

VIDEODYNE MODELS
10FM, 10TV, 12FM, 12TV

VIDEODYNE MODEL 12FM

TRADE NAME	Videodyne, Models 10FM, 10TV, 12FM, 12TV	
MANUFACTURER	Videodyne Inc., 33 Jefferson St., Stanford, Conn.	
TYPE SET	Models 10TV, 12TV, -TV Reception only, 10FM, 12FM-TV and FM reception	
TUBES	Twenty-Six	
POWER SUPPLY	110-120 Volts AC	RATING: 1.76 Amp @ 117 Volts AC
TUNING RANGE	10TV and 12TV-Channels 2 through 13	10FM & 12FM-44 through 216MC

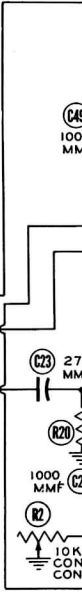
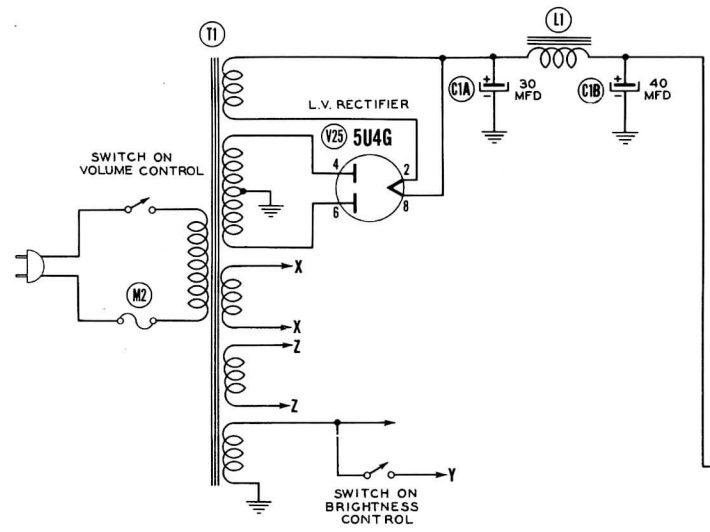
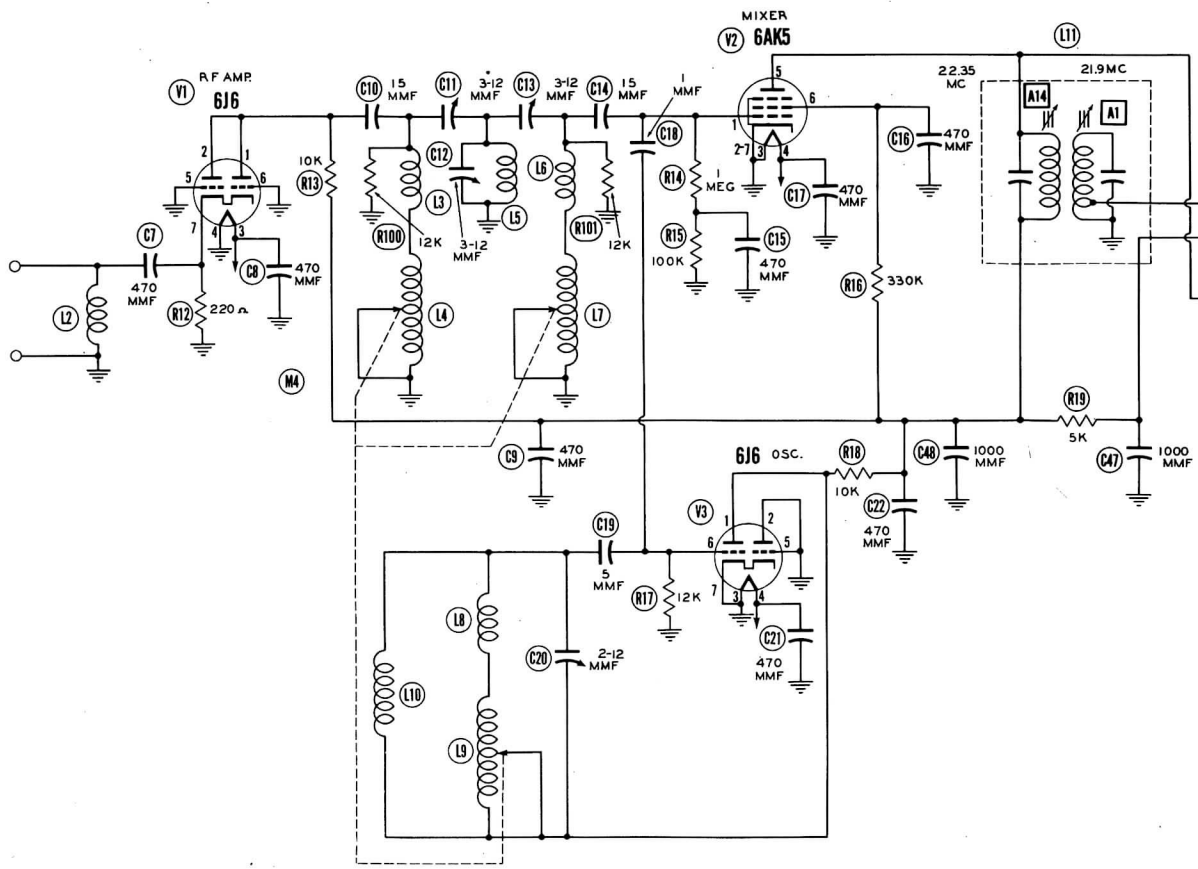
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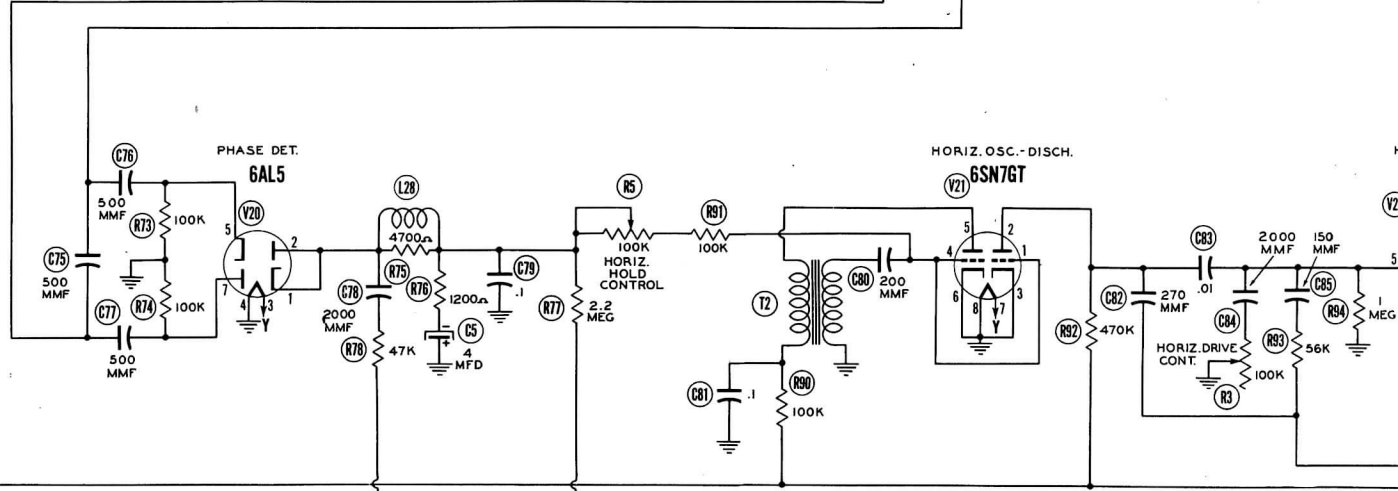
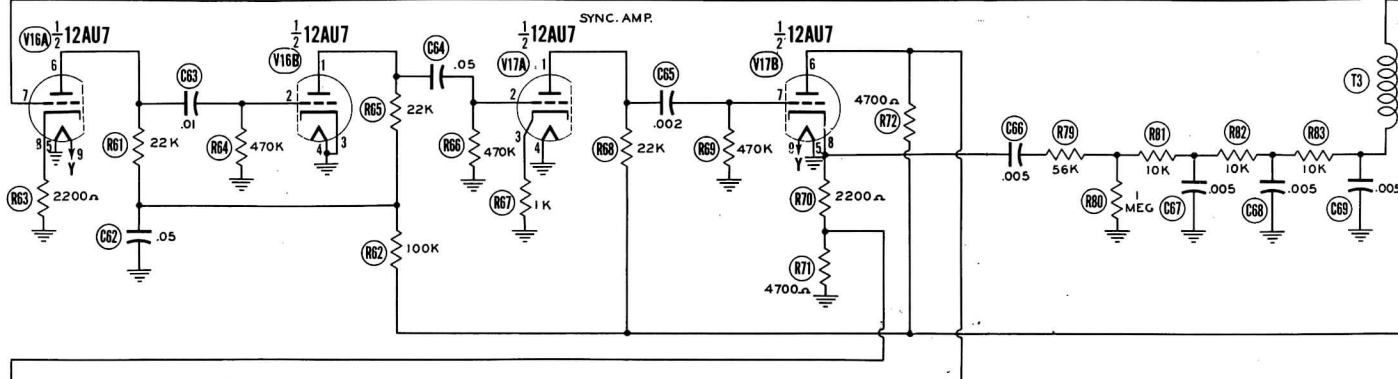
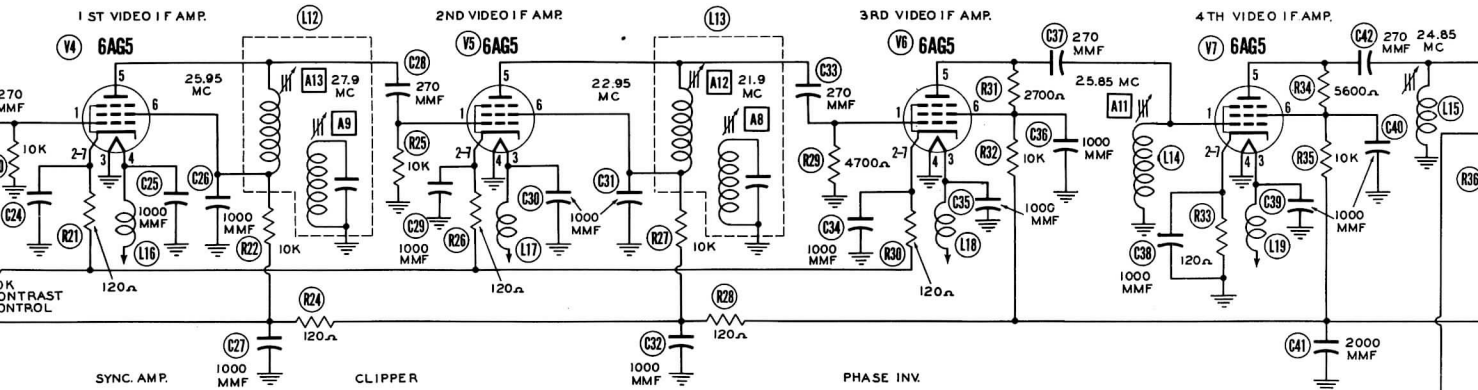
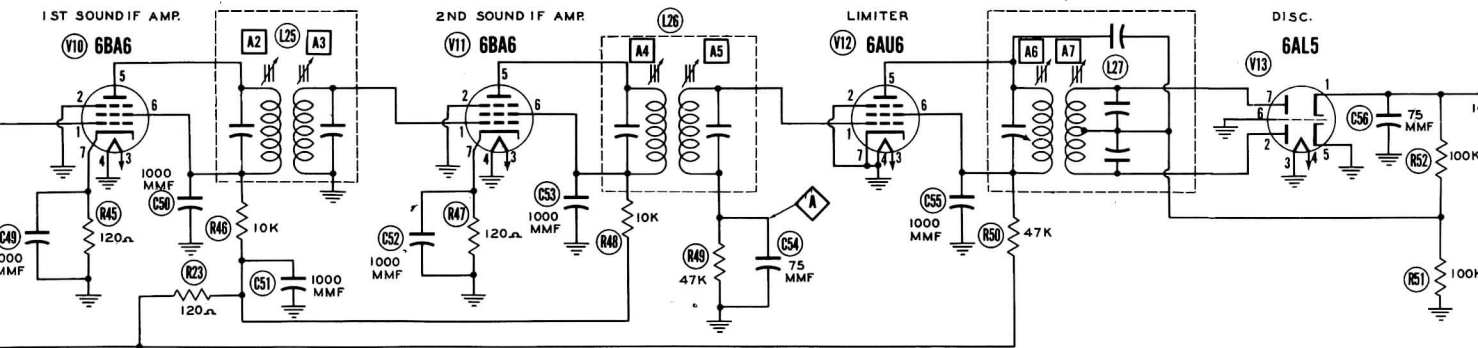
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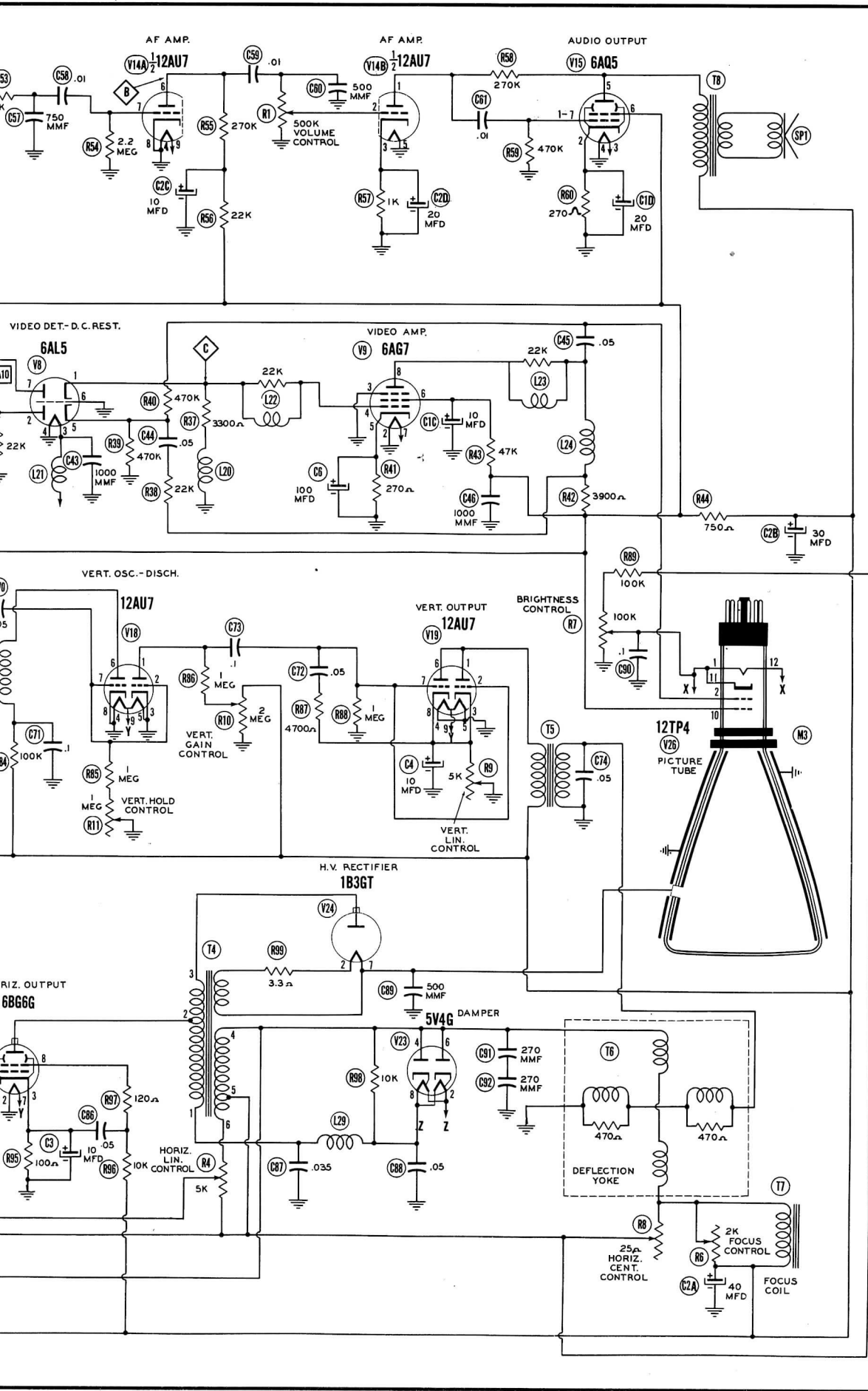


