

**STROMBERG-CARLSON
MODEL TC-10**

TRADE NAME	Stromberg-Carlson, Model TC-10
MANUFACTURER	Stromberg-Carlson Co., 100 Carlson Rd., Rochester 3, New York
TYPE SET	Television Receiver
TUBES	Twenty Two

POWER SUPPLY 110-120 Volts AC-60 Cycle **RATING:** 1.8 Amp. @ 117 Volts AC
TUNING RANGE-Channels 2 thru 13

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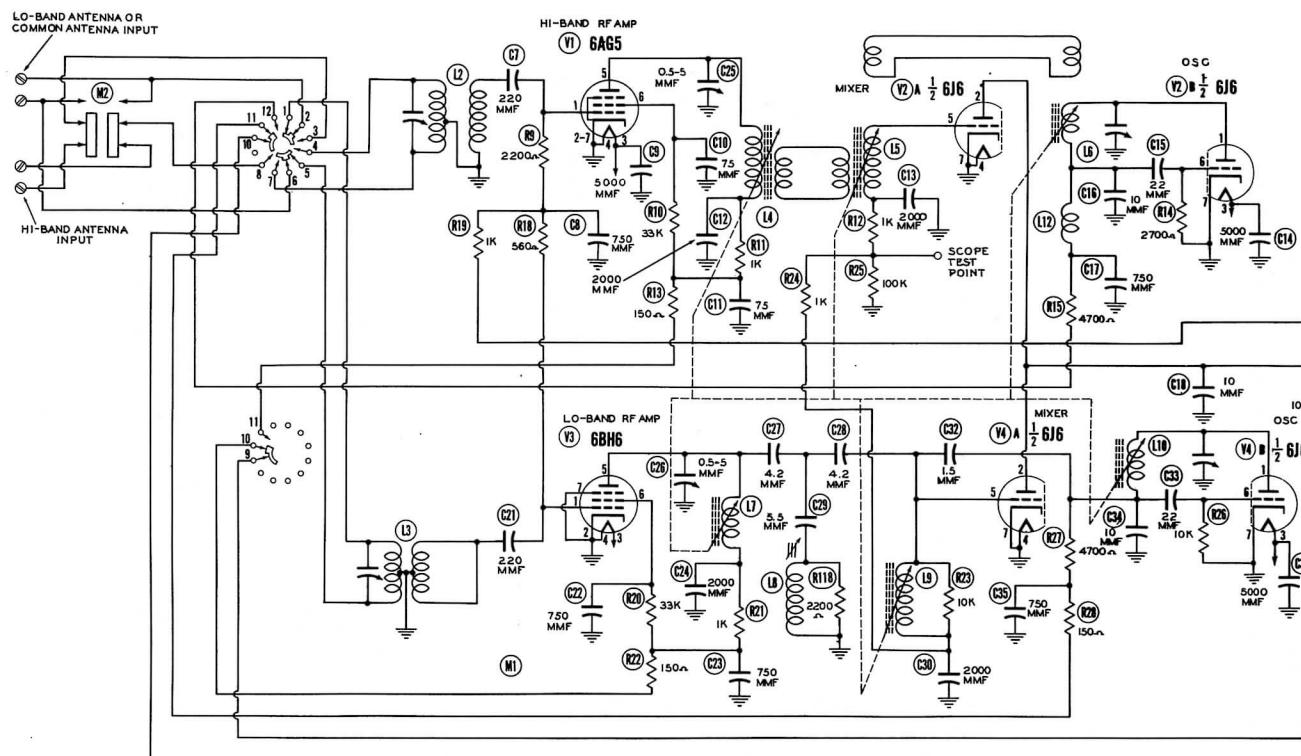
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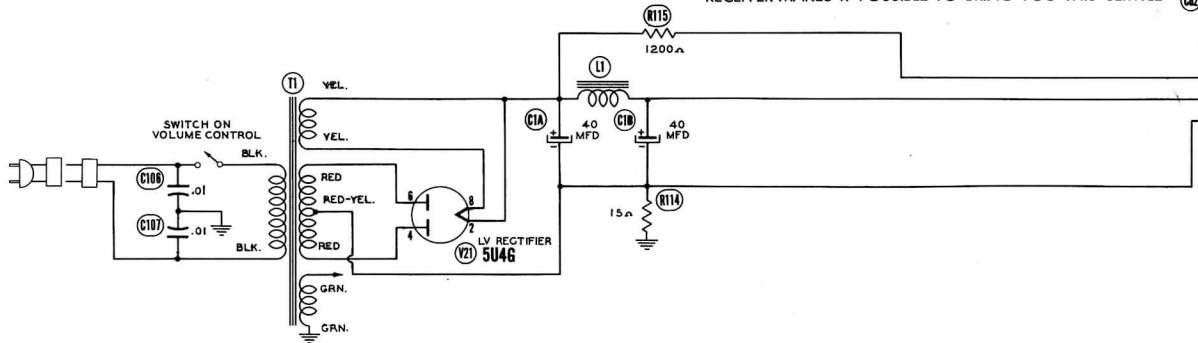
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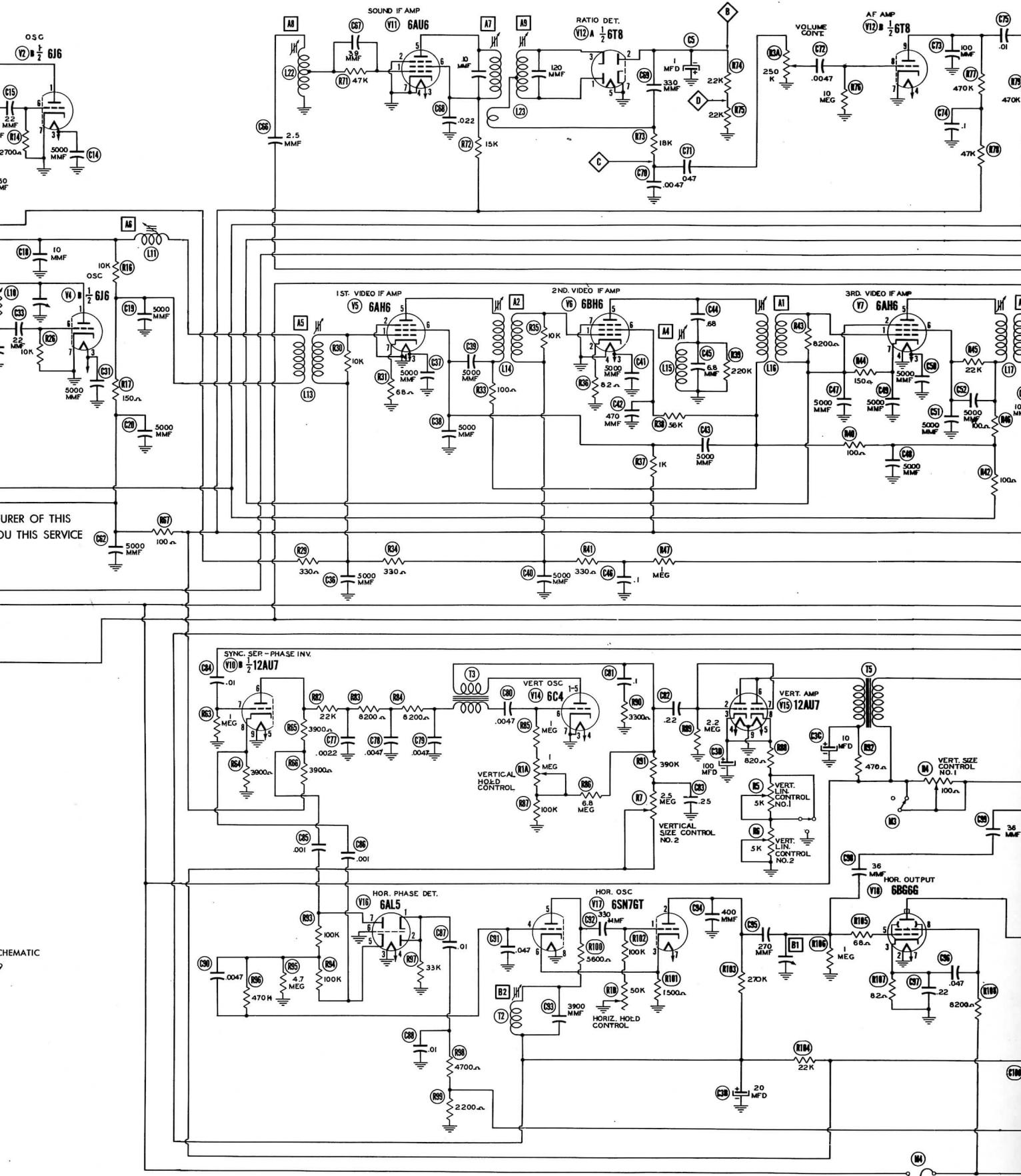
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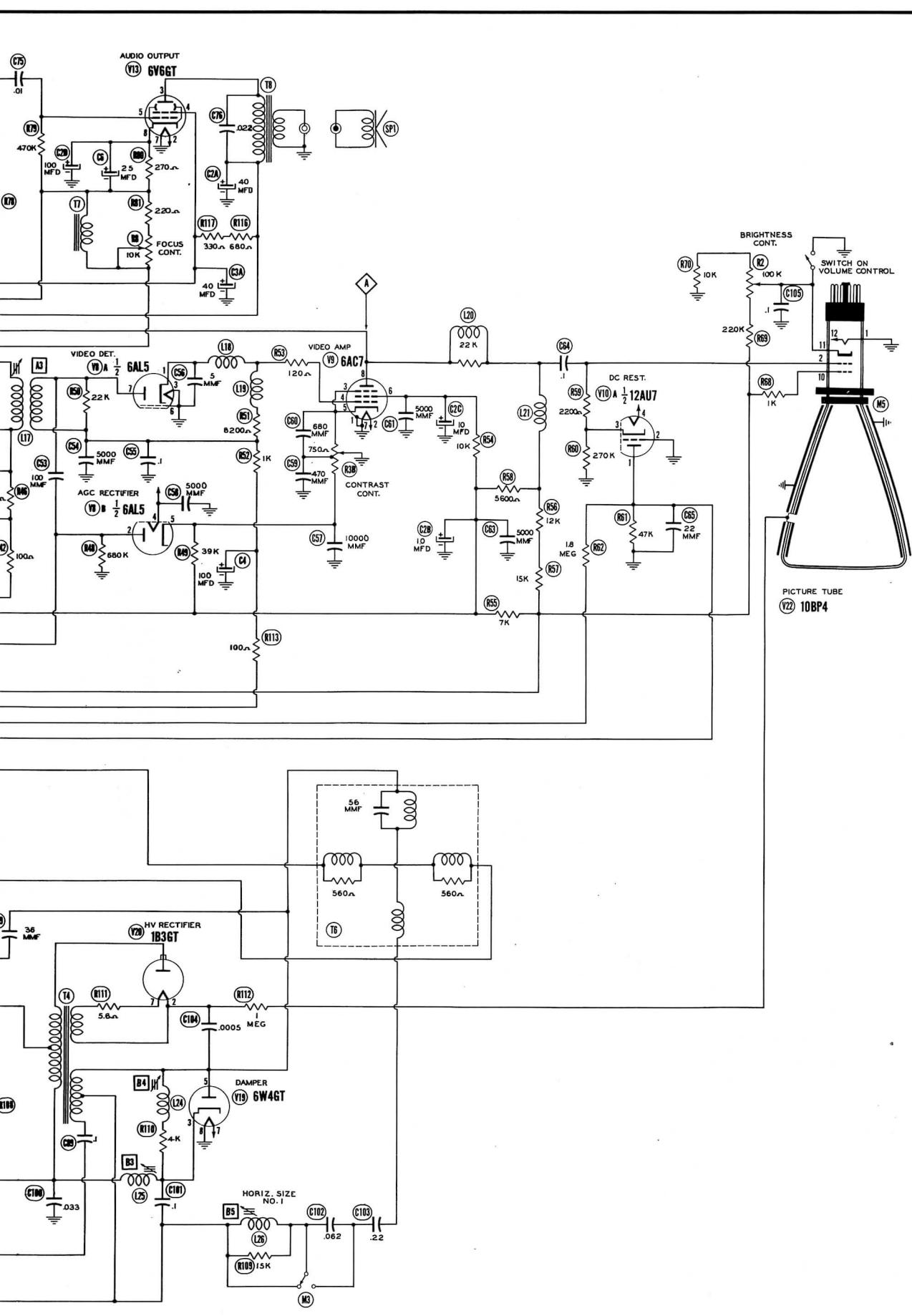
THE COOPERATION OF THE MANUFACTURER OF THIS
RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

