

**STEWART-WARNER
MODELS AVC1, AVC2, AVT1**

STEWART-WARNER MODEL AVT1

TRADE NAME Stewart-Warner Models AVT1 (9053-A) AVC1 (9054-B) AVC2 (9054-C)
MANUFACTURER Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago, Illinois
TYPE SET Television Receiver
TUBES Twenty-Five

POWER SUPPLY 117 Volts, 60 Cycles AC, or DC with Polarizing Relay
TUNING RANGE—Channels 2 through 13 **RATING** 1.8 Amps @ 117 Volts

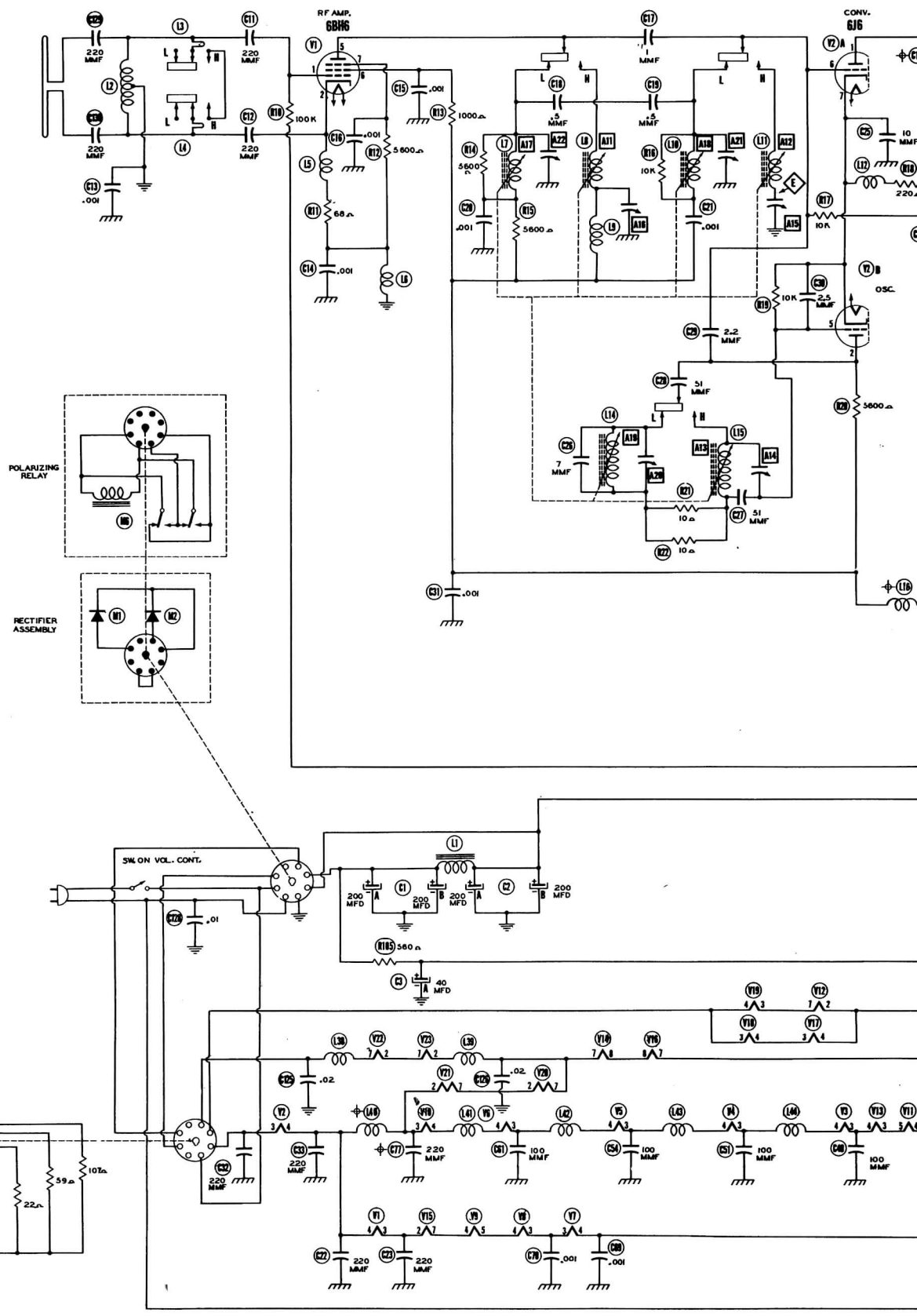
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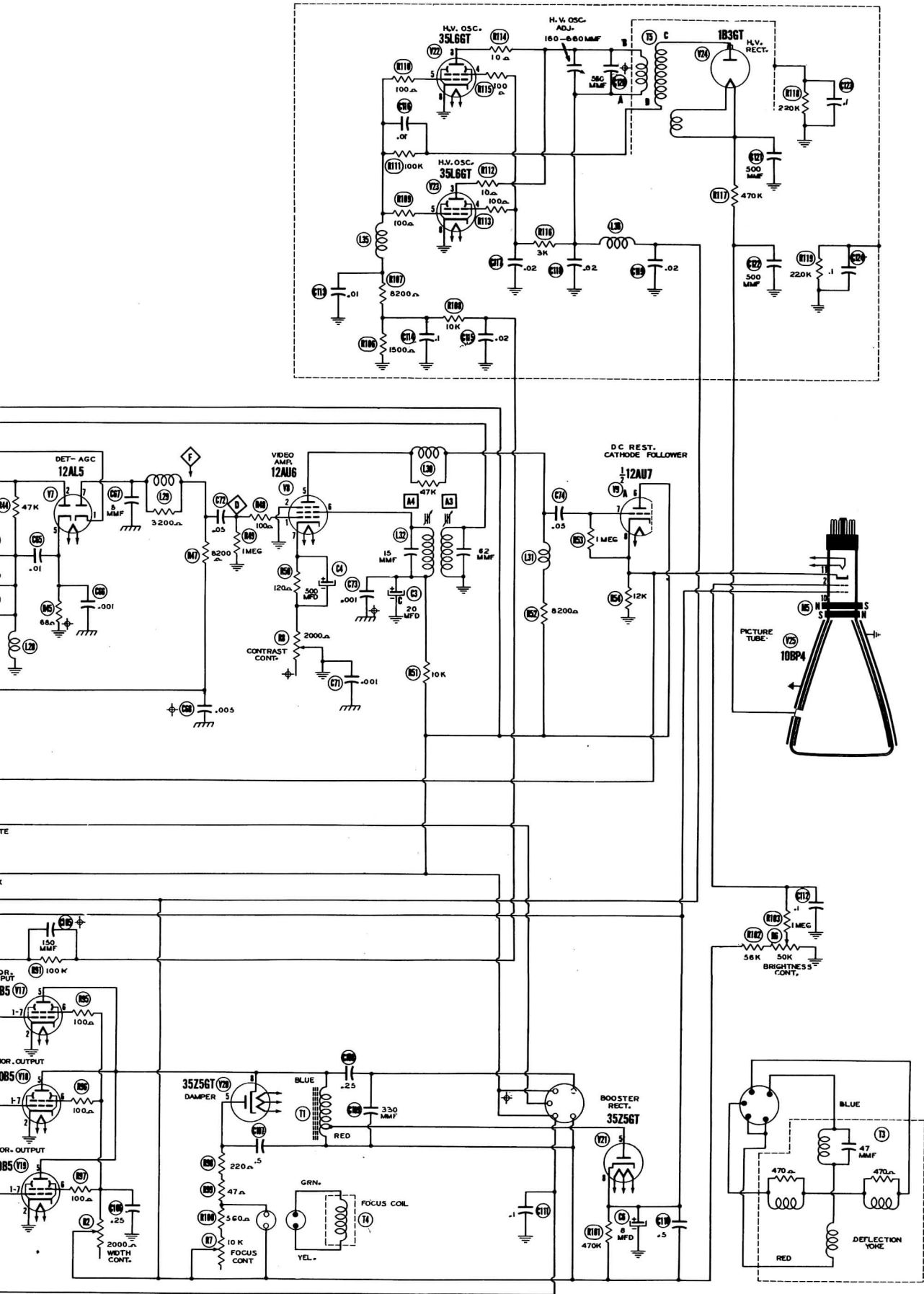


A PHOTOFAC STANDARD NOTATION SCHEMATIC
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SEE PRODUCTION CHANGES ON PAGE 20

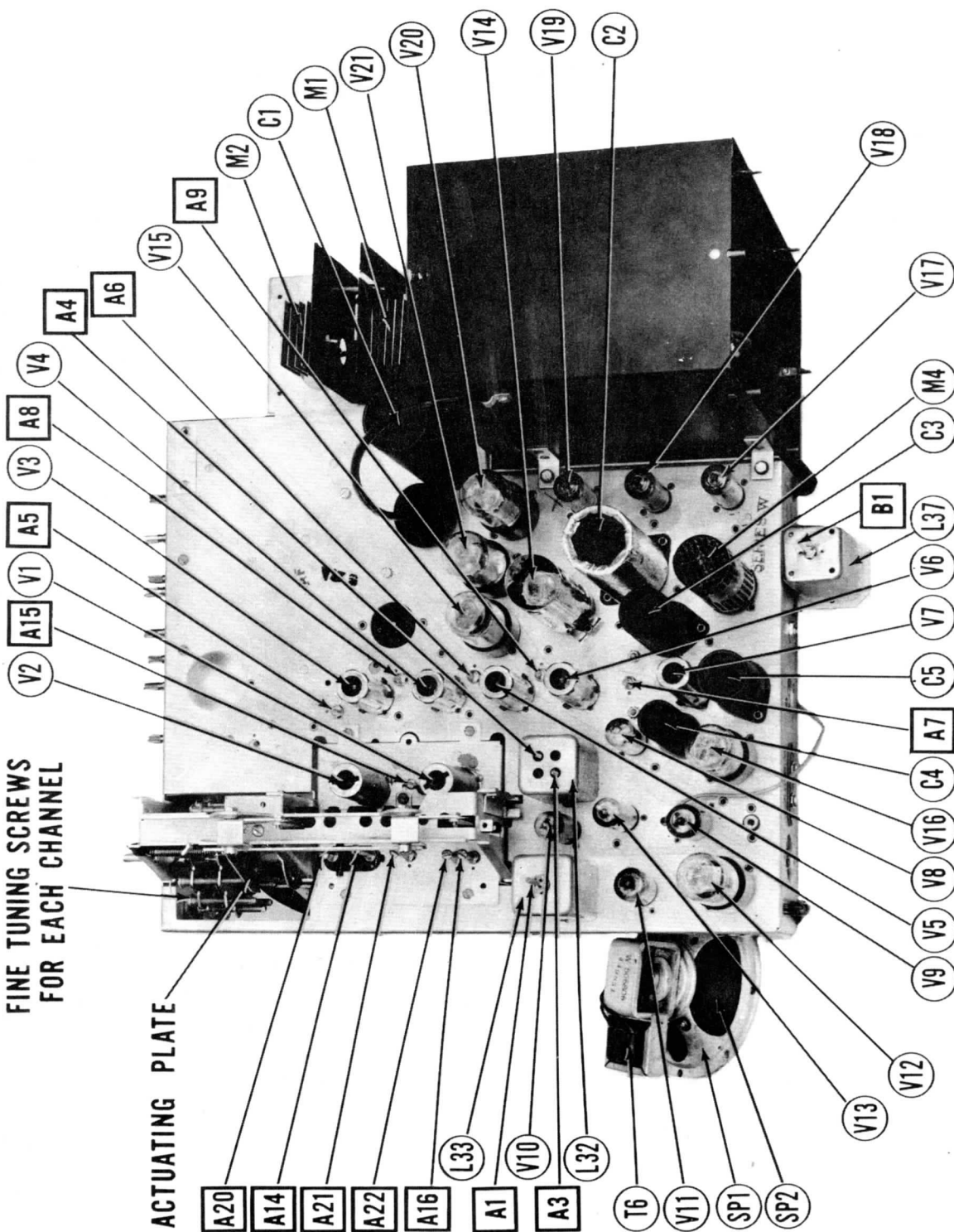
THE COOPERATION OF THE MANUFACTURER
 RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS

