

RAYTHEON  
MODELS 7DX21, 7DX22P, 18DX21A

RAYTHEON MODEL 7DX22P

**TRADE NAME** Raytheon, Models 7DX21, 7DX22P, and 18DX21A  
**MANUFACTURER** Belmont Radio Corporation, 5921 W. Dickens Ave., Chicago 39, Ill.  
**TYPE SET** Television Receiver  
**TUBES** Eighteen

**POWER SUPPLY** 105-125 Volts AC or DC  
**TUNING RANGE**—Channels 2 thru 13

**RATING:** .97 Amp. @ 117 Volts AC

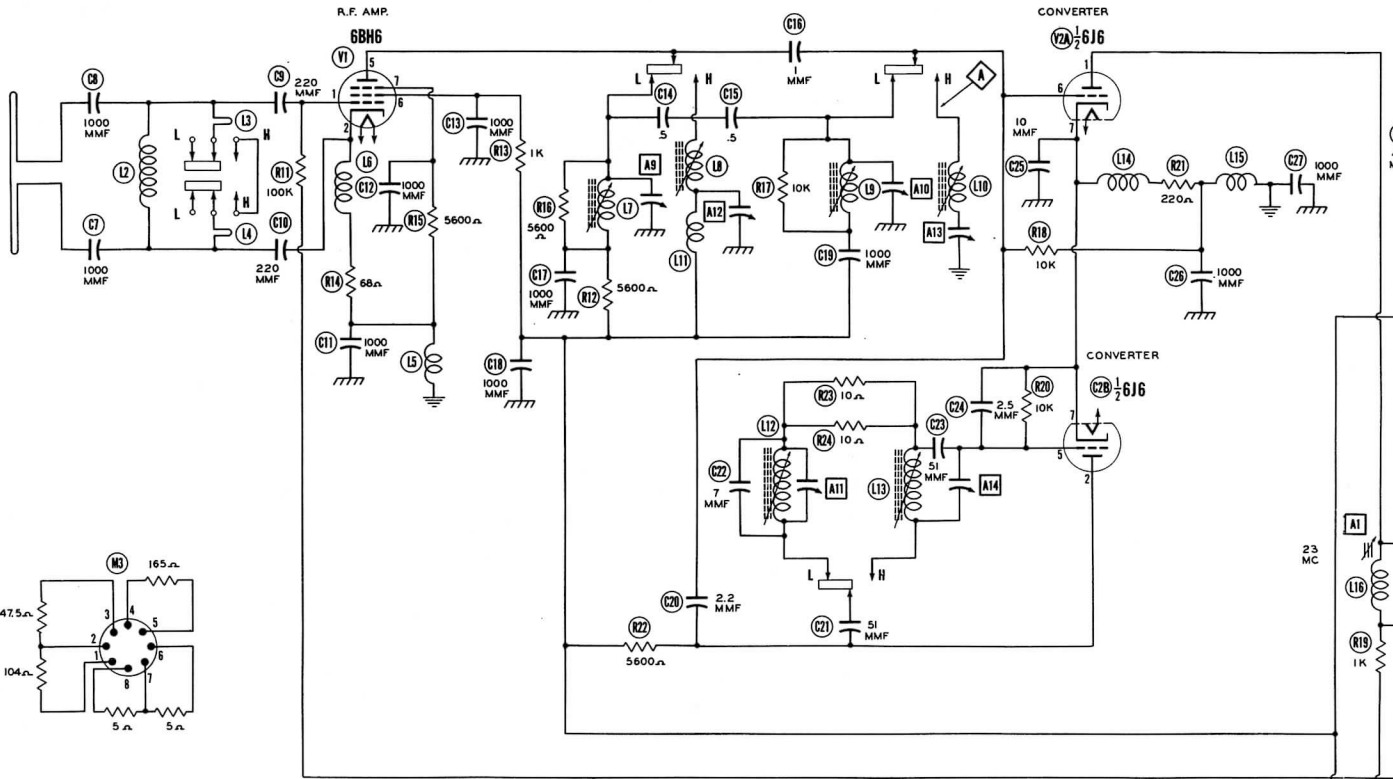
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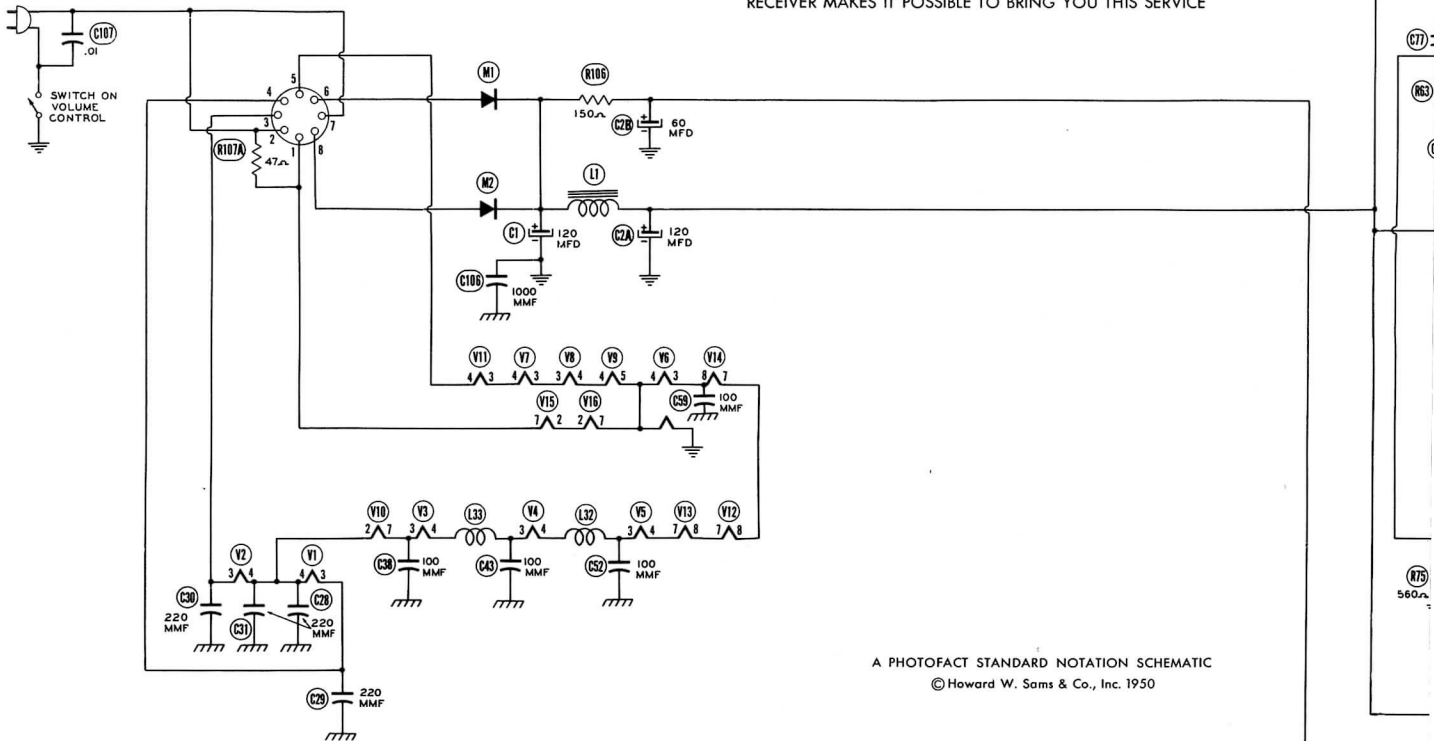
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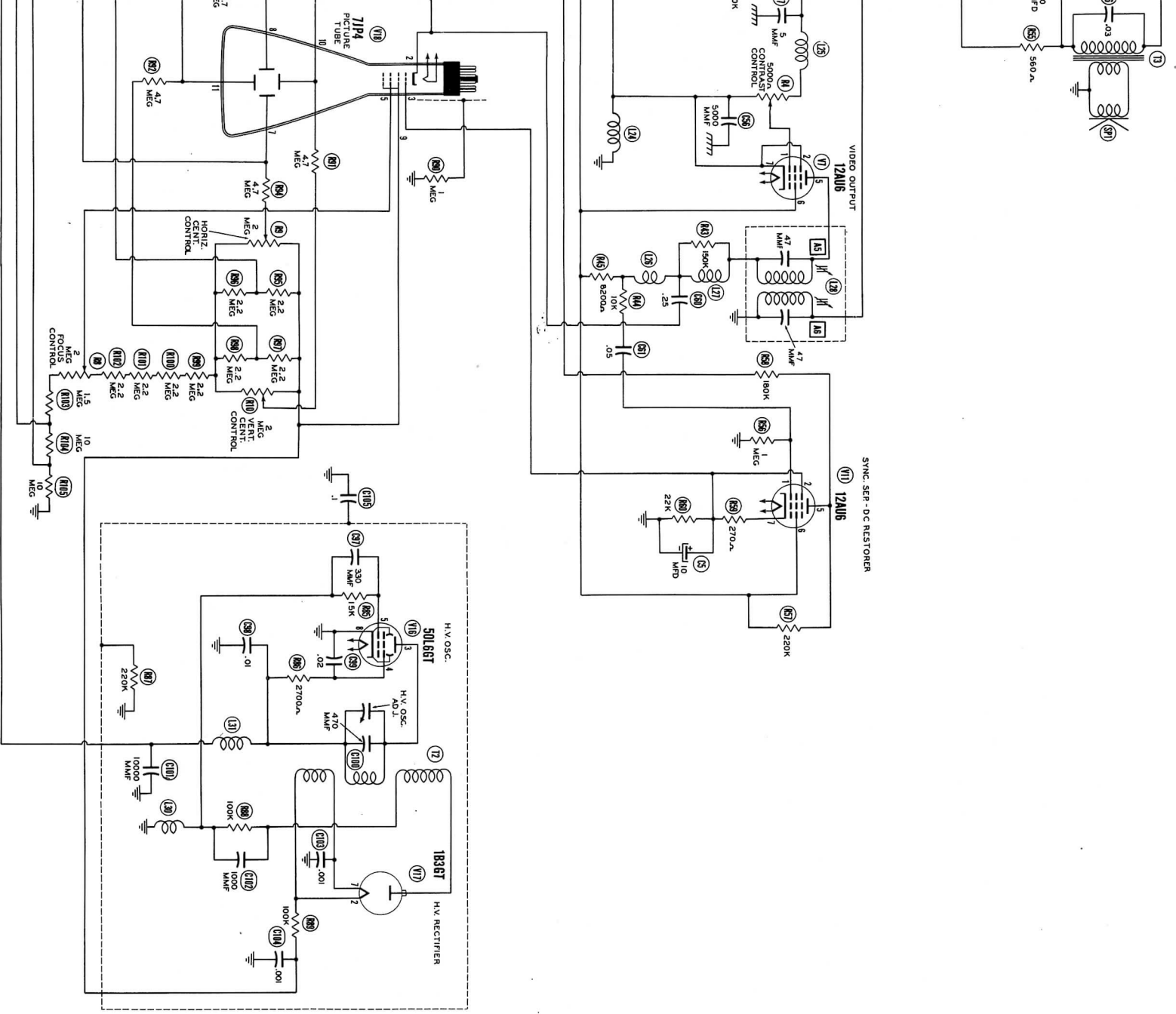
THE COOPERATION OF THE MANUFACTURER OF THIS RECEIVER MAKES IT POSSIBLE TO BRING YOU THIS SERVICE



