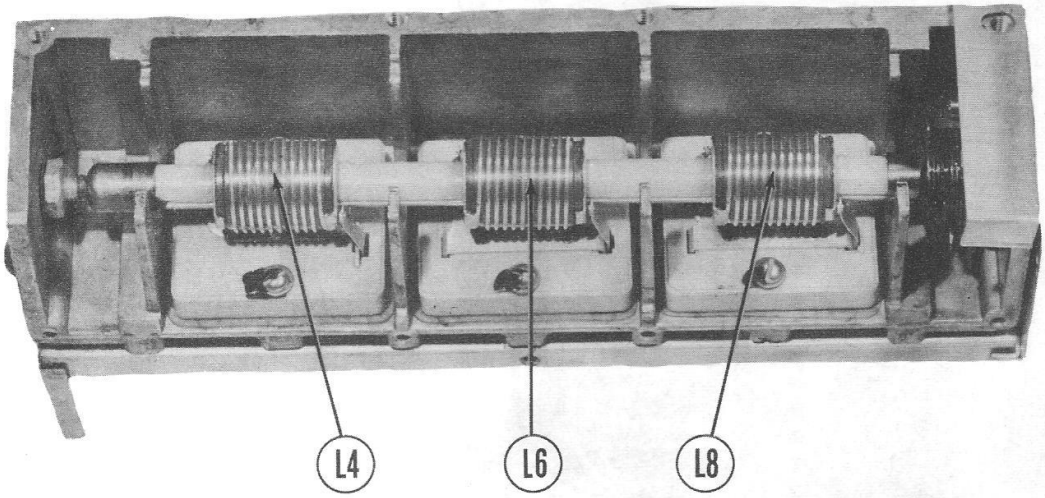
1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.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



