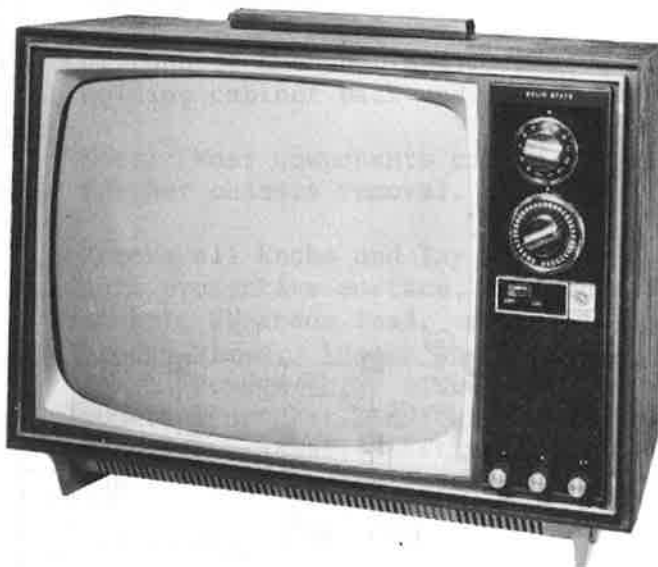


For Supplier Address See PHOTOFACT Index



MODEL	CHASSIS
AXB2503WD	12XB
XB2504VY	12XB
XB2508WD	12XB
XB2510RW	12XB
XB3336WD	15XB
XB3338RW	15XB



MODEL XB3336WD

SAFETY PRECAUTIONS

See Pages 9,10.

INDEX

	Page		Page
Alignment		Photos (Continued)	
TV.....	4	Tuner Assembly.....	16
Disassembly.....	23	Placement Chart.....	3
Parts List		Resistance Measurements.....	22
TV.....	11 thru 15	Schematics	
Photos		TV.....	2
Cabinet-Rear View.....	24	Servicing in the Field.....	24
CRT Socket Board.....	16	Troubleshooting Check Chart.....	22
Main Board.....	5 thru 8, 17 thru 21		

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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. 6PC1534

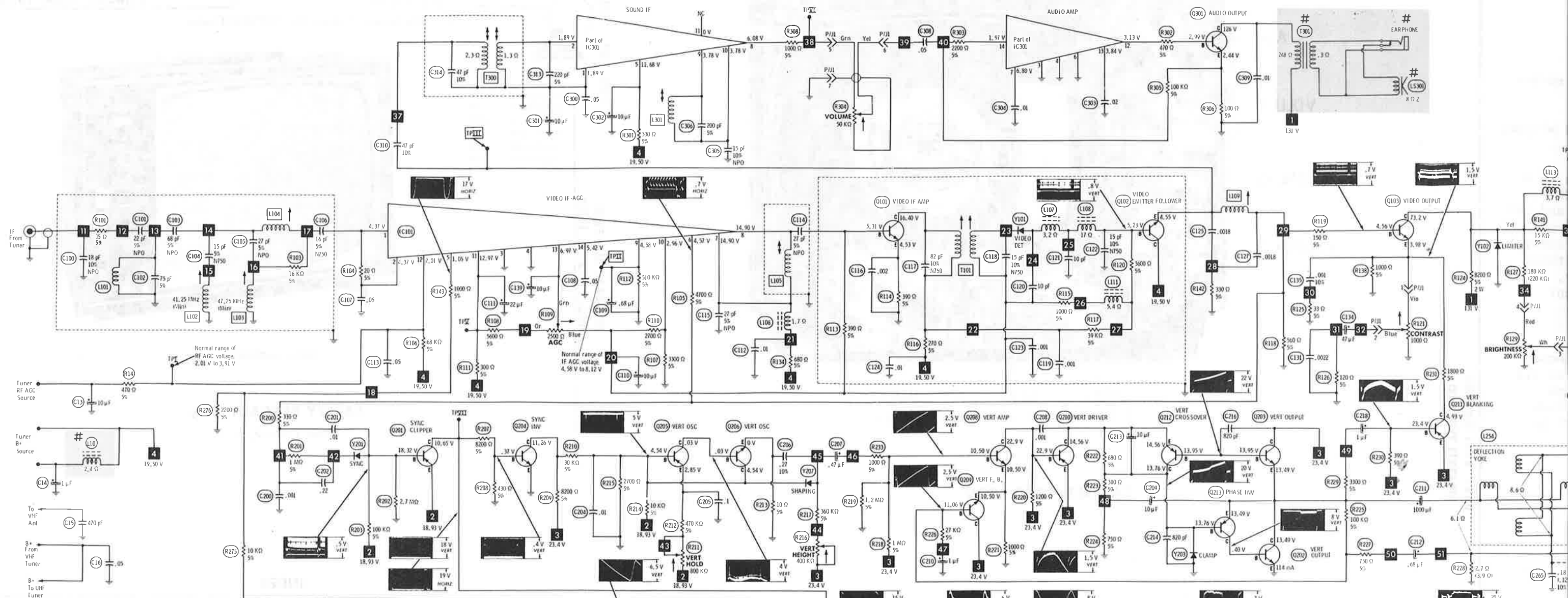
10 9 8 7 6 5 4 3 2 1 0



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DATE 4-76

SET 1561 FOLDER 1



For SAFETY use only equivalent replacement part.

— Circuitry not used in some versions

--- Circuitry used in some versions

See parts list

* Nominal value

Ground

Waveforms: triggered scope, keyed rainbow generator

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

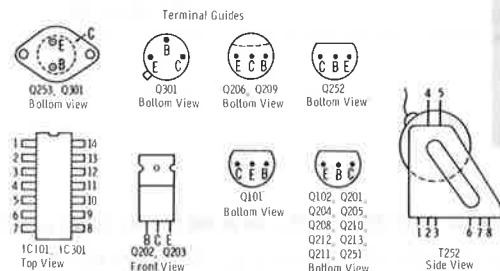
Controls adjusted for normal operation.

Arrow at control indicates direction of advance.

Terminal identification may not be found on unit.

Resistors are 1/2W or less, 10% unless noted.

Value in () used in some versions.



A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH CIRCUITRACE®

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TV ALIGNMENT INSTRUCTIONS

Use an isolation transformer, or observe polarity, and maintain voltage at 120VAC.
Allow a 20-minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: GC ELECTRONICS
L102, L103, L104, L105, T300.....8606,8606L,8869
L109, L301, T101, VHF IF OUTPUT.....9296, 9297, 9300

VIDEO IF ALIGNMENT

Set the channel selector to highest unused channel. Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough generator output to provide a usable indication. Note: Response may vary slightly from that shown. Connect a +7.0 volt bias to TPII, low side to ground.

CONNECT SCOPE	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	REMARKS
Vertical input to TPIII, low side to ground.	Thru .001uF to mixer base on VHF tuner, low side to ground.	44MHz (10MHz Sweep)	41.25MHz 47.25MHz	Adjust L102 for MINIMUM. Adjust L103 for MINIMUM. See Figure 1
"	"	"	41.25MHz 42.17MHz 44.25MHz 45.75MHz 47.25MHz	Adjust T101 (Top & Bot), L104,L105 and VHF IF output for maximum gain and symmetry of response. See Figure 2. L104 affects 45.75MHz. L105 and T101 (Bottom) affect 42.17MHz. T101 (Top) affects 42.17MHz and 45.75MHz. VHF IF output affects overall response.

SOUND IF ALIGNMENT

Tune in a station and adjust T300 (Top & Bot) for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce the signal while aligning for undistorted output by adjusting L301.

4.5MHz TRAP ALIGNMENT

Tune in a strong TV signal and set the contrast at maximum. Adjust the fine tuning until a beat pattern is visible on the screen. Adjust L109 for MINIMUM beat interference.

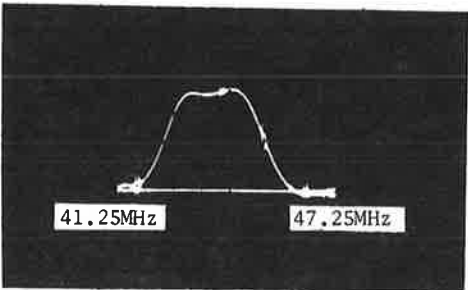


Figure 1.

