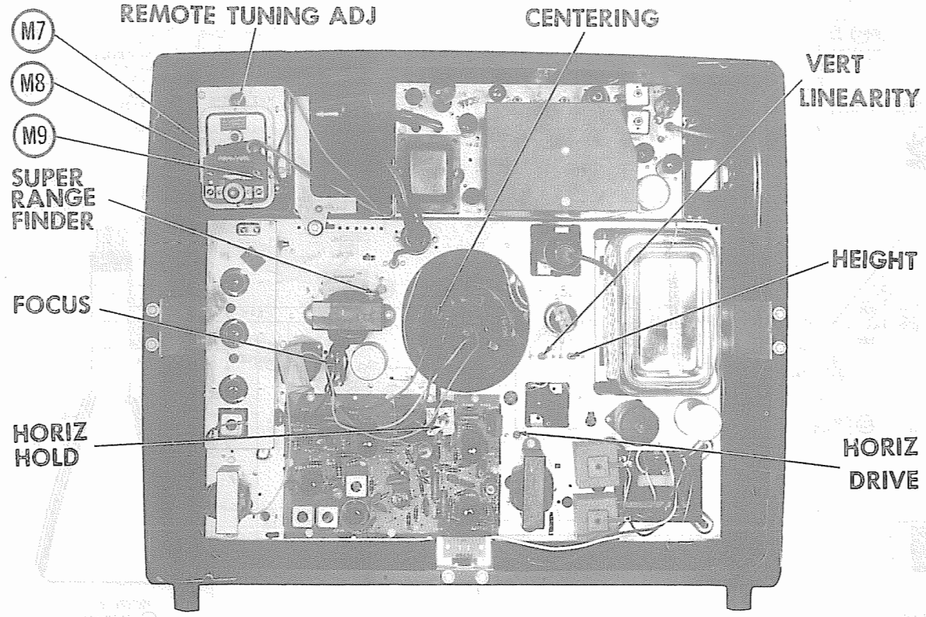


CABINET—REAR VIEW

SERVICING IN THE FIELD

TUNER OSCILLATOR ADJUSTMENTS

Touch-up adjustment of the VHF oscillator is possible by removing the channel selector and fine tuning knobs. Set the fine tuning at the center of its range. The adjustments are accessible, one at a time, as the channel selector is rotated. Adjust for best picture and sound.

PICTURE TUBE SAFETY GLASS CLEANING

Remove 2 metal screws holding the glass retainer clamp. Tilt the safety glass out at the bottom and lower to remove.

SPECIAL ADJUSTMENTS

A. AGC
To adjust the super range finder control, set the control completely counter clockwise. Tune in the strongest station in the area and advance the control to the point where the picture distorts or a buzz is heard in the sound. Back off from this position until the picture remains stable. NOTE: Keep the control set as far counter clockwise as possible to maintain good picture quality.

B. Focus
The focus may be varied in steps by the position of a plug in the focus adjustment board.

C. Remote Tuning
Remove 9 metal screws holding the rear cover and remove the rear cover. The selection of channels to be tuned may be adjusted through a recessed hole directly above the tuning motor as the channel selector is rotated. Turn the adjustment screws "IN" for channels to be selected and "OUT" for channels not to be received.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENTS

The horizontal frequency coil is used as the horizontal hold control. Adjust the horizontal hold until the picture synchronizes horizontally. (For location, see tube placement chart).

FUSE DEVICE

A 5Ω fusible resistor (R95) is used for LV power supply protection. (For location, see tube placement chart).

CENTERING

Centering is accomplished mechanically by adjusting two magnetic rings around the neck of the picture tube. Rotate the two rings around the neck of the tube until the picture is properly centered.

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

1. Turn the set on and tune in a TV station, preferably with a test pattern.

2. Set the brightness and contrast controls for a normal picture.

3. Turn the horizontal hold clockwise until the picture loses sync. It may be necessary to switch off channel and back again for picture to lose sync.

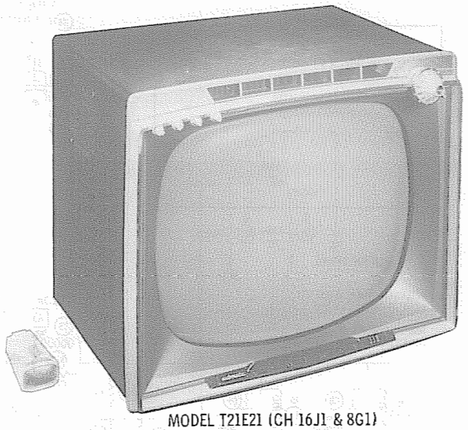
4. Turn the horizontal hold slowly counter clockwise until the picture just falls into sync.

5. Turn to an unused channel. If vertical lines appear near the center of the screen, slowly adjust the horizontal drive trimmer (R7) until white lines disappear.

6. If in step 5 the horizontal drive was adjusted, tune in a TV station and repeat steps 3 and 4. Check horizontal sync by switching off channel and back again.

24 pg

ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C



MODEL T21E21 (CH 16J1 & 8G1)

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove 9 metal screws holding the rear cover and remove the rear cover.

2. On some models it will be necessary to remove the push-on type knobs at the top of the set, the screws holding the control panel well and the control panel.

3. Remove the speaker leads.

4. Remove 2 metal screws holding the AC interlock.

5. Remove 1 metal screw holding the remote tuning chassis brace, if set is so equipped.

6. Remove 4 metal screws holding the side chassis rails to the rear of the cabinet.

7. Remove the chassis from the front of the cabinet.

CAUTION NOTE

ONE SIDE OF AC LINE CONNECTED TO CHASSIS
Care should be exercised when connecting test equipment or physically contacting the chassis.

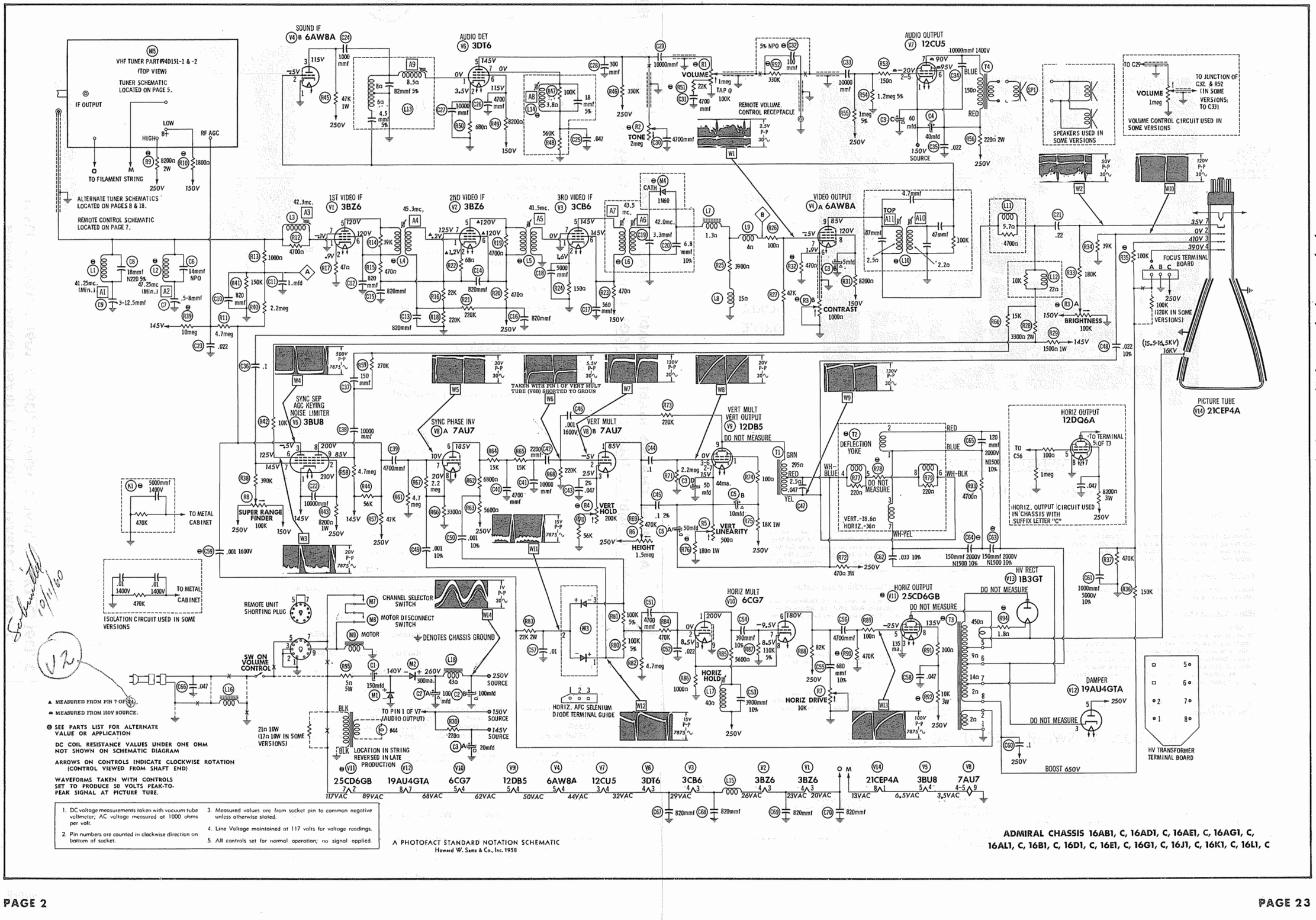
TRADE NAME	Admiral	MODELS	CHASSIS
		TA21E21, TA21E22, TA21E23	16AB1
			16AB1C
		CA21E12, CA21E13, CA21E14	16AD1
			16AD1C
		CA21E12, CA21E13, CA21E14, CA21E22, CA21E23, CA21E24, LA21E22, LA21E23	16AE1
			16AE1C
		TA21E1, TA21E2, TA21E3	16AG1
			16AG1C
		CA21E2, CA21E3	16AL1
			16AL1C
		T21E21, T21E22, T21E23	16B1
			16B1C
		C21E12, C21E13, C21E14	16D1
			16D1C
		C21E12, C21E13, C21E14, C21E16, C21E17, C21E22, C21E23, C21E24, L21E22, L21E23	16E1
			16E1C
		T21E1, T21E2, T21E3	16G1
			16G1C
		TR21E21, TR21E22, TR21E23	16J1
			16J1C
		CR21E12, CR21E13, CR21E14	16K1
			16K1C
		C21E2, C21E3, C21E6, C21E7	16L1
			16L1C
		Remote Control Unit	8G1
MANUFACTURER	Admiral Corp., 3800 W. Cortland St., Chicago 47, Illinois		
TYPE SET	Television Receiver With Remote Control		
TUBES	TV - Sixteen Remote Control - Eight		
POWER SUPPLY	110-120 Volts AC, 60 Cycle RATING Manual Tuning 160 Watts, 1.4 Amp. @ 117 Volts AC; Remote Tuning 195 Watts, 1.8 Amp. @ 117 Volts AC		
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)		

