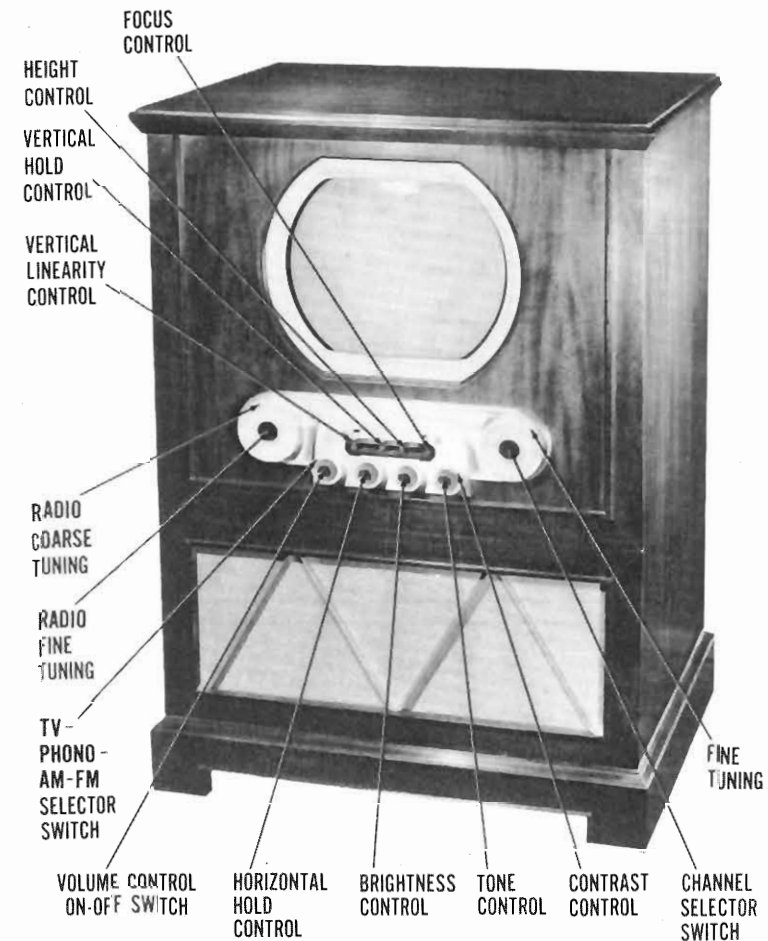


RESISTOR AND INDUCTOR IDENTIFICATION



STEWART-WARNER MODEL 9113-A

TRADE NAME	Stewart-Warner, Models 9106-A, -B, 9108-A, -B, 9109-A, -B, 9113-A
MANUFACTURER	Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago, Illinois
TYPE SET	TV-AM-FM-Phono, Combination Receivers (Some models "TV Only")
TUBES	Thirty One (Models 9108A, -B, 9113-A -Combination Receivers); Twenty Six (Models 9106-A, -B, 9109-A, -B, - TV Only Receivers)
POWER SUPPLY	110-120 Volts AC-60 Cycle
RATING	1.81 Amp. at 117 Volts AC
TUNING RANGE	TV-Channels 2 thru 13, FM-88-108MC, AM-540-1600KC

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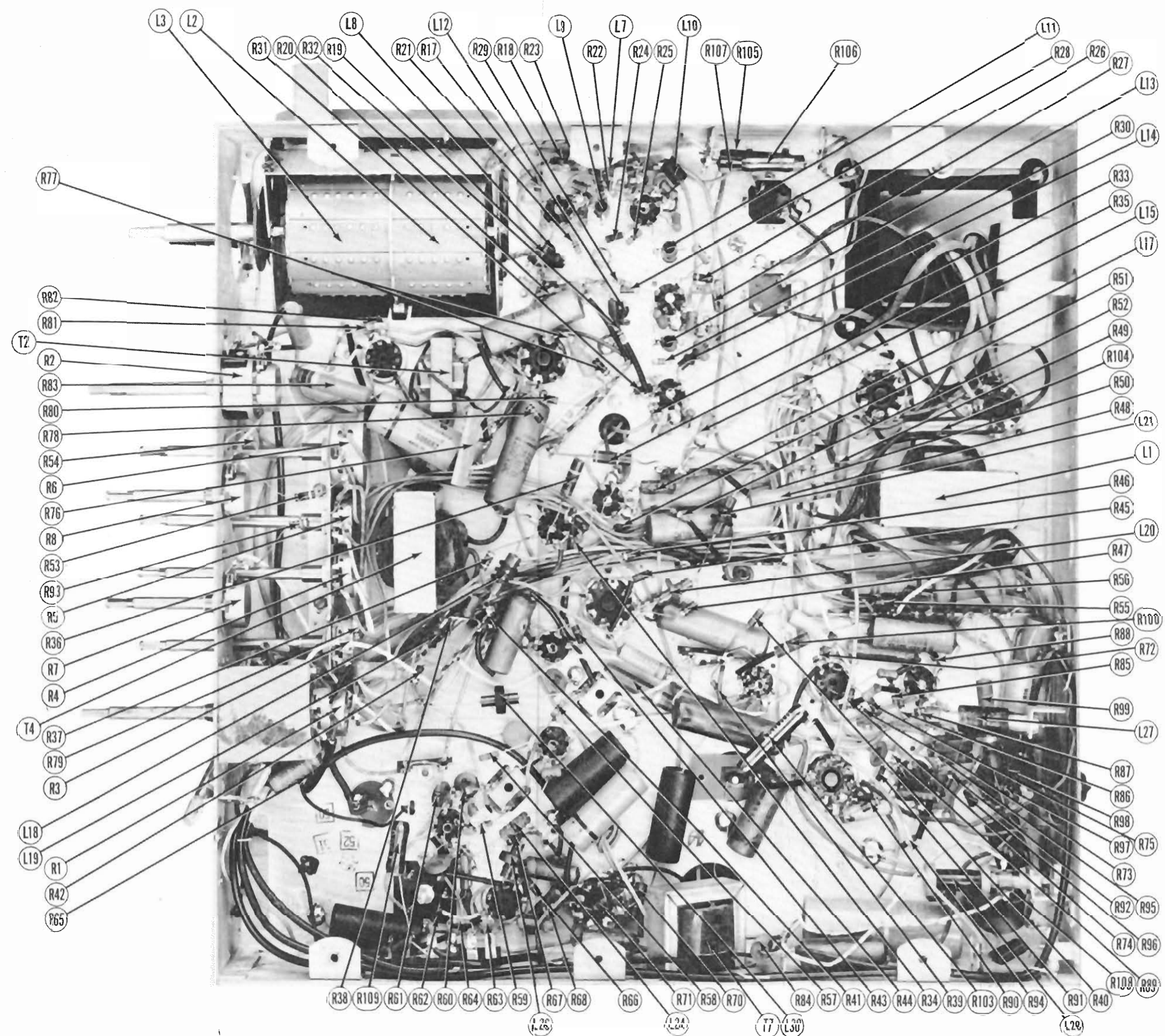
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DATE 12-50

SET 118

FOLDER 10

STEWART-WARNER MODELS 9106A, B,
9108A, B, 9109A, B, 9113A



CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

TRADE NAME
MANUFACTURER
TYPE SET
TUBES

POWER SUPPLY
RATING
TUNING RANGE

Alignment I

Dial Cord S

Disassembly

Horiz. Sweep

Parts List a

Photographs

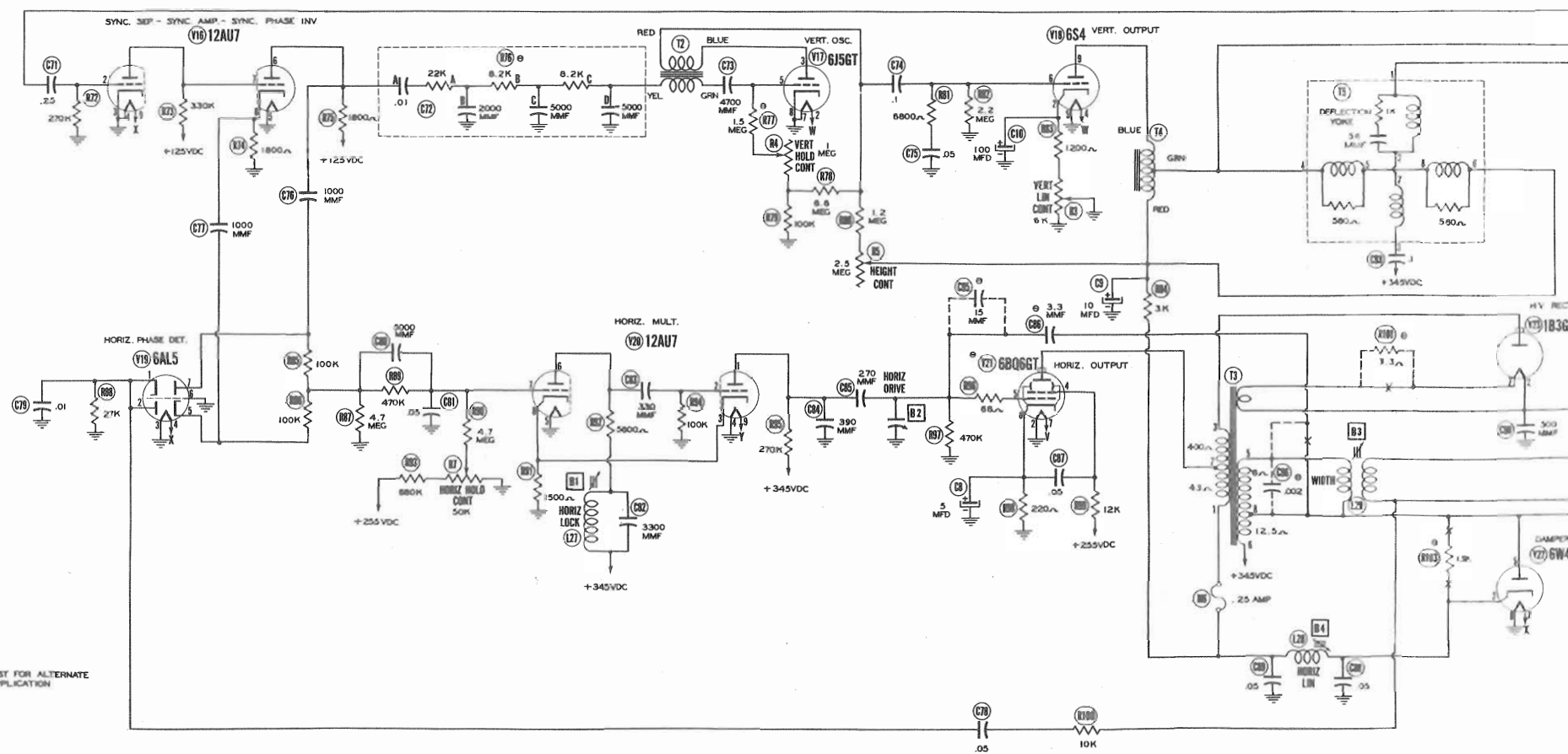
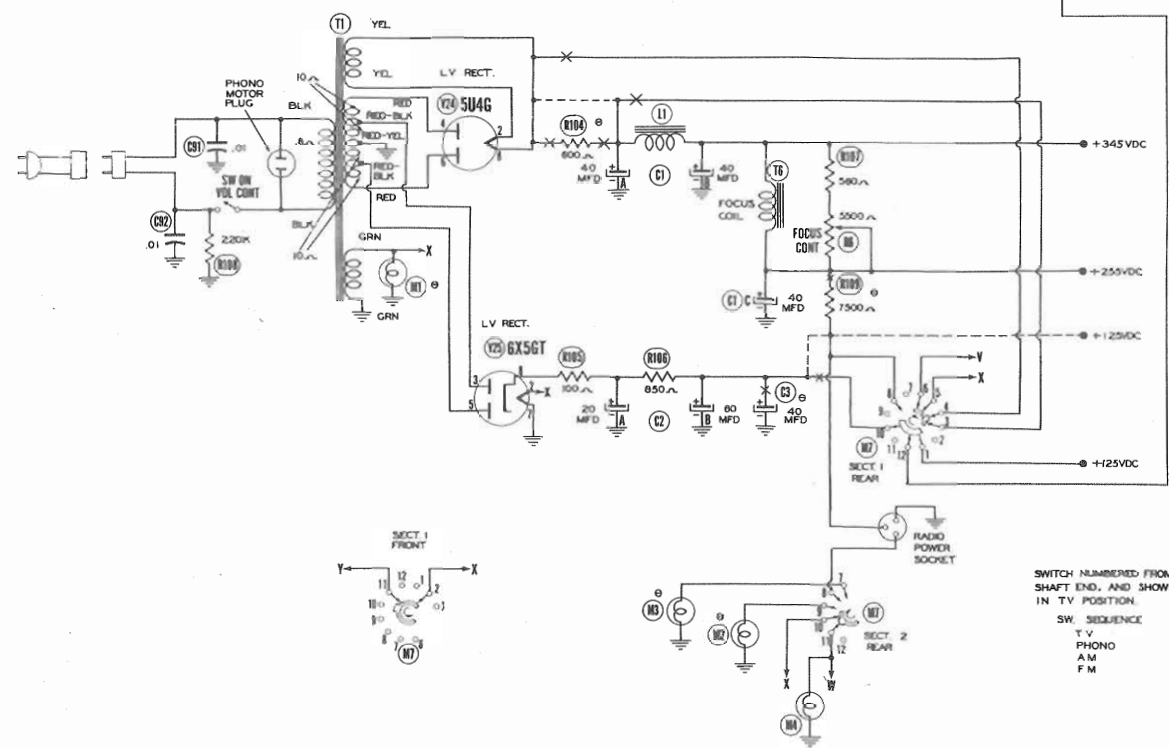
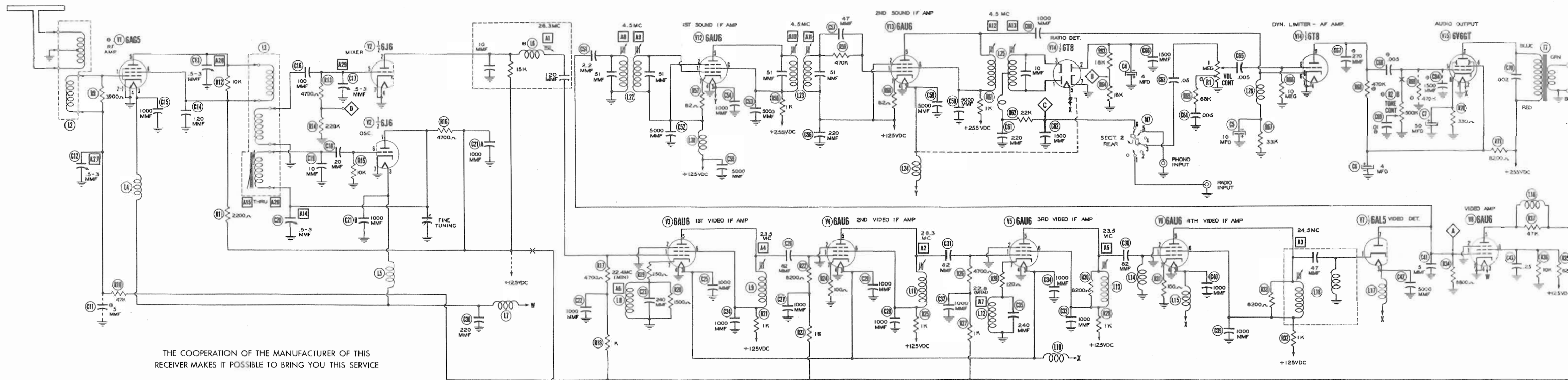
Cabinet-R