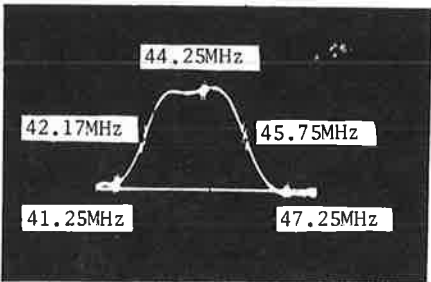
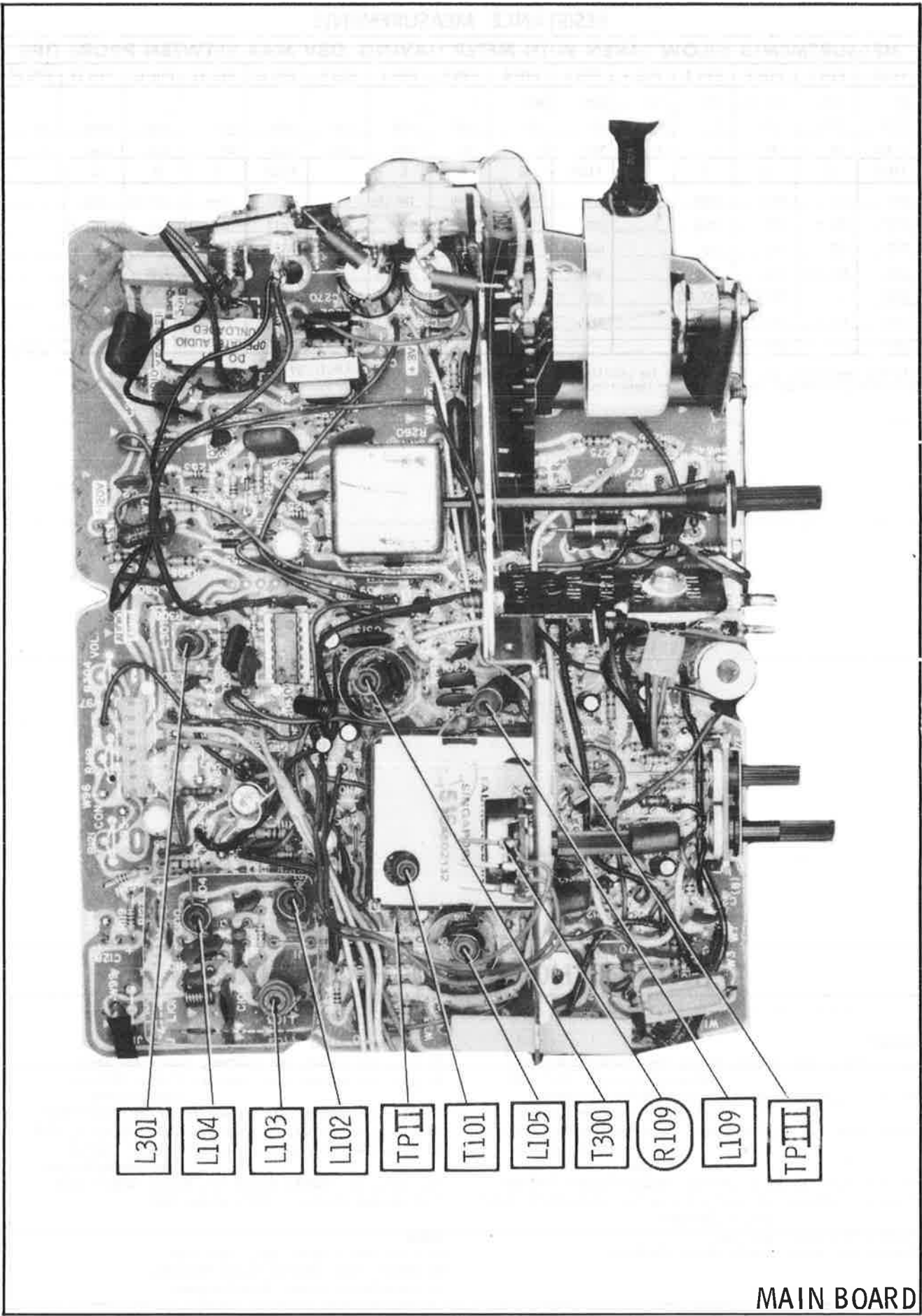
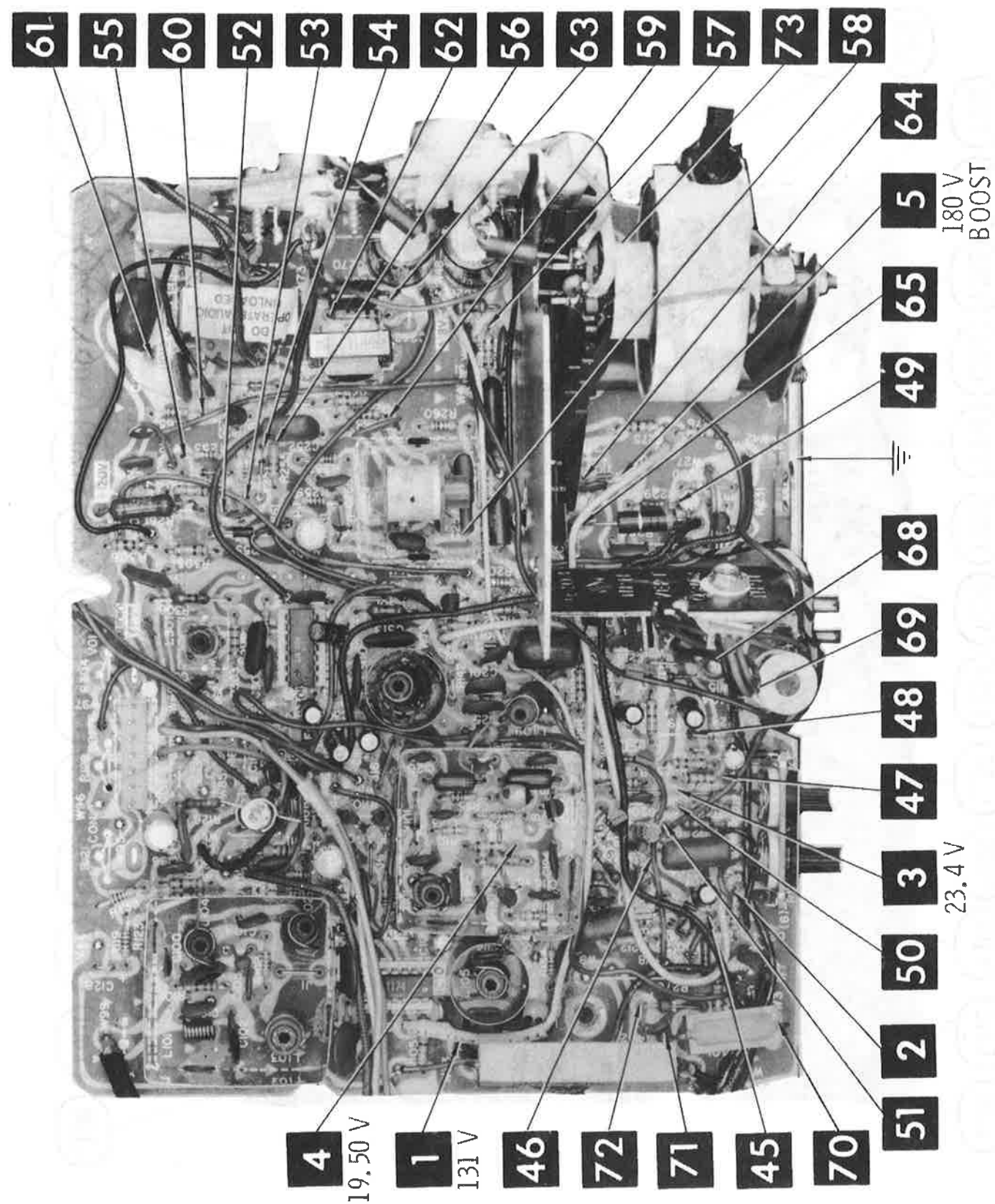
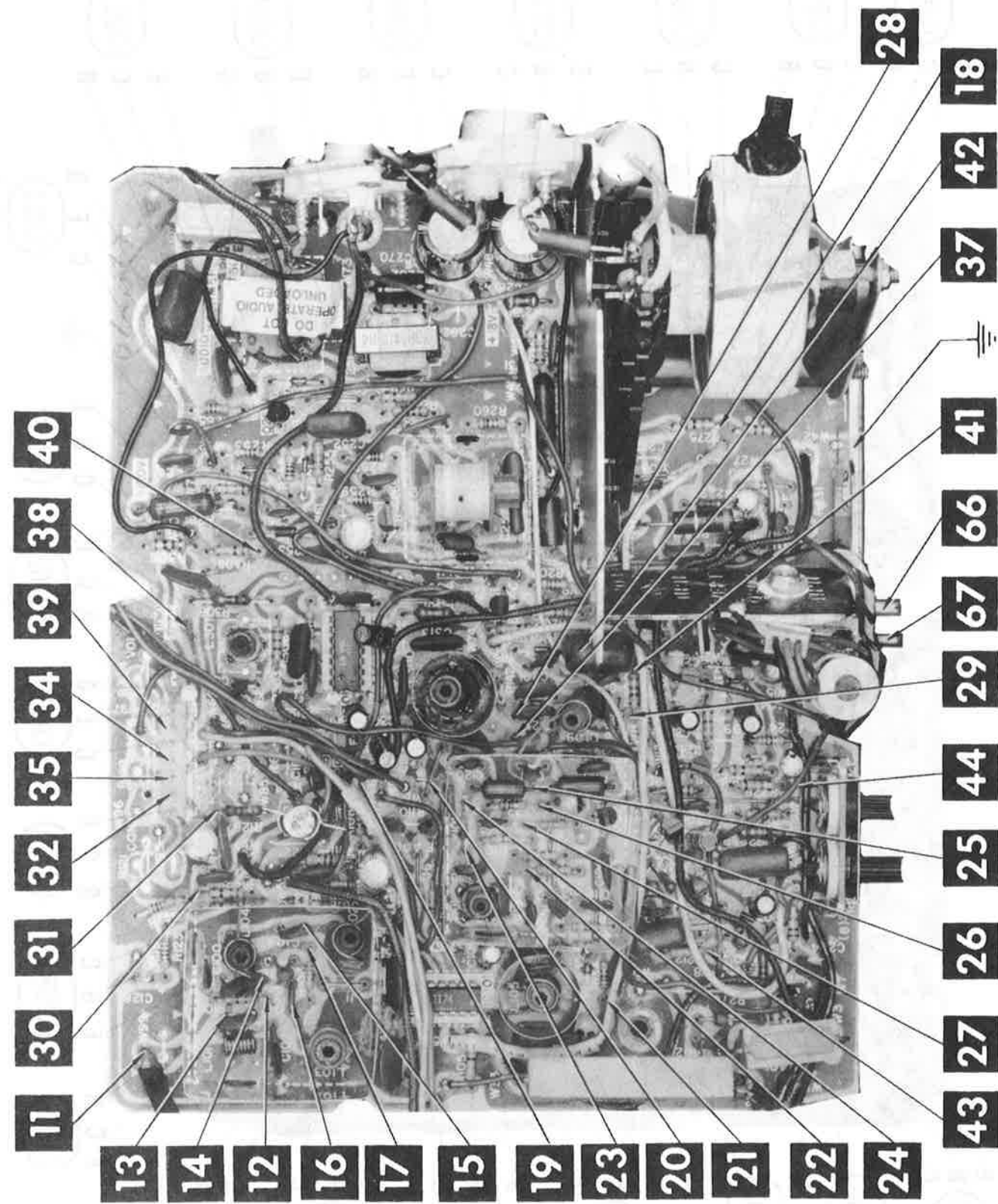


Figure 2.