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

H390

ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

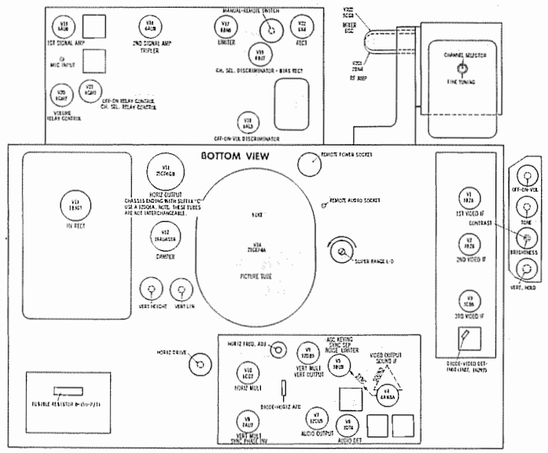
SET 394 FOLDER 1


SOUND IF V4B 6AW8A
AUDIO DET V6 3DT6
AUDIO OUTPUT V7 12CU5
VHF TUNER PART#94D151-1 & -2 (TOP VIEW)
TUNER SCHEMATIC LOCATED ON PAGE 5.
IF OUTPUT
LOW
HIGH
B+
RF AGC
TO FILAMENT STRING
ALTERNATE TUNER SCHEMATICS LOCATED ON PAGES 8 & 18.
REMOTE CONTROL SCHEMATIC LOCATED ON PAGE 7.
VOLUME
TONE
REMOTE VOLUME CONTROL RECEPTACLE
SPEAKERS USED IN SOME VERSIONS
VOLUME CONTROL CIRCUIT USED IN SOME VERSIONS
TO JUNCTION OF C32 & R52 (IN SOME VERSIONS; TO C33)
1ST VIDEO IF V1 3BZ6
2ND VIDEO IF V2 3BZ6
3RD VIDEO IF V3 3CB6
VIDEO OUTPUT V4A 6AW8A
TOP
CONTRAST
BRIGHTNESS
FOCUS TERMINAL BOARD
PICTURE TUBE V14 21CEP4A
SYNC SEP AGC KEYING NOISE LIMITER V5 3BU8
SYNC PHASE INV V8A 7AU7
VERT MULT V8B 7AU7
VERT MULT VERT OUTPUT V9 12DB5
DO NOT MEASURE
DEFLECTION YOKE
VERT. -18.6Ω
HORIZ. -36Ω
HORIZ. OUTPUT CIRCUIT USED IN CHASSIS WITH SUFFIX LETTER "C"
HORIZ OUTPUT 12DQ6A
TO TERMINAL 5 OF T3
SUPER RANGE FINDER 100K
TO METAL CABINET
ISOLATION CIRCUIT USED IN SOME VERSIONS
VERT HOLD 200K
VERT LINEARITY 500Ω
HEIGHT 1.5meg
REMOTE UNIT SHORTING PLUG
CHANNEL SELECTOR SWITCH
MOTOR DISCONNECT SWITCH
MOTOR
DENOTES CHASSIS GROUND
SW ON VOLUME CONTROL
HORIZ MULT V10 6CG7
HORIZ OUTPUT V11 25CD6GB
HORIZ HOLD 10K
HORIZ DRIVE 10K
HORIZ. AFC SELENIUM DIODE TERMINAL GUIDE
HV RECT V13 1B3GT
DAMPER V12 19AU4GTA
HV TRANSFORMER TERMINAL BOARD
BOOST 650V
▲ MEASURED FROM PIN 7 OF V14.
▬ MEASURED FROM 150V SOURCE.
⊖ SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)
WAVEFORMS TAKEN WITH CONTROLS SET TO PRODUCE 50 VOLTS PEAK-TO-PEAK SIGNAL AT PICTURE TUBE.
1. DC voltage measurements taken with vacuum tube voltmeter; AC voltage measured at 1000 ohms per volt.
2. Pin numbers are counted in 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. All controls set for normal operation; no signal applied.
25CD6GB V11 117VAC 89VAC
19AU4GTA V12 68VAC
6CG7 V10 62VAC
12DB5 V9 50VAC
6AW8A V4 44VAC
12CU5 V7 32VAC
3DT6 V6 29VAC 26VAC
3CB6 V3 23VAC 20VAC
3BZ6 V2 13VAC
3BZ6 V1 6.5VAC
21CEP4A V14 3BU8 V5 3.5VAC
7AU7 V8
A PHOTOFACT STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1958
ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

RESISTANCE MEASUREMENTS

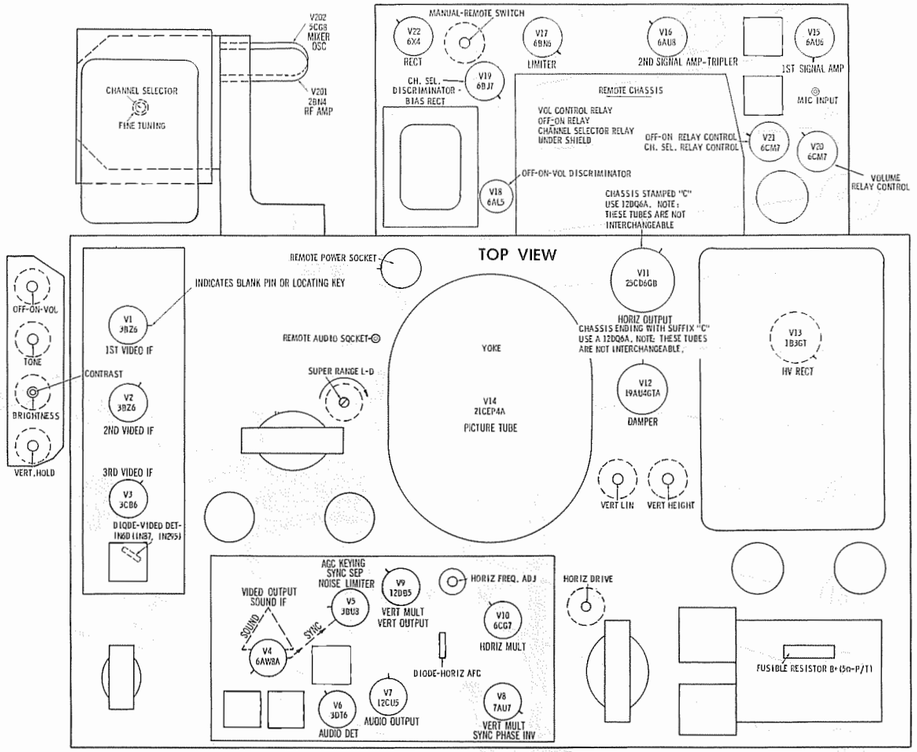
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	3BZ6	150K	47Ω	5Ω	5.5Ω	▲ 470Ω	▲ 470Ω	0Ω		
V2	3BZ6	110K	▲ 68Ω	5.5Ω	6Ω	† 470Ω	† 470Ω	130K		
V3	3CB6	.1Ω	150Ω	6Ω	7Ω	▫ 470Ω	▫ 470Ω	0Ω		
V4	6AW8A	0Ω	100K	† 47K	10Ω	11Ω	⊙ 100Ω	4000Ω	▫ 8200Ω	▫ 5700Ω
V5	3BU8	▫ 180Ω	8200Ω	1.8meg	1Ω	1.5Ω	▫ 11K	† 340K	† 47K	▫ 4.7meg
V6	3DT6	16.5Ω	680Ω	7Ω	7.5Ω	† 330K	▫ 8200Ω	560K		
V7	12CU5	¶	500K	10Ω	7.5Ω	500K	† 220Ω	† 370Ω		
V8	7AU7	⊙ † 1.1meg	220K	⊙ 150K	1Ω	1Ω	† 12K	† 1.4meg	3300Ω	0Ω
V9	12DB5	† 18K	⊙ 290Ω	2.2meg	11Ω	13Ω	2.2meg	⊙ 290Ω	NC	† 765Ω
V10	6CG7	† 5600Ω	500K	1000Ω	13Ω	14.5Ω	† 82K	110K	1000Ω	0Ω
V11	25CD6GB	TP	17.5Ω	0Ω	NC	470K	TP	22Ω	† 10K	TOP CAP †9Ω
V12	19AU4GTA	NC	NC	¶	NC	† 0Ω	NC	14.5Ω	17.5Ω	
V13	1B3GT	PINS 1 THRU 8 HAVE INFINITE RESISTANCE								TOP CAP †459Ω
V14	21CEP4A	1.5Ω	39K	†250K	† 0Ω	NC	NC	⊙ 160K	3Ω	
V15	6AU6	3.3meg	0Ω	0Ω	.1Ω	†† 6000Ω	†† 46K	0Ω		
V16	6AU8	0Ω	3.3meg	†† 220K	0Ω	.1Ω	0Ω	3.3meg	†† 16K	†† 16K
V17	6BN6	220Ω	18Ω	0Ω	.1Ω	†† 48K	†† 1000Ω	†† 1000Ω		
V18	6AL5	1.5meg	2.2meg	0Ω	.1Ω	1.5meg	0Ω	2.2meg		
V19	6BJ7	1.5meg	2.2meg	0Ω	0Ω	.1Ω	40K	9.5Ω	2.2meg	1.5meg
V20	6CM7	NC	NC	0Ω	0Ω	.1Ω	†† 2400Ω	2.5meg	NC	NC
V21	6CM7	†† 2200Ω	NC	0Ω	0Ω	.1Ω	†† 2400Ω	2.5meg	2.5meg	0Ω
V22	6X4	87Ω	NC	0Ω	.1Ω	TP	87Ω	¶		
V201	2BN4	0Ω	3.7meg	3Ω	3.5Ω	† 9200Ω	0Ω	3.7meg		
V202	5CG8	10K	▫ 8600Ω	0Ω	3.5Ω	5Ω	▫ 2800Ω	▫ 12K	0Ω	220K

¶ THIS READING CAN VARY GREATLY, (10K MINIMUM), DUE TO THE CONDITION OF THE ELECTROLYTIC CAPACITOR CONNECT IN THE ASSOCIATED CIRCUIT.
⊙ THIS READING WILL VARY. CONTROL SET FOR NORMAL OPERATION.
† MEASURED FROM 250V SOURCE.
†† MEASURED FROM PIN 7 OF V24.
† MEASURED FROM PIN 3 OF V12.
▫ MEASURED FROM 150V SOURCE.
▲ MEASURED FROM PIN 7 OF V4.
NC NO CONNECTION.
TP TIE POINT.



