

*FOCUS POINTS

CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Tune in a weak station and allow the receiver to warm up. Connect a clip lead from point ① to chassis. Connect a .22mfd capacitor from point ② to chassis. Adjust the Horizontal Range Control (R4) until the picture appears to float across the screen.

Remove the .22mfd capacitor, and adjust the Horizontal Lock (Hold) until the picture again appears to float back and forth across screen. Remove the clip lead from point ①. The picture should now be in proper sync.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

1. Remove all knobs. Remove cabinet back held by 11 screws. Remove 1 screw holding sleeve around fine tuning shaft.
2. Place cabinet face down on a soft protective surface. Remove 4 screws from upper retaining brackets. Remove 3 bottom chassis bolts.

3. Unsolder speaker leads. Unplug picture tube socket, yoke, and high voltage lead. Remove chassis.

PICTURE TUBE REMOVAL

1. Follow "Chassis Removal" instructions.
2. Loosen 2 bolts on picture tube retaining ring. Remove clamps and ring. Remove picture tube.

SET 660 FOLDER 1

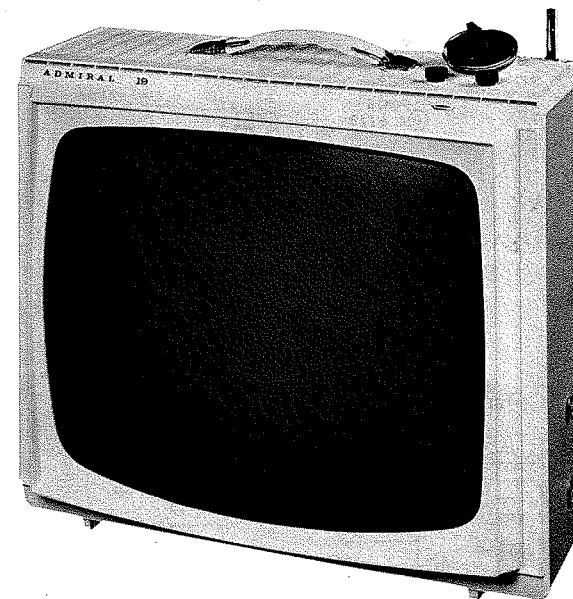
ADMIRAL CHASSIS 16K3B, 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

PHOTOFACT® Folder

with CIRCUITRACE®



ADMIRAL CHASSIS 16K3B, 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B



MODEL P9511

CAUTION

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	Admiral	Models	Chassis
		P7004B, P9509	16L3B
		P9511, P9513, P9538	16K3B
		P9521, P9523, P9548	16M3B
		UP7004B, UP9509	16UL3B
		UP9511, UP9513, UP9538	16UK3B
		UP9521, UP9523, UP9548	16UM3B
MANUFACTURER	Admiral Corp., National Service Div., 903 Morrissey Drive, P.O. Box 845, Bloomington, Illinois		
TYPE SET	Television Receiver		
TUBES	VHF - Thirteen, UHF - Fourteen		
POWER SUPPLY	110-120 Volts AC, 60 Cycles		
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)		

Run 10

SERVICING IN THE FIELD

SAFETY GLASS

For picture tube and safety glass cleaning, it is necessary to remove the chassis. (See "Chassis Removal".)

FUSE OR FUSE DEVICE

A Circuit Breaker is used for low voltage power supply protection, and may be reset by depressing the reset button. (See "Tube Placement Chart" for location.)

VHF OSCILLATOR ADJUSTMENT

To touch up the VHF Oscillator it is necessary to adjust C221 Trimmer. (See "Tuner Alignment" instructions.)

AGC

The AGC may be varied by means of an AGC Control. (See

"Tube Placement Chart" for location.)

HORIZONTAL OSCILLATOR ADJUSTMENT

The Horizontal Lock is used for the Horizontal Hold. (See "Horizontal Sweep Circuit Adjustments" on back page.)

FOCUS

The focus may be varied by connecting the lead from pin 4 of the picture tube to various voltage points. (For location, see "Cabinet - Rear View".)

CENTERING

Centering is accomplished by 2 magnetic rings located on yoke rear cover.

HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana



The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed.
MA344 10987654321

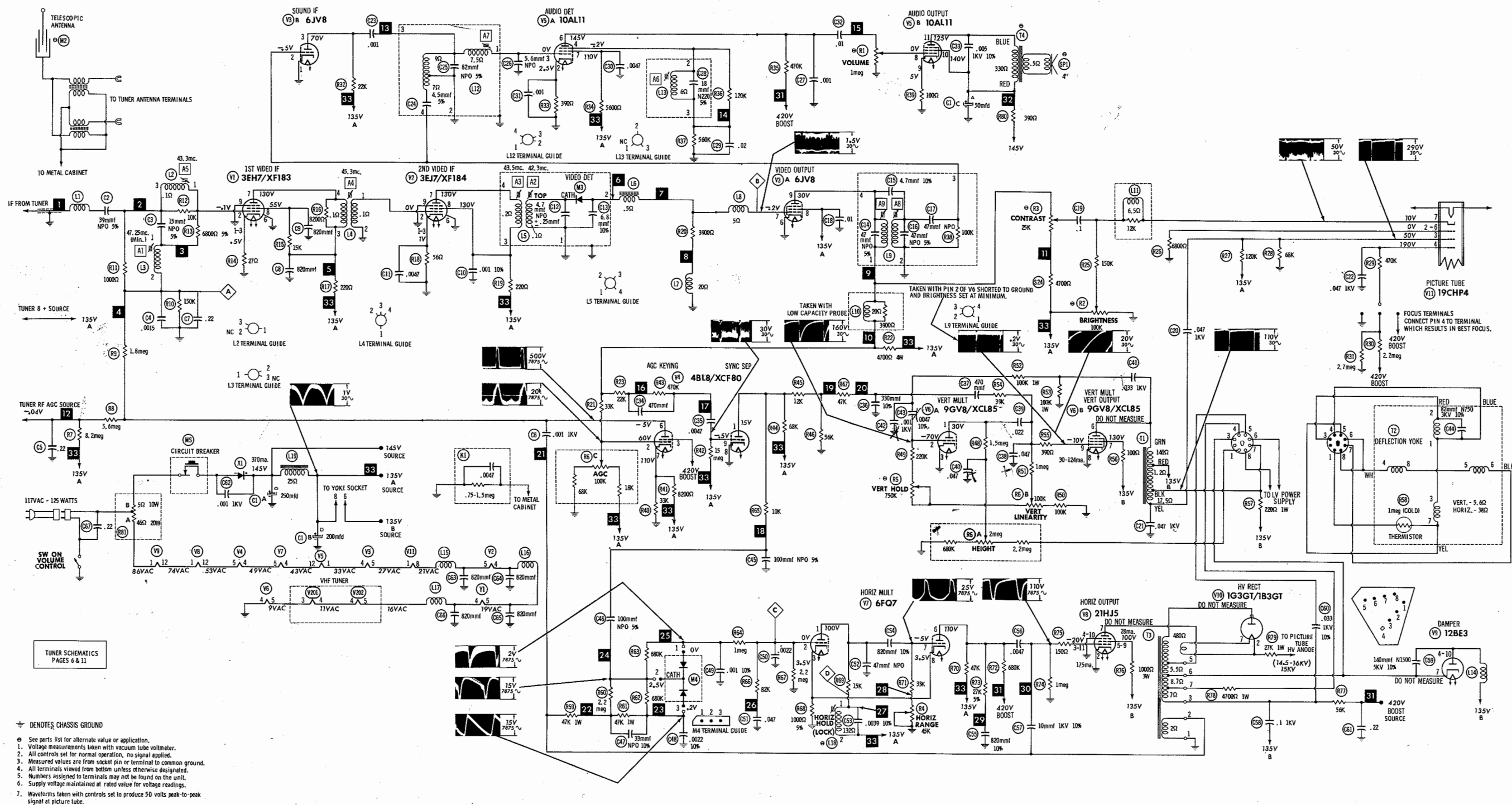
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DATE 10-63

SET 660 FOLDER 1

ADMIRAL CHASSIS 16K3B, 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

SET 660 FOLDER 1



DENOTES CHASSIS GROUND
 See parts list for alternate value or application.
 1. Voltage measurements taken with vacuum tube voltmeter.
 2. All controls set for normal operation, no signal applied.
 3. Measured values are from socket pin or terminal to common ground.
 4. All terminals viewed from bottom unless otherwise designated.
 5. Numbers assigned to terminals may not be found on the unit.
 6. Supply voltage maintained at rated value for voltage readings.
 7. Waveforms taken with controls set to produce 50 volts peak-to-peak signal at picture tube.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
 with CIRCUITTRACE
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ADMIRAL CHASSIS 16K3B,
 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