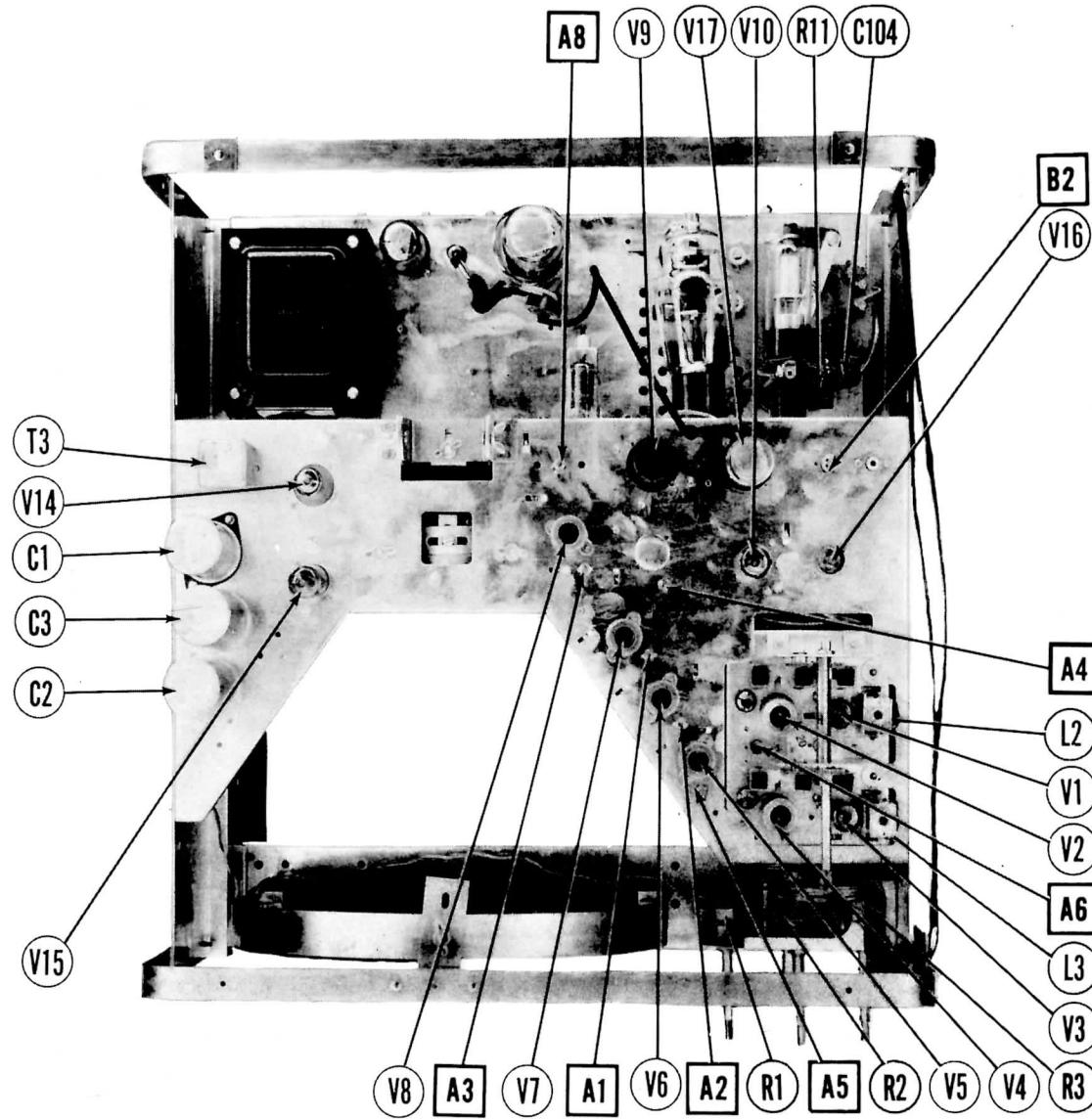


A PHOTOFAC STANDARD NOTATION SCHEMATIC
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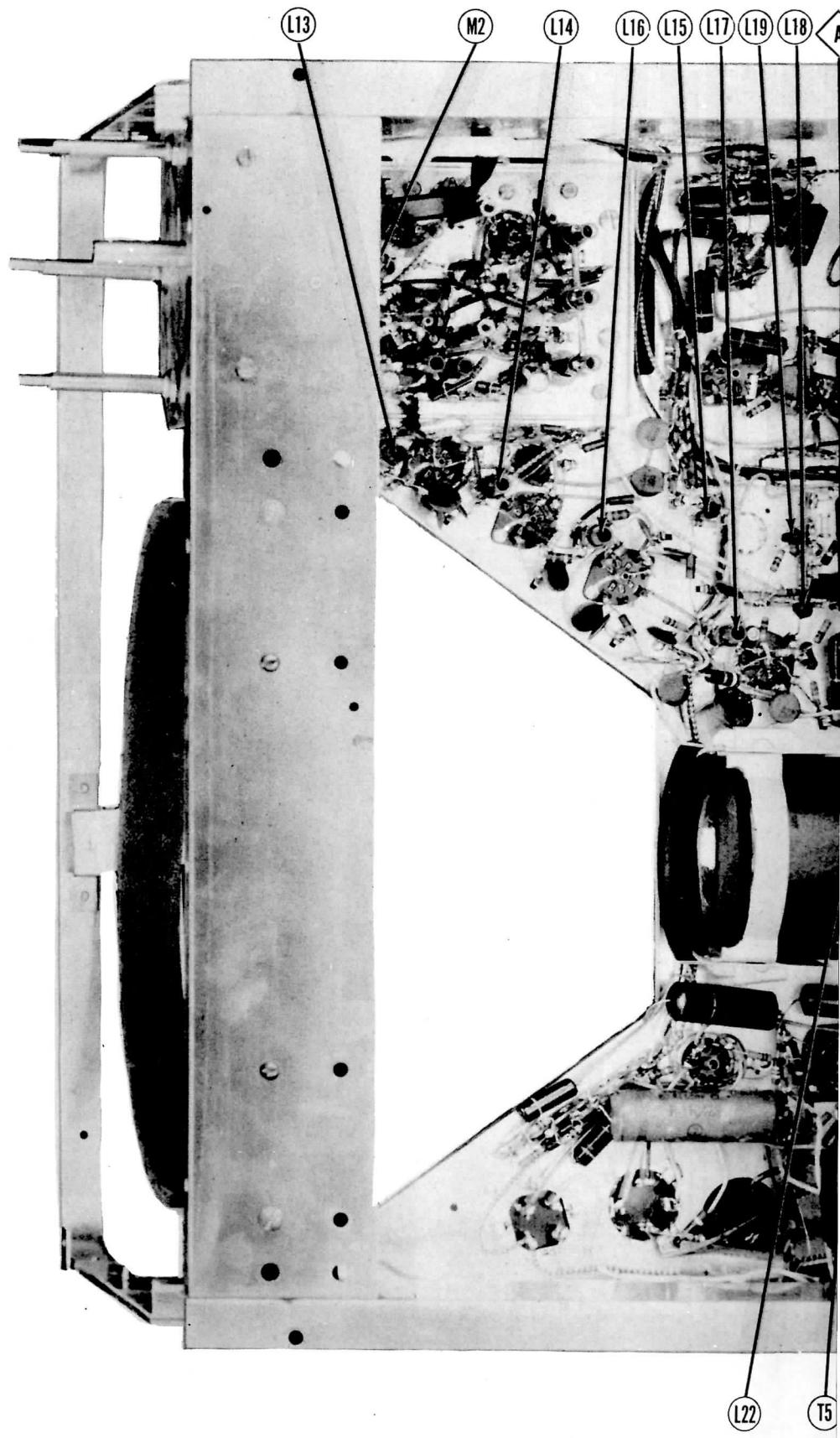
STROMBERG-CARLSON
MODEL TC-10



