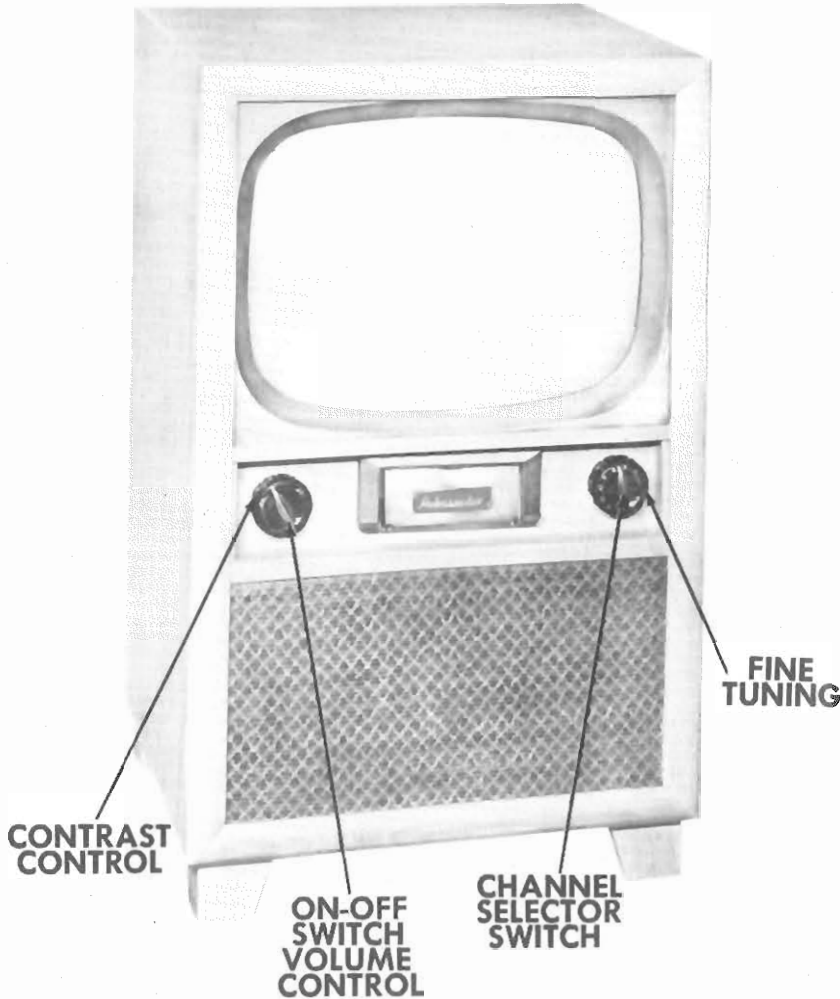


CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION



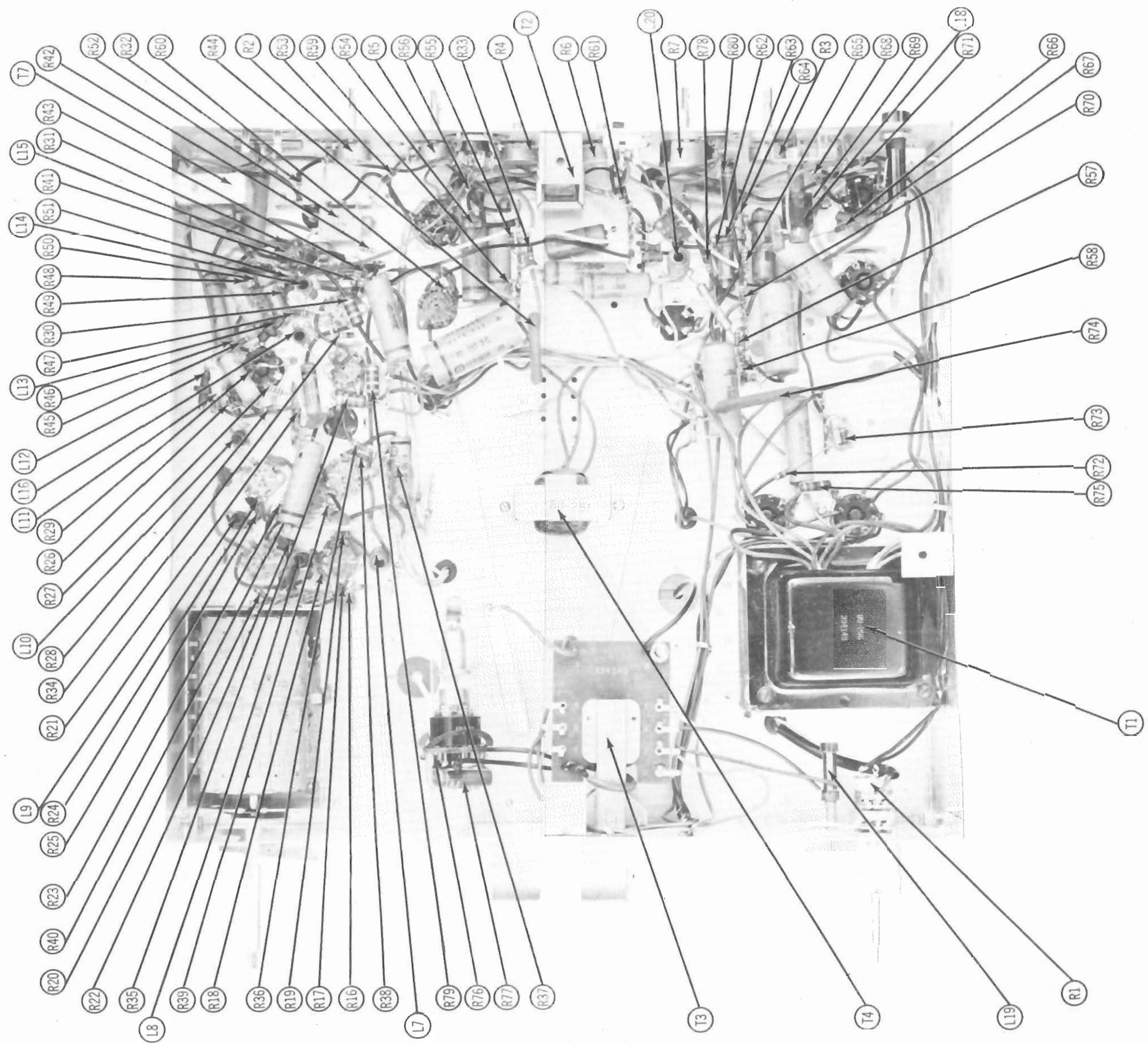
AMBASSADOR MODELS 21C2A,
21C2ALO, 9120, LO, 9820, 9821, LO

TRADE NAME	Ambassador Models 21C2A, 21C2AL0, 9120, 9120L0, 9820, 9821, 9821L0		
MANUFACTURER	Allied Pur. Corp., 401 5th. Ave., New York 16, N. Y.		
TYPE SET	Television Receiver		
TUBES	Nineteen		
POWER SUPPLY	110-120 Volts AC-60 Cycles	RATING	1.94 Amp. @ 117 Volts AC
TUNING RANGE-	Channels 2 thru 13		
INDEX			
Alignment Instructions	6, 7	Photographs (Con't)	
Horizontal Sweep Circuit Adjustments	11	RF Tuner	10
Parts List and Descriptions	12, 13, 14	Resistor and Inductor Identification	15, 16
Photographs		Resistance Measurements	8
Chassis - Rear View	11	Schematic (Alternate Tuner)	8
Capacitor & Alignment Identification	4, 9	Schematic (TV)	2
Chassis - Top View	3	Tube Placement Charts	5