Capacitor

Chassis-E

Chassis-T

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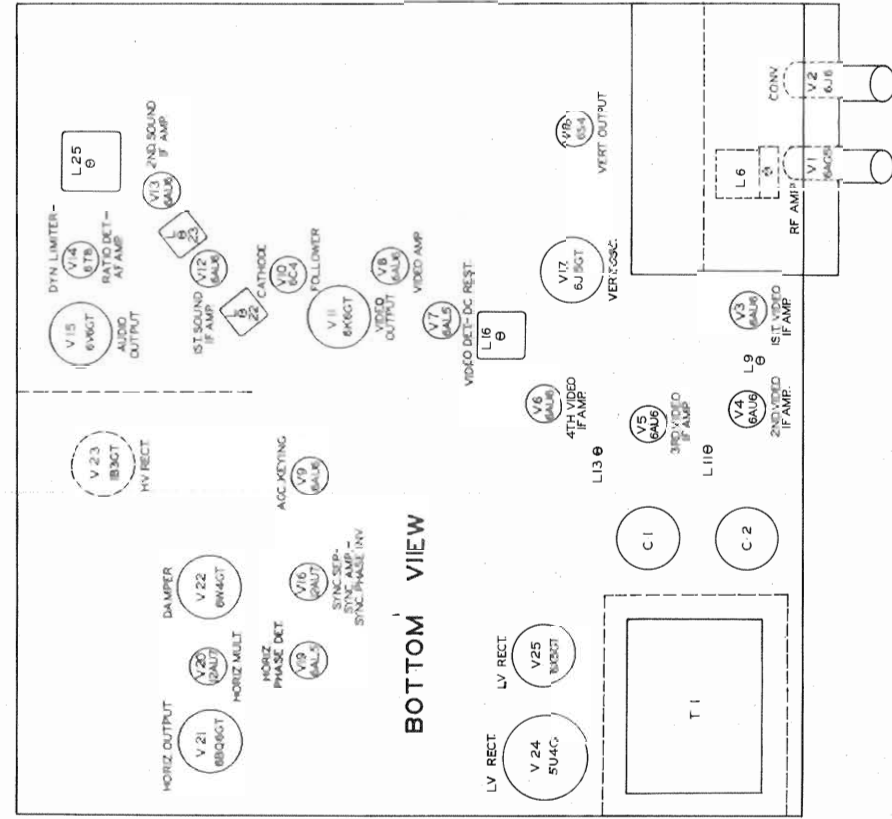
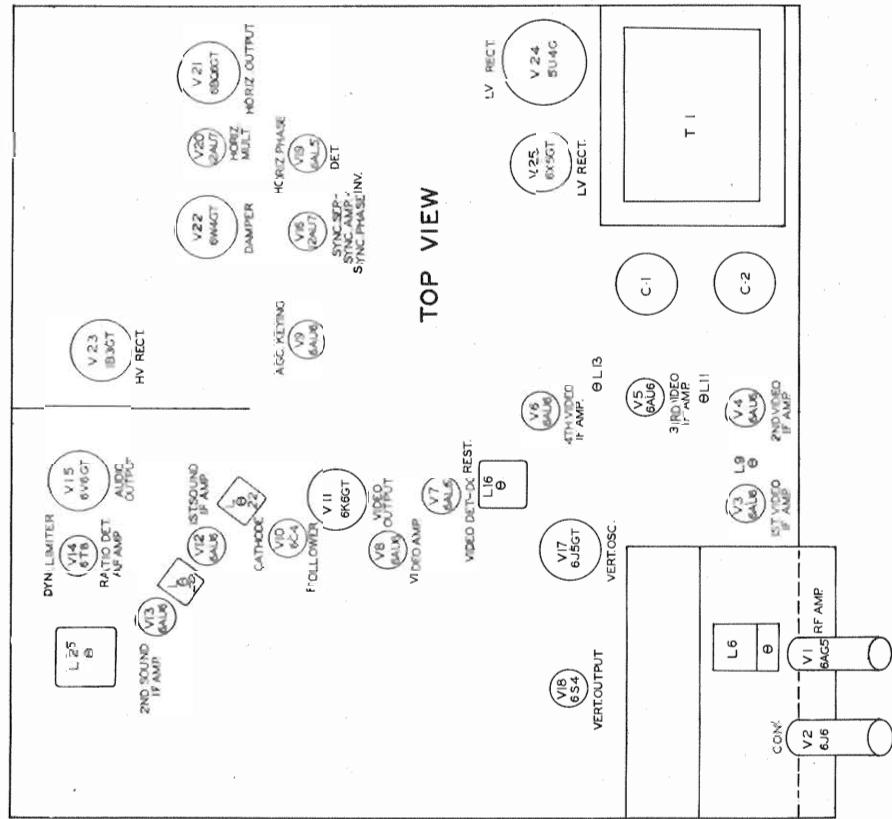
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MODELS. WHEN DOTTED IN PARTS ARE
USED POINTS MARKED X ARE BROKEN