**STEWART-WARNER
MODELS AVC1, AVC2, AVT1**



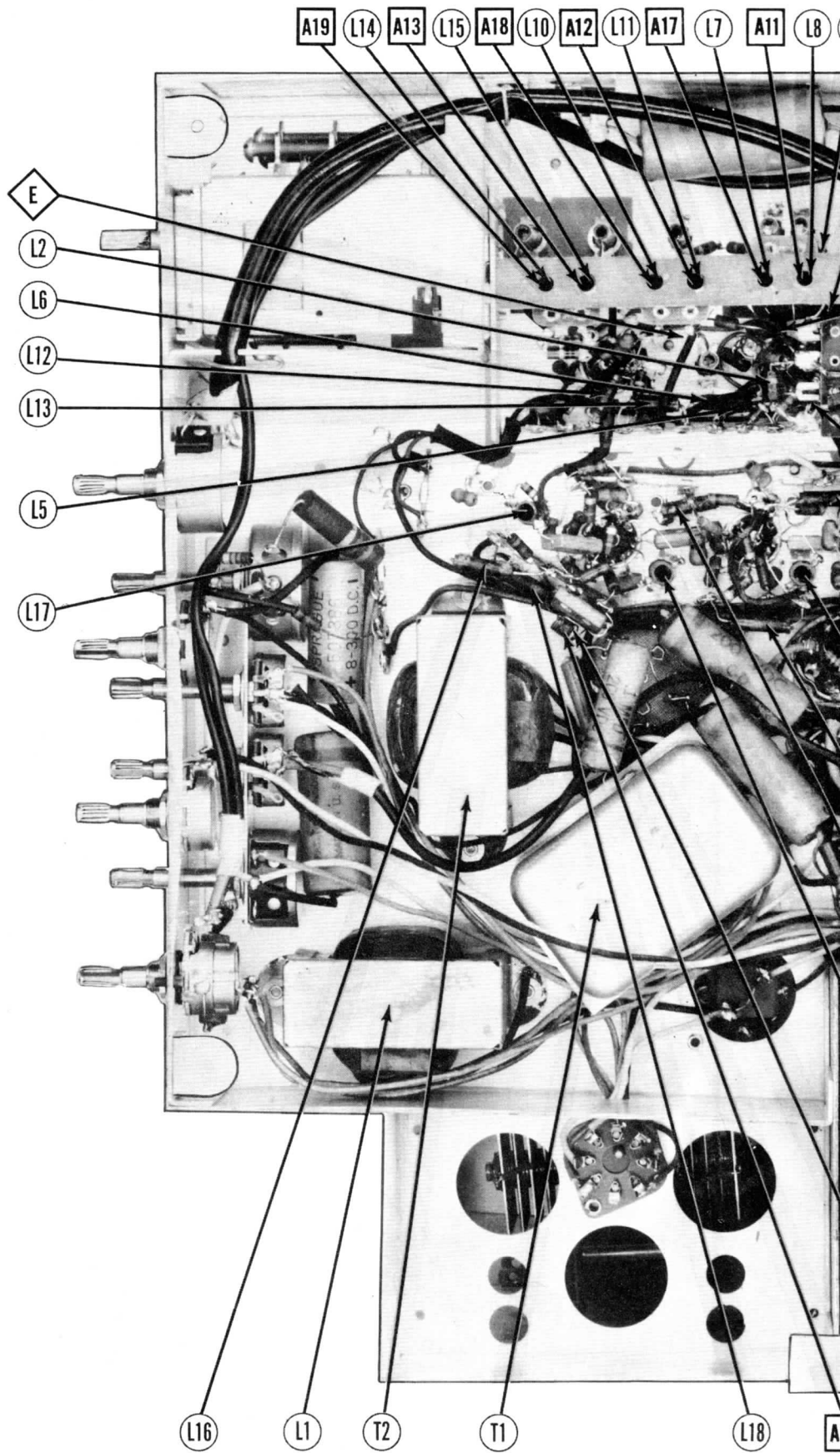
FINE TUNING SCREWS
FOR EACH CHANNEL

ACTUATING PLATE

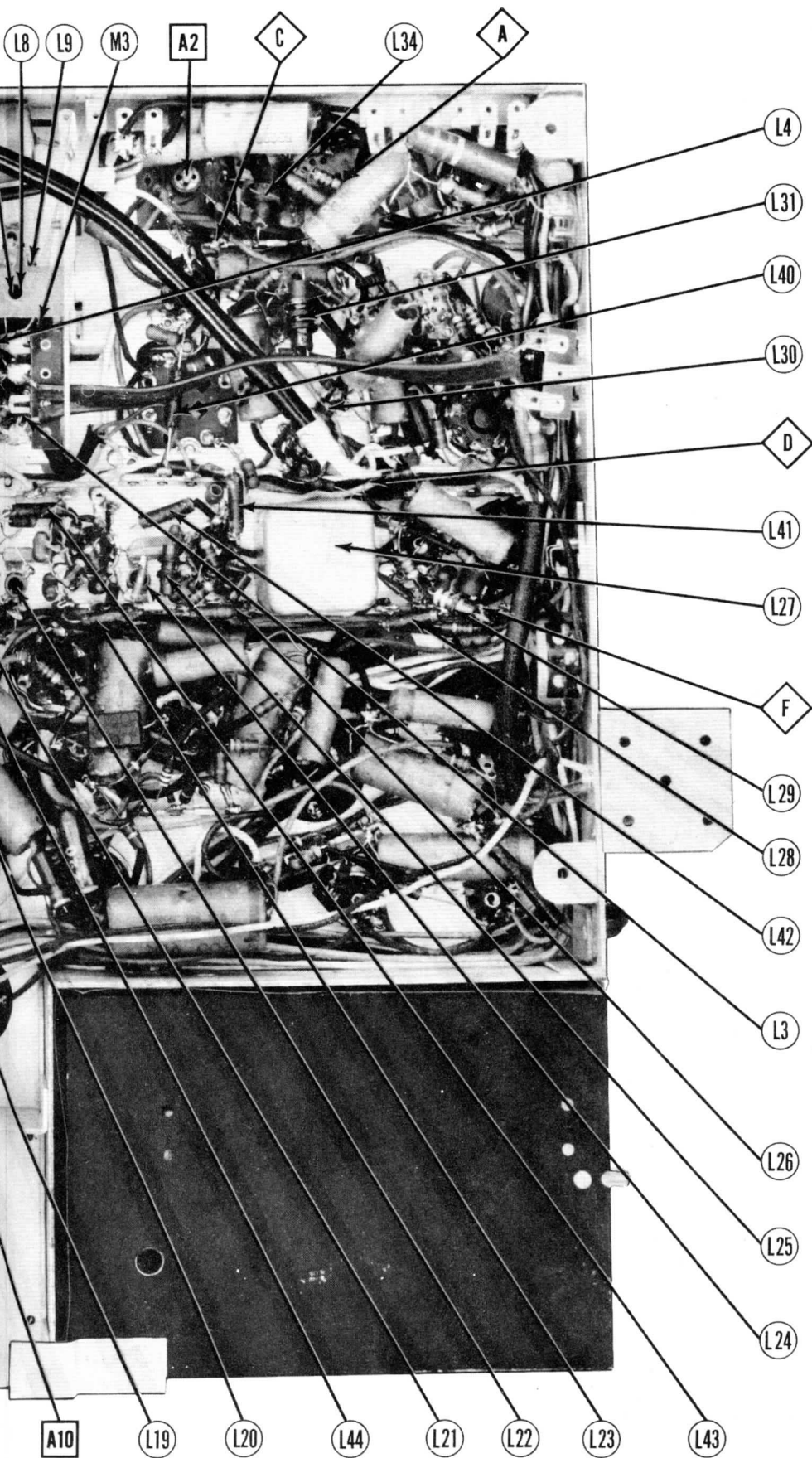


CHASSIS TOP VIEW

STEWART-WARNER
MODELS AVC1, AVC2, AVT1

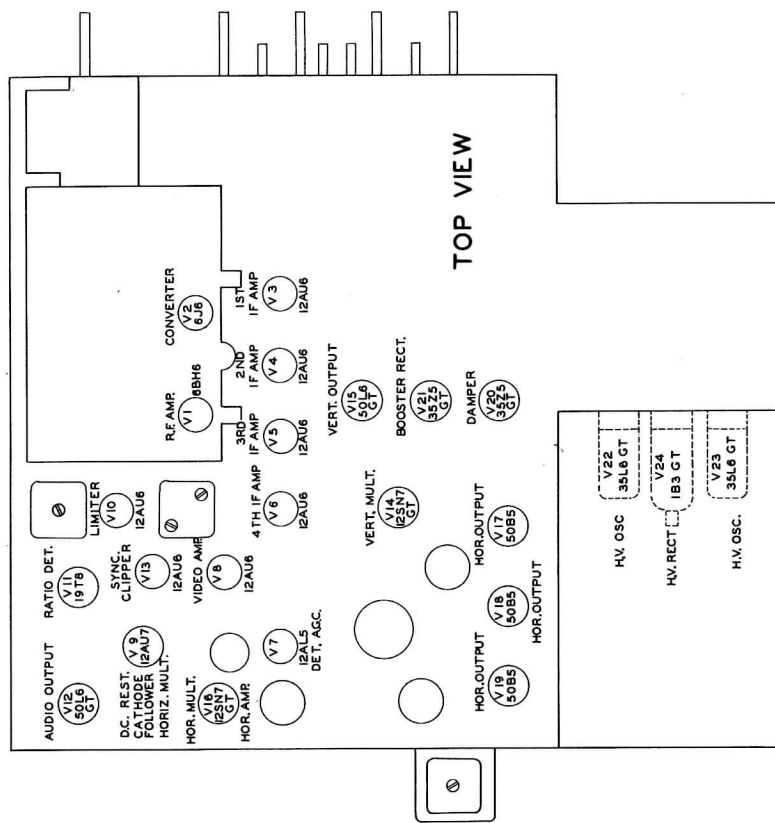
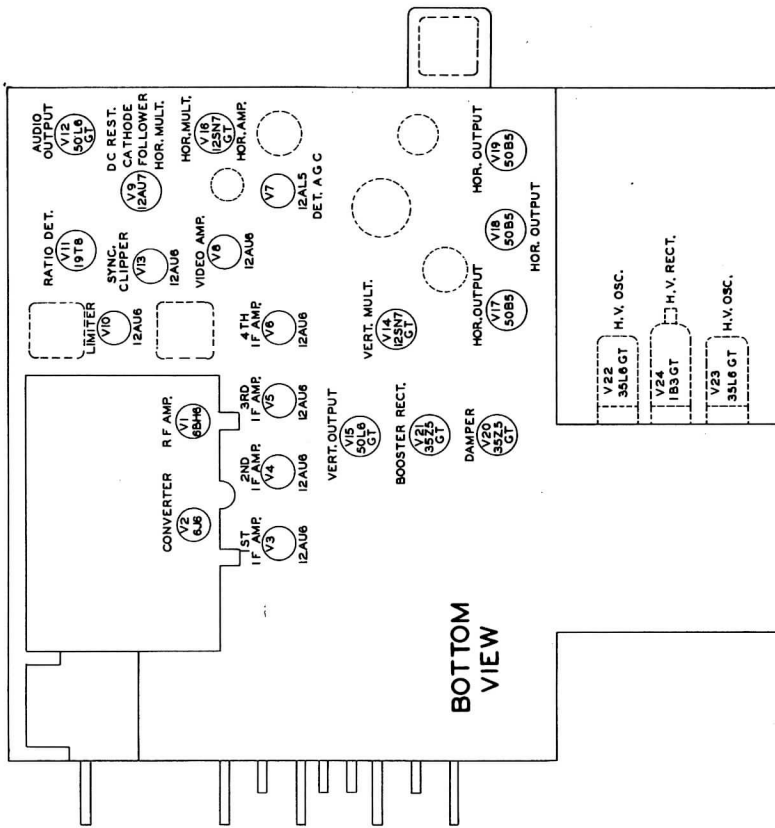


CHASSIS BOTTOM VIEW-TRANS., INDUCTOR



STEWART-WARNER
 MODELS AVCI, AVC2, AVTI

ATOR AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART

STEWART-WARNER
MODELS AVCI, AVC2, AVTI

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

(A). The sound and video IF channels may be aligned individually if desired but it is recommended alignment be performed in the sequence given.

(B). The receiver chassis must be removed from the cabinet to align the set as some of the adjustments are located beneath the chassis. For the table model sets, the chassis may be removed without disturbing the picture tube or speaker. Inner-connection between the various components may be accomplished by the extension cables listed below which are available from your Stewart-Warner distributor.

- #507443 High voltage Ext. Cable & Plugs
- #507444 Deflection Yoke Ext. Cable & Plugs
- #507445 Picture Tube Ext. Cable & Plugs
- #507446 Focus Coil Ext. Cable & Plugs
- #507447 Speaker Ext. Cable & Plugs

For console models, it will be necessary to remove the picture tube before the chassis can be taken out. Leave the speaker in the cabinet and use the extension cables listed above for inter-connections.