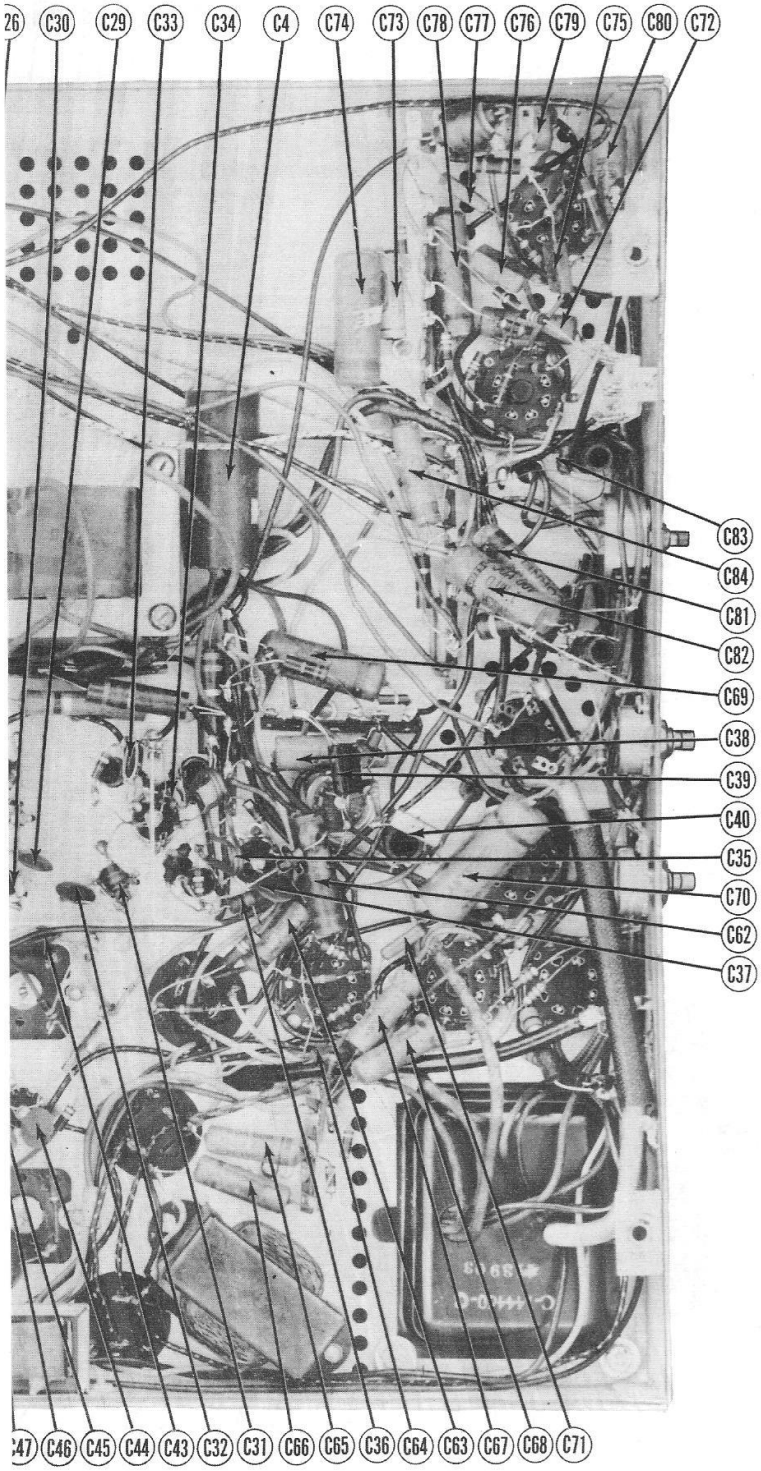
TOR AND ALIGNMENT IDENTIFICATION



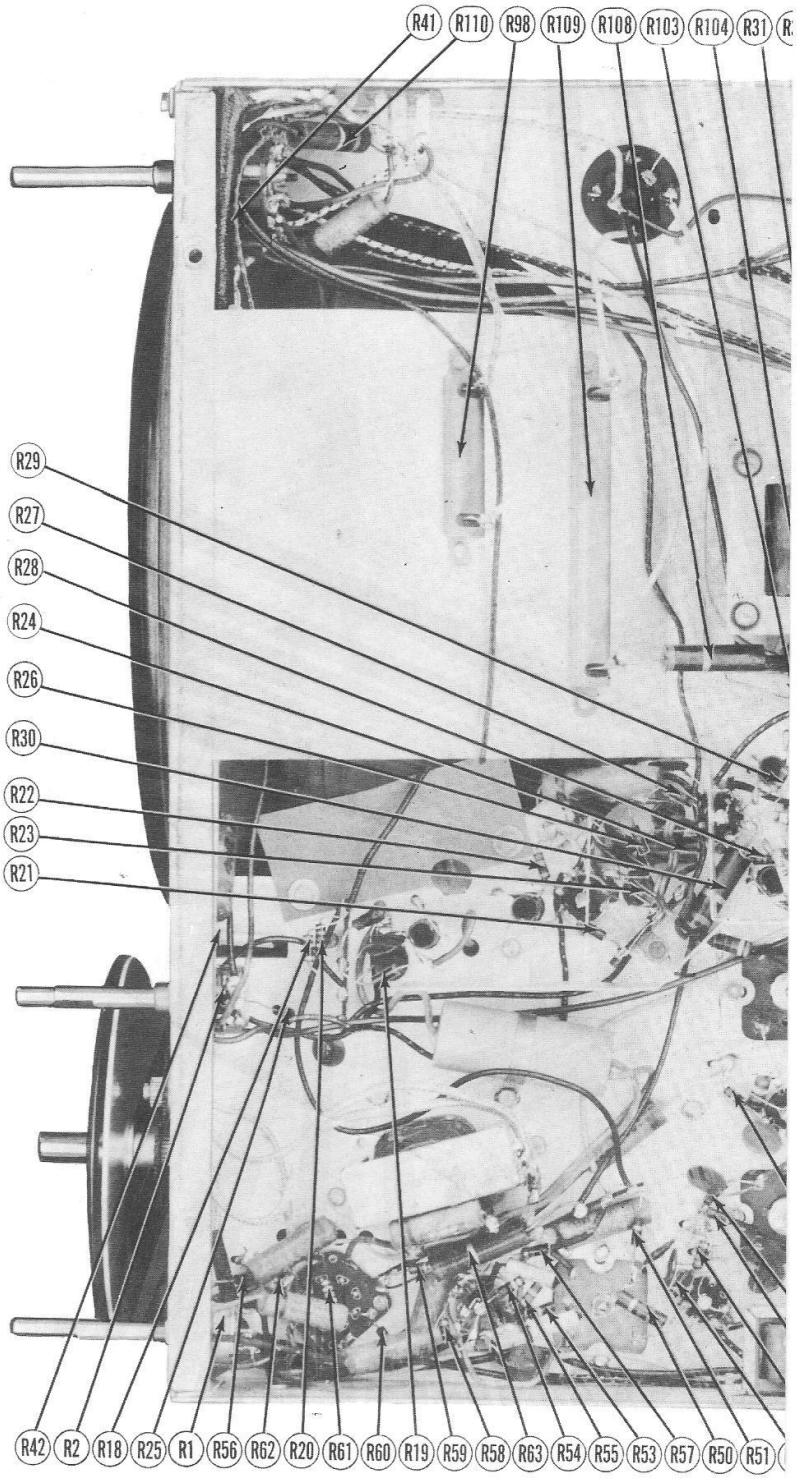
INDUCTUNER-SIDE VIEW



INDUCTUNER-INSIDE VIEW



APACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-R

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA: CROSLEY PART No.	REPLACEMENT DATA: STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1	RF Amp.	6J6	6J6	7BF	
V2	Mixer	6AK5	6AK5	7BD	
V3	Oscilllator	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.-Sync. Clamper	6AL5	6AL5	6BT	
V8	Video Amp.	12AU7	12AU7	9A	
V9	1st Sound IF	6AU6	6AU6	7BK	
V10	2nd Sound IF	6AU6	6AU6	7BK	
V11	Disc.-AF Amp.	6T8	6T8	9E	
V12	Audio Output	6V6GT	6V6GT	7AC	
V13	Sync. Amp.-Sync. Sep.	6SN7GT	6SN7GT	8BD	
V14	Vert. Osc.-Vert. Disch.-Vert. Output	6SN7GT	6SN7GT	8BD	
V15	Hor. AFC-Hor. Osc.	6SN7GT	6SN7GT	8BD	
V16	Hor. Output	6BG6G	6BG6G	5BT	
V17	Damper	5V4G	5V4G	5L	
V18	HV Rectifier	1B3GT	1B3GT	3C	
V19	LV Rectifier	5Y3GT	5Y3GT	5T	
V20	LV Rectifier	5Y3GT	5Y3GT	5T	
V21	AM RF Amp.	6BA6	6BA6	7BK	Model 9-404M, 9-414B only.
V22	AM Converter	6BE6	6BE6	7CH	Model 9-404M, 9-414B only.
V23	AM IF Amp.-Det.-AVC	6SF7	6SF7	7AZ	Model 9-404M, 9-414B only.
V24A	Picture Tube	10BP4	10BP4	12D	
B	Picture Tube	10FP4	10FP4	12D	Models 9-403M-2 and 9-413B-2 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: CAP.	RATING: VOLT	REPLACEMENT DATA: CROSLEY PART No.	REPLACEMENT DATA: AEROVOX PART No.	REPLACEMENT DATA: CORNELL-DUBILIER PART No.	REPLACEMENT DATA: ERIE PART No.	REPLACEMENT DATA: SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	40	450	B-144293	AFH88J	UP4445		TVL-64	◓ Filter
B	40	450						▲ Filter
C2A	40	450	B-144293	AFH88J	UP4445		TVL-64	◓ Filter
B	40	450						▲ Filter
C3A	30	450	B-144292	AF88J	UP7BJ948		TVL-64	◓ Filter
B	40	150						▲ Filter
C4	16	400	B-144989	PRS450/16	BR1645		TVA-22	Filter
C5A	10	450	B-144294	AF2222J	UP7BJ		TVL-36	■ Decoupling
B	10	450		PRS25/100	942T		TVA-8	◓ Vert. Output Dec.
C	10	450						▲ Decoupling
D	100	25						Vert. Output Cath. Bypass
C6A	20	400	B-144521	PRS450/20	BR2045		UT-220	Decoupling-Red
B	20	25		PRS25/25	BR202A			Output Cath. Bypass Blue
C7	470	500	W-160633-20			GP2K-470		RF Coupling
C8	470		W-160082			GP2K-470		RF Bypass
C9	15		W-160080			GP1K-15		RF Coupling
C10	2-12		W-160247			TS2A-N500-2-12		Fixed Padder
C11	2-12		W-160247			TS2A-N500-2-12		Fixed Padder
C12	15		W-160080			GP1K-15		RF Coupling
C13	470		W-160082			GP2K-470		Mixer Fil. Bypass
C14	470		W-160082			GP2K-470		Mixer Screen Bypass
C15	470		W-160082			GP2K-470		RF Bypass
C16	1		W-137398-2					Osc. Coupling
C17	2-12		W-160247			TS2A-N500-2-12		Fixed Trimmer
C18	5		W-160084			NPOK-5		Osc. Grid Cap.
C19	470	500	W-160633-20			GP2K-470		Osc. Fil. Bypass
C20	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Mixer Plate Dec.
C21	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	IF Coupling
C22	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	RF Bypass
C23	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C24	.1	200	39001-19	P288-1	GT2P1		TM-1	Bias Filter
C25	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	1st V. IF Decoupling
C26	2.5		AW-144848					IF Coupling
C27	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C28	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	2nd V. IF Fil. Bypass
C29	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	2nd V. IF Decoupling
C30	20		C-137727-81		5R5Q2	NPOK-20	MS-42	Fixed Trimmer
C31	10		C-137727-85	1469-00001	5R5Q1	NPOK-10	MS-41	Fixed Trimmer
C32	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	IF Coupling
C33	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	3rd V. IF Cath. Bypass
C34	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	3rd V. IF Decoupling
C35	4		AW-144859					IF Coupling
C36	5		W-160084	1468-000005	5W5V5	NPOK-5	MS-55	V. Diode Filter
C37	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C38	.05	400	39001-17	P488-05	GT4S5		TM-15	Video Coupling
C39	470	500	W-160633-20	1468-0005	5W5T5	GP2K-470	1FM-35	V. Amp. Cath. Bypass
C40	47		W-160081	1469-00005	5W5Q5	NPOM-50	MS-45	Fixed Trimmer
C41	.1	400	39001-19	P488-1	GT4P1		TM-1	Pic. Tube Cath. Dec.
C42	2.5		W-160078					S. IF Coupling
C43	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C44	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C45	2.5		W-160068					Fixed Trimmer
C46	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	1st S. IF Screen Bypass
C47	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	1st S. IF Decoupling
C48	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Bias Filter
C49	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Limiter Screen Bypass
C50	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Limiter Decoupling
C51	5000		B-144675-2	1467-005	1D5D5	811-005	29C1	Disc.-AF Fil. Bypass
C52	47		W-160081	1468-00005	5W5Q5	GP1K-47	1FM-45	RF Bypass
C53	47		W-160081	1468-00005	5W5Q5	GP1K-47	1FM-45	RF Bypass
C54	.003	600	39001-76	P688-003	GT6D3	GP2M-003	TM-23	De-emphasis