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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

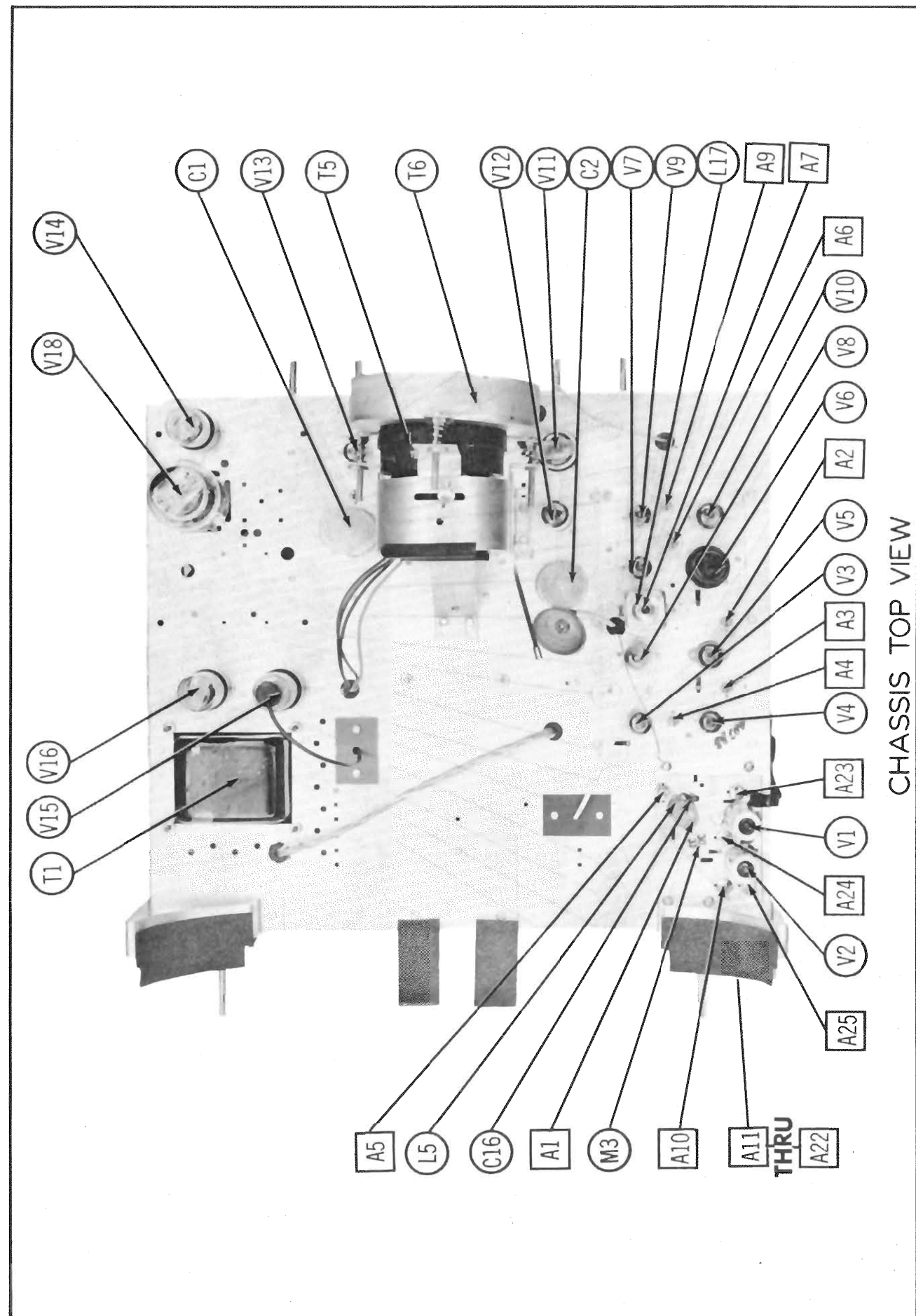
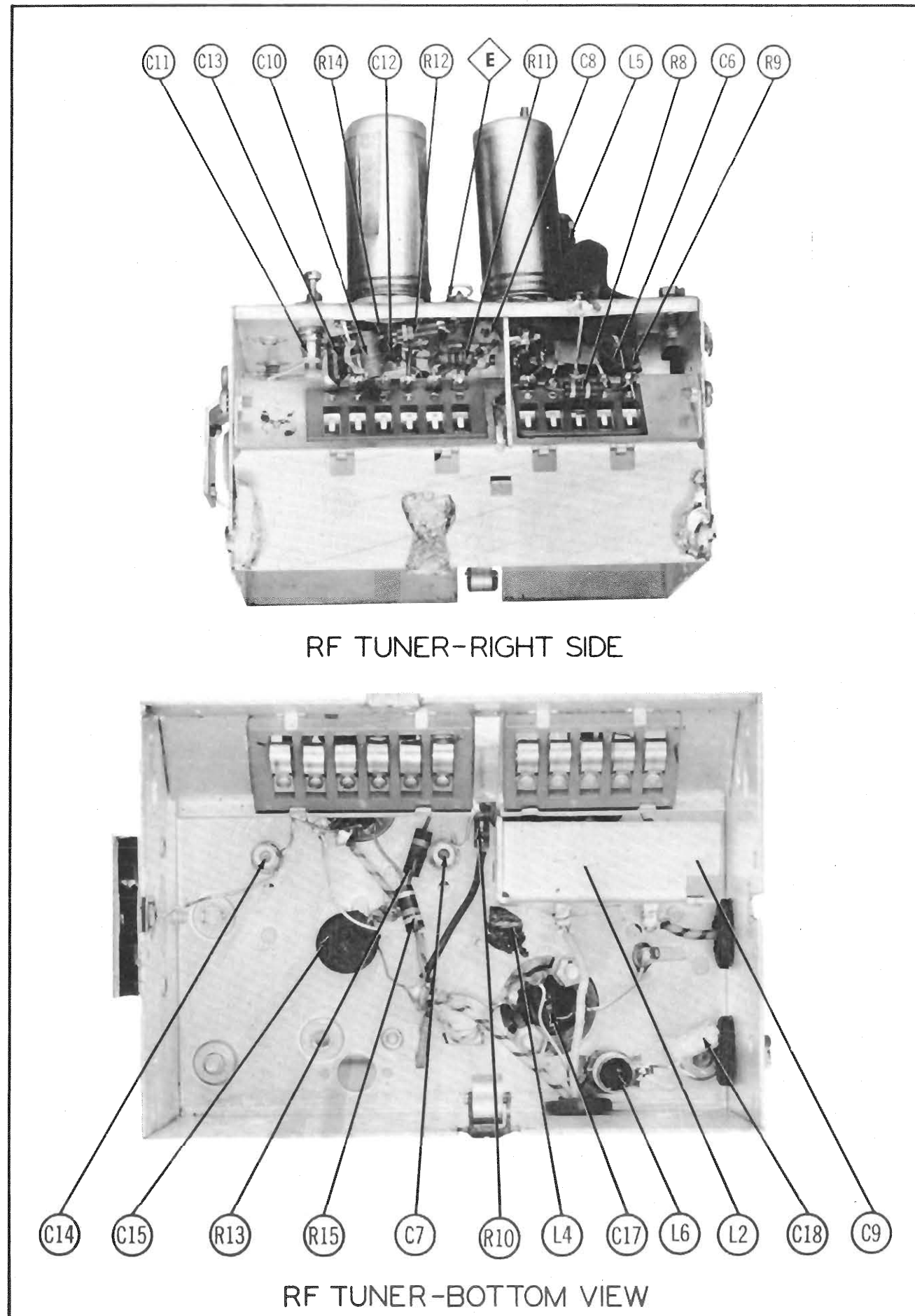
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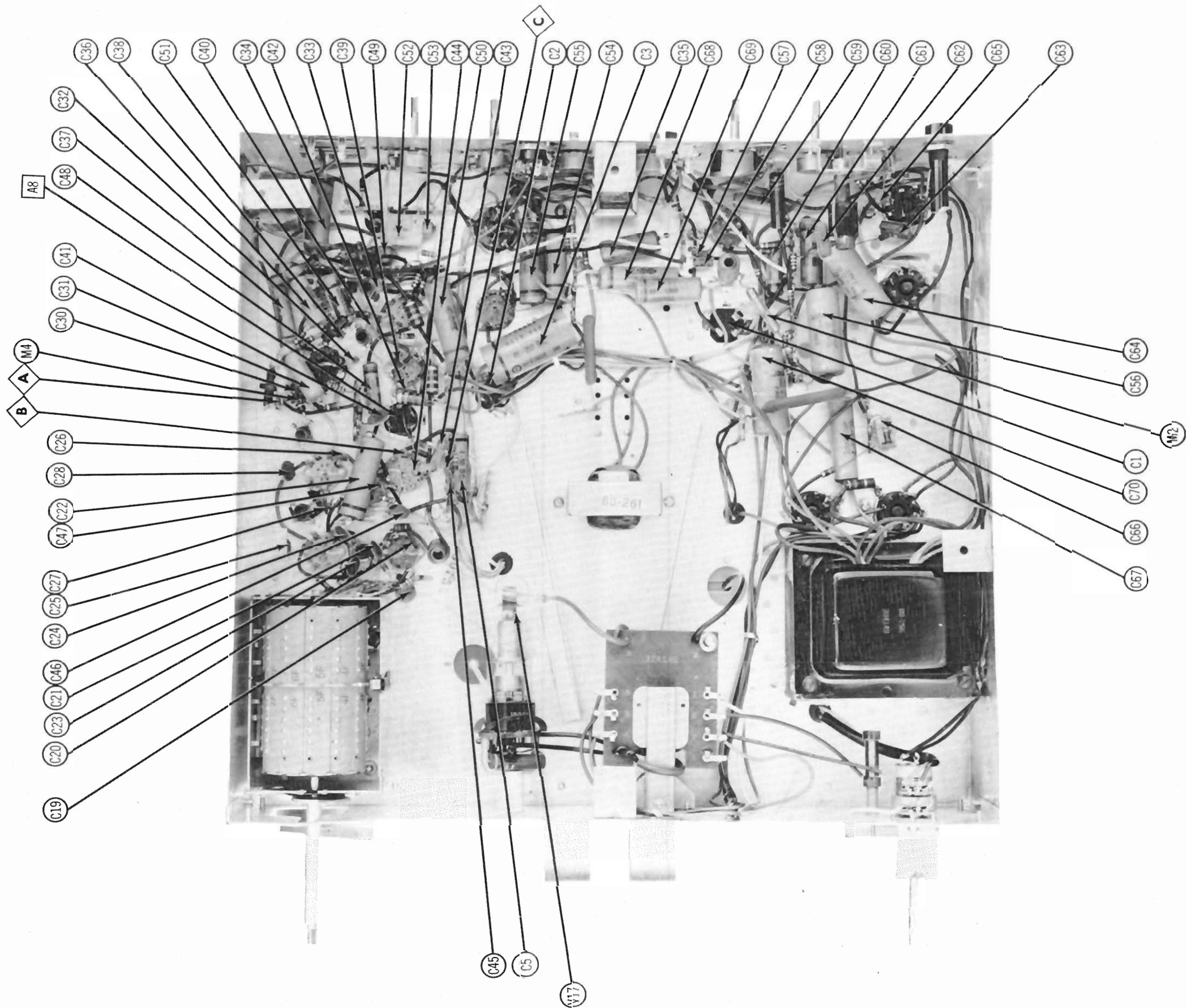
CHASSIS BOTTOM VIEW-RESISTOR AND INDUCTOR IDENTIFICATION

