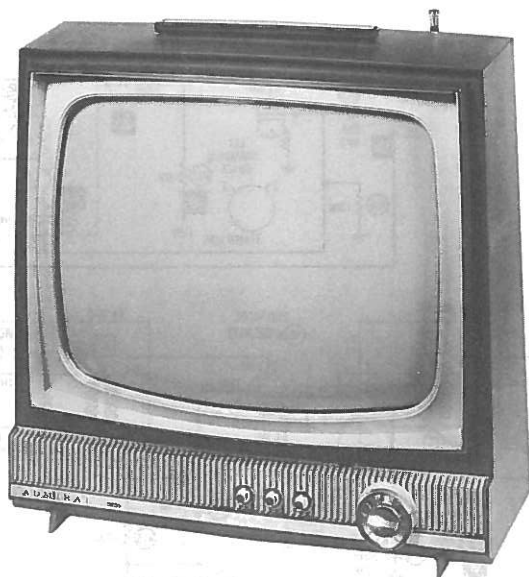


PHOTOFACT® Folder

with CIRCUITRACE™



MODEL PN1510

ADMIRAL CHASSIS
H1-1A, H2-1A, 1H1-1A, 1H2-1A**CAUTION**

ONE SIDE OF AC LINE CONNECTED TO CHASSIS

TRADE NAME	Admiral	Models	Chassis
		PK1360, PK1369, PK1377, PN1304 ..	H1-1A
		PK1560, PK1569, PK1577	H2-1A
		PN1310, PN1319, PN1327	1H1-1A
		PN1501, PN1510, PN1519, PN1527 ..	1H2-1A
SUPPLIER	For current address, see Annual Index.		
TYPE SET	Television Receiver		
TUBES	VHF: Ten, UHF: One Transistor		
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)		
			Runs 12, 13, 14, 15
			RATING 88 Watts, 1.1 Amp. @ 117 Volts AC

SERVICING IN THE FIELD**SAFETY GLASS**

The safety glass is an integral part of the picture tube.

FUSE OR FUSE DEVICE

A 5.5Ω fusible resistor is used for low voltage power supply protection. (For location, see "Cabinet - Rear View".)

VHF OSCILLATOR ADJUSTMENT

Set Fine Tuning at the center of its range and adjust oscillator slug (one for each channel) for best sound and picture.

AGC

No provision is made to vary the AGC on this receiver.

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

The Horizontal Lock Coil, L15, is used for the horizontal hold. (See "Cabinet - Rear View" photo for location.)

FOCUS

No provision is made to vary the focus on this receiver.

CENTERING

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

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. NA893 SA310 10 9 8 7 6 5 4 3 2 1 0

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DATE 7-67 SET 894 FOLDER 1

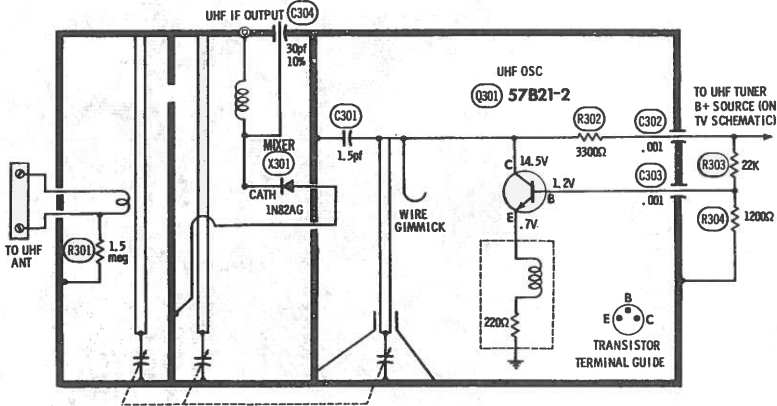


RESISTANCE MEASUREMENTS

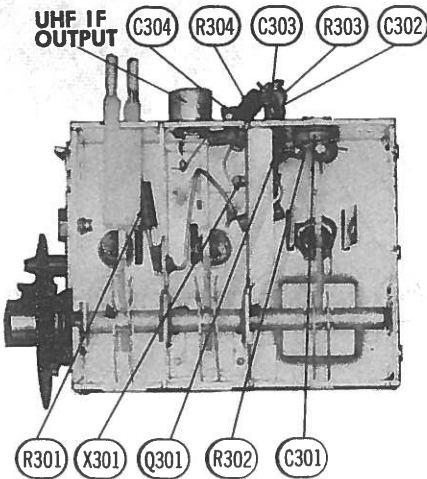
ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12
V1	8BM11	15Ω	470Ω †	470Ω †	0Ω	120Ω	0Ω	470Ω †	0Ω	470Ω †	33Ω	190K	12Ω
V2	14BR11	10.5Ω	14K ●	250Ω †	0Ω	0Ω	47K †	250Ω †	100K	1.1meg	810Ω †	4800Ω †	5.3Ω
V3	17BF11	35Ω	820Ω	16Ω	0Ω	470K	15.3K †	430K †	250K	220Ω	250Ω †	200Ω †	41Ω
V4	23Z9	15Ω	5meg †	700K	NC	248Ω †	NC	0Ω	1.7meg	250Ω †	8.2meg †	21K †	23Ω
V5	8LT8	2200Ω	350Ω †	250K †	5.3Ω	32Ω	82K	642K	1.2meg	1.5meg			
V6	33GY7A	35Ω	100Ω †	NC	5meg †	6.8Ω †	NC	NC	0Ω	1.2meg	NC	600Ω †	23Ω
V7	18C2												TOP CAP 174.8Ω †
V8	15JP4	12Ω	1000Ω	100K	0Ω	NC	NC	160K	10.5Ω				
V201	3GK5	0Ω	940K	0Ω	1Ω	1900Ω †	0Ω	0Ω					
V202	6CG8A	15K	62K	0Ω	3.2Ω	1Ω	1720Ω †	40K †	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

● READING DEPENDS ON POLARITY OF METER CONNECTIONS.
NC NO CONNECTION

† MEASURED FROM OUTPUT OF X1.
‡ MEASURED FROM PIN 4 OF V6.