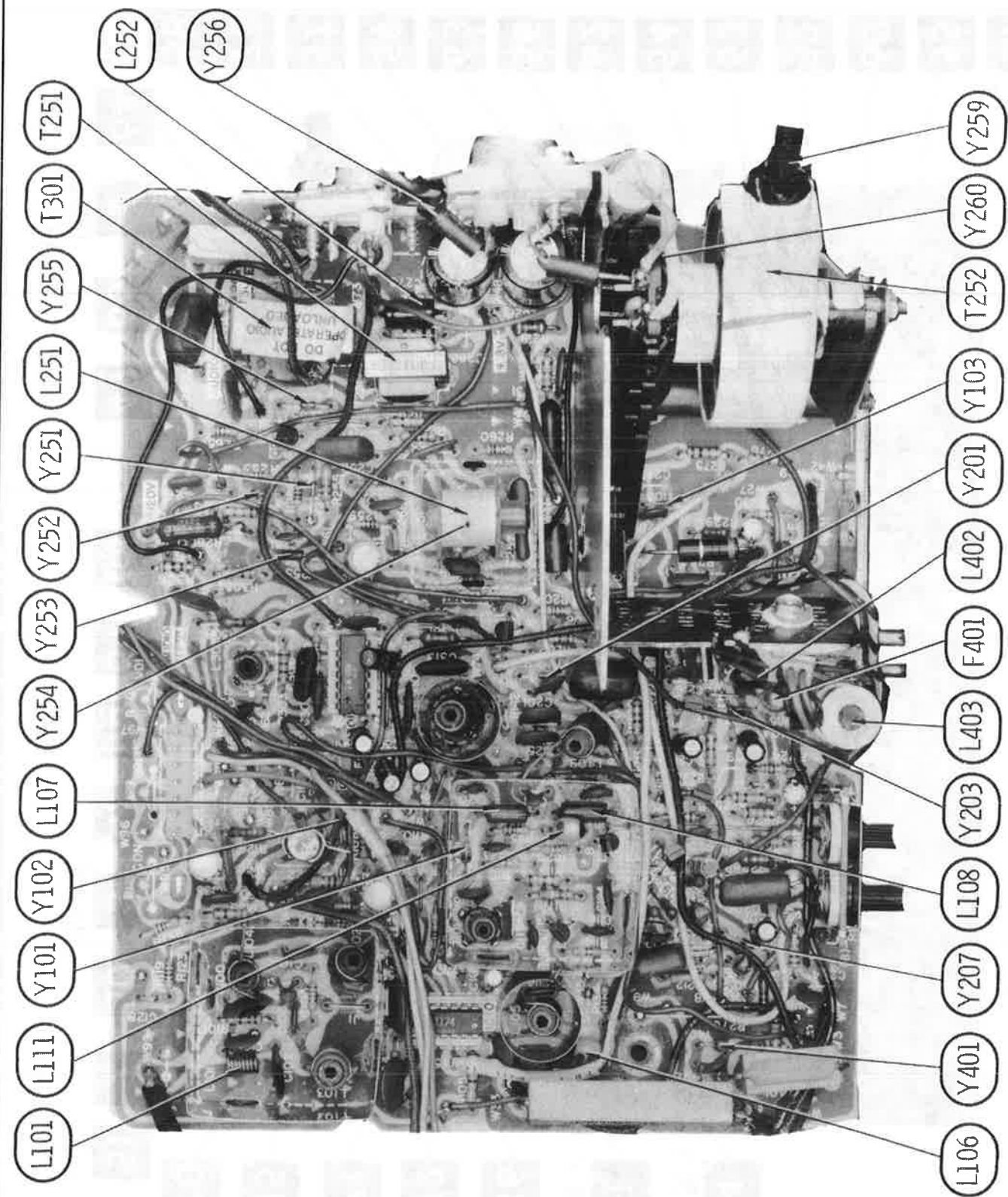
MAIN BOARD



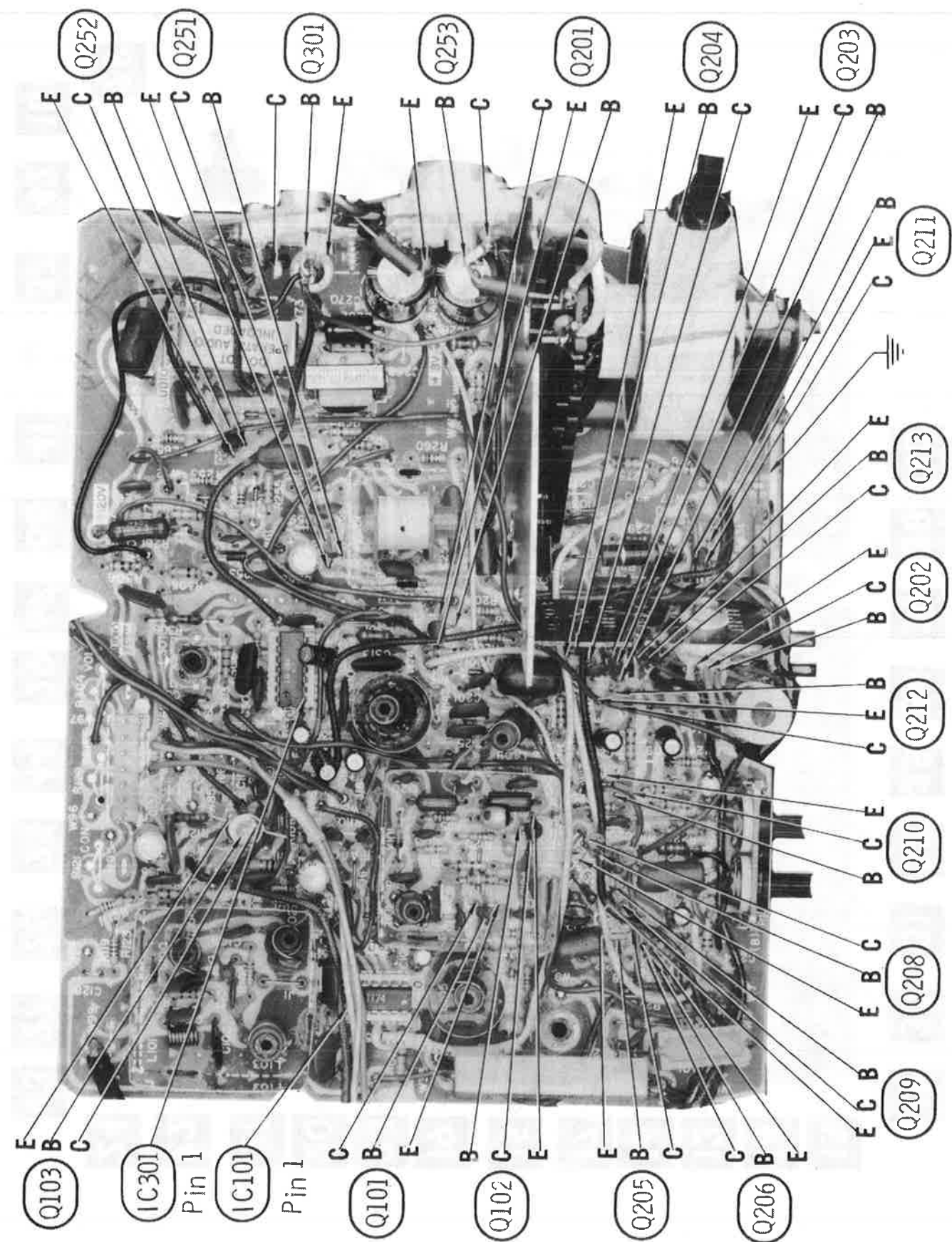
A Howard W. Sams CIRCUITRACE® Photo MAIN BOARD