TRADE NAME
MANUFACTURER
TYPE SET
TUBES
POWER SUPPLY
TUNING RANGE:
Alignment Instruc
Horizontal Sweep
Parts List and De
Photographs
Chassis -
Capacitor
Chassis -

"The listing of any avail
case a recommendation, v
as to the quality and suita
parts have been compiled
Inc., by the manufacturer
"Reproduction or use, wit



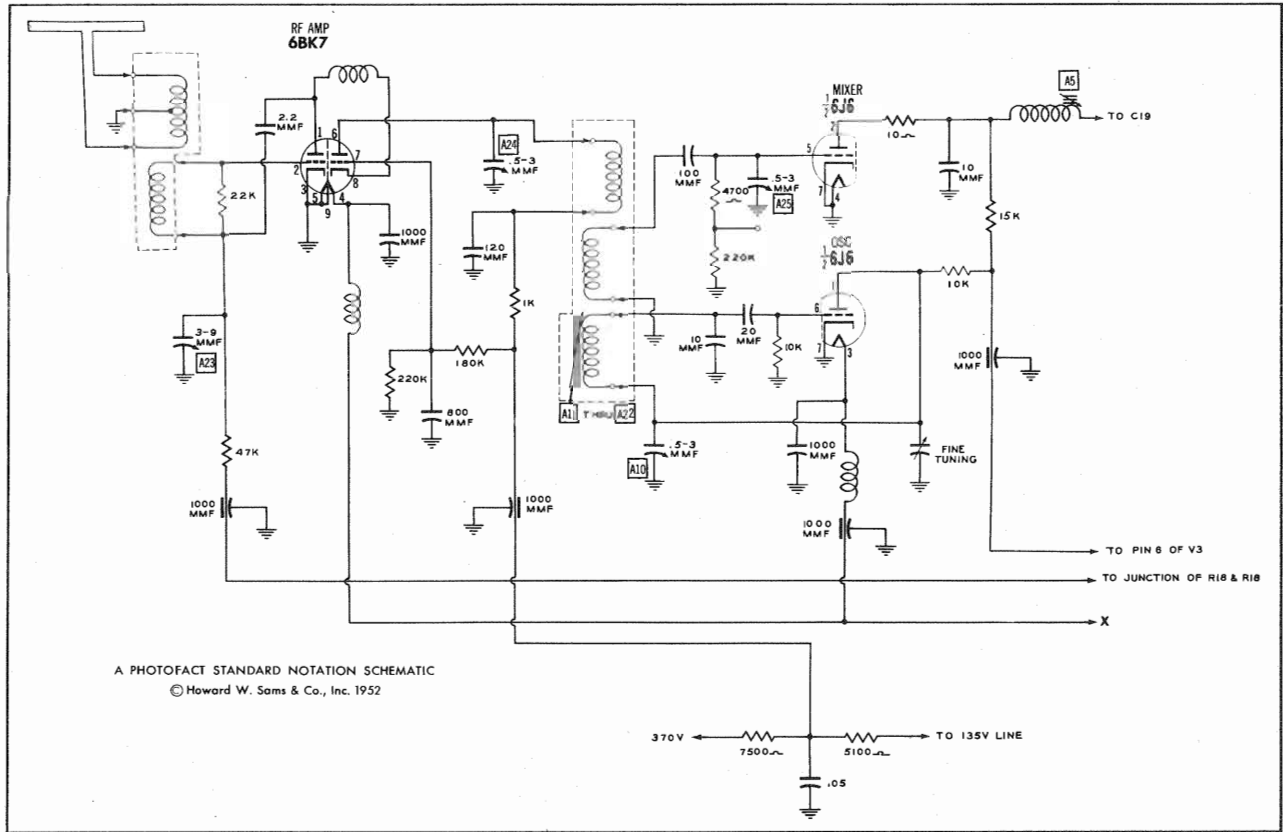
AMBASSADOR
 MODELS 21C2A, 21C2ALO, 9120, 10, 9820, 9821, 10