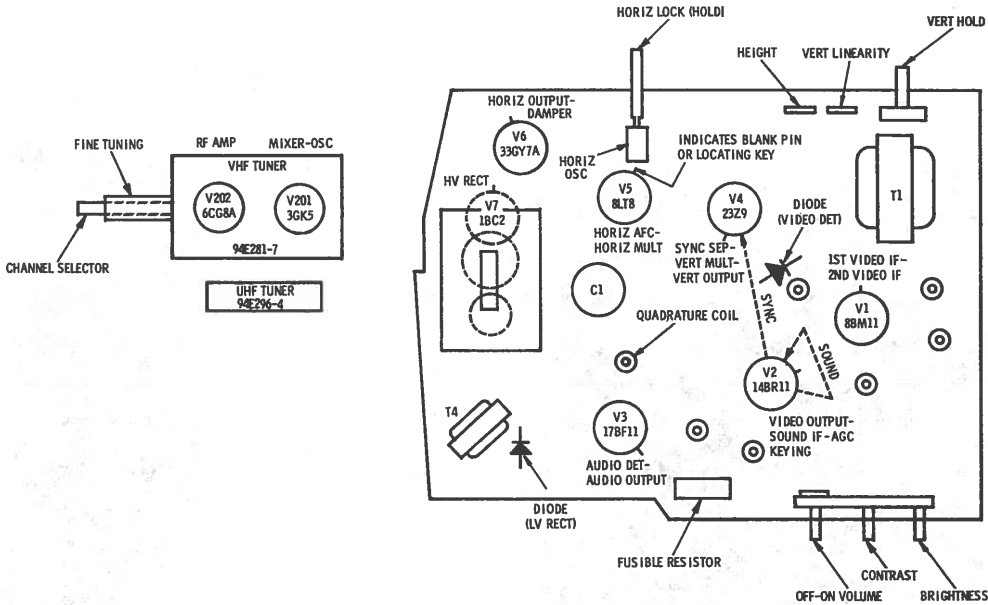


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UHF TUNER 94C296-4N

TUBE PLACEMENT CHART



V8
15JP4
PICTURE
TUBE

ADMIRAL CHASSIS
HI-1A, H2-1A, IH1-1A, IH2-1A

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.

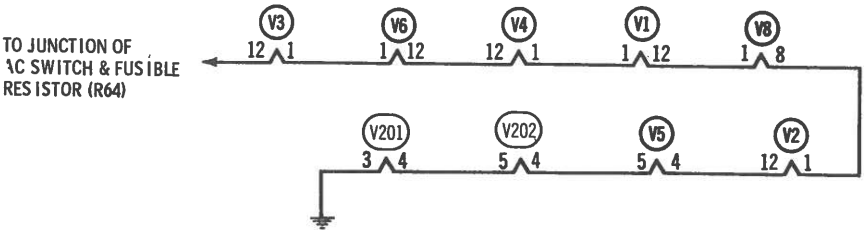
POWER SUPPLY FAILURE
No raster, no sound X1, Fusible Resistor (R64)

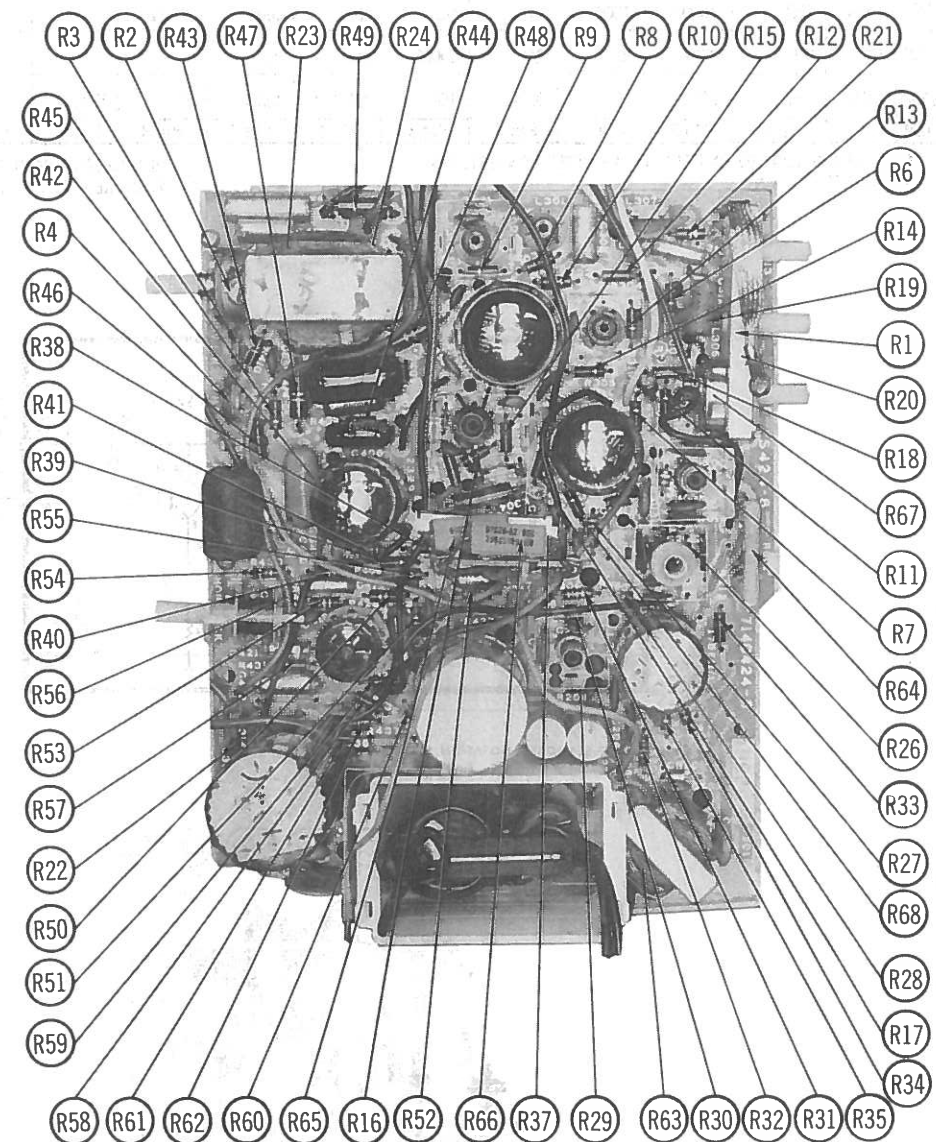
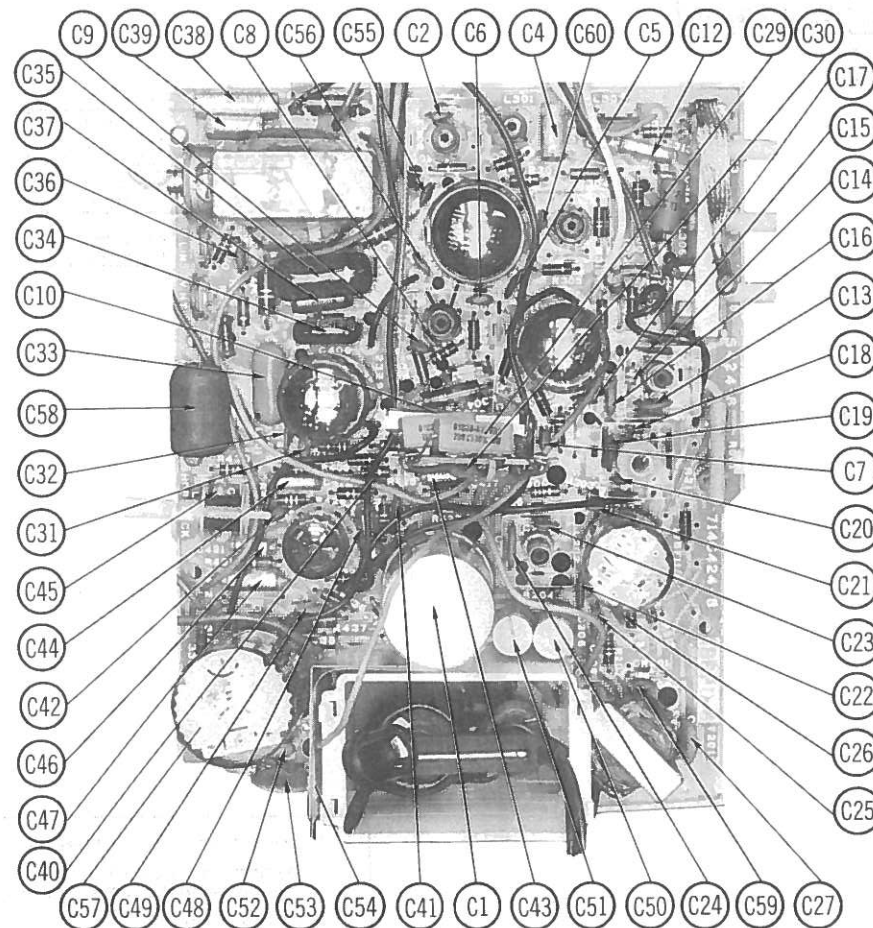
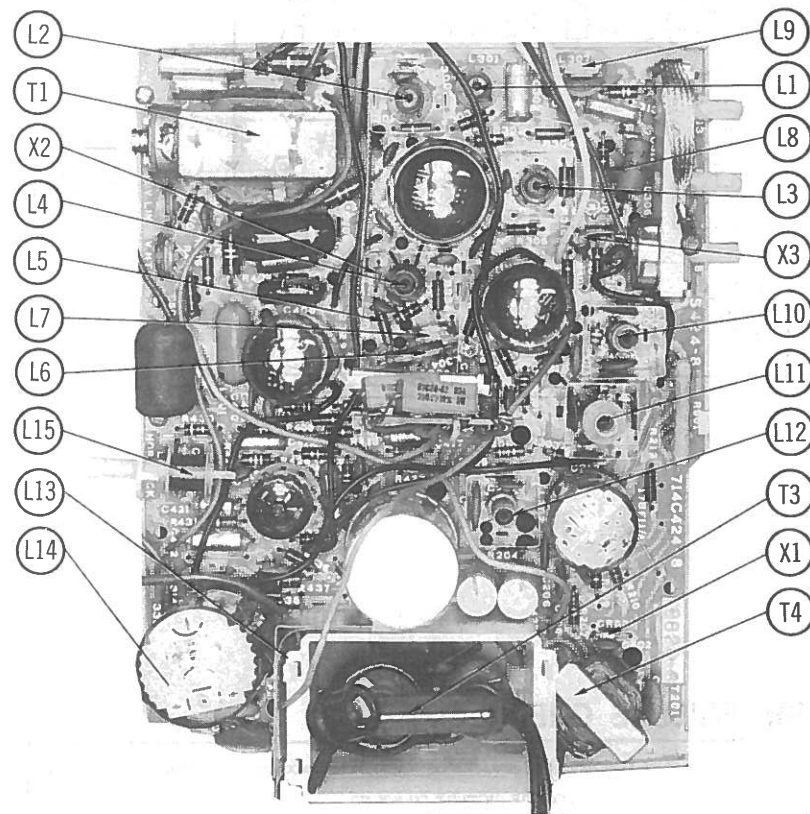
SWEEP FAILURE
No raster, has sound V6, V7, V8
No vertical deflection V4
Poor vert. linearity or foldover V4
Poor horiz. linearity or foldover V5, V6, V7
Narrow picture X1, V5, V6, V7
Vert. off freq. V4
Horiz. off freq. V5