CAPACITORS (CONT.)

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA CROSLEY PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C55	.005	600	39001-11	P688-005	GT6D5	GP2M-005	TM-25	Audio Coupling
C56	.002	600	39001-74	P688-002	GT6D2	GP2M-002	TM-22	Tone Comp.
C57	.015	400	39001-80	P488-015	GT6S15			Tone Comp.
C58	.01	400	39001-13	P488-01	GT4S1	GP2-335-01	TM-11	Audio Coupling
C59	.002	600	39001-74	P688-002	GT6D2	GP2M-002	TM-22	AF Plate Bypass †
C60	.01	400	39001-13	P488-01	GT4S1	GP2-335-01	TM-11	Audio Coupling
C61	.005	600	39001-11	P688-005	GT6D5	GP2M-005	TM-25	Output Plate Bypass
C62	.05	400	39001-17	P488-05	GT4S5		TM-15	Sync. Coupling
C63	.00025	600	39001-73	1468-00025	GT2T25	GP2K-250	TC-325	Sync. Coupling
C64	390	500	B-137498-28	1468-0004	5W5T4	GP2K-390	1FM-34	Sync. Sep. Cath. Bypass
C65	.002	600	39001-74	P688-002	GT6D2	GP2M-002	TM-22	Integrator Net.
C66	.005	600	39001-11	P688-005	GT6D5	GP2M-005	TM-25	Integrator Net.
C67	.005	600	39001-11	P688-005	GT6D5	GP2M-005	TM-25	Integrator Net.
C68	.005	600	39001-11	P688-005	GT6D5	GP2M-005	TM-25	Vert. Osc. Grid Cap.
C69	.1	400	39001-19	P488-1	GT4P1		TM-1	Vert. Discharge
C70	.25	400	39001-87	P488-25	GT4P25		TC-2	Vert. Sweep Coupling
C71	120	500	B-137498-17			GP2K-120		Hor. Sync. Coupling
C72	.002	600	39001-74	P688-002	GT6D2	GP2M-002	TM-22	Hor. Sync. Coupling
C73	.02	200	39001-80	P488-02	GT2S2		TM-12	AFC Filter
C74	.25	200	39001-87	P488-25	GT2P25		TC-2	AFC Filter
C75	220	500	B-137498-22	1468-0002	5W5T2	GP2K-220	1FM-32	Hor. Osc. Grid Cap.
C76	2200	500	B-137498-42			GP2M-0022		Hor. Discharge
C77	390	500	B-137498-28	1468-0004	5W5T4	GP2K-390	1FM-34	Hor. Sweep Coupling
C78	.05	400	39001-17	P488-05	GT4S5		TM-15	AFC Plate Bypass
C79	.25	200	39001-87	P488-25	GT2P25		TC-2	Hor. Output Cath. Bypass
C80	.05	400	39001-17	P488-05	GT4S5		TM-15	Hor. Output Screen Bypass
C81	.04	400	B-144862-2	P488-04	GT6S4		TM-14	Damper Filter
C82	.1	400	B-144862-1	P488-1	GT4P1		TM-1	Damper Filter
C83	5		W-160084	1468-000005	5W5V5	NPOK-5	MS-55	AFC Feedback
C84	.02	200	39001-80	P488-02	GT2S2		TM-12	Fixed Trimmer ‡
C85	500	10000	B-137477-1			410-500		HV Filter
C86	180		C-137727-24	1468-00015	5W5T15	GP2K-180	1FM-315	RF Coupling
C87	.01	600	39001-13	P688-01	GT6S1	GP2-335-01	TM-11	Decoupling
C88	.01	600	39001-13	P688-01	GT6S1	GP2-335-01	TM-11	Decoupling
C89	.025	200	39001-80	P488-025	GT4S25		TM-13	AVC Filter
C90	75		C-137727-36	1468-000075	5W5Q7	GP1K-75	1FM-475	Osc. Grid Cap,
C91	20		C-137727-84		5R5Q2	NPOK-20	MS-42	Fixed Trimmer
C92	.025	200	39001-80	P488-025	GT4S25		TM-13	AVC Filter
C93	.01	600	39001-13	P688-01	GT6S1	GP2-335-01	TM-11	IF Screen Bypass
C94	.01	600	39001-13	P688-01	GT6S1	GP2-335-01	TM-11	IF Decoupling
C95A	100		*	1468-0001	5W5T1	GP1K-100	1FM-31	Diode RF Filter
B	100			1468-0001	5W5T1	GP1K-100	1FM-31	Diode RF Filter

* Items C95A and C95B and R122 are combined into one unit obtainable under MFGR'S Part No. B-142951-2.
† Some models use 250MMF in this application.
‡ Not used in all models.

CONTROLS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA CROSLEY PART No.	IRC PART No.	CLAROSTAT PART No.	INSTALLATION NOTES
R1A	2.5 Meg	½	39368-19	Q18-139X		Volume control, tapped @ 1.25 Meg.
B	Switch		Not Req.	76-1		Attach to R1A per instructions
R2A	25KΩ	½	C-144343	B11-120‡‡		Contrast control, rear } (Dual Concentric)
B	100KΩ	½	C-144343	B11-128‡‡		Brightness control, front } (Dual Concentric)
C	Shaft End		C-144343	E187‡‡		Attach per instructions in "Concentrikit".
R3	1 Meg.	½	39368-8	Q13-137	M-63-Z	Tone control (Models 9-404M & 9-414B only)
R4	2250Ω	4	B-144258		10-2500	Focus control (Wire Wound)
R5	50KΩ	½	B-144261	Q11-123	M-44-S	Horiz. hold control
R6	2.5Meg.	½	B-144259	Q11-239	M-84-S	Height control
R7	500Ω	½	B-144260	Q11-114	M-19-S	Vert. linearity control
R8	1 Meg.	½	B-144262	Q11-137	M-61-S	Vert. hold control

‡‡ Additional parts to be used with "Concentrikit".