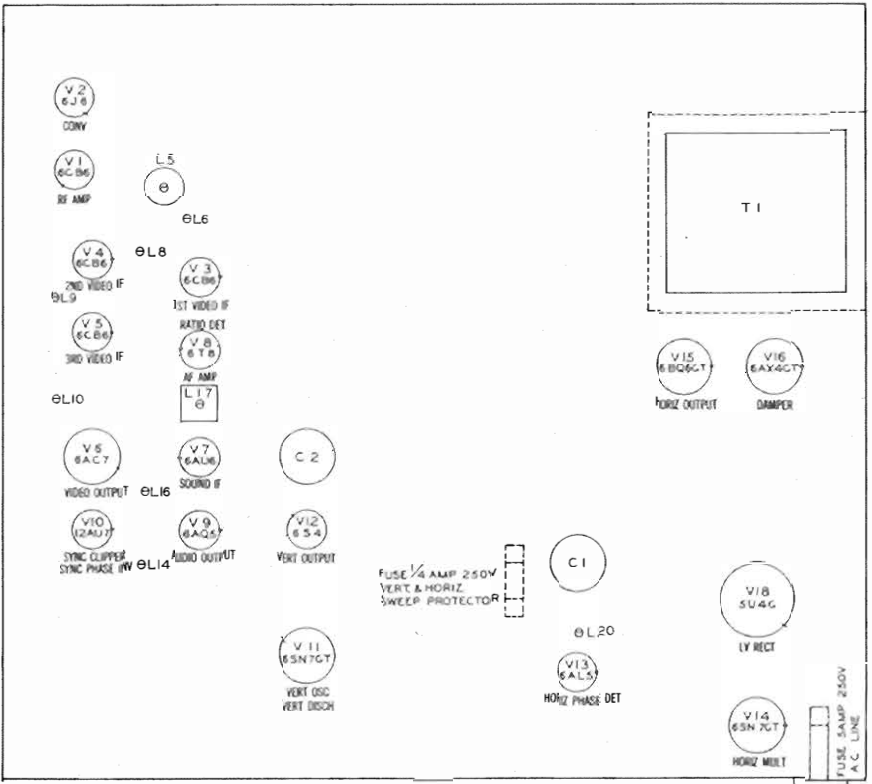
RESISTANCE MEASUREMENTS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6CB6	1Meg	0Ω	.1Ω	0Ω	■2.4KΩ	■2.4KΩ	0Ω		
V 2	6J6	■4.9KΩ	■200Ω	.1Ω	0Ω	220KΩ	10KΩ	0Ω		
V 3	6CB6	1Meg	56Ω	0Ω	.1Ω	■200Ω	■200Ω	0Ω		
V 4	6CB6	1Meg	56Ω	0Ω	.1Ω	■100Ω	■100Ω	0Ω		
V 5	6CB6	.2Ω	82Ω	0Ω	.1Ω	■0Ω	■0Ω	0Ω		
V 6	6AC7	0Ω	0Ω	0Ω	470KΩ	390Ω	■0Ω	.1Ω	†10KΩ	
V 7	6AU6	■100KΩ	■0Ω	■0Ω	■.1Ω	†22KΩ	†22KΩ	■0Ω		
V 8	6T8	INF	12KΩ	INF	0Ω	.1Ω	0Ω	0Ω	4.7MEG	■270KΩ
V 9	6AQ5	240KΩ	40KΩ	■0Ω	■.1Ω	†1.1KΩ	†800Ω	240KΩ		
V 10	12AU7	■680KΩ	1.2Meg	22KΩ	.1Ω	.1Ω	■6.1KΩ	22KΩ	2.2KΩ	0Ω
V 11	6SN7GT	2.8Meg	†22KΩ	0Ω	2.8Meg	†2.5Meg	0Ω	.1Ω	0Ω	
V 12	6S4	INF	1.6KΩ	2.2Meg	0Ω	.1Ω	2.2Meg	INF	INF	†1.4KΩ
V 13	6AL5	4.8Meg	4.8Meg	0Ω	.1Ω	15KΩ	0Ω	15KΩ		
V 14	6SN7GT	5.1Meg	†9.1KΩ	1.5KΩ	140KΩ	†325KΩ	1.5KΩ	0Ω	.1Ω	
V 15	6BQ6GT	INF	.1Ω	INF	†25KΩ	1Meg	INF	0Ω	47Ω	TOP CAP #42Ω
V 16	6AX4GT	†230Ω	INF	480KΩ	INF	†232Ω	INF	0Ω	.1Ω	
V 17	1B3GT	PINS 1 - 8	HAVE	INF	RESISTANCE					TOP CAP #347Ω
V 18	5U4G	INF	45KΩ	INF	28Ω	INF	26Ω	INF	45KΩ	
V 19	20DP4A	0Ω	8.2KΩ	PIN 10 #10KΩ	PIN 11 110KΩ	PIN 12 .1Ω				