LOSS OF PICTURE OR SOUND
No pic, no sound, has raster V1, Video Detector X2, V2
No pic, no sound, has snow V202, V201, V1
No pic, has sound, has raster V2, V8
Has pic, no sound V2, V3
Overloaded picture V2

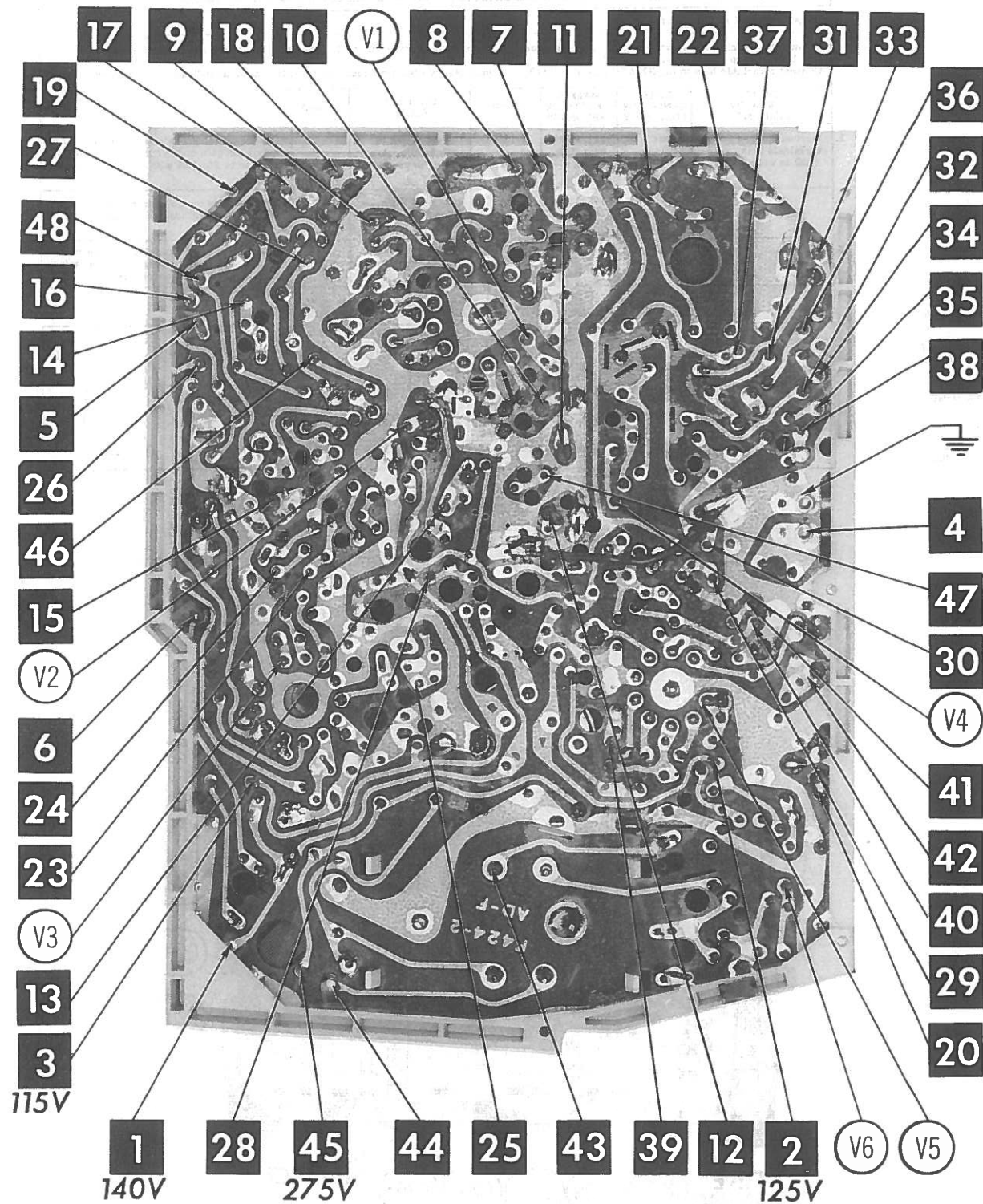
SYNC FAILURE
No vert. sync V2
No horiz. sync V2
No vert. or horiz. sync V2

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.)