GENERAL ELECTRIC
CHASSIS 12XB, 15XB

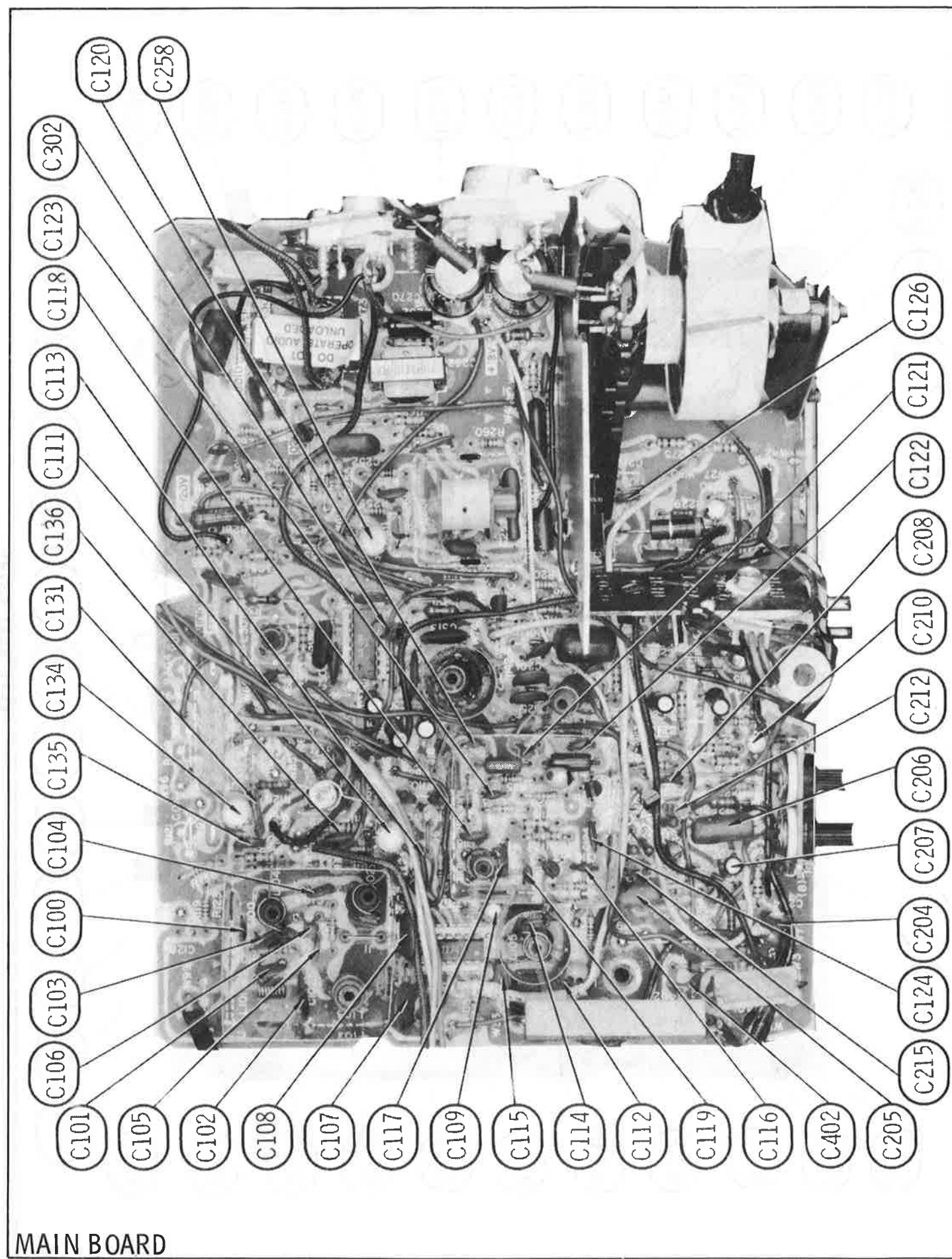
FOLDER 1



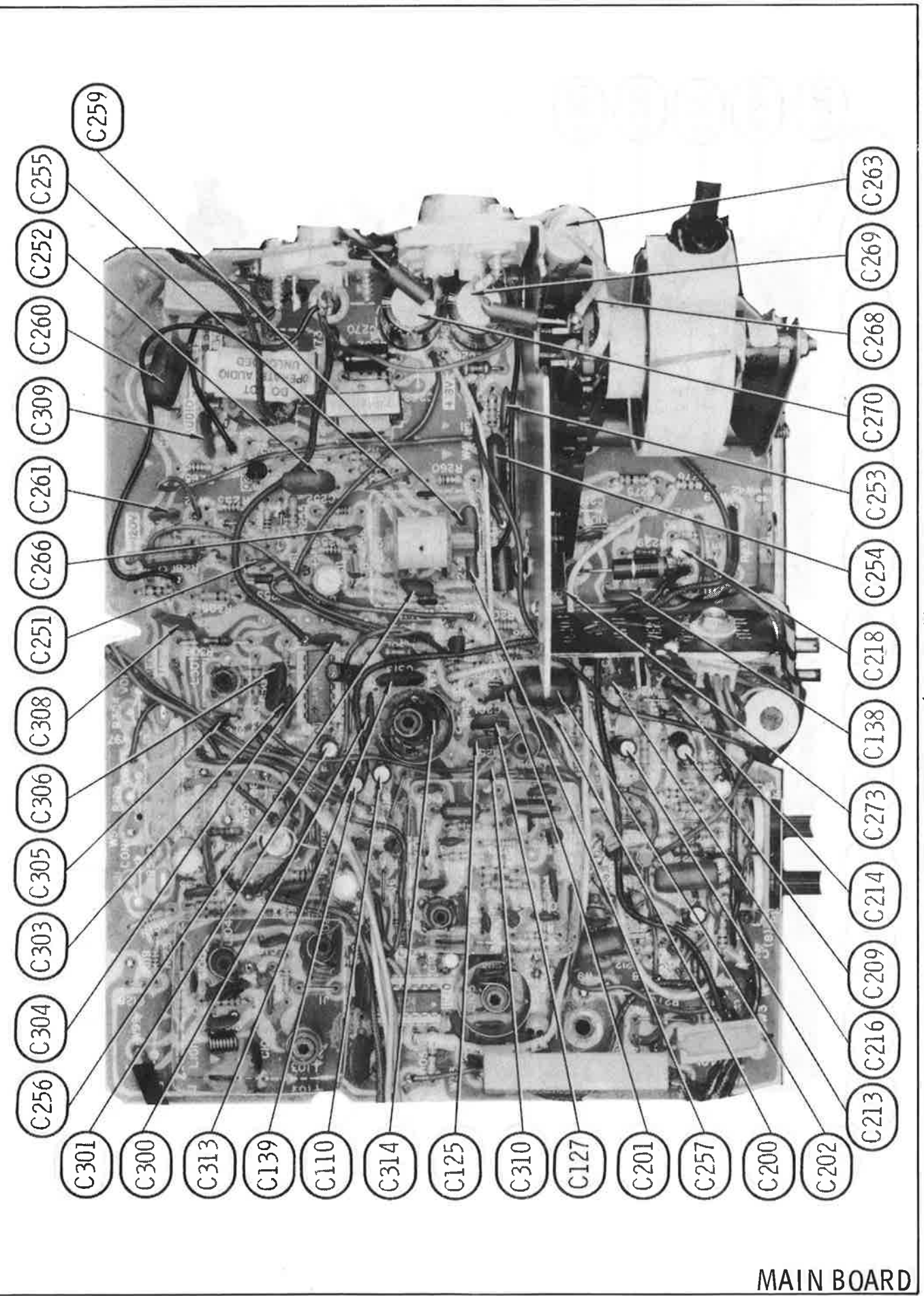
MAIN BOARD



MAIN BOARD



MAIN BOARD

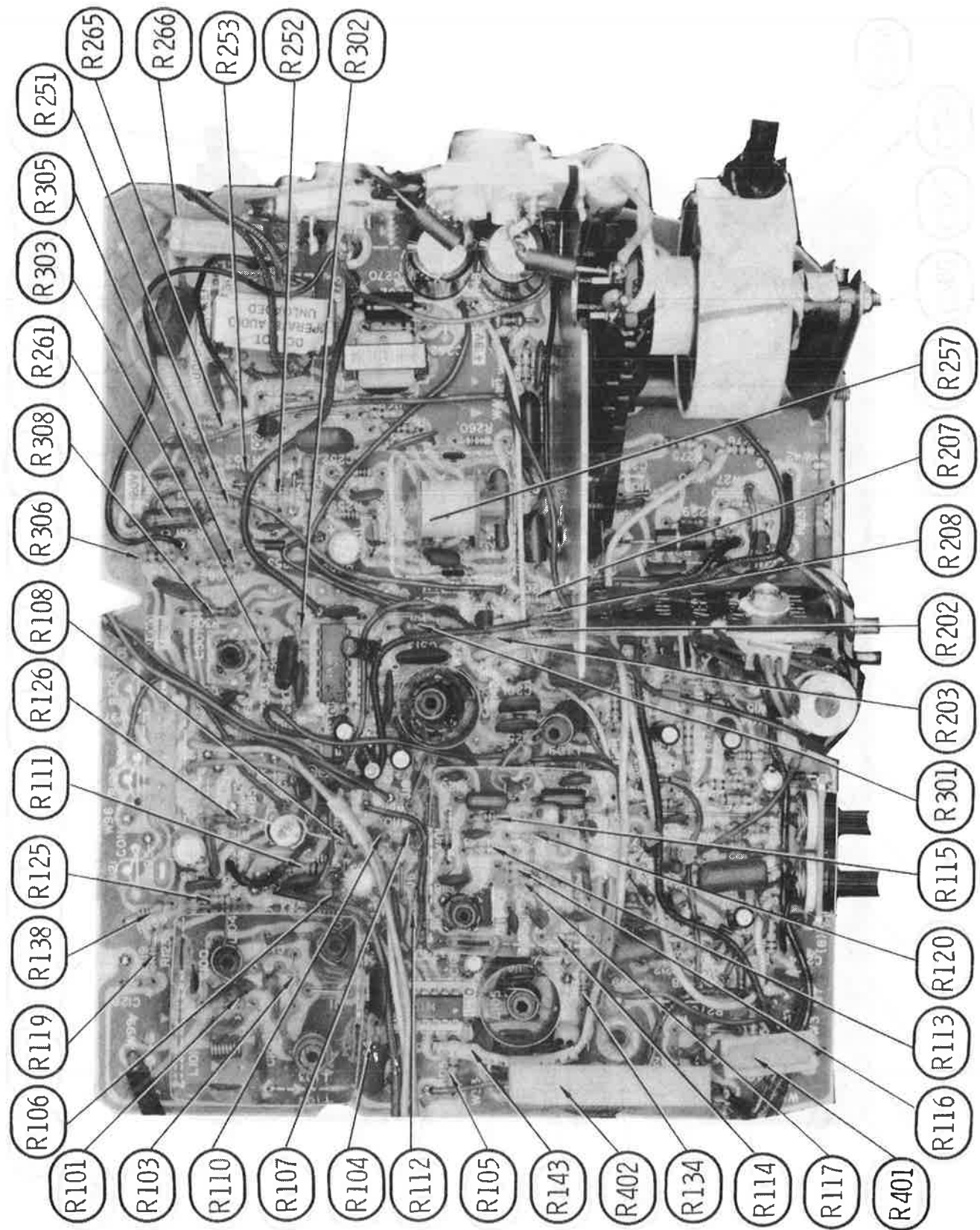


MAIN BOARD

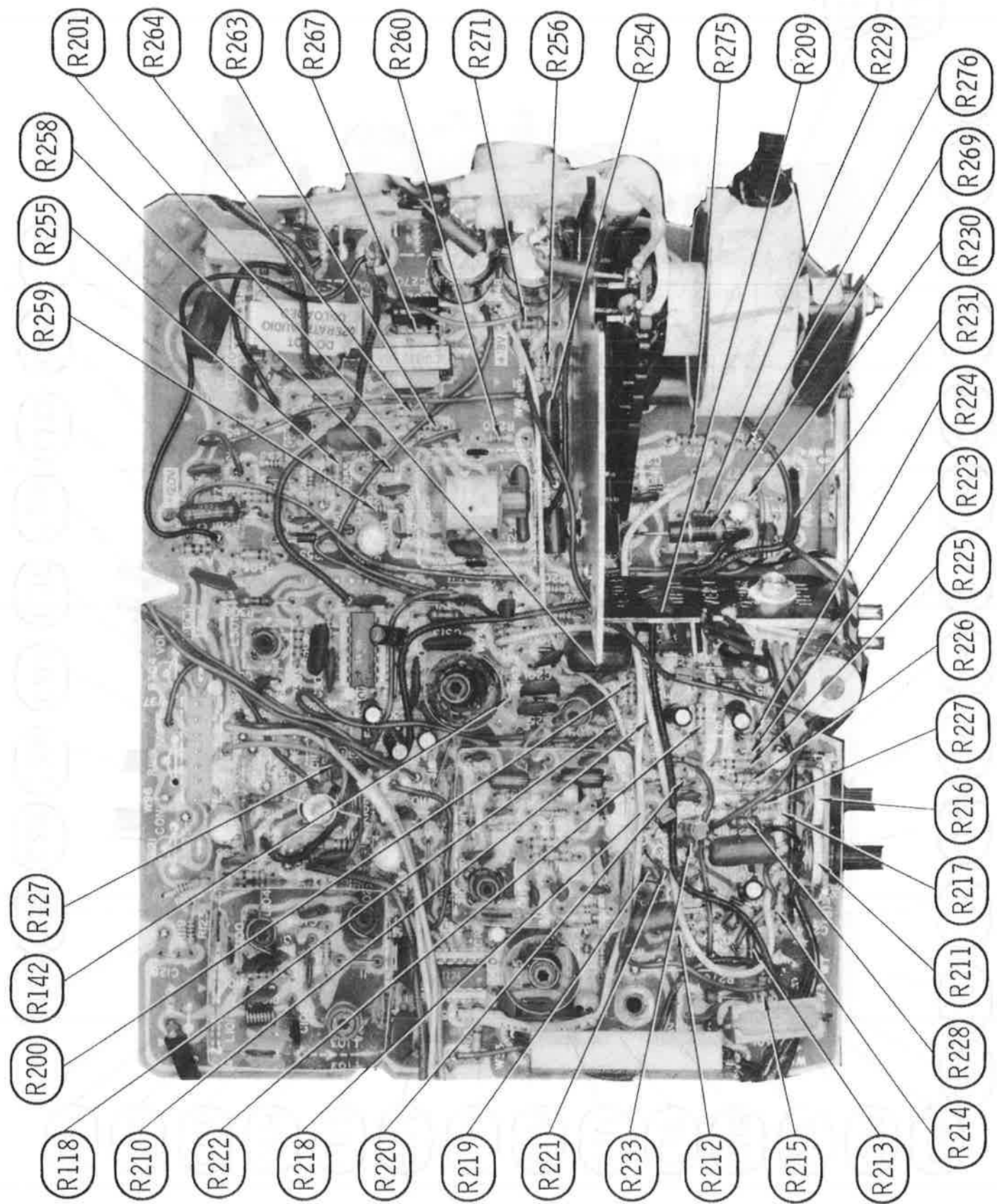
GENERAL ELECTRIC
CHASSIS 12XB, 15XB

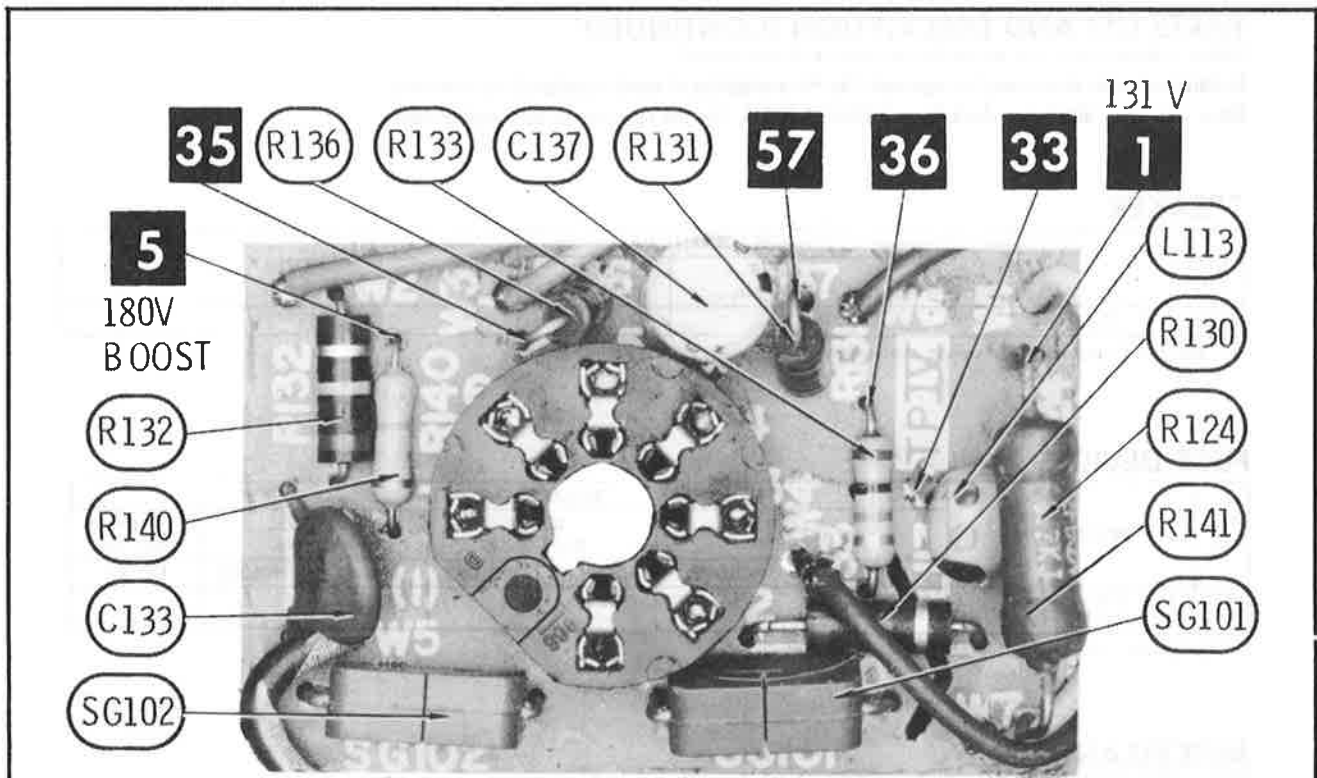
FOLDER 1