TEST EQUIPMENT INSTRUCTIONS

(A). The B- system of this receiver is connected directly to one side of the AC power line. It, therefore, is necessary to observe the following precautions before

connecting the test instruments. Failure to do so may result in severe shock if contact is made between the test equipment and ground.

1. Connect an AC voltmeter to B- of the receiver chassis and "earth" ground (radiator or water pipe, etc.). If the meter reading is not zero, reverse the receiver power plug.

2. Connect the AC voltmeter between "earth" ground and the ground terminal of the test instrument. If meter reads full voltage reverse the test instrument power plug. If meter reads 60 volts or less, do not reverse the power plug.

3. The ground terminal of the test instrument may now be connected to the B- system of the receiver.

The above precautions can be avoided if an isolation transformer is connected between the receiver and the power line.

(B). An alignment tool kit (Part No. 507475) with special tools is available from Stewart-Warner distributors. These tools are of special design and are color coded for RF tuner adjustments and will greatly expedite alignment of the receiver.

SOUND IF ALIGNMENT

(A). Set the contrast control in the fully clockwise position. The other controls may be left in any desired setting.

(B). In step 2, two matched 68KΩ (±1%) resistors connected in series are connected between pin 2 of the 19T8 (V11) and B-. The junction of these two resistors is point B as indicated on schematic.

(C). Turn the channel selector switch to any inactive channel and connect a jumper across the antenna input terminals.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1	5000MF High side to Point D at the video amp. grid. (V8). Low side to chassis.	4.5MC (Very Accurate)	Any	DC Probe to Point A Common to B-	A1, A2 A3, A4	Adjust for maximum deflection.
2	5000MF " "	" "	" "	DC Probe to Point B Common to Point	A1	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting. After this adjustment is completed, remove the two 68KΩ resistors.

SOUND IF VISUAL CHECK

(A). Connect the synchronized voltage from sweep generator to the horizontal amplifier of the oscilloscope for horizontal deflection.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
3	5000MF High side to Point D at video amp grid (V8). Low side to chassis.	4.5MC (500K Sweep)	4.5MC (Very Accurate)	Any	Vert. Amp. shunted by 1000MF thru 10KΩ to point B- Low side to B-	Check to see that pattern is obtained similar to Fig 1. The 4.5MC marker should appear at the center point and the slope should be linear for at least 50KC either side of this point. Slight adjustment of A1 may be necessary to correctly position the marker. Slight adjustment of A2, A3, and A4 is necessary only if adjustment of A1 fails to center the marker.

VIDEO IF ALIGNMENT

(A). Turn channel selector switch to channel #13 and connect a jumper across the antenna terminals.

(B). Connect a 1 1/2 volt battery to the AGC system- negative side to AGC line, positive to B-.

(C). Before aligning any of the IF stages, trap coil L19 (A10) must be detuned. This is accomplished by compressing the windings so they are closely spaced. Failure to do this may cause regeneration in the IF strip thereby preventing correct alignment.

(D). If the IF system is badly out of alignment and is oscillating, detuning the IF coils in different directions may stop the oscillations. If that fails to stop the oscillation, use a 3 or 4 1/2 volt battery instead of 1 1/2 volts on the AGC line. After aligning with the 3 or 4 1/2 volt battery change back to the 1 1/2 volt battery when using the oscilloscope to observe the band pass characteristics.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4	5000MF High side to Point E. Low side to tuner chassis.	26.3MC	Any	DC Probe thru 15KΩ resistor to Point F Common to B-	A5, A6	Adjust for maximum deflection.
5	5000MF " "	24.7MC	" "	" "	A7	" " " "
6	5000MF " "	23.2MC	" "	" "	A8, A9	" " " "

OVERALL VIDEO IF RESPONSE CHECK

(A). Use a 1 1/2 volt battery on the AGC line.

(B). Leave the VTVM connected at point F as in steps 4, 5, and 6. Attenuate the output of the sweep generator so VTVM reading is one volt.

(C). Do not use too much marker generator output which would cause distortion of the pattern obtained on the oscilloscope.

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

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS	
7	5000MF High side to Point E. Low side to tuner chassis.	25.0MC (10MC Sweep) (Attenuate output to give one volt reading on VTVM connected as in steps 4, 5, & 6)	22.25MC	13	Vert. Amp. shunted by 1000MF thru 10KΩ to Point B- Low side to B-	A10	Pattern obtained should be similar to Fig 2. Adjust spacing of coil turns of L19 (A10) so 22.25MC marker rides on "Plateau" approx. 20% out from steep side of the pattern. If the top of the response pattern is not similar to Fig 2, slight adjustment of A7 may be sufficient. If not, determine whether the curve has a high or low freq. peak. Adjustment A5 and A6 control the high freq. side of the curve, while A8 and A9 control the low freq. side. By making slight adjustment of the high or low freq. adjustments it is possible to obtain the correct pattern.

RF ALIGNMENT

(A). Connect a 1 1/2 volt battery to the AGC system—negative to AGC line, positive to B-.

(B). Do not remove the shield on the underside of the RF tuner unit.

(C). Before starting alignment of the RF tuner it is necessary to set the tuning slugs to their correct mechanical position as shown in Fig 3. This is done by turning the channel selector switch to channel #12 and then using the three special tools supplied in alignment tool kit 507475. Note the bottom tip of each slug is color coded and that aligning tools are identified by corresponding colors as the tools differ in length.

Using the correct color coded tool for a particular slug, insert the tool through the coil opening in the bottom of the tuner so that it engages a slot in the bottom of the slug. Turn the slug counter clockwise several turns so as to assure the tool has properly engaged the slug.

Press the actuating plate of the tuner mechanism back against its mechanical stop so the slugs are withdrawn from their coil forms as far as possible. Now turn the aligning tool clockwise until the slug disengages from the aligning tool. This automatically determines the correct setting as the alignment tools have been made a specific length.

All six slugs (A11, A12, A13, A17, A18 and A19) should be set in this manner using the alignment tool corresponding in color to the color on the bottom tip of the tuning slug. (See Fig 3).

HIGH BAND ALIGNMENT

(A). After positioning slugs mechanically as in paragraph "C" under RF channel alignment instructions, turn the channel selector switch to channel #12.

(B). Turn the fine tuning adjustment screw for channel 12 clockwise until the tuner actuating plate has moved back as far as it will go and presses against its mechanical stop— DO NOT FORCE SCREW BEYOND THIS POINT. Now back off the fine tuning adjustment screw by rotating it counter-clockwise 3 full turns.

(C). Connect VTVM to Point F as in steps 4, 5, and 6. Attenuate the sweep generator output so as to maintain a one volt reading on the VTVM.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8	Connect as shown in Fig 4.	207MC (10MC Sweep)	205.25MC	12	Vert. Amp. shunted by 100OMF thru 10KΩ to Point F. Low side to B-.	A14	Adjust A14 so marker appears at 50% amplitude position on pattern as per Fig 5. Do not attempt to shape pattern with this adjustment.
9	"	213MC (10MC Sweep)	211.25MC	13	"		Adjust fine tuning screw for channel #13 and note whether scope pattern can be centered on the horizontal trace line. If channel 13 cannot be tuned in, return to channel 12 and set fine tuning screw for channel 12 at 3 1/2 turns instead of 3 turns as originally specified. Recheck to see that channel 13 can now be received. Check 211.25MC marker at 50% amplitude position.
10	"	207MC (10MC Sweep)	205.25MC	12	"	A15, A16	Adjust A15 and A16 for properly shaped overall response pattern as per Fig 5. If video marker (205.25MC) is not at 50% amplitude position, change setting of A14 until pattern shifts in the desired direction. When adjusting A15 and A16, it is possible to broaden the bandpass by sacrificing amplitude. Do not overly broaden bandpass as this would result in loss of sensitivity.
11	"	213MC (10MC Sweep)	211.25MC	13	"		Check bandpass of channels 7, 8, 9, 10, 11 & 13 without disturbing high band trimmers. Adjust the sweep and marker generators for each channel as listed and adjust the fine tuning screws so each channel setting is correct. If one or two channels have a peaked response pattern, it is desirable the peak occur on the sound carrier side rather than the picture carrier side. A compromise on the peak magnitude may be made by returning to channel 12 and lowering the response on the side of the characteristic curve which tends to rise when the tuner was previously set to lower channels.
		201MC (10MC Sweep)	199.25MC	11			
		195MC (10MC Sweep)	193.25MC	10			
		189MC (10MC Sweep)	187.25MC	9			
		183MC (10MC Sweep)	181.25MC	8			
		177MC (10MC Sweep)	175.25MC	7			

**STEWART-WARNER
MODELS AVC1, AVC2, AVT1**



FIG. 1

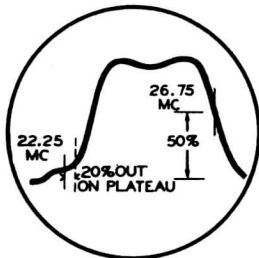


FIG. 2

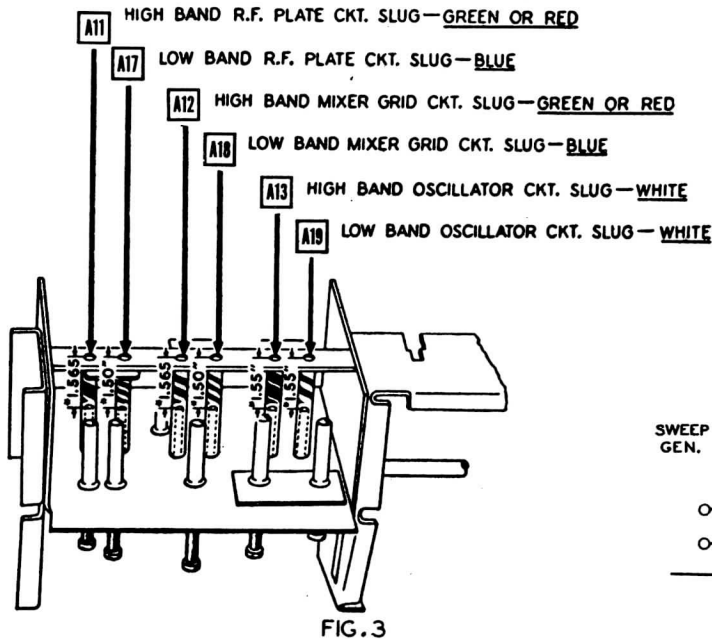


FIG. 3

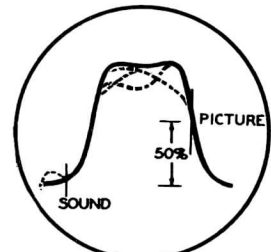


FIG. 5

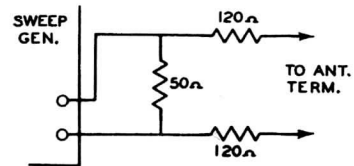


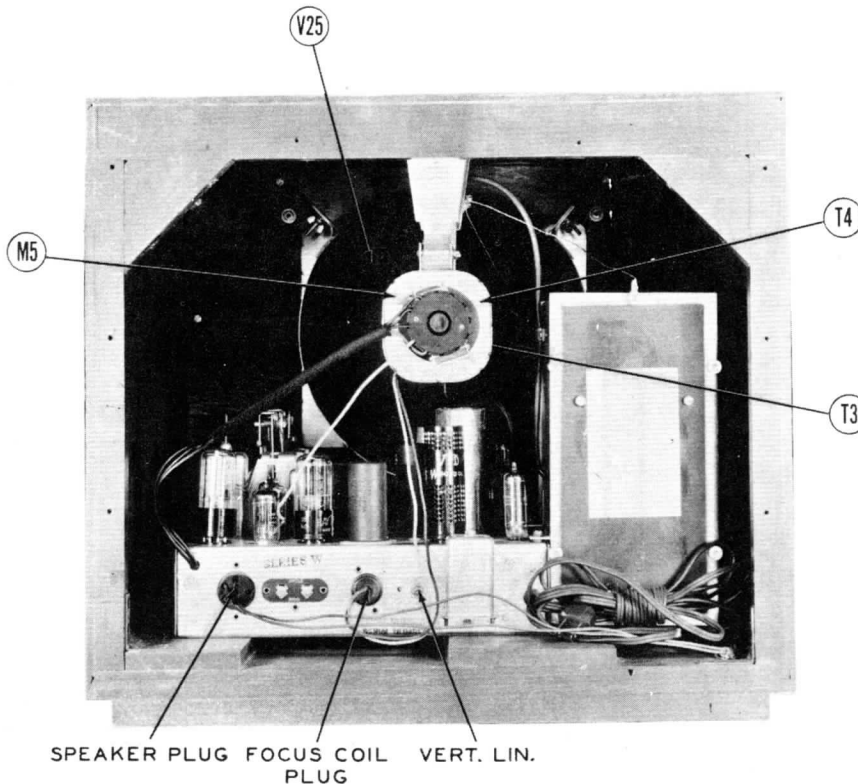
FIG. 4

ALIGNMENT INSTRUCTIONS (CONT.)