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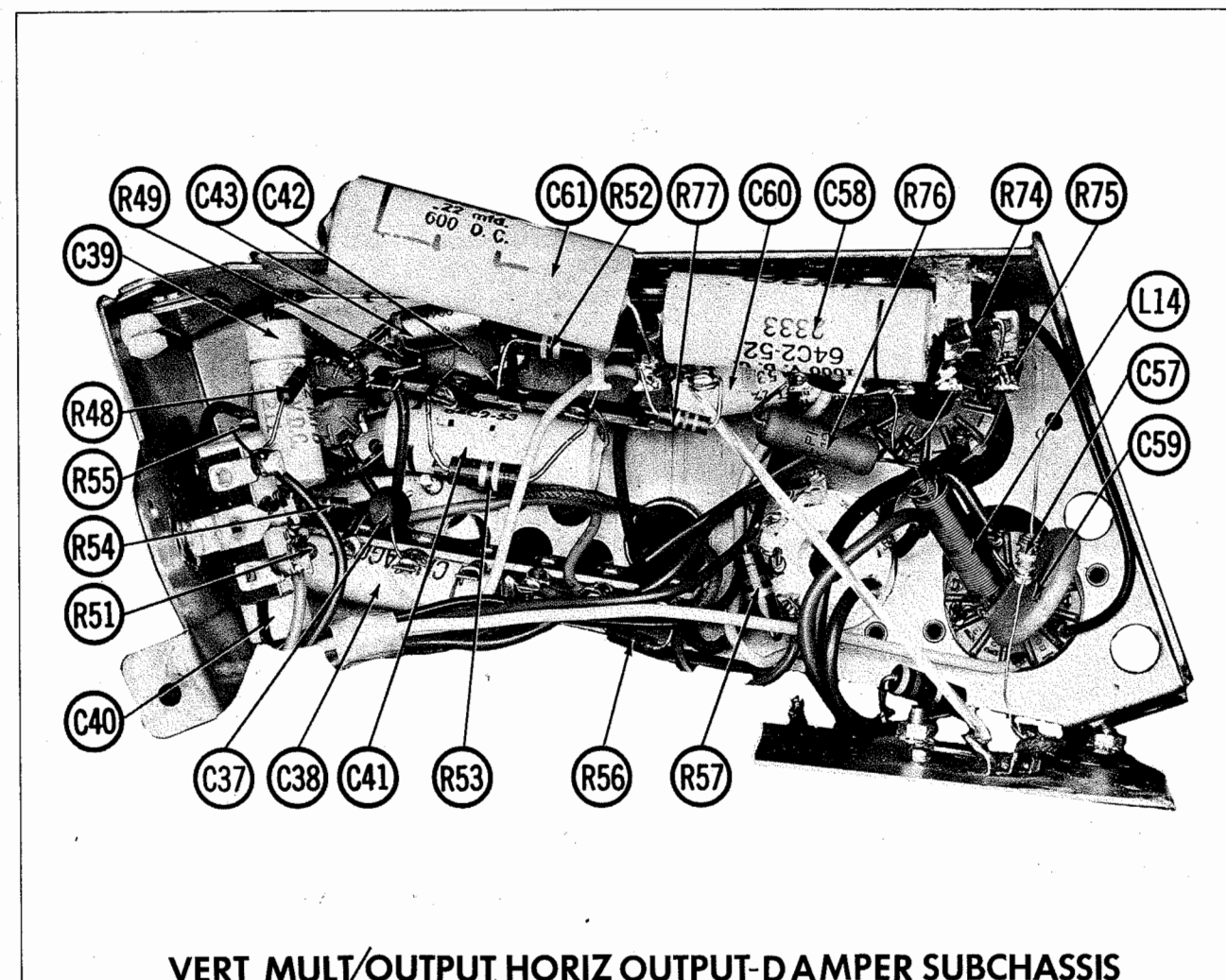
FOLDER 1

RESISTANCE MEASUREMENTS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
V1	3EH7 XF183	27Ω	160K	27Ω	5Ω	5.5Ω	0Ω	† 245Ω	† 15K	0Ω			
V2	3EJ7 XF184	56Ω	0Ω	56Ω	5.5Ω	6.5Ω	0Ω	† 245Ω	† 245Ω	0Ω			
V3	6JV8	0Ω	100K	† 22K	10Ω	8Ω	0Ω	1200Ω	† 25Ω	† 4200Ω			
V4	4BL8 XCF80	† 36K	▲ 124K	† 56K	14Ω	16Ω	1.6meg	† 7000Ω	0Ω	† 15meg			
V5	10AL11	10Ω	390Ω	15Ω	560K	0Ω	† 526K	† 5600Ω	50K	100Ω	† 390Ω	† 720Ω	12Ω
V6	9GV8 XCL85	† 3meg	760K	0Ω	0Ω	2.5Ω	† 165Ω	† 125Ω	0Ω	1.2meg			
V7	6FQ7	† 15K	2.2meg	1000Ω	12Ω	14Ω	† 47K	55K	1000Ω	0Ω			
V8	21HJ5	20Ω	0Ω	1meg	0Ω	† 1000Ω	NC	† 5.5Ω	NC	† 1000Ω	NC	NC	NC
V9	12BE3	22Ω	NC	NC	† 25Ω	NC	NC	650K	NC	NC	NC	NC	20Ω
V10	1G3GT 1B3GT		PINS 1 THRU 8 HAVE INFINITE RESISTANCE										TOP CAP † 485Ω
V11	19CHP4	8Ω	6800Ω	† 50K	2.1meg	NC	NC	160K	6.5Ω				
V201	2GU5	3.8meg	0Ω	2.5Ω	3.5Ω	† 25Ω	† 25Ω	0Ω					
V202	5FG7	15K	† 12K	0Ω	3.5Ω	5Ω	† 1000Ω	† 15K	0Ω	220K			
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12

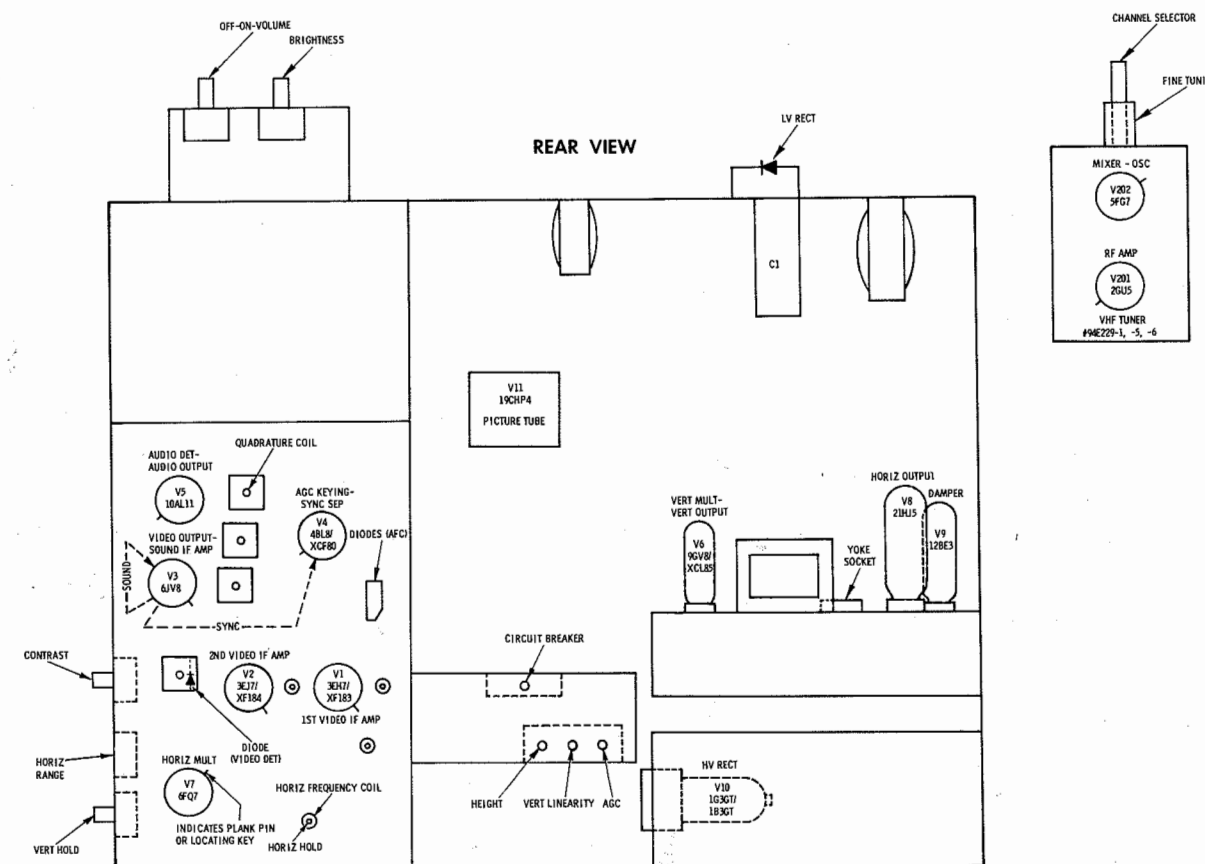
▲ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
† MEASURED FROM OUTPUT OF X1.

