

CABINET—REAR VIEW

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

AGC Control must be properly adjusted before proceeding with these adjustments.

Turn set on and tune in a TV station, preferably with a test pattern. Set Contrast and Brightness Controls for normal operation.

Connect a short clip lead from point Ⓢ to chassis. Connect a .22mfd

400V Capacitor from point Ⓢ to chassis. With picture in Vertical sync set Horiz. Range Control (R9) to a point where picture is almost stable horizontally. Remove .22mfd Capacitor from point Ⓢ.

Adjust Horizontal Lock (B1) until picture is stable horizontally. Remove short clip lead from point Ⓢ.

DISASSEMBLY INSTRUCTIONS

CHASSIS, MASK, & PICTURE TUBE ASSEMBLY REMOVAL

1. Remove rear cover (7 clips); disconnect antenna lead.
2. Remove 5 bolts holding chassis from bottom.

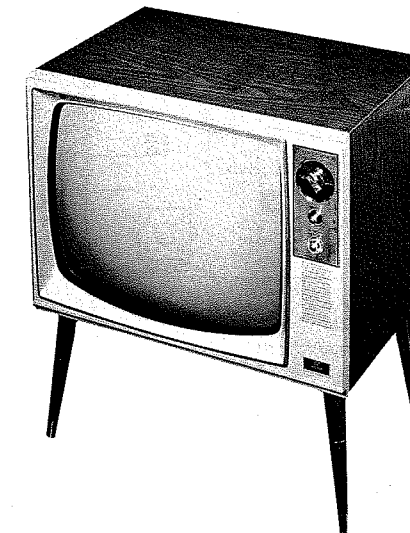
3. Remove 4 screws (inside, front) holding mask assembly (2 at top, and 1 on each side).
4. Remove assembly out front of cabinet.

SET 581 FOLDER 1

PHOTOFACT® Folder

with CIRCUITRACE®

ADMIRAL CHASSIS 20A8, 20B8, 20UA8, 20UA8M, 20UB8



ADMIRAL CHASSIS 20A8, 20B8, 20UA8, 20UA8M, 20UB8

MODEL C321

TRADE NAME	ADMIRAL	MODELS	Chassis	VHF Tuner	UHF Tuner
		C311/312/313/321/322/323/329/331/332/333, L311/312/313/341/342/343/351/352/353/359 ...	20A8	94E201-14	
		C311/312/313/321/322/323/329/331/332/333, L311/312/313/341/342/343/351/352/353/359 ...	20UA8 *	94E202-15 ...	94D162-13
		L361/362/382/389/391	20B8	94E201-16	
		L361/362/382/389/391	20UB8	94E202-16 ...	94D162-12

Chassis Runs 10, 11, 12, 13

* Suffix letter "M" after chassis number (as 20UA8M) indicates separate Tuning Control panel used. UHF Tuner 94D162-12 and VHF Tuner 94E202-15 used with this chassis.

MANUFACTURER	Admiral Sales Corp., Service Division, 903 Morrissey Drive, P.O. Box 845, Bloomington, Illinois
TYPE SET	Television Receiver
TUBES	VHF - Sixteen, UHF - Seventeen
POWER SUPPLY	110-120 Volts AC, 60 Cycle
RATING	175 Watts, 1.6 Amp. @ 117 Volts AC
TUNING RANGE	Channels 2 thru 13 VHF, 14 thru 83 UHF, Video IF 45.75MC, Sound IF 41.25MC (Intercarrier)

SERVICING IN THE FIELD

SAFETY GLASS

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

FUSE DEVICE

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

TUNER OSCILLATOR ADJUSTMENT

To touch up the VHF Oscillator, remove Channel Selector knob.

AGC

The AGC may be varied by means of an AGC Control. (For location, see "Tube Placement Chart".)

FOCUS

The focus may be varied by connecting the lead from pin 6 of the picture tube to various voltage points. (For location, see photo "Cabinet - Rear View".)

SYNC STABILITY

Sync stability may be varied by means of a Picture Guard

Control. (For location, see "Tube Placement Chart".)

Adjust Horizontal Lock, AGC, and Vertical Hold for normal operation.

Set Picture Guard Control for good sync stability on all channels. (If this control is set too far clockwise, picture instability may result when strong channel signals are received.)

HORIZONTAL OSCILLATOR FIELD ADJUSTMENT

The Horizontal Lock (Stabilizer) Coil Slug is used for the Horizontal Hold.

WIDTH

The width may be varied by adjusting a metallic sleeve, located between the yoke and the picture tube neck, in or out of the yoke.

CENTERING

Centering is accomplished by 2 magnetic rings, located behind the yoke, on the neck of the picture tube.