TUBE PLACEMENT CHART

TUBE PLACEMENT CHART



TUBE FAILURE CHECK CHART

The following chart lists tubes whose failures are most likely to produce the indicated symptoms. Refer to tube placement chart for location and type of tube.

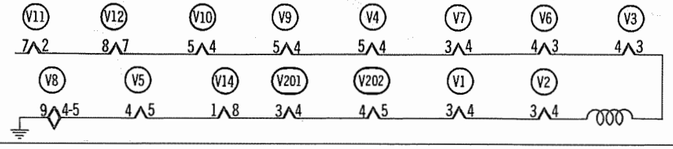
POWER SUPPLY FAILURE
No raster, no sound - Fusible Resistor (R95), Rectifiers (M1, M2)

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster - V1, V2, V3, Diode (M4), V4
No pic, no sound, has snow - V201, V202, V1
No pic, has sound, has raster - V4, V14
Has pic, no sound - V4, V6, V7
Overloaded picture - V5

SYNC FAILURE
No vert. sync - V5, V8
No horiz. sync - V5, V8, Rectifier (M3)
No vert. or horiz. sync - V5, V8

SWEEP FAILURE
No raster, has sound - M3, V10, V11, V12, V13, V14
No vertical deflection - V8, V9
Poor vert. linearity or foldover - V8, V9
Poor horiz. linearity or foldover - V10, V11, V12
Narrow picture - V10, V11, V12, M1, M2
Vert. off freq. - V8, V9
Horiz. off freq. - V10

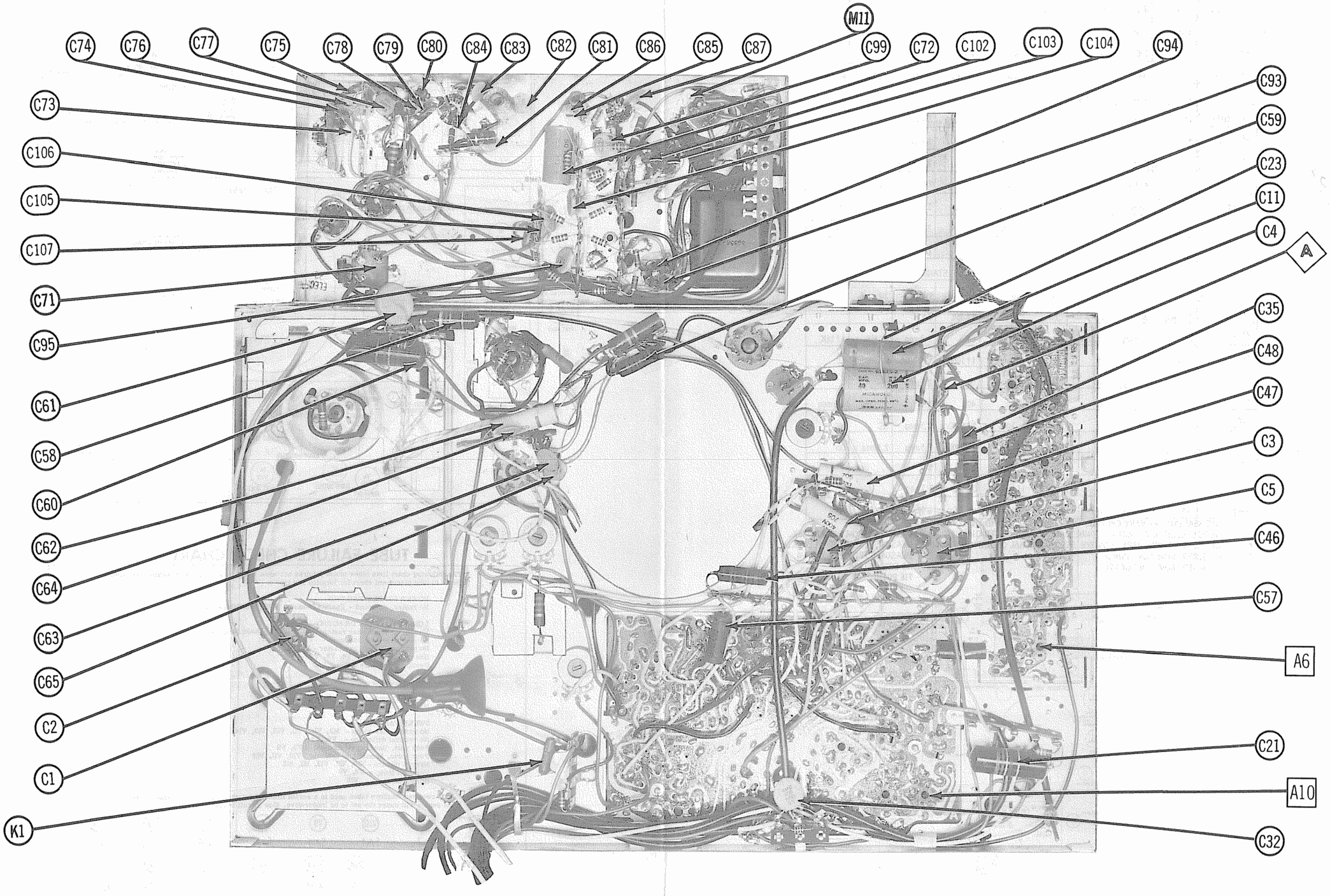
This receiver employs tubes used in a series filament network, an open filament in any tube in the series will cause the set to be inoperative. (See circuit below).



SET 394 FOLDER 1

ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

FOLDER 1



CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

TUNER ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

USE AN ISOLATION TRANSFORMER TO PROTECT THE TEST EQUIPMENT.

VHF OSCILLATOR ALIGNMENT FOR TUNERS # 94D151-1 AND-2

Set the fine tuning at the center of its range. The adjustments are accessible, one at a time, as the channel selector is rotated. Adjust for best picture and sound.

VHF RF AND MIXER ALIGNMENT FOR TUNERS # 94D151-1 AND -2

Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	195MC	193.25MC 197.75MC	10	Vert. Amp. thru 10K to point Ⓣ. Low side to chassis.	A201, A202, A203	Adjust A201 and A202 for maximum amplitude and symmetry with markers as shown in Fig. 201. Increase bias for MINIMUM amplitude of response curve. Without changing the bias adjust A203 to obtain MINIMUM response on the scope.
2.	"	"	213MC	211.25MC 215.75MC	13	"		Check for response similar to Fig. 201. If markers fall below 70% on any channel, make compromise adjustments of A201 and A202, with channel switch set to that channel. Check all other channels to see that they have not been seriously affected.
			207MC	205.25MC 209.75MC	12			
			201MC	199.25MC 203.75MC	11			
			195MC	193.25MC 197.75MC	10			
			189MC	187.25MC 191.75MC	9			
			183MC	181.25MC 185.75MC	8			
			177MC	175.25MC 179.75MC	7			
			85MC	83.25MC 87.75MC	6			
			79MC	77.25MC 81.75MC	5			
			69MC	67.25MC 71.75MC	4			
			63MC	61.25MC 65.75MC	3			
			57MC	55.25MC 59.75MC	2			

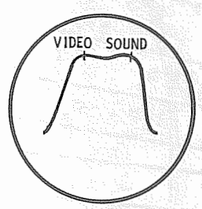


FIG. 201

TUNER PARTS LIST & DESCRIPTION

TUBES (GENERAL ELECTRIC, SYLVANIA)

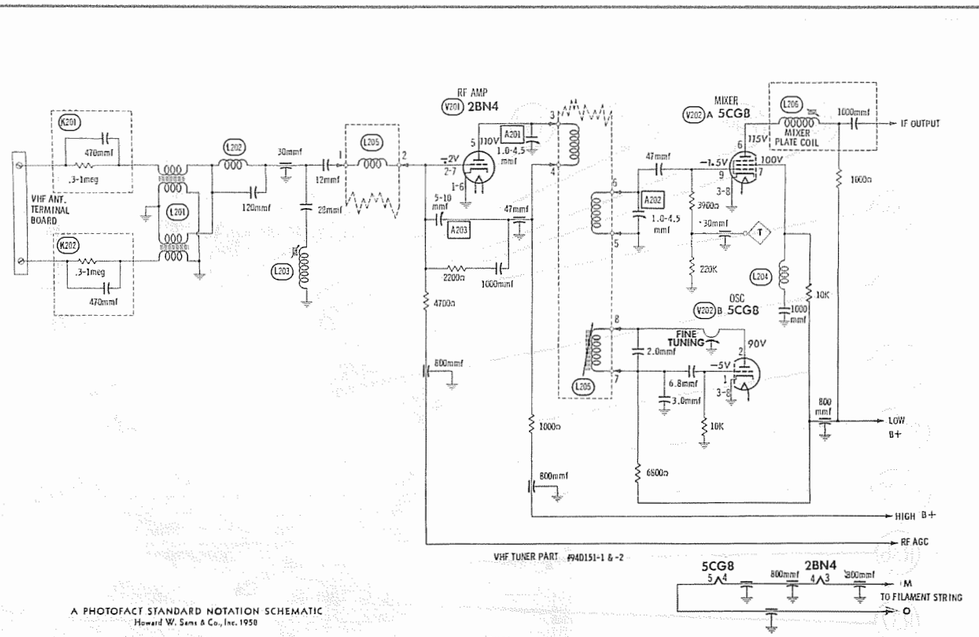
ITEM No.	USE	TYPE	NOTES
V201	RF Amplifier	2BN4	
V202	Mixer-Osc.	5CG8	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ADMIRAL PART No.	REPLACEMENT DATA	
K201	Antenna Isolation	470mmf, .3-1meg	63A11-1	Centralab Sprague	RC-471 R-9177
K202	Antenna Isolation	470mmf, .3-1meg	63A11-1	Centralab Sprague	RC-471 R-9177