PRINTED CIRCUIT BOARD



A Howard W. Sams CIRCUITRACE® Photo

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

PRINTED CIRCUIT BOARD

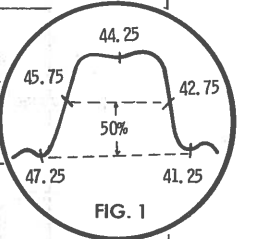
ALIGNMENT INSTRUCTIONS

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: A1 thru A7 GENERAL CEMENT #8606, 8606L, 8869 ... WALSCO #2543, 2544, 2588
Mixer Plate Coil .. GENERAL CEMENT #9296, 9297, 9300 WALSCO #2510, 2546, 2547

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 A) 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 B. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. tube. Low side to ground.		47.25MC	A1	Adjust for MINIMUM.
2. Connect DC probe of a VTVM thru a 47K resistor to point C. Common to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. tube. Low side to ground.	44MC (10MC Sweep)	44.2MC 44.8MC 45.0MC	A2 A3 A4	Adjust for maximum.
3. Connect vertical input of a scope to point D. Low side to ground.	Connect high side to ungrounded tube shield over Mixer-Osc. tube. Low side to ground.	44MC (10MC Sweep)	41.25MC 42.75MC 44.25MC 45.75MC	A2, A3, A4, Mixer Plate Coil	Adjust for maximum gain and symmetry of response with markers as shown in Figure 1.