RESISTORS

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA CROSLEY PART No.	IRC PART No.	IDENTIFICATION CODES ALL RESISTORE ARE ± 10% UNLESS OTHERWISE STATED.
R9	200Ω 5%	½	39375-32		RF Cathode
R10	10KΩ	2	39374-213		RF Plate
R11	12KΩ	½	39374-38		RF Plate Coil Shunt
R12	12KΩ	½	39374-38		Mixer Grid Coil Shunt
R13	1 Meg.	½	39374-61		Mixer Grid
R14	47Ω	½	39374-9		Mixer Cathode
R15	330KΩ	½	39374-55		Mixer Screen
R16	12KΩ	½	39374-38		Osc. Grid
R17	10KΩ	2	39374-213		Osc. Plate
R18	470Ω	½	39374-21		Decoupling Network
R19	8200Ω 5%	½	39375-71		Mixer Plate Transformer Shunt
R20	18KΩ	½	39374-40		Mixer Plate Decoupling
R21	5600Ω 5%	½	39375-67		1st Video IF Grid
R22	68Ω	½	39374-11		1st Video IF Cathode
R23	10KΩ 5%	½	39375-73		1st Video IF Plate Coil Shunt
R24	6800Ω	2	39374-211		1st Video IF Decoupling
R25	100KΩ	½	39374-49	BTS-100K	Bias Network
R26	10KΩ	½	39374-37	BTS-10K	Bias Network
R27	10KΩ 5%	½	39375-73		2nd Video IF Grid Coil Shunt
R28	68Ω	½	39374-11		2nd Video IF Cathode
R29	6800Ω 5%	½	39375-69		2nd Video IF Plate Coil Shunt
R30	6800Ω	2	39374-211		2nd Video IF Decoupling
R31	3900Ω 5%	½	39375-63		3rd Video IF Grid Coil Shunt
R32	100Ω	½	39374-13		3rd Video IF Cathode
R33	6800Ω	2	39374-211		3rd Video IF Decoupling
R34	39KΩ 5%	½	39375-87		Video Det. Coil Shunt
R35	4700Ω 5%	½	39375-65	BTS-4700-5%	Video Det. Diode Load
R36	3300Ω	½	39374-31	BTS-3300	Video Amp. Plate
R37	150Ω	½	39374-15	BW-½-150	Video Amp. Cathode
R38	1 Meg.	½	39374-61	BTS-1 Meg.	Video Amp. Grid

RESISTORS (CC

ITEM No.	RATING RESISTANCE	RATING WATTS	REPLACEMENT DATA CROSLEY PART No.	IRC PART No.
R39	3300Ω 5%	½	39375-209	BTS-3300-5%
R40	1000Ω 5%	½	39375-49	BTS-1000-5%
R41	47KΩ	½	39374-45	BTS-47K
R42	68KΩ	½	39374-47	BTS-68K
R43	100KΩ	½	39374-49	
R44	68Ω	½	39374-11	
R45	12KΩ	½	39374-38	
R46	1000Ω	½	39374-25	
R47	100KΩ	½	39374-49	
R48	56KΩ	½	39374-46	
R49	68Ω	½	39374-11	
R50	18KΩ	1	39374-128	
R51	1000Ω	½	39374-25	
R52	10KΩ	½	39374-37	BTS-10K
R53	100KΩ	½	39374-49	BTS-100K
R54	100KΩ	½	39374-49	BTS-100K
R55	27KΩ	½	39374-42	BTS-27K
R56	100KΩ	½	39374-49	BTS-100K
R57	10 Meg.	½	39374-85	BTS-10 Meg.
R58	4.7 Meg.	½	39374-77	BTS-4.7 Meg.
R59	330KΩ	½	39374-55	BTS-330K
R60	100KΩ	½	39374-49	BTS-100K
R61	470KΩ	½	39374-57	BTS-470K
R62	470Ω	1	39374-109	BTA-470
R63	1000Ω	2	39374-201	BW-2-1000
R64	1 Meg.	½	39374-61	BTS-1 Meg.
R65	15KΩ	½	39374-39	BTS-15K
R66	3.9 Meg.	½	39374-75	BTS-3.9 Meg.
R67	6800Ω	½	39374-35	BTS-6800
R68	22KΩ	½	39374-41	BTS-22K
R69	8200Ω	½	39374-36	BTS-8200
R70	8200Ω	½	39374-36	BTS-8200
R71	10KΩ	½	39374-37	BTS-10K
R72	1.2 Meg.	½	39374-63	BTS-1.2 Meg.
R73	1.5 Meg.	½	39374-65	BTS-1.5 Meg.
R74	56KΩ	½	39374-46	BTS-56K
R75	560Ω	½	39374-22	BTS-560
R76	2.2 Meg.	½	39374-69	BTS-2.2 Meg.
R77	3300Ω	½	39374-31	BTS-3300
R78	1000Ω	½	39374-25	BTS-1000
R79	560KΩ	½	39374-58	BTS-560K
R80	180KΩ	½	39374-52	BTS-180K
R81	100KΩ	½	39374-49	BTS-100K
R82	8200Ω	½	39374-36	BTS-8200
R83	150KΩ	½	39374-51	BTS-150K
R84	3.3 Meg.	½	39374-73	BTS-3.3 Meg.
R85	150KΩ	½	39374-51	BTS-150K
R86	270KΩ	½	39374-54	BTS-270K
R87	10KΩ	½	39374-37	BTS-10K
R88	100KΩ	½	39374-49	BTS-100K
R89	120KΩ	½	39374-50	BTS-120K
R90	10KΩ	½	39374-37	BTS-10K
R91	47Ω	½	39374-9	
R92	1 Meg.	½	39374-61	BTS-1 Meg.
R93	100Ω	1	39374-101	BW-1-100
R94	470Ω	1	39374-121	BTA-4700
R95	560KΩ	½	39374-58	BTS-560K
R96	3.3Ω	½	39303-14	
R97	1 Meg.	½	39374-61	
R98	350Ω	7	W-144456	AB-350
R99	100KΩ	1	39374-137	BTA-100K
R100	100KΩ	1	39374-137	BTA-100K
R101	390Ω	2	39374-196	BW-2-390
R102	15Ω	1	39374-91	BW-1-15
R103	6800Ω	2	39374-211	BW-2-6800
R104	6800Ω	2	39374-211	BW-2-6800
R105	15KΩ	2	39374-215	BT-2-15K
R106	22Ω	½	39374-5	BW-½-22
R107	8.2Ω	½	39303-19	BW-½-8.2
R108	82Ω	2	39374-188	BW-2-82
R109	570Ω	14	W-144457	
R110	1500Ω	2	39374-203	BT-2-1500
R111	5.6Ω	1	39304-13	
R112	5.6Ω	1	39304-13	
R113	220KΩ 20%	½	39373-80	BTS-220K
R114	8200Ω	½	39374-36	BTS-8200
R115	1 Meg. 20%	½	39373-92	BTS-1 Meg.
R116	22KΩ	½	39374-41	BTS-22K
R117	12KΩ	2	39374-214	BT-2-12K
R118	2200Ω	½	39373-60	BTS-2200
R119	2.2 Meg.	½	39373-97	BTS-2.2 Meg.
R120	47KΩ	½	39374-45	BTS-47K
R121	2200Ω	½	39373-40	BTS-2200
R122	47KΩ	½	*	BTS-47K
R123	220KΩ	½	39374-53	BTS-220K

* Items C95A, C95B and R122 are combined into B-142951-2.
Note 1. Some models use two resistors in para
Note 2. Not used in all models.