NC NO CONNECTION
• VHF TUNER #94E229-1G



VERT MULT/OUTPUT, HORIZ OUTPUT-DAMPER SUBCHASSIS

TUBE PLACEMENT CHART



ADMIRAL CHASSIS 16K3B,
16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

TUBE FAILURE CHECK CHART

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

POWER SUPPLY FAILURE

No raster, no sound Circuit Breaker M5, Selenium Rectifier X1

SWEEP FAILURE

No raster, has sound V7, V8, V9, V10, V11
No vertical deflection V8
Poor vert. linearity or foldover V8
Poor horiz. linearity or foldover V7, V8, V9
Narrow picture V7, V8, V9, X1
Vert. off freq. V6
Horiz. off freq. AFC Diode M4, V7

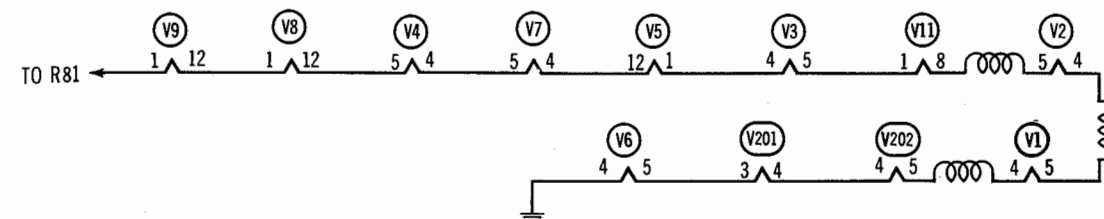
LOSS OF PICTURE OR SOUND

No pic, no sound, has raster V1, V2, Video Det. M3, V3
No pic, no sound, has snow V201, V202, V1
No pic, has sound, has raster V3, V11
Has pic, no sound V3, V5
Overloaded picture V4

SYNC FAILURE

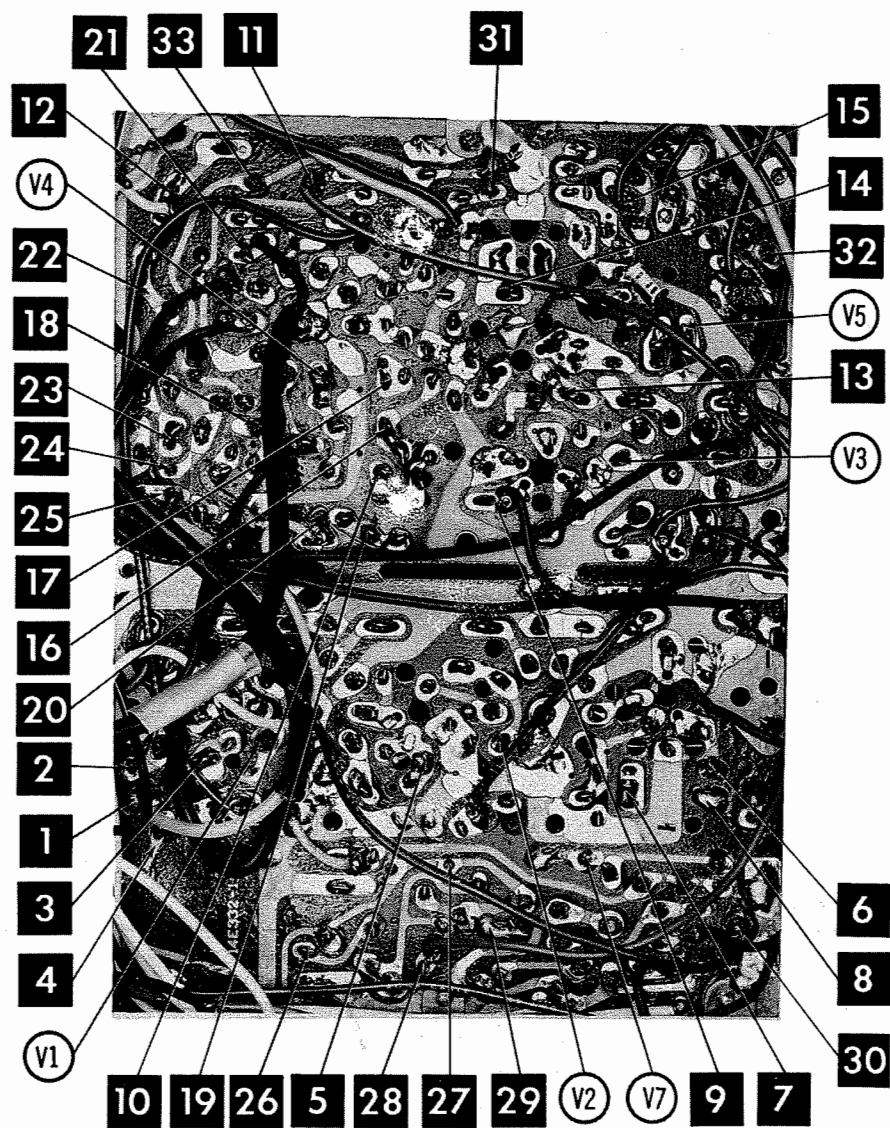
No vert. sync V4
No horiz. sync V4
No vert. or horiz. sync V4

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



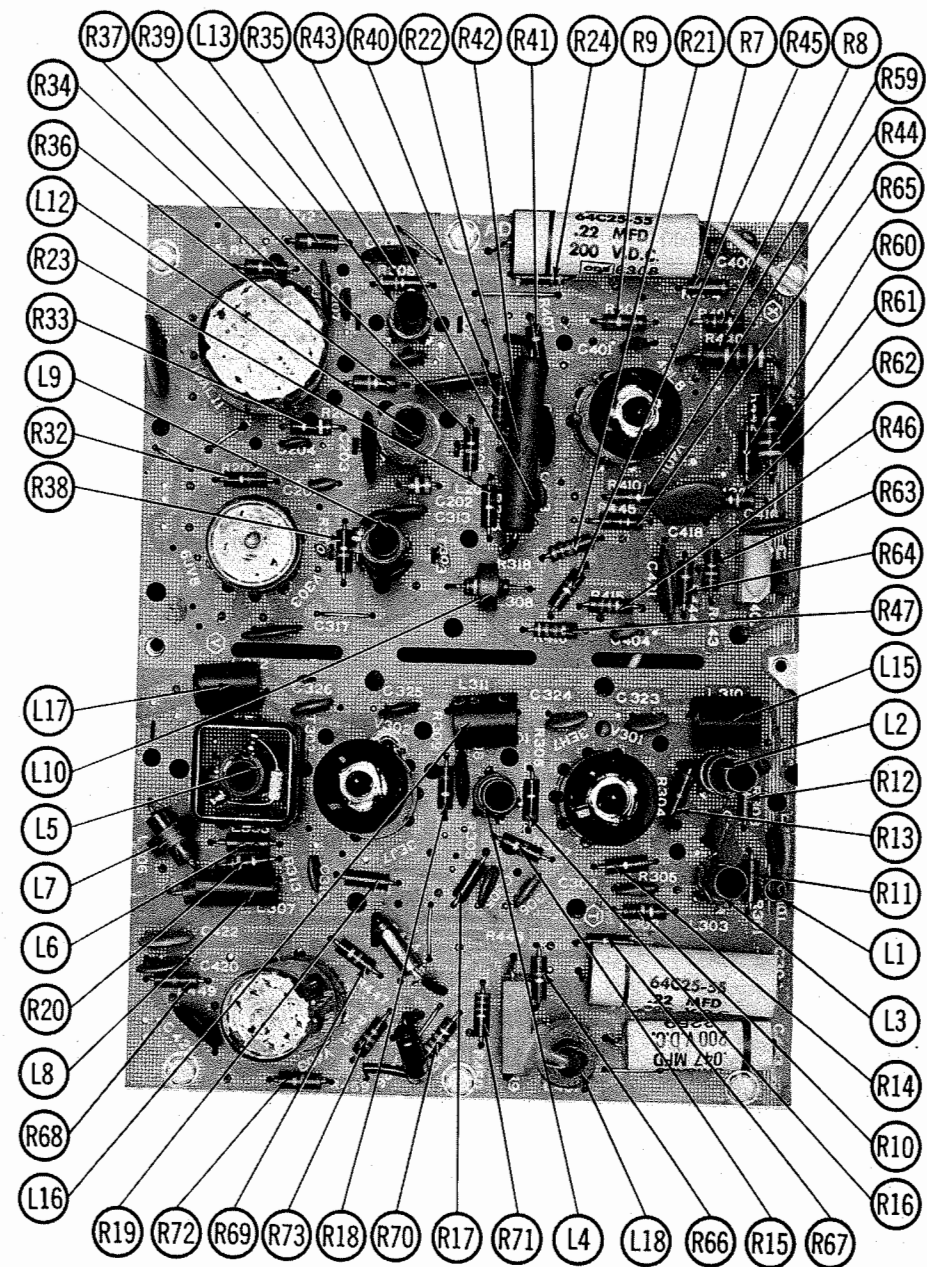
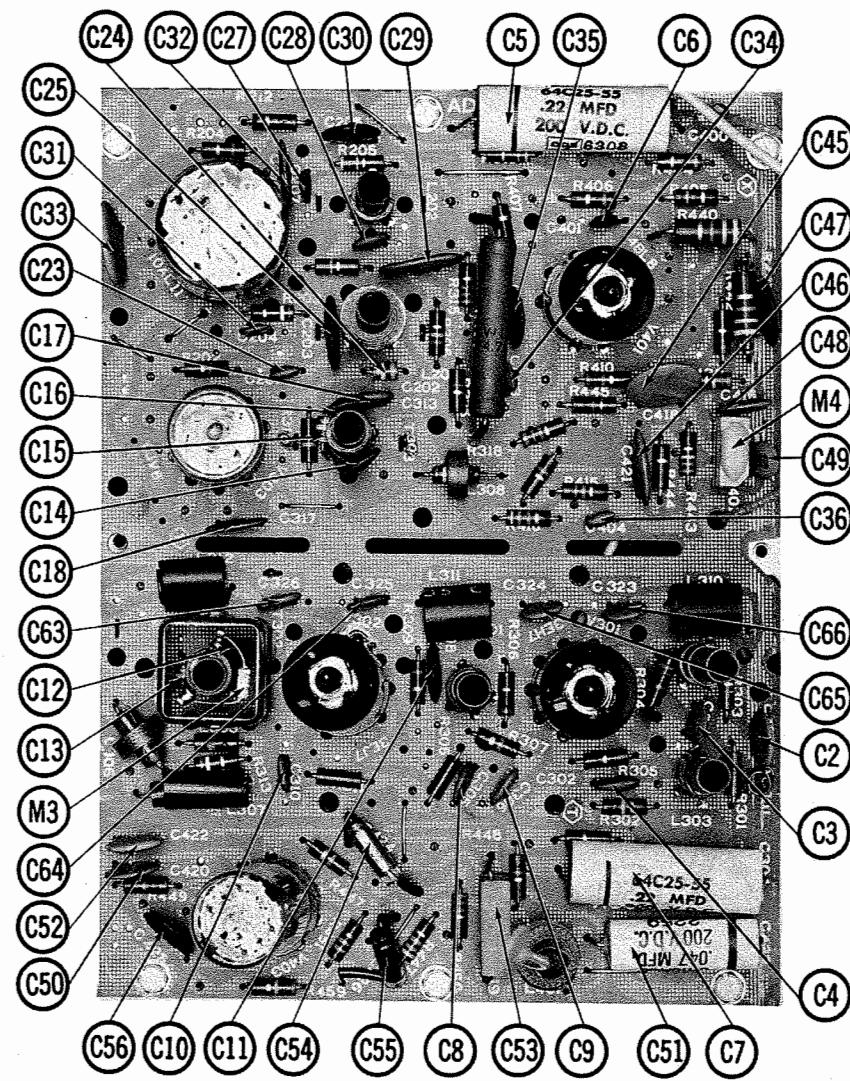
SET 660 FOLDER 1

