

AIRLINE MODEL 94WG-3008A			
TRADE NAME	Airline Models, 94WG-3006A, 94WG-3008A, 94WG-3009A		
SUPPLIER	Montgomery Ward & Co., 619 Chicago Ave., Chicago, Illinois		
TYPE SET	FM-AM-Phono-TV Combination Receiver (Some Models TV only.)		
TUBES	Thirty (TV-Radio Models) Twenty-One (TV Only Models)		
POWER SUPPLY	105-125 Volts AC-60 Cycles		
TUNING RANGE	AM 540-1600KC FM 88-108MC TV Channels 2 thru 13	RATING:	1.8 Amp. @ 117 Volts AC (TV) .78 Amp. @ 117 Volts AC (Radio)
INDEX			
Alignment Instructions	6,7	Photographs (continued)	3,21
Block Diagram	25	Chassis-Top View (TV)	
Dial Cord Stringing	24	RF Tuner	20
Disassembly Instructions	27	Resistor and Alignment Identification (Radio)	22
Horizontal Oscillator and Linearity Adjustments	24	Resistor Identification (TV)	12,17
Parts List and Description	13,14,15,16	Trans., Inductor and Alignment Identification	4,9
Photographs		Schematic (Radio)	19,26
Cabinet-Rear View	27	Schematic (TV)	2
Capacitor and Inductor Identification (Radio)	23	Tube Placement Chart	5
Capacitor Identification (TV)	11,18	Voltage and Resistance Measurements	8
Chassis-Top View (Radio)	10		

HOWARD W. SAMS & CO., INC. • Indianapolis 7, Indiana

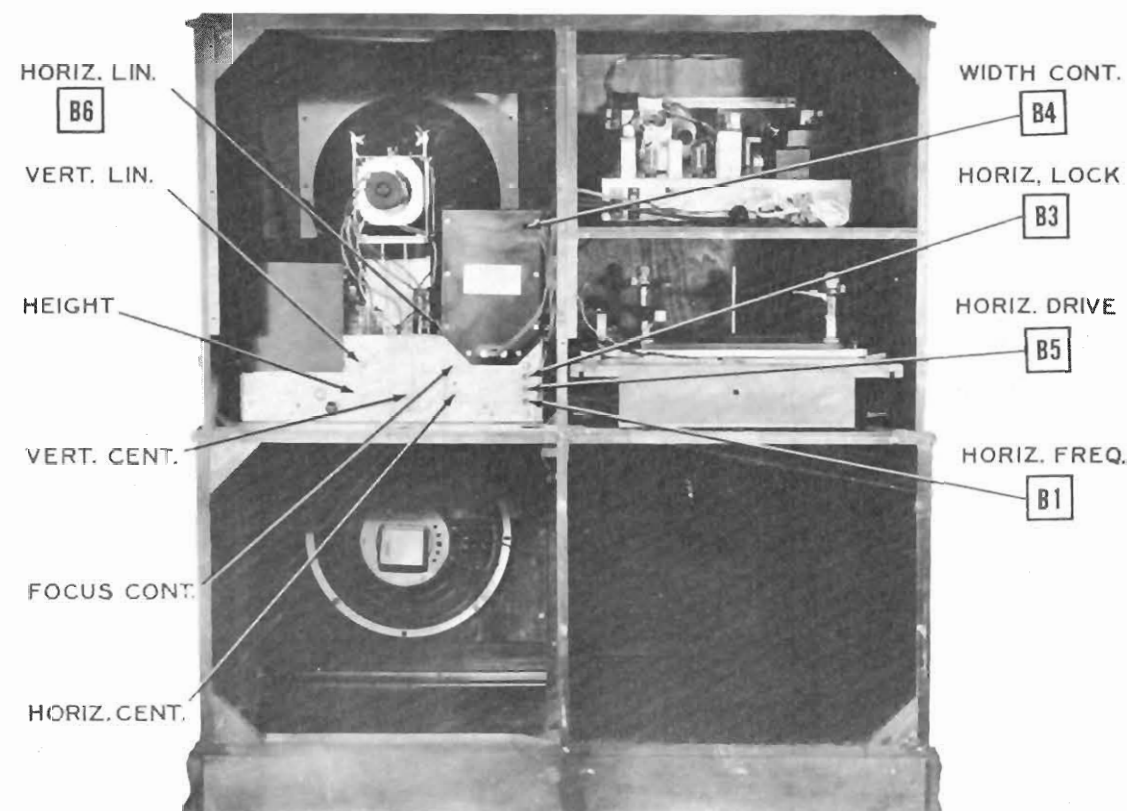
"The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W.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

"Reproduction or use, without express permission, of editorial or pictorial con-

tent, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. Copyright 1949 by Howard W. Sams & Co., Inc., Indianapolis 7, Indiana, U. S. of America. Copyright under International Copyright Union. All rights reserved under Inter-American Copyright Union (1910) by Howard W. Sams & Co., Inc. Printed in U. S. of America

DATE 10/49 SET #72 FOLDER #4

AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A



TONE CONT.

VOL. CONT.
ON-OFF SW.

TUNING CON

BAND SW.

DISASSEMBLY INSTRUCTIONS

1. Remove three push-on type knobs from TV controls.
2. Remove four push-on type knobs from receiver controls.
3. Remove six fasteners holding cover over rear of TV section.
4. Remove 16 screws holding cover over rear of phono section.
5. Disconnect TV antenna plug from left rear of receiver chassis.
6. Disconnect TV audio plug from rear of receiver chassis.
7. Disconnect TV power plug from rear of receiver chassis.
8. Remove five 7/16" hex head bolts holding TV chassis to mounting board. Remove TV chassis.
9. Remove speaker wires at speaker.
10. Remove phono motor power plug from rear of receiver chassis.
11. Remove phono audio plug from rear of receiver chassis.
12. Remove three 1/4" hex head bolts holding receiver chassis to mounting board. Remove receiver.
13. Remove four screws holding speaker to cabinet. Remove speaker.

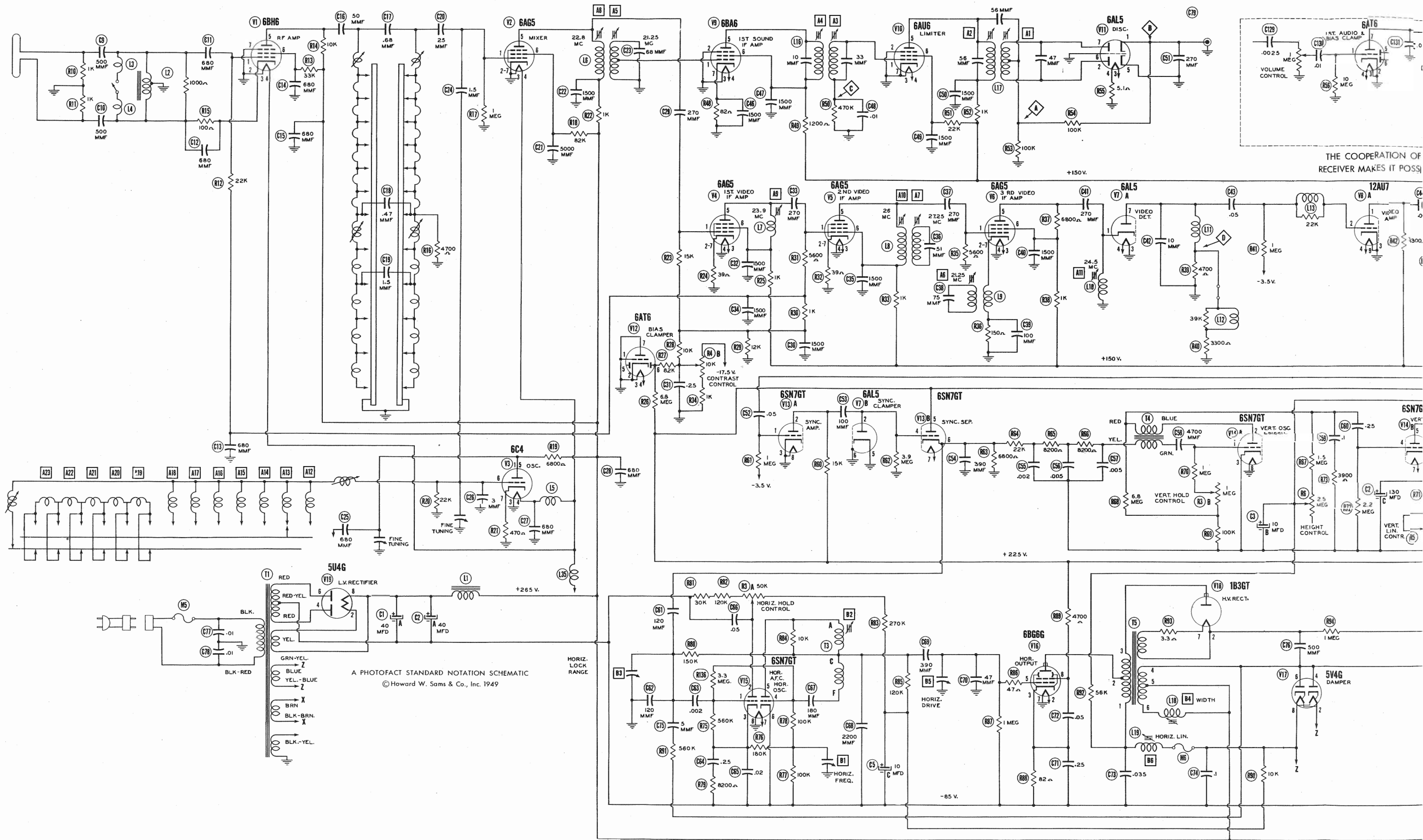
AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A

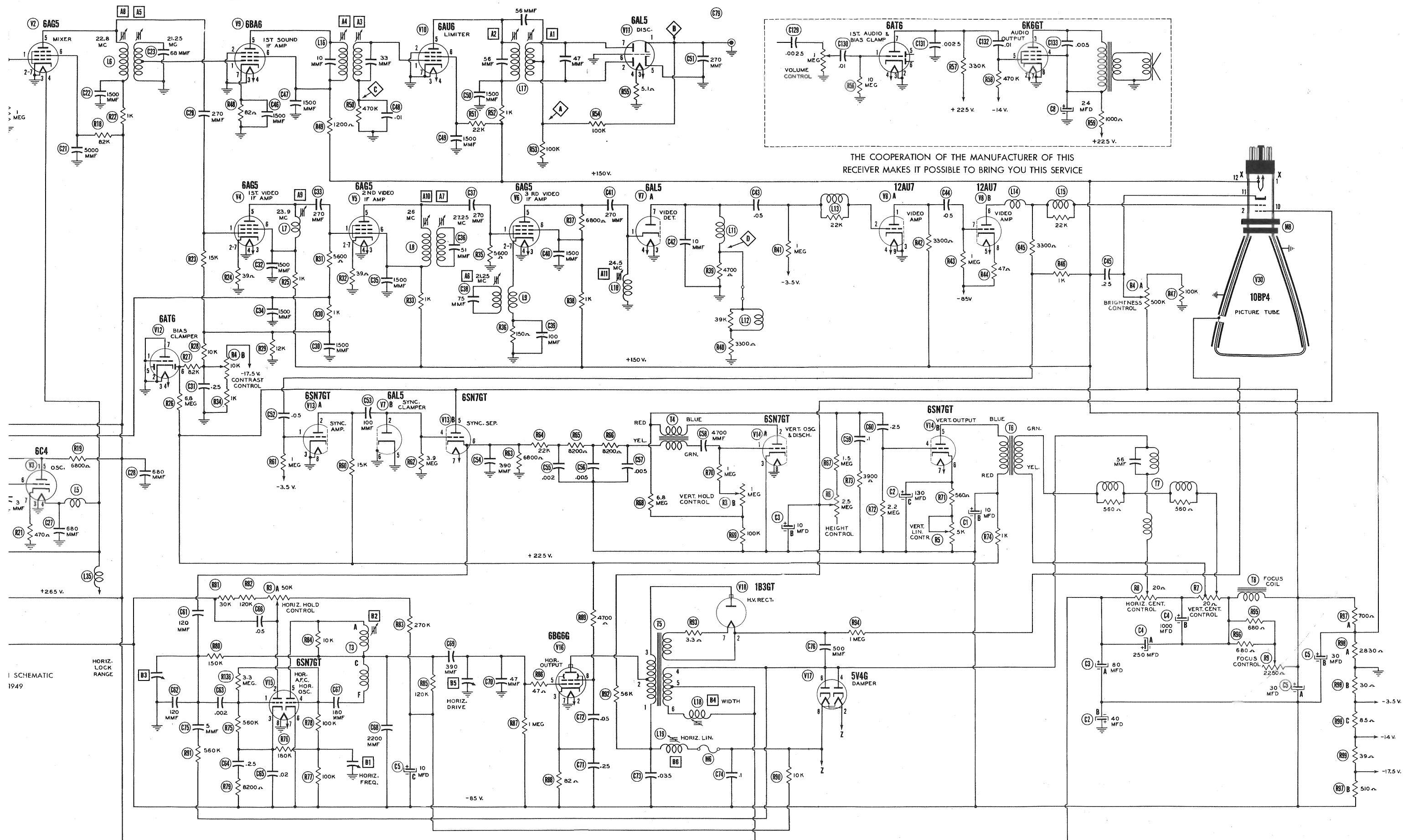
TRADE NAME	Airlin
SUPPLIER	Montgome
TYPE SET	FM-AM-Ph
TUBES	Thirty (1 Twenty-(
POWER SUPPLY	105-125
TUNING RANGE	AM 540- FM 88-10 TV Chan