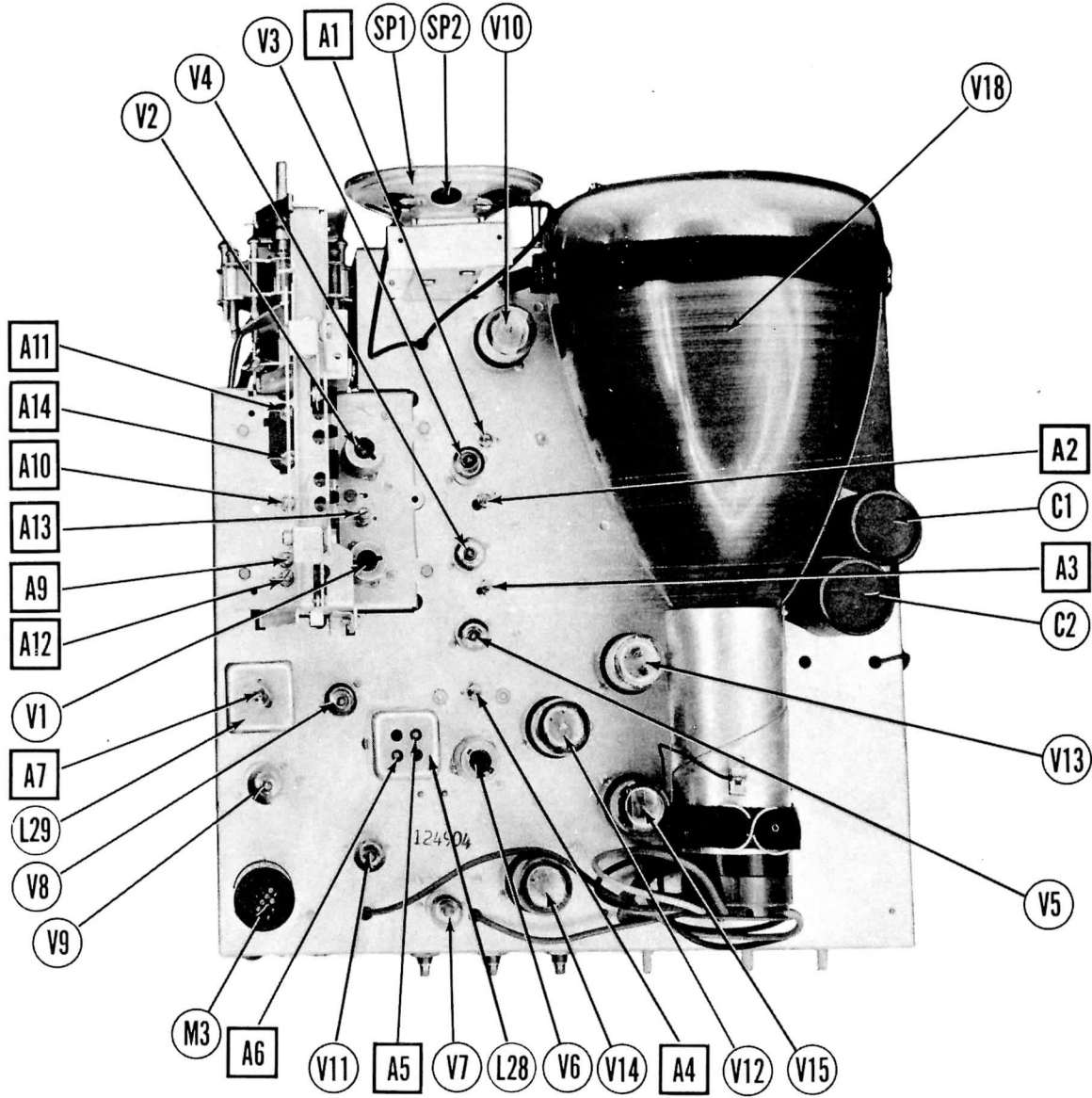
A PHOTOFACIT STANDARD NOTATION SCHEMATIC  
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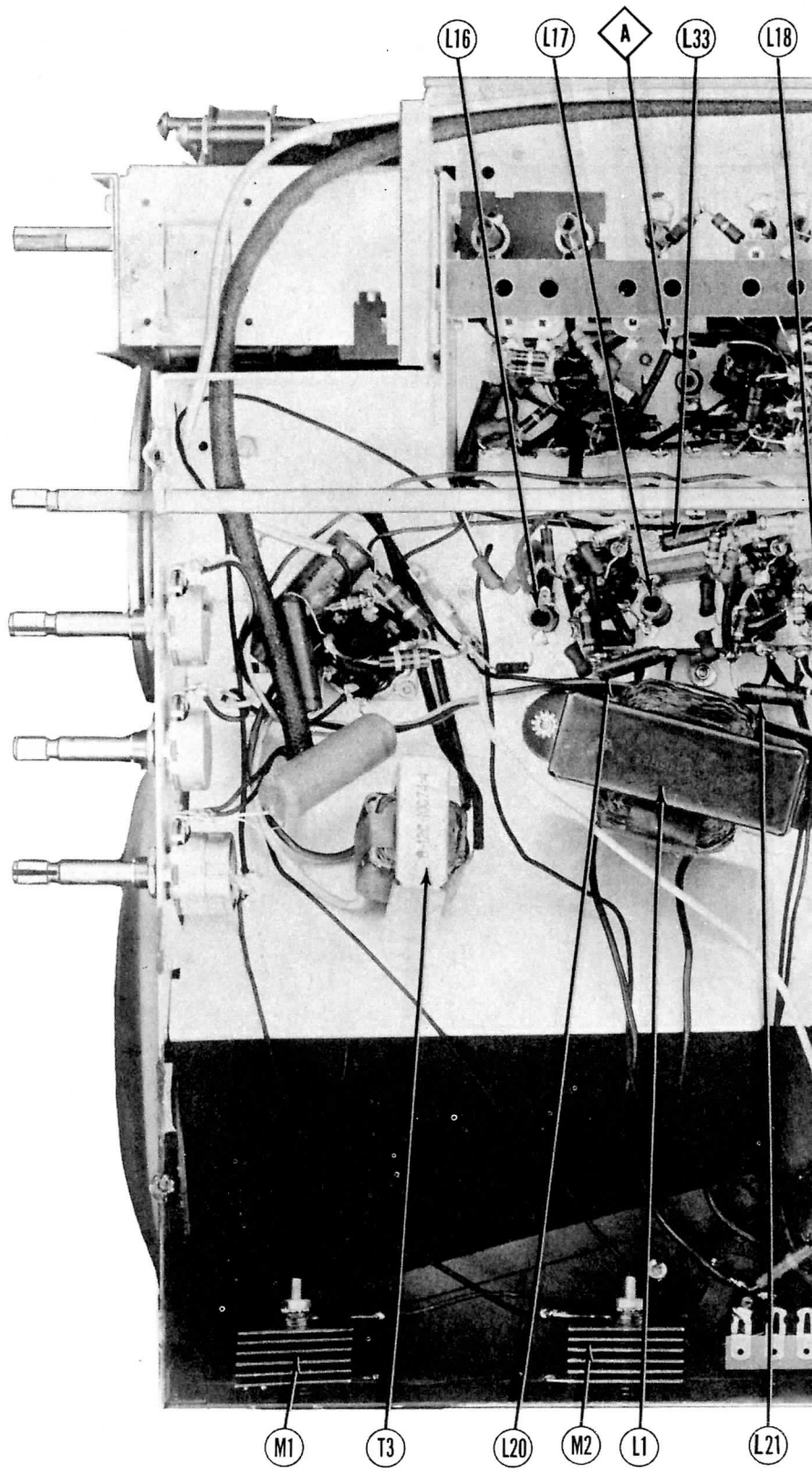