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

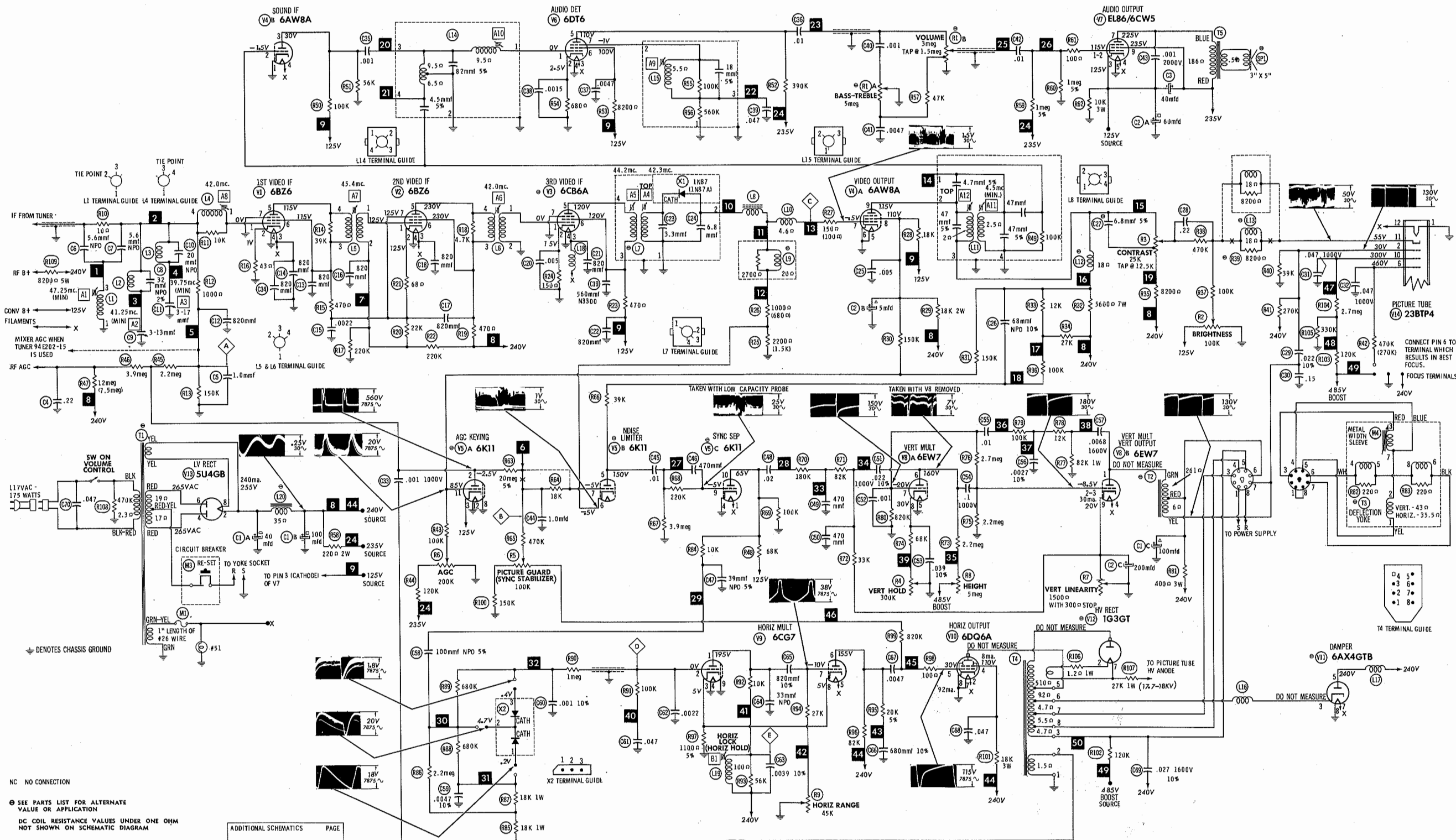


The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of LA399

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ADMIRAL CHASSIS 20A8, 20B8, 20UA8, 20UA8M, 20UB8

SET 581 FOLDER 1

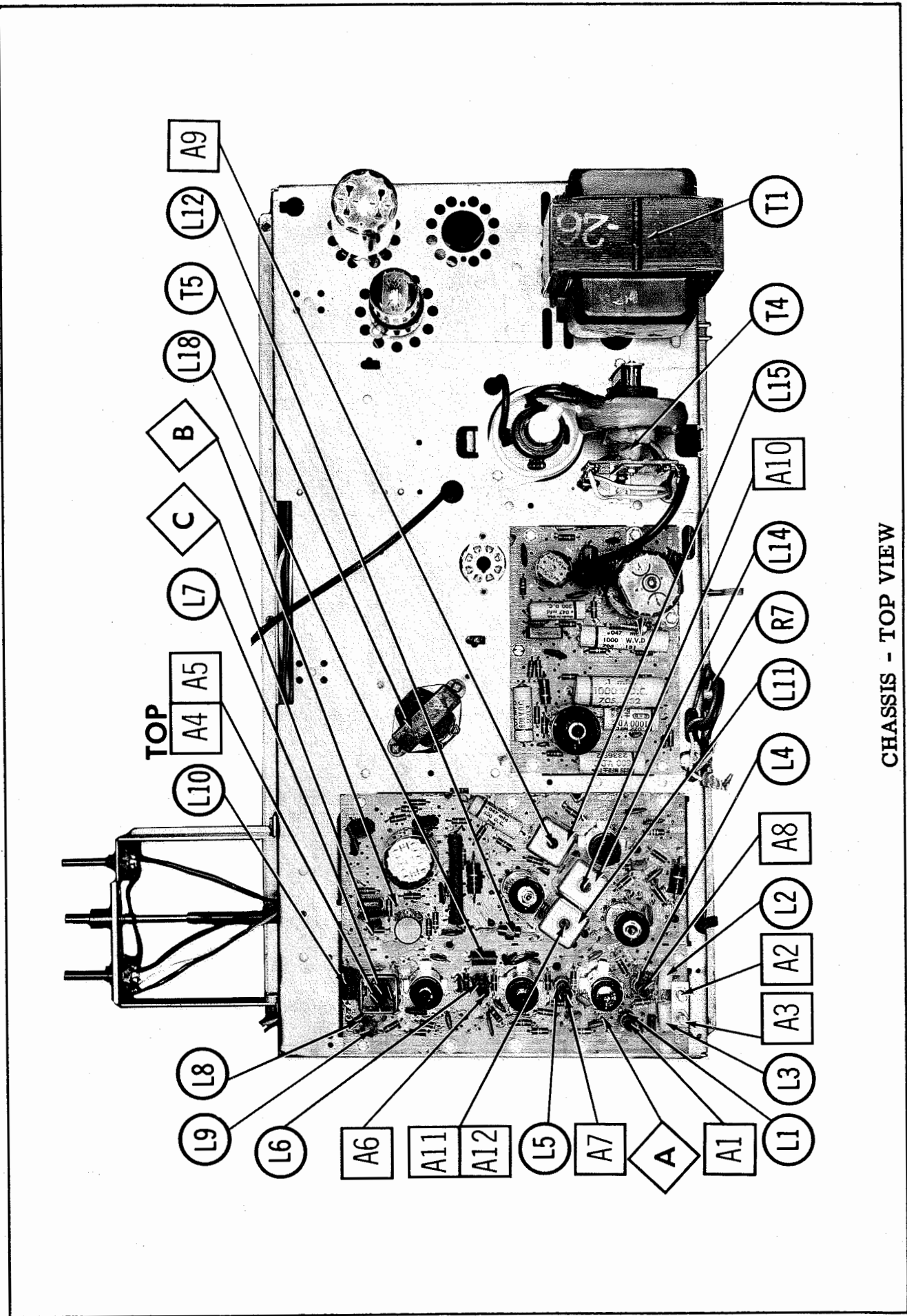


- WAVEFORMS TAKEN WITH CONTROLS SET TO PRODUCE 50 VOLTS PEAK-TO-PEAK SIGNAL AT PICTURE TUBE.
1. DC voltage measurements taken with vacuum tube voltmeter; AC voltage measured at 1000 ohms per volt.
 2. Pin numbers are counted in clockwise direction on bottom of socket.
 3. Measured values are from socket 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.

A PHOTOFAC STANDARD NOTATION SCHEMATIC with **CIRCUITRACS**
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ADMIRAL CHASSIS 20A8, 20B8,
20UA8, 20UB8, 20UB8

FOLDER 1



ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

The High Voltage lead should be securely taped and kept away from the chassis.
 Allow a 20 minute warm-up period for the receiver and test equipment.
 Suggested Alignment Tools: A1, A4 thru A12 .. GENERAL CEMENT #8282, 8806, 8806L, 9295, 9440
 WALSCO #2526, 2543, 2544, 2545
 A2, A3 GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2523, 2523, 2531, 2532, 2534, 2537, 2538
 Mixer Plate Coil ..GENERAL CEMENT #9296, 9297
 WALSCO #2546, 2547

VIDEO IF ALIGNMENT

Connect the negative lead of a 3 volt bias supply to point A. Positive to chassis.
 Connect the negative lead of a 9 volt bias supply to point B. Positive to chassis.
 Disable oscillator grid by removing a pin of a test tube.
 Use only enough generator output to provide a usable indication.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1.	High side to ungrounded tube shield over Mixer-Osc. Low side to chassis.	47.25MC	Any non-interfering channel	DC probe thru 47K to point C. Common to chassis.	A1	Adjust for MINIMUM deflection.
2.	"	41.25MC	"	"	A2	"
3.	"	39.75MC	"	"	A3	"
4.	"	42.3MC	"	"	A4	Adjust for maximum deflection.
5.	"	44.2MC	"	"	A5	"
6.	"	42.0MC	"	"	A6, A8	"
7.	"	45.4MC	"	"	A7 and Mixer Plate Coil	Adjust for maximum deflection. Repeat steps 4 and 5.