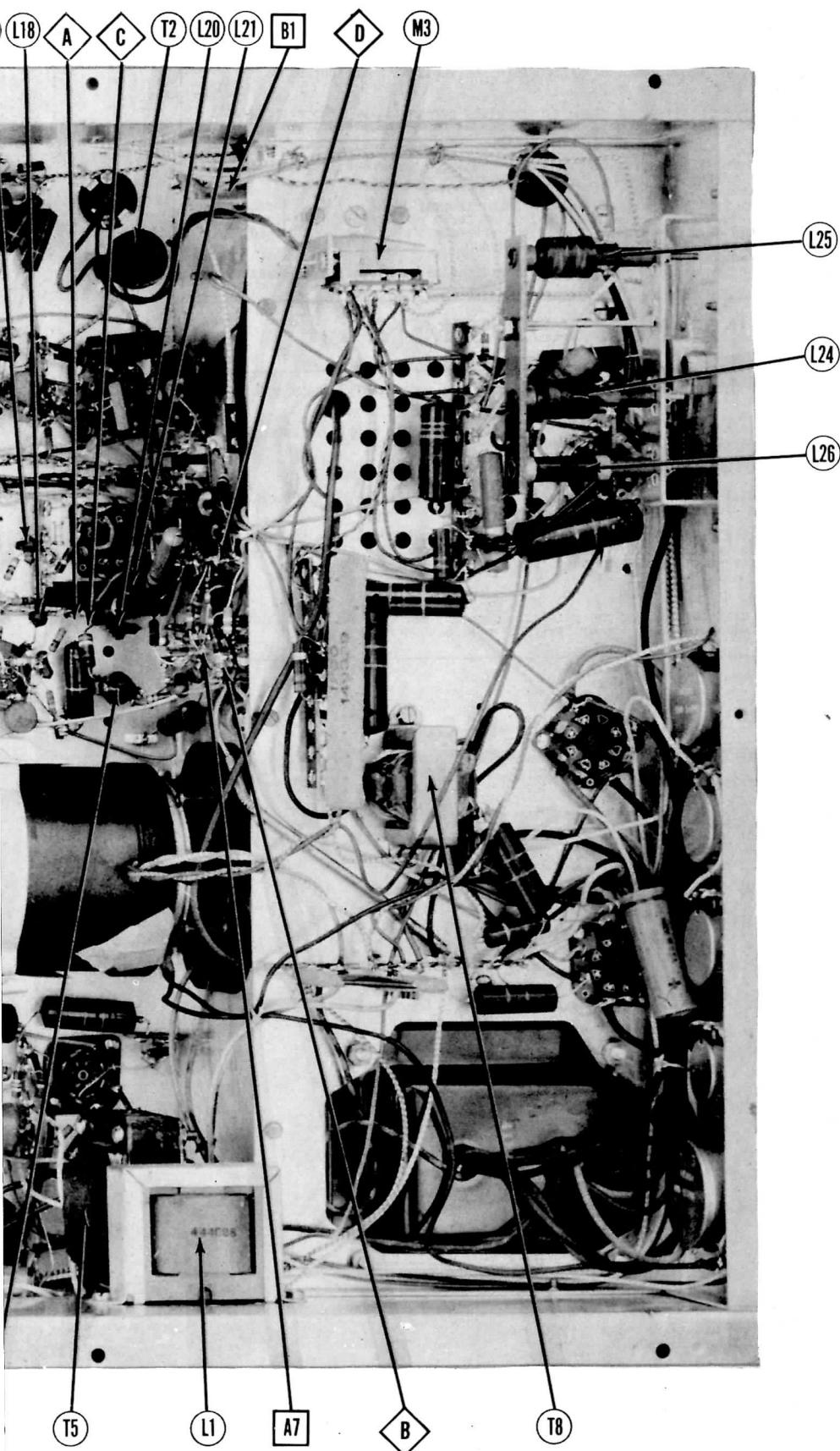


CHASSIS TOP VIEW

STROMBERG-CARLSON
MODEL TC-10



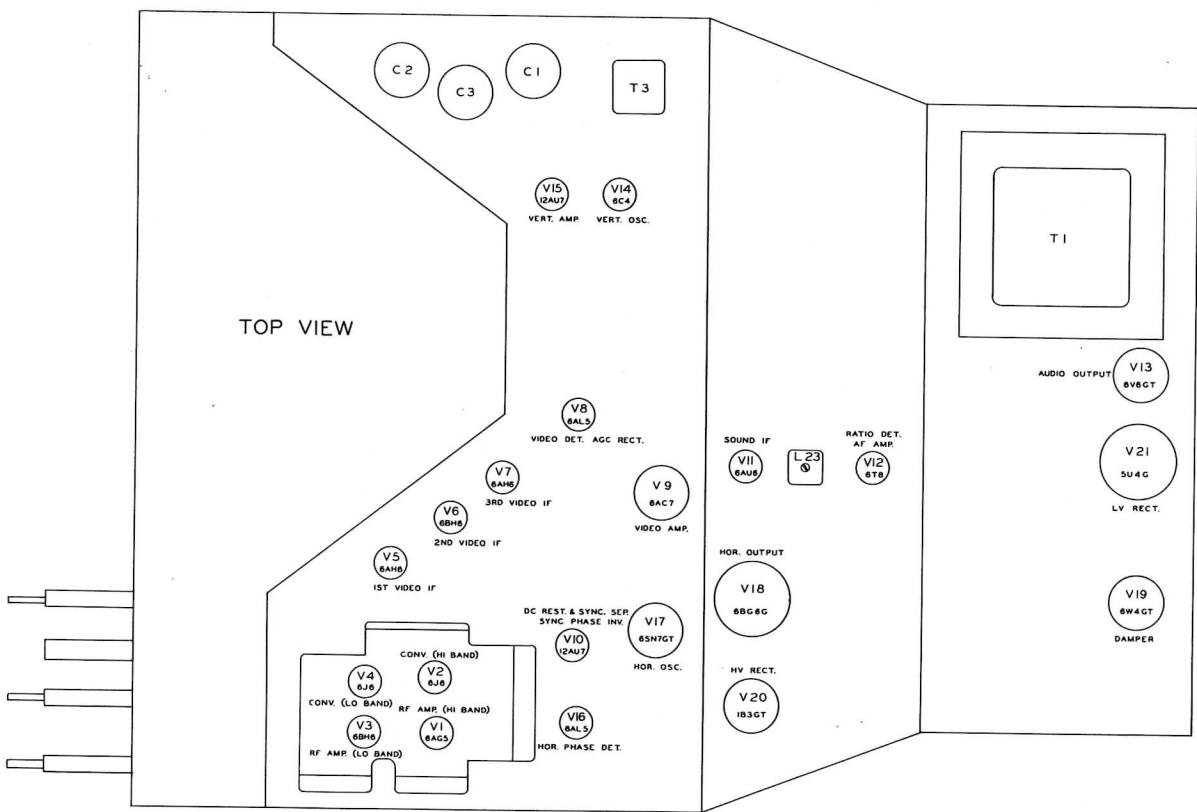
CHASSIS BOTTOM VIEW-TRANS., INDUCTO



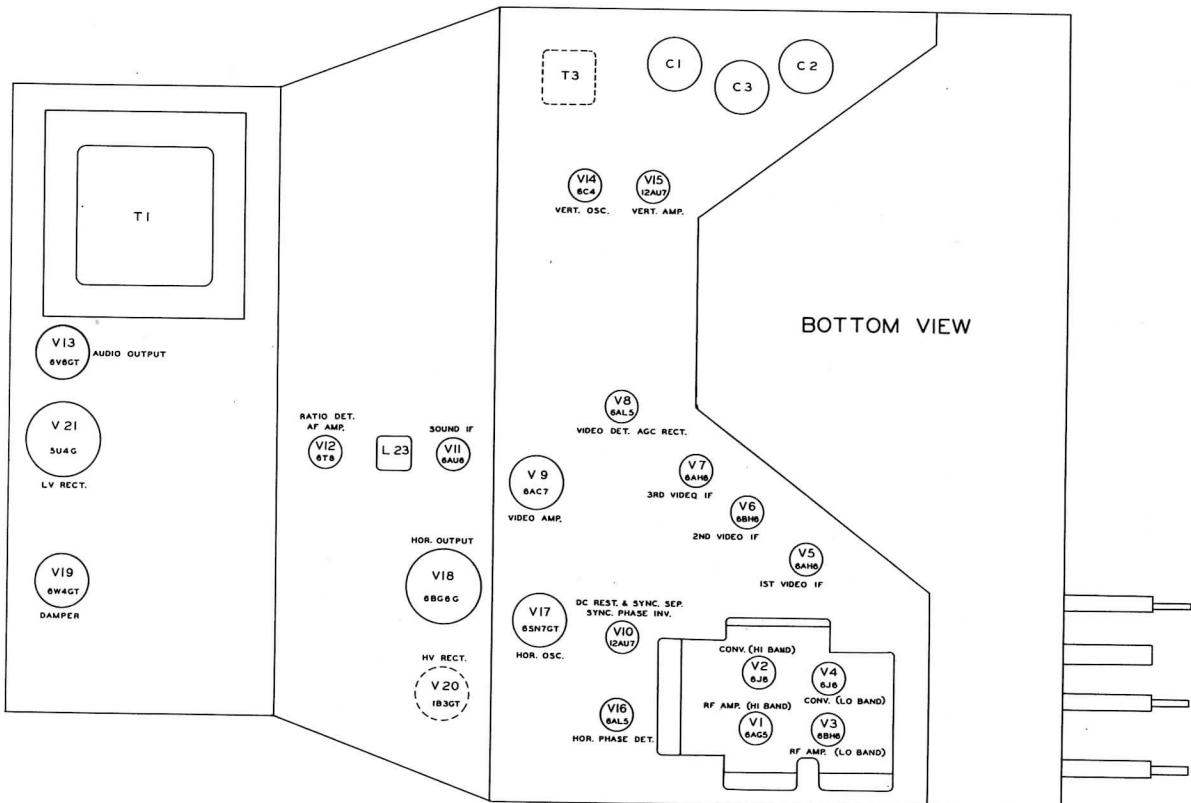
DUCTOR AND ALIGNMENT IDENTIFICATION

**STROMBERG-CARLSON
MODEL TC-10**

TOP VIEW



BOTTOM VIEW



TUBE PLACEMENT CHART

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

If the picture tube is removed during alignment, remove the horizontal oscillator tube V17, to eliminate the high voltage shock hazard.

Connect the negative lead of a 3 volt battery to the junction of R41 and R47.

Connect the positive lead to chassis.

Set the contrast control to maximum clockwise.

VIDEO IF ALIGNMENT

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

Turn the band switch to the "low" band position (counter-clockwise).

Turn the tuning control to a point where spurious signals from the local oscillator do not distort the pattern on the scope.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
1. See Fig 1.	High side thru dummy to pin 1 (Grid) of 6BA6 (V5). Low side to chassis.	25MC (10MC Sweep)	23.35MC 26.4MC	See note above	Vert. Amp. to Point Low side to chassis.	A1,A2, A3	Note that A1 is tuned near 23.35MC, and A2 is tuned near 26.4MC. A3 is tuned between A1, A2. Adjust for response curve similar to Fig 2. The markers should appear at 70%.
2. Direct	High side to un-grounded tube shield floating over converter tube (V4). Low side to chassis.	"	21.9MC (maximum output)	"	"	A4	Adjust for MINIMUM response at 21.9MC as shown in Fig 3.
3. Direct	"	"	23.35MC 26.4MC	"	"	A5,A6	Adjust for response curve similar to Fig 4 with markers at 50%. If necessary SLIGHTLY retouch A1 thru A6 for best symmetry of pattern.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4. .05MFD	High side to pin 4 (Grid) of 6AC7 (V9). Low side to chassis.	4.5MC (Unmod.)	Any channel unused locally	DC Probe to Point Low side to chassis.	A7,A8	Adjust for maximum deflection.
5. .05MFD	"	"	"	DC Probe to Point Low side to chassis.	A9	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Note that step 4 is performed using 400 v AM modulation, if the FM signal generator has no AM modulation, use an AM signal generator for this step. Check to see that the 4.5MC calibrations on both signal generators are accurate.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4. .05MFD	High side to pin 4 (Grid) of 6AC7 (V9). Low side to chassis.	4.5MC (400 v Mod.)	Any channel unused locally	Vert. Amp. thru crystal probe Fig 4. to pin 2 (picture tube). Low side to chassis.	A8	Adjust for MINIMUM 400 v response on scope.
5. .05MFD	"	4.5MC (450KC Sweep)	"	Vert. Amp. to Point Low side to chassis.	A9,A7	Adjust A9 so 4.5MC occurs at center of crossover lines as per Fig 5. Adjust A7 for maximum amplitude and straightness of crossover lines.

The RF portion of this receiver is tuned at the factory and should not require adjustment in the field.

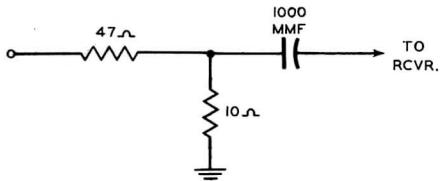


FIG 1

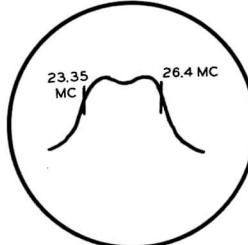


FIG 2

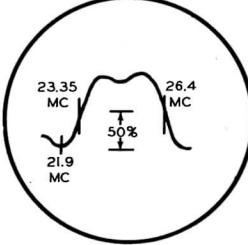


FIG 3

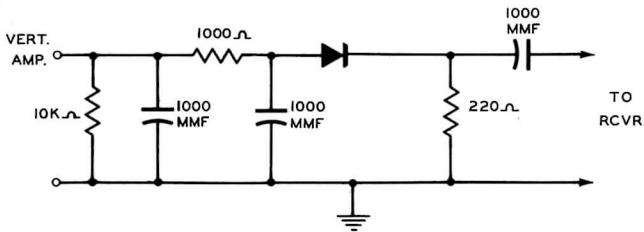


FIG 4

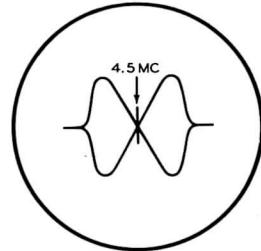
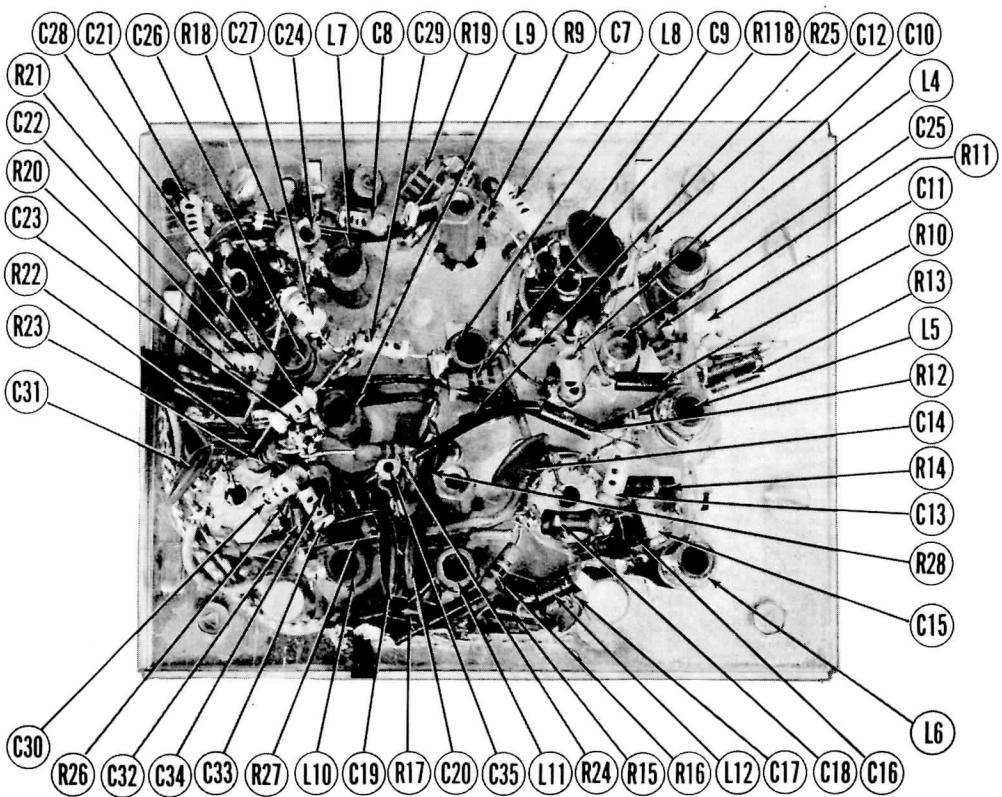
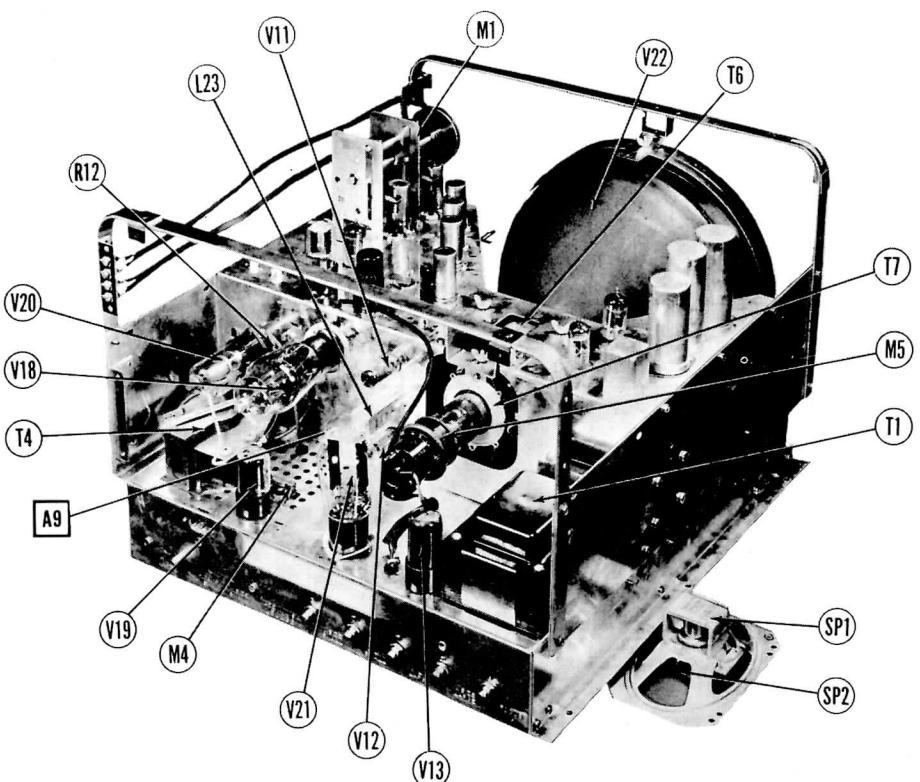