LOW BAND ALIGNMENT

- (A). After positioning the slugs mechanically as in paragraph "C" under RF Channel Alignment Instructions, turn the channel selector switch to channel #6.
- (B). Turn the fine tuning adjustment screw for channel 6 clockwise until the tuner actuating plate has been moved back as far as it will go and presses against its mechanical stop-DO NOT FORCE SCREW BEYOND THIS POINT. Now, back off this fine tuning screw by rotating it counter-clockwise one full turn.
- (C). Connect VTVM to Point F as in steps 4, 5, and 6. Attenuate the sweep generator output so as to maintain a one volt reading on VTVM.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12	Connect as shown in Fig 4.	85MC (10MC Sweep)	83.25MC	6	Vert. Amp. shunted by 1000MF thru 10KΩ to Point F. Low side to B-.	A20	Adjust A20 so marker appears at 50% amplitude position on pattern as per Fig 5. Do not attempt to shape pattern with this adjustment.
13	"	57MC (10MC Sweep)	55.25MC	2	"		Adjust fine tuning screw for channel 2 and note whether scope pattern can be centered on the horizontal base line. If channel 2 cannot be tuned in, return to channel 6 and set fine tuning screw for channel 6 at 3/4 of a turn instead of 1 full turn as originally specified. Recheck to see that channel 2 can now be received. Check 55.25MC marker at 50% amplitude position.
14	"	85MC (10MC Sweep)	83.25MC	6	"	A21, A22	Adjust A21 & A22 for properly shaped overall response pattern as per Fig 5. If video marker (83.25MC) is not at 50% amplitude position, change setting of A20 until pattern shifts in the desired direction. When adjusting A21 and A22, it is possible to broaden the bandpass by sacrificing amplitude. Do not overly broaden the bandpass as this would result in loss of sensitivity.
15	"	79MC (10MC Sweep) 69MC (10MC Sweep) 63MC (10MC Sweep) 57MC (10MC Sweep)	77.25MC 67.25MC 61.25MC 55.25MC	5 4 3 2	"		Check bandpass of channels 2,3,4,& 5 without disturbing low band trimmers. Adjust the sweep and marker generators for each channel as listed and adjust the fine tuning screws so each channel setting is correct. If one or two channels have a peaked response pattern, it is desirable the peak occur on the sound carrier side rather than the picture carrier side. A compromise on the peak magnitude may be made by returning to channel 6 and lowering the response on the side of the characteristic curve which tends to rise when the tuner was previously set to lower channels.



CABINET-REAR VIEW

VOLTAGE AND RESISTANCE MEASUREMENTS

VOLTAGE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BH6	-1.2VDC	.5VDC	95VAC	98VAC	1.25VDC	1.25VDC	0V		
V 2	6L6	1.20VDC	80VDC	1.05VAC	98VAC	§-.5VDC	0V	2VDC		
V 3	12AU6	-1.3VDC	.4VDC	58VAC	50VAC	1.15VDC	1.15VDC	.4VDC		
V 4	12AU6	0V	.6VDC	50VAC	62VAC	1.15VDC	1.15VDC	.6VDC		
V 5	12AU6	0V	.6VDC	62VAC	75VAC	1.15VDC	1.15VDC	.6VDC		
V 6	12AU6	0V	.6VDC	75VAC	87VAC	1.15VDC	1.15VDC	.6VDC		
V 7	12AL5	0V	-2.2VDC	1.8VAC	6.5VAC	0V	0V	-2.2VDC		
V 8	12AU6	0V	0V	1.8VAC	30VAC	1.15VDC	1.20VDC	2.9VDC		
V 9	12AU7	95VDC	0V	2VDC	45VAC	30VAC	1.25VDC	1.8VDC	65VDC	38VAC
V 10	12AU6	-1.9VDC	0V	1.00VAC	87VAC	1.15VDC	1.15VDC	0V		
V 11	19T8	-1.4VDC	-1.7VDC	-1.4VDC	6.5VAC	25VAC	-1.5VDC	0V	-1.4VDC	41VDC
V 12	50L6GT	0V	0V	95VDC	1.25VDC	0V	0V	50VAC	8.8VDC	
V 13	12AU6	0V	4.5VDC	25VAC	38VAC	90VDC	1.25VDC	4.5VDC		
V 14	12SN7GT	70VDC	1.28VDC	3VDC	0V	75VDC	5VDC	30VAC	1.8VAC	4VDC
V 15	50L6GT	0V	93VAC	1.25VDC	1.25VDC	-1.6VDC	1.25VDC	45VAC	19VDC	
V 16	12SN7GT	-1VDC	1.00VDC	2VDC	-2.3VDC	40VDC	0V	6.5VAC	1.8VAC	
V 17	50B5	-1.2VDC	0V	55VAC	0V	1.25VDC	1.20VDC	-1.2VDC		
V 18	50B5	-1.2VDC	0V	98VAC	55VAC	1.25VDC	95VDC	-1.2VDC		
V 19	50B5	-1.2VDC	0V	50VAC	98VAC	1.25VDC	95VDC	-1.2VDC		
V 20	35Z5GT	0V	65VAC	55VAC	1.25VDC	50VDC	0V	30VAC	1.25VDC	
V 21	35Z5GT	0V	98VAC	90VAC	80VDC	1.28VDC	0V	65VAC	2.25VDC	
V 22	35L6GT	0V	65VAC	1.25VDC	65VDC	-3.6VDC	0V	1.00VAC	0V	
V 23	35L6GT	0V	30VAC	1.25VDC	65VDC	-3.6VDC	-3.6VDC	65VAC	0V	
V 24	1B3GT		DO NOT MEASURE							
V 25	10BP4	6.5VAC	0V	PIN 10 2.25VDC	PIN 11 65VDC	PIN 12 0V				

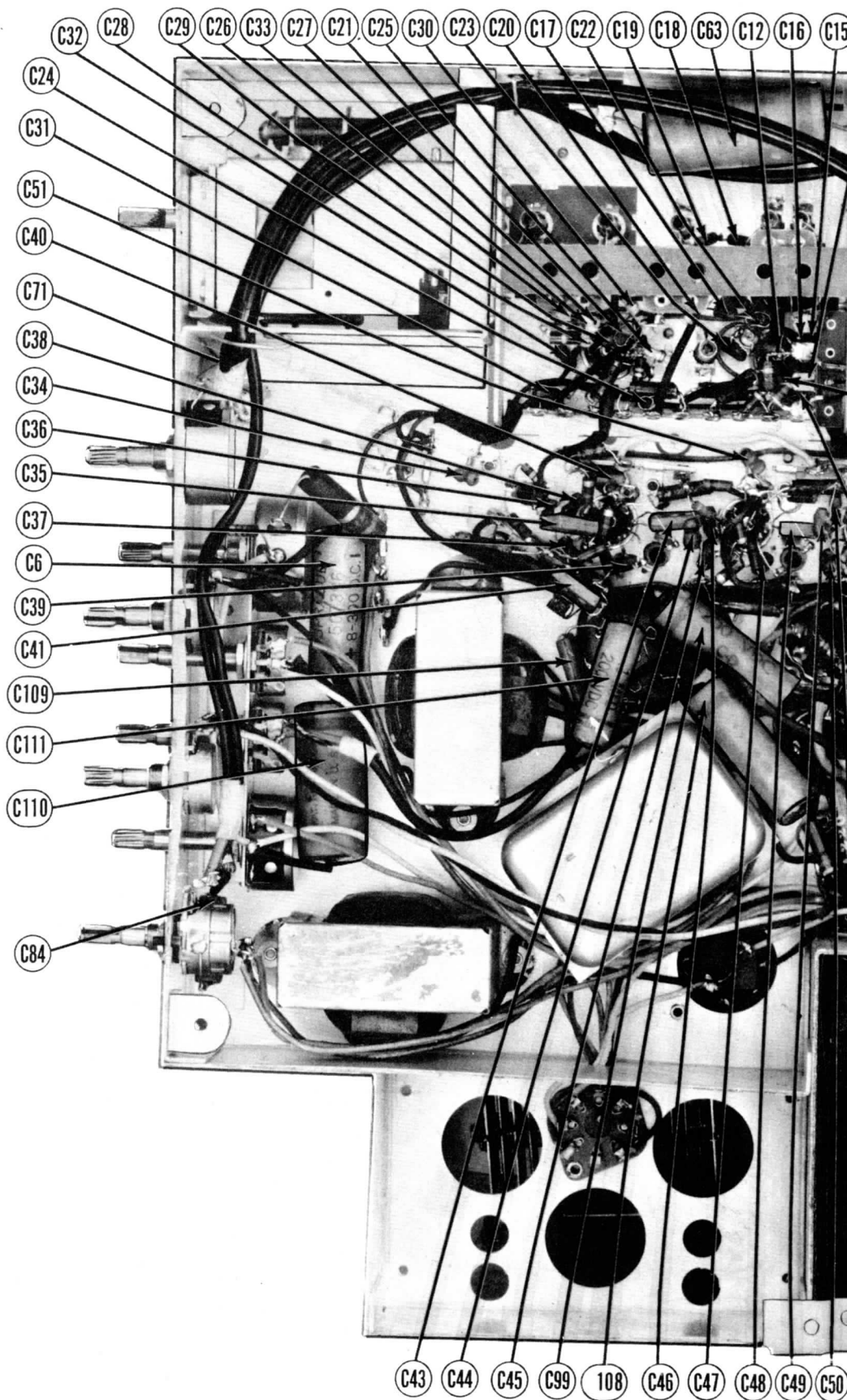
§ Taken with vacuum tube voltmeter.