TRANSFORM

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	RATING SEC. 3	CROSLEY PART No.
T1	117VAC @ 2A	680VCT .26ADC	5VAC @ 4A	5VAC @ 2A	B-144460
		SEC. 4	SEC. 5		
		6.3VAC @ 7.7A	6.3VAC @ .6A		

RIPTIONS (Continued)

)NT.)

IDENTIFICATION CODES
Video Amp. Plate
Video Amp. Plate
Voltage Divider
Voltage Divider
1st Sound IF Grid
1st Sound IF Cathode
1st Sound IF Screen
1st Sound IF Decoupling
1st Sound IF Grid Filter
2nd Sound IF Grid
2nd Sound IF Cathode
2nd Sound IF Screen
2nd Sound IF Decoupling
Voltage Divider
Disc. Diode Load
Disc. Diode Load
De-emphasis
Tone Compensation
Voltage Divider
AF Grid
AF Plate
Tone Compensation
Output Grid
Output Cathode
Filter
Sync. Amp. Grid
Sync. Amp. Plate
Sync. Sep. Grid
Sync. Sep. Cathode
Integrator
Integrator
Integrator
Vert. Osc. Transformer Shunt
Vert. Osc. Grid See Note 1
Voltage Divider
Feedback
Vert. Output Cathode
Vert. Output Grid
Vert. Peaking
Filter
Horiz. AFC Grid
Horiz. AFC Cathode
Horiz. AFC Cathode
Horiz. AFC Filter Network
Horiz. AFC Filter Network
Voltage Divider
Voltage Divider
Voltage Divider
Horiz. Osc. Transformer Shunt
Horiz. Osc. Grid
Horiz. Osc. Plate
Filter
Parasitic Supp.
Horiz. Output Grid
Horiz. Output Cathode
Horiz. Output Screen
Feedback
HV Rect. Filament Wire Wound
HV Filter
Filter Wire Wound
Bleeder See Note 2
Bleeder See Note 2
Focus Coil Shunt
Voltage Divider
Filter
Filter
Bleeder
Bias Network
Bias Network Wire Wound
Bias Network
Bias Network Wire Wound
Voltage Dropping
Surge Limiter Wire Wound
Surge Limiter Wire Wound
AM RF Grid
AM RF Transformer Shunt
AVC Network
Osc. Grid
Screen Dropping
Decoupling
AVC Network
AM IF Screen
AM IF Decoupling
Diode Filter
Diode Load

one unit, obtainable under MFGR'S Part No.

ıllel to obtain correct amount of resistance.

ER (POWER)

REPLACEMENT DATA		
STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
		TP-355

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING DC RESISTANCE PRI.	RATING DC RESISTANCE SEC.	REPLACEMENT DATA CROSLEY PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	NOTES
T2	146Ω Tap ⓐ 103Ω		AW-144564				Hor. Osc. Coil
T3	170Ω	670Ω	B-144559	A-8111 ≠	A-3000 ≠	TBO-1 ≠	Vert.Block Osc.Trans
T4	307Ω Tap ⓐ 107Ω	SEC. 1 10.1Ω Tap. ⓐ .5Ω	B-144724	A-8117		TFB-1	Hor. Output Trans.
		SEC. 2 0Ω					
T5	640Ω	12Ω	B-145498	A-8115 §	A-3035 §	TSO-1 §	Vert.Output Trans.
T6A	14Ω		AB-144904	DY-1			Hor.Deflection Coil
B	68Ω						Vert.Deflection Coil
T7	285Ω		B-144298				Focus Coil

≠ Drill one new mounting hole.
§ Drill new mounting holes.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING IMPEDANCE PRI.	RATING IMPEDANCE SEC.	RATING DC RES. PRI.	RATING DC RES. SEC.	REPLACEMENT DATA CROSLEY PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	INSTALLATION NOTES
T8	6200Ω	4.1Ω	500Ω	.5Ω	B-138131-2	A-3824	A-2904 ≠	RO-9	≠ Drill one new mounting hole.

FILTER CHOKE

ITEM No.	RATINGS TOTAL DIRECT CURRENT	RATINGS D. C. RESISTANCE	RATINGS INDUCTANCE (0 CURRENT 1000 ~)	REPLACEMENT DATA CROSLEY PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	INSTALLATION NOTES
L1	.260A	55Ω	1.2Henries	B-144546	C-2326 ≠	C-2991 ≠	TR-3300≠	≠ Drill one new mounting hole.

COILS (RF-IF)

ITEM No.	USE	DC RES. PRI.	DC RES. SEC.	REPLACEMENT DATA CROSLEY PART No.	MEISSNER PART No.	NOTES
L2	Ant. Coil	0Ω		AW-160018		Part of tuner.
L3	RF End Inductor	0Ω		AW-160218		Part of tuner.
L4	RF Plate Coil	0Ω				Part of inductuner D-144760
L5	Mixer End Inductor	0Ω		AW-160225		Part of tuner.
L6	Mixer Grid	0Ω				Part of inductuner D-144760
L7	Osc. End Inductor	0Ω		AW-160217		Part of tuner.
L8	Osc. Coil	0Ω				Part of inductuner D-144760
L9	Osc. Shunt	0Ω		AW-160054		Part of tuner.
L10	1st Video IF	.7Ω		AW-145208		
L11	RF Choke	0Ω		AW-160020		
L12	1st Video IF Coupling	.7Ω		AW-160155		
L13	2nd Video IF	.7Ω		AW-160155		
L14	2nd Video IF	.7Ω		AW-160155		
L15	3rd Video IF	.7Ω		AW-160163		
L16	21.9MC Sound Trap	.2Ω		AW-145195		
L17	Adjacent Channel Sound Trap	.2Ω		AW-145195		
L18	3rd Video IF	.7Ω		AW-160161		
L19	4th Video IF	.7Ω		AW-145328		
L20	4th Video IF	.7Ω		AW-145209		
L21	Peaking	20Ω		AW-160023-2		
L22	Peaking	10Ω		AW-144864		Wound on 22KΩ resistor.
L23	Peaking	10Ω		AW-160023-1		
L24	4.5MC Trap	1.5Ω		AW-160160		
L25	1st Sound IF	.1Ω	.1Ω	AC-160008		
L26	2nd Sound IF	.1Ω	.1Ω	AC-160008		
L27	Disc.Trans.	.5Ω	.1Ω	AC-160010		
L28	Width Cont.	.2Ω		AW-145139		
L29	Hor. Linearity	44Ω		AW-144551		
L30	AM Loop Ant.	0Ω		AB-145286		
L31	AM Ant. Loading	3Ω		AW-144764		
L32	AM RF Trans.	80Ω	9Ω	AW-144765		Models 9-404M and 9-414B.
L33	AM Osc.	9Ω		AW-144763	14-1060	
L34	AM 1st IF	16.5Ω	16Ω	AC-139919-3	16-6678	
L35	AM 2nd IF	10Ω	9.5Ω	AC-139919-4	16-6678	