FIG 5

**STROMBERG-CARLSON
MODEL TC-10**



RF TUNER - BOTTOM VIEW



CHASSIS - TOP 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	6AG5	-.8VDC	0V	6.3VAC	0V	240VDC	145VDC	0V		
V 2	6J6	85VDC	155VDC	6.3VAC	0V	-.8VDC	-\$1.5VDC	0V		
V 3	6BH6	-.8VDC	0V	6.3VAC	0V	260VDC	205VDC	0V		
V 4	6J6	85VDC	175VDC	6.3VAC	0V	-4.2VDC	-\$10VDC	0V		
V 5	6AH6	-.2.3VDC	0V	6.3VAC	0V	250VDC	175VDC	.6VDC		
V 6	6BH6	-.7VDC	-.4VDC	6.3VAC	0V	260VDC	195VDC	0V		
V 7	6AH6	7.5VDC	7.5VDC	45VDC	6.3VAC	0V	270VDC	220VDC	47VDC	
V 8	6AL5	-.7VDC	-.2VDC	0V	6.3VAC	0V	0V	-2VDC		
V 9	6AC7	0V	6.3VAC	1.8VDC	.2VDC	1.8VDC	170VDC	0V	200VDC	
V 10	12AU7	6VDC	0V	1.4VDC	6.3VAC	6.3VAC	160VDC	0V	7.8VDC	0V
V 11	6AU6	-.5VDC	0V	6.3VAC	0V	85VDC	85VDC	0V		
V 12	6T8	-.5VDC	-.9VDC	-.6VDC	6.3VAC	0V	-.5VDC	0V	-.6VDC	57VDC
V 13	6V6GT	0V	6.3VAC	280VDC	265VDC	40VDC	7.5VDC	45VDC	0V	20VDC
V 14	6C4	250VDC	0V	0V	6.3VAC	250VDC	-.90VDC	0V		
V 15	12AU7	370VDC	0V	6VDC	25VDC	6.3VAC	6.3VAC	370VDC	0V	6VDC
V 16	6AL5	0V	0V	0V	6.3VAC	2VDC	0V	-1VDC		
V 17	6SN7GT	-.4.1VDC	115VDC	15VDC	.2VDC	280VDC	15VDC	6.3VAC	0V	
V 18	6BG6G	0V	0V	7.2VDC	112VDC	-4.3VDC	-4.3VDC	6.3VAC	250VDC	TOP CAP
V 19	6W4GT	0V	0V	455VDC	0V	380VDC	0V	6.3VAC	0V	
V 20	1B3GT	*	DO NOT MEASURE							
V 21	5U4G	0V	390VDC	0V	370VAC	0V	370VAC	0V	390VDC	
V 22	10BP4	0V	1.5VDC	375VDC	PIN 10 110VDC	PIN 11 6.3VAC	PIN 12 11000Ω			

§ Taken with vacuum tube voltmeter.

▲ Measured in High Band position.

♦ Measured in Low Band position.

Note: Size switch set in "Small" position for these readings.

RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6AG5	1.7Meg.	0Ω	.1Ω	0Ω	13.5KΩ	135KΩ	0Ω		
V 2	6J6	↑11KΩ	16KΩ	.1Ω	0Ω	100KΩ	2.7KΩ	0Ω		
V 3	6BH6	1.7Meg.	0Ω	.1Ω	0Ω	13.5KΩ	135KΩ	0Ω		
V 4	6J6	↑11KΩ	16KΩ	.1Ω	0Ω	100KΩ	10KΩ	0Ω		
V 5	6AH6	1.7Meg.	0Ω	.1Ω	0Ω	12.5KΩ	18KΩ	68Ω		
V 6	6BH6	1.7Meg.	82Ω	.1Ω	0Ω	12.4KΩ	155KΩ	0Ω		
V 7	6AH6	900Ω	900Ω	170Ω	.1Ω	0Ω	12.4KΩ	124KΩ	300Ω	
V 8	6AL5	9.3KΩ	680KΩ	0Ω	.1Ω	10Ω	0Ω	1000Ω		
V 9	6AC7	0Ω	.1Ω	750Ω	9.3KΩ	750Ω	17KΩ	0Ω	127KΩ	
V 10	12AU7	47KΩ	0Ω	270KΩ	.1Ω	.1Ω	113KΩ	1 Meg.	3.9KΩ	0Ω
V 11	6AU6	47KΩ	0Ω	.1Ω	0Ω	120KΩ	120KΩ	0Ω		
V 12	6T8	Inf.	44KΩ	Inf.	.1Ω	0Ω	Inf.	0Ω	10 Meg.	1470KΩ
V 13	6V6GT	0Ω	.1Ω	11.7KΩ	12.2KΩ	470KΩ	900Ω	170Ω	480Ω	
V 14	6C4	1390KΩ	Inf.	0Ω	.1Ω	1390KΩ	1.2 Meg.	0Ω		
V 15	12AU7	↑1000Ω	2.2Meg.	750Ω	.1Ω	.1Ω	↑1000Ω	2.2Meg.	5KΩ	750Ω
V 16	6AL5	33KΩ	33KΩ	0Ω	.1Ω	4.8Meg.	0Ω	4.8Meg.		
V 17	6SN7GT	130KΩ	1300KΩ	1.5KΩ	5 Meg.	130KΩ	1.5KΩ	.1Ω	0Ω	TOP CAP 14KΩ
V 18	6BG6G	Inf.	0Ω	82Ω	1300KΩ	1 Meg.	1 Meg.	.1Ω	18.2KΩ	
V 19	6W4GT	Inf.	Inf.	↑4KΩ	Inf.	↑95Ω	Inf.	.1Ω	0Ω	
V 20	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP 14KΩ
V 21	5U4G	Inf.	20KΩ	Inf.	46Ω	Inf.	48Ω	Inf.	20KΩ	
V 22	10BP4	0Ω	270KΩ	11000Ω	PIN 10 70KΩ	PIN 11 .1Ω	PIN 12 1Ω			

† Measured from pin 2 of V21

▲ Measured in High Band position.

♦ Measured in Low Band position.

Note: Size switch set in small position for these measurements.

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.

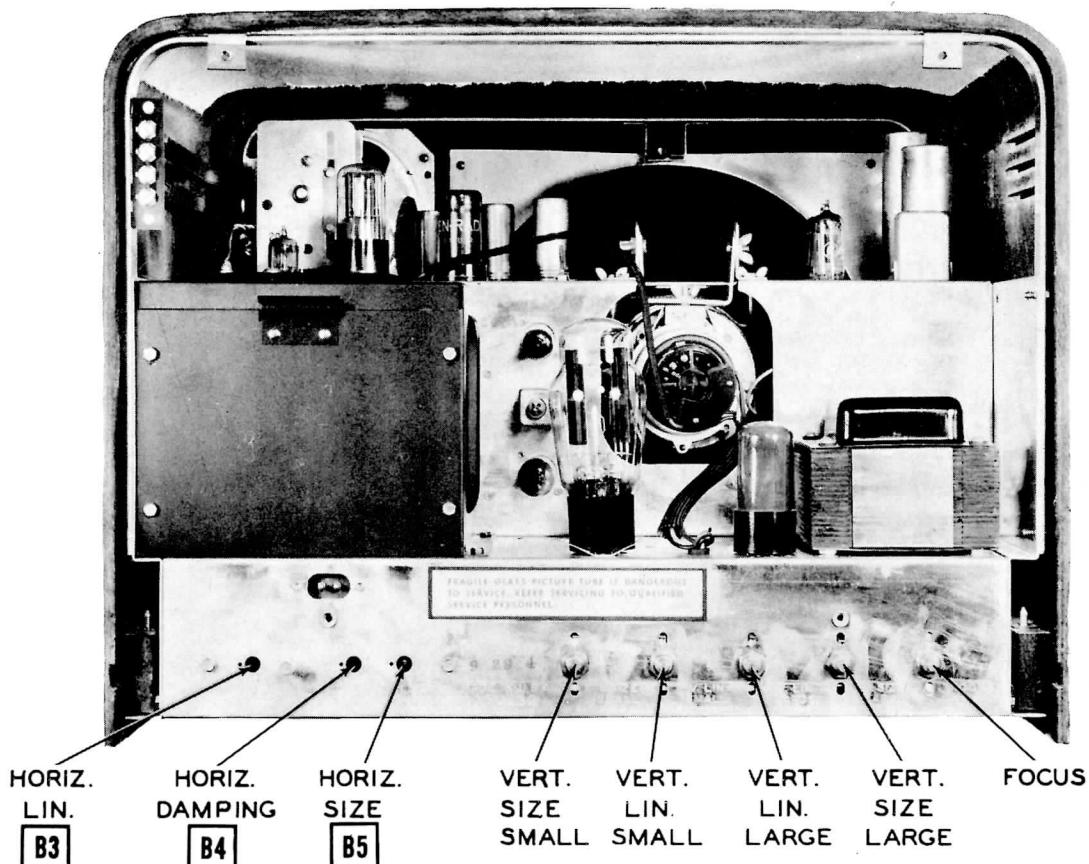
HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

1. Turn the horizontal drive trimmer (B1) (under chassis), clockwise until fully closed, then counter-clockwise 1/2 turn.
2. Turn the set on and set the contrast control to normal. Tune in a TV station, preferably a test pattern, and turn the horizontal hold control to the center of its range. Turn the vertical hold control to synchronize the picture vertically.
3. Turn the horizontal frequency adjustment B2 until the picture synchronizes horizontally. The setting of this adjustment is correct when a sudden twist of the hold control tends to throw the picture out of horizontal synchronization.
4. Turn the horizontal linearity #2, (horizontal linearity large), B3 so the screw protrudes 1/2 in., leave the adjustment in this position.
5. With the picture expander control set in "small" position, adjust the horizontal linearity #1, (horizontal damping small), B4, and the horizontal size, (horizontal size small), B5 for a picture slightly wider than the picture tube face with best linearity from right to left. If the proper width cannot be obtained, it may be necessary to readjust B1. If B1 is changed repeat steps 3, 4 and 5.
6. With the picture expander in the "large" position, no further horizontal adjustment should be necessary.