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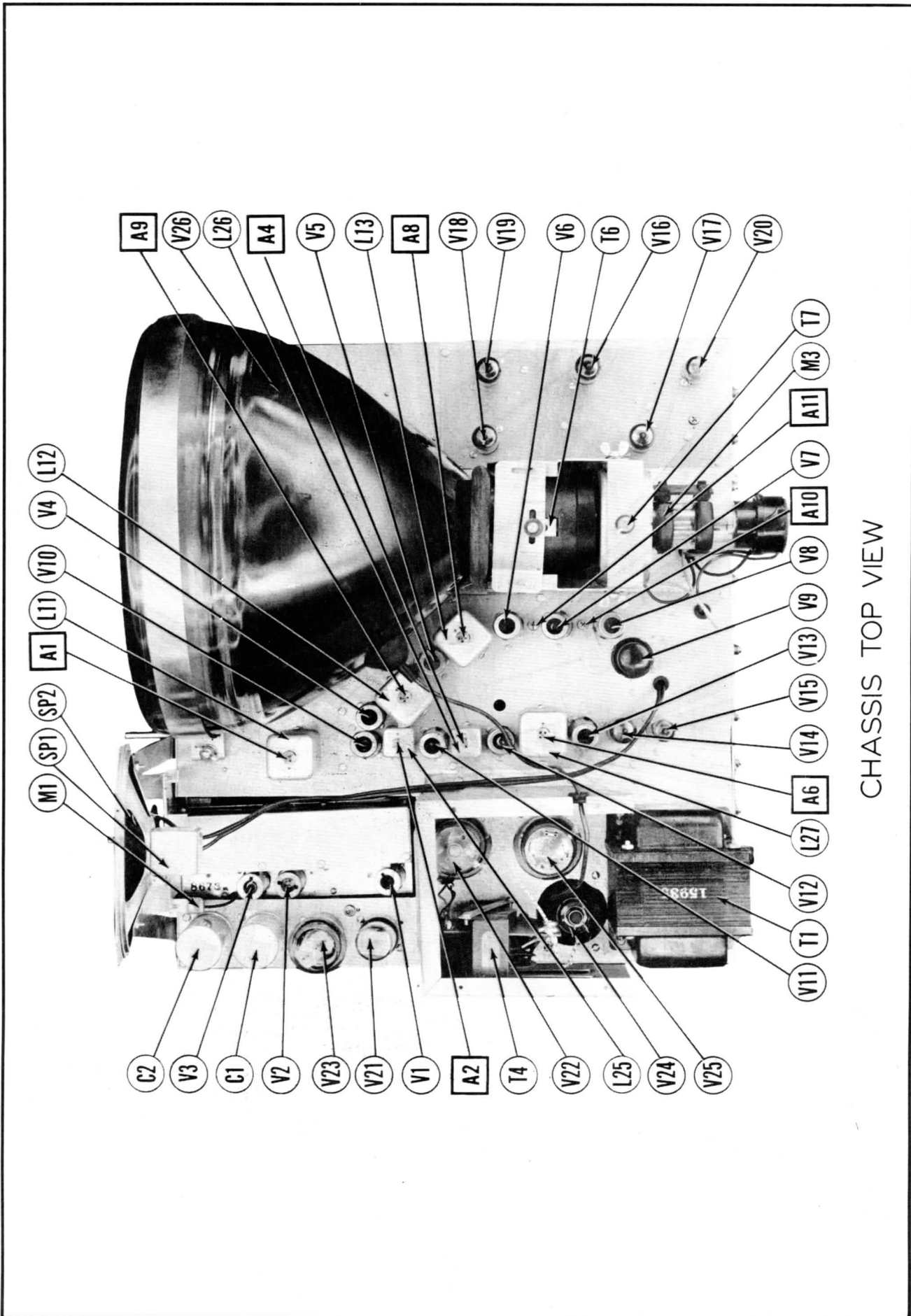


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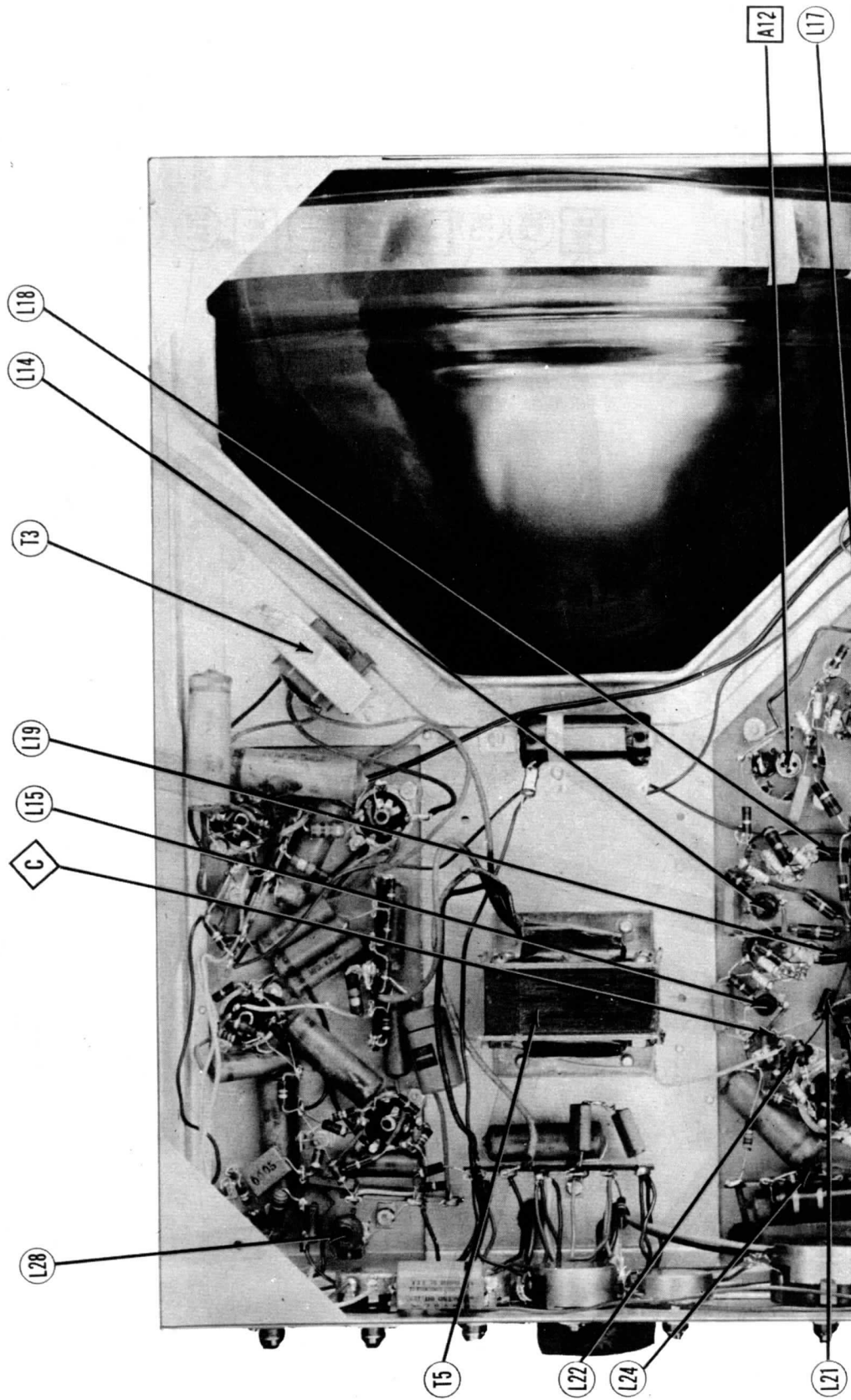