RESISTANCE READINGS

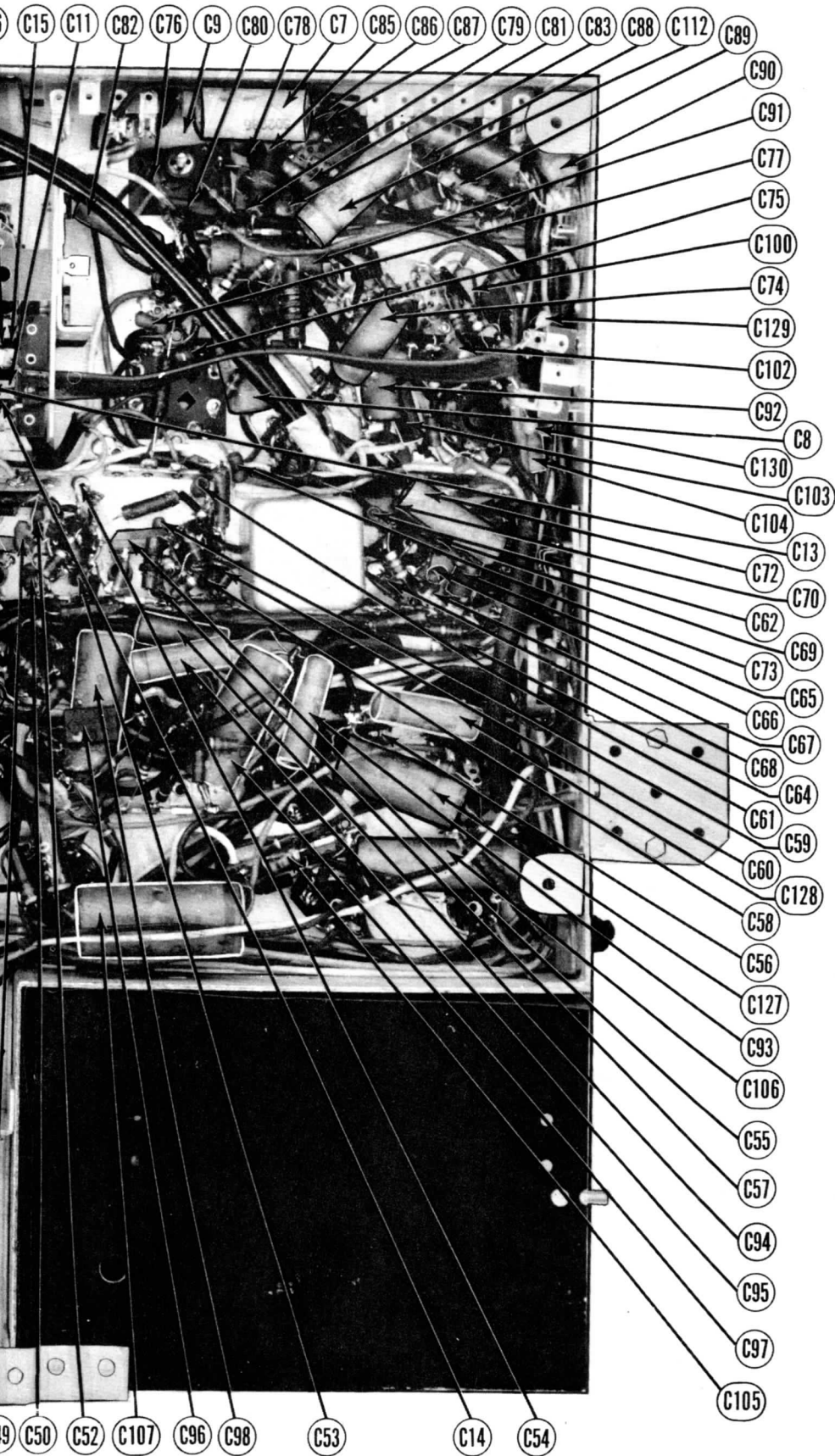
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6BH6	200KΩ	68Ω	130Ω	1.25Ω	*11Ω	*1000Ω	5.6KΩ		
V 2	6L6	*1000Ω	*6KΩ	120Ω	1.25Ω	10KΩ	10KΩ	220Ω		
V 3	12AU6	1.6KΩ	6.5KΩ	150Ω	1.50Ω	*1000Ω	*1000Ω	82Ω		
V 4	12AU6	10KΩ	5.6KΩ	150Ω	1.50Ω	*1000Ω	*1000Ω	82Ω		
V 5	12AU6	6KΩ	5.6KΩ	150Ω	1.45Ω	*1000Ω	*1000Ω	82Ω		
V 6	12AU6	8Ω	5.6KΩ	140Ω	1.35Ω	*1000Ω	*1000Ω	68Ω		
V 7	12AL5	4.5Ω	47KΩ	1.45Ω	1.40Ω	68Ω	Inf.	8.2KΩ		
V 8	12AU6	1 Meg.	0Ω	150Ω	1.50Ω	*8.5KΩ	*10KΩ	2KΩ		
V 9	12AU7	*4.5KΩ	1.8KΩ	270Ω	1.50Ω	150Ω	*10Ω	1 Meg.	1.2KΩ	150Ω
V 10	12AU6	470KΩ	0Ω	120Ω	1.30Ω	*1000Ω	*1000Ω	0Ω		
V 11	19T8	1 Meg.	33KΩ	1 Meg.	1.40Ω	150Ω	33KΩ	0Ω	10 Meg.	*470KΩ
V 12	50L6GT	Inf.	0Ω	*800Ω	*10Ω	470KΩ	450KΩ	35Ω	180Ω	
V 13	12AU6	1 Meg.	22KΩ	150Ω	1.50Ω	*220KΩ	*10Ω	22KΩ		
V 14	12SN7GT	600KΩ	*700KΩ	1000Ω	10KΩ	*100KΩ	1000Ω	140Ω	1.45Ω	2.5KΩ
V 15	50L6GT	Inf.	130Ω	*100Ω	*100Ω	1 Meg.	50KΩ	150Ω	330Ω	
V 16	12SN7GT	650KΩ	*3.8KΩ	270Ω	4 Meg.	*220KΩ	0Ω	1.45Ω	1.45Ω	
V 17	50B5	100KΩ	0Ω	35Ω	0Ω	*40Ω	*120Ω	100KΩ		
V 18	50B5	100KΩ	0Ω	46Ω	35Ω	*40Ω	*120Ω	100KΩ		
V 19	50B5	100KΩ	0Ω	35Ω	46Ω	*40Ω	*120Ω	100KΩ		
V 20	35Z5GT	Inf.	1.45Ω	1.45Ω	*10Ω	*650Ω	*400Ω	140Ω	*40Ω	
V 21	35Z5GT	Inf.	1.25Ω	130Ω	*450Ω	*13Ω	0Ω	1.45Ω	*0Ω	
V 22	35L6GT	Inf.	150Ω	*42Ω	*3KΩ	10KΩ	Inf.	150Ω	0Ω	
V 23	35L6GT	Inf.	1.40Ω	*42Ω	*3KΩ	10KΩ	10KΩ	150Ω	0Ω	
V 24	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP 120KΩ
V 25	10BP4	1.40Ω	1 Meg.	*10Ω	1.2KΩ	0Ω				

* Measured from junction of V2 and L1
 † Measured from pin 8 of V21

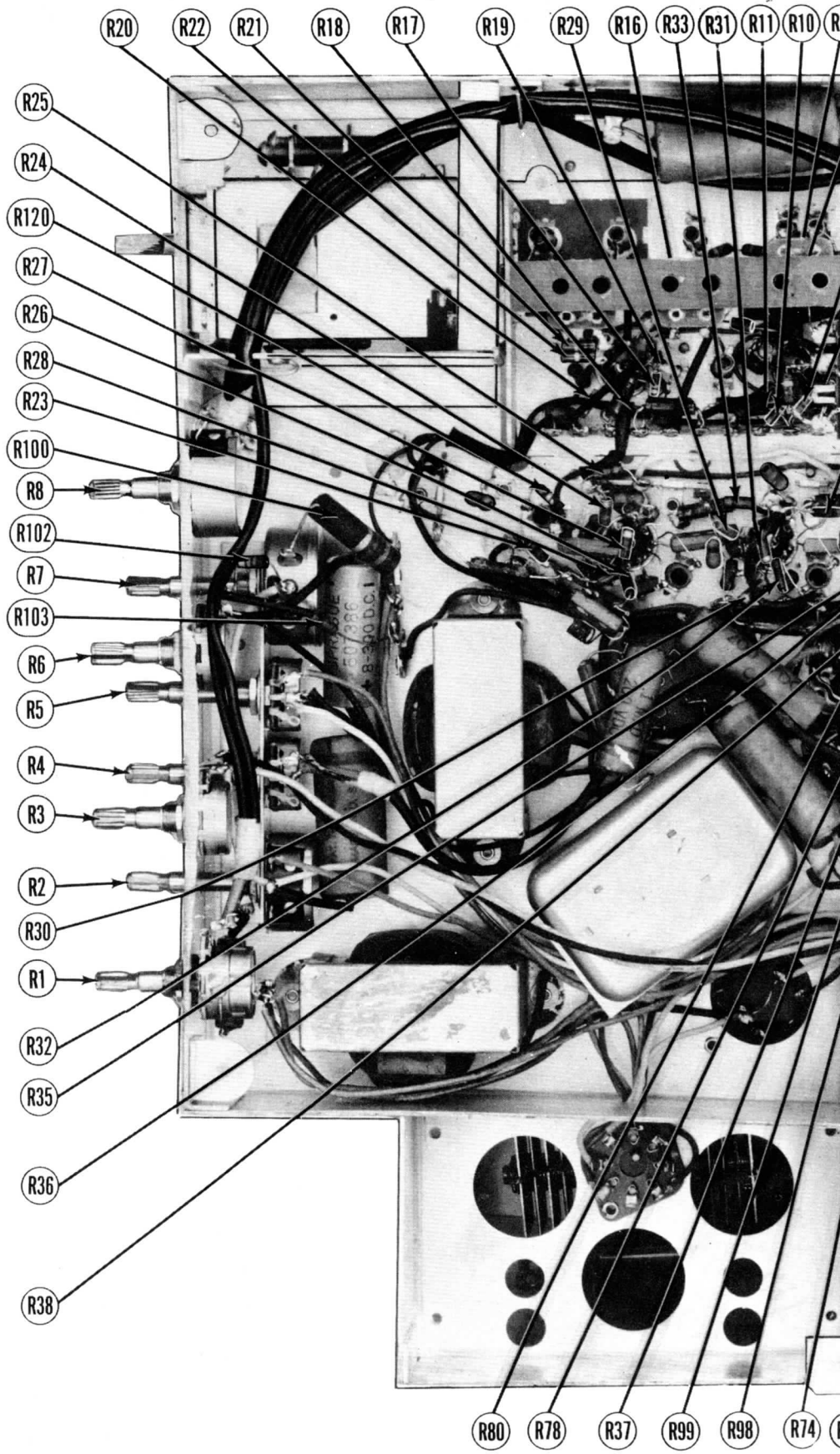
1. DC Voltage measurements are at 20,000 ohms per volt, AC Voltage measured at 1,000 ohms.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.
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.