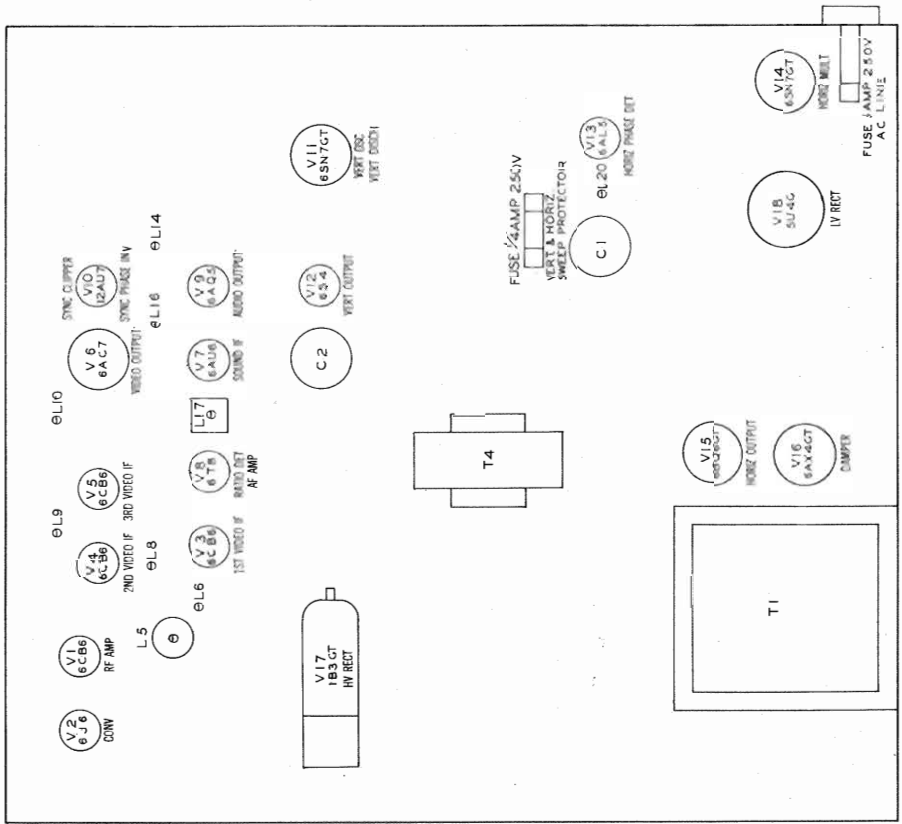
ALL CONTROLS SET FOR NORMAL OPERATION, NO SIGNAL APPLIED
† MEASURED FROM PIN 8 OF V18
■ MEASURED FROM 135 VDC LINE



ALTERNATE TUNER SCHEMATIC



TOP VIEW



BOTTOM VIEW

TUBE PLACEMENT CHART

MODELS 21C2A, 21C2AL0, 9120, 10, 9820, 9821, 10

AMBASSADOR

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The high voltage lead should be securely taped and kept away from the chassis. Do not remove the horizontal multivibrator tube to disable the high voltage.

VIDEO IF ALIGNMENT

Remove the converter tube (V2) from its socket and replace with a 6J6 which has pin 1 removed. This will disable the local oscillator and reduce the possibility of erroneous indications.
Connect the negative side of a 3 volt battery to the ungrounded side of C23. Connect the positive lead to chassis.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. Direct	High side to an ungrounded tube shield floating over dummy converter tube. Low side to chassis.	21.25MC	Any	DC probe to Point A Low side to chassis.	A1	Adjust for MINIMUM deflection.
2. "	"	23.3MC	"	"	A2	Adjust for maximum deflection.
3. "	"	25MC	"	"	A3, A4	"
4. "	"	25.3MC	"	"	A5	"

OVERALL VIDEO IF RESPONSE CHECK

Connect the synchronized sweep voltage from the signal generator to the horizontal input of the oscilloscope for horizontal deflection. Leave the 3 volt battery connected as before.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. Direct	High side to an ungrounded tube shield floating over dummy converter tube.	24MC (10MC swp.)	21.25MC 25.75MC	Any	Vert. amp. to Point A Low side to chassis.		Check for response curve similar to fig. 1 with video marker at 50%. If necessary re-adjust A2 thru A5 for proper response.

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Connect two matched 100K Ω ($\pm 5\%$) resistors in series from Point B to chassis. The junction of these two resistors is alignment Point D as shown on the schematic.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
6. .01MFD	High side to Point A Low side to chassis.	4.5MC (unmod.)	Any	DC probe to Point B Common to chassis.	A6, A7	Adjust for maximum deflection.
7. "	"	"	"	DC probe to Point C Common to Point D	A8	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

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
6. .01MFD	High side to Point A Low side to chassis.	4.5MC (450KC swp.)	4.5MC	Any	Vert. amp. to Point B Low side to chassis.	A6, A7	Disconnect stabilizer capacitor C5. Adjust for maximum amplitude and symmetry as per fig. 2.
7. "	"	"	"	"	Vert. amp. to Point C Low side to chassis.	A8	Reconnect capacitor C5. Adjust so that 4.5MC occurs at center of crossover lines as per fig. 3. SLIGHTLY retouch A7 for maximum amplitude and straightness of crossover lines.

4.5MC TRAP ADJUSTMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
8. .01MFD	High side to Point A Low side to chassis.	4.5MC (unmod.)	Any	DC probe thru crystal diode detector (fig. 4) to pin 11 of picture tube. Common to chassis.	A9	Adjust for MINIMUM deflection.

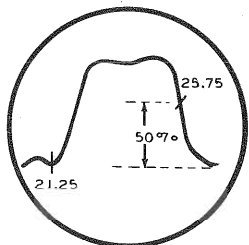


FIG. 1

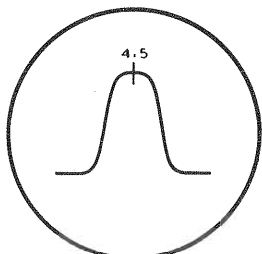


FIG. 2

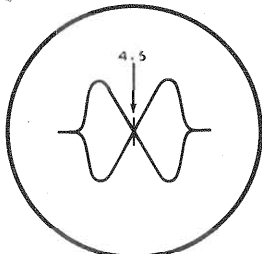


FIG. 3

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT

Complete oscillator alignment may not be necessary. If the oscillator seems to be off frequency approximately the same amount for a majority of the channels it may be possible to correct them in one step using A10. It should be noted that this is an all channel oscillator circuit adjustment and should not be used to correct any individual channel. If adjustment of A10 will not bring all channels well within the range of the fine tuning control it will be necessary to adjust the channel strip adjustment for each channel that is off frequency. The channel adjustment 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.

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

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.

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

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
9. Two 120 Ω carbon resistors	Across antenna terminals with 120 Ω in each lead.	213MC (10MC swp.) 207MC (10MC swp.) 201MC (10MC swp.) 195MC (10MC swp.) 189MC (10MC swp.) 183MC (10MC swp.) 177MC (10MC swp.) 171MC (10MC swp.) 165MC (10MC swp.) 159MC (10MC swp.) 153MC (10MC swp.) 147MC (10MC swp.) 141MC (10MC swp.) 135MC (10MC swp.) 129MC (10MC swp.) 123MC (10MC swp.) 117MC (10MC swp.) 111MC (10MC swp.) 105MC (10MC swp.) 99MC (10MC swp.) 93MC (10MC swp.) 87MC (10MC swp.) 81MC (10MC swp.) 75MC (10MC swp.) 69MC (10MC swp.) 63MC (10MC swp.) 57MC (10MC swp.) 51MC (10MC swp.) 45MC (10MC swp.) 39MC (10MC swp.) 33MC (10MC swp.) 27MC (10MC swp.) 21MC (10MC swp.) 15MC (10MC swp.) 9MC (10MC swp.) 3MC (10MC swp.)	211.25MC 215.75MC 205.25MC 209.75MC 199.25MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC 169.25MC 173.75MC 163.25MC 167.75MC 157.25MC 161.75MC 151.25MC 155.75MC 145.25MC 149.75MC 139.25MC 143.75MC 133.25MC 137.75MC 127.25MC 131.75MC 121.25MC 125.75MC 115.25MC 119.75MC 109.25MC 113.75MC 103.25MC 107.75MC 97.25MC 101.75MC 91.25MC 95.75MC 85.25MC 89.75MC 79.25MC 83.75MC 73.25MC 77.75MC 67.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	13 12 11 10 9 8 7 6 5 4 3 2	Vert. amp. to Point A Low side to chassis.	A11 A12 A13 A14 A15 A16 A17 A18 A19 A20 A21 A22	Adjust to place sound marker in 21.25MC trap notch as in fig. 5. Video marker should be at 50% response.