VIDEODYNE MODELS
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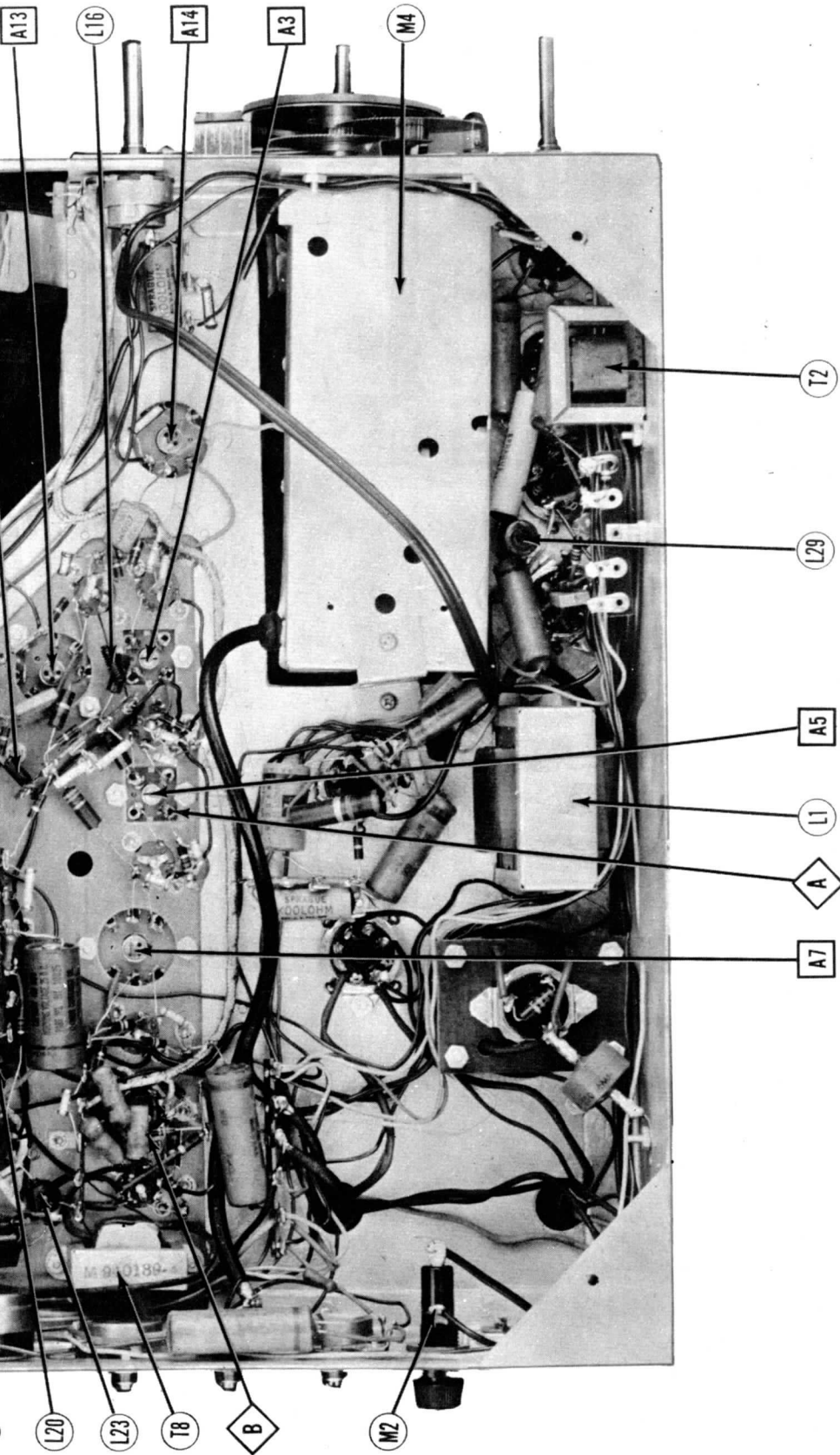


CHASSIS TOP VIEW

VIDEODYNE MODELS
10FM, 10TV, 12FM, 12TV

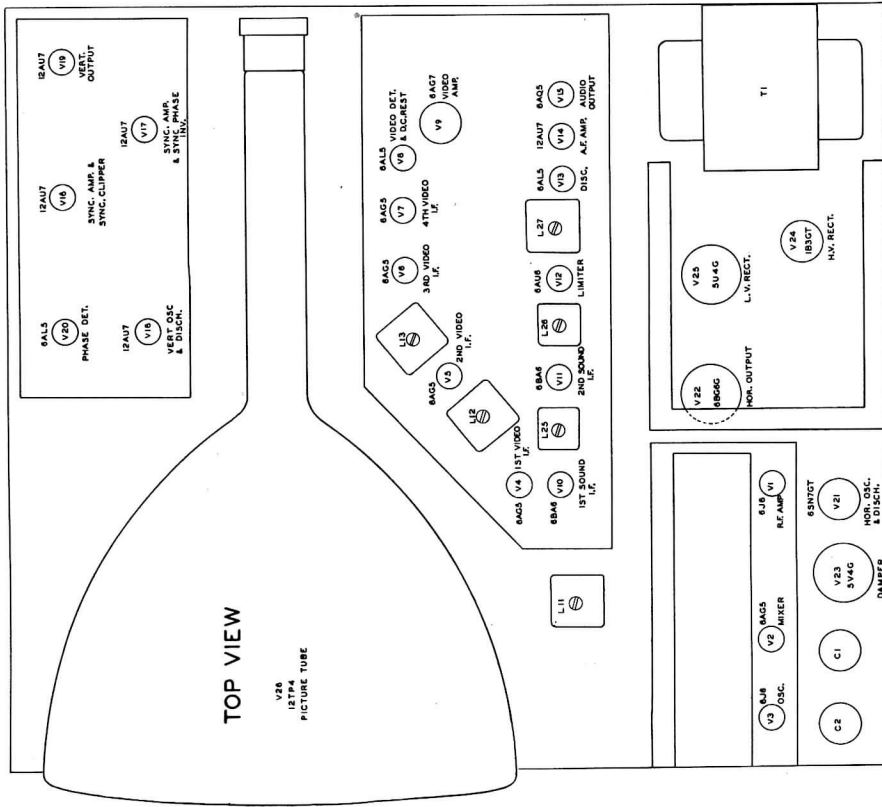
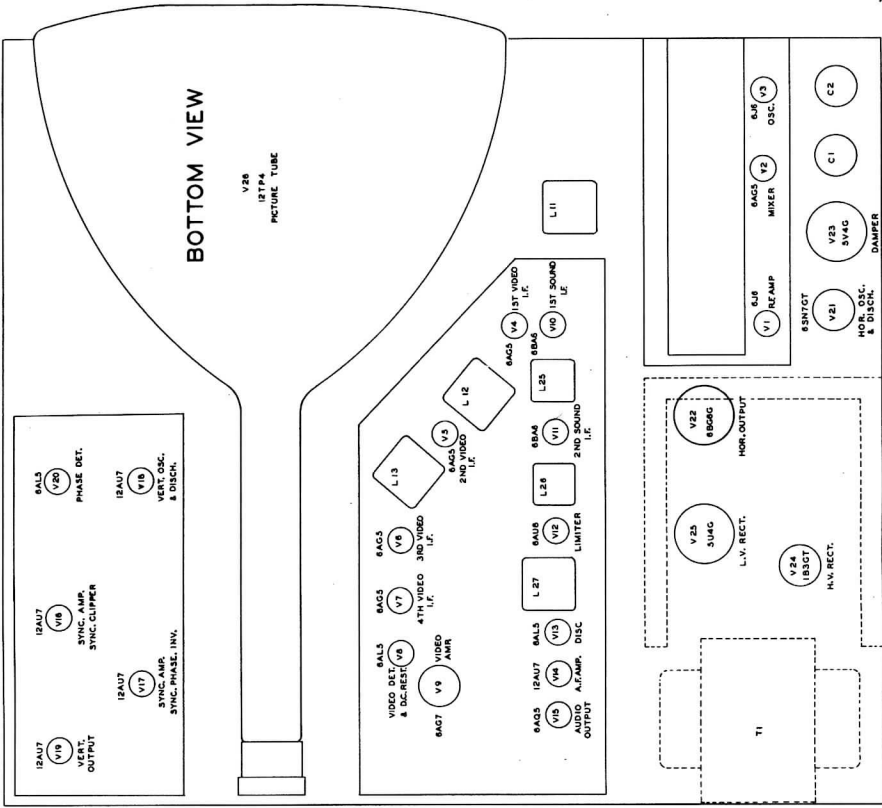


CHASSIS BOTTOM VIEW-TRANS., INDUC



RECTOR AND ALIGNMENT IDENTIFICATION

TUBE PLACEMENT CHART



ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

The models covered in this folder employ either a Dumont Input tuner or a Sarkes Tarzian tuner. The video and sound alignment procedure for the two versions are identical but the frequencies differ for the individual stages. Frequencies for the Dumont tuner will be identified by an asterisk (*) and the Tarzian tuner by a dagger (†). To eliminate the high voltage shock hazard while aligning the receiver, remove the 6SN7 horizontal oscillator tube (V21).

SOUND IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM

Remove the 6J6 high frequency oscillator tube (V3) during the sound and video IF alignment to prevent spurious oscillations from giving erroneous indications.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
1.	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	21.9MC* 21.6MC†	Any	DC Probe to Point A Common to chassis. Use 3 volt scale.	A1,A2, A3,A4, A5	Adjust for maximum deflection. Attenuate signal generator output if VTVM goes off scale.
2.	Check voltage on pins 2 and 7 of V13. The voltages should be equal but of opposite polarity. If not adjust A6 until they are equal.					
3.	Move VTVM to pin 1 of V13. The VTVM should read zero. If not, adjust A7 until VTVM does read zero. (The VTVM should swing positively and negatively on either side of this setting.)					

SOUND IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE

Connect synchronized sweep voltage from sweep 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
1.	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	21.9* 21.6† (1MC Sweep)	21.9MC* 21.6MC†	Any	Vert. Amp. to Point A Low side to chassis.	A1,A2, A3,A4, A5	Adjust for maximum amplitude and symmetry as per Fig 1.
2.	"	"	"	"	Vert. Amp. to Point A Low side to chassis.	A6,A7	Adjust A6 for maximum amplitude and straightness of diagonal line as per Fig 2. Adjust A7 so marker is at center of diagonal line. Continue with step 4.

VIDEO IF ALIGNMENT

Set the contrast control to approximately 50% of its rotation.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
4.	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	21.9MC* 21.6MC†	Any	DC Probe to Point A Common to chassis.	A8	Adjust for minimum deflection.
5.	"	27.9MC* 27.6MC†	"	"	A9	"
6.	"	24.05MC* 23.75MC†	"	"	A10	Adjust for maximum deflection.
7.	"	25.85MC* 25.55MC†	"	"	A11	"
8.	"	22.95MC* 22.65MC†	"	"	A12	"
9.	"	25.95MC* 25.65MC†	"	"	A13	"
10.	"	22.35MC* 22.05MC†	"	"	A14	"
11.	Tune in test pattern. If vertical wedges appear to "twinkle", unscrew A10 approximately one turn.					

OVERALL VIDEO IF RESPONSE CHECK

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

Turn contrast control fully counter-clockwise during this check.

DUMMY ANTENNA	SWEEP GENERATOR COUPLING	SWEEP GENERATOR FREQUENCY	MARKER GENERATOR FREQUENCY	CHANNEL	CONNECT SCOPE	ADJUST	REMARKS
12.	High side to ungrounded tube shield floating over mixer tube (V2). Low side to chassis.	24MC (10MC Sweep)	21.9MC* 21.6MC† 24.15MC* 23.85MC† 26.4MC* 26.1MC† 27.9MC* 27.6MC†	Any	Vert. Amp. to Point A Low side to chassis.		Check curve to see that it is similar to Fig 3. If not, slightly retouch A3 thru A14 to place markers at proper points.



FIG. 1



FIG. 2

ALIGNMENT INSTRUCTIONS (CONT.)

OSCILLATOR ALIGNMENT

The RF circuits of the Dumont Input tuner are very stable and will normally not require alignment in the field. The RF Amplifier circuits of the Sarkes Tarzian tuner are also very stable and should not require adjustment. However, it may be necessary to adjust the oscillator circuits in those models using the Tarzian tuner. To adjust the oscillator circuits for this tuner follow the instructions and chart below:
 (a). Replace the oscillator tube if removed for preceding steps.
 (b). Do not attempt oscillator alignment unless sound IF channel has been accurately aligned.