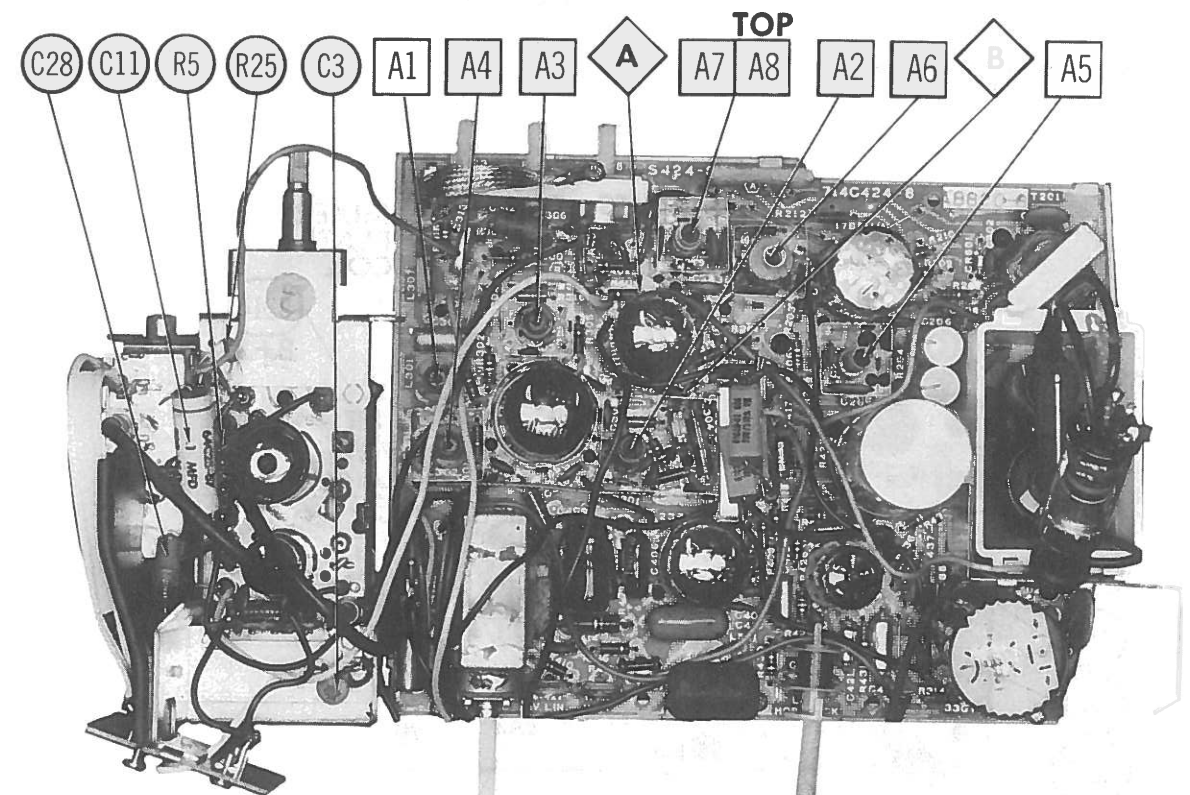


SOUND IF ALIGNMENT

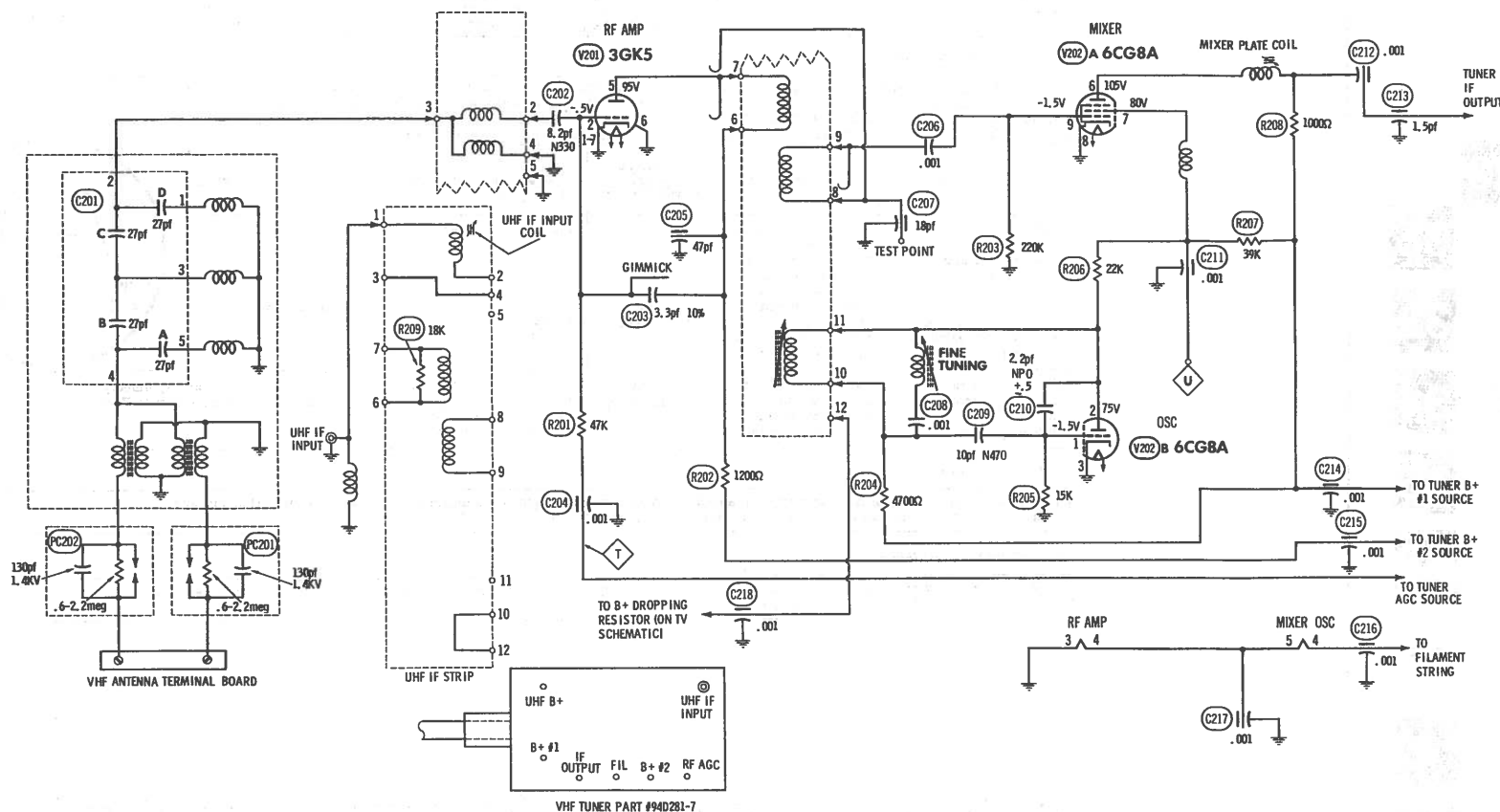
Tune in a station and adjust A 5 for maximum sound. Reduce signal strength at the antenna terminals until distortion appears. Continue to reduce signal while aligning for undistorted output by adjusting A 6 and A 7.

4.5 MC TRAP ALIGNMENT

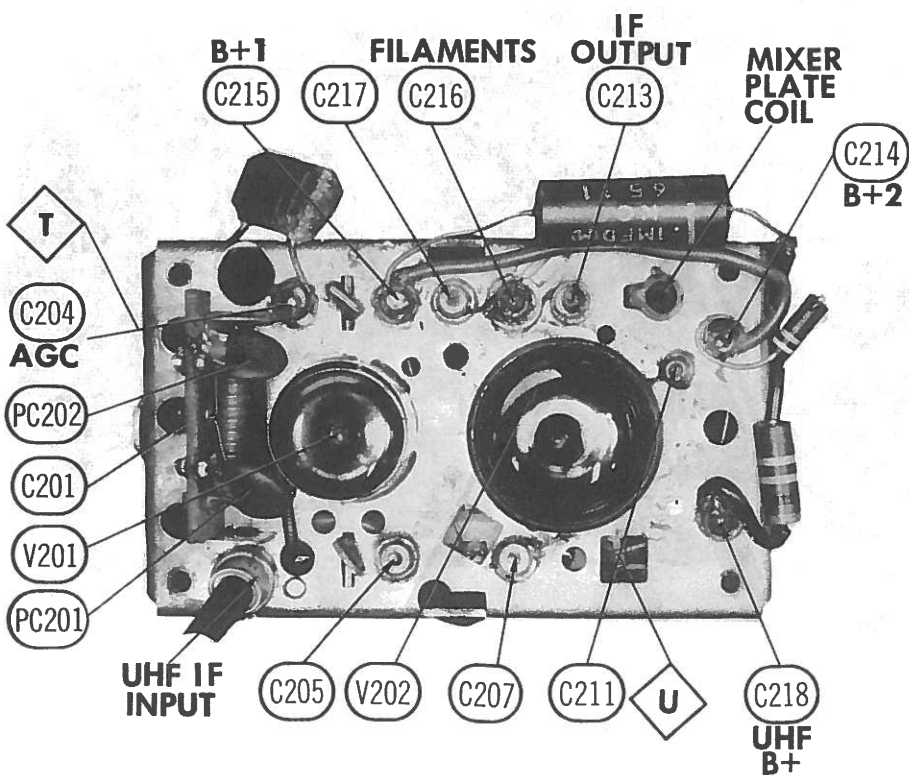
Tune in a strong TV signal and set the Contrast at maximum. Adjust the Fine Tuning until a beat pattern is visible on the screen. Adjust A 8 for MINIMUM beat interference.



CHASSIS—TOP VIEW



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VHF TUNER ALIGNMENT INSTRUCTIONS

OSCILLATOR ADJUSTMENTS

The individual oscillator slugs are accessible one at a time through a hole in the front of the tuner. Set the Fine Tuning to the center of its range and adjust oscillator 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 a variable bias to the RF AGC line at point T. Adjust bias to obtain response curve which shows no indication of overloading.

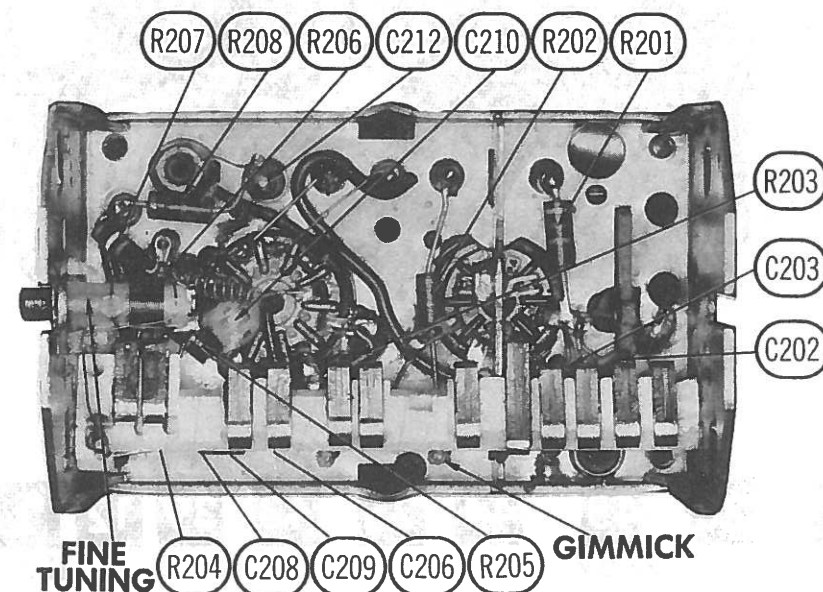
SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. Across antenna terminals with 120Ω in each lead.	213MC	211.25MC 215.75MC	13	Vert. Input to Point U, low side to ground.		Expand or compress appropriate coils for maximum gain and symmetry of response similar to Fig. 201 with markers as shown.
2. "	195MC	193.25MC 197.75MC	10	Across Video Det. load resistor.	Gimmick	Increase bias to -15 volts and adjust for MINIMUM amplitude of response.
3. "	See Chart	See Chart	12 thru 2	Vert. Input to Point U, low side to ground.		Check all channels and make compromise adjustments by expanding or compressing appropriate coils if necessary.