Alignment Instructio
Block Diagram
Dial Cord Stringing
Disassembly Instruct
Horizontal Oscillato
Adjustments
Parts List and Descr
Photographs
Cabinet-Rear View
Capacitor and Ind
Identification
Capacitor Identifi
Chassis-Top View

HOV

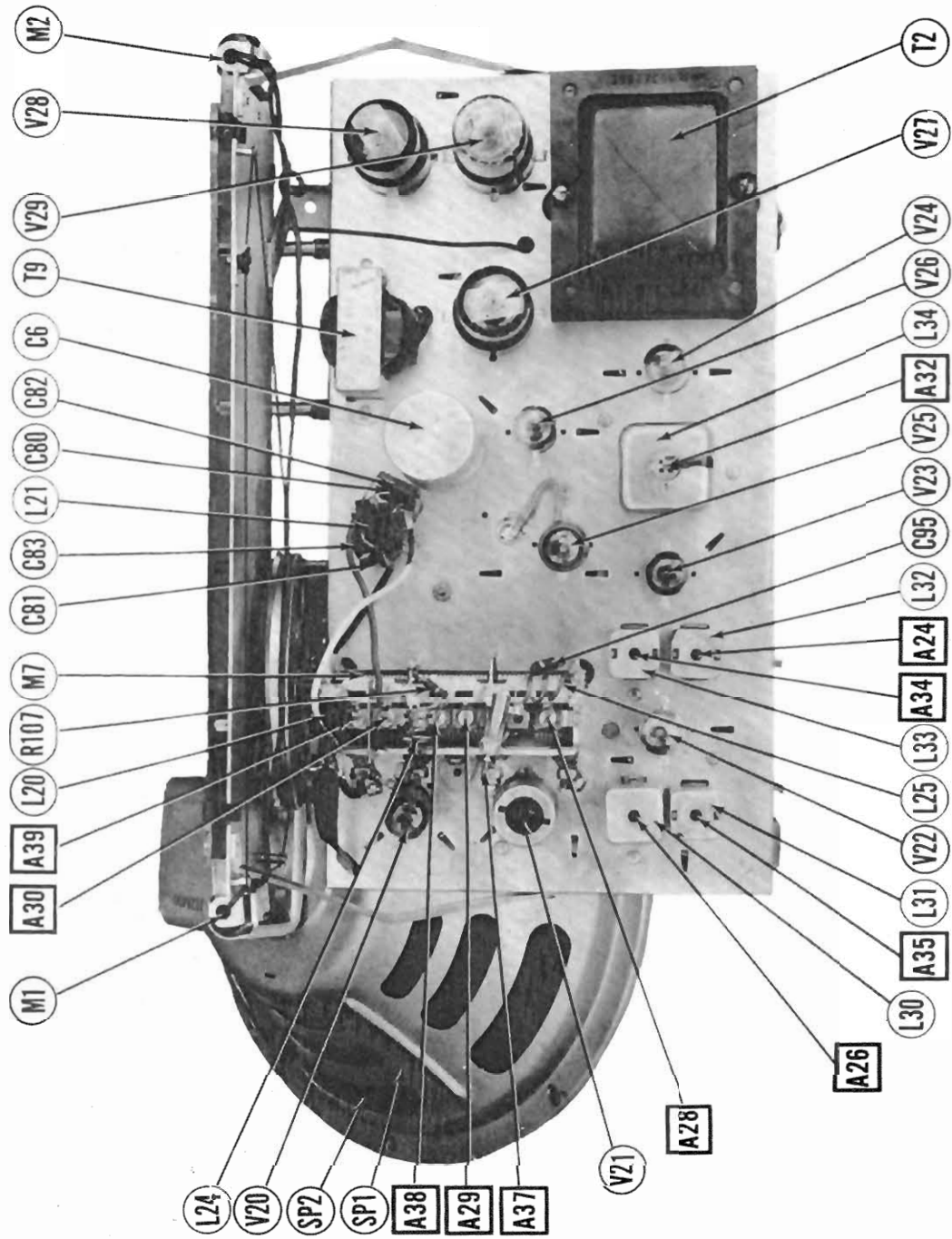
"The listing of any available replac
case a recommendation, warrant
as to the quality and suitability of
parts have been compiled from info
Inc., by the manufacturers of the pc
"Reproduction or use, without expr



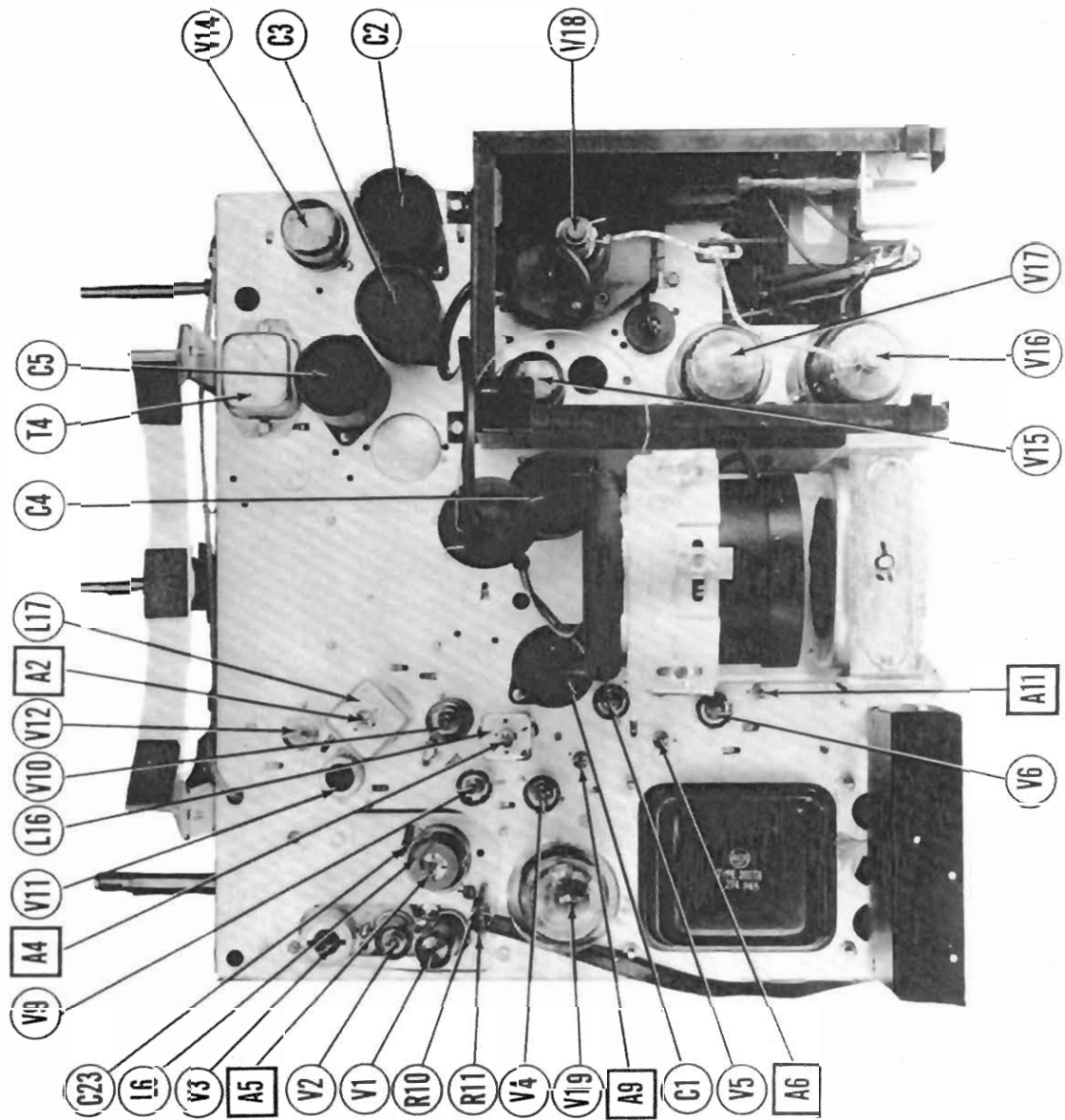


THE COOPERATION OF THE MANUFACTURER OF THIS
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

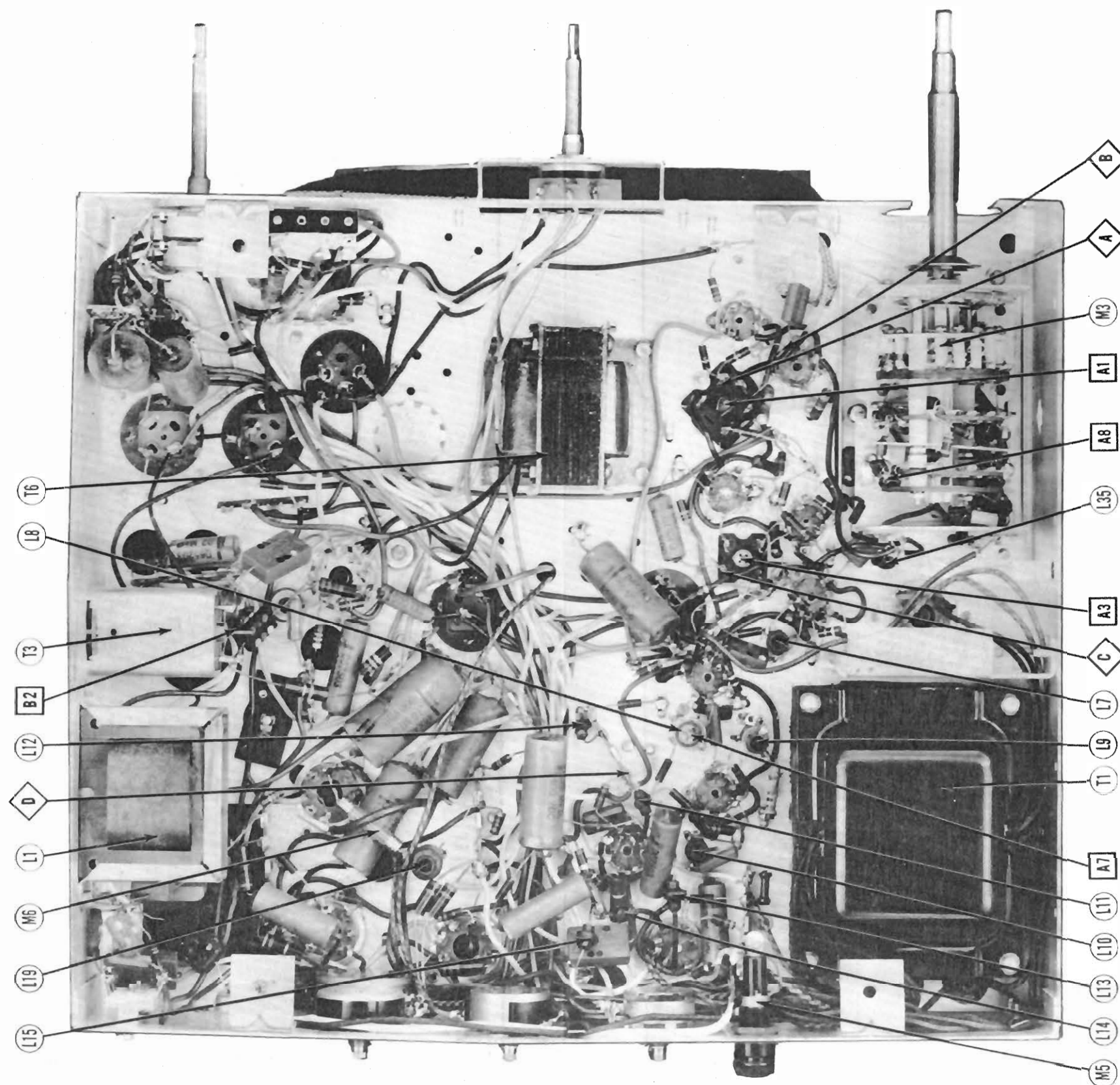
**AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A**