OVERALL VIDEO IF RESPONSE CHECK

Use only enough sweep generator output to provide a usable pattern on scope.
 Connect bias as under "Video IF Alignment".
 Set Contrast Control fully clockwise and Picture Guard Control fully counterclockwise.
 Connect 270mmf Capacitor across scope leads.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8.	High side to ungrounded tube shield over Mixer-Osc. Low side to chassis.	43MC (10MC Sweep)	39.75MC	Any non-interfering channel	Vert. Amp. thru 47K to point D. Low side to chassis.		Check for response curve similar to Fig. 1 with markers as shown. If necessary, re-touch Mixer Plate Coil to position 45.75MC marker and A7 to position 45.4MC marker and to correct shape of curve.

SOUND IF ALIGNMENT

Tune in the strongest TV station available in the area. Adjust the set for normal operation.
 Adjust A9 slowly counterclockwise until a buzz is heard in the sound, then turn clockwise for maximum undistorted sound. There may be two points approximately 1/2 turn apart at which the sound is loud. Set slug at center range of second loud point as slug is turned clockwise.
 Reduce the signal at the antenna terminal (by using an adjustable attenuator or by disconnecting the antenna) until a strong hiss is heard in the sound.
 Carefully adjust A10 and A11 for maximum undistorted sound with MINIMUM hiss. If the hiss disappears during alignment, reduce the signal more until the hiss returns and readjust A10 and A11. If sound is unsatisfactory, repeat the procedure.

4.5MC TRAP ADJUSTMENT

Adjust A11 for MINIMUM 4.5MC beat pattern in the picture (4.5MC beat interference appears as a very fine crosshatch pattern on the screen).

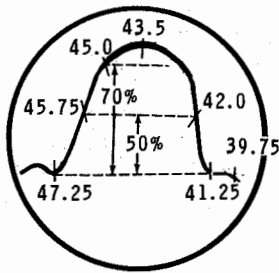
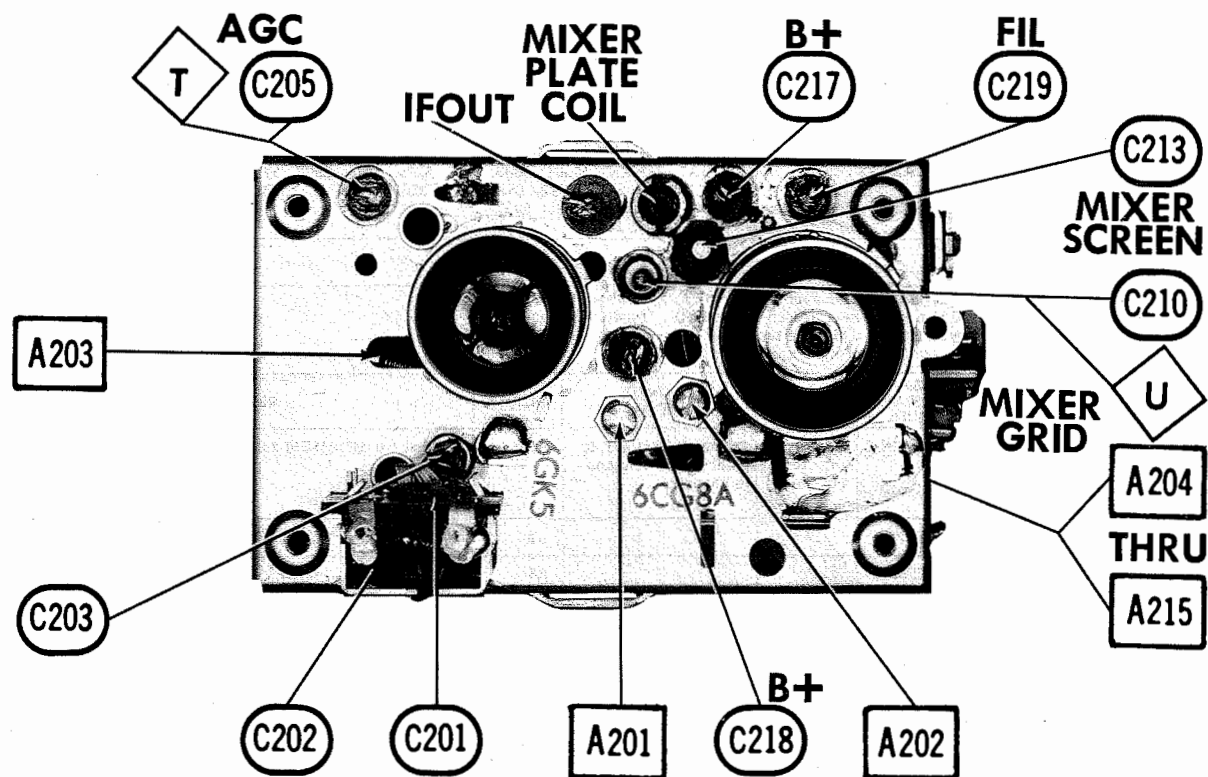