FOLDER 1



A Howard W. Sams CIRCUITRACE® Photo

ARROWS INDICATING TUBE LOCATIONS ARE POINTING TO PIN 1 UNLESS OTHERWISE INDICATED

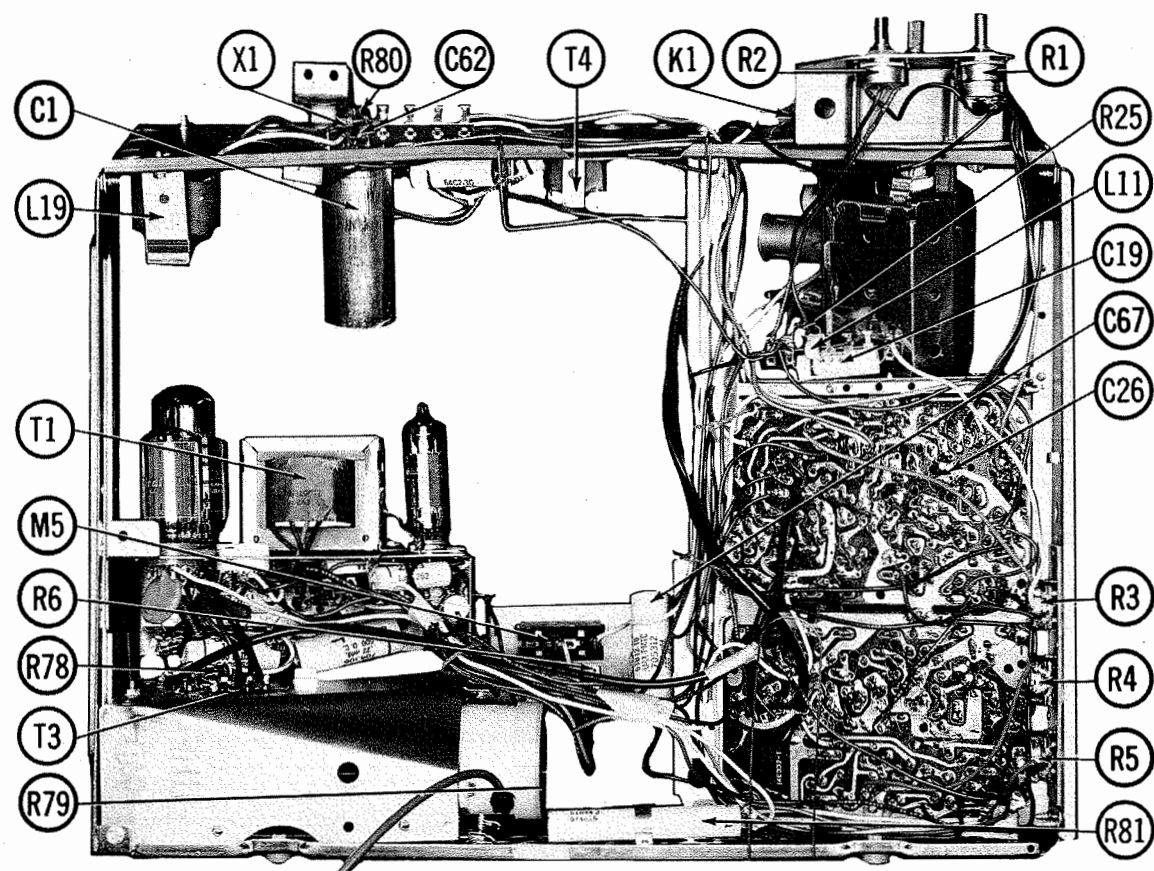
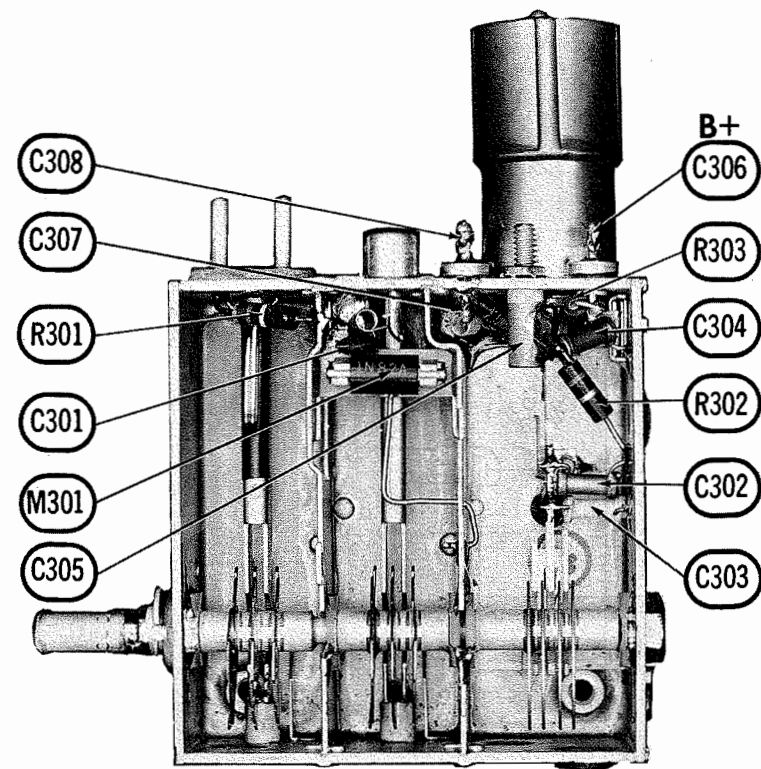


ADMIRAL CHASSIS 16K3B,
16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

FOLDER 1

PRINTED BOARD

UHF TUNER 94D173-2



CHASSIS - FRONT VIEW

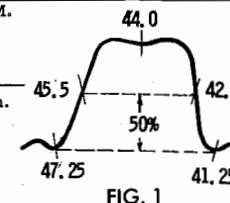
ALIGNMENT INSTRUCTIONS

Use an isolation transformer and maintain voltage at 117 volts. Allow a 20-minute warm-up period for the receiver and test equipment.
Suggested Alignment Tools: GENERAL CEMENT #8606, 8606L, 8669WALSCO #2543, 2544, 2588

VIDEO IF ALIGNMENT

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 those shown. Connect a variable bias supply to the IF AGC line (point Δ) and adjust to obtain a response curve which shows no indication of overload. Disable Oscillator section of Mixer-Osc. Set the Channel Selector to any non-interfering channel.