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	CHANNEL	CONNECT VTVM	ADJUST	REMARKS
13. Two 125Ω carbon res.	Across antenna terminals with 125Ω resistor in each generator lead.	215.75MC	13	DC Probe to Point Common to chassis.	A401	Adjust for zero reading. A positive and negative reading should be obtained on either side of the correct setting.
14. "	"	209.75MC 203.75MC 197.75MC 191.75MC 185.75MC 179.75MC 87.75MC 81.75MC 71.75MC 65.75MC 59.75MC	12 11 10 9 8 7 6 5 4 3 2	"	A402 A403 A404 A405 A406 A407 A408 A409 A410 A411 A412	"

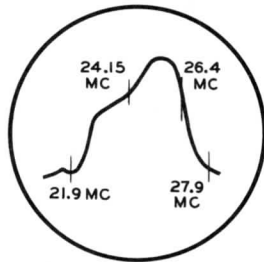


FIG. 3A

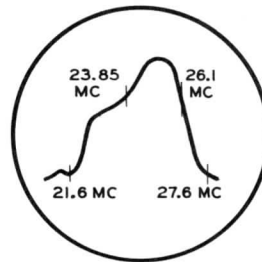
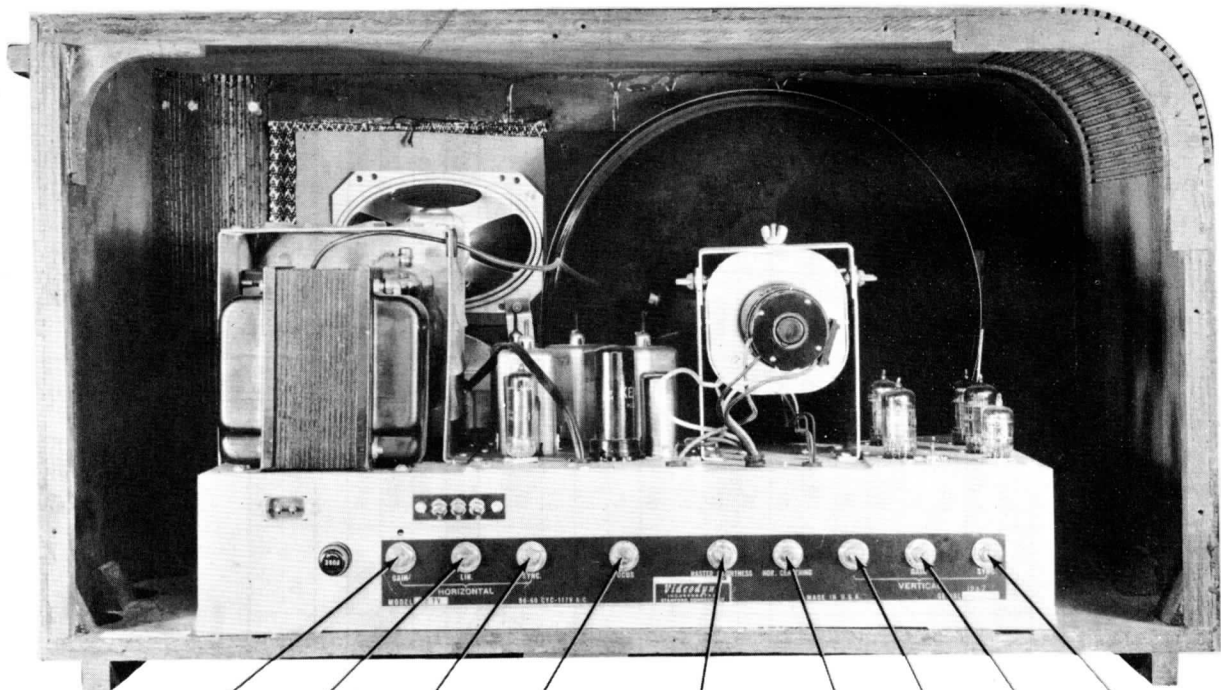


FIG. 3B



HORIZ. DRIVE HORIZ. LIN. HORIZ. HOLD FOCUS BRIGHTNESS HORIZ. CENT. VERT. LIN. VERT. DRIVE VERT. HOLD

CABINET-REAR VIEW

VIDEODYNE MODELS
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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	6J6	85VDC	85VDC	6.3VAC	OV	OV	OV	1.6VDC		
V 2	6AK5	-.5VDC	OV	OV	6.3VAC	1.75VDC	50VDC	OV		
V 3	6J6	75VDC	OV	OV	6.3VAC	OV	\$.1VDC	OV		
V 4	6AG5	OV	6.5VDC	OV	6.3VAC	235VDC	235VDC	6.5VDC		
V 5	6AG5	OV	6.5VDC	6.5VAC	OV	235VDC	235VDC	6.5VDC		
V 6	6AG5	OV	6.5VDC	6.5VAC	OV	235VDC	235VDC	6.5VDC		
V 7	6AG5	OV	1.2VDC	6.5VAC	OV	80VDC	1.25VDC	1.2VDC		
V 8	6AL5	.1VDC	OV	6.3VAC	OV	.3VDC	OV	OV		
V 9	6AG7	OV	OV	OV	.1VDC	3.6VDC	1.15VDC	6.3VAC	1.95VDC	
V 10	6BA6	OV	OV	6.3VAC	OV	1.05VDC	1.05VDC	6.5VDC		
V 11	6BA6	OV	OV	6.3VAC	OV	1.05VDC	1.05VDC	1.4VDC		
V 12	6AU6	-.3VDC	OV	6.3VAC	OV	50VDC	50VDC	OV		
V 13	6AL5	OV	-.3VDC	OV	6.3VAC	OV	OV	-.3VDC		
V 14	12AU7	22VDC	OV	.8VDC	OV	OV	1.6VDC	-.4VDC	OV	6.3VAC
V 15	6AQ5	OV	1.0VDC	6.3VAC	OV	2.70VDC	2.40VDC	OV		
V 16	12AU7	30VDC	-.4VDC	OV	OV	OV	3.7VDC	OV	1.8VDC	6.3VAC
V 17	12AU7	165VDC	OV	6VDC	OV	OV	2.70VDC	OV	20VDC	6.3VAC
V 18	12AU7	OV	-.85VDC	OV	OV	OV	OV	OV	OV	OV
V 19	12AU7	245VDC	.6VDC	.4VDC	OV	OV	2.45VDC	.6VDC	OV	OV
V 20	6AL5	5.5VDC	5.5VDC	6.3VAC	OV	1.6VDC	OV	-.30VDC	OV	OV
V 21	6SN7GT	-.33VDC	90VDC	OV	-.33VDC	21.5VDC	OV	6.3VAC	OV	OV
V 22	6BQ6G	OV	OV	6VDC	3.25VDC	-.4.5VDC	3.25VDC	6.3VAC	1.80VDC	*
V 23	5Y4G	OV	390VDC	OV	3.20VDC	OV	3.20VDC	OV	390VDC	OV
V 24	1B3GT	* DO NOT MEASURE								
V 25	5U4G	OV	350VDC	OV	3.60VAC	OV	3.60VAC	OV	350VDC	OV
V 26	12TP4	80VDC	-.1VDC	OV	PIN 11 80VDC	PIN 12 80VDC				

* Do Not Measure.

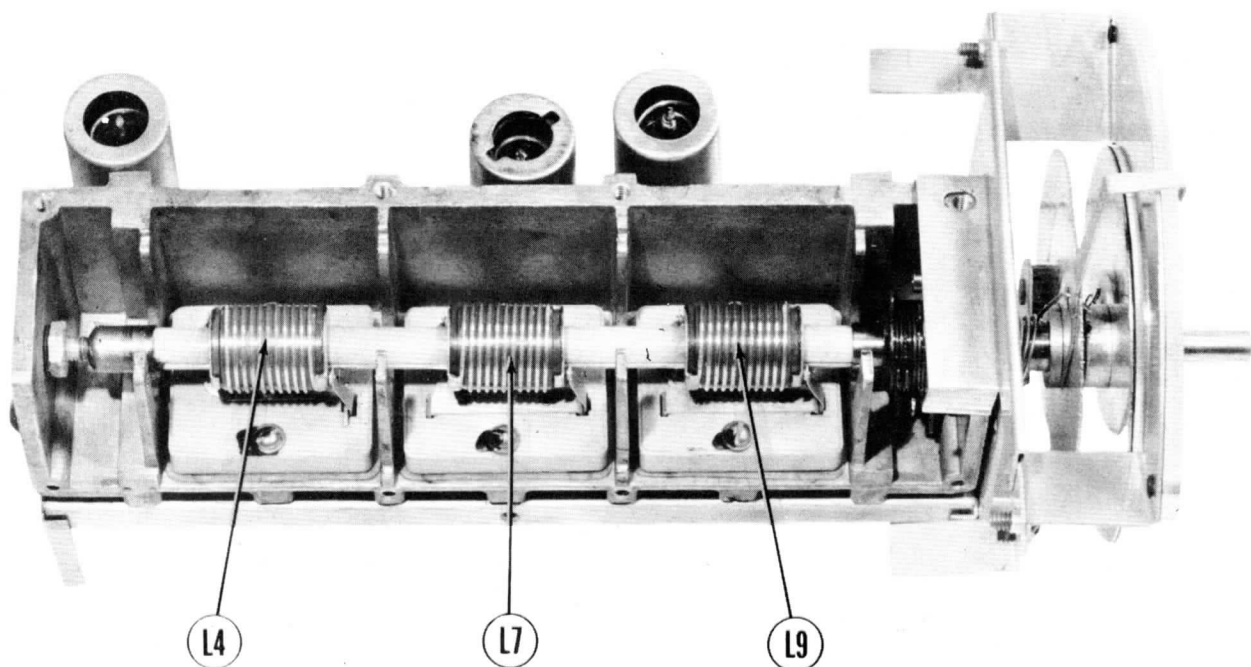
† TAKEN WITH VACUUM TUBE VOLTMETER.

RESISTANCE READINGS

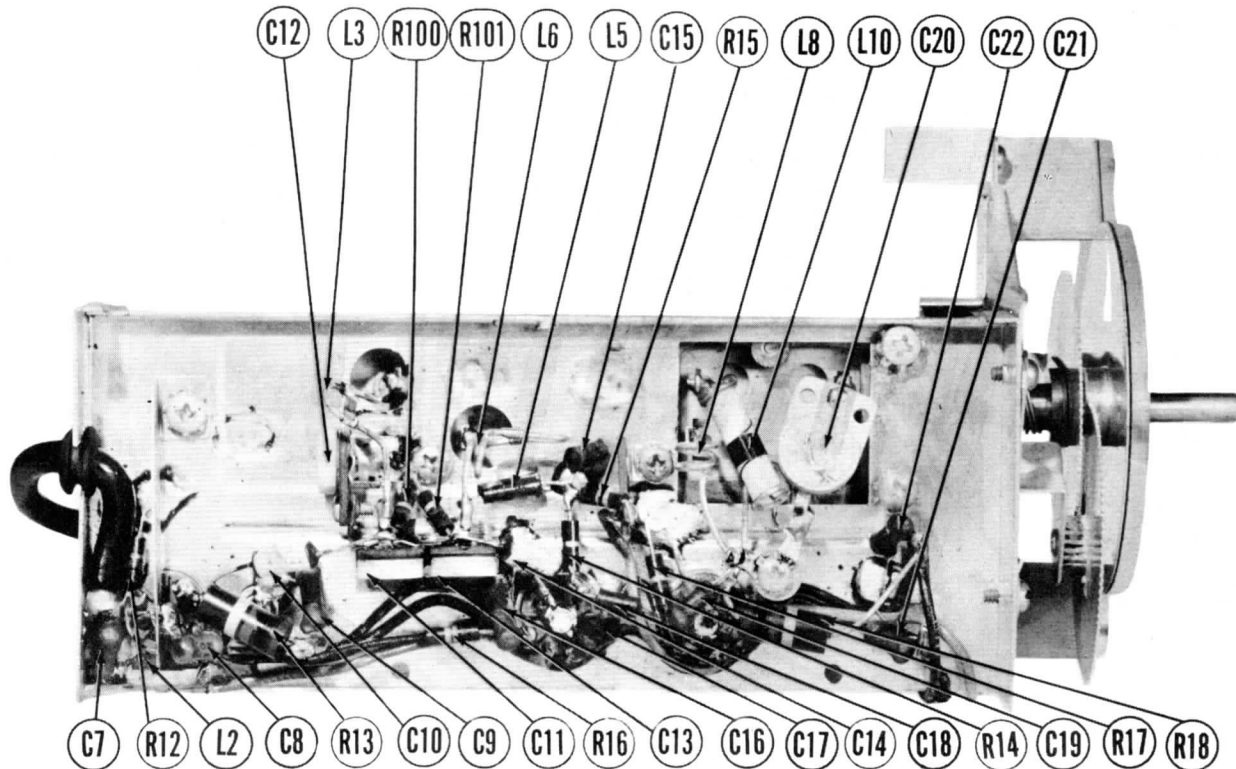
Item	Tube	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V 1	6J6	11.6KΩ	11.6KΩ	.1Ω	Ω	Ω	Ω	220Ω		
V 2	6AK5	1 Meg.	Ω	Ω	.1Ω	1.6KΩ	1.30KΩ	Ω		
V 3	6J6	11.6KΩ	Ω	Ω	.1Ω	Ω	1.2KΩ	Ω		
V 4	6AG5	10KΩ	9KΩ	Ω	.1Ω	11.1KΩ	11.1KΩ	9KΩ		
V 5	6AG5	10KΩ	9KΩ	.1Ω	Ω	11.1KΩ	11.1KΩ	9KΩ		
V 6	6AG5	4.7KΩ	9KΩ	.1Ω	Ω	11.4KΩ	11.1KΩ	9KΩ		
V 7	6AG5	.1Ω	1.2Ω	.1Ω	Ω	11.6KΩ	11.1KΩ	1.2Ω		
V 8	6AL5	3.5KΩ	2.2KΩ	.1Ω	Ω	4.70KΩ	Ω	.1Ω		
V 9	6AG7	Ω	Ω	Ω	3.5KΩ	2.70Ω	1.44KΩ	.1Ω	15KΩ	
V 10	6BA6	Ω	Ω	.1Ω	Ω	11.0KΩ	11.0KΩ	1.20Ω		
V 11	6BA6	.1Ω	Ω	.1Ω	Ω	11.0KΩ	11.0KΩ	1.20Ω		
V 12	6AU6	4.7KΩ	Ω	.1Ω	Ω	15.0KΩ	15.0KΩ	Ω		
V 13	6AL5	200KΩ	100KΩ	Ω	.1Ω	Ω	Ω	100KΩ		
V 14	12AU7	1.270KΩ	1.4Ω	1.00Ω	Ω	Ω	1.300KΩ	2.2 Meg. Ω		.1Ω
V 15	6AQ5	4.70KΩ	2.70Ω	.1Ω	Ω	1.850Ω	1.100Ω	500KΩ		
V 16	12AU7	1.125KΩ	4.70KΩ	Ω	Ω	Ω	1.125KΩ	2.2KΩ	2.2KΩ	.1Ω
V 17	12AU7	1.22KΩ	4.70KΩ	1.00Ω	Ω	Ω	1.5KΩ	4.70KΩ	7KΩ	.1Ω
V 18	12AU7	1.1.6 Meg	1.1.1 Meg	Ω	Ω	Ω	1.100KΩ	1.1 Meg. Ω		.1Ω
V 19	12AU7	1.900Ω	1 Meg.	5KΩ	Ω	Ω	1.900Ω	1 Meg. Ω		.1Ω
V 20	6AL5	400KΩ	400KΩ	.1Ω	Ω	100KΩ	Ω	100KΩ		
V 21	6SN7GT	360KΩ	1.470KΩ	Ω	360KΩ	1100KΩ	Ω	.1Ω	Ω	TOP CAP 11KΩ
V 22	6BQ6G	Inf.	Ω	100Ω	11.5KΩ	1 Meg.	1.68KΩ	.1Ω	11KΩ	
V 23	5Y4G	Inf.	45KΩ	Inf.	1100Ω	Inf.	1100Ω	Inf.	45KΩ	
V 24	1B3GT	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	Inf.	TOP CAP 110.5KΩ
V 25	5U4G	Inf.	35KΩ	Inf.	270Ω	Inf.	290Ω	Inf.	35KΩ	
V 26	12TP4	80KΩ	1.0Ω	1310Ω	PIN 11 160KΩ	PIN 12 60KΩ	10Ω			