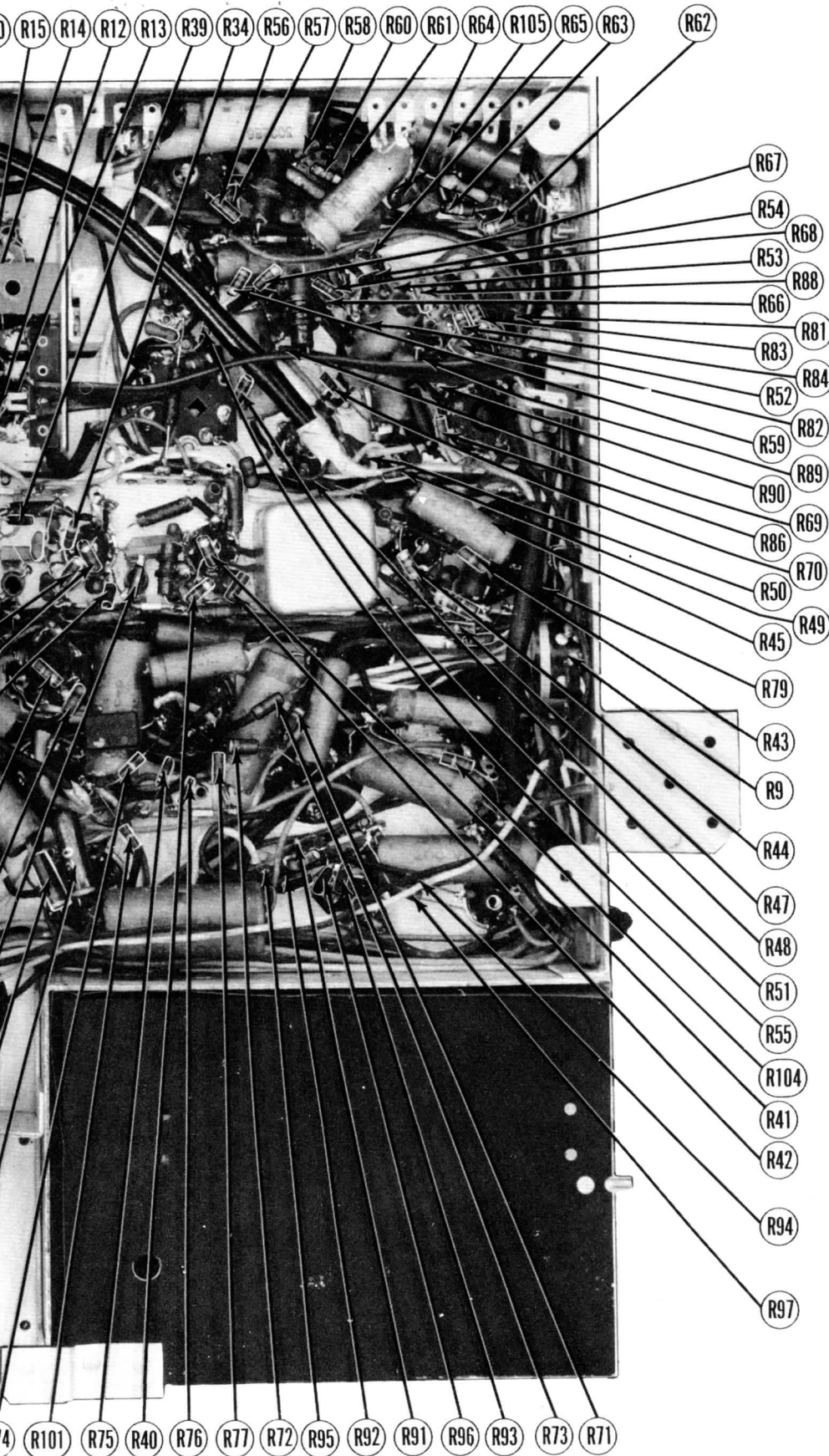
CHASSIS BOTTOM VIEW-CAP



CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW-F



STEWART-WARNER
 MODELS AVCI, AVC2, AVTI

- RESISTOR IDENTIFICATION

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		STEW. WARN. PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6BH6	6BH6	7CM	
V2	Converter	6J6	6J6	7BF	
V3	1st IF Amp.	12AU6	12AU6	7BK	
V4	2nd IF Amp.	12AU6	12AU6	7BK	
V5	3rd IF Amp.	12AU6	12AU6	7BK	
V6	4th IF Amp.	12AU6	12AU6	7BK	
V7	DET.-AGC	12AL5	12AL5		
V8	Video Amp.	12AU6	12AU6	7BK	
V9	DC Rest. Cath. Follower-Horiz. Mult.	12AU7	12AU7	9A	
V10	Limiters	12AU6	12AU6	7BK	
V11	Ratio Det.-AF Amp.	19T8	19T8		
V12	Audio Output	50L6GT	50L6GT	7AC	
V13	Sync. Clipper	12AU6	12AU6	7BK	
V14	Vert. Mult.	12SN7GT	12SN7GT	8BD	
V15	Vert. Output	50L6GT	50L6GT	7AC	
V16	Hor. Mult.-Hor. Amp.	12SN7GT	12SN7GT	8BD	
V17	Horiz. Output	50B5	50B5	7BZ	
V18	Horiz. Output	50B5	50B5	7BZ	
V19	Horiz. Output	50B5	50B5	7BZ	
V20	Damper	35Z5GT	35Z5GT	6AD	
V21	Booster Rect.	35Z5GT	35Z5GT	6AD	
V22	HV Osc.	35L6GT	35L6GT	7AC	
V23	HV Osc.	35L6GT	35L6GT	7AC	
V24	HV Rect.	1B3GT	1B3GT	3C	
V25A	Picture Tube	10BP4	10BP4	12D	Used in model AVT1
B	Picture Tube	10FP4	10FP4	12D	Used in models AVC1 and AVC2.

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	STW. WARN. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SOLAR PART No.	SPRAGUE PART No.	
C1A	200	150	507319	AFH4040D	UP11BJ			D14906	Filter
B	200	150			1055				"
C2A	200	150	507318	AFH4040D	UP11BJ			D14906	"
B	200	150			1055				"
C3A	40	150	506798	AFH844D	UP4CJ			ELS-13	Filter
B	20	150			1056				"
C	20	150							"
C4	500	3	507322	PRS6/500	BRH-605			UHC-506	Video Amp. Cath. Bypass
C5A	150	25	507359	AF888D*	UP4BJ			D14904	Vert. Output Cath. Bypass
B	50	25		PRS25/50	1059				Output Cath. Bypass
C6	8	300	507386	PRS350/8	BR835			UT-83	Filter
C7	10	25	502286	PRS25/10	BR102A			TVA-5	Stabilizing Cap.
C8	10	25	502286	PRS25/10	BR102A			TVA-5	Sync. Clipper Cath. Byp.
C9	10	150	505174	PRS150/12	BR1015			UT-121	Dyn. Limiter Cap.
C10	5		513432						Fixed Trimmer ±10% Note 2
C11	220		513018			GP2K-250			RF Coupling
C12	220		513018			GP2K-250			"
C13	.001		513009			GP2L-001			RF Bypass
C14	.001		513009			GP2L-001			"
C15	.001		513009			GP2L-001			RF Screen Bypass
C16	.001		513009			GP2L-001			RF Supp. Bypass
C17	1		513000						RF Coupling
C18	.5		513019						"
C19	.5		513019						"
C20	.001		513009			GP2L-001			RF Plate Decoupling
C21	.001		513009			GP2L-001			RF Bypass
C22	220		513018			GP2K-250			RF Fil. Bypass
C23	220		513018			GP2K-250			"
C24	.001		513009			GP2L-001			RF Bypass
C25	10		513437			NPOK-10			Conv. Cath. Bypass
C26	7		513402						Fixed Trimmer
C27	51		513416			N750L-47			Fixed Padder
C28	51		513416			N750L-47			Osc. Feedback
C29	2.2		513001						Osc. Coupling
C30	2.5		513436						Osc. Feedback
C31	.001		513009			GP2L-001			RF Bypass
C32	220		513018			GP2K-250			Conv. Fil. Bypass
C33	220		513018			GP2K-250			Conv. Fil. Bypass
C34	.001		513009			GP2L-001			Conv. Plate Decoup.
C35	47	500	512526	1468-00005	5W5Q5		MO.5-45	LFM-45	IF Coupling
C36	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	AGC Filter
C37	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	RF Bypass
C38	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	1st V. IF Supp. Byp.
C39	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	1st V. IF Decoupling
C40	100		513003	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	1st V. IF Fil. Bypass
C41	240	500		1469-00025	5R5T25		MOS.5-325	MS-325	Fixed Trimmer
C42	47		513438	1469-00005	5R5Q5	NPOM-50	MOS.5-45	MS-45	"
C43	47	500	512526	1468-00005	5W5Q5	GP1K-50	MO.5-45	LFM-45	IF Coupling
C44	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	AGC Filter
C45	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	RF Bypass
C46	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	2nd V. IF Supp. Bypass
C47	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	2nd V. IF Decoupling
C48	47	500	512526	1468-00005	5W5Q5	GP1K-50	MO.5-45	LFM-45	IF Coupling
C49	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	AGC Filter
C50	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	RF Bypass
C51	100		513003	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	2nd V. IF Fil. Bypass
C52	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	3rd V. IF Supp. Bypass
C53	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	3rd V. IF Decoupling
C54	100		513003	1468-0001	5W5T1	GP1K-100	MO.5-31	LFM-31	3rd V. IF Fil. Bypass
C55	47	500	512526	1468-00005	5W5Q5	GP1K-47	MO.5-45	LFM-45	IF Coupling
C56	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	RF Bypass
C57	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	RF Bypass
C58	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	4th V. IF Cath. Bypass
C59	.001		513009	1468-001	1W5D1	GP2L-001	MM.5-21	LFM-21	4th V. IF Supp. Bypass

STEWART-WARNER MODELS AVCI, AVC2, AVTI

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES	ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES	REPLACEMENT DATA	
			RESISTANCE	WATTS	STEW. WARN. PART No.	IRC PART No.			STEW. WARN. PART No.
							All resistors are ± 10% unless otherwise stated		
M-21	4th V. IF Decoupling	R10	100K Ω	1/4	510172		RF Grid	R117 470K Ω	
M-31	4th V. IF Fil. Bypass	R11	68K Ω	1/4	510115		RF Cathode	R118 220K Ω	
M-31	IF Coupling	R12	5600 Ω	1/4	510150	BTS-5600	RF Suppressor	R119 220K Ω	
M-10	AGC Filter	R13	100 Ω	1/4	510137	BTS-1000	RF Screen Decoupling	R120 10K Ω	
M-21	AGC Filter	R14	5600 Ω	1/4	510150		RF Coil Shunt		
M-21	AGC Diode Filter	R15	5600 Ω	1/4	510150	BTS-5600	RF Plate Decoupling		
M-21	"	R16	10K Ω	1/4	510154		Mixer Coil Shunt		
M-21	"	R17	10K Ω	1/4	510154		Mixer Grid		
M-25	Diode Filter	R18	10K Ω	1/4	510124		Mixer Cathode		
M-25	RF Bypass Note 4	R19	220 Ω	1/4	510154		Osc. Grid		
M-21	DET-AGC Fil. Bypass	R20	10K Ω	1/4	510150		Osc. Plate		
M-21	DET-AGC Fil. Bypass	R21	10K Ω	1/4	510150	BTS-5600	Parasitic Suppressor		
M-21	DET-AGC Fil. Bypass	R22	10K Ω	1/4	510100		Mixer Plate Decoupling		
M-21	Video Bypass	R23	1000 Ω	1/4	510137	BTS-1000	1st IF Grid		
M-21	RF Bypass	R24	5600 Ω	1/4	510150		1st IF Suppressor		
M-21	Video Coupling	R25	1000 Ω	1/4	510137	BTS-1000	1st IF Decoupling		
M-21	RF Bypass	R26	5600 Ω	1/4	510150		2nd IF Grid		
M-21	Video Coupling	R27	1000 Ω	1/4	510137	BTS-1000	2nd IF Cathode		
M-21	S. IF Coupling ± 10%	R28	82 Ω	1/4	510117		2nd IF Suppressor		
M-215	Limiter Decoupling	R29	82K Ω	1/4	510117		2nd IF Plate Decoupling		
M-325	Limiter Fil. Bypass Note 2	R27	5600 Ω	1/4	510150	BTS-5600	AGC Network		
M-21	IF Coupling	R28	1000 Ω	1/4	510137	BTS-1000	AGC Network		
M-32	Diode Load Cap.	R29	8200 Ω	1/4	510153	BTS-8200	3rd IF Grid		
M-35	De-emphasis	R30	82 Ω	1/4	510117		3rd IF Cathode		
M-215	RF Bypass	R31	5600 Ω	1/4	510150	BTS-5600	3rd IF Suppressor		
M-21	"	R32	1000 Ω	1/4	510137	BTS-1000	3rd IF Coil Shunt		
M-11	"	R33	1000 Ω	1/4	510137	BTS-1000	3rd IF Plate Decoupling		
M-15	Phono Isolation	R34	1000 Ω	1/4	510137	BTS-1000	4th IF Cathode		
M-21	Vol. Cont. Isolation	R34	5600 Ω	1/4	510150		4th IF Suppressor		
M-32	Audio Coupling	R35	82 Ω	1/4	510117		4th IF Plate Decoupling		
M-32	RF Bypass	R36	5600 Ω	1/4	510150	BTS-5600	AGC Network		
M-32	AF Plate Bypass	R37	8200 Ω	1/4	510153	BTS-8200	AGC Diode Load		
M-11	Audio Coupling	R38	1000 Ω	1/4	510137	BTS-1000	AGC Cathode		
M-215	Tone Compensation	R39	1000 Ω	1/4	510137	BTS-1000	Voltage Divider See Note 1		
M-21	Output Plate Bypass	R40	68 Ω	1/4	510115		Video Det. Load		
M-15	Video Coupling	R41	5600 Ω	1/4	510150	BTS-5600	Parasitic Suppressor		
M-25	Sync. Coupling	R42	1000 Ω	1/4	510137	BTS-1000	Video Amp. Grid		
M-25	Integrator Net.	R43	100K Ω	1/4	510173	BTS-100K	Video Amp. Cathode		
M-11	"	R44	47K Ω	1/4	510166	BTS-47K	Video Amp. Screen Decoupling		
M-11	Vert. Mult. Feedback	R45	68 Ω	1/4	510115		Video Amp. Plate		
M-35	Vert. Mult. Plate Byp.	R46	82K Ω	1/4	510171	BTS-82K	DC Restorer Grid		
M-36	Vert. Discharge	R47	8200 Ω	1/4	510153	BTS-8200	Cathode Follower Load		
M-36	Vert. Coupling	R48	100 Ω	1/4	510119		Limiter Grid		
M-32	Fixed Trimmer	R49	1 Meg.	1/4	510191	BTS-1 Meg.	Limiter Decoupling		
M-35	Differentiator Net.	R50	120 Ω	1/4	510120		De-emphasis		
M-45	Hor. Mult. Feedback	R51	10K Ω	1/4	510155	BTS-10K	AF Grid		
M-45	Hor. Discharge Note 3	R52	8200 Ω	1/4	510253	BTA-8200	Dynamic Limiter Load		
M-45	Hor. Coupling	R53	1 Meg.	1/4	510191	BTS-1 Meg.	Ratio Det. Load		
M-11	"	R54	12K Ω	1/4	510156	BTS-12K	AF Plate		
M-315	Hor. Output Grid Filter	R55	470K Ω	1/4	510185	BTS-470K	Tone Compensation		
M-2	Hor. Output Screen Byp.	R56	1000 Ω	1/4	510137	BTS-1000	Output Grid		
M-5	Damper Filter	R57	10K Ω	1/4	510155	BTS-10K	Output Cathode		
M-2	Hor. Coupling	R58	10K Ω	1/4	510155	BTS-10K	Phase Correction		
M-5	Fixed Trimmer	R59	10 Meg.	1/4	510197	BTS-10 Meg.	Sync. Clipper Grid		
M-5	Filter	R60	33K Ω	1/4	510163	BTS-33K	Sync. Clipper Cathode		
M-1	RF Bypass	R61	470K Ω	1/4	510185	BTS-470K	Sync. Clipper Plate		
M-1	Pic. Tube Grid Filter	R62	22K Ω	1/4	510180	BTS-22K	Phase Correction		
M-1	HV Osc. Grid Cap.	R63	470K Ω	1/4	510185	BTS-470K	Integrator		
M-1	Bias Filter	R64	180 Ω	1/4	510223	BW-1-180	Integrator		
M-12	HV Osc. Feedback	R65	10K Ω	1/4	510155	BTS-10K	Vert. Multi. Cathode		
M-12	HV Osc. Screen Byp.	R66	1 Meg.	1/4	510191	BTS-1 Meg.	Vert. Multi. Plate		
M-12	HV Osc. Plate Dec.	R67	270 Ω	1/4	510126		Vert. Multi. Grid See Note 7		
M-12	RF Bypass	R68	22K Ω	1/4	510160	BTS-22K	Vert. Peaking		
M-12	Fixed Trimmer Note 1	R69	220K Ω	1/4	510179	BTS-220K	Vert. Output Grid		
M-12	HV Filter	R70	180K Ω	1/4	510177	BTS-180K	Vert. Output Cathode		
M-1	Line Isolation	R71	4700 Ω	1/4	510149	BTS-4700	Vert. Output Trans. Shunt		
M-12	"	R72	4700 Ω	1/4	510149	BTS-4700	Voltage Divider		
M-12	HV Osc. Fil. Bypass	R73	1000 Ω	1/4	510137	BTS-1000	Voltage Divider See Note 5		
M-12	"	R74	100K Ω	1/4	510173	BTS-100K	Horiz. Multi. Grid		
M-12	"	R75	390K Ω	1/4	510179	BTS-390K	Horiz. Multi. Cathode		
M-12	"	R76	150K Ω	1/4	510176	BTS-150K	Horiz. Multi. Plate See Note 6		
M-12	"	R77	2200 Ω	1/4	510143	BTS-2200	Horiz. Multi. Decoupling		
M-11	Line Isolation	R78	1 Meg.	1/4	510191	BTS-1 Meg.	Horiz. Multi. Grid See Note 4		
M-11	Line Filter	R79	330 Ω	1/4	510128	BTA-330	Grid Current Limiting See Note 3		
M-32	Ant. Coupling	R80	18K Ω	1/4	510159	BTS-18K	Horiz. Amp. Grid		
M-32	"	R81	470 Ω	1/4	510130	BTS-470	Horiz. Amp. Plate See Note 2		
M-32	"	R82	330 Ω	1/4	510127	BTA-330	Bias Network		
M-32	"	R83	18K Ω	1/4	510159	BTS-18K	Parasitic Suppressor		
M-32	"	R84	270 Ω	1/4	510126		"		
M-32	"	R85	1800 Ω	1/4	510141	BTS-1800	"		
M-32	"	R86	2200 Ω	1/4	510143	BTS-2200	"		
M-32	"	R87	560K Ω	1/4	510186	BTS-560K	"		
M-32	"	R88	220K Ω	1/4	510178	BTS-220K	"		
M-32	"	R89	3.9 Meg.	1/4	510714	BTS-3.9 Meg.	"		
M-32	"	R90	220K Ω	1/4	510178	BTS-220K	"		
M-32	"	R91	100K Ω	1/4	510173	BTS-100K	"		
M-32	"	R92	100 Ω	1/4	510119		"		
M-32	"	R93	100 Ω	1/4	510119		"		
M-32	"	R94	100 Ω	1/4	510119		"		
M-32	"	R95	100 Ω	1/4	510119		"		
M-32	"	R96	100 Ω	1/4	510119		"		
M-32	"	R97	100 Ω	1/4	510119		"		
M-32	"	R98	220 Ω	1/4	510119		"		
M-32	"	R99	47 Ω	1/4	510716	AB-225	Damper Filter		
M-32	"	R100	560 Ω	1/4	510213	BW-2-47	"		
M-32	"	R101	470K Ω	1/4	510332	BW-2-560	Focus Coil Shunt		
M-32	"	R102	56K Ω	1/4	510185	BTS-470K	Filter		
M-32	"	R103	1 Meg.	1/4	510168	BTS-56K	Voltage Divider		
M-32	"	R104	150K Ω	1/4	510191	BTS-150K	Picture Tube Grid		
M-32	"	R105	560 Ω	1/4	510176	BW-2-560	Line Isolation		
M-32	"	R106	1500 Ω	1/4	510332	BW-2-560	Filter		
M-32	"	R107	8200 Ω	1/4	510139	BTS-1500	HV Osc. Grid		
M-32	"	R108	10K Ω	1/4	510153	BTS-8200	"		
M-32	"	R109	100 Ω	1/4	510155	BTS-10K	Filter		
M-32	"	R110	100 Ω	1/4	510119		Parasitic Suppressor		
M-32	"	R111	100K Ω	1/4	510119		"		
M-32	"	R112	10 Ω	1/4	510173	BTS-100K	HV Osc. Feedback Network		
M-32	"	R113	100 Ω	1/4	510101		Parasitic Suppressor		
M-32	"	R114	10 Ω	1/4	510101		"		
M-32	"	R115	100 Ω	1/4	510119		"		
M-32	"	R116	3000 Ω	1/4	510713	BW-2-3300	HV Osc. Screen Dropping		