CHANNEL & FREQUENCY CHART

SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	SOUND VIDEO
57MC	55.25MC 59.75MC	2	65MC	63.25MC 67.75MC	6	195MC	193.25MC 197.75MC	10	<p>FIG. 201</p>
63MC	61.25MC 65.75MC	3	177MC	175.25MC 179.75MC	7	201MC	199.25MC 203.75MC	11	
69MC	67.25MC 71.75MC	4	183MC	181.25MC 185.75MC	8	207MC	205.25MC 209.75MC	12	
75MC	73.25MC 77.75MC	5	189MC	187.25MC 191.75MC	9	213MC	211.25MC 215.75MC	13	

UHF TUNER ALIGNMENT INSTRUCTIONS

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



VHF TUNERS 94C281-7 94D281-7

VHF TUNER PARTS LIST

VHF TUNERS 94C281-7N, 94D281-7

TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	3GK5	V202	Mixer - Osc.	6CG8A

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C201A B C D	27 27 27 27							
C202	8.2 N330							
C203	3.3 10%		NPO-DI 3.0	DTZ-3R3		CCTO-3R3	CNO533	10TCS-V82
C204	.001		EF-001	MFT-1000		CCF-102	CT280A	10TCC-V30
C205	47							
C206	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C207	18							
C208	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C209	10 N470							
C210	2.2 NPO ±.5		NPO-DI 2.2	DTZ-2R2	CZ601CJ2R2D	CCTO-2R2	CNO522	10TCT-Q10
C211	.001		EF-001	MFT-1000		CCF-102	CT280A	10TCC-V22
C212	.001		EF-001	MFT-1000		CCF-102	CT280A	
C213	1.5							
C214	.001		EF-001	MFT-1000		CCF-102	CT280A	
C215	.001		EF-001	MFT-1000		CCF-102	CT280A	
C216	.001		EF-001	MFT-1000		CCF-102	CT280A	
C217	.001		EF-001	MFT-1000		CCF-102	CT280A	
C218	.001		EF-001	MFT-1000		CCF-102	CT280A	

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

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	ADMIRAL PART No.	REPLACEMENT DATA
PC201	Antenna Isolation	1-3meg, 130pf ①		Aerovox PA-821 Centralab RC-428
PC202	Antenna Isolation	1-3meg, 130pf ①		Aerovox PA-821 Centralab RC-428

① Some versions may use .6-2.2meg, 130pf in this application.

UHF TUNER PARTS LIST

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				ADMIRAL PART No.
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	
Q301		UHF Oscillator		GE-11	TR-24	SK-3019	57B21-2

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X301		1N82AG	1N82A	1N82AG			

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C301	1.5		NPO-DI 1.5	DTZ-1R5			CNO615	10TCC-V15
C302	.001		EF-001	MFT-1000		CCF-102	CT280A	
C303	.001		EF-001	MFT-1000		CCF-102	CT280A	
C304	30 10%							

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 (17KV) or 8868 (25KV)
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 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
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 8485 (Round) - 5 Conductor 8488 (Round) - 8 Conductor

TUBES

ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
Q301	UHF Osc. (Transistor)		V3	Audio Det. - Audio Output	17BF11
V201	RF Amp.	3GK5	V4	Sync Sep. - Vert. Mult. - Vert. Output	23Z9
V202	Mixer - Osc.	6CG8A	V5	Horiz. AFC - Horiz. Osc.	8LT8
V1	1st Video IF - 2nd Video IF	8BM11	V6	Horiz. Output - Damper	33GY7A
V2	Video Output - Sound IF - AGC Keying	14BR11	V7	HV Rectifier	1BC2

PICTURE TUBE

ITEM No.	REPLACEMENT DATA				NOTES
	ADMIRAL PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	SYLVANIA PART No.	
V8	15JP4 13CP4 ② 13EP4 ②			15JP4 ①	① Silver Screen "85" ② Replace with original type.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X1	.23A	93B52-1	GE-504A or GE-505	8D4 or 5A4-D	1N2070 or 1N540	SK-3016 or SK-3017A	40C or F-4
X2		93B25-3 (1N541)	1N60	1N541			
X3		93B52-1	GE-504A or GE-505	8D4 or 5A4-D	1N2070 or 1N540	SK-3016 or SK-3017A	40C or F-4

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA					
	CAP.	VOLT.	ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1A B C	250 150 150	165 150 150	67C30-11		DE0016			