RADIO CHASSIS - TOP VIEW



CHASSIS TOP VIEW

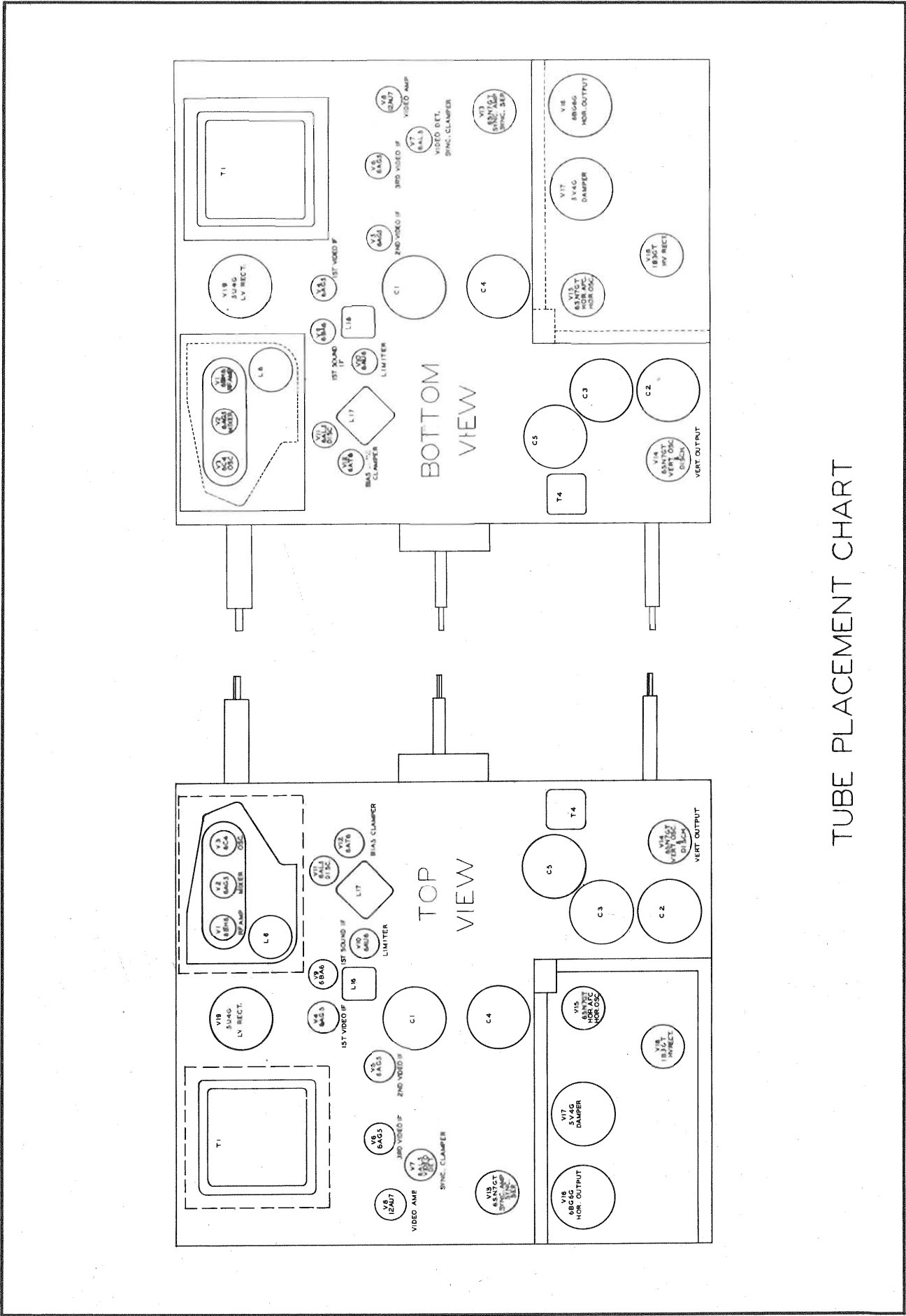


CHASSIS BOTTOM VIEW-TRANS.,INDUCTOR AND ALIGNMENT IDENTIFICATION

Item	Tab	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BH6	27KΩ	100Ω	Ω	.1Ω	110KΩ	153KΩ	Ω		
V 2	6AG5	1 Meg.	Ω	Ω	.1Ω	11.5KΩ	182KΩ	Ω		
V 3	6CA	17.5KΩ	Inf.	Ω	.1Ω	17.5KΩ	22KΩ	470Ω		
V 4	6AG5	25KΩ	39Ω	.1Ω	Ω	12KΩ	12KΩ	39Ω		
V 5	6AG5	12KΩ	39Ω	.1Ω	Ω	12KΩ	12KΩ	39Ω		
V 6	6AG5	5.6KΩ	150Ω	.1Ω	Ω	18.5KΩ	12KΩ	150Ω		
V 7	6AL5	Ω	4 Meg.	Ω	.1Ω	Ω	Ω	4.7KΩ		
V 8	12AU7	14.5KΩ	11 Meg.	Ω	.1Ω	.1Ω	15.5KΩ	11 Meg.	447Ω	Ω
V 9	6BA6	Ω	Ω	Ω	.1Ω	12KΩ	12KΩ	82Ω		
V 10	6AU6	470KΩ	Ω	Ω	.1Ω	12KΩ	12KΩ	Ω		
V 11	6AL5	200KΩ	100KΩ	.1Ω	.2Ω	Ω	Ω	100KΩ		
V 12	6AT6	Ω	Ω	Ω	.1Ω	Inf.	100KΩ	Ω		
V 13	6SN7GT	11 Meg.	115KΩ	Ω	4 Meg.	1350Ω	7KΩ	.1Ω	Ω	
V 14	6SN7GT	12 Meg.	12.4Meg	40Ω	12.4Meg	12KΩ	15.5KΩ	.1Ω	Ω	
V 15	6SN7GT	150KΩ	150KΩ	150KΩ	150KΩ	150KΩ	150KΩ	.1Ω	Ω	
V 16	6BX6	Inf.	.1Ω	182Ω	100KΩ	11 Meg.	Inf.	Ω	15KΩ	TOP CAP 220Ω
V 17	5Y4G	Inf.	100KΩ	100KΩ	160Ω	Inf.	160Ω	Inf.	100KΩ	
V 18	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP 800Ω
V 19	5Y4G	Inf.	4KΩ	Inf.	700Ω	Inf.	700Ω	Inf.	4KΩ	
V 20	6BA6	2.5 Meg	Ω	Ω	.1Ω	15.5KΩ	15.5KΩ	68Ω		
V21A	12AT7	15KΩ	10KΩ	4Ω	Ω	Ω	15.5KΩ	100KΩ	1000Ω	.1Ω
V21B	12AT7	15KΩ	10KΩ	4Ω	Ω	Ω	15.5KΩ	100KΩ	1000Ω	.1Ω
V22	6BA6	4 Meg.	Ω	Ω	.1Ω	15.5KΩ	15.5KΩ	68Ω		
V23	6BA6	.2Ω	Ω	Ω	.1Ω	15.5KΩ	15.5KΩ	68Ω		
V24	6AL5	Inf.	Inf.	Ω	.1Ω	15.5KΩ	15.5KΩ	68Ω		
V25	6AV6	10 Meg.	Ω	Ω	.1Ω	Ω	Ω	7KΩ		
V26	6AV6	10 Meg.	Ω	Ω	.1Ω	Ω	500KΩ	150KΩ		
V27	6X6GT	8.2KΩ	.1Ω	150Ω	15.5KΩ	470KΩ	Ω	Ω	560Ω	
V28	6X6GT	100KΩ	.1Ω	150Ω	15.5KΩ	470KΩ	Inf.	Ω	560Ω	
V29	5Y3GT	Inf.	100KΩ	Inf.	150Ω	Inf.	140Ω	Inf.	190KΩ	
V30	10BP4	1100Ω	15KΩ	15KΩ	15KΩ	15KΩ				

1. DC Voltage measurements are at 20,000 ohm per volt, AC Voltage measured at 1,000 ohms.
2. Pin numbers are counted in a 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. Front panels controls set at minimum.
6. Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.

AIRLINE MODELS 94WG-3006A,



TV-ALIGNMENT INSTRUCTIONS

PRE-ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

If receiver is to be aligned with picture tube removed, it is recommended to also remove the 6SN7GT (V15) horizontal oscillator tube to eliminate high voltage shock hazard.
When complete alignment is required, it is recommended that it be done in the order given below.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
.05MFD	High side to pin 1 (Grid) of 6AU6 (V10). Low side to chassis.	21.25MC (Unmod.)	13	DC Probe thru Meg. to Point \diamond Common to chassis.	A1, A2	Detune A1. Adjust A2 for maximum deflection.
.05MFD	"	"	"	DC Probe thru Meg. to Point \diamond Common to chassis.	A1	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
.05MFD	High side to pin 1 (Grid) of 6BA6 (V9). Low side to chassis.	"	"	DC Probe thru Meg. to Point \diamond Common to chassis.	A3, A4	Adjust for maximum deflection.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
.05MFD	High side to pin 1 (Grid) of 6BA6 (V9). Low side to chassis.	21.25MC (1MC Sweep)	21.25MC	13	Vert. Amp. to Point \diamond Low side to chassis.	A3, A4	If 60V sweep is used, shunt R50 with 5600Ω. Adjust A3, A4 for maximum amplitude and symmetry as per Fig 1.
.05MFD	"	"	"	"	Vert. Amp. to Point \diamond Low side to chassis.	A1, A2	Adjust A2 for maximum amplitude and straightness of diagonal line as per Fig 2. Adjust A1 so 21.25MC marker is at center of diagonal line. Continue with step 4.

VIDEO IF ALIGNMENT

Before starting video IF alignment, connect VTVM between junction of R28 and R29 and chassis. Adjust contrast control for reading of -3 volts. Leave contrast control at this setting for entire video IF alignment.
Remove 6C4 local oscillator tube (V3) to prevent erroneous indications.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	21.25MC	13	DC Probe to Point \diamond Common to chassis.	A5, A6	Adjust for <u>minimum</u> deflection.
	"	27.25MC	"	"	A7	"
	"	22.8MC	"	"	A8	Adjust for maximum deflection.
	"	23.9MC	"	"	A9	"
	"	26.0MC	"	"	A10	"
	"	24.5MC	"	"	A11	"

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	24MC (10MC Sweep)	21.25MC 23.0MC 25.0MC 25.75MC 27.25MC	13	Vert. Amp. to Point \diamond Low side to chassis.		Check response curve obtained on scope. If necessary retouch A5 thru A11 for proper wave shape and placement of markers as per Fig 3.

OSCILLATOR ALIGNMENT

The RF and mixer lines of the tuner used in this receiver are pre-set at the factory and normally do not require adjustment in the field.

To align the oscillator circuits the sound IF system must be accurately aligned. Set the fine tuning control to the midpoint of its range and proceed as follows.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
Two 125Ω carbon res.	Across antenna terminals with 125Ω resistor in each generator lead.	215.75MC	13	DC Probe thru Meg. to Point \diamond Common to chassis.	A12	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
"	"	209.75MC 203.75MC 197.75MC 191.75MC 185.75MC 179.75MC 87.75MC 81.75MC 71.75MC 65.75MC 59.75MC	12 11 10 9 8 7 6 5 4 3 2	"	A13 A14 A15 A16 A17 A18 A19 A20 A21 A22 A23	"

RADIO ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT							
Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated screwdriver for adjusting.							
AM ALIGNMENT							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
13. .1MFD	High side to pin 7 (Grid) or 12AT7 (V21). Low side to chassis.	455KC (400V Mod.)	AM (3rd position clockwise)	Tuning gang fully open	Across voice coil	A24, A25, A26, A27	Adjust for maximum output.
14. 200MMFD	High side to dipole antenna terminal. Low side to chassis.	1620KC	"	"	"	A28	"
15. 200MMFD	"	1400KC	"	Tune for maximum signal. Set pointer at 1400KC on dial.	"	A29, A30	"
FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
16. .01MFD	High side to pin 1 (Grid) of 6BA6 (V23). Low side to chassis.	10.7MC (Unmod.)	FM (Fully clockwise)	Tuning gang fully open	DC Probe to Point \diamond Low side to chassis.	A31	Adjust for maximum deflection.
17. .01MFD	"	"	"	"	DC Probe to Point \diamond Common to chassis.	A32	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
18. .01MFD	High side to pin 1 (Grid) of 6BA6 (V22). Low side to chassis.	"	"	"	DC Probe to Point \diamond Common to chassis.	A33, A34	Alternately load the primary and secondary windings with 1000Ω. (That is, when adjusting the secondary shunt the primary with 1000Ω and vice-versa.) Repeat steps 16 and 17.
19. .01MFD	High side to FM RF section of tuning gang. Low side to chassis.	"	"	"	"	A35, A36	Alternately load primary and secondary as above with 1000Ω, and adjust for max. deflection.
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE							
Use frequency modulated signal with 60V modulation and 450KC sweep. Use 120V sawtooth voltage in scope for horizontal deflection.							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
16. .01MFD	High side to pin 1 (Grid) of 6BA6 (V22). Low side to chassis.	10.7MC (450KC Sweep)	FM	Point of non interference	Vert. Amp. to Point \diamond Low side to chassis.	A31, A33, A34	Disconnect stabilizer capacitor C7. Adjust for maximum amplitude and symmetry as per Fig 4.
17. .01MFD	High side to pin 7 (Grid) of 12AT7 (V21). Low side to chassis.	"	"	"	"	A35, A36	"
18. .01MFD	"	"	"	"	Vert. Amp. to Point \diamond Low side to chassis.	A32	Reconnect stabilizer capacitor C7. Adjust A32 so crossover point occurs at center of pattern as per Fig 5. Slightly retouch A31 for maximum amplitude and straightness of crossover lines. Continue with step 20.
FM RF ALIGNMENT							
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
20. 300Ω carbon res.	High side thru 300Ω to terminal 1 of dipole terminal strip. Low side to chassis.	10.7MC (Unmod.)	FM	Tuning gang fully open	DC Probe to Point \diamond Common to chassis.	A37	Adjust for maximum deflection.
21. "	"	104.5MC (Unmod.)	"	Tune for maximum signal	"	A38, A39	Adjust for maximum deflection. Repeat steps 20 and 21 to assure accurate oscillator and RF alignment.