CTIONS (Continued)

RESISTORS

Identifiers for various components and their tolerance percentages:

- Resistors are $\pm 10\%$ unless otherwise stated
- id
- thode
- ppressor
- reen Decoupling
- il Shunt
- ate Decoupling
- Coil Shunt
- Grid
- Cathode
- Grid
- Plate
- itic Suppressor
- Plate Decoupling
- F Grid
- etwork
- F Cathode
- Suppressor
- Decoupling
- Grid
- F Cathode
- Suppressor
- Plate Decoupling
- etwork
- F Grid
- F Cathode
- Suppressor
- Coil Shunt
- Plate Decoupling
- etwork
- F Cathode
- Suppressor
- Plate Decoupling
- etwork
- ode Load
- athode
- ge Divider See Note 1
- Det. Load
- itic Suppressor
- Amp. Grid
- Amp. Cathode
- Amp. Screen Decoupling
- Amp. Plate
- storer Grid
- er Follower Load
- er Grid
- er Decoupling
- hassis
- d
- c Limiter Load
- Det. Load
- te
- ompensation
- Grid
- Cathode
- Correction
- Clipper Grid
- Clipper Cathode
- Clipper Plate
- Correction
- ator
- Multi. Cathode
- Multi. Plate
- Multi. Grid See Note 7
- Multi. Plate
- Peaking
- Output Grid
- Output Cathode
- Output Trans. Shunt
- e Divider
- e Divider See Note 5
- Multi. Grid
- Multi. Cathode
- Multi. Plate See Note 6
- Multi. Decoupling
- Multi. Grid See Note 4
- urrent Limiting See Note 3
- Amp. Grid
- Amp. Plate See Note 2
- etwork
- ic Suppressor
- "
- "
- "
- "
- Filter
- oil Shunt
- Divider
- Tube Grid
- olation
- Grid
- ic Suppressor
- "
- Feedback Network
- ic Suppressor
- "
- "
- Screen Dropping

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	STEW. WARN. PART No.	IRC PART No.	
R117	470K Ω	$\frac{1}{2}$	510185		HV Filter
R118	220K Ω	$\frac{1}{2}$	510179	BTS-220K	Isolation
R119	220K Ω	$\frac{1}{2}$	510179	BTS-220K	"
R120	10K Ω	$\frac{1}{2}$	510155	BTS-10K	1st IF Trans. Shunt See Note 8

Note 1. Item 46 82K Ω resistor not used in chassis "W".
 Note 2. Uncoded chassis uses 33K Ω in this application IRC replacement BTS-33K.
 Note 3. Uncoded chassis uses 120K Ω in this application IRC replacement BTS-120K.
 Note 4. Uncoded chassis uses 470K Ω in this application IRC replacement BTS-470K.
 Note 5. Uncoded chassis uses 180 Ω in this application.
 Note 6. Uncoded chassis uses 33K Ω in this application IRC replacement BTS-33K.
 Note 7. Uncoded chassis uses 470K Ω in this application IRC replacement BTS-470K-5%.
 Note 8. Used in chassis "W" only.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		STEW. WARN. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.					
T1	34 Ω Tap.		507293				Hor. Output Chk. Coil
T2	97 Ω	6.3 Ω	507312				Vert. Output Trans. Hor. Deflection Yoke Vert. Deflection Yoke Focus Coil
T3A	13 Ω		506805	DY-1			
T4	560 Ω		506804	FC-10			

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	STEW. WARN. PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T5	2 Ω	424 Ω	0 Ω		507285			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		STEWART WARNER PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.	PRI.	SEC.					
T6A	2600 Ω	3.6 Ω	200 Ω	.6 Ω	507212	A-3876*	RO-2*	A-2928*	* Bend mounting tabs down and mount on original bracket \emptyset Used with speaker Part # 507111.
B					507209 \emptyset				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (D CURRENT 1000 μ)	STEWART WARNER PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.390A	9.4 Ω	.7 Henries	507313				

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	STEWART WARNER PART No.	MEISSNER PART No.	
L2	Ant. Input	0 Ω		507497		Straight piece of #18 tinned wire
L3	Inductor	0 Ω				
L4	Inductor	0 Ω				
L5	RF Choke	.2 Ω		507496		
L6	RF Choke	.2 Ω		507496		
L7	RF Plate	0 Ω		507474		
L8	RF Plate	0 Ω				
L9	RF Choke	.2 Ω		507496		
L10	Mixer Grid	0 Ω		507498		
L11	Mixer Grid	0 Ω				
L12	RF Choke	.2 Ω		507496		
L13	RF Choke	.2 Ω		507496		
L14	Osc. Coil	0 Ω		507499		
L15	Osc. Coil	0 Ω				
L16	RF Choke	1.2 Ω		507372		
L17	1st Video	IF .2 Ω		507343		
L18	RF Choke	IF 1.2 Ω		507372		
L19	Absorption	0 Ω				
L20	Trap Coil	0 Ω				
L20A	2nd Video	IF 0 Ω		507343		
B	2nd Video	IF 0 Ω				
L21	RF Choke	IF 1.2 Ω		507377		
L22	3rd Video	IF 507372				
L23	RF Choke	IF .2 Ω		507343		
L24	4th Video	IF 1.2 Ω		507372		
L25	RF Choke	IF .2 Ω		507343		
L26	RF Choke	IF 6.5 Ω		507367		
L27A	5th Video	IF 1.2 Ω		507372		
B	RF Choke	IF .2 Ω		507344		
L28	RF Choke	IF 3 Ω		507344		
L29	RF Choke	IF 1.2 Ω		507372		
L29	Peaking	5.5 Ω		507376		
L30	Peaking	32 Ω		507375		
L31	Peaking	23 Ω		507374		
L32	1st Sound	IF 2.8 Ω	1.5 Ω	507384		

STEWART-WARNER MODELS AVCI, AVC2, AVTI

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	STEW. WARN. PART No.	MEISSNER PART No.	
L33	Sound Disc. Transformer	4Ω	.2Ω	507321		Not used on uncoded chassis, less slug Not used on uncoded chassis
L34	RF Choke	15Ω		507373		
L35	RF Choke	24Ω		507371		
L36	RF Choke	20Ω		507379		
L37	Horiz. Sync.	80Ω		507440		
L38	Fil. Choke	.5Ω		507378		
L39	Fil. Choke	.5Ω		507378		
L40	Fil. Choke	1.2Ω		507372		
L41	Fil. Choke	1.2Ω		507372		
L42	Fil. Choke	1.2Ω		507372		
L43	Fil. Choke	1.2Ω		507372		
L44	Fil. Choke	1.2Ω		507372		