† Measured From Pin 8 Of V25.

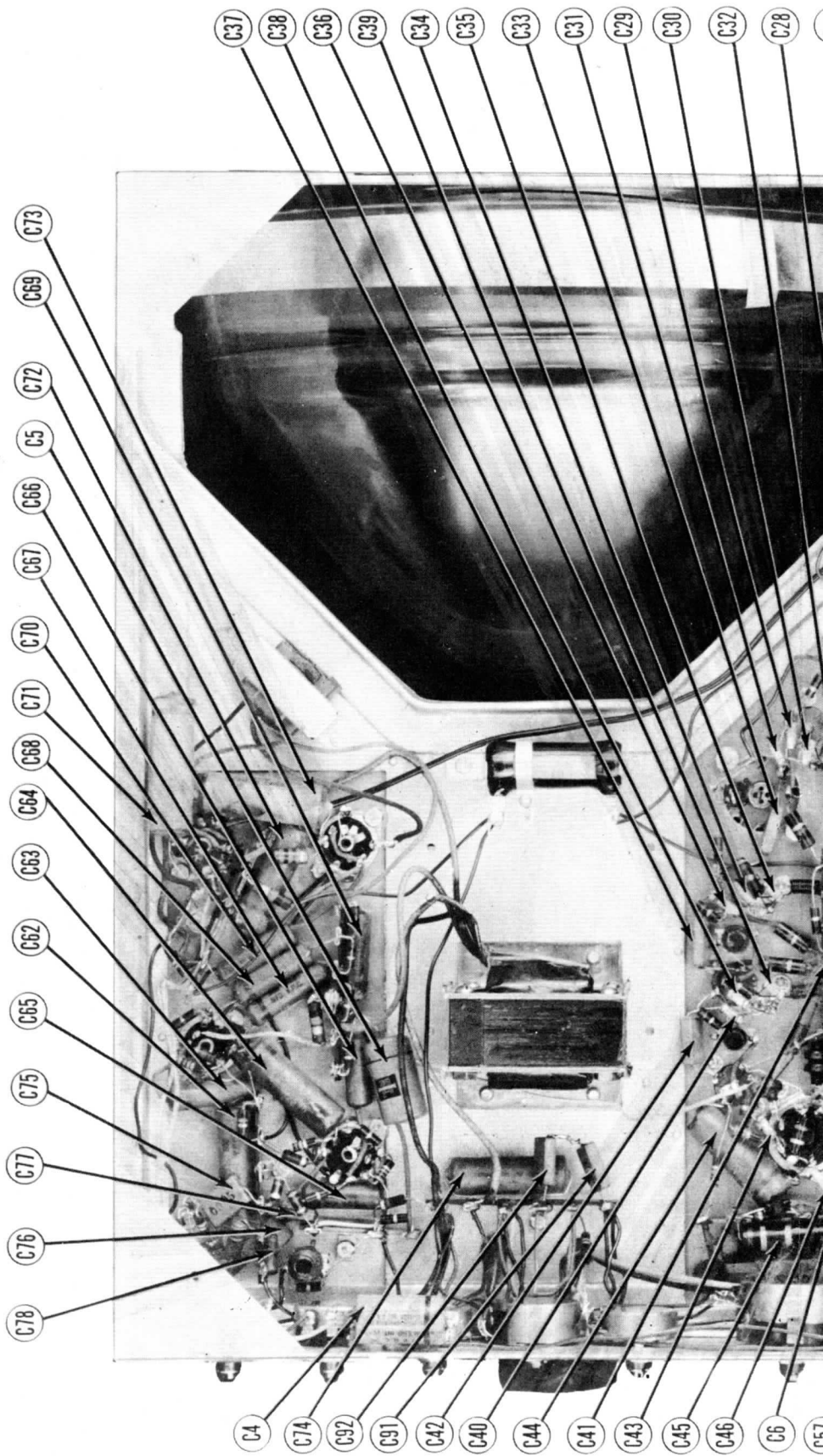
1. DC Voltage measurements are at 20,000 ohms per volt; AC Voltage measured at 1,000 ohms.
2. Pin numbers are counted in a clockwise direction on bottom of socket.
3. Measured values are from socket pin to common negative unless otherwise stated.
4. Line voltage maintained at 117 volts for voltage readings.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