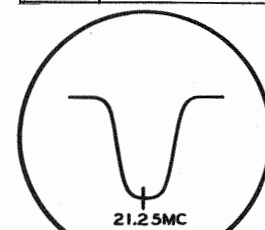


FIG. 1

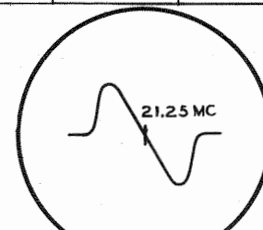


FIG. 2

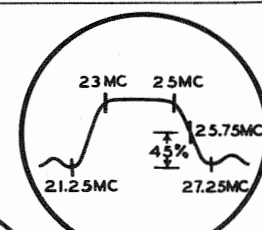


FIG. 3

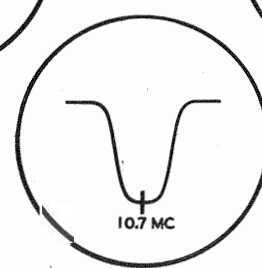


FIG. 4

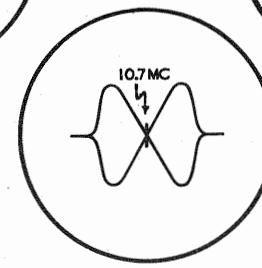
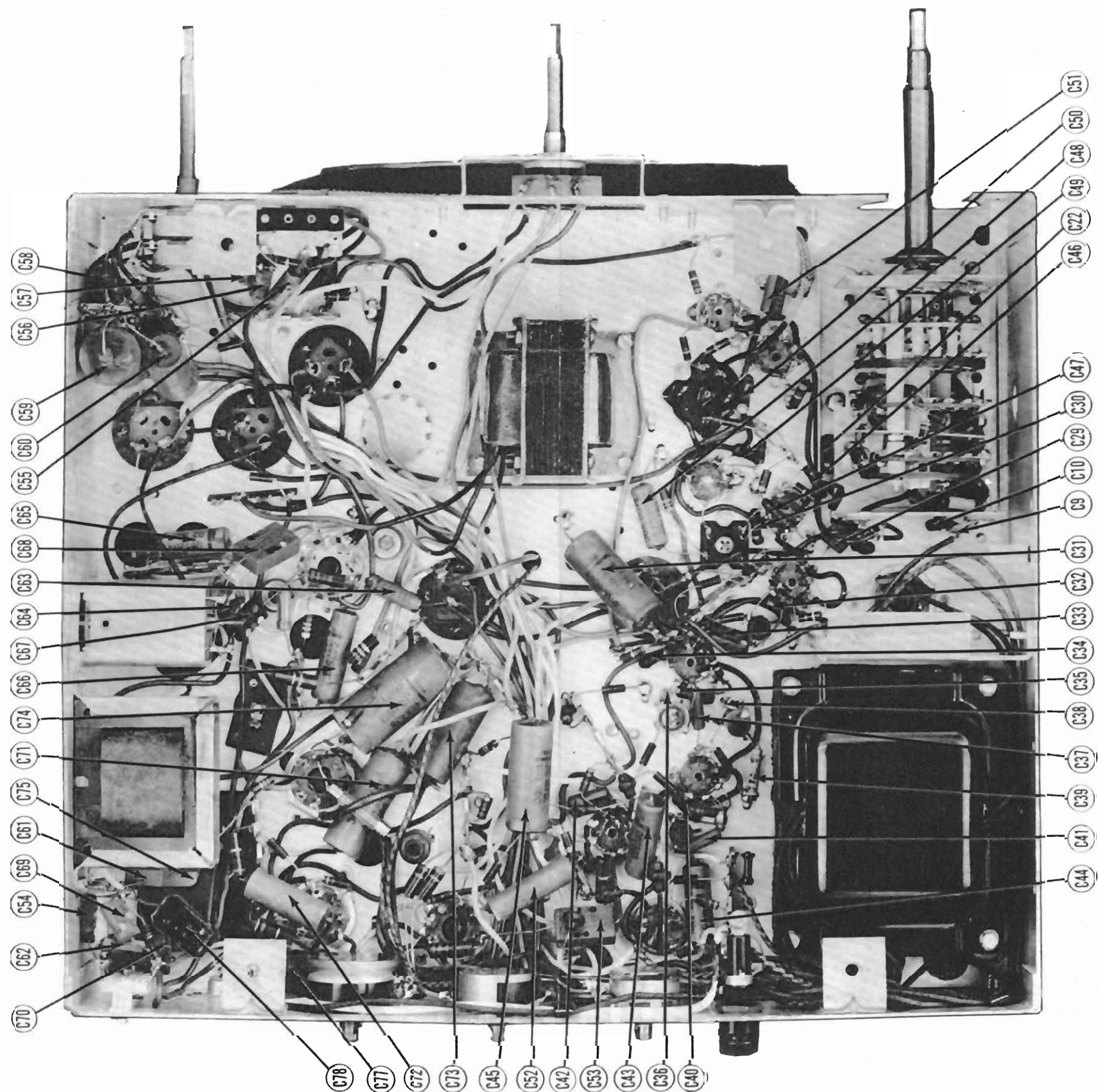


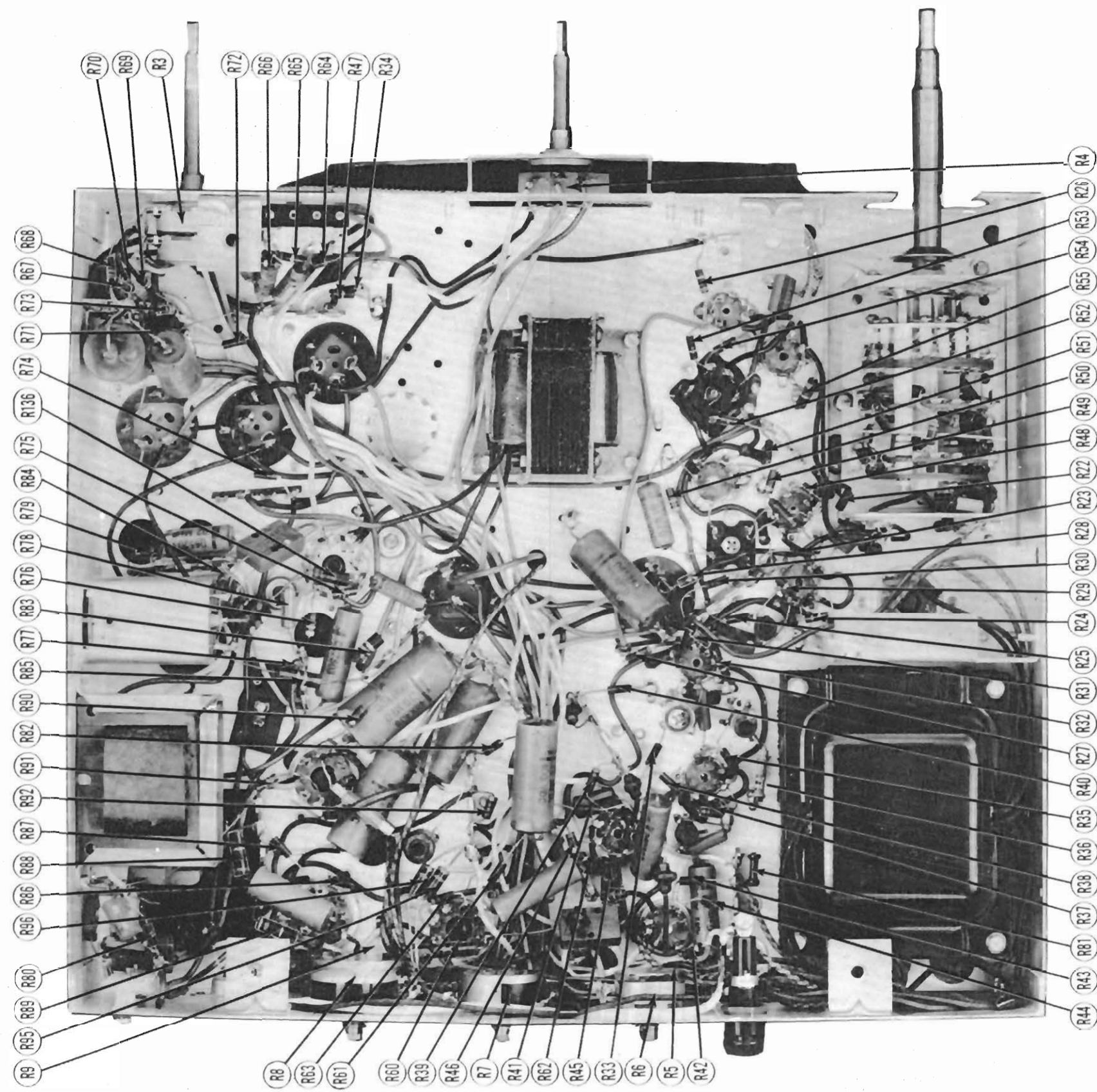
FIG. 5

AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A



CHASSIS BOTTOM VIEW-CAPACITOR IDENTIFICATION

AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A



CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION

AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A

PARTS LIST AND DESCRIPTIONS (Continued)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	AIRLINE	MEISSNER	
				PART No.	PART No.	
L2	Ant. Input	02				Part of Tuner
L3	Ant. Input	02				High Band Part of Tuner
L4	Ant. Input	02				High Band Part of Tuner
L5	Fill. Choke	02				Part of Tuner
L6	1st Video IF	02	02	9A2032		
L7	2nd Video IF	.12		9A1980		
L8	3rd Video IF	.12	02	9A1982		
L9	Sound Trap	02	02	9A1985		
L10	4th Video IF	.12		9A1980		
L11	Peaking	32		9A1979		36 Microhenries
L12	Peaking	82		9A1977		180 Microhenries wound on 39K2 resistor.
L13	Peaking	62		9A1978		120 microhenries wound on 22K2 resistor.
L14	Peaking	32		9A1979		36 Microhenries
L15	Peaking	62		9A1978		120 Microhenries wound on 22K2 resistor.
L16	Sound IF	02	02	9A1986		
L17	Disc. Trans.	02	02	9A1983		
L18	Width Control	.22		9A1976		
L19	Hor. Linearity	362		9A1981		
L20	FM Ant.	02		9A2027		Used in model 94WG-3008A only
L21	AM Ant.	292	42	9A2026		
L22	RF Choke	2.52		35A5		Used in model 94WG-3008A only.
L23	AM RF	292	42	9A2025		Used in model 94WG-3008A only.
L24	FM RF	02		9A2024		Used in model 94WG-3008A only.
L25	FM Osc.	02		9A2023		
L26	AM Osc.	52		9A2022		
L27	Cathode Chk.	2.52		35A5		
L28	Fill. Chk.	.52		9A1981		
L29	RF Choke	.42		35A7		
L30	1st FM IF	.22	.22	9A2034		
L31	1st AM IF	152	152	9A2029	16-6678	Used in model 94WG-3008A only tertiary winding 82
L32	2nd FM IF	.22	.62	9A2030	16-6678	Used in model 94WG-3008A only.
L33	2nd AM IF	192	192	9A1963		
L34	Ratio Det.	2.72	.22	9A1970		
L35	Fill. Choke	02		9A2033		

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					AIRLINE	PART No.	
M1	Bayonet	6-8	.15	Brown	7A103		Type #47
M2	Bayonet	6-8	.15	Brown	7A103		Type #47

MISCELLANEOUS

ITEM No.	PART NAME	AIRLINE PART No.	NOTES
M3	Tuner	8-25A1	Complete
M4	Band Switch	2A386	Includes TV power Switch.
M5	Fuse	16X132	Type AGC 3A
M6	Fuse	16X133	Type AGC .25A
M7	Tuning Cap.	14A207	20-473MFF, 32-215MFF W/T
M8	Ion Trap	2A382	PM
	Safety Glass	17X101	
	Knob	10A717	Fine Tuning for Model 94WG-3008A.
	Knob	10A714	Brightness & Hor. Hold for model 94WG-3008A.
	Knob	10A716	Contrast and Vert. Hold for model 94WG-3008A.
	Knob	10A718	Channel Selector for model 94WG-3008A.
	Knob	10A713	Four used on radio for model 94WG-3008A.
	Dial Glass	58X718	For radio for model 94WG-3008A.
	Knob	10A723	Fine tuning for blond cabinet.
	Knob	10A724	Brightness and Hor. Hold for Blond Cabinet.
	Knob	10A725	Contrast, Vert. Hold, On-Off Sound. (Outside Knob) for blond cabinet.
	Knob	10A726	On-Off Sound (Inside Knob) for blond cabinet.
	Knob	10A727	Channel Selector for blond cabinet.
	Knob	10A717	Fine tuning for mahogany cabinet.
	Knob	10A714	Brightness and Horiz. Hold for mahogany cabinet.
	Knob	10A716	Contrast, Vertical, On-Off Sound (Outside Knob) for mahogany cabinet.
	Knob	10A715	On-Off Sound (Inside Knob) for mahogany cabinet.
	Knob	10A718	Channel Selector for mahogany cabinet.