INDICATOR	GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	ADJUST	REMARKS
1. Connect DC probe of a VTVM thru a 47K resistor to point Δ . Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		47.25MC	A1	Adjust for MINIMUM.
2. Connect DC probe of a VTVM thru a 47K resistor to point Δ . Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.		42.3MC 43.5MC 45.3MC 43.3MC 44.8MC	A2 A3 A4 A5 Mixer Plate Coil	Adjust for maximum.
3. Connect vertical input of a scope to point Δ . Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. Low side to ground.	44MC (10MC Sweep)	41.25MC 42.5MC 44.0MC 45.5MC 47.25MC		Check for maximum gain and symmetry of response with markers as shown in Figure 1. In order to obtain a proper response, it may be necessary to slightly retouch A2, A3, A4, A5, and Mixer Plate Coil.

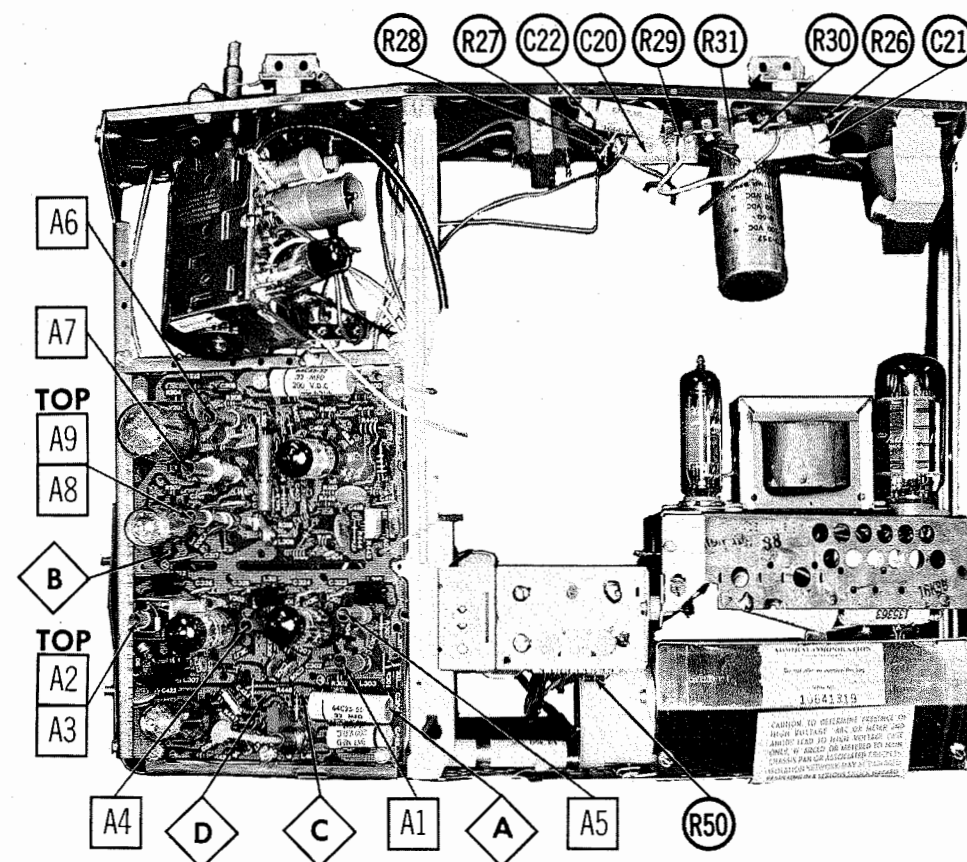


SOUND IF ALIGNMENT

Tune in a station and reduce the signal strength at the antenna terminals until a hiss is heard in the sound. Align for maximum undistorted sound with MINIMUM buzz by adjusting A6, A7, and A8. If the hiss disappears during alignment, further reduce the signal strength.

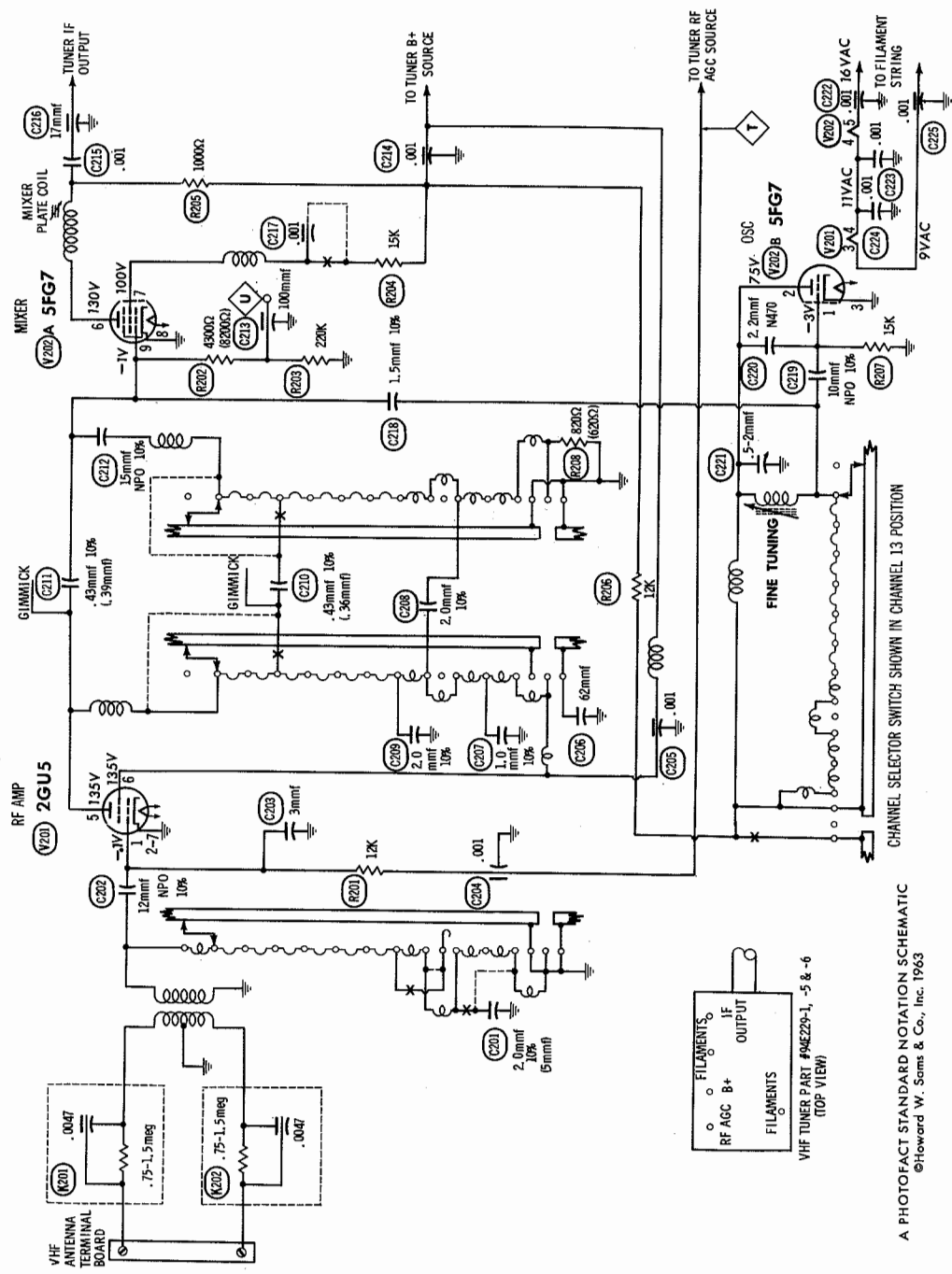
4.5 MC TRAP ALIGNMENT

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 A9 for MINIMUM beat interference.