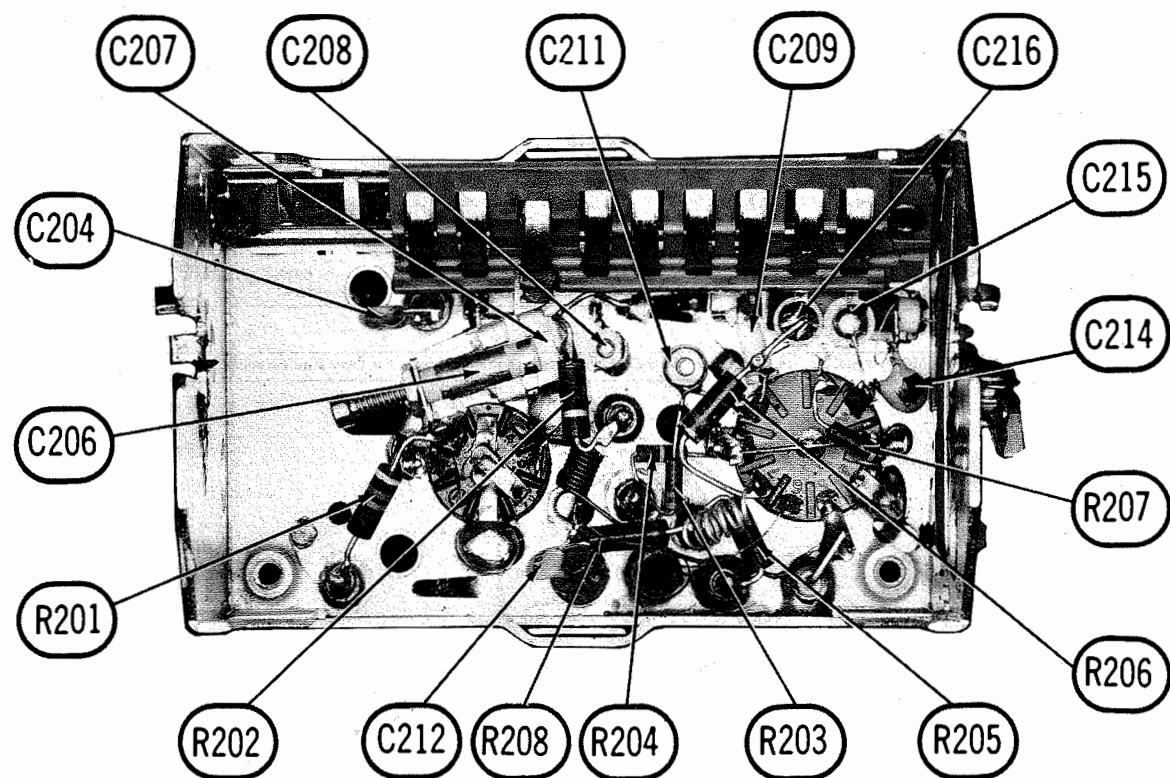
FIG 1

ADMIRAL CHASSIS 20A8, 20B8,
 20UA8, 20UA8M, 20UB8

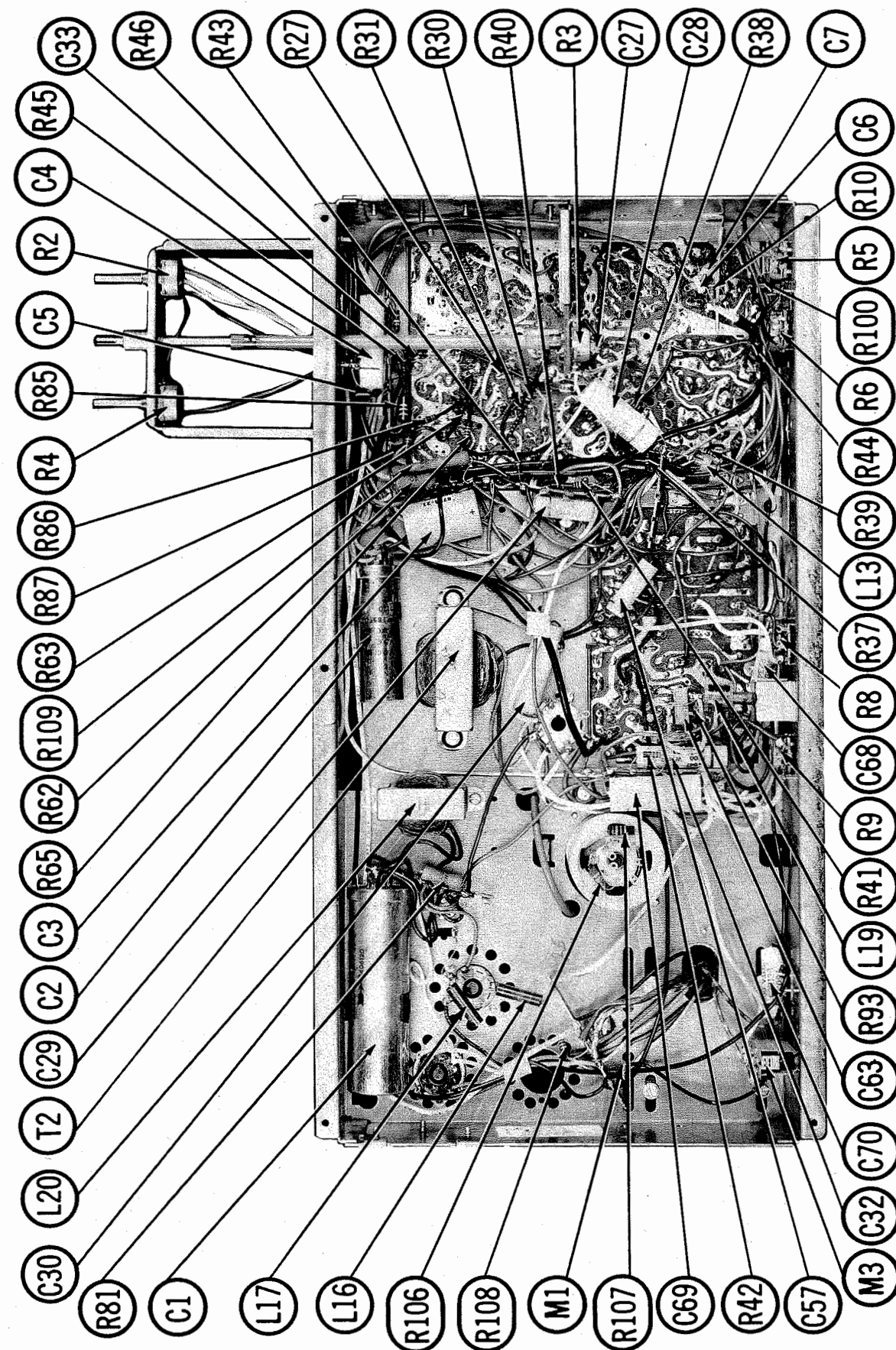
FOLDER 1



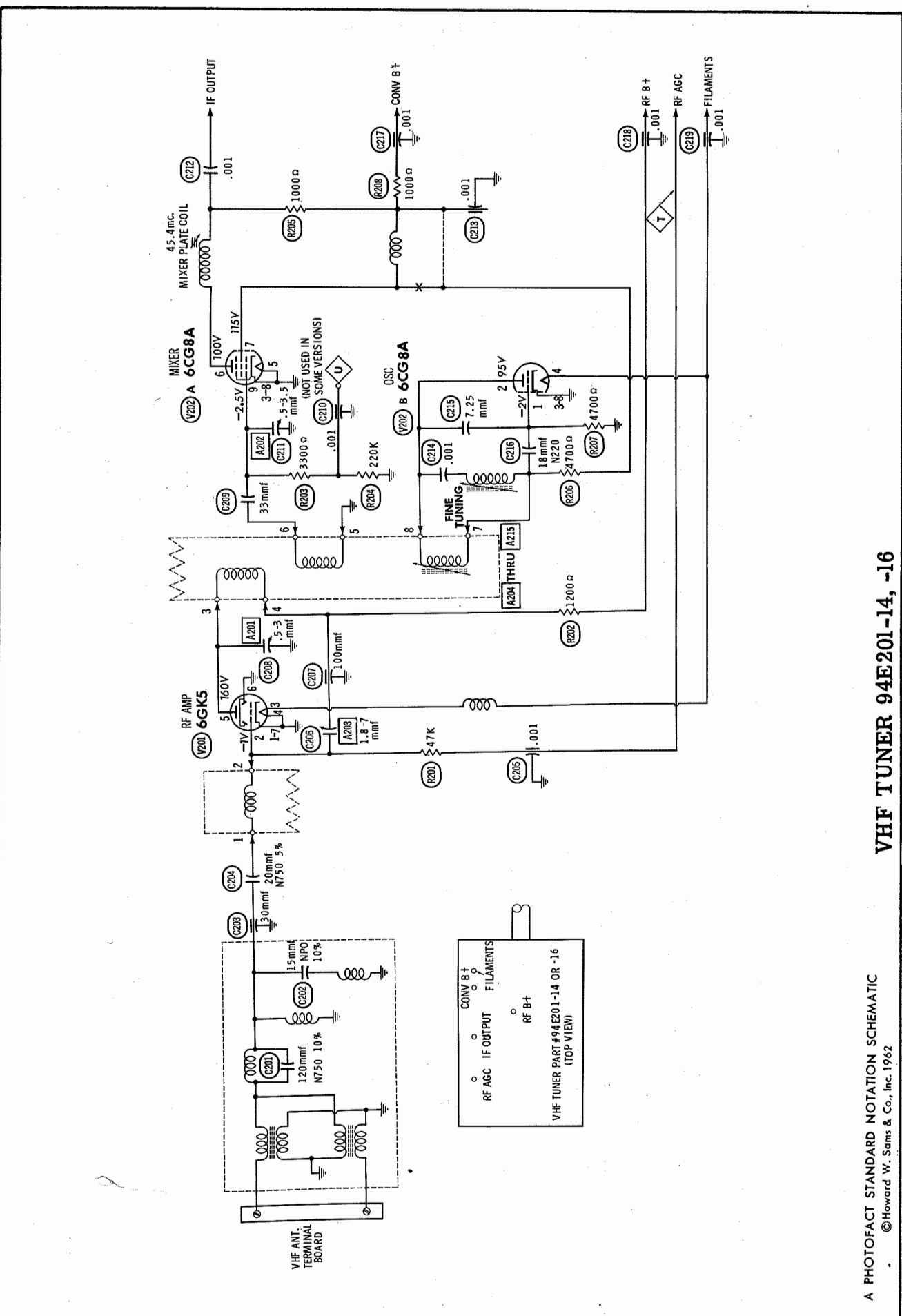
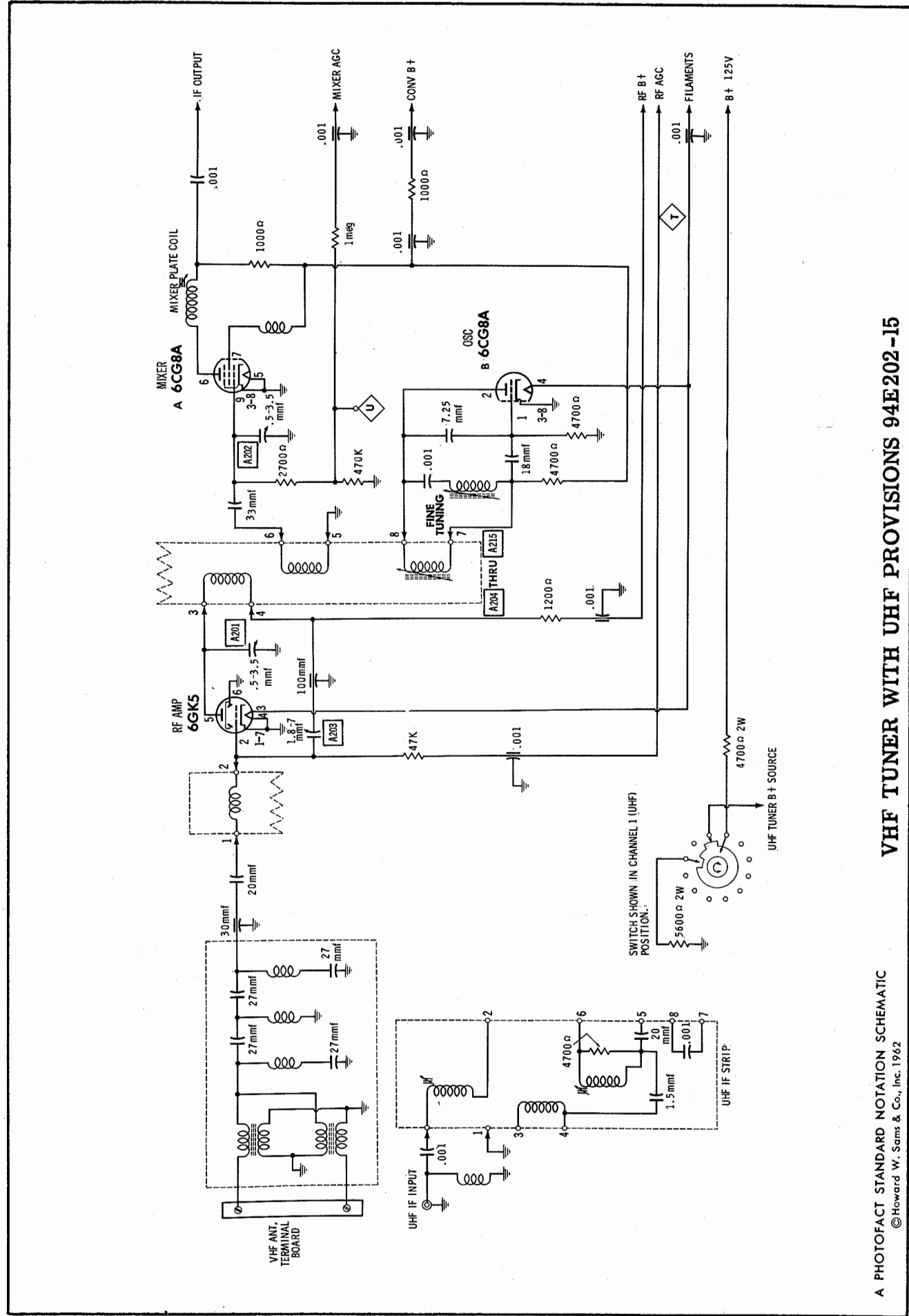
VHF TUNER 94E201-14 - TOP VIEW



VHF TUNER 94E201-14 - BOTTOM VIEW



ADMIRAL CHASSIS 20A8, 20B8,
20UA8, 20UA8M, 20UB8
WEIA WOLLOE - SISSEHA



VHF TUNER ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS

The High Voltage lead should be securely taped and kept away from the chassis.
Allow a 20 minute warm-up period for the receiver and test equipment.

Suggested Alignment Tools:

A201 thru A203	GENERAL CEMENT #5000,	5003,	5014,	5015,	5016,	8276,	8290
		WALSCO #2512,	2515,	2522,	2523,	2525,	2537	
A204 thru A215	GENERAL CEMENT #5009,	8195,	8274,	8275,	8278,	8987	
		WALSCO #2531						

RF AND MIXER ALIGNMENT

Connect the negative lead of a 4 volt bias supply to point \textcircled{D} . Positive to chassis.
Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection.
Use only enough sweep generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.
Turn Contrast fully clockwise.

Turn Contrast fully clockwise.								
	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. to point ⓪ 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 curve similar to Fig. 201. If markers fall below 70% on any channel, make compromise adjustment of A201 and A202 with channel switch set to that channel. Check to see that other channels 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			

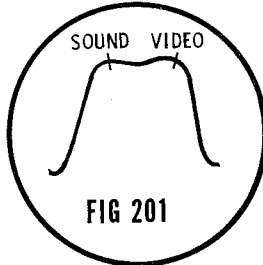


FIG 201

OSCILLATOR ALIGNMENT

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Set the Fine Tuning to the center of its range.
Use only enough sweep generator output to provide a usable pattern on scope.
Use 10MC sweep unless otherwise noted.
Connect variable bias to IF AGC line. Adjust bias to obtain response curve which shows no indication of overloading.