RF AND MIXER ALIGNMENT

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

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
10. Two 120 Ω carbon resistors	Across antenna terminals with 120 Ω in each lead.	207MC (10MC swp.)	205.25MC 209.75MC	12	Vert. amp. thru 47K Ω to Point B Low side to chassis.	A23, A24 A25	Adjust for response curve of maximum amplitude and symmetry as per fig. 6 with markers above 90% response.
11. "	"	213MC (10MC swp.) 207MC (10MC swp.) 201MC (10MC swp.) 195MC (10MC swp.) 189MC (10MC swp.) 183MC (10MC swp.) 177MC (10MC swp.) 171MC (10MC swp.) 165MC (10MC swp.) 159MC (10MC swp.) 153MC (10MC swp.) 147MC (10MC swp.) 141MC (10MC swp.) 135MC (10MC swp.) 129MC (10MC swp.) 123MC (10MC swp.) 117MC (10MC swp.) 111MC (10MC swp.) 105MC (10MC swp.) 99MC (10MC swp.) 93MC (10MC swp.) 87MC (10MC swp.) 81MC (10MC swp.) 75MC (10MC swp.) 69MC (10MC swp.) 63MC (10MC swp.) 57MC (10MC swp.) 51MC (10MC swp.) 45MC (10MC swp.) 39MC (10MC swp.) 33MC (10MC swp.) 27MC (10MC swp.) 21MC (10MC swp.) 15MC (10MC swp.) 9MC (10MC swp.) 3MC (10MC swp.)	211.25MC 215.75MC 205.25MC 209.75MC 199.25MC 203.75MC 193.25MC 197.75MC 187.25MC 191.75MC 181.25MC 185.75MC 175.25MC 179.75MC 169.25MC 173.75MC 163.25MC 167.75MC 157.25MC 161.75MC 151.25MC 155.75MC 145.25MC 149.75MC 139.25MC 143.75MC 133.25MC 137.75MC 127.25MC 131.75MC 121.25MC 125.75MC 115.25MC 119.75MC 109.25MC 113.75MC 103.25MC 107.75MC 97.25MC 101.75MC 91.25MC 95.75MC 85.25MC 89.75MC 79.25MC 83.75MC 73.25MC 77.75MC 67.25MC 71.75MC 61.25MC 65.75MC 55.25MC 59.75MC	13 11 10 9 8 7 6 5 4 3 2	"		Check all channels for proper response. If markers fall below 70% on any channel make slight compromise adjustments of A23, A24 and A25 on that channel then recheck all other channels to see that they have not been seriously affected.

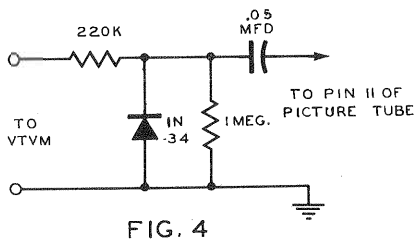


FIG. 4

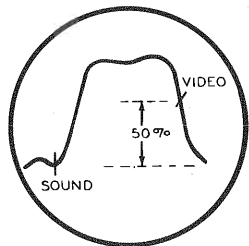


FIG. 5

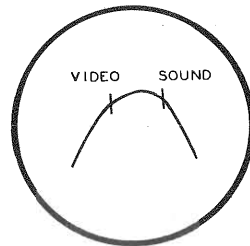


FIG. 6

MODELS 21C2A, 21C2ALO, 9120, 10, 9820, 9821, 10

AMBASSADOR

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	Ambassador PART No.	MERIT PART No.	
L1	Ant. Coil	0Ω				
L2	Fl. Choke	0Ω				
L3	RF Mixer					
L4	Grid & Osc.	0Ω				
L5	Fl. Choke	0Ω				
L6	Conv. Plate & IF Trap	1.6Ω	0Ω			
L7	1st. Video IF	1Ω				
L8	Fl. Choke	0Ω				
L9	2nd. Video IF	.2Ω	.2Ω			
L10	3rd. Video IF	.2Ω	.2Ω			
L11	4th. Video IF	.2Ω	.2Ω			
L12	Peaking Coil	2.4Ω			TV-180	White, 36 Microhenries
L13	Peaking Coil	9.5Ω			*TV-185	Red, 375 Microhenries
L14	Peaking Coil	5.8Ω			TV-151	Blue, 225 Microhenries, Wound on 10K resistor
L15	4.5MC Trap	1.8Ω				
L16	Peaking Coil	11Ω				Green, 510 Microhenries
L17	Sound IF	1.8Ω			TV-151	
L18	Ratio Det.	4.2Ω	.2Ω		TV-110	Tertiary Winding .7Ω
L19	Horiz. Osc.	47Ω			TV-163	
L20	Width Coil	.45Ω				
L21	Horiz. Lin.	22Ω			MWC-1	

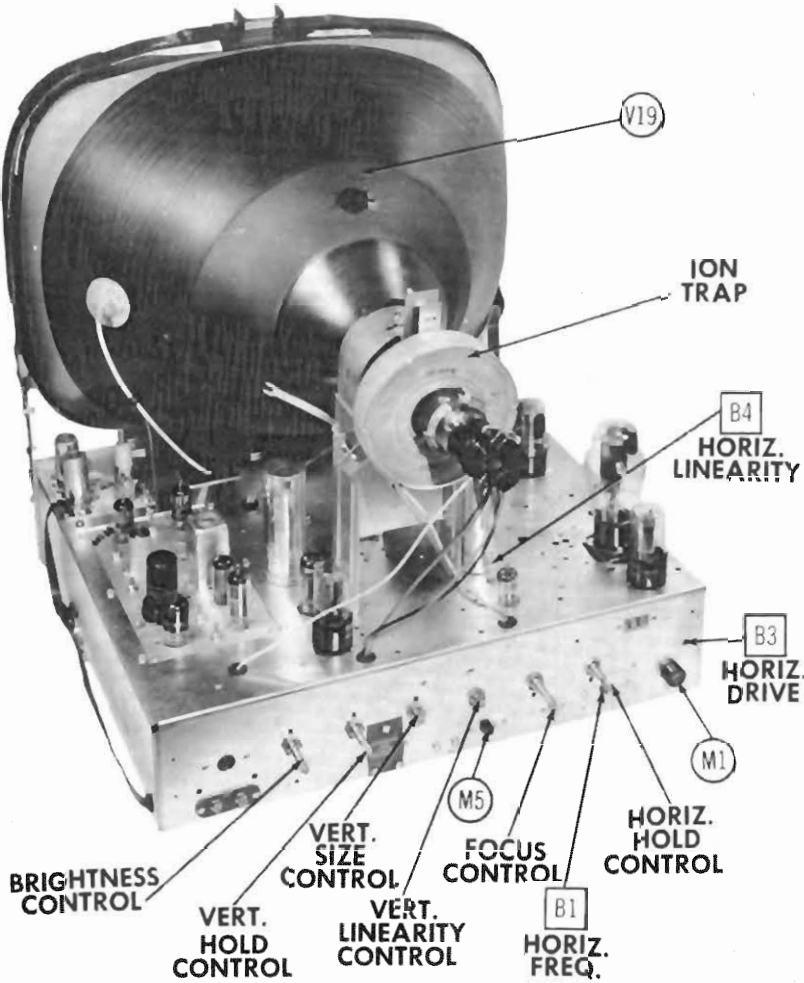
*Parallel with 10K resistor

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA			
			Ambassador PART No.		LITTELFUSE PART No.	
			FUSE	HOLDER	FUSE	HOLDER
M1	3AG	5A.			312005	341001
M2	3AG Pigtail	250V. 1/4A.			318.250	
		250V.				MTH5 GJV 1/4 HKP