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	CROSLEY PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	PM	4.12	138762-5	ST-120 †† MOD.P10-S	10A6A	Models 9-404M, 9-414B, 9-420,9-424B
B	PM	4.12	145087		57A15	Models 9-403M, 9-413B, 9-403M-2, 9-413B-2.
	CONE DIA.	V. C. DIA.				
SP2A	9 1/2"	1"				
B	4 3/4" x 7"	3/4"				

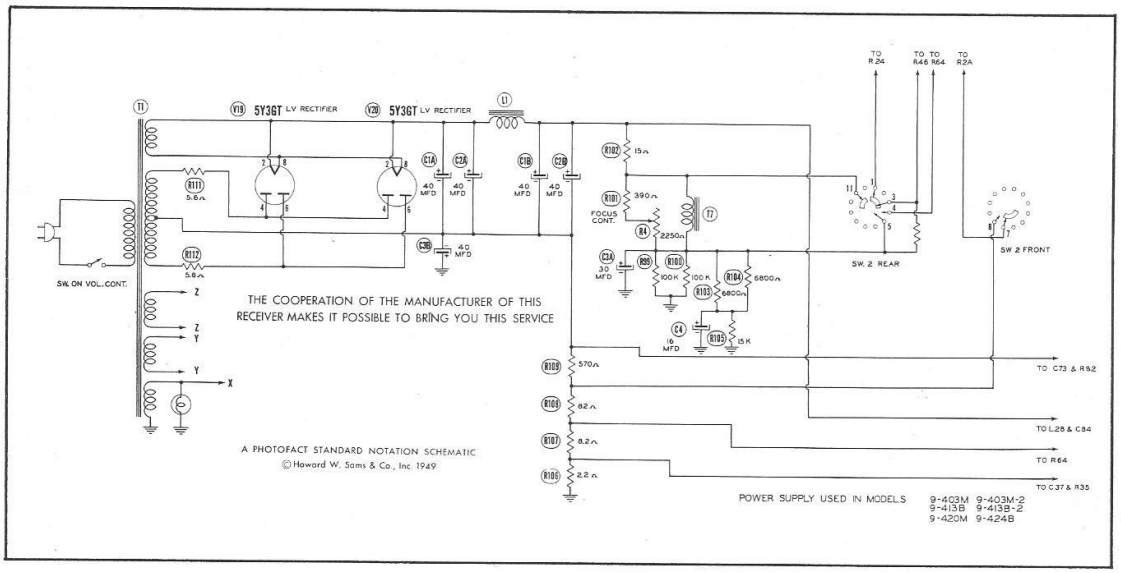
†† Replace output transformer to match 6-8Ω voice coil.

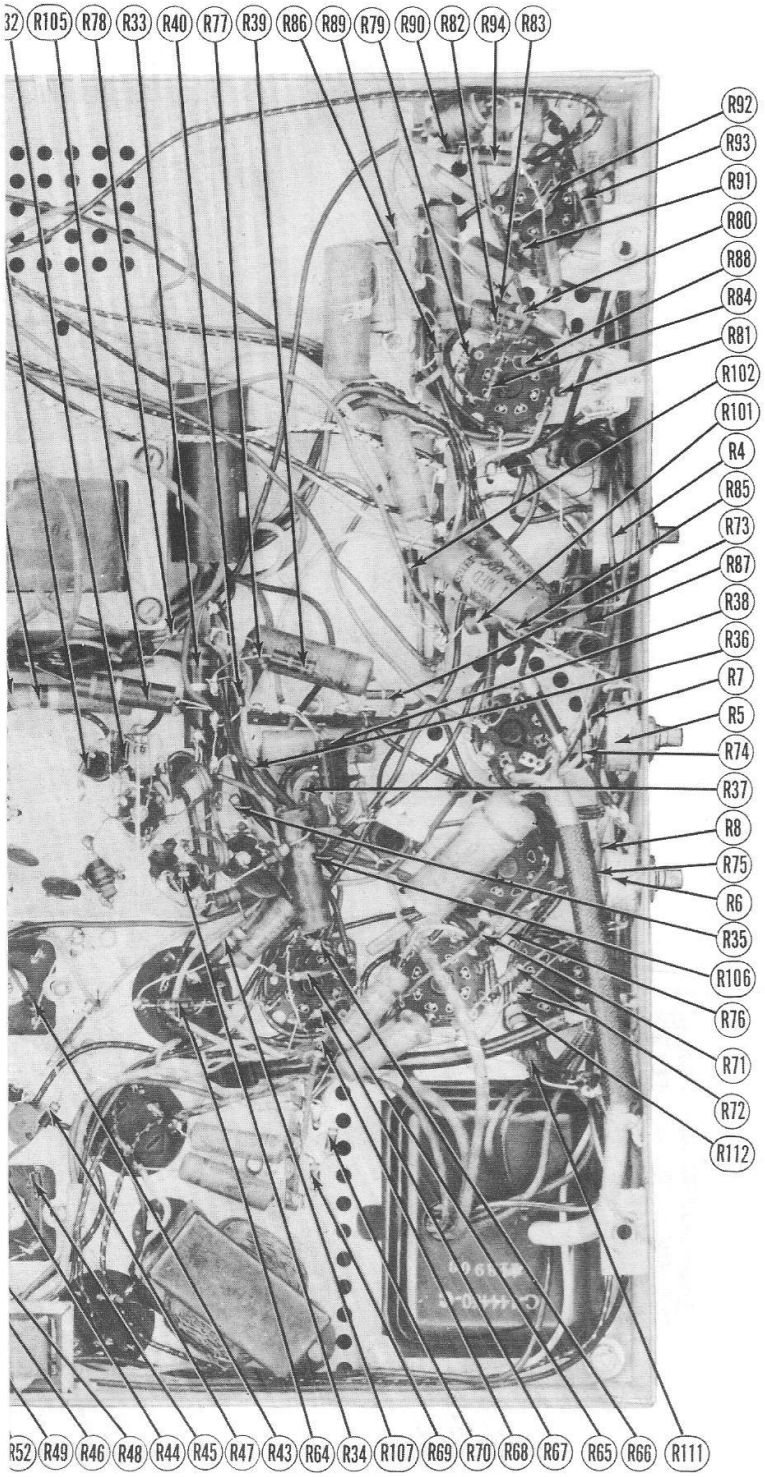
DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA CROSLEY PART No.		NOTES
M1	Bayonet	6-8	.15	Brown	138437-1		Type #47
M2	Bayonet	6-8	.15	Brown	138737-1		Type #47