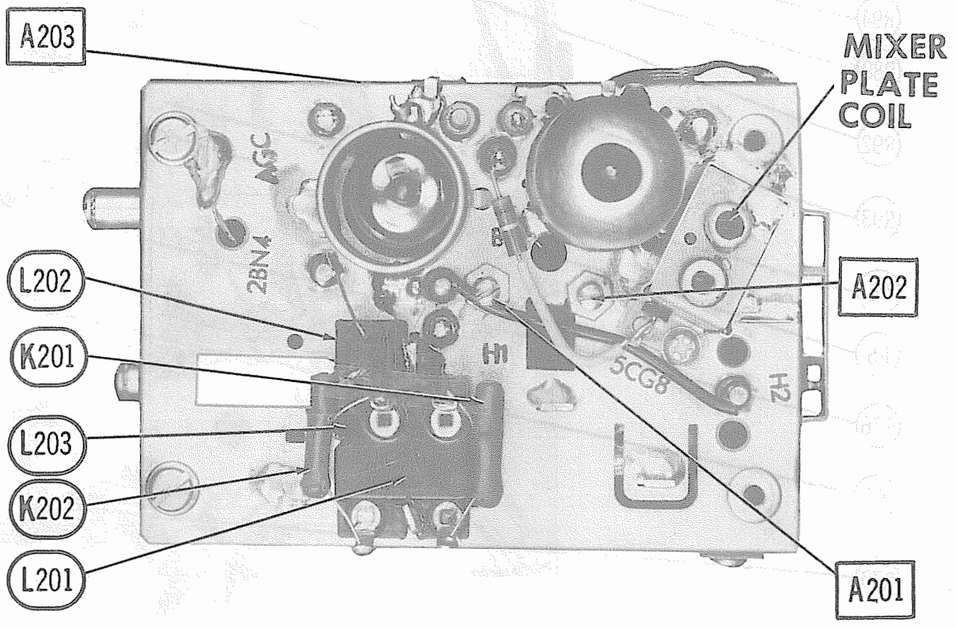
COILS (RF-IF)

ITEM No.	USE	ADMIRAL PART No.	NOTES
L201	Ant. Trans. Assy.	94D131-68	
L202	IF Trap Coil	94D131-64	
L203	IF Trap Coil	94D131-51	Core part #94D131-77
L204	Mixer Screen Coil	94D131-65	
L205A	Ant., RF, Mixer Grid, Osc. Coils	94D131-52	Channel 2
B	"	94D131-53	Channel 3
C	"	94D131-54	Channel 4
D	"	94D131-55	Channel 5
E	"	94D131-56	Channel 6
F	"	94D131-57	Channel 7
L205G	Ant., RF, Mixer Grid, Osc. Coils	94D131-58	Channel 8
H	"	94D131-59	Channel 9
I	"	94D131-60	Channel 10
J	"	94D131-61	Channel 11
K	"	94D131-62	Channel 12
L	"	94D131-63	Channel 13
L206	Mixer Plate Coil	94D151-50	Core part #94D131-78



A PHOTOFACT STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1958

TUNER SCHEMATIC

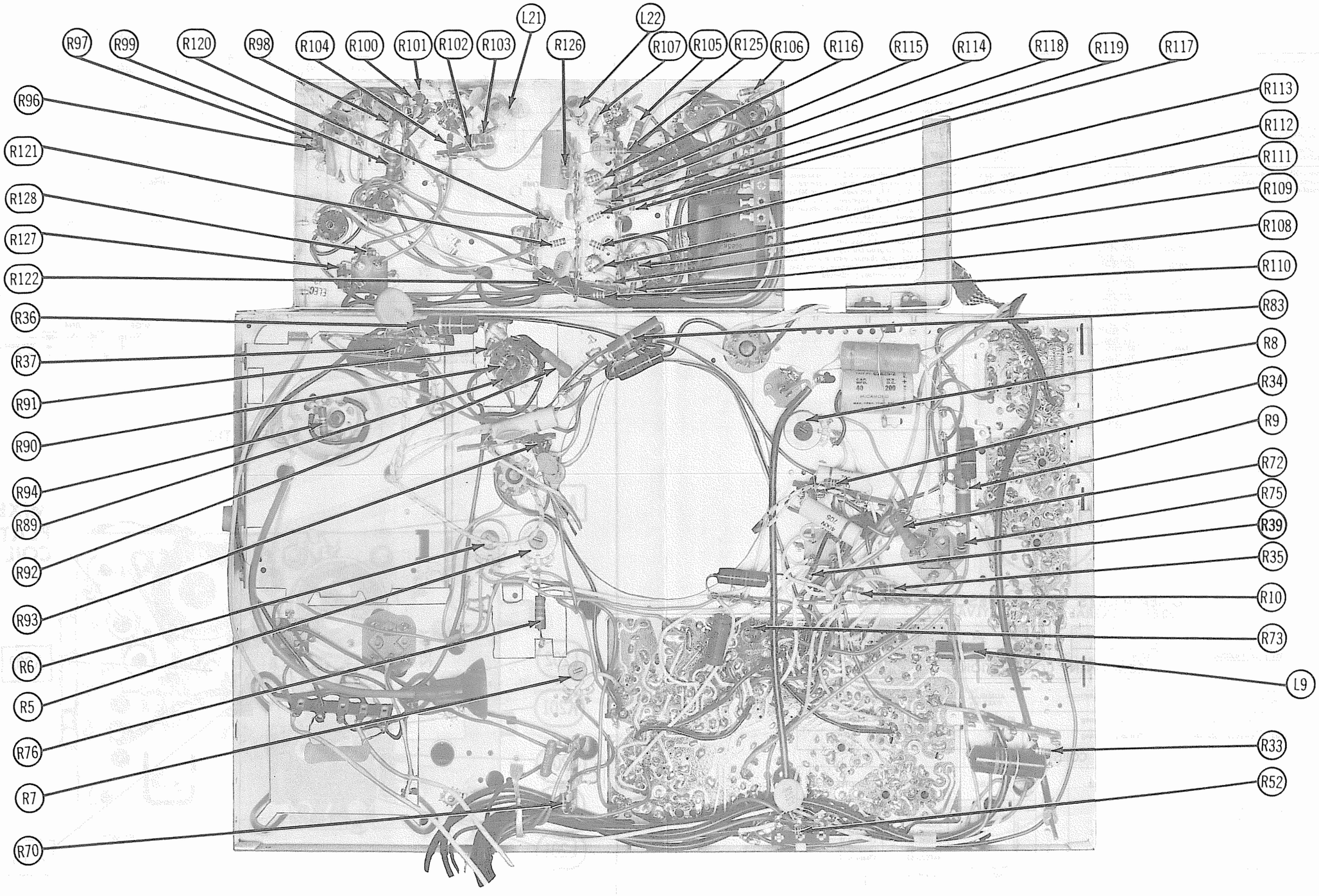


RF TUNER-TOP VIEW

SET 394 FOLDER 1

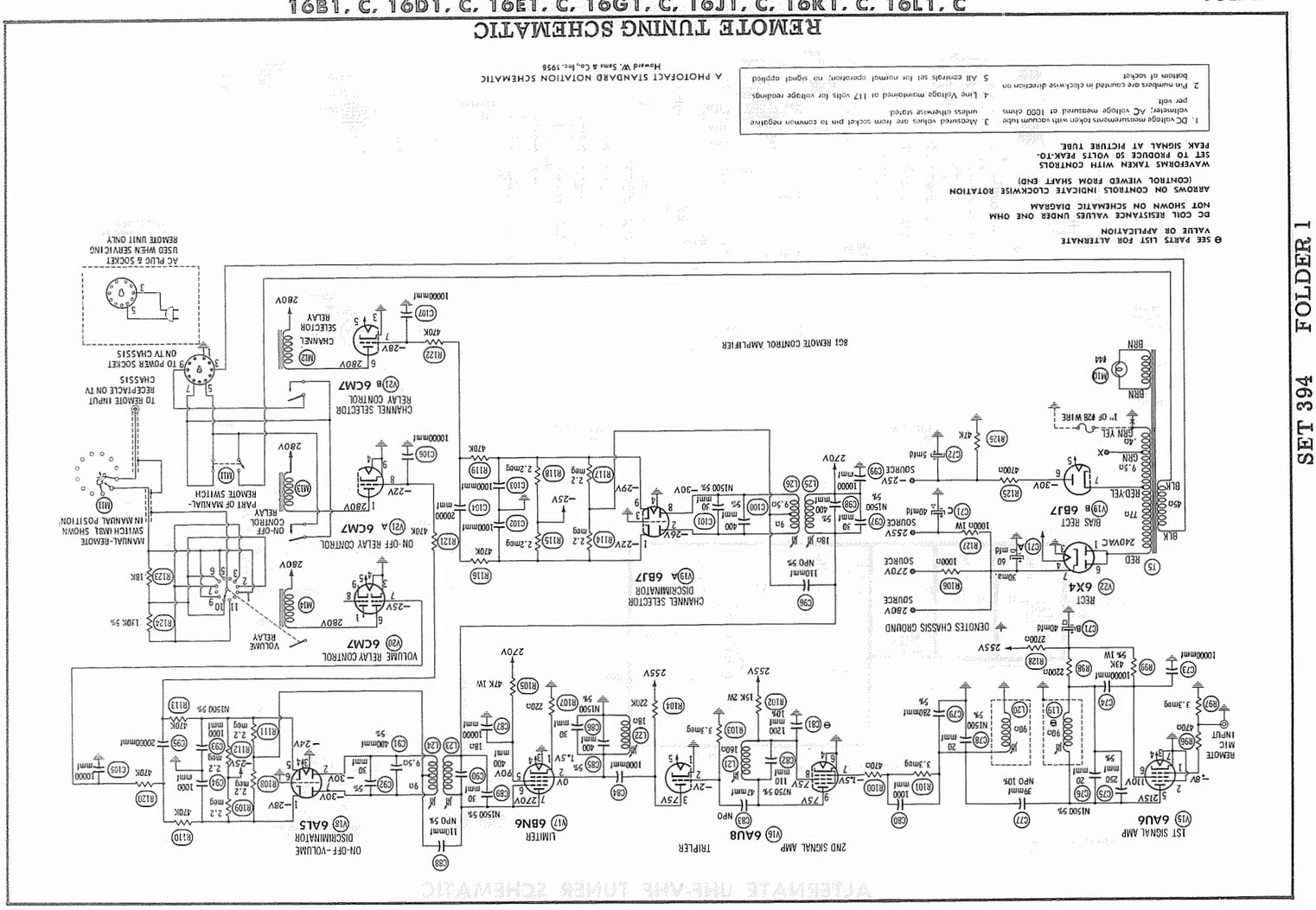
ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