PARTS LIST AND DESCRIPTIONS
TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		AIRLINE PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6BH6	6BH6	7CM	
V2	Mixer	6AQ5	6AQ5	7BD	
V3	Oscillator	6C4	6C4	6BG	
V4	1st Video IF Amp	6AG5	6AG5	7BD	
V5	2nd Video IF Amp	6AG5	6AG5	7BD	
V6	3rd Video IF Amp	6AG5	6AG5	7BD	
V7	Video Det.-Sync. Clamp	6AL5	6AL5	6BT	
V8	Video Amp.	12AU7	12AU7	9A	
V9	1st Sound IF Amp	6BA6	6BA6	7BK	
V10	Limiter	6AU6	6AU6	7BK	
V11	Disc.	6AL5	6AL5	6BT	
V12	Bias Clamp	6AT6	6AT6	7BT	
V13	Sync. Amp.-Sync. Sep.	6SN7GT	6SN7GT	8BD	
V14	Vert. Osc. and Disch.-Vert. Output	6SN7GT	6SN7GT	8BD	
V15	Hor. AFC-Hor. Osc.	6SN7GT	6SN7GT	8BD	
V16	Hor. Output	6BG6G	6BG6G	5BT	
V17	Damper	5V4G	5V4G	5L	
V18	HV Rectifier	1B3GT	1B3GT	3C	
V19	LV Rectifier	5U4G	5U4G	5T	
V20	RF Amp.	6BA6	6BA6	7BK	Model 94WG-3008A only.
V21	Converter	12AT7	12AT7	9A	
V22	1st IF Amp.	6BA6	6BA6	7BK	
V23	2nd FM IF Amp.	6BA6	6BA6	7BK	
V24	Ratio Det.	6AL5	6AL5	6BT	
V25	DET.-AVC-AF Amp.	6AV6	6AV6	7BT	
V26	Phase Inverter	6AV6	6AV6	7BT	
V27	Power Output	6K6GT	6K6GT	7S	Model 94WG-3008A only.
V28	Power Output	6K6GT	6K6GT	7S	
V29	Rectifier	5Y3GT	5Y3GT	5T	
V30	Picture Tube	10BP4	10BP4	12D	

CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA				IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	AIRLINE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	
C1A	40	450	45X367	AFH8J2H	UP7BJ920		TVL-69
B	10	350					▲ Filter
C2A	40	450	45X370	AFH8J8D26B	UP9CJ887		TVL-57
B	40	150					▲ Filter
C	130	50					▲ Filter
C3A	80	450	45X369	AFH162J	UP9BJ857		TVL-47
B	10	450					▲ Filter
C4A	250	10	45X368	AF50R2008	UP7BJ808		TVL-66
B	1000	6					▲ Filter
C5A	30	400	45X371	AFH2J616G	UP8CJ898		TVL-56
B	30	300					▲ Filter
C	10	450					▲ Decoupling
C6A	40	450	45X374	AFH8J6A	UP9CJ1100		TVL-54
B	40	450					▲ Filter
C	40	25					▲ Filter
27	5	100	47X361	FRS150/4	BR415		UT-41
28	24	300	45X372	FRS350/24	BR3045		UT-203
29	500		47X406	1468-0006	SW5T5	GP2K-500	IFM-35
C10	500		47X406	1468-0006	SW5T5	GP2K-500	IFM-35
C11	680		47X554			GP2K-750	RF Coupling
C12	680		47X554			GP2K-750	RF Cathode Bypass
C13	680		47X554			GP2K-750	Bias Filter
C14	680		47X554			GP2K-750	RF Screen Bypass
C15	680		47X554			GP2K-750	RF Bypass
C16	50		47X517			GP1K-50	RF Coupling
C17	.68						"
C18	.47						"
C19	1.5					NPOK-1.5	"
220	25		47X487			GP1K-25	"
C21	500.0		47X507				Mixer Screen Bypass
C22	150.0		47X545			GP2L-001	Mixer Plate Dec.
C23	68	500					Fixed Trimmer
C24	1.5					NPOK-1.5	Osc. Coupling
C25	680		47X554				Osc. Feedback
C26	3		47X556			NPOK-3	"
C27	680		47X554			GP2K-750	Osc. Fil. Bypass
C28	680		47X554			GP2K-750	RF Bypass
C29	270	1000	47X534	1468-00025	SW5T25	GP2K-250	IF Coupling
C30	1500		47X545	1467-0015	1W5D15	GP2L-0015	Bias Filter
C31	.25	400	D65254	P488-25	GT4P25	GP2L-0015	"
C32	1500		47X545	1467-0015	1W5D15	GP2L-0015	1st V. IF Decoupling
C33	270	500	47X534	1468-00025	SW5T25	GP2K-250	IF Coupling
C34	1500		47X545	1467-0015	1W5D15	GP2L-0015	Bias Filter
C35	1500		47X545	1467-0015	1W5D15	GP2L-0015	2nd V. IF Decoupling
C36	51		47X534	1469-00005	SR5Q5	NPOM-50	Fixed Trimmer
C37	270	500	47X534	1468-00025	SW5T25	GP2K-250	IF Coupling
C38	75			1469-000075		NPOM-75	Fixed Trimmer
C39	100		47X546	1468-0001	SW5T1	GP1K-100	3rd V. IF Cath. Byp.
C40	1500		47X545	1467-0015	1W5D15	GP2L-0015	3rd V. IF Decoupling
C41	270	500	47X534	1468-00025	SW5T25	GP2K-250	IF Coupling
C42	10	500	47X542	1468-00001	SW5Q1	GP1K-10	V. Diode Filter
C43	.05	400	D37503	P488-05	GT485		Video Coupling
C44	.05	400	D37503	P488-05	GT485		"
C45	.25	100	D6254	P488-25	GT4P25		"
C46	1500		47X545	1467-0015	1W5D15	GP2L-0015	Pic. Tube Cath. Dec.
C47	1500		47X545	1467-0015	1W5D15	GP2L-0015	1st S. IF Cath. Bypass
C48	.01	400	D67103	P488-01	GT481	GP2-335-cl	1st S. IF Decoupling
C49	1500		47X545	1467-0015	1W5D15	GP2L-0015	Limiter Grid Filter
C50	1500		47X545	1467-0015	1W5D15	GP2L-0015	Limiter Screen Byp.
C51	270	1000	47X534	1468-00025	SW5T25	GP2K-250	Limiter Plate Dec.
C52	.05	400	D67503	P488-05	GT485		RF Bypass
C53	100	500	47X544	1468-0001	SW5T1	GP1K-100	Video Coupling
C54	390	1000	47X545	1468-0004	SR5T4	GP1K-100	Sync. Coupling

AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

CAPACITORS (CONT.)										RESISTORS									
ITEM No.	RATING CAP.	VOLT	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES	ITEM No.	RATING	REPLACEMENT DATA			IDENTIFICATION CODES					
			AIRLINE PART No.	AEROVOX PART No.	CORNEILL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.				RESISTANCE	WATTS	AIRLINE PART No.		IRC PART No.	ALL RESISTORS ARE $\pm 10\%$ UNLESS OTHERWISE STATED.			
C56	.002	600	F66202	F668-002	G76D2	GP2M-002	TM-22	Integrator Net.	R10	100K	1/2	B85102	B85102	Ant. Shunt	20				
C56	.005	400	D65502	F668-005	G76D5	GP2M-005	TM-25	"	R11	1000K	1/2	B85102	B85102	Ant. Shunt	20				
C57	.005	400	D65502	F668-005	G76D5	GP2M-005	TM-25	"	R12	22K	1/2	B85223	B85223	RF Grid	20				
C58	4700	500	47X543	1467-005	1D5D5	GP2M-005	1FM-25	Vert. Osc. Grid Cap.	R13	33K	1/2	B85333	B85333	RF Screen	20				
C59	.1	1000	46X409	1084-1	G76P1		TC-2	Vert. Discharge	R14	10K	1/2	B85103	B85103	RF Plate	20				
C60	.25	400	D65254	F488-25	G74P25			Vert. Sweep Coupling	R15	100K	1/2	B85102	B85102	RF Cathode	20				
C61	120	500	47X532					Hor. Sync. Coupling	R16	4700K	1/2	B85472	B85472	Mixer Coil Shunt	20				
C62	120	500	47X532					Voltage Divider	R17	1 Meg.	1/2	B85105	B85105	Mixer Grid	20				
C63	.002	600	F66202	F668-002	G76D2	GP2M-002	TM-22	Hor. Sync. Coupling	R18	82K	1/2	B85823	B85823	Mixer Screen	20				
C64	.25	400	D65254	F488-25	G74P25		TC-2	APC Filter	R19	6800K	1/2	C85682	C85682	Osc. Plate	20				
C65	.02	400	D65203	F488-02	G74S2		TM-12	"	R20	22K	1/2	B85223	B85223	Osc. Grid	20				
C66	.05	400	D67503	F488-05	G74S5		TM-15	"	R21	470K	1/2	B85471	B85471	Osc. Cathode	20				
C67	1000	1000	47X536					APC Plate Bypass	R22	1000K	1/2	B85102	B85102	Mixer Plate Decoupling	20				
C68	2200	1000	47X531					Hor. Osc. Grid Cap.	R23	15K	1/2	32B3153	32B3153	1st Video IF Grid	20				
C69	350	1000	47X535	1468-0004	5R5T4		MS-34	Hor. Sweep Coupling	R24	35K	1/2	32B4350	32B4350	1st Video IF Cathode	20				
C70	.47	500	47X541	1468-00005	5R5Q5		GP1K-50	Voltage Divider	R25	1000K	1/2	32B5102	32B5102	1st Video IF Decoupling	20				
C71	.25	400	D65254	F488-25	G74P25		TC-2	Hor. Output Cath. Byp.	R26	6.8 Meg.	1/2	32B4685	32B4685	BTS-6.8 Meg.	20				
C72	.05	600	D67503	F668-05	G76S5		TM-15	Hor. Output Screen Byp.	R27	82K	1/2	32B4823	32B4823	Voltage Divider	20				
C73	.005	1000	46X408					Dumper Filter	R28	10K	1/2	32B4103	32B4103	Bias Network	20				
C74	.1	1000	46X409	1084-1				APC Feedback	R29	12K	1/2	32B4123	32B4123	Bias Network	20				
C75	.5	1500	47X533				410-500	HV Filter	R30	1000K	1/2	32B5102	32B5102	Bias Network	20				
C76	500	10000	47X530					Line Filter	R31	5600K	1/2	32B4350	32B4350	2nd Video IF Grid	20				
C77	.01	400	46X410	F488-01	G74S1		TM-11	"	R32	35K	1/2	32B4350	32B4350	2nd Video IF Cathode	20				
C78	.01	400	46X410	F488-01	G74S1		TM-11	"	R33	1000K	1/2	32B5102	32B5102	2nd Video IF Decoupling	20				
C79	1000			1468-001	1W5D1		GP2L-001	Voltage Divider 1	R34	100K	1/2	32B5102	32B5102	Voltage Divider	20				
C80	.40		47X472	1468-00005	5R5Q5		GP1K-50	Ant. Coupling	R35	5600K	1/2	32B3562	32B3562	3rd Video IF Grid	20				
C81	100		47X550	1468-0001	5R5T1		N750L-100	Fixed Trimmer	R36	150K	1/2	32B4151	32B4151	3rd Video IF Cathode	20				
C82	.5	1500	47X553	1468-00005	5R5V5		N750L-100	RF Coupling	R37	6800K	1/2	32B3682	32B3682	3rd Video IF Screen	20				
C83	.15		47X552				GP1K-15	Fixed Trimmer	R38	1000K	1/2	32B5102	32B5102	3rd Video IF Decoupling	20				
C84	500		47X466	1468-0005	5R5T5		GP2K-500	RF Coupling	R39	4700K	1/2	32B4472	32B4472	BTS-4700-5K	20				
C85	500		47X466	1468-0005	5R5T5		GP2K-500	AVC Filter	R40	3300K	1/2	32B4332	32B4332	Video Det. Diode Load	20				
C86	500		47X466	1468-0005	5R5T5		GP2K-500	RF Cath. Bypass	R41	3300K	1/2	32B5105	32B5105	Video Det. Diode Load	20				
C87	5000		47X507	1467-005	1D5D5		GP2M-005	RF Screen Bypass	R42	3300K	1/2	32B4332	32B4332	Video Amp. Grid	20				
C88	5000		47X507	1467-005	1D5D5		GP2M-005	RF Plate Decoupling	R43	1 Meg.	1/2	32B5105	32B5105	Video Amp. Plate	20				
C89	100		47X550	1468-0001	5R5T1		N750L-100	Fixed Trimmer	R44	47K	1/2	32B5470	32B5470	Video Output Grid	20				
C90	.15		47X552				GP1K-15	"	R45	3300K	1/2	32C4332	32C4332	Video Output Cathode	20				
C91	100		47X550	1468-0001	5R5T1		GP1K-100	RF Coupling	R46	1000K	1/2	32B5102	32B5102	Video Output Plate	20				
C92	500		47X466	1468-0005	5R5T5		GP2K-500	"	R47	100K	1/2	32B5104	32B5104	Video Output Plate	20				
C93	.68		47X501	1468-000075	5R547		GP1K-75	Fixed Trimmer	R48	82K	1/2	32B4820	32B4820	1st Sound IF Cathode	20				
C94	.47		47X466	1468-00005	5R545		N750L-100	"	R49	1200K	1/2	32B4122	32B4122	1st Sound IF Decoupling	20				
C95	.5		47X549	1468-00005	5R5V5		N750L-100	"	R50	470K	1/2	32B5472	32B5472	2nd Sound IF Grid	20				
C96	.12		47X516				GP1K-12	"	R51	22K	1/2	32B5223	32B5223	2nd Sound IF Screen Decoupling	20				
C97	.47		47X466	1468-00005	5R545		GP1K-12	"	R52	1000K	1/2	32B5102	32B5102	2nd Sound IF Plate Decoupling	20				
C98	5000		47X507	1467-005	1D5D5		GP2M-005	Osc. Grid Cap.	R53	100K	1/2	32B3104	32B3104	Disc. Diode Load	20				
C99	5000		47X507	1467-005	1D5D5		GP2M-005	Mixer Cath. Bypass	R54	100K	1/2	32B3104	32B3104	Disc. Diode Load	20				
C100	.04	600	F66202	F668-04	G76S4		GP2K-500	Mixer Decoupling	R55	5.1K	1/2	43X239	43X239	Disc. Filament (Wire Wound)	20				
C101	500		47X466	1468-0005	5R5T5		GP2K-500	IF Coupling	R56	10 Meg.	1/2	32B5106	32B5106	AF Grid See Note	20				
C102	100		47X550	1468-0001	5R5T1		GP1K-100	IF Coupling	R57	330K	1/2	32B4334	32B4334	AF Plate See Note	20				
C103	.06	200	B66503	F668-06	G72S6		GP2K-500	AVC Filter	R58	470K	1/2	32B5474	32B5474	Output Grid See Note	20				
C104	500		47X466	1468-0005	5R5T5		GP2K-500	1st IF Cath. Bypass	R59	1000K	1/2	32C5102	32C5102	Filter See Note	20				
C105	.02	600	F66202	F668-02	G76S2		GP2K-500	1st IF Screen Bypass	R60	15K	1/2	32C5133	32C5133	Sync. Amp. Plate	20				
C106	.02	600	F66202	F668-02	G76S2		GP2K-500	1st IF Plate Dec.	R61	1 Meg.	1/2	32B5105	32B5105	Sync. Amp. Grid	20				
C107	.68		47X501	1468-000075	5R547		GP1K-75	Diode RF Filter	R62	3.3 Meg.	1/2	32B4356	32B4356	Sync. Sep. Grid	20				
C108	.50		47X112	1468-00005	5R545		GP1K-50	"	R63	6800K	1/2	32B3682	32B3682	Sync. Sep. Cathode	20				
C109	5000		47X507	1467-005	1D5D5		GP2M-005	"	R64	22K	1/2	32B4223	32B4223	Integrator	20				
C110	5000		47X507	1467-005	1D5D5		GP2M-005	2nd IF Cath. Bypass	R65	8200K	1/2	32B4822	32B4822	"	20				
C111	5000		47X507	1467-005	1D5D5		GP2M-005	2nd IF Screen Bypass	R66	8200K	1/2	32B4822	32B4822	"	20				
C112	.68		47X501	1468-000075	5R547		GP1K-75	2nd IF Plate Dec.	R67	1.5 Meg.	1/2	32B4153	32B4153	Voltage Divider	20				
C113	.68		47X501	1468-000075	5R547		GP1K-75	Diode Load Cap.	R68	6.8 Meg.	1/2	32B4685	32B4685	"	20				
C114	2700	500	47X462	1467-0025	1D5D5		GP2M-0025	"	R69	100K	1/2	32B4104	32B4104	"	20				
C115	.01	600	F66202	F668-01	G76S1		GP2K-500	De-emphasis	R70	1 Meg.	1/2	32B5106	32B5106	Vert. Osc. Grid	20				
C116	.01	120	46X328	1467-005	1D5D5		GP2K-500	Audio Coupling	R71	560K	1/2	32B4561	32B4561	Vert. Output Cathode	20				
C117	5000		47X507	1467-005	1D5D5		GP2K-500	Audio Coupling	R72	2.2 Meg.	1/2	32B5225	32B5225	Vert. Output Grid	20				
C118	.68		47X501	1468-000075	5R547		GP1K-75	AVC Filter	R73	3300K	1/2	32B4332	32B4332	Vert. Peaking	20				
C119	.20	500	47X516	1468-000025	5R5Q2		N750L-100	Tone Comp.	R74	1000K	1/2	32B5102	32B5102	Filter	20				
C120	.02	200	B66202	F668-02	G76S2		GP2K-500	RF Bypass	R75	560K	1/2	32B3664	32B3664	Horiz. APC Grid	20				
C121	.005	600	F66202	F668-005	G76S5		GP2K-500	"	R76	180K	1/2	32B4184	32B4184	Horiz. APC Cathode	20				
C122	.01	600	F66202	F668-01	G76S1		GP2K-500	"	R77	100K	1/2	32C3104	32C3104	"	20				
C123	.220	500	47X466	1468-00025	5R5T25		GP2K-250	Audio Coupling	R78	100K	1/2	31B1104	31B1104	Horiz. Osc. Grid	20				
C124	.02	600	F66202	F668-02	G76S2		GP2K-500	AF Plate Bypass	R79	8200K	1/2	32B4822	32B4822	Horiz. APC Filter Network	20				
C125	.005	600	B66202	F668-005	G76S5		GP2M-005	"	R80	150K	1/2	32B4154	32B4154	"	20				
C126	.02	600	F66202	F668-02	G76S2		GP2M-005	"	R81	30K	1/2	34A1	34A1	Voltage Divider Temp. Comp.	20				
C127	.001	600	F66102	F668-001	G76D1		GP2L-001	Output Plate Bypass	R82	120K	1/2	32B4124	32B4124	"	20				
C128	.001	600	F66102	F668-001	G76D1		GP2L-001	"	R83	270K	1/2	32C4474	32C4474	"	20				
C129	.0025	400	D64252	F668-0025	G76D25		GP2M-0025	Audio Coupling	R84	10K	1/2	32B4103	32B4103	Horiz. Osc. Transformer Shunt	20				
C130	.01	400	D67103	F488-01	G74S1		GP2K-001	"	R85	120K	1/2	32C4124	32C4124	Horiz. Osc. Plate	20				
C131	.0025	400	D64252	F668-0025	G76D25		GP2M-0025	AF Plate Bypass	R86	47K	1/2	32B5470	32B5470	Parasitic Supp.	20				
C132	.01	400	D67103	F488-01	G74S1		GP2K-001	Audio Coupling	R87	1 Meg.	1/2	32B5105	32B5105	Horiz. Output Grid	20				
C133	.005	600	F66202	F668-005	G76S5		GP2M-005	Output Plate Bypass	R88	82K	1/2	32C4820	32C4820	Horiz. Output Cathode	20				
									R89	4700K	1/2	32C4472	32C4472	Horiz. Output Screen	20				

* Some models use 20M Ω in this application.
† Not used in all models.
‡ Used only in model 94WG-3006A, and 94WG-3009A.

CONTROLS

ITEM No.	RATING	REPLACEMENT DATA			INSTALLATION NOTES
		AIRLINE PART No.	IRC PART No.	CLAROSTAT PART No.	
R1A	500K Ω	36X380	Q13-13X	AT-78	Volume control, tapped @ 100K
R1B	500K Ω	Not Req.	Not Req.	KSS-3	Attach to R1A Per Instructions
R1C	500K Ω	Not Req.	Not Req.	SK-A	"
R1A	1 Meg.	36X375	Q13-140	AM-67-Z	Volume control and switch
R2A	3 Meg.	40X285	Not Req.	KSS-3	Tone control
R3A	50K Ω	78X2			Attach to R2A Per Instructions
R4A	500K Ω	78X1			Horiz. hold control (Dual Concentric)
R5A	1 Meg.	77X4	Q11-114	M-19-S	Vert. Hold control (Dual Concentric)
R6A	2.5 Meg.	77X3	Q11-239		Brightness control (Dual Concentric)
R7A	20K Ω	77X2	M-20X10	58-20CT	Contrast control
R8A	20K Ω	77X1	M-20	58-20	Vert. linearity control
R9A	2250K Ω				Height control
					Vert. centering control, tapped @ 10K Wire Wound
					Horiz. centering control, wire wound
					Focus control

* Used in model 94WG-3006A and 94WG-3009A only.

RESISTORS (CONT.)

ITEM No.	RATING	REPLACEMENT DATA			IDENTIFICATION CODES
		AIRLINE PART No.	IRC PART No.		
R109	2.2 Meg.	B85225	BTS-2.2 Meg.		1st IF Grid
R110	68K Ω	B85680	BW-4-68		1st IF Cathode
R111	56K Ω	B84563	BTS-56K		1st IF Screen
R112	51K Ω	B84913	BTS-100K-5%		1st IF Transformer Shunt
R113	100K Ω	B84102	BTS-100K		1st IF Plate Decoupling
R114	1 Meg.	B85105	BTS-1 Meg.		AVC Network
R115	47K Ω	B85474	BTS-47K		Diode Load
R116	68K Ω	B85473	BTS-47K		Diode Filter
R117	30K Ω	B85680	BW-4-68		2nd FM IF Cathode
R118	220K Ω	B85222	BTA-220K		2nd FM IF Screen
R119	220K Ω	B85222	BTS-220K		2nd FM IF Plate Decoupling
R120	27K Ω	B84273	BTS-27K		De-emphasis
R121	680K Ω	B85682	BTS-680K-5%		Ratio Det. Diode Load
R122	680K Ω	B85682	BTS-680K-5%		Ratio Det. Diode Load
R123	3.6K Ω	43X233	BW-4-3.9		Disc. Filament (Wire Wound)
R124	1 Meg.	B85105	BTS-1 Meg.		AVC Network
R125	470K Ω	B85474	BTS-47K		Tone Compensation
R126	15K Ω	B85153	BTS-15K		"
R127	10 Meg.	B85106	BTS-10 Meg.		AF Grid
R128	270K Ω	B85274	BTS-270K		AF Plate
R129	10 Meg.	B85106	BTS-10 Meg.		Phase Inv. Grid
R130	470K Ω	B85474	BTS-47K		Phase Inv. Plate
R131	470K Ω	B85474	BTS-47K		Output Grid
R132	620K Ω	B84522	BTS-620K		Output Grid
R133	470K Ω	B85474	BTS-47K		Output Cathode
R134	560K Ω	2	D83561		BT-2-560
R135	140K Ω	5	43X242		Filter (Wire Wound)
R136	3.3 Meg.	1	32C335		Voltage Divider

Note-- Used in model 94WG-3006A and 94WG-3009A only.

TRANSFORMER (POWER)

ITEM No.	RATING	REPLACEMENT DATA			
		AIRLINE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T1	117VAC 1.8A SEC. 4 6.3VAC SEC. 5 6.3VAC	53X267 5VAC @ 2A 5VAC @ 2A	P-8153	TP-355	P-3063
T2	117VAC 1.7A SEC. 4 6.3VAC SEC. 5 6.3VAC	53X266** 5VAC @ 2A 5VAC @ 2A	P-8014 #	FM-12CB	P-2954 #

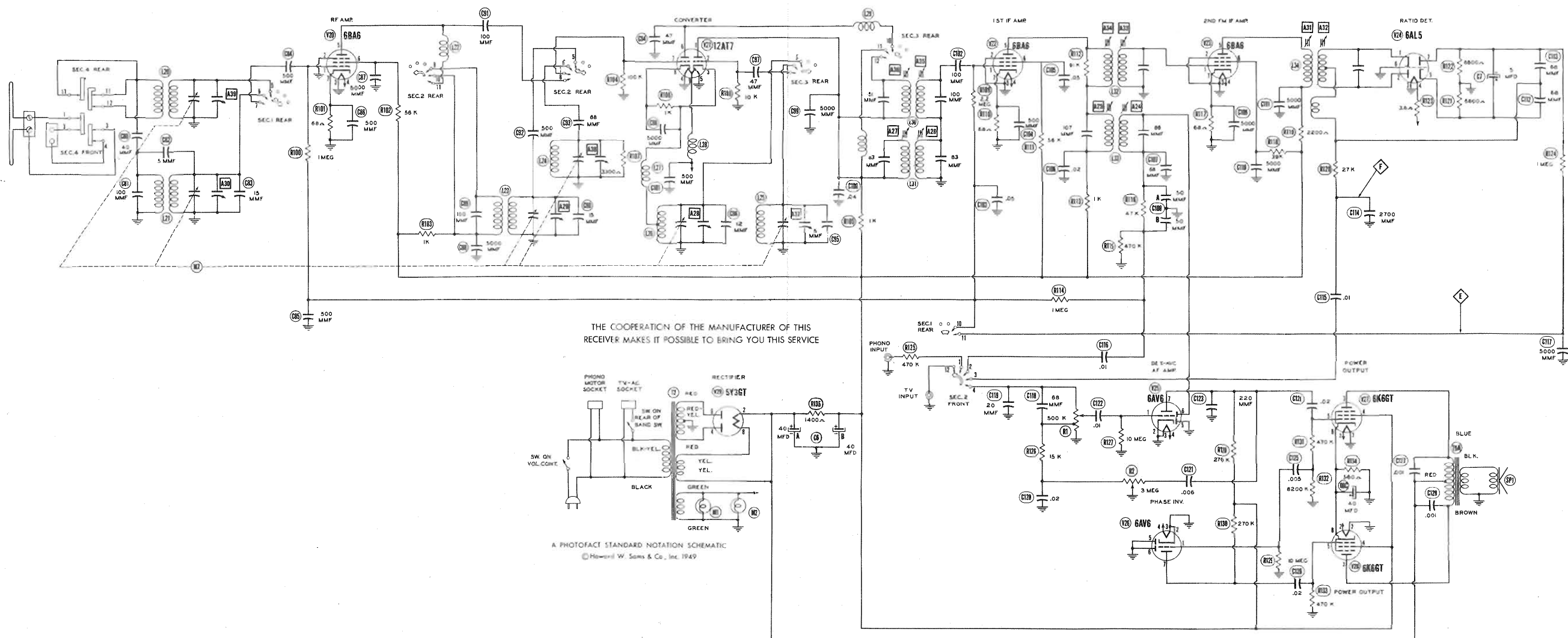
* Drill new mounting holes.
† Used in model 94WG-3006A only.