INPUTUNER-TOP VIEW

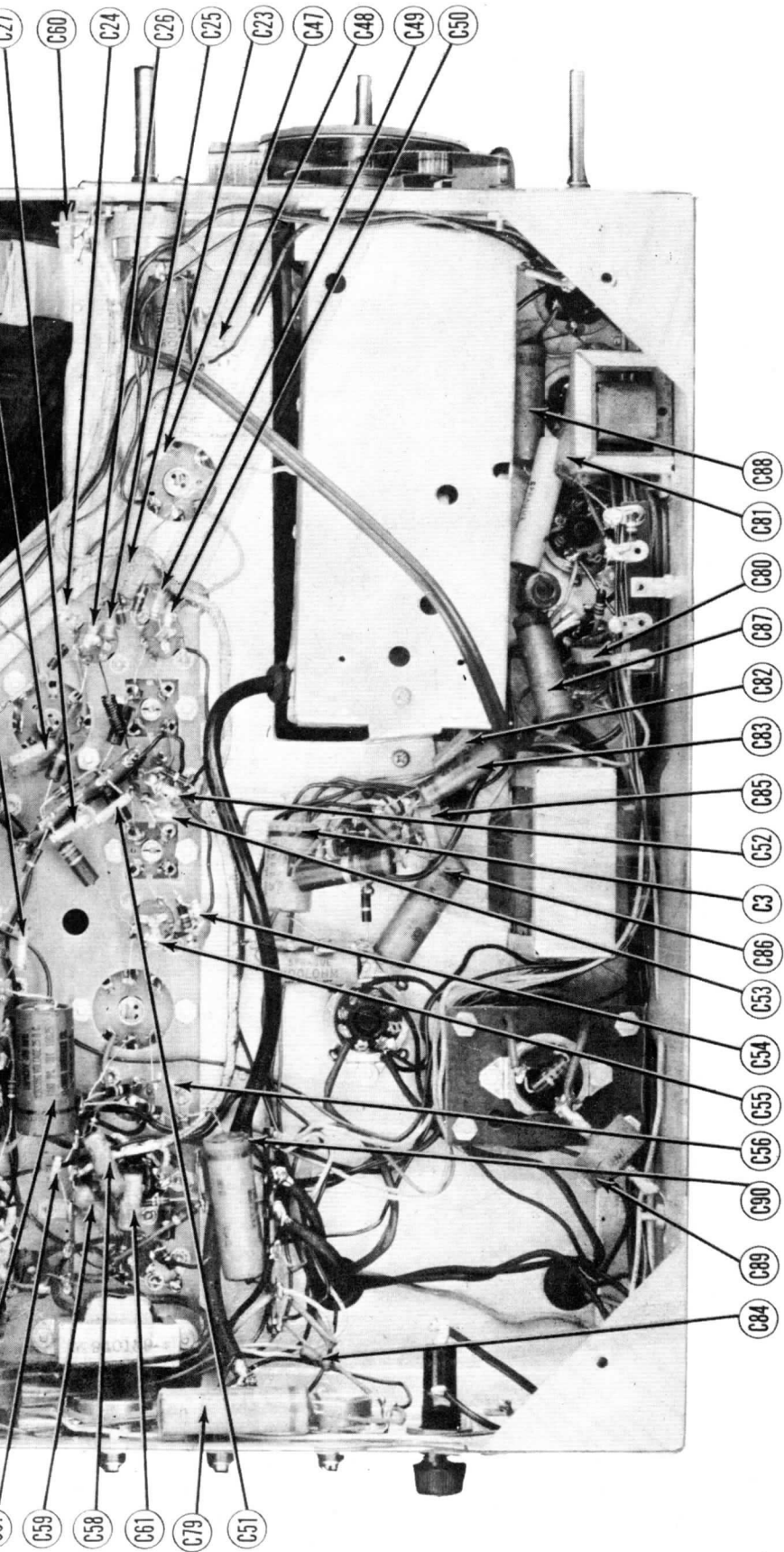


INPUTUNER-BOTTOM VIEW

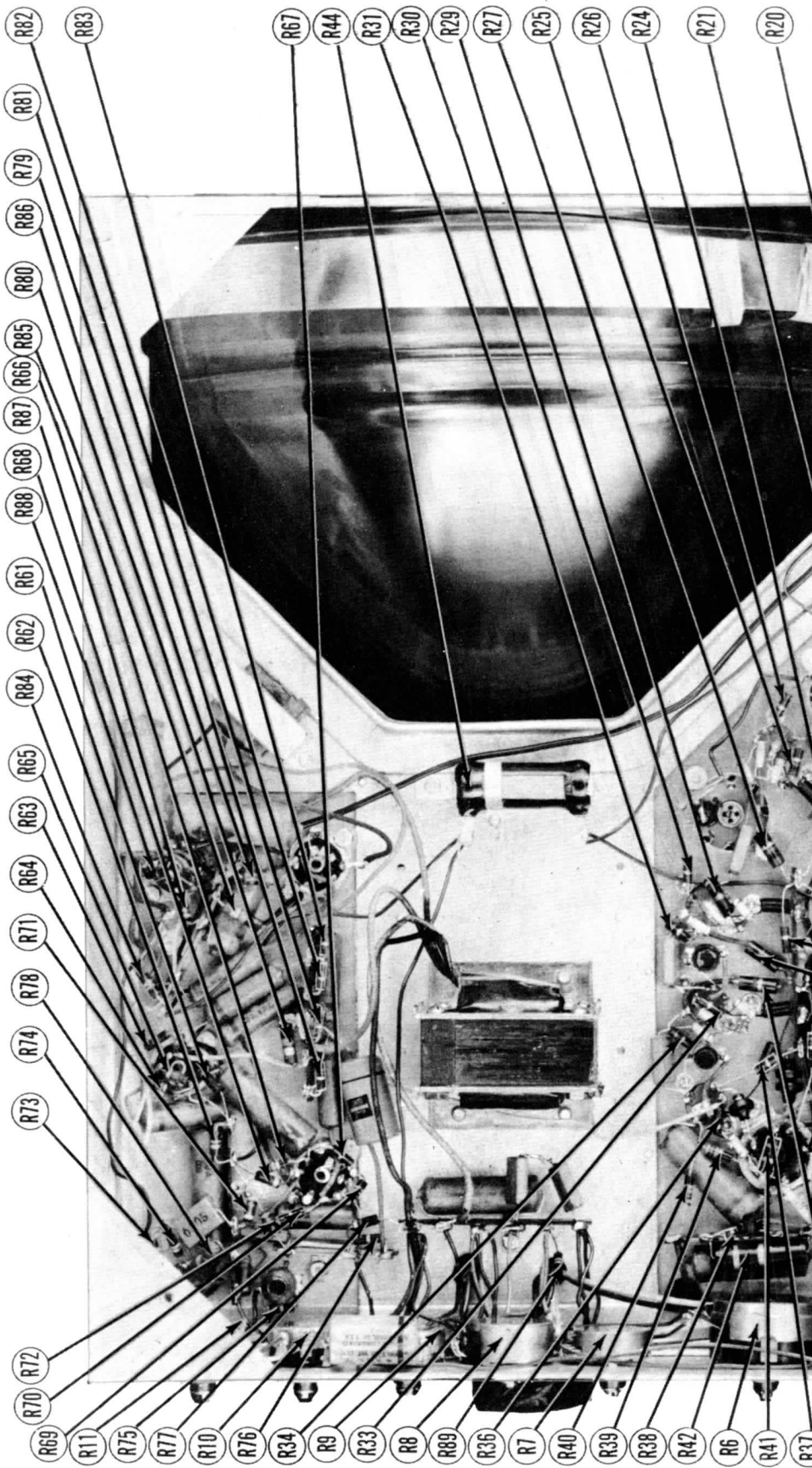


CHASSIS BOTTOM VIEW-CA

**VIDEODYNE MODELS
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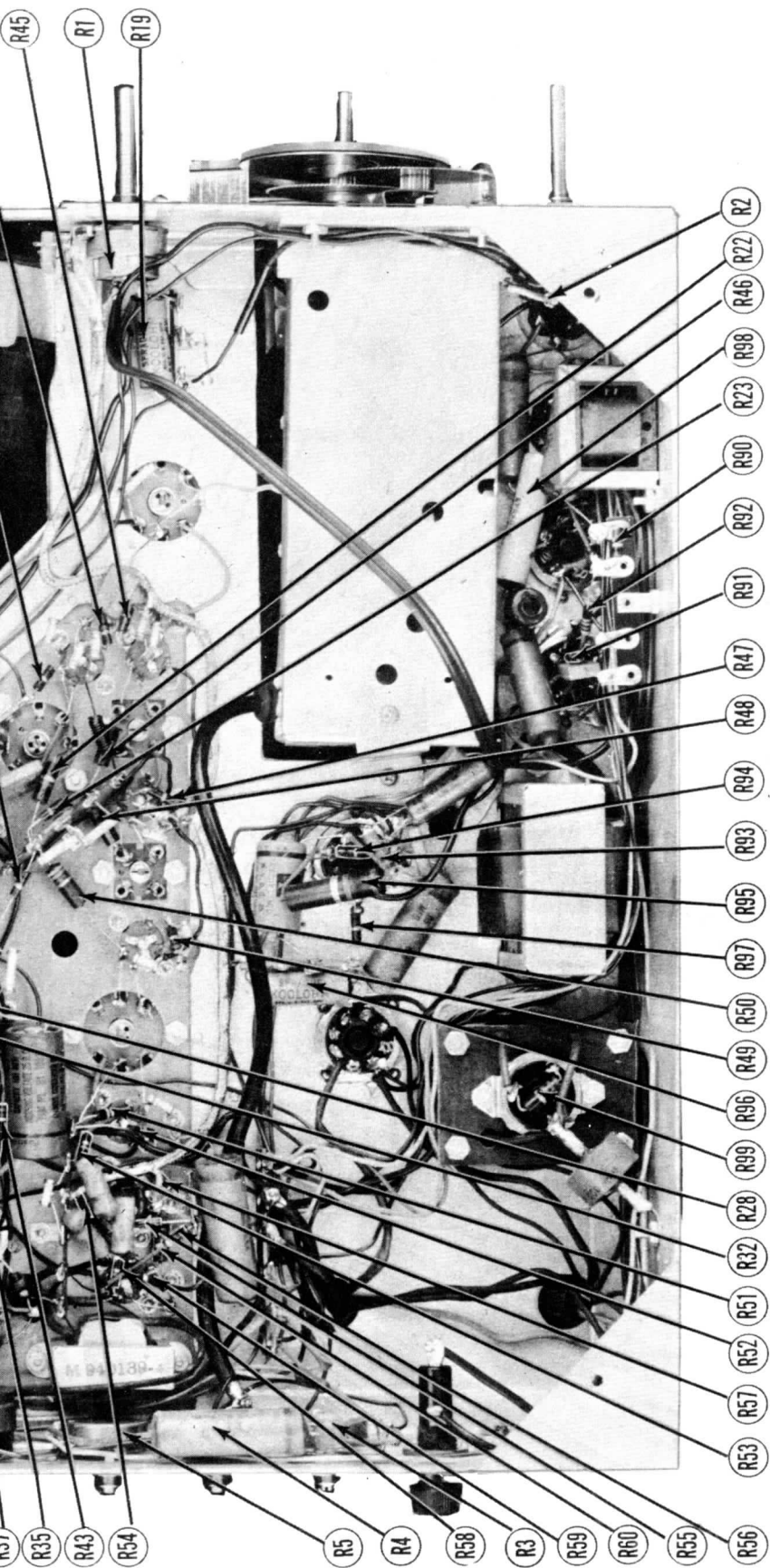


CAPACITOR IDENTIFICATION

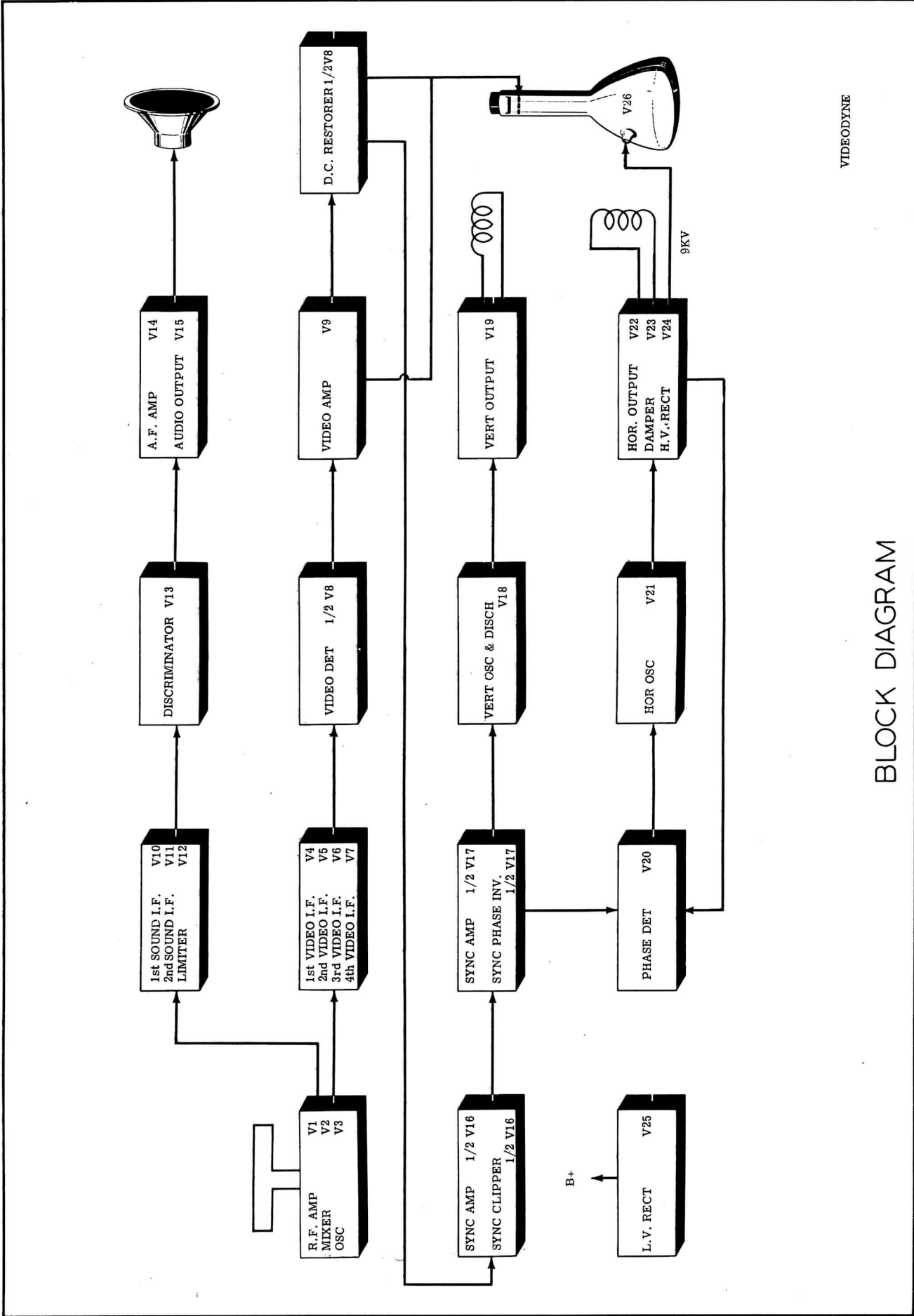


CHASSIS BOTTOM VIEW-RE

**VIDEODYNE MODELS
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RESISTOR IDENTIFICATION



VIDEODYNE

BLOCK DIAGRAM

VIDEODYNE MODELS
10FM, 10TV, 12FM, 12TV

PARTS LIST A

TUBES (SYLVANIA or Equivalent)

CAPACITORS

ITEM No.	USE	REPLACEMENT DATA		RMA BASE TYPE	NOTES
		VIDEODYNE PART No.	STANDARD REPLACEMENT		
V1	RF Amp.	6J6	6J6	7BF	
V2	Mixer	6AK5	6AK5	7BD	
V3	Oscillator	6J6	6J6	7BF	
V4	1st Video IF Amp.	6AG5	6AG5	7BD	
V5	2nd Video IF Amp.	6AG5	6AG5	7BD	
V6	3rd Video IF Amp.	6AG5	6AG5	7BD	
V7	4th Video IF Amp.	6AG5	6AG5	7BD	
V8	Video Det.-DC Rest.	6AL5	6AL5	6BT	
V9	Video Amp.	6A6	6A6	7BK	
V10	1st Sound IF Amp.	6BA6	6BA6	7BK	
V11	2nd Sound IF Amp.	6BA6	6BA6	7BK	
V12	Limiter	6AU6	6AU6	7BK	
V13	Disc.	6AL5	6AL5	6BT	
V14	AF Amp.	12AU7	12AU7	9A	
V15	Audio Output	6AQ5	6AQ5	7BZ	
V16	Sync. Amp.-Sync. Clipper	12AU7	12AU7	9A	
V17	Sync. Amp.-Sync. Phase Inv.	12AU7	12AU7	9A	
V18	Vert. Osc.-Disch.	12AU7	12AU7	9A	
V19	Vert. Output	12AU7	12AU7	9A	
V20	Phase Det.	6AL5	6AL5	6BT	
V21	Hor. Osc.-Disch.	6SN7GT	6SN7GT	8BD	
V22	Hor. Output	6BG6G	6BG6G	5BT	
V23	Damper	5V4G	5V4G	5L	
V24	HV Rectifier	1B3GT	1B3GT	3C	
V25	LV Rectifier	5U4G	5U4G	5T	
V26	Picture Tube	12TP4	12TP4 or 12LP4	12D	