FOLDER 1



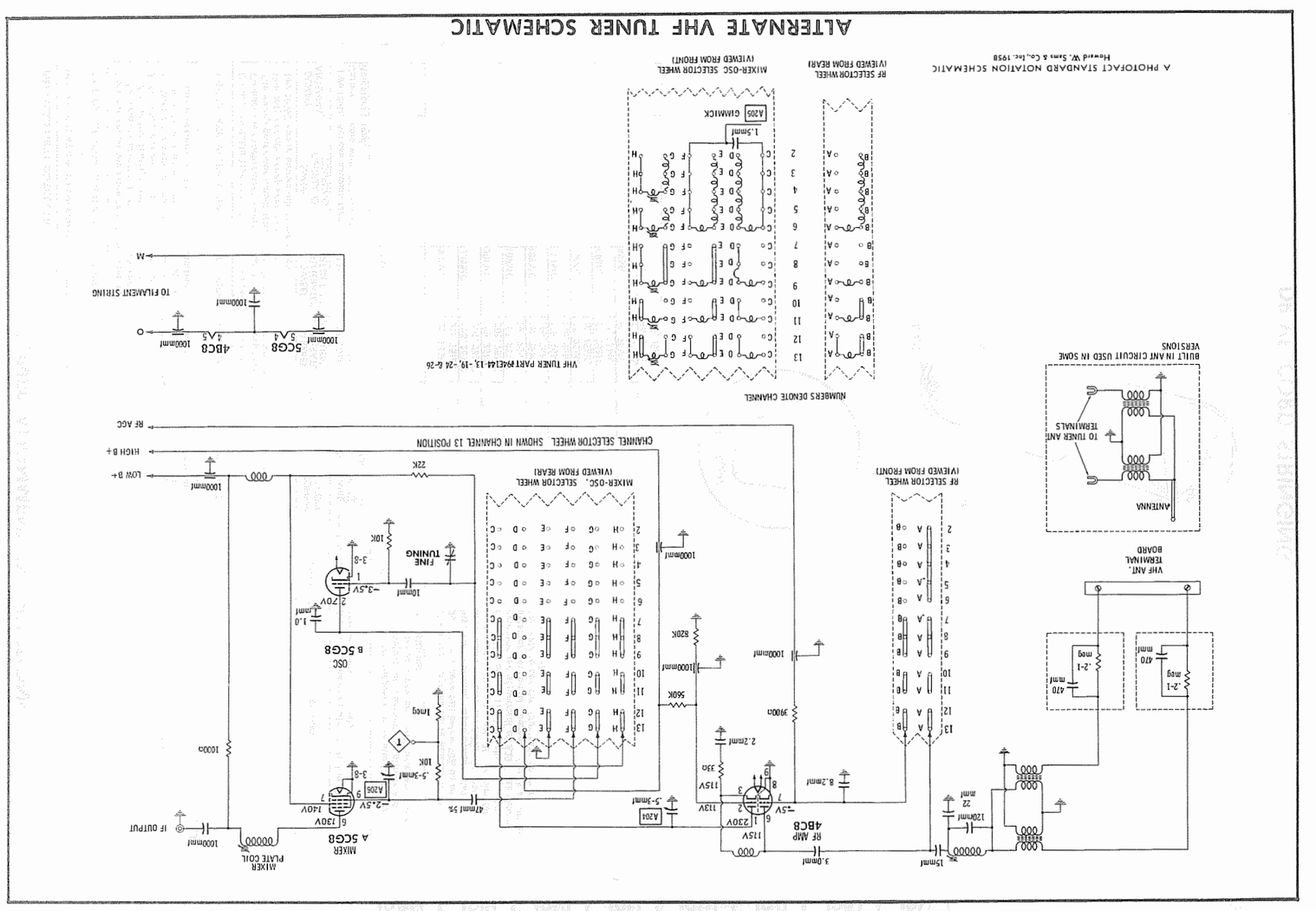
CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

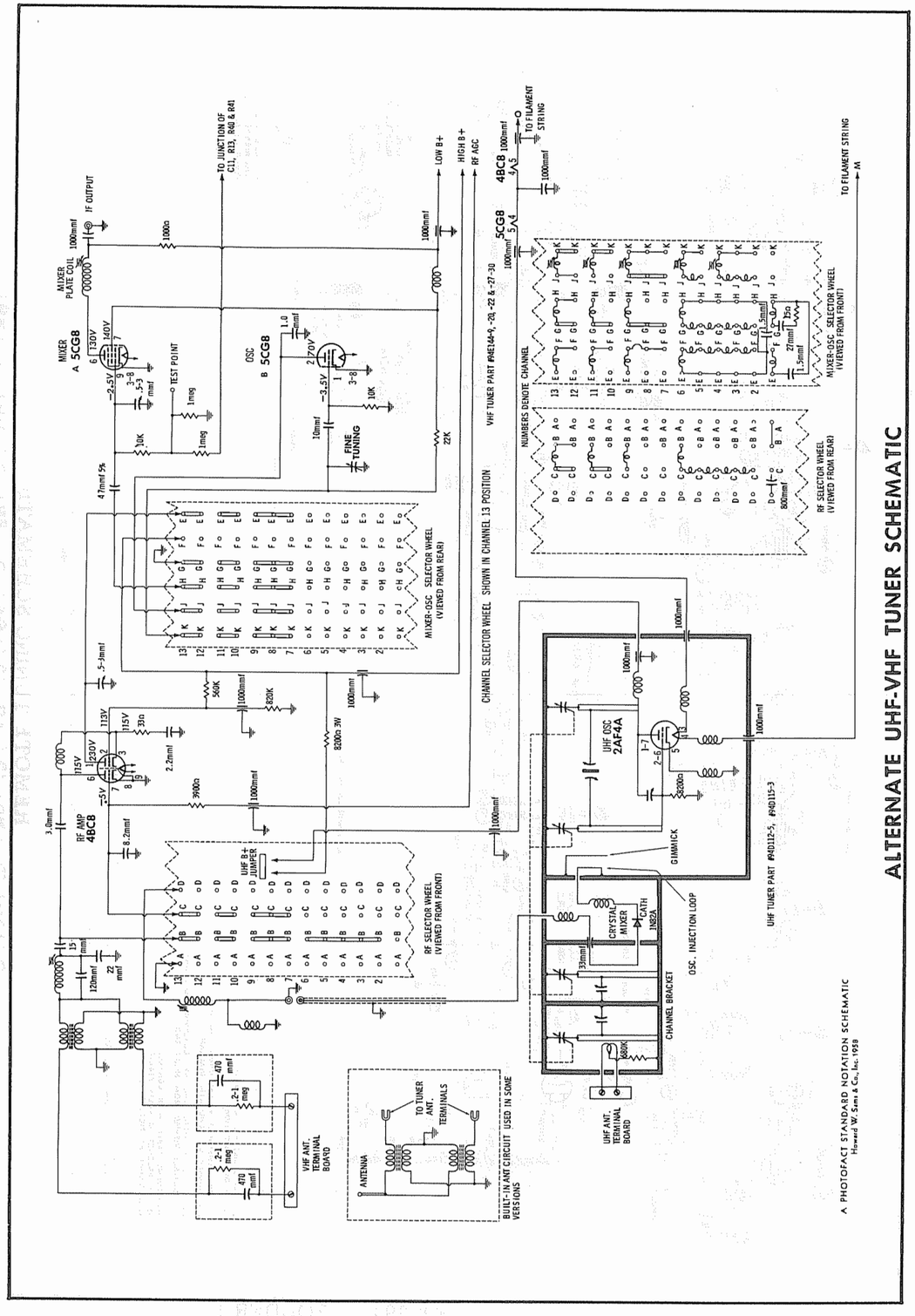
REMOTE TUNING SCHEMATIC



A PHOTOFACT STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1958

ALTERNATE VHF TUNER SCHEMATIC





TUNER ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

USE AN ISOLATION TRANSFORMER TO PROTECT THE TEST EQUIPMENT.

VHF OSCILLATOR ALIGNMENT FOR TUNERS # 94E144-9, -13, -19, -20, -22, -24, -26, and -27

Turn the set on and allow 15 to 20 minutes warm-up period.
1. Set channel selector to the lowest channel operating in the area.
2. Set the fine tuning to the center of its range.
3. Set other controls for normal picture and sound.
4. Using a 1/8 inch non-metalic alignment tool, carefully adjust the oscillator slug for best picture and sound. (Note; this is not necessarily the point of loudest sound.) If two slugs are visible at the front of the tuner, adjust the one nearest the top of the tuner chassis. Repeat this procedure for the remaining stations, adjusting them in order of the channel number from the lowest to the highest.

VHF RF AND MIXER ALIGNMENT FOR TUNERS # 94E144-9, -13, -19, -20, -22, -24, -26, and -27

Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1.	Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	195MC	193.25MC 197.75MC	10	Vert. Amp. thru 10K to point (P). Low side to chassis.	A201, A202	Adjust for response similar to Fig. 201 with markers above 90%.
2.	"	"	85MC	83.25MC 87.75MC	6	"	A203	Adjust for response curve similar to Fig. 201. Adjust for maximum amplitude and flat-topped appearance with markers properly positioned.
3.	"	"	213MC	211.25MC 215.75MC	13	"		Check for response curve similar to Fig. 201. If markers fall below 70% on any high band channel, make compromise adjustment of A201 and A202 with channel switch set to that channel. If markers fall below 70% on any low band channel, make compromise adjustment of A203 with channel selector set to that channel. Check all other channels to see that they have not been seriously affected.
			207MC	205.25MC 209.75MC	12			
			201MC	199.25MC 203.75MC	11			
			189MC	187.25MC 191.75MC	9			
			183MC	181.25MC 185.75MC	8			
			177MC	175.25MC 179.75MC	7			
			79MC	77.25MC 81.75MC	5			
			69MC	67.25MC 71.75MC	4			
			63MC	61.25MC 65.75MC	3			
			57MC	55.25MC 59.75MC	2			

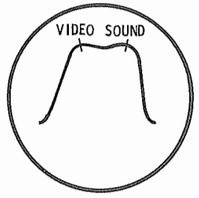
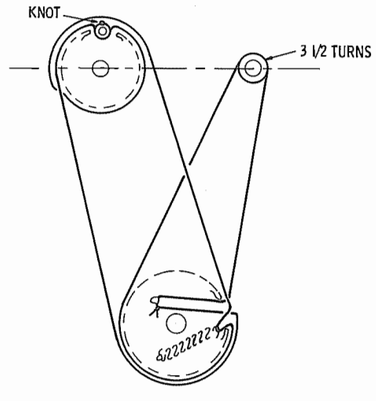