© SEE PARTS LIST FOR ALTERNATE
VALUE OR APPLICATION

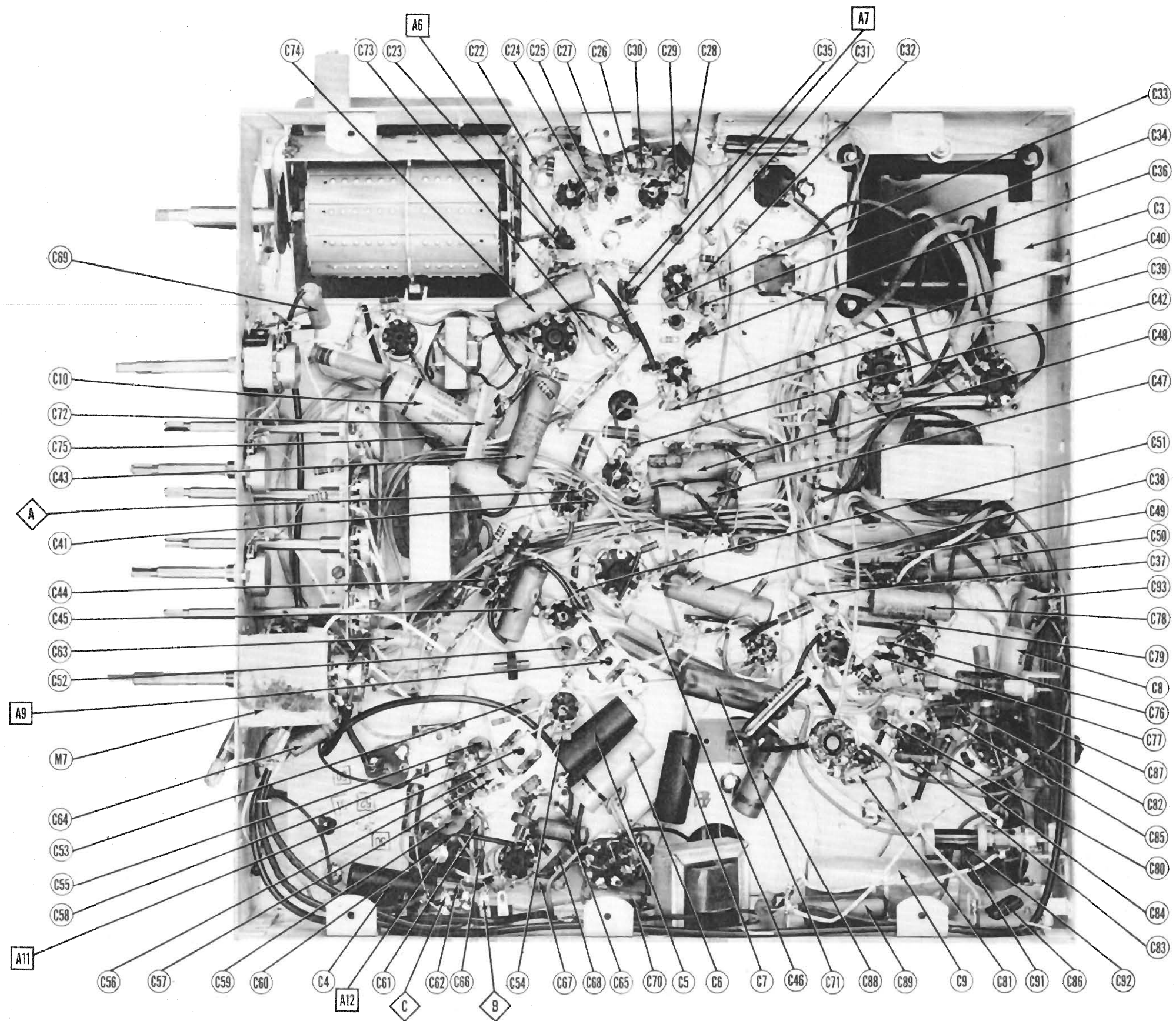
VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS										RESISTANCE READINGS											
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	-3VDC	0V	6.3VAC	0V	100VDC	100VDC	0V			V 1	6AG5	160KΩ	0Ω	10	0Ω	13.2KΩ	0Ω			
V 2	6B6	80VDC	0V	6.3VAC	0V	-1.2VDC	6.3VDC	0V			V 2	6B6	15.7KΩ	110KΩ	10	0Ω	225KΩ	0Ω			
V 3	6AU6	-1VDC	0V	6.3VAC	0V	115VDC	115VDC	1.3VDC			V 3	6AU6	115KΩ	0Ω	10	0Ω	12KΩ	150Ω			
V 4	6AU6	-1VDC	0V	6.3VAC	0V	115VDC	115VDC	.9VDC			V 4	6AU6	120KΩ	0Ω	10	0Ω	12KΩ	100Ω			
V 5	6AU6	-1VDC	0V	6.3VAC	0V	115VDC	115VDC	1.2VDC			V 5	6AU6	115KΩ	0Ω	10	0Ω	12KΩ	120Ω			
V 6	6AU6	0V	0V	6.3VAC	0V	115VDC	115VDC	.9VDC			V 6	6AU6	3Ω	0Ω	3Ω	0Ω	12KΩ	100Ω			
V 7	6AL5	0V	0V	6.3VAC	0V	1VDC	0V	-4VDC			V 7	6AL5	2.2Ω	0Ω	7Ω	0Ω	1 Meg.	0Ω	6.8KΩ		
V 8	6AU6	-4VDC	0V	6.3VAC	0V	65VDC	60VDC	0V			V 8	6AU6	6.8KΩ	0Ω	10	0Ω	112KΩ	19.2KΩ	0Ω		
V 9	6AL5	-60VDC	0V	6.3VAC	0V	-120VDC	110VDC	40V			V 9	6AU6	145KΩ	11KΩ	10	0Ω	100KΩ	1KΩ	11KΩ		
V 10	6C4	255VDC	0V	0V	6.3VAC	255VDC	18VDC	130VDC			V 10	6C4	1KΩ	Inf.	0Ω	1Ω	1KΩ	1 Meg.	19KΩ		
V 11	6K6GT	0V	0V	320VDC	125VDC	3VDC	0V	6.3VAC	42VDC		V 11	6K6GT	Inf.	0Ω	3KΩ	11KΩ	1 Meg.	Inf.	10	3.3KΩ	
V 12	6AU6	40V	40V	6.3VAC	0V	1120VDC	1120VDC	41VDC			V 12	6AU6	195Ω	195Ω	10	0Ω	2KΩ	2KΩ	11KΩ		
V 13	6AU6	40V	40V	6.3VAC	0V	1120VDC	1120VDC	41VDC			V 13	6AU6	147KΩ	195Ω	7Ω	0Ω	2KΩ	2KΩ	11KΩ		
V 14	6B8	-4VDC	-1VDC	-4VDC	0V	6.3VAC	-5VDC	0V	-6VDC	70VDC	V 14	6B8	Inf.	30KΩ	Inf.	0Ω	10	33KΩ	0Ω	10 Meg.	480KΩ
V 15	6B6GT	0V	6.3VAC	250VDC	225VDC	0V	250VDC	0V	13VDC		V 15	6B6GT	Inf.	10	1.7KΩ	1.7KΩ	500KΩ	1KΩ	0Ω	330Ω	
V 16	12AU7	22VDC	-4.2VDC	0V	0V	100VDC	22VDC	20VDC	6.3VAC		V 16	12AU7	133KΩ	270KΩ	0Ω	0Ω	12.8KΩ	133KΩ	1.8KΩ	10	
V 17	6B6GT	0V	6.3VAC	140VDC	0V	-27VDC	0V	0V	0V		V 17	6B6GT	0Ω	10	1.2Meg.	Inf.	1.6 Meg.	Inf.	0Ω	0Ω	20KΩ
V 18	6B8	0V	18VDC	0V	6.3VAC	0V	0V	0V	390VDC		V 18	6B8	Inf.	1.2KΩ	2.2 Meg.	10	2.2 Meg.	Inf.	Inf.	Inf.	
V 19	6AL5	0V	0V	6.3VAC	0V	7VDC	0V	-5VDC			V 19	6AL5	27KΩ	27KΩ	0Ω	10	2.8 Meg.	0Ω	2.8 Meg.		
V 20	12AU7	110VDC	-4.5VDC	14VDC	0V	310VDC	.3VDC	14VDC	6.3VAC		V 20	12AU7	270KΩ	100KΩ	1.5KΩ	0Ω	45.7KΩ	1.5KΩ	1.5KΩ	10	
V 21	6B6GT	0V	0V	135VDC	-7VDC	6.3VAC	18VDC	0V	TOP CAP		V 21	6B6GT	Inf.	0Ω	10	13KΩ	470KΩ	470KΩ	200Ω	15KΩ	
V 22	6W4GT	0V	0V	450VDC	0V	345VDC	0V	6.3VAC	0V		V 22	6W4GT	0Ω	Inf.	15KΩ	Inf.	2Ω	Inf.	0Ω	0Ω	TOP CAP 15KΩ
V 23	1B3GT	* DO NOT MEASURE									V 23	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	
V 24	5U4G	120VDC	345VDC	0V	340VAC	0V	340VAC	0V	345VDC		V 24	5U4G	11KΩ	70KΩ	Inf.	20Ω	Inf.	20Ω	Inf.	70KΩ	
V 25	6X5GT	0V	6.3VAC	170VAC	345VDC	170VAC	0V	0V	175VDC		V 25	6X5GT	Inf.	10	10Ω	40Ω	10Ω	10Ω	18KΩ		
V 26	12P4A	0V	17VDC	345VDC	105VDC	6.3VAC					V 26	12P4A	0Ω	1.1 Meg.	100Ω	65KΩ	10	Inf.	0Ω	18KΩ	
1 TAKEN WITH VACUUM TUBE VOLTMETER 4 MEASURED FROM 125VDC POINT * DO NOT MEASURE FUNCTION SWITCH IN TV POSITION 1 MEASURED FROM PIN 8 OF V25 4 MEASURED FROM PIN 8 OF V24																					

1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms per volt.
2. Pin numbers are counted in a clockwise direction from 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.









**STEWART-WARNER MODELS 9106A, B,
9108A, B, 9109A, B, 9113A**



STEWART-WARNER MODELS 9106A, B,
9108A, B, 9109A, B, 9113A

CHASSIS BOTTOM VIEW-CAPACITOR AND ALIGNMENT IDENTIFICATION

RADIO ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
To set dial turn tuning gang fully closed and set the dial to the heavy black mark at the low frequency end of dial scale. The dial may be adjusted by loosening the set screws on the tuning gang drive drum.						
AM ALIGNMENT						
Loop should be maintained in same relative position to chassis as when receiver is in cabinet. 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 alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	REMARKS
13. .01MFD	High side to stator on front "AM" section of tuning gang. Low side to chassis.	455KC (400 % Mod.)	AM (second position CW)	Tuning gang fully open	Across voice coil	A30, A31, A32, A33 Adjust for maximum output.
14.	Loop	1620KC	"	"	"	A34 Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
15.	Loop	1500KC	"	Tune for max. output	"	A35 "
16.	Loop	600KC	"	"	"	A36 Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. Repeat steps 15 and 16 until no further improvement can be made.
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	REMARKS
17. .01MFD	High side to stator on front "FM" section of tuning gang. Low side to chassis.	10.7MC (Unmod.)	FM (maximum CCW)	Tuning gang fully open	DC Probe to Point  . Common to chassis.	A37, A38, A39, A40, A41 Adjust for maximum deflection.
18. .01MFD	"	"	"	"	DC Probe to Point  . Common to Point  .	A42 Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. Continue with step 20.
FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE						
Use frequency modulated signal with 60 % modulation and 450KC sweep. Use 120 V sawtooth voltage in scope for horizontal deflection.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	REMARKS
17. .01MFD	High side to pin 1 (Grid) of 6BA6 (V29). Low side to chassis.	10.7MC (450KC SWP)	FM (maximum CCW)	Point of non-interference	Vert. Amp. to Point  . Low side to chassis.	A39, A40, A41 Disconnect stabilizer capacitor C97. Adjust for maximum amplitude and symmetry as per figure 6.
18. .01MFD	High side to stator on front "FM" section of tuning gang. Low side to chassis.	"	"	"	"	A37, A38 "
19. .01MFD	"	"	"	"	Vert. Amp. to Point  . Low side to chassis.	A42 Reconnect capacitor C97. Adjust A42 so 10.7MC occurs at center of crossover lines as per figure 7. Slightly retouch A41 for maximum amplitude and straightness of crossover lines.
FM RF ALIGNMENT						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	REMARKS
20. 2700 carbon res.	High side thru 2700 to "FM" antenna terminal. Low side to chassis.	109MC (Unmod.)	FM	Tuning gang fully open	DC Probe to Point  . Low side to chassis.	A43 Adjust for maximum deflection.
21. "	"	106MC	"	Tune for max. deflection.	"	A44 "