MISCELLANEOUS

ITEM No.	PART NAME	CROSLEY PART No.	NOTES
M3	RF Tuner	AR-144879-1	Complete
M4	Ion Trap	W-144315	PM
M5	Fuse	W-144898	Type GJC .2A
M6	Tuning Cap	C-144766	(27-397MMF, 25-389MMF, 15-200MMF) W/T
M7A	Function Switch	C-144320	Models 9-404M, 9-414B
B	Function Switch	C-144401	Models 9-403M, 9-413B, 9-403M-2, 9-413B-2, 9-420, 9-424B
	Safety Glass	144470	Models 9-404M and 9-414B
	Cabinet Back	R-144980	Models 9-404M and 9-414B
	Cabinet	R-145248	Model 9-404M
	Cabinet	R-145292	Model 9-414B
	Clip	C-138648-5	Coil mounting for L25, L26 and L27
	Clip	C-138648-4	Coil mounting for L10,L12, L13, L14, L15, L18 & L20
	Clip	C-138648-2	Coil mounting for L28, and L29
	Core	39012-85	Iron, for L25, L26, and L27
	Core	W-160426	Iron, For L10, L12, L13, L14, L15, L18 and L20
	Core	39012-91	Iron, for L24
	Core	39012-96	Iron, for L29
	Knob	C-144997-1	Tuning for model 9-404M
	Knob	C-144599-7	On-Off volume, and tone for model 9-404M
	Knob	C-143553-1	Brightness, model 9-404M
	Knob	C-143422-3	Contrast, model 9-404M
	Knob	C-144599-8	Selector switch, model 9-404M
	Knob	C-144997-2	Tuning, model 9-414B
	Knob	C-144599-3	On-Off volume and tone, model 9-414B
	Knob	C-143553-2	Brightness, model 9-414B
	Knob	C-143422-2	Contrast, model 9-414B
	Knob	C-144599-6	Selector switch, model 9-414B





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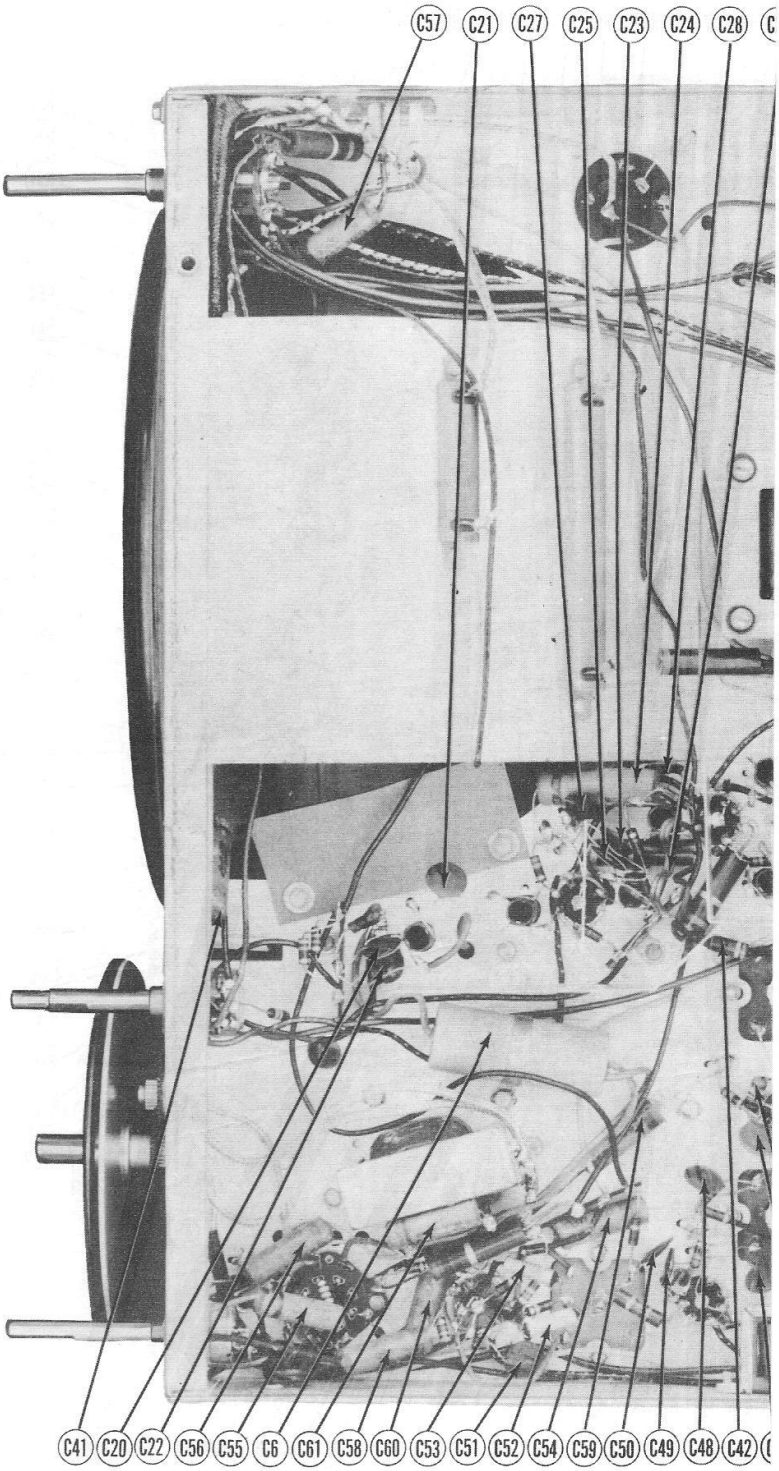
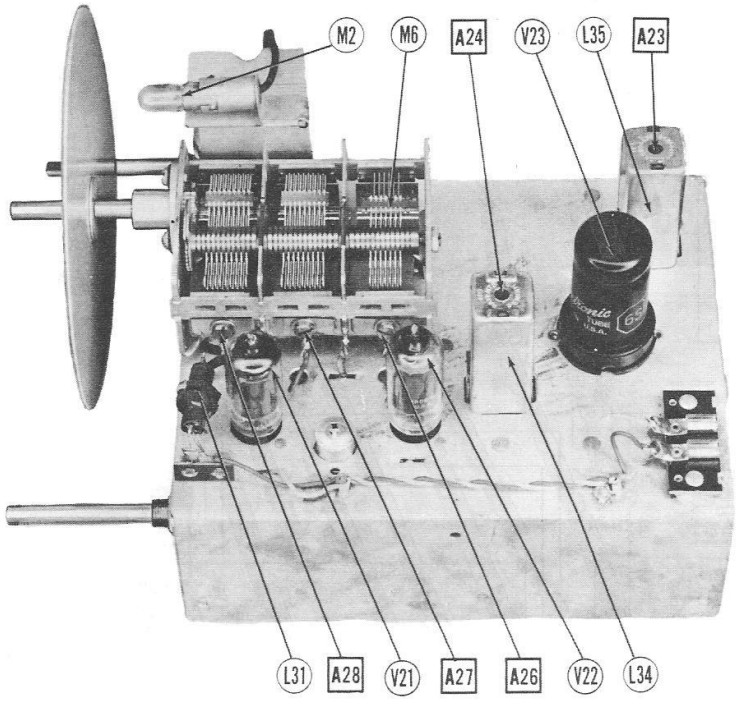
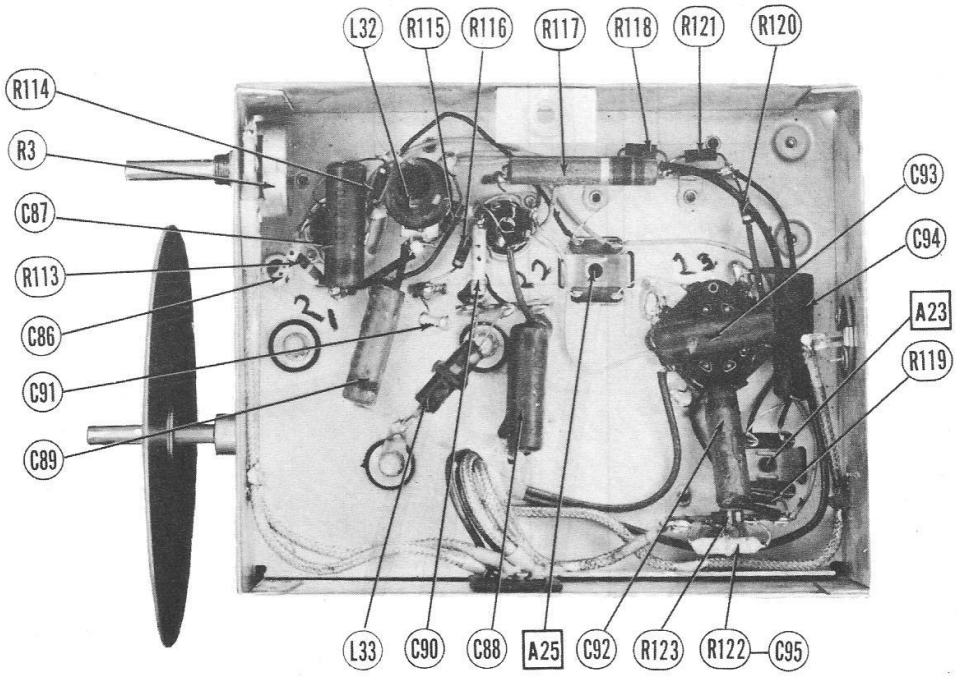