ITEM No.	RATING		REPLACEMENT DATA		
	CAP.	VOLT	VIDEODYNE PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.
C51	1000			1468-001	1W5D1
C52	1000			1468-001	1W5D1
C53	1000			1468-001	1W5D1
C54	75			1468-000075	5W5Q7
C55	1000			1468-001	1W5D1
C56	75			1468-000075	5W5Q7
C57	750			1468-000075	1W5T8
C58	.01	400		P488-01	GT4S1
C59	.01	400		P488-01	GT4S1
C60	500	500		1468-0005	5W5T5
C61	.01	400		P488-01	GT4S1
C62	.05	600		P688-05	GT6S5
C63	.01	600		P688-01	GT6S1
C64	.05	600		P688-05	GT6S5
C65	.002	600		P688-002	GT6D2
C66	.005	600		P688-005	GT6D5
C67	.005	600		P688-005	GT6D5
C68	.005	600		P688-005	GT6D5
C69	.005	600		P688-005	GT6D5
C70	.005	600		P688-005	GT6D5
C71	.1	600		P688-1	GT6P1
C72	.05	600		P688-05	GT6S5
C73	.1	600		P688-1	GT6P1
C74	.05	600		P688-05	GT6S5
C75	500	500		1468-0005	5W5T5
C76	500	500		1468-0005	5W5T5
C77	500	500		1467-002	1W5D2
C78	2000			P688-1	GT6P1
C79	.1	600		P688-1	GT6P1
C80	200	500		1468-0002	5W5T2
C81	.1	600		P688-1	GT6P1
C82	270	500		1468-00025	5W5T25
C83	.01	600		P688-01	GT6S1
C84	2000			1467-002	1W5D2
C85	150	500		1468-00015	5W5T15
C86	.05	600		P688-05	GT6S5
C87	.035	600		P688-05	GT6S5
C88	.05	600		P688-05	GT6S5
C89	500	10000			
C90	.1	600		P688-1	GT6P1
C91	270	500			
C92	270	500			

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	VIDEODYNE PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.	ERIE PART No.	SOLAR PART No.		SPRAGUE PART No.
C1A	30	450		AFH862J4A	UP43145			D14775	Filter
B	40	450							Filter
C	10	450							V. Output Screen Byp.
D	20	25							Output Cath. Bypass
C2A	40	450		AFH862J4A	UP43145			D14775	Filter
B	30	450							Decoupling
C	10	450							AF Plate Decoupling
D	20	25							AF Amp. Cath. Bypass
C3	10	25		PRS25/10	BR102A			TVA-5	Hor. Output Cath. Byp.
C4	10	25		PRS25/10	BR102A			TVA-5	Vert. Output Cath. Byp.
C5	4	25		PRS150/4	BR550			TVA-13	AFC Filter
C6	470	25		PRS25/100	BRH251A			TVA-8	V. Output Cath. Bypass
C7	470								Ant. Coupling
C8	470								RF Fil. Bypass
C9	470								RF Bypass
C10	15								RF Coupling
C11	3-12								RF Coupling
C12	3-12								RF Var. Padder
C13	3-12								RF Var. Trimmer
C14	15								RF Var. Padder
C15	470								RF Coupling
C16	470								RF Bypass
C17	470								Mixer Screen Bypass
C18	1								Mixer Fil. Bypass
C19	5								Osc. Coupling
C20	2-12								Osc. Grid Cap.
C21	470								Osc. Var. Trimmer
C22	470								Osc. Fil. Bypass
C23	270	500		1468-00025	5W5T25				RF Bypass
C24	1000			1468-001	1W5D1			MO.5-325	IF Coupling
C25	1000			1468-001	1W5D1			1FM-21	1st V. IF Cath. Bypass
C26	1000			1468-001	1W5D1			1FM-21	1st V. IF Fil. Bypass
C27	1000			1468-001	1W5D1			1FM-21	1st V. IF Decoupling
C28	270	500		1468-00025	5W5T25			1FM-21	Decoupling
C29	1000			1468-001	1W5D1			1FM-21	IF Coupling
C30	1000			1468-001	1W5D1			1FM-21	2nd V. IF Cath. Bypass
C31	1000			1468-001	1W5D1			1FM-21	2nd V. IF Fil. Bypass
C32	1000			1468-001	1W5D1			1FM-21	2nd V. IF Decoupling
C33	270	500		1468-00025	5W5T25			1FM-21	Decoupling
C34	1000			1468-001	1W5D1			1FM-21	IF Coupling
C35	1000			1468-001	1W5D1			1FM-21	3rd V. IF Cath. Bypass
C36	1000			1468-001	1W5D1			1FM-21	3rd V. IF Fil. Bypass
C37	270	500		1468-00025	5W5T25			1FM-21	3rd V. IF Decoupling
C38	1000			1468-001	1W5D1			1FM-21	IF Coupling
C39	1000			1468-001	1W5D1			1FM-21	4th V. IF Cath. Bypass
C40	1000			1468-001	1W5D1			1FM-21	4th V. IF Fil. Bypass
C41	2000			1467-002	1W5D2			1FM-21	4th V. IF Decoupling
C42	270	500		1468-00025	5W5T25			1FM-22	Decoupling
C43	1000			1468-001	1W5D1			1FM-22	IF Coupling
C44	.05	600		P688-05	GT6S5			1FM-21	V. Det. Fil. Bypass
C45	.05	600		P688-05	GT6S5			TM-15	Video Coupling
C46	1000			1468-001	1W5D1			TM-15	
C47	1000			1468-001	1W5D1			1FM-21	RF Bypass
C48	1000			1468-001	1W5D1			1FM-21	Decoupling
C49	1000			1468-001	1W5D1			1FM-21	"
C50	1000			1468-001	1W5D1			1FM-21	1st S. IF Cath. Bypass
								1FM-21	1st S. IF Decoupling

* Some models use .1MFD in this application
† Not used in all models.

ITEM No.	RATING		REPLACEMENT DATA		
	RESISTANCE	WATTS	VIDEODYNE PART No.	IRC PART No.	CORNELL DUBILIER PART No.
R1A	500KΩ	1/2		Q13-133	M-60
B	Switch			76-1	SW-A
R2A	10KΩ	1/2		Q16-116	M-30
B	Switch			76-1	SW-A
R3	100KΩ	1/2		Q11-128	M-46
R4	5000Ω	1/2		Q11-114	M-19
R5	100KΩ	1/2		Q11-128	M-49
R6	2000Ω	1/2		Q11-128	10-2
R7	100KΩ	1/2		Q11-128	M-49
R8	25Ω	1/2		W-25	43-2
R9	5000Ω	1/2		Q11-114	M-19
R10	2 Meg.	1/2			M-83
R11	1 Meg.	1/2		Q11-137	M-61

ITEM No.	RATING		REPLACEMENT DATA	
	RESISTANCE	WATTS	VIDEODYNE PART No.	IRC PART No.
R12	220Ω	1/2		
R13	10KΩ	1/2		
R14	1 Meg.	1/2		
R15	100KΩ	1/2		
R16	330KΩ	1/2		
R17	12KΩ	1/2		
R18	10KΩ	1/2		
R19	5000Ω	1/2		
R20	10KΩ	1/2		
R21	120Ω	1/2		
R22	10KΩ	1/2		
R23	120Ω	1/2		
R24	120Ω	1/2		
R25	10KΩ	1/2		
R26	120Ω	1/2		
R27	10KΩ	1/2		
R28	120Ω	1/2		
R29	4700Ω	1/2		
R30	120Ω	1/2		
R31	2700Ω	1/2		
R32	10KΩ	1/2		
R33	120Ω	1/2		
R34	5600Ω	1/2		
R35	10KΩ	1/2		
R36	22KΩ	1/2		
R37	3300Ω	1/2		BTS-22K
R38	22KΩ	1/2		BTS-3300
R39	470KΩ	1/2		BTS-22K
R40	470KΩ	1/2		BTS-470K
R41	270Ω	1/2		BTS-470K
R42	3900Ω	1/2		BW-1-270
R43	47KΩ	1/2		BT-2-3900
				BTS-47K

DESCRIPTIONS

CONT.)

No.	SOLAR PART No.	SPRAGUE PART No.	IDENTIFICATION CODES AND INSTALLATION NOTES
01	MM-5-21	LFM-21	2nd S. IF Cath. Bypass
01	MM-5-21	LFM-21	2nd S. IF Decoupling
01	MO-5-31	LFM-475	Limiter Grid Filter
5	MM-5-21	LFM-21	Limiter Decoupling
5	MO-5-31	LFM-475	RF Bypass
50	MM-5-38	LFM-38	De-emphasis
5-01	ST-4-01	TM-11	Audio Coupling
5-01	ST-4-01	TM-11	"
00	MO-5-35	LFM-35	Tone Compensation
5-01	ST-4-01	TM-11	Audio Coupling
5-01	ST-6-05	TM-15	Decoupling *
5-01	ST-6-01	TM-11	Sync. Coupling
02	ST-6-05	TM-15	"
05	ST-6-002	TM-22	"
05	ST-6-005	TM-25	Vert. Sync. Coupling
05	ST-6-005	TM-25	Integrator Net.
05	ST-6-005	TM-25	Integrator Net.
05	ST-6-005	TM-25	"
05	ST-6-005	TM-25	Vert. Osc. Grid Cap.
00	ST-6-1	TM-1	Vert. Osc. Plate Dec.
00	ST-6-05	TM-15	Vert. Discharge
00	ST-6-1	TM-1	Vert. Sweep Coupling
00	ST-6-05	TM-15	Vert. Output Sec. Shunt
00	MO-5-35	LFM-35	Pulse Forming
00	MO-5-35	LFM-35	Hor. Sync. Coupling
00	MO-5-35	LFM-35	"
00	MM-5-22	LFM-22	AFC Feedback
00	ST-6-1	TM-1	AFC Filter
00	MO-5-32	LFM-32	Hor. Osc. Grid Cap.
00	ST-6-1	TM-1	Hor. Osc. Plate Dec.
50	MO-5-325	LFM-325	Hor. Discharge
5-01	ST-6-01	TM-11	Hor. Sweep Coupling
50	MM-5-22	LFM-22	Hor. Discharge
50	MO-5-315	LFM-315	"
00	ST-6-05	TM-15	Hor. Output Screen Byp.
00	ST-6-05	TM-15	Damper Filter
00	ST-6-1	TM-1	HV Filter
00	ST-6-1	TM-1	Pic. Tube Cath. Dec.
00	ST-6-1	TM-1	Fixed Trimmer †

INSTALLATION NOTES

Volume control
 Attach to RLA Per Instructions
 Contrast control
 Attach to R2A Per Instructions
 Horiz. Drive control
 Horiz. Linearity control
 Horiz. Hold control
 Focus control (Wire Wound)
 Brightness control
 Horiz. centering control
 Vert. Linearity control
 Vert. drive control
 Vert. hold control

IDENTIFICATION CODES

RESISTORS ARE ± 10% UNLESS OTHERWISE STATED.

thode
 ate
 Grid
 Screen
 Grid
 Plate
 Decoupling (Wire Wound)
 ideo IF Grid
 ideo IF Cathode
 ideo IF Decoupling
 ideo IF Decoupling
 oling Network
 ideo IF Grid
 ideo IF Cathode
 ideo IF Plate
 ideo IF Decoupling
 ideo IF Cathode
 ideo IF Plate
 ideo IF Decoupling
 Amp. Grid

Correction
 ge Divider
 e Tube Grid
 Output Cathode
 Output Plate

RESISTORS (CONT.)