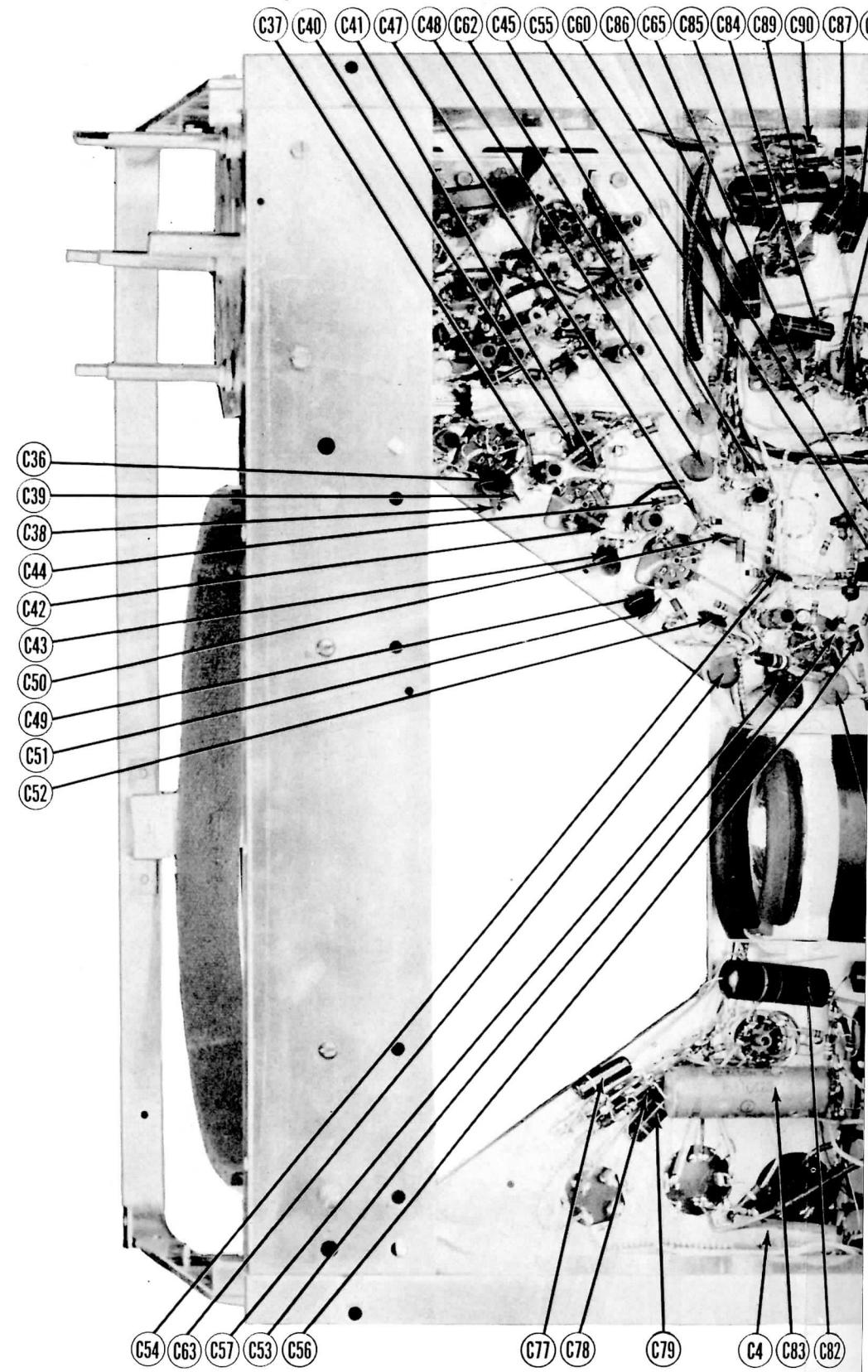
VERTICAL LINEARITY ADJUSTMENTS

The horizontal sweep circuit adjustments should be performed before beginning the vertical linearity adjustments.

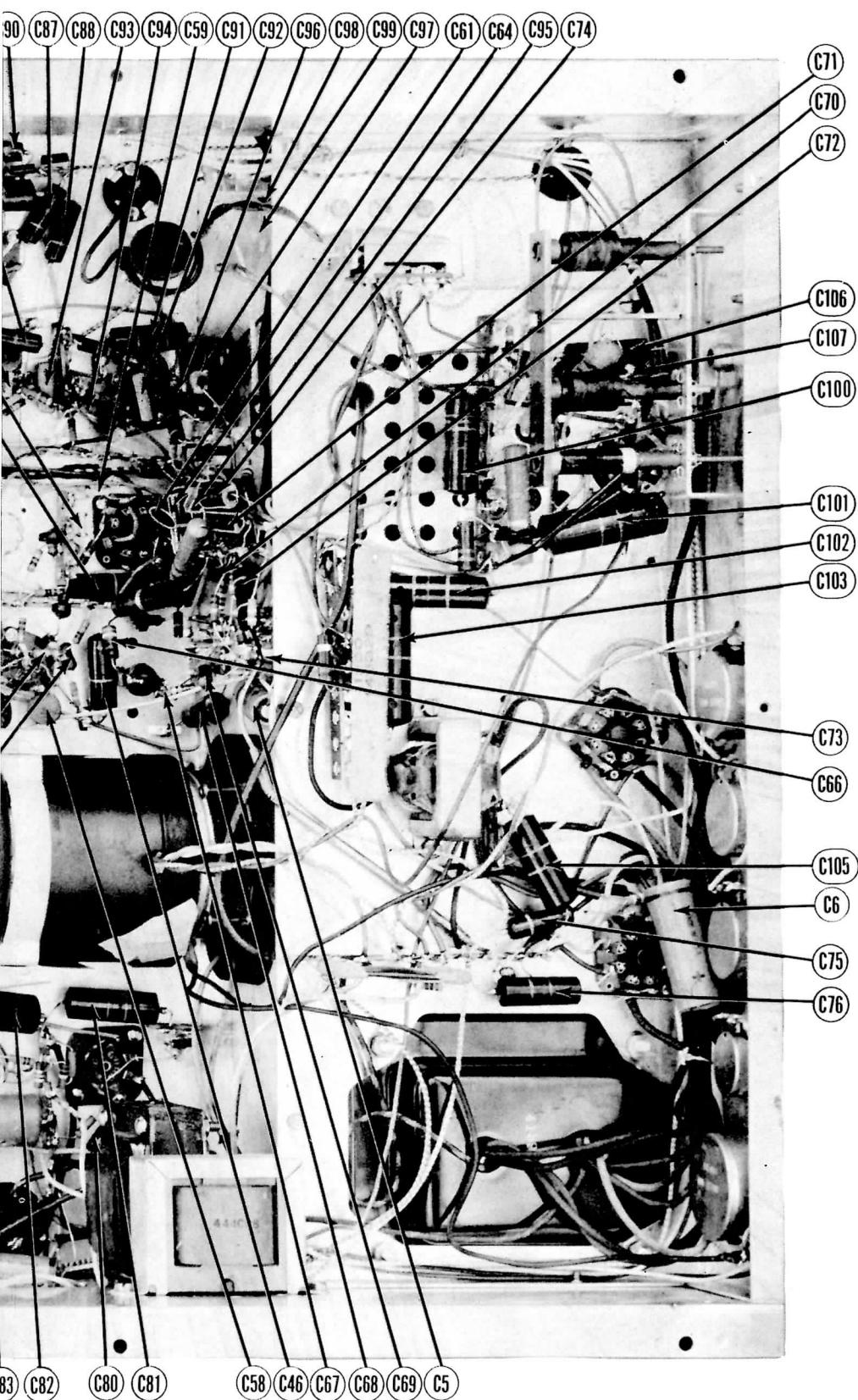
1. Tune in a test pattern from a TV station and turn the contrast control to its normal setting. Turn the vertical hold, and horizontal hold, controls to properly synchronize the picture.
2. Set the picture expander to "large".
3. Adjust the vertical size #2 (vertical size large), control until the outer circle of the test pattern almost disappears off the edge of the picture tube face.
4. Adjust the vertical linearity #2, (vertical linearity large), control for best linearity from top to bottom of the picture. The vertical size and linearity controls are interacting and should be adjusted alternately until proper size with best vertical linearity is obtained.
5. Switch the picture expander to "small".
6. Adjust the vertical size #1, (vertical size small), and the vertical linearity #1, (vertical linearity small), until the picture is of proper size with best linearity from top to bottom.