**RAYTHEON  
MODELS 7DX21, 7DX22P, 18DX21A**

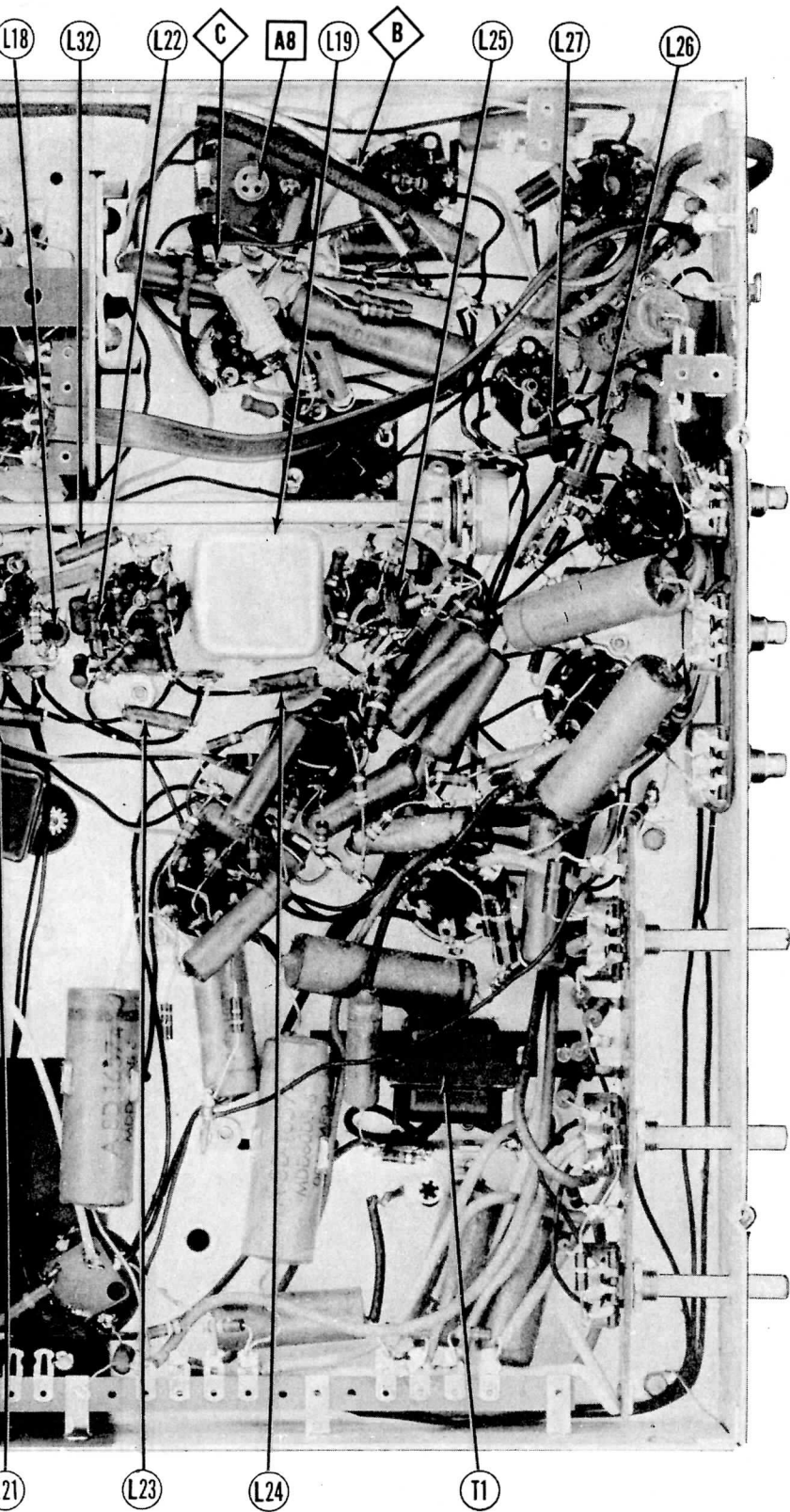


CHASSIS TOP VIEW

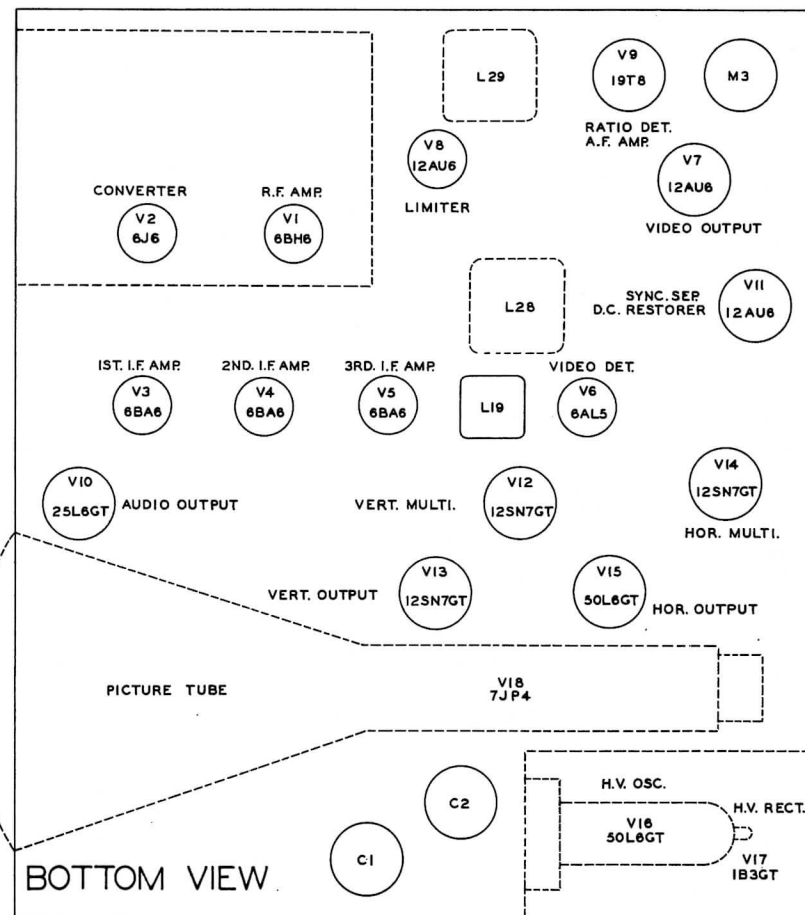
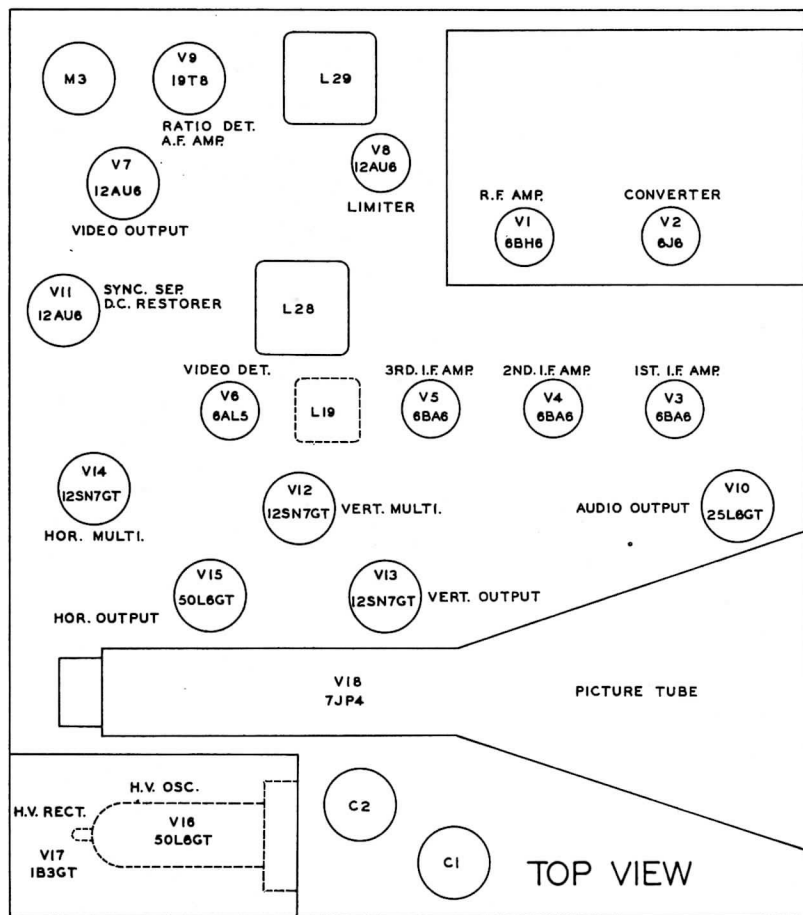




CHASSIS BOTTOM VIEW-TRANS., INDUCT



DUCTOR AND ALIGNMENT IDENTIFICATION



TUBE PLACEMENT CHART

RAYTHEON  
 MODELS 7DX21, 7DX22P, 18DX21A



# ALIGNMENT INSTRUCTIONS

**PRE- ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT**

Alignment of this receiver may be performed without removal of the picture tube or disabling the high voltage supply. When the receiver is placed on its side, care must be exercised not to damage the picture tube or to come in contact with the high voltage leads.

**VIDEO IF ALIGNMENT**

Alignment point A, where the IF signal is injected is accessible thru the large hole in the tuner shield on the underside of the tuner.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1. 47MMF	High side thru 47MMF to Point A. Low side to chassis.	23.0MC	9	Across contrast control (R4)	A1	Adjust for maximum deflection.
2. 47MMF	"	24.0MC	"	"	A2	"
3. 47MMF	"	26.4MC	"	"	A3	"
4. 47MMF	"	25.45MC	"	"	A4	"

**OVERALL VIDEO IF RESPONSE CHECK**

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

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
5. 47MMF	High side to Point A. Low side to chassis.	24MC (10MC Sweep)	26.75MC 22.25MC	9	Across contrast control (R4) with 10KΩ in series with Vert. Amp. lead. Shunt vertical input terminals with .001MFD capacitor.		If necessary, slightly retouch A1, A2, A3, A4 for proper response curve and placement of markers as per Fig 1.

**SOUND IF ALIGNMENT**

Short the antenna leads during alignment of the ratio detector circuit so extraneous noise pulses will not give erratic indications on the oscilloscope.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
6. .01MFD	Across contrast control (Control fully on)	4.5MC (1MC Sweep)	4.5MC	9	Vert. Amp. to Point A. Low side to B-.	A5,A6	Disconnect stabilizer cap (C4). Adjust for maximum amplitude and symmetry as per Fig 2.
7. .01MFD	"	"	"	"	Vert. Amp. to Point A. Low side to B-.	A7,A8	Reconnect stabilizer cap. Adjust A7 so 4.5MC marker is at center of pattern as per Fig 3. Adjust A8 for maximum amplitude and straightness of diagonal line.

**TUNER ALIGNMENT**

Pre-set the tuner cores and trimmers as indicated in figures 4 and 5 before attempting alignment of the tuner. If Fig.5, the dimensions given are the distance from the screw head shoulder to chassis. When making the adjustments of the station selector screws do not force the screw at any time. The "in" position is reached when the black shuttle bar holding the core slugs reaches the top limit of its travel. It is possible to force the screw in farther than this point but this results in jamming the tuner.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
8. Two 125Ω carbon res.	Across antenna terminals with 125Ω resistor in each generator lead.	Approx. 85MC (10MC Sweep)	Off	6	Across contrast control (R4) with 10KΩ in Vert. Amp. lead. Shunt vert. input terminals with .001MFD capacitor.	A9,A10	Turn channel 6 station selector screw 1 full turn from its maximum "in" position. Adjust A9 and A10 for maximum amplitude and symmetry as per Fig 6.
9. "	"	"	83.25MC	"	"	All	Adjust All so marker is 50% down on the low frequency slope on curve. If necessary, repeat step 8.
10. "	"	Approx. 79MC (10MC Sweep) Approx. 69MC (10MC Sweep)	77.25MC 67.25MC	5 4	"		Check the response on all low band channels. It may be necessary to forfeit some of the response on one channel to improve that of another by slight retouching of A9 and A10.
11. "	"	Approx. 57MC (10MC Sweep)	61.25MC	3	"		
		Approx. 57MC (10MC Sweep)	55.25MC	2	"		If it is possible to move video marker to 50% point on the curve by the station-selector screw (with screw at least 2 turns from its maximum "out" position) the low band is properly aligned.

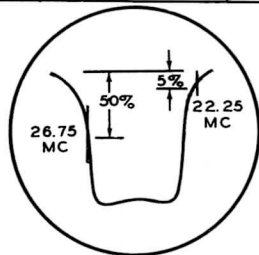


FIG. 1

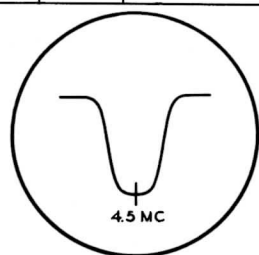


FIG. 2

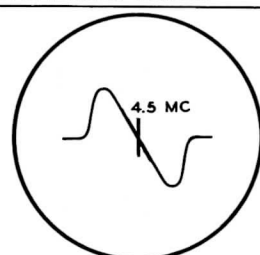
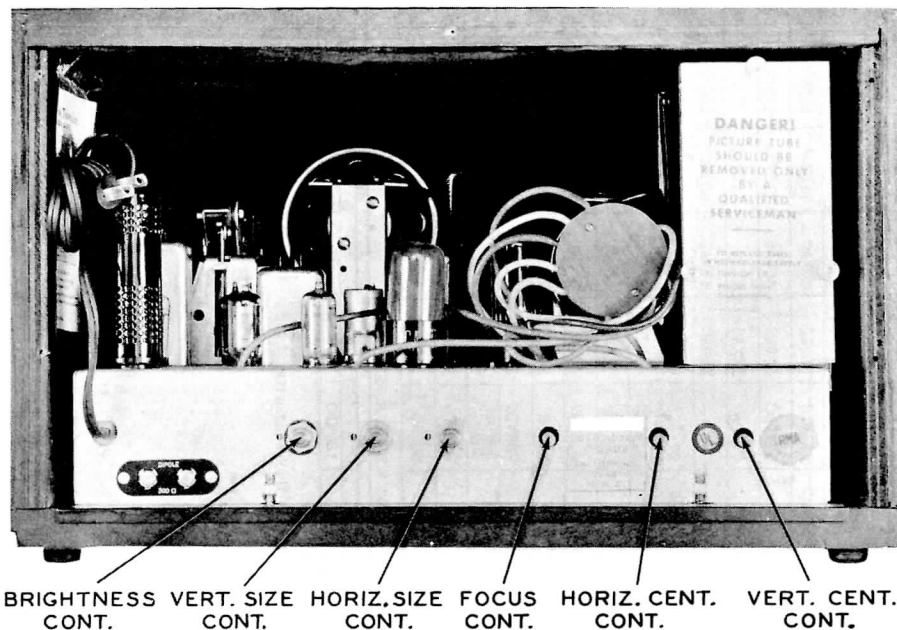
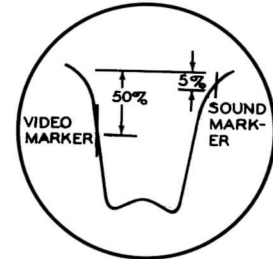
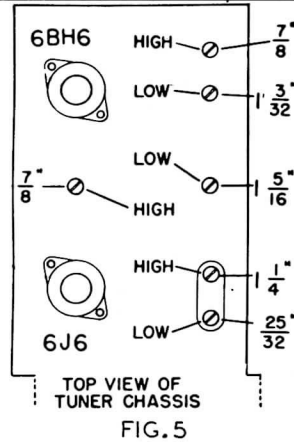
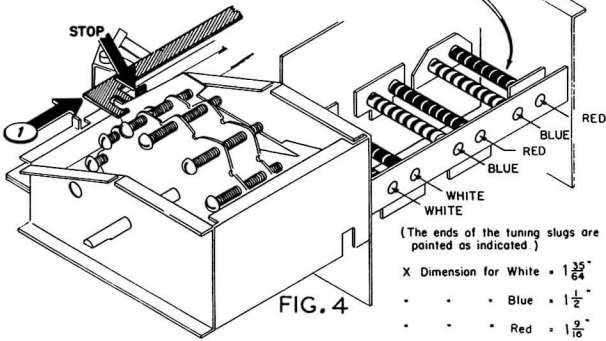
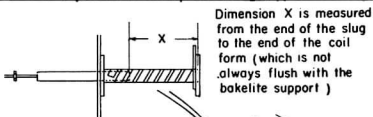


FIG. 3

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS	
12.	"	"	Approx. 213MC (10MC Sweep)	Off	13	"	A12, A13	Turn channel 13 station selector screw 3/4 turn from it maximum "in" position. Adjust A12 and A13 for maximum amplitude and symmetry as per Fig 6.
13.	"	"	"	211.25MC	"	"	A14	Adjust A14 so marker is 50% down on the low frequency slope on curve. If necessary, repeat step 12.
14.	"	"	Approx. 207MC (10MC Sweep) Approx. 201MC (10MC Sweep) Approx. 195MC (10MC Sweep) Approx. 189MC (10MC Sweep) Approx. 183MC (10MC Sweep)	205.25MC 199.25MC 193.25MC 187.25MC 181.25MC	12 11 10 9 8	"		Check response on all high band channels. If necessary, retouch A12 and A13 for compromise to give best overall response curve.
15.	"	"	Approx. 177MC (10MC Sweep)	175.25MC	7	"		If it is possible to move video carrier marker to 50% point on response curve by adjustment of channel 7 station-selector screw (screw at least one full turn in from its maximum "out" position), the high band is properly aligned.

**TO ADJUST TUNING SLUGS —**

1 - Push arm indicated to the right with respect to the picture and hold firmly against STOP while making adjustment.