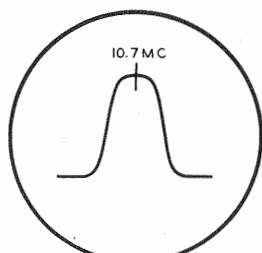


FIG. 6

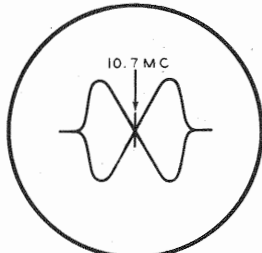
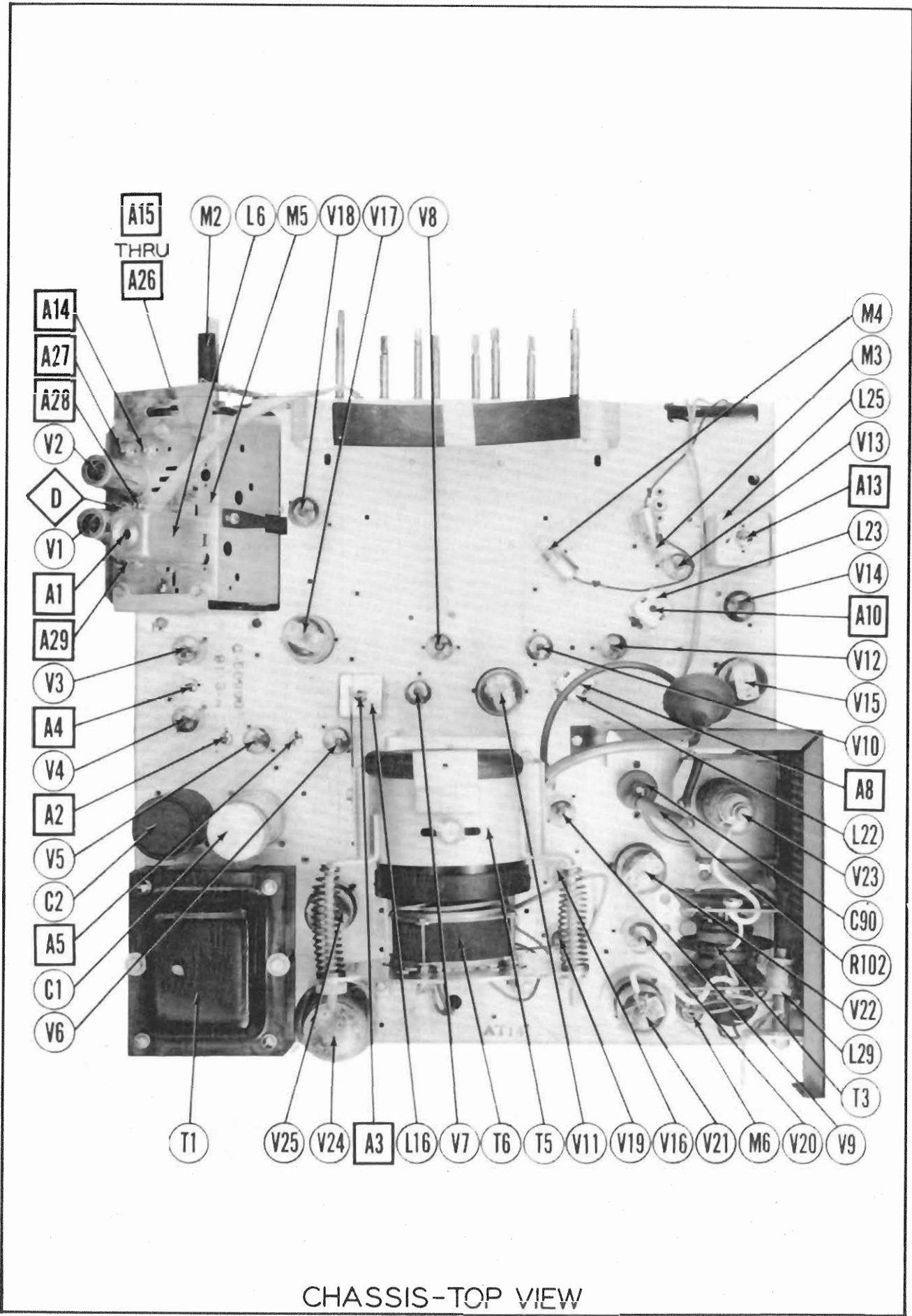


FIG. 7



CHASSIS-TOP VIEW

STEWART-WARNER MODELS 9106A, B,
9108A, B, 9109A, B, 9113A

TV ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage shock hazard may be eliminated by removing the horizontal oscillator tube (V20) from its socket.

VIDEO IF ALIGNMENT

Turn the function selector switch to "TV" (maximum clockwise).

Connect the negative lead of a 3 volt battery to the junction of R40 and C37, connect the positive lead to chassis.

Detune trap coils A6 and A7 by compressing the turns together before attempting video IF alignment. Failure to detune these traps may result in oscillations in the video IF amplifiers during alignment.

Remove the converter tube (V2) and replace it with a 6J6 which has pin 1 removed. This will disable the local oscillator and prevent the possibility of erroneous indications.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	26.3MC (Unmod.)	Any	DC Probe to Point A. Common to chassis.	A1, A2	Adjust for maximum deflection.
2. Direct	"	24.5MC	"	"	A3	"
3. Direct	"	23.5MC	"	"	A4, A5	"
4. Direct	"	22.4MC	"	"	A6	Expand coil turns for MINIMUM deflection.
5. Direct	"	22.8MC	"	"	A7	"

OVERALL VIDEO IF RESPONSE CHECK

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

Connect a 10KΩ decoupling resistor in series with the oscilloscope vertical input. Connect a .001MFD capacitor across the vertical input terminals.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6. Direct	High side to ungrounded tube shield floating over dummy converter tube (V2). Low side to chassis.	25MC (10MC SWP)	26.75MC 22.25MC	Any	Vert. Amp. thru 10KΩ to Point A. Low side to chassis.		Check for response curve similar to figure 1. If necessary retouch A1 thru A5 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
7. .01MFD	High side to pin 1 (cathode) of 6AL5 (V7). Low side to chassis.	4.5MC (Unmod.)	Any	DC Probe to Point B. Common to chassis.	A8, A9, A10, A11, A12	Adjust for maximum deflection.
8. .01MFD	"	"	"	DC Probe to Point C. Common to Point B.	A13	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Use frequency modulated signal with 60% modulation and 450KC sweep. Use 120% sawtooth voltage in scope for horizontal deflection.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
7. .01MFD	High side to pin 1 (Grid) of 6AU6 (V12). Low side to chassis.	4.5MC (450KC SWP)	4.5MC	Any	Vert. Amp. to Point B. Low side to chassis.	A8, A9, A10	Disconnect stabilizer capacitor C4. Adjust for maximum amplitude and symmetry as per figure 2.
8. .01MFD	High side to pin 1 (cathode) of 6AL5 (V7). Low side to chassis.	"	"	"	"	A11, A12	"
9. .01MFD	"	"	"	"	Vert. Amp. to Point C. Low side to chassis.	A13	Reconnect capacitor C4. Adjust A13 so 4.5MC occurs at center of crossover lines as per figure 3. Slightly retouch A12 for maximum amplitude and straightness of crossover lines.

OSCILLATOR ALIGNMENT

Remove the dummy converter tube and replace the original 6J6 in its socket.

The overall oscillator adjustment (A14) should be pre-set so that the shoulder of the screw is 3/8 inch above the chassis.

The individual channel oscillator screws are reached through a hole just to the right of the channel switch shaft.

The correct adjustment screw is accessible through this hole as the channel switch is turned to each channel.

The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.

Set the fine tuning control to the mid-position of its range.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
10. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	207MC (10MC SWP)	205.25MC 209.75MC	12	Vert. Amp. thru 10KΩ to Point A. Low side to chassis.	A15	Adjust to place sound marker in "notch" as shown in figure 4. The video marker should be at approximately 35%.
		213MC (10MC SWP)	211.25MC 215.75MC	13		A16	
		201MC (10MC SWP)	199.25MC 203.75MC	11		A17	
		195MC (10MC SWP)	193.25MC 197.75MC	10		A18	
		189MC (10MC SWP)	187.25MC 191.75MC	9		A19	
		183MC (10MC SWP)	181.25MC 185.75MC	8		A20	
		177MC (10MC SWP)	175.25MC 179.75MC	7		A21	
		85MC (10MC SWP)	83.25MC 87.75MC	6		A22	
		79MC (10MC SWP)	77.25MC 81.75MC	5		A23	
		69MC (10MC SWP)	67.25MC 71.75MC	4		A24	
		63MC (10MC SWP)	61.25MC 65.75MC	3		A25	
		57MC (10MC SWP)	55.25MC 59.75MC	2		A26	

TV ALIGNMENT INSTRUCTIONS (CONT.)

RF ALIGNMENT							
Connect the three volt battery as outlined under video IF alignment. The sweep generator output lead should be terminated with its characteristic impedance, usually 50 ohms.							
DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
11. Two 120Ω carbon res.	Across antenna terminals with 120Ω in each lead.	207MC (10MC SWP)	205.25MC 209.75MC	12	Vert. Amp. thru 10KΩ to Point D. Low side to chassis.	A27, A28, A29	Adjust for response curve similar to figure 5 with markers at 90%.
12. "	"	213MC (10MC SWP)	211.25MC 215.75MC	13	"	"	Check for response curve similar to figure 5. If markers fall below 70% on any channel, make slight adjustment of A27, A28 and A29 with channel switch set for that channel. Recheck all channels to see that they have not been seriously effected.
		201MC (10MC SWP)	199.25MC 203.75MC	11			
		195MC (10MC SWP)	193.25MC 197.75MC	10			
		189MC (10MC SWP)	187.25MC 191.75MC	9			
		183MC (10MC SWP)	181.25MC 185.75MC	8			
		177MC (10MC SWP)	175.25MC 179.75MC	7			
		85MC (10MC SWP)	83.25MC 87.75MC	6			
		79MC (10MC SWP)	77.25MC 81.75MC	5			
		69MC (10MC SWP)	67.25MC 71.75MC	4			
		63MC (10MC SWP)	61.25MC 65.75MC	3			
		57MC (10MC SWP)	55.25MC 59.75MC	2			

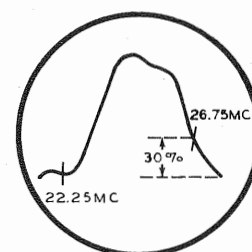


FIG. 1

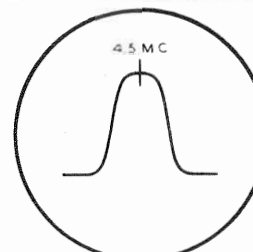


FIG. 2

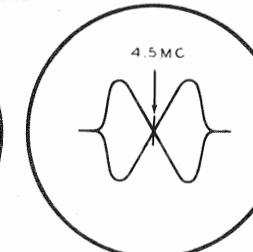


FIG. 3

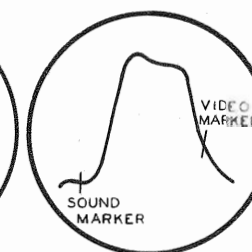


FIG. 4

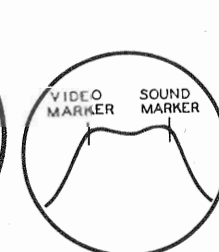


FIG. 5

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

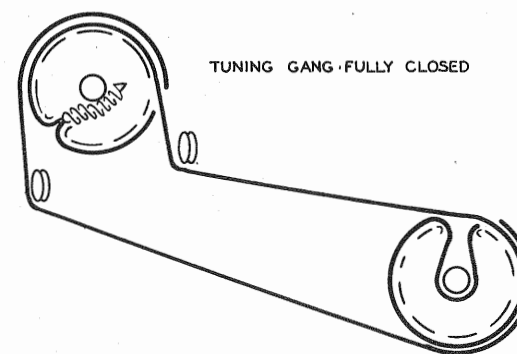
Turn the set on and tune in a TV station, preferably a test pattern.
Turn the horizontal hold control to the mid-position of its range.
Adjust the horizontal lock slug (B1) until the picture synchronizes horizontally.
Adjust the horizontal drive trimmer (B2) clockwise just enough to remove any vertical lines in the picture.
Adjust the width slug (B3) until the picture fills the mask horizontally.
Adjust the horizontal linearity slug (B4) until the picture is symmetrical from left to right. Readjustment of B2 may be required to obtain optimum horizontal linearity.