Connect variable bias to 1F AGC line. Adjust bias to obtain response on 10K across Video Det. load.							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
3. Two 120Ω Carbon Resistors	Across antenna terminals with 120Ω in each lead.	213MC	211. 25MC 215. 75MC	13	Vert. Amp. thru 10K across Video Det. load.	A204	Adjust to place sound marker in trap notch as in Fig. 202. Video marker should fall at 50%.
		207MC	205. 25MC 209. 75MC	12		A205	
		201MC	199. 25MC 203. 75MC	11		A206	
		195MC	193. 25MC 197. 75MC	10		A207	
		189MC	187. 25MC 191. 75MC	9		A208	
		183MC	181. 25MC 185. 75MC	8		A209	
		177MC	175. 25MC 179. 75MC	7		A210	
		85MC	83. 25MC 87. 75MC	6		A211	
		79MC	77. 25MC 81. 75MC	5		A212	
		69MC	67. 25MC 71. 75MC	4		A213	
		63MC	61. 25MC 65. 75MC	3		A214	
		57MC	55. 25MC 59. 75MC	2		A215	

VIDEO

50%

SOUND

FIG 202

VHF TUNER ALIGNMENT INSTRUCTIONS (cont)

UHF IF 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.

	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
4.	Across UHF antenna terminals with 120Ω in each lead. Loosely couple a second generator to the IF input cable of Receiver. Set to 45.75MC.	707MC	705.25MC	UHF 53	Vert. Amp. thru 10K to Video Detector Load. Low side to chassis.	A216	Tune UHF Tuner until markers beat or coincide. Adjust A216 for maximum gain and symmetry of response similar to Fig. 202.

UHF TUNER ALIGNMENT INSTRUCTIONS

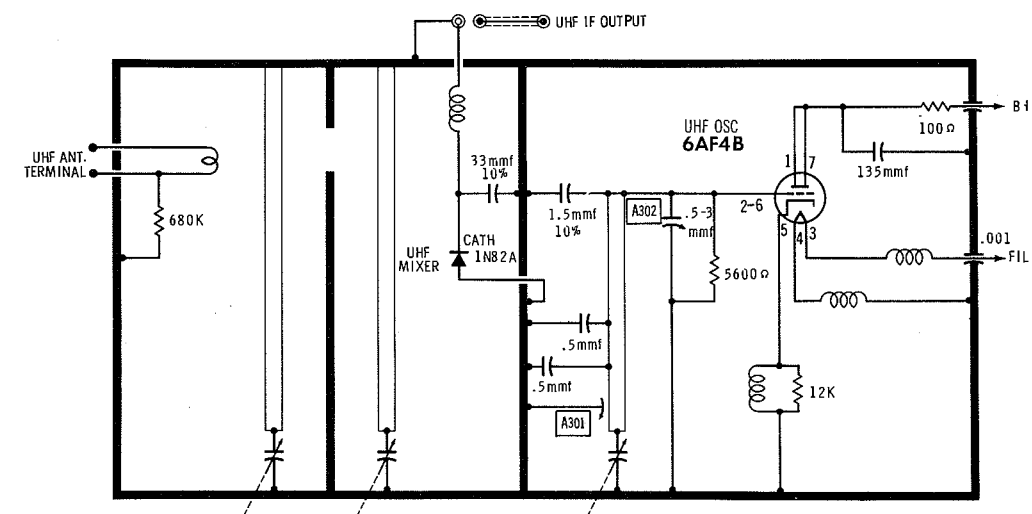
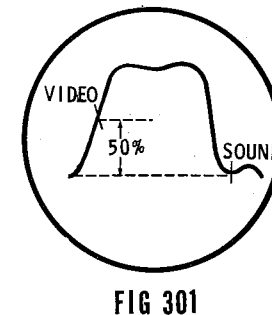
Suggested Alignment Tools: A301 ... GENERAL CEMENT #8721, 8722 ... WALSCO #2519

Connect the synchronized sweep voltage from the sweep generator to the horizontal input of the oscilloscope for horizontal deflection. Use only enough sweep generator output to provide a usable pattern on scope.

Use 10MC sweep unless otherwise noted.

Connect variable bias to IF AGC line. 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 UHF antenna terminals with 120Ω in each lead. Loosely couple marker generator to UHF antenna terminals	887MC	885.25MC 889.75MC	UHF 83	Vert. Amp. thru 10K to Video Detector Load. Low side to chassis.	A301	Adjust for maximum gain and symmetry of response similar to Fig. 301 with markers as shown.
2.	"	473MC	471.25MC 475.75MC	14	"	A302	Adjust for maximum gain and symmetry of response similar to Fig. 301 with markers as shown. Adjust by bending tab. Repeat steps 1 and 2.



A PHOTOFACIT STANDARD NOTATION SCHEMATIC
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UHF TUNER 94D162-12/13

TV PARTS LIST AND DESCRIPTIONS (Continued)

CABINETS & CABINET PARTS (cont)

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Cabinet	35E883-1	Walnut, Models L351, LU351
Cabinet	35E883-2	Mahogany, Models L352, LU352
Cabinet	35E883-3	Blond, Models L353, LU353
Cabinet	35E889-9	Fruitwood, Models L359, LU359
Cabinet	35E877-1	Walnut, Models L361, LU361
Cabinet	35E877-2	Mahogany, Models L362, LU362
Cabinet	35E886-2	Mahogany, Models L362, LU362
Cabinet	35E886-9	Fruitwood, Models L369, LU369
Cabinet	35E879-1	Walnut, Models L391, LU391

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. 8484 (Flat) or 8484 (Round) - 4 Conductor 8485 (Round) - 5 Conductor 8488 (Round) - 8 Conductor

VHF TUNER PARTS LIST AND DESCRIPTIONS

94E201-14

TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V201	RF Amp.	6GK5	V202	Mixer - Oac.	6CG8A			

FIXED 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.
C201	120 N750 10%		NPO-DI 15	TCN-120	C10T12U	CCTN-121	CN7-312	10TCU-T12
C202	15 NPO 10%			DTZ-15	C10Q15C	CCTO-150	CNO-415	10TCC-Q15
C203								
C204	20 N750 5%			DTN-20	C10Q2U	CN7-420	CT280A	10TCU-Q20
C205	.001		EF-001	MFT-1000		CCF-102		
C206	1.8-7			829-7				
C207	100							
C208	.5-3.5			829-3				
C209	33		NPO-SI 33	DTZ-33	C10Q83C	CCTO-330	CNO-433	10TCC-Q33
C210	.001		EF-001	MFT-1000		CCF-102	CT280A	
C211	.5-3.5			829-3				
C212	.001		DI-1000	DD-102	BYA10DI	CCD-102	GP210	10TS-D10
C213	.001		EF-001	MFT-1000		CCF-102	CT280A	
C214	.001		DI-1000	DD-102	BYA10DI	CCD-102	GP210	10TS-D10
C215	7.25							
C216	18 N220							
C217	.001		EF-001	MFT-1000		CCF-102	CT280A	10TCR-Q18
C218	.001		EF-001	MFT-1000		CCF-102	CT280A	
C219	.001		EF-001	MFT-1000		CCF-102	CT280A	

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

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R201	47K				R205	1000Ω			
R202	1200Ω				R206	4700Ω			
R203	3300Ω				R207	4700Ω			
R204	220K				R208	1000Ω			

TV PARTS LIST AND DESCRIPTIONS

TUBES

GENERAL ELECTRIC			RAYTHEON			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	1st Video IF Amp.	6BZ6	V7	Audio Output	EL86/6CW5			
V2	2nd Video IF Amp.	6BZ6	V8	Vert. Mult. -				
V3	3rd Video IF Amp.	6CB6A (6DK8) †	V9	Vert. Output	6EW7			
V4	Video Output -		V10	Horiz. Mult.	6CG7			
V5	Sound IF Amp.	6AW8A	V11	Horiz. Output	6DQ8A			
	AGC Keying - Sync Sep. -		V12	Damper	6AX4GTB (8DE4) *			
	Noise Limiter	6K11 (6Q11) *	V13	RV Rectifier	1G3GT (1K3) *			
V6	Audio Detector	6DT6		LV Rectifier	5U4GB			

† Used in some versions. (Replace with original type.)