MISCELLANEOUS

ITEM No.	PART NAME	Ambassador PART No.	NOTES
M3	RF tuner		
M4	Crystal		IN64
M5	Switch		TV-Phono



CHASSIS-REAR VIEW
HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

HORIZONTAL SWEEP CIRCUIT ADJUSTMENTS

Turn the set on and tune in a TV station, preferably a test pattern.

Set the horizontal hold control at the center of its range and adjust the horizontal frequency slug (B1) until the picture synchronizes horizontally.

Adjust the horizontal drive trimmer (B2) counterclockwise to the point just before the picture starts to compress in the center.

Adjust the width slug (B3) for a picture slightly wider than enough to fill the picture mask.

Adjust the horizontal linearity slug (B4) for a picture that is symmetrical from left to right.

MODELS 21C2A, 21C2ALO, 9120, 10, 9820, 9821, 10
*AMBASSADOR

PARTS LIST AND DESCRIPTIONS

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			NOTES
		Ambassador PART No.	STANDARD REPLACEMENT	RMA BASE TYPE	
V1A	RF Amplifier	6CB6	6CB6	7CH	
B	RF Amplifier	6AQ5	6AQ5	7BD	
C	RF Amplifier	6BC5	6BC5	7BD	
V2	Converter	6J6	6J6	7BF	
V3	1st. Video IF Amp	6CB6	6CB6	7CH	
V4	2nd. Video IF Amp	6CB6	6CB6	7CH	
V5	3rd. Video IF Amp	6CB6	6CB6	7CH	
V6	Video Output	6AC7	6AC7	8N	
V7	Sound IF Amp.	6AU6	6AU6	7BK	
V8	Ratio Detector - AF Amp.	6T8	6T8	9E	
V9	Audio Output	6AQ5	6AQ5	7BZ	
V10	Sync Clipper - Sync Phase Inv.	12AU7	12AU7	9A	
V11	Vert. Oscillator	6SN7GT	6SN7GT	6BD	
V12	Vert. Output	6E4	6E4	9AC	
V13	Horiz. Phase Det.	6AL5	6AL5	6BT	
V14	Horiz. Mult.	6SN7GT	6SN7GT	6BD	
V15	Horiz. Output	6BQ6GT	6BQ6GT	6AM	
V16	Damper	6AX4GT	6AX4GT	4CG	
V17	HV Rectifier	1B3GT	1B3GT	3C	
V18	LV Rectifier	5U4G	5U4G	5T	

CATHODE-RAY TUBE

ITEM No.	Ambassador PART No.	SYLVANIA PART No.	RTMA BASE TYPE	NOTES
V19A	20DP4A	20DP4A 20DP4 ① 20CP4 ① ② 20CP4A ① ② 20HP4A ① 24AP4A ①	12D 12D 12D 12C 12C 12D	① Circuit changes necessary ② 3/8" shorter
B	24AP4A	24AP4A	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	REPLACEMENT DATA							NOTES
		Ambassador PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1A	10 450		AFH4-87		UPT62245		FP245-3	TVL-2777	Note 1
B	20 450				BRH501		TC3501	TVA-1310	
C	100 50								
C2A	10 450		AFH3-159				FP375	TVL-3764	Note 2
B	10 450		PRS260/30-30				TC68	TVA-1613	
C	100 200								
C3	40 350		PRS450/40		BR4035		TC78	TVA-1611	Note 2
C4	4 50		PRS150/4		BR550		TC30	TVA-1303	
C5	4 50		PRS150/4		BR550		TC30	TVA-1303	
C6	5-3			829-3			CT565A		Note 2
C7	5-3			829-3			CT565A		
C8	120			D6-121	TM5T12	GP2K-121	UC-5312	5GA-T12	
C9	1000			D6-102	TM5D1	GP2L-102	UC-521	5HK-D1	Note 2
C10	100			D6-101	TM5T1	GP1K-101	UC-531	5GA-T1	
C11	5-3			829-3			CT565A		
C12	10			TCZ-20		NP0K-200	ZT-542	5TCU-Q1	Note 2
C13	10			TCN-10		N750K-100	NT-541		
C14	5-3			829-3			CT565A		
C15A	1000		BPD-2X001	DD-2-102	TM5DD1	B12-001	DCD-521	5HK-D1	Note 2
B	1000								
C16	72 500		1469-000075			NP0K-100	MCB230		
C17	10		SI10NP0	TCZ-10			2T-541	5TCC-Q1	Note 2
C18	120		1469-00015		SR5T15		MCB236		
C19	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C20	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	Note 2
C21	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C22	2		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C23	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	Note 2
C24	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C25	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C26	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	Note 2
C27	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C28	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C29	2		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	Note 2
C30	10 500		1469-00001	TCZ-10	SR5Q1	NP0K-100	MCB215	MS-41	
C31	10 500		P488-05	DF-503	PTE485		PT415	4TM-55	
C32	220		SI220	D6-221	SR5T25	GP2K-221	UC-5322	5GA-T22	Note 2
C33	47		SI47	D6-470	SR5Q5	GP1K-470	UC-5447	5GA-Q47	
C34	2 400		684-2		PTE4P22		PT4025	4TM-P22	
C35	10 1000		P1088-02	DF-503	PTE1082		PT1612	4TM-P22	Note 3
C36	10 400		P488-05	DF-503	PTE485		PT415	4TM-55	
C37	10 400		P488-05	DF-503	PTE485		PT415	4TM-55	
C38	2.2			TCZ-2.2		NP0K-2R2			Note 4
C39	120		SI220	D6-121	TM5T12	GP2K-121	UC-5312	5GA-T12	
C40	47		SI47	D6-470	SR5Q5	GP1K-470	UC-5447	5GA-Q47	
C41	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	Note 5
C42	5 500		1469-000005		SR5V5		MCB205	MS-55	
C43	220 500		1468-00025	D6-221	5W5T25	GP2K-221	MC240	1FM-325	
C44	2000		SI2000	D6-201	TM5D2	GP2-333-202	UC-522	5HK-D2	Note 5
C45	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C46	5000		BPD-005	DD-502	TM5D5	B11-005	DC-525	5HK-D5	
C47	470 500		1468-00005	D6-471	5W5T5	GP2K-471	MC245	1FM-35	Note 5
C48	1002 600		P688-002	D6-202	PTE6D2	GP2-333-202	PT622	6TM-D2	
C49	101 600		P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	

CAPACITORS (CONT.)

ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA							NOTES
		Ambassador PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C50	.2 400		684-2		PTE4P22		PT4025	4TM-P22	Note 2
C51	.002 600		P688-002	D6-202	PTE6D2	GP2-333-202	PT622	6TM-D2	
C52A	.002 600		P688-002		PTE6D2	GP2-333-202	PT622	6TM-D2	
B	.005		P688-005	*PC-100	PTE6D5	GP2-333-502	PT625	*10C1	Note 6
C	.005		P688-005		PTE6D5	GP2-333-502	PT625	6TM-D47	
C53	.0047 600		P688-0047	D6-472	PTE6D47	GP2-333-472	PT6247	6TM-D47	
C54	.05 600		P688-05	DF-503	PTE6S5		PT615	6TM-S5	Note 6
C55	.1 600		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C56	.2 600		684-2		PTE6P1		PT601	6TM-P1	
C57	1000		SI1000	D6-102	TM5D1	GP2L-102	UC-521	5HK-D1	Note 6
C58	1000		SI1000	D6-102	TM5D1	GP2L-102	UC-521	5HK-D1	
C59	.01 600		P688-01	D6-103	PTE6S1	GP2-333-103	PT611	6TM-S1	
C60	.005 600		P688-005	D6-502	PTE6D5	GP2-333-502	PT625	6TM-D5	Note 6
C61	.05 600		P688-05	DF-503	PTE6S5		PT615	6TM-S5	
C62	3900 500		1464-004		IDR1D4		MCB463		
C63	330 500		1469-00035						Note 6
C64	.2 600		684-2		SR5T4		MCB243	MS-34	
C65	300 500		1469-00004		SR5T4		MCB243	MS-34	
C66	390 500		1469-00004		SR5T4		MCB243	MS-34	Note 6
C67	.1 600		P688-1	DF-104	PTE6P1		PT601	6TM-P1	
C68	.05 1000		P1088-05				PT1615	MB-S5	
C69	.03 1000		D1088-03		PTE16S3		PT1613	MB-S3	Note 6

Note 1. Some models use two 40MFD in this application.
Note 2. Not used in all models.
Note 3. Some models use 120MMF in this application.
Note 4. Some models use 40MFD @ 50V. in this application.
Note 5. Some models use 75MMF in this application.
Note 6. Some models use 470MMF in this application.
• Items C52A, C52B, C52C, R52A, R52B, R52C are combined in one unit.

CONTROLS

ITEM No.	RATING RESISTANCE WATTS	REPLACEMENT DATA					INSTALLATION NOTES
		Ambassador PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	
R1A	1000Ω	P24-190A	QJ-326*			UF13R	Contrast - See Note
B	500KΩ					UR55A	Volume-Rear
C	Switch					US-26	Volume-Rear
R2A	50KΩ	P25-18	Q11-123	AG-44-S	AB-31	U-25	Attach to R1B
B	50KΩ	Not Req.	Not Req.	KSS-3	AK-4	Not Req.	Brightness
R3A	50KΩ	P25-18	Q11-123	AG-44-S	AB-31	U-25	Attach to R2A
B	50KΩ	Not Req.	Not Req.	KSS-3	AK-4	Not Req.	Horiz. Hold
R4A	2Meg	P25-15	Q11-139	AG-83-S	AB-75	SU-56	Attach to R3A
B	2Meg	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Height
R5A	2Meg	P25-20	Q11-139	AG-83-S	AB-75	SU-56	Attach to R4A
B	2Meg	Not Req.	Not Req.	KSS-3	AK-4	Not Req.	Vert. Hold
R6A	2500Ω	P25-13	Q11-112	AG-15-S	AB-7	U-8	Attach to R5A
B	2500Ω	Not Req.	Not Req.	FKS-1/4	AK-1	Not Req.	Vert. Linearity
R7	2250Ω	P25-19		RTV-319		TVF143	Focus-Wire Wound

NOTE: Connect 1800Ω resistor between center terminal and maximum clockwise terminal (Control viewed from shaft end, terminals down).
• CONCENTRIC KIT EQUIVALENT - KIT K-2, BASE ELEMENTS & SHAFTS B17-110 & P1-224 (Panel) B13-133 & R2-306 (Rear) & Switch 76-1.

RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	Ambassador PART No.	IRC PART No.	
ALL RESISTORS ± 10% UNLESS OTHERWISE NOTED					
R8	3900Ω			BTS-3900	Antenna Coil Shunt
R9	47KΩ	20%			RF Amp. Grid
R10	2200Ω	20%		BTS-2200	RF Amp. Decoupling
R11	10KΩ				RF Coil Shunt
R12	4700Ω			BTS-4700	Mixer Grid
R13	220KΩ	20%			Mixer Grid
R14	10KΩ				Oscillator Grid
R15	4700Ω			BTS-4700	Oscillator Plate
R16	4700Ω			BTS-4700	1st. Video IF Grid
R17	56Ω				1st. Video IF Cathode
R18	680Ω			BTS-680	AGC Network
R19	6800Ω				2nd. Video IF Coil Shunt
R20	56Ω				2nd. Video IF Cathode
R21	1Meg	20%		BTS-1Meg	AGC Network
R22	100Ω			BTS-100	Decoupling
R23	100Ω			BTS-100	Decoupling
R24	6800Ω				3rd. Video IF Coil Shunt
R25	82Ω			BTS-82	3rd. Video IF Cathode
R26	5600Ω			BTS-5600	Video Detector Diode Load
R27	470KΩ			BTS-470K	Video Output Grid
R28	82Ω			BTS-82	Video Output Cathode
R29	1000Ω			BTS-1000	Contrast Network
R30	6800Ω			BTS-6800	Video Output Plate
R31	10KΩ			BTS-10K	Isolation
R32	100KΩ			BTS-100K	Picture Tube Cathode
R33	10KΩ			BTS-10K	Acc. Anode Load
R34	100KΩ			BTS-100K	Sound IF Grid
R35	22KΩ			BTS-22K	Sound IF Decoupling
R36	150Ω			BTS-150	Balancing
R37	47KΩ			BTS-47K	De-emphasis
R38	12KΩ			BTS-12K	Ratio Det. Diode Load
R39	4.7Meg			BTS-4.7Meg	AF Amp. Grid
R40	270KΩ			BTS-270K	AF Amp. Plate
R41	330KΩ	5%		BTS-330K 5%	Voltage Divider
R42	180KΩ	5%		BTS-180K 5%	Voltage Divider
R43	100KΩ			BTS-100K	AF Output Grid
R44	800Ω			1 3/4A-500	AF Output Decoupling - Wire Wound
R45	1.2Meg			BTS-1.2Meg	Sync Clipper Grid
R46	22KΩ			BTS-22K	Sync Clipper Cathode
R47	6800Ω			BTS-680K	Sync Clipper Plate
R48	22KΩ			BTS-22K	Sync. Ph. Inv. Grid
R49	2200Ω			BTS-2200	Sync. Ph. Inv. Cathode
R50	3900Ω			BTS-3900	Sync. Ph. Inv. Plate
R51	2200Ω			BTS-2200	Sync. Ph. Inv. Plate