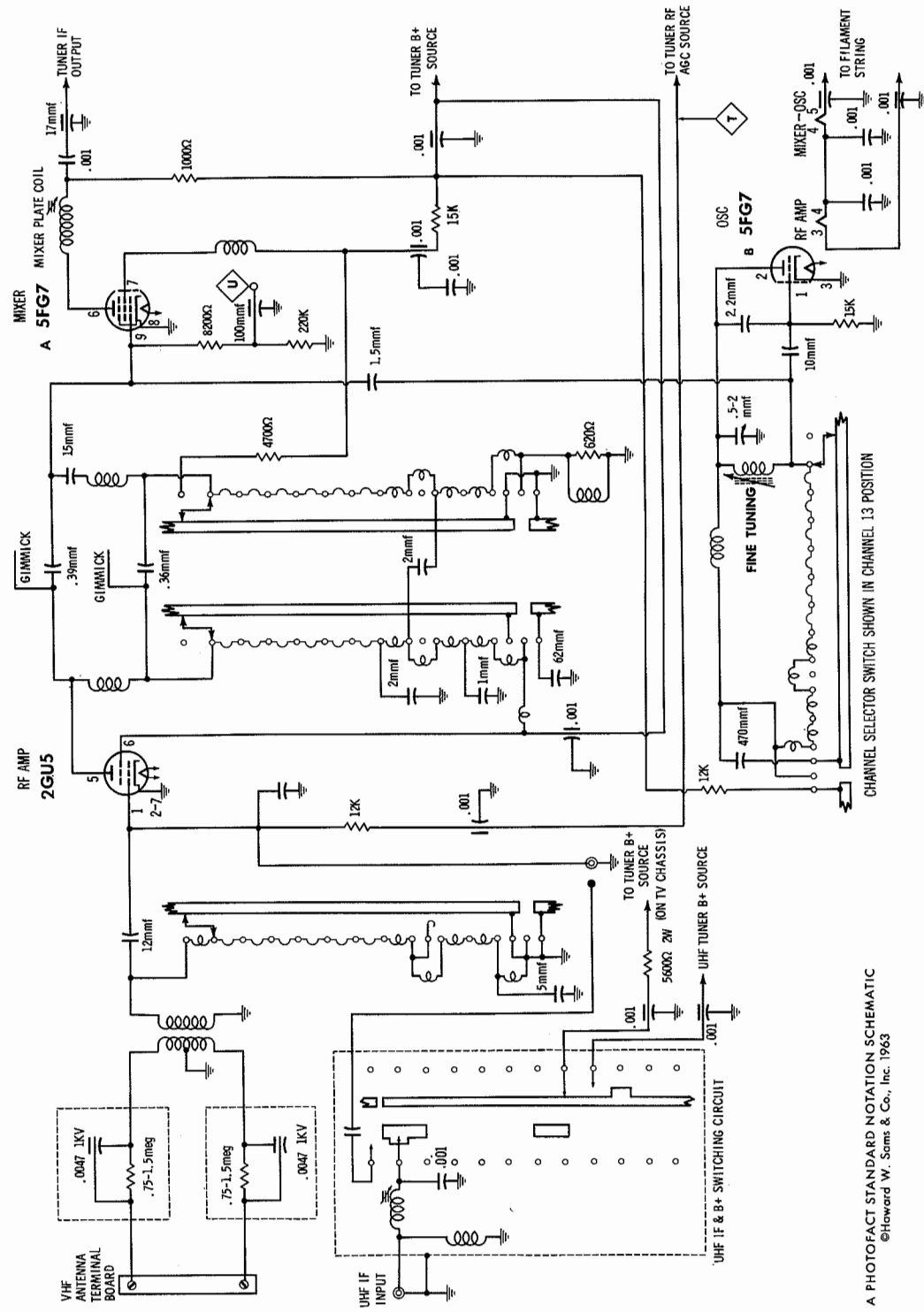


CHASSIS - REAR VIEW

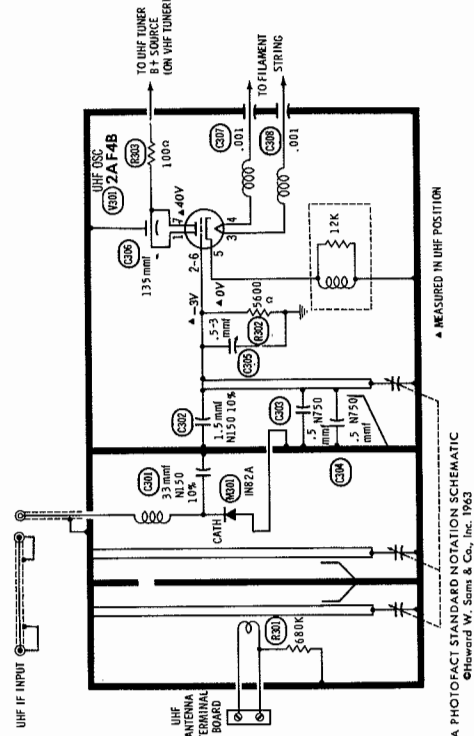
ADMIRAL CHASSIS 16K3B, 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B



13 POSITION SWITCH-TYPE VHF TUNER 94E229-1, -5, -6



13 POSITION SWITCH-TYPE VHF TUNER 94E229-7, -8, -9



UHF TUNER
94D173-2,
94D204-6
UHF TUNER
PHOTO NEXT PAGE

16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

CABINETS & CABINET PARTS
(When Ordering Specify Model, Chassis & Color)

ITEM	PART NO.	MODELS											
		P7048	P7049	P7050	P7051	P7052	P7053	P7054	P7055	P7056	P7057	P7058	P7059
Safety Glass	210141-3	X	X	X	X	X	X	X	X	X	X	X	X
Escutcheon Control Panel	23E400-5	X											
Escutcheon	330510-1						X						
Escutcheon	330510-2												X
Knob, VHF Channel Selector	330340-18	X	X										
Knob, VHF Channel Selector	330340-19							X	X				
Knob, VHF Channel Selector	A9526			X	X								
Knob, VHF Channel Selector	A9527									X	X		
Knob, VHF Channel Selector	A9528				X	X							
Knob, VHF Channel Selector	A9529										X	X	
Knob, VHF Channel Selector	A9212						X						
Knob, VHF Channel Selector	A9213											X	
Knob, VHF Channel Selector	P9209							X					X
Knob, VHF Fine Tuning	330340-5	X	X										
Knob, VHF Fine Tuning	330340-11						X	X					
Knob, VHF Fine Tuning	330508-1			X	X					X	X		
Knob, VHF Fine Tuning	33C514-6					X	X					X	X
Knob, VHF Fine Tuning	330508-2						X						X
Knob, VHF Fine Tuning	33C514-2							X					X
Knob, UHF Indicator	330340-12								X				
Knob, UHF Indicator	330528-2										X	X	
Knob, UHF Fine Tuning	330340-11							X	X				
Knob, UHF Fine Tuning	33C509-1									X	X		
Knob, UHF Fine Tuning	330528-11											X	X
Knob, UHF Fine Tuning	330528-6												X
Knob, Volume, Brightness	33C486-5	X	X					X	X				
Knob, Volume, Brightness	33C415-5			X	X					X	X		
Knob, Volume, Brightness	33C591-1					X	X					X	X
Knob, Volume, Brightness	33C516-7						X						X
Knob, Volume, Brightness	20042-2							X					X
Knob, Vertical, Contrast	330345-11	X	X					X	X				
Knob, Vertical, Contrast	330345-7			X	X					X	X		X
Knob, Vertical, Contrast	330345-9				X	X					X	X	
Knob, Vertical, Contrast	330345-5						X						X
Cabinet Front	A9723	X						X					
Cabinet Front	23E400-5		X						X				
Cabinet Front	A9679			X	X					X	X		
Cabinet Front	A9662				X	X							
Cabinet Front	A9663										X	X	
Cabinet Front	A9661						X						X
Cabinet Front	A9664							X					
Cabinet Front	A9665												X
Cabinet Back	33E337-5	X	X					X	X				
Cabinet Back	A9533			X						X			
Cabinet Back	A9534				X						X		
Cabinet Back	A9531					X						X	
Cabinet Back	A9532						X						X
Cabinet Back	A9559							X					X
Cabinet Back	A9633							X					X

UHF TUNER PARTS LIST AND DESCRIPTION

TUBES					
AMPEREX		GENERAL ELECTRIC		RAYTHEON	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V301	UHF Osc.	2AF4B			

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.
C301	33 N150 10%						
C302	1.5 N150 10%						
C303	.5 N750						
C304	.5 N750						
C305	.6-3.0						
C306	135						
C307	.001		EF-001	MFT-1000		CV-1	CT565
C308	.001		EF-001	MFT-1000		CCF-102	CT280A

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

MISCELLANEOUS			
ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M301	Diode	1N82A	UHF Mixer

VHF TUNER PARTS LIST AND DESCRIPTION

94E229-1

TUBES					
AMPEREX		GENERAL ELECTRIC		RAYTHEON	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	2GU5	V202	Mixer - Osc.	5FG7