DISASSEMBLY INSTRUCTIONS

CHASSIS REMOVAL

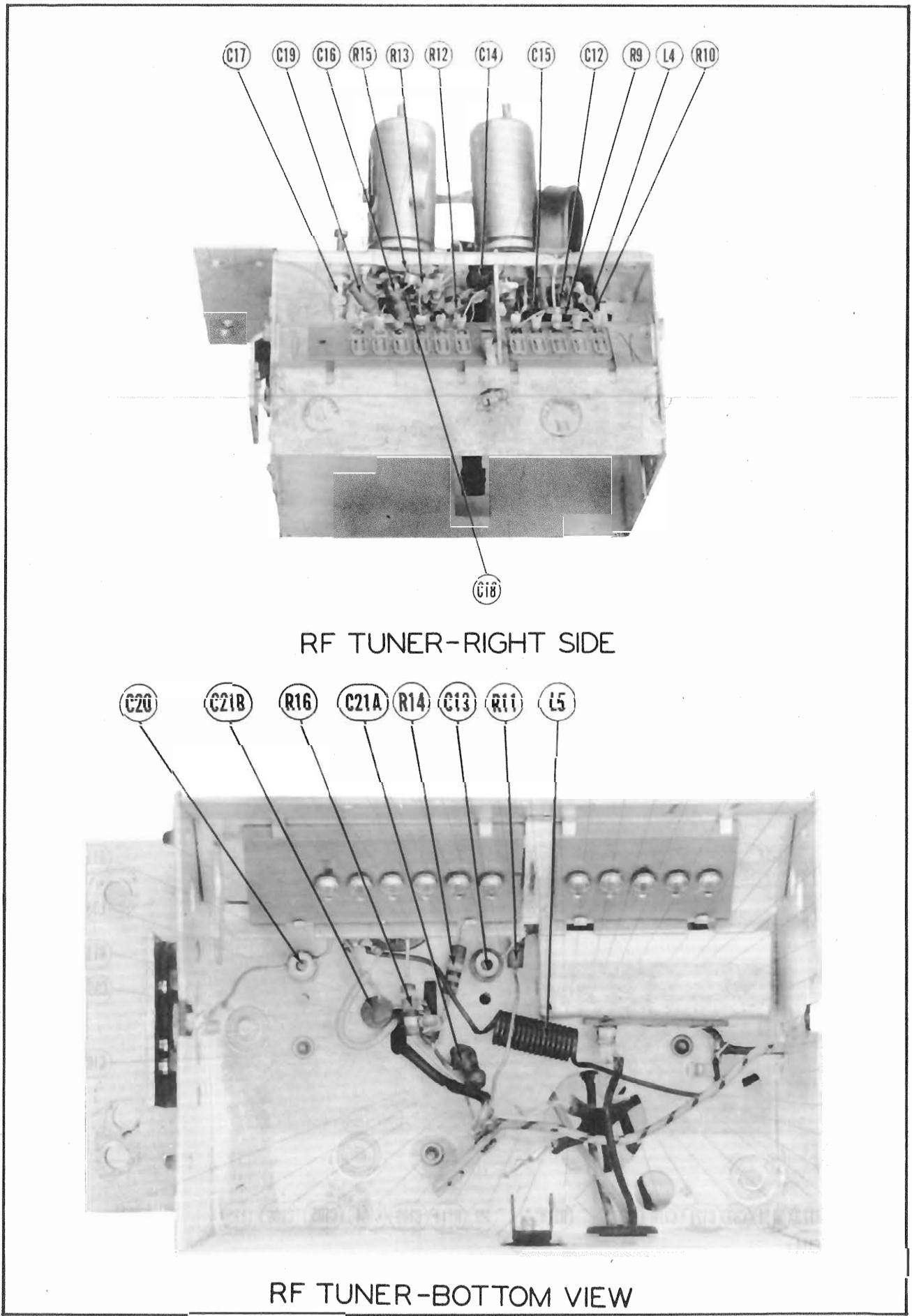
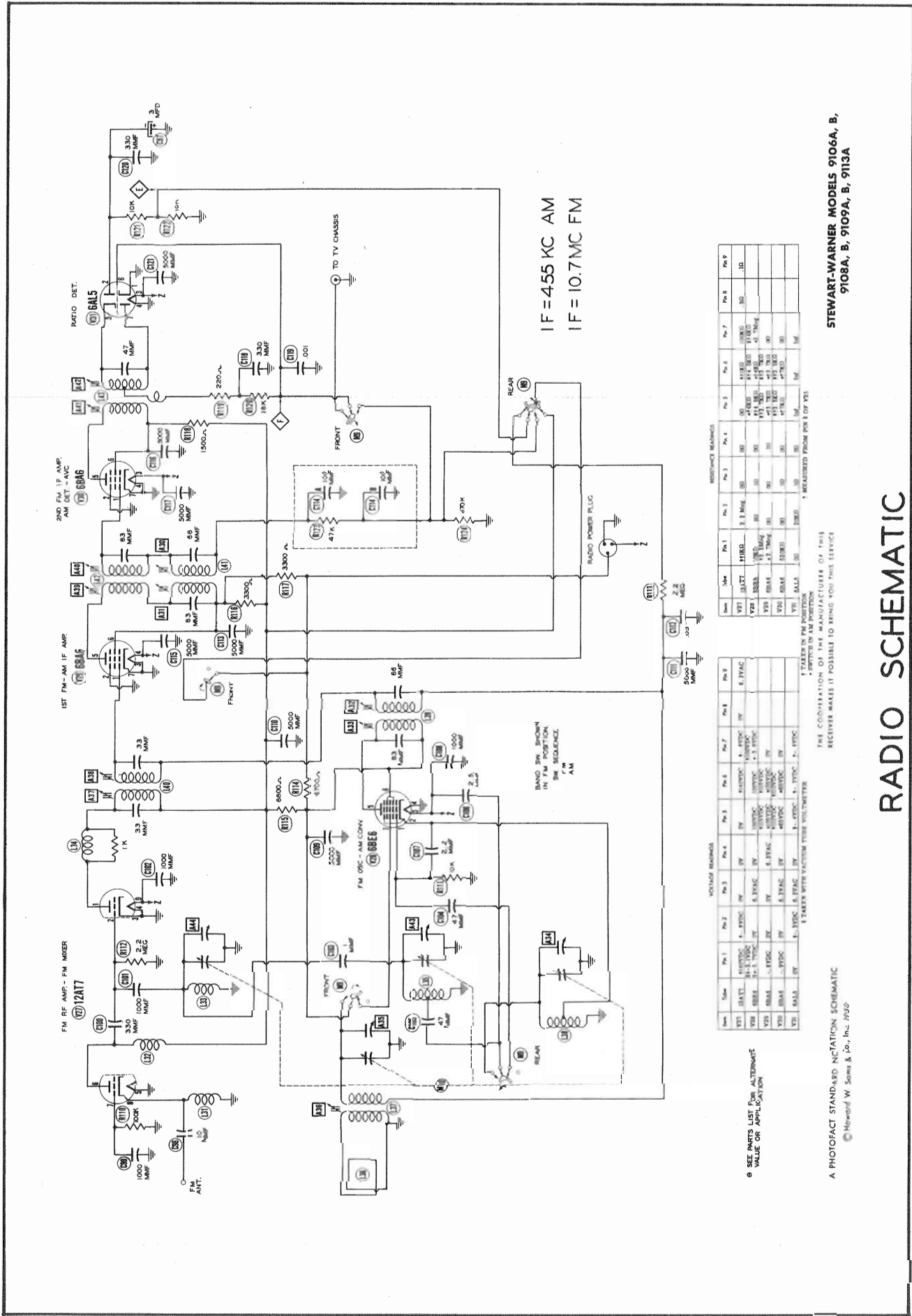
1. Remove ten push-on type control knobs.
2. Remove seven wood screws holding rear cover in place.
3. Disconnect built-in antenna.
4. Remove antenna terminal strip.
5. Disconnect AM Antenna.
6. Disconnect Jewel light.
7. Disconnect speaker.
8. Remove four 5/16" hex head screws for chassis. Remove chassis.
9. Remove four 5/16" hex nuts from speaker. Remove speaker.

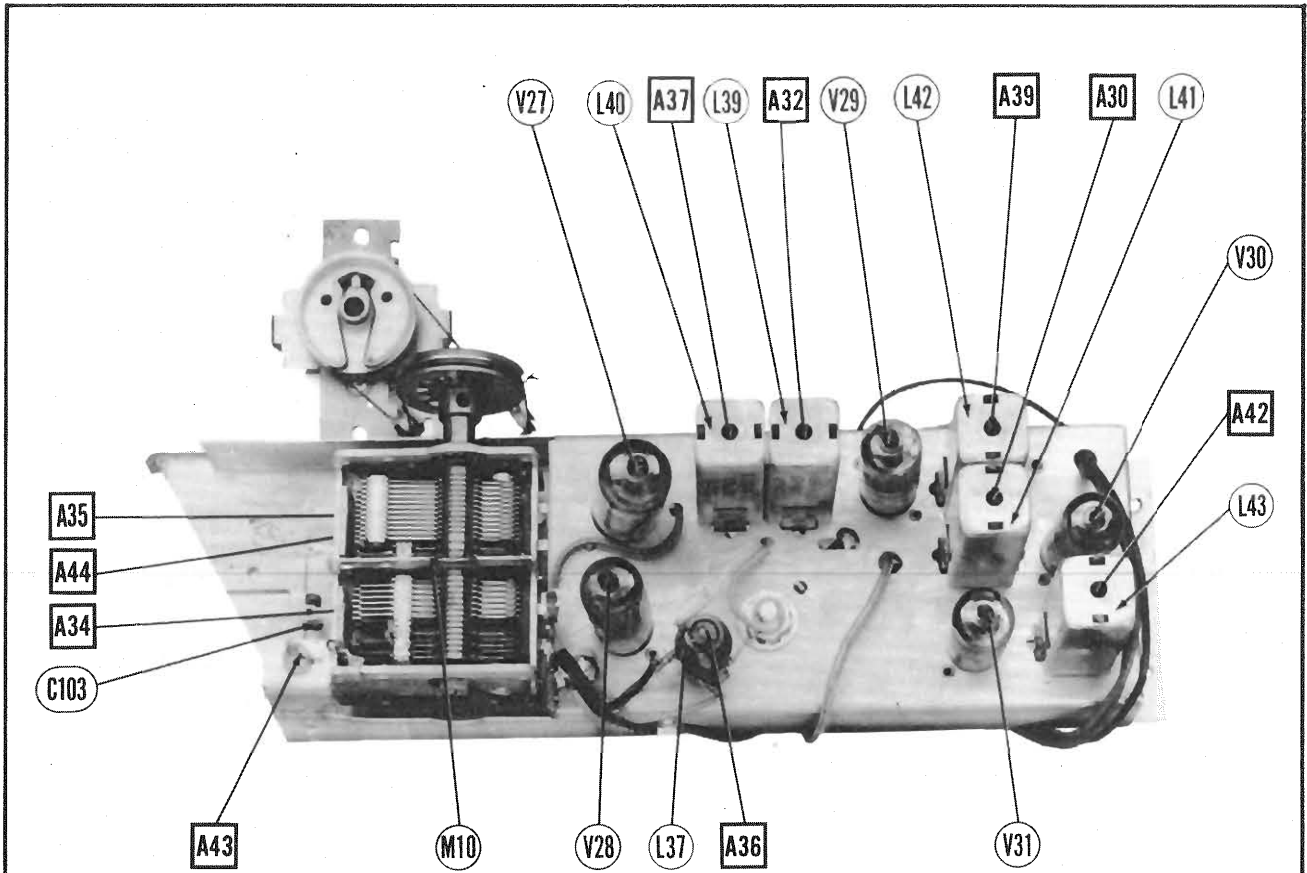
NOTE: FOR PICTURE TUBE REMOVAL, REMOVE CHASSIS AS OUTLINED ABOVE.