* Alternate

PICTURE TUBE

REPLACEMENT DATA						NOTES
ITEM No.	ADMIRAL PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
V14	23BT4					

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES		NOTES
			RCA PART No.	SARKES TARZIAN PART No.	RAYTHEON PART No.		
X1		1N87A			1N87A		Video Detector (1N87 Alternate) Horiz. AFC
X2		93B5-6					

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.	PYRAMID PART No.	SPRAGUE PART No.
CLA	40	350	67D15-344	AFH3-29-87	D0042	XC4-42	FP333.86	TMQ-4304	TVLS-3646.5*
B	100	350							
C	100	350							
C2A	60	200	67D15-351	AFH3-84-65	C0636	XC3-5.1	WP319.6	TMD-2280	TVLS-3489*
B	5	200			BR200-150		TC3501	TD-200-150	
C	200	50							
C3	40	200	67D4-21 ①	FRS1580	BR40-250	QT1-14	TC58	TD-40-250	TVA-1511

① Alternate Part Number 67A4-21.

* 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.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	.22 200V		P288N-22		CUB2P22	ZDP-4-224	GEM-2022	2TM-P22
C5	1.0 600V		P688N-1.0				GEM-61	8TM-M1
C6	5.6 NPO							10TCC-V56
C7	5.6 NPO							10TCC-V56
C8	32 NPO 2%							10TCC-Q33
C9	3-13							
C10	20 NPO 2½%	#66A88-7	NPO-DI-33	DTZ-33	C10Q33C	CCTO-330	CNO-433	
C11	3-17	#66A88-11	NPO-DI-20	DTZ-20	C10Q20C	CCTO-200	CNO-422	10TCC-Q20
C12	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C13	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C14	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C15	.0022		BPD-0022	DD-222	BYA10D22	CCD-222	B-222	5HK-D22
C16	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C17	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C18	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C19	560 N3800	#65D6-131	BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C20	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C21	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C22	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C23	3.3		DI-3.3	DD-3R3	L10V33		GP533	10TS-V33
C24	6.8		DI-6.8	DD-6R8	L10V68		GP568	10TS-V68
C25	.005		BPD-005	DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C26	6.8 NPO 10%		NPO-DI-68	DTZ-68	C10Q68C	CCTO-680	CNO-468	10TCC-Q68
C27	6.8 5%	(20) †	DI-6.8	DD-6R8	L10V68		GP568	10TS-V68
C28	.22 400V		P488N-22		CUB4P22	4DP-5-224	GEM-4022	4TM-P22
C29	.022 600V 10%		P688N-022		CUB6S22	6DP-2-223	GEM-6122	6TM-S22
C30	.15 600V		P688N-15		DPMS6P15	6DP-5-154	GEM-6015	6TM-P10
C31	.047 1000V		P1088N-047		CUB10S47	18DP-5-473	GEM-10147	10TM-S47
C32	.047 1000V		P1088N-047		CUB10S47	18DP-5-473	GEM-10147	10TM-S47
C33	.001 1000V		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C34	820 20%		BPD-0008	DD-821	BYA10T82	CCD-821	B-382	10TS-T82
C35	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C36	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C37	.0047		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C38	.0015		BPD-0015	DD-152	BYA10D15	CCD-152	B-215	5HK-D15
C39	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C40	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C41	.0047		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47

SET 581

FOLDER 1

PAGE 9

ADMIRAL CHASSIS 20A8, 20B8, 20UA8, 20UABM, 20UB8

FOLDER 1

PARTS LIST AND DESCRIPTIONS (Continued)

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNUELL-DUBILIER PART No.	ELMENCOPART No.	MALLORY PART No.	SPRAGUE PART No.
C42	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-810
C43	.001 2000V	20%	HYD-30-1000	DD30-102	HVB2D1	3CCD-102	2HV-210	BL-D10
C44	1.0mfd 100V		P288N-1.0		CUB3W1	1DP-5-105	GEM-21	2TM-M1
C45	.01		BPD-01	DD-103	BYA10S1	CCD-103	B-110	5HK-810
C46	470	20%	BPD-00047	DD-471	BYA10T47	CCD-471	B-347	10TS-T47
C47	39	NPO 5%	NPO-DI-39		C10Q39C	CCTO-390	CNO-439	10TCC-Q39
C48	.02		BPD-02	DD-203	BYA10S2	CCD-203	B-120	5HK-820
C49	470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347	10TS-T47
C50	470		BPD-00047	DD-471	BYA10T47	CCD-471	B-347	10TS-T47
C51	.022 1000V	10%	P1088N-022		CUB10S22	18DP-5-223	GEM-10122	10TM-822
C52	.001		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C53	.039 600V	10%	P688N-04	DD-403	CUB6S4	6DP-3-393	GEM-614	6TM-340
C54	.1 1000V		P1088N-1		CUB10P1		GEM-1001	10TM-P10
C55	.01 600V		P688N-01	DD-103	CUB6S1	6DP-2-103	GEM-611	6TM-S10
C56	.0027		DI-2700	DD-272	L10T27	CCD-272	GP227	10TS-D27
C57	.0088 1600V				CUB10D88	18DP-3-702	GEM-18288	18TM-D88
C58	100	NPO	NPO-DI-100	DD-102	C10T10C	CCTO-101	CNO-310	10TCC-T10
C59	.0047	10%	DI-4700	DD-472	L10D47	CCD-472	GP247	10TS-D47
C60	.001	10%	DI-1000	DD-102	L10D1	CCD-102	GP210	10TS-D10
C61	.047 200V		P288N-047	DD-503	CUB2847	4DP-3-473	GEM-4147	2TM-S47
C62	.0022		BPD-0022	DD-222	BYA10D22	CCD-222	GP222	5HK-D22
C63	.0039	10%	1464-3900	DD-392	1R5D39	CM-20B-392	MCB463	MS-239
C64	33	NPO	NPO-DI-33	DD-333	C10Q33C	CCTO-330	CNO-433	10TCC-Q33
C65	820	10%	1469-820	DD-821	5R5T82	CM-20B-821	MCB451	MS-382
C66	880	10%	1469-880	DD-881	5R5T88	CM-20B-881	MCJ249	MS-368
C67	.0047	20%	BPD-0047	DD-473	BYA10D47M	CCD-473	B-247	5HK-D47
C68	.047 400V		P488N-047	DD-503	CUB4847	4DP-3-473	GEM-4147	4TM-S47
C69	.027 1800V				DPM818028	18DP-5-253	GEM-1818	MD-58
C70	.047 600V		P688N-047	DD-503	CUB6847	6DP-3-473	GEM-6147	6TM-S47

† Value used in Run 13.