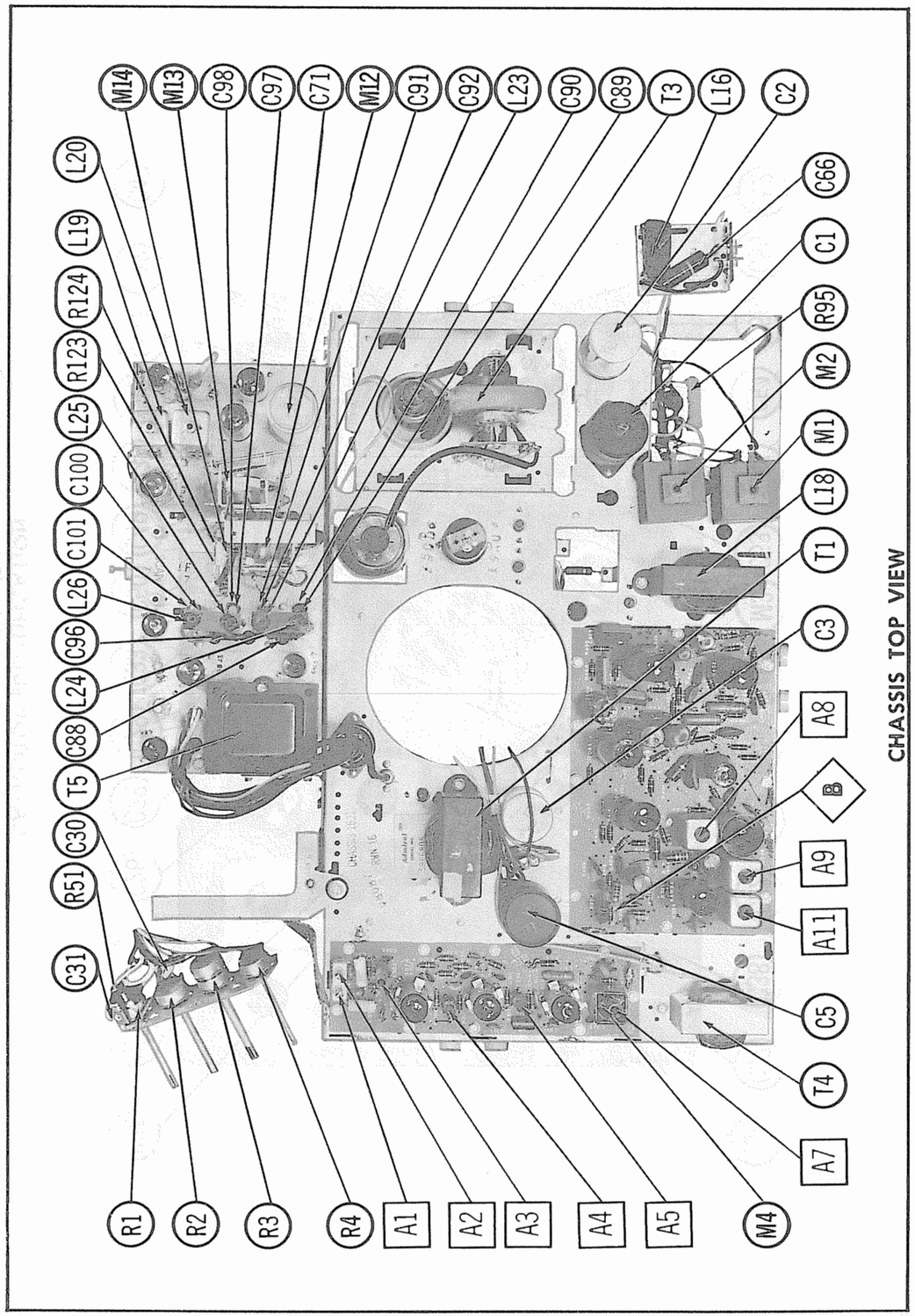
FIG. 201



DRIVE CORD STRINGING

CAPACITOR IDENTIFICATION

RESISTOR IDENTIFICATION



CHASSIS TOP VIEW

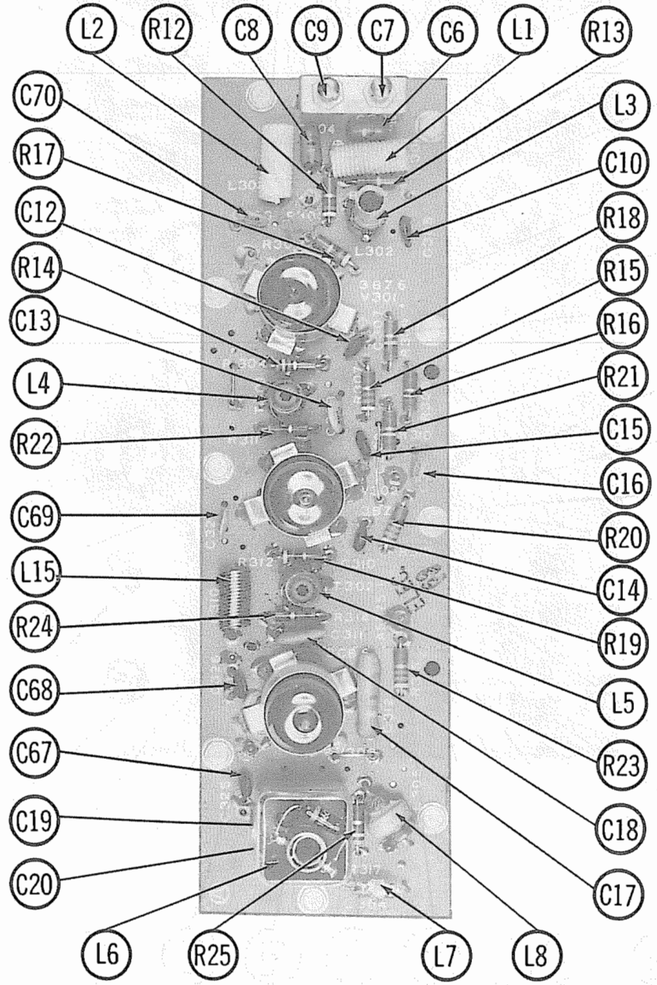
REMOTE CONTROL
PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	ADMIRAL PART No.	NOTES
L19	1st. 40KC Plate Coil	72B193-1	
L20	2nd. 40KC Grid Coil	72B193-2	
L21	2nd. 40KC Plate Coil	72B192-1	
L22	Limiter Grid Coil	72B192-2	
L23	122-125KC Disc. Pri.	72B192-2	
L24	122-125KC Disc. Sec.	72B192-3	
L25	115KC Disc. Pri.	72B192-2	
L26	115KC Disc. Sec.	72B192-3	

MISCELLANEOUS

ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M10	Pilot Lamp		#44
M11	Switch	77E75-1	Manual-Remote, Rotary, wafer type
M12	Relay	83A13-1	Channel Selector
M13	Relay	83B11-1	On-off
M14	Relay	83B14-1	Volume control
M15	Microphone	78B137	



VIDEO IF PRINTED BOARD

REMOTE CONTROL
PARTS LIST AND DESCRIPTIONS
TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V15	1st. Signal Amp.	6AU6	
V16	2nd. Signal Amp.-Tripler	6AU8	
V17	Limiter	6BN6	
V18	On-Off-Vol. Discriminator	6AL5	
V19	Channel Selector Discrim-inator - Bias Rect.	6BJ7	

ITEM No.	USE	TYPE	NOTES
V20	Volume Relay Control	6CM7	
V21	On-Off Relay Control-Channel Selector Relay Control	6CM7	
V22	Rectifier	6X4	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	RATING VOLT.	REPLACEMENT DATA ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C71A	60	350	67D15-310	AFH3-29-25	C0232	FP447.5	TMD-56 TD-40-350	T-111	TVL-3640.2
B	40	350							
C	40	350							
C72	5	50	67A4-37	PRS50V5	BBR5-50	TC30	TD-5-50	MT-0504	TVA-1303

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING CAP.	RATING VOLT	REPLACEMENT DATA ADMIRAL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
C73	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C74	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C75	250			1464-00025		22R5T22			MS-325	5% N1500 5%
C76	20		65D10-158							NPO 10% N1500 5%
C77	39		65D6-88	NPO-S1 39	TCZ-39	C10Q39C	TCO-39			5%
C78	20		65D10-158							
C79	280		65A48-281							
C80	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C81	1200					1R5D12	ED-1200		MS-212	10%① N750 5%
C82	110		65D10-156		TCN-110		TC7-110			
C83	47			NPO-D1 47	TCZ-47	C10Q47C	TCO-47		5TCC-Q47	NPO
C84	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C85	400		65A48-401			5R5T4		MCE243	MS-34	5% N1500 5%
C86	30		65D10-157							
C87	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C88	110		65D6-38		TCZ-110		TCO-110			NPO 5% N1500 5%
C89	30		65D10-157							
C90	400		65A48-401			5R5T4		MCE243	MS-34	5%
C91	400		65A48-401			5R5T4		MCE243	MS-34	N1500 5%
C92	30		65D10-157							
C93	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C94	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C95	20000			BPD-02	DD-203	BYB6S2	ED-02		5HK-S2	
C96	110		65D6-36		TCZ-110		TCO-110			NPO 5% N1500 5%
C97	30		65D10-157							
C98	400		65A48-401			5R5T4		MCE243	MS-34	5%
C99	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C100	400		65A48-401			5R5T4		MCE243	MS-34	5% N1500 5%
C101	30		65D10-157							
C102	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C103	1000			BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C104	20000			BPD-02	DD-203	BYB6S2	ED-02		5HK-S2	
C105	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C106	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C107	10000			BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	

① Some versions may use .0015mfd @ 600V 10% (Part #64A24-9) in this application.

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING OHMS	RATING WATT	ADMIRAL PART No.	NOTES
R96	470Ω			
R97	3.3meg			
R98	2200Ω			
R99	43K 5%	1		
R100	470Ω			
R101	3.3meg			
R102	15K	2		
R103	3.3meg			
R104	220K			
R105	47K	1		
R106	1000Ω			
R107	220Ω			
R108	2.2meg			
R109	2.2meg			
R110	470K			
R111	2.2meg			

ITEM No.	RATING OHMS	RATING WATT	ADMIRAL PART No.	NOTES
R112	2.2meg			
R113	470K			
R114	2.2meg			
R115	2.2meg			
R116	470K			
R117	2.2meg			
R118	2.2meg			
R119	470K			
R120	470K			
R121	470K			
R122	470K			
R123	18K			
R124	130K 5%			
R125	4700Ω			
R126	47K			
R127	1000Ω	1		
R128	2700Ω			

TRANSFORMER (POWER)

ITEM No.	RATING PRI.	RATING SEC. 1	RATING SEC. 2	REPLACEMENT DATA ADMIRAL PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordorson PART No.	Triad PART No.
T5	117V @ .4A	220V @ .030A tap @ 30V @ .001A & 6.3V @ 3.8A	6V @ .250A	80B58-1						

ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

USE AN ISOLATION TRANSFORMER TO PROTECT THE TEST EQUIPMENT.
The HighVoltage lead should be securely taped and kept away from the chassis.
Allow a 20 minute warm-up period for the receiver and test equipment.