ADMIRAL CHASSIS
HI-1A, H2-1A, IH1-1A, IH2-1A

FOLDER 1

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELEMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C2	6.8 NPO ±.5		NPO-DI 6.8	DTZ-6R8	CZ801CH6R8D	CCTO-6R8	CNO568	10TCC-V88
C3	470 1.4KV							125M-T47
C4	.22 200V		DBE4P22		DMF4P22	4DP-5-224	PVC4022	4PS-P22
C5	.0015		DI-1500	DD-152		CCD-152	GP215	10TS-D15
C6	470 10%		DI-470	DD-471	JBZ601YP471K	CCD-471	GP347	10TS-T47
C7	820		DI-820	DD-821	JBZ601YP821K	CCD-821	GP382	10TS-T82
C8	4.7 NPO ±.25		NPO-DI 4.7	DTZ-4R7	CZ801CH6R8D	CCTO-4R7	CNO547	10TCC-V47
C9	6.8 NPO 10%		NPO-DI 6.8	DTZ-6R8	CZ801CH6R8D	CCTO-6R8	CNO568	10TCC-V68
C10	6.8 NPO 10%		NPO-DI 6.8	DTZ-6R8	CZ801CH6R8D	CCTO-6R8	CNO568	10TCC-V68
C11	.1 200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C12	.1 200V		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C13	47 NPO		NPO-DI 47	DTZ-47	CX801CG470K	CCTO-470	CNO447	10TCC-Q47
C14	4.7 NPO		NPO-DI 4.7	DTZ-47	CX801CG470K	CCTO-470	CNO447	10TCC-Q47
C15	47 NPO		NPO-DI 47	DTZ-47	CX801CG470K	CCTO-470	CNO447	10TCC-Q47
C16	47 NPO		NPO-DI 47	DTZ-47	CX801CG470K	CCTO-470	CNO447	10TCC-Q47
C17	220		DI-220	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22
C18	3 5%		NPO-DI 3					10TCC-V30
C19	82 NPO 5%		DI-1000	DD-102	JBS801YP102K	CCTO-820	CNO482	10TCC-Q82
C20	.001		DI-1000	DD-102	JBS801YP102K	CCTO-820	CNO482	10TCC-Q82
C21	5.6 NPO 5%		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C22	.01		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C23	18 N220 5%		TTD-05	CK-503	HCZ3ROXR503P	CCD-222	GP222	10TS-D22
C24	.05 50V		DI-1500	DD-152	DMF4P22	CCD-152	GP215	10TS-D15
C25	.0022		DI-1500	DD-152	DMF4P22	CCD-152	GP215	10TS-D15
C26	.0015		DI-1500	DD-152	DMF4P22	CCD-152	GP215	10TS-D15
C27	.01 1KV		DI-10000	DD-103	BYX801ZU103M	CCD-103	GP110	10TS-S10
C28	.22 200V		DBE4P22		DMF4P22	4DP-5-224	PVC4022	4PS-P22
C29	220		DI-220	DD-221	JBZ601YP221K	CCD-221	GP322	10TS-T22
C30	.0047		DI-4700	DD-472	JBZ601YP472K	CCD-472	GP247	10TS-D47
C31	330 10%		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C32	.0012 10%		DI-1200	DD-122G	JBS801YP122K	CCD-122	GP212	10TS-D12
C33	.039 800V 10%		DBE6S39		DPMS6S39	6DP-3-393	PVC6139	6PS-S39
C34	.01 10%		DBE6S1		DMF6S1	6DP-1-103	PVC611	6PS-S10
C35	.039 1KV 10%		BE10S39					
C36	.001 1KV		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C37	.0068 5%		DBE6S47		CD30F682J500	DM-30-682	SX268	MS-268
C38	.047 600V		DBE6S22		DMF6S47	6DP-3-473	PVC6147	6PS-S47
C39	.022 800V 10%		DI-330	DD-331	JBZ601YP331K	CCD-331	GP331	10TS-T33
C40	330 10%		DI-270	DD-271	JBZ601YP271K	CCD-271	GP327	10TS-T27
C41	270 10%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C42	.001		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C43	.0012 5%		DBE2P1		DMF2P1	2DP-3-104	PVC201	2PS-P10
C44	.1 200V		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C45	560 10%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C46	.0033 10%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C47	.0068 5%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C48	.0039 5%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C49	.0047		DI-4700	DD-472	JBZ601YP472K	CCD-472	GP247	10TS-D47
C50	.047 600V		DBE6S47		DMF6S47	6DP-3-473	PVC6147	6PS-S47
C51	.027 1KV 10%		BE10S27					
C52	33 N1500 5KV 10%		DI-820	DD-821	JBZ601YP821K	CCD-821	GP382	10TS-T82
C53	900 N1500 1KV 10%		DI-820	DD-821	JBZ601YP821K	CCD-821	GP382	10TS-T82
C54	130 N1500 4KV 10%		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C55	820		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C56	820		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C57	.001 1KV		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C58	.22 800V		DI-1000	DD-102	JBS801YP102K	CCD-102	GP210	10TS-D10
C59	.001 1KV		DI-560	DD-561	JBZ601YP561K	CCD-561	GP356	10TS-T56
C60	560 10%		DI-560	DD-561	JBZ601YP561K	CCD-561	GP356	10TS-T56

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

① Models with Picture Tube #13CP4 use 82pf Capacitor. Models with Picture Tube #13EP4 use 39pf Capacitor.
Models with Picture Tube #15JP4 use 33pf Capacitor.

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.
R1A B C R2	Volume/Switch Contrast Brightness Vertical Hold	1meg 25K 100K 1.2meg	75C126-1				
			75C100-8	F1-1.5meg, SNK108	A47-1.5meg-S, RN-3 or (NP-15meg-S, NML-A-300)	B11-138, TM4 or (BU11, CF18, SS8) *	RUI55L, SL37, SN1375 or (UAI55L, SN1375)
R3 R4	Vertical Linearity Height	500K 5meg	75C101-17 75C101-18	T-500K		X201R504B	MTC55L1

* SNAPTRON™

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	ADMIRAL PART No.			IRC PART No.	WORKMAN PART No.	ADMIRAL PART No.
R46	Thermistor (1meg Cold)		FS-313	61C41-2	R65	100Ω 5W	PW5-100	5W-SQ-100	61C20-76
R64	5.5Ω, Fusible FR-5.6		F-5.6	61B48-1	R66	250Ω 5W	PW5-250	5W-SQ-250	61C20-82

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				
		ADMIRAL PART No.	MEISSNER Part No.	MERIT PART No.	MILLER PART No.	WORKMAN PART No.
L1	47.25MC Trap	72C308-1				
L2	1st Video IF	72C308-1				
L3	2nd Video IF	72C308-2				
L4	3rd Video IF	72C310-1				
L5	RF Choke (5.6uh)	73C45-243	19-1008	BC-565	74F566AP	T620
L6	RF Choke (28uh)	73C31-3		BC-677	72F275AP	T984
L7	Peaking (470uh)	73C55-30		TV-207 *	6138 *	T352
L8	Peaking (780uh)	73D5-46 ①	19-2031 *	BC-670	72F124AP	T328 *
L9	Peaking (120uh)	73D55-26	19-3125			T342
L10	Sound Take-off/ 4.5MC Trap	72C185-7				
L11	Sound Interstage	72C301-3				
L12	Quadrature	72C132-60	20-1051	TV-246	7117-A	TA-291
L13	RF Choke (1.8uh)	73C31-11	19-1001	BC-582	74F186AP	T810
L14	RF Choke (44 turns)	73C37-17				

① Wound on 3900Ω Resistor.

* Shunt with 3900Ω Resistor.

COILS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					
		ADMIRAL PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	THORDARSON MEISSNER PART No.	TRIAD PART No.
L15	Horiz. Lock (Hold)	94D17-19					

* TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ADMIRAL PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	Vertical Output	79D123-1 (79C123-1)					
T2	Yoke (Horiz. 24.5mh) 110° (Vert. 13mh) Alternate Yoke	750C305-40 (94D302-4) 700C814-1 79D117-3	MDF-142	DY-61AT	Y-88	YT-102-2	
T3	Horiz. Output						

* COMPONENT CONNECTION DATA

ORIGINAL → REPLACEMENT ↓	HV TRANSFORMER	VERTICAL OUTPUT	YOKE	YOKE PLUG
	Original Connections	Original Connections	Original Connections	1 2 3 4 5 6 7 8 TO YOKE TERMINAL
MERIT			1 2 3 4 5 6 7 8 † ▲	
STANCOR			7 3 2 4 5 6 1 8 †	
THORDARSON			1 2 3 4 5 6 7 8 † ▲	
TRIAD			1 2 3 4 5 6 7 8 † ▲	

† Remove Yoke Plug.

‡ Remove two 150Ω resistors and 56pf capacitor.