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.	SPRAGUE PART No.
C201	2.0mmf 10%	(5mmf) ↑						
C202	12mmf NPO 10%							
C203	3mmf		NPO-D1 3.0	DTZ-12	C10V33C	CCTO-120	CNO-412	10TCC-Q12
C204	.001		EF-001	DTZ-3R3		CCTO-3R3	CNO-533	10TCC-V30
C205	.001		EF-001	MFT-1000		CCF-102	CT280A	
C206	.001			MFT-1000		CCF-102	CT280A	
C207	1.0mmf 10%			TCZ-62				
C208	2.0mmf 10%							
C209	2.0mmf 10%							
C210	.43mmf 10%	(.36mmf) ↑						
C211	.43mmf 10%	(.39mmf) ↑						
C212	15 NPO 10%							
C213	100		NPO-D1 15	DTZ-15	C10Q15C	CCTO-150	CNO-415	10TCC-Q15
C214	.001		EF-0001	MFT-100				
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C217	.001		EF-001	MFT-1000		CCF-102	CT280A	
C218	1.5mmf 10%							
C219	10 NPO 10%		NPO-D1 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C220	2.2mmf N470							
C221	.5-2mmf			829-3		CV-1	CT565	
C222	.001		EF-001	MFT-1000		CCF-102	CT280A	
C223	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C224	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C225	.001		EF-001	MFT-1000		CCF-102	CT280A	

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
↑ Alternate Value

COMPONENT COMBINATIONS				
ITEM No.	USE	DESCRIPTION	ADMIRAL PART No.	REPLACEMENT DATA
K201	Antenna Isolation	.75-1.5meg, .0047mfd		Centralab RC-490 Sprague ACL-2
K202	Antenna Isolation	.75-1.5meg, .0047mfd		Centralab RC-490 Sprague ACL-2

VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ALIGNMENT

Set the fine tuning to the center of its range. Adjust overall oscillator adjustment for best picture and sound on each active channel.

RF AND MIXER ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use 10MC sweep unless otherwise noted.
Connect variable bias to RF AGC line at point Ⓢ. Adjust bias to obtain response curve which shows no indication of overloading.

SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
Across antenna terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to point Ⓢ, low side to ground.		Compress or expand coil turns for response similar to Figure 201.
	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			

Tune in a UHF station and adjust UHF IF Input Coil for best picture and sound.

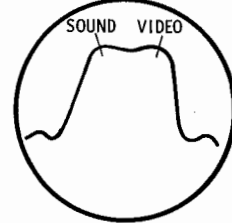
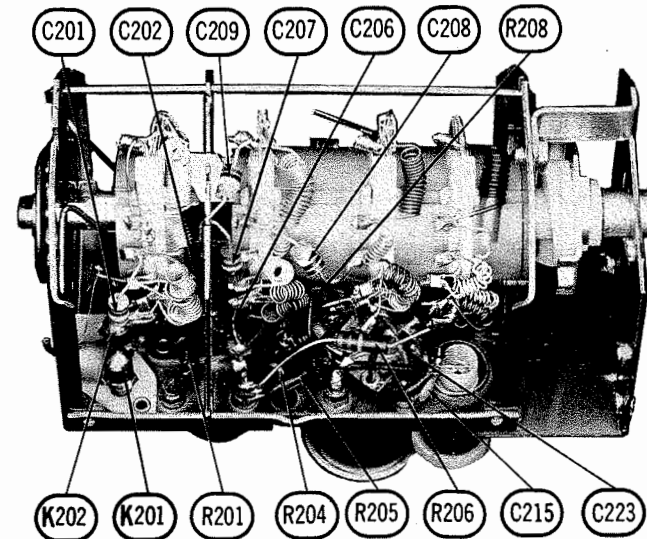
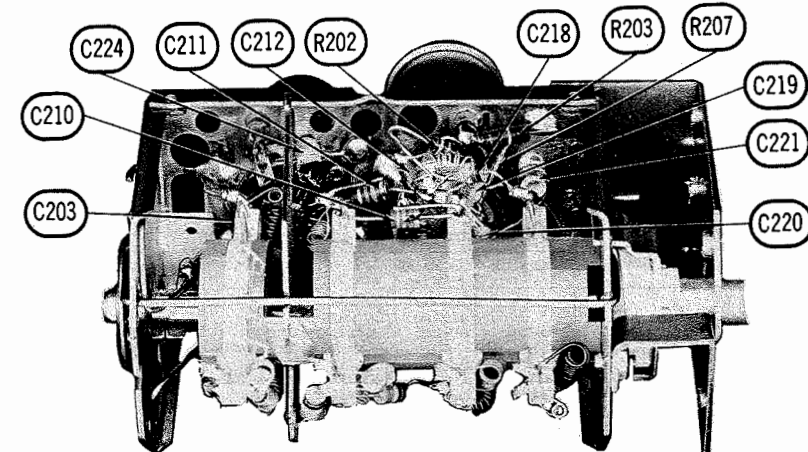
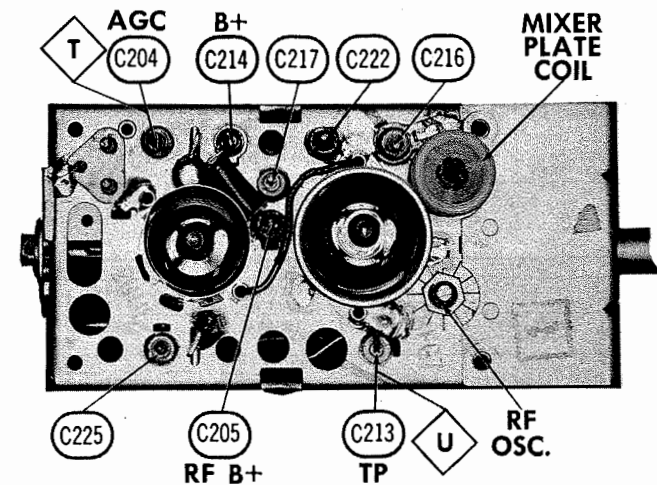


FIG. 201

ADMIRAL CHASSIS 16K3B, 16L3B, 16M3B, 16UK3B, 16UL3B, 16UM3B

FOLDER 1

SET 660 FOLDER 1

PARTS LIST 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.

TUBES

* AMPEREX *		GENERAL ELECTRIC		RCA		RAYTHEON		SYLVANIA	
ITEM No.	USE	TYPE		ITEM No.	USE	TYPE		TYPE	
V1	1st Video IF Amp.	3EH7/XF183		V6	Vert. Mult. - Vert. Output	9GV8/XCL85			
V2	2nd Video IF Amp.	3EJ7/XF184		V7	Horiz. Mult.	8FQ7			
V3	Video Output - Sound IF Amp.			V8	Horiz. Output Damper	12B53			
V4	AGC Keying - Sync Sep.	6JV8		V9	HV Rectifier	1G3GT/1B3GT			
V5	Audio Det. - Audio Output	4BL8/XCF80							
		10AL11							

PICTURE TUBE

REPLACEMENT DATA						NOTES
ITEM No.	ADMIRAL PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
V11	19CHP4	19CHP4 ①	19CHP4 ①	19CHP4 ①	19CHP4 ②	① Aluminized ② Silver Screen

POWER RECTIFIERS

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS		SARKES TARZIAN PART No.
			MALLORY PART No.	PART No.	
X1	.37A	83B12-1	1N640 or 1N3194	1N1763 or 1N3194 or 1N2881	F-4 or 40H

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.
C1A	.250	200	67D15-357	AFHS3-86-85	XCL285	XC3-20	QC318-8A	TVLS-3461-8
C1B	.200	150			BR100-250	QT1-13	TC48	
C1C	.150	150						

* Not normally in distributor's stock. Available thru distributor on order to manufacturer