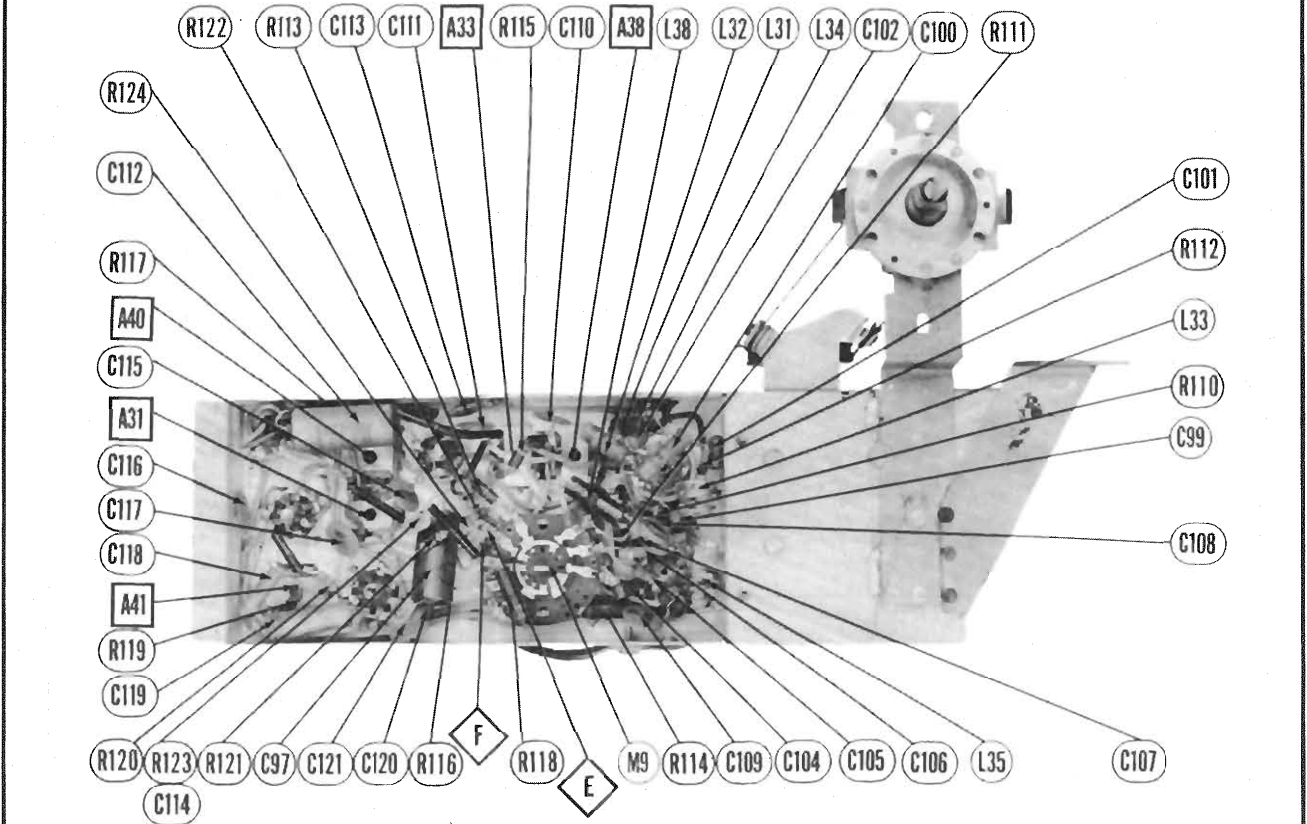
DIAL CORD STRINGING

STEWART-WARNER MODELS 9106A, B, 9108A, B, 9109A, B, 9113A





RADIO CHASSIS-TOP VIEW



RADIO CHASSIS-BOTTOM VIEW

RADIO PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	STEW. -WARN. PART No.	IRC PART No.	
R110	100KΩ		510173		RF Amp. Grid
R111	10KΩ		510155		Osc. Grid
R112	2.2 Meg.		510193		Mixer Grid
R113	2.2 Meg.		510193	BTS-2.2 Meg.	AVC Filter
R114	4700Ω		510249	BTA-4700	Decoupling
R115	6800Ω		510152	BTS-6800	Decoupling
R116	3300Ω		510146	BTA-3300	1st IF Amp. Decoupling
R117	3300Ω		510246	BTA-3300	Voltage Divider
R118	1500Ω		510240	BTA-1500	2nd IF Amp. Decoupling
R119	220Ω		510125	BTS-220	Balancing
R120	18KΩ		510159	BTS-18K	De-emphasis
R121	10KΩ		510155	BTS-10K	Ratio Det. Diode Load
R122	10KΩ		510155	BTS-10K	Ratio Det. Diode Load
R123	47KΩ		*	BTS-47K	Diode Filter
R124	470KΩ		510185	BTS-470K	AVC Network

* R123, C114A and C114B are combined into one unit obtainable under mfr's part No. 506338.

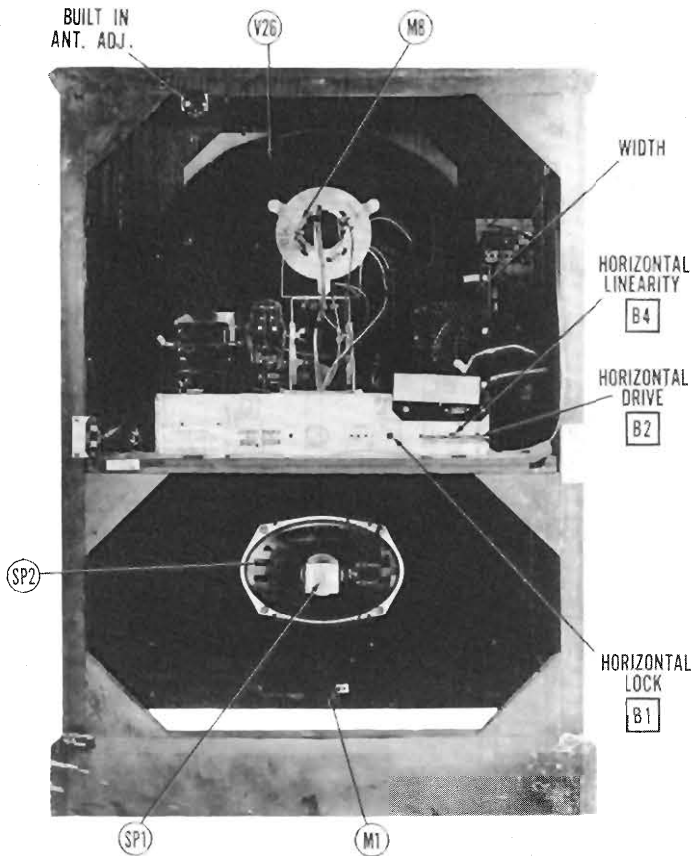
COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	STEW. -WARN. PART No.	MEISSNER PART No.	
L31	FM Ant. Coil	.5Ω		507586		1 microhenry
L32	RF Choke	2.7Ω		507935		3.3 microhenries
L33	FM RF Coil	0Ω		507941		
L34	Para. Supp.	0Ω		506581		Wound on 1KΩ resistor
L35	FM Osc. Coil	0Ω		507942		
L36	Loop Ant.	.9Ω		508212		
L37	AM Ant. Coil	.3Ω	2.3Ω	508184		
L38	AM Osc. Coil	7.7Ω		508195	14-1074	Tap at .9Ω
L39	1st AM IF	20Ω	20Ω	505867	16-6758	
L40	1st FM IF	.5Ω	.5Ω	506080	16-3487	
L41	2nd AM IF	20Ω	20Ω	505867	16-6758	
L42	2nd FM IF	1.5Ω	.5Ω	505905	16-3487	
L43	Ratio Det. Trans.	.9Ω	1.7Ω	508179		

Note: Parts L31 to L43 are used in models 9113A, 9108A and B.

MISCELLANEOUS

ITEM No.	PART NAME	STEW. -WARN. PART No.	NOTES
M9	Switch	508753	AM-FM, models 9113A, 9108A and B
M10	Tuning Cap.	508729	Models 9113A, 9108A and B (26 - 560MMF, 29 - 212MMF)



CABINET-REAR VIEW

STEWART-WARNER MODELS 9106A, B, 9108A, B, 9109A, B, 9113A

TV PARTS LIST AND DESCRIPTIONS (Continued)

MISCELLANEOUS

ITEM No.	PART NAME	STEW. -WARN. PART No.	NOTES
M5A	RF Tuner	508080	Models 9113A, 9108A and B, 9106A and B
B	RF Tuner	508805	Models 9109A and B
M6	Fuse	508713	.25A 250V Type AGC
M7	Switch	508203	Function (TV-Phono-AM-FM) Models 9113A, 9108A and B
M8	Ion Trap	508603	
B2	Trimmer	508071	Horiz. drive 10-160MMF
	Safety Glass	508540	Model 9113A
	Safety Glass	508625	Model 9106A and B
	Safety Glass	508852	Model 9109A and B
	Safety Glass	508719	Model 9108A and B
	Knob	508627	Channel selector, models 9113A, 9108A and B, 9106A and B
	Knob	507916	Channel selector, model 9109A and B
	Knob	507917	Fine tuning
	Knob	508206	Brightness, Horiz. hold, models 9113A, 9108A and B
	Knob	508209	Contrast, models 9113A, 9108A and B
	Knob	508207	Volume, models 9113A, 9108A and B
	Knob	502563	Antenna
	Knob	508208	TV-Phono-AM-FM, models 9113A, 9108A and B
	Knob	508205	AM-FM Fine tuning, models 9113A, 9108A and B
	Knob	508204	AM-FM course tuning, models 9113A, 9108A and B
	Knob	507918	Any control except channel selector and fine tuning, models 9109A and B, 9106A and B
	Knob	508205	Dummy, models 9109A and B, 9106A and B
	Antenna Coil	507952	Channel 2
	Antenna Coil	507953	Channel 3
	Antenna Coil	507954	Channel 4
	Antenna Coil	507955	Channel 5
	Antenna Coil	507956	Channel 6
	Antenna Coil	507957	Channel 7
	Antenna Coil	507958	Channel 8
	Antenna Coil	507959	Channel 9
	Antenna Coil	507960	Channel 10
	Antenna Coil	507961	Channel 11
	Antenna Coil	507962	Channel 12
	Antenna Coil	507963	Channel 13
	RF, Mixer & Osc. Coils	507972	Channel 2
	RF, Mixer & Osc. Coils	507973	Channel 3
	RF, Mixer & Osc. Coils	507974	Channel 4
	RF, Mixer & Osc. Coils	507975	Channel 5
	RF, Mixer & Osc. Coils	507976	Channel 6
	RF, Mixer & Osc. Coils	507977	Channel 7
	RF, Mixer & Osc. Coils	507978	Channel 8
	RF, Mixer & Osc. Coils	507979	Channel 9
	RF, Mixer & Osc. Coils	507980	Channel 10
	RF, Mixer & Osc. Coils	507981	Channel 11
	RF, Mixer & Osc. Coils	507982	Channel 12
	RF, Mixer & Osc. Coils	507983	Channel 13

RADIO PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	STEW. -WARN. PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V27	FM RF Amp. -FM Mixer	12AT7	12AT7	9A	
V28	FM Osc. -AM Converter	6BE6	6BE6	7CH	
V29	1st FM-AM IF Amp.	6BA6	6BA6	7BK	
V30	2nd FM IF Amp. -AM Det. -AVC	6BA6	6BA6	7BK	
V31	Ratio Det.	6AL5	6AL5	6BT	

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 CAP. VOLT	STEW. -WARN. PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C97	3	507946	PR350/4	D6-100	BR415	GPIK-10	TVA-1303	Stabilizing Cap.
C98	10	513023	SI10	D6-102	1W5D1	GP2L-001	19C19	Ant. Coupling
C99	1000	513009	SI1000	D6-331	5W5T3	GP2K-330	19C14	FM RF Grid
C100	330	513007	SI1300	D6-102	1W5D1	GP2L-001	19C1	RF Coupling
C101	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	RF Coupling
C102	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	FM RF-Mixer Fil.
C103	1	513000	TCZ-1	TCZ-1	5W5Q5	GPIK-47	19C25	Osc. Coupling
C104	47	513002	SI47	D6-470	5W5Q5	GPIK-47	19C25	Osc. Grid Cap.
C105	47	513002	SI47	D6-470	5W5Q5	GPIK-47	19C25	Osc. Grid Cap.
C106	2.5	513436	TCZ-1	TCZ-1	5W5Q5	GPIK-47	19C25	Fixed Trimmer
C107	2.2	513001	TCZ-1	TCZ-1	5W5Q5	GPIK-47	19C25	Osc. Feedback
C108	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	Conv. Fil. Byp.
C109	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	Decoupling
C110	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	Decoupling
C111	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	AVC Filter
C112	.05	512028	P688-05	D6-503	PTE6S5	6TM-S5		AVC Filter
C113	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	1st IF Dec.
C114A	100	506338	SI100	D6-101	5W5T1	GPIK-100	19C11	Diode RF Filter *
B	100		SI100	D6-101	5W5T1	GPIK-100	19C11	Diode RF Filter *
C115	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	1st IF Fil.
C116	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	2nd IF Dec.
C117	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	2nd IF Fil.
C118	330	513007	SI1300	D6-331	5W5T3	GP2K-330	19C14	Diode Load Cap.
C119	.001	512103	P688-001	D6-102	PTE6D1	GP2L-001	6TM-D1	De-emphasis
C120	330	513007	SI1300	D6-331	5W5T3	GP2K-330	19C14	RF Bypass
C121	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	Ratio Det. -AVC Fil.