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

* 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.
R1A	Bass/Treble, Volume, On-Off Switch	5meg	75C45-8 ①				U42483-8
R2	Brightness	15meg Tap 100K	75D13-110	AB-38, AK-33	A47-75K-V/RB-3/16	B17-128, SKP	U40, DS-37, or UA15R, SD3500
R3	Contrast	25K	75D20-128				
R4	Vertical Hold	300K	75D13-111	AB-50, AK-33	A47-300K-S, RB-3/16	B11-131, SKP	U46, DS-37, or UA254L, SD3500
R5	Picture Guard (Sync Stab.)	100K	75D20-116	TT-40, or (AB-40, AK-1)	A47-100K-S	B11-128, TM4, or (BU1, CF13, 858)*	PTA15L, or (TA15L)
R6	AGC	200K	75D20-143	TT-48, or (BX-48)	B47-200K-S	B11-129, TM4, or (BU1, CF14, 858)*	TA184L, or (U43)
R7	Vertical Linearity	1500Ω	75B81-1	WN-152 ②	39-1500 ②	RI500L ②	
R8	Height	300Ω Stop 5meg	75D20-119	TT-87, or (AB-87, AK-19)	B47-5meg-S	HLC-5	PTA58L, or (TA58L)
R9	Horizontal Range	45K	75D20-131	TT-31, or (BX-31)	B47-50K-S	B11-123, TM4, or (BU1, CF12, 858)*	PTA54L, or (TA54L)

† "STA-LOC" Equivalent: FA56L, RUP36T155, OS3375

* "SNAPTROL"

① Alternate Part #75B45-11.

② Use 270Ω 2W Series Resistor.

RESISTORS

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			IRC PART No.	WORKMAN PART No.	REMARKS				IRC PART No.	WORKMAN PART No.	REMARKS
R10	10Ω					R44	120K				
R11	10K					R45	2.2meg				
R12	1000Ω					R46	3.9meg				
R13	150K					R47	12meg				(7.5meg) *
R14	39K					R48	68K				
R15	470Ω					R49	100K				
R16	43Ω					R50	100K				
R17	220K					R51	56K				
R18	4700Ω					R52	390K				
R19	470Ω					R53	8200Ω				
R20	22K					R54	680Ω				
R21	68Ω					R55	100K				
R22	220K					R56	560K				
R23	470Ω					R57	47K				
R24	150Ω					R58	220Ω 2W				
R25	2200Ω					R59	1meg 5%				
R26	1000Ω					R60	1meg 5%				
R27	150Ω					R61	100Ω				
R28	18K					R62	10K 3W				
R29	18K 2W					R63	20meg 5%				
R30	150K					R64	18K				
R31	150K					R65	470K				
R32	5000Ω 7W					R66	39K				
R33	12K					R67	3.9meg				
R34	27K					R68	220K				
R35	8200Ω					R69	100K				
R36	100K					R70	180K				
R37	100K					R71	82K				
R38	470K					R72	33K				
R39	8200Ω					R73	2.2meg				
R40	39K					R74	68K				
R41	270K					R75	2.2meg				
R42	470K					R76	2.7meg				
R43	100K					R77	82K 1W				

Note 1

(270K) *

RESISTORS (cont)

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

ITEM No.	RATING	REMARKS	REPLACEMENT DATA			ITEM No.	RATING	REMARKS	REPLACEMENT DATA		
			IRC PART No.	WORKMAN PART No.	REMARKS				IRC PART No.	WORKMAN PART No.	REMARKS
R78	12K					R84	27K				
R79	100K					R85	20K 5%				
R80	820K					R86	82K				
R81	400Ω 3W		PW5-400	5W-SQ-400		R87	1100Ω 5%				
R82	220Ω					R88	100Ω				
R83	220Ω					R89	820K				
R84	10K					R90	150K				
R85	18K 1W					R91	18K 3W				
R86	2.2meg					R92	120K				
R87	18K 1W					R93	120K				
R88	680K					R94	2.7meg				
R89	880K					R95	330K				
R90	1meg					R96	1.2K 1W				
R91	100K					R97	27K 1W				
R92	10K					R98	470K				
R93	56K					R99	8200Ω 5W				

* Alternate

Note 1. 525uh coil wound on 8200Ω resistor in some versions (Pt. #73C5-40).

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	47.25MC Trap	73C132-55						① Includes Complete Assembly, Alternate Part #72B181-7. ② Wound on 2700Ω Resistor. Part #73C5-42 used in Run 13. ▲ Shunt with 2700Ω Resistor. ③ Part #73C5-43 used in Run 13. ④ Part #73C5-40 used in Run 13.
L2	41.25MC Trap	73B37-4						
L3	39.75MC Trap	73B37-5						
L4	1st Video IF	72C132-43						
L5	2nd Video IF	72C132-39						
L6	3rd Video IF	72C132-39						
L7	4th Video IF	72B191-3 ①						
L8	RF Choke (12uh)	73B31-4	BC-566	4622	RTC-8523	TB247		
L9	Peaking (95uh)	73C5-36	TV-208 ▲	8157 ▲	RTC-8589 ▲	TB246		
L10	RF Choke (28uh)	73B31-3	TV-192	4626	RTC-8525	T984		
L11A	4.5MC Trap	72C185-2	TV-236	1471-A	RTC-8277	T277		
L12	Sound Takeoff							
L13	Peaking (525uh)	73C5-20 ③	TV-188	6174	RTC-8592	T324		
L14	Peaking (525uh)	73C5-20 ④	TV-188	6174	RTC-8592	T324		
L15	Sound IF	72C208-2						
L16	Quadrature	72C132-52						
L17	RF Choke (3uh)	73B37-10	BC-564	4606	RTC-8518	T858		
L18	RF Choke (3uh)	73B37-10	BC-564	4608	RTC-8518	T858		
L18	Flt. 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.	Thordorson PART No.	Triod PART No.	Workman PART No.	
L19	Horiz. Stabilizer (Lock)	94C17-7	TV-183 ①	6210 ①	RTC-8622 ①	H8-5 ①	WLC-25 ②	T104 ③	

① Enlarge mounting hole.

② Use Blue and Red Terminal.

③ Disregard Tap.

FILTER CHOKE

ITEM No.	CURRENT (Measured)	RATINGS		REPLACEMENT DATA						NOTES
		DC RES.	INDUCTANCE (0 CURRENT 1000 Ω)	ADMIRAL PART No.	Merit PART No.	Stancor PART No.	Thordorson PART No.	Triod PART No.		
L20	.250A	35Ω	1.1 H.	74C18-42	C-4084	C-2343	26C04	C-34X		Alternate Part #74B18-42

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA						NOTES
		ADMIRAL PART No.	Merit PART No.	Stancor PART No.	Thordorson PART No.	Triod PART No.		
T1	117VAC ① 1.6A 530VAC CT ② .240A	80D85-28	P-2885	P-8356	28R53	R-75BA		Alternate Part #80D78-1
	SEC. 3 6.3VAC ③ 8A	SEC. 4	SEC. 5					

TRANSFORMERS (SWEEP CIRCUITS)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		ADMIRAL PART No.	Merit PART No.	Stancor PART No.	Thordorson PART No.	Triod PART No.		
T2	Vert. Output	79C43-23 ③	A-2854	VO-100 ①	26S73	A-133X ②		① Cut and tape Red/Yellow Lead. ② Drill new mounting hole(s). ③ Some versions of Run 10 may use #79D43-23 or #79B43-23. Run 11 and higher use #79D43-24. ④ Some versions of Run 10 may use #750C305-10. Run 11 and higher use #750C305-14. ⑤ Use original damping Resistors. ⑥ Jumper Plus 1 and 8 on Yoke Plug. ⑦ Dis