TRANSFORMER (SWEEP CIRCUITS)

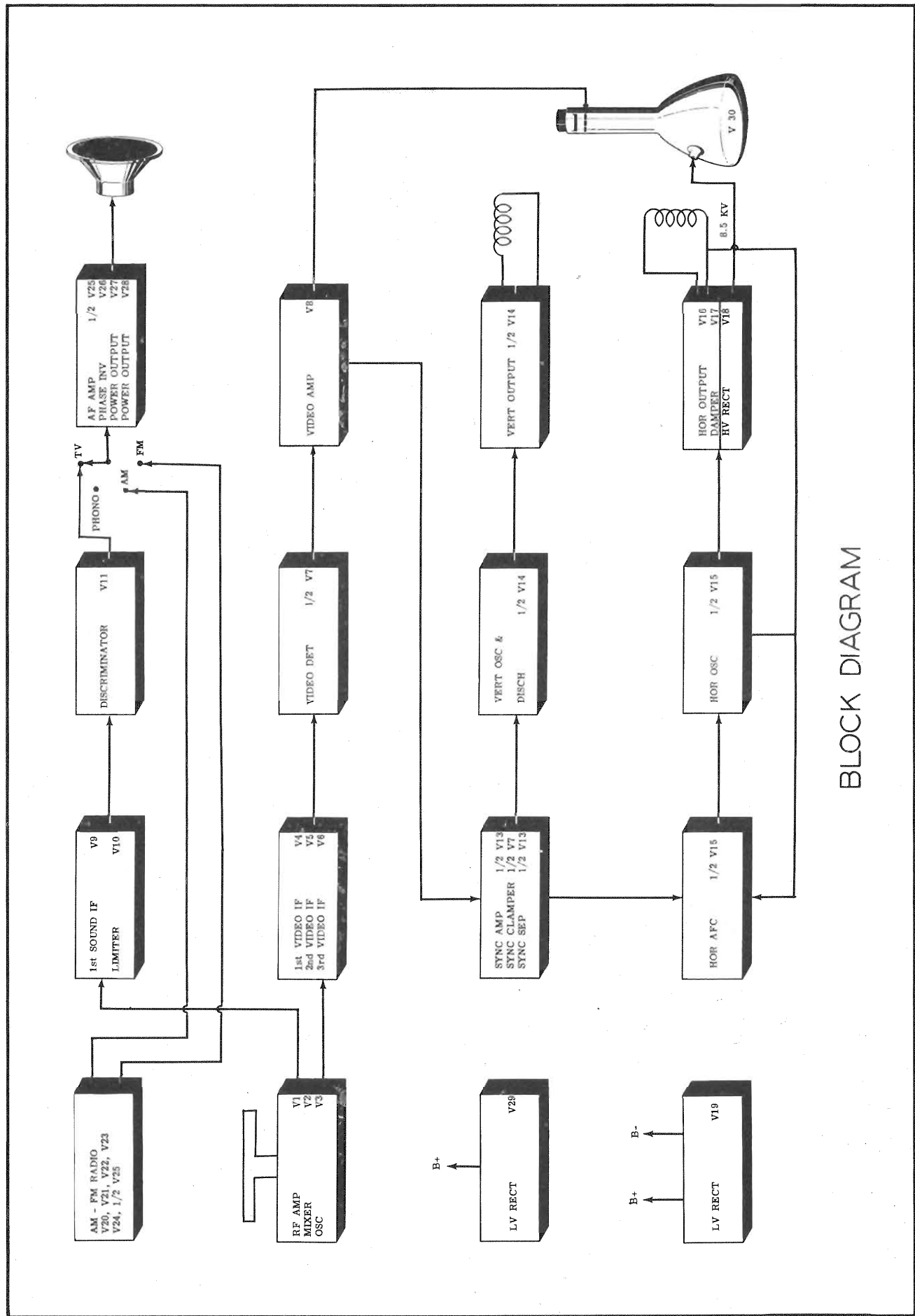
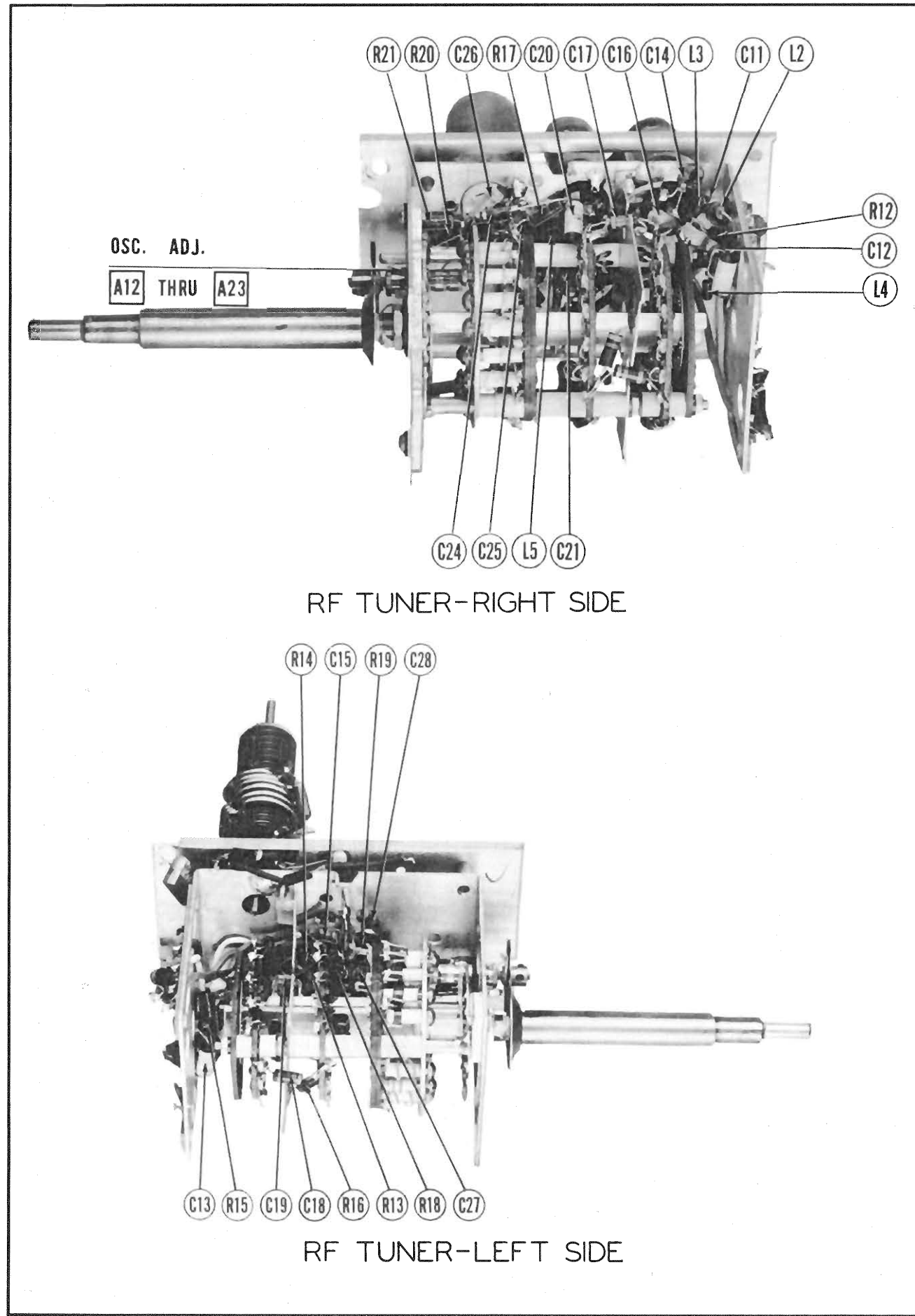
ITEM No.	RATING	REPLACEMENT DATA				NOTES
		AIRLINE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
T3	150V Tap @ 412	8A1984				Hor. Osc. Transformer
T4	160V Tap @ 180V	54X4 52X296	A-8121 A-8117	T80-1 T80-2	A-4000	Vert. Block Osc. Trans
T5	160V Tap @ 180V	54X4 52X296	A-8121 A-8117	T80-1 T80-2	A-4000	Hor. Output Trans.
T6	560V 140V	51X140 9A1987	A-8115 DY-1	T80-1	A-3035	Vert. Output Trans.
T7A	140V	9A1987				Hor. Deflection Coil
T8	560V	9A1974	FC-10			Vert. Deflection Coil

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		AIRLINE	STANCOR	CHICAGO	MERIT	
	PRI.	SEC.	PRI.	SEC.	PART No.	PART No.	PART No.	PART No.	
T9A	10K Ω	3.22	480 Ω	.52	51X142 **	A-3823	RO-110	A-2936	** Used in model 64W-300A
B	CT		CT		51X139††				†† Used in model 64W-300A and 64W-300A...



AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A



AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A

HORIZONTAL OSC. AND LINEARITY ADJUSTMENTS

HORIZONTAL OSCILLATOR ALIGNMENT CHECK:

Tune in test pattern and turn horizontal hold control to extreme counter-clockwise position. Picture should remain in synchronization. Turn channel switch to another channel and then back to the original channel. Normally, the picture should be out of synchronization. Turn the control clockwise and the picture should slowly begin to synchronize and finally lock-in. This should occur when the control is approximately 90° from the extreme counter-clockwise position. The picture should remain in synchronization for another 90° in the clockwise direction of the control. At the extreme clockwise position the picture should again drop out of synchronization and 3½ to 4½ bars should be seen sloping downward to the right. If the receiver fails to hold synchronization during this check with the hold control at the extreme counter-clockwise position or fails to hold synchronization for at least 60° in the clockwise direction from the point when it drops into "sync", it will be necessary to align the horizontal oscillator circuit as follows:

(A) HORIZONTAL OSCILLATOR ALIGNMENT

Turn horizontal hold control to extreme clockwise position. Tune in test pattern and adjust trimmer B1 until picture is out of sync. and shows 3½ to 4½ bars sloping downward to the right. If the trimmer has insufficient range, set it to its mid-position (one turn from tight) and adjust slug B2 until bars appear.

(B) HORIZONTAL LOCKING ALIGNMENT:

Turn the horizontal hold control to full counter-clockwise position. Switch to another channel and back to the original again.

Slowly turn horizontal hold control clockwise and note the last number of diagonal bars present just before picture sync. If more than 4½ bars are present just before picture sync. adjust "horizontal lock" trimmer B3 slightly clockwise. If less than 3½ bars are present, adjust B3 slightly counter-clockwise and switch channel selector to another channel and back again. Recount bars present at the "lock-in" point. Repeat this procedure until 3½ to 4½ bars are present.

Repeat Steps (A) and (B) until conditions exist as outlined under "Horizontal Oscillator Alignment Check".