MAIN BOARD

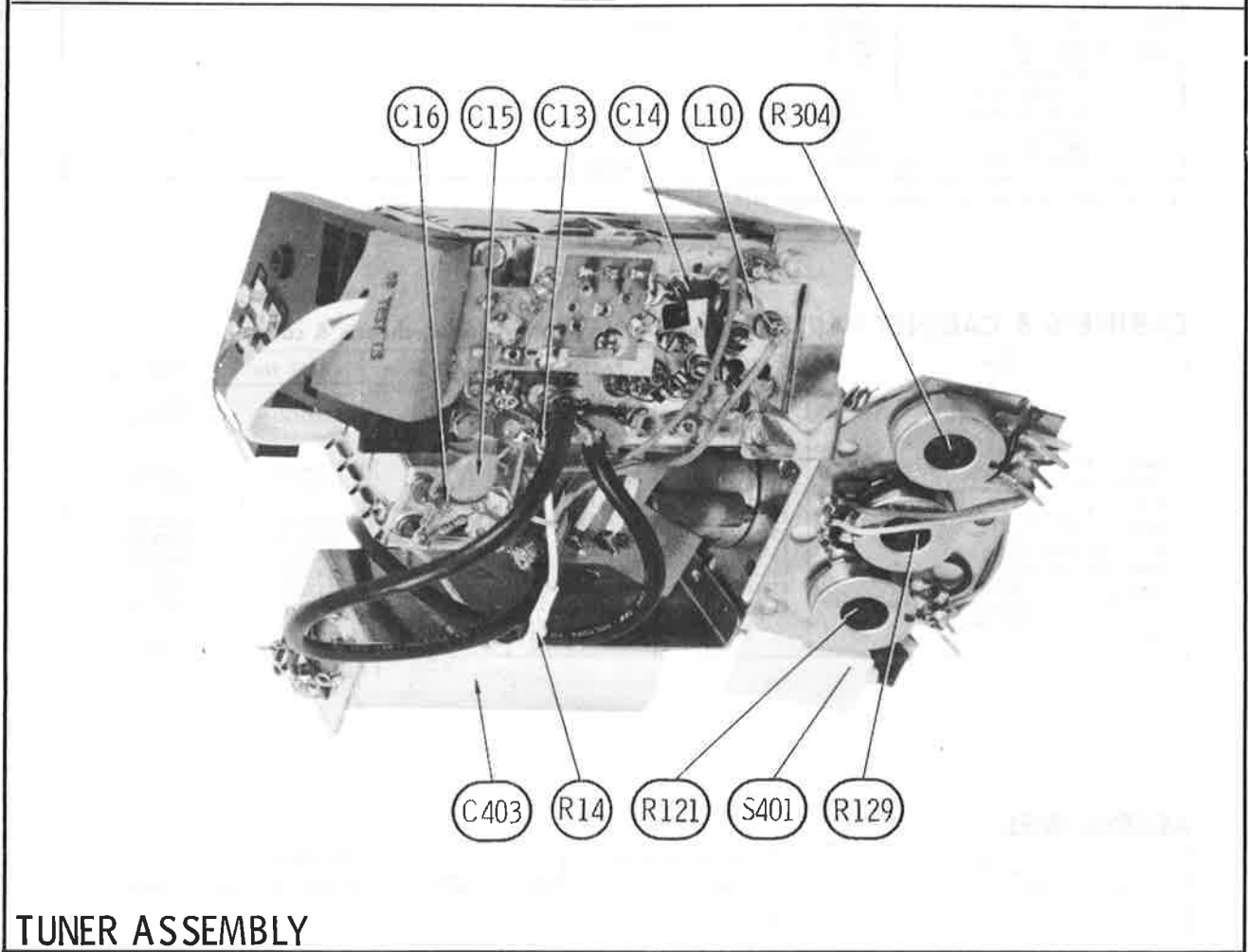


MAIN BOARD





CRT SOCKET BOARD A Howard W. Sams CIRCUITRACE® Photo



TUNER ASSEMBLY

SAFETY PRECAUTIONS

IMPORTANT – SAFETY INFORMATION

CAUTION – X-RAYS

AS PRECAUTIONS AGAINST THE EXCESSIVE EMISSION OF POSSIBLY HARMFUL X-RAYS, NEVER APPLY POWER TO THE RECEIVER UNTIL THE FOLLOWING CONDITIONS ARE VERIFIED:

1. THE LINE INPUT VOLTAGE DOES NOT EXCEED 128 VOLTS AC.
2. THE PICTURE TUBE IS THE FACTORY SPECIFIED TYPE ONLY.

FOR CONTINUED PROTECTION AGAINST X-RAYS, REPLACE R401, R402, AND C263 WITH THE EXACT CATALOGED REPLACEMENT PARTS ONLY.

THE CHASSIS OF THIS RECEIVER IS CONNECTED TO ONE SIDE OF THE A.C. LINE. USE AN ISOLATION TRANSFORMER TO POWER THE RECEIVER WHILE PERFORMING SERVICE.

THE RECEIVER IS EQUIPPED WITH A POLARIZED POWER CORD TO INSURE THAT THE CHASSIS IS ALWAYS CONNECTED TO THE GROUNDED SIDE OF THE A.C. LINE. DEFEATING THIS SAFETY DEVICE MAY CREATE A POTENTIAL HAZARD TO THE SERVICER AND THE USER.

SHATTER-PROOF SAFETY GLASSES SHOULD ALWAYS BE WORN WHEN WORKING AROUND AN EXPOSED PICTURE TUBE. BEFORE HANDLING THE TUBE, THOROUGHLY DISCHARGE THE SECOND ANODE TO THE OUTER AQUADAG COATING OF THE PICTURE TUBE.

IF THE RECEIVER BECOMES DAMAGED OR HAS TO BE DISASSEMBLED FOR ANY SERVICE (EVEN THE REMOVAL OF ONLY THE CABINET BACK) A SAFETY RESISTANCE TEST SHOULD BE PERFORMED.

(continued)

Courtesy of the Manufacturer

GENERAL ELECTRIC
CHASSIS 12XB, 15XB

FOLDER 1

SAFETY PRECAUTIONS

SAFETY TEST

1. INSPECT LEAD DRESS:

- a. Wires should not be pinched by chassis, should not touch any power resistors.
- b. Connections to the high voltage transformer, deflection yoke, damper diode (Y256), and damper capacitor (C263) should be securely soldered and have no sharp points.
- c. The antenna leads should be securely soldered. The leads should not be dressed close to any high voltage point or AC line connection. The insulation to the antenna leads should not be damaged.
- d. The AC wiring should be inspected for damaged insulation, frayed wires, pinched leads, and cold solder connections.
- e. Inspect the AC line cord for damaged insulation.

- 2. WITH THE ON-OFF SWITCH IN THE OFF POSITION, CHECK FOR DC CONTINUITY (0 OHMS) FROM THE LARGE PIN ON THE POWER INTERLOCK TO CHASSIS GROUND.
- 3. REASSEMBLE THE RECEIVER COMPLETELY WITH THE VHF RETRACTABLE ANTENNA CONNECTED TO THE VHF ANTENNA TERMINALS.
- 4. DO NOT PLUG THE RECEIVER INTO A POWER OUTLET. CONNECT BOTH BLADES OF THE POWER PLUG TOGETHER AND PLACE THE ON-OFF SWITCH IN THE ON-POSITION.
- 5. MEASURE BETWEEN THE SHORTED POWER PLUG AND THE FOLLOWING POINTS. READING SHOULD BE AS INDICATED.

TEST POINT	MIN. OHMS	MAX. OHMS
ANTENNA TERMINALS-UHF	600K	4.4 MEGS
ANTENNA TERMINALS-VHF	600K	4.4 MEGS
CABINET BACK SCREWS	OPEN CIRCUIT	
ALL METAL CONTROL OR CHANNEL SELECTOR SHAFTS (WITH KNOBS REMOVED)	OPEN CIRCUIT	
ALL NON-REMOVABLE METALLIC KNOBS, PUSH BUTTONS, EARPHONE JACKS, ETC.	OPEN CIRCUIT	
METAL ESCUTCHEONS AND OVERLAYS	OPEN CIRCUIT	
METAL HANDLES	OPEN CIRCUIT	

IF ANY READING IS OUTSIDE LIMITS SPECIFIED, THE CAUSE SHOULD BE IDENTIFIED AND CORRECTED BEFORE OPERATING THE RECEIVER.

Courtesy of the Manufacturer

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements. Have your local distributor check Sams COUNTER FACTS[®] for the most up-to-date replacement.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
LS301	4" PM 8 ohms	ES95X9 #		

For SAFETY use only equivalent replacement part.

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA							
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	
F401	2A @ 250V Quick-acting Pigtail	ES10X46 #		GJV2		318002			

For SAFETY use only equivalent replacement part.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
S401 SG101 SG102	VHF Antenna	ES83X12	Power
	UHF Antenna	EP83X1	
	UHF Tuner	ES85X23 #	
	VHF Tuner	ES86X24 #	
	Switch	ES39X22 #	
	Spark Gap	ES41X7	Correction
	Spark Gap	ES41X7	
	AC Interlock	#	
	AC Power Cord	EP66X1 #	
	Anode Connector	ES8X29 #	
	Magnet	ES42X48	CRT Socket
	Jack (Earphone)	EP8X4 #	
	Printed Circuit Board	ES93X31	

For SAFETY use only equivalent replacement part.

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	PART No.	PART No.	PART No.	PART No.
	MODEL AXB2503WD, XB2508WD	MODEL XB2504VY	MODEL XB2510RW	MODEL XB3336WD	MODEL XB3338RW
Cabinet Front	ES99X245	ES99X246	ES99X247	ES99X249	ES99X250
Cabinet Back	ES98X126	ES98X126	ES98X126	ES98X128	ES98X129
Window	ES94X19	ES94X19	ES94X19		
Knob, Volume/Contrast/Brightness	ES43X258	ES43X258	ES43X258	ES43X245	ES43X245
Knob, VHF Selector	ES43X309	ES43X309	ES43X309	ES43X310	ES43X310
Knob, VHF Fine Tuning	ES43X237	ES43X237	ES43X237	ES43X243	ES43X243
Knob, UHF Indicator	ES43X295	ES43X295	ES43X295	ES43X295	ES43X295
Knob, UHF Fine Tuning	ES43X301	ES43X301	ES43X301	ES43X301	ES43X301
Knob Pack, UHF Selector/UHF Fine Tune/UHF Indicator	ES43X273	ES43X273	ES43X273	ES43X273	ES43X273
Handle				ES78X27	ES78X28

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Earphone 8 ohms	ES90X14	Models: AXB2503WD, XB2508WD, XB2510RW, XB3338RW

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFG. PART No.			WORKMAN PART No.	MFG. PART No.
R261	10K 5% 2W Film	CD-1000	EP14X111 #	R401	10 5% 5W WW	5W-SQ10	ES14X76 #
R265	1000 5% 1/4W Carbon		ES14X71 #	R402	120 10% 10W WW		ES14X75 #
R266	2000 10% 2W WW		ES14X47 #		160 10% 10W WW		ES14X74 (1) #
R269	10 5% 2W Carbon	CC-10	ES14X48 #				

For SAFETY use only equivalent replacement part.

(1) Used in 12" chassis.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L10	Peaking (150uH)	EP36X17		72F154AP	
L101	RF Choke	ES36X126			
L102	41.25MHz Trap	ES36X83			
L103	47.75MHz Trap	EP36X13			
L104	Video Input IF	ES36X125			
L105	1st Video IF	ES36X124			
L106	Peaking (150uH)	ES36X127			
L107	RF Choke	ES36X61		74F125AP	
L108	RF Choke	ES36X84		6176	
L109	4.5MHz Trap	ES36X123			
L111	Peaking (390uH)	ES36X497			
L113	Peaking (270uH)	ES36X118			
L252	RF Choke (5.6uH)	ES36X122			
L301	Quadrature	EP36X83			
L402	Line Choke	ES36X132 #			
L403	Line Choke	ES36X132 #			
T101	Video Output	ES56X6			
T300	Sound Input IF	ES36X129			

For SAFETY use only equivalent replacement part.

COILS & TRANSFORMERS (Sweep Circuits)

ITEM No.	FUNCTION	REPLACEMENT DATA				
		MFGR. PART No.	OTHER IDENTIFICATION	MILLER PART No.	THORDARSON PART No.	TRIAD PART No.
L251	Horiz Osc (Hold)	ES36X88	73B140584	H-1034		
L254	Yoke Horiz = 5.4mH 90° Vert = 13mH (Alt)	ES76X17 ES76X16 (1)				
T251	Horiz Driver	ES64X12				
T252	Horiz Output	ES77X22 #				

For SAFETY use only equivalent replacement part.

(1) Used in 12 inch chassis.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	6300	8	ES64X13 # 73B14D700-2 (1)			# For SAFETY use only equivalent replacement part. (1) Number on unit.