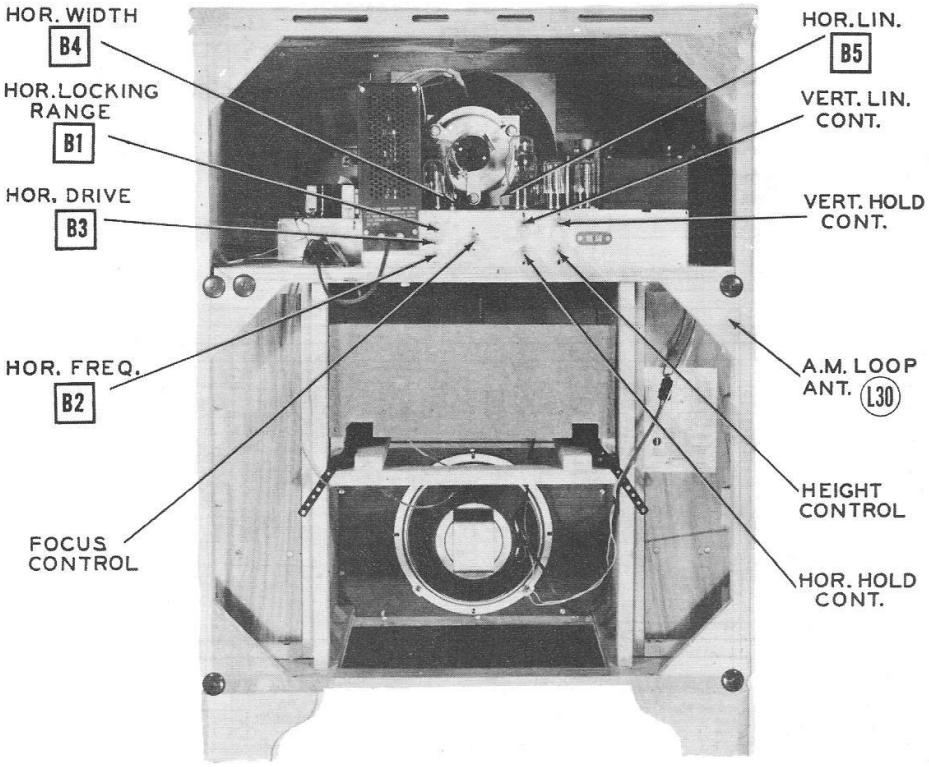
CHASSIS BOTTOM VIEW-C



AM TUNER-TOP VIEW



AM TUNER-BOTTOM VIEW



CABINET-REAR VIEW

HORIZONTAL OSCILLATOR ALIGNMENT

HORIZONTAL OSCILLATOR LOCK-IN RANGE CHECK.

Turn on the receiver and tune in a TV signal, preferably a test pattern.
Turn the vertical hold control to sync the picture vertically.
Turn the horizontal hold control to the extreme clockwise position. The picture should remain in sync. Turn the dial completely off of the station and back again, the picture should be out of sync.
Turn the horizontal hold control counter-clockwise until only three bars remain. The picture should fall into sync with a slight additional rotation of the control. This should occur at approximately 1/4 turn from maximum clockwise, and the picture should remain in sync for another additional 1/4 turn counter-clockwise. At the extreme counter-clockwise position the picture should be out of sync and show one blanking bar.
If the receiver failed the above check complete horizontal oscillator alignment will be required, proceed as follows:

COMPLETE HORIZONTAL OSCILLATOR ALIGNMENT

Set the horizontal hold control to the maximum clockwise position.
Turn the dial completely off of the station and back again. The picture should be out of sync.
Adjust B1 until 3 1/2 bars appear just before picture falls into sync as hold control is turned counter-clockwise.
In the event that the above condition cannot be obtained with adjustment of B1 it will be necessary to adjust B2 to get the proper results.
Adjustments B1 and B2 are interacting and should be adjusted alternately until the proper lock-in range is obtained.

HORIZONTAL LINEARITY ADJUSTMENTS

The horizontal drive trimmer (B3) is pre-set at the factory and normally should not require adjustment in the field.
If adjustment of B3 is seems necessary, it should be adjusted for best compromise between brightness and horizontal linearity.
Adjust B4 until the picture fills the mask horizontally.
Adjust B5 for best horizontal linearity.
Adjustments B4 and B5 are interacting and should be adjusted alternately for best results.