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C2	39 NPO 5%			TCZ-39	C10Q39C	CNO-439	CNO-439	10TCC-Q39
C3	15 NPO 5%			DTZ-15	C10Q15C	CNO-415	CNO-415	10TCC-Q15
C4	.0015 NPO 10%			DD-152	LA10D15-C4	CCD-152	B-215	10TCC-Q15
C5	.22 200V				PKM2P22	2DP-4-224	GEM-2022	2TM-P22
C6	.001 1KV			DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C7	.22 200V				PKM2P22	2DP-4-224	GEM-2022	2TM-P22
C8	820			DD-821	LA10T82-C4	CCD-821	B-382	10T8-T82
C9	820			DD-821	LA10T82-C4	CCD-821	B-382	10T8-T82
C10	.001 10%			DD-1000	JB6D1	CCD-102	GP210	10T8-T82
C11	.0047			BPD-0047	BYA10D47	CCD-472	B-247	5HK-D47
C12	4.7mmf NPO ±25mmf						CNO-547	10TCC-V47
C13	8.8mmf 10%	#65B41-141						
C14	47 NPO 5%			DTZ-47	C10Q47C	CNO-447	CNO-447	10TCC-Q47
C15	4.7 NPO 10%							
C16	47 NPO 5%			DTZ-47	C10Q47C	CNO-447	CNO-447	10TCC-Q47
C17	47 NPO			DTZ-47	C10Q47C	CNO-447	CNO-447	10TCC-Q47
C18	.01			DD-103	BYA10D1	CCD-103	B-110	5HK-S10
C19	.1 200V			DF-104	PKM2P1	2DP-3-104	GEM-201	2TM-P10
C20	.047 1000V				PKM10S47	18DP-5-473	GEM-10147	10TM-S47
C21	.047 1000V				PKM10S47	18DP-5-473	GEM-10147	10TM-S47
C22	.047 1000V				PKM10S47	18DP-5-473	GEM-10147	10TM-S47
C23	.001			DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C24	4.5mmf 5%							
C25	82 NPO 5%			DTZ-82	C10Q82C	CNO-482	CNO-482	10TCC-Q82
C26	5.6mmf NPO	#65C6-164						
C27	.001			DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C28	18 N220 5%	#65D10-140						
C29	.02			DD-203	BYA6S2	CCD-203	B-120	5HK-S10
C30	.0047			DD-472	BYA10D47	CCD-472	B-247	5HK-D47
C31	.001			DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C32	.01			DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C33	.005 1KV 10%			DD-5000		DD-502	JL-250	10T8-D50
C34	470			BPD-00047	BYA10D47	CCD-471	B-347	10T8-T47
C35	.0047			BPD-0047	BYA10D47	CCD-472	B-247	5HK-D47
C36	330	10%		DI-330	LA10T33-C4	CCD-331	GP333	10T8-T33
C37	470			DD-471	BYA10T47	CCD-471	B-347	10T8-T47
C38	.047 600V			DD-503	CUB6S47	8DP-3-473	GEM-6147	6TM-S47
C39	.022 600V				PKM6S22	8DP-2-223	GEM-6122	6TM-S22
C40	.047 600V				CUB6S47	8DP-3-473	GEM-6147	6TM-S47
C41	.033 1000V			DD-503	PKM10S33	18DP-5-333	GEM-10133	10TM-S33
C42	.001 1KV			DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C43	.0047 500V 10%	#65D10-13		CPR-4700J	CD19F472J	DM-30-472K	MCJ464	
C44	82 N750 3KV 10%							
C45	100 NPO 5%			DTZ-100	C10T1C	CNO-310	CNO-310	10TCC-T10
C46	100 NPO 5%			DTZ-100	C10T1C	CNO-310	CNO-310	10TCC-T10
C47	33 NPO 10%			CF-222	C10Q33C	CCTO-330	CNO-433	10TCC-Q33
C48	.0022 10%			JB6D22	CCD-222	CCD-222	GP222	10T8-D22
C49	.001 10%			DI-1000	JB6D1	CCD-102	GP210	10T8-D10
C50	.0022 10%			BPD-0022	LA10D22-C4	CCD-222	B-222	10T8-D22
C51	.047 200V			DD-503	CUB2S47	ADP-3-473	GEM-2147	2TM-S47
C52	47 NPO			DTZ-47	C10Q47C	CCTO-470	CNO-447	10TCC-Q47
C53	.0039 10%			CPR-3900J	CD19F392J	DM-19-392K	MCJ462.5	
C54	820 10%			CCR-820J	CD19F821K	DM-19-821K	MCB252	
C55	820 10%			CPR-820J	CD19F821K	DM-19-821K	MCB252	
C56	.0047			DD-472	BYA10D47	CCD-472	B-247	5HK-D47
C57	10 1KV 10%			DI-10	LA10Q1-SL	CCD-100	GP410	10T8-Q10

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCOR PART No.	MALLORY PART No.	SPRAGUE PART No.
C58	.1 1000V	#65D10-287	BE10P1		PKM10P1		GEM-1001	10TM-P10
C59	140 N1500 5KV 10%		BE10833		PKM10833	18DP-5-333		10TM-S35
C60	.033 1000V 10%		P688N-22		PKM6P22	8DP-5-224	GEM-6022	6TM-P22
C61	.22 600V		BPD-001		BYA10D1	CCD-102	B-210	5HK-D10
C62	.001 1KV		DD-102		LA10T82-C4	CCD-821	B-382	10T8-T82
C63	820		DD-821		LA10T82-C4	CCD-821	B-382	10T8-T82
C64	820		DD-821		LA10T82-C4	CCD-821	B-382	10T8-T82
C65	820		DD-821		LA10T82-C4	CCD-821	B-382	10T8-T82
C66	820		DD-821		LA10T82-C4	CCD-821	B-382	10T8-T82
C67	.22 600V		P688N-22		PKM6P22	8DP-5-224	GEM-6022	6TM-P22

* Admiral Part Number

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			ADMIRAL PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	1meg	75D1-153 ①	AB-70, AK-33, KR-1 or (F2-1meg, SFS212, KR-1)	A47-1meg-Z, RS-3/16, SWE-12	B13-137, SK9, 76-1 or (BU1, CF26, SS4, GC) *	UA16A, SD3500, US-41 or (RU16A, SL38, IS875, US-41) or (U53, DS-37, US-26)
R2	Brightness	100K	75D13-112 ②	AB-40, AK-33 or (F1-100K, SFS212)	A47-100K-S, RS-3/16	B11-128, SK9 or (BU1, CF13, SS4, DC1) *	UA15L, SD3500 or (RU15L, SL38, IS875) or (U41, DS-37)
R3	Contrast	25K	75D20-122 ③	AB-26, AK-33 or (F1-25K, SFS212, AK-38)	A47-25K-S, RS-3/16	B11-120, TM8	RU253L, SL37, IS875 or (UA253L, SD3500) or (U29, DS-37)
R3	Contrast	25K	75D20-137 ④	AB-26, AK-33 or (F1-25K, SFS212, AK-38)	A47-25K-S, RS-3/16	B11-120, SK9 or (BU1, CF11, SS4, DC1) *	RU253L, SL37, IS2375 or (UA253L, SD3500) or (U29, DS-37)
R4	Horiz. Range	45K	75D20-131	TT-31 or (F-50K, SN010, AK-38)	B47-50K-S	B11-123, TM4 or (BU1, CF12, SS8) *	PTA54L or (RU54L, SL37, SN1000) or (UA54L, SN1000)
R5	Vert. Hold	750K	75D20-165 ⑤	AB-66, AK-33 or (F1-750K, SFS212, AK-38)	A47-750K-S	B11-136, TM8	TA16L, DS-37 or (RU754L, SL37, IS875) or (UA16L, SD3500)
R6A	Height						
B	Vert. Linearity						
C	AGC	2meg	75B90-2				

① Chassis 16M3B and 16UM3B use Part No. 75D1-152.

② Chassis 16M3B and 16UM3B use Part No. 75D13-123.

③ Chassis 16UM3B uses Part No. 75D20-114.

④ Used only in Chassis 16M3B.

⑤ Chassis 16M3B and 16UM3B use Part No. 75D20-164.

* "SNAPTROL"

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R22	4700Ω 4W		4G-4700		R81A	46Ω 20W			
R76	1000Ω 3W	PW3-1000	3G-1000		R81B	5Ω 10W			#61B44-2

* Admiral Part Number

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ADMIRAL PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	RF Choke (.44uh)	73B37-6	TV-239	4588	RTC-8513	T958	
L2	1st Video IF	72C132-41		7504-A		TA283	
L3	47.25MC Trap	72C132-58					
L4	2nd Video IF	72C132-57					
L5	3rd Video IF - Detector Assembly	72B207-3					
L6	RF Choke (12uh)	73B31-4	BC-568	70F125AP	RTC-8523	T985	
L7	Peaking (750uh)	73C5-44	TV-207	6156	RTC-8588	T328	
L8	RF Choke (28uh)	73B31-3	TV-182	72F275AP	RTC-8525	T984	
L9	Sound Takeoff - 4.5MC Trap	72C185-2	TV-236	1471-A		T277	
L10	Peaking (750uh)	73C5-46 ①	TV-207 *	6156 *	RTC-8588 *	T328 *	① Wound on 3.9K resistor
L11	Peaking (19uh)	73C5-40 ②	TV-197 *	6154 *	RTC-8597 *	T372	* Shunt with 3.9K resistor.
L12	Sound IF Interstage	72B208-1		7116-A		TB248	
L13	Quadrature	72C132-52	TV-248	7117-A		TA261	
L14	RF Choke (3uh)	73B37-10	BC-564	4608	RTC-8518	T858	
L15	File Choke (1.4uh)	73B37-2	BC-562	4604	RTC-8516	T856	
L16	File Choke (1.4uh)	73B37-2	BC-562	4604	RTC-8516	T856	
L17	File Choke (1.4uh)	73B37-2	BC-562	4604	RTC-8516	T856	

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		ADMIRAL PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Thordarson PART No.	Workman PART No.	
L18	Horiz. Stabilizer (Hold)	94CL7-14		6335-G①		HS-16 ①		
	Alternate Rod, Horiz. Frequency Adj.	94DL7-14					T169	

① Position coil lugs for proper connection in circuit; use original horizontal frequency adjust rod, part no. 33B589-1.

FILTER CHOKE

ITEM No.	RATINGS
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