* Items C114A, C114B, and R123 are combined into one unit.

TV PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	STEW. -WARN. PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	NOTES
V1A	RF Amp.	6AG5	6AG5	7BD	
B	RF Amp.	6BC5	6BC5	7BD	
C	RF Amp.	6CB6	6CB6	7CM	
V2	Converter	6J6	6J6	7BF	
V3	1st Video IF	6AU6	6AU6	7BK	
V4	2nd Video IF	6AU6	6AU6	7BK	
V5	3rd Video IF	6AU6	6AU6	7BK	
V6	4th Video IF	6AU6	6AU6	7BK	
V7	Video Det. -DC Rest.	6AL5	6AL5	6BT	
V8	Video Amp.	6AU6	6AU6	7BK	
V9	AGC Keying	6AU6	6AU6	7BK	
V10	Cathode Follower	6C4	6C4	6EG	
V11	Video Output	6K6GT	6K6GT	7S	
V12	1st Sound IF	6AU6	6AU6	7BK	
V13	2nd Sound IF	6AU6	6AU6	7BK	
V14	Dyn. Limiter - Ratio Det. -AF Amp.	6T8	6T8	9K	
V15	Audio Output	6V6GT	6V6GT	7AC	
V16	Sync. Sep. -Sync. Amp. -Sync. Phase Inv.	12AU7	12AU7	9A	
V17	Vert. Osc.	6J5GT	6J5GT	6Q	
V18	Vert. Output	6S4	6S4	9AC	
V19	Hor. Phase Det.	6AL5	6AL5	6BT	
V20	Hor. Mult.	12AU7	12AU7	9A	
V21A	Hor. Output	6BQ6GT	6BQ6GT	6AM	
B	Hor. Output	6CD6G	6CD6G	5BT	Used in models 9109A-9109B series "A", and 9108A-9108B
V22	Damper	6W4GT	6W4GT	4CG	
V23	HV Rect.	1B3GT	1B3GT	3C	
V24	LV Rect.	5U4G	5U4G	5T	
V25	LV Rect.	6X5GT	6X5GT	6S	
V26	Picture Tube	12LP4A	12LP4A	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 CAP. VOLT	STEW. -WARN. PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
C1A	40	508072	AFH868J		UPT44445		TVA-1601	* Filter
B	40	508072	AFH868J		UPT44445		TVA-1601	* Filter
C	40	508072	AFH868J		UPT44445		TVA-1601	* Filter
C2A	20	508073	AFH1242J		UPT6245		TVA-1601	* Filter
B	20	508073	AFH1242J		UPT6245		TVA-1601	* Filter
C3	40	160095	PR5450/40		BR4035		TVA-1402	Stabilizing Cap.
C4	4	502547	PR5150/4		BR415		TVA-1406	Dyn. Limiter Cap.
C5	10	505179	PR5150/12		BR415		TVA-1702	Decoupling
C6	4	504719	PR5450/4		BR502A		TVA-1206	Output Cath. Byp.
C7	50	502527	PR525/50		BR550		TVA-1303	Hor. Output Cath.
C8	5	508684	PR5150/4		BRHV410		TVA-1902	Decoupling
C9	10	508680	PR5600/10		BRH5Q		TVA-1310	Vert. Output Dec.
C10	100	508682	PR550/100		BRH5Q		TVA-1310	Fixed Trimmer
C11	5	513432	SI5NPO	TCZ-4.7		NPOK-5		Variable Trimmer
C12	.5-3	507968		829-3				Variable Trimmer
C13	.5-3	507968		829-3				Variable Trimmer
C14	120	513439	SI120	D6-121		GP2K-120	19C29	RF Amp. Dec.
C15	1000	513009	SI1000	D6-102		GP2L-001	19C1	RF Amp. Fil.
C16	100	513440	SI1000750	TCN-100		N750L-100	19C11	RF Coupling
C17	.5-3	507968		829-3				Variable Trimmer
C18	20	513441	SI20NPO	TCZ-20		NPOK-20		Osc. Grid Cap.
C19	10	513442	SI10N750	TCN-10		N750K-10	19C4	Fixed Trimmer
C20	.5-3	507968		829-3				Variable Trimmer
C21A	1000	513009	BPD-2 x 001	DD-2-402		812-2 x 001	29C7	RF Bypass
B	1000	513009		DD-2-402				Conv. Fil. Byp.
C22	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	AGC Filter
C23	240	512532	1469-00025	TCZ-240	5R5T25		MS-325	Fixed Trimmer
C24	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	1st V. IF Dec.
C25	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	1st V. IF Fil.
C26	82	513016	SI82	TCZ-82	5W5T1	GPIK-82	19C11	IF Coupling
C27	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	AGC Filter
C28	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	2nd V. IF Dec.
C29	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	2nd V. IF Fil.
C30	220	513018	SI220	D6-221	5W5T25	GP2K-220	19C13	Filament Bypass
C31	82	513016	SI82	TCZ-82	5W5T1	GPIK-82	19C11	IF Coupling
C32	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	AGC Filter
C33	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	3rd V. IF Dec.
C34	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	3rd V. IF Fil.
C35	240	512532	1469-00025	TCZ-240	5R5T25		MS-325	Fixed Trimmer
C36	82	513016	SI82	TCZ-82	5W5T1	GPIK-82	19C11	IF Coupling
C37	.05	512027	P288-05	DF-503	PTE4S5		2TM-S5	AGC Filter
C38	.25	512046	P488-25	DF-503	GT2P25		2TM-P25	AGC Filter
C39	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	4th V. IF Dec.
C40	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	4th V. IF Fil.
C41	5	513432	SI5NPO	TCZ-4.7	5W5T1	GPIK-5	MS-55	V. Det. Filter
C42	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	V. Det. DC Res. Fil.
C43	.25	512046	P488-25	DF-503	GT2P25		2TM-P25	V. Amp. Screen
C44	100	513013	SI100	D6-101	5W5T1	GPIK-100	19C11	Peaking
C45	.1	512033	F288-.1	DF-104	PTE4P1		2TM-P1	Video Coupling
C46	.05	512027	F288-.05	DF-503	PTE4S5		2TM-S5	Video Coupling
C47	.05	512031	F688-.05	DF-503	PTE6S5		6TM-S5	Video Coupling
C48	.05	512031	F688-.05	DF-503	PTE6S5		6TM-S5	Video Coupling
C49	.02	512031	F688-.02	DF-503	PTE6S2		6TM-S2	Video Coupling
C50	.05	512031	F688-.05	DF-503	PTE6S5		6TM-S5	Integrator
C51	2.2	513013	BPD-005	DD-502	1D5D5	811-005	29C1	S. IF Coupling
C52	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	1st S. IF Dec.
C53	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	1st S. IF Dec.
C54	1000	513009	SI1000	D6-102	1W5D1	GP2L-001	19C1	1st S. IF Fil.
C55	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	RF Bypass
C56	220	513018	SI220	D6-221	5W5T25	GP2K-220	19C13	RF Bypass
C57	47	513427	SI47	D6-470	5W5Q5	GPIK-47	19C25	S. IF Coupling
C58	5000	513013	BPD-005	DD-502	1D5D5	811-005	29C1	2nd S. IF Dec.

STEWART-WARNER MODELS 9106A, B, 9108A, B, 9109A, B, 9113A

TV PARTS LIST AND DESCRIPTIONS (Continued)

CAPACITORS (CONT.)

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA						IDENTIFICATION CODES AND INSTALLATION NOTES
		STEW.-WARN. PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNEILL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C59	5000	51303	BPD-005	DD-502	1D5D5	811-005	29C1	2nd S. IF Fil.
C60	1000	51309	SI1000	D6-102	1W5D1	GP2L-001	19C1	S. IF Coupling
C61	220	512527	1468-00025	D6-221	5W5T25	GP2K-220	1FM-325	Diode Load Cap.
C62	1500	513010	SI1500	D6-152	1W5D15	GP2L-0015	29C8	De-emphasis
C63	.05	512027	P268-05	DF-503	PTE655		2TM-55	Audio Coupling
C64	.005	512007	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Tone Comp.
C65	.005	512007	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Audio Coupling
C66	1500	513010	SI1500	D6-152	1W5D15	GP2L-0015	29C8	RF Bypass
C67	270	513008	SI270	D6-271	5W5T25	GP2K-270	19C31	AF Amp. Plate #
C68	.005	512007	P688-005	D6-502	PTE6D5	811-005	6TM-D5	Audio Coupling #
C69	.01	512013	P688-01	D6-103	PTE651	821-01	6TM-S1	Tone Comp. *
C70	.002	512003	P688-002	D6-202	PTE6D2	GP2M-002	6TM-D2	Output Plate Byp.
C71	.25	512045	P488-25		GT2P25		2TM-P25	Sync. Coupling
C72A	10000	508062 †	P688-01		PTE651	821-01	6TM-S1	Vert. Sync. Coupling
C72B	2000		P688-002	IPC-101 †	PTE6D2	GP2M-002	6TM-N2	Integrator Net.
C73	5000		P688-005		PTE6D5	811-005	6TM-D5	Integrator Net.
C74	.1	512037	P688-01	D6-472	1D5D5	GP2M-0047	1FM-25	Vert. Osc. Grid
C75	.05	512308	P688-05	DF-104	PTE6P1		6TM-P1	Vert. Sweep Coupling
C76	1000	513009A	SI1000	D6-102	1W5D1	GP2L-001	19C1	Hor. Sync. Coupling
C77	1000	513009B	SI1000	D6-102	1W5D1	GP2L-001	19C1	Hor. Sync. Coupling
C78	.05	512031	P688-05	DF-503	PTE655		6TM-S5	Hor. Feedback
C79	.01	512013	P688-01	D6-103	PTE651	821-01	6TM-S1	Voltage Divider
C80	5000	513013	BPD-005	DD-502	1D5D5		29C1	AF Filter
C81	.05	512027	P268-05	DF-503	PTE655		2TM-S5	AF Filter
C82	3300	512531						Fixed Trimmer
C83	330	513007	SI330	D6-331	5W5T3	GP2K-330	1FM-335	Hor. MV Feedback
C84	390	512535	1468-0004	D6-391	5W5T4	GP2K-390	1FM-34	Hor. Discharge
C85	270	512536	1468-0003	D6-271	5W5T3	GP2K-270	1FM-325	Hor. Sweep Coupling
C86	3.3	512538						Hor. Feedback †
C87	.05	512031	P688-05	DF-503	PTE655		6TM-S5	Hor. Output Screen
C88	.05	512031	P688-05	DF-503	PTE655		6TM-S5	Damper Filter
C89	.05	512031	P688-05	DF-503	PTE655		6TM-S5	Damper Filter
C90	500	20000	513024	EV20B	TV1-502			HV Filter
C91	.01	512255	P488-01	D6-103	PTE651	821-01	4TM-S1	Line Filter
C92	.01	512255	P488-01	D6-103	PTE651	821-01	4TM-S1	Line Filter
C93	.1	512037	P688-01	DF-104	PTE6P1		6TM-P1	Hor. Sweep Coupling
C94	1500	513010	SI1500	D6-152	1W5D15	GP2L-0015	29C8	Output Grid #
C95	.15	513435						Hor. Feedback *
C96	.002	512003	P688-002	D6-202	PTE6D2	GP2M-002	6TM-D2	Fixed Trimmer *

* Used only in model 9113-A, 9108A and 9108B.
† Not used in all models.
‡ Models 9109A and 9109B use 15MMF in this application.
§ Used only in models 9106A, B and 9109A, B.
|| Used only in model 9109A, B.
¶ Items C72A, C72B, C72C, C72D, R76A, R76B, and R76C are combined into one unit.
‡ Items C67, C68, R68 and R69 are combined into a capacitor-resistor combination in models 9106A, 9106B, 9109A and 9109B. Mfr's part No. 505858.