CABINET-REAR VIEW

RAYTHEON  
MODELS 7DX21, 7DX22P, 18DX21A

## 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	-.1VDC	.4VDC	85VAC	90VAC	100VDC	125VDC	0V					
V 2	6J6	125VDC	85VDC	95VAC	90VAC	1.5 VDC	0V	2VDC					
V 3	6BA6	-.1VDC	1.1VDC	65VAC	58VAC	115VDC	115VDC	1.1VDC					
V 4	6BA6	-.1VDC	1.1VDC	58VAC	50VAC	115VDC	115VDC	1.1VDC					
V 5	6BA6	0V	1.7VDC	50VAC	45VAC	115VDC	115VDC	1.7VDC					
V 6	6AL5	0V	0V	12VAC	6VAC	4.2VDC	0V	-4VDC					
V 7	12AU6	0V	0V	35VAC	45VAC	40VDC	125VDC	0V					
V 8	12AU6	-.4VDC	0V	35VAC	24VAC	115VDC	115VDC	0V					
V 9	19T8	-.4VDC	-.6VDC	-.4VDC	24VAC	6VAC	-.6VDC	0V	-.4VDC	43VDC			
V 10	25L6GT	0V	90VAC	93VDC	100VDC	0V	0V	65VAC	8VDC				
V 11	12AU6	0V	4.5VDC	45VAC	55VAC	87VDC	125VDC	4.5VDC					
V 12	12SN7GT	0V	80VDC	2.5VDC	2.5VDC	31VDC	2.5VDC	36VAC	24VAC				
V 13	12SN7GT	0V	295VDC	16VDC	0V	265VDC	16VDC	45VAC	36VAC				
V 14	12SN7GT	-1VDC	30VDC 85VDC	4.2VDC	0V	105VDC	4.2VDC	24VAC	12VAC				
V 15	50L6GT	0V	60VAC	125VDC	125VDC	-9.2VDC	0V	110VAC	1VDC				
V 16	50L6GT	0V	60VAC	130VDC	100VDC	-13.5 VDC	0V	6VAC	0V				
V 17	1B3GT	* DO NOT MEASURE											
	PINS	1	2	3	4	5	6	7	8	9	10	11	14
V18	7JP4	6VAC	120VDC	4.5VDC	0V	*	0V	*	*	*	*	*	0V

\* Do Not Measure.

‡ TAKEN WITH VACUUM TUBE VOLTMETER

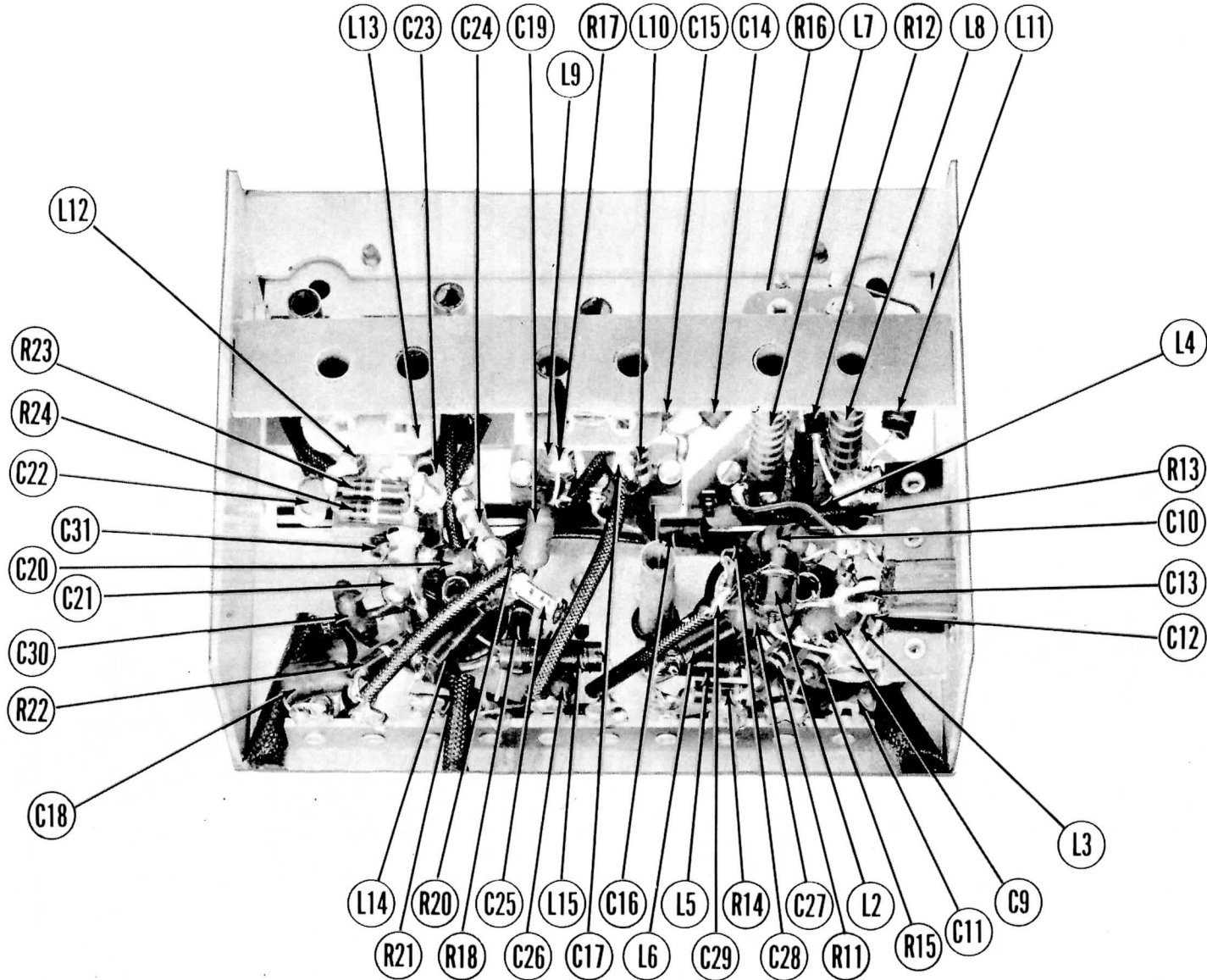
RESISTANCE READINGS

Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9			
V 1	6BH6	900KΩ	68Ω	42Ω	38Ω	†5.5KΩ	†1000Ω	5.6KΩ					
V 2	6J6	†1000Ω	†5.5KΩ	39Ω	38Ω	10KΩ	10KΩ	220Ω					
V 3	6BA6	1 Meg.	5.6KΩ	33Ω	31Ω	†1000Ω	†1000Ω	82Ω					
V 4	6BA6	850KΩ	5.6KΩ	30Ω	28Ω	†1000Ω	†1000Ω	82Ω					
V 5	6BA6	3Ω	5.6KΩ	27Ω	24Ω	†1000Ω	†1000Ω	82Ω					
V 6	6AL5	1.5Ω	100KΩ	4.5Ω	1.5Ω	3.3KΩ	Inf.	5KΩ					
V 7	12AU6	7Ω	1.5Ω	28Ω	36Ω	†8.2KΩ	†63Ω	1.5Ω					
V 8	12AU6	470KΩ	0Ω	28Ω	19Ω	†1000Ω	†1000Ω	0Ω					
V 9	19T8	Inf.	33KΩ	Inf.	19Ω	1.5Ω	33KΩ	0Ω	10 Meg.	†470KΩ			
V 10	25L6GT	Inf.	37Ω	†800Ω	†620Ω	470KΩ	0Ω	33Ω	180Ω				
V 11	12AU6	1 Meg.	22KΩ	36Ω	44Ω	†220KΩ	†63Ω	22.2KΩ					
V 12	12SN7GT	10KΩ	†18KΩ	1000Ω	350KΩ	17 Meg.	1000Ω	20Ω	13Ω				
V 13	12SN7GT	10 Meg.	25.6 Meg.	68KΩ	10 Meg.	25-6 Meg.	68KΩ	24Ω	20Ω				
V 14	12SN7GT	100KΩ	†300KΩ 150KΩ	1.2KΩ	18KΩ	†8.2KΩ	1.2KΩ	13Ω	4.5Ω				
V 15	50L6GT	Inf.	40Ω	†100Ω	†100Ω	2.2 Meg	0Ω	58Ω	62Ω				
V 16	50L6GT	Inf.	40Ω	†150Ω	†2.7KΩ	15KΩ	Inf.	1.5Ω	0Ω				
V 17	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP 100KΩ			
	PINS	1	2	3	4	5	6	7	8	9	10	11	14
V18	7JP4	1.5Ω	†180KΩ	22KΩ	Inf.	25 Meg.	Inf.	40 Meg.	40 Meg.	35 Meg	42 Meg	40 Meg	0Ω

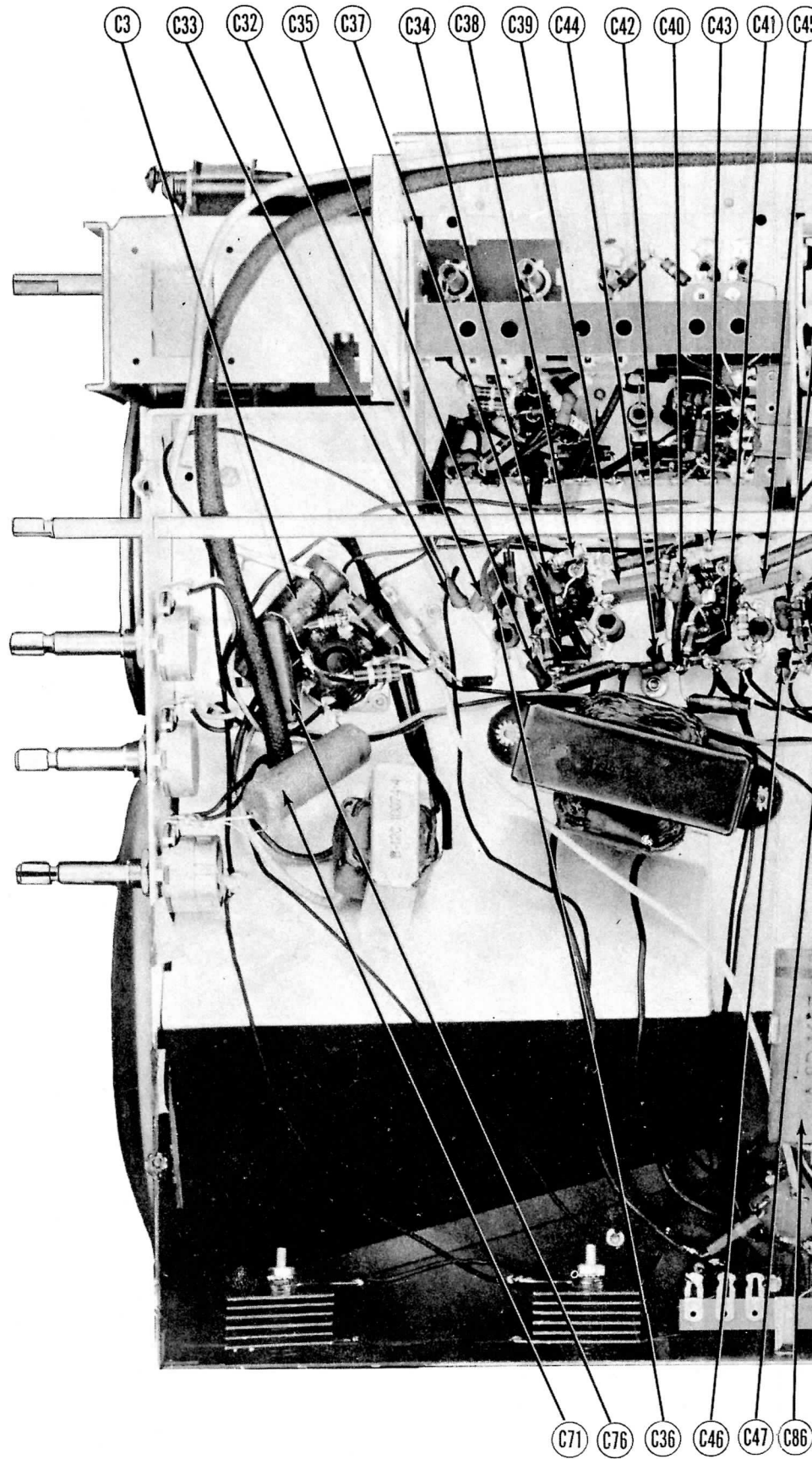
† Measured From Output Of M1.

- DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
- Pin numbers are counted in a clockwise direction on bottom of socket.
- Measured values are from socket pin to common negative unless otherwise stated.

- Line voltage maintained at 117 volts for voltage readings.
- Front panels controls set at minimum.
- Where readings may vary according to the setting of the service controls, both minimum and maximum readings are given.