SPEAKER

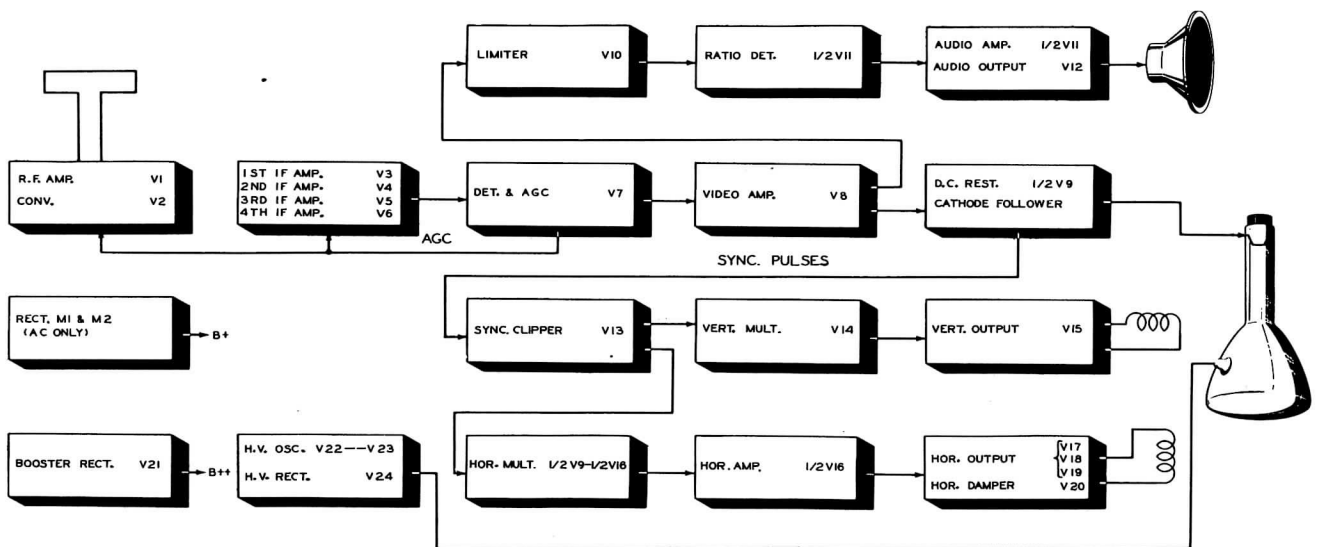
ITEM No.	RATINGS		REPLACEMENT DATA			INSTALLATION NOTES
			STEWART WARNER PART No.	JENSEN PART No.	QUAM PART No.	
SP1A	FIELD	V. C. IMP.	506806	ST-107 MOD.P5-V#	5A15#	# Remount output transformer. ‡ Used in models AVC1 and AVC2.
B	PM	3.6Ω				
SP2A	4 9/16"	V. C. DIA.				
B	6" x 9"	9"				

SELENIUM RECTIFIER

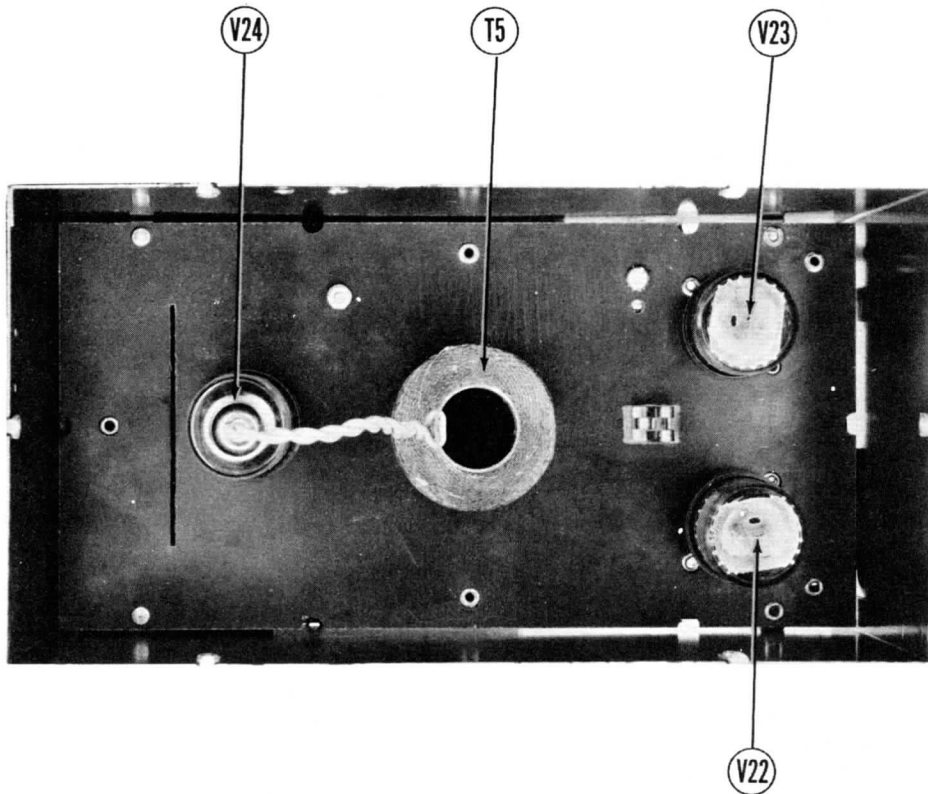
ITEM No.	RATING	REPLACEMENT DATA		NOTES
	CURRENT	STEW. WARN. PART No.		
M1	.215A	507301		
M2	.215A	507301		

MISCELLANEOUS

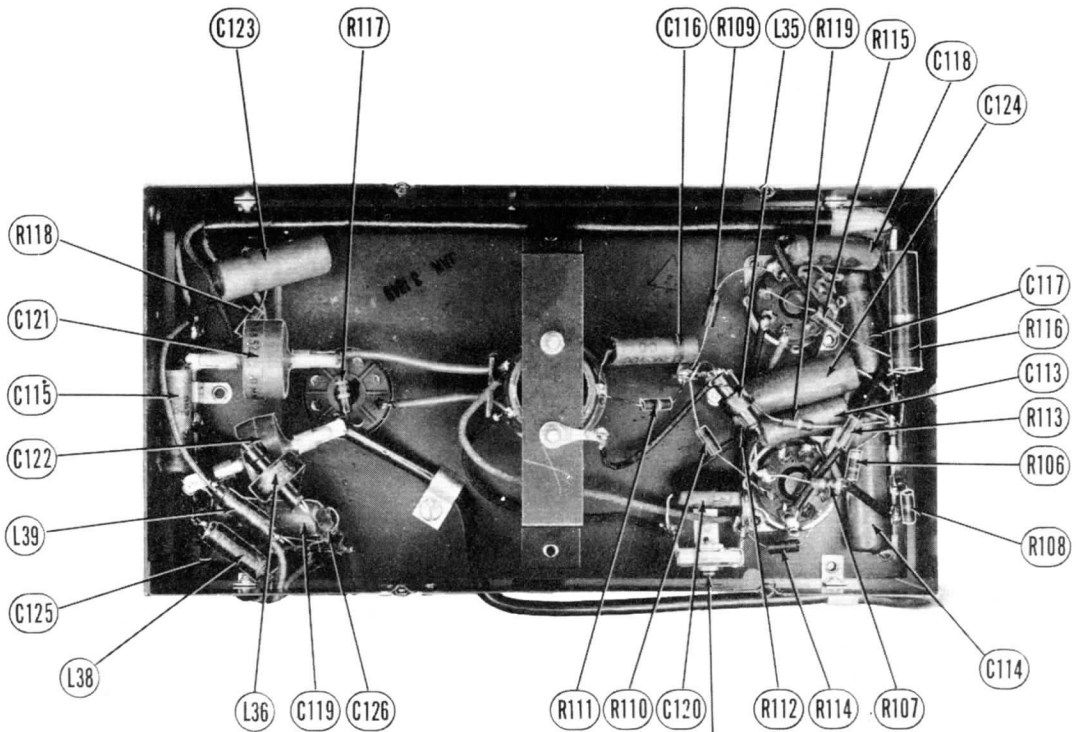
ITEM No.	PART NAME	STEW. WARN. PART No.	NOTES
M3A	Channel Selector Switch		High & Low Band, Part of RF Plate Coil Assembly, L7,8
B			High & Low Band, Part of Mixer Grid Coil Assembly L10-11
C			High and Low Band, Part of Osc. Coil Assy. L14, 15.
M4	Ballast Tube	507300	PM Type Used on Model AVT-1 Only.
M5	Ion Trap	506803	
M6	Polarizing Relay		For use on direct current.
	Knob	506904	Channel Selector
	Knob	506913	For any control except channel selector
	Socket & Cable Assy.	507338	Picture tube
	Socket	507288	Speaker
	Terminal Strip		Antenna connections
	Slug core	507357	For video IF coils, or sound IF coils
	Slug core	507486	For high band RF plate, or mixer grid coil(end painted green or red)
	Slug Core	507487	For low band RF plate or mixer grid coils (end painted blue)
	Slug Core	507488	For high or low band Osc. coil (end painted white)
	Slug Core	507429	For Horiz. Sync. Coil.



BLOCK DIAGRAM



HIGH VOLTAGE SUPPLY - TOP VIEW



HIGH VOLT OSC ADJ

HIGH VOLTAGE SUPPLY - BOTTOM VIEW

STEWART-WARNER
 MODELS AVCI, AVC2, AVTI

PRODUCTION CHANGES

The schematic on page 2 conforms to the series "W" chassis. These chassis were coded in reverse alphabetical sequence; that is, series "Z", series Y, etc. This code is stamped on the back surface of the chassis. It should be remembered that the series "W" is a later type than those listed below.

Following is a listing of changes made in each series from the initial production up to the series "W" chassis.

UNCODED: Initial production.

- SERIES Z:
1. C120 changed from 430MMF to 560MMF.
 2. C105 added in parallel with R91.
 3. R90 changed from 33KΩ to 220KΩ.
 4. R88 changed from 120KΩ to 220KΩ.
 5. C102 changed from 82MMF to 47MMF.
 6. R87 changed from 470KΩ to 560KΩ.
 7. R82 changed from 180Ω to 330Ω.
 8. R85 changed from 33KΩ to 1800Ω.
 9. L37 with a 3300MMF capacitor in parallel were added in the plate circuit of V9B.
 10. C68 changed from 1000MMF to 5000MMF.
 11. L16 added in series with B+ to RF Amp. and Oscillator stages.
 12. L40 added in series with filament supply line to V10 and V21.
 13. C77 added from pin 3 of V10 to chassis.
 14. R75 changed from 470KΩ to 390KΩ.
 15. Center arm of vertical hold control connected to B- instead of pin 3 (cathode) of V14.

- SERIES "Y"
1. Connection from B- to pin 2 of deflection yoke socket (on chassis) was removed. Pin 2 & 5 of this socket were then connected together to place vertical deflection coil at same DC potential as horizontal deflection coil.
 2. C10 was removed from circuit. C10 was connected from pin 1 of V2 to chassis.
 3. Selenium rectifiers M1 and M2 were removed from the chassis pan on Console models AVC1 and AVC2 and mounted on a separate plate which is attached to the cabinet. A cable and plug connects rectifiers to socket on chassis.

SERIES "X"

1. Connection of low potential side of C73 in screen circuit of V8 was changed from B- to chassis.

- SERIES "W"
1. Absorption trap not in L20. L19 and C41 added in cathode circuit of V3.
 2. R120 added across 1st IF Transformer.
 3. The grids of the 2nd and 3rd IF stages (V4 & V5) are returned to B- instead of the AGC line.
 4. R46, which was connected from + 130 volt line to the high end of the contrast control, was removed. The low end of the cathode resistor (R45) of V7 was connected at the junction of R46 and the contrast control. This was moved to the B- line.

DISASSEMBLY INSTRUCTIONS

MODEL AVT I

1. Remove five push-on type control knobs.
2. Remove eight phillips head screws holding back cover. Remove back cover.
3. Remove picture tube socket, from picture tube.
4. Remove focus coil plug and speaker plug from chassis.
5. Remove isolation lead from HV chassis and remove HV lead from picture tube.
6. Remove four 9/32" hex head screws holding chassis. Remove chassis.
7. Remove deflection coil plug after chassis is part way out of cabinet.
8. Remove four 11/32" hex nuts holding speaker. Remove speaker.

REMOVAL OF PICTURE TUBE

MODEL AVT I

1. Remove chassis according to disassembly instructions.
2. Remove two hex nuts holding focus and deflection coils to cabinet.
3. Loosen two wing nuts holding clamp on front of picture tube. CAUTION: HOLD REAR OF PICTURE TUBE UP WHILE LOOSENING WING NUTS.
4. Remove picture tube out rear of cabinet.

HORIZONTAL FREQUENCY ADJUSTMENT

Set the horizontal hold control to center of its range. Turn contrast control slightly below normal.

Adjust slug B1 until picture "syncs" horizontally.