ITEM No.	RATING		REPLACEMENT DATA		IDENTIFICATION CODES
	RESISTANCE	WATTS	VIDEODYNE PART No.	IRC PART No.	
R44	750Ω	25		DHA-750#	Filter Adjustable Wire Wound
R45	120Ω				1st Sound IF Cathode
R46	10KΩ				1st Sound IF Decoupling
R47	120Ω				2nd Sound IF Cathode
R48	10KΩ				2nd Sound IF Decoupling
R49	47KΩ				Limiter Grid
R50	47KΩ				Limiter Decoupling
R51	100KΩ		BTS-100K		Disc. Diode Load
R52	100KΩ		BTS-100K		Disc. Diode Load
R53	100KΩ		BTS-100K		De-emphasis
R54	2.2 Meg.		BTS-2.2 Meg.		1st AF Grid
R55	270KΩ		BTS-270K		1st AF Plate
R56	22KΩ		BTS-22K		1st AF Plate Decoupling
R57	1000Ω		BTS-1000		2nd AF Cathode
R58	270KΩ		BTS-270K		2nd AF Plate
R59	470KΩ		BTS-470K		Output Grid
R60	270Ω		BW-1-270		Output Cathode
R61	22KΩ		BTS-22K		Sync. Amp. Plate
R62	100KΩ		BTS-100K		Sync. Amp. Plate Decoupling
R63	2200Ω		BTS-2200		Sync. Amp. Cathode
R64	470KΩ		BTS-470K		Sync. Clipper Grid
R65	22KΩ		BTS-22K		Sync. Clipper Plate
R66	470KΩ		BTS-470K		Sync. Amp. Grid
R67	1000Ω		BTS-1000		Sync. Amp. Cathode
R68	22KΩ		BTS-22K		Sync. Amp. Plate
R69	470KΩ		BTS-470K		Phase Inv. Grid
R70	2200Ω		BTS-2200		Phase Inv. Cathode
R71	4700Ω		BTS-4700		"
R72	4700Ω		BTS-4700		Phase Inv. Plate
R73	100KΩ		BTS-100K		AFC Diode Load
R74	100KΩ		BTS-100K		AFC Diode Load
R75	4700Ω		BTS-4700		RF Choke Shunt
R76	1200Ω		BTS-1200		AFC Filter Network
R77	2.2 Meg.		BTS-2.2 Meg.		Voltage Divider
R78	47KΩ		BTA-47K		AFC Feedback
R79	56KΩ		BTS-56K		Voltage Divider
R80	1 Meg.		BTS-1 Meg-5%		Integrator
R81	10KΩ		BTS-10K		"
R82	10KΩ		BTS-10K		"
R83	10KΩ		BTS-10K		"
R84	100KΩ		BTS-100K		Vert. Osc. Plate
R85	1 Meg.		BTS-1 Meg-5%		Vert. Discharge Grid
R86	1 Meg.		BTS-1 Meg-5%		Vert. Discharge Plate
R87	4700Ω		BTS-4700		Vert. Peaking
R88	1 Meg.		BTS-1 Meg.		Vert. Output Grid
R89	100KΩ		BTS-100K		Voltage Divider
R90	100KΩ		BTS-100K		Horiz. Osc. Plate Decoupling
R91	100KΩ		BTS-100K		Horiz. Osc. Grid
R92	470KΩ		BTS-470K		Horiz. Discharge Plate
R93	56KΩ		BTA-56K		Horiz. Peaking
R94	1 Meg.		BTS-1 Meg.		Horiz. Output Grid
R95	100Ω		BW-2-100		Horiz. Output Cathode
R96	10KΩ		AB-10K		Horiz. Output Screen (Wire Wound)
R97	120Ω				Parasitic Supp.
R98	10KΩ		AB-10K		Damper Filter (Wire Wound)
R99	3.3Ω				HV Rect. Filament
R100	12KΩ				RF Plate Coil Shunt
R101	12KΩ				Mixer Grid Coil Shunt

Set adjustable metal band to 650Ω from one end of resistor.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI.	SEC. 1	SEC. 2	SEC. 3	VIDEODYNE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.
T1	117VAC @ 1.76A	580VCT @ .22 ADC	5VAC @ 3A	5VAC @ 2A		P-8152# LP-6134§	TP-355 ††	P-3156#
		SEC. 4 @ 9A	SEC. 5 @ .6A					

Add series resistor to reduce plate voltage.

†† Mount vertically with universal mounting brackets.

§ This transformer used to replace the SEC. 5 winding on the original transformer.

TRANSFORMER (SWEEP CIRCUITS)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	DC RESISTANCE	SEC.	VIDEODYNE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
T2	7.6Ω	3.4Ω		A-8110		A-3002	Hor.Block Osc.Trans. Vert.Block Osc.Trans. Hor.Output Trans.
T3	68Ω	360Ω		A-8111	TB0-1	A-3000	
T4	320Ω Tap @ 175Ω	SEC. 1 @ 10.5Ω		A-8117	TFB-1		
		Tap @ .5Ω					
T5	550Ω	7.2Ω		A-8115	TS0-1	A-3035	Vert. Output Trans. Hor.Deflection Yoke Vert.Deflection Yoke Focus Coil
T6A	14Ω			DY-1			
T7	255Ω			FC-10			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING				REPLACEMENT DATA				INSTALLATION NOTES
	IMPEDANCE	DC RES.	PRI.	SEC.	VIDEODYNE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
T8	5900Ω	3.2Ω	480Ω	.24Ω		A-3877	RO-9 †	A-2930	† Drill one new mounting hole.

VIDEODYNE MODELS
 10FM, 10TV, 12FM, 12TV

PARTS LIST AND DESCRIPTIONS (Continued)

SPEAKER

ITEM No.	RATING		REPLACEMENT DATA			NOTES
			VIDEODYNE PART No.	JENSEN PART No.	QUAM PART No.	
	FIELD RES.	V. C. IMP.				
SP1	PM	3.2Ω			46A1	
SP2	CONE DIA. 4" x 6"	V. C. DIA. 9/16"				

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				INSTALLATION NOTES
	TOTAL DIRECT CURRENT	D. C. RESISTANCE	INDUCTANCE (0 CURRENT 1000 μ)	VIDEODYNE PART No.	STANCOR PART No.	CHICAGO PART No.	MERIT PART No.	
L1	.220A	96Ω	4 Henries		C-2325	TR-4225†	C-2991†	† Drill one new mounting hole.

COILS (RF-IF)

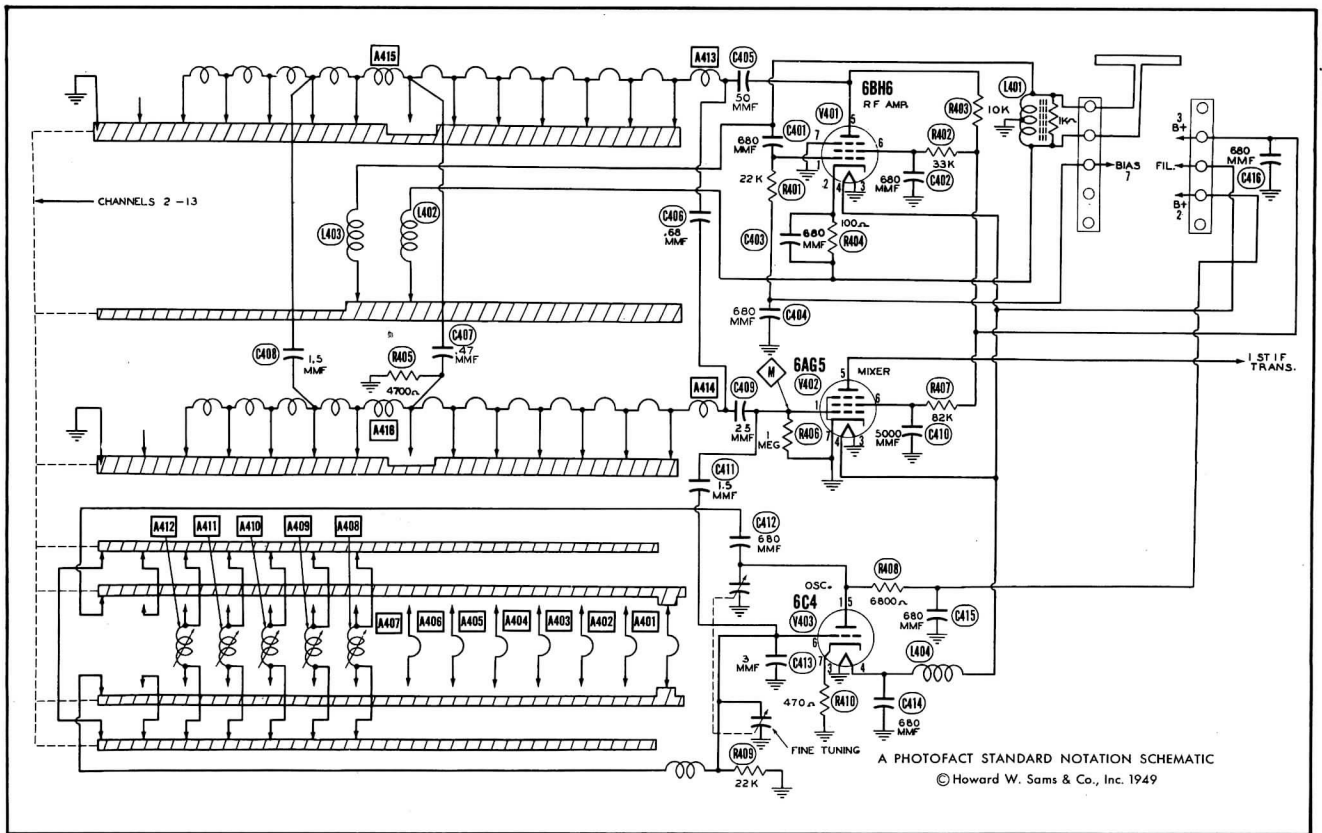
ITEM No.	USE	DC RES.		REPLACEMENT DATA		NOTES
				VIDEODYNE PART No.	MEISSNER PART No.	
		PRI.	SEC.			
L2	Ant. Coil	0Ω				Part of tuner
L3	RF End. Inductor	0Ω				
L4	RF Plate	0Ω				
L5	Band Pass	0Ω				
L6	Mixer End Inductor	0Ω				
L7	Mixer Grid	0Ω				
L8	Osc. End Inductor	0Ω				
L9	Osc.	0Ω				
L10	Osc. Shunt	0Ω				
L11	1st Video IF and Sound Take Off	.1Ω				
L12	2nd Video IF	.1Ω				
L13	3rd Video IF	.1Ω				
L14	4th Video IF	.1Ω				
L15	5th Video IF	.1Ω				
L16	Fil. Choke	.1Ω				
L17	Fil. Choke	.1Ω				
L18	Fil. Choke	.1Ω				
L19	Fil. Choke	.1Ω				
L20	Video Det. Cath. Chk.	13Ω				
L21	Fil. Choke	.1Ω				
L22	Peaking	7Ω			Wound on 22KΩ resistor	
L23	Peaking	8Ω			Wound on 22KΩ resistor	
L24	Peaking	5Ω				
L25	1st Sound IF Trans.	.1Ω	.1Ω			
L26	2nd Sound IF Trans.	.1Ω	.1Ω			
L27	Disc. Trans	.1Ω	.1Ω			
L28	Hor. AFC.	36Ω				
L29	Hor. Linearity	36Ω				

DIAL LIGHTS

ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					VIDEODYNE PART No.		
M1	Bayonet	6-8V	.25	Blue			Type #44

MISCELLANEOUS

ITEM No.	PART NAME	VIDEODYNE PART No.	NOTES
M2	Fuse		5A
M3	Ion Trap		
M4	Tuner		Dumont Input tuner used on all FM models.
M5	Tuner	TT2	Sarkes-Tarzian tuner used on all TV models.



RF TUNER

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	REPLACEMENT DATA	
		STANDARD REPLACEMENT	RMA BASE TYPE
V401	RF Amp.	6BH6	7CM
V402	Mixer	6AG5	7BD
V403	Oscillator	6C4	6BG

RESISTORS

ITEM No.	RATING		IDENTIFICATION
	RESISTANCE	WATTS	
R401	22K Ω	1/2	RF Grid
R402	33K Ω	1/2	RF Screen
R403	10K Ω	1	RF Plate
R404	100 Ω	1/2	RF Cathode
R405	4700 Ω	1/2	Mixer Coil Shunt
R406	1 Meg.	1/2	Mixer Grid
R407	82K Ω	1/2	Mixer Screen
R408	6800 Ω	1	Osc. Plate
R409	22K Ω	1/2	Osc. Grid
R410	470 Ω	1/2	Osc. Cathode

CAPACITORS

ITEM No.	RATING		IDENTIFICATION
	CAP.	VOLT	
C401	680		RF Coupling
C402	680		RF Screen Bypass
C403	680		RF Cathode Bypass
C404	680		Bias Filter
C405	50		RF Coupling
C406	.68		RF Coupling
C407	.47		RF Coupling
C408	1.5		RF Coupling
C409	25		RF Coupling
C410	5000		Mixer Screen Bypass
C411	1.5		Osc. Coupling
C412	680		Osc. Feedback
C413	3		Osc. Feedback
C414	680		Filament Bypass
C415	680		RF Bypass
C416	680		RF Bypass

COILS

ITEM No.	USE	DC RES.		IDENTIFICATION
		PRI.	SEC.	
L401	Ant. Input	0 Ω		Wound on powdered iron core & 1000 Ω resistor
L402	Ant. Input	0 Ω		
L403	Ant. Input	0 Ω		
L404	Fil. Choke	0 Ω		

VIDEODYNE MODELS
10FM, 10TV, 12FM, 12TV