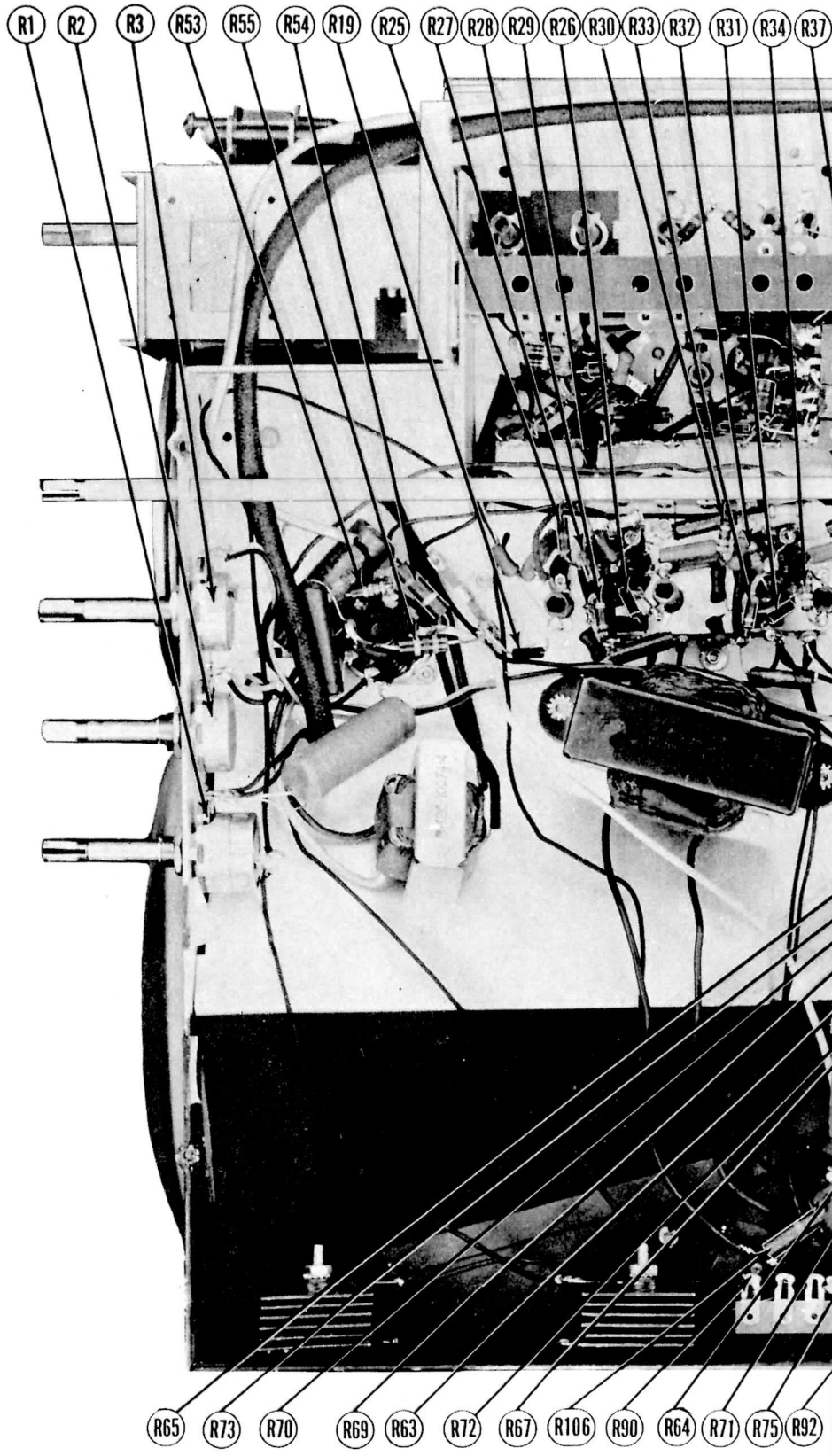
RF TUNER-BOTTOM VIEW



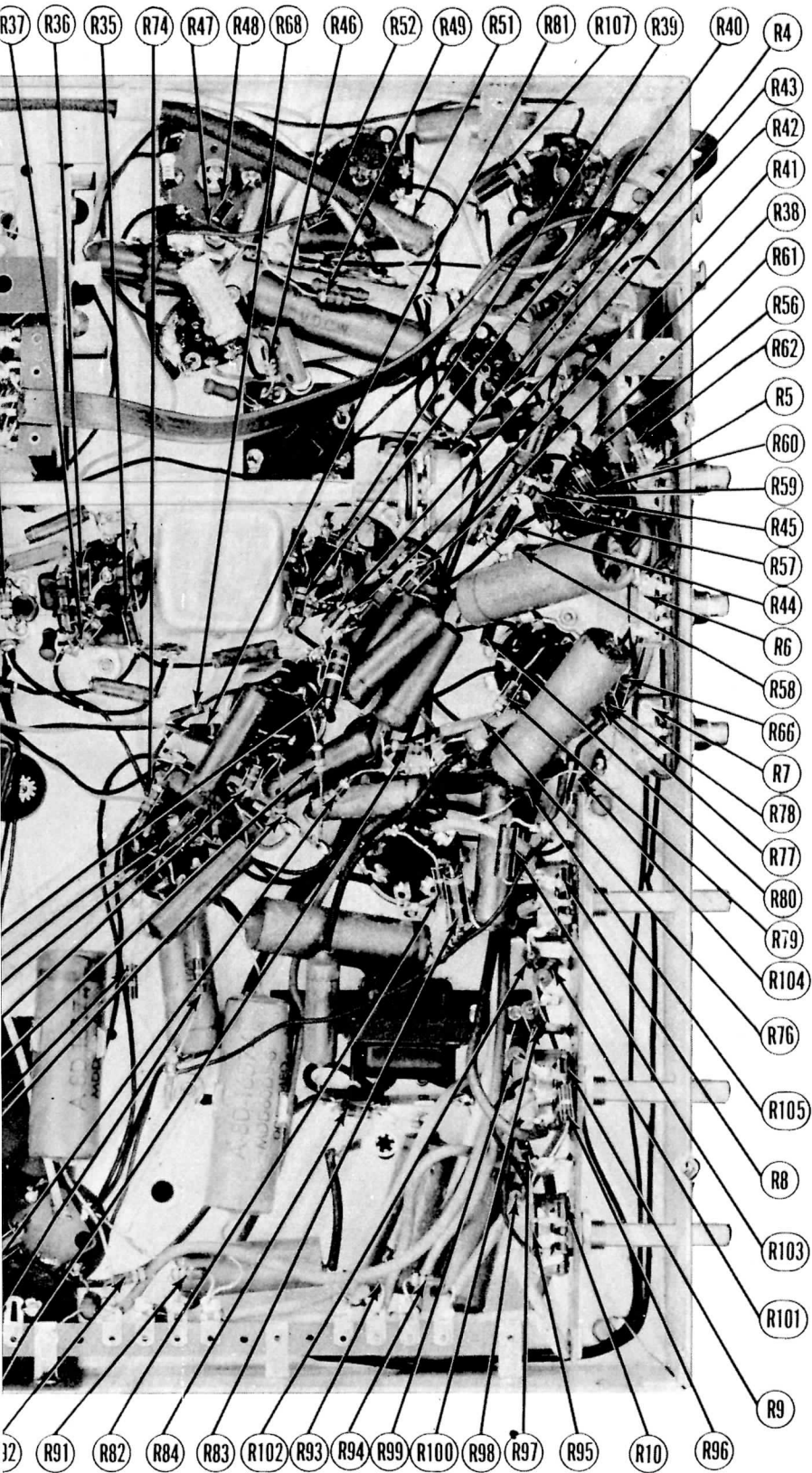
CHASSIS BOTTOM VIEW-CA



CAPACITOR IDENTIFICATION

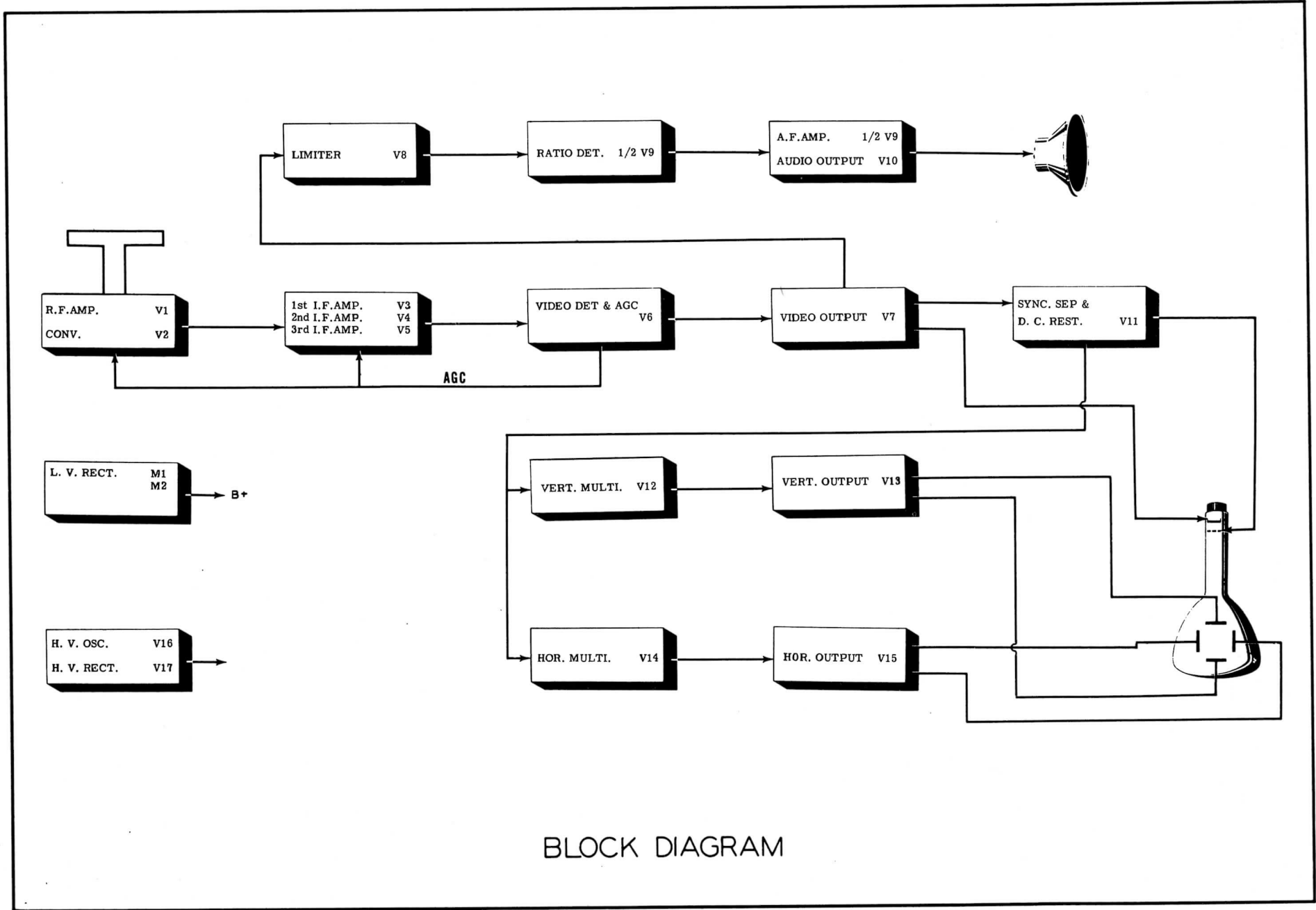


CHASSIS BOTTOM VIEW-RE



RESISTOR IDENTIFICATION





BLOCK DIAGRAM

RAYTHEON  
MODELS 7DX21, 7DX22P, 18DX21A

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		BELMONT PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6BH6	6BH6	7CM	
V2	Converter	6J6	6J6	7BK	
V3A	1st IF Amd.	6BA6	6BA6	7BK	Used in models 7DX21 and 18DX21A
V3B	1st Video IF	6AG5	6AG5	7BD	Used in model 7DX22P
V4A	2nd Video IF	6AG5	6BA6	7BK	Used in models 7DX21 and 18DX21A
V4B	2nd Video IF	6AG5	6AG5	7BD	Used in model 7DX22P
V5A	3rd Video IF	6BA6	6BA6	7BK	Used in models 7DX21 and 18DX21A
V5B	3rd Video IF	6AG5	6AG5	7BD	Used in model 7DX22P
V6	Detector	6AL5	6AL5	6BT	
V7	Video Output	12AU6	12AU6	7BK	
V8	Limiting	12AU6	12AU6	7BK	
V9	Ratio Det.-AF Amp.	19T8	19T8	9E	
V10	Audio Output	25L6GT	25L6GT	7AC	
V11	Sync. Sep.-DC Rest.	12AU6	12AU6	7BK	
V12	Vert. Multi-vibrator	12SN7GT	12SN7GT	8BD	
V13	Vert. Output	12SN7GT	12SN7GT	8BD	
V14	Hor. Multi-vibrator	12SN7GT	12SN7GT	8BD	
V15	Hor. Output	50L6GT	50L6GT	7AC	
V16	HV Osc.	50L6GT	50L6GT	7AC	
V17	HV Rectifier	1B3GT	1B3GT	3C	
V18	Picture Tube	7JP4	7JP4	14G	