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

WIRING DATA

High Voltage Lead	Use BELDEN No. 8869	(17 KV)
Shielded Hook-up Wire	Use BELDEN No. 8401	or 8421 (Single-Conductor)
		8208 (Two-Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No. 8528	(Solid) Available in 12 Colors
		8522 (Stranded) Available in 12 Colors
300-Ohm Tuner Input Lead	Use BELDEN No. 8225	
300-Ohm Antenna Lead-in	Use BELDEN No. 8230	or 8275
Antenna Rotor Cable	Use BELDEN No. 8464	(Flat) or 8484 (Round) 4-Conductor
		8485 (Round) 5-Conductor
		8488 (Round) 8-Conductor

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	MFGR. PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V1	15VAJP4A # 12VBEP4 #	15VAJP4A 12VBEP4			Used in Models: XB3336WD, XB3338RW Used in Models: AXB2503WD, XB2504VY, XB2508WD, XB2510RW

For SAFETY use only equivalent replacement part.

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
IC101	20V Zener	EP84X10	GE1C-2	IC507	PTC746	HEPC6076P	RE 304-1C	SK3171	TVCM-42	ECG749
IC301		EP84X2	GE-61	TR-70	PTC726	HEPC6083P	RE 305-1C	SK3072	TVCM-11	ECG712
Q101		EP15X54	GE-20	TR-21	PTC123	HEPS0015	RE 28	SK3132	RT-112	ECG611
Q102		EP15X9	GE-40	TR-78	PTC117	HEPS0015	RE 13	SK3124	RT-172	ECG123A
Q103		EP15X18	GE-22	TR-20	PTC117	HEPS5025	RE 23	SK3044	RT-114	ECG154
Q201		ES15X90	GE-27	TR-79	PTC103	HEPS0019	RE 26	SK3114	RT-126A	ECG159
Q202		ES15X125(5)	GE-27	TR-79	PTC110	HEPS3021	RE 191	SK3054	RT-135	ECG291
Q203		ES15X125(5)	GE-27	TR-79	PTC110	HEPS3021	RE 191	SK3054	RT-135	ECG291
Q204		EP15X5	GE-18	TR-87	PTC125	HEPS5012	RE 17	SK3024	RT-114	ECG128
Q205		ES15X128	GE-21	TR-30	PTC103	HEPS0031	RE 26	SK3114	RT-126A	ECG159
Q206		EP15X2	GE-20	TR-21	PTC136	HEPS0015	RE 13	SK3124	RT-172	ECG123A
Q208		EP15X6	GE-20	TR-21	PTC136	HEPS0015	RE 13	SK3018	RT-172	ECG233
Q209		EP15X1	GE-20	TR-21	PTC141	HEPS0015	RE 13	SK3117	RT-172	ECG123A
Q210		ES15X90	GE-22	TR-20	PTC103	HEPS0019	RE 26	SK3114	RT-126A	ECG159
Q211		ES15X90	GE-22	TR-20	PTC103	HEPS0019	RE 26	SK3114	RT-126A	ECG159
Q212		EP15X48	GE-21	TR-30	PTC103	HEPS0019	RE 26	SK3114	RT-126A	ECG159
Q213		ES15X90	GE-22	TR-20	PTC103	HEPS0019	RE 26	SK3114	RT-126A	ECG159
Q251		EP15X1	GE-20	TR-21	PTC141	HEPS0015	RE 13	SK3117	RT-172	ECG123A
Q252		EP15X19	GE-18	TR-87	PTC125	HEPS5015	RE 17	SK3044	RT-114	ECG128
Q253		ES15X126	GE-36	TR-67	PTC129A	HEPS5020	RE 30	SK3111	RT-140	ECG163
Q301		EP15X16	GE-12	TR-23	PTC104	HEPS5011	RE 14	SK3026	RT-128	ECG124
Y101		EP16X3	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-200	ECG109
Y102		EP57X4	GE-504A	8D6	PTC202	HEPRO0054	RE 49	SK3017A	RT-218	ECG116
Y103		EP16X10	GE-504A	8D6	PTC202	HEPRO0054	RE 49	SK3017A	RT-218	ECG116
Y201		ES16X27	GE-300	D200	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177
Y203		ES16X27	GE-300	D200	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177
Y207		ES16X27	GE-300	D200	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177
Y251		ES16X27	GE-300(7)	D200MP (6)	PTC214M(6)	HEPRO602(7)	RE 52(7)	SK3100(7)	RT-218(7)	ECG178MP(6)
Y252		ES16X27	GE-300(7)	D200MP (6)	PTC214M(6)	HEPRO602(7)	RE 52(7)	SK3100(7)	RT-218(7)	ECG178MP(6)
Y253		ES16X41	GEZD-20		ZB20A	HEPZ0421	RE 126		RT-247	ECG5079
Y254		ES16X27	GE-300	D200	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177
Y255		EP16X10	GE-300	D200	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177
Y256		EP16X11	GE-511	D172	PTC216	HEPR3012	RE 55	SK3130	RT-203	ECG506
Y259	ES57X23#									
Y259	EP57X5#	GE-504A	8D6	PTC202	HEPRO0054	RE 49	SK3017A	RT-210	ECG116	
Y260	EP57X4#	GE-504A	8D6	PTC202	HEPRO0054	RE 49	SK3017A	RT-218	ECG116	

#. For Safety use only equivalent replacement part.

(5) Half of complementary pair (Q202 and Q203).

(6) Matched pair.

(7) Two required - select matched pair.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C13	10 25V	EP31X5	ME-2-G-010	EA30-10	WBR10-25	TC22A	TVA-1204
C14	1 50V	EP31X16	ME-1-J-001	EA50-1	WBR1-50	MTA1D50	TVA-1300
C109	.68 16V	ES31X48	RME-A-J-001	EP15-1	PC1-50	TT15X1	EV-1315
C110	10 50V	EP31X35	RME-D-J-010	EP50-10	PC10-50	MTV10CB50	EV-1622
C111	22 50V	EP31X44	RME-F-J-025	EP50-25	WBR25-50	VTT22E63	EV-1324
C134	47 25V	EP31X12	RME-F-H-050	EP30-50	PC50-25	VTT47E25	EV-1326
C137	.47 100V	ES31X53	ME-2-M-001	EP50-10	WBR1-450	MTA1D100	TVA-1330
C139	10 50V	EP31X35	RME-D-J-010	EP50-1	PC10-50	MTV10CB50	EV-1622
C207	.47 50V	ES31X46	RME-A-J-001	EP50-10	PC1-50	VTT47B63	EV-1610
C209	10 50V	EP31X35	RME-D-J-010	EP50-10	PC10-50	MTV10CB50	EV-1622
C210	1 25V	ES31X47	RME-A-J-001	EP30-1	PC1-50	TT25X1	EV-1315
C211	1000 16V	ES31X51	ME-G1000	EA15-1000	WBR1000-16	TC1501C	TVA-1163
C212	.68 16V	ES31X48	RME-A-J-001	EP15-1	PC1-50	TT15X1	EV-1315
C213	10 50V	EP31X35	RME-D-J-010	EP50-10	PC10-50	MTV10CB50	EV-1622
C218	1 25V	ES31X47	RME-A-J-001	EP30-1	PC1-50	TT25X1	EV-1315
C258	22 50V	EP31X44	RME-F-J-025	EP50-25	WBR25-50	VTT22E63	EV-1324
C269	470 35V	EP31X47 #	RME-O-H-500	EP50-500	WBR500-35	VTT47OL35	EV-1450
	220 35V	ES31X52 # (1)	RME-L-H-250	EP50-250	WBR250-50	VTT220J35	EV-1440
C270	470 35V	EP31X47	RME-O-H-500	EP50-500	WBR500-35	VTT47OL35	EV-1450
C301	10 50V	EP31X35	RME-D-J-010	EP50-10	PC10-50	MTV10CB50	EV-1622
C302	10 50V	EP31X35	RME-D-J-010	EP50-10	PC10-50	MTV10CB50	EV-1622
C403a	300 175V	ES31X50 #	CTM-2292	DD0018.2A (2)		FP216.9	TVL-2475.5
b	300 150V						

For SAFETY use only equivalent replacement part.

(1) Used in 12" versions.

(2) Parallel 200 uF, 50 uF, and 5 uF sections.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS* for the most up-to-date replacement.

CAPACITORS (cont)

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C205	.1	ES25X27	6DP-4-104	DD-102	DPMS6P1	EWF6010	6PS-P10
C206	.27 10%		1MDF-4-274		WMF1P27	EWF1A027	1PB-P27
C208	.001 50V		CCD-102		GP1000	GP210	2SS-D10
C214	820 50V		CCD-821		GP820	GP382	10TS-T82
C215	820 50V		CCD-821		GP820	GP382	10TS-T82
C216	820 50V		CCD-821		GP820	GP382	10TS-T82
C251	100 5%		CCD-821		NP0100	CN0310	10TCC-T10
C252	.1		6DP-4-104		DPMS6P1	EWF6010	6PS-P10
C253	47 NPO 10%		CCT0-470		NP047	CN0447	10TCC-Q47
C254	.0082 500V 10%		6DP-2-822	CPR-8200J	DPMS6D82	PVC6282	6PS-D82
C255	.0022		CCD-222			GP222	10TS-D22
C256	.0033 10%		6DP-1-332		DPMS6D33	EWF6233	6PS-D33
C257	.0033 10%		6DP-1-332	CPR-3300J	DPMS6D33	EWF6233	6PS-D33
C259	.02 5%						
C260	.1 200V		2DP-3-104	DD-821	DPMS2P1	EWF2010	2PB-P10
C261	820 10%		CCD-821		GP820	GP382	10TS-T82
C263	.0033 1.2KV 5%	ES25X32 # ES25X31 # (2)		DTZ-15			
	.0016 1.2KV 5%						
C265	.18 200V 10%	(1)			WMC2P18	M192P18492	192P18492
C266	16 NPO 5%				NP015	CN0415	10TCC-Q15
C268	820 10%		CCD-821		GP820	GP382	10TS-T82
C273	820 10%		CCD-821		GP820	GP382	10TS-T82
C275	30						
C300	.05		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C303	.02		CCD-203			GP120	5GA-S20
C304	.01		CCD-103	DTZ-15			10TS-S10
C305	15 NPO 10%		CCT0-150		NP015	CN0415	10TCC-Q15
C306	200 5%		DM10-201J		CD10FD201J03	SX320	424ME2000J501
C308	.05		CCD-503		MGP05	MAG5015	TGL-S50
C309	.01		CCD-103				10TS-S10
C310	47 10%		DM10-470J		CD6ED470J03	SX447	424MC47R0J501
C313	220 5%		DM10-221J		CD10FD221J03	SX322	424ME2200J501
C314	47 10%		DM10-470J		CD6ED470J03	SX447	424MC47R0J501
C402	.001 1KV		CCD-102	DD-102		GP210	10TS-D10

For SAFETY use only equivalent replacement part.