▲ Remove two 150Ω resistors and 82pf capacitor.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRL	SEC.	ADMIRAL PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T4	3100Ω	3-4Ω	79C124-1 (79D124-1)					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		ADMIRAL PART No.	JENSEN PART No.	QUAM PART No.	
SP1	3" PM 3-4Ω	78C-201-2	P3W3	30A05	

MISCELLANEOUS

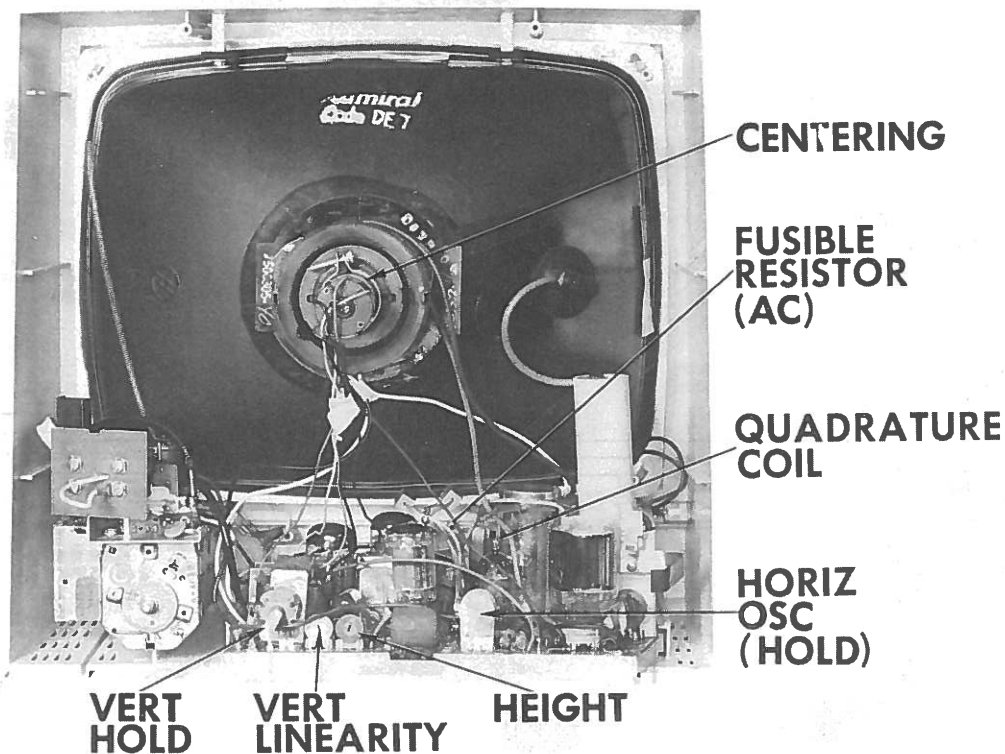
ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M1	VHF Tuner	94E281-7	
	VHF Tuner	94C281-7	
	VHF Tuner	94D281-7	
M2	UHF Tuner	94E296-4	
	UHF Tuner	94C296-4N	
	UHF Tuner	94D296-4	
M3	VHF Antenna	69B318-5	
	VHF Antenna	69C316-5	
M4	UHF Antenna	69C304-2	

Models PN1304/1310/1319/1327/1501/1510/1519/1527,
JFD Replacement TA509.
Models PK1360/1369/1377/1560/1569/1577,
JFD Replacement TA544.
7A-509

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

		MODEL	PN1304	PN1310	PN1319	PN1327	PN1501	PN1510	PN1519	PN1527	PK1360	PK1369	PK1377	PK1560	PK1569	PK1577
ITEM	PART NO.															
Cabinet Front, Beige	34E307-4	X														
Cabinet Front, Black	799A2483		X													
Cabinet Front, White	799A2484			X												
Cabinet Front, Walnut	799A2482				X											
Cabinet Front, Tan	34E308-6					X										
Cabinet Front, Black	799A2486						X									
Cabinet Front, White	799A2487							X								
Cabinet Front, Black	799A2485								X							
Cabinet Front	799A2373									X						
Cabinet Front	799A2372										X					
Cabinet Front	799A2371											X				
Cabinet Front	799A2370												X			
Cabinet Front	799A2369													X		
Cabinet Front	700A2368														X	
Cabinet Back, Beige	799A2488	X														
Cabinet Back, Black	799A2489		X		X											
Cabinet Back, White	799A2490			X												
Cabinet Back, Tan	799A2491					X										
Cabinet Back, Black	799A2492						X		X							
Cabinet Back, White	799A2493							X								
Cabinet Back, Black	33E910-1									X						
Cabinet Back, White	33E910-2										X					
Cabinet Back, Brown	33E910-3											X				
Cabinet Back, Black	33E908-1												X			
Cabinet Back, White	33E908-2													X		
Cabinet Back, Brown	33E908-3														X	
Knob-VHF Channel Selector	33C920-6	X														
Knob-VHF Channel Selector	33C920-3		X	X	X											
Knob-VHF Channel Selector	33C920-4					X										
Knob-VHF Channel Selector	33C920-1						X	X	X							
Knob-VHF/UHF Tuning	33C930-7	X	X	X	X											
Knob-VHF/UHF Tuning	33C930-3					X	X	X	X							
Knob-UHF Indicator	33C919-5	X	X	X	X											
Knob-UHF Indicator	33C919-3					X	X	X	X							
Knob-Preference, Volume, Vertical, Brightness	33C918-2	X	X	X	X											
Knob-Preference, Volume, Vertical, Brightness	33B918-7					X										
Knob-Preference, Volume, Vertical, Brightness	33C918-1						X	X	X							
Knob-VHF Channel Selector	33B920-2									X	X	X				
Knob-VHF Channel Selector	33B920-1												X	X	X	
Knob-Fine Tuning	33B930-4									X	X	X				
Knob-Fine Tuning	33B930-3												X	X	X	
Knob-UHF Indicator	33B919-4									X	X	X				
Knob-UHF Indicator	33B919-3												X	X	X	
Knob-Preference, Volume, Vertical, Brightness	33B918-2									X	X	X				
Knob-Preference, Volume, Vertical, Brightness	33B918-1												X	X	X	



CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Tune in a TV station and set all controls for normal operation. Adjust Horizontal Lock (Hold) to a point where it is virtually impossible to lose horizontal sync while switching from channel to channel.

DISASSEMBLY INSTRUCTIONS

TV CHASSIS REMOVAL

1. Remove 2 screws holding back cover and remove back cover. On some models it may be necessary to disconnect antenna leads. Remove all knobs.
2. Disconnect yoke pins, high voltage anode lead, picture tube socket, speaker leads, and ground wire.
3. Remove 1 screw holding chassis, tuner, and controls. Lift out chassis and tuner.

NOTE: Most components may be serviced without removing chassis.

PICTURE TUBE REMOVAL

1. Follow "Chassis Removal" procedure. Lay set face down on a soft protective surface.
2. Remove 1 screw holding picture retainer wire and lift out picture tube. Do not lift out by the neck of the tube.