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	BELMONT PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.		
C1	120	150	B-8H-15664	AFH24D				TVL-44	Filter
C2A	120	150	B-8C-15948	AFH2412D4A	UP 55515C†				Filter
B	80	150							Filter
C	20	25							Filter
C3	10	150	A-8C-11495	PRS150/12	BR1015			UT-121	Output Cathode Bypass
C4	10	50	A-8C-13132	PRS50/10	BR105			UT-121	Output Decoupling
C5	10	50	A-8C-13132	PRS50/10	BR105			TVA-14	Stabilizing Cap
C6	10	150	A-8C-11495	PRS150/12	BR1015			TVA-14	V. Amp. Cath. Bypass
C7	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21	UT-121	Dyn. Limiter Cath. *
C8	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		Ant. Coupling
C9	220		C-8G-16045			GP2K-200			Ant. Coupling
C10	220		C-8G-16045			GP2K-200			RF Coupling
C11	1000		C-8G-13201			GP2L-001			RF Coupling
C12	1000		C-8G-13201			GP2L-001			RF Bypass
C13	1000		C-8G-13201			GP2L-001			RF Supp. Bypass
C14	.5		A-8G-12495			GP2L-001			RF Screen Bypass
			-7						RF Coupling
C15	.5		A-8G-12495						RF Coupling
			-7						RF Coupling
C16	1		A-8G-12495						RF Coupling
			-2						RF Coupling
C17	1000		C-8G-13201			GP2L-001			RF Plate Dec.
C18	1000		C-8G-13201			GP2L-001			RF Bypass
C19	1000		C-8G-13201			GP2L-001			RF Bypass
C20	2.2		A-8G-12495						Osc. Coupling
			-4						Osc. Coupling
C21	51		C-8G-11891						Osc. Feedback
C22	7		C-8G-15224						Fixed Trimmer
C23	51		C-8G-11891						Osc. Grid Cap
C24	2.5		C-8G-15737						Osc. Feedback
C25	10		C-8G-11789						Osc. Feedback
C26	1000		C-8G-13201			NP0K-10			RF Bypass
C27	1000		C-8G-13201			GP2L-001			RF Bypass
C28	220		C-8G-16045			GP2K-200			RF Bypass
C29	220		C-8G-16045			GP2K-200			RF Fil. Bypass
C30	220		C-8G-16045			GP2K-200			RF Fil. Bypass
C31	220		C-8G-16045			GP2K-200			RF Fil. Bypass
C32	47		C-8F3-109	1468-00005	5W5Q5	GP1K-50	1FM-45		Conv. Fil. Bypass
C33	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		IF Coupling
C34	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		Conv. Plate Dec. §
C35	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		AGC Filter §
C36	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		RF Bypass §
C37	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		1st IF Supp. Bypass *
C38	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		1st IF Decoupling
C39	47		C-8F3-109	1468-00005	5W5T1	GP1K-100	1FM-51		1st IF Fil. Bypass
C40	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		IF Coupling
C41	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		AGC Filter §
C42	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		2nd IF Decoupling
C43	1000		C-8G-11734	1468-0001	5W5T1	GP1K-100	1FM-51		2nd IF Supp. Bypass *
C44	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		2nd IF Fil. Bypass
C45	47		C-8F3-109	1468-00005	5W5Q5	GP1K-50	1FM-45		RF Bypass
C46	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		RF Coupling
C47	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		RF Bypass
C48	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		3rd IF Cath. Bypass
C49	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		3rd IF Supp. Bypass *
C50	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		3rd IF Decoupling
C51	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		RF Bypass
C52	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		RF Bypass §
C53	1000		C-8G-11734	1468-0001	5W5T1	GP1K-100	1FM-51		3rd IF Fil. Bypass
C54	.01	200	C-8D-11738	P488-01	GT2S1	GP2L-335-01	TM-11		AGC Filter
C55	.1	200	C-8D-10771	P288-1	GT2P1				AGC Filter
C56	5000		A-8G-13962	1467-005	1D5D5	GP2M-005	1FM-25		RF Bypass
C57	5		C-8G-12166	1468-000005	5W5V5	V Diode	MS-55		V Diode Filter
C58	1000		C-8G-13201	1468-001	1W5D1	GP2L-001	1FM-21		DAGC Decoupling
C59	1000		C-8G-11734	1468-0001	5W5T1	GP1K-100	1FM-51		V DET-AGC Fil. Bypass
C60	.25	200	C-8D-10775	P488-25	GT2P25				Video Coupling
C61	.05	200	C-8D-10770	P288-05	GT2S5				Video Coupling
C62	.01	200	C-8D-11738	P488-01	GT2S1	GP2L-335-01	TM-11		Pic. Tube Cath. Dec.
C63	.47	500	C-8F3-109	1468-00005	5W5Q5	GP1K-50	1FM-45		S. IF Coupling
C64	1500		C-8G-11731	1467-0015	1W5D15	GP2L-0015	1FM-215		S. IF Decoupling
C65	330	500	C-8F3-119	1468-0003	5W5T3	GP2K-300	1FM-335		Diode Load Cap
C66	.002	800	C-8D-10778	P688-002	GT6D2	GP2M-002	TM-22		De-emphasis
C67	.01	200	C-8D-11738	P488-01	GT2S1	GP2L-335-01	TM-11		Audio Coupling

ITEM No.	RATING		REPLACEMENT DATA		REPLACEMENT DATA
	CAP.	VOLT	BELMONT PART No.	AEROVOX PART No.	
C68	1500		C-8G-11731	1467-0015	1W5
C69	10			1469-00001	5R5
C70	1000		C-8G-13201	1468-001	1W5
C71	.1	400	C-8D-10760	P488-1	GT4
C72	.01	200	C-8D-11738	P488-01	GT2
C73	.01	200	C-8D-11738	P488-01	GT2
C74	220		C-8G-11733	1468-00025	5W5
C75	.01	200	C-8D-11738	P488-01	GT2
C76	.03	200	C-8D-10992	P488-03	GT4
C77	.05	200	C-8D-10770	P288-05	GT2
C78	.005	600	C-8D-10935	P688-005	GT6
C79	.01	200	C-8D-11738	P488-01	GT6
C80	.02	200	C-8D-11304	P488-02	GT2
C81	.02	1600		P1688-02	GT1
C82	.02	1600		P1688-02	GT1
C83	.0014	1600		P1688-0015	
C84	.0008	1600			
C85	.01	1600	B-8D-13693	P1688-01	GT1
C86	.005	6000	B-8D-13549	7584-005	DST -60
C87	.005	6000	B-8D-13549	7584-005	DST -60
C88	.1	600	C-8D-10983	P638-1	GT6
C89	38	500	C-8F3-111		
C90	330	500	C-8F3-119		
C91	750	500	C-8F3-246	1469-00075	
C92	750	500	C-8F3-246	1469-00075	
C93	.1	200	C-8D-10771	P288-1	GT2
C94	.01	200	C-8D-11738	P488-01	GT2
C95	.001	6000	B-8D-13523	7584-001	DST -60
C96	.001	6000	B-8D-13523	7584-001	DST -60
C97	330	500	C-8F3-119		
C98	.01	200	C-8D-11738	P488-01	GT2
C99	.02	200	C-8D-11304	P488-02	GT2
C100	470	500	C-8F3-121	1469-0005	5R5
C101	10000		A-8G-16019	P488-01	GT4
C102	1000		C-8G-13201	1468-001	1W5
C103	.001	6000	B-8D-13523		
C104	.001	6000	B-8D-13523		
C105	.1	400	C-8D-10760	P488-1	GT4
C106	1000		C-8G-13201	1468-001	1W5
C107	.01	200	C-8D-11738	P488-01	GT2
C108	1000		C-8D-11738	1468-001	1W5

\* Not Used in All Models.  
† Parallel Sections To Obtain Desired Capacity.  
‡ Model A-7DX22P uses .005 Mfd. in this app.

ITEM No.	RATING		REPLACEMENT DATA	
	RESIST. MEG.	WATTS	BELMONT PART No.	IRC PART No.
R1A	1 Meg.	1/2	A-10A15666	Q13-137
B	Shaft		Not Req.	Not Req.
C	Switch		Not Req.	Not Req.
R2A	250KΩ	1/2	B-10B15671	Q11-130
B	Shaft		Not Req.	Not Req.
R3A	100KΩ	1/2	B-10B15670	Q11-123
B	Shaft		Not Req.	Not Req.
R4A	5000Ω	1/2	A-10B15672	Q11-114
B	Shaft		Not Req.	Not Req.
R5	50KΩ	1/2	A-10B15672	Q11-123
R6	2 Meg.	1/2	A-10B16250	Q11-139
R7	250KΩ	1/2	A-10B15614	Q11-130
R8	2 Meg.	1/2	B-10B15627	
R9	2 Meg.	1/2	B-10B15627	
R10	2 Meg.	1/2	B-10B15627	

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	BELMONT PART No.	IRC PART No.
R11	100KΩ	1/2	C-9B1-86	
R12	5600Ω	1/2	C-9B1-71	
R15	1000Ω	1/2	C-9B1-13	
R14	68Ω	1/2	C-9B1-48	
R15	5600Ω	1/2	C-9B1-71	
R16	5600Ω	1/2	C-9B1-71	
R17	10KΩ	1/2	C-9B1-74	
R18	10KΩ	1/2	C-9B1-74	
R19	1000Ω	1/2	C-9B1-13	
R20	10KΩ	1/2	C-9B1-74	
R21	220Ω	1/2	C-9B1-54	
R22	5600Ω	1/2	C-9B1-71	
R23	10Ω	1/2	C-9B1-38	
R24	10Ω	1/2	C-9B1-38	
R25	10KΩ	1/2	C-9B1-19	
R26	1000Ω	1/2	C-9B1-13	
R27	5600Ω	1/2	C-9B1-71	
R28	82Ω	1/2	C-9B1-133	
R29	220KΩ	1/2	C-9B1-27	BTS-220
R30	47KΩ	1/2	C-9B1-82	
R31	1000Ω	1/2	C-9B1-13	
R32	5600Ω	1/2	C-9B1-71	
R33	82			

# PARTS LIST AND DESCRIPTIONS

## CAPACITORS (CONT.)

NOTES
s 7DX21 and 18DX21A 7DX22P
s 7DX21 and 18DX21A 7DX22P
s 7DX21 and 18DX21A 7DX22P

ITEM No.	RATING		REPLACEMENT DATA					IDENTIFICATION CODES AND INSTALLATION NOTES
	CAP.	VOLT	BELMONT PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	
C68	1500		C-8G-11731	1467-0015	1W5D15	GP2L-0015	LFM-215	RF Bypass
C69	1000		C-8G-13201	1469-00001	5R5Q1	NPOK-10	MS-41	Fixed Trimmer *
C70	1000		C-8G-10760	1468-001	1W5D1	GP2L-001	LFM-21	S. IF Coupling *
C71	.1	400	C-8D-11738	P488-1	GT4P1	TM-1	TM-1	Line Isolation
C72	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	Line Isolation
C73	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	Audio Coupling
C74	.220		C-8G-11733	1468-00025	5W5T25	GP2K-250	LFM-325	AF Plate Bypass
C75	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	Audio Coupling
C76	.03	200	C-8D-10992	P488-03	GT4S3	TM-13	TM-13	Output Plate Bypass
C77	.05	200	C-8D-10770	P288-05	GT2S5	TM-15	TM-15	Sync. Coupling
C78	.005	600	C-8D-10935	P688-005	GT6D5	GP2M-005	TM-25	Integrator Net
C79	.01	200	C-8D-11738	P488-01	GT6S1	GP2-335-01	TM-11	Integrator Net
C80	.02	200	C-8D-11304	P488-02	GT2S2	TM-12	TM-12	Vert. Mult. Feedback
C81	.02	1600		P1688-02	GT16S2	MB-12	MB-12	Vert. Discharge
C82	.02	1600		P1688-02	GT16S2	MB-12	MB-12	Vert. Coupling
C83	.0014	1600		P1688-0015	P1688-0015			Voltage Divider
C84	.0008	1600						Voltage Divider *
C85	.01	1600	B-8D-13693	P1688-01	GT16S1	MB-11	MB-11	Vert. Coupling
C86	.005	6000	B-8D-13549	7584-005	D5TH	TVM-256	TVM-256	Vert. Coupling
C87	.005	6000	B-8D-13549	7584-005	D5TH	TVM-256	TVM-256	Vert. Coupling
C88	.1	600	C-8D-10983	P688-1	GT6F1	TM-1	TM-1	Vert. Output Cath. Byp.
C89	.58	500	C-8F3-111					Hor. Sync. Coupling
C90	.330	500	C-8F3-119					Hor. Mult. Feedback
C91	.750	500	C-8F3-246	1469-00075				Hor. Discharge
C92	.750	500	C-8F3-246	1469-00075				Hor. Coupling
C93	.1	200	C-8D-10771	P288-1	GT2P1	TM-1	TM-1	Hor. Output Cath. Byp.
C94	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	Hor. Feedback
C95	.001	6000	B-8D-13523	7584-001	D5TH	TVM-216	TVM-216	Hor. Coupling
C96	.001	6000	B-8D-13523	7584-001	D5TH	TVM-216	TVM-216	Hor. Coupling
C97	.330	500	C-8F3-119					HV Osc. Grid Cap
C98	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	HV Osc. Decoupling
C99	.02	200	C-8D-11304	P488-02	GT2S2	TM-12	TM-12	HV Screen Byp.
C100	.470	500	C-8F3-121	1469-00005	5R5T5	MS-35	MS-35	Fixed Trimmer
C101	.10000		A-8G-16019	P488-01	GT4S1	GP2-335-01	TM-11	RF Bypass
C102	.1000		C-8G-13201	1468-001	1W5D1	GP2L-001	LFM-21	RF Bypass
C103	.001	6000	B-8D-13523					HV Filter
C104	.001	6000	B-8D-13523					HV Filter
C105	.1	400	C-8D-10760	P488-1	GT4P1	TM-1	TM-1	HV Power Supply Isol.
C106	.1000		C-8G-13201	1468-001	1W5D1	GP2L-001	LFM-21	RF Bypass
C107	.01	200	C-8D-11738	P488-01	GT2S1	GP2-335-01	TM-11	Line Filter
C108	.1000		1468-001		1W5D1	GP2L-001	LFM-21	RF Bypass *