CABINET-REAR VIEW

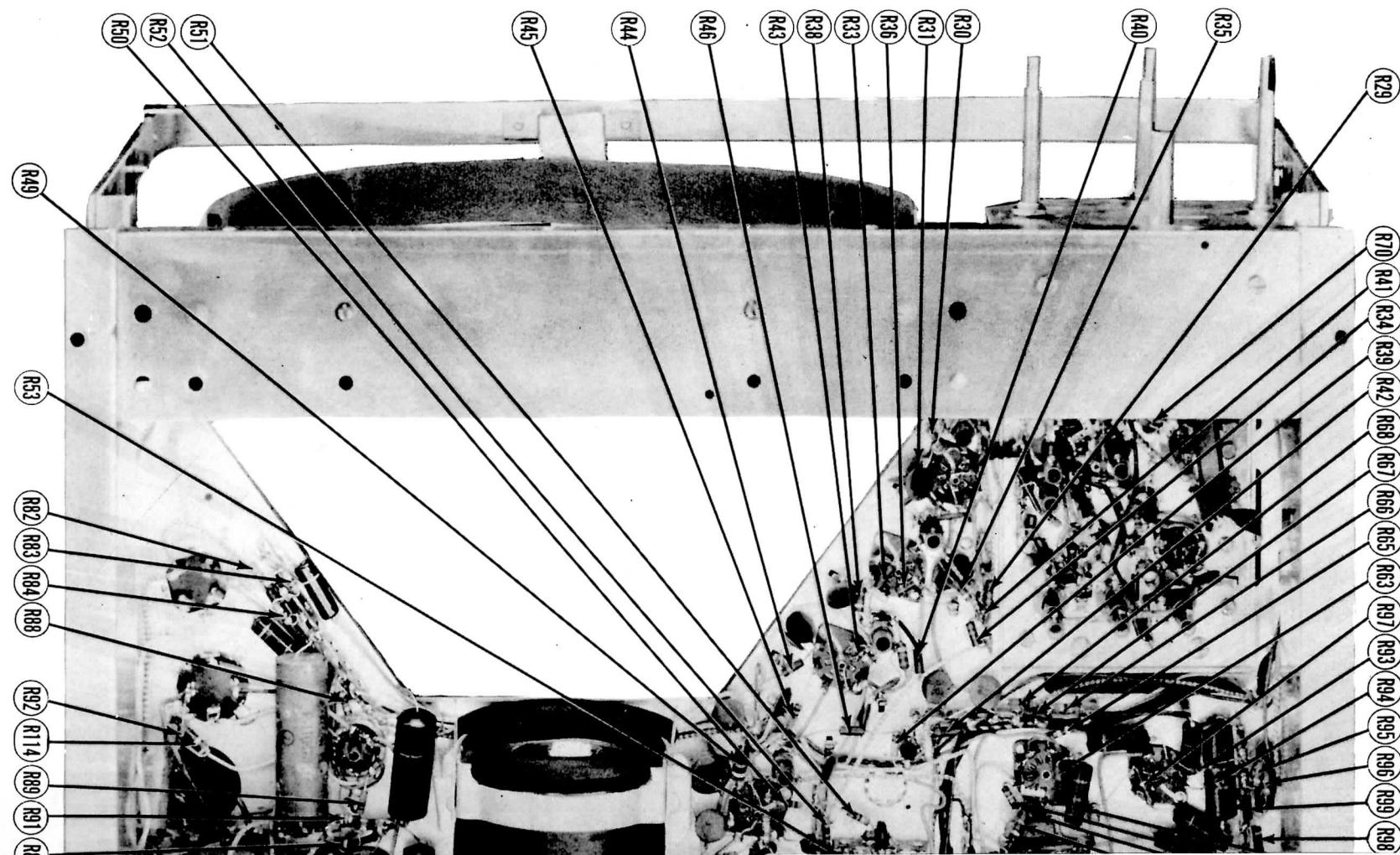


CHASSIS BOTTOM VIEW-CAPA

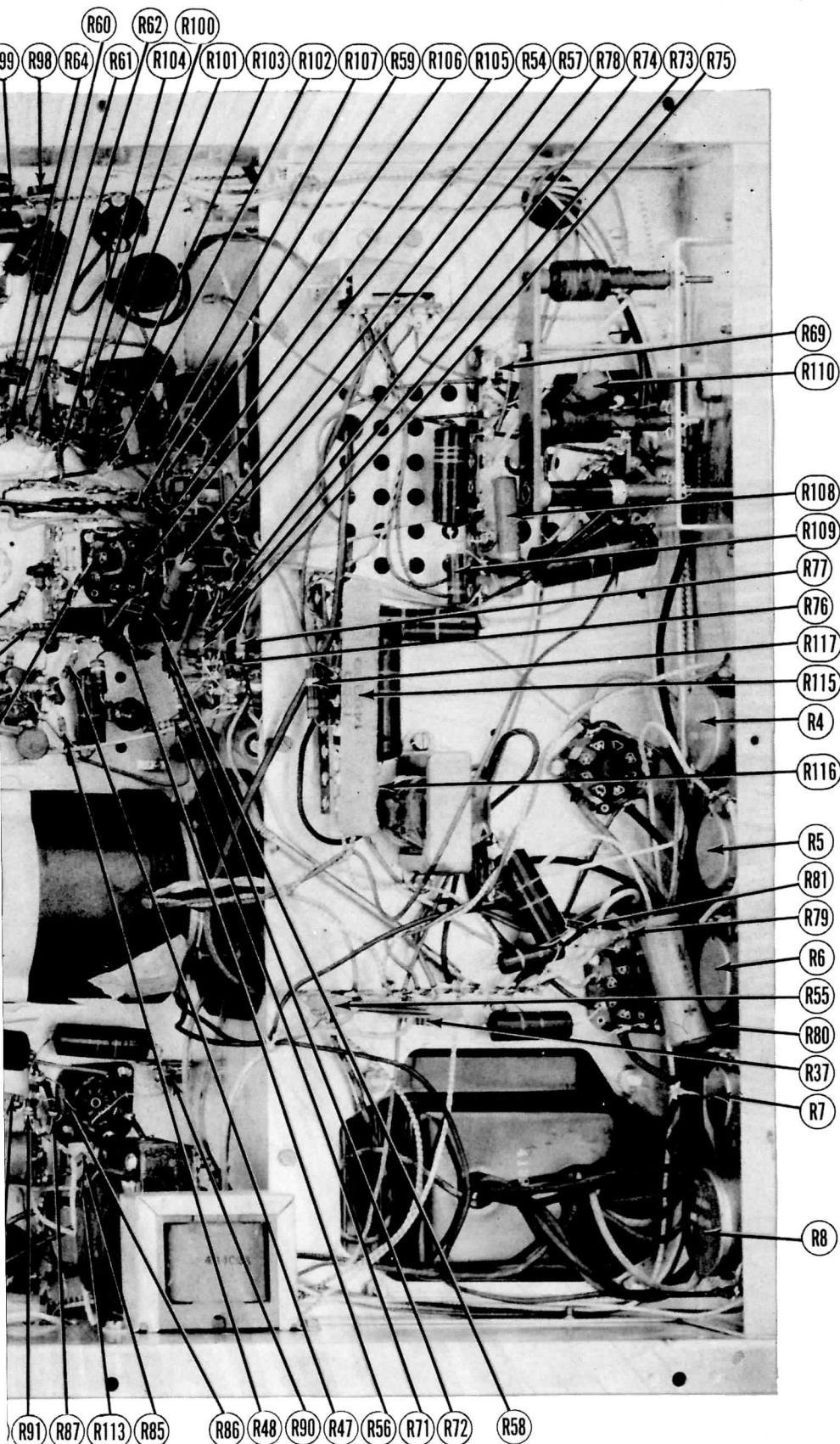


CAPACITOR IDENTIFICATION

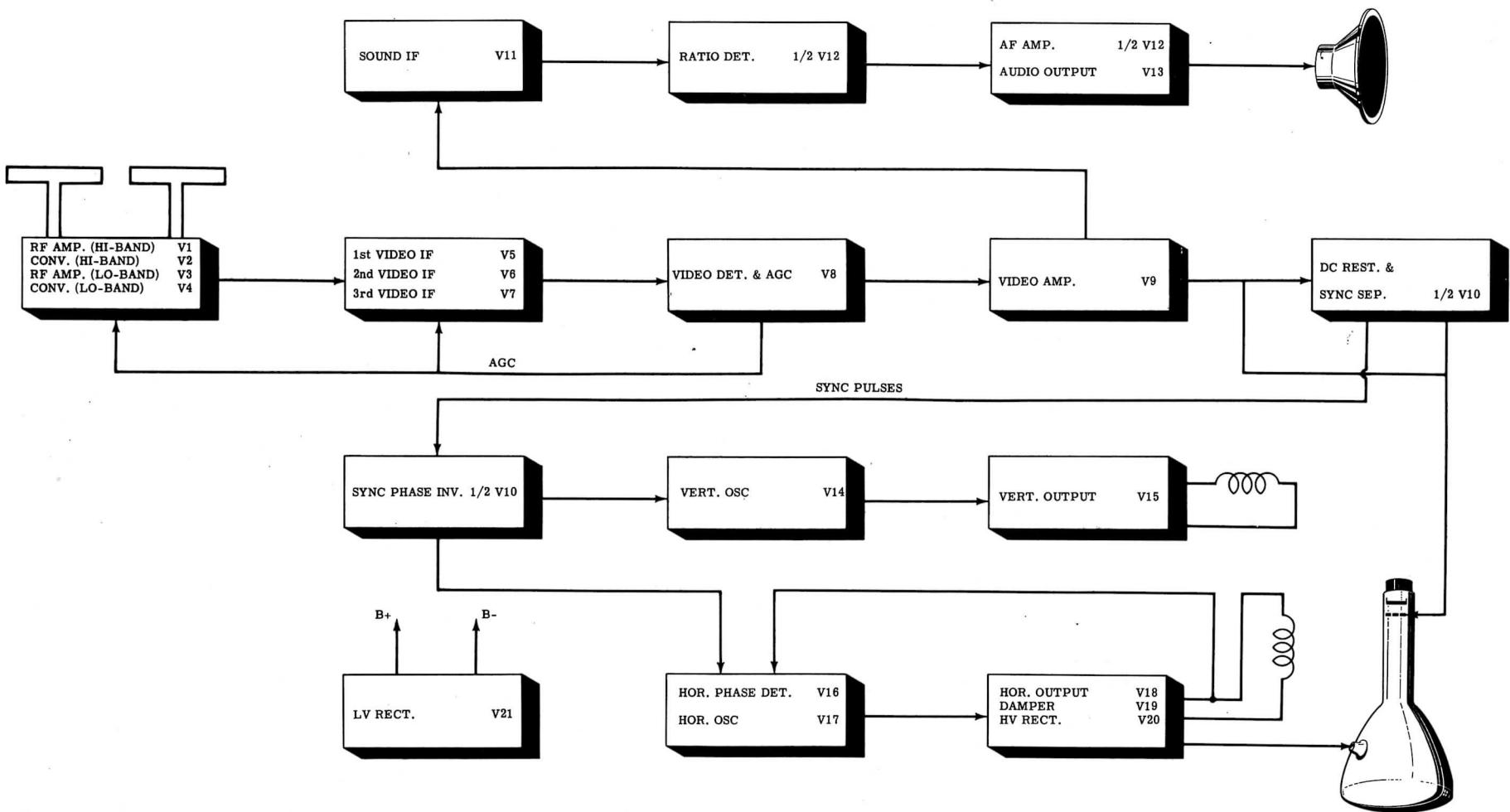
CHASSIS BOTTOM VIEW - RE.



STROMBERG-CARLSON
MODEL TC-10



RESISTOR IDENTIFICATION



BLOCK DIAGRAM

STROMBERG-CARLSON
MODEL TC-10

PARTS LIST AND

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	NOTES
		STROM.CARL. PART No.	STANDARD REPLACEMENT			
V1	H1 Band RF Amp.	6AG5	6AG5	7BD		
V2	H1 Band Conv.	6J6	6J6	7BF		
V3	Lo Band RF Amp.	6BH6	6BH6	7CM		
V4	Lo Band Conv.	6J6	6J6	7BF		
V5	1st Video IF	6AH6	6AH6	7BK		
V6	2nd Video IF	6BH6	6BH6	7CM		
V7	3rd Video IF	6AH6	6AH6	7BK		
V8	Video Det.-					
V9	AGC Rectifier	6AL5	6AL5	6BT		
V10	Video Amp.	6AC7	6AC7	8N		
	DC Rest.-Sync.					
Sep.-Sync.						
	Phase Inverter	12AU7	12AU7	9A		
V11	Sound IF Amp.	6AU6	6AU6	7BK		
V12	Ratio Det.-AF					
	Amp.	6T8	6T8	9E		
V13	Audio Output	6V6GT	6V6GT	7AC		
V14	Vert. Osc.	6C4	6C4	6BG		
V15	Vert. Amp.	12AU7	12AU7	9A		
V16	Hor. Phase Det.	6ALS	6ALS	6BT		
V17	Hor. Osc.	6SN7GT	6SN7GT	8BD		
V18	Hor. Output	6BG6G	6BG6G	5BT		
V19	Damper	6W4GT	6W4GT	4CG		
V20	HV Rectifier	1B3GT	1B3GT	3C		
V21	LV Rectifier	5U4G	5U4G	5T		
V22A	Picture Tube	10BP4	10BP4	12D		
E	Picture Tube	10FP4	10FP4	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.	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
	RATING CAP. STROM. CARL. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C1A	40	450	111058	AFH88J	UP4445	TVL-64
B	40	450				■ Filter
C2A	40	450	111059	AF822J20C		■ Filter
B	10	450				■ Filter
C	10	450				■ Decoupling
D	100	100				▲ V. Amp. Screen Bypass
C3A	40	450	111060	AF842J20B	UP43145C+	Output Cath. Bypass
B	20	450				■ Filter
C	10	450				■ Decoupling
D	100	50				▲ Vert. Output Dec.
C4	100	6	111070	PRS6/100	BRH601	Vert. Output Cath. Dec.
C5	1	50	111063		BR145	Bias Filter
C6	25	25	111069	PRS25/25	BR252A	Stabilizing Cap.
C7	220		1110462			Output Cath. Bypass
C8	750		110654			RF Coupling
C9	5000		110586			ACG Filter
C10	75		110483			HB RF Fil. Bypass
C11	75		110483			HB RF Screen Bypass
C12	2000		110652			HB RF Decoupling
C13	2000		110652			HB RF Plate Dec.
C14	5000		110586			HB Conv. Grid Filter
C15	22		110653			HB Conv. Fil. Bypass
C16	10		110656			Osc. Grid Cap.
C17	750		110654			Osc. Feedback
C18	10		110656			HB Osc. Plate Dec.
C19	5000		110586			Fixed Trimmer
C20	5000		110586			Conv. Plate Dec.
C21	220		110462			Decoupling
C22	750		110654			RF Coupling
C23	750		110654			LB RF Screen Bypass
C24	2000		110652			LB RF Decoupling
C25	0.5-5		110035			LB RF Plate Dec.
C26	0.5-5		110035			Variable Trimmer
C27	4.2		110673			
C28	4.2		110673			
C29	5.5		110655			
C30	2000		110652			
C31	5000		110586			
C32	1.5		110428			
C33	22		110653			
C34	10		110656			
C35	750		110654			
C36	5000		110586	1467-005	1D5D5	
C37	5000		110586	1467-005	1D5D5	811-005
C38	5000		110586	1467-005	1D5D5	811-005
C39	5000		110586	1467-005	1D5D5	811-005
C40	5000		110586	1467-005	1D5D5	811-005
C41	5000		110586	1467-005	1D5D5	811-005
C42	470		110464	1468-0005	5W5T5	GP2K-470
C43	5000		110586	1467-005	1D5D5	811-005
C44	.68		110437			29C1
C45	.6-8		110671			2nd V. IF Fil. Bypass
C46	.1	200	110661	P288-1	GT2P1	1FM-35
C47	5000		110586	1467-005	1D5D5	811-005
C48	5000		110586	1467-005	1D5D5	811-005
C49	5000		110586	1467-005	1D5D5	811-005
C50	5000		110586	1467-005	1D5D5	811-005
C51	5000		110586	1467-005	1D5D5	811-005
C52	5000		110586	1467-005	1D5D5	811-005
C53	100		110460	1468-0001	5W5T1	GP1K-100
C54	5000		110586	1467-005	1D5D5	811-005
C55	.1	200	110661	P288-1	GT2P1	TM-1
C56	5		110598	1468-00005	5W5V5	RF Bypass
C57	10000		110672	P488-01	GT481	3rd V. IF Cath. Bypass
C58	5000		110586	1467-005	1D5D5	811-005
C59	470		110464	1468-0005	5W5T5	GP2K-470
C60	680		110465	1468-750	1W5T7	IFM-35

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA	STROM.CARL. PART No.	AEROVOX PART No.	CORNEIL-DUBILIER PART No.	RECAPACITOR PART N.
C61	5000			110586		1467-005
C62	5000			110586		1467-005
C63	5000			110586		1467-005
C64	.1	400		110546		G74P1
C65	22			110653		1468-000025
C66	2.5			110484		5W5Q25
C67	39			110665		1468-00004
C68	.022	400		110542		G74S2
C69	330			110454		1468-0003
C70	.0047	400		110537		G76D5
C71	.047	200		110660		G72S5
C72	.0047	400		110538		G76D5
C73	100			110451		5W5T1
C74	.1	400		110546		G74P1
C75	.01	400		110540		G74S1
C76	.022	600		110557		G76S2
C77	.0022	400		110536		G76D2
C78	.0047	400		110538		G76D5
C79	.0047	400		110538		G76D5
C80	.0047	400		110538		G76D5
C81	.1	400		110546		G74P1
C82	.22	400		110548		G74P25
C83	.25	600		110428		694-25
C84	.01	400		110540		G76P25
C85	.001	400		110534		G76D1
C86	.001	400		110534		G76D1
C87	.01	400		110540		G74S1
C88	.01	400		110540		G74S1
C89	.1	400		110546		G74P1
C90	.0047	400		110538		G76D5
C91	.047	400		110544		P488-047
C92	.330	500		110234		
C93	.3900	500		110272		
C94	400	500		110216		1468-0004
C95	270	500		110208		5W5T4
C96	.047	400		110544		5W5T25
C97	.22	400		110548		G74P25
C98	.36			110664		
C99	.36			110664		
C100	.033	600		110558		P688-033
C101	.1	600		110561		G76P1
C102	.062	400		110674		G74S5
C103	.22	400		110649		G74P25
C104	.0005	10000		110658		10084-0005
C105	.1	400		110451		G74P1
C106	.01	1000		110568		P1088-01
C107	1000	110568		110568		G716S1
						* Some models use .0033 MFD in this application
						+ Some models use .01MF in this application
						+ Omit bypass section.