CONTROLS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA				INSTALLATION NOTES
		STEW.-WARN. PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	
R1A	1 Meg.	508162 *	Q13-137 X	AK-98	ANT-73	Volume control-tapped at 250KΩ
B	Shaft	Not Req.	RQ	FKS-1/4	AK-1	Attach to R1A per instructions
C	Switch	Not Req.	76-1	SWB	K-155	Attach to R1A per instructions
R2A	3000Ω	506204 †		RTV-222		Contrast control-front-Wire Wound
B	500KΩ					Tone control-rear
R3A	6000Ω	508053		AM-23-S	AN-13	Vertical linearity control
B	Shaft	Not Req.		KSS-5	FAK-16 & AK-3	Attach to R3A per instructions
R4A	1 Meg.	508051	Q11-137	AG-61-S	B-69	Vertical hold control
B	Shaft	Not Req.	C3 †	KSS-5	FAK-16	Attach to R4A per instructions
R6A	2.5 Meg.	508052	Q11-239	AG-64-S	B-83	Height control
B	Shaft	Not Req.	C3 †	KSS-5	FAK-16	Attach to R6A per instructions
R6	5500Ω	508057		RTV-221		Focus control
R7A	50KΩ	508202 ††	Q11-123	AG-44-S	AN-31	Horiz. hold control
B	Shaft	Not Req.	Not Req.	KSS-3	AK-4	Attach to R7A per instructions
R8A	50KΩ	508202 ††	Q11-123	AG-44-S	AN-31	Brightness control
B	Shaft	Not Req.	Not Req.	KSS-3	AK-4	Attach to R8A per instructions

* Models 9109A, 9109B, 9106A, and 9108B use part number 508054 in this application.
† Models 9109A, 9109B, 9106A, and 9108B use part number 508055 in this application without tone control.
†† Models 9109A, 9109B, 9106A, and 9108B use part number 508053 in this application.
‡ Use this coupler with original shaft to obtain desired length.

RESISTORS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
		STEW.-WARN. PART No.	IRC PART No.	
R9	3900Ω	510147	BTS-3900	Antenna Coil Shunt
R10	47KΩ 20%	510167	BTS-47K	AGC Network
R11	2200Ω 20%	510143	BTS-2200	RF Amp. Decoupling
R12	10KΩ	510155		RF Coil Shunt
R13	4700Ω	510148	BTS-4700	Mixer Grid
R14	220KΩ 20%	510179		Mixer Grid
R15	10KΩ	510155		Osc. Grid
R16	4700Ω	510148	BTS-4700	Osc. Plate
R17	4700Ω	510148	BTS-4700	1st Video IF Amp. Grid
R18	1000Ω 20%	510137	BTS-1000	AGC Filter Network
R19	150Ω 20%	510122	BTS-150	1st Video IF Amp. Cathode
R20	1500Ω 20%	510140	BTS-1500	1st Video IF Amp. Trap Coil Shunt
R21	1000Ω 20%	510137	BTS-1000	2nd Video IF Amp. Grid
R22	8200Ω	510153		AGC Filter Network
R23	1000Ω 20%	510137	BTS-1000	2nd Video IF Amp. Cathode
R24	100Ω 20%	510119	BTS-100	2nd Video IF Amp. Decoupling
R25	1000Ω 20%	510137	BTS-1000	3rd Video IF Amp. Grid
R26	4700Ω	510148	BTS-4700	AGC Filter Network
R27	1000Ω 20%	510137	BTS-1000	3rd Video IF Amp. Cathode
R28	120Ω	510120	BTS-120	3rd Video IF Amp. Decoupling
R29	1000Ω 20%	510137	BTS-1000	3rd Video IF Amp. Coil Shunt
R30	8200Ω	510153		4th Video IF Amp. Cathode
R31	100Ω 20%	510119	BTS-100	

RESISTORS (CONT.)

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA		IDENTIFICATION CODES
		STEW.-WARN. PART No.	IRC PART No.	
R32	1000Ω 20%	510137	BTS-1000	4th Video IF Amp. Decoupling
R33	8200Ω	510153		4th Video IF Coil Shunt
R34	6800Ω	510151	BTS-6800	Video Amp. Grid
R35	8200Ω	510253	BTA-8200	Video Amp. Screen
R36	10KΩ	510255	BTA-10K	Voltage Divider
R37	47KΩ	510166	BTS-47K	Peaking Coil Shunt
R38	33KΩ 20%	510164	BTS-33K	AGC Keying Grid
R39	100KΩ 20%	510173	BTS-100K	AGC Keying Plate Load
R40	10KΩ 20%	510155	BTS-10K	AGC Filter
R41	5600Ω	510150	BTS-5600	Peaking
R42	5600Ω	510150	BTS-5600	Peaking
R43	1 Meg. 20%	510191	BTS-1 Meg.	Cathode Follower Grid
R44	12KΩ	510356	BTB-12K	Cathode Follower Cathode
R45	1 Meg. 20%	510191	BTS-1 Meg.	Video Output Grid
R46	270Ω	510126	BTS-270	Video Output Cathode
R47	12KΩ 5%	510723	BTS-12K-5%	Peaking Coil Shunt
R48	1500Ω	510339	BTB-1500	Video Output Plate
R49	1500Ω	510339	BTB-1500	Video Output Plate
R50	12KΩ	510156	BTS-12K	Isolation
R51	1 Meg. 20%	510191	BTS-1 Meg.	DC Restorer Diode Load
R52	100KΩ 20%	510173	BTS-100K	Picture Tube Grid
R53	82KΩ	510171	BTS-82K	Voltage Divider
R54	15KΩ	510157	BTS-15K	Voltage Divider
R55	22KΩ	510161	BTS-22K	Voltage Divider
R56	2200Ω 20%	510143	BTS-2200	Blanking Network
R57	82Ω	510117	BTS-82	1st Sound IF Amp. Cathode
R58	1000Ω 20%	510137	BTS-1000	1st Sound IF Amp. Decoupling
R59	470KΩ 20%	510185	BTS-470K	2nd Sound IF Amp. Grid Leak
R60	82Ω	510117	BTS-82	2nd Sound IF Amp. Cathode
R61	1000Ω 20%	510137	BTS-1000	2nd Sound IF Amp. Decoupling
R62	22KΩ	510161	BTS-22K	De-emphasis
R63	18KΩ	510159	BTS-18K	Ratio Det. Diode Load
R64	18KΩ	510159	BTS-18K	Ratio Det. Diode Load
R65	68KΩ 20%	510170	BTS-68K	Tone Compensation
R66	10 Meg. 20%	510197	BTS-10 Meg.	AF Amp. Grid
R67	33KΩ	510163	BTS-33K	Dyn. Limiter G-Load
R68	470KΩ 20%	510185	BTS-470K	AF Amp. Plate-See Note 1
R69	470KΩ	510184	BTS-470K	Output Grid-See Note 1
R70	330Ω	510227	BTA-330	Output Cathode
R71	5200Ω	510153	BTS-5200	Decoupling
R72	270KΩ	510180	BTS-270K	Sync. Sep. Grid
R73	330KΩ	510181	BTS-330K	Sync. Sep. Plate
R74	1800Ω 5%	510739	BTS-1800-5%	Sync. Amp. Phase Inv. Cathode
R75	1800Ω 5%	510739	BTS-1800-5%	Sync. Amp. Phase Inv. Plate
R76A	22KΩ			Integrator -See Note 2
B	8200Ω			Integrator -See Note 2
C	8200Ω			Integrator -See Note 2
R77	1.5 Meg.	510721	BTS-1.5 Meg.	Vert. Osc. Grid-See Note 3
R78	6.8 Meg. 20%	510196	BTS-6.8 Meg.	Voltage Divider
R79	100KΩ	510172	BTS-100K	Voltage Divider
R80	1.2 Meg.	510738	BTS-1.2 Meg.	Vert. Osc. Plate
R81	6800Ω	510151	BTS-6800	Vert. Peaking
R82	2.2 Meg.	510193	BTS-2.2 Meg.	Vert. Output Grid
R83	1200Ω	510338	BTB-1200	Vert. Output Cathode
R84	3000Ω 5%	510713	BTB-3000-5%	Vert. Output Plate Decoupling
R85	100KΩ	510172	BTS-100K	Horiz. Phase Det. Diode Load
R86	100KΩ	510172	BTS-100K	Horiz. Phase Det. Diode Load
R87	4.7 Meg. 20%	510195	BTS-4.7 Meg.	Horiz. Phase Det. Diode Load
R88	27KΩ	510162	BTS-27K	Feedback
R89	470KΩ 20%	510185	BTS-470K	Horiz. AFC Filter
R90	4.7 Meg. 20%	510195	BTS-4.7 Meg.	Horiz. MV Grid
R91	1500Ω	510139	BTS-1500	Horiz. MV Cathode
R92	5600Ω	510150	BTS-5600	Horiz. MV Plate
R93	680KΩ	510167	BTS-680K	Voltage Divider
R94	100KΩ	510172	BTS-100K	Horiz. MV Grid
R95	270KΩ	510180	BTS-270K	Horiz. MV Plate
R96	68Ω 20%	510116	BTS-68Ω	Parasitic Suppressor
R97	470KΩ	510184	BTS-470K	Horiz. Output Grid
R98	220Ω	510716	1 3/4A-225	Horiz. Output Cathode-Wire Wound
R99	12KΩ	510356	BTB-12K	Horiz. Output Screen
R100	10KΩ	510254	BTA-10K	Horiz. Feedback Network
R101	3.3Ω	510725		HV Rectifier Filament -See Note 4
R102	1 Meg.	510391	BTB-1 Meg.	HV Filter
R103	15KΩ	510728	13/4A-15000	Damper Diode Load-See Note 5-Wire Wound
R104	600Ω	510741	1 3/4A-600	Filter-Wire Wound-See Note 6
R105	100Ω 20%	510319	BW-2-100	Filter
R106	850Ω	510726	1 3/4A-800	Filter-Wire Wound
R107	560Ω	510332	BTB-560	Focus Coil Shunt
R108	220KΩ 20%	510179	BTS-220K	Isolation
R109	7500Ω	510727	1 3/4A-7500	Voltage Divider-Wire Wound-See Note 6

Note 1. In models 9108A, 9108B, 9109A, and 9109B items R68, R69, C67 and C68 are combined into one unit under Mfr's part No. 505858.
Note 2. Items R76A, R76B, R76C, C72A, C72B, C72C and C72D are combined into one unit.
Note 3. Some models use series resistors to obtain desired value.
Note 4. Not used in all models.
Note 5. Used only in model 9113-A.
Note 6. Used only in models 9113-A, 9108A and 9108B.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	STEW.-WARN. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC @ 1.81A	700VCT .190ADC 350VCT .077ADC	5VAC @ 3.1A	6.3VAC @ 9.4A	508702	P-8160 ①	P-3067 ②	TP-409

① Drill one new mounting hole.
② Add series resistor to reduce plate voltage.

TRANSFORMER (SWEEP CIRCUITS)