\* Not Used In All Models.  
 † Parallel Sections To Obtain Desired Capacity.  
 ‡ Model A-7DX22P uses .005 Mfd. in this application.

### CONTROLS

ITEM No.	RATING		REPLACEMENT DATA			INSTALLATION NOTES
	RESIST-ANCE	WATTS	BELMONT PART No.	IRC PART No.	CLAROSTAT PART No.	
R1A	1 Meg.	1/2	A-10A15666	Q13-137	AM-63-Z	Volume Control
B	Shaft		Not Req.	Not Req.	KSS-3	Attach to R1A Per Instructions
C	Switch		Not Req.	76-1	SW-A	Attach to R1A Per Instructions
R2A	250KΩ	1/2	B-10B15671	Q11-130	AM-55-S	Vert. Hold Control
B	Shaft		Not Req.	Not Req.	KSS-3	Attach to R2A Per Instructions
R3A	100KΩ	1/2	B-10B15670	Q11-128	AM-49-S	Horiz. Hold Control
B	Shaft		Not Req.	Not Req.	KSS-3	Attach to R3A Per Instructions
R4A	5000Ω	1/2	A-10B15272	Q11-114	AM-19-S	Contrast Control
B	Shaft		Not Req.	G4	DFS-4	Attach to R4A Per Instructions
R5	50KΩ	1/2	A-10B15672	Q11-123	M-44-S	Brightness Control
R6	2 Meg.	1/2	A-10B16250	Q11-139	M-83-S	Vert. Size Control
R7	250KΩ	1/2	A-10B15614	Q11-130	M-55-S	Horiz. Size Control
R8	2 Meg.	1/2	B-10B15627			Focus Control
R9	2 Meg.	1/2	B-10B15627			Horiz. Centering Control
R10	2 Meg.	1/2	B-10B15627			Vert. Centering Control

### RESISTORS

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	BELMONT PART No.	IRC PART No.	
R11	100KΩ	1/2	C-9B1-86		RF Grid
R12	5600Ω	1/2	C-9B1-71		RF Plate
R13	1000Ω	1/2	C-9B1-13		RF Screen Decoupling
R14	68Ω	1/2	C-9B1-48		RF Cathode
R15	5600Ω	1/2	C-9B1-71		RF Suppressor Grid
R16	5600Ω	1/2	C-9B1-71		RF Coil Shunt
R17	10KΩ	1/2	C-9B1-74		Mixer Grid Coil Shunt
R18	10KΩ	1/2	C-9B1-74		Mixer Grid
R19	1000Ω	1/2	C-9B1-13		Mixer Plate Decoupl.
R20	10KΩ	1/2	C-9B1-74		Osc. Grid
R21	220Ω	1/2	C-9B1-54		Osc. Cathode
R22	5600Ω	1/2	C-9B1-71		Osc. Plate
R23	10Ω	1/2	C-9B1-38		Parasitic Supp.
R24	10Ω	1/2	C-9B1-38		Parasitic Supp.
R25	10KΩ	1/2	C-9B1-19		1st IF Grid
R26	1000Ω	1/2	C-9B1-13		1st IF Decoupl.
R27	5600Ω	1/2	C-9B1-71		1st IF Suppressor Grid
R28	82Ω	1/2	C-9B1-133		1st IF Cathode
R29	220KΩ	1/2	C-9B1-27	BTS-220K	AGC Network
R30	47KΩ	1/2	C-9B1-82		2nd IF Grid
R31	1000Ω	1/2	C-9B1-13		2nd IF Decoupl.
R32	5600Ω	1/2	C-9B1-71	BTS-5600	2nd IF Suppressor Grid
R33	82Ω	1/2	C-9B1-133		2nd IF Cathode
R34	47KΩ	1/2	C-9B1-82		2nd IF Transformer Shunt
R35	1000Ω	1/2	C-9B1-13		3rd IF Decoupl.
R36	5600Ω	1/2	C-9B1-71		3rd IF Suppressor Grid
R37	68Ω	1/2	C-9B1-131		3rd IF Cathode
R38	220KΩ	1/2	C-9B1-27	BTS-220K	AGC Network
R39	470KΩ	1/2	C-9B1-94	BTS-470K	AGC Network
R40	100KΩ	1/2	C-9B1-86	BTS-100K	AGC Diode Load

Note 1 - Not used in all models  
 Note 2 - Used in model 18DX21A  
 Note 3 - Model 7DX22P uses 22KΩ  
 Note 4 - Model 7DX22P uses 47Ω  
 Note 5 - Model 7DX22P uses 56KΩ  
 Note 6 - Model 7DX22P uses 390KΩ  
 Note 7 - Model 7DX22P uses 100KΩ  
 Note 8 - Model 7DX22P uses 3.3 M  
 Note 9 - Model 7DX22P uses 2.7 M

ITEM No.	RATING		BELMONT PART No.
	DC RESISTANCE	SEC.	
T1	270Ω Tap @ 160Ω & 110Ω		B-12M-15

ITEM No.	RATING		BELMONT PART No.
	DC RESISTANCE	SEC.	
T2	3Ω	SEC. 1 510Ω SEC. 2 0Ω	B-20-155

ITEM No.	RATING			
	IMPEDANCE	PRI.	DC RES.	SEC.
T3	2100Ω	3.5Ω	192Ω	.7Ω

**DESCRIPTIONS**

(T.)

**RESISTORS (CONT.)**

SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES	ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
			RESISTANCE	WATTS	BELMONT	IRC	
					PART No.	PART No.	
1FM-215	RF Bypass	R41	100KΩ	1/2	C-9B1-86	BTS-100K	Voltage Divider
MS-41	Fixed Trimmer *	R42	3500Ω	1/2	C-9B1-89	BTS-3300	Voltage Divider
1FM-21	S. IF Coupling *	R43	150KΩ	1/2	C-9B1-26	BTS-150K	Peaking Coil Shunt
TM-1	Line Isolation	R44	10KΩ	1/2	C-9B1-19	BTS-10K	Phase Correction
TM-11	Line Isolation	R45	8200Ω	1/2	C-9B1-73	BTS-8200	Video Output Plate
TM-11	Audio Coupling	R46	470KΩ	1/2	C-9B1-94		Limiter Grid
1FM-325	AF Plate Bypass	R47	1000Ω	1/2	C-9B1-13		Limiter Decoup.
TM-11	Audio Coupling	R48	22KΩ	1/2	C-9B1-78	BTS-22K	De-emphasis
TM-13	Output Plate Bypass	R49	33KΩ	1/2	C-9B1-80	BTS-33K	Disc. Diode Load
TM-15	Sync. Coupling	R50	35KΩ	1/2	C-9B1-80	BTS-33K	Limiter Diode Load
TM-25	Integrator Net	R51	10 Meg.	1/2	C-9B1-37	BTS-10 Meg.	AF Grid
TM-11	Integrator Net	R52	470KΩ	1/2	C-9B1-94	BTS-470K	AF Plate
TM-12	Vert. Mult. Feedback	R53	470KΩ	1/2	C-9B1-94	BTS-470K	Output Grid
MB-12	Vert. Discharge	R54	180KΩ	1	C-9B2-53	BW-1-180	Output Cathode
MB-12	Vert. Coupling	R55	560Ω	1	C-9B2-59	BW-1-560	Filter
	Voltage Divider	R56	1 Meg.	1	C-9B1-31	BTS-1 Meg.	Sync. Sep. Grid
	Voltage Divider *	R57	220KΩ	1	C-9B1-27	BTS-220K	Sync. Sep. Plate
MB-11	Vert. Coupling	R58	180KΩ	1	C-9B1-89	BTS-180K	Sync. Coupling Network
TVM-256	Vert. Coupling	R59	270Ω	1	C-9B1-55	BW-1-270	Sync. Sep. Cathode
		R60	22KΩ	1	C-9B1-78	BTS-22K	Sync. Sep. Cathode
TVM-256	Vert. Coupling	R61	47KΩ	1	C-9B1-82	BTS-47K	Voltage Divider
		R62	150KΩ	1	C-9B1-26	BTS-150K	Voltage Divider
TM-1	Vert. Output Cath. Byp.	R63	4700Ω	1	C-9B1-70	BTS-4700	Integrator
	Hor. Sync. Coupling	R64	4700Ω	1	C-9B1-70	BTS-4700	Integrator
	Hor. Mult. Feedback	R65	18KΩ	1	C-9B2-77	BTA-18K	Vert. MV Plate
	Hor. Discharge	R66	4.7 Meg.	1	C-9B1-35	BTS-4.7 Meg.	Vert. MV Plate
	Hor. Coupling	R67	330KΩ	1	C-9B1-92	BTS-330K	Vert. MV Grid
TM-1	Hor. Output Cath. Byp.	R68	1000Ω	1	C-9B1-159	BTS-1000-5%	Vert. MV Cathode
TM-11	Hor. Feedback	R69	6.8 Meg.	1	C-9B1-37	BTS-6.8 Meg.	Feedback
TVM-216	Hor. Coupling	R70	10 Meg.	1	C-9B1-37	BTS-10 Meg.	Vert. Output Grid
		R71	5.6 Meg.	1	C-9B1-249	BTS-5.6Meg-5%	Vert. Output Plate
		R72	5.6 Meg.	1	C-9B1-249	BTS-5.6Meg-5%	Vert. Output Plate
		R73	10 Meg.	1	C-9B1-37	BTS-10 Meg.	Vert. Output Grid
		R74	68KΩ	1	C-9B1-84	BTS-68K	Vert. Output Cathode
TM-11	HV Osc. Grid Cap	R75	560Ω	1	C-9B1-59	BTS-560	Differentiator
TM-12	HV Screen Byp.	R76	18KΩ	1	C-9B1-77	BTS-18K	Horiz. MV Grid
MS-35	Fixed Trimmer	R77	8200Ω	1	C-9B1-73	BTS-8200	Horiz. MV Plate
TM-11	RF Bypass	R78	47KΩ	1	C-9B1-82	BTS-47K	Horiz. MV Plate
1FM-21	RF Bypass	R79	100KΩ	1	C-9B1-86	BTS-100K	Horiz. MV Grid
TVM-216	HV Filter	R80	1200Ω	1	C-9B1-161	BTS-1200-5%	Horiz. MV Cathode
TM-1	HV Power Supply Isol.	R81	220KΩ	1	C-9B1-102	BTS-220K	Isolation
		R82	2.2 Meg.	1	C-9B1-102	BTS-2.2 Meg	Horiz. Output Grid
		R83	62Ω	1	C-9B2-130	BW-2-62	Horiz. Output Cathode
TM-11	Line Filter	R84	2.2 Meg.	1	C-9B1-76	BTS-2.2 Meg	Feedback
1FM-21	RF Bypass *	R85	15KΩ	1	C-9B1-76	BTS-15K	H V Osc. Grid
		R86	2700Ω	1	C-9B2-66	BTA-2700	H V Osc. Screen
		R87	220KΩ	1	C-9B1-27	BTS-220K	Isolation
		R88	100KΩ	1	C-9B2-25		H V Filter
		R89	100KΩ	1	C-9B1-25		H V Filament
		R90	1 Meg.	1	C-9B1-51	BTS-1 Meg.	Isolation
		R91	4.7 Meg.	1	C-9B1-35		Vert. Deflection Load
		R92	4.7 Meg.	1	C-9B1-35		Vert. Deflection Load
		R93	4.7 Meg.	1	C-9B1-35		Horiz. Deflection Load
		R94	4.7 Meg.	1	C-9B1-35		Horiz. Deflection Load
		R95	2.2 Meg.	1	C-9B1-102		Voltage Divider
		R96	2.2 Meg.	1	C-9B1-102		Voltage Divider
		R97	2.2 Meg.	1	C-9B1-102		Voltage Divider
		R98	2.2 Meg.	1	C-9B1-102		Voltage Divider
		R99	2.2 Meg.	1	C-9B2-239		Voltage Divider
		R100	2.2 Meg.	1	C-9B2-239		Voltage Divider
		R101	2.2 Meg.	1	C-9B2-239		Voltage Divider
		R102	2.2 Meg.	1	C-9B2-239		Voltage Divider
		R103	1.5 Meg.	1	C-9B2-235		Voltage Divider
		R104	10 Meg.	1	C-9B1-37		Voltage Divider
		R105	10 Meg.	1	C-9B1-37		Voltage Divider
		R106	150Ω	1	C-9B2-8	BW-2-150	Filter
		R107A	47Ω	2	C-9B4-5	BW-2-47	Filament String
		B	62Ω	1	C-9B2-130	BW-1-62	Filament String
		R108	10KΩ	1		BTS-10K	Bias Network