VIDEO IF ALIGNMENT

Connect the negative lead of a variable bias supply to point Ⓐ. Positive to chassis. Adjust bias to obtain response curve showing no signs of overloading.
Use only enough generator output to provide a usable indication on VTVM.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1.	Direct	High side to ungrounded tube shield floating over mixer osc. tube (V202). Low side to chassis.	41.25MC (Unmod)	Any non-interfering channel	DC probe thru 10K to point Ⓑ. Common to chassis. (Across video det. load).	A1	Adjust for MINIMUM deflection.
2.	"	"	47.25MC	"	"	A2	"
3.	"	"	42.3MC	"	"	A3	Adjust for maximum deflection.
4.	"	"	45.3MC	"	"	Mixer Plate Coil	"
5.	"	"	"	"	"	A4	"
6.	"	"	41.5MC	"	"	A5	"
7.	"	"	42.0MC	"	"	A6	"
8.	"	"	43.5MC	"	"	A7	"

OVERALL VIDEO IF RESPONSE CHECK

Connect bias as under "Video IF Alignment".
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.
Use only enough sweep generator output to provide a usable pattern on scope.

	DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
9.	Direct	High side to ungrounded tube shield floating over mixer-osc. tube (V202). Low side to chassis.	44.0MC (10MC Swp)	42.25MC 45.75MC	Any non-interfering channel	Vert. Amp. thru 10K to point Ⓑ. Low side to chassis. (Across video det. load).		Check for response similar to Fig. 1. If necessary, retouch A3 thru A7 for desired response.

SOUND IF ALIGNMENT

Turn the set on and tune in the strongest station in the area. Allow 15 minutes for set to warm-up. Set all controls for normal operation.
Using a non-metallic alignment tool, turn A8 very slowly clockwise until a buzz is heard in the sound. Then turn counter clockwise until the loudest and clearest sound is heard. There may be two points at which the sound peaks, (approximately ½ turn apart). The slug should be set at the center of the second peak as the slug is turned clockwise.
Using an attenuator between the antenna and the antenna terminals, reduce the input signal until a considerable amount of hiss is heard in the sound similar to super-regeneration. The signal may also be reduced by disconnecting the antenna lead and placing it in the vicinity of the antenna terminals.
Carefully adjust A9 and A10 for clearest sound and MINIMUM noise..
If the hiss desappears during alignment, further reduce the signal until the hiss returns.

4.5MC TRAP ALIGNMENT

Tune in a strong TV station and adjust the fine tuning until a beat pattern appears in the picture. Observe and adjust the picture A11 for MINIMUM beat pattern.

REMOTE CONTROL CHASSIS 8G1 ALIGNMENT

This portion of the receiver has been properly aligned at the factory and is very stable. Alignment of this portion should not be required in the field.

TUNER ALIGNMENT INSTRUCTIONS LOCATED ON PAGES 17 & 20.

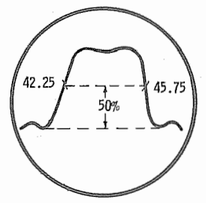


FIG.1

ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

FOLDER 1

PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	1st. Video IF Amp.	3BZ6	
V2	2nd. Video IF Amp.	3BZ6	
V3	3rd. Video IF Amp.	3CB6	
V4	Video Output-Sound IF Amp.	8AW8A	
V5	AGC Keying-Noise Limiter-Sync Sep.	3BU8	
V6	Audio Det.	3DT6	
V7	Audio Output	12CU5	
V8	Vert. Mult. -Sync Phase Inv.	7AU7	
V9	Vert. Mult. -Vert. Output	12DB5	
V10	Horiz. Mult.	6CG7	
V11	Horiz. Output	25CD6GB	Note 1
V12	Damper	19AU4GTA	
V13	HV Rectifier	1B3GT	

Note 1. Chassis ending with suffix "C" use 12DQ6A. NOTE: These tubes are not interchangeable.

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	ADMIRAL PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V14	21CEP4A		21CEP4 ①	21CEP4A 21CEP4 ②	① "Silverama" ® ② "Silver Screen 65"

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	150	150	67D15-203	AFH1-31-75	XA0266	FP131	TMS-34	S-105	TVL-1430
C2A	▲100	300	67D15-306	AFH2-41-50	B0332	FP227.7	TMT-165	D-148	TVL-2841
B	▲100	300							
C3A	▲20	200	67D15-307	AFH4-46-20	D0032	FP449		Q-138	*R2573
B	▲5	200			BR505	TC39			
C	▲60	200							
D	50	50							
C4	40	200	67A25-2	PRS250V40	BR4025	TC58	TD-40-250	MT-2540	TVA-1511
C5A	▲50	300	67D15-204	AFH3-41	C0320	FP343.8	TMT-47	D-132	*R2574
B	▲10	300							

* Non-catalog item.

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING		REPLACEMENT DATA							NOTES
	CAP.	VOLT	ADMIRAL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C8	14		65D8-40							NPO
C7	.5-8		68A38-8							
C8	18		85D10-140							N220 5%
C9	3-12.5		86A38-7							
C10	820				DD-821	BYA10T82	ED-820		5GA-T82	
C11	1.0	100		P288N-1	DF-104	CUB2P1		GEM-201	2TM-P1	
C12	820				DD-821	BYA10T82	ED-820		5GA-T82	
C13	820				DD-821	BYA10T82	ED-820		5GA-T82	
C14	820				DD-821	BYA10T82	ED-820		5GA-T82	
C15	820				DD-821	BYA10T82	ED-820		5GA-T82	
C16	820				DD-821	BYA10T82	ED-820		5GA-T82	
C17	560			SI 500	D6-581	LT6T56	GP-560	UC-5358	5GA-T58	
C18	5000			BPD-005	DD-502	BYA10D5	ED-005	DC525	5HK-D5	
C19	3.3			NPO-SI 3.3	TCZ-3R3	C10V33C	TCO-3.3	ZT-5533	5TCCB-V33	
C20	6.8		65B41-068	NPO-SI 6.8	TCZ-6R8	C10V68C	TCO-6.8	ZT-5568	5TCCB-V68	10%
C21	.22	400		P488N-22		CUB4P22		GEM-4022	4TM-P22	
C22	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C23	.022	400		P488N-022	DD-203	CUB4S22	ED-02	GEM-4122	4TM-S22	
C24	1000			BPD-001	DD-102	BYA8DI	ED-1000	DC521	5HK-DI	
C25	.047	200		P288N-047		BC2S47J		GEM-2147	2SE-S47	
C26	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C27	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C28	300				DD-301	L10T3	ED-300	UC-533	5GA-T3	
C29	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C30	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	①
C31	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	①
C32	100				TCZ-100		TCO-100			NPO 5%①
C33	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C34	10000	1400		DAC-27	DDI6-103	HVEI6SI		GEM-1601	BL-SI0	
C35	.022	400		P488N-022	DD-203	CUB4S22	ED-02	GEM-4122	4TM-S22	
C38	.1	200	84C16-53	P288N-1		BC2P1J		ACE401	2SE-P10	
C37	150			SI 150	D6-151	LT6T15	GP-150	UC-5315	5GA-T15	
C38	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C39	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C40	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C41	10000			BPD-01	DD-103	BYA6SI	ED-01	DC5II	5HK-SI	
C42	2200			BPD-0022	DD-222	BYA10D22	ED-0022	UC-5222	5GA-D22	
C43	.047	200	64C15-155							2% Drift
C44	.1	400	64C16-30	P488N-1		BC6P1J		ACE401	4SE-P10	
C45	.1	400	64C16-130							2% Drift
C46	.001	1600	64B2-32	P1688N-001	DDI6-153	CUB16D1		GEM-1621	MB-DI	
C47	.047	400		P488N-047	DF-503	CUB4S47		GEM-4147	4TM-S47	
C48	.022	600	64B22-11							10%
C49	.001	600	64B2-24							10%
C50	.001	400	64B2-24							10%
C51	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C52	.022	200	64B16-57	P288N-022		BC2S22J		ACE612	2SE-S22	
C53	3900			1464-0039		IR5D39	CY20C392K		MS-239	10%
C54	390				D6-391	5R5T39	ED-390		MS-339	10%
C55	680			1464-00088	D6-681	IR5T68	ED-680		MS-368	10%
C58	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C57	.01	600		P668N-01	D6-103	CUB6SI	GP-10000	GEM-611	6TM-SI	
C58	.047	400		P488N-047	DF-503	CUB4S47		GEM-4147	4TM-S47	
C59	.001	1600		P1688N-001	DDI6-103	CUB16D1		GEM-1621	MB-DI	②
C60	.1	800		P688N-1	DF-104	CUB6P1		GEM-601	6TM-PI	
C61	1000	5000	65D10-164							10%
C62	.033	600								10%
C63	150	2000	65D10-149							N1500 10% ③
C64	150	2000	65D10-149							N1500 10% ③
C65	120	2000	65D10-148							N1500 10%
C66	.047	600		P668N-047	DF-503	CUB6S47		GEM-6147	6TM-S47	
C67	820				DD-821	BYA10T82	ED-820		5GA-T82	
C68	820				DD-821	BYA10T82	ED-820		5GA-T82	
C69	820				DD-821	BYA10T82	ED-820		5GA-T82	
C70	820				DD-821	BYA10T82	ED-820		5GA-T82	

① Not used in some versions.
② Some versions may use 300mmf in this application.
③ Chassis stamped "Run 26" use 210mmf ⓓ2000V in this application.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	ADMIRAL PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1A	1meg	½	75B38-2	ABT-7417	A47F3-1meg		PP18T1S	Volume-Tap ⓖ 100K ①
B	Shaft			AK-8 †	RS-3/16		Not Req.	
C	Switch			KB-1 *	SWE-12		Not Req.	Push-pull
R2A	2meg	½	75D13-95	AB-76	A47-2meg-Z	QI1-139	U55	Tone ①
B	Shaft			AK-8	RS-3/18	NQ	DS-37	
R3A	100K	½	75B17-22	FI-31			▫ UE3790	Brightness ①
B	1000Ω	½		R2-5				Contrast ①
R4A	200K	½	75D13-92	AB-46	A47-200K-S	QI1-129	U43	Vert. Hold ①
B	Shaft			AK-8	RS-3/16	NQ	DS-37	
R5A	500Ω	½	75D20-103	AB-4	A47-500-S	QI1-103	PTA52L	Vert. Lin.
B	Shaft			AK-1	FKS-1/4	SQ	Not Req.	
R6A	1.5meg	½	75D20-105	BX-742	A47-1.5meg -S	QI1-136	TAI55L	Height
B	Shaft			Not Req.	FKS-1/4	SQ	Not Req.	
R7A	10K	½	75D20-106	AB-14	A47-10K-S	QI1-116	TAI4L	Horiz. Drive
B	Shaft			AK-1	FKS-1/4	TQ	Not Req.	
R8A	100K	½	75D20-101	AB-40	A47-100K-S	QI1-128	PTAI5L	Super range finder
B	Shaft			AK-19	RN-3	TQ	Not Req.	