ITEM No.	RATING	REPLACEMENT DATA	STROMBERG-CARLSON PART No.	IRC PART No.	CLAROS PART No.
R9	2200Ω			149103	BTS-2200
R10	33KΩ			149110	
R11	1000Ω			149101	BTS-1000
R12	1000Ω			149101	BTS-1000
R13	150Ω			149096	
R14	2700Ω	10%		28163	
R15	4700Ω			149105	
R16	10KΩ			149107	BTS-10K
R17	150Ω			149096	
R18	560Ω	10%		28155	BTS-560
R19	1000Ω			149101	BTS-1000
R20	33KΩ			149110	
R21	1000Ω			149101	BTS-1000
R22	150Ω			149096	
R24	1000Ω			149101	BTS-1000
R25	100KΩ			149113	BTS-100K
R26	10KΩ	10%		149107	
R27	4700Ω			149105	
R28	150Ω			149096	
R29	330Ω			149098	
R30	10KΩ	10%		28170	BTS-10K
R31	68Ω			149094	
R32	33KΩ			149110	
R33	100Ω			149095	
R34	330Ω			149098	
R35	10KΩ	10%		28170	BTS-10K
R36	62Ω	10%		28145	

PARTS LIST AND DESCRIPTIONS

CAPACITORS (CONT.)

NOTES	ITEM No.	REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES	
		RATING CAP. VOLT	STROM.CARL. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
	C61	5000	110586	1467-005	1D5D5	811-005	29C1	V. Amp. Screen Bypass
	C62	5000	110586	1467-005	1D5D5	811-005	29C1	RF Bypass
	C63	5000	110586	1467-005	1D5D5	811-005	29C1	RF Bypass
	C64	.1	110546	P488-1	GT4P1	TM-1	Video Coupling	
	C65	.22	110653	1468-000025	5W5Q25	GP1K-22	MS-425	DC Res. Plate Bypass
	C66	2.5	110484					S. IF Coupling
	C67	.39	110665	1468-00004	5W5Q4	GP1K-39	1FM-44	S. IF Coupling
	C68	.022	400	110542	P488-022	GT4S2	TM-12	S. IF Decoupling
	C69	.330		110454	1468-0003	5W5T3	GP2K-330	1FM-335
	C70	.0047	400	110537	P688-0047	GT6D5	GP2M-0047	Dio. Load Cap.
	C71	.047	200	110660	P288-047	GT2S5	TM-25	De-emphasis *
	C72	.0047	400	110538	P688-0047	GT6D5	GP2M-0047	Audio Coupling
	C73	.100		110451	1468-0001	5W5T1	GP1K-100	Audio Coupling
	C74	.1	400	110546	P488-1	GT4P1	1FM-31	AF Plate Bypass
	C75	.01	400	110540	P488-01	GT4S1	TM-11	AF Plate Decoupling
	C76	.022	600	110557	P688-022	GT6S2	TM-12	Audio Coupling
	C77	.0022	400	110536	P688-0022	GT6D2	GP2M-0022	Output Plate Bypass
	C78	.0047	400	110538	P688-0047	GT6D5	GP2M-0047	Integrator Net.
	C79	.0047	400	110538	P688-0047	GT6D5	GP2M-0047	Integrator Net.
	C80	.0047	400	110538	P688-0047	GT6D5	GP2M-0047	Vert. Osc. Grid
	C81	.1	400	110546	P488-1	GT4P1	TM-1	Vert. Discharge
	C82	.22	400	110548	P488-22	GT4P25	TC-2	Vert. Sweep Coupling
	C83	.25	600	110428	684-25	GT6P25	TC-2	Decoupling
	C84	.01	400	110540	P488-01	GT491	GP2-335-01	Sync. Coupling
	C85	.001	400	110534	P688-001	GT6D1	GP2L-001	Sync. Coupling
	C86	.001	400	110534	P688-0001	GT6D1	GP2L-001	Sync. Coupling
	C87	.01	400	110540	P488-01	GT4S1	GP2-335-01	Hor. Sweep Coupling
	C88	.01	400	110540	P488-01	GT4S1	GP2-335-01	Hor. Sweep Coupling
	C89	.1	400	110546	P488-1	GT4P1	TM-1	AFC Filter
	C90	.0047	400	110538	P688-0047	GT6D5	TM-25	Hor. Feedback
	C91	.047	400	110544	P488-047	GT4S5	TM-15	AFC Filter
	C92	.330	500	110234				Hor. MV Feedback
	C93	.3900	500	110272				Fixed Trimmer
	C94	.400	500	110216	1468-0004	5W5T4	1FM-34	Hor. Discharge
	C95	.270	500	110208	1468-00025	5W5T25	GP2K-270	Hor. Sweep Coupling
	C96	.047	400	110544	P488-047	GT4S5	1FM-34	Hor. Output Screen Bypass
	C97	.22	400	110548	P488-22	GT4P25	1FM-34	Hor. Output Cath. Bypass
	C98	.36		110664				Hor. Feedback
	C99	.36		110664				Damper Filter
	C100	.033	600	110558	P688-033			Damper Filter
	C101	.1	600	110561	P688-1	GT6P1	TM-1	Hor. Sweep Coupling
	C102	.062	400	110674	P488-068	GT4S5	TM-16	Hor. Sweep Coupling
	C103	.22	400	110548	P488-22	GT4P25	TC-2	Hor. Sweep Coupling
	C104	.0005	10000	110658	10084-00005	TVM-351	HV Filter	HV Filter
	C105	.1	400	110451	P488-1	GT4P1	TM-1	Pic. Tube Cath. Dec.
	C106	.01	1000	110568	P1088-01	GT16S1	MB-11	Line Filter
	C107	.01	1000	110568	P1088-01	GT16S1	MB-11	Line Filter

* Some models use .0033 MFD in this application.

† Some models use .01MFD in this application.

‡ Omit bypass section.

ITEM No.	REPLACEMENT DATA					INSTALLATION NOTES
	RATING	STROM.CARL. PART No.	IRC PART No.	CLAROSTAT PART No.		
R1A	1 Meg.	B	145086	B11-137 *	145086	Vert. hold-rear (Dual Concentric)
	50KΩ	C		B11-123 *		Horiz. hold-front (Dual Concentric)
	Shaft					
R1B		Eнд				
R2	100KΩ		145076			Attach per instructions in "Concentrikit".
R3A	250KΩ		145085	145085		Brightness control and range switch
R4	750Ω	B	145082	W-100	43-100	Volume control and switch (Dual Concentric)
R5	100Ω		145079	Q11-114	M-19-S	Contrast control
R6	5000Ω		145079	Q11-114	M-19-S	Vert. size #1 control (Wire Wound)
R7	5000Ω		145080	Q11-239	M-84-S	Vert. linearity #1 control
R8	2.5Meg.		145081	10-1OK	10-1OK	Vert. linearity #2 control
	10KΩ					Focus control, (Wire Wound)

* Additional parts to be used with "Concentrikit".

RESISTORS

ITEM No.	REPLACEMENT DATA			IDENTIFICATION CODES ALL RESISTORE ARE ± 20% UNLESS OTHERWISE STATED
	RATING	STROMBERG-CARLSON PART NO.	IRC PART NO.	
R9	2200Ω		149103	BTS-2200
R10	33KΩ		149110	High Band RF Grid
R11	1000Ω		149101	High Band RF Screen
R12	1000Ω		149101	High Band RF Plate Decoupling
R13	150Ω		149096	High Band Conv. Grid
R14	2700Ω 10%		28163	Decoupling
R15	4700Ω		149105	High Band Osc. Grid
R16	10KΩ		149107	High Band Osc. Plate Decoupling
R17	150Ω		149096	1st IF Transformer Shunt
R18	56Ω 10%		28155	Decoupling
R19	1000Ω		149101	Low Band RF Grid
R20	33KΩ		149110	AGC Network
R21	1000Ω		149101	Low Band RF Screen
R22	150Ω		149096	Low Band RF Plate Decoupling
R23	10KΩ		149107	Decoupling
R24	1000Ω		149101	Low Band Conv. Grid
R25	100KΩ		149113	Low Band Conv. Grid
R26	10KΩ 10%		149107	Series Test Point
R27	4700Ω		149105	Low Band Osc. Grid
R28	150Ω		149096	Low Band Osc. Plate
R29	33Ω 2		149098	Decoupling
R30	10KΩ 10%		28170	AGC Network
R31	68Ω		149094	1st Video IF Transformer Shunt
R32	33KΩ		149110	1st Video IF Cathode
R33	100Ω		149095	1st Video IF Screen See Note 1
R34	33Ω 2		149098	1st Video IF Plate Decoupling
R35	10KΩ 10%		28170	AGC Network
R36	82Ω 10%		28145	2nd Video IF Transformer Shunt
				2nd Video IF Cathode

Note 1. Not used in all m

Note 2. Some models use 3

ITEM No.	RATINGS	
	FIELD RES.	V. C. IMP.
SP1	PM	3.1Ω
SP2	CONE DIA. 3 7/8" x 6"	V. C. DIA. 9/16"

DESCRIPTIONS

CONT.J

ERIE PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
11-005	29C1	V. Amp. Screen Bypass
11-005	29C1	RF Bypass
11-005	29C1	RF Bypass
TM-1		Video Coupling
P1K-22	MS-425	DC Res. Plate Bypass
		S. IF Coupling
PIK-39	1FM-44	S. IF Coupling
	TM-12	S. IF Decoupling
P2K-330	1FM-335	Diode Load Cap.
P2M-0047	TM-25	De-emphasis *
	TM-15	Audio Coupling
P2M-0047	TM-25	Audio Coupling
PIK-100	1FM-31	AF Plate Bypass
	TM-1	AF Plate Decoupling
P2-335-01	TM-11	Audio Coupling
	TM-12	Output Plate Bypass
P2M-0022	TM-22	Integrator Net.
P2M-0047	TM-25	Integrator Net.
P2M-0047	TM-25	Integrator Net.
	Vert. Osc. Grid	
	TM-1	Vert. Discharge
	TC-2	Vert. Sweep Coupling
	TC-2	Decoupling
	TM-11	Sync. Coupling
	TM-21	Sync. Coupling
	TM-21	Sync. Coupling
P2-335-01	TM-11	Hor. Sweep Coupling
P2-335-01	TM-11	AFC Filter
	TM-1	Hor. Feedback
	TM-25	AFC Filter
	TM-15	Hor. MV Feedback
		Fixed Trimmer
	TM-15	Hor. Discharge
	1FM-34	Hor. Sweep Coupling
	1FM-325	Hor. Output Screen Bypass
	TC-2	Hor. Output Cath. Bypass
		Hor. Feedback
		Hor. Feedback
		Damper Filter
	TM-1	Damper Filter
	TM-16	Hor. Sweep Coupling
	TC-2	Hor. Sweep Coupling
	TVM-351	HV Filter
	TM-1	Pic. Tube Cath. Dec.
	MB-11	Line Filter
	MB-11	Line Filter

OLS

INSTALLATION NOTES

Vert. hold-rear (Dual Concentric)
 Horiz. hold-front (Dual Concentric)