**RAYTHEON MODELS 7DX21, 7DX22P, 18DX21A**

INSTALLATION NOTES	
Lume Control	
Touch to R1A Per Instructions	
Touch to R1A Per Instructions	
rt. Hold Control	
Touch to R2A Per Instructions	
iz. Hold Control	
Touch to R3A Per Instructions	
trast Control	
Touch to R4A Per Instructions	
ightness Control	
rt. Size Control	
iz. Size Control	
us Control	
iz. Centering Control	
rt. Centering Control	

- Note 1 - Not used in all models.
- Note 2 - Used in model 18DX21A only.
- Note 3 - Model 7DX22P uses 22KΩ in this application.
- Note 4 - Model 7DX22P uses 47Ω in this application.
- Note 5 - Model 7DX22P uses 56KΩ in this application.
- Note 6 - Model 7DX22P uses 390KΩ in this application.
- Note 7 - Model 7DX22P uses 100KΩ in this application.
- Note 8 - Model 7DX22P uses 3.3 Meg in this application.
- Note 9 - Model 7DX22P uses 2.7 Meg in this application.

**TRANSFORMER (SWEEP CIRCUITS)**

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		BELMONT PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.					
T1	270Ω Tap @ 160Ω & 110Ω		B-12M-15662				Hor. Deflection Transformer.

**TRANSFORMER (H.V. OSC.)**

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE		BELMONT PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.					
T2	3Ω	SEC. 1 510Ω SEC. 2 0Ω	B-20-15557				

**TRANSFORMER (AUDIO OUTPUT)**

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE		DC RES.		BELMONT PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
	PRI.	SEC.	PRI.	SEC.					
T3	2100Ω	3.5Ω	192Ω	.7Ω	B-12C-10074	A-3876	RO-2	A-2928	

IDENTIFICATION CODES	
en Decoupling	20%
ode	
ressor Grid	
Shunt	
rid Coil Shunt	
rid	
late Decoup.	20%
id	
thode	
ate	
ic Supp.	
ic Supp.	
Grid	See note 3
Decoup.	20%
Suppressor Grid	See note 1
Cathode	See note 4
work	20%
Grid	
Decoup.	20%
Suppressor Grid	See note 1
Cathode	See note 4
Transformer Shunt	See note 5
Decoup.	20%
Suppressor Grid	See note 1
Cathode	See note 4
work	20%
work	
de Load	5%

# PARTS LIST AND DESCRIPTIONS (Continued)

## SPEAKER

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	FIELD RES.	V. C. IMP.	BELMONT PART No.	JENSEN PART No.	QUAM PART No.	
SP1	PM	3.5Ω	B-18A-15618	ST-113† MOD.P4-X	4A07†	† Trim flange and mounting bracket.
SP2	CONE DIA. 3 7/8"	V. C. DIA. 9/16"				

## FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 ✓)	BELMONT PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.185A	63Ω	2.6Henries	C-16A15624	C-2325	TR-4225	C-29914	‡ Drill one new mounting hole.

## COILS (RF-IF)

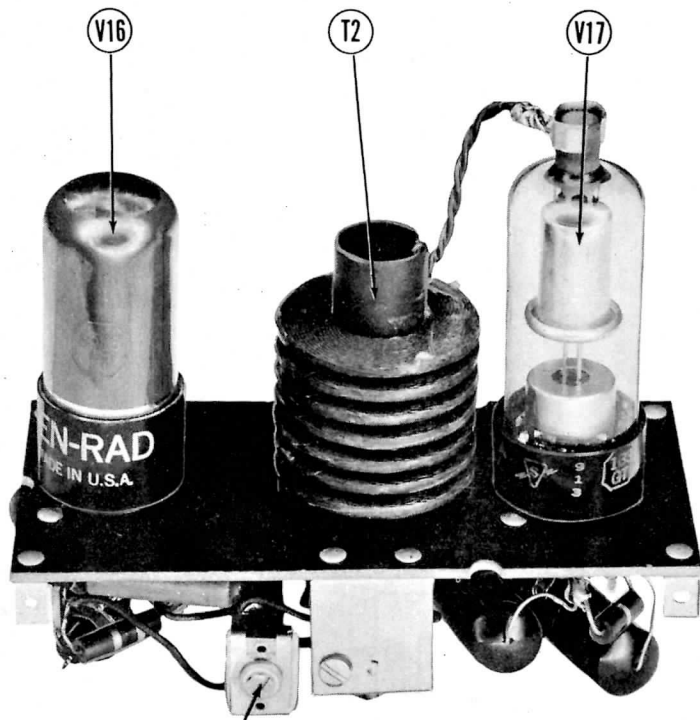
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
		PRI.	SEC.	BELMONT PART No.	MEISSNER PART No.	
L2	Ant. Coill	0Ω		A-201-15676		Consists of No. 18 straight, bare, tinned copper wire.
L3	High Band Antenna	0Ω				
L4	Low Band Antenna	0Ω				Consists of No. 18 straight, bare, tinned copper wire.
L5	RF Choke	.2Ω		A-16A-16637		
L6	RF Choke	.2Ω		A-16A-16637		
L7	Low Band RF	0Ω		B-13E-12046		
L8A	High Band RF	0Ω		A-201-15676		Uses core with green end.
B	High Band RF	0Ω		B-13D-12155		
L9	Low Band RF	0Ω		B-13E-12046		Uses core with red end.
L10A	High Band RF	0Ω		A-201-15676		Uses core with green end.
B	High Band RF	0Ω		B-13D-12155		
L11	RF Choke	.2Ω		A-16A-16637		Uses core with red end.
L12	Low Band Osc.	0Ω		B-13D-12155		
L13	High Band Osc.	0Ω		A-13D-12045		
L14	RF Choke	.2Ω		A-16A-16637		
L15	RF Choke	.2Ω		A-16A-16637		
L16	1st IF	.1Ω		B-201-15612		
L17	2nd IF	.1Ω		B-201-15612		
L18	3rd IF	.1Ω		B-201-15612		
L19	4th IF	.1Ω		B-201-15945		
L20	RF Choke	1.5Ω		A-16A-16637		
L21	RF Choke	1.5Ω		A-16A-16637		
L22	RF Choke	1.5Ω		A-201-15608		
L23	RF Choke	1.5Ω		A-16A-16637		
L24	RF Choke	1.5Ω		A-16A-16637		
L25	Peaking	7.2Ω		A-201-16170		
L26	Peaking	22Ω		A-201-16172		
L27	Peaking	9Ω		A-201-16171		
L28	Sound Take-Off Trans.	.5Ω	.5Ω	C-201-16155		
L29	Ratio Det. Trans.	4Ω	.5Ω	C-201-15717		
L30	RF Choke	24.5Ω		A-201-15556		
L31	RF Choke	20Ω		B-16A-13524		
L32	Fill. Choke	1.5Ω		A-16A-16637		
L33	Fill. Choke	1.5Ω		A-16A-16637		
L34	RF Choke	0Ω		A-201-16379		
L35	Fill. Choke	1.5Ω		A-16A-16637		Used in model 7DX22P only.

## SELENIUM RECTIFIER

ITEM No.	RATING	REPLACEMENT DATA			NOTES
	CURRENT	BELMONT PART No.			
M1	.105A	B-21J-15661			
M2	.105A	B-21J-15661			

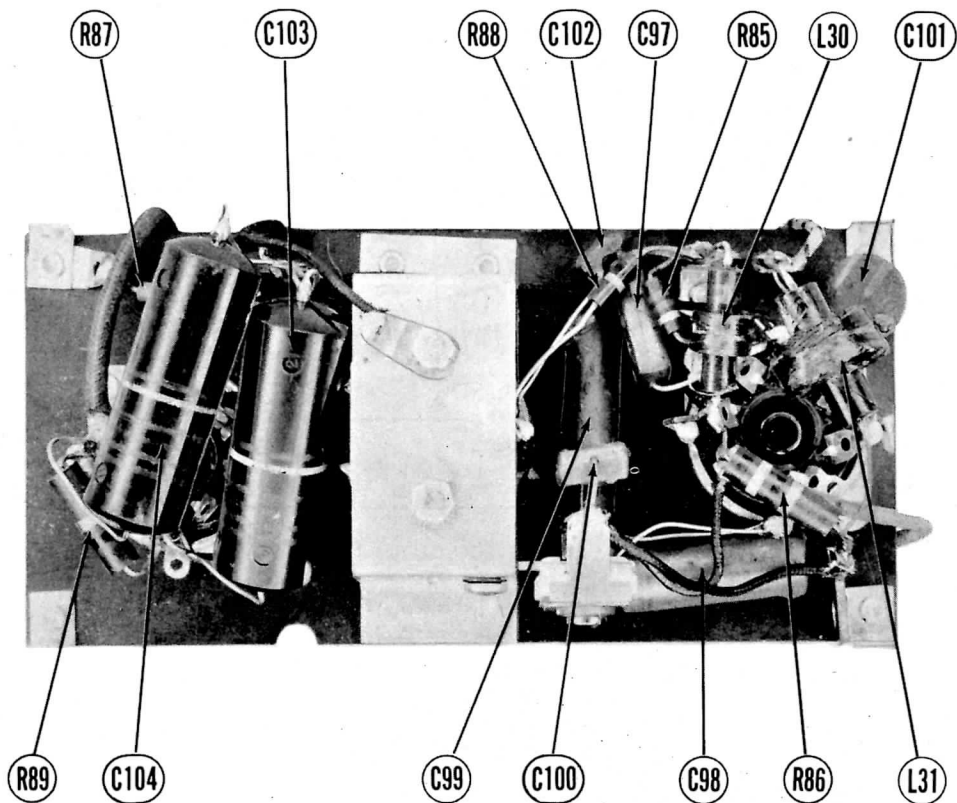
## MISCELLANEOUS

ITEM No.	PART NAME	BELMONT PART No.	NOTES
M3	Ballast Tube	B-9M-15822	
	Iron Core	A-51A-16693	For L19
	Knob	B-5B-15759-57	For station selector
	Knob	B-5B-15782-57	For contrast, Hor. Hold, Vert. Hold and on-off vol.
	Safety Glass	C-30M-15905	
	Iron Core	A-51A-15713	For L12 and L13
	Iron Core	A-51A-15714	For L8 and L10 having green end.
	Iron Core	A-51A-16391	For L8 and L10 having red end.
	Iron Core	A-51A-15715	For L7 and L9
	Core Mounting Clip	A-2M-16276	



HIGH VOLTAGE  
OSC. ADJ.

HIGH VOLTAGE SUPPLY - TOP VIEW



HIGH VOLTAGE SUPPLY - BOTTOM VIEW