* Use KR-1 on red label control only.
▫ "STA-LOC" Equivalent: FC15L, OS2125, RU13R, IS2625.
† 1meg, rotary sw., no tap.
♦ Dual control.

①	16AB1, 16AE1 16B1, 16E1	16AD1, C 16D1, C	16AG1	16AL1	16AGC, 16G1, C	16ALC 16LC	16L1	16B1C, 16E1C 16J1, 16K1
Volume		75D1-94 †	75D1-93	75D1-100	75D1-93 †	75D1-100 †	75D20-110 †	75B38-2
Tone	75D13-95	75D13-95						75D13-95
Contrast	75B17-22 ♦	75D13-93	75D13-100	75D13-98	75D13-100	75D13-98	75D13-98	75B17-22 ♦
Brightness	75B17-22 ♦	75D13-94	75D20-101	75D20-101	75D20-101	75D20-101	75D20-101	75B17-22 ♦
Vert.Hold	75D13-92	75D13-92	75D20-97	75D13-97	75D20-97	75D13-97	75D13-97	75D13-92

RESISTORS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		ADMIRAL PART No.	NOTES
	OHMS	WATT		
R9	8200Ω	2		Note 1 Note 2
R10	1800Ω			
R11	4.7meg			
R12	4700Ω			
R13	1000Ω			
R14	39K			
R15	470Ω			
R16	22K			
R17	47Ω			
R18	220K			
R19	4700Ω			
R20	470Ω			
R21	220K			
R22	68Ω			
R23	470Ω			
R24	150Ω			
R25	3900Ω			
R26	100Ω			
R27	47K			
R28	3300Ω	2		
V29	1500Ω	1		
R30	220Ω			
R31	8200Ω			
R32	470Ω			Note 3
R33	180K			
R34	39K			Note 4
R35	100K			Note 5
R36	150K			
R37	470K			
R38	390K			
R39	10meg			Note 6
R40	2.2meg			
R41	150K			
R42	10K			
R43	8200Ω	1		
R44	56K			
R45	47K	1		
R46	330K			
R47	100K			Note 7
R48	560K			
R49	8200Ω			
R50	680Ω			
R51	22K			Note 4
R52	330K			Note 4

ITEM No.	RATING		ADMIRAL PART No.	NOTES
	OHMS	WATT		
R53	150Ω			
R54	1.2meg 5%			
R55	1meg 5%			
R56	220Ω	2		
R57	47K			
R58	4.7meg			
R59	270K			
R60	15K			
R61	4.7meg			
R62	6800Ω			
R63	5600Ω			
R64	15K			
R65	15K			
R66	3300Ω			
R67	2.2meg			
R68	220K			
R69	470K			
R70	56K			
R71	2.2meg			
R72	470Ω	3	81B24-317	
R73	220K			
R74	100Ω			
R75	18K	1		
R76	180Ω	1		Note 8
R77	220Ω			
R78	3.8Ω Cold		61A27	Note 9
R79	220Ω			
R80	100K 5%			
R81	100K 5%			
R82	4.7meg			
R83	22K	2	60B20-223	
R84	470K			
R85	5600Ω			
R86	1000Ω			
R87	110K 5%			Note 10
R88	82K			
R89	100Ω			
R90	470K			Note 11
R91	100Ω			
R92	10K	3	61B24-349	Note 12
R93	4700Ω			
R94	1.8Ω			Note 13
R95	5Ω	5	61A28-3	

Note 1. Some versions may use 1800Ω 2W or 2200Ω 2W in this application.
Note 2. Chassis stamped Run 10 and 11 use 470Ω in this application.
Note 3. Chassis stamped Run 17 and lower use 220Ω in this application.
Note 4. Not used in some versions.
Note 5. Some versions may use 120K in this application.
Note 6. Chassis stamped Run 14 and lower use 7.5meg in this application.
Note 7. Chassis stamped Run 15 and lower use 220K in this application.
Note 8. Chassis with suffix "C" use a 220Ω 1W in this application.
Note 9. Temperature compensating resistor.
Note 10. Chassis stamped Run 13 and lower use 120K in this application.
Note 11. Chassis with suffix "C" use 1meg in this application.
Note 12. Chassis with suffix "C" use 8200Ω 3W in this application.
Note 13. Chassis with suffix "C" use 1.2Ω in this application.

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA							NOTES
		ADMIRAL PART No.	Halldorson PART No.	Merit PART No.	Rom PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	Vert. Output	79B43-14						A-113X①	
T2A	Yoke-Horiz. (18MH)	94D147-3						Y60 &	
B	(10°)-Vert. (13MH)							NW25 ②	
M6	Rear Cover & Centering Device	94C148-1							
	Alternate Yoke	94D150-3							
	Alt. Rear Cover & Centering Device	94C152							
T3	Horiz. Output	79D77-3							
	Horiz. Output	79D77-2 ③							

① Connect as autoformer.
② Use original rear cover and centering device.
③ Used in chassis with suffix "C".

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	ADMIRAL PART No.	QUAM PART No.	
SP1	6"	PM	3- 4Ω	78C134-3	6A21	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ADMIRAL PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Rom PART No.	
L1	47.25MC Trap Coil	73B37-1					1.36 Microhenries ①
L2	41.25MC Trap Coil	73B37-1					1.36 Microhenries ①
L3	1st. Video IF	72C132-31					
L4	2nd. Video IF	72C132-23					②
L5	3rd. Video IF	72C132-23					②
L8	4th. Video IF	72B191-1					③
L7	Resonant Choke	73B24-7					7.7 Microhenries
L8	Shunt Peaking Coil	73B5-20	19-3500	TV-203	6174	VP-8	500 Microhenries
L9	Resonant Choke	73B31-3					28 Microhenries
L10A	4.5MC Trap	72C185-2					④
B	1st. Sound IF						
L11	Series Peaking Coil	73B5-23	19-3180 *	TV-184 *	6180 *	VP-5 *	189 Microhenries, wound on 4700Ω resistor
							Wound on 10K resistor
L12	Shunt Peaking Coil	73B5-36					
L13	2nd. Sound IF	72B186-1					
L14	Quadrature Coil	72C132-37					⑤
L15	Fil. Choke	73B37-2	19-1001	BC-562		4604	1.4 Microhenries
L16	Line Choke	73B31-1					

* Parallel with 4700Ω resistor.
① Alternate part #73B37-3 may be used in some versions.
② Alternate part #72C132-38 may be used in some versions.
③ Alternate part #72B191-2 may be used in some versions.
④ Alternate part #72B185-2 may be used in some versions.
⑤ Alternate part #72C132-18 may be used in some versions.

TRANSFORMER (HORIZ. OSC.)

ITEM No.	DC RES.		REPLACEMENT DATA						NOTES
	PRI.	SEC.	ADMIRAL PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Rom PART No.	Thordarson PART No.	
L17	40Ω		94C17-4		TV-184				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA							
	CURRENT (Measured)	DC RES.	INDUCTANCE @ CURRENT 1000 ~)	ADMIRAL PART No.	Halldorson PART No.	Merit PART No.	Rom PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
L18	.280A	43Ω	1.5 Hy.	74B18-23	C5037	C-2996		C-2328	28C93	C-17X	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ADMIRAL PART No.	REPLACEMENT DATA
K1	Chassis Isolation	5000mmf ⓖ 1400V, 470K ①	63B10-3	

① Some versions may use individual components in this application.

RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA					NOTES
	CURRENT (Measured)	ADMIRAL PART No.	FEDERAL PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL PART No.	SARKES TARZIAN PART No.	
M1	.300A	93A4-4 ①	1130 ①	1N1008 ②	RS400SL ①	400 ① M500 ③	① Selenium type. ② Germanium type.
M2	.300A	93A4-4 ③	1130 ①	1N1008 ②	RS400SL ①	400 ① M500 ③	③ Silicon type. ④ Two required.
M3		93B5-4 ①	1215 ①④		1T1 ①④		

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		ADMIRAL PART No.	CBS PART No.	SYLVANIA PART No.	
M4	1N60 *	1N60	1N60	1N60	Video Detector (Pigtail)

* Some versions may use 1N87 or 1N295 in this application.

MISCELLANEOUS

ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M5	Tuner	94D151-1	VHF - Ch. 16J1, 16K1
	Tuner	94D151-2	VHF - Ch. 16J1, 16K1
	Tuner	94E144-13	VHF - Ch. 16G1, C, 16L1, C, 16B1, C, 16D1, C, 16E1, C
	Tuner	94E144-19	VHF - Ch. " "
	Tuner	94E144-24	VHF - Ch. " "
	Tuner	94E144-28	VHF - Ch. " "
	Tuner	94E144-9	UHF-VHF - Ch. 16AB1, 16AD1, 16AE1, 16AG1, C, 16AL1, C
	Tuner	94E144-20	UHF-VHF - Ch. " "
	Tuner	94E144-22	UHF-VHF - Ch. " "
	Tuner	94E144-27	UHF-VHF - Ch. " "
	Tuner	94E144-30	UHF-VHF Ch. " "
	Tuner	94D112-5	UHF Ch. " "
	Tuner	94D155-3	UHF Ch. " "
M6	Centering Device	94C148-1	Includes yoke cover (For yoke 94D147-3)
	Centering Device	94C152	Includes yoke cover (For yoke 94D150-3)
M7	Switch		Channel Selector
M8	Switch		Motor Disconnected
M9	Motor		Channel Selector
	Printed Board	A5775-1	Video IF
	Printed Board	A5780-1	Main

WIRING DATA

High Voltage Lead	Use BELDEN No.	8869
Shielded Hook-up Wire	Use BELDEN No.	8885 (Single Conductor) 8738 (Two Conductor)
General-use Unshielded Hook-up Wire	Use BELDEN No.	8530 (Solid) Available in Ten Colors 8524 (Stranded) Available in Ten Colors
Power Cord (Interlock Type)	Use BELDEN No.	8874
300Ω Tuner Input Lead	Use BELDEN No.	8225
300Ω Antenna Lead-in	Use BELDEN No.	8230 or 8275
Antenna Rotor Cable	Use BELDEN No.	8464 (Flat) or 8484 (Round) - 4 Conductor 8495 (Round) - 5 Conductor 8488 (Round) - 8 Conductor

ADMIRAL CHASSIS 16AB1, C, 16AD1, C, 16AE1, C, 16AG1, C, 16AL1, C, 16B1, C, 16D1, C, 16E1, C, 16G1, C, 16J1, C, 16K1, C, 16L1, C

FOLDER 1