(1) Used in some versions.

(2) Used in 12" versions.

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C15	470 150 VAC	EP18X3		C1-471		MAG5015	TGL-S50
C16	.05 50V		CCD-503	DC-503	MGP05	CN0418	10TCC-Q18
C100	18 NPO 10%		CCT0-180			CN0422	10TCC-Q22
C101	22 NPO 5%			DTZ-22	NP022	CN0475	10TCC-Q75
C102	75 NPO 5%			DTZ-75	NP075	CN0468	10TCC-Q68
C103	68 NPO 5%			DTZ-68	NP068	CN7415	10TCU-Q15
C104	15 N750 5%			DTN-15	N15	CN0427	10TCC-Q27
C105	27 NPO 5%					CN7415	10TCU-Q15
C106	16 N750 5%			DTN-15	N15	MAG5015	TGL-S50
C107	.05		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C108	.05		CCD-503	DC-503	MGP05	MAG5015	10TS-S10
C112	.01		CCD-103				
C113	.05		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C114	27 NPO 5%					CN0427	10TCC-Q27
C115	27 NPO 5%					CN0427	10TCC-Q27
C116	.002		CCD-202			GP220	10TS-D20
C117	82 N750 10%		CCTN-820			CN7482	10TCU-Q82
C118	15 N750 10%		CCTN-150	DTN-15	N15	CN7415	10TCU-Q15
C119	.001 50V		CCD-102	DD-102	GP1000	GP210	2SS-D10
C120	10			DTZ-10	NP010	CN0410	10TCC-Q10
C121	10			DTZ-10	NP010	CN0410	10TCC-Q10
C122	15 N750 10%			DTN-15	N15	CN7415	10TCU-Q15
C123	.001 50V		CCD-102	DD-102	GP1000	GP210	2SS-D10
C124	.01		CCD-103				10TS-S10
C125	.0018		CCS-182	DD-182	GP1800	GP218	10TS-D18
C126	470		CCD-471	DD-471	GP470	GP347	10TS-T47
C127	.0018		CCS-182	DD-182	GP1800	GP218	10TS-D18
C131	.0022		CCD-222			GP222	10TS-D22
C133	470 1.4KV	EP18X3		C1-471			
C135	.001 10%		CCD-102	DD-102		GP210	10TS-D10
C136	820 10%		CCD-821	DD-821	GP820	GP382	10TS-T82
C138	.005		CCD-502				10TS-D50
C200	.001 50V		CCD-102	DD-102	GP1000	GP210	2SS-D10
C201	.01		CCD-103				10TS-S10
C202	.22 100V		1MDF-4-224		DPMS2P22	EWF1A022	1PB-P22
C204	.01		CCD-103				10TS-S10

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
R109	AGC	2500	EP49X191 73B140362-162 (5)	F1-2500, SNK104	A47-2500-S, RN-3,TT-2 or [NP-2500-S, NML-A-300,TT-2]	RU252L,SL37, SN2000	BU11,CF86,SS6A
R121	Contrast	1000	ES49X107 # 73B140362-205 (5)				
R129	Brightness	200K	ES49X95 # 73B140362-215 (5)				
R211	Volume	50K	ES49X105 #				
	Brightness	200K	(7) (18)				
R211	Contrast	1000					
	Vert Hold	800K "A"	ES49X106 73C180008-34 (5)				
R216	Vert Size	400K "B"	(7) (19)				
R304	Volume	50K	ES49X97 # 73B140362-150 (5)				

For SAFETY use only equivalent replacement part.

(5) Number on unit.

(7) To establish section identification of side-by-side controls, view controls with shaft ends facing you, terminals down. On 3-section controls, left-hand section is "A", middle section is "B", right-hand section is "C".

On 2-section controls, left-hand section is "A", right-hand section is "B".

(18) 3 side by side, used in Models using Chassis 12XB.

(19) Includes R211 and R216.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

Disconnect antenna leads. Remove six screws holding cabinet back and remove back.

Note: Most components can be serviced without further chassis removal.

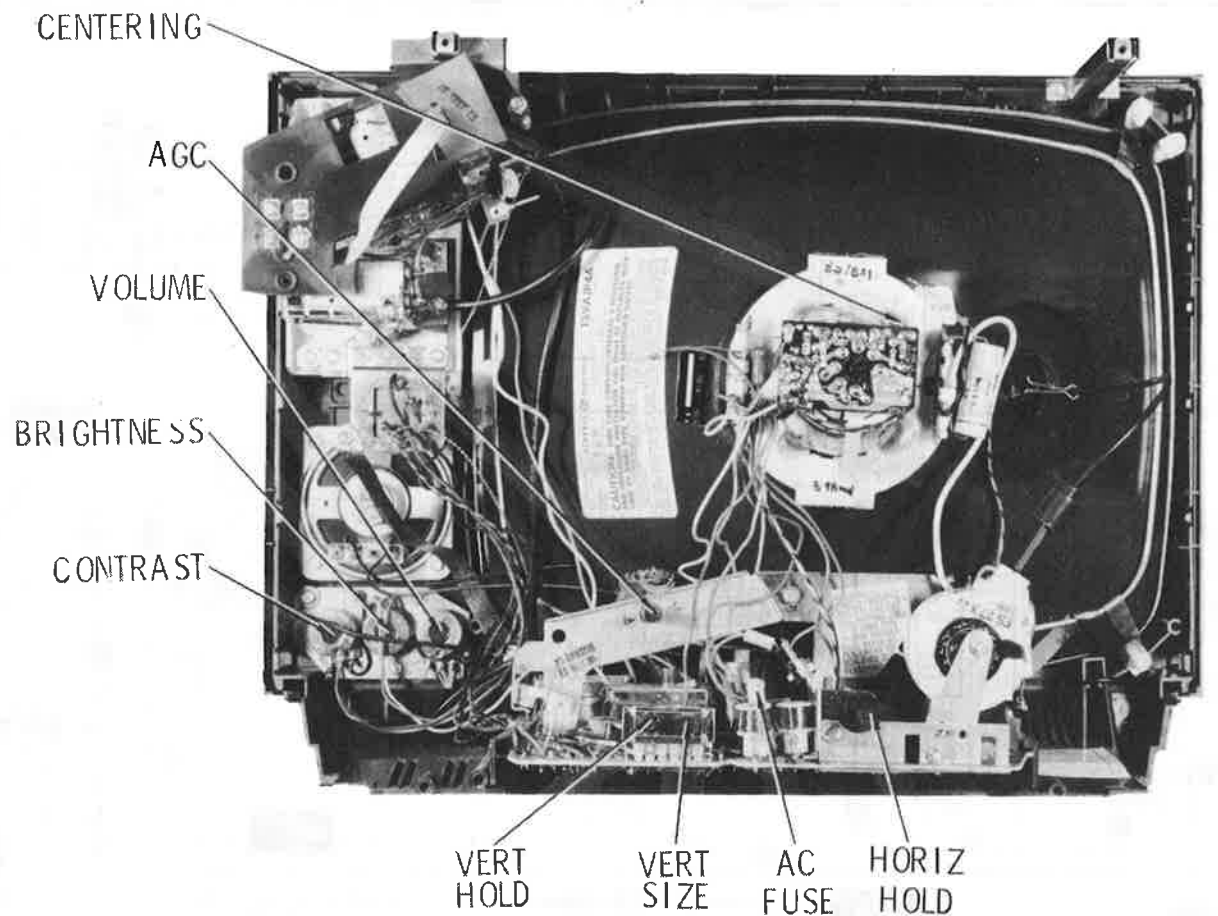
Remove all knobs and lay set face down on a soft protective surface. Disconnect CRT socket, HV anode lead, speaker leads, and CRT ground wires. Loosen and remove deflection yoke. Remove three screws from lower control mounting bracket and four screws from tuner mounting bracket. Lift tuner assembly, controls, and chassis from cabinet front.

CRT REMOVAL

Follow "Chassis Removal" procedure. Loosen bolt holding CRT retaining wire. Remove six screws holding CRT retaining wire clamps. Remove wire and clamps. Lift the CRT from the cabinet front. Do Not lift the CRT by the neck.

GENERAL ELECTRIC
CHASSIS 12XB, 15XB

FOLDER 1



CABINET-REAR VIEW

SERVICING IN THE FIELD

CRT IMPLOSION PROTECTION AND CLEANING

Implosion protection is an integral part of the picture tube, cleaning accomplished without CRT removal.

FUSE DEVICES

A 2-amp fuse is used for AC line protection. (See photo, Cabinet-Rear View.)

VHF TUNER

The fine tuning mechanically engages oscillator slug for adjustment (one slug for each channel).

UHF TUNER

The UHF tuner employs a detent mechanism for channel selection. Fine tuning is adjusted by rotating the fine tuning knob.

HORIZONTAL OSCILLATOR

Adjustment of the horizontal hold is accomplished by the proper setting of the horiz hold coil. (See photo, Cabinet-Rear View.)

AGC

The AGC may be varied by an AGC control. (See photo, Cabinet-Rear View.)

CENTERING

Centering is accomplished by proper adjustment of two magnetic rings located on the yoke rear cover.