WIDTH, DRIVE & HORIZONTAL LINEARITY ADJUSTMENTS:

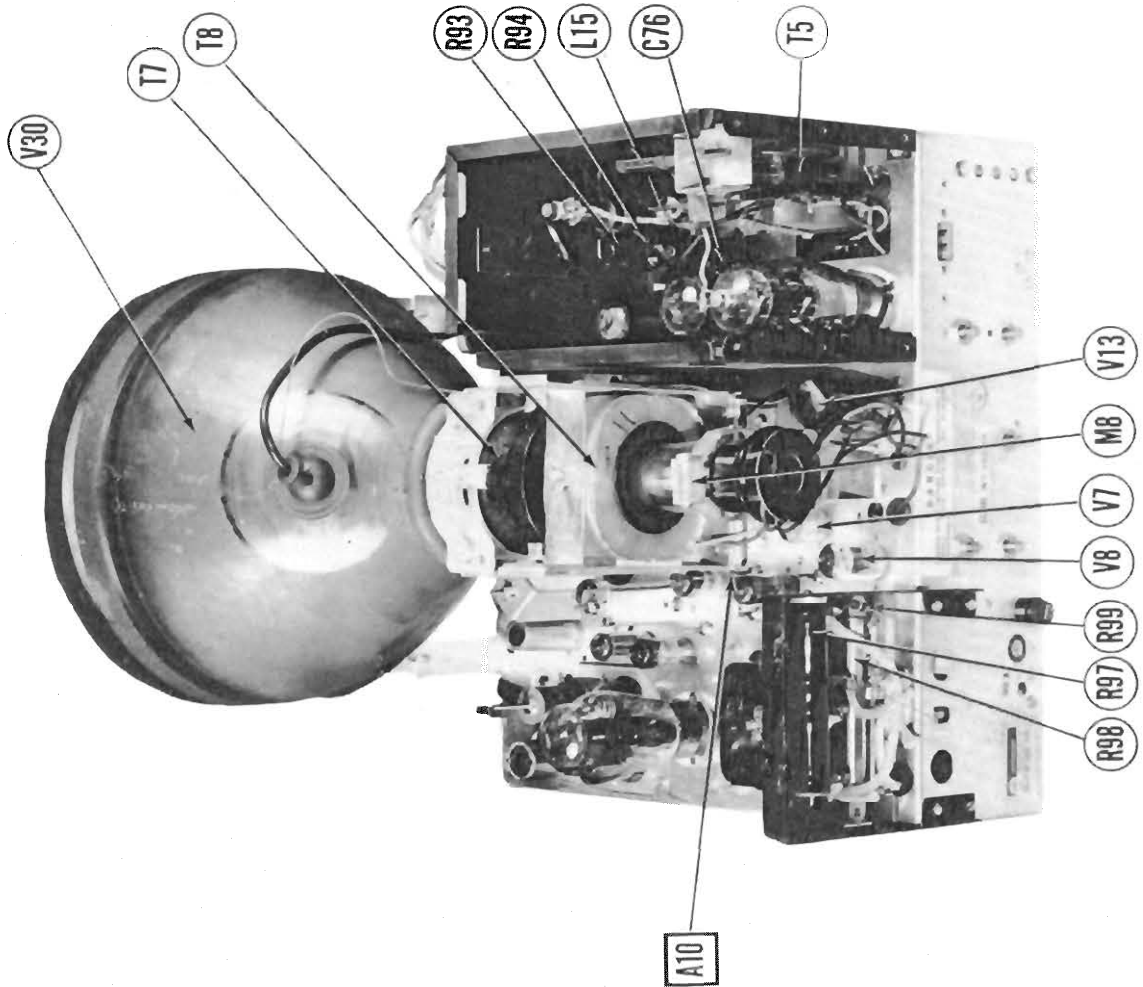
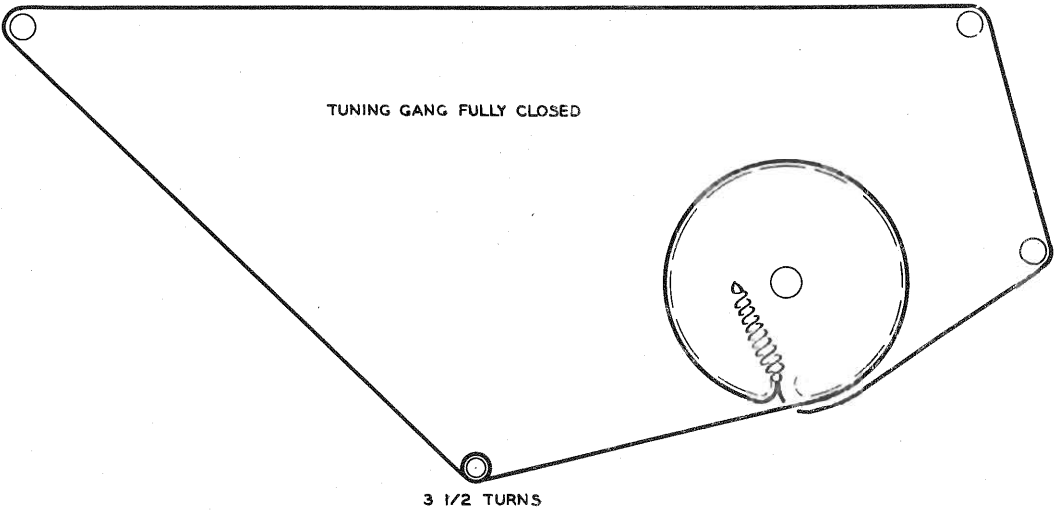
Turn width control B4 to maximum clockwise position. Adjust "horizontal drive" trimmer B5 for maximum brightness and linearity. Adjust horizontal linearity B6 for best linearity in the right half of the picture. Readjust width control until picture fills the mask.

HEIGHT & VERTICAL LINEARITY ADJUSTMENTS:

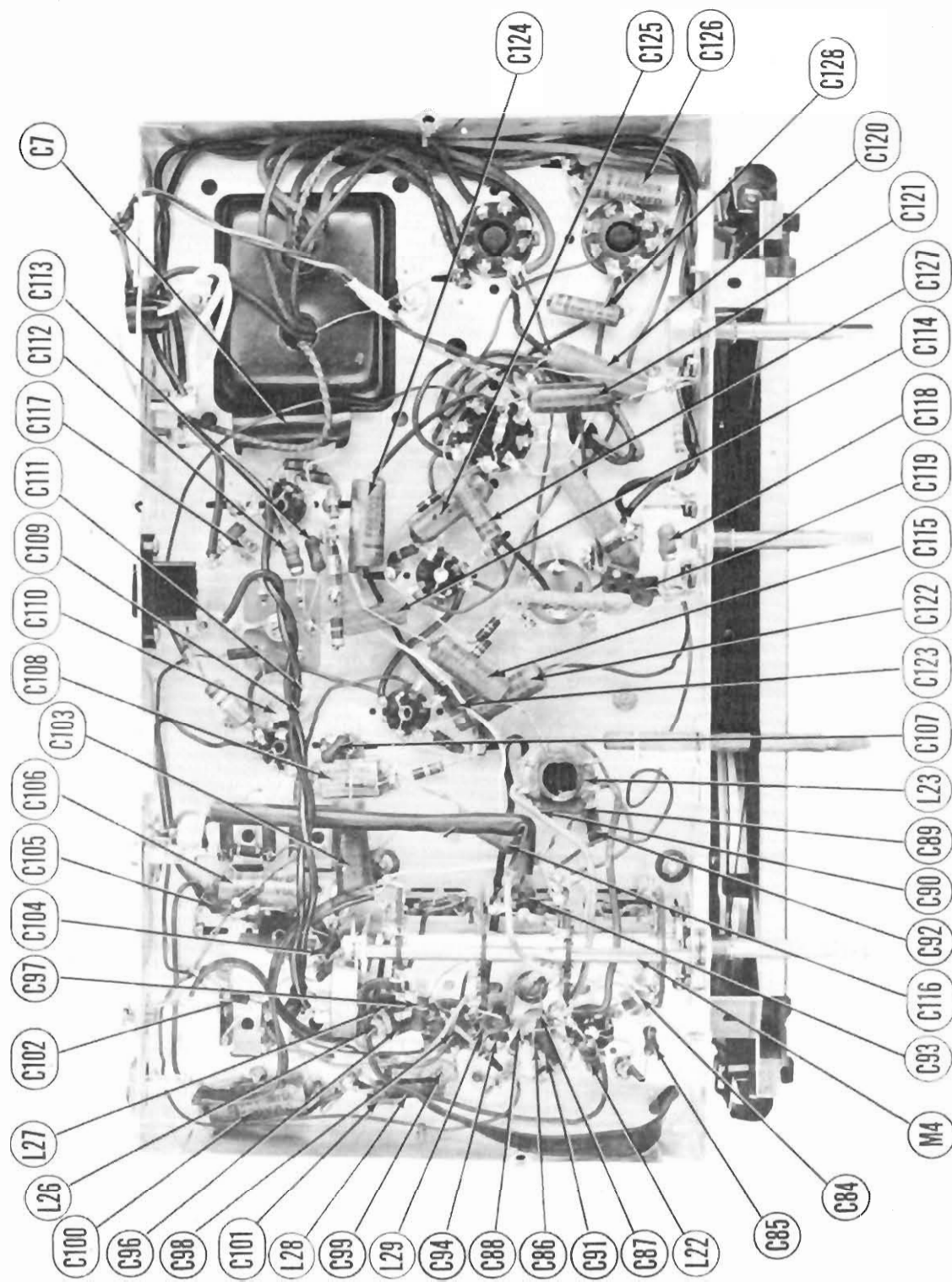
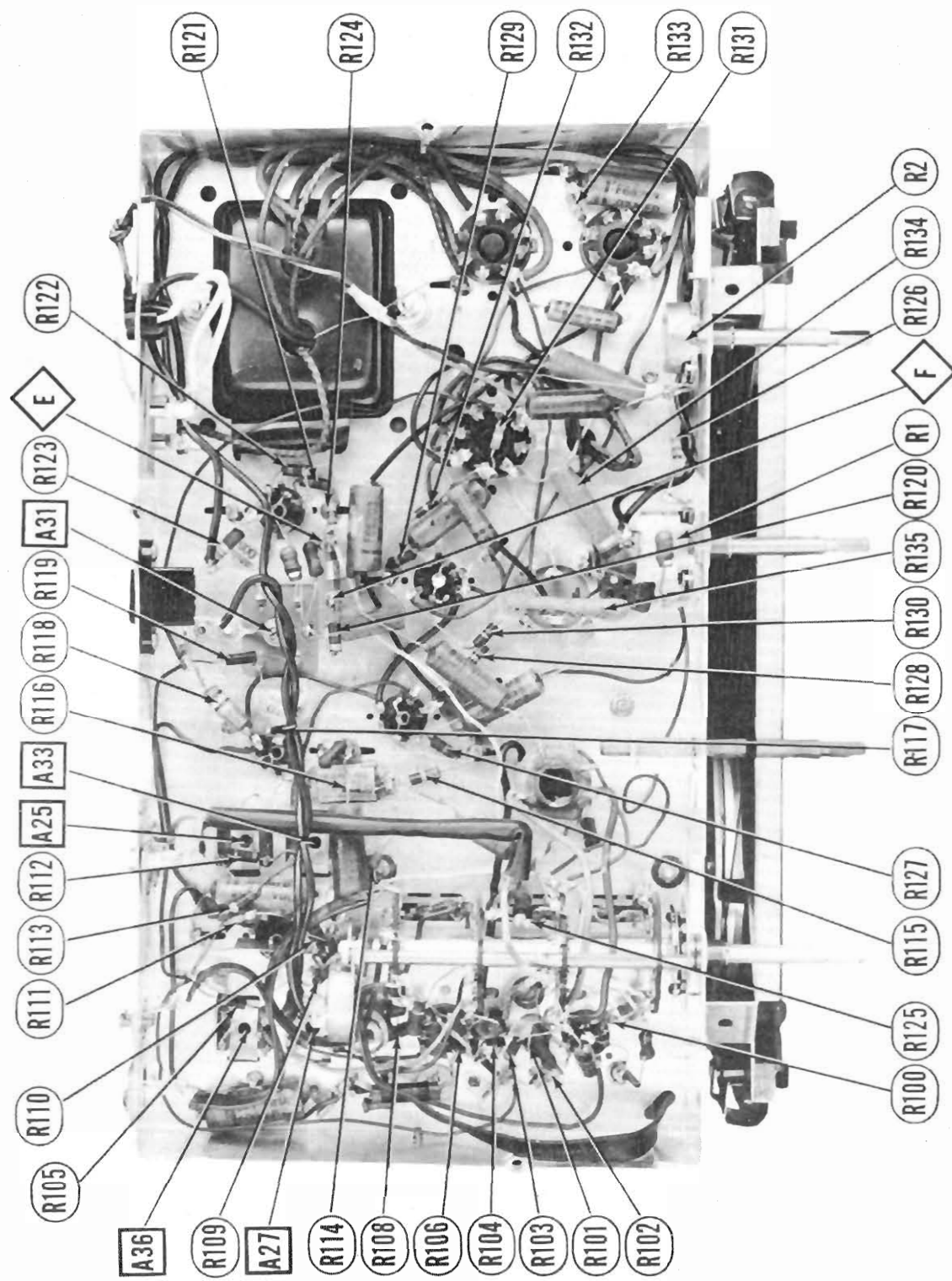
Adjust the height control until picture fills mask vertically. Adjust the vertical linearity control until the test pattern is symmetrical from top to bottom.

Due to interaction between these two controls it is necessary to repeat the adjustments. Adjust the vertical centering control to align the picture with the mask.

DIAL CORD STRINGING



AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A



**AIRLINE MODELS 94WG-3006A,
94WG-3008A, 94WG-3009A**