Attach per instructions in "Concentrikit".
 Brightness control and range switch
 Volume control and switch (Dual Concentric)
 Contrast control
 Vert. size #1 control (Wire Wound)
 Vert. linearity #1 control
 Vert. linearity #2 control
 Vert. size #2 control
 Focus control, (Wire Wound)

RS

IDENTIFICATION CODES

RESISTORS ARE $\pm 20\%$ UNLESS OTHERWISE STATED

High Band RF Grid
 High Band RF Screen
 High Band RF Plate Decoupling
 High Band Conv. Grid
 Coupling
 High Band Osc. Grid
 High Band Osc. Plate Decoupling
 IF Transformer Shunt
 Coupling
 High Band RF Grid
 Network
 High Band RF Screen
 High Band RF Plate Decoupling
 Coupling
 High Band Conv. Grid
 High Band Conv. Grid
 Test Point
 High Band Osc. Grid
 High Band Osc. Plate
 Coupling
 Network
 Video IF Transformer Shunt
 Video IF Cathode
 Video IF Screen See Note 1
 Video IF Plate Decoupling
 Network
 Video IF Transformer Shunt
 Video IF Cathode

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	STROM. CARL. PART No.	IRC PART No.	
R37	1000 Ω	1	149101	BTS-1000	Decoupling
R38	56K Ω 10%	1	149115	BTS-220K	2nd Video IF Screen See Note 1
R39	220K Ω	1	149095		Trap Coil Shunt
R40	100 Ω	1	149098		2nd Video IF Decoupling
R41	330 Ω	1	149095		AGC Network
R42	100 Ω	1	149095		Decoupling
R43	8200 Ω 10%	1	28169	BTS-8200	3rd Video IF Transformer Shunt
R44	150 Ω	1	149096	BTS-22K	3rd Video IF Cathode
R45	22K Ω	1	149109		3rd Video IF Screen
R46	100 Ω	1	149095		3rd Video IF Decoupling
R47	1 Meg.	1	149119	BTS-1 Meg.	AGC Network
R48	680K Ω	1	149118	BTS-680K	AGC Diode Load
R49	39K Ω 10%	1	149189	BTA-39K	Voltage Divider
R50	22K Ω 10%	1	27407	BTS-22K	4th Video IF Transformer Shunt
R51	8200 Ω 10%	1	28169	BTS-8200	Video Det. Diode Load
R52	1000 Ω	1	149101	BTS-1000	Bias Network
R53	120 Ω 10%	1	28147		Parasitic Supp.
R54	10K Ω	1	149107	BTS-10K	Video Amp. Screen
R55	7000 Ω	1	149326	AB-7000	Video Amp. Screen Decoupling Wire Wound
R56	12K Ω 10%	1	149055	BT-2-12K	Video Amp. Plate
R57	15K Ω	1	149083	BT-2-15K	Video Amp. Plate
R58	5600 Ω 10%	1	149184	BTS-5600	Voltage Divider
R59	2200 Ω	1	149103	BTS-2200	Picture Tube Grid
R60	270K Ω 10%	1	28184	BTS-270K	DC Rest. Load
R61	47K Ω	1	149111	BTS-47K	Voltage Divider
R62	1.8 Meg. 10%	1	28194	BTS-1.8 Meg.	Sync. Sep. Plate
R63	1 Meg.	1	149119	BTS-1 Meg.	Sync. Phase Inv. Grid
R64	3900 Ω 10%	1	28165	BTS-3900	Sync. Phase Inv. Cathode
R65	3900 Ω 10%	1	28165	BTS-3900	Sync. Phase Inv. Plate
R66	3900 Ω 10%	1	28165	BTS-3900	Decoupling
R67	100 Ω	1	149095	BW-1-100	Acc. Anode Decoupling
R68	1000 Ω	1	149101	BTS-1000	Voltage Divider
R69	220K Ω	1	149115	BTS-220K	Voltage Divider
R70	10K Ω	1	149107	BTS-10K	1st Sound IF Grid
R71	47K Ω	1	149111	BTS-47K	1st Sound IF Decoupling
R72	15K Ω	1	149108	BTS-47K	De-emphasis
R73	18K Ω 10%	1	28173	BTS-18K	Ratio Det. Diode Load
R74	22K Ω 10%	1	27407	BTS-22K	Ratio Det. Diode Load
R75	22K Ω 10%	1	27407	BTS-22K	AF Grid
R76	10 Meg.	1	149125	BTS-10 Meg.	AF Plate
R77	470K Ω	1	149117	BTS-470K	AF Plate Decoupling
R78	47K Ω	1	149111	BTS-47K	Output Grid
R79	470K Ω	1	149117	BTS-470K	Output Cathode (Wire Wound)
R80	270 Ω 10%	1	149170	BW-1-270	Focus Coil Shunt
R81	220 Ω	1	149097	BTS-220	Integrator
R82	22K Ω	1	149109	BTS-22K	Integrator
R83	8200 Ω 10%	1	28169	BTS-8200	Integrator
R84	8200 Ω 10%	1	28169	BTS-8200	Vert. Osc. Grid
R85	1 Meg.	1	149119	BTS-1 Meg.	Voltage Divider
R86	6.8 Meg.	1	149124	BTS-6.8 Meg.	Voltage Divider
R87	100K Ω	1	149113	BTS-100K	Voltage Divider
R88	820 Ω 10%	1	28157	BTS-820	Vert. Output Cathode
R89	2.2 Meg.	1	149121	BTS-2.2 Meg.	Vert. Output Grid
R90	3300 Ω	1	149104	BTS-3300	Vert. Peaking
R91	390K Ω 10%	1	28186	BTS-390K	Voltage Divider
R92	470 Ω	1	149099	BTS-470	Vert. Output Decoupling
R93	100K Ω 10%	1	28006	BTS-100K	Horiz. Phase Det. Load
R94	100K Ω 10%	1	28006	BTS-100K	Horiz. Phase Det. Load
R95	4.7 Meg.	1	149123	BTS-4.7 Meg.	Horiz. AFC Filter Network
R96	470K Ω	1	149117	BTS-470K	Feedback Network
R97	33K Ω 10%	1	149110	BTS-33K	Feedback Network
R98	4700 Ω	1	149105	BTS-4700	Feedback Network
R99	2200 Ω	1	149103	BTS-2200	Horiz. Osc. Plate
R100	5600 Ω 10%	1	149184	BTA-5600	Horiz. Osc. Cathode
R101	1500 Ω	1	149102	BTS-1500	Horiz. Osc. Grid
R102	100K Ω	1	149113	BTS-100K	Horiz. Osc. Plate
R103	270K Ω 10%	1	28184	BTS-270K	Filter
R104	22K Ω	1	149109	BTS-22K	Parasitic Supp.
R105	68 Ω	1	149094	BTS-1 Meg.	Horiz. Output Grid
R106	1 Meg.	1	149119	BTS-1 Meg.	Horiz. Output Cathode
R107	82 Ω 10%	1	149166	BW-1-82	Horiz. Output Screen
R108	8200 Ω 10%	2	149054	BW-2-8200	Horiz. Size Coil Shunt
R109	15K Ω	1	149145	BTA-15K	Damper Filter (Wire Wound)
R110	4000 Ω	10	149325	AB-4000	HV Rect. Filament (Wire Wound) See Note 2
R111	5.65 10%	1	149111		HV Filter
R112	1 Meg.	1	149119		Bias Network
R113	100 Ω	1	149095	BW-1-100	Bias Network
R114	15 Ω 10%	1	149158	BW-1-15	Filter (Wire Wound)
R115	1200 Ω	15	149329	DG-1200	Filter
R116	680 Ω 10%	2	149042	BW-2-680	Filter
R117	330 Ω 10%	1	149171	BW-1-330	Filter
R118	2200 Ω	1	149103	BTS-2200	Band Pass Coil Shunt

Note 1. Not used in all models.

Note 2. Some models use 3.3 Ω resistor in this application.

SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	STROMBERG-CARLSON PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	3.1 Ω			46A1	
SP2	CONE DIA. 3 7/8" x 6"	V. C. DIA. 9/16"				

**STROMBERG-CARLSON
MODEL TC-10**

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	STROMBERG-CARLSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.
T1	117VAC @ 1.8A	730VCT .220ADC	5VAC @ 3A	6.3VAC @ 8.5A	161419	P-6315	P-3059	TP-395 #

Add series resistor to reduce plate voltage.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	PRI. SEC.	STROM. CARL. PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T2	100Ω		114069				
T3	165Ω	1400Ω	114658				
T4	33Ω	SEC. 1	161016	A-8121 \$ A-8117	A-4000 \$	TBO-2 TFB-1	Hor.Osc. Coil Vert.Block Osc.Trans. Hor.Output Trans.
	Tap @	10.6Ω					
		.6Ω					
		SEC. 2					
T5	54Ω	Ω	161242				
T6A	13.5Ω	6.8Ω	114659	A-8116 DY-1	A-3035 ▲	TSO-4	Vert.Output Trans. Hor.Deflection Coil Vert.Deflection Coil Focus Coil
T7	62Ω		114660				
	1000Ω						

\$ Drill one new mounting hole.

▲ Drill new mounting holes.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE	DC RES.	STROMBERG-CARLSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.			
PRI.	SEC.	PRI.	SEC.						
T8	7000Ω	.3.1Ω	520Ω	.6Ω	161244	A-3878	A-2930	RO-13	

FILTER CHOKE

ITEM No.	RATINGS		REPLACEMENT DATA				INSTALLATION NOTES	
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000Ω)	STROMBERG-CARLSON PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
PRI.	SEC.							
L1	.145A	82Ω	2.5Henries	161014	C-2304	C-2974	TR-4200	

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	STROMBERG-CARLSON PART No.	MEISSNER PART No.	
L2A	Ant. Trans.	0Ω		114647		
B	Ant. Trans.	0Ω		114646		H1-Band Primary H1-Band Secondary
L3	Ant. Trans.	0Ω		114057		Lo-Band
L4	RF Plate	0Ω		114066		H1-Band
L5	Mixer Grid	0Ω		114066		H1-Band
L6	Osc. Coil	0Ω		114066		H1-Band
L7	RF Plate	0Ω		114065		Lo-Band
L8	Band Pass	0Ω		114642		Lo-Band
L9	Mixer Grid	0Ω		114065		Lo-Band
L10	Osc. Coil	0Ω		114065		Lo-Band
L11	Mixer Plate	.1Ω		114061		Lo-Band
L12	RF Choke	0Ω		114060		
L13	1st Video	IF	1Ω	114377		
L14	2nd Video	IF	1Ω	114376		
L15	21.9MC			114665		
L16	Trap	1:2Ω				
L17	3rd Video	IF	1Ω	114382		
L18	4th Video	IF	1Ω	114376		
L19	Peaking	8Ω		114657		
L20	Peaking	20Ω		114654		
L21	Peaking	9Ω		114656		
L22	Sound IF	12.5Ω		114655		
L23	Ratio Det.	5.5Ω		114374		
L24	Trans.	5Ω	.9Ω	114375		
L25	Hor. Linearity #1	65Ω		114075		
L26	Hor. Linearity #2	67Ω		114071		
	Hor. Size	2.8Ω		114074		

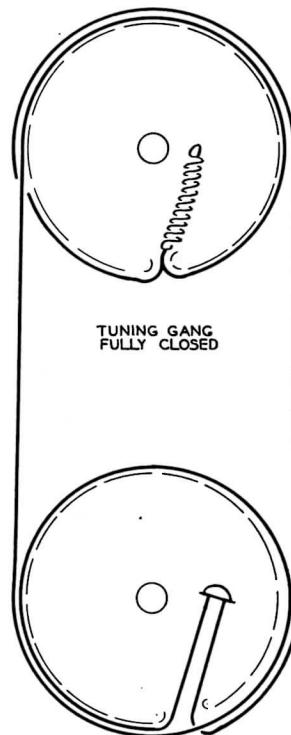
MISCELLANEOUS

ITEM No.	PART NAME	STROM. CARL. PART No.	NOTES
M1	RF Tuner		
M2	Ant. Switch		
M3	Size Switch		
M4	Fuse		
M5	Ion Trap		.25 Amp.

DISASSEMBLY INSTRUCTIONS

1. Remove four screws holding rear cover. Remove cover.
2. Remove six screws from bottom sides.
3. Slide cabinet to rear and remove.
4. Remove screw located bottom rear center. Slide bottom fiber cover to rear and remove.
5. Loosen allen head set screws on tuning knob shaft. Remove tuning knob.
6. Remove three push-on type control knobs.
7. Remove four screws located on bottom front.
8. Remove speaker plug from chassis.
9. Remove two screws located near top corners of front panel. Remove panel.

DIAL CORD STRINGING



STROMBERG-CARLSON
MODEL TC-10